UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

EARTHQUAKE DATA REPORT

NOVEMBER 1990

by

U.S. Geological Survey

NATIONAL EARTHQUAKE INFORMATION CENTER[1]

Open-File Report 90-611-A

1990

[1]USGS, Denver, Colorado

EDR No. 10-90
Part 1 of 2
P. 1-140

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.

% OCT 01, 1990 00h 44m 38.52± 0.82s
42.636 N ± 4.7km 12.538 E ±11.2km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

MNS	0.27	157	Pc	44	44.10	-0.2
			eSg	44	48.70	
ASS	0.44	12	P	44	47.30	-0.3
			eSg	44	54.50	
AQU	0.70	113	P	44	51.30	-1.1
			eSg	45	03.40	
RMP	0.83	172	P	44	54.20	-0.4
			eSg	45	08.60	
RDP	0.89	171	P	44	55.50	-0.1
			eSg	45	10.00	
ARV	0.91	19	P	44	56.20	0.2
			eSg	45	10.00	
AZI	0.93	134	P	44	58.00	1.8
			eSg	45	12.50	
SDI	1.33	134	P	45	02.90	-0.2
			eSg	45	19.50	
SFI	1.38	339	P	45	03.90	0.2
			eSg	45	23.20	

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

---

* OCT 01, 1990 01h 04m 02.66± 1.91s
32.527 S ± 8.7km 71.665 W ±15.6km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.71	129	iPd	04	17.00	0.2
			iS	04	32.00	
JACH	0.92	100	iPd	04	19.50	-0.8
			iS	04	34.50	
LCCH	0.95	175	iPc	04	20.60	-0.1
			iS	04	36.90	
PEL	1.03	127	iPd	04	22.20	0.1
			iS	04	39.50	
SAN	1.25	138	eP	04	26.00	0.1
			iS	04	47.50	
LNV	1.44	172	iPd	04	28.50	-0.3
			iS	04	50.00	
PCH	1.46	139	iPd	04	29.50	0.4
			iS	04	54.00	
			i	04	57.50	
RTBS	2.07	66	e(P)	04	38.00	0.2
MDZ	2.40	99	iP	04	48.50	5.8X
			iS	05	20.90	
ZON	2.72	70	eP	04	49.00	1.8
RTCV	2.73	77	ePc	04	47.40	0.0
RTLL	2.97	67	ePc	04	49.10	-1.6
			eS	05	33.50	

S.D. = 0.9 on 11 of 12 obs.

% OCT 01, 1990 01h 51m 47.90± 1.77s
36.708 N ±16.7km 3.037 W ± 8.0km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
mbLg 3.0 (MDD).

AFC	0.68	323	iP	52	00.90	-0.6
			eS	52	08.00	
ECOG	0.71	323	ePg	52	01.00	-0.9
			eSg	52	08.60	
ENIJ	0.71	68	iPgc	52	01.20	-0.7
			eSg	52	11.00	
MAL	1.10	271	iPnd	52	09.00	0.4
			iSg	52	26.50	
EBAN	1.57	338	ePn	52	16.30	0.4
			eSn	52	35.00	
EVIA	1.97	12	ePn	52	23.20	1.4
			eSn	52	44.00	

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

? OCT 01, 1990 03h 01m 30.59± 1.52s
38.711 N ± 9.9km 15.428 E ±31.2km
DEPTH = 100.0km (geophysicist)
SICILY (398)

ATN	0.55	177	P	01	47.10	0.1
			eSg	02	04.50	
CZI	0.75	47	P	01	49.20	0.6
			eS	02	06.20	
SOI	0.81	142	Pc	01	48.90	-0.3
			eSg	02	06.80	
TDS	1.18	36	Pc	01	52.90	-0.4
ROI	1.24	46	P	01	54.00	0.0
			eS	02	16.50	
MMN	1.26	20	P	01	53.80	-0.4
			eS	02	13.50	
CSI	1.26	32	P	01	54.60	0.3
			eS	02	16.20	

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

OCT 01, 1990 03h 46m 30.08± 0.35s
40.162 N ± 4.0km 19.838 E ± 3.4km
DEPTH = 10.0km (geophysicist)
3.2mb (1 obs.)
ALBANIA (391)
ML 3.3 (THE), 2.9 (TTG). MD 3.4 (ATH).

KEK	0.45	184	ePg	46	38.20	-1.0
IGT	0.73	149	eP	46	42.90	-1.6
			eS	46	54.50	
OHR	1.20	37	iPn	46	50.40	-2.0
	0.6s	281.00nm				
			i	47	11.20	
			Lg	47	14.60	
FNA	1.33	62	eP	46	53.60	-1.0
			eS	47	15.40	
LCI	1.45	277	P	46	55.00	-1.3
			eSn	47	18.40	
KZN	1.49	84	ePb	46	57.20	0.3
			eSb	47	22.30	
ULC	1.85	346	ePn	47	02.00	-0.2
			eSn	47	30.00	
EVR	1.97	129	ePn	47	05.20	1.3
LIT	2.03	91	ePc	47	06.10	1.3
			eS	47	33.80	
VLS	2.07	163	ePn	47	04.50	-0.8
GRG	2.11	67	iPc	47	06.60	0.7
			eS	47	36.20	
BRT	2.13	290	P	47	08.70	2.5
			eSn	47	40.00	
SKD	2.18	33	iPn	47	07.30	0.5
	0.9s	119.00nm				
			i	47	35.70	
			iSg	47	37.50	
			Lg	47	50.00	
BDV	2.25	341	ePn	47	07.00	-0.9
			eSn	47	40.00	
TTG	2.31	349	ePn	47	10.00	1.3
			eSn	47	47.00	
PVY	2.43	2	ePn	47	11.00	0.4
			eSn	47	46.50	
THE	2.43	78	iPc	47	10.50	0.0
			eS	47	42.50	
HCY	2.50	337	ePn	47	10.00	-1.4
			eSn	47	47.00	
KNT	2.53	66	iPc	47	12.60	0.7
RDI	2.58	258	P	47	20.40	7.7X
ORI	2.60	269	P	47	14.90	2.0
			eSn	47	48.50	
IVA	2.71	1	ePn	47	15.00	0.5
			eSn	47	58.00	
TDS	2.74	261	P	47	15.30	0.4
CSI	2.75	263	P	47	21.10	6.0X
SDH	2.76	75	iPc	47	15.50	0.3
			eS	47	53.70	
PLG	2.77	84	ePn	47	16.30	1.0
MMN	2.97	266	P	47	28.20	10.2X
CZI	3.01	253	P	47	18.20	-0.4
MGR	3.28	271	P	47	23.40	0.8
ITM	3.40	151	ePn	47	24.50	0.3
SDI	3.61	236	P	47	25.80	-1.3
			eSn	48	09.00	
VLI	4.21	144	ePn	47	36.00	0.3
DUI	4.34	292	P	47	38.00	0.3
SDI	4.82	291	P	47	45.00	0.6
AZI	5.17	293	P	47	50.00	0.7
VOY	7.30	325	ePn	48	17.30	-2.1
			e(Sn)	49	37.90	
NB2	21.57	349	P	51	19.60	-2.0
	0.8s	0.90nm				3.2mb

S.D. = 1.2 on 34 of 37 obs.

? OCT 01, 1990 05h 58m 33.77± 3.66s
42.440 N ±45.7km 8 689 E ± 7.1km
DEPTH = 10.0km (geophysicist)
CORSICA (380)
ML 3.3 (LDG).

PGF	0.25	65	Pn	58	39.20	0.0
			Sn	58	48.10	
SBF	1.69	328	Pn	59	03.60	0.0
			Sn	59	29.60	
LMR	1.83	300	Pn	59	05.60	0.0
			Sn	59	33.80	
FRF	1.87	307	Pn	59	06.00	-0.1
			Sn	59	35.40	
LRG	1.99	301	Pn	59	07.80	0.0
			Sn	59	38.60	

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

OCT 01, 1990 06h 59m 07.25± 0.29s
52.602 N ± 7.7km 160.724 E ± 4.0km
DEPTH = 22.5km (3 depth phases)
4.9mb (42 obs.) 4.5Msz (11 obs.)
OFF EAST COAST OF KAMCHATKA (219)

SMY	8.14	84	ePc	01	05.90	-0.9
ASAJ	14.68	242	eP	02	36.70	1.5
MDJ	21.94	261	eP	03	58.50	-2.2
MAT	22.55	234	eP	04	09.00	2.1
	0.8s	24.63nm				4.7mb
			(S)	08	28.00	
TTA	24.79	48	ePd	04	28.60	0.1
	0.8s	15.50nm				4.7mb
CN2	24.89	263	eP	04	27.60	-1.9
Z	17s	1.20um				4.5MszX
N	15s	0.40um				
E	15s	0.40um				
			pP	04	35.00	26km
SVW	24.90	53	eP	04	30.60	1.1
IMA	26.15	41	ePc	04	41.10	-0.2
	1.0s	10.60nm				4.4mb
KDC	26.77	60	eP	04	45.60	-1.2
SNY	27.14	262	eP	04	52.60	2.2
Z	17s	1.20um				4.5MszX
N	14s	0.60um				
E	14s	0.70um				
FBA	28.51	44	ePc	05	02.60	0.1
	0.6s	5.10nm				4.4mb
TOA	29.36	50	eP	05	10.70	0.4
BJI	32.70	265	eP	05	43.00	3.2X
Z	20s	0.90um				4.5Msz
N	14s	0.43um				
INK	34.03	37	eP	05	51.00	0.0
SSE	35.83	249	eP	06	14.50	7.7X
Z	20s	0.50um				4.3Msz
N	12s	0.30um				
E	12s	0.20um				
TIY	36.43	265	eP	06	09.80	-2.2
Z	18s	1.00um				4.6Msz
N	15s	0.70um				
MBC	37.35	23	eP	06	20.00	0.9
	0.9s	14.00nm				4.8mb
LZH	42.72	271	P	07	15.50	11.2X
Z	18s	0.72um				4.6Msz
N	16s	0.72um				
E	15s	0.51um				
GTA	43.05	277	eP	07	06.10	-0.7
	1.0s	10.00nm				4.5mb
Z	16s	0.90um				4.8MszX
E	14s	0.50um				
YKA	43.27	42	eP	07	08.20	0.1
	0.9s	4.20nm				4.2mb
CD2	46.30	265	eP	07	34.80	1.9
WMQ	47.50	290	P	07	40.60	-1.6
Z	20s	0.90um				4.7Msz
			eS	14	35.00	
			eScS	17	33.00	
BMW	47.59	65	P	07	43.30	0.3
GYA	47.77	259	P	07	48.00	3.4X
RMW	47.79	63	P	07	44.30	-0.2
PNT	47.87	60	eP	07	45.00	0.0
	0.9s	12.00nm				4.9mb
EDM	48.76	53	eP	07	52.00	0.1
NEW	49.82	60	P	07	59.20	-0.9
	0.8s	7.29nm				4.8mb
LBFM	51.55	70	P	08	14.10	0.5
WDC	51.68	71	iPd	08	14.50	0.2
ORV	52.95	71	eP	08	23.10	-0.8
FFC	53.09	46	eP	08	24.00	-0.7
	1.1s	15.00nm				4.8mb
KEV	53.40	342	iP	08	25.60	-1.1
	0.7s	10.70nm				4.9mb
LRM	53.84	60	eP	08	30.50	-0.1
MHC	54.36	73	eP	08	34.10	-0.2

01d 07h

GCC 54.36 74 eP 08 33.70 -0.5
ARN 54.42 73 P 08 34.70 0.0
CMB 54.62 72 ePd 08 36.20 0.0
SOD 55.50 340 iP 08 39.30 -2.8
FRI 55.72 72 eP 08 43.60 -0.5
TNP 56.41 70 P 08 49.30 0.0
0.8s 9.56nm 4.9mb
BW06 57.42 61 P 08 55.90 -0.6
0.8s 14.29nm 5.1mb
DUG 57.44 65 P 08 56.60 0.1
ABL 57.49 74 P 08 56.80 -0.3
DAU 58.14 64 P 09 01.80 0.1
CHG 58.18 259 eP 09 03.00 1.2
CHTO 58.18 259 eP 09 02.10 0.3
0.9s 4.90nm 4.6mb
SUF 59.60 338 iP 09 09.90 -1.2
0.8s 69.20nm 5.8mb
KKN 59.78 277 P 09 11.80 -1.3
0.6s 23.00nm 5.5mb
PKI 59.86 277 P 09 12.40 -1.4
0.8s 25.00nm 5.4mb
GKN 60.01 278 P 09 13.20 -1.4
DMN 60.02 277 P 09 13.60 -1.1
0.6s 20.00nm 5.4mb
GOL 61.83 61 P 09 27.30 0.4
0.7s 2.43nm 4.4mb
GLD 61.87 61 P 09 27.80 0.7
0.9s 21.05nm 5.3mb
NUR 61.88 337 iP 09 25.20 -1.4
0.8s 20.50nm 5.3mb
NB2 64.12 344 P 09 39.60 -1.9
1.1s 18.20nm 5.1mb
HFS 64.54 342 eP 09 41.20 -2.9X
0.4s 4.00nm 4.9mb
Z 18s 0.26um 4.5Msz
LR 35 16.00
ANMO 64.71 65 P 09 46.00 0.2
0.8s 3.73nm 4.6mb
ALO 64.71 65 eP 09 45.50 -0.4
1.0s 5.25nm 4.6mb
OUE 68.79 292 eP 10 12.00 0.2
MEO 69.09 60 iPc 10 13.10 -0.2
SIO 69.54 58 eP 10 15.70 -0.3
TUL 69.68 57 eP 10 16.30 -0.5
1.4s 20.40nm 5.1mb
Z 19s 0.35um 4.6Msz
LR 38 52.00
EKA 71.61 350 P 10 29.00 0.8
1.2s 12.60nm 4.9mb
HYB 71.64 275 eP 10 27.00 -2.0
KRA 72.47 335 eP 10 32.60 -0.8
0.8s 19.00nm 5.2mb
Z 20s 0.80um 5.0Msz
e 10 39.60 22km
KSP 72.65 337 ePd 10 34.20 -0.3
CLL 72.95 339 eP 10 35.00 -1.2
BRG 73.15 339 iP 10 37.80 0.4
1.0s 12.00nm 4.9mb
SPC 73.18 334 e(P) 10 36.90 -0.9
e 10 42.80 19km
POO 73.63 279 eP 10 38.50 -2.2
PRU 73.85 338 P 10 41.70 0.2
MOX 73.87 340 iP 10 43.00 1.4
ENN 74.83 344 e(P) 10 47.00 -0.1
1.0s 29.00nm 5.3mb
GRF 74.85 340 ePc 10 49.30 2.0
1.0s 20.00nm 5.1mb
Z 21s 0.10um 4.1Msz
KHC 74.87 338 P 10 48.50 1.0
1.0s 7.00nm 4.6mb
ZST 74.91 336 iP 10 48.70 1.1
SRO 74.95 335 iP 10 48.50 0.6
MEM 74.97 344 P 10 48.10 0.2
GBA 75.25 273 P 10 49.00 -1.1
DOU 75.70 344 P 10 53.70 1.6
WB5 75.73 206 eP 10 53.00 0.4
CDF 76.86 342 eP 10 58.30 -0.5
0.9s 11.45nm 4.9mb
HAU 77.42 343 eP 11 01.40 -0.4
Z 21s 0.22um 4.5Msz
BSF 77.50 342 eP 11 01.80 -0.6
KOD 77.86 271 eP 11 05.50 0.5
CTI 78.22 339 P 11 07.00 0.7
LOR 78.56 344 eP 11 07.60 -0.5
0.8s 6.05nm 4.7mb
Z 21s 0.28um 4.6Msz
VAI 79.00 340 P 11 13.00 2.6
AVF 79.11 344 eP 11 10.90 -0.1
1.1s 13.45nm 4.9mb
SMF 79.17 344 eP 11 11.10 -0.3
SKO 79.44 330 eP 11 04.00 -8.9X
ASPA 79.47 205 iPd 11 14.50 1.3
0.8s 18.30nm 5.2mb
LPL 79.74 342 eP 11 15.60 0.8
0.9s 21.30nm 5.2mb
LPG 79.76 342 eP 11 15.80 0.9
1.0s 34.00nm 5.3mb
TCF 79.78 345 eP 11 12.48 -2.3
1.1s 9.75nm 4.7mb
MAF 79.79 345 eP 11 14.20 -0.6
1.3s 18.05nm 4.9mb
SFI 80.18 338 P 11 19.50 2.7
BNI 80.20 342 P 11 19.50 2.4
PGD 80.26 338 P 11 20.50 3.0X
ARV 80.33 337 P 11 19.50 1.8
BDI 80.34 339 P 11 19.50 1.7
OHR 80.42 330 eP 11 19.20 1.0
ASS 80.80 337 P 11 22.00 1.8
CAF 81.13 345 eP 11 21.90 0.0
1.1s 14.65nm 4.9mb
AZI 81.63 336 P 11 25.50 1.1
SDI 81.80 336 P 11 26.00 0.5
LMR 81.89 341 eP 11 26.00 0.2
1.1s 24.40nm 5.2mb
MGR 82.82 334 P 11 32.00 1.3
ZOBO 127.31 65 PKP 18 12.00 -0.3
LPB 127.54 66 ePKP 18 12.00 -0.6
CNCB 127.83 66 PKP 18 13.00 -0.3
SIV 130.87 58 PKP 18 18.60 0.2
i 19 07.20
S.D. = 1.1 on 106 of 113 obs.

% OCT 01, 1990 08h 11m 59.36± 0.89s
39.291 N ± 7.2km 27.852 E ± 8.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST 0.68 62 iPg 12 12.80 -0.1
eSg 12 23.00
IZM 1.00 208 ePg 12 18.40 0.0
eSg 12 31.40
EDC 1.06 0 ePn 12 19.50 0.3
KGT 1.23 340 iPn 12 22.00 -0.3
EZN 1.30 295 ePn 12 23.40 0.1
S.D. = 0.3 on 5 of 5 obs.

& OCT 01, 1990 09h 02m 34.40s
63.475 N 151.185 W
DEPTH = 11.0km
4.1mb (11 obs.)
CENTRAL ALASKA (1)
<AGS-P>. ML 4.4 (PMR).

HUR 0.86 125 iP 02 50.45 -0.4
MCK 1.04 75 eP 02 53.93 0.0
eS 03 09.04
RND 1.05 93 iP 02 53.77 -0.4
CUT 1.15 158 iP 02 55.83 0.0
NEA 1.44 39 iP 02 59.48 -1.0
eS 03 18.46
SKT 1.51 186 iP 03 01.37 0.0
WRH 1.69 52 eP 03 02.79 -1.2
CCB 1.90 50 iP 03 05.64 -1.3
PWA 1.93 161 eP 03 07.22 -0.2
GHO 2.00 148 eP 03 08.20 -0.4
eS 03 32.22
SUA 2.03 174 eP 03 08.87 -0.1
eS 03 36.21
FBA 2.06 45 ePc 03 08.20 -1.2
HDA 2.09 62 eP 03 08.44 -1.3
PLRM 2.12 152 eP 03 09.88 -0.2
PMR 2.12 152 eP 03 10.30 0.2
NCG 2.13 193 iP 03 09.88 -0.6
eS 03 37.54
SML 2.13 141 eP 03 09.84 -0.6
CGLM 2.21 190 eP 03 10.96 -0.6
GLM 2.25 46 eP 03 10.84 -1.3
TTA 2.25 258 eP 03 10.40 -1.8
CRP 2.26 192 eP 03 12.03 -0.4
BGL 2.29 195 eP 03 12.71 -0.1
SPU 2.34 190 eP 03 13.22 -0.2
CKL 2.35 194 eP 03 13.51 -0.1
PMS 2.36 161 eP 03 13.93 0.2
DDM 2.40 80 eP 03 13.88 -0.3
SCM 2.43 131 eP 03 14.58 -0.1
TOA 2.68 119 ePc 03 18.50 0.2
NKA 2.74 181 eP 03 21.30 2.2
IMA 2.81 339 ePd 03 19.60 -0.6
RDT 2.97 192 eP 03 22.61 0.3
SLKM 3.01 171 eP 03 23.20 0.3
eS 04 01.34
RSO 3.11 194 eP 03 24.97 0.5
KLU 3.15 127 eP 03 25.34 0.4
eS 04 02.80
SVW 3.15 223 ePd 03 22.90 -2.0
DOT 3.19 84 eP 03 24.72 -0.7
GLI 3.23 142 iP 03 26.43 0.4
VZW 3.25 136 eP 03 26.62 0.3
VLZ 3.27 134 eP 03 26.54 0.1
NNL 3.45 181 eP 03 30.71 1.7
SEW 3.48 166 eP 03 31.28 1.8
TMW 3.69 89 eP 03 32.31 -0.2
BRLK 3.73 178 eP 03 33.52 0.4
HOM 3.84 183 eP 03 33.41 -1.2
MTU 3.88 153 eP 03 34.35 -0.9
OPT 3.96 195 eP 03 37.28 0.9
CNPM 3.96 180 eP 03 36.70 0.3
PDB 3.97 203 eP 03 35.41 -1.0
GLB 3.99 117 eP 03 37.10 0.3
FYU 4.00 36 eP 03 38.38 1.5
XLV 4.04 184 eP 03 40.53 3.0
AUE 4.26 195 eP 03 42.66 2.0
AUH 4.27 196 eP 03 40.31 -0.5
MID 4.68 148 eP 03 46.39 -0.2
CDD 4.71 196 eP 03 46.67 -0.4
TGL 4.78 121 iP 03 47.57 -0.5
BALM 4.80 117 eP 03 47.89 -0.5
DWY 5.25 78 P 03 52.40 -2.2
KDC 5.78 187 P 04 00.60 -1.5
ANM 6.33 286 eP 04 07.25 -2.6
BCPM 6.53 118 eP 04 11.35 -1.3
PNL 6.80 119 eP 04 15.19 -1.3
HON 7.14 119 eP 04 19.65 -1.6
INK 8.68 48 P 04 40.00 -2.7
SIT 10.15 122 eP 04 59.10 -3.8
MBC 16.49 26 eP 06 27.00 0.3
1.0s 12.00nm 4.0mb
YKA 16.51 77 eP 06 29.20 2.2
0.7s 5.40nm 3.8mb
EDM 22.00 108 iPc 07 29.10 -0.8
0.5s 19.00nm 4.8mb
PNT 22.18 115 eP 07 33.00 1.3
0.8s 8.00nm 4.2mb
NEW 24.03 113 eP 07 49.70 -0.1
0.9s 7.13nm 4.3mb
FFC 26.10 86 eP 08 09.00 -0.4
0.7s 72.00nm 5.5mb X
TNP 32.58 125 eP 09 06.30 -1.4
0.7s 1.85nm 4.1mb
ALO 39.51 115 eP 10 06.00 -0.6
0.9s 2.10nm 3.8mb
SIO 43.13 103 eP 10 34.50 -1.5
TUL 43.22 103 eP 10 35.40 -1.3
0.8s 2.50nm 4.0mb
CN2 49.17 288 eP 11 22.00 -1.8
NB2 55.09 10 P 12 05.90 -2.2
0.7s 1.10nm 4.0mb
EKA 58.96 21 Pc 12 34.00 -1.5
0.7s 5.10nm 4.8mb
GTA 63.14 305 eP 13 02.60 -1.6
LZH 64.53 300 eP 13 12.00 -1.4
1.5s 14.00nm 4.9mb
80 obs. associated

---

* OCT 01, 1990 09h 12m 16.42± 0.59s
52.876 N ±11.1km 160.413 E ±14.0km
DEPTH = 33.0km (normal)
4.6mb (5 obs.)
OFF EAST COAST OF KAMCHATKA (219)

FBA 28.44 45 eP 18 09.10 -0.7
0.6s 1.10nm 3.7mb
INK 33.93 38 eP 18 58.00 0.1
MBC 37.17 23 ePc 19 26.10 0.7
0.5s 6.00nm 4.7mb
KEV 53.08 342 eP 21 32.00 -0.1
SOD 55.17 340 iP 21 47.80 0.3
CHTO 58.05 259 eP 22 09.00 0.5
1.0s 5.25nm 4.6mb
SUF 59.27 337 iP 22 17.20 0.7
0.9s 72.00nm 5.8mb X

NUR	61.56	337	iP	22	32.10	0.0
NB2	63.81	344	P	22	46.80	-0.3
	0.4s		1.90nm		4.6mb	
HFS	64.22	342	eP	22	48.20	-1.5
	0.4s		4.00nm		4.9mb	
WB5	75.90	205	eP	24	00.60	-0.6
ASPA	79.64	205	eP	24	21.60	-0.2
ZOBO	127.37	65	(PKP)	30	57.00	-23.0X
			e	33	02.00	
LPB	127.60	65	ePKP	31	18.00	-2.2X
CNCB	127.89	65	PKP	31	22.00	1.0
			e	32	56.00	

S.D. = 0.7 on 13 of 15 obs.

% OCT 01, 1990 09h 22m 21.08± 0.65s
40.354 N ± 4.8km 29.458 E ± 6.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZI	0.02	145	iPg	22	21.40	-1.7
YLV	0.22	343	iPg	22	26.00	0.1
GBZT	0.43	359	ePg	22	29.50	-0.4
			iSg	22	37.50	
HRT	0.49	19	iPg	22	31.30	0.2
DST	0.98	221	iPn	22	39.80	0.0
CTT	1.11	316	iPn	22	42.50	0.5
EDC	1.22	270	iPn	22	43.50	-0.3
ALT	1.39	159	ePn	22	47.90	1.3
KGT	1.65	274	iPn	22	50.00	-0.2

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

% OCT 01, 1990 09h 34m 50.90± 1.04s
39.703 N ± 8.4km 29.450 E ±12.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.3 (ISK).

IZI	0.63	2	ePg	35	02.90	-0.8
			eSg	35	13.40	
ALT	0.82	141	ePn	35	06.90	0.0
YLV	0.86	356	iPn	35	07.50	-0.1
KCT	1.00	303	iPn	35	10.00	0.1
HRT	1.13	8	ePn	35	12.90	0.8

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

& OCT 01, 1990 10h 10m 54.27s
63.464 N 151.059 W
DEPTH = 13.5km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.5 (PMR).

HUR	0.81	127	iP	11	09.46	-0.2
			eS	11	21.50	
MCK	0.99	73	eP	11	12.94	0.2
			eS	11	28.01	
RND	0.99	92	eP	11	12.83	0.0
			iS	11	27.42	
CUT	1.12	161	iP	11	14.85	-0.1
NEA	1.42	37	eP	11	18.31	-1.3
			eS	11	38.01	
SKT	1.51	188	iP	11	20.75	-0.1
			iS	11	39.86	
WRH	1.65	51	eP	11	21.83	-1.2
			eS	11	46.40	
CCB	1.86	49	iP	11	24.59	-1.4
PWA	1.90	163	eP	11	26.27	-0.3
GHO	1.96	149	eP	11	27.21	-0.4
			iS	11	53.57	
SUA	2.01	176	iP	11	28.09	-0.2
FBA	2.03	43	ePc	11	27.10	-1.4
HDA	2.04	61	eP	11	27.38	-1.3
PLRM	2.08	154	eP	11	28.90	-0.3
PMR	2.08	154	eP	11	29.00	-0.2
SML	2.09	142	eP	11	28.89	-0.4
NCG	2.13	194	eP	11	29.09	-0.9
			eS	11	58.76	
CGLM	2.21	192	eP	11	30.89	-0.3
GLM	2.22	45	eP	11	29.67	-1.6
CRP	2.26	194	eP	11	31.96	-0.1
			eS	12	01.81	
BGL	2.29	196	eP	11	32.21	-0.2
			eS	12	03.14	
TTA	2.31	259	eP	11	29.90	-2.7
PMS	2.33	162	eP	11	33.34	0.4
			eS	12	02.86	
SPU	2.34	192	eP	11	32.59	-0.4
DDM	2.34	80	eP	11	32.83	-0.2
CKL	2.35	195	eP	11	33.38	0.2
SCM	2.38	132	eP	11	33.38	-0.1
TOA	2.63	119	eP	11	37.70	0.6
NKA	2.73	182	eP	11	41.36	2.9
IMA	2.85	338	eP	11	38.40	-1.8
RDT	2.97	193	eP	11	42.40	0.5
SLKM	2.99	172	eP	11	42.16	0.0
KLU	3.10	127	eP	11	44.32	0.6
			eS	12	22.65	
RSO	3.12	196	eP	11	44.91	0.8
DOT	3.14	83	eP	11	46.61	2.4
SVW	3.18	224	eP	11	45.50	0.6
GLI	3.19	143	eP	11	45.42	0.4
VZW	3.20	137	eP	11	45.54	0.3
VLZ	3.22	135	eP	11	45.66	0.3
NNL	3.44	182	eP	11	49.61	1.1
SEW	3.46	167	eP	11	50.25	1.5
BRLK	3.71	179	eP	11	53.49	1.0
MTU	3.85	154	eP	11	51.55	-2.8
GLB	3.93	118	eP	11	56.58	1.0
CNPM	3.95	181	eP	11	56.16	0.3
PDB	3.98	203	eP	11	55.40	-0.8
TGL	4.72	121	eP	12	07.01	0.1
BALM	4.75	117	eP	12	07.47	0.3
ANM	6.39	286	eP	12	26.80	-3.4
INK	8.65	48	P	12	58.00	-3.8

50 obs. associated

% OCT 01, 1990 10h 18m 17.56± 0.86s
39.123 N ± 6.8km 27.559 E ± 8.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.7 (ISK).

IZM	0.76	198	ePg	18	32.50	0.0
			eSg	18	43.00	
DST	0.96	60	iPn	18	35.80	0.0
EZN	1.18	307	ePn	18	39.50	-0.1
BNT	1.26	13	ePn	18	40.90	-0.1
KGT	1.34	352	iPn	18	42.50	0.3

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

& OCT 01, 1990 10h 31m 17.79s
63.444 N 150.906 W
DEPTH = 19.2km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.7 (PMR).

HUR	0.74	129	iP	31	31.91	0.0
			iS	31	42.92	
RND	0.92	91	eP	31	35.03	0.0
MCK	0.93	71	eP	31	35.34	0.3
			eS	31	48.24	
CUT	1.08	164	iP	31	37.34	-0.4
NEA	1.39	34	eP	31	40.75	-1.5
			eS	31	59.74	
SKT	1.50	191	iP	31	43.17	-0.6
WRH	1.62	49	eP	31	44.31	-1.1
			eS	32	06.34	
CCB	1.82	47	iP	31	47.08	-1.3
			iS	32	10.96	
PWA	1.86	165	eP	31	48.75	-0.2
GHO	1.91	150	eP	31	49.66	-0.2
SUA	1.99	178	iP	31	50.59	-0.4
HDA	2.00	59	eP	31	49.83	-1.1
			eS	32	17.53	
FBA	2.00	42	ePc	31	49.50	-1.5
SML	2.03	143	eP	31	51.27	-0.2
PLRM	2.03	155	eP	31	51.37	-0.1
			eS	32	19.97	
PMR	2.03	155	ePd	31	51.40	-0.1
NCG	2.13	196	eP	31	51.44	-1.6
			eS	32	21.65	
GLM	2.18	43	eP	31	52.19	-1.5
CGLM	2.20	194	eP	31	53.02	-1.1
CRP	2.26	195	eP	31	54.29	-0.7
DDM	2.28	79	eP	31	55.43	0.3
PMS	2.30	164	eP	31	55.87	0.6
BGL	2.30	198	eP	31	54.92	-0.4
SCM	2.31	133	eP	31	55.62	0.0
SPU	2.33	194	eP	31	55.30	-0.5
CKL	2.35	197	iP	31	55.89	-0.3
TTA	2.37	260	eP	31	52.30	-4.1
TOA	2.56	120	ePc	32	00.20	1.1
IMA	2.89	337	ePd	32	01.10	-2.7
SLKM	2.96	173	eP	32	04.93	0.2
RDT	2.97	194	eP	32	03.91	-0.9
KLU	3.03	128	eP	32	06.74	1.0
DOT	3.07	83	eP	32	08.58	2.3
RSO	3.12	197	eP	32	06.87	-0.2
GLI	3.13	143	iP	32	08.33	1.2
VZW	3.14	138	eP	32	08.19	0.9
VLZ	3.15	135	eP	32	08.09	0.7
SVW	3.22	225	eP	32	07.80	-0.6
NNL	3.42	183	eP	32	13.28	2.1
SEW	3.42	168	eP	32	12.66	1.5
GLB	3.86	118	eP	32	18.62	1.1
CNPM	3.94	182	eP	32	18.10	-0.4
PDB	3.99	205	eP	32	17.39	-1.9
TGL	4.65	122	eP	32	29.30	0.4
BALM	4.68	117	eP	32	29.74	0.6
ANM	6.46	286	eP	32	49.80	-4.4
INK	8.61	48	P	33	21.00	-3.2

47 obs. associated

& OCT 01, 1990 11h 26m 58.14s
63.461 N 151.035 W
DEPTH = 14.1km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.5 (PMR).

HUR	0.80	127	iP	27	13.18	-0.1
			eS	27	24.55	
MCK	0.98	73	eP	27	16.58	0.2
			eS	27	31.33	
RND	0.98	92	eP	27	16.50	0.0
			eS	27	30.22	
CUT	1.12	161	iP	27	18.60	-0.1
NEA	1.41	37	iP	27	22.00	-1.4
			eS	27	42.22	
SKT	1.50	189	iP	27	24.44	-0.2
			eS	27	43.70	
WRH	1.65	51	eP	27	25.54	-1.2
CCB	1.85	49	iP	27	28.31	-1.4
PWA	1.89	163	eP	27	29.96	-0.3
GHO	1.96	149	eP	27	30.95	-0.3
			eS	27	55.54	
SUA	2.01	176	eP	27	31.84	-0.2
FBA	2.03	43	ePc	27	30.80	-1.4
HDA	2.04	60	eP	27	31.06	-1.3
PLRM	2.07	154	eP	27	32.59	-0.3
PMR	2.07	154	eP	27	32.70	-0.2
SML	2.08	142	eP	27	32.63	-0.3
NCG	2.13	195	eP	27	32.94	-0.9
CGLM	2.21	192	eP	27	34.66	-0.3
GLM	2.21	44	eP	27	33.45	-1.5
CRP	2.26	194	eP	27	35.60	-0.2
			eS	28	03.57	
BGL	2.29	197	eP	27	36.17	0.0
TTA	2.32	259	eP	27	36.20	-0.3
PMS	2.33	162	eP	27	37.15	0.5
DDM	2.33	80	eP	27	37.31	0.6
SPU	2.34	192	eP	27	36.98	0.2
CKL	2.35	196	eP	27	37.16	0.1
SCM	2.37	132	eP	27	36.90	-0.3
TOA	2.62	119	eP	27	41.30	0.6
IMA	2.85	338	ePc	27	42.00	-2.1
RDT	2.97	193	eP	27	46.06	0.4
SLKM	2.99	172	eP	27	45.87	-0.1
KLU	3.09	127	eP	27	48.31	0.9
RSO	3.12	196	eP	27	48.20	0.3
DOT	3.13	83	eP	27	49.21	1.3
GLI	3.18	143	eP	27	49.28	0.6
SVW	3.19	224	eP	27	49.00	0.2
VLZ	3.21	135	eP	27	49.35	0.4
SEW	3.45	167	eP	27	54.65	2.2
MTU	3.84	154	eP	27	58.03	0.0
GLB	3.92	118	eP	28	00.19	1.0
CNPM	3.95	181	eP	28	00.98	1.4
FYU	3.97	36	eP	27	58.37	-1.4
PDB	3.98	204	eP	28	01.71	1.7
TGL	4.71	121	eP	28	10.71	0.2
BALM	4.73	117	eP	28	10.86	0.0
ANM	6.40	286	eP	28	30.90	-3.3
INK	8.64	48	P	29	02.00	-3.5

47 obs. associated

? OCT 01, 1990 11h 45m 29.17± 1.28s
15.104 N ±20.0km 145.604 E ±24.7km
DEPTH = 181.4 ± 13.4 km
4.4mb (7 obs.)
MARIANA ISLANDS (216)

01d 11h

PJG	1.67	205	eP	46	03.00	-0.2
GUMO	1.67	205	eP	46	03.00	-0.2
GUA	1.70	203	eP	46	03.30	-0.2
			eS	46	26.30	
WB5	36.48	198	eP	52	20.50	1.9
LZH	42.65	307	Pd	53	11.50	1.9
	1.5s	25.00nm			4.6mb	
CHTO	44.69	282	eP	53	26.80	0.9
	0.9s	3.41nm			3.9mb	
GBA	65.81	278	Pc	55	56.80	-0.6
	0.3s	1.40nm			4.3mb	
INK	72.70	23	eP	56	40.00	1.5
MBC	76.64	14	eP	57	03.00	2.1
	0.6s	4.00nm			4.3mb	
KEV	85.31	342	eP	57	47.00	0.6
SOD	86.69	340	eP	57	51.00	-2.2
SUF	89.37	336	iP	58	06.30	0.3
	0.4s	3.10nm			4.6mb	
NUR	91.19	335	eP	58	13.00	-1.4
HFS	95.67	338	eP	58	34.10	-1.0
	0.4s	1.30nm			4.6mb	
NB2	95.89	340	P	58	36.20	0.0
	0.7s	0.90nm			4.2mb	
KIC	143.69	304	PKP	04	43.70	-1.3
TIC	143.74	305	PKP	04	44.00	-1.1
LIC	144.00	304	PKP	04	44.60	-0.9
ZOBO	147.53	97	PKP	04	58.90	6.9X
CNCB	147.69	98	PKP	05	00.00	7.8X
S.D. = 1.4 on 18 of 20 obs.						

OCT 01, 1990 11h 50m 56.05± 0.37s
7.072 S ± 8.5km 106.494 E ±10.1km
DEPTH = 53.5km (2 depth phases)
4.7mb (7 obs.)
JAVA (277)

TRT	6.12	96	ePc	52	28.90	2.7
			iS	53	32.40	
NANU	17.69	151	eP	54	56.60	-3.7X
			eS	57	58.00	
MBL	19.04	139	iPd	55	15.20	-1.6
			eS	58	30.00	
MEKA	22.56	151	eP	55	43.40	-9.5X
			e	56	02.00	85kmX
			eS	59	57.00	
KNA	23.45	114	iPd	56	01.80	0.2
MRWA	23.78	159	eP	56	06.00	1.3
			eS	00	25.00	
MTN	24.92	105	eP	56	15.30	-0.5
MUN	26.38	161	eP	56	31.00	1.7
			e	56	55.00	111kmX
			eS	01	27.00	
KLB	26.57	158	eP	56	29.50	-1.5
			eS	01	27.00	
CHG	26.78	344	eP	56	32.60	-0.4
CHTO	26.78	344	eP	56	32.20	-0.8
	0.8s	2.93nm			3.9mb	
			pP	56	47.00	61km
			sP	56	53.50	
COOL	27.38	152	eP	56	37.00	-1.4
			i	57	04.70	130kmX
WB5	29.88	118	eP	56	59.90	-1.2
			eS	01	52.00	
ASPA	31.05	125	iPc	57	10.40	-1.0
	0.5s	6.60nm			4.6mb	
FORR	31.13	142	eP	57	10.00	-1.9
	0.4s	6 00nm			4.7mb	
			i	57	55.50	224kmX
			e	03	16.00	
GYA	33.33	0	P	57	32.00	0.8
QIS	34.74	116	iP	57	43.00	-0.4
GBA	35.42	305	Pd	57	50.40	1.2
	0.7s	19.00nm			5.1mb	
HYB	36.80	312	eP	58	03.00	2.1
GUN	40.08	331	P	58	27.60	-0.9
DMN	40.21	330	P	58	29.00	-0.4
KKN	40.27	330	P	58	29.20	-0.7
ADE	40.59	138	eP	58	31.50	-0.8
GKN	40.77	330	P	58	33.00	-0.9
XAN	40.95	3	P	58	35.00	-0.2
STK	40.97	132	iPc	58	35.70	0.4
	0.4s	52.00nm			5.6mb	
			iPP	58	49.50	
POO	41.04	309	eP	58	36.80	0.7
LZH	43.00	357	P	59	01.50	9.4X
NDI	45.39	323	eP	59	10.00	-1.2
GTA	46.66	353	eP	59	21.50	0.2
	1.0s	10.00nm			4.7mb	
CAN	48.03	132	eP	59	34.30	2.2
BRS	48.25	121	iPc	59	36.50	2.6
			i	59	49.00	46km
CN2	53.46	17	eP	00	12.00	-1.0
MAIO	61.66	318	eP	01	11.00	0.0
MAW	67.15	197	iP	01	46.70	0.6
SPA	82.98	180	iPd	03	17.10	0.4
	0.9s	8.64nm			4.8mb	
VRI	87.96	317	ePd	03	43.00	1.5
MLR	88.41	316	eP	03	45.50	1.6
SOB1	143.70	244	ePKP	10	26.30	-1.6
SIO	144.63	33	ePKP	10	27.90	-0.9
TUL	144.78	32	ePKP	10	28.20	-0.9
	0.8s	7.10nm				
BAO	146.12	228	ePKP	10	35.50	3.5X
SIV	153.99	208	PKP	10	52.80	9.0X
			i	11	06.60	
CNCB	155.65	193	ePKP	10	51.00	4.3X
ZOBO	156.21	193	PKP	11	05.00	17.5X
S.D. = 1.3 on 38 of 45 obs.						

• OCT 01, 1990 12h 49m 58.72± 0.78s
14.543 N ±14.8km 124.232 E ±17.5km
DEPTH = 33.0km (normal)
4.6mb (4 obs.)
LUZON, PHILIPPINE ISLANDS (249)

CHG	24.58	283	eP	55	18.50	1.3
CHTO	24.58	283	eP	55	16.90	-0.3
	0.8s	4.21nm			4.1mb	
LZH	28.17	323	eP	55	50.50	0.1
	1.5s	17.00nm			4.5mb	
WB5	35.63	163	eP	56	56.00	0.3
GUN	37.98	297	P	57	16.20	0.3
PKI	38.32	296	P	57	18.40	-0.3
KKN	38.47	296	P	57	19.60	-0.3
DMN	38.59	296	P	57	20.40	-0.5
GKN	39.07	297	P	57	24.20	-0.6
ASPA	39.13	166	eP	57	24.80	-0.3
	0.6s	7.30nm			4.6mb	
KEV	78.96	339	eP	02	14.00	13.7X
SOD	79.60	337	eP	02	05.00	1.2
HFS	87.36	332	eP	02	42.60	-0.9
	0.6s	2.70nm			4.7mb	
S.D. = 0.7 on 12 of 13 obs.						

OCT 01, 1990 13h 44m 54.60± 0.38s
14.561 N ± 6.0km 124.062 E ± 8.4km
DEPTH = 33.0km (normal)
4.9mb (14 obs.) 4.0Msz (3 obs.)
LUZON, PHILIPPINE ISLANDS (249)

QIZ	14.32	290	eP	48	15.00	-2.1
	N 13s	0.40um				
	E 17s	1.90um				
			pP	48	25.70	
SSE	16.67	351	Pd	48	55.00	7.7X
	1.2s	19.00nm			4.1mb	
WHN	18.24	332	eP	49	08.00	1.1
	E 11s	0.30um				
GYA	20.11	309	P	49	28.80	0.1
	Z 16s	0.90um			4.2MszX	
	N 13s	0.40um				
	E 13s	1.00um				
GUMO	20.20	90	eP	49	48.40	18.8X
PJG	20.20	90	eP	49	48.20	18.6X
LOE	21.65	281	eP	49	44.00	-0.4
KMI	22.61	301	Pd	49	57.00	2.9X
	2.0s	120.00nm			5.0mb	
	Z 16s	1.10um			4.4MszX	
			pP	50	07.50	40kmX
NNT	23.73	268	eP	50	01.00	-3.8X
XAN	23.74	327	iPc	50	05.20	0.4
			S	54	18.00	
BDT	24.24	280	eP	50	06.00	-3.7X
CHG	24.42	283	iPc	50	12.00	0.5
	1.0s	24.75nm			4.7mb	
CHTO	24.42	283	iP	50	11.90	0.4
	1.2s	31.94nm			4.8mb	
CD2	24.74	315	eP	50	15.20	0.7
	Z 16s	0.80um			4.3MszX	
	E 12s	0.44um				
TRT	24.86	208	iPd	50	17.50	1.8
TIY	25.26	338	eP	50	19.40	-0.1
	Z 20s	0.60um			4.1Msz	
	N 15s	0.40um				
BJI	26.31	346	eP	50	28.00	-1.0
SNY	27.17	359	eP	50	41.20	4.3X
	Z 16s	0.60um			4.3MszX	
	E 15s	0.70um				
LZH	28.05	323	Pc	50	45.50	0.3
	1.5s	68.00nm			5.1mb	
	Z 15s	0.48um			4.2MszX	
	N 12s	0.39um				
			eS	55	28.00	
HHC	28.37	340	eP	50	48.00	0.1
	Z 15s	0.60um			4.3MszX	
BTO	28.69	337	eP	50	50.00	-0.9
	N 12s	0.30um				
	E 12s	0.30um				
GTA	32.65	324	Pc	51	26.00	0.1
	1.2s	20.00nm			4.9mb	
	Z 16s	0.30um			4.1MszX	
	E 13s	0.30um				
LSA	33.86	302	eP	51	37.30	0.4
WB5	35.69	163	eP	51	51.00	-1.1
GUN	37.82	297	P	52	10.60	0.2
	1.0s	114.00nm			5.7mb	
QIS	38.10	156	iP	52	11.80	-0.5
PKI	38.16	296	P	52	13.20	0.0
	0.8s	38.00nm			5.3mb	
KKN	38.32	296	P	52	13.20	-1.2
DMN	38.43	296	P	52	15.40	0.0
	0.9s	53.00nm			5.4mb	
GKN	38.92	297	P	52	18.40	-1.0
ASPA	39.19	166	iPc	52	20.90	-0.6
	0.8s	23.20nm			5.0mb	
	Z 22s	0.13um			3.7Msz	
			iS	58	15.00	
			LR	08	08.00	
MEKA	41.28	188	eP	52	38.30	-0.3
WMQ	42.54	321	P	52	49.50	0.6
	Z 16s	0.50um			4.5MszX	
GBA	45.17	275	P	53	11.00	0.5
KOD	45.65	270	eP	53	16.20	1.5
KSH	48.78	310	P	53	41.50	2.8X
STK	49.14	160	iPd	53	41.50	0.2
	0.9s	5.00nm			4.5mb	
ADE	51.18	165	eP	53	57.00	0.1
QUE	54.53	297	eP	54	22.10	-0.1
MAIO	61.11	304	iPc	55	08.50	0.3
KEV	78.88	339	eP	56	55.00	-0.8
SOD	79.52	337	iP	56	59.70	0.4
			i	57	06.00	
SUF	80.77	332	eP	57	07.00	1.0
INK	81.11	22	eP	57	16.00	8.3X
MBC	82.02	12	eP	57	14.50	2.2
	1.0s	6.00nm			4.6mb	
VRI	84.70	316	ePd	57	27.50	0.9
MLR	85.33	316	eP	57	30.00	0.1
HFS	87.27	332	eP	57	38.40	-0.6
	1.0s	7.50nm			4.9mb	
	Z 18s	0.07um			4.1Msz	
			LR	32	36.00	
NB2	87.98	333	P	57	41.30	-1.1
	1.0s	3.40nm			4.6mb	
OHR	90.24	313	eP	57	51.00	-2.6
SIV	174.85	107	PKP	05	03.00	0.4
S.D. = 0.9 on 42 of 51 obs.						

• OCT 01, 1990 14h 16m 48.55± 1.11s
13.096 N ± 8.8km 145.297 E ± 8.7km
DEPTH = 57.4 ± 7.5 km
4.6mb (9 obs.) 4.5Msz (6 obs.)
MARIANA ISLANDS (216)

GUA	0.58	320	ePd	17	01.50	0.2
			eS	17	16.50	
GUMO	0.64	319	ePd	17	02.20	0.1
PJG	0.64	319	eP	17	02.10	0.0
CHJJ	23.55	347	eP	21	53.70	-0.8
MAT	24.20	346	(P)	22	01.00	0.1
	1.0s	10.00nm			4.3mb	
	Z 18s	0.69um			4.2Msz	
			eS	26	14.00	
MTMJ	24.34	345	eP	22	00.50	-1.8
SSE	28.53	313	P	22	53.50	12.7X
	1.0s	10.00nm				
MDJ	34.16	340	eP	23	36.50	6.3X
WB5	34.49	198	eP	23	32.90	-0.4
BJI	37.09	322	eP	23	55.00	0.0
	Z 17s	0.52um			4.4MszX	
			eS	29	40.00	

ASPA	38.20	197	eP	24	04.00	-0.6
	0.8s		6.00nm			4.6mb
	Z 24s		0.29um			4.0MszX
			LR	38	44.00	
GYA	38.55	296	P	24	10.80	3.1X
	Z 20s		0.90um			4.6Msz
	N 20s		1.00um			
XAN	39.03	309	eP	24	12.00	0.5
HHC	40.42	319	eP	24	20.00	-2.9
	Z 22s		1.00um			4.6Msz
	E 20s		0.78um			
BTO	41.27	318	eP	24	31.50	1.6
	N 17s		0.80um			
	E 17s		0.80um			
LZH	43.65	309	P	24	53.00	3.5X
	Z 18s		0.48um			4.4Msz
CHTO	44.83	284	eP	25	00.20	1.1
	0.8s		1.10nm			3.7mb
GTA	47.81	312	eP	25	24.00	1.5
	Z 22s		0.60um			4.5Msz
	E 12s		0.20um			
			PcP	26	52.30	
			eS	32	21.00	
GUN	57.08	295	P	26	32.40	0.4
PKI	57.48	294	P	26	34.80	0.0
KKN	57.60	295	P	26	35.20	-0.3
DMN	57.75	294	P	26	37.00	0.4
WMQ	57.78	314	P	26	36.70	0.4
	Z 30s		0.60um			4.5MszX
			eS	34	36.20	
GKN	58.18	295	P	26	39.40	-0.1
SVW	63.90	28	eP	27	18.00	0.5
HYB	64.26	283	eP	27	21.00	0.5
TTA	64.42	26	eP	27	21.20	0.4
	1.1s		10.00nm			4.7mb
GBA	65.82	279	Pc	27	28.20	-2.3
	0.5s		2.50nm			4.5mb
KOD	66.32	276	eP	27	34.70	0.6
IMA	66.54	23	eP	27	34.90	0.4
	1.1s		5.60nm			4.5mb
PMR	67.02	28	eP	27	36.50	-0.9
	0.7s		6.60nm			4.7mb
FBA	68.49	25	eP	27	45.50	-1.1
POO	68.58	285	iPc	27	46.50	-1.4
INK	74.66	22	eP	28	22.50	-0.8
MBC	78.65	14	eP	28	46.00	0.5
	1.0s		7.00nm			4.6mb
MAIO	79.03	305	eP	28	50.00	1.6
YKA	83.10	27	eP	29	09.40	0.2
	1.3s		10.90nm			4.7mb
WDC	83.23	50	eP	29	16.30	6.0X
ORV	84.22	51	eP	29	20.80	5.5X
MHC	84.58	53	eP	29	23.20	5.9X
CMB	85.40	52	eP	29	22.70	1.4
FRI	86.16	53	eP	29	30.80	5.8X
SOD	88.47	340	eP	29	36.00	0.4
LRM	89.06	43	eP	29	39.70	0.5
SUF	91.08	336	iP	29	48.00	0.1
NUR	92.87	335	eP	29	56.00	-0.1
MAW	99.13	203	eP	30	42.00	17.7X
KIC	144.51	301	PKPc	36	21.04	-0.1
TIC	144.59	302	PKPc	36	21.16	-0.1
LIC	144.82	301	PKPc	36	22.08	0.4
	0.8s		33.50nm			
ZOBO	147.54	100	PKP	36	34.00	7.2X
	Z 18s		0.21um			5.0Msz
			LR	25	36.00	
LPB	147.56	100	ePKP	36	33.00	6.4X
CNCB	147.66	101	PKP	36	31.00	4.0X
SIV	154.32	100	PKP	36	53.20	17.1X
			i	37	18.00	
	S.D. = 1.0		on	41	of 54	obs.

---

* OCT 01, 1990 14h 44m 13.54± 0.45s
30.831 S ± 9.4km 177.600 W ± 9.0km
DEPTH = 33.0km (normal)
5.1mb (7 obs.) 4.8Msz (4 obs.)
KERMADEC ISLANDS (178)

PUZ	7.99	204	eP	46	07.90	-2.4
			eS	47	40.70	
WEL	12.12	208	eP	47	07.00	0.3
			eS	49	15.00	
SVA	13.16	343	ePd	47	21.90	1.3
KHZ	13.57	209	eP	47	19.80	-6.1X
DZM	16.73	298	iPc	48	10.90	3.9X
BRS	26.07	270	iPd	49	48.00	2.1
COO	26.20	263	iPc	49	50.90	3.8X
	0.8s		32.00nm			5.0mb
CNB	27.97	252	eP	50	05.00	1.8
CAN	28.26	252	eP	50	09.40	3.6X
			e	53	19.80	
BWA	28.76	254	eP	50	11.20	0.9
RMQ	29.77	270	eP	50	19.00	-0.4
TOO	31.11	247	eP	50	33.00	1.8
CMS	31.21	259	eP	50	33.00	0.9
CTA	34.21	280	iPd	50	59.20	0.9
	0.8s		44.78nm			5.4mb
			iS	56	29.00	
STK	34.72	257	iPd	51	03.00	0.4
	0.9s		34.00nm			5.3mb
			iPP	51	13.40	
ADE	36.70	252	eP	51	21.00	1.6
QIS	39.69	275	eP	51	44.60	0.1
ASPA	43.43	267	eP	52	12.90	-2.3
	0.6s		20.10nm			5.1mb
	Z 16s		1.96um			5.1MszX
			iScP	57	53.80	
			eS	58	43.20	
			LR	09	47.00	
WB5	44.46	272	eP	52	22.00	-1.5
			eS	57	58.10	
FORR	46.22	255	eP	52	37.00	-0.3
	0.4s		37.00nm			5.7mb
SBA	47.63	184	e(P)	52	52.60	4.7X
COOL	51.97	253	eP	53	20.00	-1.7
KLB	54.53	251	eP	53	36.00	-4.6X
MUN	55.68	250	eP	53	48.00	-0.9
MRWA	56.73	253	eP	53	55.00	-1.5
SPA	59.34	180	iPc	54	16.50	1.9
	1.0s		14.50nm			5.1mb
NANU	59.54	260	eP	54	15.00	-1.3
MAW	72.03	201	iPc	55	37.50	1.9
MAT	78.79	325	(P)	56	10.00	-4.5X
PLM	85.82	47	eP	56	52.00	0.8
SBB	86.11	46	eP	56	52.00	-0.4
ISA	86.36	44	eP	56	54.00	0.3
TPC	86.83	47	eP	56	56.00	0.0
GLA	86.92	48	eP	56	57.00	0.6
CLC	86.99	45	eP	56	57.00	0.2
GSC	87.14	46	eP	56	57.00	-0.5
SNY	90.34	320	Pc	57	11.60	-0.8
TIA	90.51	313	eP	57	12.10	-1.2
CN2	90.69	323	Pc	57	12.40	-1.5
BJI	93.47	315	eP	57	26.00	-0.8
	Z 20s		0.30um			4.7Msz
ALQ	93.57	51	eP	57	27.00	-0.7
	1.0s		3.25nm			4.7mb
	Z 18s		0.34um			4.9Msz
			e	57	37.70	
TIY	94.41	312	eP	57	29.20	-2.1
	Z 20s		0.50um			5.0Msz
XAN	94.65	307	eP	57	35.00	2.5
SOB1	122.48	127	ePKP	03	21.60	13.9X
MAIO	132.69	293	ePKP	03	27.00	0.2
KEV	138.62	347	ePKP	03	37.00	0.2
SOD	140.69	345	ePKP	03	41.00	0.4
SUF	144.63	341	iPKP	03	44.30	-3.3X
	0.4s		12.70nm			
NUR	146.83	340	iPKP	03	51.00	-0.3
	0.7s		46.70nm			
UPP	149.22	345	iPKP	03	57.40	2.3X
NB2	149.23	352	PKP	03	57.70	2.5X
	0.9s		24.10nm			
HFS	149.73	349	ePKP	03	55.70	-0.2
	0.8s		30.20nm			
	Z 20s		0.13um			4.7Msz
			LR	58	06.00	
HRI	151.70	284	ePKP	04	06.00	6.1X
MML	151.90	282	ePKP	04	07.00	6.9X
RMN	152.32	278	ePKP	04	07.00	6.2X
KIC	154.75	163	PKP	04	11.30	6.8X
MLR	156.52	315	ePKP	04	25.00	18.9X
	S.D. = 1.3		on	41	of 57	obs.

% OCT 01, 1990 15h 44m 16.49± 1.07s
39.497 N ± 9.0km 29.064 E ±10.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.8 (ISK).

DST	0.35	288	ePg	44	24.00	0.2
			iSg	44	30.20	
YLV	1.09	12	iPn	44	37.30	0.2
KHL	1.23	163	ePn	44	39.20	-0.1
BNT	1.23	315	ePn	44	38.00	-1.4
KGT	1.66	306	iPn	44	46.80	1.1
	S.D. = 1.3		on	5	of 5	obs.

% OCT 01, 1990 15h 46m 45.07± 1.02s
38.935 N ±10.4km 29.188 E ±11.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

KHL	0.66	157	iPg	46	58.20	-0.2
			iSg	47	07.70	
ALT	0.73	80	ePg	46	59.40	-0.1
DST	0.80	327	iPg	46	58.70	-1.9
			eSg	47	11.00	
KCT	1.46	334	ePn	47	12.30	0.8
YLV	1.64	5	iPn	47	14.30	0.2
KGT	2.10	317	ePn	47	21.80	1.1
	S.D. = 1.4		on	6	of 6	obs.

? OCT 01, 1990 15h 47m 15.15± 1.07s
42.001 N ± 9.5km 20.173 E ±11.4km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.3 (TTG).

PVY	0.61	346	ePg	47	27.70	0.1
			eSg	47	37.50	
ULC	0.69	267	ePg	47	29.00	0.2
			eSg	47	39.50	
TTG	0.80	303	ePg	47	30.40	-0.3
			eSg	47	43.30	
OHR	1.01	152	ePg	47	34.20	0.0
			eSg	47	49.80	
	S.D. = 0.4		on	4	of 4	obs.

? OCT 01, 1990 16h 36m 40.15± 2.88s
20.506 S ±19.8km 171.524 W ±41.7km
DEPTH = 33.0km (normal)
5.0mb (4 obs.)
TONGA ISLANDS REGION (174)

BKM	19.33	275	iPd	41	05.20	-0.5
PUZ	19.62	205	eP	41	16.00	7.2X
WLZ	20.58	210	P	41	17.10	-1.7
DZM	20.59	262	iPd	41	24.00	4.9X
KIW	23.35	207	P	41	46.50	0.0
MTW	23.36	205	eP	41	47.90	1.4
CAW	23.49	206	P	41	48.10	0.3
WDW	23.65	206	eP	41	49.20	-0.2
MRW	23.74	206	eP	41	50.00	-0.2
TCW	23.91	207	eP	41	51.60	-0.2
KHZ	25.21	207	eP	42	04.90	0.5
	0.3s		14.00nm			5.0mb
LTZ	26.06	208	P	42	11.80	-0.5
STK	43.27	245	eP	44	35.90	-4.6X
	1.6s		51.00nm			5.0mb
ASPA	50.42	256	iPd	45	38.50	1.7
	1.0s		22.00nm			5.1mb
			iS	51	15.90	
WB5	50.59	261	eP	45	43.10	5.0X
CHTO	95.99	288	eP	50	05.00	-0.7
	1.0s		1.25nm			4.3mb
	S.D. = 1.0		on	12	of 16	obs.

OCT 01, 1990 16h 44m 05.18± 0.73s
39.224 N ± 6.6km 20.497 E ± 6.9km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 3.0 (ATH).

IGT	0.33	338	ePd	44	11.98	-0.1
			iS	44	19.50	
KEK	0.73	312	ePb	44	19.50	0.0
VLS	1.05	176	ePb	44	25.00	0.1
EVR	1.07	106	ePb	44	24.50	-0.8
AGG	1.44	97	iPc	44	32.10	0.8
			eS	44	53.42	
KZN	1.46	42	ePn	44	31.50	-0.1
FNA	1.70	23	ePc	44	42.02	7.0X
			eS	44	54.86	
LIT	1.77	60	iPc	44	36.34	0.3
			eS	44	59.98	
OHR	1.90	7	ePn	44	41.70	3.7X
GRG	2.26	40	ePd	44	45.26	2.0X
SKO	2.84	14	ePn	44	45.50	-5.9X

01d 16h

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

OCT 01, 1990 18h 02m 24.91± 0.60s
30.376 N ± 7.3km 103.736 E ± 9.2km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
SICHUAN PROVINCE, CHINA (307)
ML 4.2 (BJI).

CD2	0.53	2	ePg	02 37.50	1.4	
			Sg	02 49.80		
GYA	4.68	146	Pn	03 34.00	-1.1	
			Sn	04 30.20		
KMI	5.31	190	Pnc	03 45.00	0.9	
			Pg	04 03.00		
			Sn	04 42.00		
LZH	5.70	1	ePn	03 58.00	8.4X	
			Sn	05 03.80		
			Sg	05 29.00		
XAN	5.71	49	Pn	03 49.50	-0.2	
			Sn	04 54.50		
			Sg	05 25.50		
GTA	9.57	341	eP	04 47.20	3.6X	
TIY	10.27	42	eP	04 52.60	-0.5	
BTO	11.41	25	eP	05 07.00	-1.7	
N	10s		0.30um			
E	10s		0.20um			
CHTO	12.31	202	eP	05 22.60	1.9	
PKI	16.28	265	P	06 12.00	-1.1	
KKN	16.34	266	P	06 12.00	-1.7	
CN2	21.82	46	eP	07 17.50	1.5	
SUF	57.85	328	iP	12 16.70	1.4	
	0.4s		2.50nm		4.6mb	
WB5	58.01	146	eP	12 16.00	-0.9	
NB2	65.10	328	P	13 04.40	0.1	
	0.7s		0.90nm		4.0mb	

S.D. = 1.4 on 13 of 15 obs.

& OCT 01, 1990 18h 06m 39.58s
58.732 N 142.779 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>.

YAH	1.72	17	eP	07 05.18	-4.7	
			eS	07 24.61		
PNL	1.98	60	eP	07 08.38	-5.1	
BCPM	2.02	51	eP	07 09.26	-4.9	
			eS	07 32.58		
TGL	2.03	359	eP	07 09.28	-5.0	
HON	2.14	69	eP	07 10.83	-5.0	
			eS	07 36.03		
BALM	2.32	5	eP	07 13.41	-5.1	
GLB	2.77	350	eP	07 19.54	-5.3	
	7 obs. associated					

OCT 01, 1990 18h 35m 31.90± 0.14s
18.229 N ± 2.8km 65.932 W ± 2.6km
DEPTH = 166.9km (6 depth phases)
4.7mb (45 obs.)
PUERTO RICO REGION (90)
Felt strongly in eastern Puerto Rico; felt throughout the island. Also felt in the U.S. and U.K. Virgin Islands.

LPR	0.10	37	P	35 54.00	-1.3	
SJG	0.24	241	eP	35 54.50	-1.0	
LRS	0.87	274	P	35 57.30	-0.3	
MEP	1.00	265	P	35 58.70	0.2	
MGP	1.12	259	P	35 59.70	0.1	
SKI	3.17	106	eP	36 23.28	0.6	
			eS	37 03.37		
NEV	3.38	108	eP	36 26.15	0.8	
CPB	3.95	98	eP	37 05.56	32.9X	
BPA	4.06	106	eP	36 33.65	-0.4	
			eS	37 20.47		
SEG	4.60	113	eP	36 41.63	0.5	
PAG	4.62	118	eP	36 42.30	0.9	
			S	37 40.00		
MGG	4.98	117	eP	36 46.87	0.8	
			S	37 46.00		
BBL	5.04	122	eP	36 47.69	0.7	
FDF	5.76	126	iPc	36 56.79	0.4	
			S	38 13.20		
CRM	5.92	125	iPc	36 59.21	0.6	
MVM	6.06	126	ePc	37 01.18	0.7	
SLB	6.42	132	eP	37 05.56	0.2	
			eS	38 29.37		
SVV	6.67	136	eP	37 08.47	-0.1	
			eTT	41 50.95		
SOA	6.67	136	eP	37 07.94	-0.6	
SVB	6.68	137	iP	37 08.73	0.1	
			eTT	41 54.43		
GRW	7.31	145	eP	37 17.12	0.0	
TPR	8.59	144	eP	37 35.00	0.8	
TRN	8.72	149	eP	37 37.52	1.7	
UPA	16.09	237	iPd	39 10.80	0.5	
	0.8s		119.40nm		5.3mb	
DVD	18.77	241	iPc	39 45.00	4.1X	
LHS	20.92	324	P	40 04.00	1.4	
JSC	21.04	322	P	40 05.00	1.2	
BLA	22.80	329	P	40 21.00	0.1	
TUL	31.71	310	e(P)	41 41.40	-0.5	
	1.2s		12.30nm		4.5mb	
SIV	34.34	172	iPd	42 03.00	-1.7	
ZOBO	34.35	184	P	42 04.00	-1.4	
LPB	34.61	184	P	42 07.00	-0.4	
CNCB	34.88	183	P	42 08.80	-1.0	
SOB1	36.80	136	iPc	42 26.40	1.0	
BAO	38.01	151	Pc	42 36.10	0.4	
ALO	39.58	303	iPd	42 48.90	0.3	
	1.0s		11.25nm		4.5mb	
			e	43 23.50	157km	
ANMO	39.58	303	P	42 49.00	0.4	
	0.8s		7.93nm		4.4mb	
GOL	40.17	311	P	42 53.00	-0.5	
	0.9s		9.47nm		4.4mb	
PPD	42.49	160	eP	43 11.60	-0.7	
BW06	44.20	313	P	43 26.20	0.0	
	1.0s		12.00nm		4.4mb	
JFO	45.46	150	eP	43 35.50	-0.6	
FFC	45.65	331	eP	43 36.00	-1.2	
	0.5s		5.00nm		4.3mb	
GLA	46.09	299	eP	43 43.00	2.0	
LRM	47.19	316	eP	43 50.20	0.4	
TPC	47.22	300	eP	43 51.00	1.1	
BAR	47.60	298	eP	43 52.00	-0.8	
PLM	47.81	299	eP	43 56.00	1.3	
GSC	47.98	301	eP	43 56.00	0.2	
PEC	48.11	299	P	43 57.40	0.6	
CLC	48.68	302	eP	44 01.00	-0.2	
TNP	48.70	305	P	44 01.20	-0.2	
	0.8s		5.88nm		4.3mb	
SBB	48.74	300	eP	44 02.00	0.3	
BCH	50.63	301	P	44 16.80	0.7	
MDZ	50.90	183	eP	44 16.90	-1.1	
NEW	51.00	318	P	44 18.10	-0.5	
	0.9s		18.75nm		4.8mb	
TOL	57.10	54	eP	45 04.00	0.9	
LKO	59.00	90	P	45 13.78	-2.9	
	0.9s		26.00nm		5.1mb	
EKA	59.76	36	P	45 22.00	0.8	
	0.6s		3.70nm		4.4mb	
LPF	59.92	45	eP	45 22.00	-0.4	
	0.6s		7.20nm		4.7mb	
GRR	60.08	44	eP	45 23.30	-0.2	
	0.6s		9.00nm		4.8mb	
TIC	60.35	93	Pc	45 25.32	-0.6	
FLN	60.37	44	eP	45 25.30	-0.2	
	0.8s		17.45nm		5.0mb	
MFF	60.40	46	eP	45 25.60	-0.1	
	0.6s		14.45nm		5.0mb	
LIC	60.46	93	Pc	45 26.26	-0.4	
EPF	60.54	50	eP	45 27.20	0.4	
	0.6s		19.85nm		5.2mb	
LDF	60.59	44	eP	45 26.80	-0.2	
	0.6s		10.80nm		4.9mb	
KIC	60.70	93	Pc	45 27.88	-0.4	
	0.6s		20.00nm		5.2mb	
LFF	60.91	48	eP	45 29.20	0.0	
	0.6s		9.00nm		4.8mb	
LPO	61.22	49	eP	45 30.90	-0.4	
	0.6s		15.35nm		5.0mb	
RJF	61.48	48	eP	45 32.70	-0.4	
	0.8s		16.10nm		5.0mb	
LSF	61.53	47	eP	45 33.20	-0.2	
	0.6s		5.40nm		4.6mb	
CAF	61.85	48	eP	45 35.30	-0.3	
	0.8s		15.45nm		4.9mb	
TCF	62.01	47	eP	45 36.30	-0.3	
	0.6s		9.90nm		4.9mb	
MAF	62.25	47	eP	45 37.80	-0.3	
	0.6s		3.60nm		4.4mb	
BGF	62.46	47	eP	45 39.00	-0.5	
	0.6s		8.10nm		4.8mb	
AVF	62.81	46	eP	45 41.30	-0.5	
	0.8s		9.40nm		4.7mb	
SSF	62.93	46	eP	45 42.10	-0.5	
	0.6s		6.30nm		4.7mb	
SMF	63.14	46	eP	45 44.10	0.1	
	0.6s		2.70nm		4.3mb	
LOR	63.18	46	eP	45 43.50	-0.7	
	0.6s		14.45nm		5.0mb	
DOU	63.77	43	P	45 48.10	0.0	
MBC	64.06	348	eP	45 50.00	0.5	
	1.0s		4.00nm		4.3mb	
ENN	64.65	42	eP	45 54.00	0.3	
	0.8s		11.00nm		4.8mb	
MEM	64.70	42	P	45 54.30	0.3	
INK	64.95	338	eP	45 54.00	-1.3	
			pP	46 41.00	201kmX	
FRF	65.14	50	eP	45 56.80	-0.2	
	1.0s		8.00nm		4.6mb	
LPL	65.15	48	eP	45 57.60	0.3	
	0.6s		3.60nm		4.4mb	
LPG	65.17	48	eP	45 57.90	0.4	
	0.6s		4.05nm		4.5mb	
BSF	65.17	45	eP	45 56.60	-0.6	
	1.0s		8.00nm		4.6mb	
WTS	65.25	41	eP	45 58.00	0.5	
	0.7s		18.00nm		5.1mb	
			e	46 38.50	171km	
CDF	65.49	45	eP	45 58.80	-0.5	
	0.6s		4.50nm		4.5mb	
ABH	65.67	43	eP	46 00.62	0.3	
SBF	65.70	50	eP	46 00.60	-0.1	
	0.8s		13.45nm		4.9mb	
PGF	66.92	51	eP	46 08.10	-0.4	
	0.8s		8.05nm		4.6mb	
NB2	68.01	31	P	46 15.10	0.3	
	0.8s		4.40nm		4.3mb	
SOTA	68.18	46	iPc	46 16.30	0.0	
	0.5s		8.40nm		4.8mb	
			ipP	46 56.10	166km	
			i	47 15.90		
HFS	69.22	32	eP	46 21.50	-0.6	
	0.5s		1.10nm		3.9mb	
KHC	69.63	44	iPd	46 25.30	0.3	
			e	47 06.00	170km	
BRG	69.73	42	iP	46 25.70	0.2	
	1.0s		14.00nm		4.7mb	
			i	47 06.40	170km	
PRU	70.18	43	eP	46 28.50	0.2	
			e	47 09.00	168km	
ZST	72.05	44	eP	46 39.50	0.1	
IMA	72.60	335	P	46 42.20	-0.3	
	0.7s		3.34nm		4.2mb	
SOD	74.32	24	eP	46 53.00	0.7	
STK	151.70	236	iPKPc	55 08.40	6.7X	
	0.8s		5.00nm			

S.D. = 0.7 on 100 of 103 obs.

? OCT 01, 1990 20h 01m 50.02± 3.67s
51.213 N ±27.2km 16.060 E ±23.2km
DEPTH = 10.0km (geophysicist)
POLAND (548)

KSP	0.40	158	iP	01 58.20	0.0	
	0.3s		58.00nm			
			iS	02 06.60		
BRG	1.38	257	iPg	02 15.40	0.2	
			iSg	02 35.60		
PRU	1.56	219	Pn	02 18.50	0.6	
			Pg	02 19.70		
			Sn	02 35.80		
			Sg	02 43.10		
CLL	1.92	274	e(Pg)	02 23.00	-0.1	
			eSg	02 50.00		
KHC	2.63	218	ePn	02 32.50	-0.7	
			Pg	02 49.50		
			Sn	03 07.70		
			Sg	03 17.20		

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

? OCT 01, 1990 20h 42m 38.24± 1.80s
30.264 N ±22.2km 49.942 E ±23.8km
DEPTH = 33.0km (normal)
4.9mb (2 obs.)
WESTERN IRAN (347)

DHR 3.95 177 eP 43 43.50 5.5X
BBU 4.06 173 ePn 43 39.60 0.0
eSn 44 19.60
RYD 6.26 209 eP 44 09.50 -1.3
eS 45 29.00
OASM 7.02 235 eP 44 29.00 7.6X
AFIF 8.60 226 ePc 44 53.80 10.4X
MAIO 10.00 51 eP 45 04.00 1.2
KMSA 11.01 208 ePc 45 18.70 2.1
QUE 14.71 86 eP 46 08.10 2.2
GKN 30.32 86 P 48 48.20 -1.0
DMN 30.82 86 P 48 52.80 -0.9
KKN 30.92 86 P 48 53.80 -0.8
0.5s 11.00nm 4.9mb
PKI 31.09 86 P 48 55.20 -0.9
1.0s 24.00nm 5.0mb
GUN 31.41 85 P 48 58.40 -0.6
S.D. = 1.5 on 10 of 13 obs.

OCT 01, 1990 21h 45m 31.02± 0.19s
17.778 S ± 6.2km 167.603 E ± 5.0km
DEPTH = 5.0km (geophysicist)
4.9mb (10 obs.) 4.9Msz (8 obs.)
VANUATU ISLANDS (186)

BKM 0.62 80 iPd 45 41.90 -1.5
iS 45 49.00
PVC 0.68 87 iPd 45 43.00 -1.6
iS 45 49.50
DZM 4.41 194 iPc 46 38.40 -1.8
iS 47 31.10
NDF 9.38 91 eP 47 55.00 5.1X
SGE 9.84 90 eP 47 58.50 2.1X
SVA 10.34 94 eP 48 05.00 1.9
VUN 10.34 93 eP 48 04.10 0.9
HNR 11.14 317 eP 48 10.00 -4.1X
COO 19.15 225 eP 50 05.00 7.1X
RMO 19.48 240 eP 50 01.50 -0.4
CTA 20.32 260 iPc 50 14.10 3.2X
1.1s 40.51nm 4.7mb
iS 54 09.00
MNG 23.76 165 eP 50 46.20 1.1
CNB 23.83 219 e(P) 50 49.00 3.0X
CMS 23.98 231 eP 50 49.00 1.6
TCW 24.05 168 P 50 48.90 1.0
MTW 24.27 165 P 50 49.90 -0.2
MOW 24.46 166 eP 50 52.40 0.4
BLW 24.46 166 P 50 52.80 0.8
STK 27.38 234 eP 51 19.80 0.5
1.2s 7.00nm 4.3mb
iS 56 04.00
WB5 31.50 261 eP 51 55.00 -1.3
ASPA 32.01 254 iPc 51 59.50 -1.3
0.5s 12.30nm 5.1mb
Z 20s 3.38um 5.0Msz
LR 03 56.00
NWAO 47.52 241 eP 54 10.00 0.7
SBA 60.11 180 e(P) 55 38.50 -2.7
MAT 60.75 333 (P) 55 43.00 -3.1X
1.0s 19.00nm 5.2mb
eS 04 12.00
MDJ 71.11 332 eP 56 50.50 -1.9
SPA 72.33 180 eP 56 57.30 -2.4
1.0s 24.00nm 5.3mb
CN2 72.41 329 eP 56 59.00 -1.2
1.0s 20.00nm 5.2mb
Z 24s 0.51um 4.7MszX
BJI 74.83 322 eP 57 13.50 -0.8
1.0s 6.00nm 4.6mb
Z 16s 0.58um 5.0MszX
eS 06 48.00
TIY 75.71 318 eP 57 19.30 -0.3
Z 18s 0.50um 4.9Msz
N 14s 0.50um
XAN 75.98 313 Pd 57 21.00 -0.1
CHG 76.63 295 eP 57 26.20 1.2
CHTO 76.63 295 eP 57 24.00 -1.0
0.9s 4.69nm 4.6mb
HHC 78.11 320 eP 57 32.80 -0.1
LZH 80.60 313 eP 57 46.50 -0.1
1.5s 14.00nm 4.7mb
Z 22s 0.50um 4.6Msz
GTA 85.00 314 eP 58 09.20 0.2
1.2s 10.00nm 4.9mb
Z 20s 0.50um 4.9Msz
WMO 95.08 314 eP 58 52.50 -3.9X
Z 24s 0.40um 4.8MszX

KEV 122.74 345 ePKP 04 27.00 -1.8
SOD 124.49 343 iPKP 04 31.00 -1.4
SUF 127.79 339 ePKP 04 35.00 -3.9X
0.5s 4.30nm
NUR 129.79 337 ePKP 04 41.00 -1.7
APO 133.31 342 ePKP 04 38.50 -10.9X
0.5s 1.20nm
NB2 133.63 344 PKP 04 49.30 -0.8
0.7s 2.80nm
SPC 139.06 327 ePKP 04 58.70 -2.2X
KSP 139.87 332 ePKP 05 02.50 0.5
BRG 140.88 334 ePKP 05 02.60 -1.2
SRO 140.93 327 iPKP 05 04.50 0.5
CLL 140.94 335 ePKP 05 05.00 1.1
PRU 141.27 332 ePKP 04 59.00 -5.6X
Z 19s 0.40um 5.2Msz
e 05 04.50
ZST 141.30 328 ePKP 05 05.80 1.1
KHC 142.32 332 PKP 05 01.60 -4.9X
SKO 142.41 317 ePKP 05 03.00 -3.9X
WTS 142.64 340 ePKP 05 06.00 -0.9
0.8s 8.00nm
GRF 142.91 334 ePKP 05 02.00 -5.5X
Z 21s 0.20um 4.9Msz
OHR 143.25 316 ePKP 05 02.00 -6.4X
ENN 143.98 340 ePKP 05 05.00 -4.2X
1.0s 16.00nm
LJU 144.04 328 ePKP 05 06.00 -3.5X
FUR 144.06 333 ePKP 05 06.60 -2.9X
MEM 144.09 340 PKP 05 05.20 -4.2X
CEY 144.30 327 ePKP 05 06.80 -3.2X
VOY 144.38 328 ePKP 05 06.20 -4.0X
i 05 07.60
UCC 144.44 342 PKP 05 13.00 3.0X
FVI 144.53 330 PKP 05 08.00 -2.2X
WATA 144.55 332 ePKP 05 07.50 -3.0X
1.0s 13.40nm
SNF 144.72 342 PKP 05 08.70 -1.7
SOTA 144.80 332 iPKPd 05 07.70 -3.2X
1.0s 53.60nm
i 06 13.30
ipP 06 17.30
ETA 144.82 353 iPKPd 05 08.40 -2.1X
0.9s 86.00nm
WLF 144.85 339 PKP 05 10.10 -0.6
DOU 144.99 341 PKP 05 09.60 -1.3
e 05 15.00
e 06 17.60
VVI 145.14 329 PKP 05 10.00 -1.4
OGA 145.15 331 iPKPd 05 09.10 -2.5X
ECB 145.20 354 iPKPd 05 08.40 -2.8X
0.9s 91.00nm
ECP 145.34 353 iPKPd 05 08.00 -3.4X
0.7s 187.00nm
CTI 145.47 330 PKP 05 10.50 -1.6
CDF 145.50 337 ePKP 05 09.10 -2.9X
1.0s 124.00nm
SLE 145.54 335 ePKPc 05 09.50 -2.5X
SAX 145.60 333 ePKPc 05 10.20 -2.3X
CAI 145.65 133 ePKP 05 09.50 -3.7X
FEL 145.65 335 ePKP 05 10.29 -2.1
OSS 145.69 332 ePKPc 05 10.70 -1.8
ZLA 145.81 335 ePKPc 05 09.90 -2.6X
VAL 145.87 358 iPKP 05 12.00 -0.3
LLS 146.05 333 ePKPc 05 11.40 -1.7
BSF 146.16 337 ePKP 05 10.80 -2.4X
1.0s 20.00nm
HAU 146.18 337 ePKP 05 11.10 -2.0
0.8s 21.50nm
Z 20s 0.13um 4.7Msz
SAL 146.32 330 PKP 05 17.00 3.7X
MDI 146.57 331 PKP 05 13.00 -0.7
ARV 146.60 326 PKP 05 11.50 -2.4X
TMA 146.69 333 ePKPc 05 13.30 -0.9
ROI 146.81 317 PKP 05 15.00 0.6
CSI 146.88 317 PKP 05 14.40 -0.1
SFI 146.88 327 PKP 05 16.50 2.3X
TDS 146.92 317 PKP 05 13.90 -0.6
DUI 146.92 322 PKP 05 15.50 1.0
VAI 146.93 332 PKP 05 13.60 -0.6
PGD 146.98 327 PKP 05 16.00 1.3
CRE 147.04 327 PKP 05 15.00 0.3
ASS 147.04 325 PKP 05 15.00 0.3
SGO 147.07 319 PKP 05 14.50 -0.1
MMK 147.13 333 ePKPc 05 16.30 1.3
MGR 147.15 319 PKP 05 14.00 -0.8
SDI 147.27 322 PKP 05 16.20 1.1

MME 147.27 329 PKP 05 17.50 2.3X
CZI 147.29 317 PKP 05 14.80 -0.2
AZI 147.31 323 PKP 05 15.00 0.0
DIX 147.34 334 ePKPc 05 15.40 0.1
BDI 147.42 328 PKPc 05 16.00 0.7
ORX 147.45 333 PKP 05 15.37 0.1
BOB 147.46 330 PKP 05 15.50 0.2
MNS 147.48 324 PKP 05 14.20 -1.2
FLN 147.61 345 ePKP 05 14.80 -0.5
0.8s 40.30nm
LDF 147.68 345 ePKP 05 14.70 -0.7
0.8s 26.85nm
LOR 147.69 339 ePKP 05 15.10 -0.4
0.8s 30.90nm
Z 20s 0.22um 5.0Msz
PII 147.70 328 PKP 05 16.50 0.9
RMP 147.85 323 PKP 05 18.10 2.2X
LBF 147.90 339 ePKP 05 15.60 -0.3
0.9s 41.75nm
GRC 147.93 340 PKP 05 17.23 1.4
LSD 147.95 334 PKP 05 17.63 1.3
SDI 147.95 315 PKP 05 17.20 1.1
SSF 147.99 339 ePKP 05 16.20 0.2
0.8s 45.65nm
PCP 148.05 331 PKP 05 16.91 0.7
GRR 148.05 345 ePKP 05 16.10 0.1
0.9s 42.60nm
LPL 148.08 334 ePKP 05 17.30 0.8
0.8s 24.20nm
LPG 148.08 334 ePKP 05 17.10 0.5
0.8s 26.85nm
RSP 148.15 333 PKP 05 17.32 0.9
AVF 148.28 339 ePKP 05 16.60 0.2
1.0s 19.00nm
BHB 148.39 333 PKP 05 16.70 0.0
LPF 148.43 345 ePKP 05 17.30 0.7
0.9s 65.50nm
FIN 148.46 331 PKP 05 18.55 1.7
BNI 148.47 334 PKPc 05 19.70 2.7X
RRL 148.53 333 PKP 05 18.96 1.7
ROB 148.55 332 PKP 05 18.86 1.8
BGF 148.65 340 ePKP 05 17.90 0.8
0.9s 41.75nm
PZZ 148.73 333 PKP 05 17.73 0.3
ENR 148.80 332 PKP 05 18.45 1.0
STV 148.83 332 PKP 05 17.93 0.4
IMI 148.84 331 PKP 05 19.17 1.7
AGO 149.00 339 PKP 05 19.82 2.2X
MAF 149.04 340 ePKP 05 19.10 1.4
0.9s 24.55nm
SBF 149.08 331 ePKP 05 18.60 0.7
1.0s 54.00nm
TCF 149.10 340 ePKP 05 19.20 1.4
1.0s 42.00nm
PYM 149.30 339 PKP 05 20.93 2.7X
PGF 149.32 328 ePKP 05 19.00 1.4
0.8s 56.40nm
LSF 149.35 341 ePKP 05 19.30 1.2
0.8s 33.60nm
MFF 149.52 343 ePKP 05 19.80 1.4
0.8s 45.65nm
LBL 149.66 338 PKP 05 22.07 3.5X
FRF 149.67 332 ePKP 05 20.40 1.7
1.0s 40.00nm
LRG 149.88 332 ePKP 05 21.30 2.3X
0.9s 42.60nm
LMR 149.91 332 ePKP 05 21.10 2.1X
0.9s 37.65nm
RJF 150.19 340 ePKP 05 22.00 2.6X
0.8s 25.50nm
CAF 150.35 339 ePKP 05 22.30 2.6X
0.9s 14.75nm
LFF 150.77 341 ePKP 05 22.90 2.6X
0.8s 34.90nm
LPO 150.85 340 ePKP 05 23.50 3.1X
0.8s 30.90nm
EPF 152.60 339 ePKP 05 27.40 4.3X
1.0s 19.00nm
S.D. = 1.1 on 101 of 153 obs.

& OCT 01, 1990 22h 23m 24.80s
60.101 N 151.379 W
DEPTH = 48.3km
KENAI PENINSULA, ALASKA (14)
<AGS-P>. ML 3.8 (PMR). Felt (IV)
at Homer.

01d 22h

NNL	0.07	145	iP	23	33.31	2.5
BRLK	0.42	143	iP	23	34.72	-0.4
HOM	0.46	197	iP	23	35.46	-0.1
CNPM	0.58	173	iP	23	36.42	-0.6
			eS	23	45.54	
NKA	0.65	6	iP	23	39.53	1.7
XLV	0.67	195	iP	23	37.10	-1.1
			eS	23	48.27	
RDT	0.70	313	iP	23	38.06	-0.6
			eS	23	48.31	
SLKM	0.71	54	iP	23	38.01	-0.7
			eS	23	48.71	
RSO	0.77	298	iP	23	39.09	-0.7
SEW	0.97	89	eP	23	41.10	-1.1
OPT	1.04	245	iP	23	42.39	-0.8
SPU	1.13	343	iP	23	44.18	-0.4
			iS	23	58.91	
CKL	1.20	337	iP	23	45.03	-0.5
CRP	1.23	342	iP	23	45.90	-0.2
CGLM	1.25	346	iP	23	46.06	-0.2
AUE	1.25	234	iP	23	45.35	-0.9
BGL	1.27	337	iP	23	46.29	-0.2
AUH	1.28	236	eP	23	45.97	-0.7
AUI	1.29	234	eP	23	45.86	-0.9
NCG	1.36	344	iP	23	47.70	-0.2
			eS	24	05.11	
SUA	1.40	13	eP	23	48.31	-0.1
PDB	1.45	259	eP	23	48.18	-0.8
			eS	24	06.84	
PMS	1.46	37	eP	23	49.12	0.0
CDD	1.65	225	iP	23	51.33	-0.5
PWA	1.72	25	eP	23	53.34	0.6
MCNL	1.76	240	eP	23	52.20	-1.2
PLRM	1.86	35	iP	23	54.05	-0.7
PMR	1.86	35	ePc	23	54.10	-0.6
MTU	1.87	92	eP	23	53.12	-1.9
SKT	1.89	358	eP	23	55.39	0.2
GHO	2.06	34	iP	23	57.04	-0.7
GLI	2.26	68	iP	23	57.98	-2.5
SML	2.27	40	eP	23	59.79	-0.8
SVW	2.32	298	iPc	23	59.50	-1.9
CUT	2.37	13	eP	24	02.69	0.7
KDC	2.43	194	eP	23	59.10	-3.7
VZW	2.57	66	iP	24	02.71	-2.2
SCM	2.63	47	eP	24	05.19	-0.6
VLZ	2.69	65	iP	24	04.73	-1.8
HUR	3.01	15	eP	24	13.18	2.1
KLU	3.02	60	iP	24	09.61	-1.7
TOA	3.23	49	iPc	24	13.50	-0.8
RND	3.53	19	eP	24	18.30	-0.3
TTA	3.60	324	eP	24	18.31	-1.3
MCK	3.82	17	eP	24	23.28	0.6
GLB	3.95	67	eP	24	21.52	-2.9
TGL	4.29	77	eP	24	26.63	-2.6
DDM	4.52	33	eP	24	32.87	0.3
BALM	4.56	74	eP	24	29.92	-3.1
NEA	4.62	12	eP	24	32.16	-1.6
WRH	4.65	18	eP	24	32.99	-1.2
HDA	4.79	24	eP	24	35.42	-0.8
CCB	4.86	18	eP	24	35.54	-1.6
DOT	4.96	41	eP	24	36.88	-1.9
FBA	5.09	17	eP	24	40.90	0.3
GLM	5.24	19	eP	24	43.05	0.4
IMA	6.08	351	ePc	24	53.60	-0.9
MBC	19.62	22	eP	27	53.00	1.5

58 obs. associated

OCT 01, 1990 22h 56m 17.86± 0.74s
38.291 N ±10.5km 25.029 E ± 7.3km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.2 (ATH).

ATH	1.08	253	ePg	56	38.40	0.2
			eSb	56	53.50	
APE	1.28	162	ePg	56	41.00	-0.7
PRK	1.36	45	ePb	56	41.50	-1.3
IZM	1.76	86	ePn	56	50.00	1.4
EZN	1.83	33	ePn	56	46.00	-3.6X
VLI	2.29	227	ePn	56	56.00	-0.2
ITM	2.70	247	ePn	57	02.50	0.4
BNT	3.05	46	ePn	57	02.00	-5.0X
DST	3.10	64	ePn	57	08.00	0.3

S.D. = 1.1 on 7 of 9 obs.

• OCT 01, 1990 22h 59m 00.57± 0.85s
38.344 N ±10.0km 25.000 E ± 9.1km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.1 (ATH).

ATH	1.08	250	ePb	59	21.50	0.7
			eSn	59	36.50	
APE	1.34	162	ePn	59	24.50	-0.8
PRK	1.34	47	ePb	59	25.60	0.3
IZM	1.78	88	ePn	59	33.00	1.4
EZN	1.80	34	ePn	59	30.50	-1.4
VLI	2.31	226	ePn	59	39.00	-0.2

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

& OCT 02, 1990 00h 17m 47.15s
66.123 N 151.290 W
DEPTH = 41.8km
ALASKA (676)
<AGS-P>.

IMA	0.97	268	eP	18	04.38	-0.3
			eS	18	17.20	
NEA	1.81	148	eP	18	16.45	0.1
			eS	18	36.44	
FBA	1.91	129	eP	18	18.52	0.8
			eS	18	39.74	
GLM	1.98	123	eP	18	19.16	0.2
			eS	18	42.46	
CCB	2.08	134	eP	18	20.40	0.2
			eS	18	44.82	
WRH	2.14	140	eP	18	20.89	-0.1
			eS	18	46.69	
HDA	2.51	131	eP	18	26.12	-0.2
			eS	18	57.68	

7 obs. associated

OCT 02, 1990 00h 22m 43.30± 0.59s
43.099 N ± 6.7km 0.449 W ± 4.3km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.4 (LDG).

OGE	0.07	346	Pg	22	45.76	0.1
JAU	0.08	136	Pg	22	46.15	0.2
			Sg	22	48.14	
ESCF	0.09	258	Pg	22	45.82	-0.2
			Sg	22	47.60	
ATE	0.19	266	Pg	22	47.32	-0.1
			Sg	22	50.31	
LHE	0.22	214	Pg	22	48.21	0.0
			Sg	22	51.28	
ISSF	0.26	255	Pg	22	48.99	0.1
			Sg	22	52.76	
MADF	0.28	280	Pg	22	49.25	0.1
			Sg	22	53.43	
EPF	0.58	96	Pg	22	55.00	-0.1
			Sg	23	03.80	
LPO	1.98	36	Pg	23	22.00	4.8X
			Sg	23	46.00	
LFF	2.03	25	Pg	23	22.80	4.9X
			Sg	23	48.00	
CAF	2.57	44	Pg	23	33.00	7.3X
			Sg	24	04.20	
RJF	2.62	32	Pg	23	32.80	6.4X
			Sg	24	05.80	

S.D. = 0.2 on 8 of 12 obs.

% OCT 02, 1990 01h 05m 37.98± 1.11s
43.107 N ±10.7km 0.431 W ± 9.0km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 1.0 (STR).

OGE	0.07	333	Pg	05	40.37	0.0
			Sg	05	42.16	
JAU	0.08	147	Pg	05	40.67	0.0
			Sg	05	42.55	
ESCF	0.11	255	Pg	05	40.51	-0.3
			Sg	05	42.21	
ATE	0.20	264	Pg	05	42.86	0.5
			Sg	05	45.05	
MADF	0.29	278	Pg	05	43.83	-0.2
			Sg	05	48.23	

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

OCT 02, 1990 02h 06m 23.60± 0.46s
43.919 N ± 3.4km 7.724 E ± 3.4km
DEPTH = 16.4 ± 6.1 km
NEAR SOUTH COAST OF FRANCE (379)
ML 2.9 (LDG), 2.7 (GEN).

IMI	0.12	94	P	06	27.45	0.0
			S	06	30.12	
SBF	0.22	255	Pg	06	28.70	-0.1
			Sg	06	32.00	
AUTN	0.23	290	Pg	06	28.70	-0.4
			Sg	06	32.28	
AURF	0.29	264	Pg	06	29.74	-0.3
REVF	0.31	235	Pg	06	30.50	0.1
TOUF	0.36	286	Pg	06	30.98	-0.3
ENR	0.38	325	P	06	31.25	-0.3
			S	06	36.13	
ROB	0.39	16	P	06	32.07	0.3
			S	06	37.41	
MVIF	0.41	267	Pg	06	32.04	-0.2
			Sg	06	38.04	
STV	0.43	319	P	06	32.27	-0.2
			S	06	37.71	
FIN	0.45	50	P	06	33.19	0.4
			S	06	39.20	
CALN	0.63	255	Pg	06	35.72	-0.1
DDI	0.68	330	P	06	36.60	-0.1
			eSg	06	45.70	
PZZ	0.74	323	P	06	37.81	0.1
			S	06	46.83	
PCP	0.86	43	P	06	40.58	0.9
			S	06	51.77	
FRF	0.86	246	Pg	06	40.10	0.4
			Sg	06	51.80	
LMR	1.06	237	Pg	06	43.80	0.7
			Sg	06	57.60	
LRG	1.09	245	Pg	06	44.60	1.0
			Sg	06	59.90	
RRL	1.21	326	P	06	45.19	-0.6
			S	07	00.61	
RSP	1.28	345	P	06	45.60	-1.2
			S	07	01.51	
BNI	1.36	327	P	06	48.30	0.3
			eSg	07	04.00	
LSD	1.59	345	P	06	50.52	-0.9
			S	07	09.59	
PGF	1.66	145	Pn	06	51.08	-1.1
LPG	1.72	337	Pg	06	54.50	1.2
			Sg	07	16.70	
LPL	1.75	336	Pg	06	54.80	1.2

S.D. = 0.7 on 25 of 25 obs.

& OCT 02, 1990 03h 51m 48.42s
62.530 N 151.146 W
DEPTH = 90.4km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.43	107	iP	52	02.69	-0.1
SKT	0.58	198	iP	52	03.92	-0.2
HUR	0.83	56	iP	52	06.26	-0.3
			eS	52	19.21	
PWA	1.07	145	eP	52	09.24	0.1
SUA	1.09	170	iP	52	09.93	0.3
NCG	1.23	203	eP	52	10.93	-0.3
			eS	52	28.88	
GHO	1.29	125	eP	52	12.17	0.1
			eS	52	30.91	
CGLM	1.29	199	eP	52	11.95	-0.1
PLRM	1.34	134	eP	52	12.17	-0.3
CRP	1.35	201	eP	52	13.22	0.3
BGL	1.40	205	eP	52	13.95	0.5
SPU	1.42	198	eP	52	13.59	0.0
CKL	1.45	203	eP	52	14.16	0.1
PMS	1.49	149	eP	52	14.22	-0.3
SML	1.51	118	iP	52	14.58	-0.1
RDT	2.05	198	eP	52	21.74	-0.2
SLKM	2.08	167	eP	52	22.68	0.4
TOA	2.36	98	eP	52	25.06	-1.0
GLI	2.54	129	eP	52	27.50	-1.0
VZW	2.63	122	eP	52	29.06	-0.7
KLU	2.68	111	eP	52	28.76	-1.6

21 obs. associated

• OCT 02, 1990 04h 08m 53.79± 0.30s
17.710 S ±10.5km 167.768 E ± 8.6km
DEPTH = 33.0km (normal)
4.8mb (3 obs.) 4.2Msz (1 obs.)
VANUATU ISLANDS (186)

PVC	0.52	93	iP	09	04.00	-0.7
			iS	09	12.50	
DZM	4.51	196	iPc	10	02.10	0.4
			iS	10	51.10	
RMO	19.65	240	iP	13	23.00	0.1
STK	27.54	234	eP	14	39.70	0.0
WB5	31.67	261	eP	15	14.90	-1.6
ASPA	32.18	254	iPc	15	19.80	-1.3
	0.5s	10.30nm			5.0mb	
Z	18s	0.41um			4.2Msz	
		LR		27	20.00	
MAT	60.76	333	iPc	19	01.20	-3.5X
SPA	72.40	180	iPc	20	19.20	0.7
	1.0s	13.00nm			4.9mb	
CHG	76.75	295	eP	20	45.00	0.9
CHTO	76.75	295	eP	20	45.30	1.2
	1.0s	4.00nm			4.4mb	
KEV	122.71	345	ePKP	27	46.00	-1.0
NUR	129.79	337	ePKP	27	57.00	-3.9X
NB2	133.61	344	PKP	28	07.90	-0.4
	0.8s	2.30nm				
ZST	141.32	328	ePKP	28	23.60	0.7
KHC	142.34	332	ePKP	28	20.50	-4.3X
OHR	143.31	316	ePKP	28	23.00	-3.7X
MEM	144.08	340	PKP	28	26.10	-1.5
CEY	144.33	327	ePKP	28	26.90	-1.4
VOY	144.40	328	iPKP	28	26.70	-1.8
FVI	144.55	330	PKP	28	27.00	-1.5
WATA	144.57	332	iPKPd	28	27.30	-1.5
	0.7s	4.10nm				
			e	28	36.00	
SQTA	144.82	332	iPKPd	28	28.40	-0.8
	0.7s	16.40nm				
			i	28	32.90	
			i	28	37.30	
GWF	144.90	337	PKP	28	28.62	-0.5
DOU	144.98	341	iPKPd	28	28.80	-0.3
OGA	145.17	332	ePKP	28	29.50	-0.4
WLS	145.47	337	PKP	28	30.30	0.2
CDF	145.50	337	PKP	28	30.30	0.1
SLE	145.55	335	ePKPc	28	30.30	0.0
SAX	145.61	334	ePKPc	28	30.90	0.2
FEL	145.65	336	ePKP	28	30.56	0.0
OSS	145.70	332	ePKPc	28	31.60	0.8
ECH	145.70	337	PKP	28	30.57	0.1
ZLA	145.82	335	ePKPc	28	31.20	0.4
MOF	146.01	336	PKP	28	31.10	0.0
VITF	146.13	338	PKP	28	31.65	0.5
BSF	146.16	337	ePKP	28	32.00	0.6
	0.8s	8.05nm				
HAU	146.18	337	ePKP	28	32.20	0.9
	0.7s	11.00nm				
LOMF	146.54	336	PKP	28	33.51	1.5
ARV	146.63	326	PKP	28	31.00	-1.2
TMA	146.71	333	ePKPc	28	34.00	1.6
ROI	146.87	317	PKP	28	34.00	1.3
CSI	146.94	318	PKP	28	34.60	1.8
CRE	147.07	327	PKP	28	36.50	3.5X
ASS	147.07	325	PKP	28	35.00	2.1X
SGO	147.12	320	PKP	28	35.00	2.1X
MMK	147.14	334	ePKPc	28	36.00	2.8X
MME	147.30	329	PKP	28	36.30	2.8X
SDI	147.31	322	PKP	28	36.00	2.6X
CZI	147.35	317	PKP	28	35.30	1.9X
DIX	147.35	334	ePKPc	28	36.20	2.6X
AZI	147.35	323	PKP	28	36.00	2.7X
BDI	147.45	329	PKP	28	35.00	1.5
BOB	147.48	331	PKP	28	37.00	3.5X
MNS	147.52	324	PKPc	28	36.00	2.4X
FLN	147.59	345	ePKP	28	35.80	2.3X
	0.8s	21.50nm				
LDF	147.66	345	ePKP	28	36.00	2.4X
	0.6s	6.30nm				
LOR	147.68	339	iPKPc	28	36.70	3.0X
	1.0s	20.00nm				
PII	147.73	328	PKP	28	36.00	2.2X
LBF	147.89	339	iPKPc	28	37.20	3.1X
	0.8s	6.70nm				
GRC	147.92	340	PKP	28	37.57	3.5X
SSF	147.98	340	iPKPc	28	37.60	3.4X
	0.8s	20.15nm				
SOI	148.01	315	PKP	28	38.00	3.5X
GRR	148.03	346	ePKP	28	37.30	3.1X
	0.8s	12.10nm				
LPL	148.08	334	iPKPc	28	38.30	3.6X
	0.8s	12.75nm				
LPG	148.09	334	iPKPc	28	38.50	3.7X
	0.8s	16.10nm				
SMF	148.23	339	ePKP	28	37.90	3.3X
	1.0s	12.00nm				
AVF	148.27	339	ePKP	28	37.90	3.3X
	0.8s	4.70nm				
LPF	148.40	346	ePKP	28	38.40	3.6X
	0.6s	14.45nm				
BGF	148.64	340	iPKPc	28	39.10	3.8X
	0.8s	18.80nm				
GRN	148.71	335	PKP	28	39.60	4.1X
SURF	148.88	333	PKP	28	40.36	4.4X
PLDF	148.89	338	PKP	28	40.11	4.3X
AGO	148.99	339	PKP	28	40.06	4.2X
MAF	149.03	340	iPKPc	28	40.30	4.4X
	0.8s	8.05nm				
TCF	149.09	340	iPKPc	28	40.30	4.3X
	0.9s	11.45nm				
SBF	149.10	332	iPKPc	28	40.10	4.0X
	0.8s	24.20nm				
PYM	149.30	339	PKP	28	41.16	4.7X
LSF	149.34	341	iPKPc	28	40.60	4.2X
	0.8s	13.45nm				
PGF	149.35	328	iPKPc	28	41.20	4.6X
	0.7s	30.85nm				
MFF	149.50	343	ePKP	28	41.20	4.6X
	0.8s	18.80nm				
LBL	149.66	338	PKP	28	42.30	5.5X
FRF	149.69	332	iPKPc	28	41.50	4.6X
	0.8s	13.45nm				
LRG	149.90	332	iPKPc	28	42.40	5.2X
	0.8s	17.45nm				
LMR	149.93	332	iPKPc	28	42.30	5.0X
	0.8s	20.15nm				
RJF	150.18	340	ePKP	28	43.20	5.6X
	0.8s	10.75nm				
CAF	150.34	339	iPKPc	28	43.70	5.8X
	0.8s	5.35nm				
LFF	150.76	341	iPKPc	28	44.70	6.2X
	0.8s	16.10nm				
LPO	150.84	340	ePKP	28	44.90	6.3X
	0.8s	18.80nm				
EPF	152.59	340	ePKP	28	48.80	7.5X
	0.8s	6.70nm				

S.D. = 1.0 on 39 of 89 obs.

OCT 02, 1990 05h 15m 01.96± 0.91s
33.502 S ± 6.7km 70.441 W ± 7.5km
DEPTH = 10.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

PCH	0.13	207	iPd	15	06.00	0.8
			iS	15	08.50	
SAN	0.19	285	iPd	15	07.40	1.2
			iS	15	11.70	
PEL	0.41	330	iPd	15	11.00	0.6
			iS	15	17.50	
ROCH	0.71	318	eP	15	16.00	-0.2
			i	15	26.70	
JACH	0.83	351	iP	15	17.20	-0.8
			iS	15	29.20	
LNV	0.93	241	iP	15	18.40	-1.2
			iS	15	31.50	
LCCH	0.94	271	iP	15	19.50	-0.4
			iS	15	32.70	
MDZ	1.47	66	eP	15	28.70	0.1

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

• OCT 02, 1990 06h 44m 48.90± 2.31s
44.303 N ±11.4km 126.274 W ±15.3km
DEPTH = 10.0km (geophysicist)
OFF COAST OF OREGON (30)
CL 3.3 (SEA).

NLO	2.68	47	P	45	33.46	0.6
HBO	2.89	98	P	45	36.23	0.3
PGO	2.96	65	P	45	37.49	0.8
			S	46	09.38	
GT2	2.98	72	P	45	37.21	0.1
			S	46	10.64	
BMW	3.05	44	P	45	38.33	0.2
RVW	3.10	52	P	45	38.83	0.0
			S	46	12.67	
ONR	3.12	33	P	45	38.95	0.0
VLMM	3.25	66	P	45	41.25	0.2
LVP	3.25	56	P	45	41.07	0.0
			S	46	16.39	
TDH	3.34	71	P	45	42.42	0.0
MTMW	3.35	58	P	45	42.19	-0.3
FL2	3.36	54	P	45	42.94	0.4
CZM	3.41	50	P	45	43.23	0.1
SHW	3.42	55	P	45	44.25	0.8
VBEM	3.43	76	P	45	43.66	0.1
HSR	3.44	56	P	45	44.13	0.3
STD	3.45	55	P	45	44.40	0.5
CPW	3.46	38	P	45	43.52	-0.4
OBH	3.46	28	P	45	43.82	-0.1
VLL	3.47	69	P	45	44.40	0.3
APW	3.47	46	P	45	44.39	0.4
ESD	3.47	56	P	45	44.74	0.5
CDFW	3.49	57	P	45	44.22	-0.2
TDL	3.52	53	P	45	44.81	0.0
APM	3.56	65	P	45	45.81	0.5
VFP	3.57	72	P	45	45.45	-0.2
KOSW	3.60	52	P	45	45.79	-0.1
LMW	3.67	48	P	45	46.59	-0.4
GULW	3.69	62	P	45	47.57	0.3
OOW	3.73	22	P	45	48.15	0.4
ASR	3.79	59	P	45	48.43	-0.3
			S	46	29.56	
OSD	3.95	26	P	45	51.14	0.1
LON	3.98	50	P	45	51.79	0.5
GLK	3.99	54	P	45	51.68	0.2
RVC	4.01	47	P	45	52.26	0.5
HDW	4.03	33	P	45	51.67	-0.3
VIPM	4.06	85	P	45	52.06	-0.5
WPW	4.10	53	P	45	53.00	0.0
FMW	4.16	49	P	45	53.96	-0.1
GL2	4.20	65	P	45	54.18	-0.3
STW	4.25	24	P	45	55.39	0.3
HTW	4.70	40	P	46	01.12	-0.5
JBO	4.72	74	P	46	01.20	-0.7
EBG	4.78	55	P	46	02.67	0.0
MXC	4.78	60	P	46	02.65	-0.1
MCW	4.98	27	P	46	05.46	0.0
MDW	5.13	61	P	46	07.44	-0.2
RSW	5.15	64	P	46	07.74	-0.3
ETW	5.30	49	P	46	09.69	-0.4
GBL	5.32	62	P	46	09.88	-0.3
WAH2	5.32	60	P	46	09.98	-0.2
LOCW	5.38	61	P	46	10.96	-0.2
CRF	5.45	60	P	46	11.79	-0.4
RC1	5.48	59	P	46	12.11	-0.4
PNT	6.78	40	iP	46	29.00	-1.9

S.D. = 0.4 on 55 of 55 obs.

& OCT 02, 1990 07h 34m 37.61s
62.686 N 150.918 W
DEPTH = 90.6km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.41	133	iP	34	51.82	-0.1
			eS	35	02.44	
HUR	0.66	63	iP	34	53.72	-0.3
			eS	35	05.28	
SKT	0.76	202	iP	34	54.82	-0.3
PWA	1.15	154	eP	34	59.42	0.1
			eS	35	17.11	
RND	1.19	52	eP	34	59.70	-0.2
			eS	35	15.72	
SUA	1.23	176	eP	35	00.44	-0.1
GHO	1.31	134	iP	35	01.32	-0.1
			eS	35	19.23	
PLRM	1.38	142	eP	35	01.81	-0.4
			eS	35	20.41	
PMR	1.38	142	iPd	35	01.80	-0.4
NCG	1.41	205	iP	35	02.25	-0.5
			eS	35	21.14	
CGLM	1.48	201	eP	35	02.87	-0.7
SML	1.50	125	iP	35	03.27	-0.5
CRP	1.54	203	eP	35	04.04	-0.4
PMS	1.58	155	eP	35	04.86	0.0
BGL	1.59	207	eP	35	05.09	0.1
SPU	1.60	200	eP	35	03.94	-1.2
CKL	1.64	205	eP	35	05.17	-0.5
SCM	1.89	115	eP	35	07.83	-1.1
NKA	1.96	185	eP	35	12.31	2.6
NEA	2.07	23	eP	35	10.20	-1.1
SLKM	2.21	171	eP	35	13.61	0.4
RDT	2.24	199	eP	35	13.12	-0.5
TOA	2.29	103	iPc	35	13.50	-0.8
TTA	2.35	278	iPc	35	14.20	-1.0
RSO	2.40	202	eP	35	14.95	-1.0
CCB	2.41	34	eP	35	14.68	-1.2

02d 07h

HDA	2.48	44	eP	35	15.84	-1.0
GLI	2.57	133	eP	35	16.40	-1.6
FBA	2.62	31	iPd	35	17.40	-1.3
KLU	2.64	115	eP	35	17.05	-2.0
VLZ	2.67	124	eP	35	17.28	-2.1
SVW	2.73	237	iPd	35	19.50	-0.8
GLM	2.79	33	eP	35	20.10	-1.0
KNIM	2.80	146	eP	35	19.40	-1.8
CNPM	3.18	183	eP	35	25.99	-0.4
IMA	3.60	342	iPd	35	32.00	-0.4

36 obs. associated

OCT 02, 1990 07h 48m 27.97± 0.84s
17.634 S ± 4.0km 167.831 E ± 4.1km
DEPTH = 26.3 ± 6.0 km
5.3mb (17 obs.) 5.3Msz (7 obs.)
VANUATU ISLANDS (186)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 23C
Centroid Location:
Origin Time 07:48:35.1 1.0
Lat 17.39S 0.13 Lon 167.71E 0.07
Dep 15.0 FIX Half-duration 1.7
Moment Tensor; Scale 10**16 Nm
Mrr= 8.89 0.42 Mtt= 0.17 0.60
Mff=-9.06 0.69 Mrt=-0.13 1.44
Mrf=-6.57 2.06 Mtf= 1.29 0.45
Principal Axes:
T Val= 11.06 Plg=71 Azm= 99
N 0.26 4 355
P -11.33 18 264
Best Double Couple:Mo=1.1*10**17
NP1:Strike=347 Dip=27 Slip= 80
NP2: 178 63 95

BKM	0.39	95	iPd	48	37.40	0.9
			iS	48	46.00	
PVC	0.47	103	iPd	48	38.00	0.3
DZM	4.60	196	iPd	49	35.10	-2.6
			iS	50	24.90	
SGE	9.62	91	eP	50	52.00	4.0X
VUN	10.13	94	ePd	50	59.00	4.0X
HNR	11.19	316	eP	51	13.00	3.7X
			e(S)	53	32.00	
SVO	11.48	316	eP	51	13.00	-0.4
BRS	16.95	232	eP	52	24.00	-1.0
			i	52	29.00	
			i	52	56.00	
COO	19.40	225	ePc	52	55.00	-0.2
	1.0s	54.00nm			4.8mb	
RMO	19.74	240	iP	52	58.00	-0.9
RAB	20.34	309	e(P)	53	04.00	-1.2
CTA	20.56	260	iPd	53	07.00	-0.5
	1.5s	111.11nm			5.0mb	
			iS	57	05.00	
PUZ	22.32	158	P	53	25.20	0.1
WHH	22.48	162	P	53	28.20	1.4
NOZ	22.73	159	P	53	28.10	-1.0
QLP	23.57	244	iPd	53	38.50	1.1
MNG	23.84	165	P	53	40.10	0.2
	0.6s	41.00nm			5.1mb	
PGZ	24.04	164	P	53	41.60	-0.2
	0.6s	83.00nm			5.4mb	
CNB	24.08	219	eP	53	43.00	0.6
BWA	24.09	222	eP	53	42.80	0.4
TCW	24.14	168	P	53	42.50	-0.3
CAW	24.21	167	P	53	43.70	0.2
CMS	24.24	231	eP	53	44.70	0.8
CAN	24.31	220	eP	53	47.50	3.0X
WEL	24.31	167	P	53	46.00	1.5
			eS	58	16.00	
THZ	24.44	171	P	53	46.50	0.7
BLW	24.55	166	P	53	45.80	-1.0
LTZ	25.35	172	P	53	53.40	-1.0
OIS	26.82	259	eP	54	08.00	-0.2
STK	27.64	234	iPd	54	15.70	0.1
	1.3s	16.00nm			4.6mb	
			iS	58	58.20	
ADE	31.14	231	eP	54	48.70	1.8
WB5	31.74	261	eP	54	48.70	-3.5X
			e	57	41.00	
ASPA	32.26	254	eP	54	54.70	-2.1
	1.5s	18.70nm			4.8mb	
	Z 20s	2.63um			4.9Msz	
			eS	59	49.70	
			LR	06	56.00	

GUMO	38.42	322	eP	55	52.00	2.7X
MBL	45.28	257	eP	56	46.00	0.5
	0.9s	27.00nm			5.2mb	
NANU	49.16	255	eP	57	16.00	0.1
HON	51.18	42	P	57	45.00	13.8X
	Z 20s	1.17um			4.9Msz	
SBA	60.25	180	e(P)	58	36.00	0.1
MAT	60.72	333	eP	58	38.00	-1.6
	1.1s	45.57nm			5.5mb	
			eS	06	54.00	
TSRJ	60.89	330	eP	58	37.70	-3.0X
MTMJ	60.93	333	P	58	40.70	-0.4
NIIJ	60.97	334	P	58	41.10	-0.1
NJ2	68.13	316	Pc	59	29.00	1.0
WHN	70.28	313	eP	59	46.50	5.3X
SNG	70.79	284	eP	59	41.00	-3.6X
MDJ	71.08	332	Pc	59	45.60	-0.2
CN2	72.40	329	Pc	59	53.50	-0.2
	1.0s	40.00nm			5.4mb	
			eS	09	18.00	
SPA	72.48	180	iPc	59	53.70	-0.4
	1.0s	98.50nm			5.8mb	
GYA	73.81	305	P	00	03.00	0.5
BJI	74.86	321	eP	00	08.00	-0.1
			eS	09	46.00	
TIY	75.75	318	Pc	00	13.00	-0.4
			pP	00	21.00	26kmX
XAN	76.05	313	P	00	15.50	0.4
			eS	09	55.50	
KMI	76.29	302	eP	00	17.00	0.1
	1.5s	80.00nm			5.5mb	
			pP	00	23.50	21kmX
CHG	76.77	295	eP	00	20.10	0.7
			e	08	18.20	
CHTO	76.77	295	eP	00	16.60	-2.8
HHC	78.14	320	P	00	28.00	1.4
			pP	00	34.00	19kmX
CD2	78.20	308	eP	00	28.10	1.0
			eS	10	23.60	
BTO	78.95	319	eP	00	32.00	0.9
MAW	79.41	202	eP	00	34.00	1.0
LZH	80.66	312	eP	00	42.00	1.5
	2.0s	46.00nm			5.2mb	
	Z 18s	0.72um			5.1Msz	
	E 13s	0.62um				
SVW	83.75	17	iPd	00	56.30	0.5
	1.0s	13.10nm			5.1mb	
GTA	85.06	314	eP	01	04.20	1.3
	1.2s	40.00nm			5.5mb	
TTA	85.15	16	ePc	01	02.70	-0.1
	1.1s	69.06nm			5.8mb	
			pP	01	12.30	30kmX
GCC	85.51	49	ePKP	01	06.00	1.0
MHC	85.90	49	ePKPc	01	07.70	0.6
SYP	85.93	52	eP	01	16.00	8.6X
PRI	86.10	50	ePKP	01	05.80	-2.3
BCH	86.13	51	P	01	08.00	-0.3
ABL	86.63	52	P	01	11.20	0.3
			pP	01	20.40	29kmX
WDC	86.69	46	ePKPc	01	10.70	-0.1
ORV	86.96	47	ePKP	01	11.70	-0.4
CMB	87.10	49	ePKPc	01	12.70	-0.2
FRI	87.15	50	ePKPc	01	13.00	-0.1
MWC	87.26	53	eP	01	14.00	0.1
TOA	87.37	20	ePd	01	23.80	10.1X
ISA	87.52	51	eP	01	15.00	0.0
SBB	87.62	53	eP	01	14.00	-1.5
RVR	87.69	53	eP	01	16.00	0.2
BAR	87.73	55	eP	01	16.00	0.0
PLM	87.84	54	eP	01	17.00	0.3
CLC	88.24	52	eP	01	19.00	0.6
GSC	88.63	52	eP	01	20.00	-0.4
TPC	88.75	54	eP	01	21.00	0.1
FBA	88.94	17	iPd	01	18.80	-2.3
	1.0s	54.75nm			5.8mb	
			pP	01	29.20	32kmX
GLA	89.31	55	eP	01	24.00	0.4
TNP	89.40	50	P	01	23.80	-0.3
	1.4s	17.71nm			5.2mb	
PNT	92.32	39	eP	01	37.00	-0.1
GBA	94.40	283	P	01	49.00	1.7
WMO	95.13	314	P	01	50.50	0.3
ALQ	96.49	56	eP	01	55.00	-1.8
	Z 18s	0.77um			5.2Msz	
KEV	122.65	345	iPKP	07	22.00	-0.1
	0.7s	17.40nm				
SOD	124.42	343	iPKP	07	25.20	-0.5

PPD	125.03	134	ePKP	07	27.40	-0.8
BUL	125.13	229	iPKPc	07	29.00	0.4
			ipP	07	38.40	
KRI	126.47	233	iPKPc	07	28.10	-3.3X
SUF	127.73	339	ePKP	07	32.00	-0.2
NUR	129.74	337	iPKP	07	36.00	-0.1
	0.7s	24.00nm				
APO	133.24	343	ePKP	07	32.60	-10.1X
	0.7s	2.50nm				
NB2	133.55	345	PKP	07	43.00	-0.4
	0.8s	8.00nm				
SPC	139.06	328	iPKP	07	53.80	-0.5
			e	11	31.00	
			e	27	46.30	
			e	30	41.10	
			e	31	29.50	
KSP	139.85	332	ePKP	07	47.20	-8.2X
			i	07	58.00	
BRG	140.85	334	ePKP	07	47.60	-9.6X
			e	07	57.60	
			e	11	35.00	
CLL	140.90	335	ePKP	07	52.00	-5.3X
	Z 20s	1.00um				5.6Msz
SOB1	141.05	131	ePKP	07	53.60	-5.1X
			e	07	58.30	
PRU	141.24	332	ePKP	07	52.50	-5.4X
			e	10	15.00	
ZST	141.29	328	ePKP	07	58.70	0.6
MOX	141.97	335	ePKP	07	54.50	-4.8X
	1.2s	9.00nm				
KHC	142.30	332	PKP	07	56.50	-3.4X
	1.3s	12.00nm				
WTS	142.58	341	ePKP	08	00.00	-0.2
	1.0s	26.00nm				
WET	142.60	333	ePKP	07	56.80	-3.6X
GRF	142.88	335	ePKPc	07	58.70	-2.1X
OHR	143.30	317	ePKP	07	57.50	-4.4X
TNS	143.52	338	ePKPd	08	00.20	-1.8
ENN	143.92	340	ePKP	08	00.00	-2.5X
	0.9s	23.00nm				
VBY	144.03	327	ePKP	08	02.80	-0.1
MEM	144.03	340	PKP	08	01.00	-1.7
FUR	144.03	333	iPKPd	08	01.80	-1.1
LJU	144.04	328	ePKPd	08	01.00	-1.9
ABH	144.13	338	ePKP	08	01.02	-2.0
CEY	144.30	327	ePKP	08	02.00	-1.4
VOY	144.37	328	iPKPd	08	01.90	-1.7
FVI	144.52	330	PKP	08	02.00	-1.6
WATA	144.53	332	iPKPd	08	03.00	-0.9
	0.8s	26.90nm				
RIY	144.59	327	ePKP	08	02.90	-0.9
SNF	144.65	342	PKP	08	03.30	-0.5
TRI	144.66	328	iPKPc	08	02.00	-1.9X
ETA	144.70	354	ePKP	08	02.60	-1.2
	0.8s	91.00nm				
SQTA	144.78	332	iPKPc	08	03.70	-0.6
	0.8s	103.00nm				
WLF	144.79	339	PKPd	08	04.40	0.4
HVAR	144.85	323	iPKPc	08	03.40	-1.0
GWF	144.85	337	PKP	08	03.57	-0.7
DOU	144.92	341	iPKPd+	08	04.30	0.0
ECB	145.08	354	ePKP	08	03.70	-0.7
	1.0s	157.00nm				
STR	145.12	337	PKP	08	05.09	0.5
VVI	145.13	329	PKP	08	04.00	-0.8
OGA	145.13	332	iPKPc	08	05.50	0.5
ECP	145.23	354	ePKP	08	04.60	-0.1
	0.8s	269.00nm				
WLS	145.42	337	PKP	08	05.64	0.4
CDF	145.45	337	PKP	08	05.64	0.3
CTI	145.45	330	PKP	08	05.30	-0.2
SLE	145.51	335	ePKPd	08	04.80	-0.6
LCI	145.55	317	PKP	08	06.00	0.4
SAX	145.57	334	ePKPd	08	05.90	0.0
CAI	145.58	132	iPKPc	08	05.00	-1.5
FEL	145.61	336	PKP	08	06.05	0.3
ECH	145.66	337	PKP	08	05.95	0.3
OSS	145.66	332	ePKPd	08	06.00	0.1
ZLA	145.78	335	ePKPd	08	06.20	0.3
MOF	145.97	337	PKP	08	06.87	0.6
LLS	146.01	334	ePKPd	08	06.50	0.0
VITF	146.09	338	PKP	08	07.53	1.3
VDL	146.11	333	ePKPd	08	06.80	0.1
BSF	146.11	337	PKP	08	05.90	-0.6
HAU	146.13	337	iPKPc	08	08.00	1.6
	0.8s	56.40nm				
	Z 20s	1.10um				5.6Msz

BBS 146.14 336 PKP 08 07.57 1.1
SAL 146.30 331 PKP 08 08.50 1.8
LOMF 146.50 336 PKP 08 08.89 1.8
MDI 146.55 332 PKPc 08 08.00 0.9
RSM 146.57 327 PKP 08 10.30 3.1X
ARV 146.60 326 PKP 08 07.80 0.5
ORI 146.66 318 PKP 08 10.50 3.0X
TMA 146.67 333 ePKPd 08 09.20 1.6
ROI 146.86 317 PKP 08 11.00 3.1X
SFI 146.88 327 PKP 08 08.30 0.6
VAI 146.90 333 PKP 08 09.00 1.4
CSI 146.93 318 PKP 08 11.80 3.8X
DUI 146.94 322 PKP 08 10.50 2.5X
TDS 146.96 317 PKP 08 08.50 0.5
PGD 146.98 327 PKP 08 11.00 2.9X
CRE 147.03 327 PKP 08 10.60 2.5X
ASS 147.04 326 PKP 08 10.30 2.2X
MMN 147.05 318 PKP 08 08.60 0.5
MMK 147.10 334 ePKPd 08 10.80 2.5X
SGO 147.10 320 PKP 08 09.40 1.3
MGR 147.19 319 PKP 08 08.00 -0.3
MME 147.27 329 PKPc 08 12.10 3.4X
BSS 147.27 320 PKPc 08 10.90 2.5X
SDI 147.29 323 PKP 08 10.90 2.4X
DIX 147.30 334 ePKPd 08 11.20 2.5X
AZI 147.33 323 PKPc 08 11.50 3.1X
CZI 147.33 317 PKP 08 09.30 0.8
BDI 147.41 329 PKP 08 08.50 -0.2
ORX 147.42 333 PKP 08 10.98 2.3X
BOB 147.44 331 PKP 08 11.80 3.1X
EMS 147.51 335 ePKPd 08 12.00 3.1X
FLN 147.53 346 iPKPc 08 11.60 3.0X
1.0s 100.00nm
LDF 147.60 345 iPKPc 08 11.70 3.0X
1.0s 56.00nm
LOR 147.63 339 iPKPc 08 12.20 3.3X
0.9s 76.80nm
Z 20s 1.02um 5.6Msz
PII 147.70 328 PKP 08 11.30 2.3X
LBF 147.84 339 iPKPc 08 12.70 3.5X
RMP 147.86 324 PKP 08 12.40 3.0X
GRC 147.87 340 PKP 08 12.98 3.8X
RDP 147.89 324 PKP 08 13.00 3.5X
LSD 147.91 334 PKP 08 13.23 3.6X
SSF 147.93 340 iPKPc 08 13.10 3.8X
GRR 147.97 346 iPKPc 08 13.00 3.7X
1.0s 66.00nm
SOI 148.00 315 PKP 08 13.40 3.8X
PCP 148.03 331 PKP 08 12.52 2.9X
LPL 148.04 335 iPKPc 08 13.90 4.1X
LPG 148.05 334 iPKPc 08 14.00 4.1X
0.8s 62.95nm
RSP 148.12 334 PKP 08 12.11 2.3X
SMF 148.18 339 iPKPc 08 13.40 3.7X
1.1s 73.25nm
AVF 148.22 340 iPKPc 08 13.40 3.6X
1.0s 42.00nm
CKI 148.24 332 PKP 08 11.90 2.0
LPF 148.34 346 iPKPc 08 14.00 4.1X
1.1s 146.50nm
BHB 148.36 333 PKP 08 11.90 1.8
FIN 148.44 331 PKP 08 13.13 2.9X
BNI 148.44 334 PKPc 08 14.60 4.2X
RRL 148.50 334 PKP 08 14.77 4.2X
ROB 148.52 332 PKP 08 13.54 3.1X
BGF 148.59 340 iPKPc 08 14.70 4.3X
DOI 148.64 333 PKP 08 12.50 1.9
PZZ 148.70 333 PKP 08 13.34 2.5X
ENR 148.78 332 PKP 08 13.03 2.1
STV 148.81 332 PKP 08 13.34 2.4X
IMI 148.81 331 PKP 08 14.57 3.6X
PLDF 148.84 338 PKP 08 15.46 4.5X
AGO 148.94 339 PKP 08 15.50 4.5X
MAF 148.98 340 iPKPc 08 15.80 4.8X
1.2s 89.25nm
TCF 149.04 340 iPKPc 08 16.00 4.9X
SBF 149.06 332 iPKPc 08 15.80 4.5X
1.0s 136.00nm
PYM 149.25 339 PKP 08 16.62 5.1X
LSF 149.28 341 iPKPc 08 16.20 4.7X
PGF 149.31 328 iPKPc 08 16.60 4.8X
MFF 149.45 344 iPKPc 08 16.70 5.0X
1.0s 116.00nm
LBL 149.61 338 PKP 08 17.68 5.7X
FRF 149.65 332 iPKPc 08 17.30 5.2X
1.0s 108.00nm
LRG 149.86 333 iPKPc 08 18.10 5.7X
1.0s 124.00nm
LMR 149.89 332 iPKPc 08 17.90 5.5X
1.0s 124.00nm
FAI 150.02 316 PKP 08 20.00 7.2X
RJF 150.13 340 iPKPc 08 18.70 5.9X
1.0s 88.00nm
CAF 150.29 339 iPKPc 08 19.20 6.1X
1.0s 43.00nm
LFF 150.70 341 iPKPc 08 20.20 6.6X
0.9s 91.75nm
LPO 150.79 340 iPKPc 08 20.30 6.5X
1.0s 96.00nm
EPF 152.54 340 iPKPc 08 24.20 7.7X
0.9s 36.05nm
LKO 169.73 219 PKP 08 32.24 -2.7X
S.D. = 1.0 on 146 of 236 obs.

OCT 02, 1990 08h 08m 26.37± 1.00s
17.617 S ± 4.1km 167.799 E ± 4.5km
DEPTH = 19.8 ± 7.1 km
5.3mb (19 obs.) 5.5Msz (21 obs.)
VANUATU ISLANDS (186)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 28C
Centroid Location:
Origin Time 08:08:35.6 0.5
Lat 17.37S 0.06 Lon 167.71E 0.03
Dep 15.0 FIX Half-duration 2.5
Moment Tensor; Scale 10**17 Nm
Mrr= 4.91 0.13 Mtt=-0.01 0.16
Mff=-4.90 0.20 Mrt= 1.57 0.38
Mrf=-6.16 0.50 Mtf= 0.48 0.13
Principal Axes:
T Val= 8.06 Plg=64 Azm= 70
N -0.03 4 169
P -8.03 26 261
Best Double Couple:Mo=8.1*10**17
NP1:Strike= 1 Dip=19 Slip= 103
NP2: 168 71 86

BKM 0.43 97 iPd 08 35.60 0.5
iS 08 45.50
PVC 0.50 104 iPd 08 36.50 0.1
iS 08 46.50
DZM 4.61 196 iPc 09 33.00 -3.8X
iS 10 25.90
SGE 9.66 91 eP 10 51.50 4.0X
VUN 10.17 94 ePd 10 59.00 4.6X
HNR 11.15 316 eP 11 07.00 -0.9
eS 13 27.00
SVO 11.45 316 eP 11 14.00 2.1
BRS 16.94 232 iPd 12 26.00 2.1
i 12 38.00
COO 19.39 225 iPc 12 53.80 -0.4
RMQ 19.72 240 iP 12 56.80 -1.0
RAB 20.31 309 e(P) 13 08.00 3.9X
CTA 20.54 260 iPd- 13 05.80 -0.6
1.2s 109.38nm 5.1mb
iS 16 59.00
PMG 21.65 289 eP 13 15.00 -2.8
PUZ 22.35 158 P 13 24.80 0.2
NOZ 22.76 159 P 13 29.00 0.5
OLP 23.55 244 eP 13 36.90 0.4
MNG 23.86 165 P 13 38.50 -0.8
0.5s 22.00nm 5.0mb
KIW 23.96 167 P 13 41.70 1.4
PGZ 24.06 164 P 13 40.90 -0.3
0.6s 65.00nm 5.4mb
CNB 24.07 219 iPc 13 43.80 2.3
BWA 24.08 222 eP 13 41.10 -0.5
TCW 24.17 168 P 13 42.50 0.3
CMS 24.23 231 eP 13 43.00 0.0
MRW 24.27 167 P 13 43.10 -0.2
CAN 24.30 220 eP 13 45.30 1.6
WEL 24.34 167 P 13 43.00 -0.9
eS 18 04.00
WDW 24.37 167 P 13 44.00 -0.2
MTW 24.38 166 P 13 43.30 -1.0
THZ 24.46 171 P 13 47.30 2.1
BLW 24.57 166 P 13 44.70 -1.5
MOW 24.57 166 P 13 45.00 -1.2
LTZ 25.37 172 P 13 52.40 -1.5
OIS 26.79 259 eP 14 06.40 -0.8
STK 27.62 234 iPd 14 14.00 -0.7
1.3s 21.00nm 4.7mb
iS 18 58.40
ADE 31.12 231 eP 14 46.00 0.0
WB5 31.71 261 eP 14 48.00 -3.2X
ASPA 32.24 253 iPd 14 53.10 -2.8
0.5s 24.10nm 5.4mb
eS 20 08.20
MBL 45.25 257 eP 16 45.00 0.4
0.7s 17.00nm 5.1mb
NANU 49.14 255 eP 17 14.40 -0.6
HON 51.19 42 P 17 30.00 -0.6
Z 20s 5.74um 5.6Msz
KAKJ 59.57 334 P 18 30.40 -0.6
CHJJ 59.93 333 P 18 33.00 -0.5
SBA 60.27 180 e(P) 18 35.00 -0.3
MAT 60.69 333 eP 18 37.00 -1.7
1.2s 46.88nm 5.5mb
eS 26 48.00
MTMJ 60.90 333 P 18 40.10 -0.1
NIIJ 60.94 334 eP 18 40.20 -0.1
QZH 63.93 310 eP 19 00.00 -0.5
Z 20s 1.30um 5.1Msz
E 20s 1.50um
sS 27 38.00
SSE 65.96 317 Pc 19 12.00 -1.5
4.0s 400.00nm 5.9mb X
Z 20s 0.90um 5.0Msz
N 14s 0.80um
E 14s 0.30um
eS 27 53.00
QIZ 67.59 300 eP 19 25.50 1.3
E 16s 1.30um
S 28 09.50
sS 28 24.80
NJ2 68.10 316 Pc 19 24.50 -2.6
Z 26s 0.80um 4.8MszX
N 15s 1.00um
S 28 25.00
WHN 70.25 313 eP 19 40.70 0.3
Z 24s 0.70um 4.8MszX
E 16s 0.90um
pP 19 51.00 33kmX
S 28 52.00
SNG 70.75 284 eP 19 44.00 0.3
MDJ 71.06 332 eP 19 45.10 0.1
1.0s 30.00nm 5.4mb
Z 24s 1.50um 5.2MszX
sP 19 58.00
SKS 29 44.00
TIA 71.83 319 eP 19 46.00 -3.8X
Z 19s 1.77um 5.4Msz
N 19s 1.57um
E 20s 1.79um
SNY 71.88 327 Pc 19 49.00 -1.0
8.0s 1100.00nm 6.0mb X
Z 18s 2.40um 5.5Msz
N 15s 1.00um
E 17s 1.20um
sP 20 02.00
iS 29 11.00
CN2 72.37 329 Pc 19 51.50 -1.3
1.0s 30.00nm 5.3mb
Z 18s 1.80um 5.4Msz
N 15s 0.60um
E 15s 0.40um
sP 20 04.00
eS 29 11.00
SPA 72.49 180 iPc 19 52.40 -1.2
1.2s 43.66nm 5.4mb
Z 18s 3.53um 5.7Msz
GYA 73.77 305 P 20 02.20 0.6
Z 16s 0.60um 5.0MszX
BJI 74.82 321 eP 20 08.00 0.8
6.0s 550.00nm 5.8mb X
Z 20s 1.49um 5.3Msz
N 15s 1.00um
eS 29 44.00
TIY 75.72 318 iPc 20 13.50 1.0
Z 18s 2.20um 5.5Msz
N 17s 1.20um
S 29 54.50
XAN 76.01 313 P 20 15.00 0.8
KMI 76.26 302 eP 20 15.00 -1.0
KMI 76.26 302 Pd 20 17.50 1.5X
2.0s 90.00nm 5.5mb
Z 20s 1.30um 5.2Msz
pP 20 26.00 27kmX
S 30 03.00
CHG 76.74 295 eP 20 20.00 1.5

02d 08h

	1.2s	22.27nm		5.1mb					e	28	10.00		CSI	146.89	318	PKP	28	08.00	0.7
CHTO	76.74	295 eP	20	20.50	2.0				e	30	59.00		DUI	146.91	322	PKP	28	08.00	0.7
	1.0s	15.50nm		5.0mb					e	31	04.00		TDS	146.93	317	PKP	28	10.00	2.7X
HHC	78.11	320 Pc	20	25.50	-0.3	SOB1	141.09	131 ePKP	27	52.00	-6.1X		PGD	146.95	327	PKP	28	09.50	2.0X
	5.0s	300.00nm		5.6mb	X				e	28	07.30		CRE	147.00	327	PKP	28	09.50	2.0X
	Z 22s	1.40um		5.2Msz		PRU	141.21	332 ePKP	27	53.00	-4.3X		ASS	147.01	326	PKP	28	08.50	1.1
	N 15s	0.30um					Z 20s	1.40um		5.7Msz			SGO	147.07	320	PKP	28	09.00	1.5
	E 15s	0.50um					N 20s	0.90um					MMK	147.07	334	ePKPc	28	09.50	1.8X
HHC	78.11	320 eP	20	27.30	1.5		E 20s	0.50um					AQU	147.08	324	PKP	28	10.00	2.4X
CD2	78.17	308 eP	20	27.00	0.7	ZST	141.26	328 ePKP	27	57.90	0.5		MGR	147.16	319	PKP	28	07.00	-0.7
	Z 21s	2.01um		5.4Msz				e	31	20.00			BSS	147.24	320	PKP	28	09.00	1.2
		sP	20	39.89				e	36	47.00			MME	147.24	329	PKP	28	10.30	2.3X
		eS	30	21.80		MOX	141.95	335 ePKP	27	54.00	-4.6X		SDI	147.26	323	PKP	28	09.70	1.8X
BTO	78.92	319 P	20	30.50	0.2		Z 26s	0.70um		5.3MszX			DIX	147.28	334	ePKPc	28	10.10	2.1X
	N 17s	0.80um					N 20s	0.60um					AZI	147.30	323	PKP	28	10.00	2.2X
	E 17s	0.80um				KHC	142.27	332 PKP	27	56.00	-3.3X		CZI	147.30	317	PKP	28	08.60	0.7
		esP	20	43.00			Z 19s	0.80um		5.5Msz			BDI	147.38	329	PKP	28	09.50	1.5
		S	30	30.00			N 19s	0.80um					ORX	147.40	333	PKP	28	08.43	0.4
MAW	79.41	202 eP	20	33.00	0.6		E 19s	0.50um					BOB	147.41	331	PKP	28	11.00	3.0X
LZH	80.63	312 Pd	20	40.50	0.9	SKO	142.42	317 iPKP	27	55.50	-4.2X		MNS	147.46	325	PKP	28	09.50	1.4
	2.0s	90.00nm		5.4mb			Z 19s	1.02um		5.6Msz			EMS	147.48	335	ePKPc	28	10.60	2.3X
	Z 22s	1.44um		5.3Msz			N 19s	0.90um					FLN	147.50	346	ePKP	28	09.80	1.9
	N 18s	1.29um					E 18s	0.79um						1.0s	40.00nm				
		pP	20	47.50	22kmX			i	28	06.00			LDF	147.57	345	ePKP	28	09.90	1.8X
		PP	23	43.50				i	31	07.00				1.2s	56.55nm				
		S	30	48.00				LR	39	54.00			LOR	147.61	339	ePKP	28	10.30	2.1X
		SS	36	02.00		WET	142.57	333 ePKP	27	56.40	-3.3X			1.1s	65.95nm				
GTA	85.02	314 P	21	03.60	1.5	GRF	142.85	335 ePKPd	27	56.60	-3.6X		PII	147.67	328	PKPd	28	09.70	1.4
	1.4s	40.00nm		5.5mb			Z 21s	1.00um		5.6Msz			LBF	147.82	339	ePKP	28	11.00	2.4X
	Z 24s	2.10um		5.4MszX		DBN	142.96	342 ePKP	28	06.00	5.8X			1.0s	56.00nm				
	E 17s	0.90um				OHR	143.26	317 ePKP	27	58.50	-2.7X		RMP	147.83	324	PKP	28	12.00	3.3X
		sP	21	14.00		ENN	143.90	340 ePKP	28	00.00	-1.9		GRC	147.84	340	PKP	28	11.29	2.8X
		SKS	31	27.00			1.0s	20.00nm					RDP	147.85	324	PKP	28	10.90	2.1X
TTA	85.14	16 P	21	01.80	-0.3	VBY	144.00	327 e(PKP)	28	02.50	0.3		LSD	147.88	334	PKP	28	11.10	2.1X
	1.1s	25.94nm		5.4mb		MEM	144.01	340 PKP	28	01.00	-1.0		SSF	147.91	340	ePKP	28	11.40	2.7X
		pP	21	11.20	30kmX	LJU	144.01	328 ePKPd	28	00.50	-1.8		GRR	147.94	346	ePKP	28	11.40	2.8X
PMR	86.04	19 P	21	10.00	3.5X	CEY	144.27	327 ePKP	28	00.10	-2.6X			1.0s	50.00nm				
	Z 18s	2.67um		5.7Msz		VOY	144.34	328 ePKPd	28	00.20	-2.7X		SOI	147.96	315	PKP	28	10.60	1.6
ABL	86.65	52 P	21	10.30	-0.1	UCC	144.35	342 PKP	28	01.00	-1.6		PCP	148.00	331	PKP	28	11.30	2.3X
CMB	87.11	49 P	21	11.60	-0.7	FVI	144.49	330 PKP	27	58.90	-4.1X		LPL	148.01	334	ePKP	28	11.20	2.0X
	1.1s	19.61nm		5.3mb		WATA	144.50	332 ePKP	28	00.00	-3.2X			1.0s	42.00nm				
		pP	21	21.70	32kmX		2.0s	179.00nm					LPG	148.02	334	ePKP	28	12.30	3.0X
MWC	87.28	53 eP	21	16.00	2.6	RIY	144.56	327 ePKP	28	00.90	-2.3X			1.0s	52.00nm				
ISA	87.54	51 eP	21	14.00	-0.4	SNF	144.63	342 PKP	28	03.20	0.1		RSP	148.09	334	PKP	28	12.74	3.6X
SBB	87.64	53 eP	21	12.00	-2.9X	TRI	144.63	328 iPKPc	28	02.00	-1.3		SMF	148.16	339	ePKP	28	11.80	2.7X
RVR	87.71	53 eP	21	15.00	-0.2	ETA	144.68	354 iPKPd	28	06.20	3.1X			1.3s	90.25nm				
BAR	87.75	55 eP	21	14.00	-1.4		1.1s	116.00nm					AVF	148.20	340	ePKP	28	11.70	2.6X
PLM	87.86	54 eP	21	17.00	0.8	SOTA	144.75	332 iPKPd	28	02.40	-1.2			1.0s	37.00nm				
CLC	88.25	52 eP	21	18.00	0.2		0.6s	29.70nm					CKI	148.21	332	PKPd	28	11.60	2.4X
GSC	88.65	52 eP	21	19.00	-0.8			i	28	09.00			LPF	148.32	346	ePKP	28	12.35	3.1X
GLA	89.32	55 eP	21	23.00	0.0			i	28	11.90				1.2s	121.40nm				
TNP	89.41	50 P	21	22.30	-1.2	GWF	144.83	337 PKP	28	02.38	-1.2		BHB	148.33	333	PKP	28	11.20	1.8
	1.9s	36.81nm		5.3mb		DOU	144.90	341 iPKP+	28	02.80	-0.8		FIN	148.41	331	PKP	28	11.20	1.6
GBA	94.37	283 P	21	45.00	-1.5	ECB	145.06	354 iPKPd	28	03.60	-0.2		BNI	148.41	334	PKP	28	13.00	3.3X
WMO	95.10	314 P	21	49.50	0.1	STR	145.10	337 PKP	28	03.60	-0.4		RRL	148.47	334	PKP	28	12.43	2.5X
	2.5s	60.00nm		5.6mb		VVI	145.10	329 PKP	28	03.50	-0.6		ROB	148.50	332	PKP	28	10.99	1.2
	Z 24s	1.30um		5.3MszX		OGA	145.10	332 ePKP	28	03.50	-0.9		BGF	148.57	340	ePKP	28	13.10	3.4X
	N 19s	1.60um				ECP	145.21	354 iPKPd	28	03.00	-1.0			0.8s	28.90nm				
		pP	21	59.50	31kmX		0.6s	88.00nm					DOI	148.61	333	PKP	28	12.00	2.0X
		PP	25	37.50		WLS	145.39	337 PKP	28	03.98	-0.6		PZZ	148.67	333	PKP	28	12.84	2.7X
		SKS	32	25.00		CTI	145.42	330 PKP	28	04.00	-0.8		ENR	148.75	332	PKP	28	12.12	1.9
		S	33	03.00		CDF	145.42	337 PKP	28	04.05	-0.7		STV	148.78	332	PKP	28	12.02	1.8
		sS	33	16.00		SLE	145.48	335 ePKPc	28	04.00	-0.7		IMI	148.79	331	PKP	28	12.63	2.4X
		SS	39	29.00		LCI	145.52	317 PKP	28	06.00	1.0		PLDF	148.82	338	PKP	28	13.58	3.3X
ALO	96.51	56 eP	22	00.00	3.8X	SAX	145.54	334 ePKPc	28	05.00	-0.2		AGO	148.91	339	PKP	28	13.81	3.5X
	Z 20s	1.51um		5.5Msz		FEL	145.58	336 ePKP	28	03.84	-1.2		MAF	148.95	340	ePKP	28	14.20	3.8X
GOL	98.67	51 P	22	12.00	6.1X	CAI	145.62	132 ePKP	28	03.40	-2.5X			1.2s	44.65nm				
	Z 20s	3.00um		5.8Msz		ECH	145.63	337 PKP	28	04.43	-0.6		TCF	149.01	340	ePKP	28	14.20	3.7X
GLD	98.79	51 P	22	12.00	5.6X	OSS	145.63	332 ePKPc	28	05.20	0.0			1.2s	66.95nm				
	Z 20s	3.70um		5.9Msz		ZLA	145.75	335 ePKPc	28	04.80	-0.4		SBF	149.03	332	ePKP	28	13.90	3.3X
KEV	122.63	345 ePKP	27	20.00	-1.5	MOF	145.94	337 PKP	28	06.49	0.9			1.2s	80.35nm				
PPD	125.06	134 ePKP	27	24.10	-3.6X	LLS	145.99	334 ePKPc	28	06.10	0.2		PYM	149.22	339	PKP	28	15.03	4.1X
TAB	125.29	304 ePKP	27	28.00	0.1	VITF	146.06	338 PKP	28	06.04	0.4		LSF	149.26	341	ePKP	28	14.60	3.8X
SUF	127.71	339 iPKP	27	30.70	-0.8	VDL	146.08	333 ePKPc	28	06.50	0.5			1.3s	93.85nm				
	0.4s	3.50nm				BSF	146.09	337 PKP	28	06.42	0.6		PGF	149.28	328	ePKP	28	15.00	3.9X
NUR	129.72	337 ePKP	27	35.00	-0.4	HAU	146.11	337 ePKP	28	06.40	0.6			1.1s	107.45nm				
APO	133.22	343 ePKP	27	31.80	-10.3X		1.2s	9.25nm					MFF	149.42	344	ePKP	28	15.00	4.0X
	0.4s	1.60nm				BBS	146.11	336 PKP	28	07.02	1.2			1.2s	77.35nm				
NB2	133.53	345 PKP	27	42.20	-0.5	SAL	146.28	331 PKP	28	08.00	1.9		LBL	149.59	338	PKP	28	16.18	4.9X
	0.9s	4.90nm				LOMF	146.47	336 PKP	28	07.02	0.5		FRF	149.62	332	ePKP	28	15.50	4.1X
BBTK	135.36	309 ePKP	27	54.00	7.0X	MDI	146.52	332 PKP	28	07.50	1.1			1.2s	74.40nm				
BUC	138.26	318 ePKP	27	50.00	-2.1	ARV	146.57	326 PKP	28	07.50	0.8		LRG	149.83	333	ePKP	28	16.30	4.6X
KRA	138.63	329 ePKP	27	51.90	-0.7	ORI	146.63	318 PKP	28	10.00	3.1X			1.2s	95.20nm				
KSP	139.82	332 ePKP	27	53.50	-1.3	TMA	146.64	333 ePKPc	28	07.30	0.4		LMR	149.86	332	ePKP	28	16.20	4.4X
		e	30	55.00		ROI	146.82	317 PKP	28	09.50	2.3X			1.2s	89.25nm				
BRG	140.82	334 iPKP	27	57.00	0.5	SFI	146.85	327 PKP	28	07.90	0.9		FAI	149.98	316	PKP	28	19.00	6.8X
	2.0s	44.00nm				VAI	146.87	333 PKP	28	07.40	0.4		RJF	150.11	340	ePKP	28	17.10	5.0X

1.2s 65.45nm
CAF 150.26 339 ePKP 28 17.50 5.1X
1.2s 35.70nm
LFF 150.68 341 ePKP 28 18.40 5.4X
1.0s 44.00nm
LPO 150.77 340 ePKP 28 18.60 5.5X
1.2s 71.40nm
EPF 152.52 340 ePKP 28 22.40 6.6X
1.2s 29.75nm
TOL 156.72 344 ePKP 28 21.00 -0.6
ePKKP 28 53.00
S.D. = 1.1 on 147 of 233 obs.

? OCT 02, 1990 08h 18m 17.38± 0.73s
15.773 N ±14.9km 119.215 E ±21.2km
DEPTH = 33.0km (normal)
4.4mb (7 obs.)
LUZON, PHILIPPINE ISLANDS (249)

CHTO 19.59 282 eP 22 46.90 1.0
1.2s 11.46nm 4.0mb
BJI 24.32 354 eP 23 34.50 1.4
1.3s 29.00nm 4.7mb
WB5 38.43 157 eP 25 37.00 -0.9
ASPA 41.74 160 eP 26 06.50 1.3
0.8s 6.60nm 4.4mb
KEV 76.09 339 eP 29 52.00 -11.2X
SOD 76.57 337 iP 30 03.60 -2.3
e 30 14.00
SUF 77.52 332 iP 30 11.00 -0.2
0.5s 2.50nm 4.5mb
NUR 78.65 330 eP 30 12.00 -5.4X
e 30 26.00
INK 81.69 21 eP 30 34.00 0.5
MBC 81.83 12 eP 30 35.00 0.9
1.0s 5.00nm 4.5mb
HFS 83.98 331 eP 30 44.70 -0.7
0.4s 1.00nm 4.3mb
NB2 84.77 332 P 30 48.40 -1.0
0.8s 1.90nm 4.3mb
S.D. = 1.4 on 10 of 12 obs.

? OCT 02, 1990 08h 48m 36.93± 1.02s
44.355 N ±11.6km 7.255 E ±12.0km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.4 (GEN).

STV 0.12 156 P 48 40.12 0.1
S 48 42.99
ENR 0.17 137 P 48 40.84 -0.1
S 48 43.81
PZZ 0.19 324 P 48 41.15 0.0
S 48 44.94
ROB 0.45 98 P 48 46.07 0.0
S 48 52.53
S.D. = 0.1 on 4 of 4 obs.

• OCT 02, 1990 08h 57m 46.95± 1.65s
17.588 S ±13.4km 167.792 E ±12.0km
DEPTH = 26.1 ± 12.6 km
4.8mb (6 obs.)
VANUATU ISLANDS (186)

BKM 0.44 101 iPd 57 56.50 0.3
iS 58 04.50
PVC 0.52 107 iPd 57 57.50 0.0
iS 58 06.00
DZM 4.64 196 iPc 58 55.30 -1.9
iS 59 46.10
RMQ 19.73 240 iP 02 17.60 -0.2
BWA 24.10 222 eP 03 02.70 1.2
CMS 24.24 231 eP 03 05.00 2.1
CAN 24.32 220 eP 03 07.50 3.9X
STK 27.63 234 iPc 03 35.10 0.6
0.7s 5.00nm 4.3mb
WB5 31.71 261 eP 04 09.70 -1.3
ASPA 32.24 253 eP 04 14.20 -1.4
1.1s 9.50nm 4.6mb
MAT 60.66 333 eP 07 56.00 -2.2
0.7s 10.27nm 5.1mb
SPA 72.52 180 iPc 09 13.40 0.0
0.9s 18.64nm 5.1mb
BJI 74.80 321 eP 09 26.50 -0.2
KMI 76.24 302 eP 09 37.00 1.4
CHG 76.72 295 eP 09 39.00 0.9
CHTO 76.72 295 eP 09 39.70 1.6

0.9s 6.61nm 4.7mb
BW06 96.51 47 eP 11 12.00 -3.8X
1.2s 5.48nm 4.9mb
KEV 122.60 345 iPKP 16 41.00 0.0
SOD 124.36 343 ePKP 16 44.00 -0.6
SUF 127.68 339 iPKP 16 50.50 -0.6
0.5s 3.80nm
NUR 129.69 337 iPKP 16 55.40 0.4
0.7s 13.30nm
NB2 133.50 345 PKP 17 02.40 0.1
0.8s 3.20nm
KSP 139.79 332 ePKP 17 16.50 2.2X
PRU 141.19 332 ePKP 17 19.50 2.6X
KHC 142.24 332 ePKP 17 15.50 -3.3X
OHR 143.24 317 ePKP 17 17.80 -3.0X
MEM 143.98 340 PKP 17 20.30 -1.3
LJU 143.98 328 ePKPc 17 19.60 -2.2
CEY 144.24 328 ePKPc 17 20.50 -1.8
VOY 144.31 328 iPKPd 17 20.40 -2.1
FVI 144.46 330 PKP 17 20.50 -2.1
WATA 144.47 332 iPKPd 17 21.60 -1.2
0.7s 7.70nm
TRI 144.60 328 ePKP 17 21.40 -1.4
SOTA 144.72 332 iPKP 17 22.40 -0.8
0.8s 32.00nm
GWF 144.80 337 PKP 17 22.80 -0.4
DOU 144.87 341 PKP 17 22.60 -0.6
e 17 32.30
ECP 145.18 354 ePKP 17 23.00 -0.6
WLS 145.36 337 PKP 17 24.23 0.1X
CTI 145.39 330 PKP 17 22.00 -2.4
CDF 145.39 337 PKP 17 24.44 0.2
SLE 145.45 335 ePKPc 17 24.20 -0.1
SAX 145.51 334 ePKPc 17 25.00 0.2
FEL 145.55 336 ePKP 17 24.50 -0.1
ECH 145.60 337 PKP 17 24.70 0.1
OSS 145.60 332 ePKPc 17 25.40 0.6
ZLA 145.72 335 ePKPc 17 25.20 0.4
MOF 145.91 337 PKP 17 25.61 0.4
LLS 145.96 334 ePKPc 17 26.20 0.8
VITF 146.03 338 PKP 17 26.09 0.9
VDL 146.05 333 ePKPc 17 26.90 1.3
BSF 146.06 337 PKP 17 25.98 0.5
HAU 146.08 337 iPKPc 17 26.50 1.1
0.6s 18.05nm
LOMF 146.44 336 PKP 17 26.83 0.8
ARV 146.54 326 PKP 17 28.50 2.3X
ORI 146.61 318 PKP 17 29.00 2.6X
TMA 146.61 333 ePKPc 17 28.10 1.6
SFI 146.82 327 PKPd 17 30.00 3.4X
VAI 146.84 333 PKP 17 27.70 1.2
DUI 146.89 322 PKP 17 29.00 2.1X
TDS 146.90 318 PKP 17 29.00 2.1X
PGD 146.92 327 PKP 17 29.00 2.0X
CRE 146.98 327 PKP 17 29.60 2.6X
ASS 146.98 326 PKP 17 28.50 1.5
SGO 147.04 320 PKP 17 29.00 2.0X
MMK 147.04 334 ePKPc 17 29.90 2.7X
MGR 147.13 319 PKP 17 29.00 1.8X
MME 147.21 329 PKP 17 30.30 2.7X
BSS 147.21 320 PKP 17 28.00 0.7
SDI 147.23 323 PKP 17 29.40 2.0X
DIX 147.25 334 ePKPc 17 30.40 2.8X
AZI 147.27 323 PKP 17 29.50 2.1X
BDI 147.35 329 PKPd 17 29.30 1.7
ORX 147.37 333 PKP 17 29.37 1.8X
BOB 147.38 331 PKP 17 30.00 2.4X
MNS 147.43 325 PKPd 17 30.10 2.4X
FLN 147.47 346 iPKPc 17 30.10 2.6X
0.8s 24.20nm
LDF 147.54 345 iPKPc 17 30.20 2.6X
0.6s 9.00nm
LOR 147.58 339 iPKPc 17 30.60 2.8X
0.8s 20.15nm
LBF 147.79 339 ePKP 17 31.20 3.1X
0.9s 13.10nm
GRC 147.81 340 PKP 17 31.70 3.6X
RDP 147.83 324 PKP 17 31.50 3.1X
LSD 147.86 334 PKP 17 32.03 3.4X
SSF 147.88 340 iPKPc 17 31.60 3.4X
0.8s 31.55nm
GRR 147.91 346 iPKPc 17 31.40 3.2X
0.8s 17.45nm
SOI 147.94 315 PKPd 17 32.00 3.4X
PCP 147.97 331 PKP 17 31.11 2.6X
LPL 147.98 335 iPKPc 17 32.40 3.6X
0.8s 20.15nm

LPG 147.99 334 iPKPc 17 32.60 3.7X
0.8s 26.85nm
RSP 148.06 334 PKP 17 30.60 1.9X
SMF 148.13 339 ePKP 17 32.10 3.4X
0.9s 16.40nm
AVF 148.17 340 ePKP 17 32.00 3.3X
0.8s 6.70nm
LPF 148.29 346 iPKPc 17 32.50 3.7X
0.7s 28.65nm
BHB 148.30 333 PKP 17 31.01 2.0X
FIN 148.38 331 PKP 17 31.73 2.6X
BNI 148.38 334 PKP 17 33.30 4.0X
RRL 148.44 334 PKP 17 33.37 3.8X
ROB 148.47 332 PKP 17 31.93 2.6X
BGF 148.54 340 iPKPc 17 33.10 3.8X
0.8s 30.90nm
PZZ 148.64 333 PKP 17 31.93 2.2X
ENR 148.72 332 PKP 17 30.90 1.1
STV 148.75 332 PKP 17 31.52 1.7
IMI 148.76 331 PKP 17 32.96 3.1X
AGO 148.88 339 PKP 17 34.32 4.4X
MAF 148.92 340 ePKP 17 34.50 4.5X
0.8s 12.75nm
TCF 148.98 340 ePKP 17 34.40 4.3X
1.2s 26.80nm
SBF 149.00 332 iPKPc 17 34.30 4.1X
1.0s 24.00nm
PYM 149.19 339 PKP 17 35.12 4.7X
LSF 149.23 341 ePKP 17 34.70 4.3X
1.0s 32.00nm
PGF 149.26 328 iPKPc 17 35.30 4.6X
0.8s 64.50nm
MFF 149.39 344 iPKPc 17 35.30 4.7X
0.8s 25.50nm
LBL 149.56 338 PKP 17 36.36 5.5X
FRF 149.59 332 iPKPc 17 35.70 4.7X
0.8s 26.85nm
LRG 149.80 333 iPKPc 17 36.50 5.2X
0.9s 37.65nm
LMR 149.83 332 iPKPc 17 36.50 5.1X
1.0s 42.00nm
RJF 150.08 340 iPKPc 17 37.30 5.6X
1.0s 24.00nm
CAF 150.23 339 iPKPc 17 37.60 5.6X
1.2s 20.85nm
LFF 150.65 341 iPKPc 17 38.60 6.1X
0.8s 26.85nm
LPO 150.74 340 iPKPc 17 39.00 6.3X
0.8s 22.85nm
EPF 152.49 340 iPKPc 17 43.20 7.8X
0.8s 11.40nm
S.D. = 1.2 on 53 of 119 obs.

% OCT 02, 1990 09h 59m 07.65± 0.89s
39.101 N ± 7.3km 27.643 E ± 9.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM 0.76 203 ePg 59 22.50 -0.1
DST 0.91 56 iPn 59 25.30 0.1
EZN 1.25 306 ePn 59 31.00 0.1
BNT 1.27 10 ePn 59 31.40 0.1
KGT 1.37 349 iPn 59 32.40 -0.4
S.D. = 0.3 on 5 of 5 obs.

% OCT 02, 1990 10h 35m 52.49± 0.85s
44.355 N ± 8.9km 7.294 E ± 8.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.6 (GEN).

STV 0.11 169 P 35 55.65 0.2
S 35 57.71
ENR 0.16 145 P 35 56.58 0.4
S 35 58.83
PZZ 0.20 317 P 35 56.99 0.0
S 35 59.76
ROB 0.42 98 P 36 00.99 -0.1
S 36 06.63
IMI 0.62 136 P 36 04.17 -0.8
S 36 12.88
FIN 0.67 102 P 36 06.22 0.3
S 36 14.42
S.D. = 0.6 on 6 of 6 obs.

& OCT 02, 1990 10h 58m 10.00s

02d 10h

45.648 N 111.962 W
DEPTH = 6.8km
MONTANA (456)
<BUT>. ML 3.0 (BUT).

LRM	0.38	297	iPd	58	17.90	0.1
BGMT	0.42	188	iPc	58	18.30	-0.2
HBMT	0.48	288	iPd	58	19.60	0.0
BUT	0.56	311	iPd	58	21.10	-0.1
			iS	58	28.70	
MEMT	0.70	93	iPc	58	23.30	-0.7
SXM	0.73	46	iPc	58	24.10	-0.5
MCMT	1.03	218	iPc	58	29.60	-0.4
HRY	1.07	5	ePc	58	30.40	-0.1
LTMT	1.13	185	ePc	58	31.40	-0.2
HPI	2.10	203	ePc	58	47.90	1.6

10 obs. associated

? OCT 02, 1990 11h 03m 27.34± 2.26s
41.083 N ±19.9km 29.353 E ±13.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.0 (ISK).

ISK	0.22	266	iPg	03	31.90	-0.2
			iSg	03	34.70	
HRT	0.35	138	iPg	03	34.60	-0.1
			iSg	03	39.90	
YLV	0.52	178	ePg	03	37.90	0.1
CTT	0.70	276	ePg	03	41.40	0.2

S.D. = 0.3 an 4 af 4 obs.

% OCT 02, 1990 11h 25m 15.44± 0.98s
37.969 N ± 8.3km 6.344 W ± 9.4km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.6 (MDD).

EVAL	0.50	220	iP	25	25.00	-0.6
			eS	25	32.00	
EHOR	0.88	99	eP	25	31.60	-0.7
			eS	25	44.50	
EPRU	1.34	138	eP	25	41.30	1.2
			eS	25	59.00	
EBAN	2.03	84	eP	25	50.00	-0.1
			eS	26	14.80	
EPLA	2.10	6	eP	25	52.50	1.3
GUD	3.16	32	eP	26	05.20	-1.2

S.D. = 1.3 an 6 af 6 obs.

OCT 02, 1990 12h 38m 58.98± 1.04s
32.530 N ± 5.0km 94.027 E ± 3.8km
DEPTH = 32.5 ± 8.2 km
5.0mb (42 obs.) 4.0Msz (2 obs.)
TIBET (306)
ML 4.2 (BJI).

LSA	3.75	222	Pn	39	58.50	2.2
			Pg	40	02.00	
			Sn	40	45.40	
			Sg	40	51.20	
GTA	8.31	33	P	40	59.10	-1.2
	1.2s	400.00nm				6.4mb X
	Z 10s	2.90um				
	E 11s	2.30um				
GUN	8.42	239	P	40	58.00	-4.0X
CD2	8.45	98	eP	41	04.40	2.3
	1.0s	70.00nm				5.8mb
LZH	8.86	64	Pd	41	07.50	-0.5
	2.0s	40.00nm				5.2mb
	Z 10s	3.10um				4.2Msz
KKN	8.92	240	P	41	04.00	-4.8X
PKI	8.95	239	P	41	04.60	-4.8X
DMN	9.15	240	P	41	07.20	-4.8X
GKN	9.29	243	P	41	08.60	-5.2X
KMI	10.62	132	eP	41	31.00	-1.2
	1.5s	70.00nm				5.7mb
	Z 10s	3.70um				
		eS		43	30.00	
WMO	12.32	338	eP	41	50.00	-5.0X
	N 11s	0.80um				
	E 11s	1.40um				
XAN	12.56	79	P	41	57.40	-0.8
	N 10s	0.50um				
	E 10s	1.30um				
CHG	14.36	161	eP	42	23.10	1.2
CHTO	14.36	161	eP	42	20.60	-1.3
NDI	14.97	260	eP	42	17.00	-12.9X
BTO	15.15	53	eP	42	33.00	0.7
	N 11s	1.10um				
	E 13s	1.20um				
		PP		42	46.50	
TIY	15.92	66	eP	42	41.70	-0.5
	Z 20s	1.20um				
KSH	16.15	300	P	42	42.50	-2.6
HHC	16.31	54	P	42	49.00	1.7
	Z 13s	2.50um				
	N 10s	0.40um				
	E 10s	1.60um				
		pP		42	54.00	
		S		45	51.00	
LOE	16.59	153	eP	42	50.00	-0.7
WHN	17.44	91	eP	43	00.00	-1.3
NST	17.68	160	eP	43	05.00	0.7
BJI	19.33	61	eP	43	24.50	0.1
	1.3s	70.00nm				4.8mb
	Z 11s	0.99um				
	N 11s	1.15um				
TIA	19.41	73	P	43	25.00	-0.3
	N 12s	0.91um				
	E 11s	0.63um				
QIZ	19.55	130	eP	43	28.00	1.0
	N 10s	0.90um				
NNT	20.53	164	eP	43	35.00	-2.2
HYB	20.53	227	ePd	43	37.00	-0.3
	1.0s	50.00nm				4.8mb
NJ2	20.99	85	Pc	43	42.00	0.2
	1.2s	100.00nm				5.1mb
POO	22.87	237	eP	43	59.00	-1.8
SSE	23.11	86	Pc	44	04.00	1.1
	1.0s	20.00nm				4.6mb
	Z 12s	0.90um				4.4MszX
		sS		48	20.00	
QUE	23.22	271	eP	44	04.20	-0.1
	1.3s	47.12nm				4.8mb
		e		48	15.00	
GBA	24.18	223	P	44	15.00	1.5
SNY	25.21	60	Pc	44	23.40	0.3
	1.2s	100.00nm				5.3mb
	Z 16s	0.80um				4.3MszX
	N 13s	0.90um				
CN2	26.99	56	Pd	44	38.80	-0.8
	1.0s	30.00nm				4.9mb
	Z 15s	1.30um				4.6MszX
	N 15s	1.80um				
	E 15s	0.40um				
		pP		44	48.00	32kmX
SUF	51.57	327	eP	48	02.00	-1.7
SOD	51.75	333	iP	48	03.40	-1.6
NUR	52.24	324	iP	48	09.80	1.0
	0.6s	14.30nm				5.1mb
VRI	52.37	306	eP	48	10.00	0.0
MLR	52.97	305	ePc	48	15.00	0.3
UPP	55.79	324	iP	48	32.80	-2.0
		i		48	35.20	
SPC	56.04	311	iP	48	36.80	-0.2
HFS	57.70	324	eP	48	45.70	-2.8
	0.6s	15.80nm				5.2mb
	Z 16s	0.12um				4.1MszX
		LR		12	14.00	
NB2	58.74	326	P	48	53.20	-2.6
	0.7s	14.80nm				5.2mb
BRG	59.59	314	iP	49	02.10	0.4
	1.0s	16.00nm				5.1mb
CLL	60.04	314	iPd	49	04.00	-0.8
MOX	61.07	314	e(P)	49	12.00	0.2
CDF	64.47	313	eP	49	34.80	0.2
	0.8s	8.05nm				4.9mb
WB5	64.84	138	eP	49	35.20	-2.0
BSF	64.98	312	eP	49	38.00	0.1
	0.9s	9.85nm				4.9mb
PGF	65.50	306	eP	49	41.30	0.0
	0.9s	8.20nm				4.8mb
LPG	65.88	310	eP	49	44.60	0.7
	0.8s	36.80nm				5.5mb
LPL	65.88	310	eP	49	44.70	0.8
	0.6s	18.05nm				5.3mb
SBF	66.05	308	eP	49	45.10	0.3
	0.8s	21.50nm				5.3mb
FRF	66.70	308	eP	49	48.70	-0.1
	0.8s	5.35nm				4.7mb
LMR	66.88	308	eP	49	50.20	0.2
	1.0s	10.00nm				4.9mb
LRG	66.93	308	eP	49	50.80	0.5
	0.8s	13.45nm				5.1mb
LOR	67.03	312	eP	49	50.60	-0.3
	0.8s	4.70nm				4.6mb
	Z 20s	0.13um				4.1Msz
LBF	67.07	312	eP	49	51.00	-0.2
	0.8s	5.35nm				4.7mb
SMF	67.29	312	eP	49	52.70	0.1
	1.0s	14.00nm				5.0mb
SSF	67.34	312	eP	49	52.90	0.1
	0.8s	10.75nm				5.0mb
AVF	67.54	312	eP	49	54.20	0.1
	1.0s	14.00nm				5.0mb
ASPA	67.62	141	iPd	49	54.10	-0.7
	0.8s	12.30nm				5.1mb
EKA	67.74	322	Pc	49	56.50	1.3
	0.9s	11.20nm				5.0mb
BGF	67.96	312	eP	49	56.80	0.1
	0.8s	10.75nm				5.0mb
MAF	68.27	312	eP	49	59.40	0.7
	0.8s	8.75nm				4.9mb
TCF	68.47	312	eP	50	00.50	0.5
	0.8s	12.10nm				5.0mb
LDF	68.92	315	eP	50	03.00	0.3
	0.8s	10.75nm				5.0mb
IMA	69.03	24	eP	50	03.20	0.0
CAF	69.14	311	eP	50	05.10	1.0
	1.0s	8.50nm				4.8mb
RJF	69.33	311	eP	50	06.40	1.2
	0.9s	9.85nm				4.9mb
	Z 20s	0.08um				3.9Msz
GRR	69.45	315	eP	50	06.30	0.4
	0.8s	16.10nm				5.1mb
MBC	69.46	8	eP	50	07.00	1.5
MFF	69.80	313	eP	50	08.30	0.2
	1.0s	12.00nm				4.9mb
LPO	69.81	311	eP	50	09.10	0.9
	0.8s	8.05nm				4.8mb
LFF	69.98	311	eP	50	10.20	1.0
	0.8s	10.75nm				5.0mb
SVW	71.03	29	eP	50	15.60	0.3
FBA	71.71	23	eP	50	18.70	-0.6
PMR	73.29	26	eP	50	30.50	1.9
INK	73.45	17	eP	50	28.50	-1.0
TOL	75.49	308	eP	50	43.00	1.2
STK	78.25	140	eP	50	56.50	-0.6
	0.8s	3.00nm				4.4mb
FFC	92.01	9	eP	52	07.00	1.4
	0.8s	10.00nm				5.3mb
LKO	92.92	283	P	52	08.92	-1.5
KIC	93.96	280	P	52	16.60	1.4
PPD	147.60	280	ePKP	58	41.30	2.1X
			e	58	44.60	
SIV	152.06	300	PKP	58	51.40	5.2X
			i	58	54.60	

S.D. = 1.2 an 77 af 86 obs.

% OCT 02, 1990 12h 44m 03.44± 0.78s
43.204 N ± 7.8km 12.244 E ± 8.3km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.33	113	P	44	11.00	0.6
			eSg	44	17.40	
CRE	0.47	333	P	44	12.50	-0.6
			eSg	44	20.40	
ARV	0.59	60	P	44	15.30	-0.1
			eSg	44	24.60	
PGD	0.77	331	P	44	18.60	0.0
			eSg	44	30.50	
SFI	0.77	338	P	44	18.10	-0.4
			eSg	44	29.80	
MNS	0.88	158	P	44	19.60	-0.8
			eSg	44	32.60	
BDI	1.47	306	P	44	31.20	1.1

S.D. = 0.8 an 7 af 7 obs.

---

* OCT 02, 1990 13h 19m 28.96± 0.54s
17.596 S ±16.4km 167.579 E ± 7.3km
DEPTH = 33.0km (normal)
4.6mb (3 obs.) 4.1Msz (1 obs.)
VANUATU ISLANDS (186)

BKM	0.64	97	iPc	19	41.50	0.0
			iS	19	49.00	
PVC	0.71	102	iPc	19	42.00	-0.6
			iS	19	52.00	
DZM	4.58	193	iPc	20	31.70	-6.1X

			iS	21	18.00	
RMO	19.55	240	iP	23	56.50	-0.5
CTA	20.33	260	iPd	24	06.40	1.1
	1.0s		28.00nm			4.6mb
BWA	23.96	222	eP	24	41.50	0.2
CMS	24.08	231	eP	24	43.00	0.6
CAN	24.18	220	eP	24	45.50	2.0X
STK	27.46	234	iPc	25	14.50	0.4
	0.9s		6.00nm			4.3mb
			iPcP	25	27.20	
WB5	31.51	261	eP	25	48.60	-1.7
ASPA	32.04	253	iPd	25	54.10	-0.9
	0.9s		11.40nm			4.8mb
	Z 20s		0.36um			4.1Msz
			LR	37	47.00	
GUN	91.03	299	P	32	33.30	1.2
PKI	91.32	298	P	32	31.40	-1.9
KKN	91.50	299	P	32	34.20	0.2
DMN	91.58	298	P	32	33.40	-1.1
GKN	92.10	299	P	32	37.60	0.9
NDI	98.56	297	eP	33	15.00	9.1X
LJU	143.88	328	e(PKP)	39	18.50	15.9X
VOY	144.21	328	ePKP	39	20.20	16.9X
			e	39	36.80	
CAI	145.79	132	iPKPd	39	07.00	0.2
CSI	146.74	318	PKP	39	11.10	3.5X
CZI	147.14	317	PKP	39	10.00	1.8
	S.D. = 1.1		on 16 of 22 obs.			

OCT 02, 1990 13h 27m 06.16± 0.46s
3.734 N ± 7.7km 95.793 E ± 5.5km
DEPTH = 59.9km (7 depth phases)
5.0mb (9 obs.)
OFF W COAST OF NORTHERN SUMATERA(705)

IPM	5.29	81	ePc	28	25.10	0.6
	0.4s		135.90nm			5.6mb
			e	29	20.90	
KLM	5.88	96	eP	28	45.00	12.3X
SNG	5.90	54	eP	28	33.60	0.6
KGM	7.71	103	ePd	28	59.30	1.1
NNT	9.62	24	eP	29	21.40	-3.2X
LOE	14.78	23	eP	30	38.00	4.7X
CHG	15.30	11	eP	30	40.70	0.7
CHTO	15.30	11	eP	30	40.70	0.7
	0.7s		4.45nm			3.8mb X
			pP	30	53.30	
			sP	30	56.80	
KOD	19.29	290	eP	31	30.00	0.5
KKM	20.48	83	ePd	31	41.60	-0.1
	0.7s		100.90nm			5.3mb
QIZ	20.49	41	P	31	41.60	-0.1
GBA	20.61	300	P	31	43.00	0.1
			S	35	13.00	
KMI	22.29	17	eP	32	02.00	2.0
	Z 16s		0.40um			3.9MszX
			pP	32	16.00	60km
GYA	24.88	24	P	32	25.00	0.0
POD	26.02	306	eP	32	33.50	-2.1
LSA	26.20	351	eP	32	36.00	-1.6
CD2	28.06	15	eP	32	53.10	-0.9
WHN	31.91	31	eP	33	27.50	-0.7
XAN	32.54	21	P	33	32.00	-1.7
LZH	33.04	12	Pc	33	36.50	-1.7
	0.8s		12.00nm			4.8mb
TIY	37.09	22	Pd	34	12.40	-0.2
QUE	37.89	317	eP	34	20.60	1.1
BTO	38.88	17	eP	34	26.60	-1.0
HHC	39.59	19	P	34	34.50	1.0
KSH	39.84	336	P	34	36.50	0.9
WMO	40.56	351	P	34	37.00	-4.4X
BJI	40.57	24	eP	34	42.00	0.6
	0.9s		42.00nm			5.3mb
WB5	44.57	123	eP	35	13.50	-0.8
ASPA	46.04	128	iPd	35	24.50	-1.5
	0.4s		5.30nm			4.8mb
CN2	47.74	29	P	35	37.80	-1.2
MAT	50.83	44	eP	36	02.00	-0.9
STK	56.09	133	eP	36	42.00	0.3
	1.6s		29.00nm			5.1mb
			e	36	51.50	31kmX
BRS	63.01	123	iP	37	12.50	-17.0X
			i	37	30.50	68km
VRI	72.82	317	ePd	38	30.50	0.1
OHR	76.25	311	e(P)	38	49.00	-1.3
NUR	77.54	331	eP	39	13.00	16.1X
	0.5s		11.20nm			
			i	39	29.20	58km
SPC	77.75	319	iP	38	59.30	0.7
KRA	78.07	320	eP	39	00.80	0.7
			e	39	17.00	58km
SOD	78.64	338	iP	39	02.60	-0.3
			i	39	18.80	58km
KEV	79.26	341	eP	39	22.00	15.8X
ZST	79.69	318	i(P)	39	10.00	1.1
			i	39	26.60	59km
PRU	81.53	320	P	39	19.80	1.2
			e	39	36.30	59km
BRG	81.97	321	e(P)	39	16.40	-4.5X
KHC	82.09	319	eP	39	23.30	1.7
CLL	82.59	321	eP	39	23.00	-1.1
HFS	82.84	330	eP	39	25.20	0.0
	0.6s		6.10nm			4.8mb
WATA	83.35	317	iP	39	32.50	4.2X
			i	39	46.10	46kmX
SOTA	83.60	317	iP	39	29.30	-0.2
	0.5s		8.80nm			5.0mb
NB2	84.12	331	P	39	31.70	-0.1
	0.9s		7.30nm			4.7mb
ALO	136.21	27	e(PKP)	46	25.00	1.6
SIV	154.20	240	PKP	47	09.40	16.1X
	S.D. = 1.1		on 41 of 51 obs.			

% OCT 02, 1990 13h 42m 50.80± 0.83s
39.119 N ± 6.7km 27.648 E ± 8.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.7 (ISK).

IZM	0.78	203	iPg	43	06.00	0.0
			iSg	43	18.00	
DST	0.90	57	iPn	43	08.20	0.1
EDC	1.24	8	ePn	43	13.50	-0.3
EZN	1.24	305	ePn	43	14.10	0.2
BNT	1.25	10	ePn	43	14.50	0.4
KGT	1.36	349	iPn	43	15.30	-0.4
	S.D. = 0.4		on 6 of 6 obs.			

---

* OCT 02, 1990 13h 43m 44.61± 0.51s
17.052 S ± 9.0km 174.338 W ±14.3km
DEPTH = 33.0km (normol)
5.0mb (8 obs.)
TONGA ISLANDS (173)

DZM	18.78	252	iPd	48	14.80	11.1X
PUZ	21.93	196	eP	48	41.80	4.8X
NOZ	22.50	196	eP	48	45.30	2.7
WLZ	22.53	201	P	48	47.60	4.7X
MNG	25.08	199	eP	49	08.10	0.4
CAW	25.66	199	eP	49	12.80	-0.2
WDW	25.82	199	eP	49	14.10	-0.5
MOW	25.89	198	eP	49	14.80	-0.4
TCW	26.00	200	eP	49	15.60	-0.6
LTZ	28.08	201	P	49	34.00	-1.2
			e	49	38.00	
COO	33.56	240	iPd	50	25.10	1.3
	0.7s		23.00nm			5.2mb
STK	42.45	241	iPc	51	39.60	1.4
	1.0s		11.00nm			4.5mb
WB5	48.59	258	eP	52	26.10	-1.2
ASPA	48.76	253	iPd	52	28.50	-0.1
	0.8s		63.20nm			5.7mb
			iS	59	12.10	
WARB	55.23	250	eP	53	16.30	-0.8
NANU	65.69	253	eP	54	28.10	-0.3
	0.5s		7.00nm			5.0mb
SPA	73.06	180	iPd	55	12.30	-0.9
	0.7s		14.84nm			5.1mb
PMR	80.91	12	eP	55	57.10	0.5
TOA	81.98	13	eP	56	02.70	0.4
ALO	82.54	50	eP	56	06.00	0.0
	1.0s		4.00nm			4.4mb
FBA	84.18	11	eP	56	13.50	0.1
	0.8s		41.03nm			5.7mb
IMA	84.32	8	eP	56	14.70	0.4
	0.8s		3.20nm			4.5mb
CLL	145.32	352	iPKPc	03	19.60	-0.9
	1.0s		14.00nm			
	S.D. = 1.0		on 20 of 23 obs.			

? OCT 02, 1990 14h 06m 34.72± 3.44s
11.954 N ±10.6km 60.123 W ±35.6km
DEPTH = 33.0km (normol)
WINDWARD ISLANDS (95)

GRW	1.52	278	eP	06	59.98	0.0
			eS	07	18.69	
SVB	1.71	320	eP	07	02.64	0.0
			eS	07	25.64	
SVV	1.73	322	eP	07	02.81	-0.1
			eS	07	26.36	
TRN	1.81	224	eP	07	04.00	0.0
			eS	07	28.56	
SLB	2.06	334	eP	07	07.89	0.1
			eS	07	33.39	
	S.D. = 0.1		on 5 of 5 obs.			

OCT 02, 1990 14h 45m 30.54± 0.29s
47.465 N ± 5.1km 89.607 E ± 5.3km
DEPTH = 33.0km (normol)
4.8mb (16 obs.) 3.9Msz (1 obs.)
NORTHERN XINJIANG, CHINA (332)
ML 5.3 (BJI).

WMO	3.88	201	iPnd	46	30.50	1.1
			Sg	47	33.50	
GTA	10.94	134	eP	48	05.00	-2.9X
	Z 10s		1.30um			
KSH	12.72	236	P	48	33.00	1.1
			eS	50	56.00	
LZH	15.53	132	eP	49	08.00	-0.7
	1.5s		25.00nm			4.2mb
	Z 10s		0.53um			
			isP	49	16.00	
BTO	16.18	108	eP	49	21.00	4.0X
	N 10s		0.70um			
	E 10s		0.50um			
HHC	17.06	105	eP	49	29.60	1.5
			pP	49	34.00	
TIY	19.37	112	eP	49	57.00	0.7
	Z 11s		1.20um			
	N 10s		0.50um			
GUN	19.74	190	P	49	59.70	-1.1
XAN	19.78	126	P	50	00.80	0.0
	E 10s		0.40um			
			S	53	40.00	
CD2	19.79	142	eP	50	04.00	3.1X
GKN	19.81	193	P	50	00.50	-0.8
KKN	19.93	191	P	50	01.60	-1.0
PKI	20.13	191	P	50	04.20	-0.6
DMN	20.13	192	P	50	04.00	-0.8
BJI	20.51	101	eP	50	09.00	0.7
	1.1s		29.00nm			4.6mb
	Z 12s		0.96um			4.4MszX
	N 10s		0.80um			
NDI	21.09	212	eP	50	13.50	-0.8
SNY	24.69	91	eP	50	49.80	0.3
MAIO	24.89	254	eP	50	53.00	1.3
GYA	24.90	141	P	50	54.00	2.1
CN2	25.19	85	eP	50	59.00	4.7X
WHN	25.43	123	Pc	51	01.50	4.8X
GBA	35.26	201	Pc	52	26.60	2.6
	0.6s		2.10nm			4.2mb
KEV	37.12	329	eP	52	32.00	-7.2X
SOD	37.19	325	iP	52	40.40	0.6
NUR	38.70	314	iP	52	53.00	0.5
	0.6s		23.50nm			5.2mb
UPP	42.26	314	iP	53	22.00	0.1
HFS	44.06	316	eP	53	35.50	-1.0
	0.8s		11.30nm			4.7mb
	Z 19s		0.13um			3.9Msz
			LR	11	24.00	
NB2	44.91	318	P	53	43.00	-0.5
	0.7s		11.70nm			4.9mb
KSP	46.24	303	eP	53	54.50	0.4
PRU	47.63	302	eP	54	20.50	15.5X
	Z 15s		0.40um			4.5MszX
CLL	47.89	305	eP	54	07.00	-0.1
KHC	48.59	302	P	54	13.50	1.0
MMN	51.94	290	P	54	38.80	0.7
CZI	52.23	290	P	54	40.70	0.4
LPG	54.44	301	eP	54	57.20	0.2
	0.9s		9.85nm			4.8mb
LPL	54.44	301	eP	54	57.10	0.2
	1.0s		12.00nm			4.9mb
SBF	54.96	299	eP	55	00.10	-0.5
	0.8s		10.75nm			4.9mb
MBC	55.17	8	eP	55	02.00	0.5
	1.0s		7.00nm			4.6mb
MAF	56.43	304	eP	55	10.60	-0.4
	1.0s		6.00nm			4.6mb
LDF	56.53	307	eP	55	11.90	0.2

02d 14h

	0.8s	10.75nm			4.9mb	
FLN	56.63	308	eP	55	11.70	-0.7
	0.8s	14.80nm			5.1mb	
GRR	57.05	307	eP	55	14.50	-0.9
	1.0s	20.00nm			5.1mb	
INK	60.14	17	eP	55	36.50	-0.1
FFC	77.71	7	eP	57	25.00	-0.1
	0.7s	16.00nm			5.2mb	
WB5	78.16	137	eP	57	26.00	-2.0
ASPA	81.25	140	eP	57	42.40	-2.1
	0.9s	3.60nm			4.4mb	
ZOBO	143.86	322	ePKP	05	00.00	-4.9X
LPB	144.09	322	(PKP)	05	03.00	-2.0
CNCB	144.28	321	PKP	05	03.00	-2.5X
ARE	145.37	327	ePKP	05	07.00	-0.1
S.D. = 1.1 on 41 of 50 obs.						

& OCT 02, 1990 14h 50m 59.63s
62.343 N 150.932 W
DEPTH = 76.2km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.31	78	iP	51	11.05	-0.7
SKT	0.46	218	iP	51	12.26	-0.6
PWA	0.85	144	iP	51	16.42	-0.5
HUR	0.87	43	iP	51	16.33	-0.9
			eS	51	29.01	
SUA	0.89	174	iP	51	17.08	-0.4
			eS	51	30.68	
GHO	1.11	120	iP	51	19.69	-0.4
			eS	51	36.17	
NCG	1.11	212	iP	51	19.35	-0.8
			eS	51	35.00	
PLRM	1.14	131	eP	51	19.78	-0.6
PMR	1.14	131	iPc	51	19.90	-0.5
CGLM	1.16	207	eP	51	19.91	-0.9
			eS	51	34.85	
CRP	1.23	209	eP	51	21.01	-0.8
PMS	1.28	149	eP	51	21.72	-0.6
SPU	1.28	205	iP	51	21.59	-0.8
			eS	51	38.85	
BGL	1.29	213	eP	51	22.07	-0.4
CKL	1.33	211	eP	51	22.48	-0.6
SML	1.34	113	iP	51	22.51	-0.6
RND	1.43	41	eP	51	23.07	-1.3
			eS	51	41.29	
NKA	1.61	185	eP	51	28.70	2.0
MCK	1.67	32	eP	51	26.84	-0.6
SCM	1.77	105	eP	51	27.67	-1.3
SLKM	1.87	169	eP	51	29.73	-0.6
RDT	1.91	202	eP	51	30.17	-0.7
RSO	2.08	206	eP	51	33.01	-0.3
TOA	2.24	94	iPd	51	34.70	-0.7
NNL	2.32	185	eP	51	37.78	1.5
GLI	2.35	127	eP	51	34.93	-1.9
SEW	2.36	162	eP	51	36.04	-0.8
NEA	2.39	20	eP	51	35.46	-1.9
TTA	2.42	286	iPd	51	36.40	-1.4
VZW	2.45	120	eP	51	36.35	-1.9
WRH	2.49	30	iP	51	36.97	-1.8
VLZ	2.50	117	eP	51	36.56	-2.3
			eS	52	06.41	
KLU	2.52	108	iP	51	37.14	-2.1
KNIM	2.53	141	eP	51	36.13	-3.1
SVW	2.55	243	iPd	51	38.30	-1.4
BRLK	2.59	179	eP	51	40.97	0.8
CCB	2.70	30	eP	51	39.76	-1.9
DDM	2.72	56	eP	51	41.77	-0.3
HDA	2.74	39	eP	51	40.65	-1.5
CNPM	2.83	183	eP	51	43.39	-0.1
MTU	2.85	145	eP	51	40.91	-2.8
OPT	2.92	204	eP	51	45.97	1.2
FBA	2.92	27	iPd	51	43.20	-1.6
PDB	3.01	213	eP	51	45.21	-0.8
GLM	3.09	29	eP	51	45.25	-1.9
DOT	3.40	64	eP	51	49.73	-1.6
GLB	3.49	102	iP	51	50.35	-2.3
CDD	3.68	202	eP	51	55.54	0.3
TMW	3.77	71	eP	51	54.55	-2.0
IMA	3.93	343	eP	51	57.00	-1.9
TGL	4.19	109	eP	51	59.58	-3.0
BALM	4.30	104	eP	52	00.64	-3.4
52 obs. associated						

• OCT 02, 1990 15h 00m 52.11± 0.76s
24.170 N ±14.2km 64.679 E ± 7.4km
DEPTH = 10.0km (geophysicist)
4.6mb (7 obs.)
NEAR COAST OF PAKISTAN (356)

QUE	6.33	18	iPd	02	27.50	-0.4
	1.0s	1683.00nm			6.9mb	X
			eS	03	36.60	
POO	10.22	122	eP	03	20.50	-1.5
NDI	12.10	66	iPd	03	46.00	-1.5
	0.5s	28.17nm			5.8mb	X
HYB	14.60	115	ePd	04	24.40	3.6X
GBA	15.99	129	P	04	43.00	4.2X
			S	07	13.00	
GKN	18.33	74	P	05	09.30	1.0
DMN	18.69	75	P	05	13.20	0.3
	0.6s	27.00nm			4.6mb	
KKN	18.87	75	P	05	15.00	0.0
	0.6s	26.00nm			4.6mb	
PKI	18.96	75	P	05	17.30	1.1
	0.6s	27.00nm			4.6mb	
GUN	19.41	74	P	05	20.40	-1.3
CHG	32.27	93	eP	07	33.10	9.8X
CHTO	32.27	93	eP	07	25.80	2.5
	1.1s	3.53nm			4.2mb	
SKO	39.87	307	iP	08	28.00	0.3
OHR	40.17	306	eP	08	29.50	-0.7
BJI	45.78	57	eP	09	42.50	26.9X
CLL	47.74	318	eP	09	32.00	1.0
	1.5s	17.00nm			4.9mb	
NB2	51.66	330	P	10	00.50	-0.5
	0.7s	1.80nm			4.1mb	
LKO	68.21	271	P	11	53.70	-1.8
	0.7s	7.50nm			5.0mb	
KIC	68.66	267	P	11	59.50	1.3
S.D. = 1.3 on 15 of 19 obs.						

% OCT 02, 1990 15h 06m 02.38± 0.93s
39.085 N ± 8.1km 27.723 E ± 8.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.0 (ISK).

IZM	0.78	208	ePg	06	18.00	0.5
			eSg	06	30.50	
DST	0.87	53	iPn	06	20.10	0.9
KCT	1.26	23	iPn	06	26.80	1.0
EDC	1.26	5	ePn	06	26.50	0.6
BNT	1.28	7	iPn	06	26.30	0.2
EZN	1.31	305	ePn	06	26.00	-0.6
KGT	1.40	347	iPn	06	27.80	-0.1
IZI	1.84	47	ePn	06	32.00	-2.3
YLV	1.95	40	ePn	06	35.80	-0.1
S.D. = 1.2 on 9 of 9 obs.						

OCT 02, 1990 15h 06m 44.61± 0.11s
24.036 S ± 3.5km 174.646 W ± 2.6km
DEPTH = 9.3km (geophysicist)
5.8mb (48 obs.) 5.5Msz (20 obs.)
SOUTH OF TONGA ISLANDS (175)
Mo=1.0•10••18 Nm (PPT). Depth from broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 38 Dip=84 Slip= 5
NP2: 307 85 174
Principal Axes:
T Plg= 8 Azm=263
P 1 353
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: 7 Focal mech. F
Energy 9.2±1.7•10••13 Nm
MOMENT TENSOR SOLUTION
Dep 11 No. of sta: 13
Moment Tensor; Scale 10••18 Nm
Mrr= 0.12 Mtt=-2.87
Mff= 2.75 Mrt=-0.22
Mrf= 0.58 Mtf=-0.51
Principal axes:
T Val= 2.92 Plg=12 Azm=265
N 0.01 78 100
P -2.92 3 355
Best Double Couple:Mo=2.9•10••18
NP1:Strike= 40 Dip=79 Slip= 6
NP2: 309 84 169
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 31C
Centroid Location:
Origin Time 15:06:50.6 0.5
Lat 24.08S 0.04 Lon 174.49W 0.03
Dep 15.0 BDY Half-duration 2.3
Moment Tensor; Scale 10••17 Nm
Mrr=-4.14 0.08 Mtt=-0.42 0.10
Mff= 4.56 0.11 Mrt= 1.09 0.25
Mrf= 1.53 0.34 Mtf= 2.12 0.08
Principal Axes:
T Val= 5.68 Plg=10 Azm=291
N -1.13 8 22
P -4.55 77 149
Best Double Couple:Mo=5.1•10••17
NP1:Strike= 11 Dip=35 Slip=-104
NP2: 208 56 -80

RAO	5.96	209	P	08	14.00	-1.1
			S	09	20.00	
KRO	8.71	319	eP	08	53.20	-0.5
SVA	8.72	311	iPc	08	54.00	0.1
			eS	09	47.00	
VUN	8.80	312	iPd	08	55.10	0.2
NDE	9.33	322	eP	09	02.20	-0.1
MBU	9.38	317	eP	09	02.80	-0.2
SGE	9.45	311	eP	09	06.00	1.9
PUZ	15.25	202	P	10	10.50	-11.2X
			eS	12	58.40	
PVC	17.11	288	iPc	10	47.50	2.0
DZM	17.51	273	iPc	10	52.00	1.3
			iS	14	13.30	
			i	19	41.20	
PGZ	18.21	203	eP	10	48.90	-10.2X
			eS	14	08.20	
KIW	18.93	205	eP	10	56.50	-11.5X
WEL	19.34	205	P	11	12.00	-1.1
			S	14	31.00	
TCW	19.47	206	P	11	02.40	-12.2X
			eS	14	36.10	
AFR	24.11	79	iP	12	01.10	-0.5
	1.2s	115.00nm			5.4mb	
PAE	24.25	80	iP	12	02.30	-0.6
	1.2s	90.00nm			5.3mb	
PPT	24.28	79	iP	12	02.70	-0.6
	1.2s	100.00nm			5.3mb	
PPN	24.42	79	iP	12	04.00	-0.6
	1.2s	45.00nm			5.0mb	
TVO	24.50	80	iP	12	05.60	0.1
	1.2s	180.00nm			5.6mb	
TPT	26.98	75	eP	12	29.00	0.4
	1.2s	50.00nm			5.1mb	
RUV	27.11	76	eP	12	30.00	0.2
	1.2s	40.00nm			5.0mb	
HNR	28.26	297	eP	12	37.00	-3.3X
SVO	28.53	297	eP	12	46.00	3.3X
COO	30.36	250	eP	12	59.00	-0.1
CNB	33.06	242	eP	13	23.00	0.3
			iPcP	16	08.00	
RMO	33.12	258	iP	13	22.00	-1.2
CAN	33.36	242	eP	13	26.40	1.1
BWA	33.69	244	eP	13	26.70	-1.5
			e	16	07.20	
CMS	35.61	249	eP	13	44.00	-0.6
CTA	36.37	268	iPd	13	50.00	-1.2
	0.9s	151.26nm			5.8mb	
			iS	19	27.00	
TOO	36.53	239	iPc	13	53.10	0.7
	1.0s	118.00nm			5.7mb	
OLP	37.15	257	eP	13	57.00	-0.6
RAB	37.57	296	eP	14	02.00	0.7
BFD	38.79	240	iPc	14	14.00	2.7
PMG	39.22	285	iPc	14	23.00	7.9X
	1.1s	379.75nm			6.0mb	
STK	39.23	249	iPc	14	14.20	-0.8
	0.6s	18.00nm			4.9mb	
Z	16s	551.00um			7.5MszX	
			iS	20	13.50	
ADE	41.70	244	eP	14	35.50	0.1
	0.7s	50.68nm			5.4mb	
OIS	42.33	265	eP	14	39.00	-1.7
			i	16	34.60	
ASPA	46.84	259	iPc	15	16.00	-0.9

0.9s 86.20nm 5.8mb
Z 16s 5.84um 5.6MszX
iPcS 20 43.10
iS 22 01.80
iScS 25 21.90
LR 35 42.00
WB5 47.27 265 eP 15 17.00 -3.3X
e 21 02.90
e 22 09.80
HON 47.90 21 P 15 30.00 4.9X
Z 19s 0.99um 4.8Msz
KIP 48.00 21 ePc 15 23.96 -1.9
epPc 15 26.11 7kmX
esPd 15 28.59
FORR 50.80 249 iPd 15 46.40 -1.0
0.4s 60.00nm 5.9mb
MTN 52.35 272 iPc 15 57.20 -2.2
KNA 53.55 268 eP 16 07.00 -1.3
0.5s 34.00nm 5.6mb
GUA 54.37 309 eP 16 13.00 -1.2
0.8s 220.90nm 6.2mb
GUMO 54.44 309 eP 16 13.50 -1.2
1.0s 264.00nm 6.2mb
PJG 54.44 309 eP 16 13.80 -0.9
SBA 54.59 185 iPd 16 18.30 3.2X
COOL 56.71 248 eP 16 30.10 -1.0
KLB 59.43 246 iPd 16 49.90 -0.2
0.6s 88.00nm 6.1mb
RKG 59.61 243 iPd 16 50.50 -0.8
0.5s 34.00nm 5.7mb
NWAO 59.62 245 iPd 16 50.80 -0.6
Z 20s 0.90um 4.9Msz
N 20s 1.60um
E 20s 1.00um
MBL 60.07 259 eP 16 53.70 -0.9
0.7s 87.00nm 6.0mb
BAL 60.51 247 iPd 16 57.10 -0.4
MUN 60.65 246 iPd 16 58.20 -0.3
0.9s 102.00nm 6.0mb
MRWA 61.42 249 iPd 17 03.40 -0.3
NANU 63.51 256 iPc 17 17.90 0.2
SPA 66.11 180 iPd 17 34.80 0.7
1.1s 126.79nm 6.0mb
Z 19s 2.45um 5.4Msz
TRT 71.15 270 iPd 18 06.90 0.9
KAKJ 73.56 323 eP 18 19.30 -0.4
CHJJ 74.09 322 eP 18 22.60 -0.3
IIDJ 74.30 321 eP 18 24.40 0.3
WKYJ 74.77 319 eP 18 26.80 -0.1
MAJO 74.89 322 ePd 18 26.93 -0.6
ipPc 18 29.91 10kmX
e 18 33.22
MAT 74.89 322 iPd 18 26.40 -1.1
1.0s 46.00nm 5.5mb
eS 27 49.00
OFUJ 74.91 326 eP 18 26.80 -0.7
NIIJ 74.95 323 eP 18 27.50 -0.3
YAMJ 75.08 325 P 18 28.60 0.0
MTMJ 75.15 322 eP 18 28.70 -0.4
TSRJ 75.45 320 eP 18 30.60 -0.1
TKSJ 75.54 318 eP 18 31.00 -0.3
ADK 75.61 359 eP 18 29.90 -1.3
1.0s 160.00nm 6.0mb
KAGJ 75.72 314 eP 18 32.60 0.2
AIA 76.51 156 eP 18 36.10 -0.2
KUSJ 76.56 331 eP 18 36.40 -0.4
KUMJ 76.62 315 eP 18 37.30 -0.1
HOOJ 76.65 329 eP 18 38.20 0.9
AOMJ 76.68 326 eP 18 38.20 0.7
YONJ 76.71 319 eP 18 38.00 0.1
SMY 77.07 353 P 18 45.00 5.6X
Z 20s 3.00um 5.6Msz
SHNJ 77.47 316 eP 18 38.90 -3.1X
MRRJ 77.74 328 eP 18 43.40 0.1
SYP 77.99 44 eP 18 46.00 0.9
ASAJ 78.29 330 P 18 47.40 1.0
BCH 78.35 43 P 18 47.00 -0.1
GCC 78.40 40 eP 18 50.40 3.3X
ABL 78.68 44 P 18 48.20 -0.8
MHC 78.82 40 eP 18 51.70 2.1
ARN 78.89 41 P 18 49.80 -0.1
PAS 78.90 45 ePd 18 49.45 -0.5
epPc 18 52.60 10kmX
BAR 78.97 47 eP 18 50.00 -0.5
MWC 79.02 45 eP 18 50.00 -0.9
PLM 79.26 46 eP 18 52.00 -0.2
MAW 79.28 199 iPd- 18 53.90 2.4

0.9s 89.00nm 5.8mb
RVR 79.32 45 eP 18 52.00 -0.3
PEC 79.40 46 P 18 51.50 -1.2
SBB 79.46 45 eP 18 53.00 -0.1
ISA 79.67 43 eP 18 54.00 -0.2
FRI 79.75 42 eP 18 54.40 -0.1
FHC 79.84 37 eP 18 55.00 0.0
CMB 80.03 41 eP 18 56.00 0.0
TPC 80.26 46 eP 18 58.00 0.6
CLC 80.32 44 eP 18 58.00 0.3
ORV 80.38 39 eP 18 57.60 -0.2
GLA 80.43 47 eP 18 58.00 -0.3
WDC 80.49 38 eP 18 57.90 -0.5
GSC 80.50 45 ePd 18 58.95 0.3
epPc 19 01.93 9kmX
OZH 80.93 302 eP 19 00.00 -1.0
TNP 81.97 42 P 19 05.80 -0.7
1.4s 75.00nm 5.6mb
SSE 82.32 309 Pc 19 09.00 0.9
1.0s 48.00nm 5.6mb
Z 20s 0.50um 4.9Msz
E 16s 0.50um
PP 22 12.00
SKS 29 20.00
SS 34 44.00
KGM 83.54 275 ePc 19 16.50 1.7
GZH 84.14 298 P 19 19.00 1.4
NJ2 84.51 309 Pd 19 20.00 0.7
5.0s 500.00nm 6.0mb X
Z 32s 0.90um 4.9MszX
pP 19 33.00 44kmX
PP 22 36.00
S 29 44.00
QIZ 85.12 293 P 19 20.10 -2.5
PP 22 40.00
eS 29 49.50
MDJ 85.19 324 iPd 19 23.50 1.1
1.0s 200.00nm 6.3mb
Z 28s 1.10um 5.1MszX
S 29 46.70
MSU 85.39 44 P 19 24.70 0.8
SVW 86.23 9 eP 19 26.80 -0.5
DL2 86.42 315 iPc 19 30.00 1.4
1.0s 100.00nm 6.0mb
Z 30s 0.70um 4.9MszX
SKS 29 52.00
IPM 86.68 276 ePd 19 32.50 2.0
0.7s 81.50nm 6.0mb
SNY 86.90 319 iPd 19 31.00 0.1
1.0s 100.00nm 6.0mb
Z 40s 1.70um 5.1MszX
sP 19 52.00
eSKS 29 54.00
CN2 86.98 321 Pd 19 31.80 0.5
1.0s 200.00nm 6.3mb
Z 28s 1.40um 5.2MszX
pP 19 43.00 36kmX
eS 30 07.00
WHN 87.02 305 eP 19 33.00 1.3
6.0s 600.00nm 6.0mb X
Z 20s 0.60um 5.0Msz
pP 19 46.50 45kmX
S 30 00.00
LNV 87.07 126 eP 19 32.50 0.4
LCCH 87.17 125 eP 19 34.00 1.4
ALO 87.24 50 iPd 19 33.10 0.1
1.0s 55.50nm 5.8mb
Z 20s 3.10um 5.7Msz
e 19 45.00
ANMO 87.24 50 iPd 19 33.76 0.8
1.7s 230.77nm 6.2mb
Z 20s 3.72um 5.8Msz
ipPc 19 36.74 9kmX
eSKS 30 00.50
iS 30 24.67
SIT 87.29 20 eP 19 32.10 -0.3
DPW 87.66 34 P 19 33.80 -0.7
PMR 87.77 12 eP 19 34.80 0.1
1.0s 402.00nm 6.7mb
TTA 87.92 8 iPd 19 35.80 0.3
1.0s 115.00nm 6.2mb
TIA 87.94 311 Pd 19 36.80 0.8
Z 38s 1.66um 5.2MszX
PEL 87.98 125 iPc 19 37.50 0.9
1.0s 35.00nm 5.6mb
SNG 88.11 279 eP 19 39.40 2.1
eS 30 15.80

TOA 88.82 13 iPd 19 40.40 0.6
1.1s 96.90nm 6.0mb
BW06 89.46 42 P 19 42.80 -0.7
1.8s 43.40nm 5.4mb
LRM 89.50 38 eP 19 42.60 -1.0
GOL 90.46 46 P 19 55.00 6.7X
Z 20s 2.00um 5.5Msz
BJI 90.57 314 ePd 19 48.35 0.0
1.5s 140.00nm 6.0mb
Z 26s 0.99um 5.1MszX
epPc 19 51.50 10kmX
ePP 23 28.00
GLD 90.59 46 P 19 55.00 6.3X
Z 20s 2.50um 5.6Msz
COL 91.05 11 ePd 19 49.53 -0.5
ipPc 19 52.51 9kmX
eSKS 30 21.91
eS 30 47.40
FBA 91.05 11 iPd 19 49.50 -0.6
0.9s 2512.50nm 7.5mb X
GYA 91.07 298 iPd 19 52.20 1.0
IMA 91.23 8 iPd 19 50.70 -0.3
LOE 91.35 288 eP 19 53.50 1.1
TIY 91.93 311 iPd 19 55.50 0.7
1.1s 100.00nm 6.1mb
Z 34s 1.70um 5.3MszX
N 17s 0.90um
sP 20 16.20
SKS 30 27.00
NST 92.03 286 eP 19 57.50 2.0
XAN 92.73 306 P 19 59.50 1.0
MEO 92.79 53 iPd 19 58.30 -0.5
SES 92.93 35 eP 19 59.00 0.0
1.1s 107.00nm 6.2mb
HIA 93.37 323 ePd 20 00.46 -0.6
epPc 20 03.44 9kmX
esPc 20 04.76
EDM 93.42 32 iPd 20 00.90 -0.3
RSSD 93.58 43 P 20 04.00 1.6
pP 20 17.00 43kmX
BDT 93.65 287 eP 20 00.60 -2.4
0.8s 57.10nm 6.0mb
KMI 93.70 296 ePd 20 05.18 1.8
1.5s 80.00nm 5.9mb
Z 20s 0.60um 5.1Msz
epPc 20 08.16 9kmX
esPc 20 09.98
S 30 40.00
SS 31 18.00
HHC 94.03 313 Pc 20 05.60 1.2
1.0s 100.00nm 6.1mb
Z 25s 1.40um 5.3MszX
CHG 94.34 289 ePd 20 07.90 1.8
1.0s 35.50nm 5.7mb
CHTO 94.34 289 ePd 20 06.86 0.7
epPc 20 09.84 9kmX
SIO 94.89 53 eP 20 08.60 0.2
BTO 94.95 312 eP 20 09.50 0.8
sP 20 30.50
SKS 30 40.00
TUL 95.34 53 eP 20 10.20 -0.2
1.0s 28.30nm 5.7mb
INK 96.89 14 eP 20 16.00 -0.7
LZH 97.36 306 Pd 20 21.00 1.2
1.5s 28.00nm 5.7mb
Z 40s 2.56um 5.4MszX
sP 20 36.00
PP 24 19.00
SKS 30 57.00
SS 38 20.00
CNCB 97.74 112 P 20 25.00 2.5
LPB 97.77 112 P 20 23.00 0.6
Z 16s 1.35um 5.5MszX
LR 52 20.00
ZOBO 97.87 112 P 20 25.00 1.9
Z 18s 1.29um 5.5Msz
SKS 31 16.00
LR 52 36.00
GTA 101.60 308 Pdiff 20 41.60 2.7X
Z 46s 2.50um 5.4MszX
GUN 108.77 293 PKP 25 15.80 -0.9
PKI 109.07 292 PKP 25 16.30 -1.0
1.0s 24.00nm
KKN 109.24 292 Pdiff 21 00.00 -13.3X
KKN 109.24 292 PKP 25 16.60 -0.8
1.0s 36.00nm
DMN 109.33 292 PKP 25 17.00 -0.7

02d 15h

GKN	109.85	293	PKP	25	17.10	-1.4
GBA	111.60	276	PKPc	25	20.70	-1.2
	0.7s		3.80nm			
NDI	116.33	291	iPKPc	25	30.00	-0.6
	0.7s		13.70nm			
BLF	123.49	202	iPKPc	25	45.00	0.5
	1.0s		64.00nm			
SOB1	124.04	121	iPKPd	25	45.30	-0.5
OUE	125.40	291	iPKPc	25	48.90	0.7
SLR	125.77	206	iPKPd	25	48.50	-0.6
	1.5s		97.22nm			
	Z 18s		2.06um			5.8Msz
DAG	125.90	7	iPKPd	25	46.20	-1.4
	0.9s		32.21nm			
BUL	130.59	209	iPKPc	25	58.50	0.1
MAIO	132.18	298	ePKP	26	01.00	0.1
KEV	132.49	350	ePKP	26	00.00	-0.3
			e	26	15.00	
KRI	132.98	213	iPKPc	25	58.30	-4.7X
			i	29	58.90	
SOD	134.68	349	iPKP	26	03.60	-0.9
			e	26	15.00	
SUF	138.88	346	ePKP	26	10.00	-2.5X
NUR	141.16	345	ePKP	26	10.00	-6.7X
	0.7s		12.00nm			
			i	26	15.90	
ARO	142.32	257	iPKP+	26	18.00	-2.2X
TAB	142.52	302	ePKP	26	17.00	-3.0X
NB2	142.80	355	PKP	26	13.80	-5.8X
	0.8s		8.70nm			
UPP	143.18	350	iPKP	26	14.80	-5.4X
HFS	143.46	353	ePKP	26	15.70	-5.0X
	1.4s		69.50nm			
	Z 18s		0.35um			5.2Msz
			LR	15	03.00	
KMSA	143.66	272	PKP	26	19.60	-2.7X
SRAT	144.29	268	PKP	26	23.30	-0.4
KMTA	144.59	268	PKP	26	23.70	-0.5
ABHA	144.72	268	PKP	26	25.00	0.5
OASM	145.43	282	PKP	26	25.30	0.1
AFIF	145.53	278	PKP	26	26.00	0.5
UOSK	146.46	281	PKP	26	27.70	0.7
EDR	146.65	8	ePKPd	26	27.00	0.8
	0.9s		126.00nm			
ELO	146.93	9	ePKPd	26	28.00	1.3
EDU	146.95	8	ePKPd	26	28.10	1.4
	1.0s		270.00nm			
EAB	147.11	10	ePKPd	26	28.60	1.7
	1.1s		241.00nm			
EBH	147.17	9	ePKPd	26	29.00	2.0
	0.9s		218.00nm			
ESY	147.62	8	ePKPd	26	29.90	2.1X
	0.9s		129.00nm			
COP	147.96	352	iPKPd	26	31.30	3.0X
	1.0s		152.00nm			
			i	26	35.00	
			i	26	41.00	
EKA	148.11	9	PKP	26	29.00	0.5
	0.9s		67.40nm			
ESK	148.12	9	ePKPd	26	31.20	2.6X
	1.0s		80.00nm			
KVT	149.26	311	iPKP	26	35.90	5.0X
GAZ	149.77	303	iPKP	26	37.30	5.6X
WIT	151.25	358	iPKPc	26	41.00	7.6X
			ec	26	52.00	
KRA	151.64	340	ePKP	26	34.00	-0.1
	0.8s		141.00nm			
			i	26	40.50	
			i	26	44.00	
WAJH	151.69	281	PKP	26	42.50	7.6X
HRI	151.87	296	ePKP	26	42.00	6.8X
KSP	151.93	345	ePKP	26	34.20	-0.3
	0.9s		153.00nm			
			id	26	41.50	
			i	26	45.20	
CFR	151.94	324	ePKP	26	33.00	-1.7
DBN	151.98	0	ePKP	26	38.00	3.5X
ANTO	152.02	311	ePKPd	26	34.82	-0.3
			e	26	42.10	
BBTK	152.06	311	ePKP	26	35.00	-0.2
WTS	152.06	358	ePKPc	26	35.00	0.4
	1.1s		225.00nm			
			ic	26	41.50	
CLL	152.14	350	iPKP	26	34.80	0.0
	1.6s		31.00nm			
			i	26	41.70	
			i	26	53.80	

AYN	152.19	287	PKP	26	42.80	7.3X
VRI	152.21	327	ePKPc	26	41.50	6.4X
BRD	152.29	326	ePKP	26	40.00	4.8X
SPC	152.30	339	ePKP	26	35.00	-0.4
BMR	152.34	333	ePKPc	26	36.00	0.8
TLB	152.39	324	ePKP	26	39.00	3.7X
BRG	152.39	348	iPKPc	26	35.60	0.4
			i	26	42.50	
			i	26	45.50	
			i	26	54.10	
JVI	152.43	293	ePKP	26	43.00	7.2X
ISR	152.81	326	ePKP	26	40.00	4.0X
MLR	152.87	327	ePKPc	26	35.00	-1.2
MOX	152.99	351	ePKP	26	36.00	0.0
	1.6s		37.00nm			
	Z 20s		1.20um			5.7Msz
			i	26	43.50	
			i	26	55.00	
BADA	153.08	286	PKP	26	25.00	-11.8X
MBH	153.10	289	ePKP	26	45.00	8.2X
PRU	153.12	347	PKP	26	35.70	-0.5
	Z 16s		0.60um			5.5MszX
	E 17s		0.50um			
			e	26	39.50	
			i	26	44.00	
UCC	153.27	1	PKP	26	45.00	8.6X
ENN	153.31	359	ePKPc	26	36.50	0.1
	1.1s		112.00nm			
			ic	26	44.50	
			e	26	56.00	
MEM	153.47	359	PKP	26	36.80	0.2
			e	26	44.70	
CMP	153.47	328	iPKPc	26	27.00	-9.9X
PSZ	153.51	338	ePKP	26	37.00	0.0
BUC	153.54	325	ePKP	26	36.00	-1.0
TNR	153.55	329	ePKPc	26	32.00	-5.0X
SNF	153.56	2	PKP	26	37.40	0.6
			e	26	45.20	
HRT	153.65	315	ePKP	26	39.00	1.7
TNS	153.75	356	ePKPd	26	45.00	7.8X
ISK	153.91	316	ePKP	26	49.00	11.4X
YLV	153.97	315	iPKP	26	45.80	8.0X
DOU	153.98	1	PKP+	26	41.00	3.6X
			ec	26	46.00	
			e	50	30.00	
GRF	153.98	351	ePKP	26	37.70	0.2
	Z 20s		0.70um			5.5Msz
			ed	26	46.30	
			ec	26	59.30	
DEV	154.00	331	iPKPc	26	40.00	2.4X
SRO	154.13	340	ePKP	26	37.80	0.1
KHC	154.13	348	iPKPd	26	37.80	0.1
	Z 20s		0.70um			5.5Msz
	N 20s		0.60um			
	E 20s		0.50um			
			e	26	46.30	
ZST	154.15	342	ePKP	26	37.50	-0.2
ALT	154.24	311	ePKP	26	39.00	0.7
WET	154.25	349	ePKP	26	37.60	-0.3
CTT	154.25	317	ePKP	26	46.30	8.2X
VKA	154.30	343	iPKPd	26	38.20	0.3
	4.0s		418.00nm			
			i	26	50.50	
JMB	154.56	321	ePKP	26	38.00	-0.4
BZS	154.76	333	ePKP	26	37.00	-1.6
PVL	154.76	324	iPKPd	26	38.00	-0.6
SOP	154.77	342	iPKPd	26	39.00	0.5
KMR	155.03	346	ePKP	26	36.00	-2.9X
KGT	155.35	317	ePKP	26	38.00	-1.5
DIM	155.43	322	ePKP	26	40.00	0.4
FUR	155.46	350	ePKP	26	39.80	0.3
CDF	155.62	357	ePKP	26	39.20	-0.6
KDZ	155.75	321	iPKP	26	40.00	-0.1
HAU	156.07	358	ePKP	26	40.10	-0.3
HLW	156.15	290	ePKP	26	40.00	-1.0
SLE	156.19	355	ePKPc	26	40.70	0.2
WATA	156.22	349	iPKPc	26	40.60	-0.2
	0.8s		10.30nm			
BSF	156.23	358	ePKP	26	40.20	-0.5
	1.3s		21.65nm			
VTS	156.32	326	iPKPc	26	41.00	0.0
SQTA	156.40	350	i(PKP)	26	41.00	0.0
			i	26	51.20	
ZLA	156.48	355	ePKPc	26	41.40	0.4
FVI	156.71	347	PKP	26	40.00	-1.1
BCAO	156.73	215	iPKPd	26	42.38	0.1
			ePKPab	27	11.85	

MM8	156.74	323	iPKPc	26	41.00	-0.5
OGA	156.77	350	ePKP	26	41.20	-0.4
LOR	156.79	3	ePKP	26	41.10	-0.2
	1.3s		27.10nm			
	Z 21s		1.02um			5.6Msz
LJU	156.82	344	ePKPd	26	41.00	-0.4
SSF	156.98	3	ePKP	26	41.30	-0.2
	1.1s		15.85nm			
VOY	157.00	345	ePKPd	26	41.00	-0.7
LLS	157.03	354	ePKPc	26	42.10	0.2
MFF	157.05	10	ePKP	26	41.50	-0.1
	1.3s		21.65nm			
OSS	157.07	352	ePKPc	26	42.10	0.2
LBF	157.07	2	ePKP	26	41.50	-0.2
	1.3s		19.35nm			
CEY	157.14	343	ePKPd	26	41.00	-0.8
TRI	157.33	345	ePKP	26	41.10	-0.9
			i	27	12.50	
			i	30	50.00	
VDL	157.36	353	ePKPc	26	42.70	0.4
SMF	157.41	3	ePKP	26	41.70	-0.4
BGF	157.44	5	ePKP	26	41.90	-0.2
CTI	157.46	349	PKP	26	42.00	-0.3
LSF	157.62	7	ePKP	26	42.20	-0.2
TCF	157.65	6	ePKP	26	42.30	-0.1
	1.3s		19.85nm			
SKO	157.66	327	iPKP	26	41.80	-0.7
	Z 20s		0.93um			5.6Msz
			i	27	15.50	
			i	30	51.00	
MAF	157.75	5	ePKP	26	42.40	-0.1
TMA	157.80	354	ePKPc	26	42.90	0.1
MMK	157.93	355	ePKPc	26	43.90	0.9
DIX	157.94	356	ePKPc	26	44.20	1.1
EMS	157.98	357	ePKPc	26	43.50	0.5
VAI	158.04	354	PKP	26	42.80	0.0
LPL	158.54	357	ePKP	26	44.00	0.3
RJF	158.55	7	ePKP	26	43.50	0.1
	1.1s		17.10nm			
	Z 22s		1.58um			5.8Msz
LPG	158.56	357	ePKP	26	44.20	0.4
	1.3s		18.05nm			
OHR	158.63	326	ePKP	26	42.50	-1.2
	1.2s		60.00nm			
			i	27	09.00	
LFF	158.81	9	ePKP	26	44.10	0.4
CAF	158.99	7	ePKP	26	44.30	0.3
	1.3s		25.25nm			
BNI	159.01	357	PKP	26	45.40	1.3
LPO	159.12	8	ePKP	26	44.40	0.3
	1.3s		20.85nm			
SFI	159.46	347	PKP	26	44.50	0.1
PGD	159.53	347	PKP	26	45.00	0.2
BDI	159.57	349	PKP	26	43.50	-1.2
ARV	159.61	344	PKP	26	44.50	-0.2
LIC	159.67	149	PKPd	26	45.82	0.3
	1.1s		37.50nm			
CRE	159.72	346	PKP	26	43.50	-1.4
KIC	159.93	149	PKPd	26	46.24	0.4
	1.2s		51.00nm			
TIC	160.04	148	PKPd	26	46.30	0.3
	1.0s		39.00nm			
SBF	160.15	356	ePKP	26	44.80	-0.5
	1.2s		35.70nm			
ECRI	160.36	17	ePKP	26	47.70	2.1X
FRF	160.50	357	ePKP	26	45.50	-0.1
	1.2s		26.80nm			
LCI	160.60	330	PKP	26	46.00	0.3
EPF	160.61	11	ePKP	26	46.50	0.7
	1.3s		36.10nm			
LRG	160.61	358	ePKP	26	45.90	0.2
	1.3s		50.55nm			
MNS	160.72	343	PKP	26	45.50	-0.4
LMR	160.73	357	ePKP	26	45.90	0.1
	1.0s		18.00nm			
DUI	160.85	339	PKP	26	46.00	-0.1
AZI	160.87	341	PKP	26	46.00	0.1
SDI	161.02	340	PKP	26	46.00	-0.2
PGF	161.29	352	ePKP	26	46.40	-0.1
	1.3s		39.70nm			
ORI	161.48	332	PKP	26	45.00	-1.7
SGO	161.52	335	PKP	26	46.00	-0.6
GUD	161.62	23	ePKP	26	49.50	2.5X
TDS	161.87	332	PKP	26	47.50	0.4
ETOR	162.15	19	ePKP	26	49.50	2.1X
LKO	162.20	142	PKPd	26	45.90	-2.2X
	1.1s		52.50nm			

```
CZI   162.32 331 PKP   26 45.50  -2.0
TOL   162.32  24 iPKP  26 49.00   1.5
                 iPKKP 27 35.50
                 iPP   31 17.00
                 eSP   45 00.00
                 eSS   51 45.00
EVAL  162.98  35 ePKP  26 50.50   2.3X
ECOG  164.74  28 ePKP  26 51.00   0.9
AFC   164.77  28 ePKP  26 51.00   0.8
     S.D. = 0.9  on 283 of 341 obs.
-------------------------------------
   OCT  02, 1990  15h 15m 24.89± 0.36s
   43.531 N ± 2.5km  110.463 W ± 3.1km
   DEPTH =   5.0km  (geophysicist)
 WYOMING                          (460)
      ML 3.6 (BUT).

TRXW    0.23 342 iPd   15 29.71   0.1
MOOW    0.30 317 iPc   15 30.91  -0.1
ANGW    0.36  33 iPd   15 31.81  -0.4
PACW    0.37 357 iPd   15 32.20  -0.2
TARW    0.45 301 iPc   15 33.79  -0.1
MUDI    0.46 281 iPc   15 34.28   0.2
COLW    0.46 338 iPd   15 33.83  -0.2
RAMW    0.50 316 iPc   15 34.64  -0.4
IMW     0.50 317 iP    15 34.10  -0.9
STEW    0.54 343 iPd   15 35.34  -0.4
                 S     15 42.48
ALPW    0.54 226 ePc   15 36.06   0.2
                 S     15 43.50
CHOI    0.59 249 ePc   15 36.79   0.1
                 S     15 45.21
PINI    0.64 268 ePc   15 37.70  -0.1
                 S     15 46.85
GRAI    0.69 294 ePc   15 38.69  -0.1
BW06    1.00 138 eP    15 43.20  -1.3
PTI     1.54 245 eP    15 53.00  -0.3
LTMT    1.55 311 iPnc  15 53.00  -0.5
HPI     1.92 276 eP    15 58.20  -0.7
BGMT    2.04 327 ePn   16 01.60   1.0
MEMT    2.10 350 ePn   16 02.50   1.1
MCMT    2.15 308 ePnc  16 03.10   0.9
SXM     2.67 349 ePn   16 09.90   0.4
LRM     2.69 329 ePn   16 11.00   1.1
HBMT    2.73 327 ePn   16 12.60   2.1X
BUT     2.90 330 ePg   16 11.90  -0.8
                 eSg   16 54.10
HRY     3.32 344 ePn   16 18.90   0.2
RSSD    4.69  81 eP    16 40.00   1.8X
PV09    5.13 168 eP    16 45.00   0.5
GOL     5.40 133 eP    16 49.00   0.6
     S.D. = 0.6  on  27 of  29 obs.
-------------------------------------
?  OCT  02, 1990  15h 30m 02.94± 3.39s
   38.021 N ±15.0km    0.311 W ±30.7km
   DEPTH =  10.0km  (geophysicist)
 SPAIN                            (377)
      mbLg 2.7 (MDD).

ACU     0.50 351 iP    30 13.20   0.2
                 eS    30 19.00
ECHE    1.65 342 ePn   30 31.80  -0.3
EVIA    1.83 290 ePn   30 35.00   0.2
                 eSn   30 58.00
ENIJ    1.84 236 ePn   30 35.00   0.1
EBAN    2.74 274 ePn   30 47.60  -0.3
                 eSn   31 20.50
     S.D. = 0.3  on   5 of   5 obs.
-------------------------------------
?  OCT  02, 1990  15h 35m 00.39± 5.10s
   32.350 S ±33.9km   70.350 W ±19.2km
   DEPTH =  10.0km  (geophysicist)
 CHILE-ARGENTINA BORDER REGION    (127)

JACH    0.39 212 iPd   35 08.60   0.2
                 iS    35 11.50
ROCH    0.83 222 iPd   35 16.20  -0.5
                 iS    35 24.80
FCH     0.98 177 iPc   35 19.20   0.0
                 iS    35 29.90
PCH     1.27 186 iPc   35 24.20   0.1
                 iS    35 38.40
TACH    1.39 201 iP    35 25.20  -0.6
                 iS    35 41.00
LCCH    1.52 222 iPc   35 28.00   0.4
                 iS    35 45.00
LNV     1.83 209 iPd   35 32.50   0.4
                 iS    35 53.50
     S.D. = 0.5  on   7 of   7 obs.
-------------------------------------
?  OCT  02, 1990  16h 11m 48.39± 0.74s
   54.405 S ±20.9km  119.540 W ±20.0km
   DEPTH =  10.0km  (geophysicist)
   4.8mb (  3 obs.)  5.1Msz (  1 obs.)
 EASTER ISLAND CORDILLERA         (684)

SPA    35.78 180 iPc   18 49.50   0.2
       1.0s    14.00nm          4.8mb
CNCB   54.46  67 P     21 16.00  -2.8X
                 i     24 21.00
LPB    54.62  67 eP    21 20.00   0.2
                 e     24 27.00
ZOBO   54.82  67 P     21 21.00  -0.5
       1.2s    20.27nm          5.0mb
     Z 24s      0.63um          4.6MszX
                 LR    37 36.00
SIV    58.92  73 eP    21 42.00  -8.0X
                 i     21 48.00
ASPA   80.15 243 eP    23 59.00  -1.1
       1.2s     7.40nm          4.5mb
WB5    83.01 246 eP    24 15.90   0.8
PLM    87.43   2 eP    24 40.00   3.2X
ALO    89.70  11 e(P)  24 48.00   0.4
LZH   145.08 256 PKPc  31 29.50   2.3X
       2.0s    57.00nm
     Z 18s      0.29um          5.1Msz
                 pP    31 36.00
PKI   147.57 224 PKP   31 35.30   3.6X
       0.7s    15.00nm
GUN   147.68 225 PKP   31 35.90   4.0X
DMN   147.73 224 PKP   31 36.00   4.1X
       0.8s    57.00nm
KKN   147.82 224 PKP   31 36.00   4.0X
       1.0s    44.00nm
GKN   148.27 224 PKP   31 36.60   4.0X
MOX   150.53  77 ePKP  31 43.00   7.9X
OHR   150.63 100 ePKP  31 31.20  -4.5X
KHC   150.95  81 ePKP  31 41.60   5.7X
SKO   151.55 100 ePKP  31 39.00   2.0X
CLL   151.61  77 ePKP  31 45.00   8.3X
       1.3s    18.00nm
                 e     31 54.00
PRU   151.91  80 ePKP  31 46.50   9.3X
BRG   151.96  78 e(PKP)31 40.20   2.9X
                 e     31 50.00
KSP   153.29  79 ePKP  31 50.50  11.4X
     S.D. = 0.9  on   6 of  23 obs.
-------------------------------------
•  OCT  02, 1990  16h 57m 49.13± 1.16s
   39.589 N ±11.9km   25.205 E ± 7.7km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                       (365)
      MD 2.9 (ATH).

PRK     0.89 112 ePn   58 06.00  -0.3
                 eSn   58 20.00
EZN     0.90  74 iPn   58 06.60   0.3
PLG     1.56 301 ePn   58 17.50   0.5
RDO     1.58   9 ePn   58 17.50   0.4
KGT     1.83  61 iPn   58 20.80   0.0
KDZ     2.07   4 iP    58 24.00  -0.3
                 iS    58 51.00
MMB     2.29 331 iPd   58 27.00  -0.6
     S.D. = 0.5  on   7 of   7 obs.
-------------------------------------
•  OCT  02, 1990  17h 00m 55.18± 0.90s
   24.034 S ± 6.4km   66.622 W ±15.9km
   DEPTH = 199.1 ± 12.2 km
   4.3mb (  2 obs.)
 SALTA PROVINCE, ARGENTINA        (129)

ANT     3.49 275 iPc   01 52.30   1.2
                 iS    02 31.50
CNCB    7.30 350 iPc   02 43.50   2.7X
                 eS    04 07.00
RTLL    7.45 192 iPd   02 41.20  -1.0
LPB     7.59 349 Pc    02 48.00   3.5X
RTCB    7.67 194 iP    02 44.60  -0.6
ZOBO    7.85 349 iPc   02 49.20   1.0
                 S     04 15.00
RTCV    7.98 192 eP    02 48.20  -1.1
RTBS    8.00 198 e(P)  02 49.70   0.3
ARE     8.81 328 iPc   02 59.80  -0.4
                 eS    04 34.00
MDZ     9.03 192 eP    03 03.50   0.7
SIV     9.55  34 iPc   03 09.60   0.0
VC1    25.91 332 P     06 10.60  -0.7
CAYA   26.38 334 P     06 12.00  -3.6X
COTA   26.76 333 iP+    06 16.50  -2.5
SPA    66.11 180 iPd   11 24.70   1.9
       0.8s    11.25nm          4.7mb
ALQ    69.76 326 eP    11 47.00   1.2
       0.8s     2.43nm          4.0mb
GBA   144.53 100 PKP   20 10.00   0.0
     S.D. = 1.3  on  14 of  17 obs.
-------------------------------------
   OCT  02, 1990  17h 28m 23.10± 0.45s
   44.468 N ± 4.2km   22.390 E ± 4.6km
   DEPTH =  10.0km  (geophysicist)
 ROMANIA                          (358)

SRE     0.61  71 iPd   28 36.00   0.5
BZS     1.27 335 iPd   28 46.00  -0.7
DRA     1.35  80 eP    28 48.00   0.1
BEO     1.43 285 ePn   28 48.50  -0.5
                 eSg   29 07.50
COZ     1.63  58 iPc   28 53.00   0.9
TNR     1.78  48 ePc   28 55.00   0.8
VTS     1.97 162 iPc   28 58.00   1.0
                 iSg   29 29.00
CMP     2.05  66 iPd   29 09.00  11.0X
MTUR    2.05  67 iPc   28 58.00  -0.1
PGB     2.31 145 iPc   29 02.00   0.1
                 eSg   29 39.00
PVL     2.47 119 eP    29 03.00  -1.0
                 iS    29 32.00
SKO     2.59 196 ePn   29 06.00   0.3
       0.8s    86.00nm
                 i     29 37.50
                 Lg    29 51.00
BUC1    2.61  91 eP    29 48.00  42.0X
KKB     2.65 169 eP    29 07.00   0.4
                 eSg   29 51.00
MLR     2.72  67 ePd   29 07.50  -0.3
CVO     3.00  62 eP    29 18.00   6.4X
ISR     3.03  76 eP    29 21.00   8.9X
MMB     3.04 161 eP    29 13.00   0.9
                 eSg   30 05.00
TTG     3.06 229 ePn   29 13.00   0.7
                 eSn   30 04.00
BMR     3.30  13 ePd   29 26.00  10.2X
DIM     3.33 135 eP    29 15.00  -1.3
VRI     3.37  64 eP    29 19.00   2.1
OHR     3.55 200 ePn   29 20.30   0.8
KDZ     3.58 141 iP    29 19.00  -0.9
PSZ     3.86 334 iP    29 23.00  -0.9
CFR     4.16  78 ePd   29 27.00  -1.0
SRO     4.38 321 eP    29 35.20   4.0X
KGT     5.41 136 iPn   29 43.70  -2.1
     S.D. = 1.0  on  22 of  28 obs.
-------------------------------------
?  OCT  02, 1990  18h 20m 49.54±10.51s
   39.539 N ±79.4km   29.188 E ±46.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                           (366)
      MD 2.3 (ISK).

DST     0.44 279 iPg   20 58.10  -0.4
                 iSg   21 03.10
IZI     0.83  15 ePg   21 05.70   0.1
                 eSg   21 15.20
YLV     1.04   8 iPg   21 09.20   0.0
HRT     1.33  16 ePn   21 14.00  -0.1
CTT     1.71 340 ePn   21 19.20  -0.3
KGT     1.71 303 iPn   21 20.20   0.7
     S.D. = 0.5  on   6 of   6 obs.
-------------------------------------
%  OCT  02, 1990  19h 29m 49.27± 0.67s
   46.273 N ± 7.4km    8.640 E ± 5.6km
   DEPTH =  10.0km  (geophysicist)
 SWITZERLAND                      (544)

TMA     0.23 136 iPc   29 54.90   0.6
MMK     0.52 245 iPd   29 59.30  -0.5
VDL     0.61  69 ePd   30 01.20  -0.6
LLS     0.65  22 ePd   30 01.60  -0.7
DIX     0.88 258 ePd   30 06.30   0.0
OSS     1.12  68 ePc   30 10.30  -0.1
SLE     1.50 356 ePc   30 17.50   1.3
     S.D. = 0.9  on   7 of   7 obs.
-------------------------------------
```

02d 19h

• OCT 02, 1990 19h 59m 29.22± 1.12s
36.584 N ±12.1km 26.686 E ± 6.8km
DEPTH = 173.6 ± 18.1 km
DODECANESE ISLANDS (369)

KAP	1.10	159	eP	59 57.00	-0.4
SMG	1.13	6	eP	59 56.90	-0.6
ARG	1.22	107	eP	59 58.00	-0.3
NPS	1.58	214	eP	00 01.50	-0.3
			eS	00 23.00	
VAM	2.33	241	eP	00 10.20	0.2
KSL	2.38	100	eP	00 10.70	0.1
VLI	3.02	274	eP	00 18.80	0.5
BCK	3.24	73	ePn	00 22.00	0.8
ITM	3.86	280	eP	00 30.50	1.5
VLS	5.11	290	eP	00 45.60	0.4
SOI	8.60	283	P	01 30.20	-1.1
MGR	9.43	295	P	01 41.50	-0.8

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

• OCT 02, 1990 20h 19m 35.83± 0.91s
36.763 N ±23.4km 49.926 E ±14.1km
DEPTH = 33.0km (normal)
4.1mb (2 obs.)
WESTERN IRAN (347)

TEH	1.56	131	ePc	20 01.50	-0.2
TAB	3.15	296	eP	20 24.00	-0.4
MAIO	7.72	91	eP	21 29.00	0.2
			eS	23 45.00	
NUR	28.70	334	eP	25 30.00	-1.6
WATA	30.09	303	iP	25 45.80	1.3
SOTA	30.33	302	iP	25 45.90	-0.6
	0.7s		4.90nm		4.4mb
			i	25 47.50	
NB2	34.36	327	P	26 22.80	1.4
	0.6s		0.90nm		3.9mb

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

• OCT 02, 1990 20h 20m 23.69± 2.70s
35.344 N ±30.6km 23.458 E ±18.3km
DEPTH = 42.8 ± 20.2 km
4.1mb (1 obs.)
CRETE (370)
ML 3.7 (ATH).

VAM	0.61	84	ePg	20 34.60	-1.4
VLI	1.43	343	ePb	20 46.00	-1.6
NPS	1.76	92	ePb	20 54.00	1.7
ITM	2.21	326	ePb	20 59.70	1.0
ATH	2.63	4	ePn	21 06.00	1.4
KAP	3.04	85	ePn	21 10.60	0.1
SMG	3.60	48	ePg	21 28.80	10.4X
VLS	3.65	322	ePn	21 19.00	-0.1
EVR	3.80	340	ePn	21 21.50	0.2
ARG	3.89	76	ePn	21 22.00	-0.6
HFS	25.60	349	eP	25 49.70	-0.6
	0.6s		3.60nm		4.1mb

S.D. = 1.4 on 10 of 11 obs.

OCT 02, 1990 20h 45m 19.45± 0.32s
43.548 N ± 3.0km 0.583 W ± 5.3km
DEPTH = 17.7 ± 4.3 km
PYRENEES (378)
ML 3.5 (LDG). Felt (IV) in the Serres Sainte-Marie area, France.

OGE	0.39	168	Pg	45 26.68	-0.8
MADF	0.44	203	Pg	45 27.63	-0.8
			Sg	45 34.12	
ESCF	0.47	179	Pg	45 28.00	-0.9
ATE	0.47	191	Pg	45 28.11	-0.8
			Sg	45 34.61	
ELYF	0.48	218	Pg	45 28.76	-0.4
BTH	0.51	147	iPgc	45 28.90	-0.6
JAU	0.53	163	Pg	45 29.15	-1.0
ISSF	0.54	197	Pg	45 29.61	-0.6
			Sg	45 37.17	
BOH	0.54	215	Pg	45 29.71	-0.5
			Sg	45 37.21	
LHE	0.64	183	Pg	45 31.01	-0.8
EPF	0.85	127	Pg	45 35.90	0.5
			Sg	45 47.10	
LFF	1.69	34	Pn	45 50.40	2.2
			Pg	45 53.60	
			Sg	46 16.00	
ECRI	1.70	237	eP	45 51.00	2.5
			eS	46 13.00	
LPO	1.71	48	Pn	45 49.60	1.0
			Pg	45 53.60	
			Sg	46 18.00	
RJF	2.31	40	Pn	45 58.20	0.9
			Pg	46 04.80	
			Sg	46 35.20	
CAF	2.35	53	Pn	45 59.00	1.2
			Pg	46 05.40	
			Sg	46 36.80	
ETER	2.82	115	ePn	46 17.50	13.1X
			eSn	46 53.80	
EROO	2.82	165	ePn	46 12.00	7.5X
ETOR	2.94	202	ePn	46 07.50	1.3
			eSn	46 34.00	
MFF	3.07	6	Pn	46 08.40	0.4
			Pg	46 20.20	
			Sg	46 59.00	
LSF	3.09	28	Pn	46 08.30	0.0
			Sn	46 45.50	
			Sg	46 59.00	
TCF	3.38	35	Pn	46 12.50	0.0
			Pg	46 24.60	
			Sg	47 10.00	
MAF	3.49	39	Pn	46 14.40	0.4
			Pg	46 27.80	
			Sg	47 11.60	
BGF	3.87	38	Pn	46 19.70	0.3
			Pg	46 34.10	
			Sg	47 25.00	
GUD	3.94	224	ePn	46 21.00	0.6
AVF	4.27	39	Pn	46 26.00	0.9
			Sg	47 36.40	
SMF	4.40	44	Pn	46 27.40	0.4
			Sg	47 41.00	
LPF	4.50	356	Pn	46 27.20	-1.0
			Sn	47 17.00	
SSF	4.55	38	Pn	46 28.10	-0.9
			Sn	47 21.50	
			Sg	47 44.80	
LBF	4.71	42	Pn	46 31.00	-0.4
			Sg	47 50.00	
GRR	4.85	358	Pn	46 33.60	0.4
			Sn	47 27.00	
LOR	4.86	39	Pn	46 33.00	-0.5
			Sg	47 54.40	
LDF	5.06	3	Pn	46 36.20	0.0
FLN	5.22	1	Pn	46 37.50	-0.9

S.D. = 1.0 on 32 of 34 obs.

& OCT 02, 1990 22h 46m 48.52s
63.230 N 151.012 W
DEPTH = 13.9km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.67	111	iP	47 01.74	0.2
			eS	47 11.50	
CUT	0.90	157	iP	47 05.87	0.6
RND	0.99	79	iP	47 06.81	-0.2
			eS	47 21.30	
MCK	1.06	61	eP	47 07.91	-0.2
			eS	47 23.75	
SKT	1.28	191	iP	47 11.47	-0.4
NEA	1.60	31	eP	47 16.34	-0.1
			eS	47 36.81	
PWA	1.67	161	iPc	47 17.90	0.5
GHO	1.76	146	eP	47 18.75	0.0
SUA	1.78	176	eP	47 19.65	0.5
			eS	47 44.52	
PLRM	1.86	151	eP	47 20.58	0.4
PMR	1.86	151	iPc	47 20.60	0.4
SML	1.89	138	eP	47 20.51	-0.2
NCG	1.91	197	eP	47 20.49	-0.5
CGLM	1.98	194	eP	47 21.78	-0.3
CCB	2.01	43	eP	47 20.36	-2.0
BGL	2.08	199	eP	47 23.48	0.0
PMS	2.11	161	iPc	47 25.20	1.4
SPU	2.11	194	eP	47 23.85	-0.1
			eS	47 52.65	
CKL	2.13	198	eP	47 24.66	0.4
HDA	2.15	55	eP	47 25.16	0.7
F8A	2.19	39	iPd	47 27.40	2.4
TTA	2.29	265	eP	47 26.56	0.0
DDM	2.38	74	eP	47 29.56	1.9
GLM	2.38	40	eP	47 25.20	-2.5
NKA	2.50	183	eP	47 31.90	2.6
TOA	2.50	115	iPc	47 30.20	0.7
RDT	2.75	195	eP	47 32.53	-0.5
SLKM	2.76	172	eP	47 33.79	0.7
KLU	2.94	124	eP	47 36.37	0.6
GLI	2.99	140	eP	47 37.57	1.2
SVW	3.03	228	ePd	47 35.40	-1.6
VLZ	3.04	132	eP	47 37.65	0.7
IMA	3.07	339	eP	47 34.71	-2.9
DOT	3.15	79	eP	47 43.68	5.0
KNIM	3.28	150	eP	47 40.47	-0.1
CNPM	3.72	182	eP	47 47.54	0.8
GL8	3.81	115	eP	47 48.79	0.8

37 obs. associated

? OCT 02, 1990 23h 35m 48.38± 0.97s
44.375 N ±10.7km 7.299 E ±10.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.5 (GEN).

STV	0.13	172	P	35 51.44	-0.2
			S	35 54.00	
ENR	0.17	150	P	35 52.56	0.2
			S	35 55.15	
PZZ	0.19	313	P	35 52.75	0.0
			S	35 55.74	
ROB	0.42	101	P	35 56.87	-0.1
			S	36 02.82	

S.D. = 0.3 on 4 of 4 obs.

? OCT 03, 1990 00h 06m 02.79± 4.24s
51.344 N ±30.1km 16.020 E ±25.9km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.2 (VKA).

KSP	0.53	161	iP	06 13.50	0.0
			iS	06 23.00	
			e	06 32.00	
BRG	1.39	251	iPg	06 28.00	-0.2
			iSg	06 48.00	
PRU	1.65	215	Pn	06 32.00	0.1
			Pg	06 33.80	
			Sn	06 51.40	
			Sg	06 57.80	
CLL	1.89	270	i(Pg)	06 35.50	0.1
			iSg	07 01.00	
			eSg	29 12.00	
KHC	2.71	216	eP	06 47.30	0.0
			ePg	06 54.00	
			Sn	07 21.50	
			Sg	07 31.50	
			e	29 02.60	
			Sg	29 30.70	
MOX	2.87	258	ePg	06 56.00	6.6X
			iSg	07 35.00	
VKA	3.09	176	ePg	07 01.50	9.0X
			eSg	07 45.50	

S.D. = 0.2 on 5 of 7 obs.

? OCT 03, 1990 01h 15m 15.61± 2.14s
25.163 S ±29.4km 173.277 E ±15.4km
DEPTH = 33.0km (normal)
4.5mb (1 obs.) 3.8Msz (1 obs.)
LOYALTY ISLANDS REGION (189)

DZM	6.98	295	iPd	16 58.20	-0.1
			iS	18 15.00	
SVA	8.51	35	iP	17 19.50	0.0
VUN	8.60	35	eP	17 19.20	-1.6
SGE	8.69	31	eP	17 22.50	0.4
MBU	9.60	33	eP	17 35.50	0.8
KRO	9.67	37	eP	17 35.60	0.0
NDE	10.23	35	eP	17 43.70	0.4
ASPA	35.80	264	eP	22 14.10	0.1
	1.4s		8.80nm		4.5mb
	Z 18s		0.14um		3.8Msz
			LR	36 33.00	
KSP	148.85	331	ePKP	35 04.50	7.4X
BRG	149.81	334	iPKP	35 06.40	7.9X
	1.0s		12.00nm		
CLL	149.84	335	ePKP	35 07.00	8.5X
	1.3s		15.00nm		
PRU	150.24	332	iPKPc	35 07.50	8.3X
KHC	151.30	332	PKP	35 11.00	10.1X
OHR	152.16	312	ePKP	35 12.00	9.6X

S.D. = 0.8 on 8 of 14 obs.

? OCT 03, 1990 01h 46m 31.39± 5.95s
40.734 N ±11.7km 30.031 E ±40.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.0 (ISK).

HRT	0.29	288	iPg	46 37.70	0.2
YLV	0.53	252	iPg	46 42.00	-0.1
IZI	0.58	227	iPg	46 43.30	0.1
			eSg	46 50.50	
ISK	0.81	295	ePg	46 47.00	0.0
			iSg	46 58.00	
CTT	1.28	289	ePn	46 55.00	-0.2

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

OCT 03, 1990 01h 51m 29.62± 0.96s
40.670 N ± 6.9km 29.954 E ± 7.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.9 (ISK).

HRT	0.27	305	iPg	51 35.00	-0.2
GBZT	0.40	287	ePg	51 37.50	-0.4
			iSg	51 44.00	
YLV	0.45	257	iPg	51 38.50	-0.4
GPA	0.47	144	iPg	51 38.90	-0.2
			eSg	51 45.60	
IZI	0.50	228	iPg	51 39.90	0.2
			iSg	51 47.50	
ISK	0.79	300	iPg	51 44.50	-0.4
			iSg	51 55.00	
CTT	1.25	293	iPn	51 53.00	0.1
BNT	1.58	259	ePn	51 57.00	-0.8
EDC	1.63	259	iPn	51 59.50	1.1
DMK	2.02	305	ePn	52 04.80	0.7
KGT	2.03	265	iPn	52 04.50	0.2

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

OCT 03, 1990 03h 43m 47.01± 0.37s
42.752 N ± 3.3km 12.784 E ± 6.5km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.33	344	Pc	43 53.40	-0.5
			eSg	43 58.10	
MNS	0.38	192	Pc	43 54.30	-0.4
			eSg	44 00.20	
AQU	0.61	131	P	43 58.50	-0.8
			eSg	44 09.00	
ARV	0.76	9	Pc	44 00.80	-1.0
			eSg	44 13.60	
AZI	0.90	147	P	44 05.50	1.2
			eSg	44 18.50	
RMP	0.94	184	P	44 04.50	-0.5
			eSg	44 19.50	
RDP	0.99	183	P	44 05.30	-0.6
			eSg	44 21.00	
CRE	1.07	325	P	44 07.70	0.5
			eSg	44 23.80	
RSM	1.20	348	P	44 10.30	1.0
SDI	1.30	143	P	44 11.50	0.5
SFI	1.35	330	P	44 12.40	0.6
			eSg	44 29.70	
PGD	1.36	326	P	44 12.20	0.0
			eSg	44 30.70	
DUI	1.65	131	P	44 17.00	0.7
BDI	2.06	310	P	44 22.50	0.3
TRI	3.04	13	eP	45 12.40	36.4X
			i	45 30.00	
VOY	3.37	13	e(Pn)	44 40.90	0.0
			e(Sn)	45 22.70	
FVI	3.84	360	P	44 46.40	-1.0

S.D. = 0.8 on 16 of 17 obs.

OCT 03, 1990 03h 54m 05.56± 0.31s
45.647 N ± 3.5km 26.438 E ± 4.3km
DEPTH = 161.4 ± 3.7 km
4.2mb (21 obs.)
ROMANIA (358)
Felt (III) in the Vrancea region.

CVO	0.25	313	iPc	54 26.50	-0.5
VRI	0.30	42	iPc	54 27.00	0.0
MLR	0.38	246	iPd	54 26.50	-1.0
ISR	0.52	172	iPc	54 27.50	-1.1
BAC	0.97	19	iPc	54 24.00	-7.5X
CMP	1.06	249	iPc	54 34.00	1.8
MTUR	1.06	247	iPc	54 31.50	-0.8
BUC	1.26	191	ePc	54 33.00	-0.9
PTT	1.29	358	iPc	54 34.50	0.3
CFR	1.29	110	iPc	54 33.00	-1.2
BUC1	1.33	193	iPc	54 33.50	-1.1
COZ	1.51	258	iPd	54 36.50	-0.1
TNR	1.52	271	ePc	54 36.00	-0.5
TLB	1.55	133	iPd	54 36.50	-0.3
IAS	1.73	26	iPc	54 40.00	1.3
DRA	1.82	239	iPd	55 03.00	23.3X
PSN	2.33	147	iPd	54 48.00	2.4
			iS	55 14.00	
SRE	2.49	248	eP	54 47.00	-0.6
PVL	2.56	198	iPd	54 49.00	0.7
			iS	55 14.00	
BMR	2.86	316	iPc	54 53.00	0.8
JMB	3.18	178	iPd	54 56.00	-0.2
BZS	3.38	271	iPc	54 58.00	-0.7
PGB	3.50	209	eP	55 00.00	-0.3
VTS	3.84	218	iP	55 05.00	0.2
			iS	55 42.00	
DMK	3.94	166	iPn	55 05.90	-0.1
KDZ	4.06	191	iPd	55 08.00	0.4
BEO	4.31	261	eP	55 55.00	44.3X
MMB	4.51	207	iPd	55 14.00	0.5
			eS	56 14.00	
CTT	4.73	161	iPn	55 15.50	-0.8
ISK	4.96	156	iPn	55 19.50	0.1
PSZ	5.04	299	eP	55 20.00	-0.5
SKO	5.15	226	ePn	55 21.50	-0.5
KGT	5.23	173	iPn	55 21.50	-1.5
GBZT	5.33	155	iPnd	55 24.50	0.2
HRT	5.37	153	iPn	55 25.30	0.5
BNT	5.40	168	iPn	55 25.50	0.3
EDC	5.40	168	iPn	55 24.50	-0.7
SPC	5.50	312	iP	55 27.30	0.6
YLV	5.51	156	iPn	55 27.00	0.2
IZI	5.75	156	iPn	55 30.00	0.0
EZN	5.82	181	ePn	55 30.10	-0.7
SRO	5.99	294	eP	55 34.60	1.6
GPA	6.06	151	iPn	55 35.10	1.1
OHR	6.12	224	ePn	55 35.30	0.5
KRA	6.21	318	iPc	55 36.50	0.5
			i	55 46.70	
ZST	6.88	295	eP	55 45.30	0.3
ALT	7.13	156	iP	55 49.40	1.0
BBTK	7.43	139	eP	55 53.00	0.5
KSP	8.53	311	ePc	56 06.80	-0.2
			e	56 17.70	
PRU	9.10	303	eP	56 15.00	0.5
KHC	9.39	296	P	56 21.20	2.8
MGR	9.70	239	P	56 22.00	-0.3
SOI	10.82	229	P	56 37.00	0.0
PGF	12.91	262	eP	57 11.70	7.4X
	0.7s		16.55nm		4.6mb
SBF	13.62	269	eP	57 18.90	5.6X
BSF	13.65	286	eP	57 13.40	-0.2
	0.7s		5.50nm		4.0mb
LPG	13.79	276	eP	57 18.70	3.1X
	0.5s		6.20nm		4.2mb
LPL	13.81	277	eP	57 18.80	3.1X
	0.4s		4.00nm		4.1mb
HAU	13.95	287	eP	57 17.50	0.1
FRF	14.25	269	eP	57 26.40	5.3X
	0.9s		11.45nm		4.2mb
LMR	14.41	268	eP	57 28.20	5.1X
	0.9s		9.85nm		4.2mb
LRG	14.48	268	eP	57 29.10	5.1X
NUR	14.93	357	iP	57 28.20	-1.2
	0.7s		13.30nm		4.4mb
LBF	15.57	283	eP	57 38.40	0.8
	0.7s		6.05nm		4.1mb
LOR	15.64	284	eP	57 38.20	-0.2
	0.9s		9.85nm		4.2mb
SMF	15.69	282	eP	57 39.00	0.0
	0.9s		6.55nm		4.0mb
SSF	15.89	283	eP	57 42.50	1.1
	0.8s		6.70nm		4.0mb
AVF	16.01	282	eP	57 43.00	0.1
	1.0s		13.00nm		4.2mb
HFS	16.37	337	eP	57 46.60	-0.6
	0.9s		9.30nm		4.1mb
BGF	16.38	282	eP	57 48.20	0.8
	1.1s		23.20nm		4.4mb
MAF	16.61	281	eP	57 50.90	0.7
TCF	16.85	281	eP	57 54.80	1.7
LSF	17.32	281	eP	57 58.40	-0.4
	0.6s		5.40nm		4.1mb
RJF	17.47	278	eP	58 01.20	0.6
	0.5s		4.35nm		4.1mb
LPO	17.82	276	eP	58 06.20	1.7
NB2	17.82	335	P	58 04.40	-0.1
	0.7s		6.40nm		4.1mb
LFF	18.08	277	eP	58 06.80	-0.5
	0.5s		6.55nm		4.2mb
LDF	18.28	289	eP	58 07.50	-1.9
MFF	18.43	283	eP	58 10.00	-1.0
	0.7s		8.80nm		4.2mb
FLN	18.52	289	eP	58 09.30	-2.6
GRR	18.78	288	eP	58 12.50	-2.1
EPF	18.82	271	eP	58 14.70	-0.6
	0.7s		4.95nm		4.0mb
LPF	18.91	287	eP	58 13.40	-2.7
SOD	21.78	0	iP	58 52.60	7.9X
LKO	45.25	227	Pc	02 07.14	-1.3
	0.2s		4.00nm		4.6mb
TIC	47.44	225	P	02 27.12	1.5
KIC	47.55	224	Pc	02 27.50	1.1
LIC	47.81	224	Pc	02 29.48	1.1

S.D. = 1.0 on 77 of 88 obs.

? OCT 03, 1990 04h 18m 10.34± 6.52s
12.907 N ±15.2km 60.299 W ±57.1km
DEPTH = 33.0km (normal)
WINDWARD ISLANDS (95)
MD 3.4 (TRN).

SOA	0.95	299	eP	18 27.63	0.3
			eS	18 40.32	
SVV	0.98	295	eP	18 27.77	-0.1
			eS	18 40.42	
SV8	1.00	291	eP	18 27.84	-0.2
			eS	18 40.56	
SLB	1.16	322	eP	18 30.37	-0.1
			eS	18 45.93	
GRW	1.52	241	eP	18 35.65	0.0

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

OCT 03, 1990 04h 22m 02.25± 0.56s
36.510 N ± 8.9km 139.352 E ± 7.9km
DEPTH = 118.1 ± 4.7 km
4.9mb (3 obs.)
HONSHU, JAPAN (227)

CHJJ	0.54	212	iPd	22 21.10	0.6
			S	22 34.60	
KAKJ	0.73	114	iPd	22 22.60	0.7
			S	22 37.00	
NIIJ	0.78	339	iP+	22 21.70	-0.6
			S	22 36.20	
MAT	0.92	272	iPd	22 23.10	-0.6
			eS	22 38.00	
MTMJ	1.25	274	iPd	22 26.70	-0.4
IIDJ	1.56	229	iPd	22 31.10	0.5
			S	22 52.30	
TSRJ	2.90	251	iPd	22 48.00	0.2
			S	23 20.90	
WKYJ	3.83	234	P	22 59.50	-0.9
			S	23 41.00	
BJI	18.52	288	eP	26 13.50	1.4
CHTO	39.56	255	e(P)	29 23.90	0.6
	1.0s		2.75nm		4.0mb
INK	55.60	27	eP	31 27.00	-0.3
WB5	56.28	186	iPd	31 31.90	-0.8
ASPA	60.07	186	iPc	31 59.00	0.0
	0.3s		7.20nm		5.2mb
FORR	67.83	190	eP	32 49.00	-0.4
	0.4s		9.00nm		5.0mb
ZOBO	148.37	58	PKP	41 38.00	4.4X
LPB	148.57	58	(PKP)	41 21.00	-12.7X
CNCB	148.85	58	PKP	41 40.60	6.2X

S.D. = 0.8 on 14 of 17 obs.

% OCT 03, 1990 04h 35m 25.30± 0.69s
42.780 N ± 5.7km 12.796 E ±11.5km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.31	341	P	35 31.30	-0.4
			eSg	35 36.90	
MNS	0.40	192	P	35 31.90	-1.7

03d 04h

			eSg	35 39.20		
AQU	0.62	133	P	35 36.40	-1.4	
			eSg	35 46.70		
ARV	0.73	8	P	35 38.40	-1.2	
			eSg	35 50.00		
AZI	0.92	149	P	35 45.00	2.1	
			eSg	35 58.00		
RMP	0.97	184	P	35 44.50	0.7	
RDP	1.02	183	P	35 44.00	-0.7	
CRE	1.05	324	P	35 46.00	0.9	
SDI	1.31	144	P	35 50.50	0.9	
PGD	1.35	325	P	35 51.00	0.8	

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

• OCT 03, 1990 06h 02m 57.05± 0.59s
11.567 N ±10.5km 125.381 E ±16.7km
DEPTH = 33.0km (normal)
4.8mb (11 obs.)
SAMAR, PHILIPPINE ISLANDS (251)

SSE	19.82	349	Pc	07 27.80	0.0	
	1.0s		19.00nm		4.4mb	
CHTO	26.49	289	e(P)	08 32.10	-1.3	
	0.7s		1.43nm		3.7mb	X
ASPA	35.99	167	eP	09 55.70	-1.4	
WARB	37.54	178	eP	10 11.00	0.9	
	0.5s		3.00nm		4.4mb	
GUN	40.36	300	P	10 34.60	0.5	
	0.6s		41.00nm		5.4mb	
PKI	40.68	299	P	10 36.80	0.2	
	0.6s		16.00nm		4.9mb	
KKN	40.84	299	P	10 38.40	0.6	
	0.6s		26.00nm		5.1mb	
DMN	40.95	299	P	10 39.20	0.5	
GKN	41.45	299	P	10 43.00	0.3	
	0.6s		18.00nm		5.0mb	
FORR	42.25	177	eP	10 48.00	-0.9	
	0.4s		4.00nm		4.5mb	
STK	45.91	161	eP	11 20.00	1.6	
	1.6s		25.00nm		4.9mb	
			i	11 28.70		
KEV	82.12	340	eP	15 16.00	0.6	
SOD	82.76	337	iP	15 19.00	0.2	
SUF	84.01	333	iP	15 25.10	-0.1	
	0.7s		14.80nm		5.3mb	
HFS	90.50	332	eP	15 56.80	0.1	
	0.5s		1.00nm		4.4mb	
NB2	91.22	334	P	15 58.40	-1.7	
	0.7s		1.90nm		4.6mb	

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

& OCT 03, 1990 06h 48m 18.57s
63.914 N 148.652 W
DEPTH = 113.8km
CENTRAL ALASKA (1)
<AGS-P>.

MCK	0.22	215	eP	48 34.58	1.6	
RND	0.52	190	iP	48 35.77	-0.5	
WRH	0.61	23	iP	48 36.59	-0.3	
NEA	0.69	345	iP	48 37.05	-0.4	
			eS	48 50.33		
CCB	0.82	26	iP	48 38.14	-0.5	
HDA	0.89	56	iP	48 38.98	-0.3	
HUR	1.04	206	eP	48 40.25	-0.5	
			eS	48 57.29		
FBA	1.06	20	iPc	48 40.50	-0.5	
GLM	1.21	26	eP	48 42.00	-0.7	
DDM	1.24	95	eP	48 42.72	-0.3	
			eS	49 01.67		
CUT	1.68	207	iP	48 47.44	-0.8	
DOT	2.06	95	eP	48 51.63	-1.3	
SML	2.12	176	eP	48 53.05	-0.7	
TOA	2.14	147	eP	48 53.46	-0.6	
GHO	2.15	183	eP	48 53.84	-0.4	
SCM	2.18	163	eP	48 53.57	-1.0	
PLRM	2.34	186	eP	48 56.46	-0.1	
PMR	2.34	186	iPc	48 57.40	0.8	
PWA	2.34	194	eP	48 56.72	0.1	
SKT	2.34	215	iP	48 55.35	-1.3	
SUA	2.64	202	eP	49 00.76	0.0	
PMS	2.71	189	eP	49 01.66	0.1	
KLU	2.74	151	eP	48 59.87	-2.1	
VLZ	2.99	158	eP	49 03.21	-2.0	
NCG	2.99	214	eP	49 04.15	-1.3	
IMA	3.04	318	iPc	49 04.80	-1.2	
CGLM	3.04	212	eP	49 05.06	-1.0	
CRP	3.11	213	eP	49 05.80	-1.2	
GLI	3.13	166	eP	49 05.31	-1.8	
SPU	3.16	211	eP	49 06.90	-0.7	
BGL	3.17	215	eP	49 07.02	-0.8	
CKL	3.22	214	eP	49 07.55	-0.9	
GLB	3.34	136	eP	49 09.06	-0.9	
NKA	3.40	202	eP	49 11.92	1.2	
SLKM	3.50	193	iP	49 11.05	-1.1	
KNIM	3.60	173	eP	49 12.70	-0.8	
RDT	3.78	209	eP	49 15.02	-1.0	
SEW	3.84	186	eP	49 15.13	-1.6	
RSO	3.96	211	eP	49 16.93	-1.6	
BALM	4.11	132	eP	49 18.97	-1.6	
SVW	4.28	232	eP	49 22.00	-0.8	

41 obs. associated

• OCT 03, 1990 07h 28m 36.82± 0.56s
52.791 N ±11.8km 160.554 E ±10.8km
DEPTH = 33.0km (normal)
4.7mb (9 obs.)
OFF EAST COAST OF KAMCHATKA (219)

MAT	22.58	233	eP	33 37.00	1.6	
	0.3s		32.47nm		5.3mb	
FBA	28.44	45	eP	34 30.80	0.6	
	0.9s		1.00nm		3.5mb	X
M8C	37.21	23	eP	35 47.00	0.9	
	1.0s		8.00nm		4.5mb	
DAG	50.71	360	iPd	37 35.50	1.0	
	0.4s		14.12nm		5.3mb	
BW06	57.42	61	eP	38 23.20	-1.4	
CHTO	58.12	259	eP	38 30.00	0.6	
	1.2s		9.03nm		4.7mb	
GUN	59.20	276	P	38 36.30	-1.0	
RSSD	59.34	56	ePd	38 37.30	-0.7	
KKN	59.65	277	P	38 39.60	-0.7	
PKI	59.74	277	P	38 40.40	-0.6	
GKN	59.89	277	P	38 41.20	-0.6	
DMN	59.89	277	P	38 41.60	-0.4	
NUR	61.67	337	eP	39 12.00	18.7X	
NB2	63.91	344	P	39 07.40	-0.8	
	0.5s		2.40nm		4.6mb	
HFS	64.32	342	ePKP	39 09.20	-1.6	
	0.3s		2.50nm		4.8mb	
CLL	72.73	339	iPd	40 03.40	0.4	
	1.8s		23.00nm		4.9mb	
BRG	72.94	339	e(P)	40 05.00	0.8	
	1.2s		11.00nm		4.7mb	
PRU	73.63	338	eP	40 09.20	0.9	
KHC	74.66	338	P	40 15.50	1.2	
GBA	75.14	273	P	40 17.00	-0.5	
WB5	75.86	205	eP	40 21.00	-0.3	
ASPA	79.60	205	eP	40 42.50	0.6	
	0.7s		3.70nm		4.5mb	

S.D. = 1.0 on 21 of 22 obs.

& OCT 03, 1990 07h 44m 08.04s
61.701 N 147.368 W
DEPTH = 29.2km
SOUTHERN ALASKA (2)
<AGS-P>.

SCM	0.13	8	iP	44 13.67	0.0	
			iS	44 18.08		
SML	0.47	284	iP	44 16.83	-1.2	
TOA	0.70	54	iP	44 20.99	-0.7	
KLU	0.72	106	iP	44 20.79	-1.3	
			iS	44 30.72		
GHO	0.74	276	iP	44 20.81	-1.6	
			eS	44 31.22		
VZW	0.75	148	iP	44 20.99	-1.6	
			eS	44 32.52		
VLZ	0.76	138	iP	44 20.85	-1.7	
GLI	0.83	171	iP	44 22.90	-0.8	
			eS	44 35.45		
PLRM	0.85	263	iP	44 22.42	-1.5	
			iS	44 34.28		
PMR	0.85	263	iPc	44 22.40	-1.5	
PMS	1.15	247	iP	44 27.78	-0.4	
PWA	1.20	269	iP	44 28.06	-0.8	
			eS	44 43.49		
KNIM	1.37	188	eP	44 30.58	-0.7	
			eS	44 49.38		
CUT	1.54	299	iP	44 33.14	-0.6	
SUA	1.63	263	eP	44 34.83	-0.4	
			eS	44 56.01		
HUR	1.66	321	eP	44 35.05	-0.5	
			eS	44 56.44		
GLB	1.72	97	eP	44 35.52	-1.0	
MTU	1.72	185	eP	44 36.75	0.3	
SLKM	1.83	230	eP	44 37.94	-0.1	
			eS	45 01.64		
RND	1.84	339	eP	44 37.62	-0.7	
SEW	1.90	213	eP	44 38.83	-0.1	
SKT	1.99	280	iP	44 40.03	-0.4	
NKA	2.10	245	eP	44 43.40	1.5	
MCK	2.16	341	eP	44 42.73	-0.1	
DDM	2.21	18	eP	44 44.13	0.7	
CGLM	2.26	262	iP	44 43.84	-0.4	
SPU	2.31	259	iP	44 44.35	-0.6	
NCG	2.31	265	iP	44 44.67	-0.3	
			eS	45 15.15		
CRP	2.34	261	eP	44 44.97	-0.4	
TGL	2.39	111	eP	44 45.87	-0.3	
CKL	2.44	260	eP	44 46.02	-0.8	
BGL	2.45	262	eP	44 46.22	-0.8	
DOT	2.48	37	eP	44 47.64	0.3	
BALM	2.51	103	eP	44 47.05	-0.8	
NNL	2.54	231	eP	44 48.56	0.4	
RDT	2.69	247	eP	44 49.26	-1.1	
HDA	2.72	4	eP	44 50.44	-0.3	
WRH	2.80	354	eP	44 50.54	-1.2	
RSO	2.90	247	eP	44 52.14	-1.2	
CNPM	2.90	223	eP	44 52.26	-0.9	
HOM	2.94	228	eP	44 53.10	-0.6	
CCB	2.96	356	eP	44 52.81	-1.3	
FBA	3.22	357	iPc	44 57.60	-0.1	
PDB	3.86	243	eP	45 05.43	-1.4	
SVW	4.01	265	iPc	45 06.70	-2.4	
TTA	4.22	291	iPc	45 09.20	-2.8	
IMA	5.19	330	iPd	45 23.80	-2.1	

47 obs. associated

? OCT 03, 1990 08h 11m 48.52± 3.77s
16.476 N ±31.2km 99.633 W ±18.9km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (5B)

ACX	0.45	331	iP	11 58.00	-0.4	
			iS	12 06.50		
III	1.90	5	eP	12 18.50	-0.8	
			iS	12 42.00		
PPM	2.75	20	eP	12 32.00	0.3	
			(S)	13 02.00		
IIT	2.83	26	eP	12 32.00	-0.6	
OXX	2.85	77	iP	12 33.00	0.1	
			iS	13 05.00		
IIJ	3.24	358	(P)	12 40.20	1.5	
			(S)	13 21.50		
MRX	3.54	335	(P)	12 50.00	7.5X	
			(S)	13 29.00		

S.D. = 1.1 on 6 of 7 obs.

• OCT 03, 1990 08h 48m 59.32± 0.66s
72.541 N ±10.1km 1.746 E ±10.7km
DEPTH = 10.0km (geophysicist)
4.4mb (7 obs.) 3.2Msz (1 obs.)
NORWEGIAN SEA (642)

TRO	6.29	109	iP	50 33.70	-0.6	
			eS	51 41.50		
DAG	6.86	318	iPc	50 40.00	-2.3	
	0.9s		21.01nm		5.2mb	
			iS	51 51.40		
KEV	8.60	97	iP	51 06.60	0.0	
SOD	9.92	109	eP	51 23.00	-1.8	
			i	51 27.40		
NRA0	12.45	157	Pn	51 54.90	-4.2X	
CLL	21.88	161	iPc	53 52.90	-0.7	
BRG	22.40	159	eP	54 00.40	1.5	
	1.0s		16.00nm		4.4mb	
			e	55 13.20		
MOX	22.40	163	eP	53 59.00	0.1	
PRU	23.34	159	Pc	54 09.00	0.9	
	1.0s		8.70nm		4.3mb	
			e	54 28.80		
KRA	23.97	150	eP	54 16.50	2.3	
WET	24.01	162	eP	54 16.30	1.7	
KHC	24.09	161	eP	54 02.50	-12.9X	
SPC	24.87	150	eP	54 23.90	0.8	
LOR	25.37	177	eP	54 27.40	-0.3	
	0.9s		8.20nm		4.4mb	
Z	20s		0.08um		3.2Msz	
ZST	25.41	156	eP	54 29.50	1.5	

SSF 25.57 177 eP 54 28.50 -1.1
AVF 25.84 177 eP 54 31.60 -0.5
1.0s 8.00nm 4.4mb
TCF 26.34 179 eP 54 35.00 -1.7
1.0s 8.00nm 4.4mb
LSF 26.37 180 eP 54 35.00 -2.0
MAF 26.40 179 eP 54 35.80 -1.5
INK 36.36 334 eP 56 05.00 0.4
FFC 42.69 304 eP 56 59.00 1.7
0.8s 15.00nm 4.8mb
SES 48.88 308 eP 57 48.00 1.5
S.D. = 1.5 on 21 of 23 obs.

? OCT 03, 1990 09h 05m 24.39± 1.21s
21.324 S ±11.8km 67.801 W ±16.6km
DEPTH = 33.0km (normal)
CHILE-BOLIVIA BORDER REGION (124)

ANT 3.39 225 eP 06 16.20 0.0
iS 06 47.50
CNCB 4.49 358 P 06 33.00 0.5
LPB 4.77 357 P 06 37.00 0.7
ZOBO 5.04 356 P 06 39.00 -1.2
ARE 5.97 324 eP 06 44.00 -9.1X
iS 07 47.00
SIV 8.29 51 iPc 07 25.40 0.0
S.D. = 1.1 on 5 of 6 obs.

OCT 03, 1990 10h 07m 21.09± 0.87s
23.345 N ±12.9km 94.325 E ±10.3km
DEPTH = 68.4 ± 12.7 km
3.9mb (2 obs.)
BURMA-INDIA BORDER REGION (294)

CHG 6.24 135 ePd 08 52.60 -0.1
0.8s 12.87nm 4.4mb X
CHTO 6.24 135 ePn 08 52.90 0.2
BDT 7.49 143 eP 09 06.20 -3.7X
GUN 8.87 303 P 09 29.80 0.4
PKI 9.09 299 P 09 32.40 0.1
KKN 9.29 300 P 09 34.60 -0.3
DMN 9.35 299 P 09 35.60 -0.2
GKN 9.89 300 P 09 42.80 -0.3
GBA 18.70 242 Pd 11 36.90 0.2
0.6s 3.20nm 3.7mb
WB5 58.06 134 eP 17 09.20 -0.5
NB2 66.56 328 P 18 06.20 0.4
0.5s 0.90nm 4.0mb
S.D. = 0.4 on 10 of 11 obs.

? OCT 03, 1990 10h 14m 42.86± 3.01s
51.184 N ±20.4km 15.196 E ±18.5km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.7 (VKA).

BRG 0.85 249 iPg 15 00.20 1.0
iSg 15 20.20
PRU 1.27 199 Pg 15 06.50 0.1
Sn 15 23.00
Sg 15 29.80
CLL 1.38 276 iPn 15 07.60 -0.6
iPg 15 11.00
eSg 15 38.00
KHC 2.30 207 ePn 15 20.00 -1.5
Pg 15 25.60
Sg 16 02.00
MOX 2.33 258 ePg 15 31.00 9.2X
iSg 16 11.00
WET 2.53 217 ePn 15 24.30 -0.3
GRF 2.95 241 ePn 15 31.10 0.5
ePg 15 40.90
eSg 16 29.00
VKA 3.01 166 iPgd 15 32.20 0.7
iSg 16 15.60
ZST 3.24 157 eP 16 15.30 40.6X
HFS 9.01 355 eP 17 59.00 63.1X
0.5s 3.10nm
S.D. = 1.1 on 7 of 10 obs.

OCT 03, 1990 10h 33m 17.81± 1.18s
41.389 N ± 9.1km 29.220 E ± 7.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.7 (ISK).

ISK 0.34 201 iPg 33 24.90 0.0
GBZT 0.62 164 ePg 33 30.00 -0.3
CTT 0.64 248 iPg 33 30.30 -0.4
HRT 0.66 149 iPg 33 30.30 -0.7
YLV 0.83 172 iPg 33 33.80 -0.1
IZI 1.07 170 iPg 33 38.10 0.1
DMK 1.18 292 iPn 33 39.70 -0.1
KCT 1.31 210 iPn 33 42.30 0.2
GPA 1.38 143 iPn 33 43.80 0.8
BNT 1.43 224 iPn 33 44.30 0.5
S.D. = 0.5 on 10 of 10 obs.

? OCT 03, 1990 10h 47m 38.23± 3.71s
2.590 S ± 8.6km 79.402 W ±58.3km
DEPTH = 33.0km (normal)
NEAR COAST OF ECUADOR (105)

TUNG 1.51 39 iP 48 04.00 0.5
S 48 25.10
VC1 2.18 27 iP+ 48 13.50 0.1
OTO 2.53 20 eP 48 18.40 0.1
GGP 2.53 19 eP 48 18.70 0.2
S 48 48.60
OUR 2.56 20 eP 48 18.30 -0.4
YANA 2.60 19 eP 48 19.30 0.0
S 48 50.00
ANGL 2.87 40 eP 48 32.10 9.1X
CAYA 3.01 28 P 48 25.00 -0.2
COTA 3.09 20 P 48 26.40 0.0
ZOBO 17.55 141 P 51 43.00 0.3
LPB 17.76 142 eP 51 48.00 2.8
CNCB 18.05 142 P 51 48.00 -0.9
SIV 22.43 128 P 52 33.00 -2.8
S.D. = 1.4 on 12 of 13 obs.

% OCT 03, 1990 10h 56m 16.33± 0.91s
39.069 N ± 7.4km 27.671 E ± 9.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.7 (ISK).

IZM 0.74 206 ePg 56 31.00 0.1
eSg 56 43.00
DST 0.92 54 iPn 56 33.70 -0.2
EDC 1.28 7 iPn 56 40.50 0.4
EZN 1.29 306 ePn 56 40.00 -0.2
BNT 1.30 8 ePn 56 40.30 -0.1
S.D. = 0.3 on 5 of 5 obs.

---

* OCT 03, 1990 11h 29m 20.21± 1.33s
41.467 N ±17.0km 19.948 E ±10.6km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 2.5 (TTG).

ULC 0.72 314 ePg 29 33.00 -1.4
eSg 29 44.50
OHR 0.73 119 iPgc 29 34.40 -0.2
0.8s 147.00nm
iSg 29 46.50
Lg 29 57.10
TTG 1.09 332 ePg 29 40.00 -0.7
eSg 29 56.70
BDV 1.17 315 ePg 29 41.50 -0.5
eSg 30 00.00
SKO 1.23 65 iPg 29 43.00 0.0
0.5s 250.00nm
iSg 29 59.50
Lg 30 02.30
HCY 1.46 313 ePg 29 47.60 1.0
eSg 30 09.00
NKY 1.52 333 ePg 29 47.60 0.1
eSg 30 11.00
BRY 1.77 324 ePn 29 53.00 1.8
eSn 30 19.00
S.D. = 1.2 on 8 of 8 obs.

? OCT 03, 1990 12h 28m 54.65± 1.59s
44.503 N ±15.4km 7.233 E ± 9.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.4 (GEN).

PZZ 0.09 271 P 28 57.44 0.0
S 28 59.69
STV 0.27 166 P 29 00.21 -0.1
S 29 04.62
ENR 0.31 154 P 29 01.23 0.1
S 29 05.64
ROB 0.50 114 P 29 04.82 0.0
S 29 11.18
S.D. = 0.2 on 4 of 4 obs.

& OCT 03, 1990 12h 57m 08.90s
40.500 N 126.978 W
DEPTH = 6.0km
OFF COAST OF NORTHERN CALIFORNIA(34)
<BRK>. ML 4.4 (BRK).

FHC 2.30 81 ePc 57 44.90 -3.1
eS 58 11.50
WDC 3.38 87 ePc 58 00.40 -2.9
i 58 01.30
LTCM 3.72 93 eP 58 05.50 -2.6
NWRM 3.77 121 eP 58 05.00 -3.8
L8FM 3.95 76 eP 58 09.50 -2.0
MIN 4.10 90 ePd 58 10.50 -3.2
ORV 4.31 101 ePc 58 13.00 -3.5
ZSP 4.47 123 eP 58 14.50 -4.2
BRK 4.51 124 ePc 58 14.80 -4.4
BKS 4.52 124 iPd 58 15.30 -4.2
eS 59 06.30
PCC 4.67 128 iPd 58 17.20 -4.4
GCC 5.21 130 ePc 58 24.50 -4.7
ARN 5.28 125 eP 58 26.00 -4.4
CMB 5.68 114 eP 58 34.20 -1.7
SAO 5.72 129 iP 58 31.20 -5.2
PRS 6.06 132 eP 58 36.20 -5.0
FRI 6.67 119 eP 58 46.50 -3.4
TNP 7.94 105 eP 59 05.70 -2.2
ALQ 17.14 102 e(P) 01 11.50 0.7
0.9s 1.89nm 3.2mb
19 obs. associated

OCT 03, 1990 13h 13m 43/34± 0.97s
30.732 S ± 5.6km 71.787 W ±11.6km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

JACH 2.19 153 iPc 14 20.20 -0.3
i 14 46.00
RTBS 2.20 115 iPd 14 20.50 0.0
IHA 2.29 177 eP 14 25.50 3.8X
eS 14 54.00
ROCH 2.33 164 iPd 14 23.00 0.5
iS 14 52.00
PEL 2.58 159 iPc 14 26.00 0.1
iS 14 54.50
RTCB 2.67 107 iP 14 21.80 -5.5X
LCCH 2.74 176 iPc 14 28.00 -0.2
i 14 58.00
ZON 2.79 108 eP 14 30.00 1.1
SAN 2.88 161 eP 14 29.00 -1.1
i 15 06.00
FCH 2.88 154 eP 14 31.70 1.2
i 15 07.00
RTCV 3.00 113 ePc 14 31.50 -0.3
TACH 3.00 166 iP 14 32.40 0.6
i 15 04.20
PCH 3.08 160 eP 14 33.20 0.3
iS 15 10.00
LNV 3.23 174 iPc 14 34.20 -0.8
iS 15 13.50
MDZ 3.29 131 iPc 14 35.20 -0.9
e 14 44.00
e 14 50.50
CHCH 3.33 164 eP 14 36.70 0.1
i 15 10.80
ZOBO 14.78 14 eP 17 16.00 1.2
SIV 17.65 36 P 17 49.40 -1.5
PPD 20.26 70 (P) 18 32.00 10.3X
S.D. = 0.9 on 16 of 19 obs.

& OCT 03, 1990 14h 00m 52.79s
48.218 N 121.322 W
DEPTH = 1.1km
WASHINGTON (29)
<SEA>. CL 2.6 (SEA).

RPW 0.26 331 Pd 00 57.43 -0.6
S 01 00.98
JCW 0.41 267 Pc 01 00.52 -0.4
HTW 0.51 216 Pd 01 02.36 -0.7
S 01 09.38
CMW 0.57 291 Pd 01 03.15 -1.0

03d 14h

		S	01	11.70	
BLH	0.61	232 P	01	04.48	-0.5
		S	01	12.96	
NLW	0.67	102 Pc	01	05.24	-1.0
MBW	0.68	326 Pc	01	04.59	-1.9
		S	01	13.81	
OHW	0.82	278 P	01	07.71	-1.3
RMW	0.83	203 P	01	07.89	-1.4
ETW	0.91	132 P	01	09.40	-1.5
SPW	0.91	223 P	01	10.33	-0.6
PGW	0.94	246 P	01	10.87	-0.7
CBSW	0.95	115 Pc	01	10.23	-1.6
WTV	1.06	119 Pc	01	12.20	-1.4
DHW2	1.07	102 P	01	12.01	-1.7
MCW	1.11	295 P	01	13.02	-1.4
TWW	1.12	164 P	01	14.16	-0.6
BLN	1.13	260 P	01	13.07	-1.7
TBM	1.16	155 P	01	14.17	-1.1
GMW	1.19	236 P	01	14.33	-1.5
HDW	1.30	245 P	01	15.61	-2.1
FMW	1.31	191 P	01	16.15	-1.8
GHW	1.34	209 P	01	17.13	-1.2
RVC	1.35	199 P	01	16.79	-1.8
SAW	1.39	111 P	01	18.15	-1.1
EBG	1.40	158 P	01	18.94	-0.6
REMR	1.44	194 P	01	18.52	-1.7
EPH	1.45	126 P	01	19.61	-0.6
LON	1.51	193 P	01	19.45	-1.6
NAC	1.52	167 P	01	20.88	-0.4
WPW	1.53	186 P	01	20.20	-1.2
VTG	1.55	144 P	01	21.31	-0.3
STW	1.57	268 P	01	19.78	-2.1
GLK	1.67	187 P	01	22.54	-0.8
LMW	1.68	203 P	01	22.52	-1.1
BVW	1.71	145 P	01	23.76	-0.2
CPW	1.75	225 Pd	01	23.16	-1.3
MXC	1.78	157 P	01	25.47	0.5
APW	1.81	210 P	01	24.20	-1.1
WAH2	1.89	140 P	01	27.55	1.1
CRF	1.91	136 P	01	27.84	1.0
MDW	1.92	146 P	01	27.10	0.1
OD2	1.95	114 P	01	28.08	0.8
BRVW	1.96	152 P	01	28.51	1.0
CZM	1.96	205 P	01	26.92	-0.6
ERK	2.04	200 P	01	28.43	-0.3
GBL	2.06	141 P	01	31.03	2.1
ASR	2.08	185 P	01	29.92	0.6
DPW	2.12	98 P	01	29.82	-0.1
CDFW	2.16	194 P	01	31.01	0.5

50 obs. associated

& OCT 03, 1990 14h 05m 05.70s
37.845 N 121.988 W
DEPTH = 2.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.0 (BRK). Felt at Alamo.

BKS	0.20	279 eP	05	09.70	0.0
		iS	05	13.20	
BRK	0.22	278 iPd	05	09.90	-0.2
		iS	05	13.20	
ZSP	0.23	295 eP	05	09.50	-0.9
		iS	05	13.40	
PCC	0.46	222 eP	05	14.90	-0.1
		iS	05	21.80	
ARN	0.61	144 eP	05	18.70	0.8
CMB	1.28	81 eP	05	28.50	-1.7
		eS	05	46.30	

6 obs. associated

• OCT 03, 1990 16h 09m 47.91± 0.74s
58.869 S ±13.4km 24.577 W ±11.1km
DEPTH = 33.0km (normal)
4.9mb (4 obs.) 4.3Msz (1 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

SPA	31.30	180 iPc	16	07.40	0.5
	1.1s	17.86nm		4.8mb	
BMA	38.75	330 eP	17	11.80	1.1
VAO	39.23	326 eP	17	15.50	0.8
		e	17	58.70	
PCH	39.43	289 eP	17	17.50	1.2
JFO	39.47	332 eP	17	17.80	1.1
		e	17	19.80	
LNV	39.60	288 iPc	17	16.50	-1.1
TACH	39.61	289 eP	17	18.00	0.3
PEL	39.90	290 iPd	17	20.00	-0.2
PPD	41.48	321 eP	17	33.10	0.0
SBA	43.35	183 P	17	51.90	4.1X
BAO	46.51	328 Pc	18	14.10	0.2
SLR	49.31	71 iPc	18	22.50	-13.2X
SIV	50.53	312 Pc	18	42.60	-2.3
SOB1	51.09	339 ePc	18	49.10	0.0
		i	18	51.90	
CNCB	52.62	304 P	19	01.00	-0.3
LPB	52.92	304 eP	19	03.00	-0.4
BUL	54.20	68 eP	19	12.10	-0.3
KRI	57.52	67 eP	19	44.10	7.7X
LIC	66.75	21 P	20	38.60	0.8
	0.7s	8.00nm		5.0mb	
	Z 20s	0.19um		4.3Msz	
KIC	66.94	22 P	20	39.82	0.8
	0.7s	7.50nm		4.9mb	
TIC	67.16	21 P	20	41.00	0.5
	0.7s	8.50nm		5.0mb	
LKO	69.89	20 P	20	54.68	-2.7
MBC	147.14	334 ePKPd	29	28.50	3.6X
	0.7s	12.00nm			
INK	148.86	317 ePKPc	29	32.50	4.7X
	0.6s	16.00nm			
BJI	148.91	110 ePKP	29	34.00	5.3X
TOA	151.89	302 ePKP	29	42.20	9.6X
	0.6s	28.10nm			
FBA	153.41	307 ePKP	29	44.70	10.1X
ANM	160.82	304 ePKP	29	58.30	14.6X

S.D. = 1.1 on 19 of 28 obs.

& OCT 03, 1990 16h 45m 50.03s
62.308 N 150.954 W
DEPTH = 74.8km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.33	73 iP	46	01.51	-0.6
SKT	0.43	220 iP	46	02.24	-0.6
PWA	0.83	142 iP	46	06.62	-0.4
SUA	0.85	173 iP	46	07.01	-0.4
		eS	46	20.35	
HUR	0.91	42 iP	46	06.91	-1.0
		eS	46	19.88	
NCG	1.07	213 eP	46	09.19	-0.9
GHO	1.10	118 eP	46	10.04	-0.3
		eS	46	26.27	
CGLM	1.12	207 eP	46	09.79	-0.9
PLRM	1.12	129 eP	46	09.94	-0.6
		eS	46	26.24	
PMR	1.12	129 iPc	46	09.90	-0.6
CRP	1.19	209 eP	46	10.94	-0.7
		eS	46	27.87	
SPU	1.25	205 eP	46	11.49	-0.8
BGL	1.25	214 eP	46	11.94	-0.4
PMS	1.26	148 eP	46	11.73	-0.6
		eS	46	29.62	
CKL	1.30	211 eP	46	12.33	-0.6
SML	1.33	111 eP	46	12.83	-0.5
		eS	46	31.69	
RND	1.46	40 eP	46	13.83	-1.3
NKA	1.58	185 eP	46	18.92	2.4
SCM	1.77	104 eP	46	18.05	-1.3
SLKM	1.84	169 eP	46	19.33	-0.9
RDT	1.88	202 eP	46	19.88	-0.8
RSO	2.04	206 eP	46	22.84	-0.3
TOA	2.25	93 iPd	46	25.10	-0.8
NNL	2.28	184 eP	46	26.98	0.8
SEW	2.33	161 eP	46	24.82	-2.0
GLI	2.34	126 eP	46	25.10	-1.9
TTA	2.42	287 iPd	46	26.20	-2.0
VZW	2.44	119 eP	46	26.85	-1.7
VLZ	2.50	116 eP	46	26.76	-2.4
KNIM	2.50	140 eP	46	26.16	-3.2
KLU	2.52	107 eP	46	27.43	-2.2
WRH	2.53	29 eP	46	27.43	-2.2
SVW	2.53	244 iPd	46	27.90	-1.8
CCB	2.74	30 eP	46	30.30	-2.3
DDM	2.75	55 eP	46	33.00	0.2
HDA	2.77	39 eP	46	31.31	-1.7
CNPM	2.80	183 eP	46	33.06	-0.3
MTU	2.83	144 eP	46	33.69	-0.1
FBA	2.96	27 eP	46	33.70	-1.9
PDB	2.98	213 eP	46	34.26	-1.6
GLB	3.49	101 eP	46	40.64	-2.5
IMA	3.96	344 iPd	46	47.20	-2.5
BALM	4.30	103 eP	46	51.18	-3.3

43 obs. associated

• OCT 03, 1990 17h 11m 06.95± 1.06s
23.943 S ±11.6km 174.727 W ±16.5km
DEPTH = 33.0km (normal)
4.9mb (8 obs.)
TONGA ISLANDS REGION (174)

VUN	8.68	312 eP	13	12.80	-0.4
SGE	9.34	311 eP	13	23.50	1.1
RAR	14.08	82 P	14	16.00	-10.2X
		S	16	36.00	
DZM	17.44	272 iPc	15	11.10	1.7
PGZ	18.27	202 eP	15	22.30	2.9X
THZ	20.55	207 eP	15	46.80	1.5
		eS	19	17.70	
KHZ	20.84	205 eP	15	48.40	0.2
	0.7s	44.00nm		5.0mb	
LTZ	21.65	207 eP	15	57.20	0.7
CTA	36.30	268 iPd	18	08.20	-1.4
	0.7s	9.59nm		4.8mb	
ASPA	46.78	259 eP	19	33.50	-1.9
	0.7s	9.80nm		4.9mb	
WB5	47.20	265 eP	19	36.70	-2.1
FORR	50.77	249 eP	20	05.00	-1.1
	0.4s	9.00nm		5.1mb	
MTN	52.28	272 eP	20	15.00	-2.7X
	0.5s	10.00nm		5.0mb	
WARB	52.77	254 eP	20	20.00	-1.3
	0.3s	2.00nm		4.6mb	
NANU	63.46	256 eP	21	37.00	0.8
MAT	74.77	322 (P)	22	47.00	1.4
ALQ	87.24	50 eP	23	50.80	-0.9
	1.0s	7.75nm		4.9mb	
CHG	94.24	289 eP	24	26.80	2.4X
CHTD	94.24	289 eP	24	26.00	1.6
	0.9s	3.41nm		4.8mb	
LWI	145.35	225 iPKPc	30	44.20	0.0
KRA	151.53	340 ePKP	30	58.00	5.5X
	0.7s	17.00nm			
KSP	151.82	345 iPKPd	30	59.20	6.3X
		i	31	03.20	
		i	31	11.20	
WTS	151.97	358 ePKP	30	59.50	6.5X
	0.8s	15.00nm			
CLL	152.03	350 iPKPd	30	59.20	6.0X
	1.4s	19.00nm			
		i	31	11.70	
BRG	152.29	348 iPKPd	31	00.00	6.4X
	0.8s	14.00nm			
		i	31	03.80	
PRU	153.01	347 ePKP	31	01.50	6.9X
		e	31	05.80	
ENN	153.22	359 ePKP	31	02.00	7.1X
	1.0s	12.00nm			
KHC	154.02	347 ePKP	31	04.40	8.3X

S.D. = 1.4 on 16 of 28 obs.

• OCT 03, 1990 17h 34m 06.94± 1.13s
40.147 N ±10.6km 25.138 E ± 8.3km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 2.7 (ATH).

EZN	0.97	109 iPg	34	25.40	0.1
		iSg	34	38.70	
RDO	1.04	17 ePb	34	26.00	-0.6
		eSb	34	39.00	
PLG	1.31	280 ePb	34	31.00	-0.3
KDZ	1.52	B iP	34	34.00	-0.1
		iS	34	52.00	
RZN	1.57	348 iP	34	36.00	0.9
		iS	37	57.00	
KKB	2.32	319 iPd	34	51.00	5.3X
		eS	35	20.00	

S.D. = 0.8 on 5 of 6 obs.

OCT 03, 1990 18h 02m 48.03± 1.08s
42.994 N ±10.9km 0.382 W ± 5.1km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.9 (LDG). MD 2.2 (STR). Felt (III) at Castet, Fronce.

JAU	0.05	12 Pg	02	49.51	-0.8
ESCF	0.16	301 Pg	02	51.46	-0.4
		Sg	02	53.97	

BTH	0.18	45	iPgc	02	50.50	-1.6
			iSg	02	53.00	
OGE	0.19	339	Pg	02	51.02	-1.2
			Sg	02	53.71	
LHE	0.19	245	Pg	02	52.91	0.5
ATE	0.25	292	Pg	02	53.04	-0.4
			Sg	02	56.81	
ISSF	0.31	277	Pg	02	54.58	0.1
			Sg	02	58.98	
MADF	0.35	295	Pg	02	54.99	-0.4
			Sg	03	00.62	
BOH	0.47	283	Pg	02	57.40	-0.3
ELYF	0.48	292	Pg	02	57.74	-0.1
EPF	0.53	86	Pg	02	57.90	-0.9
			Sg	03	05.60	
LPO	2.03	33	Pg	03	25.00	2.3
			Sg	03	51.40	
LFF	2.11	22	Pg	03	26.40	2.6
			Sg	03	53.40	
CAF	2.62	42	Pg	03	35.60	4.5X
			Sg	04	10.00	
RJF	2.68	30	Pg	03	35.60	3.6X
			Sg	04	10.40	
MAF	3.85	32	Pg	03	58.60	10.0X
			Sg	04	46.80	
BGF	4.24	32	Pg	04	05.20	11.1X
			Sg	04	59.50	

S.D. = 1.4 on 13 of 17 obs.

? OCT 03, 1990 18h 20m 35.99± 1.01s
31.096 N ±11.7km 78.557 E ± 8.2km
DEPTH = 33.0km (normal)
4.4mb (1 obs.)
TIBET-INDIA BORDER REGION (305)

NDI	2.67	206	iPnc	21	16.60	-1.0
	0.4s		88.98nm			
GKN	6.13	119	P	22	07.20	0.4
DMN	6.69	120	P	22	14.80	0.1
KKN	6.72	118	P	22	15.00	-0.2
PKI	6.94	119	P	22	17.60	-0.6
GUN	7.13	115	P	22	20.80	-0.1
QUE	10.04	268	eP	23	07.00	5.8X
HYB	13.62	180	eP	23	50.50	1.3
HFS	51.15	324	eP	29	37.70	0.2
	0.4s		1.70nm		4.4mb	

S.D. = 0.8 on 8 of 9 obs.

• OCT 03, 1990 18h 21m 02.25± 0.78s
17.823 S ±16.0km 167.673 E ±10.2km
DEPTH = 33.0km (normal)
4.3mb (3 obs.) 3.8Msz (1 obs.)
VANUATU ISLANDS (186)

BKM	0.57	74	iP	21	13.50	-0.3
			iS	21	23.00	
PVC	0.61	82	iPc	21	15.00	0.5
			iS	21	28.00	
DZM	4.38	195	iPc	22	07.20	-1.1
			iS	23	02.00	
CTA	20.38	260	eP	25	46.00	7.0X
	1.1s		15.19nm		4.3mb	
BWA	23.85	222	eP	26	15.20	1.7
CAN	24.07	220	eP	26	24.70	9.1X
STK	27.40	234	iPc	26	47.40	0.6
	1.5s		7.00nm		4.1mb	
			i	26	54.30	
WB5	31.56	261	eP	27	25.10	1.0
ASPA	32.06	254	eP	27	26.80	-1.7
	0.7s		4.90nm		4.5mb	
Z	22s		0.23um		3.8Msz	
			LR	38	51.00	
BJI	74.91	322	eP	32	41.00	-0.7

S.D. = 1.3 on 8 of 10 obs.

OCT 03, 1990 19h 24m 36.03± 0.43s
37.077 N ± 4.1km 29.403 E ± 4.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 4.0 (ISK), 3.9 (ATH).

KSL	0.97	171	ePn	24	53.00	-1.4
BCK	1.02	68	iPn	24	55.20	-0.2
KHL	1.25	4	iPn	24	59.70	0.4
ARG	1.34	230	ePn	25	01.50	0.8
ALT	2.05	16	ePn	25	12.40	1.3
SMG	2.14	288	ePn	25	12.50	0.3
IZM	2.15	309	iPn	25	11.60	-0.8
KAP	2.36	230	ePn	25	16.00	0.6
DST	2.60	347	ePn	25	17.40	-1.4
PPCY	3.24	132	eP	25	28.20	0.4
IZI	3.26	1	ePn	25	28.50	0.3
PRK	3.28	312	ePn	25	28.50	0.0
EZN	3.66	320	iPn	25	33.50	-0.3
BBTK	3.82	43	eP	25	36.00	-0.2
CSS	3.82	122	eP	25	36.50	0.3

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

OCT 03, 1990 19h 41m 49.15± 0.34s
40.325 N ± 4.2km 25.762 E ± 3.3km
DEPTH = 15.3 ± 3.9 km
AEGEAN SEA (365)
MD 3.9 (ISK). ML 3.5 (ATH).

ALN	0.61	21	ePd	42	01.00	0.0
			eS	42	10.52	
EZN	0.66	139	iPg	42	01.30	-0.5
			eSg	42	10.20	
PRK	1.15	160	ePb	42	10.00	-0.1
KDZ	1.35	349	iPc	42	13.00	-0.4
			iS	42	32.00	
OUR	1.36	271	ePd	42	11.88	-1.6
			eS	42	32.76	
RZN	1.58	330	iPc	42	17.00	0.3
			iS	42	39.00	
EDC	1.61	89	iPn	42	17.50	0.5
BNT	1.65	88	iPn	42	19.70	2.1
DIM	1.73	354	iPd	42	19.00	0.2
			Sg	42	45.00	
PLG	1.77	272	ePb	42	13.00	-6.4X
SRS	1.83	296	ePc	42	21.48	1.2
			eS	42	45.88	
SOH	1.90	286	ePc	42	24.40	3.1X
			eS	42	51.20	
KCT	1.99	91	iPn	42	22.70	0.2
MMB	1.99	310	ePd	42	22.00	-0.6
			eS	42	50.00	
DMK	2.12	45	ePn	42	23.00	-1.5
THE	2.16	279	iPc	42	27.00	2.1
			iS	42	56.00	
CTT	2.19	67	ePn	42	24.70	-0.7
NEO	2.20	243	ePb	42	05.00	-20.7X
JMB	2.23	16	iPc	42	41.00	15.0X
			iSg	43	03.00	
IZM	2.25	148	ePn	42	26.10	-0.3
DST	2.32	107	ePn	42	27.40	0.1
LIT	2.52	266	iPc	42	30.00	-0.1
PGB	2.53	332	eP	42	30.00	-0.3
			iSg	43	10.00	
KKB	2.54	308	iP	42	30.00	-0.5
			eS	43	10.00	
ISK	2.61	72	ePn	42	31.00	-0.5
GRG	2.63	285	ePc	42	32.64	0.8
YLV	2.77	84	iPn	42	35.70	1.9
IZI	2.84	89	iPn	42	35.20	0.5
GBZT	2.84	79	ePg	43	19.50	44.7X
PVL	2.91	354	iPd	42	35.00	-0.6
VTS	2.97	321	iP	42	37.00	0.4
			iS	43	25.00	
HRT	3.02	79	ePn	42	42.00	4.8X
FNA	3.37	279	iPc	42	42.00	-0.3
KHL	3.54	123	ePn	42	45.00	0.3
ALT	3.59	109	ePn	42	45.90	0.5
SKO	3.65	298	ePn	42	49.50	3.2X
OHR	3.85	283	ePn	43	02.00	12.9X
MLR	5.17	1	eP	43	12.00	4.2X
VRI	5.59	7	ePc	43	15.00	1.4
BZS	6.10	331	ePc	43	18.00	-2.8X

S.D. = 1.0 on 30 of 40 obs.

• OCT 03, 1990 21h 29m 10.67± 0.98s
13.937 N ±13.0km 93.093 W ±10.7km
DEPTH = 33.0km (normal)
4.1mb (2 obs.)
OFF COAST OF CHIAPAS, MEXICO (68)

TPX	1.25	40	iP	29	31.42	-0.6
			iS	29	49.84	
SCX	2.82	9	iP	29	55.63	1.3
			iS	30	29.17	
OXX	4.69	312	(P)	30	22.00	0.8
EVV	4.99	335	(P)	29	46.05	-39.2X
			iS	31	13.86	
LVVM	6.60	331	(P)	30	48.45	0.5
III	7.55	307	(P)	30	59.50	-2.0
IIJ	8.58	313	(P)	31	18.00	1.9
MEO	21.34	347	iPc	33	55.50	-1.7
ANMO	24.15	332	eP	34	25.00	0.0
	0.9s		1.05nm		3.4mb	
SIV	43.43	132	P	37	12.60	0.2
SOB1	56.67	111	eP	38	54.40	0.8
INK	60.20	344	eP	39	17.00	-0.4
MBC	63.85	353	eP	39	41.00	-0.7
	1.5s		16.00nm		4.9mb	
GBA	151.07	19	PKPd	49	02.30	5.6X
	0.8s		4.20nm			

S.D. = 1.3 on 12 of 14 obs.

• OCT 03, 1990 22h 52m 55.08± 1.30s
50.372 N ±23.8km 18.814 E ± 9.5km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.2 (KRA), 3.0 (VKA).

KRA	0.79	113	ePg	53	10.10	-0.3
			iSg	53	20.90	
SPC	1.50	141	iPn	53	22.70	0.4
			iSg	53	42.70	
KSP	1.67	287	ePn	53	24.80	0.3
			iPg	53	27.40	
			iS	53	50.50	
ZST	2.45	208	e(P)	53	57.30	21.6X
			i	54	06.80	
SRO	2.58	188	eP	53	45.60	8.0X
VKA	2.67	219	iPnc	53	47.30	8.5X
			iSg	54	25.10	
PRU	2.77	264	Pn	53	40.30	0.0
			Pg	53	49.00	
			Sg	54	22.00	
BRG	3.14	281	ePg	53	54.00	8.5X
			iSg	54	36.00	
KHC	3.62	252	Pn	53	52.00	-0.3
			ePg	54	00.00	
			Sg	54	49.00	
CLL	3.80	287	ePg	54	09.00	14.1X
			iSg	55	02.00	
GRF	4.94	265	e(Pg)	55	11.00	59.9X
			eSg	55	35.00	

S.D. = 0.5 on 5 of 11 obs.

• OCT 03, 1990 22h 57m 11.84± 1.71s
31.066 S ±13.1km 71.992 W ±16.2km
DEPTH = 94.7 ± 20.9 km
NEAR COAST OF CENTRAL CHILE (135)

IMA	1.98	171	eP	57	46.50	2.1
			eS	58	14.50	
JACH	2.00	144	iPc	57	43.60	-1.3
			i	58	09.50	
ROCH	2.07	157	iPd	57	45.00	-1.0
			i	58	15.00	
RTBS	2.25	106	ePd	57	47.90	-0.2
PEL	2.35	152	iPc	57	48.60	-0.9
			iS	58	22.00	
LCCH	2.43	172	iP	57	53.60	3.1X
			i	58	27.50	
SAN	2.63	155	iPc	57	55.30	2.0
			iS	58	28.50	
FCH	2.68	148	eP	57	53.70	-0.5
			i	58	32.00	
TACH	2.73	161	eP	57	54.00	-0.6
			i	58	33.70	
RTCB	2.76	100	iPc	57	54.70	-0.5
PCH	2.84	154	iPc	57	55.90	-0.3
			i	58	38.50	
ZON	2.88	100	eP	57	58.00	1.4
LNV	2.92	170	eP	57	56.00	-1.2
			iS	58	38.00	
RTLL	3.03	96	iPd	57	57.10	-1.6
RTCV	3.06	106	e(P)	57	59.30	0.2
CHCH	3.08	159	iP	57	59.40	0.0
			i	58	44.40	
MDZ	3.23	125	eP	58	03.70	2.2
			i	58	13.70	
			iS	58	45.60	
ZOBO	15.15	14	P	00	42.50	0.0
SIV	18.02	36	P	01	27.80	10.2X
PPD	20.55	69	(P)	01	46.00	1.2
VAO	23.66	76	eP	02	14.30	-1.3

S.D. = 1.3 on 19 of 21 obs.

04d 01h

• OCT 04, 1990 01h 18m 01.97± 0.86s
36.572 N ±10.4km 77.882 E ±11.0km
DEPTH = 33.0km (normal)
4.2mb (3 obs.)
KASHMIR-XINJIANG BORDER REGION (324)

NDI	7.89	184	iPc	19	59.50	2.3
	0.6s		86.67nm			6.0mb X
KKN	10.76	142	P	20	35.80	-1.3
DMN	10.83	144	P	20	38.00	0.0
GUN	10.97	140	P	20	39.80	-0.2
PKI	11.01	142	P	20	39.80	-0.7
QUE	11.13	238	eP	20	41.50	-0.6
			eS	22	36.40	
HYB	19.09	178	ePc	22	23.80	-0.9
GBA	22.87	181	P	23	03.40	-0.3
			S	27	03.00	
CHG	25.61	128	eP	23	34.20	4.2X
CHTO	25.61	128	eP	23	31.70	1.7
	1.0s		3.25nm			3.9mb
HFS	46.45	322	eP	26	26.70	-0.4
	0.5s		1.20nm			4.1mb
MBC	66.92	4	ePc	20	53.00	0.4
	0.5s		8.00nm			5.1mb

S.D. = 1.2 on 11 of 12 obs.

• OCT 04, 1990 02h 30m 30.93± 1.02s
37.197 N ±12.8km 21.064 E ± 7.9km
DEPTH = 5.0km (geophysicist)
SOUTHERN GREECE (368)
MD 3.7 (ATH).

ITM	0.69	91	ePg	30	43.50	-1.2
VLS	1.05	339	ePg	30	51.50	0.3
VLI	1.57	107	ePb	31	01.00	1.4
EVR	1.81	19	ePg	31	07.00	3.9X
VAM	3.10	124	ePg	31	30.00	8.6X
OHR	3.91	357	ePn	31	33.00	-0.1
LCI	3.96	323	P	31	33.00	-0.7
SKO	4.78	3	ePn	31	40.50	-4.8X
MEU	4.90	271	P	31	46.30	-0.8
			eSn	32	43.60	
MGR	5.22	306	P	31	48.00	-3.5X
SGO	5.61	309	P	31	58.00	1.0

S.D. = 1.2 on 7 of 11 obs.

• OCT 04, 1990 03h 21m 01.37± 2.59s
17.291 N ±15.7km 100.511 W ±20.8km
DEPTH = 24.2 ± 10.4 km
4.1mb (1 obs.)
GUERRERO, MEXICO (59)

ACX	0.75	124	IP	21	16.04	0.3
			IS	21	31.77	
III	1.47	42	IP	21	27.62	1.0
			iS	21	55.00	
UNM	2.39	32	(P)	21	44.00	4.0X
MRX	2.49	345	IP	21	39.17	-2.0
			IS	22	11.50	
PPM	2.52	45	IP	21	41.62	-0.4
			iS	22	23.00	
IIJ	2.54	17	iP	21	41.75	-0.6
			(S)	22	22.00	
IIT	2.71	50	(P)	21	44.00	-0.6
			(S)	22	24.00	
OXX	3.63	93	(P)	21	57.00	-0.6
LVVM	4.56	57	(P)	22	10.00	-0.6
SIO	18.76	11	eP	25	23.00	2.0
TUL	19.01	12	eP	25	25.60	1.5
	0.9s		10.50nm			4.1mb

S.D. = 1.5 on 10 of 11 obs.

OCT 04, 1990 03h 31m 27.11± 0.66s
42.461 N ± 5.9km 19.257 E ± 5.7km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.2 (TTG).

TTG	0.03	175	iPgc	31	30.30	1.2
			iSg	31	33.70	
BDV	0.36	241	ePg	31	34.30	-0.3
			eSg	31	41.00	
NKY	0.40	332	ePg	31	36.00	0.7
			eSg	31	43.50	
ULC	0.50	181	ePg	31	36.00	-1.2
			eSg	31	43.00	
PVY	0.55	76	ePg	31	37.50	-0.7
			eSg	31	46.10	
HCY	0.56	269	ePg	31	38.00	-0.5
			eSg	31	47.50	
IVA	0.63	49	ePg	31	39.40	-0.4
			eSg	31	50.10	
OHR	1.77	139	ePn	31	59.30	1.2

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

OCT 04, 1990 03h 47m 28.98± 0.72s
17.765 S ± 6.7km 178.766 W ± 5.9km
DEPTH = 546.6 ± 8.7 km
5.3mb (26 obs.)
FIJI ISLANDS REGION (181)

SVA	2.67	262	eP	48	43.00	0.7
DZM	14.55	250	iPd	50	33.90	0.0
PUZ	20.40	187	eP	51	30.50	0.6
PGZ	23.17	190	eP	51	52.80	-2.2X
THZ	24.96	195	eP	52	10.70	-0.4
KHZ	25.43	193	P	52	13.90	-1.3
	0.4s		30.00nm			5.3mb
LTZ	26.08	195	eP	52	19.10	-1.8
BRS	27.91	245	iPc	52	37.50	0.4
			i	52	51.00	
MMCZ	28.99	198	P	52	45.80	-0.6
MHZ	29.00	198	P	52	45.50	-0.9
TLC	29.18	198	P	52	47.70	-0.3
COO	29.55	239	iPd	52	51.70	0.3
	0.7s		76.00nm			5.4mb
RUV	30.18	90	iP	52	56.80	0.0
	0.8s		15.00nm			4.7mb
RMO	31.24	248	iP	53	05.20	-0.5
CTA	33.13	260	iPd	53	21.00	-0.7
	0.9s		78.57nm			5.3mb
			iPcP	55	49.00	
			iScP	58	45.90	
CNB	33.24	232	iPc	53	24.00	1.5
	0.6s		161.00nm			5.8mb
CAN	33.52	232	iPd	53	26.70	1.9
BWA	33.63	234	iPd	53	25.30	-0.4
PMG	34.10	280	eP	53	29.50	-0.3
	0.7s		89.04nm			5.5mb
CMS	34.80	240	iPd	53	36.40	0.9
	0.3s		53.00nm			5.6mb
LAT	35.17	284	eP	53	40.00	1.3
OLP	35.27	249	iPd	53	39.80	0.4
TOO	37.00	230	iPd	53	56.60	3.1X
	0.6s		62.00nm			5.4mb
STK	38.40	241	iPd	54	06.30	1.2
	0.7s		57.00nm			5.3mb
BFD	39.05	232	ePd	54	13.00	2.7
DIS	39.35	259	eP	54	11.50	-1.4
ADE	41.43	237	iPd	54	30.00	0.5
	0.7s		98.63nm			5.4mb
WB5	44.30	260	iPd	54	35.90	-16.3X
ASPA	44.50	254	iPd	54	52.90	-0.8
	0.6s		437.10nm			6.2mb
			iPcP	56	25.10	
			iScP	59	29.20	
			iS	00	47.40	
			iScS	03	52.70	
FORR	49.73	244	iPd	55	32.50	-0.6
	0.5s		258.00nm			6.0mb
KNA	50.15	264	iPd	55	35.50	-0.9
	0.5s		105.00nm			5.6mb
WARB	51.01	250	iPd	55	42.20	-0.5
	0.4s		56.00nm			5.3mb
DRV	55.69	199	eP	56	15.80	0.5
COOL	55.71	244	eP	56	15.00	-1.1
MBL	57.68	256	iPd	56	28.60	-1.1
	0.6s		55.00nm			5.1mb
KLB	58.58	243	iPd	56	34.80	-0.9
	0.5s		66.00nm			5.2mb
NWAO	58.98	242	eP	56	37.00	-1.3
RKG	59.13	241	eP	56	39.00	-0.3
BAL	59.54	245	eP	56	41.00	-1.0
MUN	59.88	243	eP	56	44.00	-0.3
	0.5s		135.00nm			5.5mb
MRWA	60.25	246	iPd	56	45.60	-1.2
NANU	61.44	254	iPd	56	54.20	-0.4
	0.4s		375.00nm			6.2mb
KKM	68.38	284	ePd	57	38.00	-0.3
	0.7s		47.40nm			5.1mb
GCC	76.35	44	ePc	58	23.20	-0.1
PRS	76.37	44	ePc	58	23.80	0.3
SAO	76.56	44	eP	58	24.10	-0.4
BRK	76.66	43	eP	58	25.00	0.0
PRI	76.73	45	ePc	58	26.10	0.5
PAS	77.37	48	eP	58	23.00	-6.0X
MWC	77.49	48	eP	58	30.00	0.1
FRI	77.84	45	ePc	58	31.20	-0.2
RVR	77.86	48	eP	58	31.00	-0.6
PLM	77.90	49	eP	58	32.00	-0.1
SBB	77.90	47	eP	58	32.00	0.1
ISA	77.96	46	eP	58	32.00	-0.2
CMB	77.97	43	iPc	58	32.10	-0.1
WDC	78.05	40	iPc	58	36.40	3.9X
ORV	78.11	42	iPc	58	33.60	0.8
TPC	78.86	49	eP	58	38.00	1.0
GSC	78.93	47	eP	58	38.00	0.6
SVW	80.77	11	iPc	58	44.90	-1.3
	0.9s		11.90nm			4.4mb
TTA	82.39	10	iPc	58	54.10	-0.4
PMR	82.54	14	iPc	58	54.00	-1.1
	0.4s		10.50nm			4.7mb
SNG	83.31	280	eP	59	01.70	1.8
BJI	83.44	316	eP	59	00.00	-0.1
	1.1s		12.00nm			4.4mb
TOA	83.69	15	iPc	59	00.60	-0.4
	1.0s		70.20nm			5.2mb
MAW	83.88	200	iP	59	04.70	2.9
FBA	85.74	13	iPc	59	09.10	-1.7
	0.4s		11.40nm			4.9mb
ALQ	86.27	52	eP	59	14.00	-0.3
	1.0s		4.00nm			4.1mb X
			e	01	14.00	
LZH	90.53	308	Pd	59	34.80	0.8
	1.0s		23.00nm			5.1mb
YKA	94.34	25	eP	59	49.60	-1.1
	0.7s		2.30nm			4.4mb
PPD	115.12	126	(PKP)	05	18.00	7.7X
SOB1	130.51	119	ePKP	05	39.60	-0.3
			e	08	15.70	
NB2	136.19	353	PKP	05	43.00	-6.4X
	0.6s		1.10nm			
HFS	136.74	351	ePKP	05	40.10	-10.3X
	0.4s		1.80nm			
KRA	144.45	339	ePKP	06	03.50	-0.8
WIT	144.77	354	ePKP	06	05.00	0.3
KSP	144.88	343	ePKP	06	05.20	0.2
	0.6s		37.00nm			
			i	06	06.00	
BBTK	144.97	315	iPKPd	06	07.00	1.3
SPC	145.08	338	ePKP	06	08.90	3.2X
CLL	145.25	347	iPKP	06	06.10	0.5
	0.7s		39.00nm			
HRI	145.43	303	iPKPd	06	07.00	0.4
BRG	145.44	346	iPKP	06	07.00	1.0
	0.6s		12.00nm			
MLR	145.53	329	ePKPc	06	08.00	1.5
WTS	145.56	354	ePKPc	06	07.50	1.4
	0.8s		15.00nm			
PRU	146.12	345	PKP	06	09.00	1.9X
	0.5s		9.50nm			
			e	06	11.70	
MOX	146.16	348	e(PKP)	06	09.00	1.9X
DSI	146.22	300	iPKPd	06	08.80	1.0
CSS	146.72	307	ePKP	06	10.50	2.0X
ENN	146.86	355	ePKP	06	11.00	2.8X
	0.7s		9.00nm			
SRO	146.93	339	ePKP	06	15.90	7.5X
ZST	147.00	340	ePKP	06	10.70	2.2X
MBH	147.09	298	iPKPd	06	11.40	2.2X
TNS	147.10	351	ePKPd	06	11.70	3.0X
GRF	147.15	348	ePKP	06	12.20	3.5X
KHC	147.15	345	ePKP	06	12.30	3.5X
VKA	147.18	341	ePKPd	06	12.00	3.2X
SNF	147.24	356	PKP	06	11.80	3.0X
BZS	147.45	333	ePKP	06	07.50	-1.8
PPCY	147.50	308	ePKP	06	12.00	2.3X
ABH	147.56	352	ePKP	06	12.82	3.4X
DOU	147.63	356	PKPd	06	13.00	3.5X
CDF	149.04	352	ePKP	06	16.30	4.4X
	0.5s		16.05nm			
FLN	149.05	2	ePKP	06	16.10	4.4X
	0.7s		30.85nm			
LDF	149.23	2	ePKP	06	16.30	4.3X
	0.5s		8.75nm			
WATA	149.31	346	iPKPd	06	17.00	4.6X
	0.4s		16.90nm			
			i	06	19.90	
			i	06	23.70	
GRR	149.41	3	ePKP	06	17.10	4.8X
	0.6s		21.65nm			

```
SQTA  149.50 347 iPKPd 06 17.40   4.8X
       0.4s    22.00nm
                    i  06 20.50
                    i  06 25.60
HAU   149.55 353 ePKP  06 17.50   5.0X
       0.5s    13.10nm
BSF   149.67 353 ePKP  06 17.70   4.9X
       0.6s     9.90nm
FVI   149.71 344 PKPc  06 17.40   4.7X
LJU   149.71 341 ePKP  06 18.00   5.2X
AKSR  149.74 287 iPKPd 06 20.00   6.5X
LPF   149.76   3 ePKP  06 17.90   5.1X
       0.4s    12.60nm
VOY   149.92 342 ePKP  06 18.10   4.8X
VBY   149.97 340 ePKPd 06 19.80   6.6X
AKRL  150.02 287 ePKP  06 19.50   5.6X
CEY   150.02 341 ePKP  06 18.50   5.2X
ANMR  150.17 287 iPKPd 06 20.00   5.9X
TRI   150.25 342 PKP   06 19.00   5.4X
SKO   150.33 329 ePKP  06 19.00   5.1X
VVI   150.37 344 PKP   06 19.50   5.7X
CTI   150.50 345 PKP   06 20.00   5.8X
AVF   151.00 357 ePKP  06 20.40   5.7X
       0.5s     7.30nm
SMF   151.12 356 ePKP  06 20.60   5.7X
       0.5s     2.55nm
MFF   151.22   2 ePKP  06 21.20   6.2X
       0.5s    13.10nm
BGF   151.26 358 ePKP  06 21.60   6.5X
       0.5s    15.65nm
VAI   151.29 349 PKPc  06 21.60   6.5X
OHR   151.29 328 ePKP  06 21.50   6.1X
       0.6s    80.00nm
MAF   151.60 358 ePKP  06 22.70   7.1X
       0.5s     7.30nm
LPL   151.95 352 ePKP  06 24.00   7.6X
       0.6s     4.50nm
LPG   151.97 352 ePKP  06 24.00   7.4X
       0.6s     4.50nm
BNI   152.41 352 PKP   06 25.00   8.0X
RJF   152.54 360 ePKP  06 24.30   7.3X
       0.7s     7.70nm
LFF   152.90   1 ePKP  06 25.10   7.6X
       0.7s    11.00nm
CAF   152.91 359 ePKP  06 25.30   7.7X
       0.5s     4.00nm
LPO   153.16   0 ePKP  06 25.50   7.6X
       0.4s     3.45nm
SBF   153.46 350 ePKP  06 26.90   8.5X
       0.6s     8.10nm
FRF   153.88 351 ePKP  06 27.70   8.9X
SGO   154.24 335 PKP   06 27.00   7.6X
LIC   167.00 151 PKP   06 33.60   0.1
KIC   167.25 152 PKP   06 33.70   0.0
TIC   167.37 150 PKP   06 33.90   0.1
     S.D. = 1.0  on  81 of 143 obs.
-----------------------------------------
   OCT  04, 1990  08h 46m 56.45± 0.50s
   71.605 N ± 7.1km     4.275 W ± 8.1km
   DEPTH =  10.0km  (geophysicist)
   4.9mb ( 31 obs.)  3.9Msz (  4 obs.)
 JAN MAYEN ISLAND REGION              (639)

JNW     1.46 249 eP    47 23.50   0.7
DAG     6.50 329 iPc   48 32.00  -2.4
       0.5s    65.73nm          5.8mb
                   ipP 49 43.10
KEV    10.45  85 eP    49 41.00  11.8X
SOD    11.54  96 iP    49 41.80  -2.1
                    i  49 53.10
NRA0   12.58 142 Pn    49 54.90  -3.1X
                   Sn  52 07.90
EKA    16.34 178 P     50 48.00   0.8
       1.1s    53.30nm          4.6mb
WTS    20.30 160 eP    51 35.00   0.4
       1.0s    26.00nm          4.5mb
UCC    21.24 165 P     51 45.00   0.6
ENN    21.42 162 eP    51 46.00  -0.1
       1.0s    52.00nm          4.9mb
SNF    21.52 165 P     51 49.60   2.4
CLL    21.80 150 iPc   51 49.40  -0.6
       1.4s    36.00nm          4.6mb
                    e  52 01.00
DOU    21.96 165 P     51 55.60   4.0X
MOX    22.23 153 iPc   51 54.00  -0.4
       1.4s    47.00nm          4.7mb
     Z 16s     0.60um           4.1MszX

BRG    22.38 149 iP    51 55.10  -0.6
       1.0s    50.00nm          4.9mb
                    i  52 02.20
                    i  52 10.40
ABH    22.46 160 eP    51 56.68   0.0
HOF    22.60 152 eP    51 58.50   0.5
KSP    22.81 145 iP    51 59.80  -0.3
       1.1s    72.00nm          5.1mb
FLN    22.99 174 eP    52 01.70  -0.1
       1.0s    32.00nm          4.8mb
     Z 22s     0.52um           3.9Msz
GRF    23.11 154 eP    52 04.00   1.0
     Z 29s     0.40um           3.7MszX
                    e  52 09.00
LDF    23.17 173 eP    52 03.50  -0.1
       1.1s    34.20nm          4.8mb
PRU    23.33 148 P     52 06.00   0.9
                    e  52 12.00
GRR    23.35 174 eP    52 04.40  -0.9
       1.1s    39.05nm          4.9mb
GWF    23.36 160 P     52 07.08   1.6
BST    23.38 180 P     52 12.84   7.3X
LPF    23.70 175 eP    52 07.90  -0.8
       1.1s    95.25nm          5.3mb
CDF    23.88 161 P     52 08.85  -1.7
WET    23.88 151 eP    52 12.00   1.5
WLS    23.89 161 P     52 10.95   0.3
VITF   23.95 163 P     52 10.37  -0.7
KHC    24.01 150 P     52 13.50   1.8
ECH    24.06 161 P     52 10.47  -1.8
KRA    24.27 140 eP    52 14.00  -0.2
       1.0s    74.00nm          5.3mb
     Z 18s     1.80um           4.6Msz
     E 18s     1.20um
                    i  52 15.90
                    e  52 20.20
                    e  52 30.00
MOF    24.42 161 P     52 15.18  -0.7
LOR    24.71 167 eP    52 18.20  -0.4
       0.8s    13.45nm          4.7mb
     Z 18s     0.28um           3.8Msz
BBS    24.84 161 P     52 20.18   0.3
LOMF   24.89 162 P     52 18.66  -1.7
SSF    24.89 167 eP    52 20.00  -0.3
       0.8s    16.80nm          4.8mb
LBF    25.00 167 eP    52 21.10  -0.3
       0.9s    34.40nm          5.0mb
AVF    25.15 168 eP    52 22.20  -0.5
       0.9s    18.85nm          4.8mb
MFF    25.16 173 eP    52 22.40  -0.4
       0.9s    19.65nm          4.8mb
SPC    25.16 140 eP    52 23.00   0.0
SMF    25.33 167 eP    52 24.00  -0.5
       1.0s    35.00nm          5.0mb
BGF    25.35 168 eP    52 24.00  -0.6
       0.8s    25.50nm          5.0mb
WATA   25.46 154 iPc   52 26.80   0.9
       1.2s    51.40nm          5.1mb
ZST    25.51 146 eP    52 27.90   1.8
                    e  21 42.80
SQTA   25.53 155 iPc   52 27.70   1.3
       1.2s    56.30nm          5.1mb
                    i  52 38.80
TCF    25.58 170 eP    52 26.10  -0.7
       1.0s    37.00nm          5.0mb
LSF    25.58 171 eP    52 26.00  -0.8
       0.9s    26.20nm          4.9mb
MAF    25.67 169 eP    52 26.80  -0.8
       1.0s    47.00nm          5.1mb
SOP    25.90 147 eP    52 38.10   8.3X
SRO    26.10 144 eP    52 34.20   2.7
FVI    26.36 153 P     52 35.00   1.0
RJF    26.53 171 eP    52 34.80  -0.7
       0.9s    29.50nm          5.0mb
     Z 20s     0.38um           3.9Msz
CTI    26.74 155 P     52 38.00   0.4
MDJ    26.76 158 P     52 38.50   0.9
LFF    26.85 172 eP    52 37.40  -1.1
       1.2s    47.60nm          5.1mb
CAF    26.93 170 eP    52 38.60  -0.7
       1.0s    23.00nm          4.8mb
BNI    27.15 163 P     52 42.00   0.6
MBC    27.32 332 eP    52 45.00   2.5
       1.0s     6.00nm          4.3mb
TRI    27.37 152 P     52 41.00  -2.2
EPF    28.74 173 eP    52 54.60  -1.1
       0.9s    37.65nm          5.2mb

SFI    28.85 155 P     52 56.50  -0.1
VRI    29.71 133 ePc   53 06.50   2.1
SDI    31.30 153 P     53 17.50  -0.9
TOL    31.80 180 eP    53 24.00   1.2
SKO    32.32 143 eP    53 26.00  -1.3
OHR    33.03 144 eP    53 32.00  -1.6
YKA    37.94 315 eP    54 16.80   1.7
       0.9s     3.50nm          4.1mb
MAIO   47.76 102 eP    55 36.00   0.8
QUE    55.74  97 eP    56 35.70   0.3
ALQ    60.95 293 e(P)  57 09.00  -2.8
KIC    65.17 181 Pc    57 39.30  -0.2
LIC    65.31 181 Pc    57 39.90  -0.5
SIV    95.30 234 Pc    00 23.80   2.4
     S.D. = 1.2  on  69 of  74 obs.
-----------------------------------------
?  OCT  04, 1990  09h 11m 33.74± 0.65s
    0.257 S ±38.2km   20.894 W ±20.4km
    DEPTH =  10.0km  (geophysicist)
    4.8mb (  1 obs.)  4.5Msz (  2 obs.)
 CENTRAL MID-ATLANTIC RIDGE           (406)

LIC    17.10  68 P     15 35.30   0.8
CAI    17.36 249 eP    15 36.00  -1.9
KIC    17.41  68 P     15 38.50   0.0
                    S  18 30.00
                   eTT 29 22.00
LKO    18.08  57 P     15 45.12  -1.8
SOB1   21.81 245 eP    16 28.90   0.8
                    e  16 35.00
PPD    36.70 232 eP    18 42.70  -0.3
SIV    42.60 246 iPc   19 33.00   0.9
CNCB   49.20 248 P     20 26.00   0.8
ZOBO   49.20 249 P     20 25.00  -0.2
     Z 20s     0.12um           3.9Msz
                   LR  36 04.00
LPB    49.24 248 P     20 22.00  -3.3X
SQTA   54.96  26 e(P)  21 08.30   0.9
       1.0s    10.70nm          4.8mb
KHC    57.44  26 eP    21 30.10   5.0X
XAN   122.29  49 PKP   30 34.00   2.8X
TIY   123.15  44 ePKP  30 51.50  18.7X
     Z 20s     0.50um           5.2Msz
     S.D. = 1.2  on  10 of  14 obs.
-----------------------------------------
    OCT  04, 1990  09h 23m 27.74± 1.57s
    0.314 N ± 7.1km  125.838 E ±10.9km
    DEPTH =  50.0 ± 14.3 km
    4.9mb ( 12 obs.)  4.4Msz (  2 obs.)
 MOLUCCA PASSAGE                      (266)

MNI     1.50 318 eP    23 53.40   0.7
                   eS  24 15.00
KKM    11.16 301 ePd   26 13.00   5.4X
TRT    15.39 239 ePc   27 10.20   6.9X
WB5    21.74 158 iPc   27 59.90 -17.0X
                    e  32 05.00
MBL    22.13 195 eP    28 20.00  -0.7
       0.5s     5.00nm          4.2mb
PMG    23.32 115 eP    28 36.00   3.7X
QIS    24.73 148 eP    28 45.70  -0.4
NANU   24.86 203 eP    28 48.50   1.3
IPM    25.14 280 ePc   28 49.50  -0.5
WARB   26.35 178 eP    29 01.00  -0.1
       0.8s    30.00nm          4.9mb
BDT    31.32 304 eP    29 41.00  -4.7X
CHG    32.17 306 eP    29 53.00  -0.2
CHTO   32.17 306 iP    29 52.60  -0.6
       1.0s    10.50nm          4.6mb
KMI    33.27 320 Pc    30 05.00   2.0
       2.0s    80.00nm          5.2mb
     Z 18s     0.60um           4.3Msz
STK    35.32 156 iPc   30 19.30  -1.0
       1.0s    10.00nm          4.7mb
ADE    37.10 162 eP    30 35.00  -0.3
BRS    37.80 139 iP    30 39.60  -1.6
BJI    40.51 349 eP    31 02.50  -1.0
     Z 32s     0.38um           4.0MszX
BWA    40.52 151 eP    31 06.80   3.1X
LZH    41.04 332 eP    31 07.50  -0.6
       1.0s    25.00nm          4.9mb
     Z 12s     0.40um           4.5MszX
SNY    41.37 357 eP    31 10.40  -0.1
       1.2s    30.00nm          4.9mb
CAN    41.52 151 eP    31 13.80   1.9
MDJ    44.24   4 eP    31 34.00   0.1
GTA    45.61 332 eP    31 44.50  -0.6
```

04d 09h

	0.8s	6.00nm			4.5mb	
Z	18s	0.44um			4.4Msz	
GUN	47.09	309	P	31	57.40	0.1
	0.7s	26.00nm			5.3mb	
PKI	47.29	308	P	31	59.40	0.5
KKN	47.50	309	P	32	00.20	-0.1
	0.8s	19.00nm			5.1mb	
DMN	47.55	308	P	32	00.80	0.0
GKN	48.10	309	P	32	04.80	-0.2
	0.7s	16.00nm			5.2mb	
HYB	49.51	293	eP	32	14.00	-1.8
GBA	49.70	288	P	32	17.00	-0.2
	0.3s	2.70nm			4.8mb	
WMQ	55.04	327	P	32	56.50	-0.3
ALQ	119.96	49	ePKP	42	16.00	0.9
KIC	130.24	279	PKP	42	37.10	1.9X
LIC	130.53	278	PKP	42	37.50	1.8
MDZ	144.77	158	iPKP	43	02.50	1.1
CNCB	158.69	141	PKP	43	26.00	3.4X
LPB	158.82	140	ePKP	43	19.00	-3.5X
ZOBO	159.00	140	PKP	43	26.70	3.8X
SIV	163.00	157	PKP	43	28.20	1.9X

S.D. = 1.0 on 29 of 40 obs.

% OCT 04, 1990 10h 20m 05.74± 1.00s
39.122 N ± 8.1km 27.697 E ±10.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.80	205	ePg	20	21.00	-0.3
			eSg	20	33.50	
DST	0.87	56	iPn	20	23.10	0.6
EDC	1.23	6	ePn	20	27.50	-1.1
BNT	1.24	8	ePn	20	29.00	0.1
EZN	1.27	304	ePn	20	30.00	0.6

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

? OCT 04, 1990 11h 09m 55.58± 1.25s
4.086 S ±20.7km 152.442 E ±16.1km
DEPTH = 188.1 ± 10.7 km
NEW BRITAIN REGION (192)

RAB	0.29	249	iPc	10	22.20	0.1
			iS	10	44.00	
PMG	7.45	225	eP	11	42.50	-0.2
			eS	13	07.00	
BKM	20.54	132	iPd	14	20.10	-0.8
DZM	22.45	144	iPc	14	40.60	0.9
PKI	71.76	301	P	21	00.00	0.0

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

OCT 04, 1990 11h 39m 18.62± 0.43s
41.365 N ± 3.7km 23.374 E ± 4.3km
DEPTH = 10.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)
ML 3.0 (THE).

SRS	0.30	146	ePd	39	24.16	-0.7
			eS	39	27.92	
MMB	0.35	50	iPgc	39	25.00	-0.8
			iSg	39	31.00	
KNT	0.41	241	ePc	39	26.88	-0.2
			iS	39	30.68	
SOH	0.54	182	ePc	39	28.88	-0.7
			eS	39	36.64	
KKB	0.55	337	ePg	39	30.00	0.3
			Sg	39	37.00	
THE	0.79	203	ePc	39	33.56	-0.5
			eS	39	44.16	
GRG	0.84	241	ePd	39	34.88	0.0
			eS	39	47.28	
RZN	1.06	72	ePg	39	39.00	0.3
			Sg	39	54.00	
OUR	1.13	156	ePc	39	40.08	0.3
			eS	39	55.92	
VTS	1.23	354	iP	39	41.00	-0.6
			iSg	39	55.00	
PLD	1.24	53	ePg	39	44.00	2.4X
			iSg	40	02.00	
PGB	1.32	26	ePg	39	44.00	0.9
			Sg	40	03.00	
LIT	1.43	208	ePd	39	45.80	1.2
			eS	40	05.40	
KDZ	1.56	79	eP	39	47.00	0.5
			iS	40	06.00	
SKO	1.57	293	ePn	39	45.00	-1.6
FNA	1.62	250	ePd	39	48.84	1.5
			eS	40	11.36	
DIM	1.76	66	ePg	39	53.00	3.7X
			eSg	40	18.00	
OHR	1.96	263	ePn	39	55.20	2.9X

S.D. = 0.9 on 15 of 18 obs.

OCT 04, 1990 12h 00m 22.50± 0.95s
46.070 N ± 8.0km 14.338 E ± 6.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.8 (LJU). Felt at Ljubljono
ond Skofjo Loko.

LJU	0.14	101	iPgc	00	25.60	-0.2
			iSg	00	27.90	
VOY	0.31	263	iPgd	00	29.00	0.0
			eSg	00	34.30	
CEY	0.34	169	iPgc	00	29.60	0.1
			iSg	00	34.50	
TRI	0.54	228	iPgd	00	33.10	-0.3
			iSg	00	42.00	
RIY	0.73	177	iPgd	00	37.00	0.2
			iSg	00	47.20	
VBY	0.86	131	eP	00	53.10	14.1X
			e(Sg)	00	54.50	
FVI	1.20	296	Pc	00	45.00	0.2
			eSn	01	03.40	
SOTA	2.44	299	iPn	01	06.10	2.9X
			i	01	07.70	

S.D. = 0.3 on 6 of 8 obs.

% OCT 04, 1990 12h 13m 18.46± 0.43s
48.264 N ± 3.8km 0.585 W ± 4.3km
DEPTH = 13.4 ± 3.2 km
FRANCE (538)
ML 3.1 (LDG).

GRR	0.22	304	Pg	13	23.30	-0.2
			Sg	13	25.70	
LPF	0.38	233	Pg	13	26.60	0.1
			Sg	13	30.80	
LDF	0.45	43	Pg	13	28.00	0.3
			Sg	13	34.00	
FLN	0.50	8	Pg	13	28.60	0.0
			Sg	13	35.10	
MFF	1.69	170	Pn	13	48.30	0.6
			Pg	13	50.60	
			Sg	14	13.30	
LSF	2.48	144	Pn	13	59.60	0.5
			Pg	14	05.70	
			Sg	14	36.30	
TCF	2.74	135	Pn	14	03.10	0.2
			Pg	14	10.20	
			Sg	14	47.20	
BGF	2.89	125	Pn	14	04.90	0.0
			Pg	14	13.00	
			Sg	14	49.70	
MAF	2.96	132	Pn	14	06.00	0.0
			Pg	14	14.40	
			Sg	14	51.30	
SSF	3.02	112	Pn	14	07.60	0.9
			Pg	14	16.30	
			Sg	14	53.00	
AVF	3.05	117	Pn	14	07.20	0.1
			Pg	14	17.40	
			Sg	14	54.30	
LOR	3.16	107	Pn	14	08.50	-0.3
			Pg	14	19.00	
			Sg	14	57.50	
RJF	3.29	153	Pn	14	11.00	0.3
			Pg	14	20.20	
			Sg	15	02.30	
LBF	3.34	111	Pn	14	10.80	-0.6
			Pg	14	22.70	
			Sg	15	03.70	
SMF	3.41	117	Pn	14	11.70	-0.6
			Pg	14	22.90	
			Sg	15	06.80	
LPO	3.79	160	Pn	14	16.80	-0.9
			Sg	15	18.00	
CAF	3.81	150	Pn	14	17.60	-0.4
			Sg	15	19.60	

S.D. = 0.5 on 17 of 17 obs.

% OCT 04, 1990 14h 33m 57.93± 1.01s
39.115 N ± 8.7km 27.559 E ±10.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.7 (ISK).

IZM	0.75	198	ePg	34	12.60	-0.1
			eSg	34	24.10	
DST	0.96	59	iPn	34	15.00	-1.3
EZN	1.19	307	ePn	34	20.00	-0.1
EDC	1.25	11	ePn	34	20.50	-0.7
BNT	1.27	13	ePn	34	22.00	0.5
KCT	1.29	28	iPn	34	21.20	-0.6
YLV	2.01	43	iPn	34	34.70	2.3

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

? OCT 04, 1990 14h 39m 02.37± 0.60s
33.784 N ±10.8km 139.274 E ±12.2km
DEPTH = 33.0km (normal)
4.5mb (5 obs.)
SOUTH OF HONSHU, JAPAN (211)

GUN	45.80	278	P	47	23.30	0.0
PKI	46.31	277	P	47	27.40	0.1
KKN	46.33	278	P	47	27.80	0.4
DMN	46.54	278	P	47	29.50	0.4
GKN	46.79	278	P	47	31.20	0.3
FBA	52.78	31	eP	48	17.00	0.9
	0.6s	0.90nm			3.9mb	
WB5	53.57	186	eP	48	07.00	-15.3X
WARB	60.83	193	eP	49	14.00	0.3
	0.4s	2.00nm			4.6mb	
FORR	65.15	191	iPc	49	41.70	-0.4
	0.5s	17.00nm			5.4mb	
HFS	76.31	335	eP	50	48.50	-0.8
	0.4s	2.60nm			4.6mb	
NB2	76.49	337	P	50	49.60	-0.8
	0.6s	2.60nm			4.4mb	
CLL	83.02	329	e(P)	51	25.00	-0.4
			eSg	07	41.00	
PRU	83.31	328	eP	51	28.00	1.0
MKT	83.76	303	iPc	51	29.50	-0.2
KHC	84.37	328	eP	51	33.10	0.7
RMN	84.39	303	iPc	51	32.20	-0.7
MBH	84.64	302	iPc	51	33.40	-0.7

S.D. = 0.6 on 16 of 17 obs.

OCT 04, 1990 16h 00m 42.39± 0.59s
37.010 N ± 5.6km 29.515 E ± 6.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 4.0 (ISK), 3.9 (ATH).

KSL	0.89	176	ePn	01	00.60	1.1
			eSn	01	17.20	
BCK	0.97	62	iPn	01	01.90	1.1
KHL	1.31	0	iPn	01	06.70	0.0
ARG	1.37	235	ePn	01	07.70	0.2
ALT	2.10	13	ePn	01	20.90	2.8X
SMG	2.24	289	ePn	01	20.00	-0.1
IZM	2.26	308	ePn	01	19.10	-1.3
DST	2.68	345	ePn	01	25.00	-1.4
PPCY	3.13	132	eP	01	35.00	2.4X
IZI	3.32	359	ePn	01	36.00	0.5
PRK	3.39	312	ePn	01	35.70	-0.7
YLV	3.55	358	ePn	01	41.00	2.2
BNT	3.57	340	ePn	01	46.00	7.1X
NPS	3.61	242	ePn	01	41.00	1.5
CSS	3.71	122	eP	01	43.30	2.3X
EZN	3.77	319	iPn	01	41.40	-0.3
ADI	6.11	128	eP	02	14.00	-0.9
DSI	7.28	136	eP	02	29.50	-1.8

S.D. = 1.3 on 14 of 18 obs.

• OCT 04, 1990 16h 08m 51.62± 2.05s
40.594 N ±12.1km 30.237 E ±16.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

GPA	0.31	170	iPg	08	58.00	-0.1
			eSg	09	03.50	
HRT	0.49	298	iPg	09	01.20	-0.4
			iSg	09	09.60	
GBZT	0.63	288	ePg	09	15.00	10.7X
IZI	0.64	246	iPg	09	05.10	0.6
YLV	0.66	268	iPg	09	04.60	-0.2
			iSg	09	14.60	
ISK	1.01	298	iPn	09	10.60	-0.1
KCT	1.48	257	iPn	09	17.60	-0.7

```
CTT      1.48 293 iPn    09 19.10   0.8
     S.D. = 0.7   on    7 of    8 obs.
-----------------------------------------
?  OCT  04, 1990  17h 33m 02.14± 1.05s
   20.037 S ±11.3km  179.972 E ±27.6km
   DEPTH = 599.9 ± 13.8 km
   5.3mb (  1 obs.)
 SOUTH OF FIJI ISLANDS                (171)

SGE      3.11 321 eP     34 22.50   0.0
PUZ     18.03 184 eP     36 39.80   0.7
WLZ     18.15 191 eP     36 43.50   3.4X
NOZ     18.59 185 P      36 44.50   0.3
PGZ     20.76 188 eP     37 03.10  -1.0
MNG     20.87 190 eP     37 04.00  -1.2
KHZ     22.97 192 eP     37 24.70   0.7
LTZ     23.59 194 eP     37 30.20   0.5
W85     42.76 262 eP     40 10.00   0.0
FBA     88.21  13 ePc    44 50.90   0.0
        0.6s     27.80nm          5.3mb
HFS    138.76 350 ePKP   51 16.70  -5.3X
        1.1s     15.70nm
KRA    146.10 337 ePKP   51 46.00  11.1X
MKT    146.57 296 ePKP   51 46.00   9.7X
KSP    146.66 341 iPKP   51 43.30   7.5X
SPC    146.69 336 ePKP   51 44.10   7.9X
RMN    147.09 295 ePKP   51 48.00  10.8X
CLL    147.15 345 iPKPd  51 44.90   8.3X
        1.0s     25.00nm
                   i     51 48.30
BRG    147.31 344 iPKP   51 45.60   8.8X
        0.8s     14.00nm
                   i     51 49.40
WTS    147.66 352 ePKP   51 45.50   8.2X
        0.8s     15.00nm
PRU    147.94 342 iPKPd  51 47.50   9.6X
        0.8s     13.80nm
MOX    148.09 346 ePKP   51 47.00   8.9X
ZST    148.68 338 ePKP   51 49.20  10.1X
ENN    148.98 353 ePKP   51 48.50   9.1X
        0.7s     11.00nm
                   e     51 54.50
KHC    148.99 343 iPKP   51 50.00  10.4X
GRF    149.08 346 ePKPd  51 49.80  10.1X
                   e     51 56.80
ABH    149.61 350 ePKP   51 49.94   9.4X
DOU    149.78 354 PKPd   51 50.20   9.5X
CDF    151.08 350 ePKP   51 53.20  10.4X
        0.5s     3.65nm
FLN    151.34   1 ePKP   51 52.60   9.6X
        0.5s     9.50nm
LDF    151.51   0 ePKP   51 53.00   9.7X
        0.5s     5.85nm
HAU    151.62 351 ePKP   51 54.20  10.7X
        0.7s     5.50nm
GRR    151.71   1 ePKP   51 53.60  10.0X
        0.4s     6.85nm
BSF    151.73 350 ePKP   51 54.20  10.4X
        0.7s     4.40nm
LPF    152.06   1 ePKP   51 54.30  10.2X
        0.5s    14.60nm
LOR    152.65 354 ePKP   51 56.30  11.3X
        0.6s     2.70nm
SSF    152.89 355 ePKP   51 56.90  11.6X
MFF    153.50   0 ePKP   51 57.50  11.4X
     S.D. = 0.9   on    9 of   37 obs.
-----------------------------------------
%  OCT  04, 1990  18h 20m 42.82± 1.08s
   32.880 S ± 8.8km   70.534 W ±12.2km
   DEPTH =  33.0km  (normal)
 CHILE-ARGENTINA BORDER REGION        (127)

JACH     0.20 346 iPc    20 49.30  -0.3
                   iS    21 01.50
ROCH     0.41 257 iPc    20 53.20   0.9
                   iS    21 08.10
FCH      0.49 155 iPd    20 54.00   0.4
                   iS    21 08.60
PCH      0.74 179 iPd    20 57.10   0.2
                   iS    21 14.40
TACH     0.84 204 eP     20 58.50   0.2
                   iS    21 17.00
CHCH     1.06 185 iPc    21 01.20  -0.2
                   eS    21 14.40
LNV      1.30 214 iPc    21 03.50  -1.2
                   iS    21 25.30
     S.D. = 0.8   on    7 of    7 obs.
-----------------------------------------
   OCT  04, 1990  19h 34m 35.30± 0.61s
   39.288 N ± 5.7km   27.754 E ± 5.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                               (366)
      MD 3.1 (ISK).

DST      0.75  65 iPg    34 48.90  -1.1
                   iSg   35 00.90
IZM      0.97 203 ePn    34 51.00  -2.7
EDC      1.06   5 iPn    34 55.50   0.2
KCT      1.07  26 iPn    34 56.00   0.6
BNT      1.07   7 iPn    34 56.00   0.5
PRK      1.15 268 eP     34 57.60   0.8
                   eS    35 14.00
KGT      1.21 344 iPn    34 56.00  -1.9
EZN      1.23 296 iPn    34 58.30   0.2
KHL      1.69 124 ePn    35 05.70   0.7
IZI      1.69  51 iPn    35 04.70  -0.4
SMG      1.73 205 eP     35 07.00   1.4
YLV      1.78  44 ePn    35 03.00  -3.4X
ALT      1.85  96 ePn    35 09.00   1.6
CTT      1.93  15 ePn    35 09.00   0.6
HRT      2.12  43 ePn    35 10.00  -1.3
RDO      2.51 318 eP     35 17.70   0.9
     S.D. = 1.3   on   15 of   16 obs.
-----------------------------------------
%  OCT  04, 1990  20h 37m 00.59± 1.71s
   33.699 S ± 6.2km   71.605 W ±13.5km
   DEPTH =  10.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE          (135)

LCCH     0.23   7 iPc    37 05.50   0.1
                   iS    37 12.10
LNV      0.30 148 iPd    37 07.00   0.1
                   iS    37 15.50
TACH     0.56  85 eP     37 12.20   0.3
                   iS    37 25.50
CHCH     0.83 107 iPd    37 16.20  -0.4
                   iS    37 32.30
ROCH     0.88  35 eP     37 17.00  -0.6
                   iS    37 31.70
PCH      0.91  85 iPc    37 18.10   0.0
                   iS    37 35.30
FCH      1.16  72 eP     37 22.60   0.1
                   iS    37 44.00
JACH     1.32  40 iPd    37 25.60   0.5
                   e     37 44.50
     S.D. = 0.4   on    8 of    8 obs.
-----------------------------------------
   OCT  04, 1990  20h 57m 14.97± 1.38s
    2.089 N ± 4.7km  126.691 E ± 7.7km
   DEPTH =  68.4 ± 13.4 km
   5.1mb ( 13 obs.)
 MOLUCCA PASSAGE                      (266)

MNI      1.96 251 eP     57 47.00   0.4
                   eS    58 08.00
KKM     11.16 291 ePc    59 55.00   0.9
        0.6s     50.20nm          5.7mb
MTN     15.48 164 eP     00 49.00  -1.7
        0.4s     54.00nm          5.1mb
KNA     17.84 173 eP     01 19.60  -0.6
W85     23.10 161 eP     02 00.30 -15.4X
                   eS    06 09.70
MBL     24.06 196 iPd    02 25.70   0.6
        0.4s      4.00nm          4.2mb
OIS     25.82 151 eP     02 41.20  -0.5
NANU    26.81 203 eP     02 50.30  -0.5
WARB    28.11 180 eP     03 04.00   1.5
        0.4s      8.00nm          4.7mb
LOE     28.86 303 eP     03 08.80  -0.6
CHG     31.86 303 eP     03 36.00   0.1
        0.8s     16.60nm          4.9mb
MRWA    32.77 197 eP     03 43.60  -0.1
FORR    32.78 178 iPd    03 43.30  -0.4
        0.4s     34.00nm          5.5mb
COOL    33.21 189 eP     03 48.00   0.5
BAL     33.88 196 eP     03 53.00  -0.3
TSRJ    34.38  13 P      03 57.80   0.3
KLB     34.55 194 eP     04 00.00   0.9
IIDJ    34.82  16 eP     04 01.50   0.1
MUN     35.31 196 eP     04 06.00   0.5
CHJJ    35.66  17 P      04 07.10  -1.3
MTMJ    35.83  15 P      04 09.70  -0.3
NWAO    35.96 194 eP     04 12.00   1.0
STK     36.63 158 eP     04 15.00  -1.6
        0.8s      7.00nm          4.6mb
NIIJ    36.77  17 eP     04 17.30  -0.4
YAMJ    37.94  17 P      04 28.60   1.0
BRS     38.60 141 iPd    04 32.80  -0.5
BJI     38.96 347 eP     04 37.00   0.9
        1.0s     24.00nm          5.1mb
OFUJ    39.27  19 P      04 39.90   1.2
LZH     39.90 331 eP     04 45.50   1.4
        1.8s     32.00nm          4.9mb
      Z  15s      0.53um          4.5MszX
BWA     41.67 153 eP     05 01.80   3.3X
CAN     42.67 153 eP     05 08.90   2.2
GUN     46.67 307 P      05 39.00  -0.2
        0.8s     86.00nm          5.7mb
PKI     46.90 307 P      05 40.20  -0.8
KKN     47.09 307 P      05 41.00  -1.4
        0.8s     31.00nm          5.3mb
DMN     47.16 307 P      05 43.20   0.2
        1.0s     52.00nm          5.4mb
GKN     47.70 307 P      05 45.60  -1.5
        0.9s     39.00nm          5.4mb
HYB     49.65 291 eP     06 02.50   0.4
GBA     50.01 286 P      06 04.00  -0.8
NDI     54.00 304 eP     06 32.00  -2.5
QUE     62.99 303 eP     07 38.00   0.6
MAIO    70.47 308 eP     08 26.00   1.4
ZOBO   159.72 135 PKP    17 12.00   3.4X
SIV    164.21 151 PKP    17 08.80  -3.6X
     S.D. = 1.1   on   39 of   43 obs.
-----------------------------------------
?  OCT  04, 1990  22h 19m 32.94± 1.02s
   43.380 N ±20.0km  150.002 E ±16.4km
   DEPTH =  33.0km  (normal)
   4.7mb (  7 obs.)
 KURIL ISLANDS REGION                 (222)

KUSJ     3.88 268 iPd    20 29.20  -2.4X
                   S     20 59.30
HOOJ     5.03 261 P      20 49.30   1.2X
                   eS    21 35.80
ASAJ     5.38 280 P      20 49.00  -4.0X
BJI     25.37 274 eP     24 57.50  -1.0
        1.0s     12.00nm          4.4mb
LZH     35.86 274 Pc     26 30.80  -0.9
        1.5s     28.00nm          5.0mb
FBA     40.18  36 e(P)   27 06.90  -0.3
CHG     49.20 257 eP     28 23.00   3.1X
CHTO    49.20 257 eP     28 22.60   2.7
        0.8s     5.86nm           4.7mb
GUN     53.11 275 P      28 49.60  -0.4
KKN     53.61 276 P      28 53.20  -0.3
        0.7s     17.00nm          5.2mb
PKI     53.64 275 P      28 53.20  -0.6
DMN     53.84 276 P      28 55.00  -0.2
        0.9s     34.00nm          5.4mb
GKN     53.96 276 P      28 55.40  -0.5
W85     64.57 196 eP     30 08.20  -0.8
FFC     64.75  38 eP     30 20.00  10.1X
        0.5s      8.00nm
HYB     64.85 271 eP     30 11.50   0.4
GBA     68.14 268 Pd     30 32.70   0.7
        0.8s     3.10nm           4.5mb
NB2     70.68 340 P      30 47.30   0.3
        0.5s     1.20nm           4.2mb
RMN     85.65 309 iPc    32 10.50   0.9
MBH     86.05 308 eP     32 23.00  11.5X
     S.D. = 1.1   on   14 of   20 obs.
-----------------------------------------
   OCT  04, 1990  23h 17m 33.13± 0.36s
   36.536 N ± 6.7km  139.275 E ± 5.8km
   DEPTH = 123.2 ±  3.5 km
   4.8mb (  4 obs.)
 HONSHU, JAPAN                        (227)

CHJJ     0.54 205 iPd    17 51.90   0.0
                   S     18 05.40
NIIJ     0.74 343 P      17 52.70  -0.6
                   S     18 06.90
KAKJ     0.80 114 iPd    17 53.40  -0.4
                   S     18 07.30
MTMJ     1.18 273 iPd    17 57.60  -0.1
IIDJ     1.53 227 P      18 02.00   0.5
                   S     18 23.30
YAMJ     1.74  20 P      18 04.30   0.3
TSRJ     2.85 250 iPd    18 18.90   0.8
                   eS    18 49.90
OFUJ     3.17  36 P      18 22.50   0.1
```

04d 23h

		S	18	59.50		
WKYJ	3.79	234 P	18	30.40	-0.5	
YONJ	4.91	256 P	18	46.40	0.5	
TKSJ	4.98	241 P	18	46.70	-0.1	
		S	19	41.40		
SSE	15.98	255 eP	20	55.00	-17.0X	
	1.0s	12.00nm				
CHTO	39.50	255 e(P)	24	53.20	-0.1	
	1.0s	3.75nm		4.1mb		
PKI	46.01	275 P	25	46.00	-0.3	
KKN	46.02	275 P	25	46.20	0.0	
GKN	46.45	276 P	25	49.40	-0.1	
GBA	59.46	264 Pc	27	24.70	-0.7	
	0.6s	2.30nm		4.4mb		
ASPA	60.09	186 iPd	27	29.30	-0.2	
	0.5s	12.50nm		5.2mb		
FORR	67.85	190 iPd	28	20.30	0.5	
	0.4s	15.00nm		5.2mb		
LRM	75.69	43 eP	29	08.20	1.5	
ZOBO	148.41	58 PKP	37	09.00	5.1X	
LPB	148.61	58 (PKP)	37	03.00	-1.1	
CNCB	148.88	58 PKP	37	11.00	6.3X	
		i	37	41.90		

S.D. = 0.6 on 20 of 23 obs.

OCT 04, 1990 23h 48m 31.38± 0.79s
41.480 S ± 8.6km 174.955 E ± 5.8km
DEPTH = 36.7 ± 6.0 km
5.5mb (24 obs.) 5.1Msz (10 obs.)
COOK STRAIT, NEW ZEALAND (163)
ML 5.3 (WEL). Felt strongly in the Wellington area, North Island. Felt widely from New Plymouth, Wongonui and Donnevirke on North Island to Nelson, Blenheim and Christchurch on South Island.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 24C
Centroid Location:
Origin Time 23:48:30.2 0.5
Lat 41.84S 0.05 Lon 175.62E 0.07
Dep 15.0 FIX Half-duration 2.2
Moment Tensor; Scale 10**17 Nm
Mrr= 1.18 0.09 Mtt= 0.00 0.09
Mff=-1.18 0.08 Mrt= 1.39 0.21
Mrf= 1.48 0.24 Mtf=-1.08 0.09
Principal Axes:
T Val= 2.26 Plg=61 Azm=330
N 0.56 11 220
P -2.82 27 124
Best Double Couple:Mo=2.5*10**17
NP1:Strike=190 Dip=21 Slip= 58
NP2: 43 72 101

WDW	0.21	8 P	48	38.00	-0.4	
WEL	0.24	324 iPc+	48	40.00	1.3	
		S	48	49.50		
CAW	0.38	13 P	48	39.70	-0.7	
KIW	0.62	357 P	48	43.90	0.3	
KAI	2.84	247 eP	49	14.00	-1.4	
RIV	20.29	284 eP	53	12.00	5.4X	
		e	58	08.00		
DZM	20.64	337 iPc	53	10.00	-0.4	
CNB	20.94	279 ePd	53	14.70	1.3	
	1.4s	176.00nm		5.2mb		
CAN	21.21	278 iPd	53	19.00	2.9X	
		eTT	11	30.00		
COO	21.53	293 iPc	53	23.80	4.4X	
BWA	22.03	280 eP	53	23.70	-0.6	
		eTT	12	15.00		
BRS	22.98	301 iPd	53	37.00	3.3X	
		i	53	43.50		
		e	53	55.00		
TOO	23.01	270 iPd	53	35.90	2.0	
	1.2s	183.00nm		5.4mb		
BKM	24.42	344 iPc	53	47.50	-0.2	
CMS	25.35	284 eP	53	57.00	0.5	
BFD	25.35	269 eP	54	00.00	3.5X	
RMO	26.24	296 eP	54	05.00	0.2	
STK	28.27	279 iPc	54	25.50	2.3	
	1.3s	54.00nm		5.1mb		
		e	57	34.20		
OLP	29.29	291 eP	54	32.50	0.0	
CTA	32.35	302 iPd	55	00.80	1.3	
	1.2s	234.38nm		5.9mb		
		iS	00	30.00		
QIS	36.42	294 eP	55	33.90	-0.5	
SBA	36.64	183 iPc	55	38.10	2.5	
AFR	38.47	62 eP	55	51.00	-0.6	
	0.8s	20.00nm		5.0mb		
ASPA	38.47	285 ePc	55	50.70	-1.0	
	1.6s	113.00nm		5.4mb		
PAE	38.51	63 eP	55	52.00	0.0	
	0.8s	15.00nm		4.9mb		
PPT	38.58	63 eP	55	52.00	-0.6	
	0.8s	20.00nm		5.0mb		
TVO	38.65	63 eP	55	55.00	1.8	
	0.8s	15.00nm		4.9mb		
PPN	38.70	63 eP	55	53.00	-0.6	
	0.8s	10.00nm		4.7mb		
PMG	40.27	315 eP	56	06.50	-0.1	
	0.8s	231.34nm		6.0mb		
WRA	40.51	289 P	56	08.30	-0.2	
WARB	42.39	275 eP	56	24.00	0.1	
	0.4s	2.00nm		4.2mb X		
MTN	47.59	294 iPd	57	04.50	-1.0	
MRWA	48.77	265 eP	57	13.00	-1.6	
MBL	50.37	276 eP	57	25.00	-2.0	
	0.6s	10.00nm		5.0mb		
NANU	52.77	272 eP	57	42.00	-3.1X	
MAW	59.92	204 eP	58	34.00	-1.6	
GUA	61.37	326 eP	58	44.80	-1.2	
	1.0s	256.00nm		6.3mb		
GUMO	61.44	326 eP	58	45.30	-1.1	
	1.0s	248.00nm		6.3mb		
Z	19s	1.06um		5.0Msz		
PJG	61.44	326 eP	58	44.80	-1.6	
TRT	64.29	283 ePc	59	05.20	-0.3	
HON	67.33	27 P	59	30.00	5.4X	
Z	22s	0.83um		4.9Msz		
KKM	71.41	296 ePd	59	47.00	-3.1X	
	1.3s	168.30nm		5.9mb		
IPM	81.08	284 ePc	00	43.90	-0.5	
	1.2s	88.80nm		5.6mb		
SNG	83.14	286 eP	00	55.60	0.6	
	1.2s	156.25nm		6.0mb		
PEL	84.32	130 eP	01	00.70	-0.2	
MAT	84.62	331 eP	01	03.00	1.0	
	1.3s	26.92nm		5.3mb		
		eS	11	38.00		
PCT	87.72	292 eP	01	12.00	-5.6X	
	1.1s	49.90nm		5.7mb		
LOE	89.38	294 eP	01	27.00	1.4	
NJ2	89.58	315 eP	01	24.30	-1.9	
Z	20s	0.50um		4.9Msz		
WHN	90.89	311 eP	01	33.00	0.7	
BDT	91.15	292 eP	01	30.80	-2.9X	
	1.2s	84.20nm		6.0mb		
CHG	92.26	293 eP	01	40.10	1.2	
	1.0s	42.50nm		5.8mb		
CHTO	92.26	293 iP	01	40.00	1.1	
	1.7s	137.20nm		6.1mb		
		pP	01	45.50	17kmX	
GYA	92.48	304 P	01	42.40	2.5	
XAN	96.56	310 eP	02	00.00	1.7	
ZOBO	98.22	120 P	02	07.00	0.0	
Z	22s	0.40um		4.9Msz		
		SKS	12	48.00		
		LR	34	44.00		
CMB	98.68	46 P	02	10.00	2.2	
	0.9s	4.42nm		5.0mb		
TNP	100.46	48 Pdiff	02	18.20	2.0X	
	0.8s	3.92nm		5.0mb		
LZH	100.95	309 ePdiff	02	19.50	1.1	
Z	20s	0.49um		5.0Msz		
ALO	104.72	56 ePdiff	02	37.00	1.8	
Z	18s	1.72um		5.6Msz		
ANMO	104.72	56 Pdiff	02	40.00	4.8X	
Z	20s	1.06um		5.4Msz		
GOL	108.41	53 PKP	07	06.00	8.4X	
Z	18s	0.87um		5.4Msz		
WMO	115.42	307 PKP	07	08.00	-2.6X	
Z	20s	0.40um		5.0Msz		
		PP	08	14.20		
INK	116.02	19 ePKP	07	09.00	-1.8	
YKA	117.88	30 ePKP	07	11.00	-3.5X	
	0.7s	4.70nm				
JSC	121.21	70 PKP	07	19.00	-2.8X	
QUE	122.09	284 ePKP	07	22.60	-1.2	
MBC	124.51	15 ePKP	07	25.00	-1.9	
	1.0s	24.00nm				
MAIO	130.53	286 ePKP	07	39.00	-0.8	
		i	11	04.00		
KER	138.77	278 ePKP	07	41.00	-14.4X	
		e	38	55.00		
TAB	140.84	282 e(PKP)	08	01.00	1.9X	
		e	11	32.00		
DAG	144.12	5 iPKPd	07	58.90	-4.5X	
	0.7s	22.83nm				
LIC	144.89	180 PKP	08	02.80	-3.7X	
Z	22s	0.85um		5.5Msz		
KIC	145.03	181 PKPd	08	03.40	-3.4X	
CSTJ	145.12	266 PKPd	08	05.40	-1.2	
TIC	145.31	180 PKP	08	04.30	-3.0X	
JRSJ	145.78	264 PKPd	08	07.60	0.0	
PRNI	145.99	264 ePKP	08	06.30	-1.7	
DSI	146.31	266 ePKP	08	07.70	-0.7	
SHMJ	146.56	268 PKPd	08	09.70	0.9	
MML	146.69	268 ePKP	08	10.80	1.7	
KEV	147.17	340 iPKP	08	08.90	0.3	
	1.2s	86.70nm				
HLW	148.47	260 ePKP	08	11.50	-0.4	
SOD	148.86	337 iPKP	08	14.00	2.6X	
		i	08	18.40		
KVT	149.32	283 iPKP	08	16.00	3.0X	
BCK	152.32	273 ePKP	08	22.00	4.4X	
ALT	153.18	277 ePKP	08	23.90	5.1X	
NUR	153.69	326 iPKP	08	25.70	7.1X	
	1.0s	48.00nm				
HRT	153.95	280 ePKP	08	27.00	7.3X	
VRI	156.69	292 ePKP	08	22.00	-1.2	
MLR	157.24	291 ePKP	08	23.00	-1.1	
CMP	157.87	290 ePKPc	08	38.00	13.3X	
SKO	160.25	280 ePKP	08	22.30	-5.1X	
		i	08	26.60		
		i	09	08.50		
BZS	160.28	291 ePKP	08	20.00	-7.2X	
OHR	160.60	278 ePKP	08	24.00	-3.8X	
		e	09	04.00		
KRA	160.65	305 ePKP	08	27.00	-0.5	
		e	09	09.00		
SPC	160.69	302 ePKP	08	25.50	-2.3X	
		i	09	10.10		
BEO	161.12	289 ePKP	08	28.00	-0.1	
ZST	162.95	301 ePKP	08	29.90	0.1	
		e	08	37.60		
		e	09	20.40		
		e	15	01.50		
SOI	163.43	265 PKP	08	32.00	1.4	
BRG	163.88	312 ePKP	08	30.60	-0.1	
	1.6s	28.00nm				
		i	08	39.80		
		i	09	23.20		
		e	13	16.60		
CLL	164.18	315 ePKP	08	31.00	0.1	
		e	09	31.00		
PTJ	164.19	293 ePKP	08	28.70	-2.6X	
LJU	165.14	294 e(PKP)	08	29.00	-3.0X	
		e	09	31.00		
VOY	165.58	295 e(PKP)	08	32.20	-0.3	
		e	09	29.10		
WATA	166.76	302 ePKP	08	39.00	5.5X	
	1.5s	35.00nm				
		e	09	36.00		
		i	09	45.80		
		e	13	26.00		
SOTA	167.04	302 ePKP	08	54.00	20.4X	
	1.1s	24.80nm				
		i	09	38.10		
		i	09	56.40		
		e	13	28.10		
DOU	169.08	325 ePKP	08	43.00	8.3X	
TOL	178.23	206 ePKP	08	35.00	-3.1X	
		ePKKP	10	47.00		
		ePP	14	17.00		
		ePPS	28	50.00		
		eSS	35	50.00		

S.D. = 1.2 on 70 of 109 obs.

• OCT 05, 1990 01h 27m 03.88± 3.91s
42.307 N ±32.4km 7.213 E ±17.0km
DEPTH = 10.0km (geophysicist)
WESTERN MEDITERRANEAN SEA (387)
ML 2.7 (LDG). MD 2.3 (STR).

LMR	1.15	333 Pn	27	25.30	-0.1	
		Sn	27	39.50		
LRG	1.31	332 Pn	27	28.00	0.0	
		Sn	27	43.90		

FRF	1.32	342	Pn	27	28.00	-0.3
			Sn	27	42.60	
PGF	1.34	79	Pg	27	28.68	0.0
			Sg	27	44.95	
CALN	1.46	351	Pg	27	30.63	0.2
SBF	1.56	6	Pn	27	31.50	-0.3
			Sn	27	51.00	
AURF	1.58	3	Pg	27	32.01	-0.1
			Sg	27	51.88	
MVIF	1.59	358	Pg	27	32.62	0.4
			Sg	27	52.06	
AUTN	1.70	5	Pg	27	33.81	-0.1
TOUF	1.71	1	Pg	27	34.18	0.2
			Sg	27	54.87	

S.D. = 0.2 on 10 of 10 obs.

% OCT 05, 1990 01h 36m 17.09± 0.80s
39.856 N ± 6.7km 28.291 E ± 5.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.8 (ISK).

DST	0.36	134	iPg	36	23.70	-0.8
			iSg	36	27.70	
KCT	0.40	7	iPg	36	24.90	-0.3
BNT	0.57	330	iPg	36	28.40	-0.3
			iSg	36	36.00	
EDC	0.59	326	iPg	36	28.50	-0.5
			iSg	36	36.50	
KGT	0.96	308	iPg	36	34.00	-1.4
			iSg	36	47.40	
IZI	1.03	62	iPn	36	36.50	0.0
YLV	1.09	49	iPn	36	37.40	-0.2
CTT	1.29	5	iPn	36	41.20	0.1
ISK	1.34	26	iPn	36	42.80	1.0
HRT	1.43	47	iPn	36	43.80	0.7
EZN	1.51	269	ePn	36	46.00	1.8

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

& OCT 05, 1990 01h 52m 52.88s
59.956 N 151.395 W
DEPTH = 64.1km
3.2mb (1 obs.)
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NNL	0.10	30	iP	53	03.21	2.3
HOM	0.32	203	iP	53	03.66	-0.1
CNPM	0.44	169	iP	53	04.25	-0.5
			eS	53	13.07	
XLV	0.53	198	iP	53	04.59	-1.1
NKA	0.79	6	iP	53	10.15	1.5
RDT	0.80	321	eP	53	08.13	-0.7
			eS	53	20.25	
SLKM	0.81	46	iP	53	08.43	-0.5
RSO	0.85	307	iP	53	08.99	-0.6
OPT	0.98	253	eP	53	10.24	-0.8
			eS	53	22.89	
SEW	0.99	81	iP	53	10.07	-1.1
			eS	53	23.98	
AUE	1.17	240	eP	53	12.93	-0.6
			eS	53	29.10	
AUH	1.20	241	eP	53	13.44	-0.6
			eS	53	28.85	
AUI	1.21	240	eP	53	13.26	-0.8
SPU	1.27	345	iP	53	14.54	-0.5
			eS	53	31.65	
CKL	1.33	340	iP	53	15.40	-0.5
CRP	1.37	344	eP	53	16.26	-0.2
CGLM	1.39	348	iP	53	16.40	-0.3
			eS	53	34.74	
BGL	1.40	340	iP	53	16.61	-0.2
			eS	53	35.50	
PDB	1.42	264	iP	53	15.64	-1.4
			eS	53	33.34	
NCG	1.50	346	iP	53	18.02	-0.2
			eS	53	37.58	
CDD	1.54	229	iP	53	17.55	-1.1
SUA	1.55	12	iP	53	18.58	-0.3
PMS	1.58	34	iP	53	19.02	-0.2
MCNL	1.69	244	eP	53	19.01	-1.6
			eS	53	38.91	
PWA	1.86	23	eP	53	22.51	-0.5
KNIM	1.87	76	iP	53	21.36	-1.9
			eS	53	42.92	
MTU	1.88	87	eP	53	21.70	-1.7
PLRM	1.98	33	iP	53	23.89	-0.8
PMR	1.98	33	iPd	53	23.90	-0.8
SKT	2.03	358	iP	53	25.31	-0.2
GHO	2.19	32	iP	53	26.84	-0.9
KDC	2.29	195	ePd	53	26.30	-2.7
GLI	2.33	65	iP	53	27.15	-2.4
SML	2.39	38	eP	53	29.48	-1.0
SVW	2.39	301	iPc	53	28.40	-2.1
CUT	2.52	12	eP	53	31.69	-0.5
MID	2.62	99	eP	53	31.91	-1.7
SCM	2.74	45	eP	53	34.27	-1.1
VLZ	2.77	63	eP	53	33.95	-1.7
KLU	3.10	58	iP	53	38.86	-1.7
HUR	3.15	15	iP	53	41.36	0.2
TOA	3.33	47	iPc	53	43.10	-0.7
RND	3.67	18	eP	53	47.57	-0.9
TTA	3.72	325	eP	53	45.70	-3.5
SDG	3.83	45	eP	53	49.03	-1.6
MCK	3.97	16	eP	53	51.77	-0.8
GLB	4.01	65	eP	53	50.61	-2.7
PAX	4.15	41	eP	53	53.45	-1.8
TGL	4.33	76	eP	53	54.41	-3.4
BALM	4.61	72	eP	53	58.24	-3.5
DDM	4.65	32	eP	54	02.19	-0.1
NEA	4.76	12	eP	54	00.97	-2.8
WRH	4.79	17	eP	54	01.81	-2.3
HDA	4.93	23	eP	54	03.96	-2.1
CCB	5.00	18	eP	54	04.75	-2.3
DOT	5.08	40	eP	54	06.29	-2.0
F8A	5.24	17	eP	54	08.30	-2.1
GLM	5.38	18	eP	54	10.05	-2.5
BCPM	5.91	85	eP	54	17.16	-2.7
YKU	5.91	89	eP	54	18.82	-1.0
PNL	6.06	88	eP	54	17.82	-4.2
IMA	6.22	351	eP	54	22.00	-2.3
HON	6.36	89	eP	54	21.96	-4.1
SIT	8.90	102	eP	54	56.30	-4.8
YKA	17.73	66	eP	56	54.70	-1.8
	0.6s		1.10nm			3.2mb

65 obs. associated

OCT 05, 1990 02h 01m 57.91± 0.67s
48.338 N ± 4.6km 7.494 E ± 5.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG). MD 1.8 (STR).

WLS	0.12	309	Pg	02	00.81	-0.1
			Sg	02	02.54	
ECH	0.26	241	Pg	02	03.33	0.0
			Sg	02	06.78	
MOF	0.54	207	Pg	02	08.85	-0.1
			Sg	02	16.16	
FEL	0.58	143	ePg	02	09.53	-0.2
GWF	0.65	8	Pg	02	11.00	0.1
			Sg	02	18.98	
BSF	0.69	223	Pg	02	11.40	-0.3
			Sg	02	20.30	
HAU	0.84	247	Pg	02	14.00	-0.1
			Sg	02	25.60	
VITF	1.02	264	Pg	02	17.18	0.1
			Sg	02	31.68	
LOMF	1.09	205	Pg	02	18.96	0.6
			Sg	02	33.60	
LOR	2.67	248	Pg	02	48.20	6.4X
			Sg	03	22.90	
LBF	2.74	242	Pg	02	49.90	7.2X
			Sg	03	24.90	
SMF	3.00	237	Pg	02	54.60	8.2X
			Sg	03	32.30	

S.D. = 0.3 on 9 of 12 obs.

& OCT 05, 1990 02h 11m 17.69s
63.437 N 151.067 W
DEPTH = 11.9km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.80	125	iP	11	32.89	-0.1
			eS	11	43.74	
RND	1.00	91	eP	11	36.33	-0.1
			eS	11	50.53	
MCK	1.00	72	eP	11	36.47	0.0
			eS	11	50.78	
CUT	1.10	160	eP	11	38.02	-0.1
NEA	1.44	37	eP	11	44.15	0.6
			eS	12	03.07	
SKT	1.48	189	eP	11	44.23	0.1
WRH	1.67	50	eP	11	45.17	-1.8
PWA	1.88	162	eP	11	49.96	0.1
CCB	1.88	48	eP	11	48.11	-1.8
GHO	1.94	148	eP	11	50.68	-0.2
SUA	1.99	176	eP	11	51.69	0.1
FBA	2.05	43	eP	11	54.16	1.8
PLRM	2.06	153	eP	11	52.30	-0.2
HDA	2.06	60	eP	11	50.76	-1.8
SML	2.07	141	eP	11	52.34	-0.3
NCG	2.10	194	eP	11	52.67	-0.6
CGLM	2.18	192	eP	11	54.86	0.5
CRP	2.24	194	eP	11	55.73	0.5
GLM	2.24	44	eP	11	53.53	-1.6
BGL	2.27	196	eP	11	56.23	0.6
PMS	2.31	162	eP	11	57.10	0.9
SPU	2.31	192	eP	11	56.66	0.5
CKL	2.33	195	eP	11	56.95	0.5
SCM	2.36	131	eP	11	59.45	2.5
PAX	2.58	98	eP	12	01.99	2.0
TOA	2.62	119	eP	12	00.52	0.0
SDG	2.68	107	eP	12	02.06	0.6
IMA	2.87	338	eP	12	03.63	-0.6
RDT	2.94	193	eP	12	05.71	0.6
KLU	3.09	127	eP	12	08.40	1.2
GLI	3.17	142	eP	12	09.21	0.9
VZW	3.19	136	eP	12	09.46	0.9
VLZ	3.20	134	eP	12	09.41	0.7
SEW	3.43	166	eP	12	14.88	2.9
KNIM	3.48	152	eP	12	12.01	-0.7

35 obs. associated

• OCT 05, 1990 02h 17m 19.27± 0.58s
29.588 S ± 6.3km 68.831 W ±15.1km
DEPTH = 120.6 ± 13.5 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	1.76	170	iP	17	49.50	-0.8
RTCB	1.89	179	iPc	17	51.80	-0.2
ZON	1.96	176	iPc	17	53.20	0.5
			eS	18	18.20	
RTBS	2.14	194	iPc	17	56.10	1.2
RTCV	2.28	174	iPd	17	56.20	-0.6
MDZ	3.29	180	eP	18	10.80	0.7
			i	18	38.10	
JACH	3.43	206	iPc	18	13.90	1.7
			iS	18	55.50	
ROCH	3.86	208	iPc	18	18.00	0.0
			iS	19	03.30	
PEL	3.88	204	iP	18	18.50	0.3
			i	18	54.50	
FCH	3.93	198	iPd	18	20.10	1.0
			i	18	56.60	
			iS	19	08.60	
PCH	4.27	199	iPc	18	23.50	0.0
			iS	19	14.00	
TACH	4.43	203	iPd	18	24.50	-1.1
			i	19	17.00	
CHCH	4.60	199	eP	18	27.00	-0.9
			iS	19	22.80	
LNV	4.88	206	ePc	18	29.50	-2.1
			i	18	45.50	
ANT	6.03	346	eP	18	48.00	0.6
CNCB	12.74	4	eP	20	18.00	0.2
			e	21	18.00	
LPB	13.01	3	(P)	20	20.00	-1.1
			e	21	22.00	
ARE	13.29	349	iPc	20	30.00	5.4X
			iS	20	47.00	
LWI	95.54	96	iPd	30	33.10	0.6

S.D. = 1.1 on 18 of 19 obs.

% OCT 05, 1990 02h 59m 58.76± 1.21s
42.481 N ± 5.8km 13.530 E ±11.6km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

AQU	0.16	216	Pc	00	01.90	-0.6
			eSg	00	05.30	
AZI	0.50	188	P	00	08.70	-0.1
			eSg	00	17.00	
MNS	0.64	262	P	00	10.50	-1.1
			eSg	00	21.60	
SDI	0.80	165	P	00	13.90	-0.5
			eSg	00	27.80	
ASS	0.87	313	P	00	15.10	-0.4
			eSn	00	28.00	
RMP	0.91	223	P	00	16.90	0.7

05d 03h

```
                    eSg    00 31.90
RDP      0.94 220 P        00 18.10    1.3
                    eSg    00 31.60
ARV      1.10 337 P        00 20.10    0.6
                    eSn    00 36.70
     S.D. = 1.0  on   8 of   8 obs.
-------------------------------------------
&  OCT  05, 1990  03h 17m 54.80s
   32.470 N          115.440 W
   DEPTH =  16.0km
 CALIFORNIA-MEXICO BORDER REGION  ( 45)
      <PAS-P>. ML 3.1 (PAS).

IKP      0.59 288 ePd   18 06.40    0.0
                    eS     18 14.30
GLA      0.78  42 iPc    18 08.60   -0.9
      2 obs. associated
-------------------------------------------
*  OCT  05, 1990  05h 06m 40.97± 1.85s
   23.087 N ±11.5km  121.507 E ±14.1km
   DEPTH =  10.0km  (geophysicist)
 TAIWAN                              (244)

TWF1     0.33 324 iPd    06 48.10    0.3
                    eS     06 52.30
TWG      0.48 237 iPc    06 50.90    0.2
                    eS     06 58.80
TWK      0.95 281 iPc    06 58.80   -0.4
                    eS     07 11.50
TWD      0.99   5 ePc    06 59.50   -0.3
                    eS     07 12.60
TWC      1.55  12 eP     07 08.70    0.1
MAT     19.70  43 eP     11 27.00   13.5X
     S.D. = 0.4  on   5 of   6 obs.
-------------------------------------------
*  OCT  05, 1990  05h 07m 24.52± 1.10s
   17.803 S ±20.3km  167.453 E ±11.2km
   DEPTH =  33.0km  (normal)
   4.7mb (  1 obs.)
 VANUATU ISLANDS                     (186)

BKM      0.77  80 iP     07 38.50   -0.4
                    iS     07 52.00
PVC      0.82  86 iP     07 40.00    0.4
                    iS     07 52.90
DZM      4.35 192 iPc    08 30.20    0.1
                    iS     09 22.10
CAN     23.95 220 eP     12 43.70    7.0X
WB5     31.35 261 eP     13 46.00    1.5
ASPA    31.87 254 eP     13 47.50   -1.5
      0.5s      5.40nm          4.7mb
   Z  24s      0.10um          3.4MszX
                    LR     25 16.00
     S.D. = 1.5  on   5 of   6 obs.
-------------------------------------------
?  OCT  05, 1990  05h 56m 45.27± 3.16s
   38.004 N ±10.4km   98.825 E ±33.0km
   DEPTH =  10.0km  (geophysicist)
 QINGHAI PROVINCE, CHINA             (325)
      ML 4.0 (BJI).

GTA      1.60  29 iPgd   57 13.70   -0.1
   Z  10s      1.30um
                    Sg     57 39.50
LZH      4.45 114 Pnc    57 55.00    0.5
   Z  12s      0.75um
   E  11s      0.83um
                    Pg     58 07.00
                    Sn     58 50.00
                    Sg     59 10.00
CDZ      8.16 149 eP     58 47.00    0.3
BTO      9.06  70 eP     58 59.50    0.4
   N  10s      0.40um
   E  10s      0.30um
XAN      9.08 113 P      58 56.50   -2.9X
WMO     10.23 308 P      59 01.80  -13.4X
   Z  12s      0.50um
                    S      00 57.00
HHC     10.26  70 eP     59 09.00   -6.7X
TIY     10.77  87 eP     59 17.40   -5.2X
   Z  16s      0.60um
   E  16s      1.00um
GYA     13.28 148 P      59 51.00   -5.5X
WHN     14.83 116 eP     00 15.50   -1.2
PKI     15.33 231 P      00 00.00  -23.6X
     S.D. = 1.0  on   5 of  11 obs.
-------------------------------------------
%  OCT  05, 1990  06h 03m 46.94± 1.26s
   16.974 N ±12.3km   99.668 W ±13.5km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF GUERRERO, MEXICO   ( 58)

ACX      0.21 240 iP     03 53.34   -0.3
                    iS     03 59.72
III      1.41   8 iP     04 09.52   -1.1
                    iS     04 27.86
PPM      2.31  25 iP     04 22.34   -1.5
                    (S)    04 54.00
UNM      2.39  11 (P)    04 26.00    1.1
                    (S)    05 02.00
IIT      2.41  32 (P)    04 24.80   -0.4
IIJ      2.75 359 (P)    04 31.72    1.6
                    (S)    05 08.00
OXX      2.82  87 iP     04 31.52    0.7
                    (S)    05 06.00
MRX      3.08 332 iP     04 39.60    5.3X
                    (S)    05 18.50
     S.D. = 1.4  on   7 of   8 obs.
-------------------------------------------
&  OCT  05, 1990  06h 04m 18.00s
   37.057 N          122.032 W
   DEPTH =  11.0km
 CENTRAL CALIFORNIA                  ( 39)
      <BRK>. ML 3.9 (BRK).
      Mo=4.3*10**14 Nm (BRK). Felt (V)
      at Aptos, Santa Cruz and Scotts
      Valley; (IV) at Brookdale,
      Davenport, Redwood Estates and
      Soquel; (III) at Loma Mar and
      San Carlos.

GCC      0.04 134 iPc    04 19.80   -0.4
MHC      0.42  48 iPd    04 26.60   -0.1
ARN      0.49  54 iPc    04 27.60   -0.5
PCC      0.52 328 iP     04 27.80   -0.8
SAO      0.55 122 iPc    04 27.90   -1.3
BKS      0.83 349 iPd    04 33.20   -0.8
                    iS     04 44.40
BRK      0.83 348 iPd    04 33.60   -0.4
                    iS     04 44.70
PRS      0.90 143 iPd    04 34.60   -0.5
ZSP      0.90 349 ePd    04 34.50   -0.7
LLA      0.98 116 iPc    04 35.40   -1.1
PRI      1.43 129 eP     04 43.00   -1.0
NWRM     1.55 334 eP     04 43.00   -2.6
CMB      1.63  53 ePc    04 45.20   -1.6
PKEM     1.84 122 eP     04 48.40   -1.4
FRI      1.86  91 ePc    04 48.20   -1.8
BCH      2.44 139 eP     04 56.00   -2.6
ORV      2.53   9 eP     04 57.40   -2.2
ABL      3.17 133 eP     05 06.00   -3.0
TNP      3.96  74 eP     05 18.40   -1.8
      19 obs. associated
-------------------------------------------
   OCT  05, 1990  06h 16m 38.13± 0.57s
   40.305 N ± 6.4km   25.832 E ± 5.6km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                          (365)
      MD 3.3 (ISK).

EZN      0.61 141 ePg    16 50.00   -0.4
                    eSg    16 58.30
RDO      0.87 345 iPc    16 53.20   -1.6
                    eS     17 05.00
PRK      1.11 162 eP     16 59.20    0.3
                    eS     17 15.50
KGT      1.13  82 iPg    16 58.80   -0.6
KDZ      1.38 347 iPd    17 02.00   -1.4
                    iS     17 20.00
EDC      1.55  88 ePn    17 06.00    0.1
BNT      1.60  87 iPn    17 07.20    0.7
RZN      1.62 329 eP     17 07.00    0.0
                    iSg    17 28.00
PLG      1.83 273 eP     17 10.00    0.2
PLD      1.99 335 eP     17 14.00    1.8
                    iS     17 41.00
MMB      2.05 310 eP     17 13.00    0.0
                    eS     17 39.00
DMK      2.10  43 ePn    17 16.00    2.2
CTT      2.15  66 ePn    17 13.70   -0.8
DST      2.26 107 ePn    17 15.50   -0.7
PGB      2.57 331 eP     17 25.00    4.5X
                    eS     17 59.00
KKB      2.60 308 eP     17 21.00    0.1
                    iS     17 55.00
PVL      2.93 353 eP     17 31.00    5.4X
                    eS     18 09.00
VTS      3.02 320 eP     17 32.00    5.0X
                    iSg    18 13.00
     S.D. = 1.1  on  15 of  18 obs.
-------------------------------------------
?  OCT  05, 1990  06h 33m 17.75± 3.03s
   32.697 S ±17.5km  178.257 E ±62.2km
   DEPTH = 262.1 ± 37.2 km
   4.6mb (  2 obs.)
 SOUTH OF KERMADEC ISLANDS           (179)

HBZ      4.89 180 eP     34 35.60    2.5
      0.2s     17.00nm
PUZ      5.36 180 eP     34 37.60   -1.3
                    eS     35 46.50
NOZ      5.91 182 eP     34 45.80    0.2
WHH      6.34 193 eP     34 54.50    3.5X
PGZ      8.07 191 eP     35 12.30   -0.2
MNG      8.21 195 eP     35 11.50   -3.0
                    eS     36 50.70
KIW      8.58 197 eP     35 19.40    0.3
MTW      8.73 194 eP     35 20.50   -0.5
WDW      8.94 196 eP     35 22.80   -0.9
THZ     10.00 204 eP     35 38.90    1.7
KHZ     10.40 200 eP     35 42.30    0.3
      0.3s     28.00nm          4.9mb
LTZ     11.12 203 eP     35 52.00    0.8
MQZ     11.84 200 eP     35 59.90   -0.1
                    eS     38 14.20
DZM     14.89 312 iPc    36 37.30   -0.3
ASPA    39.88 271 iPc    40 28.70    0.8
      0.9s     14.70nm          4.4mb
WB5     41.09 277 eP     40 37.30   -0.5
     S.D. = 1.4  on  15 of  16 obs.
-------------------------------------------
%  OCT  05, 1990  06h 43m 44.82± 2.57s
   44.939 N ± 7.6km    6.709 E ±22.6km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                              (538)
      ML 2.0 (GEN).

RRL      0.06 110 P      43 46.45   -0.8
                    S      43 48.20
BHB      0.41 104 P      43 53.43    0.3
                    S      43 59.37
PZZ      0.52 147 P      43 54.45   -0.9
                    S      44 01.22
LSD      0.61  31 P      43 57.22    0.0
                    S      44 05.83
STV      0.82 147 P      44 01.63    0.8
ENR      0.88 144 P      44 02.35    0.6
     S.D. = 0.9  on   6 of   6 obs.
-------------------------------------------
%  OCT  05, 1990  07h 36m 48.26± 0.88s
   17.012 N ± 7.7km   99.813 W ±11.6km
   DEPTH =  10.0km  (geophysicist)
 GUERRERO, MEXICO                    ( 59)

ACX      0.15 197 iP     36 51.49   -0.2
                    iS     36 56.43
III      1.40  14 iP     37 13.95    0.0
                    iS     37 37.44
PPM      2.33  29 iP     37 26.50   -1.3
                    (S)    38 08.42
UNM      2.38  14 (P)    37 31.50    3.3X
                    (S)    38 04.00
CRX      2.39   3 (P)    37 38.00    9.7X
IIT      2.46  35 iP     37 33.22    3.9X
                    (S)    38 12.20
IIJ      2.71   2 iP     37 33.50    0.4
                    iS     38 08.00
OXX      2.96  88 iP     37 37.02    0.7
                    (S)    38 29.00
MRX      2.98 334 iP     37 36.88    0.5
                    iS     38 15.87
LVVM     4.19  49 (P)    38 05.91   12.3X
                    (S)    39 10.33
     S.D. = 0.9  on   6 of  10 obs.
-------------------------------------------
   OCT  05, 1990  08h 43m 29.71± 1.35s
    2.924 N ± 7.2km   96.324 E ± 7.4km
   DEPTH =  50.2 ± 12.4 km
   4.7mb (  9 obs.)
 NORTHERN SUMATERA                   (706)
```

BSI	2.75	338	ePd	44 12.50	0.1
			e(S)	44 22.50	
IPM	4.97	71	ePc	44 44.10	0.3
	0.6s	56.60nm			
			e	45 31.90	
SNG	6.01	45	eP	44 58.00	-0.3
	1.1s	232.91nm		5.5mb	
			eS	47 15.60	
KGM	7.05	97	eP	45 12.50	-0.4
CHG	16.00	9	eP	47 14.40	1.3
CHTO	16.00	9	eP	47 12.10	-1.0
KOD	20.08	292	eP	48 02.30	0.1
GBA	21.47	301	Pc	48 15.80	-0.3
	0.6s	8.50nm		4.3mb	
KMI	22.92	15	eP	48 33.50	2.8
			pP	48 43.50	37kmX
GYA	25.42	22	P	48 53.80	-0.7
PKI	26.64	338	P	49 05.40	-0.6
GUN	26.77	339	P	49 06.00	-1.3
GKN	27.32	337	P	49 11.00	-1.1
CD2	28.71	13	eP	49 24.00	-0.4
XAN	33.11	19	P	50 00.00	-3.2X
GTA	36.46	5	Pc	50 30.80	-1.0
	0.8s	10.00nm		4.8mb	
QUE	38.84	317	eP	50 53.70	1.6
MUN	39.52	153	eP	50 59.00	1.6
HHC	40.18	18	P	51 04.60	1.7
NWAO	40.78	153	eP	51 04.00	-3.8X
BJI	41.09	23	eP	51 10.50	0.3
	0.7s	9.00nm		4.6mb	
COOL	41.11	147	eP	51 11.00	0.4
WMO	41.44	351	P	51 13.80	0.6
WB5	43.69	123	eP	51 30.70	-1.1
ASPA	45.13	128	eP	51 42.30	-1.1
	0.4s	5.10nm		4.7mb	
MAIO	47.50	319	eP	52 02.00	0.0
STK	55.16	133	eP	52 58.60	-1.1
	1.2s	4.00nm		4.3mb	
MBH	63.89	302	eP	53 59.00	-0.9
PRNI	63.91	302	eP	53 59.00	-1.1
CIR	67.66	246	iPc	54 25.20	1.0
KRI	68.68	251	iPc	54 34.00	3.3X
BUL	70.21	248	iPc	54 40.50	0.4
	1.0s	15.00nm		4.9mb	
VRI	73.77	317	ePc	55 05.00	4.4X
MLR	74.22	316	eP	55 03.00	-0.4
SOD	79.58	338	iP	55 32.70	0.0
ZST	80.64	318	e(P)	55 51.20	12.5X
BRG	82.93	321	eP	56 02.90	12.3X
	1.2s	15.00nm			
HFS	83.80	330	eP	55 54.00	-0.8
	0.5s	1.50nm		4.3mb	
NB2	85.08	331	P	56 01.20	-0.1
	1.1s	8.80nm		4.8mb	
PPD	143.28	236	(PKP)	02 58.00	-3.0X
CNCB	159.30	227	ePKP	03 18.00	-7.2X
LPB	159.57	228	(PKP)	03 22.00	-3.3X
ZOBO	159.75	228	PKP	03 27.00	1.3
			i	04 07.00	

S.D. = 1.1 on 34 of 43 obs.

% OCT 05, 1990 09h 16m 30.81± 0.85s
39.132 N ± 6.6km 27.631 E ± 8.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM	0.79	202	ePg	16 46.00	-0.2
			eSg	16 57.00	
DST	0.91	58	iPn	16 48.50	0.3
EZN	1.22	305	ePn	16 54.00	0.4
EDC	1.23	8	ePn	16 53.00	-0.6
BNT	1.24	10	ePn	16 54.20	0.3
KGT	1.34	349	iPn	16 55.20	-0.3

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

OCT 05, 1990 09h 46m 45.65± 0.76s
44.502 N ± 4.7km 114.148 W ± 7.1km
DEPTH = 5.0km (geophysicist)
WESTERN IDAHO (33)
ML 3.1 (BUT). Felt (III) at Ellis. Also felt at Challis.

MCMT	0.98	70	iPc	47 05.00	0.0
HPI	1.09	136	P	47 06.80	-0.1
			S	47 22.50	
JGI	1.13	111	P	47 07.20	-0.3
CBTI	1.43	141	P	47 12.10	-0.4
LTMT	1.46	88	ePn	47 13.80	0.9
HBMT	1.69	40	ePn	47 16.30	0.1
LRM	1.78	42	ePn	47 17.70	0.1
BUT	1.88	36	ePg	47 21.70	2.8X
			eSn	47 43.40	
			eSg	47 47.10	
PTI	2.08	141	P	47 22.00	0.2
MEMT	2.51	63	ePn	47 28.10	0.1
SXM	2.65	51	ePn	47 29.50	-0.5
HRY	2.74	36	ePn	47 30.80	-0.4
BW06	3.75	116	P	47 49.00	3.3X
DPW	4.39	322	P	47 54.70	0.2

S.D. = 0.4 on 12 of 14 obs.

• OCT 05, 1990 09h 57m 01.86± 0.80s
42.526 N ± 9.2km 19.410 E ± 6.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.1 (TTG).

TTG	0.15	229	iPgd	57 05.90	0.7
			eSg	57 09.60	
NKY	0.42	313	ePg	57 10.50	0.1
			eSg	57 17.50	
PVY	0.42	80	ePg	57 10.40	-0.1
			eSg	57 18.40	
BDV	0.49	241	ePg	57 11.30	-0.6
			eSg	57 20.80	
IVA	0.50	46	ePg	57 12.00	0.0
			eSg	57 20.20	
OHR	1.75	143	ePn	57 34.50	2.0X

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

OCT 05, 1990 10h 16m 45.09± 1.06s
40.702 N ± 7.2km 29.957 E ± 7.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.7 (ISK).

HRT	0.25	299	iPg	16 50.70	0.3
GBZT	0.40	283	ePg	16 52.60	-0.6
			iSg	16 59.00	
YLV	0.46	253	iPg	16 53.70	-0.9
GPA	0.49	147	iPg	16 54.90	-0.2
			eSg	17 01.90	
IZI	0.52	226	iPg	16 55.70	0.1
			iSg	17 03.70	
ISK	0.77	298	ePg	17 00.20	0.1
			eSg	17 10.70	
CTT	1.24	292	iPn	17 08.30	0.2
KCT	1.30	250	iPn	17 10.20	1.0
DMK	2.00	305	ePn	17 19.00	-0.3
EZN	2.91	254	ePn	18 08.00	35.7X

S.D. = 0.6 on 9 of 10 obs.

• OCT 05, 1990 10h 42m 24.67± 0.87s
37.653 N ±12.9km 72.107 E ± 7.9km
DEPTH = 33.0km (normal)
4.6mb (3 obs.)
TAJIK SSR (715)

QUE	8.59	211	eP	44 29.00	-0.9
			eS	45 58.00	
NDI	9.91	153	eP	44 49.50	1.6
MAIO	10.18	266	eP	44 52.00	0.3
			eS	46 36.00	
GKN	14.25	129	P	45 46.60	0.3
KKN	14.81	128	P	45 52.80	-0.8
DMN	14.83	129	P	45 54.00	0.1
	0.6s	36.00nm		4.9mb X	
PKI	15.04	128	P	45 56.80	0.0
	0.6s	19.00nm		4.6mb	
GUN	15.10	126	P	45 57.00	-0.6
	0.4s	25.00nm		4.8mb	
HFS	42.72	321	eP	50 20.00	0.1
	0.4s	3.80nm		4.5mb	

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

% OCT 05, 1990 10h 54m 07.81± 3.03s
39.562 N ±26.0km 28.474 E ± 8.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

DST	0.13	70	iPg	54 10.50	-0.5
			iSg	54 12.00	
BNT	0.90	332	ePn	54 25.00	-0.1
EDC	0.91	329	ePg	54 24.50	-0.8
			eSg	54 37.50	
IZI	1.09	44	ePn	54 28.00	-0.4
YLV	1.22	34	iPn	54 30.20	-0.3
KGT	1.26	315	iPn	54 31.70	0.4
HRT	1.56	36	ePn	54 37.00	1.4
CTT	1.58	359	ePn	54 36.10	0.1

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

? OCT 05, 1990 12h 14m 17.20± 4.65s
40.674 N ± 7.9km 29.838 E ±34.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.2 (ISK).

HRT	0.20	319	iPg	14 21.20	-0.4
GBZT	0.32	291	ePg	14 29.30	5.5X
YLV	0.37	253	iPg	14 24.60	-0.2
IZI	0.44	220	iPg	14 26.20	0.1
			iSg	14 34.60	
ISK	0.71	304	ePg	14 31.60	0.4
			eSg	14 41.30	
CTT	1.17	294	ePn	14 39.10	0.1

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

% OCT 05, 1990 13h 43m 27.69± 0.78s
36.199 N ± 9.3km 24.335 E ± 8.5km
DEPTH = 33.0km (normal)
SOUTHERN GREECE (368)

VAM	0.80	188	eP	43 43.00	0.5
			eS	43 54.50	
VLI	1.24	295	eP	43 49.00	0.2
APE	1.30	48	eP	43 50.00	0.4
			eS	44 07.00	
NPS	1.40	132	eP	43 50.50	-0.6
ITM	2.17	298	eP	44 01.70	-0.5

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

OCT 05, 1990 15h 11m 24.10± 1.25s
40.678 N ± 8.9km 29.951 E ± 8.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

HRT	0.26	304	iPg	11 29.50	-0.1
			eSg	11 33.00	
GBZT	0.48	286	ePg	11 37.50	5.2X
YLV	0.45	256	iPg	11 33.00	-0.4
			iSg	11 39.50	
GPA	0.47	145	iPg	11 33.70	-0.1
			eSg	11 41.00	
IZI	0.50	227	iPg	11 34.50	0.3
CTT	1.24	293	ePn	11 47.50	0.3
KCT	1.29	251	iPn	11 48.00	0.0

S.D. = 0.3 on 6 of 7 obs.

? OCT 05, 1990 15h 16m 26.03± 1.58s
28.966 S ±19.9km 177.071 W ±13.8km
DEPTH = 67.6 ± 13.4 km
4.6mb (7 obs.)
KERMADEC ISLANDS REGION (177)

RAO	0.79	249	P	16 42.00	-0.1
			S	16 58.00	
DZM	16.38	291	iPc	20 18.90	5.8X
BRS	26.60	266	iP	22 04.50	4.7X
CTA	34.40	277	iPd	23 10.20	1.2
	1.1s	18.99nm		4.9mb	
			eS	29 05.00	
STK	35.61	255	iPd	23 19.70	0.6
	0.9s	4.00nm		4.3mb	
ASPA	44.02	265	eP	24 28.30	-0.5
	1.0s	8.60nm		4.5mb	
	Z 18s	0.91um		4.7Msz	
			LR	42 19.00	
WB5	44.87	270	eP	24 34.90	-0.8
SPA	61.20	180	eP	26 35.60	-0.3
	1.1s	8.33nm		4.8mb	
MAT	77.54	325	eP	28 16.00	0.0
TNP	87.06	43	eP	29 05.90	0.3
ALQ	92.05	51	eP	29 29.00	0.0
	1.0s	2.50nm		4.6mb	
ANMO	92.05	51	eP	29 30.20	1.2
	1.0s	2.50nm		4.6mb	
FBA	96.30	12	e(P)	29 46.00	-1.6

05d 15h

1.0s 0.40nm 3.9mb
NB2 147.45 353 PKP 36 08.00 7.5X
0.8s 4.40nm
BBTK 153.22 302 ePKP 36 18.00 8.1X
S.D. = 1.0 on 11 of 15 obs.

? OCT 05, 1990 15h 21m 25.17± 6.74s
43.040 N ±15.9km 5.812 E ±54.4km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.6 (STR).

CALN	1.06	47	Pg	21 44.97	-0.3
			Sg	21 58.75	
MVIF	1.30	48	Pn	21 49.50	0.2
			Sg	22 06.17	
REVF	1.33	58	Pn	21 49.83	0.1
AURF	1.39	52	Pn	21 50.87	0.2
			Sg	22 08.71	
TOUF	1.43	47	Pn	21 51.19	-0.1
PGF	2.40	101	Pn	22 05.15	0.0

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

OCT 05, 1990 15h 43m 01.41± 0.23s
47.224 N ± 6.2km 153.007 E ± 3.0km
DEPTH = 97.4km (6 depth phases)
4.9mb (40 obs.)
KURIL ISLANDS (221)

KUSJ	7.17	238	P	44 43.20	-2.1X
			S	45 58.70	
ASAJ	7.90	251	eP	44 57.40	2.2X
MAT	15.31	231	(P)	46 32.00	-1.3X
MDJ	16.49	270	eP	46 47.00	-0.9
CN2	19.57	270	eP	47 20.00	-3.9X
SNY	21.59	266	Pd	47 43.70	-0.6
TIY	31.10	267	eP	49 12.50	0.1
Z 18s 0.36um 4.1Msz					
TTA	32.12	42	eP	49 21.10	0.1
0.8s 13.30nm 4.7mb					
SVW	32.19	45	ePd	49 22.30	0.6
IMA	33.47	36	ePd	49 32.80	0.0
0.8s 17.50nm 4.9mb					
KDC	33.91	51	ePd	49 35.40	-1.1
0.7s 41.70nm 5.4mb					
WHN	33.98	255	eP	49 38.50	1.1
PMR	35.31	44	eP	49 48.80	0.4
0.7s 51.16nm 5.6mb					
XAN	35.49	264	P	49 50.10	-0.2
FBA	35.84	39	ePd	49 53.40	0.6
0.9s 175.00nm 6.0mb X					
TOA	36.67	43	eP	50 01.00	1.0
LZH	37.80	271	eP	50 10.00	0.1
1.5s 28.00nm 5.0mb					
			pP	50 17.50	25kmX
GTA	38.83	278	eP	50 18.20	-0.1
INK	41.29	33	eP	50 39.00	1.0
GYA	41.75	257	P	50 43.00	0.5
WMQ	44.69	291	eP	51 05.40	-0.7
LSA	50.18	273	P	51 50.60	1.2
YKA	50.59	37	eP	51 50.90	-0.6
0.9s 7.40nm 4.7mb					
CHG	52.16	256	eP	52 05.90	1.9
GUN	54.89	275	P	52 24.20	-0.2
PNT	54.99	53	iP	52 25.00	0.5
KKN	55.37	275	P	52 27.80	0.1
0.6s 33.00nm 5.5mb					
PKI	55.43	275	P	52 28.20	0.0
0.6s 19.00nm 5.3mb					
DMN	55.61	275	P	52 29.60	0.1
0.8s 70.00nm 5.7mb					
GKN	55.67	276	P	52 29.80	0.0
WDC	58.38	63	eP	52 52.30	3.7X
MIN	59.09	63	eP	52 53.50	-0.2
ORV	59.63	63	eP	52 57.00	-0.3
GCC	60.90	66	eP	53 04.70	-1.2
MHC	60.92	65	eP	53 06.40	0.2
LRM	60.97	53	eP	53 06.60	0.0
CMB	61.26	64	eP	53 08.50	0.1
PRS	61.73	66	eP	53 11.50	0.0
LLA	61.81	66	eP	53 12.50	0.4
TNP	63.16	62	eP	53 21.10	-0.1
0.8s 12.06nm 4.9mb					
			pP	53 46.10	100km
ISA	63.96	65	eP	53 25.00	-1.3
CLC	64.40	64	eP	53 29.00	-0.1
BW06	64.52	54	iP	53 30.00	-0.1
	0.9s		16.53nm		5.0mb
			pP	53 55.10	100km
SBB	65.00	65	eP	53 33.00	0.0
GSC	65.22	64	eP	53 34.00	-0.5
RVR	65.73	66	eP	53 37.00	-0.6
PLM	66.48	66	eP	53 43.00	0.4
TPC	66.48	65	eP	53 43.00	0.5
RSSD	66.57	50	iPc	53 43.00	-0.2
0.8s 36.06nm 5.4mb					
			pP	54 08.90	103km
NB2	67.76	341	P	53 49.10	-1.0
0.8s 7.20nm 4.7mb					
GLA	67.94	65	eP	53 52.00	0.3
HFS	67.99	339	eP	53 49.20	-2.3
0.7s 7.40nm 4.7mb					
WB5	68.87	199	eP	53 57.00	-0.3
			e	54 21.00	93km
ANMO	71.65	58	eP	54 15.00	0.6
0.9s 10.50nm 4.7mb					
			pP	54 39.70	96km
ALQ	71.65	58	eP	54 14.20	-0.2
0.9s 6.09nm 4.4mb					
			e	54 38.50	94km
ASPA	72.64	198	iPc	54 18.90	-1.0
0.9s 11.60nm 4.7mb					
EKA	75.86	346	P	54 38.00	-0.2
0.4s 3.90nm 4.6mb					
CLL	76.00	335	iP	54 38.80	-0.2
1.1s 24.00nm 4.9mb					
SIO	76.72	51	e(P)	54 43.80	0.5
TUL	76.87	51	eP	54 44.30	0.2
1.0s 10.00nm 4.6mb					
Z 19s 0.10um 4.2Msz					
			LR	04 28.00	
ZST	77.51	332	eP	54 47.70	0.3
DOU	79.29	340	P	54 57.70	0.6
CDF	80.19	338	eP	55 01.20	-0.9
0.7s 12.15nm 4.8mb					
SQTA	80.20	335	iPc	55 02.90	0.7
0.9s 20.80nm 5.0mb					
FEL	80.49	337	eP	55 03.68	0.0
HAU	80.80	338	eP	55 04.40	-0.8
BSF	80.85	338	eP	55 04.60	-1.0
0.7s 4.40nm 4.4mb					
GRR	82.09	343	eP	55 11.70	-0.2
1.0s 26.00nm 5.0mb					
LOR	82.11	339	eP	55 11.50	-0.5
0.7s 21.50nm 5.1mb					
GRC	82.27	340	P	55 13.28	0.5
LBF	82.34	339	eP	55 12.60	-0.7
0.7s 7.70nm 4.7mb					
SSF	82.39	340	eP	55 13.10	-0.4
0.7s 11.60nm 4.9mb					
LPF	82.47	343	eP	55 13.70	-0.1
0.8s 13.45nm 4.9mb					
AVF	82.68	340	eP	55 14.70	-0.3
0.6s 15.35nm 5.1mb					
SMF	82.70	339	eP	55 14.60	-0.5
0.9s 34.40nm 5.3mb					
LPL	83.01	337	eP	55 17.00	0.0
0.9s 13.90nm 4.9mb					
BGF	83.02	340	eP	55 16.50	-0.2
0.5s 7.65nm 4.9mb					
LPG	83.02	337	eP	55 17.40	0.3
0.9s 12.30nm 4.8mb					
PLDF	83.38	339	P	55 19.43	0.7
MAF	83.40	340	eP	55 19.10	0.4
0.7s 32.50nm 5.4mb					
TCF	83.42	340	eP	55 18.90	0.1
0.8s 15.45nm 5.0mb					
AGO	83.42	339	P	55 20.02	1.2
LSF	83.61	341	eP	55 19.90	0.1
0.9s 35.20nm 5.3mb					
MFF	83.65	342	eP	55 20.10	0.2
0.8s 13.45nm 4.9mb					
LBL	84.16	339	P	55 23.64	1.1
MKT	84.21	310	eP	55 22.50	-0.6
RJF	84.51	340	eP	55 24.60	0.3
0.9s 13.10nm 4.9mb					
CAF	84.74	340	eP	55 26.20	0.7
PRNI	84.77	310	iPc	55 25.60	-0.3
LFF	85.03	341	eP	55 27.70	0.8
0.6s 8.10nm 4.8mb					
LPO	85.17	340	eP	55 28.20	0.6
0.6s 9.90nm 4.9mb					
MBH	85.29	310	eP	55 28.00	-0.4
BAO	144.00	36	ePKP	02 25.00	-2.3X
PPD	148.12	46	(PKP)	02 37.00	3.2X

S.D. = 0.7 on 87 of 94 obs.

• OCT 05, 1990 16h 33m 12.24± 1.12s
50.381 N ±15.5km 18.929 E ± 7.9km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.9 (KRA).

KRA	0.73	116	ePg	33 26.20	-0.3
			iSg	33 36.80	
SPC	1.47	144	iPn	33 39.30	0.4
			eSg	33 59.80	
KSP	1.74	286	iPn	33 42.50	-0.2
0.7s 81.00nm					
			iPg	33 45.00	
			iS	34 07.90	
ZST	2.49	209	e(P)	33 53.50	0.0
			i	34 05.40	
			e	34 20.50	
			i	34 24.30	
PSZ	2.54	165	iP	34 01.10	6.8X
SRO	2.60	189	iPn	34 02.80	7.8X
			i	34 29.80	
			i	35 25.70	
VKA	2.72	220	iP	34 03.20	6.4X
			i	34 07.00	
			iSg	34 33.90	
			i	34 44.60	
PRU	2.85	264	Pn	33 57.50	-1.0
			Pg	34 06.00	
			Sn	34 30.50	
			Sg	34 41.00	
BUD	2.90	179	e(P)	34 12.00	12.7X
BRG	3.21	281	iPg	34 12.00	8.3X
			iSg	34 53.00	
KHC	3.69	252	Pn	34 09.90	-0.6
			Pg	34 17.00	
			eSn	34 51.60	
			Sg	35 09.00	
CLL	3.87	286	iPg	34 26.40	13.4X
			eSn	35 02.00	
			iSg	35 19.30	
MOX	4.67	276	ePn	34 25.00	0.5
			ePg	34 40.00	
			eSn	35 19.00	
			eSg	35 40.00	
GRF	5.02	265	e(Pn)	34 30.50	1.2
			ePg	34 44.40	
			e(Sn)	35 28.50	
			eSg	35 49.60	

S.D. = 0.8 on 8 of 14 obs.

OCT 05, 1990 17h 58m 18.55± 0.53s
38.587 N ± 4.5km 14.380 E ± 5.8km
DEPTH = 5.0km (geophysicist)
SICILY (398)

GIB	0.66	205	Pc	58 30.40	-1.3
			eSg	58 40.10	
MNO	0.70	159	P	58 33.10	0.5
			eSg	58 44.90	
ATN	0.95	116	P	58 36.80	-0.3
			eSg	58 54.20	
MSI	1.00	112	P	58 39.60	1.7
			eSn	58 56.30	
MCT	1.12	212	P	58 41.70	1.5
			eSn	58 57.50	
SOI	1.41	111	Pd	58 44.00	-0.9
			eSn	59 05.90	
FAI	1.42	203	P	58 45.70	0.6
			iSg	59 02.80	
CZI	1.51	65	P	58 45.70	-0.5
CVT	1.55	235	P	58 46.50	-0.3
MEU	1.55	163	P	58 45.60	-1.3
			eSg	59 07.10	
MGR	1.80	30	P	58 50.90	0.5
MMN	1.80	43	P	58 50.40	-0.1
			eSg	59 11.80	
TDS	1.86	54	P	58 50.80	-0.6
			eSn	59 16.00	
CSI	1.90	51	P	58 52.30	0.3
			eSg	59 16.50	
ROI	1.97	59	P	58 53.00	0.1
SGO	2.10	20	P	58 54.40	-0.3
ORI	2.18	47	P	58 56.30	0.3

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

? OCT 05, 1990 19h 08m 40.30± 1.90s
46.233 N ±27.9km 2.706 E ±11.3km
DEPTH = 10.0km (geophysicist)
FRANCE (53B)
ML 1.8 (LDG).

MAF	0.10	263	Pg	08	43.50	0.5
			Sg	08	45.20	
TCF	0.35	279	Pg	08	47.00	-0.5
			Sg	08	53.10	
SMF	0.89	62	Pg	08	56.90	-0.4
			Sg	09	08.50	
SSF	1.00	33	Pg	08	59.60	0.4
			Sg	09	12.30	

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

• OCT 05, 1990 20h 42m 40.12± 2.71s
40.498 N ±10.9km 127.482 W ±24.7km
DEPTH = 10.0km (geophysicist)
4.1mb (2 obs.)
OFF COAST OF NORTHERN CALIFORNIA(34)

FHC	2.68	82	eP	43	22.00	-2.1
LBFM	4.32	77	eP	43	48.00	0.4
ARN	5.60	122	eP	44	05.30	-0.3
PGO	6.18	35	P	44	13.90	0.3
VLMM	6.42	37	P	44	19.01	1.8
LVP	6.68	32	P	44	20.81	0.0
MTMW	6.73	33	P	44	20.50	-1.0
FL2	6.81	32	P	44	22.48	-0.2
SHW	6.86	32	P	44	23.34	0.1
HSR	6.86	32	P	44	23.15	-0.2
CDFW	6.87	33	P	44	22.49	-0.9
ESD	6.89	33	P	44	23.71	-0.1
ERK	6.91	31	P	44	24.03	0.1
GULW	6.92	36	P	44	25.37	1.3
CZM	6.95	30	P	44	24.89	0.4
TDL	6.99	31	P	44	25.73	0.6
VGB	7.02	42	P	44	25.68	0.2
ASR	7.09	35	P	44	26.19	-0.4
CPW	7.20	24	P	44	26.72	-1.2
LMW	7.23	30	P	44	28.30	-0.1
GLK	7.41	33	P	44	30.68	-0.3
LON	7.48	31	P	44	31.52	-0.4
WPW	7.55	33	P	44	32.13	-0.7
RVC	7.58	30	P	44	33.61	0.3
FMW	7.68	31	P	44	34.36	-0.5
GSM	7.86	30	P	44	37.53	0.3
LRM	12.19	59	eP	45	38.20	1.2
ALQ	17.52	102	eP	46	47.00	0.8
	1.0s		4.50nm			3.6mb
FFC	22.15	41	eP	47	38.00	0.6
	1.0s		22.00nm			4.6mb

S.D. = 0.8 on 29 of 29 obs.

% OCT 05, 1990 20h 52m 18.78± 0.78s
38.975 N ± 6.7km 29.767 E ± 7.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

ALT	0.28	73	iPg	52	24.90	0.2
			iSg	52	28.90	
KHL	0.68	196	iPg	52	32.20	-0.1
			iSg	52	42.20	
DST	1.09	306	ePn	52	39.50	0.3
IZI	1.38	351	ePn	52	44.10	0.0
YLV	1.62	349	iPn	52	47.90	0.4
HRT	1.85	358	ePn	52	50.00	-0.8

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

OCT 05, 1990 20h 54m 48.04± 1.10s
44.539 N ± 6.5km 6.969 E ±11.1km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (GEN).

PZZ	0.10	109	P	54	51.29	0.4
			S	54	52.93	
STV	0.39	139	P	54	56.01	0.0
			S	55	01.34	
RRL	0.40	341	P	54	56.21	-0.2
			S	55	02.47	
ENR	0.45	134	P	54	57.01	-0.2
			S	55	02.85	
RSP	0.65	18	P	55	00.79	-0.3
			S	55	09.76	
ROB	0.69	110	P	55	01.65	-0.1
			S	55	10.69	
IMI	0.91	133	P	55	05.69	0.1
			S	55	18.05	
LSD	0.93	8	P	55	06.36	0.4
FIN	0.95	110	P	55	06.16	0.0
			S	55	18.50	
PCP	1.13	89	P	55	09.04	-0.2

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

OCT 05, 1990 21h 53m 04.37± 1.15s
13.926 N ± 8.0km 146.335 E ± 8.8km
DEPTH = 69.7 ± 9.5 km
4.8mb (6 obs.)
SOUTH OF MARIANA ISLANDS (210)

GUA	1.44	255	iPc	53	29.10	0.2
			eS	53	52.30	
GUMO	1.47	257	iPc	53	29.40	0.1
			eS	53	56.70	
PJG	1.47	257	ePc	53	29.50	0.2
PMG	23.20	178	eP	58	05.00	-0.9
QIS	34.90	191	eP	59	50.80	-0.6
WB5	35.60	200	iPc	59	56.50	-0.8
BJI	37.08	320	P	00	09.00	-0.6
	1.2s		16.00nm			4.8mb
	Z 13s		0.47um			4.5MszX
LZH	43.93	308	eP	01	06.00	-0.3
	2.0s		50.00nm			5.0mb
NANU	47.18	220	eP	01	33.20	1.2
GUN	57.65	294	P	02	50.60	0.1
PKI	58.06	294	P	02	52.80	-0.6
KKN	58.18	294	P	02	53.60	-0.4
	0.8s		13.00nm			5.1mb
DMN	58.33	294	P	02	55.00	-0.2
GKN	58.75	294	P	02	57.60	-0.3
	0.8s		20.00nm			5.3mb
HYB	65.06	283	eP	03	39.00	-1.1
GBA	66.69	279	Pd	03	50.10	-0.4
	0.9s		3.50nm			4.3mb
INK	73.51	22	eP	04	31.00	0.0
QUE	74.07	298	eP	04	36.30	1.0
MBC	77.60	14	eP	04	53.50	-0.6
MAIO	79.39	305	eP	05	06.00	1.3
YKA	81.91	28	eP	05	18.30	1.0
	0.7s		1.80nm			4.1mb
CLC	86.80	54	eP	05	42.00	-0.6
SBB	86.90	55	eP	05	43.00	-0.2
SES	87.25	39	ePd	05	43.50	-1.0
GSC	87.55	54	eP	05	47.00	0.7
LRM	87.77	43	eP	05	46.40	-1.0
LKO	143.67	308	PKP	12	29.00	-5.0X
KIC	144.92	303	PKPc	12	36.14	0.0
	1.0s		45.00nm			
TIC	144.99	304	PKPc	12	36.28	0.0
	0.9s		43.00nm			
LIC	145.23	303	PKPc	12	37.12	0.5
	1.0s		49.50nm			
ZOBO	146.67	98	PKP	12	40.00	0.4
LPB	146.70	99	(PKP)	12	45.00	5.5X
CNCB	146.81	99	PKP	12	42.60	2.8

S.D. = 0.9 on 31 of 33 obs.

OCT 05, 1990 22h 11m 07.59± 0.66s
16.165 N ± 8.9km 94.115 W ± 7.8km
DEPTH = 110.9 ± 7.1 km
4.5mb (10 obs.)
OAXACA, MEXICO (60)

SCX	1.53	68	iP	11	35.96	0.8
			iS	11	56.00	
TPX	2.18	125	iP	11	43.50	0.0
			iS	12	10.00	
EVV	2.57	333	iP	11	47.58	-0.9
			iS	12	20.00	
OXX	2.66	290	iP	11	50.82	0.8
			iS	12	20.00	
LVVM	4.19	328	iP	12	08.11	-2.4
IIT	4.91	306	iP	12	21.50	0.9
			(S)	13	20.00	
PPM	5.18	305	iP	12	26.50	1.9
			iS	13	23.00	
ACX	5.55	278	(P)	12	28.00	-1.3
III	5.57	294	iP	12	29.50	-0.2
			iS	13	30.00	
UNM	5.77	304	(P)	13	13.00	40.5X
IIJ	6.42	304	eP	12	44.00	2.4
MRX	7.60	299	(P)	12	55.00	-2.3
MED	18.97	349	iPc	15	22.20	-0.8
SIO	19.60	355	iP	15	28.90	-0.6
TUL	19.72	356	eP	15	30.00	-0.8
	0.8s		16.60nm			4.4mb
	Z 19s		0.10um			4.4MszX
			LR	47	22.00	
ALQ	21.73	332	eP	15	52.50	1.3
	0.8s		4.66nm			3.9mb
LRM	33.32	336	ePc	17	38.50	1.5
FFC	38.96	353	iPc	18	24.20	0.0
	0.5s		19.00nm			5.2mb
ZOBO	41.18	140	P	18	43.70	0.1
LPB	41.40	140	(P)	18	46.00	0.8
CNCB	41.69	141	P	18	48.20	0.5
YKA	48.47	347	eP	19	40.00	-0.5
	0.5s		7.20nm			4.8mb
PPD	56.56	131	(P)	20	39.00	-2.1
INK	57.80	344	eP	20	49.00	-0.1
VAO	60.35	129	eP	21	06.20	-1.2
MBC	61.53	353	eP	21	14.50	-0.1
	0.5s		4.00nm			4.7mb
NB2	83.22	28	P	23	24.20	1.6
	0.8s		5.20nm			4.5mb
HFS	84.70	29	eP	23	30.00	0.0
	0.5s		1.50nm			4.2mb
HAU	84.96	42	eP	23	32.30	0.7
	0.7s		4.40nm			4.5mb
KEV	85.04	17	eP	23	23.00	-8.5X
BSF	85.30	42	eP	23	34.00	0.6
	0.7s		4.40nm			4.5mb
CDF	85.42	41	eP	23	34.60	0.6
	0.7s		4.40nm			4.5mb
NUR	89.33	26	eP	23	51.00	-1.5
GBA	149.27	16	PKPd	30	47.40	6.4X
	0.8s		3.00nm			

S.D. = 1.3 on 31 of 34 obs.

• OCT 05, 1990 23h 05m 15.75± 1.64s
37.794 N ±11.7km 16.129 E ±13.5km
DEPTH = 23.2 ± 8.9 km
IONIAN SEA (399)

SOI	0.28	348	Pd	05	21.90	-0.5
			eSg	05	26.40	
MSI	0.61	312	P	05	28.20	0.5
			iSg	05	36.90	
ATN	0.64	305	P	05	27.50	-0.7
			eSg	05	37.50	
MNO	1.14	277	Pc	05	36.60	0.1
			eSg	05	52.60	
MEU	1.18	234	P	05	36.70	-0.2
			eSn	05	52.50	
CZI	1.42	0	P	05	38.40	-1.8
GIB	1.67	277	P	05	44.50	0.5
			eSn	06	03.50	
ROI	1.81	11	P	05	49.60	3.7X
TDS	1.87	5	P	05	47.50	0.7
CSI	1.98	4	P	05	49.20	0.7
MMN	2.10	357	P	05	50.20	0.2
SGO	2.83	347	P	06	01.00	0.6

S.D. = 0.9 on 11 of 12 obs.

OCT 05, 1990 23h 27m 25.98± 0.47s
45.956 N ± 3.7km 3.041 E ± 4.7km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.2 (LDG), 1.7 (STR).

PYM	0.21	186	Pg	27	30.50	0.0
			Sg	27	33.60	
PLDF	0.40	88	Pg	27	34.50	0.2
			Sg	27	40.19	
MAF	0.42	309	Pg	27	34.60	0.0
			Sg	27	40.30	
BGF	0.62	347	Pg	27	38.20	-0.2
			Sg	27	47.10	
TCF	0.67	300	Pg	27	39.30	0.0
			Sg	27	47.60	
L8L	0.74	169	Pg	27	39.90	-0.5
AVF	0.86	14	Pg	27	42.50	-0.1
			Sg	27	53.80	
SMF	0.88	39	Pg	27	43.10	0.1
			Sg	27	54.70	
CAF	1.24	214	Pg	27	49.50	0.5
			Sg	28	04.60	

05d 23h

S.D. = 0.3 on 9 of 9 obs.

OCT 05, 1990 23h 43m 34.72± 0.15s
10.955 S ± 3.8km 70.830 W ± 4.4km
DEPTH = 616.1km (4 depth phases)
4.8mb (38 obs.)
PERU-BRAZIL BORDER REGION (112)

ARE	5.51	187	iPd	45	13.70	0.2
			iS	46	21.50	
ZOBO	5.90	154	iPc	45	17.60	0.6
			S	46	32.00	
LPB	6.15	155	iPd	45	20.20	1.3
	1.0s	480.00nm			5.4mb	
CNCB	6.44	155	iPd	45	22.50	0.9
ANT	12.69	178	iPc	46	20.70	0.7
PPD	21.69	123	eP	47	43.70	-1.0
			e	47	48.90	
			e	47	55.50	
PEL	22.08	180	iPc	47	47.00	-1.2
	0.7s	27.40nm			5.0mb	
			i	51	07.00	
FCH	22.27	179	eP	47	49.50	-0.8
PCH	22.56	179	eP	47	51.50	-1.1
BAO	22.70	104	eP	47	54.50	0.5
			e	55	01.90	
			e	55	17.90	
			e	56	40.00	
VAO	25.73	121	eP	48	16.70	-3.9X
JFO	28.43	116	eP	48	43.20	-0.9
SOB1	29.52	89	iPc	48	53.50	0.1
			e	49	09.00	
			e	53	04.40	
CAI	33.58	85	iPd	49	27.70	0.2
SGS	44.86	348	P	50	58.00	0.4
JSC	46.06	348	P	51	06.70	-0.1
LHS	46.16	349	P	51	07.70	0.2
TKL	47.95	346	P	51	20.00	-1.1
BLA	48.75	350	P	51	27.00	0.0
NAV	48.92	349	P	51	28.00	-0.2
FVM	52.02	340	P	51	50.00	-0.8
TUL	52.23	334	iP	51	51.60	-0.7
	0.9s	20.60nm			4.5mb	
MEO	52.55	331	iPd	51	53.60	-1.1
CLE	53.11	350	iP	51	57.90	-0.6
ALQ	56.76	325	eP	52	23.00	-1.2
	0.9s	4.41nm			3.7mb X	
			e	53	09.00	
			e	54	22.00	
ANMO	56.77	325	P	52	24.00	-0.2
CBM	57.67	2	P	52	29.60	-0.3
GLD	59.70	330	P	52	44.00	0.3
GOL	59.74	330	P	52	43.50	-0.5
	0.6s	4.12nm			3.8mb	
RSSD	62.56	334	P	53	02.40	0.2
			pP	55	03.00	616km
RVR	62.86	317	eP	53	04.00	-0.1
GSC	63.28	319	eP	53	07.00	0.2
DAU	63.33	326	P	53	07.50	0.2
SBB	63.58	318	eP	53	08.00	-0.7
DUG	64.04	325	P	53	12.00	0.4
CLC	64.11	319	eP	53	12.00	0.0
BW06	64.13	329	P	53	11.50	-0.7
			pP	55	14.00	623km
ISA	64.58	318	eP	53	15.00	0.0
TNP	65.26	321	P	53	19.70	0.4
	0.7s	8.33nm			4.3mb	
			pP	55	21.50	613km
PRI	66.31	318	eP	53	26.50	0.8
LLA	66.76	318	eP	53	28.80	0.5
PRS	66.88	317	eP	53	29.70	0.7
CMB	67.22	319	eP	53	31.30	0.2
MHC	67.63	318	eP	53	34.60	0.8
LIC	67.68	79	Pd	53	33.54	-0.7
	0.2s	10.50nm			4.9mb	
GCC	67.69	318	eP	53	34.80	0.9
LRM	67.77	330	eP	53	35.00	0.5
TIC	67.79	78	Pd	53	34.30	-0.7
	0.2s	6.00nm			4.7mb	
KIC	67.99	79	Pd	53	35.68	-0.5
	0.2s	22.00nm			5.3mb	
			S	01	46.00	
LKO	68.00	75	Pd	53	33.06	-3.2X
ORV	68.81	320	eP	53	41.50	0.9
WDC	70.05	321	eP	53	46.50	-1.4
LBFM	70.10	321	P	53	48.50	0.1
NEW	71.76	329	P	53	57.50	-0.2
	0.6s	4.43nm			4.2mb	
			pP	56	02.50	612km
LON	73.26	326	P	54	06.50	0.2
PNT	73.70	329	eP	54	09.00	0.4
	0.7s	23.00nm			4.8mb	
BMW	73.88	325	P	54	10.50	0.7
EVAL	76.92	47	eP	54	28.50	2.0
SPA	79.12	180	iPd	54	38.40	0.6
	0.7s	77.34nm			5.3mb	
TOL	79.79	46	iPc	54	44.00	2.4
	1.3s	230.77nm			5.5mb	
GUD	80.02	45	eP	54	44.00	1.1
EVIA	80.41	48	eP	54	46.80	1.9
YKA	80.68	341	eP	54	45.00	-0.6
	0.6s	27.90nm			4.9mb	
ETOR	81.55	46	eP	54	52.60	1.9
EPF	84.03	44	eP	55	03.20	0.3
	1.1s	17.10nm			4.6mb	
LPF	84.97	39	eP	55	06.60	-0.6
	1.0s	16.00nm			4.6mb	
LFF	84.98	43	eP	55	07.30	0.0
	1.0s	34.00nm			4.9mb	
MFF	85.00	41	eP	55	07.20	-0.2
	1.0s	12.00nm			4.5mb	
LPO	85.18	43	eP	55	08.10	-0.3
	1.0s	24.00nm			4.8mb	
GRR	85.21	39	eP	55	08.10	-0.3
	1.1s	22.00nm			4.7mb	
FLN	85.59	39	eP	55	09.80	-0.4
	0.9s	22.95nm			4.9mb	
RJF	85.62	42	eP	55	10.10	-0.3
	1.1s	24.40nm			4.8mb	
LDF	85.74	39	eP	55	10.60	-0.3
	1.0s	20.00nm			4.8mb	
CAF	85.85	43	eP	55	11.30	-0.3
	1.0s	30.00nm			5.0mb	
LSF	85.95	42	eP	55	11.50	-0.5
TCF	86.41	42	eP	55	13.50	-0.8
	0.8s	6.70nm			4.4mb	
MAF	86.62	42	eP	55	14.70	-0.5
	1.1s	23.20nm			4.8mb	
BGF	86.92	42	eP	55	15.90	-0.7
	0.7s	11.00nm			4.7mb	
AVF	87.32	41	eP	55	17.60	-0.9
	1.1s	12.20nm			4.6mb	
SSF	87.51	41	eP	55	18.40	-1.0
	1.1s	9.75nm			4.5mb	
SMF	87.59	42	eP	55	19.20	-0.6
	1.0s	18.00nm			4.8mb	
LBF	87.79	41	eP	55	19.60	-1.1
	1.1s	11.00nm			4.6mb	
LOR	87.80	41	eP	55	19.80	-0.9
	1.2s	14.90nm			4.6mb	
SNF	89.10	38	P	55	26.80	0.3
DOU	89.16	39	Pc	55	27.00	0.2
	1.0s	25.00nm			5.1mb	
LPL	89.17	43	eP	55	27.90	0.6
	0.6s	9.00nm			4.8mb	
LPG	89.18	43	eP	55	28.00	0.5
	0.7s	12.15nm			4.9mb	
BSF	89.87	41	eP	55	29.50	-0.8
CDF	90.34	41	eP	55	32.00	-0.5
INK	90.44	341	eP	55	33.00	0.6
	0.7s	22.00nm			5.2mb	
MBC	91.59	350	eP	55	38.50	0.9
	0.5s	3.00nm			4.6mb	
SOTA	92.60	43	iPd	55	43.10	0.1
	1.5s	30.00nm			5.1mb	
			ic	55	43.50	
CLL	94.63	39	i(P)	55	52.90	1.0
MAW	94.91	164	iP	55	52.00	-1.0
BRG	95.13	39	eP	55	54.80	0.6
	1.0s	16.00nm			5.2mb	
KSP	96.59	40	iP	56	01.70	0.9
ZST	96.70	42	eP	56	01.50	0.2
QUE	136.40	58	ePKP	01	51.00	0.9
MDJ	142.13	336	ePKP	01	55.50	-4.1X
WMQ	142.35	26	PKPd	01	57.00	-3.2X
NIIJ	142.53	319	PKP	01	57.10	-3.4X
CN2	144.37	340	PKP	02	01.80	-1.7
POO	145.07	73	iPKP	02	05.50	0.1
NDI	145.31	55	iPKPd	02	05.80	0.3
	1.0s	55.00nm				
TSRJ	145.49	320	PKP	02	05.70	0.1
MBL	146.41	198	iPKPd	02	08.60	1.1
	0.5s	61.00nm				
KOD	148.84	88	ePKP	02	12.00	0.1
GBA	148.89	82	PKP	02	11.20	-0.3
HYB	149.66	74	ePKPc	02	12.40	-0.3
HHC	150.15	356	ePKP	02	13.80	0.9
BJI	150.37	349	ePKP	02	13.00	0.0
GTA	150.46	15	PKPd	02	14.00	0.6
GKN	151.42	50	PKP	02	15.00	-0.2
DMN	151.98	50	PKP	02	15.80	-0.3
KKN	152.01	50	PKP	02	15.80	-0.3
PKI	152.22	50	PKP	02	15.60	-1.0
GUN	152.39	49	PKP	02	15.60	-1.2
TIY	153.20	354	ePKP	02	18.00	0.7
LZH	154.52	10	ePKP	02	18.50	-0.7
LSA	154.90	39	ePKP	02	21.20	0.9
GYA	164.40	8	PKP	02	30.60	0.3

S.D. = 0.8 on 116 of 121 obs.

% OCT 06, 1990 00h 02m 25.06± 0.63s
39.521 N ± 5.6km 28.506 E ± 5.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.1 (ISK).

DST	0.13	48	iPg	02	27.20	-1.0
KCT	0.74	351	iPg	02	39.30	-0.2
BNT	0.95	332	iPg	02	43.30	0.2
			iSg	02	56.30	
EDC	0.96	329	iPg	02	42.50	-0.8
IZI	1.10	42	iPn	02	45.80	0.0
YLV	1.24	32	iPn	02	47.80	-0.3
KGT	1.31	316	iPn	02	49.80	0.5
ALT	1.33	110	iPn	02	50.20	0.5
KHL	1.44	146	iPn	02	52.70	1.5
IZM	1.48	221	ePn	02	49.70	-2.1
HRT	1.58	34	ePn	02	51.80	-1.3
GPA	1.59	60	ePn	02	53.00	-0.3
ISK	1.60	15	ePn	02	54.80	1.4
CTT	1.63	358	iPn	02	53.50	-0.3
EZN	1.71	281	ePn	02	55.90	0.9
DMK	2.37	346	ePn	03	06.00	1.5

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

• OCT 06, 1990 00h 18m 51.33± 1.21s
5.860 S ±14.3km 146.747 E ± 8.2km
DEPTH = 108.4 ± 11.1 km
5.1mb (5 obs.)
EAST PAPUA NEW GUINEA REGION (207)

MNDI	3.09	264	eP	19	40.00	0.6
			eS	20	27.00	
PMG	3.55	173	eP	19	45.00	-0.5
			eS	20	28.00	
RAB	5.65	73	eP	20	14.00	-0.4
CTA	14.15	182	iPc	22	12.90	4.8X
	0.7s	8.90nm			4.1mb	
QIS	16.17	205	eP	22	38.00	4.4X
			e	25	31.50	
			e	26	25.80	
WB5	18.41	220	eP	22	59.50	-1.6
			e	26	25.20	
			e	26	36.00	
KNA	20.19	239	eP	23	21.70	2.0
RMO	20.60	175	iP	23	24.00	0.1
ASPA	21.60	214	eP	23	34.00	0.2
	0.3s	49.60nm			5.3mb	
			iS	27	26.20	
DZM	24.95	132	iPc	24	05.60	-0.7
WARB	27.88	221	iPc	24	33.80	0.8
	0.4s	16.00nm			5.0mb	
MBL	30.19	237	iPc	24	51.90	-1.7
FORR	30.41	213	iPd	24	44.80	-10.6X
	0.4s	24.00nm				
MRWA	37.19	228	eP	25	53.20	-0.5
			e	29	52.00	
HBZ	42.70	142	eP	26	40.80	1.8
PUZ	42.97	143	P	26	42.00	0.6
MNG	43.13	148	P	26	43.10	0.5
	0.4s	29.00nm			5.4mb	
PGZ	43.56	147	P	26	46.30	0.3
LZH	57.94	319	P	29	00.00	25.2X
SPA	84.18	180	iPc	31	10.00	-1.6
	0.7s	11.72nm			4.9mb	
SIV	144.93	129	iPKPc	38	16.80	-1.5
PPD	147.12	148	ePKP	38	23.10	1.4
			i	38	24.90	
KIC	151.65	273	PKP	38	33.00	4.1X

S.D. = 1.3 on 18 of 23 obs.

? OCT 06, 1990 00h 22m 37.28± 0.77s
6.179 S ±12.5km 147.586 E ±14.4km
DEPTH = 33.0km (normal)
4.7mb (2 obs.)
EAST PAPUA NEW GUINEA REGION (207)
ML 4.7 (PMG).

PMG	3.24	188	eP	23	26.50	-0.5
			eS	24	08.00	
MNDI	3.91	270	eP	23	45.00	8.3X
RAB	4.97	67	iPc	23	51.50	-0.2
WB5	18.72	222	eP	26	55.00	-0.6
DZM	24.12	133	iPc	28	06.00	14.7X
WARB	28.20	223	eP	28	30.00	0.8
	0.3s		4.00nm			4.6mb
MAT	43.39	349	(P)	30	38.00	-0.5
	1.5s		27.78nm			4.8mb
			(S)	37	40.00	
ZOBO	138.21	123	PKP	41	44.00	-18.6X
			e	42	03.00	
SIV	144.08	128	PKP	42	08.40	-3.9X
PPD	146.40	147	ePKP	42	17.00	0.9
			e	42	31.20	

S.D. = 0.9 on 6 of 10 obs.

OCT 06, 1990 00h 25m 06.02± 0.33s
44.068 N ± 3.2km 19.403 E ± 3.4km
DEPTH = 13.9 ± 2.5 km
YUGOSLAVIA (383)
ML 3.1 (TTG). Felt in the Srebrenico-Bojino Bosto oreo.

PLE	0.74	180	iPgd	25	18.90	-1.3
			iSg	25	28.00	
BEO	1.07	45	iPg	25	27.50	1.8
			iSg	25	42.50	
IVA	1.25	163	ePg	25	28.10	-0.8
			eSg	25	47.00	
NKY	1.29	193	ePg	25	28.50	-1.1
			eSg	25	45.50	
BRY	1.32	208	iPgd	25	28.90	-1.3
			eSg	25	48.50	
PVY	1.53	164	ePg	25	33.00	0.0
			eSg	25	56.20	
TTG	1.64	184	ePg	25	34.70	0.2
			eSg	25	57.30	
BLY	1.73	294	Pn	25	37.80	2.0
			Sn	26	00.60	
HCY	1.75	203	ePn	25	37.00	0.9
			eSn	26	02.50	
BDV	1.83	193	ePn	25	38.50	1.2
			eSn	26	05.00	
ULC	2.11	183	ePn	25	43.00	1.7
			eSn	26	10.00	
BZS	2.21	45	iPc	25	41.50	-1.2
HVAR	2.32	248	iPn	25	44.80	0.4
			iSn	26	13.80	
SKO	2.57	144	ePn	25	47.40	-0.5
			iPg	25	53.00	
			i	25	56.70	
			iSn	26	18.00	
			iSg	26	25.00	
			i	26	29.20	
ZAG	2.99	307	eP	25	58.00	4.2X
			iSn	26	41.50	
PTJ	3.05	308	ePn	25	53.70	-1.1
			eSn	26	38.50	
OHR	3.13	160	iPn	25	56.60	0.7
			iSg	26	45.00	
			Lg	26	53.50	
VTS	3.14	117	eP	25	56.00	-0.2
			iSg	26	46.00	
VBY	3.28	297	e(Pn)	26	09.40	11.4X
			e(Sn)	26	52.80	
BUD	3.43	356	e(P)	25	59.00	-1.0
KKB	3.48	128	iPc	26	01.00	0.1
			i	26	47.00	
PGB	3.79	112	eP	26	13.00	7.7X
			eS	26	50.00	
SRO	3.82	349	eP	26	11.40	5.8X
			i	26	24.60	
			i	27	07.50	
			i	27	14.60	
PSZ	3.87	5	eP	26	05.20	-1.2
CEY	3.91	297	eP	26	08.00	1.1
			e	26	09.50	
			e	26	19.00	
			e(Sn)	26	53.50	
LJU	3.98	301	e(Pn)	26	07.70	-0.1
			e	26	20.00	
			e(Sn)	26	52.80	
CMP	4.20	71	ePd	26	52.00	41.0X
TRI	4.33	294	P	26	14.50	1.6
DUI	4.36	238	P	26	14.00	0.6
VOY	4.37	299	ePnc	26	12.70	-0.8
			eSn	27	01.30	
PVL	4.39	99	eP	26	13.00	-0.7
			eS	26	53.00	
ZST	4.43	340	eP	26	10.80	-3.4X
			e	26	20.20	
			e	27	19.20	
RZN	4.57	120	eP	26	18.00	1.5
SGO	4.64	222	P	26	16.00	-1.2
VKA	4.71	334	ePn	26	18.00	-0.3
			e	26	25.00	
			e	27	05.00	
			i(Sn)	27	07.90	
			e	27	43.00	
SDI	4.74	242	P	26	19.00	0.3
MLR	4.87	71	eP	26	21.50	0.8
ASS	5.00	261	P	26	24.50	2.1
KDZ	5.04	117	eP	26	32.00	9.1X
			eS	27	37.00	
SPC	5.16	6	eP	26	26.20	1.5
MNS	5.19	253	P	26	24.50	-0.6
FVI	5.31	301	P	26	26.50	-0.2
			eSn	27	25.50	
CRE	5.41	268	P	26	28.50	0.2
VRI	5.50	68	ePc	27	03.00	33.5X
CTI	5.84	293	P	26	33.00	-1.3
WATA	6.38	304	iPnd	26	41.60	-0.4
			ic	26	41.90	
KHC	6.46	324	ePn	26	42.00	-1.0
			Pg	26	50.00	
			eSg	27	57.20	
SOTA	6.55	302	iPnd	26	44.70	0.3
	0.4s		7.70nm			5.0mb X
			i	26	47.90	
			i	26	52.10	
			i	28	01.60	
			i	28	36.60	
PRU	6.79	332	eP	26	56.50	8.9X
			eSg	28	15.00	

S.D. = 1.1 on 40 of 49 obs.

% OCT 06, 1990 00h 34m 14.77± 2.12s
39.124 N ± 7.9km 31.387 E ±21.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.5 (ISK).

ALT	1.00	266	iPg	34	32.40	-1.3
			eSg	34	45.90	
GPA	1.43	325	ePn	34	41.30	0.5
KHL	1.66	242	ePn	34	44.20	0.0
BCK	1.78	201	ePn	34	45.70	-0.1
IZI	1.91	310	iPn	34	48.00	0.3
YLV	2.12	314	iPn	34	50.30	-0.4
HRT	2.15	323	iPn	34	50.60	-0.6
DST	2.19	284	ePn	34	54.20	2.4
ISK	2.64	318	ePn	34	58.00	-0.1
CTT	3.04	313	ePn	35	03.00	-0.7

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

? OCT 06, 1990 00h 36m 01.00± 1.86s
18.010 S ±42.4km 178.623 W ±30.4km
DEPTH = 579.4 ± 14.3 km
FIJI ISLANDS REGION (181)

VUN	2.77	270	eP	37	16.80	-0.8
BKM	12.51	270	iPd	38	47.00	2.1
DZM	14.60	251	iPc	39	05.70	0.1
CTA	33.23	261	iPd	41	52.20	-0.5
	1.2s		46.88nm			5.0mb
TOO	36.95	231	iPc	42	25.00	1.8
	0.9s		53.00nm			5.2mb
WB5	44.39	260	eP	43	21.90	-0.9
ASPA	44.57	254	iPd	43	23.80	-0.3
	0.6s		113.20nm			5.6mb
FORR	49.75	245	iPc	44	02.30	-0.7
	0.4s		39.00nm			5.3mb
MBL	57.76	256	iPd	44	59.00	-0.8
NANU	61.50	254	eP	45	24.00	-0.5
	0.3s		5.00nm			4.4mb
PNT	84.93	34	eP	47	37.00	0.6

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

OCT 06, 1990 00h 54m 47.97± 0.46s
45.943 N ± 3.8km 3.030 E ± 4.1km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.9 (LDG). MD 1.3 (STR).

PYM	0.19	185	Pg	54	52.50	0.2
			Sg	54	55.60	
PLDF	0.41	86	Pg	54	56.50	0.1
			Sg	55	02.50	
MAF	0.43	311	Pg	54	57.10	0.4
			Sg	55	03.10	
BGF	0.63	348	Pg	55	00.70	0.1
			Sg	55	09.60	
TCF	0.67	302	Pg	55	01.20	-0.1
			Sg	55	10.30	
LBL	0.73	168	Pg	55	02.10	-0.1
SMF	0.90	38	Pg	55	05.30	0.1
			Sg	55	17.20	
LSF	1.09	287	Pg	55	08.00	-0.4
			Sg	55	22.60	
SSF	1.17	16	Pg	55	09.80	0.0
			Sg	55	25.20	
L8F	1.23	32	Pg	55	10.60	-0.3
			Sg	55	27.40	

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

OCT 06, 1990 01h 49m 38.40± 0.47s
7.805 S ± 7.6km 74.498 W ±10.4km
DEPTH = 156.8km (5 depth phases)
4.4mb (13 obs.)
PERU-BRAZIL BORDER REGION (112)

TUNG	7.46	328	P	51	24.20	-1.9
VC1	8.11	331	eP	51	33.00	-1.9
CAYA	8.57	336	P	51	40.30	-0.7
OUR	8.58	332	eP	51	40.80	-0.3
YANA	8.65	332	eP	51	42.00	-0.1
COTA	8.95	334	eP	51	46.00	0.0
ARE	9.09	161	eP	51	49.00	1.3
ZOBO	10.47	144	P	52	05.20	-0.9
LP8	10.69	145	P	52	09.00	0.1
CNCB	10.98	145	P	52	12.50	-0.3
SIV	15.44	123	iPc	53	09.00	-0.3
TOV	18.09	15	eP	53	43.70	2.6
GUAC	19.27	22	eP	53	55.40	1.8
OLLA	19.29	24	eP	53	57.30	3.5X
FISA	19.63	15	eP	53	57.10	-0.1
LLAV	19.71	23	eP	53	57.90	-0.1
GUAN	19.72	27	eP	53	58.70	0.5
PPD	26.44	125	eP	55	02.40	-0.2
			e	55	04.80	9kmX
BAO	27.07	109	eP	55	06.00	-2.5
			e	55	45.00	193kmX
JFO	33.08	118	iPc	56	02.60	1.2
SOB1	33.26	95	iPc	56	01.80	-1.2
GBTN	44.20	349	P	57	41.00	7.6X
BLA	45.12	353	eP	57	40.90	0.1
	1.0s		6.00nm			4.2mb
			pP	58	16.00	157km
TUL	47.88	337	eP	58	02.20	-0.2
	0.8s		5.50nm			4.3mb
ALQ	52.14	327	eP	58	34.80	-0.3
	1.0s		5.25nm			4.2mb
			e	59	11.00	158km
ANMO	52.14	327	P	58	35.50	0.4
	0.8s		2.80nm			4.0mb
			pP	59	11.50	157km
RSSD	58.18	335	eP	59	19.00	0.6
			pP	59	56.00	158km
BW06	59.61	331	eP	59	27.50	-0.7
	1.1s		4.17nm			4.3mb
			pP	00	01.20	142kmX
SES	66.06	335	eP	00	11.00	0.7
NEW	67.24	331	P	00	17.50	-0.4
	0.8s		4.95nm			4.4mb
PNT	69.17	330	eP	00	30.00	0.3
	0.6s		6.00nm			4.6mb
LIC	70.67	81	Pc	00	38.14	-1.3
	0.4s		5.00nm			4.7mb
TIC	70.76	80	Pc	00	38.64	-1.4
	0.8s		17.50nm			4.9mb
LKO	70.76	77	Pc	00	36.88	-4.0X
	0.5s		12.00nm			4.9mb

06d 02h

```
KIC     70.98  81 Pc     00 40.20  -1.1
        0.6s     20.00nm          5.1mb
YKA     76.56 342 eP     01 24.10  11.5X
        0.6s      1.90nm
TOL     80.27  47 eP     01 36.00   2.7
SPA     82.25 180 iPd    01 45.00   1.8
        1.0s     12.50nm          4.6mb
FBA     90.03 336 e(P)   02 22.90   1.9
        0.6s      0.90nm          4.0mb
                  pP     03 02.00 154km
QUE    137.60  53 ePdiff05 59.20   4.5X
WB5    140.45 226 ePKP   08 45.10  -6.4X
GBA    151.84  76 PKP    09 25.00  14.8X
GKN    151.85  42 PKP    09 17.40   7.3X
     S.D. = 1.3  on  35 of  43 obs.
-----------------------------------------
?  OCT  06, 1990  01h 57m 55.66± 10.47s
   0.602 S ±13.6km   79.819 W ±88.2km
   DEPTH =  33.0km  (normal)
 ECUADOR                          (107)

YANA    1.34  69 eP     58 18.30  -0.3
                S      58 34.20
QTO     1.35  73 eP     58 19.00   0.3
                S      58 35.20
QUR     1.36  72 eP     58 18.50  -0.4
                S      58 35.50
VC1     1.42  92 P      58 20.00   0.2
TUNG    1.59 121 eP     58 22.20   0.0
COTA    1.75  58 P      58 24.80   0.2
CAYA    1.96  70 eP     58 27.80   0.1
     S.D. = 0.3  on   7 of   7 obs.
-----------------------------------------
•  OCT  06, 1990  02h 09m 29.07± 0.52s
   15.757 S ±13.2km   69.456 W ±11.0km
   DEPTH = 288.2 ±  7.1 km
   3.8mb (  3 obs.)
 PERU-BOLIVIA BORDER REGION       (118)

ZOBO    1.38 112 iPc    10 10.90  -0.4
                S      10 44.00
LPB     1.52 121 iPc    10 12.70   0.7
        1.0s  1220.00nm
                i      10 40.00
CNCB    1.76 127 iPc    10 14.20   0.3
ARE     2.08 250 iPd    10 15.50  -0.6
                iS     10 51.00
ANT     7.96 186 iP     11 23.00   0.3
PPD    18.26 113 eP     13 23.50  -0.6
                e      13 25.70
ANMO   61.45 326 eP     19 17.90   0.0
        0.9s      0.84nm          3.3mb
                  pP     20 11.90 237kmX
BW06   68.92 329 eP     20 04.80  -0.4
TNP    69.82 322 iP     20 11.80   1.0
        0.9s      2.34nm          3.9mb
                  pP     21 13.80 268kmX
YKA    85.62 341 eP     21 35.80  -0.2
        0.7s      1.70nm          4.0mb
GBA   147.92  89 PKP    28 43.00   3.9X
     S.D. = 0.7  on  10 of  11 obs.
-----------------------------------------
?  OCT  06, 1990  02h 19m 22.99± 3.67s
   37.809 N ±13.1km   23.140 E ±22.8km
   DEPTH = 111.5 ± 40.5 km
 SOUTHERN GREECE                  (368)

ATH     0.48  70 eP     19 40.00  -0.1
VLI     1.10 189 eP     19 45.50  -0.2
ITM     1.15 237 eP     19 46.80   0.6
EVR     1.52 317 eP     19 51.00   0.4
VLS     2.05 281 eP     19 56.20  -1.0
CZI     5.67 287 P      20 46.50   0.3
     S.D. = 0.9  on   6 of   6 obs.
-----------------------------------------
   OCT  06, 1990  02h 41m 15.43± 1.52s
   41.589 S ± 7.2km  175.344 E ± 9.2km
   DEPTH =  39.1 ± 11.1 km
   5.7mb ( 16 obs.)  5.1Msz (  5 obs.)
 NORTH ISLAND, NEW ZEALAND        (159)
      ML 5.1 (WEL). Felt at
      Wellington, Tawa and Roumati.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 13S, 28C
      Centroid Location:
      Origin Time        02:41:22.8 0.8
      Lat 41.56S 0.08 Lon 175.35E 0.09
      Dep  20.0 4.3 Half-duration  2.0
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 0.93 0.08  Mtt=-0.24 0.10
        Mff=-0.69 0.09  Mrt=-0.09 0.18
        Mrf= 1.06 0.30  Mtf=-0.99 0.09
       Principal Axes:
        T  Val=  1.62  Plg=54  Azm=238
        N        0.11     30      22
        P       -1.73     18     123
       Best Double Couple:Mo=1.7*10**17
        NP1:Strike=250 Dip=38 Slip= 145
        NP2:          9     69      57

WEL     0.53 305 iPc+   41 27.00   0.5
                S       41 36.50
KAI     3.08 251 P      42 01.60  -1.1
DZM    20.85 336 iPc    45 55.90  -0.6
CNB    21.25 279 eP     46 01.00   0.7
CAN    21.51 278 eP     46 04.20   1.2
COO    21.84 293 iPd    46 08.10   1.8
        1.2s   268.00nm          5.5mb
TOO    23.30 270 eP     46 22.00   1.4
        1.0s   118.00nm          5.3mb
PVC    24.52 344 iPc    46 33.20   0.7
BKM    24.61 344 iP     46 34.30   1.0
BFD    25.64 269 eP     46 46.00   3.0X
        1.2s   167.00nm          5.5mb
CMS    25.66 284 eP     46 43.80   0.6
RMO    26.55 296 eP     46 50.60  -0.9
CTA    32.66 302 iPc    47 46.00   0.0
        1.3s   200.96nm          5.8mb
                iS      53 16.00
HNR    34.79 333 eP     48 04.00  -0.4
SVO    35.10 333 eP     48 06.00  -1.0
SBA    36.54 183 eP     48 22.50   3.9X
ASPA   38.78 284 iPc    48 36.80  -1.3
        1.7s   104.30nm          5.4mb
     Z  18s     2.19um          5.0Msz
                eS      54 25.20
                LR      04 23.00
FORR   39.16 270 iPd    48 41.30   0.2
        0.4s    13.00nm          5.1mb
PMG    40.55 314 eP     48 53.50   0.8
        1.3s   200.00nm          5.7mb
WB5    40.84 289 iPc    48 54.20  -0.8
RAB    42.63 325 iPc    49 10.00   0.3
        0.5s   563.38nm          6.6mb
NWAO   46.29 261 eP     49 39.00   0.1
     Z  20s     2.10um          5.1Msz
     N  20s     0.50um
     E  20s     1.60um
KLB    46.54 263 eP     49 40.00  -0.9
MUN    47.50 262 eP     49 47.00  -1.6
BAL    47.81 264 eP     49 50.00  -1.0
MTN    47.90 294 iPd    49 51.10  -0.7
        0.5s    79.00nm          6.0mb
SPA    48.60 180 iPd    49 58.30   1.4
        1.3s    54.17nm          5.4mb
     Z  19s     1.77um          5.1Msz
MRWA   49.05 265 eP     49 59.50  -1.1
NANU   53.07 272 eP     50 30.00  -1.1
MAW    59.94 204 iP     51 19.90   0.4
GUA    61.63 326 eP     51 31.00  -0.5
        0.8s   119.40nm          6.1mb
GUMO   61.69 326 eP     51 31.00  -0.9
        0.8s   117.13nm          6.1mb
     Z  19s     0.71um          4.8Msz
PJG    61.69 326 eP     51 30.80  -1.1
TRT    64.60 283 ePc    51 51.50   0.3
KKM    71.72 296 ePd    52 35.00  -0.7
KGM    77.98 284 eP     53 11.00  -0.4
IPM    81.39 284 ePc    53 30.20   0.4
        0.8s    49.00nm          5.6mb
SNG    83.45 286 eP     53 55.60  15.2X
MAT    84.86 331 eP     53 46.00  -1.0
        1.9s   100.00nm          5.7mb
                eS      04 20.00
WHN    91.18 311 eP     54 18.50   1.2
BDT    91.46 292 eP     54 15.50  -3.4X
CHG    92.57 293 ePd    54 26.00   1.9
        1.5s   119.44nm          6.1mb
CHTO   92.57 293 iPd    54 26.10   2.1
KMI    94.35 300 Pd     54 34.50   2.1
        2.0s    70.00nm          5.7mb
                sP      54 46.00
ZOBO   97.92 120 eP     54 49.00  -0.4
     Z  16s     0.53um          5.1Msz
                SKS     05 28.00
                LR      27 30.00
WMQ   115.72 307 PKP    59 54.80  -0.1
INK   116.03  19 ePKP   59 54.00  -0.6
QUE   122.40 283 ePKP   00 09.20   1.1
MBC   124.54  15 ePKP   00 10.50  -0.2
        1.5s    32.00nm
MAIO  130.84 286 ePKP   00 24.00  -0.1
                i       03 48.00
TAB   141.15 282 ePKP   00 41.00  -2.4X
DAG   144.20   6 iPKPd  00 45.50  -1.8
        0.6s    16.67nm
LIC   144.78 179 PKP    00 49.04  -1.0
     Z  20s     0.50um          5.3Msz
KIC   144.92 180 PKP    00 49.72  -0.6
TIC   145.20 179 PKP    00 50.24  -0.6
MBH   146.07 263 ePKP   00 52.00   0.2
DSI   146.59 266 ePKP   00 53.00   0.4
ATZ   147.26 268 ePKP   00 57.00   3.3X
KEV   147.37 340 iPKP   00 51.40  -1.3
LKO   148.07 178 PKP    00 56.28   0.8
        1.3s    38.00nm
HLW   148.73 260 ePKP   01 00.50   4.4X
SOD   149.07 337 iPKP   01 00.30   4.8X
KVT   149.63 283 iPKP   01 02.60   5.4X
KAS   151.37 283 iPKPc  01 06.80   7.0X
SUF   152.10 330 iPKP   01 06.70   6.6X
        0.5s    15.30nm
BCK   152.62 273 ePKP   01 08.70   6.9X
NUR   153.94 327 iPKP   01 11.20   8.5X
        0.6s    22.20nm
HRT   154.26 280 ePKP   01 09.00   5.1X
MLR   157.55 290 ePKP   01 09.00   0.8
APO   157.87 335 ePKP   01 18.50  10.6X
        1.1s    15.40nm
RZN   158.09 280 ePKP   01 09.00   0.0
                i       01 43.00
KKB   159.32 280 ePKPd  01 08.00  -2.1X
OHR   160.90 277 ePKP   01 06.00  -5.8X
                i       01 51.00
KRA   160.95 305 ePKP   01 13.00   1.5
                e       01 55.00
SPC   160.99 302 ePKP   01 09.30  -2.5X
                e       01 55.50
ZST   163.26 301 e(PKP) 01 11.40  -2.5X
                e       02 06.40
TOL   178.23 195 ePKP   01 26.00   4.2X
                ePKKP   03 01.00
                ePP     07 09.00
                eSKSP   17 35.00
                ePPS    21 25.00
                eSS     27 55.00
                eSSP    29 04.00
     S.D. = 1.0  on  57 of  77 obs.
-----------------------------------------
•  OCT  06, 1990  02h 47m 10.68± 1.34s
   38.259 N ± 9.7km   22.029 E ±18.8km
   DEPTH =   5.0km  (geophysicist)
 GREECE                           (364)
     MD 3.3 (ATH).

EVR     0.68 345 ePg    47 21.80  -2.5
AGG     0.80  17 ePc    47 26.22  -0.4
                eS      47 38.74
ITM     1.08 184 ePb    47 34.50   3.0X
ATH     1.36 102 ePn    47 41.00   4.7X
VLI     1.70 155 ePg    47 47.00   5.9X
IGT     1.84 314 ePd    47 45.26   2.1X
                eS      48 11.66
LIT     1.87  11 iPc    47 43.50  -0.2
                eS      48 11.50
KZN     2.05 354 ePn    47 47.00   0.7
KEK     2.26 311 ePb    47 52.00   2.7X
THE     2.48  17 iPc    47 52.50   0.2
FNA     2.57 349 ePc    47 54.30   0.6
                eS      48 30.26
KNT     2.98  13 iPc    48 00.00   0.6
OHR     3.00 342 ePn    48 01.20   1.4
SRS     3.10  22 iPc    48 01.40   0.3
                iS      48 39.50
VAM     3.34 148 ePn    48 04.00  -0.6
CZI     4.71 284 P      48 19.60  -4.4X
     S.D. = 1.2  on  10 of  16 obs.
-----------------------------------------
   OCT  06, 1990  04h 28m 33.41± 0.76s
   37.780 N ± 7.8km   14.076 E ± 5.8km
```

DEPTH = 10.0km (geophysicist)
SICILY (398)

GIB	0.21	350	Pd	28 37.80	-0.3
			eSg	28 40.90	
MCT	0.38	247	P	28 41.40	0.1
			eSg	28 48.90	
MNO	0.51	73	P	28 43.50	-0.4
			eSg	28 52.40	
MEU	0.96	135	P	28 51.30	-0.4
			eSg	29 06.70	
ATN	1.16	70	Pc	28 55.10	0.0
			eSn	29 13.20	
SOI	1.59	79	P	29 02.60	0.9

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

& OCT 06, 1990 04h 45m 58.36s
58.750 N 154.209 W
DEPTH = 0.5km
ALASKA PENINSULA (12)
<AGS-P>.

CDD	0.35	58	iP	46 05.54	0.3
			eS	46 11.38	
MCNL	0.44	351	iP	46 07.31	0.1
			eS	46 14.55	
AUI	0.71	34	eP	46 12.83	0.2
			eS	46 23.70	
AUH	0.73	32	eP	46 13.36	0.4
AUE	0.75	35	eP	46 13.65	0.4
OPT	1.04	29	eP	46 18.25	-0.6
			eS	46 33.35	
PDB	1.04	0	eP	46 17.54	-1.4
			eS	46 31.72	
HOM	1.60	54	eP	46 27.11	-0.9
CNPM	1.72	62	eP	46 28.64	-1.0
RSO	1.87	23	eP	46 31.81	-0.2
RDT	2.05	26	eP	46 33.88	-0.6

11 obs. associated

? OCT 06, 1990 05h 18m 30.06± 1.00s
42.857 N ± 7.6km 7.450 W ± 9.2km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.7 (MDD).

ERUA	0.52	154	iP	18 40.70	0.2
			eS	18 47.00	
EMON	0.58	9	iP	18 41.80	-0.1
			eS	18 49.60	
STS	0.81	272	eP	18 46.20	0.4
			eS	18 56.30	
EZAM	1.16	233	eP	18 51.30	-0.5
			eS	19 06.00	

S.D. = 0.7 on 4 of 4 obs.

OCT 06, 1990 05h 52m 25.14± 0.41s
40.728 N ± 4.4km 27.432 E ± 3.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.3 (ISK).

KGT	0.29	200	iPg	52 31.20	-0.1
EDC	0.50	139	iPg	52 35.50	0.2
			iSg	52 41.50	
BNT	0.53	135	iPg	52 36.20	0.4
			eSg	52 43.70	
KCT	0.85	124	iPg	52 41.70	0.1
CTT	0.86	61	iPg	52 41.50	-0.3
DMK	1.12	13	iPn	52 46.30	0.2
EZN	1.24	224	iPn	52 47.70	-0.4
ISK	1.28	74	iPn	52 48.40	-0.5
DST	1.45	140	iPn	52 52.00	0.6
YLV	1.49	96	iPn	52 51.20	-0.8
GBZT	1.53	87	ePn	52 53.40	0.9
IZI	1.60	103	ePn	52 53.70	0.0
HRT	1.70	86	iPn	52 54.20	-0.8
KDZ	1.78	302	iP	52 55.00	-1.1
			iS	53 21.00	
JMB	1.85	340	ePg	53 03.00	5.9X
			iS	53 25.00	
DIM	1.95	313	iP	53 01.00	2.5
			Sg	53 25.00	
RZN	2.26	296	iPd	53 03.00	-0.3
			iS	53 35.00	
IZM	2.33	183	ePn	53 10.00	5.8X
PLD	2.47	305	ePg	53 21.00	14.9X
			iSg	53 41.00	
MMB	2.93	288	eP	53 12.00	-0.6
			eS	53 55.00	
PVL	2.94	329	eP	53 18.00	5.3X
			lS	53 19.00	
			eS	53 43.00	
PGB	3.05	308	iPc	53 21.00	6.7X
			i	54 03.00	
			eS	55 40.00	
KKB	3.47	291	iPc	53 28.00	7.7X
			lS	54 14.00	
VTS	3.67	302	eP	53 35.00	11.7X
			i	54 19.00	

S.D. = 0.9 on 17 of 24 obs.

OCT 06, 1990 05h 54m 04.18± 0.76s
40.735 N ± 5.2km 27.378 E ± 6.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.9 (ISK).

KGT	0.29	191	iPg	54 09.70	-0.5
EDC	0.54	136	iPg	54 14.50	-0.5
			iSg	54 22.50	
BNT	0.56	132	iPg	54 15.20	-0.4
			iSg	54 23.20	
KCT	0.89	123	iPg	54 21.20	-0.1
CTT	0.90	62	ePg	54 21.70	0.3
			eSg	54 34.20	
DMK	1.12	15	ePn	54 25.00	-0.2
EZN	1.21	222	ePn	54 27.00	0.2
ISK	1.32	75	ePn	54 28.00	-0.5
DST	1.48	139	iPn	54 32.00	1.1
YLV	1.53	96	iPn	54 31.20	-0.4
IZI	1.65	103	ePn	54 34.70	1.4
KDZ	1.74	302	iP	54 38.00	3.4X
			iS	55 00.00	
HRT	1.74	86	ePn	54 34.20	-0.5
DIM	1.91	314	iP	54 40.00	2.9X
			Sg	55 05.00	
RZN	2.22	296	eP	54 35.00	-6.8X
			iS	55 15.00	
KKB	3.43	291	eP	55 12.00	13.3X
			eS	55 54.00	

S.D. = 0.7 on 12 of 16 obs.

? OCT 06, 1990 07h 20m 11.04± 0.92s
5.224 N ±11.9km 126.399 E ±24.2km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

MNI	4.07	203	ePc	21 12.00	-0.5
WB5	26.15	163	eP	25 43.10	-1.1
ASPA	29.63	166	eP	26 17.60	1.7
	0.7s		6.60nm		4.5mb
GBA	48.94	283	Pc	28 57.10	0.7
	1.1s		6.00nm		4.5mb
SUF	90.08	333	eP	33 09.00	0.3
SLL	96.59	333	eP	33 38.10	-0.6
	0.5s		2.50nm		5.0mb
NB2	97.31	334	P	33 41.60	-0.4
	0.7s		2.10nm		4.8mb

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

OCT 06, 1990 09h 08m 09.18± 0.31s
2.711 S ± 7.2km 67.908 E ± 4.6km
DEPTH = 10.0km (geophysicist)
5.6mb (62 obs.) 5.2Msz (19 obs.)
CARLSBERG RIDGE (421)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 34C
Centroid Location:
Origin Time 09:08: 8.1 0.7
Lat 3.55S 0.06 Lon 67.86E 0.04
Dep 15.0 FIX Half-duration 2.2
Moment Tensor; Scale 10**17 Nm
Mrr=-2.32 0.09 Mtt= 1.45 0.09
Mff= 0.87 0.13 Mrt= 2.18 0.36
Mrf=-2.61 0.30 Mtf=-1.43 0.09
Principal Axes:

	Val=	Plg=	Azm=
T	4.32	27	43
N	-0.23	6	136
P	-4.09	62	238

Best Double Couple:Mo=4.2*10**17
NP1:Strike=118 Dip=19 Slip=-109
NP2: 318 72 -84

KOD	16.00	36	eP	11 56.40	0.1
GBA	18.76	30	P	12 30.90	0.3
			S	13 00.00	
POO	21.91	15	iPc	13 06.30	1.7
	1.3s		165.38nm		5.3mb
HYB	22.59	27	ePc	13 12.00	0.7
	1.2s		181.80nm		5.4mb
NPA	30.81	245	eP	14 32.40	4.7X
NDI	32.47	15	eP	14 43.00	1.0
	0.7s		23.97nm		5.2mb
QUE	32.73	358	eP	14 46.30	1.8
			eS	20 05.00	
			e	22 13.00	
IPM	33.87	78	ePd	14 55.40	0.9
	1.0s		69.90nm		5.5mb
DMN	34.40	28	P	15 00.00	0.9
PKI	34.51	28	P	15 01.20	1.1
GKN	34.52	27	P	15 00.20	0.2
KKN	34.63	28	P	15 01.00	-0.1
GUN	35.01	28	P	15 04.60	0.1
NNT	35.07	64	eP	15 03.00	-1.8
BDT	36.53	56	eP	15 14.50	-2.5
CHG	37.28	54	ePd	15 24.10	0.7
	1.2s		128.91nm		5.6mb
			eS	21 14.00	
CHTO	37.28	54	eP	15 24.00	0.6
	1.2s		85.76nm		5.4mb
LOE	38.89	58	eP	15 38.00	1.1
LWI	39.07	270	e(P)c	15 40.30	1.5
LSA	39.16	33	eP	15 40.20	0.7
N	15s		2.70um		
E	15s		2.10um		
			PP	17 08.00	
			S	21 39.00	
MAIO	39.60	349	iPc	15 44.00	1.4
	1.3s		44.93nm		5.0mb
			eS	21 54.00	
CIR	39.77	240	iPc	15 47.40	3.2X
KRI	40.15	247	iPd	15 53.20	5.6X
BUL	42.06	243	iPd	16 07.00	3.8X
	1.0s		95.00nm		5.5mb
KSH	42.61	9	eP	16 10.00	2.6X
N	16s		5.10um		
E	20s		5.60um		
KMI	43.66	49	Pc	16 18.00	1.7
	2.0s		900.00nm		6.2mb
Z	34s		4.60um		5.2MszX
SLR	44.42	235	iPc	16 24.50	2.1
	1.6s		366.67nm		6.0mb
Z	20s		28.37um		6.2Msz
MBH	45.17	318	eP	16 31.00	2.9X
TAB	45.23	336	eP	16 30.00	1.4
DSI	46.02	320	eP	16 38.00	3.2X
QIZ	46.55	61	eP	16 40.00	0.8
N	14s		1.40um		
E	18s		3.70um		
			S	23 18.50	
			sS	23 31.00	
GLH	46.61	322	eP	16 42.00	2.6
GYA	47.35	50	P	16 46.40	0.8
Z	38s		2.00um		4.8MszX
			S	23 40.00	
CD2	47.79	43	eP	16 48.20	-0.7
Z	20s		6.02um		5.6Msz
			sP	17 01.00	
			S	23 44.00	
KKM	49.02	80	eP	17 01.00	2.3
WMO	49.61	19	P	17 03.00	0.2
	5.0s		600.00nm		5.8mb X
Z	21s		6.20um		5.6Msz
N	19s		10.90um		
			PcP	18 27.00	
			S	24 09.00	
LZH	51.13	38	iPc	17 15.00	0.4
	1.5s		100.00nm		5.5mb
Z	10s		2.51um		5.5MszX
E	16s		2.43um		
			pP	17 21.70	22kmX
			PcP	18 31.00	
			S	24 26.00	
GTA	51.15	32	eP	17 13.40	-1.3
	1.6s		110.00nm		5.5mb
Z	24s		10.90um		5.8MszX
E	15s		3.30um		
			pP	17 21.40	27kmX

06d 09h

			eS	24	35.00		
MRWA		52.69	125	eP	17	27.50	1.1
XAN		53.15	43	P	17	27.20	-2.5
MBL		53.71	114	iPc	17	34.60	0.7
		1.0s	37.00nm			5.3mb	
KAS		53.75	328	eP	17	33.00	-1.0
ALT		54.19	324	eP	17	36.90	-0.4
IZM		55.50	322	eP	17	48.00	1.2
HRT		55.61	325	eP	17	48.00	0.4
EZN		56.95	322	eP	17	56.00	-1.1
TIY		57.58	41	eP	17	59.50	-2.2
	Z	18s	1.20um			5.0Msz	
	N	19s	3.20um				
			S	25	50.00		
BTO		57.74	37	eP	18	00.50	-2.3
	N	17s	1.60um				
	E	17s	1.20um				
			eS	26	05.00		
HHC		58.83	38	eP	18	11.00	0.6
	Z	18s	2.90um			5.4Msz	
			eS	26	19.00		
CFR		59.34	328	eP	18	11.00	-2.8
NJ2		59.36	50	eP	18	12.50	-1.6
	Z	16s	1.10um			5.1MszX	
VRI		60.55	328	ePd	18	21.50	-0.6
MLR		60.72	327	eP	18	23.00	-0.4
SSE		60.78	52	Pc	18	24.50	0.7
		1.5s	120.00nm			5.8mb	
	Z	20s	2.80um			5.4Msz	
WARB		60.89	118	eP	18	23.00	-1.8
		0.8s	10.00nm			5.0mb	
CMP		61.07	327	ePd	18	26.00	0.3
BJI		61.29	41	eP	18	26.50	-0.7
		1.5s	170.00nm			6.0mb	
	Z	18s	2.30um			5.4Msz	
	N	15s	1.51um				
			esP	18	40.00		
			eS	26	48.00		
SOI		62.73	316	Pc	18	39.10	2.2
MEU		63.09	314	P	18	41.30	1.9
CZI		63.22	317	P	18	39.40	-0.7
TDS		63.29	317	P	18	43.00	2.4
MTN		63.30	103	eP	18	40.50	-0.5
CSI		63.38	317	P	18	42.40	1.2
BEO		63.40	324	eP	18	41.50	0.3
ORI		63.41	318	P	18	35.50	-5.9X
MMN		63.64	317	P	18	42.40	-0.4
MGR		64.05	318	P	18	42.00	-3.6X
MCT		64.25	314	Pc	18	52.10	5.0X
SGO		64.42	318	P	18	49.00	1.1
MAW		64.87	182	eP	18	52.00	1.7
SDI		65.95	318	P	18	58.00	0.1
SPC		66.05	328	eP	18	56.70	-1.8
			e	21	28.60		
AZI		66.33	319	P	19	00.00	-0.2
PTJ		66.65	323	e(P)	19	01.50	-0.8
RDP		66.71	318	P	19	03.50	0.8
KRA		66.72	329	eP	19	03.50	0.9
		1.5s	91.00nm			5.7mb	
	Z	18s	1.40um			5.2Msz	
			e	19	10.80		
RMP		66.74	318	P	19	04.40	1.5
VBY		66.87	323	e(P)	19	06.00	2.4
ASPA		66.96	114	iPd	19	02.80	-1.9
		2.4s	40.60nm			5.2mb	
	Z	28s	1.16um			4.9MszX	
			LR	41	50.00		
WB5		66.96	110	eP	19	02.80	-1.9
			e	25	49.00		
MNS		67.01	319	P	19	03.00	-1.7
SNY		67.06	42	Pc	19	04.80	0.0
		1.8s	100.00nm			5.7mb	
	Z	24s	1.80um			5.2MszX	
			sP	19	18.20		
ZST		67.20	326	eP	19	03.20	-2.5
			e	21	29.00		
SOP		67.24	325	eP	19	06.10	0.2
ASS		67.34	319	P	19	08.50	1.8
ARV		67.35	320	P	19	08.50	1.7
CEY		67.49	322	e(P)	19	09.50	1.9
LJU		67.58	323	eP	19	08.90	0.8
TRI		67.88	322	P	19	09.00	-1.0
VOY		67.96	323	e(P)	19	11.50	0.9
CRE		68.05	320	P	19	12.80	1.5
SFI		68.25	320	P	19	13.80	1.5
PGD		68.31	320	P	19	17.00	4.0X
KMR		68.83	325	iP+	19	14.80	-1.1
VVI		68.84	322	P	19	17.00	1.0
FVI		68.91	323	P	19	17.50	1.2
KSP		69.09	328	eP	19	16.50	-0.9
		1.5s	59.00nm			5.5mb	
			e	21	50.00		
BDI		69.12	320	P	19	16.20	-1.6
CN2		69.16	41	Pc	19	19.20	1.2
		1.2s	100.00nm			5.9mb	
	Z	18s	3.00um			5.6Msz	
			PP	21	53.40		
			eS	28	26.00		
CTI		69.35	322	Pc	19	20.10	0.9
BHG		69.39	324	eP	19	16.80	-2.6
PGF		69.54	318	eP	19	18.20	-2.3
		1.5s	83.55nm			5.7mb	
PRU		69.58	326	eP	19	20.50	0.1
		1.8s	46.90nm			5.3mb	
	Z	20s	0.60um			4.8Msz	
			e	19	28.50		
KHC		69.69	325	iP	19	21.40	0.3
		1.5s	26.50nm			5.2mb	
			e	20	06.90		
WET		70.09	325	eP	19	25.00	1.4
		2.0s	100.00nm			5.6mb	
OGA		70.11	322	iPc	19	24.80	0.8
		1.7s	96.00nm			5.7mb	
SQTA		70.16	323	iPc	19	22.70	-1.5
		1.4s	111.00nm			5.8mb	
			i	19	24.50		
			i	19	25.80		
			i	19	31.90		
BOB		70.17	320	P	19	24.00	-0.2
BRG		70.37	327	eP	19	23.70	-1.5
		1.6s	70.00nm			5.5mb	
			i	19	26.10		
MDI		70.44	321	P	19	25.50	-0.2
FUR		70.55	324	eP	19	25.30	-1.1
PCP		70.66	319	P	19	28.92	1.7
FIN		70.74	319	P	19	29.43	1.7
CKI		70.79	319	P	19	29.10	1.2
IMI		70.83	318	P	19	28.82	0.5
ROB		71.00	319	P	19	29.33	0.0
VAI		71.07	321	P	19	30.40	0.9
CLL		71.10	327	eP	19	29.00	-0.6
		1.8s	155.00nm			5.8mb	
			i	19	36.90		
SBF		71.12	318	eP	19	28.00	-2.0
		1.5s	104.45nm			5.7mb	
ENR		71.27	319	P	19	32.92	2.0
GRF		71.30	325	eP	19	29.80	-1.1
	Z	22s	0.40um			4.6Msz	
			e	19	38.40		
STV		71.34	319	P	19	33.12	1.7
NUR		71.39	339	eP	19	34.00	2.8
QRX		71.47	320	P	19	31.28	-0.9
FRF		71.53	318	eP	19	30.60	-1.8
		1.5s	73.10nm			5.6mb	
LMR		71.53	318	eP	19	30.80	-1.6
		1.4s	52.30nm			5.5mb	
MOX		71.54	326	eP	19	33.50	1.2
		2.2s	138.00nm			5.7mb	
	Z	17s	0.70um			5.0MszX	
			e	19	39.00		
PZZ		71.59	319	P	19	31.79	-1.2
BHB		71.62	319	P	19	31.38	-1.6
RSP		71.74	319	P	19	31.07	-2.8
QIS		71.92	111	eP	19	33.50	-1.7
LSD		71.93	320	P	19	34.05	-1.1
RRL		71.96	319	P	19	35.38	0.1
BNI		72.08	319	P	19	37.00	1.1
LPG		72.21	320	eP	19	34.30	-2.5
		1.5s	52.25nm			5.4mb	
MDJ		72.21	41	iPc	19	37.50	1.1
		1.5s	100.00nm			5.7mb	
	Z	24s	1.50um			5.2MszX	
			sP	19	50.00		
LPL		72.23	320	eP	19	34.30	-2.5
		1.3s	54.15nm			5.5mb	
FEL		72.39	322	eP	19	36.04	-1.6
SUF		72.44	341	eP	19	37.00	-0.5
ADE		72.75	126	iPd	19	41.00	1.1
CDF		73.06	323	eP	19	39.40	-2.1
		1.2s	65.45nm			5.6mb	
KIC		73.09	277	P	19	42.52	0.3
		1.6s	64.50nm			5.4mb	
BSF		73.12	322	eP	19	39.50	-2.4
		1.0s	26.00nm			5.3mb	
TNS		73.14	325	ePd	19	41.50	-0.4
LIC		73.36	277	P	19	44.20	0.4
		1.4s	22.00nm			5.0mb	
	Z	20s	0.55um			4.8Msz	
TIC		73.39	278	P	19	45.02	1.1
HAU		73.46	322	eP	19	41.60	-2.2
		0.9s	13.10nm			5.0mb	
	Z	21s	0.38um			4.6Msz	
ETER		73.68	316	e(P)	19	47.80	2.7
TSRJ		73.92	52	eP	19	46.80	0.2
LKO		74.21	281	P	19	46.34	-2.4
		1.6s	99.50nm			5.6mb	
LBL		74.40	318	P	19	49.46	0.3
PLDF		74.42	319	P	19	48.89	-0.5
SMF		74.52	320	eP	19	47.90	-2.0
		1.5s	67.90nm			5.5mb	
LBF		74.56	320	eP	19	48.50	-1.7
		1.5s	78.35nm			5.5mb	
LOR		74.73	321	eP	19	49.40	-1.7
		1.5s	88.80nm			5.6mb	
	Z	20s	0.40um			4.7Msz	
PYM		74.74	319	P	19	51.36	0.1
AGO		74.77	319	P	19	50.76	-0.6
ENN		74.83	324	eP	19	52.00	0.4
		1.5s	164.00nm			5.8mb	
WTS		74.84	326	eP	19	59.00	7.5X
		1.3s	66.00nm			5.5mb	
SSF		74.80	320	eP	19	50.40	-1.6
		1.5s	78.35nm			5.5mb	
AVF		74.89	320	eP	19	50.00	-2.0
EROQ		74.96	313	e(P)	19	55.70	3.2X
CAF		75.09	318	eP	19	52.40	-0.9
		1.5s	60.05nm			5.4mb	
BGF		75.13	320	eP	19	52.30	-1.1
MAF		75.19	319	eP	19	52.60	-1.2
		1.3s	32.50nm			5.2mb	
GRC		75.24	320	P	19	52.97	-1.1
DOU		75.35	324	P	19	57.30	2.8
HFS		75.42	335	eP	19	53.60	-1.2
		1.5s	167.80nm			5.9mb	
	Z	20s	0.76um			5.0Msz	
			LR	49	08.00		
TCF		75.45	319	eP	19	54.10	-1.2
RJF		75.58	318	eP	19	55.40	-0.6
		1.4s	95.85nm			5.7mb	
	Z	20s	0.47um			4.8Msz	
LPO		75.60	317	eP	19	55.80	-0.3
		1.5s	109.70nm			5.7mb	
MTMJ		75.61	51	eP	19	58.40	1.9
ECHE		75.62	312	e(P)	20	01.00	4.6X
EPF		75.67	316	eP	19	56.00	-0.6
SOD		75.69	345	iP	19	58.70	2.5
LSF		75.88	319	eP	19	56.60	-1.1
		1.5s	83.55nm			5.6mb	
MAT		75.92	51	eP	19	58.00	-0.1
		2.5s	211.11nm			5.8mb	
	Z	20s	1.42um			5.3Msz	
			eS	29	39.00		
CHJJ		76.42	52	eP	20	00.30	-0.6
NIIJ		76.70	51	P	20	02.50	0.0
ETOR		76.75	313	e(P)	20	04.00	1.2
NB2		76.94	335	P	20	02.80	-0.6
		1.6s	96.70nm			5.6mb	
MFF		77.09	319	eP	20	03.50	-1.0
		1.5s	88.80nm			5.6mb	
KEV		77.36	346	eP	20	08.00	2.5
KAKJ		77.38	52	eP	20	05.50	-0.7
MAL		77.54	308	eP	20	07.50	0.4
TOL		77.99	312	iPc	20	14.00	4.4X
		1.2s	93.75nm			5.8mb	
			eS	30	46.00		
GRR		78.10	321	eP	20	08.90	-1.1
LPF		78.11	320	eP	20	09.10	-0.9
		1.4s	122.00nm			5.8mb	
CTA		78.13	110	iPc	20	11.10	0.4
		1.9s	184.21nm			5.8mb	
EPRU		78.23	308	e(P)	20	13.60	2.6
GUD		78.25	312	e(P)	20	12.00	0.8
EJIF		78.31	308	e(P)	20	14.40	3.0
EKA		81.57	327	P	20	33.00	4.6X
		1.6s	70.50nm			5.5mb	
SPA		87.31	180	eP	20	57.20	-0.2
		1.6s	245.83nm			6.2mb	
	Z	20s	2.75um			5.7Msz	
SBA		89.23	168	eP	21	07.80	1.6
MBC		106.43	2	ePKP	26	45.00	9.9X
		1.5s	39.00nm				

```
SES   132.48 359 ePKP  27 25.00  -0.7
NEW   134.41   5 PKP   27 32.00   2.6X
LRM   137.06   0 ePKP  27 37.90   3.1X
RSSD  138.15 351 PKP   27 37.00   0.1
BW06  140.04 357 PKP   27 38.50  -1.9X
LBFM  140.54  12 PKP   27 41.00  -0.3
GOL   142.68 351 PKP   27 53.00   7.8X
TUL   143.68 337 ePKP  27 44.70  -1.9X
        1.5s     30.50nm
      Z  20s      0.85um          5.5Msz
                   e      30 57.30
                   LR     18 00.00
SIO   144.02 338 ePKP  27 47.50   0.3
                   e      30 56.40
CMB   144.03  11 PKP   27 46.00  -1.2
ARN   144.45  13 PKP   27 48.00   0.0
TNP   144.49   7 PKP   27 46.00  -2.2X
UYO   144.65 334 iPKPd 27 46.80  -1.5
GCC   144.65  14 ePKP  27 41.50  -6.7X
FRI   145.17  11 ePKP  27 48.80  -0.3
LLA   145.29  13 ePKP  27 48.10  -1.3
PRS   145.46  13 ePKP  27 45.20  -4.5X
MEO   145.70 340 iPKPc 27 55.50   5.4X
PHAM  146.15  12 PKP   27 53.00   2.1X
CLC   146.67   8 ePKP  27 53.00   1.3
UPA   147.04 282 (PKP) 27 58.00   5.2X
GSC   147.28   7 ePKP  27 55.00   2.2X
ABL   147.34  11 PKP   27 55.00   1.9
ANMO  147.50 351 PKP   28 05.00  11.7X
        1.8s     62.50nm
SYP   147.50  12 ePKP  27 58.00   4.8X
ALQ   147.51 351 ePKP  27 54.00   0.7
SBB   147.74   9 ePKP  27 58.00   4.5X
MWC   148.16   9 ePKP  27 58.00   3.7X
RVR   148.49   8 ePKP  27 58.00   3.4X
TPC   148.55   6 ePKP  27 58.00   3.2X
PLM   149.19   8 ePKP  28 03.00   7.0X
GLA   149.71   5 ePKP  28 01.00   4.4X
BAR   149.88   8 ePKP  28 01.00   4.2X
    S.D. = 1.4  on 191 of 229 obs.
-------------------------------------
?  OCT  06, 1990  09h 24m 22.98± 6.52s
   19.955 N ±68.4km   64.497 W ± 9.3km
   DEPTH =  33.0km  (normal)
 VIRGIN ISLANDS                    ( 91)

LPR     2.09 219 P      24 55.80  -0.6
CSB     2.28 224 P      24 59.00  -0.1
SJG     2.41 221 iP     25 00.70  -0.3
PORP    2.77 227 P      25 06.30   0.3
MGP     3.13 232 P      25 12.00   0.9
NEV     3.35 147 eP     25 16.30   2.0
BPA     3.83 139 eP     25 21.00  -0.1
BBL     5.26 146 eP     25 40.00  -1.5
SIV    35.88 174 P      31 21.40  -0.7
    S.D. = 1.2  on   9 of   9 obs.
-------------------------------------
   OCT  06, 1990  10h 02m 30.79± 0.28s
   13.490 N ± 5.0km  120.383 E ± 6.6km
   DEPTH =  34.1km  (  3 depth phases)
   5.1mb ( 19 obs.)  4.7Msz (  8 obs.)
 MINDORO, PHILIPPINE ISLANDS       (250)

OIZ    11.52 300 eP     05 13.60  -2.4
     N  15s     1.60um
     E  18s     3.00um
NJ2    18.53 356 eP     06 52.00   5.4X
     Z  16s     0.90um
NNT    20.14 270 eP     07 02.20  -2.8
                e      28 50.00
KMI    20.25 307 eP     07 08.00   1.6
       1.8s    80.00nm          4.8mb
     Z  20s     2.40um          4.5Msz
                pP     07 17.00  34km
KGM    20.37 237 eP     07 08.50   1.1
SNG    20.42 254 eP     07 05.90  -2.0
BDT    20.95 283 eP     07 09.50  -3.8X
IPM    21.05 247 ePd    07 16.30   1.9
CHG    21.25 287 ePd    07 17.00   0.5
       1.1s    15.19nm          4.3mb
CHTO   21.25 287 eP     07 17.10   0.6
       1.1s    12.96nm          4.2mb
TRT    22.42 201 eP     07 30.50   2.4
XAN    22.95 335 P      07 33.40   0.1
CD2    23.13 321 iP     07 36.00   1.0
     Z  19s     3.79um          4.9Msz
TIY    25.14 345 eP     07 55.00   0.6
     Z  18s     2.20um          4.7Msz
     N  15s     1.30um
BJI    26.71 353 eP     08 09.00   0.2
       1.4s    70.00nm          5.1mb
     Z  20s     1.19um          4.4Msz
LZH    26.97 329 eP     08 21.00   9.6X
       1.8s    22.00nm          4.5mb
     Z  24s     2.05um          4.6MszX
     E  13s     1.24um
MAT    27.97  32 (P)    08 40.00  19.6X
                eS     13 25.00
MTN    28.25 157 eP     08 22.10  -0.9
HHC    28.33 346 eP     08 24.60   0.9
GTA    31.56 329 eP     08 51.40  -1.0
     Z  24s     2.60um          4.8MszX
     E  20s     1.70um
MBL    34.44 181 eP     09 17.00  -0.4
       0.4s    6.00nm           4.9mb
GUN    35.18 300 P      09 24.60   0.4
PKI    35.48 299 P      09 26.40  -0.4
DMN    35.75 299 P      09 29.10   0.1
WB5    35.90 157 iPc    09 28.80  -1.2
                eS     15 01.00
GKN    36.26 299 P      09 32.20  -0.9
ASPA   39.22 160 iPc    09 57.50  -0.3
       0.7s   109.70nm          5.7mb
     Z  20s     0.24um          4.0Msz
                eS     15 38.00
                LR     28 46.00
WARB   39.90 171 iPd    10 03.80   0.4
       0.4s    16.00nm          5.1mb
MEKA   39.90 183 eP     10 03.50   0.1
HY8    40.45 281 eP     10 22.00  13.9X
WMQ    41.19 324 P      10 16.00   2.1
     Z  18s     1.40um          4.9Msz
     N  16s     2.70um
                pP     10 26.50  36km
                PcS    16 02.50
                eS     16 31.00
                ScS    20 16.50
GBA    41.71 275 P      10 18.00  -0.4
CTA    41.97 142 iPd    10 21.20   0.8
       1.1s    31.65nm          5.0mb
KOD    42.09 270 eP     10 30.50   8.6X
MRWA   42.67 186 eP     10 25.50  -0.5
FORR   44.70 171 iPc    10 42.20  -0.3
       0.4s    22.00nm          5.4mb
ADE    51.23 161 iPd    11 33.30   0.0
       0.8s    49.25nm          5.5mb
BRS    51.37 142 iPc    11 35.80   1.3
QUE    51.85 298 eP     11 38.60   0.2
DZM    57.35 128 iPd    12 17.80  -0.6
MAIO   58.74 304 eP     12 28.00  -0.1
KEV    78.62 339 eP     14 31.00   0.6
SOD    79.10 337 iP     14 32.80  -0.3
SUF    80.06 332 iP     14 37.70  -0.6
       0.5s    8.50nm           5.0mb
NUR    81.18 330 iP     14 44.00  -0.2
       0.8s    20.50nm          5.2mb
INK    83.40  21 ePd    14 55.10  -0.6
MLR    83.58 315 eP     14 59.00   1.8
MBC    83.82  12 eP     14 57.00  -0.7
       1.0s    6.00nm           4.7mb
UPP    84.74 330 iP     15 01.80  -0.7
KRA    86.36 321 eP     15 11.30   0.5
                e      15 26.30  52kmX
HFS    86.51 331 eP     15 09.50  -1.8
       1.3s    52.50nm          5.6mb
     Z  18s     0.41um          4.9Msz
                LR     51 02.00
NB2    87.30 333 P      15 14.60  -0.7
       0.8s    23.60nm          5.5mb
KSP    88.33 322 iPd    15 21.10   0.8
PRU    89.68 322 P      15 27.00   0.3
     Z  16s     0.50um          5.0MszX
BRG    89.72 323 iPd    15 27.00   0.1
       1.1s    21.00nm          5.3mb
CLL    90.11 323 iP     15 28.80   0.1
       1.7s    24.00nm          5.2mb
                e      15 39.00  32km
                e      15 51.00
KHC    90.57 321 P      15 31.50   0.5
GRF    91.78 322 ePc    15 37.10   0.6
     Z  18s     0.40um          4.9Msz
SOTA   92.76 320 iPd    15 40.90  -0.3
       1.0s    19.60nm          5.5mb
                ic     15 41.50   2kmX
                i      15 46.20
WDC   100.78  44 ePdiff16 16.00  -1.6
LBFM  100.85  43 Pdiff 16 18.70   0.5
MIN   101.52  44 ePdiff16 12.20  -8.9X
ORV   101.97  44 ePdiff16 08.70 -14.2X
SCH   111.69   4 Pdiff 17 21.00  15.2X
LKO   121.70 290 PKP   21 30.78   7.0X
KIC   122.06 286 PKP   21 24.34  -0.1
TIC   122.22 287 PKP   21 24.52  -0.2
LIC   122.37 286 PKP   21 24.84  -0.2
    S.D. = 1.0  on  58 of  68 obs.
-------------------------------------
   OCT  06, 1990  10h 09m 01.99± 0.80s
   13.445 N ± 5.8km   92.058 W ± 5.1km
   DEPTH =  41.3 ±  6.8 km
   5.0mb ( 21 obs.)  4.4Msz (  2 obs.)
 OFF COAST OF CHIAPAS, MEXICO      ( 68)
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.:  7S, 14C
      Centroid Location:
      Origin Time          10:09:16.3 3.5
      Lat 14.55N 0.23 Lon  92.34W 0.16
      Dep  15.0 FIX Half-duration  1.5
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-0.42 0.14  Mtt= 1.24 0.12
        Mff=-0.82 0.20  Mrt= 1.09 0.59
        Mrf= 0.36 0.34  Mtf=-0.68 0.13
       Principal Axes:
        T  Val=  1.86  Plg=24  Azm= 11
        N       -0.31      43      257
        P       -1.55      37      121
      Best Double Couple:Mo=1.7*10**17
       NP1:Strike=150 Dip=44 Slip= -12
       NP2:       249     82     -134

TPX     1.47 352 iP     09 26.00  -0.3
                iS     09 46.50
SCX     3.32 350 iP     09 55.00   2.3
                iS     10 33.50
OXX     5.77 309 iP     10 26.50  -1.2
                (S)    11 23.00
EVV     5.90 328 (P)    10 39.00   9.7X
IIT     8.17 314 iP     11 02.00   0.7
ACX     8.26 295 (P)    10 59.90  -2.4
PPM     8.43 312 iP     11 06.00   1.0
                (S)    12 45.00
III     8.65 305 iP     11 07.00  -0.8
UNM     9.00 312 (P)    11 23.00  10.3X
IIJ     9.65 311 iP     11 23.00   1.0
MRX    10.74 307 (P)    11 36.50   0.2
UPA    13.06 109 iPc    12 09.00   1.5
     Z  18s     1.72um
PSO    19.00 129 eP     13 22.00  -1.5
BOG    19.80 115 eP     13 39.00   6.6X
                eS     17 24.00
UYO    20.74 354 iPc    13 39.50  -2.2
OLY    21.97   1 P      13 55.00   1.0
MEO    22.05 346 iPc    13 53.30  -1.6
SIO    22.53 351 eP     14 00.80   1.2
TUL    22.62 352 eP     14 00.50   0.0
       1.2s    17.30nm          4.4mb
JSC    22.94  23 P      14 03.00  -0.6
GBTN   23.23  16 P      14 06.00  -0.4
LHS    23.29  24 P      14 07.00   0.0
TKL    23.34  17 P      14 07.50   0.0
ELC    23.88   6 P      14 11.30  -1.3
ALQ    25.05 331 ePd    14 24.90   0.6
       0.9s    20.38nm          4.7mb
     Z  18s     0.86um          4.3Msz
NAV    25.82  21 P      14 30.00  -1.2
BLA    25.85  22 eP     14 30.80  -0.7
       1.0s    28.00nm          4.8mb
     Z  20s     1.63um          4.6Msz
CBN    27.90  25 eP     14 50.00  -0.2
                e      15 01.00
GLA    28.49 317 eP     14 56.00   0.3
GOL    28.66 338 P      14 57.70   0.3
       0.7s    6.67nm           4.4mb
CLE    29.41  16 iP     15 05.10   1.4
TPC    29.94 317 eP     15 09.00   0.3
PLM    30.04 315 eP     15 10.00   0.3
RVR    30.76 316 eP     15 15.00  -0.8
GSC    31.17 319 eP     15 20.00   0.5
MWC    31.36 316 eP     15 21.00  -0.3
SBB    31.47 317 eP     15 22.00  -0.1
DAU    31.70 331 P      15 25.00   0.6
```

06d 10h

```
CLC     31.99 319 eP      15 26.00   -0.7
RSSD    32.25 344 P       15 29.00    0.0
BW06    32.91 336 P       15 34.00   -0.8
        1.0s     9.58nm              4.6mb
TNP     33.19 322 P       15 37.50    0.2
        1.0s    12.08nm              4.7mb
PHAM    33.85 316 P       15 43.00    0.2
FRI     34.06 318 eP      15 44.50    0.0
PRI     34.20 316 eP      15 46.90    1.0
CMB     35.11 319 eP      15 54.00    0.4
MHC     35.52 317 eP      15 58.20    1.0
LRM     36.59 336 eP      16 07.00    0.7
ZOBO    37.83 141 Pc      16 17.50    0.2
        1.0s    11.25nm              4.7mb
                  e       18 31.00
LPB     38.05 141 P       16 27.00    8.0X
CNCB    38.33 141 P       16 22.00    0.5
                  i       18 36.00
CBM     38.95  26 P       16 24.00   -1.7
NEW     40.47 334 P       16 38.00   -0.3
        1.0s    10.00nm              4.5mb
LON     41.53 329 P       16 48.00    0.9
PNT     42.34 333 ePd     16 54.00    0.4
        0.9s    29.00nm              5.0mb
SIV     42.36 133 P       16 53.60   -0.5
EDM     43.14 341 iPd     17 00.40    0.3
        0.8s    73.00nm              5.5mb
PGC     43.64 330 eP      17 05.00    0.9
RTBS    49.81 155 ePd     18 03.10   10.2X
ZON     50.04 154 eP      18 13.00   18.2X
RTCV    50.37 154 ePd     18 14.10   16.8X
YKA     51.55 347 eP      18 04.80   -1.0
        0.6s    10.70nm              5.0mb
BAO     52.29 122 Pd      18 11.50   -0.7
SOB1    55.55 111 ePd     18 35.80   -0.2
                  e       18 40.00
VAO     57.10 129 eP      18 43.70   -3.3X
INK     60.95 344 eP      19 12.50   -0.4
        1.0s    46.00nm              5.6mb
                  pP      19 25.00   44kmX
PMR     62.88 333 P       19 25.20   -0.7
        1.0s    17.50nm              5.1mb
FBA     63.73 337 iPd     19 30.60   -0.9
        1.0s    21.70nm              5.2mb
MBC     64.45 353 ePd     19 36.20    0.1
        1.0s    26.00nm              5.2mb
                  pP      19 47.00   35kmX
SVW     65.65 331 iPc     19 43.10   -0.9
        1.1s    30.60nm              5.3mb
TTA     66.37 333 iPd     19 47.80   -0.9
        0.9s    13.00nm              5.0mb
IMA     66.45 337 ePd     19 48.10   -1.1
DAG     73.19  13 iPc     20 31.80    1.8
        0.7s    17.12nm              5.1mb
EKA     78.45  36 P       21 00.00   -0.1
        0.9s     9.90nm              4.8mb
NB2     84.66  28 P       21 33.70    1.2
        1.2s    14.50nm              5.0mb
HFS     86.11  29 eP      21 39.20   -0.5
        1.7s    81.80nm              5.7mb
SOD     88.15  20 eP      21 54.00    4.5X
KHC     89.89  39 eP      22 10.80   12.7X
ZST     92.41  39 eP      22 10.70    1.0
TIY    124.16 337 ePKP     28 00.40    2.2
XAN    128.73 338 PKP      28 07.20    0.1
GYA    136.36 335 PKP      28 22.00    0.1
POO    145.32  24 iPKPd    28 37.30   -0.6
        1.0s    38.00nm
CHG    146.16 341 ePKPd    28 40.00    0.7
        1.3s    81.73nm
LOE    146.46 336 ePKP     28 41.00    1.2
BDT    147.61 340 ePKP     28 40.00   -1.6
HYB    147.97  17 ePKP     28 45.50    3.3X
GBA    151.18  22 PKP      28 48.30    1.2
      S.D. = 1.0  on  77 of  88 obs.
-------------------------------------------
% OCT 06, 1990  10h 10m 16.34± 0.91s
  39.051 N ± 7.4km   27.661 E ± 9.5km
  DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      MD 2.5 (ISK).

IZM      0.72 206 ePg     10 30.70    0.1
DST      0.93  53 ePn     10 33.90   -0.3
EZN      1.29 307 ePn     10 40.00   -0.2
EDC      1.30   7 ePn     10 40.50    0.0
BNT      1.32   9 ePn     10 41.10    0.4
      S.D. = 0.4  on   5 of   5 obs.
-------------------------------------------
? OCT 06, 1990  10h 17m 28.89± 3.35s
  32.010 S ±18.6km   71.737 W ±24.9km
  DEPTH =  10.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE         (135)

JACH     1.18 125 iPc     17 50.50   -0.4
                  iS      18 05.50
TACH     1.77 158 iP      18 00.50    0.7
                  iS      18 23.50
FCH      1.79 138 iP      18 00.00   -0.4
                  iS      18 22.50
PCH      1.91 148 eP      18 02.50    0.7
                  iS      18 26.20
LNV      1.96 172 eP      18 01.50   -1.0
                  iS      18 28.00
CHCH     2.12 155 iPd     18 05.30    0.4
                  iS      18 31.70
                  i       18 34.20
MDZ      2.59 110 eP      18 03.60   -8.0X
                  i(S)    18 49.70
RTLL     2.87  77 eP      18 15.60    0.1
      S.D. = 0.8  on   7 of   8 obs.
-------------------------------------------
% OCT 06, 1990  10h 17m 52.25± 0.87s
  39.091 N ± 7.2km   27.634 E ± 9.0km
  DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      MD 2.7 (ISK).

IZM      0.75 203 ePg     18 07.00    0.0
                  eSg     18 18.00
DST      0.93  56 iPn     18 09.90   -0.1
EZN      1.25 306 ePn     18 15.40   -0.1
BNT      1.28  10 ePn     18 16.10    0.1
KGT      1.38 349 iPn     18 17.60    0.1
      S.D. = 0.1  on   5 of   5 obs.
-------------------------------------------
% OCT 06, 1990  13h 13m 53.21± 0.96s
  39.088 N ± 7.7km   27.612 E ±10.0km
  DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      MD 2.8 (ISK).

IZM      0.74 202 ePg     14 07.50   -0.3
                  eSg     14 20.00
DST      0.94  56 iPn     14 11.90    0.7
EZN      1.24 307 ePn     14 17.00    0.8
EDC      1.27   9 ePn     14 15.50   -1.3
BNT      1.29  11 ePn     14 17.60    0.5
KGT      1.38 350 iPn     14 18.10   -0.4
      S.D. = 1.1  on   6 of   6 obs.
-------------------------------------------
* OCT 06, 1990  14h 21m 14.13± 0.84s
   3.981 N ±15.2km   62.601 E ± 7.8km
   DEPTH =  10.0km  (geophysicist)
   5.1mb ( 10 obs.)  4.5Msz (  1 obs.)
 CARLSBERG RIDGE                     (421)

KOD     16.00  66 eP      25 02.60    1.3
GBA     17.49  56 P       25 27.00    7.2X
        0.3s     0.60nm              3.2mb X
POO     18.17  36 eP      25 28.50    0.1
HYB     20.56  48 eP      25 53.50   -2.3
OUE     26.39   8 eP      26 54.60    1.8
GKN     31.80  39 P       27 41.60    0.2
DMN     31.82  40 P       27 42.00    0.3
PKI     31.99  41 P       27 42.20   -1.1
KKN     32.06  40 P       27 42.80   -0.9
MAIO    32.29 355 eP      27 47.00    1.6
                  eS      33 13.00
GUN     32.53  41 P       27 47.20   -0.8
VRI     52.11 329 eP      30 29.00    2.4X
MLR     52.27 328 ePd     30 30.00    2.0
SPC     57.61 328 eP      31 06.50   -0.3
SRO     57.84 326 eP      30 54.40  -13.8X
                  e       31 07.70
KRA     58.29 329 eP      31 12.50    1.2
ZST     58.73 326 eP      31 14.60    0.2
BJI     60.07  45 eP      31 24.50    0.7
        1.5s    21.00nm              5.0mb
KSP     60.64 328 eP      31 27.00   -0.6
KHC     61.20 326 P       31 32.10    0.6
BRG     61.91 327 eP      31 36.50    0.3
        1.4s    17.00nm              5.0mb
CLL     62.64 327 iPc     31 41.70    0.7
        1.8s    51.00nm              5.4mb
LPG     63.71 320 eP      31 45.00   -3.6X
LPL     63.73 320 eP      31 45.10   -3.5X
FEL     63.89 322 eP      31 48.78   -0.7
LOR     66.23 320 eP      32 03.70   -0.8
        1.3s    18.05nm              5.1mb
SSF     66.38 320 eP      32 04.60   -0.9
        1.2s    16.35nm              5.1mb
BGF     66.63 320 eP      32 06.60   -0.5
        1.5s    78.35nm              5.7mb
MAF     66.70 319 eP      32 07.20   -0.3
        1.0s    11.00nm              5.0mb
HFS     67.18 336 eP      32 08.50   -1.8
        1.4s    70.60nm              5.7mb
      Z 19s      0.28um              4.5Msz
                  LR      02 28.00
SOD     67.91 346 eP      32 33.00   18.2X
NB2     68.70 336 P       32 18.90   -1.0
        1.2s    25.00nm              5.3mb
WB5     74.31 112 eP      32 53.90   -0.2
ASPA    74.59 116 eP      32 57.00    1.3
        1.1s     8.40nm              4.7mb
      S.D. = 1.1  on  28 of  34 obs.
-------------------------------------------
   OCT 06, 1990  14h 33m 01.32± 0.54s
   36.424 N ± 4.4km  140.583 E ± 4.4km
   DEPTH =  70.4 ±  4.2 km
   5.1mb ( 40 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN(228)
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.: 13S, 22C
      Centroid Locotion:
      Origin Time        14:33: 2.7 0.6
      Lat 36.42N 0.07 Lon 140.51E 0.07
      Dep  39.7 6.4 Half-durotion  1.5
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 5.11 0.32  Mtt=-0.56 0.47
        Mff=-4.54 0.50  Mrt= 0.39 0.79
        Mrf= 4.83 0.97  Mtf=-1.96 0.50
       Principal Axes:
        T  Val=  7.13  Plg=67  Azm=262
        N        0.00       9       14
        P       -7.14      21      108
      Best Double Couple:Mo=7.1*10**16
        NP1:Strike=214 Dip=25 Slip= 112
        NP2:       10     67       80

KAKJ     0.40 237 iPd     33 12.20   -1.2
                  S       33 19.60
CHJJ     1.34 254 iPd     33 24.30   -0.2
                  S       33 39.50
NIIJ     1.51 303 iPd     33 26.80    0.0
                  eS      33 48.70
YAMJ     1.00 346 iPd     33 30.40   -0.4
                  eS      33 45.40
MAT      1.92 274 iPd     33 32.30   -0.1
                  eS      33 48.00
MTMJ     2.24 275 iPd     33 37.90    0.9
IIDJ     2.36 247 iPd     33 40.30    1.7
                  S       34 12.60
OFUJ     2.79  18 iP+     33 42.70   -1.8
TSRJ     3.83 258 iPd     34 00.20    1.1
AOMJ     4.13 358 P       34 03.60    0.3
WKYJ     4.63 243 P       34 10.50    0.0
TKSJ     5.88 247 P       34 27.90    0.1
YONJ     5.92 260 P       34 29.30    1.0
MRRJ     6.01   3 P       34 26.90   -2.6
SHK      6.72 256 eP      34 40.30    0.8
MDJ     11.69 318 iPc     35 49.60    2.4
        1.5s   250.00nm              5.9mb
      Z 22s      2.40um              4.6MszX
                  sP      36 06.10
                  iS      38 08.00
CN2     13.72 307 eP      36 15.00    1.1
        1.0s  4000.00nm              6.9mb X
      Z 22s     17.00um              5.0Msz
SNY     14.25 297 eP      36 21.80    0.9
      Z 30s      2.20um
DL2     15.22 285 Pd      36 36.00    2.6
SSE     16.97 257 P       37 01.20    5.7X
        1.3s    50.00nm              4.6mb
      Z 20s      1.80um              4.5MszX
TIA     18.90 276 P       37 16.50   -2.5
BJI     19.49 288 eP      37 23.00   -2.3
        1.2s    40.00nm              4.6mb
TIY     22.47 282 eP      37 52.00   -3.6X
```

Z 18s 2.00um 4.6Msz
WHN 22.62 263 eP 37 56.00 -0.9
HHC 23.04 290 eP 38 03.00 1.8
pP 38 18.00 64kmX
GUMO 23.06 169 e(P) 37 52.80 -8.6X
PJG 23.06 169 e(P) 37 52.90 -8.5X
GUA 23.12 169 e(P) 38 11.20 9.3X
0.5s 61.97nm 5.3mb
XAN 25.91 274 P 38 26.50 -2.0
GZH 27.02 248 P 38 38.50 -0.1
LZH 29.52 280 eP 38 58.00 -3.3X
2.0s 400.00nm 5.8mb
Z 18s 1.10um 4.5Msz
sP 39 23.60
GYA 30.46 261 P 39 07.80 -1.8
pP 39 21.80 56kmX
CD2 31.01 271 eP 39 13.20 -1.1
GTA 32.11 288 eP 39 22.50 -1.5
1.2s 20.00nm 4.8mb
Z 18s 1.20um 4.6Msz
KMI 34.21 262 Pd 39 41.00 -1.4
1.5s 100.00nm 5.5mb
pP 39 59.00 75kmX
CHG 40.49 256 eP 40 34.90 0.0
CHTO 40.49 256 eP 40 34.60 -0.3
1.2s 10.76nm 4.6mb
WMQ 40.52 297 P 40 35.40 0.4
Z 24s 0.60um 4.4MszX
eS 46 44.00
LSA 41.60 275 eP 40 44.90 0.4
NNT 43.64 248 eP 40 51.20 -9.4X
TTA 46.30 34 P 41 22.50 1.1
GUN 46.55 276 P 41 24.20 0.0
0.6s 58.00nm 5.7mb
PKI 47.07 276 P 41 27.80 -0.5
0.6s 27.00nm 5.4mb
KKN 47.08 276 P 41 28.00 -0.2
DMN 47.30 276 P 41 29.80 -0.2
GKN 47.51 277 P 41 31.20 -0.3
IMA 47.55 30 P 41 31.70 0.4
1.0s 5.38nm 4.4mb
KDC 48.05 42 P 41 35.50 0.4
IPM 48.18 23B ePd 41 38.10 1.5
PMR 49.51 36 P 41 46.00 -0.3
1.0s 13.00nm 4.9mb
MTN 49.81 192 eP 41 49.00 0.0
FBA 49.97 32 P 41 50.40 0.6
0.8s 8.62nm 4.8mb
KSH 50.06 294 eP 41 52.00 1.0
INK 55.23 27 eP 42 29.00 0.1
WB5 56.30 187 eP 42 36.00 -1.1
QIS 56.68 181 eP 42 38.00 -0.9
MBC 57.30 16 eP 42 43.50 0.0
1.0s 12.00nm 5.0mb
HYB 57.52 268 eP 42 45.00 -0.9
ASPA 60.10 187 iPc 43 02.90 -0.6
1.0s 17.00nm 5.1mb
Z 24s 0.21um 4.2MszX
QUE 60.49 287 eP 43 06.00 -0.5
GBA 60.50 265 P 43 05.90 -0.5
POO 60.72 272 iP 43 06.30 -1.7
KOD 62.40 262 eP 43 19.00 -0.6
RMO 63.05 172 eP 43 22.80 -0.4
DZM 63.10 153 iPc 43 25.80 2.1
NANU 63.26 206 eP 43 25.00 0.3
MAIO 63.30 297 iPc 43 25.00 0.0
WARB 63.64 194 iPd 43 27.80 0.6
0.4s 4.00nm 4.8mb
KEV 63.78 339 eP 43 15.00 -12.6X
YKA 64.67 30 eP 43 32.90 -0.6
0.9s 4.30nm 4.4mb
SOD 65.27 337 iP 43 36.60 -0.7
DAG 66.33 355 iPd 43 43.00 -0.9
1.0s 20.33nm 5.2mb
SUF 68.23 333 iP 43 55.20 -0.8
0.4s 10.00nm 5.1mb
RMW 68.79 46 P 44 00.40 0.5
PNT 69.07 44 eP 44 16.00 14.5X
LON 69.16 47 P 44 02.00 -0.1
NUR 70.17 332 iP 44 07.60 -0.3
0.8s 20.50nm 5.1mb
NEW 71.03 44 P 44 13.00 -0.5
1.0s 7.50nm 4.6mb
SES 73.05 39 eP 44 25.00 -0.4
HFS 74.37 335 eP 44 31.70 -1.1
1.1s 27.20nm 5.1mb
Z 19s 0.28um 4.6Msz

LR 15 46.00
NB2 74.49 337 P 44 33.20 -0.3
1.0s 31.20nm 5.2mb
FFC 74.58 32 eP 44 34.00 -0.1
1.0s 26.00nm 5.1mb
TNP 76.79 52 P 44 48.00 0.8
0.8s 5.88nm 4.6mb
AKU 76.88 351 iP 44 49.00 2.1
1.0s 28.00nm 5.2mb
BW06 78.56 45 P 44 57.00 0.1
KRA 79.22 326 ePc 45 00.70 0.7
1.1s 50.00nm 5.4mb
e 45 15.20
SPC 79.70 325 eP 45 02.80 0.0
KSP 80.27 328 iPc 45 06.20 0.6
1.1s 29.00nm 5.1mb
ic 45 20.60
BRG 81.23 329 iPc 45 10.80 0.1
1.1s 21.00nm 5.0mb
i 45 25.40
CLL 81.29 330 iPc 45 11.10 0.2
1.3s 42.00nm 5.2mb
i 45 25.50
BUD 81.49 324 e(P) 45 12.00 0.0
SRO 81.58 325 eP 45 12.60 0.1
PRU 81.65 328 Pc 45 13.40 0.6
e 45 22.00
ZST 81.86 326 eP 45 14.60 0.7
MOX 82.36 330 ePc 45 17.00 0.4
1.4s 26.00nm 5.0mb
e 45 31.50
KHC 82.71 328 iPc 45 19.30 0.9
1.2s 15.00nm 4.8mb
e 45 34.00
GRF 83.26 330 iPc 45 22.30 1.1
1.5s 85.00nm 5.5mb
Z 20s 0.10um 4.2Msz
ec 45 31.20
ic 45 37.20
NOH 83.50 303 iPc 45 22.60 -0.3
PRNI 83.70 303 iPc 45 23.60 -0.2
BHG 84.09 328 eP 45 26.70 1.2
MBH 84.13 303 iPc 45 25.40 -0.5
SKO 84.21 319 iPc 45 27.00 0.9
1.2s 55.00nm 5.5mb
OHR 85.15 319 ePc 45 31.10 0.1
1.2s 67.00nm 5.6mb
e 45 44.30
ANMO 85.49 49 P 45 34.00 1.1
ALQ 85.49 49 eP 45 33.00 0.0
1.0s 7.50nm 4.7mb
LOR 88.11 332 eP 45 44.70 -0.6
1.1s 12.20nm 5.0mb
Z 20s 0.13um 4.3Msz
SMF 88.64 332 eP 45 47.60 -0.2
AVF 88.70 332 eP 45 47.80 -0.2
0.9s 8.20nm 4.9mb
MAF 89.47 332 eP 45 52.10 0.3
1.3s 32.50nm 5.4mb
LSF 89.83 333 eP 45 53.10 -0.3
1.1s 17.10nm 5.2mb
LKO 124.30 318 PKP 51 50.80 -3.4X
ZOBO 147.57 59 ePKP 52 31.00 -6.4X
Z 20s 0.15um 4.8Msz
i 52 38.00
LR 27 44.00
LPB 147.77 60 PKP 52 41.00 3.5X
CNCB 148.04 60 PKP 52 40.70 2.6X
CAI 150.17 355 ePKP 52 45.60 4.8X
SIV 151.99 49 PKP 52 45.00 1.5
i 52 51.20
S.D. = 1.0 on 102 of 116 obs.

& OCT 06, 1990 14h 37m 57.85s
62.988 N 151.045 W
DEPTH = 121.6km
CENTRAL ALASKA (1)
<AGS-P>.

HUR 0.64 90 eP 38 16.80 -0.4
eS 38 31.39
CUT 0.69 148 iP 38 17.40 -0.1
SKT 1.04 193 iP 38 20.29 -0.4
eS 38 37.86
RND 1.08 66 eP 38 20.58 -0.6
eS 38 37.88
MCK 1.21 51 eP 38 21.81 -0.7

eS 38 40.52
PWA 1.45 157 eP 38 24.84 -0.3
SUA 1.54 175 eP 38 26.02 -0.3
eS 38 48.04
GHO 1.57 140 eP 38 26.16 -0.5
eS 38 48.60
PLRM 1.66 147 eP 38 26.74 -0.9
eS 38 49.52
PMR 1.66 147 iPc 38 26.70 -0.9
NCG 1.67 199 iP 38 27.15 -0.8
eS 38 50.49
SML 1.73 132 iP 38 27.72 -0.8
CGLM 1.75 195 eP 38 27.95 -0.8
CRP 1.80 197 eP 38 28.91 -0.7
eS 38 52.90
NEA 1.82 28 eP 38 28.14 -1.4
BGL 1.84 201 eP 38 29.48 -0.5
SPU 1.87 195 iP 38 29.33 -1.0
eS 38 53.64
PMS 1.88 158 eP 38 29.48 -1.0
eS 38 53.95
CKL 1.90 199 eP 38 30.00 -0.7
eS 38 55.56
WRH 1.99 40 iP 38 30.52 -1.1
SCM 2.08 122 eP 38 31.62 -1.3
CCB 2.20 39 eP 38 32.96 -1.4
NKA 2.26 182 eP 38 36.63 1.6
TTA 2.27 271 iPc 38 33.80 -1.6
HDA 2.31 50 eP 38 34.29 -1.5
FBA 2.40 35 iPc 38 35.30 -1.6
TOA 2.43 109 iPc 38 36.80 -0.6
RDT 2.51 196 eP 38 37.32 -1.1
SLKM 2.52 171 eP 38 37.69 -0.9
SDG 2.57 98 eP 38 38.56 -0.7
GLM 2.57 37 iP 38 37.93 -1.3
RSO 2.66 199 eP 38 39.81 -0.8
GLI 2.82 137 eP 38 40.68 -1.8
KLU 2.83 120 eP 38 40.60 -2.1
SVW 2.86 231 iPd 38 41.70 -1.4
VZW 2.87 130 eP 38 40.95 -2.2
VLZ 2.90 128 eP 38 41.15 -2.3
NNL 2.96 182 eP 38 44.87 0.6
SEW 2.99 165 eP 38 43.48 -1.2
KNIM 3.08 148 eP 38 43.29 -2.7
DOT 3.22 75 eP 38 45.90 -1.9
IMA 3.30 341 iPc 38 46.90 -2.0
HOM 3.35 185 eP 38 49.17 -0.4
MTU 3.42 150 eP 38 48.33 -2.2
CNPM 3.48 182 eP 38 49.93 -1.3
OPT 3.51 198 eP 38 50.88 -0.8
PDB 3.55 207 eP 38 51.02 -1.2
XLV 3.56 186 eP 38 51.14 -1.2
GLB 3.73 111 eP 38 52.78 -1.8
AUE 3.81 198 eP 38 55.63 -0.1
MCNL 4.14 204 eP 38 58.68 -1.5
CDD 4.26 198 eP 38 59.98 -1.9
BALM 4.54 112 eP 39 03.51 -2.2
53 obs. associated

& OCT 06, 1990 15h 09m 59.18s
60.027 N 141.077 W
DEPTH = 0.0km
SOUTHEASTERN ALASKA (19)
<AGS-P>.

TGL 1.14 311 eP 10 20.16 -1.3
eS 10 36.02
BALM 1.19 329 eP 10 20.71 -1.7
eS 10 37.17
GLB 1.95 318 eP 10 31.78 -2.2
KLU 2.80 304 eP 10 43.43 -2.7
VLZ 2.82 295 eP 10 45.84 -0.5
VZW 2.90 293 eP 10 46.34 -1.2
GLI 3.10 289 eP 10 50.35 0.0
TOA 3.24 312 eP 10 52.42 0.1
SDG 3.31 321 eP 10 52.36 -0.9
9 obs. associated

• OCT 06, 1990 17h 10m 26.76± 1.41s
31.679 S ± 7.1km 72.115 W ±13.6km
DEPTH = 60.2 ± 12.4 km
4.7mb (1 obs.)
OFF COAST OF CENTRAL CHILE (134)

IMA 1.40 163 eP 10 50.50 0.1
iS 11 12.40
ROCH 1.59 144 iPd 10 52.30 -1.0

06d 17h

		iS	11 12.50			
JACH	1.63	128 iPc	10 52.10	-1.6		
		iS	11 11.50			
LCCH	1.85	166 iPd	10 57.10	0.5		
		i	11 22.50			
PEL	1.90	141 iP	10 57.00	-0.3		
		iS	11 19.00			
SAN	2.15	146 iPd	11 01.20	0.3		
		i	11 26.20			
		iS	11 31.60			
TACH	2.21	154 iP	11 02.00	0.4		
		iS	11 27.50			
FCH	2.25	137 iPd	11 02.50	-0.1		
		iS	11 29.50			
LNV	2.35	166 iPd	11 03.40	-0.2		
		iS	11 31.50			
		i	11 38.20			
CHCH	2.56	152 iPd	11 06.70	0.0		
		i	11 37.60			
		iS	11 42.40			
RTCB	2.84	87 iPc	11 10.80	0.1		
ZON	2.94	88 iPd	11 12.50	0.5		
		eS	11 49.50			
MDZ	3.02	114 iPc	11 15.20	2.0		
		i	11 25.00			
		i	11 54.50			
RTCV	3.05	94 eP	11 13.70	0.0		
RTLL	3.13	85 e(P)	11 14.20	-0.6		
		e	11 14.90			
ANT	8.08	11 e(P)	12 36.70	12.8X		
CNCB	15.27	15 eP	14 02.00	1.3		
LPB	15.51	15 P	14 00.00	-3.7X		
ZOBO	15.76	14 P	14 07.00	0.0		
Z	18s	0.10um				
		LR	20 16.00			
SIV	18.58	35 P	14 39.30	-2.1		
PPD	20.87	68 (P)	15 08.00	2.0		
BAO	27.17	60 eP	16 05.00	-1.6		
LIC	74.11	72 P	21 59.20	0.5		
TIC	74.36	72 P	22 01.00	0.9		
KIC	74.43	72 P	22 01.20	0.7		
LKO	75.59	69 P	22 05.38	-1.8		
	0.6s	6.50nm		4.7mb		
GBA	146.80	116 PKPc	30 05.50	3.2X		
	0.7s	3.60nm				
	S.D. = 1.2	on 24 of 27 obs.				

? OCT 06, 1990 17h 19m 23.59± 9.94s
0.123 S ±18.7km 79.523 W ±68.4km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

GGP	0.93	93 eP	19 42.20	0.5		
YANA	0.95	90 eP	19 42.00	0.0		
OUR	1.00	93 eP	19 42.80	0.0		
		eS	20 19.00			
VC1	1.23	115 P	19 46.50	-0.4		
COTA	1.27	69 P	19 47.00	-0.5		
CAYA	1.55	83 P	19 52.20	0.4		
	S.D. = 0.5	on 6 of 6 obs.				

• OCT 06, 1990 18h 29m 29.50± 1.45s
47.524 N ±10.2km 7.263 E ± 9.9km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
ML 2.5 (LDG). MD 1.7 (STR).

MOF	0.34	345 Pg	29 37.90	1.3		
		Sg	29 43.08			
LOMF	0.34	240 Pg	29 37.15	0.5		
BSF	0.44	314 Pg	29 36.60	-2.0		
		Sg	29 46.40			
FEL	0.62	55 ePg	29 41.23	-0.8		
ECH	0.70	354 Pg	29 43.94	0.7		
		Sg	29 53.82			
HAU	0.78	308 Pg	29 41.20	-3.6X		
		Sg	29 56.80			
CDF	0.89	1 Pg	29 46.66	0.0		
		Sg	29 59.82			
WLS	0.89	4 Pg	29 46.79	0.2		
		Sg	30 00.22			
	S.D. = 1.3	on 7 of 8 obs.				

OCT 06, 1990 19h 09m 56.18± 0.21s
45.496 N ± 2.4km 26.234 E ± 2.2km
DEPTH = 142.2 ± 2.7 km
4.8mb (49 obs.)

ROMANIA (358)
MD 4.7 (ATH). Felt (V) in the Vrancea region and (IV) at Bucharest.

MLR	0.20	269 iPc	10 16.00	0.7		
CVO	0.33	353 iPc	10 16.00	0.5		
ISR	0.42	148 iPc	10 16.50	-0.1		
VRI	0.51	42 iPc	10 17.00	0.1		
MTUR	0.87	252 iPc	10 19.50	0.0		
CMP	0.87	255 iPc	10 20.00	0.5		
BUC	1.09	185 iPd	10 18.00	-3.2X		
BUC1	1.16	187 iPc	10 22.50	0.6		
BAC	1.17	23 iP	10 21.00	-1.0		
CLI	1.28	34 iPc	10 55.00	31.8X		
COZ	1.34	263 iPd	10 24.00	0.0		
TNR	1.39	277 iPc	10 23.00	-1.3		
CFR	1.39	102 ePc	10 25.00	0.7		
TLB	1.57	125 iPc	10 26.50	0.3		
DRA	1.62	240 iPc	10 28.00	1.2		
IAS	1.93	28 iPc	10 31.00	0.6		
SRE	2.30	250 iPd	10 34.50	-0.4		
DEV	2.37	281 iPd	10 37.00	1.3		
PVL	2.37	196 iPd	10 37.00	1.3		
		iS	11 03.00			
JMB	3.04	175 iPd	10 44.00	-0.3		
		iS	11 15.00			
BZS	3.25	274 iPc	10 46.00	-1.0		
PGB	3.30	208 iPd	10 48.00	0.2		
		iS	11 20.00			
CEI	3.40	311 eP	10 52.00	3.0X		
DIM	3.48	189 iP	10 50.00	-0.1		
		Pg	10 58.00			
PLD	3.57	199 eP	10 50.00	-1.2		
		iSg	11 25.00			
VTS	3.63	218 iP	10 52.00	-0.2		
		iSg	11 25.00			
DMK	3.84	163 iPn	10 54.60	-0.2		
KDZ	3.89	189 iPd	10 56.00	0.5		
		eS	11 37.00			
RZN	3.96	197 iPd	10 57.00	0.3		
		iS	11 31.00			
BEO	4.14	263 iPn	10 58.00	-0.8		
		i	11 43.50			
KKB	4.29	213 iPd	11 01.00	0.2		
		iS	11 41.00			
MMB	4.31	206 iPd	11 02.00	0.9		
		eS	12 01.00			
RDO	4.38	187 ePn	11 01.50	-0.5		
ALN	4.60	182 iPc	11 04.00	-0.9		
		iS	11 45.00			
CTT	4.63	159 iPn	11 05.00	-0.4		
SRS	4.78	205 iPc	11 07.00	-0.4		
		iS	11 50.00			
ISK	4.88	154 iPn	11 08.40	-0.4		
SKO	4.95	226 ePn	11 08.00	-1.6		
		i	11 09.80			
		iSn	11 56.50			
		i	12 03.50			
		Lg	12 18.50			
KNT	4.97	210 iPc	11 10.00	0.1		
PSZ	4.99	301 iP	11 09.00	-1.2		
KGT	5.10	171 iPn	11 10.40	-1.3		
IVA	5.26	242 ePn	11 14.50	0.6		
		eSn	12 10.00			
BNT	5.28	166 iPn	11 13.80	-0.4		
EDC	5.28	166 iPn	11 13.00	-1.1		
HRT	5.30	151 iP	11 15.00	0.6		
PLE	5.36	249 ePn	11 15.50	0.3		
		eSn	12 10.00			
BUD	5.36	294 iPd	11 14.00	-1.2		
PVY	5.36	239 ePn	11 16.50	1.2		
		eSn	12 13.00			
THE	5.42	207 iPc	11 16.70	0.8		
		iS	12 06.00			
YLV	5.44	154 iP	11 16.50	0.2		
KCT	5.47	163 iP	11 15.50	-1.2		
PLG	5.51	203 ePn	11 17.50	0.2		
EZN	5.67	179 iP	11 18.50	-0.8		
IZI	5.68	154 iP	11 19.40	-0.1		
TTG	5.89	241 ePn	11 23.50	1.2		
		eSn	12 25.00			
FNA	5.90	219 iPc	11 22.50	0.0		
OHR	5.91	224 iPn	11 22.80	0.2		
SRO	5.92	296 iPd	11 23.10	0.4		
		i	13 16.60			
GPA	6.00	149 iP	11 24.10	0.2		

LIT	6.05	208 iPc	11 23.20	-1.3		
KZN	6.13	214 ePn	11 25.20	-0.5		
DST	6.15	162 iP	11 24.90	-0.9		
ULC	6.17	238 ePn	11 28.00	1.9		
		eSn	12 35.00			
KRA	6.23	319 iPd	11 26.20	-0.7		
		i	11 37.20			
		e	12 44.00			
BDV	6.24	242 ePn	11 29.20	2.1		
		eSn	12 36.00			
PRK	6.25	180 ePn	11 26.80	-0.3		
HCY	6.36	244 ePn	11 29.50	0.8		
		eSn	12 37.00			
ZST	6.82	297 iP	11 33.80	-1.1		
		i	11 41.90			
		e	13 42.10			
KAS	6.86	124 iPd	11 35.10	-0.4		
SOP	7.02	292 iPd	11 38.90	1.3		
ALT	7.05	155 iP	11 37.90	-0.2		
AGG	7.09	205 iPc	11 38.00	-0.6		
IZM	7.13	173 eP	11 34.70	-4.6X		
ZAG	7.19	276 iPc	11 41.50	1.6		
PTJ	7.21	277 eP	11 39.50	-0.8		
VKA	7.34	296 iPd	11 41.50	-0.4		
	2.5s	597.00nm		5.7mb		
		i	11 51.30			
		i	13 49.00			
EVR	7.35	208 ePn	11 42.00	-0.2		
KHL	7.57	160 iP	11 44.70	-0.5		
LJU	8.20	278 eP	11 53.50	0.0		
CEY	8.28	276 eP	11 56.00	1.4		
KVT	8.41	118 iP	11 53.90	-2.4		
KSP	8.53	312 iPd	11 56.30	-1.5		
	1.5s	118.00nm		5.3mb		
		i	12 07.00			
VOY	8.65	278 eP	11 59.80	0.3		
BCK	8.67	156 eP	12 00.00	0.2		
KMR	8.69	291 iP-	12 01.00	1.0		
TRI	8.75	276 eP	12 02.40	1.7		
ITM	8.92	203 ePn	12 03.00	0.0		
ORI	9.01	236 P	12 03.00	-1.3		
PRU	9.07	304 Pd	12 04.40	-0.6		
	1.5s	78.10nm		5.1mb		
		e	12 12.20			
VLI	9.11	197 ePn	12 06.00	0.4		
CSI	9.29	236 P	12 06.80	-1.2		
KHC	9.33	297 iPd	12 09.00	0.4		
	1.4s	70.00nm		5.1mb		
DUI	9.37	250 P	12 08.50	-0.5		
MMN	9.39	237 P	12 09.40	0.1		
SGO	9.40	242 P	12 08.00	-1.3		
FVI	9.42	281 P	12 12.00	2.3		
BHG	9.46	288 iPc	12 11.70	1.5		
CZI	9.75	234 P	12 14.00	-0.1		
SDI	9.77	252 P	12 18.00	3.6X		
WET	9.77	297 iPd	12 14.50	0.1		
BRG	9.81	308 iPc	12 13.00	-1.8		
	1.8s	120.00nm		5.3mb		
		i	12 34.10			
		e	15 40.80			
		e	16 14.50			
AZI	9.90	254 P	12 36.00	20.0X		
ASS	10.03	261 P	12 17.30	-0.5		
CTI	10.21	278 P	12 22.00	1.8		
MNS	10.26	257 P	12 20.00	-0.8		
WATA	10.29	286 iPc	12 24.40	3.1X		
	1.5s	75.00nm		5.1mb		
		i	12 43.60			
SFI	10.36	266 P	12 25.00	2.9X		
CRE	10.36	265 P	12 22.50	0.2		
PGD	10.46	266 P	12 23.50	-0.1		
CLL	10.54	308 eP	12 22.00	-2.4		
	1.9s	53.00nm		4.9mb		
		i	12 31.00			
FUR	10.59	290 eP	12 25.50	0.3		
		i	12 36.30			
SOI	10.61	229 P	12 23.50	-1.9		
OGA	10.64	283 iPc	12 31.00	5.0X		
HOF	10.77	302 iPc	12 28.20	0.7		
GRF	10.97	298 eP	12 29.30	-0.8		
Z	18s	0.30um				
MOX	11.05	303 eP	12 30.50	-0.7		
	2.0s	196.00nm		5.4mb		
		e	12 40.00			
		e	14 08.50			
BDI	11.21	268 P	12 36.50	3.2X		
MDI	11.58	277 P	12 47.00	9.0X		

GIB	11.80	235	P	12 40.00	-1.0
CSS	11.83	150	eP	12 43.80	2.4
BOB	11.88	272	P	12 51.00	8.9X
VAI	12.22	278	P	12 50.00	3.6X
PCP	12.56	272	P	12 58.31	7.4X
PGF	12.75	263	eP	12 57.00	3.5X
	1.2s	110.10nm		5.2mb	
CKI	12.77	272	P	13 00.00	6.5X
ORX	12.80	277	P	13 02.00	8.0X
FIN	12.86	271	P	13 00.57	5.8X
ROB	13.08	271	P	13 02.92	5.3X
IMI	13.15	270	P	13 04.05	5.5X
CDF	13.27	289	eP	12 58.70	-1.5
RSP	13.36	275	P	13 04.67	3.3X
LSD	13.39	277	P	13 08.67	6.8X
BHB	13.40	274	P	13 05.84	4.1X
ENR	13.41	271	P	13 06.92	5.0X
STV	13.47	271	P	13 06.31	3.6X
DOI	13.48	273	P	13 05.50	2.7
SBF	13.48	270	eP	13 05.70	2.9X
BSF	13.55	287	eP	13 05.00	1.2
	1.0s	20.00nm		4.5mb	
PZZ	13.58	273	P	13 07.54	3.4X
LPG	13.67	277	eP	13 07.80	2.4
	1.3s	101.10nm		5.0mb	
LPL	13.68	277	eP	13 07.90	2.4
	0.9s	24.55nm		4.6mb	
RRL	13.73	275	P	13 12.15	6.0X
BNI	13.78	275	P	13 11.50	4.8X
HAU	13.86	288	eP	13 08.20	0.6
	1.1s	19.55nm		4.4mb	
Z	20s	0.13um			
FRF	14.11	269	eP	13 13.00	2.3
	1.3s	93.85nm		4.9mb	
ADI	14.21	148	iPc	13 12.90	0.9
LMR	14.26	268	eP	13 14.70	2.1
	1.2s	86.30nm		4.9mb	
LRG	14.34	269	eP	13 15.90	2.3
	1.5s	198.50nm		5.2mb	
MML	14.85	148	iPc	13 21.10	0.9
NUR	15.07	357	iP	13 19.40	-3.2X
	1.0s	152.00nm		5.3mb	
UPP	15.28	343	iP	13 22.70	-2.6
		i		13 36.60	
LBF	15.47	283	eP	13 27.80	0.0
	1.2s	13.40nm		4.1mb	
LOR	15.54	285	eP	13 27.70	-0.9
	0.7s	6.60nm		4.1mb	
Z	21s	0.13um			
SMF	15.58	282	eP	13 29.20	0.0
	1.0s	20.00nm		4.4mb	
SSF	15.79	284	eP	13 31.60	-0.1
	0.9s	12.30nm		4.2mb	
AVF	15.91	283	eP	13 33.00	-0.2
	1.1s	14.65nm		4.2mb	
BGF	16.27	282	eP	13 37.60	-0.1
	1.1s	24.40nm		4.4mb	
NOH	16.28	152	iPc	13 38.20	0.2
HFS	16.46	337	eP	13 36.70	-3.1X
	0.7s	60.70nm		5.0mb	
Z	18s	0.16um			
		LR		19 45.00	
MAF	16.49	281	eP	13 40.50	0.1
	1.2s	32.75nm		4.5mb	
TAB	16.70	109	eP	13 47.00	3.9X
TCF	16.73	281	eP	13 42.60	-0.8
	0.9s	9.85nm		4.1mb	
CAF	17.03	277	eP	13 45.80	-1.2
	1.1s	14.65nm		4.2mb	
LSF	17.21	281	eP	13 47.80	-1.3
SUF	17.26	360	eP	13 47.00	-2.6
RJF	17.35	278	eP	13 49.90	-1.0
	1.0s	28.00nm		4.5mb	
Z	21s	0.22um			
NRA0	17.56	336	Pn	13 49.90	-3.3X
LPO	17.69	276	eP	13 52.90	-2.0
	1.1s	41.50nm		4.7mb	
NB2	17.90	336	P	13 53.80	-3.5X
	1.2s	108.80nm		5.0mb	
LFF	17.95	277	eP	13 56.00	-1.9
	1.3s	101.10nm		5.0mb	
LDF	18.20	289	eP	13 56.20	-4.4X
	0.9s	31.10nm		4.6mb	
MFF	18.32	283	eP	13 58.20	-3.7X
	0.9s	37.65nm		4.7mb	
FLN	18.43	290	eP	13 58.60	-4.5X
	1.0s	34.00nm		4.6mb	

Z	20s	0.10um			
EPF	18.68	272	eP	14 02.90	-3.0X
	0.5s	7.30nm		4.3mb	
GRR	18.69	289	eP	14 01.50	-4.3X
	0.9s	24.55nm		4.5mb	
LPF	18.82	286	eP	14 03.60	-3.6X
EROO	19.37	265	eP	14 12.00	-1.0
ECRI	20.81	272	eP	14 27.80	0.1
EKA	21.01	309	P	14 35.00	5.6X
	1.7s	175.60nm		5.2mb	
ETOR	21.11	267	eP	14 30.70	0.1
SOD	21.93	0	iP	14 39.20	0.8
			i	14 44.60	
EVIA	22.33	262	eP	14 43.60	0.9
GUD	22.65	268	iPc	14 45.40	-0.4
TOL	22.87	267	iPc	14 48.00	0.2
	1.3s	307.69nm		5.6mb	
EBAN	23.44	262	eP	14 53.20	-0.2
AFC	23.71	260	eP	14 55.80	-0.3
ECOG	23.72	260	eP	14 55.60	-0.5
KEV	24.33	1	eP	15 02.00	0.5
			e	15 16.00	
MAIO	26.61	98	eP	15 31.00	8.1X
WMQ	42.80	69	iPc	17 43.00	1.9
NDI	43.24	95	iPc	17 46.70	2.0
	0.5s	26.76nm		5.2mb	
LKO	45.04	227	Pc	17 55.92	-3.4X
TIC	47.23	225	Pc	18 15.24	-1.3
KIC	47.34	224	Pc	18 16.40	-1.0
	0.3s	5.50nm		4.8mb	
LIC	47.60	224	Pc	18 18.36	-1.0
	0.2s	3.50nm		4.8mb	
DMN	49.43	90	P	18 34.80	1.1
KKN	49.44	90	P	18 34.40	0.6
PKI	49.67	90	P	18 36.30	0.7
GUN	49.79	89	P	18 37.40	0.8
GTA	52.88	69	eP	19 00.00	0.7
GBA	53.51	110	Pd	19 02.60	-1.4
	0.6s	4.70nm		4.5mb	
LZH	57.38	70	Pc	19 32.50	0.7
	1.8s	20.00nm		4.8mb	
HHC	59.56	61	eP	19 47.40	0.5
CD2	60.40	75	eP	19 53.00	0.4
KRI	62.10	176	iPc	20 01.20	-2.8
BJI	62.87	60	eP	20 09.00	0.2
	1.0s	10.00nm		4.7mb	
CHG	64.79	88	ePd	20 22.00	0.3
	0.9s	16.81nm		5.0mb	
CHTO	64.79	88	iPc	20 21.90	0.2
	1.1s	24.44nm		5.0mb	
			pP	20 57.60	149kmX
GYA	65.18	77	P	20 24.20	0.0
BUL	65.36	178	iPd	20 25.50	0.3
	2.5s	166.67nm		5.5mb	
CIR	66.37	175	iPd	20 32.90	1.4
YKA	67.89	342	eP	20 40.00	-0.6
	0.9s	4.00nm		4.3mb	
CAI	76.53	246	eP	21 32.50	0.4
SES	77.56	334	eP	21 37.00	-0.4
PNT	80.99	338	eP	21 56.00	0.2
	0.6s	4.00nm		4.3mb	
STK	129.04	98	ePKP	28 48.70	0.3
	1.8s	54.00nm			

S.D. = 1.1 on 173 of 216 obs.

? OCT 06, 1990 19h 10m 17.35± 7.08s
48.564 N ±46.4km 8.045 E ±38.4km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 1.9 (LDG).

CDF	0.53	254	Pg	10 28.20	0.0
			Sg	10 30.40	
BSF	1.11	229	Pg	10 38.10	-0.2
			Sg	10 46.70	
HAU	1.26	244	Pg	10 41.00	0.2
			Sg	10 53.00	
LOR	3.10	247	Pg	11 06.80	-0.4
			Sg	11 40.10	
SMF	3.43	238	Pg	11 12.40	0.5
			Sg	11 51.20	

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

OCT 06, 1990 19h 49m 13.62± 0.41s
24.854 S ± 3.5km 179.676 E ± 5.2km
DEPTH = 505.8 ± 5.7 km
4.8mb (18 obs.)

SOUTH OF FIJI ISLANDS (171)

SVA	6.80	350	eP	50 59.00	0.1
VUN	6.91	350	eP	50 59.00	-1.0
SGE	7.41	347	eP	51 05.20	-0.1
MBU	7.89	353	eP	51 10.50	0.3
NDE	8.23	358	eP	51 03.10	-10.7X
YSA	8.35	346	eP	51 14.60	-0.3
DZM	12.46	280	iPc	52 00.20	2.1
			iS	54 18.30	
HBZ	12.76	185	eP	52 02.10	1.1
PUZ	13.23	185	eP	52 04.30	-1.7
			eS	54 24.00	
WLZ	13.41	194	P	52 10.10	2.4
TAZ	13.61	191	eP	52 12.60	2.9
NOZ	13.79	185	eP	52 12.50	0.9
			S	54 33.00	
NGZ	14.69	193	eP	52 22.60	1.7
PGZ	15.98	189	eP	52 33.20	-0.4
MNG	16.11	192	eP	52 32.60	-2.3
			S	55 19.10	
MTW	16.63	191	eP	52 39.10	-1.0
CAW	16.66	192	eP	52 40.30	-0.1
WDW	16.83	192	eP	52 40.50	-1.5
BLW	16.84	191	eP	52 41.20	-0.9
MRW	16.85	193	eP	52 40.20	-2.0
			S	55 32.90	
WEL	16.89	193	P	52 43.00	0.4
			S	55 35.00	
TCW	16.92	194	eP	52 42.70	-0.2
MOW	16.93	191	eP	52 41.70	-1.3
THZ	17.78	197	eP	52 52.80	1.5
KHZ	18.24	195	P	52 55.70	0.1
LTZ	18.90	197	P	53 01.70	-0.4
MOZ	19.67	195	eP	53 09.40	0.0
TVO	29.74	82	iP	54 39.50	-0.5
	0.8s	25.00nm		4.8mb	
CMS	30.48	250	iPc	54 47.20	1.1
PMO	31.95	78	iP	54 58.20	-0.5
	0.8s	30.00nm		4.9mb	
VAH	32.09	79	iP	55 00.20	0.3
	0.8s	30.00nm		4.9mb	
TPT	32.20	78	iP	55 00.40	-0.4
	0.8s	60.00nm		5.2mb	
RUV	32.33	79	iP	55 01.70	-0.2
	0.8s	40.00nm		5.0mb	
STK	34.11	249	iPd	55 17.90	1.2
	0.5s	9.00nm		4.6mb	
PMG	34.54	291	eP	55 20.00	-0.5
	0.8s	31.34nm		4.9mb	
ASPA	41.60	262	iPd	56 18.30	0.1
	0.5s	13.50nm		4.7mb	
Z	20s	0.09um		3.6Msz	
			eS	01 54.40	
WB5	42.05	267	eP	56 20.20	-1.6
			eS	02 01.00	
FORR	45.67	250	eP	56 49.00	-0.9
	0.4s	43.00nm		5.3mb	
MTN	47.24	275	eP	57 01.00	-1.1
WARB	47.60	256	iPd	57 04.10	-0.7
	0.4s	9.00nm		4.6mb	
NANU	58.29	258	eP	58 21.00	-0.4
MAT	72.52	326	eP	59 49.00	-1.0
	0.6s	5.33nm		4.2mb	
ADK	76.47	2	P	00 10.00	-1.6
SYP	82.22	46	eP	00 43.00	0.5
PRS	82.43	44	eP	00 43.90	0.6
GCC	82.47	43	eP	00 44.20	0.8
PCC	82.52	43	eP	00 44.00	0.3
SAO	82.65	44	eP	00 44.80	0.4
PRI	82.76	45	eP	00 46.30	1.2
BRK	82.83	43	eP	00 45.90	0.7
LLA	82.87	44	eP	00 46.30	0.8
MHC	82.88	43	eP	00 46.00	0.3
ABL	82.92	47	P	00 46.00	0.0
ARN	82.96	43	P	00 46.50	0.6
PAS	83.20	48	eP	00 48.00	0.8
MWC	83.32	48	eP	00 48.00	0.0
BAR	83.37	50	eP	00 48.00	-0.1
PLM	83.63	49	eP	00 50.00	0.4
RVR	83.65	48	eP	00 50.00	0.6
SBB	83.75	47	eP	00 50.00	0.0
FRI	83.89	45	eP	00 50.60	0.1
ISA	83.89	46	eP	00 51.00	0.3
CM8	84.09	43	eP	00 51.70	0.1
ORV	84.35	42	eP	00 53.00	0.2
WDC	84.37	40	eP	00 53.20	0.3

06d 20h

CLC	84.56	47	eP	00	54.00	0.0
TPC	84.61	49	eP	00	55.00	0.7
GSC	84.79	47	eP	00	55.00	-0.1
GLA	84.86	50	eP	00	56.00	0.5
TNP	86.13	45	P	01	01.00	-0.7
	0.8s	19.61nm			4.9mb	
			pP	01	30.00	111kmX
GMW	88.69	35	P	01	13.30	0.0
LON	88.69	36	P	01	13.00	-0.4
PGC	89.06	34	eP	01	15.00	0.1
RMW	89.14	35	P	01	15.00	-0.5
CHG	89.74	291	eP	01	20.00	1.3
CHTO	89.74	291	iP	01	20.10	1.4
	0.8s	5.12nm			4.5mb	
PMR	89.74	14	P	01	16.50	-1.2
	0.9s	16.15nm			4.9mb	
DUG	90.14	45	P	01	20.00	-0.3
DAU	91.27	46	P	01	26.00	0.3
PNT	91.44	35	eP	01	25.00	-0.9
	0.7s	9.00nm			4.9mb	
ALQ	91.77	52	eP	01	27.00	-1.0
	1.0s	10.00nm			4.8mb	
ANMO	91.77	52	P	01	27.40	-0.6
	0.8s	5.83nm			4.6mb	
GOL	94.82	48	P	01	41.50	-0.4
	0.8s	6.32nm			4.8mb	
SOB1	127.94	125	ePKPc	07	22.70	-0.9
SUF	138.22	342	ePKP	07	32.00	-9.6X
NUR	140.42	341	ePKP	07	42.00	-3.6X
NB2	142.97	351	PKP	07	45.40	-4.7X
	0.9s	29.40nm				
HFS	143.42	348	ePKP	07	46.00	-4.8X
	0.5s	73.40nm				
ADI	147.95	293	iPKPc	08	01.60	2.4X
ZNT	148.19	292	iPKPc	08	02.70	3.2X
RMN	148.62	288	iPKPc	08	03.50	3.2X
EKA	149.48	3	PKP	08	05.00	4.2X
	1.2s	53.60nm				
VRI	149.81	321	ePKPd	08	06.00	4.4X
KRA	150.33	333	iPKPc	08	07.60	5.4X
MLR	150.47	321	ePKPc	08	07.00	4.2X
SPC	150.86	332	ePKP	08	08.90	5.6X
KSP	151.06	338	iPKP	08	09.80	6.5X
CLL	151.67	342	iPKPc	08	10.30	6.2X
	1.0s	58.00nm				
			i	08	21.20	
BRG	151.79	341	iPKPc	08	10.60	6.3X
	1.5s	40.00nm				
			i	08	21.60	
WTS	152.36	350	ePKP	08	11.50	6.5X
	0.7s	32.00nm				
PRU	152.38	339	PKPc	08	12.00	6.8X
MOX	152.65	343	ePKP	08	13.00	7.4X
KHC	153.43	339	ePKP	08	14.70	8.0X
			e	08	29.80	
ENN	153.68	351	ePKP	08	29.50	22.6X
	0.9s	27.00nm				
LIC	160.94	166	PKP	08	16.60	-0.1
KIC	161.13	166	PKP	08	16.80	-0.1
TIC	161.34	165	PKP	08	17.10	0.0
LKO	163.97	161	PKP	08	16.54	-3.2X
	0.7s	9.50nm				
	S.D. = 0.9	on	86 of 108 obs.			

• OCT 06, 1990 20h 25m 02.13± 1.27s
14.870 N ±16.1km 93.331 W ±11.5km
DEPTH = 75.2 ± 12.8 km
3.7mb (2 obs.)
NEAR COAST OF CHIAPAS, MEXICO (69)

TPX	1.04	88	iPd	25	21.51	-0.1
			iS	25	35.72	
SCX	1.97	20	iP	25	33.89	-0.2
			iS	25	58.88	
OXX	3.93	304	iP	26	02.00	0.4
			iS	26	46.50	
EVV	4.06	332	(P)	26	10.00	6.9X
IIT	6.30	312	(P)	27	15.50	40.8X
PPM	6.56	310	iP	26	38.47	-0.1
III	6.84	301	(P)	27	32.50	50.4X
TUL	21.07	354	eP	29	43.30	1.2
	1.0s	14.70nm			4.3mb	
ANMO	23.22	332	eP	30	02.20	-1.3
	0.8s	0.75nm			3.2mb	
SIV	44.22	133	eP	33	06.00	0.1
	S.D. = 1.1	on	7 of 10 obs.			

• OCT 06, 1990 21h 10m 20.78± 1.03s
11.623 S ±11.7km 116.650 E ±14.8km
DEPTH = 33.0km (normal)
3.4mb (1 obs.)
SOUTH OF SUMBAWA ISLAND (291)

TRT	5.55	314	ePc	11	43.10	-0.2
MBL	9.96	163	eP	12	43.00	-1.8
	0.2s	8.00nm			5.6mb	X
			iS	14	25.50	
NANU	10.93	185	eP	12	58.40	0.4
	0.2s	8.00nm			5.6mb	X
			eS	14	51.00	
MEKA	15.02	173	eP	13	52.50	0.1
			eS	16	29.50	
WARB	17.28	148	eP	14	21.50	0.2
	0.3s	1.00nm			3.4mb	
			eS	17	21.50	
MRWA	17.52	182	eP	14	25.00	0.8
			eS	17	27.00	
WB5	18.91	118	eP	14	41.90	0.4
			eS	17	58.80	
COOL	19.61	168	eP	14	43.00	-6.5X
			eS	18	12.00	
KLB	19.90	177	eP	14	57.00	4.5X
			eS	18	23.00	
MUN	20.26	181	eP	15	04.00	7.7X
			eS	18	33.00	
NWAO	21.21	179	eP	15	13.00	7.0X
	S.D. = 1.0	on	7 of 11 obs.			

? OCT 06, 1990 22h 54m 51.37± 7.10s
43.384 N ±39.4km 18.498 E ±40.6km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.2 (TTG).

BRY	0.48	176	ePg	55	00.80	-0.4
			eSg	55	08.00	
PLE	0.66	94	ePg	55	04.40	-0.1
			eSg	55	11.50	
NKY	0.68	147	ePg	55	05.20	0.3
			eSg	55	12.50	
HCY	0.94	180	ePg	55	09.50	0.3
			eSg	55	25.00	
	S.D. = 0.6	on	4 of 4 obs.			

? OCT 06, 1990 22h 55m 13.66± 6.19s
40.673 N ± 7.9km 29.921 E ±43.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

HRT	0.24	308	iPg	55	18.80	-0.1
YLV	0.43	256	iPg	55	22.40	-0.1
			iSg	55	27.40	
IZI	0.48	226	iPg	55	23.30	-0.1
			iSg	55	29.90	
ISK	0.76	301	iPg	55	28.60	0.1
			iSg	55	38.90	
CTT	1.23	293	iPn	55	36.40	-0.1
KCT	1.27	251	iPn	55	37.40	0.2
	S.D. = 0.2	on	6 of 6 obs.			

• OCT 06, 1990 23h 04m 41.56± 0.58s
12.885 N ± 8.5km 144.637 E ±17.6km
DEPTH = 33.0km (normal)
4.6mb (3 obs.)
SOUTH OF MARIANA ISLANDS (210)
Felt (III) on Guom.

GUA	0.70	22	iPc	04	54.80	-0.2
			eS	05	03.50	
GUMO	0.73	18	eP	04	55.10	-0.3
PJG	0.73	18	eP	04	55.30	-0.1
MAT	24.25	347	(P)	09	57.00	0.3
WB5	34.09	197	eP	11	24.80	-0.6
ASPA	37.81	196	iPd	11	56.60	-0.3
	0.5s	8.30nm			4.9mb	
MBL	41.69	216	iPc	12	29.20	0.2
	0.4s	6.00nm			4.7mb	
CHTO	44.26	284	e(P)	12	49.90	-0.1
	1.0s	3.25nm			4.1mb	
ZOBO	148.14	100	PKP	24	25.00	1.1
LPB	148.15	101	PKP	24	28.00	4.3X
CNCB	148.25	101	PKP	24	28.00	4.0X
	S.D. = 0.6	on	9 of 11 obs.			

• OCT 06, 1990 23h 14m 24.88± 2.31s
37.078 N ±15.0km 142.258 E ±21.7km
DEPTH = 33.0km (normal)
4.2mb (1 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)

KAKJ	1.89	243	P	14	54.40	-1.0
			S	15	17.60	
OFUJ	2.05	347	P	14	57.10	-0.6
			eS	15	22.80	
YAMJ	2.08	302	P	14	58.00	-0.1
			eS	15	24.80	
NIIJ	2.61	275	P	15	05.50	-0.1
CHJJ	2.82	250	P	15	07.50	-1.1
			S	15	43.60	
MAT	3.29	262	eP	15	15.00	-0.4
			eS	15	58.00	
MTMJ	3.61	263	eP	15	21.70	1.8
IIDJ	3.86	247	P	15	24.10	0.7
GKN	48.77	277	P	23	00.00	-8.8X
WB5	57.14	189	eP	24	20.00	9.3X
NB2	74.41	338	P	26	01.70	0.7
	0.8s	2.00nm			4.2mb	
CNCB	146.55	61	PKP	34	09.00	5.0X
	S.D. = 1.1	on	9 of 12 obs.			

? OCT 07, 1990 00h 07m 43.09± 3.56s
51.261 N ±27.7km 15.995 E ±21.5km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.1 (VKA), 2.8 (KRA).

KSP	0.46	156	iPd	07	52.10	-0.3
	0.7s	59.00nm				
			iS	08	00.00	
			i	08	02.00	
BRG	1.35	254	iPg	08	07.00	-0.9
			iSg	08	28.00	
PRU	1.58	217	ePn	08	12.00	0.9
			Pg	08	13.50	
			Sn	08	29.20	
			Sg	08	36.50	
			i	08	43.50	
CLL	1.88	273	e(Pg)	08	16.00	0.5
			iSg	08	41.00	
KHC	2.64	217	Pn	08	26.00	-0.5
			Pg	08	34.20	
			Sn	09	02.50	
			Sg	09	10.40	
KRA	2.78	114	eP	08	33.60	5.1X
			e	09	09.10	
MOX	2.84	259	ePg	08	35.50	6.2X
			iSg	09	14.00	
VKA	3.01	176	ePn	08	32.00	0.4
			iPg	08	40.60	
			iSn	09	09.80	
			iSg	09	21.50	
GRF	3.43	245	e(Pg)	08	51.00	13.3X
			eSg	09	34.40	
	S.D. = 0.9	on	6 of 9 obs.			

OCT 07, 1990 00h 12m 52.34± 0.42s
37.500 N ± 3.2km 29.573 E ± 3.6km
DEPTH = 25.0 ± 4.1 km
4.2mb (16 obs.) 3.0Msz (2 obs.)
TURKEY (366)
ML 4.2 (CSS). MD 4.2 (ATH), 4.2 (HLW).

BCK	0.81	92	ePg	13	06.80	-0.9
KML	0.82	357	iPg	13	06.70	-1.3
KSL	1.38	180	ePn	13	17.30	1.2
ALT	1.61	15	ePn	13	20.90	1.4
ARG	1.73	223	ePn	13	23.00	1.8
IZM	2.03	297	iPn	13	24.90	-0.8
SMG	2.18	276	ePn	13	27.60	-0.1
DST	2.23	341	iPn	13	28.60	0.2
IZI	2.83	358	ePn	13	38.30	1.3
GPA	2.84	11	ePn	13	38.20	1.1
KCT	2.90	341	iPn	13	39.30	1.4
YLV	3.07	357	iPn	13	41.30	1.0
PRK	3.13	305	ePn	13	41.50	0.4
BNT	3.13	336	iPn	13	41.80	0.6
EDC	3.14	335	iPn	13	40.50	-0.8
APE	3.25	264	ePn	13	44.00	1.1
HRT	3.32	1	iPn	13	44.60	0.8

BBTK	3.42	46	iPd	13 47.00	1.6
			iS	14 58.00	
PPCY	3.44	139	eP	13 48.00	2.4
EZN	3.44	313	iPn	13 45.50	-0.1
ISK	3.58	354	ePn	13 48.00	0.4
CTT	3.75	347	iPn	13 49.80	-0.1
NPS	3.90	236	ePn	13 53.00	0.9
CSS	3.95	129	eP	13 55.50	2.6
			eSn	14 46.00	
DMK	4.54	343	ePn	14 00.10	-1.1
RDO	4.80	321	ePn	14 05.00	0.2
VAM	4.81	246	ePn	14 08.00	3.0X
KAS	5.05	39	eP	14 09.50	1.1
KDZ	5.24	324	iPc	14 11.00	-0.1
			i	15 19.00	
VLI	5.36	264	ePn	14 14.60	1.8
JMB	5.47	336	eP	14 15.00	0.8
			e	15 57.00	
DIM	5.51	327	iP	14 15.00	0.2
RZN	5.62	320	iPc	14 16.00	-0.6
			iS	15 20.00	
PLD	5.93	322	eP	14 21.00	0.2
			iSg	15 27.00	
MMB	6.09	314	iPd	14 22.00	-1.1
			eS	15 27.00	
ITM	6.10	269	ePn	14 27.00	3.7X
EVR	6.28	285	ePn	14 27.00	1.2
ADI	6.39	132	eP	14 26.50	-0.8
PGB	6.53	322	iPd	14 28.00	-1.3
			iS	15 41.00	
PVL	6.56	332	ePd	14 29.00	-0.7
			iS	15 46.00	
KKB	6.64	313	iP	14 30.00	-0.8
			iS	15 40.00	
ZNT	6.90	138	eP	14 32.50	-2.0
			eS	15 23.00	
SHMJ	6.96	131	Pd	14 34.80	-0.5
VTS	7.05	318	eP	14 37.00	0.3
BURJ	7.33	134	Pd	14 41.40	0.8
SKO	7.69	308	iP	14 45.00	-0.6
OHR	7.70	301	eP	14 41.20	-4.5X
HLW	7.76	169	ePc	14 45.00	-1.5
			eS	16 07.50	
MKT	8.00	143	eP	14 48.00	-1.9
			eS	16 05.00	
MLR	8.44	342	ePd	14 55.50	-0.5
CMP	8.47	338	ePd	14 53.00	-3.5X
VRI	8.63	347	ePc	14 58.00	-0.6
MBH	8.89	149	eP	14 59.50	-2.6
SOI	10.72	277	P	15 28.00	0.7
SGO	11.51	290	P	15 38.50	0.4
TAB	13.27	82	eP	16 10.00	8.2X
KHC	16.41	320	eP	16 47.80	5.3X
BRG	17.40	325	i(P)	16 57.80	3.0X
	1.0s		10.00nm		3.9mb
LPG	18.83	302	eP	17 16.70	3.9X
	0.7s		6.60nm		4.0mb
LPL	18.84	302	eP	17 16.50	3.5X
	0.9s		8.20nm		3.9mb
CDF	19.56	311	eP	17 21.10	-0.1
	0.7s		5.50nm		4.0mb
BSF	19.61	309	eP	17 22.10	0.3
HAU	19.95	309	eP	17 25.00	-0.3
	1.0s		14.00nm		4.2mb
Z	19s		0.05um		5.2Msz
SMF	21.10	304	eP	17 36.70	-0.5
	0.9s		12.30nm		4.3mb
LBF	21.11	305	eP	17 38.10	0.8
LOR	21.27	305	eP	17 39.20	0.3
	0.7s		2.75nm		3.8mb
Z	20s		0.08um		3.1Msz
SSF	21.44	305	eP	17 42.10	1.5
	0.9s		16.40nm		4.5mb
AVF	21.46	304	eP	17 40.10	-0.7
	1.1s		12.20nm		4.2mb
MFF	23.75	302	eP	18 03.90	0.5
	0.9s		19.65nm		4.6mb
LDF	24.22	307	eP	18 06.80	-1.1
	0.9s		9.85nm		4.4mb
FLN	24.49	307	eP	18 09.40	-1.1
	0.9s		19.65nm		4.7mb
Z	21s		0.05um		3.0Msz
GRR	24.64	306	eP	18 10.80	-1.1
	0.9s		14.75nm		4.6mb
LPF	24.66	305	eP	18 10.20	-2.0
SUF	25.34	356	iP	18 19.20	0.8
	0.6s		3.80nm		4.2mb

BCAO	34.43	200	iPd	19 44.00	4.0X
	0.4s		2.00nm		4.4mb
GBA	48.66	106	Pd	21 33.40	-3.0X
	0.5s		1.20nm		4.2mb
	S.D. = 1.1		on 65 of 76 obs.		

% OCT 07, 1990 00h 58m 51.23± 1.96s
37.332 N ±18.8km 29.659 E ± 9.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.2 (ISK).

BCK	0.75	80	ePn	59 06.00	0.0
KHL	0.99	354	iPg	59 05.70	-4.4X
			iSg	59 18.70	
ALT	1.76	12	ePn	59 21.90	-0.1
IZM	2.17	300	ePn	59 28.00	0.0
DST	2.41	341	ePn	59 24.00	-7.4X
IZI	3.00	357	ePn	59 40.00	0.2
YLV	3.24	356	ePn	59 43.00	-0.1
	S.D. = 0.2		on 5 of 7 obs.		

OCT 07, 1990 01h 55m 30.29± 0.34s
40.678 N ± 3.9km 21.690 E ± 3.0km
DEPTH = 5.0km (geophysicist)
GREECE (364)
ML 3.2 (THE), 2.7 (TTG). MD 3.3 (ATH).

FNA	0.26	294	iPc	55 33.70	-1.9
			eS	55 36.60	
KZN	0.38	171	ePg	55 37.00	-0.9
GRG	0.61	62	ePd	55 42.20	-0.3
			eS	55 52.88	
KBN	0.67	266	iPgc	55 41.50	-2.2
OHR	0.80	303	iPgc	55 43.80	-2.6
			iSg	55 55.40	
			Lg	55 56.30	
LIT	0.84	133	iPd	55 45.84	-1.2
			eS	55 59.88	
THE	0.97	92	ePc	55 48.72	-0.5
			eS	56 05.44	
KNT	1.04	62	ePd	55 49.92	-0.4
			eS	56 05.28	
SOH	1.27	83	ePc	55 55.04	0.7
			eS	56 15.64	
SKO	1.31	352	iPg	55 53.40	-1.5
BERA	1.32	272	ePn	55 54.50	-0.7
TPE	1.34	254	ePn	55 56.00	0.6
PLG	1.37	102	ePb	55 56.00	-0.1
SRS	1.51	72	ePd	55 57.88	-0.1
			eS	56 19.48	
SRN	1.52	239	ePn	55 59.60	1.5
TIR	1.53	296	ePn	55 58.50	0.2
IGT	1.55	223	ePd	55 57.96	-0.6
KKB	1.59	41	iPd	55 59.00	-0.1
			iS	56 22.00	
KKS	1.70	326	ePn	56 02.00	1.4
AGG	1.73	163	ePd	56 02.04	0.9
			eS	56 28.52	
KEK	1.74	237	ePb	56 03.00	1.7
EVR	1.76	177	ePg	56 02.00	0.3
LACI	1.78	303	iPnd	56 03.10	1.3
OUR	1.78	100	ePc	56 02.96	1.1
			eS	56 29.44	
MMB	1.79	59	iPc	56 02.00	-0.1
			eS	56 27.00	
BCI	2.08	325	ePn	56 07.50	1.3
SDA	2.12	310	ePn	56 08.60	1.7
VTS	2.23	30	eP	56 09.00	0.5
RZN	2.50	65	eP	56 12.00	-0.4
			iS	56 58.00	
TTG	2.53	315	ePn	56 13.50	0.9
			eSn	56 46.00	
PGB	2.64	44	eP	56 16.00	1.7
			eS	56 57.00	
VLS	2.64	199	ePn	56 14.00	-0.3
PLD	2.68	57	eP	56 26.00	11.2X
RDO	2.95	80	ePb	56 27.00	8.3X
KDZ	2.98	70	iP	56 17.00	-2.1
ITM	3.50	177	ePb	56 29.00	2.5X
PVL	3.72	46	eP	56 38.00	8.4X
			eS	57 29.00	
VLI	4.07	166	ePn	56 35.00	0.4
	S.D. = 1.2		on 34 of 38 obs.		

• OCT 07, 1990 01h 58m 26.79± 0.70s
2.628 S ±12.3km 68.005 E ±11.1km
DEPTH = 10.0km (geophysicist)
4.8mb (8 obs.) 4.9Msz (2 obs.)
CARLSBERG RIDGE (421)

KOD	16.03	36	eP	02 18.50	4.1X
GBA	18.82	30	P	02 46.00	-2.9
HYB	22.65	27	eP	03 30.00	0.5
QUE	32.84	358	eP	05 04.80	1.7
DMN	34.46	27	P	05 18.00	0.8
PKI	34.56	28	P	05 18.40	0.2
GKN	34.58	26	P	05 18.60	0.4
KKN	34.69	28	P	05 19.60	0.4
GUN	35.07	28	P	05 23.10	0.5
CHG	37.27	54	eP	05 42.00	1.1
	1.0s		15.50nm		4.7mb
CHTO	37.27	54	eP	05 41.50	0.6
	1.1s		11.19nm		4.5mb
			i	05 46.90	
MAIO	39.73	349	iPc	06 02.30	1.0
SLR	44.43	235	iPc	06 46.50	6.4X
	1.3s		57.69nm		5.3mb
CD2	47.81	43	eP	07 06.00	-0.6
WMQ	49.69	19	P	07 21.00	0.0
BCAO	49.95	278	iPc	07 24.00	0.6
	0.7s		7.00nm		4.7mb
LZH	51.16	38	eP	07 35.00	2.5
	2.0s		40.00nm		5.0mb
Z	20s		0.58um		4.6Msz
GTA	51.20	32	eP	07 31.80	-0.8
Z	24s		1.40um		4.9MszX
XAN	53.17	43	P	07 46.00	-1.5
VRI	60.70	328	ePc	08 40.00	-0.7
MLR	60.87	327	eP	08 40.00	-2.0
BJI	61.32	41	eP	08 44.50	-0.5
	1.5s		30.00nm		5.2mb
ASPA	66.82	114	eP	09 21.00	-0.4
	1.3s		11.90nm		4.9mb
WB5	66.83	110	eP	09 20.70	-0.8
CLL	71.25	327	eP	09 47.00	-1.2
QIS	71.79	111	eP	09 51.20	-0.8
HFS	75.57	335	eP	10 12.00	-1.2
	0.7s		2.10nm		4.3mb
TUL	143.83	337	ePKP	18 08.70	4.2X
	1.2s		5.90nm		
MEO	145.85	340	iPKPc	18 08.70	0.7
CLC	146.77	8	ePKP	18 11.00	1.5
GSC	147.38	7	ePKP	18 14.00	3.5X
ALQ	147.64	351	ePKP	18 12.00	0.9
Z	18s		0.34um		5.2Msz
SBB	147.84	9	ePKP	18 14.00	2.7X
	S.D. = 1.2		on 28 of 33 obs.		

OCT 07, 1990 02h 09m 43.98± 0.42s
40.723 N ± 5.2km 21.642 E ± 3.3km
DEPTH = 5.0km (geophysicist)
GREECE (364)
MD 3.1 (ATH). ML 2.0 (THE).

FNA	0.21	287	iPc	09 47.29	-1.0
			eS	09 49.72	
KZN	0.43	167	ePg	09 51.00	-1.6
GRG	0.62	68	ePd	09 55.84	-0.6
			eS	10 05.28	
KBN	0.64	261	ePn	09 55.30	-1.4
OHR	0.75	302	iPgc	09 57.40	-1.5
			iSg	10 09.10	
			Lg	10 11.90	
LIT	0.90	134	ePd	09 59.84	-1.8
			eS	10 16.16	
THE	1.01	95	ePc	10 03.44	-0.1
			iS	10 19.60	
KNT	1.05	65	ePd	10 03.76	-0.5
			eS	10 21.80	
BERA	1.29	270	ePn	10 09.70	1.4
SOH	1.30	85	ePc	10 08.64	0.0
			eS	10 28.64	
TPE	1.32	252	ePn	10 08.50	-0.3
PLG	1.42	104	ePb	10 10.00	-0.5
TIR	1.48	295	ePn	10 12.70	1.4
SRN	1.51	237	ePn	10 13.30	1.6
IGT	1.56	221	iPd	10 15.20	2.8X
			iS	10 25.81	
KKB	1.58	43	iPd	10 13.00	0.3
			iS	10 36.00	
KEK	1.73	235	ePn	10 18.00	3.0X
AGG	1.78	162	ePc	10 16.92	1.3

07d 02h

			eS	10	46.48	
MMB	1.80	61	iPc	10	16.00	0.1
			eS	10	41.00	
EVR	1.81	176	ePn	10	17.00	0.9
OUR	1.82	102	ePc	10	17.56	1.3
			eS	10	46.32	
BCI	2.02	325	ePn	10	22.00	2.9X
SDA	2.07	309	ePn	10	25.30	5.6X
VTS	2.21	32	eP	10	22.00	0.1
RZN	2.51	66	eP	10	27.00	0.7
			eS	11	15.00	
PGB	2.63	45	eP	10	36.00	8.1X
			iS	11	17.00	
KDZ	3.00	71	iP	10	27.00	-6.0X

S.D. = 1.1 on 21 of 27 obs.

• OCT 07, 1990 02h 22m 09.24± 1.47s
44.565 N ±10.9km 113.825 W ±10.0km
DEPTH = 10.0km (geophysicist)
EASTERN IDAHO (457)
ML 3.4 (BUT).

MCMT	0.74	69	iPd	22	25.00	1.0
LTMT	1.23	91	ePd	22	32.60	0.3
BGMT	1.43	62	ePn	22	35.90	0.4
HBMT	1.50	35	iPnd	22	36.00	-0.5
LRM	1.59	37	iPnd	22	37.50	-0.2
BUT	1.70	31	ePg	22	42.60	3.3X
			iSn	23	05.50	
			iSg	23	09.10	
MEMT	2.27	62	ePn	22	47.70	0.1
SXM	2.43	48	ePn	22	49.70	-0.1
HRY	2.56	32	ePn	22	50.60	-1.0
BW06	3.58	118	eP	23	05.50	-0.6
NEW	4.34	330	eP	23	17.50	0.7

S.D. = 0.7 on 10 of 11 obs.

OCT 07, 1990 02h 53m 28.13± 1.00s
18.850 N ± 8.1km 62.598 W ± 7.1km
DEPTH = 43.6 ± 9.6 km
4.5mb (7 obs.) 4.4Msz (2 obs.)
LEEWARD ISLANDS (92)

NEV	1.70	179	eP	53	57.70	1.8
			S	54	25.00	
BPA	1.93	158	eP	54	00.00	0.9
			S	54	30.00	
SEG	2.65	157	eP	54	08.90	-0.4
DOG	2.95	161	eP	54	13.52	-0.2
LPR	3.15	261	P	54	15.50	-1.0
CSB	3.42	261	P	54	19.80	-0.6
SJG	3.45	258	iP	54	20.80	0.0
BBL	3.48	162	eP	54	20.80	-0.4
PORP	3.91	259	P	54	27.00	-0.3
MGP	4.34	260	P	54	33.40	0.0
SLB	5.21	163	eP	54	46.53	0.8
SVV	5.66	166	eP	54	51.08	-0.9
SVB	5.69	167	eP	54	52.43	-0.1
UPA	19.13	241	eP-	57	52.00	1.4
HBF	21.23	315	P	58	20.00	7.5X
SGS	21.47	315	P	58	23.50	8.5X
LHS	22.46	317	P	58	37.00	12.2X
JSC	22.63	316	P	58	38.00	11.6X
TKL	25.11	316	P	59	13.50	23.1X
TUL	33.81	307	eP	00	08.50	0.2
	1.0s		7.00nm			4.5mb
Z	18s		0.48um			4.3Msz
			LR	11	34.00	
SIO	34.14	306	e(P)	00	10.90	-0.3
SIV	34.65	177	P	00	14.00	-1.7
ZOBO	35.32	189	P	00	21.00	-1.0
Z	20s		0.91um			4.5Msz
			LR	08	28.00	
LPB	35.57	189	P	00	24.00	0.0
Z	16s		2.02um			5.0MszX
			LR	08	18.00	
CNCB	35.83	189	P	00	26.70	0.4
ALQ	41.92	302	ePc	01	17.00	0.5
	1.0s		5.50nm			4.2mb
ANMO	41.92	302	P	01	17.50	1.0
	0.7s		3.21nm			4.2mb
PPD	42.10	164	eP	01	21.80	4.0X
			e	01	31.30	
BW06	46.11	312	P	01	50.00	-0.2
	1.0s		7.29nm			4.6mb
DAU	46.76	308	P	01	56.00	0.5
DUG	47.88	307	P	02	04.50	0.4
LRM	48.96	315	eP	02	13.60	1.1
SES	49.55	321	eP	02	17.00	0.3
NEW	52.68	317	P	02	40.00	-0.5
	0.8s		9.38nm			4.8mb
LON	55.49	314	P	02	58.00	-3.1X
YKA	56.28	334	eP	03	04.30	-2.1
	0.9s		5.70nm			4.6mb
MBC	64.15	347	eP	04	01.00	1.0
INK	65.59	337	eP	04	09.00	-0.3
BCAO	80.20	89	iPd	05	36.10	-0.1
	0.5s		3.00nm			4.5mb

S.D. = 0.9 on 32 of 39 obs.

& OCT 07, 1990 02h 57m 44.22s
59.870 N 153.322 W
DEPTH = 124.5km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.22	168	iP	58	01.05	0.9
			eS	58	13.93	
PDB	0.45	260	iP	58	01.61	-1.0
			eS	58	15.31	
AUH	0.51	187	eP	58	02.27	-0.8
AUE	0.51	183	iP	58	02.12	-0.8
			iS	58	16.04	
AUI	0.54	186	iP	58	02.24	-0.9
RSO	0.66	25	eP	58	03.46	-0.8
			iS	58	18.70	
RDT	0.84	33	iP	58	04.69	-0.9
			iS	58	20.41	
MCNL	0.86	217	eP	58	04.39	-1.2
			eS	58	20.37	
HOM	0.88	103	iP	58	05.09	-0.6
			eS	58	21.51	
XLV	0.91	116	eP	58	05.00	-1.1
CDD	0.96	190	iP	58	05.30	-1.3
			eS	58	21.43	
NNL	1.03	80	iP	58	07.41	0.2
			eS	58	26.18	
CNPM	1.11	107	iP	58	06.89	-1.2
			eS	58	24.01	
CKL	1.42	20	iP	58	10.79	-0.7
			iS	58	31.79	
SPU	1.46	25	iP	58	10.95	-0.9
			iS	58	32.41	
BGL	1.47	18	iP	58	11.59	-0.5
CRP	1.52	22	iP	58	12.07	-0.6
CGLM	1.58	24	iP	58	12.58	-0.8
NCG	1.64	20	eP	58	13.49	-0.6
SLKM	1.68	66	eP	58	12.89	-1.5
SEW	1.96	81	eP	58	16.30	-1.5
SUA	2.04	37	eP	58	17.85	-1.2
SKT	2.29	22	eP	58	20.73	-1.3
PMS	2.31	52	eP	58	20.84	-1.5
PWA	2.46	42	eP	58	22.36	-1.8
PLRM	2.69	48	eP	58	25.06	-2.1
			eS	58	56.74	
PMR	2.69	48	eP	58	25.40	-1.7
KNIM	2.84	78	eP	58	26.48	-2.7
MTU	2.86	85	eP	58	27.91	-1.5
GHO	2.88	47	eP	58	27.06	-2.7
			iS	59	00.94	
CUT	2.94	29	eP	58	28.60	-1.9
SML	3.12	49	eP	58	30.10	-2.9
GLI	3.25	69	eP	58	31.83	-2.9
			iS	59	08.81	
VZW	3.56	67	eP	58	35.91	-2.9
VLZ	3.68	67	eP	58	37.48	-2.9
KLU	3.99	63	iP	58	41.65	-3.0
TOA	4.14	54	eP	58	44.60	-2.1
GLB	4.94	67	eP	58	54.55	-2.9
WRH	5.23	26	eP	58	58.28	-3.0
CCB	5.44	26	iP	59	00.89	-3.3
HDA	5.44	31	eP	59	01.49	-2.7
BALM	5.56	73	eP	59	03.66	-2.3
GLM	5.83	26	eP	59	06.56	-3.0

43 obs. associated

OCT 07, 1990 03h 58m 27.06± 1.59s
43.635 N ±12.1km 7.288 E ±11.8km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
ML 2.1 (LDG).

SBF	0.25	25	Pg	58	32.80	0.4
			Sg	58	36.40	
AURF	0.25	6	Pg	58	32.49	0.0
			Sg	58	35.98	
CALN	0.31	292	Pg	58	33.76	0.1
			Sg	58	37.72	
AUTN	0.37	16	Pg	58	34.44	-0.4
			Sg	58	39.62	
FRF	0.47	261	Pg	58	36.70	0.1
			Sg	58	43.10	
LMR	0.64	242	Pg	58	40.00	0.1
			Sg	58	49.20	
LRG	0.70	255	Pg	58	40.60	-0.2
			Sg	58	49.60	

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

• OCT 07, 1990 04h 45m 54.68± 0.41s
28.848 S ±12.9km 177.000 W ± 9.4km
DEPTH = 60.0km (geophysicist)
5.2mb (11 obs.)
KERMADEC ISLANDS REGION (177)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 24C
Centroid Location:
Origin Time 04:45:56.4 0.9
Lat 28.97S 0.10 Lon 176.58W 0.07
Dep 15.0 FIX Half-duration 1.8
Moment Tensor: Scale 10**16 Nm
Mrr= 8.47 0.47 Mtt= 0.21 0.60
Mff=-8.67 0.62 Mrt= 4.04 1.50
Mrf= 9.54 1.88 Mtf=-1.87 0.51
Principal Axes:
T Val= 13.39 Plg=64 Azm=301
N 0.36 6 198
P -13.75 25 105
Best Double Couple:Mo=1.4*10**17
NP1:Strike=182 Dip=21 Slip= 72
NP2: 20 70 97

RAO	0.90	243	P	45	12.00	-59.5X
DZM	16.40	291	iPc	49	49.00	6.6X
BRS	26.67	266	iPd	51	33.00	3.2X
CNB	29.13	249	eP	51	53.00	0.9
CTA	34.45	276	iPc	52	39.90	1.1
	0.9s		42.02nm			5.4mb
			iS	58	19.00	
QIS	40.10	272	eP	53	27.30	1.1
			e	55	10.80	
ASPA	44.09	265	eP	53	57.70	-1.1
	0.9s		22.50nm			4.9mb
Z	18s		4.25um			5.4Msz
WB5	44.94	270	eP	54	05.00	-0.6
			e	55	47.60	
SBA	49.65	184	eP	54	42.80	1.2
GUA	55.95	314	eP	55	29.00	-0.2
	0.7s		43.84nm			5.6mb
GUMO	56.02	314	eP	55	28.00	-1.7
MBL	57.19	262	eP	55	36.00	-2.1
	0.7s		20.00nm			5.3mb
MRWA	57.81	252	eP	55	40.40	-1.9
	0.8s		11.00nm			5.0mb
NANU	60.41	259	eP	55	58.90	-1.4
	0.5s		11.00nm			5.2mb
SPA	61.31	180	eP	56	06.30	0.1
	1.0s		20.50nm			5.2mb
MAW	74.06	200	e(P)	57	25.00	-0.5
MAT	77.48	324	eP	57	46.00	0.8
	1.7s		34.62nm			5.1mb
			eS	07	46.00	
SYP	82.91	44	eP	58	19.00	4.6X
BAR	83.78	47	eP	58	03.00	-15.7X
PLM	84.09	47	eP	58	20.00	-0.5
RVR	84.18	46	eP	58	23.00	2.3
SBB	84.35	45	eP	58	20.00	-1.6
ISA	84.58	44	eP	58	23.00	0.2
TPC	85.09	47	eP	58	25.00	-0.3
GLA	85.22	48	eP	58	26.00	0.1
CLC	85.22	45	eP	58	25.00	-0.9
GSC	85.38	45	eP	58	27.00	0.2
TNP	86.93	43	P	58	34.00	-0.5
	1.0s		8.13nm			4.9mb
CN2	89.44	322	eP	58	46.60	0.6
RMW	90.73	34	P	58	51.00	-1.1
GYA	91.54	299	P	58	58.60	2.3
ALQ	91.93	51	eP	58	56.80	-1.2
	1.8s		34.09nm			5.5mb
Z	18s		0.60um			5.1Msz
ANMO	91.93	51	P	58	57.00	-1.0

BJI	92.44	315	eP	59	01.50	1.6
	2.0s		80.00nm		5.8mb	
Z	16s		0.60um		5.1MszX	
KMI	93.91	296	Pc	59	11.00	3.7X
			pP	59	28.50	61kmX
SUF	142.91	343	ePKP	05	24.00	1.6
TAB	142.98	296	ePKP	05	20.00	-3.5X
NUR	145.14	341	ePKP	05	25.00	-1.2
NB2	147.34	353	PKP	05	30.80	0.9
	1.2s		17.40nm			
UPP	147.43	346	iPKP	05	31.60	1.6
HFS	147.89	350	ePKP	05	32.00	1.3
	0.6s		5.30nm			
BCAO	151.59	214	iPKPc	05	37.50	-0.4
	0.6s		8.00nm			
KAS	152.05	305	ePKP	05	46.50	8.7X
MBH	152.23	280	ePKP	05	45.00	6.7X
NOH	152.24	282	ePKP	05	46.00	7.6X
KHC	158.18	341	ePKP	05	51.40	5.8X
			e	06	23.40	
S.D. = 1.2		on	35 of	46	obs.	

---

* OCT 07, 1990 05h 29m 33.57± 2.13s
29.217 S ±16.0km 176.713 W ±12.5km
DEPTH = 53.3 ± 18.2 km
5.0mb (6 obs.) 5.0Msz (1 obs.)
KERMADEC ISLANDS REGION (177)

RAO	1.05	268	P	29	53.00	0.7
MRW	13.88	208	eP	32	48.00	-1.0
			eS	35	10.00	
DZM	16.76	291	iPd	33	30.00	3.7X
BRS	26.89	266	iP	35	12.50	1.0
CTA	34.74	277	iPd	36	21.20	0.4
	1.1s		41.77nm		5.3mb	
ASPA	44.31	265	iPc	37	38.80	-1.4
	0.6s		16.90nm		5.0mb	
Z	18s		1.76um		5.0Msz	
			iPcP	39	36.70	
WB5	45.19	270	eP	37	46.00	-1.2
MBL	57.39	262	eP	39	17.00	-2.1
	0.3s		2.00nm		4.7mb	
MAW	73.80	200	iP	41	06.00	2.3
MAT	77.92	324	(P)	41	26.00	-1.4
	1.6s		33.33nm		5.1mb	
PLM	84.16	47	eP	42	02.00	1.5
SBB	84.43	45	eP	42	02.00	0.3
ISA	84.67	44	eP	42	03.00	0.1
TPC	85.16	47	eP	42	19.00	13.6X
CLC	85.31	44	eP	42	06.00	-0.1
GSC	85.46	45	eP	42	20.00	13.1X
TNP	87.02	43	P	42	14.00	-0.6
	1.0s		8.33nm		4.9mb	
MDJ	88.30	325	eP	42	24.00	3.7X
CN2	89.89	322	eP	42	27.40	-0.4
RMW	90.90	34	P	42	31.30	-1.2
ALQ	91.96	51	eP	42	37.00	-0.9
	1.5s		13.89nm		5.2mb	
ANMO	91.97	51	P	42	37.00	-0.9
BJI	92.87	315	eP	42	42.50	0.9
TIY	93.92	311	eP	42	47.00	0.3
KMI	94.29	296	eP	42	51.00	2.2
XAN	94.30	307	eP	42	49.20	0.8
SUF	143.34	343	ePKP	49	05.00	2.1X
NUR	145.57	341	ePKP	49	06.00	-0.7
	0.9s		30.40nm			
			i	49	16.80	
NB2	147.74	353	PKP	49	12.40	2.1X
	1.4s		24.10nm			
UPP	147.85	346	ePKP	49	13.00	2.6X
SLL	148.02	351	ePKP	49	12.30	1.6
	0.4s		1.40nm			
BCAO	151.43	213	iPKPd	49	25.00	7.7X
	0.6s		7.00nm			
JVI	152.31	284	ePKP	49	26.00	7.9X
PRNI	152.50	280	ePKP	49	27.00	8.5X
BRG	156.93	343	ePKP	49	37.50	13.7X
	1.5s		13.00nm			
S.D. = 1.3		on	24 of	35	obs.	

% OCT 07, 1990 06h 45m 49.93± 0.55s
43.405 N ± 5.1km 12.434 E ± 5.7km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.37	153	P	45	57.40	-0.2
			eSg	46	03.80	
ARV	0.38	76	P	45	57.40	-0.4
			eSg	46	03.30	
CRE	0.42	303	P	45	58.30	-0.2
			eSg	46	05.30	
RSM	0.52	1	P	46	01.20	0.7
			eSg	46	07.60	
SFI	0.67	321	P	46	02.70	-0.5
			eSg	46	12.50	
PGD	0.70	313	P	46	03.80	-0.1
			eSg	46	14.30	
MNS	1.04	170	P	46	10.00	0.5
			eSn	46	25.00	
BDI	1.48	297	P	46	16.80	0.1
			eSn	46	36.00	
S.D. = 0.5		on	8 of	8	obs.	

OCT 07, 1990 07h 15m 44.56± 1.20s
18.922 N ± 4.7km 62.475 W ± 4.1km
DEPTH = 31.5 ± 9.5 km
4.7mb (22 obs.) 4.9Msz (6 obs.)
LEEWARD ISLANDS (92)

NEV	1.78	183	eP	16	15.70	2.1
			S	16	40.50	
BPA	1.96	162	eP	16	17.00	0.8
			S	16	43.40	
DOG	2.99	164	eP	16	32.01	1.1
LPR	3.28	260	P	16	34.00	-1.0
BBL	3.51	164	eP	16	39.40	1.0
CSB	3.55	260	P	16	38.00	-0.9
SJG	3.58	258	iP	16	39.00	-0.3
PORP	4.04	258	P	16	45.00	-0.9
MGP	4.47	259	P	16	51.00	-1.0
SLB	5.25	165	eP	17	03.22	0.2
SVV	5.70	168	eP	17	09.22	-0.1
SVB	5.74	168	eP	17	10.17	0.3
TRN	8.29	173	eP	17	47.75	2.1
CUM	8.57	191	iP	17	45.50	-3.9X
LLAV	9.38	207	eP	17	59.40	-1.4
OLLA	9.79	206	eP	18	05.30	-1.2
GUAC	9.84	209	eP	18	05.10	-2.1
			eS	19	53.10	
PLAV	10.23	209	eP	18	12.00	-0.6
TOV	11.52	219	eP	18	33.20	3.2X
UPA	19.26	241	eP+	20	08.50	-1.0
SGS	21.50	315	P	20	30.00	-2.9
LHS	22.49	317	P	20	43.00	0.3
CBN	23.19	329	eP	20	51.00	1.6
BLA	24.06	323	P	20	59.00	0.9
TKL	25.13	316	P	21	06.00	-2.4
TUL	33.86	307	eP	22	26.50	0.0
	1.2s		12.70nm		4.7mb	
SIV	34.72	178	P	22	33.00	-1.0
SOB1	35.13	141	(P)	22	50.00	12.4X
ZOBO	35.41	189	P	22	39.00	-1.5
Z	18s		2.87um		5.1Msz	
			S	28	22.00	
			LR	34	32.00	
CAI	35.54	133	eP	22	44.30	3.3X
MEO	35.66	304	iPd	22	41.80	-0.1
LPB	35.66	189	P	22	42.00	-0.5
Z	16s		3.70um		5.2MszX	
			LR	34	36.00	
CNCB	35.92	189	P	22	44.00	-0.8
ALQ	41.98	301	ePc	23	35.20	0.5
	1.0s		9.75nm		4.5mb	
Z	18s		0.86um		4.7Msz	
			e	23	45.00	
ANMO	41.98	301	P	23	35.70	1.0
	0.9s		6.83nm		4.4mb	
PPD	42.14	164	eP	23	37.60	1.7
			e	23	49.30	
GOL	42.26	309	P	23	37.00	0.0
	1.0s		5.00nm		4.2mb	
BW06	46.15	312	P	24	08.00	-0.3
	1.0s		20.83nm		5.0mb	
DAU	46.81	308	P	24	14.50	0.9
DUG	47.93	307	P	24	23.00	0.7
GLA	48.66	298	eP	24	29.00	1.2
LRM	48.99	315	ePc	24	31.40	0.9
TPC	49.74	299	eP	24	38.00	1.8
BAR	50.19	297	eP	24	41.00	1.4
PLM	50.37	298	eP	24	43.00	1.8
GSC	50.44	300	eP	24	43.00	1.5
RVR	50.83	299	eP	24	46.00	1.6
TNP	51.01	304	P	24	46.00	0.0
	1.0s		5.00nm		4.4mb	
SBB	51.24	300	eP	24	48.00	0.4
ISA	51.82	301	eP	24	53.00	1.0
EDM	51.92	324	eP	24	52.50	0.0
NEW	52.71	317	P	24	58.00	-0.5
	1.0s		25.00nm		5.1mb	
PNT	54.56	318	eP	25	12.00	0.0
YKA	56.27	334	eP	25	23.50	-0.6
	0.8s		14.00nm		5.0mb	
EPF	57.57	51	eP	25	33.60	-0.2
	0.9s		14.75nm		5.0mb	
LFF	58.00	48	eP	25	36.20	-0.5
LPO	58.30	49	eP	25	37.90	-0.9
	0.7s		7.70nm		4.9mb	
RJF	58.58	48	eP	25	39.80	-1.0
Z	19s		0.90um		4.9Msz	
LSF	58.67	47	eP	25	40.20	-1.2
CAF	58.94	48	eP	25	42.50	-0.8
TCF	59.14	47	eP	25	43.80	-0.9
	0.7s		3.30nm		4.6mb	
AVF	59.96	46	eP	25	49.10	-1.2
	0.8s		4.05nm		4.6mb	
SSF	60.09	46	eP	25	49.90	-1.2
SMF	60.29	47	eP	25	51.30	-1.2
	0.9s		7.35nm		4.8mb	
LOR	60.34	46	eP	25	51.40	-1.5
	0.8s		4.05nm		4.6mb	
Z	19s		0.85um		4.9Msz	
LBF	60.41	46	eP	25	51.80	-1.6
HAU	62.06	45	eP	26	03.40	-1.2
Z	18s		0.77um		4.9Msz	
LPL	62.26	48	eP	26	05.70	-0.5
	0.7s		3.30nm		4.6mb	
LPG	62.27	48	eP	26	06.00	-0.3
	0.7s		3.85nm		4.6mb	
BSF	62.36	45	eP	26	05.00	-1.6
CDF	62.70	45	eP	26	07.40	-1.5
MBC	64.10	347	eP	26	18.50	1.0
	1.0s		6.00nm		4.7mb	
INK	65.57	337	eP	26	27.00	-0.1
NB2	65.73	31	P	26	29.30	1.0
	1.2s		12.90nm		4.9mb	
CLL	66.43	42	eP	26	45.00	12.2X
KHC	66.86	44	eP	26	38.10	2.3
BRG	67.03	42	eP	26	36.70	0.0
	1.0s		10.00nm		4.9mb	
			i	26	49.60	
PRU	67.45	43	ePd	26	40.20	0.8
Z	18s		1.10um		5.1Msz	
E	18s		0.80um			
			e	26	52.50	
ZST	69.26	45	eP	26	40.50	-10.1X
			e	27	02.30	
KRA	70.91	43	eP	27	01.80	1.1
			e	27	13.50	
FBA	71.06	333	eP	27	01.70	0.4
	0.9s		8.33nm		4.8mb	
PMR	71.97	330	P	27	07.00	0.3
KEV	72.23	21	eP	27	04.00	-4.2X
NUR	72.33	31	eP	27	17.00	8.1X
			e	27	22.00	
SOD	72.37	24	iP	27	10.20	1.2
SUF	72.75	29	eP	27	13.00	1.7
OHR	72.85	52	eP	27	13.00	0.5
IMA	73.37	335	iPd	27	15.80	0.7
	0.9s		7.81nm		4.7mb	
SVW	75.14	330	iPd	27	25.00	-0.3
BCAO	80.08	89	iPd	27	54.50	1.0
	0.6s		7.00nm		4.8mb	
S.D. = 1.2		on	82 of	90	obs.	

? OCT 07, 1990 07h 49m 31.47± 7.31s
17.085 N ±29.8km 60.520 W ±51.8km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.7 (FDF).

SFG	1.05	218	eP	49	51.60	0.3
BPA	1.28	268	eP	49	54.86	-0.4
DOG	1.48	225	eP	49	58.12	-0.1
			S	50	14.70	
BBL	1.80	211	eP	50	02.60	-0.3
NEV	1.96	272	eP	50	05.51	0.4
			S	50	25.00	
S.D. = 0.5		on	5 of	5	obs.	

% OCT 07, 1990 08h 21m 24.52± 0.90s
39.215 N ± 7.2km 27.790 E ± 8.4km

07d 08h

DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

DST	0.76	59	ePg	21	39.40	0.0
			eSg	21	51.00	
IZM	0.91	207	ePn	21	42.00	0.0
BNT	1.14	5	ePn	21	46.00	0.1
EZN	1.29	299	iPn	21	48.50	0.1
KGT	1.29	343	iPn	21	48.20	-0.2

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

• OCT 07, 1990 08h 43m 04.25± 2.64s
32.302 S ±15.4km 69.733 W ±15.4km
DEPTH = 155.7 ± 29.9 km
MENDOZA PROVINCE, ARGENTINA (139)

RTBS	0.68	21	e(P)	43	28.00	0.6
JACH	0.82	242	iPd	43	28.00	-0.6
			iS	43	44.50	
RTCV	1.11	67	iPd	43	30.10	-0.7
FCH	1.13	204	iPc	43	31.60	0.3
			iS	43	50.00	
RTCB	1.14	45	iP	43	31.00	-0.1
PEL	1.16	223	iP	43	31.00	-0.3
			iS	43	49.00	
ZON	1.17	50	iPc	43	32.00	0.6
			eS	43	49.00	
SAN	1.39	214	iPc	43	33.50	0.0
			iS	43	53.80	
RTLL	1.45	48	iPd	43	33.90	-0.2
PCH	1.47	206	iPc	43	34.50	0.1
			iS	43	56.50	
TACH	1.69	217	iPc	43	36.50	-0.1
			iS	44	00.50	
CHCH	1.80	205	iPc	43	38.40	0.5
			iS	44	02.80	
LCCH	1.94	232	iPd	43	39.70	0.3
LNV	2.17	220	iPc	43	41.50	-0.5
			iS	44	08.40	

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

% OCT 07, 1990 08h 43m 28.61± 0.88s
39.081 N ± 7.3km 27.640 E ± 9.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

IZM	0.74	204	ePg	43	43.20	0.0
			eSg	43	55.00	
DST	0.93	55	ePn	43	46.40	0.0
EZN	1.26	307	ePn	43	52.00	0.0
BNT	1.29	10	ePn	43	52.40	-0.1
KGT	1.39	349	iPn	43	54.20	0.2

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

& OCT 07, 1990 08h 47m 30.50s
46.320 N 75.190 W
DEPTH = 17.5km
SOUTHERN QUEBEC (447)
<OTT-P>. mbLg 3.9 (OTT). Felt in the Loc-du-Cerf area.

TRO	0.45	102	Pd	47	39.63	-0.1
			S	47	46.01	
GRO	0.54	302	Pc	47	40.70	-0.5
			S	47	47.60	
OTT	1.00	202	Pd	47	48.67	-0.2
			S	48	01.49	
WBO	1.32	183	Pd	47	54.28	0.2
			S	48	11.63	
MNT	1.37	126	Pd	47	54.89	0.2
			S	48	13.31	
CKO	1.60	259	Pc	47	58.25	0.1
			S	48	19.29	
HBVT	2.47	142	eP	48	11.00	0.5
BNH	3.26	121	eP	48	22.00	0.1
MIM	4.43	102	eP	48	38.00	-0.4
WVLY	4.55	213	eP	48	37.00	-3.1
CBM	4.91	80	eP	48	43.50	-1.7
TBR	5.22	172	eP	48	48.50	-1.2
ELF	5.37	237	P	48	49.60	-2.1
LDN	5.39	235	P	48	49.60	-2.4
PNJ	5.46	172	e(Pn)	48	56.10	3.1
GMTN	5.48	172	iP	48	52.20	-1.2
DLA	5.72	235	P	48	54.00	-2.7
BLA	9.90	205	eP	49	53.00	-2.0
SCH	10.04	29	P	49	51.50	-5.3
TKL	12.46	214	eP	50	27.00	-2.8
LHS	12.57	202	e(P)	50	31.50	0.2

21 obs. associated

? OCT 07, 1990 08h 57m 51.00± 5.54s
61.650 N ±15.5km 2.901 E ±46.1km
DEPTH = 10.0km (geophysicist)
NORWEGIAN SEA (642)
MD 2.6 (BER).

FOO	1.03	92	eP	58	05.32	-5.0X
			eS	58	18.63	
SUE	1.08	123	iP	58	11.99	0.8
			iS	58	26.00	
ASK	1.62	135	iP	58	19.90	0.3
			eS	58	39.52	
HYA	1.65	106	iP	58	20.50	0.4
			eS	58	42.30	
MOL	2.37	65	iP	58	31.15	0.6
ODD1	2.53	132	iP	58	32.60	-0.2
			iS	59	02.51	
BLS2	3.09	138	iP	58	40.51	-0.3
			iS	59	14.81	
NRA0	4.28	99	Pn	58	56.00	-1.6
			Lg	00	11.00	

S.D. = 1.0 on 7 of 8 obs.

? OCT 07, 1990 09h 02m 25.94± 1.06s
7.648 N ±14.3km 126.991 E ±23.9km
DEPTH = 33.0km (normal)
4.7mb (5 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

MTN	20.77	169	eP	07	07.50	0.7
WB5	28.30	165	eP	08	18.10	-0.7
ASPA	31.85	168	eP	08	50.60	0.3
	0.3s		4.90nm			4.9mb
WARB	33.63	181	eP	09	06.00	0.3
	0.3s		2.00nm			4.5mb
FORR	38.29	178	eP	09	45.00	-0.1
	0.4s		17.00nm			5.2mb
COOL	38.72	188	eP	09	48.30	-0.5
KLB	40.00	192	eP	09	59.00	-0.5
MUN	40.73	194	eP	10	05.20	-0.2
NWAO	41.40	192	iPd	10	11.40	0.5
GBA	49.00	281	P	11	12.00	0.2
	0.3s		0.80nm			4.2mb
SLL	94.72	333	eP	15	45.00	-0.1
	0.6s		2.20nm			4.8mb

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

• OCT 07, 1990 09h 12m 43.99± 1.07s
43.634 N ± 8.3km 19.528 E ±11.4km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.5 (TTG).

PLE	0.32	198	iPgd	12	49.80	-0.9
			iSg	12	56.30	
IVA	0.81	160	ePg	12	59.50	-0.2
			eSg	13	13.50	
NKY	0.91	205	ePg	12	59.50	-1.9
			eSg	13	13.60	
BRY	1.03	225	ePg	13	00.50	-3.0X
			eSg	13	15.00	
PVY	1.09	162	ePg	13	06.50	2.0
			eSg	13	25.00	
TTG	1.22	189	ePg	13	06.40	-0.3
			eSg	13	26.50	
BEO	1.36	29	ePn	13	08.20	-0.8
			eSg	13	30.20	
HCY	1.41	213	ePg	13	10.00	0.4
			eSg	13	32.20	
BDV	1.44	201	ePg	13	10.50	0.3
			eSg	13	33.50	
HVAR	2.29	260	ePn	13	23.80	1.4
			iSn	13	50.00	

S.D. = 1.4 on 9 of 10 obs.

? OCT 07, 1990 09h 22m 00.52± 2.28s
25.734 S ± 7.6km 71.863 W ±47.5km
DEPTH = 33.0km (normal)
OFF COAST OF NORTHERN CHILE (121)

RTLL	6.32	153	eP	23	32.50	-1.4
			eS	24	36.00	
RTCB	6.33	156	eP	23	33.80	-0.3
RTCV	6.77	155	e(P)	23	42.00	1.9
PEL	7.45	172	eP	23	59.00	9.2X
MDZ	7.59	160	eP	24	06.60	14.9X
LNV	8.20	177	eP	24	00.00	-0.2
CNCB	9.59	23	P	24	20.00	0.1
LPB	9.80	22	eP	24	40.00	17.3X
ZOBO	10.04	21	P	24	26.00	-0.1
SIV	13.98	48	P	25	09.00	-9.5X

S.D. = 1.4 on 6 of 10 obs.

& OCT 07, 1990 10h 08m 48.70s
37.508 N 118.878 W
DEPTH = 4.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.1 (BRK), 3.1 (PAS).

FRI	0.84	232	ePc	09	04.80	-0.6
			iS	09	15.20	
CMB	1.30	294	ePd	09	13.30	-0.2
			iS	09	29.70	
TNP	1.43	66	eP	09	16.10	0.4
PKEM	1.75	215	eP	09	21.50	1.5
ISA	1.87	170	iPc	09	23.70	1.9
LLA	1.88	242	ePd	09	23.00	1.1
			iS	09	47.00	
PRI	1.98	227	ePc	09	25.20	1.8
PHAM	2.07	217	eP	09	25.50	0.8
ARN	2.12	267	eP	09	26.50	1.1
SAO	2.18	251	iP	09	28.10	1.8
MHC	2.21	267	ePd	09	28.70	1.9
PRS	2.32	240	eP	09	29.70	1.5
BCH	2.51	203	eP	09	31.80	0.7
ABL	2.67	186	eP	09	34.50	1.1
BKS	2.69	279	eP	09	35.00	1.5
BRK	2.71	279	eP	09	34.90	1.1

16 obs. associated

& OCT 07, 1990 10h 09m 42.80s
37.510 N 118.990 W
DEPTH = 5.0km (geophysicist)
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.0 (BRK).

FRI	0.77	228	iPc	09	56.80	-1.5
			iS	10	07.20	
CMB	1.22	296	iPc	10	04.90	-1.2
			iS	10	21.30	
TNP	1.52	67	eP	10	08.20	-2.6
LLA	1.80	241	iPd	10	15.30	0.6
			iS	10	37.50	
PRI	1.92	225	iPc	10	17.80	1.3

5 obs. associated

% OCT 07, 1990 10h 13m 32.12± 0.92s
39.099 N ± 7.7km 27.592 E ±13.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.7 (ISK).

IZM	0.75	200	ePg	13	46.70	-0.1
DST	0.95	57	ePn	13	50.40	0.2
EDC	1.26	9	ePn	13	55.90	0.3
BNT	1.28	11	ePn	13	55.10	-0.8
KGT	1.37	351	iPn	13	57.60	0.4

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

% OCT 07, 1990 11h 05m 08.96± 0.48s
39.496 N ± 4.3km 3.787 W ± 5.7km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 3.1 (MDD).

TOL	0.43	332	iPgd	05	17.50	-0.3
			eSg	05	23.60	
GUD	1.18	346	iP	05	31.08	0.0
			eS	05	46.80	
EVIA	1.32	130	eP	05	33.64	0.3
			eS	05	51.00	
EBAN	1.33	180	eP	05	32.71	-0.8
			eS	05	50.00	
EPLA	1.86	289	eP	05	41.44	0.3
			eS	06	04.50	
ETOR	1.87	45	eP	05	41.59	0.2
			eS	06	05.20	
EHOR	2.03	215	eP	05	44.17	0.6
			eS	06	09.10	

```
ECHE    2.18  87 eP    05 45.94   0.1
                eS    06 11.90
AFC     2.25 175 eP    05 46.94   0.0
                eS    06 14.60
      S.D. = 0.5  on   9 of   9 obs.
-------------------------------------
   OCT  07, 1990  11h 32m 13.75± 0.27s
   56.167 S ± 7.1km   27.008 W ± 7.6km
   DEPTH =  99.8km  (  3 depth phases)
   5.4mb ( 11 obs.)
 SOUTH SANDWICH ISLANDS REGION    (153)
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 14S, 32C
      Centroid Location:
      Origin Time        11:32:17.6 0.4
      Lat 56.26S 0.05 Lon  26.47W 0.10
      Dep  78.5 4.7 Half-duration  1.7
      Moment Tensor;   Scale 10**16 Nm
        Mrr=-2.93 0.44  Mtt= 8.52 0.68
        Mff=-5.59 0.61  Mrt=-5.51 0.43
        Mrf= 5.72 0.40  Mtf= 3.82 0.68
       Principal Axes:
        T  Val= 10.88  Plg=19  Azm=174
        N       1.26      45      284
        P     -12.14      39       67
      Best Double Couple:Mo=1.2*10**17
       NP1:Strike=218 Dip=47 Slip=-164
       NP2:       117    78      -44

SPA    34.01 180 iPc   38 48.90  -0.7
       0.8s    40.83nm        5.3mb
                i     39 11.40   98km
BMA    35.75 332 eP    39 06.10   1.6
                e     39 11.30  18kmX
VAO    36.24 328 eP    39 10.70   2.0
JFO    36.46 334 eP    39 11.90   1.3
CHCH   37.14 288 ePc   39 13.00  -3.2X
PCH    37.31 289 iPc   39 17.50  -0.1
LNV    37.53 287 eP    39 17.00  -2.3
RTCV   37.65 293 e(P)  39 20.00  -0.4
PEL    37.77 289 ePd   39 20.50  -0.9
RTLL   38.04 293 ePd   39 21.90  -1.8
RTCB   38.08 293 ePc   39 22.60  -1.5
PPD    38.54 322 iPc   39 28.90   1.0
                i     39 31.60   9kmX
                e     39 35.00
                e     39 54.60
MAW    40.00 143 iPc   39 39.80   0.4
       0.9s    27.00nm        5.1mb
BAO    43.51 330 iPc   40 10.20   1.3
SIV    47.73 313 iPc   40 41.50  -0.7
SOB1   48.10 341 iP    40 45.20   0.2
                e     41 13.60 122kmX
                e     41 33.50
SLR    49.82  76 iPd   40 57.00  -1.3
CNCB   50.00 305 P     41 01.00   0.8
                e     48 06.00
CAI    50.16 347 eP    41 01.40   0.7
LPB    50.30 305 P     41 04.00   1.7
       1.0s   140.00nm        5.9mb
                e     48 09.00
ZOBO   50.54 305 iPc   41 04.30   0.0
     Z  20s     0.20um        4.1Msz
                LR    54 20.00
ARE    51.95 301 eP    41 15.00   0.3
BUL    54.51  72 iPd   41 32.10  -1.3
       1.1s   125.32nm        5.9mb
CIR    55.40  76 iPd   41 35.90  -3.7X
KRI    57.78  71 iPd   41 58.80   2.1
LIC    64.76  24 Pd    42 43.06  -0.3
       0.6s    22.00nm        5.3mb
     Z  20s     0.30um        4.5Msz
KIC    64.96  25 Pd    42 44.20  -0.5
       0.8s    23.50nm        5.2mb
TIC    65.17  24 Pd    42 45.60  -0.4
       0.7s    25.00nm        5.3mb
LKO    67.85  23 Pd    43 00.18  -2.9
       0.6s    22.00nm        5.3mb
BCAO   70.92  49 iPd   43 21.00  -0.8
       0.8s    42.00nm        5.3mb
                ic    43 47.30 103km
OLLA   73.74 319 eP    43 38.60   0.1
PLAV   73.86 318 iPd   43 39.50   0.1
GUAC   74.07 319 eP    43 40.80   0.3
LLAV   74.16 319 eP    43 41.00   0.1
FISA   75.83 317 iPc   43 50.20  -0.2

UPA    78.02 307 (P)   44 02.50   0.0
LTZ    80.08 194 P     44 13.90   0.5
THZ    80.99 195 eP    44 15.70  -2.5
NWAO   86.18 150 iPc   44 48.30   3.7X
BFD    86.60 172 eP    44 49.00   2.4
                i     45 15.20  99km
MUN    86.78 149 eP    44 47.00  -0.6
KLB    87.58 150 eP    44 52.00   0.5
BAL    88.21 149 eP    44 54.00  -0.5
ADE    88.41 168 iPc   44 56.00   0.5
CAN    88.81 177 eP    44 58.80   1.4
COOL   89.15 153 eP    45 00.00   1.0
BWA    89.68 176 eP    45 02.00   0.5
FORR   90.77 159 iPd   45 07.10   0.6
       0.4s    37.00nm        5.9mb
ASPA   98.85 162 eP    45 43.30  -0.3
       0.7s    10.60nm        5.6mb
WB5   102.63 162 ePdiff46 00.80   0.4
HFS   120.36  22 ePKP  50 50.60  -2.6X
       0.6s     1.60nm
NB2   120.68  20 PKP   50 53.00  -0.9
       0.7s     2.00nm
GKN   124.72  91 PKP   51 01.90  -1.0
       0.4s     5.00nm
PKI   124.82  92 PKP   51 03.20  -0.1
       0.6s     7.00nm
KKN   124.92  91 PKP   51 02.40  -0.9
       0.4s     6.00nm
SOD   129.49  24 ePKP  51 10.00  -0.6
PNT   130.05 301 ePKP  51 13.00   0.8
YKA   136.32 318 ePKP  51 23.00  -0.7
       0.4s     2.50nm
GTA   141.62  93 ePKP  51 35.20   0.9
MBC   144.13 336 ePKPc 51 35.90  -1.4
       0.5s     9.00nm
INK   145.96 320 ePKP  51 41.00   0.4
       0.7s    39.00nm
                pP    52 05.00
NJ2   146.19 121 PKPd  51 44.00   1.9
SSE   146.49 125 ePKP  51 49.20   6.6X
TIY   147.35 107 PKPc  51 46.20   2.3X
BTO   148.10 101 ePKP  51 48.00   2.9X
HHC   149.12 102 ePKP  51 50.80   4.1X
TOA   149.29 306 iPKPd 51 52.40   6.2X
PMR   150.49 305 iPKPc 51 53.80   5.9X
FBA   150.67 312 iPKPd 51 53.30   5.2X
BJI   151.04 108 ePKP  51 55.00   5.6X
IMA   153.26 313 iPKPd 52 00.00   8.0X
SVW   153.40 302 ePKP  52 00.00   7.8X
TTA   153.92 306 ePKP  52 01.70   8.8X
      S.D. = 1.2  on  58 of  73 obs.
-------------------------------------
%  OCT  07, 1990  13h 09m 13.36± 0.89s
   39.062 N ± 7.0km   27.664 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      MD 2.8 (ISK).

IZM    0.73 205 ePg    09 27.70  -0.1
                eSg   09 41.20
DST    0.92  54 iPn    09 31.30   0.3
EZN    1.29 307 ePn    09 37.50   0.3
EDC    1.29   7 ePn    09 36.50  -0.8
BNT    1.31   9 ePn    09 38.00   0.5
KGT    1.42 349 iPn    09 39.00  -0.1
      S.D. = 0.6  on   6 of   6 obs.
-------------------------------------
   OCT  07, 1990  13h 10m 35.29± 1.13s
   20.348 N ± 5.2km  146.737 E ± 6.5km
   DEPTH =  62.4 ± 10.2 km
   4.9mb ( 14 obs.)
 MARIANA ISLANDS REGION          (215)

GUMO   6.96 195 eP    12 16.80  -0.1
       0.6s    67.34nm        5.5mb
                eS    13 36.60
PJG    6.96 195 eP    12 17.00   0.1
GUA    6.99 195 eP    12 17.50   0.1
       0.7s    71.23nm        5.5mb
MAT   17.78 337 eP    14 15.00 -25.0X
                eS    14 53.00
GYA   37.17 287 eP    17 42.20   0.0
BTO   37.17 311 eP    17 41.40  -0.7
LZH   40.57 302 eP    18 10.50  -0.1
       1.5s    30.00nm        4.9mb
                pP    18 16.00  19kmX
                sP    18 20.50

WB5   41.77 198 eP    18 21.00   0.7
GTA   44.35 306 eP    18 40.80  -0.5
CHG   44.93 277 eP    18 46.20   0.1
       0.9s    12.60nm        4.7mb
CHTO  44.93 277 iPc   18 46.00   0.0
       1.0s    17.00nm        4.8mb
BDT   45.18 274 eP    18 44.00  -3.9X
       0.5s    29.90nm        5.4mb
ASPA  45.50 197 eP    18 49.80  -0.6
       0.6s     6.90nm        4.7mb
MBL   48.93 214 eP    19 17.00  -0.2
       0.4s     2.00nm        4.5mb
WAR8  50.20 204 eP    19 27.00   0.1
       0.5s     5.00nm        4.8mb
LSA   50.82 292 Pd    19 33.60   1.4
NANU  52.41 217 eP    19 44.10   0.4
WMO   53.99 310 P     19 55.50   0.2
GUN   55.57 290 P     20 07.80   0.4
       0.5s    25.00nm        5.5mb
PKI   56.03 290 P     20 10.50  -0.1
       0.8s    27.00nm        5.3mb
KKN   56.11 290 P     20 11.20   0.1
DMN   56.29 290 P     20 12.70   0.3
GKN   56.65 291 P     20 15.10   0.2
BAL   58.31 210 eP    20 25.50  -0.6
KLB   58.65 209 eP    20 28.00  -0.4
MUN   59.69 210 eP    20 36.00   0.4
HYB   64.17 280 ePc   21 06.50   0.5
GBA   66.22 276 Pd    21 17.90  -1.2
       0.7s     3.00nm        4.4mb
INK   67.48  23 eP    21 26.00  -0.3
POO   68.21 282 eP    21 15.50 -16.3X
MBC   71.32  15 eP    21 50.00   0.3
YKA   76.08  28 eP    22 17.10  -0.5
       0.6s     2.50nm        4.3mb
PNT   77.15  42 eP    22 24.00   0.1
ALO   91.48  52 eP    23 37.30   0.7
       1.0s     2.00nm        4.5mb
ZOBO  146.69  89 PKP   30 15.00   3.6X
LPB   146.77  89 (PKP) 30 16.00   4.7X
CNCB  146.94  90 PKP   30 16.60   4.8X
      S.D. = 0.5  on  31 of  37 obs.
-------------------------------------
%  OCT  07, 1990  14h 25m 53.30± 0.73s
   41.173 N ± 8.1km   28.489 E ± 4.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      MD 2.6 (ISK).

CTT    0.05 240 iPg    25 54.60  -0.9
ISK    0.44 104 iPg    26 01.90  -0.4
DMK    0.85 320 iPg    26 10.20   0.5
                eSg   26 22.20
YLV    0.90 132 iPn    26 10.50  -0.2
BNT    0.92 208 ePn    26 12.10   1.2
HRT    0.96 111 iPn    26 11.90   0.3
MFT    0.99 248 ePn    26 12.00  -0.2
KGT    1.15 232 iPn    26 14.50  -0.3
      S.D. = 0.8  on   8 of   8 obs.
-------------------------------------
   OCT  07, 1990  14h 47m 51.58± 0.31s
   27.043 N ± 6.1km   53.003 E ± 3.7km
   DEPTH =  33.0km  (normal)
   4.5mb ( 19 obs.)  4.4Msz (  1 obs.)
 SOUTHERN IRAN                   (353)

BRF    2.37 247 ePn    48 39.90  10.9X
BBU    2.42 251 iPn    48 41.90  12.2X
                eSn   49 15.90
DHR    2.67 255 eP     48 45.00  11.9X
RYD    6.21 250 eP     49 24.60   1.2
                iS    50 35.30
OASM   8.53 266 iP+    49 56.90   1.0
KER    8.88 327 eP     50 27.00  26.3X
AFIF   9.34 254 ePc    50 17.50  10.4X
KMSA  10.24 231 ePc    50 17.70  -1.7
MAIO  10.75  29 eP     50 25.00  -1.4
                eS    52 35.00
QUE   12.65  72 eP     50 51.70  -0.4
                eS    53 05.90
SRAT  12.76 227 eP     50 53.00  -0.7
KMTA  12.87 229 eP     50 54.70  -0.4
MKT   16.09 288 eP     51 41.50   4.5X
RMN   16.48 286 eP     51 46.00   4.1X
NDI   21.46  80 iPc    52 40.00   0.7
KSH   22.78  51 eP     52 54.00   1.5
EZN   25.55 307 eP     53 20.50   1.6
```

07d 14h

GBA	26.46	116	Pd	53	27.60	0.0
	0.8s		2.30nm			3.8mb
GKN	28.03	81	P	53	42.30	0.3
KKN	28.62	81	P	53	47.80	0.4
PKI	28.76	81	P	53	48.60	-0.2
GUN	29.14	81	P	53	52.20	0.0
WMQ	32.56	50	P	54	22.00	0.1
KRA	34.15	321	eP	54	36.50	1.0
KHC	37.48	317	eP	55	04.80	1.0
SQTA	38.36	313	iPd	55	11.60	0.3
	0.7s		14.50nm			4.9mb
			i	55	13.70	
SBF	40.19	307	eP	55	26.30	-0.2
	0.7s		7.70nm			4.6mb
GTA	40.64	60	iPd	55	31.40	1.1
	1.0s		30.00nm			5.0mb
	Z 20s		0.50um			4.4Msz
LPG	40.95	309	eP	55	32.10	-0.9
	0.7s		4.40nm			4.3mb
LPL	40.97	309	eP	55	32.10	-1.0
	0.6s		3.15nm			4.2mb
CDF	41.23	314	eP	55	34.20	-0.8
BSF	41.41	313	eP	55	35.60	-0.9
	0.7s		5.50nm			4.4mb
HAU	41.74	313	eP	55	37.80	-1.3
HFS	42.53	332	eP	55	45.40	0.0
	0.8s		12.10nm			4.7mb
CHTO	42.91	91	eP	55	47.10	-1.9
	1.3s		3.68nm			4.0mb
LBF	43.11	311	eP	55	49.20	-1.2
SMF	43.15	310	eP	55	49.70	-0.9
	0.7s		4.95nm			4.4mb
LOR	43.24	311	eP	55	50.80	-0.6
DOU	43.34	315	P	55	56.90	4.8X
	0.7s		8.90nm			4.6mb
SOD	43.43	346	eP	55	54.00	1.4
SSF	43.44	311	eP	55	52.40	-0.6
	0.9s		6.55nm			4.4mb
LZH	43.83	65	eP	55	56.50	0.0
	2.0s		40.00nm			4.9mb
MAF	43.95	310	eP	55	56.80	-0.4
NB2	44.05	332	P	55	57.80	0.0
	0.8s		7.10nm			4.5mb
CAF	44.15	308	eP	55	58.80	0.0
	0.7s		5.50nm			4.5mb
TCF	44.21	310	eP	55	58.80	-0.5
	0.7s		3.30nm			4.3mb
RJF	44.57	308	eP	56	02.40	0.2
	0.7s		5.50nm			4.5mb
KIC	58.47	260	P	57	48.30	1.2
TIC	58.59	261	P	57	49.20	1.3
LIC	58.79	260	P	57	50.50	1.2
	0.6s		4.50nm			4.8mb
CN2	59.56	53	eP	57	53.60	-0.6
MBC	76.85	358	eP	59	42.50	1.2
	1.0s		4.00nm			4.4mb
BMG	117.77	295	ePKP	06	42.00	4.9X
	S.D. = 1.0		on 44 of 53 obs.			

& OCT 07, 1990 14h 58m 44.36s
63.610 N 149.710 W
DEPTH = 125.1km
CENTRAL ALASKA (1)
<AGS-P>.

MCK	0.37	70	iP	59	02.38	-0.1
			eS	59	15.48	
RND	0.44	118	iP	59	02.48	-0.4
			eS	59	16.17	
HUR	0.64	177	eP	59	03.54	-0.5
			eS	59	18.34	
NEA	1.01	16	iP	59	06.47	-0.7
			eS	59	22.60	
WRH	1.12	39	iP	59	07.86	-0.5
			eS	59	25.08	
CUT	1.24	192	iP	59	08.85	-0.7
CCB	1.33	38	eP	59	09.98	-0.6
			eS	59	28.83	
HDA	1.45	55	eP	59	11.07	-0.9
FBA	1.54	32	iPd	59	12.40	-0.6
GLM	1.71	35	iP	59	14.47	-0.6
SKT	1.84	208	iP	59	15.14	-1.4
GHO	1.88	169	iP	59	16.58	-0.5
			eS	59	41.23	
SML	1.92	160	iP	59	16.71	-0.8
PWA	1.97	182	eP	59	17.71	-0.4
PLRM	2.04	172	eP	59	18.12	-0.9
			eS	59	46.42	
PMR	2.04	172	iPc	59	18.10	-0.9
SCM	2.09	147	eP	59	18.91	-0.9
SDG	2.19	118	eP	59	20.34	-0.6
SUA	2.21	193	eP	59	21.48	0.2
TOA	2.22	131	iPd	59	23.70	2.4
PMS	2.38	178	eP	59	22.40	-0.9
NCG	2.49	208	iP	59	23.49	-1.4
DOT	2.52	87	eP	59	24.39	-0.8
CGLM	2.55	206	eP	59	24.48	-1.1
BGL	2.66	209	eP	59	26.33	-0.8
SPU	2.67	205	eP	59	26.04	-1.1
CKL	2.71	208	eP	59	26.78	-1.0
KLU	2.76	139	eP	59	26.89	-1.4
VLZ	2.94	146	eP	59	28.69	-2.0
VZW	2.95	149	eP	59	29.13	-1.8
IMA	2.99	327	iPd	59	29.80	-1.7
GLI	3.00	155	eP	59	29.56	-1.9
SLKM	3.12	185	eP	59	32.06	-1.1
RDT	3.30	204	eP	59	34.79	-0.7
KNIM	3.40	163	eP	59	34.53	-2.3
RSO	3.47	206	eP	59	37.10	-0.8
GLB	3.49	126	eP	59	37.26	-0.8
SEW	3.52	178	eP	59	36.67	-1.7
NNL	3.66	193	eP	59	40.29	0.0
SVW	3.73	230	eP	59	39.50	-1.7
CNPM	4.16	191	eP	59	45.36	-1.7
OPT	4.31	204	eP	59	47.99	-1.1
PDB	4.39	211	eP	59	48.72	-1.3
	43 obs. associated					

OCT 07, 1990 15h 28m 02.16± 0.99s
44.033 N ± 7.5km 7.704 E ± 7.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.5 (LDG).

AUTN	0.20	259	Pg	28	06.14	-0.6
SBF	0.26	229	Pg	28	08.10	0.4
			Sg	28	11.80	
AURF	0.31	242	Pg	28	08.61	0.0
			Sg	28	13.47	
MVIF	0.42	251	Pg	28	10.02	-0.8
			Sg	28	16.63	
FRF	0.90	239	Pg	28	19.40	0.0
			Sg	28	31.40	
LMR	1.11	232	Pg	28	23.60	0.6
			Sg	28	39.60	
LRG	1.13	240	Pg	28	23.80	0.4
			Sg	28	40.00	
LPL	1.64	335	Pg	28	31.60	0.3
PGF	1.76	147	Pn	28	32.60	-0.4
			Sn	28	54.40	
	S.D. = 0.6		on 9 of 9 obs.			

• OCT 07, 1990 15h 40m 02.73± 0.56s
3.947 N ±11.5km 62.786 E ± 8.1km
DEPTH = 10.0km (geophysicist)
5.0mb (12 obs.)
CARLSBERG RIDGE (421)

KOD	15.84	66	eP	43	54.20	6.3X
GBA	17.36	56	P	44	09.00	2.3
	2.1s		87.80nm			4.5mb
GBA	17.36	56	P	44	04.00	-2.7
POO	18.09	36	iPc	44	15.00	-1.0
HYB	20.45	48	ePd	44	43.00	-0.3
OUE	26.40	8	eP	45	44.00	2.5
GKN	31.71	39	P	46	29.80	0.6
PKI	31.90	40	P	46	31.60	0.5
	1.2s		42.00nm			5.2mb
KKN	31.97	40	P	46	31.80	0.3
	1.2s		48.00nm			5.3mb
MAIO	32.34	355	iPd	46	35.30	0.8
GUN	32.44	40	P	46	36.60	0.8
LSA	37.11	43	Pd	47	17.00	1.1
KSH	37.32	17	eP	47	18.00	0.9
CHTO	38.29	64	IP	47	26.90	1.5
	1.5s		22.52nm			4.7mb
KRI	38.73	237	iPc	47	33.60	4.3X
CIR	39.39	230	iPd	47	33.10	-1.5
BUL	41.22	233	eP	47	51.20	1.3
BCAO	44.13	272	iPc	48	14.40	0.8
	0.5s		5.00nm			4.6mb
WMQ	45.40	25	P	48	23.50	0.1
GYA	47.55	57	P	48	40.00	-0.7
GTA	48.68	38	eP	48	48.80	-0.5
	Z 15s		0.40um			4.5Msz
LZH	49.50	44	eP	48	55.00	-0.7
	2.5s		50.00nm			5.1mb
VRI	52.23	329	ePc	49	17.50	1.3
XAN	52.25	49	Pc	49	15.80	-0.8
MLR	52.39	328	eP	49	19.00	1.4
WHN	55.28	55	Pc	49	39.00	0.2
BTO	55.93	42	eP	49	43.00	-0.6
TIY	56.36	47	Pd	49	45.70	-1.0
HHC	57.09	43	P	49	51.60	-0.3
NJ2	59.40	55	Pc	50	08.00	0.0
BJI	59.96	45	eP	50	11.00	-0.7
	1.3s		40.00nm			5.4mb
KSP	60.77	328	eP	50	16.50	-0.5
KHC	61.33	325	eP	50	19.80	-1.2
CLL	62.77	327	eP	50	30.00	-0.5
	1.5s		14.00nm			4.9mb
SUF	64.56	342	iP	50	41.00	-1.0
	0.9s		10.00nm			5.0mb
HFS	67.28	336	eP	50	57.50	-2.0
	0.8s		18.30nm			5.3mb
NB2	68.81	336	P	51	07.00	-2.1
	1.0s		4.80nm			4.6mb
ASPA	74.41	116	iPd	51	43.80	0.5
	1.1s		11.20nm			4.8mb
LPB	130.22	252	ePKP	59	16.00	-0.4
ZOBO	130.28	252	PKP	59	18.00	1.3
	S.D. = 1.2		on 38 of 40 obs.			

OCT 07, 1990 15h 50m 11.36± 0.67s
40.786 N ± 7.9km 21.625 E ± 5.4km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.8 (THE).

FNA	0.19	270	ePd	50	14.52	-1.1
			eS	50	16.96	
GRG	0.61	74	ePd	50	22.92	-0.8
			eS	50	33.80	
OHR	0.71	298	iPgc	50	24.70	-0.6
			iSg	50	36.50	
			Lg	50	37.00	
LIT	0.95	136	ePd	50	26.72	-2.8
			eS	50	42.72	
THE	1.03	98	ePd	50	31.52	0.7
			iS	50	46.72	
KNT	1.03	68	ePd	50	30.68	-0.2
			eS	50	45.76	
SKO	1.19	353	iPg	50	34.10	0.5
	0.5s		174.00nm			
			i	50	39.00	
			iSg	50	51.10	
			Lg	50	56.00	
SOH	1.31	88	ePd	50	35.52	-0.1
			iS	50	56.88	
TIR	1.44	293	ePn	50	43.50	6.0X
SRS	1.53	77	iPc	50	39.50	0.8
KKS	1.58	325	ePn	50	43.00	3.6X
IGT	1.60	219	ePc	50	41.68	2.0
			eS	51	06.36	
LACI	1.68	301	ePn	50	44.40	3.6X
PUK	1.81	315	ePn	50	45.80	3.0X
AGG	1.84	163	ePd	50	43.72	0.4
			eS	51	13.84	
OUR	1.85	103	ePd	50	44.68	1.3
			iS	51	10.48	
	S.D. = 1.4		on 12 of 16 obs.			

• OCT 07, 1990 16h 57m 29.73± 0.43s
10.118 N ± 7.8km 126.084 E ±12.4km
DEPTH = 33.0km (normal)
4.9mb (13 obs.)
PHILIPPINE ISLANDS REGION (248)

KKM	10.58	248	ePc	00	07.00	4.8X
	1.0s		72.00nm			5.9mb
QIZ	18.03	301	eP	01	41.80	2.2
SSE	21.36	348	Pc	02	18.00	1.5
	1.0s		40.00nm			4.8mb
NJ2	22.83	344	Pd	02	32.00	1.0
MTN	23.36	168	eP	02	37.50	1.2
GYA	24.52	314	P	02	49.20	1.5
NST	25.88	285	eP	03	03.00	2.5
CHG	27.63	291	eP	03	10.80	-5.8X
CHTO	27.63	291	eP	03	15.90	-0.7
	1.1s		8.24nm			4.3mb
XAN	28.54	329	Pd	03	24.00	-0.6

TIY	30.10	338	eP	03	40.00	1.4
WB5	30.90	165	eP	03	44.20	-1.6
BJI	31.07	345	eP	03	47.00	0.0
	1.5s	10.00nm			4.4mb	
LZH	32.80	326	P	04	00.00	-2.4
	2.5s	50.00nm			5.0mb	
HHC	33.19	340	eP	04	07.20	1.5
ASPA	34.44	167	eP	04	14.70	-1.8
	0.5s	9.10nm			5.0mb	
		eS		09	23.00	
WARB	36.09	179	iPc	04	32.00	1.5
	0.3s	6.00nm			5.0mb	
GTA	37.40	326	Pc	04	41.40	-0.2
	0.6s	10.00nm			4.9mb	
LSA	37.97	306	eP	04	46.10	-0.8
FORR	40.78	177	eP	05	10.00	0.5
	0.4s	39.00nm			5.5mb	
GUN	41.69	301	P	05	17.10	-0.5
	0.6s	17.00nm			5.0mb	
PKI	41.99	300	P	05	18.80	-1.3
KKN	42.16	300	P	05	20.40	-0.9
GKN	42.77	300	P	05	25.00	-1.2
NWAO	43.63	191	eP	05	34.00	1.2
STK	44.32	161	eP	05	38.60	0.1
	1.4s	49.00nm			5.1mb	
		e		05	53.60	
RKG	44.78	191	eP	05	47.00	4.8X
WMQ	47.23	322	eP	05	57.00	-4.6X
GBA	47.68	279	P	06	05.50	0.1
PVC	50.06	123	iPc	06	16.00	-7.7X
DZM	50.89	129	iPc	06	31.10	1.0
KEV	83.71	340	eP	09	55.00	-1.3
SOD	84.36	337	eP	09	59.00	-0.6
DSI	85.38	301	iPd	10	04.80	-0.6
SUF	85.61	333	iP	10	05.50	-0.4
PRNI	85.90	300	iPd	10	07.40	-0.7
MBC	85.90	13	eP	10	08.50	1.3
	0.8s	3.00nm			4.6mb	
MBH	86.09	299	iPd	10	08.50	-0.5
NUR	86.84	331	eP	10	11.00	-1.0
HFS	92.10	332	eP	10	35.40	-1.4
	0.4s	1.30nm			4.7mb	
KIC	128.36	286	PKP	16	35.70	0.0
TIC	128.53	287	PKP	16	36.00	-0.1
LIC	128.67	286	PKP	16	36.10	-0.2
	S.D. = 1.2	on	38 of	43	obs.	

• OCT 07, 1990 17h 45m 53.58± 1.37s
22.074 S ±13.6km 67.896 W ±17.0km
DEPTH = 33.0km (normal)
CHILE-BOLIVIA BORDER REGION (124)

ANT	2.83	235	eP	46	37.50	0.0
			iS	47	10.00	
CNCB	5.24	359	P	47	12.00	-0.2
LPB	5.52	358	eP	47	17.00	1.0
ZOBO	5.78	358	P	47	19.00	-0.8
SIV	8.84	48	P	48	02.20	0.0
	S.D. = 1.0	on	5 of	5	obs.	

• OCT 07, 1990 18h 46m 21.01± 3.69s
43.552 N ±22.5km 0.667 W ± 9.4km
DEPTH = 5.0km (geophysicist)
PYRENEES (378)
MD 2.0 (STR).

OGE	0.41	160	Pg	46	29.46	0.2
MADF	0.42	195	Pg	46	30.09	0.6
			Sg	46	35.69	
ELYF	0.45	212	Pg	46	29.72	-0.3
			Sg	46	37.22	
ATE	0.47	183	Pg	46	29.57	-0.8
			Sg	46	37.15	
ESCF	0.48	172	Pg	46	30.46	-0.1
ISSF	0.53	190	Pg	46	32.15	0.5
			Sg	46	39.47	
JAU	0.56	157	Pg	46	32.08	-0.1
EPF	0.90	125	Pg	46	38.80	0.0
			Sg	46	50.20	
	S.D. = 0.5	on	8 of	8	obs.	

? OCT 07, 1990 19h 01m 27.83± 8.56s
11.018 N ±34.3km 62.375 W ±75.4km
DEPTH = 85.0km (geophysicist)
WINDWARD ISLANDS (95)
MD 3.3 (TRN).

TCE	0.69	118	iP	01	43.84	-0.2
			eS	01	57.40	
TRN	1.02	111	iP	01	47.50	-0.2
			eS	02	03.05	
TPP	1.14	127	eP	01	49.53	0.3
			eS	02	05.76	
TBH	1.39	112	eP	01	52.13	-0.2
			eS	02	13.12	
PIG	1.51	84	eP	01	54.33	0.4
			eS	02	15.14	
TPR	1.58	84	eP	01	54.75	0.0
			eS	02	16.25	
BOT	1.63	85	eP	01	55.21	-0.3
			eS	02	16.25	
	S.D. = 0.4	on	7 of	7	obs.	

% OCT 07, 1990 19h 04m 58.80± 2.05s
44.136 N ± 8.9km 7.141 E ±14.9km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.1 (LDG), 1.8 (GEN).

STV	0.17	51	P	05	03.46	0.7
			S	05	05.20	
ENR	0.22	66	P	05	03.56	-0.1
			S	05	05.61	
SBF	0.35	142	Pg	05	05.00	-1.0
			Sg	05	15.80	
PZZ	0.37	356	P	05	06.33	-0.1
			S	05	10.22	
ROB	0.55	73	P	05	08.27	-1.6
			S	05	14.02	
IMI	0.59	112	P	05	12.48	1.8
			S	05	18.63	
FIN	0.77	84	P	05	14.12	0.2
			S	05	20.58	
	S.D. = 1.4	on	7 of	7	obs.	

OCT 07, 1990 19h 17m 10.42± 0.52s
37.861 N ± 5.1km 21.131 E ± 3.5km
DEPTH = 10.0km (geophysicist)
4.0mb (2 obs.)
SOUTHERN GREECE (368)
ML 3.9 (THE), 3.7 (ATH).

VLS	0.53	307	ePg	17	22.20	1.0
ITM	0.93	137	ePg	17	27.00	-1.2
EVR	1.18	27	ePb	17	32.50	0.0
AGG	1.49	39	iPc	17	38.30	1.0
			eS	18	03.06	
IGT	1.78	340	ePd	17	42.62	1.2
			eS	18	14.46	
VLI	1.84	128	ePg	17	44.80	2.5
ATH	2.05	86	ePb	17	47.00	1.7
KEK	2.12	331	ePn	17	47.00	0.6
SRN	2.20	337	ePn	17	48.00	0.5
LIT	2.47	25	ePd	17	51.98	0.6
			iS	18	29.00	
KZN	2.49	11	ePn	17	53.00	1.3
TPE	2.58	341	ePn	17	51.00	-1.9
KBN	2.77	355	ePn	17	58.10	2.5
FNA	2.93	4	iPc	17	58.50	0.6
			eS	18	42.18	
BERA	2.98	342	ePn	17	59.30	0.7
PLG	3.09	35	ePn	18	00.00	-0.1
THE	3.11	27	iPc	18	01.00	0.6
			iS	18	38.00	
GRG	3.24	17	ePc	18	02.34	0.0
			eS	18	39.54	
OHR	3.26	356	iPn	18	03.90	1.3
			iSn	18	43.50	
			Lg	19	08.60	
OUR	3.32	41	ePd	18	03.02	-0.4
SOH	3.42	30	iPc	18	05.90	1.0
			iS	18	47.34	
VAM	3.48	134	ePn	18	06.00	0.4
LCI	3.49	316	P	18	05.50	-0.3
KNT	3.57	22	ePd	18	07.22	0.3
			iS	18	58.00	
TIR	3.62	345	ePn	18	08.30	0.7
SRS	3.77	30	ePd	18	09.86	0.0
			eS	19	00.30	
LACI	3.93	344	ePn	18	11.80	-0.2
SKO	4.11	3	iPn	18	14.00	-0.6
			i	18	25.70	
			i	19	01.90	
			i	19	20.80	
			Lg	19	42.00	
CZI	4.15	291	P	18	15.30	0.2
TDS	4.15	297	P	18	16.00	0.7
MMB	4.23	27	ePc	18	16.00	-0.3
			eS	19	06.00	
CSI	4.24	298	P	18	18.80	2.3
KKS	4.25	353	ePn	18	20.20	3.7X
ORI	4.26	303	P	18	18.00	1.2
KKB	4.27	20	iPc	18	18.00	1.0
			iS	19	06.00	
PUK	4.28	348	ePn	18	16.30	-0.8
ULC	4.35	341	ePn	18	16.50	-1.5
			eSn	19	04.00	
ATN	4.49	276	P	18	19.50	-0.5
			eSn	19	10.30	
MMN	4.49	298	P	18	23.20	3.1X
			eSn	19	17.00	
EZN	4.50	63	eP	18	19.00	-1.2
RZN	4.72	35	iPc	18	32.00	8.6X
RDO	4.73	45	ePn	18	22.30	-1.2
TTG	4.78	343	ePn	18	23.30	-0.9
			eSn	19	17.30	
ALN	4.87	50	iPc	18	24.00	-1.4
MGR	4.90	299	P	18	26.00	0.1
VTS	4.99	18	eP	18	28.00	0.8
MEU	4.99	263	P	18	24.70	-2.5
			eSn	19	22.90	
KDZ	5.02	40	eP	18	26.00	-1.6
			eS	19	19.00	
SGO	5.26	303	P	18	32.20	1.2
			eSn	19	31.70	
DIM	5.38	38	eP	18	32.00	-0.6
PVL	6.23	30	eP	18	42.00	-2.6
DUI	6.39	309	P	18	47.00	0.0
ASS	8.29	312	P	19	13.00	-0.6
ARV	8.39	315	P	19	13.00	-1.9
MLR	8.43	24	eP	19	20.00	4.4X
TLB	8.50	36	eP	19	24.00	7.7X
PTJ	8.91	336	eP	19	26.50	4.4X
VRI	9.02	26	ePd	19	24.00	0.4
PGD	9.32	313	P	19	27.00	-0.9
FVI	10.69	327	P	19	45.50	-1.0
NUR	22.78	5	eP	22	33.00	19.1X
HFS	22.79	350	eP	22	11.70	-2.3
	0.5s	2.00nm			3.9mb	
N82	24.03	348	P	22	22.60	-3.5X
	0.8s	3.70nm			4.0mb	
	S.D. = 1.2	on	55 of	63	obs.	

? OCT 07, 1990 20h 41m 08.00± 5.54s
17.541 N ±33.6km 61.052 W ±30.7km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)

BPA	0.91	237	eP	41	25.50	0.0
			S	41	36.80	
SEG	1.21	201	eP	41	30.50	-0.1
NEV	1.51	255	eP	41	35.02	0.0
			S	41	53.30	
DOG	1.60	200	eP	41	36.60	0.2
BBL	2.05	192	eP	41	42.80	-0.1
	S.D. = 0.2	on	5 of	5	obs.	

OCT 07, 1990 21h 20m 52.88± 0.66s
43.402 N ± 4.4km 5.436 E ± 4.9km
DEPTH = 8.8 ± 3.9 km
NEAR SOUTH COAST OF FRANCE (379)
MD 2.7 (STR).

GELF	0.02	198	Pg	20	54.53	-0.1
BERF	0.21	116	Pg	20	57.92	0.6
TREF	0.23	350	Pg	20	57.58	-0.1
PUYF	0.23	56	Pg	20	57.28	-0.5
PRAF	0.45	334	Pg	21	02.39	0.4
VILF	0.49	24	Pg	21	02.42	-0.5
TAVF	0.50	64	Pg	21	02.91	-0.1
GANF	0.69	30	Pg	21	06.33	-0.3
CALN	1.11	71	Pg	21	14.55	0.6
MVIF	1.34	68	Pn	21	18.00	0.2
			Sg	21	37.41	
REVF	1.44	76	Pn	21	19.21	-0.1
TOUF	1.45	64	Pn	21	19.62	0.1
			Sg	21	40.40	
AURF	1.46	70	Pn	21	19.36	-0.1
			Sg	21	40.53	
AUTN	1.56	67	Pn	21	21.22	0.1
			Sg	21	43.73	

07d 21h

DOI	1.71	49	P	21	26.00	2.9X
			eSn	21	48.50	
BNI	1.88	28	Pc	21	28.50	3.0X
			eSn	21	51.90	
CKI	2.30	63	P	21	22.00	-9.5X
PGF	2.75	107	Pn	21	36.87	-1.2

S.D. = 0.5 on 15 of 18 obs.

OCT 07, 1990 21h 25m 34.91± 0.32s
39.587 N ± 3.2km 27.787 E ± 3.1km
DEPTH = 9.4 ± 2.3 km
TURKEY (366)
MD 3.9 (ISK), 3.7 (ATH). Felt in the Bolikesir area.

DST	0.65	88	iPg	25	47.60	-0.3
			iSg	25	53.60	
EDC	0.76	4	iPg	25	49.50	-0.3
			iSg	25	59.50	
BNT	0.78	8	iPg	25	50.60	0.5
KGT	0.94	337	iPn	25	53.80	0.9
EZN	1.15	282	iPn	25	57.30	0.8
PRK	1.22	254	ePn	25	58.80	1.1
IZM	1.26	199	iPn	25	57.20	-1.1
YLV	1.56	51	iPn	26	03.30	0.4
CTT	1.63	17	iPn	26	03.20	-0.7
ISK	1.77	33	iPn	26	05.70	-0.1
KHL	1.85	132	ePn	26	08.20	1.1
ALT	1.88	106	iPn	26	08.40	0.9
HRT	1.90	49	iPn	26	07.20	-0.5
SMG	2.02	202	ePb	26	13.00	3.6X
GPA	2.06	69	ePn	26	10.20	0.1
DMK	2.23	359	iPn	26	12.30	-0.3
RDO	2.32	313	ePn	26	14.00	0.2
KDZ	2.74	320	iPc	26	20.00	0.2
			iSg	26	59.00	
DIM	3.00	326	iPc	26	23.00	-0.4
			Sg	27	08.00	
BCK	3.06	133	ePn	26	24.90	0.6
RZN	3.14	313	iPd	26	26.00	0.4
			iS	27	15.00	
ARG	3.38	175	ePn	26	28.50	-0.3
PLG	3.43	285	ePn	26	29.00	-0.6
PLD	3.43	318	iPd	26	29.00	-0.6
			iS	27	23.00	
MMB	3.68	304	ePd	26	30.00	-3.2X
			eS	27	31.00	
BBTK	3.84	85	iPd	26	47.00	11.4X
			iS	27	42.00	
PGB	4.03	318	iPd	26	38.00	-0.1
			iS	27	12.00	
PVL	4.07	334	eP	26	38.00	-0.5
KKB	4.24	304	iPd	26	41.00	-0.1
			eS	27	48.00	
VTS	4.58	312	eP	26	46.00	0.0
			eSg	28	00.00	
TLB	5.00	2	eP	27	12.00	20.2X
MLR	6.06	348	eP	27	07.00	0.2
VRI	6.33	353	ePd	27	13.00	2.4

S.D. = 0.8 on 29 of 33 obs.

? OCT 07, 1990 22h 03m 47.34± 1.39s
48.325 N ±12.1km 7.452 E ±10.2km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.5 (LDG).

CDF	0.15	307	Pg	03	50.80	0.0
			Sg	03	53.20	
FEL	0.59	140	ePg	03	59.31	0.0
BSF	0.66	222	Pg	04	00.50	-0.1
			Sg	04	09.80	
HAU	0.81	247	Pg	04	03.10	0.1
			Sg	04	14.40	
LOR	2.64	248	Pg	04	38.20	7.4X
			Sg	05	10.60	
LBF	2.70	242	Pg	04	39.20	7.5X
			Sg	05	13.20	
SSF	2.95	246	Pg	04	43.20	8.1X
			Sg	05	21.60	
SMF	2.97	237	Pg	04	43.50	8.1X
			Sg	05	21.80	
AVF	3.17	243	Pg	04	47.00	8.8X

S.D. = 0.2 on 4 of 9 obs.

OCT 07, 1990 22h 36m 30.96± 0.30s
23.620 S ± 5.2km 66.578 W ± 7.5km
DEPTH = 229.3km (3 depth phases)
4.7mb (17 obs.)
JUJUY PROVINCE, ARGENTINA (128)

ANT	3.52	268	iPc	37	35.50	6.9X
			iS	38	05.00	
CNCB	6.90	349	Pc	38	08.70	-2.7
			S	39	26.00	
LPB	7.19	348	P	38	12.00	-3.0
			S	39	33.00	
ZOBO	7.46	348	iPd	38	15.70	-2.8
			S	39	38.00	
RTLL	7.86	192	iPd	38	21.00	-2.2
RTC8	8.08	194	eP	38	24.50	-1.6
ZON	8.11	193	eP	38	27.00	0.5
			eS	39	54.00	
RTCV	8.39	191	eP	38	28.50	-1.7
RTBS	8.41	197	ePd	38	29.50	-0.8
ARE	8.49	326	eP	38	26.00	-5.7X
			iS	39	56.00	
PEL	10.15	200	eP	38	51.50	-1.2
FCH	10.21	198	eP	38	53.50	-0.2
PCH	10.54	198	ePc	38	57.00	-0.7
LNV	11.13	201	eP	39	03.00	-2.1
PPD	14.17	87	eP	39	42.30	-0.8
			i	39	46.30	
			e	39	52.10	
			e	42	25.80	
VAO	18.03	92	eP	40	26.60	-1.0
			eS	43	37.60	
BAO	19.21	69	Pc	40	39.10	-0.8
			e	41	16.50	
			e	41	53.90	
BMA	20.64	92	eP	40	54.50	0.5
JFO	21.54	90	eP	41	04.00	1.2
			e	41	15.50	46kmX
SOB1	28.43	64	ePc	42	04.90	-1.8
			e	45	13.80	
CAI	33.00	64	eP	42	44.80	-1.8
OLY	63.35	337	P	46	35.70	-2.1
FVM	65.25	339	P	46	48.50	-1.5
TUL	65.34	334	eP	46	48.50	-2.1
	1.1s		13.30nm			4.6mb
SIO	65.40	334	iP	46	50.30	-0.7
LIC	66.95	72	P	47	00.00	-1.2
KIC	67.27	72	P	47	02.40	-0.8
	0.7s		11.50nm			4.7mb
LKO	68.09	68	P	47	04.36	-4.0X
	0.8s		10.00nm			4.6mb
ALQ	69.45	326	eP	47	16.00	-0.4
	0.9s		15.76nm			4.7mb
			e	48	09.00	226km
ANMO	69.45	326	P	47	16.30	-0.1
	0.9s		20.38nm			4.9mb
			pP	48	13.30	245kmX
CBM	70.23	359	P	47	20.30	-0.4
GLD	72.63	330	P	47	34.80	-0.5
	1.2s		16.16nm			4.6mb
GOL	72.66	330	P	47	34.90	-0.6
	0.9s		7.39nm			4.4mb
			pP	48	30.80	238km
PLM	74.18	318	P	47	46.00	1.6
PEC	74.73	318	P	47	48.40	1.0
RSSD	75.64	333	P	47	53.00	0.5
	0.9s		16.26nm			4.8mb
DAU	76.07	326	P	47	56.20	1.1
BW06	77.03	329	P	48	01.30	1.1
	0.8s		5.24nm			4.3mb
			pP	48	54.80	224km
BCH	77.39	318	P	48	03.90	1.7
TNP	77.62	321	P	48	04.90	1.3
	1.0s		9.25nm			4.5mb
SCH	78.11	360	ePc	48	05.50	-0.1
	0.9s		48.00nm			5.2mb
LLA	78.85	318	eP	48	11.70	1.6
PRS	78.93	318	eP	48	12.00	1.5
SAO	79.26	318	eP	48	13.00	0.8
CMB	79.44	320	eP	48	14.00	0.8
MHC	79.75	318	eP	48	16.50	1.5
BRK	80.46	318	eP	48	11.80	-6.7X
LRM	80.69	329	ePd	48	20.90	1.0
ORV	81.09	320	eP	48	23.30	1.5
MAW	81.68	163	iPd	48	27.10	2.7
WDC	82.36	320	eP	48	28.10	-0.2
SES	83.52	333	eP	48	34.00	0.0
FFC	83.73	340	eP	48	34.00	-1.0
	0.9s		10.00nm			4.6mb

NEW	84.66	329	P	48	40.10	0.3
	0.7s		4.00nm			4.3mb
PNT	86.58	328	eP	48	50.00	0.9
	0.8s		16.00nm			4.9mb
BUL	86.65	110	iPc	48	52.80	2.4
	1.0s		25.00nm			5.0mb
BCAO	87.29	84	iPc	48	55.30	2.0
	0.4s		3.00nm			4.5mb
CIR	88.83	112	iPc	49	00.20	-0.4
KRI	88.86	108	iPc	49	07.50	6.6X
YKA	93.90	340	eP	49	23.10	0.2
	0.6s		4.00nm			4.7mb
ASPA	128.96	204	ePKP	55	13.90	0.4
	0.8s		8.70nm			
WB5	132.18	207	ePKP	55	21.00	1.4
GBA	144.56	100	PKP	55	42.50	0.3
HYB	146.82	94	ePKP	55	47.50	1.5
GKN	153.75	74	PKP	55	58.00	1.7
KKN	154.33	75	PKP	55	58.80	1.6
PKI	154.46	75	PKP	55	58.90	1.4
GUN	154.85	74	PKP	55	59.80	1.8

S.D. = 1.4 on 63 of 68 obs.

? OCT 07, 1990 23h 38m 40.24± 5.23s
31.559 S ±25.4km 178.791 W ±83.3km
DEPTH = 509.5 ± 24.1 km
KERMADEC ISLANDS REGION (177)

H8Z	6.48	201	eP	40	22.60	0.1
PUZ	6.94	200	eP	40	26.90	-0.2
			S	41	45.30	
NOZ	7.51	199	eP	40	33.00	0.2
TAZ	7.70	209	P	40	36.50	1.8
WLZ	7.79	215	eP	40	35.70	0.0
WHH	8.26	207	eP	40	40.90	0.2
NGZ	8.87	210	eP	40	46.40	-0.8
PGZ	9.88	202	eP	40	57.80	0.3
MNG	10.16	206	eP	40	58.80	-1.6
			S	42	43.50	
KIW	10.58	207	eP	41	04.80	0.0
MTW	10.62	204	eP	41	05.30	0.1
MOW	10.94	204	eP	41	09.00	0.4
TCW	11.13	208	eP	41	09.10	-1.5
KHZ	12.44	207	eP	41	25.10	0.9
DZM	16.20	302	iPd	42	01.90	-0.6
WB5	43.48	274	eP	46	00.20	0.8
SUF	144.98	340	iPKP	57	31.70	12.3X
	0.5s		10.50nm			
NUR	147.15	339	ePKP	57	38.00	15.0X
BCAO	148.49	215	iPKPc	57	41.30	14.7X
	0.4s		4.00nm			
NB2	149.78	350	PKP	57	45.60	18.4X
	0.7s		2.60nm			
HFS	150.23	347	ePKP	57	45.50	17.7X
	0.4s		1.30nm			

S.D. = 0.9 on 16 of 21 obs.

? OCT 08, 1990 00h 14m 46.10± 8.51s
29.382 N ±25.3km 56.658 E ±75.4km
DEPTH = 33.0km (normal)
SOUTHERN IRAN (353)

DHR	6.54	244	eP	16	30.00	7.6X
RYD	10.09	245	eP	17	12.50	0.7
			iS	19	14.00	
QASM	12.08	257	ePc	17	38.30	-0.6
AFIF	13.14	250	ePc	17	57.10	4.1X
KMSA	14.21	234	ePc	18	06.80	-0.4
SRAT	16.72	231	eP	18	40.00	0.2
KMTA	16.83	232	eP	18	41.00	-0.1
ABHA	16.86	232	eP	18	49.30	7.9X
HQL	18.84	275	ePc	19	05.70	0.0
BADA	18.97	273	ePc	19	07.50	0.2

S.D. = 0.5 on 7 of 10 obs.

• OCT 08, 1990 00h 51m 32.45± 0.67s
4.011 N ±12.7km 62.648 E ±11.1km
DEPTH = 10.0km (geophysicist)
5.0mb (4 obs.)
CARLSBERG RIDGE (421)

KOD	15.94	66	eP	55	24.00	5.1X
GBA	17.43	56	P	55	30.00	-7.4X
HYB	20.51	48	eP	56	14.00	0.4
QUE	26.35	8	eP	57	12.70	1.9
MAIO	32.26	355	eP	58	05.00	1.5
CHG	38.38	65	eP	58	56.90	1.0

BUL 41.15 233 iPc 59 20.90 1.9
1.1s 12.66nm 4.6mb
SLR 44.54 227 iPd 59 47.00 0.4
TLB 50.56 328 eP 00 46.00 12.8X
VRI 52.11 329 ePd 00 46.50 1.5
MLR 52.27 328 eP 00 48.00 1.7
SPC 57.61 328 eP 01 24.20 -0.9
ZST 58.73 326 eP 01 32.00 -0.8
ARV 58.86 320 P 01 37.00 3.2X
SFI 59.76 320 P 01 40.00 0.1
PGD 59.82 319 P 01 43.00 2.4
BJI 60.01 45 eP 01 41.00 -0.8
FVI 60.41 323 P 01 43.00 -1.4
BDI 60.63 319 P 01 45.50 -0.6
CTI 60.85 322 P 01 45.00 -2.5
KHC 61.20 326 eP 01 48.70 -1.1
BOB 61.68 320 P 01 55.00 1.8
MDI 61.94 321 P 01 54.00 -0.8
CKI 62.30 319 P 01 57.00 -0.2
VAI 62.57 321 P 01 59.00 0.0
CLL 62.64 327 eP 01 59.00 -0.3
FEL 63.89 322 eP 02 06.73 -1.1
HFS 67.17 336 eP 02 26.40 -2.1
1.4s 89.20nm 5.8mb
NB2 68.69 336 P 02 37.60 -0.5
1.2s 19.50nm 5.2mb
KEV 69.68 348 eP 02 44.00 0.1
WB5 74.28 112 eP 03 12.00 -0.2
ASPA 74.56 116 eP 03 12.60 -1.3
0.8s 6.90nm 4.7mb
ALQ 139.92 346 ePKP 10 58.00 -5.6X
S.D. = 1.3 on 28 of 33 obs.

• OCT 08, 1990 01h 53m 18.40± 1.04s
40.266 N ±10.9km 25.177 E ± 8.6km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.0 (ISK), 2.7 (ATH).

RDO 0.92 17 ePb 53 36.00 0.0
EZN 0.99 116 iPg 53 36.60 -0.5
PRK 1.32 140 ePb 53 42.50 -0.3
PLG 1.33 275 ePb 53 43.00 0.1
KGT 1.64 83 iPn 53 46.60 -0.7
MFT 1.69 71 ePn 53 46.00 -2.1
EDC 2.06 87 ePn 53 55.00 1.6
BNT 2.10 87 ePn 53 56.00 1.9
S.D. = 1.5 on 8 of 8 obs.

OCT 08, 1990 02h 19m 44.29± 0.34s
40.251 N ± 4.0km 25.189 E ± 2.8km
DEPTH = 7.3 ± 2.4 km
AEGEAN SEA (365)
MD 4.2 (ISK), 3.5 (THE).

ALN 0.92 45 iPc 20 02.28 0.2
iS 20 13.54
OUR 0.93 276 ePc 20 03.16 0.9
RDO 0.93 16 eP 20 02.60 0.3
EZN 0.97 116 iPg 20 00.90 -2.1
PRK 1.31 140 eP 20 09.00 0.3
eS 20 27.00
PLG 1.34 276 eP 20 10.00 0.7
KDZ 1.41 7 iPd 20 10.00 -0.3
iSg 20 27.00
RZN 1.48 346 iPc 20 12.00 0.5
eS 20 53.00
SRS 1.49 306 iPc 20 11.80 0.3
eS 20 34.00
SOH 1.51 293 ePd 20 12.20 0.4
iS 20 36.32
KGT 1.63 82 iPn 20 13.10 -0.3
MFT 1.68 71 iPn 20 13.50 -0.8
MMB 1.74 321 ePd 20 15.00 0.0
eS 20 36.00
THE 1.74 283 iPc 20 16.00 1.0
iS 20 39.50
DIM 1.82 8 iPc 20 17.00 0.9
Sg 20 44.00
PLD 1.89 349 eP 20 18.00 0.8
iSg 20 41.00
KNT 1.96 298 ePd 20 18.92 0.6
iS 20 42.60
EDC 2.05 86 iPn 20 22.00 2.5
LIT 2.07 267 iPc 20 20.20 0.3
eS 20 46.20
BNT 2.09 86 iPn 20 22.00 1.8

GRG 2.24 289 ePc 20 22.76 0.5
iS 20 51.00
KKB 2.27 316 iPc 20 23.00 0.3
iSg 20 58.00
PGB 2.42 342 iP 20 16.00 -8.9X
iSg 21 02.00
IZM 2.45 138 iPn 20 25.50 0.1
DMK 2.50 50 ePn 20 26.00 0.1
AGG 2.53 242 ePd 20 26.56 0.2
KZN 2.62 272 eP 20 28.00 0.3
CTT 2.62 69 iPn 20 26.50 -1.2
DST 2.72 103 iPn 20 29.00 -0.2
VTS 2.77 328 iP 20 30.00 0.0
iSg 21 16.00
FNA 2.95 282 ePc 20 33.12 0.6
iS 21 09.52
PVL 2.96 2 iPd 20 31.00 -1.5
iS 21 20.00
ISK 3.05 73 ePn 20 39.00 5.2X
YLV 3.21 83 iPn 20 42.60 6.5X
SKO 3.31 302 ePn 20 36.60 -1.0
OHR 3.45 286 ePn 20 40.00 0.5
HRT 3.46 79 ePn 20 52.00 12.3X
VLI 3.95 207 eP 20 45.50 -1.0
ALT 3.98 106 ePn 20 46.90 -0.2
PSN 4.09 32 eP 20 51.00 2.5
MLR 5.27 6 ePc 21 05.00 -0.4
TNR 5.44 353 ePc 21 07.00 -0.7
VRI 5.73 11 ePc 21 12.00 0.3
BEO 5.75 324 e(P) 21 42.00 30.0X
BBTK 5.82 92 eP 21 16.00 2.8
BZS 5.97 335 ePc 21 13.00 -2.1
S.D. = 1.1 on 41 of 46 obs.

• OCT 08, 1990 02h 23m 04.99± 1.03s
40.273 N ±10.0km 25.237 E ± 9.2km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 2.7 (ATH).

RDO 0.90 15 ePb 23 23.00 0.8
EZN 0.95 118 iPg 23 23.60 0.6
PRK 1.30 142 ePb 23 29.00 0.0
PLG 1.37 275 ePb 23 30.00 -0.2
KGT 1.59 83 ePn 23 34.10 0.9
MFT 1.64 71 ePn 23 32.00 -2.0
EDC 2.01 87 ePn 23 45.00 5.7X
BNT 2.05 87 ePn 23 46.00 6.0X
S.D. = 1.4 on 6 of 8 obs.

• OCT 08, 1990 02h 40m 49.48± 0.76s
36.962 N ± 7.0km 29.376 E ± 7.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.7 (ISK).

KSL 0.86 169 eP 41 07.00 1.0
eS 41 36.00
BCK 1.09 62 iPn 41 09.20 -0.8
ARG 1.25 234 eP 41 11.00 -1.7
KHL 1.36 5 iPn 41 13.70 -0.9
SMG 2.16 291 eP 41 27.50 1.6
ALT 2.17 15 ePn 41 27.90 1.7
IZM 2.21 311 ePn 41 27.00 0.3
DST 2.70 348 ePn 41 33.00 -0.8
YLV 3.60 360 ePn 41 52.00 5.5X
KGT 3.84 336 ePn 41 49.60 -0.3
BBTK 3.92 42 eP 41 51.00 -0.1
eS 42 59.00
S.D. = 1.3 on 10 of 11 obs.

? OCT 08, 1990 03h 05m 01.03± 3.67s
42.056 N ±16.9km 126.608 W ±28.5km
DEPTH = 10.0km (geophysicist)
4.1mb (1 obs.)
OFF COAST OF OREGON (30)

LBFM 3.60 100 eP 05 58.00 -0.3
GT2 4.42 44 P 06 10.80 1.1
VBEM 4.72 49 P 06 13.84 -0.3
TDH 4.76 46 P 06 14.54 -0.1
VLMM 4.80 42 P 06 15.02 -0.2
VLL 4.93 45 P 06 18.73 1.7
VFP 4.95 47 P 06 19.16 1.8
VIPM 5.01 59 P 06 16.95 -1.3
MTMW 5.08 37 P 06 18.07 -1.0
FL2 5.15 35 P 06 21.15 1.1

SHW 5.20 36 P 06 21.56 0.8
HSR 5.20 36 P 06 21.19 0.3
CDFW 5.22 37 P 06 20.12 -0.9
ESD 5.24 36 P 06 21.48 0.1
STD 5.24 36 P 06 21.46 0.1
ERK 5.24 34 P 06 20.96 -0.4
CZM 5.28 33 P 06 21.75 -0.1
GULW 5.29 41 P 06 22.26 0.1
TDL 5.33 35 P 06 22.22 -0.4
KOSW 5.43 34 P 06 24.11 0.1
ASR 5.46 40 P 06 24.03 -0.4
GLK 5.76 37 P 06 28.06 -0.6
LON 5.82 35 P 06 28.94 -0.5
WPW 5.89 36 P 06 29.52 -1.0
RVC 5.90 33 P 06 31.02 0.4
JBO 5.97 53 P 06 31.63 0.1
FMW 6.02 34 P 06 32.15 -0.2
GSM 6.19 32 P 06 34.99 0.3
TBM 6.67 38 P 06 41.47 -0.1
HTW 6.69 29 P 06 41.18 -0.6
JCW 6.97 27 P 06 45.51 -0.1
ETW 7.12 37 P 06 47.66 -0.2
FFC 20.56 44 eP 09 43.00 0.8
0.7s 6.00nm 4.1mb
S.D. = 0.7 on 33 of 33 obs.

OCT 08, 1990 03h 23m 09.59± 1.56s
10.519 S ± 7.8km 162.460 E ± 8.1km
DEPTH = 40.6 ± 14.0 km
5.1mb (14 obs.) 4.9Msz (6 obs.)
SOLOMON ISLANDS (193)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centroid Locotion:
Origin Time 03:23:13.2 1.1
Lat 10.17S 0.12 Lon 162.59E 0.04
Dep 15.0 FIX Half-durotion 1.7
Moment Tensor; Scale 10**16 Nm
Mrr=-0.64 0.38 Mtt= 1.75 0.59
Mff=-1.12 0.50 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf= 8.80 0.37
Principal Axes:
T Val= 9.24 Plg= 0 Azm=140
N -0.64 90 180
P -8.60 0 50
Best Double Couple:Mo=8.9**16
NP1:Strike=185 Dip=90 Slip=-180
NP2: 275 90 0

HNR 2.70 293 eP 23 51.50 0.0
eS 24 24.00
BKM 9.05 142 iP 25 19.00 -1.8
DZM 12.11 162 iPd 26 01.90 -0.6
iS 28 15.00
PMG 15.12 273 eP 26 44.00 1.9
1.5s 305.56nm 5.3mb
CTA 18.28 237 iPd 27 24.00 1.9
1.2s 184.38nm 5.1mb
iS 30 51.00
RMO 20.49 217 eP 27 46.00 -0.0
COO 22.25 205 iPc 28 05.80 1.2
JAY 23.01 289 ePc 28 13.00 0.8
QIS 24.14 243 e(P) 28 35.00 11.9X
CMS 25.94 214 eP 28 42.00 2.0
i 28 47.60
WB5 28.62 248 eP 29 03.00 -1.6
i 29 08.00
STK 28.71 219 eP 29 05.20 0.0
1.4s 8.00nm 4.2mb
GUA 29.57 324 eP 29 10.00 -3.1X
ASPA 30.19 241 eP 29 14.50 -4.1X
0.3s 4.10nm 4.7mb
Z 22s 0.70um 4.3Msz
BFD 32.04 211 eP 29 43.00 8.3X
WARB 37.24 240 eP 30 20.00 0.7
0.4s 4.00nm 4.7mb
FORR 37.75 232 iPd 30 23.60 0.1
0.4s 19.00nm 5.3mb
MRWA 47.14 240 eP 31 39.00 -1.0
MAT 52.08 335 (P) 32 15.00 -2.8
1.1s 12.66nm 4.8mb
eS 39 39.00
SSE 57.26 318 eP 33 14.00 18.4X
1.3s 28.00nm
Z 20s 0.50um 4.6Msz
eS 40 44.00

08d 03h

NJ2	59.41	317	Pc	33	10.50	-0.1
WHN	61.65	313	eP	33	26.00	0.1
MDJ	62.42	334	eP	33	30.50	-0.3
CN2	63.67	331	P	33	38.40	-0.7
	1.0s	30.00nm			5.3mb	
Z	18s	1.20um			5.1Msz	
		pP	33	47.00	28kmX	
		eS	42	14.00		
GYA	65.47	305	P	33	50.40	-0.8
BJI	66.08	323	eP	33	54.00	-0.6
	2.0s	110.00nm			5.6mb	
Z	40s	37.00um			6.3MszX	
TIY	67.01	319	eP	34	00.60	-0.2
Z	22s	1.00um			5.0Msz	
XAN	67.40	314	P	34	02.00	-1.3
KMI	68.10	302	Pd	34	08.00	-0.1
	2.0s	80.00nm			5.4mb	
Z	22s	0.60um			4.8Msz	
CHG	69.07	295	eP	34	19.00	5.1X
CHTO	69.07	295	e(P)	34	12.20	-1.7
	1.1s	2.06nm			4.0mb X	
HHC	69.37	321	eP	34	15.60	0.1
BTO	70.19	320	eP	34	20.50	0.0
LZH	72.03	313	iPc	34	32.00	0.2
	1.6s	90.00nm			5.5mb	
GTA	76.39	315	iPc	34	57.20	0.4
	1.6s	90.00nm			5.5mb	
Z	18s	0.80um			5.1Msz	
E	14s	0.40um				
SPA	79.55	180	eP	35	11.30	-2.5
	0.9s	9.09nm			4.7mb	
WMO	86.45	316	P	35	49.50	0.1
Z	36s	0.50um			4.7MszX	
MWC	87.29	55	eP	35	55.00	1.1
ISA	87.33	53	eP	35	55.00	1.1
SBB	87.60	54	eP	36	04.00	8.8X
RVR	87.79	55	eP	35	58.00	2.0
GSC	88.56	54	eP	36	04.00	4.2X
TPC	88.88	55	eP	36	03.00	1.7
TNP	88.91	51	eP	36	02.90	1.3
	1.0s	2.25nm			4.4mb	
GLA	89.64	56	eP	36	06.00	1.1
PNT	90.14	40	eP	36	20.00	13.2X
CNCB	123.21	118	PKP	42	14.00	8.8X
LPB	123.23	118	(PKP)	42	15.00	9.9X
ZOBO	123.31	117	ePKP	41	49.00	-16.5X
		e		42	05.00	
APO	124.91	342	ePKP	42	05.80	-0.7
	0.5s	1.60nm				
SIV	129.50	121	PKP	42	29.00	12.3X
SPC	130.30	328	ePKP	42	20.70	3.2X
ZST	132.54	329	ePKP	42	27.20	5.7X
BCAO	143.75	263	ePKPd	42	41.00	-2.1X
	0.6s	4.00nm				
SOB1	149.60	129	ePKP	43	01.10	8.5X
		e		43	06.60	
		e		43	14.30	

S.D. = 1.3 on 38 of 55 obs.

OCT 08, 1990 03h 55m 11.44± 0.47s
16.354 N ± 4.4km 145.694 E ± 5.7km
DEPTH = 538.2 ± 5.9 km
4.8mb (18 obs.)
MARIANA ISLANDS (216)

GUMO	2.86	196	eP	56	25.20	0.0
	0.4s	363.10nm				
PJG	2.86	196	eP	56	25.20	0.0
GUA	2.90	195	eP	56	25.20	-0.3
	0.4s	508.47nm				
		eS		57	22.70	
KAKJ	20.37	347	P	59	12.40	0.0
CHJJ	20.50	344	P	59	12.60	-1.1
MAT	21.18	343	eP	59	18.00	-1.9
	0.8s	28.36nm			4.9mb	
		eS		02	47.00	
NIIJ	21.63	345	P	59	23.30	-0.7
AAI	26.38	222	eP	00	06.00	-0.7
KKM	30.63	254	ePc	00	44.50	0.8
	0.6s	64.50nm			5.4mb	
CN2	32.31	332	P	00	57.40	0.0
	0.8s	40.00nm			5.1mb	
MTN	32.39	207	iPc	00	58.50	0.2
OIZ	34.22	280	eP	01	14.80	1.0
BJI	34.85	319	eP	01	19.00	0.3
TIY	36.18	313	eP	01	30.60	0.7
XAN	37.39	305	P	01	40.60	0.8
GYA	37.57	292	P	01	42.60	1.1
WB5	37.69	198	iPc	01	43.10	0.9
		i		03	32.00	
		i		03	45.60	
CD2	40.81	298	P	02	07.80	0.2
ASPA	41.41	196	eP	02	10.00	-2.3
	0.3s	9.40nm			4.8mb	
		iPcP		03	57.70	
		iPcS		06	55.50	
		iS		07	48.20	
		eScS		11	16.50	
LZH	41.98	306	eP	02	18.00	1.0
	1.5s	30.00nm			4.6mb	
DZM	43.26	151	iPd	02	28.00	0.9
CHTO	44.54	280	iPc	02	37.30	0.3
	0.7s	15.57nm			4.6mb	
NNT	44.59	271	eP	02	39.60	2.1
MBL	45.09	215	iPc	02	41.30	0.1
	0.3s	4.00nm			4.4mb	
GTA	45.99	309	eP	02	48.20	0.0
WARB	46.16	204	iPc	02	50.30	0.9
	0.3s	8.00nm			4.7mb	
PSI	47.94	259	ePd	03	03.80	0.7
STK	48.12	185	eP	03	03.90	-0.2
	0.6s	5.00nm			4.2mb	
NANU	48.66	218	eP	03	08.30	0.0
FORR	49.89	200	eP	03	17.00	-0.3
	0.4s	19.00nm			5.0mb	
BWA	50.56	177	eP	03	23.30	1.1
MRWA	53.62	213	eP	03	43.00	-1.4
PKI	56.54	292	P	04	00.00	-5.4X
THZ	63.06	157	eP	04	48.40	0.6
MNG	63.08	155	eP	04	47.00	-0.9
LTZ	63.72	158	P	04	51.30	-0.7
KHZ	63.86	157	P	04	51.10	-1.7
	0.5s	29.00nm			5.1mb	
INK	71.52	23	ePd	05	38.20	-0.7
	0.8s	34.00nm			4.9mb	
MBC	75.41	14	ePd	06	00.50	-0.3
	0.5s	21.00nm			4.8mb	
PGC	78.47	43	eP	06	18.00	0.2
YKA	80.05	28	eP	06	25.20	-0.6
	0.5s	15.80nm			4.7mb	
PNT	80.78	41	eP	06	30.00	0.1
WDC	80.86	50	iPd	06	31.40	0.9
MIN	81.61	51	ePd	06	34.80	0.3
ORV	81.89	51	eP	06	36.00	0.3
PRS	82.80	54	eP	06	41.20	0.9
CMB	83.12	53	eP	06	42.70	0.8
FRI	83.91	53	eP	06	46.70	0.9
KEV	84.15	342	iP	06	45.80	-0.6
	0.6s	19.60nm			4.9mb	
SYP	84.37	56	eP	06	49.00	0.6
ISA	85.24	54	eP	06	53.00	0.5
SOD	85.55	340	iP	06	52.50	-0.7
SES	85.76	39	eP	06	55.00	0.4
SBB	86.03	55	eP	06	57.00	0.7
LRM	86.44	43	ePd	06	58.50	0.2
GSC	86.65	54	eP	07	00.00	0.7
PLM	87.19	56	eP	07	03.00	1.0
BAR	87.55	57	eP	07	04.00	0.5
TPC	87.61	55	eP	07	04.00	0.2
SUF	88.27	336	eP	07	05.00	-1.2
GLA	88.91	56	eP	07	11.00	1.2
FFC	89.06	32	iPd	07	10.10	0.1
	0.5s	9.00nm			4.9mb	
NUR	90.10	335	eP	07	13.00	-1.6
HFS	94.55	338	eP	07	33.00	-2.1
	0.6s	7.40nm			5.0mb	
Z	18s	0.22um			4.7Msz	
		LR		38	12.00	
ALO	94.72	52	eP	07	37.00	0.4
NB2	94.76	340	P	07	34.00	-2.1
	0.7s	3.60nm			4.7mb	
LKO	141.66	310	PKP	13	35.50	-8.5X
LNV	142.37	125	ePKP	13	42.00	-2.6X
ROCH	142.99	123	iPKPc	13	44.50	-1.5
KIC	143.05	305	PKPd	13	43.54	-2.8X
	0.3s	10.00nm				
TIC	143.09	306	PKPd	13	43.54	-2.9X
	0.4s	11.50nm				
SAN	143.12	124	ePKP	13	44.50	-1.5
PCH	143.19	125	ePKP	13	45.00	-1.2
PEL	143.20	124	iPKPd	13	45.20	-0.9
	0.6s	53.33nm				
LIC	143.36	305	PKPd	13	44.58	-2.3X
	0.4s	57.00nm				
JACH	143.42	123	iPKPd	13	46.00	-0.6
FCH	143.46	124	ePKP	13	46.50	-0.4
ARE	144.36	96	ePKP	13	40.00	-8.8X
MDZ	144.75	124	ePKP	13	49.90	1.1
ZOBO	147.56	95	PKP	13	55.00	0.6
Z	24s	0.08um			4.4MszX	
		LR		18	00.00	
LPB	147.61	95	PKP	14	00.00	5.7X
CNCB	147.74	96	PKP	13	56.00	1.3
		i		14	00.00	
SIV	154.30	93	PKP	14	04.00	0.5
		i		14	30.00	
PPD	162.98	112	ePKP	14	19.50	6.3X
		e		15	08.70	

S.D. = 1.0 on 75 of 84 obs.

---

* OCT 08, 1990 05h 50m 15.28± 1.85s
40.630 N ±12.6km 30.188 E ±15.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.2 (ISK).

GPA	0.35	165	iPg	50	22.20	-0.4
HRT	0.44	296	ePg	50	23.50	-0.7
		eSg		50	30.00	
GBZT	0.59	286	ePg	50	28.50	1.4
		iSg		50	37.70	
YLV	0.62	264	iPg	50	27.00	-0.9
ISK	0.96	297	ePg	50	27.00	-6.5X
CTT	1.43	292	iPn	50	40.60	-0.7
ALT	1.57	182	ePn	50	43.90	0.5
DST	1.57	230	iPn	50	43.00	-0.4
BNT	1.75	262	ePn	50	48.00	2.1X
EDC	1.80	262	ePn	50	47.80	1.3
DMK	2.19	304	ePn	50	52.40	0.2
KGT	2.21	266	ePn	50	52.00	-0.5
MFT	2.22	275	ePn	50	58.00	5.3X

S.D. = 0.9 on 10 of 13 obs.

? OCT 08, 1990 06h 01m 55.77± 9.89s
0.596 N ±48.9km 79.201 W ±52.2km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF ECUADOR (105)

COTA	0.90	107	iP+	02	13.50	0.1
		S		02	28.00	
OUR	1.02	139	iP+	02	15.20	-0.1
		S		02	30.10	
OTO	1.04	140	eP	02	15.80	0.1
		S		02	31.00	
CAYA	1.32	113	P	02	20.40	-0.1
		S		02	39.40	
VC1	1.46	147	iP+	02	22.70	0.0

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

& OCT 08, 1990 06h 06m 58.39s
63.471 N 151.005 W
DEPTH = 16.8km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.79	128	eP	07	13.17	-0.2
MCK	0.96	73	eP	07	16.85	0.6
RND	0.97	93	eP	07	16.67	0.3
		eS		07	30.85	
CUT	1.12	162	iP	07	18.64	-0.3
		eS		07	33.93	
NEA	1.40	37	eP	07	22.52	-0.6
		eS		07	41.68	
SKT	1.52	189	iP	07	24.82	0.0
		iS		07	43.52	
WRH	1.63	51	eP	07	25.59	-0.9
CCB	1.84	49	eP	07	28.38	-1.0
PWA	1.90	164	eP	07	30.93	0.6
GHO	1.96	150	eP	07	31.34	0.1
FBA	2.01	43	eP	07	32.30	0.4
HDA	2.02	61	eP	07	31.79	-0.3
PLRM	2.08	154	eP	07	32.87	0.0
SML	2.08	142	eP	07	32.85	-0.1
NCG	2.14	195	eP	07	33.49	-0.5
GLM	2.19	44	eP	07	33.67	-1.0
CRP	2.28	194	eP	07	37.11	1.1
BGL	2.31	197	eP	07	36.39	0.0
PMS	2.33	163	eP	07	37.21	0.6
SPU	2.35	192	eP	07	36.38	-0.5
SCM	2.36	132	eP	07	39.27	2.2
CKL	2.37	196	eP	07	37.73	0.6

TOA	2.61	120	eP	07 41.56	0.9
SDG	2.67	108	eP	07 42.58	1.2
KLU	3.08	128	eP	07 48.51	1.2
VLZ	3.21	135	eP	07 49.37	0.4

26 obs. associated

? OCT 08, 1990 06h 10m 24.57± 2.85s
6.060 S ±43.7km 107.416 W ±53.1km
DEPTH = 10.0km (geophysicist)
4.3mb (6 obs.) 4.1Msz (1 obs.)
NORTHERN EASTER I. CORDILLERA (694)

ZOBO	39.79	108	eP	18 01.00	0.6
	Z 22s		0.32um		4.1Msz
			LR	27 04.00	
LPB	39.86	109	eP	18 06.00	5.2X
CNCB	40.02	109	P	18 02.00	-0.4
ANMO	40.79	1	eP	18 08.60	0.6
	1.9s	11.84nm			4.3mb
TUL	43.15	14	e(P)	18 27.40	0.3
	1.0s	3.30nm			4.0mb
TNP	44.85	349	eP	18 41.90	0.8
	1.2s	5.24nm			4.3mb
CMB	45.50	346	e(P)	18 46.90	0.9
	1.6s	0.40nm			3.1mb X
GOL	45.57	2	eP	18 45.90	-0.9
	1.1s	2.56nm			4.1mb
DAU	46.38	356	eP	18 52.90	-0.3
BW06	48.64	358	eP	19 11.70	0.8
	1.6s	9.87nm			4.6mb
PNT	56.16	350	eP	20 09.00	2.2X
SES	56.31	357	eP	20 06.00	-1.8
YKA	68.58	356	eP	21 28.80	-0.5
	0.8s	3.20nm			4.6mb

S.D. = 1.0 on 11 of 13 obs.

• OCT 08, 1990 10h 04m 39.71± 2.49s
44.344 N ± 6.7km 114.371 W ±22.3km
DEPTH = 5.0km (geophysicist)
WESTERN IDAHO (33)
ML 3.5 (BUT).

HPI	1.12	124	eP	05 01.30	0.0
MCMT	1.19	66	iPd	05 02.00	-0.6
LTMT	1.63	83	ePn	05 10.10	0.7
BGMT	1.88	61	ePn	05 13.30	0.2
HBMT	1.91	40	iPnd	05 13.70	0.2
LRM	2.01	42	iPnd	05 15.00	0.1
PTI	2.07	135	e(P)	05 15.50	-0.2
BUT	2.10	37	ePg	05 19.60	3.4X
			iSn	05 43.00	
			iSg	05 46.90	
MEMT	2.72	61	ePn	05 24.80	-0.3
SXM	2.87	50	ePn	05 27.40	0.2
HRY	2.96	36	ePn	05 28.10	-0.3
BW06	3.83	112	e(P)	05 46.20	5.3X
NEW	4.36	335	e(P)	05 53.00	4.9X

S.D. = 0.4 on 10 of 13 obs.

% OCT 08, 1990 10h 14m 59.39± 0.78s
46.283 N ± 6.1km 8.635 E ± 7.6km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)

TMA	0.24	137	iPc	15 05.00	0.3
VAI	0.43	167	P	15 08.30	0.2
MMK	0.52	244	iPc	15 09.40	-0.6
VDL	0.61	70	iPc	15 11.30	-0.6
LLS	0.64	23	iPc	15 11.60	-0.7
SLE	1.49	356	iPc	15 27.50	1.3

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

• OCT 08, 1990 11h 24m 19.69± 1.50s
41.958 N ± 7.6km 23.046 E ±13.0km
DEPTH = 11.7 ± 5.8 km
GREECE-BULGARIA BORDER REGION (363)
MD 3.0 (ATH).

KKB	0.10	163	ePg	24 23.00	0.4
			Sg	24 29.00	
MMB	0.63	126	iPgc	24 32.00	-0.2
VTS	0.64	11	iPg	24 33.00	0.5
			iSg	24 42.00	
PGB	1.02	54	iPgd	24 37.00	-1.9
			Sg	24 51.00	
PLD	1.24	83	iPgd	24 43.00	0.4
			iSg	25 00.00	
RZN	1.28	102	ePg	24 47.00	3.6X
			Sg	25 00.00	
PLG	1.61	169	ePb	24 47.50	-0.6
KDZ	1.80	99	iPc	24 51.00	0.2
DIM	1.86	86	iPg	24 53.00	1.4
RDO	2.04	113	ePn	24 56.20	2.0
			eSn	25 22.80	
PVL	2.11	53	iPc	24 56.00	0.8
KGT	3.55	114	iPn	25 14.90	-0.8

S.D. = 1.3 on 11 of 12 obs.

• OCT 08, 1990 11h 28m 25.10± 0.87s
39.105 N ± 7.2km 27.617 E ± 8.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.1 (ISK).

IZM	0.76	202	ePg	28 40.00	0.0
			eSg	28 52.30	
DST	0.93	57	ePg	28 42.80	-0.1
			eSg	28 56.80	
EZN	1.23	306	ePn	28 48.00	0.0
BNT	1.27	10	ePn	28 49.00	0.3
KGT	1.37	350	ePn	28 49.90	-0.3

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

• OCT 08, 1990 11h 32m 39.47± 0.89s
39.129 N ± 7.0km 27.622 E ± 8.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

IZM	0.78	201	ePg	32 54.80	0.1
			eSg	33 06.80	
DST	0.91	58	iPg	32 56.80	-0.2
			eSg	33 09.80	
EZN	1.22	305	ePn	33 02.10	-0.1
EDC	1.23	9	ePn	33 02.80	0.5
KGT	1.34	350	iPn	33 03.90	-0.3

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

& OCT 08, 1990 12h 25m 13.29s
63.469 N 150.622 W
DEPTH = 15.5km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.67	137	iP	25 26.18	0.1
			eS	25 36.44	
RND	0.80	94	eP	25 28.58	0.2
			eS	25 40.60	
MCK	0.80	70	eP	25 28.56	0.2
CUT	1.08	171	iP	25 32.98	-0.1
			eS	25 48.41	
NEA	1.30	31	eP	25 36.29	-0.5
			eS	25 53.83	
WRH	1.50	47	eP	25 38.34	-1.3
SKT	1.55	196	eP	25 39.89	-0.5
CCB	1.71	45	eP	25 41.15	-1.5
			eS	26 05.62	
PWA	1.86	169	eP	25 44.68	-0.1
HDA	1.87	58	eP	25 45.08	0.1
GHO	1.88	155	eP	25 45.10	0.0
FBA	1.90	39	eP	25 45.57	0.3
SML	1.97	147	eP	25 46.40	-0.1
PLRM	2.01	159	eP	25 46.84	0.0
GLM	2.08	41	eP	25 46.63	-1.4
DDM	2.15	79	eP	25 52.39	3.3
NCG	2.19	200	eP	25 48.44	-1.3
CGLM	2.26	197	eP	25 49.17	-1.6
PMS	2.29	167	eP	25 51.52	0.5
CRP	2.32	199	eP	25 51.72	0.1
BGL	2.36	201	eP	25 51.83	-0.3
TOA	2.46	122	eP	25 54.63	1.2
SDG	2.50	110	eP	25 55.27	1.2
KLU	2.95	130	eP	26 02.04	1.6
RDT	3.03	197	eP	26 01.20	-0.3

25 obs. associated

OCT 08, 1990 12h 39m 05.46± 0.52s
40.563 N ± 5.2km 27.803 E ± 3.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.9 (ISK).

EDC	0.22	168	iPg	39 10.80	0.6
			iSg	39 12.80	
BNT	0.22	157	iPg	39 10.50	0.2
			iSg	39 12.60	
KGT	0.40	254	iPg	39 13.80	0.2
MFT	0.46	300	ePg	39 14.00	-0.8
KCT	0.53	126	iPg	39 14.80	-1.3
CTT	0.75	39	ePg	39 21.30	1.1
DST	1.15	146	iPn	39 27.80	0.9
YLV	1.20	89	iPn	39 27.30	-0.5
GBZT	1.27	79	ePg	39 29.00	0.0
			iSg	39 47.00	
IZI	1.29	99	ePn	39 28.80	-0.7
EZN	1.35	237	ePn	39 30.10	-0.2
HRT	1.44	79	ePn	39 32.10	0.4

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

OCT 08, 1990 14h 49m 05.14± 0.43s
9.814 N ± 8.1km 92.792 E ± 7.8km
DEPTH = 33.0km (normal)
4.8mb (6 obs.)
NICOBAR ISLANDS REGION (704)

BSI	4.96	150	eP	50 20.00	0.7
NNT	7.35	67	eP	50 55.20	2.3
SNG	8.17	108	eP	51 05.40	1.0
PSI	9.33	139	ePd	51 24.80	4.3X
BDT	9.54	39	eP	51 20.00	-3.3X
IPM	9.68	122	ePd	51 27.00	1.7
			e	53 10.20	
CHG	10.75	33	iPd	51 43.90	4.0X
	1.0s	25.00nm			5.4mb
KOD	15.10	273	eP	52 39.50	1.4
GBA	15.50	286	P	52 43.00	0.0
			S	55 14.00	
HYB	15.76	300	eP	52 47.50	1.0
PKI	18.99	339	P	53 26.60	-0.4
	1.2s	73.00nm			4.8mb
DMN	19.13	339	P	53 29.00	0.4
GUN	19.14	341	P	53 29.00	0.1
KKN	19.23	339	P	53 29.60	-0.1
	1.2s	36.00nm			4.5mb
GKN	19.65	338	P	53 32.60	-1.9
POO	20.29	297	eP	53 42.00	0.9
QUE	31.49	314	eP	55 28.10	1.6
BJI	36.58	31	eP	56 09.00	-0.9
MUN	47.21	153	eP	57 36.00	-0.8
KLB	47.61	151	eP	57 38.80	-1.2
NWAO	48.47	152	eP	57 45.20	-1.5
RKG	49.33	153	eP	57 55.00	1.7
WB5	50.46	126	iPd	58 00.00	-2.2
STK	62.40	134	iPc	59 25.50	-1.8
	0.6s	6.00nm			4.9mb
RMO	65.21	125	iPd	59 44.90	-1.0
BWA	68.61	133	e(P)	00 08.50	1.2
SOD	71.92	338	eP	00 26.00	-0.8
BCAO	73.76	272	iPd	00 39.00	0.4
	0.6s	6.00nm			4.8mb
			id	10 10.50	
HFS	76.12	330	eP	00 49.50	-1.7
	0.4s	0.90nm			4.1mb

S.D. = 1.4 on 26 of 29 obs.

& OCT 08, 1990 15h 28m 58.18s
61.150 N 150.790 W
DEPTH = 55.0km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.32	4	eP	29 07.61	-0.5
NKA	0.46	208	eP	29 10.82	1.4
PMS	0.60	80	iP	29 10.67	-0.4
			iS	29 20.87	
CGLM	0.61	286	iP	29 10.60	-0.6
			eS	29 20.44	
SPU	0.61	274	iP	29 10.68	-0.6
			eS	29 20.71	
PWA	0.67	41	eP	29 11.18	-0.6
CRP	0.67	281	eP	29 11.67	-0.4
SLKM	0.70	156	iP	29 11.82	-0.5
			eS	29 22.99	
NCG	0.71	292	iP	29 11.68	-0.8
			eS	29 22.51	
CKL	0.75	274	iP	29 12.31	-0.7
			iS	29 23.81	
BGL	0.78	279	iP	29 12.70	-0.7
			eS	29 24.25	
SKT	0.91	337	iP	29 13.99	-1.0
PLRM	0.91	60	eP	29 13.83	-1.2

08d 15h

		eS	29	26.92	
RDT	0.98 235	iP	29	15.37	-0.6
		eS	29	29.06	
GHO	1.09 54	eP	29	16.47	-1.1
NNL	1.14 193	eP	29	18.70	0.6
RSO	1.18 235	eP	29	18.40	-0.5
		eS	29	34.39	
SEW	1.24 147	eP	29	18.74	-0.7
CUT	1.28 11	eP	29	18.74	-1.3
SML	1.35 60	eP	29	19.81	-1.3
CNPM	1.64 188	eP	29	24.02	-1.1
KNIM	1.70 117	iP	29	23.38	-2.6
VZW	2.06 91	iP	29	28.79	-2.2
VLZ	2.16 89	iP	29	30.38	-2.0
KLU	2.37 80	eP	29	33.24	-2.2

25 obs. ossocioted

• OCT 08, 1990 16h 11m 44.49± 0.91s
35.994 N ±10.5km 81.091 E ±12.0km
DEPTH = 10.0km (geophysicist)
4.4mb (3 obs.)
SOUTHERN XINJIANG, CHINA (321)

NDI	7.99 205	eP	13	43.00	-0.4
GKN	8.52 158	P	13	54.00	3.1X
	0.4s 18.00nm			5.7mb X	
KKN	8.92 155	P	13	56.20	-0.3
	0.4s 21.00nm			5.8mb X	
GUN	9.02 152	P	13	58.40	0.3
	0.4s 21.00nm			5.8mb X	
DMN	9.03 157	P	13	57.60	-0.5
PKI	9.16 155	P	13	59.20	-0.8
	0.4s 21.00nm			5.9mb X	
QUE	13.19 248	eP	14	47.00	-7.6X
HYB	18.64 188	eP	16	05.00	0.6
GBA	22.53 189	P	16	46.00	0.1
CHTO	23.26 133	e(P)	16	54.00	1.0
	1.0s 2.00nm			3.6mb	
NB2	49.69 323	P	20	37.40	-0.8
	0.9s 4.50nm			4.5mb	
BCAO	65.32 257	iPc	22	30.00	0.8
	0.8s 4.00nm			4.7mb	
		id	29	51.50	

S.D. = 0.8 on 10 of 12 obs.

OCT 08, 1990 16h 28m 44.38± 0.87s
40.271 N ± 9.0km 25.188 E ± 7.4km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 2.7 (ATH).

RDO	0.91 17	ePb	29	02.10	0.3
EZN	0.98 117	iPg	29	03.00	0.0
		iSg	29	16.10	
PRK	1.32 140	ePb	29	08.70	-0.1
PLG	1.34 275	ePb	29	09.00	0.0
MFT	1.68 71	ePn	29	12.70	-1.3
BNT	2.09 87	ePn	29	21.00	1.1

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

• OCT 08, 1990 16h 33m 14.54± 1.44s
40.166 N ± 7.8km 23.391 E ±13.0km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.8 (THE).

THE	0.57 325	ePd	33	24.92	-1.1
		iS	33	33.40	
SOH	0.66 358	ePd	33	27.56	-0.1
		eS	33	35.64	
LIT	0.69 265	ePc	33	28.44	0.2
		eS	33	39.36	
SRS	0.96 9	ePc	33	32.96	0.1
		eS	33	48.76	
KNT	1.06 340	ePd	33	34.96	0.4
		eS	33	49.72	
GRG	1.09 317	ePc	33	35.68	0.6
		iS	33	50.68	
AGG	1.41 216	ePc	33	40.12	-0.1
		eS	34	04.88	

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

• OCT 08, 1990 17h 00m 06.98± 1.96s
9.231 S ± 9.1km 110.783 E ±11.1km
DEPTH = 92.0 ± 20.0 km
5.0mb (9 obs.)
SOUTH OF JAVA (282)

TRT	2.38 51	iPc	00	45.10	0.2
		iS	01	26.40	
NANU	14.02 162	eP	03	13.00	-9.7X
	0.3s 13.00nm			4.7mb	
		eS	05	35.00	
MBL	14.72 145	iPc	03	23.80	-8.0X
	0.3s 6.00nm			4.3mb	
		eS	05	52.00	
AAI	18.15 73	eP	04	15.00	0.4
MTN	20.29 102	iPd	04	37.50	-0.2
	0.4s 39.00nm			5.1mb	
		eS	08	16.00	
MRWA	20.48 167	eP	04	37.00	-2.6
		eS	08	08.70	
WARB	22.60 140	eP	05	02.00	1.3
		ePP	05	12.00	
		eS	09	02.00	
MUN	23.19 168	eP	05	07.00	0.6
COOL	23.61 157	eP	05	10.30	-0.2
		e	05	21.70	
WB5	25.13 118	iPd	05	25.20	0.1
		e	10	08.90	
STK	36.38 133	iPd	07	04.60	0.4
	0.7s 15.00nm			5.0mb	
KOD	38.38 299	eP	07	22.60	1.1
GBA	40.13 304	P	07	35.30	-0.3
HYB	41.42 310	eP	07	46.00	-0.2
PKI	44.07 327	P	08	08.20	0.1
GUN	44.09 328	P	08	08.60	0.4
	0.6s 20.00nm			5.1mb	
DMN	44.27 327	P	08	10.00	0.4
	0.6s 15.00nm			5.0mb	
KKN	44.32 327	P	08	10.00	0.1
	0.8s 16.00nm			4.9mb	
GKN	44.83 326	P	08	14.00	0.1
	0.6s 14.00nm			5.0mb	
POO	45.70 307	iPc	08	19.40	-1.4
MAT	52.32 28	eP	09	10.00	-1.5
QUE	57.53 315	eP	09	49.00	-0.5
MAIO	66.12 316	eP	10	46.00	-0.8
BCAO	92.91 274	iPc	13	14.00	2.4
	0.4s 4.00nm			5.1mb	
SOB1	146.37 238	iPKPd	19	43.00	4.6X
		e	20	01.50	
BAO	147.56 221	ePKP	19	45.90	5.5X
		e	32	31.20	
SIV	153.67 198	PKP	19	52.20	2.8X
CNCB	154.10 183	PKP	19	55.00	4.4X
LPB	154.38 182	ePKP	19	58.00	7.2X
ZOBO	154.64 182	PKP	19	55.00	3.7X

S.D. = 1.1 on 22 of 30 obs.

OCT 08, 1990 17h 40m 43.52± 1.19s
33.314 S ± 6.9km 71.475 W ±10.2km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

LCCH	0.18 206	iPd	40	48.00	0.4
		iS	40	54.00	
ROCH	0.52 49	iPc	40	52.10	-2.0
		iS	41	02.00	
TACH	0.56 127	iPd	40	55.50	0.5
		iS	41	07.10	
LNV	0.64 175	iPd	40	55.00	-1.4
		iS	41	07.50	
PEL	0.68 76	iPd	40	56.80	-0.3
		iS	41	10.10	
SAN	0.69 102	iPd	40	57.40	0.1
		iS	41	11.30	
PCH	0.86 111	iPc	41	00.50	0.4
		iS	41	16.50	
CHCH	0.92 132	iPd	41	01.20	0.0
JACH	0.97 50	iPd	40	58.60	-3.5X
		iS	41	14.50	
FCH	0.99 91	iP	41	02.00	-0.6
		iS	41	20.70	
MDZ	2.24 80	eP	41	24.20	2.9X
		i(S)	41	32.60	
RTBS	2.37 47	e(P)	41	22.00	-1.1
RTCV	2.87 61	e(P)	41	32.00	1.8
RTCB	2.91 52	e(P)	41	11.30	-19.4X
		eS	42	11.20	
ZON	2.95 54	eP	41	33.00	1.7
RTLL	3.22 53	e(P)	41	35.50	0.3
		eS	42	19.00	

S.D. = 1.2 on 13 of 16 obs.

? OCT 08, 1990 18h 14m 05.99± 7.42s
17.399 N ±67.8km 61.959 W ±23.4km
DEPTH = 28.2 ± 12.6 km
LEEWARD ISLANDS (92)
ML 2.7 (FDF).

BPA	0.36 164	eP	14	14.30	0.0
		S	14	21.80	
NEV	0.64 246	eP	14	18.60	0.0
		S	14	29.00	
SEG	1.08 156	eP	14	25.10	-0.2
SFG	1.35 147	eP	14	29.20	0.1
MGG	1.60 157	eP	14	32.69	0.0
BBL	1.92 166	eP	14	37.40	0.0
		S	15	03.50	

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

OCT 08, 1990 18h 50m 58.38± 0.72s
41.444 N ± 5.0km 22.616 E ± 6.5km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)

KNT	0.35 143	iPd	51	05.70	0.0
		eS	51	12.80	
GRG	0.51 199	ePc	51	10.00	1.2
		eS	51	17.36	
KKB	0.55 39	ePg	51	09.00	-0.5
		Sg	51	17.00	
SRS	0.80 114	ePc	51	13.08	-0.9
		eS	51	23.00	
SOH	0.83 138	ePd	51	13.80	-0.7
		eS	51	25.76	
MM8	0.85 80	iPgd	51	15.00	0.3
THE	0.85 162	ePd	51	14.88	0.1
		eS	51	26.84	
SKO	1.03 301	ePn	51	16.50	-1.3
VTS	1.23 21	iPgd	51	23.00	1.7
		iSg	51	40.00	
RZN	1.59 81	eP	51	27.00	0.1

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

• OCT 08, 1990 19h 23m 32.14± 1.10s
8.671 S ± 9.1km 119.730 E ±13.0km
DEPTH = 189.6 ± 16.1 km
4.4mb (5 obs.)
FLORES ISLAND REGION (286)

MKS	3.44 356	iPc	24	28.50	1.4
TRT	7.09 277	ePc	25	10.00	-4.3X
KNA	11.29 129	eP	26	08.00	-1.2
		eS	28	09.00	
MTN	11.94 111	iPd	26	16.90	-0.7
		eS	28	24.00	
MBL	12.42 180	iPd	26	22.40	-1.3
	0.4s 9.00nm			4.6mb	
		eS	28	32.00	
NANU	14.39 196	eP	26	48.00	-0.5
	0.2s 5.00nm			4.6mb	
		eS	29	18.00	
WB5	18.02 130	eP	27	31.30	-0.3
		eS	30	45.90	
WARB	18.61 160	eP	27	39.00	1.2
	0.3s 3.00nm			4.2mb	
		eS	31	06.00	
MRWA	20.74 189	eP	28	00.00	0.7
COOL	22.14 177	eP	28	13.30	0.3
KLB	22.88 184	eP	28	21.00	0.8
STK	30.75 142	eP	29	33.40	1.7
	1.8s 16.00nm			4.4mb	
CHTO	34.15 323	eP	30	00.90	-0.3
	1.0s 1.75nm			3.7mb	
PKI	49.01 318	P	32	00.20	-1.9

S.D. = 1.3 on 13 of 14 obs.

OCT 08, 1990 20h 09m 57.15± 0.67s
48.355 N ± 4.5km 7.513 E ± 5.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG), 1.8 (STR).

WLS	0.12 299	Pg	10	00.27	0.1
		Sg	10	01.81	
CDF	0.17 290	Pg	10	01.10	0.1
		Sg	10	03.39	
ECH	0.27 240	Pg	10	02.80	-0.1
		Sg	10	06.24	
MOF	0.56 207	Pg	10	08.45	-0.2

FEL 0.58 145 ePg 10 08.99 -0.1
GWF 0.63 7 Pg 10 09.74 0.0
Sg 10 19.30
BSF 0.71 223 Pg 10 10.80 -0.5
Sg 10 20.20
HAU 0.85 246 Pg 10 13.60 0.0
Sg 10 24.50
VITF 1.03 263 Pg 10 16.66 0.1
Sg 10 31.31
LOMF 1.11 285 Pg 10 18.74 0.8
Sg 10 33.25
LOR 2.69 248 Pg 10 48.00 6.7X
Sg 11 21.50
SMF 3.02 237 Pg 10 54.00 8.1X
Sg 11 32.20
S.D. = 0.4 on 10 of 12 obs.

• OCT 08, 1990 20h 17m 51.59± 0.85s
31.831 S ± 8.7km 68.966 W ± 9.1km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCV 0.37 95 ePc 18 00.90 0.6
RTCB 0.37 22 iPd 17 59.80 -0.6
ZON 0.38 41 iPd 18 00.50 0.1
eS 18 12.50
RTBS 0.45 292 ePd 18 01.80 0.4
RTLL 0.66 40 iPc 18 00.40 -4.0X
MDZ 1.05 175 eP 18 09.70 -0.4
e 18 26.90
S.D. = 0.7 on 5 of 6 obs.

OCT 08, 1990 21h 02m 14.98± 0.72s
12.430 S ± 6.2km 76.827 W ± 8.8km
DEPTH = 72.3 ± 6.2 km
4.8mb (8 obs.)
NEAR COAST OF PERU (115)
Felt strongly in the Limo-Molo-San Vicente de Conete area.

NNA 0.44 358 iPc 02 26.60 -1.1
PT08 0.54 30 iPd 02 28.00 -1.0
PT06 1.47 161 iPd 02 26.00 -14.1X
ARE 6.54 128 eP 03 52.00 1.0
iS 05 13.70
ZOBO 9.26 115 P 04 28.00 -0.6
e 06 28.00
LPB 9.38 117 P 04 32.00 1.8
CNCB 9.60 118 P 04 34.00 0.6
VC1 11.82 352 P 05 03.80 0.6
GGP 12.30 352 eP 05 12.00 2.3
YANA 12.36 352 eP 05 11.00 0.7
CAYA 12.48 355 eP 05 11.50 -0.5
COTA 12.77 353 eP 05 17.00 1.2
SIV 15.68 105 P 05 51.00 -2.1
PEL 21.37 166 eP 06 59.00 0.7
MDZ 21.63 162 eP 07 02.90 2.0
SAN 21.67 166 eP 06 59.00 -2.3
TOV 23.15 18 eP 07 19.30 3.3X
OLLA 24.42 24 eP 07 29.00 0.6
FISA 24.69 18 eP 07 31.00 0.2
VAO 30.26 114 eP 08 14.90 -6.6X
e 08 25.90
SOB1 35.42 88 (P) 09 06.00 -0.3
TUL 51.31 340 eP 11 13.80 -0.1
0.8s 15.70nm 5.1mb
e 11 28.50
FVM 51.74 346 P 11 15.40 -1.8
0.5s 8.40nm 5.0mb
ALO 54.85 330 ePc 11 40.30 -0.2
1.0s 9.25nm 4.8mb
ANMO 54.86 330 P 11 40.20 -0.3
1.0s 9.38nm 4.8mb
HBVT 56.62 3 P 11 52.50 -0.2
GOL 58.27 334 P 12 03.80 -0.9
1.2s 9.22nm 4.8mb
CBM 59.60 7 P 12 13.20 -0.3
SBB 60.90 322 eP 12 23.00 0.4
RSSD 61.49 338 P 12 25.20 -1.5
DAU 61.50 331 P 12 26.30 -0.7
CLC 61.53 323 eP 12 27.00 0.1
ABL 61.86 321 P 12 29.30 0.0
ISA 61.95 322 eP 12 22.00 -7.7X
DUG 62.10 329 P 12 30.70 0.0
TNP 62.88 325 P 12 36.30 0.3
0.7s 5.00nm 4.7mb
CMB 64.67 323 ePc 12 47.10 -0.5
ORV 66.33 324 eP 12 58.40 0.3
SES 69.35 337 eP 13 17.00 0.2
NEW 70.20 333 P 13 22.10 0.1
0.9s 8.22nm 4.7mb
BMW 71.88 328 P 13 32.50 0.3
EDM 72.47 338 eP 13 35.00 -0.6
MCW 73.17 330 P 13 40.30 0.6
KIC 74.03 80 P 13 44.60 -0.7
SPA 77.65 180 iPc 14 05.20 0.2
1.0s 10.50nm 4.7mb
INK 89.95 342 eP 15 08.00 1.0
WB5 135.57 224 ePKP 21 30.00 0.5
BJI 150.20 340 ePKP 21 59.50 5.5X
1.0s 24.00nm
GBA 154.90 84 PKPc 22 01.40 0.0
1.0s 3.40nm
S.D. = 1.0 on 44 of 49 obs.

& OCT 08, 1990 21h 42m 48.06s
62.045 N 153.161 W
DEPTH = 0.0km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.8 (PMR).

SKT 0.77 94 iP 43 03.01 -0.5
NCG 0.80 143 eP 43 03.67 -0.4
eS 43 15.49
BGL 0.87 155 iP 43 04.84 -0.5
iS 43 17.88
CRP 0.92 148 eP 43 05.97 -0.4
CGLM 0.92 143 eP 43 05.98 -0.5
iS 43 19.61
CKL 0.94 155 eP 43 06.26 -0.5
SPU 1.02 148 iP 43 07.77 -0.5
SUA 1.29 116 iP 43 12.45 -0.5
iS 43 31.79
CUT 1.40 74 eP 43 13.71 -1.1
SVW 1.51 232 iPd 43 15.10 -1.3
RDT 1.52 166 iP 43 16.64 0.0
eS 43 37.51
TTA 1.59 305 iPd 43 14.90 -2.8
NKA 1.60 144 eP 43 19.77 2.1
RSO 1.60 173 eP 43 17.75 -0.1
PWA 1.61 103 eP 43 16.96 -0.8
HUR 1.88 59 eP 43 20.50 -1.3
eS 43 45.98
PMS 1.90 113 iP 43 21.89 -0.1
iS 43 46.30
PLRM 1.97 102 eP 43 22.06 -0.9
eS 43 47.20
PMR 1.97 102 ePd 43 22.20 -0.8
GHO 2.02 96 eP 43 23.02 -0.9
eS 43 46.73
SLKM 2.10 136 eP 43 24.47 -0.4
NNL 2.21 155 eP 43 27.72 1.3
SML 2.30 94 eP 43 27.44 -0.4
RND 2.41 54 eP 43 27.70 -1.8
MCK 2.57 47 eP 43 30.28 -1.4
SEW 2.65 136 eP 43 33.63 0.8
eS 44 09.59
AUH 2.69 183 eP 43 39.13 5.6
AUE 2.70 182 eP 43 33.34 -0.1
CNPM 2.70 159 eP 43 32.84 -0.7
SCM 2.77 92 eP 43 34.55 0.0
iS 44 10.97
CDD 3.13 185 eP 43 39.10 -0.6
GLI 3.14 109 eP 43 37.71 -2.0
NEA 3.14 34 eP 43 36.79 -2.9
TOA 3.29 86 eP 43 41.90 0.0
VZW 3.31 104 eP 43 40.97 -1.3
WRH 3.34 41 eP 43 39.24 -3.4
MTU 3.38 125 eP 43 40.47 -2.8
VLZ 3.39 103 eP 43 41.94 -1.4
KLU 3.49 96 eP 43 43.62 -1.1
CCB 3.56 40 eP 43 42.19 -3.4
SDG 3.59 79 eP 43 46.14 0.0
HDA 3.67 47 eP 43 45.49 -1.9
FBA 3.74 38 eP 43 45.20 -3.1
DDM 3.77 59 eP 43 46.76 -2.0
GLM 3.92 39 eP 43 47.91 -3.1
IMA 4.05 357 ePc 43 48.90 -3.8
KDC 4.32 175 eP 43 56.80 0.3
DOT 4.47 65 eP 43 55.75 -2.9
GLB 4.49 94 eP 43 57.24 -1.7
TMW 4.86 70 eP 44 02.63 -1.5
TGL 5.13 100 eP 44 06.30 -1.8
BALM 5.27 96 eP 44 07.74 -2.4
FYU 5.70 34 eP 44 14.13 -1.9
ANM 6.06 300 eP 44 17.80 -3.2
DWY 6.56 66 P 44 25.50 -2.6
INK 10.33 44 P 45 17.00 -3.5
56 obs. associated

? OCT 08, 1990 21h 48m 11.62± 2.02s
11.582 S ±20.6km 117.483 E ±30.7km
DEPTH = 33.0km (normal)
3.9mb (1 obs.)
SOUTH OF SUMBAWA ISLAND (291)

TRT 6.14 308 ePc 49 42.30 -0.1
MBL 9.79 167 iPc 50 31.90 -1.3
0.3s 19.00nm 5.8mb X
eS 52 11.00
NANU 11.08 189 eP 50 50.50 -0.4
0.3s 3.00nm 5.0mb X
eS 52 42.00
MEKA 14.99 176 eP 51 42.00 -0.8
eS 54 16.00
WARB 16.90 151 iPd 52 08.00 0.7
0.3s 3.00nm 3.9mb
eS 55 07.00
MRWA 17.60 184 eP 52 18.00 1.9
eS 55 16.00
S.D. = 1.5 on 6 of 6 obs.

? OCT 08, 1990 21h 55m 41.24± 1.35s
40.668 N ± 9.6km 29.966 E ± 9.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

HRT 0.27 304 ePg 55 47.00 0.0
eSg 55 51.50
GPA 0.46 145 ePg 55 50.30 -0.3
eSg 55 57.30
YLV 0.46 250 iPg 55 50.10 -0.6
iSg 55 57.60
IZI 0.50 229 ePg 55 51.10 -0.3
CTT 1.26 293 ePn 56 04.60 0.0
DST 1.48 224 ePn 56 09.00 1.1
S.D. = 0.8 on 6 of 6 obs.

OCT 08, 1990 22h 04m 32.39± 0.89s
36.683 N ± 9.7km 22.030 E ± 7.5km
DEPTH = 33.0km (normal)
3.6mb (1 obs.)
SOUTHERN GREECE (368)
ML 3.3 (ATH).

ITM 0.50 351 ePg 04 42.20 -0.9
VLI 0.73 87 ePg 04 44.00 -2.2
ATH 1.86 46 ePb 05 03.20 0.7
VLS 1.88 323 ePn 05 07.50 4.7X
VAM 2.17 125 ePn 05 07.50 0.6
EVR 2.24 356 ePb 05 12.50 4.6X
APE 2.83 81 ePn 05 16.00 -0.3
NPS 3.23 115 ePb 05 25.60 3.6X
KEK 3.50 331 ePb 05 32.20 6.4X
KZN 3.62 357 ePn 05 28.20 0.6
PLG 3.85 16 ePn 05 32.00 1.3
KAP 4.32 104 ePn 05 37.50 0.1
OHR 4.52 348 ePn 05 45.00 4.6X
ARG 4.94 94 ePn 05 46.20 0.0
SKO 5.30 355 ePn 05 51.00 -0.3
CZI 5.30 300 P 05 51.10 -0.2
eSn 06 45.60
CSI 5.47 306 P 05 54.50 0.7
KSL 6.12 93 ePn 06 04.00 1.1
MGR 6.14 306 P 06 00.00 -3.2X
SGO 6.53 308 P 06 00.00 -8.6X
HFS 24.07 350 eP 09 43.20 -2.2X
2.0s 150.70nm 5.2mb X
NB2 25.33 348 P 09 56.20 -1.3
0.5s 0.80nm 3.6mb
S.D. = 1.1 on 14 of 22 obs.

OCT 08, 1990 22h 47m 28.42± 0.35s
39.020 N ± 3.7km 23.602 E ± 3.5km
DEPTH = 10.3 ± 2.5 km
AEGEAN SEA (365)
ML 3.6 (ATH), 3.5 (THE).

AGG 0.99 270 ePc 47 45.80 -1.4
iS 47 59.64

08d 22h

ATH	1.05	175	ePn	47	48.20	0.0
PLG	1.36	355	iPnc	47	53.20	-0.1
			eSn	48	10.00	
LIT	1.38	322	ePc	47	53.16	-0.5
			iS	48	11.84	
EVR	1.40	266	ePn	47	53.60	-0.5
THE	1.68	343	ePd	47	57.52	-0.4
			eS	48	20.04	
SOH	1.81	354	iPc	47	59.96	0.1
KZN	1.91	313	ePn	48	01.00	-0.4
PRK	2.09	83	ePn	48	04.20	0.4
SRS	2.09	360	ePd	48	03.44	-0.5
			eS	48	29.86	
GRG	2.14	335	ePc	48	04.12	-0.6
			iS	48	31.68	
KNT	2.21	346	iPc	48	05.70	0.1
			eS	48	33.64	
EZN	2.26	68	ePn	48	06.20	-0.1
ITM	2.26	216	ePn	48	06.70	0.3
VLI	2.36	193	ePn	48	07.30	-0.4
FNA	2.46	317	ePc	48	08.76	-0.4
APE	2.47	141	ePn	48	10.00	0.6
VLS	2.51	251	ePn	48	11.20	1.4
MMB	2.57	2	iPc	48	11.00	0.3
RDO	2.59	34	ePn	48	10.20	-0.8
ALN	2.65	44	iPc	48	11.50	-0.4
KBN	2.68	308	ePn	48	13.60	1.3
RZN	2.80	17	eP	48	14.00	-0.2
SMG	2.86	116	ePn	48	15.20	0.4
KKB	2.87	352	ePc	48	14.00	-1.0
SRN	2.92	288	ePn	48	19.30	3.7X
IZM	2.93	101	ePn	48	20.00	4.1X
KDZ	2.97	27	iPc	48	15.00	-1.4
OHR	3.00	315	iPn	48	16.60	-0.3
			iSn	49	05.30	
			Lg	49	14.20	
KEK	3.03	284	ePb	48	22.70	5.5X
TPE	3.05	296	ePn	48	19.50	2.0
KGT	3.19	62	iPn	48	20.10	0.5
PLD	3.19	15	iPd	48	21.00	1.5
MFT	3.33	57	ePn	48	20.50	-1.2
DIM	3.36	25	eP	48	26.00	4.0X
SKO	3.38	331	iPn	48	21.70	-0.5
			i	49	20.50	
VLO	3.48	296	ePn	48	32.20	8.6X
EDC	3.54	67	ePn	48	26.00	1.4
PGB	3.55	7	eP	48	14.00	-10.7X
VTS	3.58	355	iPd	48	27.00	1.8
BNT	3.59	67	ePn	48	25.00	-0.2
VAM	3.64	172	ePn	48	24.00	-1.9
TIR	3.69	310	ePn	48	29.20	2.6
KKS	3.90	322	ePn	48	30.80	1.2
DST	3.94	80	ePn	48	30.60	0.3
LACI	3.96	313	ePn	48	38.80	8.4X
NPS	4.08	156	ePb	48	38.20	6.0X
PVL	4.39	17	eP	48	34.00	-2.6
KAP	4.48	139	ePn	48	38.00	0.1
YLV	4.71	69	eP	48	55.00	13.8X
MGR	6.32	283	P	49	03.00	-0.8
SGO	6.57	286	P	49	06.00	-1.4
MLR	6.70	14	ePc	49	12.00	2.7
BZS	6.75	348	eP	49	07.50	-2.4
VRI	7.22	18	ePc	49	16.50	0.0

S.D. = 1.2 on 46 of 55 obs.

OCT 08, 1990 23h 03m 35.39± 0.24s
13.267 S ± 6.1km 167.214 E ± 7.5km
DEPTH = 168.3km (7 depth phases)
5.2mb (22 obs.)
VANUATU ISLANDS (186)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 20C
Centroid Location:
Origin Time 23:03:43.4 0.9
Lat 13.26S FIX;Lon 167.04E FIX
Dep 183.7 3.6 Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr= 4.57 0.64 Mtt= 0.61 1.22
Mff=-5.19 1.14 Mrt= 2.66 0.77
Mrf=-4.45 0.68 Mtf= 1.72 1.04
Principal Axes:
T Val= 6.89 Plg=65 Azm= 44
N 0.83 10 157
P -7.72 22 251
Best Double Couple:Mo=7.3*10**16
NP1:Strike= 0 Dip=24 Slip= 116

NP2: 152 68 79

BKM	4.49	167	iPd	04	45.40	2.3
DZM	8.79	185	iPc	05	42.00	1.8
			iS	07	20.00	
PMG	20.04	279	iPd	07	57.90	0.6
	1.4s	232.56nm			5.5mb	
CTA	21.18	249	iPd	08	08.80	0.1
	1.0s	136.00nm			5.4mb	
			iS	11	52.00	
RMO	21.74	230	iPd	08	13.70	-0.5
	1.0s	265.00nm			5.7mb	
COO	22.29	217	eP	08	20.00	0.5
CMS	26.74	224	eP	09	01.00	-0.2
			e	09	35.00	165km
BWA	27.09	216	eP	09	03.80	-0.6
STK	29.92	228	iPd	09	29.30	-0.3
	0.6s	9.00nm			4.7mb	
			e	10	03.10	161km
WB5	32.12	254	eP	09	46.80	-2.2
			eS	14	43.00	
			iScP	16	02.00	
FORR	40.00	238	iPc	10	54.50	-0.7
	0.4s	17.00nm			5.1mb	
WARB	40.13	245	iPc	10	50.60	-5.8X
	0.4s	14.00nm			5.0mb	
MBL	45.80	253	eP	11	42.00	-0.2
	0.3s	2.00nm			4.2mb	X
NANU	49.84	252	eP	12	13.00	-0.4
MAT	56.59	332	eP	13	02.00	-0.8
	1.0s	32.00nm			5.1mb	
IPM	68.05	280	ePc	14	19.90	0.7
	1.0s	48.50nm			5.2mb	
CN2	68.37	329	Pc	14	21.40	0.8
	1.0s	40.00nm			5.2mb	
			pP	15	01.00	165km
PSI	69.57	278	ePc	14	37.80	9.4X
GYA	70.85	304	P	14	36.60	0.4
BJI	71.10	321	eP	14	38.00	0.8
	1.0s	20.00nm			4.9mb	
TIY	72.16	317	Pc	14	44.60	1.0
XAN	72.67	312	P	14	47.20	0.5
KMI	73.50	301	Pc	14	53.00	1.1
	1.5s	100.00nm			5.3mb	
CHG	74.43	294	eP	14	58.00	0.9
	1.0s	27.50nm			4.9mb	
CHTO	74.43	294	eP	14	57.90	0.8
	0.9s	23.44nm			4.9mb	
			pP	15	40.60	176km
CD2	75.08	307	P	15	01.40	0.7
BTO	75.29	319	eP	15	03.00	1.2
LZH	77.30	312	iPc	15	14.50	1.4
	1.5s	70.00nm			5.2mb	
GTA	81.62	314	iPc	15	37.40	1.3
	1.0s	30.00nm			5.0mb	
MAW	83.21	202	iP	15	43.80	0.2
IMA	84.26	15	eP	15	50.60	1.6
			e	16	32.80	169km
CMB	84.69	49	eP	15	53.20	1.6
FRI	84.82	50	eP	15	53.00	0.8
FBA	84.98	18	ePd	15	53.50	1.1
	0.8s	27.40nm			5.1mb	
			e	16	36.10	171km
GUN	88.65	299	P	16	12.00	0.6
	0.8s	27.00nm			5.3mb	
PKI	88.96	299	P	16	13.20	0.3
	0.8s	35.00nm			5.4mb	
KKN	89.12	299	P	16	13.80	0.3
	0.8s	40.00nm			5.5mb	
DMN	89.23	298	P	16	14.80	0.7
	0.8s	57.00nm			5.6mb	
GKN	89.73	299	P	16	16.10	-0.2
	0.8s	38.00nm			5.4mb	
WMO	91.67	315	P	16	25.20	0.5
			pP	17	08.00	170km
HYB	92.64	287	eP	16	29.50	-0.1
GBA	92.84	283	Pc	16	29.70	-0.8
	1.0s	7.50nm			4.8mb	
SUF	123.46	340	iPKP	22	13.30	-0.2
	0.5s	8.30nm				
NUR	125.50	338	iPKP	22	17.20	-0.4
	0.8s	29.30nm				
NB2	129.21	345	PKP	22	24.20	-0.5
	1.0s	10.10nm				
HFS	129.32	343	ePKP	22	23.50	-1.4
	1.0s	12.60nm				
KRA	134.61	331	ePKP	22	35.50	0.2

BRG	136.67	335	ePKP	22	40.40	1.2
	1.4s	16.00nm				
PRU	137.10	334	ePKP	22	40.50	0.5
ZST	137.25	331	ePKP	22	40.80	0.5
MOX	137.76	337	e(PKP)	22	42.00	0.7
KHC	138.16	334	ePKP	22	43.10	1.0
WTS	138.28	342	ePKP	22	43.50	1.4
	1.0s	21.00nm				
ENN	139.62	342	ePKP	22	47.50	2.9X
	0.9s	11.00nm				
OHR	139.66	320	ePKP	22	36.30	-8.8X
CDF	141.21	339	ePKP	22	42.00	-5.7X
BSF	141.87	339	ePKP	22	44.40	-4.5X
HAU	141.88	339	ePKP	22	44.50	-4.3X
	0.9s	8.20nm				
VAI	142.74	335	PKP	22	47.50	-2.7X
PGD	142.96	330	PKP	22	48.00	-3.0X
FLN	143.17	346	iPKPc	22	48.60	-2.3X
	0.9s	18.00nm				
LDF	143.25	346	iPKPc	22	48.80	-2.3X
ORX	143.25	335	PKP	22	47.49	-3.8X
ORO	143.26	335	PKP	22	48.00	-3.3X
BOB	143.33	333	PKP	22	49.00	-2.4X
SGO	143.33	323	PKP	22	49.00	-2.4X
LOR	143.35	341	ePKP	22	49.20	-2.1X
	0.7s	5.50nm				
BDI	143.35	331	PKP	22	48.00	-3.5X
LBF	143.56	341	ePKP	22	49.80	-1.9
	1.1s	14.65nm				
GRR	143.61	347	iPKPc	22	49.80	-1.9
	0.6s	9.00nm				
SSF	143.64	341	iPKPc	22	50.20	-1.6
	1.0s	30.00nm				
CZI	143.67	321	PKP	22	49.80	-2.2X
LSD	143.72	336	PKP	22	50.77	-1.6
LPL	143.84	337	ePKP	22	51.40	-1.1
	1.0s	12.00nm				
LPG	143.85	337	ePKP	22	51.50	-1.1
	1.1s	24.40nm				
PCP	143.90	334	PKP	22	49.95	-2.4X
SMF	143.90	340	iPKPc	22	50.80	-1.5
	1.3s	59.55nm				
AVF	143.93	341	iPKPc	22	50.80	-1.5
	1.0s	28.00nm				
RSP	143.94	336	PKP	22	50.77	-1.7
LPF	143.99	347	iPKPc	22	51.10	-1.2
	0.7s	28.65nm				
CKI	144.10	334	PKP	22	50.00	-2.7X
BNI	144.25	336	PKPd	22	53.00	-0.1
SOB1	144.26	127	ePKP	22	52.70	-1.1
BGF	144.30	341	ePKP	22	52.20	-0.7
	1.1s	81.80nm				
FIN	144.31	334	PKP	22	51.87	-2.0
RRL	144.32	336	PKP	22	52.51	-0.8
BST	144.32	350	ePKP	22	52.63	-0.3
ROB	144.38	334	PKP	22	51.59	-1.6
DOI	144.47	335	PKP	22	51.00	-2.4X
PZZ	144.53	335	PKP	22	51.79	-1.8
ENR	144.63	335	PKP	22	51.18	-2.5X
STV	144.65	335	PKP	22	51.48	-2.2X
IMI	144.68	334	PKP	22	53.02	-0.7
MAF	144.69	341	ePKP	22	52.70	-0.9
	1.1s	68.35nm				
TCF	144.74	342	ePKP	22	52.70	-1.0
AUTN	144.81	334	ePKP	22	54.01	-0.2
TOUF	144.87	335	ePKP	22	54.01	-0.2
SBF	144.92	334	iPKPc	22	53.90	-0.3
	0.9s	109.75nm				
AURF	144.94	334	ePKP	22	54.01	-0.2
LSF	144.97	343	ePKP	22	53.30	-0.8
MVIF	145.01	335	ePKP	22	54.01	-0.4
REVF	145.05	334	PKP	22	54.38	0.0
MFF	145.11	345	iPKPc	22	55.00	0.7
	1.0s	142.00nm				
CALN	145.24	335	ePKP	22	55.05	0.3
PGF	145.26	331	ePKP	22	55.38	0.6
FRF	145.49	335	ePKP	22	54.90	-0.1
	1.1s	85.45nm				
LRG	145.70	335	ePKP	22	55.80	0.4
	1.2s	101.15nm				
LMR	145.74	335	ePKP	22	55.80	0.4
	1.0s	64.00nm				
RJF	145.83	342	ePKP	22	56.40	0.8
	1.2s	59.50nm				
CAF	146.00	341	ePKP	22	57.10	1.2
	0.9s	24.55nm				
LFF	146.39	343	ePKP	22	58.10	1.6

	1.1s	48.85nm				
LPO	146.49	342	ePKP	22	58.40	1.7
	1.1s	48.85nm				
BCAO	147.87	257	iPKPc	22	59.50	-0.3
	0.9s	35.00nm				
			ic	23	47.00	
EPF	148.25	342	ePKP	23	04.60	5.0X
CAI	148.83	128	ePKP	23	04.40	3.1X
ECRI	149.44	345	iPKPc	23	07.60	6.1X
EMON	149.57	352	ePKP	23	07.10	5.5X
EROO	150.21	340	e(PKP)	23	59.40	-3.2X
STS	150.26	354	iPKPc	23	08.80	6.2X
ERUA	150.57	351	ePKP	23	10.10	7.0X
ETOR	150.99	343	iPKPc	23	11.00	7.1X
GUD	151.70	346	iPKPc	23	12.90	7.9X
TOL	152.39	345	iPKPd	23	15.00	9.1X
	1.0s	60.00nm				
EPLA	152.66	349	ePKP	23	14.70	8.4X
EVIA	153.14	342	iPKP	23	16.30	9.2X
	S.D. = 1.0	on	90 of 125 obs.			

& OCT 08, 1990 23h 33m 18.98s
63.368 N 150.044 W
DEPTH = 5.4km
CENTRAL ALASKA (1)
<AGS-P>. ML 2.9 (PMR).

HUR	0.43	155	iP	33	27.37	-0.3
			iS	33	33.06	
RND	0.54	85	eP	33	29.11	-0.7
			iS	33	36.53	
MCK	0.62	53	iP	33	30.62	-0.7
CUT	0.97	186	iP	33	37.35	-0.5
			eS	33	50.42	
NEA	1.29	19	eP	33	42.55	-0.7
			eS	34	00.21	
WRH	1.40	37	eP	33	44.36	-0.8
SKT	1.55	207	iP	33	47.24	0.0
CCB	1.62	37	eP	33	47.53	-0.7
GHO	1.68	162	eP	33	48.76	-0.5
PWA	1.73	177	eP	33	50.57	0.8
SML	1.75	152	eP	33	49.77	-0.5
FBA	1.83	32	eP	33	52.20	1.0
PLRM	1.83	166	eP	33	51.00	-0.3
			eS	34	15.15	
PMR	1.83	166	eP	33	50.90	-0.4
SCM	1.99	140	eP	33	54.36	0.7
GLM	2.00	34	eP	33	53.52	-0.3
PMS	2.14	174	eP	33	56.91	1.0
TOA	2.19	124	iPc	33	57.80	1.3
NCG	2.20	207	eP	33	57.14	0.3
SDG	2.22	110	eP	33	56.99	0.0
CGLM	2.26	205	eP	33	58.93	1.3
CRP	2.33	206	eP	33	59.75	1.1
BGL	2.38	208	eP	34	01.32	2.0
SPU	2.39	204	eP	34	01.56	2.2
CKL	2.43	207	eP	34	01.38	1.3
KLU	2.69	133	eP	34	04.51	0.8
VLZ	2.84	141	eP	34	06.22	0.5
GLI	2.86	150	eP	34	06.75	0.7
SLKM	2.87	182	eP	34	07.84	1.6
IMA	3.13	332	eP	34	09.80	-0.1
	30 obs. associated					

OCT 08, 1990 23h 35m 00.77± 0.31s
21.377 S ± 4.9km 67.936 W ± 7.9km
DEPTH = 144.5km (3 depth phases)
4.8mb (10 obs.)
CHILE-BOLIVIA BORDER REGION (124)

ANT	3.26	224	iP	35	51.50	-0.3
			iS	36	26.00	
CCH	4.32	23	iPc	36	08.00	1.8
CNCB	4.54	359	iPc	36	09.80	0.4
LPB	4.82	358	Pc	36	14.00	1.0
	1.0s	280.00nm				
ZOBO	5.08	358	iPc	36	16.00	-0.7
ARE	5.93	325	eP	36	23.00	-4.8X
			iS	37	22.70	
RTLL	9.92	183	ePc	37	19.70	-1.3
RTCB	10.10	184	eP	37	23.30	0.0
RTBS	10.33	187	e(P)	37	26.00	-0.3
RTCV	10.46	183	e(P)	37	27.80	-0.2
MDZ	11.49	184	eP	37	46.70	5.1X
VAO	19.48	99	iPd	39	19.00	0.1
			e	39	35.20	77kmX
			e	39	41.40	
JFO	22.89	95	eP	39	53.00	0.2
			e	40	09.10	71kmX
SOB1	28.69	69	eP	40	45.60	-0.9
			e	41	27.50	208kmX
JSC	56.78	347	P	44	30.50	-1.4
PRM	56.84	346	P	44	30.80	-1.5
TKL	58.67	345	P	44	42.80	-2.4
GBTN	58.79	345	P	44	43.50	-2.5
NAV	59.62	348	P	44	50.50	-1.2
OLY	60.81	338	P	44	57.00	-2.7
ELC	61.70	341	P	45	03.30	-2.4
			pP	45	37.50	143km
FVM	62.72	340	P	45	10.20	-2.2
			pP	45	45.00	146km
TUL	62.78	335	iPc	45	11.80	-1.1
	1.0s	13.70nm			4.8mb	
SIO	62.85	334	iP	45	07.30	-6.0X
ALQ	66.89	326	eP	45	38.90	-0.7
	1.0s	12.00nm			4.7mb	
			e	46	14.00	145km
ANMO	66.89	326	P	45	39.20	-0.4
	1.0s	12.19nm			4.7mb	
LIC	67.48	73	Pc	45	43.54	0.0
	0.6s	13.50nm			5.0mb	
TIC	67.67	73	Pc	45	44.82	0.1
	0.9s	19.50nm			5.0mb	
KIC	67.80	73	Pc	45	45.78	0.3
	0.6s	43.50nm			5.4mb	
GLD	70.07	330	P	45	59.70	0.6
GOL	70.10	330	P	45	58.50	-0.9
	1.0s	10.63nm			4.6mb	
MSU	72.59	325	P	46	15.00	0.7
RSSD	73.08	334	P	46	16.60	-0.4
ABL	74.14	318	P	46	23.90	0.6
DUG	74.16	326	P	46	23.80	0.6
BW06	74.47	329	P	46	24.00	-1.1
	1.3s	8.88nm			4.3mb	
BCH	74.89	318	P	46	28.40	0.9
TNP	75.09	322	P	46	28.90	0.2
	0.9s	5.53nm			4.3mb	
PHAM	75.51	318	P	46	31.70	0.8
PRI	75.87	318	ePc	46	34.50	1.5
PRS	76.43	318	ePc	46	36.90	0.9
CMB	76.93	320	eP	46	39.70	0.9
ARN	77.18	319	P	46	41.00	0.8
GCC	77.26	318	ePc	46	42.00	1.5
BRK	77.96	319	eP	46	45.80	1.5
LRM	78.13	330	eP	46	46.40	0.9
ORV	78.57	321	ePc	46	49.40	1.7
WDC	79.84	321	ePc	46	54.20	-0.3
LBFM	79.95	322	P	46	55.80	0.4
DPW	82.35	329	P	47	08.30	0.8
RMW	83.87	327	P	47	15.30	0.0
BMW	83.98	325	P	47	16.50	0.6
PNT	84.02	329	eP	47	17.00	1.1
MAW	84.19	163	iPd	47	20.10	3.6X
MCW	85.19	327	P	47	22.40	0.6
YKA	91.37	340	eP	47	51.20	0.4
	0.7s	12.60nm			5.2mb	
WB5	133.56	210	ePKP	54	04.00	1.7
GBA	146.14	97	PKP	54	26.00	1.0
HYB	148.18	91	ePKP	54	41.00	12.7X
MAT	152.70	309	ePKP	54	44.00	9.5X
	1.0s	12.00nm				
	S.D. = 1.2	on	54 of 60 obs.			

OCT 08, 1990 23h 42m 42.24± 0.29s
44.125 N ± 3.1km 19.330 E ± 3.1km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 3.8 (ZAG), 3.5 (TTG). MD 4.0 (TRI), 3.6 (ATH). Felt at Srebrenico.

PLE	0.80	177	ePg	42	56.30	-1.5
			eSg	43	05.50	
BEO	1.06	49	iPg	43	04.00	1.7
			iSg	43	19.00	
IVA	1.32	162	ePg	43	05.50	-1.2
			eSg	43	22.50	
NKY	1.33	191	ePg	43	06.40	-0.5
			eSg	43	25.20	
BRY	1.35	205	iPgd	43	06.50	-0.7
			iSg	43	26.00	
PVY	1.60	163	ePg	43	11.00	0.2
			eSg	43	32.00	
BLY	1.66	293	Pn	43	15.00	3.5X
			Sn	43	37.50	
TTG	1.70	182	ePg	43	12.30	0.3
			eSg	43	35.00	
HCY	1.78	200	ePn	43	14.50	1.2
			eSn	43	40.00	
BDV	1.88	191	ePn	43	16.30	1.6
			eSn	43	43.00	
ULC	2.16	182	ePn	43	20.50	1.7
			eSn	43	48.50	
KKS	2.20	158	ePn	43	20.70	1.4
BZS	2.21	47	iPc	43	19.50	0.1
HVAR	2.30	247	iPnc	43	22.50	1.8
			iSn	43	52.40	
LACI	2.50	173	P	43	45.70	22.1X
SKO	2.65	144	iPn	43	25.20	-0.6
			iPg	43	30.50	
			i	43	32.20	
			i	43	33.60	
			iSn	43	54.00	
			iSb	43	58.00	
			iSg	43	59.00	
			i	44	02.50	
			Lg	44	16.00	
ZAG	2.92	307	ePn	43	38.50	9.0X
			iSn	44	14.70	
			iSg	44	27.00	
DEV	3.08	54	ePc	43	35.00	3.1X
OHR	3.20	160	iPn	43	34.20	0.6
			iSg	44	22.60	
			Lg	44	31.00	
VBY	3.21	297	e(Pn)	43	43.40	9.7X
			e(Sn)	44	34.30	
VTS	3.22	117	eP	43	34.00	0.1
BUD	3.37	356	eP	43	36.20	0.3
KKB	3.56	128	iPc	43	39.00	0.3
DRA	3.57	79	eP	43	59.00	20.2X
VLO	3.66	178	ePn	43	49.40	9.4X
FNA	3.67	155	iPc	43	59.74	19.5X
			iS	44	08.85	
RIY	3.73	291	iPnd	43	43.20	2.2
SRO	3.76	349	ePn	43	39.80	-1.6
			i	44	28.20	
			i	44	42.60	
PSZ	3.82	6	iP	43	42.10	-0.3
TNR	3.83	65	ePc	43	55.00	12.5X
CEY	3.84	297	ePn	43	44.30	1.6
			e(Sg)	44	52.50	
TPE	3.86	172	ePn	43	47.50	4.6X
PGB	3.86	112	eP	43	35.00	-8.0X
GRG	3.90	143	ePc	43	43.13	-0.3
			eS	43	58.06	
LJU	3.90	301	ePn	43	40.00	-3.5X
			e	43	45.00	
			e	43	57.00	
			eSg	44	50.00	
LCI	3.92	196	P	43	42.00	-1.8
KNT	3.96	137	ePd	43	45.14	0.8
			eS	44	50.26	
SOP	4.05	332	eP	43	48.60	3.1X
KZN	4.22	154	ePn	43	46.70	-1.5
CMP	4.23	72	ePd	44	02.00	13.8X
MTUR	4.23	73	eP	43	49.00	0.7
TRI	4.26	294	ePn	43	49.80	1.2
			iPg	44	03.60	
			iSn	44	37.50	
			iSg	44	59.70	
VOY	4.30	298	ePnc	43	50.20	1.0
			e(Sn)	44	39.00	
DUI	4.34	237	P	43	51.00	1.1
SRS	4.35	132	ePd	44	03.46	13.6X
ZST	4.36	340	ePn	43	49.80	-0.1
			e	13	09.20	
			i	43	57.60	
			i	44	01.50	
			i	44	17.50	
			i	44	39.10	
PLD	4.42	115	eP	44	05.00	14.1X
KEK	4.42	175	ePb	44	12.50	21.6X
SOH	4.44	137	ePc	43	51.42	0.2
			eS	44	10.10	
PVL	4.45	100	eP	43	49.00	-2.2
BMR	4.59	38	iPd	44	12.00	18.8X
ORI	4.59	209	P	43	54.00	0.7
VKA	4.64	334	ePn	43	54.50	0.5
	0.6s	54.90nm				
			i	44	10.10	
			i	44	20.60	

08d 23h

			i	44	37.00	
			i	44	44.20	
			iSn	44	46.30	
			i	45	03.20	
RZN	4.65	120	eP	43	53.00	-1.3
SGO	4.65	221	P	43	54.50	0.4
LIT	4.66	149	iPd	43	53.90	-0.4
			eS	44	11.17	
SDI	4.72	241	P	43	57.00	1.8
BSS	4.72	227	P	43	55.30	0.1
AZI	4.82	246	P	44	00.00	3.5X
PLG	4.84	139	ePb	43	56.30	-0.5
MGR	4.87	216	P	43	57.00	-0.3
MLR	4.90	72	eP	44	00.00	2.2
CSI	4.90	209	P	43	58.00	0.3
ASS	4.96	260	P	44	01.50	3.0X
TDS	4.99	208	P	44	00.00	1.1
DIM	4.99	112	eP	44	25.00	26.0X
ROI	5.00	205	P	43	59.50	0.5
KDZ	5.11	117	iPd	44	13.00	12.3X
CVO	5.14	68	eP	44	26.00	24.8X
MNS	5.16	253	P	44	03.50	2.1
FVI	5.23	300	Pd	44	03.60	1.3
			eSn	45	06.00	
ISR	5.25	76	eP	44	13.50	10.9X
CRE	5.36	267	P	44	06.60	2.3
SFI	5.40	270	P	44	07.50	2.8
CZI	5.46	207	P	44	03.30	-2.2
RDO	5.46	121	ePn	44	06.00	0.4
PGD	5.49	270	P	44	12.00	5.7X
EVR	5.53	159	ePn	44	07.50	0.8
VRI	5.53	69	eP	44	16.00	9.4X
BHG	5.76	311	eP	44	10.70	0.9
CTI	5.77	292	P	44	10.50	0.5
KRA	5.95	4	eP	44	49.00	36.6X
			e	44	55.10	
KHC	6.38	324	ePn	44	19.10	0.5
			ePg	44	28.40	
			eSg	45	35.00	
SQTA	6.48	301	iPnc	44	21.70	1.6
	0.4s		14.70nm			5.3mb X
			iPgPg	44	56.30	
			i	44	59.00	
			iSn	45	39.10	
			i	46	26.60	
MFT	6.76	117	eP	44	40.00	16.0X
KGT	6.96	119	iP	44	25.10	-1.6
MDI	7.02	287	P	44	27.00	-0.5
KSP	7.03	344	ePn	44	28.00	0.4
			iPg	44	47.80	
			eS	45	41.50	
BRG	7.67	334	e(P)	45	10.00	33.4X
			e	45	23.00	
			e	46	22.00	
			e	47	03.00	
PGF	7.70	262	eP	44	38.00	0.9
PCP	7.75	277	P	44	36.49	-1.3
GRF	7.86	318	ePn	44	38.40	-0.9
FIN	8.00	274	P	44	39.36	-1.9
ORX	8.20	285	P	44	42.64	-1.6
ROB	8.24	275	P	44	42.84	-1.8
MOX	8.36	324	e(P)	44	52.00	5.7X
			eSg	46	46.00	
SBF	8.58	272	eP	44	48.60	-0.9
	0.4s		8.00nm			5.4mb X
LPG	9.05	283	eP	44	55.40	-0.7
	0.3s		1.30nm			4.8mb X
LPL	9.06	283	eP	44	55.40	-0.8
	0.3s		1.70nm			4.9mb X
FRF	9.19	271	eP	44	55.00	-2.7
	0.5s		4.35nm			5.1mb X
LMR	9.32	270	eP	44	58.00	-1.5
CDF	9.38	301	eP	44	58.60	-1.9
LRG	9.41	270	eP	44	50.40	-2.3
BSF	9.48	297	eP	45	00.40	-1.5
	0.3s		4.25nm			5.3mb X
HAU	9.82	298	eP	45	05.00	-1.5
	0.3s		3.40nm			5.3mb X
	Z 19s		0.08um			
LBF	11.14	290	eP	45	22.90	-1.7
	S.D. = 1.3		on 76 of 106 obs.			

OCT 09, 1990 00h 14m 36.95± 0.41s
30.115 N ±10.1km 57.427 E ± 5.0km
DEPTH = 33.0km (normal)
4.4mb (17 obs.)
IRAN (348)

Felt in the Kermon oreo.

MAIO	6.41	15	ePn	16	12.00	0.4
	0.8s		6.59nm			4.4mb
			eSn	17	25.00	
TEH	7.56	319	e(P)	16	30.00	2.2
QUE	8.25	87	eP	16	37.20	-0.2
			eS	18	57.10	
TAB	12.14	314	e(P)	17	50.00	19.4X
NDI	17.31	90	eP	18	36.00	-1.6
GLH	18.76	284	eP	18	59.00	3.5X
JVI	19.01	281	eP	19	00.50	2.0
MBH	19.54	275	eP	19	05.50	0.8
BBTK	22.36	302	iPd	19	37.00	3.4X
HYB	23.05	118	eP	19	42.50	2.1
GKN	23.86	88	P	19	47.40	-1.0
ALT	24.12	299	iP	19	53.90	3.1X
KKN	24.46	89	P	19	54.40	0.1
PKI	24.62	89	P	19	55.80	-0.2
GBA	24.73	127	Pd	19	56.40	-0.3
	0.8s		2.70nm			3.9mb
GUN	24.95	88	P	19	59.80	0.6
WMO	27.61	52	eP	20	22.60	-0.7
KRA	34.43	316	eP	21	24.60	1.3
			e	21	29.10	
SGO	35.61	299	P	21	34.00	0.6
GTA	35.76	63	eP	21	35.40	0.5
KHC	38.11	312	eP	21	56.20	1.8
CLL	39.01	316	eP	22	03.00	1.1
	1.0s		15.00nm			4.7mb
CHG	39.23	97	eP	22	06.90	2.7X
CHTO	39.23	97	eP	22	06.20	2.1
	1.0s		2.50nm			3.9mb
SOTA	39.29	309	iPc	22	04.30	-0.2
	0.5s		7.90nm			4.7mb
			id	22	04.60	
			i	22	08.50	
			e	22	43.00	
HFS	41.79	329	eP	22	25.80	1.1
	0.5s		0.80nm			3.7mb
LPG	42.18	306	eP	22	27.00	-1.4
	0.7s		3.85nm			4.2mb
LPL	42.19	306	eP	22	27.10	-1.4
	0.7s		4.95nm			4.3mb
BNI	42.21	305	P	22	28.00	-0.5
DOU	44.03	312	P	22	44.90	1.9
	0.5s		4.60nm			4.5mb
LBF	44.18	308	eP	22	43.40	-1.0
	0.6s		3.15nm			4.3mb
SMF	44.26	307	eP	22	43.60	-1.4
	0.7s		3.85nm			4.3mb
LOR	44.28	308	eP	22	43.50	-1.6
	0.6s		2.70nm			4.2mb
SSF	44.51	308	eP	22	45.80	-1.2
	0.6s		4.50nm			4.5mb
BCAO	44.70	243	iPc	22	48.50	-0.4
	0.4s		5.00nm			4.7mb
MAF	45.13	307	eP	22	51.00	-1.0
TCF	45.38	307	eP	22	53.00	-1.0
	0.6s		3.15nm			4.4mb
TIY	45.72	65	eP	22	57.00	0.2
RJF	45.86	305	eP	22	57.10	-0.7
	1.0s		14.00nm			4.8mb
LFF	46.42	305	eP	23	01.40	-0.7
	0.6s		9.00nm			4.9mb
LDF	47.00	310	eP	23	04.40	-2.3
KIC	62.80	261	P	25	01.90	0.0
TIC	62.90	262	P	25	02.60	0.0
LIC	63.12	261	P	25	04.00	0.0
	S.D. = 1.2		on 39 of 44 obs.			

• OCT 09, 1990 00h 58m 24.69± 4.64s
16.368 S ±15.4km 175.112 W ±14.3km
DEPTH = 325.3 ± 42.7 km
5.0mb (12 obs.)
TONGA ISLANDS (173)

DZM	18.31	249	iPc	02	18.00	0.1
PUZ	22.40	194	eP	02	59.10	1.5
THZ	27.33	200	eP	03	40.80	-1.8
COO	33.27	239	iPc	04	34.70	0.4
	0.5s		50.00nm			5.2mb
CMS	38.52	240	iPc	05	18.50	0.4
	0.7s		56.00nm			5.0mb
TOO	40.58	231	ePd	05	36.00	1.0
STK	42.13	240	iPc	05	48.30	0.7
	0.6s		28.00nm			4.7mb
WB5	48.00	258	iPc	06	33.10	-0.8
ASPA	48.25	253	iPc	06	35.60	-0.2
	0.7s		105.30nm			5.2mb
			eS	13	12.80	
MTN	52.02	266	eP	07	04.00	-0.1
	0.4s		37.00nm			5.1mb
WARB	54.77	249	iPc	07	23.70	-0.3
	0.4s		14.00nm			4.7mb
COOL	59.46	244	eP	07	55.50	-1.0
MBL	61.42	255	iPc	08	09.40	-0.3
	0.4s		29.00nm			5.2mb
MEKA	62.00	248	eP	08	13.00	-0.5
KLB	62.33	243	iPd	08	14.80	-0.8
	0.5s		24.00nm			5.0mb
BAL	63.29	244	eP	08	21.50	-0.4
MUN	63.63	242	eP	08	24.00	0.0
MRWA	64.01	245	eP	08	26.00	-0.5
NANU	65.19	252	iPc	08	34.70	0.6
	0.4s		24.00nm			5.3mb
SPA	73.74	180	iPd	09	25.00	-0.2
	0.9s		13.18nm			4.7mb
FBA	83.66	11	ePc	10	16.90	-1.0
	0.8s		25.00nm			5.1mb
			pP	11	31.00	316km
IMA	83.75	9	ePc	10	18.40	-0.1
CHTO	91.46	289	eP	10	58.20	2.2
	0.6s		3.79nm			4.5mb
KRA	144.26	343	ePKP	17	22.50	-1.0
KSP	144.41	348	iPKP	17	22.80	-0.9
WTS	144.42	358	ePKP	17	23.00	-0.6
	0.8s		13.00nm			
CLL	144.54	351	iPKP	17	23.30	-0.6
	0.9s		12.00nm			
BRG	144.82	350	iPKP	17	24.20	-0.2
	1.2s		22.00nm			
MOX	145.38	352	ePKPd	17	26.00	0.6
	1.2s		18.00nm			
PRU	145.57	349	PKP	17	27.00	1.3
ENN	145.68	359	ePKP	17	27.00	1.2
BBTK	146.31	320	ePKP	17	30.00	2.6X
DOU	146.36	0	PKP	17	29.40	2.4X
KHC	146.56	350	ePKP	17	30.60	3.2X
CMP	146.59	334	ePKPc	17	50.00	22.5X
ZST	146.71	345	ePKP	17	30.80	3.2X
SRO	146.75	343	iPKP	17	30.60	3.0X
DEV	146.94	337	ePKPc	17	33.00	5.0X
FLN	147.40	7	iPKPc	17	31.60	2.9X
	0.7s		8.80nm			
HRI	147.50	307	ePKP	17	33.00	3.5X
LDF	147.60	6	ePKP	17	32.20	3.2X
	0.6s		4.50nm			
GRR	147.72	7	ePKP	17	32.70	3.5X
	0.6s		8.10nm			
CDF	147.98	357	ePKP	17	33.80	4.0X
	0.7s		5.50nm			
LPF	140.05	8	iPKPc	17	33.60	3.9X
	0.7s		12.15nm			
JVI	148.32	305	ePKP	17	34.50	3.9X
HAU	148.43	358	ePKP	17	34.90	4.5X
	0.7s		4.40nm			
BSF	148.58	358	ePKP	17	35.20	4.4X
SQTA	148.79	352	ePKP	17	35.00	3.9X
			id	17	36.00	
FVI	149.16	349	PKP	17	35.00	3.5X
LOR	149.18	1	iPKPc	17	36.60	5.0X
	0.6s		5.40nm			
SSF	149.37	2	iPKPc	17	37.40	5.6X
	1.0s		12.00nm			
MBH	149.46	301	ePKP	17	37.00	4.5X
LBF	149.46	1	iPKPc	17	37.40	5.4X
	0.7s		5.50nm			
MFF	149.56	7	ePKP	17	37.40	5.3X
AVF	149.64	2	iPKPc	17	37.60	5.4X
SMF	149.80	1	iPKPc	17	38.00	5.5X
BGF	149.85	3	iPKPc	17	38.50	5.9X
	0.0s		8.05nm			
CTI	149.87	351	PKP	17	37.00	4.2X
LSF	150.07	5	iPKPc	17	38.60	5.7X
	0.6s		7.65nm			
TCF	150.08	4	iPKPc	17	38.80	5.8X
	0.8s		4.05nm			
MAF	150.17	3	ePKP	17	39.40	6.3X
	0.6s		3.60nm			
VAI	150.41	355	PKP	17	39.50	6.1X
ORO	150.72	356	PKP	17	40.50	6.5X
LPL	150.90	357	ePKP	17	41.90	7.4X
	0.7s		6.05nm			

```
LPG   150.92 357 iPKPc 17 42.10   7.5X
       0.8s      6.70nm
BNI   151.36 357 PKP   17 42.00   6.9X
SGO   154.26 342 PKP   17 40.00   1.0
      S.D. = 0.9  on  32 of  67 obs.
-------------------------------------
   OCT  09, 1990  01h 15m 39.01± 0.31s
   40.264 N ± 3.8km    25.188 E ± 2.8km
   DEPTH =   7.8 ±  2.4 km
 AEGEAN SEA                      (365)
      ML 3.5 (THE). MD 3.4 (ATH).

ALN     0.91   46 iPc   15 56.92   0.3
                  iS    16 08.50
RDO     0.92   17 iPnc  15 57.00   0.2
EZN     0.98  116 iPg   15 58.00   0.3
PRK     1.32  140 iPnd  16 03.70   0.2
PLG     1.34  275 ePn   16 04.00   0.1
KDZ     1.40    7 iPc   16 10.00   5.2X
RZN     1.47  346 iPc   16 06.00   0.1
SRS     1.48  306 ePd   16 06.40   0.4
                  eS    16 24.36
SOH     1.50  292 ePd   16 06.88   0.5
                  eS    16 26.68
KGT     1.63   83 iPn   16 07.50  -0.6
MFT     1.68   71 iPn   16 08.50  -0.4
THE     1.74  283 iPc   16 10.00   0.4
                  iS    16 36.00
DIM     1.80    8 eP    16 11.00   0.4
PLD     1.87  349 eP    16 14.00   2.4X
KNT     1.96  298 iPc   16 13.54   0.7
                  eS    16 36.92
EDC     2.05   87 iPn   16 15.90   1.7
LIT     2.07  266 iPc   16 14.50  -0.1
BNT     2.09   87 iPn   16 17.00   2.2
GRG     2.23  289 iPd   16 17.74   0.9
                  iS    16 42.97
KKB     2.26  316 eP    16 17.00  -0.2
PGB     2.41  342 eP    16 19.00  -0.4
JMB     2.44   25 eP    16 25.00   5.2X
IZM     2.46  139 iPn   16 20.00  -0.2
DMK     2.49   50 ePn   16 19.00  -1.5
AGG     2.53  242 iPc   16 20.80  -0.3
KZN     2.61  272 ePn   16 22.70   0.3
CTT     2.62   69 ePn   16 20.50  -1.8
DST     2.73  103 iPn   16 23.50  -0.5
VTS     2.76  328 eP    16 27.00   2.5X
FNA     2.95  281 iPc   16 27.40   0.3
PVL     2.95    2 iPd   16 26.00  -1.0
YLV     3.21   83 iPn   16 37.50   6.7X
IZI     3.28   87 ePn   16 35.50   3.7X
GBZT    3.29   79 ePn   16 44.00  12.2X
SKO     3.31  302 eP    16 35.50   3.4X
OHR     3.44  286 ePn   16 34.80   0.7
HRT     3.46   79 ePn   16 42.00   7.7X
VLI     3.96  207 ePn   16 40.00  -1.3
ALT     3.99  106 ePn   16 41.90   0.0
ITM     4.00  221 ePn   16 40.00  -1.9
PSN     4.08   32 eP    16 47.00   4.0X
ISR     4.97   11 eP    17 01.00   5.2X
MLR     5.25    6 ePd   16 59.50  -0.4
CVO     5.60    7 eP    17 12.00   7.3X
VRI     5.71   11 ePc   17 06.00  -0.2
BZS     5.96  335 ePc   17 07.50  -2.1
KAS     6.60   78 eP    17 06.00 -12.9X
      S.D. = 1.0  on  34 of  47 obs.
-------------------------------------
   OCT  09, 1990  01h 16m 27.97± 0.57s
   43.356 N ± 4.5km    0.612 W ± 5.3km
   DEPTH =  10.0km  (geophysicist)
 PYRENEES                        (378)
      ML 2.6 (LDG).

OGE     0.21  152 Pg    16 33.12   0.5
MADF    0.26  216 Pg    16 33.83   0.4
                  Sg    16 39.66
ATE     0.28  194 Pg    16 34.29   0.5
                  Sg    16 40.76
ESCF    0.28  174 Pg    16 34.11   0.3
ELYF    0.33  236 Pg    16 34.48  -0.4
                  Sg    16 41.70
ISSF    0.35  202 Pg    16 35.30   0.0
                  Sg    16 43.39
JAU     0.36  151 Pg    16 35.00  -0.5
BOH     0.39  229 Pg    16 35.48  -0.5
LHE     0.44  181 Pg    16 37.12   0.1
EPF     0.77  115 Pg    16 42.40  -0.6
                  Sg    16 54.30
LPO     1.86   44 Pg    16 58.90  -1.2
                  Sg    17 21.40
LFF     1.86   31 Pg    16 59.90  -0.2
                  Sg    17 21.10
RJF     2.48   37 Pg    17 10.70   1.7
                  Sg    17 39.80
CAF     2.48   50 Pg    17 11.70   2.6X
                  Sg    17 41.30
MFF     3.26    6 Pg    17 24.50   4.3X
                  Sg    18 03.50
      S.D. = 0.8  on  13 of  15 obs.
-------------------------------------
   OCT  09, 1990  01h 24m 26.25± 0.32s
   40.293 N ± 3.6km    25.216 E ± 2.5km
   DEPTH =  16.4 ±  3.5 km
 AEGEAN SEA                      (365)
      ML 3.1 (THE).

ALN     0.87   46 ePd   24 42.68   0.1
                  iS    24 56.82
RDO     0.89   16 iPc   24 42.70  -0.1
EZN     0.97  118 iPg   24 43.90  -0.3
PRK     1.32  142 eP    24 49.70  -0.3
                  eS    25 07.50
PLG     1.36  274 eP    24 49.80  -0.7
KDZ     1.36    6 iPgc  24 50.00  -0.5
RZN     1.44  345 eP    24 52.00   0.2
                  S     25 13.00
SRS     1.48  304 iPc   24 52.30   0.0
                  eS    25 14.78
SOH     1.51  291 ePc   24 53.02   0.3
                  iS    25 16.82
KGT     1.60   84 iPn   24 53.50  -0.4
MFT     1.65   72 iPn   24 55.00   0.3
MMB     1.72  319 ePc   24 56.00   0.3
THE     1.75  282 iPc   24 59.00   2.9X
DIM     1.77    8 eP    25 00.00   3.6X
PLD     1.85  348 eP    25 03.00   5.5X
KNT     1.96  297 ePc   24 59.62   0.4
                  iS    25 23.94
EDC     2.02   88 iPn   25 02.90   2.8X
BNT     2.07   87 ePn   25 01.50   0.8
LIT     2.10  266 ePd   25 00.66  -0.5
                  iS    25 28.77
KKB     2.25  315 eP    25 42.00  38.6X
PGB     2.39  341 eP    25 05.00  -0.3
JMB     2.40   25 eP    25 11.00   5.5X
DMK     2.45   51 ePn   25 07.00   0.8
IZM     2.47  139 ePn   25 06.40  -0.1
CTT     2.59   70 ePn   25 07.50  -0.6
KZN     2.63  271 eP    25 09.70   0.8
DST     2.71  104 ePn   25 10.00   0.0
VTS     2.75  327 eP    25 18.00   7.4X
PVL     2.92    2 eP    25 12.00  -0.8
YLV     3.18   84 ePn   25 23.00   6.3X
IZI     3.25   88 ePn   25 18.00   0.3
HRT     3.43   80 ePn   25 29.00   8.8X
      S.D. = 0.5  on  23 of  32 obs.
-------------------------------------
%  OCT  09, 1990  01h 53m 18.52± 0.85s
   39.592 N ± 7.3km    27.765 E ± 7.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      MD 2.7 (ISK).

DST     0.67   89 iPg   53 30.50  -1.3
                  iSg   53 39.50
EDC     0.76    6 iPg   53 31.90  -1.4
BNT     0.77    9 iPg   53 32.50  -1.1
                  iSg   53 42.50
KCT     0.80   35 iPg   53 33.00  -1.0
                  iSg   53 44.00
KGT     0.93  338 iPg   53 36.00  -0.2
                  iSg   53 50.00
EZN     1.14  282 ePn   53 40.20   0.4
MFT     1.25  343 ePn   53 43.00   1.2
IZM     1.25  198 ePn   53 41.40  -0.5
IZI     1.51   60 ePn   53 46.50   0.8
YLV     1.57   51 iPn   53 47.50   0.9
CTT     1.63   18 ePn   53 47.00  -0.4
HRT     1.91   49 ePn   53 54.00   2.6
      S.D. = 1.4  on  12 of  12 obs.
-------------------------------------
%  OCT  09, 1990  02h 10m 14.35± 0.85s
   39.583 N ± 6.4km    27.762 E ± 7.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
      MD 2.7 (ISK).

DST     0.67   88 iPg   10 26.50  -1.2
                  iSg   10 35.50
EDC     0.77    6 iPg   10 27.90  -1.4
                  eSg   10 37.90
BNT     0.78    9 iPg   10 29.10  -0.5
KCT     0.81   34 iPg   10 29.00  -1.0
                  iSg   10 40.00
KGT     0.94  338 iPg   10 32.50   0.3
                  iSg   10 45.50
IZM     1.25  198 ePn   10 37.40  -0.1
MFT     1.26  343 ePn   10 38.00   0.2
IZI     1.52   60 ePn   10 42.00   0.4
YLV     1.58   51 iPn   10 43.50   1.0
CTT     1.64   18 ePn   10 44.00   0.6
HRT     1.91   49 ePn   10 49.00   1.7
      S.D. = 1.1  on  11 of  11 obs.
-------------------------------------
*  OCT  09, 1990  02h 52m 09.65± 0.76s
   29.161 S ± 7.1km    71.219 W ±13.5km
   DEPTH = 166.4 ± 19.7 km
   4.5mb (  1 obs.)
 NEAR COAST OF CENTRAL CHILE     (135)

RTBS    2.92  149 ePd   52 58.30   1.1
RTLL    3.21  133 ePd   53 00.00  -0.9
ZON     3.24  138 eP    53 02.00   0.8
RTCV    3.55  140 ePd   53 05.70   0.5
JACH    3.55  171 iPd   53 05.10  -0.2
                  iS    53 52.50
ROCH    3.80  177 eP    53 09.50   0.8
                  iS    54 05.50
PEL     4.00  174 ePc   53 10.50  -0.5
                  i     53 59.50
                  i     54 07.70
FCH     4.23  169 eP    53 15.70   1.4
                  iS    54 16.00
MDZ     4.23  152 iPc   53 16.70   2.6
                  iS    54 18.50
SAN     4.31  174 eP    53 14.00  -1.0
                  e     54 07.50
LCCH    4.31  184 iPc   53 13.60  -1.4
                  iS    54 18.00
TACH    4.48  177 eP    53 17.00  -0.3
PCH     4.49  172 eP    53 17.50   0.1
                  iS    54 12.50
LNV     4.78  182 iPd   53 19.50  -1.7
                  iS    54 20.50
CYA     4.81   83 e(P)  53 19.00  -2.7
                  S     54 15.00
ANT     5.48    8 eP    53 31.00   0.6
CCH    12.62   23 (P)   55 05.00   0.3
ARE    12.64  359 eP    55 20.00  15.0X
CNCB   12.65   14 P     55 05.00  -0.4
LPB    12.89   14 eP    55 02.00  -6.4X
                  e     55 53.00
ZOBO   13.14   13 P     55 12.00   0.3
      Z  24s      0.15um
                  LR    59 44.00
SIV    16.10   38 P     55 48.60   0.5
VAO    22.61   80 eP    56 57.00   0.0
                  e     57 04.50
                  e     57 24.40
TUL    68.74  339 eP    03 06.00   8.8X
       1.0s      7.70nm          4.5mb
GBA   147.10  111 PKPd  11 45.70  13.2X
       0.6s      2.80nm
      S.D. = 1.3  on  21 of  25 obs.
-------------------------------------
%  OCT  09, 1990  02h 56m 16.41± 3.28s
   33.650 S ± 8.4km    71.795 W ±26.1km
   DEPTH =  20.6 ±  8.7 km
 NEAR COAST OF CENTRAL CHILE     (135)

LCCH    0.26   47 iPd   56 22.50   0.0
                  iS    56 29.00
LNV     0.44  134 iPd   56 25.50   0.1
                  iS    56 34.10
TACH    0.72   91 iP    56 30.00  -0.1
                  iS    56 42.00
ROCH    0.94   44 iPc   56 33.70  -0.4
                  iS    56 49.50
SAN     0.97   79 iPd   56 34.50   0.1
                  iS    56 50.00
PEL     1.06   62 iPd   56 36.60   0.6
```

09d 02h

			iS	56	53.10	
PCH	1.07	89	iPd	56	36.00	-0.2
			iS	56	53.00	
FCH	1.30	76	ePg	56	39.50	-0.2
			iS	57	01.00	
JACH	1.40	47	iPd	56	41.00	0.1
			iS	57	01.50	

S.D. = 0.4 on 9 of 9 obs.

% OCT 09, 1990 02h 57m 20.30± 2.94s
39.562 N ±21.1km 27.813 E ±14.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

DST	0.63	86	iPg	57	33.00	0.0
			iSg	57	42.00	
EDC	0.79	3	ePg	57	35.40	-0.2
BNT	0.80	6	iPg	57	35.90	0.1
			iSg	57	45.90	
KCT	0.80	31	iPg	57	36.00	0.1
			iSg	57	47.00	
KGT	0.97	336	iPg	57	39.00	0.3
MFT	1.29	342	ePn	57	44.00	-0.2
IZI	1.49	58	iPn	57	49.50	2.3X

S.D. = 0.2 on 6 of 7 obs.

• OCT 09, 1990 03h 08m 11.50± 0.75s
33.320 N ± 8.2km 139.506 E ±10.3km
DEPTH = 10.0km (geophysicist)
4.8mb (6 obs.)
SOUTH OF HONSHU, JAPAN (211)

IIDJ	2.53	329	iP+	08	53.10	-0.2
CHJJ	2.75	351	P	08	57.20	0.7
KAKJ	2.93	11	P	08	58.00	-0.9
			eS	09	33.10	
WKYJ	3.38	286	iP+	09	03.90	-1.5
			S	09	42.20	
MAT	3.39	342	eP	09	06.00	0.5
			(S)	09	48.00	
MTMJ	3.54	337	P	09	08.80	1.0
TSRJ	3.66	308	iPd	09	08.10	-1.2
NIIJ	3.93	354	P	09	13.50	0.3
MDJ	13.65	329	ePg	11	28.00	0.6
BJI	19.85	296	eP	12	47.00	1.6
Z	16s		0.29um			
GUMO	20.24	165	ePg	13	07.20	17.5X
PJG	20.24	165	ePg	13	07.20	17.5X
WHN	21.52	269	eP	13	06.50	3.0X
			pP	13	13.00	24kmX
HHC	23.46	297	ePg	13	23.20	1.3
BTO	24.58	296	eP	13	34.00	1.2
N	13s		0.40um			
E	13s		0.30um			
			eS	17	51.50	
XAN	25.42	280	P	13	40.00	-0.8
CD2	30.28	275	eP	14	26.60	1.5
CHTO	38.94	259	eP	15	37.20	-2.2
	1.0s		2.50nm		3.8mb	
WMQ	41.24	300	P	16	02.80	4.5X
ASPA	56.92	106	eP	17	59.60	0.4
	0.5s		3.30nm		4.6mb	
INK	58.40	26	eP	18	07.00	-2.1
GBA	59.40	266	P	18	16.00	-0.7
	1.0s		8.50nm		4.8mb	
MBC	60.52	16	eP	18	25.00	1.4
STK	64.88	178	eP	18	54.30	1.3
	1.8s		43.00nm		5.3mb	
PNT	71.94	43	eP	19	41.00	4.1X
HFS	76.81	335	eP	20	02.10	-2.6
	1.1s		12.00nm		4.9mb	
NB2	76.99	337	P	20	09.20	3.4X
	0.9s		6.50nm		4.7mb	
LRM	77.91	43	eP	20	10.40	-1.0
CLL	83.51	329	e(P)	20	44.00	3.4X
ZOBO	149.05	62	PKP	28	03.20	3.6X
LPB	150.03	63	ePKP	28	01.00	1.3
CNCB	150.30	63	PKP	28	04.00	3.7X
CCH	152.02	62	ePKP	28	14.00	11.5X
SIV	154.64	52	ePKP	28	08.00	2.2X

S.D. = 1.4 on 23 of 34 obs.

• OCT 09, 1990 03h 17m 13.20± 0.96s
40.247 N ± 9.8km 25.165 E ± 8.1km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 2.9 (ATH). MD 2.9 (ISK).

RDO	0.94	17	ePb	17	30.70	-0.4
EZN	0.99	115	iPg	17	31.70	-0.2
PRK	1.31	139	ePb	17	37.50	0.0
PLG	1.32	276	ePb	17	37.70	0.1
KGT	1.65	82	iPn	17	41.00	-1.3
MFT	1.70	71	ePn	17	44.90	1.8
BNT	2.11	86	ePn	17	53.00	4.0X
DST	2.74	102	ePn	18	04.00	5.9X

S.D. = 1.3 on 6 of 8 obs.

OCT 09, 1990 03h 25m 11.99± 0.40s
40.203 N ± 3.7km 23.446 E ± 4.3km
DEPTH = 12.1 ± 3.2 km
GREECE (364)
ML 3.2 (THE). MD 3.2 (ATH).

PLG	0.17	360	iPbd	25	16.00	-0.1
THE	0.56	320	ePc	25	22.82	-0.5
			iS	25	31.00	
SOH	0.62	354	iPc	25	24.18	-0.1
			iS	25	32.26	
LIT	0.74	262	ePd	25	26.22	-0.1
			eS	25	37.21	
SRS	0.92	7	ePd	25	30.26	0.9
			iS	25	41.50	
KNT	1.04	337	ePd	25	32.06	0.5
			eS	25	46.30	
GRG	1.10	314	ePc	25	33.25	0.9
			eS	25	49.34	
KZN	1.29	275	ePb	25	35.20	-0.5
MMB	1.40	9	iPc	25	38.00	0.7
AGG	1.46	217	iPc	25	39.00	0.8
			eS	26	00.30	
KKB	1.68	351	eP	25	42.00	0.6
RZN	1.77	33	eP	25	43.00	0.3
			S	26	10.00	
EVR	1.80	225	ePn	25	43.00	-0.2
RDO	1.85	59	ePn	25	43.20	-0.5
KDZ	2.08	45	eP	25	47.00	-0.1
			iS	26	17.00	
PLD	2.12	26	eP	25	53.00	5.3X
OHR	2.21	295	ePn	25	50.00	1.0
ATH	2.24	175	ePn	25	49.30	-0.1
EZN	2.24	99	ePn	25	52.00	2.6
VTS	2.39	356	iPd	25	53.00	1.3
PGB	2.41	13	eP	25	57.00	5.2X
DIM	2.43	40	ePg	25	58.00	6.0X
KGT	2.96	84	ePn	25	59.00	-0.6
MFT	2.98	77	ePn	26	07.00	7.0X
ITM	3.24	202	ePn	26	05.00	1.3
JMB	3.27	45	eP	26	14.00	10.0X
PVL	3.33	25	eP	26	03.00	-1.8
VLI	3.50	187	ePn	26	06.60	-0.7

S.D. = 1.0 on 23 of 28 obs.

OCT 09, 1990 03h 33m 53.40± 1.12s
40.216 N ± 8.3km 23.447 E ± 6.3km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.8 (THE).

PLG	0.16	359	iPgd	33	56.60	-0.5
THE	0.56	319	ePd	34	04.60	-0.1
			eS	34	11.32	
SOH	0.61	353	ePc	34	05.36	-0.4
			eS	34	14.04	
LIT	0.74	261	ePc	34	07.80	-0.2
			eS	34	17.80	
SRS	0.91	7	iPd	34	11.50	0.7
			eS	34	24.84	
KNT	1.03	336	ePc	34	12.96	0.0
			eS	34	27.24	
GRG	1.09	313	iPc	34	14.50	0.6
			iS	34	30.00	
KZN	1.29	275	ePb	34	17.30	0.0
RDO	1.84	59	ePn	34	25.30	0.0
OHR	2.20	295	ePn	34	31.00	0.4
SKO	2.32	320	ePn	34	31.50	-0.7

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

% OCT 09, 1990 03h 45m 36.49± 1.02s
43.903 N ± 7.2km 7.450 E ± 9.2km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)

SBF	0.04	195	Pg	45	37.90	-0.8
			Sg	45	47.80	
IMI	0.32	88	P	45	44.21	1.1
			S	45	48.01	
ENR	0.32	356	P	45	43.29	0.0
			S	45	46.37	
STV	0.35	345	P	45	44.11	0.3
			S	45	47.60	
ROB	0.50	38	P	45	45.03	-1.5
			S	45	49.44	
PZZ	0.65	338	P	45	50.26	0.7
			S	45	57.95	

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

& OCT 09, 1990 04h 02m 26.10s
33.890 N 118.710 W
DEPTH = 14.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.2 (PAS). Felt (IV) at Los Angeles and (II) at Inglewood. Second event, ML 2.8 (NEIS), about one minute later.

PAS	0.52	60	eP	02	35.60	-0.8
CIS	0.55	152	ePd	02	36.70	-0.2
MWC	0.64	58	iPd	02	37.90	-0.7
SCI	0.92	171	eP	02	42.60	-0.7
ABL	1.05	336	eP	02	44.60	-1.0
PEC	1.29	89	eP	02	47.30	-2.3
BLP	1.55	296	eP	02	51.70	-1.6
PLM	1.63	109	eP	02	52.10	-2.6
BCH	1.72	319	eP	02	54.80	-1.0
PHAM	2.39	325	eP	03	03.70	-1.7
PRI	2.76	325	eP	03	09.00	-1.8
FRI	3.20	346	eP	03	16.80	-0.1
PRS	3.27	319	eP	03	16.60	-1.3
SAO	3.64	323	eP	03	20.50	-2.6
CMB	4.35	342	eP	03	32.00	-1.3
TNP	4.35	16	e(P)	03	40.00	6.5

16 obs. associated

& OCT 09, 1990 04h 13m 30.10s
37.278 N 121.683 W
DEPTH = 0.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.0 (BRK).

MHC	0.07	27	iPd	13	32.20	-0.1
ARN	0.14	59	iPd	13	32.70	-0.5
GCC	0.35	225	iPd	13	37.50	0.2
SAO	0.55	160	iPc	13	41.00	-0.1
PCC	0.60	292	iPc	13	41.50	-0.6
BKS	0.74	324	iPd	13	44.30	-0.5
			eS	13	56.00	
BRK	0.75	323	iPc	13	44.50	-0.5
			eS	13	56.30	
ZSP	0.81	326	iPc	13	45.70	-0.2
LLA	0.89	138	ePc	13	46.00	-1.3
PRS	0.90	165	e(P)	13	47.80	-1.1
CMB	1.28	53	iPc	13	52.60	-1.4
			iS	14	09.40	
NWRM	1.51	321	eP	13	55.50	-2.0
FRI	1.60	100	iPc	13	57.10	-1.7
			eS	14	16.30	

13 obs. associated

% OCT 09, 1990 04h 39m 11.78± 0.93s
42.066 N ± 7.3km 13.128 E ±11.4km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.40	301	P	39	20.70	0.7
			eSg	39	27.40	
AQU	0.55	158	P	39	23.10	0.1
			eSg	39	30.00	
MNS	0.58	215	Pc	39	23.10	-0.5
			eSg	39	32.40	
ARV	0.65	348	P	39	24.20	-0.5
			eSg	39	34.30	
SDI	1.27	156	P	39	35.40	0.1

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

? OCT 09, 1990 04h 40m 31.14± 3.51s
40.185 N ±24.9km 23.383 E ±25.9km
DEPTH = 33.0km (normal)
GREECE (364)
ML 2.6 (THE).

THE	0.55	325	ePd	40	42.02	-0.4
SOH	0.64	358	iPc	40	42.94	-0.8
			eS	40	51.06	
LIT	0.69	263	ePc	40	44.46	0.0
			iS	40	51.82	
SRS	0.94	10	iPc	40	48.38	0.3
			eS	41	01.62	
KNT	1.04	339	ePd	40	50.34	0.9
			eS	41	05.62	
GRG	1.07	316	ePd	40	44.26	-5.7X
			eS	41	06.78	

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

OCT 09, 1990 04h 42m 12.04± 0.68s
40.312 N ± 5.7km 23.374 E ± 6.4km
DEPTH = 5.0km (geophysicist)
GREECE (364)
ML 3.1 (THE).

PLG	0.08	41	iPgd	42	13.50	-0.5
THE	0.45	316	ePd	42	22.12	1.1
			eS	42	33.48	
SOH	0.51	358	ePc	42	22.88	0.6
			eS	42	35.64	
LIT	0.71	253	iPd	42	24.82	-1.4
			eS	42	39.48	
SRS	0.82	12	ePd	42	27.64	-0.8
			eS	42	46.08	
KNT	0.92	337	ePc	42	29.76	-0.4
			eS	42	49.68	
GRG	0.98	311	ePd	42	31.68	0.5
			iS	42	51.80	
KZN	1.23	270	ePg	42	35.50	0.1
MMB	1.30	12	iPd	42	35.00	-1.7
AGG	1.52	212	ePc	42	41.56	1.6
			eS	43	02.44	
KKB	1.57	352	eP	43	40.00	59.4X
RZN	1.71	36	eP	42	44.00	1.2
RDO	1.84	62	ePn	42	45.80	1.2
EVR	1.84	221	ePg	42	45.70	1.0
KDZ	2.04	48	eP	42	44.00	-3.5X
PLD	2.05	29	eP	42	52.00	4.4X
VTS	2.28	357	eP	42	56.00	4.9X
PGB	2.31	15	eP	42	55.00	3.5X
JMB	3.23	47	eP	43	18.00	13.6X
PVL	3.25	26	eP	43	04.00	-0.7
ITM	3.33	200	ePn	43	03.70	-2.1

S.D. = 1.3 on 15 of 21 obs.

? OCT 09, 1990 06h 11m 52.59± 1.77s
21.733 S ±14.4km 69.338 W ±18.5km
DEPTH = 10.0km (geophysicist)
NORTHERN CHILE (123)

CNCB	5.06	15	iPc	13	10.20	-0.7
CCH	5.27	35	P	13	14.30	0.6
			i	13	19.30	
LPB	5.30	13	Pd	13	15.20	1.0
	1.0s	484.00nm				6.1mb X
ZOBO	5.55	12	P	13	16.70	-1.2
			S	14	04.00	
ARE	5.62	338	eP	13	19.00	0.4
			iS	14	08.50	
SIV	9.69	55	iPc	14	12.00	-3.1X
VAO	20.73	98	eP	16	40.60	4.7X
BAO	21.10	77	eP	16	40.00	0.1
LIC	68.83	74	P	22	59.60	-0.1
KIC	69.15	74	P	23	01.60	-0.1

S.D. = 0.8 on 8 of 10 obs.

OCT 09, 1990 06h 33m 56.15± 0.63s
43.395 N ± 4.5km 0.630 W ± 5.1km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 2.0 (STR).

OGE	0.25	153	Pg	34	01.89	0.3
MADF	0.29	209	Pg	34	02.56	0.4
			Sg	34	08.39	
ATE	0.31	190	Pg	34	03.02	0.3
			Sg	34	09.56	
ESCF	0.32	173	Pg	34	02.97	0.2
ELYF	0.35	230	Pg	34	02.91	-0.4
ISSF	0.39	198	Pg	34	04.34	0.2
			Sg	34	12.08	
BOH	0.40	224	Pg	34	04.06	-0.4
JAU	0.40	152	Pg	34	04.51	0.0
LHE	0.48	179	Pg	34	05.55	-0.4
EPF	0.80	117	Pg	34	11.10	-0.6
			Sg	34	22.20	
LFF	1.83	32	Pg	34	28.80	0.9
			Sg	34	50.60	
LPO	1.84	45	Pg	34	27.30	-0.7
			Sg	34	51.10	
RJF	2.45	38	Pn	34	33.00	-3.8X
			Pg	34	37.80	
			Sg	35	08.20	
CAF	2.47	51	Pn	34	34.10	-3.0X
			Pg	34	39.70	
			Sg	35	11.30	
MFF	3.23	6	Pg	34	52.70	4.9X
			Sg	35	32.00	

S.D. = 0.5 on 12 of 15 obs.

& OCT 09, 1990 07h 55m 15.52s
59.814 N 152.383 W
DEPTH = 79.8km
SOUTHERN ALASKA (2)
<AGS-P>.

HOM	0.41	112	iP	55	28.15	-0.5
			iS	55	37.99	
OPT	0.46	250	iP	55	28.40	-0.7
			iS	55	38.34	
XLV	0.49	137	eP	55	28.42	-0.9
			eS	55	38.32	
NNL	0.59	67	iP	55	30.65	0.4
CNPM	0.65	116	iP	55	30.24	-0.6
			eS	55	41.40	
RSO	0.68	344	iP	55	30.77	-0.6
			iS	55	42.45	
AUE	0.68	228	eP	55	30.32	-0.8
AUH	0.70	231	eP	55	30.95	-0.5
AUI	0.72	228	eP	55	30.83	-0.7
RDT	0.76	359	iP	55	31.37	-0.8
PDB	0.92	269	iP	55	32.58	-1.2
NKA	1.09	31	iP	55	37.30	1.4
CDD	1.10	217	iP	55	35.26	-0.8
			eS	55	49.10	
MCNL	1.18	239	eP	55	35.64	-1.4
SLKM	1.29	56	eP	55	37.71	-0.7
SPU	1.38	7	iP	55	39.58	-0.1
			iS	55	57.92	
CKL	1.39	1	iP	55	39.64	-0.2
			eS	55	58.07	
BGL	1.45	360	iP	55	40.55	-0.2
CRP	1.46	4	eP	55	40.85	0.0
			eS	55	59.45	
SEW	1.50	78	eP	55	40.47	-0.8
CGLM	1.51	7	iP	55	41.40	-0.1
NCG	1.60	4	iP	55	42.56	-0.1
SUA	1.84	25	iP	55	46.20	0.3
			eS	56	10.32	
PMS	2.00	43	iP	55	47.83	-0.2
SVW	2.06	310	eP	55	47.52	-1.4
SKT	2.21	10	eP	55	50.38	-0.5
PWA	2.22	33	eP	55	50.99	0.1
KNIM	2.39	75	iP	55	51.19	-2.1
MTU	2.39	84	eP	55	52.34	-1.0
PLRM	2.40	40	eP	55	52.22	-1.1
GHO	2.60	39	eP	55	55.23	-1.0
CUT	2.79	21	eP	55	58.48	-0.4
SML	2.82	43	eP	55	58.03	-1.2
GLI	2.84	66	eP	55	56.90	-2.6
SCM	3.20	49	eP	56	03.06	-1.5
VLZ	3.27	64	eP	56	03.35	-2.1
KLU	3.60	59	eP	56	08.10	-2.0
TOA	3.80	50	eP	56	11.39	-1.5
RND	3.98	24	eP	56	14.83	-0.6
TGL	4.85	75	eP	56	25.63	-2.0
BALM	5.12	72	eP	56	29.35	-2.1
CCB	5.30	22	eP	56	30.81	-3.0

42 obs. associated

OCT 09, 1990 09h 27m 02.14± 0.72s
20.826 S ±11.0km 178.708 W ± 9.6km
DEPTH = 596.4 ± 7.8 km
4.6mb (12 obs.)
FIJI ISLANDS REGION (181)

SGE	4.53	315	ePc	28	32.00	0.2
MBU	4.54	327	eP	28	31.50	-0.3
DZM	13.88	262	iPc	30	04.00	4.6X
WLZ	17.66	195	eP	30	36.20	0.5
BRS	26.80	250	iPc	31	58.30	0.2
STK	37.05	244	iPc	33	25.40	1.1
	0.9s	6.00nm				4.2mb
ASPA	43.80	257	iPd	34	18.60	0.3
	0.6s	30.70nm				5.0mb
			iPcP	35	51.20	
			iS	40	06.40	
WB5	43.88	263	eP	34	13.80	-5.2X
			eS	40	07.80	
MTN	48.51	271	iPc	34	53.70	-0.5
	0.4s	37.00nm				5.3mb
FORR	48.52	247	eP	34	53.50	-0.6
	0.4s	32.00nm				5.2mb
WARB	50.10	253	eP	35	05.00	-0.8
	0.4s	7.00nm				4.5mb
KLB	57.31	245	iPd	35	56.00	-0.6
BAL	58.32	246	eP	36	02.50	-0.9
MUN	58.59	245	iPc	36	05.00	-0.1
MRWA	59.11	248	eP	36	08.00	-0.6
PCC	78.56	42	eP	38	04.50	0.4
BCH	78.68	45	P	38	05.00	0.0
BRK	78.87	42	eP	38	06.00	0.3
CMB	80.15	43	iPd	38	12.70	0.2
WDC	80.35	40	iPd	38	13.90	0.6
GMW	84.54	34	P	38	34.50	0.3
RMW	85.01	35	P	38	36.30	-0.2
TTA	85.38	10	P	38	38.20	0.2
	1.0s	8.75nm				4.4mb
DPW	87.20	36	P	38	46.70	-0.3
PNT	87.29	34	eP	38	48.00	0.7
NEW	88.02	36	P	38	50.30	-0.4
	0.8s	4.43nm				4.3mb
ALQ	88.12	52	eP	38	51.00	-0.7
	1.0s	5.50nm				4.4mb
ANMO	88.12	52	P	38	51.80	0.1
	1.1s	7.91nm				4.5mb
IMA	88.68	10	eP	38	53.40	-0.1
FBA	88.70	13	ePd	38	52.60	-0.8
	0.8s	16.60nm				5.0mb
LRM	89.38	40	eP	38	49.50	-7.8X
BW06	89.66	43	P	38	57.70	-0.9
	0.9s	5.30nm				4.5mb
CHTO	89.73	290	iPd	39	01.30	2.2
	0.6s	11.64nm				5.0mb
GOL	91.03	48	P	39	04.50	-0.5
NB2	139.22	353	PKP	45	16.00	-7.2X
	0.7s	2.30nm				
HFS	139.75	350	ePKP	45	14.70	-9.4X
	1.5s	47.90nm				
KRA	147.30	338	ePKP	45	40.70	3.5X
ADI	147.53	299	ePKP	45	39.00	0.9
JVI	147.67	297	ePKP	45	42.00	3.7X
KSP	147.80	342	iPKPd	45	42.30	4.3X
			e	45	47.50	
SPC	147.91	336	ePKP	45	35.90	-2.6X
CLL	148.22	346	iPKP	45	42.90	4.3X
	0.8s	26.00nm				
CLL	148.22	346	iPKP	45	48.00	9.4X
	0.9s	15.00nm				
BRG	148.40	345	iPKP	45	43.20	4.3X
	1.0s	20.00nm				
			i	45	49.10	
MBH	148.45	293	ePKP	45	43.50	3.9X
WTS	148.59	353	ePKP	45	44.00	4.9X
	0.8s	22.00nm				
PRU	149.06	343	PKPd	45	45.00	5.1X
	0.9s	8.40nm				
			e	45	52.00	
ZST	149.87	339	ePKP	45	56.10	14.9X
ENN	149.90	354	e(PKP)	45	47.00	5.9X
	0.8s	12.00nm				
			e	45	55.00	
KHC	150.10	344	ePKP	45	48.00	6.4X
DOU	150.67	356	iPKPc	45	48.90	6.6X
	0.5s	9.20nm				
CDF	152.06	351	ePKP	45	51.20	6.7X
	0.7s	4.40nm				
FLN	152.09	3	ePKP	45	51.10	6.7X
	0.8s	10.75nm				
LDF	152.27	2	ePKP	45	51.40	6.7X
GRR	152.45	3	ePKP	45	51.90	7.0X
HAU	152.58	353	ePKP	45	52.30	7.1X
	0.8s	5.35nm				
BSF	152.69	352	ePKP	45	52.50	7.0X
LPF	152.79	3	ePKP	45	52.80	7.4X
LOR	153.54	356	ePKP	45	54.50	8.0X
AVF	154.05	357	ePKP	45	56.80	9.7X

09d 09h

MFF 154.26 2 ePKP 45 56.60 9.1X
S.D. = 0.7 on 32 of 61 obs.

• OCT 09, 1990 09h 53m 49.22± 3.52s
40.378 N ±10.2km 27.561 E ±26.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.9 (ISK).

EDC 0.23 98 iPg 53 53.90 -0.3
iSg 53 59.90
BNT 0.28 94 iPg 53 55.20 0.2
iSg 54 01.20
CTT 1.01 40 iPn 54 08.30 -0.1
DST 1.13 133 iPn 54 10.30 -0.1
YLV 1.40 82 iPn 54 14.80 0.0
IZI 1.46 91 ePn 54 16.00 0.3
GBZT 1.49 73 ePg 54 52.00 35.9X
iSg 54 53.00
S.D. = 0.3 on 6 of 7 obs.

OCT 09, 1990 10h 21m 07.32± 0.66s
35.107 N ± 8.0km 118.880 W ± 7.4km
DEPTH = 20.7 ± 7.7 km
CENTRAL CALIFORNIA (39)
ML 3.3 (BRK).

ABL 0.38 228 iPd 21 15.80 0.3
BCH 0.99 275 iPc 21 25.90 0.2
PHAM 1.44 301 e(P) 21 31.50 -0.8
PRI 1.78 306 eP 21 37.80 0.4
PEC 1.07 130 eP 21 38.70 0.2
FRI 2.00 341 eP 21 41.00 0.6
eS 22 06.10
PLM 2.42 136 eP 21 46.50 -0.1
SAO 2.66 309 eP 21 49.60 -0.3
TNP 3.26 24 eP 22 07.00 8.5X
S.D. = 0.6 on 8 of 9 obs.

• OCT 09, 1990 10h 28m 31.63± 0.94s
40.802 N ± 8.2km 29.578 E ± 7.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.1 (ISK).

HRT 0.07 74 ePg 28 34.00 -0.1
GBZT 0.10 263 ePg 28 33.60 -0.8
iSg 28 36.00
YLV 0.28 214 iPg 28 37.80 0.2
iSg 28 41.80
IZI 0.47 190 ePg 28 41.30 0.1
CTT 0.94 292 ePn 28 50.00 0.5
S.D. = 0.7 on 5 of 5 obs.

• OCT 09, 1990 10h 42m 46.17± 0.37s
58.714 S ± 9.3km 25.229 W ± 9.8km
DEPTH = 33.0km (normal)
5.0mb (8 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

AIA 19.20 234 eP 47 11.00 1.5
SPA 31.46 180 iPc 49 05.20 -1.3
0.5s 13.89nm 5.1mb
LNV 39.23 289 iPc 50 12.00 -0.8
PEL 39.53 290 iPd 50 15.80 0.4
0.6s 21.33nm 5.1mb
SIV 50.18 313 P 51 38.60 -1.9
SOB1 50.82 340 iPc 51 45.70 0.3
ZOBO 52.79 305 P 52 00.00 -0.9
Z 24s 0.08um 3.7MszX
LR 10 20.00
LIC 66.73 22 P 53 36.40 0.5
0.7s 7.50nm 4.9mb
KIC 66.92 22 P 53 37.44 0.3
0.8s 9.00nm 4.9mb
TIC 67.14 22 P 53 38.72 0.1
0.8s 8.50nm 4.9mb
LKO 69.86 21 P 53 56.28 0.8
0.7s 9.50nm 5.0mb
BCAO 71.92 47 iPc 54 08.30 0.4
0.6s 12.00nm 5.1mb
STK 89.08 169 eP 55 39.30 0.3
1.8s 35.00nm 5.4mb
FRI 122.94 288 ePKP 01 40.80 1.2
GKN 123.73 91 PKP 01 41.00 -0.7
PKI 123.78 92 PKP 01 41.20 -0.9
KKN 123.89 92 PKP 01 41.40 -0.7
CMB 124.08 288 ePKP 01 42.50 0.5
GUN 124.30 92 PKP 01 43.20 0.1
BKS 124.88 287 iPKPd 01 44.60 1.2
0.7s 19.00nm
LRM 126.30 300 ePKP 01 47.10 0.8
EDM 132.17 306 ePKP 01 56.50 -0.4
YKA 138.84 315 ePKP 02 08.50 -0.7
0.6s 9.60nm
MBC 146.85 334 ePKPc 02 24.80 2.1X
0.7s 22.00nm
INK 148.51 317 ePKP 02 28.50 3.0X
0.7s 31.00nm
BJI 149.29 110 ePKP 02 32.00 4.4X
TOA 151.52 302 ePKPc 02 37.90 7.5X
1.0s 83.40nm
PMR 152.67 300 ePKP 02 39.20 7.3X
FBA 153.04 308 ePKPc 02 39.60 7.3X
0.4s 9.10nm
IMA 155.67 309 ePKPc 02 46.20 10.1X
TTA 156.13 301 ePKP 02 46.90 10.2X
S.D. = 0.9 on 23 of 31 obs.

% OCT 09, 1990 10h 54m 07.41± 0.98s
39.120 N ± 8.3km 27.689 E ±14.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZM 0.79 205 ePg 54 23.00 0.1
eSg 54 34.50
DST 0.87 56 ePg 54 24.00 -0.3
EDC 1.23 6 ePn 54 30.00 -0.3
BNT 1.25 8 iPn 54 31.70 1.1
KGT 1.36 348 iPn 54 31.70 -0.7
S.D. = 1.0 on 5 of 5 obs.

OCT 09, 1990 13h 28m 36.16± 0.86s
44.643 N ± 7.5km 10.254 E ± 9.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

MME 0.55 144 Pc 28 48.40 0.9
eSg 28 53.50
BDI 0.63 157 P 28 49.20 0.3
eSg 28 57.20
PII 0.94 168 P 28 54.60 0.5
eSg 29 06.80
MDI 1.20 342 P 29 00.80 2.4
eSg 29 17.20
CTI 1.72 35 Pd 29 04.00 -2.3
eSn 29 23.40
SBF 2.17 250 Pn 29 13.00 0.1
Sn 29 37.60
PGF 2.28 204 Pn 29 13.50 -1.1
Sn 29 38.00
FRF 2.81 249 Pn 29 22.20 0.2
Sn 29 53.20
LMR 3.00 245 Pn 29 23.60 -1.0
Sn 29 57.00
S.D. = 1.5 on 9 of 9 obs.

% OCT 09, 1990 13h 37m 31.19± 1.93s
16.655 N ±19.5km 99.270 W ±10.7km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX 0.60 291 iP 37 43.51 0.2
iS 37 50.59
III 1.72 354 iP 37 58.55 -0.9
iS 38 19.66
OXX 2.48 80 (P) 38 10.00 -0.3
iS 38 42.95
PPM 2.48 14 iP 38 10.06 -0.5
(S) 38 39.00
IIT 2.53 21 (P) 38 12.50 1.5
CRX 2.76 352 (P) 38 20.50 6.1X
IIJ 3.09 352 iP 38 22.00 2.7X
iS 38 51.00
LVVM 4.07 41 (P) 38 39.00 6.3X
S.D. = 1.3 on 5 of 8 obs.

& OCT 09, 1990 13h 45m 02.10s
62.062 N 149.115 W
DEPTH = 15.1km
CENTRAL ALASKA (1)
<AGS-P>.

GHO 0.30 163 iP 45 08.65 -0.1
iS 45 13.61
SML 0.45 124 iP 45 10.56 -0.7
PLRM 0.47 181 iP 45 11.62 0.1
eS 45 18.54
PWA 0.55 222 iP 45 13.22 0.4
iS 45 20.88
CUT 0.64 303 iP 45 13.73 -0.7
PMS 0.85 195 iP 45 17.74 -0.3
eS 45 29.53
SCM 0.88 104 eP 45 17.07 -1.4
HUR 0.95 345 iP 45 18.69 -1.1
eS 45 30.79
SUA 0.98 233 eP 45 20.11 -0.2
iS 45 34.44
SKT 1.14 267 eP 45 21.37 -1.6
RND 1.35 5 iP 45 24.81 -1.6
eS 45 42.34
TOA 1.39 87 eP 45 25.55 -1.3
GLI 1.53 140 eP 45 28.46 -0.4
CGLM 1.57 243 eP 45 30.04 0.5
VZW 1.59 128 eP 45 28.65 -1.1
NCG 1.59 247 eP 45 29.76 -0.1
KLU 1.62 109 eP 45 28.80 -1.5
VLZ 1.63 124 eP 45 28.52 -1.7
SLKM 1.65 199 eP 45 31.02 0.4
CRP 1.66 243 eP 45 32.07 1.2
SPU 1.66 239 eP 45 31.88 1.1
MCK 1.68 3 eP 45 29.77 -1.3
SDG 1.73 73 eP 45 30.70 -1.1
BGL 1.76 244 eP 45 33.72 1.5
CKL 1.77 242 eP 45 33.79 1.4
eS 45 57.06
KNIM 1.84 158 eP 45 33.56 0.1
SEW 1.97 185 eP 45 35.99 0.8
RDT 2.18 228 eP 45 39.81 1.5
eS 46 07.15
MTU 2.20 160 eP 45 39.19 0.6
DDM 2.28 39 eP 45 40.02 0.2
RSO 2.38 229 eP 45 42.88 1.6
NEA 2.53 0 eP 45 44.20 1.0
HDA 2.55 22 eP 45 44.27 0.8
GLB 2.60 102 iP 45 44.36 0.1
CCB 2.66 12 eP 45 42.77 -2.4
CNPM 2.75 203 eP 45 49.65 3.2
GLM 3.04 14 eP 45 49.20 -1.3
BALM 3.40 105 eP 45 54.91 -0.8
38 obs. associated

% OCT 09, 1990 14h 16m 56.49± 0.86s
39.106 N ± 7.1km 27.556 E ± 8.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZM 0.74 198 ePg 17 11.00 -0.1
iSg 17 22.00
DST 0.97 59 ePn 17 15.20 0.3
EZN 1.19 307 ePn 17 19.00 0.3
BNT 1.28 13 ePn 17 20.00 -0.2
KGT 1.36 352 iPn 17 21.20 -0.2
S.D. = 0.4 on 5 of 5 obs.

% OCT 09, 1990 15h 14m 52.23± 0.99s
38.090 N ± 9.3km 27.662 E ±12.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM 0.58 213 ePn 15 04.00 -0.1
DST 1.04 46 iPn 15 12.10 0.3
EZN 1.40 312 ePn 15 18.00 0.3
EDC 1.46 6 ePn 15 18.00 -0.6
BNT 1.48 8 ePn 15 19.00 0.1
S.D. = 0.6 on 5 of 5 obs.

• OCT 09, 1990 15h 28m 43.59± 1.36s
16.455 N ±12.0km 62.171 W ±16.9km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)

SEG 0.64 95 eP 28 56.52 0.3
S 29 10.30
BPA 0.66 27 eP 28 55.81 -0.7
S 29 09.00
DOG 0.68 128 eP 28 57.77 1.0
NEV 0.78 331 eP 28 58.52 0.4

```
                    S     29 15.50
BBL      1.14 144 eP     29 02.19  -1.1
     S.D. = 1.2  on   5 of   5 obs.
-----------------------------------------
?  OCT  09, 1990  15h 42m 35.35± 4.06s
   29.425 S ±33.0km   68.761 W ±43.4km
   DEPTH =  33.0km  (normal)
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTLL     1.92 173 iPc    43 06.90   0.6
RTCB     2.05 181 iPc    43 07.50  -0.9
                  eS     43 35.00
RTBS     2.31 195 ePc    43 12.10   0.3
RTCV     2.44 176 ePd    43 13.70   0.0
CYA      2.78  70 iPc    43 18.50   0.0
     S.D. = 0.8  on   5 of   5 obs.
-----------------------------------------
?  OCT  09, 1990  16h 18m 45.54± 2.25s
   43.141 N ±18.6km    0.408 W ±17.5km
   DEPTH =  10.0km  (geophysicist)
 PYRENEES                          (378)
      MD 1.0 (STR).

OGE      0.06 300 Pg     18 47.58  -0.2
                  Sg     18 49.75
JAU      0.11 165 Pg     18 48.66   0.2
ESCF     0.14 243 Pg     18 48.25  -0.6
                  Sg     18 51.87
MADF     0.30 271 Pg     18 52.39   0.5
                  Sg     18 57.46
     S.D. = 0.8  on   4 of   4 obs.
-----------------------------------------
?  OCT  09, 1990  16h 33m 19.55± 3.47s
   40.566 N ±28.8km   23.309 E ±12.5km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)

MMB      1.07  17 iPgc   33 39.00  -0.7
KKB      1.31 353 ePc    33 44.00   0.2
RZN      1.54  43 iP     33 48.00   0.7
KDZ      1.93  55 eP     33 53.00   0.3
SKO      1.99 316 ePn    33 53.00  -0.6
VTS      2.03 358 eP     33 56.00   1.8
PGB      2.08  18 eP     34 00.00   5.0X
PVL      3.05  29 eP     34 07.00  -1.6
     S.D. = 1.3  on   7 of   8 obs.
-----------------------------------------
*  OCT  09, 1990  16h 55m 33.97± 0.84s
   46.390 N ±10.7km   16.359 E ±13.3km
   DEPTH =  10.0km  (geophysicist)
 YUGOSLAVIA                        (383)

PTJ      0.56 210 iPgc   55 45.30  -0.2
                  iSg    55 54.00
ZAG      0.63 205 iPg    55 46.30  -0.3
                  iSg    55 55.80
VBY      1.17 221 eP     56 05.00   9.1X
                  e      56 16.50
LJU      1.31 255 e(Pn)  56 02.40   4.1X
                  eSn    56 26.00
CEY      1.50 245 eP     56 06.00   5.1X
                  e      56 10.00
                  e(Sn)  56 31.00
BLY      1.74 160 eP     56 20.70  16.3X
VOY      1.75 259 e(Pn)  56 05.30   0.7
                  eSn    56 41.40
ZST      1.88  15 eP     56 05.50  -0.9
                  e      56 33.30
                  e      56 47.30
TRI      1.93 250 eP     56 36.30  29.2X
                  i(Sg)  56 44.40
SRO      1.95  42 iP     56 10.00   2.6X
BUD      2.13  58 eP     56 10.70   0.7
KHC      3.32 327 ePn    56 23.20  -3.9X
                  Pg     56 32.80
                  eSg    57 13.60
PRU      3.80 342 eP     56 52.00  18.2X
                  e      57 33.80
                  eSg    57 45.80
WTS      8.40 315 ePg    58 23.50  45.0X
     S.D. = 0.9  on   5 of  14 obs.
-----------------------------------------
?  OCT  09, 1990  18h 04m 36.48± 1.53s
   22.144 S ±10.4km   70.914 W ±20.1km
   DEPTH =  10.0km  (geophysicist)
   4.9mb (  1 obs.)
 NEAR COAST OF NORTHERN CHILE      (122)

ANT      1.62 164 iPc    05 05.20   0.1
                  iS     05 20.30
ARE      5.68 354 eP     06 12.00   8.7X
                  eS     07 17.00
CNCB     5.98  28 P      06 08.00   0.2
LPB      6.18  26 eP     06 21.00  10.6X
ZOBO     6.41  25 P      06 23.00   9.1X
      Z  24s     0.20um
                  LR     08 34.00
CCH      6.53  44 P      06 26.40  11.1X
MDZ     10.85 171 eP     07 24.10   9.1X
SIV     11.13  58 P      07 18.60  -0.3
PPD     18.17  93 eP     08 51.50   0.9
VAO     22.13  97 eP     09 33.00  -1.0
SPA     67.99 180 eP     15 37.90   0.1
        0.5s     4.17nm          4.9mb
      Z 20s      1.35um          5.2Msz
     S.D. = 0.8  on   6 of  11 obs.
-----------------------------------------
   OCT  09, 1990  18h 05m 10.15± 0.19s
    3.551 S ± 4.0km  100.830 E ± 3.9km
   DEPTH =  25.3km  ( 20 depth phases)
   5.6mb ( 48 obs.)  5.1Msz ( 10 obs.)
 SOUTHERN SUMATERA                 (274)
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.: 14S, 27C
      Centroid Location:
      Origin Time        18:05:14.5 0.6
      Lat  4.18S 0.08 Lon 100.61E 0.08
      Dep  15.0 FIX Half-duration  1.9
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 0.85 0.09  Mtt=-0.81 0.07
        Mff=-0.03 0.13  Mrt= 1.01 0.33
        Mrf=-0.32 0.20  Mtf= 0.33 0.08
       Principal Axes:
        T  Val=  1.34  Plg=65  Azm= 15
        N        0.09       1      108
        P       -1.42      25      199
      Best Double Couple:Mo=1.4*10**17
       NP1:Strike=292 Dip=20 Slip=  94
       NP2:       108     70       89

PPI      3.10 352 eP     05 00.50 -58.1X
                  eS     05 30.50
KGM      6.06  24 ePd    06 43.20   2.7
                  e      08 35.50
KLM      6.66   7 eP     06 50.00   1.1
IPM      8.08   1 ePc    07 10.10   1.3
        1.4s   481.30nm          6.5mb
                  e      08 49.10
BSI     10.55 328 ePc    07 42.50  -0.4
        1.0s   526.90nm          6.8mb X
SNG     10.66 359 eP     07 42.80  -1.6
        1.1s   139.24nm          6.1mb
                  e      10 32.00
TRT     12.45 110 ePd    08 09.70   1.0
NNT     16.07 356 eP     08 55.70  -0.5
                  e      13 57.00
KKM     18.08  58 ePd    09 22.40   0.9
        1.3s   267.10nm          5.2mb
MKS     18.66  96 iPc    09 29.50   1.0
BDT     20.74 355 eP     09 44.80  -6.8X
        0.9s   138.00nm          5.4mb
LOE     20.84   2 eP     09 50.00  -2.7
CHG     22.30 355 iPd    10 06.40  -1.0
        1.1s   164.56nm          5.4mb
                  eS     14 26.00
CHTO    22.30 355 eP     10 05.20  -2.2
        1.2s    34.38nm          4.7mb
QIZ     24.13  21 Pc     10 26.50   1.3
        1.5s   500.00nm          5.8mb
      N 14s      3.50um
      E 13s      3.60um
                  S     14 38.50
                  sS    14 57.50
MNI     24.51  79 ePd    10 30.00   1.1
KOD     27.00 301 eP     10 53.10   0.5
KMI     28.56   4 Pc     11 07.00   0.5
        1.5s   120.00nm          5.4mb
      Z 14s      1.10um          4.6MszX
GBA     28.80 307 P      11 08.10  -0.4
GZH     29.16  24 eP     11 12.50   0.9
      Z 15s      5.30um          5.3MszX
      N 14s      4.60um
      E 13s      3.20um
HYB     30.29 314 iPd    11 21.50  -0.4
        1.0s    80.00nm          5.5mb
                   i     11 29.00  26km
GYA     30.36  10 iPc    11 22.00  -0.5
        1.2s   200.00nm          5.8mb
      Z 16s      3.50um          5.1MszX
      N 13s      4.80um
      E 13s      3.90um
MTN     31.34 109 eP     11 29.00  -2.2
        0.3s    10.00nm          5.2mb
WARB    33.45 135 eP     11 49.00  -0.5
        0.4s     1.00nm          4.1mb X
PKI     34.33 335 P      11 57.60   0.2
LSA     34.34 345 iPc    11 57.60   0.0
      N 15s      1.10um
      E 15s      0.90um
                  S     17 22.00
CD2     34.38   4 P      11 56.40  -1.0
        1.1s    70.00nm          5.5mb
      Z 16s     10.30um          5.7MszX
      E 15s      5.65um
                  S     17 25.30
                  sS    17 39.40
GUN     34.44 336 P      11 58.80   0.5
POO     34.46 310 iPd    11 57.70  -0.6
DMN     34.49 335 P      11 59.20   0.5
KKN     34.58 335 P      11 59.80   0.4
GKN     35.03 335 P      12 03.70   0.5
WHN     36.28  20 Pc     12 14.50   1.0
        1.0s   100.00nm          5.7mb
      Z 16s      5.40um          5.4MszX
      E 14s      4.30um
                  pP    12 22.50  27km
WB5     36.51 119 eP     12 14.30  -1.4
ASPA    37.68 125 iPc    12 24.90  -0.6
        1.2s    37.60nm          5.1mb
      Z 22s      2.70um          5.0Msz
                  eS    18 08.60
XAN     38.16  11 P      12 29.30  -0.1
        1.0s   400.00nm          6.2mb
      N 13s      4.30um
      E 14s      3.50um
                  pP    12 37.00  26km
                  S     18 14.00
                  sS    18 37.00
NDI     39.27 326 iPc    12 38.50  -0.2
        1.0s   140.00nm          5.6mb
NJ2     39.33  24 Pc     12 39.80   0.7
        1.2s    70.00nm          5.3mb
      Z 16s      2.50um          5.1MszX
      E 16s      5.20um
LZH     39.53   4 iPc    12 41.50   0.5
        2.0s   460.00nm          5.9mb
      Z 16s      5.90um          5.5MszX
                  pP    12 48.50  24km
                  sS    18 54.00
                  SS    21 30.00
                  ScS   22 46.00
SSE     39.55  28 iPc    12 42.00   1.1
        1.2s   250.00nm          5.8mb
      Z 20s      2.40um          5.0Msz
      N 13s      4.60um
      E 12s      1.60um
                  pP    12 50.00  27km
                  ePP   14 18.00
                  eS    18 48.00
                  sS    19 02.00
QIS     41.35 117 iPc    12 55.10  -0.9
TIA     42.39  20 Pc     13 04.20   0.0
TIY     42.45  14 Pc     13 05.50   0.7
        1.2s   200.00nm          5.7mb
      Z 16s      3.60um          5.4MszX
      E 14s      2.20um
                  S     19 25.50
                  sS    19 38.00
GTA     42.76 359 iPc    13 07.80   0.4
        1.2s   190.00nm          5.7mb
      Z 16s      4.10um          5.4MszX
      E 18s      4.80um
                  pP    13 15.50  26km
                  eS    19 28.00
BTO     44.73  10 iPd    13 24.00   0.6
      N 14s      4.40um
      E 12s      1.50um
                  pP    13 32.00  27km
                  eS    20 00.00
HHC     45.26  11 iPc    13 28.80   1.2
        1.2s   300.00nm          6.1mb
```

Z 16s 5.90um 5.6MszX
N 14s 2.70um
E 13s 2.70um
PP 15 17.00
S 20 10.00
BJI 45.61 17 iPc 13 31.00 0.8
1.2s 230.00nm 6.0mb
Z 16s 6.68um 5.7MszX
N 13s 3.28um
ePcP 15 06.00
esS 20 32.00
DL2 46.41 22 Pc 13 37.00 0.5
1.5s 200.00nm 5.9mb
Z 14s 3.30um 5.4MszX
N 15s 3.30um
E 14s 1.80um
GUMO 46.89 68 e(P) 13 39.00 -1.7
Z 18s 0.46um 4.5Msz
GUA 46.92 68 e(P) 13 23.20 -17.7X
ADE 46.99 136 e(P) 13 42.10 0.8
CTA 47.20 114 iPc 13 42.30 -0.8
1.7s 223.08nm 5.9mb
iS 20 33.00
STK 47.51 131 iPd 13 45.00 -0.4
1.3s 18.00nm 4.9mb
i 13 51.20 21km
i 17 42.00
KSH 48.53 334 P 13 54.00 0.7
WMQ 48.62 347 iPc 13 54.50 0.7
1.2s 400.00nm 6.3mb
Z 28s 1.40um 4.8MszX
E 13s 1.50um
pP 14 02.50 27km
sP 14 12.00
ScP 19 13.00
S 20 56.00
sS 21 12.00
ScS 23 43.50
SNY 49.68 22 iPc 14 00.00 -1.9
1.2s 100.00nm 5.7mb
Z 16s 5.60um 5.7MszX
N 14s 1.70um
E 15s 4.10um
pP 14 09.00 30km
S 21 12.00
CMS 50.58 129 eP 14 10.00 0.9
RMQ 51.19 121 eP 14 13.00 -0.8
CN2 52.08 22 iPc 14 19.20 -1.0
1.0s 200.00nm 6.0mb
Z 14s 5.00um 5.7MszX
pP 14 26.80 25km
IIDJ 52.10 39 eP 14 19.20 -1.3
MTMJ 52.75 37 P 14 24.20 -1.3
MAT 52.97 38 eP 14 25.00 -2.0
1.4s 160.47nm 5.8mb
Z 20s 0.71um 4.7Msz
eS 22 05.00
CHJJ 53.14 39 P 14 26.70 -1.5
BWA 53.77 131 eP 14 35.50 2.6
NIIJ 53.90 38 eP 14 32.30 -1.4
KAKJ 53.98 39 eP 14 31.50 -2.8
MDJ 54.42 25 Pc 14 36.50 -1.0
1.0s 30.00nm 5.3mb
Z 22s 2.10um 5.2Msz
N 14s 3.10um
E 14s 3.10um
pP 14 44.00 25km
CAN 54.57 132 eP 14 39.70 0.9
BRS 54.89 121 iPc 14 41.30 0.0
YAMJ 55.13 37 P 14 42.60 -0.2
MAIO 55.31 320 iPc 14 42.00 -2.2
1.2s 27.08nm 5.2mb
eS 22 24.00
OFUJ 56.69 38 P 14 53.40 -0.6
HNR 58.97 99 eP 15 08.00 -2.4
NPA 61.65 255 eP 15 26.00 -2.8
TAB 65.19 315 eP 15 51.00 -0.8
MAW 69.00 195 iP 16 15.00 -0.2
CIR 69.37 249 iPd 16 13.00 -5.3X
KRI 71.00 254 iPc 16 30.30 1.8
MBH 71.14 303 eP 16 27.50 -1.4
JVI 71.35 305 eP 16 29.00 -1.1
ADI 71.78 306 eP 16 32.00 -0.8
BUL 72.09 250 iPd 16 34.50 -0.5
EVA 72.10 243 iPd 16 35.00 0.0
0.6s 13.33nm 5.1mb
KAS 75.39 314 eP 16 53.00 -0.7
BBTK 75.66 313 iPc 16 54.00 -1.3
ALT 77.41 311 eP 17 04.40 -0.7
YLV 78.35 312 iP 17 10.00 -0.2
IZM 79.41 310 eP 17 16.00 0.0
SBA 81.58 169 (P) 17 35.60 8.8X
PVL 81.91 314 iPd 17 30.00 1.0
MLR 81.99 317 ePc 17 19.00 -10.6X
RZN 82.03 313 iPd 17 30.00 0.0
BCAO 82.60 275 iPd 17 33.00 -0.3
0.9s 19.00nm 5.2mb
iS 27 39.00
MMB 82.74 313 iPd 17 32.00 -1.5
KKB 83.26 313 eP 17 35.00 -1.1
VTS 83.31 313 iPd 17 37.00 0.5
BMR 84.11 318 ePd 17 42.00 1.7
DEV 84.16 317 ePd 17 42.00 1.5
SKO 84.49 313 eP 17 39.40 -2.9
OHR 84.82 312 eP 17 45.00 0.9
1.2s 58.00nm 5.7mb
BZS 84.99 316 eP 17 44.00 -0.7
BEO 85.67 315 eP 17 48.00 -0.1
SUF 86.16 334 iP 17 50.50 0.3
0.9s 12.70nm 5.1mb
NUR 86.30 331 eP 17 51.00 0.1
0.7s 24.00nm 5.5mb
SPC 86.52 320 eP 17 52.10 -0.4
KRA 86.86 320 eP 17 54.00 0.2
1.4s 67.00nm 5.7mb
e 18 02.80 28km
SOD 87.22 338 iP 17 55.90 0.6
SRO 87.58 318 eP 17 57.80 0.4
KEV 87.76 340 eP 17 58.00 0.2
ORI 87.96 310 P 18 00.50 1.1
CSI 88.05 310 P 18 02.20 2.3
CZI 88.11 309 P 18 01.10 1.0
ZST 88.44 318 eP 18 01.60 0.1
ZAG 88.93 316 ePc 18 04.50 0.6
PTJ 88.95 316 eP 18 03.70 -0.4
VKA 88.97 318 iPd 18 05.00 0.9
0.8s 29.50nm 5.7mb
e 18 12.00 22km
KSP 89.27 321 iPc 18 06.00 0.6
1.4s 49.00nm 5.6mb
ic 18 15.80 31km
VBY 89.40 315 eP 18 07.00 0.9
LJU 89.96 316 eP 18 09.40 0.7
CEY 90.00 316 eP 18 09.50 0.5
PRU 90.30 320 eP 18 06.00 -4.2X
e 18 11.20 16km
VOY 90.40 316 eP 18 11.20 0.3
BRG 90.76 321 iPd 18 13.00 0.7
1.6s 60.00nm 5.7mb
i 18 24.40 36kmX
KHC 90.86 319 iPd 18 14.00 1.1
FVI 91.21 316 P 18 14.00 -0.4
BHG 91.22 318 iPd 18 14.90 0.4
WET 91.32 319 iPc 18 15.50 0.5
1.4s 67.00nm 5.8mb
CLL 91.38 321 iP 18 14.90 -0.3
1.3s 23.00nm 5.4mb
e 18 23.00 25km
HFS 91.62 330 eP 18 16.00 -0.1
0.5s 1.30nm 4.6mb
Z 20s 0.76um 5.1Msz
LR 59 33.00
SFI 91.70 314 P 18 16.00 -0.8
CTI 91.96 316 P 18 18.60 0.5
MOX 92.22 320 iP 18 20.00 0.9
e 18 29.00 28km
e 19 02.00
e 19 45.00
SQTA 92.32 317 iPd 18 19.80 0.0
0.6s 6.70nm 5.2mb
i 18 27.30 23km
i 18 29.20
GRF 92.43 319 iPc 18 20.80 0.7
1.3s 27.00nm 5.5mb
Z 19s 0.40um 4.9Msz
e 18 28.50 24km
OGA 92.43 317 iPd 18 21.00 0.6
NB2 92.89 331 P 18 21.70 -0.3
1.3s 18.10nm 5.3mb
IMA 99.49 23 P 18 51.30 -0.8
1.0s 8.75nm 5.2mb
GMW 122.33 34 PKP 24 04.40 -0.4
BMW 122.70 35 PKP 24 06.00 0.5
LON 123.34 34 PKP 24 06.00 -0.8
NEW 124.87 30 PKP 24 09.80 0.1
FHC 125.28 41 ePKP 24 12.00 1.3
FFC 125.72 16 ePKP 24 11.00 -0.1
1.2s 23.00nm
WDC 126.33 40 ePKP 24 13.20 0.4
LBFM 126.34 39 PKP 24 13.50 0.4
MIN 127.06 40 ePKP 24 14.30 -0.1
ORV 127.55 41 ePKP 24 15.30 0.2
BRK 127.91 43 ePKP 24 16.50 0.7
PCC 128.01 44 ePKP 24 16.50 0.5
MHC 128.60 44 ePKP 24 18.20 0.8
ARN 128.67 43 PKP 24 17.60 0.2
LRM 128.86 30 ePKP 24 17.60 -0.2
CMB 129.10 42 ePKP 24 18.00 -0.2
PRI 129.89 44 ePKP 24 21.50 1.7
FRI 130.11 43 ePKP 24 20.70 0.7
BCH 130.78 45 PKP 24 22.60 1.1
ISA 131.65 44 ePKP 24 25.00 1.9
e 27 47.00
CLC 132.17 43 ePKP 24 26.00 1.9
e 26 52.00
e 27 49.00
DUG 132.53 35 PKP 24 25.00 0.2
SBB 132.62 44 ePKP 24 25.00 0.0
e 27 51.00
MWC 132.70 45 ePKP 24 34.00 8.7X
GSC 132.99 43 ePKP 24 27.00 1.3
e 27 52.00
DAU 133.27 34 PKP 24 26.30 -0.1
GOL 136.89 30 PKP 24 31.80 -1.4
ALQ 139.80 36 ePKP 24 31.00 -7.6X
Z 18s 0.57um 5.4Msz
PPD 142.73 226 ePKP 24 52.90 9.0X
MEO 144.07 28 iPKPc 24 42.50 -3.4X
TUL 144.32 23 iPKPc-24 43.80 -2.4X
1.3s 212.20nm
Z 20s 1.00um 5.6Msz
i 25 06.00
LR 21 00.00
SIV 153.59 222 PKP 25 00.00 -1.2
CNCB 156.95 208 ePKP 25 07.00 0.7
LPB 157.24 208 ePKP 25 04.00 -2.5X
ZOBO 157.48 209 PKP 25 05.00 -2.0
Z 18s 0.45um 5.3Msz
LR 22 40.00
S.D. = 1.1 on 159 of 172 obs.

? OCT 09, 1990 18h 16m 34.29± 3.27s
37.842 N ±21.7km 26.835 E ±26.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

KAP 2.30 173 ePn 17 12.60 -0.3
NPS 2.76 201 ePn 17 19.80 0.5
VAM 3.22 222 ePn 17 26.00 0.1
VLI 3.30 251 ePn 17 31.00 3.9X
ITM 3.96 262 ePn 17 35.80 -0.6
EVR 4.09 287 ePn 17 38.70 0.4
S.D. = 0.6 on 5 of 6 obs.

---

* OCT 09, 1990 19h 11m 29.37± 0.96s
39.553 N ± 7.2km 27.759 E ±11.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

DST 0.67 85 iPg 11 42.10 -0.7
iSg 11 51.10
EDC 0.80 6 iPg 11 43.90 -1.0
BNT 0.81 9 ePg 11 44.90 -0.2
eSg 11 54.90
KCT 0.83 33 iPg 11 45.00 -0.5
iSg 11 55.00
IZM 1.22 199 ePn 11 52.00 0.0
YLV 1.60 50 iPn 11 59.00 1.2
CTT 1.67 18 ePn 12 00.00 1.2
S.D. = 1.0 on 7 of 7 obs.

% OCT 09, 1990 19h 12m 56.60± 0.75s
39.565 N ± 6.9km 27.812 E ± 7.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.0 (ISK).

DST 0.63 86 iPg 13 09.00 -0.3
iSg 13 18.00
EDC 0.78 3 iPg 13 10.90 -0.9

			iSg	13	21.90	
BNT	0.79	6	iPg	13	10.90	-1.1
			iSg	13	21.90	
KCT	0.80	31	iPg	13	12.50	0.3
EZN	1.18	283	ePn	13	18.80	0.3
IZM	1.24	200	ePn	13	19.50	-0.2
YLV	1.56	50	iPn	13	24.00	-0.5
CTT	1.65	16	ePn	13	27.40	1.7
ALT	1.85	105	ePn	13	32.40	3.6X
HRT	1.90	48	ePn	13	30.00	0.7

S.D. = 1.0 on 9 of 10 obs.

OCT 09, 1990 19h 38m 26.89± 0.87s
38.865 N ± 8.7km 21.143 E ± 7.9km
DEPTH = 10.0km (geophysicist)
GREECE (364)

EVR	0.52	84	ePg	38	36.00	-1.5
VLS	0.81	212	ePg	38	41.50	-1.1
KEK	1.34	310	ePg	38	51.50	-0.1
NEO	1.68	74	ePn	38	57.50	1.0
ITM	1.79	160	ePg	39	01.00	2.9X
OHR	2.26	353	ePn	39	05.80	0.9
PLG	2.33	49	ePn	39	05.00	-0.9
VLI	2.57	146	ePn	39	11.00	1.7
SKO	3.11	4	ePn	39	19.50	2.6X

S.D. = 1.5 on 7 of 9 obs.

---

* OCT 09, 1990 21h 57m 20.33± 1.03s
10.203 N ± 9.0km 60.259 W ± 9.4km
DEPTH = 28.7 ± 6.9 km
4.7mb (1 obs.)
TRINIDAD (98)

TBH	0.84	289	eP	57	37.02	0.9
			eS	57	43.75	
BOT	1.06	335	eP	57	39.81	0.6
			eS	57	46.60	
TPR	1.10	333	eP	57	40.24	0.4
			eS	57	48.99	
PIG	1.11	329	eP	57	42.54	2.6
			eS	57	49.80	
TPP	1.18	276	eP	57	42.17	1.2
			eS	57	51.98	
TRN	1.21	292	eP	57	40.74	-0.6
			eS	57	49.76	
TCE	1.55	289	eP	57	45.90	-0.4
			eS	57	57.01	
GRW	2.38	325	eP	57	58.09	-0.2
			eS	58	25.03	
SVB	3.20	342	eP	58	08.80	-1.1
			eS	58	46.67	
SVV	3.23	343	eP	58	09.10	-1.3
			eS	58	47.74	
SOA	3.27	345	eP	58	10.77	0.0
			eS	58	50.22	
SLB	3.68	348	eP	58	16.34	-0.4
			eS	58	56.23	
CUM	3.86	274	iPc	58	18.40	-0.7
			iS	59	02.20	
SIV	26.04	182	iPc	02	53.80	0.7
ZOBO	27.43	197	P	03	05.00	-1.5
LKO	53.81	86	P	06	44.08	0.9

0.5s 3.50nm 4.7mb
S.D. = 1.2 on 16 of 16 obs.

? OCT 09, 1990 23h 36m 53.45± 3.19s
34.773 N ±29.0km 22.886 E ±15.1km
DEPTH = 10.0km (geophysicist)
4.0mb (1 obs.)
MEDITERRANEAN SEA (400)

VAM	1.25	59	ePg	37	14.50	-2.1
VLI	1.94	1	ePb	37	27.70	0.9
NPS	2.29	77	ePb	37	33.00	1.1
ITM	2.52	342	ePb	37	41.00	5.8X
APE	3.14	42	ePn	37	44.00	0.1
ATH	3.26	12	ePn	37	45.60	0.0
KAP	3.60	76	ePn	37	51.00	0.6
VLS	3.87	332	ePn	37	53.00	-1.3
EVR	4.22	349	ePn	38	01.00	1.6
IZM	5.05	43	eP	38	32.00	21.0X
KZN	5.59	351	ePn	38	16.50	-2.3X
NB2	27.34	348	P	42	39.10	-1.1

0.5s 1.60nm 4.0mb
S.D. = 1.4 on 9 of 12 obs.

? OCT 09, 1990 23h 51m 00.22± 1.08s
39.326 N ±11.1km 27.907 E ±14.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.3 (ISK).

DST	0.62	63	iPg	51	12.00	-0.8
			eSg	51	22.00	
BNT	1.03	1	ePn	51	19.40	-0.3
IZM	1.05	209	ePn	51	20.10	0.0
IZI	1.57	50	iPn	51	29.40	1.1

S.D. = 1.4 on 4 of 4 obs.

---

* OCT 10, 1990 00h 36m 33.13± 1.53s
5.191 S ±19.8km 141.691 E ±12.3km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
PAPUA NEW GUINEA (202)

MNDI	2.18	116	eP	37	08.00	0.0
			eS	37	36.00	
PMG	6.85	128	eP	38	09.00	-4.9X
MTN	12.90	233	eP	39	37.50	0.5
	0.3s		73.00nm			6.2mb X
			eS	41	57.00	
OIS	15.41	187	eP	40	08.00	-1.9
			e	42	45.40	
			e	44	34.40	
WB5	16.25	205	eP	40	18.00	-2.6X
			e	40	25.20	
			eS	43	08.00	
			e	48	41.50	
KNA	16.47	229	eP	40	27.00	3.6X
ASPA	19.84	201	eP	41	05.50	1.1
	1.0s		24.40nm			4.5mb
Z	14s		0.30um			5.4Msz
			eS	44	30.60	
BRS	24.47	156	iPd	41	51.30	0.8
WARB	25.36	213	eP	42	01.00	2.1X
	0.4s		4.00nm			4.4mb
HYB	66.24	291	eP	47	20.00	-0.6

S.D. = 1.4 on 6 of 10 obs.

% OCT 10, 1990 00h 41m 17.13± 0.64s
31.496 N ± 4.1km 35.625 E ± 7.2km
DEPTH = 10.0km (geophysicist)
DEAD SEA REGION (373)

MKRJ	0.06	13	Pc	41	19.91	0.5
MASJ	0.25	19	Pc	41	22.78	0.4
LISJ	0.28	206	Pc	41	23.14	0.1
KFNJ	0.37	7	Pc	41	24.70	0.0
SALJ	0.51	6	Pc	41	27.18	-0.4
MDSJ	0.55	76	Pc	41	28.78	0.4
BURJ	0.76	12	Pc	41	32.33	0.3
JARJ	0.79	20	Pc	41	31.92	-0.6
CSTJ	0.97	112	Pc	41	35.23	-0.4
SHMJ	1.23	5	Pc	41	39.82	-0.2

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

OCT 10, 1990 01h 00m 05.50± 0.14s
19.503 S ± 3.2km 66.618 W ± 3.2km
DEPTH = 266.0km (geophysicist)
5.8mb (64 obs.)
SOUTHERN BOLIVIA (125)

mb 6.4 (BRK), 6.3 (PAS). Felt (V) at Arica, (IV) at Tocopilla and (III) in the Antofagasta area, Chile. Also felt (III) at Arequipa, Peru. Depth from broadband displacement seismograms.

FAULT PLANE SOLUTION: P-Waves
NP1:Strike=351 Dip=80 Slip=-145
NP2: 254 56 -12
Principal Axes:
T Plg=16 Azm=118
P 31 218

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

RADIATED ENERGY
No. of sta: 7 Focal mech. F
Energy 4.3±1.6*10**14 Nm

MOMENT TENSOR SOLUTION
Dep 27† No. of sta: 11
Moment Tensor; Scale 10**18 Nm
Mrr=-3.41 Mtt=-1.79
Mff= 5.19 Mrt= 1.43
Mrf=-5.88 Mtf=-1.22
Principal axes:

	Val=	Plg=	Azm=
T	8.47	27	79
N	-1.96	4	347
P	-6.51	63	250

Best Double Couple:Mo=7.5*10**18
NP1:Strike=179 Dip=18 Slip= -78
NP2: 346 72 -94
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 38C M.W.: 15S, 30C
Centroid Location:
Origin Time 01:00:12.9 0.2
Lat 19.43S 0.02 Lon 66.60W 0.01
Dep 275.0 0.9 Half-duration 7.0
Moment Tensor; Scale 10**18 Nm
Mrr=-2.66 0.06 Mtt=-1.47 0.08
Mff= 4.13 0.08 Mrt= 1.08 0.05
Mrf=-5.18 0.06 Mtf= 2.53 0.07
Principal Axes:

	Val=	Plg=	Azm=
T	7.28	26	103
N	-0.85	27	358
P	-6.43	51	229

Best Double Couple:Mo=6.9*10**18
NP1:Strike=237 Dip=31 Slip= -28
NP2: 351 76 -118

CCH	2.16	12	iPd	00	52.50	1.1
CNCB	2.98	334	iPc	00	59.20	-0.5
LPB	3.27	334	iPc	01	03.00	0.2
ZOBO	3.52	336	Pc	01	04.50	-1.2
ANT	5.47	220	iPd	01	23.80	-4.3X
			iS	02	18.00	
ARE	5.54	302	iPc	01	26.40	-2.8
SIV	6.33	57	iPd	01	37.20	-1.6
CYA	8.93	175	iPd	02	08.00	-3.4X
RTLL	11.89	188	ePc	02	43.30	-5.2X
RTCB	12.09	189	iPd	02	47.00	-4.0X
ZON	12.14	188	eP	02	49.00	-2.5
			eS	04	49.00	
RTBS	12.37	191	e(P)	02	50.70	-3.6X
RTCV	12.43	188	e(P)	02	51.30	-3.8X
MDZ	13.47	188	eP	03	07.00	-1.0
			iS	05	37.00	
JACH	13.60	194	iPd	03	07.00	-2.5
ROCH	13.98	195	iP	03	11.50	-2.8
			i	05	36.80	
PEL	14.06	194	iPd	03	12.10	-3.0X
FCH	14.15	193	iPd	03	15.00	-1.5
			i	05	44.00	
SAN	14.35	194	iPd	03	16.00	-2.7
			iS	05	52.20	
PCH	14.48	193	iPc	03	18.00	-2.3
PPD	14.54	103	iPc	03	19.90	-1.0
LCCH	14.60	197	iPd	03	18.00	-3.6X
TACH	14.61	194	iPd	03	18.20	-3.5X
CHCH	14.81	193	iP	03	21.60	-2.6
			i	05	58.80	
LNV	15.01	196	eP	03	17.00	-9.6X
			i	03	22.50	
BAO	18.17	81	iPc	04	00.00	-1.2
BDF	18.24	81	ePc	04	00.55	-1.5
			ec	04	03.03	
			e	04	07.72	
			iS	07	17.93	
VAO	18.64	104	iPd	04	03.50	-2.5
			i	05	16.90	
			i	07	26.80	
BMA	21.19	103	eP	04	27.80	-3.4X
TUNG	21.38	326	eP	04	34.00	0.5
JFO	21.91	100	iPc	04	37.30	-0.9
			i	04	49.40	
			i	04	57.30	
VC1	22.02	327	eP	04	40.00	0.1
CAYA	22.43	329	eP	04	44.50	0.7
QTO	22.46	327	eP	04	45.20	1.2
QUR	22.48	327	eP	04	44.60	0.4
YANA	22.55	327	eP	04	45.60	0.6
COTA	22.82	328	eP	04	48.60	1.0
PSO	23.10	332	eP	04	50.00	0.0
BOG	25.07	342	iPd	05	09.00	0.8
			iS	09	18.00	

10d 01h

FUO	25.79	344	eP	05	13.00	-1.7				epP	11	28.00	275kmX				epP	12	28.70	274kmX
SOB1	26.90	71	iPc	05	22.90	-1.5	ANMO	66.06	325	ePd	10	26.28	0.0	TIO	75.91	50	iP	11	25.00	0.1
BMG	27.16	346	iPc	05	23.00	-3.8X				ed	10	28.76					i	11	27.00	
UAV	28.29	351	eP	05	35.40	-1.6				ePPd	11	26.42	262kmX	TBI	76.18	250	iP	11	26.20	-0.2
			IS	10	05.30					isPc	11	54.84			1.5s	1980.00nm				6.6mb
CEOS	28.40	356	eP	05	35.40	-2.5				iS	18	53.11		SAO	76.20	317	eP	11	26.30	0.1
SDV	28.48	352	eP	05	40.40	1.7				eSKS	20	02.14		CMB	76.31	319	ePd	11	27.17	0.3
PLAV	29.20	358	eP	05	42.60	-2.5				isS	20	36.57					ed	11	29.38	
TOV	29.27	354	eP	05	45.30	-0.2				esSKS	21	41.60					esPc	12	58.49	
			iS	10	15.30					eSS	23	24.93					ePP	14	04.69	
OLLA	29.34	360	iP	05	43.80	-2.3	KIC	66.08	74	P	10	23.80	-2.8				iS	20	52.91	
LLAV	29.79	360	eP	05	48.10	-2.0		0.8s	344.00nm			6.1mb					e	21	13.88	
CAR	29.82	359	eP	05	50.80	0.4				S	18	52.20					i	22	06.57	
MORO	30.23	357	eP	05	53.80	-0.1	CBM	66.14	359	P	10	25.70	-0.5				isS	22	41.89	
TCE	30.39	9	eP	05	51.77	-3.5X				pP	11	27.60	270kmX	RUV	76.55	258	iP	11	30.20	1.7
TRN	30.40	10	eP	05	52.79	-2.5	LKO	66.67	70	Pc	10	27.80	-2.5		1.6s	1825.00nm				6.6mb
FISA	30.69	355	eP	05	54.90	-3.0X		0.6s	132.50nm			5.8mb		ARN	76.61	318	P	11	29.00	0.5
UPA	31.03	335	ePc+	06	00.30	-0.5	GOL	69.12	329	P	10	44.40	-0.8	MHC	76.67	318	ePd	11	29.50	0.6
CAI	31.42	70	iPc	06	02.50	-1.7	GLA	69.65	318	eP	10	51.00	2.7	GCC	76.71	317	ePd	11	29.00	0.0
GRW	31.84	9	eP	06	07.86	-0.1				e	12	56.00		VAH	76.77	258	iP	11	31.30	1.6
SVB	32.99	10	eP	06	16.03	-1.8	BAR	70.58	317	eP	10	53.00	-0.9		1.6s	2230.00nm				6.6mb
SVV	33.04	10	eP	06	16.97	-1.2				e	12	00.00		TPT	76.83	259	iP	11	32.00	2.0
SOA	33.11	10	eP	06	19.59	0.9	SPA	70.62	180	iPd	10	54.00	0.2		1.6s	2435.00nm				6.7mb
SLB	33.57	10	eP	06	20.94	-1.8	SPA	70.62	180	iPd	10	57.80	4.0X	PMO	77.08	259	iP	11	33.20	1.8
FDF	34.44	9	eP	06	27.60	-2.5		1.2s	165.49nm			5.6mb			1.6s	2230.00nm				6.6mb
			S	12	22.50		Z	20s	3.15um			5.6Msz		AVE	77.11	48	iP	11	31.00	-0.2
BBL	35.17	9	eP	06	34.00	-2.2				i	12	07.00					i	12	34.50	
BPA	36.62	8	eP	06	45.00	-3.4X	TPC	71.10	318	eP	10	57.00	0.0	LRM	77.15	329	ePd	11	31.60	0.1
NEV	36.63	6	eP	06	49.00	0.6				e	12	03.00		PCC	77.24	318	eP	11	32.00	0.2
CPB	37.21	8	eP	06	49.99	-3.3X	PLM	71.13	317	eP	10	57.00	-0.4	BKS	77.37	318	ePd	11	33.10	0.5
CPD	37.31	1	P	06	51.30	-2.9				e	11	57.00			1.0s	587.00nm				6.3mb
PORP	37.32	360	P	06	51.00	-3.2X	PEC	71.67	317	P	11	00.30	-0.1				epP	12	38.00	277kmX
SJG	37.38	1	eP	06	51.50	-3.3X	RVR	71.87	317	eP	11	01.00	-0.5				e	12	46.00	
TPX	42.49	322	iPc	07	37.92	1.3				e	12	10.00					e	13	06.00	
AIA	45.75	179	eP	08	01.80	-0.1	RSSD	71.98	333	P	11	01.30	-0.9				e	15	28.00	
EVV	47.10	321	iPc	08	03.00	-10.0X		1.0s	271.15nm			5.9mb					iS	21	08.00	
ACX	48.72	316	iPd	08	26.20	0.7				pP	12	04.00	270kmX				e	22	20.00	
LVVM	48.74	321	iPc	08	24.59	-1.0	SCI	71.99	316	eP	11	05.60	3.4X				isS	22	56.00	
IIT	49.32	319	iPd	08	31.70	1.4	GSC	72.35	319	ePd	11	05.06	0.7				eSS	26	20.00	
PPM	49.55	319	iPd	08	33.37	1.0				epPd	12	07.42	268kmX				esSS	27	50.00	
III	49.56	317	iPd	08	32.98	0.8				isPc	12	35.01					e	31	24.00	
UNM	50.09	318	iPc	08	37.00	0.7				eSKS	20	07.55					eLQ	32	20.00	
IIJ	50.74	318	(P)	08	28.73	-12.7X				iS	20	11.52					e	32	32.00	
MRX	51.64	317	(P)	08	48.47	1.0				eScS	20	42.81					e	38	00.00	
SGS	54.05	346	P	09	03.50	-1.4				epPS	21	22.20		BRK	77.38	318	ePd	11	33.00	0.4
TKL	57.22	343	P	09	24.60	-2.8	MWC	72.46	317	eP	11	05.00	-0.1	ZSP	77.42	318	eP	11	33.60	0.7
			pP	10	28.50	290kmX				e	12	08.00		TVO	77.53	255	iP	11	35.70	1.7
MZX	57.54	316	iPc	09	30.28	0.5	PAS	72.48	317	ePd	11	05.33	0.3	PPN	77.76	256	iP	11	38.20	3.0X
BLA	57.89	347	eP-	09	31.00	-1.1				ed	11	07.27		PAE	77.86	255	iP	11	37.20	1.5
	1.2s	296.88nm				5.8mb				epPd	12	07.69	268kmX	PPT	77.88	256	iP	11	37.40	1.5
			epP	10	26.00	245kmX				esPc	12	34.72			1.6s	2635.00nm				6.7mb
MBO	59.35	59	iPd	09	40.50	-1.9				ec	12	36.93		ORV	77.93	320	ePd	11	36.20	0.5
UYO	59.59	333	iPc	09	42.00	-1.7				epP	14	04.00					eS	21	12.40	
GMTN	60.48	353	iP	09	48.10	-1.5				epPP	14	42.00		AFR	78.08	256	iP	11	38.40	1.5
PNJ	60.50	353	eP	09	48.00	-1.7				epPPP	16	38.00		SBA	78.16	190	iPd	11	37.10	0.7
			PcP	10	49.10					iS	20	11.60					iS	21	14.40	
TXNY	60.78	353	iP	09	50.80	-0.8				eScS	20	48.00		MIN	78.48	320	ePd	11	37.80	-1.0
FVM	61.41	339	P	09	53.40	-2.4				eSP	21	28.00		IFR	78.83	48	iPd	11	41.00	0.1
	0.7s	748.30nm				6.4mb				esS	21	55.00					i	12	42.50	
			pP	10	58.50	291kmX				e	22	07.00		LIS	79.04	42	iPc	11	41.80	0.2
TUL	61.65	333	iPd-	09	55.50	-2.0				eSS	24	52.00		WDC	79.19	320	ePd	11	41.20	-1.2
	1.4s	197.90nm				5.5mb				esSS	26	44.00		NKM	79.67	47	iP	11	56.50	11.4X
	Z 22s	4.19um				5.6Msz				e	28	48.00					i	12	04.50	
			e	11	04.20					eLg	30	16.00					i	12	59.00	
			e	17	59.00		SBB	72.60	318	eP	11	05.00	-0.8	CNIL	79.73	46	iP	11	52.00	6.6X
			LR	20	00.00					e	12	04.00		PLAT	79.80	46	iP	11	48.50	2.7
BIX	61.73	333	eP	09	56.50	-1.5	CLC	73.18	319	eP	11	09.00	-0.1	SES	79.85	333	ePd	11	45.00	-0.8
SIO	61.73	333	iP	09	55.90	-2.1				e	12	15.00			1.2s	250.00nm				5.9mb
HRV	61.86	356	ePc	09	56.60	-2.1	ABL	73.60	317	P	11	11.30	-0.5	FFC	79.87	340	eP	11	44.00	-1.7
			ec	09	59.36		ISA	73.63	318	eP	11	12.00	0.2		1.2s	171.00nm				5.7mb
			e	10	02.12					e	12	16.00					pP	12	54.00	299kmX
			ePPd	10	54.81	257kmX	SYP	73.88	316	eP	11	13.00	-0.4	MOMI	79.93	46	iP	11	49.00	2.5
			ed	10	57.85					e	12	09.00		OJEN	79.93	46	iP	11	49.00	2.4
			iS	18	01.15		SCH	74.02	360	P	11	12.50	-1.0	EVAL	79.94	44	eP	11	46.70	0.2
			i	19	22.68		BLP	74.18	316	P	11	14.80	0.0	GIBL	80.05	45	iP	11	49.00	1.9
			e	19	40.47		BCH	74.36	317	P	11	16.70	0.7	EJIF	80.17	46	eP	11	49.10	1.4
			i	21	15.66		TNP	74.41	321	P	11	16.70	0.3	FHC	80.20	320	eP	11	48.70	0.9
MEO	61.95	330	iPd	09	57.00	-2.5	FRI	75.24	319	eP	11	19.80	-1.0	EPRU	80.61	45	iPc	11	51.50	1.5
CLE	62.24	347	iP	10	00.70	-0.6				epP	12	29.00	299kmX	MAL	81.04	46	iPd	11	52.80	0.6
RKT	63.26	253	iP	10	08.80	0.4				eS	20	39.50					iS	21	44.00	
	1.2s	450.00nm				6.1mb	PRI	75.32	317	eP	11	21.70	0.3	EHOR	81.06	45	eP	11	52.30	0.0
BNH	63.92	356	P	10	13.60	1.4				eS	20	44.50		NEW	81.14	329	P	11	52.30	-0.2
LIC	65.77	74	P	10	22.00	-2.6	KVN	75.57	321	P	11	23.10	0.2		1.0s	125.00nm				5.6mb
	Z 20s	2.50um				5.4Msz	LLA	75.79	318	ePd	11	24.10	0.2	EZAM	81.33	40	eP	11	53.40	-0.2
TIC	65.95	73	P	10	23.00	-2.7				epP	12	28.30	275kmX	DPW	81.41	328	P	11	54.00	0.0
ALO	66.06	325	iPd-	10	25.10	-1.2				eS	20	47.40		TAF	81.42	49	iP	11	56.00	1.7
	1.0s	312.50nm				6.0mb	PRS	75.89	317	eP	11	24.70	0.2				i	13	00.00	

10d 01h

EPLA	81.76	42	iPc	11	55.80	-0.1
STS	81.85	39	iPc	11	57.20	0.9
ECOG	81.90	46	iPc	11	56.30	-0.5
AFC	81.90	46	eP	11	56.70	-0.2
COR	82.06	323	eP	11	58.52	1.2
			esPc	13	29.57	
			iS	21	52.94	
			e	22	50.88	
			e	23	10.74	
			isS	23	42.47	
			e	23	46.61	
FRS	82.18	119	iPd	11	58.00	-0.4
	0.7s	113.01nm			5.7mb	
			e	21	53.00	
EBAN	82.22	45	iPc	11	58.30	0.0
ERUA	82.41	40	eP	11	59.60	0.4
LON	82.57	325	eP	11	59.74	-0.2
			ePPc	13	04.85	274kmX
			esPc	13	31.89	
			eHPP	15	14.78	
			ePP	15	16.44	
ENIJ	82.66	47	iPc	12	00.60	0.0
EDM	82.90	334	iPd	12	00.10	-1.4
EMON	82.90	39	eP	12	02.00	0.3
TOL	82.97	43	iPd	12	03.00	0.9
			ipP	13	06.00	264kmX
			eS	22	02.00	
			iSKS	23	22.00	
			isS	23	42.00	
			iSS	27	30.00	
			iSSS	30	40.00	
RMW	83.01	326	P	12	03.00	0.8
PNT	83.07	328	eP	12	02.00	-0.4
	0.8s	211.00nm			6.0mb	
GUD	83.31	43	eP	12	04.40	0.5
EVIA	83.33	45	eP	12	04.10	0.1
MCW	84.31	326	P	12	09.20	0.6
PGC	84.61	326	eP	12	10.50	0.5
	1.1s	682.00nm			6.4mb	
ETOR	84.75	43	iPc	12	11.00	-0.1
ECHE	84.84	45	eP	12	11.50	0.0
ECRI	85.40	42	eP	12	15.30	1.1
MAW	85.60	163	iPd-	12	15.00	0.2
	0.9s	96.00nm			5.6mb	
SLR	85.95	116	ePc	12	17.18	-0.3
			ec	12	18.56	
EVA	86.36	117	iPc	12	21.00	1.5
	0.5s	225.35nm			6.3mb	
EROQ	86.37	44	eP	12	19.90	1.0
BOH	86.59	42	P	12	22.04	2.0
ELYF	86.64	42	P	12	21.78	1.6
ISSF	86.69	42	P	12	22.69	2.1
MADF	86.74	42	P	12	21.93	1.3
LHE	86.74	42	P	12	22.58	1.8
ATE	86.78	42	P	12	22.54	1.7
ESCF	86.86	42	P	12	21.65	0.4
BCAO	86.91	84	ePc	12	20.92	-1.2
	0.8s	110.00nm			5.8mb	
			ipPc	13	24.65	265kmX
			ePP	15	43.33	
			eHPP	15	45.31	
			iS	22	19.00	
			i	24	07.30	
JAU	86.97	42	P	12	22.84	0.9
EPF	87.41	42	eP	12	24.10	0.2
BST	87.52	36	P	12	24.46	0.2
ESEL	87.53	46	eP	12	24.90	0.4
BUL	88.12	111	iPd	12	28.30	0.3
	1.2s	282.03nm			6.0mb	
			i	13	36.80	
			i	22	38.00	
ECB	88.37	32	iPd	12	28.50	0.4
	1.4s	190.00nm			5.8mb	
ECP	88.47	32	iPd	12	27.80	-0.8
	1.3s	308.00nm			6.0mb	
JOZ	88.55	119	iPc	12	27.00	-2.7
	0.8s	14.93nm			4.9mb	
LFF	88.61	41	eP	12	28.90	-0.6
ETER	88.69	44	e(P)	12	29.90	0.0
LPO	88.76	41	eP	12	29.50	-0.7
	1.0s	84.00nm			5.6mb	
ETA	88.84	32	iPd	12	30.90	0.5
	1.3s	267.00nm			6.0mb	
MFF	88.89	39	eP	12	29.90	-0.9
LPF	89.09	38	eP	12	30.60	-1.1
	1.2s	187.45nm			5.9mb	
RJF	89.26	41	eP	12	31.70	-0.9
	1.2s	145.80nm			5.8mb	
Z	20s	3.25um			5.7Msz	
GRR	89.38	37	eP	12	32.00	-1.0
CAF	89.42	41	eP	12	32.50	-0.8
LSF	89.73	40	eP	12	33.80	-0.9
FLN	89.79	37	eP	12	33.80	-1.0
	1.2s	185.95nm			5.9mb	
Z	20s	3.50um			5.8Msz	
LDF	89.91	38	eP	12	34.50	-0.9
YKA	90.04	340	eP	12	35.00	-0.7
	0.9s	160.00nm			5.9mb	
KRI	90.15	108	iPd	12	42.10	4.7X
			i	13	49.20	
			i	16	09.00	
			i	22	54.20	
TCF	90.16	40	eP	12	35.70	-1.0
LBL	90.31	42	P	12	37.76	0.5
MAF	90.35	40	eP	12	36.90	-0.6
PYM	90.40	41	P	12	37.90	0.0
CIR	90.42	112	iPd	12	40.50	2.0
			i	13	47.50	
AGO	90.62	41	P	12	38.61	-0.2
BGF	90.68	40	eP	12	38.40	-0.6
PLDF	90.88	41	P	12	40.12	0.1
AVF	91.09	40	eP	12	39.90	-1.0
GRC	91.16	40	P	12	40.82	-0.4
SSF	91.31	40	eP	12	40.80	-1.1
SMF	91.33	41	eP	12	41.10	-0.9
LRG	91.51	44	eP	12	43.00	0.1
	1.0s	156.25nm			5.9mb	
LMR	91.56	44	eP	12	43.00	-0.1
	1.0s	128.00nm			5.8mb	
LBF	91.56	40	eP	12	42.00	-1.1
LOR	91.62	40	eP	12	42.30	-1.1
	0.8s	73.45nm			5.7mb	
Z	20s	3.00um			5.7Msz	
FRF	91.74	44	eP	12	43.60	-0.4
	1.0s	96.00nm			5.7mb	
EKA	91.80	31	Pd	12	44.70	0.7
	1.6s	126.90nm			5.7mb	
DRV	91.81	190	iPc	12	46.60	2.6
CALN	91.98	44	P	12	45.20	-0.1
MVIF	92.22	44	P	12	46.76	0.4
REVF	92.29	44	P	12	46.87	0.3
AURF	92.33	44	P	12	46.52	-0.3
TOUF	92.33	44	P	12	47.26	0.3
SBF	92.39	44	eP	12	46.60	-0.4
	0.8s	88.65nm			5.8mb	
BNI	92.40	43	P	12	48.00	0.8
RRL	92.41	43	P	12	48.18	0.8
AUTN	92.44	44	P	12	47.67	0.2
PZZ	92.44	43	P	12	47.87	0.5
STV	92.48	44	P	12	47.46	0.0
ENR	92.53	44	P	12	47.56	-0.2
DOI	92.53	43	P	12	48.90	1.2
LPL	92.63	42	eP	12	48.40	0.1
	1.0s	52.00nm			5.5mb	
LPG	92.64	42	eP	12	48.50	0.1
	1.0s	56.00nm			5.5mb	
IMI	92.71	44	P	12	48.38	-0.1
RSP	92.81	43	P	12	49.71	0.7
ROB	92.85	44	P	12	48.89	-0.3
LSD	92.88	43	P	12	50.02	0.5
PGF	92.89	46	P	12	49.58	0.1
EMS	92.99	42	ePd	12	51.20	1.3
FIN	93.04	44	P	12	50.12	0.1
CKI	93.17	44	P	12	51.00	0.4
DIX	93.30	42	ePd	12	52.90	1.4
DOU	93.34	38	P	12	49.80	-1.3
			pP	13	58.00	283kmX
			SKS	23	05.00	
			iScS	23	34.00	
			PcPP'	34	53.30	
SNF	93.35	37	P	12	51.50	0.4
PCP	93.40	44	P	12	50.64	-1.0
HAU	93.46	40	eP	12	51.00	-0.8
	1.0s	40.00nm			5.4mb	
Z	20s	4.50um			5.9Msz	
ORO	93.47	43	Pd	12	52.10	0.1
ORX	93.48	43	P	12	51.66	-0.4
UCC	93.52	37	P	12	53.00	1.1
			iSKS	23	05.00	
MMK	93.64	42	ePd	12	54.70	1.7
BSF	93.65	40	eP	12	51.90	-0.9
	1.1s	56.15nm			5.6mb	
BOB	94.08	44	Pd	12	55.40	0.6
VAI	94.08	43	P	12	45.50	-9.1X
CRZF	94.10	142	e(P)	12	55.00	0.1
			e	14	05.00	
			ePP	16	40.00	
			eSKS	23	10.00	
			eSP	25	00.00	
			eSPP	25	45.00	
			eSS	30	10.00	
CDF	94.19	40	eP	12	54.40	-0.9
	1.2s	77.35nm			5.7mb	
TMA	94.24	42	ePd	12	56.30	0.6
MCT	94.30	52	P	12	58.90	2.8
MAO	94.30	47	P	12	56.60	0.8
LWI	94.37	94	iP	12	57.90	0.9
PII	94.38	45	P	12	56.30	0.2
ENN	94.39	37	eP	12	56.00	0.0
	1.3s	131.00nm			5.9mb	
			e	14	01.00	
FEL	94.42	41	eP	12	55.80	-0.6
ZLA	94.49	41	ePd	12	57.70	1.1
BDI	94.56	45	P	12	57.00	0.0
LLS	94.62	42	ePd	12	58.40	1.0
MDI	94.65	43	P	12	56.50	-0.7
SLE	94.67	41	ePd	12	58.20	0.8
MME	94.68	45	P	12	58.30	0.5
VDL	94.77	42	ePd	12	59.20	1.1
SAX	94.99	42	ePd	13	00.40	1.2
SAL	95.11	43	P	12	59.50	0.1
RMP	95.15	48	P	13	00.60	0.9
MNO	95.19	52	P	13	00.00	-0.3
PGD	95.24	45	P	12	59.20	-1.1
OSS	95.28	42	ePd	13	01.30	0.9
MNS	95.34	47	P	13	00.50	-0.1
SFI	95.34	45	P	13	02.00	1.5
WTS	95.42	37	eP	13	01.00	0.4
	0.9s	41.00nm			5.6mb	
ASS	95.58	46	P	13	01.80	0.1
TNS	95.64	39	ePd	13	01.80	0.0
WIT	95.68	36	eP	13	03.50	1.7
AZI	95.72	48	P	13	03.50	1.3
AQU	95.83	47	P	13	03.30	0.5
SDI	95.89	48	P	13	03.30	0.2
OGA	95.91	42	iPd	13	03.40	0.1
			i	13	04.50	
ARV	95.93	46	P	13	04.00	0.8
CTI	96.00	43	P	13	03.40	-0.2
SQTA	96.16	42	iPd	13	04.10	-0.2
	1.0s	145.00nm			6.2mb	
			i	13	05.50	
			i	14	10.80	
			i	15	11.30	
			i	15	24.60	
			i	16	17.00	
			i	16	23.60	
			i	16	56.50	
			i	23	20.00	
			e	29	48.00	
			i	29	52.40	
DUI	96.32	48	P	13	06.30	1.2
WATA	96.43	42	iPd	13	05.30	-0.2
	1.4s	184.00nm			6.1mb	
			i	13	06.50	
VVI	96.48	44	P	13	07.00	1.4
SGO	96.55	49	P	13	07.00	1.0
FUR	96.55	41	iPc	13	06.70	0.8
	1.5s	152.00nm			6.0mb	
MGR	96.58	50	P	13	05.60	-0.6
FVI	96.93	43	P	13	07.40	-0.1
TDS	96.99	51	P	13	08.00	0.0
CSI	96.99	50	P	13	09.70	1.6
GRF	97.08	40	iPc	13	07.50	-0.7
	1.3s	73.00nm			5.8mb	
Z	22s	1.80um			5.5Msz	
ROI	97.13	51	P	13	09.20	0.5
ORI	97.20	50	P	13	09.60	0.6
TRI	97.26	44	iPc	13	10.10	1.0
			i	13	26.40	
			ipP	14	14.00	264kmX
			iPP	17	06.00	
			ipPP	18	04.00	
			eSKS	23	24.00	
			eS	24	12.00	
			e	24	49.00	
			iSP	25	32.00	
			i	26	56.00	
			eSSS	34	24.00	
			i	41	24.00	
VOY	97.45	44	eP	13	11.30	1.2

10d 01h

RIY 97.54 45 eP 13 11.30 1.0
MOX 97.67 39 eP 13 11.00 0.2
1.5s 51.00nm 5.6mb
Z 22s 4.00um 5.9Msz
epP 14 15.00 264kmX
CEY 97.70 44 eP 13 11.80 0.7
LJU 97.88 44 eP 13 10.50 -1.4
e(PP) 17 10.00
eS 23 20.00
e(sS) 24 16.00
WET 97.90 41 eP 13 12.00 0.1
KHC 98.32 41 P 13 15.00 1.1
1.4s 17.00nm 5.2mb
Z 17s 1.20um 5.5MszX
N 16s 1.20um
E 17s 1.00um
e 16 26.50
S 23 30.00
CLL 98.72 39 eP 13 15.00 -0.6
1.3s 42.00nm 5.7mb
Z 18s 2.00um 5.7Msz
e 14 26.00
eSKS 23 33.00
PKKP 30 14.00
PTJ 98.77 44 eP 13 16.40 0.3
BRG 99.13 39 iP 13 18.60 1.1
1.4s 36.00nm 5.6mb
i 13 25.50
i 13 30.80
i 14 03.60
i 14 24.00
e 16 49.00
i 17 08.60
e 18 09.40
e 18 24.00
iSKS 23 32.00
iS 24 30.00
e 25 56.00
iPKKP 29 44.60
i 30 11.20
PRU 99.20 40 eP 13 18.00 0.2
2.0s 97.70nm 5.9mb
Z 18s 2.10um 5.7Msz
N 17s 1.00um
E 19s 1.50um
e 14 24.70
iS 23 34.00
NPA 99.40 110 eP 13 21.50 1.9
e 17 21.40
SOP 99.72 43 iPc 13 20.60 0.4
VKA 99.75 42 eP 13 21.00 0.6
0.8s 11.40nm 5.4mb
e 17 28.00
INK 99.82 340 eP 13 19.00 -1.2
1.0s 33.00nm 5.7mb
pP 14 27.00 282kmX
ZST 100.23 43 ePdiff13 22.70 0.1
e 16 40.20
e 17 25.10
KSP 100.53 40 ePdiff13 21.00 -2.9X
ed 13 25.20
MBC 100.69 349 ePdiff13 30.50 6.5X
1.0s 7.00nm 5.1mb
SRO 100.89 43 iPdiff13 25.40 -0.1
i 17 27.80
e 30 39.20
NB2 101.14 29 Pdiff 13 26.80 0.5
1.6s 32.30nm 5.6mb
BEO 101.47 46 ePdiff13 30.00 1.9
HFS 102.00 30 ePdiff13 34.70 4.6X
1.7s 114.50nm 6.1mb
BZS 102.47 46 ePdiff13 32.50 -0.1
SPC 102.51 42 ePdiff13 35.00 2.1X
KRA 102.55 41 ePdiff13 34.00 1.2
Z 20s 2.20um 5.7Msz
E 20s 3.10um
e 17 00.80
eS 23 52.00
e 26 34.00
FBA 103.79 334 ePdiff13 37.50 -0.5
0.9s 60.63nm 6.4mb
MLR 105.40 47 ePdiff13 46.50 0.7
IMA 106.45 335 ePdiff13 49.00 -1.0
1.8s 38.90nm 6.3mb
BBTK 109.28 54 ePKP 18 03.00 -2.7X
DZM 113.70 234 iPKPd 18 15.90 1.2
CNB 115.68 212 ePKP 18 20.00 1.9X
e 19 22.00
TAB 119.61 57 e(PKP)18 26.00 0.5
KER 120.03 61 ePKP 18 33.00 6.6X
STK 122.19 208 iPKPd 18 30.70 0.3
1.0s 22.00nm
i 20 05.20
i 21 41.80
RMO 122.83 218 ePKP 18 30.50 -1.3
e 20 10.50
e 21 44.00
MUN 128.74 183 ePKP 18 42.00 -1.1
KLB 129.02 185 ePKP 18 43.00 -0.6
CTA 129.15 221 iPKPd 18 43.50 -0.7
1.0s 100.00nm
MAIO 130.15 59 ePKP 18 46.00 0.3
0.8s 13.91nm
MRWA 131.50 183 ePKP 18 37.50 -10.9X
OIS 132.62 214 ePKP 18 50.00 -0.8
ASPA 132.66 206 ePKP 18 33.00 -17.8X
Z 20s 1.20um 5.6Msz
i 18 50.30
ePP 21 09.10
eSKP 21 54.40
ePKS 22 13.20
eSKS 25 35.70
WARB 132.80 196 ePKP 18 32.00 -19.0X
0.4s 5.00nm
WB5 135.79 209 ePKP 18 44.10 -12.7X
i 18 58.00
e 21 36.00
i 22 03.90
NANU 138.14 183 ePKP 18 51.00 -10.1X
MBL 139.10 189 ePKP 18 53.40 -9.5X
KNA 141.84 204 ePKP 19 01.00 -6.9X
KSH 142.21 50 ePKP 19 06.00 -2.1X
POO 142.67 85 iPKPd 19 05.50 -3.8X
MTN 143.41 210 ePKP 19 07.00 -3.6X
KOD 144.15 100 ePKP 19 11.00 -1.3
KUSJ 144.70 319 PKP 19 10.30 -1.7
GBA 145.10 94 PKP 19 12.90 -0.6
ASAJ 145.38 322 ePKP 19 13.20 0.0
NDI 145.85 67 ePKPd 19 15.30 0.9
0.5s 475.35nm
HOOJ 145.97 319 ePKP 19 14.40 0.2
MRRJ 147.30 320 ePKP 19 17.50 1.2
WMQ 147.60 36 ePKP 19 18.97 2.1X
Z 24s 2.00um 5.8MszX
ipP'df20 24.35
OFUJ 148.75 315 PKP 19 21.80 3.1X
GUA 149.23 264 ePKP 19 22.50 2.4X
0.9s 1552.94nm
pP 19 26.80
GUMO 149.28 264 ePKP 19 22.50 2.3X
PJG 149.28 264 ePKP 19 22.20 2.0X
HIA 149.87 352 ePKPd 19 22.20 2.0X
epP'df20 30.62
ePP 22 59.00
eHPP 23 00.33
YAMJ 150.31 314 ePKP 19 27.30 6.2X
MDJ 151.55 335 ePKP 19 22.50 -0.3
MAJO 152.40 313 ePKPd 19 26.19 1.9
MAT 152.40 313 (PKP) 19 26.00 1.7
Z 20s 2.48um 6.0Msz
CN2 153.75 340 PKP 19 27.00 1.1
e 19 46.00
SNY 156.12 341 iPKPd 19 30.00 0.9
Z 24s 1.90um 5.8MszX
N 32s 2.30um
e 19 57.00
pPKP 20 36.00
sPKP 21 00.00
PP 23 36.00
GTA 156.96 28 iPKPd 19 33.00 2.5X
Z 32s 2.30um 5.8MszX
E 16s 1.40um
SKKS 30 06.00
SS 43 13.00
SHK 157.27 315 ePKP 19 33.50 2.7X
LSA 157.42 59 ePKP 19 32.50 0.7
N 15s 0.80um
E 15s 0.40um
HHC 158.67 4 PKP 19 34.00 1.6
Z 20s 2.50um 6.0Msz
SKKS 30 14.00
BTO 158.78 7 PKP 19 33.00 0.5
pPKP 20 40.00
DL2 159.39 341 PKP 19 33.00 0.0
Z 22s 0.90um 5.6Msz
N 13s 1.60um
E 13s 1.50um
pPKP 20 15.00
PP 23 55.00
BJI 159.39 354 ePKP 19 35.45 2.5X
ePKPab20 11.92
ePKPab20 12.42
eHP'ab20 12.58
pP 23 52.00
IPM 160.89 139 ePKPc 19 36.90 1.6
1.0s 35.30nm
e 20 24.90
LZH 161.47 25 ePKP 19 38.06 2.5X
ePKPab20 23.86
TIY 161.84 2 PKPc 19 37.20 1.5
Z 27s 2.50um
E 22s 2.60um
pPKP 20 46.00
PP 24 07.00
SS 44 06.50
TIA 163.03 350 PKP 19 37.20 0.3
e 20 26.00
pPKP 20 46.00
XAN 164.99 14 PKP 19 40.00 1.2
E 11s 1.90um
pPKP 20 51.00
CD2 165.70 36 PKP 19 40.80 1.3
Z 22s 4.00um
E 11s 2.30um
CHTO 166.34 90 ePKP 19 39.70 -0.5
eHP'ab20 41.85
ePKPab20 42.68
ePKPab20 43.16
KKM 166.34 192 ePKPc 19 41.80 1.3
SSE 166.48 330 PKPc 19 42.50 2.5X
Z 20s 1.40um
e 20 45.00
PP 24 32.00
SS 44 50.00
NJ2 166.57 340 PKPd 19 42.50 2.5X
e 20 44.50
iPP 24 30.00
SS 44 50.00
KMI 168.68 58 ePKP 19 44.31 2.3X
Z 24s 2.80um
i 20 49.42
e 21 55.36
pP 24 46.00
e 31 06.00
WHN 168.97 356 ePKP 19 43.50 1.8
e 20 50.50
GYA 170.72 41 PKP 19 43.80 0.8
e 21 01.00
PP 24 56.00
SKKS 31 16.00
QZH 172.75 319 PKPc 19 44.80 0.4
pPKP 20 52.00
e 21 14.00
PP 25 00.00
GZH 176.43 1 ePKP 19 45.00 0.3
QIZ 176.62 97 PKP 19 49.40 4.5X
PP 25 26.00
SKKS 31 46.00
S.D. = 1.2 on 370 of 429 obs.

OCT 10, 1990 01h 01m 32.30± 1.21
4.769 S ± 5.3km 126.820 E ± 9.9k
DEPTH = 31.6 ± 10.1 km
5.2mb (13 obs.)
BANDA SEA (280

AAI 1.74 52 eP 02 01.00 0.2
eS 03 44.00
MNI 6.48 342 eP 03 04.00 -4.0X
eS 04 20.50
MTN 9.09 152 eP 03 44.50 0.2
KNA 11.08 170 iPc 04 09.90 -1.8
0.6s 46.00nm 5.9mb
KKM 15.08 315 ePd 05 05.10 0.1
WB5 16.72 155 eP 05 23.90 -2.1
i 05 30.80
e 08 31.50
i 08 44.00
MBL 17.65 202 eP 05 38.30 0.8
ASPA 19.99 161 iPd 06 06.70 1.5
0.7s 226.30nm 5.6mb

	Z	14s	1.10um			3.8Msz
			eS	09	52.10	
OIS		20.02	143 iPd	06	04.70	-0.8
PMG		20.69	104 eP	06	16.00	3.5X
		1.0s	80.00nm			5.1mb
NANU		20.79	211 eP	06	13.30	-0.1
WARB		21.30	180 eP	06	20.00	1.4
		0.4s	18.00nm			4.8mb
MEKA		23.12	199 eP	06	38.00	1.3
CTA		24.28	130 iPd	06	52.90	4.8X
		1.3s	146.15nm			5.4mb
			iS	11	16.00	
RAB		25.28	90 eP	07	04.00	6.3X
GUMO		25.56	44 eP	07	09.00	8.7X
IPM		27.39	289 ePc	07	18.40	1.3
		1.0s	27.70nm			4.9mb
PSI		28.84	284 ePc	07	30.60	0.4
STK		30.32	155 iPc	07	44.90	1.6
		0.6s	7.00nm			4.6mb
			iS	13	39.70	
BWA		35.66	149 eP	08	34.40	4.7X
CHTO		36.10	311 iP	08	33.80	0.3
		0.6s	23.85nm			5.3mb
CAN		36.66	149 eP	08	42.10	4.0X
GYA		36.67	329 iPc	08	38.60	0.3
			S	14	22.00	
WHN		37.08	342 eP	08	43.20	1.6
NJ2		37.39	349 eP	08	44.40	0.3
KMI		37.82	323 Pc	08	49.50	1.3
		1.5s	60.00nm			5.2mb
CD2		41.76	330 P	09	20.30	-0.2
XAN		42.14	338 P	09	22.80	-0.8
MAT		42.45	14 (P)	09	26.00	-0.1
TIY		44.33	344 eP	09	40.80	-0.6
LZH		45.99	334 eP	09	55.00	0.3
		1.9s	84.00nm			5.3mb
MDJ		49.22	3 Pc	10	20.60	1.0
		1.0s	20.00nm			5.1mb
GTA		50.53	333 P	10	29.40	-0.5
		1.0s	10.00nm			4.8mb
KOD		51.36	287 eP	10	34.50	-2.3
HYB		52.50	296 eP	10	43.00	-2.1
NDI		58.13	308 iPc	11	22.00	-3.5X
		0.5s	14.08nm			5.3mb
WMO		59.83	328 P	11	36.20	-1.0
MAIO		74.83	309 eP	13	11.00	-0.9
ISA		112.78	53 ePKP	20	22.00	13.9X
MWC		113.38	55 ePKP	20	10.00	0.5
CLC		113.45	53 ePKP	20	21.00	11.6X
SBB		113.48	54 ePKP	20	13.00	3.5X
RVR		113.98	55 ePKP	20	07.00	-3.5X
GSC		114.18	53 ePKP	20	10.00	-0.9
TPC		115.04	55 ePKP	20	27.00	14.4X
		S.D. = 1.2	on 32 of 45 obs.			

OCT 10, 1990 01h 08m 44.55± 0.91s
37.332 N ± 8.7km 20.732 E ± 6.8km
DEPTH = 10.0km (geophysicist)
IONIAN SEA (399)
ML 3.9 (ATH).

VLS		0.85	352 ePn	09	00.00	-1.0
ITM		0.97	99 ePn	09	02.00	-0.9
VLI		1.87	108 ePb	09	18.20	1.4
ATH		2.45	74 ePn	09	28.00	2.8X
SRN		2.61	348 ePn	09	28.10	0.7
LSK		2.82	358 ePn	09	31.00	0.5
TPE		3.01	349 ePn	09	33.00	-0.1
KZN		3.08	15 ePn	09	35.00	0.8
VLO		3.28	343 ePn	09	42.40	5.5X
VAM		3.39	123 ePn	09	34.50	-4.1X
BERA		3.42	350 ePn	09	40.60	1.7
LCI		3.70	325 P	09	42.40	-0.5
OHR		3.77	1 eP	09	44.00	-0.1
			e	13	25.00	
			e	26	22.00	
CZI		4.08	299 P	09	58.80	10.5X
			eSn	10	30.80	
CSI		4.25	306 P	10	01.70	10.9X
			eSn	10	44.60	
ATN		4.26	283 P	09	49.00	-1.9
ORI		4.32	310 P	09	56.00	4.2X
MEU		4.64	269 P	09	56.30	-0.1
SKO		4.67	7 iP	09	55.00	-1.7
			i	10	17.30	
			i	11	40.00	
			i	13	28.50	
			i	14	29.00	
			i	17	40.00	
			i	18	39.00	
			iS	23	43.00	
			i	25	39.00	
			i	27	53.00	
			i	40	40.00	
MMB		4.84	28 iPd	09	58.00	-1.2
KKB		4.88	21 eP	09	38.00	-21.7X
SGO		5.31	309 P	10	08.10	2.3
VTS		5.59	19 eP	10	10.00	0.2
		S.D. = 1.3	on 16 of 23 obs.			

? OCT 10, 1990 01h 59m 55.81± 4.86s
5.452 N ±35.0km 126.053 E ±30.0km
DEPTH = 135.9 ± 30.7 km
4.5mb (3 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

MNI		4.16	197 eP	00	59.00	0.3
AAI		9.33	167 eP	01	53.50	-14.8X
MTN		18.87	165 eP	04	07.00	-1.2
WB5		26.47	162 eP	05	21.00	-1.1
NANU		29.68	200 eP	05	51.20	0.2
ASPA		29.94	165 iPc	05	52.50	-0.8
		0.5s	8.40nm			4.7mb
WARB		31.45	179 eP	06	07.00	0.5
MRWA		35.80	195 eP	06	44.00	0.2
STK		39.97	159 iPc	07	18.80	0.3
		0.6s	6.00nm			4.5mb
BWA		44.93	154 eP	08	01.70	2.8X
CAN		45.94	154 eP	08	08.80	2.0
GBA		48.55	283 P	08	27.00	-0.4
		0.5s	1.90nm			4.1mb
BUD		97.38	319 eP	13	28.00	13.1X
		S.D. = 1.1	on 10 of 13 obs.			

OCT 10, 1990 04h 17m 38.77± 1.40s
42.064 N ± 5.0km 126.372 W ±13.6km
DEPTH = 10.0km (geophysicist)
4.3mb (5 obs.)
OFF COAST OF OREGON (30)

FHC		2.19	124 eP	18	14.60	-1.2
LBFM		3.43	101 eP	18	34.00	0.4
GROR		3.83	30 P	18	39.14	0.1
TCO		4.05	58 P	18	42.22	-0.1
KMOR		4.13	29 P	18	42.97	-0.4
GT2		4.29	43 P	18	45.97	0.3
PGO		4.43	39 P	18	48.15	0.6
ORV		4.47	123 eP	18	48.00	0.0
NLO		4.54	27 P	18	49.71	0.6
TDH		4.63	44 P	18	50.08	-0.5
VLL		4.81	43 P	18	54.15	1.2
VFP		4.82	46 P	18	55.75	2.5X
RVW		4.85	31 P	18	53.91	0.4
VIPM		4.86	58 P	18	52.42	-1.4
LVP		4.92	34 P	18	54.32	-0.2
BMW		4.95	26 P	18	54.53	-0.5
MTMW		4.97	36 P	18	54.66	-0.6
			S	19	48.83	
APM		5.00	41 P	18	56.57	1.0
FL2		5.04	34 P	18	56.24	-0.1
JLK		5.09	35 P	18	56.47	-0.4
SHW		5.09	34 P	18	57.14	0.2
CDFW		5.11	36 P	18	56.80	-0.4
ERK		5.14	33 P	18	57.66	0.0
SOSW		5.17	35 P	18	59.20	1.1
GULW		5.17	40 P	18	58.58	0.4
CZM		5.18	31 P	18	58.49	0.4
TDL		5.22	33 P	18	58.67	-0.2
APW		5.31	29 P	19	00.30	0.3
VGB		5.32	48 eP	18	59.80	-0.4
KOSW		5.32	33 P	19	00.40	0.2
ASR		5.34	38 P	19	00.19	-0.4
CPW		5.43	24 P	19	01.35	-0.3
LMW		5.45	31 P	19	02.51	0.4
GLK		5.65	36 P	19	04.65	-0.3
LON		5.71	33 P	19	05.51	-0.2
REMR		5.75	33 P	19	06.54	0.1
GHW		5.77	29 P	19	07.24	0.8
WPW		5.78	35 P	19	06.33	-0.4
RVC		5.80	31 P	19	07.24	0.2
JBO		5.82	52 P	19	07.20	-0.1
GMW		6.05	24 eP	19	09.50	-0.9
HDW		6.06	22 P	19	10.76	0.1
NAC		6.13	39 P	19	12.17	0.6
RMW		6.30	30 eP	19	14.00	0.0
HTW		6.60	28 P	19	17.86	-0.4
JCW		6.89	26 P	19	21.82	-0.4
ETW		7.01	36 P	19	23.35	-0.7
RPW		7.24	27 P	19	26.99	-0.3
PNT		8.65	31 eP	19	47.00	0.1
		0.5s	4.00nm			5.0mb
GOL		16.06	91 eP	21	25.40	-1.0
ANMO		17.11	108 eP	21	41.00	1.3
ALO		17.11	108 eP	21	40.00	0.3
		1.3s	6.25nm			3.6mb
FFC		20.43	43 eP	22	18.00	-0.6
		0.8s	24.00nm			4.6mb
YKA		21.62	15 eP	22	33.70	3.0X
		0.8s	7.60nm			4.2mb
MEO		22.89	99 eP	22	44.40	0.9
TUL		24.47	94 eP	23	00.70	1.8X
		1.3s	8.40nm			4.2mb
		S.D. = 0.6	on 53 of 56 obs.			

? OCT 10, 1990 04h 30m 23.72± 1.05s
19.600 S ±18.2km 66.928 W ±25.9km
DEPTH = 292.8 ± 31.3 km
SOUTHERN BOLIVIA (125)

CCH		2.33	19 iPd	31	13.30	0.0
			i	31	47.50	
CNCB		2.95	340 P	31	19.80	0.3
			S	32	03.00	
LPB		3.25	340 eP	31	27.00	4.6X
ZOBO		3.50	341 ePc	31	25.00	-0.2
			S	32	11.00	
ANT		5.22	218 eP	31	44.00	0.0
			eS	32	43.50	
ARE		5.35	305 iPc	31	43.80	-2.1X
			eS	32	48.00	
SIV		6.63	58 iPc	31	57.00	-4.2X
VAO		18.90	104 (P)	34	25.00	0.0
		S.D. = 0.4	on 5 of 8 obs.			

OCT 10, 1990 04h 40m 22.77± 1.16s
42.135 N ± 5.0km 125.986 W ±12.0km
DEPTH = 10.0km (geophysicist)
4.3mb (4 obs.) 4.0Msz (1 obs.)
OFF COAST OF OREGON (30)

FHC		2.01	131 eP	40	55.80	-1.3
LBFM		3.16	103 eP	41	14.60	0.8
KMOR		3.94	26 P	41	24.12	-0.5
GT2		4.05	41 P	41	26.79	0.7
PGO		4.20	36 P	41	28.91	0.7
ORV		4.27	126 eP	41	29.00	-0.3
NLO		4.35	24 P	41	30.29	-0.2
TDH		4.38	43 P	41	31.36	0.4
VLL		4.56	42 P	41	34.50	1.0
VIPM		4.58	57 P	41	33.39	-0.4
CROR		4.61	50 P	41	34.51	0.3
RVW		4.64	29 P	41	34.98	0.4
LVP		4.70	32 P	41	35.51	0.0
MTMW		4.74	34 P	41	35.49	-0.6
APM		4.76	39 P	41	37.02	0.8
BMW		4.77	24 e(P)	41	34.20	-2.2
FL2		4.83	32 P	41	37.57	0.2
JLK		4.87	33 P	41	37.27	-0.5
SHW		4.87	32 P	41	38.46	0.5
HSR		4.88	33 P	41	38.62	0.6
CDFW		4.89	34 P	41	37.52	-0.5
ESD		4.91	33 P	41	39.40	0.9
ERK		4.92	31 P	41	38.34	-0.3
GULW		4.94	38 P	41	39.14	0.3
SOSW		4.95	33 P	41	39.74	0.8
CZM		4.97	29 P	41	39.23	0.0
VGB		5.06	46 eP	41	40.00	-0.5
APW		5.11	27 P	41	42.31	1.2
ASR		5.11	37 P	41	41.35	0.1
KOSW		5.11	31 P	41	41.51	0.3
LMW		5.25	29 P	41	43.42	0.2
CPW		5.25	22 P	41	42.07	-1.1
GL2		5.33	42 P	41	44.49	0.1
GLK		5.43	34 P	41	45.63	-0.1
LON		5.50	32 P	41	46.39	-0.3
WPW		5.56	33 P	41	47.23	-0.4
RVC		5.60	29 P	41	48.35	0.2
FMW		5.70	31 P	41	49.66	0.0
GMW		5.87	22 eP	41	50.50	-1.4
ARN		5.88	143 eP	41	49.00	-3.1
MXC		6.03	41 P	41	53.86	-0.3

10d 04h

RMW	6.10	28	eP	41	54.50	-0.6
TBM	6.33	36	P	41	56.57	-1.9
HTW	6.41	26	P	41	58.77	-0.8
WAH2	6.52	43	P	42	00.91	-0.1
LOCW	6.56	43	P	42	04.47	2.9
LNOR	6.69	53	P	42	03.65	0.1
JCW	6.70	24	P	42	03.16	-0.5
ETW	6.78	34	P	42	05.07	0.2
TNP	7.84	118	eP	42	23.50	3.7X
PNT	8.45	30	eP	42	26.00	-2.0
LRM	10.43	65	eP	42	53.10	-2.5
GOL	15.77	92	eP	44	05.50	-1.2
ANMO	16.86	109	eP	44	22.80	2.3
	1.0s	1.25nm			3.0mb X	
ALO	16.86	109	eP	44	21.00	0.4
	1.2s	3.91nm			3.4mb	
FFC	20.18	43	iPd	44	59.40	-0.6
	0.8s	16.00nm			4.4mb	
YKA	21.48	14	eP	45	14.80	1.5
	1.0s	10.80nm			4.2mb	
MEO	22.61	100	iPd	45	26.30	1.4
SIO	23.87	96	eP	45	38.80	1.7
PMR	23.92	332	eP	45	41.20	3.9X
TUL	24.19	95	ePd	45	41.90	1.8
	1.4s	23.90nm			4.6mb	
Z	18s	0.41um			4.0Msz	
		LR		54	40.00	
FBA	25.96	339	e(P)	45	58.00	1.3
S.D. = 1.1 on 60 of 62 obs.						

& OCT 10, 1990 05h 37m 23.20s
41.157 N 125.513 W
DEPTH = 5.0km
OFF COAST OF NORTHERN CALIFORNIA(34)
<BRK>. ML 3.0 (BRK).

FHC	1.21	107	iPc	37	44.50	-1.7
			iS	37	59.70	
WDC	2.33	103	iPd	38	00.70	-2.1
			eS	38	28.30	
LBFM	2.74	85	eP	38	07.70	-1.1
MIN	3.08	104	eP	38	10.90	-2.6
			eS	38	47.50	
ORV	3.46	116	eP	38	15.70	-3.1
5 obs. assocíated						

OCT 10, 1990 05h 54m 53.54± 0.07s
23.497 S ± 2.5km 179.029 E ± 2.5km
DEPTH = 548.5km (geophysicist)
6.0mb (58 obs.)
SOUTH OF FIJI ISLANDS (171)
mb 6.6 (PAS), 6.5 (BRK). Depth from broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=135 Dip=73 Slip= -90
NP2: 315 17 -90
Principal Axes:
T Plg=28 Azm=225
P 62 45
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sta: 8 Focal mech. M
Energy 2.8±0.7*10**12 Nm
MOMENT TENSOR SOLUTION
Dep 562 No. of sta: 10
Moment Tensor; Scale 10**18 Nm
Mrr=-1.23 Mtt= 1.04
Mff= 0.19 Mrt=-0.31
Mrf= 0.55 Mtf=-0.35
Principal axes:
T Val= 1.27 Plg=11 Azm=204
N 0.17 14 297
P -1.43 72 76
Best Double Couple:Mo=1.3*10**18
NP1:Strike=276 Dip=36 Slip=-115
NP2: 126 58 -73
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.8.: 15S, 35C
Centroid Location:
Origin Time 05:55: 3.2 0.4
Lat 23.08S 0.04 Lon 178.93E 0.03
Dep 575.1 1.4 Half-duration 4.0
Moment Tensor; Scale 10**18 Nm
Mrr=-1.30 0.03 Mtt= 1.10 0.04
Mff= 0.20 0.05 Mrt=-0.21 0.04
Mrf= 0.48 0.04 Mtf=-0.40 0.04
Principal Axes:
T Val= 1.30 Plg= 8 Azm=203
N 0.14 13 295
P -1.44 74 82
Best Double Couple:Mo=1.4*10**18
NP1:Strike=278 Dip=38 Slip=-112
NP2: 125 55 -73

SVA	5.38	354	iPd	56	28.40	1.2
			e	56	54.00	
			eS	57	45.40	
VUN	5.49	354	iPd	56	28.50	0.3
NDF	5.90	345	ePc	56	36.50	4.6X
SGE	5.97	350	eP	56	34.50	1.8
RAO	6.35	155	P	56	40.50	4.5X
			S	58	01.00	
MBU	6.50	357	iPc	56	38.80	1.3
NDE	6.88	2	ePc	56	41.80	0.6
YSA	6.90	348	eP	56	42.20	0.9
BKM	11.64	298	iPc	57	30.50	1.5
DZM	11.70	275	iPc	57	32.00	2.4
			iS	59	46.00	
			ScP	05	12.10	
HBZ	14.07	182	eP	57	52.80	-0.5
	0.3s	362.00nm			6.3mb	
PUZ	14.54	182	P	57	57.40	-0.7
			S	00	27.50	
WLZ	14.60	191	eP	58	01.90	3.3X
NOZ	15.10	183	P	58	03.60	0.1
WHH	15.49	187	P	58	06.90	-0.6
PGZ	17.23	187	Pc	58	24.10	-0.2
MNG	17.33	189	Pc	58	24.60	-0.7
			S	01	13.30	
KIW	17.66	190	P	58	27.90	-0.6
MTW	17.86	189	P	58	29.70	-0.7
CAW	17.87	190	P	58	29.30	-1.2
MRW	18.05	191	P	58	32.60	0.4
BLW	18.07	189	P	58	32.40	0.0
WEL	18.09	190	P	58	34.10	1.5
TCW	18.11	192	P	58	33.30	0.5
CCW	18.64	191	P	58	38.70	0.8
THZ	18.92	194	P	58	41.30	0.7
KHZ	19.41	192	P	58	44.80	-0.3
	0.2s	533.00nm			6.8mb	
LTZ	20.04	195	P	58	50.80	-0.2
MQZ	20.83	193	Pc	58	58.10	-0.1
			S	02	14.40	
MMCZ	22.93	198	Pc	59	17.20	-0.2
MHZ	22.94	198	P	59	17.10	-0.4
TLC	23.11	198	P	59	19.20	0.1
BRS	24.01	255	iPc	59	29.50	2.3
			e	00	20.00	
			eS	03	07.00	
			iScP	05	39.00	
			iScS	09	29.00	
COO	25.14	248	iPc	59	39.60	2.3
			i	00	54.00	
			i	05	41.20	
			e	09	33.80	
RIV	26.46	241	ePc	59	52.00	3.3X
			e	02	28.00	
			e	03	48.00	
			i	06	36.00	
RMO	27.57	257	iP	00	00.00	1.5
			i	01	30.50	
			i	02	58.60	
			e	04	05.00	
			i	05	48.50	
CNB	28.29	239	iPd	00	07.30	2.5
			iPcP	03	02.20	
			eS	04	15.00	
			eScP	05	50.00	
CAN	28.58	239	iPc	00	10.20	2.9
			i	01	43.00	
			i	04	23.00	
BWA	28.81	241	iP	00	10.00	0.7
TBI	28.89	96	iP	00	10.50	0.5
	1.0s	865.00nm			6.3mb	
AFR	29.77	84	iP	00	17.20	-0.4
PAE	29.92	85	iP	00	18.40	-0.5
PPT	29.95	85	iP	00	18.90	-0.3
	1.1s	1405.00nm			6.5mb	

PPN	30.09	85	iP	00	20.00	-0.3
TVO	30.18	85	iP	00	21.00	-0.2
CMS	30.42	248	iP	00	23.60	0.5
			i	05	57.30	
			i	09	55.30	
CTA	30.58	270	iPd	00	25.20	0.6
	1.0s	568.00nm			6.2mb	
			iPcP	03	06.20	
			iS	04	44.00	
			iScP	05	58.00	
			iScS	09	57.00	
OLP	31.62	257	iPc	00	34.60	1.4
			i	06	03.60	
PMO	32.29	81	iP	00	39.00	0.1
	1.1s	1180.00nm			6.4mb	
VAH	32.45	81	iP	00	39.90	-0.3
	1.1s	1035.00nm			6.4mb	
TPT	32.54	81	iP	00	41.10	0.0
	1.1s	2365.00nm			6.7mb	
RUV	32.69	81	iP	00	42.30	0.0
	1.1s	1845.00nm			6.6mb	
PMG	33.52	289	iPc	00	49.50	0.2
	0.8s	14.93nm			4.7mb	
STK	34.05	247	iPc	00	56.10	2.4
	1.4s	305.00nm			5.7mb	
			iS	05	42.70	
QIS	36.59	267	iPc	01	15.30	0.6
			e	06	19.00	
ADE	36.77	243	iPc	01	18.00	1.9
	1.0s	500.00nm			6.1mb	
ASPA	41.23	260	iPd	01	53.00	0.6
	1.0s	467.10nm			6.0mb	
Z	22s	1.40um			4.8Msz	
			iScP	06	36.80	
			iS	07	26.20	
			iScS	10	54.40	
WB5	41.53	266	iPd	01	54.80	0.0
			iScP	06	39.00	
RKT	42.10	99	iP	01	59.80	0.6
	1.2s	450.00nm			5.9mb	
FORR	45.58	249	iPc	02	15.10	-11.1X
	0.4s	45.00nm				
MTN	46.54	274	eP	02	33.00	-0.7
WARB	47.35	255	eP	02	39.30	-0.6
	0.3s	27.00nm			5.3mb	
			e	07	03.70	
			e	08	52.00	
KNA	47.77	270	iPd	02	43.60	0.5
GUA	49.68	314	eP	02	56.70	-0.6
	0.8s	614.93nm			6.2mb	
GUMO	49.75	314	eP	02	57.20	-0.6
PJG	49.75	314	eP	02	57.00	-0.8
HON	49.85	28	P	02	58.10	-0.3
KIP	49.93	28	eP	03	01.56	2.6
			eS	09	27.78	
OPA	50.17	28	P	02	59.70	-1.0
COOL	51.53	248	eP	03	10.30	-0.5
AAI	52.85	284	eP	03	20.50	0.1
KLB	54.32	247	iPc	03	31.60	0.9
MEKA	54.45	253	eP	03	30.80	-0.9
MBL	54.47	260	eP	03	31.00	-0.9
	0.3s	53.00nm			5.3mb	
NWAO	54.59	245	eP	03	32.90	0.3
			eS	10	36.00	
RKG	54.65	244	eP	03	32.50	-0.4
	0.6s	154.00nm			5.5mb	
SBA	54.73	183	iPc	03	35.90	3.0
			eS	10	39.20	
BAL	55.35	248	eP	03	37.40	-0.5
MUN	55.58	246	eP	03	39.00	-0.4
MRWA	56.19	250	eP	03	43.10	-0.6
	0.4s	38.00nm			5.1mb	
NANU	58.00	257	iPd	03	56.00	-0.1
	0.3s	28.00nm			5.1mb	
KKM	67.93	287	ePd	04	59.80	-0.1
	0.6s	121.90nm			5.6mb	
KAKJ	69.81	327	P	05	10.30	-0.2
CHJJ	70.28	326	P	05	13.20	-0.1
IIDJ	70.40	325	P	05	13.70	-0.4
WKYJ	70.70	323	iP+	05	15.40	-0.5
MAJO	71.06	326	eP	05	16.99	-0.9
			eS	13	50.33	
			e	14	28.65	
			esS	17	16.01	
MAT	71.06	326	iPd	05	17.30	-0.6
	1.1s	594.94nm			6.0mb	
			eS	13	40.00	

NIIJ 71.21 327 P 05 18.40 -0.3
KAGJ 71.29 318 eP 05 19.70 0.4
MTMJ 71.31 326 P 05 19.40 0.0
OFUJ 71.39 330 eP 05 19.50 -0.2
TKSJ 71.40 322 P 05 20.30 0.5
YAMJ 71.43 328 P 05 20.20 0.2
TSRJ 71.47 324 P 05 20.50 0.3
KUMJ 72.26 319 eP 05 24.90 0.0
SHK 72.58 321 iPd 05 26.60 -0.1
1.1s 632.91nm 6.1mb
YONJ 72.60 322 P 05 27.00 0.2
SHNJ 73.20 320 eP 05 29.30 -0.9
HOOJ 73.39 333 P 05 32.40 1.3
KUSJ 73.41 334 P 05 31.50 0.3
MRRJ 74.37 332 P 05 36.90 0.4
SAP 74.77 332 eP 05 40.00 1.2
ASAJ 75.09 334 P 05 42.20 1.6
ADK 75.15 3 iPd 05 39.80 -0.8
1.3s 3496.30nm 6.6mb
OZH 75.82 305 eP 05 45.50 0.5
8.0s 1300.00nm 5.4mb X
S 14 38.00
SMY 76.02 357 ePd 05 44.60 -0.8
1.2s 2158.20nm 6.5mb
SSE 77.56 312 Pd 05 54.00 -0.3
1.0s 140.00nm 5.3mb
S 14 58.50
HKC 77.78 301 iPc 05 57.20 1.5
MAW 77.81 201 iPd 05 57.00 1.9
1.0s 308.00nm 5.7mb
GZH 78.84 301 P 06 02.03 0.8
S 15 16.00
AIA 79.29 157 eP 06 04.40 1.6
OIZ 79.62 296 eP 06 06.40 1.0
NJ2 79.73 312 iPd 06 06.50 0.8
1.1s 500.00nm 5.9mb
iS 15 24.00
SDN 80.45 12 iPd 06 08.20 -0.7
IPM 80.86 279 ePd 06 13.20 1.2
1.0s 196.00nm 5.6mb
MDJ 81.44 327 iPd 06 15.00 0.8
1.0s 500.00nm 6.0mb
S 15 40.00
BLP 81.46 47 P 06 15.70 1.1
SYP 81.73 47 ePd 06 17.00 0.9
e 08 24.00
PRS 81.88 45 iPd 06 17.80 1.1
GCC 81.90 44 iPd 06 17.60 0.9
PCC 81.94 43 iPd 06 17.80 0.9
PSI 82.01 276 ePc 06 18.50 0.7
1.0s 79.40nm 5.2mb
BCH 82.04 46 P 06 18.60 0.9
WHN 82.05 308 iPd 06 19.00 1.4
1.2s 300.00nm 5.7mb
S 15 47.00
DL2 82.07 318 iPd 06 17.00 -0.5
5.0s 1800.00nm 5.9mb X
SAO 82.09 44 iPd 06 18.50 0.8
PRI 82.22 45 iPd 06 19.80 1.3
BRK 82.24 43 iPd 06 19.40 1.0
BKS 82.26 43 ePd 06 20.00 1.5
0.8s 1109.00nm 6.4mb
esP 09 15.00
e(PPP)12 15.00
eSKS 15 53.00
e(SP) 16 47.00
esS 19 52.00
e 20 09.00
esSP 20 38.00
ZSP 82.29 43 iPd 06 19.90 1.2
MHC 82.31 44 iPd 06 20.10 1.1
LLA 82.32 45 iPd 06 19.80 0.9
ARN 82.38 44 P 06 20.20 1.0
ABL 82.42 47 P 06 20.40 0.7
PAS 82.73 48 iPd 06 21.12 0.1
isPc 09 14.60
ePPP 10 32.00
iS 15 56.42
e 16 22.07
e 16 50.05
esS 19 31.61
eSS 20 31.00
eLg 24 04.00
CPE 82.76 50 eP 06 22.60 1.5
SNY 82.78 322 iPd 06 21.00 0.0
1.2s 200.00nm 5.5mb
S 15 45.00

sS 19 29.00
MWC 82.85 48 ePd 06 22.00 0.2
BAR 82.95 50 ePd 06 23.00 0.9
FHC 83.01 40 iPd 06 23.80 1.5
CN2 83.04 324 iPd 06 23.00 0.7
1.0s 500.00nm 6.0mb
SKS 15 47.00
S 15 58.00
PLM 83.19 49 ePd 06 24.00 0.5
e 08 26.00
RVR 83.19 49 ePd 06 23.00 -0.3
e 08 23.00
SBB 83.27 48 ePd 06 24.00 0.2
e 08 23.00
PEC 83.28 49 P 06 24.00 0.2
1.0s 166.67nm 5.5mb
TIA 83.31 314 Pd 06 24.80 1.0
1.2s 780.00nm 6.1mb
S 15 52.00
IKP 83.33 50 eP 06 26.10 2.0
FRI 83.34 45 iPd 06 24.50 0.5
ISA 83.39 47 ePd 06 25.00 0.7
e 08 29.00
ISA 83.39 47 eP 06 26.00 1.7
CMB 83.52 44 iPd 06 25.06 0.1
isPc 09 20.20
eSKS 15 53.27
iS 16 04.08
e 16 57.00
eP'P' 35 19.30
WDC 83.73 41 iPd 06 26.50 0.7
eP'P' 35 19.50
ORV 83.74 42 iPd 06 26.50 0.6
eP'P' 35 19.00
CLC 84.06 47 ePd 06 28.00 0.3
CLC 84.06 47 eP 06 29.10 1.4
MIN 84.15 41 iPd 06 28.00 -0.1
eP'P' 35 19.20
TPC 84.17 49 ePd 06 29.00 0.8
e 08 34.00
GSC 84.31 48 ePd 06 29.00 0.1
KDC 84.37 15 iPd 06 28.50 0.0
1.4s ********nm 8.0mb X
LBFM 84.59 40 P 06 31.20 0.9
KVN 85.57 44 P 06 35.50 0.4
GYA 85.78 301 iPd 06 37.00 0.8
1.4s 200.00nm 5.6mb
COR 85.78 37 iPd 06 36.76 1.1
i 09 34.22
MZX 86.00 63 iPd 06 38.00 0.9
BJI 86.13 317 iPd 06 38.00 0.6
2.0s 1380.00nm 6.3mb
eSKS 16 09.00
eS 16 27.00
SVW 86.77 12 iPd 06 39.40 -0.7
TIY 87.26 313 iPd 06 44.50 1.5
1.2s 600.00nm 6.2mb
MID 87.40 17 eP 06 43.10 0.1
XAN 87.79 309 iPd 06 46.60 1.1
1.0s 400.00nm 6.2mb
SKS 16 20.00
S 16 42.00
GMW 87.92 35 P 06 46.50 0.7
LON 87.95 36 ePd 06 45.64 -0.4
e 09 43.43
PGC 88.27 34 ePd 06 47.60 0.3
1.0s 963.00nm 6.6mb
KMI 88.29 298 iPd 06 49.33 1.1
2.4s 580.00nm 6.0mb
ipPc 08 48.19 538kmX
e 08 54.81
iSKS 16 25.63
eS 16 48.56
TTA 88.38 11 ePd 06 47.50 -0.2
RMW 88.39 36 P 06 48.40 0.4
PMR 88.58 15 iPd 06 47.90 -0.6
1.2s 1234.40nm 6.7mb
CHTO 88.70 291 iPd 06 50.37 0.4
ipPc 08 49.88 541kmX
e 08 56.17
ACX 88.77 71 iPc 06 52.00 1.7
MRX 88.82 68 iPc 06 52.00 1.6
SIT 88.93 23 eP 06 50.80 0.6
HHC 89.51 316 eP 06 54.40 1.0
5.0s 1100.00nm 6.0mb X
SKS 16 30.00
HIA 89.56 326 iPd 06 53.02 -0.3

ipPc 08 52.20 538kmX
e 08 58.49
isPc 09 47.82
iSKS 16 28.58
eS 16 58.63
DUG 89.61 45 P 06 54.20 0.3
1.1s 167.76nm 5.9mb
TOA 89.73 16 iPd 06 54.00 0.1
III 89.74 70 iPd 06 56.50 1.5
CRX 89.98 69 iPd 06 58.00 1.8
IIJ 90.08 69 iP 06 58.00 1.1
CD2 90.12 304 P 06 57.80 1.5
1.2s 400.00nm 6.2mb
SKS 16 33.00
S 17 04.50
BTO 90.38 315 iPc 06 58.50 1.1
UNM 90.38 69 iPc 07 00.00 2.0
PNT 90.67 35 ePd 06 59.00 0.6
0.9s 452.00nm 6.5mb
PPM 90.75 70 iP 07 01.00 1.0
IIT 91.00 70 iPd 07 02.50 1.6
NEW 91.41 37 P 07 01.80 -0.1
ALQ 91.41 52 iPd- 07 02.50 0.1
0.9s 168.07nm 6.1mb
epP 09 10.00 584kmX
ANMO 91.41 52 P 07 03.00 0.6
pP 09 13.00 598kmX
IMA 91.67 11 ePd 07 02.40 -0.4
COL 91.77 14 eP 07 00.29 -2.8
eSKS 16 39.75
eS 17 10.05
ePS 18 27.02
FBA 91.77 14 iPd 07 02.00 -1.1
LNV 92.01 128 iPc 07 06.00 1.0
LCCH 92.14 128 iPc 07 06.50 0.9
LZH 92.43 308 eP 07 10.14 3.2X
2.5s 640.00nm 6.2mb
iSKS 16 46.43
TACH 92.50 128 eP 07 08.50 1.1
CHCH 92.57 129 eP 07 09.00 1.3
LRM 92.77 41 ePd 07 08.40 -0.1
SAN 92.80 128 eP 07 10.00 1.2
PCH 92.82 128 iPc 07 10.40 1.4
PEL 92.94 128 iPd 07 10.50 1.0
0.6s 60.00nm 5.9mb
FCH 93.13 128 iPc 07 12.50 1.8
JACH 93.24 128 eP 07 12.00 1.1
EVV 93.34 71 iPc 07 12.50 1.3
GOL 94.36 49 P 07 16.10 0.2
pP 09 26.40 599kmX
SES 95.91 37 eP 07 22.00 -0.3
0.9s 106.00nm 6.1mb
EDM 96.12 34 iPd 07 22.00 -1.2
1.2s 152.00nm 6.1mb
GTA 96.75 310 iPd 07 26.80 0.3
1.5s 200.00nm 6.2mb
SKS 17 08.10
MEO 97.18 55 iPd 07 27.70 -0.7
RSSD 97.21 45 P 07 28.00 -0.6
0.7s 69.20nm 6.1mb
SHL 97.40 295 iP 07 29.50 -0.3
iS 17 16.20
INK 97.89 16 ePd 07 29.70 -1.1
1.0s 115.00nm 6.2mb
SIO 99.27 55 iP 07 38.00 0.2
TUL 99.72 55 eP 07 39.00 -0.8
0.9s 10.20nm 5.3mb
Z 23s 0.67um 5.1MszX
LR 20 00.00
UYO 100.10 57 e(Pdif07 40.80 -0.8
YKA 100.38 26 ePdiff07 40.90 -1.3
0.8s 13.50nm 5.5mb
ARE 100.49 113 ePdiff07 47.00 2.9X
FFC 102.78 36 ePdiff07 51.00 -2.0
1.3s 21.00nm 5.7mb
CNCB 103.27 115 ePdiff07 57.00 0.3
i 08 02.50
i 12 13.00
LPB 103.31 115 ePdiff07 58.00 1.3
GBA 105.79 278 PKP 12 16.40 -0.5
HYB 106.10 282 ePKP 12 16.00 -1.5
MBC 106.29 13 ePdiff08 08.00 -0.1
1.0s 12.00nm 5.8mb
MBC 106.29 13 ePKPd 12 14.90 -1.2
0.9s 34.00nm
SIV 109.37 118 Pdiff 08 27.00 3.8X
SIV 109.37 118 PKP 12 17.20 -6.5X

10d 06h

			i	12	22.80		HFS	141.97	348	ePKP	13	18.80	-5.2X	WIT	150.15	351	ePKP	13	38.00	0.6
			i	13	04.40			0.8s	513.80nm					CLL	150.20	342	iPKP	13	37.50	-0.1
POO	110.69	282	iPKPc	12	24.80	-1.3	HYA	142.03	354	ePKP	13	19.11	-4.9X		1.7s	220.00nm				
BLA	111.90	58	PKP	12	26.30	-1.6	SUE	142.25	355	iPKP	13	20.25	-4.2X	DST	150.28	310	iPKP	13	43.80	5.6X
KSH	114.29	304	PKP	12	33.50	0.9	ASK	142.79	355	iPKP	13	22.07	-3.3X	BRG	150.32	341	iPKPd	13	37.00	-0.8
WVLY	114.37	52	PKP	12	31.20	-1.4	BER	142.88	355	ePKP	13	22.42	-3.1X				i	13	43.40	
PLAV	115.33	90	iPKPc	12	34.40	-1.0	BLS2	143.80	353	iPKP	13	25.79	-1.5				i	13	53.00	
VAO	115.70	133	iPKPd	12	35.40	-0.3	SHBJ	144.97	293	PKPc	13	48.03	17.9X	BNT	150.45	312	iPKP	13	44.10	5.7X
			e	12	38.30		KAS	145.98	310	iPKPd	13	31.40	-0.1	DEV	150.47	325	iPKPc	13	39.00	0.8
OLLA	116.02	90	iPKPc	12	35.50	-1.1	HLBJ	146.07	293	PKPc	13	49.50	17.6X	HLW	150.50	289	ePKP-	13	38.00	-0.7
LLAV	116.18	90	iPKPc	12	35.60	-1.3	MDSJ	146.15	292	PKPc	13	49.72	17.6X				e	13	45.00	
TXNY	117.39	54	iPKP	12	37.60	-0.7	BSD	146.29	344	iPKPc	13	30.90	-0.5				e	15	48.00	
BMA	117.78	134	ePKP	12	39.50	-0.1		0.5s	312.00nm					PSZ	150.50	331	iPKP	13	33.80	-4.5X
JFO	119.01	134	iPKPc	12	41.90	-0.1	JARJ	146.35	293	PKPc	13	49.96	17.6X	ETA	150.57	6	ePKP	13	37.40	-0.7
SJG	119.28	82	iPKP	12	25.20	-17.3X	QTRJ	146.38	292	PKPc	13	49.91	17.5X		1.5s	428.00nm				
BAO	119.79	126	PKPd	12	43.40	-0.3	HRI	146.41	295	ePKP	13	31.00	-1.5	PVL	150.71	319	iPKPc	13	38.00	-0.6
SVB	122.25	89	ePKP	12	45.68	-2.6X	SHMJ	146.46	294	PKPc	13	50.14	17.7X	ECB	150.84	7	ePKP	13	38.00	-0.5
NEV	122.25	84	ePKP	12	46.00	-2.2X	BURJ	146.47	293	PKPc	13	51.83	19.2X		1.2s	221.00nm				
SVV	122.29	89	ePKP	12	46.09	-2.2X	MASJ	146.59	292	PKPc	13	50.33	17.6X	PRU	150.90	339	ePKPd	13	38.00	-0.7
SOA	122.37	89	ePKP	12	43.30	-5.1X	SALJ	146.60	293	PKPc	13	50.38	17.6X		1.8s	134.40nm				
EVA	122.42	212	iPKPc	12	49.00	0.5	MKRJ	146.67	292	PKPc	13	50.23	17.3X				i	13	45.20	
	0.9s	134.45nm					MML	146.78	294	iPKPc	13	31.80	-1.2	WTS	150.93	350	ePKPd	13	38.50	-0.1
SLB	122.62	88	ePKP	12	46.77	-2.3X	LISJ	146.84	292	PKPc	13	50.73	17.8X		1.0s	174.00nm				
SCH	122.75	39	ePKPd	12	46.50	-1.6	EDU	146.95	2	ePKPc	13	31.70	-0.7	ECP	151.07	7	ePKP	13	38.60	-0.2
	1.1s	218.00nm					ELO	147.00	3	ePKPc	13	31.80	-0.7		1.2s	306.00nm				
BBL	122.76	86	ePKP	12	46.00	-3.2X	IAS	147.14	323	ePKP	13	33.00	0.0	SRE	151.09	323	ePKPc	13	46.00	6.8X
FDF	122.81	87	ePKP	12	48.20	-1.2	BBTK	147.23	308	ePKP	13	40.00	6.4X	MOX	151.18	343	ePKP	13	39.00	-0.1
BPA	122.87	84	ePKP	12	47.00	-2.4X	EBH	147.23	3	ePKPc	13	32.40	-0.5		1.8s	262.00nm				
KBS	124.20	357	ePKP	12	50.00	-0.2		0.9s	1704.00nm								epPKP	15	55.00	
NPA	125.07	230	iPKP	12	53.80	0.0	EAB	147.25	3	ePKPc	13	32.30	-0.6	SRO	151.27	332	iPKPd	13	38.80	-0.5
	1.0s	250.00nm						0.9s	1204.00nm								i	13	45.90	
			e	14	40.40		HQL	147.31	288	PKP	13	33.90	0.1				e	24	34.90	
			e	15	17.00		MBH	147.44	289	iPKPd	13	32.70	-1.3				e	27	20.80	
CIR	125.57	218	iPKPc	12	55.50	0.9	FAM	147.56	299	ePKP	13	37.70	3.6X	BZS	151.32	326	ePKP	13	37.00	-2.5X
			i	15	20.00		EDI	147.57	2	ePKPc	13	32.80	-0.6	HOF	151.41	343	ePKP	13	39.00	-0.5
			i	15	32.50		ESY	147.60	2	ePKPc	13	32.80	-0.7				i	13	46.20	
DAG	125.95	5	iPKPc	12	51.50	-2.2X		1.0s	1772.00nm								i	13	57.50	
	0.9s	224.09nm					EAU	147.64	3	ePKPc	13	33.00	-0.6	ZST	151.47	334	iPKPd	13	39.30	-0.3
MAIO	126.82	299	iPKPd	12	56.20	-0.5		0.9s	2142.00nm								i	13	46.60	
	1.1s	76.56nm					CLI	147.67	322	ePKPc	13	34.00	0.0				i	13	58.50	
			e	15	04.00		EBL	147.73	2	ePKPc	13	33.30	-0.4				i	14	13.70	
BUL	127.91	216	iPKPc	12	59.80	0.6	CFR	147.94	320	ePKPc	13	34.00	-0.3				i	15	54.90	
	2.0s	820.59nm					CSS	148.11	299	ePKP	13	34.20	-0.8				e	27	27.30	
			i	15	28.50		EKA	148.16	2	PKPd	13	33.10	-1.3	RDO	151.68	315	ePKP	13	39.50	-0.6
			i	15	42.60			1.3s	203.10nm					VKA	151.72	335	ePKP	13	39.00	-1.0
			i	22	23.00		ESK	148.18	2	iPKPc	13	38.00	3.6X		2.4s	716.00nm				
SOB1	129.20	125	ePKP	12	43.60	-18.1X		1.0s	600.00nm								i	13	40.00	
			e	12	58.50		VRI	148.38	322	ePKPc	13	34.00	-1.1				i	13	47.70	
			e	13	00.60		PSN	148.71	317	iPKPc	13	36.00	0.4				i	13	55.50	
			i	15	29.80		CVO	148.72	322	ePKPc	13	34.50	-1.1				i	13	59.10	
KRI	130.00	220	iPKPc	12	57.90	-5.4X	GPA	148.82	310	iPKP	13	35.60	-0.4				i	15	06.60	
			i	13	06.00		KRA	148.86	334	iPKPd	13	34.90	-0.7				ipPKP	15	50.70	
			i	15	39.30			1.1s	982.00nm								isPKP	16	54.30	
			i	15	54.00					i	13	40.10		IZM	151.73	308	ePKP	13	38.60	-1.8
			i	22	17.90					i	13	46.60		BNS	151.86	349	ePKPc	13	38.90	-1.2
KEV	130.83	348	ePKP	12	57.00	-6.1X	ISR	148.91	321	ePKPc	13	36.00	0.0		1.0s	624.00nm				
	0.7s	50.70nm					PPCY	148.92	299	ePKP	13	35.00	-1.2				id	13	47.40	
			i	13	02.40		BMR	148.97	327	ePKPc	13	36.00	0.1	ARG	151.88	303	ePKP	13	40.00	-0.6
			i	15	35.00		AMAN	149.00	278	iPKPc	13	36.50	-0.1	KHC	151.96	339	iPKPd	13	40.40	0.1
WIN	130.96	202	iPKPd	13	05.50	0.4	MLR	149.05	322	ePKPc	13	35.00	-1.3				i	13	48.60	
	0.9s	54.62nm					BRN	149.15	343	ePKPc	13	37.00	1.0	PRK	152.08	311	ePKP	13	40.00	-0.7
TRO	132.34	351	iPKP	13	04.70	-1.3				id	13	42.00		SOP	152.10	334	ePKP	13	40.10	-0.4
SOD	132.87	346	iPKP	12	57.90	-9.2X	AKRL	149.17	277	ePKP	13	37.00	0.1	GRF	152.16	343	iPKPd	13	40.40	-0.2
			i	13	06.30		GBZT	149.22	311	iPKPd	13	40.50	4.0X				e	13	48.30	
			i	15	42.20		ANMR	149.32	277	iPKPc	13	38.00	0.9				e	14	01.30	
CAI	133.76	126	iPKPc	12	55.40	-15.0X	YLV	149.36	311	iPKP	13	41.10	4.3X	GRFO	152.16	343	ePKPd	13	39.01	-1.5
AKU	136.39	10	iPKP	13	01.50	-12.3X	ISK	149.37	312	ePKP	13	34.00	-2.7X	WET	152.17	340	ePKP	13	40.00	-0.6
	1.0s	104.00nm					AWKL	149.38	277	iPKPc	13	38.00	0.8				i	14	01.30	
			i	13	14.00		IZI	149.39	310	ePKP	13	41.10	4.2X	ENN	152.25	351	iPKPd	13	40.40	-0.2
			i	15	55.00		SPC	149.39	332	ePKP	13	36.80	0.1		1.0s	121.00nm				
SUF	136.75	342	ePKP	13	02.00	-12.6X				i	13	41.30		SMG	152.31	307	ePKP	13	40.00	-1.1
REY	137.08	13	iPKP	13	15.20	0.1				i	15	49.90		TNS	152.32	347	ePKPd	13	40.90	0.1
			e	15	57.30		ALT	149.42	308	iPKP	13	36.90	-0.1				i	13	49.20	
TAB	137.29	301	ePKP	13	83.00	-13.6X	CEI	149.48	328	ePKP	13	45.00	8.4X				i	14	00.70	
			e	13	16.00		KSP	149.59	338	iPKPd	13	36.20	-0.5	VTS	152.35	319	iPKPc	13	41.00	-0.3
KMTA	138.80	271	PKP	13	13.30	-6.7X				id	13	42.20		UCC	152.43	353	PKP	13	41.40	0.6
NUR	138.95	341	ePKP	13	05.00	-13.6X				i	13	50.30					ed-	13	48.60	
	1.0s	124.00nm					BCK	149.61	305	ePKP	13	35.90	-1.4				e	14	01.00	
			i	13	10.00		CMP	149.69	322	ePKPd	13	42.00	4.9X				e	15	58.00	
			i	13	18.20		MTUR	149.71	322	ePKPc	13	42.50	5.3X	BEO	152.46	326	ePKP	13	41.00	-0.1
			i	16	01.20		TNR	149.88	323	ePKPc	13	37.00	-0.4				i	13	49.00	
OASM	139.66	283	PKP	13	14.70	-6.4X	DMK	149.89	314	ePKP	13	36.60	-0.9	KMR	152.70	338	iPKP-	13	41.00	-0.4
AFIF	139.72	280	PKP	13	15.40	-5.9X	COZ	150.05	323	ePKPc	13	37.00	-0.8				i	13	49.40	
RGS	139.75	352	ePKP	13	11.40	-8.6X	KHL	150.12	307	iPKP	13	37.20	-0.8				i	14	03.60	
MOL	140.52	354	iPKP	13	14.27	-7.1X	WIT	150.15	351	ePKP	13	44.50	7.1X				ipPKP	15	34.60	
UOSK	140.68	283	PKP	13	17.70	-5.3X				e	13	54.00		SNF	152.72	353	iPKPc	13	41.73	0.5
NB2	141.54	350	PKP	13	17.90	-5.4X				e	16	05.00		KAP	152.82	303	ePKP	13	41.00	-0.9

DOU	153.10	352	PKP	13	42.00	0.2
			i	13	49.90	
BCAO	153.28	228	iPKPd	13	42.75	-0.5
	1.1s	246.00nm				
BHG	153.42	339	iPKPd	13	41.60	-0.8
			i	14	06.60	
PLG	153.44	315	ePKP	13	49.50	6.8X
STU	153.52	345	iPKP	13	41.70	-0.7
FUR	153.52	341	iPKPd	13	42.20	-0.3
			i	13	50.90	
			i	14	06.90	
GWF	153.68	347	PKP	13	42.79	0.1
SKO	153.77	320	iPKPc	13	42.60	-0.4
	1.3s	137.00nm				
			iP'P'	13	50.50	
			i	14	08.00	
			i(pPKP	16	07.20	
PTJ	153.78	333	iPKPd	13	42.20	-0.8
KBA	153.81	337	iPKPd	13	41.70	-1.4
			i	13	42.40	
			i	13	51.20	
			i	14	07.80	
STR	154.02	347	PKP	13	43.25	0.2
NPS	154.12	303	ePKP	13	44.00	0.3
BLY	154.13	329	ePKP	13	47.30	3.9X
WATA	154.18	340	iPKPd	13	42.80	-0.8
			i	13	43.20	
			i	13	52.40	
			i	14	09.60	
LJU	154.24	335	ePKPd	13	43.00	-0.5
WLS	154.27	347	PKP	13	42.79	-0.8
CDF	154.29	347	PKP	13	43.14	-0.5
VBY	154.39	333	ePKP	13	44.00	0.3
SQTA	154.39	341	iPKPd	13	43.30	-0.5
	1.1s	396.00nm				
			i	13	53.00	
			i	14	10.60	
			i	16	03.00	
			i	16	56.30	
			e	23	35.00	
FVI	154.43	338	PKP	13	42.50	-1.2
ATH	154.44	310	ePKP	13	41.60	-2.4X
ECH	154.50	347	PKP	13	42.99	-0.8
VOY	154.50	335	ePKPc	13	43.20	-0.8
			i	14	10.00	
CEY	154.54	334	ePKPd	13	43.00	-1.0
			i	14	10.50	
KZN	154.55	317	ePKP	13	44.00	-0.2
SLE	154.63	345	ePKPd	13	43.30	-0.7
FEL	154.64	346	ePKP	13	43.51	-0.7
OHR	154.68	319	iPKPd	13	43.40	-0.9
	1.6s	226.00nm				
			iP'P'	13	53.70	
			i	14	11.90	
VITF	154.72	349	PKP	13	43.72	-0.3
OGA	154.76	340	iPKPd	13	44.20	-0.3
			i	14	12.20	
FLN	154.78	359	iPKPd	13	43.90	-0.2
	1.2s	232.45nm				
	Z 20s	0.17um			4.9Msz	
TRI	154.82	335	iPKPd	13	43.60	-0.7
			i	13	53.20	
			i	14	11.30	
			i	15	56.00	
			e	28	52.00	
			e	42	56.00	
MOF	154.85	347	PKP	13	43.72	-0.7
HAU	154.86	348	iPKP	13	44.10	-0.2
	1.3s	176.90nm				
	Z 20s	0.32um			5.1Msz	
RIY	154.88	334	ePKPd	13	43.50	-0.8
SAX	154.90	343	ePKPd	13	44.30	-0.4
ZLA	154.92	345	ePKPd	13	43.80	-0.7
BSF	154.94	348	PKP	13	43.72	-0.8
LDF	154.95	359	iPKPd	13	43.90	-0.5
	1.2s	169.60nm				
VVI	155.08	337	PKP	13	44.10	-0.6
BST	155.12	5	PKP	13	41.99	-2.6X
VAM	155.15	304	ePKP	13	45.00	-0.1
GRR	155.16	360	iPKPd	13	44.50	-0.2
	1.3s	173.30nm				
OSS	155.19	342	ePKPd	13	44.50	-0.5
EVR	155.28	314	ePKP	13	45.50	0.2
CTI	155.29	339	PKP	13	44.20	-0.9
LLS	155.34	343	ePKPd	13	45.00	-0.2
LOMF	155.39	347	PKP	13	44.78	-0.4
LPF	155.52	0	iPKPd	13	44.90	-0.2
	1.4s	278.80nm				
VLI	155.56	308	ePKP	13	44.50	-1.1
VDL	155.56	342	ePKPd	13	45.20	-0.4
HVAR	155.66	328	iPKP	13	44.60	-0.9
LOR	155.97	352	iPKPd	13	45.50	-0.3
	1.3s	169.25nm				
	Z 20s	0.30um			5.1Msz	
GRC	156.03	353	PKP	13	46.34	0.5
SAL	156.05	340	PKPc	13	45.50	-0.4
ITM	156.07	310	ePKP	13	45.00	-1.3
TMA	156.08	343	ePKPd	13	45.40	-0.8
MDI	156.14	341	PKPc	13	44.90	-1.1
SSF	156.21	352	iPKPd	13	46.00	-0.1
LBF	156.23	352	iPKPd	13	45.90	-0.3
VAI	156.33	343	PKP	13	45.30	-1.0
MMK	156.36	344	ePKPd	13	46.70	0.0
DIX	156.47	345	ePKPd	13	47.10	0.2
VLS	156.48	313	ePKP	13	48.00	1.2
AVF	156.50	353	iPKPd	13	46.10	-0.4
	1.5s	151.45nm				
SMF	156.58	352	iPKPd	13	46.20	-0.4
	1.6s	211.45nm				
EMS	156.59	346	ePKPd	13	46.90	0.0
ORX	156.75	344	PKP	13	45.04	-2.0
ORO	156.76	344	PKP	13	46.10	-0.9
BGF	156.79	353	iPKPd	13	47.00	0.1
MFF	156.94	359	iPKPd	13	47.00	0.0
ARV	156.98	333	PKPc	13	47.40	0.2
SFI	157.06	336	PKP	13	47.00	-0.2
LSD	157.12	345	PKP	13	47.30	-0.3
TCF	157.12	354	iPKPd	13	47.20	-0.1
BOB	157.14	341	PKP	13	47.00	-0.4
PGD	157.15	336	PKP	13	47.10	-0.5
MAF	157.15	354	iPKPd	13	47.40	0.1
	1.6s	146.15nm				
LPL	157.16	346	iPKPd	13	47.80	0.1
	1.2s	62.50nm				
LPG	157.17	346	iPKPd	13	48.00	0.2
	1.2s	65.45nm				
LSF	157.21	356	iPKPd	13	47.10	-0.3
MME	157.24	338	PKPc	13	48.00	0.2
AGO	157.25	353	PKP	13	47.30	-0.2
CRE	157.27	335	PKP	13	46.90	-0.8
PLDF	157.27	352	PKP	13	47.60	0.0
RSP	157.38	345	PKP	13	45.25	-2.5
BDI	157.39	338	PKP	13	46.00	-1.8
ASS	157.45	333	PKPc	13	46.90	-0.9
PYM	157.56	353	PKP	13	48.25	0.3
PCP	157.61	342	PKP	13	46.07	-1.9
BNI	157.61	346	PKPc	13	48.60	0.5
RRL	157.71	345	PKP	13	48.02	-0.3
PII	157.72	338	PKP	13	46.50	-1.5
ADU	157.72	331	PKP	13	48.10	0.0
DUI	157.77	328	PKPc	13	47.90	-0.4
CKI	157.79	342	PKPc	13	47.00	-1.1
DOI	157.99	344	PKP	13	47.00	-1.4
AZI	157.99	330	PKP	13	47.50	-0.8
MNS	158.01	332	PKP	13	46.00	-2.5X
FIN	158.01	342	PKP	13	46.68	-1.7
ROB	158.02	343	PKP	13	47.40	-1.0
PZZ	158.03	344	PKP	13	48.22	-0.3
SDI	158.04	329	PKP	13	47.40	-1.1
LBL	158.05	352	PKP	13	48.64	0.3
ROI	158.15	321	PKP	13	48.20	-0.5
RJF	158.15	355	iPKPd	13	48.70	0.2
	1.4s	239.60nm				
	Z 20s	0.47um			5.3Msz	
SGO	158.16	325	PKPc	13	47.90	-0.7
CSI	158.17	322	PKP	13	48.60	-0.1
ENR	158.20	344	PKP	13	46.99	-1.7
STV	158.21	344	PKP	13	48.12	-0.6
TDS	158.22	322	PKPc	13	48.70	0.0
BSS	158.25	326	PKPc	13	48.00	-0.7
MGR	158.32	324	PKP	13	47.00	-1.8
IMI	158.37	342	PKP	13	47.71	-1.2
AUTN	158.42	343	PKP	13	48.60	-0.5
TOUF	158.45	344	PKP	13	48.14	-1.0
CAF	158.48	354	iPKPd	13	49.30	0.4
SBF	158.54	343	ePKP	13	48.50	-0.5
	1.2s	190.40nm				
AURF	158.55	343	PKP	13	49.66	0.6
LFF	158.56	357	iPKPd	13	49.20	0.3
	1.4s	200.40nm				
MVIF	158.58	344	PKP	13	47.47	-1.7
CZI	158.63	321	PKP	13	46.60	-2.6X
REVF	158.67	343	PKP	13	48.14	-1.0
CALN	158.78	344	PKP	13	49.07	-0.4
LPO	158.79	356	iPKPd	13	49.60	0.4
	1.6s	286.05nm				
FRF	159.02	344	ePKP	13	48.90	-0.6
	1.3s	104.70nm				
LRG	159.19	345	ePKP	13	48.90	-0.7
	1.2s	59.50nm				
LMR	159.27	344	ePKP	13	49.50	-0.2
	1.6s	174.15nm				
PGF	159.27	339	PKP	13	49.20	-0.7
EMON	159.43	13	iPKPd	13	50.20	0.2
			ic	14	31.20	
STS	159.67	16	iPKPd	13	50.70	0.5
			ic	14	32.60	
EZAM	160.32	17	ePKP	13	51.50	0.6
ERUA	160.47	14	iPKPd	13	51.30	0.2
			ic	14	36.40	
EPF	160.49	357	iPKPd	13	51.70	0.6
	1.2s	185.95nm				
ECRI	160.90	3	ePKP	13	52.20	0.7
			ic	14	38.20	
ETER	160.98	351	iPKPc	13	52.10	0.6
			ic	14	38.60	
LIC	162.39	167	PKPd	13	53.40	-0.4
MBO	162.39	118	ePKP	13	54.90	1.3
KIC	162.58	167	PKPd	13	53.50	-0.5
	1.1s	283.50nm				
EROQ	162.68	356	ePKP	13	54.10	0.8
			ic	14	45.80	
GUD	162.70	8	iPKPc	13	54.70	1.2
			ic	14	45.80	
ETOR	162.70	3	iPKPd	13	54.10	0.7
			ic	14	46.00	
TIC	162.80	166	PKPd	13	54.20	0.0
EPLA	162.92	13	iPKPd	13	53.90	0.3
			ic	14	47.40	
LIS	163.30	23	iPKPd	13	54.80	0.9
ESEL	163.45	349	ePKP	13	54.00	-0.1
			e	14	50.00	
TOL	163.46	8	iPKPc	13	55.50	1.4
	1.5s	222.22nm				
			ePP	18	35.00	
			eSS	30	50.00	
			eSSS	35	05.00	
ECHE	163.96	360	iPKPc	13	55.70	1.1
			ic	14	52.00	
EVIA	164.85	5	iPKPd	13	56.00	0.5
			ic	14	56.00	
EBAN	165.18	9	iPKPd	13	56.00	0.3
			ic	14	57.60	
EHOR	165.26	13	iPKPd	13	56.30	0.6
			ic	14	57.70	
LKO	165.44	162	PKPd	13	56.46	-0.1
	1.0s	201.50nm				
EALH	165.68	1	iPKPc	13	56.80	0.7
GIBL	166.04	17	iPKP	14	00.00	3.6X
EPRU	166.08	14	iPKPc	13	58.00	1.5
			e	15	02.00	
ECOG	166.08	9	iPKPc	13	55.70	-0.9
			e	15	01.00	
AFC	166.11	9	ePKP	13	56.50	-0.2
			ic	15	01.60	
CNIL	166.44	18	iPKP	13	59.50	2.8X
MAL	166.48	12	iPKPd	13	56.50	-0.2
			ipP	14	03.20	
EJIF	166.52	16	ePKP	13	58.20	1.4
			ic	15	04.00	
ENIJ	166.53	4	ePKP	13	56.80	0.0
			e	15	02.00	
MOMI	166.58	17	iPKP	13	58.00	1.2
PLAT	166.75	17	iPKP	14	01.00	4.0X
OJEN	166.83	16	iPKP	14	00.00	2.9X
NKM	167.48	17	iPKPc	13	59.00	1.5
			i	14	04.00	
			i	15	08.00	
TAF	168.65	6	iPKPd	14	00.00	1.6
			i	15	12.00	
AVE	168.71	29	iPKP	13	59.00	0.7
			i	15	12.50	
			i	19	06.50	
IFR	169.37	19	iPKPd	14	00.00	1.0
			i	15	16.50	
TIO	170.72	36	iPKPd	14	00.50	0.8
			i	15	21.00	

S.D. = 0.9 on 483 of 560 obs.

? OCT 10, 1990 06h 17m 16.96± 1.01s
16.525 N ±10.6km 61.960 W ±15.7km

10d 06h

DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)

BPA	0.53	11	eP	17	28.32	0.3
			S	17	39.60	
DOG	0.59	146	eP	17	30.28	1.4
			S	17	43.50	
SFG	0.78	110	eP	17	30.80	-0.7
			S	17	44.50	
NEV	0.84	316	eP	17	32.19	-0.2
			S	17	46.80	
BBL	1.10	155	eP	17	35.31	-0.8

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

& OCT 10, 1990 06h 59m 32.30s
37.808 N 121.755 W
DEPTH = 13.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.4 (BRK).
Mo=8.7•10••13 Nm (BRK).

BKS	0.39	280	iPc	59	39.90	-0.5
BKS	0.39	280	iPc	59	40.00	-0.4
			iS	59	45.90	
			i	59	47.20	
BRK	0.41	279	iPc	59	40.20	-0.5
			iS	59	46.10	
ZSP	0.42	289	iPc	59	40.50	-0.5
MHC	0.47	169	iPd	59	41.95	-0.1
			iS	59	48.95	
MHC	0.47	169	iPd	59	42.00	-0.1
ARN	0.49	159	iPc	59	42.30	0.0
PCC	0.58	238	iPc	59	43.30	-0.6
GCC	0.80	194	eP	59	46.60	-0.9
SAO	1.07	167	eP	59	50.60	-1.6
CMB	1.11	78	ePc	59	51.50	-1.3
			iS	00	06.20	
LLA	1.35	151	eP	59	54.90	-2.0
ORV	1.76	6	eP	00	02.50	-0.1
FRI	1.82	116	eP	00	01.90	-1.6
TNP	3.60	84	eP	00	35.50	6.4

15 obs. associated

& OCT 10, 1990 07h 11m 16.73s
59.926 N 153.383 W
DEPTH = 143.4km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.28	164	iP	11	36.00	0.9
			eS	11	50.34	
PDB	0.43	252	iP	11	36.23	-1.0
AUE	0.57	179	eP	11	37.11	-0.8
RED	0.58	31	iP	11	37.22	-0.9
AUI	0.59	182	eP	11	37.55	-0.5
RSO	0.62	30	iP	11	37.78	-0.8
RDT	0.81	36	iP	11	38.77	-0.9
MCNL	0.89	214	iP	11	39.15	-1.1
HOM	0.92	106	eP	11	39.82	-0.6
			eS	11	57.17	
CDD	1.01	188	iP	11	40.12	-1.1
			eS	11	57.86	
NNL	1.06	83	eP	11	41.77	0.1
BGM	1.08	241	eP	11	42.29	0.4
CNPM	1.16	189	iP	11	41.63	-1.0
			eS	12	00.08	
NKA	1.35	52	eP	11	45.02	0.6
CKL	1.38	22	iP	11	44.31	-0.6
			eS	12	05.20	
SPU	1.42	27	eP	11	44.53	-0.8
			eS	12	05.50	
BGL	1.43	20	iP	11	45.25	-0.2
CRP	1.48	24	eP	11	45.56	-0.5
NCG	1.60	22	eP	11	46.92	-0.4
SLKM	1.68	68	eP	11	46.93	-1.3
SEW	1.98	83	eP	11	50.36	-1.3
SUA	2.02	39	eP	11	51.22	-1.0
SKT	2.25	23	eP	11	53.71	-1.2
PMS	2.30	53	eP	11	54.09	-1.5
PWA	2.44	43	eP	11	58.04	0.8
PLRM	2.67	49	eP	12	00.22	0.1
KNIM	2.86	79	eP	12	00.20	-2.3
GHO	2.86	48	eP	12	01.94	-0.8
MTU	2.88	86	eP	12	01.58	-1.3
CUT	2.91	30	eP	12	01.90	-1.3
SML	3.11	50	eP	12	03.32	-2.5
GLI	3.26	70	eP	12	05.01	-2.8
VZW	3.56	68	eP	12	10.15	-1.7
VLZ	3.69	68	eP	12	11.37	-2.0
KLU	3.99	64	eP	12	15.10	-2.4
BALM	5.57	74	eP	12	36.55	-2.1

36 obs. associated

OCT 10, 1990 07h 35m 40.35± 0.77s
19.213 N ± 5.5km 145.634 E ±10.0km
DEPTH = 140.7 ± 8.1 km
4.8mb (10 obs.)
MARIANA ISLANDS (216)

GUMO	5.64	188	eP	37	03.40	0.2
	0.7s	182.97nm			5.4mb	
PJG	5.64	188	eP	37	03.30	0.1
GUA	5.68	187	eP	37	03.50	-0.3
	0.5s	338.03nm			5.8mb X	
			eS	38	08.30	
MAT	18.46	341	eP	39	48.00	0.1
MTN	34.91	205	eP	42	20.10	-0.3
WBS	40.39	196	eP	43	06.00	-0.1
ASPA	44.13	196	eP	43	36.60	0.0
	0.5s	7.40nm			4.6mb	
INK	68.93	23	ePd	46	31.00	-0.6
MBC	72.67	14	eP	46	54.50	0.6
	0.5s	4.00nm			4.4mb	
BMW	77.09	45	P	47	19.80	0.1
GMW	77.12	44	P	47	20.10	0.3
YKA	77.57	28	eP	47	21.20	-0.7
	0.6s	8.60nm			4.7mb	
RMW	77.78	44	P	47	23.50	0.0
WDC	79.10	51	ePc	47	31.30	0.5
MIN	79.86	51	eP	47	34.70	-0.3
ORV	80.16	52	eP	47	35.80	-0.6
NEW	80.58	42	P	47	38.00	-0.5
	0.8s	15.63nm			4.8mb	
MHC	80.69	54	eP	47	39.70	0.3
ARN	80.77	54	P	47	39.90	0.2
PRS	81.20	55	eP	47	42.30	0.4
CMB	81.44	53	eP	47	43.50	0.3
PHAM	82.10	55	P	47	46.70	0.1
FRI	82.27	54	eP	47	47.70	0.2
BCH	82.54	55	P	47	48.80	-0.3
ABL	83.32	56	P	47	52.70	-0.5
TNP	83.79	52	P	47	54.90	-0.6
	0.7s	8.89nm			4.7mb	
LRM	84.41	43	eP	47	58.90	0.4
DUG	86.26	49	P	48	07.70	0.1
FFC	86.70	32	iPd	48	09.70	0.4
	0.9s	24.00nm			5.1mb	
DAU	87.27	48	P	48	12.80	0.0
RSSD	90.55	42	P	48	27.40	-0.6
GOL	91.67	47	P	48	33.20	-0.1
	0.8s	5.21nm			4.7mb	
ANMO	92.99	52	P	48	39.40	0.0
	1.0s	6.25nm			4.8mb	
ALQ	92.99	52	eP	48	39.70	0.3
	1.0s	6.00nm			4.8mb	
ZOBO	147.74	90	ePKP	55	09.00	0.6
LPB	147.81	91	ePKP	55	05.00	-3.3X
CNCB	147.97	91	PKP	55	09.00	0.3

S.D. = 0.4 on 36 of 37 obs.

OCT 10, 1990 07h 45m 07.95± 0.40s
1.602 S ± 5.7km 99.479 E ± 6.5km
DEPTH = 57.0km (4 depth phases)
5.2mb (17 obs.)
SOUTHERN SUMATERA (274)

PSI	4.30	353	ePc	46	11.70	-0.7
KLM	5.15	25	eP	46	24.50	0.1
TSI	5.15	350	ePc	47	04.00	39.6X
KGM	5.26	47	ePd	46	28.00	2.1
			e	48	22.50	
IPM	6.33	14	ePc	46	41.20	0.3
	0.9s	248.50nm			5.7mb	
			e	47	46.50	
BSI	8.20	329	eP	47	04.00	-2.8
			e(S)	48	35.50	
KKM	18.36	65	ePd	49	21.40	1.1
	0.9s	79.00nm			4.9mb	
CHTO	20.29	359	eP	49	41.20	-0.6
	0.6s	5.89nm			4.1mb X	
			pP	49	46.10	18kmX
			sP	49	56.20	
QIZ	22.89	26	eP	50	08.40	0.6
	0.8s	40.00nm			4.9mb	
	N	12s	1.30um			
KOD	24.87	299	eP	50	28.00	0.8
KMI	26.75	7	eP	50	45.00	0.5
SHL	27.99	345	iP	50	55.40	-0.3
			eS	56	06.00	
GYA	28.75	13	P	51	01.80	-0.6
LSA	32.13	346	eP	51	33.60	0.9
POO	32.19	310	iPc	51	32.30	-0.6
CD2	32.59	7	P	51	35.00	-1.2
	Z	18s	1.90um			4.8Msz
			eS	56	41.00	
WHN	34.97	23	Pd	51	57.00	0.3
XAN	36.55	13	iPc	52	09.60	-0.5
	1.0s	100.00nm			5.7mb	
	N	16s	1.90um			
	E	15s	1.20um			
			pP	52	28.00	75kmX
LZH	37.71	6	P	52	20.00	0.0
	2.5s	100.00nm			5.3mb	
	Z	11s	1.30um			5.0MszX
			pP	52	33.50	52km
			sP	52	44.50	
			S	58	10.00	
SSE	38.52	31	P	52	26.70	0.1
	0.8s	16.00nm			5.0mb	
	Z	20s	1.40um			4.8Msz
WBS	38.64	120	iPc	52	26.00	-1.9
ASPA	39.90	126	iPc	52	37.20	-1.1
	1.1s	28.20nm			5.0mb	
			eS	58	38.20	
GTA	40.81	0	iPc	52	46.50	0.9
	1.4s	100.00nm			5.4mb	
	Z	22s	1.00um			4.6Msz
	E	14s	0.50um			
			sP	53	07.20	
TIY	40.92	16	eP	52	45.50	-0.9
	Z	22s	1.00um			4.6Msz
	E	17s	0.90um			
			S	58	53.00	
BTO	43.09	12	eP	53	04.00	-0.2
	N	16s	1.40um			
	E	16s	0.70um			
HHC	43.66	13	P	53	09.70	0.8
BJI	44.17	18	eP	53	13.00	0.2
	1.0s	42.00nm			5.2mb	
	Z	20s	0.60um			4.5Msz
QUE	44.29	318	eP	53	14.20	0.0
KSH	46.20	335	eP	53	30.50	1.3
WMQ	46.44	348	iPc	53	32.50	1.6
	1.5s	100.00nm			5.5mb	
			eS	00	20.00	
SNY	48.43	24	Pd	53	45.80	-0.6
	Z	16s	1.50um			5.1MszX
CTA	49.24	115	iPc	53	51.50	-1.6
	1.0s	46.00nm			5.5mb	
STK	49.80	132	iPc	53	57.00	-0.2
	0.9s	18.00nm			5.1mb	
			i	54	05.50	28kmX
MAT	52.30	40	eP	54	14.00	-2.1
	1.0s	19.00nm			5.1mb	
BFO	53.13	137	eP	54	26.00	3.8X
			e	54	34.80	29kmX
MDJ	53.26	27	P	54	23.00	0.0
OFUJ	56.01	39	P	54	42.50	-0.7
BWA	56.05	131	eP	54	45.50	1.8
CAN	56.86	132	eP	54	49.60	0.2
BRS	57.05	122	iP	54	51.00	0.1
			i	55	06.00	56km
COO	57.32	126	ePd	54	53.00	0.3
CIR	68.82	248	iPc	56	17.80	8.9X
KRI	70.27	253	iPd	56	28.70	10.7X
BUL	71.50	249	iPc	56	33.90	8.6X
VRI	79.21	317	ePc	57	09.00	0.4
MLR	79.66	317	ePc	57	11.50	0.4
BCAO	81.10	275	iPd	57	20.50	1.2
	0.7s	5.00nm			4.6mb	
OHR	82.53	312	eP	57	25.00	-1.2
SPC	84.17	320	eP	57	22.70	-11.9X
SRO	85.24	318	eP	57	48.80	9.1X
ZST	86.10	318	eP	57	44.60	0.7
BRG	88.40	321	eP	57	56.00	1.0
	1.2s	22.00nm			5.3mb	
			i	58	13.00	60km
SPA	88.41	180	eP	58	03.20	8.2X
	1.1s	18.45nm			5.2mb	
CLL	89.03	321	iP	57	58.60	0.6
	1.1s	10.00nm			5.0mb	

```
                 e       58 16.00   61km
MOX    89.87 320 e(P)    58 15.00   13.0X
ALQ   138.97  33 ePKP    04 24.00   -6.7X
       0.9s      3.36nm
TUL   143.04  21 ePKP    04 35.50   -2.1X
       1.0s      6.00nm
    Z  21s       0.29um             5.0Msz
                 LR      02 00.00
    S.D. = 1.0  on  46 of  57 obs.
----------------------------------------
• OCT  10, 1990  07h 58m 07.90± 1.11s
   3.994 S ± 7.6km    80.572 W ±15.3km
   DEPTH = 10.0km  (geophysicist)
 PERU-ECUADOR BORDER REGION        (110)

TUNG    3.32  40 P       59 02.00    0.6
VC1     3.98  33 P       59 11.10    0.4
OTO     4.28  28 eP      59 15.10    0.1
                 S       00 03.00
OUR     4.31  28 eP      59 15.30   -0.1
                 eS      00 04.20
ANGL    4.68  40 eP      59 29.80    9.0X
CAYA    4.80  33 P       59 22.00   -0.5
COTA    4.84  27 P       59 22.80   -0.3
ZOBO   17.27 136 eP      02 11.00   -0.5
                 e       05 11.00
LPB    17.47 136 eP      02 12.00   -1.8
                 e       05 18.00
CNCB   17.75 137 P       02 19.80    2.4
                 S       05 15.00
SIV    22.57 123 P       03 09.60   -0.3
ALQ    45.74 330 eP      06 29.70   -1.8
TNP    53.90 324 e(P)    07 35.90    1.9
    S.D. = 1.4  on  12 of  13 obs.
----------------------------------------
   OCT  10, 1990  08h 22m 53.66± 0.10s
   27.195 N ± 2.4km  140.119 E ± 2.7km
   DEPTH = 384.0km  (  6 depth phases)
   5.2mb ( 58 obs.)
 BONIN ISLANDS REGION              (212)

WKYJ    8.01 332 iP+     24 52.40    3.1X
IIDJ    8.47 348 iP+     24 55.10    0.5
MAT     9.46 351 iPc     25 04.90   -1.3
       0.7s    397.26nm             5.9mb
                 eS      26 50.00
SHK     9.71 321 iPc     25 12.40    3.3X
       1.0s   1552.00nm           6.3mb X
GUMO   14.25 161 eP      26 02.20    1.2
       0.7s    228.72nm             5.7mb
PJG    14.25 161 eP      26 01.80    0.8
GUA    14.31 161 eP      26 02.60    0.9
       0.8s    483.58nm             6.0mb
                 eS      28 35.50
SAP    15.86   3 eP      26 18.00    0.1
SSE    16.99 288 eP      26 26.30   -3.3X
NJ2    19.10 290 Pd      26 50.60   -0.1
MDJ    19.33 337 eP      26 53.50    0.7
       0.8s    100.00nm             5.3mb
DL2    19.37 312 eP      26 53.00   -0.2
       0.8s     50.00nm             5.0mb
SNY    19.92 321 iPc     26 59.50    1.0
       0.8s    200.00nm             5.6mb
                 sP      28 40.00
                 S       30 17.00
CN2    20.37 328 iPc     27 04.00    1.1
       1.0s    200.00nm             5.5mb
                 sP      28 48.00
                 S       30 28.00
                 PcP     30 58.50
                 ScP     33 57.00
                 ScS     37 39.00
TIA    21.49 300 Pd      27 14.60    0.8
       0.9s    300.00nm             5.7mb
WHN    22.80 285 Pc      27 27.50    1.5
BJI    23.62 309 eP      27 32.50   -0.9
       1.0s    400.00nm             5.8mb
TIY    25.52 301 eP      27 51.50    0.7
                 S       31 50.00
HHC    27.17 307 eP      28 05.40   -0.2
XAN    27.63 292 iPd     28 10.00    0.4
       1.0s    100.00nm             5.1mb
BTO    28.18 306 eP      28 14.00   -0.5
GYA    29.82 276 iPd     28 29.00    0.1
                 pP      29 41.00 391km
                 PcP     31 21.80
                 S       32 56.40

CD2    31.91 285 iPc     28 47.20    0.2
       0.6s    200.00nm             5.6mb
LZH    31.98 295 iPd     28 48.50    0.9
       1.0s    168.00nm             5.3mb
                 pP      29 05.00  69kmX
                 PP      29 44.00
                 eS      33 29.00
                 sS      33 42.00
LZH    31.98 295 iPd     28 38.50   -9.1X
       1.0s    170.00nm             5.3mb
                 eS      33 29.00
GTA    35.54 300 iPd     29 17.80    0.2
       0.8s    400.00nm             5.8mb
                 PcP     31 37.20
                 S       34 22.50
                 ScP     34 45.20
                 ScS     38 48.40
PMG    37.02 168 eP      29 29.00   -0.9
CHTO   38.67 266 iPd     29 44.70    1.2
       1.0s     30.75nm             4.6mb
                 pP      30 58.00 377km
                 PcP     31 47.70
MTN    40.75 194 eP      30 01.00    0.6
LSA    42.88 285 eP      30 19.40    1.3
SHL    43.03 279 iP      30 19.50    0.5
                 iS      36 14.00
IPM    43.52 246 ePd     30 25.00    2.3
       0.8s     35.40nm             4.7mb
KNA    44.09 196 eP      30 07.50  -19.5X
WMQ    45.02 306 iPd     30 35.00    0.6
       1.5s    100.00nm             4.9mb
                 PcP     32 08.00
                 ScP     35 22.50
                 S       36 42.30
                 ScS     39 47.50
PSI    46.31 245 ePd     30 45.60    1.0
WB5    47.13 187 iPd     30 51.00    0.3
                 ePP     32 14.10
                 eS      36 56.20
                 iScP    37 11.00
CTA    47.38 172 iPd     30 52.80    0.2
       1.0s     68.00nm             4.9mb
OIS    47.47 181 iPd     30 53.20   -0.1
SDN    50.78  39 e(P)    31 16.40   -1.6
ASPA   50.92 187 iPd     31 18.90   -0.5
       0.4s    107.80nm             5.5mb
                 iS      38 02.40
MBL    51.93 204 iPd     31 27.00    0.3
       0.4s     35.00nm             5.0mb
OLP    53.61 175 iP      31 38.20   -0.7
KSH    53.95 300 P       31 43.00    1.5
RMQ    54.02 170 iPc     31 40.20   -1.7
                 e       32 40.00 274kmX
SVW    54.18  33 eP      31 43.20    0.4
WARB   54.63 195 iPd     31 46.70    0.4
       0.6s     52.00nm             5.1mb
NANU   54.88 208 iPd     31 48.60    0.5
       0.4s     14.00nm             4.7mb
NDI    55.00 287 iPd     31 49.00    0.0
       0.8s     97.01nm             5.2mb
DZM    55.20 150 iPd     31 50.90    0.4
KDC    55.44  37 e(P)    31 50.40   -1.2
       0.5s     16.53nm             4.7mb
BRS    55.62 166 iPc     31 52.60   -0.6
IMA    55.83  27 ePd     31 54.40   -0.1
       0.9s      7.60nm           4.1mb X
HYB    57.31 274 ePd     32 05.00   -0.3
PMR    57.34  32 eP      32 03.40   -1.4
       0.9s     40.80nm             4.9mb
MEKA   57.39 203 eP      32 05.00   -0.6
FBA    58.13  29 eP      32 09.30   -1.0
       0.8s     18.97nm             4.6mb
COO    58.54 168 eP      32 13.00   -0.4
TOA    58.76  32 eP      32 14.60    0.0
STK    58.76 179 iPd     32 14.50   -0.3
       0.8s     15.00nm             4.5mb
FORR   58.85 192 iPd     32 14.00   -1.4
       0.4s    108.00nm             5.6mb
GBA    59.76 270 P       32 21.90   -0.1
COOL   60.53 199 eP      32 26.40   -0.4
MRWA   60.67 204 iPd     32 27.50   -0.2
POO    61.07 277 iPd     32 30.20   -0.5
       0.8s     56.72nm             5.2mb
KOD    61.12 267 iPd     32 31.80    0.4
       0.8s     63.43nm             5.2mb
BWA    61.79 172 iPd     32 36.40    1.4
KLB    62.23 202 iPd     32 37.50   -0.5

CAN    62.74 172 iPd     32 42.30    1.0
MUN    63.10 203 eP      32 43.10   -0.5
QUE    63.21 292 iPd     32 45.00    0.3
                 (S)     40 45.00
NWAO   63.63 201 iPd     32 47.00    0.0
       0.7s     46.00nm             5.2mb
INK    63.70  24 ePd     32 46.30   -0.8
                 pP      33 19.00 135kmX
BFD    64.07 178 iPc     32 52.90    3.2X
RKG    64.75 201 eP      32 57.50    3.4X
MBC    66.27  15 ePd     33 03.00   -0.3
       0.5s     26.00nm             5.2mb
MAIO   67.35 300 iPd     33 11.40    0.7
KEV    72.28 340 iP      33 39.80    0.4
       0.6s     26.10nm             5.1mb
WLZ    72.74 151 P       33 43.20    0.7
YKA    72.92  28 eP      33 42.50   -0.8
       0.6s     36.50nm             5.2mb
SOD    73.63 338 iP      33 47.00   -0.3
HBZ    73.74 149 P       33 47.30   -0.9
PGC    74.09  43 eP      33 50.00   -0.2
PUZ    74.11 150 P       33 49.30   -1.1
NOZ    74.46 150 eP      33 51.30   -1.0
GMW    74.94  44 P       33 55.80    0.7
THZ    75.01 155 P       33 54.30   -1.2
MNG    75.04 153 P       33 54.30   -1.3
BMW    75.09  45 P       33 56.00    0.0
PGZ    75.36 152 P       33 56.40   -0.9
DAG    75.47 355 iPd     33 56.80   -0.6
       0.8s     18.66nm             4.9mb
RMW    75.58  44 P       33 59.00    0.3
LTZ    75.67 156 P       33 59.20    0.2
KHZ    75.82 155 P       33 57.90   -1.9
PNT    76.12  42 eP      34 02.00    0.4
SUF    76.31 334 iP      34 01.70   -0.6
       0.7s     46.60nm             5.3mb
FHC    76.91  51 ePd     34 07.70    1.6
DPW    77.60  42 P       34 10.00    0.2
EDM    77.83  36 iPd     34 11.00    0.1
WDC    78.00  51 iPd     34 12.70    0.7
NEW    78.07  42 P       34 11.80   -0.5
       1.0s     72.50nm             5.4mb
                 pP      35 40.00 390km
L8FM   78.12  50 P       34 12.50   -0.4
NUR    78.14 333 iP      34 12.20   -0.1
       1.0s     64.00nm             5.3mb
LTCM   78.45  51 P       34 13.90   -0.5
MIN    78.75  50 ePd     34 16.30    0.1
ORV    79.17  51 ePd     34 18.40    0.1
BRK    79.37  53 eP      34 20.10    0.8
BKS    79.39  53 ePd     34 20.10    0.6
       0.8s    103.00nm             5.6mb
PCC    79.45  53 eP      34 20.00    0.3
GCC    79.93  54 eP      34 22.80    0.5
MHC    80.05  53 eP      34 23.70    0.6
ARN    80.12  53 P       34 23.60    0.3
SAO    80.45  54 eP      34 25.40    0.4
SES    80.49  38 ePd     34 25.50    0.5
       1.2s    175.00nm             5.7mb
CMB    80.63  52 ePd     34 26.70    0.7
PRS    80.70  54 ePd     34 27.10    0.0
LLA    80.87  54 eP      34 28.00    0.8
PRI    81.29  54 eP      34 30.60    1.1
FRI    81.58  53 ePd     34 31.70    0.8
PHAM   81.62  54 P       34 31.60    0.5
KVN    81.74  50 P       34 32.30    0.4
LRM    82.05  42 iPd     34 34.10    0.7
BCH    82.15  55 P       34 34.20    0.2
SYP    82.53  55 eP      34 37.00    1.1
HFS    82.60 336 eP      34 34.20   -1.4
       0.8s     47.80nm             5.3mb
FFC    82.62  31 iPd     34 36.00    0.2
       0.9s     62.00nm             5.4mb
TNP    82.81  51 P       34 37.10   -0.3
NB2    82.83 338 P       34 35.90   -0.9
       0.7s     34.50nm             5.2mb
ABL    82.93  55 P       34 38.00   -0.1
ISA    83.09  54 eP      34 39.00    0.4
PTI    83.62  45 P       34 42.20    0.9
CLC    83.64  53 ePd     34 42.00    0.6
SBB    84.02  54 ePd     34 44.00    0.7
PAS    84.03  55 eP      34 44.00    0.7
MWC    84.07  55 ePd     34 44.00    0.3
GSC    84.45  53 ePd     34 46.00    0.5
RVR    84.68  55 ePd     34 47.00    0.5
DUG    84.72  47 P       34 47.00    0.2
PEC    84.88  55 P       34 47.20   -0.4
```

10d 08h

	0.8s	42.21nm			5.3mb	
PLM	85.37	55	ePd	34	50.00	-0.2
TPC	85.58	54	ePd	34	51.00	0.0
DAU	85.62	47	P	34	51.60	0.2
BAR	85.84	55	ePd	34	53.00	0.8
HRI	86.39	306	eP	34	54.00	-1.0
DSI	87.51	304	eP	34	59.00	-1.2
KSP	87.87	328	iPd	35	01.20	-0.4
			e	36	30.00	382km
RSSD	87.95	40	P	35	01.90	-0.5
			pP	37	43.70	
PV09	88.04	47	P	35	03.00	0.0
MBH	88.80	303	eP	35	04.50	-1.8
BRG	88.93	329	iP	35	05.60	-0.9
	1.0s	20.00nm			4.9mb	
CLL	89.05	330	iPd	35	06.30	-0.8
	1.3s	19.00nm			4.8mb	
			e	36	35.00	381km
ZST	89.25	326	eP	35	07.50	-0.5
PRU	89.27	328	ePd	35	07.50	-0.6
GOL	89.76	45	P	35	11.00	0.0
	0.9s	9.47nm			4.7mb	
GLD	89.83	44	P	35	11.80	0.7
	1.2s	50.51nm			5.3mb	
KHC	90.32	328	eP	35	12.60	-0.4
ANMO	91.82	49	P	35	20.50	0.1
	1.0s	37.50nm			5.3mb	
ALQ	91.82	49	eP	35	20.60	0.2
	0.9s	34.66nm			5.3mb	
			e	36	50.00	383km
OHR	91.82	319	eP	35	19.00	-1.1
EKA	92.00	340	P	35	20.00	-0.6
	2.6s	231.40nm			5.7mb	
OGA	93.14	328	iPc	35	25.80	-0.5
CDF	93.70	331	eP	35	27.90	-0.8
	0.6s	6.30nm			4.9mb	
LOR	96.05	332	eP	35	38.30	-1.0
	0.8s	6.70nm			4.9mb	
LPG	96.14	329	eP	35	39.30	-0.8
	0.8s	9.40nm			5.0mb	
LBF	96.22	331	eP	35	38.80	-1.3
	1.0s	6.00nm			4.7mb	
SSF	96.36	332	eP	35	39.00	-1.7
	1.0s	6.00nm			4.7mb	
AVF	96.64	332	eP	35	40.10	-1.8
	0.8s	9.40nm			5.0mb	
LPF	97.39	335	eP	35	44.50	-0.8
	0.6s	7.20nm			5.1mb	
CIR	115.25	258	iPKPc	40	53.00	0.9
KRI	115.44	263	iPKPc	40	55.60	2.9X
BCAO	115.48	290	iPKPc	40	57.50	4.7X
	0.6s	8.00nm				
SPA	117.04	180	iPKPd	40	53.00	-1.3
	0.8s	16.25nm				
BUL	117.54	260	iPKPc	40	56.30	-0.3
LKO	130.61	313	PKP	41	21.28	-0.4
	0.7s	12.00nm				
TIC	132.36	310	PKP	41	24.92	-0.1
	0.8s	9.50nm				
KIC	132.37	309	PKP	41	25.02	0.0
	0.8s	16.50nm				
LIC	132.67	309	PKP	41	25.58	0.0
	0.8s	14.00nm				
ARE	148.86	77	ePKP	41	55.00	0.6
LPB	151.81	74	PKP	42	00.00	1.1
			i	42	11.80	
LNV	152.10	112	ePKP	41	57.50	-0.8
			i	42	05.10	
PEL	152.78	110	ePKPd	42	00.10	0.7
			i	42	07.50	
SIV	157.40	65	PKP	42	06.20	0.3
			i	42	39.00	
SOB1	162.08	3	ePKPd	42	12.00	1.1
BAO	166.25	35	ePKP	42	15.50	0.7
			e	43	19.00	
VAO	172.34	59	ePKP	42	18.50	0.5
JFO	173.72	31	ePKP	42	20.10	1.5

S.D. = 0.8 on 176 of 185 obs.

% OCT 10, 1990 10h 19m 35.99± 0.58s
43.099 N ± 7.0km 0.606 W ± 4.0km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.9 (STR).

ESCF	0.03	132	Pg	19	37.66	-0.4
ATE	0.07	260	Pg	19	38.00	-0.4
			Sg	19	40.24	
OGE	0.12	54	Pg	19	39.28	0.3
ISSF	0.16	243	Pg	19	39.85	0.2
			Sg	19	43.36	
MADF	0.16	287	Pg	19	39.74	0.0
			Sg	19	43.08	
JAU	0.18	109	Pg	19	40.17	0.0
LHE	0.19	184	Pg	19	40.50	0.3
BOH	0.30	271	Pg	19	42.36	0.1
			Sg	19	47.11	

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

& OCT 10, 1990 11h 14m 03.80s
61.618 N 149.935 W
DEPTH = 36.8km
SOUTHERN ALASKA (2)
<AGS-P>.

PWA	0.04	39	iP	14	10.12	0.3
			eS	14	16.02	
PLRM	0.39	94	iP	14	12.18	-0.7
			eS	14	19.76	
PMS	0.42	154	iP	14	12.86	-0.5
			eS	14	20.57	
SUA	0.42	249	iP	14	13.05	-0.4
			eS	14	20.98	
GHO	0.51	72	iP	14	13.85	-0.8
			eS	14	22.77	
SML	0.79	75	iP	14	17.41	-1.1
CUT	0.81	349	eP	14	17.98	-0.7
			eS	14	29.14	
SKT	0.84	296	iP	14	18.24	-1.0
			eS	14	30.01	
CGLM	1.04	254	iP	14	21.53	-0.7
NKA	1.08	216	eP	14	23.58	0.9
NCG	1.09	260	iP	14	22.22	-0.6
SPU	1.11	248	P	14	22.38	-0.7
			iS	14	37.15	
SLKM	1.12	187	eP	14	21.93	-1.4
CRP	1.12	253	eP	14	23.08	-0.3
CKL	1.23	251	iP	14	24.31	-0.6
			eS	14	39.80	
BGL	1.23	254	eP	14	24.42	-0.5
SCM	1.26	79	eP	14	24.57	-0.7
HUR	1.37	6	eP	14	26.61	-0.2
SEW	1.54	171	eP	14	28.85	-0.3
GLI	1.56	117	iP	14	28.16	-1.4
			eS	14	48.09	
RDT	1.59	230	eP	14	29.24	-0.9
KNIM	1.66	139	eP	14	28.68	-2.4
NNL	1.72	203	eP	14	33.68	1.9
VZW	1.72	108	eP	14	30.73	-1.3
RSO	1.80	231	iP	14	32.69	-0.5
VLZ	1.80	104	eP	14	31.46	-1.5
RED	1.83	230	eP	14	32.94	-0.6
TOA	1.85	73	eP	14	33.72	0.0
RND	1.86	15	eP	14	33.62	-0.4
KLU	1.93	92	eP	14	33.44	-1.4
MTU	1.98	145	eP	14	35.78	0.2
CNPM	2.20	198	eP	14	39.19	0.6
SDG	2.26	64	eP	14	39.69	0.1
GLB	2.94	91	eP	14	49.45	0.2
TGL	3.55	101	eP	14	58.14	0.2
BALM	3.70	96	eP	14	58.93	-1.3

36 obs. associated

? OCT 10, 1990 11h 32m 48.72± 9.17s
30.952 S ±56.1km 71.852 W ±58.9km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

JACH	2.03	148	iPd	33	20.10	-1.3
			iS	33	45.00	
RTBS	2.17	110	eP	33	23.60	0.4
FCH	2.71	151	eP	33	32.00	0.8
			iS	34	05.70	
ZON	2.78	103	eP	33	33.00	1.1
TACH	2.80	164	eP	33	31.20	-1.0
PCH	2.89	157	eP	33	34.00	0.4
			iS	34	11.60	
RTLL	2.92	98	ePd	33	32.50	-1.5
			eS	34	10.10	
RTCV	2.98	109	e(P)	33	35.20	0.5
LNV	3.02	173	eP	33	36.00	0.7
			iS	34	15.00	

S.D. = 1.1 on 9 of 9 obs.

& OCT 10, 1990 12h 20m 18.28s
59.798 N 152.674 W
DEPTH = 87.6km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.32	243	iP	20	31.17	-0.6
			eS	20	40.59	
HOM	0.54	105	eP	20	33.10	-0.2
			eS	20	44.63	
AUE	0.57	219	eP	20	32.85	-0.7
AUH	0.59	222	eP	20	33.06	-0.8
XLV	0.59	125	eP	20	33.36	-0.4
AUI	0.60	220	eP	20	33.11	-0.8
RED	0.62	356	iP	20	33.46	-0.7
RSO	0.67	357	eP	20	34.06	-0.7
NNL	0.74	70	eP	20	35.54	0.4
PD8	0.77	270	iP	20	34.58	-0.9
CNPM	0.78	110	eP	20	34.97	-0.7
			eS	20	48.07	
RDT	0.79	10	iP	20	34.96	-0.9
CDD	1.00	210	eP	20	36.93	-1.2
MCNL	1.05	235	iP	20	37.39	-1.3
NKA	1.19	36	iP	20	41.69	1.4
CKL	1.41	7	iP	20	42.78	-0.5
			iS	21	02.18	
SLKM	1.42	59	eP	20	42.84	-0.5
SPU	1.42	12	iP	20	42.83	-0.5
BGL	1.48	5	eP	20	43.68	-0.5
CRP	1.50	10	eP	20	43.90	-0.5
CGLM	1.55	12	iP	20	44.62	-0.5
NCG	1.63	9	iP	20	45.72	-0.4
SEW	1.65	78	eP	20	45.29	-1.0
SUA	1.92	29	eP	20	50.01	0.0
			eS	21	14.36	
PMS	2.12	45	eP	20	51.93	-0.6
			eS	21	16.81	
SKT	2.26	14	iP	20	53.67	-0.8
PWA	2.31	35	eP	20	54.66	-0.5
PLRM	2.51	43	eP	20	56.07	-1.7
KNIM	2.54	75	iP	20	55.92	-2.3
			eS	21	24.61	
GHO	2.70	41	eP	20	59.29	-1.3
CUT	2.86	23	eP	21	00.93	-1.8
SML	2.93	45	eP	21	01.89	-1.8
GLI	2.98	66	eP	21	01.26	-3.1
VZW	3.29	65	eP	21	06.08	-2.5
VLZ	3.41	64	eP	21	06.27	-4.0
KLU	3.73	60	iP	21	12.46	-2.4
TOA	3.92	51	eP	21	15.96	-1.5
GLB	4.67	66	eP	21	24.67	-3.1
TGL	4.99	75	eP	21	29.81	-2.5
BALM	5.27	72	eP	21	34.08	-2.1
YAH	5.50	79	eP	21	37.56	-2.0

41 obs. associated

• OCT 10, 1990 12h 48m 08.90± 2.37s
32.480 S ±15.3km 70.255 W ±18.3km
DEPTH = 118.9 ± 27.1 km
CHILE-ARGENTINA BORDER REGION (127)

JACH	0.35	235	iPc	48	26.00	-0.3
			iS	48	38.00	
ROCH	0.80	232	iP	48	29.50	-0.1
			iS	48	44.10	
FCH	0.85	182	iP	48	30.00	0.0
			iS	48	45.00	
RTBS	1.06	40	ePd	48	32.30	0.6
MDZ	1.25	109	eP	48	49.60	15.7X
			iS	48	52.50	
TACH	1.30	206	iP	48	34.50	0.1
			iS	48	53.20	
CHCH	1.49	193	iPd	48	36.80	0.3
			iS	48	57.40	
RTCV	1.58	67	eP	48	37.50	-0.2
			S	48	57.50	
LNV	1.76	213	iPc	48	39.60	-0.1
			iS	49	05.00	
RTLL	1.90	53	iPc	48	41.30	-0.3
			eS	49	05.00	

S.D. = 0.4 on 9 of 10 obs.

OCT 10, 1990 13h 22m 58.80± 1.25s
23.602 S ± 9.1km 179.024 E ± 7.2km
DEPTH = 584.3 ± 15.8 km
5.2mb (10 obs.)
SOUTH OF FIJI ISLANDS (171)

```
DZM    11.70 275 iPc    25 35.40   0.7
HBZ    13.97 182 P      25 56.80  -0.1
       0.5s     43.00nm          5.1mb
PUZ    14.44 182 P      26 00.90  -0.7
                eS      28 28.90
NOZ    14.99 183 P      26 07.10   0.2
CNZ    15.83 190 P      26 17.10   2.0
PGZ    17.12 187 eP     26 27.30  -0.2
MNG    17.23 189 eP     26 27.70  -0.8
       0.8s     13.00nm          4.5mb
                eS      29 19.40
KIW    17.56 190 eP     26 31.10  -0.6
WDW    17.94 190 eP     26 34.60  -0.6
MRW    17.95 191 eP     26 35.60   0.3
BLW    17.96 189 eP     26 36.40   0.9
TCW    18.01 192 P      26 35.90   0.0
THZ    18.82 194 eP     26 44.60   1.0
                eS      29 46.50
KHZ    19.31 192 P      26 47.40  -0.6
       0.2s     17.00nm          5.3mb
LTZ    19.93 195 P      26 53.00  -0.8
                eS      30 05.20
MQZ    20.73 193 eP     27 00.80  -0.2
MMCZ   22.82 198 P      27 19.40  -0.7
MHZ    22.83 198 P      27 19.50  -0.7
TLC    23.01 198 P      27 21.50  -0.4
BRS    23.97 255 iPc    27 31.30   0.8
COO    25.10 248 iPd    27 41.70   1.3
CNB    28.23 239 iPd    28 09.80   2.0
       0.2s     26.00nm          5.5mb
CAN    28.52 239 eP     28 11.90   1.7
BWA    28.75 241 eP     28 12.00  -0.2
CMS    30.38 248 iP     28 26.50   0.4
CTA    30.58 270 iPc    28 27.80  -0.1
       0.6s     80.00nm          5.5mb
PMG    33.55 290 eP     28 52.00  -0.9
STK    34.01 248 iPd    28 58.30   1.7
       0.7s     24.00nm          4.9mb
ASPA   41.20 261 iPc    29 54.90  -0.3
       0.3s     38.60nm          5.4mb
                iScP    34 40.70
                eS      35 24.60
WB5    41.52 266 iPc    29 56.80  -1.0
                e       34 42.60
MTN    46.54 275 eP     30 35.00  -1.7
       0.4s     53.00nm          5.4mb
WARB   47.32 255 iPd    30 42.00  -0.6
       0.3s      9.00nm          4.8mb
COOL   51.49 249 eP     31 12.00  -1.3
KLB    54.27 247 eP     31 33.00  -0.1
MBL    54.45 260 eP     31 32.00  -2.4
MUN    55.53 246 eP     31 41.00  -0.8
MRWA   56.15 250 eP     31 45.20  -0.9
SPA    66.54 180 eP     32 53.20   0.0
       1.0s     15.50nm          4.5mb
PLM    83.26  49 eP     34 26.00  -0.1
RVR    83.26  49 eP     34 25.00  -0.8
SBB    83.35  48 eP     34 26.00  -0.3
ISA    83.46  47 eP     34 27.00   0.1
CLC    84.14  47 eP     34 30.00  -0.2
TPC    84.24  49 eP     34 31.00   0.3
GSC    84.38  48 eP     34 32.00   0.6
CHTO   88.73 291 eP     34 53.90   1.7
       1.0s      1.75nm          3.9mb X
SOB1  129.15 125 ePKP   41 02.10  -1.3
                e       43 31.90
NUR   139.04 341 ePKP   41 37.00  16.5X
NB2   141.65 350 PKP    41 19.30  -6.0X
       0.7s      3.70nm
HFS   142.08 348 ePKP   41 19.90  -6.0X
       0.3s      3.40nm
EKA   148.27   2 PKP    41 40.00   3.7X
       1.0s     17.90nm
KRA   148.95 334 iPKPc  41 42.30   4.8X
KSP   149.68 338 iPKP    41 43.90   5.3X
       0.7s     29.00nm
CLL   150.30 342 iPKPc  41 45.90   6.4X
       0.9s     42.00nm
BRG   150.42 341 iPKP    41 45.50   5.8X
       0.8s     30.00nm
PRU   151.00 339 PKPc    41 47.30   6.7X
MOX   151.28 343 ePKP    41 48.00   7.0X
KHC   152.06 339 ePKP    41 48.50   6.3X
BCAO  153.21 228 iPKPc   41 46.00   1.2
       0.5s      4.00nm
                id      44 07.80
LIC   162.29 167 PKP     41 56.30   0.9
KIC   162.48 167 PKP     41 56.50   0.9
TIC   162.70 166 PKP     41 56.80   1.0
      S.D. = 1.0  on  51 of  62 obs.
-------------------------------------
*  OCT  10, 1990  14h 34m 06.17± 1.74s
   15.436 N ± 6.8km  147.080 E ±11.3km
   DEPTH =  36.5 ± 14.7 km
   4.9mb (  5 obs.) 4.2Msz (  1 obs.)
 MARIANA ISLANDS REGION            (215)

GUA     2.82 228 eP     34 49.70  -0.2
                eS      35 25.90
GUMO    2.82 230 eP     34 50.20   0.3
CHJJ   21.76 342 P      38 54.90  -1.7
MAT    22.46 341 eP     39 02.00  -1.5
NIIJ   22.87 343 P      39 07.30  -0.2
YAMJ   23.49 346 eP     39 14.40   0.9
OFUJ   24.03 350 eP     39 19.50   0.8
PMG    24.68 180 eP     39 25.00  -0.3
WB5    37.25 200 eP     41 16.10  -0.3
                e       41 26.00
TIY    37.78 313 eP     41 21.40   0.6
       Z  20s     0.40um          4.2Msz
XAN    39.01 305 P      41 31.20   0.1
GYA    39.16 293 P      41 34.00   1.5
BTO    40.76 315 eP     41 46.00   0.4
CD2    42.42 299 eP     41 59.00  -0.3
LZH    43.60 306 P      42 09.50   0.6
       1.4s     52.00nm          5.1mb
       Z  16s     0.20um          4.1MszX
CHTO   46.02 281 eP     42 28.60   0.3
       1.0s      4.75nm          4.4mb
GTA    47.60 310 eP     42 40.70   0.0
       1.4s     20.00nm          4.9mb
       Z  16s     0.30um          4.4MszX
       E  10s     0.20um
SHL    52.36 291 eP     43 17.00  -0.4
LSA    53.10 296 eP     43 23.80   0.6
WMQ    57.45 312 P      43 53.50  -0.5
       1.5s     30.00nm          5.1mb
                S       51 52.00
INK    71.85  23 eP     45 27.50   0.6
MBC    75.97  14 eP     45 50.50  -0.2
       1.5s     16.00nm          4.8mb
SES    85.63  39 eP     46 43.00   0.6
KIC   144.67 306 PKP    53 40.08  -1.6
TIC   144.71 306 PKP    53 40.10  -1.7
LIC   144.98 306 PKP    53 41.26  -0.9
ZOBO  146.15  96 PKP    53 45.00   0.2
LPB   146.19  97 ePKP   53 55.00  10.3X
CNCB  146.32  97 PKP    53 47.00   1.9
SIV   152.90  95 ePKP   53 55.00   0.6
      S.D. = 0.9  on  29 of  30 obs.
-------------------------------------
?  OCT  10, 1990  14h 37m 28.26± 5.18s
   32.337 S ±36.8km   71.659 W ±24.6km
   DEPTH =  23.3 ±  8.7 km
 NEAR COAST OF CENTRAL CHILE       (135)

ROCH    0.84 139 ePd    37 43.50  -0.7
                iS      37 53.40
JACH    0.96 111 iPd    37 46.00  -0.3
                iS      37 57.90
LCCH    1.14 176 iPd    37 48.50  -0.3
                iS      38 01.80
TACH    1.45 155 eP     37 52.70  -0.4
                iS      38 10.50
FCH     1.52 131 iPd    37 53.80  -0.7
                iS      38 13.00
PCH     1.60 143 iPd    37 55.50   0.0
                iS      38 16.00
LNV     1.63 173 iP     37 55.00  -0.7
                iS      38 14.00
CHCH    1.80 152 iP     37 58.60   0.2
                iS      38 21.50
      S.D. = 0.5  on   8 of   8 obs.
-------------------------------------
?  OCT  10, 1990  15h 02m 55.38± 4.23s
   26.775 S ±12.6km   72.805 W ±88.9km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF NORTHERN CHILE       (121)

ANT     3.75  36 iPc    03 54.50   0.0
                iS      04 40.50
ZON     5.97 144 e(P)   04 41.00  15.1X
PEL     6.61 164 eP     04 35.00   0.0
                iS      06 05.70
MDZ     6.99 152 eP     04 57.20  16.8X
                e       06 19.50
CNC8   10.88  25 eP     05 35.00   0.2
LPB    11.09  24 eP     05 36.00  -1.5
ZOBO   11.32  24 P      05 42.00   1.2
SIV    15.30  48 P      06 25.00  -8.2X
PPD    20.13  81 eP     07 30.40  -2.0X
VAO    23.72  87 eP     08 04.30  -4.2X
      S.D. = 1.4  on   5 of  10 obs.
-------------------------------------
   OCT  10, 1990  15h 03m 23.55± 0.76s
   38.324 N ± 7.0km   22.217 E ± 8.3km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)
      ML 3.0 (ATH).

EVR     0.67 332 ePn    03 35.70  -1.3
ITM     1.16 191 ePn    03 45.20  -0.1
ATH     1.23 106 ePb    03 46.60   0.1
VLS     1.29 264 ePb    03 48.00   0.5
VLI     1.70 160 ePn    03 53.10  -0.3
KZN     2.01 350 ePb    03 59.00   1.0
      S.D. = 1.0  on   6 of   6 obs.
-------------------------------------
   OCT  10, 1990  15h 32m 16.27± 0.20s
   29.162 N ± 4.7km  132.000 E ± 3.2km
   DEPTH =  33.0km  (normal)
   5.1mb ( 42 obs.) 4.4Msz (  4 obs.)
 SOUTHEAST OF SHIKOKU, JAPAN       (237)
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.: 10S, 17C
      Centroid Locotion:
      Origin Time        15:32:19.8 1.8
      Lat 29.19N 0.15 Lon 131.66E 0.15
      Dep  15.0 FIX Half-durotion  1.5
      Moment Tensor;   Scale 10**16 Nm
        Mrr=-3.49 0.39  Mtt= 0.84 0.46
        Mff= 2.65 0.48  Mrt= 0.59 1.19
        Mrf= 3.70 1.32  Mtf= 2.68 0.40
       Principal Axes:
        T  Val=  5.83  Plg=21  Azm=300
        N       -0.54      18      203
        P       -5.30      62       76
      Best Double Couple:Mo=5.6*10**16
       NP1:Strike= 58 Dip=29 Slip= -51
       NP2:       196     68     -109

SHK     5.38   6 iPd    33 36.00  -0.4
       0.8s   462.69nm          6.0mb
                S       34 35.60
MAT     9.02  34 iPd    34 25.80  -1.4
       0.6s    41.33nm          5.8mb
                (S)     36 03.00
SSE     9.56 284 Pc     34 33.80  -0.8
       1.0s   680.00nm          6.8mb X
       Z  20s     1.00um
       E  11s     2.80um
                pP      34 40.50
NJ2    11.69 288 Pc     35 02.50  -1.2
       1.2s   100.00nm          5.9mb
       Z  12s     0.90um          4.5Msz
DL2    12.97 321 eP     35 20.60  -0.2
TIA    14.35 303 eP     35 39.00  -0.1
WHN    15.38 279 Pc     35 56.50   4.1X
       1.0s    50.00nm          4.7mb
       Z  12s     1.20um          5.4Msz
       E  12s     1.30um
                sP      36 07.00
MDJ    15.54 354 Pd     36 01.00   6.5X
       1.0s   100.00nm          5.0mb
       N  16s     1.50um
BJI    16.93 314 eP     36 13.50   1.4
       1.6s    91.00nm          4.7mb
       Z  22s     1.23um          3.8Msz
TIY    18.40 303 Pc     36 30.60   0.1
       1.0s   100.00nm          4.9mb
       Z  14s     1.60um
       N  13s     1.10um
                pP      36 41.90
GUMO   19.56 140 eP     36 45.00   0.6
GUA    19.63 140 eP     36 45.70   0.6
XAN    20.24 290 P      36 49.80  -1.6
       1.0s   100.00nm          5.1mb
       N  10s     0.90um
       E  11s     0.40um
                sP      37 05.50
```

10d 15h

HHC 20.35 310 eP 36 51.40 -1.2
Z 24s 1.40um 4.2MszX
N 13s 0.90um
BTO 21.28 308 eP 37 00.00 -2.1
Z 14s 0.80um 4.3MszX
N 14s 0.60um
E 14s 0.50um
GYA 22.56 269 P 37 14.00 -1.1
N 14s 1.00um
E 14s 1.80um
CD2 24.49 281 P 37 33.20 -0.5
E 12s 0.90um
LZH 24.64 294 iPc 37 34.70 -0.6
2.5s 160.00nm 5.1mb
Z 25s 1.10um 4.3MszX
pP 37 48.00 55kmX
KMI 26.31 268 Pd 37 50.50 -0.6
1.5s 60.00nm 5.0mb
Z 14s 1.90um 4.8MszX
sP 38 05.00
GTA 28.36 300 eP 38 10.00 0.5
1.0s 20.00nm 4.8mb
Z 12s 0.90um 4.6MszX
E 13s 0.90um
eS 42 55.00
CHTO 31.81 259 iPc 38 40.60 0.4
1.2s 16.32nm 4.8mb
pP 38 51.10 38kmX
LSA 35.45 281 eP 39 12.00 -0.1
SHL 35.69 274 eP 39 15.00 1.1
WMO 38.04 305 eP 39 32.50 -0.8
Z 20s 0.50um 4.3Msz
IPM 38.19 236 ePc 39 44.80 10.1X
1.0s 28.40nm
PSI 41.00 236 ePd 40 07.60 9.6X
KSH 46.74 298 eP 40 48.70 4.4X
NDI 47.57 283 eP 40 51.00 0.2
0.7s 17.12nm 5.2mb
WB5 48.81 177 eP 40 58.60 -1.7
ASPA 52.56 178 eP 41 27.10 -1.7
0.4s 12.00nm 5.2mb
GBA 52.67 265 P 41 30.00 0.1
KOD 54.19 261 eP 41 42.60 1.2
OUE 55.81 288 eP 41 54.10 1.2
IMA 57.38 28 P 42 02.80 -0.8
1.2s 16.10nm 4.9mb
KDC 58.23 30 P 42 08.20 -1.2
0.9s 20.83nm 5.2mb
PMR 59.57 33 P 42 17.30 -1.4
1.0s 32.50nm 5.4mb
BRS 59.65 159 iP 42 19.00 -0.7
FBA 59.87 29 P 42 20.20 -0.6
0.8s 8.62nm 4.9mb
MAIO 60.12 297 eP 42 25.00 2.1
STK 61.39 171 iPc 42 30.80 -0.6
1.0s 7.00nm 4.7mb
INK 64.87 24 eP 42 53.00 -1.0
MBC 66.19 14 eP 43 02.00 -0.3
1.0s 29.00nm 5.3mb
SUF 71.33 332 eP 43 34.00 -0.3
DAG 72.79 353 iPd 43 42.50 -0.2
0.6s 31.11nm 5.5mb
NUR 73.01 330 eP 43 50.00 5.7X
HFS 77.75 333 eP 44 10.00 -1.2
0.7s 7.90nm 4.9mb
NB2 78.13 335 P 44 12.60 -0.8
1.0s 17.70nm 5.0mb
GMW 78.40 42 P 44 15.30 0.2
PNT 79.28 39 eP 44 20.00 0.1
VRI 79.29 317 eP 44 21.00 1.0
LON 79.38 42 P 44 20.20 -0.3
EDM 80.33 34 eP 44 25.50 0.1
ALT 80.57 309 eP 44 26.00 -1.1
DPW 80.85 40 P 44 28.30 0.0
KRA 80.86 323 eP 44 29.00 0.8
1.0s 25.00nm 5.2mb
e 44 32.50
i 44 35.40
SPC 81.19 322 eP 44 31.60 1.4
NEW 81.24 39 P 44 30.00 -0.3
WDC 82.15 48 iPd 44 34.90 -0.3
LBFM 82.17 47 P 44 35.80 0.3
KSP 82.28 325 iPd 44 36.40 0.8
SRO 83.03 322 eP 44 43.90 4.3X
SES 83.18 35 ePd 44 40.20 -0.2
ORV 83.37 48 ePd 44 40.70 -0.8
BRG 83.43 326 iP 44 41.60 0.0

1.0s 20.00nm 5.2mb
ZST 83.46 322 eP 44 42.90 1.1
CLL 83.61 326 iPd 44 43.40 0.9
1.2s 50.00nm 5.5mb
PRU 83.69 325 Pc 44 44.20 1.3
BKS 83.78 50 e(P) 44 43.20 -0.4
FFC 84.46 28 eP 44 47.00 0.3
1.1s 23.00nm 5.3mb
MHC 84.46 50 ePd 44 47.60 0.4
ARN 84.53 50 P 44 47.20 -0.3
SKO 84.61 315 iP 44 49.10 1.4
MOX 84.71 327 iP 44 49.00 1.0
e 45 37.00
KHC 84.72 325 iPc 44 49.50 1.3
CMB 84.93 49 ePd 44 49.40 0.0
PRS 85.19 51 ePd 44 51.20 0.5
LRM 85.25 39 eP 44 51.60 0.4
OHR 85.50 315 eP 44 45.00 -7.2X
GRF 85.53 326 eP 44 53.70 1.5
1.4s 18.00nm 5.1mb
Z 22s 0.20um 4.5Msz
e 45 00.20
PRI 85.77 51 ePd 44 54.00 0.2
FRI 85.95 50 ePd 44 54.00 -0.5
BCH 86.69 51 P 44 59.50 1.2
FVI 86.75 323 P 45 02.50 4.3X
TRI 86.79 322 P 45 06.00 7.6X
TNP 86.97 48 P 44 59.90 0.1
0.9s 19.21nm 5.3mb
ABL 87.47 51 P 45 02.20 0.0
ISA 87.52 50 eP 45 02.00 -0.3
CTI 87.70 323 P 45 09.00 6.0X
CLC 88.02 50 eP 45 05.00 0.4
CDF 88.31 327 eP 45 05.70 -0.1
1.0s 14.00nm 5.2mb
DUG 88.48 44 P 45 07.80 0.9
SBB 88.51 51 eP 45 07.00 0.0
BW06 88.78 40 P 45 09.80 1.4
GSC 88.84 50 eP 45 09.00 0.3
BSF 88.94 327 eP 45 08.20 -0.7
0.9s 8.20nm 5.1mb
SFI 88.99 321 P 45 11.00 2.0
HAU 89.03 327 eP 45 08.60 -0.6
1.0s 8.00nm 5.0mb
Z 20s 0.17um 4.5Msz
PGD 89.09 321 P 45 11.00 1.2
ASS 89.09 320 P 45 11.00 1.3
DAU 89.28 43 P 45 11.40 0.4
TPC 90.04 50 eP 45 14.00 -0.3
LOR 90.74 328 eP 45 16.50 -0.7
0.8s 5.35nm 4.9mb
Z 20s 0.15um 4.4Msz
LBF 90.89 327 eP 45 17.20 -0.7
0.9s 6.55nm 5.0mb
RSSD 90.89 37 P 45 17.80 -0.4
SSF 91.05 328 eP 45 18.20 -0.4
1.0s 5.00nm 4.8mb
SMF 91.20 327 eP 45 18.80 -0.5
1.0s 6.00nm 4.9mb
AVF 91.32 328 eP 45 19.50 -0.3
1.1s 9.75nm 5.1mb
GRR 92.02 331 eP 45 22.90 -0.1
0.8s 6.70nm 5.1mb
LPF 92.37 331 eP 45 24.80 0.2
1.0s 20.00nm 5.5mb
MFF 93.07 329 eP 45 28.10 0.2
1.0s 12.00nm 5.3mb
GOL 93.18 41 P 45 29.70 0.8
0.9s 8.05nm 5.2mb
ALQ 95.71 45 eP 45 41.00 0.5
1.2s 8.59nm 5.1mb
KIC 125.43 303 PKP 51 15.80 -0.4
LIC 125.73 303 PKP 51 16.10 -0.8
ZOBO 157.48 60 ePKP 52 09.00 -2.5X
i 52 42.00
CNCB 157.92 61 ePKP 52 35.00 23.0X
SIV 162.20 45 PKP 52 16.60 0.8
i 53 02.20
S.D. = 0.9 on 104 of 117 obs.

OCT 10, 1990 15h 34m 45.21± 0.70s
44.031 N ± 6.9km 12.077 E ± 4.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

SFI 0.20 236 Pc 34 49.50 0.0
eSg 34 52.80

RSM 0.29 111 P 34 49.90 -1.4
PGD 0.30 239 P 34 50.80 -0.7
eSg 34 55.70
CRE 0.41 193 P 34 53.20 -0.5
eSg 35 00.00
ARV 0.82 130 P 35 02.00 0.9
eSg 35 15.00
MME 1.00 280 P 35 05.00 0.6
ASS 1.05 156 P 35 06.20 1.2
BDI 1.07 272 P 35 05.30 -0.1
eSg 35 19.60
TRI 2.06 35 eP 35 20.30 0.0
e 35 23.00
e 35 42.80
e(Sg) 35 53.30
S.D. = 0.9 on 9 of 9 obs.

OCT 10, 1990 16h 11m 52.04± 0.61s
44.017 N ± 6.2km 12.075 E ± 5.0km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

SFI 0.19 239 Pc 11 56.50 0.3
eSg 11 58.40
RSM 0.29 108 P 11 56.20 -1.8
eSg 12 02.20
PGD 0.29 241 Pc 11 57.90 -0.3
eSg 12 03.00
CRE 0.40 193 Pc 12 00.20 0.0
eSg 12 07.40
ARV 0.81 129 P 12 08.00 0.2
eSg 12 20.60
MME 1.01 281 P 12 12.00 0.7
eSg 12 26.80
ASS 1.04 156 P 12 12.90 1.2
eSg 12 29.40
BDI 1.07 273 P 12 12.20 0.0
eSg 12 27.70
PII 1.16 256 P 12 13.10 -0.6
eSg 12 29.10
MNS 1.69 165 P 12 21.40 -0.4
TRI 2.07 35 eP 12 27.40 0.1
e 12 29.70
i 12 50.00
i(Sg) 12 59.70
RIY 2.12 50 ePn 12 30.60 2.7
VOY 2.39 32 e(Pn) 12 35.30 3.3X
eSn 13 09.60
CEY 2.40 43 e(Pn) 12 36.00 4.0X
eSn 13 10.50
FVI 2.62 11 P 12 33.10 -2.0
LJU 2.67 40 eP 12 42.00 6.1X
eSn 13 18.50
PTJ 3.34 54 eP 13 42.20 56.8X
S.D. = 1.3 on 13 of 17 obs.

• OCT 10, 1990 17h 28m 12.32± 1.38s
40.466 N ± 8.4km 25.657 E ±14.0km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.2 (ISK).

RDO 0.69 352 eP 28 25.80 -0.1
eS 29 14.50
PRK 1.31 159 eP 28 37.00 0.5
eS 28 48.00
EDC 1.69 93 iPg 28 41.90 -0.1
iSg 28 56.90
BNT 1.73 93 iPg 28 41.80 -0.8
iSg 28 55.00
KCT 2.07 95 iPg 28 46.80 -0.8
CTT 2.21 71 iPn 28 54.30 4.7X
IZM 2.41 148 ePn 28 52.00 -0.5
DST 2.44 110 iPn 28 49.50 -3.3X
ISK 2.65 76 ePn 29 02.00 6.1X
YLV 2.83 87 ePn 29 00.30 1.8
S.D. = 1.1 on 7 of 10 obs.

& OCT 10, 1990 17h 49m 21.92s
63.268 N 148.998 W
DEPTH = 6.7km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.3 (PMR).

RND 0.15 25 iP 49 25.10 -0.2
HUR 0.41 225 iP 49 30.03 -0.2
eS 49 35.87

MCK	0.47	3	iP	49	30.98	-0.3
			eS	49	37.99	
CUT	1.04	215	iP	49	41.33	-0.6
WRH	1.27	18	iP	49	45.41	-0.4
			eS	50	02.14	
NEA	1.32	359	eP	49	46.11	-0.4
			eS	50	04.11	
HDA	1.46	38	eP	49	48.60	-0.1
			eS	50	07.79	
CCB	1.48	20	iP	49	48.70	-0.3
			eS	50	07.65	
DDM	1.50	68	eP	49	50.16	0.8
SML	1.50	168	iP	49	48.76	-0.5
GHO	1.50	179	iP	49	48.79	-0.6
			eS	50	08.36	
SCM	1.63	151	eP	49	51.04	-0.3
			eS	50	12.65	
PWA	1.67	195	iP	49	51.92	0.2
PLRM	1.68	182	eP	49	51.50	-0.4
PMR	1.68	182	iPc	49	51.40	-0.5
			iS	50	13.70	
FBA	1.72	17	iPd	49	52.30	-0.2
SKT	1.74	223	iP	49	52.81	0.0
SDG	1.75	114	eP	49	53.04	0.1
TOA	1.75	131	iPc	49	53.40	0.4
GLM	1.87	22	eP	49	54.32	-0.3
SUA	1.99	205	eP	49	56.10	-0.3
PMS	2.05	188	eP	49	57.48	0.2
DOT	2.25	78	eP	50	00.29	0.1
KLU	2.29	140	eP	50	00.78	0.0
CGLM	2.42	217	eP	50	04.16	1.5
VLZ	2.48	149	eP	50	04.01	0.6
CRP	2.49	218	eP	50	05.26	1.5
VZW	2.50	152	eP	50	04.19	0.5
SPU	2.54	216	eP	50	04.24	0.0
GLI	2.56	159	eP	50	05.40	0.9
BGL	2.56	220	eP	50	05.84	1.2
CKL	2.60	218	eP	50	06.80	1.6
KNIM	2.99	168	eP	50	11.11	0.5
GLB	3.03	125	eP	50	12.88	1.6
RDT	3.15	212	eP	50	13.97	1.1
SEW	3.18	184	eP	50	14.30	1.0
TTA	3.21	267	eP	50	21.30	7.5
RSO	3.33	214	eP	50	16.96	1.3
IMA	3.46	326	iPc	50	17.50	0.1
SVW	3.79	238	eP	50	25.40	3.4
BALM	3.84	123	eP	50	22.88	0.0
TGL	3.85	128	eP	50	25.04	2.1

42 obs. associated

& OCT 10, 1990 17h 55m 49.20s
38.797 N 122.833 W
DEPTH = 5.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.9 (BRK).
Mo=9.8•10••14 Nm (BRK). Felt (V) ot Cobb, (IV) ot Finley ond (III) ot Loch Lomond.

ZSP	0.96	152	eP	56	07.00	-1.0
			eS	56	23.00	
BRK	1.03	154	eP	56	07.80	-1.2
			eS	56	23.00	
BKS	1.03	153	ePc	56	07.00	-2.2
			eS	56	22.60	
ORV	1.28	53	ePd	56	11.40	-2.1
PCC	1.34	164	eP	56	12.40	-2.0
LTCM	1.51	21	eP	56	14.50	-2.5
MHC	1.73	147	ePc	56	17.30	-2.9
ARN	1.77	144	eP	56	18.50	-2.3
WDC	1.80	7	ePd	56	20.80	-0.2
GCC	1.88	159	eP	56	19.10	-3.2
CMB	2.07	111	iPc	56	23.40	-1.7
FHC	2.19	336	ePd	56	24.90	-1.9
SAO	2.31	151	eP	56	25.60	-2.9
LLA	2.64	145	ePd	56	30.60	-2.7
LBFM	2.65	16	eP	56	33.50	0.0
PRS	2.72	154	eP	56	31.80	-2.6
FRI	3.06	125	ePd	56	37.40	-1.7
KVN	3.70	85	eP	56	45.50	-3.0
TNP	4.47	97	eP	56	57.50	-1.8
ISA	4.68	131	eP	57	01.00	-1.2
CLC	5.13	124	eP	57	15.00	6.5
SBB	5.74	134	eP	57	14.00	-3.3
BW06	10.82	64	eP	58	30.00	1.9
MEO	19.81	94	e(P)	00	23.00	-0.5

24 obs. associated

& OCT 10, 1990 18h 35m 34.49s
56.973 N 143.381 W
DEPTH = 10.0km (geophysicist)
3.9mb (1 obs.)
GULF OF ALASKA (15)
<AGS-P>.

MID	2.92	329	eP	36	15.86	-5.9
			eS	36	48.60	
YKU	3.23	35	iP	36	20.99	-5.1
			eS	36	57.13	
PNL	3.42	36	iP	36	23.08	-5.9
HON	3.44	42	iP	36	22.96	-6.3
YAH	3.51	13	eP	36	25.02	-5.3
YAH	3.51	13	eP	36	25.07	-5.3
BCPM	3.58	32	iP	36	25.33	-5.8
TGL	3.81	4	iP	36	28.89	-5.6
KNIM	4.08	328	eP	36	31.66	-6.6
BALM	4.11	7	iP	36	33.23	-5.6
			iS	37	17.63	
GLI	4.36	335	eP	36	36.79	-5.5
SIT	4.41	86	eP	36	32.93	-9.9
			eS	37	19.07	
VZW	4.41	340	eP	36	36.77	-6.3
VLZ	4.44	341	eP	36	37.28	-6.1
SEW	4.47	317	eP	36	37.01	-6.7
GLB	4.49	357	iP	36	38.18	-5.9
KLU	4.72	345	eP	36	41.36	-6.1
CNPM	4.87	305	eP	36	42.62	-7.0
SLKM	5.02	318	eP	36	46.09	-5.6
HOM	5.12	305	eP	36	47.59	-5.4
NNL	5.17	310	eP	36	48.55	-5.1
SCM	5.28	339	eP	36	49.89	-5.4
PMS	5.34	326	eP	36	49.38	-6.8
TOA	5.34	346	eP	36	52.34	-3.9
SML	5.47	335	eP	36	51.77	-6.2
PLRM	5.49	330	eP	36	53.25	-5.0
GHO	5.58	332	eP	36	54.76	-4.9
CDD	5.81	294	eP	36	57.21	-5.5
AUH	5.84	298	eP	36	58.39	-4.8
OPT	5.84	301	eP	36	57.76	-5.5
RDT	5.92	311	eP	36	58.06	-6.3
RED	5.99	309	eP	36	58.77	-6.6
RSO	6.01	310	eP	36	59.65	-6.0
SPU	6.15	317	eP	37	01.12	-6.4
CGLM	6.21	318	eP	37	02.56	-5.9
CRP	6.24	317	eP	37	03.08	-5.8
CKL	6.26	316	eP	37	03.45	-5.8
BGL	6.32	317	eP	37	04.43	-5.7
NCG	6.33	318	eP	37	04.51	-5.7
PDB	6.35	301	eP	37	03.35	-7.0
CUT	6.47	330	eP	37	06.88	-5.1
SKT	6.51	324	eP	37	06.59	-6.1
INK	12.22	18	eP	38	26.00	-5.3
MBC	21.23	16	eP	40	20.00	-2.2
	1.0s		6.00nm			3.9mb

44 obs. associated

% OCT 10, 1990 18h 47m 41.36± 0.47s
44.657 N ± 3.8km 7.267 E ± 5.0km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

PZZ	0.19	218	P	47	45.57	-0.1
			S	47	47.52	
STV	0.42	174	P	47	49.88	0.0
			S	47	54.49	
RRL	0.43	308	P	47	50.39	0.1
			S	47	55.72	
RSP	0.49	359	P	47	51.11	-0.3
			S	47	54.90	
ROB	0.56	130	P	47	52.75	-0.1
			S	48	00.54	
LSD	0.80	354	P	47	57.37	0.2
			S	48	07.72	
FIN	0.81	123	P	47	57.16	0.1
			S	48	07.11	
IMI	0.87	149	P	47	58.29	0.1
			S	48	08.23	
PCP	0.92	97	P	47	59.01	0.0
			S	48	11.41	

S.D. = 0.2 on 9 of 9 obs.

? OCT 10, 1990 19h 43m 04.38± 1.37s
46.049 N ±18.3km 151.946 E ±42.0km
DEPTH = 33.0km (normal)
4.5mb (12 obs.)
KURIL ISLANDS (221)

KUSJ	5.95	243	P	44	30.80	-1.6
			eS	45	33.10	
MAT	14.01	232	eP	46	31.00	8.4
	0.5s		16.20nm			5.0mb
CHTO	51.17	256	eP	52	06.60	0.2
	1.0s		3.25nm			4.2mb
WB5	67.52	198	eP	53	58.80	-0.5
NB2	68.63	341	P	54	04.60	-1.2
	0.5s		1.60nm			4.4mb
HFS	68.83	339	eP	54	04.70	-2.3
	0.4s		3.10nm			4.7mb
CLL	76.76	335	eP	54	53.00	-0.8
CDF	80.99	337	eP	55	17.00	0.1
	0.6s		3.60nm			4.5mb
LOR	82.94	339	eP	55	27.20	0.2
	0.6s		2.70nm			4.5mb
LBF	83.18	339	eP	55	28.40	0.1
	1.0s		4.00nm			4.5mb
SSF	83.23	339	eP	55	28.70	0.3
	0.8s		4.05nm			4.6mb
AVF	83.52	339	eP	55	30.30	0.4
	0.6s		1.80nm			4.4mb
SMF	83.53	339	eP	55	30.50	0.5
	0.8s		6.70nm			4.8mb
LPL	83.79	336	eP	55	32.70	1.0
LPG	83.81	336	eP	55	32.70	0.9
	0.6s		1.80nm			4.4mb
MAF	84.24	339	eP	55	34.80	1.2
	0.6s		4.50nm			4.8mb

S.D. = 1.0 on 14 of 16 obs.

? OCT 10, 1990 19h 47m 38.22± 1.67s
35.288 S ±14.2km 72.532 W ±20.2km
DEPTH = 12.9 ± 3.6 km
4.8mb (2 obs.)
NEAR COAST OF CENTRAL CHILE (135)
Felt (II) in the Santiago area.

LNV	1.62	35	iPd	48	07.00	0.5
LCCH	1.98	24	iP	48	13.00	1.3
CHCH	2.06	49	iPd	48	12.60	-0.3
TACH	2.10	39	iPc	48	13.60	0.1
PCH	2.36	46	iPd	48	17.00	-0.3
SAN	2.40	41	iPc	48	18.00	0.2
			i	48	41.50	
PEL	2.63	36	iPc	48	21.30	0.1
ROCH	2.63	29	iPc	48	21.90	0.6
			iS	48	47.00	
FCH	2.70	44	iPc	48	22.00	-0.4
JACH	3.06	32	iPd	48	27.60	0.4
			iS	48	56.50	
MDZ	3.88	53	eP	48	39.40	0.4
			e	48	45.80	
			i(S)	48	59.70	
RTBS	4.44	36	eP	48	48.00	1.3
RTCV	4.77	45	eP	48	51.00	-0.6
RTCB	4.91	41	iPc	48	53.20	-0.4
			eS	49	53.20	
ZON	4.93	42	eP	48	54.00	0.2
RTLL	5.21	42	iPd	48	56.20	-1.5
ZOBO	19.35	13	P	52	07.00	0.0
			LR	58	24.00	
SIV	21.78	31	P	52	29.60	-2.2
			i	52	46.40	
PPD	22.77	60	(P)	52	44.00	2.5
SOB1	38.82	56	eP	55	02.80	-1.9
LIC	75.57	72	P	59	24.60	0.0
TIC	75.83	71	P	59	26.00	-0.1
KIC	75.87	72	P	59	26.60	0.2
	0.6s		4.50nm			4.7mb
LKO	77.22	69	Pc	59	34.62	0.7
	0.6s		6.00nm			4.9mb
GBA	145.39	121	PKP	07	20.00	2.1

S.D. = 1.1 on 24 of 25 obs.

? OCT 10, 1990 20h 12m 26.63± 3.48s
21.607 N ±10.0km 143.094 E ±37.3km
DEPTH = 329.8 ± 39.5 km
4.4mb (4 obs.)
MARIANA ISLANDS REGION (215)

WKYJ	14.20	334	eP	15	36.30	0.2
TKSJ	14.69	329	eP	15	42.50	1.0
KAKJ	14.77	351	P	15	42.10	-0.1

10d 20h

			eS	18	18.30	
CHJJ	14.83	347	P	15	42.20	-0.7
			eS	18	23.70	
MAT	15.48	345	eP	15	49.00	-0.9
	0.5s	16.20nm			4.6mb	
			eS	18	33.00	
MTMJ	15.62	344	P	15	50.40	-1.1
YONJ	15.95	330	eP	15	55.10	0.2
NIIJ	15.98	348	P	15	54.50	-0.7
YAMJ	16.72	352	P	16	04.10	1.1
OFUJ	17.46	356	P	16	11.90	1.3
MTN	36.20	200	eP	19	00.00	-0.5
	0.3s	37.00nm			5.3mb	
WB5	42.11	192	iP	19	49.10	0.1
ASPA	45.88	192	iPd	20	19.20	0.3
	0.6s	6.30nm			4.1mb	
HFS	88.78	337	eP	24	44.20	-0.2
	0.5s	1.30nm			4.1mb	
	S.D. = 0.9	on	14 of	14	obs.	

? OCT 10, 1990 20h 40m 38.64± 4.52s
13.968 S ±38.9km 167.059 E ±16.1km
DEPTH = 142.4 ± 42.0 km
4.9mb (2 obs.)
VANUATU ISLANDS (186)

BKM	3.85	163	iPd	41	37.30	-0.2
DZM	8.08	184	iPc	42	34.80	0.3
			iS	44	00.20	
STK	29.34	228	iPc	46	29.90	-0.2
	0.4s	13.00nm			5.0mb	
WB5	31.79	255	eP	46	52.00	0.3
ASPA	32.76	248	eP	46	59.60	-0.6
	0.4s	7.60nm			4.8mb	
NANU	49.48	252	eP	49	17.00	0.4
GRR	144.25	346	ePKP	59	59.10	0.0
	0.6s	5.40nm				
SSF	144.25	341	ePKP	59	58.90	-0.3
	0.6s	3.60nm				
LPL	144.42	336	ePKP	00	00.10	0.2
	0.6s	1.80nm				
LPG	144.43	336	ePKP	00	00.10	0.1
	0.6s	3.15nm				
AVF	144.54	341	ePKP	59	59.60	-0.1
LPF	144.63	346	ePKP	59	59.90	0.1
	0.6s	3.60nm				
	S.D. = 0.4	on	12 of	12	obs.	

• OCT 10, 1990 22h 00m 26.20± 3.90s
43.770 N ±22.3km 8.409 E ±18.1km
DEPTH = 10.0km (geophysicist)
CORSICA (380)

IMI	0.40	291	P	00	34.36	-0.1
			S	00	40.00	
FIN	0.46	342	P	00	35.80	0.2
			S	00	42.36	
ROB	0.65	324	P	00	39.08	-0.2
			S	00	48.21	
SBF	0.71	278	Pg	00	40.40	0.1
			Sg	00	50.00	
PCP	0.78	7	P	00	41.34	-0.1
			S	00	51.69	
ENR	0.85	303	P	00	42.98	0.4
			S	00	53.33	
STV	0.92	302	P	00	43.39	-0.4
	S.D. = 0.3	on	7 of	7	obs.	

? OCT 10, 1990 23h 12m 22.87± 6.33s
33.854 S ±21.1km 72.275 W ±54.6km
DEPTH = 46.8 ± 25.6 km
OFF COAST OF CENTRAL CHILE (134)

LCCH	0.70	58	iP	12	35.00	-1.6
LNV	0.73	98	iPd	12	36.50	-0.4
TACH	1.13	80	iPd	12	41.60	-1.0
CHCH	1.35	94	iPd	12	46.40	0.7
ROCH	1.37	51	iPc	12	45.50	-0.7
SAN	1.40	74	iPd	12	46.00	-0.4
			iS	13	04.00	
PCH	1.49	81	iPd	12	47.60	0.0
PEL	1.51	62	iPd	12	38.10	-9.8X
RTBS	3.23	48	e(P)	13	14.70	2.4
RTCV	3.72	59	eP	13	20.80	1.4
RTCB	3.76	52	iP	13	21.50	1.5
ZON	3.81	54	eP	13	24.00	3.4X
RTLL	4.08	53	ePd	13	24.60	0.2
CCH	17.30	20	P	16	28.00	5.0X
ZOBO	17.90	13	eP	16	03.00	-27.7X
	Z 18s	0.28um				
			i	16	30.20	
			LR	22	16.00	
SIV	20.45	32	P	16	56.80	-2.3
			i	16	59.80	
PPD	21.90	63	eP	17	11.80	-1.9
VAO	24.68	71	eP	17	40.40	-0.5
SOB1	37.85	57	eP	19	36.70	-0.3
			e	19	39.50	
			e	19	46.40	
KIC	75.22	72	P	24	04.00	1.3
LKO	76.50	69	P	24	11.64	1.7
	S.D. = 1.5	on	17 of	21	obs.	

? OCT 11, 1990 00h 34m 53.90± 1.96s
41.879 N ±16.9km 20.094 E ±10.2km
DEPTH = 5.0km (geophysicist)
ALBANIA (391)

LACI	0.38	230	ePg	35	01.40	-0.1
TIR	0.56	198	ePg	35	05.20	0.1
OHR	0.93	145	iPg	35	12.10	-0.1
			iSg	35	26.10	
SKO	1.01	84	ePg	35	13.50	0.0
			iSg	35	30.50	
	S.D. = 0.2	on	4 of	4	obs.	

? OCT 11, 1990 00h 55m 04.06± 0.97s
18.134 N ± 8.6km 99.945 W ±12.3km
DEPTH = 33.0km (normal)
GUERRERO, MEXICO (59)

III	0.51	62	iP	55	15.00	0.0
			iS	55	25.00	
ACX	1.26	176	iP	55	25.50	0.0
			iS	55	41.50	
PPM	1.56	53	(P)	55	16.00	-14.2X
IIJ	1.60	7	iP	55	31.00	0.1
			iS	55	44.50	
MRX	1.96	323	iP	55	35.50	-0.1
			iS	55	58.50	
	S.D. = 0.1	on	4 of	5	obs.	

OCT 11, 1990 01h 53m 41.61± 0.55s
35.005 N ± 7.3km 119.456 W ± 6.2km
DEPTH = 10.0km (geophysicist)
CENTRAL CALIFORNIA (39)
ML 3.1 (BRK).

ABL	0.25	129	iPc	53	47.50	0.5
BCH	0.55	289	iPc	53	52.40	-0.3
BLP	0.90	241	eP	53	58.60	-0.2
PHAM	1.13	317	eP	54	04.00	1.2
PRI	1.50	319	eP	54	09.30	0.6
FRI	1.99	354	eP	54	15.00	-0.7
			eS	54	41.00	
PEC	2.20	120	eP	54	18.80	0.1
SAO	2.39	318	eP	54	20.60	-0.8
PLM	2.71	127	eP	54	25.70	-0.5
TNP	3.56	30	eP	54	46.00	7.8X
	S.D. = 0.8	on	9 of	10	obs.	

? OCT 11, 1990 02h 18m 59.94± 1.03s
33.407 N ±15.6km 132.173 E ±19.6km
DEPTH = 33.0km (normal)
4.4mb (3 obs.)
SHIKOKU, JAPAN (236)

SHK	1.20	20	iPd	19	22.00	1.6
	0.3s	1558.44nm				
MAT	5.86	56	iPc	20	25.70	-1.1
	0.8s	11.19nm			4.5mb	
			eS	21	31.00	
BJI	14.43	302	eP	22	30.00	6.4X
WB5	53.03	177	eP	28	16.70	0.7
HFS	74.05	333	eP	30	33.00	-1.0
	0.5s	2.20nm			4.4mb	
NB2	74.38	334	P	30	35.40	-0.5
	0.8s	2.60nm			4.3mb	
TNP	84.02	48	P	31	29.00	0.3
	S.D. = 1.3	on	6 of	7	obs.	

& OCT 11, 1990 02h 58m 06.62s
63.338 N 149.695 W
DEPTH = 106.4km

CENTRAL ALASKA (1
<AGS-P>.

HUR	0.36	176	iP	58	22.11	-0.4
			eS	58	33.80	
RND	0.39	79	eP	58	22.39	-0.3
MCK	0.52	40	eP	58	23.24	-0.3
CUT	0.97	196	iP	58	27.12	-0.4
NEA	1.27	12	eP	58	30.08	-0.8
WRH	1.34	31	eP	58	30.88	-0.8
CCB	1.56	32	eP	58	33.33	-0.9
SKT	1.60	213	iP	58	34.04	-0.9
			eS	58	55.57	
GHO	1.61	167	eP	58	35.03	0.0
			eS	58	56.17	
HDA	1.62	47	eP	58	34.48	-0.6
SML	1.66	157	iP	58	35.35	-0.3
PWA	1.70	183	eP	58	36.36	0.4
PLRM	1.77	171	eP	58	36.78	-0.2
DDM	1.77	74	eP	58	37.13	0.0
GLM	1.94	30	eP	58	38.49	-0.7
SUA	1.94	195	eP	58	39.33	0.0
TOA	2.04	126	eP	58	40.44	-0.1
SDG	2.07	111	eP	58	40.65	-0.2
PMS	2.10	178	eP	58	41.19	-0.1
NCG	2.26	212	eP	58	42.60	-0.8
CGLM	2.31	209	eP	58	42.86	-2.0
SPU	2.43	208	eP	58	45.00	-0.6
KLU	2.55	135	eP	58	45.99	-1.3
VLZ	2.72	143	eP	58	47.53	-1.9
GLI	2.75	152	eP	58	48.60	-1.3
SEW	3.25	178	eP	58	53.74	-2.8
GLB	3.34	122	eP	58	56.98	-0.9
	27 obs. associated					

• OCT 11, 1990 03h 14m 39.44± 0.86s
21.185 N ± 7.6km 99.691 W ±13.9km
DEPTH = 10.0km (geophysicist)
4.0mb (2 obs.)
CENTRAL MEXICO (523)

IIJ	1.44	182	iP	15	05.24	-0.8
			iS	15	30.22	
UNM	1.90	165	iP	15	13.50	1.0
			(S)	15	41.00	
MRX	2.04	224	iP	15	15.35	1.2
			iS	15	44.50	
IIA	2.24	154	(P)	15	26.40	9.2X
PPM	2.33	154	iP	15	18.31	-0.6
			iS	15	50.00	
IIT	2.51	149	(P)	15	07.05	-14.2X
AGX	2.53	286	eP	15	19.21	-1.9
			(S)	16	01.50	
III	2.80	176	iP	15	29.91	4.6X
			(S)	16	11.06	
LVVM	3.36	115	(P)	15	42.51	9.4X
ACX	4.30	182	(P)	15	59.50	13.1X
OXX	4.95	145	(P)	16	13.00	17.2X
MZX	6.56	289	(P)	16	40.00	21.7X
ALQ	14.94	338	eP	18	13.50	0.9
	1.0s	3.75nm			3.8mb	
ANMO	14.95	338	eP	18	14.20	1.5
TUL	15.06	12	eP	18	12.80	-1.2
	1.0s	11.30nm			4.3mb	
			e	18	17.20	
	S.D. = 1.5	on	8 of	15	obs.	

? OCT 11, 1990 03h 53m 22.90± 5.02s
34.280 S ±37.8km 72.904 W ±29.2km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

LNV	1.28	76	iPd	53	45.10	0.5
			iS	53	54.00	
TACH	1.75	70	iPd	53	50.10	-1.3
			iS	54	04.00	
CHCH	1.90	80	iPd	53	54.60	1.0
SAN	2.04	67	eP	53	55.00	-0.6
			iS	54	13.50	
PCH	2.09	72	iPd	53	56.50	0.1
			iS	54	16.00	
PEL	2.17	59	iPd	53	56.90	-0.6
			iS	54	15.50	
MDZ	3.66	69	iP	54	23.90	5.3X
RTBS	3.90	49	e(P)	54	27.20	5.2X
			eS	55	08.80	
RTCV	4.39	58	e(P)	54	30.00	1.0

RTCB 4.44 52 ePd 54 30.00 0.3
ZON 4.48 54 e(P) 54 34.00 3.7X
RTLL 4.75 53 eP 54 34.10 0.0
CCH 17.88 21 P 57 37.50 6.4X
ZOBO 18.44 15 P 57 39.00 0.7
SIV 21.09 33 P 58 06.00 -1.0
S.D. = 0.9 on 11 of 15 obs.

% OCT 11, 1990 03h 54m 35.13± 2.09s
35.004 N ±24.0km 25.233 E ± 6.0km
DEPTH = 10.0km (geophysicist)
CRETE (370)
MD 3.7 (ATH).

NPS 0.40 50 ePg 54 42.60 -0.8
VAM 0.94 296 ePg 54 52.00 -1.0
KAP 1.68 71 ePb 55 05.20 0.5
APE 2.07 7 ePn 55 11.00 0.6
VLI 2.53 313 ePn 55 16.70 -0.2
ARG 2.65 62 ePn 55 18.50 -0.1
ITM 3.45 310 ePn 55 31.00 1.1
S.D. = 0.9 on 7 of 7 obs.

OCT 11, 1990 04h 25m 25.23± 0.30s
33.656 S ± 6.3km 72.087 W ± 4.4km
DEPTH = 32.9km (11 depth phases)
5.2mb (14 obs.) 4.9Msz (2 obs.)
OFF COAST OF CENTRAL CHILE (134)
Felt (IV) at Son Antonio and (III) at Volparaiso and in the Santiago area.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 25C
Centroid Location:
Origin Time 04:25:28.7 0.5
Lat 34.17S 0.08 Lon 72.07W 0.10
Dep 15.0 FIX Half-duration 1.7
Moment Tensor; Scale 10**17 Nm
Mrr= 0.53 0.05 Mtt=-0.05 0.05
Mff=-0.48 0.06 Mrt=-0.10 0.12
Mrf=-1.54 0.14 Mtf= 0.14 0.05
Principal Axes:
T Val= 1.66 Plg=54 Azm= 99
N -0.07 6 1
P -1.59 36 267
Best Double Couple:Mo=1.6*10**17
NP1:Strike=329 Dip=11 Slip= 58
NP2: 182 81 96

LNV 0.64 118 iPd 25 37.10 -0.7
TACH 0.96 90 iPd 25 42.50 0.1
SAN 1.21 81 iPd 25 47.00 1.1
iS 25 54.00
iS 25 58.00
CHCH 1.23 103 iPd 25 46.80 0.6
PEL 1.28 67 iPd 25 48.80 1.8
PCH 1.31 89 iPd 25 48.50 1.0
FCH 1.54 78 iPd 25 52.30 1.3
MDZ 2.82 75 iPc 26 12.40 3.4X
i 26 26.60
iS 26 57.40
RTCV 3.49 60 eP 26 22.00 3.5X
RTCB 3.52 53 iPc 26 21.70 2.7
ZON 3.56 55 eP 26 23.00 3.4X
eS 26 58.00
RTLL 3.84 54 ePd 26 25.00 1.5
ANT 10.02 9 eP 27 43.50 -6.5X
CCH 17.06 20 P 29 24.00 0.8
i 29 29.50
ARE 17.13 2 eP 29 25.00 0.9
ZOBO 17.68 13 Pc 29 30.80 -0.4
Z 20s 4.29um
S 33 29.00
LR 35 08.00
SIV 20.20 32 iPc 29 57.60 -2.5
VAO 24.47 71 eP 30 41.70 -0.8
i 30 52.20 39km
i 31 04.30
e 31 08.40
e 31 17.50
BMA 26.86 73 eP 31 04.20 -0.6
e 31 07.60 12kmX
e 31 11.50
JFO 28.01 72 eP 31 14.70 -0.6
e 31 24.70 36km
e 31 47.30

BAO 28.20 56 Pc 31 15.20 -1.9
e 31 25.90 40km
SOB1 37.61 57 ePc 32 37.40 -1.4
i 32 40.40 10kmX
i 32 48.00
CAI 42.13 58 eP 33 14.20 -2.0
CEOS 42.60 5 eP 33 19.00 -1.1
OLLA 43.72 8 eP 33 28.00 -1.2
GUAC 43.84 7 iPd 33 30.00 -0.2
LLAV 44.17 7 iPd 33 32.00 -0.8
SPA 56.52 180 iPc 35 05.30 -1.2
1.0s 49.50nm 5.5mb
PRM 68.07 351 P 36 22.20 -1.4
pP 36 31.30 29km
JSC 68.12 352 P 36 22.50 -1.4
pP 36 31.50 29km
TKL 69.82 350 P 36 32.70 -1.6
GBTN 69.89 350 P 36 33.50 -1.2
NAV 71.07 353 P 36 40.40 -1.5
pP 36 49.80 30km
ELC 72.36 346 P 36 48.20 -1.4
MEO 72.47 337 iPd 36 49.50 -0.8
SIO 72.66 340 eP 36 51.00 -0.4
TUL 72.67 340 iP 36 51.00 -0.4
0.9s 19.70nm 5.1mb
e 37 58.90 295kmX
FVM 73.29 345 P 36 53.50 -1.5
ACO 74.41 338 e(P) 37 01.20 -0.4
TBR 74.45 358 P 37 02.00 0.3
LIC 74.70 72 P 37 02.88 -0.9
1.3s 46.50nm 5.3mb
Z 20s 0.44um 4.7Msz
TIC 74.96 71 P 37 04.40 -0.9
KIC 75.01 72 P 37 04.78 -0.7
0.8s 29.50nm 5.3mb
ALQ 75.46 331 eP 37 07.70 -0.2
0.9s 15.76nm 5.0mb
Z 19s 0.82um 5.0Msz
e 37 19.00 37km
ANMO 75.46 331 P 37 08.20 0.3
0.9s 11.03nm 4.9mb
WVLY 75.99 355 P 37 10.50 0.0
pP 37 19.80 30km
LKO 76.28 69 P 37 12.30 -0.4
0.9s 69.00nm 5.7mb
GLA 77.58 324 eP 37 21.00 1.4
RSNY 77.86 358 P 37 20.70 -0.1
1.2s 29.15nm 5.2mb
pP 37 29.90 29km
BAR 78.19 323 eP 37 24.00 1.0
PLM 78.83 323 eP 37 28.00 1.4
TPC 79.03 324 eP 37 29.00 1.5
GLD 79.21 335 P 37 29.20 0.6
1.1s 38.57nm 5.3mb
GOL 79.22 334 P 37 28.30 -0.4
0.8s 6.32nm 4.7mb
RVR 79.60 323 eP 37 33.00 2.5
FRS 79.70 119 eP 37 31.50 0.2
PAS 80.12 323 eP 37 44.00 10.7X
MWC 80.12 323 eP 37 35.00 1.4
CBM 80.30 3 P 37 43.20 9.3X
GSC 80.36 324 eP 37 36.00 1.3
SBB 80.37 323 eP 37 35.00 0.2
ABL 81.21 322 P 37 40.50 1.2
pP 37 49.50 29km
SYP 81.34 322 eP 37 41.00 1.1
ISA 81.47 323 eP 37 43.00 2.5
DAU 82.09 331 P 37 44.00 0.0
DUG 82.55 330 P 37 46.40 0.3
RSSD 82.70 337 P 37 46.80 -0.1
pP 37 57.50 34km
TNP 82.79 326 P 37 47.80 0.3
1.2s 26.88nm 5.2mb
PRI 82.95 322 eP 38 01.30 13.1X
BW06 83.45 333 P 37 50.00 -0.8
1.3s 9.56nm 4.8mb
LLA 83.46 322 eP 38 03.00 12.3X
SLR 84.10 117 iPd 37 52.60 -1.9
CMB 84.28 324 P 37 55.40 0.6
1.5s 26.94nm 5.2mb
GCC 84.31 322 ePd 38 07.50 12.6X
ORV 86.00 324 ePd 38 04.90 1.5
LRM 87.13 333 eP 38 09.70 0.7
WDC 87.30 324 ePd 38 09.50 -0.2
BUL 87.52 112 iPd 38 11.80 0.3
LBFM 87.57 325 P 38 11.40 0.2
CIR 89.28 115 iPd 38 21.00 1.3

KRI 90.19 110 iPd 38 28.00 3.8X
SES 90.50 336 eP 38 24.00 -0.6
PNT 92.78 331 eP 38 46.00 10.9X
BCAO 92.95 87 iPd 38 37.00 0.3
0.6s 10.00nm 5.4mb
EDM 93.65 337 eP 38 38.00 -1.1
CLL 112.62 43 ePdiff 40 18.00 13.8X
WB5 121.09 209 ePKP 44 15.20 -1.3
MAIO 140.56 72 ePKP 44 53.00 -0.1
QUE 145.22 84 ePKP 45 01.80 0.3
1.1s 632.91nm
GBA 145.88 118 PKP 45 02.00 -0.7
POO 146.09 108 iPKPd 45 03.70 0.6
1.0s 66.00nm
HYB 149.11 114 ePKP 45 11.00 3.1X
IPM 150.37 166 ePKPd 45 15.00 5.1X
1.0s 47.10nm
SNG 152.80 164 ePKP 45 32.80 19.4X
WMQ 161.29 51 PKP 45 23.70 0.7
Z 18s 0.30um
e 46 07.50
pPKP 46 17.00
PP 49 55.00
CHG 163.19 149 ePKP 45 26.00 0.4
SHL 163.91 116 ePKP 45 26.00 -0.3
BJI 170.81 316 ePKP 45 41.00 10.5X
GTA 171.32 46 PKPd 45 32.00 1.0
e 46 52.20
pPKP 47 00.00
TIY 174.53 319 ePKP 45 33.00 0.8
Z 15s 0.40um
LZH 175.87 53 ePKP 45 32.50 -0.2
Z 20s 0.30um
e 47 12.50
pPKP 47 20.50
ePP 51 09.50
XAN 179.08 295 PKP 45 33.50 0.5
S.D. = 1.1 on 06 of 102 obs.

---

* OCT 11, 1990 05h 28m 13.73± 0.92s
24.042 N ±11.5km 125.326 E ± 9.0km
DEPTH = 33.0km (normal)
SOUTHWESTERN RYUKYU ISLANDS (246)

TWC 3.22 281 ePd 29 04.40 1.2
eS 29 40.70
TWD 3.41 271 ePc 29 06.10 0.2
eS 29 43.70
TWF1 3.76 260 ePc 29 10.40 -0.4
eS 29 50.70
TWG 4.09 254 iPc 29 15.10 -0.5
eS 29 58.70
MAT 16.68 39 (P) 32 07.00 0.4
BJI 17.72 336 eP 32 18.50 -1.0
Z 24s 0.32um
WB5 44.54 168 eP 36 24.20 -0.1
S.D. = 0.9 on 7 of 7 obs.

& OCT 11, 1990 06h 51m 31.70s
41.933 N 70.573 W
DEPTH = 13.0km
SOUTHERN NEW ENGLAND (476)
<WES-P>. CL 2.7 (WES). Felt (V) at Plymouth; (IV) at West Dennis; (III) at Duxbury and Monamet; (II) at Hanson and Pocasset, Massachusetts. Also felt at Sandwich and Woods Hole, Massachusetts.

FLR 0.46 242 P 51 39.82 -1.3
S 51 46.68
WES 0.72 309 P 51 45.50 0.0
S 51 55.32
NSC 1.06 245 P 51 50.58 -0.8
OUA 1.44 292 P 51 56.90 -0.5
MD2 1.45 255 P 51 57.46 -0.1
MD3 1.48 254 eP 51 57.40 -0.6
BNH 2.70 350 eP 52 15.80 0.2
TBR 2.85 255 eP 52 17.70 0.0
HBVT 3.04 324 eP 52 19.00 -1.3
9 obs. associated

OCT 11, 1990 07h 26m 24.67± 0.85s
43.973 N ± 5.0km 8.500 E ± 6.3km
DEPTH = 10.0km (geophysicist)
CORSICA (380)

11d 07h

ML 2.4 (LDG). MD 2.1 (STR).

FIN	0.32	318	P	26	31.27	0.0
			S	26	34.86	
IMI	0.45	262	P	26	33.01	-0.8
			S	26	38.45	
ROB	0.56	306	P	26	35.17	-0.8
			S	26	41.52	
PCP	0.57	3	P	26	36.91	0.7
			S	26	44.70	
AUTN	0.77	272	Pg	26	39.49	-0.4
			Sg	26	50.11	
SBF	0.78	262	Pg	26	40.40	0.5
			Sg	26	50.00	
ENR	0.82	288	P	26	39.94	-0.6
			S	26	50.40	
AURF	0.85	265	Pg	26	40.90	-0.3
			Sg	26	52.51	
STV	0.89	288	P	26	41.63	-0.2
			S	26	52.70	
TOUF	0.90	273	Pg	26	41.91	-0.2
			Sg	26	55.13	
MVIF	0.98	266	Pg	26	43.89	0.6
			Sg	26	55.93	
PZZ	1.14	298	P	26	45.73	-0.3
			S	26	59.37	
CALN	1.19	260	Pg	26	47.33	0.4
FRF	1.40	254	Pg	26	51.00	0.7
			Sg	27	06.40	
PGF	1.47	165	Pn	26	50.32	-1.0
LMR	1.58	247	Pg	26	52.80	0.0
			Sg	27	10.40	
LRG	1.64	252	Pg	26	55.00	1.4
			Sg	27	14.40	

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

% OCT 11, 1990 08h 11m 47.50± 1.22s
40.679 N ± 9.1km 29.910 E ± 8.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

HRT	0.23	308	ePg	11	52.40	-0.1
			eSg	11	56.90	
YLV	0.42	255	iPg	11	55.90	-0.3
IZI	0.48	224	iPg	11	57.40	0.2
			iSg	12	05.40	
GPA	0.49	142	ePg	11	57.50	0.0
CTT	1.22	293	ePn	12	10.40	0.3

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

% OCT 11, 1990 08h 27m 44.19± 0.86s
39.237 N ± 7.6km 27.741 E ±12.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

DST	0.78	62	iPg	27	59.10	-0.3
			eSg	28	12.00	
IZM	0.92	204	ePn	28	01.80	0.0
EDC	1.11	5	ePn	28	04.90	-0.2
KCT	1.12	25	iPn	28	05.90	0.8
BNT	1.13	7	ePn	28	04.90	-0.4
YLV	1.83	43	ePn	28	16.00	0.0

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

• OCT 11, 1990 09h 35m 17.46± 1.71s
32.439 S ± 7.9km 71.714 W ±18.6km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)
Felt (III) in central Chile.

PEL	1.12	129	iPc	35	35.80	-1.1
SAN	1.34	139	iP	35	39.20	-0.9
			iS	35	51.50	
TACH	1.38	152	iP	35	40.50	-0.1
LNV	1.53	171	iPd	35	45.00	2.2
			iS	36	03.50	
PCH	1.55	140	iPc	35	41.90	-1.3
CHCH	1.74	149	iPd	35	45.80	0.0
RTBS	2.07	69	ePd	35	52.90	2.4
MDZ	2.46	101	eP	35	55.80	-0.4
			i(S)	36	23.60	
ZON	2.73	72	eP	36	04.00	4.1X
RTCV	2.76	79	ePc	36	01.00	0.7
RTLL	2.97	69	iPc	36	04.00	0.5
ZOBO	16.42	12	P	39	08.00	0.3
SIV	19.01	33	P	39	36.80	-2.5

S.D. = 1.5 on 12 of 13 obs.

% OCT 11, 1990 10h 03m 52.49± 0.55s
41.132 N ± 5.5km 28.491 E ± 4.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.7 (ISK).

CTT	0.05	288	iPg	03	54.30	-0.4
ISK	0.43	99	ePg	04	01.30	0.0
			eSg	04	07.30	
GBZT	0.80	115	ePg	04	07.80	-0.2
			iSg	04	22.00	
YLV	0.88	130	iPg	04	08.80	-0.6
			iSg	04	22.30	
DMK	0.88	322	iPg	04	09.60	0.2
			iSg	04	21.60	
BNT	0.89	209	ePg	04	09.80	0.3
KCT	0.89	187	iPg	04	09.80	0.3
EDC	0.92	212	iPg	04	09.90	-0.1
HRT	0.94	109	ePg	04	11.30	0.8
			eSg	04	25.30	
IZI	1.09	136	ePn	04	12.80	-0.2

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

? OCT 11, 1990 10h 13m 00.60± 0.68s
54.870 N ±12.6km 109.634 E ±24.1km
DEPTH = 33.0km (normal)
4.5mb (3 obs.)
LAKE BAIKAL REGION (327)

BJI	15.47	161	eP	16	38.00	0.2
			eS	19	44.00	
LZH	19.21	194	eP	17	31.50	7.0X
	2.0s		32.00nm		4.2mb	
	Z 10s		0.80um			
			sP	17	44.00	
			Lg	23	20.50	
			Lg	23	49.50	
SSE	25.15	156	eP	18	17.00	-7.0X
	Z 12s		0.50um		4.2MszX	
	E 10s		0.30um			
			pP	18	24.00	25kmX
			S	22	56.00	
HFS	47.43	317	eP	21	42.20	8.9X
	0.5s		2.60nm		4.5mb	
NB2	47.81	319	P	21	45.20	8.9X
	0.8s		5.40nm		4.6mb	
BRG	53.49	308	e(P)	22	19.40	-0.1
SES	69.73	26	ePc	24	09.00	0.2
WB5	77.39	156	eP	24	53.00	-0.6
TNP	79.09	36	P	25	03.00	-0.1
SPA	144.69	180	iPKPd	32	34.40	0.4
	1.0s		9.50nm			
			i	32	37.60	

S.D. = 0.5 on 6 of 10 obs.

? OCT 11, 1990 11h 14m 38.90± 0.98s
39.129 N ± 8.9km 27.650 E ±16.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM	0.79	203	ePn	14	54.30	0.0
DST	0.90	58	iPn	14	56.10	0.0
EDC	1.23	8	ePn	15	01.90	0.2
BNT	1.24	10	ePn	15	01.80	-0.2
IZI	1.85	49	ePn	15	15.00	4.0X

S.D. = 0.3 on 4 of 5 obs.

? OCT 11, 1990 12h 19m 02.24± 0.95s
39.124 N ± 8.1km 27.610 E ± 9.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM	0.77	201	ePg	19	17.30	-0.1
			iSg	19	29.80	
DST	0.92	58	iPn	19	20.10	0.2
EZN	1.22	306	ePn	19	25.00	0.1
BNT	1.25	11	ePn	19	25.30	-0.2

S.D. = 0.3 on 4 of 4 obs.

OCT 11, 1990 13h 57m 05.10± 0.51s
32.838 N ± 3.0km 48.212 E ± 2.1km
DEPTH = 45.9 ± 5.1 km

5.3mb (70 obs.) 4.7Msz (4 obs.)
WESTERN IRAN (347)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 22C
Centroid Location:
Origin Time 13:57: 3.5 0.9
Lat 32.41N 0.10 Lon 47.89E 0.09
Dep 15.0 BDY Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr= 3.56 0.32 Mtt=-2.21 0.50
Mff=-1.35 0.35 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf= 1.71 0.33
Principal Axes:
T Val= 3.56 Plg=90 Azm=180
N -0.01 0 126
P -3.55 0 36
Best Double Couple:Mo=3.5*10**16
NP1:Strike=128 Dip=45 Slip= 90
NP2: 308 45 90

KER	1.77	329	iPc	57	35.20	1.3
TEH	3.91	41	ePc	58	04.50	0.2
TAB	5.44	344	eP	58	26.00	0.1
DHR	6.72	165	eP	58	43.10	-0.7
			eS	00	56.00	
BBU	6.88	163	ePn	58	40.70	-5.3X
			eSn	59	55.90	
BRF	7.05	162	ePn	58	42.30	-6.0X
QASM	7.86	212	iPd	58	54.70	-5.0X
RYD	8.21	190	ePc	59	02.70	-1.8
			eS	01	46.00	
AFIF	9.76	208	eP	59	25.40	-0.6
MAIO	9.92	67	eP	59	27.00	-1.1
	0.8s		9.52nm		5.0mb	
HRI	10.48	276	eP	59	40.50	4.8X
ZNT	11.14	270	eP	59	44.80	0.1
BGIO	11.17	268	eP	59	45.40	0.4
AYN	11.21	253	eP	59	42.00	-3.6X
HQL	11.83	256	eP	59	51.00	-2.9
BADA	12.16	253	eP	59	55.00	-3.2X
CSS	12.55	284	eP	00	05.20	1.7
BBTK	14.27	304	eP	00	27.00	0.7
KAS	14.32	311	eP	00	27.50	0.7
HLW	14.72	263	eP	00	32.00	0.0
			eS	03	17.00	
BCK	15.13	293	eP	00	37.00	-0.5
ABHA	15.33	200	ePd	00	42.70	2.3
KMTA	15.38	200	eP	00	40.10	-0.8
SRAT	15.42	198	eP	00	41.30	-0.2
ALT	15.91	298	iP	00	47.90	0.5
AMAN	16.09	240	eP	00	51.50	1.8
KHL	16.15	295	eP	00	50.20	-0.3
QUE	16.20	94	eP	00	51.60	0.3
			e	04	03.60	
			e	13	03.30	
AKSR	16.21	239	eP	00	52.00	0.8
ANMR	16.53	240	eP	00	56.00	0.7
HRT	16.83	304	eP	00	59.00	0.0
YLV	16.94	302	iP	01	02.20	1.8
GBZT	16.97	303	eP	01	00.00	-0.7
DST	17.17	299	iP	01	04.00	0.8
CTT	17.82	303	eP	01	08.70	-2.6
IZM	17.90	294	eP	01	10.00	-2.3
NPS	18.88	284	ePn	01	24.00	-0.3
EZN	18.94	298	eP	01	23.00	-1.9
PSN	19.05	310	iPd	01	27.00	0.8
CFR	19.81	314	ePc	01	33.50	-1.0
RDO	19.88	301	ePn	01	35.00	-0.2
VAM	20.03	284	ePn	01	36.60	-0.3
KDZ	20.12	302	iPc	01	38.00	0.2
DIM	20.17	304	iPc	01	38.00	-0.3
RZN	20.63	302	iPc	01	43.00	-0.3
PVL	20.73	307	iPc	01	45.00	1.0
VRI	21.02	314	ePc	01	46.50	-0.5
CLI	21.05	317	ePd	01	49.00	1.6
VLI	21.10	288	ePn	01	46.00	-1.9
NEO	21.17	295	ePn	01	48.20	-0.4
PLG	21.21	298	ePn	01	48.40	-0.6
IAS	21.26	318	eP	01	50.00	0.7
PGB	21.29	304	iPc	01	50.00	0.2
MLR	21.31	313	ePc	01	50.00	-0.1
MMB	21.31	301	iPc	01	50.00	0.0
CMP	21.77	311	iPc	01	57.00	2.4
KKB	21.05	302	iPc	01	55.00	-0.4
DRA	22.02	309	ePd	01	59.00	2.0
COZ	22.24	311	eP	02	00.50	1.1

11d 14h

TNR		22.43	312	ePd	02	02.00	0.9				e	05	04.00		ENN		35.67	313	ePd	04	01.50	0.9
SKO		23.06	301	iPd	02	07.70	0.4	CTI		30.88	306	P	03	18.50	-0.9			1.0s		50.00nm			5.4mb
		1.1s		249.00nm			5.6mb	WET		30.90	312	iPc	03	18.50	-1.0	WIT		35.77	316	eP	04	03.00	1.6
	Z	14s		1.11um			4.5MszX	MME		31.21	302	P	03	23.50	1.0	LBF		36.26	306	iPc	04	04.90	-0.8
	N	14s		1.03um				WATA		31.23	308	iPc	03	21.60	-0.9			1.3s		39.70nm			5.2mb
	E	14s		1.05um				BDI		31.27	302	P	03	22.60	-0.1	SMF		36.32	306	iPc	04	05.70	-0.5
				i	02	09.70		PII		31.27	301	P	03	22.50	-0.2	DOU		36.35	311	P	04	06.40	0.0
				iS	06	18.00		HYB		31.33	112	eP	03	23.50	0.0	LOR		36.38	307	iPc	04	05.60	-1.1
				i	06	31.00				1.0s		50.00nm			5.2mb			1.0s		32.00nm			5.2mb
				e	06	40.00		SQTA		31.44	308	iPc	03	23.60	-0.7		Z	20s		0.22um			3.9MszX
				LR	12	39.00				1.5s		60.10nm			5.2mb	PLDF		36.40	304	P	04	06.20	-0.8
LSK		23.31	296	iPc	02	10.20	0.4					i	03	27.10		SSF		36.59	306	iPc	04	07.80	-0.6
KSH		23.32	66	iPc	02	13.00	3.0X					e	06	17.00				1.2s		86.30nm			5.5mb
	N	13s		3.90um								i	08	30.10		L8L		36.60	303	P	04	08.29	-0.2
OHR		23.34	299	iPc	02	10.10	0.1					i	08	38.00		LSA		36.65	83	Pc	04	10.20	0.5
		1.2s		71.00nm			5.0mb	OGA		31.48	307	eP	03	24.70	-0.1	AVF		36.66	306	iPc	04	08.40	-0.7
				i	02	12.40				1.3s		52.00nm			5.2mb			1.2s		80.35nm			5.5mb
SRN		23.72	295	iP	02	13.70	0.1	SAL		31.57	305	P	03	26.00	0.8	AGO		36.75	304	P	04	09.34	-0.5
KKS		23.83	301	eP	02	16.00	1.3	CLL		31.58	316	iPc	03	24.70	-0.6	PYM		36.81	304	P	04	09.57	-0.8
BMR		23.85	316	ePd	02	18.00	3.2X			1.3s		50.00nm			5.2mb	SOD		36.81	346	iP	04	10.20	0.2
BERA		23.89	297	eP	02	15.60	0.3	FUR		31.64	310	iPc	03	25.50	-0.4	GRC		36.91	307	P	04	10.92	-0.2
TIR		24.07	299	eP	02	19.00	1.9			1.0s		131.00nm			5.7mb	BGF		36.99	305	eP	04	11.20	-0.6
BZS		24.11	310	eP	02	07.50	-9.9X	NUR		31.70	338	iP	03	25.80	-0.4			1.0s		29.00nm			5.1mb
LACI		24.25	299	P	02	19.90	1.2			0.7s		53.40nm			5.5mb	NB2		36.99	331	P	04	10.80	-0.9
IVA		24.40	302	eP	02	21.50	1.2	OSS		32.04	307	ePc	03	29.70	0.1			1.1s		41.00nm			5.3mb
SDA		24.48	300	eP	02	21.30	0.3	GRF		32.10	313	iPc	03	30.00	0.0	MAF		37.15	305	eP	04	13.00	-0.2
BEO		24.59	307	iP	02	22.50	0.5			1.3s		129.00nm			5.6mb			1.2s		56.55nm			5.4mb
ULC		24.65	300	eP	02	22.90	0.2		Z	21s		0.20um			3.8MszX	TCF		37.40	305	iPc	04	15.10	-0.2
TTG		24.75	301	eP	02	24.00	0.5					ec	03	31.80				1.2s		50.60nm			5.3mb
PLE		24.87	303	eP	02	26.50	1.6	MDI		32.16	305	P	03	30.50	0.1	CAF		37.42	303	eP	04	15.20	-0.3
BDV		25.03	301	eP	02	26.30	0.0	BOB		32.18	303	Pd	03	31.70	0.9			1.0s		20.00nm			5.0mb
NDI		25.23	92	iPc	02	28.80	0.5	BSD		32.22	324	iPd	03	29.10	-1.7	RJF		37.83	303	eP	04	18.80	-0.1
HCY		25.30	301	eP	02	28.50	-0.3			0.7s		70.40nm			5.6mb			1.0s		22.00nm			5.0mb
LCI		25.34	296	P	02	27.00	-2.2	PGF		32.26	299	iPc	03	31.50	0.0		Z	20s		0.17um			3.9MszX
BRY		25.37	302	eP	02	29.60	0.0			1.1s		80.60nm			5.5mb	LSF		37.87	305	eP	04	18.50	-0.7
PSZ		26.12	314	iP	02	37.80	1.3	VDL		32.45	306	ePc	03	33.00	-0.3			1.3s		25.25nm			5.0mb
ROI		26.31	294	P	02	43.10	4.8X	WMO		32.57	59	iPc	03	35.00	0.8	LPO		38.04	302	eP	04	20.30	-0.3
GRI		26.37	292	P	02	40.04	1.2			1.2s		40.00nm			5.1mb			1.0s		10.00nm			4.7mb
		1.0s		271.80nm			5.8mb		Z	24s		0.60um			4.2MszX	LFF		38.36	303	eP	04	23.10	-0.3
SPC		26.48	316	iP	02	39.80	-0.1					eS	08	48.00				1.0s		24.00nm			5.0mb
BUD		26.48	312	iPc	02	40.50	0.8	SAX		32.69	308	ePc	03	34.70	-0.7	RGS		38.39	333	eP	04	23.20	-0.1
TDS		26.50	294	P	02	41.50	1.6	PCP		32.79	303	P	03	35.00	-1.0	SHL		38.59	89	iP	04	24.90	-0.8
CSI		26.54	294	P	02	41.20	0.8	TMA		32.79	305	ePc	03	35.20	-1.0					iS	10	20.00	
CZI		26.62	293	P	02	42.10	1.1	GBA		32.81	119	P	03	36.80	0.5	KEV		38.82	348	eP	04	27.00	0.2
HVAR		26.93	302	iPc	02	42.40	-1.4	VAI		32.82	305	P	03	35.50	-0.7	MFF		39.05	305	iPc	04	28.30	-0.8
MSI		27.03	291	P	02	47.00	2.2	LLS		32.84	307	ePc	03	35.80	-0.9			1.0s		32.00nm			5.1mb
POO		27.05	115	iPc	02	50.50	5.3X	CKI		32.96	302	Pd	03	36.80	-0.7	LDF		39.18	308	iPc	04	29.20	-0.9
SRO		27.05	312	iP	02	45.80	0.9	FIN		32.99	302	P	03	36.13	-1.6			1.0s		20.00nm			4.9mb
KRA		27.06	318	iPc	02	44.50	-0.5	SUF		33.02	341	iP	03	37.60	-0.1	FLN		39.43	309	iPc	04	31.40	-0.8
		0.9s		113.00nm			5.5mb			0.8s		55.00nm			5.5mb			1.0s		42.00nm			5.2mb
	Z	16s		1.10um			4.5MszX	IMI		33.19	301	P	03	38.49	-1.0		Z	20s		0.20um			3.9MszX
				i	02	48.00		ROB		33.24	302	P	03	38.80	-1.2	BCAO		39.58	231	iPc	04	33.50	-0.3
MGR		27.14	295	Pd	02	46.50	0.7	ORX		33.33	304	P	03	42.49	1.7			0.5s		33.00nm			5.4mb
SGO		27.37	296	P	02	48.90	1.1	SLE		33.36	308	ePc	03	40.20	-0.7					ic	07	26.00	
BSS		27.77	296	P	02	52.10	0.6	ZLA		33.37	308	ePc	03	40.60	-0.5					iS	10	44.00	
ZAG		27.89	307	iP	02	53.50	0.9	MMK		33.41	305	ePc	03	41.10	-0.5					ic	14	16.00	
PTJ		27.94	307	iPc	02	53.20	0.1	SBF		33.51	301	iPc	03	42.30	0.0					ed	16	25.50	
ZST		27.95	312	eP	02	52.80	-0.3			1.0s		108.00nm			5.7mb	GRR		39.65	308	iPc	04	33.10	-0.9
				e	04	08.10		ENR		33.56	302	P	03	41.98	-0.8			1.1s		90.35nm			5.5mb
SOP		28.11	311	iPc	02	55.30	0.8	STV		33.63	302	P	03	41.26	-2.1	LPF		39.75	307	iPc	04	33.80	-1.0
DUI		28.13	298	P	02	55.70	0.8	DOI		33.71	302	P	03	42.50	-1.6			1.1s		65.95nm			5.4mb
VBY		28.30	306	e(P)	03	00.00	3.7X	UPP		33.73	332	iP	03	43.10	-0.8	ECHE		39.84	294	eP	04	38.00	2.2
RFI		28.44	297	P	02	58.29	0.8	RSP		33.77	303	P	03	42.49	-2.2	EVIA		41.15	293	eP	04	48.00	1.4
		1.8s		2531.10nm			6.6mb X	DIX		33.79	305	ePc	03	44.40	-0.6	ENIJ		41.18	290	eP	04	47.20	0.5
VKA		28.46	312	iPd	02	58.00	0.3	PZZ		33.81	302	P	03	43.21	-1.8	GTA		41.73	66	iPc	04	52.70	1.3
SDI		28.61	298	P	02	59.20	0.0	LSD		33.88	304	P	03	45.67	-0.1			1.4s		100.00nm			5.4mb
CEY		28.92	306	ePc	03	02.50	0.6	TNS		33.97	313	ePc	03	46.20	0.0		Z	18s		0.90um			4.7Msz
AZI		28.93	298	Pd	03	03.10	1.2	RRL		34.08	303	P	03	46.80	-0.6		E	13s		0.50um			
LJU		28.93	307	eP	03	02.50	0.6	EMS		34.12	305	ePc	03	47.30	-0.4					sP	04	59.00	
VOY		29.36	307	ePc	03	05.80	-0.1	LPG		34.17	304	iPc	03	47.70	-0.6					PP	06	34.40	
TRI		29.37	306	eP	03	05.40	-0.4			1.0s		78.15nm			5.6mb	EKA		41.99	318	Pd	04	53.10	-0.1
ARV		29.50	301	P	03	07.50	0.4	BNI		34.17	303	P	03	47.60	-0.5			1.3s		57.90nm			5.1mb
MNS		29.54	299	P	03	07.60	0.2	LPL		34.19	304	iPc	03	47.70	-0.6	GUD		42.16	296	iPc	04	55.60	0.7
ASS		29.64	301	Pd	03	09.10	0.7	CDF		34.29	309	eP	03	47.70	-1.3	TOL		42.17	295	iPd	04	54.50	-0.3
PRU		30.18	315	eP	03	12.70	-0.3			1.2s		17.85nm			4.9mb			1.2s		93.75nm			5.4mb
				e	03	15.00		BSF		34.50	308	eP	03	49.90	-0.9	ECOG		42.19	291	eP	04	55.40	0.3
CRE		30.23	301	P	03	14.20	0.5			1.1s		34.20nm			5.2mb	EBAN		42.21	292	eP	04	56.20	1.0
FVI		30.25	307	P	03	13.00	-0.6	HAU		34.82	308	eP	03	52.50	-1.0	EHOR		43.41	292	eP	05	05.60	0.7
VVI		30.34	306	P	03	14.00	-0.5			1.0s		26.00nm			5.1mb	ETA		43.42	314	eP	05	05.10	0.3
SFI		30.35	302	P	03	16.10	1.6		Z	20s		0.20um			3.9MszX	ECP		43.48	313	eP	05	04.80	-0.4
PGD		30.44	302	P	03	17.00	1.4	KOD		35.09	123	eP	03	56.60	0.2			0.8s		142.00nm			5.8mb
KHC		30.47	313	iPc	03	15.10	-0.5	WTS		35.45	315	eP	04	00.00	1.3	ECB		43.74	313	eP	05	07.80	0.4
		1.2s		22.00nm			4.8mb			0.8s		60.00nm			5.6mb			1.1s		109.00nm			5.5mb
				e	03	47.80		HFS		35.47	331	eP	03	58.00	-0.8	EJIF		43.84	290	eP	05	08.60	0.1
BHG		30.48	310	eP	03	15.80	0.1			0.8s		105.80nm			5.8mb	NKM		44.00	289	eP	05	10.50	0.7
BRG		30.87	316	iP	03	18.00	-1.1	NAI		35.60	200	iP	04	05.50	4.9X					i	05	12.00	
		1.1s		30.00nm			5.0mb			1.0s		20.00nm			5.0mb	LZH		45.46	70	iPc	05	22.50	0.8

11d 14h

		2.0s	220.00nm			5.7mb
	Z	22s	1.50um			4.9Msz
			PcP	06	57.00	
			ePP	07	12.00	
			eS	12	06.00	
AVE		46.13	287 eP	05	19.00	-7.8X
CD2		46.75	77 P	05	31.70	0.0
CHG		47.33	94 iPc	05	36.00	-0.5
		1.0s	27.50nm			5.2mb
KMI		47.88	84 Pc	05	40.00	-0.9
		1.8s	180.00nm			5.8mb
			PcP	07	09.50	
			eS	12	38.00	
BDT		48.12	96 eP	05	43.80	1.2
BTO		49.25	62 P	05	52.00	0.8
	N	13s	0.40um			
	E	16s	0.50um			
			esP	06	00.00	
XAN		50.01	71 Pc	05	56.50	-0.5
HHC		50.35	62 Pd	06	00.60	1.0
GYA		50.65	81 iPc	06	01.20	-0.9
			S	13	16.00	
NNT		51.08	101 eP	06	01.70	-3.5X
TIY		51.75	65 iPd	06	10.60	0.4
	Z	24s	1.00um			4.8MszX
	N	22s	1.30um			
			S	13	34.50	
KRI		52.49	203 iPd	06	20.00	4.0X
DAG		53.06	345 iPd	06	18.90	-0.5
		0.9s	60.22nm			5.6mb
BJI		53.96	62 eP	06	26.00	-0.4
		1.0s	24.00nm			5.2mb
	Z	23s	0.62um			4.6MszX
			PcP	07	31.00	
LKO		54.60	258 Pc	06	31.12	-0.4
		0.8s	26.00nm			5.3mb
SNG		54.79	106 eP	06	31.60	-1.2
WHN		55.48	73 Pd	06	38.00	0.4
		1.2s	40.00nm			5.3mb
			sP	06	49.50	
KIC		55.70	254 P	06	38.94	-0.5
		0.9s	16.50nm			5.1mb
TIC		55.76	254 P	06	39.20	-0.7
TIA		55.78	66 P	06	39.80	0.1
CIR		55.86	199 iPd	06	43.90	3.5X
BUL		55.91	202 iPd	06	42.90	1.9
LIC		56.01	254 P	06	41.12	-0.5
		0.7s	14.00nm			5.1mb
	Z	20s	0.40um			4.5Msz
OIZ		56.40	88 P	06	44.00	-0.5
IPM		56.63	108 ePd	06	46.00	-0.1
		1.1s	40.90nm			5.4mb
NJ2		58.54	70 Pc	06	59.00	-0.2
		1.0s	50.00nm			5.6mb
SNY		58.83	58 eP	07	00.90	-0.2
CN2		59.54	55 Pc	07	05.40	-0.6
		1.0s	20.00nm			5.2mb
	Z	16s	0.60um			4.8MszX
	N	12s	0.30um			
	E	12s	0.30um			
			eS	15	14.00	
SSE		60.74	70 Pc	07	12.50	-1.9
		1.6s	80.00nm			5.6mb
	Z	18s	0.60um			4.8Msz
SLR		61.26	201 iPc	07	19.00	0.9
		1.4s	53.49nm			5.5mb
MBC		70.90	357 ePc	08	19.00	0.2
		1.0s	54.00nm			5.5mb
MAT		71.34	58 (P)	08	21.00	-1.2
FRB		71.65	335 eP	08	24.00	0.5
		0.9s	73.00nm			5.6mb
INK		79.16	1 eP	09	06.00	0.0
ANM		79.40	14 e(P)	09	07.60	0.1
IMA		79.98	9 ePc	09	11.50	0.8
		1.2s	49.10nm			5.3mb
FBA		81.78	7 eP	09	21.10	1.1
TTA		82.61	11 eP	09	25.50	1.0
YKA		84.00	352 eP	09	31.40	-0.1
		1.1s	19.70nm			5.1mb
TOA		84.68	7 eP	09	36.80	1.8
PMR		84.86	8 eP	09	36.70	1.0
		1.4s	76.80nm			5.6mb
MBL		86.90	117 eP	09	47.00	0.5
MEKA		89.24	123 eP	09	57.90	0.3
SES		95.12	347 eP	10	25.00	0.4
WB5		97.43	109 eP	10	35.00	-0.3
TNP		108.15	348 Pdiff	11	30.00	6.8X

ZOBO		120.60	270 PKP	15	55.00	0.4
SPA		122.66	180 iPKPd	15	52.20	-4.3X
		1.7s	39.06nm			
		S.D. = 0.9	on 260 of 279 obs.			

---

* OCT 11, 1990 14h 00m 58.53± 1.73s
38.179 N ±24.1km 26.236 E ±12.7km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

DST		2.35	52 iPn	01	37.00	-0.8
EDC		2.51	30 ePn	01	40.90	0.9
ITM		3.56	255 ePn	01	55.00	0.0
KZN		4.07	303 ePn	02	01.50	-0.7
VLS		4.45	272 ePn	02	08.00	0.4
SRN		5.14	291 iPn	02	23.30	5.9X
KEK		5.25	289 ePn	02	15.50	-3.4X
		S.D. = 1.0	on 5 of 7 obs.			

OCT 11, 1990 14h 42m 02.38± 0.63s
21.232 N ± 8.8km 92.433 E ± 7.2km
DEPTH = 33.0km (normal)
4.0mb (4 obs.)
BURMA-BANGLADESH BORDER REGION (295)

SHL		4.34	353 eP	43	09.50	1.5
			iS	43	50.00	
CHG		6.58	110 iPd	43	39.00	-0.4
		0.9s	13.24nm			4.7mb
BDT		7.37	121 eP	43	52.00	1.6
LSA		8.51	352 P	44	07.00	0.3
HYB		13.64	256 eP	45	13.50	-2.5
CD2		14.01	44 P	45	27.50	6.8X
GYA		14.02	65 P	45	27.60	6.6X
GBA		16.19	244 P	45	55.00	5.9X
		0.3s	1.60nm			3.6mb
POO		17.68	265 eP	46	07.50	-0.4
LZH		17.85	32 eP	46	10.50	0.6
		1.5s	14.00nm			3.9mb
			pP	46	20.50	
			sP	46	26.50	
KOD		18.07	235 iPd	46	15.00	2.0
GTA		19.19	18 eP	46	33.60	7.3X
XAN		19.36	45 P	46	26.00	-2.3
WHN		21.76	60 eP	46	53.00	-0.1
WMO		22.87	351 eP	47	05.20	1.1
TIY		23.86	42 eP	47	13.20	-0.5
NJ2		25.89	60 Pc	47	33.00	-0.1
TIA		26.20	50 eP	47	35.50	-0.4
SSE		27.54	63 eP	47	47.50	-0.7
BJI		27.58	42 eP	47	48.50	0.0
		1.0s	6.00nm			4.2mb
		S.D. = 1.3	on 16 of 20 obs.			

? OCT 11, 1990 14h 57m 36.32± 1.52s
20.709 S ±63.2km 173.317 W ±29.6km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
TONGA ISLANDS (173)

DZM		18.90	262 iPc	01	59.00	2.2
ASPA		48.74	256 iPd	06	19.60	-0.5
		1.6s	6.00nm			4.4mb
WB5		48.89	261 eP	06	20.10	-1.2
MTN		53.55	269 eP	06	55.10	-1.5
MBL		61.99	256 eP	07	55.20	-0.7
NANU		65.57	254 eP	08	20.20	0.9
ALQ		84.16	49 eP	10	06.50	0.6
		1.1s	3.80nm			4.5mb
ANMO		84.16	49 P	10	06.50	0.6
FBA		87.57	11 P	10	21.20	-0.6
CHTO		94.46	288 P	10	55.00	0.2
SLB		115.35	84 ePKP	16	30.02	12.8X
CLL		149.06	352 iPKPd	17	23.60	5.4X
BRG		149.36	351 ePKP	17	24.40	5.7X
PRU		150.12	350 ePKP	17	26.50	6.7X
KHC		151.11	351 ePKP	17	28.50	7.1X
		S.D. = 1.3	on 10 of 15 obs.			

OCT 11, 1990 15h 14m 45.05± 0.09s
18.726 N ± 1.8km 69.376 W ± 1.7km
DEPTH = 100.8km (18 depth phases)
5.4mb (78 obs.)
DOMINICAN REPUBLIC REGION (88)
MD 5.2 (TRN). Felt strongly in eastern Dominicon Republic. Also felt throughout Puerto Rico.

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 28C
Centroid Location:
Origin Time 15:14:48.7 0.7
Lat 18.56N 0.07 Lon 69.70W 0.06
Dep 101.5 5.4 Half-duration 1.7
Moment Tensor; Scale 10**16 Nm
Mrr= 1.70 0.38 Mtt= 2.46 0.77
Mff=-4.16 0.87 Mrt= 3.34 0.42
Mrf=-5.50 0.49 Mtf=-5.99 0.73
Principal Axes:
T Val= 10.08 Plg=36 Azm= 38
N -1.28 47 179
P -8.80 20 292
Best Double Couple:Mo=9.4**16
NP1:Strike= 70 Dip=49 Slip= 167
NP2: 168 80 42

PORP		2.69	104 P	15	29.00	1.7
CSB		3.09	98 P	15	33.90	1.1
SJG		3.12	101 iP	15	34.00	0.7
LPR		3.35	97 P	15	36.50	0.0
CPD		3.36	101 P	15	37.00	0.5
SKI		6.46	101 eP	16	19.00	-0.3
			eS	17	33.00	
NEV		6.67	103 eP	16	22.00	-0.1
CPB		7.26	97 eP	16	29.86	-0.3
BPA		7.35	102 eP	16	30.02	-1.5
			eS	17	52.02	
FISA		7.42	180 iPd	16	33.00	0.6
			eS	17	59.00	
MORO		7.87	172 iPc	16	38.50	-0.2
			iS	18	05.00	
BBL		8.19	112 eP	16	43.00	0.0
			eTT	24	00.00	
CAR		8.51	164 iPc	16	47.50	0.1
			iS	18	14.00	
GUAC		8.72	166 iPd	16	50.00	-0.4
			eS	18	19.00	
FDF		8.82	116 eP	16	51.60	0.0
		0.1s	4.10nm			5.0mb
TDV		8.90	183 iPnc	16	53.10	0.5
			iSn	18	26.20	
OLLA		9.01	164 iPd	16	54.50	0.3
			iS	18	26.00	
SLB		9.37	120 eP	16	58.10	-0.9
			eS	18	30.60	
			eTT	25	31.00	
SVB		9.51	124 eP	17	00.45	-0.4
			eTT	25	40.00	
SVV		9.51	123 eP	16	59.50	-1.4
			eTT	25	40.00	
CUM		9.63	148 eP	17	03.00	0.5
CEOS		9.69	174 iPc	17	03.00	-0.4
			eS	18	45.00	
SDV		9.86	187 ePn	17	06.20	0.5
			iSn	18	18.90	
GRW		9.89	130 eP	17	05.09	-1.0
			eS	19	00.29	
TCE		10.86	136 eP	17	19.62	0.6
TRN		11.13	135 eP	17	23.16	0.6
			eS	19	18.66	
BOT		11.24	131 eP	17	26.23	2.2
TPP		11.34	136 eP	17	26.83	1.5
TBH		11.48	134 eP	17	28.05	0.9
			eS	19	27.55	
HBF		17.25	327 P	18	40.90	-0.1
SGS		17.52	327 P	18	43.60	-0.7
JSC		18.76	328 P	18	57.60	-1.3
PRM		19.19	325 eP	19	02.90	-0.6
COTA		20.28	207 P	19	16.00	0.4
CAYA		20.37	205 P	19	18.00	1.6
NA2		20.67	341 P	19	18.50	-0.2
YANA		20.79	207 P+	19	22.00	1.3
BLA		20.81	334 eP	19	20.50	0.3
		0.7s	75.34nm			5.1mb
QTO		20.85	207 eP	19	22.00	0.8
TKL		21.13	326 eP	19	23.60	0.2
VC1		21.19	206 P	19	26.00	1.3
GBTN		21.37	325 P	19	25.60	-0.2
GMTN		22.47	350 iP	19	38.80	2.3
PNJ		22.48	350 iP	19	39.00	2.3
			PcP	23	37.30	
TBR		22.72	350 P	19	39.70	0.7
CLE		24.95	338 iP	20	03.50	3.0X
ELC		25.38	321 P	20	04.80	0.3

```
BNH    25.84 357 P      20 09.00   0.4
RSNY   26.11 352 P      20 11.30   0.2
       1.2s    58.31nm          5.0mb
MIM    26.44   1 P      20 14.50   0.4
FVM    26.56 321 P      20 15.00  -0.3
TUL    28.91 312 iPd    20 36.50  -0.1
       1.1s   151.80nm          5.5mb
     Z 20s      0.70um          4.3Msz
               LR       29 00.00
SIO    29.20 311 eP     20 38.90  -0.3
MEO    30.45 308 iPd    20 49.50  -0.7
RRO    30.56 309 ePd    20 52.00   0.8
               e        21 15.40 105km
ACO    31.67 311 iP     21 00.80  -0.2
       0.9s   182.20nm          5.8mb
ZOBO   34.80 178 P      21 27.00  -1.7
     Z 20s      0.23um          3.9Msz
               LR       58 20.00
SIV    35.45 166 iPc    21 31.20  -2.4
CCH    36.02 175 P      21 39.50   0.8
               i        21 52.50  49kmX
ALO    36.58 304 ePd    21 43.00  -0.2
       0.9s    39.92nm          5.3mb
               epP      22 06.00  98km
               esP      22 17.00
ANMO   36.58 304 P      21 44.00   0.8
       0.9s    44.12nm          5.4mb
               pP       22 06.00  93km
GLD    37.30 312 P      21 50.00   0.8
       1.2s   115.15nm          5.7mb
               pP       22 13.50 100km
GOL    37.38 312 P      21 50.00   0.0
       0.8s    56.55nm          5.5mb
SOB1   39.49 132 eP     22 06.30  -1.3
               e        22 30.90 106km
BAO    40.11 147 eP     22 12.00  -0.7
CAI    40.49 125 iPd    22 15.10  -0.7
DUG    42.92 309 P      22 36.00   0.4
       0.9s    48.87nm          5.3mb
               pP       22 59.30  99km
GLA    42.98 299 eP     22 37.00   1.0
FFC    43.69 333 iPc    22 40.20  -1.2
       0.6s    28.00nm          5.3mb
TPC    44.14 300 eP     22 46.00   0.6
BAR    44.48 298 eP     22 48.00  -0.1
LRM    44.59 317 eP     22 49.00  -0.1
PLM    44.71 299 eP     22 51.00   0.9
GSC    44.93 301 eP     22 52.00   0.3
FRB    44.99   1 ePc    22 51.40  -0.2
       0.8s    67.00nm          5.5mb
RVR    45.21 300 eP     22 54.00   0.1
CLC    45.64 302 eP     22 58.00   0.7
SBB    45.67 300 eP     22 58.00   0.4
SES    45.71 324 eP     22 58.00   0.4
       0.7s    51.00nm          5.5mb
               pP       23 22.00 102km
TNP    45.74 305 P      22 59.00   0.8
       1.0s    50.00nm          5.3mb
MWC    45.80 300 eP     22 59.00   0.2
PAS    45.89 300 eP     22 59.00  -0.2
ISA    46.33 302 eP     23 04.00   1.3
VAO    46.89 151 eP     23 06.30  -1.0
SYP    47.42 300 eP     23 12.00   0.6
FRI    47.50 303 ePd    23 11.30  -0.6
               epP      23 23.40  44kmX
               e        23 35.30
               e        23 48.00
BMA    47.98 148 (P)    23 15.00  -0.7
PRI    48.15 302 eP     23 17.00  -0.1
CMB    48.19 305 ePd    23 17.30   0.0
               epP      23 30.10  47kmX
EDM    48.31 326 eP     23 17.50  -0.4
       0.6s    45.00nm          5.5mb
               pP       23 41.50 101km
LLA    48.44 303 eP     23 19.20   0.1
NEW    48.45 319 P      23 18.80  -0.3
       0.9s    96.49nm          5.7mb
               pP       23 41.00  92km
PRS    48.74 302 eP     23 21.50   0.0
SAO    48.85 303 eP     23 22.50   0.2
MHC    49.08 303 eP     23 25.10   0.9
               epP      23 36.80  42kmX
ORV    49.29 306 eP     23 25.80   0.2
               epP      23 36.30  36kmX
MIN    49.50 307 eP     23 26.50  -0.9
BKS    49.62 304 eP     23 28.00  -0.2
       0.8s   109.00nm          5.9mb

BRK    49.64 304 eP     23 28.70   0.4
PCC    49.69 304 eP     23 29.10   0.4
WDC    50.24 308 eP     23 30.20  -2.7
PNT    50.36 319 eP     23 34.00   0.3
       0.5s    12.00nm          5.2mb
MDZ    51.32 179 eP     23 40.00  -1.1
FHC    51.36 308 eP     23 41.50   0.1
PEL    51.59 181 iPd    23 41.50  -1.6
CHCH   52.38 181 eP     23 58.80   9.8X
LNV    52.42 182 eP     23 47.00  -2.2
PGC    52.58 317 eP     23 49.00  -1.4
YKA    53.66 336 eP     23 56.60  -1.5
       0.6s    24.80nm          5.4mb
EVAL   57.32  57 iPc    24 25.20   0.3
EPLA   57.90  54 iPc    24 28.80  -0.1
EJIF   58.34  58 eP     24 33.30   1.3
EHOR   58.51  57 iPc    24 33.10  -0.1
ECB    58.70  40 eP     24 33.80  -0.4
       0.8s    91.00nm          5.9mb
ECP    58.92  40 eP     24 35.30  -0.4
ETA    59.10  39 eP     24 36.70  -0.3
       1.0s   104.00nm          5.9mb
GUD    59.38  53 iPc    24 39.40   0.0
TOL    59.46  54 iPc    24 39.00  -0.7
       1.1s   151.90nm          6.0mb
EBAN   59.66  56 iPc    24 41.00  -0.2
ECOG   59.85  57 iPd    24 43.10   0.5
AFC    59.87  57 iPc    24 43.40   0.6
BST    59.88  45 P      24 42.49   0.1
ECRI   60.65  51 iPc    24 48.30   0.4
EVIA   60.66  56 iPc    24 48.30   0.2
EAB    60.78  36 ePc    24 47.60  -0.8
       0.7s    67.00nm          5.8mb
ENIJ   60.94  58 iPc    24 49.90   0.0
ETOR   60.98  53 iPc    24 50.70   0.5
ELO    61.17  35 ePc    24 50.20  -0.9
EBH    61.25  36 ePc    24 50.60  -1.0
       0.9s    44.00nm          5.5mb
EKA    61.30  37 Pd     24 51.70  -0.2
       0.8s    45.90nm          5.6mb
EBL    61.43  36 ePc    24 52.00  -0.8
       0.7s    39.00nm          5.5mb
EDU    61.57  35 ePc    24 53.20  -0.5
       0.7s    70.00nm          5.8mb
ESY    61.69  36 ePc    24 53.80  -0.8
       0.7s    46.00nm          5.6mb
BOH    61.76  51 P      24 55.69   0.3
ELYF   61.77  51 P      24 55.08  -0.3
ECHE   61.83  55 eP     24 56.40   0.5
LPF    61.88  45 iPc    24 55.80  -0.1
MADF   61.90  51 P      24 56.12  -0.1
ISSF   61.92  51 P      24 57.01   0.5
ATE    61.98  51 P      24 56.90   0.1
GRR    62.02  45 iPc    24 57.00   0.1
LHE    62.04  51 P      24 57.40   0.1
ESCF   62.08  51 P      24 57.64   0.2
JAU    62.23  51 P      24 58.98   0.4
LKO    62.26  89 Pc     24 58.42  -0.6
       0.8s    86.00nm          5.8mb
FLN    62.29  44 iPc    24 58.80   0.2
       0.6s    70.45nm          5.8mb
     Z 20s      0.10um          4.0Msz
MFF    62.43  47 iPc    24 59.90   0.3
LDF    62.52  44 iPc    25 00.40   0.3
EPF    62.75  51 iPc    25 02.50   0.6
       0.8s   104.95nm          5.8mb
MBC    62.89 348 ePc    25 01.60  -0.6
       0.5s    14.00nm          5.2mb
LFF    63.03  49 iPc    25 03.80   0.2
       0.8s    85.95nm          5.7mb
INK    63.26 338 eP     25 03.00  -1.7
               pP       25 39.00 151kmX
DAG    63.32  11 iPd    25 04.00  -1.0
       0.7s    86.76nm          5.8mb
               ipP      25 33.00 118kmX
LPO    63.35  49 iPc    25 05.70   0.0
       0.8s    59.10nm          5.6mb
RJF    63.58  48 iPc    25 07.30   0.1
       0.8s    85.95nm          5.7mb
     Z 20s      0.10um          4.0Msz
LSF    63.58  47 iPc    25 07.10  -0.2
TIC    63.63  92 Pc     25 06.84  -1.2
       1.0s    53.00nm          5.4mb
LIC    63.75  92 Pc     25 07.76  -1.1
       0.9s    58.50nm          5.5mb
CAF    63.97  49 iPc    25 09.80   0.0
KIC    63.98  92 Pc     25 09.52  -0.8

       0.7s    72.00nm          5.7mb
TCF    64.06  47 iPc    25 10.30  -0.1
MAF    64.30  47 iPc    25 11.80  -0.2
       1.0s    42.00nm          5.3mb
BGF    64.49  47 iPc    25 12.80  -0.4
PYM    64.62  48 P      25 13.89  -0.2
ETER   64.63  51 iPc    25 14.80   0.7
GRC    64.64  46 P      25 13.83  -0.2
LBL    64.80  48 P      25 15.34   0.2
AVF    64.84  46 iPc    25 14.80  -0.6
SSF    64.94  46 iPc    25 15.60  -0.4
       1.0s    52.00nm          5.4mb
PLDF   65.04  47 P      25 16.23  -0.6
LOR    65.18  46 iPc    25 17.10  -0.5
       0.6s    70.45nm          5.8mb
     Z 20s      0.17um          4.3Msz
SMF    65.18  47 iPc    25 17.20  -0.4
LBF    65.26  46 iPc    25 17.60  -0.5
       0.8s    33.60nm          5.3mb
SNF    65.43  42 Pc     25 18.70  -0.3
DOU    65.63  43 Pc     25 19.70  -0.6
       0.8s    96.70nm          5.8mb
ENN    66.47  42 iPc    25 25.50  -0.2
       0.9s   104.00nm          5.8mb
               e        25 51.50 103km
VITF   66.58  45 P      25 26.09  -0.4
HAU    66.83  45 iPc    25 27.90  -0.3
       1.0s    44.00nm          5.3mb
     Z 20s      0.17um          4.3Msz
WTS    67.00  41 iPc    25 29.40   0.4
       0.7s   157.00nm          6.0mb
               e        25 55.00 101km
               e        26 05.00
LRG    67.12  50 iPc    25 30.20   0.2
       0.8s    26.85nm          5.2mb
BSF    67.14  45 P      25 29.38  -0.8
LOMF   67.19  46 P      25 30.14  -0.3
BNI    67.23  48 Pd     25 31.40   0.6
LPL    67.24  48 iPc    25 31.50   0.5
LMR    67.24  50 eP     25 30.60  -0.2
       1.0s    28.00nm          5.1mb
LPG    67.25  48 iPc    25 31.70   0.5
       0.8s    52.45nm          5.5mb
RRL    67.32  48 P      25 31.72   0.2
FRF    67.32  50 iPc    25 31.00  -0.3
       1.0s    56.00nm          5.4mb
EMS    67.34  47 ePc    25 31.60   0.0
ECH    67.37  45 P      25 31.20  -0.3
MOF    67.37  45 P      25 30.90  -0.7
CDF    67.44  45 P      25 31.46  -0.5
WLS    67.49  45 P      25 31.59  -0.7
ABH    67.54  43 eP     25 32.67   0.1
LSD    67.54  48 P      25 33.26   0.3
PZZ    67.57  49 P      25 33.36   0.3
GWF    67.63  44 P      25 33.11   0.0
RSP    67.63  48 P      25 34.08   0.7
DIX    67.67  47 ePc    25 34.40   0.6
DOI    67.68  49 Pd     25 34.10   0.5
STV    67.76  49 P      25 34.29   0.2
ENR    67.83  49 P      25 34.18  -0.3
SBF    67.87  49 iPc    25 34.70  -0.1
       0.8s    45.65nm          5.5mb
FEL    67.96  45 P      25 34.78  -0.6
MMK    68.06  47 ePc    25 37.10   1.0
TNS    68.10  43 ePc    25 31.40  -4.7X
ORO    68.11  48 P      25 36.00  -0.3
ORX    68.11  48 P      25 35.21  -1.1
ROB    68.14  49 P      25 36.34  -0.1
IMI    68.19  49 P      25 35.83  -0.9
ZLA    68.24  46 ePc    25 37.00   0.0
SLE    68.29  45 ePc    25 37.00  -0.3
FBA    68.30 333 eP     25 35.80  -1.1
FIN    68.39  49 P      25 36.85  -1.1
CKI    68.42  49 Pd     25 38.10   0.0
PCP    68.60  49 P      25 39.11  -0.2
VAI    68.64  47 P      25 39.20  -0.1
TMA    68.69  47 ePc    25 40.10   0.2
LLS    68.70  46 ePc    25 40.60   0.6
PMR    68.85 330 eP     25 39.80  -0.5
       0.7s    10.90nm          4.8mb
RGS    68.87  29 eP     25 40.60   0.2
SAX    68.91  46 ePc    25 41.80   0.4
VDL    69.06  47 ePc    25 42.80   0.6
PGF    69.14  51 iPc    25 42.40  -0.3
       0.8s    32.25nm          5.2mb
BOB    69.22  48 P      25 43.50   0.4
NB2    69.26  31 P      25 43.50   0.6
```

11d 15h

	0.8s	41.10nm		5.3mb		
MDI	69.30	47 P	25	43.00	-0.4	
OSS	69.51	46 ePc	25	45.30	0.4	
GRF	69.93	43 iPc	25	47.20	0.0	
	1.5s	79.00nm		5.3mb		
	Z 20s	0.30um		4.5Msz		
		e(pP)	26	24.00	152kmX	
KBS	70.07	12 eP	25	48.20	0.6	
OGA	70.09	46 eP	25	48.70	0.2	
	0.8s	53.00nm		5.4mb		
MOX	70.09	42 eP	25	48.00	-0.2	
	1.2s	21.00nm		4.8mb		
		e	26	25.00	152kmX	
BDI	70.12	49 P	25	47.00	-1.6	
FUR	70.12	45 iPc	25	48.70	0.3	
SOTA	70.17	46 iPc	25	49.10	0.2	
	0.5s	25.60nm		5.3mb		
		ipP	26	15.20	102km	
		isP	26	25.10		
HOF	70.29	42 iPc	25	49.20	-0.2	
	0.9s	16.00nm		4.8mb		
WATA	70.41	45 iPc	25	50.10	-0.3	
HFS	70.52	32 eP	25	50.20	-0.4	
	0.7s	23.90nm		5.1mb		
	Z 17s	0.14um		4.3MszX		
		LR	48	01.00		
CTI	70.61	47 P	25	51.00	-0.6	
IMA	70.75	335 eP	25	51.50	-0.6	
	0.5s	13.00nm		5.0mb		
		e	26	17.70	103km	
CLL	70.90	41 iPc	25	53.10	0.1	
	1.5s	50.00nm		5.1mb		
		i	26	29.90	151kmX	
PGD	70.95	49 P	25	52.50	-1.2	
SFI	71.03	49 P	25	53.50	-0.5	
WET	71.06	43 iPc	25	54.40	0.3	
	0.9s	62.00nm		5.4mb		
CRE	71.15	49 P	25	53.50	-1.3	
FVI	71.32	46 P	25	55.20	-0.4	
KHC	71.52	43 iPc	25	57.20	0.3	
	1.0s	35.50nm		5.1mb		
		e	26	34.20	152kmX	
BRG	71.54	42 iPc	25	57.10	0.2	
	1.0s	52.00nm		5.3mb		
		e	26	23.00	101km	
		e	26	33.00		
ASS	71.74	50 P	25	57.00	-1.3	
MNS	71.86	51 P	25	56.70	-2.3	
ARV	71.88	49 P	25	58.00	-1.1	
TTA	71.99	331 eP	25	58.20	-1.2	
SVW	72.00	329 eP	25	58.30	-1.2	
TRO	72.02	22 eP	26	00.00	0.6	
PRU	72.03	42 eP	26	00.00	0.2	
		e	26	26.50	104km	
TRI	72.12	47 iPc	26	00.50	0.1	
		i	26	26.50	101km	
VOY	72.16	47 iPc	26	00.90	0.1	
		i	26	27.90	106km	
UPP	72.51	32 iP	26	02.40	0.0	
CEY	72.58	47 ePc	26	02.50	-0.7	
LJU	72.60	47 ePc	26	03.50	0.2	
SDI	72.80	51 P	26	03.40	-1.2	
RFI	73.00	51 P	26	06.17	0.5	
	0.5s	69.60nm		5.7mb		
DUI	73.29	51 P	26	08.00	0.5	
PTJ	73.61	47 eP	26	09.10	-0.1	
SOP	73.70	45 iPc	26	10.60	1.0	
BSS	73.70	52 P	26	10.00	0.2	
ZST	73.97	44 iPc	26	11.40	0.2	
	0.9s	36.00nm		5.2mb		
		i	26	48.70	152kmX	
SGO	74.12	52 P	26	13.00	0.8	
MGR	74.39	52 P	26	14.00	0.2	
KEV	74.78	21 iP	26	16.20	0.7	
	0.9s	47.30nm		5.3mb		
ORI	75.08	52 P	26	17.50	-0.2	
SOD	75.17	23 iP	26	18.30	0.6	
BUD	75.38	44 iP	26	19.80	0.5	
KRA	75.45	42 iPc	26	20.20	0.6	
	0.9s	43.00nm		5.3mb		
	Z 20s	1.00um		5.1Msz		
		e	26	58.20	154kmX	
SPC	75.82	43 iP	26	22.60	0.6	
NUR	75.86	31 iP	26	22.00	0.3	
	0.9s	67.60nm		5.5mb		
PSZ	75.86	44 iP	26	22.40	0.3	
SUF	76.05	28 iP	26	23.70	1.0	

	0.9s	74.90nm		5.5mb		
LCI	76.14	52 P	26	25.00	1.3	
OHR	78.06	51 iPc	26	35.90	1.5	
	0.7s	95.00nm		5.7mb		
		e	26	42.20	20kmX	
VTS	79.42	49 iPc	26	44.00	2.1	
KKB	79.53	49 iPc	26	44.00	1.7	
CMP	79.96	46 ePc	26	46.00	1.5	
MMB	80.07	50 ePc	26	47.00	1.8	
PVL	80.74	48 iPc	26	49.00	0.3	
RZN	80.75	49 iPc	26	50.00	1.0	
DIM	81.23	49 iPc	26	53.00	1.8	
KDZ	81.26	49 iPc	26	53.00	1.5	
EZN	82.47	51 eP	26	58.60	0.9	
AIA	83.80	178 eP	27	04.10	0.3	
RUV	83.86	252 iP	27	05.50	0.4	
	0.8s	30.00nm		5.3mb		
TPT	83.99	252 iP	27	05.50	-0.3	
	0.8s	20.00nm		5.1mb		
VAH	84.10	252 iP	27	06.70	0.4	
	0.8s	25.00nm		5.2mb		
PMO	84.25	252 iP	27	07.50	0.4	
	0.8s	30.00nm		5.3mb		
YLV	84.44	49 iP	27	08.20	0.4	
BCK	86.40	52 eP	27	18.00	0.3	
BCAO	86.62	86 iPc	27	19.50	0.5	
	0.8s	147.00nm		6.1mb		
		i	27	46.00	100km	
		ic	27	56.00		
		iS	35	34.30		
BBTK	87.12	49 eP	27	23.00	1.9	
PRNI	92.46	57 eP	27	47.00	0.8	
MBH	92.60	58 eP	27	47.00	0.3	
BJI	121.31	355 ePKP	33	26.30	-1.7	
MAW	122.61	160 iPKP	33	29.10	-0.5	
LZH	125.11	7 ePKP	33	35.50	-0.2	
	1.2s	16.00nm				
GBA	134.15	48 PKP	33	53.10	-0.1	
KOD	136.44	51 ePKP	33	57.80	-0.2	
PMG	143.44	280 ePKP	34	06.00	-4.2X	
RMO	144.06	251 iPKP	34	06.50	-4.5X	
NST	144.29	17 ePKP	34	10.30	-1.3	
PCT	145.59	16 ePKP	34	19.00	5.2X	
CTA	146.40	262 iPKPc	34	15.10	0.0	
	1.0s	41.00nm				
		i	35	01.00		
BFD	146.56	230 ePKP	34	19.00	4.1X	
		e	34	45.00		
NNT	147.08	20 ePKP	34	12.00	-4.3X	
STK	149.21	239 ePKP	34	13.60	-5.6X	
	0.7s	9.00nm				
		i	34	22.20		
ADE	150.31	231 e(PKP)	34	25.20	4.3X	
	0.8s	25.37nm				
SNG	152.43	22 ePKP	34	42.30	17.8X	
QIS	152.66	261 ePKPd	34	30.30	5.6X	
WB5	157.56	263 ePKP	34	30.90	-0.3	
		e	35	03.10		

S.D. = 0.8 on 305 of 317 obs.

---

* OCT 11, 1990 15h 24m 21.56± 0.84s
27.503 S ± 6.5km 70.799 W ±24.0km
DEPTH = 120.7 ± 24.1 km
NEAR COAST OF NORTHERN CHILE (122)

ANT	3.80	5 eP	25	18.50	-0.7	
RTBS	4.31	165 e(P)	25	27.20	1.1	
RTLL	4.32	153 iPc	25	26.00	-0.4	
		(S)	26	13.00		
RTCV	4.77	156 ePd	25	32.50	0.0	
JACH	5.16	178 ePd	25	44.60	6.7X	
MDZ	5.62	163 eP	25	45.30	1.2	
		i	25	54.40		
PEL	5.62	179 iPc	25	42.50	-1.6	
		iS	26	45.60		
FCH	5.82	176 eP	25	46.20	-1.0	
		iS	26	50.50		
PCH	6.10	178 eP	25	51.50	0.7	
CHCH	6.41	179 eP	25	55.20	0.2	
		i	26	32.40		
LNV	6.45	185 eP	25	50.00	-5.5X	
		iS	26	03.50		
		iS	27	09.50		
ARE	11.01	357 eP	26	58.00	1.0	
VAO	22.00	84 eP	29	11.90	5.0X	
BAO	24.23	66 eP	29	28.20	-0.4	
WB5	126.97	210 ePKP	43	20.20	6.8X	

KOD	145.56	114 ePKP	43	56.80	8.7X	
GBA	147.31	109 PKPc	44	00.80	10.4X	
	0.5s	2.80nm				
HYB	150.02	103 ePKP	44	08.00	13.3X	

S.D. = 1.1 on 11 of 18 obs.

? OCT 11, 1990 17h 29m 48.50± 1.21s
25.453 S ±32.4km 179.491 W ±23.1km
DEPTH = 450.0km (geophysicist)
4.4mb (1 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM	13.31	282 iPc	32	44.80	1.5	
THZ	17.44	199 eP	33	33.10	7.7X	
WB5	42.78	268 iPd	37	05.10	-1.3	
		e	42	47.90		
WARB	48.20	257 eP	37	47.00	-1.4	
SPA	64.70	180 eP	39	43.50	1.0	
	0.5s	5.56nm		4.4mb		
CHTO	90.65	290 P	42	04.20	1.1	
NB2	143.68	351 PKP	48	31.50	-0.5	
	1.0s	7.20nm				
HFS	144.15	349 ePKP	48	32.20	-0.5	
	0.4s	8.90nm				

S.D. = 1.5 on 7 of 8 obs.

? OCT 11, 1990 18h 47m 17.28± 6.05s
15.295 N ±51.9km 97.902 W ±15.7km
DEPTH = 33.0km (normal)
NEAR COAST OF OAXACA, MEXICO (66)

OXX	2.11	32 iP	47	51.00	-0.1	
		iS	48	11.50		
ACX	2.45	310 iP	47	56.00	0.2	
		iS	48	23.00		
III	3.41	334 (P)	48	13.00	3.3X	
		(S)	48	46.00		
IIT	3.73	354 iP	48	14.50	0.4	
		iS	48	51.00		
PPM	3.81	350 iP	48	16.00	0.4	
		(S)	48	58.00		
IIJ	4.75	339 eP	48	28.00	-0.9	
		(S)	49	24.50		

S.D. = 0.7 on 5 of 6 obs.

? OCT 11, 1990 18h 52m 26.75± 1.38s
31.372 S ±38.4km 68.555 W ±25.2km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.08	60 iPc	52	42.30	-0.1	
ZON	0.20	211 iPd	52	43.00	0.3	
		eS	52	55.00		
RTCV	0.49	178 iP	52	43.70	-0.1	
RTBS	0.82	249 e(P)	52	46.30	-0.1	
MDZ	1.53	189 eP	53	11.20	16.9X	

S.D. = 0.4 on 4 of 5 obs.

? OCT 11, 1990 18h 56m 28.40± 1.02s
37.653 N ±11.5km 23.173 E ±10.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
ML 2.9 (ATH).

ATH	0.54	53 eP	56	39.00	-0.2	
VLI	0.95	191 eP	56	47.00	0.5	
ITM	1.10	245 eP	56	48.00	-1.1	
VLS	2.11	285 eP	57	05.00	0.8	

S.D. = 1.4 on 4 of 4 obs.

---

* OCT 11, 1990 20h 48m 53.53± 0.45s
3.457 S ± 7.3km 146.597 E ±10.6km
DEPTH = 25.4km (3 depth phases)
5.1mb (9 obs.) 4.9Msz (3 obs.)
BISMARCK SEA (203)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 36C
Centroid Location:
Origin Time 20:48:56.0 0.5
Lat 3.34S 0.05 Lon 146.78E 0.05
Dep 15.0 FIX Half-duration 1.7
Moment Tensor; Scale 10**16 Nm
Mrr= 0.96 0.35 Mtt=-4.30 0.42
Mff= 3.34 0.45 Mrt= 2.27 1.08
Mrf=-1.86 1.49 Mtf= 9.51 0.36
Principal Axes:

```
        T  Vol=  9.78  Plg= 2  Azm=124
        N       1.64       77       26
        P     -11.42       13      214
      Best Double Couple:Mo=1.1*10**17
       NP1:Strike=258 Dip=79 Slip=  -8
       NP2:        350     82     -169

PMG     5.94 175 eP     50 20.50  -1.6
      0.9s   252.10nm          5.9mb
HNR    14.53 115 eP     52 18.00  -1.5
CTA    16.53 181 iPd    52 49.10   3.7X
      1.6s   320.00nm          5.2mb
                iS     55 50.00
OIS    18.31 201 iPc    53 08.00   0.4
WB5    20.22 215 eP     53 28.00  -1.6
RMQ    22.99 175 eP     53 57.50   0.0
BRS    24.52 167 iPc    54 14.00   1.6
DZM    26.71 136 iPd    54 33.90   0.9
CMS    27.89 181 ePd    54 51.00   7.5X
STK    28.66 189 iPc    54 56.10   5.6X
      1.3s    16.00nm          4.6mb
WARB   29.61 218 eP     54 59.00  -0.1
ADE    32.20 192 e(P)   55 15.10  -6.7X
MAT    40.55 350 (P)    56 31.00  -1.6
      1.6s    43.33nm          4.9mb
                eS     02 34.00
MTMJ   40.67 349 P      56 31.70  -1.9
NIIJ   41.10 351 P      56 35.40  -1.6
SSE    42.04 327 eP     56 46.00   1.3
      1.5s    30.00nm          4.8mb
    Z  20s     1.80um          4.9Msz
    E  10s     0.50um
                pP     56 53.00  24km
                S      03 02.00
                SS     06 06.00
LOE    48.88 297 eP     57 39.00  -0.5
NNT    49.21 290 eP     57 53.00  10.9X
NST    49.74 294 eP     57 47.20   1.1
KMI    51.16 306 Pd     57 58.50   1.4
      1.5s    70.00nm          5.4mb
    Z  20s     1.00um          4.8Msz
                pP     58 07.50  30km
                S      05 12.00
BJI    51.50 330 eP     58 01.00   1.8
      1.2s    16.00nm          4.8mb
    Z  24s     0.89um          4.7MszX
                eS     05 18.00
CHG    51.85 297 eP     58 01.50  -0.7
LZH    56.04 318 eP     58 33.00   0.0
      2.0s    57.00nm          5.3mb
    Z  22s     1.36um          5.0Msz
                pP     58 40.00  23km
                sP     58 44.00
                PcP    59 31.50
SHL    60.32 302 eP     59 02.00  -1.1
KOD    70.16 282 eP     00 06.50  -0.4
HYB    70.21 290 eP     00 11.50   4.6X
IMA    81.34  21 eP     01 09.50   0.3
      1.6s    28.80nm          5.1mb
OUE    82.80 301 eP     01 18.00   0.4
CNCB  140.35 122 PKP    08 26.00   2.1
LPB   140.38 121 (PKP)  08 33.00   9.2X
ZOBO  140.48 121 PKP    08 25.00   0.9
                i      08 45.00
                LR     55 48.00
SIV   146.50 126 PKP    08 34.60   0.8
LKO   151.72 284 PKP    08 49.06   7.1X
     S.D. = 1.3  on  25 of  33 obs.
-------------------------------------
?  OCT  11, 1990  22h 33m 01.65± 1.02s
   40.383 N ±11.2km   15.577 E ±11.5km
   DEPTH =  10.0km  (geophysicist)
 SOUTHERN ITALY                  (390)

MGR     0.25 184 P      33 06.80  -0.1
                eSg    33 12.30
SGO     0.27 311 P      33 06.60  -0.7
                eSg    33 12.20
BSS     0.71 305 P      33 16.50   0.8
                eSg    33 25.00
ORI     0.74 115 P      33 16.20   0.0
                eSg    33 27.50
     S.D. = 1.1  on   4 of   4 obs.
-------------------------------------
*  OCT  11, 1990  23h 12m 27.56± 1.15s
   51.293 N ±20.5km  178.467 E ±11.1km
   DEPTH =  33.0km  (normal)
    4.4mb (  2 obs.)
 RAT ISLANDS, ALEUTIAN ISLANDS   (  6)

SMY     3.06 300 eP     13 16.50   1.9
ADK     3.08  77 eP     13 17.00   2.0
IMA    20.44  33 eP     17 04.50   0.0
FBA    22.08  39 eP     17 20.00  -0.9
INK    28.52  35 eP     18 21.00  -0.5
MBC    34.33  22 eP     19 12.50   0.0
      0.6s     7.00nm          4.8mb
NB2    67.55 353 P      23 20.50  -1.7
      0.7s     1.20nm          4.1mb
W85    80.72 222 eP     24 38.10  -0.6
GBA    86.27 287 Pd     25 07.10  -0.1
      0.6s    34.30nm          5.8mb X
IFR    95.50   3 iP     25 55.00   4.6X
                i      25 59.00
     S.D. = 1.4  on   9 of  10 obs.
-------------------------------------
?  OCT  11, 1990  23h 14m 13.76± 3.49s
   36.692 N ±20.7km   71.132 E ±19.0km
   DEPTH =  71.7 ± 38.7 km
   4.2mb (  2 obs.)
 AFGHANISTAN-USSR BORDER REGION  (717)

QUE     7.37 210 iPc    16 02.40   1.4
      0.0s    19.78nm          4.8mb X
                eS     17 23.50
MAIO    9.38 271 iPc    16 27.00  -1.6
      0.7s    15.88nm          5.1mb X
                eS     18 07.00
NDI     9.49 146 iPd    16 30.50   0.6
                iS     18 07.00
HYB    20.29 159 eP     18 43.50  -2.7
SHL    20.90 116 iP     18 52.00  -0.4
                eS     22 27.00
GBA    23.67 165 P      19 21.00   1.4
                S      24 21.00
LZH    26.27  81 P      19 37.50  -6.8X
KEV    40.66 338 eP     21 48.00   0.0
HFS    42.98 322 eP     22 08.00   0.9
      0.5s     2.00nm          4.2mb
NB2    44.29 323 P      22 18.20   0.4
      0.7s     2.50nm          4.1mb
     S.D. = 1.7  on   9 of  10 obs.
-------------------------------------
   OCT  11, 1990  23h 21m 15.15± 0.44s
   37.830 N ± 3.8km   19.813 E ± 2.4km
   DEPTH =  38.2 ±  5.7 km
   4.1mb ( 21 obs.)
 IONIAN SEA                      (399)
     MD 4.5 (ATH).

VLS     0.70  60 ePg    21 26.50  -2.2
IGT     1.75  13 iPd    21 44.74   1.2
ITM     1.80 110 ePb    21 43.20  -1.2
KEK     1.88 360 ePn    21 46.00   0.5
SRN     2.05   4 iPn    21 48.30   0.4
AGG     2.31  58 iPc    21 53.29   1.7
                eS     22 16.62
LSK     2.40  15 iPnd   21 54.20   1.3
VLO     2.65 355 ePn    21 57.20   0.9
VLI     2.73 113 ePn    21 58.00   0.4
BERA    2.87   2 iPnc   22 00.20   0.7
LCI     2.89 331 P      21 59.10  -0.7
KBN     2.90  15 iPnd   22 01.90   2.0
KZN     2.90  31 ePb    22 02.50   2.4
NEO     3.05  60 ePn    22 02.00  -0.2
ROI     3.08 305 P      22 03.10   0.6
                eSn    22 43.40
LIT     3.08  42 ePc    22 03.98   1.4
ATH     3.09  86 ePb    22 05.00   2.3
FNA     3.19  22 iPd    22 05.29   1.2
CZI     3.20 297 P      22 04.50   0.3
                eSn    22 44.60
TDS     3.27 305 P      22 05.00  -0.2
OHR     3.36  13 iPnc   22 07.90   1.3
                iSn    22 47.10
                LR     23 21.90
CSI     3.37 306 P      22 07.30   0.6
                eSn    22 56.00
MSI     3.38 278 P      22 06.30  -0.5
ORI     3.44 311 P      22 07.80   0.1
TIR     3.51   1 ePn    22 09.20   0.5
GRG     3.71  32 ePd    22 12.06   0.6
THE     3.72  40 iPd    22 12.46   0.9
PLG     3.80  47 ePn    22 12.50  -0.3
MGR     4.04 306 P      22 17.00   0.8
SOH     4.06  41 iPc    22 17.29   0.8
KNT     4.09  35 iPc    22 17.53   0.6
ULC     4.15 354 ePn    22 16.20  -1.5
                eSn    23 03.00
KKS     4.27   6 ePn    22 20.90   1.6
VAM     4.28 123 ePn    22 17.00  -2.5
SKO     4.32  16 iPn    22 19.50  -0.6
                iPb    22 27.00
                iPg    22 34.00
                i      22 36.00
                i      22 45.00
                iSn    23 05.00
                i      23 08.00
                i      23 12.80
                iSb    23 15.50
                i      23 17.50
                i      23 20.00
                iSg    23 23.00
SRS     4.40  41 iPd    22 21.06  -0.1
SGO     4.43 309 P      22 22.10   0.4
BDV     4.51 351 ePn    22 20.90  -1.9
                eSn    23 09.50
GIB     4.58 274 P      22 23.60  -0.3
APE     4.61  98 ePb    22 28.00   3.6X
TTG     4.61 355 ePn    22 23.80  -0.5
                eSn    23 13.00
HCY     4.72 348 ePn    22 24.00  -1.8
                eSn    23 15.00
KKB     4.75  31 iPc    22 26.00  -0.3
PVY     4.76   1 ePn    22 26.50   0.0
                eSn    23 20.20
MMB     4.82  38 ePc    22 27.00  -0.2
BSS     4.88 309 P      22 28.10   0.0
FAI     4.91 265 P      22 28.00  -0.4
NKY     5.02 353 ePn    22 29.00  -1.0
                eSn    23 27.00
IVA     5.04   1 ePn    22 30.40   0.1
                eSn    23 27.00
BRY     5.16 350 ePn    22 30.50  -1.6
                eSn    23 27.50
PRK     5.26  72 ePn    22 35.00   1.7
NPS     5.33 117 ePn    22 34.00  -0.3
RZN     5.40  43 iPc    22 35.00  -0.4
VTS     5.42  28 iPd    22 37.00   1.3
EZN     5.46  67 eP     22 38.00   1.8
PLE     5.50 357 ePn    22 36.50  -0.4
                eSn    23 38.00
RDO     5.53  51 ePn    22 36.00  -1.1
SMG     5.57  89 ePn    22 42.00   4.3X
DUI     5.63 315 P      22 39.00   0.4
ALN     5.72  56 ePc    22 40.50   0.7
KDZ     5.76  47 iPd    22 39.00  -1.5
PGB     5.77  34 iP     22 40.00  -0.7
IZM     5.90  82 eP     22 44.00   1.5
HVAR    5.92 335 ePn    22 40.00  -2.8
                iSn    23 51.80
SDI     6.03 312 P      22 43.40  -0.9
DIM     6.09  44 iPc    22 45.00  -0.1
KAP     6.34 109 ePn    22 47.50  -1.1
AZI     6.42 312 P      22 49.50  -0.2
MFT     6.50  61 eP     22 49.00  -1.9
AQU     6.67 315 Pd     22 54.00   0.7
BNT     6.79  66 eP     23 00.00   5.1X
PVL     6.83  36 iPd    22 52.00  -3.4X
BEO     7.00   4 iPn    23 11.00  13.2X
MNS     7.11 312 P      22 58.80  -0.6
DST     7.12  73 eP     22 58.80  -0.8
BLY     7.19 345 eP     23 12.50  12.0X
                eS     24 21.50
CTT     7.44  61 eP     23 02.00  -2.0
ASS     7.56 316 P      23 06.00   0.3
ARV     7.70 319 Pd     23 06.50  -1.2
BZS     7.90   9 eP     23 09.50  -0.8
YLV     7.91  67 iP     23 10.50  -0.2
IZI     7.92  69 eP     23 10.00  -0.8
KSL     8.00  99 ePn    23 10.50  -1.4
ALT     8.17  78 eP     23 15.00   0.6
HRT     8.20  66 eP     23 22.00   7.3X
CRE     8.31 317 P      23 16.50   0.3
VBY     8.39 337 eP     23 23.60   6.4X
                e(S)   25 01.40
CMP     8.40  26 ePc    23 17.00  -0.3
ZAG     8.48 342 ePn    23 16.50  -1.8
TNR     8.50  22 ePd    23 37.00  18.4X
RIY     8.54 333 e(Pn)  23 17.90  -1.2
BCK     8.56  89 eP     23 21.80   2.2
```

11d 23h

SFI	8.56	318	P	23	19.90	0.4
PGD	8.60	317	P	23	20.50	0.2
PSN	8.63	45	iPd	23	19.00	-1.5
CEY	8.86	335	eP	23	24.00	0.2
			eS	25	01.50	
MLR	8.92	29	ePd	23	25.50	0.9
TRI	9.07	332	e(Pn)	23	24.00	-2.6
			i	23	47.40	
			i(Sn)	25	01.50	
			i	26	01.40	
LJU	9.10	336	eP	23	25.30	-1.6
			eS	25	04.00	
VOY	9.30	334	eP	23	27.80	-2.1
			eS	25	09.30	
VRI	9.54	30	ePc	23	33.50	0.4
SOP	10.13	347	eP	23	49.80	8.7X
FVI	10.19	331	P	23	40.00	-1.9
CTI	10.21	326	P	23	39.50	-2.9
SAL	10.41	321	P	23	44.00	-1.0
ZST	10.55	350	eP	23	58.40	11.6X
BHG	11.12	335	iPd	23	52.40	-2.2
CSS	11.26	101	eP	23	56.00	-0.7
SQTA	11.32	329	iPc	23	56.30	-1.2
			i	24	02.50	
			iS	25	56.30	
SPC	11.36	1	e(P)	23	57.60	-0.4
KHC	12.16	340	P	24	05.50	-3.2X
			e	24	22.20	
KRA	12.22	0	eP	24	28.30	18.8X
LPG	12.40	312	eP	24	22.90	10.7X
	0.6s	4.50nm				
LPL	12.42	312	eP	24	23.30	10.9X
	0.8s	6.70nm				
HLW	12.44	126	eP	24	06.50	-6.0X
			eS	26	15.00	
PRU	12.73	344	eP	24	14.30	-1.9
			e	24	24.00	
GRF	13.37	335	eP	24	36.50	11.8X
Z	19s	0.10um				
ADI	13.43	106	e(P)	24	19.00	-6.5X
ZNT	13.66	110	eP	24	21.00	-7.5X
			eS	26	39.00	
BRG	13.69	344	eP	24	40.20	11.3X
			e	27	27.00	
			e	28	12.00	
BSF	13.81	321	eP	24	41.90	11.3X
	0.4s	3.45nm				
CDF	13.97	323	eP	24	41.70	9.1X
	0.4s	3.45nm			4.4mb	
MOX	14.08	338	eP	24	40.00	6.0X
			e	29	28.00	
HAU	14.15	320	eP	24	43.80	8.9X
	0.6s	3.60nm			4.2mb	
Z	20s	0.15um				
CLL	14.31	342	e(P)	24	44.00	7.0X
			e	25	42.00	
PRNI	14.62	116	eP	24	34.00	-7.2X
SMF	14.73	312	eP	24	51.80	9.3X
	0.6s	3.60nm			3.9mb	
TNS	14.82	330	ePd	24	52.00	8.3X
LBF	14.83	313	eP	24	50.10	6.3X
	0.8s	10.75nm			4.3mb	
ABH	14.92	328	eP	24	53.12	8.1X
LOR	15.05	314	eP	24	53.10	6.4X
	0.8s	5.35nm			3.9mb	
Z	20s	0.15um				
SSF	15.14	313	eP	24	53.80	5.9X
	0.7s	4.95nm			3.9mb	
MAF	15.29	309	eP	24	56.30	6.4X
	0.6s	3.60nm			3.8mb	
TCF	15.54	308	eP	24	56.30	3.2X
	0.8s	5.35nm			3.8mb	
ENN	16.28	327	eP	25	08.00	5.7X
	0.9s	31.00nm			4.4mb	
ECHE	16.32	283	e(P)	25	08.00	4.9X
DOU	16.40	323	P	25	07.10	3.1X
	0.7s	12.20nm			4.1mb	
WTS	16.85	331	eP	25	19.00	9.4X
	1.0s	13.00nm			4.0mb	
MFF	17.15	307	eP	25	17.20	3.8X
	0.8s	5.35nm			3.7mb	
ECRI	17.69	293	e(P)	25	22.00	1.8
LDF	18.02	313	eP	25	26.90	2.7
	0.6s	3.60nm			3.7mb	
LPF	18.31	310	eP	25	27.60	-0.1
	0.6s	9.00nm			4.1mb	
FLN	18.32	313	eP	25	28.70	0.9
	0.6s	4.50nm			3.8mb	
Z	20s	0.15um				
GRR	18.36	312	eP	25	29.60	1.3
	0.8s	8.05nm			3.9mb	
TOL	18.69	284	eP	25	42.00	9.5X
GUD	18.76	286	eP	25	35.00	1.4
TAB	20.89	81	eP	25	51.00	-5.7X
UPP	22.09	357	iP	26	08.20	-0.1
KER	22.30	91	eP	26	10.00	-0.8
AVE	22.57	267	iP	26	15.50	2.2
HFS	22.66	352	eP	26	14.00	0.0
	0.8s	16.80nm			4.6mb	
Z	15s	0.11um			3.4MszX	
		LR		33	21.00	
NUR	22.91	6	eP	26	16.00	-0.3
	0.7s	14.70nm			4.6mb	
		i		26	23.80	
TIO	23.33	261	iP	26	25.40	4.5X
EKA	23.40	326	P	26	22.00	0.9
	0.8s	31.90nm			4.9mb	
NB2	23.85	350	P	26	26.20	0.6
	0.8s	12.80nm			4.5mb	
SUF	25.22	7	eP	26	40.00	1.4
SOD	29.84	5	eP	27	21.00	0.4
			e	27	27.00	
KEV	32.22	5	eP	27	28.00	-13.5X
BCAO	33.26	182	iPc	27	51.00	-0.1
	0.7s	22.00nm			5.2mb X	
LKO	36.28	226	P	28	16.04	-0.9
TIC	38.37	222	P	28	34.90	0.5
KIC	38.46	222	P	28	34.90	-0.3
	1.0s	11.00nm			4.6mb	
LIC	38.72	222	P	28	37.00	-0.4
Z	20s	0.09um			3.6Msz	
QUE	39.47	87	eP	28	43.40	-0.4
WMO	50.42	60	P	30	10.00	-0.8
			pP	30	20.00	33kmX
HYB	54.97	95	eP	30	42.50	-2.5
GTA	60.48	61	P	31	22.80	-0.8
TIY	69.92	58	eP	32	25.50	1.0
CHG	70.29	81	eP	32	27.00	0.1
GYA	71.96	70	P	32	36.40	-0.6
NNT	74.48	86	eP	32	44.20	-7.5X

S.D. = 1.2 on 127 of 171 obs.

• OCT 11, 1990 23h 51m 59.22± 1.77s
3.523 N ±16.0km 123.950 E ±17.5km
DEPTH = 421.6 ± 20.3 km
4.5mb (6 obs.)

CELEBES SEA (262)

KKM	8.10	288	iPd	53	56.80	0.1
	0.5s	44.90nm			5.0mb	
MBL	24.86	189	iPc	56	47.80	-0.1
	0.3s	6.00nm			4.5mb	
WB5	25.41	157	eP	56	52.00	-0.9
NANU	27.20	197	eP	57	08.80	0.1
	0.3s	4.00nm			4.3mb	
WARB	29.65	175	iPc	57	31.10	1.0
	0.3s	4.00nm			4.3mb	
MEKA	30.41	190	eP	57	36.50	-0.3
	0.3s	16.00nm			4.9mb	
HYB	46.58	291	eP	59	49.00	-0.3
GBA	46.99	285	Pd	59	52.50	0.1
	0.4s	3.80nm			4.1mb	
DZM	48.71	123	iPc	00	05.80	0.3

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

% OCT 12, 1990 01h 48m 35.27± 1.47s
39.911 N ±20.6km 26.813 E ±12.1km
DEPTH = 10.0km (geophysicist)

TURKEY (366)

MD 2.1 (ISK).

EZN	0.38	257	iPg	48	43.20	0.0
			eSg	48	48.70	
KGT	0.66	35	ePg	48	48.50	0.1
MFT	0.94	22	ePg	48	53.50	0.2
BNT	0.96	62	iPg	48	53.90	0.4
			iSg	49	07.40	
CTT	1.74	44	ePn	49	05.00	-0.8

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

OCT 12, 1990 01h 49m 19.50± 0.35s
29.076 N ± 7.8km 60.977 E ± 4.4km
DEPTH = 28.7km (3 depth phases)
4.8mb (16 obs.) 4.3Msz (5 obs.)

SOUTHERN IRAN (353)

Felt at Zahedan.

QUE	5.32	77	iPc	50	40.70	1.5
	0.8s	134.33nm			5.5mb	
		e(S)		51	46.00	
MAIO	7.31	351	eP	51	07.00	-0.2
		eS		53	15.00	
BRF	9.69	254	eP	51	31.20	-8.9X
	0.4s	87.00nm			6.4mb	
BBU	9.75	255	eP	51	32.60	-8.3X
	0.4s	55.00nm			6.2mb	
TEH	10.48	312	eP	51	48.00	-3.0
KER	12.92	298	eP	52	25.00	1.0
NDI	14.24	88	eP	52	39.00	-2.2
POO	15.76	129	eP	53	02.50	1.3
		iS		54	42.20	
KSH	16.13	46	P	53	06.20	0.3
HYB	19.86	122	eP	53	50.00	-1.3
	1.0s	40.00nm			4.7mb	
GBA	21.68	132	P	54	10.00	0.0
DSI	22.22	283	eP	54	15.00	-0.2
PRNI	22.59	280	eP	54	18.00	-1.0
MBH	22.73	278	eP	54	20.00	-0.3
BBTK	25.53	302	eP	54	48.00	0.7
WMO	25.90	48	eP	54	50.50	-0.3
Z	22s	0.60um			4.1Msz	
N	12s	0.80um				
		eS		59	18.50	
		sS		59	36.00	
MLR	32.02	310	eP	55	46.50	0.7
CMP	32.56	310	ePc	55	47.00	-3.3X
GTA	33.49	62	eP	55	58.20	-0.4
Z	16s	0.40um			4.2MszX	
E	12s	0.30um				
		pP		56	08.60	37km
SKO	34.36	303	eP	56	04.00	-1.9
		i		56	05.50	5kmX
OHR	34.71	301	eP	56	07.20	-1.8
CHG	36.03	98	eP	56	20.90	0.5
LZH	36.56	68	P	56	20.50	-4.4X
Z	20s	0.50um			4.3Msz	
E	12s	0.30um				
KMI	37.25	86	eP	56	30.00	-0.9
	1.2s	50.00nm			5.2mb	
Z	20s	0.50um			4.3Msz	
		sP		56	38.50	
		eS		02	10.00	
KRA	37.32	316	ePd	56	31.90	1.0
	1.0s	37.00nm			5.2mb	
		e		56	37.70	19km
CZI	38.13	297	P	56	37.80	0.0
MGR	38.61	299	P	56	41.50	-0.3
SGO	38.81	300	P	56	44.50	1.0
BSS	39.20	300	P	56	46.50	-0.3
DUI	39.51	301	P	56	51.00	1.6
NUR	39.73	333	iP	56	52.20	1.4
	0.6s	14.30nm			4.9mb	
KSP	39.78	316	ePd	56	52.70	1.2
SUF	40.52	336	iP	56	57.90	0.6
	0.4s	5.00nm			4.6mb	
XAN	40.86	70	eP	57	01.50	0.9
KHC	41.08	313	P	57	02.90	0.7
BRG	41.23	315	eP	56	55.40	-7.9X
		e		57	04.30	30km
BHG	41.29	310	eP	57	04.40	0.5
PGD	41.66	304	P	57	08.00	0.8
CLL	41.91	316	iP	57	08.90	0.0
	2.2s	71.00nm			5.0mb	
SQTA	42.34	309	iPd	57	12.40	-0.3
	0.7s	3.80nm			4.2mb	
TIY	43.36	65	eP	57	21.40	0.4
Z	20s	0.90um			4.7Msz	
N	10s	0.50um				
SOD	43.49	342	iP	57	21.70	0.1
HFS	44.29	328	eP	57	27.70	-0.5
	0.7s	12.50nm			4.9mb	
Z	18s	0.27um			4.2Msz	
		LR		15	05.00	
NB2	45.77	329	P	57	39.50	-0.5
	0.9s	8.40nm			4.7mb	
BCAO	47.06	247	iPc	57	50.30	-0.5
	0.9s	19.00nm			5.1mb	
LBF	47.25	309	eP	57	51.40	-0.5
	1.0s	7.00nm			4.6mb	
TIA	47.26	66	eP	57	50.30	-1.8
SMF	47.34	308	eP	57	52.10	-0.5

1.0s 11.00nm 4.8mb
SSF 47.57 309 eP 57 56.20 1.8X
0.8s 4.70nm 4.6mb
LPO 49.23 306 eP 58 08.50 1.2
0.8s 8.05nm 4.8mb
LFF 49.54 306 eP 58 11.60 2.0X
0.8s 10.75nm 4.9mb
WB5 85.87 115 eP 01 58.00 -0.1
ASPA 87.55 119 eP 02 07.50 1.2
1.4s 8.20nm 4.8mb
S.D. = 1.1 on 46 of 53 obs.

• OCT 12, 1990 03h 09m 46.98± 0.96s
34.963 N ±18.2km 47.794 E ± 9.7km
DEPTH = 33.0km (normal)
4.3mb (1 obs.)
WESTERN IRAN (347)

KER 0.83 223 eP 10 03.00 0.6
TEH 3.04 74 eP 10 35.00 1.0
MAIO 9.62 79 eP 12 05.00 -1.3
CMP 20.16 308 ePc 14 28.00 6.8X
SKO 21.74 297 iP 14 38.00 0.7
OHR 22.08 294 eP 14 41.00 0.2
CZI 25.54 289 P 15 11.70 -2.5
NUR 29.61 337 eP 15 46.00 -5.0X
HFS 33.46 329 eP 16 26.00 1.2
0.4s 1.60nm 4.3mb
Z 18s 0.09um 3.5Msz
LR 31 14.00
S.D. = 1.7 on 7 of 9 obs.

• OCT 12, 1990 03h 20m 56.00± 1.97s
14.826 N ±19.6km 97.996 W ±11.4km
DEPTH = 33.0km (normal)
4.5mb (1 obs.)
OFF COAST OF OAXACA, MEXICO (67)

OXX 2.56 28 iP 21 37.66 1.5
iS 22 07.09
ACX 2.71 319 eP 21 37.50 -0.7
iS 22 08.69
III 3.80 338 eP 21 54.22 0.4
iS 22 36.88
IIT 4.18 356 eP 21 59.51 0.2
(S) 22 43.92
PPM 4.26 352 iP 21 58.64 -2.0
iS 22 47.57
EVV 4.41 35 (P) 22 08.94 6.5X
UNM 4.62 346 (P) 22 14.00 8.4X
CRX 4.83 341 (P) 22 24.00 15.4X
LVVM 5.10 17 (P) 22 11.50 -0.7
(S) 23 06.50
IIJ 5.16 341 (P) 22 13.00 -0.4
(S) 23 11.00
SCX 5.50 69 (P) 22 37.00 19.2X
TPX 5.55 88 (P) 22 18.00 -0.4
MRX 5.73 328 eP 22 22.50 1.5
TUL 21.09 5 eP 25 28.70 -11.3X
1.0s 4.70nm
e 25 45.20
ALQ 21.43 341 eP 25 43.30 -0.4
2.0s 44.12nm 4.5mb
ANMO 21.43 341 P 25 44.00 0.3
ACO 21.81 358 e(P) 25 48.00 0.8
ZOBO 42.72 135 (P) 29 14.00 21.4X
Z 16s 0.20um 4.1MszX
LR 44 36.00
CCH 44.85 134 (P) 29 35.00 25.4X
S.D. = 1.1 on 12 of 19 obs.

? OCT 12, 1990 04h 56m 51.82± 2.58s
21.651 S ±43.9km 179.074 W ±26.3km
DEPTH = 576.2 ± 22.6 km
4.3mb (5 obs.)
FIJI ISLANDS REGION (181)

SGE 4.93 324 iPc 58 23.10 -0.3
DZM 13.45 266 iPc 59 46.10 0.9
ASPA 43.29 258 iPd 04 05.60 0.3
0.5s 7.30nm 4.5mb
iS 09 50.70
WB5 43.45 264 eP 04 06.00 -0.5
WARB 49.54 254 iPc 04 52.50 -0.1
0.3s 1.00nm 3.8mb
MBL 56.54 258 eP 05 41.00 -1.5
NANU 60.14 256 iPc 06 06.70 0.1
0.4s 7.00nm 4.3mb
PRS 79.34 44 eP 07 59.60 0.0
PRI 79.68 44 eP 08 03.10 1.6
FRI 80.81 44 ePc 08 07.20 0.1
CMB 80.98 43 ePc 08 08.10 0.0
WDC 81.20 40 iPc 08 09.60 0.5
ORV 81.20 41 eP 08 09.30 0.2
MIN 81.62 41 ePc 08 11.10 -0.3
PNT 88.17 34 eP 08 43.00 0.3
0.8s 13.00nm 4.8mb
ALQ 88.90 52 eP 08 45.90 -0.8
1.0s 4.00nm 4.3mb
ANMO 88.90 52 P 08 46.50 -0.2
FBA 89.58 13 P 08 47.00 -1.9
CHG 89.69 290 eP 08 52.20 1.8
NUR 137.75 343 ePKP 15 11.00 -1.1
NB2 139.99 352 PKP 15 08.00 -8.2X
0.6s 1.60nm
HFS 140.50 350 ePKP 15 08.60 -8.5X
0.5s 2.80nm
EKA 146.23 4 PKP 15 28.00 1.1
0.8s 12.10nm
KSP 148.47 341 iPKPd 15 34.60 4.0X
SPC 148.52 335 ePKP 15 35.20 4.2X
e 39 03.60
CLL 148.93 345 iPKPd 15 35.50 4.2X
1.0s 23.00nm
e 15 41.00
BRG 149.10 344 iPKP 15 36.20 4.6X
1.2s 22.00nm
WTS 149.37 353 ePKP 15 37.00 5.1X
1.0s 38.00nm
PRU 149.74 342 PKPd 15 37.70 5.1X
0.8s 12.40nm
MOX 149.87 346 ePKP 15 38.00 5.2X
ZST 150.51 338 ePKP 15 39.30 5.5X
e 39 01.80
ENN 150.68 354 ePKP 15 40.00 6.1X
0.8s 17.00nm
e 15 49.00
KHC 150.79 343 ePKP 15 40.20 6.0X
ABH 151.34 351 ePKP 15 42.14 7.1X
CDF 152.82 351 ePKP 15 44.40 7.2X
0.6s 3.60nm
FLN 152.92 2 ePKP 15 44.10 6.9X
0.4s 4.60nm
Z 20s 0.08um 4.5Msz
LDF 153.10 2 ePKP 15 44.60 7.1X
0.4s 2.85nm
GRR 153.28 3 ePKP 15 45.20 7.5X
0.6s 5.40nm
LPF 153.63 3 ePKP 15 46.00 7.8X
0.5s 4.35nm
MFF 155.09 2 ePKP 15 49.00 8.8X
BCAO 155.82 227 iPKPc 15 42.00 -0.2
0.6s 6.00nm
ic 16 14.00
S.D. = 1.0 on 22 of 41 obs.

& OCT 12, 1990 05h 02m 18.10s
45.238 N 112.723 W
DEPTH = 7.1km
MONTANA (456)
<BUT>. ML 3.2 (BUT). Felt at Dillon.

MCMT 0.42 192 iPc 02 26.00 -0.6
BGMT 0.48 90 iPc 02 27.10 -0.8
HBMT 0.56 8 iPc 02 28.80 -0.6
LRM 0.61 18 iPc 02 29.80 -0.7
BUT 0.78 8 eP 02 33.00 -0.7
iS 02 43.90
LTMT 0.83 148 ePc 02 33.90 -0.8
MEMT 1.29 73 eP 02 41.70 -0.7
SXM 1.40 49 eP 02 43.80 -0.4
HPI 1.55 190 eP 02 46.50 0.1
HRY 1.60 23 ePn 02 46.30 -0.7
NEW 4.28 317 e(P) 03 25.00 -0.1
11 obs. associated

? OCT 12, 1990 05h 31m 12.65± 3.88s
15.347 S ±53.5km 72.558 W ±29.8km
DEPTH = 149.3 ± 21.4 km
SOUTHERN PERU (117)

ARE 1.51 137 iPd 31 43.00 0.1
iS 32 03.50
ZOBO 4.37 103 iPc 32 17.90 -1.1
S 33 06.00
LPB 4.45 106 iPc 32 20.00 0.0
1.0s 120.00nm
i 33 12.00
CNCB 4.64 109 iPc 32 22.80 0.2
i 33 41.00
CCH 6.48 109 P 32 48.30 1.1
SIV 11.08 95 Pc 33 43.60 -4.5X
PPD 21.18 111 eP 35 46.70 -0.9
BAO 23.67 94 eP 36 12.50 0.5
KIC 70.54 77 P 42 13.80 0.1
S.D. = 0.9 on 8 of 9 obs.

OCT 12, 1990 05h 34m 28.17± 0.38s
27.775 N ± 6.9km 130.771 E ± 5.1km
DEPTH = 33.0km (normal)
5.1mb (19 obs.)
RYUKYU ISLANDS (238)

SHK 6.93 13 eP 36 09.10 -0.9
SSE 8.99 294 Pd 36 37.50 -1.2
1.2s 33.00nm 5.4mb
Z 16s 1.30um
N 11s 2.80um
pP 36 45.20
sP 36 51.00
S 38 30.00
MAT 10.77 34 (P) 37 02.00 -1.2
0.8s 37.31nm 5.7mb
eS 39 04.00
NJ2 11.18 295 Pc 37 09.50 0.8
Z 14s 0.70um
N 12s 2.40um
E 10s 0.90um
pP 37 15.80
TIA 14.30 309 eP 37 50.50 0.2
Z 14s 1.20um
N 12s 1.00um
E 12s 0.40um
eS 40 35.00
WHN 14.61 285 Pd 37 57.00 2.7
Z 14s 1.20um
N 15s 2.30um
eS 40 33.00
SNY 15.20 339 Pc 38 02.00 0.0
Z 13s 2.10um
N 13s 1.20um
E 13s 1.00um
S 40 53.00
CN2 16.56 346 P 38 21.50 2.2
1.0s 60.00nm 4.7mb
Z 15s 2.10um 3.8Msz
N 13s 1.30um
E 13s 0.30um
epP 38 30.00
eS 41 23.00
MDJ 16.83 357 eP 38 21.00 -1.8
BJI 17.19 319 eP 38 28.00 0.7
1.5s 120.00nm 4.8mb
Z 15s 1.46um
N 14s 1.28um
eS 41 40.00
TIY 18.31 307 Pc 38 41.50 0.2
Z 14s 2.50um
N 12s 1.20um
pP 38 53.50
sP 39 00.00
GUMO 19.29 134 eP 38 52.00 -1.2
XAN 19.74 294 iPc 38 56.50 -1.7
1.2s 200.00nm 5.3mb
N 13s 1.10um
pP 39 10.00 65kmX
S 42 37.00
HHC 20.48 314 P 39 05.00 -0.9
Z 24s 0.70um 3.9MszX
N 13s 0.40um
E 13s 0.70um
S 42 54.00
sS 43 10.00
QIZ 21.06 250 eP 39 12.70 0.8
N 14s 1.33um
BTO 21.34 312 eP 39 13.00 -1.7
N 14s 0.60um
E 14s 0.70um
PP 39 39.00
GYA 21.49 272 P 39 15.80 -0.5

12d 05h

Z 14s 0.70um 4.2MszX
N 12s 1.20um
E 12s 0.90um
CD2 23.73 284 eP 39 36.70 -1.6
1.1s 60.00nm 5.0mb
Z 14s 2.69um 4.9MszX
eS 43 44.00
LZH 24.25 297 Pc 39 43.00 -0.4
1.5s 85.00nm 5.1mb
Z 16s 1.00um 4.4MszX
N 11s 0.60um
E 12s 0.80um
pP 39 56.00 53kmX
sP 40 01.50
PP 40 26.00
KMI 25.22 270 eP 39 53.00 0.2
1.5s 50.00nm 4.9mb
Z 14s 1.30um 4.6MszX
pP 40 04.50 45kmX
eS 44 14.00
sS 44 31.00
GTA 28.14 302 eP 40 17.80 -1.7
1.0s 30.00nm 4.9mb
Z 14s 1.50um 4.7MszX
E 14s 0.80um
eS 45 06.00
CHG 30.49 260 eP 40 40.30 -0.2
1.0s 17.25nm 4.8mb
WMQ 37.97 307 eP 41 39.60 -5.0X
Z 16s 0.60um 4.5MszX
N 11s 0.50um
pP 41 56.50 68kmX
ASPA 51.23 176 iPc 43 30.10 -0.7
1.3s 11.00nm 4.7mb
GBA 51.48 265 P 43 33.00 0.2
POO 52.75 273 iPc 43 41.80 -0.7
KOD 52.92 262 eP 43 41.50 -2.5
OUE 55.22 289 eP 44 01.70 1.1
SVW 58.22 33 eP 44 21.40 0.1
IMA 59.11 27 eP 44 27.20 -0.4
1.3s 25.60nm 5.2mb
MAIO 59.80 298 eP 44 34.00 1.4
KDC 59.98 37 e(P) 44 32.40 -1.1
DZM 60.36 142 iPc 44 35.90 -0.7
PMR 61.32 32 eP 44 41.20 -1.3
1.2s 35.50nm 5.4mb
FBA 61.60 29 eP 44 43.90 -0.6
INK 66.57 24 eP 45 17.00 0.2
MBC 67.79 14 ePd 45 24.50 0.1
1.0s 16.00nm 5.1mb
SOD 69.90 336 eP 45 35.00 -2.5
SUF 72.04 332 eP 45 50.00 -0.5
NUR 73.67 330 eP 45 58.00 -2.0
HFS 78.50 333 eP 46 26.30 -0.9
1.0s 10.80nm 4.8mb
Z 16s 0.15um 4.4MszX
LR 17 35.00
NB2 78.92 334 P 46 29.20 -0.4
0.8s 7.40nm 4.7mb
VRI 79.55 316 eP 46 35.00 1.7
PNT 81.03 39 eP 46 41.00 -0.1
KRA 81.30 322 eP 46 43.40 1.0
e 46 56.90
KSP 82.78 324 iP 46 51.70 1.5
WDC 83.88 47 ePd 46 56.60 0.6
ZST 83.89 322 e(P) 46 58.00 2.1
BRG 83.96 325 iP 46 57.00 0.8
1.1s 18.00nm 5.1mb
e 47 13.00
CLL 84.16 326 iPd 46 58.00 0.8
1.5s 38.00nm 5.3mb
MIN 84.61 47 eP 46 59.90 0.0
SKO 84.83 315 iP 47 02.00 1.3
ORV 85.10 48 eP 47 02.50 0.4
KHC 85.21 324 P 47 04.20 1.7
OHR 85.70 315 eP 47 05.00 -0.2
FFC 86.19 28 iPc 47 08.20 0.9
1.1s 28.00nm 5.4mb
CMB 86.65 48 ePd 47 10.70 0.8
PRS 86.90 50 eP 47 12.00 0.9
LRM 87.01 39 eP 47 13.30 1.5
PRI 87.49 50 ePd 47 15.50 1.4
FRI 87.67 49 eP 47 15.20 0.4
TNP 88.70 47 P 47 21.00 1.0
S.D. = 1.2 on 61 of 62 obs.

OCT 12, 1990 05h 36m 15.50± 0.29s
38.183 N ± 3.3km 23.148 E ± 2.4km
DEPTH = 10.0km (geophysicist)
4.1mb (15 obs.)
GREECE (364)
ML 4.0 (THE), 4.0 (TTG), 3.9 (ATH).

ATH 0.50 115 ePg 36 26.70 1.1
AGG 1.05 323 ePc 36 35.58 0.2
eS 36 52.42
NEO 1.12 3 ePb 36 37.00 0.4
ITM 1.39 224 ePb 36 41.20 0.2
VLI 1.47 187 ePb 36 41.60 -0.5
LIT 1.98 345 iPc 36 50.01 0.6
VLS 2.02 271 ePb 36 51.50 1.6
APE 2.19 120 ePn 36 52.60 0.0
PLG 2.20 6 ePn 36 52.00 -0.6
KZN 2.37 334 ePn 36 55.80 0.6
THE 2.45 357 ePc 36 56.50 0.4
IGT 2.58 302 ePd 36 59.74 1.8
SOH 2.64 3 iPc 36 59.41 0.5
PRK 2.66 66 ePn 37 01.00 1.8
LSK 2.79 316 iPnd 37 03.20 2.1
GRG 2.83 348 ePd 37 01.78 0.2
iS 37 36.66
VAM 2.90 163 ePn 37 02.00 -0.5
FNA 2.94 333 iPc 37 03.98 0.9
eS 37 39.90
SRS 2.95 7 ePc 37 03.14 -0.1
SMG 2.95 98 ePn 37 03.00 -0.3
EZN 2.97 55 ePn 37 07.00 3.5X
SRN 2.98 306 iPn 37 05.10 1.5
KNT 2.98 356 iPc 37 04.41 0.7
eS 37 41.93
KEK 3.03 301 ePb 37 06.80 2.5X
KBN 3.03 324 iPnd 37 06.10 1.7
IZM 3.24 85 ePn 37 08.50 1.0
MMB 3.43 7 iPc 37 10.00 -0.1
OHR 3.44 329 iPnc 37 11.10 0.8
iSn 37 48.50
RDO 3.49 31 ePn 37 10.00 -0.8
ALN 3.52 39 ePd 37 09.74 -1.5
NPS 3.52 145 ePn 37 11.50 0.1
BERA 3.53 316 iP 37 13.60 2.2
VLO 3.64 310 iPn 37 14.70 1.7
KKB 3.68 359 iPc 37 19.00 5.4X
RZN 3.70 19 iPc 37 14.00 -0.1
KDZ 3.88 26 eP 37 16.00 -0.4
KGT 3.94 54 ePn 37 18.30 1.0
SKO 4.00 341 iPnc 37 18.50 0.3
iPg 37 30.00
i 37 37.00
iSn 38 04.00
i 38 06.80
i 38 10.00
iSb 38 14.00
i 38 18.00
TIR 4.05 322 iPn 37 14.70 -4.1X
MFT 4.12 50 ePn 37 19.40 -0.5
KAP 4.16 128 ePn 37 21.00 0.5
EDC 4.25 58 ePn 37 22.00 0.3
BNT 4.29 58 ePn 37 23.80 1.4
LACI 4.35 324 ePn 37 24.30 1.3
VTS 4.40 1 iPd 37 25.00 1.0
KKS 4.42 333 ePn 37 20.00 4.0X
DST 4.51 70 eP 37 24.60 -0.8
LCI 4.57 300 P 37 24.80 -1.4
SDA 4.74 325 ePn 37 30.00 1.3
ULC 4.82 323 ePn 37 30.00 0.2
eSn 38 22.50
KHL 5.02 86 eP 37 33.70 1.0
PVY 5.03 332 ePn 37 34.00 1.2
eSn 38 30.00
CTT 5.04 52 eP 37 30.30 -2.6
TTG 5.18 326 ePn 37 35.00 0.2
eSn 38 33.00
BDV 5.26 322 ePn 37 35.00 -1.1
eSn 38 34.00
GRI 5.32 279 P 37 37.18 0.3
ROI 5.32 287 P 37 36.70 -0.2
eSn 38 37.40
IZI 5.36 64 eP 37 36.80 -0.7
YLV 5.38 62 iP 37 36.80 -1.0
TDS 5.51 288 P 37 40.50 0.9
ALT 5.52 79 iP 37 40.70 0.8
ORI 5.54 292 P 37 39.40 -0.6
HCY 5.55 322 ePn 37 38.60 -1.5
eSn 38 40.00
CSI 5.58 289 P 37 40.60 0.0
eSn 38 41.20
CZI 5.58 283 P 37 41.10 0.5
NKY 5.60 327 ePn 37 41.00 0.0
eSn 38 42.00
HRT 5.69 60 eP 37 42.00 -0.2
PLE 5.88 332 ePn 37 45.00 0.2
BCK 5.94 95 eP 37 49.00 3.4X
MGR 6.22 291 P 37 48.10 -1.4
SGO 6.52 294 P 37 53.20 -0.6
PZI 6.64 263 P 37 56.06 0.5
BSS 6.96 295 P 37 58.30 -1.6
CMP 7.22 11 ePc 38 01.00 -2.6
BZS 7.51 352 eP 38 04.00 -3.7X
DUI 7.53 300 P 38 07.90 -0.1
MLR 7.59 15 eP 38 07.50 -1.5
RFI 7.72 297 P 38 12.07 1.5
SDI 7.98 299 P 38 13.50 -0.9
AZI 8.36 300 P 38 19.50 0.0
MNS 9.03 301 P 38 28.80 -0.1
ASS 9.35 305 P 38 32.00 -1.3
ARV 9.38 308 P 38 32.00 -1.7
PTJ 9.38 328 eP 38 30.20 -3.5X
RIY 9.69 320 eP 38 34.10 -3.8X
CEY 9.95 322 eP 38 38.00 -3.6X
eS 40 28.50
CRE 10.07 306 P 38 41.80 -1.4
LJU 10.13 324 e(P) 38 40.50 -3.4X
e(S) 40 33.50
TRI 10.26 320 e(Pn) 38 48.10 2.4
i(Sn) 40 31.70
SFI 10.27 307 P 38 45.00 -0.9
PGD 10.33 307 P 38 45.00 -2.0
VOY 10.42 322 eP 38 44.20 -3.9X
eS 40 37.90
FVI 11.37 321 P 38 59.00 -1.8
DSI 12.01 120 eP 39 06.00 -3.6X
KRA 12.09 350 eP 39 10.60 0.0
RMN 12.19 126 eP 39 07.00 -5.1X
WATA 12.48 321 iP 39 13.80 -2.2
0.5s 4.50nm 5.0mb
e 39 24.30
e 41 26.70
SOTA 12.58 320 iP 39 16.00 -1.4
0.5s 6.95nm 5.1mb X
i 39 17.20
i 39 27.10
i(S) 41 23.30
i 41 28.80
KHC 12.94 331 eP 39 20.50 -1.5
BRG 14.27 336 eP 39 55.00 15.5X
1.0s 11.00nm
MOX 14.91 330 eP 40 06.00 18.1X
CLL 14.95 335 e(P) 39 55.00 6.6X
i 40 03.30
BSF 15.34 314 eP 39 52.30 -1.3
1.0s 12.00nm 4.2mb
SMF 16.55 307 eP 40 12.70 3.6X
0.8s 4.70nm 3.7mb
LBF 16.60 308 eP 40 13.70 3.9X
0.8s 10.75nm 4.0mb
LOR 16.80 309 eP 40 13.60 1.4
1.0s 6.00nm 3.7mb
Z 20s 0.17um 4.3Msz
AVF 16.91 307 eP 40 16.50 2.8X
0.8s 6.70nm 3.8mb
SSF 16.93 308 eP 40 16.30 2.5X
0.8s 4.05nm 3.6mb
DOU 17.81 318 P 40 27.60 2.8X
0.5s 3.80nm 3.8mb
MFF 19.10 304 eP 40 42.10 1.3
0.8s 6.70nm 3.9mb
LPF 20.14 307 eP 40 51.00 -1.4
0.8s 10.75nm 4.2mb
NUR 22.37 2 eP 41 17.00 2.1
HFS 22.78 348 eP 41 17.80 -1.2
0.8s 7.10nm 4.2mb
Z 17s 0.08um 3.2MszX
LR 48 29.00
NB2 24.07 346 P 41 28.60 -3.0X
0.8s 3.70nm 4.0mb
SUF 24.63 3 eP 41 37.00 0.0
EKA 24.65 323 P 41 38.00 0.8
0.6s 6.60nm 4.5mb
BCAO 33.85 188 iPc 42 59.60 -0.7
0.4s 7.00nm 4.9mb

LKO 38.47 230 P 43 38.02 -1.4
0.4s 3.50nm 4.4mb
S.D. = 1.2 on 95 of 118 obs.

? OCT 12, 1990 06h 40m 42.85± 0.88s
15.773 S ±46.3km 173.938 W ±32.0km
DEPTH = 33.0km (normal)
4.7mb (2 obs.) 4.7Msz (2 obs.)
TONGA ISLANDS (173)

DZM 19.58 248 iPc 45 18.90 7.6X
STK 43.41 240 eP 48 36.20 -8.1X
ASPA 49.51 252 iPd 49 31.10 -1.5
0.9s 17.20nm 5.1mb
PRS 71.75 42 ePc 52 03.90 0.0
PRI 72.09 43 eP 52 06.30 0.1
MHC 72.17 41 eP 52 06.60 0.0
FRI 73.21 43 ePc 52 12.00 -0.6
CMB 73.39 42 ePc 52 13.50 -0.1
WDC 73.59 38 e(P) 52 14.90 0.2
ORV 73.59 40 eP 52 14.00 -0.7
MIN 74.01 39 ePc 52 17.00 -0.3
TNP 75.46 43 P 52 25.40 -0.4
ALQ 81.43 50 eP 52 55.00 -3.5X
1.2s 5.08nm 4.4mb
LRM 82.63 38 eP 53 04.40 -0.1
FBA 82.86 11 e(P) 53 06.10 1.1
BW06 82.89 42 P 53 05.20 -0.8
SES 85.80 35 eP 53 20.00 -0.2
KRA 144.00 345 ePKP 00 16.10 -0.5
KSP 144.06 349 iPKPd 00 16.70 0.0
e 00 30.00
CLL 144.12 353 iPKP 00 16.20 -0.5
1.1s 18.00nm
BRG 144.42 351 ePKP 00 17.70 0.4
1.3s 16.00nm
SPC 144.72 344 ePKP 00 18.50 0.4
MOX 144.93 354 iPKP 00 19.00 0.8
1.4s 34.00nm
e 00 33.00
PRU 145.19 350 PKPc 00 20.10 1.5
1.1s 19.90nm
e 00 34.00
KHC 146.17 351 PKP 00 23.40 3.0X
1.2s 7.50nm
e 00 37.50
ZST 146.41 347 ePKP 00 23.90 3.2X
CDF 147.44 358 ePKP 00 26.00 3.5X
1.0s 10.00nm
HAU 147.86 360 ePKP 00 27.20 4.1X
1.0s 8.00nm
Z 20s 0.08um 4.5Msz
BSF 148.03 359 ePKP 00 27.60 4.1X
0.8s 5.35nm
LOR 148.54 3 ePKP 00 28.80 4.6X
1.4s 23.95nm
Z 20s 0.17um 4.8Msz
SSF 148.73 3 ePKP 00 29.40 4.9X
1.4s 30.50nm
LBF 148.83 3 ePKP 00 29.60 4.9X
1.4s 19.60nm
LJU 149.00 349 e(PKP) 00 30.00 5.1X
BGF 149.19 4 ePKP 00 30.40 5.2X
1.4s 21.80nm
CEY 149.31 348 ePKP 00 30.50 5.0X
LSF 149.38 6 ePKP 00 30.60 5.1X
1.3s 18.05nm
TCF 149.41 5 ePKP 00 31.20 5.6X
1.4s 21.80nm
TRI 149.46 349 ePKP 00 31.00 5.4X
MAF 149.50 5 ePKP 00 31.20 5.5X
1.2s 20.85nm
LPG 150.36 359 ePKP 00 34.40 7.0X
1.4s 23.95nm
OHR 151.71 336 ePKP 00 37.00 7.8X
BCAO 163.35 229 iPKPc 00 45.00 1.1
0.4s 5.00nm
ic 07 57.00
id 17 53.00
S.D. = 0.7 on 22 of 42 obs.

& OCT 12, 1990 07h 56m 44.57s
59.564 N 152.996 W
DEPTH = 91.6km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT 0.15 307 iP 56 57.17 0.9
eS 57 06.70
AUE 0.28 223 iP 56 57.58 -0.7
eS 57 07.21
AUI 0.32 224 iP 56 57.71 -0.8
PDB 0.65 291 eP 57 00.37 -0.6
eS 57 12.27
XLV 0.66 99 iP 57 00.38 -0.7
HOM 0.69 82 eP 57 01.01 -0.4
eS 57 14.28
CDD 0.72 208 iP 57 00.73 -0.9
MCNL 0.78 242 eP 57 01.05 -1.3
CNPM 0.90 92 iP 57 02.63 -0.9
eS 57 16.38
RSO 0.91 8 eP 57 03.03 -0.8
NNL 0.98 60 eP 57 04.41 -0.1
NKA 1.47 36 eP 57 11.52 1.1
SLKM 1.68 55 iP 57 12.61 -0.6
SPU 1.69 16 iP 57 12.58 -0.7
BGL 1.73 10 iP 57 13.60 -0.3
CGLM 1.82 15 eP 57 14.42 -0.6
SEW 1.87 72 eP 57 13.81 -1.8
NCG 1.89 12 eP 57 15.39 -0.6
PMS 2.40 44 iP 57 21.93 -0.8
PWA 2.60 35 iP 57 24.61 -0.8
MTU 2.74 79 eP 57 25.77 -1.6
KNIM 2.76 71 eP 57 24.98 -2.7
PLRM 2.79 41 eP 57 25.76 -2.3
GHO 2.99 40 eP 57 29.05 -1.8
SML 3.21 44 eP 57 31.86 -2.1
GLI 3.23 63 eP 57 30.64 -3.4
26 obs. associated

& OCT 12, 1990 08h 50m 11.80s
38.347 N 118.108 W
DEPTH = 15.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 2.8 (BRK).

CMB 1.82 261 iPd 50 44.30 1.5
eS 51 06.80
FRI 1.86 224 eP 50 43.80 0.5
eS 51 08.50
ARN 2.89 251 e(P) 51 02.30 4.2
MIN 3.37 307 eP 51 05.20 0.2
4 obs. associated

OCT 12, 1990 08h 50m 19.97± 0.75s
40.403 N ± 7.1km 25.875 E ± 6.7km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 2.9 (ISK), 2.8 (ATH).

EZN 0.67 149 ePg 50 32.70 -0.6
eSg 50 42.70
RDO 0.79 341 iPgc 50 34.10 -1.1
eSg 50 45.00
KGT 1.09 87 iPn 50 40.20 -0.3
MFT 1.14 70 iPn 50 42.80 1.5
PRK 1.20 165 ePb 50 42.00 -0.2
eSb 50 58.10
BNT 1.56 91 ePn 50 48.00 0.2
PLG 1.86 270 ePn 50 53.20 1.1
eSb 51 16.00
CTT 2.08 68 iPn 50 54.80 -0.5
S.D. = 1.0 on 8 of 8 obs.

% OCT 12, 1990 09h 10m 58.13± 0.97s
39.185 N ± 7.8km 27.615 E ± 9.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

IZM 0.83 199 ePg 11 14.00 -0.3
DST 0.89 62 iPn 11 15.50 0.3
EZN 1.19 303 ePn 11 21.00 0.8
BNT 1.19 11 ePn 11 20.70 0.3
KGT 1.29 349 iPn 11 20.70 -1.3
S.D. = 1.1 on 5 of 5 obs.

? OCT 12, 1990 09h 50m 04.15± 1.04s
35.447 N ±17.6km 140.787 E ±16.8km
DEPTH = 33.0km (normal)
4.3mb (1 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

MAT 2.36 298 eP 50 42.00 0.6
eS 51 04.00
BJI 19.97 291 eP 54 40.00 3.6X
FBA 50.72 31 (P) 59 03.00 0.7
WB5 55.36 187 eP 59 37.50 0.3
GBA 60.59 266 P 00 13.80 -0.3
NB2 75.45 337 P 01 45.00 -1.3
0.7s 2.50nm 4.3mb
LPB 148.10 61 ePKP 09 51.00 5.3X
CNCB 148.37 62 PKP 09 50.00 3.7X
S.D. = 1.2 on 5 of 8 obs.

? OCT 12, 1990 10h 00m 53.36± 0.96s
39.287 N ± 8.5km 27.816 E ± 9.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

DST 0.70 63 iPg 01 07.50 0.2
eSg 01 21.50
IZM 0.99 206 ePn 01 12.00 -0.1
EDC 1.06 2 ePn 01 13.00 -0.3
EZN 1.27 296 ePn 01 17.20 0.2
S.D. = 0.5 on 4 of 4 obs.

% OCT 12, 1990 10h 04m 21.40± 0.86s
39.095 N ± 7.0km 27.598 E ± 9.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM 0.74 201 ePg 04 36.00 0.0
DST 0.95 57 iPn 04 39.50 0.0
EZN 1.23 307 ePn 04 44.20 0.0
EDC 1.27 9 iPn 04 44.90 0.0
BNT 1.28 11 iPn 04 45.20 0.0
S.D. = 0.0 on 5 of 5 obs.

• OCT 12, 1990 10h 31m 06.48± 1.91s
39.251 N ±14.6km 28.282 W ±10.2km
DEPTH = 10.0km (geophysicist)
AZORES ISLANDS (405)
Felt (IV) on Gracioso and (III) on Sao Jorge.

ROSA 0.53 177 iPc 31 17.60 0.4
CALA 0.75 206 iPc 31 21.30 0.2
PICO 0.76 189 iPc 31 21.10 -0.2
HOR 0.77 201 iPc 31 21.20 -0.3
eS 31 29.50
ADH 1.01 126 iPc 31 25.50 -0.1
iS 31 36.80
ZOBD 66.60 222 P 42 00.00 0.1
LPB 66.81 222 eP 42 05.00 4.0X
CNCB 66.98 222 eP 41 53.00 -9.3X
S.D. = 0.4 on 6 of 8 obs.

OCT 12, 1990 10h 36m 35.72± 0.72s
43.413 N ± 5.2km 5.442 E ± 5.7km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.5 (STR).

GELF 0.03 200 Pg 36 37.68 -0.1
BERF 0.21 119 Pg 36 40.21 -0.1
TREF 0.21 349 Pg 36 40.25 -0.1
PUYF 0.22 58 Pg 36 39.78 -0.8
PRAF 0.44 333 Pg 36 44.87 0.2
VILF 0.48 24 Pg 36 44.70 -0.8
TAVF 0.49 65 Pg 36 45.43 -0.3
MVIF 1.33 68 Pn 37 01.39 1.0
TOUF 1.44 65 Pn 37 02.60 0.6
Sg 37 23.17
AURF 1.45 70 Pn 37 02.36 0.3
AUTN 1.55 67 P 37 04.79 1.1
Sg 37 27.63
PGF 2.75 107 Pn 37 19.61 -1.2
S.D. = 0.8 on 12 of 12 obs.

• OCT 12, 1990 13h 30m 33.16± 1.68s
32.721 N ±10.0km 48.342 E ±13.5km
DEPTH = 47.4 ± 22.4 km
4.6mb (4 obs.)
WESTERN IRAN (347)

TEH 3.93 39 eP 31 33.00 0.4
TAB 5.58 343 eP 32 10.00 14.0X
RYD 8.12 191 eP 32 30.50 -0.7

12d 13h

AFIF 9.71 209 ePAIO 9.87 66 ePVRI 21.18 315 ePMLR 21.47 313 ePCMP 21.93 312 ePdSKO 23.22 301 iPOHR 23.49 299 eP 35 39.80 0.4
1.0s 39.00nm 4.8mb
CZI 26.77 293 P 36 09.80 -0.5
KHC 30.63 313 eP 36 48.00 3.1X
HFS 35.63 331 eP 37 25.90 -2.1
0.6s 8.00nm 4.8mb
NB2 37.15 331 P 37 38.60 -2.3
0.6s 1.50nm 4.1mb
BCAO 39.59 231 iPd 38 03.00 1.2
0.4s 3.00nm 4.5mb
CHG 47.22 94 eP 39 04.10 0.7
S.D. = 1.5 on 13 of 16 obs.

% OCT 12, 1990 14h 06m 05.18± 0.88s
39.117 N ± 7.2km 27.596 E ± 9.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM 0.76 200 ePg 06 20.00 -0.1
eSg 06 32.50
DST 0.94 58 iPn 06 23.40 0.3
EZN 1.21 306 ePn 06 28.00 0.3
EDC 1.25 9 ePn 06 27.90 -0.4
BNT 1.26 11 ePn 06 28.60 0.0
S.D. = 0.4 on 5 of 5 obs.

OCT 12, 1990 14h 26m 02.10± 0.81s
34.762 N ± 5.2km 23.144 E ± 3.5km
DEPTH = 28.0 ± 5.3 km
4.4mb (24 obs.)
CRETE (370)
MD 4.3 (HLW). ML 4.2 (THE), 4.2 (ATH).

VAM 1.08 53 ePn 26 20.00 -1.4
VLI 1.96 355 iPnd 26 36.80 2.8
NPS 2.09 75 iPbc 26 39.50 3.6X
ITM 2.61 338 ePn 26 45.50 2.2
APE 3.01 39 ePn 26 51.50 2.5
ATH 3.24 8 iPnd 26 54.30 2.2
KAP 3.39 75 ePn 26 55.20 0.7
VLS 3.98 330 iPnc 27 03.00 0.2
SMG 4.19 44 ePn 27 08.00 2.3
EVR 4.28 346 ePn 27 10.00 2.9
AGG 4.30 352 ePd 27 09.24 1.9
ARG 4.32 69 ePn 27 08.40 0.9
NEO 4.54 1 ePn 27 11.60 0.9
IZM 4.91 41 eP 27 21.50 5.5X
PRK 5.13 28 ePn 27 20.50 1.5
IGT 5.26 336 ePc 27 20.56 -0.4
LIT 5.35 355 ePc 27 21.92 -0.3
KSL 5.43 74 ePn 27 22.70 -0.5
PLG 5.61 2 iPnc 27 25.20 -0.6
KEK 5.62 333 ePn 27 27.60 1.7
KZN 5.64 349 ePn 27 26.70 0.4
EZN 5.65 26 eP 27 25.00 -1.4
SRN 5.69 335 ePn 27 26.00 -0.9
LSK 5.75 340 ePn 27 28.10 0.3
SOH 6.05 2 ePd 27 31.76 -0.3
FNA 6.17 347 ePd 27 32.96 -0.8
GRG 6.21 355 ePc 27 33.12 -1.2
KHL 6.24 53 iP 27 35.30 0.4
SRS 6.35 3 ePc 27 35.88 -0.4
KNT 6.39 358 ePc 27 36.72 -0.1
KGT 6.57 29 iP 27 38.10 -1.2
BCK 6.60 64 eP 27 39.00 -0.9
OHR 6.60 344 iPnc 27 38.70 -1.2
RDO 6.65 16 ePn 27 40.80 0.4
MMB 6.83 4 ePc 27 42.00 -1.0
LCI 6.92 325 P 27 41.50 -2.7
RZN 7.02 10 iPc 27 46.00 0.1
ATN 7.06 301 P 27 46.90 0.7
MEU 7.06 292 P 27 46.70 0.4
TIR 7.06 340 ePn 27 45.50 -0.7
KKB 7.09 360 eP 27 46.00 -0.7
KDZ 7.11 14 eP 27 47.00 0.2
ROI 7.11 314 P 27 47.00 0.0
CZI 7.16 310 P 27 46.40 -1.1
TDS 7.30 314 P 27 49.50 -0.1
SKO 7.32 350 iPn 27 47.70 -2.2

iPg 28 21.20
iSn 29 06.90
LACI 7.38 340 ePn 27 50.00 -0.6
CSI 7.41 314 P 27 49.90 -1.2
PLD 7.43 9 eP 27 52.00 0.6
ORI 7.51 317 P 27 52.00 -0.5
KKS 7.61 344 ePn 27 53.00 -0.8
SDA 7.79 340 ePn 27 55.20 -1.1
PGB 7.82 6 eP 27 56.00 -0.9
VTS 7.82 0 iP 27 58.00 1.0
MGR 8.07 314 P 27 59.00 -1.4
CSS 8.38 86 eP 28 03.00 -1.6
HLW 8.49 123 eP 28 04.40 -1.7
eS 29 31.00
SGO 8.49 315 P 28 05.00 -1.1
DUI 9.70 318 P 28 22.00 -0.9
RMN 10.57 111 eP 28 29.00 -5.9X
CMP 10.59 7 ePc 28 36.00 0.9
DSI 10.74 104 eP 28 31.50 -5.6X
MKT 10.79 107 eP 28 32.50 -5.4X
eS 30 27.00
MLR 10.93 10 eP 28 39.00 -0.8
MBH 11.11 113 eP 28 37.00 -5.1X
VRI 11.42 13 eP 28 46.00 -0.4
PTJ 12.39 336 eP 28 55.00 -4.5X
CEY 12.82 331 eP 29 03.60 -1.5
e(S) 31 22.50
LJU 13.03 332 eP 29 26.50 18.6X
e 31 33.50
TRI 13.06 330 e(Pn) 29 08.00 -0.3
i(Sn) 31 29.50
VOY 13.27 331 eP 29 08.80 -2.4
eS 31 31.40
ZST 14.16 343 eP 29 35.30 12.6X
SPC 14.57 352 eP 29 34.70 6.3X
SOTA 15.34 328 iP 29 43.70 5.4X
0.8s 12.20nm 4.2mb
KRA 15.46 352 eP 29 43.80 4.1X
KHC 16.00 337 eP 29 46.50 -0.2
i 29 51.40
WET 16.25 335 iPc 29 54.00 4.1X
1.0s 30.00nm 4.4mb
PRU 16.47 340 eP 29 53.80 1.2
e 29 55.40
KSP 16.83 345 iPd 30 00.30 3.2X
1.0s 20.00nm 4.2mb
i 30 04.80
GRF 17.30 333 eP 30 05.20 2.1
Z 19s 0.30um
BRG 17.44 340 iP 30 06.20 1.5
1.4s 24.00nm 4.1mb
i 30 16.00
BSF 17.88 322 eP 30 09.90 -0.5
0.8s 8.05nm 3.9mb
MOX 17.96 336 eP 30 12.00 0.8
CDF 18.03 324 eP 30 10.80 -1.4
0.7s 4.40nm 3.7mb
CLL 18.09 339 iP 30 13.60 0.7
0.7s 15.00nm 4.2mb
e 30 27.00
HAU 18.22 322 eP 30 14.10 -0.4
0.8s 9.40nm 4.0mb
Z 20s 0.40um
LBF 18.89 316 eP 30 23.30 0.5
0.6s 2.70nm 3.6mb
SSF 19.20 316 eP 30 26.70 0.3
0.7s 4.40nm 3.8mb
WLF 19.43 325 Pc 30 27.40 -1.6
ENN 20.31 327 eP 30 40.00 1.7
0.9s 30.00nm 4.6mb
DOU 20.46 324 P 30 39.80 -0.2
0.9s 80.00nm 5.1mb
WTS 20.84 331 eP 30 44.00 0.2
0.7s 14.00nm 4.5mb
MFF 21.17 311 eP 30 49.20 1.9
0.8s 8.05nm 4.2mb
LDF 22.09 316 eP 30 56.90 0.4
0.6s 9.00nm 4.4mb
TOL 22.18 291 eP 31 04.00 6.5X
LPF 22.36 314 eP 30 59.90 0.8
0.8s 10.75nm 4.4mb
FLN 22.38 316 eP 30 59.90 0.5
0.8s 16.10nm 4.5mb
Z 20s 0.10um 3.2Msz
NUR 25.78 2 eP 31 30.00 -2.0
HFS 26.12 349 eP 31 34.00 -1.2
0.5s 20.40nm 5.0mb

Z 17s 0.09um 3.4MszX
LR 42 26.00
N82 27.39 347 P 31 45.80 -1.1
0.7s 4.90nm 4.3mb
EKA 27.44 327 P 31 48.00 0.8
0.9s 10.90nm 4.5mb
BCAO 30.48 189 iPd 32 16.00 1.1
0.6s 8.00nm 4.7mb
LKO 36.33 233 P 33 07.28 1.7
NDI 45.94 82 eP 34 25.00 0.7
WMQ 49.63 59 P 34 53.50 0.4
GBA 53.14 99 P 35 20.00 0.2
KOD 55.05 103 eP 35 34.50 0.3
GTA 59.61 61 eP 36 05.00 -0.9
1.2s 10.00nm 4.8mb
CD2 66.08 68 eP 36 48.00 -0.8
CHG 68.08 82 eP 37 02.00 0.3
TIY 69.28 58 P 37 08.20 -0.7
GYA 70.44 71 P 37 16.00 -0.2
BJI 70.71 54 eP 37 16.50 -1.0
1.2s 8.00nm 4.7mb
CN2 74.67 47 eP 37 40.00 -0.7
FFC 79.19 331 eP 38 11.00 5.3X
0.8s 10.00nm 4.9mb
FBA 80.41 356 P 38 14.20 2.1
S.D. = 1.2 on 100 of 116 obs.

? OCT 12, 1990 14h 35m 53.62± 1.14s
31.423 S ±34.4km 68.836 W ±20.6km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.07 154 eP 36 08.30 0.2
e(S) 36 18.70
RTLL 0.33 74 iPc 36 08.50 -0.1
eS 36 19.90
RTCV 0.51 150 eP 36 09.70 0.0
S 36 21.50
RTBS 0.58 246 ePc 36 10.10 -0.1
S.D. = 0.2 on 4 of 4 obs.

• OCT 12, 1990 16h 04m 03.05± 0.53s
55.496 N ±24.1km 35.048 W ± 7.3km
DEPTH = 10.0km (geophysicist)
4.3mb (8 obs.)
NORTH ATLANTIC OCEAN (402)

GRR 22.07 94 eP 09 00.40 1.0
0.8s 8.05nm 4.2mb
LDF 22.38 93 eP 09 03.50 1.0
1.0s 12.00nm 4.3mb
TCF 24.97 96 eP 09 26.90 -0.9
1.0s 6.00nm 4.2mb
MAF 25.21 96 eP 09 28.80 -1.2
1.2s 14.90nm 4.6mb
SSF 25.26 93 eP 09 31.00 0.5
1.0s 8.00nm 4.4mb
AVF 25.33 94 eP 09 31.50 0.4
0.8s 5.35nm 4.3mb
TOL 25.78 114 eP 09 36.00 0.6
MOX 28.02 80 eP 09 54.00 -1.9
KHC 29.88 82 eP 10 13.10 0.5
MBC 35.72 336 eP 11 04.00 1.0
1.0s 6.00nm 4.4mb
FVM 40.59 268 P 11 44.60 0.5
GLD 47.74 281 P 12 42.40 0.5
ANMO 51.84 278 P 13 13.80 0.4
ALQ 51.84 278 eP 13 13.00 -0.4
1.0s 2.50nm 4.1mb
TNP 55.51 288 (P) 13 38.80 -1.7
S.D. = 1.1 on 15 of 15 obs.

& OCT 12, 1990 16h 07m 20.00s
37.063 N 121.907 W
DEPTH = 15.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.0 (BRK). Felt at Santo Cruz.

GCC 0.08 245 iPd 07 22.50 -0.7
MHC 0.35 37 iPc 07 27.20 -0.3
ARN 0.41 46 iPd 07 28.00 -0.5
SAO 0.47 129 iPd 07 28.20 -1.3
PCC 0.58 319 iPd 07 30.70 -0.6
PRS 0.85 149 ePd 07 35.10 -0.8
eS 07 46.60
BKS 0.85 342 iPc 07 35.80 -0.2

BRK	0.86	341	eP	07	35.50	-0.5
			eS	07	47.20	
LLA	0.89	120	ePd	07	35.80	-0.9
ZSP	0.92	343	eP	07	37.20	0.0
			eS	07	51.80	
PRI	1.36	132	ePc	07	43.80	-0.6
CMB	1.55	51	ePc	07	47.20	0.1
NWRM	1.59	331	eP	07	49.00	1.3
PHAM	1.73	135	eP	07	48.20	-1.4
FRI	1.76	92	eP	07	48.10	-2.0
BCH	2.39	141	eP	07	55.70	-3.5
ORV	2.51	7	eP	08	01.50	0.6
TNP	3.86	73	e(P)	08	19.50	-0.8

18 obs. associated

OCT 12, 1990 16h 14m 25.50± 0.39s
13.377 N ± 7.9km 87.560 W ± 7.5km
DEPTH = 207.5km (4 depth phases)
4.5mb (10 obs.)
HONDURAS (72)

DVD	7.02	134	iPd	16	07.00	0.2
UPA	9.00	118	iPc	16	32.50	-0.2
	0.8s	29.85nm			4.6mb	
SDV	17.19	103	eP	18	15.40	0.2
TOV	17.77	100	eP	18	21.40	0.4
FISA	17.93	95	iPc	18	23.00	0.2
MORO	18.98	95	iPd	18	33.50	-0.2
CEOS	19.34	101	iPc	18	36.50	-0.9
PLAV	19.95	98	eP	18	44.00	0.3
GUAC	20.11	97	eP	18	46.00	0.8
CAR	20.39	96	eP	18	48.00	0.1
LLAV	20.51	96	iPc	18	49.50	0.4
OLLA	20.60	97	iPd	18	50.00	0.0
CUM	23.07	95	iP	19	15.00	1.1
MEO	23.53	337	iPc	19	18.30	0.0
SIO	23.63	342	e(P)	19	19.00	-0.2
TUL	23.63	343	eP	19	19.00	-0.2
	1.5s	258.40nm			5.6mb X	
			e	19	29.30	39kmX
ACO	25.44	338	ePd	19	36.00	0.0
	1.0s	113.80nm			5.5mb	
			e	20	16.80	208km
ALQ	27.44	325	eP	19	54.00	-0.3
	1.3s	10.58nm			4.4mb	
			e	20	35.00	204km
ANMO	27.44	325	P	19	54.00	-0.3
			pP	20	35.80	209km
ZOBO	35.17	146	P	21	01.00	-1.2
LPB	35.40	147	P	21	04.60	0.7
			i	21	36.00	141kmX
CNCB	35.69	147	P	21	06.00	-0.5
			i	21	37.00	139kmX
TNP	36.04	318	(P)	21	09.00	0.1
			pP	21	50.20	191kmX
CCH	37.16	145	P	21	20.50	1.9
LRM	38.59	332	eP	21	30.20	0.1
			e	22	14.40	209km
SIV	39.21	137	P	21	32.50	-2.8
FFC	42.77	348	iPc	22	03.90	-0.1
	0.6s	15.00nm			4.7mb	
FFC	42.77	348	eP	22	05.00	1.0
	0.8s	23.00nm			4.7mb	
SCH	44.43	17	ePc	22	16.50	-0.8
	0.6s	23.00nm			4.8mb	
PNT	44.47	330	eP	22	18.00	0.3
	0.7s	9.00nm			4.3mb	
BAO	48.61	125	eP	22	44.50	-6.0X
PPD	50.02	134	eP	22	56.70	-4.4X
			e	22	58.80	7kmX
			e	23	21.20	
SOB1	51.48	113	eP	23	08.30	-3.9X
			e	23	15.40	24kmX
VAO	53.73	132	(P)	23	25.00	-3.7X
MBC	65.09	352	eP	24	44.50	-0.9
	1.0s	6.00nm			4.4mb	
LKO	80.10	82	P	26	12.78	-1.5
NB2	82.61	29	P	26	28.00	1.5
	1.3s	11.30nm			4.4mb	
HFS	84.03	30	eP	26	32.50	-1.1
	0.7s	2.00nm			4.0mb	
KHC	87.14	40	eP	26	47.50	-1.7
STK	131.48	239	ePKP	33	15.50	0.2
	1.3s	8.00nm				
ASPA	139.51	249	iPKPd	33	30.50	-0.2
	1.2s	12.70nm				
			e	34	22.10	

WARB	145.50	243	ePKP	33	41.00	0.0
	0.4s	2.00nm				
CHG	147.38	349	ePKP	33	45.00	0.8
GBA	149.35	30	PKP	33	50.00	2.7
	S.D. = 1.0	on	40 of	44	obs.	

& OCT 12, 1990 17h 30m 00.08s
37.248 N 116.494 W
DEPTH = 0.0km
5.6mb (75 obs.) 4.2Msz (5 obs.)
SOUTHERN NEVADA (41)
<DOE>. ML 5.4 (BRK). 37° 14' 52.31" N., 116° 29' 39.16" W., Surfoce Elev. 1898 m., Depth of Buriol 600 m., Shot Time 173000.08, "TENABO," Nevodo Test Site (Dept. of Energy). Felt ot Las Vegas.

TNP	1.01	326	iPc	30	20.10	-0.2
CLC	1.68	212	iPc	30	30.60	-0.4
MNA	1.77	312	iPc	30	32.30	0.0
GSC	1.96	187	iPc	30	34.40	-0.6
KVN	2.20	325	iPc	30	38.40	-0.2
FRI	2.58	265	iPc	30	43.60	-0.2
SBB	2.77	203	iPc	30	45.90	-0.8
PKEM	3.14	249	iPc	30	52.50	0.7
TPC	3.16	173	iPc	30	51.10	-0.9
CMB	3.19	285	iPc	30	51.90	-0.6
MWC	3.27	203	iPc	30	53.60	-0.3
PEC	3.39	189	iPc	30	55.20	-0.3
PRI	3.53	253	iPc	30	56.80	-0.6
BCH	3.56	236	iPc	30	57.50	-0.3
HAY	3.60	169	eP	30	56.90	-1.4
LLA	3.62	261	ePc	30	57.40	-1.2
PLM	3.90	185	iPc	31	02.50	-0.3
SYP	3.92	227	ePc	31	02.90	-0.1
ARN	4.02	273	eP	31	03.70	-0.6
PRS	4.02	258	iPc	31	03.40	-0.9
MHC	4.11	273	iPc	31	05.30	-0.3
CIS	4.14	203	ePc	31	05.10	-0.9
BLP	4.15	231	eP	31	05.90	-0.2
CPE	4.39	187	iPc	31	08.60	-0.9
GLA	4.40	161	iPc	31	08.60	-1.2
ORV	4.56	302	iPc	31	10.90	-1.0
BAR	4.56	182	ePc	31	11.00	-1.0
SCI	4.58	202	ePc	31	11.40	-0.8
IKP	4.60	176	eP	31	11.60	-1.0
BKS	4.60	280	iPnc	31	11.70	-0.9
			ePg	31	22.80	
BRK	4.62	280	ePc	31	11.80	-1.0
ZSP	4.63	280	eP	31	12.00	-0.9
PCC	4.70	275	ePc	31	12.50	-1.4
MIN	5.05	309	iPc	31	18.30	-0.8
DAU	5.17	51	eP	31	21.00	0.1
WDC	5.77	307	iPc	31	27.80	-1.3
FHC	6.83	304	e(P)	31	43.30	-0.7
BW06	7.67	42	iPc	31	55.80	-0.2
ALQ	8.44	103	ePc	32	04.30	-2.5
ANMO	8.44	103	eP	32	04.70	-2.1
GOL	9.06	71	eP	32	15.00	-0.4
LRM	9.09	18	eP	32	17.10	1.4
GLD	9.18	71	eP	32	17.20	0.2
NEW	11.02	358	eP	32	42.70	0.6
RSSD	11.68	50	eP	32	48.30	-3.0
PNT	12.27	350	eP	33	00.00	0.9
	1.0s	240.00nm			6.5mb	
PGC	12.48	338	eP	33	05.00	3.3
	0.9s	192.00nm			6.4mb	
SES	13.71	15	ePc	33	17.60	-0.6
	1.3s	478.00nm			6.3mb	
			pP	33	26.00	
ACO	13.88	87	eP	33	20.90	0.4
	1.0s	92.70nm			5.6mb	
			i	33	30.00	
			e	34	26.10	
MEO	14.70	94	iPc	33	32.20	0.9
EDM	16.12	7	ePc	33	48.50	-1.1
SIO	16.30	89	eP	33	52.90	0.9
BIX	16.63	88	iP	33	56.50	0.4
TUL	16.68	88	eP	33	56.70	-0.1
	1.0s	128.30nm			5.0mb	
Z	19s	1.20um			5.4Msz	
			LR	39	40.00	
FFC	20.11	25	iPc	34	36.10	-2.0
	1.0s	538.00nm			5.8mb	
FVM	20.65	80	ePc	34	42.90	-1.0

SIT	23.45	334	eP	35	13.40	1.8
PPM	23.93	134	(P)	35	20.50	3.3
RSCP	24.89	84	eP	35	25.60	-0.3
YKA	25.30	2	eP	35	27.50	-2.0
	0.9s	57.60nm			5.3mb	
CLE	27.24	70	iP	35	45.60	-2.1
BLA	28.62	79	eP	35	59.50	-0.7
	1.0s	180.00nm			5.9mb	
JSC	28.65	85	eP	35	59.20	-1.2
LHS	28.95	85	eP	36	01.50	-1.7
MID	29.33	329	e(P)	36	04.40	-1.9
TOA	30.91	333	ePc	36	21.20	0.7
KDC	31.25	323	eP	36	23.70	0.3
PMR	31.72	331	ePc	36	27.30	-0.1
	1.2s	149.20nm			5.8mb	
RSNY	32.26	64	eP	36	30.20	-2.2
	1.0s	48.81nm			5.4mb	
INK	32.52	348	eP	36	33.00	-1.4
	1.0s	37.00nm			5.3mb	
TBR	32.76	70	eP	36	35.00	-1.7
PNJ	32.84	70	e(P)	36	34.30	-3.1
			i	36	36.40	
FBA	33.29	336	iPc	36	40.50	-0.6
	0.9s	166.67nm			6.0mb	
HBVT	33.32	64	eP	36	40.20	-1.4
SVW	34.16	327	iPc	36	48.40	-0.4
SDN	34.66	316	eP	36	53.10	0.1
TTA	35.16	330	iPc	36	57.10	-0.3
	1.2s	92.80nm			5.5mb	
IMA	35.94	335	iPc	37	03.80	-0.3
	0.9s	53.90nm			5.4mb	
SCH	37.80	46	ePc	37	17.00	-2.7
	1.3s	151.00nm			5.6mb	
FRB	38.97	32	eP	37	29.00	-0.2
	0.8s	87.00nm			5.4mb	
MBC	39.11	359	eP	37	30.00	-0.3
	0.9s	74.00nm			5.3mb	
ADK	44.04	309	eP	38	09.80	-1.2
	0.8s	76.20nm			5.6mb	
TOV	50.12	111	eP	38	59.70	0.4
CEOS	51.70	110	iPc	39	10.00	-1.4
CAR	51.82	108	eP	39	09.00	-3.3
LLAV	51.93	108	iPc	39	12.00	-1.1
CUM	53.95	106	iP	39	22.00	-6.0
DAG	55.82	16	iPc	39	37.70	-3.2
	0.9s	32.21nm			5.4mb	
RUV	59.72	215	iP	40	08.90	0.0
	1.2s	70.00nm			5.7mb	
ARE	68.18	133	eP	41	05.00	0.1
KEV	70.02	13	eP	41	13.00	-2.1
ZOBO	70.04	130	Pc	41	14.80	-1.9
LPB	70.26	130	P	41	16.00	-1.8
CNCB	70.54	130	P	41	18.00	-1.7
EKA	71.70	34	Pd	41	23.10	-2.4
	1.4s	49.70nm			5.5mb	
SOD	72.02	14	iP	41	24.40	-2.8
CCH	72.11	129	P	41	29.50	0.7
NB2	73.21	24	P	41	32.10	-2.3
	0.9s	19.40nm			5.2mb	
SIV	74.30	125	P	41	39.40	-1.9
HFS	74.69	23	iPc	41	40.50	-2.5
	0.8s	48.10nm			5.6mb	
Z	17s	0.09um			4.1MszX	
			LR	10	28.00	
BST	75.80	40	P	41	46.70	-2.8
SUF	75.96	17	eP	41	48.00	-2.2
	0.8s	8.50nm			4.9mb	
UPP	76.12	22	iP	41	48.60	-2.5
YAMJ	77.03	308	P	41	55.60	-1.0
FLN	77.27	38	iPc	41	56.50	-1.2
	1.2s	101.15nm			5.8mb	
Z	20s	0.08um			4.0Msz	
GRR	77.34	38	iPc	41	57.00	-1.1
	1.3s	101.10nm			5.8mb	
LPF	77.49	38	iPc	41	57.70	-1.2
	1.2s	98.20nm			5.8mb	
NUR	77.51	19	iP	41	56.00	-2.8
	0.8s	19.10nm			5.3mb	
LDF	77.56	38	iPc	41	58.10	-1.2
	1.2s	86.30nm			5.8mb	
WIT	77.64	31	eP	42	00.00	0.4
NIIJ	78.25	308	P	42	02.30	-1.0
SNF	78.28	34	P	42	02.70	-0.5
WTS	78.30	32	eP	42	02.50	-0.8
	1.0s	39.00nm			5.5mb	
DOU	78.72	34	P	42	04.70	-0.9
	1.2s	166.70nm			6.0mb	

12d 17h

ENN 78.82 33 iP 42 05.50 -0.7
0.9s 45.00nm 5.5mb
MFF 78.91 39 iPc 42 05.50 -1.3
1.2s 83.30nm 5.7mb
CHJJ 78.99 307 P 42 06.70 -0.7
MAT 79.18 308 iPc 42 07.20 -1.3
0.7s 31.51nm 5.4mb
MTMJ 79.41 308 P 42 08.90 -0.9
LSF 79.99 38 iPc 42 11.20 -1.5
1.0s 26.00nm 5.1mb
EPLA 80.05 47 eP 42 12.00 -1.1
ABH 80.18 33 eP 42 13.54 -0.1
TCF 80.30 38 iPc 42 13.00 -1.3
0.9s 29.50nm 5.2mb
ECRI 80.38 43 iPc 42 14.00 -0.9
SSF 80.38 37 iPc 42 13.40 -1.3
1.2s 89.25nm 5.6mb
LOR 80.40 37 iPc 42 13.70 -1.1
1.2s 139.45nm 5.8mb
Z 20s 0.13um 4.3Msz
BGF 80.42 38 iPc 42 13.40 -1.5
1.2s 87.75nm 5.6mb
AVF 80.50 37 iPc 42 13.70 -1.6
1.1s 67.15nm 5.5mb
LFF 80.51 40 iPc 42 14.30 -1.1
1.2s 83.30nm 5.6mb
MAF 80.52 38 iPc 42 14.20 -1.3
1.2s 58.00nm 5.4mb
MAF 80.52 38 P 42 19.41 3.9
RJF 80.65 39 iPc 42 14.70 -1.5
1.3s 86.65nm 5.6mb
Z 20s 0.10um 4.2Msz
LBF 80.66 37 iPc 42 14.90 -1.4
1.2s 68.45nm 5.5mb
VITF 80.71 35 P 42 15.25 -1.1
GUD 80.78 45 iPc 42 15.80 -1.3
SMF 80.84 37 iPc 42 15.50 -1.7
1.0s 58.00nm 5.5mb
GWF 80.88 34 P 42 16.00 -1.3
LPO 80.92 40 iPc 42 16.40 -1.2
0.9s 36.05nm 5.4mb
HAU 81.03 35 iPc 42 17.00 -1.1
0.9s 42.60nm 5.5mb
Z 20s 0.13um 4.3Msz
CDF 81.15 34 P 42 17.66 -1.2
WLS 81.18 34 P 42 17.50 -1.5
CAF 81.19 39 iPc 42 17.70 -1.4
1.0s 61.00nm 5.6mb
ECH 81.24 34 P 42 17.66 -1.6
MOX 81.30 30 eP 42 18.00 -1.5
1.3s 49.00nm 5.4mb
CLL 81.34 29 iP 42 18.30 -1.3
1.1s 35.00nm 5.3mb
TOL 81.35 46 iPc 42 19.50 -0.4
1.1s 88.61nm 5.7mb
BSF 81.36 35 P 42 18.66 -1.3
EPF 81.63 41 iPc 42 20.00 -1.4
1.2s 38.70nm 5.4mb
HOF 81.67 31 eP 42 20.50 -0.9
1.2s 25.00nm 5.2mb
LOMF 81.73 35 P 42 20.49 -1.4
ETOR 81.84 44 iPc 42 21.60 -1.0
FEL 81.88 34 P 42 21.10 -1.6
GRF 81.88 31 iPc 42 22.30 -0.2
1.3s 66.00nm 5.6mb
Z 18s 0.10um 4.2Msz
EHOR 82.01 48 eP 42 22.20 -1.2
PEL 82.03 143 eP 42 14.00 -9.4
BRG 82.05 29 iPd 42 22.10 -1.2
1.1s 32.00nm 5.4mb
i 42 38.60
i 43 06.00
e 45 32.10
SLE 82.17 34 ePc 42 22.90 -1.2
ZLA 82.34 34 ePd 42 24.40 -0.6
MDZ 82.72 141 eP 42 26.60 -0.5
EMS 82.73 36 ePd 42 26.90 -0.3
DIX 82.94 36 ePd 42 28.50 0.0
KSP 82.97 28 eP 42 26.30 -1.8
e 45 24.70
PRU 82.98 29 Pc 42 27.30 -0.9
1.3s 25.30nm 5.3mb
e 42 35.20
WET 82.99 31 eP 42 27.80 -0.5
1.3s 46.00nm 5.5mb
LPL 83.04 36 iPc 42 28.50 -0.4
1.1s 31.75nm 5.5mb

LPG 83.07 36 iPc 42 28.80 -0.3
1.1s 47.60nm 5.6mb
EVIA 83.07 46 eP 42 28.40 -0.6
LLS 83.08 34 ePd 42 28.90 -0.1
FUR 83.08 32 eP 42 28.20 -0.6
1.2s 63.00nm 5.7mb
BAO 83.09 115 eP 42 29.40 0.0
MMK 83.22 35 ePc 42 30.60 0.7
KHC 83.28 30 P 42 29.00 -0.8
1.1s 16.50nm 5.2mb
LSD 83.29 36 P 42 29.57 -0.7
BNI 83.36 37 P 42 30.50 0.1
RRL 83.51 37 P 42 31.00 -0.3
ORO 83.55 36 P 42 31.50 0.1
RSP 83.56 36 P 42 31.31 -0.1
VDL 83.58 34 ePd 42 31.90 0.3
TMA 83.60 35 ePd 42 31.30 -0.4
AVE 83.64 53 iP 42 31.00 -0.9
OSS 83.73 34 ePd 42 32.40 0.1
SOTA 83.78 33 iPc 42 31.90 -0.6
1.3s 70.20nm 5.7mb
WATA 83.85 33 ePc 42 32.00 -0.9
1.3s 65.50nm 5.7mb
PZZ 83.97 37 P 42 32.75 -0.8
OGA 83.97 33 eP 42 33.20 -0.4
1.3s 51.00nm 5.6mb
DOI 84.04 37 P 42 33.50 -0.3
BHG 84.10 32 iPd 42 33.50 -0.5
MDI 84.23 35 P 42 33.00 -1.6
SOB1 84.25 106 iPc 42 34.70 -0.5
STV 84.27 37 P 42 33.26 -1.7
ENR 84.33 37 P 42 33.16 -2.2
LRG 84.39 38 eP 42 34.60 -0.9
1.0s 28.00nm 5.4mb
FRF 84.45 38 eP 42 34.70 -1.1
1.2s 89.25nm 5.9mb
ROB 84.49 37 P 42 34.39 -1.7
LMR 84.55 38 eP 42 35.20 -1.1
1.2s 83.30nm 5.8mb
SBF 84.61 37 eP 42 35.10 -1.6
1.2s 74.40nm 5.8mb
PCP 84.63 36 P 42 33.98 -2.8
FIN 84.72 36 P 42 31.72 -5.5
SAL 84.72 34 P 42 36.50 -0.6
FVI 84.95 32 P 42 37.00 -1.2
KRA 84.95 26 iPd 42 37.10 -1.1
1.3s 115.00nm 5.9mb
e 42 43.00
VKA 85.06 29 ePc 42 37.50 -1.3
1.3s 48.50nm 5.6mb
PPD 85.07 122 eP 42 38.60 -0.5
TIO 85.28 55 iP 42 39.50 -0.9
ZST 85.43 29 iP 42 39.70 -0.9
0.6s 36.00nm 5.7mb
CAI 85.50 102 iPc 42 40.40 -1.0
SOP 85.63 30 iPd 42 42.10 0.5
SRO 86.21 29 iP 42 43.90 -0.8
SFI 86.63 35 P 42 46.00 -0.6
PTJ 86.83 31 eP 42 45.20 -2.5
ARV 87.45 34 P 42 49.50 -1.2
ASS 87.66 35 P 42 49.50 -2.2
VAO 88.68 120 eP 42 56.50 -0.3
AZI 88.86 35 P 42 56.00 -1.4
BJI 89.16 322 eP 42 58.00 -0.9
1.4s 44.00nm 5.5mb
SDI 89.26 35 P 42 57.00 -2.4
JFO 90.40 117 (P) 43 04.00 -0.9
MLR 90.95 25 eP 43 03.00 -4.3
SKO 92.30 30 iP 43 11.20 -2.2
OHR 92.77 31 eP 43 14.00 -1.7
SSE 93.23 313 Pd 43 17.00 -0.8
1.0s 43.00nm 5.8mb
DZM 93.41 245 iPc 43 19.60 0.9
LZH 98.01 328 eP 43 39.00 -0.8
2.0s 29.00nm 5.7mb
LKO 100.46 70 Pdiff 43 49.26 -1.8
0.8s 12.50nm 5.5mb
ASPA 119.08 261 ePKP 48 50.60 -2.2
1.0s 9.00nm
BCAO 121.10 55 iPKPd 48 55.00 -1.9
0.7s 8.00nm
GBA 127.75 343 PKP 49 07.70 -1.9
KRI 143.88 65 iPKPc 49 39.00 -0.7
BUL 145.21 70 iPKPd 49 39.40 -2.5
KSR 146.99 81 iPKPc 49 43.00 -1.7
1.0s 30.00nm
CIR 147.95 69 iPKPd 49 48.90 2.8

SLR 148.02 79 iPKPc 49 48.00 1.7
1.0s 45.00nm
NPA 149.17 51 ePKP 49 46.70 -1.5
BFT 149.37 78 iPKPc 49 51.50 3.0
1.0s 45.00nm
MAW 149.59 180 iPKP 49 50.70 3.5
235 obs. associated

? OCT 12, 1990 18h 00m 05.43± 1.77s
50.198 N ±38.6km 143.723 E ±29.1km
DEPTH = 33.0km (normal)
4.6mb (3 obs.)
SAKHALIN ISLAND (662)

FBA 37.49 41 P 07 16.00 -1.2
INK 42.15 33 eP 07 58.00 2.2
CHTO 47.34 245 P 08 38.10 0.2
FFC 61.92 37 eP 10 23.00 -0.8
0.6s 9.00nm 5.1mb
NB2 62.75 336 P 10 29.00 -0.2
0.7s 1.70nm 4.3mb
HFS 62.85 334 eP 10 29.50 -0.3
0.5s 2.10nm 4.5mb
S.D. = 1.6 on 6 of 6 obs.

% OCT 12, 1990 18h 55m 10.40± 1.61s
61.772 N ±12.8km 5.331 E ±13.1km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.3 (BER).

FOO 0.22 218 iPgd 55 16.14 1.0
eSg 55 20.44
HYA 0.73 146 eP 55 26.79 2.0
eSg 55 39.89
SUE 0.77 201 eP 55 24.48 -0.9
eS 55 35.26
ASK 1.30 183 eP 55 33.62 -0.7
eSg 55 52.74
MOL 1.31 51 eP 55 35.05 0.4
eSg 55 54.10
BLS2 2.61 162 eP 55 52.97 -0.4
eS 56 24.64
NRA0 3.18 106 Pn 56 00.00 -1.3
Pg 56 06.10
Sn 56 40.10
Sg 56 52.30
S.D. = 1.5 on 7 of 7 obs.

? OCT 12, 1990 19h 08m 13.84± 6.15s
32.778 S ±31.4km 70.942 W ±17.0km
DEPTH = 75.8 ± 51.5 km
CHILE-ARGENTINA BORDER REGION (127)

ROCH 0.20 197 iPc 08 25.40 -0.2
iS 08 33.80
JACH 0.31 72 iPd 08 26.00 0.0
iS 08 34.50
SAN 0.71 161 iPd 08 29.70 0.1
iS 08 41.00
LCCH 0.87 217 iPc 08 31.70 0.4
iS 08 44.10
PCH 0.91 157 iPc 08 32.00 0.0
iS 08 45.00
LNV 1.24 198 iP 08 35.50 -0.4
iS 08 50.70
S.D. = 0.4 on 6 of 6 obs.

• OCT 12, 1990 19h 23m 22.70± 0.45s
55.926 S ±10.0km 27.739 W ±14.6km
DEPTH = 33.0km (normal)
5.3mb (10 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

AIA 19.92 227 eP 27 59.30 5.3X
SPA 34.25 180 iPc 30 07.50 0.1
1.0s 84.00nm 5.6mb
SBA 46.18 184 iPd 31 47.30 2.0
SIV 47.27 314 P 31 54.00 -0.6
SOB1 47.74 342 eP 31 58.90 0.6
CNCB 49.53 306 P 32 14.80 2.1
LPB 49.82 306 eP 32 13.00 -1.8
ZOBO 50.07 306 P 32 17.00 0.1
LIC 64.71 25 Pd 34 00.02 0.4
0.6s 11.00nm 5.2mb
KIC 64.91 25 Pd 34 01.12 0.2
0.6s 6.50nm 4.9mb

TIC	65.12	25 P	34 02.42	0.2	
	0.7s	14.00nm		5.2mb	
LKO	67.79	24 Pd	34 19.70	0.5	
	0.5s	17.00nm		5.4mb	
BCAO	71.07	50 iPd	34 39.60	0.2	
	0.6s	51.00nm		5.8mb	
NWAO	86.59	151 eP	36 03.00	-0.6	
	0.7s	6.00nm		4.9mb	
MUN	87.20	150 iPd	36 06.30	-0.3	
	0.7s	25.00nm		5.6mb	
KLB	87.99	151 iPd	36 10.30	-0.1	
	0.7s	22.00nm		5.6mb	
ASPA	99.20	163 eP	37 01.10	-1.1	
	0.9s	5.70nm		5.1mb	
MBC	143.74	336 ePKP	42 52.00	-2.1	
	0.7s	3.00nm			
INK	145.51	321 ePKP	42 56.00	-1.3	
FBA	150.21	312 PKP	43 06.00	1.2	
BJI	151.50	109 ePKP	43 13.00	5.5X	
S.D. = 1.2	on	19 of	21 obs.		

OCT 12, 1990 20h 24m 50.07± 0.67s
29.250 N ± 8.4km 51.431 E ± 8.3km
DEPTH = 33.0km (normal)
4.2mb (3 obs.)
SOUTHERN IRAN (353)
ML 4.1 (BMU).

BBU	3.14	196 iPn	25 39.00	0.6	
		eSn	26 34.00		
DHR	3.15	202 eP	25 38.50	0.0	
BRF	3.25	194 ePn	25 40.20	0.3	
		eSn	26 28.80		
BJA	3.33	193 iPn	25 41.20	0.2	
		eSn	26 30.80		
RYD	6.23	225 iPd	26 20.00	-2.2	
KER	6.28	325 e(P)	26 42.00	19.1X	
OASM	7.68	248 eP	26 58.70	16.3X	
AFIF	8.98	237 ePc	27 01.30	0.7	
KMSA	10.85	217 eP	27 21.20	-5.0X	
SRAT	13.48	216 eP	27 57.00	-4.7X	
QUE	13.52	82 eP	28 03.10	0.9	
MLR	25.79	316 eP	30 24.00	4.2X	
HYB	27.48	109 eP	30 35.00	-0.4	
GBA	28.68	117 Pd	30 45.00	-1.2	
	0.7s	1.70nm		3.9mb	
KHC	34.94	315 eP	31 41.00	0.2	
BCAO	39.74	238 iPc	32 23.00	1.5	
	0.7s	7.00nm		4.5mb	
HFS	39.94	332 eP	32 22.00	-0.6	
	0.7s	3.90nm		4.3mb	
CHG	44.36	93 eP	33 02.80	3.5X	
S.D. = 1.1	on	12 of	18 obs.		

? OCT 12, 1990 23h 46m 50.74±13.42s
7.743 S ±116.km 119.209 E ±64.9km
DEPTH = 133.2 ± 40.5 km
4.3mb (3 obs.)
FLORES SEA (279)

MTN	12.78	114 eP	49 49.00	0.3	
	0.4s	81.00nm		5.6mb X	
		eS	51 54.00		
MBL	13.35	177 eP	49 56.00	-0.2	
	0.3s	3.00nm		4.2mb	
		eS	52 07.00		
NANU	15.15	193 eP	50 19.00	0.0	
		eS	52 51.00		
WB5	19.01	131 eP	51 03.80	-1.1	
		eS	54 19.00		
WARB	19.66	160 eP	51 12.00	0.4	
	0.4s	4.00nm		4.1mb	
		eS	54 40.00		
ASPA	21.20	140 eP	51 27.70	0.6	
	0.2s	11.20nm		4.9mb	
		eS	55 06.10		
S.D. = 0.9	on	6 of	6 obs.		

OCT 13, 1990 00h 03m 04.79± 0.34s
54.420 N ± 6.2km 159.511 E ± 7.4km
DEPTH = 131.0km (6 depth phases)
4.6mb (33 obs.)
NEAR EAST COAST OF KAMCHATKA (218)

KUSJ	14.92	227 eP	06 26.90	-3.0	
		eS	09 02.90		
ASAJ	15.04	234 eP	06 36.50	5.0X	
HOOJ	16.11	228 eP	06 44.80	0.0	
		eS	09 32.10		
OFUJ	19.53	226 eP	07 24.30	0.3	
NIIJ	22.21	228 P	07 55.90	5.0X	
MAT	23.14	228 (P)	08 03.00	3.1X	
CHJJ	23.22	226 P	08 07.60	6.9X	
IIDJ	24.17	227 P	08 12.50	2.6X	
INK	33.04	39 eP	09 25.00	-3.9X	
MBC	35.96	24 eP	09 53.00	-0.7	
	0.9s	3.00nm		4.1mb	
LZH	42.03	268 eP	10 45.00	0.4	
	2.0s	39.00nm		4.8mb	
TNP	56.47	70 P	12 34.70	-0.4	
		e	13 03.80	122km	
SUF	57.64	337 eP	12 42.00	-0.7	
CHTO	57.85	257 P	12 45.20	0.5	
CLC	57.89	72 eP	12 45.00	0.0	
SBB	58.59	73 eP	12 49.00	-0.8	
GSC	58.71	72 eP	12 50.00	-0.7	
NUR	59.92	336 eP	12 58.00	-0.5	
NB2	62.17	343 P	13 12.20	-1.5	
	0.6s	3.60nm		4.5mb	
HFS	62.58	342 eP	13 14.50	-1.9	
	0.4s	3.40nm		4.6mb	
EKA	69.69	350 P	14 01.00	-0.4	
	0.6s	6.00nm		4.6mb	
KSP	70.69	336 eP	14 07.70	0.1	
		e	14 40.50	133km	
HYB	70.79	273 eP	14 08.00	-0.7	
CLL	70.99	339 iP	14 09.00	-0.4	
	0.9s	13.00nm		4.8mb	
		i	14 42.60	136km	
BRG	71.19	338 e(P)	14 10.20	-0.4	
WTS	71.54	343 eP	14 13.00	0.4	
	0.7s	7.00nm		4.6mb	
PRU	71.89	337 Pc	14 15.20	0.4	
		e	14 49.00	137km	
MOX	71.91	339 eP	14 15.00	0.1	
ENN	72.88	343 eP	14 21.00	0.5	
	1.0s	11.00nm		4.6mb	
		e	14 31.00	32kmX	
GRF	72.89	339 ePc	14 21.50	0.8	
	1.0s	13.00nm		4.7mb	
KHC	72.91	337 P	14 21.90	1.1	
		e	14 55.20	134km	
MLR	72.94	328 eP	14 21.50	0.4	
		e	34 02.00		
GBA	74.45	272 P	14 30.00	-0.1	
CDF	74.90	341 eP	14 32.20	-0.2	
	0.8s	8.05nm		4.5mb	
HAU	75.46	342 eP	14 35.20	-0.3	
BSF	75.55	341 eP	14 35.70	-0.4	
FLN	75.82	346 eP	14 36.60	-0.8	
	0.6s	9.00nm		4.7mb	
LDF	75.93	346 eP	14 37.60	-0.5	
	0.6s	4.50nm		4.4mb	
GRR	76.23	347 eP	14 39.60	-0.2	
	0.6s	10.80nm		4.8mb	
LPF	76.61	347 eP	14 41.60	-0.2	
	0.6s	7.20nm		4.6mb	
LOR	76.61	343 eP	14 41.50	-0.4	
	1.0s	16.00nm		4.7mb	
LBF	76.87	343 eP	14 42.90	-0.5	
	0.8s	4.70nm		4.3mb	
SSF	76.87	343 eP	14 43.00	-0.3	
	0.8s	8.05nm		4.5mb	
WB5	77.08	204 eP	14 45.90	1.2	
AVF	77.16	343 eP	14 44.80	-0.1	
	0.9s	13.10nm		4.7mb	
SMF	77.22	343 eP	14 45.00	-0.3	
	0.9s	6.55nm		4.4mb	
BGF	77.47	344 eP	14 47.40	0.8	
	0.8s	5.35nm		4.4mb	
SKO	77.50	329 eP	14 40.70	-6.2X	
LPL	77.78	341 eP	14 49.70	1.0	
	0.8s	14.80nm		4.8mb	
LPG	77.80	341 eP	14 49.70	0.9	
	0.8s	20.80nm		5.0mb	
TCF	77.83	344 eP	14 48.70	0.0	
	0.8s	6.70nm		4.5mb	
MAF	77.84	344 eP	14 49.20	0.5	
	0.8s	8.05nm		4.5mb	
MFF	77.88	346 eP	14 49.00	0.1	
	0.6s	5.40nm		4.5mb	
LSF	77.98	345 eP	14 49.40	0.0	
	0.8s	9.40nm		4.6mb	
OHR	78.48	329 eP	14 52.20	-0.1	
CAF	79.18	344 eP	14 57.00	0.9	
	0.8s	8.05nm		4.5mb	
LFF	79.38	345 eP	14 58.00	1.0	
	0.6s	10.80nm		4.8mb	
LPO	79.56	344 eP	14 58.70	0.7	
	0.8s	14.80nm		4.8mb	
LRG	79.84	340 eP	15 00.20	0.7	
	0.8s	37.60nm		5.2mb	
LMR	79.93	340 eP	15 00.60	0.6	
	0.8s	13.45nm		4.8mb	
ASPA	80.83	204 iPc	15 07.00	2.1	
	1.2s	6.10nm		4.2mb	
		i	15 38.60	124km	
EPF	81.31	345 eP	15 07.80	0.5	
	0.8s	6.70nm		4.5mb	
KIC	118.02	342 PKP	21 38.00	0.6	
S.D. = 0.8	on	56 of	63 obs.		

OCT 13, 1990 00h 19m 26.99± 0.66s
47.025 N ± 5.4km 9.477 E ± 6.1km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.1 (VIE).

SAX	0.24	338 ePd	19 31.60	-0.7	
LLS	0.36	245 eP	19 34.60	0.1	
VDL	0.54	181 eP	19 37.90	0.0	
OSS	0.57	126 eP	19 37.20	-1.5	
SLE	1.00	318 ePd	19 45.90	0.0	
TMA	1.01	205 iPd	19 46.80	0.6	
SOTA	1.20	80 iPgd	19 50.80	1.4	
		i	20 05.60		
		i(Sg)	20 08.30		
FEL	1.31	311 ePn	19 51.52	0.2	
S.D. = 1.0	on	8 of	8 obs.		

OCT 13, 1990 00h 20m 23.38± 0.13s
15.724 N ± 3.1km 147.931 E ± 3.2km
DEPTH = 36.8km (26 depth phases)
5.8mb (68 obs.) 5.5Msz (19 obs.)
MARIANA ISLANDS REGION (215)
Ms 5.4 (BRK). Mo=2.0•10••18 Nm
(PPT).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 18S, 41C
Centroid Location:
Origin Time 00:20:23.7 0.3
Lat 15.77N 0.03 Lon 148.18E 0.03
Dep 15.0 BDY Half-duration 2.2
Moment Tensor; Scale 10••17 Nm
Mrr=-5.25 0.11 Mtt= 0.62 0.14
Mff= 4.63 0.15 Mrt= 1.99 0.39
Mrf= 4.57 0.46 Mtf= 2.71 0.11
Principal Axes:
T Val= 7.89 Plg=21 Azm=296
N -0.74 2 205
P -7.15 69 110
Best Double Couple:Mo=7.5•10••17
NP1:Strike= 30 Dip=24 Slip= -85
NP2: 204 66 -92

GUA	3.64	234 ePd	21 18.30	-0.5	
		eS	21 59.40		
GUMO	3.65	235 eP	21 18.20	-0.7	
PJG	3.65	235 ePd	21 18.10	-0.8	
JAY	19.48	202 ePd	24 51.00	0.6	
	0.8s	99.00nm		5.1mb	
RAB	20.23	168 iP-	24 58.00	-0.3	
		iS	28 40.00		
MAT	22.47	339 eP	25 19.00	-1.8	
	0.9s	327.73nm		5.8mb	
Z	20s	4.96um		4.9Msz	
		eS	29 27.00		
SHK	23.21	327 eP	25 27.60	-0.5	
PMG	24.98	182 eP	25 44.00	-1.3	
MNI	26.83	240 eP	26 04.00	1.5	
SVO	27.37	154 eP	26 06.00	-1.4	
AAI	27.45	227 ePc	26 07.70	-0.4	
HNR	27.68	154 eP	26 18.00	7.8X	
SAP	27.82	350 eP	26 12.00	0.8	
		eS	31 02.00		
SSE	28.82	307 P	26 18.00	-2.3	
	4.0s	400.00nm		5.5mb X	
Z	20s	10.10um		5.4Msz	
N	16s	5.20um			
E	16s	5.10um			

13d 00h

pP 26 27.00 31km
sP 26 33.40
OZH 28.95 293 Pc 26 20.50 -1.1
0.7s 200.00nm 5.9mb
Z 24s 11.50um 5.4MszX
S 31 07.00
NJ2 31.02 307 Pc 26 38.00 -1.9
Z 21s 5.20um 5.2Msz
N 13s 3.30um
E 15s 4.50um
YSS 31.50 353 P 26 45.00 1.1
HKC 32.53 287 ePd 26 53.80 0.6
DL2 32.64 320 eP 26 53.00 -1.0
Z 14s 2.90um 5.1MszX
N 16s 5.80um
E 16s 5.10um
S 32 05.00
MDJ 32.71 335 Pc 26 54.50 -0.1
1.4s 300.00nm 6.0mb
N 14s 2.90um
E 14s 2.60um
S 32 10.00
MTN 32.90 211 iPc 26 55.50 -0.9
0.5s 128.00nm 6.1mb
GZH 33.37 288 Pc 27 01.10 0.5
0.6s 130.00nm 6.0mb
Z 22s 9.50um 5.5Msz
N 15s 3.00um
E 18s 4.20um
S 32 17.00
SNY 33.42 326 Pd 26 59.40 -1.3
1.2s 130.00nm 5.7mb
Z 19s 10.70um 5.6Msz
N 13s 4.10um
E 14s 5.90um
sP 27 16.00
PP 28 05.00
sS 32 25.00
CN2 33.89 330 Pc 27 03.50 -1.4
1.0s 100.00nm 5.7mb
Z 16s 17.00um 5.9MszX
N 15s 7.90um
E 15s 2.00um
pP 27 14.80 41km
PcP 29 43.00
S 32 20.00
ScP 33 25.00
SS 34 20.00
WHN 34.07 302 iPc 27 06.50 0.0
1.0s 100.00nm 5.7mb
Z 19s 4.30um 5.2Msz
N 15s 2.30um
E 12s 2.70um
pP 27 17.50 40km
S 32 30.00
TIA 34.17 312 eP 27 05.50 -1.9
E 16s 5.40um
S 32 29.00
MKS 35.03 236 iPc 27 17.00 2.1
KUPT 35.23 225 eP 27 07.00 -9.6X
1.0s 166.40nm 5.9mb
CTA 35.63 183 iPd 27 19.10 -0.8
2.0s 567.65nm 6.2mb
iS 33 00.00
QIZ 36.45 281 P 27 28.20 1.3
0.7s 70.00nm 5.7mb
N 12s 2.50um
E 16s 2.56um
KNA 36.55 212 eP 27 27.00 -0.7
0.7s 36.00nm 5.4mb
BJI 36.75 318 eP 27 28.00 -1.2
2.0s 720.00nm 6.2mb
Z 40s 12.90um 5.4MszX
N 18s 4.17um
epP 27 41.00 49kmX
OIS 36.97 193 iPd 27 30.40 -0.8
WB5 37.81 201 iPd 27 38.00 -0.3
TIY 38.20 312 iPc 27 41.00 -0.5
Z 32s 8.90um 5.4MszX
N 14s 3.60um
E 16s 3.60um
PP 29 09.00
S 33 25.50
XAN 39.51 305 P 27 51.50 -1.0
1.2s 100.00nm 5.5mb
N 16s 3.90um
E 14s 5.50um

S 33 51.00
GYA 39.80 293 iPc 27 56.00 0.9
4.0s 1200.00nm 6.0mb X
Z 20s 3.60um 5.2Msz
N 13s 2.00um
E 13s 2.00um
S 33 59.00
HHC 40.20 316 Pc 27 57.50 -0.7
1.4s 320.00nm 5.9mb
Z 16s 6.50um 5.6MszX
N 15s 2.20um
E 15s 3.20um
PP 29 39.00
S 33 55.50
BTO 41.14 315 iPd 28 06.00 0.2
N 15s 3.80um
E 15s 3.50um
pP 28 18.00 44km
S 34 18.00
ASPA 41.48 200 iPd 28 03.40 -5.3X
1.0s 19.60nm 4.8mb X
Z 19s 0.02um 3.0MszX
eS 33 56.20
DZM 41.71 154 iPd 28 10.00 -0.7
RMQ 41.97 179 iPd 28 10.00 -2.6
TRT 42.00 239 ePc 28 13.80 0.8
1.0s 102.30nm 5.5mb
QLP 42.21 185 iPd 28 13.00 -1.5
CD2 43.00 299 P 28 21.20 0.0
Z 19s 6.99um 5.6Msz
E 13s 1.94um
pP 28 27.00 19kmX
sP 28 33.50
S 34 44.00
sS 34 54.00
SS 37 50.00
KMI 43.20 290 Pc 28 24.50 1.4
2.0s 310.00nm 5.7mb
Z 20s 6.60um 5.5Msz
pP 28 36.00 41km
LZH 44.09 306 iPd 28 31.00 0.9
2.0s 730.00nm 6.1mb
Z 22s 8.10um 5.6Msz
N 15s 4.20um
E 16s 3.00um
PP 30 14.00
S 34 54.00
sS 35 14.00
LOE 44.24 279 eP 28 31.10 -0.2
ADK 45.73 30 P 28 40.40 -2.3
MBL 45.87 218 eP 28 44.00 -0.2
0.6s 39.00nm 5.5mb
NST 45.93 277 eP 28 46.00 1.2
COO 46.19 175 iPd 28 46.40 -0.2
0.6s 38.00nm 5.5mb
WARB 46.52 207 iPd 28 50.20 0.9
0.4s 33.00nm 5.6mb
NNT 46.76 273 eP 28 54.40 3.0X
CHG 46.77 281 iPd 28 51.70 0.3
0.9s 73.95nm 5.7mb
eS 35 40.00
BDT 46.84 279 eP 28 53.80 1.8
0.8s 109.00nm 5.9mb
CMS 46.98 182 eP 28 51.50 -1.3
SNG 47.05 265 iPd 28 56.20 2.5
1.0s 120.00nm 5.8mb
eS 35 45.80
IPM 47.37 262 ePc 28 59.00 2.8
0.5s 15.90nm 5.3mb
STK 47.72 187 iPc 28 57.70 -0.9
1.5s 37.00nm 5.2mb
eS 35 56.80
GTA 48.06 309 Pd 29 01.20 -0.3
1.4s 370.00nm 6.2mb
Z 24s 12.80um 5.8MszX
E 16s 8.20um
pP 29 11.50 35km
sP 29 14.20
PcP 30 31.10
PP 30 50.00
S 35 48.00
sS 36 06.00
ScS 38 52.40
NANU 49.54 221 eP 29 12.00 -0.8
0.6s 64.00nm 5.8mb
BWA 49.87 179 eP 29 15.90 0.7
CAN 50.77 179 eP 29 22.50 0.4

ADE 51.17 190 iPd 29 24.60 -0.5
0.9s 193.28nm 6.1mb
HON 51.36 75 P 29 40.00 13.2X
Z 18s 1.49um 5.1Msz
BFD 52.86 185 iPc 29 41.70 4.0X
COOL 53.02 209 eP 29 28.00 -11.1X
SHL 53.03 290 iP 29 38.50 -1.0
iS 37 02.00
LSA 53.72 295 eP 29 46.00 1.2
pP 29 55.00 30km
S 37 16.00
sS 37 31.00
MRWA 54.29 215 iPc 29 47.80 -0.6
0.5s 30.00nm 5.6mb
BAL 55.00 213 iPc 29 53.10 -0.5
0.7s 46.00nm 5.6mb
KLB 55.24 211 iPc 29 54.60 -0.7
0.7s 87.00nm 5.9mb
SDN 55.74 33 eP 30 01.00 2.4
MUN 56.34 212 iPc 30 02.70 -0.5
1.0s 200.00nm 6.1mb
NWAO 56.58 211 iPc 30 04.60 -0.3
0.7s 88.00nm 5.9mb
N 20s 1.00um
E 20s 1.70um
RKG 57.61 210 iPc 30 15.20 3.0X
0.7s 235.00nm 6.4mb
WMO 57.87 312 P 30 13.20 -0.9
8.0s 1000.00nm 5.9mb X
Z 28s 4.30um 5.4MszX
N 15s 5.40um
sP 30 25.00
S 38 11.50
ScS 39 59.00
SVW 60.40 28 eP 30 30.70 -0.6
KDC 60.74 32 e(P) 30 32.00 -1.5
TTA 60.96 26 eP 30 34.00 -1.1
MRW 61.86 157 P 30 39.00 -2.2
IMA 63.14 23 eP 30 49.10 -0.6
1.1s 59.50nm 5.6mb
PMR 63.51 28 eP 30 50.20 -1.8
1.4s 338.40nm 6.3mb
TOA 65.00 28 eP 31 01.10 -0.7
FBA 65.05 25 eP 31 00.30 -1.7
NDI 65.92 295 iP 31 08.00 -0.2
eS 39 53.00
HYB 66.17 282 iPc 31 09.50 -0.5
0.8s 100.00nm 5.9mb
e 31 20.50 36km
iS 39 58.00
KSH 66.33 307 eP 31 13.00 2.2
E 16s 4.80um
iS 40 03.00
GBA 67.94 279 P 31 21.00 -0.1
KOD 68.62 275 eP 31 25.80 0.0
AFR 69.72 116 iP 31 32.40 0.4
1.2s 215.00nm 6.1mb
PPN 70.02 116 iP 31 34.10 0.2
1.2s 125.00nm 5.8mb
TVO 70.28 116 iP 31 36.10 0.5
1.2s 270.00nm 6.2mb
PMO 70.36 113 iP 31 35.80 -0.1
1.2s 180.00nm 6.0mb
POO 70.39 284 iPc 31 35.20 -1.0
0.9s 95.80nm 5.8mb
TPT 70.60 112 iP 31 37.10 -0.3
1.2s 205.00nm 6.0mb
VAH 70.68 113 iP 31 38.90 1.0
1.2s 140.00nm 5.9mb
RUV 70.88 113 iP 31 39.00 -0.2
1.2s 205.00nm 6.0mb
INK 71.27 23 eP 31 40.00 -0.7
0.9s 81.00nm 5.7mb
pP 31 51.00 36km
BOM 71.28 285 iP 31 43.00 1.4
eS 40 57.00
OUE 74.61 298 eP 32 03.80 2.6
eS 41 37.00
MBC 75.49 14 ePd 32 05.00 -0.2
1.1s 201.00nm 6.0mb
pP 32 17.50 42km
PGC 77.47 43 eP 32 15.00 -1.7
FHC 78.48 51 eP 32 24.00 1.5
RMW 78.77 44 P 32 25.00 1.0
LON 78.90 44 P 32 25.00 0.3
WDC 79.60 51 eP 32 29.00 0.4
epP 32 39.50 34km

YKA 79.60 28 eP 32 27.20 -0.9
0.9s 27.70nm 5.2mb
MAIO 79.63 305 iPd- 32 30.00 1.0
1.1s 61.84nm 5.5mb
i 35 32.00
eS 43 32.00
PNT 79.82 42 ePd 32 29.00 -0.6
1.1s 130.00nm 5.8mb
LBFM 79.92 50 P 32 30.50 -0.1
pP 32 41.90 37km
MIN 80.35 51 eP 32 32.80 0.0
BRK 80.38 53 eP 32 33.00 0.2
BKS 80.39 53 e(P) 32 33.20 0.3
0.7s 83.00nm 5.8mb
Z 20s 1.40um 5.3Msz
E 20s 1.80um
ePcP 32 37.50
epP 32 43.70 33km
eS 42 50.00
eSS 48 00.00
eLQ 53 00.00
eLR 56 40.00
ORV 80.59 52 eP 32 34.00 0.1
epP 32 45.70 39km
GCC 80.76 54 eP 32 35.30 0.5
MHC 80.97 54 ePd 32 36.50 0.4
epP 32 47.00 33km
ARN 81.05 54 P 32 36.00 -0.4
pP 32 48.00 40km
SAO 81.25 54 e(P) 32 38.70 1.3
PRS 81.41 55 eP 32 38.70 0.4
NEW 81.67 42 P 32 39.00 -0.4
LLA 81.68 54 eP 32 40.30 0.6
CMB 81.78 53 ePd 32 40.60 0.4
epP 32 52.00 37km
PRI 82.01 55 ePd 32 42.40 0.9
epP 32 53.50 36km
DRV 82.36 183 eP 32 43.00 0.7
FRI 82.55 54 ePd 32 44.50 0.3
epP 32 55.00 33km
EDM 82.68 37 eP 32 45.00 0.5
BCH 82.69 56 P 32 45.90 0.8
ABL 83.46 56 P 32 49.70 0.5
ISA 83.85 55 eP 32 51.00 0.1
TNP 84.19 52 P 32 52.90 0.1
pP 33 03.80 35km
CLC 84.50 54 eP 32 54.00 -0.2
MWC 84.55 56 eP 32 54.00 -0.7
SBB 84.62 56 eP 32 55.00 0.2
RKT 84.67 116 iP 33 01.80 6.7X
1.2s 55.00nm 5.6mb
SES 84.89 39 eP 32 56.00 0.2
1.3s 478.00nm 6.5mb
pP 33 08.00 39km
RVR 85.16 56 eP 32 57.00 -0.4
GSC 85.26 55 eP 32 58.00 0.0
e 36 23.00
PEC 85.36 56 P 32 58.40 -0.1
1.4s 104.17nm 5.8mb
LRM 85.41 44 eP 32 58.90 0.1
PLM 85.74 57 eP 33 01.00 0.4
e 36 24.00
BAR 86.08 57 eP 33 02.00 -0.1
TPC 86.19 56 eP 33 02.00 -0.6
e 36 23.00
SOD 86.86 341 iP 33 04.40 -0.8
i 33 16.40 39km
DUG 86.88 49 P 33 06.20 0.2
DAG 87.35 357 iPc 33 06.60 -0.8
0.7s 110.73nm 6.2mb
GLA 87.47 57 eP 33 09.00 0.2
e 36 34.00
TRO 87.70 344 eP 33 10.30 1.1
DAU 87.94 49 P 33 10.70 -0.6
BW06 88.36 46 P 33 13.40 0.2
1.4s 41.09nm 5.5mb
FFC 88.43 33 eP 33 13.00 0.1
1.4s 76.00nm 5.8mb
TAB 89.29 309 eP 33 18.00 0.4
SUF 89.70 337 eP 33 18.00 -0.8
NUR 91.57 336 eP 33 26.00 -1.5
1.2s 150.30nm 6.3mb
i 33 37.80 38km
RSSD 91.60 43 P 33 28.00 -0.3
pP 33 39.00 35km
GOL 92.42 48 P 33 32.60 0.4
1.2s 43.03nm 5.8mb

ALO 93.40 52 ePd 33 37.00 0.3
1.0s 25.00nm 5.6mb
Z 18s 1.20um 5.4Msz
e 33 49.00 39km
ANMO 93.40 52 P 33 37.50 0.8
1.2s 38.09nm 5.7mb
pP 33 48.70 36km
SBA 94.02 176 eP 33 40.30 2.0
UPP 94.70 337 iP 33 46.50 4.6X
i 33 52.30 18kmX
KVT 95.46 315 eP 33 45.60 -0.3
HFS 95.92 339 eP 33 44.80 -2.8
0.6s 6.50nm 5.3mb
Z 17s 1.52um 5.5MszX
LR 09 18.00
NB2 96.08 340 P 33 46.80 -1.6
1.0s 21.60nm 5.6mb
KAS 96.86 316 eP 33 52.00 -0.2
BBTK 98.25 315 eP 33 56.00 -2.6
CFR 98.50 322 eP 34 00.00 0.6
TLB 98.89 321 eP 34 01.50 0.3
VRI 98.97 323 eP 34 01.00 -0.6
MEO 99.38 50 e(P) 34 05.00 1.3
KRA 100.15 329 ePdiff34 09.50 2.8
e 34 18.00
e 44 45.00
CMP 100.29 323 ePdiff34 08.00 0.4
SPC 100.55 328 ePdiff34 16.70 7.9X
TUL 100.89 48 ePdiff34 19.70 9.3X
1.2s 7.70nm 5.1mb
JMB 100.93 320 ePdiff34 10.00 -0.4
KSP 101.39 331 ePdiff34 13.00 0.7
e 34 23.00
e 37 18.00
e 38 23.50
DIM 101.81 320 ePdiff34 15.00 0.7
BZS 102.03 325 ePdiff34 13.00 -2.2
KDZ 102.10 320 ePdiff34 15.00 -0.7
PGB 102.36 321 ePdiff34 17.00 0.1
BRG 102.44 332 ePdiff34 17.60 0.7
1.2s 17.00nm 5.6mb
i 34 28.50
e 35 15.00
e 37 37.70
i 38 24.10
i 38 34.20
RZN 102.51 320 iPdiff34 19.00 1.2
CLL 102.55 333 ePdiff34 28.00 10.6X
1.0s 16.00nm
Z 18s 3.50um 5.9Msz
ZST 102.78 329 ePdiff34 30.40 11.9X
e 37 30.60
i 38 46.90
PRU 102.79 331 ePdiff34 22.50 4.0X
Z 18s 2.50um 5.8Msz
N 17s 1.90um
E 17s 1.40um
e 34 30.60
PP 38 43.00
VTS 102.91 321 iPdiff34 21.00 1.5
MMB 103.18 320 ePdiff34 20.00 -0.5
MOX 103.63 333 ePdiff34 34.00 11.7X
KHC 103.84 331 Pdiff 34 28.50 5.2X
Z 18s 1.00um 5.4Msz
N 18s 1.70um
E 16s 1.20um
e 37 33.50
SKO 104.34 322 iPdiff34 25.70 0.1
1.0s 56.00nm 6.4mb
Z 18s 2.88um 5.9Msz
N 15s 1.43um
E 17s 1.78um
i 34 30.70
i 34 37.20
iPP 38 47.20
iSKS 45 04.20
iSKKS 45 44.20
iS 46 14.20
iPS 48 06.20
GRF 104.50 333 ePdiff34 32.00 5.8X
Z 19s 2.00um 5.7Msz
e(PP) 38 46.00
OHR 105.24 321 iPdiff34 28.70 -1.0
1.1s 135.00nm 6.8mb X
i 34 40.30
e 34 46.20
FUR 105.59 332 ePKP 38 53.50 9.2X

i 39 05.70
ENN 105.90 336 ePKP 38 53.00 8.2X
1.2s 104.00nm
e 39 04.00
WATA 106.06 331 ePKP 38 58.00 12.6X
1.5s 134.00nm
i 39 09.00
TRI 106.14 328 ePKP 39 02.90 17.5X
e 48 08.00
e 49 09.00
e 57 54.00
SNF 106.73 337 PKP 39 03.60 17.3X
CTI 106.95 330 PKP 39 01.00 13.9X
DOU 106.95 336 PKP 39 03.70 16.9X
CDF 107.18 334 ePKP 39 04.80 17.4X
1.4s 61.00nm
TOL 118.83 336 ePKP 39 22.00 12.2X
CIR 119.70 255 iPKPd 39 13.00 1.0
KRI 121.00 260 iPKPd 39 18.50 3.8X
BFT 121.50 249 iPKPc 39 16.00 0.5
1.0s 20.00nm
BUL 122.36 256 iPKPd 39 17.80 0.6
KSR 124.35 249 iPKPc 39 20.50 -0.5
1.0s 17.00nm
IFR 124.70 333 iPKP 39 22.50 1.1
AVE 125.87 334 iPKP 39 25.20 1.7
BCAO 126.07 288 iPKPd 39 24.40 -0.1
0.8s 22.00nm
i 41 23.00
TIO 127.84 333 iPKP 39 28.00 0.4
i 39 40.00
i 41 30.00
LKO 143.70 312 PKP 39 53.82 -3.4X
KIC 145.16 307 PKP 39 59.36 -0.3
1.0s 419.00nm
TIC 145.19 308 PKP 39 59.34 -0.4
0.6s 86.00nm
ZOBO 145.36 96 PKPd 40 01.00 0.3
1.6s 249.37nm
Z 24s 0.68um 5.3MszX
LR 27 52.00
LPB 145.41 96 PKP 40 02.00 1.5
Z 25s 1.61um 5.7MszX
LR 27 53.00
LIC 145.46 307 PKP 40 00.22 0.0
1.0s 371.50nm
Z 20s 0.65um 5.4Msz
CNCB 145.54 97 PKPd 40 02.10 1.2
MBO 146.56 333 ePKP 40 02.40 0.5
CCH 147.32 98 PKP 40 08.00 4.5X
SIV 152.11 95 PKP 40 11.20 0.7
PPD 160.75 112 ePKP 40 22.00 0.9
e 41 03.30
e 41 14.20
e 41 33.20
VAO 164.20 120 ePKP 40 26.20 1.6
e 40 37.40
e 41 19.80
e 41 30.90
BAO 164.67 92 e(PKP)40 27.00 1.7
SOB1 169.22 54 ePKP 40 29.60 1.1
e 40 41.80
e 41 41.00
CAI 169.60 29 ePKP 40 29.80 1.0
S.D. = 1.1 on 195 of 225 obs.

% OCT 13, 1990 00h 30m 42.87± 1.71s
17.029 N ±17.9km 99.458 W ±16.9km
DEPTH = 33.0km (normal)
GUERRERO, MEXICO (59)
ACX 0.41 248 iP 30 52.10 -0.1
iS 31 01.18
III 1.34 360 iPc 31 04.91 -0.7
eS 31 23.22
PPM 2.18 21 eP 31 16.95 -1.0
iS 31 40.62
IIT 2.26 29 iP 31 17.73 -1.2
eS 31 45.41
UNM 2.30 6 (P) 31 20.00 0.4
CRX 2.37 355 (P) 31 22.00 1.4
IIJ 2.70 354 (P) 31 29.08 3.7X
iS 32 01.50
MRX 3.13 329 (P) 31 35.50 4.5X
(S) 32 26.39
LVVM 3.93 46 (P) 31 43.59 1.3
S.D. = 1.3 on 7 of 9 obs.

? OCT 13, 1990 00h 52m 28.86± 1.15s
38.873 N ±10.2km 27.640 E ±13.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZM	0.56	212	ePg	52	40.10	-0.1
			iSg	52	48.10	
DST	1.06	46	iPn	52	49.20	0.3
EZN	1.39	313	ePn	52	55.00	0.7
KGT	1.60	351	ePn	52	56.30	-0.9

S.D. = 1.2 on 4 of 4 obs.

* OCT 13, 1990 01h 34m 13.70± 0.83s
17.929 N ±10.7km 122.109 E ±15.2km
DEPTH = 33.0km (normal)
4.6mb (5 obs.)
LUZON, PHILIPPINE ISLANDS (249)

QZH	7.71	335	P	36	05.00	-1.5
QIZ	11.69	277	eP	37	00.00	-1.3
			eS	39	09.00	
XAN	19.92	326	P	38	46.00	0.4
CD2	21.08	311	P	38	58.20	0.5
TIY	21.46	339	Pd	39	02.80	1.3
CHG	22.00	276	eP	39	08.50	1.6
BJI	22.62	348	eP	39	13.50	0.6
	1.5s	26.00nm			4.5mb	
LZH	24.25	322	eP	39	30.50	1.5
	1.8s	38.00nm			4.6mb	
			pP	39	40.50	37kmX
WMQ	38.77	319	eP	41	34.60	-2.4
WB5	39.45	162	eP	41	42.20	-0.5
ASPA	42.91	164	eP	42	11.40	0.3
	0.6s	8.70nm			4.7mb	
KOD	43.88	266	eP	42	20.00	0.5
HFS	83.43	331	eP	46	38.40	-0.6
	0.9s	10.40nm			5.0mb	
NB2	84.14	333	P	46	42.30	-0.3
	0.8s	3.20nm			4.5mb	

S.D. = 1.3 on 14 of 14 obs.

? OCT 13, 1990 02h 07m 31.83± 1.24s
31.364 S ±35.0km 68.517 W ±23.9km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.05	50	iPc	07	47.50	0.0
ZON	0.23	217	iPd	07	48.00	0.1
			eS	08	00.00	
RTCB	0.27	243	iPd	07	47.90	-0.2
RTCV	0.50	182	iPc	07	48.90	0.0
RTBS	0.85	249	iPd	07	51.80	0.0
			S	08	03.50	
MDZ	1.54	190	eP	08	18.10	18.5X

S.D. = 0.2 on 5 of 6 obs.

OCT 13, 1990 02h 32m 26.46± 0.55s
49.173 N ± 4.4km 6.954 E ± 6.9km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
MD 2.5 (UCC), 2.4 (STR).

RUP	0.53	7	ePg	32	37.35	0.1
CDF	0.79	164	Pg	32	41.69	-0.2
			Sg	32	54.46	
ABH	0.81	28	ePg	32	42.37	0.2
VITF	1.15	214	Pn	32	47.48	-0.5
			Sg	33	02.78	
TOD	1.28	70	ePg	32	49.74	-0.6
MOF	1.33	175	Pn	32	51.83	0.8
			Sg	33	10.09	
TNS	1.43	42	ePnc	32	52.70	0.2
			e	33	13.60	
DOU	1.79	302	P	32	57.60	0.0
			i	32	59.70	
GRF	2.83	78	ePg	33	21.60	9.0X
			eSg	34	02.20	

S.D. = 0.5 on 8 of 9 obs.

? OCT 13, 1990 03h 52m 08.13± 2.53s
35.366 S ±23.3km 70.948 W ±16.1km
DEPTH = 85.8 ± 16.0 km
CHILE-ARGENTINA BORDER REGION (127)

LNV	1.46	345	iPc	52	33.30	-0.2
			iS	52	48.50	
PCH	1.78	12	iPd	52	38.50	0.7
			iS	52	59.00	
SAN	1.92	7	eP	52	39.50	-0.2
			i	52	58.20	
LCCH	1.95	345	iPd	52	39.20	-0.9
			iS	53	00.50	
PEL	2.23	6	iPd	52	43.90	0.0
			iS	53	07.00	
ROCH	2.39	359	iPc	52	46.00	-0.3
JACH	2.69	6	iPc	52	50.00	-0.3
			iS	53	18.50	
MDZ	3.03	36	eP	53	04.50	9.6X
			eS	53	23.20	
RTBS	3.90	19	e(P)	53	08.10	1.2
RTCV	4.03	31	e(P)	53	10.30	1.5
RTCB	4.27	26	eP	53	12.10	0.0
RTLL	4.53	28	ePd	53	14.60	-1.1
CNCB	18.67	9	P	56	23.00	0.2
ZOBO	19.18	8	P	56	30.00	1.6
SIV	21.22	27	P	56	47.00	-1.8
PPD	21.70	57	eP	56	51.90	-1.5
			e	56	53.70	
KIC	74.67	71	P	03	41.00	0.7
GBA	144.23	119	PKPd	11	36.40	0.4
	0.6s	2.50nm				

S.D. = 1.1 on 17 of 18 obs.

& OCT 13, 1990 03h 56m 17.80s
31.720 N 115.910 W
DEPTH = 6.0km (geophysicist)
3.6mb (1 obs.)
BAJA CALIFORNIA (48)
<PAS-P>. ML 4.0 (PAS).

RDX	0.21	351	iPc	56	22.69	0.4
			S	56	25.61	
EMX	0.63	65	iPc	56	30.45	0.1
			S	56	38.98	
ENX	0.66	284	iPc	56	30.76	-0.3
			S	56	39.75	
PBX	0.70	272	iPc	56	31.45	-0.3
			S	56	40.97	
ECBX	0.77	108	iPc	56	33.52	0.3
			S	56	44.12	
SPX	0.77	150	iPd	56	33.37	-0.1
			S	56	43.97	
CPBX	0.87	36	iPc	56	35.21	0.4
			S	56	46.80	
CBX	0.87	313	iPc	56	34.44	-0.6
			S	56	45.51	
LMX	0.90	64	iPc	56	35.75	0.4
			S	56	48.85	
IKP	0.94	350	iPc	56	35.60	-0.6
			eS	56	47.10	
BAR	1.15	326	iPd	56	38.70	-1.1
			eS	56	53.00	
CPE	1.53	319	ePc	56	45.20	-0.5
GLA	1.61	34	iPd	56	45.40	-1.5
PLM	1.82	334	eP	56	49.50	-0.5
PEC	2.41	334	ePd	56	57.40	-1.0
ABL	4.18	319	eP	57	22.00	-1.7
BLP	4.71	308	eP	57	29.50	-1.6
BCH	4.91	316	eP	57	32.80	-1.2
PHAM	5.55	319	eP	57	40.50	-2.5
TNP	6.44	351	eP	57	55.00	-0.7
CMB	7.29	331	e(P)	58	10.00	2.5
ALQ	8.54	65	eP	58	25.00	-0.1
TUL	17.23	71	eP	00	24.50	3.9
	1.2s	5.90nm			3.6mb	
	23 obs. associated					

* OCT 13, 1990 03h 59m 07.94± 2.92s
70.353 N ±22.9km 7.262 E ±18.2km
DEPTH = 10.0km (geophysicist)
NORWEGIAN SEA (642)
MD 3.5 (BER).

LOF	3.16	132	iPn	00	00.20	1.6
			iS	00	47.79	
TRO	4.07	95	iPn	00	10.96	-0.6
			iS	01	02.33	
KTK1	5.72	96	iPn	00	35.14	0.2
			eS	01	43.68	
NSS	6.12	161	iPn	00	40.94	0.4
			eS	01	53.31	
RGS	7.47	169	ePn	00	58.50	-1.0
			eS	02	21.50	
SOD	7.60	104	iP	01	00.90	-0.3
			iS	02	28.30	
MOL	7.82	179	iPn	01	01.72	-2.7X
			eS	02	27.55	
NB2	9.49	168	P	01	26.60	-1.0
	0.4s	2.40nm			4.9mb	
NRA0	9.82	168	P	01	28.10	-4.0X
			Sg	04	23.90	
HFS	10.60	162	eP	01	41.30	-1.5X
	0.4s	14.50nm			5.7mb	
NUR	12.18	135	iP	02	04.00	-0.1
			iS	04	21.90	
EKA	15.77	202	P	02	52.00	0.7
	2.6s	135.60nm			4.7mb	
KRA	21.22	157	eP	03	59.00	3.3X
KHC	21.50	169	eP	04	02.10	3.5X
BCAO	66.24	168	iPd	09	54.00	-3.9X
	0.4s	6.00nm			5.1mb	

S.D. = 1.0 on 9 of 15 obs.

* OCT 13, 1990 04h 07m 40.77± 1.51s
51.327 N ±16.5km 15.806 E ± 7.4km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.3 (VKA), 2.7 (KRA).

KSP	0.57	147	iPd	07	50.70	-1.7
	0.5s	94.00nm				
			iS	07	59.00	
			iLR	08	06.70	
BRG	1.26	250	iPg	08	05.20	1.1
			iSg	08	25.00	
PRU	1.56	211	Pn	08	08.70	0.1
			Pg	08	10.60	
			Sn	08	27.60	
			Sg	08	34.20	
CLL	1.76	271	iPn	08	10.20	-1.2
			iPg	08	13.80	
			eSg	08	38.00	
KHC	2.62	214	Pn	08	24.40	0.5
			Pg	08	30.50	
			eSg	09	07.20	
HOF	2.69	249	iPnd	08	24.80	-0.1
MOX	2.73	257	ePn	08	25.00	-0.5
			iPg	08	33.00	
			iSg	09	13.00	
WET	2.88	222	iPnc	08	28.00	0.4
KRA	2.92	114	eP	08	29.40	1.3
			iS	09	10.30	
VKA	3.08	174	iPgd	08	38.50	8.1X
			iSg	09	21.90	
ZST	3.24	164	eP	08	39.80	7.1X
			e	08	47.90	
			e	09	26.60	
			e	14	16.00	
GRF	3.35	243	ePn	08	34.40	0.1
			ePg	08	47.40	
			e(Sn)	09	14.00	
			eSg	09	32.50	

S.D. = 1.1 on 10 of 12 obs.

OCT 13, 1990 04h 12m 08.35± 0.27s
40.709 N ± 2.7km 23.404 E ± 2.3km
DEPTH = 10.8 ± 2.1 km
4.3mb (5 obs.)
GREECE (364)
ML 4.0 (THE), 3.9 (ATH). Felt at Thessaloniki.

SOH	0.12	341	ePd	12	11.76	0.3
PLG	0.34	175	iPgd	12	14.20	-1.2
THE	0.34	257	iPc	12	14.50	-1.0
			eS	12	19.16	
SRS	0.43	19	iPc	12	17.13	-0.1
OUR	0.58	130	ePd	12	19.48	-0.5
KNT	0.59	320	iPc	12	19.82	-0.5
GRG	0.80	288	iPd	12	22.98	-0.9
			iS	12	34.96	
MMB	0.91	15	iPgc	12	25.00	-0.7
LIT	0.93	229	iPd	12	25.12	-0.9
			eS	12	38.08	
KKB	1.18	348	iPc	12	30.00	-0.3
KZN	1.31	253	iPbc	12	31.60	-0.9
RZN	1.39	45	iPgc	12	35.00	1.2
NEO	1.41	186	iPbd	12	33.40	-0.5
FNA	1.54	273	ePc	12	36.48	0.6

RDO	1.67	74	ePb	12	40.50	2.8
PLD	1.70	35	iPc	12	40.00	1.9
KDZ	1.79	58	iP	12	39.00	-0.4
AGG	1.88	206	ePc	12	40.54	-0.2
VTS	1.89	356	iPc	12	42.00	1.1
PGB	1.93	17	iPc	12	42.00	0.6
SKO	1.94	311	iPn	12	42.20	0.6
			iPg	12	45.80	
			i	12	56.20	
			i	13	01.70	
			i	13	03.20	
			iSn	13	07.00	
			iSg	13	10.20	
ALN	2.01	84	ePd	12	42.84	0.2
OHR	2.02	282	iPnd	12	43.60	0.9
			iSn	13	09.70	
EVR	2.17	215	ePb	12	45.50	0.5
LSK	2.21	256	iPnc	12	53.30	7.7X
EZN	2.40	111	iPn	12	48.30	0.1
IGT	2.63	244	ePd	12	53.16	1.6
PRK	2.64	123	ePg	13	00.00	8.3X
SRN	2.73	253	ePn	12	54.40	1.5
ATH	2.74	175	iPnc	12	54.00	0.9
			eSn	13	25.60	
TIR	2.75	285	ePn	12	55.70	2.5
PVL	2.89	29	iPc	12	54.00	-1.1
KEK	2.93	251	ePn	12	57.00	1.2
MFT	2.95	87	iPn	12	55.30	-0.7
JMB	2.96	53	iPd	12	56.00	-0.1
KGT	2.98	94	iPn	12	55.20	-1.2
SDA	3.22	295	ePn	13	02.70	2.9X
VLS	3.34	222	ePb	13	05.00	3.5X
IVA	3.40	311	ePn	13	03.60	1.2
			e(Sn)	13	42.00	
EDC	3.42	95	ePn	13	03.00	0.4
BNT	3.46	94	ePn	13	01.20	-2.0
DMK	3.46	70	ePn	13	03.80	0.5
TTG	3.55	300	e(Pn)	13	06.30	1.8
			e(Sn)	13	48.00	
ITM	3.71	199	ePb	13	09.00	2.2
IZM	3.77	127	ePn	13	08.10	0.4
CTT	3.83	82	iPn	13	07.20	-1.4
SRE	3.95	358	eP	13	25.00	14.8X
APE	4.00	155	ePn	13	10.00	-0.9
VLI	4.00	185	ePn	13	10.00	-0.9
SMG	4.01	137	ePn	13	10.00	-1.0
DRA	4.02	9	ePd	13	13.00	1.9
DST	4.15	104	iPn	13	13.10	0.0
LCI	4.17	267	P	13	11.40	-1.9
BRY	4.24	303	ePn	13	16.00	1.5
			e(Sn)	14	06.00	
ISK	4.30	83	ePn	13	16.00	0.8
YLV	4.54	90	ePn	13	25.20	6.5X
IZI	4.64	93	ePn	13	15.00	-5.1X
CMP	4.71	14	ePc	13	19.00	-2.1
TNR	4.98	7	ePc	13	23.00	-1.8
ISR	4.99	26	ePc	13	26.00	1.0
BZS	5.08	346	ePc	13	24.50	-1.6
MLR	5.13	20	ePd	13	27.50	0.5
			e	41	12.00	
TLB	5.17	40	eP	13	31.00	3.6X
KHL	5.30	115	ePn	13	31.00	1.6
VAM	5.33	173	ePn	13	32.60	2.8
ORI	5.35	265	P	13	30.00	-0.1
ALT	5.42	106	eP	13	32.20	1.1
CVO	5.50	21	eP	13	33.50	1.4
TDS	5.51	261	P	13	33.50	1.1
CSI	5.52	263	P	13	31.80	-0.8
CFR	5.67	36	eP	13	34.00	-0.5
VRI	5.70	24	ePd	13	35.50	0.6
CZI	5.78	257	P	13	36.00	-0.1
MGR	6.02	267	P	13	39.00	-0.4
SGO	6.16	271	P	13	41.00	-0.4
BSS	6.53	274	P	13	46.20	-0.5
DUI	6.82	281	P	13	49.00	-1.8
SDI	7.30	281	P	13	57.50	0.0
ZAG	7.44	316	eP	14	01.00	1.6
PTJ	7.51	316	eP	14	01.00	0.5
MEU	7.53	244	P	13	57.00	-3.7X
CEY	8.26	310	ePc	14	12.60	1.7
ARV	8.26	293	P	14	11.00	0.0
ASS	8.35	290	P	14	11.00	-1.3
LJU	8.37	312	e(P)	14	14.50	2.0
TRI	8.63	309	ePn	14	14.50	-1.5
			eSn	15	49.00	
			e	16	53.00	
			e	16	59.10	

VOY	8.73	311	iPc	14	16.80	-0.7
			i	14	22.50	
FVI	9.68	311	P	14	30.00	-0.5
CTI	10.08	306	P	14	34.50	-1.7
SOTA	10.93	311	iP	14	43.80	-4.0X
	0.3s		2.70nm		5.2mb	
			i	14	47.20	
HFS	20.37	346	eP	16	44.60	-2.8
	1.0s		8.60nm		4.1mb	
NB2	21.69	344	P	17	00.60	-0.3
	0.8s		4.60nm		3.9mb	
EKA	22.82	319	P	17	11.00	-1.2
	1.0s		10.90nm		4.3mb	
BCAO	36.38	188	iPc	19	14.00	-0.5
	0.4s		4.00nm		4.6mb	
	S.D. = 1.2		on 84 of 94 obs.			

OCT 13, 1990 04h 28m 27.72± 0.43s
9.012 N ± 5.8km 122.647 E ± 8.3km
DEPTH = 24.0km (4 depth phases)
4.9mb (12 obs.) 4.5Msz (6 obs.)
NEGROS, PHILIPPINE ISLANDS (257)
Felt at Bacolod and Iloilo.

KKM	7.03	246	ePd	30	09.90	-1.9
	0.9s		334.20nm		6.4mb X	
MKS	14.49	193	ePd	32	03.50	10.2X
QIZ	15.91	310	eP	32	15.80	4.0X
	N 16s		2.70um			
	E 16s		2.00um			
			eS	35	13.00	
QZH	16.31	347	P	32	21.00	4.2X
	1.0s		100.00nm		4.9mb	
	Z 18s		1.80um		4.5Msz	
	N 18s		1.30um			
			sS	35	30.00	
TRT	19.37	211	iPc	32	56.50	1.6
KGM	20.44	251	eP	33	07.20	0.9
IPM	21.91	260	ePd	33	21.90	0.7
LOE	21.99	294	eP	33	18.60	-3.4X
SSE	22.02	357	Pd	33	22.10	0.0
	1.0s		58.00nm		5.0mb	
	Z 20s		0.80um		4.1Msz	
	E 14s		0.70um			
			sP	33	28.80	
			S	37	24.00	
			sS	37	30.00	
PJG	22.25	76	eP	33	30.50	5.9X
WHN	22.78	341	eP	33	31.50	1.8
	Z 16s		1.20um		4.4MszX	
	N 14s		1.20um			
			sP	33	43.00	
			S	37	38.00	
NNT	22.78	281	eP	33	31.20	1.3
NST	22.96	289	eP	33	51.30	19.8X
GYA	23.04	321	P	33	33.40	1.0
	Z 14s		1.20um		4.5MszX	
	N 13s		1.10um			
	E 13s		1.30um			
			S	37	46.00	
NJ2	23.19	352	Pc	33	35.40	1.7
	Z 17s		0.40um		3.9MszX	
	N 11s		0.50um			
	E 11s		0.40um			
			sP	33	48.00	
			S	37	45.00	
BDT	24.42	292	eP	33	46.80	1.1
	0.9s		36.30nm		5.0mb	
KMI	24.82	313	eP	33	50.00	0.2
	Z 18s		2.00um		4.7Msz	
			pP	33	58.00	28km
			eS	38	12.00	
CHG	24.96	296	eP	33	50.30	-0.7
KNA	25.34	166	eP	33	55.00	0.5
TIA	27.54	350	eP	34	15.30	0.6
	E 13s		0.60um			
XAN	27.93	335	P	34	16.80	-1.4
	N 12s		0.80um			
	E 12s		0.50um			
			eS	38	58.00	
CD2	28.01	324	P	34	17.20	-1.9
	Z 18s		1.60um		4.7Msz	
TIY	30.03	344	P	34	35.90	-1.3
	Z 20s		1.25um		4.5Msz	
	N 15s		0.90um			
WB5	30.94	158	eP	34	44.00	-1.3
			i	34	54.80	40kmX

BJI	31.43	350	eP	34	48.50	-0.9
	1.0s		24.00nm		5.0mb	
	Z 24s		0.38um		4.0MszX	
LZH	31.93	330	eP	34	53.00	-1.0
	2.0s		36.00nm		4.9mb	
	Z 14s		1.30um		4.8MszX	
	N 15s		1.00um			
	E 15s		2.10um			
			pP	35	02.00	31km
			sP	35	07.00	
			eS	40	08.00	
HHC	33.20	345	P	35	04.20	-0.7
	Z 20s		1.80um		4.8Msz	
BTO	33.40	342	eP	35	05.00	-1.7
	N 16s		1.10um			
	E 16s		1.10um			
			eS	40	25.00	
ASPA	34.29	161	iPd	35	12.90	-1.6
	1.6s		14.80nm		4.7mb	
	Z 20s		0.48um		4.2Msz	
LSA	35.95	309	P	35	29.00	-0.1
MDJ	35.98	8	eP	35	27.70	-0.9
	1.0s		30.00nm		5.2mb	
GTA	36.51	330	Pc	35	33.30	-0.1
	0.8s		10.00nm		4.7mb	
	Z 16s		1.20um		4.8MszX	
	E 14s		0.70um			
STK	44.52	157	iP	36	39.70	0.4
	1.4s		11.00nm		4.5mb	
			e	36	44.10	15km
			e	38	27.30	
GBA	44.52	280	P	36	39.00	-0.6
KOD	44.53	275	eP	36	40.60	0.5
WMQ	46.10	325	P	36	52.50	0.6
	Z 16s		0.70um		4.7MszX	
			pP	36	59.00	22km
ADE	46.30	162	e(P)	36	52.50	-1.0
	0.8s		61.19nm		5.6mb	
POO	48.20	287	iPc	37	08.00	-0.7
	1.0s		24.00nm		5.2mb	
CAN	50.63	152	eP	37	37.90	10.8X
MAIO	63.12	306	eP	38	56.00	-0.1
FBA	81.72	26	(P)	40	46.30	0.9
INK	86.75	21	eP	41	13.00	2.2
MBC	87.70	12	eP	41	18.00	2.7X
NB2	92.28	333	P	41	37.00	0.0
	0.9s		3.60nm		4.8mb	
KIC	125.38	284	PKP	47	38.90	9.5X
TIC	125.57	285	PKP	47	39.20	9.4X
PPD	165.81	203	ePKP	48	36.60	4.4X
ZOBO	167.26	126	PKP	48	36.00	1.8
	S.D. = 1.2		on 37 of 48 obs.			

---

* OCT 13, 1990 05h 28m 09.15± 2.38s
32.752 S ±12.0km 72.808 W ±21.1km
DEPTH = 28.4 ± 8.0 km
OFF COAST OF CENTRAL CHILE (134)

LCCH	1.26	125	iPc	28	31.00	0.0
			iS	28	46.50	
ROCH	1.53	99	iPc	28	33.50	-1.5
			iS	28	50.20	
LNV	1.68	136	iPc	28	37.50	0.6
			iS	28	57.50	
PEL	1.83	103	iPc	28	38.90	-0.3
			iS	28	59.00	
JACH	1.87	88	iPd	28	38.00	-1.8
			iS	28	58.00	
SAN	1.93	112	iPc	28	41.00	0.3
			iS	29	02.40	
PCH	2.11	115	iPc	28	43.70	0.4
			iS	29	07.40	
RTBS	3.04	70	eP	28	57.30	0.8
MDZ	3.34	93	eP	29	07.40	6.7X
RTC8	3.63	71	eP	29	05.00	0.1
			eS	29	48.50	
RTCV	3.72	77	ePc	29	07.00	0.8
RTLL	3.95	70	ePd	29	10.40	1.1
			eS	29	52.60	
ZOBO	16.95	16	P	32	06.00	-0.5
	Z 20s		0.12um			
			LR	49	28.00	
	S.D. = 1.1		on 12 of 13 obs.			

% OCT 13, 1990 05h 35m 34.07± 0.91s
40.191 N ± 8.7km 27.375 E ± 6.9km
DEPTH = 10.0km (geophysicist)

13d 05h

TURKEY (366)
MD 3.1 (ISK).

EDC	0.40	67	iPg	35	42.50	0.2
			iSg	35	48.50	
BNT	0.45	68	iPg	35	42.20	-1.0
			iSg	35	48.20	
MFT	0.60	353	iPg	35	46.30	0.1
			iSg	35	53.80	
EZN	0.89	246	iPg	35	51.00	0.0
			eSg	36	04.40	
DST	1.13	121	iPn	35	55.00	-0.2
CTT	1.25	40	iPn	35	56.30	-0.9
ISK	1.55	55	ePn	36	03.00	1.3
YLV	1.57	76	iPn	36	03.60	1.5
IZI	1.61	84	ePn	36	00.70	-2.0
DMK	1.65	10	ePn	36	02.80	-0.4
HRT	1.86	69	ePn	36	08.00	1.7
KHL	2.50	138	ePn	36	20.00	4.5X

S.D. = 1.3 on 11 of 12 obs.

• OCT 13, 1990 05h 55m 49.08± 0.90s
21.856 S ± 9.3km 68.618 W ±18.8km
DEPTH = 193.2 ± 28.0 km
CHILE-BOLIVIA BORDER REGION (124)

ANT	2.48	222	iP	56	32.80	0.1
			iS	57	04.50	
CCH	5.02	28	P	57	05.00	0.4
CNCB	5.06	7	P	57	05.30	0.0
LPB	5.32	5	P	57	09.80	1.3
ZOBO	5.58	5	P	57	11.00	-1.1
ARE	6.01	333	eP	57	17.00	-0.5
			eS	58	23.00	
PPD	16.06	94	eP	59	24.80	-1.0
			e	59	27.50	
VAO	20.05	97	eP	00	09.90	0.8

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

• OCT 13, 1990 06h 24m 34.98± 0.69s
31.751 S ±10.7km 70.852 W ±11.5km
DEPTH = 121.5 ± 15.8 km
CHILE-ARGENTINA BORDER REGION (127)

JACH	0.95	167	iPc	24	56.70	-0.4
			iS	25	12.50	
RTBS	1.20	86	iPd	24	59.10	-0.3
ROCH	1.22	186	iPc	24	59.30	-0.7
			iS	25	17.00	
PEL	1.40	174	iPc	25	01.90	0.2
			iS	25	21.70	
SAN	1.70	175	iPc	25	05.80	0.5
			iS	25	26.50	
			iS	25	28.00	
RTCB	1.77	82	iPd	25	05.70	-0.5
			e(S)	25	29.00	
LCCH	1.82	199	iPc	25	06.50	-0.2
			iS	25	27.50	
PCH	1.89	171	iPc	25	08.00	0.4
			iS	25	35.00	
RTCV	1.97	94	eP	25	09.00	0.3
MDZ	2.04	124	eP	25	11.80	2.3
			iS	25	37.40	
RTLL	2.08	79	iPc	25	09.00	-1.0
LNV	2.25	192	iPc	25	11.60	-0.5
			i	25	36.50	
			iS	25	40.00	
CYA	5.48	54	e(P)	25	51.50	-4.1X
CNCB	15.10	11	P	28	04.00	0.3
LPB	15.36	10	eP	28	09.00	2.2
ZOBO	15.61	10	P	28	09.00	-1.1
PPD	19.91	66	eP	28	57.90	-1.3

S.D. = 1.2 on 16 of 17 obs.

OCT 13, 1990 06h 49m 52.92± 0.43s
43.156 N ± 5.2km 0.392 W ± 3.9km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.7 (LDG).

OGE	0.06	282	Pg	49	54.63	-0.6
			Sg	49	57.49	
JAU	0.12	172	Pg	49	56.48	0.4
			Sg	50	00.98	
ESCF	0.15	240	Pg	49	56.71	0.2
			Sg	50	00.57	
ATE	0.24	253	Pg	49	58.79	0.8
			Sg	50	03.00	
LHE	0.30	215	Pg	49	59.57	0.4
MADF	0.31	268	Pg	49	58.99	-0.4
			Sg	50	04.41	
ISSF	0.32	247	Pg	49	59.12	-0.5
			Sg	50	00.77	
BOH	0.46	264	Pg	50	01.89	-0.4
			Sg	50	08.98	
EPF	0.55	103	Pg	50	03.20	-1.0
			Sg	50	12.00	
LPO	1.91	36	Pg	50	25.00	-0.7
			Sg	50	48.80	
LFF	1.96	24	Pg	50	26.80	0.3
			Sg	50	51.60	
CAF	2.50	44	Pg	50	35.00	0.6
RJF	2.55	32	Pg	50	35.60	0.6
			Sg	51	04.20	

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

OCT 13, 1990 07h 22m 45.00± 0.73s
38.726 N ± 6.9km 22.143 E ± 7.7km
DEPTH = 5.0km (geophysicist)
GREECE (364)
ML 3.0 (ATH).

EVR	0.32	306	iPgc	22	50.60	-0.9
NEO	1.02	55	ePg	23	04.60	-0.2
			eSg	23	20.00	
VLS	1.34	246	ePb	23	10.00	-0.2
ATH	1.45	121	ePn	23	13.00	1.1
			eSb	23	29.80	
ITM	1.55	186	ePn	23	14.00	0.6
KZN	1.60	350	ePb	23	13.60	-0.5
PLG	1.93	31	ePn	23	17.60	-1.2
KEK	2.07	299	ePg	23	24.60	3.8X
VLI	2.10	162	ePn	23	20.00	-1.3
OHR	2.60	337	ePn	23	31.00	2.6

S.D. = 1.5 on 9 of 10 obs.

% OCT 13, 1990 07h 33m 57.68± 0.63s
40.289 N ± 5.5km 29.453 E ± 6.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

IZI	0.05	17	iPg	34	00.10	0.2
YLV	0.28	348	iPg	34	04.10	0.4
GPA	0.65	90	ePg	34	10.00	-0.8
DST	0.93	223	iPg	34	15.00	-0.5
CTT	1.16	318	iPn	34	19.10	-0.2
BNT	1.17	274	ePn	34	19.60	0.0
ALT	1.33	157	ePn	34	23.20	0.9

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

OCT 13, 1990 07h 36m 45.12± 0.75s
38.280 N ± 6.5km 22.127 E ± 8.4km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.9 (ATH).

EVR	0.68	339	iPgc	36	57.00	-1.7
ITM	1.11	188	ePg	37	06.00	0.0
VLS	1.22	266	ePb	37	07.00	-0.8
ATH	1.29	103	ePb	37	07.60	-1.4
NEO	1.34	40	ePg	37	10.00	0.2
VLI	1.69	157	ePg	37	16.00	1.2
KZN	2.04	352	ePn	37	21.00	1.0
KEK	2.31	309	ePg	37	34.20	10.4X
PLG	2.33	26	ePn	37	23.50	-0.6
OHR	3.01	340	ePn	37	38.20	4.5X
SKO	3.73	352	ePn	37	45.90	2.0

S.D. = 1.4 on 9 of 11 obs.

• OCT 13, 1990 07h 44m 39.91± 1.23s
15.793 N ±18.0km 93.467 W ±14.2km
DEPTH = 80.9km (2 depth phases)
4.2mb (1 obs.)
NEAR COAST OF CHIAPAS, MEXICO (69)

SCX	1.23	40	iPc	45	04.17	2.0
			iS	45	22.48	
TPX	1.46	127	eP	45	03.74	-1.4
			(S)	45	28.44	
EVV	3.20	326	eP	45	28.12	-0.8
			(S)	46	08.55	
LVVM	4.84	325	iP	45	49.70	-2.2
			iS	46	44.73	
IIT	5.63	305	(P)	46	05.25	2.2X
			iS	47	10.50	
PPM	5.90	304	eP	46	10.06	2.9X
			(S)	47	30.76	
ACX	6.23	281	(P)	46	19.00	7.8X
IIJ	7.14	304	(P)	46	26.00	1.8
MRX	8.32	299	(P)	46	41.50	1.5
MEO	19.46	347	eP	49	00.50	-2.4
SIO	20.03	353	e(P)	49	09.20	0.4
TUL	20.14	355	eP	49	13.50	3.5X
	0.7s		9.30nm			4.2mb
ACO	21.43	347	eP	49	23.70	0.7
ALO	22.35	331	eP	49	32.30	0.0
ANMO	22.35	331	P	49	32.50	0.2
			pP	49	50.50	82km
TNP	30.51	321	(P)	50	46.30	-1.5
			pP	51	05.00	80km
PNT	39.64	333	eP	52	23.00	17.7X
INK	58.33	344	eP	54	25.00	-3.4X
MBC	61.97	353	eP	54	50.00	-3.2X
GBA	149.44	18	PKPd	04	19.20	1.8
	0.5s		1.10nm			

S.D. = 1.7 on 13 of 20 obs.

? OCT 13, 1990 09h 52m 04.42± 0.97s
39.164 N ± 7.7km 27.592 E ±13.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM	0.81	199	ePg	52	20.10	0.0
			eSg	52	31.60	
DST	0.92	61	iPg	52	22.00	0.0
			eSg	52	36.00	
BNT	1.22	12	ePn	52	27.00	-0.1
KGT	1.31	350	iPn	52	28.60	0.0

S.D. = 0.1 on 4 of 4 obs.

? OCT 13, 1990 09h 54m 40.07± 0.96s
39.129 N ± 8.3km 27.675 E ± 9.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.3 (ISK).

IZM	0.80	204	ePg	54	55.60	0.0
			eSg	55	06.00	
DST	0.88	57	ePn	54	57.00	0.0
BNT	1.24	9	iPn	55	03.10	0.0
EZN	1.26	304	ePn	55	03.40	0.0

S.D. = 0.0 on 4 of 4 obs.

? OCT 13, 1990 10h 13m 14.73± 7.91s
25.126 N ±42.5km 127.020 E ±51.7km
DEPTH = 205.8 ± 47.0 km
4.2mb (1 obs.)
RYUKYU ISLANDS (238)

SSE	7.87	320	Pc	15	07.20	0.0
	1.2s		22.00nm			4.2mb
	Z 16s		0.60um			
	E 10s		0.60um			
BJI	17.43	331	eP	17	08.00	1.5
TIY	17.65	319	eP	17	08.60	-0.3
	Z 14s		0.70um			
	N 14s		0.40um			
			eS	20	18.00	
XAN	18.05	304	eP	17	12.40	-0.9
GYA	18.38	279	P	17	28.60	11.8X
CN2	18.67	356	eP	17	19.00	-0.6
CD2	21.31	291	eP	17	54.40	8.2X
KMI	21.98	275	eP	18	07.00	14.1X
			sP	18	15.00	
LZH	22.69	304	eP	18	07.50	7.8X
			PP	18	31.50	
CHTO	26.75	262	(P)	18	37.60	0.3
GTA	26.93	309	eP	18	44.40	5.5X

S.D. = 1.3 on 6 of 11 obs.

? OCT 13, 1990 10h 23m 04.51± 1.02s
39.094 N ± 8.7km 27.619 E ±10.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZM	0.75	202	ePg	23	19.00	-0.2
			eSg	23	30.70	
DST	0.93	57	iPn	23	22.90	0.5

```
EZN      1.24 307 ePn   23 28.00   0.5
BNT      1.28  10 iPn   23 27.50  -0.8
     S.D. = 1.1  on   4 of   4 obs.
-----------------------------------------
%  OCT  13, 1990  10h 23m 14.33± 2.47s
   23.150 N ±17.3km  121.703 E ±21.6km
   DEPTH =  33.0km  (normal)
 TAIWAN                              (244)

TWF1     0.42 298 iPc   23 23.70  -0.1
                  eS    23 30.90
TWG      0.67 241 iPd   23 27.20  -0.1
TWD      0.93 354 ePd   23 30.80  -0.2
TWK      1.12 276 eP    23 34.10   0.3
TWC      1.46   5 ePc   23 38.80   0.2
     S.D. = 0.3  on   5 of   5 obs.
-----------------------------------------
   OCT  13, 1990  11h 14m 33.15± 0.29s
    2.225 S ± 4.5km   80.044 W ± 4.0km
   DEPTH =  75.6km  (   2 depth phases)
   5.0mb ( 10 obs.)
 NEAR COAST OF ECUADOR               (105)
      Felt at Guayaquil and (I) at
      Quito.

TUNG     1.79  63 iP    15 02.80  -0.1
VC1      2.28  46 iPd   15 11.00   1.2
QTO      2.52  37 eP    15 13.50   0.5
                  S     15 45.00
OUR      2.54  37 ePn   15 13.30  -0.1
                  iPg   15 14.80
YANA     2.56  35 P+    15 14.00   0.3
COTA     3.06  34 P     15 21.00   0.3
                  eS    16 10.00
CAYA     3.08  42 P     15 21.70   0.7
ANGL     3.09  54 eP    15 28.80   7.8X
UPA     11.14   3 ePc   17 15.00   3.3X
ARE     16.46 150 eP    18 37.00  15.8X
GUAC    17.72  46 eP    18 38.00   1.4
OLLA    17.94  47 eP    18 37.50  -1.8
ZOBO    18.23 141 P     18 43.00  -0.4
        1.0s     20.00nm          4.3mb
                  i     18 45.00
LLAV    10.24  46 eP    18 42.50  -0.5
LPB     18.45 141 P     18 46.00   0.2
CNCB    18.73 141 P     18 49.50   0.2
CUM     20.21  51 iP    19 03.00  -1.5
CCH     20.33 139 eP    19 07.00   0.9
SIV     23.16 127 P     19 33.80  -0.1
TUL     40.69 340 eP    22 07.90   0.1
        1.2s     22.30nm          4.9mb
MEO     40.72 336 iPc   22 07.80  -0.3
SIO     40.72 340 eP    22 07.80  -0.3
ACO     42.61 337 ePd   22 24.50   0.9
        0.7s     35.50nm          5.3mb
CAI     42.90  97 e(P)  22 23.80  -3.1X
ALO     44.50 329 eP    22 39.40   0.2
        1.0s     28.75nm          5.1mb
                  e     22 53.00  51kmX
ANMO    44.50 329 P     22 40.10   0.9
        1.0s     30.00nm          5.1mb
GOL     47.76 334 P     23 04.60  -0.3
        0.7s      4.61nm          4.5mb
GLA     40.06 320 eP    23 08.00   0.9
BAR     49.04 318 eP    23 15.00   0.4
TPC     49.52 320 eP    23 19.00   0.7
PLM     49.57 319 eP    23 20.00   1.1
RVR     50.31 319 eP    23 25.00   0.8
GSC     50.76 321 eP    23 29.00   1.3
MWC     50.89 319 eP    23 29.00   0.1
SBB     51.03 320 eP    23 29.00  -0.8
DAU     51.12 329 P     23 30.90   0.2
CLC     51.58 321 eP    23 34.00   0.0
DUG     51.77 328 P     23 35.60   0.2
        0.9s      5.83nm          4.6mb
ISA     52.04 320 eP    23 38.00   0.5
TNP     52.80 323 P     23 43.20   0.0
                  e     24 02.90  78km
CMB     54.71 321 eP    23 57.10   0.0
ORV     56.32 322 P     24 08.80   0.2
                  e     24 27.50  73km
MIN     56.87 323 eP    24 11.70  -1.0
WDC     57.58 322 eP    24 15.30  -2.1
LBFM    57.65 324 P     24 18.00  -0.2
SES     58.76 337 eP    24 24.00  -1.6
PNT     61.65 332 eP    24 45.00  -0.3
        0.8s     16.00nm          5.2mb
EDM     61.88 338 eP    24 45.50  -1.3
KIC     75.66  83 P     26 12.00  -0.6
INK     79.32 342 eP    26 31.00  -0.7
MBC     81.51 351 ePd   26 43.40   0.2
        0.8s     12.00nm          4.9mb
SPA     87.79 180 iPd   27 15.90   0.9
        1.1s     17.86nm          5.1mb
SSE    144.97 327 PKPc  34 02.40  -1.4
        1.0s     35.00nm
     S.D. = 0.8  on  49 of  53 obs.
-----------------------------------------
*  OCT  13, 1990  11h 23m 51.75± 2.96s
   26.729 N ±12.7km  126.388 E ±15.8km
   DEPTH =  78.2 ± 26.6 km
   4.4mb (  5 obs.)
 RYUKYU ISLANDS                      (238)

OZH      7.25 258 eP    25 38.00   1.0
WHN     11.24 293 eP    26 30.50  -0.9
SNY     15.24 352 eP    27 24.80   1.1
     Z  15s      0.80um
BJI     15.76 330 eP    27 28.00  -2.3
        1.5s     39.00nm          4.3mb
     Z  16s      0.41um          4.5Msz
     E  10s      0.30um
                  PP    27 43.00
TIY     16.08 316 eP    27 34.00  -0.5
     Z  13s      0.80um
     N  12s      0.60um
CN2     17.05 358 eP    27 50.00   3.6X
        1.0s     15.00nm          4.2mb
     Z  12s      0.60um          4.9Msz
                  pP    27 54.00
GYA     17.65 274 P     27 55.80   1.8
     N  10s      0.60um
     E  10s      0.40um
MDJ     18.03   7 eP    28 00.00   1.5
HHC     18.67 323 eP    28 05.00  -1.4
     Z  14s      0.50um
     N  12s      0.40um
     E  12s      0.40um
BTO     19.37 320 eP    28 13.00  -1.0
     N  13s      0.50um
     E  13s      0.30um
CD2     20.25 287 P     28 22.60  -0.6
KMI     21.33 271 Pc    28 35.50   1.2
        2.0s     50.00nm          4.5mb
     Z  10s      0.70um          4.4MszX
                  pP    28 40.00  16kmX
LZH     21.34 301 eP    28 34.00  -0.3
        2.0s     54.00nm          4.6mb
     Z  18s      0.49um          3.9Msz
     E  13s      0.35um
                  pP    28 42.50  31kmX
                  PP    29 04.00
GTA     25.51 306 eP    29 14.40  -0.2
        1.0s     10.00nm          4.3mb
     Z  16s      0.50um          4.1MszX
     E  10s      0.20um
                  eS    33 43.00
CHTO    26.46 258 (P)   29 24.20   0.8
WMQ     35.52 309 eP    30 43.50   0.5
     Z  14s      0.30um          4.2MszX
WB5     46.97 170 eP    32 14.20  -2.6
                  e     33 54.00
SES     87.96  33 eP    36 36.00   1.8
     S.D. = 1.5  on  17 of  18 obs.
-----------------------------------------
?  OCT  13, 1990  12h 51m 03.49± 1.07s
   39.185 N ± 8.0km   27.480 E ±14.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      MD 2.5 (ISK).

IZM      0.80 192 ePg   51 19.20   0.1
                  iSg   51 31.20
DST      0.98  64 iPn   51 21.90  -0.3
BNT      1.22  16 ePn   51 27.00   0.8
KGT      1.27 354 iPn   51 26.50  -0.6
     S.D. = 1.1  on   4 of   4 obs.
-----------------------------------------
   OCT  13, 1990  12h 54m 31.49± 0.56s
   40.028 N ± 4.7km   23.714 E ± 5.0km
   DEPTH =  10.0km  (geophysicist)
 GREECE                              (364)
      ML 3.4 (ATH), 3.0 (THE).

OUR      0.37  34 ePd   54 40.14   1.1
                  eS    54 46.30
PLG      0.40 329 iPgc   54 39.00  -0.7
NEO      0.81 208 ePb    54 47.00  -0.3
THE      0.83 317 ePd    54 48.78   1.2
                  eS    54 57.82
SOH      0.84 341 ePc    54 48.06   0.3
                  eS    55 00.14
LIT      0.94 275 ePd    54 48.66  -0.8
                  eS    55 01.38
SRS      1.09 355 ePd    54 53.70   1.7
                  eS    55 08.02
KNT      1.29 332 ePc    54 56.14   0.7
                  eS    55 12.98
GRG      1.37 313 ePd    54 57.06   0.5
AGG      1.47 227 ePc    54 57.46  -0.6
KZN      1.52 281 ePb    54 58.10  -0.6
MMB      1.56   0 ePg    54 59.00  -0.3
RDO      1.78  51 ePb    55 00.30  -2.2
RZN      1.82  24 eP     55 03.00  -0.3
EVR      1.85 234 ePg    55 07.80   4.3X
KKB      1.90 346 iPd    55 04.00  -0.2
FNA      1.94 294 ePc    55 04.22  -0.6
ALN      1.98  63 ePd    55 05.42   0.0
ATH      2.05 180 ePn    55 08.60   2.2
KDZ      2.07  38 iPc    55 06.00  -0.7
PRK      2.12 111 ePg    55 13.00   5.5X
OHR      2.47 297 ePn    55 12.30  -0.2
     S.D. = 1.1  on  20 of  22 obs.
-----------------------------------------
?  OCT  13, 1990  13h 35m 38.06± 2.92s
   36.314 N ±23.6km   70.601 E ±22.4km
   DEPTH =  79.5 ± 30.6 km
   4.2mb (  2 obs.)
 HINDU KUSH REGION                   (710)

MAIO     8.97 273 ePn    37 47.00   0.0
                  eSn   39 07.00
NDI      9.44 142 iPd    37 53.50   0.2
        0.5s     42.25nm          5.6mb X
                  iS    39 30.00
HYB     20.10 157 eP     40 06.50  -1.3
GBA     23.43 163 P      40 42.00   1.2
                  S     46 02.00
HFS     43.02 322 eP     43 30.70  -0.2
        0.4s      2.20nm          4.3mb
NB2     44.34 323 P      43 41.80   0.2
        0.6s      1.40nm          4.0mb
     S.D. = 1.3  on   6 of   6 obs.
-----------------------------------------
   OCT  13, 1990  13h 58m 35.42± 0.31s
   40.683 N ± 3.1km   23.399 E ± 3.1km
   DEPTH =  10.0km  (geophysicist)
   3.6mb (  1 obs.)
 GREECE                              (364)
      ML 3.8 (ATH), 3.6 (THE).

SOH      0.14 346 ePc    58 39.12   0.3
PLG      0.31 173 iPgd   58 41.80  -0.1
THE      0.33 261 iPc    58 41.80  -0.5
                  eS    58 46.44
SRS      0.46  19 iPc    58 44.53  -0.2
                  eS    58 51.84
OUR      0.56 128 ePd    58 46.64  -0.2
                  eS    58 54.72
KNT      0.61 322 ePd    58 47.32  -0.4
                  eS    58 55.08
GRG      0.80 290 ePd    58 50.40  -0.7
                  eS    59 02.56
LIT      0.91 230 ePc    56 52.44  -0.3
                  eS    59 05.44
MMB      0.94  15 iPgc   58 53.00  -0.4
KKB      1.21 349 iPc    58 58.00   0.1
KZN      1.30 254 ePb    58 58.70  -0.8
NEO      1.38 186 iPbd   59 00.60  -0.1
RZN      1.41  44 iPgc   59 03.00   1.7
FNA      1.54 274 ePc    59 03.68   0.7
RDO      1.69  73 ePb    59 05.00   0.0
PLD      1.73  34 eP     59 07.00   1.4
KDZ      1.80  57 iP     59 06.00  -0.8
AGG      1.85 207 ePd    59 07.80   0.3
VTS      1.91 356 iP     59 10.00   1.5
SKO      1.96 312 iPn    59 09.80   0.6
                  iPg   59 11.70
                  i     59 16.40
                  iSn   59 33.70
                  iSg   59 36.70
```

13d 13h

			i	59	39.60	
OHR	2.02	283	iPn	59	10.60	0.7
			iSn	59	35.30	
ALN	2.02	83	ePd	59	09.60	-0.3
			iS	59	36.98	
EVR	2.15	215	ePn	59	12.00	0.1
EZN	2.40	110	ePn	59	19.00	3.7X
PRK	2.63	122	ePb	59	26.00	7.3X
ATH	2.72	175	ePg	59	31.70	11.8X
KEK	2.92	252	ePb	59	25.00	2.2
MFT	2.95	87	ePn	59	22.50	-0.8
VLS	3.32	222	ePn	59	32.00	3.6X
BNT	3.46	94	ePn	59	41.00	10.6X
DMK	3.48	69	ePn	59	41.00	10.3X
ITM	3.68	199	ePn	59	38.10	4.5X
VLI	3.97	185	ePn	59	38.10	0.4
BZS	5.10	346	ePc	59	52.00	-1.6
MGR	6.01	267	P	00	06.00	-0.5
SGO	6.16	271	P	00	08.00	-0.6
NB2	21.71	344	P	03	26.60	-1.8
	0.8s		2.30nm			3.6mb

S.D. = 0.9 on 30 of 37 obs.

OCT 13, 1990 14h 03m 20.07± 0.29s
40.693 N ± 2.9km 23.393 E ± 2.9km
DEPTH = 7.9 ± 2.5 km
3.8mb (1 obs.)
GREECE (364)
ML 3.7 (THE), 3.7 (ATH).

SOH	0.13	347	ePd	03	23.84	0.8
PLG	0.32	173	iPgd	03	26.00	-0.6
THE	0.33	260	iPc	03	26.48	-0.4
			eS	03	31.04	
SRS	0.45	19	ePc	03	29.32	0.2
			eS	03	35.28	
OUR	0.57	128	iPd	03	31.40	-0.2
			eS	03	39.52	
KNT	0.60	321	ePc	03	32.00	-0.1
			eS	03	38.80	
GRG	0.80	290	iPd	03	35.04	-0.7
			eS	03	46.84	
LIT	0.91	230	ePc	03	37.04	-0.6
			eS	03	50.12	
MMB	0.93	16	iPgc	03	37.00	-1.1
			iSg	03	50.00	
KKB	1.20	349	iPc	03	42.00	-0.6
KZN	1.30	253	ePb	03	43.60	-0.7
NEO	1.39	185	iPbd	03	45.00	-0.8
RZN	1.41	45	iPgc	03	48.00	1.8
FNA	1.54	274	ePc	03	48.44	0.6
RDO	1.69	74	ePb	03	50.00	0.0
PLD	1.72	34	ePc	03	52.00	1.5
			iSg	04	18.00	
KDZ	1.80	57	iPd	03	51.00	-0.7
AGG	1.86	206	ePd	03	52.48	0.0
VTS	1.90	356	iPc	03	54.00	0.7
PGB	1.94	17	eP	03	54.00	0.2
SKO	1.95	312	iPn	03	54.00	0.2
			iPb	03	56.20	
			iPg	03	57.20	
			i	04	00.20	
			iSn	04	20.00	
OHR	2.01	283	iPnd	03	55.50	0.8
			iSn	04	20.10	
ALN	2.02	83	ePd	03	56.36	1.5
EVR	2.15	215	ePn	03	56.60	-0.3
EZN	2.40	110	ePn	03	59.90	-0.4
PRK	2.64	122	ePg	04	12.00	8.3X
ATH	2.73	175	ePb	04	10.00	5.0X
PVL	2.91	29	iPc	04	06.00	-1.5
KEK	2.92	252	ePn	04	09.10	1.4
MFT	2.96	87	ePn	04	07.50	-0.8
JMB	2.98	52	eP	04	10.00	1.5
KGT	2.99	93	iPn	04	07.00	-1.6
VLS	3.32	222	ePn	04	15.20	1.8
BNT	3.47	94	ePn	04	10.00	-5.4X
DMK	3.48	70	eP	04	24.00	8.4X
ITM	3.69	199	ePn	04	20.00	1.4
VLI	3.98	185	ePn	04	22.70	-0.1
BZS	5.09	346	ePc	04	36.50	-1.9
MLR	5.15	20	eP	04	40.00	0.6
CFR	5.69	36	eP	04	55.00	8.1X
MGR	6.01	267	P	04	51.00	-0.4
SGO	6.15	271	P	04	53.50	0.1
NB2	21.70	344	P	08	12.00	-1.3
	0.8s		3.10nm			3.8mb

S.D. = 1.0 on 38 of 43 obs.

OCT 13, 1990 14h 06m 35.64± 0.37s
40.694 N ± 3.6km 23.356 E ± 3.7km
DEPTH = 9.7 ± 3.4 km
GREECE (364)
ML 3.3 (THE). MD 3.3 (ATH).

SOH	0.13	359	iPc	06	38.88	0.1
			eS	06	41.04	
THE	0.30	258	ePc	06	41.52	-0.4
			eS	06	46.04	
PLG	0.33	168	ePg	06	41.50	-0.9
SRS	0.46	23	iPc	06	44.44	-0.5
			eS	06	50.48	
KNT	0.58	324	eP	06	47.00	-0.4
			eS	06	54.84	
OUR	0.60	127	ePd	06	46.72	-1.0
			eS	06	54.96	
GRG	0.77	290	ePd	06	50.24	-0.5
			eS	07	02.24	
LIT	0.89	228	iPd	06	52.12	-0.6
			eS	07	04.80	
MMB	0.94	17	iPgc	06	52.00	-1.6
KKB	1.19	350	iPc	06	57.00	-0.9
KZN	1.27	253	ePb	06	59.00	-0.3
NEO	1.39	184	ePb	07	00.40	-0.7
RZN	1.43	45	iPgc	07	03.00	1.2
FNA	1.51	274	ePc	07	03.40	0.6
RDO	1.71	74	ePb	07	06.00	0.3
KDZ	1.83	58	eP	07	06.00	-1.4
AGG	1.85	206	ePc	07	07.64	-0.1
VTS	1.90	357	ePc	07	10.00	1.4
SKO	1.93	312	iPn	07	09.50	0.7
			iPb	07	11.40	
			iPg	07	12.50	
			iSn	07	34.90	
OHR	1.98	283	iPn	07	10.30	0.6
			iSn	07	35.30	
ALN	2.05	83	eP	07	10.20	-0.4
EVR	2.14	214	ePn	07	12.00	0.0
EZN	2.43	110	ePn	07	21.00	4.9X
PRK	2.67	122	ePg	07	27.00	7.6X
ATH	2.73	174	ePb	07	26.00	5.6X
KEK	2.90	251	ePg	07	30.00	7.3X
MFT	2.98	87	ePn	07	26.00	2.0
VLS	3.30	221	ePn	07	32.00	3.5X
ITM	3.68	198	ePn	07	38.70	4.8X
VLI	3.98	185	ePn	07	40.00	1.9

S.D. = 1.0 on 24 of 30 obs.

OCT 13, 1990 14h 33m 49.94± 0.74s
39.996 N ± 5.3km 23.675 E ± 6.2km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 2.9 (THE). MD 2.9 (ATH).

OUR	0.41	35	iPc	33	58.76	0.4
			eS	34	04.16	
PLG	0.42	335	iPbc	33	57.50	-1.0
NEO	0.77	207	iPnc	34	06.00	1.0
			eSn	34	17.00	
THE	0.84	320	ePc	34	05.56	-0.5
SOH	0.86	344	ePc	34	06.44	-0.1
LIT	0.92	277	iPd	34	07.30	-0.2
			iS	34	20.08	
SRS	1.12	357	ePd	34	11.80	0.8
KNT	1.31	333	ePc	34	14.36	0.3
GRG	1.37	315	iPc	34	15.62	0.6
KZN	1.49	283	ePb	34	17.00	0.1
EVR	1.80	234	ePn	34	20.00	-1.4
RDO	1.83	50	ePn	34	20.70	-0.9
OHR	2.46	298	e(Pn)	34	31.50	0.7

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

? OCT 13, 1990 14h 44m 06.64± 4.63s
26.495 N ±23.4km 126.325 E ±27.0km
DEPTH = 86.1 ± 34.3 km
4.7mb (3 obs.)
RYUKYU ISLANDS (238)

SSE	6.43	317	eP	45	41.20	0.7
Z	12s		1.50um			
E	10s		1.50um			
OZH	7.14	259	eP	45	52.00	1.6
WHN	11.28	294	eP	46	44.00	-2.5
N	11s		1.30um			
E	11s		0.90um			
SNY	15.46	352	eP	47	38.80	-2.2
Z	14s		1.10um			
N	13s		0.70um			
BJI	15.94	330	eP	47	49.00	2.1
	2.0s		44.00nm			4.3mb
Z	16s		0.46um			4.2Msz
N	12s		0.45um			
TIY	16.21	317	eP	47	50.00	-0.6
Z	15s		1.20um			
N	11s		0.60um			
CN2	17.28	358	eP	48	04.00	0.3
Z	14s		0.90um			
N	13s		0.50um			
E	13s		0.40um			
			pP	48	08.00	
			eS	51	17.00	
GYA	17.61	274	P	48	07.80	-0.1
MDJ	18.27	7	eP	48	15.00	-0.9
MHC	18.83	323	eP	48	24.60	2.2
Z	13s		1.90um			
N	11s		0.90um			
E	12s		0.40um			
BTO	19.51	320	eP	48	30.50	0.8
N	13s		0.70um			
E	13s		0.40um			
			eS	52	12.00	
KMI	21.27	272	eP	48	46.00	-2.0
	2.0s		70.00nm			4.7mb
LZH	21.42	302	eP	49	00.00	10.7X
	2.0s		61.00nm			
Z	16s		0.70um			4.2MszX
E	14s		1.00um			
			pP	49	07.00	25kmX
			sP	49	12.00	
			PP	49	21.50	
			eS	52	42.00	
			sS	53	00.00	
CHTO	26.36	259	(P)	49	36.50	-0.1
FFC	89.10	26	eP	56	54.00	0.6
	0.7s		8.00nm			5.0mb

S.D. = 1.7 on 14 of 15 obs.

---

* OCT 13, 1990 15h 53m 17.37± 0.51s
23.281 S ±26.0km 179.844 W ± 9.7km
DEPTH = 500.0km (geophysicist)
4.7mb (14 obs.)
SOUTH OF FIJI ISLANDS (171)

BRS	25.06	255	iP	58	05.40	2.4
TPT	31.49	81	eP	59	00.00	1.1
	0.8s		20.00nm			4.7mb
CTA	31.62	269	iPd	59	01.80	1.7
	0.6s		80.00nm			5.4mb
RUV	31.63	81	eP	59	01.00	0.9
	0.8s		15.00nm			4.6mb
PMG	34.44	288	iPd	59	24.60	0.9
	0.9s		67.23nm			5.2mb
ASPA	42.28	260	iPd	00	28.00	0.2
	0.6s		28.30nm			5.0mb
WB5	42.58	266	iPd	00	30.10	0.0
MTN	47.55	274	iPc	01	08.00	-0.7
	0.4s		64.00nm			5.4mb
WARB	48.41	255	iPd	01	14.80	-0.3
	0.4s		5.00nm			4.3mb
KNA	48.81	269	iPd	01	17.80	-0.4
	0.4s		13.00nm			4.7mb
KLB	55.36	247	eP	02	05.00	-0.4
	0.5s		14.00nm			4.5mb
MBL	55.53	260	iPd	02	05.80	-1.0
	0.5s		20.00nm			4.7mb
NWAO	55.62	245	eP	02	07.00	-0.3
	0.4s		3.00nm			4.0mb
BAL	56.39	248	eP	02	12.00	-0.7
	0.6s		11.00nm			4.4mb
MUN	56.61	246	iPd	02	13.80	-0.3
MRWA	57.23	249	eP	02	18.00	-0.4
	0.6s		10.00nm			4.3mb
NANU	59.06	257	iPd	02	30.30	-0.6
	0.4s		23.00nm			5.0mb
TNP	84.71	45	P	04	58.00	-1.2
CHTO	89.59	291	P	05	22.20	-0.1
ANMO	90.47	52	P	05	25.40	-0.9
HFS	141.97	349	ePKP	11	45.50	-7.2X
	0.7s		2.60nm			

S.D. = 1.0 on 20 of 21 obs.

? OCT 13, 1990 16h 23m 33.08± 4.98s
15.482 N ±43.7km 97.862 W ±20.1km
DEPTH = 10.0km (geophysicist)
4.0mb (2 obs.)
NEAR COAST OF OAXACA, MEXICO (66)

ACX	2.36	306	eP	24	10.50	-2.0
			iS	24	41.50	
III	3.26	332	eP	24	25.50	0.0
			eS	25	05.50	
IIT	3.54	353	eP	24	30.50	1.0
			iS	25	15.50	
PPM	3.64	349	iPc	24	30.50	-0.6
			iS	25	16.54	
EVV	3.81	39	(P)	24	36.50	3.4X
			eS	25	22.00	
UNM	4.03	342	(P)	24	45.00	8.6X
			(S)	25	32.50	
CRX	4.27	336	(P)	24	54.00	14.1X
LVVM	4.44	17	(P)	24	39.63	-2.4
			eS	25	37.27	
IIJ	4.59	337	(P)	24	46.00	1.4
MRX	5.26	323	(P)	24	53.50	-0.2
			(S)	26	10.00	
TUL	20.43	5	eP	28	13.80	0.6
	1.0s		5.70nm			3.9mb
ALQ	20.86	340	eP	28	19.00	1.1
	1.0s		8.00nm			4.0mb
ANMO	20.86	340	P	28	19.10	1.2

S.D. = 1.5 on 10 of 13 obs.

OCT 13, 1990 19h 51m 37.29± 0.52s
40.662 N ± 4.1km 23.342 E ± 4.9km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 2.7 (ATH). ML 2.2 (THE).

SOH	0.16	3	ePd	51	40.48	-0.5
			eS	51	43.17	
THE	0.29	264	iPd	51	43.08	-0.2
			eS	51	47.44	
PLG	0.30	165	ePb	51	42.90	-0.6
			eSb	51	47.50	
SRS	0.49	23	ePc	51	48.16	0.9
			iS	51	53.34	
OUR	0.59	124	ePd	51	49.44	0.3
KNT	0.60	326	iPd	51	48.80	-0.7
			iS	51	56.60	
GRG	0.77	293	ePc	51	52.16	-0.2
			iS	52	03.52	
LIT	0.86	230	ePc	51	54.16	0.3
			iS	52	05.74	
KZN	1.25	254	ePb	52	01.60	1.0
			eSb	52	20.00	
NEO	1.36	184	ePb	52	02.00	-0.2

S.D. = 0.7 on 10 of 10 obs.

OCT 13, 1990 20h 07m 27.96± 0.80s
42.955 N ± 5.4km 13.572 E ± 9.6km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

AQU	0.61	192	P	07	39.70	-0.7
			eSg	07	50.50	
ASS	0.68	280	P	07	40.20	-1.3
			eSg	07	51.50	
ARV	0.71	320	P	07	40.50	-1.5
			eSg	07	52.20	
MNS	0.87	229	P	07	45.50	0.8
			eSg	07	58.40	
AZI	0.97	186	P	07	48.00	1.6
SDI	1.26	172	P	07	50.40	-1.0
			eSn	08	08.80	
RSM	1.27	320	P	07	52.60	1.1
			eSn	08	11.50	
CRE	1.36	300	P	07	53.00	0.0
DUI	1.45	153	P	07	54.00	-0.3
			eSg	08	14.00	
SFI	1.58	308	P	07	56.50	0.5
PGD	1.63	305	P	07	57.50	0.5
TRI	2.76	3	eP	08	13.30	0.3
			i	08	24.90	

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

OCT 13, 1990 20h 15m 13.91± 1.26s
4.282 N ± 8.2km 95.300 E ± 5.8km
DEPTH = 76.1 ± 11.1 km

5.0mb (12 obs.)
NORTHERN SUMATERA (706)

IPM	5.72	87	ePc	16	38.40	0.3
	0.8s		104.20nm			5.2mb
			e	17	41.40	
SNG	6.02	61	iPc	16	43.00	0.7
	1.0s		430.00nm			5.7mb
NNT	9.35	28	eP	17	26.40	-1.7
			e	19	09.00	
BDT	13.38	15	eP	18	26.00	4.0X
LOE	14.49	25	eP	18	41.50	5.0X
CHG	14.88	14	ePd	18	41.90	0.4
	1.0s		122.50nm			5.1mb
KOD	18.65	289	eP	19	28.90	0.1
GBA	19.91	299	P	19	41.90	-0.2
			S	23	01.90	
HYB	20.97	310	eP	19	53.50	0.5
	1.0s		70.00nm			4.9mb
KMI	21.92	18	Pc	20	03.50	0.8
	1.0s		100.00nm			5.2mb
GYA	24.59	25	iPc	20	28.80	0.3
POO	25.30	306	eP	20	35.50	0.3
LSA	25.58	352	iP	20	38.00	-0.2
CD2	27.66	16	P	20	55.30	-1.4
WHN	31.71	32	P	21	33.00	0.4
	1.0s		30.00nm			5.0mb
XAN	32.21	22	iPc	21	35.80	-1.2
GTA	35.21	6	eP	22	01.40	-1.5
	0.8s		10.00nm			4.8mb
NJ2	35.37	36	iPc	22	04.50	0.3
SSE	36.12	39	Pc	22	11.20	0.7
	1.0s		10.00nm			4.7mb
TIY	36.78	23	Pd	22	16.30	0.2
BTO	38.51	18	eP	22	30.40	-0.2
KSH	39.15	336	eP	22	37.60	1.6
HHC	39.23	20	eP	22	37.20	0.5
WMQ	39.94	351	P	22	42.00	-0.4
BJI	40.28	25	eP	22	46.50	1.4
	1.0s		54.00nm			5.4mb
SNY	45.12	30	iPd	23	24.40	0.0
WB5	45.28	123	eP	23	25.80	-0.3
ASPA	46.77	128	iPc	23	37.50	-0.3
	0.6s		9.60nm			4.9mb
CN2	47.50	30	Pc	23	42.80	-0.4
MDJ	50.18	32	eP	24	04.00	0.2
MAT	50.79	45	(P)	24	08.00	-0.6
OHR	75.53	311	eP	26	50.00	-2.1
BCAO	76.51	274	iPd	26	58.00	-0.1
	0.5s		8.00nm			4.9mb
NUR	76.82	331	eP	27	07.00	8.2X
SOD	77.95	338	eP	27	07.00	2.0
ZST	78.95	318	eP	27	10.80	0.0
LJU	80.52	316	e(P)	27	19.50	0.2
VOY	80.97	316	eP	27	21.50	-0.3
HFS	82.12	330	eP	27	26.90	-0.4
	0.9s		4.60nm			4.4mb

S.D. = 0.9 on 36 of 39 obs.

% OCT 13, 1990 20h 26m 52.28± 0.57s
39.028 N ± 5.1km 29.716 E ± 5.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.4 (ISK).

ALT	0.31	85	iPg	26	59.20	0.5
KHL	0.72	192	iPg	27	05.50	-1.0
			iSg	27	14.00	
DST	1.02	305	iPn	27	10.70	-0.9
IZI	1.32	352	iPn	27	16.80	0.1
GPA	1.34	20	iPn	27	17.20	0.2
YLV	1.56	350	iPn	27	19.30	-0.9
KCT	1.61	320	iPn	27	20.80	0.0
BCK	1.71	156	ePn	27	22.00	-0.3
BNT	1.92	314	iPn	27	24.90	-0.4
EDC	1.94	313	ePn	27	25.00	-0.7
IZM	2.02	253	ePn	27	29.00	2.2
ISK	2.10	346	ePn	27	28.80	1.0
CTT	2.34	335	ePn	27	35.30	4.0X
BBTK	2.49	70	eP	27	41.00	7.3X
			eS	28	19.00	
EZN	2.74	288	iPn	27	37.50	0.4

S.D. = 1.0 on 13 of 15 obs.

OCT 13, 1990 20h 51m 02.00± 0.44s
40.695 N ± 4.0km 23.313 E ± 4.3km
DEPTH = 10.0km (geophysicist)

GREECE (364)
MD 2.9 (ATH). ML 2.7 (THE).

SOH	0.13	14	iPc	51	06.10	0.1
			eS	51	09.20	
THE	0.27	257	iPd	51	08.80	0.3
			eS	51	13.10	
PLG	0.34	162	iPgc	51	08.50	-1.3
			eSg	51	13.00	
SRS	0.47	27	ePc	51	11.60	-0.8
KNT	0.56	326	ePc	51	14.20	0.0
			iS	51	22.00	
OUR	0.62	125	eP	51	14.90	-0.4
GRG	0.74	291	eP	51	17.80	0.5
			iS	51	29.40	
LIT	0.86	227	ePc	51	19.40	0.0
			iS	51	31.90	
MMB	0.95	19	iPgc	51	20.00	-0.9
KKB	1.18	352	eP	51	24.00	-0.9
KZN	1.24	252	ePb	51	26.00	0.1
			eSb	51	46.20	
NEO	1.39	183	ePb	51	28.30	0.1
			eSb	51	46.30	
RZN	1.45	46	iPgc	51	30.00	0.8
FNA	1.47	274	ePc	51	30.90	1.5
RDO	1.75	74	ePn	51	35.60	2.3
AGG	1.83	205	ePc	51	34.60	0.0
SKO	1.90	313	ePn	51	40.20	4.6X
OHR	1.95	283	ePn	51	35.00	-1.3

S.D. = 1.0 on 17 of 18 obs.

OCT 13, 1990 20h 58m 38.51± 0.70s
40.683 N ± 6.3km 23.336 E ± 7.9km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 2.9 (ATH).

PLG	0.32	165	iPgd	58	44.30	-0.9
MMB	0.95	18	iPgc	58	55.00	-1.7
KKB	1.20	351	iPc	59	00.00	-0.8
KZN	1.25	253	ePb	59	03.00	1.2
			eSb	59	22.00	
NEO	1.38	184	ePb	59	03.10	-0.7
			eSb	59	23.00	
RZN	1.45	46	iPgc	59	05.00	0.1
RDO	1.73	74	ePn	59	11.00	2.2
SKO	1.92	313	ePn	59	13.20	1.6
			i	59	38.70	
OHR	1.97	283	ePn	59	11.20	-1.1
EVR	2.12	214	ePn	59	14.60	0.0

S.D. = 1.5 on 10 of 10 obs.

OCT 13, 1990 21h 00m 49.53± 0.63s
40.663 N ± 4.9km 23.387 E ± 7.8km
DEPTH = 5.0km (geophysicist)
GREECE (364)
MD 2.9 (ATH).

PLG	0.29	171	ePg	00	55.70	0.2
MMB	0.96	15	iPgc	01	07.00	-1.3
KKB	1.22	349	iPc	01	12.00	-0.8
KZN	1.28	254	ePb	01	13.00	-0.8
			eSb	01	33.00	
NEO	1.36	185	ePb	01	15.10	0.0
			eSb	01	34.70	
RZN	1.43	44	iPgc	01	17.00	0.6
RDO	1.70	73	ePn	01	23.70	3.7X
VTS	1.93	356	iPc	01	24.00	0.5
SKO	1.96	312	ePn	01	25.70	1.9
			i	01	53.20	
OHR	2.01	284	ePn	01	24.50	-0.1
EVR	2.13	215	ePn	01	26.00	-0.3

S.D. = 1.0 on 10 of 11 obs.

• OCT 13, 1990 21h 02m 34.19± 1.04s
15.586 N ±13.9km 148.107 E ±18.8km
DEPTH = 33.0km (normal)
MARIANA ISLANDS REGION (215)

GUMO	3.71	238	eP	03	30.70	0.1
PJG	3.71	238	eP	03	30.50	-0.1
			eS	04	13.50	
MAT	22.66	339	eP	07	34.00	0.2
WB5	37.74	201	eP	09	49.20	0.3
KIC	145.38	307	PKP	22	11.20	-0.2
TIC	145.41	308	PKP	22	11.20	-0.2

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

? OCT 13, 1990 21h 06m 22.77± 5.59s
16.644 N ±47.7km 99.896 W ±25.7km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	0.23	9	iP	06	29.62	-0.1
			iS	06	37.96	
III	1.77	13	eP	06	52.01	0.3
			eS	07	18.86	
PPM	2.70	26	eP	07	04.90	-0.3
			iS	07	43.50	
IIA	2.76	25	eP	07	05.58	0.0
			eS	07	44.96	
UNM	2.76	14	(P)	07	29.50	23.6X
IIT	2.81	32	eP	07	06.50	-0.1
			(S)	07	47.50	
IIJ	3.08	3	(P)	07	16.13	5.5X
			eS	07	51.00	
MRX	3.28	338	(P)	07	20.50	7.4X
			(S)	08	09.00	
LVVM	4.50	46	(P)	07	30.50	0.2
			(S)	08	16.50	

S.D. = 0.3 on 6 of 9 obs.

OCT 13, 1990 21h 16m 57.28± 0.48s
40.685 N ± 4.4km 23.341 E ± 4.6km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.0 (THE). MD 3.0 (ATH).

SOH	0.14	4	iPc	17	00.42	-0.2
			eS	17	03.46	
THE	0.29	260	iPc	17	03.06	-0.3
			eS	17	07.62	
PLG	0.32	166	iPgc	17	03.00	-0.9
SRS	0.47	24	ePd	17	05.86	-1.0
KNT	0.58	325	iPc	17	08.53	-0.6
			eS	17	16.34	
OUR	0.60	125	ePd	17	09.26	-0.1
GRG	0.76	291	iPc	17	11.86	-0.4
			eS	17	23.82	
LIT	0.87	228	ePc	17	13.82	-0.3
			eS	17	26.57	
MMB	0.95	18	iPgc	17	14.00	-1.4
KZN	1.26	253	ePb	17	21.00	0.3
			eSg	17	40.00	
NEO	1.38	184	ePb	17	22.60	0.0
RZN	1.44	46	iPgc	17	23.00	-0.6
FNA	1.50	274	ePc	17	24.74	0.5
RDO	1.73	74	ePb	17	30.00	2.5
VTS	1.91	357	iPd	17	31.00	0.7
SKO	1.92	313	ePn	17	32.90	2.5
			i	18	00.20	
OHR	1.97	283	ePn	17	30.00	-1.2
EVR	2.12	214	ePn	17	33.60	0.2

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

? OCT 13, 1990 22h 02m 16.19± 3.50s
20.290 S ±21.9km 175.789 W ±37.7km
DEPTH = 248.4 ± 16.7 km
4.8mb (5 obs.)
TONGA ISLANDS (173)

VUN	5.89	292	iPc	03	42.30	-1.2
SGE	6.53	293	eP	03	51.50	-0.2
BKM	15.33	277	iPd	05	44.50	2.7
DZM	16.67	261	iPc	05	57.10	-0.1
NOZ	19.03	195	eP	06	22.70	1.1
PGZ	21.37	197	eP	06	45.80	1.1
MNG	21.59	198	eP	06	45.00	-1.9
	0.2s	7.00nm			4.8mb	
WDW	22.33	199	eP	06	54.00	-0.1
MRW	22.39	199	eP	06	54.00	-0.6
TCW	22.50	200	P	06	55.10	-0.7
THZ	23.45	202	eP	07	06.10	1.2
KHZ	23.83	200	eP	07	09.00	0.7
	0.2s	15.00nm			5.2mb	
LTZ	24.57	201	P	07	16.00	0.7
MMCZ	27.63	203	eP	07	41.90	-1.1
CAN	34.35	237	eP	08	42.00	0.5
CTA	35.57	264	iPd	08	52.10	0.2
	0.8s	44.78nm			5.1mb	
PMG	37.33	281	eP	09	06.50	-0.1
ASPA	46.59	256	iPc	10	21.30	-0.2
	0.6s	19.00nm			4.6mb	
WB5	46.67	261	eP	10	21.20	-0.9
WARB	52.87	252	eP	11	09.00	0.0
	0.3s	2.00nm			4.0mb	
M8L	59.83	257	eP	11	57.00	-1.1
NANU	63.45	254	eP	12	20.00	-2.1
CHTO	92.13	289	(P)	15	01.00	2.1
KSP	148.05	345	ePKP	21	37.00	7.0X
CLL	148.28	349	iPKPd	21	37.80	7.5X
	0.7s	11.00nm				
PRU	149.25	347	PKP	21	40.50	8.6X
JVI	149.84	299	ePKP	21	41.00	7.7X
DOU	150.26	360	PKP	21	42.90	9.5X
KHC	150.26	348	ePKP	21	43.10	9.6X
PRNI	150.51	296	ePKP	21	42.00	7.5X
MBH	150.73	295	ePKP	21	42.50	7.8X

S.D. = 1.3 on 23 of 31 obs.

? OCT 13, 1990 22h 11m 54.51± 0.90s
15.345 N ±17.8km 147.559 E ±19.6km
DEPTH = 33.0km (normal)
4.5mb (2 obs.)
MARIANA ISLANDS REGION (215)

GUA	3.13	235	eP	12	42.10	-0.6
			eS	13	33.60	
GUMO	3.14	237	eP	12	51.30	8.5X
PJG	3.14	237	eP	12	51.20	8.4X
MAT	22.70	340	(P)	16	53.00	-1.5
	1.0s	9.00nm			4.2mb	
WB5	37.33	201	eP	19	10.00	4.2X
LZH	44.02	306	P	20	03.00	1.9
	2.5s	53.00nm			4.9mb	
KIC	145.10	306	PKP	31	31.08	-0.1
TIC	145.13	307	PKP	31	31.08	-0.2
LIC	145.40	306	PKP	31	32.00	0.3
ZOBO	145.68	96	ePKP	31	21.00	-11.8X
LPB	145.72	97	PKP	31	32.00	-0.7
CNCB	145.85	97	PKP	31	34.00	0.9

S.D. = 1.3 on 8 of 12 obs.

? OCT 13, 1990 22h 15m 22.40± 3.63s
29.436 S ±42.9km 68.238 W ±50.9km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	1.90	186	eP	15	53.80	-1.3
			(S)	16	25.00	
RTCB	2.10	193	ePc	15	57.50	-0.2
			eS	16	31.50	
ZON	2.14	190	e(P)	15	58.00	-0.1
CYA	2.36	66	e(P)	16	01.00	0.0
RTCV	2.43	186	ePc	16	03.30	1.4
RTBS	2.45	205	eP	16	02.30	0.2
			S	16	39.00	
MDZ	3.48	189	eP	16	22.80	7.0X
			i(S)	17	15.90	

S.D. = 1.1 on 6 of 7 obs.

OCT 13, 1990 22h 53m 32.8B± 0.16s
23.493 S ± 3.8km 179.135 E ± 4.1km
DEPTH = 572.2km (2 depth phases)
5.3mb (44 obs.)
SOUTH OF FIJI ISLANDS (171)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 33C
Centroid Location:
Origin Time 22:53:39.7 0.5
Lat 23.29S 0.05 Lon 178.88E 0.04
Dep 586.0 2.7 Half-duration 2.1
Moment Tensor; Scale 10**17 Nm
Mrr=-0.68 0.06 Mtt= 2.17 0.10
Mff=-1.49 0.10 Mrt= 1.66 0.09
Mrf=-0.02 0.10 Mtf=-0.81 0.09
Principal Axes:

	Val=	Plg=	Azm=
T	3.06	24	10
N	-1.21	50	249
P	-1.86	30	115

Best Double Couple:Mo=2.5*10**17
NP1:Strike=151 Dip=50 Slip= -5
NP2: 244 86 -140

NDF	5.92	344	eP	55	12.50	0.0
SGE	5.98	349	ePd	55	11.00	-2.2
			e	55	25.00	
RAO	6.31	156	P	55	17.50	1.5
			S	56	39.00	
MBU	6.50	357	iPd	55	15.20	-2.6
			e	55	40.50	
BKM	11.73	298	iPc	56	08.40	-0.6
DZM	11.79	274	iPd	56	09.50	-0.3
			iS	5B	21.00	
			i	03	49.40	
HBZ	14.08	183	P	56	32.30	0.0
	0.3s	114.00nm			5.7mb	
PUZ	14.55	183	P	56	37.10	0.1
			eS	59	07.70	
WLZ	14.62	191	eP	56	40.20	2.6
NOZ	15.11	183	eP	56	41.80	-0.5
WHH	15.51	188	eP	56	45.10	-1.3
CNZ	15.95	190	eP	56	52.40	1.7
PGZ	17.25	187	eP	57	01.70	-1.4
	0.6s	107.00nm			5.6mb	
MNG	17.35	189	eP	57	02.80	-1.3
	0.2s	38.00nm			5.6mb	
			eS	59	54.90	
KIW	17.68	191	P	57	06.70	-0.6
MTW	17.88	189	eP	57	08.00	-1.2
CAW	17.89	190	eP	57	08.40	-0.9
WDW	18.06	190	eP	57	10.00	-0.9
MRW	18.08	191	eP	57	10.80	-0.2
			eS	00	04.90	
BLW	18.09	189	eP	57	10.30	-0.9
WEL	18.12	191	P	57	10.00	-1.4
			S	00	07.00	
TCW	18.13	192	P	57	11.40	-0.2
MOW	18.17	189	eP	57	11.00	-1.0
THZ	18.95	194	eP	57	19.90	0.6
			eS	00	20.50	
KHZ	19.44	193	P	57	23.20	-0.6
	0.3s	136.00nm			6.0mb	
LTZ	20.06	195	P	57	28.70	-0.9
			S	00	37.00	
MOZ	20.86	193	P	57	36.10	-0.7
MMCZ	22.96	198	P	57	55.20	-0.8
MHZ	22.97	198	P	57	55.10	-0.9
BRS	24.10	255	iPc	58	07.60	1.3
COO	25.23	248	iPd	58	18.40	2.2
	0.6s	97.00nm			5.6mb	
CNB	28.38	239	iPd	58	45.70	2.0
	0.6s	172.00nm			5.9mb	
CAN	28.67	239	iPc	58	48.20	2.0
TBI	28.79	96	iP	58	46.70	-0.5
	0.9s	100.00nm			5.4mb	
BWA	28.90	241	eP	58	48.00	-0.2
AFR	29.67	84	iP	58	53.90	-1.0
	1.2s	205.00nm			5.6mb	
PAE	29.82	85	iP	58	55.20	-0.9
	1.2s	135.00nm			5.5mb	
PPT	29.85	85	iP	58	55.50	-0.9
	1.2s	180.00nm			5.6mb	
PPN	29.99	85	iP	58	56.60	-1.0
	1.2s	115.00nm			5.4mb	
TVO	30.09	85	iP	58	57.60	-0.9
	1.2s	250.00nm			5.7mb	
CMS	30.51	248	iP	59	02.50	0.6
CTA	30.6B	270	iPc	59	04.00	0.5
	0.9s	304.20nm			5.9mb	
			iS	03	27.00	
			iScP	04	36.00	
			iScS	08	34.70	
PMO	32.19	81	iP	59	15.40	-0.7
	1.2s	130.00nm			5.4mb	
VAH	32.35	81	iP	59	16.30	-1.2
	1.2s	125.00nm			5.4mb	
TPT	32.45	81	iP	59	17.60	-0.7
	1.2s	220.00nm			5.7mb	
RUV	32.59	81	iP	59	18.80	-0.7
	1.2s	185.00nm			5.6mb	
PMG	33.61	289	eP	59	27.50	-0.6
	1.9s	2473.68nm			6.5mb	X
BFD	34.18	238	iP	59	39.00	6.3X
QIS	36.68	267	iPd	59	53.30	-0.2
ADE	36.86	243	iPc	59	55.50	0.7
	0.6s	60.00nm			5.4mb	
ASPA	41.32	260	iPc	00	30.80	-0.2
	0.8s	139.70nm			5.5mb	
Z	22s	0.18um			3.9Msz	
			iScP	05	15.20	
			iS	06	03.70	
			iScS	09	31.70	
WB5	41.63	266	iPc	00	32.80	-0.6
			iScP	05	16.80	
			eS	06	06.90	
RKT	42.01	99	iP	00	36.60	0.3

```
        1.0s   65.00nm          5.1mb
MTN     46.63 274 iPc    01 11.40  -0.9
        0.3s   55.00nm          5.6mb
WARB    47.45 255 eP     01 18.00  -0.4
        0.3s   11.00nm          4.9mb
KNA     47.87 270 iPc    01 20.90  -0.8
        0.4s   31.00nm          5.2mb
GUA     49.75 314 e(P)   01 33.70  -1.8
GUMO    49.82 314 e(P)   01 29.00  -7.0X
PJG     49.82 314 e(P)   01 34.00  -2.0
KLB     54.41 247 eP     02 08.00  -1.0
        0.7s   49.00nm          4.9mb
MBL     54.57 260 eP     02 09.00  -1.2
NWAO    54.68 245 eP     02 10.00  -0.8
        0.7s   13.00nm          4.4mb
RKG     54.74 244 iPc    02 10.50  -0.7
        0.6s   48.00nm          5.0mb
SBA     54.74 183 iPd    02 13.70   3.1X
BAL     55.45 248 iPd    02 15.40  -0.8
        0.4s   12.00nm          4.6mb
MUN     55.67 246 iPd    02 17.40  -0.3
        0.8s   35.00nm          4.7mb
MRWA    56.28 250 iPc    02 21.20  -0.8
        0.5s   14.00nm          4.5mb
NANU    58.10 257 iPc    02 33.90  -0.5
        0.3s   27.00nm          5.0mb
TRT     65.44 272 iPd    03 23.50   1.5
SPA     66.65 180 iPd    03 30.90   2.0
        1.2s  213.38nm          5.5mb
                  i      03 53.50  88kmX
MAT     71.12 326 eP     03 53.00  -2.6
        0.8s   18.66nm          4.7mb
                  eS     12 24.00
ADK     75.14   3 eP     04 15.50  -2.4
SSE     77.63 312 eP     04 31.40  -0.6
        1.2s   20.00nm          4.4mb
                  S      13 35.00
MAW     77.85 201 iPd    04 34.20   1.6
        0.8s   48.00nm          5.0mb
AIA     79.25 157 eP     04 42.10   2.1
NJ2     79.80 311 Pc     04 43.60   0.3
PRS     81.81  45 eP     04 54.90   1.3
PCC     81.87  43 eP     04 54.80   1.0
WHN     82.13 308 eP     04 55.50   0.2
BRK     82.17  43 eP     04 56.30   0.9
BKS     82.19  43 eP     04 56.50   1.0
        0.8s   47.00nm          5.1mb
MHC     82.24  44 eP     04 57.00   1.1
CN2     83.09 324 Pc     04 59.70  -0.1
        1.0s  100.00nm          5.3mb
                  S      14 35.00
PLM     83.11  49 eP     05 01.00   0.6
RVR     83.11  48 eP     05 01.00   0.8
SBB     83.20  48 eP     05 01.00   0.3
FRI     83.27  45 eP     05 01.50   0.6
ISA     83.32  47 eP     05 02.00   0.7
CMB     83.45  44 iPc    05 02.50   0.6
WDC     83.66  41 eP     05 03.60   0.8
ORV     83.67  42 eP     05 03.50   0.7
CLC     83.99  47 eP     05 05.00   0.4
MIN     84.08  41 eP     05 05.70   0.6
TPC     84.09  49 eP     05 05.00  -0.1
GSC     84.23  48 eP     05 07.00   1.2
KDC     84.34  15 e(P)   05 04.70  -1.0
GLA     84.38  50 eP     05 08.00   1.5
TNP     85.52  45 iPd    05 12.20   0.1
                  pP     07 15.60 569km
BJI     86.19 317 eP     05 15.00   0.0
        1.5s   52.00nm          5.0mb
                  eSKS   14 46.00
                  eS     15 06.00
TIY     87.33 313 iPd    05 22.00   1.4
        1.2s   50.00nm          5.2mb
XAN     87.87 309 P      05 24.40   1.3
TTA     88.36  11 eP     05 23.90  -0.9
PMR     88.55  15 eP     05 24.40  -1.2
        1.1s   46.40nm          5.3mb
CHG     88.79 291 ePc    05 29.30   1.7
        1.0s   15.00nm          4.9mb
HHC     89.57 315 eP     05 32.00   1.1
CD2     90.19 304 P      05 35.80   1.9
PNT     90.61  35 iPc    05 36.00   0.6
        0.8s   19.00nm          5.1mb
ALQ     91.33  52 eP     05 39.00  -0.3
        0.9s    7.98nm          4.7mb
                  e      07 45.00 575km
IMA     91.65  11 eP     05 38.80  -1.1
```

```
         1.2s   17.30nm          5.0mb
LZH      92.50 308 Pc     05 41.00  -3.6X
         1.5s   28.00nm          5.1mb
GTA      96.82 310 eP     06 04.30   0.3
GBA     105.88 278 PKPc   10 53.30  -0.8
         0.3s    0.90nm
SIV     109.28 118 PKP    11 00.00  -0.5
                   i      11 41.20
MAIO    126.90 299 iPKPd  11 34.50   0.6
                   e      13 24.00
SOD     132.89 346 ePKP   11 40.00  -4.1X
                   iSKP   14 19.20
SUF     136.78 342 ePKP   11 49.00  -2.6
NUR     138.97 341 ePKP   11 50.00  -5.7X
         0.8s   24.90nm
                   i      11 56.80
                   iSKP   14 38.00
NB2     141.55 351 PKP    11 54.90  -5.5X
         0.8s   14.80nm
HFS     141.99 348 ePKP   11 55.70  -5.4X
         0.6s   18.60nm
KAS     146.05 310 iPKPc  12 11.20   2.6
BSD     146.31 344 iPKPc  12 09.90   1.5
         0.8s   79.80nm
EDU     146.94   2 iPKPc  12 11.80   2.4
         0.7s   71.00nm
ELO     146.99   3 iPKPc  12 11.90   2.4
IAS     147.20 323 ePKP   12 14.00   3.9X
EBH     147.22   3 iPKPc  12 12.70   2.8X
         0.8s  111.00nm
EAB     147.24   4 iPKPc  12 12.70   2.8X
         0.8s   71.00nm
BBTK    147.30 308 ePKP   12 10.00  -0.7
EDI     147.56   2 iPKPc  12 13.30   2.9X
ESY     147.59   2 iPKPc  12 13.40   2.9X
         0.8s   73.00nm
EAU     147.63   3 iPKPc  12 13.90   3.3X
         0.8s  134.00nm
EBL     147.72   2 iPKPc  12 14.00   3.3X
CFR     148.00 320 ePKP   12 09.00  -2.4
EKA     148.15   2 PKPc   12 14.70   3.3X
         0.7s   19.30nm
VRI     148.44 322 ePKP   12 14.50   2.3
KRA     148.90 334 ePKP   12 12.10  -0.6
                   i      12 17.10
                   e      12 24.10
AKSR    148.98 277 ePKP   12 19.00   5.4X
BMR     149.02 327 ePKPc  12 19.00   6.0X
AMAN    149.09 278 iPKPc  12 19.20   5.4X
AKRL    149.27 277 iPKPc  12 19.50   5.5X
ANMR    149.42 277 iPKPc  12 19.70   5.4X
SPC     149.44 332 ePKP   12 18.50   4.7X
                   e      14 33.10
KSP     149.62 338 ePKP   12 14.00   0.2
         0.8s   85.00nm
                   i      12 19.30
                   i      12 27.10
                   e      14 26.50
BCK     149.69 305 ePKP   12 19.20   4.8X
CMP     149.75 322 ePKPc  12 20.00   5.8X
WIT     150.17 351 ePKP   12 21.50   7.0X
CLL     150.23 342 ePKP   12 15.00   0.3
BRG     150.35 341 ePKP   12 15.10   0.2
         1.0s   90.00nm
                   i      12 20.70
                   i      12 28.10
                   e      14 30.40
                   e      14 56.60
PRU     150.93 339 PKP    12 21.80   6.0X
         1.0s   43.40nm
                   e      12 29.20
WTS     150.94 350 ePKP   12 17.00   1.3
         0.7s   83.00nm
                   iP'P'  12 22.90
                   e(pPKP14 34.00
MOX     151.21 343 iPKPc  12 23.00   6.8X
         1.3s   51.00nm
                   e      12 33.00
                   e      14 36.00
SRO     151.32 333 i(PKP)12 20.20   3.8X
                   i      12 23.00
                   e      14 33.70
BZS     151.37 326 ePKP   12 15.50  -1.0
HOF     151.44 343 iPKPc  12 23.20   6.7X
ZST     151.51 334 e(PKP)12 16.90   0.2
                   i      12 23.70
                   i      12 34.60
```

```
                   e      14 33.20
EZN     151.85 312 ePKP   12 24.00   6.6X
KHC     151.99 340 PKP    12 25.00   7.6X
                   e      12 37.40
GRF     152.18 343 iPKPc  12 25.40   7.8X
                   e      12 38.60
ENN     152.27 351 ePKP   12 25.50   7.9X
         1.0s   45.00nm
                   e      12 33.00
                   e(pPKP14 40.00
TNS     152.34 347 ePKPc  12 25.50   7.6X
BEO     152.51 326 i(PKP)12 25.50   7.3X
DOU     153.10 352 PKP    12 26.90   8.1X
         1.0s   38.90nm
                   e      12 40.40
                   e      14 42.00
BCAO    153.36 228 iPKPd  12 20.20  -0.1
         0.9s   23.00nm
                   id     12 29.00
                   id     12 44.20
SKO     153.83 320 ePKP   12 20.40   0.3
         1.1s   91.00nm
                   iP'P'  12 28.40
                   i      12 45.70
                   i      13 36.20
LJU     154.28 335 e(PKP)12 20.50  -0.1
VOY     154.54 336 ePKP   12 21.00   0.0
                   e      12 29.10
                   e      12 47.00
CEY     154.57 335 e(PKP)12 21.50   0.5
FLN     154.78 359 ePKP   12 21.00  -0.1
         0.8s    9.40nm
LDF     154.94 359 ePKP   12 20.80  -0.6
         0.9s   16.40nm
BSF     154.95 348 ePKP   12 21.60   0.0
         0.8s    5.35nm
LOR     155.98 352 ePKP   12 22.90   0.0
         1.2s   17.85nm
SSF     156.22 353 ePKP   12 23.20   0.1
         1.0s   13.00nm
LBF     156.24 352 ePKP   12 23.20   0.0
         0.8s    4.05nm
TCF     157.12 355 ePKP   12 24.50   0.2
         0.9s    8.20nm
LIC     162.37 166 PKP    12 30.52  -0.2
         1.0s   23.00nm
KIC     162.56 167 PKP    12 30.62  -0.3
         0.9s   21.00nm
TIC     162.78 166 PKP    12 30.96  -0.2
         0.7s   15.50nm
LKO     165.41 161 PKPd   12 33.62   0.1
         0.8s   11.50nm
IFR     169.33  20 iPKPc  12 38.00   2.1
                   i      13 54.00
     S.D. = 1.1  on 142 of 178 obs.
-----------------------------------------
? OCT 13, 1990  23h 32m 40.14±14.96s
  14.433 N ±45.4km   60.605 W ±158.km
  DEPTH =  33.0km  (normal)
 WINDWARD ISLANDS                   ( 95)
   MG 2.9 (FDF).

FDF       0.61 300 iPd    32 52.30   0.0
          0.1s    4.50nm
                   S      33 03.30
SLB       0.74 215 eP     32 54.12   0.0
                   eS     33 05.00
SOA       1.18 207 eP     33 00.33   0.0
                   eS     33 16.27
SVV       1.26 208 eP     33 01.44  -0.1
                   eS     33 17.05
SVB       1.31 209 eP     33 02.43   0.1
                   eS     33 18.09
     S.D. = 0.1  on   5 of   5 obs.
-----------------------------------------
  OCT  13, 1990  23h 36m 19.32± 0.74s
  28.160 S ± 5.8km   69.534 W ± 8.6km
  DEPTH =   94.0 ±  9.4 km
  4.4mb (  2 obs.)
 CHILE-ARGENTINA BORDER REGION      (127)

RTLL      3.29 164 iPd    37 09.50  -0.3
CYA       3.31  96 iPd    37 11.50   1.5
                   S      37 46.00
RTCB      3.38 169 eP     37 11.00   0.0
ZON       3.45 168 e(P)   37 12.00  -0.1
RTBS      3.49 179 ePd    37 13.00   0.6
```

13d 23h

RTCV	3.79	167	ePd	37	16.50	-0.1
ANT	4.51	350	e(P)	37	35.00	8.5X
JACH	4.60	191	iPd	37	26.20	-1.7
			iS	38	16.00	
MDZ	4.74	173	eP	37	29.40	-0.5
			e	37	49.20	
			e(S)	38	03.90	
PEL	5.07	191	eP	37	36.00	1.7
			iS	38	25.60	
LNV	6.00	195	iPd	37	42.20	-4.9X
CNCB	11.39	8	P	39	05.00	4.1X
LPB	11.65	7	eP	39	03.00	-1.3
ZOBO	11.91	7	P	39	08.00	0.2
SIV	14.42	35	P	39	40.40	0.2
PPD	17.59	74	eP	40	18.90	-0.9
VAO	20.98	81	eP	40	56.20	-0.7
			e	40	59.80	
BAO	23.51	62	eP	41	22.00	0.2
JFO	24.58	81	(P)	41	32.00	-0.1
TUL	68.37	337	eP	47	13.40	0.8
	0.7s		7.60nm			4.7mb
ALQ	71.81	329	eP	47	34.00	0.2
	0.7s		1.71nm			4.0mb
ANMO	71.81	329	P	47	34.50	0.7
WB5	126.94	208	ePKP	55	12.90	-1.5
GBA	146.04	108	PKPd	55	50.40	0.9
	0.3s		2.10nm			
	S.D. = 1.0		on 21 of 24 obs.			

OCT 13, 1990 23h 52m 46.18± 0.43s
15.654 N ± 6.3km 147.987 E ± 8.2km
DEPTH = 33.0km (normal)
4.8mb (6 obs.)
MARIANA ISLANDS REGION (215)

GUA	3.64	235	eP	53	41.20	-0.5
			eS	54	21.90	
GUMO	3.65	236	eP	53	41.80	0.0
PJG	3.65	236	eP	53	41.60	-0.2
CHJJ	21.84	340	eP	57	36.80	-0.9
MAT	22.55	339	eP	57	44.00	-0.8
	0.9s		10.08nm			4.3mb
MTMJ	22.73	338	eP	57	45.80	-0.8
SSE	28.90	307	Pc	58	45.50	1.2
	1.0s		10.00nm			4.5mb
WHN	34.15	302	eP	59	30.00	-0.4
WB5	37.76	201	iPd	00	00.00	-1.1
GYA	39.88	293	P	00	19.80	0.9
ASPA	41.43	200	iPd	00	30.90	-0.6
	0.6s		19.10nm			5.0mb
CD2	43.08	299	eP	00	46.00	1.0
LZH	44.17	306	eP	00	54.70	0.7
	2.0s		54.00nm			5.0mb
Z	20s		0.20um			4.0Msz
			pP	01	02.00	24kmX
WARB	46.48	207	iPc	01	12.80	0.6
	0.4s		3.00nm			4.6mb
WMO	57.95	312	eP	02	38.40	0.5
FBA	65.09	25	(P)	03	25.50	0.0
MAIO	79.72	305	eP	04	53.00	0.3
TNP	84.20	52	P	05	16.00	-0.1
APO	95.63	339	eP	06	08.00	-1.5
	0.8s		6.90nm			5.2mb
KIC	145.24	307	PKP	12	22.62	-0.5
	1.0s		36.50nm			
TIC	145.28	308	PKP	12	22.54	-0.6
	0.9s		21.50nm			
ZOBO	145.30	96	PKP	12	24.00	0.2
LPB	145.35	97	ePKP	12	25.00	1.3
CNCB	145.48	97	PKP	12	25.80	1.7
LIC	145.55	307	PKP	12	23.22	-0.4
	0.9s		26.00nm			
CCH	147.26	98	(PKP)	12	40.00	13.3X
SIV	152.05	95	PKP	12	40.80	7.1X
	S.D. = 0.9		on 25 of 27 obs.			

? OCT 14, 1990 00h 04m 41.37± 2.08s
31.398 S ±46.2km 69.400 W ±26.9km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.27	190	iPd	04	58.50	-0.1
RTCB	0.52	100	eP	05	00.00	0.2
ZON	0.63	104	eP	05	01.00	0.5
			eS	05	15.00	
RTLL	0.80	85	iPd	05	01.50	-0.4
			eS	05	15.20	
RTCV	0.87	122	iPd	05	02.30	-0.2
MDZ	1.55	163	eP	05	26.00	16.1X
			e	05	32.90	
	S.D. = 0.5		on 5 of 6 obs.			

• OCT 14, 1990 00h 18m 46.83± 0.53s
15.571 N ± 9.1km 148.080 E ±10.3km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
MARIANA ISLANDS REGION (215)

GUA	3.67	237	eP	19	42.80	0.1
			eS	20	23.20	
GUMO	3.68	238	eP	19	42.70	-0.1
PJG	3.68	238	eP	19	42.70	-0.1
MAT	22.66	339	eP	23	46.00	-0.5
	0.9s		10.92nm			4.3mb
WB5	37.72	201	eP	26	02.00	0.6
ASPA	41.39	200	eP	26	31.20	-0.6
	0.8s		7.10nm			4.4mb
LZH	44.30	306	eP	26	56.50	0.9
			pP	27	04.00	25kmX
ZOBO	145.20	96	PKP	38	25.00	0.7
LPB	145.25	97	ePKP	38	24.00	-0.2
KIC	145.36	307	PKP	38	23.90	-0.1
	0.7s		9.50nm			
CNCB	145.38	97	ePKP	38	14.00	-10.6X
TIC	145.40	308	PKP	38	23.90	-0.1
	0.7s		8.50nm			
LIC	145.67	307	PKP	38	24.00	-0.5
	0.8s		9.50nm			
	S.D. = 0.5		on 12 of 13 obs.			

• OCT 14, 1990 00h 31m 34.35± 1.09s
15.805 N ±12.6km 147.984 E ±18.2km
DEPTH = 33.0km (normal)
4.6mb (1 obs.)
MARIANA ISLANDS REGION (215)

GUA	3.73	233	eP	32	31.50	0.5
			eS	33	11.50	
GUMO	3.74	234	eP	32	31.00	-0.1
PJG	3.74	234	eP	32	31.00	-0.1
MAT	22.41	339	(P)	36	31.00	-0.5
WB5	37.90	201	eP	38	50.20	-0.2
ASPA	41.57	200	iPd	39	20.30	-0.5
	0.6s		8.30nm			4.6mb
KIC	145.15	307	PKP	51	12.20	1.1
	S.D. = 0.7		on 7 of 7 obs.			

% OCT 14, 1990 01h 01m 47.15± 2.63s
23.138 N ±18.3km 121.724 E ±22.7km
DEPTH = 33.0km (normal)
TAIWAN (244)

TWF1	0.45	299	iPc	01	56.70	-0.3
			eS	02	02.90	
TWG	0.68	242	iPd	02	00.10	-0.2
TWD	0.95	353	iPd	02	03.80	-0.3
TWK	1.14	277	iPc	02	07.40	0.5
			eS	02	22.10	
TWC	1.47	4	ePc	02	11.80	0.3
	S.D. = 0.5		on 5 of 5 obs.			

OCT 14, 1990 01h 07m 48.09± 0.80s
38.246 N ± 7.3km 23.159 E ± 9.2km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 2.7 (ATH).

ATH	0.52	122	iPbc	07	58.00	-0.6
			eSb	08	05.00	
NEO	1.06	3	ePn	08	09.00	0.9
			eSn	08	24.20	
EVR	1.25	303	ePn	08	11.70	0.3
			eSn	08	30.70	
ITM	1.45	223	ePn	08	13.70	-0.6
			eSn	08	32.20	
VLI	1.54	187	ePb	08	16.70	1.2
OHR	3.39	328	ePn	08	41.00	-1.2
	S.D. = 1.2		on 6 of 6 obs.			

OCT 14, 1990 01h 58m 42.84± 0.12s
17.650 S ± 3.8km 178.906 W ± 3.6km
DEPTH = 556.3km (2 depth phases)
5.1mb (47 obs.)
FIJI ISLANDS REGION (181)

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 17C
Centroid Location:
Origin Time 01:58:50.3 1.1
Lat 17.30S 0.11 Lon 179.35W 0.11
Dep 551.9 6.4 Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr= 3.19 0.56 Mtt= 3.10 0.91
Mff=-6.29 0.89 Mrt=-4.47 0.91
Mrf=-6.47 0.90 Mtf= 0.20 0.81
Principal Axes:
T Val= 9.25 Plg=49 Azm=150
N 0.60 26 25
P -9.86 29 280
Best Double Couple:Mo=9.6*10**16
NP1:Strike=323 Dip=29 Slip= 24
NP2: 211 79 116

MBU	2.36	286	iPc	59	55.30	-0.1
SVA	2.55	259	ePc	59	57.60	1.3
			iS	00	58.50	
SGE	3.02	271	iPc	59	59.60	0.4
NDF	3.47	268	iPc	00	05.60	3.6X
PVC	12.18	268	iPd	01	24.40	0.7
BKM	12.25	268	iPd	01	25.20	0.8
DZM	14.46	250	iPd	01	46.80	0.2
HBZ	20.02	186	eP	02	39.80	0.0
PUZ	20.50	186	P	02	44.70	0.4
WLZ	20.69	192	P	02	48.50	2.5
NOZ	21.06	187	P	02	50.10	0.8
HNR	22.10	289	eP	02	46.00	-13.0X
PGZ	23.26	189	P	03	08.00	-1.3
MNG	23.40	191	eP	03	08.40	-2.1
	0.2s		8.00nm			5.0mb
MTW	23.92	190	P	03	14.00	-1.2
CAW	23.95	191	P	03	14.20	-1.3
WDW	24.12	191	P	03	15.50	-1.4
MRW	24.14	192	eP	03	16.20	-0.9
TCW	24.20	193	P	03	16.50	-1.2
THZ	25.04	195	P	03	24.70	-0.5
KHZ	25.51	193	eP	03	27.90	-1.4
	0.3s		28.00nm			5.4mb
LTZ	26.15	195	P	03	34.10	-0.9
AFR	27.76	94	iP	03	48.60	-0.5
	0.8s		85.00nm			5.4mb
BRS	27.84	245	iPc	03	49.80	-0.1
			i	04	04.30	60kmX
			i	04	56.00	
PAE	27.93	95	iP	03	50.00	-0.7
	0.8s		80.00nm			5.4mb
PPT	27.95	94	iP	03	50.20	-0.6
	0.8s		80.00nm			5.4mb
PPN	28.08	94	iP	03	51.20	-0.8
	0.8s		30.00nm			5.0mb
TBI	28.13	107	iP	03	53.30	1.0
	0.7s		60.00nm			5.3mb
TVO	28.24	95	iP	03	52.80	-0.6
	0.8s		75.00nm			5.4mb
MMCZ	29.05	198	P	03	59.70	-0.6
MHZ	29.07	197	P	03	59.70	-0.7
TLC	29.24	198	Pd	04	02.00	0.1
COO	29.50	239	iPd	04	05.60	1.4
PMO	29.86	90	iP	04	06.90	-0.4
	0.8s		55.00nm			5.2mb
VAH	30.07	90	iP	04	08.50	-0.6
	0.8s		30.00nm			5.0mb
TPT	30.13	90	iP	04	09.20	-0.4
	0.8s		40.00nm			5.1mb
RUV	30.32	90	iP	04	10.70	-0.5
	0.8s		45.00nm			5.2mb
RMO	31.16	248	iPd	04	17.40	-1.0
			e	05	50.00	
			e	09	50.00	
CTA	33.02	260	iPd	04	33.70	-0.3
	0.9s		107.56nm			5.5mb
			iScP	09	57.00	
CNB	33.21	232	iPc	04	37.00	1.5
	0.7s		256.00nm			6.0mb
CAN	33.49	232	iPd	04	39.80	2.0
BWA	33.59	234	iPd	04	38.30	-0.4
PMG	33.95	279	iPd	04	42.00	0.1
	1.0s		290.00nm			5.9mb
CMS	34.74	240	iPd	04	49.40	1.1
STK	38.34	241	iPd	05	19.10	1.2
	0.8s		75.00nm			5.4mb
			e	10	16.50	

BFD	39.02	232	iPd	05	29.00	5.7X	KVN	80.03	44	P	09	56.40	0.2		1.0s	302.00nm							
ADE	41.38	237	iPd	05	43.00	0.7	TNP	80.11	45	iPd	09	56.40	-0.2	CLL	145.11	347	iPKPc	17	19.20	0.9			
	0.6s	86.67nm			5.5mb					pP	11	55.00	551km		0.8s	120.00nm							
RKT	41.42	105	iP	05	43.40	0.7	SVW	80.68	11	ePc	09	57.50	-1.3				e	19	34.00				
	0.6s	25.00nm			4.9mb		BMW	81.16	35	P	10	01.80	0.2	BRG	145.30	346	iPKP	17	18.60	0.0			
WB5	44.19	259	eP	06	01.80	-2.8	GMW	82.04	35	P	10	06.10	0.1		0.6s	70.00nm							
			ScP	10	39.50		LON	82.10	36	P	10	06.10	-0.3				e	19	30.00				
			eS	12	00.40		TTA	82.30	10	iPc	10	06.60	-0.5	MLR	145.37	329	ePKPd	17	20.00	0.9			
ASPA	44.41	254	iPd	06	05.50	-0.7	PGC	82.36	33	ePd	10	07.60	0.2	WTS	145.43	354	ePKP	17	19.00	0.2			
	0.4s	497.10nm			6.4mb	X	PMR	82.46	14	ePc	10	06.40	-1.3		1.2s	205.00nm							
Z	23s	0.09um			3.6MszX			1.1s	67.70nm			5.1mb		PRU	145.97	344	ePKP	17	19.50	-0.2			
			iScP	10	40.60		MCW	82.70	34	P	10	10.10	0.8		0.7s	42.10nm							
			iS	11	59.00		SNG	83.16	280	eP	10	15.20	3.0X				e	17	21.50				
			iScS	15	04.90		BJI	83.27	316	eP	10	12.50	0.3	MOX	146.02	348	ePKP	17	20.50	0.7			
GUA	47.28	309	eP	06	27.00	-1.2		1.0s	18.00nm			4.6mb			1.2s	37.00nm							
	0.9s	268.91nm			5.8mb					eS	19	40.00		DSI	146.04	301	iPKPc	17	21.40	1.0			
GUMO	47.35	309	eP	06	27.50	-1.2	TOA	83.61	15	iPc	10	13.00	-0.6	NOH	146.62	299	iPKPc	17	23.20	1.7			
	0.8s	169.84nm			5.6mb		AIA	83.92	157	eP	10	17.50	2.4	ENN	146.74	354	iPKPc	17	23.50	2.6			
MTN	48.33	268	iPd	06	34.80	-1.4	MAW	83.94	200	iPc	10	17.00	1.8		0.7s	48.00nm							
	0.4s	212.00nm			6.0mb		DUG	84.13	45	P	10	16.80	0.1	SRO	146.77	339	iPKP	17	24.10	3.0X			
WARB	50.92	250	iPd	06	54.90	-0.4		0.6s	3.29nm			4.1mb	X	BUD	146.80	338	iPKPc	17	23.80	2.7			
	0.7s	182.00nm			5.6mb		TIY	84.74	312	iPc	10	21.00	1.3	ZST	146.85	340	iPKPc	17	24.60	3.4X			
KUPT	56.13	269	e(P)	07	23.00	-9.3X	DAU	85.28	45	P	10	23.40	0.9				e	19	31.90				
MBL	57.58	256	iPd	07	41.20	-0.9	IMA	85.60	10	ePc	10	22.00	-1.3	MBH	146.92	298	iPKPc	17	24.00	2.2			
	0.5s	38.00nm			5.0mb			0.7s	6.80nm			4.4mb		TNS	146.97	351	iPKPc	17	23.90	2.5			
MEKA	58.15	249	eP	07	45.00	-1.0	FBA	85.66	13	iPc	10	22.00	-1.4	KHC	147.01	345	ePKP	17	21.90	0.4			
	0.4s	14.00nm			4.6mb					pP	12	20.00	537kmX				i	17	24.80				
KLB	58.51	243	iPd	07	47.40	-1.0	PTI	85.71	43	P	10	25.00	0.7	GRF	147.01	348	iPKPc	17	24.80	3.4X			
	0.6s	76.00nm			5.2mb		XAN	85.73	308	Pd	10	25.20	0.7		0.9s	62.00nm							
NWAO	58.91	242	eP	07	50.00	-1.0	ANMO	86.31	52	P	10	27.90	0.5	Z	17s	0.20um				5.0MszX			
RKG	59.07	241	eP	07	52.00	0.0		1.1s	28.16nm			4.9mb		VKA	147.03	341	iPKPc	17	24.70	3.2X			
	0.8s	63.00nm			5.0mb		LRM	87.08	40	iPc	10	30.70	-0.2		0.7s	73.10nm							
BAL	59.47	245	eP	07	53.50	-1.2	CHTO	88.47	290	P	10	38.80	1.2	BZS	147.29	333	ePKP	17	20.00	-2.0			
MUN	59.82	243	eP	07	56.50	-0.5	GOL	89.04	48	P	10	41.00	0.8	SOP	147.47	340	iPKPc	17	27.60	5.4X			
MRWA	60.18	246	iPd	07	58.40	-1.0		1.0s	26.25nm			5.1mb		DOU	147.51	356	iPKPc	17	25.60	3.4X			
	0.4s	12.00nm			4.6mb		GLD	89.16	48	P	10	41.60	1.0		0.7s	86.70nm							
SBA	60.65	183	iPc	08	04.30	2.6		1.2s	42.93nm			5.3mb					e	17	32.00				
NANU	61.34	254	iPd	08	06.90	-0.2	SES	90.09	36	iPc	10	44.00	-0.5	GWF	148.31	352	PKP	17	27.62	4.1X			
	0.4s	34.00nm			5.1mb			0.7s	64.00nm			5.7mb		FUR	148.45	347	iPKPc	17	28.20	4.4X			
MAT	67.42	324	iPd	08	43.50	-1.5	EDM	90.20	33	iPc	10	44.10	-0.8		0.8s	83.00nm							
	0.7s	17.12nm			4.7mb		LZH	90.36	308	eP	10	46.50	0.3	BHG	148.49	345	iPKPc	17	28.30	4.4X			
ADK	69.26	1	eP	08	52.80	-2.9X		1.5s	28.00nm			5.0mb			0.8s	49.00nm							
	0.7s	55.60nm			5.2mb		INK	91.76	15	eP	10	50.00	-1.7	RDO	148.55	323	iPKPc	17	28.00	3.9X			
SPA	72.46	180	iPc	09	15.60	1.1		0.9s	22.00nm			5.2mb		STR	148.67	351	PKP	17	29.13	5.1X			
	0.9s	54.09nm			5.1mb		YKA	94.30	25	eP	11	02.20	-1.2	CDF	148.91	352	PKP	17	29.13	4.6X			
SSE	75.21	310	P	09	29.80	-0.4		0.7s	13.90nm			5.2mb		FLN	148.94	2	iPKPc	17	29.00	4.5X			
	0.8s	10.00nm			4.3mb		SIO	94.32	54	eP	11	03.40	-0.8		0.8s	146.90nm							
BLP	76.06	46	P	09	35.40	0.6	GTA	94.51	310	eP	11	05.40	0.3	Z	20s	0.30um				5.1Msz			
SYP	76.33	47	eP	09	37.00	0.4	TUL	94.77	54	eP	11	06.50	0.3	LDF	149.12	2	iPKPc	17	29.40	4.7X			
GCC	76.36	44	eP	09	36.80	0.4		0.7s	4.50nm			4.8mb			0.6s	43.30nm							
PCC	76.37	43	eP	09	36.80	0.3	MBC	100.19	12	ePdiff	11	28.50	-1.2	VITF	149.25	354	PKP	17	29.98	5.1X			
PRS	76.38	45	eP	09	37.00	0.4		0.9s	5.00nm			5.0mb		GRR	149.30	3	iPKPc	17	30.10	5.1X			
SAO	76.57	44	ePd	09	37.90	0.3	DAG	119.99	5	iPKPc	16	29.00	-1.8	PRK	149.31	320	ePKP	17	30.00	4.7X			
BCH	76.62	46	P	09	38.40	0.3		0.3s	23.81nm					SDTA	149.36	346	iPKPc	17	30.20	4.9X			
BRK	76.67	43	ePd	09	38.30	0.2	KEV	125.52	349	ePKP	16	41.00	-0.7		0.6s	68.70nm							
PRI	76.74	45	ePc	09	39.20	0.5	MAIO	125.54	302	iPKPd	16	43.00	0.1				i	17	37.20				
PHAM	76.76	45	P	09	39.20	0.5				e	18	41.00		SLE	149.36	350	ePKPd	17	24.80	-0.4			
MHC	76.77	44	eP	09	39.30	0.5	SOD	127.65	348	ePKP	16	45.00	-0.8	HAU	149.42	353	iPKPc	17	30.40	5.1X			
LLA	76.82	44	eP	09	39.70	0.7	SOB1	130.68	119	ePKP	16	38.40	-14.8X		0.6s	37.90nm							
ARN	76.84	44	P	09	39.80	0.7				e	16	53.20		Z	20s	0.17um				4.9Msz			
ABL	77.03	47	P	09	40.70	0.2				e	19	28.10		MOF	149.48	352	PKP	17	30.22	4.8X			
PAS	77.40	48	eP	09	43.00	0.8	SUF	131.72	345	ePKP	16	52.00	-1.6	BSF	149.54	352	iPKPc	17	30.60	5.0X			
MWC	77.52	48	eP	09	43.00	0.0	NUR	133.98	344	ePKP	16	58.00	0.0		0.6s	30.65nm							
MDJ	77.70	325	eP	09	43.50	0.0	NB2	136.06	353	PKP	16	50.40	-11.6X	FVI	149.56	344	PKP	17	29.70	4.3X			
	0.7s	20.00nm			4.7mb			0.6s	2.10nm					LJU	149.56	341	ePKP	17	26.00	0.5			
BAR	77.72	50	eP	09	43.00	-1.0	HFS	136.60	351	ePKP	16	49.10	-13.9X				i	17	30.50				
FRI	77.85	45	ePc	09	44.30	-0.2		0.4s	1.50nm					AKSR	149.58	287	ePKP	17	32.50	6.4X			
RVR	77.88	48	eP	09	44.00	-0.7	EKA	142.25	4	PKP	17	08.00	-5.3X	LPF	149.65	3	iPKPc	17	30.90	5.4X			
SBB	77.92	48	eP	09	44.00	-1.0		0.7s	8.20nm					SAX	149.71	349	ePKP	17	25.90	-0.2			
PLM	77.92	49	eP	09	45.00	-0.2	KAS	143.37	317	ePKP	17	15.00	-0.8	VOY	149.77	342	ePKP	17	26.70	0.8			
CMB	77.98	44	ePc	09	45.20	0.0	KRA	144.30	339	iPKPc	17	16.30	-0.6				i	17	30.50				
ISA	77.98	46	eP	09	45.00	-0.3		0.5s	63.00nm					AGAL	149.77	286	ePKP	17	33.00	6.6X			
PEC	77.98	49	P	09	45.20	-0.1				e	17	23.30		VBY	149.82	340	ePKP	17	31.80	5.9X			
	0.6s	15.50nm			4.6mb		CFR	144.45	326	ePKP	17	17.00	-0.3	AKRL	149.86	287	ePKP	17	32.50	5.9X			
WDC	78.05	40	eP	09	45.50	0.0	ETA	144.56	8	ePKP	17	16.40	-0.9	CEY	149.87	341	ePKP	17	31.40	5.4X			
ORV	78.11	42	eP	09	45.50	-0.4		0.6s	85.00nm					ANMR	150.01	287	ePKP	17	33.00	6.2X			
KDC	78.26	14	eP	09	45.10	-1.1	WIT	144.64	354	iPKP	17	19.50	2.1	OSS	150.09	347	ePKP	17	26.50	0.0			
MIN	78.50	41	eP	09	48.00	-0.1	VRI	144.71	328	ePKPc	17	15.00	-2.8	TRI	150.10	342	iPKPc	17	31.60	5.3X			
CLC	78.67	47	eP	09	48.00	-0.9	KSP	144.73	343	iPKP	17	17.70	0.0	LLS	150.14	349	ePKPd	17	26.40	-0.2			
TPC	78.89	49	eP	09	50.00	-0.1		0.7s	95.00nm					SKO	150.17	329	iPKP	17	31.90	5.4X			
LBFM	78.90	40	P	09	50.40	0.2				i	20	08.00			0.8s	66.00nm							
GSC	78.96	47	eP	09	50.00	-0.5	BBTK	144.80	315	ePKP	17	18.00	-0.3	VVI	150.22	344	PKP	17	32.00	5.5X			
GLA	79.25	50	eP	09	52.00	0.0	ECB	144.81	8	ePKP	17	16.90	-0.8	RIY	150.24	341	iPKPc	17	31.80	5.3X			
			e	11	52.00	561km		0.8s	162.00nm					PLG	150.25	324	ePKP	17	31.70	4.9X			
CN2	79.53	323	eP	09	54.00	0.9	BMR	144.88	333	ePKPc	17	19.00	1.0	CTI	150.36	345	PKP	17	28.20	1.4			
	1.0s	50.00nm			4.9mb		SPC	144.92	338	iPKP	17	17.80	-0.5	LOR	150.38	356	iPKPc	17	32.70	6.0X			
			epP	11	47.00	520kmX	ECP	145.05	8	ePKP	17	17.60	-0.5		0.6s	70.45nm							

14d 02h

Z 20s 0.15um 4.8Msz
GRC 150.39 357 PKP 17 33.18 6.5X
VDL 150.42 348 ePKPd 17 27.40 0.3
LBF 150.65 356 iPKPc 17 33.40 6.2X
AVF 150.88 357 iPKPc 17 33.50 6.1X
0.6s 48.70nm
TMA 150.90 349 ePKPd 17 27.50 -0.3
SMF 151.00 356 iPKPc 17 33.80 6.1X
0.8s 34.90nm
SAL 151.04 346 PKP 17 31.00 3.3X
MDI 151.05 347 PKP 17 32.80 5.1X
MMK 151.11 350 ePKP 17 29.20 1.0
MFF 151.11 2 iPKPc 17 34.20 6.4X
0.8s 85.95nm
OHR 151.13 328 iPKPc 17 34.10 6.0X
0.6s 127.00nm
BGF 151.14 357 iPKPc 17 34.50 6.6X
VAI 151.15 349 PKP 17 29.50 1.7
DIX 151.17 351 ePKP 17 28.80 0.5
KZN 151.21 326 ePKP 17 33.00 4.7X
HVAR 151.41 336 iPKP 17 34.40 6.1X
TCF 151.43 358 iPKPc 17 35.20 6.9X
LSF 151.48 359 iPKPc 17 35.00 6.6X
MAF 151.48 358 iPKPc 17 35.60 7.2X
0.6s 24.35nm
ORO 151.52 350 PKP 17 36.00 7.4X
AGO 151.63 357 PKP 17 35.44 6.8X
PLDF 151.68 356 PKP 17 35.86 7.1X
LSD 151.82 351 PKP 17 36.02 6.8X
LPL 151.82 352 iPKP 17 36.70 7.5X
0.8s 22.85nm
LPG 151.84 352 iPKP 17 36.90 7.6X
0.8s 21.50nm
PYM 151.94 357 PKP 17 36.42 7.3X
BDB 152.07 347 PKP 17 36.50 7.2X
RSP 152.10 351 PKP 17 34.89 5.5X
SFI 152.28 343 PKP 17 30.00 0.5
BNI 152.28 351 PKPc 17 37.60 7.9X
ARV 152.35 341 PKP 17 37.50 7.8X
RRL 152.40 351 PKP 17 36.84 6.8X
RJF 152.43 359 iPKP 17 37.10 7.4X
0.7s 27.55nm
Z 20s 0.13um 4.7Msz
LBL 152.44 357 PKP 17 37.85 8.2X
PCP 152.47 348 PKP 17 36.33 6.4X
BDI 152.48 345 PKP 17 30.50 0.6
CRE 152.52 343 PKP 17 37.00 6.9X
KEK 152.68 327 ePKP 17 37.60 7.3X
DDI 152.73 350 PKPd 17 36.50 6.2X
PZZ 152.75 351 PKP 17 36.64 6.2X
LFF 152.79 1 iPKPc 17 38.10 7.9X
0.6s 12.65nm
CAF 152.79 358 iPKPc 17 38.40 8.1X
0.6s 14.45nm
ASS 152.82 341 PKP 17 38.00 7.6X
ROB 152.83 349 PKP 17 36.94 6.5X
FIN 152.85 349 PKP 17 36.33 5.9X
STV 152.97 350 PKP 17 36.12 5.5X
ENR 152.97 350 PKP 17 36.64 6.0X
LPD 153.05 360 iPKPc 17 38.70 8.1X
0.7s 15.45nm
IMI 153.20 349 PKP 17 37.56 6.6X
SBF 153.33 350 iPKPc 17 38.90 7.8X
0.6s 23.45nm
VLS 153.37 324 ePKP 17 38.00 6.7X
AZI 153.54 339 PKP 17 39.50 8.2X
SDI 153.66 338 PKP 17 39.50 7.9X
ORI 154.01 332 PKP 17 40.50 8.4X
SGO 154.08 335 PKP 17 40.00 7.9X
BCAO 158.45 234 iPKPc 17 38.50 0.1
0.6s 9.00nm
ic 18 18.00
AVE 162.64 25 iPKP 17 44.00 1.9
i 18 34.50
IFR 163.24 18 iPKPd 17 45.00 2.0
i 18 38.00
LIC 167.17 151 PKP 17 46.70 0.2
KIC 167.42 152 PKP 17 46.80 0.1
0.9s 13.00nm
TIC 167.54 151 PKP 17 47.10 0.3
0.7s 8.00nm
LKO 169.65 140 PKPc 17 48.02 -0.1
0.9s 14.50nm
S.D. = 1.0 on 187 of 280 obs.

& OCT 14, 1990 02h 06m 21.50s
38.048 N 122.227 W
DEPTH = 9.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.6 (BRK).
Mo=1.5•10••15 Nm (BRK). Felt (V) at Crockett, Pinole and Port Costa; (IV) at Richmond and Rodeo; (II) at Albany and Sonoma. Also felt at Concord, Oakland, San Rafael and Vallejo.

ZSP 0.11 193 iPd 06 23.90 -0.3
8KS 0.17 182 iPd 06 25.20 -0.1
iS 06 28.20
BRK 0.18 189 iPd 06 25.20 -0.2
PCC 0.56 193 iPd 06 32.20 -0.6
MHC 0.84 146 iPc 06 37.30 -0.7
ARN 0.89 141 iPd 06 37.80 -0.9
GCC 1.03 170 iPd 06 39.40 -1.7
SAO 1.42 154 iPd 06 45.00 -2.5
CMB 1.45 90 iPc 06 46.00 -2.0
iS 07 05.20
ORV 1.61 20 ePc 06 47.40 -2.7
LLA 1.76 144 ePc 06 51.30 -1.0
PRS 1.84 158 ePc 06 51.80 -1.8
FRI 2.26 117 eP 06 58.00 -1.6
PRI 2.28 146 eP 06 59.80 -0.1
WDC 2.54 355 eP 07 01.70 -1.8
PHAM 2.65 146 eP 07 03.00 -2.2
LBFM 3.31 4 eP 07 12.50 -2.1
BCH 3.34 148 eP 07 12.00 -3.0
KVN 3.39 72 eP 07 21.00 5.2
TNP 3.95 88 e(P) 07 21.50 -2.3
ABL 4.01 142 eP 07 21.20 -3.4
21 obs. associated

OCT 14, 1990 02h 21m 12.54± 0.43s
16.209 N ± 6.1km 120.501 E ± 6.2km
DEPTH = 26.9km (5 depth phases)
4.8mb (15 obs.) 4.4Msz (5 obs.)
LUZON, PHILIPPINE ISLANDS (249)

OIZ 10.54 287 P 23 40.90 -4.1X
N 12s 1.14um
E 16s 2.40um
SSE 14.83 2 eP 24 42.50 0.3
sP 24 54.50
MNI 15.28 163 e(P) 24 56.30 8.1X
NJ2 15.84 355 eP 24 56.00 0.6
Z 18s 0.50um
GYA 16.42 311 P 25 03.40 0.5
N 15s 1.20um
E 15s 0.90um
LOE 18.01 276 eP 25 24.00 1.2
KMI 18.82 301 Pd 25 33.50 0.5
TIA 20.15 352 eP 25 46.40 -1.1
Z 19s 0.80um 4.1Msz
N 15s 0.80um
eS 29 28.00
NNT 20.43 263 eP 25 48.00 -2.6
XAN 20.59 332 P 25 52.00 -0.2
N 14s 1.37um
E 14s 0.69um
S 29 40.00
BDT 20.61 276 iPc 25 55.50 3.0X
1.0s 62.10nm 4.9mb
CHG 20.72 280 ePd 25 54.00 0.4
1.1s 20.57nm 4.4mb
CD2 21.16 317 P 25 57.60 -0.5
Z 16s 2.05um 4.6MszX
eS 29 49.00
SNG 21.42 248 eP 26 05.10 4.4X
TIY 22.57 343 eP 26 10.00 -2.2
Z 16s 1.10um 4.4MszX
N 16s 0.80um
TSRJ 23.70 33 P 26 24.00 1.0
BJI 24.04 352 eP 26 27.00 0.7
1.5s 62.00nm 4.9mb
Z 20s 0.60um 4.1Msz
N 14s 0.43um
pP 26 33.00 21km
LZH 24.74 326 eP 26 33.50 0.2
1.5s 65.00nm 5.0mb
Z 20s 1.70um 4.5Msz
N 14s 1.30um
pP 26 41.50 28km
sP 26 45.50
ePP 27 15.00
eS 30 57.00
MAT 25.64 34 (P) 26 41.00 -0.7
0.8s 5.22nm 4.2mb
SNY 25.67 5 eP 26 41.60 -0.2
1.2s 30.00nm 4.8mb
Z 14s 0.50um 4.2MszX
E 13s 0.50um
pP 26 51.60 37km
S 31 03.00
HHC 25.75 344 eP 26 43.00 0.3
Z 18s 1.20um 4.5Msz
N 16s 0.60um
E 16s 0.50um
BTO 25.95 342 eP 26 45.00 0.4
N 15s 0.40um
E 14s 0.60um
esP 26 54.00
CN2 27.82 8 eP 27 02.00 0.4
Z 15s 0.50um 4.2MszX
N 15s 0.50um
E 15s 0.40um
GTA 29.34 326 Pc 27 15.60 0.1
1.4s 40.00nm 5.0mb
Z 18s 1.30um 4.6Msz
E 14s 0.50um
pP 27 22.70 25km
LSA 30.08 302 P 27 22.80 0.2
WB5 38.37 159 eP 28 33.80 0.5
WMO 39.11 322 eP 28 41.00 1.5
Z 16s 1.10um 4.8MszX
GBA 41.64 272 Pd 29 01.00 0.5
0.8s 8.20nm 4.5mb
ASPA 41.74 161 eP 29 01.60 0.4
0.8s 7.10nm 4.4mb
Z 24s 0.20um 3.9MszX
MAIO 57.34 303 iPc 31 01.10 0.2
SOD 76.66 337 iP 33 02.60 0.2
SUF 77.72 332 eP 33 08.00 -0.3
0.5s 3.80nm 4.7mb
NUR 78.89 330 eP 33 10.00 -4.8X
INK 80.84 21 eP 33 25.00 -0.1
MBC 81.15 12 ePd 33 26.60 0.0
0.5s 6.00nm 4.9mb
UPP 82.45 330 iP 33 33.30 -0.3
DAG 84.13 351 iPc 33 41.00 -1.0
0.7s 29.68nm 5.6mb
HFS 84.19 331 eP 33 41.10 -1.5
1.0s 13.10nm 5.1mb
KRA 84.34 320 eP 33 44.10 0.6
e 33 51.60 24km
NB2 84.96 333 P 33 45.80 -0.6
1.0s 14.50nm 5.2mb
SKO 85.87 312 iP 33 51.40 0.0
i 33 55.10 12kmX
KSP 86.27 322 eP 33 53.00 -0.1
YKA 90.54 22 eP 34 13.90 0.6
0.7s 2.30nm 4.6mb
S.D. = 0.9 on 38 of 43 obs.

OCT 14, 1990 03h 32m 00.93± 0.58s
40.036 N ± 5.2km 23.666 E ± 4.9km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.1 (THE). MD 3.1 (ATH).

PLG 0.38 334 iPbc 32 08.50 -0.2
OUR 0.38 39 ePd 32 09.70 0.9
eS 32 15.66
THE 0.80 318 ePc 32 16.18 -0.3
eS 32 27.86
NED 0.80 205 ePn 32 16.20 -0.4
SOH 0.82 343 ePd 32 17.54 0.7
eS 32 29.70
LIT 0.90 274 ePc 32 18.06 -0.2
eS 32 30.66
SRS 1.08 357 ePc 32 21.58 0.3
eS 32 37.26
GRG 1.33 314 ePc 32 26.42 0.9
AGG 1.45 226 ePd 32 26.98 -0.2
eS 32 46.90
KZN 1.48 281 ePn 32 27.60 0.0
MMB 1.55 2 iPgd 32 29.00 0.3
iSg 32 46.00
RDO 1.81 52 ePn 32 30.00 -2.3
EVR 1.82 233 ePn 32 33.60 1.0
KKB 1.88 347 eP 32 34.00 0.6
FNA 1.90 294 ePd 32 34.18 0.4

ALN	2.01	64	ePd	32	36.74	1.5
EZN	2.06	95	ePn	32	37.00	1.1
ATH	2.06	179	ePb	32	41.00	5.0X
KDZ	2.09	39	iPc	32	35.00	-1.4
PRK	2.16	111	ePb	32	43.50	6.0X
OHR	2.43	297	ePn	32	39.20	-2.2
SKO	2.56	320	iPn	32	43.40	0.2
VTS	2.58	352	iP	32	45.00	1.5
KEK	2.99	265	ePb	32	56.00	6.7X
PVL	3.41	21	eP	32	53.00	-2.2
MLR	5.70	16	eP	33	20.00	-7.8X

S.D. = 1.2 on 22 of 26 obs.

---

* OCT 14, 1990 04h 07m 17.09± 0.93s
13.842 N ±12.6km 90.568 W ± 8.1km
DEPTH = 33.0km (normal)
4.0mb (1 obs.)
NEAR COAST OF GUATEMALA (71)
Felt (II) at Son Solvodor, El Solvodor.

VSS	1.47	62	iPc	07	41.50	-0.1
SJAS	1.50	65	iPc	07	41.80	-0.3
OZA	1.60	72	iPc	07	43.20	-0.3
VSM	2.27	80	eP	07	54.20	1.0
TPX	2.48	319	iP	07	54.00	-2.0
			iS	08	11.00	
SCX	4.18	332	eP	08	20.50	0.4
			iS	08	47.25	
PPM	9.79	309	iP	09	41.00	1.8
			iS	11	24.00	
TUL	23.25	349	eP	12	32.10	9.6X
	1.1s		6.10nm			4.0mb
CNCB	37.12	142	eP	14	27.00	-0.3
SIV	41.02	134	P	14	59.00	-0.2

S.D. = 1.2 on 9 of 10 obs.

& OCT 14, 1990 05h 31m 09.96s
59.875 N 153.620 W
DEPTH = 130.1km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.30	138	iP	31	27.67	0.9
			eS	31	41.40	
PDB	0.30	253	iP	31	27.52	0.8
			eS	31	41.13	
AUH	0.52	170	eP	31	28.70	-0.8
AUE	0.53	166	eP	31	28.59	-0.8
AUI	0.55	170	eP	31	28.90	-0.7
RSO	0.73	36	eP	31	30.41	-0.7
MCNL	0.78	208	eP	31	30.28	-1.0
RDT	0.93	40	iP	31	31.57	-1.0
CDD	0.95	181	eP	31	31.54	-1.2
			eS	31	48.58	
HOM	1.02	101	eP	31	32.20	-1.2
NNL	1.18	81	eP	31	34.45	-0.5
CNPM	1.26	105	eP	31	33.99	-1.8
			eS	31	52.37	
CKL	1.47	25	iP	31	37.47	-0.7
NKA	1.47	53	eP	31	39.24	1.2
BGL	1.52	23	eP	31	38.14	-0.6
SPU	1.52	30	eP	31	37.67	-1.1
			eS	31	59.96	
CRP	1.57	27	eP	31	38.75	-0.7
CGLM	1.64	28	eP	31	39.29	-0.9
NCG	1.69	25	eP	31	40.30	-0.5
SLKM	1.81	68	eP	31	40.62	-1.5
SEW	2.11	82	eP	31	43.52	-2.2
SUA	2.13	40	eP	31	44.79	-1.3
			eS	32	11.08	
SKT	2.35	25	eP	31	47.53	-1.2
PMS	2.43	54	eP	31	47.85	-2.0
PWA	2.56	44	eP	31	50.26	-1.1
PLRM	2.80	50	eP	31	52.09	-2.4
KNK	2.97	57	eP	31	55.91	-1.0
KNIM	2.98	78	eP	31	54.15	-2.8
GHO	2.99	48	eP	31	54.11	-3.0
MTU	3.01	85	eP	31	55.14	-2.1
CUT	3.01	31	eP	31	55.62	-1.7
SML	3.23	51	eP	31	57.04	-3.3
GLI	3.39	70	eP	31	59.92	-2.5
VZW	3.69	68	eP	32	03.76	-2.7
VLZ	3.82	68	eP	32	05.81	-2.2
KLU	4.12	63	eP	32	08.74	-3.5
RND	4.21	31	eP	32	11.10	-2.3
TOA	4.26	55	eP	32	11.71	-2.4
GLB	5.08	68	eP	32	22.48	-2.6
NEA	5.17	22	eP	32	23.36	-3.0
WRH	5.29	27	eP	32	24.80	-3.1
CCB	5.50	27	eP	32	27.56	-3.2
HDA	5.52	32	eP	32	27.54	-3.4
GLM	5.89	27	eP	32	32.96	-3.2

44 obs. associated

OCT 14, 1990 06h 05m 51.37± 0.27s
30.534 N ± 5.3km 67.495 E ± 4.1km
DEPTH = 12.3km (2 depth phases)
4.7mb (16 obs.) 4.1Msz (2 obs.)
PAKISTAN (710)
Felt (III) at Quetto.

QUE	0.58	234	iPc	06	04.00	0.9
NDI	8.66	100	iPnd	07	56.50	-2.8
	0.4s		42.37nm			6.1mb X
			iSn	09	28.00	
MAIO	8.82	313	eP	08	06.00	4.4X
			eS	10	11.00	
KSH	11.29	36	P	08	35.50	-0.1
			S	10	43.00	
BOM	12.55	156	eP	08	53.00	0.5
			eS	11	28.00	
POO	13.27	153	eP	09	02.00	-0.1
HYB	16.49	140	eP	09	49.00	4.8X
			eS	12	58.00	
GBA	19.18	149	P	10	18.00	0.5
			S	13	52.00	
LSA	20.48	86	P	10	35.80	3.7X
WMQ	20.79	45	P	10	35.00	0.2
Z	16s		0.50um			4.0MszX
			eS	14	20.50	
			sS	14	29.00	
QASM	21.54	264	eP	10	48.90	-1.7
UOSK	22.64	264	eP	10	54.30	0.7
KMSA	23.06	249	ePc	10	56.70	-1.0
GTA	27.81	63	eP	11	42.80	0.4
LZH	30.76	70	eP	12	13.50	4.6X
	2.0s		21.00nm			4.7mb
Z	15s		0.30um			4.1MszX
			pP	12	17.50	14km
CHG	30.76	105	eP	12	11.90	3.0X
	1.0s		15.25nm			4.8mb
CHTO	30.76	105	P	12	08.90	0.0
			pP	12	12.00	11km
KMI	31.55	91	eP	12	19.00	3.0X
GYA	34.54	87	P	12	42.40	0.5
XAN	35.03	73	P	12	47.60	1.7
MLR	35.56	307	eP	12	52.00	1.6
BTO	35.72	62	eP	12	52.00	0.2
TIY	37.60	67	eP	13	07.50	-0.1
Z	18s		0.40um			4.3Msz
N	17s		0.60um			
SPC	40.03	311	eP	13	32.30	4.4X
NUR	41.21	329	eP	13	30.00	-7.1X
SUF	41.66	333	eP	13	40.00	-0.8
ZST	41.95	310	eP	13	44.60	1.2
NJ2	43.57	74	Pc	14	02.50	5.6X
SOD	44.06	339	iP	14	06.60	6.3X
BRG	44.28	313	eP	14	07.60	5.2X
FVI	44.78	307	P	14	06.00	-0.5
SFI	45.47	303	P	14	13.00	1.0
CTI	45.56	306	P	14	13.00	0.1
PGD	45.57	303	P	14	14.50	1.5
HFS	46.16	326	eP	14	15.80	-1.4
	0.7s		2.10nm			4.2mb
NB2	47.57	327	P	14	26.80	-1.6
	0.8s		2.90nm			4.4mb
SBF	48.66	303	eP	14	35.80	-1.4
	0.6s		19.85nm			5.3mb
LPG	49.01	306	eP	14	39.70	-0.4
	0.6s		4.50nm			4.7mb
LPL	49.02	306	eP	14	39.70	-0.4
	0.6s		5.40nm			4.8mb
DOU	50.22	312	P	14	50.30	1.4
LBF	50.81	308	eP	14	52.80	-0.8
	0.6s		2.70nm			4.4mb
LOR	50.87	308	eP	14	54.10	0.2
	8.1s		0.40nm			2.4mb X
Z	20s		0.15um			4.0Msz
SMF	50.93	307	eP	14	54.00	-0.5
	0.8s		6.70nm			4.6mb
SSF	51.13	308	eP	14	56.20	0.3
	0.7s		4.40nm			4.5mb
CAF	52.36	305	eP	15	05.40	0.1
	0.8s		6.70nm			4.6mb
BCAO	52.87	251	iPc	15	09.50	0.1
	0.5s		14.00nm			5.1mb
LKO	70.68	270	P	17	08.58	-0.8
	0.9s		13.00nm			5.1mb
KIC	71.50	266	P	17	14.00	-0.3
TIC	71.60	267	P	17	14.60	-0.3
MBC	73.39	2	eP	17	24.50	0.1
	1.0s		7.00nm			4.7mb
INK	80.22	8	ePd	18	03.30	0.6
FBA	80.98	14	P	18	07.30	0.5
WB5	81.48	119	eP	18	10.50	0.3
YKA	87.28	1	eP	18	39.00	0.3
	0.7s		4.80nm			4.9mb
FFC	94.61	354	eP	19	18.00	4.9X
	0.7s		9.00nm			5.3mb

S.D. = 1.0 on 43 of 55 obs.

% OCT 14, 1990 06h 33m 14.97± 2.51s
39.990 N ±17.7km 23.621 E ± 9.5km
DEPTH = 5.0km (geophysicist)
AEGEAN SEA (365)
ML 2.5 (THE).

OUR	0.44	39	ePd	33	23.74	-0.1
			eS	33	30.02	
THE	0.81	322	ePc	33	30.94	-0.3
			eS	33	41.34	
SOH	0.86	346	ePd	33	31.50	-0.5
			eS	33	43.82	
LIT	0.88	278	ePc	33	32.26	0.0
			eS	33	44.98	
SRS	1.13	359	iPd	33	37.06	0.5
			eS	33	51.22	
KNT	1.29	335	ePc	33	39.38	0.0
			eS	33	57.18	
GRG	1.34	316	ePd	33	40.54	0.3
			eS	33	59.78	

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

& OCT 14, 1990 06h 48m 18.14s
63.073 N 149.361 W
DEPTH = 84.6km
CENTRAL ALASKA (1)
<AGS-P>. Felt (III) at Cantwell.

HUR	0.16	233	iP	48	30.28	1.5
			eS	48	39.75	
RND	0.41	34	iP	48	31.71	-0.2
MCK	0.69	16	iP	48	34.24	-0.1
			eS	48	46.23	
CUT	0.79	212	iP	48	35.21	-0.1
GHO	1.32	171	eP	48	41.21	-0.6
			eS	48	59.86	
SML	1.36	159	eP	48	42.03	-0.2
PWA	1.45	190	iP	48	43.59	0.3
SKT	1.49	223	iP	48	43.55	-0.4
			iS	49	02.83	
PLRM	1.49	176	eP	48	43.77	-0.1
PMR	1.49	176	iPc	48	44.00	0.1
			iS	49	04.30	
WRH	1.51	21	iP	48	43.58	-0.6
			eS	49	01.91	
NEA	1.52	5	iP	48	43.38	-0.9
			eS	49	02.11	
SCM	1.56	142	eP	48	44.76	-0.2
			eS	49	06.95	
HDA	1.71	38	iP	48	46.19	-0.7
			eS	49	06.80	
KNK	1.72	165	eP	48	44.74	-2.2
			eS	49	07.60	
CCB	1.72	23	iP	48	46.13	-0.8
DDM	1.73	64	eP	48	47.30	0.2
SUA	1.74	202	eP	48	47.46	0.1
TOA	1.77	122	iP	48	48.34	0.7
PMS	1.84	183	eP	48	48.44	-0.1
SDG	1.84	106	eP	48	48.74	0.2
			eS	49	13.32	
FBA	1.96	20	iP	48	49.50	-0.7
GLM	2.11	23	iP	48	51.38	-0.9
NCG	2.13	219	eP	48	52.13	-0.4
CGLM	2.16	216	eP	48	53.00	0.0
CRP	2.24	217	eP	48	54.09	0.0
KLU	2.26	133	iP	48	53.58	-0.7
			eS	49	21.76	
SPU	2.28	215	eP	48	54.31	-0.3
BGL	2.31	219	eP	48	55.29	0.3

14d 06h

```
CKL      2.35 218 eP     48 55.32  -0.2
VLZ      2.41 142 eP     48 54.99  -1.3
VZW      2.41 146 eP     48 55.20  -1.2
GLI      2.45 153 iP     48 55.65  -1.2
DOT      2.46  74 eP     48 56.78  -0.2
                  eS     49 26.38
NKA      2.50 202 eP     49 00.51   3.0
SLKM     2.61 189 eP     48 59.31   0.3
KNIM     2.84 163 eP     49 01.21  -1.0
RDT      2.89 211 eP     49 03.71   0.7
SEW      2.98 181 eP     49 03.56  -0.5
TTA      3.04 270 iPc    49 04.00  -1.0
GLB      3.07 120 iP     49 04.75  -0.7
RSO      3.08 213 eP     49 06.82   1.2
RED      3.12 213 eP     49 06.05  -0.1
NNL      3.18 198 iP     49 07.88   1.0
MTU      3.20 164 eP     49 06.99  -0.2
IMA      3.54 330 ePd    49 11.10  -0.9
SVW      3.54 239 ePd    49 11.10  -0.9
HOM      3.60 199 eP     49 12.49  -0.2
CNPM     3.67 195 eP     49 12.89  -0.9
TGL      3.87 124 eP     49 14.87  -1.6
BALM     3.88 119 eP     49 15.33  -1.4
OPT      3.90 210 eP     49 16.87  -0.1
FYU      3.93  25 eP     49 15.98  -1.2
PDB      4.03 217 eP     49 18.66   0.0
AUE      4.20 209 eP     49 21.03   0.0
AUH      4.21 210 eP     49 21.71   0.4
AUI      4.23 209 eP     49 21.93   0.4
CDD      4.65 209 eP     49 25.63  -1.7
KDC      5.56 198 eP     49 38.10  -1.9
INK      8.36  44 P      50 17.00  -1.5
        60 obs. ossociated
-------------------------------------------
?  OCT  14, 1990  07h 01m 27.81± 1.95s
    6.414 S ±20.9km   130.734 E ±31.5km
   DEPTH = 133.6 ± 29.3 km
   4.5mb (  2 obs.)
 BANDA SEA                          (280)

AAI      3.71 317 ePc    02 24.50   0.0
MTN      6.40 177 eP     03 02.00   1.0
KNA      9.48 192 iPc    03 42.00  -0.4
                  eS     05 22.00
WB5     13.84 166 eP     04 37.90  -1.7
                  eS     07 07.50
ASPA    17.42 170 eP     05 25.40   1.2
        0.7s     36.60nm          4.8mb
                  iS     08 32.60
MBL     18.06 215 eP     05 31.10  -0.7
        0.4s      6.00nm          4.2mb
                  eS     08 37.00
NANU    21.74 221 eP     06 10.10   0.6
      S.D. = 1.4  on   7 of   7 obs.
-------------------------------------------
?  OCT  14, 1990  08h 12m 21.92± 9.16s
    8.875 N ±54.6km   70.954 W ±58.2km
   DEPTH =   5.0km  (geophysicist)
 VENEZUELA                          (101)

SDV      0.32  88 iPgd   12 28.00  -0.4
                  iSg    12 29.40
TOV      1.46  52 ePn    12 47.70  -1.3
                  iSn    13 02.60
CEOS     2.59  86 iPd    13 04.50  -0.8
                  iS     13 37.00
PLAV     3.55  73 eP     13 27.00   8.0X
GUAC     3.86  70 eP     13 23.00  -0.4
                  eS     14 23.00
OLLA     4.25  74 eP     13 29.00   0.1
                  iS     14 32.00
CAR      4.29  67 eP     13 30.00   0.5
                  eS     14 34.00
LLAV     4.39  68 iPc    13 33.00   2.2
                  iS     14 35.00
      S.D. = 1.4  on   7 of   8 obs.
-------------------------------------------
•  OCT  14, 1990  08h 44m 34.57± 0.94s
    38.050 N ±13.3km   98.083 E ±10.8km
   DEPTH =  10.0km  (geophysicist)
   4.1mb (  2 obs.)
 QINGHAI PROVINCE, CHINA            (325)
      ML 3.8 (BJI).

GTA      1.92  44 iPgd   45 09.40   1.7
                  Sg     45 37.00
LZH      5.01 111 Pn     45 50.00  -1.7
                  Pg     46 03.50
                  Sn     46 46.00
CD2      8.52 145 eP     46 42.60   1.6
BTO      9.59  71 eP     46 55.00  -0.8
WMO      9.74 310 P      46 57.00  -0.8
      Z  14s      0.50um
SSE     20.22 103 eP     49 12.00  -0.4
CN2     21.41  66 eP     49 30.00   5.5X
HFS     55.25 323 eP     54 09.70  -0.1
        0.4s      0.90nm          4.2mb
NB2     56.14 324 P      54 16.80   0.5
        0.7s      1.50nm          4.1mb
      S.D. = 1.4  on   8 of   9 obs.
-------------------------------------------
%  OCT  14, 1990  09h 06m 24.30± 0.55s
    43.111 N ± 6.6km    0.618 W ± 3.6km
   DEPTH =  10.0km  (geophysicist)
 PYRENEES                           (378)
      MD 1.2 (STR).

ESCF     0.05 135 Pg     06 26.45   0.0
                  Sg     06 28.34
ATE      0.07 248 Pg     06 26.71   0.1
                  Sg     06 28.53
OGE      0.12  62 Pg     06 27.43   0.1
MADF     0.15 283 Pg     06 28.04   0.2
                  Sg     06 30.51
ISSF     0.15 237 Pg     06 28.23   0.3
                  Sg     06 31.00
JAU      0.20 112 Pg     06 28.60  -0.1
                  Sg     06 32.24
LHE      0.20 181 Pg     06 28.58  -0.1
ELYF     0.28 282 Pg     06 29.86  -0.3
BOH      0.29 268 Pg     06 30.25  -0.1
                  Sg     06 34.71
      S.D. = 0.2  on   9 of   9 obs.
-------------------------------------------
%  OCT  14, 1990  09h 13m 00.16± 0.86s
    47.216 N ± 7.6km    0.305 W ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                             (538)
      ML 2.3 (LDG).

MFF      0.62 170 Pg     13 13.00   0.3
                  Sg     13 21.60
LPF      0.96 329 Pg     13 19.20   0.9
                  Sg     13 33.00
GRR      1.23 343 Pg     13 23.20   0.2
                  Sg     13 39.40
LDF      1.38   5 Pg     13 24.00  -1.5
                  Sg     13 40.70
FLN      1.55 356 Pg     13 27.60  -0.2
                  Sg     13 47.40
LSF      1.59 127 Pg     13 27.00  -1.4
                  Sg     13 45.20
TCF      1.96 117 Pg     13 27.60  -6.2X
                  Sg     13 54.80
BGF      2.26 106 Pg     13 37.60  -0.5
                  Sg     14 02.60
SSF      2.61  92 Pg     13 43.40   0.4
                  Sg     14 12.20
CAF      2.82 143 Pg     13 50.40   4.2X
                  Sg     14 26.00
LOR      2.84  87 Pg     13 47.00   0.6
                  Sg     14 18.80
LBF      2.93  93 Pg     13 49.00   1.3
                  Sg     14 22.60
      S.D. = 1.0  on  10 of  12 obs.
-------------------------------------------
?  OCT  14, 1990  09h 19m 15.65± 6.71s
    4.287 S ±20.7km   79.931 W ±100.km
   DEPTH =  90.0km  (geophysicist)
 PERU-ECUADOR BORDER REGION         (110)

TUNG     3.21  28 P      20 05.80   0.5
VC1      3.93  23 eP     20 15.00  -0.4
                  eS     20 41.50
QTO      4.29  19 eP     20 21.40   1.1
QUR      4.32  19 ePn    20 20.00  -0.7
                  iPg    20 21.50
                  S      21 12.50
YANA     4.36  18 iP+    20 21.20  -0.1
                  S      21 13.50
CAYA     4.75  24 P      20 26.30  -0.5
COTA     4.86  19 P      20 28.50   0.2
SIV     21.88 123 P      24 02.60   0.0
      S.D. = 0.7  on   8 of   8 obs.
-------------------------------------------
?  OCT  14, 1990  09h 27m 38.52± 4.68s
    34.574 N ±40.3km   22.687 E ±22.8km
   DEPTH =  33.0km  (normal)
   4.3mb (  1 obs.)
 MEDITERRANEAN SEA                  (400)
      MD 3.7 (ATH).

VAM      1.49  56 ePg     28 01.00  -2.3
VLI      2.15   5 ePb     28 15.70   3.0X
NPS      2.50  73 ePn     28 22.00   4.2X
ITM      2.67 347 ePn     28 28.70   8.5X
APE      3.40  42 ePn     28 30.00  -0.5
ATH      3.49  13 ePn     28 33.10   1.3
KAP      3.81  74 ePn     28 38.00   1.7
NEO      4.74   5 ePn     28 50.50   0.9
OHR      6.70 348 iPn     29 16.40  -0.7
KHC     16.03 338 eP      31 29.50   6.5X
HFS     26.24 350 eP      33 11.60  -0.4
        0.6s      5.60nm          4.3mb
      S.D. = 1.7  on   7 of  11 obs.
-------------------------------------------
   OCT  14, 1990  09h 52m 41.01± 0.32s
   30.823 N ± 7.3km   86.385 E ± 5.6km
   DEPTH =  12.0km  (  2 depth phases)
   4.9mb ( 27 obs.)
 TIBET                              (306)

LSA      4.27 104 Pg     54 00.00  12.3X
                  Sg     55 06.00
SHL      7.14 136 iP     54 27.00  -0.9
                  eS     55 47.00
NDI      8.25 257 iPnc   54 41.00  -2.3
        0.5s     54.93nm          6.1mb X
                  iSn    56 11.00
KSH     12.10 318 eP     55 36.00  -0.3
WMO     13.02   4 eP     55 57.00   8.6X
      Z  10s      0.30um
GTA     13.92  48 eP     56 08.30   7.9X
      Z  12s      0.50um
CD2     14.92  85 eP     56 16.40   2.9
HYB     15.13 210 eP     56 24.00   7.7X
                  eS     58 54.00
KMI     15.52 107 eP     56 22.50   1.0
        1.0s    100.00nm          5.0mb
CHG     16.50 134 eP     56 34.20   0.3
        0.9s     18.07nm          4.2mb
POO     16.70 226 eP     56 40.00   3.6X
QUE     16.77 273 eP     56 25.20 -12.2X
BDT     17.74 137 eP     56 52.00   2.6
GYA     18.32  99 P      56 57.00   0.3
GBA     19.02 208 P      57 05.00  -0.2
                  S      00 23.00
XAN     19.29  74 eP     57 06.00  -2.5
NNT     21.94 143 eP     57 38.00   1.8
KOD     22.10 204 eP     57 39.50   1.3
TIY     22.56  65 eP     57 40.80  -1.5
      Z  12s      0.60um          4.2MszX
HHC     22.66  57 eP     57 43.60   0.2
MAIO    23.03 291 iPd    57 46.00  -1.0
        1.0s     16.00nm          4.5mb
                  eS     02 00.00
BJI     25.86  61 eP     58 14.00   0.0
SSE     29.77  80 eP     58 47.80  -1.9
SNY     31.69  59 eP     59 05.30  -1.2
CN2     33.35  56 eP     59 19.00  -2.0
SUF     49.51 328 eP     01 31.00  -2.0
NUR     49.86 325 eP     01 38.00   2.3
SOD     50.37 334 eP     01 41.00   1.5
UPP     53.31 324 iP     02 03.00   1.3
KSP     54.55 313 eP     02 11.80   0.8
HFS     55.28 324 eP     02 13.70  -2.5
        0.7s     28.20nm          5.4mb
      Z  15s      0.05um          3.7MszX
                  LR     24 07.00
PRU     55.78 312 P      02 21.00   1.1
BRG     56.02 313 iP     02 22.60   1.0
        0.8s     20.00nm          5.2mb
NB2     56.46 326 P      02 21.80  -2.9
        0.7s      6.80nm          4.8mb
KHC     56.53 311 eP     02 26.80   1.4
MOX     57.52 313 eP     02 34.00   1.7
WATA    58.19 309 eP     02 36.50  -0.7
        0.6s      2.10nm          4.4mb
SOTA    58.46 309 i(P)   02 38.70  -0.4
        0.6s      5.40nm          4.8mb
NANU    60.00 149 eP     02 49.00  -0.8
```

```
CDF     60.76 311 eP     02 55.30   0.4
MBL     60.86 144 eP     02 54.40  -1.3
BSF     61.22 311 eP     02 58.20   0.2
        0.7s      6.60nm          4.9mb
HAU     61.46 311 eP     03 00.00   0.4
        0.6s      3.60nm          4.7mb
      Z 20s       0.08um          3.8MszX
LPG     61.88 308 eP     03 03.50   0.7
        0.8s      8.05nm          4.9mb
LPL     61.89 308 eP     03 03.40   0.6
        0.7s      7.70nm          5.0mb
DOU     62.02 314 P      03 04.90   1.6
        0.7s      5.50nm          4.8mb
LBF     63.29 311 eP     03 11.80   0.0
        0.6s      3.15nm          4.7mb
SMF     63.48 310 eP     03 13.30   0.3
        0.8s      9.40nm          5.0mb
SSF     63.58 311 eP     03 13.80   0.2
        0.6s      5.40nm          4.9mb
AVF     63.76 311 eP     03 15.00   0.2
        0.7s      4.40nm          4.8mb
MAF     64.45 310 eP     03 20.10   0.7
        0.8s      6.70nm          4.9mb
TCF     64.67 310 eP     03 20.80   0.0
        0.8s      6.70nm          4.9mb
EKA     65.02 321 P      03 24.00   1.1
        1.0s     10.90nm          5.0mb
LDF     65.41 313 eP     03 25.90   0.3
        0.6s     10.80nm          5.2mb
GRR     65.94 313 eP     03 29.30   0.4
        0.6s     10.80nm          5.2mb
LPF     66.18 313 eP     03 31.00   0.6
        0.8s     10.75nm          5.1mb
BCAO    68.74 262 iPc    03 44.40  -2.8
        0.4s      6.00nm          5.1mb
ASPA    70.78 134 eP     03 58.30  -1.1
        0.6s      9.20nm          5.1mb
MBC     71.97   6 eP     04 08.00   2.2
IMA     73.12  22 e(P)   04 14.30   1.4
FBA     75.74  21 P      04 26.50  -1.3
                  pP     04 30.30  12km
INK     76.82  14 eP     04 32.50  -1.3
PMR     77.59  24 eP     04 36.80  -1.4
        0.6s      9.10nm          5.0mb
                  e      04 40.50  12km
YKA     85.49  10 eP     05 21.30   1.7
        0.7s      3.80nm          4.7mb
KIC     87.75 276 P      05 30.00  -1.5
SIV    146.83 289 PKP    12 23.80   0.4
ZOBO   152.59 296 ePKP   12 31.00  -1.9
LPB    152.73 296 PKP    12 34.00   1.1
CNCB   152.80 295 PKP    12 33.00  -0.2
     S.D. = 1.4  on  63 of  69 obs.
-------------------------------------
?  OCT  14, 1990  10h 04m 47.58± 0.97s
   39.095 N ± 8.3km   27.592 E ± 9.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     MD 2.2 (ISK).

IZM     0.74 200 ePg     05 02.30   0.1
                 eSg     05 13.30
DST     0.95  57 iPn     05 05.40  -0.3
EZN     1.22 307 ePn     05 10.00  -0.3
BNT     1.28  11 ePn     05 11.90   0.5
     S.D. = 0.7  on   4 of   4 obs.
-------------------------------------
%  OCT  14, 1990  10h 16m 41.19± 0.92s
   39.265 N ± 8.5km   27.719 E ± 8.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     MD 2.6 (ISK).

DST     0.78  64 iPg     16 55.40  -1.1
                 eSg     17 07.40
IZM     0.94 203 ePn     16 58.90  -0.2
EDC     1.09   6 iPn     17 01.00  -0.6
BNT     1.10   8 ePn     17 01.40  -0.5
EZN     1.21 298 ePn     17 04.00   0.2
IZI     1.72  51 ePn     17 11.40  -0.1
YLV     1.82  44 iPn     17 15.00   2.2
     S.D. = 1.3  on   7 of   7 obs.
-------------------------------------
?  OCT  14, 1990  10h 49m 23.95± 2.77s
   15.797 N ±17.5km  146.102 E ±25.2km
   DEPTH =  55.8 ± 28.4 km
   4.4mb (  2 obs.)

 MARIANA ISLANDS                 (216)

GUMO    2.50 209 eP     50 02.80  -0.2
PJG     2.50 209 eP     50 03.10   0.1
GUA     2.52 207 eP     50 03.10  -0.2
                 eS     50 34.00
SSE    27.37 308 eP     55 06.40   0.4
        1.0s     12.00nm          4.5mb
WB5    37.28 198 eP     56 33.00   0.6
FBA    65.73  25 (P)    00 05.00   0.3
INK    71.88  23 eP     00 41.50  -1.2
YKA    80.36  28 eP     01 29.40  -1.1
        0.8s      3.40nm          4.3mb
TNP    85.54  52 P      01 59.90   2.1
SES    85.94  39 eP     02 00.00   0.6
ZOBO  147.12  96 PKP    09 06.80   5.1X
LPB   147.17  96 ePKP   09 00.00  -1.5
CNCB  147.29  97 PKP    09 05.00   3.1X
     S.D. = 1.2  on  11 of  13 obs.
-------------------------------------
%  OCT  14, 1990  10h 52m 44.91± 0.88s
   39.139 N ± 7.2km   27.624 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                          (366)
     MD 2.5 (ISK).

IZM     0.79 201 ePg     53 00.30   0.0
                 eSg     53 12.30
DST     0.91  59 iPn     53 02.40   0.1
EZN     1.22 305 ePn     53 07.60   0.1
EDC     1.22   9 iPn     53 08.00   0.4
BNT     1.24  11 ePn     53 07.40  -0.5
     S.D. = 0.5  on   5 of   5 obs.
-------------------------------------
?  OCT  14, 1990  10h 57m 05.84± 0.85s
   46.667 N ± 5.6km    6.839 E ±47.7km
   DEPTH =  10.0km  (geophysicist)
 SWITZERLAND                     (544)
     ML 2.3 (LDG).

LPL     1.15 184 Pg     57 27.60   0.0
                 Sg     57 44.00
BSF     1.17 358 Pg     57 26.80  -0.9
LPG     1.17 183 Pg     57 27.80  -0.1
HAU     1.38 346 Pg     57 31.60   0.5
                 Sg     57 51.60
CDF     1.77   9 Pg     57 37.30   0.5
                 Sg     57 59.40
LBF     1.99 280 Pg     57 47.60   7.7X
                 Sg     58 16.20
SMF     2.07 270 Pg     57 48.40   7.4X
                 Sg     58 18.40
LOR     2.13 288 Pg     57 49.40   7.5X
                 Sg     58 19.80
SSF     2.32 281 Pg     57 53.60   8.9X
                 Sg     58 27.50
     S.D. = 0.8  on   5 of   9 obs.
-------------------------------------
?  OCT  14, 1990  11h 02m 40.18± 1.31s
   16.301 N ±13.7km  144.815 E ±66.0km
   DEPTH =  33.0km  (normal)
   5.1mb (  1 obs.)
 MARIANA ISLANDS REGION          (215)

PJG     2.70 179 eP     03 21.80  -0.4
GUMO    2.70 179 eP     03 21.70  -0.5
GUA     2.75 178 eP     03 22.50  -0.4
                 eS     03 53.00
WB5    37.39 196 eP     09 52.20   0.3
FBA    65.81  26 (P)    13 22.20  -1.9
INK    71.90  23 eP     14 01.00  -0.7
TNP    86.20  52 (P)    15 22.00   1.9
SES    86.32  38 eP     15 19.00  -1.2
FFC    89.56  32 eP     15 35.00  -0.6
        0.7s      8.00nm          5.1mb
ZOBO  148.40  95 PKP    22 25.00   2.1
LPB   148.45  95 ePKP   22 24.00   1.3
CNCB  148.58  96 PKP    22 27.00   3.9X
     S.D. = 1.4  on  11 of  12 obs.
-------------------------------------
   OCT  14, 1990  11h 42m 43.94± 0.22s
   46.685 N ± 2.0km    7.288 E ± 2.6km
   DEPTH =  10.0km  (geophysicist)
 SWITZERLAND                     (544)
     ML 3.1 (LDG), 2.7 (VIE). MD 2.9
     (STR).

DIX     0.61 172 ePc    42 54.90  -1.6
EMS     0.66 202 ePc    42 56.40  -0.9
LOMF    0.74 335 Pg     42 59.51   1.1
                 Sg     43 10.86
MMK     0.79 143 ePc    42 57.60  -1.8
ZLA     1.10  43 eP     43 04.60   0.0
ORO     1.16 155 P      43 05.50  -0.3
                 eSg    43 22.00
MOF     1.17 355 Pn     43 06.47   0.6
                 Pg     43 07.27
                 Sg     43 23.25
LLS     1.19  80 ePc    43 05.40  -0.9
BSF     1.20 344 Pg     43 07.84   1.5
                 Sg     43 25.03
LPL     1.23 198 Pn     43 07.20   0.2
                 Pg     43 08.80
                 Sg     43 26.60
LSD     1.23 184 P      43 07.25   0.2
                 S      43 22.43
TMA     1.24 117 ePd    43 06.20  -0.9
LPG     1.24 198 Pn     43 07.60   0.3
FEL     1.29  22 ePn    43 06.92  -1.0
VAI     1.31 128 P      43 09.00   0.8
                 eSg    43 24.50
SLE     1.36  37 ePd    43 07.70  -1.2
HAU     1.47 335 Pn     43 10.80   0.3
                 Pg     43 12.90
                 Sg     43 31.20
SAX     1.52  67 eP     43 12.10   0.7
ECH     1.53 357 Pn     43 11.08  -0.3
                 Sg     43 33.97
RSP     1.53 181 P      43 12.28   0.8
                 S      43 30.01
BNI     1.69 195 P      43 15.10   1.4
                 eSg    43 35.00
CDF     1.73 360 Pn     43 13.71  -0.6
                 Sg     43 40.51
WLS     1.73   1 Pn     43 13.77  -0.5
                 Sg     43 40.26
VITF    1.77 330 Pn     43 15.16   0.4
RRL     1.80 191 P      43 18.12   2.6
                 S      43 39.86
MDI     1.91 117 P      43 17.60   0.8
PZZ     2.18 184 P      43 21.40   0.4
                 S      43 45.24
LBF     2.29 279 Pn     43 22.50   0.1
                 Pg     43 28.20
                 Sg     43 57.50
PCP     2.32 157 P      43 23.56   0.8
SMF     2.37 270 Pn     43 24.00   0.5
                 Pg     43 30.10
                 Sg     43 58.60
LOR     2.42 285 Pn     43 24.80   0.6
                 Pg     43 30.00
                 Sg     44 00.00
ROB     2.43 170 P      43 24.48   0.2
STV     2.44 179 P      43 23.86  -0.7
ENR     2.46 178 P      43 24.16  -0.7
FIN     2.56 165 P      43 26.53   0.3
SSF     2.62 280 Pn     43 26.40  -0.6
                 Pg     43 34.40
                 Sg     44 08.00
AVF     2.71 274 Pn     43 28.20  -0.1
                 Sg     44 09.60
SQTA    2.74  77 e(Pn)  43 29.80   0.9
                 iPg    43 35.00
                 i      44 02.10
                 iSg    44 10.20
IMI     2.81 171 P      43 29.71  -0.1
SBF     2.82 178 Pn     43 30.00   0.0
WATA    3.01  76 iPgd   43 40.10   7.5X
                 iSg    44 18.60
BGF     3.06 269 Pn     43 32.80  -0.5
                 Sg     44 21.20
FRF     3.16 188 Pn     43 35.00   0.4
MAF     3.30 264 Pn     43 36.30  -0.3
                 Sg     44 30.00
TCF     3.53 265 Pn     43 39.50  -0.4
                 Sn     44 21.00
DOU     3.86 333 P      43 44.40  -0.1
        0.3s      5.60nm
                 S      44 29.00
LSF     4.00 266 Pn     43 46.10  -0.5
                 Sn     44 32.00
MEM     4.02 348 iP     43 46.80   0.0
SNF     4.32 334 P      43 52.30   1.2
MFF     5.12 272 Pn     44 01.60  -0.9
```

14d 11h

GRR 5.77 290 Pn 44 10.40 -1.3
LPF 5.82 286 Pn 44 11.40 -0.9
S.D. = 0.9 on 51 of 52 obs.

& OCT 14, 1990 11h 53m 35.04s
62.514 N 151.268 W
DEPTH = 93.2km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.48	103	iP	53 50.04	-0.1
SKT	0.55	193	eP	53 50.77	0.0
			eS	54 02.54	
HUR	0.88	57	eP	53 53.60	-0.4
			eS	54 07.47	
PWA	1.09	142	eP	53 56.17	0.0
NCG	1.19	201	eP	53 57.21	-0.4
GHO	1.33	123	eP	53 59.17	-0.1
			eS	54 18.03	
BGL	1.36	203	eP	53 59.62	-0.1
PLRM	1.37	132	eP	53 59.12	-0.5
RND	1.42	50	eP	53 59.99	-0.4
			eS	54 18.07	
PMS	1.51	147	eP	54 01.09	-0.4
SML	1.55	116	iP	54 01.70	-0.3
TOA	2.42	98	eP	54 12.75	-0.8
GLI	2.58	128	eP	54 14.18	-1.5
SDG	2.65	87	eP	54 16.41	-0.3
KLU	2.72	110	eP	54 16.32	-1.4

15 obs. associated

% OCT 14, 1990 12h 25m 55.99± 0.58s
40.689 N ± 4.7km 23.380 E ± 5.2km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.9 (THE).

SOH	0.13	352	iPd	25 59.58	0.3
			eS	26 02.74	
THE	0.32	260	ePc	26 02.34	-0.3
			eS	26 06.54	
SRS	0.46	21	ePc	26 05.06	-0.2
OUR	0.58	127	ePc	26 07.82	0.1
			eS	26 15.82	
KNT	0.60	322	ePd	26 07.58	-0.5
GRG	0.79	290	ePc	26 11.42	0.1
			iS	26 23.06	
LIT	0.90	229	iPc	26 13.10	-0.1
			eS	26 25.74	
FNA	1.53	274	ePc	26 24.18	0.8
AGG	1.85	206	iPd	26 27.82	-0.2

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

OCT 14, 1990 13h 17m 37.54± 0.53s
45.959 N ± 4.4km 26.983 E ± 4.7km
DEPTH = 39.9 ± 9.2 km
4.2mb (7 obs.)
ROMANIA (358)
MD 3.7 (ATH). Felt (V) in the epicentrol areo ond (IV) at Focsoni.

VRI	0.20	244	iPc	17 43.00	-1.9
CVO	0.58	257	iPc	17 50.00	0.6
BAC	0.61	355	iP	17 56.00	6.2X
MLR	0.87	238	iPd	17 50.00	-3.5X
ISR	0.88	201	iPc	17 57.00	3.4X
PTT	1.06	337	iPc	17 58.00	1.9
CFR	1.13	133	iPc	17 58.00	0.9
IAS	1.30	18	iPc	18 03.00	3.5X
CMP	1.53	244	iPd	18 05.00	2.2
MTUR	1.53	242	iPd	18 04.00	1.1
TLB	1.56	151	iPc	18 04.00	0.8
BUC1	1.75	203	eP	18 10.00	4.1X
TNR	1.92	262	ePc	18 08.00	-0.4
COZ	1.96	252	iPc	18 10.00	0.9
DRA	2.31	237	ePd	18 18.00	4.0X
BMR	2.94	307	ePc	18 24.00	1.1
SRE	2.96	245	eP	18 26.50	3.3X
BZS	3.77	267	ePc	18 33.00	-1.7
DMK	4.17	172	iPn	18 40.50	0.1
BEO	4.74	258	ePn	18 57.50	9.1X
RDO	4.92	193	iPbd	18 51.20	0.2
ALN	5.11	188	iPc	18 53.76	0.2
ISK	5.12	162	ePn	18 53.40	-0.3
MFT	5.17	177	ePn	18 53.00	-1.6
PSZ	5.24	295	iPn	18 53.70	-1.8
SRS	5.43	208	ePd	18 58.48	0.3
HRT	5.49	158	ePn	18 59.40	0.3
KNT	5.64	213	ePd	19 01.48	0.4
BNT	5.64	173	iPn	19 01.60	0.4
EDC	5.65	173	iPn	19 02.00	0.8
SKO	5.65	227	ePn	19 02.00	0.8
YLV	5.67	161	iPn	19 00.90	-0.6
SOH	5.78	209	ePc	19 03.24	0.2
IZI	5.91	161	ePn	19 04.80	-0.2
GRG	6.01	215	ePd	19 05.80	-0.5
OUR	6.03	202	ePc	19 05.92	-0.7
THE	6.08	210	ePd	19 07.36	0.1
EZN	6.15	185	iPn	19 08.30	0.0
PLG	6.15	206	iPbc	19 08.40	0.1
GPA	6.17	156	iPn	19 08.70	0.1
SRO	6.23	290	iP	19 07.60	-1.7
KRA	6.25	313	eP	19 07.40	-2.3
			e	19 13.40	
			e	19 19.40	
DST	6.46	169	ePn	19 12.30	-0.4
FNA	6.59	220	ePc	19 14.24	-0.3
LIT	6.72	211	ePc	19 16.32	0.1
KAS	6.72	131	eP	19 18.00	1.6
KZN	6.81	216	iPnd	19 18.00	0.4
NEO	7.20	204	ePn	19 22.20	-0.8
ALT	7.28	160	iPn	19 23.70	-0.4
BBTK	7.44	143	eP	19 37.00	10.6X
KVT	8.19	123	eP	19 35.00	-1.9
KSP	8.63	308	iP	19 43.30	0.5
			i	19 59.00	
KHC	9.60	294	eP	19 58.00	1.7
			e	21 54.50	
LPL	14.15	275	eP	21 05.10	7.6X
	0.6s		2.70nm	4.1mb	
DOU	15.52	294	P	21 20.90	5.9X
	0.9s		27.50nm	4.5mb	
LOR	15.94	283	eP	21 23.90	3.5X
	0.8s		4.05nm	3.6mb	
	Z 20s		0.08um	5.7MszX	
SSF	16.19	282	eP	21 26.90	3.3X
	0.8s		5.35nm	3.7mb	
NRA0	17.36	334	Pn	21 31.30	-6.9X
			Sn	24 38.90	
			Lg	26 52.20	
NB2	17.70	334	P	21 37.20	-5.2X
	0.6s		10.30nm	4.1mb	
BCAO	42.01	193	iPd	25 26.00	-0.6
	0.4s		7.00nm	4.7mb	
YKA	67.62	342	eP	28 32.20	0.4
	0.6s		1.90nm	4.3mb	

S.D. = 1.1 on 46 of 61 obs.

? OCT 14, 1990 14h 32m 58.46± 5.96s
28.537 S ±71.0km 67.324 W ±50.2km
DEPTH = 33.0km (normal)
LA RIOJA PROVINCE, ARGENTINA (138)

CYA	1.35	86	iPd	33 21.20	0.0
			S	33 42.00	
RTLL	2.96	199	iPc	33 44.30	0.1
RTCB	3.21	203	eP	33 47.80	0.0
			eS	34 22.70	
RTCV	3.47	197	e(P)	33 51.50	-0.1
RTBS	3.62	210	e(P)	33 53.50	0.0
PEL	5.42	211	eP	34 28.00	8.8X

S.D. = 0.1 on 5 of 6 obs.

& OCT 14, 1990 15h 13m 40.94s
63.179 N 150.637 W
DEPTH = 132.5km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.50	113	eP	14 00.14	-0.4
			eS	14 14.34	
CUT	0.80	168	iP	14 02.20	-0.3
			eS	14 18.71	
RND	0.84	73	eP	14 02.58	-0.4
			eS	14 19.57	
MCK	0.95	53	eP	14 03.49	-0.4
			eS	14 19.75	
SKT	1.27	199	iP	14 06.61	-0.5
			eS	14 26.12	
NEA	1.56	25	iP	14 08.98	-1.3
PWA	1.57	167	eP	14 10.05	-0.3
			eS	14 33.28	
GHO	1.62	150	iP	14 10.56	-0.5
			eS	14 34.12	
WRH	1.72	40	eP	14 11.11	-1.0
SUA	1.72	182	eP	14 12.23	0.0
PLRM	1.74	156	iP	14 11.27	-1.0
SML	1.74	141	iP	14 11.50	-0.9
NCG	1.92	202	eP	14 13.45	-1.1
CCB	1.93	39	eP	14 13.55	-1.1
CGLM	1.98	199	eP	14 14.79	-0.6
PMS	2.01	165	eP	14 14.77	-0.8
KNK	2.05	149	eP	14 14.93	-1.1
SCM	2.04	130	eP	14 15.23	-0.9
CRP	2.05	201	eP	14 15.32	-0.9
HDA	2.05	51	eP	14 14.91	-1.1
BGL	2.09	204	eP	14 16.20	-0.5
SPU	2.11	199	eP	14 15.74	-1.2
FBA	2.13	35	eP	14 16.10	-1.0
CKL	2.14	203	eP	14 16.80	-0.6
DDM	2.23	72	eP	14 18.03	-0.3
GLM	2.31	37	eP	14 18.41	-1.0
TOA	2.33	116	eP	14 19.36	-0.3
SDG	2.43	103	eP	14 20.17	-0.7
SLKM	2.69	176	eP	14 23.41	-0.8
RDT	2.75	199	eP	14 24.14	-0.9
KLU	2.78	125	eP	14 23.87	-1.5
GLI	2.85	143	eP	14 24.70	-1.6
VZW	2.86	136	eP	14 24.86	-1.7
VLZ	2.88	134	eP	14 24.65	-2.0
DOT	2.99	78	eP	14 27.00	-1.2
SVW	3.13	231	eP	14 28.00	-2.0
SEW	3.14	169	eP	14 28.31	-1.7
KNIM	3.16	153	eP	14 28.24	-2.1
MTU	3.51	155	eP	14 33.00	-1.9
GLB	3.63	116	iP	14 35.62	-1.0
CNPM	3.68	185	eP	14 35.86	-1.4
PDB	3.81	208	eP	14 36.58	-2.3
TGL	4.41	120	eP	14 45.56	-1.6
DWY	5.08	75	P	14 54.40	-1.6

44 obs. associated

% OCT 14, 1990 16h 02m 51.92± 0.74s
37.122 N ± 6.8km 3.547 W ± 6.2km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.2 (MDD).

AFC	0.13	1	iP	02 55.20	0.0
			eS	02 58.80	
ECOG	0.16	354	iP	02 55.40	-0.2
			eS	02 59.00	
EBAN	1.06	350	eP	03 12.00	0.1
			eS	03 27.40	
ENIJ	1.08	98	iP	03 12.20	0.0
			eS	03 26.60	
EPRU	1.36	264	eP	03 16.50	-0.4
			eS	03 36.80	
EHOR	1.52	298	eP	03 19.50	0.3
			eS	03 37.70	
EJIF	1.68	247	eP	03 21.60	0.1

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

? OCT 14, 1990 16h 13m 24.02± 1.41s
28.762 N ±18.2km 81.951 E ±10.2km
DEPTH = 143.2 ± 19.8 km
4.3mb (2 obs.)
NEPAL-INDIA BORDER REGION (309)

NDI	4.16	270	ePn	14 27.00	0.1
			iSn	15 05.50	
SHL	9.40	107	eP	15 37.50	0.0
			eS	17 18.00	
POO	12.59	218	iPc	16 19.20	-0.1
QUE	13.15	280	eP	16 16.70	-9.9X
GBA	15.66	196	P	17 03.00	4.9X
			S	19 53.00	
KOD	18.91	194	eP	17 46.70	10.2X
HFS	54.75	325	eP	22 40.20	-0.3
	0.5s		2.50nm	4.3mb	
NB2	56.00	326	P	22 49.00	-0.6
	0.8s		2.60nm	4.2mb	
EKA	64.18	321	P	23 46.00	0.9
WB5	69.99	127	eP	24 31.10	9.0X

S.D. = 0.8 on 6 of 10 obs.

OCT 14, 1990 16h 19m 56.66± 0.42s
37.996 N ± 4.4km 20.128 E ± 2.6km
DEPTH = 10.0km (geophysicist)
4.3mb (13 obs.)

IONIAN SEA (399)
ML 4.4 (ATH), 4.4 (TTG).

VLS	0.41	63	eP	20 04.50	-0.5
IGT	1.54	6	ePd	20 25.30	1.1
			eS	20 48.70	
EVR	1.61	55	eP	20 27.00	1.7
ITM	1.64	119	eP	20 24.50	-1.2
KEK	1.73	352	eP	20 28.00	1.0
SRN	1.88	357	iPn	20 29.90	0.8
AGG	2.01	59	ePd	20 33.02	2.0
			eS	20 59.18	
LSK	2.18	10	ePn	20 30.90	-2.7
TPE	2.30	358	ePn	20 35.60	0.4
VLI	2.58	119	eP	20 40.00	0.9
KZN	2.64	28	eP	20 43.00	2.9X
KBN	2.68	11	ePn	20 52.70	12.2X
BERA	2.71	357	iPnd	20 41.70	0.7
NEO	2.75	61	eP	20 41.00	-0.7
LIT	2.79	40	iPc	20 43.30	1.1
			eS	21 18.42	
ATH	2.84	89	eP	20 42.50	-0.3
LCI	2.88	325	P	20 43.70	0.3
FNA	2.95	19	ePc	20 45.30	0.9
OHR	3.15	9	iPnc	20 49.00	1.7
			iSn	21 25.00	
ROI	3.20	301	P	20 49.90	2.0
TIR	3.35	357	iPnd	20 51.80	1.7
ACI	3.36	295	ePn	20 53.60	3.4X
CZI	3.36	293	P	20 52.20	2.0
TDS	3.39	300	P	20 51.80	1.1
THE	3.43	39	iPd	20 52.38	1.2
			eS	21 33.78	
GRG	3.44	30	ePd	20 52.90	1.5
			eS	21 36.02	
CSI	3.48	302	P	20 54.00	2.0
PLG	3.50	46	eP	20 52.00	-0.3
ORI	3.53	307	P	20 54.00	1.3
ATN	3.68	274	P	20 55.40	0.5
SOH	3.77	41	ePc	20 57.06	0.9
			eS	21 41.82	
OUR	3.80	51	iPc	20 57.70	1.2
			iS	21 42.86	
KNT	3.82	33	iPc	20 57.66	0.9
			eS	21 43.54	
ULC	4.02	351	ePn	20 58.80	-0.8
			eSn	21 44.50	
SDA	4.04	353	ePn	21 00.00	0.1
SKO	4.10	14	iPn	21 01.00	0.4
			iPg	21 13.00	
			iSn	21 43.00	
			iSb	21 52.50	
			iSg	21 58.00	
			i	22 09.00	
SRS	4.11	40	ePc	21 02.22	1.4
			eS	21 50.94	
MGR	4.15	302	P	21 02.60	1.1
VAM	4.17	127	eP	21 00.00	-1.7
MEU	4.23	259	Pd	21 01.90	-0.7
MNO	4.29	271	P	21 04.00	0.3
APE	4.39	101	ePb	21 10.00	5.0X
BDV	4.40	347	ePn	21 03.50	-1.5
			eSn	21 53.00	
TTG	4.48	352	ePn	21 05.00	-1.0
			eSn	21 55.60	
KKB	4.48	30	iPd	21 06.00	-0.2
SGO	4.53	306	P	21 08.20	1.4
MMB	4.53	37	eP	21 07.00	0.1
PVY	4.60	359	ePn	21 07.80	-0.1
			eSn	21 59.00	
HCY	4.62	345	ePn	21 06.30	-1.8
			eSn	21 57.00	
GIB	4.82	272	P	21 11.50	0.4
IVA	4.87	358	ePn	21 11.80	0.0
			eSn	22 05.00	
NKY	4.89	350	ePn	21 11.20	-0.8
			eSn	22 05.00	
BSS	4.98	306	P	21 15.20	2.0
BRY	5.05	347	ePn	21 13.50	-0.8
			eSn	22 08.20	
RZN	5.10	42	iPc	21 15.00	-0.2
VTS	5.16	26	iP	21 16.00	0.1
EZN	5.17	67	ePn	21 15.00	-0.9
RDO	5.23	51	ePn	21 16.20	-0.6
PLE	5.36	354	iPn	21 19.00	0.3
			iSn	22 19.00	
ALN	5.42	56	iPd	21 18.66	-0.8
KDZ	5.47	46	iP	21 19.00	-1.1
IZM	5.63	84	ePn	21 23.00	0.4
DUI	5.70	312	P	21 24.60	1.2
HVAR	5.88	333	iPnc	21 23.90	-2.0
			iSn	22 29.50	
SDI	6.11	309	P	21 29.80	0.6
KAP	6.16	111	ePn	21 29.50	-0.4
AZI	6.50	310	P	21 35.50	0.8
BEO	6.82	2	eP	21 43.50	4.3X
			i	22 09.00	
DST	6.83	74	ePn	21 39.20	-0.2
RMP	6.86	306	P	21 41.00	1.2
BLY	7.10	343	eP	22 04.40	21.3X
			eS	22 57.30	
MNS	7.19	310	P	21 44.40	0.0
ASS	7.62	314	P	21 51.60	1.2
BZS	7.70	8	eP	21 50.00	-1.4
ARV	7.74	317	P	21 51.40	-0.7
KSL	7.79	101	ePn	21 52.00	-0.7
ALT	7.90	79	ePn	21 59.00	4.6X
CMP	8.14	25	ePc	22 03.00	5.3X
TNR	8.25	21	ePc	22 13.00	13.8X
VBY	8.34	336	ePn	22 01.90	1.5
			eSn	23 29.80	
CRE	8.37	315	P	22 01.50	0.5
ZAG	8.40	340	ePn	22 01.00	-0.3
			iSn	23 32.00	
PTJ	8.49	340	ePn	21 59.10	-3.4X
			iSn	23 31.90	
RIY	8.50	332	ePn	22 00.70	-2.0
			iSn	23 32.10	
ISR	8.60	32	eP	22 10.00	5.9X
SFI	8.61	316	P	22 04.80	0.6
PGD	8.66	315	P	22 06.00	1.0
MLR	8.66	28	eP	22 07.00	2.1
CEY	8.83	333	ePn	22 05.40	-1.8
			eSn	23 42.00	
TRI	9.05	330	ePnc	22 07.40	-2.8
			iSn	23 45.60	
			i	24 48.30	
			i	24 52.50	
LJU	9.05	334	ePn	22 08.00	-2.3
			eSn	23 45.00	
VOY	9.27	332	ePn	22 11.50	-1.9
			eSn	23 49.50	
VRI	9.27	30	eP	22 13.00	-0.3
BDI	9.41	313	P	22 13.50	-1.8
MME	9.43	314	P	22 17.80	2.1
VVI	9.82	327	P	22 19.20	-1.7
SRO	9.90	353	eP	22 25.50	3.6X
PSZ	9.92	359	eP	22 27.20	4.9X
FVI	10.16	330	P	22 21.30	-4.2X
CTI	10.22	325	P	22 23.60	-2.8
ZST	10.43	349	e(P)	22 32.30	3.1X
SAL	10.44	320	P	22 28.40	-1.0
BOB	10.49	314	P	22 31.60	1.4
MDI	10.98	318	P	22 34.80	-1.9
BHG	11.07	334	eP	22 37.40	-0.6
SPC	11.19	0	e(P)	22 40.90	1.1
			e	22 48.70	
WATA	11.25	329	iPnc	22 40.20	-0.4
			iSn	23 46.30	
			i	24 24.20	
SOTA	11.31	327	iPnc	22 41.70	0.3
			iSn	23 49.70	
			i	24 30.90	
VAI	11.54	317	P	22 42.50	-1.9
KHC	12.10	339	eP	22 50.20	-1.7
			e	23 10.20	
WET	12.31	337	iPc	22 55.40	0.6
LPG	12.48	311	eP	23 04.40	7.0X
	0.6s		3.60nm		4.8mb
LPL	12.50	311	eP	23 04.60	7.0X
	0.6s		2.70nm		4.7mb
PRU	12.64	343	eP	22 58.00	-1.2
			e	23 03.00	
KSP	13.13	349	eP	23 06.50	0.8
GRF	13.33	334	eP	23 13.00	4.7X
Z	19s		0.20um		
BRG	13.60	343	e(P)	23 17.00	5.1X
			i	26 33.00	
BSF	13.84	319	eP	23 14.20	-1.0
	0.6s		3.60nm		4.4mb
CDF	13.99	322	eP	23 16.30	-0.8
	0.6s		3.60nm		4.3mb
MOX	14.02	337	eP	23 16.00	-1.5
			e	26 14.00	
DSI	14.07	113	eP	23 11.50	-6.7X
			eS	25 40.00	
HAU	14.18	319	eP	23 18.20	-1.4
	0.6s		3.60nm		4.3mb
Z	20s		0.38um		5.2MszX
CLL	14.23	342	e(P)	23 30.00	9.8X
PRNI	14.47	117	eP	23 16.00	-7.5X
LBF	14.90	312	eP	23 33.30	4.3X
	0.6s		2.70nm		3.9mb
LOR	15.12	313	eP	23 35.40	3.6X
	0.6s		2.70nm		3.8mb
SSF	15.21	312	eP	23 38.20	5.1X
	0.6s		3.15nm		3.9mb
MEM	16.12	326	eP	23 51.20	6.5X
ENN	16.27	326	eP	23 56.00	9.3X
	1.0s		19.00nm		4.2mb
DOU	16.42	322	eP	23 59.60	11.0X
UPP	21.94	357	iP	24 53.30	1.5
HFS	22.53	352	eP	24 57.00	-0.7
	0.5s		9.00nm		4.5mb
Z	16s		0.13um		3.5MszX
			LR	32 57.00	
NUR	22.72	6	eP	25 02.00	2.5
	0.7s		12.00nm		4.5mb
			i	25 13.80	
NB2	23.74	349	P	25 09.00	-0.5
	0.6s		4.00nm		4.2mb
SUF	25.03	7	eP	25 21.00	-0.9
SOD	29.65	5	eP	26 11.00	6.9X
BCAO	33.44	183	iPd	26 37.00	-0.8
	0.3s		3.00nm		4.7mb

S.D. = 1.3 on 108 of 137 obs.

OCT 14, 1990 17h 56m 47.23± 0.69s
37.007 N ± 6.0km 29.559 E ± 8.6km
DEPTH = 10.0km (geophysicist)

TURKEY (366)
MD 3.8 (ATH), 3.6 (ISK).

KSL	0.89	179	ePb	57 04.00	-0.2
BCK	0.94	61	ePn	57 04.90	-0.3
KHL	1.31	359	iPn	57 11.20	-0.4
ARG	1.40	236	ePb	57 12.00	-0.7
ALT	2.09	12	ePn	57 23.20	0.4
IZM	2.29	308	ePn	57 25.40	-0.3
KAP	2.41	234	ePn	57 28.50	1.1
DST	2.70	345	iPn	57 30.20	-1.2
IZI	3.33	359	ePn	57 42.00	1.6

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

OCT 14, 1990 18h 28m 36.93± 0.50s
17.861 S ± 9.2km 178.709 W ± 6.9km
DEPTH = 588.4 ± 5.6 km
5.2mb (16 obs.)

FIJI ISLANDS REGION (181)

MBU	2.61	289	iPc	29 53.20	-0.3
VUN	2.70	266	eP	29 53.00	-0.9
SGE	3.22	274	iPc	29 57.00	0.0
BKM	12.43	269	iP	31 22.20	2.2
DZM	14.57	251	iPc	31 41.70	0.6
BRS	27.92	245	iPc	33 43.00	-0.1
COO	29.55	239	iPd	33 58.00	0.9
RMO	31.26	248	iPd	34 10.80	-0.7
CTA	33.17	260	iPd	34 27.80	0.2
	0.8s		47.01nm		5.2mb
CNB	33.23	232	iPc	34 29.20	1.1
	0.7s		147.00nm		5.7mb
CAN	33.51	232	iPd	34 31.80	1.4
BWA	33.62	234	eP	34 30.70	-0.6
PMG	34.17	280	iPd	34 35.00	-1.0
	0.9s		110.59nm		5.5mb
CMS	34.80	240	iPd	34 41.80	0.7
STK	38.41	241	iPd	35 11.70	1.1
	0.5s		57.00nm		5.4mb
BFD	39.04	233	e(P)	35 21.00	5.3X
WB5	44.34	260	iPd	35 57.00	-0.8
ASPA	44.53	254	iPd	35 59.20	0.0
	0.7s		384.10nm		6.0mb
GUA	47.56	309	eP	36 23.10	0.8
	0.7s		87.67nm		5.4mb
GUMO	47.62	309	eP	36 23.10	0.3
	0.7s		50.83nm		5.2mb
MTN	48.52	268	eP	36 29.00	-0.6
	0.4s		81.00nm		5.6mb
WARB	51.03	251	iPd	36 47.50	-0.5
	0.7s		80.00nm		5.3mb

14d 18h

MBL	57.71	256	iPd	37	34.00	-0.8
	0.4s	30.00nm			4.9mb	
KLB	58.59	244	iPd	37	39.50	-1.1
	0.5s	30.00nm			4.8mb	
NWAO	58.98	242	eP	37	42.00	-1.1
RKG	59.13	241	iPd	37	43.60	-0.5
	0.6s	29.00nm			4.7mb	
BAL	59.55	245	eP	37	46.00	-0.9
MUN	59.89	243	eP	37	48.70	-0.4
MRWA	60.26	246	iPd	37	50.70	-1.0
	0.6s	13.00nm			4.4mb	
NANU	61.46	254	iPd	37	59.60	0.1
	0.5s	67.00nm			5.3mb	
MAT	67.70	324	eP	38	37.00	-1.2
SPA	72.25	180	iPd	39	04.00	-0.8
	0.9s	11.36nm			4.4mb	
SYP	76.34	47	eP	39	29.00	1.0
PRS	76.39	44	eP	39	28.80	0.7
SAO	76.59	44	eP	39	29.30	0.1
PRI	76.76	45	eP	39	31.20	1.0
LLA	76.84	44	eP	39	31.00	0.5
PAS	77.40	48	eP	39	34.00	0.4
MWC	77.52	48	eP	39	34.00	-0.4
FRI	77.87	45	eP	39	36.00	0.0
RVR	77.88	48	eP	39	36.00	-0.1
PLM	77.92	49	eP	39	37.00	0.4
SBB	77.93	47	eP	39	36.00	-0.4
ISA	77.99	46	eP	39	37.00	0.2
CMB	78.00	43	eP	39	36.80	0.0
WDC	78.09	40	eP	39	37.50	0.4
ORV	78.15	42	eP	39	37.30	-0.1
CLC	78.68	47	eP	39	40.00	-0.4
TPC	78.88	49	eP	39	41.00	-0.5
GSC	78.96	47	eP	39	42.00	0.1
GLA	79.24	50	eP	39	44.00	0.7
TNP	80.13	45	iP	39	48.00	0.0
SVW	80.85	11	eP	39	49.00	-2.1
TTA	82.48	10	eP	39	59.40	0.2
PMR	82.62	14	eP	39	59.10	-0.8
	0.6s	10.10nm			4.5mb	
SNG	83.38	280	eP	40	06.20	1.6
TOA	83.76	15	eP	40	05.70	0.0
FBA	85.82	13	P	40	14.80	-0.7
LRM	87.12	40	eP	40	22.80	0.4
CHG	88.72	290	eP	40	32.00	2.0
SES	90.15	36	eP	40	36.00	0.0
INK	91.92	15	eP	40	43.00	-0.7
CLL	145.35	347	iPKP	47	10.20	0.6
S.D. = 0.8 on 62 of 63 obs.						

? OCT 14, 1990 19h 06m 49.74± 2.06s
23.402 S ±20.8km 67.854 W ±18.1km
DEPTH = 150.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

ANT	2.37	262	iPc	07	29.70	0.0
			iS	07	55.20	
CNCB	6.56	359	P	08	25.60	0.1
LPB	6.84	358	P	08	30.00	0.8
ZOBO	7.10	358	P	08	32.00	-0.9
SIV	9.75	42	Pc	09	07.60	0.0
			i	10	35.20	
VAO	19.20	93	eP	11	11.00	6.4X
S.D. = 0.8 on 5 of 6 obs.						

& OCT 14, 1990 19h 09m 16.16s
60.120 N 150.416 W
DEPTH = 31.9km
KENAI PENINSULA, ALASKA (14)
<AGS-P>. ML 3.5 (PMR).

SLKM	0.40	14	iP	09	25.07	-0.2
BRLK	0.43	214	iP	09	24.94	-0.7
NNL	0.45	260	iP	09	26.30	0.4
SEW	0.48	92	iP	09	25.25	-1.2
			iS	09	33.10	
CNPM	0.73	215	iP	09	28.84	-1.2
			eS	09	38.78	
NKA	0.75	327	iP	09	31.17	0.9
HOM	0.77	234	iP	09	30.10	-0.6
XLV	0.94	225	iP	09	31.79	-1.3
			eS	09	44.11	
RDT	1.09	296	iP	09	34.49	-0.8
			eS	09	49.16	
PMS	1.20	20	iP	09	36.41	-0.5
RED	1.21	285	iP	09	36.22	-0.8
RSO	1.21	287	iP	09	36.37	-0.8
SPU	1.34	324	iP	09	38.15	-0.6
			eS	09	55.90	
KNIM	1.36	79	iP	09	36.69	-2.4
SUA	1.36	353	eP	09	38.53	-0.6
MTU	1.39	94	eP	09	37.36	-2.2
CGLM	1.43	327	eP	09	39.62	-0.5
CRP	1.43	324	iP	09	39.91	-0.4
CKL	1.44	320	iP	09	39.65	-0.7
OPT	1.49	253	eP	09	40.30	-0.8
			eS	10	00.39	
BGL	1.50	321	iP	09	40.68	-0.6
NCG	1.55	327	iP	09	41.40	-0.5
			eS	10	01.66	
PWA	1.56	9	eP	09	41.47	-0.5
PLRM	1.61	23	iP	09	41.54	-1.1
PMR	1.61	23	iPd	09	41.50	-1.1
AUE	1.68	244	eP	09	43.03	-0.7
AUH	1.71	245	eP	09	43.59	-0.6
AUI	1.72	244	eP	09	43.66	-0.6
GHO	1.81	23	iP	09	44.64	-1.1
GLI	1.81	64	iP	09	42.98	-2.7
PDB	1.93	262	eP	09	46.42	-0.9
SKT	1.94	344	iP	09	46.84	-0.8
SML	1.98	30	iP	09	46.81	-1.3
CDD	2.03	235	eP	09	48.59	-0.3
VZW	2.13	62	iP	09	47.70	-2.5
MCNL	2.20	246	eP	09	50.90	-0.3
VLZ	2.25	61	eP	09	49.59	-2.3
SCM	2.29	40	eP	09	51.19	-1.3
CUT	2.29	2	eP	09	51.55	-0.9
KLU	2.60	56	iP	09	54.94	-2.0
KDC	2.61	205	e(P)	09	55.10	-1.9
SVW	2.75	293	eP	09	57.24	-1.8
TOA	2.86	44	iPd	10	00.00	-0.7
SDG	3.37	42	eP	10	06.12	-1.7
RND	3.38	12	eP	10	07.40	-0.7
GLB	3.50	65	iP	10	06.52	-3.2
TGL	3.81	77	eP	10	10.85	-3.3
TTA	3.89	319	eP	10	13.30	-1.9
BALM	4.09	74	eP	10	14.51	-3.6
DDM	4.26	28	eP	10	20.19	-0.3
YAH	4.33	83	eP	10	18.54	-3.1
WRH	4.50	13	eP	10	22.31	-1.6
HDA	4.60	19	eP	10	24.09	-1.1
CCB	4.70	14	eP	10	24.44	-2.2
FBA	4.95	13	eP	10	28.30	-1.9
GLM	5.08	15	eP	10	30.16	-2.0
IMA	6.15	347	eP	10	45.60	-1.7
57 obs. associated						

% OCT 14, 1990 19h 36m 20.71± 2.33s
44.672 N ±16.4km 8.445 E ±10.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

PCP	0.15	151	P	36	24.17	0.0
			S	36	26.94	
FIN	0.49	200	P	36	30.53	-0.2
			S	36	36.89	
ROB	0.56	228	P	36	31.55	-0.5
			S	36	38.63	
ENR	0.86	239	P	36	37.50	0.2
			S	36	48.98	
IMI	0.86	208	P	36	37.81	0.5
STV	0.91	242	P	36	38.32	0.1
			S	36	50.11	
PZZ	0.97	261	P	36	39.24	-0.1
			S	36	51.34	
S.D. = 0.4 on 7 of 7 obs.						

& OCT 14, 1990 19h 43m 41.00s
36.130 N 115.970 W
DEPTH = 6.0km (geophysicist)
CALIFORNIA-NEVADA BORDER REGION (40)
<PAS-P>. ML 3.0 (PAS).

GSC	1.07	220	iPd	44	00.50	-1.1
CLC	1.36	257	iPc	44	05.20	-1.2
TNP	2.19	333	eP	44	20.00	1.4
PEC	2.44	204	eP	44	21.00	-1.0
PLM	2.87	195	eP	44	26.90	-1.4
GLA	3.21	163	eP	44	32.00	-1.0
6 obs. associated						

---

* OCT 14, 1990 19h 48m 12.61± 0.48s
46.121 S ± 8.5km 33.554 E ±20.0km
DEPTH = 10.0km (geophysicist)

4.9mb (6 obs.)
PRINCE EDWARD ISLANDS REGION (431)

BFT	20.58	351	iPc	52	54.00	-0.5
	0.7s	27.40nm			4.7mb	
SLR	20.78	346	iPc	52	55.50	-0.9
KSR	20.90	343	iPc	52	57.00	-0.7
	1.2s	60.00nm			4.8mb	
CIR	25.10	356	iPd	53	27.70	-11.1
BUL	26.23	349	iPd	53	49.70	0.2
MAW	26.36	155	iPc	53	49.50	-0.6
SPA	44.07	180	iPd	56	21.80	-0.4
	0.9s	26.82nm			5.1mb	
			i	58	01.80	
BCAO	52.07	341	iPc	57	26.00	1.2
	0.5s	9.00nm			5.0mb	
SBA	53.04	169	iPc	57	32.30	1.0
KIC	62.39	316	P	58	45.00	7.2X
LKO	65.56	317	P	58	59.28	0.7
	0.6s	15.50nm			5.3mb	
ASPA	80.08	114	eP	00	23.80	-0.4
	1.1s	12.50nm			4.8mb	
QUE	81.76	29	eP	00	33.70	0.9
WB5	83.11	111	eP	00	44.50	4.5X
CNCB	85.80	250	P	00	59.00	4.8X
LPB	86.08	250	eP	00	55.00	-0.5
S.D. = 0.8 on 12 of 16 obs.						

OCT 14, 1990 19h 53m 48.93± 0.73s
43.042 N ±11.6km 0.222 W ± 4.5km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.6 (LDG). Felt (II) at Ferrieres and Lau-Balagnas, France.

JAU	0.11	268	Pg	53	51.86	0.0
			Sg	53	53.68	
OGE	0.22	305	Pg	53	53.63	-0.1
			Sg	53	57.19	
ESCF	0.26	278	Pg	53	54.31	-0.2
			Sg	53	57.86	
LHE	0.32	246	Pg	53	55.52	-0.1
			Sg	53	59.90	
ATE	0.35	277	Pg	53	56.78	0.5
			Sg	54	00.96	
EPF	0.41	91	Pg	53	57.40	0.0
			Sg	54	03.60	
ISSF	0.42	268	Pg	53	57.47	-0.1
			Sg	54	03.54	
MADF	0.45	284	Pg	53	58.01	-0.1
			Sg	54	03.84	
LPO	1.93	31	Pg	54	25.40	3.3X
			Sg	54	50.80	
LFF	2.02	20	Pn	54	27.80	4.4X
			Sg	54	53.20	
CAF	2.50	40	Pg	54	35.20	4.8X
			Sg	55	08.00	
RJF	2.59	28	Pg	54	38.00	6.5X
			Sg	55	11.20	
S.D. = 0.3 on 8 of 12 obs.						

OCT 14, 1990 19h 58m 16.83± 0.40s
44.070 N ± 2.8km 7.661 E ± 2.8km
DEPTH = 10.2 ± 4.3 km
NORTHERN ITALY (545)
ML 2.7 (LDG).

AUTN	0.18	246	Pg	58	20.79	-0.3
IMI	0.23	134	P	58	21.86	0.0
			S	58	25.43	
ENR	0.23	312	P	58	21.74	-0.2
			S	58	25.13	
SBF	0.26	218	Pg	58	22.60	0.2
			Sg	58	26.90	
ROB	0.27	34	P	58	23.09	0.5
			S	58	27.81	
STV	0.30	306	P	58	22.78	-0.3
			S	59	26.99	
AURF	0.30	233	Pg	58	23.28	0.1
			Sg	58	27.91	
TOUF	0.30	259	Pg	58	22.89	-0.3
			Sg	58	28.02	
REVF	0.39	213	Pg	58	25.16	0.3
MVIF	0.41	245	Pg	58	25.29	0.1
			Sg	58	31.32	
FIN	0.42	70	P	58	25.66	0.3

		S	58 32.12		
PZZ	0.59 317	P	58 28.73	-0.2	
		S	58 36.30		
CALN	0.64 241	Pg	58 29.76	0.0	
PCP	0.79 53	P	58 32.92	0.7	
		S	58 43.79		
FRF	0.89 236	Pg	58 34.40	0.5	
		Sg	58 46.00		
LMR	1.11 229	Pg	58 38.20	0.5	
		Sg	58 53.20		
RSP	1.12 345	P	58 37.14	-0.7	
		S	58 50.25		
LRG	1.13 237	Pg	58 38.60	0.7	
		Sg	58 53.60		
LSD	1.43 346	P	58 42.88	-0.2	
LPL	1.59 336	Pn	58 46.00	0.7	
		Pg	58 48.90		
		Sn	59 07.60		
PGF	1.81 147	Pn	58 46.80	-1.5	
		Sn	59 08.30		
S.D. = 0.6		on	21 of 21 obs.		

% OCT 14, 1990 20h 05m 25.53± 1.40s
36.064 N ±15.6km 27.246 E ±13.1km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.7 (ATH).

KAP	0.52 187	ePn	05 36.50	0.5	
		eSn	05 46.50		
ARG	0.73 78	ePn	05 38.50	-1.3	
		eSn	05 50.50		
NPS	1.55 239	ePb	05 52.70	-0.5	
KSL	1.89 88	ePn	05 57.90	-0.3	
BCK	3.02 62	ePn	06 16.00	1.6	
S.D. = 1.6		on	5 of 5 obs.		

OCT 14, 1990 21h 29m 53.19± 0.35s
44.720 N ± 2.7km 7.415 E ± 3.9km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (LDG).

PZZ	0.31 226	P	30 00.36	0.6	
		S	30 04.87		
RSP	0.45 345	P	30 02.33	0.0	
		S	30 07.96		
STV	0.48 188	P	30 02.74	-0.2	
		S	30 08.58		
RRL	0.49 294	P	30 03.56	0.3	
		S	30 10.32		
ENR	0.49 180	P	30 02.92	-0.3	
		S	30 09.17		
ROB	0.54 142	P	30 04.68	0.6	
		S	30 12.17		
LSD	0.76 346	P	30 07.66	-0.6	
		S	30 17.19		
FIN	0.76 132	P	30 08.27	0.1	
		S	30 18.42		
PCP	0.83 102	P	30 09.50	0.3	
		S	30 21.19		
SBF	0.86 179	Pg	30 09.00	-0.8	
		Sg	30 19.40		
IMI	0.88 157	P	30 09.91	-0.2	
		S	30 21.50		
LPG	0.91 329	Pg	30 10.80	0.0	
		Sg	30 21.80		
LPL	0.93 329	Pg	30 11.10	0.0	
		Sg	30 22.00		
FRF	1.28 206	Pg	30 16.80	-0.2	
		Sg	30 33.00		
LRG	1.48 211	Pg	30 20.00	0.2	
		Sg	30 39.50		
S.D. = 0.4		on	15 of 15 obs.		

• OCT 14, 1990 21h 45m 03.72± 0.61s
56.148 S ±12.1km 27.270 W ±13.0km
DEPTH = 33.0km (normal)
5.0mb (3 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

SPA	34.03 180	iPc	51 46.60	0.1	
	0.8s 9.58nm		4.8mb		
SOB1	48.03 342	eP	53 41.40	-0.2	
CNCB	49.87 305	P	53 56.00	-0.4	
LPB	50.17 305	P	54 00.00	1.5	
ZOBO	50.41 305	Pd	53 59.80	-0.7	
LIC	64.80 25	P	55 41.20	0.0	
KIC	65.00 25	P	55 42.40	-0.1	
TIC	65.21 24	P	55 44.00	0.2	
LKO	67.89 23	Pd	56 00.76	-0.1	
	0.6s 10.50nm		5.1mb		
BCAO	71.01 49	iPc	56 20.50	0.4	
	0.5s 8.00nm		5.0mb		
INK	145.85 321	ePKP	04 38.00	-0.8	
FBA	150.55 312	PKP	04 50.00	3.6X	
S.D. = 0.7		on	11 of 12 obs.		

• OCT 14, 1990 21h 47m 13.41± 1.13s
37.879 N ±13.1km 21.177 E ±14.6km
DEPTH = 33.0km (normal)
3.7mb (2 obs.)
SOUTHERN GREECE (368)
ML 3.5 (ATH).

VLS	0.55 303	iPgd	47 24.50	-0.3	
ITM	0.92 139	iPgd	47 30.00	0.0	
EVR	1.15 25	ePb	47 38.50	5.2X	
VLI	1.82 129	ePg	47 49.70	6.8X	
ATH	2.01 87	ePb	47 53.00	7.3X	
KEK	2.12 330	ePb	47 54.50	7.2X	
NEO	2.15 48	ePn	47 52.00	4.4X	
KZN	2.47 11	ePb	48 00.50	8.2X	
OHR	3.24 355	ePn	48 03.80	0.6	
SKO	4.09 3	ePn	48 15.00	-0.2	
CSI	4.26 298	P	48 18.50	0.8	
NUR	22.76 4	eP	52 16.00	2.4	
HFS	22.78 350	eP	52 12.00	-1.9	
	0.8s 2.60nm		3.8mb		
NB2	24.02 348	P	52 24.40	-1.5	
	0.9s 2.20nm		3.7mb		
S.D. = 1.6		on	8 of 14 obs.		

OCT 14, 1990 21h 50m 58.25± 0.62s
36.170 N ± 6.5km 27.215 E ± 6.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
ML 3.9 (ATH). MD 3.9 (ISK).

KAP	0.62 183	ePg	51 10.70	0.0	
		eSb	51 17.70		
ARG	0.74 86	ePg	51 12.00	-0.7	
SMG	1.57 349	ePn	51 25.00	-1.1	
NPS	1.59 236	ePb	51 26.80	0.3	
APE	1.63 304	ePb	51 26.70	-0.3	
KSL	1.92 91	ePn	51 31.00	-0.2	
IZM	2.22 1	ePn	51 37.00	1.3	
KHL	2.83 40	ePn	51 44.00	-0.4	
BCK	3.00 64	ePn	51 48.00	1.3	
ATH	3.33 304	ePg	51 59.50	8.2X	
DST	3.61 18	ePn	52 02.00	6.6X	
ALT	3.68 38	ePn	52 04.00	7.4X	
S.D. = 0.9		on	9 of 12 obs.		

? OCT 14, 1990 22h 03m 18.64± 1.31s
36.134 N ±15.2km 27.195 E ±12.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

KAP	0.58 182	eP	03 30.60	0.2	
		eS	03 41.40		
ARG	0.76 83	eP	03 33.00	-0.4	
		eS	03 44.00		
NPS	1.55 236	eP	03 46.20	-0.2	
		eS	04 06.00		
BCK	3.03 63	ePn	04 08.00	0.4	
S.D. = 0.7		on	4 of 4 obs.		

• OCT 14, 1990 22h 45m 17.55± 0.61s
31.279 S ±11.8km 68.850 W ±15.6km
DEPTH = 109.6 ± 13.1 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.21 168	iPd	45 33.40	-0.1	
ZON	0.30 151	iPd	45 34.00	0.2	
RTLL	0.33 99	iPc	45 33.70	0.0	
RTCV	0.64 155	iPc	45 35.80	0.1	
MDZ	1.60 180	iP	45 46.50	0.5	
		iS	46 06.40		
JACH	2.04 226	iP	45 52.50	0.9	
		i	46 08.50		
PEL	2.42 219	iPd	45 57.00	0.4	
		i	46 26.00		
ROCH	2.49 227	iPc	45 57.50	-0.2	
		i	46 28.50		
PCH	2.73 211	iPc	46 01.20	0.5	
		i	46 34.50		
		i	47 06.50		
LNV	3.43 218	iPc	46 07.90	-2.2	
		i	46 25.00		
		iS	46 40.00		
CYA	3.88 44	iPc	46 15.00	-1.2	
CNCB	14.43 3	eP	48 37.00	-1.3	
LPB	14.70 3	eP	48 42.00	0.4	
ZOBO	14.96 3	P	48 46.00	1.0	
SIV	16.79 27	Pc	49 08.40	0.9	
S.D. = 1.0		on	15 of 15 obs.		

? OCT 14, 1990 22h 50m 05.68± 0.97s
33.838 N ±10.8km 6.336 W ± 9.4km
DEPTH = 10.0km (geophysicist)
MOROCCO (395)

AVE	1.05 239	iPgc	50 25.80	0.3	
		i	50 38.00		
		iSg	50 41.00		
IFR	1.06 107	iPg	50 26.00	0.3	
		i	50 27.50		
		iSg	50 40.00		
NKM	1.78 25	ePn	50 36.50	-0.1	
		i	50 40.50		
		eSn	50 54.50		
		i	51 06.00		
		i	51 07.50		
TIO	3.01 195	iPnd	50 53.90	-0.5	
		iSn	51 27.50		
S.D. = 0.6		on	4 of 4 obs.		

% OCT 15, 1990 00h 16m 17.62± 2.51s
38.626 N ±21.5km 13.296 E ± 9.4km
DEPTH = 10.0km (geophysicist)
SICILY (398)

ERC	0.81 224	P	16 33.20	-0.2	
		eSg	16 45.00		
GIB	0.86 138	P	16 34.40	0.2	
		eSg	16 44.00		
MCT	1.03 165	P	16 37.60	0.4	
MNO	1.30 122	P	16 41.00	-0.9	
ATN	1.76 105	P	16 49.00	0.6	
MEU	2.00 139	P	16 51.70	-0.2	
S.D. = 0.7		on	6 of 6 obs.		

? OCT 15, 1990 01h 10m 32.67± 5.31s
17.581 N ±33.4km 61.147 W ±27.7km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 3.2 (FDF).

BPA	0.86 232	ePd	10 49.56	0.3	
		S	11 00.70		
SEG	1.22 196	ePd	10 55.03	-0.3	
		S	11 12.10		
SFG	1.32 182	eP	10 57.30	0.3	
NEV	1.43 252	ePd	10 58.58	-0.1	
		S	11 19.00		
PAG	1.62 198	eP	11 01.10	-0.4	
BBL	2.07 189	eP	11 08.21	0.3	
S.D. = 0.4		on	6 of 6 obs.		

OCT 15, 1990 01h 35m 44.56± 0.11s
2.211 S ± 3.1km 92.249 E ± 2.5km
DEPTH = 32.2km (20 depth phases)
5.9mb (102 obs.) 6.5Msz (47 obs.)
SOUTHWEST OF SUMATERA (273)
Ms 6.4 (PAS). Mo=4.0•10••18 Nm
(PPT). Complex event observed on broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=105 Dip=90 Slip=-170
NP2: 15 80 -360
Principal Axes:
T Plg= 7 Azm=240
P 7 330
Comment: The focal mechanism is well controlled and corresponds to strike-slip faulting with a small strike-slip component. The preferred fault plane is not determined.

15d 01h

RADIATED ENERGY
No. of sta: 9 Focal mech. F
Energy 1.3±0.4*10**15 Nm
MOMENT TENSOR SOLUTION
Dep 26 No. of sta: 14
Moment Tensor; Scale 10**19 Nm
Mrr= 0.13 Mtt=-0.54
Mff= 0.41 Mrt=-0.34
Mrf= 0.30 Mtf=-1.43
Principal axes:
T Val= 1.58 Plg=17 Azm=234
N 0.00 73 66
P -1.58 3 325
Best Double Couple:Mo=1.6*10**19
NP1:Strike= 10 Dip=76 Slip= 10
NP2: 278 81 165
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 20S, 49C M.W.: 12S, 31C
Centroid Location:
Origin Time 01:35:49.9 0.2
Lat 2.20S 0.01 Lon 92.29E 0.01
Dep 23.0 1.3 Half-duration 7.0
Moment Tensor; Scale 10**18 Nm
Mrr= 0.61 0.13 Mtt=-8.46 0.12
Mff= 7.85 0.14 Mrt=-4.63 0.42
Mrf= 0.67 0.34 Mtf=-9.72 0.12
Principal Axes:
T Val= 12.94 Plg=12 Azm=243
N 1.11 70 116
P -14.06 15 336
Best Double Couple:Mo=1.4*10**19
NP1:Strike= 19 Dip=70 Slip= -2
NP2: 110 88 -160

IPM 11.06 52 ePc 38 23.20 -0.5
e 39 15.20
e 40 21.20
KGM 11.84 69 iPc 38 33.50 -0.7
0.9s 4464.90nm 7.6mb X
i 38 43.90
i 39 02.10
SNG 12.52 42 iPc 38 40.60 -2.7
1.0s 1600.00nm 7.1mb X
eS 41 20.00
NNT 16.48 27 iPc 39 37.70 2.7
KOD 19.22 310 iPd 40 09.00 -0.3
iS 43 28.00
NST 19.40 23 iPd 40 11.00 -0.1
BDT 20.45 19 iPd 40 22.70 0.5
1.2s 842.70nm 6.0mb
TRT 21.02 106 ePc 40 28.40 0.3
0.6s 87.50nm 5.3mb
GBA 21.51 317 P 40 33.00 0.0
S 44 23.00
LOE 21.62 25 eP 40 33.00 -1.1
CHG 21.91 17 iPd 40 36.90 -0.1
eS 44 30.00
HYB 23.72 326 iPd 40 55.50 0.7
1.2s 1515.20nm 6.4mb
iS 45 08.00
KKM 25.30 71 ePc 41 10.90 0.8
0.9s 309.90nm 5.9mb
OIZ 27.29 39 P 41 29.20 0.9
8.0s ******nm 6.9mb X
N 13s 71.80um
E 14s 115.00um
iS 46 11.00
MKS 27.32 97 iPc 41 29.50 0.8
POO 27.44 319 iPd 41 29.30 -0.4
1.0s 90.00nm 5.4mb
iS 46 06.00
BOM 28.38 318 iPd 41 38.00 -0.1
iS 46 28.00
KMI 29.01 20 iPd 41 45.89 1.8
2.5s 960.00nm 6.1mb
N 17s 74.20um
E 17s 68.30um
pP 41 56.50 39km
GYA 31.72 25 iPd 42 08.00 0.0
N 14s 92.80um
E 14s 101.00um
S 47 15.00
LSA 31.75 358 iPd 42 09.60 1.0
N 18s 39.10um
E 20s 93.00um
sP 42 22.00
S 47 20.00
SS 49 05.00
KUPT 32.13 106 ePc 42 01.00 -10.5X
0.7s 946.70nm
HKC 32.43 40 iPc 42 16.00 1.9
iS 47 30.00
GZH 32.48 38 P 42 14.00 -0.5
8.0s ******nm 7.0mb X
Z 20s 155.00um 6.7Msz
N 17s 162.00um
E 17s 120.00um
MNI 32.79 84 ePc 42 17.90 0.6
MBL 32.81 127 eP 42 17.30 -0.1
0.8s 127.00nm 5.9mb
NDI 33.94 336 iPd 42 27.60 0.5
0.5s 387.32nm 6.6mb
iSn 47 48.00
CD2 34.71 18 P 42 33.00 -0.8
0.8s 150.00nm 6.0mb
N 16s 94.50um
E 15s 104.00um
PP 43 53.00
S 47 57.00
MEKA 35.00 136 eP 42 36.30 0.0
MRWA 35.10 142 eP 42 37.00 -0.1
0.6s 32.00nm 5.4mb
AAI 35.93 93 eP 42 50.00 5.7X
BAL 36.52 143 eP 42 49.00 -0.1
OZH 37.17 42 Pd 42 56.50 2.0
8.0s ******nm 7.0mb X
Z 16s 125.00um 6.8MszX
N 14s 57.90um
E 14s 68.60um
PP 44 20.00
MUN 37.23 145 eP 42 54.80 -0.2
0.8s 181.00nm 6.0mb
Z 20s 63.20um 6.4Msz
eS 48 40.00
KLB 37.85 143 eP 42 59.70 -0.6
0.5s 36.00nm 5.5mb
KNA 38.40 113 iPd 43 04.00 -1.1
0.9s 54.00nm 5.4mb
NWAO 38.51 145 ePd 43 04.96 -0.8
0.6s 51.00nm 5.5mb
e 43 14.23 31km
iPP 44 29.63
WHN 38.80 31 Pd 43 09.50 1.3
1.7s 400.00nm 5.9mb
Z 18s 70.40um 6.5Msz
N 19s 173.00um
E 20s 170.00um
pP 43 18.00 29km
iPP 44 46.00
iPcS 49 04.00
iS 49 10.00
RKG 39.23 147 eP 43 14.80 3.0X
0.6s 240.00nm 6.1mb
ANP 39.33 44 iPc 43 14.00 1.2
iS 49 11.00
XAN 39.33 22 iPd 43 12.20 -0.4
1.0s 160.00nm 5.7mb
N 20s 165.00um
E 20s 177.00um
S 49 08.00
SS 51 58.50
LZH 39.61 15 iPd 43 14.50 -0.6
2.0s 620.00nm 6.0mb
Z 20s 131.00um 6.8Msz
E 18s 119.00um
iPP 44 49.23
ScS 53 20.00
MTN 39.90 107 eP 43 16.50 -1.1
QUE 40.27 325 iPd 43 22.70 2.1
1.0s 2905.00nm 7.0mb X
ePP 43 38.40
ePP 44 59.50
e(S) 49 45.40
WARB 40.73 129 eP 43 25.00 0.7
GTA 42.00 9 iPd 43 34.20 -0.4
2.2s 1810.00nm 6.4mb
Z 28s 76.40um 6.4MszX
E 14s 27.60um
PP 45 16.00
S 49 49.00
SS 52 48.00
NJ2 42.40 34 iPd 43 38.00 0.2
1.2s 200.00nm 5.7mb
Z 16s 34.80um 6.3MszX
N 19s 120.00um
E 19s 93.00um
iS 49 57.00
SSE 43.07 37 Pc 43 44.00 0.7
Z 20s 56.10um 6.5Msz
N 16s 95.60um
E 16s 47.60um
pP 43 53.70 32km
sP 43 58.80
PP 45 28.00
S 50 10.00
sS 50 26.00
SS 53 18.00
ScS 53 39.00
TIY 43.91 23 Pd 43 49.80 -0.3
Z 20s 93.90um 6.7Msz
E 19s 171.00um
PP 45 35.00
ScS 53 40.00
KSH 44.08 342 iPc 43 50.00 -1.6
Z 24s 91.50um 6.6MszX
N 17s 53.70um
PP 45 37.00
S 50 22.00
FORR 44.26 134 eP 43 51.50 -1.5
TIA 44.71 29 Pd 43 55.80 -0.8
9.0s 9000.00nm 6.6mb X
Z 20s 78.30um 6.6Msz
N 19s 63.20um
E 19s 129.00um
S 50 33.00
WRA 44.72 116 P 43 56.50 -0.4
WB5 44.72 116 eP 43 56.20 -0.7
e 44 07.00 37km
ASPA 45.58 121 iPd 44 03.10 -0.7
1.3s 87.10nm 5.5mb
Z 19s 73.40um 6.6Msz
i 44 13.80 37km
iS 50 42.20
iScS 52 03.60
iS 54 01.60
BTO 45.59 19 iPc 44 03.50 -0.2
7.0s 4500.00nm 6.5mb X
N 15s 90.30um
E 15s 74.00um
sP 44 16.00
PP 45 50.00
iS 50 43.00
sS 50 56.00
SS 53 57.00
DSH 45.99 334 eP 44 06.30 -0.4
eS 51 00.00
WMQ 46.01 355 iPd 44 06.95 0.1
iPP 45 55.28
HHC 46.34 20 iPd 44 10.00 0.5
1.5s 1370.00nm 6.7mb
Z 20s 133.00um 6.9Msz
N 18s 39.10um
E 18s 156.00um
PP 46 00.00
S 50 56.50
TLG 47.21 345 iP 44 16.00 -0.3
iS 51 08.00
BJI 47.41 25 ePd 44 18.12 0.2
Z 35s 41.30um 6.2MszX
E 20s 59.80um
e 44 25.41 24km
PP 45 57.00
SS 54 06.00
FRU 47.58 342 iPd 44 19.00 -0.2
iS 51 18.00
JAY 48.41 91 ePd 44 24.20 -2.0
1.2s 105.70nm 5.7mb
MAIO 48.98 325 iPd 44 29.60 -0.7
1.2s 76.39nm 5.6mb
eS 51 28.00
DL2 49.05 30 iPd 44 31.00 0.4
1.4s 200.00nm 6.0mb
Z 20s 53.70um 6.5Msz
N 17s 86.40um
E 15s 37.30um
S 51 33.00
BBU 49.28 308 eP 44 30.60 -1.9
1.0s 250.00nm 6.2mb
DHR 49.57 308 ePd 44 34.50 -0.3
eS 51 41.00

OIS	49.63	115	iPc	44	34.80	-0.6	RAB	59.85	94	eP	45	48.00	-2.0	DRV	72.38	162	eP	47	09.20	0.1
			i	44	44.90	34km				iS	54	08.00		NPS	72.41	308	eP	47	08.80	-1.1
			i	47	24.40		BWA	61.22	128	eP	46	01.00	2.0	APE	72.97	310	eP	47	09.80	-3.4X
PAF	50.60	199	iPc	44	50.00	7.7X	CIR	61.90	247	iPc	45	51.00	-12.8X	OBN	72.98	330	iPd	47	11.90	-0.9
			ePP	46	42.00		CAN	61.96	129	eP	46	04.30	0.3		1.1s	220.00nm			6.1mb	
			eS	52	04.00		AYN	62.06	304	ePd	46	04.30	-0.4	Z	20s	31.00um			6.6Msz	
			eSSS	56	50.00		CNB	62.24	129	eP	46	06.00	0.1				iS	56	11.00	
ARO	50.97	287	eP	44	46.10	0.3		1.2s	83.00nm			5.7mb		PRK	73.04	312	eP	47	13.00	-0.4
MNDI	51.40	96	eP	44	50.50	1.2				i	46	16.00	33km	PSN	73.10	317	iPc	47	13.00	-0.7
RYD	51.72	304	ePd	44	50.00	-1.4				ePP	48	36.00		EZN	73.17	313	eP	47	12.00	-2.2
			iS	52	04.00					eS	54	32.00		POF	73.51	240	iPc	47	17.00	0.6
KMSA	51.90	298	ePd	44	50.70	-2.0				eLg	01	32.00			1.3s	144.23nm			5.8mb	
SNY	52.23	29	Pd	44	53.60	-1.2				eLR	05	28.00		TLB	73.51	318	eP	47	15.00	-1.1
	1.4s	500.00nm				6.3mb	CSTJ	62.31	307	Pd	46	24.34	17.9X	VAM	73.56	308	eP	47	14.80	-1.8
Z	18s	94.80um				6.9Msz	BADA	62.77	304	ePd	46	09.20	-0.2	CFR	73.64	318	ePd	47	16.00	-0.8
N	17s	77.10um					MDSJ	62.83	307	P	46	27.91	18.0X	JMB	73.81	315	iPc	47	18.00	0.2
E	15s	25.30um					OTRJ	62.90	307	Pc	46	27.04	16.7X	BCAO	73.95	275	iPc	47	17.65	-1.6
			pP	45	05.00	40km	COO	62.94	123	eP	46	11.60	1.0		0.9s	370.00nm			6.4mb	
			PcS	50	00.00		HLBJ	62.95	308	P	46	28.35	17.7X				ic	47	32.00	50kmX
			iS	52	16.00		BRS	62.95	120	iPd	46	10.80	0.1				id	48	09.00	
SRAT	52.35	295	ePd	44	57.00	0.6				ipP	46	17.80	23km				ic	49	21.00	
KMTA	52.66	295	ePd	44	59.00	0.3				i	46	21.30					ic	50	44.00	
SHK	52.67	42	eP	44	57.00	-1.3				i(sP)	46	44.30		RDO	74.14	314	eP	47	19.40	-0.4
TEH	53.66	319	ePc	45	06.00	0.3	HQL	62.98	304	ePd	46	10.00	-0.8	KDZ	74.38	314	iP	47	20.00	-1.2
ADE	54.04	133	eP	45	08.90	0.5	SAP	63.02	38	eP	46	19.00	8.2X	DIM	74.42	315	iP	47	21.00	-0.4
	1.2s	437.50nm				6.4mb	AKSR	63.03	298	iPd	46	11.50	0.3	DZM	74.53	112	iPd	47	22.80	0.3
AFIF	54.36	302	ePd	45	11.00	0.0	AGAL	63.14	298	iPd	46	12.50	0.6	ATH	74.60	310	eP	47	23.20	0.7
AAE	54.45	283	eP	45	12.50	0.5	AMAN	63.18	298	eP	46	12.80	0.6	CLI	74.69	320	eP	47	24.00	1.1
GUMO	54.48	72	ePc	45	09.16	-2.7	KRI	63.20	252	iPc	46	13.90	1.3	ISR	74.70	318	eP	47	23.50	0.4
	1.3s	163.40nm				5.9mb	MOO	63.21	137	P	46	07.00	-5.1X	IAS	74.73	320	eP	47	24.00	0.9
			e	45	14.95	19kmX	MBH	63.28	305	iPd	46	11.20	-1.6	BUC	74.76	317	ePd	47	20.50	-2.8
PJG	54.48	72	eP	45	07.00	-4.8X	MKRJ	63.28	307	Pc	46	29.42	16.5X	VRI	74.82	319	ePd	47	23.00	-0.7
GUA	54.51	72	eP	45	07.00	-5.1X	MASJ	63.29	307	P	46	30.31	17.4X	VLI	74.88	309	eP	47	24.70	0.5
	0.7s	54.79nm				5.7mb	JARJ	63.29	308	Pd	46	30.07	17.2X	RZN	74.89	314	iPd	47	24.00	-0.4
Z	18s	15.35um				6.1Msz	AKRL	63.31	298	iPd	46	13.50	0.5	PVL	74.91	316	iPd	47	24.00	-0.2
			eS	52	48.00		LWI	63.40	269	iP+	46	14.00	-0.1	CVO	75.17	319	eP	47	25.00	-0.7
CN2	54.62	29	iPd	45	11.40	-1.0				i(S)	54	43.00		MLR	75.21	318	iPd	47	25.50	-0.6
	1.0s	200.00nm				6.1mb	BURJ	63.40	308	Pc	46	31.22	17.5X	PTT	75.40	320	eP	47	27.50	0.5
Z	15s	61.00um				6.8MszX	SALJ	63.41	308	P	46	31.29	17.6X	WIN	75.44	247	iPc+	47	27.00	-0.9
N	15s	51.00um					ANMR	63.46	298	iPd	46	14.50	0.5		0.7s	68.49nm			5.8mb	
E	15s	17.00um					SHMJ	63.61	308	Pd	46	32.73	17.8X	Z	20s	69.50um			7.0Msz	
			pP	45	17.00	18kmX	MML	63.78	308	iPd	46	14.80	-1.3	PLG	75.45	313	eP	47	26.30	-1.1
OASM	54.82	304	ePd	45	12.70	-1.6	BFT	64.09	243	iPc	46	17.00	-1.5	PGB	75.53	315	iPc	47	27.00	-0.9
STK	54.97	128	iPc	45	14.60	-0.6		1.0s	215.00nm			6.2mb		MMB	75.57	314	eP	47	27.00	-1.1
	1.6s	121.00nm				5.7mb	ADI	64.16	309	eP	46	17.50	-1.1	MTUR	75.72	318	eP	47	28.00	-0.9
Z	20s	2431.00um				8.3MszX	BUL	64.53	249	iPc	46	19.90	-1.4	CMP	75.75	318	ePc	47	30.00	1.0
			iS	53	01.00		SLR	65.66	243	iPc	46	25.84	-2.7	ITM	75.78	309	eP	47	28.40	-1.0
PMG	55.03	100	iPd	45	15.30	-0.6	YSS	65.97	35	iPc	46	31.00	1.2	PVC	76.06	108	iPc	47	45.80	14.6X
	1.1s	215.19nm				6.1mb				iS	55	16.00		DRA	76.10	317	eP	47	29.00	-2.0
IRK	55.23	9	iPd	45	16.00	-0.8	HLW	66.23	304	eP	46	31.10	-0.8	KKB	76.11	314	iPc	47	30.00	-1.2
			eS	52	56.00					ePP	48	54.00		VTS	76.22	315	iP	47	30.00	-1.9
OLP	55.38	121	eP	45	18.90	0.6				ePPP	50	12.00		EVR	76.29	311	eP	47	32.50	0.2
			e	45	28.60	32km				eS	55	17.00		TNR	76.38	318	ePd	47	48.00	15.4X
CTA	55.59	113	iPc	45	19.30	-0.6	CSS	66.31	310	eP	46	32.00	-0.3	KZN	76.66	312	eP	47	33.30	-1.1
	1.1s	151.90nm				5.9mb	KVT	66.73	317	eP	46	34.10	-0.8	VLS	77.04	310	eP	47	35.50	-0.9
			i	45	28.70	31km	KSR	66.92	243	iPc	46	33.50	-3.1X	SKO	77.33	314	iP	47	35.10	-2.8
			iS	53	04.00			1.0s	185.00nm			6.1mb			1.8s	115.00nm			5.6mb	
CTAO	55.59	113	ePd	45	21.14	1.2	PPCY	67.04	309	eP	46	36.00	-1.0	Z	17s	22.00um			6.5MszX	
			e	45	29.42	27km	HNR	67.64	99	eP	46	41.00	-0.1	N	18s	14.58um				
KER	55.83	315	ePd	45	20.50	-1.1	MAW	68.34	192	iPc+	46	44.40	-0.1	E	19s	17.58um				
CRZF	56.35	213	iPc	45	24.50	-0.4		1.0s	62.00nm			5.7mb					iPcP	47	53.60	
			ePP	47	40.00		Z	14s	14.00um			6.3MszX					iPP	50	36.00	
			ePPP	50	40.00					e	46	54.00	31km				iPPP	52	29.00	
			eS	53	20.00		KAS	68.41	316	eP	46	45.00	-0.6				iPSP	53	51.00	
			eSS	57	10.00		ANTO	68.51	315	ePd	46	45.02	-1.2				iS	57	11.00	
			eSSS	59	50.00		BBTK	68.52	315	iPd	46	45.00	-1.3				iPS	58	05.00	
HIA	56.52	21	iPd	45	25.46	-0.6	FRS	68.93	239	eP	46	43.00	-5.9X				i	58	40.00	
			ePPP	48	51.45					i	46	48.50	18kmX				iSS	02	17.00	
MDJ	57.28	31	Pd	45	31.00	-0.5	BCK	69.25	312	iP	46	50.00	-0.8				i	02	40.00	
	1.5s	400.00nm				6.2mb	KSL	69.57	310	eP	46	54.00	1.3				iSSS	06	11.00	
Z	20s	46.60um				6.6Msz	SIM	69.66	320	eP	46	52.00	-1.0	TIK	77.41	11	iPd	47	35.50	-2.3
N	18s	53.20um								iS	55	50.00					eS	57	21.00	
E	19s	98.60um					YAK	70.10	18	iPd	46	53.00	-2.4	BMR	77.50	320	ePc	47	40.00	1.3
			iS	53	30.00		ALT	70.15	313	iP	46	54.70	-1.6	OHR	77.58	313	iP	47	38.00	-1.4
			SS	57	14.00		KHL	70.34	312	eP	46	56.00	-1.4		1.2s	73.00nm			5.6mb	
MAJO	57.54	43	ePd	45	33.06	-0.5	GPA	70.43	314	eP	46	56.70	-1.2	PET	77.81	35	iPd	47	39.00	-1.2
			ePP	47	48.79		ARG	70.72	310	iPd	46	59.80	0.1				iS	57	28.00	
MAT	57.54	43	eP	45	33.00	-0.5	IZI	71.05	314	iP	47	00.60	-1.2	KEK	77.99	311	eP	47	41.20	-0.4
	2.2s	369.23nm				6.0mb	YLV	71.20	314	iP	47	01.60	-1.1	BZS	78.15	317	eP	47	39.00	-3.3X
			eS	53	14.00		KAP	71.26	309	eP	47	03.00	0.0	PUL	78.18	333	eP	47	42.00	-0.1
BFD	57.80	133	eP	45	41.00	5.7X	DST	71.42	313	iP	47	03.00	-0.9				eS	57	32.00	
			e	45	49.00	26km	ISK	71.60	315	eP	47	03.50	-1.4	PVY	78.53	314	eP	47	43.60	-1.1
			e	48	21.00		IZM	72.04	312	eP	47	07.00	-0.7	BEO	78.74	316	eP	47	44.50	-1.1
CMS	58.21	126	iPc	45	38.20	-0.1	CTT	72.07	315	eP	47	03.00	-4.7X	TTG	79.01	314	eP	47	46.00	-1.1
	1.2s	274.00nm				6.2mb	SMG	72.16	311	eP	47	08.00	-0.3				e(S)	57	39.00	
			i	45	48.00	32km	BNT	72.18	314	eP	47	07.60	-0.8	PLE	79.12	315	eP	47	47.60	-0.3
TAB	58.32	318	iPd-	45	39.00	-0.2	EDC	72.21	314	eP	47	07.80	-0.8	NKY	79.28	314	eP	47	48.00	-0.8

15d 01h

BDV 79.29 314 eP 47 48.10 -0.6
LCI 79.51 312 P 47 50.50 0.7
BRY 79.63 314 eP 47 50.00 -0.7
PSZ 79.90 319 iP 47 51.30 -0.6
SPC 80.00 321 iPd 47 52.30 -0.3
BUD 80.36 319 e(P) 47 53.00 -1.3
ROI 80.40 311 P 47 56.60 1.9
KRA 80.42 321 ePd 47 54.70 0.2
0.8s 141.00nm 6.0mb
Z 18s 13.30um 6.3Msz
E 18s 13.70um
i 47 56.80 7kmX
i 48 11.10
i 51 02.00
iS 57 58.00
ORI 80.59 311 P 47 56.50 0.8
TDS 80.59 311 P 47 56.60 0.9
APA 80.63 341 iP 47 55.30 0.0
CSI 80.65 311 P 47 57.80 1.8
CZI 80.67 310 P 47 57.60 1.6
MMN 80.90 311 P 47 58.60 1.4
SRO 80.90 319 iPd 47 56.90 -0.2
ATN 81.00 309 P 47 58.50 0.6
NUR 81.08 332 iP 47 57.80 0.1
0.8s 85.10nm 5.8mb
Z 22s 41.40um 6.7Msz
e 51 04.00
e 52 54.00
e 58 00.00
e 03 18.00
LR 27 04.00
SUF 81.22 335 iP 47 57.80 -0.7
0.8s 25.00nm 5.3mb
MEU 81.24 308 P 48 00.80 1.6
MGR 81.27 311 P 47 59.00 -0.2
SGO 81.53 311 P 48 00.30 -0.2
MNO 81.56 309 P 48 03.00 2.0
THZ 81.56 132 P 48 00.20 -0.6
ZST 81.78 319 iPd 48 02.20 0.5
i 48 21.60 71kmX
BSS 81.95 312 P 48 02.60 -0.1
SOP 82.03 319 iPd 48 05.30 2.3
ZAG 82.04 317 iPd 48 03.00 -0.1
PTJ 82.07 317 iPd 48 03.30 -0.1
GIB 82.09 309 P 48 03.00 -0.6
VKA 82.31 319 ePd 48 04.00 -0.5
2.0s 672.00nm 6.3mb
Z 17s 10.30um 6.3MszX
i 48 20.90 60kmX
ePP 51 18.00
eS 58 17.00
eSS 03 49.00
LR 30 25.00
MCT 82.34 308 P 48 07.10 2.0
DUI 82.36 312 P 48 05.30 0.3
VBY 82.48 316 eP 48 06.30 0.9
TCW 82.55 131 P 48 04.70 -1.1
SDI 82.84 312 P 48 07.00 -0.4
SOD 82.86 339 iP 48 06.90 0.0
KSP 82.87 322 iPd 48 08.00 0.7
1.8s 355.00nm 6.2mb
i 48 24.20 57kmX
WEL 82.92 131 eP 48 05.00 -2.8
PP 51 26.00
S 58 20.00
SS 04 10.00
KIW 83.01 131 P 48 07.40 -0.8
RIY 83.05 316 eP 48 07.70 -0.6
LJU 83.07 317 ePd 48 08.50 0.0
eS 58 20.00
CEY 83.09 316 eP 48 08.50 -0.1
AZI 83.17 313 P 48 09.00 0.0
AOU 83.25 313 Pc 48 10.80 1.3
LVI 83.41 308 P 48 04.50 -5.8X
MTW 83.47 131 P 48 10.40 -0.2
VOY 83.51 317 iPd 48 10.50 -0.3
TRI 83.54 316 iPd 48 09.80 -1.0
i 48 47.50 150kmX
iPP 51 28.00
iPPP 53 20.00
iS 58 24.00
iSP 59 14.00
iSPP 00 04.00
iSSS 03 53.00
RMP 83.68 312 P 48 12.00 0.3
KEV 83.70 341 iP 48 12.00 0.8
1.0s 74.00nm 5.8mb

Z 22s 47.10um 6.8Msz
i 48 28.90 60kmX
e 51 24.00
e 53 20.00
e 55 10.00
e 58 30.00
e 04 04.00
LR 27 08.00
KMR 83.71 319 iP- 48 11.90 0.3
i 48 22.20 33km
ARV 83.76 314 P 48 12.50 0.4
MNS 83.78 313 Pc 48 12.10 -0.1
PRU 83.80 321 Pd 48 12.50 0.5
2.3s 295.10nm 6.0mb
Z 22s 11.90um 6.2Msz
N 18s 7.00um
E 20s 8.50um
e 48 28.00 54kmX
PP 51 35.60
PPP 53 24.00
SKS 58 32.00
ASS 83.90 314 P 47 59.40 -13.4X
RSM 84.18 314 P 48 16.10 2.0
UPP 84.22 331 iP 48 13.80 -0.1
i 49 59.90 474kmX
iPP 51 28.50
iS 58 34.00
KHC 84.26 320 iPd 48 15.20 0.7
1.5s 133.50nm 5.9mb
Z 20s 2.50um 5.6Msz
N 21s 8.00um
E 21s 7.50um
S 58 36.00
BRG 84.34 321 iPd 48 14.60 -0.1
1.8s 260.00nm 6.1mb
i 48 30.00 54kmX
i 49 57.80
i 50 36.00
i 51 50.40
i 53 28.00
i 58 38.00
FVI 84.36 317 P 48 15.30 0.4
BHG 84.48 318 iPd 48 15.60 0.0
CRE 84.49 314 P 48 16.00 0.2
VVI 84.51 316 P 48 16.40 0.6
SBA 84.61 168 iP 48 16.90 1.2
iS 58 37.20
SFI 84.61 314 P 48 17.50 1.3
PGD 84.69 314 P 48 18.00 1.1
WET 84.71 320 iPd 48 17.40 0.7
Z 19s 14.00um 6.4Msz
CLL 85.00 322 iPd 48 18.40 0.4
1.7s 185.00nm 6.0mb
Z 17s 13.50um 6.4MszX
e 48 37.00 67kmX
eS 58 38.00
CTI 85.06 316 P 48 19.00 0.4
BRN 85.07 323 eP 48 19.00 0.7
WATA 85.29 318 iPd 48 18.90 -0.9
1.1s 107.00nm 6.0mb
i 48 31.10 40km
i 49 01.30
i 51 18.60
e 59 29.00
MME 85.47 314 P 48 21.20 0.3
BDI 85.52 314 P 48 20.40 -0.5
SQTA 85.52 318 iPd 48 20.20 -0.7
1.1s 112.50nm 6.0mb
i 48 31.00 34km
i 48 38.50
i 49 08.40
e(sS) 59 09.50
HOF 85.54 321 eP 48 21.80 1.0
Z 17s 13.00um 6.4MszX
OGA 85.60 317 iPd 48 21.90 0.5
i 48 24.00 7kmX
FUR 85.61 318 eP 48 21.40 0.2
Z 20s 20.00um 6.5Msz
eS 58 52.80
MOX 85.76 321 iP 48 23.00 1.1
2.1s 305.00nm 6.2mb
Z 18s 15.90um 6.5Msz
N 17s 6.70um
E 18s 15.40um
SAL 85.77 316 P 48 23.30 1.3
GRF 85.87 320 ePd 48 23.10 0.6
1.7s 212.00nm 6.1mb

Z 20s 9.00um 6.2Msz
e 48 38.30 53km
eS 58 54.00
COP 86.07 326 eP 48 24.00 0.8
0.9s 131.09nm 6.2mb
Z 22s 21.48um 6.5Msz
i 48 26.00 6km
i 48 40.00
OSS 86.18 317 eP 48 25.30 1.0
HFS 86.21 331 eP 48 23.40 -0.5
0.9s 105.60nm 6.1mb
Z 23s 23.50um 6.5MszX
LR 23 24.00
MDI 86.36 316 P 48 25.00 0.1
BOB 86.43 315 P 48 24.90 -0.5
PGF 86.50 313 eP 48 25.70 -0.2
1.2s 89.25nm 5.9mb
VDL 86.61 317 eP 48 27.00 0.6
SAX 86.79 317 eP 48 28.40 1.0
SMY 86.81 37 P 48 26.00 -0.9
1.2s 530.30nm 6.6mb
Z 20s 14.00um 6.4Msz
LLS 86.98 317 eP 48 28.70 0.5
TMA 86.98 316 eP 48 28.10 -0.1
VAI 87.03 316 P 48 28.00 -0.1
PCP 87.04 315 P 48 28.92 0.5
STU 87.06 319 eP 48 27.50 -0.8
2.3s 418.18nm 6.3mb
Z 20s 4.61um 5.9Msz
iS 59 08.00
CKI 87.22 314 P 48 29.60 0.4
FIN 87.25 314 P 48 29.54 0.2
SLE 87.42 318 eP 48 30.60 0.5
IMI 87.45 314 P 48 30.67 0.3
ZLA 87.46 318 eP 48 30.80 0.5
ROB 87.50 314 P 48 30.05 -0.5
NB2 87.57 331 P 48 29.40 -1.1
1.0s 77.30nm 5.9mb
MMK 87.60 316 eP 48 31.80 0.5
TNS 87.71 320 ePd 48 32.40 0.9
FEL 87.75 318 eP 48 31.70 -0.1
SBF 87.77 314 eP 48 31.70 -0.2
1.0s 80.00nm 6.0mb
SPA 87.80 180 iPc 48 32.00 0.3
ENR 87.82 314 P 48 32.72 0.6
STV 87.89 314 P 48 32.31 -0.2
DOI 87.97 314 P 48 34.00 1.2
BHB 87.98 315 P 48 30.87 -2.0
DIX 87.99 316 eP 48 34.30 1.1
RSP 88.01 315 P 48 32.82 -0.3
PZZ 88.07 314 P 48 31.90 -1.5
LSD 88.11 315 P 48 34.15 0.4
GWF 88.12 319 P 48 33.89 0.5
KONO 88.17 330 iPd 48 34.02 0.7
RGS 88.24 333 eP 48 34.30 0.7
WLS 88.24 318 P 48 34.16 0.1
CDF 88.29 318 P 48 34.26 -0.1
FRF 88.32 314 eP 48 34.70 0.3
1.0s 50.00nm 5.8mb
EMS 88.32 316 eP 48 35.40 0.7
RRL 88.33 315 P 48 35.69 0.9
MOF 88.34 318 P 48 34.50 -0.1
ECH 88.35 318 P 48 34.72 0.2
LMR 88.40 313 eP 48 34.80 0.0
1.4s 52.30nm 5.7mb
LPG 88.40 315 eP 48 35.10 -0.1
1.2s 50.60nm 5.7mb
LPL 88.41 315 eP 48 35.10 -0.1
1.2s 80.35nm 5.9mb
BNI 88.42 315 P 48 35.00 -0.1
LOMF 88.50 317 P 48 35.39 0.0
LRG 88.52 313 eP 48 36.00 0.6
1.2s 83.30nm 5.9mb
BSF 88.57 318 P 48 35.37 -0.3
BNS 88.59 321 iPd 48 36.30 0.7
Z 20s 14.00um 6.4Msz
iPP 52 01.00
iS 59 16.00
iSP 00 22.50
HAU 88.88 318 eP 48 36.90 -0.2
1.2s 119.00nm 6.1mb
Z 20s 12.50um 6.3Msz
WTS 88.91 322 eP 48 37.50 0.5
0.9s 35.00nm 5.7mb
e 49 41.00 263kmX
WIT 89.07 323 eP 48 40.00 2.2
e 49 42.00 256kmX

VITF	89.14	318	P	48	38.39	0.2
MEM	89.30	321	iPc	48	39.89	1.0
ENN	89.37	321	eP	48	40.00	0.8
	1.0s	37.00nm			5.6mb	
			e	49	43.50	263kmX
DBN	89.92	322	eP	48	43.00	1.2
Z	21s	11.50um			6.3Msz	
			ePP	52	18.00	
			eSKS	59	19.00	
			iS	59	36.00	
			ePS	00	36.00	
			eSS	05	41.00	
			e	12	20.00	
DOU	90.17	320	P+	48	43.60	0.6
Z	19s	6.40um			6.1Msz	
			PP	52	23.00	
			SKS	59	13.00	
			S	59	35.00	
KBS	90.29	349	eP	48	43.10	0.0
UCC	90.36	321	P	48	46.00	2.2
			SKS	59	13.00	
			S	59	37.00	
			SP	00	50.00	
SNF	90.39	320	iPc	48	44.83	0.8
LBF	90.42	317	eP	48	44.40	0.1
	1.2s	92.25nm			6.0mb	
SMF	90.50	316	eP	48	44.60	0.0
	1.2s	77.35nm			5.9mb	
LOR	90.51	317	eP	48	44.70	0.0
	1.0s	93.75nm			6.1mb	
Z	20s	15.00um			6.4Msz	
PLDF	90.62	316	P	48	45.93	0.6
SSF	90.74	317	eP	48	46.10	0.4
	1.3s	117.35nm			6.1mb	
AVF	90.84	317	eP	48	46.10	-0.1
	1.2s	86.30nm			6.0mb	
LBL	90.85	315	P	48	47.37	1.2
ESEL	90.90	310	eP	48	49.20	2.6
AGO	90.96	316	P	48	47.44	0.6
ETER	91.02	312	eP	48	48.50	1.4
PYM	91.04	316	P	48	47.90	0.7
GRC	91.05	317	P	48	47.83	0.7
BGF	91.18	316	eP	48	48.30	0.5
MAF	91.36	316	eP	48	48.90	0.3
	1.0s	36.00nm			5.7mb	
TCF	91.61	316	eP	48	50.20	0.4
	1.2s	38.70nm			5.7mb	
ILT	91.67	22	eP	48	48.00	-1.6
			iS	59	44.00	
CAF	91.68	315	eP	48	51.30	1.2
	1.4s	91.50nm			6.0mb	
RJF	92.07	315	eP	48	52.90	1.0
	1.2s	107.10nm			6.2mb	
Z	20s	15.00um			6.4Msz	
LSF	92.08	316	eP	48	52.30	0.4
	1.2s	69.90nm			6.0mb	
LPO	92.30	314	eP	48	53.90	1.0
	1.0s	68.00nm			6.0mb	
ADK	92.38	38	P	48	54.00	0.9
	1.4s	318.18nm			6.6mb	
LFF	92.62	315	eP	48	55.50	1.1
	1.2s	107.10nm			6.2mb	
EPF	92.89	313	eP	48	56.20	0.4
	1.1s	17.10nm			5.4mb	
LDF	93.22	318	eP	48	57.30	0.2
	1.0s	52.00nm			5.9mb	
MFF	93.24	316	eP	48	57.60	0.4
	1.2s	65.45nm			5.9mb	
FLN	93.45	319	eP	48	58.20	0.0
	1.0s	48.00nm			5.9mb	
Z	20s	17.50um			6.5Msz	
GRR	93.71	318	eP	48	59.80	0.5
	1.0s	40.00nm			5.8mb	
LPF	93.84	318	eP	49	00.50	0.6
	1.2s	65.45nm			5.9mb	
ECHE	93.88	309	eP	49	04.00	3.6X
ETOR	94.70	311	eP	49	05.60	1.4
EKA	94.89	325	P	49	06.00	1.4
	0.9s	19.40nm			5.5mb	
ECRI	94.99	312	eP	49	07.00	1.5
TAF	95.08	305	iP	49	12.00	5.9X
			i	52	54.00	
TOL	96.25	310	eP	49	29.00	17.8X
			iPP	53	04.00	
			iPPP	55	26.00	
			eSKS	59	48.00	
			iS	00	30.00	
			iSS	07	08.00	
			iSSS	09	40.00	
GUD	96.30	310	eP	49	13.00	1.4
DAG	96.88	347	iPc	49	12.00	-1.4
	1.4s	93.02nm			6.1mb	
Z	22s	25.19um			6.7Msz	
N	21s	7.17um				
E	23s	28.79um				
KIC	97.19	276	Pd	49	16.28	0.4
	0.9s	32.00nm			5.8mb	
IFR	97.37	303	iP	49	12.00	-4.6X
			i	53	14.00	
LIC	97.47	276	Pd	49	17.38	0.2
	1.1s	44.50nm			5.9mb	
Z	20s	11.00um			6.3Msz	
TIC	97.47	276	P	49	17.74	0.5
	1.0s	27.50nm			5.8mb	
LKO	98.09	279	PKP	49	19.48	-0.5
SDN	101.58	34	Pdiff	49	40.00	5.2X
Z	20s	12.50um			6.4Msz	
IMA	101.61	22	Pdiff	49	33.60	-1.3
	2.0s	71.66nm			5.9mb	
TTA	101.74	26	Pdiff	49	35.00	-0.5
MBC	103.94	7	ePdiff	49	45.00	0.1
	1.7s	52.00nm			6.1mb	
COL	104.33	22	ePdiff	49	51.66	4.8X
			eSKS	00	21.78	
			i	01	43.72	
			i	04	12.70	
PMR	105.22	26	Pdiff	49	52.00	1.1
Z	18s	25.71um			6.8Msz	
INK	107.14	16	ePdiff	50	03.00	3.7X
HON	109.18	68	Pdiff	50	20.00	10.5X
Z	20s	8.24um			6.3Msz	
SIT	113.61	26	PKP	54	30.00	8.9X
Z	18s	21.43um			6.8Msz	
YKA	116.61	14	ePKP	54	42.00	15.3X
	0.8s	3.00nm				
FRB	117.00	351	ePKP	54	34.00	6.6X
EDM	124.92	18	ePKP	54	42.50	-0.5
PNT	125.76	25	ePKP	54	45.00	0.2
	1.0s	29.00nm				
FFC	126.38	10	iPKPc	54	46.10	0.3
	0.9s	26.00nm				
SES	128.09	19	ePKP	54	49.00	-0.2
	2.0s	360.00nm				
FHC	129.56	36	ePKP	54	48.50	-3.8X
LBFM	130.39	34	PKP	54	55.50	1.4
JFO	130.50	239	ePKP	54	54.50	-0.2
			e	55	27.20	
			e	55	51.10	
WDC	130.53	35	ePKP	54	55.70	1.6
MIN	131.22	34	ePKP	54	55.90	0.3
LRM	131.47	23	ePKP	54	56.50	0.4
ORV	131.81	35	ePKP	54	57.00	0.4
SOB1	131.96	256	ePKP	54	58.80	1.2
			e	55	18.70	
			e	58	19.60	
BRK	132.46	37	ePKP	55	01.00	3.2X
VAO	133.02	235	ePKP	54	57.40	-2.0
MHC	133.18	38	ePKP	55	01.30	1.9
CMB	133.47	36	ePKP	55	00.50	0.7
			e	57	42.80	
			e	58	30.00	
PRI	134.55	38	ePKP	55	04.70	2.7
FRI	134.57	37	ePKP	55	02.50	0.6
TNP	135.24	33	ePKP	55	14.00	10.6X
Z	19s	1424.24um			8.7MszX	
SYP	136.02	39	ePKP	55	12.00	7.1X
ISA	136.20	37	ePKP	55	06.00	0.9
RSNY	136.25	346	PKP	55	10.00	5.2X
Z	22s	10.58um			6.5Msz	
CLC	136.62	36	ePKP	55	06.00	0.1
BAO	136.87	244	ePKP	55	08.50	1.5
PPD	137.02	234	ePKP	55	04.20	-2.8
			e	55	07.30	
SBB	137.25	37	ePKP	55	09.00	1.9
MWC	137.42	38	ePKP	55	08.00	0.4
GSC	137.44	36	ePKP	55	08.00	0.5
RVR	137.99	38	ePKP	55	09.00	0.5
TPC	138.72	37	ePKP	55	10.00	0.1
PLM	138.74	38	ePKP	55	15.00	4.9X
TXNY	139.32	344	iPKP	55	10.40	-0.2
GOL	139.39	21	PKP	55	04.20	-7.0X
Z	22s	14.71um			6.7Msz	
GLD	139.40	21	PKP	55	04.20	-6.9X
Z	18s	16.10um			6.8Msz	
PNJ	139.57	344	PKP	55	08.60	-2.4
			PP	58	05.10	
			PKS	58	24.30	
PNJ	139.57	344	ePKP	55	12.60	1.6
GMTN	139.60	344	iPKP	55	12.60	1.5
GLA	140.18	37	ePKP	55	14.00	1.5
MDZ	140.79	206	ePKP	55	09.40	-4.2X
LNV	140.87	202	ePKP	55	12.50	-1.1
PEL	141.32	203	ePKP	55	09.00	-5.6X
RTLL	141.94	207	ePKPc	55	09.20	-6.5X
RTCB	141.95	207	ePKP	55	10.00	-5.8X
CBN	142.94	346	ePKP	55	15.00	-2.1
			e	58	25.00	
			e	58	46.00	
ANMO	143.07	26	PKP	55	14.30	-3.4X
Z	22s	13.33um			6.7Msz	
FVM	144.31	4	PKP	55	16.40	-3.1X
BLA	144.52	350	ePKP	55	17.80	-2.1
	2.0s	264.71nm				
Z	20s	17.02um			6.8Msz	
ELC	145.07	2	PKP	55	19.00	-1.8
BIX	145.57	12	iPKP	55	25.50	3.8X
TUL	145.65	12	iPKP-	55	22.00	0.2
	1.2s	200.00nm				
Z	19s	33.24um			7.1Msz	
			LR	48	00.00	
SIO	145.70	12	iPKP	55	22.50	0.6
			e	55	31.10	
MEO	146.06	16	iPKPd	55	22.20	-0.4
RSCP	146.72	357	PKP	55	22.70	-0.9
Z	20s	19.21um			6.9Msz	
LHS	147.25	349	PKP	55	25.20	0.8
PRM	147.89	352	PKP	55	26.20	0.7
SIV	148.02	235	PKPc	55	26.40	0.2
ANT	149.21	212	e(PKP)	55	20.00	-7.9X
BPA	150.59	302	ePKP	55	34.00	3.9X
BBL	150.92	299	ePKP	55	36.00	5.4X
FDF	150.95	297	ePKP	55	37.00	6.3X
	0.8s	1.50nm				
CCH	151.14	227	PKP	55	34.20	2.9X
			i	55	40.00	
NEV	151.15	303	ePKP	55	33.00	2.1
SLB	151.19	295	ePKP	55	37.17	6.1X
SKI	151.20	303	ePKP	55	36.99	6.0X
SVV	151.53	294	ePKP	55	38.52	6.9X
SVB	151.58	294	ePKP	55	37.52	5.9X
CNCB	152.83	225	PKP	55	35.80	1.7
LPB	153.10	225	PKP	55	35.00	0.7
			LR	46	34.00	
ZOBO	153.29	226	PKPc	55	35.00	0.2
	1.0s	77.50nm				
PORP	153.98	309	ePKP	55	35.00	0.0
ARE	155.46	220	ePKP	55	36.00	-1.3
LLAV	157.64	292	ePKP	55	41.00	1.0
GUAC	158.17	292	ePKP	55	41.00	0.3
CEOS	159.53	290	ePKP	55	42.00	-0.1
BMG	164.60	289	iPKPc	55	48.00	0.8
FUO	165.65	283	ePKP	55	50.00	1.6
BOG	166.13	280	ePKP	55	50.00	1.2
UPA	169.41	310	ePKPd-	55	51.80	1.3
Z	22s	23.33um				
PSO	169.53	265	ePKP	55	54.00	2.8
S.D. = 1.0 on 432 of 496 obs.						

• OCT 15, 1990 03h 37m 27.73± 0.98s
38.496 N ± 7.1km 23.779 E ±14.5km
DEPTH = 5.0km (geophysicist)
GREECE (364)
MD 3.1 (ATH).

ATH	0.53	185	iPgd	37	36.60	-1.6
NEO	0.92	332	iPbd	37	46.20	0.4
PLG	1.89	352	ePn	37	59.90	-1.1
VLI	1.90	201	ePb	38	01.20	0.2
ITM	1.97	229	ePb	38	03.20	1.1
APE	1.99	135	ePn	38	03.50	1.1
KZN	2.39	320	ePg	38	14.00	5.8X
OHR	3.48	320	e(Pn)	38	26.80	3.2X
S.D. = 1.5 on 6 of 8 obs.						

OCT 15, 1990 03h 40m 54.43± 0.37s
44.052 N ± 3.0km 7.247 E ± 3.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.4 (LDG), 2.0 (GEN).

TOUF	0.04	179	Pg	40	55.63	-1.1

15d 03h

AUTN	0.14	113	Pg	40 57.43	-0.5
			Sg	41 00.51	
MVIF	0.17	204	Pg	40 57.84	-0.5
			Sg	41 01.16	
AURF	0.17	161	Pg	40 58.10	-0.3
			Sg	41 01.74	
STV	0.20	16	P	40 58.15	-0.7
			S	41 00.92	
ENR	0.21	35	P	40 58.69	-0.5
			S	41 02.23	
SBF	0.23	144	Pg	40 59.60	0.1
			Sg	41 03.40	
PZZ	0.47	347	P	41 03.48	-0.4
			S	41 09.24	
IMI	0.48	107	P	41 05.33	1.0
			S	41 11.89	
ROB	0.51	61	P	41 04.51	-0.3
			S	41 10.65	
FRF	0.66	222	Pg	41 07.20	-0.3
			Sg	41 15.60	
FIN	0.71	77	P	41 08.30	-0.1
			S	41 17.56	
LRG	0.88	227	Pg	41 12.20	0.9
			Sg	41 23.20	
LMR	0.90	217	Pg	41 12.30	0.7
			Sg	41 24.00	
PCP	1.05	62	P	41 15.17	0.8
LSD	1.41	357	P	41 21.09	0.8
LPL	1.51	346	Pg	41 22.10	0.4

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

? OCT 15, 1990 03h 48m 28.33± 1.33s
42.847 N ± 8.4km 13.356 E ±14.0km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.56	294	P	48 39.50	-0.2
			eSg	48 48.80	
MNS	0.68	227	P	48 42.00	0.1
			eSg	48 51.20	
ARV	0.72	335	P	48 42.60	0.1
			eSg	48 54.40	
SDI	1.19	163	P	48 50.50	-0.1

S.D. = 0.3 on 4 of 4 obs.

& OCT 15, 1990 04h 40m 59.04s
58.306 N 143.015 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>.

MID	2.06	305	eP	41 28.21	-5.9
YKU	2.11	52	eP	41 30.61	-4.2
YAH	2.16	17	iP	41 30.06	-5.8
			eS	41 53.16	
PNL	2.32	52	eP	41 32.82	-5.1
BCPM	2.40	45	eP	41 34.04	-5.0
HON	2.44	60	iP	41 34.22	-5.3
			eS	42 02.41	
TGL	2.46	2	eP	41 35.08	-4.8
			eS	42 03.63	
BALM	2.76	7	iP	41 39.42	-4.8
			eS	42 10.85	
KNIM	3.17	312	eP	41 43.23	-6.7
			eS	42 18.78	
GLB	3.17	353	eP	41 44.60	-5.4
VZW	3.29	328	eP	41 45.66	-6.1
VLZ	3.29	331	eP	41 45.35	-6.3
GLI	3.31	323	iP	41 45.52	-6.4
KLU	3.52	337	eP	41 49.08	-5.8
SEW	3.77	301	eP	41 51.15	-7.2
TOA	4.12	339	eP	41 58.35	-5.1
KNK	4.15	321	eP	41 57.46	-6.4
SLKM	4.29	304	eP	41 59.16	-6.7
SML	4.41	325	eP	42 01.30	-6.2
PMS	4.43	314	eP	42 01.44	-6.4
CNPM	4.43	289	eP	42 01.50	-6.4
PLRM	4.51	320	eP	42 02.97	-5.9
GHO	4.57	322	eP	42 04.10	-5.7
RDT	5.30	299	eP	42 13.66	-6.6
CUT	5.46	322	eP	42 16.09	-6.3

25 obs. associated

OCT 15, 1990 06h 30m 20.39± 0.17s
15.311 N ± 3.9km 46.350 W ± 2.3km
DEPTH = 10.0km (geophysicist)
5.2mb (60 obs.) 4.9Msz (11 obs.)

NORTH ATLANTIC RIDGE (403)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 32C
Centroid Location:
Origin Time 06:30:28.8 0.7
Lat 15.42N 0.07 Lon 46.21W 0.06
Dep 15.0 FIX Half-durotion 1.9
Moment Tensor; Scale 10**17 Nm
Mrr=-0.22 0.08 Mtt=-0.33 0.12
Mff= 0.56 0.12 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf=-1.46 0.08
Princippl Axes:

	Val=	Plg=	Azm=
T	1.64	0	233
N	-0.22	90	180
P	-1.42	0	143

Best Double Couple:Mo=1.5*10**17
NP1:Strike=278 Dip=90 Slip=-180
NP2: 8 90 0

SLB	14.30	266	eP	33 42.38	-2.7
SOA	14.47	264	eP	33 46.31	-1.0
SVV	14.54	264	eP	33 46.94	-1.3
BOT	14.58	255	eP	33 46.92	-1.8
SVB	14.58	264	eP	33 46.64	-2.2
TPR	14.63	255	eP	33 47.55	-1.8
PIG	14.70	255	eP	33 49.55	-0.7
BPA	15.00	279	eP	33 50.00	-4.2X
			e	36 13.00	
			eTT	48 10.00	
TBH	15.12	253	eP	33 55.70	-0.2
GRW	15.20	260	eP	33 55.29	-1.6
TRN	15.38	254	eP	33 58.03	-1.2
TPP	15.54	253	eP	33 59.64	-1.6
NEV	15.68	279	eP	34 04.00	0.8
SKI	15.86	280	eP	34 00.61	-4.8X
CUM	18.02	257	iP	34 35.00	2.3
PORP	19.62	281	eP	34 51.00	-1.2
LLAV	20.51	259	iPc	35 01.00	-0.6
OLLA	20.63	258	iPd	35 02.00	-0.9
GUAC	21.02	258	eP	35 07.00	0.0
CEOS	22.37	256	iPc	35 20.00	-0.4
TOV	23.52	259	eP	35 32.00	0.3
SOB1	24.95	167	eP	35 47.60	2.1
			e	35 55.00	
BAO	30.79	183	eP	36 42.00	3.3X
SIV	34.33	206	iPc	37 10.20	0.7
			i	38 13.80	
TBR	35.29	322	P	37 18.00	0.5
TXNY	35.29	322	iP	37 18.40	0.9
CBN	35.60	316	eP	37 20.00	-0.2
NA2	35.81	315	P	37 22.00	0.1
CBM	36.37	335	P	37 28.20	1.7
LHS	36.37	308	P	37 26.80	0.1
JFO	36.93	175	eP	37 33.50	2.0
			e	37 40.80	
BLA	37.23	312	eP	37 33.30	-0.7
	1.0s	160.00nm		5.7mb	
	Z 20s	1.65um		4.8Msz	
PRM	37.42	307	P	37 36.30	0.7
PPD	37.43	188	eP	37 37.00	1.3
			e	37 43.90	
			e	38 17.20	
RSNY	37.66	326	P	37 37.80	0.4
	1.0s	25.31nm		4.9mb	
ZOBO	38.04	215	Pc	37 41.80	0.3
	1.0s	70.00nm		5.4mb	
	Z 22s	4.98um		5.3Msz	
			S	43 36.00	
			LR	48 34.00	
VAO	38.08	181	eP	37 39.20	-2.0
LPB	38.24	215	P	37 45.00	2.0
	Z 24s	3.88um		5.1MszX	
			LR	48 34.00	
CNCB	38.40	215	P	37 46.00	1.5
TIO	38.94	60	iP	37 50.00	1.5
TKL	39.07	308	P	37 50.40	1.0
CLE	40.03	318	iP	37 58.50	1.2
ARE	40.16	219	eP	37 55.00	-3.9X
LKO	40.17	93	Pc	37 58.26	-0.5
	1.0s	108.50nm		5.5mb	
RSCP	40.42	307	P	38 01.80	1.2
	0.9s	302.04nm		6.0mb	
TIC	41.41	97	Pc	38 08.34	-0.6
	1.1s	60.50nm		5.3mb	
LIC	41.52	98	Pc	38 09.36	-0.4
	1.0s	53.00nm		5.2mb	
	Z 20s	0.38um		4.3Msz	
KIC	41.76	98	Pc	38 11.28	-0.5
	0.9s	56.50nm		5.3mb	
PWLA	42.16	306	P	38 15.60	0.8
ELC	43.76	308	P	38 27.90	0.1
TOL	44.21	48	eP	38 33.00	1.5
FVM	44.88	309	P	38 37.10	0.2
EPF	48.41	46	eP	39 05.90	1.1
	1.2s	65.45nm		5.6mb	
TUL	48.50	305	eP	39 05.40	-0.1
	1.3s	94.90nm		5.7mb	
	Z 22s	1.69um		5.0Msz	
			LR	52 00.00	
BIX	48.56	305	iP	39 06.50	0.6
SIO	48.88	304	eP	39 08.40	0.0
LFF	49.36	43	eP	39 12.30	0.4
	1.2s	53.55nm		5.4mb	
MFF	49.42	41	eP	39 12.80	0.4
	0.9s	32.75nm		5.3mb	
LPF	49.46	39	eP	39 12.70	0.1
	1.0s	38.00nm		5.4mb	
LPO	49.56	44	eP	39 13.80	0.3
	1.0s	28.00nm		5.2mb	
GRR	49.72	39	eP	39 14.50	-0.2
	1.2s	41.65nm		5.3mb	
RJF	50.00	43	eP	39 16.60	-0.3
	1.0s	16.00nm		4.9mb	
	Z 20s	1.25um		4.9Msz	
FLN	50.11	38	eP	39 16.30	-1.3
	1.0s	24.00nm		5.1mb	
	Z 20s	1.25um		4.9Msz	
CAF	50.23	44	eP	39 18.70	0.0
	1.2s	50.60nm		5.4mb	
LDF	50.25	39	eP	39 18.50	-0.2
	0.8s	13.45nm		5.0mb	
MEO	50.55	303	iPd	39 22.20	1.0
FRB	50.77	347	eP	39 26.00	3.6X
TCF	50.81	42	eP	39 23.20	0.2
	1.1s	31.75nm		5.2mb	
MAF	51.01	42	eP	39 25.10	0.5
	1.0s	16.00nm		4.9mb	
BGF	51.31	42	eP	39 26.90	0.0
	0.8s	20.15nm		5.1mb	
AVF	51.72	42	eP	39 29.80	-0.1
	0.9s	24.55nm		5.1mb	
SSF	51.92	42	eP	39 31.00	-0.4
	1.0s	22.00nm		5.0mb	
SMF	51.99	42	eP	39 31.80	-0.2
	1.0s	26.00nm		5.1mb	
LBF	52.19	42	eP	39 32.90	-0.7
	0.8s	14.80nm		5.0mb	
LOR	52.21	41	eP	39 33.10	-0.6
	1.0s	24.00nm		5.1mb	
	Z 20s	1.00um		4.9Msz	
MDZ	52.53	204	eP	39 36.80	0.6
LRG	52.73	47	eP	39 38.20	0.6
	1.1s	19.55nm		4.9mb	
LMR	52.80	47	eP	39 38.00	-0.1
	1.2s	29.75nm		5.1mb	
FRF	52.96	47	eP	39 39.40	0.1
	1.2s	32.75nm		5.1mb	
BNI	53.38	45	Pc	39 43.30	0.8
LPL	53.55	44	eP	39 44.60	0.7
	1.2s	19.35nm		5.0mb	
LPG	53.56	44	eP	39 44.80	0.8
	1.0s	14.00nm		4.9mb	
SBF	53.59	46	eP	39 43.80	-0.2
	1.2s	89.25nm		5.6mb	
DOI	53.62	46	P	39 45.00	0.7
DOU	53.68	38	Pd	39 44.20	-0.2
			ec	40 00.30	
HAU	54.05	41	eP	39 46.50	-0.7
	1.0s	20.00nm		5.1mb	
	Z 20s	1.25um		5.0Msz	
BSF	54.28	42	eP	39 48.20	-0.8
	1.0s	24.00nm		5.2mb	
MEM	54.71	38	P	39 52.70	0.7
ENN	54.71	38	eP	39 52.00	0.0
	1.0s	16.00nm		5.0mb	
CDF	54.76	41	eP	39 51.60	-1.0
	0.9s	14.75nm		5.0mb	
MME	55.96	47	P	40 01.10	-0.4
GOL	56.62	308	P	40 06.20	-0.2
	0.8s	16.37nm		5.1mb	
SOTA	56.99	43	iPc	40 07.80	-0.9
	1.1s	51.20nm		5.5mb	
		i		40 26.60	

ANMO	57.00	302	P	40	09.60	0.5	
	1.2s	21.48nm			5.1mb		
MNS	57.03	49	P	39	49.70	-19.3X	
WATA	57.26	43	iPc	40	09.70	-0.9	
	1.1s	37.20nm			5.3mb		
		i		40	19.10		
GRF	57.62	40	ePc	40	12.50	-0.5	
FVI	57.90	44	P	40	14.10	-0.8	
FFC	58.01	326	eP	40	14.50	-1.1	
	1.3s	80.00nm			5.6mb		
MOX	58.12	39	eP	40	16.00	-0.4	
	1.5s	31.00nm			5.1mb		
HOF	58.19	40	eP	40	16.50	-0.4	
	1.0s	36.00nm			5.4mb		
BHG	58.20	43	iPd	40	16.50	-0.6	
TRI	58.39	46	iPc	40	17.50	-0.9	
WET	58.53	41	iPd	40	18.80	-0.6	
VOY	58.54	45	iPd	40	19.00	-0.6	
CEY	58.85	46	eP	40	21.00	-0.7	
KHC	58.97	42	iPc	40	22.00	-0.5	
	1.2s	16.00nm			5.0mb		
N	17s	0.80um					
E	16s	0.40um					
LJU	58.98	45	ePd	40	22.00	-0.5	
CLL	59.14	39	iPc	40	22.50	-1.0	
	1.2s	38.00nm			5.4mb		
VBY	59.39	46	ePd	40	25.50	0.2	
BRG	59.60	40	eP	40	26.40	-0.4	
	1.3s	23.00nm			5.1mb		
PRU	59.77	41	P	40	27.50	-0.4	
Z	16s	0.50um			4.7MszX		
N	18s	0.40um					
E	16s	0.50um					
		e		40	30.00		
PTJ	59.94	46	eP	40	28.60	-0.6	
VKA	60.58	43	ePd	40	33.00	-0.5	
SOP	60.63	44	iPc	40	33.40	-0.4	
KSP	61.05	40	iPc	40	36.00	-0.6	
DAU	61.19	308	P	40	38.20	0.0	
NB2	61.24	28	P	40	36.90	-0.9	
	1.2s	14.80nm			5.0mb		
SRO	61.82	44	iP	40	41.50	-0.4	
		i		40	44.00		
HFS	62.07	29	eP	40	42.10	-1.3	
	1.0s	33.90nm			5.5mb		
Z	21s	0.56um			4.7Msz		
		LR		59	07.00		
SES	62.25	319	ePd	40	44.00	-0.8	
	1.1s	328.00nm			6.4mb	X	
		pP		40	50.00	20kmX	
DUG	62.36	308	P	40	46.00	0.1	
	1.0s	75.00nm			5.8mb		
LRM	62.55	314	eP	40	47.10	-0.1	
OHR	62.93	51	eP	40	50.30	0.8	
BEO	62.95	47	eP	40	50.50	1.1	
KRA	63.21	41	ePc	40	50.90	-0.2	
	1.4s	89.00nm			5.8mb		
Z	18s	1.30um			5.1Msz		
		e		40	54.30		
		e		49	40.00		
SPC	63.29	42	eP	40	51.00	-0.9	
SKO	63.46	51	iP	40	52.70	-0.2	
Z	19s	0.84um			4.9Msz		
E	19s	0.91um					
		iS		49	44.00		
		LR		07	54.00		
GLA	63.91	300	P	40	57.60	1.5	
EDM	64.13	322	eP	40	56.50	-0.6	
BCAO	64.63	92	iPc	41	00.30	-0.7	
	0.9s	32.00nm			5.5mb		
TPC	64.90	301	eP	41	03.00	0.5	
BAR	65.48	299	eP	41	07.00	0.8	
GSC	65.48	302	eP	41	07.00	0.7	
PLM	65.60	300	eP	41	08.00	0.8	
TNP	65.75	305	P	41	08.30	0.2	
	0.9s	29.95nm			5.5mb		
PEC	65.83	301	P	41	08.60	0.1	
	1.1s	20.83nm			5.2mb		
NEW	65.95	316	P	41	08.80	-0.2	
RVR	66.00	301	eP	41	10.00	0.5	
CLC	66.11	303	eP	41	11.00	0.8	
SBB	66.34	301	eP	41	12.00	0.2	
YKA	66.52	332	eP	41	11.10	-1.2	
	0.9s	11.40nm			5.1mb		
MWC	66.56	301	eP	41	14.00	0.7	
PAS	66.65	301	eP	41	15.00	1.3	
ISA	66.83	303	eP	41	16.00	1.1	
VRI	67.42	46	eP	41	17.50	-0.8	
NUR	67.45	30	eP	41	18.00	-0.2	
ABL	67.48	302	P	41	20.10	0.9	
PNT	67.65	317	ePc	41	20.00	0.2	
	0.9s	103.00nm			6.0mb		
FRI	67.76	304	eP	41	20.30	-0.3	
SYP	68.12	301	eP	41	24.00	0.8	
CMB	68.25	305	eP	41	24.30	0.5	
SUF	68.49	28	eP	41	24.00	-0.7	
PRI	68.58	303	eP	41	25.00	-0.9	
LLA	68.77	304	eP	41	26.50	-0.5	
ORV	69.05	307	eP	41	29.50	0.9	
LON	69.08	315	P	41	28.60	-0.1	
MIN	69.09	308	eP	41	29.00	0.0	
PRS	69.13	303	eP	41	28.00	-1.2	
LBFM	69.26	309	P	41	30.10	-0.1	
MHC	69.28	304	eP	41	31.50	1.2	
SOD	69.44	23	eP	41	31.00	0.6	
WDC	69.79	308	eP	41	31.80	-1.3	
KEV	69.99	21	iP	41	33.30	-0.5	
ALT	70.09	54	eP	41	34.00	-1.1	
PGC	70.17	317	eP	41	35.00	-0.2	
FHC	70.87	308	eP	41	42.00	2.2	
MBC	71.20	346	eP	41	42.00	0.9	
	1.1s	15.00nm			5.0mb		
INK	74.85	337	ePd	42	02.40	-0.2	
	0.9s	41.00nm			5.5mb		
DSI	75.22	61	eP	42	06.00	0.6	
FBA	81.04	335	eP	42	37.90	1.2	
	1.0s	42.50nm			5.4mb		
PMR	82.63	332	eP	42	45.80	0.8	
IMA	82.97	337	eP	42	48.50	1.6	
	0.8s	7.30nm			4.9mb		
KDC	85.55	329	eP	43	01.30	1.5	
MAIO	93.33	51	eP	43	39.00	1.7	
SHL	122.51	46	ePKP	49	17.50	-1.0	
	S.D. = 0.9	on 170 of 176 obs.					

• OCT 15, 1990 07h 00m 55.64± 1.34s
1.095 N ±11.1km 121.105 E ±13.9km
DEPTH = 167.6 ± 16.4 km
MINAHASSA PENINSULA (265)

MNI	3.75	85	ePc	01	53.50	-0.3	
			eS	02	25.00		
MKS	6.48	195	e(P)	02	30.50	0.8	
WB5	24.57	149	eP	06	00.50	-1.2	
ASPA	27.58	154	eP	06	29.30	0.2	
CHG	27.97	310	eP	06	33.10	0.4	
CHTO	27.97	310	P	06	31.30	-1.4	
SHL	37.22	313	eP	07	52.00	-0.8	
BJI	39.02	354	eP	08	09.00	1.6	
Z	24s	0.64um			4.4MszX		
CNCB	162.00	151	ePKP	20	40.00	0.8	
LPB	162.18	150	ePKP	20	44.00	4.8X	
CCH	162.31	157	(PKP)	20	45.00	5.8X	
ZOBO	162.39	149	PKP	20	22.00	-17.6X	
			e	20	46.00		
	S.D. = 1.3	on 9 of 12 obs.					

OCT 15, 1990 08h 04m 00.76± 0.88s
41.775 N ±10.5km 19.849 E ± 7.3km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 3.0 (SKO), 2.7 (TTG).

ULC	0.49	293	ePg	04	10.80	0.2	
			eSg	04	20.00		
TTG	0.79	326	ePg	04	15.40	-0.7	
			eSn	04	28.50		
PVY	0.83	6	ePg	04	15.60	-1.2	
			eSg	04	28.50		
BDV	0.92	304	ePg	04	18.40	0.1	
			eSg	04	34.50		
OHR	0.97	133	ePg	04	18.50	-0.8	
			iSg	04	32.00		
SKO	1.20	80	iPg	04	22.50	-0.7	
			iSg	04	36.00		
			LQ	04	39.70		
HCY	1.21	304	ePg	04	23.00	-0.3	
			eSg	04	43.50		
NKY	1.21	329	ePg	04	22.80	-0.6	
			eSg	04	44.00		
BRY	1.48	320	ePn	04	27.50	-0.1	
			eSn	04	51.00		
PLE	1.59	348	ePn	04	31.80	2.7	
			eSn	04	53.50		
VAY	2.09	102	ePn	04	37.70	1.4	
	S.D. = 1.3	on 11 of 11 obs.					

? OCT 15, 1990 09h 07m 19.50± 4.91s
5.847 S ±42.1km 129.206 E ±57.2km
DEPTH = 167.7 ± 46.9 km
BANDA SEA (280)

MTN	7.21	165	iPd	09	04.10	0.7	
			eS	10	11.00		
KNA	9.85	182	eP	09	38.00	-0.3	
			eS	11	13.00		
WB5	14.82	161	eP	10	41.00	-1.2	
			e	10	45.30		
			eS	13	08.20		
ASPA	18.28	166	iPd	11	24.10	0.7	
	0.4s	34.40nm			5.1mb		
			eS	14	34.20		
CHTO	38.60	310	(P)	14	28.00	0.0	
	S.D. = 1.6	on 5 of 5 obs.					

OCT 15, 1990 09h 38m 16.83± 0.41s
85.119 N ± 8.3km 94.193 E ± 7.6km
DEPTH = 10.0km (geophysicist)
4.6mb (7 obs.) 4.3Msz (1 obs.)
NORTH OF SEVERNAYA ZEMLYA (651)

DAG	15.88	309	iPd	42	01.00	-0.4	
	1.5s	46.30nm			4.4mb		
MBC	18.14	25	ePc	42	31.50	1.7	
	1.0s	24.00nm			4.3mb		
SOD	21.35	259	iP	43	05.30	-0.4	
INK	25.38	40	eP	43	45.00	0.0	
	1.0s	34.00nm			5.0mb		
SUF	25.97	257	eP	43	52.00	1.4	
FBA	27.87	54	eP	44	09.10	1.1	
NB2	28.90	272	P	44	17.70	0.4	
	0.8s	3.20nm			4.2mb		
YKA	32.05	25	eP	44	44.00	-1.1	
	1.2s	6.50nm			4.4mb		
KSP	38.57	264	eP	45	41.00	0.2	
KRA	39.04	260	iPc	45	45.60	0.9	
			e	45	53.90		
ZST	41.13	263	eP	46	11.50	9.6X	
EDM	41.37	25	eP	46	04.50	0.5	
PNT	45.03	31	eP	46	36.00	2.3	
BJI	45.62	156	eP	46	39.00	0.6	
LRM	48.80	25	eP	47	03.50	-0.2	
TNP	56.34	30	P	48	00.00	0.0	
CLC	58.58	30	eP	48	16.00	0.4	
ISA	58.70	31	eP	48	16.00	-0.4	
TUL	59.12	9	eP	48	18.00	-1.3	
	1.1s	14.10nm			5.0mb		
Z	18s	0.21um			4.3Msz		
		e		48	26.40		
		LR		10	00.00		
GSC	59.13	29	eP	48	19.00	-0.5	
SIO	59.27	10	eP	48	18.90	-1.4	
SHL	59.67	182	eP	48	23.50	0.1	
SBB	59.70	30	eP	48	23.00	-0.4	
MWC	60.15	31	eP	48	27.00	0.4	
PAS	60.22	31	eP	48	27.00	0.1	
TPC	60.35	29	eP	48	28.00	0.2	
RVR	60.41	30	eP	48	27.00	-1.1	
PLM	61.07	30	eP	48	32.00	-0.9	
GLA	61.45	28	eP	48	42.00	6.7X	
BAR	61.75	29	eP	48	37.00	-0.3	
GBA	71.78	197	P	49	39.00	-1.9	
BCAO	84.40	256	iPd	50	45.00	-5.2X	
	0.5s	4.00nm			4.9mb		
	S.D. = 1.0	on 29 of 32 obs.					

? OCT 15, 1990 11h 10m 11.46± 0.94s
39.153 N ± 8.1km 27.615 E ± 9.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZM	0.80	200	ePg	10	27.00	-0.1	
			eSg	10	38.50		
DST	0.91	60	ePg	10	29.00	0.2	
EZN	1.20	304	ePn	10	34.00	0.1	
BNT	1.22	11	ePn	10	34.00	-0.2	
	S.D. = 0.3	on 4 of 4 obs.					

OCT 15, 1990 11h 46m 38.98± 0.46s
7.202 S ± 4.2km 122.996 E ± 6.6km

15d 11h

DEPTH = 544.8 ± 7.8 km
5.0mb (16 obs.)
FLORES SEA (279)

KUPT	2.99	168	ePd	47	44.00	-10.1X
			eS	48	37.00	
MKS	4.02	299	iPd	48	02.80	1.5
AAI	6.24	56	ePc	48	20.10	-0.3
			eS	49	33.00	
MNI	8.78	12	ePc	48	45.50	0.2
TRT	10.29	267	iPd	48	59.50	-1.1
			eS	49	53.20	
MBL	14.21	192	iPc	49	40.90	0.5
KKM	14.80	333	ePc	49	45.90	-0.5
	0.4s	87.80nm			5.6mb	
WB5	16.75	140	iPd	50	06.10	0.7
			eS	52	55.00	
NANU	16.88	204	iPc	50	08.00	1.4
WARB	19.19	170	iPc	50	30.00	1.1
ASPA	19.43	149	iPc	50	32.10	0.9
	0.6s	33.10nm			5.1mb	
			iS	53	37.20	
MEKA	19.77	192	iPc	50	34.20	0.0
QIS	20.86	131	iPd	50	44.30	0.0
			e	54	00.00	
			e	57	32.50	
			e	01	55.00	
MRWA	22.87	196	iPc	51	02.00	-0.6
PMG	24.00	97	eP	51	11.50	-1.4
	0.6s	40.00nm			5.2mb	
FORR	24.01	169	iPc	51	11.40	-1.3
BAL	24.02	193	iPc	51	12.10	-0.8
	0.4s	49.00nm			5.5mb	
KLB	24.75	191	iPc	51	18.40	-1.0
	0.4s	57.00nm			5.5mb	
MUN	25.45	194	eP	51	24.00	-1.6
CTA	25.93	122	iPd	51	29.80	-0.2
	1.0s	38.00nm			5.0mb	
NWAO	26.15	191	iPc	51	31.10	-0.6
	0.4s	42.00nm			5.4mb	
RKG	27.30	191	iPc	51	46.70	4.9X
	0.4s	65.00nm			5.6mb	
STK	30.06	147	iPd	52	06.40	0.7
	0.8s	29.00nm			4.9mb	
			iS	56	25.20	
BRS	34.64	129	iPc	52	45.30	0.9
			i	52	48.00	
			i	58	14.00	
CHG	35.08	318	eP	52	48.50	0.4
BWA	35.82	143	eP	52	58.00	4.0X
CAN	36.78	143	eP	53	05.10	3.2X
			i	55	11.00	
GYA	37.02	335	iPc	53	04.40	0.4
SSE	38.12	357	Pc	53	12.50	-0.3
	1.0s	20.00nm			4.7mb	
WHN	38.43	348	Pd	53	16.70	1.3
NJ2	39.23	354	Pc	53	22.00	0.2
CD2	42.14	335	P	53	44.60	-0.6
DZM	44.38	114	iPd	54	03.60	0.6
TIY	45.76	348	eP	54	12.20	-1.1
MAT	45.79	17	eP	54	13.00	-0.6
	0.8s	5.97nm			4.2mb	
LZH	46.67	339	iPc	54	21.00	0.5
	1.0s	38.00nm			4.9mb	
BJI	47.43	353	eP	54	24.50	-1.4
	1.0s	10.00nm			4.3mb	
			PcP	55	46.50	
MDJ	51.92	6	eP	54	58.50	-0.6
KHZ	56.59	137	P	55	32.10	0.0
	0.4s	6.00nm			4.4mb	
TCW	56.63	135	P	55	32.00	-0.4
MRW	56.94	135	P	55	33.80	-0.7
CAW	57.15	135	eP	55	35.20	-0.7
WDW	57.16	135	P	55	35.00	-0.9
MNG	57.27	134	P	55	36.10	-0.7
	0.4s	11.00nm			4.5mb	
MTW	57.47	135	eP	55	37.40	-0.7
BLW	57.53	135	eP	55	39.30	0.8
PGZ	57.83	134	eP	55	40.50	-0.1
	0.3s	14.00nm			4.8mb	
NOZ	58.48	131	P	55	45.90	0.9
TNP	117.74	51	(PKP)	04	26.00	0.6
PPD	150.42	191	(PKP)	05	31.00	6.1X
CNCB	153.79	156	ePKP	05	33.00	2.5
			i	05	41.00	
ZOBO	154.21	155	ePKP	05	33.00	1.9
			e	05	42.00	

SIV 156.61 170 PKP 05 49.00 15.4X
S.D. = 1.0 on 47 of 53 obs.

• OCT 15, 1990 11h 54m 02.70± 2.83s
38.959 N ±23.5km 20.538 E ±15.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.2 (ATH). ML 3.0 (THE).

IGT	0.59	344	ePd	54	12.40	-2.3
			iS	54	21.56	
VLS	0.78	177	ePn	54	26.60	8.7X
KEK	0.95	323	ePb	54	21.80	1.1
EVR	0.99	92	ePb	54	20.60	-1.0
AGG	1.40	87	iPc	54	28.28	0.0
			eS	54	48.56	
KZN	1.65	35	ePg	54	31.50	-0.4
LIT	1.89	52	ePc	54	36.44	1.1
			eS	55	02.24	
FNA	1.93	19	ePd	54	36.72	0.7
OHR	2.16	5	ePn	54	41.80	2.6X
VAY	2.83	33	ePn	54	49.40	0.7
S.D. = 1.4		on	8 of	10	obs.	

? OCT 15, 1990 14h 53m 55.16±10.25s
32.526 S ±57.9km 71.979 W ±65.1km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.93	119	iPd	54	11.50	-0.6
			iS	54	21.50	
JACH	1.18	98	iPd	54	15.60	0.1
			iS	54	30.00	
LNV	1.50	162	iP	54	20.00	0.0
			iS	54	37.50	
FCH	1.63	120	iPd	54	22.50	0.3
			iS	54	41.10	
PCH	1.64	132	iPc	54	22.50	0.3
			iS	54	43.50	
S.D. = 0.5		on	5 of	5	obs.	

? OCT 15, 1990 16h 14m 15.62± 1.31s
16.039 N ±14.0km 98.320 W ±17.6km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	1.69	299	iP	14	42.64	-0.7
			iS	15	09.91	
III	2.57	335	eP	14	57.63	1.6
			eS	15	32.70	
IIT	2.97	0	eP	15	01.19	-0.5
			(S)	15	46.24	
PPM	3.03	354	eP	14	55.49	-7.3X
			(S)	15	40.09	
IIA	3.11	354	eP	15	02.93	-0.6
			eS	15	47.35	
IIJ	3.91	340	(P)	15	21.56	6.2X
			(S)	16	16.74	
LVVM	4.09	26	(P)	15	03.92	-13.4X
			eS	16	01.88	
LPB	44.00	136	P	22	27.00	4.5X
CNCB	44.28	136	P	22	25.00	0.1
CCH	45.92	135	P	22	51.70	14.0X
S.D. = 1.3		on	5 of	10	obs.	

OCT 15, 1990 19h 06m 52.68± 0.20s
33.640 N ± 4.3km 56.808 E ± 2.7km
DEPTH = 33.0km (normal)
5.0mb (37 obs.)
IRAN (348)
ML 5.2 (MHI). Felt in the Tabas areo and at Ferdows.
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.8.: 15S, 28C
Centroid Location:
Origin Time 19:06:51.6 0.7
Lat 33.56N 0.10 Lon 56.74E 0.08
Dep 15.0 BDY Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr= 4.38 0.32 Mtt=-2.22 0.48
Mff=-2.16 0.35 Mrt= 0.68 1.08
Mrf= 1.71 1.19 Mtf= 3.04 0.32
Principal Axes:

T	Val= 5.10	Plg=68	Azm=305
N	0.19	22	138
P	-5.29	4	46

Best Double Couple:Mo=5.2•10••16
NP1:Strike=114 Dip=45 Slip= 58
NP2: 335 53 118

MHI	3.45	39	iPnd	07	44.80	-0.7
	0.7s	2136.99nm				
			eSn	08	39.00	
BBU	9.22	218	ePn	09	07.60	1.2
BRF	9.27	217	ePn	09	07.40	0.3
QUE	9.28	109	eP	09	07.70	0.3
DHR	9.32	220	eP	09	11.50	3.8X
BJA	9.33	217	iPn	09	08.40	0.5
			eSn	09	32.60	
TAB	9.58	300	eP	09	14.00	2.4
RYD	12.58	228	eP	09	50.00	-2.1
QASM	13.75	240	eP	10	05.00	-2.6
UQSK	14.78	242	ePd	10	20.30	-0.9
AFIF	15.25	235	ePd	10	28.70	1.5
KSH	16.45	64	eP	10	39.00	-3.7X
NDI	18.14	100	iPc	11	05.50	1.8
	0.5s	49.30nm			4.9mb	
			eS	14	32.00	
DSI	18.17	269	eP	11	11.00	7.0X
AYN	18.41	261	ePd	11	08.80	1.9
RMN	19.05	267	eP	11	16.00	1.1
HQL	19.06	263	ePd	11	16.30	1.4
CSS	19.44	280	eP	11	20.00	0.7
KAS	19.81	300	eP	11	25.00	1.7
BBTK	20.21	295	eP	11	28.00	0.4
BOM	20.49	132	eP	11	25.00	-5.5X
			eS	15	13.00	
POO	21.41	130	iPc	11	30.60	-9.3X
BCK	21.65	288	eP	11	43.00	0.8
HLW	21.96	267	eP	11	49.50	4.2X
ALT	22.13	292	iP	11	48.10	1.0
DST	23.33	293	iP	11	59.80	1.0
HYB	25.33	124	eP	12	18.00	-0.2
ISR	25.91	305	ePd	12	26.00	2.7
			e	35	21.50	
VRI	25.99	307	eP	12	25.00	0.9
WMQ	26.02	58	P	12	24.50	0.1
	1.5s	100.00nm			5.2mb	
Z	10s	1.50um			4.8MszX	
N	10s	1.70um				
MLR	26.41	306	ePd	12	29.00	0.9
			e	35	13.50	
CMP	26.97	305	ePc	12	30.00	-3.1X
GBA	27.38	132	Pc	12	37.40	0.5
	1.2s	21.30nm			4.7mb	
VAY	28.10	296	eP	12	42.00	-1.3
SKO	28.99	297	eP	12	50.50	-0.9
N	18s	1.92um				
BZS	29.39	304	eP	12	47.50	-7.4X
LSA	29.41	88	P	12	55.60	-0.2
N	12s	0.70um				
OHR	29.41	295	eP	12	59.00	3.7X
KOD	30.04	136	eP	13	02.20	0.9
SPC	31.16	311	eP	13	19.30	8.6X
			e	13	34.10	
SHL	31.43	95	iP	13	11.70	-1.6
KRA	31.60	312	eP	13	13.80	-0.6
			e	13	20.20	
			e	13	31.30	
ZST	32.94	308	eP	13	28.60	2.5
SOP	33.21	307	eP	13	29.70	1.3
NUR	34.04	332	iP	13	35.00	-0.5
	0.8s	16.10nm			5.0mb	
			i	14	54.90	
KSP	34.05	313	ePc	13	35.80	0.0
			e	14	51.00	
LJU	34.35	304	e(P)	13	38.50	0.1
CEY	34.40	303	eP	13	39.00	0.2
GTA	34.79	68	iPc	13	43.00	0.7
	0.8s	20.00nm			5.1mb	
Z	12s	0.90um			4.7MszX	
			pP	13	50.00	24kmX
VOY	34.79	304	eP	13	39.50	-2.8
SUF	34.91	336	eP	13	44.00	1.1
PRU	34.95	311	eP	13	41.00	-2.5
			e	13	55.00	
KHC	35.41	309	eP	13	48.00	0.6
			e	14	03.70	
BRG	35.51	312	eP	13	55.20	7.0X
			i	14	02.00	
CLL	36.18	313	iP	13	53.80	0.0
	1.1s	20.00nm			4.9mb	
WATA	36.51	306	ePc	13	55.00	-1.8

			i	14	12.50	
			i	14	29.30	
UPP		36.64	328 iP	13	56.70	-0.9
SOTA		36.74	306 i(P)	13	57.80	-1.0
MOX		36.92	311 eP	14	09.00	8.9X
SOD		38.05	342 iP	14	10.00	0.7
			e	15	20.00	
LZH		38.38	73 Pc	14	13.50	0.8
		2.0s	86.00nm			5.2mb
	Z	22s	1.10um			4.6Msz
	N	10s	0.70um			
			eS	20	08.00	
SBF		39.32	300 eP	14	19.60	-0.7
		1.0s	44.00nm			5.2mb
CD2		39.53	81 P	14	22.00	-0.2
KEV		39.75	344 iP	14	25.00	1.6
			e	15	27.00	
LPG		39.77	303 eP	14	23.30	-1.0
		1.0s	10.00nm			4.5mb
LPL		39.78	303 eP	14	23.30	-1.0
		1.0s	13.00nm			4.6mb
NB2		40.02	327 P	14	25.00	-0.9
		1.0s	41.00nm			5.1mb
CHG		40.29	101 iPc	14	29.00	0.4
		1.0s	53.00nm			5.2mb
			eS	20	36.00	
MEM		40.45	310 P	14	31.20	1.7
KMI		40.64	90 Pc	14	31.50	-0.2
		1.2s	140.00nm			5.6mb
			pP	14	42.50	39kmX
BDT		41.14	103 eP	14	37.10	1.6
LOR		41.75	305 eP	14	39.10	-1.1
		1.0s	8.00nm			4.4mb
	Z	20s	0.25um			4.1Msz
SMF		41.77	304 eP	14	39.90	-0.5
		1.0s	20.00nm			4.8mb
SSF		41.99	305 eP	14	41.60	-0.6
		0.8s	7.40nm			4.5mb
AVF		42.10	305 eP	14	42.30	-0.8
		1.0s	16.00nm			4.7mb
BTO		42.45	65 eP	14	47.50	1.3
	N	11s	0.50um			
	E	11s	0.50um			
BGF		42.46	304 eP	14	45.30	-0.8
		1.2s	23.80nm			4.8mb
MAF		42.67	304 eP	14	47.70	-0.1
		1.2s	17.85nm			4.7mb
XAN		42.89	74 P	14	49.60	-0.2
	N	12s	0.80um			
CAF		43.10	302 eP	14	51.10	-0.2
		1.0s	10.00nm			4.5mb
GYA		43.41	86 P	14	53.60	-0.5
RJF		43.46	302 eP	14	54.30	0.1
		1.2s	29.75nm			4.9mb
	Z	20s	0.25um			4.1Msz
HHC		43.58	64 eP	14	56.80	1.5
LPO		43.74	302 eP	14	56.10	-0.4
		1.2s	29.75nm			4.9mb
TIY		44.81	68 eP	15	05.40	0.1
	Z	17s	1.10um			4.9MszX
	E	11s	0.50um			
			eS	21	39.00	
BCAO		45.95	239 iPd	15	14.50	0.1
		0.5s	4.00nm			4.6mb
EKA		46.28	317 Pd	15	16.40	-0.2
		0.6s	7.90nm			4.8mb
BJI		47.18	64 eP	15	23.50	-0.4
		0.8s	10.00nm			4.9mb
	N	20s	0.90um			
GUD		48.25	297 eP	15	31.80	-0.7
WHN		48.31	77 eP	15	33.50	0.6
TOL		48.34	296 eP	15	33.00	0.0
EBAN		48.53	294 eP	15	34.50	-0.1
AFC		48.57	292 eP	15	34.50	-0.6
ECOG		48.59	292 eP	15	34.50	-0.6
TIA		48.82	69 eP	15	37.00	0.3
IPM		50.23	115 ePc	15	48.20	0.4
		0.9s	43.70nm			5.5mb
IFR		50.88	288 iP	15	46.00	-6.8X
			i	15	54.50	
NJ2		51.44	74 Pc	15	56.00	-0.8
SNY		52.25	60 Pc	16	01.20	-1.5
	Z	16s	0.80um			4.9MszX
CN2		53.11	57 Pd	16	08.40	-0.7
	Z	15s	0.90um			4.9MszX
	N	13s	0.40um			
	E	13s	0.30um			

			pP	16	14.00	18kmX
SSE		53.64	74 Pc	16	13.00	-0.2
		1.2s	28.00nm			5.1mb
DAG		54.24	344 iPd	16	15.70	-1.3
		1.3s	70.51nm			5.5mb
MDJ		55.79	56 eP	16	24.50	-4.2X
LKO		61.83	263 P	17	10.06	-1.1
		1.0s	29.00nm			5.3mb
KIC		62.89	259 Pc	17	17.86	-0.3
		0.9s	18.00nm			5.2mb
TIC		62.96	259 P	17	18.22	-0.4
LIC		63.20	259 Pc	17	19.82	-0.4
		0.8s	18.00nm			5.2mb
	Z	22s	0.15um			4.1Msz
MAT		64.70	62 eP	17	28.00	-1.7
		1.0s	8.00nm			4.8mb
MBC		70.36	359 eP	18	04.50	-0.1
		1.3s	22.00nm			5.1mb
FRB		73.79	338 eP	18	25.00	-0.1
IMA		77.87	12 eP	18	48.40	0.1
		0.8s	14.60nm			5.1mb
INK		78.07	4 eP	18	49.00	-0.1
SCH		79.48	331 eP	18	57.00	-0.2
FBA		79.91	10 eP	18	59.60	0.3
TTA		80.24	15 eP	19	01.50	0.3
PMR		82.79	12 eP	19	15.00	0.6
		0.9s	32.70nm			5.4mb
TOA		82.80	11 eP	19	15.80	1.2
YKA		83.95	356 eP	19	26.00	5.7X
		1.3s	10.40nm			4.8mb
KDC		85.68	15 eP	19	29.90	0.8
WB5		90.99	113 eP	19	54.20	-0.7
ASPA		92.82	117 eP	20	02.60	-0.7
		0.8s	8.10nm			5.2mb
SPA		123.46	180 iPKPd	25	46.80	-0.5
		0.5s	5.56nm			
ZOBO		127.76	275 PKP	25	57.00	-0.6
LPB		127.87	275 (PKP)	26	07.00	9.4X
CNCB		127.91	274 PKP	25	57.20	-0.7
		S.D. = 1.1	on 109 of 125 obs.			

? OCT 15, 1990 19h 49m 23.03± 7.42s
22.350 S ±44.0km 113.590 E ±55.7km
DEPTH = 33.0km (normal)
WESTERN AUSTRALIA (590)

NANU		1.81	97 eP	49	55.00	2.7
MBL		5.92	80 eP	50	50.60	-0.2
		0.2s	4.00nm			4.7mb
			eS	51	50.00	
MEKA		6.19	134 eP	50	56.00	1.5
		0.3s	6.00nm			4.8mb
			iS	52	00.30	
MRWA		7.17	163 iPd	51	09.40	1.1
		0.3s	5.00nm			5.0mb
			eS	52	25.00	
BAL		8.68	162 eP	51	29.50	0.2
		0.4s	3.00nm			4.8mb
MUN		9.87	167 iPd	51	46.00	0.3
			eS	53	30.40	
KLB		9.93	159 eP	51	45.80	-0.7
		0.3s	3.00nm			5.0mb
			eS	53	30.00	
NWAO		11.02	164 eP	52	01.00	-0.4
			eS	53	55.00	
WARB		12.50	110 iPd	52	19.20	-2.3
			eS	54	30.00	
FORR		15.48	126 eP	52	58.50	-2.1
		S.D. = 1.7	on 10 of 10 obs.			

OCT 15, 1990 19h 50m 24.06± 1.27s
10.047 S ± 5.2km 114.607 E ± 6.2km
DEPTH = 70.3 ± 11.2 km
5.8mb (35 obs.)
SOUTH OF BALI ISLAND (284)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 29C
Centroid Location:
Origin Time 19:50:24.5 0.7
Lat 10.82S 0.08 Lon 114.62E 0.11
Dep 33.0 FIX Half-duration 1.8
Moment Tensor; Scale 10**17 Nm
Mrr= 0.33 0.06 Mtt=-0.22 0.06
Mff=-0.11 0.10 Mrt= 1.30 0.09
Mrf=-0.25 0.10 Mtf=-0.62 0.06
Principal Axes:

		T	Val= 1.59	Plg=45	Azm= 28	
		N	-0.22	26	269	
		P	-1.37	34	161	
		Best Double Couple:Mo=1.5*10**17				
		NP1:Strike=195	Dip=26	Slip= 14		
		NP2:	92	84	116	
TRT		3.04	320 iPd	51	12.50	1.8
			eS	51	53.10	
MKS		6.80	45 iPc	52	05.80	2.4
MBL		12.14	156 eP	53	07.30	-8.8X
			eS	55	07.00	
NANU		12.48	176 eP	53	12.00	-8.5X
AAI		14.89	66 ePd	53	55.00	2.9
			eS	56	52.50	
KNA		14.92	114 iPc	53	48.50	-4.0X
MNI		15.30	42 ePc	54	01.50	4.1X
KKM		16.06	6 ePc	54	07.50	0.3
		0.8s	104.20nm			5.0mb
KGM		16.43	316 eP	54	11.30	-0.4
MEKA		16.89	168 eP	54	12.10	-5.3X
MRWA		19.12	176 eP	54	40.00	-4.3X
WARB		19.68	146 eP	54	49.00	-1.4
			eS	58	13.00	
IPM		19.85	316 ePc	54	53.00	0.8
		0.9s	309.30nm			5.6mb
BAL		20.55	175 eP	54	56.50	-2.8
		0.4s	100.00nm			5.5mb
			ePP	55	02.00	
			eS	58	26.00	
WB5		21.42	119 iPd	55	07.10	-1.1
			eS	58	58.00	
KLB		21.64	173 eP	55	08.00	-2.2
		0.4s	56.00nm			5.3mb
			ePP	55	16.00	
			eS	58	50.00	
MUN		21.87	176 eP	55	10.20	-2.4
			ePP	55	19.00	
			eS	58	54.00	
ASPA		22.86	129 iPd	55	22.40	0.0
		1.2s	257.00nm			5.5mb
	Z	24s	1.30um			4.3MszX
			eS	59	20.70	
			iScS	06	26.20	
NWAO		22.90	174 eP	55	18.00	-4.6X
	Z	20s	1.50um			4.4Msz
	N	20s	2.00um			
	E	20s	1.10um			
			ePP	55	32.00	
			eS	59	19.00	
RKG		24.01	175 eP	55	37.50	4.1X
		0.4s	35.00nm			5.2mb
			ePP	55	54.00	
			eS	00	02.00	
FORR		24.21	151 iPc	55	34.20	-1.1
NNT		26.91	326 iPd	56	03.20	2.6
QIZ		29.27	351 iPd	56	22.50	0.6
		1.0s	270.00nm			5.9mb
			S	01	10.00	
NST		29.30	331 iPc	56	22.50	0.3
LOE		30.10	335 eP	56	29.00	-0.3
BDT		31.20	330 iPc	56	47.50	8.6X
		0.7s	88.10nm			5.6mb
CTA		32.09	112 iPd	56	47.20	0.4
		1.1s	75.95nm			5.4mb
			iS	02	06.00	
QLP		32.46	124 eP	56	50.00	0.1
CHG		32.57	332 iPc	56	51.20	0.2
		0.9s	85.50nm			5.6mb
GZH		32.95	358 Pc	56	54.20	0.1
		1.0s	160.00nm			5.8mb
CMS		35.94	131 e(P)	57	19.00	-0.8
			e	58	22.00	
			e	04	17.00	
RMQ		36.16	122 eP	57	21.50	-0.2
KMI		36.82	342 iPc	57	30.00	2.6
		2.0s	500.00nm			6.1mb
	Z	26s	1.70um			4.7MszX
			S	03	10.00	
BFD		36.94	141 iPd	57	33.40	5.3X
GYA		37.10	348 iPc	57	30.60	1.0
	Z	12s	0.60um			4.6MszX
			S	03	10.00	
GUMO		38.12	53 eP	57	37.50	-0.7
		0.7s	742.06nm			6.7mb
PJG		38.12	53 eP	57	37.50	-0.7
GUA		38.13	53 eP	57	37.60	-0.7

15d 19h

```
       0.7s   668.49nm              6.7mb
BWA    39.29 133 eP      57 50.00    2.1
                 e       59 24.50
BRS    39.84 121 iPc     57 55.00    2.5
                 e       58 07.00
CAN    40.15 134 eP      57 56.10    1.1
                 e       59 30.50
COO    40.22 126 iPc     57 58.00    2.4
WHN    40.36 360 iPc     57 58.00    1.5
       1.0s   200.00nm              5.9mb
     Z 24s     0.70um               4.4MszX
                 S       03 59.00
SSE    41.39   9 Pc      58 05.50    0.5
       1.2s   150.00nm              5.7mb
     Z 20s     0.50um               4.4Msz
                 sP      58 18.00
                 eS      04 18.00
SHL    41.75 328 iP      58 08.40    0.1
                 iS      04 17.00
CD2    42.03 346 P       58 10.90    0.5
       0.6s   280.00nm              6.3mb
NJ2    42.06   5 iPc     58 11.00    0.6
       1.1s   300.00nm              6.0mb
KOD    42.08 298 eP      58 11.00   -0.3
GBA    43.74 302 P       58 23.00   -1.4
XAN    44.17 353 iPc     58 27.50   -0.2
       1.4s   500.00nm              6.1mb
SVO    44.56  93 eP      58 31.00   -0.1
HNR    44.66  93 eP      58 30.00   -2.0
HYB    44.88 307 iPc     58 32.70   -0.9
       1.0s    50.00nm              5.3mb
LSA    45.52 331 iP      58 39.00    0.0
       2.0s   500.00nm              6.1mb
                 iS      05 15.00
TIA    46.07   3 Pc      58 41.70   -1.0
SHNJ   46.64  19 eP      58 46.40   -0.8
LZH    46.99 348 iPc     58 51.20    1.0
       2.0s   380.00nm              6.0mb
     Z 30s     0.86um               4.5MszX
     N 12s     0.28um
TKSJ   47.52  22 iP+     58 53.60   -0.6
TIY    47.55 358 Pc      58 54.00   -0.5
       4.0s   900.00nm              6.1mb X
     Z 26s     1.10um               4.7MszX
     N 11s     0.25um
WKYJ   48.32  23 eP      58 59.10   -1.4
YONJ   48.40  21 iP+     58 59.90   -1.1
DL2    49.14   7 eP      59 05.50   -1.1
       1.4s   400.00nm              6.3mb
     Z 25s     0.30um               4.2MszX
                 S       06 04.00
POO    49.23 305 iPc     59 06.10   -1.6
TSRJ   49.63  23 P       59 09.10   -1.4
BJI    49.85   2 Pc      59 11.50   -0.5
       1.2s   310.00nm              6.2mb
     Z 32s     0.75um               4.5MszX
     N 14s     0.85um
IIDJ   50.35  25 P       59 14.90   -1.1
BTO    50.57 355 iPd     59 17.00   -0.6
                 pP      59 23.50   22kmX
                 eS      06 26.50
HHC    50.72 357 Pc      59 18.30   -0.5
       1.3s   240.00nm              6.1mb
     Z 28s     0.70um               4.5MszX
     N 10s     0.30um
DZM    51.01 110 iPc     59 22.20    0.9
GTA    51.09 345 iPc     59 22.20    0.5
       1.2s   110.00nm              5.8mb
     Z 32s     1.00um               4.6MszX
                 pP      59 33.00   37kmX
                 PcP     00 37.40
                 ScP     04 27.80
                 eS      06 35.00
                 ScS     09 05.00
MTMJ   51.26  24 P       59 21.30   -1.7
CHJJ   51.29  25 P       59 21.00   -2.1
MAT    51.39  24 iPc     59 21.70   -2.2
KAKJ   51.93  26 eP      59 25.00   -2.9X
SNY    52.27   8 Pc      59 28.70   -1.7
       1.4s   200.00nm              6.0mb
     Z 32s     0.70um               4.5MszX
NIIJ   52.31  25 P       59 28.80   -2.0
NDI    52.79 318 iPc     59 31.70   -2.8
       0.9s    75.63nm              5.7mb
                 iS      06 49.00
YAMJ   53.53  25 iP+     59 38.60   -1.1
CN2    54.49  10 iPc     59 44.60   -2.1
```

```
       1.0s   100.00nm              5.8mb
                 PcP     00 49.80
                 ScP     04 42.00
                 eS      07 16.00
                 ScS     09 29.00
OFUJ   54.98  26 iP+     59 48.90   -1.5
AOMJ   55.70  24 P       59 54.70   -0.8
MDJ    56.07  13 Pc      59 56.80   -1.3
       0.8s   200.00nm              6.2mb
MRRJ   57.57  23 eP      00 06.70   -2.0
HOOJ   58.41  25 eP      00 14.20   -0.4
WMQ    58.93 338 iPc     00 18.00   -0.4
     Z 28s     0.70um               4.6MszX
                 eS      08 16.00
KUSJ   59.60  25 eP      00 21.70   -1.1
ASAJ   59.61  23 P       00 21.70   -1.2
QUE    60.81 313 iPc     00 31.60    0.0
                 eS      08 39.40
KSH    60.92 326 iPd     00 32.00   -0.1
                 S       08 42.00
MAW    66.81 199 iP      01 08.60   -1.4
MAIO   69.34 315 iPc     01 25.70   -0.7
       1.1s    17.67nm              4.9mb
NAI    77.77 271 iPc     02 18.00    1.9
TAB    79.56 312 eP      02 25.00   -0.3
SPA    80.02 180 iPd     02 26.20   -1.0
       1.1s    26.79nm              5.1mb
                 i       02 41.50
EVA    81.62 245 iPc     02 41.00    4.5X
ADK    85.09  35 P       02 54.00    0.7
PRNI   86.19 302 eP      02 59.50    0.2
BBTK   90.18 310 eP      03 19.00    0.8
MLR    96.14 315 eP      03 40.00   -5.6X
BCAO   96.73 273 iPd     03 49.00    0.3
       0.5s     7.00nm              5.4mb
SUF    98.14 332 eP      03 54.00    0.1
SOD    98.42 337 eP      04 06.00   10.9X
KEV    98.52 339 eP      03 56.00    0.5
TTA    98.58  28 P       03 56.40    0.3
       1.0s    14.50nm              5.5mb
IMA    99.80  24 P       04 01.00   -0.7
PMR   101.75  29 Pdiff   04 10.00   -0.2
HFS   104.08 330 ePdiff04 22.90      2.2
       0.4s     0.80nm              5.0mb
YKA   116.89  23 ePKP    09 02.00    0.2
       0.8s     5.40nm
LKO   121.14 275 PKP     09 11.00   -0.4
NEW   122.45  38 PKP     09 14.50    1.5
SES   125.02  34 ePKP    09 17.00   -0.9
ISA   125.62  53 ePKP    09 21.00    1.4
PAS   126.22  55 ePKP    09 23.00    2.3
CLC   126.27  53 ePKP    09 23.00    2.2
MWC   126.30  55 ePKP    09 23.00    1.9
SBB   126.37  54 ePKP    09 23.00    1.9
LRM   126.38  39 ePKP    09 19.40   -1.6
FFC   126.86  26 iPKPd   09 22.70    1.4
       0.9s    21.00nm
RVR   126.90  55 ePKP    09 24.00    2.0
GSC   127.02  53 ePKP    09 25.00    2.7
TPC   127.94  54 ePKP    09 26.00    2.0
GLA   129.20  55 ePKP    09 29.00    2.5
FVM   144.23  35 PKP     09 52.60   -1.3
HBVT  145.17  10 PKP     09 56.00    0.7
PPD   145.26 203 ePKP    09 55.70   -0.5
                 e       10 15.90
OLY   145.28  39 PKP     09 55.80    0.0
ELC   145.39  35 PKP     09 56.40    0.5
IIJ   145.51  70 (PKP)   10 00.00    2.7
WVLY  145.70  17 PKP     09 57.40    1.1
III   146.00  72 (PKP)   10 01.00    3.3X
PPM   146.66  71 (PKP)   10 02.60    3.4X
PNJ   148.30  13 iPKP    10 05.40    4.9X
SOB1  149.01 233 ePKP    10 07.40    5.0X
                 e       10 16.00
GBTN  149.28  31 PKP     10 07.40    5.2X
NAV   149.50  25 PKP     10 07.60    5.0X
TKL   149.51  30 PKP     10 08.40    5.8X
BLA   149.74  24 PKP     10 08.00    5.1X
JSC   151.84  29 PKP     10 07.50    1.4
CCH   152.74 178 PKP     10 11.00    2.8X
CNCB  153.19 174 PKP     10 19.00    9.8X
LPB   153.46 174 ePKP    10 19.00    9.6X
ZOBO  153.71 174 PKP     10 15.00    5.1X
       1.2s    16.89nm
     Z 24s     0.23um               4.9MszX
                 LR      04 48.00
SIV   153.78 189 PKP     10 19.00    9.7X
```

```
    S.D. = 1.4 on 116 of 143 obs.
--------------------------------------
? OCT 15, 1990 20h 18m 50.95± 3.35s
  44.278 N ± 7.4km    6.126 E ±62.6km
  DEPTH = 10.0km (geophysicist)
 FRANCE                          (538)
    ML 2.0 (LDG).

FRF     0.81 152 Pg      19 06.40   -0.2
                 Sg      19 17.50
LRG     0.84 168 Pg      19 06.60   -0.5
                 Sg      19 18.60
LMR     0.98 163 Pg      19 10.40    0.8
                 Sg      19 22.00
LPG     1.30  20 Pg      19 15.20    0.0
    S.D. = 1.0 on 4 of 4 obs.
--------------------------------------
• OCT 15, 1990 21h 59m 09.90± 0.96s
  21.110 S ±10.0km   68.947 W ±19.9km
  DEPTH = 182.3 ± 26.4 km
 CHILE-BOLIVIA BORDER REGION     (124)

ANT     2.92 207 eP      59 58.20    0.1
                 eS      00 29.00
CNCB    4.37  12 Pc      00 17.70    0.6
CCH     4.56  36 P       00 18.00   -1.2
LPB     4.62  10 P       00 21.50    1.4
ZOBO    4.88   9 P       00 23.30   -0.3
ARE     5.21 332 eP      00 27.00   -0.7
                 eS      01 26.00
SIV     9.04  57 P       01 12.40   -5.4X
VAO    20.46  99 (P)     03 35.00    0.1
    S.D. = 1.2 on 7 of 8 obs.
--------------------------------------
? OCT 15, 1990 23h 04m 50.08±12.22s
  39.451 N ±64.2km   27.629 E ±68.2km
  DEPTH = 10.0km (geophysicist)
 TURKEY                          (366)
    MD 2.6 (ISK).

DST     0.79  78 iPg     05 04.80   -0.7
                 iSg     05 13.80
EDC     0.91  11 iPg     05 06.80   -0.7
                 eSg     05 16.80
BNT     0.93  14 iPg     05 08.00    0.1
                 iSg     05 18.00
KCT     0.97  35 iPg     05 08.50   -0.1
                 iSg     05 19.00
IZI     1.67  57 ePn     05 19.00   -0.6
YLV     1.74  50 iPn     05 22.50    1.9
    S.D. = 1.3 on 6 of 6 obs.
--------------------------------------
  OCT 16, 1990 00h 50m 49.60± 0.52s
  38.209 N ± 5.0km   23.207 E ± 5.2km
  DEPTH = 11.2 ± 3.3 km
 GREECE                          (364)
    ML 3.3 (ATH), 3.3 (THE).

ATH     0.47 120 iPgc    50 57.80   -1.3
AGG     1.06 320 ePc     51 07.68   -1.9
                 eS      51 25.08
NEO     1.10   1 ePb     51 08.50   -1.6
EVR     1.30 303 ePb     51 10.00   -3.7X
ITM     1.44 225 ePn     51 17.70    2.1
VLI     1.50 188 ePb     51 14.90   -1.5
LIT     1.97 344 iPc     51 23.65    0.4
                 eS      51 47.44
VLS     2.06 270 ePn     51 23.00   -1.6
APE     2.17 121 ePb     51 28.00    1.9
PLG     2.17   5 ePn     51 26.00   -0.1
OUR     2.21  16 ePc     51 26.16   -0.4
KZN     2.37 332 ePb     51 29.50    0.4
THE     2.43 356 ePc     51 30.72    1.0
IGT     2.60 301 iPc     51 34.24    1.9
                 iS      52 08.89
SOH     2.61   2 ePd     51 32.44    0.0
LSK     2.80 315 ePn     51 37.20    2.0
GRG     2.81 347 ePc     51 35.72    0.4
VAM     2.91 164 ePn     51 36.40   -0.2
SMG     2.91  99 ePb     51 40.00    3.4X
EZN     2.92  55 ePn     51 44.00    7.3X
SRS     2.92   6 ePd     51 36.24   -0.5
FNA     2.94 332 ePc     51 38.16    1.1
KNT     2.96 355 ePd     51 37.96    0.7
                 eS      52 12.36
SRN     3.00 305 ePn     51 39.00    1.1
KBN     3.04 323 ePn     51 38.20   -0.2
```

```
KEK     3.05 301 ePb   51 39.00   0.4
VAY     3.15 351 ePn   51 40.40   0.5
IZM     3.20  85 ePn   51 42.00   1.3
TPE     3.24 311 ePn   51 42.50   1.2
MMB     3.40   7 iPd   51 43.00  -0.6
                 eSg   52 21.00
OHR     3.44 328 iPn   51 43.00  -1.2
NPS     3.52 146 ePg   51 58.00  12.7X
BERA    3.54 316 ePn   51 47.30   1.7
KK8     3.65 359 eP    51 47.00  -0.2
RZN     3.66  18 eP    51 48.00   0.5
CSI     5.61 288 P     52 15.10   0.1
                 eSn   53 18.80
CZI     5.62 283 P     52 12.20  -2.9
                 eS    53 12.40
     S.D. = 1.3  on  33 of  37 obs.
-------------------------------------
?  OCT  16, 1990  01h 29m 24.25± 0.92s
   36.010 N ±19.8km  143.004 E ±17.2km
   DEPTH =  33.0km  (normal)
   4.5mb (  2 obs.)
 OFF EAST COAST OF HONSHU, JAPAN (229)

MAT     3.91 279 eP    30 24.00   0.5
                 eS    31 09.00
WB5    56.18 190 eP    39 02.80  -0.4
                 e     39 14.70
ASPA   59.97 190 eP    39 29.40  -0.4
       1.1s     5.10nm          4.6mb
NB2    75.62 338 P     41 05.80  -1.5
       0.8s     3.70nm          4.4mb
LPB   146.25  63 ePKP  49 04.00   1.2
CNCB  146.51  63 PKP   49 04.00   0.6
     S.D. = 1.3  on   6 of   6 obs.
-------------------------------------
•  OCT  16, 1990  02h 38m 49.69± 0.79s
   49.870 N ±11.0km   18.522 E ± 6.3km
   DEPTH =  10.0km  (geophysicist)
 CZECHOSLOVAKIA                 (547)
      ML 2.4 (VKA).

KRA     0.93  78 eP    39 07.40  -0.1
                 iS    39 21.40
SPC     1.31 121 iPnd  39 14.10   0.0
                 iSg   39 34.20
KSP     1.73 305 iPg   39 20.30   0.3
                 iS    39 43.90
ZST     1.92 210 eP    39 23.00   0.3
                 e     39 32.20
                 e     39 47.20
SRO     2.06 184 eP    39 30.20   5.4X
VKA     2.16 223 iPgc  39 31.60   5.3X
                 iSg   39 58.50
PRU     2.58 274 Pn    39 35.00   2.9X
                 Pg    39 38.00
                 Sg    40 11.50
BRG     3.10 291 iPg   39 46.00   6.5X
                 iSg   40 28.00
KHC     3.31 259 ePn   39 42.00  -0.6
                 Pg    39 49.80
                 Sg    40 33.60
GRF     4.73 271 e(Pg) 40 38.30  35.5X
                 eSg   41 20.40
     S.D. = 0.5  on   5 of  10 obs.
-------------------------------------
?  OCT  16, 1990  03h 48m 32.72± 5.87s
   39.837 N ± 9.7km   30.864 E ±54.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                         (366)
      MD 2.5 (ISK).

GPA     0.62 317 ePg   48 44.40  -0.8
ALT     0.97 217 ePg   48 51.20  -0.1
                 eSg   49 03.20
IZI     1.18 296 ePn   48 55.00   0.2
HRT     1.34 317 ePn   48 58.00   0.5
YLV     1.36 303 iPn   48 57.90   0.2
     S.D. = 0.7  on   5 of   5 obs.
-------------------------------------
•  OCT  16, 1990  04h 12m 14.53± 0.86s
   46.176 N ±16.6km  152.889 E ±12.1km
   DEPTH =  33.0km  (normal)
   4.8mb ( 13 obs.)
 KURIL ISLANDS                  (221)

MAT    14.61 234 (P)   15 35.00  -5.7X
MDJ    16.43 273 eP    16 02.00  -2.0
CN2    19.52 273 eP    16 40.60  -1.3
SNY    21.47 269 eP    17 01.70  -0.3
TIY    30.98 269 eP    18 31.80   0.9
       Z  20s     0.40um          4.1Msz
IMA    34.37  35 eP    18 59.40  -0.7
       0.9s     3.60nm          4.3mb
FBA    36.71  38 eP    19 19.40  -0.4
LZH    37.75 272 Pc    19 30.00   0.8
       1.5s    40.00nm          5.1mb
GTA    38.91 280 P     19 39.60   0.8
       0.8s    10.00nm          4.6mb
CD2    40.68 266 eP    19 53.80   0.4
GYA    41.44 258 P     20 00.40   0.7
INK    42.22  32 eP    20 05.50   0.1
CHG    51.84 257 eP    21 22.90   1.3
WB5    67.85 199 eP    23 10.20  -1.3
                 e     23 28.10
UPP    68.18 338 iP    23 11.70  -1.4
NB2    68.72 341 P     23 15.30  -1.3
       0.6s     3.00nm          4.5mb
HFS    68.94 339 eP    23 15.80  -2.0
       0.9s    17.80nm          5.1mb
GBA    70.26 269 P     23 26.00  -0.5
CLL    76.92 335 iP    24 04.00  -0.8
       0.8s     8.00nm          4.8mb
WTS    77.95 339 eP    24 12.00   1.5
       0.9s    10.00nm          4.8mb
KHC    78.69 334 eP    24 15.60   1.0
GRF    78.88 336 e(P)c 24 17.00   1.3
ENN    79.30 339 eP    24 19.00   1.1
       0.7s    11.00nm          5.0mb
LOR    83.06 339 eP    24 37.70  -0.1
       0.8s     7.40nm          4.8mb
SSF    83.34 339 eP    24 40.10   0.9
       0.8s     6.70nm          4.8mb
AVF    83.63 339 eP    24 40.90   0.3
SMF    83.65 339 eP    24 41.70   0.9
       0.8s    10.05nm          5.0mb
MAF    84.35 340 eP    24 44.50   0.2
       0.8s     4.05nm          4.7mb
TCF    84.38 340 eP    24 44.50   0.0
       0.8s     4.05nm          4.7mb
PPD   148.90  47 (PKP) 31 59.00   2.7X
     S.D. = 1.1  on  28 of  30 obs.
-------------------------------------
?  OCT  16, 1990  04h 21m 28.60± 2.00s
   45.832 N ±37.0km  152.609 E ±35.3km
   DEPTH =  33.0km  (normal)
   4.5mb (  2 obs.)
 KURIL ISLANDS REGION           (222)

MAT    14.25 234 (P)   24 50.00   0.0
FBA    37.10  38 P     28 37.10  -0.1
LZH    37.57 273 Pc    28 41.50  -0.2
       1.5s    17.00nm          4.7mb
NB2    68.98 341 P     32 31.00  -1.3
       1.0s     3.40nm          4.4mb
ZST    78.60 331 eP    33 29.80   1.6
     S.D. = 1.5  on   5 of   5 obs.
-------------------------------------
•  OCT  16, 1990  04h 30m 50.53± 1.35s
   7.000 N ±11.8km   76.421 W ±10.8km
   DEPTH =  57.8 ± 16.5 km
   4.4mb (  1 obs.)
 NORTHERN COLOMBIA              ( 99)

FUO     3.07 120 eP    31 37.50  -0.5
BMG     3.32  89 eP    31 42.00   0.7
BOG     3.33 135 eP    31 43.00   1.4
                 eS    32 28.00
UPA     3.66 303 iPc   31 45.00  -0.9
       1.5s   222.22nm
SDV     6.03  72 ePn   32 21.00   1.5
                 eSn   33 29.20
TOV     7.12  67 ePn   32 34.70   0.2
                 eSn   33 52.30
CEOS    8.26  75 eP    32 47.20  -3.1X
LLAV   10.11  69 eP    33 13.00  -2.8
ZOBO   24.53 161 eP    36 04.00  -2.8
       Z  16s     0.27um          3.8MszX
                 LR    43 38.00
LPB    24.79 161 eP    36 06.00  -3.1X
CNCB   25.09 161 P     36 13.00   0.9
CCH    26.27 157 P     36 22.60  -0.1
SIV    27.44 146 P     36 34.20   1.1
SOB1   38.89 114 (P)   38 12.00  -0.5
ANMO   39.20 319 (P)   38 16.00   1.0
TNP    48.14 316 P     39 28.00   0.9
YKA    62.00 341 eP    41 09.50   2.7X
       0.8s     2.60nm          4.4mb
GBA   146.94  52 PKP   50 30.00   2.9X
     S.D. = 1.6  on  14 of  18 obs.
-------------------------------------
   OCT  16, 1990  06h 13m 13.74± 0.12s
   49.043 N ± 2.7km  155.076 E ± 2.2km
   DEPTH =  82.9km  (geophysicist)
   6.0mb ( 76 obs.)
 KURIL ISLANDS                  (221)
      Felt (IV) at Mys Vasilyevo and
      (III) at Severo-Kurilsk. Depth
      from broadband displacement
      seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike= 22 Dip=81 Slip=  90
       NP2:      202     9       90
       Principal Axes:
        T                Plg=54  Azm=292
        P                  36        112
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to reverse
        faulting. The preferred fault
        plane is NP2.
      RADIATED ENERGY
       No. of sta:   7  Focal mech.  F
       Energy        2.1±0.6*10**12 Nm
      MOMENT TENSOR SOLUTION
      Dep  75            No. of sta: 13
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.09        Mtt=-0.02
        Mff=-1.07        Mrt= 2.92
        Mrf= 6.50        Mtf= 3.97
       Principal axes:
        T  Val=  9.13  Plg=41  Azm=308
        N       -2.30      30       188
        P       -6.83      35        75
      Best Double Couple:Mo=8.0*10**17
       NP1:Strike=106 Dip=30 Slip=   7
       NP2:       10     87       120
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 17S, 40C
      Centroid Location:
      Origin Time       06:13:17.7 0.2
      Lat 49.01N 0.02 Lon 155.06E 0.03
      Dep  89.5 1.7 Half-duration  3.0
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.56 0.11  Mtt=-0.31 0.16
        Mff=-1.25 0.15  Mrt= 2.29 0.10
        Mrf= 5.91 0.11  Mtf= 2.59 0.17
       Principal Axes:
        T  Val=  7.68  Plg=45  Azm=304
        N       -1.68      23       189
        P       -6.00      36        81
      Best Double Couple:Mo=6.8*10**17
       NP1:Strike=113 Dip=23 Slip=  13
       NP2:       11     85       113

KUSJ    9.34 234 eP    15 23.50  -4.0X
                 S     17 00.60
ASAJ    9.87 245 P     15 37.10   2.3
HOOJ   10.59 235 P     15 42.00  -2.4
                 S     17 33.60
MRRJ   11.80 241 eP    15 58.70  -1.9
SMY    12.56  66 eP    16 08.50  -2.0
                 i     18 22.00
OFUJ   13.84 229 eP    16 22.20  -5.1X
                 eS    18 45.90
YAMJ   15.35 231 P     16 44.10  -2.7
NIIJ   16.60 231 P     16 59.00  -3.4X
KAKJ   16.84 226 P     17 00.80  -4.6X
CHJJ   17.53 228 P     17 12.20  -1.8
MAJO   17.54 231 iPc   17 14.28   0.2
                 iS    20 29.45
                 i     20 47.99
                 esS   21 00.08
MAT    17.54 231 P     17 13.00  -1.1
MTMJ   17.71 232 eP    17 17.50   1.2
MDJ    17.96 265 Pd    17 18.20  -0.9
       1.0s   200.00nm          5.3mb
     Z  17s    10.80um          4.1MszX
     N  10s     4.60um
                 pP    17 35.00
                 iS    20 34.00
```

16d 06h

ADK		18.15	70	eP	17	17.40	-4.1X
		1.4s	936.40nm			5.8mb	
				i	17	20.90	
				e	17	30.10	
IIDJ		18.52	229	P	17	24.60	-1.4
TSRJ		19.46	233	P	17	35.70	-0.6
WKYJ		20.68	231	P	17	49.40	0.4
CN2		21.01	267	Pc	17	48.20	-3.9X
		4.0s	800.00nm			5.4mb X	
	Z	28s	13.80um			5.2MszX	
				S	21	31.00	
YONJ		21.08	237	P	17	52.90	-0.1
TKSJ		21.67	234	P	17	59.50	0.7
SHK		22.00	237	eP	18	02.90	0.8
HIA		22.99	284	iPc	18	10.23	-1.4
SNY		23.13	264	iPc	18	11.00	-2.0
		1.4s	150.00nm			5.2mb	
	Z	19s	3.40um			4.8Msz	
	N	11s	1.10um				
	E	10s	0.90um				
				S	22	14.00	
				sS	22	39.50	
				SS	23	00.00	
				ScS	29	16.00	
SHNJ		23.18	239	eP	18	15.20	1.7
KUMJ		24.52	237	eP	18	27.50	1.0
KAGJ		25.52	235	eP	18	36.70	0.8
DL2		25.92	260	P	18	39.00	-0.6
		6.0s	1400.00nm			5.7mb X	
	Z	38s	8.60um			5.0MszX	
	N	10s	2.30um				
	E	10s	1.70um				
				pP	19	00.00	95kmX
BJI		28.88	267	eP	19	05.00	-1.3
		6.0s	900.00nm			5.6mb X	
	Z	34s	6.81um			5.0MszX	
	N	14s	2.55um				
				eS	23	46.00	
TTA		29.84	44	ePd	19	14.20	-0.6
SVW		29.93	48	ePd	19	15.60	0.0
TIA		30.40	259	eP	19	19.00	-0.9
	Z	42s	21.30um			5.5MszX	
	E	11s	1.20um				
SSE		31.18	248	Pc	19	26.00	-0.8
		4.0s	1120.00nm			6.0mb X	
	Z	20s	1.80um			4.7Msz	
	N	13s	1.10um				
				pP	19	44.00	76kmX
				S	24	26.00	
IMA		31.18	38	iPd	19	25.90	-0.7
		0.5s	23.90nm			5.2mb	
HHC		31.50	272	iPd	19	28.50	-1.2
		1.4s	400.00nm			6.0mb	
	Z	24s	8.70um			5.3MszX	
	N	11s	1.70um				
	E	10s	1.30um				
				PP	20	34.00	
				PcP	22	20.50	
				eS	24	34.00	
KDC		31.71	54	eP	19	29.40	-1.7
NJ2		31.96	251	Pc	19	33.00	-0.5
		5.0s	900.00nm			5.8mb X	
	Z	21s	1.40um			4.6Msz	
	N	11s	2.00um				
	E	13s	1.50um				
				pP	19	53.00	86kmX
				sP	20	02.00	
				iS	24	36.00	
				sS	25	12.00	
TIY		32.59	266	iPc	19	38.50	-0.6
		1.2s	200.00nm			5.8mb	
	Z	40s	5.30um			4.9MszX	
	N	18s	3.60um				
				sP	20	10.00	
				S	24	50.00	
BTO		32.64	272	P	19	38.00	-1.6
	N	14s	2.20um				
	E	14s	1.60um				
				pP	19	58.00	86kmX
PMR		33.05	46	eP	19	41.50	-1.2
		1.3s	186.00nm			5.8mb	
COL		33.55	40	ePc	19	44.72	-2.4
				eS	25	03.75	
FBA		33.55	40	iPd	19	47.00	-0.1
TOA		34.40	45	eP	19	54.60	0.0
WHN		35.81	254	iPc	20	06.50	-0.2
		4.0s	1200.00nm			6.2mb X	
	Z	20s	1.30um			4.7Msz	
	E	12s	0.90um				
				pP	20	25.00	76kmX
				PcP	22	32.00	
				S	25	34.00	
				ScS	30	16.00	
GUMO		36.34	197	eP	20	14.00	2.7X
GUA		36.38	197	eP	20	14.00	2.4
		0.3s	103.90nm			6.2mb	
XAN		37.05	264	P	20	16.60	-0.6
		5.0s	1100.00nm			6.0mb X	
	N	18s	2.70um				
	E	18s	2.70um				
				PcP	22	37.50	
QZH		37.24	243	Pc	20	20.00	1.2
		5.0s	1300.00nm			6.1mb X	
	Z	34s	3.80um			5.0MszX	
				pP	20	38.00	73kmX
				S	25	56.00	
INK		39.01	34	ePd	20	33.70	0.6
		0.8s	89.00nm			5.7mb	
				pP	20	59.00	110kmX
LZH		39.17	270	iPc	20	34.33	-0.7
		5.0s	870.00nm			5.9mb X	
	Z	24s	5.20um			5.3MszX	
	N	16s	3.20um				
	E	19s	4.10um				
				epPc	20	53.28	78kmX
				e	20	54.60	
				sP	21	05.00	
				PP	22	06.00	
				ScS	30	35.00	
GTA		39.95	277	iPc	20	40.70	-0.7
		1.2s	190.00nm			5.9mb	
	Z	24s	5.00um			5.3MszX	
				pP	21	02.00	90kmX
				PP	22	17.50	
				PcP	22	45.00	
				eS	26	36.00	
				ScS	30	39.80	
SIT		40.89	51	P	20	50.30	1.7
		1.2s	242.42nm			5.9mb	
GZH		41.77	247	Pc	20	56.00	-0.3
		4.0s	1400.00nm			6.1mb X	
	Z	32s	3.00um			5.0MszX	
				pP	21	17.00	88kmX
				S	27	04.00	
MBC		41.99	21	ePd	20	57.90	0.4
		0.9s	82.00nm			5.6mb	
CD2		42.41	264	P	21	01.20	-0.3
		5.0s	1070.00nm			5.9mb X	
	Z	20s	3.71um			5.3Msz	
	N	12s	1.37um				
				pP	21	22.00	87kmX
GYA		43.51	257	iPc	21	10.60	0.0
		1.2s	200.00nm			5.8mb	
	Z	42s	3.90um			5.0MszX	
				pP	21	30.00	80kmX
				S	27	29.00	
WMQ		45.35	290	iPc	21	24.76	-0.4
	Z	32s	5.00um			5.2MszX	
	N	10s	1.90um				
				ePcP	23	03.33	
				iPP	23	12.93	
				PcS	26	58.50	
				iS	27	57.46	
				esS	28	34.54	
				eScS	31	13.18	
OPA		45.99	109	P	21	31.80	1.5
QIZ		46.97	247	P	21	39.30	1.3
		1.2s	100.00nm			5.6mb	
	N	13s	0.90um				
	E	15s	1.30um				
				pP	21	57.00	71kmX
				S	28	23.00	
				sS	28	57.50	
				ScS	31	24.50	
				SS	31	43.50	
KMI		46.97	259	iPc	21	38.28	0.0
		4.0s	1600.00nm			6.3mb X	
	Z	38s	4.70um			5.2MszX	
				ipPc	21	58.23	82kmX
				ePP	23	29.10	
				eS	28	20.12	
				i	31	23.53	
YKA		48.30	38	eP	21	47.10	-0.8
		0.9s	30.20nm			5.2mb	
KBS		50.44	351	eP	22	03.00	-1.1
PGC		51.07	57	eP	22	10.00	0.8
LSA		51.48	273	eP	22	13.80	0.6
		5.0s	1000.00nm			6.1mb X	
				pP	22	34.00	81kmX
				S	29	25.00	
GMW		52.06	58	P	22	16.80	0.0
BMW		52.42	60	P	22	19.40	-0.1
PNT		52.80	55	ePd	22	22.00	-0.3
		0.9s	115.00nm			5.9mb	
LON		53.06	59	ePd	22	23.55	-0.7
LOE		53.21	253	eP	22	25.00	-0.5
COR		53.47	62	iPd	22	27.34	0.2
				eS	29	58.73	
				eScS	32	13.95	
SHL		53.76	268	iP	22	29.00	-0.8
				iS	29	56.00	
EDM		53.79	48	iPd	22	28.60	-0.9
CHG		53.93	257	iPc	22	31.50	0.6
		1.0s	244.50nm			6.2mb	
				eS	29	52.00	
CHTO		53.93	257	iPc	22	31.28	0.4
				ipPc	22	51.47	80kmX
KKM		53.96	231	ePc	22	31.00	-0.2
DAG		54.40	358	iPd	22	31.60	-2.0
		0.6s	110.00nm			6.1mb	
NEW		54.76	55	P	22	36.00	-0.7
		1.0s	68.75nm			5.6mb	
KSH		55.04	292	iPd	22	38.00	-1.0
	E	14s	3.50um				
BDT		55.05	255	eP	22	40.00	1.0
		0.7s	41.50nm			5.6mb	
FHC		55.33	66	eP	22	41.70	0.8
PCT		55.46	251	eP	22	43.00	1.0
NST		55.51	253	eP	22	43.50	1.2
KEV		55.62	341	iP	22	40.90	-1.6
		1.1s	88.80nm			5.7mb	
L8FM		56.24	64	P	22	48.00	0.3
				pP	23	11.90	97kmX
WDC		56.33	65	ePd	22	48.10	0.0
SES		56.63	50	ePd	22	49.00	-1.1
		0.9s	84.00nm			5.8mb	
				pP	23	12.00	93kmX
LTCM		56.81	65	P	22	51.60	0.1
MIN		57.04	65	eP	22	52.60	-0.7
TRO		57.37	343	eP	22	53.00	-2.0
SOD		57.59	339	iP	22	54.00	-2.6
ORV		57.60	65	ePd	22	56.20	-0.8
NNT		58.10	251	eP	23	03.00	2.3
FFC		58.14	42	iPd	23	00.20	-0.4
		0.9s	61.00nm			5.7mb	
ZSP		58.16	67	eP	22	59.80	-1.2
BRK		58.21	67	eP	23	00.60	-0.7
PCC		58.37	68	eP	23	01.70	-0.7
LRM		58.77	55	ePd	23	05.00	-0.5
GCC		58.91	68	eP	23	05.80	-0.4
MHC		58.93	68	eP	23	06.20	-0.3
ARN		58.99	67	P	23	06.40	-0.4
CMB		59.24	66	iPd	23	07.64	-0.9
				ipPc	23	29.91	88kmX
				eS	31	14.38	
				esS	31	47.15	
				eScS	32	38.46	
				e	33	30.45	
SAO		59.42	68	eP	23	09.30	-0.4
PRS		59.75	68	eP	23	11.50	-0.5
LLA		59.82	68	eP	23	12.30	-0.2
PRI		60.30	68	eP	23	16.00	0.1
FRI		60.33	67	eP	23	15.30	-0.6
PTI		60.73	57	P	23	19.60	0.8
				pP	23	43.50	95kmX
TNP		61.10	64	P	23	21.10	-0.3
				pP	23	45.80	99kmX
NDI		61.24	282	iPc	23	20.70	-1.5
		1.0s	70.00nm			5.7mb	
				eS	31	32.00	
SUF		61.46	336	iP	23	21.10	-2.1
		0.6s	55.70nm			5.8mb	
SNG		61.77	246	eP	23	26.60	0.7
				eS	31	47.50	
SYP		61.79	69	eP	23	26.00	0.0
ISA		61.95	67	eP	23	27.60	0.6
DUG		62.26	60	P	23	29.20	0.1
		1.0s	62.50nm			5.6mb	
BW06		62.34	56	P	23	29.20	-0.5
		1.0s	105.00nm			5.9mb	
				pP	23	50.00	81kmX

CLC	62.38	66	iPd	23	29.00	-0.8	CLI	74.54	326	ePc	24	44.50	-0.3	ECB	77.80	349	eP	25	03.00	0.1
FRB	62.45	20	eP	23	28.00	-1.7	BIX	74.58	53	eP	24	45.70	0.6		0.9s	562.00nm			6.5mb	
	1.0s	214.00nm			6.2mb		TUL	74.65	53	iP	24	45.40	-0.2	ANTO	77.86	318	iPc	25	03.87	0.3
GSC	63.20	66	iPd	23	35.00	-0.3		1.1s	95.30nm			5.6mb		HBVT	77.89	33	P	25	03.80	0.2
NUR	63.69	335	eP	23	36.00	-2.0	Z	22s	1.85um			5.3Msz					pP	25	26.00	84kmX
TPC	64.47	67	eP	23	43.00	-0.5				e	24	53.50	26kmX	BBTK	77.90	318	eP	25	04.00	0.2
PLM	64.49	68	eP	23	43.00	-0.8				LR	49	00.00					i	25	08.00	13kmX
CPE	64.67	68	eP	23	46.10	1.4	ASPA	74.81	200	eP	24	43.60	-2.9	ECP	77.92	348	eP	25	03.80	0.2
RGS	64.83	343	eP	23	43.40	-1.9		0.9s	9.90nm			4.7mb	X		1.0s	841.00nm			6.6mb	
BAR	65.07	68	eP	23	46.00	-1.3	Z	24s	0.80um			4.9MszX		DOU	78.04	341	P+	25	04.00	-0.3
MTN	65.16	206	eP	23	48.00	0.1	CLL	74.90	336	iP	24	45.60	-1.2				id	25	05.70	5kmX
AKU	65.49	357	iP	23	50.00	0.6		1.4s	690.00nm			6.4mb					S	34	54.00	
	1.0s	220.00nm			6.0mb					eS	34	12.00		PVL	78.10	325	iPc	25	05.00	0.3
GLA	65.93	67	eP	23	54.80	1.9	BMR	74.94	328	ePc	24	49.00	2.0	BHG	78.21	335	eP	25	05.90	0.6
UPP	66.08	338	iP	23	51.30	-2.0	WIT	75.04	341	eP	24	48.00	0.5	FUR	78.24	336	eP	25	06.00	0.6
			i	23	52.60	4kmX	BRG	75.05	336	iPc	24	56.40	8.8X		1.4s	890.00nm			6.5mb	
NB2	66.47	342	P	23	54.10	-1.9		1.3s	360.00nm			6.1mb		JMB	78.26	324	eP	25	05.00	-0.6
	0.7s	49.50nm			5.5mb					i	25	10.20	48kmX	BNH	78.33	32	P	25	06.80	0.8
QUE	66.71	290	iP+	23	57.10	-1.0				i	26	55.40		HRT	78.40	321	eP	25	06.30	-0.2
			e	24	27.70	124kmX				i	27	27.10		GWF	78.40	339	P	25	06.81	0.5
			e(S)	33	47.00					i	28	32.20		GBZT	78.52	321	eP	25	07.00	-0.1
GOL	66.74	56	P	23	58.20	-0.1	KER	75.23	306	eP	24	50.00	0.9	GPA	78.58	320	eP	25	07.50	0.0
	1.1s	33.65nm			5.2mb		VRI	75.32	325	ePd	24	50.00	0.8	CTT	78.64	322	iP	25	07.80	0.1
			pP	24	23.50	100kmX	CFR	75.35	324	eP	24	49.00	-0.4	STR	78.74	339	P	25	09.24	1.1
HFS	66.76	340	eP	23	55.30	-2.4	RMQ	75.40	186	eP	24	50.00	0.2	YLV	78.74	321	iP	25	09.30	0.9
	0.7s	81.30nm			5.8mb		KVT	75.43	317	iP	24	50.10	0.1	IZI	78.89	321	eP	25	08.80	-0.4
Z	24s	1.41um			5.1MszX		PRU	75.69	335	Pc	24	51.20	0.0	PTJ	78.96	332	iPc	25	09.30	-0.2
		LR	46	17.00			Z	21s	2.40um			5.5Msz		WLS	79.00	339	P	25	10.04	0.4
MAIO	66.91	299	iPc	24	00.00	0.8	N	21s	2.40um					CDF	79.01	339	P	25	10.17	0.4
			e	24	28.00	112kmX	E	20s	5.10um					DIM	79.02	324	eP	25	10.00	0.2
			eS	32	48.00					i	24	52.40	4kmX	ZAG	79.02	332	iPc	25	10.00	0.3
REY	67.14	359	iP	24	03.00	3.0X				eS	34	24.00		WARB	79.08	206	iPd	25	11.20	1.0
TRT	67.61	226	ePc	24	01.60	-1.9	FVM	75.77	48	P	24	51.30	-0.6	PGS	79.11	325	iPc	25	11.00	0.7
KONO	68.08	342	ePc	24	06.02	0.1	WTS	75.77	340	iPc	24	51.20	-0.4	SOTA	79.12	336	iPc	25	10.80	0.4
HYB	68.26	272	iPc	24	07.20	-0.5		1.2s	898.00nm			6.5mb			1.4s	1485.00nm			6.7mb	
	1.0s	285.00nm			6.1mb		MOX	75.87	337	iPc+	24	52.00	-0.3				i	25	24.60	
			i	24	31.00	93kmX		1.6s	654.00nm			6.3mb					i	25	28.80	
ANMO	69.53	60	ePd	24	15.81	0.3	Z	26s	2.30um			5.4MszX					ipP	25	49.60	157kmX
	1.2s	33.20nm			5.1mb					e	25	27.00	141kmX	RBL	79.18	334	P	25	10.00	-0.6
			i	24	36.09	77kmX	TLB	75.90	324	ePc	24	52.00	-0.5	ECH	79.23	339	P	25	11.36	0.5
			eS	33	22.37		QLP	75.90	190	eP	24	54.00	1.4	LJU	79.26	333	eP	25	10.60	-0.4
			esS	33	53.82					i	25	16.50	85kmX	FVI	79.26	335	P	25	15.20	4.2X
			e	34	50.76		PSZ	75.92	331	iP	24	52.90	0.2	PLD	79.29	325	eP	25	11.00	-0.2
POO	70.54	276	iPc	24	20.80	-0.9	MLR	75.93	326	iPd	24	52.50	-0.4	COO	79.31	183	iPc	25	21.80	10.5X
	1.3s	557.69nm			6.3mb		ISR	76.01	325	ePd	24	54.00	0.8				i	25	34.70	44kmX
			eS	33	36.00		DBN	76.02	341	iP+	24	52.00	-1.0	SLE	79.32	338	ePc	25	11.30	-0.1
OIS	70.65	195	e(P)	24	21.00	-1.1	HOF	76.11	337	iPc	24	53.50	-0.1	FEL	79.34	338	eP	25	11.37	-0.2
			e	24	44.00	88kmX		1.4s	545.00nm			6.3mb		KDZ	79.41	324	eP	25	13.00	1.1
SCH	70.71	24	eP	24	22.00	-0.1	KAS	76.21	319	iPc	24	54.70	0.3	VTS	79.43	326	iPc	25	12.00	-0.2
BOM	70.96	277	eP	24	23.00	-1.1	TNR	76.40	327	ePd	24	55.00	-0.4	VOY	79.45	334	iPc	25	11.20	-1.0
			eS	33	33.00		CMP	76.45	326	iPc	24	59.00	3.3X	EMM	79.46	29	P	25	12.70	0.6
WB5	71.05	201	eP	24	23.50	-1.0	SRO	76.52	332	eP	24	56.40	0.5	OGA	79.50	336	iPc	25	13.30	0.8
			i	24	45.20	83kmX	ZST	76.55	333	eP	24	56.50	0.4	VITF	79.50	340	P	25	12.77	0.6
COP	71.07	339	iPd+	24	25.70	1.5	PSN	76.61	323	iPd	24	57.00	0.5	BNT	79.51	322	iP	25	13.30	0.8
	1.3s	600.00nm			6.3mb		VKA	76.72	333	ePc	24	56.50	-0.6	VBY	79.53	333	iPc	25	13.50	1.1
			i	24	30.00	14kmX		2.5s	1287.00nm			6.4mb		EDC	79.55	322	iP	25	12.30	-0.3
GBA	71.76	270	P	24	28.00	-1.0				epP	25	36.50	163kmX	CEY	79.56	333	iPc	25	12.40	-0.3
TAB	72.82	309	iP+	24	36.00	0.9				e	27	18.00		MOF	79.57	339	P	25	13.03	0.2
EDU	73.21	348	eP	24	36.00	-0.9	KHC	76.73	335	iPc	24	57.50	0.3	SAX	79.58	337	ePc	25	13.40	0.3
	1.0s	271.00nm			6.1mb			1.2s	240.00nm			6.0mb		ZLA	79.61	338	ePc	25	13.30	0.3
ELO	73.38	348	eP	24	36.80	-1.1	Z	20s	0.60um			4.9Msz		HAU	79.61	339	iPc	25	13.00	0.1
	1.1s	316.00nm			6.1mb		N	20s	1.60um						1.1s	324.30nm			6.1mb	
EBH	73.57	348	eP	24	38.20	-0.8	E	20s	0.70um					Z	20s	1.25um			5.3Msz	
	1.0s	562.00nm			6.4mb					S	34	38.00		RZN	79.64	325	iPc	25	13.00	-0.4
EDI	73.84	347	eP	24	39.60	-0.9	GRF	76.85	337	iPc	24	58.30	0.5	DHR	79.65	298	PKP	25	13.30	-0.1
	1.0s	191.00nm			5.9mb			1.3s	1050.00nm			6.6mb		BSF	79.67	339	P	25	13.53	0.2
BRN	73.85	337	ePc	24	41.00	0.4	Z	22s	1.00um			5.1Msz		ALT	79.69	320	iP	25	14.20	0.6
EAU	73.95	348	eP	24	40.50	-0.7	ELC	76.90	48	P	24	57.80	-0.4	TRI	79.79	334	iPc	25	13.00	-0.8
	1.1s	631.00nm			6.4mb		WET	76.91	336	iPc	24	58.50	0.4	RDO	79.79	324	iPc	25	14.00	0.1
MEO	74.02	55	iPd	24	41.50	-0.5	CLE	77.00	40	iP	24	58.40	-0.3	ALN	79.81	323	ePc	25	13.50	-0.5
KRA	74.03	332	iPd	24	41.80	0.1	TNS	77.05	339	ePc	24	59.10	0.2	DST	79.86	321	iP	25	14.60	0.2
	0.8s	222.00nm			6.1mb		ENN	77.12	340	iPc	24	59.00	-0.2	OSS	79.90	336	ePc	25	15.30	0.6
Z	24s	2.50um			5.4MszX			1.0s	721.00nm			6.5mb		VVI	79.92	335	P	25	13.40	-1.2
E	24s	3.80um					OLY	77.19	50	P	24	59.00	-0.9	RIY	79.93	333	iPc	25	14.00	-0.6
		i	24	52.50	35kmX	RSNY	77.20	34	P	24	58.90	-0.9	RSCP	80.01	46	P	25	15.20	-0.1
		eS	34	40.00			1.0s	39.77nm			5.3mb			0.9s	111.52nm			5.8mb	
KOD	74.22	267	iPc	24	43.90	0.1	DRA	77.24	326	ePd	25	02.00	2.0				pP	25	38.50	88kmX
	0.8s	74.63nm			5.6mb		MEM	77.25	340	iPc	24	59.92	0.1	LLS	80.03	337	ePc	25	15.90	0.5
			eS	34	11.00		CBM	77.31	29	P	25	00.80	0.5	CTI	80.08	335	Pc	25	15.00	-0.5
EKA	74.41	347	Pc	24	43.40	-0.4	BZS	77.37	329	eP	24	59.00	-1.6	KKB	80.10	326	iPc	25	19.00	3.4X
	0.7s	130.00nm			5.9mb		ETA	77.40	348	eP	25	00.60	-0.1	MMB	80.10	325	iPc	25	16.00	0.4
KSP	74.42	334	iPd	24	43.80	-0.2		1.0s	503.00nm			6.4mb		LOMF	80.12	339	P	25	16.34	0.7
	1.2s	394.00nm			6.2mb		WVLY	77.41	38	P	25	01.20	0.2	PLE	80.13	329	eP	25	16.00	0.1
		id	24	45.00	4kmX	UCC	77.42	341	Pc+	25	02.20	1.4	VDL	80.26	337	ePc	25	17.40	0.8
ESK	74.43	347	ePd	24	43.50	-0.5	KMR	77.55	334	iP+	25	02.00	0.4	FLN	80.32	344	eP	25	16.70	0.1
	1.0s	280.00nm			6.1mb					i	25	42.00	163kmX		1.0s	437.50nm			6.3mb	
SIO	74.51	53	eP	24	44.10	-0.7	SNF	77.71	341	iPc	25	02.57	0.1	Z	20s	1.50um			5.3Msz	

16d 06h

IVA	80.37	328	eP	25	17.20	0.1	BHB	82.36	338	P	25	26.05	-1.3	EMON	86.62	347	eP	25	49.10	0.3
LDF	80.41	344	eP	25	17.10	0.0	KSL	82.38	318	eP	25	27.00	-0.6	ECRI	86.63	344	iPd	25	49.90	1.0
KHL	80.56	320	iP	25	18.00	-0.2	RRL	82.40	338	P	25	28.92	1.0	GIB	86.72	330	P	25	48.50	-1.0
SRS	80.56	325	ePc	25	17.70	-0.3	CKI	82.49	337	P	25	28.30	0.3	HLW	86.82	314	eP+	25	50.00	0.1
EZN	80.61	323	eP	25	17.90	-0.4	PYM	82.50	341	P	25	29.67	1.5				e	36	09.00	
SKO	80.61	327	iPc	25	17.90	-0.4	ASS	82.51	333	P	25	29.10	0.8	KLB	86.90	211	eP	25	49.70	-0.4
	1.7s	827.00nm			6.4mb		LSK	82.52	327	eP	25	28.40	0.1	ERC	87.14	331	P	25	50.80	-0.7
Z	20s	1.55um			5.4Msz		PII	82.53	335	Pc	25	27.50	-0.7	MCT	87.17	330	P	25	56.00	4.2X
		i		25	25.20	23kmX	HLBJ	82.58	311	Pc	25	46.42	17.6X	MEU	87.22	329	P	25	52.60	0.7
		iS		35	14.00		TPE	82.60	327	eP	25	36.20	7.5X	LVI	87.27	331	P	25	53.20	1.3
		i		36	24.50		JARJ	82.63	312	Pc	25	46.51	17.4X	PZI	87.29	329	P	25	53.34	1.1
		LR		05	59.00		DOI	82.68	337	P	25	29.20	0.1		1.3s	978.20nm			6.7mb	
NKY	80.73	329	e(P)	25	18.30	-0.7	BURJ	82.70	312	Pc	25	47.14	17.7X	STS	87.33	348	eP	25	53.20	1.0
GRR	80.74	344	eP	25	19.20	0.3	FIN	82.71	337	P	25	28.67	-0.5	KMSA	87.50	298	PKP	25	53.00	-0.5
TMA	80.77	337	ePc	25	19.50	0.2	PZZ	82.71	338	P	25	28.76	-0.6	ERUA	87.61	347	eP	25	54.50	0.9
VAY	80.77	326	iPc	25	19.00	-0.1	ROB	82.71	337	P	25	29.04	-0.2	EROQ	87.76	341	eP	25	55.20	0.8
	1.2s	815.00nm			6.5mb		AGG	82.86	325	ePc	25	28.30	-1.8	MUN	87.79	212	eP	25	54.30	0.0
KNT	80.78	325	ePc	25	19.00	-0.2	ENR	82.89	337	P	25	28.62	-1.6	ESEL	88.21	339	eP	25	57.00	0.5
SAL	80.79	336	Pc	25	19.50	0.4	RYD	82.90	300	PKP	25	30.50	-0.1	ETOR	88.27	343	iPc	25	57.20	0.3
BRY	80.80	329	eP	25	18.50	-0.9	STV	82.90	337	P	25	28.91	-1.4	NWAO	88.30	211	eP	25	57.30	0.6
BCK	80.82	318	iP	25	17.50	-2.0	LBL	82.94	340	P	25	31.80	1.5	PTS	88.45	331	P	25	58.00	0.3
MDI	80.85	336	P	25	19.80	0.4	AQU	82.95	332	P	25	31.30	0.8	GUD	88.83	344	iPd	26	00.20	0.5
LOR	80.87	341	iPc	25	19.60	0.0	MDSJ	82.97	311	Pc	25	48.62	17.8X	ECHE	89.24	342	e(P)	26	02.10	0.6
	1.0s	343.75nm			6.2mb		SRN	82.97	327	eP	25	30.30	-0.2	TOL	89.55	344	iPd	26	04.50	1.6
Z	20s	1.75um			5.4Msz		IMI	83.07	337	P	25	31.08	0.0		1.3s	250.00nm			6.3mb	
KKS	80.89	328	eP	25	20.00	0.3	KFNJ	83.07	312	Pd	25	49.05	17.9X	EPLA	89.72	346	iPd	26	04.20	0.5
SOH	80.91	325	ePc	25	19.10	-0.8	ZNT	83.08	312	eP	25	31.00	-0.3	ABHA	90.18	298	PKP	26	08.00	1.5
TTG	80.98	329	eP	25	19.70	-0.4	FORR	83.10	203	iPd	25	31.90	0.8	KMTA	90.18	298	PKP	26	08.70	2.3
RUWJ	81.00	310	Pd	25	40.48	19.9X		0.4s	19.00nm			5.4mb		EVIA	90.47	343	iPd	26	08.20	0.9
GRC	81.02	341	P	25	21.35	1.1	AUTN	83.11	337	P	25	32.36	0.8	EBAN	91.17	343	eP	26	11.20	0.8
VAI	81.02	337	Pc	25	20.40	0.1	TOUF	83.14	337	P	25	32.40	0.8	ECOG	91.99	343	iPc	26	14.40	0.1
BLA	81.03	42	ePc	25	21.10	0.5	MNS	83.14	333	Pc	25	31.00	-0.4	AFC	92.01	343	eP	26	14.20	-0.3
	1.0s	30.00nm			5.1mb		LHS	83.14	44	P	25	31.20	-0.3	ENIJ	92.02	342	eP	26	14.70	0.4
MMK	81.05	337	ePc	25	21.70	0.9	MASJ	83.15	312	Pc	25	49.17	17.4X	EPRU	92.60	344	eP	26	18.70	1.7
OUR	81.09	324	ePc	25	20.30	-0.5	IGT	83.16	326	ePc	25	30.80	-0.7	EJIF	93.14	344	iPd	26	20.60	1.1
LBF	81.12	340	iPc	25	20.90	0.0	KEK	83.19	327	eP	25	31.30	-0.4	NKM	94.11	344	iP	26	25.50	1.6
LPF	81.12	344	eP	25	21.20	0.4	SBF	83.23	337	iPc	25	32.00	0.1				i	26	27.00	5kmX
SSF	81.14	341	iPc	25	21.10	0.1	AURF	83.23	337	P	25	32.62	0.6	IFR	95.93	343	iP	26	32.00	-0.6
GRG	81.15	326	ePc	25	20.80	-0.3	ATH	83.24	323	eP	25	31.40	-0.6	AVE	96.55	345	iP	26	36.00	0.8
DIX	81.16	338	ePc	25	22.40	0.9	RJF	83.24	342	eP	25	32.50	0.6	BCAO	114.73	311	ePKP	31	45.91	-0.4
THE	81.22	325	ePc	25	20.50	-0.9	Z	20s	1.25um			5.3Msz					ePP	32	40.46	
HCY	81.22	329	eP	25	20.40	-1.0	DUI	83.25	331	P	25	32.80	0.7	LKO	119.23	338	PKP	31	54.80	-0.1
HVAR	81.25	331	iP	25	20.60	-1.0	AZI	83.27	332	P	25	33.50	1.5	TIC	121.87	337	PKP	32	00.70	0.8
BDV	81.25	329	eP	25	21.00	-0.6	MVIF	83.27	337	P	25	32.97	0.7	KIC	122.07	336	PKP	32	00.90	0.7
SDA	81.26	328	iPd	25	22.10	0.5	LCI	83.29	328	Pc	25	32.00	-0.2	LIC	122.28	336	PKP	32	01.00	0.4
PLG	81.26	325	iPc	25	21.00	-0.8	MKRJ	83.34	312	Pc	25	50.18	17.5X	Z	20s	0.32um			5.0Msz	
EMS	81.29	338	ePc	25	22.80	0.8	QTRJ	83.36	311	Pc	25	50.34	17.5X	KRI	125.61	286	iPKPd	32	11.50	4.3X
FAM	81.31	315	eP	25	23.00	1.0	REVF	83.36	337	P	25	33.40	0.8	BUL	128.70	284	iPKPd	32	14.20	1.2
BST	81.37	346	P	25	23.67	1.5	SDI	83.41	332	Pc	25	32.50	-0.4	ZOBO	132.09	62	PKP	32	21.00	0.9
ULC	81.39	328	eP	25	21.50	-0.9	CALN	83.47	337	P	25	34.24	1.0				LR	17	00.00	
AVF	81.44	341	iPc	25	22.80	0.3	CAF	83.49	341	eP	25	34.20	1.0	LPB	132.32	63	PKP	32	23.00	2.7X
IZM	81.44	321	eP	25	22.20	-0.5	QASM	83.56	303	PKP	25	34.00	0.1	CNCB	132.60	63	PKP	32	22.00	1.0
ORO	81.44	337	P	25	23.50	0.8	RMP	83.65	333	Pc	25	34.70	0.7				i	35	44.00	
SMF	81.47	340	iPc	25	23.00	0.3	FRF	83.71	337	iPc	25	34.70	0.4	CCH	134.12	61	PKP	32	25.20	1.6
CSS	81.65	315	eP	25	23.50	-0.4	RFI	83.72	332	P	25	35.56	1.2				e	35	47.00	
FNA	81.68	326	ePc	25	23.10	-0.8		1.3s	3471.20nm			7.2mb X		SIV	135.82	55	PKP	32	14.20	-12.3X
TIR	81.72	328	eP	25	24.20	0.1	LFF	83.75	342	eP	25	35.40	0.9				i	32	27.40	
BGF	81.77	341	eP	25	24.70	0.5	LRG	83.88	338	iPc	25	35.80	0.7	SOB1	138.10	24	ePKP	32	20.00	-10.9X
RSM	81.79	334	P	25	25.70	1.4		1.2s	511.35nm			6.4mb		SPA	138.85	180	iPKPc	32	32.90	2.1
LSD	81.81	338	P	25	25.75	0.9	KAP	83.90	320	eP	25	34.40	-1.0		0.8s	20.42nm				
LPL	81.86	338	iPc	25	26.10	1.1	LPO	83.90	342	eP	25	36.10	0.8	BAO	141.72	38	e(PKP)	32	32.00	-5.4X
BOB	81.86	336	P	25	25.40	0.6	BSS	83.93	331	P	25	34.90	-0.5	MDZ	143.67	80	ePKP	32	36.90	-3.4X
LIT	81.86	325	ePc	25	23.70	-1.2	LMR	83.96	338	iPc	25	36.00	0.5	BLE	144.55	279	ePKP	32	42.50	0.9
LPG	81.87	338	iPc	25	26.30	1.1	SGO	83.97	330	P	25	34.90	-0.7		0.6s	33.33nm				
	1.0s	437.50nm			6.3mb		PGF	84.04	336	P	25	36.82	0.7	PPD	145.87	47	ePKP	32	44.20	-0.1
HRI	81.89	312	eP	25	25.00	-0.2	ORI	84.04	329	P	25	36.80	0.8				e	32	54.20	
KZN	81.95	326	iPc	25	24.30	-1.1	MGR	84.27	330	Pc	25	37.60	0.4				e	33	06.90	
SFI	81.97	334	Pc	25	26.60	1.3	MMN	84.35	330	P	25	37.60	0.1				e	33	23.50	
KBN	82.02	327	eP	25	25.30	-0.3	CSI	84.35	329	P	25	37.80	0.2	VAO	148.71	42	ePKP	32	53.30	4.4X
ARV	82.04	333	Pc	25	26.10	0.4	TDS	84.44	329	P	25	38.10	0.1				e	32	57.10	
MME	82.05	335	P	25	27.47	1.4	ROI	84.44	329	P	25	40.80	2.7X				e	33	06.90	
RSP	82.07	338	P	25	25.43	-0.6	UQSK	84.45	303	PKP	25	39.60	1.2				e	33	19.50	
MAF	82.15	341	iPc	25	27.00	0.8	ITM	84.62	324	iPc	25	37.80	-1.2				e	33	33.40	
PLDF	82.16	340	P	25	27.68	1.3	CZI	84.91	329	P	25	38.80	-1.5	JFO	149.06	35	ePKP	32	54.20	4.8X
TCF	82.16	341	iPc	25	26.90	0.6	MBH	85.17	311	eP	25	41.00	-0.8				e	33	05.30	
PPCY	82.17	316	eP	25	25.50	-1.0	GRI	85.17	329	P	25	41.97	0.2	BMA	149.61	37	ePKP	32	54.60	4.4X
AGO	82.18	341	P	25	27.92	1.5		1.3s	586.20nm			6.4mb			S.D. = 0.9		on 454 of 490 obs.			
BDI	82.20	335	Pc	25	27.50	0.9	VAM	85.26	322	eP	25	41.50	-0.7							
OTFJ	82.20	310	Pc	25	44.63	17.8X	AFIF	85.32	302	PKP	25	45.00	2.2	?	OCT 16, 1990 07h 26m 05.07± 1.48s					
SMG	82.21	321	eP	25	25.70	-0.9	AYN	85.34	310	PKP	25	43.40	0.7		44.182 N ±27.3km 149.780 E ±18.5km					
CRE	82.21	334	Pc	25	27.50	0.8	MRWA	85.36	214	eP	25	42.80	0.2		DEPTH = 33.0km (normal)					
NEO	82.27	324	eP	25	27.00	0.0	HOL	85.49	311	PKP	25	43.70	0.3		4.2mb (1 obs.)					
BNI	82.31	338	Pc	25	28.00	0.7	EPF	85.66	342	eP	25	44.90	0.7	KURIL ISLANDS						(221)
PCP	82.31	337	P	25	27.08	-0.1		0.6s	42.25nm			5.6mb								
SHMJ	82.32	312	Pc	25	45.07	17.7X	ATN	86.09	329	P	25	45.00	-1.3	KUSJ	3.84	255	P	27	01.80	-1.4
MFF	82.33	343	eP	25	27.70	0.5	BAL	86.37	212	eP	25	47.40	-0.1				S	27	39.20	
LSF	82.33	342	iPc	25	27.70	0.5	MNO	86.55	330	P	25	50.00	1.2	HOOJ	5.07	251	P	27	22.40	1.7

		S	28 16.40		
ASAJ	5.14	272 P	27 21.60	-0.1	
MRRJ	6.59	258 P	27 42.50	0.4	
		S	28 52.00		
OFUJ	7.93	233 P	28 00.60	-0.3	
		eS	29 21.80		
FBA	39.63	36 (P)	33 35.00	0.2	
GBA	68.01	268 Pd	37 02.80	-0.5	
	0.7s	1.60nm		4.2mb	
	S.D. = 1.1	on 7 of 7 obs.			

? OCT 16, 1990 08h 52m 28.35± 2.90s
11.260 N ±14.0km 61.819 W ±55.9km
DEPTH = 33.0km (normal)
WINDWARD ISLANDS (95)
MD 3.0 (TRN).

TRN	0.73	146 eP	52 41.15	-1.1	
		eS	52 51.79		
GRW	0.91	10 eP	52 44.81	0.0	
		eS	52 58.98		
TPP	1.00	159 eP	52 46.58	0.5	
		eS	52 57.65		
TBH	1.07	136 eP	52 47.65	0.6	
		eS	53 00.11		
	S.D. = 1.3	on 4 of 4 obs.			

? OCT 16, 1990 10h 14m 10.77± 1.06s
39.070 N ± 9.9km 27.639 E ±18.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.3 (ISK).

IZM	0.73	204 ePg	14 25.20	0.0	
		iSg	14 37.20		
DST	0.93	55 ePn	14 28.60	0.0	
EDC	1.29	8 ePn	14 33.80	-0.8	
BNT	1.30	9 iPn	14 35.70	0.8	
	S.D. = 1.2	on 4 of 4 obs.			

? OCT 16, 1990 10h 15m 46.25± 2.67s
43.782 N ±50.5km 7.362 E ±44.5km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
ML 2.2 (LDG).

SBF	0.10	33 Pg	15 49.00	0.0	
		Sg	15 56.00		
FRF	0.56	247 Pg	15 58.00	0.3	
		Sg	16 10.60		
LMR	0.76	234 Pg	16 01.20	0.0	
		Sg	16 17.80		
LRG	0.80	246 Pg	16 01.40	-0.3	
		Sg	16 17.80		
	S.D. = 0.4	on 4 of 4 obs.			

? OCT 16, 1990 10h 47m 28.20± 0.97s
39.103 N ± 8.3km 27.630 E ± 9.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.3 (ISK).

IZM	0.76	202 ePg	47 43.20	0.1	
		eSg	47 55.70		
DST	0.92	57 iPn	47 45.60	-0.3	
EZN	1.24	306 ePn	47 51.00	-0.2	
BNT	1.27	10 iPn	47 52.20	0.4	
	S.D. = 0.5	on 4 of 4 obs.			

? OCT 16, 1990 12h 12m 15.70± 1.03s
13.061 N ±13.3km 144.708 E ±31.4km
DEPTH = 62.1 ± 8.9 km
4.3mb (1 obs.)
MARIANA ISLANDS (216)

GUA	0.51	23 ePd	12 27.80	-0.3	
		eS	12 43.50		
GUMO	0.55	16 ePd	12 28.60	0.2	
PJG	0.55	16 iPd	12 28.70	0.3	
MAT	24.10	347 eP	17 27.00	0.4	
WB5	34.28	197 eP	18 57.80	-0.3	
ASPA	38.00	196 eP	19 29.80	0.2	
	1.0s	3.60nm		4.3mb	
FBA	68.77	25 (P)	23 15.40	0.5	
INK	74.91	22 ePd	23 49.00	-2.3	
TNP	88.29	51 (P)	25 03.50	1.3	
KIC	144.03	301 PKP	31 46.84	0.0	
TIC	144.11	301 PKP	31 47.04	0.0	
LIC	144.35	301 PKP	31 47.82	0.4	
	S.D. = 1.0	on 12 of 12 obs.			

• OCT 16, 1990 12h 55m 14.16± 2.12s
32.642 S ± 8.7km 71.795 W ±16.0km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.74	117 iPd	55 29.00	0.2	
		iS	55 41.50		
LCCH	0.85	167 iPd	55 31.30	0.7	
		iS	55 45.00		
JACH	1.01	93 iPd	55 32.50	-0.9	
		iS	55 47.10		
PEL	1.06	119 iPd	55 34.50	0.3	
		iS	55 50.60		
TACH	1.24	145 iPc	55 37.50	0.3	
		iS	55 58.00		
SAN	1.25	131 iP	55 37.60	0.2	
		iS	55 56.10		
LNV	1.35	166 iPd	55 37.90	-1.1	
		i	55 56.20		
		iS	55 58.50		
FCH	1.44	119 iPc	55 40.40	-0.2	
		iS	56 01.20		
PCH	1.45	133 iPc	55 40.50	0.0	
		iS	56 02.50		
RTC8	2.79	66 ePd	56 00.50	0.7	
		eS	56 37.80		
RTLL	3.11	66 ePd	56 04.00	-0.3	
		eS	56 47.80		
	S.D. = 0.7	on 11 of 11 obs.			

• OCT 16, 1990 13h 05m 16.17± 2.04s
32.672 S ± 8.7km 71.722 W ±15.3km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.67	117 iPd	05 30.00	0.4	
		iS	05 42.00		
LCCH	0.81	171 iP	05 32.50	0.6	
		iS	05 45.90		
JACH	0.95	91 iPd	05 33.50	-0.9	
		iS	05 48.10		
PEL	0.99	119 iPd	05 35.20	0.2	
		iS	05 51.60		
TACH	1.18	146 iP	05 38.50	0.3	
		iS	05 57.50		
SAN	1.18	131 eP	05 38.50	0.2	
		iS	05 57.00		
LNV	1.31	169 iPd	05 39.20	-1.1	
		i	05 58.00		
		iS	05 59.70		
FCH	1.37	119 iPc	05 41.20	-0.4	
		iS	06 02.00		
PCH	1.39	133 iP	05 42.00	0.4	
		i	06 06.90		
RTC8	2.75	65 ePd	06 02.10	0.9	
RTLL	3.07	65 ePd	06 05.20	-0.5	
		(S)	06 48.70		
	S.D. = 0.7	on 11 of 11 obs.			

? OCT 16, 1990 13h 23m 56.65± 7.10s
43.714 N ±29.4km 128.200 W ±48.8km
DEPTH = 10.0km (geophysicist)
OFF COAST OF OREGON (30)

KMOR	3.87	59 P	24 56.70	-0.9	
NLO	4.13	53 P	25 00.72	-0.4	
HBO	4.26	86 P	25 02.47	-0.7	
PGO	4.46	65 P	25 06.29	0.4	
8MW	4.47	50 P	25 05.34	-0.7	
GT2	4.48	69 P	25 05.99	-0.2	
RVW	4.58	56 P	25 07.20	-0.3	
LVP	4.74	58 P	25 10.12	0.1	
VLMM	4.76	65 P	25 10.32	0.1	
FL2	4.84	57 P	25 11.33	0.0	
MTMW	4.84	59 P	25 11.28	-0.1	
TDH	4.85	69 P	25 11.63	0.1	
CZM	4.87	54 P	25 10.83	-0.8	
ERK	4.90	56 P	25 11.15	-1.0	
APW	4.90	51 P	25 11.72	-0.4	
SHW	4.90	58 P	25 12.67	0.4	
V8EM	4.93	72 P	25 12.65	0.0	
HSR	4.93	58 P	25 12.93	0.3	
JLK	4.93	58 P	25 12.73	0.1	
STD	4.93	57 P	25 12.63	-0.1	
ESD	4.96	58 P	25 14.09	1.0	
VLL	4.98	67 P	25 13.58	0.3	
CDFW	4.99	59 P	25 13.46	0.1	
TDL	4.99	56 P	25 13.48	-0.1	
KOSW	5.06	55 P	25 14.37	-0.1	
APM	5.07	64 P	25 15.08	0.6	
VFP	5.08	69 P	25 15.68	0.9	
LMW	5.12	53 P	25 14.94	-0.3	
GULW	5.19	63 P	25 17.28	1.0	
ASR	5.29	60 P	25 17.60	-0.1	
LON	5.44	54 P	25 19.40	-0.4	
RVC	5.45	52 P	25 20.07	0.1	
REMR	5.46	53 P	25 20.36	0.2	
GLK	5.46	56 P	25 20.34	0.1	
WPW	5.57	55 P	25 21.79	0.1	
VGB	5.60	69 P	25 22.25	0.2	
FMW	5.62	53 P	25 21.97	-0.4	
GL2	5.71	64 P	25 23.46	-0.1	
HTW	6.08	45 P	25 29.61	0.9	
EBG	6.26	57 P	25 31.50	0.2	
JCW	6.26	42 P	25 31.71	0.4	
MXC	6.28	60 P	25 31.64	0.0	
RPW	6.64	42 P	25 36.37	-0.3	
MBW	6.69	39 P	25 38.06	0.5	
CRF	6.95	60 P	25 40.74	-0.3	
RC1	6.97	59 P	25 41.00	-0.3	
	S.D. = 0.5	on 46 of 46 obs.			

? OCT 16, 1990 13h 32m 51.98±13.10s
32.233 S ±78.3km 72.189 W ±73.4km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

ROCH	1.24	127 iPd	33 12.50	-0.8	
		iS	33 25.00		
LCCH	1.34	157 iPc	33 14.80	0.2	
		iS	33 28.00		
JACH	1.42	109 iPd	33 15.90	0.1	
		iS	33 30.60		
PEL	1.56	126 iPd	33 17.70	-0.1	
		iS	33 33.50		
SAN	1.77	134 eP	33 20.50	-0.3	
		iS	33 40.00		
LNV	1.84	159 eP	33 21.50	-0.2	
		i	33 34.00		
		i	33 40.30		
		iS	33 42.80		
FCH	1.94	125 iPd	33 24.00	0.5	
		iS	33 44.50		
PCH	1.97	135 iPd	33 24.50	0.7	
		iS	33 45.50		
	S.D. = 0.5	on 8 of 8 obs.			

OCT 16, 1990 14h 25m 30.72± 0.42s
43.149 N ± 4.2km 0.006 W ± 4.8km
DEPTH = 28.3 ± 4.4 km
PYRENEES (378)
ML 4.1 (LDG). mbLg 3.6 (MDD).
Felt (V) in the Lourdes area, France.

BTH	0.15	260 iPgd	25 38.50	2.3	
EPF	0.28	115 Pg	25 35.20	-2.6	
		Sg	25 39.00		
LPO	1.76	29 Pn	26 01.00	1.3	
		Pg	26 04.80		
LFF	1.87	16 Pn	26 03.00	1.7	
		Pg	26 07.40		
ECRI	1.92	255 iP	26 04.69	2.6	
		eS	26 28.60		
ETER	2.27	111 iPnc	26 09.90	2.8	
		eSn	26 39.00		
CAF	2.32	39 Pn	26 08.50	0.7	
		Pg	26 15.40		
EROO	2.34	172 ePn	26 11.40	3.3X	
		eSn	26 38.40		
RJF	2.42	26 Pn	26 09.60	0.4	
		Pg	26 17.20		
ETOR	2.78	214 ePn	26 15.00	0.6	
		eSn	26 44.90		
LBL	3.13	47 Pn	26 19.34	0.1	
LSF	3.29	19 Pn	26 22.50	1.0	
		Pg	26 33.20		
MFF	3.45	358 Pn	26 24.20	0.3	
		Pg	26 36.40		
		Sg	27 22.00		

16d 14h

TCF	3.51	26	Pn	26	24.20	-0.6
			Pg	26	37.40	
			Sg	27	22.50	
MAF	3.58	30	Pn	26	25.80	0.1
			Pg	26	38.40	
			Sg	27	25.80	
ECHE	3.63	192	ePn	26	25.90	-0.5
			eSn	27	03.60	
AGO	3.67	37	Pg	26	40.47	13.6X
SSB	3.90	55	Pn	26	30.05	-0.2
			Pg	26	44.25	
			Sg	27	34.58	
BGF	3.97	30	Pn	26	30.50	-0.6
			Pg	26	46.40	
GUD	3.98	232	ePn	26	31.70	0.2
			eSn	27	16.70	
ESEL	4.02	146	ePn	26	31.40	-0.5
			eSn	27	15.40	
AVF	4.35	32	Pn	26	35.80	-0.8
			Pg	26	53.50	
			Sg	27	49.80	
SMF	4.44	37	Pn	26	38.20	0.4
			Pg	26	54.00	
			Sg	27	52.50	
TOL	4.46	224	e(Pg)	26	43.00	4.8X
			eSn	27	28.00	
			e(Sg)	27	58.00	
SSF	4.63	31	Pn	26	40.40	-0.2
			Pg	26	58.60	
			Sg	27	58.00	
LRG	4.66	84	Pn	26	43.50	2.6
LBF	4.76	35	Pn	26	41.80	-0.6
			Pg	27	00.00	
			Sg	28	02.80	
LMR	4.76	86	Pn	26	43.60	1.2
FRF	4.87	83	Pn	26	45.30	1.4
EVIA	4.89	204	ePn	26	42.80	-1.5
LPF	4.94	352	Pn	26	44.60	-0.2
			Pg	27	03.10	
			Sg	28	08.00	
LOR	4.94	32	Pn	26	43.60	-1.4
			Sg	28	06.80	
GRR	5.27	354	Pn	26	48.60	-1.0
			Pg	27	10.40	
			Sg	28	18.80	
ERUA	5.31	264	ePn	26	50.60	0.4
			eSn	27	49.50	
LPL	5.38	62	Pn	26	51.20	-0.2
LDF	5.45	359	Pn	26	50.40	-1.7
			Pg	27	14.00	
			Sg	28	22.70	
SBF	5.46	80	Pn	26	52.00	-0.4
EPLA	5.50	238	ePn	26	51.90	-0.9
			eSn	27	51.50	
FLN	5.62	357	Pn	26	53.40	-1.2
			Sg	28	28.80	
EBAN	5.75	211	ePn	26	55.10	-1.3
			eSn	27	56.30	
HAU	6.59	40	Pg	27	32.00	23.8X
PGF	6.65	92	Pn	27	07.00	-2.1
EHOR	6.65	219	ePn	27	08.60	-0.5
			eSn	28	18.50	
DOU	7.63	23	P	27	21.90	-0.9

S.D. = 1.3 on 40 of 44 obs.

? OCT 16, 1990 14h 38m 55.47± 0.98s
39.062 N ± 8.4km 27.681 E ± 9.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM	0.74	206	ePg	39	10.00	0.0
			eSg	39	24.70	
DST	0.91	53	iPn	39	13.00	0.0
EZN	1.30	306	ePn	39	19.50	0.0
BNT	1.31	8	ePn	39	19.60	0.0

S.D. = 0.0 on 4 of 4 obs.

OCT 16, 1990 15h 45m 50.26± 0.95s
43.402 N ± 5.6km 5.411 E ± 7.0km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.6 (STR).

GELF	0.02	147	Pg	45	52.05	-0.2
BERF	0.22	113	Pg	45	55.48	0.4
TREF	0.22	355	Pg	45	54.88	-0.2
PUYF	0.25	58	Pg	45	54.74	-0.8
PRAF	0.44	336	Pg	45	59.42	0.2
VILF	0.50	26	Pg	45	59.75	-0.7
TAVF	0.52	65	Pg	46	00.27	-0.5
CALN	1.13	71	Pg	46	12.04	0.5
MVIF	1.36	68	Pn	46	15.61	0.3
REVF	1.46	76	Pn	46	17.56	0.8
TOUF	1.47	65	Pn	46	17.13	0.2
			Sg	46	37.56	
AURF	1.47	70	Pn	46	17.13	0.2
AUTN	1.58	67	Pn	46	18.71	0.2
DOI	1.72	50	P	46	21.50	1.0
			eSn	46	46.00	
PGF	2.77	107	Pn	46	34.19	-1.4

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

OCT 16, 1990 16h 27m 20.92± 0.57s
51.253 N ±13.7km 175.096 W ± 5.5km
DEPTH = 33.0km (normal)
4.7mb (15 obs.) 4.6Msz (5 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
Felt (II) on Adok.

ADK	1.18	303	iPc	27	41.50	0.4
			iS	27	57.70	
SDN	9.65	59	e(P)	29	42.30	1.9
			e	29	52.70	
SVW	14.60	40	eP	30	53.20	6.4X
KDC	14.61	55	eP	30	48.00	1.2
TTA	15.55	34	eP	31	04.50	5.4X
PMR	17.57	44	P	31	22.50	-2.0
IMA	18.40	28	eP	31	36.60	1.7
	1.0s		11.60nm			4.0mb
TOA	19.06	44	e(P)	31	43.60	0.7
FBA	19.65	36	e(P)	31	49.70	0.2
INK	26.25	34	eP	32	53.50	-0.8
LON	34.60	76	eP	34	08.00	-0.6
MAT	36.07	264	eP	34	21.00	-0.2
	1.0s		12.00nm			4.8mb
NEW	36.74	71	eP	34	27.40	0.7
	1.1s		9.26nm			4.6mb
CN2	39.85	283	eP	34	52.00	-0.6
	1.0s		20.00nm			4.8mb
Z	18s		0.90um			4.7Msz
N	14s		0.40um			
E	14s		0.30um			
			epP	35	01.00	30kmX
SNY	42.08	282	eP	35	11.00	0.0
	1.2s		100.00nm			5.4mb
Z	20s		0.50um			4.4Msz
TNP	42.14	85	eP	35	22.20	10.4X
FFC	42.31	56	eP	35	13.00	0.3
	0.8s		10.00nm			4.6mb
DUG	43.62	79	e(P)	35	29.40	5.6X
	1.0s		6.25nm			4.3mb
BW06	44.11	74	eP	35	29.00	1.1
	1.1s		4.96nm			4.2mb
PLM	45.37	90	eP	35	38.00	0.1
BJI	47.66	285	eP	35	55.50	-0.2
	1.3s		29.00nm			5.1mb
Z	19s		0.59um			4.6Msz
GOL	48.48	75	eP	36	01.20	-1.2
	0.7s		3.64nm			4.5mb
HHC	49.95	288	eP	36	13.80	0.3
Z	24s		0.50um			4.4MszX
SSE	50.32	272	P	36	18.50	2.2
	1.0s		12.00nm			4.9mb
BTO	51.02	289	eP	36	22.00	0.3
TIY	51.40	285	iPd	36	25.20	0.7
Z	22s		0.50um			4.5Msz
N	20s		1.00um			
XAN	55.96	284	P	36	57.20	-0.9
LZH	57.64	289	Pc	37	10.00	-0.2
	1.5s		40.00nm			5.2mb
Z	12s		0.50um			4.8MszX
GTA	57.76	294	Pd	37	09.60	-1.4
	1.0s		10.00nm			4.8mb
Z	20s		0.90um			4.9Msz
E	15s		0.40um			
CD2	61.27	284	eP	37	35.00	-0.2
WMO	61.34	305	P	37	34.50	-1.1
H8VT	63.38	52	eP	37	48.00	-1.0
CBM	63.85	47	eP	37	50.00	-2.0
LHS	66.45	64	eP	38	08.50	-0.4
N82	67.95	357	P	38	16.40	-1.6
	0.9s		5.00nm			4.6mb
HFS	68.74	355	eP	38	20.90	-2.0
	0.4s		1.70nm			4.5mb
LSA	69.66	292	iPc	38	30.80	1.2
CHG	73.07	279	eP	38	50.00	0.4
MAIO	80.54	318	eP	39	32.00	0.8
QUE	82.29	309	eP	39	41.70	1.1
SKO	86.04	348	eP	40	00.20	1.1
KSR	149.60	318	ePKP	47	07.00	3.3X

S.D. = 1.1 on 37 of 42 obs.

• OCT 16, 1990 16h 28m 54.74± 0.70s
51.293 N ±15.1km 175.053 W ± 7.2km
DEPTH = 33.0km (normal)
4.8mb (10 obs.) 4.4Msz (3 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
Felt (II) on Adok.

ADK	1.18	301	iPc	29	15.00	0.1
			eS	29	30.00	
SVW	14.55	40	eP	32	26.20	6.2X
KDC	14.56	55	e(P)	32	26.40	6.4X
TTA	15.50	34	eP	32	38.30	6.0X
IMA	18.36	28	eP	33	10.40	2.2
	1.0s		13.30nm			4.1mb
TOA	19.02	44	eP	33	16.80	0.6
FBA	19.61	36	eP	33	23.60	0.8
INK	26.20	34	eP	34	27.00	-0.6
MBC	32.82	21	eP	35	25.50	-1.1
MAT	36.11	264	eP	35	55.00	-0.3
	1.0s		12.00nm			4.8mb
NEW	36.70	71	eP	36	10.00	9.8X
	0.9s		7.68nm			4.6mb
SNY	42.10	282	Pd	36	45.40	0.5
	1.2s		50.00nm			5.1mb
Z	20s		0.50um			4.4Msz
			pP	36	57.60	45kmX
			eS	43	00.00	
TNP	42.11	85	e(P)	37	06.00	20.6X
	1.0s		2.50nm			
DUG	43.59	79	eP	37	12.70	15.4X
	1.0s		7.50nm			
PLM	45.34	90	eP	37	13.50	2.0
BJI	47.68	285	eP	37	30.00	0.3
	1.4s		42.00nm			5.3mb
GOL	48.44	75	eP	37	35.00	-1.0
	0.8s		5.95nm			4.7mb
HHC	49.96	288	eP	37	46.80	-0.6
SSE	50.35	272	P	37	46.00	-4.3X
	1.2s		14.00nm			4.8mb
			pP	37	53.70	26kmX
BTO	51.04	289	eP	37	56.00	0.4
NJ2	51.16	275	P	37	58.00	1.5
TIY	51.41	285	iPd	37	58.90	0.5
LZH	57.65	289	eP	38	43.50	-0.6
	1.5s		42.00nm			5.3mb
Z	20s		0.60um			4.7Msz
CD2	61.28	284	eP	39	08.80	-0.3
WMO	61.34	305	eP	39	04.80	-4.6X
GYA	62.66	279	P	39	17.80	-0.7
HBVT	63.34	52	eP	39	21.80	-0.7
CBM	63.80	47	eP	39	24.40	-1.1
LHS	66.41	64	eP	39	42.00	-0.5
NUR	67.43	350	eP	39	50.00	1.5
NB2	67.91	357	P	39	50.50	-1.1
	1.0s		5.80nm			4.6mb
HFS	68.70	355	eP	39	53.70	-2.8
	0.5s		2.60nm			4.6mb
Z	21s		0.15um			4.2Msz
			LR	04	28.00	
LSA	69.67	292	P	40	04.00	0.5
KHC	79.68	354	eP	41	00.00	-0.2
QUE	82.29	310	eP	41	15.00	0.6

S.D. = 1.1 on 27 of 35 obs.

• OCT 16, 1990 17h 09m 37.01± 1.92s
13.221 S ±13.5km 167.030 E ± 9.5km
DEPTH = 204.9 ± 14.4 km
5.2mb (5 obs.)
VANUATU ISLANDS (186)

BKM	4.57	165	iP	10	46.50	-0.2
			iS	11	33.50	
DZM	8.82	184	iPc	11	43.00	1.1
			iS	13	20.40	
BRS	19.40	221	iP	13	50.50	0.9
CTA	21.03	248	iPd	14	06.10	0.2
	0.8s		23.88nm			4.8mb
RMQ	21.63	230	iPc	14	12.20	0.5

PUZ	26.69	160	P	14	58.60	-0.5
CNZ	26.95	165	P	15	03.20	1.7
NOZ	27.12	161	P	15	02.80	0.0
MNG	28.28	166	P	15	13.10	-0.2
KIW	28.39	167	P	15	14.10	-0.2
PGZ	28.47	165	P	15	14.30	-0.7
	0.6s	77.00nm			5.6mb	
TCW	28.60	169	P	15	16.30	0.2
CAW	28.66	167	P	15	16.00	-0.7
MRW	28.70	168	P	15	16.60	-0.4
WDW	28.80	167	P	15	17.00	-0.8
MTW	28.80	167	P	15	17.00	-0.9
THZ	28.89	171	P	15	19.90	1.1
BLW	29.00	167	P	15	19.50	-0.1
MOW	29.00	167	P	15	19.30	-0.4
KHZ	29.63	170	P	15	24.80	-0.4
	0.4s	34.00nm			5.4mb	
LTZ	29.80	172	P	15	27.10	0.3
MOZ	30.76	172	P	15	34.80	-0.3
WB5	31.96	254	eP	15	44.00	-1.9
ASPA	33.02	247	eP	15	53.40	-1.6
	0.4s	8.80nm			4.7mb	
WARB	39.98	245	iPc	16	53.90	0.6
MBL	45.64	253	eP	17	39.00	0.0
NANU	49.68	252	eP	18	10.00	-0.2
SPA	76.86	180	iPc	21	08.10	0.4
	0.9s	48.64nm			5.2mb	
MAW	83.19	202	eP	21	42.00	1.0
FBA	84.99	18	P	21	50.00	0.0
SOB1	144.43	127	ePKP	28	50.20	-1.1
			e	28	51.80	
BCAO	147.70	257	iPKPc	28	59.50	2.8
	0.5s	31.00nm				
			id	29	46.00	
			ic	30	15.00	
	S.D. = 1.0	on	32 of	32	obs.	

& OCT 16, 1990 17h 56m 50.57s
58.167 N 156.505 W
DEPTH = 0.0km
ALASKA PENINSULA (12)
<AGS-P>.

BGM	1.40	28	eP	57	15.57	-1.7
MCNL	1.53	47	iP	57	17.08	-2.1
			eS	57	37.77	
CDD	1.68	62	eP	57	19.44	-2.0
AUI	1.99	53	eP	57	24.37	-1.4
AUH	2.00	52	eP	57	25.78	-0.2
PDB	2.02	35	eP	57	24.88	-1.4
AUE	2.02	52	eP	57	26.48	0.2
KDC	2.18	99	eP	57	28.75	0.2
OPT	2.26	47	eP	57	28.10	-1.7
			eS	57	58.85	
RED	2.96	39	eP	57	37.97	-1.9
SVW	2.98	8	eP	57	38.98	-1.1
RSO	3.00	38	eP	57	39.21	-1.3
CNPM	3.06	61	eP	57	40.09	-1.0
RDT	3.20	39	eP	57	41.21	-1.9
NNL	3.28	53	eP	57	43.76	-0.5
CKL	3.70	33	eP	57	49.73	-0.6
BGL	3.74	32	eP	57	50.45	-0.5
SPU	3.77	35	eP	57	50.19	-1.2
CRP	3.81	33	eP	57	52.16	0.2
CGLM	3.89	34	eP	57	53.70	0.7
NCG	3.92	32	eP	57	53.31	-0.2
	21 obs. associated					

• OCT 16, 1990 18h 01m 51.46± 0.68s
51.254 N ±16.4km 174.999 W ± 7.0km
DEPTH = 33.0km (normal)
4.8mb (11 obs.) 4.5Msz (4 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
Felt (II) on Adak.

ADK	1.23	302	iPc	02	12.50	0.2
SDN	9.60	59	eP	04	13.90	3.7X
KDC	14.56	55	e(P)	05	24.30	7.6X
SVW	14.56	40	eP	05	21.60	4.8X
			e	05	33.20	
TTA	15.52	34	eP	05	34.70	5.5X
IMA	18.38	28	eP	06	07.00	1.9
	1.2s	15.40nm			4.0mb	
TOA	19.02	44	e(P)	06	13.40	0.5
FBA	19.62	36	eP	06	20.50	0.8
INK	26.21	34	eP	07	24.00	-0.5
PNT	34.73	71	eP	08	43.00	2.8
	0.6s	15.00nm			5.1mb	
MAT	36.13	265	iPc	08	52.00	-0.2
	1.1s	12.66nm			4.8mb	
CN2	39.91	283	eP	09	22.60	-1.1
	Z 18s	0.60um			4.5Msz	
			epP	09	29.00	22kmX
TNP	42.08	85	eP	09	47.30	5.4X
	0.9s	3.91nm			4.1mb	
SNY	42.14	282	iPc	09	42.70	0.7
	1.2s	40.00nm			5.0mb	
PLM	45.31	90	eP	10	00.50	-7.5X
BJI	47.72	285	eP	10	26.00	-0.7
	1.5s	39.00nm			5.2mb	
	Z 22s	0.31um			4.2Msz	
TIA	49.54	280	eP	10	41.40	0.6
HHC	50.01	288	P	10	44.20	-0.3
SSE	50.38	272	eP	10	33.00	-14.3X
BTO	51.08	289	P	10	53.00	0.3
NJ2	51.20	275	Pc	10	54.80	1.3
TIY	51.45	285	Pc	10	55.50	0.0
	Z 28s	0.60um			4.5MszX	
WHN	55.04	277	eP	11	23.00	1.0
XAN	56.02	284	P	11	27.90	-1.2
LZH	57.70	289	iPc	11	40.50	-0.7
	1.5s	34.00nm			5.2mb	
	Z 22s	0.50um			4.6Msz	
			pP	11	46.50	20kmX
			sP	12	00.00	
GTA	57.81	294	eP	11	40.40	-1.5
	0.6s	10.00nm			5.0mb	
	Z 22s	0.50um			4.6Msz	
FVM	58.42	67	eP	11	44.70	-1.3
CD2	61.33	284	eP	12	05.40	-0.7
WMQ	61.39	305	P	12	05.00	-1.4
GYA	62.70	279	eP	12	15.60	0.2
HBVT	63.33	52	eP	12	18.00	-1.2
GBTN	63.61	65	eP	12	20.30	-0.9
CBM	63.80	47	eP	12	21.50	-0.8
NAV	64.36	62	eP	12	26.00	-0.1
LHS	66.40	64	eP	12	38.00	-1.1
NB2	67.95	357	P	12	46.70	-1.9
	1.0s	4.40nm			4.5mb	
HFS	68.75	355	eP	12	51.20	-2.3
	0.5s	5.30nm			4.9mb	
LSA	69.71	292	Pc	13	01.20	0.7
KSH	70.50	309	eP	13	05.00	0.3
CHG	73.13	279	eP	13	22.50	2.0
KHC	79.73	354	eP	13	57.80	0.7
MAIO	80.58	318	eP	14	03.00	1.1
QUE	82.34	310	eP	14	12.40	1.0
SKO	86.06	348	iP	14	30.00	0.3
GBA	90.15	292	P	14	51.00	1.4
	0.7s	1.90nm			4.5mb	
	S.D. = 1.2	on	38 of	45	obs.	

? OCT 16, 1990 18h 25m 17.75± 2.59s
31.486 S ±21.1km 179.837 W ±32.0km
DEPTH = 401.3 ± 24.2 km
KERMADEC ISLANDS REGION (177)

HBZ	6.29	194	P	26	57.10	3.0
PUZ	6.76	193	P	26	57.70	-1.7
			S	28	20.80	
NOZ	7.33	193	P	27	04.50	-1.3
WHH	7.97	201	P	27	15.90	2.7
PGZ	9.64	198	P	27	33.30	0.8
MNG	9.87	201	P	27	34.50	-0.6
KIW	10.27	203	P	27	39.30	-0.6
MTW	10.36	200	P	27	40.80	0.0
CAW	10.44	202	P	27	39.50	-2.3
WDW	10.61	202	P	27	43.50	-0.3
MOW	10.67	200	P	27	44.60	0.1
MRW	10.67	203	P	27	44.50	0.1
TCW	10.80	204	P	27	45.30	-0.6
THZ	11.79	208	P	27	57.80	0.0
KHZ	12.12	204	P	28	00.70	-0.8
LTZ	12.91	207	P	28	11.30	1.4
DZM	15.41	304	iPc	28	35.90	-0.8
WB5	42.58	274	eP	32	39.00	1.1
SOD	140.82	344	ePKP	44	00.00	-1.2
SUF	144.60	340	iPKP	44	08.90	1.1
	0.5s	21.50nm				
NUR	146.76	338	iPKP	44	15.60	4.2X
	0.7s	16.00nm				
BCAO	148.03	216	iPKPd	44	22.30	7.4X
	0.5s	6.00nm				
UPP	149.31	343	iPKP	44	27.20	11.8X
NB2	149.55	349	PKP	44	23.10	7.3X
	0.6s	3.50nm				
HFS	149.96	346	ePKP	44	22.70	6.3X
	0.4s	1.70nm				
	S.D. = 1.5	on	20 of	25	obs.	

OCT 16, 1990 19h 58m 16.06± 0.32s
44.913 N ± 3.0km 10.777 E ± 3.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 3.7 (VIE), 3.5 (LDG). MD 3.3 (TRI).

SAL	0.72	346	P	58	31.70	1.5
			eSg	58	43.00	
BDI	0.86	189	P	58	34.00	1.3
			eSg	58	47.00	
BOB	0.96	262	P	58	36.80	2.5
			eSg	58	51.50	
MDI	1.15	319	P	58	38.70	1.2
			eSg	58	54.80	
PII	1.21	189	P	58	39.80	1.3
			eSg	58	56.00	
PGD	1.24	147	Pc	58	39.40	0.2
			eSg	58	55.60	
SFI	1.26	142	Pc	58	39.10	-0.3
			eSg	58	57.50	
CTI	1.29	28	P	58	39.80	-0.2
			eSg	58	57.10	
CRE	1.54	146	P	58	43.30	-0.3
			eSg	59	02.50	
RSM	1.55	129	P	58	42.40	-1.3
VVI	1.58	47	P	58	44.80	0.7
			eSg	59	04.40	
PCP	1.63	258	P	58	46.56	1.6
			S	59	10.12	
VAI	1.71	305	P	58	46.20	0.3
			eSn	59	09.00	
TMA	1.79	312	P	58	47.63	0.2
VDL	1.82	330	iPd	58	48.60	0.7
OSS	1.83	346	iP	58	51.20	3.3X
CKI	1.85	256	P	58	49.80	1.7
			eSn	59	12.50	
OGA	1.96	5	iPnc	58	53.10	3.2X
FIN	1.97	250	P	58	49.38	-0.4
			S	59	14.21	
ARV	2.10	131	P	58	51.40	-0.4
ROB	2.17	254	P	58	52.77	0.0
FVI	2.19	39	P	58	52.40	-0.6
			eSn	59	19.00	
SCE	2.22	17	ePn	58	56.70	3.0X
TRI	2.25	68	i(Pn)d	58	50.70	-3.2X
			i(Pg)	58	53.00	
			i	58	57.20	
			i(Sn)	59	16.60	
			i(Sg)	59	24.00	
MMK	2.28	301	P	58	54.38	-0.2
ASS	2.29	143	P	58	53.70	-0.8
IMI	2.30	245	P	58	54.18	-0.5
LLS	2.32	328	eP	58	56.10	1.0
SQTA	2.33	7	ePn	58	55.40	0.3
	0.3s	59.90nm				
			iPg	59	00.10	
			i	59	27.30	
			iSg	59	30.90	
VOY	2.46	62	ePn	58	54.00	-3.0X
			ePb	59	00.30	
			eSn	59	32.30	
WATA	2.49	13	iPnc	58	57.50	0.1
	0.2s	8.40nm				
			iPgc	59	02.00	
			i	59	32.20	
			iSg	59	34.70	
ENR	2.50	255	P	58	56.15	-1.3
BHB	2.50	270	P	58	56.29	-1.1
RSP	2.51	277	P	58	55.87	-1.8
SAX	2.54	337	P	59	00.59	2.3
DOI	2.55	262	P	58	59.50	1.3
STV	2.56	256	P	58	57.42	-0.9
AUTN	2.57	250	Pn	58	58.23	-0.4
			Sg	59	33.44	
LSD	2.62	283	P	59	00.24	0.9
DIX	2.64	297	eP	59	02.10	2.4
PZZ	2.65	262	P	58	58.13	-1.6
AURF	2.68	249	Pn	59	00.27	0.2
			Sg	59	35.83	
TOUF	2.68	252	Pn	59	00.92	0.7

16d 19h

			Sg	59	36.15	
PGF	2.69	209	Pn	58	59.23	-1.1
			Sg	59	31.97	
CEY	2.70	71	ePb	59	04.00	3.6X
			eSn	59	43.50	
REVF	2.71	246	Pn	59	01.77	1.2
MVIF	2.79	250	Pn	59	02.50	0.8
			Sg	59	39.25	
RRL	2.84	272	P	59	03.35	0.9
LJU	2.87	66	ePb	59	08.00	5.2X
			eSn	59	46.00	
BNI	2.91	274	P	59	05.00	1.6
CALN	3.02	249	Pn	59	04.71	-0.2
ZLA	3.06	328	P	59	09.78	4.4X
BHC	3.16	27	ePn	59	12.80	6.0X
FRF	3.26	247	Pn	59	07.60	-0.7
			Sn	59	47.60	
SLE	3.26	332	eP	59	07.70	-0.6
LMR	3.45	244	Pn	59	10.00	-1.0
			Sn	59	51.50	
LRG	3.50	247	Pn	59	11.60	0.1
			Sn	59	54.40	
FEL	3.53	328	eP	59	10.85	-1.3
PTJ	3.78	73	eP	59	17.20	1.5
BSF	4.02	318	Pn	59	18.00	-1.0
			Sn	00	03.20	
CDF	4.25	327	Pn	59	20.90	-1.4
HAU	4.35	317	Pn	59	22.40	-1.3
			Sn	00	12.00	
KHC	4.63	23	ePn	59	27.40	-0.4
			Pg	59	34.00	
			Sn	00	24.10	
			Sg	00	44.50	
SMF	5.15	292	Pn	59	33.80	-1.3
LBF	5.18	296	Pn	59	34.20	-1.2
LOR	5.36	299	Pn	59	36.70	-1.3
			Sn	00	35.60	
SSF	5.50	296	Pn	59	38.80	-1.3
AVF	5.52	293	Pn	59	38.50	-1.7
BGF	5.79	289	Pn	59	43.00	-1.1

S.D. = 1.2 on 60 of 69 obs.

% OCT 16, 1990 20h 00m 01.44± 0.68s
45.075 N ± 4.9km 7.169 E ± 8.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.1 (GEN).

RSP	0.10	39	P	00	05.00	0.7
			S	00	06.64	
RRL	0.31	241	P	00	08.48	0.4
			S	00	12.69	
LSD	0.38	359	P	00	08.69	-0.7
			S	00	13.10	
PZZ	0.57	185	P	00	13.51	0.4
			S	00	22.63	
STV	0.84	172	P	00	16.99	-0.7
			S	00	28.48	
ENR	0.87	168	P	00	17.71	-0.5
			S	00	29.00	
ROB	0.93	147	P	00	19.56	0.4

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

% OCT 16, 1990 20h 20m 03.79± 1.30s
39.502 N ± 7.6km 16.520 E ±10.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

ROI	0.08	28	P	20	06.60	0.3
TDS	0.21	318	P	20	08.70	0.3
			eSg	20	12.30	
CSI	0.33	327	P	20	10.40	-0.2
			eSg	20	15.20	
CZI	0.41	227	P	20	12.10	-0.1
MMN	0.56	314	P	20	15.40	0.2
ORI	0.56	354	P	20	14.70	-0.5

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

OCT 16, 1990 21h 07m 41.13± 0.65s
43.161 N ± 6.0km 0.024 E ± 8.2km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 3.3 (LDG). Felt (IV) in the Lourdes oreo.

EPF	0.27	119	Pg	07	46.00	-0.8
LPO	1.74	29	Pg	08	15.50	4.0X
			Sg	08	39.10	
LFF	1.85	16	Pn	08	14.10	0.9
			Pg	08	18.20	
			Sg	08	43.00	
ECRI	1.94	254	eP	08	15.00	0.4
			eS	08	39.00	
ETER	2.26	111	eP	08	25.40	6.4X
			eS	08	53.60	
CAF	2.30	39	Pn	08	19.50	-0.2
			Pg	08	25.90	
			Sg	08	54.50	
EROO	2.35	173	eP	08	22.00	1.6
			eS	08	46.40	
RJF	2.40	26	Pn	08	21.10	0.1
			Pg	08	27.60	
			Sg	08	59.20	
ETOR	2.81	214	eP	08	25.60	-1.4
LSF	3.27	19	Pg	08	44.00	10.6X
			Sg	09	26.50	
MFF	3.44	358	Pn	08	34.80	-1.1
			Pg	08	46.70	
			Sg	09	31.80	
TCF	3.49	26	Pn	08	36.90	0.3
			Pg	08	48.20	
			Sg	09	34.20	
MAF	3.56	30	Pg	08	49.60	12.1X
			Sg	09	36.10	
BGF	3.95	30	Pn	08	57.10	14.1X
			Sg	09	47.60	
AVF	4.33	32	Pn	09	05.00	16.5X
			Sg	09	59.40	
SMF	4.41	37	Pg	09	06.60	16.9X
			Sg	10	02.60	
SSF	4.61	31	Pg	09	08.90	16.4X
			Sg	10	07.70	

S.D. = 1.1 on 9 of 17 obs.

? OCT 16, 1990 21h 12m 39.05± 1.28s
16.945 S ±37.8km 168.124 E ±43.2km
DEPTH = 225.0 ± 15.7 km
4.7mb (1 obs.)
VANUATU ISLANDS (186)

BKM	0.73	171	iPd	13	10.30	0.1	
			iS	13	35.80		
PVC	0.81	167	iP	13	10.50	-0.1	
			iS	13	37.00		
DZM	5.34	197	iPd	13	59.00	0.0	
			iS	15	05.00		
ASPA	32.73	253	iPc	18	52.90	0.2	
	0.7s		13.30nm			4.7mb	
SQTA	144.30	333	iPKPd	31	47.20	-2.7	
	0.5s		5.70nm				
CDF	144.93	338	ePKP	31	49.00	-1.8	
	0.8s		10.75nm				
LOR	147.09	340	ePKP	31	54.80	0.5	
	0.6s		3.15nm				
GRR	147.37	346	ePKP	31	55.70	1.0	
SSF	147.39	340	ePKP	31	56.00	1.2	
	0.7s		4.40nm				
LPL	147.54	335	ePKP	32	00.20	4.8X	
	0.6s		1.80nm				
LPG	147.55	335	ePKP	32	00.40	4.9X	
	0.8s		4.05nm				
LPF	147.75	346	ePKP	31	56.90	1.6	
	0.5s		3.65nm				
MFF	148.87	344	ePKP	31	59.60	2.5X	
	0.5s		2.90nm				

S.D. = 1.6 on 10 of 13 obs.

% OCT 16, 1990 21h 22m 05.45± 0.87s
1.025 S ± 5.5km 78.376 W ±22.6km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

VC1	0.38	356	iP+	22	13.80	0.3	
			iS	22	17.60		
TUNG	0.40	190	P	22	13.70	0.0	
			S	22	19.20		
OUR	0.86	350	P+	22	22.20	-0.1	
YANA	0.93	348	P+	22	23.30	-0.1	
			S	22	36.00		
CAYA	1.17	20	P	22	27.50	-0.1	
			S	22	44.00		
COTA	1.35	2	eP	22	30.80	0.0	
			eS	22	50.00		

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

& OCT 16, 1990 21h 38m 56.43s 6
60.352 N 152.348 W
DEPTH = 87.9km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.22	288	eP	39	08.97	1.0
RDT	0.22	353	iP	39	08.92	1.0
			eS	39	18.94	
RSO	0.23	299	eP	39	09.31	1.2
			eS	39	19.16	
NNL	0.61	120	iP	39	12.74	0.6
NKA	0.67	54	eP	39	13.88	1.2
HOM	0.78	153	eP	39	13.79	0.0
			eS	39	27.57	
OPT	0.83	213	iP	39	13.84	-0.5
			eS	39	27.54	
CKL	0.85	0	iP	39	13.81	-0.9
			eS	39	27.34	
BGL	0.91	359	iP	39	14.67	-0.7
CRP	0.92	6	eP	39	14.87	-0.7
BRLK	0.94	128	eP	39	14.74	-0.9
XLV	0.95	160	eP	39	15.04	-0.7
CNPM	1.00	145	eP	39	15.72	-0.6
			eS	39	30.67	
PDB	1.08	239	iP	39	15.99	-1.3
			eS	39	30.24	
AUE	1.12	208	eP	39	16.47	-1.2
AUH	1.14	210	eP	39	17.25	-0.7
AUI	1.16	209	eP	39	17.01	-1.1
SUA	1.36	34	eP	39	20.31	-0.6
			eS	39	38.81	
SEW	1.47	99	eP	39	20.69	-1.3
MCNL	1.54	222	eP	39	21.72	-1.3
CDD	1.57	205	eP	39	22.14	-1.3
PMS	1.63	56	eP	39	23.77	-0.5
SKT	1.68	13	eP	39	23.45	-1.4
PWA	1.77	42	eP	39	25.79	-0.3
SVW	1.78	297	eP	39	23.94	-2.3
PLRM	2.00	50	eP	39	26.38	-2.7
GHO	2.19	48	eP	39	30.27	-1.5
CUT	2.29	25	eP	39	31.74	-1.3
KNIM	2.29	88	eP	39	29.87	-3.2
MTU	2.38	97	eP	39	32.03	-2.2
SML	2.44	51	eP	39	32.95	-2.1
GLI	2.64	76	eP	39	35.02	-2.8
VZW	2.94	74	eP	39	39.14	-2.8
KLU	3.34	67	eP	39	44.40	-3.1

34 obs. associated

& OCT 16, 1990 21h 52m 13.61s
59.303 N 153.543 W
DEPTH = 111.6km
SOUTHERN ALASKA (2)
<AGS-P>.

AUI	0.07	61	iP	52	28.51	0.9
AUH	0.08	40	eP	52	28.77	1.0
AUE	0.10	57	eP	52	28.69	1.1
CDD	0.38	188	iP	52	29.26	-0.9
			eS	52	41.61	
OPT	0.39	24	iP	52	29.64	-0.6
			eS	52	41.25	
MCNL	0.42	254	iP	52	29.51	-0.9
			eS	52	41.43	
PDB	0.59	326	iP	52	30.56	-0.9
			eS	52	43.72	
BGM	0.87	277	eP	52	32.88	-1.1
XLV	0.94	80	eP	52	33.78	-0.9
HOM	1.03	69	eP	52	34.90	-0.6
			eS	52	50.60	
RED	1.19	19	iP	52	36.23	-1.1
CNPM	1.20	78	eP	52	36.31	-1.1
			eS	52	54.67	
RSO	1.23	19	eP	52	36.92	-1.0
NNL	1.36	56	eP	52	39.26	0.0
RDT	1.40	24	eP	52	38.60	-1.1
			eS	52	57.72	
BRLK	1.43	70	eP	52	38.64	-1.5
CKL	1.99	17	iP	52	45.99	-1.2
BGL	2.05	16	iP	52	46.88	-1.0
CRP	2.09	19	eP	52	47.66	-0.8
SEW	2.23	67	eP	52	48.79	-1.2
SUA	2.58	31	eP	52	53.68	-1.1
PMS	2.78	44	eP	52	55.98	-1.5
SKT	2.86	19	eP	52	56.69	-1.9

```
MTU      3.07   75 eP     52 59.48   -1.8
KNIM     3.11   68 eP     52 59.39   -2.5
GLI      3.60   61 eP     53 05.25   -3.2
SML      3.60   43 eP     53 05.35   -3.1
       27 obs. associoted
-------------------------------------------
   OCT  16, 1990  21h 55m 31.88± 0.39s
   24.092 S ± 3.4km    66.705 W ± 4.7km
   DEPTH = 192.6 ±  4.3 km
   4.9mb (  8 obs.)
 SALTA PROVINCE, ARGENTINA          (129)

ANT      3.42 276 iPc    56 25.90   -0.8
                  iS     57 02.50
CYA      4.41 170 iPc    56 40.50    1.3
CCH      6.70   5 P      57 09.80    0.6
CNCB     7.34 350 iPc    57 18.50    0.4
                  S      58 36.00
RTLL     7.38 192 ePc    57 17.30   -0.7
RTCB     7.60 194 ePc    57 21.00    0.1
ZON      7.63 193 eP     57 21.00   -0.3
                  eS     58 46.00
LPB      7.63 350 P      57 23.00    1.2
       0.9s   218.49nm          5.4mb
                  S      58 39.00
ZOBO     7.90 350 iPc    57 24.00   -1.4
RTCV     7.91 191 e(P)   57 25.00    0.0
RTBS     7.92 197 e(P)   57 25.70    0.6
ARE      8.82 329 eP     57 32.00   -5.1X
                  iS     59 06.80
MDZ      8.96 192 eP     57 38.30   -0.3
                  e      59 16.10
                  e      59 35.40
SIV      9.64  34 P      57 47.20   -0.3
PEL      9.67 200 eP     57 47.00   -0.9
                  i      29 06.20
PPD     14.32  85 eP     58 47.70    0.5
                  e      58 50.90
VAO     18.13  91 iPc    59 32.10   -0.2
                  i      59 40.50
                  i      59 47.10
                  i      59 53.00
                  e      02 54.40
BMA     20.74  91 eP     59 59.80    0.9
                  e      00 02.70
                  e      00 10.90
JFO     21.66  88 eP     00 09.00    1.1
SOB1    28.74  63 eP     01 12.00   -1.6
                  e      01 24.70
TUL     65.71 334 iP     05 56.50   -1.2
       1.0s    26.00nm          5.0mb
SIO     65.77 334 eP     05 57.00   -1.1
SPA     66.05 180 iPd    06 00.70    0.9
       0.9s    21.82nm          4.9mb
LIC     67.21  72 P      06 06.70   -0.9
KIC     67.52  72 P      06 08.90   -0.7
       0.5s     8.50nm          4.7mb
LKO     68.37  68 P      06 13.46   -1.4
ANMO    69.77 326 ePd    06 22.80   -0.4
                  epP    07 16.90 231kmX
BAR     73.88 318 eP     06 48.00    0.6
PLM     74.46 318 eP     06 51.00    0.1
TPC     74.48 319 eP     06 51.00    0.1
RVR     75.21 318 eP     06 55.00    0.1
GSC     75.76 320 eP     06 59.00    0.9
SBB     75.95 319 eP     06 59.00   -0.2
CLC     76.58 320 eP     07 03.00    0.4
ISA     77.00 319 eP     07 06.00    1.1
FRI     78.63 319 e(P)   07 15.80    2.1
PRI     78.64 318 eP     07 14.60    0.6
LLA     79.13 318 eP     07 17.00    0.5
PRS     79.20 318 eP     07 17.30    0.4
CMB     79.72 320 eP     07 19.90    0.2
MHC     80.02 319 eP     07 22.00    0.6
LRM     81.04 330 eP     07 27.20    0.6
MAW     81.27 163 iP     07 26.60   -0.6
ORV     81.38 320 eP     07 28.70    0.5
WDC     82.65 321 eP     07 33.50   -1.3
SES     83.89 333 ePd    07 40.30   -0.6
FFC     84.14 340 eP     07 41.00   -1.0
       1.2s    32.00nm          4.9mb
NEW     85.00 329 P      07 45.40   -1.1
PNT     86.92 328 eP     07 56.00    0.2
       0.9s    16.00nm          4.9mb
BCAO    87.45  84 iPd    08 00.00    0.8
       0.5s     5.00nm          4.6mb
YKA     94.30 340 eP     08 29.60   -0.2
```

```
       0.6s     6.40nm          5.0mb
ASPA   128.49 204 iPKPc 14 17.10   -0.7
       0.6s    10.40nm
WB5    131.71 207 ePKP   14 24.10    0.1
GBA    144.59 101 PKP    14 47.00   -0.6
MAT    155.25 306 ePKP   15 12.00    8.8X
CHG    165.65 109 ePKP   15 16.00    1.3
     S.D. = 0.9  on  54 of  56 obs.
-------------------------------------------
   OCT  16, 1990  22h 36m 46.50± 0.74s
   43.882 N ± 4.5km     8.611 E ± 6.1km
   DEPTH =  10.0km  (geophysicist)
 CORSICA                            (380)
      ML 2.4 (GEN), 2.1 (LDG).

FIN      0.44 319 P      36 55.53    0.1
                  S      37 00.76
IMI      0.52 273 P      36 56.96   -0.1
                  S      37 03.73
PCP      0.66 356 P      36 59.73    0.0
                  S      37 08.51
ROB      0.67 308 P      36 59.63   -0.3
                  S      37 08.34
SBF      0.85 269 Pn     37 03.40    0.5
                  Sn     37 14.40
ENR      0.93 292 P      37 04.20    0.0
                  S      37 15.89
STV      1.00 292 P      37 05.47    0.0
                  S      37 17.78
DOI      1.16 303 P      37 08.50    0.2
                  eSn    37 23.00
PZZ      1.25 300 P      37 09.99    0.1
                  S      37 25.53
PGF      1.36 168 Pn     37 11.70    0.1
                  Sn     37 27.70
FRF      1.46 258 Pn     37 12.60   -0.3
                  Sg     37 29.00
RSP      1.60 323 P      37 14.80   -0.2
                  S      37 34.04
LRG      1.69 256 Pn     37 16.00   -0.1
                  Sn     37 34.80
     S.D. = 0.2  on  13 of  13 obs.
-------------------------------------------
?  OCT  16, 1990  22h 50m 00.55± 1.82s
   10.248 S ±33.3km   161.683 E ±21.3km
   DEPTH =  94.2 ± 27.6 km
   4.5mb (  1 obs.)
 SOLOMON ISLANDS                    (193)

HNR      1.89 295 eP     50 32.00    0.0
                  eS     50 57.00
BKM      9.74 140 iPd    52 19.70    0.0
DZM     12.61 159 iPd    52 57.90    0.0
                  iS     55 10.50
CTA     17.80 235 iPc    54 03.80    0.0
       0.9s    26.89nm          4.5mb
WB5     28.02 247 eP     55 44.90    0.0
     S.D. = 0.0  on   5 of   5 obs.
-------------------------------------------
   OCT  16, 1990  23h 14m 09.44± 0.49s
   28.132 S ± 5.5km    67.402 W ± 8.7km
   DEPTH = 151.2 ±  8.6 km
   4.9mb (  2 obs.)
 LA RIOJA PROVINCE, ARGENTINA       (138)

CYA      1.45 103 iPc    14 38.40   -0.5
                  S      14 52.80
RTLL     3.32 196 eP     15 02.20    0.6
RTCB     3.56 200 iPc    15 05.50    0.8
                  S      15 45.20
ZON      3.58 198 iPc    15 07.00    2.1
                  eS     15 47.00
RTCV     3.84 195 ePc    15 09.00    0.6
MDZ      4.90 194 iP     15 23.00    0.6
                  i      16 02.60
ANT      5.18 328 eP     15 26.20    0.2
JACH     5.31 211 eP     15 28.70    0.8
PEL      5.74 209 iPd    15 33.00   -0.6
                  iS     16 36.70
ROCH     5.74 212 eP     15 33.00   -0.8
                  i      16 37.00
FCH      5.74 205 eP     15 35.00    1.0
                  i      16 40.00
SAN      6.00 207 eP     15 37.50    0.4
PCH      6.09 205 eP     15 38.90    0.5
TACH     6.29 208 eP     15 39.50   -1.5
LCCH     6.42 213 eP     15 40.50   -2.2
```

```
LNV      6.75 210 iPc    15 44.10   -3.1
CCH     10.76   6 P      16 47.50    6.7X
CNCB    11.28 357 P      16 48.00    0.2
LPB     11.56 357 P      16 53.00    1.6
ZOBO    11.82 357 P      16 55.00    0.0
SIV     13.43  27 P      17 13.20   -1.9
PPD     15.79  71 eP     17 44.80    0.1
VAO     19.12  79 eP     18 22.20   -1.1
                  e      18 25.90
                  e      18 58.70
JFO     22.73  79 eP     19 00.50    1.3
SPA     62.03 180 iPd    24 16.40    0.7
       0.9s    21.36nm          5.1mb
LIC     69.11  71 P      25 01.30    0.0
KIC     69.42  71 Pc     25 03.30    0.0
       0.4s     5.00nm          4.7mb
LKO     70.48  67 Pc     25 09.64   -0.1
ASPA   124.56 204 iPKPc 32 53.50    0.7
       0.5s     7.30nm
     S.D. = 1.2  on  28 of  29 obs.
-------------------------------------------
•  OCT  16, 1990  23h 28m 13.65± 1.26s
    1.663 S ±11.0km   134.502 E ±19.6km
   DEPTH =  33.0km  (normal)
   4.5mb (  3 obs.)
 WEST IRIAN REGION                  (196)

AAI      6.61 252 eP     29 52.00    0.9
                  eS     30 55.00
KNA     15.10 202 eP     31 46.00   -0.3
WB5     18.11 180 eP     32 24.70    0.3
                  eS     35 37.50
ASPA    21.88 181 eP     33 05.80    0.1
       0.6s    16.30nm          4.6mb
                  eS     37 02.20
SSE     34.95 340 eP     35 10.00    5.3X
CHG     40.44 302 eP     35 50.90   -0.1
BJI     44.76 340 eP     36 27.00    1.1
       1.0s     8.00nm          4.5mb
GBA     58.56 287 P      38 08.00   -1.9
       0.8s     2.30nm          4.3mb
CNCB   151.21 130 PKP    48 10.20    9.5X
LPB    151.28 130 (PKP)  48 10.00    9.3X
ZOBO   151.42 129 PKP    48 10.00    8.9X
     S.D. = 1.2  on   7 of  11 obs.
-------------------------------------------
•  OCT  16, 1990  23h 38m 44.16± 0.39s
   29.131 S ±10.5km   177.391 W ±12.2km
   DEPTH =  33.0km  (normal)
   5.3mb (  7 obs.)
 KERMADEC ISLANDS                   (178)

PUZ      9.63 201 eP     41 01.00   -2.5
                  eS     42 51.00
MRW     13.69 206 eP     42 01.00    2.9
                  eS     44 24.00
THZ     14.87 209 eP     42 13.60   -0.1
                  S      44 50.20
KHZ     15.15 207 eP     42 14.50   -2.8
LTZ     15.97 209 eP     42 25.00   -2.9
DZM     16.18 292 iPc    42 37.70    7.0X
CAN     29.00 249 eP     44 46.00    2.9
BWA     29.45 251 eP     44 49.00    1.8
CTA     34.14 277 iPc    45 29.20    0.8
       0.8s    48.51nm          5.5mb
ASPA    43.72 265 iPd    46 47.30   -0.9
       0.6s    22.50nm          5.1mb
WB5     44.60 271 iPc    46 55.00   -0.3
SBA     49.34 184 eP     47 37.40    5.7X
MBL     56.81 263 iPc    48 26.20   -1.7
       0.7s    39.00nm          5.5mb
NANU    60.02 259 eP     48 49.00   -1.2
       0.4s    12.00nm          5.4mb
SPA     61.03 180 iPc    48 59.60    2.8
       1.0s    30.00nm          5.4mb
                  i      49 04.20
MAW     73.68 200 iPc    50 18.70    2.8
MAT     77.51 325 eP     50 36.00   -2.1
       0.8s     8.21nm          4.8mb
PRS     83.73  42 eP     51 11.30    0.2
PRI     84.02  43 eP     51 13.30    0.6
PLM     84.53  47 eP     51 15.00   -0.4
SBB     84.79  46 eP     51 16.00   -0.5
ISA     85.03  44 eP     51 18.00    0.3
FRI     85.16  43 eP     51 17.80   -0.4
CMB     85.47  42 eP     51 19.40   -0.4
TPC     85.54  47 eP     51 21.00    0.7
```

16d 23h

CLC	85.66	45	eP	51	21.00	0.1
GSC	85.82	46	eP	51	22.00	0.3
ORV	85.86	40	eP	51	21.60	-0.1
WDC	86.00	39	eP	51	22.20	-0.1
TNP	87.37	43	ePd	51	28.20	-1.1
ANMO	92.37	51	P	51	52.50	-0.3
BJI	92.40	315	eP	51	53.00	0.5
	1.0s		11.00nm			5.2mb
CHG	93.66	289	eP	52	00.30	1.5
PPD	107.30	128	(Pdiff	52	57.00	-3.3X
QUE	124.77	288	iPKP	57	43.40	0.7
BUL	124.96	210	iPKPd	57	44.00	0.8
	1.0s		8.75nm			
MAIO	132.19	294	ePKP	57	57.00	0.5
SUF	143.07	342	ePKP	58	10.00	-5.6X
NUR	145.30	341	iPKP	58	17.60	-1.8
	0.9s		86.20nm			
RGS	145.72	354	ePKP	58	18.50	-1.6
NB2	147.58	352	PKP	58	23.30	0.1
	0.9s		16.20nm			
UPP	147.63	346	iPKP	58	24.10	0.9
HFS	148.10	350	ePKP	58	22.00	-2.0
	0.8s		19.90nm			
BCAO	151.17	215	iPKPc	58	30.70	0.5
	0.5s		38.00nm			
			ic	58	36.80	
BBTK	153.07	301	ePKP	58	40.00	7.7X
KSP	155.99	338	ePKP	58	45.50	9.7X
	0.8s		20.00nm			
			id	59	02.30	
KIC	156.31	162	PKP	58	38.40	1.1
CLL	156.51	343	ePKP	58	46.00	9.6X
			i	59	03.80	
KHC	158.33	340	ePKP	58	39.50	0.7
			e	59	13.10	

S.D. = 1.5 on 42 of 49 obs.

• OCT 16, 1990 23h 55m 57.90± 1.20s
34.517 N ±11.4km 26.886 E ±11.0km
DEPTH = 33.0km (normal)
CRETE (370)
MD 3.8 (ATH).

KAP	1.06	13	iPc	56	15.50	-0.9
NPS	1.28	306	eP	56	20.00	0.3
ARG	1.98	31	eP	56	29.00	-0.7
KSL	2.72	53	eP	56	42.00	1.8
ZNT	7.18	106	eP	57	43.00	-0.3
			eS	58	59.00	
JVI	7.55	108	eP	57	48.00	-0.4
PRNI	8.02	119	eP	57	55.00	0.0

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

% OCT 17, 1990 00h 51m 03.52± 3.94s
38.963 N ±12.3km 15.632 E ±19.6km
DEPTH = 102.8 ± 47.4 km
SICILY (398)

CZI	0.47	57	P	51	19.70	0.2
			eS	51	35.00	
ATN	0.81	189	P	51	22.50	0.0
			eSn	51	40.00	
TDS	0.88	38	Pd	51	23.10	-0.1
ROI	0.95	50	P	51	23.50	-0.4
			eS	51	39.60	
CSI	0.96	32	P	51	24.10	0.1
			eS	51	38.60	
MMN	0.97	17	P	51	23.80	-0.2
			eS	51	40.20	
MGR	1.18	357	P	51	26.50	0.1
ORI	1.27	30	P	51	28.00	0.5
SGO	1.61	351	P	51	31.50	-0.2

S.D. = 0.3 on 9 of 9 obs.

? OCT 17, 1990 01h 32m 23.53± 1.41s
1.155 S ±21.6km 128.957 E ±32.8km
DEPTH = 33.0km (normal)
4.8mb (2 obs.)
HALMAHERA (267)

KNA	14.50	181	eP	35	48.50	0.1
WB5	19.35	164	eP	36	48.80	-0.6
			eS	40	21.50	
QIS	21.91	152	iPc	37	16.10	0.2
ASPA	22.89	168	eP	37	26.30	0.8
	0.9s		40.20nm			4.9mb
			eS	41	38.10	
STK	32.81	160	iPd	38	56.10	0.0
	0.8s		9.00nm			4.7mb
CHG	35.55	305	eP	39	19.90	0.0

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

OCT 17, 1990 02h 00m 53.23± 0.59s
37.049 N ± 5.2km 34.003 E ± 4.5km
DEPTH = 29.4 ± 5.5 km
4.3mb (12 obs.)
TURKEY (366)

FAM	2.05	180	eP	01	26.70	0.4
CSS	2.15	195	eP	01	27.00	-0.8
PPCY	2.54	212	eP	01	35.20	1.8
GAZ	2.57	86	iPn	01	32.90	-0.8
BCK	2.75	280	iPn	01	36.50	0.1
BBTK	2.95	341	ePn	01	40.00	0.7
			e	01	48.00	
			eS	02	41.00	
ALT	3.67	304	ePn	01	48.90	-0.5
KHL	3.77	291	ePn	01	53.00	2.1
HRI	4.03	159	eP	01	53.00	-1.6
KAS	4.32	358	eP	02	08.00	9.4X
IZI	4.83	314	ePn	01	58.00	-7.9X
ZNT	4.87	170	eP	02	06.00	-0.4
			eS	03	00.00	
DST	4.94	303	iP	02	07.00	-0.4
IZM	5.51	286	eP	02	16.00	0.5
PRNI	6.74	173	eP	02	33.00	0.3
FVI	18.42	308	P	05	18.00	10.1X
CTI	18.94	305	P	05	13.00	-1.4
PRU	19.07	319	eP	05	16.00	0.2
KHC	19.12	316	eP	05	17.50	1.0
WATA	19.47	309	eP	05	20.00	-0.7
	1.1s		11.60nm			4.1mb
			e	05	26.00	
WET	19.52	315	iPc	05	20.50	-0.6
SOTA	19.66	308	iP	05	21.80	-0.9
BRG	19.90	320	e(P)	05	29.50	4.5X
BOB	20.05	300	P	05	18.00	-8.8X
MDI	20.14	303	P	05	16.50	-11.1X
MAIO	20.45	84	eP	05	32.00	1.0
GRF	20.73	315	ePc	05	33.50	-0.3
			e	05	39.20	
VAI	20.79	303	P	05	31.00	-3.4X
MOX	21.00	317	e(P)	05	40.00	3.6X
			eSg	15	22.00	
SBF	21.28	297	eP	05	43.00	3.6X
	0.9s		31.10nm			4.7mb
LPG	22.07	301	eP	05	48.90	1.3
	0.9s		9.85nm			4.2mb
LPL	22.09	301	eP	05	49.00	1.3
	0.8s		5.35nm			4.0mb
CDF	22.56	309	eP	05	50.60	-1.6
	0.7s		6.60nm			4.2mb
BSF	22.68	307	eP	05	52.80	-0.6
	0.7s		6.60nm			4.2mb
HAU	23.01	307	eP	05	56.20	-0.4
	0.8s		5.35nm			4.1mb
LBF	24.28	304	eP	06	08.90	0.0
	1.0s		8.00nm			4.2mb
SMF	24.30	303	eP	06	09.20	0.1
	0.9s		16.40nm			4.6mb
LOR	24.43	304	eP	06	09.40	-0.9
	0.9s		9.00nm			4.3mb
SSF	24.62	304	eP	06	11.40	-0.7
	1.1s		12.20nm			4.4mb
AVF	24.66	303	eP	06	12.50	0.0
	0.7s		7.15nm			4.4mb
DOU	24.80	311	Pc	06	19.80	6.0X
GKN	43.21	87	P	08	53.40	-0.1
DMN	43.75	87	P	08	59.40	1.3
KKN	43.81	87	P	08	59.30	0.8
PKI	44.01	87	P	09	01.00	0.7
GUN	44.24	86	P	09	01.50	-0.6

S.D. = 1.0 on 36 of 46 obs.

% OCT 17, 1990 02h 56m 20.69± 0.72s
45.951 N ± 7.3km 26.874 E ± 8.7km
DEPTH = 27.4 ± 8.2 km
ROMANIA (358)

VRI	0.13	232	iPc	56	26.00	0.0
CLI	0.66	25	iPc	56	34.00	0.3
PTT	1.04	341	eP	56	39.00	-0.5
CFR	1.18	130	iPd	56	41.50	0.1
CMP	1.46	243	ePc	57	04.00	18.6X
TLB	1.59	149	ePd	56	47.00	-0.3
COZ	1.88	251	eP	56	52.00	0.2

S.D. = 0.5 on 6 of 7 obs.

% OCT 17, 1990 05h 21m 52.51± 0.59s
40.724 N ± 5.0km 29.036 E ± 4.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.3 (ISK).

YLV	0.30	121	iPg	21	58.10	-0.7
GBZT	0.32	78	ePg	21	59.50	0.4
			iSg	22	04.20	
ISK	0.34	3	ePg	21	59.80	0.2
HRT	0.49	78	ePg	22	02.60	0.1
			eSg	22	09.10	
IZI	0.51	139	iPg	22	02.60	-0.3
			iSg	22	09.60	
CTT	0.62	313	ePg	22	04.60	-0.5
			eSg	22	12.60	
KCT	0.70	228	iPn	22	06.10	-0.3
DST	1.16	196	iPn	22	15.20	1.0

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

? OCT 17, 1990 06h 36m 36.05± 6.44s
33.241 S ±16.4km 72.088 W ±53.1km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

LCCH	0.49	118	iPd	36	45.50	-1.1
			iS	36	52.50	
LNV	0.91	142	iPc	36	52.50	0.1
			iS	37	04.80	
ROCH	0.94	74	iPc	36	52.30	-0.9
			e	37	05.00	
PEL	1.18	86	iPd	36	56.40	0.0
			iS	37	13.00	
SAN	1.21	100	ePd	36	57.50	0.7
			eS	37	13.00	
PCH	1.37	106	eP	37	00.00	0.9
			i	37	18.70	
JACH	1.38	66	eP	36	59.50	0.3

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

• OCT 17, 1990 07h 47m 34.44± 0.92s
41.216 N ± 6.6km 20.579 E ± 8.8km
DEPTH = 5.0km (geophysicist)
ALBANIA (391)
ML 3.5 (SKO).

PHP	0.48	348	iPgc	47	42.00	-2.1
TIR	0.55	284	ePg	47	45.50	0.0
KBN	0.62	163	ePg	47	45.30	-1.5
BERA	0.70	223	ePg	47	48.00	-0.4
KKS	0.87	352	ePg	47	56.00	4.4X
SKO	0.99	40	iPg	47	57.50	3.8X
			i	47	58.30	
			iSg	48	12.70	
TPE	1.02	205	ePg	47	54.00	-0.1
SDA	1.14	315	ePg	47	57.80	1.6
BCI	1.21	342	ePn	48	02.60	5.2X
SRN	1.41	198	ePn	48	01.90	1.2
VAY	1.50	85	ePn	48	03.40	1.3

S.D. = 1.6 on 8 of 11 obs.

OCT 17, 1990 07h 54m 01.56± 0.36s
4.240 S ± 5.9km 142.221 E ± 7.9km
DEPTH = 123.6km (2 depth phases)
4.9mb (4 obs.)
PAPUA NEW GUINEA (202)

MNDI	2.38	143	eP	54	42.00	1.3
			eS	55	15.00	
PMG	7.10	137	iPd	55	44.00	-0.2
	0.9s		184.87nm			5.6mb
CTA	16.23	166	iPc	57	46.00	2.1
	1.4s		55.81nm			4.6mb
QIS	16.42	189	iP	57	46.70	0.6
			e	00	45.00	
			e	02	36.00	
WB5	17.33	206	iPd	57	55.00	-2.3
			iPcP	01	10.00	
			eS	03	25.00	
			eScP	04	23.60	
KNA	17.49	228	iPd	57	58.40	-0.8
GUMO	17.91	8	eP	58	04.00	-0.4
PJG	17.91	8	eP	58	05.00	0.6

ASPA	20.92	202	iPc	58 35.90	-0.1
	0.8s		64.00nm		5.1mb
			iPP	59 02.60	
			eS	02 01.70	
OLP	22.30	175	eP	58 50.00	0.4
			e	59 15.00	122km
RMO	22.99	165	eP	58 57.00	0.7
MBL	27.49	230	eP	59 38.00	-0.3
DZM	29.42	129	iPd	59 55.00	-0.7
BWA	30.58	170	eP	00 07.00	1.3
CAN	31.56	169	eP	00 15.00	0.7
MRWA	35.14	222	eP	00 45.00	-0.2
	0.4s		6.00nm		4.8mb
TCW	46.69	147	P	02 19.50	-0.1
MRW	46.94	146	P	02 21.00	-0.6
MNG	46.97	145	P	02 21.60	-0.2
PUZ	47.03	141	eP	02 22.00	-0.4
MTW	47.34	146	P	02 23.30	-1.4
PGZ	47.42	145	P	02 25.10	-0.2
BLW	47.46	146	P	02 24.50	-1.2
GUN	62.94	304	P	04 18.20	0.5
PKI	63.21	304	P	04 19.60	0.1
KKN	63.39	304	P	04 20.80	0.2
DMN	63.47	304	P	04 21.20	0.0
GKN	64.00	304	P	04 24.20	-0.3
KOD	66.06	283	eP	04 38.60	0.5
GBA	66.68	287	P	04 40.00	-1.6
FBA	85.46	24	P	06 25.00	-1.2
			pP	06 57.20	125km
CNCB	143.56	126	PKP	13 23.00	-1.9
LPB	143.61	125	PKP	13 24.00	-0.9
ZOBO	143.73	125	PKP	13 23.00	-2.3
CCH	144.71	128	PKP	13 26.80	0.2
KIC	147.04	275	PKPd	13 31.72	1.6
	0.3s		3.00nm		
TIC	147.31	276	PKPd	13 32.82	2.2
	0.9s		0.14nm		
LIC	147.33	275	PKPd	13 32.74	2.1
LKO	147.63	281	PKPc	13 33.22	2.1
	0.4s		23.00nm		
SIV	149.42	132	iPKPc	13 39.20	5.3X
			i	14 10.80	
PPD	150.72	154	ePKP	13 41.70	6.0X
			e	14 14.00	
			e	14 23.90	
VAO	151.48	162	ePKP	13 20.60	-16.2X
			e	13 44.10	
			e	14 16.10	
BMA	152.51	167	(PKP)	13 33.00	-5.3X
	S.D. = 1.2		on	39 of 43	obs.

? OCT 17, 1990 08h 45m 43.49±11.07s
44.722 N ±56.8km 5.735 E ±68.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.5 (LDG).

FRF	1.33	150	Pg	46 08.20	0.1
			Sg	46 24.30	
LRG	1.34	160	Pg	46 08.30	0.1
			Sg	46 24.60	
SBF	1.49	125	Pg	46 11.40	1.0
			Sg	46 30.50	
LMR	1.50	158	Pg	46 10.50	0.1
			Sg	46 28.10	
PGF	3.22	131	Pn	46 33.80	-1.3
	S.D. = 1.2		on	5 of 5	obs.

% OCT 17, 1990 10h 03m 59.21± 0.85s
39.131 N ± 6.9km 27.520 E ± 8.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM	0.76	195	ePg	04 14.00	-0.1
DST	0.98	61	iPg	04 18.10	0.2
			eSg	04 30.10	
EZN	1.16	307	ePn	04 21.00	0.2
EDC	1.24	12	ePn	04 22.00	-0.3
BNT	1.26	14	ePn	04 22.60	0.0
	S.D. = 0.3		on	5 of 5	obs.

? OCT 17, 1990 10h 11m 26.23±10.91s
40.019 N ±88.6km 29.255 E ±43.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZI	0.36	28	iPg	11 33.50	-0.1
			iSg	11 44.50	
YLV	0.55	9	iPn	11 37.50	0.0
KCT	0.73	289	ePn	11 40.50	0.0
HRT	0.86	21	ePn	11 43.00	0.2
	S.D. = 0.2		on	4 of 4	obs.

OCT 17, 1990 10h 19m 28.78± 0.51s
44.277 N ± 5.2km 7.536 E ± 3.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.1 (LDG), 2.0 (GEN).

ENR	0.10	239	P	19 30.63	-0.9
			S	19 32.20	
STV	0.16	258	P	19 32.20	-0.2
			S	19 34.27	
ROB	0.24	86	P	19 34.13	0.2
			S	19 39.44	
PZZ	0.39	306	P	19 36.76	0.0
			S	19 42.34	
SBF	0.42	190	Pg	19 37.00	-0.4
			Sg	19 43.50	
IMI	0.45	145	P	19 37.92	0.0
			S	19 43.77	
FIN	0.49	98	P	19 38.28	-0.4
			S	19 45.63	
PCP	0.77	70	P	19 44.14	0.3
			S	19 55.16	
FRF	0.96	222	Pg	19 47.70	0.6
			Sg	20 01.30	
LRG	1.18	226	Pg	19 51.10	0.3
			Sg	20 07.70	
LMR	1.20	219	Pg	19 51.70	0.6
			Sg	20 08.60	
	S.D. = 0.5		on	11 of 11	obs.

? OCT 17, 1990 11h 04m 35.71± 1.04s
39.205 N ± 8.6km 27.579 E ±16.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM	0.84	197	ePg	04 52.00	0.0
			eSg	05 04.40	
DST	0.91	63	iPg	04 53.10	0.0
			eSg	05 05.10	
EDC	1.16	11	ePn	04 57.80	0.4
BNT	1.18	13	ePn	04 57.30	-0.4
	S.D. = 0.6		on	4 of 4	obs.

& OCT 17, 1990 11h 13m 31.57s
58.108 N 154.847 W
DEPTH = 65.0km
ALASKA PENINSULA (12)
<AGS-P>.

CDD	1.04	37	iP	13 49.66	-1.0
			eS	14 04.03	
MCNL	1.11	14	iP	13 50.67	-0.9
			eS	14 05.47	
BGM	1.30	351	eP	13 53.18	-1.0
KDC	1.31	105	eP	13 53.12	-1.0
AUI	1.44	30	iP	13 54.84	-1.1
AUH	1.46	30	iP	13 55.37	-0.9
AUE	1.47	31	iP	13 55.56	-0.8
PDB	1.72	11	iP	13 58.34	-1.5
			eS	14 18.75	
OPT	1.76	28	iP	13 59.19	-1.3
			eS	14 20.10	
XLV	2.11	49	eP	14 04.04	-1.3
HOM	2.28	46	eP	14 06.16	-1.4
CNPM	2.36	51	eP	14 06.53	-2.2
RED	2.55	24	eP	14 09.77	-1.7
RSO	2.59	24	iP	14 10.57	-1.6
BRLK	2.64	49	eP	14 10.24	-2.5
NNL	2.67	42	eP	14 11.62	-1.4
RDT	2.77	26	eP	14 12.40	-2.2
CKL	3.35	21	eP	14 20.66	-2.1
BGL	3.40	20	eP	14 21.43	-2.0
SEW	3.43	52	eP	14 20.04	-3.6
CRP	3.45	22	eP	14 21.93	-2.3
	21 obs. ossociated				

OCT 17, 1990 11h 25m 03.50± 0.52s
43.236 N ± 4.8km 111.647 W ± 3.0km
DEPTH = 5.0km (geophysicist)
EASTERN IDAHO (457)
ML 3.2 (BUT).

CHOI	0.33	76	ePc	25 10.32	0.2
			S	25 14.56	
PINI	0.35	39	P	25 10.47	-0.1
			S	25 15.13	
ALPW	0.48	100	P	25 13.18	0.0
MUDI	0.56	47	P	25 14.66	-0.2
			S	25 22.78	
TPAW	0.57	63	P	25 14.67	-0.2
			S	25 22.72	
REDW	0.59	77	P	25 15.32	-0.1
GRAI	0.62	21	P	25 15.80	-0.1
PTI	0.64	236	eP	25 16.30	-0.1
SNOW	0.69	71	P	25 17.29	0.0
			S	25 26.99	
RAMW	0.83	38	P	25 19.44	-0.7
MOOW	0.83	52	P	25 19.34	-0.9
			S	25 30.14	
STEW	1.07	40	P	25 23.63	-0.7
PACW	1.08	51	P	25 24.09	-0.3
HPI	1.16	295	eP	25 24.30	-1.5
LTMT	1.33	346	eP	25 28.70	-0.1
BW06	1.60	106	eP	25 33.80	1.0
MCMT	1.81	332	iPnc	25 36.00	0.2
BGMT	2.02	352	ePn	25 39.70	0.9
MEMT	2.42	11	ePn	25 47.10	2.6X
LRM	2.65	348	ePn	25 49.30	1.5
BUT	2.85	347	(P)	25 50.00	-0.7
			eSg	26 37.20	
SXM	2.93	6	ePn	25 53.70	1.9
CPI	3.44	282	ePn	25 58.80	0.0
	S.D. = 0.8		on	22 of 23	obs.

? OCT 17, 1990 11h 27m 27.11± 1.72s
29.395 N ± 8.9km 142.618 E ±31.4km
DEPTH = 33.0km (normal)
4.4mb (1 obs.)
SOUTH OF HONSHU, JAPAN (211)

KAKJ	7.10	344	P	29 12.10	0.9
			S	30 28.10	
IIDJ	7.25	328	P	29 17.30	3.8X
			S	30 37.90	
CHJJ	7.30	336	P	29 14.60	0.4
			S	30 32.50	
MAT	8.03	334	eP	29 24.00	-0.4
			eS	30 51.00	
MTMJ	8.23	332	P	29 28.30	1.1
NIIJ	8.39	340	P	29 28.30	-1.0
YAMJ	9.01	347	eP	29 36.90	-1.1
			eS	31 09.70	
BJI	24.11	303	eP	32 42.00	1.4
CHG	41.03	265	eP	35 08.30	-0.8
WB5	49.63	190	eP	36 18.20	0.7
GBA	61.95	270	Pd	37 45.30	-1.1
	0.4s		1.30nm		4.4mb
	S.D. = 1.1		on	10 of 11	obs.

& OCT 17, 1990 11h 34m 03.50s
60.389 N 152.449 W
DEPTH = 96.1km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.16	281	eP	34 16.51	0.7
RSO	0.17	296	iP	34 16.90	0.9
			eS	34 27.80	
RDT	0.19	7	iP	34 16.67	0.8
			eS	34 27.37	
NNL	0.67	121	iP	34 20.74	0.2
NKA	0.70	59	iP	34 21.83	1.1
CKL	0.81	4	iP	34 21.35	-0.7
			eS	34 35.54	
OPT	0.84	208	iP	34 21.41	-0.8
			eS	34 36.10	
HOM	0.84	151	eP	34 21.70	-0.4
			eS	34 36.04	
BGL	0.08	2	iP	34 22.25	-0.5
CRP	0.89	9	iP	34 22.41	-0.5
			eS	34 37.00	
BRLK	1.00	128	eP	34 22.73	-1.3
			eS	34 37.86	
XLV	1.01	158	eP	34 23.21	-0.8
CNPM	1.06	144	eP	34 23.59	-1.0
			eS	34 38.93	

17d 11h

PDB		1.06	236	iP	34	23.35	-1.3	GUMO		54.26	311	eP	25	50.00	-3.1X	ANMO		89.37	50	P	29	21.60	-1.0
AUE		1.13	205	eP	34	24.37	-1.0			1.2s		300.00nm			6.2mb			1.2s		29.30nm			5.5mb
SUA		1.36	37	eP	34	28.19	-0.2	MRWA		59.46	250	eP	26	27.30	-2.8		Z	20s		3.19um			5.7Msz
				eS	34	46.93		NANU		61.69	257	eP	26	43.20	-2.1	PMR		89.57	13	P	29	21.70	-1.0
SEW		1.52	100	eP	34	28.71	-1.5	SPA		64.59	180	iPc	27	03.00	-1.1			1.4s		85.23nm			5.9mb
MCNL		1.54	219	eP	34	29.14	-1.3			1.0s		62.00nm			5.6mb		Z	20s		2.00um			5.5Msz
CDD		1.58	203	eP	34	29.45	-1.6		Z	20s		8.42um			5.9Msz	TTA		89.65	9	P	29	22.70	-0.5
PMS		1.66	58	eP	34	31.23	-0.7	CHJJ		74.39	324	eP	28	02.70	-1.5			1.5s		67.57nm			5.7mb
SKT		1.66	15	eP	34	31.02	-1.0	MAT		75.18	324	iPc	28	07.40	-1.4	PNT		89.99	33	eP	29	24.00	-0.9
SVW		1.72	296	eP	34	31.24	-1.5					eS	37	56.00				1.2s		49.00nm			5.7mb
PLRM		2.02	52	eP	34	34.97	-1.7	OFUJ		75.35	327	eP	28	09.10	-0.5	NNT		90.00	284	eP	29	28.30	2.6
GHO		2.20	49	eP	34	37.68	-1.6	MTMJ		75.43	323	eP	28	09.20	-1.1	LOE		90.40	289	eP	29	28.00	0.6
CUT		2.28	26	eP	34	39.84	-0.3	YAMJ		75.46	326	P	28	10.30	0.0	GYA		90.48	299	iPc	29	29.00	1.2
KNIM		2.34	89	eP	34	37.85	-3.2	TSRJ		75.67	321	eP	28	10.10	-1.4	BJI		90.56	315	eP	29	27.50	-0.2
MTU		2.43	97	eP	34	39.94	-2.3	AIA		75.73	156	eP	28	10.60	-0.9		Z	24s		0.95um			5.1Msz
SML		2.45	53	eP	34	40.88	-1.7	MAW		77.35	200	iP	28	20.20	-0.3					eSKS	40	00.00	
GLI		2.68	77	eP	34	44.08	-1.6	PRS		80.45	42	eP	28	38.90	1.1	NEW		90.58	35	P	29	26.60	-1.1
VLZ		3.09	73	eP	34	48.29	-2.9	SAO		80.69	42	eP	28	41.00	2.0			1.3s		14.15nm			5.2mb
KLU		3.37	68	iP	34	52.45	-2.7	PRI		80.75	43	eP	28	41.00	1.5		Z	20s		2.00um			5.5Msz
TOA		3.49	58	eP	34	55.21	-1.5	MHC		80.96	41	eP	28	41.50	0.9	NST		91.00	287	eP	29	32.20	2.0
BALM		5.01	78	eP	35	15.13	-2.6	BKS		80.96	40	eP	28	41.30	0.9	BW06		91.60	43	P	29	31.60	-1.2
FBA		5.01	23	P	35	17.40	-0.2			0.9s		47.00nm			5.4mb	LRM		91.63	39	eP	29	32.00	-0.9
		34 obs. associated							Z	20s		1.80um			5.4Msz	TIY		91.78	311	eP	29	34.20	0.7
----------									N	20s		1.30um					Z	20s		1.50um			5.4Msz
									E	20s		1.10um					E	19s		1.70um			
												eS	38	48.00						sP	29	48.00	
												eLQ	48	40.00		XAN		92.41	307	P	29	37.80	1.3
												eLR	52	52.00		GOL		92.60	47	P	29	37.70	0.2
								PAS		81.04	45	eP	28	46.00	5.1X			1.3s		18.23nm			5.3mb
								BAR		81.11	47	eP	28	41.00	-0.4		Z	20s		2.25um			5.6Msz
								MWC		81.16	45	eP	28	42.00	0.2	BDT		92.66	288	eP	29	40.30	2.5
								PLM		81.40	47	eP	28	43.00	-0.1	GLD		92.73	47	P	29	39.40	1.4
								RVR		81.46	46	eP	28	43.00	-0.1		Z	20s		3.00um			5.7Msz
								PEC		81.54	46	P	28	48.70	5.1X	FBA		92.84	12	P	29	36.40	-1.3
								SBB		81.60	45	eP	28	43.00	-0.9			1.3s		33.02nm			5.6mb
								ISA		81.81	44	eP	28	44.00	-1.0	KMI		93.00	296	Pc	29	41.00	1.4
								FRI		81.89	42	eP	28	44.30	-0.9			1.5s		150.00nm			6.2mb
								SSE		82.11	310	Pc	28	47.50	1.0		Z	20s		1.40um			5.4Msz
										5.0s		400.00nm			5.7mb X					pP	29	48.00	22kmX
									Z	20s		0.90um			5.1Msz	CHG		93.39	289	ePc	29	24.50	-16.7X
									N	16s		0.80um						1.2s		67.58nm			
									E	16s		0.50um				CHTO		93.39	289	ePc	29	42.20	1.0
												sP	29	05.00		HHC		93.97	314	P	29	44.00	0.4
								CMB		82.16	41	P	28	46.10	-0.6	CD2		94.79	302	P	29	48.00	0.5
												pP	29	01.30	53km		Z	22s		2.21um			5.6Msz
								TPC		82.40	47	eP	28	48.00	0.0	BTO		94.86	313	eP	29	48.00	0.3
								CLC		82.46	44	eP	28	49.00	0.7		N	17s		0.60um			
								ORV		82.51	40	eP	28	47.80	-0.7		E	17s		0.60um			
								WDC		82.61	38	eP	28	48.70	-0.2					eSKS	40	25.00	
VUN		8.94	326	eP	18	38.90	0.2	GSC		82.64	45	eP	28	48.00	-1.3	SES		95.04	36	eP	29	47.00	-1.2
SGE		9.57	325	eP	18	48.50	1.1	MIN		82.98	39	eP	28	49.90	-1.2	LZH		97.04	307	P	30	02.20	4.4X
NDF		9.69	322	eP	18	55.00	6.1X	LBFM		83.49	38	P	28	53.20	-0.5		Z	20s		1.00um			5.3Msz
PVC		16.26	296	iPd	20	22.10	6.0X	TNP		84.11	43	P	28	56.30	-0.6		E	18s		1.10um			
BKM		16.36	296	iPd	20	14.50	-2.8			1.3s		45.92nm			5.4mb	ZOBO		98.70	113	eP	29	57.00	-9.2X
MNG		16.51	202	eP	20	09.50	-9.5X	NJ2		84.28	309	Pd	28	58.60	1.0		Z	18s		0.90um			5.3Msz
WEL		17.35	203	eP	20	25.00	-4.5X			5.0s		700.00nm			6.0mb X					SKS	40	52.00	
				eS	23	23.00						pP	29	10.00	37km					LR	02	34.00	
THZ		18.46	206	eP	20	36.40	-7.0X					S	39	22.00		SOB1		124.54	123	ePKP	35	24.10	-1.9
KHZ		18.78	204	eP	20	37.50	-9.7X	IPM		85.36	277	eP	29	04.60	1.2	MAIO		131.53	297	ePKP	35	41.00	2.1
LTZ		19.58	206	eP	20	46.90	-9.4X	MDJ		85.53	325	eP	29	04.50	1.0	TAB		141.99	300	ePKP	35	52.00	-6.4X
HNR		27.67	301	eP	22	10.00	-5.0X			1.5s		100.00nm			5.8mb	NB2		144.16	354	PKP	35	57.40	-3.8X
BRS		27.70	259	iP	22	16.00	0.7		Z	20s		1.90um			5.5Msz			1.2s		51.00nm			
COO		28.45	253	iPd	22	24.10	2.1					sP	29	17.00		UPP		144.37	348	iPKP	35	57.90	-3.6X
CAN		31.32	244	eP	22	50.50	3.0X	BMW		86.28	34	P	29	08.20	0.9	HFS		144.75	351	ePKP	35	58.70	-3.4X
BWA		31.67	245	eP	22	48.80	-1.8	WHN		86.67	306	Pc	29	10.50	1.0			1.1s		70.00nm			
CMS		33.67	251	eP	23	08.00	0.0			4.0s		700.00nm			6.2mb X		Z	20s		0.83um			5.5Msz
CTA		34.85	271	iPd	23	18.50	0.2		Z	20s		0.60um			5.0Msz					LR	27	15.00	
		1.2s		31.25nm			5.1mb		N	18s		1.30um				KVT		149.06	308	ePKP	36	14.10	4.3X
				iS	29	13.00						pP	29	17.50	22kmX	KAS		150.55	310	ePKP	36	17.50	5.4X
RAB		36.95	300	eP	23	28.00	-8.0X					S	39	47.00		MML		151.49	291	ePKP	36	19.00	5.3X
STK		37.28	250	eP	23	39.10	0.5	SNY		87.06	320	iPc	29	11.00	-0.1	BBTK		151.84	308	ePKP	36	16.00	1.9
		1.4s		12.00nm			4.6mb			4.5s		700.00nm			6.2mb X					e	36	25.00	
PMG		38.20	288	eP	23	45.00	-1.5		Z	18s		1.10um			5.3Msz	PRNI		151.99	287	ePKP	36	20.00	5.5X
		1.0s		82.00nm			5.6mb					pP	29	24.00	43km	MBH		152.10	286	ePKP	36	20.00	5.4X
QIS		40.73	268	eP	24	07.50	0.0					sS	40	00.00		KRA		152.50	337	ePKP	36	15.40	0.8
ASPA		45.09	261	iPd	24	41.10	-1.9	CN2		87.23	322	Pc	29	12.00	0.1					e	36	22.20	
		1.4s		41.90nm			5.1mb			5.0s		700.00nm			6.2mb X	KSP		152.96	342	ePKP	36	15.50	0.3
	Z	19s		7.50um			5.6Msz		Z	18s		1.20um			5.3Msz			1.2s		43.00nm			
				iS	30	14.50			N	18s		0.70um								i	36	21.40	
WB5		45.64	267	eP	24	45.80	-1.6		E	18s		0.60um								i	36	35.00	
DRV		49.17	201	eP	25	13.60	-0.7					pP	29	21.80	31kmX	CLL		153.32	347	iPKP	36	22.30	6.6X
HON		49.87	23	P	25	30.00	9.9X					SKS	39	40.00				1.4s		29.00nm			
	Z	18s		1.29um			5.0Msz	RMW		87.66	34	P	29	14.40	0.4					e	36	28.00	
SBA		52.96	184	eP	25	44.20	1.3	TIA		87.81	312	eP	29	15.40	0.5	WTS		153.49	356	ePKP	36	22.00	6.1X
				(S)	33	24.00			Z	18s		1.10um			5.3Msz			1.0s		27.00nm			
GUA		54.19	311	eP	25	50.30	-2.3	DUG		88.11	43	P	29	16.60	0.2	BRG		153.52	345	ePKP	36	16.40	0.4
		1.0s		80.00nm			5.7mb	DAU		89.21	44	P	29	22.20	0.3			1.3s		23.00nm			

OCT 17, 1990 12h 16m 29.12± 0.26s
25.557 S ± 7.3km 176.311 W ± 5.5km
DEPTH = 44.4km (3 depth phases)
5.6mb (18 obs.) 5.5Msz (22 obs.)
SOUTH OF FIJI ISLANDS (171)
Ms 5.4 (BRK).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 18S, 41C
Centroid Location:
Origin Time 12:16:31.3 0.4
Lat 25.52S 0.05 Lon 175.92W 0.03
Dep 15.0 BDY Half-duration 2.8
Moment Tensor; Scale 10**17 Nm
Mrr= 3.31 0.09 Mtt= 0.63 0.11
Mff=-3.93 0.13 Mrt= 0.23 0.23
Mrf= 5.05 0.32 Mtf= 0.00 0.09
Principal Axes:
T Val= 5.91 Plg=63 Azm=275
N 0.62 2 182
P -6.53 27 91
Best Double Couple:Mo=6.2*10**17
NP1:Strike=177 Dip=18 Slip= 85
NP2: 2 72 92

EDR No. 10-90
Part 2 of 2
P. 141-280

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.

			i	36	23.50	
			i	36	29.80	
			i	36	35.60	
			i	36	38.60	
			i	37	17.40	
TNR	154.02	326	ePKPc	36	37.00	20.1X
PRU	154.20	344	PKP	36	26.00	9.1X
Z 18s		1.10um				5.7Msz
			e	36	40.50	
COZ	154.21	325	ePKP	36	18.00	0.7
MOX	154.22	348	ePKP	36	26.00	9.0X
BCAO	154.62	217	iPKPd	36	19.00	0.4
0.5s		8.00nm				
			ic	37	47.00	
			ic	40	23.00	
			ic	47	33.50	
ENN	154.77	357	ePKP	36	35.00	17.4X
1.1s		43.00nm				
GRF	155.20	348	e(PKP)	36	16.70	-1.6
			e	36	43.50	
KHC	155.23	344	PKP	36	19.00	0.6
			e	36	45.00	
VTS	156.64	322	ePKP	36	30.00	9.3X
SKO	158.03	323	ePKP	36	23.00	0.8
CTI	158.58	345	PKP	36	40.00	17.2X
VAI	159.33	350	PKP	36	25.00	1.6
BNI	160.40	354	PKP	36	36.00	11.2X
LKO	161.80	149	PKP	36	27.14	0.2
S.D. = 1.2		on	97 of 132 obs.			

? OCT 17, 1990 13h 59m 34.85± 4.98s
43.720 N ±24.6km 6.899 E ±24.3km
DEPTH = 5.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)

STV	0.61	30	P	59	46.94	-0.1
			S	00	03.55	
ENR	0.63	36	P	59	47.15	-0.3
			S	00	02.43	
IMI	0.74	75	P	59	49.92	0.2
			S	00	04.99	
PZZ	0.80	10	P	59	51.05	0.1
			S	00	06.94	
ROB	0.91	50	P	59	53.71	1.0
			S	00	11.96	
FIN	1.06	62	P	59	54.74	-0.6
			S	00	14.22	
PCP	1.44	55	P	00	01.40	-0.3
S.D. = 0.7		on	7 of 7 obs.			

OCT 17, 1990 14h 30m 13.16± 0.10s
10.970 S ± 2.4km 70.776 W ± 2.6km
DEPTH = 598.8km (geophysicist)
6.7mb (48 obs.)
PERU-BRAZIL BORDER REGION (112)

mb 6.8 (BRK), 6.8 (PAS).
Ma=3.0•10••19 Nm (PPT). Slight damage at Rio Bronco, Brazil. Felt (IV) at Pucallpa, Peru and (III) at La Paz, Bolivia. Depth from broadband displacement seismograms.

FAULT PLANE SOLUTION: P-Waves
NP1:Strike=170 Dip=60 Slip= -77
NP2: 325 32 -111
Principal Axes:
T Plg=14 Azm=251
P 72 111

Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting with a small left-lateral strike-slip component. The preferred fault plane is NP1.

RADIATED ENERGY
No. of sta: 5 Focal mech. C
Energy 3.0±1.3•10••14 Nm

MOMENT TENSOR SOLUTION
Dep 590 No. of sta: 12
Moment Tensor; Scale 10••19 Nm
Mrr=-3.56 Mtt= 0.47
Mff= 3.09 Mrt= 0.25
Mrf= 0.52 Mtf=-1.23
Principal axes:
T Val= 3.60 Plg= 3 Azm=249
N 0.03 7 339
P -3.63 83 134

Best Double Couple:Mo=3.6•10••19
NP1:Strike=332 Dip=42 Slip=-100
NP2: 165 49 -81
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 19S, 49C M.W.: 15S, 36C
Centroid Location:
Origin Time 14:30:22.2 0.2
Lat 10.95S 0.01 Lon 70.73W 0.01
Dep 616.1 1.1 Half-duration 8.0
Moment Tensor; Scale 10••19 Nm
Mrr=-3.02 0.03 Mtt= 0.24 0.03
Mff= 2.78 0.03 Mrt=-0.21 0.03
Mrf= 1.17 0.03 Mtf=-0.45 0.03
Principal Axes:
T Val= 3.09 Plg=11 Azm=260
N 0.16 0 170
P -3.25 79 80

Best Double Couple:Mo=3.2•10••19
NP1:Strike=350 Dip=34 Slip= -90
NP2: 170 56 -90

HUA	4.58	256	iPd	31	48.00	4.3X
ARE	5.50	187	iPd	31	53.50	2.6
PT08	5.74	260	iPd	31	55.60	2.6
ZOBO	5.86	154	Pd	31	57.20	2.9
NNA	6.03	260	iPd	31	57.30	2.2
LPB	6.11	155	iPd	31	59.20	3.0
PT10	6.17	259	iPd	31	58.60	2.4
CNCB	6.41	155	iPd	32	02.00	3.0
CCH	7.80	145	iPc	32	14.50	3.1X
SIV	10.67	119	iPc	32	42.60	3.6X
TUNG	12.17	321	ePn	32	58.00	4.1X
ANT	12.67	178	iPd	33	00.40	1.9
			i	33	45.20	
			iS	35	09.50	
VC1	12.76	323	ePn	33	04.50	4.5X
CAYA	13.11	326	ePn	33	08.20	4.8X
OTO	13.18	324	eP+	33	09.30	5.3X
			eS	35	10.00	
			LR	35	38.30	
YANA	13.28	324	ePn	33	09.00	4.0X
			iPg+	33	09.90	
PSO	13.73	331	eP	33	14.00	4.7X
BOG	15.83	348	iPd	33	34.00	4.3X
			iS	35	42.00	
FUQ	16.60	350	eP	33	37.50	0.5
CYA	18.00	166	iPd	33	50.80	0.8
BMG	18.07	353	iPc	33	51.00	0.3
UAV	19.45	359	eP	34	07.20	3.5X
			eS	37	14.00	
SDV	19.73	0	eP	34	07.60	1.4
			iS	37	10.10	
CEOS	20.02	7	iPc	34	09.90	1.2
RTLL	20.37	174	iPc	34	11.00	-0.9
RTCB	20.50	175	e(P)c	34	12.90	-0.2
ZON	20.57	175	iPd	34	14.00	0.4
			eS	37	24.00	
TOV	20.64	3	iPc	34	15.50	1.1
			iS	37	26.70	
RTCV	20.89	175	ePc	34	16.00	-0.6
PLAV	20.96	9	iPd	34	19.50	2.0
OLLA	21.22	11	iP	34	21.00	1.3
GUAC	21.31	10	iP	34	22.20	1.6
JACH	21.61	180	iP	34	23.00	-0.1
			i	37	42.10	
PPD	21.63	123	iPd	34	22.90	-0.4
UPA	21.65	336	ePd-	34	25.00	1.6
1.0s		60.00nm				5.2mb X
			S	37	01.00	
LLAV	21.67	11	eP	34	24.80	1.1
CAR	21.68	10	eP	34	24.80	1.0
ROCH	21.90	181	iP	34	25.40	-0.5
			i	37	45.00	
IHA	21.97	182	P	34	26.20	0.0
PEL	22.07	180	iPd	34	26.70	-0.5
FCH	22.26	179	iPd	34	29.50	0.3
			i	37	52.00	
CUM	22.28	17	iPd	34	31.20	2.0
			iS	37	58.50	
SAN	22.38	180	iPd	34	28.50	-1.5
			iS	37	06.00	
LCCH	22.41	182	iPd	34	29.60	-0.6
			i	37	47.70	
DVD	22.51	328	ePc	34	34.00	2.8
PCH	22.55	179	iPd	34	31.20	-0.3
			i	37	56.00	

TACH	22.58	180	iP	34	31.20	-0.5
			i	37	54.50	
BDF	22.73	104	ePc	34	38.06	4.6X
			eS	38	02.93	
CHCH	22.86	180	iPd	34	33.80	-0.5
			i	38	00.20	
LNV	22.89	181	ePd	34	31.30	-3.1X
			i	34	33.60	8kmX
			i	38	02.00	
TPP	23.09	24	eP	34	40.25	3.8X
TBH	23.40	25	eP	34	42.75	3.6X
TRN	23.41	24	eP	34	40.89	1.6
			e	37	38.00	
PIG	24.10	24	eP	34	48.28	2.9
TPR	24.15	25	eP	34	47.77	1.9
BOT	24.16	25	eP	34	47.90	2.0
GRW	24.70	22	eP	34	51.72	1.0
			e	37	38.00	
VAO	25.67	121	iPd	34	58.50	-0.9
MVM	27.18	21	eP	35	11.04	-1.4
BBL	27.89	19	eP	35	16.92	-1.6
BMA	27.97	118	ePd	35	19.00	-0.3
DOG	28.32	19	eP	35	20.29	-2.0
JFO	28.38	116	eP	35	22.70	-0.2
SFG	28.66	19	eP	35	23.40	-1.8
SEG	28.70	19	eP	35	24.09	-1.4
NEV	29.08	16	eP	35	27.40	-1.4
PORP	29.13	8	iP	35	28.80	-0.4
BPA	29.20	18	eP	35	27.40	-2.4X
CPD	29.22	10	iP	35	29.40	-0.6
SKI	29.22	16	eP	35	30.78	0.8
			e	38	17.00	
SJG	29.25	9	iP	35	29.30	-1.0
CSB	29.43	9	iP	35	32.40	0.6
SOB1	29.47	89	iPd	35	33.20	1.0
LPR	29.49	9	iP	35	31.50	-0.9
CPB	29.77	17	eP	35	31.37	-3.3X
CAI	33.52	85	iPd	36	07.00	0.6
SCX	35.00	322	(P)	36	21.50	3.0X
EVV	37.98	320	(P)	36	44.00	1.1
LVVM	39.63	320	(P)	36	57.18	1.0
ACX	39.90	313	(P)	36	59.80	1.3
IIT	40.31	317	(P)	37	04.50	2.5
PPM	40.55	317	(P)	37	06.30	2.0
III	40.64	316	(P)	37	05.80	1.2
MEX	41.11	317	(P)	37	12.00	3.6X
UNM	41.11	317	(P)	37	10.50	2.1
IIJ	41.76	317	(P)	37	15.80	2.0
MRX	42.74	315	(P)	37	22.70	1.9
CGX	44.33	313	(P)	37	35.50	2.0
HBF	44.61	348	P	37	35.00	-0.1
SGS	44.88	348	P	37	37.00	-0.3
JSC	46.09	348	P	37	45.90	-0.6
PRM	46.14	347	P	37	46.30	-0.6
TKL	47.97	346	P	37	59.30	-1.5
GBTN	48.09	345	P	38	00.20	-1.4
RSCP	48.38	344	P	38	02.20	-1.7
MZX	48.69	314	(P)	38	07.94	1.7
BLA	48.77	350	iPd	38	06.40	-0.3
			pP	39	20.00	360kmX
			PcP	39	56.00	
NAV	48.94	349	P	38	07.50	-0.5
UYO	50.21	334	iPc	38	16.00	-1.3
ELC	51.03	341	P	38	21.00	-2.2
GMTN	51.69	357	iP	38	26.40	-1.5
PNJ	51.71	357	iP	38	26.80	-1.2
			PcP	39	32.00	
			pP	40	18.70	607kmX
TXNY	51.98	357	iP	38	28.50	-1.5
FVM	52.06	340	iPd	38	28.80	-1.8
			iS	44	55.00	
TUL	52.27	334	iPd-	38	27.40	-4.8X
Z 21s		17.38um				6.1Msz
			epP	40	24.00	643kmX
			eS	45	05.00	
			LR	48	30.00	
SIO	52.35	334	iP	38	31.50	-1.3
MEO	52.59	331	iPd	38	32.60	-1.9
CLE	53.13	350	iP	38	37.20	-1.0
HRV	53.22	359	iPd	38	37.79	-1.0
			iPcP	39	35.66	
			ipPc	40	31.34	611kmX
			isPc	41	33.59	
			e	42	46.72	
			eS	45	22.91	
			eScS	47	21.27	
			eSS	48	40.94	

17d 14h

AIA	54.39	177	iP	38	45.50	-1.2	PAS	63.54	317	iPd	39	48.76	0.7					iSKS	49	07.91			
DLA	54.47	350	P	38	46.60	-1.0				iPcP	40	18.06						iP'P'	08	26.00			
LDN	54.58	351	P	38	46.55	-1.8				ipPc	41	46.62	593kmX	MCMT	67.30	329	iPd	40	11.50	0.0			
ELF	54.75	351	P	38	47.60	-2.0				epPcP	42	49.00		CFTV	67.33	53	iPd	40	11.70	0.0			
ANMO	56.81	325	iPd	39	04.08	0.0				esP	43	20.00					iS	48	22.90				
			iPcP	39	50.68					esPcP	43	32.00		SXM	67.43	331	iPd	40	12.00	-0.2			
			ipPc	40	59.96	609kmX				esPP	45	10.00					ipP	42	15.40	616kmX			
			isPc	42	01.87					epPcS	46	28.00		ARN	67.61	318	P	40	12.00	-1.3			
			iScP	42	48.28					eS	47	36.58		LIC	67.63	79	Pd	40	12.72	-1.0			
			iS	46	09.27					iSKS	48	38.99		MHC	67.68	318	eP	40	13.80	0.0			
			eScS	47	50.40					eScS	48	39.00					e	40	14.80				
			eSS	49	31.10					esS	51	06.00					ipP	42	17.50	618kmX			
CBM	57.69	2	iP	39	08.50	-1.1				eSS	51	57.00					eS	48	24.60				
			ipP	41	06.00	617kmX				eSSS	55	10.00					eP'P'	08	15.50				
			eS	46	12.80					eLg	57	50.00		GCC	67.74	318	eP	40	13.80	-0.2			
MBO	59.00	66	iPd	39	19.40	0.5	SBB	63.62	318	iPd	39	48.00	-0.7				e	40	14.70	3km			
GLD	59.74	330	P	39	23.00	-0.7				e	40	17.00		TIC	67.74	78	Pd	40	13.50	-0.9			
	1.5s	3937.50nm				6.4mb				epP	41	47.00	600kmX	LRM	67.80	330	iPd	40	14.00	-0.5			
			pP	41	24.00	633kmX				e	42	27.00					epP	42	17.70	617kmX			
GOL	59.78	330	iP	39	23.00	-1.0				esP	43	15.00		HBMT	67.86	330	iPd	40	14.40	-0.5			
			e(pP)	41	24.00	633kmX				e	47	25.00					epP	40	17.70	11kmX			
			iS	47	49.00					eScS	48	18.00		KIC	67.94	79	Pd	40	15.00	-0.6			
			i	48	34.00		CHIE	63.98	52	iP	39	51.00	0.0				S	48	20.00				
GLA	60.65	318	eP	39	31.40	1.8				iS	47	43.40		BUT	68.00	330	ePd	40	16.00	0.4			
GLA	60.65	318	eP	39	34.00	4.4X	CLC	64.15	319	eP	39	51.00	-1.0	HRY	68.14	331	iPd	40	16.00	-0.4			
			e	40	07.00					epP	41	52.00	612kmX				epP	40	19.80	12kmX			
			epP	41	03.00	421kmX				esP	43	22.00		PCC	68.26	318	eP	40	17.40	0.3			
			e	41	28.00					e	47	44.00		BKS	68.37	318	ePd	40	17.40	-0.4			
			esP	43	08.00					eScS	48	42.00			0.8s	2797.00nm				6.8mb			
			e	47	01.00		BW06	64.17	329	P	39	50.90	-1.3				epP	42	22.30	624kmX			
			eScS	48	20.00		TBT	64.49	51	iPd	39	53.80	-0.4				eS	48	38.00				
IKP	61.26	317	eP	39	35.50	1.9				iS	47	49.80					esS	52	08.00				
BAR	61.66	317	eP	39	35.00	-1.1	ISA	64.63	318	eP	39	54.00	-1.0				eSS	53	18.00				
			e	40	10.00					e	40	17.00					e(sSS)	56	48.00				
			epP	41	33.00	601kmX				epP	41	57.00	624kmX				e(LQ)	59	36.00				
			e	42	24.00					e	42	27.00		BRK	68.39	318	ePc	40	18.00	0.2			
			esP	43	13.00					esP	43	18.00					ipP	42	19.00	597kmX			
			eScS	48	26.00					e	47	37.00					epPP	44	06.00				
CPE	62.06	316	eP	39	40.40	1.7				eScS	48	19.00					eS	48	30.00				
TPC	62.10	318	eP	39	38.00	-1.0	SYP	64.97	316	iPd	39	57.00	-0.3				eScS	49	14.00				
			e	40	12.00					e	40	24.00					eSS	52	27.00				
			epP	41	38.00	614kmX				epP	41	58.00	609kmX				eLQ	57	14.00				
			e	42	27.00					esP	43	46.00					eP'P'	08	22.00				
			esP	43	12.00					e	47	39.00		ZSP	68.42	318	iPd	40	19.00	0.9			
			e	47	15.00					eScS	48	51.00					ipP	42	22.70	615kmX			
			eScS	48	28.00		TNP	65.30	321	iP	39	58.50	-0.8				eS	48	37.00				
PLM	62.19	317	iPd	39	39.00	-0.7				eS	47	54.00					eP'P'	08	21.70				
			e	40	23.00		BCH	65.42	317	iP	40	00.00	0.0	ORV	68.86	320	eP	40	20.50	-0.2			
			epP	41	39.00	613kmX				iPcP	40	25.80	612kmX				eP'P'	08	19.50				
			e	42	27.00					i	42	01.70		MIN	69.38	321	eP	40	22.60	-1.4			
			esP	43	11.00					e	08	20.00					eP'P'	08	18.50				
			e	47	19.00		SCH	65.62	3	ePd	39	59.50	-1.2	WDC	70.10	320	eP	40	25.80	-2.2			
			eScS	48	30.00			0.8s	319.00nm				5.8mb		1		i	41	21.80				
PEC	62.71	317	P	39	41.20	-1.6	CTFE	65.66	52	iPd	40	01.80	0.3				ipP	42	30.00	613kmX			
			pP	41	43.00	624kmX				iS	48	03.50					eS	48	48.00				
RVR	62.91	317	eP	39	43.00	-1.1	PKEM	65.94	318	P	40	03.60	0.6				eP'P'	08	12.30				
			e	40	15.00		GGC	65.98	53	iP	40	04.00	0.5	SES	70.47	334	iPd	40	29.00	-1.0			
			epP	41	41.00	596kmX				iS	48	12.00			0.8s	858.00nm				6.3mb			
			e	42	18.00		FRI	66.22	319	ePc	40	03.50	-1.2	FFC	70.53	341	iPd	40	29.10	-1.1			
			esP	43	17.00		PRI	66.35	317	ePc	40	06.00	0.3		0.7s	1018.00nm				6.5mb			
			e	47	22.00					ipP	42	28.80	762kmX	FHC	71.13	320	eP	40	34.60	0.6			
			eScS	48	34.00					iP'P'	08	20.00					ipP	42	39.80	616kmX			
VPD	63.06	317	iP	39	45.80	0.8	KVN	66.44	321	iP	40	05.50	-0.8				eP'P'	08	18.20				
			iPcP	40	15.90					iPcP	40	27.20	593kmX	NEW	71.80	329	iP	40	36.00	-1.7			
			ipP	41	46.10	612kmX				i	42	05.00					iS	49	06.20				
			iScP	43	13.70					i	43	49.00		COR	72.86	324	iPd	40	45.40	1.6			
			eScS	48	39.40					iS	48	07.50					ipPc	42	47.90	593kmX			
SCI	63.11	316	eP	39	47.00	1.7	LTMT	66.72	329	iPd	40	08.50	0.5				esPc	43	49.48				
CIS	63.26	316	eP	39	48.30	2.0				epP	42	12.30	622kmX				iS	49	23.40				
GSC	63.33	319	iPd	39	47.00	0.2	LLA	66.81	318	iP	40	07.60	-0.8				eSKS	49	50.66				
			e	42	47.00					e	40	10.00	8kmX	LON	73.30	326	iPd	40	46.55	0.2			
			esP	43	49.00					eP'P'	08	24.30					ipPc	42	50.04	598kmX			
			e	47	16.00		MEMT	66.92	330	ePd	40	08.90	-0.2				esPc	43	50.30				
			eScS	48	24.00		PRS	66.93	317	eP	40	09.00	-0.1				iS	49	28.38				
DAU	63.37	326	iPd	39	46.00	-1.3				eP'P'	08	23.80					eSKS	49	55.75				
			iS	47	30.00		BGMT	67.18	330	iPd	40	10.40	-0.3	RMW	73.73	327	P	40	48.00	-0.7			
			eSS	52	11.90					epP	42	14.90	625kmX	PNT	73.74	329	iPd	40	48.50	-0.2			
PVPS	63.48	317	eP	39	48.80	1.1	SAO	67.22	318	eP	40	11.40	0.5	TIO	73.76	53	iPd	40	50.00	0.6			
			ePcP	40	18.20					epP	42	12.50	601kmX				i	42	58.00	626kmX			
			epP	41	48.80	608kmX				eS	48	24.70		FRB	74.51	1	ePd	40	51.00	-1.5			
MWC	63.50	317	eP	39	48.00	-0.1				eP'P'	08	16.00		AVE	74.61	51	iPd	40	54.80	1.0			
			e	40	17.00		CMB	67.27	319	iPd	40	11.41	0.2				i	41	16.00	80kmX			
			epP	41	48.00	607kmX				ePcP	40	32.18					i	49	45.00				
			e	42	16.00					ipPc	42	11.26	593kmX	PGC	75.32	327	ePd	40	57.50	0.1			
			esP	43	19.00					ipPP	43	53.60		LIS	75.68	45	iPd	41	01.90	2.3			
			e	47	33.00					iPPP	43	57.04		CNIL	76.89	49	eP	41	08.50	2.3			
			eScS	48	39.00					iS	48	20.73		MOMI	77.12	49	eP	41	09.50	2.0			

GIBL	77.15	48	eP	41	08.50	0.8				S	51	12.00		UCC	89.21	38	Pd-	42	07.00	0.0
OJEN	77.16	49	eP	41	11.00	3.2X	GRR	85.19	39	eP	41	46.80	-1.4				pP	44	19.00	613kmX
ALJ	77.35	48	eP	41	09.50	0.7	POF	85.33	119	iPd	41	50.00	0.7				sP	45	20.00	
EJIF	77.35	49	iPd	41	10.40	1.7	ETER	85.50	46	iPd	41	49.60	-0.2				iSKS	51	38.00	
			ipPd	43	20.50	628kmX				ipPd	44	04.00	635kmX				S	52	03.00	
EZAM	77.55	42	iPd	41	10.10	0.4	FLN	85.56	39	eP	41	48.70	-1.3				SP	53	15.00	
			ipPd	43	19.80	625kmX		1.5s		5223.15nm			7.0mb				sS	54	02.00	
EPRU	77.74	48	iPd	41	12.20	1.4		Z 20s		11.25um			6.3Msz				iP'P'	07	44.00	
			ipPd	43	22.50	629kmX	RJF	85.59	42	eP	41	48.80	-1.4	KKH	89.22	290	P	42	08.00	0.4
STS	77.99	42	iPc	41	13.00	1.1		Z 18s		1.48um			5.4Msz	MHA	89.22	291	P	42	08.00	0.3
			ipPc	43	20.80	612kmX	LDF	85.72	39	iPc	41	49.50	-1.2	ENR	89.25	45	P	42	07.64	0.1
EHOR	78.07	47	iPd	41	13.10	0.6	AKU	85.73	19	iP	41	51.70	1.3	BHB	89.32	44	P	42	07.00	-0.7
			ipPd	43	23.50	628kmX		1.9s		6589.47nm			7.0mb	RSP	89.40	44	P	42	10.06	1.9
EPLA	78.41	45	iPd	41	15.00	0.7				e	44	00.00	597kmX	LSD	89.42	43	P	42	09.81	1.4
			ipPd	43	25.50	628kmX	SBA	85.81	190	iPd	41	51.00	0.2	VITF	89.43	41	P	42	07.83	-0.2
ERUA	78.69	43	iPd	41	16.40	0.7				iS	51	20.00		EMS	89.44	43	ePd	42	08.30	-0.1
			ipPd	43	26.80	627kmX	CAF	85.83	43	iPc	41	50.10	-1.3	IMI	89.49	45	P	42	07.97	-0.6
EMEL	78.79	51	eP	41	16.70	0.4	SIT	85.86	330	eP	41	51.50	0.4	ROB	89.58	45	P	42	09.17	0.2
			ipPc	43	30.00	645kmX	LSF	85.93	42	eP	41	50.60	-1.2	HAU	89.61	41	eP	42	07.60	-1.4
TAF	79.02	51	iPc	41	19.00	1.4	TCF	86.39	42	eP	41	52.40	-1.6		1.6s		1101.90nm			6.5mb
			i	43	29.00	623kmX	EAB	86.40	31	eP	41	52.40	-1.4		Z 22s		10.25um			6.2Msz
EMON	79.03	42	iPd	41	18.00	0.5		0.8s		965.00nm			6.6mb	HKL	89.66	291	P	42	09.00	-1.2
			ipPd	43	29.00	629kmX	MAF	86.60	42	eP	41	53.60	-1.4	LOMF	89.73	42	P	42	09.37	-0.2
ECOG	79.08	49	iPc	41	18.60	0.6	ESK	86.61	32	ePd	41	54.00	-0.9	DIX	89.76	43	ePd	42	10.20	0.2
			ipPc	43	29.00	625kmX		1.0s		1640.00nm			6.7mb	FIN	89.80	45	P	42	09.88	0.0
AFC	79.09	49	iPd	41	18.60	0.5	EKA	86.65	32	Pd	41	54.10	-0.9	BSF	89.84	41	P	42	09.56	-0.6
			ipPd	43	30.00	632kmX		1.0s		1116.00nm			6.5mb	CKI	89.90	45	Pd	42	09.50	-0.9
SPA	79.10	180	iPd	41	16.30	-1.3	EAU	86.71	31	eP	41	54.30	-1.0	PGF	89.92	47	P	42	10.67	0.1
	1.0s		555.00nm			5.9mb		0.8s		1716.00nm			6.8mb	ORO	90.02	43	P	42	09.90	-1.1
	Z 21s		13.33um			6.3Msz	LBL	86.72	43	P	41	55.95	0.4	ORX	90.02	43	P	42	14.04	3.0
EBAN	79.27	48	iPd	41	19.40	0.6	PYM	86.73	42	P	41	55.69	-0.1	MOF	90.07	41	P	42	10.75	-0.4
			ipPc	43	30.00	626kmX	ELO	86.84	31	eP	41	55.40	-0.5	DBN	90.10	37	iP	42	12.00	1.0
TOL	79.76	46	iPd	41	22.46	1.2	EBH	86.85	31	eP	41	55.30	-0.7				ipP	44	24.00	612kmX
	1.2s		4062.50nm			6.7mb	EBL	86.89	32	eP	41	55.20	-1.0				esP	45	21.00	
			ipPc	43	31.58	616kmX		0.8s		572.00nm			6.4mb				esPP	48	49.00	
			isP	44	22.00		BGF	86.89	42	eP	41	55.00	-1.4				eSKS	51	44.00	
			ePP	44	31.40		AGO	86.91	42	P	41	56.32	-0.2				eS	52	06.00	
			iS	50	38.00		ESY	87.17	32	eP	41	56.70	-0.8				ePS	53	22.00	
			iSP	51	14.00			0.8s		1186.00nm			6.7mb				esS	56	09.00	
			iPP	07	55.00		PLDF	87.21	42	P	41	57.97	0.0	PCP	90.12	45	P	42	11.77	0.4
ENIJ	79.96	49	iPd	41	22.00	-0.4	EDU	87.23	31	eP	41	57.30	-0.4	MMK	90.12	43	ePd	42	11.80	0.1
			ipPd	43	33.00	627kmX	GRC	87.28	41	P	41	57.66	-0.5	ENN	90.15	38	iPd	42	11.70	0.4
GUD	79.99	45	iPd	41	23.40	0.8	AVF	87.30	41	iPc	41	56.40	-1.9		1.3s		1761.00nm			6.8mb
			ipPd	43	34.50	628kmX	SSF	87.48	41	eP	41	57.30	-1.9				ipP	44	25.50	622kmX
EVIA	80.38	48	iPd	41	25.60	1.0	SMF	87.57	42	iPc	41	58.00	-1.6				e(S)	52	13.00	
			ipPd	43	36.50	625kmX	PRAF	87.58	45	P	41	59.57	-0.2				ePKKP	59	38.50	
YKA	80.71	341	eP	41	26.00	0.3	GELF	87.63	45	P	42	00.09	0.1				eP'P'	07	40.50	
	0.8s		3011.50nm			6.8mb	TREF	87.67	45	P	42	00.09	-0.1	MEM	90.15	38	iPd	42	11.02	-0.3
VAL	81.34	33	iP	41	29.20	0.2	LBF	87.76	41	eP	41	58.70	-1.8				pP	44	25.00	623kmX
			S	50	48.00		LOR	87.78	41	eP	41	58.70	-1.9				SKS	51	45.80	
ETOR	81.53	46	iPd	41	31.50	1.1		1.2s		1046.00nm			6.5mb				PKKP	59	38.80	
			ipPd	43	43.30	628kmX		Z 20s		13.50um			6.4Msz				P'P'	07	42.50	
ECHE	81.84	47	iPd	41	32.70	0.7	BERF	87.79	45	P	42	00.39	-0.4	BCAO	90.16	86	iPd	42	11.80	-0.4
			ipPd	43	45.00	631kmX	PUYF	87.86	45	P	42	00.54	-0.5		0.5s		125.00nm			6.1mb
ECRI	81.90	44	iPd	41	32.80	0.6	VILF	87.97	45	P	42	01.37	-0.2				id	43	02.80	206kmX
			epP	43	44.50	627kmX	TAVF	88.14	45	P	42	01.97	-0.4				id	44	25.00	
BOH	83.11	44	P	41	39.25	1.0	PFH	88.20	290	P	42	03.00	0.0				ic	46	31.00	
ELYF	83.14	44	P	41	38.81	0.4	LRG	88.30	45	iPc	42	02.40	-0.6				id	51	44.50	
BST	83.20	38	P	41	39.72	1.2	LMR	88.37	45	iPc	42	02.40	-0.9				id	52	11.00	
ISSF	83.22	44	P	41	39.66	0.8	HIL	88.38	290	P	42	04.50	0.7				id	59	40.00	
MADF	83.25	44	P	41	39.31	0.4	FRF	88.53	45	iPc	42	03.30	-0.8				ic	07	42.00	
EROQ	83.27	46	iPd	41	39.40	0.4	CALN	88.75	45	P	42	05.62	0.3	ECH	90.19	41	P	42	11.58	0.0
			ipPd	43	52.00	629kmX	BNI	88.98	44	Pd	42	06.30	0.0	BBS	90.21	42	P	42	11.66	-0.1
LME	83.30	44	P	41	40.03	0.8	MVIF	88.98	45	P	42	06.85	0.5	CDF	90.32	41	P	42	11.88	-0.4
ATE	83.31	44	P	41	40.03	0.8	RRL	89.01	44	P	42	07.23	0.7	WLS	90.37	41	P	42	12.42	-0.1
ESCF	83.39	44	P	41	40.24	0.6	YKU	89.03	332	eP	42	07.90	2.0	INK	90.48	341	iPd	42	11.90	-0.6
ECB	83.42	34	iPd	41	38.80	-0.6	SNF	89.08	38	iPd	42	05.89	-0.5		0.5s		348.00nm			6.6mb
REY	83.49	19	iP	41	41.20	1.6				pP	44	19.80	625kmX				pP	42	59.00	189kmX
			e	41	52.40	36kmX				PKKP	59	41.50		VAI	90.62	43	P	42	12.50	-1.1
OGE	83.50	44	P	41	40.57	0.5				P'P'	07	44.40		FEL	90.65	41	eP	42	12.96	-0.9
BLE	83.50	123	iPd	41	40.00	-0.4	TOUF	89.08	45	P	42	07.18	0.3	STR	90.68	41	P	42	14.26	0.5
	0.6s		565.33nm			6.3mb	REVF	89.08	45	P	42	07.20	0.5	GWF	90.69	40	P	42	13.92	0.0
JAU	83.52	44	P	41	41.35	0.9	AURF	89.10	45	P	42	07.22	0.4	DWY	90.72	336	Pd	42	12.70	-1.0
ECP	83.56	34	iPd	41	39.60	-0.5	PZZ	89.11	44	P	42	07.34	0.4	TMA	90.75	43	ePd	42	13.60	-0.8
BTH	83.66	44	iPc	41	42.00	1.1	DOU	89.13	39	Pd-	42	06.00	-0.7	PLH	90.76	38	ePd	42	13.10	-0.9
			PcP	41	46.00					pP+	44	19.00	619kmX	PTS	90.78	53	Pd	42	15.40	0.9
			i	51	06.00					sP	45	22.00		ZLA	90.79	42	ePd	42	14.00	-0.4
ETA	83.88	34	iPd	41	41.00	-0.7				PP	46	33.00		BOB	90.80	45	Pd	42	14.20	-0.4
EPF	84.00	44	iPc	41	42.10	-0.6				SKS	51	38.00		SLE	90.93	42	ePd	42	14.50	-0.5
	1.2s		1208.70nm			6.4mb				S	52	02.00		LLS	91.03	42	ePd	42	15.50	-0.2
ESEL	84.70	48	iPd	41	46.00	-0.1				SP	53	16.00		WTS	91.04	37	iPd	42	15.20	-0.1
			ipPd	44	00.00	635kmX	LPL	89.15	43	eP	42	06.80	-0.4		0.9s		765.00nm			6.7mb
LPF	84.94	39	eP	41	45.60	-1.4	LPG	89.15	43	eP	42	07.00	-0.3				epP	44	30.50	630kmX
LFF	84.95	43	eP	41	46.60	-0.5	SBF	89.17	45	iPc	42	06.00	-1.1				e(S)	52	20.00	
MFF	84.97	41	iPc	41	46.10	-1.1	STV	89.19	45	P	42	07.92	0.7				ePKKP	59	36.00	
LPO	85.16	43	eP	41	47.00	-1.1	AUTN	89.20	45	P	42	07.74	0.3				eP'P'	07	40.00	
RAR	85.18	249	P	41	50.00	1.3	DOI	89.21	44	P	42	07.60	0.3	WIT	91.18	36	eP	42	16.50	0.5

17d 14h

			•pP	44	27.50	605kmX			1.8s	2385.00nm		7.0mb			2.0s	2800.00nm		7.1mb											
			•(S)	52	21.00						i	42	50.00					i	43	03.80									
			•PKKP	59	32.00						ipP	44	41.00	621kmX				i	43	21.00									
			•P'P'	07	45.00		DUI	93.67	48	P	42	28.10	0.2				ipP	44	46.80	613kmX									
DHH	91.19	291	P	42	07.00	-9.7X	HOF	93.70	40	•P	42	27.50	-0.2				isP	45	35.20										
MDI	91.23	44	Pd	42	15.10	-1.3		1.8s	1588.00nm			6.9mb					•SKS	52	08.00										
VDL	91.24	43	•Pd	42	16.30	-0.5	Z	16s	10.00um			6.4MszX					iP'P'	52	32.20										
PII	91.29	46	P	42	16.20	-0.5					iS	54	04.80				iS	52	52.00										
LVI	91.31	52	Pd	42	17.10	0.2	ATN	93.76	52	P	42	26.70	-1.6				•	54	51.50										
SAX	91.35	42	•Pd	42	17.20	-0.1	BSS	93.76	49	P	42	28.60	0.4				iPKKP	59	26.10										
HON	91.38	291	P	42	18.50	0.9	BHG	93.79	42	iPd	42	28.00	-0.2				iP'P'	07	32.20										
KIP	91.41	291	•P	42	19.89	2.2	EVA	93.82	118	iPc	42	28.60	-0.5		PRU	95.32	40	Pd	42	35.10	0.1							
			i	51	52.50		KBA	93.97	43	iPd	42	28.00	-1.2			1.9s	1731.00nm		7.0mb										
			iS	52	25.89					ipP	44	42.80	626kmX				pP	44	47.90	613kmX									
			•	52	46.58					iSKS	52	04.70					iSKS	52	13.00										
			•PS	53	38.17		TRI	93.98	44	•Pc	42	28.00	-1.0				PS	55	49.00										
BDI	91.42	45	P	42	16.10	-1.4				ipP	44	36.00	586kmX		HVAR	95.40	47	iPd	42	35.60	0.1							
MAO	91.43	47	Pd	42	17.10	-0.3				iPP	46	22.50			PTJ	95.52	44	iPd	42	36.00	-0.1							
OPA	91.46	292	P	42	18.00	0.1				iSKS	52	05.00			ZAG	95.53	45	iP	42	37.00	1.0							
ERC	91.51	52	P	42	18.20	0.2				iSKKS	52	27.90			NB2	95.66	29	P	42	36.40	0.1							
MME	91.53	45	Pd	42	17.50	-0.7				iS	52	47.90			RGS	95.73	27	•P	42	37.30	0.8							
TNS	91.55	39	•Pd	42	17.70	-0.2				iSP	54	00.00			LCI	96.04	50	P	42	38.50	0.1							
JMI	91.56	17	•P	42	19.21	1.7				isSKS	55	34.00			VKA	96.17	42	iPd	42	39.70	0.8							
CVT	91.59	52	P	42	19.70	1.5				i	57	50.00				3.5s	7313.00nm		7.3mb X									
MBC	91.61	350	•Pd	42	17.40	-0.2				i	03	00.00					i	43	51.40	299kmX									
	1.0s	578.00nm			6.6mb		PMR	94.09	332	•P	42	28.80	-0.3				i	44	52.80										
STU	91.64	41	iPd-	42	17.50	-0.8		0.3s	134.20nm			6.6mb					i	48	34.70										
	1.0s	880.00nm			6.7mb					i	42	57.90	110kmX				i	52	16.50										
JNW	91.70	17	•P	42	20.17	2.1				•	44	39.90					i	53	04.50										
JNE	91.71	17	•P	42	20.07	1.9	WET	94.09	41	iPd	42	29.50	0.0				i	54	30.30										
SAL	91.74	44	P	42	18.50	-0.3				iS	52	05.00					i	55	54.00										
OSS	91.74	43	•Pd	42	18.60	-0.4	SGO	94.09	50	P	42	29.20	-0.4		SOP	96.23	43	iPd	42	41.10	2.0							
MID	92.14	330	P	42	20.30	0.1	VOY	94.13	44	iPd	42	29.40	-0.5		KSP	96.57	40	iPd	42	40.50	-0.1							
PGD	92.17	46	P	42	19.70	-1.3	MGR	94.20	50	P	42	29.70	-0.5			1.0s	994.00nm		7.1mb										
FAI	92.19	53	P	42	25.00	4.0X	MOL	94.33	27	•P	42	31.21	1.0				i	44	53.80	615kmX									
MCT	92.23	52	P	42	22.80	1.3	RIY	94.34	45	•Pd	42	30.10	-0.5				i	46	44.00										
CRE	92.28	46	P	42	19.80	-1.6				iS	52	06.90					i	47	21.70										
PRY	92.33	118	iPc	42	25.60	3.4X	COL	94.41	335	iPd	42	30.36	-0.2				iS	52	19.70										
	1.0s	720.00nm			6.7mb					ipPc	44	41.46	603kmX		KRI	96.62	109	iPd	42	45.40	3.7X							
RMP	92.42	48	P	42	22.20	0.2				•PP	46	21.18					i	46	44.10										
MNS	92.53	47	P	42	22.20	-0.3				iS	52	04.59					i	52	28.90										
SOTA	92.58	43	iPd	42	22.20	-0.6				iSKS	52	05.15					i	53	17.00										
	1.3s	1938.00nm			7.0mb					•	52	27.22			ZST	96.67	42	iPd	42	40.00	-1.1							
			ipP	44	36.50	624kmX				•S	52	47.08					i	42	41.80	6kmX									
			iPP	46	15.00					•PS	54	04.33					i	44	49.50										
			i(S)	52	38.80					•	56	39.92					i	46	43.00										
CTI	92.61	44	P	42	22.60	-0.3	FBA	94.41	335	P	42	29.00	-1.6				•	54	34.10										
GIB	92.61	52	P	42	23.10	0.0		1.0s	350.00nm			6.5mb					•	59	20.40										
SUE	92.63	28	•P	42	23.24	0.8				pP	44	43.00	621kmX		HFS	96.68	30	•P	42	40.20	-0.7							
ASK	92.66	29	•P	42	23.37	0.8	CEY	94.44	44	•Pd	42	30.60	-0.6			0.9s	155.80nm		6.3mb										
ASS	92.66	47	Pd	42	21.80	-1.4	CZI	94.47	51	P	42	29.10	-2.3		Z	16s	4.57um		6.1MszX										
BER	92.69	29	iPc	42	23.31	0.5	MMN	94.48	50	P	42	31.60	0.2				LR	20	34.00										
RSM	92.70	46	Pd	42	22.20	-1.0	KHC	94.54	41	iPd	42	31.30	-0.3		NSS	96.71	26	•P	42	42.50	1.6							
FUR	92.84	42	•P	42	23.30	-0.5		1.4s	594.50nm			6.6mb			HCY	96.77	48	•P	42	42.00	0.3							
	1.0s	1900.00nm			7.1mb					•	44	43.00	607kmX		BRY	96.87	48	•P	42	42.50	0.1							
Z	17s	6.00um			6.1MszX					S	52	08.00			BDV	96.99	48	•P	42	43.10	0.4							
			•S	52	00.40		KONO	94.56	30	iPd	42	32.08	0.8		SVW	97.03	331	•P	42	41.00	-1.5							
WATA	92.85	42	iPd	42	23.70	-0.4				ipPc	44	43.95	608kmX				•	44	55.40	622kmX									
	1.6s	4255.00nm			7.2mb		LJU	94.57	44	•Pd	42	31.40	-0.3		IMA	97.07	336	•P	42	42.10	-0.7							
			ipP	44	37.40	620kmX				•S	52	08.00				1.2s	388.70nm		6.6mb									
			iPP	46	15.80		CLL	94.61	39	iPd	42	31.80	0.0				•	43	17.80	138kmX									
			iSKS	52	00.00			1.9s	2450.00nm			7.1mb					i	44	55.10										
			iSKKS	52	06.80					ipP	44	45.00	616kmX		NKY	97.19	48	•P	42	45.00	1.2							
			iS	52	35.30					iSKS	52	08.00			VLO	97.23	50	iPd	42	45.50	1.7							
			iP'P'	07	42.80					•S	52	49.00			ULC	97.25	49	•P	42	44.50	0.5							
TOA	92.89	333	•P	42	23.00	-0.8				PKKP	59	27.10			TTG	97.33	48	•P	42	44.60	0.4							
			id	42	24.40	4kmX				P'P'	07	34.00					•(S)	52	23.50									
ARV	92.95	46	P	42	23.30	-1.1	CSI	94.69	51	P	42	33.30	0.9		KEK	97.35	51	iPd	42	45.00	0.6							
AZI	92.99	48	P	42	24.70	0.1	KMR	94.69	42	iP-	42	33.20	1.0		CIR	97.41	113	iPd	42	46.10	1.0							
AQU	93.04	48	P	42	25.60	0.7				i	44	44.80	606kmX				i	46	48.00										
MNO	93.12	52	P	42	26.20	0.6				i	49	26.90			SRO	97.42	43	iP	42	44.30	-0.2							
VVI	93.12	44	P	42	25.50	0.3				i	52	15.00			SDA	97.45	49	•P	42	45.40	0.6							
MEU	93.14	53	Pd	42	25.70	0.1				i	54	14.70			TTA	97.52	333	•Pd	42	43.90	-0.9							
BLS2	93.15	30	iPc	42	26.96	1.9	TDS	94.70	51	P	42	32.10	-0.4		SRN	97.53	51	iP	42	46.10	0.9							
GRF	93.15	40	•Pd	42	25.30	0.1	KDC	94.80	328	•P	42	32.00	-0.4		LACI	97.55	49	iPc	42	45.60	0.3							
	1.7s	2644.00nm			7.0mb					•	44	46.00	620kmX		PLE	97.55	47	•P	42	46.00	0.6							
Z	22s	7.00um			6.1Msz		ORI	94.86	50	P	42	32.20	-1.0		TPE	97.59	50	•P	42	42.00	-3.5X							
			•pPc	44	38.40	616kmX	ROI	94.86	51	P	42	33.30	0.1		BERA	97.60	50	•P	42	45.30	-0.2							
			•S	52	02.70		MAW	94.88	164	iPd-	42	32.00	-0.8		TIR	97.63	49	•P	42	47.00	1.4							
			•	07	27.70		BUL	94.92	111	iP	42	33.70	-0.3		IGT	97.73	51	•Pc	42	46.50	0.3							
			iP'P'	07	42.70					i	44	48.00	622kmX		VLS	97.75	53	•P	42	45.50	-0.8							
SDI	93.21	48	P	42	25.40	-0.3				iS	52	55.00			BUD	97.85	43	•(P)	42	43.00	-3.5X							
SLR	93.31	117	iPd	42	24.58	-2.1	BRN	94.95	38	iPd	42	35.50	2.3		IVA	97.85	48	•P	42	47.00	0.2							
			ipPc	44	36.68	610kmX				•pP	44	48.00	611kmX		PVY	97.87	48	•P	42	48.40	1.5							
HYA	93.32	28	iPd	42	27.01	1.3				•S	52	26.00			LSK	98.02	51	•P	42	46.30	-1.3							
FVI	93.49	43	P	42	26.50	-0.3	VBY	94.97	45	•Pd	42	33.90	0.4		PHP	98.10	49	•P	42	47.30	-0.5							
MOX	93.61	39	•P-	42	27.00	-0.3	BRG	95.11	39	iPd	42	34.00	0.0		KKS	98.13	49	•P	42	48.00	0.1							

KBN	98.24	50	iPd	42	48.80	0.4					e	52	34.00					eS	56	47.00		
OHR	98.29	50	iPd	42	49.10	0.3					e	53	24.00					eSP	57	52.00		
	1.7s	1118	.00nm		6.9mb						e	55	30.00					eSPP	59	00.00		
			i	43	16.90	104kmX					e	56	50.00					eSSS	08	37.00		
			i	43	20.50						e	57	52.00		SHBJ	111.25	60	PKPc	48	01.19	19.3X
PSZ	98.49	43	iP	42	49.30	-0.2	ALN	102.22	50	ePdiff	43	06.40	0.2		ARO	115.04	82	iPKPd	47	49.50	-0.1	
BEO	98.50	46	P	42	50.20	0.7	PRK	102.28	52	ePdiff	43	06.40	-0.1		BKR	115.32	49	iPdiff	44	06.00	1.4	
			i(S)	52	27.50		EZN	102.36	51	ePdiff	43	06.00	-0.8		TAB	117.98	53	iPKP-	47	54.00	-0.7	
UPP	98.59	31	iP	42	49.40	-0.1	BUC1	102.43	47	ePdiff	42	50.00	-17.0X		TIK	118.20	353	iPdiff	44	16.00	-0.4	
			i	42	52.10		MLR	102.43	46	iPdiff	43	07.50	0.3		KER	119.09	57	iPKPd	47	57.30	0.4	
			ipP	45	08.20	650kmX	KAP	102.72	56	ePdiff	43	08.30	-0.3		RIV	120.22	220	ePKP	47	59.00	0.2	
			iSKS	52	26.00		JMB	102.72	49	ePdiff	43	08.00	-0.4					e	54	00.00		
			iS	53	25.00		PTT	102.80	44	ePdiff	43	09.00	0.4					e	55	27.00		
			eP'P'	07	27.60		ISR	102.83	46	ePdiff	43	09.00	0.1					e	58	24.00		
ITM	98.67	54	iPd	42	50.10	-0.4	SUF	102.85	28	iPdiff	43	09.20	0.8		CNB	120.34	218	iPKPc	47	57.90	-1.2	
FNA	98.69	50	eP	42	50.70	0.2		0.7s		18.70nm			5.8mb			0.3s		138.00nm				
SDN	98.77	325	eP	42	50.20	-0.2	SOD	102.90	23	iPdiff	43	09.30	0.7					e	58	09.00		
KRA	98.77	41	ePd	42	50.30	-0.3	KEV	102.92	21	ePdiff	43	09.66	1.1					e	01	50.00		
Z	22s		5.10um		6.0Msz						epPc	45	21.81		CAN	120.55	217	iPKPd	47	57.90	-1.6	
E	22s		6.60um								e	47	30.00					e	49	19.30		
			i	42	52.00	5kmX					e	52	48.00					ePP	50	19.10		
			i	42	59.00						e	53	28.00					i	50	36.30		
			i	43	08.00						e	55	36.00					iPKKP	58	08.10		
			e	45	04.00						e	57	00.00					iSKKP	01	51.10		
			eS	54	46.00						e	58	58.00		BWA	121.51	218	ePKP	47	59.80	-1.6	
EVR	98.79	52	iPd	42	52.00	0.9	VRI	102.99	45	ePdiff	43	09.00	-0.5					ePKKP	58	05.00		
SKO	98.87	49	eP	42	50.30	-1.0	IZM	102.99	53	ePdiff	43	09.00	-0.8					eSKKP	01	48.00		
	1.7s	689	.00nm		6.8mb		CRZF	103.28	143	iPdiff	43	14.00	3.2X		TEH	122.36	55	ePKP	48	03.00	-0.1	
			i	42	50.80	2kmX					e	47	35.00		PET	122.45	327	ePdiff	44	36.00	0.3	
			i	42	52.00						ePP	48	05.00		BFD	122.80	211	ePKPd	48	02.00	-1.7	
			i	45	05.00						ePPP	50	45.00			0.4s		131.00nm				
			iS	52	28.00						eSKKS	55	15.00					i	50	40.50		
			i	53	28.50						eSPP	59	45.00					e	57	59.00		
KZN	98.93	51	iPd	42	51.80	0.2					eSS	04	45.00					e	01	39.00		
LWI	98.97	94	iPc	42	53.50	0.9					eSSS	09	05.00		BRS	123.11	227	iPKP	47	52.00	-12.7X	
BRW	99.02	341	eP	42	50.70	-0.5	CLI	103.40	45	ePdiff	43	11.00	-0.4		CMS	125.11	219	e(PKP)	48	00.00	-8.4X	
AGG	99.21	52	eP	42	52.90	0.1	ARG	103.54	55	ePdiff	43	12.00	-0.2			0.6s		223.00nm				
KBS	99.28	11	eP	42	53.50	1.1	IAS	103.61	44	ePdiff	43	30.00	17.8X					i	48	06.90		
DRV	99.36	192	PKP	42	52.20	-0.8	TLB	103.87	47	ePdiff	43	14.00	0.6					i	50	30.80		
BZS	99.41	45	eP	42	53.00	-0.5	CFR	103.97	46	ePdiff	43	14.00	0.2					i	53	38.60		
VLI	99.42	54	iPd	42	54.70	0.9	DST	104.12	52	iPdiff	43	15.00	0.2					i	57	51.20		
LIT	99.45	51	ePc	42	52.40	-1.5	KIS	104.50	44	iPdiff	43	15.00	-1.1					e	00	33.00		
GRG	99.48	50	eP	42	53.70	-0.3	ISK	104.51	50	ePdiff	43	15.80	-0.5		SVO	125.85	250	ePKP	48	07.00	-3.3X	
VAY	99.64	50	iP	42	55.30	0.6	YLV	104.73	51	ePdiff	43	17.00	-0.5		ADE	126.45	210	ePKP-	48	08.50	-2.4X	
	1.7s	553	.00nm		6.7mb		KHL	104.76	53	ePdiff	43	18.00	0.3					e	48	22.00		
KNT	99.87	50	ePc	42	56.40	0.7	ALT	105.25	52	ePdiff	43	20.00	0.2		RMQ	126.51	225	e(PKP)	47	50.00	-21.2X	
NEO	99.93	52	eP	42	55.50	-0.5	GPA	105.44	51	ePdiff	43	18.00	-2.6X					e	50	32.50		
KKB	100.08	49	iPdiff	42	58.00	1.3	APA	105.46	23	iPdiff	43	20.90	1.0					e	57	45.00		
UZH	100.16	42	iPdiff	42	50.00	1.2	HLW	105.83	62	ePdiff	43	24.00	1.5					e	01	29.00		
ATH	100.17	53	ePdiff	42	58.20	1.0					e	45	38.00		STK	127.32	215	iPKP	48	12.80	0.2	
			e	55	14.00						i	47	56.00			0.9s		857.00nm				
SOH	100.18	50	ePdiff	42	57.10	-0.1					e	53	05.00					iPP	50	32.70		
PLG	100.21	51	iPdiff	42	57.30	0.0					e	53	59.00			f		iPKS	51	31.90		
VTS	100.25	48	iPdiff	42	59.00	1.4	PPCY	106.91	57	ePKP	47	33.00	-0.4					iPKKP	57	42.10		
			i	59	12.00		ANTO	107.34	52	iPdiff	43	29.77	0.7		STK	127.32	215	ePKP	47	52.90	-19.7X	
VAM	100.29	56	ePdiff	42	57.10	-0.7	CSS	107.72	57	ePdiff	43	34.50	3.7X			0.5s		15.00nm				
SRS	100.39	50	ePdiff	42	58.10	0.0	CSS	107.72	57	ePKP	47	35.50	0.5		MAIO	128.62	52	ePdiff	45	21.00	17.3X	
SRE	100.43	46	ePdiff	43	00.00	1.8	SIM	108.20	46	ePdiff	43	34.00	1.4		MAIO	128.62	52	ePKP	48	14.00	-1.1	
WEL	100.49	224	Pdiff	43	00.00	1.5	FAM	108.27	57	ePKP	47	36.20	0.2					i	50	27.00		
			pP	45	15.50		ADK	108.37	321	e(Pdif	43	32.80	-0.4		OLP	129.50	222	ePKP	48	01.00	-15.9X	
			PP	47	12.00		RMN	108.70	61	iPKPc	47	36.70	-0.3					i	48	17.20		
			pPP	49	18.00		OBN	108.86	35	iPdiff	43	36.00	0.7					i	50	39.30		
			sPP	50	11.00			1.9s		360.00nm			7.0mb					i	51	48.00		
			SKS	52	39.50			Z 24s		10.40um			6.3MszX					e	58	43.00		
			S	53	46.00						iSKS	53	00.00		CTAO	132.24	230	iPKPd	48	22.05	-0.2	
			SP	55	12.00		PRNI	109.01	62	ePdiff	43	33.00	-3.7X					e	50	43.75		
			PS	56	36.00		ZNT	109.09	60	iPKPc	47	37.30	-0.4					e	50	49.38		
			PKKP	59	09.00		LISJ	109.45	61	PKPc	47	59.26	21.0X		YSS	134.28	328	ePKP	48	16.00	-9.3X	
			SSS	04	18.00		MKRJ	109.60	60	PKPc	47	59.09	20.3X		FORR	134.64	203	ePKP	48	08.00	-18.5X	
MMB	100.54	50	ePdiff	42	59.00	0.2	SALJ	109.64	60	PKPc	47	59.23	20.4X					e	50	58.00		
BMR	100.88	43	ePdiff	43	02.00	1.9	MASJ	109.66	60	PKPc	47	59.37	20.5X		RAB	134.68	253	iPKPd	48	27.00	-0.1	
PGB	100.95	49	iPdiff	43	01.00	0.4	HRI	109.70	59	ePdiff	43	40.00	0.3		DSH	134.69	46	iPKP	48	14.00	-12.5X	
DRA	101.18	46	ePdiff	43	02.00	0.5	HRI	109.70	59	iPKPc	47	38.50	-0.4		FRU	136.27	37	ePKP	48	30.60	1.3	
TNR	101.27	45	ePdiff	43	02.00	0.1	SHMJ	109.72	59	PKPc	47	59.28	20.4X		OIS	136.71	224	iPKPd	48	16.50	-14.3X	
COZ	101.29	46	ePdiff	43	03.00	0.8	BURJ	109.74	60	PKPd	48	00.30	21.3X					e	50	45.00		
NPS	101.42	56	iPdiff	43	03.70	0.9	KVT	109.79	50	ePdiff	43	44.20	4.3X					e	00	00.00		
KTK1	101.60	22	ePdiff	43	03.83	1.0	JARJ	109.87	60	PKPd	47	59.21	20.0X		MUN	136.78	189	ePKP	48	15.00	-15.6X	
MTUR	101.79	46	ePdiff	43	05.00	0.7	QTRJ	109.91	61	PKPc	47	59.84	20.5X			1.1s		53.00nm				
KDZ	101.80	50	iPdiff	43	04.00	-0.4	MDSJ	110.12	60	PKPc	48	00.58	20.8X					e	48	28.00		
PVL	101.85	48	iPdiff	43	04.00	-0.5	HLBJ	110.17	60	PKPc	48	00.52	20.7X					e	50	50.00		
RDO	101.86	50	ePdiff	43	04.50	-0.1	CSTJ	110.47	61	PKPc	48	01.19	20.8X					e	51	03.00		
DIM	101.92	49	ePdiff	43	06.00	1.2	AAE	110.73	84	iPdiff	43	48.00	3.0X		SAP	137.58	325	iPKP	48	31.80	0.2	
NUR	102.14	30	ePdiff	43	06.00	0.7	GAZ	110.85	54	iPKP	47	41.00	0.2		TLG	137.60	35	ePKP	48	18.00	-13.8X	
	0.7s		50.70nm		6.2mb		PAF	110.85	154	iPdiff	43	50.00	5.7X		ASPA	137.96	215	ePKP	48	15.50	-17.5X	
			e	45	20.00						ePP	48	16.00			0.2s		5.30nm				
			e	47	24.00						ePPP	50	50.00					i	48	31.60		
			e	50	24.00						eSKKS	55	30.00					iPP	50	56.10		

17d 14h

			iPKS	52	06.00		GUN	152.36	49	PKP	48	55.90	-1.0				e	50	31.80	
			iSKS	54	28.20		TIY	153.22	354	iPKPd	48	56.50	-0.9				e	54	19.00	
			iSKKS	57	13.50					e	49	20.00		IPM	169.69	127	ePKPd	49	13.90	-0.5
			iPP	59	43.30					pPKP	51	18.00			1.0s	670.40nm				
			i	06	12.70					PP	52	55.00					e	50	33.80	
			i	07	15.00					SS	11	35.00					e	52	49.80	
IRK	138.62	5	ePKP	48	24.50	-8.8X	TIA	153.87	345	PKPd	48	57.30	-0.9	NST	169.99	61	iPKPd	49	13.80	-0.6
KSH	139.07	40	PKP	48	27.00	-7.7X				e	49	22.30					e	59	35.80	
			SKS	54	44.00					pPKP	51	20.00		LOE	170.32	48	iPKPd	49	13.80	-0.7
MRWA	139.52	189	iPKPc	48	25.60	-10.0X	LZH	154.52	10	iPKPd	49	00.32	1.0				e	50	35.50	
WB5	140.60	219	ePKP	48	29.00	-8.8X	LZH	154.52	10	ePKPc	49	08.60	9.2X				e	54	29.20	
			e	51	18.00					ePKPab	49	26.48		NNT	170.57	79	iPKPc	49	14.00	-0.7
			eSKKP	59	27.80					epP'df	51	21.69		KKM	171.53	235	ePKPd	49	14.20	-1.1
			eSKKS	03	16.00					epPKPc	51	28.64			1.5s	3969.80nm				
HIA	140.83	349	ePKPd	48	29.71	-7.7X				epP'ab	51	39.57		PCT	171.54	63	iPKPc	49	15.50	0.4
			e	50	55.05					iHPP	53	01.74			1.0s	7.80nm				
			e	51	14.90					ePP	53	02.23					e	50	42.70	
			e	51	15.91					eSKS	55	10.00		QIZ	171.96	356	iPKPc	49	15.50	0.3
			iPP	51	41.39					eSKKS	58	53.00					e	50	43.00	
			eHPP	51	42.22		LSA	154.88	39	iPKPd	49	00.20	-0.2				pPKP	51	37.50	
MEKA	141.56	193	ePKP	48	32.00	-7.3X				SKKS	58	54.00					PP	54	33.00	
MNDI	141.74	245	ePKP	48	36.50	-3.8X	XAN	157.04	1	PKP	49	02.20	-0.3				SKKS	00	19.50	
MDJ	142.17	336	iPKPd	48	34.60	-5.2X				e	49	38.00			S.D. = 1.0		on 608 of 685 obs.			
			PP	51	55.00					pPKP	51	18.00		----------						
			SKKS	57	40.00					PP	53	17.00		? OCT 17, 1990 15h 12m 18.83± 0.98s						
			SS	09	34.60					SS	12	20.00		9.227 S ±24.0km 71.056 W ±20.9km						
WMQ	142.34	26	ePKPd	48	36.12	-4.1X	SSE	157.11	333	iPKPd	49	02.00	-0.6	DEPTH = 600.0km (geophysicist)						
			S	51	48.00					e	49	36.00		5.3mb (2 obs.)						
MAT	143.50	319	iPKPd	48	40.50	-1.9				pPKP	51	23.00		PERU-BRAZIL BORDER REGION (112)						
CN2	144.40	340	iPKPd	48	41.00	-2.6X				PP	53	16.00								
			pPKP	50	58.00					SKS	55	12.00		UPA	19.96	335	(P)	16	39.50	25.8X
			PP	52	03.00					SKKS	59	02.00		PPD	22.84	126	eP	16	39.90	0.0
			SKKS	57	52.00					SS	12	16.00		TOA	91.22	333	eP	24	22.90	1.2
POO	145.03	73	iPKPd	48	42.40	-3.1X	NJ2	157.21	338	iPKPd	49	02.00	-0.7	SOTA	91.49	43	iPc	24	23.70	0.3
	0.9s	680.67nm								i	49	36.00			1.1s	29.10nm			5.2mb	
GUA	145.05	278	ePKP	48	44.20	-1.3				ipPKP	51	23.00		WATA	91.76	42	eP	24	24.00	-0.6
	1.0s	4584.00nm								sPKP	52	18.00		FBA	92.72	335	eP	24	28.50	0.0
			pP	51	04.50					iPP	53	15.00		KHC	93.41	41	P	24	32.10	0.1
GUMO	145.09	278	ePKPc	48	41.49	-4.1X				SKKS	59	04.00		BRG	93.94	39	iP	24	34.70	0.3
			epP'df	51	02.53		CD2	159.52	14	PKP	49	04.80	-0.6	PRU	94.17	40	P	24	35.60	0.2
PJG	145.09	278	ePKP	48	44.10	-1.5				e	49	48.40		IMA	95.38	336	eP	24	40.20	-0.5
NDI	145.28	55	iPKPd	48	45.50	-0.1				pPKP	51	27.00			1.2s	26.50nm			5.3mb	
			ePP	52	04.00					PP	53	30.40		SVW	95.38	331	eP	24	40.00	-0.7
NANU	146.11	190	iPKPd	48	45.50	-1.5				SKKS	59	18.00		KSP	95.41	40	iPc	24	41.00	0.0
MBL	146.41	198	iPKPd	48	45.90	-1.7	WHN	159.95	347	PKPd	49	05.50	-0.2				e	28	08.50	
SNY	146.78	340	PKPd	48	46.30	-1.2				e	49	50.00					e	28	39.50	
			pPKP	51	06.00					ipPKP	51	27.00		ZST	95.58	42	e(P)	24	41.00	-0.8
			PP	52	18.00					PP	53	32.20		KRA	97.63	41	ePc	24	51.50	0.4
			SKKS	58	09.00					iSKKS	59	20.00		S.D. = 0.6			on 13 of 14 obs.			
KNA	147.15	216	iPKPd	48	48.00	-0.8	MKS	160.96	213	iPKPd	49	09.00	1.8	----------						
	0.8s	486.00nm					ANP	161.68	322	iPKPd	49	08.00	0.3	& OCT 17, 1990 16h 50m 51.70s						
MTN	147.86	223	iPKPd	48	48.70	-1.3	QZH	163.50	329	iPKPd	49	11.00	1.6	31.740 N 115.920 W						
	0.5s	209.00nm								i	50	04.20		DEPTH = 6.0km (geophysicist)						
SHK	148.26	321	ePKPd	48	49.50	-0.7				pPKP	51	31.00		BAJA CALIFORNIA (48)						
GBA	148.84	82	PKPd	48	49.80	-1.7				sPKP	52	17.00		<PAS-P>. ML 3.1 (PAS).						
HYB	149.61	74	iPKPd	48	51.40	-1.3				PP	53	51.50								
	1.0s	1180.00nm								SKKS	59	38.00		IKP	0.92	350	eP	51	08.80	-0.9
			iPP	51	13.20		GYA	164.40	9	iPKPd	49	10.00	-0.4				eS	51	20.50	
			e	52	10.00					e	50	10.00		BAR	1.13	326	ePc	51	12.00	-1.3
			i	52	36.00					pPKP	51	32.00					iS	51	26.20	
DL2	150.06	340	PKP	48	52.00	-0.7				sPKP	52	22.00		GLA	1.60	35	e(P)	51	22.00	1.3
			pPKP	51	12.00					PP	53	56.00		PLM	1.79	334	eP	51	22.70	-0.9
			PP	52	39.00					SKKS	59	42.00		PEC	2.39	334	e(P)	51	33.30	1.3
			SKKS	58	24.00		KMI	164.64	23	iPKPd	49	10.51	-0.3	5 obs. associated						
HHC	150.17	356	iPKPd	48	53.60	0.6				iPKPab	50	09.11		----------						
			pPKP	51	16.00					ePKPab	50	09.90		OCT 17, 1990 17h 06m 27.84± 0.40s						
			PP	52	36.00					eHP'ab	50	10.39		36.900 N ±11.2km 49.344 E ± 5.6km						
			SKKS	58	27.00					epP'df	51	32.54		DEPTH = 21.1km (4 depth phases)						
BJI	150.40	349	iPKPd	48	53.69	0.5				epP'ab	52	18.33		4.5mb (8 obs.)						
			pPKP	51	09.00					epP'ab	52	22.53		WESTERN IRAN (347)						
			epP'df	51	14.07					e	53	19.65		Felt at Rudbar.						
			eSKP	52	38.05					ePP	53	53.93								
			eSKS	54	57.00					eHPP	53	57.31		TEH	2.02	125	iPd	07	03.00	1.7
GTA	150.46	15	iPKPd	48	53.00	-0.5				eSKKS	59	43.00		TAB	2.67	297	iPd	07	13.00	2.4
			e	49	08.00		BKB2	165.65	213	ePKPc	49	14.10	2.5	MAIO	8.19	91	iPc	08	26.40	-2.0
			pPKP	51	13.80		GZH	167.32	342	PKP	49	13.80	1.2		0.8s	34.77nm			5.6mb	X
			sPKP	52	08.00					e	50	21.50					eS	09	58.00	
			PP	52	36.00					pPKP	51	34.00		HRT	15.82	290	eP	10	16.00	5.1X
			SKKS	58	29.00					PP	54	08.00		IZI	15.90	289	iP	10	16.90	4.9X
			SS	11	05.50					SKKS	59	59.00		YLV	16.01	289	iP	10	17.40	4.1X
BTO	150.48	359	iPKPc	48	53.00	-0.5	HKC	167.78	338	iPKPc	49	14.30	1.4	MLR	19.54	303	eP	11	01.50	4.4X
			pPKP	51	14.00		MCO	168.16	340	ePKP	49	14.00	0.8	CMP	20.08	302	ePc	11	09.00	6.3X
			SKKS	58	26.50		BDT	168.29	57	iPKPd	49	13.50	0.2	MMB	20.35	291	eP	11	06.00	0.4
GKN	151.38	50	PKP	48	54.30	-1.0	KLM	169.16	136	ePKPc	49	12.50	-1.5	VTS	20.84	294	eP	11	14.00	3.2X
DMN	151.94	50	PKP	48	55.50	-0.7		1.0s	1175.20nm					KKB	20.86	292	eP	11	11.00	0.2
KKN	151.98	50	PKP	48	55.20	-1.0	KGM	169.35	146	ePKP	49	13.50	-0.6				eS	11	57.00	
PKI	152.19	50	PKP	48	55.20	-1.4		1.5s	3055.40nm					KSH	21.07	75	eP	11	12.90	-0.2

VAY	21.20	290	eP	11	12.40	-1.8
SKO	22.09	292	eP	11	26.70	3.5X
OHR	22.53	290	eP	11	22.50	-5.1X
SPC	24.39	309	eP	11	54.90	9.1X
NDI	24.76	101	eP	11	50.50	1.2
KRA	24.88	311	eP	11	59.80	9.6X
			e	12	04.00	15km
KSP	27.34	311	eP	12	22.00	9.0X
NUR	28.37	334	eP	12	25.00	2.8
CLL	29.46	311	eP	12	32.00	-0.2
SUF	29.53	338	eP	12	32.00	-0.7
WMQ	29.83	65	P	12	36.00	0.3
			pP	12	44.50	29km
SOTA	29.86	302	iP	12	36.10	0.1
	0.5s		6.90nm			4.7mb
			i	12	41.40	18km
GKN	30.93	96	P	12	45.40	-0.3
DMN	31.48	97	P	12	50.80	0.2
KKN	31.54	96	P	12	50.80	-0.3
PKI	31.74	97	P	12	52.60	-0.3
GUN	31.96	96	P	12	53.60	-1.4
SBF	32.40	296	eP	12	59.00	0.7
	0.8s		18.80nm			5.1mb
HFS	32.48	327	eP	12	57.40	-1.2
	0.9s		15.80nm			4.9mb
LPG	32.86	299	eP	13	02.00	-0.5
	0.7s		3.30nm			4.4mb
LPL	32.87	299	eP	13	02.00	-0.5
	0.7s		4.40nm			4.5mb
NB2	33.99	327	P	13	10.40	-1.4
	0.7s		2.90nm			4.3mb
GBA	34.18	125	P	13	13.00	-0.8
LSA	35.45	89	P	13	26.40	1.2
EKA	39.70	315	Pc	13	59.80	-0.2
	0.7s		3.60nm			4.2mb
BCAO	42.91	229	iPd	14	27.00	0.2
	0.5s		4.00nm			4.4mb
CD2	45.05	81	eP	14	46.80	2.8
CHG	46.86	99	eP	14	58.10	-0.3
CN2	56.51	57	eP	16	09.60	-1.1
KIC	57.78	252	Pd	16	19.40	-0.6
LIC	58.09	252	P	16	21.40	-0.7
SSE	58.56	73	eP	16	43.80	18.5X
			pP	16	50.50	22km
FBA	77.64	7	(P)	18	24.00	0.2
	S.D. = 1.2		on	33	of 45	obs.

% OCT 17, 1990 17h 12m 39.38± 2.56s
39.920 N ±22.6km 28.835 E ± 5.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

KCT	0.49	312	iPg	12	49.40	0.0
			iSg	12	54.90	
IZI	0.64	49	ePg	12	52.40	0.1
YLV	0.77	32	iPg	12	54.40	0.0
			iSg	13	05.90	
BNT	0.83	302	iPg	12	54.70	-0.7
EDC	0.86	300	ePg	12	56.80	0.9
			eSg	13	08.80	
MRT	1.10	35	ePn	13	00.00	-0.1
CTT	1.26	346	iPn	13	02.90	0.0
KGT	1.29	295	ePn	13	03.00	-0.2
	S.D. = 0.5		on	8	of 8	obs.

? OCT 17, 1990 18h 17m 16.69± 1.55s
45.420 N ±13.1km 14.196 E ±12.0km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)

RIY	0.15	119	iPg	17	20.20	-0.1
			iSg	17	23.30	
CEY	0.36	27	eP	17	24.60	0.5
			eSg	17	25.60	
TRI	0.42	314	ePg	17	26.00	0.8
			iSg	17	33.80	
VOY	0.65	341	e(Pg)	17	28.50	-1.2
			eSg	17	38.40	
	S.D. = 1.5		on	4	of 4	obs.

? OCT 17, 1990 20h 14m 35.64± 2.20s
16.669 S ±88.2km 69.688 W ±11.9km
DEPTH = 203.1 ± 23.3 km
PERU-BOLIVIA BORDER REGION (118)

LPB	1.53	85	P	15	10.40	-0.3
ZOBO	1.55	75	Pd	15	11.20	0.1
CNCB	1.64	95	iPd	15	12.00	0.1
ARE	1.74	277	iPc	15	12.50	0.0
			iS	15	39.50	
SIV	8.30	87	P	16	33.80	0.0
	S.D. = 0.3		on	5	of 5	obs.

% OCT 17, 1990 20h 32m 23.37± 1.46s
17.635 N ±13.6km 98.749 W ±13.7km
DEPTH = 33.0km (normal)
GUERRERO, MEXICO (59)

III	1.01	317	iPd	32	40.36	-1.0
			iS	32	52.38	
ACX	1.30	234	iPc	32	45.85	0.4
			iS	32	57.53	
PPM	1.43	5	iPd	32	48.44	0.8
			iS	33	06.25	
IIT	1.44	17	iP	32	48.97	1.3
			iS	33	07.21	
OXX	2.01	106	(P)	33	05.02	9.2X
IIJ	2.29	336	iP	32	59.75	-0.3
			(S)	33	16.21	
LVVM	3.02	46	(P)	33	08.70	-1.3
			(S)	33	34.08	
MRX	3.10	312	(P)	33	21.71	10.6X
			(S)	33	57.22	
EVV	3.34	75	(P)	33	34.00	19.5X
	S.D. = 1.3		on	6	of 9	obs.

% OCT 17, 1990 21h 12m 30.86± 0.54s
43.120 N ± 6.5km 0.687 W ± 3.7km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

ATE	0.04	199	Pg	12	33.17	0.2
			Sg	12	34.87	
ESCF	0.09	117	Pg	12	33.61	0.1
MADF	0.10	285	Pg	12	33.87	0.3
			Sg	12	36.37	
ISSF	0.12	221	Pg	12	34.17	0.2
			Sg	12	36.71	
OGE	0.16	73	Pg	12	34.73	0.1
			Sg	12	37.96	
LHE	0.21	167	Pg	12	35.32	-0.2
ELYF	0.23	283	Pg	12	35.54	-0.3
			Sg	12	39.28	
BOH	0.24	266	Pg	12	35.86	-0.2
			Sg	12	40.04	
JAU	0.25	109	Pg	12	35.99	-0.2
	S.D. = 0.2		on	9	of 9	obs.

OCT 17, 1990 21h 58m 45.87± 0.52s
34.646 N ±11.6km 58.226 E ± 7.1km
DEPTH = 11.6km (2 depth phases)
4.6mb (7 obs.)
IRAN (348)
Felt at Bajestan.

MAIO	1.95	32	iPnd	51	18.80	-0.4
	0.4s		73.21nm			
			eSn	51	45.00	
TEH	5.71	283	eP	52	10.00	-2.7
KER	9.18	271	e(P)	53	14.00	12.7X
NDI	17.22	105	eP	54	49.00	1.3
GKN	23.47	99	P	55	55.20	-1.2
	0.6s		14.00nm			4.7mb
DMN	24.01	100	P	56	02.60	0.9
KKN	24.08	99	P	56	01.60	-0.7
	0.6s		15.00nm			4.8mb
PKI	24.27	99	P	56	03.80	-0.5
GUN	24.52	98	P	56	06.20	-0.6
	0.8s		40.00nm			5.1mb
MLR	26.81	304	eP	56	30.00	2.2X
GBA	27.22	136	Pc	56	31.90	0.3
	0.7s		1.70nm			3.9mb
KRA	31.81	311	eP	57	12.80	0.5
NUR	33.73	330	eP	57	30.00	1.1
KHC	35.71	308	eP	57	47.00	0.9
BRG	35.73	311	eP	57	47.40	1.2
	1.4s		12.00nm			4.6mb
CLL	36.39	311	eP	57	56.00	4.3X
HFS	38.36	326	eP	58	07.00	-1.2
	0.6s		1.00nm			3.7mb
CHG	39.35	103	eP	58	16.30	-0.6
CHTO	39.35	103	P	58	16.50	-0.4
			pP	58	20.00	12km
BCAO	47.47	240	iPc	59	23.80	1.1
	0.5s		5.00nm			4.9mb
FBA	78.71	11	P	02	50.00	0.8
			pP	02	53.60	12km
	S.D. = 1.2		on	18	of 21	obs.

---

* OCT 17, 1990 22h 05m 35.39± 0.75s
19.809 S ± 7.8km 69.422 W ±11.3km
DEPTH = 121.7 ± 14.2 km
NORTHERN CHILE (123)

CNCB	3.28	25	P	06	27.00	0.3
LPB	3.49	21	P	06	30.00	0.6
ZOBO	3.73	20	Pc	06	32.20	-0.6
ARE	3.87	329	iPd	06	34.50	0.1
			iS	07	15.50	
CCH	3.94	53	Pc	06	34.80	-0.5
ANT	3.99	193	e(P)	06	35.50	-0.1
SIV	8.81	66	iPc	07	36.00	-5.3X
PPD	17.06	101	eP	09	28.50	0.5
KIC	68.71	75	(P)	16	28.00	-0.2
	S.D. = 0.6		on	8	of 9	obs.

? OCT 17, 1990 22h 06m 47.90±10.12s
36.862 N ±62.3km 2.102 W ±53.6km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
mbLg 2.3 (MDD).

ENIJ	0.14	320	iP	06	50.40	-0.9
			eS	06	52.20	
ALM	0.29	268	eP	06	53.10	-0.8
			eS	06	58.10	
AFC	1.22	289	eP	07	09.90	-0.8
			eS	07	25.40	
ECOG	1.24	290	eP	07	11.20	0.1
			eS	07	26.40	
EVIA	1.80	350	eP	07	18.20	-1.1
			eS	07	41.00	
EBAN	1.87	315	eP	07	22.40	2.2
			eS	07	44.90	
	S.D. = 1.6		on	6	of 6	obs.

OCT 17, 1990 22h 48m 01.89± 0.96s
41.604 N ±11.0km 23.948 E ± 5.7km
DEPTH = 10.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)

MM8	0.17	265	iPgd	48	05.00	-0.7
			Sg	48	08.00	
KKB	0.70	292	iPgd	48	15.00	-0.7
f			iSg	48	24.00	
PLD	0.75	48	ePg	48	17.00	0.4
			eSg	48	30.00	
PGB	0.96	10	iPg	48	19.00	-1.2
			iSg	48	33.00	
VAY	1.07	255	ePn	48	23.20	1.1
KDZ	1.10	87	iPg	48	21.00	-1.6
			iSg	48	37.00	
VTS	1.13	331	ePg	48	24.00	0.8
			eSg	48	41.00	
DIM	1.27	69	eP	48	27.00	1.6
			i	48	45.00	
PVL	1.91	32	eP	48	35.00	0.2
	S.D. = 1.3		on	9	of 9	obs.

OCT 17, 1990 23h 24m 38.50± 0.64s
16.633 S ± 5.1km 71.351 W ± 5.3km
DEPTH = 40.1 ± 6.0 km
5.0mb (21 obs.)
SOUTHERN PERU (117)
Felt (IV) in the Arequipa area.

ARE	0.22	322	iPc	24	47.20	0.9
ZOBO	3.12	84	iPc	25	36.00	9.1X
LPB	3.12	89	P	25	36.00	9.1X
	1.0s		1880.00nm			
CNCB	3.23	94	iPc	25	37.80	9.2X
CCH	5.04	99	P	26	01.00	7.1X
			i	26	17.60	
ANT	7.09	173	iPc	26	19.40	-3.0
SIV	9.89	86	P	27	03.20	1.9
MDZ	16.34	172	eP	28	27.30	0.6
PEL	16.45	178	eP	28	27.50	-0.6
FCH	16.65	177	eP	28	31.50	0.6
LNV	17.25	180	eP	28	33.00	-5.0X

17d 23h

PPD	19.65	109	eP	29	07.00	0.0
BAO	22.46	91	eP	29	35.50	-0.3
JFO	26.93	105	eP	30	18.80	0.6
SOB1	30.56	80	eP	30	51.20	0.4
SGS	50.31	350	P	33	33.00	-0.3
JSC	51.50	350	P	33	41.80	-0.5
TKL	53.32	347	P	33	54.20	-1.7
GBTN	53.42	347	P	33	55.00	-1.6
RSCP	53.67	346	P	33	56.80	-1.7
BLA	54.23	351	P	34	02.60	0.0
NAV	54.39	351	P	34	03.80	0.0
OLY	55.25	340	P	34	08.30	-1.7
TUL	57.15	336	iP	34	22.20	-1.5
	0.7s	27.20nm			5.4mb	
FVM	57.21	342	P	34	22.40	-1.6
MEO	57.31	333	iPc	34	24.50	-0.3
	0.9s	33.70nm			5.4mb	
CLE	58.59	351	iP	34	32.90	-0.7
ANMO	61.18	327	P	34	51.40	-0.4
	0.9s	7.35nm			4.8mb	
GLD	64.37	332	P	35	13.20	0.3
	1.2s	17.68nm			5.0mb	
GOL	64.40	331	P	35	12.50	-0.7
BAR	65.44	319	eP	35	20.00	0.3
TPC	66.00	320	eP	35	24.00	0.7
PLM	66.01	319	eP	35	24.00	0.5
GSC	67.27	321	eP	35	32.00	0.6
SBB	67.49	320	eP	35	33.00	0.2
DAU	67.80	328	P	35	35.00	0.1
CLC	68.09	321	eP	35	37.00	0.5
DUG	68.44	327	P	35	39.10	0.4
	1.1s	23.03nm			5.1mb	
ISA	68.53	320	eP	35	40.00	0.8
BW06	68.77	331	P	35	39.80	-1.0
	1.3s	13.66nm			4.8mb	
BCH	69.22	319	P	35	44.40	0.8
TNP	69.39	323	P	35	45.20	0.5
TIC	69.54	76	(P)	35	45.00	-0.8
KIC	69.70	77	(P)	35	45.80	-0.9
PRI	70.19	319	eP	35	50.20	0.7
LLA	70.67	320	eP	35	52.80	0.5
CMB	71.23	321	eP	35	55.90	0.2
ARN	71.50	320	P	35	58.20	0.9
MHC	71.56	320	eP	35	59.00	1.2
ORV	72.87	322	eP	36	06.40	1.1
WDC	74.14	322	eP	36	12.10	-0.6
LBFM	74.24	323	P	36	14.00	0.5
SES	75.31	335	eP	36	20.00	0.7
NEW	76.40	330	P	36	25.80	0.3
PNT	78.32	330	eP	36	37.00	1.0
	0.7s	14.00nm			5.1mb	
EPF	B8.43	44	eP	37	27.80	0.0
	0.7s	2.75nm			4.7mb	
LFF	B9.4B	43	eP	37	32.80	0.1
	0.7s	6.60nm			5.1mb	
LPF	B9.66	39	eP	37	32.90	-0.5
	0.9s	9.85nm			5.1mb	
LPO	89.66	43	eP	37	33.70	0.1
	0.8s	B.05nm			5.1mb	
GRR	89.92	39	eP	37	34.30	-0.4
	0.8s	8.05nm			5.1mb	
RJF	90.13	42	eP	37	35.70	0.0
	0.8s	5.35nm			4.9mb	
FLN	90.31	39	eP	37	36.30	-0.2
CAF	90.33	43	eP	37	36.90	0.2
	0.8s	4.70nm			4.9mb	
LDF	90.45	39	eP	37	37.00	-0.1
	0.8s	8.05nm			5.1mb	
LSF	90.52	42	eP	37	37.40	-0.1
	0.7s	3.30nm			4.8mb	
TCF	90.96	42	eP	37	39.40	-0.2
	0.8s	3.35nm			4.8mb	
MAF	91.17	42	eP	37	40.50	0.0
BGF	91.47	42	eP	37	41.80	-0.1
	0.7s	6.05nm			5.1mb	
AVF	91.89	42	eP	37	43.50	-0.2
SSF	92.09	41	eP	37	44.30	-0.4
SMF	92.14	42	eP	37	45.00	0.0
	0.9s	7.35nm			5.1mb	
LPL	93.62	44	eP	37	52.30	0.2
	0.8s	3.35nm			4.8mb	
LPG	93.62	44	eP	37	52.30	0.1
	0.9s	4.10nm			4.9mb	
WB5	135.78	216	ePKP	43	56.80	-0.6
POO	146.80	81	ePKP	44	18.50	1.5
MAT	147.16	313	iPKPc	44	19.10	2.1X
	0.8s	29.10nm				

NDI	148.71	62	ePKP	44	21.50	1.8
KOD	149.04	98	ePKP	44	25.20	4.2X
GBA	149.73	91	PKPd	44	22.80	1.2
	0.5s	8.20nm				
KKN	155.73	59	PKP	44	40.20	10.1X
GUN	156.17	58	PKP	44	39.00	8.1X

S.D. = 0.9 on 72 of 81 obs.

OCT 18, 1990 00h 19m 25.90± 0.74s
34.542 N ± 7.6km 33.052 E ±10.1km
DEPTH = 33.0km (normal)
CYPRUS (372)
ML 3.2 (CSS).

CSS	0.48	29	eP	19	36.20	0.0
			eSg	19	45.00	
PPCY	0.68	301	eP	19	39.00	0.0
ADI	2.32	128	eP	20	03.00	0.4
ZNT	2.83	144	eP	20	10.50	0.7
			eS	20	42.50	
SHMJ	2.90	128	Pc	20	10.70	-0.1
CSTJ	4.57	137	P	20	33.60	-1.0
SHWJ	4.63	153	P	20	36.30	0.7
MBH	5.00	161	eP	20	40.00	-0.6

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

% OCT 18, 1990 00h 30m 35.88± 1.37s
61.309 N ± 9.9km 5.081 E ±11.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.7 (BER). Felt.

SUE	0.30	212	iPc	30	42.03	0.0
			iS	30	46.36	
HYA	0.55	105	iP	30	48.01	0.9
			iS	30	56.70	
ASK	0.83	176	iP	30	52.10	0.2
			eS	31	03.36	
BER	0.94	172	iPc	30	53.85	0.1
			iS	31	07.50	
MOL	1.72	42	eP	31	06.43	0.4
			eSg	31	29.13	
BLS2	2.22	155	iPc	31	13.19	-0.2
			iSg	31	45.73	
NRA0	3.20	98	Pn	31	25.60	-1.5
			Pg	31	30.70	
			Sg	32	14.00	

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

& OCT 18, 1990 00h 38m 52.14s
60.820 N 151.609 W
DEPTH = 70.2km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NKA	0.20	113	iP	39	04.51	1.6
			eS	39	13.99	
RDT	0.46	238	iP	39	04.20	-0.7
			eS	39	14.41	
CKL	0.52	317	iP	39	04.65	-0.8
CRP	0.52	330	iP	39	05.04	-0.5
			eS	39	15.41	
BGL	0.59	320	iP	39	05.45	-0.7
			eS	39	16.40	
RSO	0.67	238	iP	39	06.51	-0.6
			eS	39	18.03	
RED	0.70	235	iP	39	06.65	-0.7
			eS	39	18.20	
SUA	0.77	33	iP	39	07.86	-0.4
			eS	39	20.26	
NNL	0.80	169	eP	39	09.07	0.7
PMS	1.08	66	eP	39	11.74	-0.3
			eS	39	27.65	
BRLK	1.12	161	eP	39	12.18	-0.3
			eS	39	28.70	
SKT	1.17	2	eP	39	12.16	-0.9
			eS	39	28.38	
PWA	1.18	44	eP	39	13.13	-0.1
SEW	1.29	123	eP	39	13.86	-0.8
CNPM	1.31	172	eP	39	14.56	-0.4
			eS	39	32.06	
OPT	1.42	215	eP	39	15.99	-0.5
PLRM	1.43	56	eP	39	15.44	-1.1
			eS	39	35.21	
PMR	1.43	56	iPc	39	15.60	-0.9
GHO	1.61	52	eP	39	18.14	-1.0
			eS	39	39.05	

PDB	1.65	232	eP	39	17.87	-1.7
			eS	39	38.17	
CUT	1.71	21	eP	39	19.63	-0.8
KNIM	1.97	102	eP	39	21.56	-2.4
SVW	1.98	280	iPd	39	21.70	-2.4
MTU	2.13	111	eP	39	24.18	-2.0
MCNL	2.14	221	eP	39	24.99	-1.3
CDD	2.16	209	eP	39	25.54	-1.0
GLI	2.21	86	eP	39	24.55	-2.7
SCM	2.30	62	eP	39	27.29	-1.3
HUR	2.36	22	eP	39	29.57	0.2
VZW	2.48	82	eP	39	28.83	-2.2
VLZ	2.59	81	eP	39	30.49	-2.0
KLU	2.84	74	eP	39	34.05	-2.1
RND	2.90	25	eP	39	36.91	-0.1
TOA	2.91	61	iPc	39	36.10	-1.0
TTA	2.97	317	iPc	39	36.20	-1.8

35 obs. associated

• OCT 18, 1990 01h 01m 38.98± 0.71s
19.967 N ±11.0km 121.187 E ±11.7km
DEPTH = 33.0km (normal)
4.6mb (6 obs.)
PHILIPPINE ISLANDS REGION (248)

QZH	5.50	335	Pn	02	58.00	-2.7
			Sn	03	57.00	
MCO	7.44	288	eP	03	26.50	-1.5
GZH	7.93	294	P	03	32.00	-2.9
OIZ	10.74	267	eP	04	13.80	0.2
	0.5s	20.00nm			5.6mb	
			eS	06	08.40	
XAN	17.75	325	P	05	46.00	0.7
CD2	19.12	308	P	06	02.50	0.5
Z	16s	1.07um				
TIY	19.25	339	Pd	06	04.70	1.1
BJI	20.46	349	eP	06	22.00	5.5X
	1.0s	24.00nm			4.5mb	
Z	20s	0.30um			3.7Msz	
CHG	21.01	271	eP	06	25.30	3.0X
LZH	22.13	320	eP	06	34.00	0.4
	2.0s	32.00nm			4.4mb	
Z	14s	0.40um			4.0MszX	
			sP	06	45.00	
			eS	10	30.00	
GUN	33.14	291	P	08	16.40	1.5
PKI	33.52	290	P	08	19.00	0.8
KKN	33.65	290	P	08	20.30	1.1
DMN	33.79	290	P	08	21.80	1.3
GKN	34.24	291	P	08	25.10	0.9
WB5	41.65	161	eP	09	25.00	-1.1
OIS	44.13	155	iPd	09	45.50	-0.7
ASPA	45.11	163	iPd	09	54.00	-0.1
	0.5s	22.10nm			5.3mb	
FBA	72.55	27	P	13	04.00	-0.4
SLL	B1.26	332	eP	13	52.70	-0.3
	0.7s	2.70nm			4.4mb	
NB2	81.94	332	P	13	56.40	-0.2
	1.1s	4.40nm			4.4mb	
KSP	83.73	322	ePd	14	07.50	1.6

S.D. = 1.4 on 20 of 22 obs.

OCT 18, 1990 01h 19m 52.29± 0.34s
42.406 N ± 3.3km 1.446 E ± 3.4km
DEPTH = 10.0km (geophysicist)
PYRENEES (37B)
ML 3.3 (LDG). mbLg 3.2 (MDD).

EPF	1.03	308	Pg	20	11.60	-0.1
ETER	1.05	95	iP	20	12.40	0.3
			eS	20	27.00	
EROO	1.76	207	iPnc	20	24.60	1.6
			eSn	20	45.50	
LPO	2.28	355	Pn	20	31.60	1.0
			Sg	21	05.80	
CAF	2.56	10	Pn	20	34.60	0.1
			Sg	21	14.60	
LFF	2.58	349	Pn	20	35.40	0.6
			Sg	21	14.60	
ESEL	2.85	157	ePn	20	38.00	-0.7
			eSn	21	11.40	
RJF	2.90	1	Pn	20	40.10	0.8
			Sg	21	25.40	
ECRI	2.93	275	ePn	20	40.20	0.3
			eSn	21	16.00	
ETOR	3.07	240	ePn	20	41.90	0.1
			eSn	21	18.70	

ECHE	3.36	214	ePn	20	45.90	0.0
			eSn	21	25.00	
LRG	3.76	72	Pn	20	51.60	0.1
			Sn	21	35.60	
LMR	3.84	74	Pn	20	52.90	0.3
			Sn	21	35.80	
LSF	3.84	1	Pn	20	53.00	0.3
			Sg	21	54.30	
MAF	3.90	12	Pn	20	52.60	-0.9
			Pg	21	05.90	
			Sg	21	55.60	
TCF	3.92	8	Pn	20	53.70	-0.1
			Sg	21	56.60	
FRF	3.99	71	Pn	20	54.60	-0.1
			Sn	21	39.20	
BGF	4.27	13	Pn	20	58.60	-0.2
			Pg	21	12.40	
			Sg	22	06.90	
MFF	4.35	345	Pn	21	00.30	0.4
			Pg	21	15.90	
			Sg	22	08.60	
GUD	4.56	249	ePn	21	02.00	-1.0
			eSn	21	52.80	
SMF	4.57	21	Pn	21	03.20	0.2
			Pg	21	18.70	
			Sg	22	17.30	
AVF	4.59	17	Pn	21	03.20	-0.1
			Pg	21	18.20	
			Sg	22	16.90	
SBF	4.62	70	Pn	21	03.90	0.1
			Sn	21	55.10	
SSF	4.88	17	Pg	21	24.20	16.8X
			Sg	22	25.90	
LBF	4.92	21	Pn	21	08.40	0.4
			Pg	21	26.70	
			Sg	22	27.60	
LPG	4.92	49	Pn	21	09.40	1.1
LPL	4.92	49	Pn	21	09.30	1.0
LOR	5.16	19	Pg	21	29.20	17.9X
			Sg	22	36.10	
PGF	5.59	86	Pn	21	15.40	-2.2
			Sn	22	14.60	
GRR	6.20	346	Pn	21	24.80	-1.2
			Sn	22	32.00	
LDF	6.29	350	Pn	21	26.10	-1.1
FLN	6.50	349	Pn	21	29.40	-0.9
			Sn	22	37.90	
HAU	6.58	30	Pg	21	56.70	25.2X
BSF	6.61	33	Pg	21	57.60	25.6X

S.D. = 0.8 on 30 of 34 obs.

& OCT 18, 1990 01h 55m 28.39s
63.110 N 150.636 W
DEPTH = 120.5km
4.0mb (2 obs.)
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.47	106	eP	55	46.13	-0.4
			iS	55	59.62	
CUT	0.73	166	iP	55	48.16	-0.1
RND	0.86	69	iP	55	48.92	-0.6
MCK	0.99	50	iP	55	50.18	-0.5
			eS	56	07.35	
SKT	1.21	200	iP	55	52.62	-0.3
PWA	1.51	166	iP	55	56.32	0.1
GHO	1.56	149	iP	55	56.85	-0.2
			eS	56	19.47	
NEA	1.63	24	iP	55	56.62	-1.1
			eS	56	17.32	
SUA	1.65	182	eP	55	57.99	-0.2
PLRM	1.68	155	iP	55	57.61	-0.7
PMR	1.68	155	iPc	55	57.70	-0.6
SML	1.69	140	eP	55	57.91	-0.6
WRH	1.77	38	iP	55	58.56	-0.9
PMS	1.94	164	iP	56	01.14	-0.5
CRP	1.98	202	eP	56	01.94	-0.3
KNK	1.99	148	eP	56	01.43	-0.7
CCB	1.99	38	iP	56	01.13	-1.0
SCM	2.00	128	eP	56	01.43	-1.0
BGL	2.03	205	eP	56	02.74	0.0
CKL	2.08	203	eP	56	03.06	-0.4
HDA	2.09	50	eP	56	02.40	-1.1
FBA	2.19	34	eP	56	03.76	-1.0
			eS	56	31.51	
DDM	2.25	70	eP	56	05.13	-0.4
TOA	2.30	114	iPc	56	06.40	0.2
GLM	2.36	36	iP	56	06.19	-0.9
NKA	2.39	187	eP	56	10.25	2.9
SDG	2.41	102	eP	56	07.03	-0.6
TTA	2.46	268	iPd	56	07.50	-0.8
RDT	2.68	199	eP	56	10.52	-0.7
KLU	2.74	124	eP	56	10.36	-1.6
			eS	56	44.56	
GLI	2.79	142	iP	56	11.07	-1.5
VZW	2.81	135	eP	56	12.22	-0.7
VLZ	2.83	133	eP	56	11.18	-1.9
RSO	2.84	202	eP	56	13.10	-0.4
RED	2.89	202	eP	56	13.48	-0.4
DOT	3.01	77	iP	56	14.35	-1.2
SEW	3.07	169	iP	56	15.20	-1.0
SVW	3.09	232	iPc	56	16.00	-0.6
NNL	3.10	186	eP	56	17.42	0.8
KNIM	3.10	152	iP	56	14.58	-2.1
IMA	3.25	338	iPd	56	17.60	-1.2
BRLK	3.36	182	eP	56	19.72	-0.5
MTU	3.44	154	eP	56	19.66	-1.6
TMW	3.47	83	eP	56	19.95	-1.6
HOM	3.50	188	eP	56	22.19	0.2
GLB	3.60	115	eP	56	22.35	-1.1
CNPM	3.61	185	eP	56	22.86	-0.7
OPT	3.69	201	eP	56	24.52	-0.1
XLV	3.71	189	eP	56	24.21	-0.6
PDB	3.75	209	eP	56	24.75	-0.6
AUE	3.99	201	eP	56	29.33	0.7
AUH	4.00	201	eP	56	30.46	1.6
AUI	4.02	201	eP	56	30.53	1.5
FYU	4.17	31	eP	56	29.64	-1.4
MCNL	4.33	206	eP	56	32.78	-0.5
TGL	4.38	119	eP	56	32.15	-1.9
BALM	4.42	114	eP	56	32.76	-1.8
CDD	4.44	201	eP	56	33.98	-0.8
DWY	5.09	74	Pd	56	41.90	-1.7
KDC	5.46	191	iPc	56	46.80	-1.8
INK	8.75	46	P	57	31.50	-1.8
MBC	16.71	26	eP	59	15.50	-0.6
NB2	55.41	11	P	04	49.00	-2.6
	0.7s		0.90nm			3.8mb
HFS	56.50	9	eP	04	55.80	-3.6
	0.4s		0.90nm			4.1mb
	64 obs. ossociated					

OCT 18, 1990 03h 06m 52.33± 1.08s
7.348 S ± 3.8km 129.279 E ± 5.0km
DEPTH = 47.6 ± 10.5 km
5.3mb (16 obs.)
BANDA SEA (280)

MTN	5.76	162	eP	08	17.90	0.4
KUPT	6.26	243	eP	08	19.50	-5.0X
			eS	09	26.00	
KNA	8.36	183	iPc	08	52.50	-1.3
			lS	10	09.10	
JAY	12.35	68	ePc	09	48.00	-0.2
WB5	13.40	159	iPc	09	57.20	-4.8X
			e(S)	12	13.00	
MNDI	14.33	86	eP	10	14.00	-0.4
QIS	16.50	144	eP	10	38.00	-4.2X
			eS	13	28.00	
TRT	16.51	268	ePc	10	45.80	3.6X
ASPA	16.82	165	eP	10	42.30	-3.9X
	0.4s		164.20nm			5.5mb
Z	19s		0.80um			4.1Msz
			iS	13	34.80	
PMG	17.80	98	eP	10	59.50	1.1
	1.2s		531.25nm			5.5mb
KKM	18.62	315	ePc	11	10.80	2.2X
NANU	20.10	220	iPc	11	25.20	0.3
	0.4s		84.00nm			5.4mb
			eS	14	59.70	
CTA	20.76	129	iPc	11	32.50	0.7
	1.2s		218.75nm			5.4mb
			iS	15	17.00	
MEKA	21.72	207	eP	11	41.80	0.4
			eS	15	32.00	
FORR	23.41	183	iPd	11	58.10	0.2
QLP	23.84	145	eP	12	03.00	0.9
			e	13	25.00	
			e	16	21.00	
COOL	24.62	197	eP	12	10.00	0.3
MRWA	25.10	208	iPc	12	14.70	0.5
			eS	16	44.00	
KLB	26.41	203	iPc	12	26.90	0.5
RMQ	26.56	138	eP	12	26.80	-1.1
STK	26.97	156	iPc	12	30.00	-1.6
	0.7s		27.00nm			5.0mb
			eS	17	30.10	
MUN	27.37	205	iPc	12	35.00	-0.1
NWAO	27.80	202	iPd	12	29.20	-9.9X
CMS	28.56	149	eP	12	45.50	-0.4
			eS	18	10.00	
ADE	28.82	164	iPc	12	48.10	-0.2
RKG	28.91	201	eP	12	54.00	5.0X
COO	31.35	140	eP	13	10.60	-0.2
SNG	32.02	296	eP	13	17.20	0.4
BFD	32.05	160	iPd	13	17.00	0.2
			e	19	40.00	
BWA	32.21	149	eP	13	18.80	0.5
CAN	33.21	150	eP	13	27.20	0.3
CNB	33.39	149	eP	13	29.00	0.5
			e	20	12.00	
BDT	38.63	309	eP	14	15.00	1.9
	1.0s		31.10nm			5.1mb
DZM	38.68	116	iPd	14	13.20	-0.4
SSE	39.00	349	P	14	16.00	0.0
	1.0s		19.00nm			4.9mb
CHG	39.63	311	eP	14	22.50	1.1
	1.0s		11.50nm			4.7mb
GYA	40.14	328	P	14	25.80	0.2
WHN	40.31	340	eP	14	28.50	1.7
KMI	41.34	322	eP	14	37.00	1.3
	1.5s		50.00nm			5.0mb
MAT	44.45	10	eP	14	58.00	-2.6X
	1.2s		23.44nm			4.8mb
CD2	45.22	329	P	15	07.20	0.4
XAN	45.46	336	P	15	07.50	-1.2
TIY	47.51	342	eP	15	25.00	0.1
BJI	48.68	347	eP	15	33.00	-0.8
	1.5s		52.00nm			5.3mb
HHC	50.65	343	eP	15	48.60	-0.5
LSA	51.96	317	P	16	00.40	0.8
GTA	53.94	332	eP	16	13.00	-0.6
	0.8s		10.00nm			4.9mb
KOD	54.47	288	eP	16	07.80	-10.3X
GUN	54.65	312	P	16	18.70	-0.6
	0.6s		56.00nm			5.8mb
PKI	54.81	311	P	16	19.60	-0.9
KKN	55.03	311	P	16	21.10	-0.9
	0.6s		31.00nm			5.5mb
DMN	55.06	311	P	16	21.10	-1.2
	0.6s		33.00nm			5.5mb
GBA	55.52	292	P	16	23.00	-2.4
GKN	55.62	311	P	16	25.40	-0.8
WMQ	63.30	327	P	17	19.50	0.8
			pP	17	28.00	27kmX
MAW	74.37	201	eP	18	27.00	0.4
SPA	82.70	180	iPc	19	12.10	-0.1
	0.6s		35.37nm			5.6mb
TNP	112.97	52	(PKP)	25	26.00	-0.6
ARE	148.66	139	ePKP	26	34.00	0.7
JFO	150.21	194	ePKP	26	40.80	5.5X
CNCB	150.55	145	PKP	26	37.00	0.5
			i	26	43.20	
LPB	150.70	144	ePKP	26	31.00	-5.6X
			i	26	43.00	
PPD	150.80	179	ePKP	26	41.20	5.1X
			e	26	48.40	
ZOBO	150.89	144	PKP	26	36.00	-1.1
CCH	151.08	148	PKP	26	44.30	7.3X
SIV	154.65	156	PKP	26	41.30	-0.4
			i	27	05.40	
SOB1	160.86	211	(PKP)	26	50.00	0.8

S.D. = 0.9 on 53 of 67 obs.

% OCT 18, 1990 03h 58m 55.17± 0.91s
38.977 N ± 7.0km 27.160 E ±12.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.8 (ISK).

IZM	0.58	172	ePg	59	07.00	0.0
EZN	1.07	323	ePg	59	15.30	0.1
			eSg	59	28.80	
EDC	1.47	21	ePn	59	21.80	0.1
BNT	1.50	23	ePn	59	21.50	-0.6
KCT	1.57	36	iPn	59	23.60	0.4

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

? OCT 18, 1990 04h 41m 13.45± 0.94s
38.972 N ± 7.3km 27.248 E ±15.0km
DEPTH = 10.0km (geophysicist)

18d 04h

TURKEY (366)
MD 2.6 (ISK).

IZM	0.57	179	ePg	41	25.10	0.0
EZN	1.11	320	iPg	41	34.30	0.0
			iSg	41	46.80	
EDC	1.45	19	ePn	41	39.80	0.1
BNT	1.48	20	ePn	41	40.00	-0.1

S.D. = 0.1 on 4 of 4 obs.

---

* OCT 18, 1990 06h 05m 48.80± 0.80s
63.547 N ± 8.9km 151.202 W ± 8.8km
DEPTH = 33.0km (normal)
CENTRAL ALASKA (1)

FBA	2.02	46	iPc	06	21.50	0.4
PMR	2.18	153	iPc	06	22.80	-0.7
TTA	2.26	256	iPd	06	25.20	0.5
TOA	2.72	120	iPd	06	31.60	0.4
IMA	2.74	338	iPc	06	31.00	-0.6

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

---

* OCT 18, 1990 06h 52m 12.75± 1.02s
26.414 S ± 8.2km 27.368 E ±13.0km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
mbLg 3.5 (BUL). ML 3.4 (PRE).

PRY	0.52	170	eP	52	23.00	-0.2
			S	52	28.00	
KSR	0.69	322	iPd	52	27.00	0.4
			S	52	36.00	
EVA	1.54	94	iPd	52	41.50	0.5
			S	52	59.00	
BUL	6.35	11	iPn	53	47.80	-1.6
			iSn	54	57.00	
			iSg	55	24.20	
KRI	9.76	13	iPn	54	38.00	0.9
			iSn	56	19.00	
			iSg	57	16.50	

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

OCT 18, 1990 07h 14m 18.20± 0.66s
24.120 S ± 6.1km 66.669 W ±11.4km
DEPTH = 202.5 ± 11.7 km
4.7mb (2 obs.)
SALTA PROVINCE, ARGENTINA (129)

ANT	3.45	276	iPc	15	13.80	0.0
			iS	15	53.50	
CYA	4.38	170	iPc	15	27.50	2.1
			S	16	19.00	
CCH	6.72	4	P	15	58.30	2.4
RTLL	7.36	192	ePc	16	02.20	-1.8
CNCB	7.38	350	iPc	16	06.30	1.5
			S	17	28.00	
RTCB	7.58	194	eP	16	05.30	-1.7
LPB	7.67	350	Pc	16	09.60	1.1
			S	17	31.00	
ZOBO	7.93	350	iPc	16	12.10	-0.1
			eS	17	35.00	
ARE	8.86	328	eP	16	21.00	-2.8
			iS	17	56.00	
MDZ	8.94	192	eP	16	25.20	0.6
SIV	9.64	34	iPd	16	32.20	-1.6
PEL	9.66	201	iPc	16	34.50	0.6
	1.5s		27.78nm			4.4mb
FCH	9.71	198	eP	16	36.00	1.2
SAN	9.93	200	eP	16	38.00	0.5
LNV	10.64	202	eP	16	44.00	-2.5
PPD	14.29	85	eP	17	32.30	-0.5
			e	17	35.50	
			e	17	38.30	
			e	17	46.40	
BAO	19.47	68	eP	18	30.70	-1.1
JFO	21.63	88	eP	18	54.80	1.7
SOB1	28.72	63	eP	19	57.30	-1.6
SPA	66.02	180	iPd	24	46.70	1.8
	0.7s		28.13nm			5.1mb
KIC	67.50	72	(P)	24	53.50	-1.2
ASPA	128.47	204	ePKP	33	03.50	0.5
	0.7s		5.60nm			
WB5	131.70	207	ePKP	33	10.00	0.9
GBA	144.55	101	PKPc	33	32.80	0.1
	0.3s		3.60nm			
GKN	153.96	75	PKP	34	00.00	13.0X

S.D. = 1.6 on 24 of 25 obs.

? OCT 18, 1990 07h 22m 49.63± 4.04s
41.460 N ±22.2km 23.886 E ±20.5km
DEPTH = 5.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)
ML 2.7 (THE).

SRS	0.41	213	ePc	22	58.18	0.4
			eS	23	04.74	
SOH	0.75	212	ePd	23	04.34	-0.4
			eS	23	15.62	
KNT	0.80	249	ePc	23	05.22	-0.4
			eS	23	15.70	
VAY	1.00	262	ePn	23	09.30	0.3
OUR	1.13	176	ePc	23	11.26	0.1
GRG	1.23	246	ePc	23	13.10	0.2
			eS	23	29.62	

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

& OCT 18, 1990 08h 30m 15.00s
32.420 N 115.130 W
DEPTH = 6.0km (geophysicist)
CALIFORNIA-MEXICO BORDER REGION (45)
<PAS-P>. ML 3.1 (PAS).

GLA	0.68	22	eP	30	27.30	-1.3
PLM	1.73	303	eP	30	45.00	-0.9
PEC	2.25	311	e(P)	30	55.00	1.7

3 obs. associated

? OCT 18, 1990 09h 22m 23.90± 1.29s
36.126 N ±11.1km 100.180 E ±15.4km
DEPTH = 33.0km (normal)
3.9mb (1 obs.)
QINGHAI PROVINCE, CHINA (325)
ML 3.5 (BJI).

LZH	2.97	90	Pnc	23	09.00	-0.9
			Pg	23	14.00	
			Sn	23	46.50	
			Sg	23	54.00	
GTA	3.29	355	Pn	23	14.10	-0.4
			Pg	23	18.80	
			Sn	23	56.40	
CD2	6.00	149	Pg	24	03.40	10.7X
BTO	8.92	57	eP	24	30.00	-3.6X
HHC	10.09	59	eP	24	50.80	1.1
CHG	17.28	184	eP	26	24.50	0.2
	0.9s		8.61nm			3.9mb
WB5	64.41	144	eP	32	55.20	-3.9X

S.D. = 1.5 on 4 of 7 obs.

---

* OCT 18, 1990 09h 30m 44.46± 0.91s
26.390 S ± 7.6km 27.349 E ±12.0km
DEPTH = 5.0km (geophysicist)
4.0mb (1 obs.)
REPUBLIC OF SOUTH AFRICA (584)
mbLg 4.0 (BUL). ML 3.8 (PRE). At least 9 people killed, one missing and 6 injured in a mine near Carletonville. Probable rockburst.

PRY	0.55	168	iPd	30	55.00	-0.4
			S	31	01.00	
KSR	0.66	322	iPd	30	58.50	0.8
			S	31	07.50	
EVA	1.55	95	eP	31	14.00	1.0
			S	31	34.00	
BUL	6.33	11	iPn	32	19.60	-1.2
			iSn	33	29.50	
			iSg	34	01.40	
KRI	9.74	13	iPn	33	08.30	-0.2
			iSn	34	56.50	
			iSg	35	49.20	
GBA	62.85	57	P	41	14.00	0.1
	0.2s		0.20nm			4.0mb

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

? OCT 18, 1990 09h 59m 45.78± 1.41s
39.125 N ± 8.6km 27.737 E ±16.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.3 (ISK).

IZM	0.82	207	ePg	00	01.60	0.0
			eSg	00	14.10	
EDC	1.22	5	ePn	00	08.00	-0.5
BNT	1.24	6	ePn	00	09.30	0.5
EZN	1.30	303	ePn	00	09.80	0.0

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

OCT 18, 1990 10h 05m 44.54± 0.59s
42.869 N ± 5.3km 13.544 E ± 7.5km
DEPTH = 14.1 ± 4.9 km
CENTRAL ITALY (381)

AQU	0.53	191	P	05	56.80	1.8
			eSg	06	05.80	
ASS	0.68	288	P	05	56.90	-0.8
			eSg	06	09.20	
ARV	0.77	325	P	05	59.50	0.3
			eSg	06	10.60	
MNS	0.80	233	P	06	00.50	0.8
			eSg	06	13.70	
AZI	0.88	185	P	06	02.50	1.4
			eSg	06	16.00	
SDI	1.18	170	P	06	06.00	-0.2
			eSg	06	24.90	
RMP	1.23	211	P	06	09.00	2.0
RSM	1.32	323	P	06	09.70	1.2
DUI	1.39	150	P	06	08.80	-0.6
			eSn	06	29.40	
CRE	1.39	304	P	06	09.00	-0.5
			eSg	06	29.50	
SFI	1.62	311	P	06	12.40	-0.3
PGD	1.67	308	P	06	13.40	-0.2
HVAR	2.15	81	iPn	06	22.10	1.7
			iSn	06	54.60	
BSS	2.28	155	P	06	21.00	-1.3
SGO	2.66	150	P	06	26.50	-1.2
TRI	2.84	3	eP	06	46.70	16.5X
			e	07	12.60	
VOY	3.17	4	e(Pn)	06	36.80	1.8
			eSn	07	22.70	

S.D. = 1.3 on 16 of 17 obs.

---

* OCT 18, 1990 10h 05m 45.92± 1.77s
45.726 N ±14.1km 26.644 E ±11.2km
DEPTH = 162.3 ± 17.2 km
ROMANIA (358)

VRI	0.15	22	iPc	06	07.50	0.3
CVO	0.34	286	ePc	06	24.50	16.8X
MLR	0.54	245	iPc	06	09.00	-0.3
ISR	0.59	187	ePc	06	10.00	0.5
CLI	0.94	28	iPc	06	11.50	-0.2
MTUR	1.22	246	eP	06	14.00	-0.1
TLB	1.50	139	eP	06	16.50	-0.2
COZ	1.67	257	ePd	06	18.50	-0.2
PTJ	7.47	275	eP	07	33.50	0.2

S.D. = 0.4 on 8 of 9 obs.

% OCT 18, 1990 10h 27m 05.01± 2.23s
43.807 N ±18.5km 12.666 E ±13.7km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ARV	0.37	147	Pc	27	12.90	0.3
			eSg	27	19.90	
CRE	0.55	251	P	27	16.50	0.4
			eSg	27	25.80	
SFI	0.60	281	P	27	16.90	-0.2
			eSg	27	27.30	
PGD	0.69	276	P	27	18.70	0.0
			eSg	27	29.50	
ASS	0.74	180	P	27	19.00	-0.5
			eSg	27	29.50	

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

? OCT 18, 1990 10h 59m 41.17± 2.21s
41.502 N ±18.9km 13.246 E ± 8.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SDI	0.47	64	P	59	50.60	-0.2
			eSg	59	59.50	
AZI	0.51	16	P	59	51.50	0.1
			eSg	59	59.00	
RMP	0.51	307	P	59	51.50	0.0
			eSg	59	59.70	
DUI	0.92	80	P	59	59.00	0.1
			eSg	00	12.00	

S.D. = 0.3 on 4 of 4 obs.

? OCT 18, 1990 11h 35m 46.44±13.00s
44.182 N ±50.5km 127.552 W ±89.8km
DEPTH = 10.0km (geophysicist)
OFF COAST OF OREGON (30)

KMOR	3.23	62	P	36	37.42	-0.9
NLO	3.47	55	P	36	41.35	-0.3
BMW	3.82	52	P	36	45.85	-0.7
PGO	3.85	69	P	36	47.99	1.0
GT2	3.89	74	P	36	47.15	-0.5
RVW	3.93	58	P	36	47.68	-0.4
LVP	4.10	61	P	36	50.57	0.0
VLMM	4.15	69	P	36	51.27	0.0
FL2	4.19	59	P	36	51.97	0.0
MTMW	4.21	62	P	36	52.09	0.0
CZM	4.21	56	P	36	51.43	-0.7
APW	4.25	53	P	36	52.03	-0.6
ERK	4.25	58	P	36	52.32	-0.4
TDH	4.25	73	P	36	52.76	-0.1
SHW	4.26	60	P	36	53.29	0.3
HSR	4.29	60	P	36	53.92	0.5
STD	4.29	60	P	36	53.52	0.2
JLK	4.29	61	P	36	53.49	0.1
REMW	4.30	60	P	36	54.60	1.0
ESD	4.32	60	P	36	54.10	0.3
SOSW	4.34	60	P	36	54.10	0.0
TDL	4.35	58	P	36	54.13	0.0
CDFW	4.35	62	P	36	54.39	0.3
VBEM	4.35	76	P	36	53.88	-0.3
VLL	4.37	71	P	36	54.72	0.2
KOSW	4.41	57	P	36	55.46	0.4
APM	4.45	68	P	36	55.41	-0.1
LMW	4.46	54	P	36	55.77	0.0
VFP	4.48	73	P	36	56.08	0.0
GULW	4.57	65	P	36	57.78	0.5
ASR	4.65	63	P	36	58.61	0.1
LON	4.79	56	P	37	00.18	-0.2
RVC	4.79	53	P	37	00.91	0.4
GLK	4.82	58	P	37	01.17	0.3
WPW	4.92	57	P	37	02.43	0.2
FMW	4.96	54	P	37	02.57	-0.3
GL2	5.09	67	P	37	04.22	-0.4
RMW	5.18	49	P	37	05.99	0.0
JCW	5.60	42	P	37	12.28	0.5
MXC	5.65	62	P	37	12.10	-0.4
CRF	6.32	62	P	37	21.49	-0.4
RC1	6.33	61	P	37	21.70	-0.4

S.D. = 0.4 on 42 of 42 obs.

OCT 18, 1990 12h 54m 48.74± 0.49s
49.047 N ±11.1km 153.797 E ± 7.7km
DEPTH = 150.0km (geophysicist)
4.5mb (15 obs.)
KURIL ISLANDS (221)

MAT	16.90	228	(P)	58	37.00	-0.6
	0.8s	7.46nm			4.1mb	
TTA	30.42	44	iPc	00	47.70	-0.8
IMA	31.70	38	iPc	00	58.90	-0.8
FBA	34.09	40	iPc	01	20.00	-0.2
	0.7s	31.90nm			5.2mb	
INK	39.48	34	eP	02	05.00	-0.2
CHG	53.12	256	eP	03	53.50	0.7
GUN	55.28	274	P	04	08.20	-0.8
	0.6s	20.00nm			5.2mb	
KKN	55.76	274	P	04	12.20	0.0
	0.6s	15.00nm			5.1mb	
PKI	55.82	274	P	04	12.80	0.0
	0.6s	12.00nm			5.0mb	
DMN	55.99	274	P	04	13.80	-0.2
	0.8s	28.00nm			5.2mb	
GKN	56.03	275	P	04	13.40	-0.8
	0.6s	30.00nm			5.4mb	
LRM	59.46	54	eP	04	38.60	0.7
TNP	61.85	63	P	04	54.20	0.0
NB2	66.20	341	P	05	20.60	-1.2
	0.7s	1.00nm			3.8mb	
HFS	66.47	340	eP	05	22.20	-1.2
	0.4s	1.40nm			4.2mb	
ANMO	70.25	59	P	05	47.70	0.3
GBA	70.92	269	P	05	52.00	0.6
CDF	78.70	338	eP	06	35.40	0.0
FLN	80.07	343	eP	06	42.60	0.0
	0.9s	11.45nm			4.6mb	
LDF	80.17	343	eP	06	43.70	0.6
LOR	80.58	340	eP	06	45.10	-0.2
	0.8s	4.05nm			4.2mb	
LBF	80.82	340	eP	06	47.00	0.4
	0.7s	2.20nm			4.0mb	
SSF	80.86	340	eP	06	46.80	0.1
AVF	81.15	340	eP	06	48.40	0.2
	0.8s	3.35nm			4.1mb	
SMF	81.18	340	eP	06	48.80	0.4
BGF	81.48	340	eP	06	50.30	0.3
LPL	81.53	337	eP	06	51.50	0.9
LPG	81.55	337	eP	06	51.70	1.0
	0.8s	6.70nm			4.4mb	
MAF	81.86	340	eP	06	52.90	0.9
	0.8s	4.70nm			4.3mb	

S.D. = 0.6 on 29 of 29 obs.

? OCT 18, 1990 13h 11m 42.60± 3.17s
35.162 N ±56.9km 25.157 E ± 8.3km
DEPTH = 5.0km (geophysicist)
CRETE (370)
MD 3.6 (ATH).

NPS	0.39	75	ePg	11	49.50	-0.9
			eSg	11	58.20	
VAM	0.82	288	ePb	11	58.50	-0.5
KAP	1.69	76	ePn	12	13.80	0.8
VLI	2.38	311	ePn	12	23.20	0.3

S.D. = 1.3 on 4 of 4 obs.

? OCT 18, 1990 13h 18m 28.58± 1.20s
39.149 N ± 7.5km 27.494 E ±16.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.2 (ISK).

IZM	0.77	194	ePg	18	43.60	-0.1
			eSg	18	56.00	
EZN	1.13	307	ePn	18	50.00	0.3
BNT	1.25	15	iPn	18	52.30	0.5
KGT	1.31	354	ePn	18	52.00	-0.8

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

? OCT 18, 1990 13h 28m 50.77± 0.67s
15.775 N ±31.5km 146.418 E ±49.6km
DEPTH = 33.0km (normal)
4.6mb (1 obs.)
MARIANA ISLANDS (216)

GUMO	2.64	215	eP	29	32.20	0.2
PJG	2.64	215	eP	29	32.10	0.1
GUA	2.66	213	eP	29	32.00	-0.2
			eS	30	03.80	
WB5	37.36	199	eP	36	02.20	-0.1
FBA	65.62	25	P	39	34.00	0.5
INK	71.79	23	eP	40	11.00	-0.6
YKA	80.24	28	eP	41	03.50	4.1X
	0.8s	5.60nm			4.6mb	
ZOBO	146.82	96	ePKP	48	31.00	0.1

S.D. = 0.4 on 7 of 8 obs.

? OCT 18, 1990 13h 31m 06.16± 8.40s
62.654 N ±86.7km 7.750 E ±11.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.7 (BER).

MOL	0.13	228	iPc	31	09.12	-0.1
			eS	31	11.28	
HYA	1.67	207	eP	31	35.40	-0.1
SUE	2.14	223	eP	31	42.40	0.1
			eSg	32	11.50	
NRA0	2.64	135	Pn	31	49.50	0.0
			Pg	31	54.20	
			Sg	32	25.00	
			Lg	32	33.20	

S.D. = 0.1 on 4 of 4 obs.

? OCT 18, 1990 13h 38m 06.09± 1.02s
62.244 N ±10.2km 7.102 E ±12.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.8 (BER).

MOL	0.39	32	iPc	38	14.12	0.1
			eS	38	19.43	
HYA	1.17	202	eP	38	28.20	0.4
			eS	38	43.90	
SUE	1.63	224	eP	38	34.60	-0.3
			eS	38	54.10	
NRA0	2.61	123	Pn	38	48.90	-0.1
			Pg	38	51.90	
			Lg	39	28.50	

S.D. = 0.5 on 4 of 4 obs.

% OCT 18, 1990 14h 20m 31.00± 0.76s
38.141 N ± 7.5km 5.051 W ± 8.3km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.0 (MDD).

EHOR	0.36	206	iP	20	38.00	-0.3
			eS	20	44.50	
EBAN	1.00	88	eP	20	50.00	0.1
			eS	21	05.00	
EVAL	1.45	248	eP	20	57.80	0.5
			eS	21	17.00	
EVIA	2.06	75	eP	21	10.00	3.8X
			eS	21	36.00	
EPLA	2.08	338	eP	21	06.00	-0.4
			eS	21	30.50	
GUD	2.59	15	eP	21	14.00	0.2
			eS	21	45.00	

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

? OCT 18, 1990 14h 57m 15.62± 1.05s
11.258 N ±22.9km 124.100 E ±28.6km
DEPTH = 33.0km (normal)
4.4mb (1 obs.)
LEYTE, PHILIPPINE ISLANDS (256)

CHTO	25.41	290	(P)	02	42.00	0.0
LZH	30.77	327	P	03	30.50	0.0
WB5	32.55	162	eP	03	45.80	-0.3
GUN	39.43	300	P	04	45.20	0.3
PKI	39.73	300	P	04	47.30	-0.1
KKN	39.91	300	P	04	48.70	0.0
DMN	40.00	300	P	04	49.70	0.1
GKN	40.51	300	P	04	53.30	-0.3
STK	46.05	159	eP	05	38.40	0.3
	0.8s	4.00nm			4.4mb	

S.D. = 0.2 on 9 of 9 obs.

% OCT 18, 1990 15h 35m 52.12± 0.87s
38.993 N ± 6.8km 27.216 E ±14.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.9 (ISK).

IZM	0.60	177	iPg	36	04.20	0.0
EZN	1.08	321	iPg	36	12.30	-0.1
			eSg	36	25.90	
EDC	1.44	20	ePn	36	17.80	-0.5
KGT	1.46	3	iPn	36	18.90	0.4
BNT	1.47	22	iPn	36	18.70	0.1

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

OCT 18, 1990 16h 43m 05.31± 0.98s
37.303 N ±10.3km 16.491 E ± 6.1km
DEPTH = 33.0km (normal)
IONIAN SEA (399)

MSI	1.16	321	Pc	43	25.40	0.1
			eSg	43	41.90	
ATN	1.18	317	P	43	25.50	-0.1
			eSn	43	41.00	
MEU	1.26	261	P	43	26.20	-0.6
			eSg	43	42.00	
MNO	1.56	294	P	43	31.50	0.3
			eSg	43	51.20	
CZI	1.93	352	P	43	36.40	0.0
ROI	2.27	2	P	43	43.00	1.8
TDS	2.35	357	P	43	41.50	-1.0
CSI	2.47	356	P	43	46.80	2.6
MMN	2.61	352	P	43	50.00	3.9X
			eSg	44	14.00	
MGR	2.92	346	P	43	50.50	0.0
LCI	3.23	20	P	43	53.20	-1.7
VLS	3.36	74	eP	43	56.00	-0.8
			eS	44	33.20	
SGO	3.38	345	P	43	56.00	-1.0
KEK	3.54	46	eP	43	57.00	-2.3
			eS	44	35.50	
ITM	4.34	90	eP	44	10.50	-0.2
			eS	44	55.50	
EVR	4.49	67	eP	44	13.50	0.6

18d 16h

KZN 5.10 52 eP 44 22.50 1.0
VLI 5.19 95 eP 44 24.00 1.3
S.D. = 1.3 on 17 of 18 obs.

OCT 18, 1990 16h 55m 20.99± 0.52s
38.207 N ± 3.8km 30.895 E ± 5.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 4.0 (ISK).

BCK	0.78	198	iPn	55 34.50	-1.8
ALT	1.05	324	iPn	55 40.70	-0.1
KHL	1.09	277	iPn	55 41.40	-0.1
GPA	2.13	348	ePn	55 57.50	0.4
BBTK	2.19	41	iPnc	55 58.00	0.0
			i	56 03.00	
			iS	56 29.00	
CIN	2.30	256	eP	56 00.00	0.4
KSL	2.33	207	iPc	56 02.00	2.0
IZI	2.40	333	iPn	56 01.00	0.1
YLV	2.63	334	iPn	56 04.80	0.5
GBZT	2.81	337	eP	56 07.00	0.2
IZM	2.86	275	iPn	56 07.30	-0.3
ARG	2.97	229	eP	56 16.00	7.0X
BNT	3.15	314	ePn	56 10.70	-0.9
EDC	3.18	313	iPn	56 11.80	-0.2
ISK	3.19	334	ePn	56 12.00	-0.1
SMG	3.25	262	iPd	56 13.50	0.6
CTT	3.50	328	ePn	56 16.30	-0.2
KGT	3.58	310	iPn	56 17.30	-0.3
PRK	3.76	287	iPd	56 20.10	-0.2
CSS	3.79	148	eP	56 20.50	-0.2
EZN	3.91	296	ePn	56 22.40	0.1

S.D. = 0.7 on 20 of 21 obs.

& OCT 18, 1990 17h 21m 56.00s
33.640 N 117.880 W
DEPTH = 3.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.6 (PAS). Slight domage (VI) at Costo Meso. Felt (V) at Santo Ano, Seal Beach, Stanton and Tustin; (IV) at Balboo, Buena Park, East Irvine, El Toro, Fountain Valley, Huntington Beach, Midway City and Newport Beach; (III) at Atwood, Fullerton, La Habra, Laguna Niguel, Los Angeles and Surfside.

VPD	0.20	29	iPd	22 00.32	0.3
LCL	0.32	307	eP	22 03.01	0.5
FMA	0.35	282	eP	22 02.44	-0.5
PCF	0.42	10	ePd	22 04.10	-0.3
PVPS	0.46	289	ePd	22 04.18	-1.0
CIS	0.50	242	ePd	22 05.50	-0.4
PEM	0.53	1	iPd	22 05.99	-0.5
RVR	0.55	50	iPd	22 06.40	-0.6
PAS	0.56	335	ePc	22 06.30	-0.9
CIW	0.59	253	iPd	22 06.96	-0.8
MWC	0.60	346	iPc	22 07.00	-1.0
PEC	0.65	67	eP	22 08.20	-0.8
SCI	0.86	220	ePd	22 12.60	-0.6
PLM	0.90	108	ePc	22 12.80	-1.2
SBB	1.05	2	iPc	22 15.00	-1.4
BAR	1.39	133	ePc	22 20.80	-1.6
ABL	1.64	318	eP	22 23.90	-2.2
CLC	2.18	6	ePc	22 32.00	-1.8
BLP	2.28	294	eP	22 32.30	-2.9
BCH	2.39	311	eP	22 34.50	-2.3
GLA	2.62	102	eP	22 38.00	-2.0
PHAM	3.02	317	eP	22 43.40	-2.2
PKEM	3.03	323	e(P)	22 43.50	-2.3
PRI	3.39	318	eP	22 52.00	1.0
			eS	23 45.70	
FRI	3.66	336	eP	22 53.00	-1.7
LLA	3.89	321	eP	22 58.30	0.3
PRS	3.93	314	eP	22 57.30	-1.2
SAO	4.27	318	iP	23 00.00	-3.4
TNP	4.46	7	eP	23 05.00	-1.4
CMB	4.83	336	eP	23 10.40	-1.1
ALQ	9.54	79	e(P)	24 25.00	7.5

31 obs. associated

OCT 18, 1990 18h 36m 56.38± 0.39s
43.625 N ± 4.5km 16.904 E ± 4.1km
DEPTH = 5.0km (geophysicist)
YUGOSLAVIA (383)
MD 3.6 (TRI). ML 3.0 (VIE), 3.0 (TTG).

BLY	1.14	10	Pn	37 17.50	-0.7
			Sn	37 33.00	
BRY	1.40	121	ePg	37 20.50	-2.2
			eSg	37 41.00	
HCY	1.66	135	ePg	37 24.90	-1.3
			eSg	37 49.00	
NKY	1.73	117	ePn	37 28.00	0.6
			eSn	37 52.00	
PLE	1.84	98	ePn	37 30.00	1.1
			eSn	37 55.00	
BDV	1.95	133	ePn	37 30.50	0.1
			eSn	37 58.00	
TTG	2.10	124	ePn	37 33.20	0.6
			eSn	38 01.80	
PTJ	2.37	344	iPn	37 36.00	-0.7
			iSn	38 05.70	
PVY	2.47	114	ePn	37 40.50	2.4
			eSn	38 12.50	
DUI	2.67	223	P	37 42.00	1.2
CEY	2.75	321	eP	37 48.00	5.9X
			eSn	38 18.50	
ARV	2.88	269	P	37 44.50	0.7
LJU	2.95	326	eP	37 54.50	9.8X
			e(Sn)	38 27.00	
SDI	2.98	231	P	37 45.80	0.6
			eSn	38 22.00	
AZI	3.03	239	P	37 46.00	0.1
TRI	3.06	314	ePn	37 46.40	0.1
			iPg	37 55.00	
			iSn	38 24.60	
			i	38 32.70	
			iSg	38 39.70	
ASS	3.14	261	P	37 48.20	0.7
			eSn	38 26.00	
VOY	3.22	319	ePnc	37 48.90	0.2
			ePg	37 56.20	
			eSn	38 30.00	
			eSg	38 44.20	
BSS	3.23	210	P	37 48.50	-0.2
SGO	3.29	202	P	37 48.50	-1.0
MNS	3.34	250	P	37 50.90	0.6
			eSn	38 30.40	
LCI	3.38	166	P	37 48.00	-2.9
MGR	3.63	197	P	37 54.50	0.1
SFI	3.67	276	P	37 55.60	0.6
			eSn	38 39.90	
SKO	3.72	115	ePn	37 49.00	-6.8X
PGD	3.76	276	P	37 55.50	-1.0
OHR	3.83	130	ePn	37 58.70	1.4
FVI	4.16	317	P	38 01.90	0.0
			eSn	38 49.00	
CTI	4.45	305	P	38 04.90	-1.3
			eSn	38 56.00	
WATA	5.27	317	iPnc	38 18.30	0.4
			iSg	39 15.50	
SOTA	5.38	314	iPnc	38 19.40	0.0
			iSg	39 16.70	

S.D. = 1.1 on 28 of 31 obs.

OCT 18, 1990 19h 12m 15.93± 0.14s
17.643 N ± 2.3km 62.172 W ± 2.7km
DEPTH = 53.6km (8 depth phases)
5.2mb (47 obs.)
LEEWARD ISLANDS (92)
MD 4.9 (TRN). Felt (V) on Antiguo, (III) on St. Maarten, Guadeloupe and Sabo. Also felt on Barbuda, Nevis and St. Kitts.

SKI	0.62	240	eP	12 31.24	2.3
NEV	0.63	217	eP	12 30.78	1.7
BPA	0.67	153	eP	12 29.87	0.3
SEG	1.39	153	iPd	12 39.61	0.3
			S	12 55.00	
SFG	1.67	146	ePd	12 43.50	0.3
PAG	1.67	164	ePd	12 43.88	0.5
DOG	1.69	162	ePd	12 44.02	0.5
BTG	1.70	165	eP	12 44.06	0.4
			S	13 02.00	
MGG	1.90	154	iPd	12 46.89	0.4
FDF	3.05	161	eP	13 02.48	-0.5
	0.2s		6.45nm		
			S	13 36.50	
BIM	3.28	161	eP	13 06.09	-0.1
MVM	3.31	158	eP	13 06.12	-0.4
			S	13 43.60	
CPD	3.59	277	iP	13 12.30	1.9
SJG	3.82	278	iP	13 15.60	1.9
CSB	3.85	280	iP	13 16.20	2.1
SLB	3.95	164	iP	13 15.08	-0.5
			eS	14 01.00	
PORP	4.27	276	iP	13 21.60	1.6
SVV	4.40	168	eP	13 22.00	0.2
			eTT	16 17.00	
SVB	4.44	168	eP	13 23.00	0.7
			eS	14 15.00	
GRW	5.47	175	eP	13 36.21	-0.8
			e	13 41.00	
			eTT	18 39.00	
TPR	6.56	168	eP	13 53.00	0.8
TRN	6.99	174	eP	13 58.00	-0.2
			e	14 04.00	
			e	15 13.67	
TBH	7.20	171	eP	14 03.60	2.5X
			eS	15 17.74	
TPP	7.32	174	eP	14 06.59	3.8X
			eS	15 31.77	
CUM	7.39	195	iP	14 04.40	0.6
LLAV	8.43	213	eP	14 15.50	-2.7
OLLA	8.81	211	eP	14 25.50	2.0
GUAC	8.91	214	eP	14 22.00	-2.9
CEOS	10.45	216	eP	14 46.00	0.1
TOV	10.76	224	eP	14 52.00	1.9
SDV	11.98	224	eP	15 09.00	2.3
BMG	14.95	227	eP	15 45.00	-0.7
BOG	17.41	223	eP	16 18.00	0.9
			eS	19 40.00	
HBF	22.37	316	P	17 10.80	0.0
SGS	22.62	317	P	17 13.00	-0.2
JSC	23.78	318	P	17 24.00	-0.5
PRM	24.38	316	P	17 30.70	0.3
BLA	25.26	324	P	17 39.70	1.0
	0.9s		86.78nm		5.3mb
NAV	25.54	324	P	17 41.50	0.1
TKL	26.26	317	P	17 47.50	-0.5
GBTN	26.55	317	P	17 50.20	-0.4
HBVT	28.17	343	P	18 05.00	-0.3
PWLA	28.80	312	P	18 10.70	-0.3
ELC	30.79	315	P	18 27.90	-0.8
OLY	31.50	310	P	18 34.00	-0.9
FVM	31.97	315	P	18 37.80	-1.3
UYO	33.20	306	iPd	18 49.80	0.0
SIV	33.44	178	iPc	18 49.80	-2.2
SOB1	33.97	140	eP	18 56.00	-0.6
ZOBO	34.20	190	P	18 56.00	-3.2X
Z	22s		0.42um		4.1Msz
			S	24 24.00	
			LR	29 44.00	
LPB	34.46	190	P	18 59.00	-2.2
CAI	34.47	132	eP	19 09.00	8.1X
CNCB	34.71	190	P	19 01.00	-2.6
TUL	34.86	308	iPc	19 04.40	0.3
	0.9s		88.80nm		5.7mb
Z	22s		0.74um		4.4Msz
			i	19 18.60	56km
			LR	28 45.00	
SIO	35.19	308	iP	19 07.30	0.4
			i	19 21.50	55km
MEO	36.61	305	iPd	19 17.50	-1.4
PPD	40.84	164	eP	19 52.70	-1.5
			e	20 07.60	58km
ALQ	42.90	303	iPc	20 11.80	0.5
	0.9s		42.02nm		5.2mb
			e	20 26.00	54km
ANMO	42.90	303	P	20 11.30	0.1
	0.9s		45.17nm		5.2mb
GLD	43.19	310	P	20 13.50	0.0
	1.0s		22.50nm		4.9mb
GOL	43.29	310	P	20 13.90	-0.5
	1.0s		18.13nm		4.8mb
BW06	47.22	312	P	20 44.90	-0.8
	1.3s		61.48nm		5.4mb
DAU	47.83	309	P	20 50.70	0.1
FFC	47.91	330	iPc	20 49.80	-0.8
	0.8s		15.00nm		5.1mb
MSU	48.12	306	P	20 52.80	0.0
PTI	49.24	312	P	21 01.40	0.2
GLA	49.51	299	eP	21 04.00	0.7
LRM	50.10	315	eP	21 08.20	0.3

TPC	50.61	300	eP	21	12.00	0.2
SES	50.74	321	ePc	21	12.30	-0.1
BAR	51.03	298	eP	21	13.00	-1.9
PLM	51.23	299	eP	21	17.00	0.4
GSC	51.34	301	eP	21	18.00	0.7
RVR	51.70	300	eP	21	20.00	0.0
TNP	51.97	305	P	21	21.80	-0.4
	0.9s	18.23nm			5.1mb	
CLC	52.03	302	eP	21	22.00	-0.5
SBB	52.12	300	eP	21	23.00	-0.2
MWC	52.28	300	eP	21	24.00	-0.6
ISA	52.72	302	eP	21	28.00	0.3
			e	22	37.00	326kmX
ABL	53.28	301	P	21	31.50	-0.5
FRI	53.82	303	eP	21	34.40	-1.2
BCH	54.01	301	P	21	36.90	-0.3
CMB	54.45	304	eP	21	40.20	-0.1
LLA	54.79	303	eP	21	42.30	-0.5
PRS	55.11	302	eP	21	44.50	-0.6
SAO	55.20	303	eP	21	45.80	0.0
ARN	55.30	303	P	21	46.10	-0.4
MHC	55.39	303	eP	21	47.50	0.2
ORV	55.45	306	P	21	47.10	-0.4
			pP	22	00.80	50km
MIN	55.61	307	eP	21	47.50	-1.3
GCC	55.65	303	eP	21	49.20	0.2
BRK	55.91	304	eP	21	51.30	0.5
LBFM	55.93	308	P	21	50.80	-0.4
PCC	55.99	304	eP	21	51.30	-0.1
LTCM	55.99	307	P	21	50.50	-0.9
WDC	56.34	307	eP	21	51.40	-2.5
LIC	56.85	94	P	21	56.62	-1.3
Z	20s	0.11um			4.0Msz	
KIC	57.09	94	P	21	58.02	-1.6
FHC	57.45	307	eP	22	02.50	0.7
YKA	57.54	334	eP	22	00.50	-1.5
	0.9s	26.90nm			5.3mb	
LPF	57.84	44	eP	22	04.60	0.3
	0.7s	6.60nm			4.9mb	
GRR	58.02	44	eP	22	06.00	0.4
	0.7s	14.35nm			5.2mb	
EPF	58.16	50	eP	22	08.00	1.2
	0.9s	25.40nm			5.4mb	
MFF	58.23	46	eP	22	07.80	0.7
	0.9s	19.65nm			5.2mb	
FLN	58.33	43	eP	22	08.30	0.6
	0.8s	18.80nm			5.3mb	
Z	20s	0.22um			4.3Msz	
LDF	58.53	43	eP	22	09.80	0.6
	0.8s	12.10nm			5.1mb	
LFF	58.64	48	eP	22	10.50	0.5
	1.0s	28.00nm			5.3mb	
LPO	58.93	48	eP	22	12.70	0.7
	0.7s	28.65nm			5.5mb	
RJF	59.22	47	eP	22	14.30	0.2
	0.8s	20.15nm			5.3mb	
Z	22s	0.40um			4.5Msz	
LSF	59.33	46	eP	22	15.20	0.4
	0.8s	17.45nm			5.2mb	
CAF	59.57	48	eP	22	17.00	0.5
	0.9s	16.40nm			5.2mb	
TCF	59.81	46	eP	22	18.60	0.5
	0.7s	13.25nm			5.2mb	
MAF	60.04	46	eP	22	20.00	0.3
	0.7s	4.40nm			4.7mb	
BGF	60.27	46	eP	22	21.40	0.2
	0.8s	10.75nm			5.0mb	
PYM	60.31	47	P	22	34.69	13.1X
AGO	60.42	47	P	22	32.94	10.7X
LBL	60.43	48	P	22	35.72	13.4X
GRC	60.50	45	P	22	35.68	13.0X
AVF	60.64	46	eP	22	23.80	0.1
	0.8s	18.15nm			5.3mb	
PLDF	60.75	47	P	22	37.74	13.1X
SSF	60.77	46	eP	22	24.80	0.2
	0.8s	13.45nm			5.1mb	
SMF	60.96	46	eP	22	26.20	0.3
	1.0s	26.00nm			5.3mb	
LOR	61.03	45	eP	22	26.50	0.1
	0.8s	17.45nm			5.2mb	
Z	22s	0.22um			4.3Msz	
LBF	61.08	46	eP	22	26.70	-0.1
	0.8s	12.75nm			5.1mb	
LRG	62.58	50	eP	22	37.50	0.7
	0.7s	6.60nm			4.9mb	
LMR	62.68	50	eP	22	38.00	0.5
	0.9s	9.85nm			4.9mb	

ENN	62.70	42	eP	22	39.00	1.5
	0.8s	33.00nm			5.5mb	
			i	22	50.60	39kmX
MEM	62.74	42	eP	22	50.70	13.0X
HAU	62.76	45	eP	22	38.20	0.2
	0.8s	8.05nm			4.9mb	
Z	22s	0.22um			4.3Msz	
FRF	62.79	50	eP	22	38.80	0.6
	0.8s	12.10nm			5.1mb	
BNI	62.85	48	P	22	52.50	13.8X
LPL	62.90	47	eP	22	40.30	1.1
	0.7s	11.60nm			5.1mb	
LPG	62.91	47	eP	22	40.60	1.2
	0.7s	10.45nm			5.1mb	
BSF	63.05	45	eP	22	40.00	0.0
	0.8s	9.40nm			5.0mb	
SBF	63.36	49	eP	22	42.60	0.5
	0.8s	14.80nm			5.1mb	
WTS	63.37	40	eP	22	44.00	2.2
	0.8s	25.00nm			5.3mb	
			e	22	55.50	39kmX
CDF	63.41	44	eP	22	42.40	0.1
	0.8s	12.10nm			5.0mb	
FEL	63.87	45	eP	22	57.34	11.9X
BOB	64.81	48	P	23	04.50	13.0X
MBC	65.41	347	ePc	22	54.90	0.2
	0.9s	30.00nm			5.3mb	
SOTA	66.03	46	iP	23	02.80	3.5X
	0.6s	13.50nm			5.1mb	
			i	23	12.20	30kmX
GRF	66.04	43	ePc	23	12.70	13.5X
	1.4s	25.00nm				
Z	19s	0.10um			4.0Msz	
WATA	66.28	46	iP	23	13.20	12.2X
	0.8s	8.30nm				
			i(Sg)	26	40.80	
			i	26	48.50	
CTI	66.35	47	P	23	13.50	12.1X
NB2	66.68	31	P	23	03.00	-0.1
	1.2s	12.00nm			4.8mb	
INK	66.86	337	eP	23	03.00	-1.1
	0.7s	30.00nm			5.4mb	
FVI	67.12	46	P	23	19.00	12.9X
CLL	67.19	41	eP	23	05.00	-1.5
			i	23	19.20	50km
KHC	67.59	44	eP	23	22.20	13.1X
BRG	67.79	42	iPc	23	23.40	13.1X
	0.8s	20.00nm				
HFS	67.83	32	eP	23	09.50	-0.8
	1.1s	8.80nm			4.7mb	
VOY	67.91	47	ePKP	23	10.20	-1.0
			e	23	24.00	49km
PRU	68.19	43	Pc	23	26.20	13.4X
	1.5s	29.00nm				
LJU	68.35	47	e(PKP)	23	10.50	-3.4X
			e	23	26.50	58km
KSP	69.28	42	ePc	23	33.00	13.5X
SRO	70.81	45	iP	23	41.80	13.0X
			i	24	32.60	215kmX
KRA	71.66	42	eP	23	47.50	13.6X
			e	23	50.80	11kmX
FBA	72.33	333	iPd	23	36.90	-0.7
	1.0s	33.00nm			5.2mb	
OHR	73.41	51	eP	23	36.00	-8.5X
IMA	74.65	335	iPc	23	51.20	0.0
MLR	76.34	46	eP	24	02.50	1.2
BCAO	79.82	89	iPc	24	20.50	-0.3
	0.5s	6.00nm			4.8mb	
GKN	124.40	36	PKP	31	00.00	-11.4X
GBA	129.47	55	PKPc	31	40.90	19.7X
	1.0s	1.80nm				
NNT	145.05	32	ePKP	31	50.20	0.4
CNB	146.93	232	ePKP	31	52.70	0.2
CAN	147.20	231	ePKP	31	53.60	0.7
BWA	148.00	233	ePKP	31	57.00	2.8X
PMG	150.37	282	iPKPc	32	04.00	5.7X
	1.2s	65.63nm				
CMS	151.15	236	iPKPc	32	05.20	6.2X
WB5	164.18	259	ePKP	32	14.20	-0.7

S.D. = 1.0 on 140 of 171 obs.

• OCT 18, 1990 19h 30m 29.04± 1.05s
50.709 N ±16.9km 5.617 E ± 5.6km
DEPTH = 10.0km (geophysicist)
BELGIUM (541)
ML 1.9 (BNS).

ENN	0.20	73	iPgd	30	33.90	0.4
	0.5s	37.00nm				
			iSg	30	37.30	
MEM	0.27	112	iPd	30	35.30	0.6
KLL	0.45	98	iPd	30	37.80	-0.3
	0.1s	********nm				
			iS	30	44.20	
STB	0.79	98	iPd	30	43.60	-0.7
	0.1s	20.00nm				
			iS	30	53.90	
SNF	0.87	257	P	30	45.70	-0.1
DOU	0.90	227	iP	30	46.30	0.1
			iS	30	59.40	

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

• OCT 18, 1990 20h 15m 52.20± 3.47s
41.414 N ±18.4km 23.844 E ±18.3km
DEPTH = 5.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)
ML 2.4 (THE).

SRS	0.35	213	ePd	15	59.68	0.4
			eS	16	06.92	
SOH	0.70	212	ePc	16	05.80	-0.4
			eS	16	17.68	
KNT	0.76	251	ePd	16	07.32	-0.1
			eS	16	18.72	
VAY	0.96	265	ePn	16	11.00	0.0
OUR	1.08	174	iPc	16	13.02	0.0

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

& OCT 18, 1990 21h 14m 38.17s
59.514 N 152.748 W
DEPTH = 76.3km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.28	300	eP	14	49.69	-0.5
			eS	14	58.76	
AUE	0.35	244	eP	14	49.72	-0.8
AUH	0.39	247	eP	14	50.69	-0.2
AUI	0.39	243	eP	14	50.18	-0.6
XLV	0.53	96	iP	14	51.28	-0.7
			eS	15	01.96	
HOM	0.58	75	iP	14	52.25	-0.2
			eS	15	03.54	
CDD	0.75	219	iP	14	53.11	-1.2
			eS	15	05.27	
CNPM	0.77	88	iP	14	53.76	-0.8
			iS	15	06.40	
PDB	0.78	291	eP	14	53.80	-0.9
MCNL	0.88	249	eP	14	54.41	-1.4
NNL	0.91	54	iP	14	56.40	0.3
RED	0.91	359	iP	14	55.40	-0.8
RSO	0.95	360	iP	14	56.20	-0.7
			iS	15	10.52	
RDT	1.08	9	iP	14	57.38	-0.9
			eS	15	11.85	
NKA	1.45	31	eP	15	03.92	0.9
CKL	1.70	7	iP	15	05.84	-0.7
BGL	1.76	6	iP	15	06.78	-0.6
SEW	1.77	69	eP	15	05.46	-1.9
KDC	1.78	176	iPd	15	05.50	-1.9
CRP	1.78	9	iP	15	07.11	-0.6
SVW	2.15	319	iPd	15	11.30	-1.3
SUA	2.19	26	iP	15	12.67	-0.6
PMS	2.35	41	eP	15	14.26	-1.1
			eS	15	41.78	
SKT	2.55	13	eP	15	16.72	-1.4
PWA	2.57	32	eP	15	17.56	-0.8
KNIM	2.66	69	eP	15	16.91	-2.7
PLRM	2.75	39	eP	15	18.67	-2.1
PMR	2.75	39	ePd	15	18.50	-2.3
GHO	2.95	38	eP	15	21.78	-1.9
GLI	3.14	62	eP	15	22.83	-3.4
CUT	3.14	22	iP	15	24.98	-1.3
SML	3.17	41	eP	15	24.56	-2.1
VZW	3.45	61	eP	15	27.88	-2.8
SCM	3.54	47	eP	15	29.67	-2.3
VLZ	3.58	60	eP	15	29.77	-2.6
TTA	3.77	337	iPd	15	33.40	-1.8
HUR	3.79	22	eP	15	34.72	-0.6
KLU	3.92	57	eP	15	34.24	-3.0
TOA	4.14	48	eP	15	38.60	-1.7
RND	4.33	24	eP	15	41.19	-1.8
MCK	4.61	22	eP	15	45.74	-1.1
GLB	4.83	63	eP	15	46.57	-3.4

18d 21h

```
BALM     5.40   69 eP     15 55.15   -2.8
YAH      5.60   77 eP     15 58.50   -2.4
HDA      5.62   27 eP     15 58.34   -2.6
CCB      5.65   22 eP     15 58.34   -3.0
FBA      5.88   21 iPd    16 01.60   -3.0
GLM      6.03   22 eP     16 03.52   -3.3
IMA      6.59  357 iPc    16 12.60   -2.0
       49 obs. associated
-----------------------------------------
• OCT 18, 1990  21h 51m 21.43± 1.93s
   39.974 N ±14.2km   23.299 E ± 6.3km
   DEPTH =   5.0km  (geophysicist)
 AEGEAN SEA                          (365)
      ML 2.2 (THE).

LIT      0.63  282 ePc    51 34.06   -0.1
                 eS     51 43.62
OUR      0.64   55 ePd    51 34.10    0.0
                 iS     51 42.98
THE      0.71  339 iPc    51 35.54    0.0
                 eS     51 44.50
SOH      0.85    3 iPc    51 37.66   -0.7
                 eS     51 50.06
SRS      1.16   11 ePc    51 44.26    0.6
                 eS     52 00.38
GRG      1.20  325 ePc    51 44.50    0.3
                 eS     52 01.46
KNT      1.23  346 ePd    51 44.50   -0.2
                 eS     52 02.34
VAY      1.46  338 ePn    51 48.40    0.0
OHR      2.22  302 ePn    52 03.30    3.8X
     S.D. = 0.4  on   8 of   9 obs.
-----------------------------------------
   OCT 18, 1990  22h 21m 16.16± 0.88s
    3.431 S ± 3.2km  143.544 E ± 4.9km
   DEPTH =  46.3 ±  7.7 km
   5.4mb ( 18 obs.)  4.5Msz (  2 obs.)
 NEAR N COAST OF PAPUA NEW GUINEA(200)
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.: 14S, 25C
      Centroid Location:
      Origin Time          22:21:16.5 0.6
      Lat  3.16S 0.08 Lon 143.36E 0.08
      Dep  15.0 BDY Half-duration  1.5
      Moment Tensor;    Scale 10**16 Nm
        Mrr= 5.47 0.35  Mtt=-3.25 0.38
        Mff=-2.22 0.47  Mrt= 1.09 1.45
        Mrf= 1.49 1.14  Mtf= 3.64 0.37
       Principal Axes:
        T  Val=  6.12  Plg=70   Azm=309
        N        0.29       20       131
        P       -6.41        1        41
      Best Double Couple:Mo=6.3*10**16
       NP1:Strike=112 Dip=48 Slip=  63
       NP2:       329     49       116

PMG      6.94  149 eP     22 57.00   -0.9
       1.0s    280.00nm          6.0mb
CTA     16.77  171 iPc    25 13.90    4.5X
       1.0s     32.00nm          4.4mb
                 iS     28 26.00
GUA     16.91    5 eP     25 12.80    1.5
       0.8s     89.55nm          4.9mb
GUMO    16.96    4 eP     25 13.00    1.2
                 eS     28 18.00
QIS     17.45  192 eP     25 19.00    1.0
                 eS     28 15.00
                 e      30 45.00
WB5     18.64  208 eP     25 31.60   -1.0
                 eS     28 51.20
KUPT    20.88  250 eP     25 46.50  -10.5X
       0.5s    384.20nm
ASPA    22.17  204 eP     26 10.10    0.2
       0.4s     29.80nm          5.1mb
     Z  23s      0.90um          4.1MszX
                 iS     30 14.80
OLP     23.03  178 eP     26 20.00    1.7
RMQ     23.47  168 eP     26 23.00    0.5
BRS     25.41  161 iPd    26 41.50    0.3
                 i      26 49.50
CMS     27.99  176 eP     27 05.00    0.3
STK     28.36  183 iPd    27 02.80   -5.3X
       0.8s     10.00nm          4.5mb
KKM     28.87  289 eP     27 08.00   -5.0X
DZM     28.93  132 iPc    27 12.00   -1.5
BWA     31.17  172 eP     27 33.30    0.2
CAN     32.13  172 eP     27 42.20    0.7
BFD     33.59  181 eP     27 54.80    0.6
MRWA    36.63  223 eP     28 19.00   -1.1
SSE     40.41  330 Pc     28 52.00    0.4
       1.2s     64.00nm          5.3mb
NJ2     42.37  328 Pc     29 08.00    0.3
WHN     43.80  323 Pc     29 20.00    0.7
       1.0s     20.00nm          4.8mb
SNG     44.12  284 eP     29 21.80   -0.4
NNT     46.34  291 eP     29 39.40   -0.4
THZ     46.34  150 P      29 39.30   -0.3
GYA     46.41  312 P      29 41.40    1.0
TIA     46.53  330 eP     29 40.20   -0.8
TCW     46.66  148 Pc     29 42.00    0.0
LTZ     46.79  151 P      29 43.20    0.1
MNG     46.89  147 Pc     29 43.80   -0.1
       0.9s     31.00nm          5.3mb
MRW     46.90  148 P      29 43.50   -0.4
NST     46.95  295 eP     29 44.50   -0.2
WDW     47.08  148 P      29 44.60   -0.7
MTW     47.28  147 P      29 46.60   -0.3
MOW     47.32  147 P      29 46.70   -0.6
BLW     47.41  147 P      29 47.50   -0.4
KMI     48.71  308 Pc     29 59.00    0.4
       1.5s    120.00nm          5.7mb
CHG     49.14  298 eP     30 01.20   -0.5
MDJ     49.44  347 eP     30 01.50   -2.1
XAN     49.53  322 Pc     30 03.60   -0.9
CN2     49.76  343 Pc     30 04.50   -1.5
       5.0s    300.00nm          5.6mb X
BJI     50.02  333 eP     30 07.00   -1.1
       1.5s     78.00nm          5.5mb
CD2     51.03  315 P      30 15.80   -0.2
       1.1s     48.00nm          5.4mb
HHC     52.87  330 eP     30 28.80   -1.0
BTO     53.48  328 eP     30 34.00   -0.2
LZH     54.04  320 iPc    30 38.50    0.0
       8.0s    290.00nm          5.4mb X
                 pP     30 48.00   31kmX
GTA     58.58  321 iPc    31 11.00    0.1
       1.2s     60.00nm          5.6mb
LSA     59.95  307 iPc    31 21.60    0.6
GUN     63.59  303 P      31 45.20   -0.1
       1.0s    120.00nm          5.9mb
PKI     63.87  303 P      31 46.80   -0.3
       1.1s     55.00nm          5.5mb
KKN     64.05  303 P      31 47.80   -0.3
DMN     64.13  303 P      31 48.90    0.2
GKN     64.65  303 P      31 51.80   -0.2
HYB     67.34  290 ePc    32 08.00   -1.2
       1.0s     40.00nm          5.4mb
GBA     67.71  286 P      32 11.50    0.0
WMO     68.62  320 iPc    32 16.50   -0.2
NDI     71.11  302 iPc    32 31.00   -1.2
POO     71.95  291 iPc    32 34.00   -3.4X
KSH     75.09  312 P      32 57.00    1.6
SVW     79.38   26 eP     33 20.00    1.3
IMA     82.41   21 iPc    33 35.30    0.6
PMR     82.43   26 iPc    33 34.40   -0.2
MAW     83.29  202 iPc    33 40.00    1.0
       0.9s     48.00nm          5.5mb
FBA     84.19   24 iPc    33 42.90   -0.7
SPA     86.59  180 iPc    33 56.10    0.3
       0.9s     44.55nm          5.7mb
                 i      34 25.20
MAIO    87.22  306 eP     34 00.00    0.7
INK     90.55   22 eP     34 13.50   -0.7
MBC     95.00   14 eP     34 34.50   -0.2
       1.2s      7.00nm          5.0mb
BRG    116.69  327 iPKP   39 57.80    0.8
       1.1s     14.00nm
CLL    116.97  328 iPKPd  39 57.90    0.4
       0.9s      9.00nm
FEL    121.57  326 ePKP   40 06.29   -0.3
BSF    122.27  327 ePKP   40 07.80   -0.1
       1.1s     22.00nm
HAU    122.40  327 ePKP   40 08.20    0.2
       1.0s     14.00nm
LPG    123.64  325 ePKP   40 11.10    0.2
       0.9s      5.75nm
LPL    123.64  325 ePKP   40 11.10    0.3
       1.0s      7.00nm
PGF    123.88  321 ePKP   40 11.10   -0.1
       0.9s     16.40nm
SBF    124.15  323 ePKP   40 11.40   -0.2
       1.0s     16.00nm
LOR    124.19  328 ePKP   40 11.80    0.3
       1.2s     11.90nm
LBF    124.30  327 ePKP   40 11.90    0.1
       1.0s      8.00nm
SSF    124.50  328 ePKP   40 12.40    0.3
       1.0s     10.00nm
AVF    124.76  328 ePKP   40 12.50   -0.1
       0.9s      4.90nm
FRF    124.80  323 ePKP   40 12.80    0.0
       0.9s     14.75nm
LMR    125.01  323 ePKP   40 13.40    0.2
LRG    125.03  323 ePKP   40 13.50    0.3
       0.9s     14.75nm
BCAO   125.14  273 iPKPd  40 14.60    0.3
       0.8s      9.00nm
                 id     47 48.00
BGF    125.17  328 ePKP   40 13.80    0.4
       1.0s     11.00nm
LDF    125.33  331 ePKP   40 13.80    0.1
       1.0s      8.00nm
FLN    125.39  332 ePKP   40 13.70    0.0
       1.0s     16.00nm
     Z  21s      0.13um          4.6Msz
MAF    125.54  328 ePKP   40 14.60    0.4
       1.0s      7.00nm
TCF    125.68  328 ePKP   40 14.80    0.3
       1.1s     18.30nm
GRR    125.83  331 ePKP   40 14.80    0.1
       1.1s     17.10nm
LSF    126.07  328 ePKP   40 15.20    0.0
       1.2s     17.85nm
LPF    126.16  331 ePKP   40 15.40    0.1
       1.0s     16.00nm
CAF    126.63  327 ePKP   40 17.10    0.7
       1.1s     12.20nm
RJF    126.69  327 ePKP   40 16.80    0.4
     Z  21s      0.08um          4.3Msz
MFF    126.70  329 ePKP   40 16.40    0.0
       1.1s     12.20nm
LPO    127.27  327 ePKP   40 18.30    0.8
       1.0s     16.00nm
LFF    127.34  327 ePKP   40 18.20    0.5
       1.2s     20.85nm
EPF    128.80  326 ePKP   40 21.00    0.4
       1.2s      8.95nm
CNCB   142.93  124 PKP    40 45.80   -2.4
LPB    142.97  123 PKP    40 45.00   -3.1X
ZOBO   143.08  123 PKP    40 45.00   -3.5X
CCH    144.14  126 PKP    40 50.00    0.1
TOV    146.31   78 ePKP   40 54.50    1.1
CEOS   147.84   79 ePKP   40 54.50   -1.4
KIC    148.27  277 PKPc   41 00.06    3.6X
       1.3s     69.00nm
TIC    148.53  277 PKPc   41 00.48    3.6X
       1.1s     36.50nm
LIC    148.56  276 PKPc   41 00.64    3.7X
       1.1s     59.50nm
GUAC   148.69   76 ePKP   41 01.50    4.2X
SIV    148.93  129 iPKPc  41 01.80    4.4X
LLAV   149.09   75 ePKP   41 02.00    4.2X
OLLA   149.18   76 ePKP   41 02.00    4.0X
PPD    150.82  151 ePKP   41 04.90    4.8X
                 e      41 12.60
VAO    151.80  159 ePKP   41 09.60    7.9X
BMA    152.97  164 (PKP)  41 23.00   19.7X
     S.D. = 0.7   on  98 of 115 obs.
-----------------------------------------
   OCT 18, 1990  23h 22m 22.28± 1.57s
    1.897 S ± 7.4km  100.102 E ± 6.6km
   DEPTH =  68.0 ± 12.7 km
   5.4mb ( 23 obs.)
 SOUTHERN SUMATERA                   (274)

KGM      5.04   40 ePc    23 39.20    2.0
       0.6s    332.90nm          5.7mb
                 e      24 46.40
                 e      25 30.80
KLM      5.20   17 ePd    23 40.00    0.6
IPM      6.50    8 ePc    23 59.10    1.6
       0.4s     95.30nm          5.7mb
                 e      24 38.50
SNG      9.03    3 eP     24 29.70   -2.6
       1.7s    792.31nm          6.3mb
NNT     14.40  359 eP     25 46.00    1.9
KKM     17.92   64 ePc    26 28.30   -0.3
       1.0s     58.20nm          4.7mb
BDT     19.05  357 eP     26 40.80   -1.2
       0.8s     36.30nm          4.7mb
```

```
LOE     19.25   5 eP      26 41.00  -3.2X
CHG     20.61 357 ePc     26 56.40  -2.0
        1.0s     22.25nm           4.4mb
                  eS      30 40.40
QIZ     22.89  24 P       27 22.00   0.9
        0.7s     50.00nm           5.1mb
     N  15s      3.40um
     E  18s      3.20um
                  eS      31 32.50
KOD     25.55 299 eP      27 47.30   0.3
KMI     26.98   5 eP      28 00.00   0.1
     Z  20s      3.00um           4.9Msz
GBA     27.25 305 Pc      28 01.10  -1.0
HYB     28.63 313 eP      28 26.50  11.8X
GYA     28.89  12 P       28 16.60  -0.4
     Z  16s      1.80um          4.8MszX
     N  15s      3.20um
                  sS      33 22.00
PKI     32.53 335 P       28 49.00  -0.4
LSA     32.56 345 iPc     28 50.00   0.2
                  S       34 01.00
GUN     32.64 336 P       28 50.40   0.1
DMN     32.69 335 P       28 50.40  -0.3
KKN     32.78 335 P       28 51.00  -0.4
CD2     32.81   6 eP      28 49.80  -1.6
     Z  20s      3.24um           5.0Msz
     E  13s      1.17um
POO     32.85 309 iPd     28 49.00  -2.9
GKN     33.24 335 P       28 55.00  -0.3
WHN     35.00  22 eP      29 10.50   0.3
XAN     36.70  12 iPc     29 23.60  -1.0
NDI     37.50 326 iPc     29 30.00  -1.3
                  eS      35 42.00
LZH     37.95   5 eP      29 34.50  -0.7
        2.0s     79.00nm           5.3mb
     Z  11s      2.60um          5.3MszX
     N  15s      1.30um
                  pP      29 43.50  30kmX
                  sP      29 54.50
WB5     37.96 121 iPc     29 34.10  -1.2
                  eS      35 21.20
NJ2     38.16  26 Pc      29 37.00   0.2
     Z  14s      2.40um          5.2MszX
     N  12s      0.70um
     E  13s      0.80um
SSE     38.46  30 Pd      29 40.50   1.2
        1.5s     99.00nm           5.5mb
     Z  20s      2.30um           5.0Msz
     N  16s      1.60um
     E  16s      1.40um
                  pP      29 50.00  32kmX
                  sS      35 51.00
ASPA    39.23 126 iPc     29 44.80  -1.1
        0.5s     41.90nm           5.6mb
     Z  20s      1.50um           4.8Msz
                  eS      35 37.00
TIY     41.03  15 eP      30 01.00   0.4
     Z  18s      1.10um           4.8Msz
     N  12s      0.80um
TIA     41.10  21 eP      30 00.50  -0.6
GTA     41.11 360 iPc     30 01.40   0.2
        1.0s    100.00nm           5.6mb
     Z  16s      1.50um          5.0MszX
     E  13s      0.60um
                  sP      30 19.20
                  PcP     32 00.00
QIS     42.77 119 iPc     30 14.00  -1.0
                  e       34 45.00
BTO     43.25  11 P       30 19.00   0.3
     N  17s      3.80um
     E  17s      1.10um
                  eS      36 49.50
HHC     43.81  13 eP      30 24.30   1.0
BJI     44.25  18 eP      30 27.50   0.8
        1.5s    160.00nm           5.6mb
     Z  16s      1.74um          5.1MszX
     N  16s      1.79um
WMQ     46.85 348 iPc     30 48.50   1.1
        1.5s    300.00nm           6.0mb
     Z  20s      0.40um           4.4Msz
     N  10s      0.30um
                  pP      30 58.50  33kmX
                  sP      31 01.50
                  PcP     32 21.00
                  PcS     36 11.50
                  S       37 36.50
                  sSKS    37 58.40
```

```
                  ScS     40 38.50
GUMO    46.97  69 eP      30 46.50  -2.2
SNY     48.45  23 eP      30 58.40  -1.3
     Z  20s      0.90um           4.8Msz
     N  14s      0.70um
     E  14s      1.50um
ADE     48.68 137 eP      31 06.00   4.2X
        1.0s     60.00nm           5.6mb
CN2     50.85  24 iPc     31 18.00  -0.1
        5.0s    300.00nm         5.6mb X
     Z  18s      2.10um           5.2Msz
     N  17s      1.60um
     E  17s      0.60um
                  epP     31 27.00  30kmX
MAT     52.13  39 iPc     31 27.40  -0.6
        1.2s     35.94nm           5.3mb
     Z  19s      0.69um           4.7Msz
                  eS      39 16.00
BFD     52.49 137 eP      31 31.00   0.3
MDJ     53.25  26 Pc      31 36.00  -0.1
MAIO    53.59 319 eP      31 37.00  -1.8
                  i       31 51.00
BWA     55.39 131 eP      31 52.50   0.5
CAN     56.20 132 eP      31 58.00   0.1
BRS     56.37 122 iP      31 59.00  -0.2
                  i       32 13.00
TAB     63.51 315 eP      32 44.00  -4.0X
DZM     67.40 113 iPc     33 13.90   0.7
VRI     79.85 317 ePc     34 25.00   0.0
MLR     80.30 317 ePc     34 27.50  -0.1
CMP     80.87 316 ePc     34 30.00  -0.5
BCAO    81.74 275 iPc     34 35.70   0.0
        0.6s      3.00nm           4.4mb
VAY     81.90 312 eP      34 35.00  -0.9
SKO     82.84 313 iP      34 39.10  -1.7
                  i       34 54.70
OHR     83.19 312 eP      34 41.20  -1.4
SUF     84.37 334 eP      34 49.00   1.0
NUR     84.51 331 eP      34 50.00   1.2
SPC     84.80 320 eP      34 50.30  -0.4
KRA     85.13 320 eP      34 52.50   0.4
        1.4s     67.00nm           5.5mb
                  e       35 07.40
SOD     85.43 338 iP      34 54.30   1.0
SRO     85.88 318 iP      34 56.30   0.4
TDS     86.39 310 P       35 01.00   2.4
CSI     86.44 310 P       35 01.50   2.6X
CZI     86.51 309 P       35 00.30   1.1
MGR     87.04 310 P       35 02.00   0.3
VKA     87.26 318 e(P)    35 03.00   0.4
                  e       35 14.00
SGO     87.26 311 P       35 04.50   1.8
KSP     87.54 321 ePc     35 05.00   1.1
LJU     88.27 316 eP      35 08.50   1.0
SDI     88.47 312 P       35 08.00  -0.7
PRU     88.58 320 iPc     35 09.90   1.0
VOY     88.71 316 eP      35 09.80   0.0
AZI     88.77 312 P       35 10.50   0.5
BRG     89.03 321 iP      35 11.80   0.8
        1.4s     29.00nm           5.3mb
                  i       35 22.20
                  i       35 26.50
                  i       35 49.80
                  i       36 08.80
KHC     89.14 319 P       35 13.70   2.0
ARV     89.23 313 P       35 13.00   0.8
MNS     89.36 312 P       35 12.50  -0.3
ASS     89.41 313 P       35 12.00  -1.1
FVI     89.52 316 P       35 13.00  -0.4
CLL     89.65 321 iP      35 15.00   1.1
        2.1s     47.00nm           5.4mb
                  e       35 25.00
HFS     89.83 330 eP      35 14.90   0.3
        0.5s      3.30nm           4.8mb
     Z  19s      0.22um           4.6Msz
                  LR      13 38.00
PGD     90.13 314 P       35 15.50  -1.1
CTI     90.27 316 Pc      35 17.50   0.4
WATA    90.38 317 eP      35 17.00  -0.6
MOX     90.49 320 eP      35 19.00   1.1
        1.6s     31.00nm           5.4mb
                  e       35 29.00
                  e       35 33.00
SOTA    90.62 317 iPc     35 18.70   0.0
        0.6s      6.00nm           5.1mb
                  i       35 29.60
                  i       35 33.80
```

```
GRF     90.71 320 e(PKP)35 20.20   1.3
     Z  21s      0.10um           4.2Msz
                  ec      35 34.40
                  e       35 47.20
SAL     91.04 315 P       35 21.50   1.0
NB2     91.10 331 P       35 20.80   0.3
        1.4s     17.00nm           5.2mb
MDI     91.62 316 P       35 23.00  -0.1
BNI     93.76 315 P       35 31.00  -2.2
ANMO   138.87  34 (PKP)   41 39.50  -3.9X
ALQ    138.87  34 e(PKP)41 34.00    -9.4X
MDZ    143.87 196 ePKP    42 03.10  11.0X
UYO    145.13  21 iPKPd   41 53.80  -0.3
SIV    154.27 226 PKP     42 17.20   8.6X
                  i       42 31.80
CNCB   158.00 212 ePKP    42 26.00  11.9X
ZOBO   158.53 212 PKP     42 16.00   1.3
     Z  20s      0.31um           5.1Msz
                  LR      38 06.00
        S.D. = 1.1  on  92 of 102 obs.
-----------------------------------------
? OCT 18, 1990  23h 25m 48.63± 2.80s
  26.994 N ±23.2km   53.202 E ±34.3km
  DEPTH =  33.0km  (normal)
  4.2mb (  4 obs.)  4.0Msz (  1 abs.)
 SOUTHERN IRAN                      (353)

DHR      2.83 257 ePc     26 44.30  11.9X
RYD      6.36 251 ePc     27 23.50   1.0
OASM     8.71 266 eP      27 54.70  -0.6
AFIF     9.50 255 ePc     28 09.90   3.6X
KMSA    10.35 232 ePc     28 16.70  -1.2
PRNI    16.32 286 eP      29 41.50   4.5X
WATA    38.32 313 e(P)    33 08.00   0.0
        0.9s      3.90nm           4.2mb
SOTA    38.52 313 iPc     33 10.40   0.7
        0.5s      3.60nm           4.4mb
HFS     42.66 332 eP      33 41.90  -1.6
        0.5s      2.80nm           4.2mb
NB2     44.18 332 P       33 56.30   0.4
        0.9s      3.00nm           4.1mb
LIC     58.96 261 P       35 48.90   1.4
     Z  20s      0.11um           4.0Msz
        S.D. = 1.3  on   8 of  11 obs.
-----------------------------------------
* OCT 18, 1990  23h 29m 16.17± 1.32s
  40.144 N ±14.9km   33.790 E ±10.0km
  DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      MD 4.2 (ISK).

BBTK     0.85 249 iPc     29 32.00  -0.6
KAŞ      1.23 359 ePg     29 38.50  -0.5
                  iSg     29 49.50
KVT      1.96  61 ePn     29 50.00   0.2
GPA      2.67 274 ePn     30 00.00   0.0
HRT      3.22 283 ePn     30 09.10   1.3
IZI      3.31 275 ePn     30 08.70  -0.4
BCK      3.66 224 ePn     30 05.00  -9.2X
        S.D. = 0.9  on   6 of   7 obs.
-----------------------------------------
  OCT 18, 1990  23h 58m 32.01± 0.52s
  38.314 N ± 6.1km   17.387 E ± 4.1km
  DEPTH =  27.7 ±  4.4 km
 SOUTHERN ITALY                     (390)

CZI      1.33 313 P       58 55.50   0.7
ROI      1.41 333 P       58 56.40   0.4
ATN      1.52 265 P       58 57.60  -0.1
                  eSg     59 14.50
TDS      1.57 329 P       58 58.50   0.1
                  eSg     59 18.00
CSI      1.69 330 P       59 00.30   0.2
ORI      1.89 338 P       59 02.90  -0.1
                  eSn     59 25.40
MMN      1.91 326 P       59 03.60   0.3
                  eSg     59 28.40
LCI      2.06  12 P       59 05.50   0.0
                  eSn     59 32.50
MEU      2.29 239 Pd      59 08.50  -0.3
                  eSn     59 32.90
MGR      2.31 323 P       59 08.70  -0.3
                  eSn     59 33.20
KEK      2.34  53 iPd     59 08.50  -0.9
                  eS      59 34.00
VLS      2.53  92 eP      59 11.00  -1.1
                  eS      59 40.00
```

18d 23h

SGO	2.76	325	P	59	14.50	-0.8
EVR	3.52	79	eP	59	27.50	1.3
KZN	3.94	58	eP	59	32.00	-0.2
VLI	4.69	108	eP	59	43.50	0.7

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

& OCT 19, 1990 00h 13m 06.56s
59.792 N 153.270 W
DEPTH = 128.4km
SOUTHERN ALASKA (2)
<AGS-P>.

PMS	2.34	50	eP	13	43.68	-1.6
			eS	14	11.24	
SKT	2.36	20	eP	13	43.71	-1.7
KNIM	2.83	76	eP	13	49.21	-2.3
			eS	14	22.07	
MTU	2.84	84	iP	13	50.45	-1.2
			eS	14	23.76	
GHO	2.91	45	eP	13	50.43	-2.3
			eS	14	24.61	
CUT	3.00	28	eP	13	52.23	-1.5
			eS	14	26.98	
GLI	3.26	68	eP	13	55.43	-1.7
VZW	3.56	66	eP	13	59.59	-1.7
VLZ	3.69	66	iP	14	01.80	-1.1
KLU	4.00	62	eP	14	04.43	-2.7
GLB	4.94	66	eP	14	18.26	-1.6

11 obs. associated

• OCT 19, 1990 00h 27m 52.45± 2.10s
40.087 N ±20.9km 24.786 E ± 8.8km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 2.9 (THE).

OUR	0.66	292	ePc	28	04.88	-0.8
			eS	28	16.40	
ALN	1.26	49	iPd	28	15.44	-0.3
			eS	28	33.44	
SOH	1.32	304	ePd	28	16.00	-0.8
			iS	28	36.12	
SRS	1.37	319	ePc	28	18.28	0.7
			eS	28	36.92	
LIT	1.76	271	ePd	28	23.80	0.6
KNT	1.79	307	ePd	28	23.56	-0.1
			eS	28	49.68	
BZS	6.00	338	ePc	29	24.00	0.7

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

OCT 19, 1990 00h 32m 06.93± 0.48s
39.568 N ± 4.2km 107.559 W ± 4.5km
DEPTH = 5.0km (geophysicist)
COLORADO (479)
ML 2.3 (NEIS). Felt (III) at New Castle.

RW2	1.26	186	iPc	32	30.83	-0.2
			S	32	48.08	
PV08	1.30	221	eP	32	30.78	-1.0
RW1	1.32	188	iPc	32	31.70	-0.3
			S	32	49.18	
RW3	1.32	184	P	32	31.51	-0.5
			S	32	49.43	
RW6	1.39	192	eP	32	33.00	-0.4
RW4	1.41	182	eP	32	33.53	-0.1
			S	32	52.60	
PV07	1.41	217	iP	32	32.64	-0.9
PV06	1.42	210	iPc	32	33.09	-0.6
RW5	1.50	188	eP	32	35.20	0.3
PV04	1.57	222	P	32	35.87	0.1
PV09	1.63	229	P	32	36.88	0.3
PV01	1.63	209	eP	32	37.10	0.4
PV02	1.64	214	ePc	32	37.37	0.6
PV03	1.65	218	iPc	32	37.26	0.3
PV10	1.66	225	iPc	32	38.54	1.5
GOL	1.69	85	ePc	32	37.40	-0.2
			e(S)	32	38.00	
GLD	1.81	83	e(P)	32	39.50	0.3
PV05	1.91	219	ePc	32	39.68	-1.0
DAU	2.96	288	eP	32	56.00	0.2
BW06	3.54	335	eP	33	03.00	-0.9
DUG	4.09	280	e(P)	33	12.50	0.9
ANMO	4.70	169	P	33	17.50	-2.8X
ALQ	4.70	169	e(P)	33	21.50	1.1

S.D. = 0.7 on 22 of 23 obs.

& OCT 19, 1990 00h 39m 21.84s
59.670 N 152.224 W
DEPTH = 70.2km
SOUTHERN ALASKA (2)
<AGS-P>.

HOM	0.29	92	eP	39	33.00	-0.1
			eS	39	41.18	
XLV	0.33	130	eP	39	32.61	-0.8
			eS	39	41.51	
OPT	0.51	268	iP	39	34.48	-0.5
			eS	39	44.81	
CNPM	0.52	106	iP	39	34.46	-0.6
			eS	39	44.40	
NNL	0.60	51	eP	39	35.93	0.1
AUI	0.70	242	eP	39	36.10	-0.9
RED	0.80	340	iP	39	37.48	-0.8
RSO	0.84	342	eP	39	38.07	-0.7
RDT	0.91	354	eP	39	38.72	-0.9
PDB	1.00	278	eP	39	39.45	-1.2
CDD	1.04	225	eP	39	40.10	-1.1
MCNL	1.18	247	eP	39	41.64	-1.4
SEW	1.47	72	eP	39	45.03	-1.7
BGL	1.60	357	eP	39	47.47	-1.2
CRP	1.60	1	eP	39	48.31	-0.5
KNIM	2.35	71	eP	39	56.36	-2.6
VZW	3.14	61	eP	40	07.13	-2.9
VLZ	3.27	61	eP	40	08.67	-3.1

18 obs. associated

OCT 19, 1990 00h 43m 06.84± 0.57s
39.565 N ± 5.4km 107.580 W ± 4.5km
DEPTH = 5.0km (geophysicist)
COLORADO (479)
ML 2.1 (NEIS). Felt at New Castle.

RW2	1.26	185	iPc	43	30.83	-0.1
			S	43	48.19	
PV08	1.29	220	P	43	30.66	-0.8
RW1	1.31	187	iPc	43	31.70	-0.1
			S	43	49.51	
RW3	1.32	184	eP	43	31.75	-0.1
			S	43	49.27	
RW6	1.39	192	eP	43	32.92	-0.3
			S	43	52.10	
PV07	1.40	217	eP	43	32.65	-0.6
			S	43	51.91	
RW4	1.41	181	P	43	33.46	0.0
			S	43	53.06	
PV06	1.41	209	iPc	43	33.09	-0.3
			S	43	51.77	
RW5	1.50	188	P	43	35.28	0.6
			S	43	55.35	
PV04	1.56	222	P	43	35.82	0.4
PV09	1.61	229	P	43	36.56	0.2
PV01	1.62	209	eP	43	37.05	0.6
PV02	1.63	214	iPc	43	37.35	0.9
PV03	1.64	217	iPc	43	37.22	0.6
PV10	1.64	224	iPc	43	38.44	1.7X
GOL	1.71	85	eP	43	37.50	-0.2
GLD	1.83	83	e(P)	43	39.50	0.1
PV05	1.90	219	iPc	43	39.66	-0.8
DAU	2.95	288	e(P)	43	55.50	0.0
BW06	3.54	336	eP	44	00.50	-3.3X

S.D. = 0.5 on 18 of 20 obs.

? OCT 19, 1990 01h 45m 47.61± 0.99s
38.968 N ± 7.9km 27.152 E ±17.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM	0.58	171	ePg	45	59.30	0.0
EZN	1.07	323	ePg	46	07.90	0.2
			eSg	46	21.40	
EDC	1.48	22	ePn	46	14.80	0.5
KGT	1.49	4	iPn	46	13.70	-0.6

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

OCT 19, 1990 01h 49m 31.22± 0.27s
36.564 N ± 5.1km 139.264 E ± 5.2km
DEPTH = 117.4km (3 depth phases)
4.4mb (5 obs.)
HONSHU, JAPAN (227)

CHJJ	0.56	203	iPd	49	49.80	0.3
			S	50	03.20	
NIIJ	0.71	343	iP+	49	50.60	0.0
			S	50	05.70	
KAKJ	0.82	116	iPd	49	51.20	-0.3
			S	50	05.50	
MAT	0.85	269	iPd	49	51.90	0.0
			iS	50	07.50	
MTMJ	1.17	271	iPd	49	55.50	0.2
IIDJ	1.54	226	iPd	50	00.10	0.7
			S	50	21.90	
YAMJ	1.72	21	eP	50	02.10	0.6
			eS	50	26.20	
TSRJ	2.85	250	P	50	17.00	0.9
			S	50	53.20	
OFUJ	3.15	36	P	50	20.50	0.4
			eS	50	57.40	
WKYJ	3.80	233	P	50	28.60	-0.4
YONJ	4.91	255	iPd	50	44.40	0.4
TKSJ	4.98	240	P	50	45.50	0.5
MRRJ	6.02	13	eP	50	59.00	-0.1
HOOJ	6.59	27	P	51	05.80	-1.2
SHNJ	7.09	252	P	51	24.00	10.1X
KUSJ	7.75	31	eP	51	19.30	-3.5X
KUMJ	8.03	242	P	51	29.50	2.8X
KAGJ	8.79	235	P	51	37.70	0.9
SSE	15.98	255	eP	53	14.50	4.1X
BJI	18.44	288	eP	53	36.50	-3.7X
GUN	45.48	275	P	57	40.80	0.0
PKI	46.00	275	P	57	44.40	-0.5
KKN	46.01	275	P	57	44.60	-0.2
DMN	46.23	275	P	57	46.40	-0.2
GKN	46.44	276	P	57	47.60	-0.5
MTN	49.74	190	iPc	58	12.70	-0.7
	0.4s		111.00nm			6.1mb X
FBA	50.42	32	P	58	19.10	1.0
			e	58	48.20	125km
INK	55.59	27	eP	58	56.00	-0.2
WB5	56.33	186	eP	59	00.90	-1.1
MBC	57.46	16	eP	59	09.50	0.0
	1.0s		6.00nm			4.5mb
			pP	59	37.00	114km
GBA	59.46	264	Pc	59	23.40	-0.7
	0.8s		4.30nm			4.6mb
ASPA	60.12	186	eP	59	27.90	-0.4
	0.5s		21.70nm			5.5mb
MBL	60.28	201	iPd	59	28.40	-1.0
NANU	62.93	205	eP	59	46.70	-0.5
PNT	69.70	43	eP	00	30.00	0.1
HFS	73.79	335	eP	00	52.00	-2.0
	0.8s		2.00nm			4.0mb
NB2	73.94	336	P	00	53.60	-1.3
	0.7s		2.10nm			4.0mb
LRM	75.68	43	eP	01	06.20	0.8
TNP	77.54	52	P	01	17.10	1.3
			pP	01	46.30	114km
CLL	80.63	329	e(P)	01	32.00	0.1
LPB	148.60	58	ePKP	09	04.00	1.1
CNCB	148.88	58	PKP	09	08.70	5.2X
CCH	150.52	56	ePKP	09	10.00	4.4X
SIV	152.68	47	ePKP	09	10.00	1.6

S.D. = 0.8 on 37 of 44 obs.

% OCT 19, 1990 01h 57m 16.44± 0.84s
39.144 N ± 7.5km 20.563 E ± 9.2km
DEPTH = 5.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 2.8 (ATH).

KEK	0.82	314	ePg	57	32.80	0.0
VLS	0.97	179	ePb	57	34.80	-0.5
EVR	1.00	103	ePb	57	35.50	-0.4
KZN	1.49	38	ePb	57	44.00	0.1
ITM	2.24	151	ePb	57	55.50	0.8

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

& OCT 19, 1990 02h 08m 52.50s
37.965 N 122.355 W
DEPTH = 2.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.7 (BRK).
Mo=5.1•10••13 Nm (BRK). Felt (V) at San Pablo. Also felt at Richmond.

ZSP	0.08	104	iPc	08	54.30	0.1
BRK	0.12	141	iPd	08	54.80	-0.1
			iS	08	57.10	
BKS	0.13	133	iPd	08	55.00	-0.1

			iS	08	57.50	
PCC	0.46	183	iP	09	01.50	-0.3
NWRM	0.65	320	eP	09	04.30	-1.1
MHC	0.84	137	ePd	09	08.40	-0.9
			iS	09	21.00	
ARN	0.90	133	eP	09	09.00	-1.5
GCC	0.98	163	eP	09	10.00	-1.8
SAO	1.40	149	iPc	09	15.90	-3.1
CMB	1.56	87	ePd	09	19.00	-2.3
ORV	1.72	23	e(P)	09	20.20	-3.5
LLA	1.75	140	ePc	09	21.70	-2.5
PRS	1.81	154	ePc	09	22.40	-2.5
BCH	3.32	146	eP	09	43.80	-2.9

14 obs. associated

---

* OCT 19, 1990 02h 26m 52.84± 0.97s
35.083 N ±11.5km 26.257 E ± 6.8km
DEPTH = 33.0km (normal)
CRETE (370)
MD 3.8 (ATH).

NPS	0.56	289	iPgc	27	05.10	0.8
KAP	0.88	58	iPbc	27	07.80	-1.1
VAM	1.71	281	ePn	27	25.00	4.2X
			eSn	27	47.20	
ARG	1.90	53	ePn	27	22.50	-1.0
			eSn	27	47.20	
APE	2.07	344	ePn	27	26.50	0.6
SMG	2.66	10	ePb	27	36.50	2.2
KSL	2.90	68	ePn	27	39.50	1.8
CIN	2.91	30	eP	27	37.00	-0.9
VLI	3.15	302	ePn	27	40.00	-1.3
IZM	3.41	13	ePn	27	48.00	3.0X
ITM	4.08	302	ePn	27	55.00	0.5
BCK	4.23	55	ePn	27	56.50	-0.1
EVR	5.23	318	ePn	28	09.50	-1.3
JVI	8.22	110	eP	28	51.00	-1.7
MBH	9.01	124	eP	29	05.00	1.4

S.D. = 1.4 on 13 of 15 obs.

OCT 19, 1990 02h 39m 05.79± 1.25s
7.139 S ± 5.7km 129.318 E ± 6.2km
DEPTH = 98.2 ± 12.9 km
5.1mb (11 obs.)
BANDA SEA (280)

MTN	5.95	163	eP	40	33.10	0.2
KUPT	6.39	242	eP	40	32.00	-7.1X
			eS	41	40.50	
KNA	8.57	184	iPc	41	07.80	-1.2
			eS	42	36.00	
JAY	12.24	69	ePd	41	59.00	1.0
WB5	13.58	159	iPd	42	11.70	-3.9X
			eS	44	34.00	
TRT	16.55	267	iPd	42	55.10	1.7
QIS	16.65	144	eP	42	53.00	-1.6
			iS	45	45.20	
MBL	16.69	212	eP	42	55.20	0.2
	0.3s	11.00nm			4.6mb	
			eS	45	34.00	
ASPA	17.01	165	eP	42	57.10	-2.0
	0.8s	164.60nm			5.3mb	
			i	45	53.70	
PMG	17.79	99	eP	43	09.50	0.8
	1.0s	104.00nm			5.0mb	
KKM	18.51	315	ePc	43	17.80	0.4
NANU	20.29	219	iPc	43	36.30	0.4
	0.4s	57.00nm			5.3mb	
			eS	47	16.70	
CTA	20.87	130	iPd	43	42.70	0.8
	0.8s	59.70nm			5.0mb	
			iS	47	37.00	
MEKA	21.92	207	eP	43	54.50	2.2
			eS	47	51.00	
QLP	23.99	145	iPd	44	13.30	0.9
			e	48	44.00	
			i	49	18.70	
COOL	24.83	197	eP	44	21.00	0.5
MRWA	25.30	208	eP	44	25.00	0.2
	0.4s	10.00nm			4.6mb	
			eS	49	01.00	
BAL	26.17	205	eP	44	34.00	1.2
KL8	26.62	202	eP	44	37.00	0.1
RMO	26.69	138	iPc	44	36.00	-1.6
STK	27.15	157	iPd	44	41.50	-0.2
	0.6s	40.00nm			5.1mb	
			eS	49	54.90	
MUN	27.57	205	eP	44	45.00	-0.5
CMS	28.72	150	iPd	44	55.60	-0.3
			eS	50	31.00	
ADE	29.01	164	eP	44	58.30	-0.3
	1.0s	100.00nm			5.4mb	
BRS	30.01	135	iPc	45	07.00	-0.5
BFD	32.23	160	iPc	45	28.10	1.3
	0.8s	86.00nm			5.6mb	
			e	46	30.00	
			e	51	52.00	
DZM	38.74	117	iPc	46	22.40	0.0
CHG	39.52	311	ePc	46	29.10	0.3
	1.0s	15.25nm			4.8mb	
WHN	40.12	340	eP	46	35.50	2.0
XAN	45.28	336	P	47	18.50	3.1X
LZH	49.21	333	eP	47	46.00	-0.3
LSA	51.83	317	P	48	07.00	0.3
GTA	53.77	332	eP	48	20.30	-0.1
GUN	54.54	312	P	48	25.20	-1.3
PKI	54.70	311	P	48	26.20	-1.5
KKN	54.92	311	P	48	27.40	-1.7
DMN	54.95	311	P	48	28.20	-1.2
GBA	55.48	292	P	48	32.00	-1.0
GKN	55.51	311	P	48	31.60	-1.7
WMO	63.14	327	P	49	25.00	-0.5
MAIO	78.25	309	iPd	50	58.00	1.4
SPA	82.91	180	iPd	51	20.10	-0.7
	0.6s	18.70nm			5.2mb	
ARE	148.79	139	ePKP	58	45.00	4.4X
VAO	149.83	187	(PKP)	58	46.00	4.3X
CNCB	150.69	144	PKP	58	45.30	1.5
			i	58	51.00	
PPD	151.00	179	ePKP	58	48.40	4.9X
ZOBO	151.03	144	PKP	58	45.20	0.9
	1.1s	23.78nm				
			i	58	50.00	
CCH	151.24	148	PKP	58	51.50	7.2X
SIV	154.82	156	PKP	58	58.00	9.1X
			i	59	13.80	

S.D. = 1.1 on 41 of 49 obs.

---

* OCT 19, 1990 03h 05m 17.31± 0.58s
23.986 S ± 5.9km 66.844 W ±14.4km
DEPTH = 234.2 ± 22.0 km
JUJUY PROVINCE, ARGENTINA (128)

ANT	3.28	274	iPc	06	13.00	0.6
			i	06	47.70	
			i	06	52.20	
CCH	6.60	6	P	06	54.30	0.5
CNCB	7.22	351	P	07	03.00	1.1
			S	08	20.00	
RTLL	7.46	191	ePd	07	03.40	-0.9
			eS	08	25.00	
LPB	7.51	351	P	07	06.00	0.6
			S	08	28.00	
RTCB	7.67	193	eP	07	06.90	-0.2
ZOBO	7.77	351	P	07	08.90	0.0
			S	08	35.00	
RTBS	7.99	196	ePd	07	11.80	0.7
RTCV	7.99	190	ePc	07	11.00	-0.2
ARE	8.66	329	eP	07	19.00	-1.3
			eS	08	51.00	
SIV	9.63	35	iPc	07	29.80	-2.5
PPD	14.43	85	eP	08	34.40	1.8
VAO	18.26	91	eP	09	15.30	-0.8
			e	09	18.40	
KIC	67.61	72	(P)	15	51.80	0.6

S.D. = 1.3 on 14 of 14 obs.

OCT 19, 1990 03h 28m 07.57± 0.56s
38.391 S ± 6.0km 176.154 E ± 9.1km
DEPTH = 177.4 ± 6.2 km
4.8mb (2 obs.)
NORTH ISLAND, NEW ZEALAND (159)
Felt at Wellington.

UTU	0.22	8	P	28	30.40	-0.9
HUTZ	0.25	191	eP	28	31.50	0.2
TAZ	0.32	61	Pc	28	30.70	-0.7
HITZ	0.44	224	Pc	28	32.10	0.2
HATZ	0.50	186	eP	28	32.40	0.2
WHH	0.56	152	P	28	32.30	-0.4
RATZ	0.56	212	P	28	32.90	0.3
WLZ	0.71	321	Pd	28	32.00	-1.3
			eS	28	48.60	
KETZ	0.81	209	P	28	34.70	0.6
NGZ	0.90	209	P	28	35.40	0.7
CNZ	0.94	210	P	28	35.70	0.7
DRZ	1.00	207	eP	28	37.00	1.4
MOH	1.07	134	P	28	36.70	0.9
NOZ	1.49	99	P	28	39.70	0.2
PUZ	1.69	80	Pc	28	40.50	-1.0
			S	29	03.90	
HBZ	1.87	66	Pc	28	42.50	-0.9
PGZ	2.23	178	P	28	48.70	1.4
			S	29	17.20	
MNG	2.28	193	Pd	28	49.00	1.0
			eS	29	17.90	
KIW	2.65	201	P	28	52.80	0.5
MTW	2.81	190	Pd	28	54.60	0.4
CAW	2.84	197	eP	28	54.90	0.3
WDW	3.01	197	P	28	56.80	0.2
BLW	3.02	190	P	28	57.10	0.3
MRW	3.05	201	P	28	57.10	0.0
			eS	29	34.70	
WEL	3.08	200	P	28	58.00	0.5
MOW	3.11	193	Pd	28	58.00	0.1
TCW	3.17	207	Pd	28	58.60	0.0
CCW	3.67	203	P	29	05.30	0.4
THZ	4.19	215	P	29	11.10	-0.6
KHZ	4.49	206	Pd	29	15.20	-0.3
LTZ	5.29	213	P	29	24.50	-1.5
MQZ	5.93	205	P	29	32.40	-2.0
TMP	7.46	216	eP	29	54.00	-0.6
			S	31	13.00	
MHZ	8.41	215	eP	30	03.10	-4.2X
MMCZ	8.44	216	eP	30	04.90	-2.7
DZM	18.28	330	iPc	32	11.80	1.2
ASPA	38.72	280	eP	35	18.60	2.6
	0.5s	12.90nm			4.9mb	
WB5	40.49	285	eP	35	29.50	-1.0
SPA	51.80	180	iPd	37	04.50	5.5X
	1.0s	24.50nm			4.8mb	
MAW	63.11	203	eP	38	21.00	3.2X
LIC	147.96	178	PKP	47	36.60	6.3X
KIC	148.10	178	PKP	47	37.00	6.5X
TIC	148.38	178	PKP	47	37.80	6.8X

S.D. = 1.1 on 37 of 43 obs.

& OCT 19, 1990 04h 01m 15.45s
61.854 N 151.934 W
DEPTH = 119.7km
4.3mb (2 obs.)
SOUTHERN ALASKA (2)
<AGS-P>.

SKT	0.23	56	iP	01	31.68	1.0
			eS	01	44.01	
CRP	0.60	190	iP	01	33.67	-0.8
BGL	0.63	200	iP	01	33.95	-0.7
CKL	0.69	197	iP	01	34.26	-0.8
SUA	0.69	124	iP	01	34.97	-0.1
			eS	01	49.83	
CUT	0.96	54	iP	01	36.78	-0.5
PWA	1.00	101	iP	01	37.09	-0.6
NKA	1.16	163	eP	01	40.32	0.9
PMS	1.29	117	iP	01	39.85	-1.0
RDT	1.30	190	iP	01	40.05	-1.0
			iS	01	59.41	
PLRM	1.36	100	iP	01	40.06	-1.5
PMR	1.36	100	iPc	01	40.10	-1.5
GHO	1.43	92	iP	01	41.18	-1.3
			eS	02	02.35	
RSO	1.45	196	iP	01	42.04	-0.9
			eS	02	02.62	
RED	1.50	196	iP	01	42.37	-0.9
			eS	02	03.01	
HUR	1.55	42	iP	01	43.11	-0.8
			eS	02	04.11	
SML	1.71	90	eP	01	44.26	-1.5
NNL	1.84	170	eP	01	47.34	-0.1
SVW	1.92	249	iPc	01	46.90	-1.5
RND	2.11	41	iP	01	49.64	-1.2
			eS	02	15.73	
SEW	2.13	144	eP	01	49.70	-1.3
SCM	2.18	89	iP	01	50.29	-1.5
			eS	02	18.57	
TTA	2.18	301	iPc	01	50.00	-1.8
HOM	2.21	176	eP	01	50.88	-1.1
			eS	02	19.06	
OPT	2.30	197	eP	01	52.27	-0.9
			eS	02	20.97	
MCK	2.34	35	iP	01	52.62	-1.1

19d 04h

		eS	02	19.93	
PDB	2.35	209 iP	01	52.99	-0.8
		eS	02	22.13	
CNPM	2.36	171 eP	01	52.24	-1.8
		eS	02	20.38	
XLV	2.41	177 eP	01	52.68	-1.9
GLI	2.53	111 iP	01	53.64	-2.5
		eS	02	24.02	
KNIM	2.54	125 iP	01	53.33	-3.0
		eS	02	24.01	
AUE	2.60	196 eP	01	55.80	-1.3
VZW	2.70	105 iP	01	56.32	-2.2
		eS	02	30.23	
TOA	2.73	82 iPc	01	58.00	-0.9
VLZ	2.78	103 iP	01	57.17	-2.3
		eS	02	31.90	
MTU	2.81	130 iP	01	57.60	-2.2
KLU	2.89	95 iP	01	59.12	-1.9
		eS	02	34.03	
MCNL	2.93	205 iP	02	00.30	-1.2
NEA	3.02	24 eP	02	00.82	-1.9
		eS	02	35.45	
CDD	3.05	197 iP	02	01.60	-1.6
SDG	3.07	74 eP	02	02.21	-1.2
WRH	3.15	32 eP	02	02.53	-1.9
		eS	02	37.60	
CVA	3.27	111 eP	02	04.78	-1.2
CCB	3.37	32 eP	02	05.26	-2.0
		eS	02	42.91	
DDM	3.39	52 eP	02	07.89	0.1
HDA	3.42	39 eP	02	06.18	-1.8
		eS	02	44.36	
SGAM	3.53	110 eP	02	06.69	-2.8
FBA	3.58	30 iPd	02	08.40	-1.8
MID	3.68	129 iPd	02	10.30	-1.1
GLM	3.75	31 eP	02	10.59	-1.9
RAGM	3.82	109 eP	02	12.50	-0.9
GLB	3.90	93 eP	02	12.50	-2.0
DOT	4.04	60 eP	02	14.76	-1.7
KDC	4.13	184 eP	02	14.41	-3.1
IMA	4.30	350 iPd	02	18.00	-2.1
TMW	4.39	66 eP	02	18.70	-2.4
TGL	4.53	100 eP	02	20.92	-2.2
		eS	03	12.96	
WAX	4.62	104 eP	02	21.77	-2.6
BALM	4.68	96 eP	02	23.02	-2.1
		eS	03	14.78	
WRG	5.16	106 eP	02	30.24	-1.4
FYU	5.56	29 eP	02	34.76	-2.3
DWY	6.11	63 P	02	42.70	-2.0
SIT	9.71	112 eP	03	31.60	-1.7
	0.3s	7.30nm		5.0mb	
INK	10.07	42 P	03	35.00	-3.1
MBC	18.11	24 eP	05	18.00	-2.1
	0.7s	3.00nm		3.7mb	
	65 obs. associated				

OCT 19, 1990 04h 12m 01.67± 0.61s
38.492 N ± 4.9km 26.923 E ± 6.6km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 4.0 (ISK), 3.6 (ATH).

IZM	0.28	109 iPg	12	07.50	-0.1
SMG	0.78	185 ePg	12	17.00	0.1
PRK	0.91	326 iPbd	12	18.50	-0.5
CIN	1.28	134 eP	12	24.00	-1.4
EZN	1.41	341 iPn	12	26.90	-0.4
APE	1.80	218 ePn	12	33.90	0.9
KGT	1.98	8 iPn	12	34.60	-0.9
EDC	1.99	21 iPn	12	34.80	-0.9
BNT	2.02	22 iPn	12	35.50	-0.6
KHL	2.05	94 ePn	12	37.00	0.3
KCT	2.08	32 iPn	12	36.10	-0.9
MFT	2.31	7 ePn	12	43.00	2.6
ARG	2.47	157 ePb	12	48.20	5.7X
IZI	2.70	46 ePn	12	46.00	0.0
YLV	2.81	42 iPn	12	46.60	-0.9
RDO	2.86	339 iPnd	12	47.50	-0.6
CTT	2.89	23 ePn	12	49.60	1.0
BCK	3.07	108 ePn	12	51.50	0.3
HRT	3.15	41 ePn	12	55.00	2.8
GPA	3.18	55 ePn	13	03.00	10.3X
DMK	3.39	11 ePn	12	55.00	-0.6
	S.D. = 1.2	on 19 of 21 obs.			

% OCT 19, 1990 05h 02m 36.67± 0.71s
40.622 N ±16.6km 15.161 E ±17.8km
DEPTH = 14.2 ± 6.8 km
SOUTHERN ITALY (390)

SGO	0.13	120 Pc	02	40.10	-0.2
		eSg	02	44.00	
BSS	0.32	302 Pc	02	44.00	0.5
		eSg	02	50.40	
MGR	0.57	140 Pc	02	47.20	-0.7
		eSg	02	57.90	
MMN	0.97	139 P	02	55.60	0.9
		eSg	03	13.00	
DUI	1.17	333 P	02	58.00	-0.1
		eSn	03	15.00	
CSI	1.21	134 P	03	00.20	1.4
		eSg	03	22.20	
TDS	1.32	136 P	03	00.00	-0.6
CZI	1.59	152 P	03	04.00	-0.4
	S.D. = 1.0	on 8 of 8 obs.			

% OCT 19, 1990 05h 28m 11.60± 0.93s
40.644 N ± 6.5km 29.959 E ± 7.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.1 (ISK).

HRT	0.28	309 ePg	28	17.00	-0.6
GBZT	0.42	290 ePg	28	20.00	-0.1
		iSg	28	26.00	
GPA	0.44	143 ePg	28	20.30	-0.4
YLV	0.45	260 iPg	28	20.00	-0.8
IZI	0.48	231 iPg	28	21.60	0.2
		iSg	28	30.60	
ISK	0.80	302 ePg	28	26.80	-0.4
		eSg	28	37.80	
CTT	1.26	294 iPn	28	34.50	-0.6
KCT	1.29	253 iPn	28	35.60	0.2
BNT	1.58	260 iPn	28	40.00	0.3
EDC	1.63	260 iPn	28	40.80	0.4
KGT	2.03	265 iPn	28	46.60	0.3
DMK	2.04	306 ePn	28	47.70	1.4
	S.D. = 0.7	on 12 of 12 obs.			

• OCT 19, 1990 05h 43m 04.60± 2.91s
38.026 N ±20.1km 29.586 E ±22.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.3 (ISK).

KHL	0.30	351 iPg	43	09.50	-1.4
ALT	1.11	22 iPn	43	25.40	0.0
CIN	1.26	251 iPn	43	27.00	-1.0
		iSg	43	46.00	
IZM	1.87	282 ePn	43	38.00	1.1
IZI	2.31	358 ePn	43	44.00	0.6
YLV	2.54	356 iPn	43	51.50	4.9X
BNT	2.66	331 ePn	43	49.00	0.7
	S.D. = 1.3	on 6 of 7 obs.			

& OCT 19, 1990 07h 01m 57.40s
46.470 N 75.590 W
DEPTH = 13.0km
4.6mb (24 obs.) 4.2Msz (1 obs.)
SOUTHERN QUEBEC (447)
<OTT>. mbLg 5.1 (OTT). Felt from Burlington, Ontario to Quebec City, Canada and from Buffalo to Albany, New York and Burlington, Vermont. Also felt at Waterville, Maine. Felt (V) at Malone and Tupper Lake, New York; (IV) at Massena and Ogdensburg, New York. Felt (III) in many areas of New York and Vermont.

GRO	0.23	306 Pg	02	02.40	-0.2
TRO	0.76	109 Pg	02	11.60	-0.4
OTT	1.08	185 Pg	02	17.40	0.0
MNT	1.68	124 Pg	02	26.50	0.0
DPO	1.95	83 Pg	02	30.30	-0.2
HBVT	2.76	139 iPc	02	41.50	-0.6
BNH	3.58	120 eP	02	52.70	-1.0
WVLY	4.53	209 eP	03	05.60	-1.6
MIM	4.74	103 eP	03	08.30	-1.9
CBM	5.16	82 eP	03	13.80	-2.3
ELF	5.23	233 P	03	14.85	-2.2
LDN	5.26	231 P	03	15.20	-2.3
TXNY	5.39	169 eP	03	18.00	-1.3
TBR	5.42	169 iPc	03	18.00	-1.8
DLA	5.59	232 P	03	18.10	-4.1
PNJ	5.66	169 iP	03	21.40	-1.7
LVNJ	5.69	174 eP	03	21.50	-2.1
EMM	5.94	104 eP	03	25.00	-2.1
CLE	6.57	223 iP	03	35.10	-0.9
NA2	8.49	192 eP	03	59.30	-3.5
BLA	9.93	203 ePn	04	19.10	-3.6
NAV	9.93	205 eP	04	19.20	-3.6
SCH	10.05	31 P	04	19.00	-5.3
TKL	12.43	213 eP	04	52.00	-4.8
GBTN	12.59	214 eP	04	53.70	-5.2
LHS	12.61	200 eP	04	55.00	-4.2
JSC	12.92	201 eP	04	59.50	-3.7
RSCP	13.20	218 eP	05	02.00	-5.1
PRM	13.40	205 eP	05	05.20	-4.5
ELC	13.67	233 eP	05	07.00	-6.2
FVM	13.87	238 eP	05	10.50	-5.3
TUL	18.45	242 eP	06	10.20	-4.1
	1.0s	50.00nm		4.6mb	
Z	22s	0.23um		4.2Msz	
		e	06	11.80	
		eLg	11	18.50	
FFC	18.59	306 eP	06	11.00	-4.8
	0.7s	13.00nm		4.2mb	
SIO	18.88	243 eP	06	17.70	-1.8
MEO	20.92	244 iPd	06	39.30	-2.6
GLD	22.56	263 eP	06	58.50	-0.1
	1.0s	35.00nm		4.8mb	
GOL	22.69	263 ePc	06	59.00	-1.0
	0.7s	19.42nm		4.7mb	
SES	23.70	293 P	07	09.00	-0.5
BW06	24.34	274 ePc	07	15.00	-1.0
	0.9s	14.12nm		4.6mb	
EDM	25.04	300 eP	07	21.00	-1.4
LRM	25.40	282 ePc	07	25.70	-0.4
ANMO	25.91	255 eP	07	31.00	0.1
	1.0s	15.00nm		4.6mb	
ALQ	25.92	255 eP	07	30.00	-1.0
	0.8s	12.13nm		4.6mb	
YKA	27.20	320 eP	07	39.90	-2.3
	0.9s	15.60nm		4.7mb	
DUG	27.61	270 eP	07	45.20	-1.1
NEW	27.94	289 eP	07	47.50	-1.7
PNT	29.35	292 P	08	00.00	-1.8
TNP	31.62	270 eP	08	21.00	-1.2
	0.7s	4.81nm		4.5mb	
LBFM	33.37	278 eP	08	36.20	-1.3
MBC	34.80	343 eP	08	48.00	-1.2
	1.0s	18.00nm		4.9mb	
IMK	36.16	328 eP	08	59.00	-1.8
	0.9s	44.00nm		5.3mb	
FBA	41.95	323 eP	09	50.70	1.8
PMR	43.25	318 eP	09	58.90	-0.7
	0.7s	13.08nm		4.8mb	
IMA	44.11	325 iPd	10	06.10	-0.6
GRR	48.70	59 eP	10	41.20	-1.8
NB2	49.45	40 P	10	46.20	-2.5
	0.8s	2.80nm		4.3mb	
TCF	51.54	60 eP	11	02.40	-2.4
	1.0s	8.00nm		4.6mb	
BGF	51.78	59 eP	11	04.20	-2.4
	0.4s	2.85nm		4.6mb	
MAF	51.79	60 eP	11	04.20	-2.4
SSF	51.92	59 eP	11	05.10	-2.5
	0.8s	8.75nm		4.7mb	
AVF	51.96	59 eP	11	05.40	-2.5
	0.5s	3.30nm		4.5mb	
LOR	52.02	58 eP	11	06.10	-2.3
	1.0s	11.00nm		4.7mb	
Z	21s	0.22um		4.2Msz	
CAF	52.15	62 eP	11	06.90	-2.5
	0.6s	4.50nm		4.6mb	
LBF	52.23	58 eP	11	07.40	-2.7
	1.0s	9.00nm		4.7mb	
SMF	52.33	59 eP	11	07.80	-2.9
CDF	53.41	55 eP	11	16.50	-2.3
LPL	54.63	59 eP	11	26.10	-1.9
	0.4s	2.30nm		4.6mb	
MOX	54.64	51 eP	11	26.00	-1.7
LPG	54.65	59 eP	11	26.20	-2.1
	0.5s	2.55nm		4.5mb	
BRG	55.76	50 eP	11	38.50	2.7
	1.4s	15.00nm		4.8mb	
		iSg	22	35.00	

ZOBO	62.81	172	P	12	23.20	-2.3
CNCB	63.35	172	eP	12	26.00	-3.1
SOB1	63.50	141	eP	12	27.80	-1.7
SIV	63.53	164	iPc	12	28.00	-1.6
CCH	64.12	170	eP	12	32.00	-1.8
TIC	71.85	100	P	13	20.60	-1.4
LIC	72.15	100	P	13	22.20	-1.5
KIC	72.25	100	Pc	13	23.00	-1.3
	0.7s	8.00nm			4.9mb	
WB5	143.89	307	ePKP	21	29.10	-5.0
CAN	144.93	272	ePKP	21	37.80	2.3
ASPA	147.15	304	iPKPc	21	39.50	0.0
	0.5s	20.60nm				
STK	148.03	284	iPKPd	21	41.70	1.1
	0.6s	10.00nm				
			i	21	45.70	
MAW	149.97	149	iPKP	21	46.10	3.6
	83 obs. associated					

---

* OCT 19, 1990 07h 51m 00.19± 0.97s
15.535 N ± 9.8km 146.717 E ±17.9km
DEPTH = 33.0km (normal)
4.9mb (2 obs.)
MARIANA ISLANDS (216)

GUMO	2.64	223	eP	51	41.40	0.0
PJG	2.64	223	eP	51	41.30	-0.1
GUA	2.65	222	eP	51	41.50	0.0
			eS	52	00.70	
LZH	43.26	306	Pd	59	04.50	4.0X
GUN	57.34	293	P	00	48.40	0.2
PKI	57.77	293	P	00	51.20	0.0
KKN	57.88	293	P	00	51.80	0.0
DMN	58.04	293	P	00	53.20	0.2
GKN	58.44	294	P	00	55.20	-0.5
	0.6s	16.00nm			5.3mb	
YKA	80.32	28	eP	03	18.20	9.0X
	0.6s	2.90nm			4.5mb	
SES	85.77	39	eP	03	47.00	9.5X
KIC	144.33	305	PKP	10	35.30	-0.3
TIC	144.37	306	PKP	10	35.60	-0.1
LIC	144.63	306	PKP	10	36.40	0.3
ZOBO	146.51	96	PKP	10	48.00	8.1X
LPB	146.55	97	ePKP	10	48.00	8.3X
CNCB	146.68	97	PKP	10	49.00	8.9X
	S.D. = 0.2	on	11 of	17	obs.	

---

* OCT 19, 1990 08h 12m 38.54± 1.11s
21.777 S ±11.4km 178.768 W ±21.1km
DEPTH = 648.8 ± 12.2 km
4.6mb (2 obs.)
FIJI ISLANDS REGION (181)

SGE	5.20	323	iPc	14	16.50	0.1
MBU	5.33	333	eP	14	17.00	-0.4
DZM	13.73	266	iPc	15	34.90	1.0
WLZ	16.74	196	P	16	04.50	2.5
NOZ	17.01	189	eP	16	05.50	0.9
MNG	19.41	193	eP	16	25.10	-1.5
THZ	21.13	197	P	16	42.30	0.1
KHZ	21.57	196	Pd	16	45.00	-1.1
LTZ	22.25	198	Pd	16	50.70	-1.6
ASPA	43.54	258	iPd	19	49.40	-0.2
	0.8s	15.00nm			4.5mb	
			iS	25	29.80	
WB5	43.71	264	eP	19	50.80	-0.2
MTN	48.47	272	eP	20	25.00	-2.0
MBL	56.79	258	eP	21	26.40	0.5
NANU	60.38	256	eP	21	51.00	1.3
SPA	68.36	180	iPc	22	44.60	5.6X
	0.8s	25.42nm			4.7mb	
CHG	90.00	290	eP	24	38.80	6.5X
SOB1	128.46	122	(PKP)	30	43.00	7.3X
NB2	140.15	352	PKP	30	56.40	0.1
	0.6s	0.90nm				
HFS	140.67	350	ePKP	30	57.60	0.4
	1.2s	13.60nm				
CLL	149.12	346	iPKP	31	23.80	12.5X
BRG	149.30	344	i(PKP)	31	24.40	12.8X
			i	31	31.40	
	S.D. = 1.3	on	16 of	21	obs.	

? OCT 19, 1990 09h 26m 00.17± 4.71s
14.315 N ±42.5km 97.962 W ±23.7km
DEPTH = 33.0km (normal)
OFF COAST OF OAXACA, MEXICO (67)
Felt in Oaxaca State.

OXX	3.00	23	eP	26	46.68	0.0
			eS	27	09.78	
III	4.29	341	iP	27	05.00	0.0
			iS	27	43.24	
IIT	4.69	356	eP	27	10.75	0.0
			eS	27	52.74	
PPM	4.77	352	eP	27	08.73	-3.3X
IIJ	5.65	343	(P)	27	28.39	3.9X
			(S)	28	26.23	
ALQ	21.92	341	eP	30	52.50	-0.2
ANMO	21.92	341	(P)	30	53.00	0.2
	S.D. = 0.2	on	5 of	7	obs.	

---

* OCT 19, 1990 09h 28m 01.18± 1.97s
14.334 N ±20.1km 92.639 W ±17.1km
DEPTH = 65.2 ± 12.8 km
4.7mb (5 obs.)
NEAR COAST OF CHIAPAS, MEXICO (69)
Felt in the Mexico-Guatemala border area.

TPX	0.68	33	iPc	28	14.61	-1.0
			iS	28	28.91	
SCX	2.39	0	iP	28	41.48	2.8
			iS	29	08.48	
OXX	4.79	305	(P)	29	43.65	30.9X
			eS	30	11.01	
LVVM	6.49	326	eP	29	33.47	-2.8
IIT	7.16	311	eP	29	52.03	6.2X
			(S)	31	17.16	
PPM	7.42	310	eP	29	51.11	1.4
MEO	21.06	346	iPd	32	40.20	-1.8
SIO	21.57	352	e(P)	32	46.70	-0.4
TUL	21.67	353	e(P)	32	51.80	3.7X
	0.7s	11.70nm			4.4mb	
ALQ	24.01	331	eP	33	11.80	0.7
	0.9s	5.88nm			4.1mb	
ANMO	24.01	331	P	33	12.00	0.9
LRM	35.56	336	ePc	34	54.90	0.6
SES	38.95	341	eP	35	23.00	0.5
PNT	41.30	333	ePd	35	43.00	1.2
	0.7s	15.00nm			4.9mb	
SIV	43.37	133	P	35	59.00	-0.1
YKA	50.56	347	eP	36	53.80	-1.1
	0.7s	12.40nm			5.0mb	
SOB1	56.40	111	eP	37	38.10	-0.6
			e	37	47.80	
INK	59.94	344	eP	38	02.00	-0.6
FBA	62.69	337	P	38	20.00	-1.2
MBC	63.51	353	eP	38	26.00	-0.4
	0.6s	6.00nm			4.8mb	
LKO	84.85	82	P	40	30.90	0.3
LIC	86.18	85	(P)	40	38.00	0.8
KIC	86.42	84	(P)	40	39.10	0.7
	S.D. = 1.4	on	20 of	23	obs.	

---

* OCT 19, 1990 10h 24m 11.17± 1.10s
30.284 S ± 7.7km 69.354 W ±22.1km
DEPTH = 130.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

RTCB	1.29	158	iPd	24	37.00	-0.4
			eS	24	51.00	
RTLL	1.29	144	iPc	24	36.00	-1.4
RTBS	1.38	184	e(P)	24	40.00	1.8
ZON	1.39	155	iPd	24	38.60	0.2
			eS	24	54.60	
RTCV	1.72	156	e(P)	24	41.50	-0.7
			eS	24	59.00	
CYA	3.61	60	e(P)	25	07.80	1.3
			S	25	47.00	
CNCB	13.47	6	eP	27	19.00	0.2
LPB	13.74	5	eP	27	21.00	-1.0
ZOBO	14.00	5	(P)	27	37.00	11.5X
	S.D. = 1.3	on	8 of	9	obs.	

% OCT 19, 1990 10h 25m 15.98± 1.03s
39.147 N ± 7.0km 27.569 E ±13.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM	0.79	198	iPg	25	31.30	0.0
			eSg	25	44.80	
EZN	1.18	306	ePn	25	38.00	0.1
EDC	1.22	11	iPn	25	38.80	0.1
BNT	1.24	13	ePn	25	39.00	0.0
MFT	1.65	352	ePn	25	45.00	-0.2
	S.D. = 0.2	on	5 of	5	obs.	

? OCT 19, 1990 11h 12m 52.78± 8.40s
35.194 N ±127.km 24.321 E ±50.9km
DEPTH = 33.0km (normal)
3.8mb (1 obs.)
CRETE (370)
MD 3.7 (ATH).

VAM	0.23	335	ePb	12	58.40	-1.3
NPS	1.06	86	ePn	13	11.30	-0.1
VLI	1.89	324	ePn	13	23.70	0.4
KAP	2.36	80	ePn	13	29.50	-0.5
ITM	2.77	316	ePn	13	35.30	-0.5
HFS	25.89	348	eP	18	18.70	-4.4X
	0.4s	1.20nm			3.8mb	
	S.D. = 0.9	on	5 of	6	obs.	

? OCT 19, 1990 11h 13m 40.68± 1.80s
28.441 N ±18.7km 139.635 E ±56.1km
DEPTH = 414.2 ± 18.8 km
4.1mb (2 obs.)
BONIN ISLANDS REGION (212)

IIDJ	7.17	349	P	15	28.80	1.4
CHJJ	7.60	356	iP+	15	31.90	-0.3
			S	16	57.90	
KAKJ	7.76	3	P	15	32.60	-1.3
			S	16	58.00	
MAT	8.17	352	eP	15	38.00	-0.6
			eS	17	12.00	
YAMJ	9.71	2	P	15	57.20	0.8
			S	17	47.40	
OFUJ	10.75	9	eP	16	08.30	0.1
			eS	18	05.00	
WB5	48.31	187	eP	21	44.30	0.2
HFS	81.29	336	eP	25	13.70	0.9
	0.4s	1.70nm			4.1mb	
NB2	81.52	337	P	25	15.00	0.9
	0.9s	3.30nm			4.0mb	
VAY	89.44	318	eP	25	51.00	-1.9
			i	26	07.60	
	S.D. = 1.3	on	10 of	10	obs.	

& OCT 19, 1990 12h 28m 17.50s
37.018 N 118.360 W
DEPTH = 3.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.3 (BRK).

PPK	0.54	41	iPc	20	27.40	-1.0
FRI	1.08	269	iPc	28	37.40	-1.0
			iS	28	51.30	
CLC	1.35	153	eP	28	41.40	-1.7
ISA	1.36	184	iPd	28	41.80	-1.4
TNP	1.40	40	iPc	28	42.60	-1.4
PKEM	1.70	236	eP	28	48.00	-0.2
CMB	1.90	303	iPc	28	51.60	0.4
			iS	29	15.90	
PHAM	2.02	235	eP	28	52.70	-0.2
PRI	2.05	245	ePd	28	54.00	0.6
LLA	2.11	260	ePd	28	54.80	0.6
			eS	29	21.90	
ABL	2.27	198	eP	28	57.00	0.3
BCH	2.30	218	eP	28	57.00	0.0
SAO	2.49	265	iPc	29	00.00	0.4
PRS	2.51	255	ePc	28	59.90	-0.1
ARN	2.56	278	eP	29	01.40	0.8
MHC	2.64	278	ePd	29	02.60	0.7
			e	29	38.90	
GCC	2.91	271	e(P)	29	06.40	0.8
PCC	3.24	280	e(P)	29	09.90	-0.4
	18 obs. associated					

% OCT 19, 1990 12h 29m 57.96± 0.94s
41.171 N ±11.0km 28.519 E ± 7.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.3 (ISK).

CTT	0.07	251	iPg	29	58.90	-1.4
ISK	0.42	104	ePg	30	06.20	-0.4
DMK	0.87	319	ePg	30	15.20	0.6
			eSg	30	28.20	
BNT	0.93	209	iPn	30	16.80	1.0
HRT	0.94	111	ePg	30	16.00	0.1

19d 12h

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

• OCT 19, 1990 13h 21m 28.89± 0.94s
30.220 S ±12.0km 177.699 W ±21.0km
DEPTH = 40.7km (2 depth phases)
4.9mb (4 obs.) 4.5Msz (1 obs.)
KERMADEC ISLANDS (178)
Felt on Rooul Island.

RAO	0.98	349	P	21 45.00	-1.4
			S	21 58.50	
THZ	13.79	211	eP	24 44.00	0.0
KHZ	14.06	208	eP	24 45.00	-2.4
BWA	28.86	253	eP	27 27.80	2.0
CTA	34.03	279	iPd	28 15.00	3.7X
	0.9s	15.97nm		4.9mb	
STK	34.77	257	eP	28 21.10	3.5X
	1.0s	13.00nm		4.6mb	
			i	28 32.10	40km
ASPA	43.38	267	eP	29 28.60	-0.7
	0.8s	7.70nm		4.5mb	
	Z 18s	0.50um		4.5Msz	
WB5	44.35	272	eP	29 38.10	0.9
SPA	59.95	180	eP	31 34.00	0.7
	0.9s	10.91nm		5.0mb	
MAT	78.24	325	(P)	33 29.00	3.1X
TNP	88.34	43	P	34 18.20	0.4
			pP	34 31.10	43km
KEV	138.00	347	ePKP	40 51.00	0.9
SUF	144.02	342	ePKP	40 59.00	-1.9
NUR	146.23	340	ePKP	41 06.00	1.3
	0.8s	55.70nm			
			i	41 12.60	
NB2	148.61	352	PKP	41 11.80	3.2X
	1.0s	15.60nm			
HFS	149.12	349	ePKP	41 12.50	3.2X
	0.8s	16.10nm			

S.D. = 1.6 on 11 of 16 obs.

& OCT 19, 1990 14h 12m 01.45s
60.316 N 152.331 W
DEPTH = 75.9km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.24	295	iP	12 12.71	-0.5
RSO	0.26	305	iP	12 13.04	-0.4
RDT	0.26	352	iP	12 12.68	-0.6
			iS	12 22.20	
NNL	0.59	118	eP	12 16.04	0.2
NKA	0.69	51	eP	12 17.81	1.0
HOM	0.74	152	eP	12 17.12	-0.4
			eS	12 29.79	
OPT	0.80	215	iP	12 17.57	-0.6
			eS	12 30.13	
CKL	0.88	360	iP	12 18.43	-0.8
BRLK	0.91	127	iP	12 18.71	-0.8
XLV	0.92	160	eP	12 18.59	-0.9
			eS	12 32.64	
BGL	0.95	358	iP	12 19.33	-0.7
CRP	0.96	5	iP	12 19.49	-0.7
			eS	12 33.53	
CNPM	0.97	145	eP	12 19.20	-0.9
PDB	1.07	241	iP	12 20.26	-1.2
			iS	12 35.34	
AUH	1.11	211	eP	12 21.56	-0.4
SUA	1.39	33	iP	12 25.32	-0.3
SEW	1.45	97	iP	12 24.63	-1.7
MCNL	1.52	223	eP	12 25.96	-1.4
CDD	1.54	206	eP	12 26.35	-1.3
PMS	1.65	54	iP	12 28.46	-0.6
SKT	1.71	13	eP	12 28.90	-1.0
PWA	1.80	41	eP	12 30.41	-0.6
SVW	1.80	298	iPc	12 29.30	-1.8
PLRM	2.02	49	eP	12 32.11	-1.9
PMR	2.02	49	iPd	12 32.40	-1.6
GHO	2.21	47	eP	12 34.86	-1.9
KNIM	2.29	87	eP	12 34.14	-3.6
CUT	2.32	24	eP	12 37.02	-1.1
SML	2.45	51	eP	12 38.00	-2.1
VLZ	3.06	72	eP	12 45.16	-3.2
TTA	3.16	328	iPd	12 48.10	-1.8
KLU	3.35	67	eP	12 49.27	-3.3
TOA	3.48	56	eP	12 51.90	-2.5
FBA	5.05	23	ePd	13 14.00	-2.3
IMA	5.81	355	eP	13 25.90	-1.1

35 obs. associated

& OCT 19, 1990 14h 13m 19.50s
37.020 N 118.353 W
DEPTH = 3.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.3 (BRK).

FRI	1.09	269	iPc	13 39.50	-1.0
			iS	13 53.30	
ISA	1.36	184	eP	13 43.80	-1.5
CMB	1.91	303	iPc	13 53.70	0.4
			iS	14 18.70	
PRI	2.06	245	eP	13 55.50	0.0
LLA	2.12	260	eP	13 56.90	0.6
SAO	2.49	265	iP	14 01.80	0.2
PRS	2.52	255	eP	14 01.80	-0.3
MHC	2.65	278	eP	14 04.70	0.8
BRK	3.22	286	eP	14 12.40	0.4
PCC	3.25	280	e(P)	14 11.50	-0.9
ORV	3.54	317	e(P)	14 19.70	3.2

11 obs. associated

& OCT 19, 1990 14h 13m 58.16s
45.341 N 121.686 W
DEPTH = 6.0km
WASHINGTON-OREGON BORDER REGION (28)
<SEA>. CL 3.5 (SEA). Felt at Government Camp and Timberline Lodge, Oregon.

TDH	0.09	235	Pc	14 00.44	0.0
VLL	0.12	2	Pd	14 01.20	0.3
VFP	0.16	98	Pc	14 01.60	0.0
VBEM	0.29	166	Pd	14 04.43	0.3
VLMM	0.32	309	Pc	14 04.93	0.3
APM	0.40	1	Pd	14 06.20	0.1
GT2	0.45	246	Pc	14 07.09	-0.2
PGO	0.55	283	Pc	14 08.94	-0.3
GULW	0.59	6	Pd	14 09.43	-0.5
CROR	0.61	126	Pc	14 09.64	-0.8
VGB	0.66	74	Pc	14 10.80	-0.7
			S	14 20.56	
MTMW	0.78	332	Pc	14 12.42	-1.3
VTHM	0.81	101	Pc	14 13.07	-1.2
			S	14 25.02	
ASR	0.81	5	Pd	14 13.40	-1.0
CDFW	0.82	342	Pc	14 13.18	-1.2
GL2	0.87	44	Pc	14 14.71	-0.5
			S	14 27.94	
JLK	0.87	338	Pd	14 14.33	-1.0
LVP	0.89	325	Pc	14 14.14	-1.5
HSR	0.90	337	P	14 15.02	-0.9
ESD	0.92	339	P	14 15.20	-1.0
REMW	0.93	338	ePd	14 15.34	-1.0
SHW	0.93	336	Pc	14 15.30	-1.2
SOSW	0.95	341	Pc	14 15.76	-0.9
STD	0.97	337	Pc	14 15.81	-1.3
FL2	0.97	332	P	14 15.89	-1.2
GMO	1.04	150	ePd	14 17.39	-0.9
ERK	1.07	335	Pc	14 17.32	-1.4
TDL	1.08	340	Pc	14 17.54	-1.3
RVW	1.10	318	Pc	14 17.69	-1.4
VIPM	1.13	137	P	14 18.57	-1.2
KOSW	1.17	343	P	14 19.16	-1.3
GLK	1.22	3	P	14 20.70	-0.7
CZM	1.24	333	Pc	14 20.23	-1.3
KMOR	1.30	284	Pc	14 21.50	-1.2
JBO	1.31	84	Pc	14 22.04	-0.7
WPW	1.36	4	P	14 23.68	-0.1
COR	1.37	237	Pd	14 22.70	-1.1
			S	14 41.76	
GROR	1.39	271	P	14 21.55	-2.7
LMW	1.39	343	P	14 23.93	-0.3
LON	1.41	357	P	14 23.39	-1.1
YAKW	1.43	34	P	14 24.51	-0.2
NLO	1.44	302	Pc	14 24.20	-0.7
			S	14 43.40	
PATW	1.45	68	P	14 24.78	-0.2
APW	1.47	333	Pc	14 24.39	-0.9
REMR	1.48	356	P	14 24.70	-0.8
NAC	1.52	23	P	14 25.92	0.0
BMW	1.56	317	Pc	14 25.58	-1.0
HBO	1.56	197	ePd	14 26.28	-0.4
MPOR	1.57	238	Pd	14 25.88	-0.8
MXC	1.57	38	P	14 26.55	-0.1
FMW	1.59	0	P	14 26.77	-0.3
RVC	1.61	353	P	14 26.96	-0.4
BRVW	1.65	45	P	14 28.31	0.5
			S	14 51.13	
PRW	1.65	57	P	14 27.79	0.0
GHW	1.75	347	ePd	14 29.63	0.4
EBG	1.75	26	Pc	14 29.56	0.3
RSW	1.80	54	Pc	14 30.03	-0.1
MDW	1.85	46	Pc	14 30.83	0.2
GSM	1.86	358	Pc	14 31.73	0.7
CPW	1.92	329	P	14 31.42	-0.3
BVW	1.93	40	P	14 32.14	0.2
TBM	1.98	22	P	14 33.03	0.4
GBL	2.00	50	P	14 32.91	0.1
WIW	2.00	56	P	14 32.96	0.2
VTG	2.00	36	P	14 32.86	0.0
MJ2	2.03	52	P	14 33.31	0.1
WAH2	2.05	45	P	14 33.83	0.3
LOCW	2.09	48	P	14 34.50	0.4
WG3	2.10	70	P	14 33.39	-0.9
RMW	2.12	358	P	14 36.16	1.5
			S	15 01.97	
CRF	2.18	46	Pc	14 35.54	0.1
OT2	2.20	50	P	14 35.80	0.1
RC1	2.24	44	P	14 36.31	-0.1
SPW	2.25	350	P	14 38.65	2.3
ET3	2.28	56	P	14 36.72	-0.2
GMW	2.33	341	P	14 38.57	0.9
LNOR	2.45	76	P	14 37.92	-1.4
			S	15 08.70	
HTW	2.46	359	P	14 41.96	2.4
DBO	2.49	207	P	14 40.88	1.0
HDW	2.49	338	P	14 41.25	1.2
			S	15 16.28	
OBH	2.49	324	P	14 40.70	0.8
BLH	2.51	355	P	14 40.51	0.4
SAW	2.84	33	P	14 44.40	-0.5
DHW2	2.96	26	Pc	14 47.34	0.8
			S	15 32.11	
CMW	3.10	355	P	14 52.10	3.5
			S	15 32.39	
DPW	3.49	42	Pd	14 53.04	-1.1
PNT	4.22	19	P	15 08.00	3.6

87 obs. associated

& OCT 19, 1990 14h 19m 20.20s
37.007 N 118.350 W
DEPTH = 3.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.2 (BRK), 3.0 (PAS).

FRI	1.09	270	iPc	19 40.30	-1.0
			iS	19 54.00	
ISA	1.34	184	ePd	19 44.60	-1.1
CMB	1.92	303	iPc	19 54.50	0.4
			iS	20 19.70	
PRI	2.05	246	eP	19 56.40	0.2
LLA	2.12	260	eP	19 57.80	0.8
SAO	2.49	265	iP	20 02.50	0.1
PRS	2.52	255	eP	20 02.60	-0.1
MHC	2.65	278	eP	20 05.40	0.7
GCC	2.92	272	e(P)	20 09.30	0.9
BRK	3.23	287	eP	20 11.80	-1.0
PCC	3.25	280	e(P)	20 13.00	-0.1

11 obs. associated

? OCT 19, 1990 14h 43m 41.68±16.19s
40.116 N ±70.6km 29.552 E ±92.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZI	0.23	345	iPg	43 46.40	-0.2
			iSg	43 49.40	
YLV	0.47	343	iPg	43 50.80	-0.5
BNT	1.27	281	iPn	44 05.30	0.0
EDC	1.31	281	ePn	44 05.80	-0.2
CTT	1.34	321	iPn	44 06.80	0.5

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

OCT 19, 1990 16h 03m 47.52± 0.64s
24.098 S ± 4.9km 179.158 E ± 9.3km
DEPTH = 543.0 ± 8.4 km
5.2mb (20 obs.)
SOUTH OF FIJI ISLANDS (171)

SGE	6.58	350	iPd	05 32.70	0.6
MBU	7.10	357	iP	05 37.00	-0.1
DZM	11.88	277	iPc	06 27.90	2.4

		iS	08 48.00		
BKM	12.04 300	iPd	06 27.80	0.8	
HBZ	13.48 183	eP	06 41.00	-0.5	
PUZ	13.95 183	eP	06 45.80	-0.5	
WLZ	14.04 192	eP	06 49.70	2.6	
NOZ	14.51 184	P	06 52.60	0.8	
		eS	09 21.90		
CNZ	15.36 191	eP	07 01.80	1.4	
PGZ	16.65 188	eP	07 12.50	-0.3	
	0.4s	30.00nm		5.2mb	
MNG	16.76 190	eP	07 11.70	-2.2	
	0.2s	8.00nm		5.0mb	
		eS	10 01.70		
KIW	17.09 191	P	07 17.10	0.0	
MTW	17.29 189	eP	07 17.90	-1.1	
CAW	17.31 190	P	07 19.20	0.0	
WDW	17.47 191	P	07 20.40	-0.4	
MRW	17.49 191	P	07 21.10	0.2	
		eS	10 14.10		
WEL	17.53 191	P	07 21.50	0.2	
		S	10 18.00		
TCW	17.55 192	eP	07 21.60	0.1	
		eS	10 16.00		
MOW	17.58 190	eP	07 22.40	0.5	
THZ	18.37 195	P	07 30.20	0.6	
		S	10 27.60		
KHZ	18.86 193	P	07 33.80	-0.3	
	0.3s	36.00nm		5.5mb	
LTZ	19.49 195	P	07 39.70	-0.4	
MQZ	20.28 194	P	07 47.20	-0.1	
MMCZ	22.40 199	P	08 05.90	-0.9	
MHZ	22.41 199	P	08 05.70	-1.2	
HNR	23.43 305	eP	08 14.00	-2.2	
CMS	30.31 248	iPc	09 17.90	1.5	
CTA	30.71 271	iPd	09 20.70	0.8	
	0.4s	128.81nm		5.9mb	
		iS	13 46.00		
TPT	32.53 80	iP	09 34.40	-0.8	
	1.0s	55.00nm		5.1mb	
PMG	33.84 290	iPd	09 45.70	-0.6	
	0.8s	231.34nm		5.8mb	
OIS	36.68 268	iPd	10 10.00	0.3	
ASPA	41.25 261	iPd	10 46.90	0.1	
	0.7s	54.60nm		5.2mb	
		iPcP	12 32.30		
		iS	16 20.40		
WB5	41.61 267	iPd	10 49.00	-0.8	
		eS	16 25.90		
MTN	46.70 275	eP	11 28.00	-1.4	
	0.4s	84.00nm		5.6mb	
GUA	50.19 315	eP	11 53.80	-1.6	
	0.8s	119.40nm		5.4mb	
GUMO	50.25 315	eP	11 54.30	-1.5	
	0.3s	74.65nm		5.7mb	
PJG	50.25 315	eP	11 54.20	-1.6	
MBL	54.49 260	eP	12 24.70	-1.6	
	0.3s	10.00nm		4.6mb	
MRWA	56.09 250	eP	12 36.70	-0.7	
	0.4s	6.00nm		4.3mb	
NANU	57.99 258	iPd	12 50.10	-0.3	
	0.4s	38.00nm		5.1mb	
TRT	65.49 272	ePd	13 38.80	-0.4	
MAT	71.63 326	iPd	14 14.40	-1.2	
	0.9s	24.37nm		4.7mb	
NJ2	80.21 312	Pd	15 03.00	0.4	
MDJ	82.00 327	eP	15 11.50	0.0	
WHN	82.51 308	eP	15 15.00	0.6	
SNY	83.32 322	eP	15 18.00	-0.1	
CN2	83.59 324	iPd	15 19.60	0.1	
	1.0s	60.00nm		5.1mb	
TIA	83.81 314	Pd	15 21.10	0.3	
BJI	86.64 317	eP	15 34.50	0.2	
	1.0s	18.00nm		4.8mb	
TIY	87.76 313	Pd	15 40.80	1.0	
	1.0s	100.00nm		5.6mb	
XAN	88.26 309	Pc	15 43.20	1.0	
CHG	89.03 291	ePd	15 47.20	1.3	
	1.0s	11.25nm		4.7mb	
CD2	90.55 304	P	15 53.80	1.0	
	0.8s	20.00nm		5.1mb	
LZH	92.89 308	Pd	16 04.30	0.7	
	1.5s	23.00nm		5.1mb	
SOB1	128.76 125	ePKP	21 55.10	-0.3	
NB2	142.15 350	PKP	22 13.90	-5.0X	
	0.8s	6.60nm			
HFS	142.58 348	ePKP	22 13.70	-5.9X	
	0.4s	33.90nm			

KAS	146.45 309	ePKP	22 28.50	1.8	
ADI	147.22 294	iPKPd	22 30.40	2.2	
JVI	147.22 292	iPKPd	22 30.90	2.8X	
RMN	147.93 289	iPKPd	22 32.40	3.0X	
EKA	148.75 3	PKPc	22 33.50	3.7X	
	0.6s	5.20nm			
MLR	149.59 321	ePKP	22 36.00	4.4X	
KSP	150.19 338	iPKPd	22 38.20	6.1X	
		ic	22 46.70		
CLL	150.81 342	iPKP	22 38.70	5.7X	
	0.9s	42.00nm			
BRG	150.92 341	iPKPd	22 39.50	6.3X	
		i	22 49.60		
PRU	151.50 339	PKP	22 40.80	6.7X	
		e	22 52.00		
WTS	151.54 350	ePKP	22 41.00	7.0X	
	0.8s	23.00nm			
KHC	152.56 339	ePKP	22 43.30	7.6X	
ENN	152.86 351	ePKP	22 52.00	16.0X	
	0.9s	15.00nm			
BCAO	152.97 227	iPKPd	22 45.00	7.7X	
	0.5s	5.00nm			
	S.D. = 1.1	on	57 of 71 obs.		

?	OCT 19, 1990	16h 41m	24.03± 2.04s		
	3.429 S ±11.0km		136.143 E ±41.5km		
	DEPTH = 33.0km	(normal)			
	5.0mb (1 obs.)				
WEST IRIAN				(201)	
MTN	10.59 208	eP	43 55.40	-1.2	
		eS	45 44.00		
WB5	16.44 186	eP	45 13.00	-1.0	
		eS	48 04.90		
OIS	17.36 169	eP	45 34.00	8.5X	
		eS	48 36.00		
ASPA	20.24 186	eP	46 00.40	1.0	
	0.6s	44.70nm		5.0mb	
		iS	49 36.00		
MBL	23.71 221	eP	46 35.90	1.9	
GUN	57.52 306	P	51 13.20	-0.1	
PKI	57.76 306	P	51 14.60	-0.3	
KKN	57.95 306	P	51 15.90	-0.3	
DMN	58.02 306	P	51 16.60	-0.1	
GKN	58.56 306	P	51 20.40	0.1	
	S.D. = 1.1	on	9 of 10 obs.		

?	OCT 19, 1990	16h 57m	36.79± 2.19s		
	29.924 S ±28.4km		68.463 W ±30.8km		
	DEPTH = 110.0km	(geophysicist)			
SAN JUAN PROVINCE, ARGENTINA				(137)	
RTLL	1.40 180	ePd	58 01.00	-1.8	
		eS	58 22.50		
RTCB	1.58 190	ePc	58 03.80	-1.3	
		eS	58 27.80		
ZON	1.63 186	eP	58 07.30	1.7	
RTBS	1.93 206	ePc	58 08.10	-1.2	
		eS	58 34.00		
RTCV	1.93 182	eP	58 10.10	0.7	
		S	58 38.10		
CYA	2.76 58	e(P)	58 20.50	0.2	
MDZ	2.97 186	eP	58 27.90	4.7X	
		e	58 34.00		
		e	59 10.50		
PEL	3.73 210	eP	58 34.50	1.1	
		i	58 38.50		
		i	59 19.00		
FCH	3.73 204	eP	58 36.00	2.2	
TACH	4.27 209	eP	58 41.50	0.7	
LNV	4.74 211	eP	58 45.00	-2.1	
		i	59 42.00		
	S.D. = 1.7	on	10 of 11 obs.		

?	OCT 19, 1990	17h 00m	02.43± 2.67s		
	38.915 N ±13.1km		16.649 E ±27.8km		
	DEPTH = 33.0km	(normal)			
SOUTHERN ITALY				(390)	
CZI	0.50 307	P	00 11.90	-1.2	
ROI	0.66 355	P	00 14.10	-1.2	
TDS	0.78 342	P	00 16.90	-0.1	
		eSg	00 30.30		
CSI	0.90 342	P	00 19.70	0.9	
MMN	1.10 333	P	00 22.40	0.9	
		eSg	00 38.40		
ORI	1.16 352	P	00 26.00	3.6X	

		eSg	00 43.50		
ATN	1.20 231	P	00 23.00	0.1	
		eSg	00 37.50		
MGR	1.49 326	P	00 27.50	0.4	
		eSn	00 46.60		
	S.D. = 1.1	on	7 of 8 obs.		

?	OCT 19, 1990	17h 30m	21.93±15.16s		
	39.111 N ±94.1km		16.432 E ±50.0km		
	DEPTH = 10.0km	(geophysicist)			
SOUTHERN ITALY				(390)	
CZI	0.26 295	P	30 27.40	0.1	
ROI	0.47 13	P	30 31.60	0.1	
TDS	0.55 352	P	30 33.20	0.1	
		eSg	30 47.60		
CSI	0.67 351	P	30 35.20	-0.1	
MMN	0.85 336	P	30 38.20	-0.1	
	S.D. = 0.1	on	5 of 5 obs.		

%	OCT 19, 1990	17h 30m	58.21± 2.91s		
	38.868 N ±15.9km		16.458 E ±32.7km		
	DEPTH = 25.2 ± 11.5 km				
SOUTHERN ITALY				(390)	
ROI	0.71 7	P	31 11.70	-0.2	
TDS	0.80 353	P	31 13.40	0.1	
		eSg	31 28.80		
CSI	0.92 352	P	31 15.70	0.3	
ATN	1.05 228	P	31 17.40	0.0	
		eSg	31 34.50		
MMN	1.08 341	P	31 17.80	0.1	
		eSg	31 33.20		
ORI	1.19 360	P	31 19.50	0.2	
MGR	1.45 331	P	31 22.60	-0.3	
		eSn	31 45.10		
SGO	1.91 333	P	31 30.00	0.4	
	S.D. = 0.3	on	8 of 8 obs.		
----------					
*	OCT 19, 1990	17h 42m	10.80± 0.64s		
	20.338 S ±13.6km		168.410 E ±15.7km		
	DEPTH = 33.0km	(normal)			
	5.1mb (3 obs.)				
LOYALTY ISLANDS				(188)	
DZM	2.52 226	iPc	42 49.20	-1.2	
		iS	43 21.10		
PVC	2.59 358	iP	42 56.80	5.6X	
BKM	2.66 357	iP	42 51.40	-0.9	
		iS	43 02.50		
CTA	20.79 267	iPd	46 59.20	7.4X	
	1.1s	25.32nm		4.5mb	
BWA	22.57 227	eP	47 09.70	0.1	
		e	47 21.20		
CAN	22.69 225	e(P)	47 15.00	4.2X	
		e	47 23.90		
WB5	31.94 265	eP	48 36.00	0.1	
ASPA	32.12 258	iPd	48 37.00	-0.5	
	0.5s	13.90nm		5.1mb	
	Z 19s	0.50um		4.2Msz	
MTN	36.43 276	eP	49 15.00	0.4	
	0.5s	61.00nm		5.8mb	
CHG	78.40 295	eP	54 29.00	18.8X	
CHTO	78.40 295	(P)	54 11.00	0.8	
TNP	90.73 49	(P)	55 10.00	-2.0	
PKI	93.30 298	P	55 24.20	-0.1	
KKN	93.48 298	P	55 25.00	0.0	
DMN	93.56 298	P	55 25.80	0.4	
VAY	144.31 314	ePKP	01 42.00	-3.2X	
MOX	144.64 334	ePKP	01 44.00	-1.5	
SKO	144.77 315	ePKP	01 43.50	-2.5	
KHC	144.92 331	ePKP	01 46.90	0.8	
WTS	145.30 340	ePKP	01 45.50	-1.0	
GRF	145.54 334	e(PKP)	01 47.00	-0.1	
OHR	145.60 314	ePKP	01 42.30	-5.3X	
ENN	146.64 340	iPKP	01 50.80	2.0	
	0.6s	7.00nm			
BCAO	146.70 246	iPKPc	01 50.50	0.4	
	0.4s	4.00nm			
CDF	148.13 336	ePKP	01 51.50	0.0	
	0.7s	4.40nm			
BSF	148.80 336	ePKP	01 53.10	0.5	
	0.7s	4.40nm			
FLN	150.27 345	ePKP	01 56.20	1.6	
LDF	150.34 345	ePKP	01 56.20	1.5	
LPL	150.70 333	ePKP	01 58.80	3.1X	
LPG	150.70 333	ePKP	01 58.40	2.6X	

19d 18h

0.7s 4.40nm
GRR 150.71 345 ePKP 01 56.60 1.3
0.7s 6.60nm
LPF 151.08 345 ePKP 01 58.30 2.5X
0.7s 6.60nm
S.D. = 1.2 on 23 of 32 obs.

OCT 19, 1990 18h 48m 55.38± 0.39s
10.856 N ± 6.4km 125.973 E ± 9.3km
DEPTH = 33.0km (normal)
4.8mb (4 obs.)
LEYTE, PHILIPPINE ISLANDS (256)

GUMO 18.66 80 eP 53 13.00 0.0
SSE 20.62 348 eP 53 35.50 0.9
eS 57 22.00
WHN 22.37 333 eP 53 54.50 2.3
S 58 00.00
MTN 24.10 168 eP 54 10.20 1.1
0.5s 58.00nm 5.4mb
TIA 26.48 344 eP 54 31.00 -0.5
CHTO 27.27 290 (P) 54 40.20 1.3
XAN 27.86 329 P 54 43.70 -0.4
TIY 29.38 338 eP 54 57.20 -0.6
Z 12s 0.60um 4.4MszX
BJI 30.34 345 eP 55 07.50 1.3
SNY 30.92 357 eP 55 10.00 -1.3
WB5 31.64 165 eP 55 16.00 -1.9
LZH 32.13 325 P 55 41.50 19.2X
Z 16s 0.30um 4.1MszX
QIS 33.97 157 eP 55 37.00 -1.2
ASPA 35.18 167 eP 55 49.50 1.0
0.3s 7.70nm 5.1mb
GTA 36.74 325 eP 56 02.00 0.3
LSA 37.45 305 P 56 08.80 0.6
MRWA 40.99 193 eP 56 36.60 -0.4
GUN 41.22 300 P 56 39.00 -0.4
FORR 41.52 177 iPd 56 42.20 1.0
PKI 41.53 299 P 56 40.10 -1.8
KKN 41.70 300 P 56 43.40 0.2
DMN 41.80 299 P 56 43.40 -0.6
BAL 42.17 192 iPd 56 53.80 7.1X
GKN 42.30 300 P 56 46.80 -1.3
MUN 43.60 192 eP 56 59.00 0.7
NWAO 44.33 191 iPd 57 04.90 0.7
RKG 45.48 190 iPc 57 18.70 5.3X
WMQ 46.58 322 P 57 23.00 0.9
GBA 47.46 279 Pd 57 28.60 -0.7
0.8s 3.60nm 4.4mb
DZM 51.44 130 iPd 58 00.00 0.1
NB2 92.11 334 P 02 01.30 -1.2
0.8s 1.00nm 4.3mb
S.D. = 1.1 on 28 of 31 obs.

? OCT 19, 1990 18h 57m 32.47± 1.94s
28.804 S ±15.1km 176.693 W ±21.0km
DEPTH = 144.3 ± 18.1 km
4.1mb (1 obs.)
KERMADEC ISLANDS REGION (177)

RAO 1.16 247 P 57 58.00 -0.4
S 58 24.50
MNG 13.42 207 eP 00 38.50 0.3
THZ 15.45 210 eP 01 08.00 4.1X
S 04 01.50
KHZ 15.72 208 P 01 06.90 -0.2
DZM 16.63 290 iPd 01 21.20 2.6
BKM 17.71 305 iPc 01 30.00 -1.6
ASPA 44.36 265 iPd 05 34.90 4.7X
2.1s 9.00nm 4.1mb
Z 23s 0.30um 4.1MszX
WB5 45.20 270 eP 05 40.90 4.0X
MAT 77.60 324 (P) 09 13.00 -1.0
CMB 84.82 41 eP 09 53.00 1.2
WDC 85.36 38 eP 09 55.80 1.4
TNP 86.71 43 P 10 00.00 -1.3
BJI 92.60 315 eP 10 44.50 16.0X
CHTO 94.13 289 (P) 10 35.00 -1.0
NB2 147.33 353 PKP 17 00.60 3.4X
0.9s 8.40nm
HFS 147.89 350 ePKP 17 02.50 4.5X
0.6s 1.80nm
S.D. = 1.7 on 10 of 16 obs.

? OCT 19, 1990 19h 38m 59.09± 1.87s
23.197 S ±19.4km 68.261 W ±18.2km
DEPTH = 110.0km (geophysicist)
NORTHERN CHILE (123)

ANT 2.04 255 iPc 39 33.10 0.0
iS 39 53.20
CCH 6.12 19 P 40 32.50 3.7X
CNCB 6.36 2 P 40 32.00 -0.4
LPB 6.63 1 eP 40 37.00 1.0
ZOBO 6.89 1 P 40 39.00 -0.7
SIV 9.86 45 P 41 19.40 0.0
S.D. = 0.9 on 5 of 6 obs.

% OCT 19, 1990 20h 32m 43.71± 3.57s
39.224 N ±22.5km 16.360 E ±18.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

CZI 0.18 268 P 32 48.10 0.4
ROI 0.38 25 P 32 51.10 -0.5
TDS 0.43 358 P 32 53.00 0.4
eSg 33 03.90
CSI 0.55 354 P 32 56.10 1.1
MMN 0.72 337 P 32 57.80 -0.1
MGR 1.10 326 P 33 03.00 -1.4
eSn 33 21.50
S.D. = 1.1 on 6 of 6 obs.

• OCT 19, 1990 21h 04m 27.18± 0.94s
9.764 S ±12.5km 120.762 E ± 7.1km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
SUMBA ISLAND REGION (287)

TRT 8.29 284 ePc 06 28.60 0.5
KNA 9.81 128 eP 06 49.90 0.8
eS 08 35.00
MTN 10.62 108 eP 06 59.00 -1.2
0.4s 171.00nm 6.6mb X
eS 08 54.00
MBL 11.37 184 eP 07 10.60 0.2
0.3s 5.00nm 5.2mb X
eS 09 11.00
NANU 13.68 201 eP 07 40.50 -0.7
0.3s 8.00nm 5.0mb X
eS 10 05.00
WB5 16.54 129 eP 08 19.30 0.9
eS 11 12.90
ASPA 18.67 139 iPd 08 46.00 1.1
0.9s 24.00nm 4.4mb
iS 12 01.70
MRWA 19.86 192 eP 08 58.00 -0.5
e 09 03.00
eS 12 28.00
QIS 21.09 123 eP 09 11.00 -0.3
eS 12 58.00
STK 29.27 142 eP 10 28.30 -0.3
0.5s 5.00nm 4.5mb
BRS 34.89 125 iP 11 17.50 -0.4
CHG 35.63 323 eP 11 15.00 -9.2X
S.D. = 0.8 on 11 of 12 obs.

& OCT 19, 1990 21h 49m 14.84s
61.926 N 149.798 W
DEPTH = 46.3km
SOUTHERN ALASKA (2)
<AGS-P>.

PWA 0.28 188 iP 49 23.61 0.2
eS 49 30.87
GHO 0.44 110 iP 49 25.05 -0.3
eS 49 33.87
PLRM 0.46 136 iP 49 24.79 -0.6
CUT 0.53 335 iP 49 26.24 0.0
SUA 0.65 225 eP 49 27.42 -0.5
PMS 0.69 170 eP 49 27.69 -0.8
eS 49 38.34
SML 0.70 99 iP 49 27.85 -0.8
SKT 0.82 275 iP 49 29.16 -1.0
eS 49 40.61
HUR 1.06 4 eP 49 33.24 -0.3
eS 49 47.08
SCM 1.17 93 eP 49 34.34 -0.9
CRP 1.31 241 eP 49 36.50 -0.6
eS 49 53.72
BGL 1.41 243 eP 49 37.77 -0.7
CKL 1.42 240 eP 49 37.70 -1.0
eS 49 56.46
GLI 1.67 128 eP 49 40.45 -1.7
TOA 1.72 82 eP 49 42.42 -0.5
VZW 1.78 118 eP 49 42.44 -1.3
SEW 1.84 175 eP 49 43.30 -1.1
VLZ 1.84 114 eP 49 42.78 -1.7
KNIM 1.87 147 eP 49 41.98 -3.0
KLU 1.90 102 eP 49 43.95 -1.5
RSO 2.05 226 eP 49 46.50 -1.2
SDG 2.08 71 eP 49 47.69 -0.3
MTU 2.21 151 eP 49 47.11 -2.6
CNPM 2.51 197 eP 49 53.24 -0.9
24 obs. associated

OCT 19, 1990 21h 57m 36.31± 1.13s
51.734 N ± 6.1km 16.367 E ±10.9km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 4.0 (GRF), 3.7 (VKA).

KSP 0.89 183 iPd 57 54.00 0.6
0.3s 159.00nm
iS 58 02.80
iLR 58 10.00
BRG 1.75 241 iPn 58 06.80 0.0
iPg 58 08.20
iSg 58 27.50
PRU 2.10 214 iPn 58 11.80 -0.1
iPg 58 13.80
iSn 58 31.00
Sg 58 36.00
CLL 2.14 260 iPn 58 13.00 0.4
iPg 58 15.80
iSg 58 42.00
KHC 3.16 215 iPn 58 27.00 0.0
Pg 58 33.50
Sn 59 02.50
Sg 59 16.00
HOF 3.17 245 iPnc 58 27.30 0.1
MOX 3.18 252 ePn 58 28.00 0.7
iPg 58 36.00
iSg 59 15.00
WET 3.42 222 iPnc 58 31.00 0.3
VKA 3.47 181 iPgc 58 42.20 10.7X
iSg 59 24.70
SPC 3.55 134 e(Pn) 58 39.80 7.0X
i 58 49.20
i(Sn) 59 31.10
GRF 3.86 240 iPnc 58 37.30 0.4
ePg 58 50.30
eSg 59 33.70
TNS 5.23 256 ePnc 58 55.50 -0.9
eSn 00 21.80
SOTA 5.63 219 iPnc 59 00.60 -1.6
iSn 00 32.60
FVI 5.66 206 P 59 01.60 -0.8
eSn 00 31.00
OGA 5.99 218 iPc 59 08.00 0.7
CTI 6.48 210 P 59 14.50 0.3
eSn 01 05.00
NRA0 9.41 345 Pn 59 54.80 0.0
Pg 00 04.80
Sn 01 38.50
Lg 02 27.70
S.D. = 0.7 on 15 of 17 obs.

& OCT 19, 1990 22h 55m 30.66s
61.408 N 151.044 W
DEPTH = 56.2km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA 0.16 69 iP 55 39.74 0.0
CRP 0.55 256 iP 55 42.82 -0.4
eS 55 52.90
PWA 0.61 66 iP 55 43.48 -0.2
SKT 0.62 338 iP 55 43.16 -0.7
eS 55 53.28
CKL 0.66 252 iP 55 43.81 -0.6
eS 55 54.73
BGL 0.67 258 iP 55 43.95 -0.5
NKA 0.67 188 eP 55 45.59 1.1
PMS 0.73 102 eP 55 44.85 -0.4
eS 55 56.61
PLRM 0.94 78 eP 55 46.99 -0.8
eS 56 00.25
CUT 1.07 20 eP 55 48.79 -0.8
RDT 1.07 219 iP 55 48.76 -1.6
eS 56 03.79

GHO 1.08 69 eP 55 49.15 -0.7
eS 56 04.36
RSO 1.26 222 eP 55 51.90 -0.6
RED 1.30 221 eP 55 52.15 -0.8
SML 1.36 72 iP 55 52.50 -1.2
NNL 1.38 185 eP 55 56.29 2.4
SEW 1.53 148 eP 55 56.15 0.2
SCM 1.83 75 eP 55 58.53 -1.7
KNIM 1.94 122 eP 55 58.55 -3.2
GLI 1.99 104 iP 55 59.77 -2.7
VZW 2.20 97 eP 56 03.14 -2.3
VLZ 2.29 95 eP 56 03.97 -2.7
KLU 2.46 86 eP 56 06.61 -2.6
23 obs. associated

OCT 19, 1990 23h 39m 21.47± 0.27s
30.317 N ± 5.6km 57.474 E ± 3.4km
DEPTH = 33.0km (normal)
4.7mb (15 obs.) 4.1Msz (3 obs.)
IRAN (348)
Felt in the Kermon oreo.

MAIO 6.20 15 ePn 40 53.00 -0.2
0.8s 16.47nm 4.8mb
eSn 42 11.00
BRF 7.40 237 (Pn) 41 10.30 0.4
BBU 7.41 238 ePn 41 10.70 0.6
(Sn) 42 22.70
BJA 7.44 236 iPn 41 12.30 1.9
TEH 7.44 318 eP 41 10.00 -0.6
DHR 7.60 240 ePc 41 11.60 -1.1
RYD 11.14 243 iP+ 41 57.00 -4.5X
iS 44 00.70
TAB 12.03 313 eP 42 16.00 2.3
OASM 12.99 254 ePc 42 20.40 -6.1X
AFIF 14.14 247 ePc 42 40.70 -0.9
KMSA 15.34 233 ePc 42 50.40 -6.9X
NDI 17.27 90 eP 43 21.20 -0.4
KSH 17.68 54 eP 43 26.00 -0.9
N 11s 3.40um
BOM 17.97 126 eP 43 29.50 -0.9
eS 46 11.00
HRI 18.71 285 eP 43 40.00 0.5
AYN 18.73 271 ePc 43 38.70 -1.0
POO 18.95 125 iPd 43 40.20 -2.2
ZNT 19.28 281 eP 43 46.00 -0.3
HOL 19.49 273 ePd 43 48.70 0.0
BADA 19.66 270 ePd 43 50.60 0.1
RMN 19.71 276 iPd 43 49.80 -1.3
CSS 20.84 289 eP 44 03.30 0.5
BBTK 22.29 302 eP 44 18.00 0.6
HYB 23.11 119 eP 44 26.00 0.5
1.0s 45.00nm 4.9mb
GKN 23.81 89 P 44 32.20 -0.3
KSL 24.00 291 eP 44 35.30 1.3
ALT 24.06 299 eP 44 35.60 0.9
DMN 24.30 89 P 44 39.20 1.8
KKN 24.41 89 P 44 38.60 0.2
0.6s 24.00nm 4.9mb
PKI 24.58 89 P 44 40.20 0.1
0.6s 20.00nm 4.9mb
GBA 24.82 128 P 44 43.00 1.0
HRT 24.83 303 eP 44 43.00 0.9
GUN 24.91 88 P 44 43.70 0.4
0.8s 40.00nm 5.1mb
CTT 25.82 303 eP 44 52.00 0.6
BNT 26.00 301 eP 44 57.00 4.0X
EDC 26.04 301 eP 44 53.80 0.4
SMG 26.36 294 eP 45 01.50 5.2X
NPS 27.17 289 eP 45 12.40 8.6X
TLB 27.20 310 eP 45 13.00 9.1X
KOD 27.31 133 eP 45 07.00 1.4
WMO 27.45 52 P 45 07.00 0.6
Z 12s 0.60um 4.4MszX
N 10s 0.40um
ISR 28.38 310 eP 45 22.00 7.3X
VRI 28.53 312 ePd 45 21.00 5.0X
MLR 28.90 310 eP 45 22.00 2.5
LSA 29.11 83 P 45 22.20 0.3
VLI 29.39 292 eP 45 31.00 7.2X
ITM 30.21 293 eP 45 30.40 -0.8
SHL 30.69 90 eP 45 35.00 -0.7
GTA 35.63 64 eP 46 18.20 -0.2
0.8s 10.00nm 4.8mb
KSP 36.77 316 eP 46 29.80 2.1
NUR 37.25 334 eP 46 44.00 12.5X
KHC 38.00 312 eP 46 38.50 0.4
e 46 46.50 27kmX
CLL 38.89 316 eP 46 45.00 -0.4
LZH 38.94 69 P 46 51.00 4.8X
Z 16s 0.30um 4.2MszX
N 16s 0.50um
E 12s 0.30um
SOTA 39.20 309 iPc 46 46.20 -2.0
0.8s 10.60nm 4.7mb
id 46 47.60 5kmX
i 47 13.10
i 47 30.50
CHG 39.22 97 eP 46 48.10 -0.4
SOD 41.37 343 iP 47 07.00 1.3
HFS 41.64 329 eP 47 07.00 -0.9
0.5s 2.00nm 4.1mb
Z 18s 0.14um 3.9Msz
LR 05 22.00
LPG 42.09 306 eP 47 10.60 -1.6
0.7s 4.40nm 4.3mb
LPL 42.11 306 eP 47 10.30 -2.0
0.6s 3.60nm 4.3mb
BNI 42.13 305 P 47 05.50 -6.8X
NB2 43.14 329 P 47 19.00 -1.2
0.7s 1.60nm 3.9mb
GYA 43.18 83 P 47 24.80 3.6X
XAN 43.33 71 P 47 23.00 0.8
BTO 43.45 62 eP 47 25.00 1.9
DOU 43.92 312 P 47 27.80 1.1
SMF 44.17 307 eP 47 27.10 -1.7
LOR 44.18 308 eP 47 26.90 -2.0
0.7s 3.30nm 4.3mb
Z 19s 0.15um 3.9Msz
HHC 44.60 61 eP 47 37.50 5.0X
BCAO 44.83 243 iPc 47 33.40 -1.1
0.5s 31.00nm 5.4mb
TIY 45.60 65 eP 47 40.00 -0.4
Z 18s 1.00um 4.8Msz
N 14s 0.40um
KRI 54.01 214 iPc 48 47.10 2.1
LKO 62.02 265 P 49 39.52 -1.8
0.6s 13.00nm 5.2mb
MBC 73.68 359 eP 50 53.00 -0.1
INK 81.34 4 eP 51 35.00 -0.5
FBA 83.07 11 P 51 44.50 -0.1
YKA 87.30 356 eP 52 04.90 -0.8
0.7s 3.30nm 4.7mb
WB5 89.15 114 eP 52 14.70 -0.6
S.D. = 1.2 on 63 of 78 obs.

? OCT 20, 1990 00h 22m 55.76±27.19s
39.084 N ±159.km 16.511 E ±97.4km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

CZI 0.32 295 P 23 02.40 0.0
ROI 0.49 5 P 23 05.50 -0.2
TDS 0.59 347 P 23 07.80 0.1
eSg 23 21.30
CSI 0.71 346 P 23 10.20 0.4
MMN 0.90 334 P 23 12.60 -0.4
S.D. = 0.4 on 5 of 5 obs.

• OCT 20, 1990 00h 28m 03.83± 1.77s
40.274 N ± 8.9km 25.997 E ±15.3km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.3 (ISK).

EZN 0.51 151 iPn 28 14.20 0.0
KGT 1.01 79 iPn 28 24.10 1.1
MFT 1.10 62 ePn 28 24.00 -0.6
EDC 1.43 86 ePn 28 34.80 5.0X
BNT 1.47 86 ePn 28 34.60 4.2X
CTT 2.04 64 ePn 28 45.00 6.3X
YLV 2.59 82 ePn 28 46.00 -0.6
MLR 5.22 360 eP 29 24.00 0.2
S.D. = 1.0 on 5 of 8 obs.

? OCT 20, 1990 00h 52m 09.34± 2.80s
17.435 N ±21.4km 95.553 W ±20.3km
DEPTH = 33.0km (normal)
OAXACA, MEXICO (60)

EVV 1.03 11 eP 52 27.50 0.0
OXX 1.17 253 iP 52 29.75 0.1
iS 52 44.50
LVVM 2.44 340 (P) 52 56.50 8.7X
SCX 2.88 104 (P) 53 05.50 11.6X
iS 53 25.50
IIT 3.06 301 eP 52 56.50 -0.2
PPM 3.34 300 eP 53 01.50 0.5
III 3.84 285 eP 53 07.50 -0.3
IIJ 4.58 301 (P) 53 36.00 17.4X
S.D. = 0.4 on 5 of 8 obs.

? OCT 20, 1990 01h 58m 13.93± 3.54s
41.970 N ±38.9km 25.196 E ±12.2km
DEPTH = 5.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)
ML 2.8 (THE).

ALN 1.25 149 ePc 58 38.18 0.6
eS 59 00.06
SRS 1.47 235 ePd 58 40.34 -0.8
eS 59 01.06
SOH 1.80 231 ePd 58 45.86 0.0
eS 59 11.82
KNT 1.90 246 ePc 58 47.18 -0.2
eS 59 12.06
MFT 1.97 126 ePn 58 52.00 3.7X
VAY 2.07 253 ePn 58 50.70 0.9
KGT 2.20 133 iPn 58 51.10 -0.5
MLR 3.56 9 eP 59 15.00 3.9X
S.D. = 0.9 on 6 of 8 obs.

? OCT 20, 1990 02h 52m 10.70±16.75s
24.055 N ±56.9km 122.311 E ±113.km
DEPTH = 10.0km (geophysicist)
TAIWAN REGION (243)

TWD 0.65 272 ePd 52 23.00 -0.7
eS 52 32.00
TWC 0.69 323 iPd 52 23.90 -0.5
eS 52 34.20
TWZ 1.23 327 ePd 52 33.60 0.0
ANP 1.34 328 eP 52 34.50 -0.9
TWQ 1.36 280 ePc 52 35.80 0.0
S.D. = 0.6 on 5 of 5 obs.

& OCT 20, 1990 03h 12m 32.30s
60.517 N 152.027 W
DEPTH = 80.5km
SOUTHERN ALASKA (2)
<AGS-P>.

RDT 0.20 287 iP 12 43.76 1.0
eS 12 53.07
RSO 0.36 262 eP 12 44.95 -0.5
iS 12 54.94
RED 0.38 255 eP 12 44.83 -0.6
NKA 0.45 59 iP 12 46.94 1.1
NNL 0.60 142 iP 12 47.30 0.1
CKL 0.70 348 iP 12 47.73 -0.6
CRP 0.76 355 eP 12 48.60 -0.4
eS 13 00.93
BGL 0.77 347 iP 12 48.63 -0.5
HOM 0.88 167 eP 12 49.91 -0.3
OPT 1.06 215 iP 12 51.86 -0.5
eS 13 06.56
CNPM 1.07 158 iP 12 51.49 -1.0
eS 13 06.84
XLV 1.08 172 eP 12 51.43 -1.2
SUA 1.14 33 iP 12 53.03 -0.4
eS 13 09.20
PDB 1.31 237 iP 12 54.32 -1.2
iS 13 11.55
AUE 1.34 211 iP 12 55.11 -0.9
SEW 1.35 107 eP 12 54.14 -1.9
AUH 1.36 212 eP 12 55.67 -0.6
AUI 1.38 211 eP 12 55.65 -0.8
PMS 1.41 58 iP 12 56.04 -0.9
eS 13 14.14
SKT 1.49 9 iP 12 56.98 -0.9
PWA 1.54 42 eP 12 58.42 -0.2
MCNL 1.77 222 iP 13 00.62 -1.1
PLRM 1.77 51 eP 13 00.11 -1.6
CDD 1.79 208 eP 13 00.85 -1.1
SVW 1.86 290 eP 13 01.33 -1.6
GHO 1.96 49 eP 13 02.82 -1.5
eS 13 26.14
BGM 1.97 236 eP 13 03.43 -0.9
CUT 2.07 23 iP 13 05.07 -0.7
KNIM 2.13 93 iP 13 03.42 -3.2
SML 2.21 53 iP 13 06.05 -1.6

20d 03h

MTU	2.25	102	eP	13	05.60	-2.5
GLI	2.45	79	eP	13	07.39	-3.6
SCM	2.63	58	eP	13	11.55	-2.0
HUR	2.72	24	eP	13	14.07	-0.6
VLZ	2.86	75	eP	13	13.02	-3.5
KLU	3.13	69	iP	13	17.69	-2.7
TOA	3.24	58	eP	13	20.53	-1.4
RND	3.26	26	eP	13	20.77	-1.5
MCK	3.54	23	eP	13	26.49	0.5
NEA	4.30	17	eP	13	35.34	-1.3
WRH	4.37	23	eP	13	35.07	-2.5
HDA	4.56	29	eP	13	38.48	-1.8
CCB	4.58	23	iP	13	38.63	-1.9

43 obs. associated

? OCT 20, 1990 03h 58m 33.56±10.25s
40.210 N ±65.1km 29.622 E ±26.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.1 (ISK).

IZI	0.17	318	iPg	58	37.00	-0.5
YLV	0.40	332	iPg	58	42.00	0.2
			iSg	58	45.00	
HRT	0.61	3	ePg	58	45.80	-0.1
CTT	1.30	316	ePn	58	58.00	0.3

S.D. = 0.6 on 4 of 4 obs.

& OCT 20, 1990 04h 29m 07.86s
62.890 N 150.648 W
DEPTH = 105.6km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.47	79	eP	29	24.01	-0.3
			eS	29	36.21	
CUT	0.52	160	iP	29	24.45	-0.1
RND	0.97	57	eP	29	28.40	-0.3
			eS	29	43.22	
SKT	1.00	205	iP	29	28.66	-0.4
			eS	29	44.76	
MCK	1.15	42	eP	29	32.03	1.4
PWA	1.29	164	iP	29	32.25	0.0
GHO	1.38	144	iP	29	33.26	-0.2
SUA	1.43	182	eP	29	34.14	0.0
PLRM	1.48	151	eP	29	33.86	-0.7
PMR	1.48	151	eP	29	33.80	-0.8
			eS	29	54.70	
SML	1.53	134	iP	29	34.69	-0.5
PMS	1.73	162	eP	29	37.36	-0.3
CRP	1.78	204	eP	29	37.96	-0.5
BGL	1.83	207	eP	29	38.85	-0.2
NEA	1.83	22	iP	29	37.78	-1.2
SCM	1.88	123	eP	29	38.68	-1.0
WRH	1.95	35	eP	29	39.56	-1.0
CCB	2.17	34	eP	29	42.06	-1.3
TOA	2.22	109	eP	29	43.70	-0.4
HDA	2.24	46	eP	29	42.86	-1.5
FBA	2.38	31	eP	29	45.00	-1.1
SDG	2.38	97	eP	29	45.89	-0.3
TTA	2.46	273	eP	29	45.70	-1.5
RDT	2.47	201	eP	29	46.99	-0.4
GLM	2.55	33	eP	29	47.32	-1.2
KLU	2.62	120	eP	29	47.74	-1.7
GLI	2.63	139	eP	29	48.00	-1.5
VZW	2.67	132	eP	29	48.07	-2.0
VLZ	2.69	129	eP	29	47.92	-2.4
SEW	2.85	168	eP	29	51.51	-1.0
KNIM	2.90	150	eP	29	50.93	-2.3
SVW	2.95	235	eP	29	52.30	-1.5
IMA	3.45	339	eP	29	59.20	-1.5
GLB	3.52	111	iP	30	00.05	-1.6

34 obs. associated

& OCT 20, 1990 04h 32m 24.21s
62.148 N 150.438 W
DEPTH = 1.3km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.27	17	iP	32	30.23	0.6
SKT	0.54	252	eP	32	35.04	0.0
			eS	32	42.69	
PWA	0.56	152	eP	32	36.30	0.8
			eS	32	44.54	
SUA	0.70	192	iP	32	38.73	0.5
			eS	32	48.91	
GHO	0.81	117	iP	32	39.88	-0.5
			eS	32	51.69	
PLRM	0.83	131	eP	32	40.51	-0.3
			eS	32	52.58	
HUR	0.91	24	iP	32	41.04	-1.3
			eS	32	54.10	
PMS	1.00	155	eP	32	43.43	-0.5
			iS	32	57.77	
SML	1.05	108	iP	32	44.02	-0.8
			eS	32	59.40	
CRP	1.20	224	eP	32	47.01	-0.6
BGL	1.29	227	eP	32	48.11	-0.8
CKL	1.32	224	eP	32	48.84	-0.6
RND	1.46	29	eP	32	49.89	-1.9
			eS	33	09.35	
SCM	1.50	101	eP	32	51.21	-1.2
MCK	1.73	23	eP	32	54.56	-1.1
RDT	1.84	212	eP	32	57.37	0.1
TOA	2.00	89	eP	32	59.80	0.2
RSO	2.03	214	eP	33	00.37	0.3
RED	2.07	214	eP	33	01.24	0.7
SEW	2.11	166	eP	33	02.80	1.8
VZW	2.15	119	eP	33	02.21	0.5
VLZ	2.21	116	eP	33	02.69	0.2
KNIM	2.23	143	eP	33	01.85	-0.9
KLU	2.24	105	eP	33	02.66	-0.4
WRH	2.56	23	eP	33	04.95	-2.6

25 obs. associated

? OCT 20, 1990 05h 20m 34.88±16.48s
16.984 N ±72.3km 100.120 W ±134.km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	0.28	114	iP	20	40.50	-0.2
			iS	20	44.00	
III	1.52	24	iP	21	02.50	0.2
			iS	21	24.00	
PPM	2.51	34	eP	21	16.50	-0.4
			iS	21	52.00	
OXX	3.25	88	eP	21	27.50	0.4

S.D. = 0.6 on 4 of 4 obs.

& OCT 20, 1990 05h 35m 42.26s
61.793 N 149.698 W
DEPTH = 37.7km
SOUTHERN ALASKA (2)
<AGS-P>.

PWA	0.17	211	iP	35	49.40	0.4
			iS	35	54.81	
PLRM	0.34	126	eP	35	50.05	-0.7
			eS	35	57.22	
GHO	0.37	93	iP	35	50.70	-0.6
			eS	35	58.12	
PMS	0.55	173	iP	35	53.16	-0.6
SUA	0.60	237	eP	35	54.03	-0.4
SML	0.65	88	iP	35	53.89	-1.2
CUT	0.67	337	iP	35	54.24	-1.0
SKT	0.89	283	iP	35	57.37	-1.0
			eS	36	09.60	
SCM	1.13	87	iP	36	01.17	-0.7
HUR	1.19	1	eP	36	01.94	-0.7
			eS	36	17.69	
CRP	1.29	247	eP	36	04.52	0.3
BGL	1.40	249	eP	36	05.90	0.2
CKL	1.40	246	eP	36	05.77	0.0
GLI	1.55	125	eP	36	07.24	-0.6
RND	1.67	13	eP	36	08.69	-0.9
VZW	1.68	115	eP	36	09.45	-0.3
TOA	1.70	78	eP	36	10.43	0.4
SEW	1.70	176	eP	36	09.38	-0.6
KNIM	1.74	146	iP	36	08.74	-1.8
VLZ	1.75	111	eP	36	09.99	-0.6
RDT	1.79	228	eP	36	10.99	-0.4
KLU	1.83	98	eP	36	11.31	-0.6
MCK	1.98	10	eP	36	13.50	-0.5
RED	2.03	229	eP	36	14.68	-0.2
MTU	2.07	150	eP	36	13.67	-1.6
SDG	2.08	67	eP	36	15.65	0.1
CNPM	2.40	199	eP	36	20.39	0.4
CCB	2.99	16	eP	36	26.38	-2.0
FBA	3.24	15	eP	36	30.34	-1.5

29 obs. associated

OCT 20, 1990 05h 47m 50.34± 0.47s
36.545 N ± 8.2km 139.288 E ± 8.6km
DEPTH = 121.8 ± 5.2 km
4.4mb (2 obs.)
HONSHU, JAPAN (227)

CHJJ	0.55	206	iPd	48	09.00	0.0
			S	48	22.30	
NIIJ	0.73	342	iP+	48	09.80	-0.5
			S	48	23.80	
KAKJ	0.79	115	iPd	48	10.40	-0.4
			S	48	24.40	
MAT	0.87	270	iPd	48	11.20	-0.4
			eS	48	26.00	
MTMJ	1.19	272	P	48	14.90	0.0
IIDJ	1.54	227	P	48	19.30	0.5
			S	48	40.40	
YAMJ	1.73	20	iP+	48	21.40	0.4
			eS	48	46.00	
TSRJ	2.86	250	P	48	36.30	0.8
OFUJ	3.16	36	P	48	39.60	0.2
			eS	49	16.30	
MTN	49.72	190	eP	56	32.00	0.1
	0.4s		17.00nm			5.3mb
WB5	56.31	186	eP	57	19.80	-0.8
N82	73.97	337	P	59	12.40	-1.3
	0.7s		0.80nm			3.6mb
TNP	77.53	52	P	59	35.80	1.4
CNCB	148.87	58	PKP	07	28.70	6.7X

S.D. = 0.8 on 13 of 14 obs.

? OCT 20, 1990 06h 00m 29.01± 0.96s
35.452 N ±20.9km 24.434 E ± 9.2km
DEPTH = 33.0km (normal)
CRETE (370)
MD 3.3 (ATH).

VAM	0.20	257	ePb	00	35.50	-0.1
NPS	0.98	101	ePn	00	46.80	0.3
VLI	1.75	317	ePn	00	57.60	0.1
KAP	2.24	87	ePn	01	04.20	-0.3

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

• OCT 20, 1990 06h 36m 12.75± 0.81s
19.259 N ± 8.8km 120.997 E ±13.0km
DEPTH = 33.0km (normal)
4.4mb (3 obs.)
PHILIPPINE ISLANDS REGION (248)

QZH	6.08	339	eP	37	40.00	-2.7
QIZ	10.55	271	eP	38	43.00	-1.8
			eS	40	35.20	
TIA	17.23	349	eP	40	13.10	0.6
XAN	18.23	326	P	40	25.20	0.2
CD2	19.42	310	P	40	39.70	0.3
TIY	19.85	340	eP	40	43.80	-0.1
Z	16s		1.00um			
N	11s		0.20um			
			eS	44	22.00	
BJI	21.12	350	eP	40	56.50	-0.5
	1.1s		17.00nm			4.4mb
LZH	22.56	321	Pd	41	13.00	1.4
Z	18s		0.30um			3.8Msz
			SP	41	31.50	
HHC	22.99	341	eP	41	16.20	0.5
GUN	33.22	292	P	42	50.40	1.0
PKI	33.60	291	P	42	53.40	0.7
KKN	33.74	291	P	42	53.80	0.1
DMN	33.87	291	P	42	55.70	0.8
GKN	34.33	292	P	42	58.80	0.0
WB5	41.05	161	eP	43	53.80	-1.1
ASPA	44.48	163	eP	44	23.30	0.4
	0.9s		4.80nm			4.3mb
YKA	87.56	23	eP	49	06.40	7.9X
	0.9s		2.20nm			4.4mb

S.D. = 1.1 on 16 of 17 obs.

& OCT 20, 1990 07h 04m 01.90s
37.018 N 118.338 W
DEPTH = 2.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.1 (BRK).

FRI	1.10	269	iPc	04	22.00	-1.2
			iS	04	36.30	
TNP	1.39	40	iPc	04	26.90	-1.4
CMB	1.92	303	iPc	04	36.10	0.1
			iS	05	01.00	
PHAM	2.04	235	eP	04	37.30	-0.4

PRI 2.07 246 eP 04 38.70 0.5
iS 05 04.70
LLA 2.13 260 eP 04 40.60 1.6
ABL 2.28 199 eP 04 41.80 0.5
SAO 2.50 265 iP 04 44.50 0.2
PRS 2.53 255 eP 04 46.30 1.6
ARN 2.57 278 eP 04 45.70 0.4
10 obs. associated

OCT 20, 1990 08h 07m 27.59± 0.15s
37.093 N ± 3.6km 103.781 E ± 2.9km
DEPTH = 11.7km (7 depth phases)
5.6mb (71 obs.) 5.8Msz (11 obs.)
GANSU PROVINCE, CHINA (322)
One person killed, two injured
and damage in the Tianzhu area.
Felt at Lanzhou.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 31C
Centroid Location:
Origin Time 08:07:32.5 0.2
Lat 37.06N 0.03 Lon 103.54E 0.04
Dep 15.0 FIX Half-duration 2.5
Moment Tensor; Scale 10**17 Nm
Mrr=-0.12 0.10 Mtt= 1.40 0.11
Mff=-1.27 0.15 Mrt=-0.15 0.34
Mrf= 0.42 0.36 Mtf= 4.52 0.10
Principal Axes:
T Val= 4.78 Plg= 2 Azm=323
N -0.09 84 217
P -4.69 5 53
Best Double Couple:Mo=4.7*10**17
NP1:Strike= 98 Dip=85 Slip= -3
NP2: 188 87 -175

LZH 1.01 177 Pg 07 47.00 0.4
Sg 08 00.00
GTA 3.89 308 iPnc 08 27.00 -1.6
Z 12s 572.00um
E 10s 359.00um
Pg 08 35.50
XAN 5.18 125 Pn 08 47.20 0.4
Pg 09 01.30
Sg 10 07.00
BTO 5.99 52 Pn 08 57.00 -1.3
N 11s 53.20um
E 11s 61.60um
Pg 09 20.00
eSg 10 42.00
CD2 6.17 180 Pn 09 01.40 0.7
Sg 10 37.00
TIY 6.92 82 Pnc 09 11.80 0.5
N 11s 213.00um
Pg 09 36.00
Sn 10 33.20
Sg 11 06.70
HHC 7.13 56 ePn 09 13.00 -1.3
N 11s 183.00um
Pg 09 40.00
BJI 10.14 69 eP 09 56.00 0.0
1.0s 61.00nm 6.0mb
N 12s 114.00um
E 11s 42.70um
TIA 10.76 91 Pd 10 03.70 -0.8
N 15s 283.00um
E 13s 63.00um
GYA 10.88 166 iPc 10 04.00 -2.3
Z 12s 20.10um
S 12 05.00
WHN 10.95 124 Pd 10 05.00 -2.0
0.6s 100.00nm 6.3mb
Z 16s 27.90um 5.2Msz
E 11s 73.90um
KMI 11.97 185 Pc 10 19.00 -2.2
Z 10s 68.40um
pP 10 27.50
S 12 28.00
NJ2 13.40 108 Pc 10 42.00 2.0
5.0s 1300.00nm 6.2mb X
N 12s 203.00um
E 11s 62.10um
sP 10 54.00
S 13 12.00
WMO 13.96 304 P 10 44.00 -3.5X
Z 10s 23.80um
N 10s 172.00um

pP 10 53.50
DL2 14.19 77 P 10 51.00 0.6
8.0s 1400.00nm 5.7mb X
Z 14s 35.90um 4.4Msz
N 13s 28.80um
E 14s 60.30um
S 13 35.00
SSE 15.60 107 iPc 11 12.00 3.1X
6.0s 1160.00nm 5.3mb X
Z 16s 30.90um 4.2Msz
N 14s 67.10um
E 14s 26.50um
S 14 02.00
SNY 16.00 67 iPd 11 14.00 0.1
5.0s 2700.00nm 5.6mb X
N 12s 28.10um
E 11s 18.50um
S 14 11.00
sS 14 23.00
GZH 16.21 147 P 11 13.80 -3.0X
Z 20s 28.20um
N 10s 20.10um
E 10s 40.40um
MCO 17.15 148 eP 11 29.00 0.3
OZH 17.52 130 eP 11 36.00 2.8X
3.0s 2200.00nm 5.8mb
Z 12s 30.10um 4.2MszX
sP 11 46.00
GUN 17.64 244 P 11 29.00 -6.1X
CN2 17.78 61 Pd 11 35.80 -0.5
5.0s 2700.00nm 5.6mb X
Z 10s 52.80um 5.6Msz
pP 11 40.00
S 14 54.00
KKN 18.14 245 P 11 36.20 -4.9X
PKI 18.17 244 P 11 36.40 -5.3X
DMN 18.37 244 P 11 38.80 -5.2X
GKN 18.48 246 P 11 38.60 -6.8X
CHG 18.70 194 ePc 11 47.90 0.0
1.0s 120.00nm 5.0mb
eS 15 12.00
QIZ 18.77 162 P 11 47.50 -1.2
eS 15 15.00
ANP 19.24 123 iPd 12 02.00 7.6X
iS 15 36.80
LOE 19.69 186 iPc 11 58.30 -1.5
BDT 20.22 193 ePd 12 05.50 0.3
1.0s 200.10nm 5.4mb
MDJ 20.86 61 Pd 12 12.00 0.3
3.0s 2600.00nm 6.1mb
Z 18s 21.30um 5.6Msz
pP 12 17.00 18km
NST 21.58 190 eP 12 19.00 -0.2
KSH 21.92 285 eP 12 24.00 1.3
Z 16s 47.50um 6.0MszX
N 12s 59.00um
SHNJ 22.39 89 eP 12 27.30 0.2
KUMJ 22.63 94 eP 12 30.00 0.4
KAGJ 23.16 97 eP 12 35.20 0.5
SHK 23.54 88 eP 12 39.60 1.2
NDI 23.77 257 iPc 12 40.00 -0.8
0.6s 113.33nm 5.6mb
eS 16 56.00
YONJ 24.00 86 eP 12 42.90 -0.1
NNT 24.67 190 eP 12 49.50 0.0
TKSJ 24.77 88 P 12 51.70 1.3
TSRJ 25.93 84 P 13 01.20 -0.1
WKYJ 25.94 87 eP 13 00.70 -0.9
MTMJ 27.15 81 eP 13 13.00 0.3
MAT 27.48 81 iPd 13 15.60 0.0
1.6s 130.00nm 5.4mb
Z 20s 9.22um 5.4Msz
eS 17 58.00
NIIJ 27.97 79 eP 13 19.10 -0.9
CHJJ 28.21 81 eP 13 21.80 -0.3
YAMJ 28.62 77 eP 13 25.10 -0.7
MRRJ 29.00 68 eP 13 29.40 0.3
HYB 29.63 235 eP 13 33.80 -1.3
eS 18 24.00
e 18 32.00
e 19 00.00
OFUJ 29.75 74 eP 13 35.70 -0.2
SNG 29.92 186 eP 13 36.20 -1.4
eS 18 33.90
ASAJ 30.11 64 P 13 39.20 0.1
HOOJ 30.64 68 eP 13 44.30 0.6
KUSJ 31.64 66 P 13 52.20 -0.4

POO 32.09 243 eP 13 55.50 -1.3
IPM 32.46 185 ePd 14 03.50 3.5X
KKM 32.93 157 eP 14 04.50 0.4
GBA 33.17 232 P 14 05.50 -0.6
MAIO 35.28 282 eP 14 24.00 -0.3
1.0s 22.50nm 5.0mb
eS 20 04.00
KOD 35.76 228 eP 14 28.20 -0.6
GUMO 43.43 112 eP 15 34.50 2.4
1.1s 329.80nm 6.0mb
PJG 43.43 112 eP 15 34.50 2.4
GUA 43.49 112 eP 15 35.50 2.9X
0.7s 82.19nm 5.6mb
TAB 44.91 290 eP 15 45.00 1.0
TRT 45.33 168 ePc 15 48.50 1.2
KER 45.51 284 eP 15 51.00 2.1
DHR 46.36 273 eP 15 56.30 0.9
RYD 49.91 273 eP 16 21.00 -2.2
KEV 51.20 334 iP 16 31.80 -0.5
0.8s 33.70nm 5.3mb
Z 16s 9.40um 5.9MszX
e 23 54.00
e 27 36.00
LR 40 20.00
SOD 51.50 331 iP 16 35.80 1.2
SUF 52.27 325 eP 16 38.00 -2.6
KTK1 52.59 333 eP 16 41.00 -1.9
UQSK 52.79 276 eP 16 44.70 -0.4
AFIF 52.95 274 ePd 16 47.20 0.9
KAS 53.05 298 iPc 16 48.80 2.0
NUR 53.38 323 iP 16 47.80 -1.0
0.9s 76.00nm 5.7mb
Z 14s 8.00um 5.9MszX
e 24 20.00
e 26 36.00
e 28 04.00
LR 40 08.00
TRO 54.01 334 eP 16 53.90 0.6
BBTK 54.31 296 eP 16 57.00 0.9
HRI 54.66 288 eP 17 05.00 6.2X
CFR 55.60 304 eP 17 07.00 1.8
DSI 55.66 286 eP 17 11.50 5.6X
HRT 56.14 298 eP 17 10.00 0.7
KMTA 56.25 268 ePd 17 09.70 -0.9
LOF 56.25 333 eP 17 07.12 -2.5
ABHA 56.29 268 eP 17 11.30 0.3
ISK 56.47 299 eP 17 13.00 1.4
ALT 56.50 296 eP 17 12.70 0.7
BCK 56.79 294 iP 17 13.00 -1.1
MBH 56.84 284 eP 17 19.50 5.1X
UPP 56.94 323 iP 17 12.30 -2.4
i 17 15.40 10km
MLR 56.95 305 ePd 17 16.50 1.3
EDC 57.59 299 eP 17 19.80 0.3
CMP 57.63 305 ePc 17 25.00 5.2X
BMR 57.74 308 ePd 17 23.00 2.5
MFT 57.82 299 eP 17 19.00 -2.3
NSS 57.96 329 eP 17 19.19 -2.6
TNR 57.98 306 ePc 17 24.00 1.7
HFS 58.71 324 eP 17 24.50 -2.6
0.8s 35.10nm 5.5mb
Z 19s 5.38um 5.7Msz
LR 42 11.00
IZM 58.81 297 eP 17 28.00 -0.1
EZN 58.88 299 eP 17 29.00 0.5
RDO 58.89 300 eP 17 29.50 0.9
RGS 59.13 328 eP 17 30.40 0.5
SMG 59.40 296 eP 17 33.00 0.8
NB2 59.52 326 P 17 30.00 -2.8
0.8s 33.90nm 5.5mb
HLW 59.53 286 eP 17 34.00 0.8
e 25 44.00
PSZ 59.89 309 iP 17 36.90 1.4
KAP 60.09 294 eP 17 37.50 0.5
NANU 60.36 167 eP 17 38.50 -0.3
MOL 60.53 328 iPc 17 40.28 0.7
BUD 60.60 309 e(P) 17 40.00 -0.3
PLG 60.66 300 eP 17 41.10 0.3
BEO 60.79 306 eP 17 42.00 0.4
KSP 60.88 314 eP 17 40.50 -1.7
1.2s 43.00nm 5.5mb
ic 17 43.50 10km
SRO 60.91 310 iP 17 43.10 0.8
COP 61.03 320 iPc 17 44.40 1.3
0.7s 101.37nm 6.1mb
NPS 61.36 294 eP 17 45.90 0.3
IMA 61.48 27 eP 17 45.20 -1.0

20d 08h

Sta	Dist / period	Az / amplitude	Phase	Time	Res / mag
	1.7s	126.70nm			5.8mb
			i	18 21.90	155kmX
ZST	61.49	311	iP	17 47.70	1.4
PMG	61.58	130	eP	17 47.00	-0.2
	1.2s	93.75nm			5.8mb
HYA	61.70	327	eP	17 48.00	0.4
VKA	61.94	311	iPc	17 50.90	1.5
	3.0s	291.00nm			5.9mb
	Z 14s	4.00um			5.7MszX
			i	18 10.70	76kmX
			i	18 25.10	
			LR	46 05.00	
BRN	61.98	316	eP	17 52.00	2.4
TTA	62.02	31	eP	17 48.80	-1.0
SOP	62.04	310	iPd	17 50.00	0.0
BRG	62.22	314	iPd	17 52.50	1.3
	1.2s	54.00nm			5.6mb
			iPcP	18 31.30	311kmX
			i	19 01.60	
			eS	26 20.00	
			eScS	27 47.00	
PRU	62.26	313	iPd	17 52.50	1.0
	Z 19s	6.50um			5.8Msz
	N 17s	6.00um			
	E 15s	3.80um			
			e	17 56.50	13km
			S	26 18.00	
VAM	62.32	295	eP	17 50.80	-1.3
ASK	62.44	326	eP	17 53.00	0.5
CLL	62.57	315	iPd	17 54.30	0.8
	1.3s	71.00nm			5.7mb
	Z 17s	3.00um			5.5MszX
			eS	26 18.00	
VLI	62.63	297	eP	17 51.30	-2.8
SVW	63.03	32	eP	17 56.20	-0.3
ITM	63.14	298	eP	17 55.30	-2.2
PTJ	63.19	309	eP	17 57.50	-0.3
KHC	63.20	313	iP	17 59.20	1.5
	1.1s	11.00nm			5.0mb
	N 16s	1.80um			
	E 18s	3.50um			
			S	26 32.00	
WB5	63.59	148	eP	17 59.50	-1.0
WET	63.60	313	iPd	18 01.80	1.4
	1.2s	45.00nm			5.5mb
VLS	63.62	299	eP	17 49.90	-10.7X
MOX	63.65	315	eP	18 02.00	1.3
	1.4s	49.00nm			5.5mb
	Z 11s	1.80um			5.5MszX
	N 12s	5.00um			
	E 13s	2.80um			
			eS	26 32.00	
MBC	63.68	11	ePc	18 00.10	-0.4
	0.7s	19.00nm			5.4mb
LJU	64.01	309	eP	18 04.00	0.9
CEY	64.22	309	eP	18 05.00	0.5
BHG	64.25	311	eP	18 06.40	1.7
GRF	64.31	314	iPc	18 06.60	1.6
	1.1s	122.00nm			6.0mb
	Z 19s	3.00um			5.5Msz
			e(pP)	18 26.40	76kmX
			e	18 45.70	
			e	19 32.80	
VOY	64.41	309	ePc	18 06.00	0.2
RIY	64.42	309	eP	18 05.70	-0.1
LCI	64.43	302	P	18 05.50	-0.4
TRI	64.64	309	iPc	18 06.00	-1.2
FVI	64.83	310	P	18 08.50	0.1
FUR	65.00	312	eP	18 11.60	2.1
	0.9s	55.00nm			5.7mb
	Z 17s	4.00um			5.7MszX
WIT	65.35	318	eP	18 14.50	2.9X
PMR	65.48	30	eP	18 10.80	-1.5
	0.6s	42.50nm			5.8mb
	Z 20s	9.00um			6.0Msz
			ic	18 13.80	10km
			e	19 07.10	
SOTA	65.48	312	iPc	18 13.30	0.5
	1.0s	44.60nm			5.6mb
			i	19 06.70	230kmX
			i	20 10.40	
ORI	65.57	303	P	18 16.00	2.7X
TNS	65.64	315	ePd	18 14.50	0.9
WTS	65.67	318	iP	18 15.20	1.5
	1.0s	75.00nm			5.8mb
CTI	65.78	310	P	18 14.50	-0.2
TDS	65.84	302	P	18 16.50	1.5
SGO	66.10	304	P	18 17.90	1.3
KDC	66.10	35	eP	18 14.80	-1.5
			i	18 18.20	11km
DUI	66.12	305	P	18 15.50	-1.4
MGR	66.14	303	P	18 15.00	-1.9
GRI	66.19	301	P	18 18.65	1.3
	0.2s	8.10nm			5.6mb
ARV	66.21	307	P	18 18.50	1.2
TOA	66.36	29	eP	18 17.90	-0.1
OSS	66.38	311	eP	18 17.20	-1.4
SDI	66.52	305	P	18 19.90	0.5
ASS	66.60	307	P	18 20.30	0.4
INK	66.62	20	eP	18 18.50	-1.0
	0.8s	46.00nm			5.7mb
AZI	66.63	306	P	18 21.50	1.5
SFI	66.69	308	P	18 22.00	1.6
GWF	66.72	315	P	18 21.43	0.9
ENN	66.77	317	iPd	18 22.10	1.4
	1.0s	69.00nm			5.8mb
			e	20 49.00	792kmX
ASPA	66.77	150	iPc	18 20.40	-0.6
	0.8s	45.50nm			5.7mb
CRE	66.77	308	P	18 21.00	-0.1
PGD	66.80	308	P	18 21.50	0.2
MEM	66.80	317	Pc	18 22.70	1.8
			e	18 42.40	75kmX
			e	20 49.20	
SLE	66.82	313	eP	18 19.80	-1.4
VDL	66.88	311	eP	18 20.30	-1.6
MNS	66.92	306	P	18 21.40	-0.6
MRWA	66.95	168	eP	18 20.50	-1.5
FEL	67.05	313	eP	18 23.35	0.6
MDI	67.09	311	P	18 18.00	-4.9X
WLS	67.16	314	P	18 24.14	0.8
ATN	67.17	301	P	18 24.00	0.5
CDF	67.20	314	eP	18 21.10	-2.6
	1.0s	32.00nm			5.5mb
CDF	67.20	314	P	18 24.52	0.8
MME	67.28	309	P	18 26.20	1.8
ECH	67.37	314	P	18 25.47	0.8
BDI	67.41	309	P	18 25.50	0.5
TMA	67.43	311	eP	18 23.00	-2.3
MOF	67.57	314	P	18 26.80	0.8
DWY	67.62	25	P	18 24.80	-1.2
BOB	67.76	310	P	18 28.40	1.1
BSF	67.78	314	P	18 28.00	0.6
SNF	67.79	317	P	18 29.00	1.8
DOU	67.84	317	Pc	18 29.10	1.6
	1.0s	61.10nm			5.7mb
			S	27 21.00	
HAU	67.94	314	eP	18 25.80	-2.5
	Z 20s	6.25um			5.8Msz
MMK	68.01	312	eP	18 27.70	-1.3
LOMF	68.01	313	P	18 28.71	0.0
VITF	68.04	314	P	18 29.87	1.1
AKU	68.18	338	eP	18 29.00	-0.4
	0.9s	57.14nm			5.8mb
			i	18 32.20	10km
DIX	68.32	312	eP	18 29.80	-1.2
BAL	68.43	168	eP	18 32.00	0.7
EKA	68.92	324	Pd	18 34.90	0.8
	1.0s	27.90nm			5.4mb
LPG	69.02	312	eP	18 33.50	-1.8
	1.0s	63.00nm			5.8mb
LPL	69.02	312	eP	18 33.40	-1.9
	1.0s	65.00nm			5.8mb
PGF	69.19	308	eP	18 34.00	-2.2
	0.7s	35.30nm			5.6mb
BNI	69.30	311	P	18 35.60	-1.3
SBF	69.47	310	eP	18 35.10	-2.7
	0.7s	51.80nm			5.8mb
CTA	69.56	137	iPd	18 39.00	0.6
	1.0s	33.50nm			5.4mb
			iS	27 49.00	
KLB	69.57	167	eP	18 37.00	-1.3
MUN	69.69	169	eP	18 40.00	1.0
LOR	69.76	314	eP	18 36.20	-3.3X
	1.0s	23.00nm			5.3mb
	Z 20s	4.25um			5.7Msz
LBF	69.85	314	eP	18 37.00	-3.1X
	1.1s	17.10nm			5.1mb
SSF	70.08	314	eP	18 38.60	-2.8
	0.9s	21.30nm			5.3mb
FRF	70.11	310	eP	18 39.00	-2.7
	0.7s	15.45nm			5.2mb
SMF	70.11	314	eP	18 39.00	-2.6
	1.0s	48.00nm			5.6mb
GRC	70.20	315	P	18 43.18	1.1
AVF	70.31	314	eP	18 40.20	-2.6
	1.1s	52.50nm			5.6mb
LMR	70.32	310	eP	18 40.50	-2.4
	1.2s	53.55nm			5.5mb
PLDF	70.61	313	P	18 45.91	1.1
BGF	70.73	314	eP	18 42.80	-2.6
	1.0s	18.00nm			5.2mb
NWAO	70.78	168	eP	18 45.00	-0.7
AGO	70.85	314	P	18 47.57	1.4
MAF	71.08	314	eP	18 45.60	-1.9
	1.0s	57.00nm			5.7mb
PYM	71.09	313	P	18 49.07	1.4
LBL	71.24	313	P	18 48.79	0.4
LDF	71.24	317	eP	18 46.00	-2.4
	0.9s	27.85nm			5.4mb
TCF	71.25	314	eP	18 46.30	-2.3
	1.0s	47.00nm			5.6mb
FLN	71.34	317	eP	18 46.40	-2.6
	1.0s	40.00nm			5.5mb
	Z 20s	7.25um			5.9Msz
GRR	71.76	317	eP	18 49.20	-2.3
	0.9s	50.80nm			5.6mb
LPF	72.07	317	eP	18 51.20	-2.2
	1.0s	30.00nm			5.3mb
CAF	72.10	313	eP	18 52.00	-1.7
	1.3s	65.00nm			5.6mb
RJF	72.21	314	eP	18 52.40	-1.9
	1.2s	83.30nm			5.7mb
	Z 18s	5.75um			5.9Msz
MFF	72.41	315	eP	18 53.50	-1.9
	1.0s	136.00nm			6.0mb
NAI	72.58	255	eP	18 57.00	-0.1
LPO	72.75	313	eP	18 55.70	-1.8
	0.9s	19.65nm			5.2mb
LFF	72.87	314	eP	18 56.50	-1.6
	1.1s	53.70nm			5.5mb
BST	73.53	318	P	19 04.04	2.1
SIT	73.82	29	e(P)	19 03.30	-0.1
EPF	74.22	312	eP	19 03.80	-2.3
	1.3s	25.25nm			5.1mb
ESEL	74.56	308	eP	19 11.70	3.6X
EROO	75.48	310	eP	19 15.20	1.9
YKA	76.06	17	eP	19 15.30	-0.9
	0.7s	22.90nm			5.4mb
RMO	76.08	139	eP	19 17.50	0.7
ECRI	76.14	313	eP	19 19.50	2.3
ETOR	76.97	311	eP	19 21.70	-0.2
ECHE	77.07	310	eP	19 24.10	1.8
STK	77.19	148	iPc	19 23.80	1.0
	0.9s	22.00nm			5.2mb
GUD	78.33	312	iPc	19 29.50	0.1
EALH	78.40	309	eP	19 31.70	2.0
EVIA	78.59	310	eP	19 30.70	-0.1
ADE	78.71	151	eP	19 30.00	-1.2
CMS	78.75	144	eP	19 32.00	0.6
TOL	78.75	312	eP	19 32.50	1.0
			iS	29 31.00	
			iSS	33 42.00	
			iSSS	37 42.00	
ENIJ	79.45	308	eP	19 37.20	1.8
EPLA	79.83	313	eP	19 37.60	0.2
AFC	80.10	309	eP	19 40.10	1.0
ECOG	80.10	309	eP	19 40.10	1.1
EHOR	80.78	311	eP	19 42.70	0.2
COO	81.00	139	iPd	19 48.20	4.6X
EPRU	81.32	310	eP	19 46.90	1.5
EJIF	81.80	310	eP	19 49.20	1.4
EVAL	81.84	311	eP	19 48.40	0.4
BFD	82.14	150	eP	19 53.00	3.7X
BWA	82.39	144	eP	19 53.00	2.2
CAN	83.40	144	eP	19 57.00	1.1
BCAO	83.56	271	iPc	19 57.40	0.1
	0.8s	46.00nm			5.7mb
			id	20 38.00	163kmX
CNB	83.56	144	eP	20 00.00	3.2X
EDM	84.46	21	iP	20 01.90	0.7
PGC	84.87	29	eP	20 06.00	2.8X
AVE	85.07	308	iP	20 05.00	0.5
			i	20 21.50	58kmX
PNT	85.76	27	ePd	20 08.00	0.2
	0.9s	62.00nm			5.8mb
FFC	85.91	15	iPd	20 07.80	-0.6
	0.8s	30.00nm			5.5mb
TIO	86.54	307	iP	20 14.00	1.9
NEW	87.54	26	P	20 17.00	0.5
	1.0s	48.75nm			5.7mb

```
SES     87.63  21 eP      20 17.00    0.0
LRM     91.25  24 eP      20 35.00    0.7
WDC     91.80  33 ePc     20 37.80    1.2
MIN     92.41  33 eP      20 38.10   -1.5
ORV     93.10  33 eP      20 43.80    1.2
BRK     94.14  35 eP      20 50.90    3.5X
CMB     94.84  34 eP      20 51.70    1.0
FRI     96.01  34 eP      20 59.00    3.0X
PRI     96.28  35 eP      20 58.80    1.4
GLD     99.01  22 P       21 13.00    3.2X
KIC    100.74 286 (Pdiff)21 19.10    1.4
LIC    101.05 286 (Pdiff)21 20.50    1.4
ALQ    103.01  25 ePdiff)21 33.00    5.4X
        1.0s      3.50nm          5.0mb
TUL    105.13  16 e(PKP)25 50.30   -1.0
        0.9s      3.70nm
PDCR   138.79 297 ePKP    26 51.90   -4.1X
BAO    147.10 303 ePKP    27 12.50    2.1
JFO    147.70 289 ePKP    27 13.90    2.7X
                  e       27 15.80
                  e       27 22.00
BMA    148.89 288 ePKP    27 17.70    4.7X
VAO    151.18 291 ePKP    27 22.60    6.1X
                  e       27 28.60
                  e       27 33.10
PPD    153.75 298 ePKP    27 19.70   -0.5
NNA    155.00   1 iPKP    27 22.00    0.0
        0.8s     10.45nm
SIV    155.06 323 PKP     27 23.00    1.0
                  i       27 49.00
ZOBO   158.05 339 PKPc    27 29.50    2.9X
        1.1s      8.99nm
     Z  24s      0.98um          5.6MszX
                  LR      25 28.00
LPB    158.30 339 ePKP    27 28.00    1.3
     Z  20s      1.77um          5.9Msz
                  LR      26 40.00
CCH    158.45 333 PKP     27 28.60    1.9
CNCB   158.52 338 PKP     27 28.00    0.9
     S.D. = 1.4  on 268 of 304 obs.
-------------------------------------------
   OCT  20, 1990  08h 39m 17.50± 0.21s
   37.14S N ± 3.7km  103.60E E ± 3.4km
   DEPTH =  10.4km  (  2 depth phases)
   4.9mb ( 28 obs.)
 GANSU PROVINCE, CHINA              (322)
      Felt in the Tianzhu area.

LZH     1.08 170 Pgc     39 40.00    2.2
                 Sg      39 53.00
GTA     3.74 308 iPnc    40 17.90    1.3
     Z  12s     10.80um
                 Pg      40 27.60
                 Sg      41 13.70
XAN     5.33 124 Pn      40 39.20    0.2
                 Pg      40 55.60
                 Sg      42 04.00
BTO     6.07  53 Pg      41 11.00   21.5X
     N  11s      5.10um
     E  11s      8.20um
                 Sg      42 30.00
CD2     6.22 179 Pn      40 54.00    2.4
     Z  11s     11.30um
                 Pg      41 14.80
                 Sg      42 36.50
TIY     7.05  83 Pnc     41 01.70   -1.5
     Z  14s      7.10um
                 Pg      41 28.20
                 Sg      42 59.00
HHC     7.21  57 ePn     41 05.00   -0.6
                 Pg      41 30.40
                 Sg      43 05.40
BJI    10.25  70 eP      41 45.50   -2.1
        0.7s     23.00nm          5.7mb
     Z  12s      4.80um          4.2Msz
     N  10s      4.00um
     E  10s      4.30um
TIA    10.90  91 eP      41 55.50   -1.0
     Z  12s      2.90um
     N  11s      2.10um
     E  11s      3.30um
GYA    10.97 165 iPd     41 56.40   -1.2
     Z  10s      2.00um
                 S       44 07.00
WHN    11.09 123 P       41 58.50   -0.6
        0.7s     20.00nm          5.6mb
NJ2    13.55 108 eP      42 32.00    0.0
     N  11s      8.10um
     E  11s      2.90um
                 S       45 03.00
WMO    13.81 304 P       42 34.50   -1.1
     Z  12s      4.10um
                 sP      42 47.50
DL2    14.32  77 eP      42 43.20    1.0
SSE    15.75 107 Pc      43 05.50    4.6X
        1.2s     42.00nm          4.5mb
     Z  13s      2.30um          4.4Msz
     N  14s      7.50um
     E  14s      4.50um
SNY    16.10  67 eP      43 05.60    0.2
        1.0s    200.00nm          5.2mb
     Z  16s      3.30um          4.2Msz
     N  11s      2.70um
     E  11s      2.30um
GZH    16.34 146 P       43 05.80   -2.6
     N  10s      3.50um
     E  10s      6.10um
GUN    17.54 243 P       43 22.40   -1.5
CN2    17.87  61 iPd     43 27.00   -0.6
        1.0s    100.00nm          4.9mb
     Z  13s      4.80um          5.2MszX
                 epP     43 35.00
                 eS      46 41.00
KKN    18.04 244 P       43 28.70   -1.3
PKI    18.07 243 P       43 29.40   -1.1
DMN    18.27 244 P       43 31.40   -1.5
GKN    18.38 246 P       43 32.40   -1.7
CHG    18.72 194 ePc     43 39.00    0.7
        1.0s     20.00nm          4.3mb
LOE    19.74 185 iPd     43 49.00   -1.3
BDT    20.24 193 ePd     43 56.80    1.2
        0.8s     26.00nm          4.6mb
MDJ    20.96  61 eP      44 04.00    1.2
        1.0s     60.00nm          4.9mb
                 epP     44 06.90   11km
NST    21.61 189 eP      44 10.70    1.1
NDI    23.65 257 eP      44 31.00    1.3
        0.6s     23.33nm          4.9mb
SHK    23.67  88 eP      44 30.50    0.6
NNT    24.70 189 eP      44 40.30    0.4
MAT    27.61  81 (P)     45 00.00   -6.9X
GBA    33.09 232 P       45 55.70    0.1
KOD    35.69 228 eP      46 18.80    0.5
VRI    56.16 305 ePd     49 01.50    2.1
TNR    57.84 305 ePc     49 15.00    3.6X
HFS    58.59 324 eP      49 16.70    0.3
        0.5s     3.20nm           4.7mb
NB2    59.40 326 P       49 22.40    0.3
        0.7s     5.30nm           4.8mb
KSP    60.74 313 eP      49 35.50    4.2X
ZST    61.35 310 e(P)    49 39.20    3.7X
IMA    61.49  27 eP      49 36.30   -0.1
        1.4s     17.20nm          5.0mb
TTA    62.04  31 eP      49 39.80   -0.3
BRG    62.08 314 eP      49 44.20    3.8X
                 i       50 02.60   70kmX
PRU    62.12 313 eP      49 44.00    3.3X
CLL    62.43 315 eP      49 46.00    3.3X
KHC    63.06 313 eP      49 50.00    3.1X
SVW    63.06  32 eP      49 47.20    0.4
MBC    63.65  10 eP      49 50.50    0.1
        1.0s     7.00nm           4.8mb
WB5    63.71 148 eP      49 51.10   -0.3
GRF    64.17 314 e(P)    49 58.30    4.0X
FBA    64.21  27 P       49 54.70    0.5
PMR    65.50  30 eP      50 01.80   -0.8
        0.8s     14.10nm          5.2mb
                 e       50 05.00   10km
KDC    66.13  35 e(P)    50 05.70   -1.0
TOA    66.38  29 eP      50 09.30    1.0
INK    66.61  20 eP      50 10.00    0.4
ASPA   66.89 150 eP      50 11.40   -0.5
        0.6s     16.50nm          5.4mb
CDF    67.06 314 eP      50 12.40   -0.6
BSF    67.64 314 eP      50 15.90   -0.7
LPG    68.88 312 eP      50 24.70    0.1
        0.6s     5.40nm           4.9mb
LPL    68.88 312 eP      50 24.60    0.1
        1.0s     15.00nm          5.1mb
LDR    69.62 314 eP      50 27.70   -1.1
SMF    69.97 314 eP      50 30.30   -0.6
        1.0s     9.00nm           4.9mb
AVF    70.18 314 eP      50 31.60   -0.5
        1.0s     8.00nm           4.8mb
BGF    70.59 314 eP      50 34.10   -0.6
MAF    70.94 314 eP      50 36.80    0.0
        1.0s     14.00nm          5.0mb
LDF    71.11 317 eP      50 37.30   -0.5
        0.9s     9.85nm           4.9mb
TCF    71.11 314 eP      50 37.60   -0.3
        1.0s     9.00nm           4.8mb
FLN    71.21 317 eP      50 37.80   -0.5
GRR    71.63 317 eP      50 40.40   -0.5
        0.8s     12.10nm          5.1mb
MFF    72.27 315 eP      50 44.80    0.1
        0.7s     13.25nm          5.1mb
YKA    76.05  17 eP      51 06.50    0.2
        0.8s     6.30nm           4.8mb
STK    77.31 148 iPc     51 14.10    0.5
        0.8s     5.00nm           4.7mb
BCAO   83.42 271 iPd     51 48.00    1.3
        0.8s     5.00nm           4.8mb
DZM    83.47 124 iPc     51 52.70    5.9X
EDM    84.46  21 eP      51 53.00    1.6
PNT    85.78  27 eP      51 59.00    1.0
FFC    85.89  15 eP      51 59.00    0.6
        0.8s     10.00nm          5.0mb
SES    87.63  21 eP      52 08.00    0.9
LRM    91.26  24 eP      52 25.80    1.3
BAO   146.95 303 ePKP    59 04.50    4.2X
JFO   147.55 289 ePKP    59 05.70    4.6X
VAO   151.03 291 (PKP)   59 17.00   10.6X
SIV   154.93 323 PKP     59 14.00    2.0
                 i       59 39.20
ZOBO  157.95 338 ePKP    59 16.00   -0.6
CNCB  158.42 338 PKP     59 20.00    2.9X
     S.D. = 1.1  on 69 of 85 obs.
-------------------------------------------
&  OCT  20, 1990  08h 58m 14.91s
   62.00S N          150.27W
   DEPTH =  56.9km
 CENTRAL ALASKA                     (  1)
     <AGS-P>.

CUT     0.40   1 iP      58 24.97   -0.7
PWA     0.40 152 iP      58 25.57   -0.1
SUA     0.59 202 iP      58 27.71   -0.1
                 eS      58 38.15
SKT     0.59 268 iP      58 27.02   -0.8
GHO     0.68 109 iP      58 28.62   -0.3
                 eS      58 39.59
PLRM    0.68 127 iP      58 28.09   -0.8
PMS     0.84 155 iP      58 30.33   -0.5
SML     0.94 101 iP      58 31.59   -0.7
HUR     1.02  17 iP      58 32.53   -0.8
                 eS      58 46.26
CRR     1.16 231 eP      58 34.49   -0.9
                 eS      58 50.62
BGL     1.25 235 eP      58 36.01   -0.5
CKL     1.28 231 eP      58 35.93   -0.9
NKA     1.35 200 eP      58 38.97    1.2
SCM     1.41  96 eP      58 38.02   -0.6
                 eS      58 56.75
RND     1.55  24 eP      58 39.47   -1.2
RDT     1.77 217 eP      58 42.56   -1.1
MCK     1.84  19 eP      58 43.68   -1.0
GLI     1.90 125 eP      58 43.75   -1.7
TOA     1.94  85 eP      58 45.54   -0.5
SEW     1.95 168 eP      58 45.07   -1.1
RSO     1.96 219 eP      58 46.40   -0.1
RED     2.00 218 eP      58 46.67   -0.2
VZW     2.02 116 eP      58 45.87   -1.3
NNL     2.03 195 eP      58 47.33    0.0
KNIM    2.07 142 eP      58 44.85   -3.0
VLZ     2.08 113 eP      58 46.33   -1.6
KLU     2.14 102 iP      58 47.24   -1.6
SDG     2.28  75 eP      58 50.17   -0.6
MTU     2.39 147 eP      58 51.07   -1.3
CNPM    2.53 191 eP      58 54.47    0.1
WRH     2.67  21 eP      58 54.35   -1.9
SVW     2.71 253 eP      58 54.74   -2.2
HDA     2.84  31 eP      58 56.78   -2.0
CCB     2.88  22 eP      58 57.09   -2.2
FBA     3.11  20 eP      59 00.66   -2.0
GLB     3.13  98 eP      59 00.55   -2.4
GLM     3.26  22 eP      59 02.74   -2.1
TGL     3.80 106 eP      59 10.31   -2.0
BALM    3.92 101 eP      59 11.15   -3.0
       39 obs. associated
-------------------------------------------
?  OCT  20, 1990  09h 35m 05.16± 1.04s
```

20d 09h

39.171 N ± 9.5km 27.491 E ±37.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM	0.79	193	ePg	35 20.60	0.0
			eSg	35 33.00	
EDC	1.21	14	iPn	35 27.80	0.1
BNT	1.23	15	iPn	35 27.90	-0.1
KGT	1.29	354	iPn	35 29.00	0.0

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

? OCT 20, 1990 10h 00m 51.11± 1.30s
39.114 N ± 7.9km 27.611 E ±16.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.0 (ISK).

IZM	0.77	201	ePg	01 06.10	0.0
			eSg	01 17.10	
EZN	1.22	306	ePn	01 14.00	0.2
BNT	1.26	11	iPn	01 14.90	0.3
KGT	1.36	350	iPn	01 15.50	-0.5

S.D. = 0.6 on 4 of 4 obs.

OCT 20, 1990 10h 01m 31.25± 0.21s
7.729 S ± 4.6km 74.413 W ± 5.2km
DEPTH = 162.0km (4 depth phases)
5.0mb (34 obs.)
PERU-BRAZIL BORDER REGION (112)

PT10	5.00	210	iP	02 45.50	-0.2
			iS	03 40.30	
TUNG	7.45	327	P	03 16.50	-2.2
VC1	8.09	330	eP	03 26.20	-1.2
OTO	8.53	331	eP	03 33.50	0.3
CAYA	8.54	335	P	03 21.50	-11.8X
OUR	8.56	331	Pd	03 33.30	-0.2
YANA	8.63	331	eP	03 34.00	-0.5
COTA	8.92	334	eP	03 38.20	-0.2
ARE	9.14	162	eP	03 40.00	-1.1
LPB	10.71	145	P	04 00.00	-1.8
CNCB	10.99	146	P	04 05.00	-0.7
CCH	12.53	141	P	04 25.10	-0.4
SIV	15.41	123	P	05 01.20	-0.4
SDV	16.93	13	eP	05 23.00	2.7
DVD	17.95	333	iPc	05 26.80	-5.1X
TOV	18.00	15	eP	05 32.90	0.4
			eS	08 45.90	
GUAC	19.17	22	eP	05 49.60	4.6X
MORO	19.45	18	eP	05 51.10	3.3X
BAO	27.02	109	eP	07 01.00	0.6
SOB1	33.18	95	eP	07 53.30	-1.4
			e	08 28.60	166km
PDCR	35.05	101	eP	08 09.40	-1.2
BLA	45.06	353	ePd	09 33.30	0.7
	1.1s	160.76nm		5.5mb	
TUL	47.84	336	iP	09 54.00	-0.4
	1.0s	76.30nm		5.3mb	
			e	17 00.70	
SIO	47.91	336	eP	09 54.50	-0.4
CLE	49.41	353	iP	10 06.60	0.2
ALQ	52.12	326	eP	10 26.00	-1.3
	1.0s	35.00nm		5.0mb	
			e	11 03.00	162km
ANMO	52.13	326	P	10 27.00	-0.3
GLD	55.17	331	P	10 50.50	1.1
	1.1s	86.79nm		5.5mb	
GOL	55.20	331	P	10 48.50	-1.3
	1.2s	28.69nm		5.0mb	
TPC	57.32	319	eP	11 05.00	0.4
PLM	57.39	318	eP	11 06.00	0.7
PEC	57.91	318	P	11 08.50	-0.3
RVR	58.12	318	eP	11 10.00	-0.1
GSC	58.55	320	eP	11 14.00	0.8
MWC	58.71	318	eP	11 15.00	0.6
SBB	58.83	319	eP	11 14.00	-1.2
CLC	59.37	320	eP	11 19.00	0.2
BW06	59.59	331	P	11 19.00	-1.4
	1.4s	65.75nm		5.3mb	
ISA	59.84	319	eP	11 22.00	0.0
FRI	61.44	320	eP	11 31.80	-0.9
LLA	62.02	319	eP	11 36.70	0.1
PRS	62.13	318	eP	11 38.00	0.6
CMB	62.49	320	eP	11 39.90	0.2
SCH	62.64	5	eP	11 41.00	0.6
LRM	63.24	331	eP	11 44.40	-0.4
ORV	64.09	321	P	11 50.00	-0.2
			pP	12 28.60	163km
MIN	64.62	322	eP	11 52.70	-1.1
WDC	65.34	321	eP	11 56.30	-1.8
SES	66.02	335	iPd	12 02.00	-0.4
	1.3s	248.00nm		5.9mb	
FFC	66.37	343	iPd	12 03.80	-0.7
	1.1s	50.00nm		5.3mb	
NEW	67.22	331	P	12 09.50	-0.5
EDM	69.10	336	iPd	12 20.60	-0.9
	1.4s	315.00nm		5.9mb	
PNT	69.15	330	ePd	12 22.00	0.1
	0.8s	51.00nm		5.4mb	
LIC	70.58	81	P	12 30.20	-1.0
LKO	70.66	77	Pd	12 30.30	-1.4
	0.4s	4.50nm		4.6mb	
PGC	70.68	328	eP	12 32.00	0.9
KIC	70.88	81	Pd	12 32.24	-0.8
	0.6s	6.50nm		4.6mb	
			S	21 34.00	
YKA	76.52	342	eP	13 03.70	-0.9
	0.8s	10.40nm		4.6mb	
TOL	80.16	47	iPc	13 26.50	1.6
	1.1s	50.63nm		5.2mb	
SPA	82.32	180	iPd	13 37.70	1.8
	1.0s	23.50nm		4.9mb	
			e	14 14.80	148kmX
EPF	84.25	45	eP	13 46.60	0.7
	1.4s	56.65nm		5.2mb	
LPF	84.76	40	eP	13 47.90	-0.4
	0.9s	13.10nm		4.7mb	
MFF	84.92	42	eP	13 49.10	0.0
	1.3s	43.30nm		5.1mb	
GRR	84.98	40	eP	13 49.00	-0.4
	1.2s	32.75nm		5.0mb	
LFF	85.05	44	eP	13 49.70	-0.1
	1.0s	32.00nm		5.1mb	
LPO	85.29	44	eP	13 50.90	-0.1
	1.2s	38.70nm		5.1mb	
FLN	85.33	40	eP	13 50.70	-0.4
	1.0s	20.00nm		4.9mb	
LDF	85.51	40	eP	13 51.70	-0.3
	1.2s	23.80nm		4.9mb	
RJF	85.68	43	eP	13 52.60	-0.3
	1.2s	35.70nm		5.1mb	
CAF	85.95	44	eP	13 54.30	0.0
	1.2s	20.85nm		4.8mb	
INK	86.26	341	eP	13 55.00	-0.3
MAF	86.62	43	eP	13 57.40	-0.2
	1.2s	17.85nm		4.8mb	
BGF	86.90	42	eP	13 58.70	-0.2
	1.2s	26.80nm		5.0mb	
AVF	87.29	42	eP	14 00.00	-0.7
SSF	87.46	42	eP	14 00.80	-0.7
SMF	87.58	42	eP	14 01.50	-0.6
MBC	87.81	350	ePd	14 03.70	1.0
	1.0s	90.00nm		5.7mb	
TOA	88.40	333	eP	14 06.30	0.5
DOU	88.88	39	Pc	14 07.50	-0.7
LPL	89.30	44	eP	14 10.90	0.3
	0.9s	10.65nm		4.8mb	
LPG	89.31	44	eP	14 11.00	0.3
	0.9s	11.45nm		4.9mb	
PMR	89.57	333	e(P)	14 11.00	-0.2
BSF	89.81	42	eP	14 12.00	-0.8
FBA	90.00	336	P	14 13.40	0.3
			pP	14 53.40	158km
CDF	90.24	41	eP	14 13.90	-0.8
IMA	92.68	336	e(P)	14 25.40	-0.2
	1.8s	31.60nm		5.2mb	
BCAO	93.50	86	iPc	14 31.50	1.1
	0.6s	4.00nm		4.8mb	
NB2	94.58	29	P	14 35.00	0.6
	1.2s	13.20nm		5.1mb	
HFS	95.70	30	ePKP	14 39.60	0.2
	0.5s	0.80nm		4.4mb	
ZST	96.71	42	eP	14 45.20	1.0
ASPA	138.30	221	ePKP	20 32.60	-7.2X
	0.6s	4.30nm			
WB5	140.56	226	ePKP	20 37.90	-6.0X
WMO	140.79	21	PKP	20 44.80	1.1
BJI	146.46	345	PKPd	20 55.00	1.6
BTO	147.03	354	PKP	20 57.00	2.5
MTN	147.41	231	ePKP	20 57.00	1.4
	0.4s	53.00nm			
MBL	148.06	206	ePKP	21 00.00	3.5X
	0.4s	9.00nm			
NANU	148.36	198	ePKP	21 01.10	4.2X
	0.4s	5.00nm			
TIY	149.51	349	PKPc	21 04.00	5.6X
TIA	149.75	341	ePKP	21 00.00	1.3
GKN	151.74	42	PKP	21 03.50	1.3
GBA	151.74	76	PKPd	21 02.80	0.6
	0.6s	2.30nm			
HYB	151.95	67	ePKP	21 03.50	1.0
			e	21 10.00	
			e	21 19.50	
KKN	152.30	41	PKP	21 04.10	1.0
DMN	152.31	42	PKP	21 04.20	1.1
PKI	152.53	42	PKP	21 04.10	0.6
SSE	152.56	330	PKPc	21 11.00	8.0X
GUN	152.61	40	PKP	21 04.70	1.0
NJ2	152.83	335	PKPc	21 11.00	7.7X
CHG	167.23	30	ePKP	21 21.00	1.6
			e	22 26.10	

S.D. = 0.9 on 99 of 110 obs.

OCT 20, 1990 10h 08m 51.43± 0.70s
37.097 N ± 7.9km 103.668 E ± 7.9km
DEPTH = 10.0km (geophysicist)
GANSU PROVINCE, CHINA (322)
ML 4.3 (BJI).

LZH	1.02	172	Pg	09 11.00	0.2
			Sg	09 24.50	
GTA	3.81	308	Pn	09 51.40	-0.2
			Pg	10 02.00	
			Sg	10 46.40	
XAN	5.26	124	Pn	10 12.20	0.2
N	10s	0.90um			
E	10s	0.90um			
			Pg	10 26.00	
			Sg	11 36.00	
BTO	6.06	53	Pg	10 47.20	23.8X
			Sg	12 04.60	
CD2	6.17	179	Pg	10 39.80	14.9X
TIY	7.01	82	ePn	10 35.80	-0.8
			Pg	10 59.40	
HHC	7.20	56	ePn	10 41.60	2.2
			Pg	11 03.00	
TIA	10.85	91	eP	11 28.80	-1.0
GYA	10.91	166	P	11 30.00	-0.7
			S	13 31.00	
WMQ	13.88	304	P	12 10.00	-0.5
Z	12s	0.30um			
			sP	12 20.00	
SSE	15.69	107	eP	12 40.00	5.9X
CHTO	18.68	194	P	13 13.50	1.7
WB5	63.64	148	eP	19 23.90	-1.1

f S.D. = 1.3 on 10 of 13 obs.

% OCT 20, 1990 10h 43m 17.97± 0.86s
37.061 N ± 8.3km 103.610 E ±10.6km
DEPTH = 10.0km (geophysicist)
GANSU PROVINCE, CHINA (322)
ML 3.9 (BJI).

LZH	0.99	169	iPgd	43 37.50	0.6
			Sg	43 51.00	
GTA	3.80	309	Pn	44 17.90	0.0
			Pg	44 28.20	
			Sg	45 12.80	
XAN	5.28	123	Pn	44 38.50	-0.3
			Pg	44 56.50	
CD2	6.14	179	Pg	45 16.20	25.3X
TIY	7.06	82	ePg	45 25.60	21.7X
HHC	7.26	56	ePn	45 07.00	0.2
			Pg	45 29.80	
			Sg	47 03.80	
GYA	10.88	165	eP	45 56.40	-0.5

S.D. = 0.6 on 5 of 7 obs.

? OCT 20, 1990 11h 02m 29.27± 1.92s
36.832 N ±23.2km 27.423 E ±31.5km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.9 (ATH).

ARG	0.84	137	ePb	02 45.00	-0.4
SMG	0.99	332	ePb	02 48.50	0.5
IZM	1.57	355	ePn	02 56.60	-0.6
KSL	1.88	112	ePn	03 02.30	0.6
KHL	2.24	48	ePn	03 13.20	6.2X
BNT	3.54	6	ePn	03 34.60	9.2X

```
MFT      3.95 358 ePn    03 41.00    9.7X
      S.D. = 1.1  on   4 of   7 obs.
-----------------------------------------
%  OCT  20, 1990  11h 12m 34.10± 3.21s
   40.130 N ±28.7km   28.187 E ± 6.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      MD 2.5 (ISK).

KCT      0.18  47 iPg    12 36.40   -1.7
BNT      0.30 318 iPg    12 40.40   -0.1
                 iSg    12 44.40
EDC      0.33 311 ePg    12 40.80   -0.1
KGT      0.75 296 iPn    12 47.90   -0.9
MFT      0.95 314 iPn    12 53.40    1.1
CTT      1.03  10 iPn    12 53.90    0.3
HRT      1.32  58 ePn    12 59.90    1.3
      S.D. = 1.3  on   7 of   7 obs.
-----------------------------------------
%  OCT  20, 1990  12h 03m 25.60± 1.68s
   38.875 N ±11.2km   16.383 E ±21.2km
   DEPTH =  33.0km  (normol)
 SOUTHERN ITALY                      (390)

CZI      0.39 331 P      03 34.60    0.0
                 eSg    03 45.50
ROI      0.71  12 P      03 38.40   -0.8
TDS      0.78 357 P      03 40.70    0.5
                 eSg    03 51.00
ATN      1.01 226 P      03 43.60    0.0
                 eSg    03 57.50
MMN      1.06 343 P      03 44.60    0.5
ORI      1.19   2 P      03 46.50    0.5
MGR      1.41 333 P      03 48.50   -0.7
                 eSg    04 07.00
      S.D. = 0.7  on   7 of   7 obs.
-----------------------------------------
*  OCT  20, 1990  13h 10m 19.79± 0.83s
   29.670 S ± 9.0km   178.946 W ±16.4km
   DEPTH = 323.6 ±  9.6 km
   5.0mb (  4 obs.)
 KERMADEC ISLANDS                    (178)

RAO      0.99  65 P      11 03.00   -0.3
                 S      11 35.50
HBZ      8.23 195 eP     12 21.70    4.6X
        0.2s     15.00nm          4.7mb
PUZ      8.70 195 eP     12 23.30    0.5
                 eS     14 04.00
NOZ      9.27 195 eP     12 31.50    1.8
NGZ     10.50 204 eP     12 48.20    3.3X
PGZ     11.60 198 eP     13 00.10    2.0
        0.2s     13.00nm          4.9mb
                 eS     15 03.40
MNG     11.83 201 eP     13 01.30    0.3
        0.1s     17.00nm          5.3mb
                 S      15 10.50
KIW     12.24 203 eP     13 05.50   -0.3
MTW     12.32 200 eP     13 06.40   -0.4
CAW     12.41 202 eP     13 07.40   -0.5
WDW     12.58 201 eP     13 09.40   -0.5
MOW     12.64 200 eP     13 10.40   -0.3
MRW     12.64 202 eP     13 10.30   -0.3
                 eS     15 28.20
TCW     12.77 204 eP     13 10.00   -2.2
                 S      15 31.30
THZ     13.75 206 eP     13 24.40    0.2
                 eS     15 53.40
KHZ     14.09 203 P      13 27.20   -0.8
        0.3s     25.00nm          5.1mb
DZM     15.16 297 iPc    13 41.00    0.9
WB5     43.25 272 eP     17 52.00    0.1
MAT     77.18 326 eP     21 38.00   -1.6
TNP     88.69  44 P      22 37.80   -0.4
SUF    143.16 341 ePKP   29 11.00   -5.1X
NUR    145.35 340 iPKP   29 19.00   -0.9
        0.8s     42.50nm
NB2    147.90 351 PKP    29 25.90    1.8
        0.7s      7.00nm
HFS    148.36 348 ePKP   29 25.70    0.9
        0.9s     13.30nm
BCAO   149.94 217 iPKPc  29 35.50    6.8X
        0.5s     10.00nm
      S.D. = 1.2  on  21 of  25 obs.
-----------------------------------------
?  OCT  20, 1990  13h 29m 50.80± 1.21s
   24.486 N ±11.3km   121.697 E ±18.4km
   DEPTH =  33.0km  (normol)
 TAIWAN                              (244)

TWC      0.18  49 iPd    29 57.20    0.0
                 eS     30 08.00
TWZ      0.62 350 ePd    30 03.60    0.5
ANP      0.72 347 eP     30 04.00   -0.5
TWK      1.64 223 ePd    30 17.80    0.0
      S.D. = 0.7  on   4 of   4 obs.
-----------------------------------------
%  OCT  20, 1990  13h 31m 24.38± 0.85s
   39.029 N ± 8.3km   28.668 E ± 7.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      MD 3.1 (ISK).

KHL      0.97 136 iPg    31 42.70   -0.2
                 iSg    31 55.70
ALT      1.12  88 ePn    31 45.30   -0.2
IZM      1.27 241 iPn    31 48.10    0.1
BNT      1.45 337 iPn    31 49.80   -0.8
IZI      1.45  25 ePn    31 49.00   -1.7
EDC      1.46 335 iPn    31 49.80   -0.9
KGT      1.77 324 iPn    31 54.40   -0.8
HRT      1.95  23 ePn    31 59.00    1.1
EZN      1.98 294 ePn    32 00.00    1.7
MFT      2.05 329 ePn    31 57.30   -2.1
ISK      2.06   8 ePn    32 01.40    2.0
CTT      2.12 355 ePn    32 02.00    1.6
      S.D. = 1.5  on  12 of  12 obs.
-----------------------------------------
   OCT  20, 1990  13h 31m 38.99± 0.46s
   43.858 N ± 4.3km   20.349 E ± 4.7km
   DEPTH =  10.0km  (geophysicist)
 YUGOSLAVIA                          (383)
      MD 4.2 (TRI), 3.7 (VIE). Felt at
      Ivanjico.

PLE      0.87 233 iPgd   31 55.00   -0.8
                 iSg    32 09.00
BEO      0.97   4 iPg    31 58.70    1.4
                 eSg    32 14.00
IVA      1.04 199 iPgd   31 57.20   -1.5
                 iSg    32 13.00
PVY      1.29 192 iPgc   32 01.80   -1.2
                 eSg    32 17.80
NKY      1.44 224 ePg    32 04.90   -0.3
                 eSg    32 25.00
BRY      1.63 235 ePg    32 08.20    0.3
                 eSg    32 32.50
TTG      1.63 210 ePg    32 08.00    0.2
                 eSg    32 30.00
BDV      1.93 216 ePn    32 13.00    0.8
                 eSn    32 37.00
BZS      1.98  27 iPc    32 11.00   -1.8
ULC      2.06 203 ePn    32 15.50    1.4
                 eSn    32 41.00
BLY      2.44 293 Pn     32 26.10    6.6X
                 S      32 56.10
HVAR     2.92 258 iPn    32 28.20    1.9
                 iSn    33 03.20
DRA      2.92  72 eP     32 29.00    2.6
VAY      3.02 146 ePn    32 25.50   -2.2
TNR      3.32  56 ePc    32 34.00    1.9
CMP      3.64  66 ePd    32 50.00   13.5X
PTJ      3.73 305 e(Pn)  32 37.50   -0.4
                 iSn    33 20.40
PSZ      4.07 356 iP     32 41.30   -1.4
SRO      4.20 341 i(Pn)  32 43.40   -1.1
                 i      32 55.30
                 i(Sn)  33 34.70
                 i      33 42.80
MLR      4.31  66 ePd    32 46.00   -0.2
BMR      4.41  29 ePd    33 11.00   23.6X
RIY      4.51 291 ePnd   32 49.40    0.5
CEY      4.62 296 e(Pn)  32 50.10   -0.3
                 e(Sn)  33 43.50
LJU      4.67 300 ePn    32 51.50    0.3
                 e(Sn)  33 44.50
DUI      4.86 245 P      32 56.50    2.5
ZST      4.89 334 i(Pn)  32 53.50   -0.8
                 i      33 01.10
                 i      33 14.20
                 e      33 51.80
VRI      4.96  64 ePd    32 54.50   -0.8
TRI      5.04 294 ePn    32 56.60    0.2
                 iSn    33 54.00
                 iSg    34 21.90
VOY      5.07 298 iPnc   32 56.80   -0.1
                 e(Sn)  33 51.00
VKA      5.22 329 eP     32 49.00  -10.0X
                 i(Sg)  33 06.90
SDI      5.27 248 P      33 02.00    2.3
SPC      5.33 359 eP     33 01.40    0.7
ASS      5.65 265 P      33 04.00   -1.1
MNS      5.80 258 P      33 05.00   -2.2
FVI      6.00 300 P      33 09.70   -0.2
CRE      6.09 271 P      33 11.00   -0.3
KHC      7.04 321 ePn    33 24.00   -0.7
                 e      34 52.00
SOTA     7.24 301 iPnd   33 27.80    0.2
        0.5s     13.90nm          5.4mb X
                 i      33 34.00
                 iSn    34 52.30
PRU      7.31 329 ePn    33 45.00   16.7X
                 e      34 27.20
                 Sg     34 59.30
      S.D. = 1.3  on  34 of  39 obs.
-----------------------------------------
?  OCT  20, 1990  13h 34m 45.74± 1.38s
   39.126 N ± 8.2km   27.650 E ±17.3km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      MD 2.6 (ISK).

IZM      0.79 203 ePg    35 01.10    0.0
                 iSg    35 13.60
EZN      1.24 305 ePn    35 09.00    0.2
BNT      1.25  10 iPn    35 09.30    0.4
KGT      1.35 349 iPn    35 09.90   -0.6
      S.D. = 0.8  on   4 of   4 obs.
-----------------------------------------
?  OCT  20, 1990  15h 03m 21.82± 5.70s
   41.442 N ±42.4km   28.731 E ±12.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)
      MD 1.9 (ISK).

CTT      0.37 218 iPg    03 29.60    0.1
                 iSg    03 32.80
ISK      0.45 147 ePg    03 31.00    0.0
                 eSg    03 35.50
BNT      1.25 210 iPn    03 44.80   -0.2
KGT      1.47 228 iPn    03 48.30    0.0
      S.D. = 0.2  on   4 of   4 obs.
-----------------------------------------
*  OCT  20, 1990  15h 13m 30.28± 0.59s
   28.701 S ± 7.4km   176.517 W ±11.5km
   DEPTH =  50.2km  (  3 depth phases)
   5.0mb (  4 obs.)
 KERMADEC ISLANDS REGION             (177)

RAO      1.34 246 P      13 59.50    6.5X
                 S      14 18.40
PUZ     10.31 204 P      15 56.90   -1.5
NOZ     10.88 203 eP     16 04.00   -2.1
MNG     13.58 207 P      16 37.60   -4.5X
                 S      19 08.90
MTW     14.04 206 P      16 49.00    1.0
BLW     14.23 205 P      16 51.40    0.9
MOW     14.36 206 P      16 52.00   -0.2
MRW     14.41 208 eP     17 02.00    9.1X
                 eS     19 28.00
LTZ     16.72 210 P      17 22.90    0.4
DZM     16.74 289 iPc    17 24.20    1.2
BKM     17.78 305 iPc    17 35.10   -0.7
BRS     27.10 265 iPc    19 12.10    1.7
CAN     29.87 248 eP     19 37.80    2.5
BWA     30.32 250 eP     19 39.50    0.2
ASPA    44.53 265 iPd    21 37.50   -1.5
        1.2s     15.30nm          4.7mb
      Z 22s      0.20um           4.0Msz
WB5     45.36 270 eP     21 44.40   -1.2
                 e      23 26.00 558kmX
MAW     74.34 200 eP     25 10.00    6.1X
MAT     77.61 324 iPc    25 19.90   -2.8
        0.8s     12.69nm          5.0mb
TNP     86.53  43 P      26 09.50    0.1
                 pP     26 24.30   51km
MDJ     87.97 325 eP     26 15.50   -0.3
SNY     89.32 320 Pd     26 21.80   -0.5
CN2     89.59 322 Pc     26 22.20   -1.3
TIA     89.78 312 eP     26 24.50   -0.1
ALO     91.50  51 eP     26 33.20    0.3
```

20d 15h

1.0s 6.75nm 5.0mb
e 26 48.00 50km
ANMO 91.51 51 P 26 33.60 0.7
pP 26 48.20 50km
BJI 92.63 315 eP 26 37.50 -0.1
0.8s 20.00nm 5.6mb
CHG 94.24 289 eP 26 46.50 1.0
NB2 147.25 353 PKP 33 07.90 1.3
0.9s 15.30nm
UPP 147.39 347 iPKP 33 07.60 0.8
HFS 147.81 350 ePKP 33 08.00 0.5
0.7s 17.40nm
BCAO 151.95 213 iPKPc 33 24.50 9.2X
0.6s 7.00nm
id 33 34.90
id 36 50.00
MML 152.31 286 ePKP 33 23.00 7.7X
MKT 152.48 283 ePKP 33 23.00 7.4X
RMN 152.90 281 ePKP 33 23.50 7.3X
KSP 155.86 340 ePKP 33 28.50 9.0X
e 33 45.40
S.D. = 1.3 on 26 of 35 obs.

? OCT 20, 1990 16h 29m 20.47± 8.95s
30.912 S ±87.4km 69.919 W ±62.8km
DEPTH = 120.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

RTBS 0.85 152 eP 29 41.30 0.0
S 29 55.00
RTCB 1.12 121 ePc 29 44.00 -0.1
eS 30 02.20
RTLL 1.31 109 iPd 29 46.20 0.0
eS 30 06.50
RTCV 1.51 129 ePc 29 48.50 0.0
S.D. = 0.1 on 4 of 4 obs.

• OCT 20, 1990 16h 49m 22.00± 2.05s
39.722 N ±12.3km 23.799 E ±15.8km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 2.5 (THE).

OUR 0.63 13 iPd 49 34.42 -0.2
eS 49 44.96
LIT 1.08 291 iPc 49 42.04 -0.2
eS 49 56.68
SOH 1.15 343 ePc 49 43.24 -0.3
eS 50 00.24
AGG 1.34 239 ePd 49 46.60 0.0
eS 50 06.76
SRS 1.40 354 ePd 49 47.80 0.2
KNT 1.59 335 ePc 49 51.12 0.8
eS 50 14.56
GRG 1.63 320 iPd 49 51.64 0.8
eS 50 13.44
VAY 1.85 330 ePn 49 53.00 -1.0
S.D. = 0.7 on 8 of 8 obs.

& OCT 20, 1990 16h 54m 38.00s
37.017 N 118.337 W
DEPTH = 1.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.3 (BRK).

FRI 1.10 269 iPc 54 58.00 -1.4
iS 55 12.50
TNP 1.39 40 iPc 55 03.00 -1.5
PKEM 1.72 237 eP 55 09.20 0.0
CMB 1.92 303 iPc 55 12.20 0.0
iS 55 37.00
PHAM 2.04 235 eP 55 13.20 -0.7
PRI 2.07 246 eP 55 14.20 -0.2
iS 55 39.30
LLA 2.13 260 eP 55 15.20 0.0
ABL 2.28 199 eP 55 18.00 0.4
BCH 2.31 218 eP 55 17.40 -0.5
SAO 2.50 265 eP 55 20.10 -0.5
PRS 2.53 255 eP 55 20.60 -0.4
ARN 2.57 278 eP 55 22.00 0.4
MHC 2.66 278 eP 55 23.50 0.6
13 obs. associated

• OCT 20, 1990 18h 47m 05.53± 1.35s
21.699 S ±13.1km 69.009 W ±19.6km
DEPTH = 42.7 ± 15.7 km
4.4mb (1 obs.)

NORTHERN CHILE (123)

ANT 2.38 213 iPd 47 43.00 0.1
iS 48 16.20
CNCB 4.96 11 Pc 48 20.50 0.5
CCH 5.07 33 P 48 26.30 4.9X
LPB 5.21 10 P 48 25.60 2.2
1.0s 304.00nm 5.6mb X
ZOBO 5.47 9 P 48 25.00 -2.2
S 49 42.00
SIV 9.42 54 iPd 49 21.20 -0.5
MDZ 11.14 179 eP 49 52.00 6.7X
PPD 16.43 94 eP 51 02.30 7.5X
KIC 68.85 74 (P) 58 08.80 0.6
TNP 74.73 322 P 58 43.00 -0.1
YKA 91.34 341 eP 00 07.20 -0.3
0.7s 1.30nm 4.4mb
S.D. = 1.6 on 8 of 11 obs.

& OCT 20, 1990 20h 21m 25.87s
58.989 N 152.453 W
DEPTH = 76.3km
KODIAK ISLAND REGION (13)
<AGS-P>.

XLV 0.60 39 eP 21 39.93 -0.5
eS 21 49.92
AUE 0.60 308 eP 21 39.89 -0.5
AUI 0.61 305 eP 21 40.14 -0.4
CDD 0.62 265 eP 21 39.92 -0.7
eS 21 50.43
OPT 0.78 329 iP 21 41.64 -0.7
eS 21 53.56
HOM 0.79 31 eP 21 42.09 -0.3
eS 21 54.19
CNPM 0.83 49 iP 21 42.01 -0.9
eS 21 53.67
MCNL 0.99 282 eP 21 43.85 -1.0
BRLK 1.12 45 eP 21 45.14 -1.3
eS 21 59.84
PDB 1.20 313 iP 21 46.23 -1.2
eS 22 00.76
NNL 1.21 29 iP 21 47.42 -0.2
KDC 1.25 181 eP 21 47.03 -1.0
RED 1.44 354 eP 21 49.74 -1.0
RSD 1.49 354 eP 21 50.59 -0.9
RDT 1.59 1 iP 21 51.58 -1.2
SEW 1.89 53 eP 21 53.83 -2.9
SLKM 1.90 36 eP 21 55.41 -1.4
SPU 2.21 5 eP 22 00.09 -1.1
CKL 2.22 1 eP 22 00.42 -0.9
BGL 2.28 1 eP 22 01.48 -0.7
CRP 2.29 4 eP 22 01.72 -0.7
CGLM 2.34 5 eP 22 02.16 -0.8
NCG 2.43 3 eP 22 03.23 -1.0
SUA 2.63 18 eP 22 05.82 -1.2
PMS 2.69 31 eP 22 06.54 -1.2
KNIM 2.75 58 eP 22 06.66 -2.0
SKT 3.04 8 eP 22 10.99 -1.6
GHO 3.30 31 eP 22 14.29 -2.0
SML 3.49 34 eP 22 15.45 -3.5
CUT 3.59 16 eP 22 17.51 -2.8
VZW 3.62 52 eP 22 18.49 -2.2
31 obs. associated

? OCT 20, 1990 20h 39m 47.57± 1.05s
31.679 S ±38.7km 69.138 W ±22.0km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.27 274 iPc 40 04.80 0.0
RTCB 0.35 56 iPd 40 05.10 0.0
eS 40 16.20
ZON 0.41 71 eP 40 05.30 0.0
eS 40 18.30
RTCV 0.54 110 ePc 40 06.10 0.0
S 40 18.80
RTLL 0.67 59 iPc 40 07.00 0.0
MDZ 1.23 169 eP 40 29.20 16.9X
e 40 31.40
S.D. = 0.0 on 5 of 6 obs.

& OCT 20, 1990 21h 05m 23.23s
59.651 N 153.028 W
DEPTH = 101.3km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT 0.10 271 eP 05 36.75 0.7
eS 05 47.68
AUE 0.34 211 eP 05 37.51 -0.8
AUH 0.36 216 eP 05 37.98 -0.6
AUI 0.38 213 eP 05 37.98 -0.6
PDB 0.61 284 eP 05 39.29 -0.9
XLV 0.69 106 eP 05 40.18 -0.8
HOM 0.70 89 iP 05 40.59 -0.4
eS 05 53.78
CDD 0.79 204 iP 05 40.83 -1.1
MCNL 0.82 236 eP 05 41.15 -1.0
RSD 0.83 9 eP 05 41.66 -0.8
CNPM 0.92 97 iP 05 42.27 -0.9
NNL 0.96 65 eP 05 43.63 0.1
RDT 0.98 18 eP 05 42.95 -0.9
eS 05 57.83
BRLK 1.09 83 eP 05 43.96 -1.1
eS 05 59.99
NKA 1.41 38 eP 05 50.56 1.7
CKL 1.59 12 eP 05 50.49 -0.7
SPU 1.61 17 iP 05 50.69 -0.7
eS 06 12.01
BGL 1.65 11 eP 05 51.54 -0.4
SLKM 1.65 57 eP 05 50.91 -0.9
CRP 1.68 15 eP 05 51.92 -0.4
NCG 1.81 13 eP 05 53.39 -0.6
SEW 1.86 74 eP 05 53.05 -1.4
SUA 2.14 31 iP 05 58.01 -0.3
PMS 2.35 46 eP 05 59.73 -1.3
PLRM 2.74 43 eP 06 04.97 -1.2
MTU 2.74 81 eP 06 04.59 -1.6
KNIM 2.75 73 iP 06 04.09 -2.3
GHO 2.93 42 eP 06 07.45 -1.5
eS 06 40.08
CUT 3.07 25 eP 06 09.92 -0.8
SML 3.16 45 eP 06 10.07 -2.0
GLI 3.20 65 eP 06 09.85 -2.7
VZW 3.51 64 eP 06 14.58 -2.2
VLZ 3.64 63 eP 06 15.55 -2.9
KLU 3.96 59 eP 06 20.69 -2.3
TOA 4.16 51 eP 06 23.96 -1.7
RND 4.27 26 eP 06 25.58 -1.6
SDG 4.64 48 eP 06 31.61 -0.6
GLB 4.89 65 eP 06 33.30 -2.5
BALM 5.49 71 eP 06 41.97 -2.1
39 obs. associated

• OCT 20, 1990 21h 56m 32.73± 0.65s
21.479 N ±10.8km 122.221 E ±15.9km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
TAIWAN REGION (243)

TWG 1.71 322 ePc 56 58.60 -2.0
TWK 2.40 318 eP 57 11.20 0.7
TWO 3.06 336 ePc 57 20.80 0.9
MAT 20.47 39 (P) 01 10.00 -0.3
LZH 21.65 316 eP 01 23.00 0.5
CHG 22.01 267 eP 01 29.90 3.9X
WB5 42.79 163 eP 04 28.60 -0.5
QIS 45.10 157 iPc 04 48.00 0.2
ASPA 46.29 165 eP 04 57.40 0.2
1.1s 7.70nm 4.6mb
SLL 80.40 332 eP 08 42.70 0.5
0.5s 1.10nm 4.1mb
S.D. = 1.0 on 9 of 10 obs.

& OCT 20, 1990 22h 12m 31.86s
66.138 N 151.274 W
DEPTH = 10.0km (geophysicist)
ALASKA (676)
<AGS-P>.

IMA 0.98 267 eP 12 50.61 0.0
eS 13 04.37
NEA 1.82 149 eP 13 02.73 -0.7
eS 13 27.27
FBA 1.91 129 eP 13 04.57 -0.2
eS 13 29.98
GLM 1.99 124 eP 13 04.71 -1.2
eS 13 32.62
CCB 2.09 134 eP 13 06.99 -0.3
eS 13 35.22
WRH 2.14 140 eP 13 06.39 -1.7
FYU 2.47 77 eP 13 12.71 -0.1
HDA 2.51 132 eP 13 14.07 0.7
8 obs. associated

---

* OCT 20, 1990 23h 55m 22.80± 0.80s
52.029 N ±16.4km 169.371 W ± 9.1km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)

ADK	4.53	271	eP	56 32.40	1.7
KDC	11.27	53	e(P)	58 00.00	-4.4X
TTA	13.04	28	e(P)	58 30.00	1.8
IMA	16.15	23	e(P)	59 10.50	1.8
FBA	17.01	32	eP	59 17.70	-1.7
INK	23.63	33	eP	00 31.00	-0.3
YKA	30.47	48	eP	01 34.90	0.7
	0.8s	2.00nm		4.0mb	
MBC	30.85	21	eP	01 36.00	-1.5
	0.4s	3.00nm		4.4mb	
NEW	33.10	75	eP	01 58.00	0.5
BW06	40.47	79	eP	03 02.50	2.6X
CN2	43.10	286	eP	03 19.60	-1.6
GOL	44.83	80	eP	03 36.00	0.4
SSE	53.83	276	Pd	04 45.50	1.1
	1.0s	12.00nm		4.9mb	
XAN	59.20	287	eP	05 20.50	-2.3
BLA	61.15	66	e(P)	05 51.00	14.9X
JSC	62.76	69	e(P)	05 46.00	-0.9
LHS	62.88	68	e(P)	05 48.00	0.4
CD2	64.48	288	eP	05 58.80	0.5
GYA	66.00	283	P	06 08.40	0.2
HFS	68.16	358	eP	06 19.40	-1.8
	0.6s	9.40nm		5.1mb	
KMI	69.35	285	eP	06 30.00	0.7
KSP	77.39	356	eP	07 15.70	0.1
PRU	78.31	357	eP	07 20.70	0.1
KHC	79.19	358	eP	07 26.00	0.5
ZST	80.00	356	e(P)	07 29.50	-0.3

S.D. = 1.2 on 22 of 25 obs.

& OCT 21, 1990 00h 44m 45.40s
36.725 N 122.338 W
DEPTH = 7.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.7 (BRK).

GCC	0.41	42	ePd	44 52.00	-1.7
			iS	44 57.50	
SAO	0.72	87	iP	44 58.40	-1.4
PCC	0.77	357	ePd	44 59.00	-1.7
			eS	45 08.50	
MHC	0.83	42	eP	45 00.50	-1.3
			iS	45 11.50	
PRS	0.87	116	eP	45 03.00	0.5
			eS	45 14.50	
ARN	0.90	46	eP	45 01.30	-1.6
BRK	1.15	3	eP	45 09.50	2.4
			eS	45 19.00	
BKS	1.15	4	eP	45 09.50	2.3
			e(S)	45 19.40	

8 obs. associated

OCT 21, 1990 01h 57m 33.99± 1.26s
14.949 S ± 9.2km 166.738 E ± 7.2km
DEPTH = 47.1 ± 10.8 km
5.0mb (12 obs.) 4.4Msz (6 obs.)
VANUATU ISLANDS (186)

BKM	3.07	152	iPd	58 20.00	-1.1
PVC	3.16	152	iP	58 23.00	0.6
DZM	7.09	182	iPc	59 14.30	-3.6X
			iS	00 33.20	
HNR	8.61	309	P	59 45.00	6.1X
			S	01 41.00	
SVO	8.89	310	eP	59 43.00	0.2
			eS	01 27.00	
CTA	20.19	252	iPd	02 07.90	0.4
	1.1s	34.18nm		4.6mb	
			iS	06 03.00	
RMO	20.34	233	ePc	02 08.00	-1.1
COO	20.68	219	eP	02 13.50	0.8
STK	28.47	229	eP	03 34.30	7.5X
	1.8s	27.00nm		4.6mb	
WB5	31.24	256	eP	03 51.20	-0.4
ASPA	32.12	249	iPc	03 58.20	-1.1
	1.4s	5.90nm		4.2mb	
	Z 21s	0.60um		4.3Msz	
GUMO	35.67	322	eP	04 24.00	-5.9X
	Z 18s	0.19um		3.9Msz	

AFR	41.76	100	iP	05 21.30	0.7
	1.2s	100.00nm		5.4mb	
PPT	41.95	100	iP	05 23.10	0.9
	1.2s	115.00nm		5.5mb	
TVO	42.25	100	iP	05 25.50	0.8
	1.2s	135.00nm		5.6mb	
PMO	43.76	96	iP	05 48.40	11.4X
	1.2s	115.00nm			
VAH	44.00	97	iP	05 50.00	11.2X
	1.2s	70.00nm			
TPT	44.03	96	iP	05 50.40	11.3X
	1.2s	75.00nm			
RUV	44.24	97	iP	05 52.00	11.2X
	1.2s	95.00nm			
KAKJ	56.74	334	eP	07 21.20	5.8X
CHJJ	57.10	333	eP	07 23.70	5.6X
IIDJ	57.11	332	P	07 22.10	3.9X
MAT	57.86	333	eP	07 22.00	-1.4
	1.0s	8.00nm		4.8mb	
TSRJ	58.05	331	eP	07 27.80	3.1X
MTMJ	58.08	333	P	07 24.70	-0.3
BJI	72.11	321	eP	08 56.00	0.5
	1.1s	14.00nm		4.8mb	
CHG	74.70	295	eP	09 12.90	1.8
SPA	75.15	180	iPd	09 16.80	3.8X
	0.5s	36.11nm		5.6mb	
LZH	78.09	313	eP	09 32.00	2.1
	2.0s	36.00nm		5.0mb	
			pP	09 36.50	14kmX
MAW	81.49	202	eP	09 48.00	0.6
PMR	83.88	20	eP	09 59.50	-0.2
	0.6s	7.00nm		4.9mb	
IMA	85.99	15	eP	10 10.30	-0.1
	1.0s	9.60nm		5.0mb	
FBA	86.72	18	eP	10 12.50	-1.3
GUN	89.05	299	PKP	10 27.20	1.0
PKI	89.35	299	PKP	10 28.20	0.6
KKN	89.52	299	PKP	10 29.00	0.7
DMN	89.62	299	PKP	10 29.80	1.0
GKN	90.13	299	PKP	10 31.30	0.3
HFS	130.78	343	ePKP	16 43.10	1.8
	1.4s	44.60nm			
KHC	139.45	333	ePKP	17 01.00	2.9X
FVI	141.68	331	PKP	17 06.00	4.0X
SQTA	141.93	333	e(PKP)	17 01.50	-1.2
	1.1s	10.50nm			
PDCR	142.57	136	ePKP	16 53.20	-11.3X
			e	17 02.40	
CDF	142.58	337	ePKP	17 00.90	-2.8X
CTI	142.61	331	PKP	17 02.50	-1.4
BSF	143.24	337	ePKP	17 03.00	-1.9
HAU	143.26	338	ePKP	17 03.00	-1.8
	1.0s	12.00nm			
	Z 21s	0.08um		4.4Msz	
SOB1	143.58	130	ePKP	17 03.00	-3.3X
MDI	143.70	333	PKP	17 06.50	1.0
ARV	143.80	327	PKP	17 06.00	0.1
ORI	143.96	320	PKP	17 05.00	-1.2
VAI	144.04	333	PKP	17 04.50	-1.6
SFI	144.06	328	PKP	17 05.00	-1.2
PGD	144.16	329	PKP	17 05.50	-1.2
DUI	144.18	323	PKP	17 08.00	1.4
CRE	144.22	328	PKP	17 05.40	-1.3
ASS	144.24	327	PKP	17 04.90	-1.8
TDS	144.27	319	PKP	17 06.00	-0.7
SGO	144.37	321	PKP	17 05.80	-1.0
MME	144.43	330	PKP	17 06.60	-0.6
MGR	144.47	321	PKP	17 07.50	0.4
SDI	144.52	324	PKP	17 05.80	-1.4
AZI	144.55	325	PKP	17 06.50	-0.6
BDI	144.58	330	PKP	17 05.00	-2.2
BOB	144.59	332	PKPd	17 06.60	-0.6
FLN	144.68	345	ePKP	17 06.30	-0.8
	1.0s	34.00nm			
	Z 20s	0.08um		4.5Msz	
MNS	144.70	326	PKP	17 06.10	-1.3
LDF	144.75	345	ePKP	17 06.60	-0.7
	0.8s	18.80nm			
LOR	144.77	340	ePKP	17 06.50	-0.9
	1.0s	40.00nm			
	Z 21s	0.10um		4.6Msz	
PII	144.87	329	PKP	17 05.00	-2.6X
LBF	144.97	339	iPKPc	17 06.90	-0.9
	1.2s	61.00nm			
GRC	145.00	341	PKP	17 08.07	0.4
LSD	145.05	335	PKP	17 08.20	0.0
SSF	145.06	340	iPKPc	17 07.40	-0.5

RMP	145.08	325	PKP	17 06.80	-1.3
GRR	145.12	346	iPKPc	17 07.40	-0.5
	0.7s	40.80nm			
LPL	145.18	335	iPKPc	17 08.60	0.2
	1.0s	39.00nm			
PCP	145.18	332	PKP	17 07.48	-0.7
LPG	145.18	335	iPKPc	17 08.60	0.1
	0.9s	50.80nm			
RSP	145.26	334	PKP	17 07.99	-0.4
SMF	145.31	339	iPKPc	17 08.20	-0.1
	1.0s	60.00nm			
AVF	145.35	340	iPKPc	17 08.30	0.0
	0.9s	35.20nm			
CKI	145.39	332	PKPd	17 08.10	-0.4
LPF	145.50	345	iPKPc	17 08.70	0.2
	0.6s	37.90nm			
BNI	145.58	335	PKP	17 10.10	1.1
FIN	145.59	332	PKP	17 08.30	-0.6
RRL	145.64	334	PKP	17 09.12	-0.1
ROB	145.67	333	PKP	17 08.51	-0.6
BGF	145.72	340	iPKPc	17 09.70	0.7
	0.8s	40.30nm			
PZZ	145.84	334	PKP	17 08.51	-1.0
ENR	145.92	333	PKP	17 08.92	-0.6
STV	145.95	333	PKP	17 08.92	-0.7
IMI	145.97	332	PKP	17 09.94	0.3
PLDF	145.97	339	PKP	17 11.42	1.9
AGO	146.07	339	PKP	17 11.27	1.6
MAF	146.11	340	iPKPc	17 11.00	1.3
	0.9s	25.40nm			
TCF	146.17	341	iPKPc	17 10.80	1.0
	0.9s	26.20nm			
SBF	146.21	333	iPKPc	17 10.60	0.6
	0.8s	80.60nm			
PYM	146.38	339	PKP	17 12.32	2.1
LSF	146.42	341	iPKPc	17 11.30	1.1
PGF	146.49	330	ePKP	17 11.60	1.1
	0.9s	60.60nm			
MFF	146.59	343	iPKPc	17 12.00	1.6
	0.8s	73.90nm			
LBL	146.74	339	PKP	17 13.76	3.1X
FRF	146.79	333	iPKPc	17 12.60	1.8
	1.0s	56.00nm			
LRG	147.00	333	ePKP	17 13.40	2.3
BCAO	147.01	255	iPKPc	17 12.80	0.7
	0.6s	13.00nm			
LMR	147.03	333	ePKP	17 13.20	2.0
	0.9s	36.05nm			
RJF	147.27	341	iPKPc	17 14.20	2.7X
	0.7s	19.85nm			
	Z 20s	0.08um		4.5Msz	
CAF	147.42	340	iPKPc	17 14.90	3.1X
	1.0s	32.00nm			
LFF	147.84	341	iPKPc	17 15.60	3.2X
	0.7s	37.50nm			
LPO	147.93	340	ePKP	17 15.90	3.3X
	0.8s	40.30nm			
CAI	148.13	130	ePKP	17 16.30	2.5X
EPF	149.68	340	iPKPc	17 21.80	6.3X
	0.9s	19.65nm			
ECRI	150.92	344	ePKP	17 24.00	6.6X
ETOR	152.44	341	e(PKP)	17 29.00	9.3X
GUD	153.20	345	e(PKP)	17 29.00	8.2X
LKO	170.78	235	PKP	17 39.68	1.0
	0.9s	10.50nm			

S.D. = 1.1 on 88 of 117 obs.

? OCT 21, 1990 02h 43m 29.19± 5.78s
42.958 N ±11.3km 13.577 E ±47.0km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.68	280	P	43 42.70	0.0
			eSg	43 53.20	
ARV	0.71	320	P	43 43.10	-0.1
			eSg	43 51.20	
MNS	0.88	229	P	43 46.00	0.0
			eSg	44 01.20	
CRE	1.36	300	P	43 54.50	0.2

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

---

* OCT 21, 1990 03h 27m 20.34± 0.81s
12.867 N ±10.1km 87.964 W ±15.0km
DEPTH = 85.7 ± 9.4 km
4.6mb (11 obs.)
NEAR COAST OF NICARAGUA (74)
Felt (II) at San Salvador, El

21d 03h

Salvodor.

QZA	1.20	303	iPd	27	41.10	-1.4
LFU	1.42	308	eP	27	45.20	-0.1
VSS	1.52	305	iPd	27	46.50	-0.2
TME	1.77	310	eP	27	50.00	0.1
YPE	2.08	307	iPd	27	54.70	0.4
DVD	6.98	129	eP	29	02.80	0.9
OLY	22.76	353	eP	32	17.00	0.9
MEO	23.85	338	iPd	32	28.00	1.3
FVM	25.11	355	eP	32	39.00	0.3
BLA	25.17	14	eP	32	41.10	1.8
	0.9s	32.77nm			4.8mb	
ANMO	27.63	326	eP	33	00.00	-2.1
GOL	30.83	333	iP	33	31.00	0.4
	0.9s	15.15nm			4.7mb	
PV09	31.71	327	eP	33	38.90	0.5
ARE	33.38	150	eP	33	53.00	-0.1
DAU	34.23	328	iP	34	01.00	0.8
	1.0s	3.00nm			4.1mb	
ZOBO	34.97	145	P	34	07.20	0.2
BW06	35.18	332	iP	34	09.00	0.8
	0.8s	6.25nm			4.6mb	
LPB	35.20	146	(P)	34	11.00	2.2
CNCB	35.49	146	P	34	13.00	1.6
TNP	36.16	319	eP	34	18.00	1.5
	0.8s	2.65nm			4.2mb	
CCH	36.98	144	P	34	24.90	1.2
SIV	39.11	136	iPd	34	39.20	-2.0
SES	41.91	338	ePc	35	03.70	-0.2
NEW	42.80	331	iP	35	10.50	-0.7
	0.9s	17.54nm			4.9mb	
FFC	43.19	348	iPc	35	14.20	0.0
	0.6s	18.00nm			5.1mb	
PNT	44.72	331	iPd	35	27.60	1.0
	0.7s	35.00nm			5.3mb	
SCH	45.03	17	eP	35	28.00	-1.0
PEL	48.63	161	ePd	35	58.00	0.5
			i	37	36.00	
LNV	49.16	162	iP	36	00.80	-0.6
YKA	53.08	345	eP	36	29.70	-1.0
	0.5s	6.60nm			4.9mb	
VAO	53.68	131	eP	36	33.30	-2.5
PDCR	54.62	116	eP	36	38.10	-4.6X
			e	37	43.20	
JFD	55.68	128	e(P)	36	49.20	-1.2
MBC	65.54	352	eP	37	55.00	-1.3
	0.5s	2.00nm			4.3mb	
HFS	84.67	29	eP	39	43.50	-2.0
	0.5s	1.00nm			4.1mb	
GBA	149.98	29	PKPc	47	01.80	3.7X
	0.7s	3.30nm				
MBL	152.20	249	ePKP	47	08.80	7.5X
	S.D. = 1.3	on	34 of	37	obs.	

OCT 21, 1990 03h 43m 02.00± 0.66s
17.362 S ± 6.2km 69.272 W ± 9.5km
DEPTH = 181.8 ± 5.0 km
4.8mb (15 obs.)
PERU-BOLIVIA BORDER REGION (118)

CNCB	1.35	66	iPd	43	35.10	1.4
LPB	1.39	54	iPd	43	34.20	0.3
ZOBO	1.55	46	iPd	43	35.30	-0.2
CCH	2.99	91	iPc	43	15.37	-36.0X
			i	44	15.40	
			i	44	31.90	
ANT	6.40	189	iP	44	32.50	-2.5
SIV	7.98	81	iP	44	54.60	-1.4
PT10	9.11	304	e(P)	45	22.00	11.1X
			eS	46	41.00	
MDZ	15.46	179	eP	46	33.40	1.5
PEL	15.77	184	eP	46	34.50	-1.2
	1.2s	40.63nm			4.7mb	
SAN	16.07	184	eP	46	40.50	1.1
LNV	16.64	186	eP	46	47.00	0.9
PPD	17.53	108	eP	46	56.40	-0.4
			e	46	57.50	
			i	47	00.70	
BAO	20.48	88	eP	47	27.00	-0.4
VAO	21.66	109	eP	47	39.80	0.8
			e	47	41.10	
			e	47	43.20	
			e	47	47.90	
			e	47	58.50	
			e	48	42.80	
BMA	24.17	107	eP	48	04.90	1.8
JFO	24.82	104	eP	48	12.50	3.3X
SOB1	28.75	77	eP	48	44.20	-0.6
PDCR	29.50	85	eP	48	50.90	-0.5
LIC	67.63	76	Pc	53	41.36	-0.3
	0.8s	23.00nm			5.0mb	
TIC	67.79	75	P	53	42.28	-0.4
KIC	67.94	76	Pc	53	43.56	0.0
	0.6s	51.00nm			5.5mb	
LKO	68.36	72	Pc	53	45.44	-0.7
	0.6s	24.50nm			5.2mb	
YKA	87.19	341	eP	55	28.00	-0.2
	0.6s	2.10nm			4.2mb	
LFF	88.68	42	eP	55	35.80	0.1
	0.8s	9.40nm			4.8mb	
LPO	88.85	42	eP	55	36.70	0.1
BCAO	89.22	85	iPc	55	45.00	6.0X
	0.6s	3.00nm			4.4mb	
GRR	89.25	38	eP	55	37.80	-0.5
	0.7s	8.80nm			4.8mb	
CAF	89.52	42	eP	55	39.90	0.1
	0.8s	6.70nm			4.7mb	
FLN	89.64	38	eP	55	39.70	-0.4
	1.0s	20.00nm			5.0mb	
LDF	89.78	38	eP	55	40.40	-0.4
	0.8s	10.75nm			4.9mb	
MAF	90.39	41	eP	55	43.50	-0.2
BGF	90.70	41	iPc	55	45.60	0.5
	0.6s	4.95nm			4.7mb	
AVF	91.12	41	eP	55	47.20	0.2
SMF	91.37	41	eP	55	48.10	-0.1
	0.8s	5.35nm			4.7mb	
LPL	92.78	43	eP	55	55.90	0.9
	0.8s	4.05nm			4.6mb	
LPG	92.79	43	eP	55	56.10	1.0
	0.8s	4.70nm			4.7mb	
	S.D. = 0.9	on	32 of	36	obs.	

• OCT 21, 1990 04h 22m 56.94± 0.68s
2.563 N ±13.3km 64.788 E ± 6.7km
DEPTH = 10.0km (geophysicist)
4.9mb (13 obs.)
CARLSBERG RIDGE (421)

GBA	16.63	48	Pd	26	54.10	2.2
	0.8s	3.70nm			3.6mb	X
POO	18.19	29	eP	27	12.00	0.6
HYB	20.01	42	eP	27	33.50	0.6
DMN	31.59	36	P	29	22.60	0.2
	1.0s	31.00nm			5.2mb	
GKN	31.61	35	P	29	22.50	0.0
PKI	31.74	36	P	29	23.60	-0.2
KKN	31.82	36	P	29	24.40	-0.1
GUN	32.27	37	P	29	28.60	0.1
MAIO	33.92	352	eP	29	44.00	1.5
CHG	37.13	62	eP	30	10.00	0.1
BCAO	46.20	274	iPc	31	26.20	1.9
	0.6s	5.00nm			4.7mb	
VRI	54.45	328	ePd	32	21.50	-5.3X
SSE	60.19	55	eP	33	06.00	-1.6
ARV	61.34	319	P	33	14.50	-0.8
SFI	62.24	319	P	33	22.50	1.2
FVI	62.85	322	P	33	25.50	0.2
BDI	63.12	319	P	33	25.50	-1.7
CTI	63.30	321	P	33	27.50	-1.0
BOB	64.16	319	P	33	34.00	-0.1
MDI	64.41	320	P	33	35.50	0.0
CKI	64.79	319	P	33	37.50	-0.6
CLL	65.01	327	i(P)	33	39.20	-0.1
	1.1s	10.00nm			4.9mb	
FRF	65.55	317	eP	33	42.90	-0.1
	0.8s	10.75nm			5.1mb	
LMR	65.57	317	eP	33	42.90	-0.2
LPG	66.20	319	iPc	33	46.50	-1.0
	0.9s	5.75nm			4.8mb	
LPL	66.22	319	eP	33	46.60	-0.9
	0.8s	4.70nm			4.7mb	
CDF	67.01	322	eP	33	51.90	-0.4
	0.8s	5.35nm			4.8mb	
BSF	67.07	322	eP	33	52.00	-0.8
SMF	68.50	320	eP	34	00.80	-0.9
LOR	68.71	320	iPc	34	02.20	-0.7
SSF	68.86	320	iPc	34	03.30	-0.6
	0.7s	3.85nm			4.7mb	
CAF	69.11	317	eP	34	05.50	0.0
BGF	69.12	319	iPc	34	05.40	-0.1
	0.8s	10.05nm			5.1mb	
MAF	69.19	319	eP	34	05.90	0.0
HFS	69.36	335	eP	34	05.50	-1.2
	0.5s	2.10nm			4.6mb	
KIC	69.38	276	P	34	08.70	1.0
RJF	69.60	318	eP	34	08.60	0.2
	1.0s	10.00nm			4.9mb	
LPO	69.64	317	eP	34	09.10	0.4
	0.8s	10.75nm			5.1mb	
TIC	69.66	276	P	34	10.70	1.3
LIC	69.67	276	P	34	10.80	1.4
LFF	70.01	317	eP	34	11.20	0.3
	1.0s	24.00nm			5.3mb	
LKO	70.23	279	P	34	14.24	1.4
W85	71.76	112	eP	34	20.50	-1.5
	S.D. = 1.0	on	42 of	43	obs.	

OCT 21, 1990 04h 31m 19.90± 0.41s
38.908 N ± 3.4km 108.355 W ± 3.1km
DEPTH = 10.0km (geophysicist)
COLORADO (479)
ML 2.5 (NEIS). Felt (V) at Palisade and (IV) at Clifton and Whitewater. Also felt at Grand Junction.

PV08	0.40	215	iPc	31	28.40	0.2
PV07	0.52	206	iPc	31	30.54	0.0
PV06	0.58	188	iPc	31	32.04	0.2
PV04	0.67	220	iP	31	33.55	0.2
PV09	0.73	236	ePd	31	33.84	-0.7
PV10	0.75	225	ePd	31	35.87	1.0
PV03	0.76	211	P	31	34.98	0.1
PV02	0.76	203	P	31	35.40	0.5
RW2	0.77	140	iPc	31	34.96	-0.2
RW6	0.78	155	iPc	31	35.22	-0.1
			S	31	47.39	
RW1	0.79	145	iPc	31	35.11	-0.3
PV01	0.79	192	P	31	35.87	0.4
RW3	0.84	141	iPc	31	36.20	-0.1
RW5	0.92	153	P	31	37.96	0.2
RW4	0.95	142	ePc	31	38.20	0.0
PV05	1.01	215	P	31	37.45	-1.8
GOL	2.45	70	eP	32	00.50	-0.3
GLD	2.57	70	eP	32	03.00	0.5
DAU	2.70	305	eP	32	03.70	-0.7
MSU	3.01	264	e(P)	32	09.50	0.7
BW06	3.97	347	e(P)	32	22.60	0.2
ANMO	4.24	158	e(P)	32	39.00	12.9X
ALQ	4.24	158	eP	32	38.50	12.3X
	S.D. = 0.6	on	21 of	23	obs.	

• OCT 21, 1990 04h 44m 00.59± 0.90s
19.057 S ±10.4km 168.201 E ±13.2km
DEPTH = 91.2 ± 6.4 km
4.3mb (1 obs.)
VANUATU ISLANDS (186)

PVC	1.31	5	iPc	44	24.00	-0.4
			iS	44	44.00	
BKM	1.38	2	iPc	44	25.60	0.3
			iS	44	45.50	
DZM	3.42	208	iPc	44	53.00	0.1
			iS	45	35.60	
SVO	12.77	319	eP	47	06.00	6.0X
STK	27.12	237	eP	49	37.50	0.5
	0.6s	6.00nm			4.3mb	
WB5	31.88	263	eP	50	18.80	-0.6
ASPA	32.22	256	iPd	50	22.10	-0.3
	0.4s	126.30nm			6.0mb	X
MTN	36.12	274	iPd	50	56.70	0.9
	0.4s	90.00nm			6.1mb	X
FORR	38.02	244	iPd	51	11.00	-0.6
MBL	45.33	259	iPd	52	11.70	0.2
NANU	49.16	256	eP	52	41.00	-0.3
SSE	67.27	317	eP	54	40.50	-7.1X
GRF	144.31	334	ePKPc	03	22.50	-5.0X
SQTA	146.19	331	ePKP	03	22.00	-8.9X
	0.6s	7.10nm				
			i	03	27.80	
CDF	146.89	337	ePKP	03	29.20	-2.7X
	0.5s	4.35nm				
BCAO	147.02	248	iPKPd	03	32.00	-1.0
	0.6s	6.00nm				
BSF	147.55	336	ePKP	03	31.70	-1.3
HAU	147.57	337	ePKP	03	31.10	-1.8
	0.5s	2.90nm				
LOR	149.08	339	ePKP	03	34.60	-0.7
	0.5s	4.35nm				

SSF 149.38 339 ePKP 03 35.40 -0.4
0.7s 4.40nm
LPL 149.47 334 ePKP 03 36.50 0.2
LPG 149.47 334 ePKP 03 36.60 0.2
0.7s 3.85nm
BGF 150.04 340 iPKPc 03 36.90 0.1
0.8s 8.05nm
SBF 150.47 331 ePKP 03 38.50 0.9
TCF 150.49 340 ePKP 03 37.90 0.4
PGF 150.70 328 ePKP 03 38.90 0.9
0.6s 11.70nm
LSF 150.74 341 ePKP 03 38.20 0.4
FRF 151.06 332 ePKP 03 39.40 1.0
LWR 151.30 331 ePKP 03 39.90 1.2
S.D. = 0.8 on 24 of 29 obs.

? OCT 21, 1990 07h 19m 05.85± 1.88s
24.891 S ±46.2km 13.584 W ±28.0km
DEPTH = 10.0km (geophysicist)
4.6mb (3 obs.)
SOUTH ATLANTIC RIDGE (410)

PDCR 27.07 292 eP 24 40.40 -10.2X
KIC 32.23 17 (P) 25 36.00 -0.7
BCAO 42.71 51 iPd 27 04.80 -0.2
0.8s 11.00nm 4.6mb
SIV 45.18 272 Pc 27 26.20 1.2
CCH 49.34 268 P 27 58.00 0.0
CNCB 51.19 268 P 28 12.80 0.4
LPB 51.39 268 P 28 13.20 -0.5
ZOBO 51.50 269 P 28 13.00 -1.7
LR 45 48.00
ARE 54.49 267 eP 28 37.00 0.4
LPG 72.46 15 eP 30 35.20 0.6
0.8s 4.70nm 4.6mb
LPL 72.47 15 eP 30 35.10 0.5
0.8s 4.05nm 4.6mb
S.D. = 0.9 on 10 of 11 obs.

? OCT 21, 1990 08h 24m 09.35± 1.27s
10.922 S ±82.5km 166.553 E ±19.2km
DEPTH = 33.0km (normal)
SANTA CRUZ ISLANDS (184)

HNR 6.67 282 eP 25 47.00 -0.6
eS 26 15.00
SVO 6.87 284 eP 25 51.00 0.7
eS 27 05.00
GUN 86.95 299 P 36 53.40 0.1
PKI 87.27 299 P 36 54.60 -0.2
KKN 87.44 299 P 36 55.40 0.0
DMN 87.54 299 P 36 56.40 0.4
GKN 88.04 299 P 36 57.80 -0.4
BCAO 147.68 261 iPKPc 43 50.50 0.1
0.5s 29.00nm
S.D. = 0.5 on 8 of 8 obs.

% OCT 21, 1990 09h 49m 09.51± 1.04s
39.131 N ± 7.4km 27.713 E ±12.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.7 (ISK).

IZM 0.81 206 iPg 49 25.30 0.0
eSg 49 37.50
EDC 1.22 5 iPn 49 32.80 0.6
KCT 1.22 24 iPn 49 32.40 0.2
BNT 1.23 7 ePn 49 32.00 -0.4
EZN 1.28 303 ePn 49 33.40 0.2
KGT 1.36 347 iPn 49 33.90 -0.5
S.D. = 0.5 on 6 of 6 obs.

% OCT 21, 1990 09h 53m 14.05± 1.58s
43.034 N ± 9.8km 13.705 E ±14.9km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

AOU 0.71 198 P 53 28.70 0.5
eSg 53 38.60
ARV 0.73 310 P 53 27.30 -1.0
eSg 53 39.10
ASS 0.77 273 P 53 27.30 -1.7
eSg 53 39.60
MNS 1.00 230 P 53 33.20 0.2
eSg 53 45.20
AZI 1.06 191 P 53 35.00 0.9
eSg 53 50.00

SDI 1.33 176 P 53 37.50 -1.1
eSg 53 56.80
CRE 1.41 296 P 53 41.00 1.1
eSg 54 00.50
DUI 1.48 158 P 53 40.50 -0.3
PGD 1.67 301 P 53 45.00 1.4
S.D. = 1.3 on 9 of 9 obs.

? OCT 21, 1990 10h 04m 34.90± 1.48s
39.083 N ± 8.3km 27.686 E ±18.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZM 0.76 206 ePg 04 49.80 0.0
eSg 05 01.30
EDC 1.27 6 iPn 04 58.80 0.3
EZN 1.29 306 ePn 04 58.90 0.1
KGT 1.40 348 iPn 04 59.90 -0.5
S.D. = 0.6 on 4 of 4 obs.

& OCT 21, 1990 10h 17m 26.68s
58.955 N 154.275 W
DEPTH = 112.4km
ALASKA PENINSULA (12)
<AGS-P>.

MCNL 0.23 352 eP 17 42.03 0.9
eS 17 53.53
CDD 0.33 94 iP 17 42.22 -0.9
eS 17 54.47
AUI 0.58 49 eP 17 43.78 -0.8
AUH 0.59 46 eP 17 45.64 0.9
AUE 0.62 49 eP 17 44.24 -0.6
PDB 0.84 3 iP 17 45.65 -1.1
eS 18 00.61
OPT 0.88 37 eP 17 46.49 -0.7
eS 18 01.02
HOM 1.52 61 eP 17 53.04 -1.2
eS 18 13.68
RED 1.65 27 iP 17 54.61 -1.4
CNPM 1.66 69 eP 17 54.18 -1.8
iS 18 15.45
RSO 1.70 26 eP 17 55.32 -1.3
NNL 1.87 53 eP 17 58.18 -0.4
RDT 1.88 29 iP 17 57.18 -1.6
eS 18 21.06
SVW 2.26 343 eP 18 02.40 -1.3
CKL 2.45 23 iP 18 04.66 -1.6
SPU 2.50 26 eP 18 04.93 -1.8
BGL 2.50 21 eP 18 05.50 -1.4
CRP 2.55 24 eP 18 06.38 -1.2
SLKM 2.58 51 eP 18 05.76 -2.1
CGLM 2.62 25 eP 18 06.74 -1.7
NCG 2.68 22 eP 18 07.48 -1.7
SEW 2.72 63 eP 18 07.59 -2.0
PMS 3.29 44 eP 18 14.79 -2.7
SKT 3.33 23 eP 18 15.73 -2.1
MTU 3.53 70 eP 18 18.10 -2.6
KNIM 3.60 64 eP 18 18.10 -3.5
PLRM 3.68 42 eP 18 19.43 -3.2
GHO 3.88 41 eP 18 22.01 -3.4
CUT 3.98 28 eP 18 23.94 -2.8
29 obs. associated

? OCT 21, 1990 10h 21m 09.64± 4.72s
14.694 S ±72.1km 75.536 W ±62.1km
DEPTH = 33.0km (normal)
NEAR COAST OF PERU (115)

PT10 2.95 332 e(P) 21 56.00 0.7
iS 22 12.00
NNA 2.98 335 iP 21 55.00 -0.7
i 21 58.80
iS 22 35.50
ARE 4.28 115 eP 22 14.00 -0.4
iS 23 04.00
ZOBO 7.32 103 P 22 57.00 -0.5
LPB 7.40 105 eP 22 59.00 0.5
CNCB 7.57 107 P 23 01.50 0.4
S.D. = 0.8 on 6 of 6 obs.

• OCT 21, 1990 10h 32m 00.06± 1.40s
18.663 S ±11.5km 178.009 W ±15.6km
DEPTH = 526.9 ± 11.5 km
4.9mb (9 obs.)
FIJI ISLANDS REGION (181)

SGE 4.01 285 eP 33 21.00 -0.2
BKM 13.11 272 iPc 34 51.00 0.3
DZM 14.97 254 iPc 35 09.80 0.2
PUZ 19.61 189 eP 35 56.30 1.8
NOZ 20.18 189 eP 35 59.30 -0.5
KHZ 24.74 195 P 36 40.00 -1.2
LTZ 25.42 197 P 36 45.70 -1.5
BRS 28.20 247 iPd 37 13.10 1.3
CTA 33.70 262 iPd 37 59.00 0.3
0.6s 37.33nm 5.1mb
PMG 34.97 280 iPc 38 09.70 0.4
1.1s 88.61nm 5.3mb
CMS 34.99 242 iPc 38 11.10 1.8
0.6s 20.00nm 4.9mb
STK 38.61 242 iPd 38 41.20 2.1
0.6s 14.00nm 4.7mb
WB5 44.85 260 iPd 39 28.20 -0.6
ASPA 44.96 255 iPd 39 30.00 0.4
0.8s 118.70nm 5.5mb
Z 23s 0.20um 4.0MszX
eS 45 28.20
MTN 49.16 269 eP 40 00.60 -1.1
FORR 50.00 245 iPc 40 07.80 0.2
KNA 50.78 265 eP 40 12.50 -1.0
COOL 55.98 245 eP 40 49.70 -0.8
MBL 58.17 256 iPd 41 05.10 -0.4
0.3s 8.00nm 4.5mb
MEKA 58.60 250 eP 41 07.80 -0.7
KLB 58.83 244 eP 41 09.70 -0.2
NWAO 59.20 242 eP 41 12.00 -0.3
BAL 59.81 245 eP 41 16.00 -0.4
MUN 60.12 243 eP 41 18.40 -0.1
MRWA 60.55 246 eP 41 20.00 -1.4
NANU 61.88 254 eP 41 30.30 0.2
0.4s 32.00nm 5.1mb
MAT 68.73 323 eP 42 11.00 -1.6
0.7s 4.79nm 4.2mb
CHTO 89.61 290 eP 44 03.50 0.8
0.8s 2.20nm 4.1mb
KSP 145.94 344 ePKP 50 40.70 0.9
CLL 146.28 348 iPKPd 50 41.70 1.4
S.D. = 1.1 on 30 of 30 obs.

% OCT 21, 1990 10h 32m 47.41± 1.03s
39.088 N ± 7.4km 27.679 E ±12.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZM 0.76 205 ePg 33 02.30 0.0
EDC 1.27 6 iPn 33 11.30 0.4
KCT 1.27 24 iPn 33 11.40 0.4
BNT 1.28 8 iPn 33 10.60 -0.6
EZN 1.28 306 ePn 33 11.40 0.2
KGT 1.39 348 iPn 33 12.40 -0.4
S.D. = 0.5 on 6 of 6 obs.

% OCT 21, 1990 10h 33m 50.47± 2.33s
17.151 N ±16.0km 100.407 W ±21.4km
DEPTH = 33.0km (normal)
GUERRERO, MEXICO (59)

ACX 0.60 118 eP 34 02.25 -0.2
iS 34 13.00
III 1.51 36 eP 34 16.50 0.8
CRX 2.35 17 (P) 34 31.50 3.7X
PPM 2.55 41 eP 34 30.50 -0.4
IIJ 2.65 14 eP 34 31.00 -1.2
MRX 2.65 344 eP 34 32.00 0.3
IIT 2.73 47 (P) 34 36.50 3.3X
OXX 3.52 91 (P) 34 56.00 11.5X
S.D. = 1.1 on 5 of 8 obs.

& OCT 21, 1990 10h 34m 31.55s
62.979 N 150.720 W
DEPTH = 97.1km
CENTRAL ALASKA (1)
<AGS-P>.

HUR 0.49 90 eP 34 46.95 -0.3
eS 34 58.73
CUT 0.61 160 eP 34 48.10 0.0
eS 35 00.37
RND 0.95 62 iP 34 51.02 -0.5
eS 35 05.56
SKT 1.07 201 eP 34 52.50 -0.4
eS 35 08.73

21d 10h

MCK	1.10	46	eP	34	53.02	-0.2
PWA	1.39	163	eP	34	56.70	0.1
GHO	1.47	145	eP	34	57.70	-0.1
			eS	35	18.23	
SUA	1.52	180	eP	34	58.85	0.4
PLRM	1.58	151	eP	34	58.39	-0.6
SML	1.62	136	eP	34	58.99	-0.6
NCG	1.72	204	eP	35	00.51	-0.4
NEA	1.76	24	eP	35	00.33	-1.1
CGLM	1.78	200	eP	35	01.77	0.0
			eS	35	24.45	
PMS	1.82	162	eP	35	02.07	-0.2
			eS	35	24.65	
BGL	1.89	205	eP	35	03.76	0.6
WRH	1.90	37	eP	35	02.02	-1.2
CKL	1.94	204	eP	35	04.24	0.3
SCM	1.95	125	eP	35	03.06	-0.9
CCB	2.12	36	eP	35	04.78	-1.2
HDA	2.21	48	eP	35	06.00	-1.3
TOA	2.28	111	eP	35	07.88	-0.5
SDG	2.42	98	eP	35	09.72	-0.5
SLKM	2.49	174	eP	35	11.15	0.0
RDT	2.54	199	eP	35	12.48	0.6
KLU	2.70	121	eP	35	11.62	-2.3
GLI	2.72	139	eP	35	12.20	-1.9
VZW	2.75	133	eP	35	12.80	-1.9
VLZ	2.78	130	eP	35	12.64	-2.3
KNIM	3.00	150	eP	35	15.18	-2.8
CNPM	3.47	184	eP	35	23.96	-0.6
GLB	3.58	112	eP	35	23.91	-2.2

31 obs. associated

• OCT 21, 1990 10h 47m 47.90± 1.63s
5.011 S ±13.6km 151.178 E ±17.8km
DEPTH = 40.1 ± 18.9 km
4.6mb (4 obs.)
NEW BRITAIN REGION (192)

RAB	1.28	51	iPd-	48	09.10	-0.5
PMG	5.92	222	eP	49	16.00	0.6
	0.9s	100.84nm			5.4mb	X
			eS	50	29.00	
QIS	19.11	215	ePc	52	08.00	-2.5X
BKM	20.90	128	iP	52	38.00	8.5X
MTN	21.27	247	eP	52	34.00	0.9
	0.4s	21.00nm			4.9mb	
WB5	22.05	226	eP	52	39.70	-1.3
			i	52	44.40	
BRS	22.31	176	iPc	52	46.00	2.5
DZM	22.50	140	iPc	52	39.10	-6.4X
KNA	24.46	242	eP	53	03.50	-1.0
ASPA	24.93	220	iPc	53	07.40	-1.6
	0.6s	32.10nm			5.1mb	
MBL	34.38	239	eP	54	32.00	-1.6
MRWA	41.07	230	eP	55	30.50	1.0
CHTO	56.62	296	eP	57	31.10	1.4
	1.1s	3.24nm			4.3mb	
GUN	70.85	302	P	59	04.20	0.7
PKI	71.15	301	P	59	05.40	0.1
KKN	71.33	301	P	59	06.60	0.4
DMN	71.42	301	P	59	07.60	0.7
GKN	71.93	301	P	59	10.20	0.4
GBA	75.47	285	Pd	59	30.20	-0.1
	0.7s	2.90nm			4.4mb	
BCAO	132.81	271	iPKPd	06	59.00	-2.5
	0.4s	5.00nm				

S.D. = 1.4 on 17 of 20 obs.

OCT 21, 1990 10h 56m 30.82± 0.34s
37.635 N ± 7.5km 72.131 E ± 7.1km
DEPTH = 33.0km (normal)
4.7mb (10 obs.)
TAJIK SSR (715)

QUE	8.58	212	eP	58	36.30	0.4
			eS	00	06.00	
NDI	9.89	153	iPd	58	55.40	1.7
	0.5s	21.13nm			5.7mb	X
MAIO	10.20	266	eP	58	57.00	-1.1
			eS	00	44.00	
GKN	14.23	129	P	59	51.40	-0.7
KKN	14.78	128	P	59	58.00	-1.4
DMN	14.80	129	P	59	59.60	-0.1
PKI	15.01	128	P	00	01.80	-0.8
GUN	15.08	126	P	00	02.40	-1.0
HYB	20.92	163	eP	01	15.50	2.4
NUR	37.45	323	eP	03	44.00	1.6
SUF	37.45	327	eP	03	44.00	1.5
SOD	39.10	334	iP	03	58.90	2.6X
HFS	42.74	321	eP	04	26.20	-0.1
	0.4s	9.60nm			4.9mb	
NB2	44.03	322	P	04	37.30	0.6
	0.7s	4.90nm			4.4mb	
BSF	47.74	304	eP	05	06.20	-0.3
	0.6s	4.50nm			4.7mb	
HAU	47.99	304	eP	05	08.00	-0.3
LPG	48.33	301	eP	05	11.10	-0.2
LPL	48.34	301	eP	05	11.20	-0.1
FRF	48.93	299	eP	05	15.50	-0.1
	0.7s	5.50nm			4.7mb	
SMF	49.98	303	eP	05	23.10	-0.5
AVF	50.27	304	eP	05	25.10	-0.7
	0.7s	5.50nm			4.7mb	
MAF	50.95	303	eP	05	30.80	-0.2
	0.8s	4.70nm			4.5mb	
TCF	51.16	303	eP	05	32.20	-0.5
LSF	51.63	303	eP	05	35.70	-0.4
	0.5s	2.20nm			4.4mb	
LDF	52.02	307	eP	05	38.20	-0.9
	0.5s	5.10nm			4.7mb	
FLN	52.20	307	eP	05	40.00	-0.4
	0.6s	7.20nm			4.8mb	
MBC	66.16	3	ePd	07	17.60	1.0
	0.5s	14.00nm			5.3mb	
INK	72.64	10	eP	07	57.00	0.6

S.D. = 1.0 on 27 of 28 obs.

• OCT 21, 1990 13h 16m 29.29± 0.88s
37.801 N ±19.5km 73.424 E ±23.3km
DEPTH = 33.0km (normal)
4.5mb (5 obs.)
TAJIK SSR (715)

NDI	9.63	160	e(P)	18	50.00	1.4
MAIO	11.23	267	eP	18	57.00	-13.7X
			eS	20	52.00	
GKN	13.56	133	P	19	42.20	0.4
	0.6s	28.00nm			5.3mb	
KKN	14.10	132	P	19	47.80	-1.1
PKI	14.33	132	P	19	52.70	0.5
	0.6s	11.00nm			4.6mb	
GBA	24.36	171	P	21	44.00	-1.4
HFS	43.26	321	eP	24	28.90	0.0
	0.4s	4.50nm			4.6mb	
NB2	44.53	322	P	24	39.60	0.3
	0.6s	2.30nm			4.2mb	
MBC	65.94	3	eP	27	18.50	4.9X
	0.8s	3.00nm			4.4mb	

S.D. = 1.2 on 7 of 9 obs.

OCT 21, 1990 13h 18m 46.94± 0.54s
3.075 S ± 7.2km 136.460 E ± 9.8km
DEPTH = 33.0km (normal)
5.1mb (5 obs.) 4.2Msz (1 obs.)
WEST IRIAN (201)

MTN	11.05	208	iPd	21	27.10	1.3
			eS	23	29.00	
PMG	12.35	121	eP	21	44.00	0.6
KNA	14.70	211	iPc	22	15.30	0.9
			eS	24	53.00	
WB5	16.83	187	eP	22	39.50	-2.3
			eS	25	40.00	
			eScP	30	41.30	
QIS	17.65	170	eP	22	50.00	-2.0
			eS	26	00.00	
GUMO	18.54	27	eP	23	03.00	0.0
CTA	19.42	151	iPd	23	15.40	1.8
	1.2s	40.63nm			4.6mb	
ASPA	20.62	187	iPc	23	26.50	0.2
	0.9s	207.20nm			5.5mb	
	Z 19s	1.10um			4.2Msz	
			iS	27	11.30	
MBL	24.19	221	eP	24	03.00	1.4
	0.6s	51.00nm			5.2mb	
BRS	28.78	149	iPc	24	42.50	-1.5
MRWA	32.47	215	eP	25	16.50	-0.1
KLB	33.39	210	eP	25	24.30	-0.3
BJI	46.77	339	eP	27	21.50	6.5X
	Z 16s	0.29um			4.3MszX	
LZH	49.45	325	eP	27	41.50	5.2X
	1.5s	23.00nm			5.0mb	
GUN	57.56	306	P	28	36.00	-0.5
PKI	57.81	305	P	28	37.30	-0.9
KKN	58.00	306	P	28	40.00	0.6
DMN	58.07	305	P	28	39.70	-0.3
GKN	58.61	305	P	28	44.20	0.6
	0.8s	17.00nm			5.2mb	
POO	65.23	292	eP	29	26.50	-1.4
CNCB	148.81	130	PKP	38	32.00	1.6
LPB	148.88	130	(PKP)	38	35.00	4.7X
ZOBO	149.02	129	PKP	38	31.00	0.3

S.D. = 1.2 on 20 of 23 obs.

& OCT 21, 1990 13h 24m 11.00s
61.243 N 151.407 W
DEPTH = 63.8km
4.4mb (1 obs.)
SOUTHERN ALASKA (2)
<AGS-P>. Felt (III) at Anchorage and (II) at Palmer.

CGLM	0.30	283	iP	24	21.49	-0.3
SPU	0.32	259	iP	24	21.49	-0.4
			eS	24	30.43	
CRP	0.36	274	iP	24	22.09	-0.3
SUA	0.39	55	iP	24	22.35	-0.2
NCG	0.40	294	iP	24	22.11	-0.5
			eS	24	31.40	
CKL	0.45	264	iP	24	22.57	-0.6
BGL	0.48	273	iP	24	22.66	-0.7
NKA	0.51	171	eP	24	24.88	1.4
SKT	0.74	356	iP	24	25.21	-1.0
RDT	0.83	216	eP	24	26.52	-0.8
			iS	24	39.56	
PWA	0.84	60	iP	24	27.31	-0.1
PMS	0.89	89	iP	24	27.77	-0.4
SLKM	0.94	141	iP	24	27.84	-0.9
RSO	1.02	221	iP	24	29.19	-0.8
RED	1.06	220	iP	24	29.48	-0.9
PLRM	1.15	71	iP	24	30.45	-0.9
PMR	1.15	71	iPd	24	30.40	-1.0
			eS	24	47.60	
NNL	1.21	177	iP	24	32.65	0.5
CUT	1.28	24	iP	24	32.23	-1.0
GHO	1.30	65	iP	24	32.58	-1.0
			eS	24	49.87	
SEW	1.50	139	eP	24	34.20	-1.9
BRLK	1.51	170	eP	24	35.21	-1.1
SML	1.58	68	iP	24	35.86	-1.5
HOM	1.59	184	eP	24	37.41	-0.1
CNPM	1.73	177	eP	24	38.14	-1.2
XLV	1.80	185	eP	24	40.13	-0.2
OPT	1.83	210	eP	24	40.03	-0.8
			eS	25	01.55	
HUR	1.93	25	eP	24	41.80	-0.4
			eS	25	05.71	
PDB	2.01	225	iP	24	41.32	-1.9
KNIM	2.01	115	iP	24	40.00	-3.3
SCM	2.04	71	eP	24	41.87	-1.9
SVW	2.05	268	iPd	24	41.80	-2.0
AUE	2.13	208	eP	24	43.94	-0.9
GLI	2.13	98	iP	24	41.86	-3.1
AUH	2.14	209	iP	24	44.53	-0.6
AUI	2.16	209	eP	24	44.47	-0.9
MTU	2.24	123	iP	24	43.76	-2.7
VZW	2.36	92	iP	24	45.53	-2.7
VLZ	2.46	90	iP	24	46.92	-2.6
RND	2.48	28	eP	24	48.55	-1.3
MCNL	2.53	217	eP	24	49.09	-1.4
HIN	2.55	107	iP	24	47.33	-3.5
CDD	2.58	207	iP	24	49.81	-1.4
TOA	2.64	69	iPd	24	50.90	-1.3
KLU	2.65	82	iP	24	49.53	-2.8
TTA	2.75	310	iPd	24	51.50	-2.2
MCK	2.75	24	eP	24	53.31	-0.3
CVA	2.85	102	iP	24	51.51	-3.5
SDG	3.06	63	eP	24	56.46	-1.6
MID	3.11	124	eP	24	56.30	-2.3
SGAM	3.12	101	iP	24	54.95	-3.9
PAX	3.29	56	eP	24	59.85	-1.4
RAGM	3.41	102	eP	24	58.70	-4.2
NEA	3.51	17	eP	25	02.24	-2.1
KDC	3.55	189	eP	25	03.00	-1.8
WRH	3.58	24	eP	25	03.42	-1.8
HMT	3.62	101	eP	25	01.57	-4.3
DDM	3.62	43	eP	25	06.02	0.1
GLB	3.67	84	eP	25	03.00	-3.5
KAIM	3.69	108	eP	25	02.01	-4.8
HDA	3.77	31	eP	25	06.26	-1.8
CCB	3.79	24	eP	25	05.79	-2.4

```
FBA      4.02  23 iPd    25 09.90   -1.6
GLM      4.18  24 iP     25 12.26   -1.5
DOT      4.18  52 eP     25 12.40   -1.4
TGL      4.21  93 eP     25 10.11   -4.1
WAX      4.26  97 eP     25 10.36   -4.6
BALM     4.40  89 iP     25 12.95   -4.0
TMW      4.45  58 eP     25 16.72   -0.8
WRG      4.77 101 eP     25 18.16   -3.9
IMA      4.95 349 ePd    25 21.40   -3.3
FYU      6.00  24 eP     25 37.17   -2.0
YKU      6.03 101 e(P)   25 36.70   -2.9
DWY      6.20  58 P      25 38.80   -3.1
ANM      7.19 304 eP     25 53.20   -2.5
SDN      7.61 223 eP     25 59.60   -1.9
SIT      9.26 110 eP     26 19.90   -4.2
INK     10.37  39 eP     26 36.00   -3.3
PNT     21.43 109 eP     28 53.00   -2.2
        1.0s     19.00nm          4.4mb
        79 obs. associated
-------------------------------------------
%  OCT  21, 1990  13h 44m 24.42± 1.58s
   42.961 N ± 9.3km   13.461 E ±17.5km
   DEPTH =  10.0km  (geophysicist)
 CENTRAL ITALY                    (381)

ASS      0.60 281 P      44 36.50    0.0
                 eSg     44 47.80
AQU      0.61 184 P      44 38.00    1.3
                 eSg     44 45.60
ARV      0.66 325 P      44 37.50    0.0
                 eSg     44 47.00
MNS      0.81 225 P      44 39.40   -0.8
                 eSg     44 53.70
AZI      0.97 181 P      44 44.50    1.6
SDI      1.28 168 P      44 46.00   -2.2
                 eSg     45 04.20
CRE      1.29 302 P      44 48.00   -0.4
SFI      1.51 310 P      44 52.60    1.1
PGD      1.56 306 P      44 52.00   -0.4
     S.D. = 1.4  on   9 of   9 obs.
-------------------------------------------
   OCT  21, 1990  15h 10m 43.70± 0.12s
    3.989 S ± 2.4km   77.274 W ± 2.6km
   DEPTH = 116.3km  ( 12 depth phases)
   5.7mb ( 67 obs.)
 PERU-ECUADOR BORDER REGION       (110)
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike=150 Dip=70 Slip=-110
       NP2:        17      28      -47
       Principal Axes:
        T                Plg=22  Azm=255
        P                  60        31
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to normal faulting
        with a moderate left-lateral
        strike-slip component. The
        preferred fault plane is NP1.
      MOMENT TENSOR SOLUTION
      Dep 113              No. of sta:  5
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-0.74        Mtt=-0.29
        Mff= 1.03        Mrt=-0.64
        Mrf= 0.69        Mtf=-0.46
       Principal axes:
        T  Val=  1.51  Plg=22  Azm=248
        N       -0.26      22       149
        P       -1.24      58        18
      Best Double Couple:Mo=1.4*10**17
       NP1:Strike= 12 Dip=31 Slip= -42
       NP2:      140      70      -114
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 18S, 31C
      Centroid Location:
      Origin Time        15:10:47.4 0.4
      Lat  4.16S 0.04 Lon  77.29W 0.05
      Dep 108.1 2.7 Half-duration  2.0
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-1.18 0.05  Mtt=-0.08 0.08
        Mff= 1.25 0.10  Mrt=-0.46 0.05
        Mrf= 0.59 0.05  Mtf=-0.51 0.07
       Principal Axes:
        T  Val=  1.61  Plg=14  Azm=249
        N       -0.20      11       156
        P       -1.40      72        30
      Best Double Couple:Mo=1.5*10**17
```

```
         NP1:Strike=354 Dip=32 Slip= -69
         NP2:       150      60      -103

TUNG     2.81 335 P      11 28.60    0.2
VC1      3.51 341 iP+    11 38.60    0.6
OTO      3.97 342 P      11 45.60    1.5
QUR      3.99 342 eP     11 45.00    0.6
                  eS     12 14.00
GGP      4.01 341 Pn+    11 44.80   -0.1
                  Pg     11 50.00
                  eS     12 10.00
YANA     4.06 341 eP     11 46.00    0.6
CAYA     4.10 350 iP     11 45.80   -0.2
                  iS     12 16.50
COTA     4.42 346 P      11 51.20    0.8
                  eS     12 30.00
PSO      5.15 359 eP     12 00.00   -0.1
NNA      7.96 177 iPc    12 32.30   -6.0X
         0.9s   378.15nm          6.0mb
                  iS     13 56.00
PT10     8.04 178 iP     12 38.50   -0.8
                  iS     14 01.00
BOG      9.14  21 iPc    12 52.00   -2.4
                  iS     14 40.00
BMG     11.76  21 iPd    13 28.00   -1.1
ARE     13.63 156 eP     13 57.00    3.2X
ZOBO    15.16 144 P      14 10.00   -3.5X
      Z  20s      0.53um
                  LR     17 04.00
LPB     15.38 145 P      14 13.80   -2.3
         1.0s   234.00nm          5.4mb
                  i      14 21.00
CNCB    15.67 145 P      14 19.00   -0.9
                  i      14 24.90
CCH     17.21 141 eP     14 20.00 -18.8X
                  i      14 41.00
CUM     19.40  42 iPc    15 02.80   -0.5
TPP     21.22  48 eP     15 24.72    3.0X
TRN     21.47  47 eP     15 27.79    3.5X
TBH     21.61  48 eP     15 29.20    3.5X
TPX     23.94 322 (P)    15 50.00    1.7
PORP    24.29  25 iP     15 51.70    0.1
LRS     24.41  25 iP     15 53.00    0.2
MCP     24.42  24 iP     15 53.60    0.8
FDF     24.52  40 eP     15 53.00   -0.9
         0.1s     1.50nm
SJG     24.55  26 iP     15 53.80   -0.3
LPR     24.84  27 iP     15 56.00   -0.9
BBL     24.91  39 eP     15 56.00   -1.5
NEV     25.52  34 eP     16 01.00   -2.2
CYA     26.66 157 e(P)   16 14.00    0.4
OXX     28.41 318 (P)    16 28.50   -1.2
RTLL    28.43 164 ePc    16 29.70    0.1
RTCB    28.49 165 ePd    16 30.70    0.5
PEL     29.65 169 iPd    16 41.00    0.6
         1.0s    25.00nm          4.9mb
MDZ     29.81 166 iP     16 42.80    1.0
                  iS     17 08.10
SAN     29.96 169 eP     16 43.50    0.4
LNV     30.31 170 eP     16 46.00   -0.1
ACX     30.45 313 (P)    16 48.00    0.4
IIT     30.85 319 (P)    16 53.00    1.6
PPD     30.91 128 eP     16 49.80   -1.8
                  e      17 23.60 160kmX
BAO     31.04 114 eP     16 52.40   -0.5
PPM     31.09 318 (P)    16 55.00    1.2
III     31.18 316 (P)    16 55.50    1.3
IIJ     32.30 318 (P)    17 06.00    1.7
MRX     33.28 316 (P)    17 14.00    1.8
VAO     34.87 126 eP     17 24.00   -2.0
SOB1    36.49 100 eP     17 39.30   -0.4
                  e      18 13.40 154kmX
                  e      19 04.00
JFO     37.35 121 eP     17 46.50   -0.4
                  e      18 08.90  94kmX
                  e      18 19.60
PDCR    38.65 105 eP     17 56.60   -1.2
                  e      18 17.80  89kmX
TKL     39.91 352 P      18 07.00   -0.8
GBTN    39.98 351 P      18 07.80   -0.6
CAI     40.04  95 iPd    18 08.60   -0.6
BLA     41.09 356 ePd    18 17.50   -0.1
         1.3s   188.46nm          5.7mb
NA2     41.90 359 P      18 24.60    0.5
TUL     43.32 338 iPd    18 35.30   -0.4
         1.2s   120.00nm          5.5mb
                  e      18 47.80  46kmX
```

```
                  i      18 54.20
SIO     43.37 337 iP     18 35.40   -0.7
MEO     43.47 334 iPd    18 36.60   -0.4
FVM     43.51 345 P      18 36.80   -0.4
LVNJ    44.64   3 P      18 49.00    2.8X
GMTN    44.74   3 iP     18 46.20   -0.9
PNJ     44.77   3 iP     18 47.60    0.4
CLE     45.43 356 iP     18 51.50   -1.0
WVLY    46.26 359 P      18 58.40   -0.6
                  pP     19 26.00 119km
ALQ     47.46 327 iPd    19 09.00    0.1
         1.0s   225.00nm          5.9mb
                  epP    19 36.00 116km
ANMO    47.46 327 P      19 09.00    0.1
HBVT    48.28   4 P      19 15.00    0.2
                  pP     19 42.20 116km
BNH     48.66   6 P      19 17.80    0.1
EMM     49.29   9 P      19 23.60    1.1
MIM     49.56   8 P      19 24.60    0.0
GLD     50.55 332 P      19 32.60    0.1
         1.5s   171.88nm          5.8mb
GOL     50.58 332 P      19 32.40   -0.4
         0.9s    50.19nm          5.4mb
GLA     51.19 319 eP     19 38.00    0.7
CBM     51.34   8 P      19 38.40    0.3
BAR     52.19 317 eP     19 35.00   -9.8X
TPC     52.64 319 eP     19 48.00   -0.2
PLM     52.72 318 eP     19 49.00    0.1
MSU     53.20 326 P      19 52.30   -0.1
PEC     53.24 318 P      19 52.50    0.0
RVR     53.45 318 eP     19 53.00   -1.0
GSC     53.87 320 eP     19 57.00   -0.2
MWC     54.04 318 eP     19 58.00   -0.6
DAU     54.05 328 P      19 58.80    0.1
PAS     54.07 318 eP     19 58.00   -0.6
CLC     54.70 320 eP     20 03.00   -0.2
DUG     54.73 327 P      20 03.60    0.1
BW06    54.95 331 P      20 04.20   -1.0
ISA     55.17 319 eP     20 05.00   -1.6
ABL     55.18 318 P      20 06.80   -0.1
SYP     55.51 317 eP     20 09.00   -0.1
BLP     55.81 317 P      20 11.00   -0.2
TNP     55.87 322 P      20 11.50   -0.3
         1.0s    50.00nm          5.5mb
BCH     55.96 318 P      20 12.40    0.1
PTI     56.41 330 P      20 15.00   -0.5
PHAM    56.54 318 P      20 16.60    0.2
FRI     56.76 320 eP     20 16.20   -1.7
PRI     56.89 318 eP     20 17.80   -1.2
LLA     57.35 319 eP     20 21.40   -0.6
HPI     57.39 330 P      20 21.90   -0.6
PRS     57.47 318 eP     20 22.00   -0.9
SAO     57.76 319 eP     20 24.00   -0.9
CMB     57.81 320 eP     20 24.50   -0.8
ARN     58.15 319 P      20 28.20    0.5
MHC     58.22 319 eP     20 28.20   -0.1
GCC     58.28 319 eP     20 28.00   -0.5
PCC     58.80 319 eP     20 31.80   -0.3
RKT     58.82 245 iP     20 33.30    0.8
         1.0s    40.00nm          5.4mb
BKS     58.91 319 ePd    20 32.70   -0.2
         1.0s   122.00nm          5.9mb
BRK     58.93 319 eP     20 31.80   -1.2
ZSP     58.96 319 eP     20 33.50    0.3
SCH     59.24   7 eP     20 33.70   -1.2
         1.0s   168.00nm          6.1mb
ORV     59.41 321 ePd    20 36.50    0.2
MIN     59.94 322 eP     20 38.80   -1.3
WDC     60.66 322 eP     20 42.20   -2.6
LBFM    60.71 323 P      20 45.00   -0.4
                  pP     21 12.40 112km
SES     61.47 336 iPd    20 49.10   -1.1
         1.2s   438.00nm          6.3mb
                  pP     21 13.00  95kmX
FHC     61.69 321 eP     20 52.00    0.2
FFC     62.00 344 iPd    20 51.80   -1.8
         1.1s   163.00nm          5.9mb
NEW     62.59 331 P      20 57.00   -0.6
         1.0s    87.50nm          5.7mb
DPW     62.85 330 P      20 59.00   -0.3
PNT     64.51 331 iPd    21 10.40    0.2
         1.0s   158.00nm          5.9mb
EDM     64.56 337 iPd    21 08.70   -1.7
         1.1s   349.00nm          6.2mb
                  pP     21 37.50 117km
MCW     65.72 329 P      21 18.00    0.1
YKA     72.11 343 eP     21 55.40   -1.6
```

21d 15h

	0.9s	39.70nm		5.2mb		BGF	86.09	43 eP	23 12.50	-0.2		PII	91.13	46 P	23 36.50	-0.1							
LKO	72.67	79 Pd	22 00.12	-1.1			1.4s	283.15nm		6.0mb		BDI	91.21	46 P	23 36.00	-1.1							
	1.1s	94.50nm		5.5mb		LBL	86.15	44 P	23 13.48	0.5		SAL	91.28	45 P	23 37.50	0.3							
TIO	75.07	57 iP	22 15.60	0.7		AGO	86.20	43 P	23 13.22	-0.1		SBA	91.43	191 eP	23 39.60	2.2							
		i	22 45.30	117km		GRC	86.37	42 P	23 13.63	-0.4		SOTA	91.87	43 iPd	23 40.40	0.3							
AVE	75.53	54 iP	22 18.00	0.7		AVF	86.48	43 iPc	23 13.90	-0.7			1.0s	87.10nm		6.0mb							
		i	22 43.00	96kmX			1.0s	29.00nm		5.2mb				i	23 48.90	26km							
SIT	76.67	332 eP	22 23.50	0.3		PLDF	86.53	44 P	23 14.39	-0.6				i	24 10.50								
	1.3s	85.60nm		5.4mb		SSF	86.63	43 eP	23 14.60	-0.7				i	24 23.70								
EVAL	77.16	50 eP	22 26.90	0.6			1.2s	44.65nm		5.3mb		FUR	91.97	42 iPc	23 41.50	1							
EJIF	77.86	52 iPd	22 31.80	1.6		SMF	86.79	43 eP	23 15.60	-0.5			1.2s	66.00nm		5.8mb							
EPRU	78.17	51 eP	22 32.50	0.5			1.3s	72.20nm		5.5mb		PGD	92.01	46 P	23 39.50	-1.4							
ERUA	78.19	45 eP	22 32.30	0.4		LOR	86.90	42 eP	23 15.80	-0.8		GRF	92.04	41 iPd	23 41.70	1.0							
EPLA	78.32	48 iPd	22 32.50	-0.2			1.0s	40.00nm		5.4mb			1.5s	108.00nm		5.9mb							
EMON	78.35	44 iPc	22 33.00	0.2		Z	22s	0.10um		4.2Msz				e	24 06.80	93km							
EHOR	78.37	50 iPd	22 33.10	0.1		LBF	86.93	43 eP	23 16.00	-0.8		CTI	92.09	44 Pd	23 41.10	0.0							
ECOG	79.54	51 iPc	22 40.20	0.7			1.0s	24.00nm		5.1mb		SFI	92.11	46 P	23 41.00	0.0							
AFC	79.55	51 iPd	22 40.40	0.8		SNF	87.69	39 P	23 20.70	0.4		WATA	92.12	43 iPd	23 41.60	0.3							
TOL	79.78	48 iPc	22 42.00	1.4		UCC	87.78	39 P	23 21.80	1.1		CRE	92.16	47 P	23 39.50	-2.0							
	1.4s	418.60nm		6.0mb		DOU	87.82	40 Pd	23 21.20	0.3		MOX	92.35	40 iP	23 43.50	1.4							
GUD	79.89	48 eP	22 41.10	-0.2			0.9s	140.00nm		6.0mb			1.6s	77.00nm		5.7mb							
ENIJ	80.52	52 eP	22 43.40	-1.2				e	23 52.30	120km		RMP	92.61	48 P	23 44.50	1.0							
EVIA	80.66	50 eP	22 45.70	0.3		SVW	87.85	332 ePd	23 20.50	-0.5		MNS	92.63	48 P	23 44.00	0.4							
ECB	81.39	36 iPc	22 49.00	0.3		LRG	88.10	46 iPc	23 22.50	0.1		ASS	92.65	47 P	23 43.00	-0.7							
	1.5s	399.00nm		6.0mb			1.1s	58.60nm		5.5mb		NB2	92.73	29 P	23 44.00	0.4							
AKU	81.44	21 iP	22 50.00	1.3		IMA	88.13	337 iPd	23 22.50	0.2			1.4s	32.90nm		5.4mb							
	1.0s	32.00nm		5.1mb				e	23 52.20	113km		ARV	92.87	47 P	23 44.00	-0.7							
ETOR	81.48	48 iPd	22 50.20	0.6		LMR	88.19	47 eP	23 22.80	-0.1		FVI	92.91	44 P	23 45.20	0.5							
ECRI	81.55	46 iPd	22 50.50	0.6			1.2s	71.40nm		5.6mb		BHG	93.02	43 eP	23 45.70	0.4							
ECP	81.58	36 iPc	22 49.80	0.1		FRF	88.32	46 iPc	23 23.40	-0.1			1.6s	131.00nm		6.0mb							
	1.1s	363.00nm		6.1mb			1.1s	107.45nm		5.8mb		WET	93.09	41 eP	23 46.20	0.7							
ETA	81.82	36 eP	22 51.00	0.0		TTA	88.41	333 ePd	23 23.30	-0.4			1.8s	222.00nm		6.2mb							
	1.1s	247.00nm		5.9mb		VITF	88.45	42 P	23 24.01	0.0		AZI	93.17	48 P	23 46.50	0.5							
INK	81.84	342 iPd	22 51.10	0.3		BNI	88.52	45 Pd	23 25.10	0.5		CLL	93.26	39 iP	23 47.00	0.8							
	1.1s	285.00nm		6.0mb		RRL	88.58	45 P	23 25.38	0.3			1.6s	79.00nm		5.8mb							
		pP	23 21.00	116km		LPL	88.62	44 eP	23 25.60	0.4				e	23 57.00	31km							
BST	81.90	40 P	22 52.42	0.9			1.0s	94.00nm		5.8mb		SDI	93.44	49 P	23 47.40	0.1							
BOH	82.73	46 P	22 56.84	0.8		LPG	88.63	44 eP	23 25.70	0.4		KHC	93.55	41 iPd	23 48.50	0.8							
ELYF	82.76	46 P	22 56.23	0.1			1.0s	110.00nm		5.9mb			1.1s	16.50nm		5.3mb							
ISSF	82.87	46 P	22 57.60	0.8		HAU	88.67	42 eP	23 24.70	-0.4				e	24 19.80	119km							
MADF	82.88	46 P	22 56.95	0.2			0.9s	16.40nm		5.1mb		BRG	93.84	39 iP	23 49.60	0.7							
ATE	82.95	46 P	22 57.47	0.4		Z	20s	0.08um		4.1Msz			1.2s	75.00nm		5.9mb							
LHE	82.97	46 P	22 57.99	0.7		PZZ	88.76	45 P	23 26.10	0.3				i	24 14.80	93km							
ESCF	83.04	46 P	22 58.21	0.6		ENN	88.76	39 iPd	23 26.00	0.6				i	24 20.60								
OGE	83.13	46 P	22 58.45	0.5			0.9s	121.00nm		6.0mb				i	24 26.80								
JAU	83.18	46 P	22 59.36	0.9		MEM	88.79	39 P	23 26.20	0.7		HFS	93.91	30 eP	23 48.90	-0.1							
EROQ	83.31	48 iPd	22 59.70	0.8		EMS	88.82	44 ePd	23 26.60	0.5			1.7s	89.50nm		5.9mb							
BTH	83.31	46 iP	23 00.00	1.1		STV	88.89	46 P	23 26.51	0.2		DUI	93.92	49 P	23 47.50	-2.1							
		e(PcP)	23 11.00			LSD	88.91	44 P	23 27.23	0.6		PRU	94.20	40 Pd	23 51.30	0.7							
MBC	83.68	351 iPd	23 00.60	0.5		LOMF	88.91	43 P	23 26.22	-0.1			1.0s	28.90nm		5.6mb							
	1.0s	142.00nm		5.8mb		SBF	88.92	46 eP	23 25.90	-0.6		SGO	94.53	50 P	23 52.50	0.2							
		pP	23 30.50	116km			1.0s	96.00nm		5.8mb		MGR	94.71	50 P	23 53.00	-0.2							
EPF	83.69	46 iPc	23 01.50	0.6		RSP	88.94	45 P	23 27.33	0.7		PTJ	95.09	44 eP	23 55.30	0.4							
	1.1s	171.70nm		5.9mb		BSF	88.94	42 eP	23 25.90	-0.6		TDS	95.30	51 P	23 56.00	0.1							
LPF	83.79	41 iPc	23 01.20	0.0			0.9s	18.00nm		5.2mb		KSP	95.32	39 iP	23 56.60	0.8							
TOA	83.80	334 iPd	23 01.80	0.7		ENR	88.95	46 P	23 25.79	-0.8			1.0s	43.00nm		5.8mb							
		id	23 31.60	115km		DIX	89.16	44 ePd	23 28.40	0.6				e	24 21.00	90km							
GRR	83.99	41 eP	23 02.30	0.1		MOF	89.17	42 P	23 27.11	-0.5		VKA	95.35	42 iPd	23 57.00	1.1							
MFF	84.08	43 eP	23 02.80	0.1		ECH	89.23	42 P	23 27.83	0.0		ZST	95.87	42 iP	23 58.50	0.2							
ESK	84.27	34 iPc	23 04.00	0.6		IMI	89.25	46 P	23 27.33	-0.7				e	27 49.80								
	0.8s	80.00nm		5.7mb		ROB	89.28	46 P	23 27.74	-0.4		BCAO	96.08	86 iPc	24 00.00	0.0							
EKA	84.30	34 Pd	23 03.60	0.0		CDF	89.34	42 P	23 28.04	-0.3			0.4s	25.00nm		6.1mb							
	1.0s	76.20nm		5.5mb		BBS	89.38	43 P	23 28.35	-0.2				ic	24 13.50	45km							
FLN	84.32	40 eP	23 04.10	0.3		WLS	89.39	42 P	23 28.00	-0.5				ic	24 28.50								
	0.9s	217.55nm		6.1mb		SDN	89.40	325 eP	23 28.60	0.3				id	28 27.50								
Z	20s	0.15um		4.4Msz		WTS	89.47	38 iPd	23 39.90	11.2X		STK	128.64	223 iPKPd	29 39.10	-0.2							
LFF	84.35	44 eP	23 04.20	0.2			1.0s	143.00nm					1.2s	13.00nm									
LDF	84.51	41 iPc	23 05.10	0.3				e	23 54.50	50kmX				i	30 10.90								
LPO	84.61	45 iPc	23 05.40	0.0		WIT	89.49	37 eP	23 30.50	1.7		MAIO	128.90	45 ePKP	29 40.00	0.2							
RJF	84.96	44 eP	23 07.00	-0.1		FIN	89.51	46 P	23 28.56	-0.6		CTA	131.01	239 iPKPd	29 43.90	-0.2							
	1.1s	151.40nm		5.8mb		MMK	89.54	44 ePd	23 30.30	0.8			1.3s	82.69nm									
Z	22s	0.17um		4.4Msz		CKI	89.59	46 P	23 29.00	-0.5		OIS	136.36	235 ePKP	29 53.00	-1.3							
PMR	84.96	333 ePd	23 06.70	0.0		GWF	89.63	41 P	23 29.86	0.3		QUE	137.34	48 ePKP	29 57.20	1.1							
	1.2s	69.30nm		5.4mb		FEL	89.77	42 eP	23 30.26	-0.1			1.0s	28.50nm									
ESEL	84.99	50 iPd	23 07.60	0.2		PCP	89.79	45 P	23 30.00	-0.5		WB5	140.89	232 ePKP	29 55.50	-7.1							
LSF	85.14	43 iPc	23 07.80	-0.2		PGF	89.92	48 eP	23 30.90	-0.3				i	30 02.10								
CAF	85.27	44 eP	23 08.80	0.1			1.1s	56.15nm		5.6mb				i	30 34.00								
ETER	85.38	47 eP	23 09.50	0.2		ZLA	89.98	43 ePd	23 31.50	0.2				eSKP	33 27.00								
FBA	85.45	336 ePd	23 09.00	-0.1		SLE	90.08	42 ePd	23 31.90	0.2		BJI	142.11	343 ePKP	29 58.50	-5.6							
TCF	85.61	43 eP	23 10.00	-0.4		TMA	90.17	44 ePd	23 32.40	0.0			1.0s	49.00nm									
	1.1s	51.30nm		5.4mb		TNS	90.30	40 ePd	23 32.50	-0.2		MRWA	144.61	200 ePKP	30 06.90	-1.9							
MAF	85.85	43 iPc	23 11.40	-0.1		LLS	90.33	43 ePd	23 33.80	0.7		MEKA	145.95	205 ePKP	30 09.30	-1.8							
	1.0s	120.00nm		5.8mb		BOB	90.45	45 Pd	23 33.60	0.0		MTN	147.20	239 ePKP	30 13.10	-0.3							
SPA	86.04	180 iPd	23 13.30	1.0		SAX	90.60	43 ePd	23 35.20	0.7			0.6s	204.00nm									
	1.0s	90.50nm		5.7mb		VDL	90.62	44 ePd	23 35.00	0.5		SSE	147.92	329 PKP	30 12.50	-1.6							
		i	23 37.50	90kmX		MDI	90.72	44 P	23 33.50	-1.1			1.0s	241.00nm									
PYM	86.07	44 P	23 12.81	0.1		OSS	91.10	43 ePd	23 37.20	0.6				sP	30 44.00								

```
LZH    148.04 358 PKPd  30 15.00    0.6
        1.5s     53.00nm
POO    148.28  61 iPKPc 30 15.50    0.4
MBL    149.90 213 ePKP  30 17.70    0.2
                  e     30 22.00
GKN    150.55  34 PKP   30 19.00    0.5
NANU   150.80 205 ePKP  30 24.10    5.4X
        0.3s     7.00nm
KKN    151.07  33 PKP   30 19.60    0.2
DMN    151.12  34 PKP   30 20.10    0.6
GUN    151.30  32 PKP   30 20.40    0.5
PKI    151.31  33 PKP   30 20.00    0.1
GBA    153.27  67 PKPd  30 22.50    0.0
        1.0s    34.40nm
KMI    158.99 360 PKP   30 30.00    0.1
                  pPKP  31 02.00
CHG    164.81  14 iPKPd 30 36.00    0.4
        1.2s    40.23nm
BDT    166.33  15 iPKPc 30 38.20    1.4
        1.3s    106.40nm
NST    168.11  12 ePKP  30 39.30    1.2
IPM    178.21  71 ePKPc 30 43.10    1.2
                  e     32 32.10
     S.D. = 0.8  on 298 of 311 obs.
-------------------------------------
?  OCT  21, 1990  15h 21m 02.17± 1.17s
   11.872 S ±13.5km  114.237 E ±23.6km
   DEPTH = 33.0km  (normal)
 SOUTH OF BALI ISLAND              (284)

MBL    10.68 151 eP    23 37.00    1.0
        0.3s     4.00nm          5.2mb X
                  eS    25 39.00
NANU   10.70 174 eP    23 35.00   -1.3
        0.2s    12.00nm          5.8mb X
                  eS    25 37.00
MRWA   17.34 175 eP    25 04.00    0.7
                  eS    28 17.00
COOL   19.97 162 eP    25 40.00    5.3X
MUN    20.09 175 eP    25 41.00    5.1X
WB5    20.92 115 eP    25 44.00   -0.6
CHG    34.02 333 eP    27 45.50    0.1
     S.D. = 1.3  on   5 of   7 obs.
-------------------------------------
%  OCT  21, 1990  15h 36m 41.69± 1.05s
   39.106 N ± 7.7km   27.696 E ±12.6km
   DEPTH = 10.0km  (geophysicist)
 TURKEY                            (366)
      MD 2.4 (ISK).

IZM     0.78 206 ePg    36 57.00    0.0
                 eSg    37 08.90
EDC     1.25   6 ePn    37 04.80    0.0
KCT     1.25  24 iPn    37 04.80   -0.1
BNT     1.26   8 iPn    37 05.30    0.2
EZN     1.28 305 ePn    37 05.40    0.0
     S.D. = 0.2  on   5 of   5 obs.
-------------------------------------
?  OCT  21, 1990  16h 04m 22.26± 1.46s
    0.413 S ±14.1km  124.318 E ±35.6km
   DEPTH = 33.0km  (normal)
   4.7mb (  3 obs.)  3.4Msz (  1 obs.)
 MOLUCCA SEA                       (269)

MBL    21.08 192 eP    09 06.20   -0.1
WB5    21.71 154 eP    09 10.90   -1.7
                  i    09 15.80
ASPA   24.92 159 iPd   09 44.50    0.5
        0.9s    15.90nm          4.6mb
     Z  18s     0.10um           3.4Msz
OIS    24.99 144 iPd   09 44.80    0.2
        0.6s    20.00nm          4.9mb
MAT    38.97  18 eP    11 47.00   -0.2
        0.7s     9.59nm          4.7mb
CAN    41.65 149 eP    12 10.50    1.1
     S.D. = 1.2  on   6 of   6 obs.
-------------------------------------
   OCT  21, 1990  16h 05m 19.56± 0.84s
   23.789 N ± 5.8km  121.574 E ±10.8km
   DEPTH =  14.1 ±  4.8 km
   3.6mb (  1 obs.)
 TAIWAN                            (244)

TWD     0.29   4 iPc    05 25.90    0.0
                 eS     05 29.70
TWF1    0.50 210 iPd    05 29.00   -0.7
                 eS     05 37.20

TWO     0.83 306 iPd    05 34.90   -0.3
TWC     0.85  17 ePc    05 35.90    0.3
                 eS     05 48.60
TWG     1.07 206 ePc    05 39.40    0.1
TWK     1.12 243 ePd    05 40.60    0.3
TWZ     1.30   0 eP     05 43.00   -0.2
ANP     1.39 358 eP     05 44.30   -0.2
                 eS     06 04.50
CHTO   21.65 261 eP     10 12.00    0.4
        1.0s     2.75nm          3.6mb
     S.D. = 0.4  on   9 of   9 obs.
-------------------------------------
%  OCT  21, 1990  16h 18m 30.33± 0.52s
   48.101 N ± 4.5km    0.725 W ± 5.4km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                            (538)
      ML 2.7 (LDG).

LPF     0.22 252 Pg     18 35.10    0.0
                 Sg     18 38.00
GRR     0.30 343 Pg     18 36.40   -0.2
                 Sg     18 40.00
LDF     0.64  39 Pg     18 43.80    0.7
                 Sg     18 52.50
FLN     0.68  14 Pg     18 43.70   -0.1
                 Sg     18 52.30
MFF     1.55 165 Pn     18 58.20    0.2
                 Pg     19 00.20
                 Sg     19 21.20
LSF     2.41 139 Pn     19 11.00    0.6
                 Pg     19 17.00
                 Sg     19 49.20
TCF     2.70 131 Pn     19 14.40   -0.2
                 Sg     19 57.80
BGF     2.88 121 Pn     19 17.20    0.1
                 Pg     19 25.50
                 Sg     20 04.40
MAF     2.93 129 Pg     19 26.60    8.8X
                 Sg     20 05.90
SSF     3.05 108 Pn     19 18.50   -0.9
                 Pg     19 28.40
                 Sg     20 08.00
RJF     3.19 150 Pg     19 31.00    9.5X
                 Sg     20 12.80
LOR     3.21 103 Pg     19 31.40    9.7X
                 Sg     20 13.20
LBF     3.38 108 Pn     19 24.00   -0.2
                 Sg     20 18.60
     S.D. = 0.5  on  10 of  13 obs.
-------------------------------------
?  OCT  21, 1990  16h 44m 31.11± 6.75s
   30.483 N ±94.7km   82.157 E ±20.4km
   DEPTH =  33.0km  (normal)
 TIBET                             (306)

GKN     3.29 138 P      45 22.00    0.4
KKN     3.83 134 P      45 29.10   -0.3
DMN     3.86 137 P      45 29.90    0.1
PKI     4.06 135 P      45 32.40   -0.5
GUN     4.14 127 P      45 34.20    0.2
NDI     4.66 249 eP     45 41.00    0.0
     S.D. = 0.4  on   6 of   6 obs.
-------------------------------------
?  OCT  21, 1990  17h 13m 38.62±16.46s
   43.027 N ±98.7km    0.252 E ±117.km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                            (538)

EPF     0.06  87 Pg     13 41.00    0.0
                 Sg     13 43.80
LPO     1.79  22 Pg     14 10.20    0.5
                 Sg     14 36.40
LFF     1.94  10 Pg     14 12.00    0.0
                 Sg     14 41.80
CAF     2.31  34 Pg     14 19.00    1.7X
                 Sg     14 50.40
RJF     2.45  21 Pg     14 18.80   -0.5
                 Sg     14 55.00
     S.D. = 0.7  on   4 of   5 obs.
-------------------------------------
&  OCT  21, 1990  17h 16m 58.70s
   36.140 N          120.240 W
   DEPTH =  10.0km
 CENTRAL CALIFORNIA                ( 39)
      <BRK>. ML 2.9 (BRK).

PKEM    0.13 126 iPd    17 01.80   -0.1

PHAM    0.33 203 iPd    17 05.10   -0.4
PRI     0.34 270 iPd    17 05.20   -0.7
LLA     0.74 310 iP     17 11.60   -1.6
PRS     0.93 282 ePd    17 15.30   -1.2
FRI     0.95  27 iPd    17 14.40   -2.4
BCH     0.96 172 eP     17 15.30   -1.8
SAO     1.15 303 iP     17 18.40   -1.9
ABL     1.53 147 eP     17 23.00   -3.3
BLP     1.58 185 eP     17 24.60   -2.2
ARN     1.59 320 eP     17 24.80   -2.2
MHC     1.64 317 ePc    17 25.40   -2.5
GCC     1.67 303 eP     17 26.00   -2.1
CMB     1.90 357 ePc    17 29.20   -2.2
                 eS     17 53.40
TNP     3.10  50 eP     17 47.00   -1.7
     15 obs. associated
-------------------------------------
%  OCT  21, 1990  17h 19m 23.66± 1.45s
   38.168 N ±11.0km   29.456 E ±14.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)
      MD 3.1 (ISK).

KHL     0.16  19 iPg     19 26.40   -1.1
                 iSg     19 34.40
ALT     1.02  30 iPn     19 43.60    0.5
BCK     1.14 128 ePn     19 45.00   -0.1
IZM -   1.74 278 ePn     19 45.90   -8.3X
IZI     2.17   0 ePn     20 01.20    0.9
KCT     2.25 338 iPn     20 02.30    0.8
BNT     2.49 332 ePn     20 03.80   -1.1
     S.D. = 1.2  on   6 of   7 obs.
-------------------------------------
?  OCT  21, 1990  17h 36m 56.82± 2.04s
   31.493 S ±20.7km   69.563 W ±29.5km
   DEPTH = 130.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

RTBS    0.19 151 iPd    37 15.00   -0.1
RTCB    0.65  90 iPd    37 17.00   -0.2
ZON     0.76  94 iPd    37 18.80    0.8
                 eS     37 31.80
RTCV    0.95 113 iPc    37 19.50   -0.1
                 eS     37 34.00
RTLL    0.95  80 iPc    37 19.10   -0.5
MDZ     1.51 157 eP     37 25.40   -0.1
                 iS     38 45.70
     S.D. = 0.6  on   6 of   6 obs.
-------------------------------------
*  OCT  21, 1990  18h 02m 01.51± 1.63s
   13.430 S ±17.0km  166.060 E ±22.3km
   DEPTH =  78.5 ± 12.2 km
   4.4mb (  1 obs.)
 VANUATU ISLANDS                   (186)

BKM     4.71 154 iPd    03 10.80   -0.8
HNR     7.19 303 eP     03 46.00    0.0
                 eS     05 10.00
SVO     7.46 304 eP     03 50.00    0.3
                 eS     05 11.00
DZM     8.60 178 iPc    04 06.60    1.0
                 iS     05 42.90
ASPA   32.07 247 eP     08 22.40   -0.9
        0.8s     4.70nm          4.4mb
     Z  23s     0.10um           3.4MszX
PKI    88.05 299 P      14 44.80   -0.4
KKN    88.22 299 P      14 45.80    0.0
DMN    88.32 299 P      14 46.40    0.0
BCAO  146.74 257 iPKPd 21 36.00    0.8
        0.5s    12.00nm
                 ic     23 42.00
     S.D. = 0.8  on   9 of   9 obs.
-------------------------------------
   OCT  21, 1990  19h 05m 47.72± 0.15s
   20.894 S ± 4.1km  177.939 W ± 3.8km
   DEPTH = 497.6km  (  2 depth phases)
   5.3mb ( 43 obs.)
 FIJI ISLANDS REGION               (181)
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.: 16S, 27C
      Centroid Location:
      Origin Time        19:05:58.7 0.8
      Lat 20.26S 0.08 Lon 178.23W 0.05
      Dep 517.7 3.3 Half-duration  1.6
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-1.02 0.05  Mtt= 0.37 0.09
```

21d 19h

Mff= 0.65 0.09 Mrt=-0.16 0.08
Mrf=-0.49 0.08 Mtf=-0.17 0.07
Principal Axes:
T Val= 0.82 Plg=13 Azm= 74
N 0.36 11 167
P -1.18 73 295
Best Double Couple:Mo=1.0*10**17
NP1:Strike=150 Dip=33 Slip=-110
NP2: 354 59 -77

SVA	4.38	309	eP	07	04.00	-5.9X
			eS	08	16.00	
SGE	5.11	309	iPc	07	17.00	0.5
NDF	5.36	305	ePc	07	22.00	3.3X
			eS	08	43.00	
PVC	13.35	281	iPd	08	42.90	1.4
BKM	13.43	281	iPd	08	43.40	1.0
HBZ	16.96	190	P	09	20.80	3.0X
WLZ	17.80	197	P	09	29.50	3.6X
NOZ	18.00	190	P	09	30.10	2.2
PGZ	20.27	193	P	09	49.70	0.1
MNG	20.45	194	P	09	50.30	-1.0
			S	13	14.40	
KIW	20.82	195	P	09	54.70	0.0
MTW	20.96	194	P	09	55.70	-0.3
CAW	21.01	195	P	09	55.70	-0.8
WDW	21.18	195	P	09	57.50	-0.6
MRW	21.21	195	P	09	58.30	-0.1
MOW	21.26	194	P	09	58.30	-0.6
SNZO	21.29	195	eP	10	02.00	2.9X
			eS	13	38.00	
TCW	21.31	196	P	09	58.70	-0.5
THZ	22.20	198	P	10	08.60	1.1
KHZ	22.63	197	eP	10	11.40	0.1
LTZ	23.32	198	P	10	16.10	-1.6
MOZ	24.06	197	P	10	24.10	-0.2
MMCZ	26.31	201	P	10	43.10	-1.3
MHZ	26.31	201	P	10	42.90	-1.6
AFR	26.79	88	iP	10	48.50	-0.2
	1.2s	225.00nm			5.6mb	
PAE	26.95	88	iP	10	49.90	-0.2
	1.2s	160.00nm			5.4mb	
PPT	26.97	88	iP	10	50.20	-0.1
	1.2s	270.00nm			5.6mb	
PPN	27.11	88	iP	10	51.40	-0.2
	1.2s	80.00nm			5.1mb	
TVO	27.23	88	iP	10	52.30	-0.4
	1.2s	115.00nm			5.3mb	
BRS	27.45	251	iPc	10	55.20	0.6
COO	28.76	244	iPc	11	07.80	1.8
PMO	29.14	83	iP	11	09.00	-0.3
	1.2s	145.00nm			5.4mb	
VAH	29.33	84	iP	11	10.30	-0.6
	1.2s	135.00nm			5.3mb	
TPT	29.41	84	iP	11	11.30	-0.3
	1.2s	220.00nm			5.6mb	
RUV	29.57	84	iP	11	12.60	-0.4
	1.2s	230.00nm			5.6mb	
RMO	30.95	253	iPc	11	24.20	-0.6
CNB	32.05	236	iPc	11	35.80	1.6
	0.5s	41.00nm			5.2mb	
			e	13	06.00	
CTA	33.51	265	iPc	11	45.70	-0.8
	1.0s	70.00nm			5.1mb	
			iS	16	31.20	
			iScP	17	13.40	
CMS	34.04	244	eP	11	52.00	1.1
TOO	35.71	234	iPc	12	06.60	1.8
STK	37.67	245	iPd	12	21.90	1.0
	0.5s	22.00nm			4.9mb	
			iS	17	34.50	
OIS	39.62	263	ePc	12	36.50	-0.5
RKT	39.79	101	iP	12	39.90	1.6
	1.3s	70.00nm			5.0mb	
ASPA	44.49	257	iPd	13	15.20	-0.5
	1.3s	142.30nm			5.3mb	
			iPcP	14	48.20	
			iS	19	11.60	
			iScS	22	20.20	
WB5	44.59	263	iPd	13	15.30	-1.2
			ePcP	14	49.10	
			eS	19	12.90	
FORR	49.15	247	iPd	13	50.30	-0.9
MTN	49.23	271	eP	13	50.30	-1.6
	0.3s	30.00nm			5.2mb	
GUA	50.03	310	eP	13	56.80	-1.0
	0.9s	154.62nm			5.4mb	

GUMO	50.10	310	eP	13	57.00	-1.3
	0.9s	122.76nm			5.3mb	
PJG	50.10	310	eP	13	56.70	-1.6
COOL	55.12	246	eP	14	33.00	-1.4
	0.3s	5.00nm			4.4mb	
MBL	57.73	258	iPd	14	51.30	-1.2
	0.4s	94.00nm			5.5mb	
MEKA	57.92	251	eP	14	53.00	-0.7
KLB	57.94	245	iPd	14	53.10	-0.7
	0.3s	32.00nm			5.1mb	
NWAO	58.24	244	eP	14	55.10	-0.8
RKG	58.32	242	eP	14	55.90	-0.5
	0.5s	56.00nm			5.2mb	
BAL	58.95	246	iPd	14	59.80	-0.9
	0.4s	29.00nm			5.1mb	
MUN	59.21	245	iPc	15	02.10	-0.3
MRWA	59.75	248	iPd	15	05.10	-0.9
	0.4s	31.00nm			5.1mb	
NANU	61.35	255	iPd	15	15.80	-0.8
	0.4s	90.00nm			5.6mb	
SPA	69.23	180	iPd	16	07.00	1.5
	0.9s	45.00nm			5.1mb	
KKM	69.91	285	iPc	16	10.50	0.2
	1.1s	116.90nm			5.3mb	
MAT	70.56	324	iPd	16	11.80	-1.7
	0.8s	32.09nm			4.9mb	
OFUJ	70.63	328	P	16	12.90	-0.9
KUSJ	72.36	332	eP	16	23.10	-0.6
AOMJ	72.40	328	eP	16	24.30	0.3
ADK	72.47	1	eP	16	22.00	-2.2
	0.6s	108.50nm			5.6mb	
MRRJ	73.48	330	eP	16	30.30	0.1
SMY	73.64	355	e(P)	16	28.90	-1.9
ASAJ	74.08	332	eP	16	34.20	0.6
SDN	77.37	10	eP	16	49.50	-1.9
SSE	77.98	310	Pc	16	54.50	-0.8
	1.0s	19.00nm			4.5mb	
PRS	78.06	44	eP	16	56.70	1.1
PCC	78.13	42	eP	16	56.60	0.7
SAO	78.28	43	eP	16	57.80	1.1
PRI	78.41	44	eP	16	59.30	1.7
MHC	78.50	43	eP	16	59.00	0.9
ARN	78.57	43	P	16	59.70	1.3
MWC	79.03	47	eP	17	01.00	0.0
PLM	79.37	48	eP	17	04.00	1.2
SBB	79.45	47	eP	17	03.00	-0.1
PEC	79.46	48	P	17	03.10	0.0
FRI	79.53	44	eP	17	03.90	0.6
ISA	79.57	45	eP	17	04.00	0.4
CMB	79.71	43	eP	17	05.00	0.7
ORV	79.94	41	eP	17	06.00	0.6
WDC	79.94	40	eP	17	06.30	0.9
CLC	80.24	46	eP	17	08.00	0.9
TPC	80.35	48	eP	17	09.00	1.3
GSC	80.49	47	eP	17	09.00	0.5
LBFM	80.80	39	P	17	10.30	0.2
KDC	81.17	13	P	17	10.30	-1.0
MAW	81.22	200	iPc	17	13.30	1.8
TNP	81.77	44	P	17	15.00	-0.2
	0.9s	8.79nm			4.3mb	
			pP	19	05.00	499km
IPM	83.27	277	ePd	17	24.20	1.3
	0.7s	108.30nm			5.5mb	
SNG	84.60	280	eP	17	32.00	2.6
	1.0s	142.00nm			5.6mb	
TTA	85.32	10	eP	17	31.50	-0.5
	1.2s	37.88nm			4.9mb	
PMR	85.39	13	eP	17	31.10	-1.1
	1.4s	96.00nm			5.3mb	
BJI	86.21	315	eP	17	37.00	0.4
	1.4s	135.00nm			5.5mb	
TOA	86.50	14	eP	17	37.30	-0.4
DPW	86.84	36	P	17	39.80	0.2
PNT	86.95	34	eP	17	40.00	0.0
	0.6s	7.00nm			4.6mb	
NNT	87.42	284	iPd	17	44.50	1.6
LOE	87.45	290	eP	17	44.20	1.2
ALO	87.60	51	eP	17	43.00	-0.7
	1.0s	4.00nm			4.2mb	X
			epP	19	34.00	496km
ANMO	87.61	51	P	17	43.20	-0.5
FBA	88.61	12	eP	17	46.00	-1.5
	0.8s	25.00nm			5.1mb	
IMA	88.62	10	eP	17	46.60	-1.1
	1.2s	21.90nm			4.9mb	
BW06	89.22	43	P	17	50.20	-0.8
	0.9s	7.77nm			4.6mb	

KMI	89.58	297	Pd	17	54.00	0.9
	1.5s	160.00nm			5.7mb	
BDT	89.80	288	iPc	17	56.30	2.5
	1.0s	138.00nm			5.8mb	
CHG	90.43	290	iPd	17	58.20	1.4
	1.0s	97.50nm			5.7mb	
LZH	93.05	307	Pd	18	09.20	0.4
	1.5s	56.00nm			5.4mb	
INK	94.64	15	eP	18	14.00	-1.0
PKI	105.03	294	Pdiff	19	04.00	1.0
KKN	105.20	294	Pdiff	19	05.70	2.1
DMN	105.30	294	Pdiff	19	05.50	1.4
GKN	105.81	294	Pdiff	19	07.70	1.5
BNH	116.09	50	Pdiff	20	10.80	19.5X
QUE	121.40	293	ePKP	23	45.90	0.1
PDCR	127.64	126	ePKP	23	56.70	-1.3
MAID	127.99	300	ePKP	23	58.00	-0.2
SOB1	128.26	121	ePKP	23	58.80	-0.5
BUL	131.64	214	iPKPd	24	05.70	0.0
KRI	133.78	218	iPKPd	24	18.30	8.5X
NB2	139.38	353	PKP	24	09.40	-9.4X
	0.7s	4.10nm				
HFS	139.93	351	ePKP	24	10.40	-9.4X
	0.3s	5.60nm				
LWI	145.15	232	ePKP	24	30.80	0.3
EKA	145.39	5	PKP	24	29.00	-0.3
	2.1s	108.50nm				
KAS	146.32	314	iPKPd	24	33.90	2.5
BBTK	147.70	313	ePKP	24	33.00	-0.7
HRI	147.72	300	ePKP	24	37.50	3.6X
VRI	147.93	327	ePKPd	24	37.00	3.3X
WIT	147.94	355	ePKP	24	38.00	4.5X
KSP	148.08	343	ePKP	24	33.80	0.0
	0.9s	60.00nm				
			id	24	37.60	
			e	25	59.00	
BMR	148.16	332	ePKPc	24	39.00	5.0X
MML	148.18	298	iPKPd	24	38.60	4.0X
CLL	148.46	347	iPKP	24	38.10	3.8X
	1.6s	140.00nm				
PSN	148.55	322	iPKP	24	40.00	5.3X
BRG	148.65	345	iPKP	24	34.70	0.0
			i	24	39.00	
			i	24	44.10	
			ipPKP	26	41.00	
			e	28	10.00	
WTS	148.74	354	iPKPc	24	39.50	4.8X
	1.0s	75.00nm				
PRNI	148.94	294	iPKPd	24	40.40	4.6X
HRT	149.28	316	ePKP	24	40.00	4.0X
PRU	149.33	344	PKP	24	40.20	4.5X
	1.2s	41.30nm				
r			e	24	47.00	
			pPKP	26	43.50	
MOX	149.37	348	ePKP	24	36.00	0.2
HOF	149.63	348	iPKPc	24	41.40	5.2X
ENN	150.03	355	iPKPc	24	42.20	5.5X
	0.9s	24.00nm				
			i	24	59.40	
SRO	150.11	338	ePKP	24	41.70	4.8X
			i	24	50.90	
			e	26	39.70	
BUD	150.13	337	e(PKP)	24	42.00	5.0X
MEM	150.18	355	PKP	24	42.70	5.8X
ZST	150.19	340	e(PKP)	24	36.10	-1.0
			i	24	42.40	
			i	24	51.30	
			e	26	44.60	
BCK	150.28	310	ePKP	24	42.00	4.3X
GRF	150.35	348	ePKPd	24	43.10	5.8X
			ec	24	51.80	
KHC	150.36	345	PKP	24	36.80	-0.6
			i	24	43.50	
			i	24	52.00	
SNF	150.39	357	PKP	24	43.40	6.1X
PVL	150.44	324	ePKP	24	44.00	6.4X
WET	150.51	345	iPKPc	24	43.50	5.9X
			i	24	52.00	
BZS	150.57	331	ePKP	24	36.00	-1.7
BNT	150.65	317	iPKP	24	43.70	5.6X
DOU	150.79	357	PKP	24	44.00	6.1X
SOP	150.82	340	ePKP	24	42.80	4.8X
DIM	151.09	322	e(PKP)	24	46.00	7.4X
PLD	151.53	323	ePKP	24	46.00	6.8X
			e	24	58.00	
PGB	151.53	324	iPKPc	24	46.00	6.7X
FUR	151.80	347	iPKPc	24	46.70	7.2X

BHG	151.84	344	ePKP	24	45.90	6.3X
			i	24	58.20	
EZN	151.96	318	ePKP	24	46.00	6.1X
VTS	152.01	325	iPKPc	24	48.00	7.8X
			i	24	59.00	
FLN	152.12	4	ePKP	24	46.20	6.3X
	0.6s	11.70nm				
IZM	152.14	314	ePKP	24	47.00	6.7X
CDF	152.23	353	ePKP	24	46.90	6.7X
	0.7s	8.80nm				
LDF	152.31	3	ePKP	24	46.60	6.4X
	0.6s	11.70nm				
MMB	152.41	323	ePKP	24	47.00	6.4X
GRR	152.47	4	ePKP	24	47.20	6.8X
	0.5s	11.65nm				
PTJ	152.58	339	ePKP	24	48.10	7.3X
KKB	152.58	324	iPKPc	24	46.00	5.2X
SQTA	152.71	346	iPKPc	24	40.30	-0.7
	0.7s	12.70nm				
			i	24	48.20	
			i	24	57.20	
HAU	152.73	354	ePKP	24	48.10	7.3X
	0.6s	5.40nm				
LPF	152.81	5	ePKP	24	48.00	7.1X
	0.6s	18.05nm				
BSF	152.86	353	ePKP	24	48.20	7.1X
	0.7s	5.50nm				
FVI	152.91	344	PKP	24	47.00	6.0X
OGA	153.08	346	ePKP	24	41.70	0.1
VAY	153.23	324	ePKP	24	49.00	7.3X
	1.3s	104.00nm				
			i	25	04.00	
LOR	153.65	357	ePKP	24	49.90	7.8X
	0.8s	6.70nm				
CTI	153.71	345	PKP	24	49.00	6.7X
SSF	153.87	358	ePKP	24	50.40	8.0X
LBF	153.93	357	ePKP	24	50.60	8.1X
	0.9s	6.55nm				
SMF	154.27	357	ePKP	24	51.30	8.4X
	1.0s	7.00nm				
MFF	154.29	4	ePKP	24	51.20	8.3X
	0.6s	4.50nm				
SAL	154.39	346	PKP	25	01.00	17.9X
BGF	154.39	359	ePKP	24	52.00	8.9X
	0.7s	7.15nm				
LPL	155.14	352	ePKP	24	53.20	8.8X
LPG	155.16	352	ePKP	24	53.50	8.9X
	0.8s	4.70nm				
BDI	155.83	345	PKP	24	54.00	8.8X
BCAO	157.11	227	iPKPd	24	47.50	-0.1
	0.4s	13.00nm				
			ic	25	22.50	
LIC	163.88	154	PKPc	24	54.90	0.3
KIC	164.12	155	PKPc	24	55.00	0.1
	0.9s	16.00nm				
TIC	164.26	153	PKPc	24	55.30	0.3
	0.9s	13.00nm				
LKO	166.52	146	PKP	24	56.36	-0.5
	1.1s	19.00nm				

S.D. = 1.0 on 135 of 199 obs.

& OCT 21, 1990 20h 02m 41.81s
60.325 N 151.776 W
DEPTH = 61.8km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NNL	0.37	140	iP	02	53.49	0.7
RDT	0.40	309	iP	02	52.50	-0.6
			eS	03	01.85	
NKA	0.50	32	iP	02	55.40	1.5
RED	0.50	281	iP	02	53.48	-0.7
RSO	0.50	286	iP	02	53.66	-0.6
			eS	03	03.68	
HOM	0.67	174	eP	02	55.85	-0.1
			eS	03	06.77	
BRLK	0.72	141	iP	02	55.92	-0.6
SLKM	0.79	76	eP	02	56.74	-0.7
CNPM	0.85	161	eP	02	57.51	-0.6
			eS	03	09.76	
SPU	0.87	351	iP	02	57.67	-0.8
			eS	03	10.53	
CKL	0.92	343	iP	02	58.45	-0.6
			eS	03	12.14	
CRP	0.96	349	iP	02	59.58	-0.2
BGL	0.99	343	iP	02	59.55	-0.5
			eS	03	14.39	
CGLM	0.99	354	iP	02	59.52	-0.5
OPT	0.99	228	eP	02	59.64	-0.4
			eS	03	13.36	
NCG	1.10	350	iP	03	01.09	-0.4
			eS	03	16.57	
SEW	1.18	100	eP	03	01.39	-1.1
SUA	1.25	23	eP	03	03.11	-0.4
AUE	1.26	220	eP	03	03.29	-0.3
PDB	1.33	247	eP	03	02.97	-1.5
			eS	03	20.02	
PMS	1.43	49	iP	03	05.67	-0.2
PWA	1.62	34	eP	03	09.27	0.8
SKT	1.67	4	eP	03	08.43	-0.7
CDD	1.69	215	eP	03	07.53	-2.0
PLRM	1.81	44	eP	03	10.03	-1.1
GHO	2.01	42	eP	03	12.74	-1.3
KNIM	2.01	88	eP	03	10.91	-3.0
MTU	2.09	98	eP	03	13.01	-2.1
CUT	2.21	19	eP	03	15.89	-0.8
GLI	2.38	74	eP	03	17.38	-1.7
KLU	3.09	65	eP	03	25.26	-4.0

31 obs. assocloted

? OCT 21, 1990 20h 43m 17.22± 6.05s
15.067 N ±15.7km 60.563 W ±64.4km
DEPTH = 31.7 ± 15.9 km
LEEWARD ISLANDS (92)
ML 3.1 (FDF).

FDF	0.66	240	ePd	43	30.20	0.0
	0.1s	3.80nm				
			S	43	40.50	
BBL	0.99	297	ePd	43	34.98	0.0
			S	43	49.80	
SFG	1.33	333	eP	43	39.60	-0.1
DOG	1.40	313	eP	43	40.68	-0.1
			S	43	58.10	
PAG	1.44	312	eP	43	41.40	0.0
			S	43	59.40	
SEG	1.61	326	eP	43	43.88	0.1
			S	44	04.50	

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

• OCT 21, 1990 20h 51m 45.72± 0.63s
0.619 N ±10.1km 126.631 E ±14.9km
DEPTH = 33.0km (normol)
4.9mb (7 obs.)
MOLUCCA PASSAGE (266)

WB5	21.74	160	iPc	56	36.80	0.4
			eS	00	32.50	
MBL	22.64	197	eP	56	45.30	0.0
	0.5s	30.00nm			5.0mb	
OIS	24.58	150	iPc	57	04.00	-0.2
	0.9s	53.00nm			5.1mb	
ASPA	25.15	164	eP	57	09.20	-0.5
	0.4s	96.20nm			5.7mb	
			eS	01	31.10	
NANU	25.45	204	eP	57	13.00	0.6
IPM	25.87	279	ePd	57	18.60	2.1
MRWA	31.36	198	eP	58	05.00	-0.7
BAL	32.46	196	eP	58	14.00	-1.3
CHTO	32.63	305	eP	58	15.00	-1.9
	1.0s	2.50nm			4.1mb	
KLB	33.12	194	eP	58	20.40	-0.6
MUN	33.89	196	eP	58	27.20	-0.5
STK	35.29	158	iPc	58	39.00	-0.7
	0.8s	16.00nm			5.0mb	
BRS	37.51	140	iPc	58	57.50	-1.1
BJI	40.38	348	eP	59	21.50	-0.7
	1.0s	18.00nm			4.8mb	
BFD	40.39	160	ePd	59	24.40	2.0
BWA	40.40	152	eP	59	24.00	1.4
LZH	41.14	332	eP	59	31.50	2.7
CAN	41.41	152	eP	59	31.10	0.3
GUN	47.52	308	P	00	19.20	-1.2
PKI	47.73	308	P	00	22.70	0.6
KKN	47.93	308	P	00	21.80	-1.7
DMN	47.99	308	P	00	23.00	-1.0
GKN	48.54	308	P	00	26.40	-1.7
HYB	50.13	292	eP	00	42.00	1.6
GBA	50.37	287	Pc	00	43.70	1.6
	0.5s	2.70nm			4.5mb	
MAIO	71.33	308	eP	03	05.00	0.4
CNCB	158.41	139	ePKP	11	35.00	-7.4X
LPB	158.53	138	(PKP)	11	40.00	-2.4X
ZOBO	158.71	138	ePKP	11	48.00	5.2X

S.D. = 1.4 on 26 of 29 obs.

• OCT 21, 1990 21h 18m 25.33± 0.85s
37.510 N ±11.0km 71.154 E ± 8.7km
DEPTH = 33.0km (normol)
3.5mb (1 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE	8.10	207	eP	20	23.70	0.0
			eS	21	41.00	
NDI	10.16	148	iPc	20	52.00	0.0
	0.5s	38.73nm			5.9mb	X
GKN	14.77	126	P	21	53.40	-0.3
KKN	15.33	125	P	22	01.00	-0.1
DMN	15.34	126	P	22	01.50	0.2
PKI	15.56	125	P	22	04.00	-0.2
GUN	15.64	123	P	22	05.70	0.4
NB2	43.65	322	P	26	28.20	0.0
	0.6s	0.60nm			3.5mb	

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

& OCT 21, 1990 22h 44m 56.55s
150.984 W
DEPTH = 14.0km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.66	112	iP	45	09.55	0.2
			eS	45	19.25	
CUT	0.89	158	iP	45	13.71	0.5
			eS	45	26.09	
RND	0.98	78	eP	45	14.29	-0.5
			eS	45	28.64	
MCK	1.05	60	eP	45	15.79	-0.2
			eS	45	30.46	
SKT	1.28	192	eP	45	19.40	-0.5
NEA	1.60	31	eP	45	24.20	-0.2
			eS	45	45.03	
PWA	1.66	162	eP	45	25.92	0.6
GHO	1.75	146	eP	45	26.90	0.3
SUA	1.77	176	eP	45	27.74	0.7
WRH	1.79	44	eP	45	27.43	0.2
			eS	45	52.55	
PLRM	1.85	151	iP	45	28.43	0.3
SML	1.88	138	eP	45	28.49	-0.1
NCG	1.91	197	iP	45	28.58	-0.5
CGLM	1.99	194	eP	45	29.74	-0.4
CCB	2.00	43	eP	45	31.52	1.3
BGL	2.08	199	eP	45	31.42	-0.1
PMS	2.10	161	eP	45	32.77	1.0
SPU	2.11	194	eP	45	31.76	-0.2
CKL	2.13	198	eP	45	32.59	0.3
HDA	2.14	55	eP	45	34.25	1.9
FBA	2.19	38	eP	45	35.07	2.1
SCM	2.20	128	eP	45	35.60	2.4
TTA	2.31	265	eP	45	35.86	1.1
GLM	2.37	40	eP	45	36.92	1.3
TOA	2.49	115	eP	45	37.96	0.7
KLU	2.93	124	eP	45	44.93	1.3

26 obs. assocloted

OCT 21, 1990 22h 53m 33.61± 0.30s
8.911 S ± 5.7km 123.843 E ± 7.3km
DEPTH = 122.3km (4 depth phoses)
5.0mb (18 obs.)
FLORES ISLAND REGION (286)
CENTROID, MOMENT TENSOR (HRV)
Dato Used: GDSN
L.P.B.: 15S, 22C
Centroid Locotion:
Origin Time 22:53:35.1 1.2
Lot 8.58S 0.12 Lon 123.26E 0.12
Dep 64.7 9.4 Holf-durotion 1.5
Moment Tensor; Scale 10**16 Nm
Mrr=-1.72 0.31 Mtt=-2.42 0.43
Mff= 4.14 0.60 Mrt= 3.65 0.43
Mrf= 0.87 0.46 Mtf= 1.23 0.38
Principol Axes:

	Vol=	4.82	Plg=17	Azm=288
T				
N		0.93	43	35
P		-5.75	42	183

Best Double Couple:Mo=5.3*10**16
NP1:Strike=335 Dip=47 Slip=-159
NP2: 230 74 -45

MTN	8.16	119	iPd	54	26.20	-64.5X
KNA	8.33	145	eP	55	27.40	-5.6X

21d 22h

		eS	56	51.00		
M8L	12.78	197 eP	56	30.70	-1.3	
	0.4s	39.00nm			5.3mb	X
		eS	58	43.00		
NANU	15.75	210 eP	57	09.00	-0.8	
	0.3s	32.00nm			5.1mb	
		e	57	15.00		
		eS	59	55.00		
KKM	16.69	333 ePc	57	25.30	3.6X	
	1.5s	204.90nm			5.2mb	
ASPA	17.55	148 eP	57	28.00	-4.1X	
	0.6s	191.10nm			5.5mb	
Z	22s	0.60um			4.9Msz	
		eS	00	23.80		
		eS	27	39.20		
MEKA	18.31	195 eP	57	35.00	-6.1X	
		eS	00	58.00		
OIS	19.12	129 iPd	57	48.00	-1.8	
	0.8s	152.00nm			5.4mb	
		eS	01	09.00		
MRWA	21.50	199 iPd	58	14.20	0.3	
	0.3s	12.00nm			4.7mb	
		e	58	28.00	60kmX	
		eS	02	09.00		
COOL	22.01	186 eP	58	18.50	-0.4	
	0.3s	6.00nm			4.4mb	
		e	58	37.00	85kmX	
		eS	02	19.00		
FORR	22.19	170 iPd	58	19.80	-0.8	
		e	58	36.00	72kmX	
		eS	02	22.50		
BAL	22.59	196 iPd	58	25.10	0.6	
		eS	02	35.00		
PMG	23.02	93 eP	58	30.00	1.2	
	0.9s	50.42nm			4.9mb	
KLB	23.27	193 eP	58	31.20	0.1	
	0.4s	17.00nm			4.8mb	
		eS	02	52.00		
MUN	24.02	196 eP	58	38.00	-0.4	
		e	59	03.00	119km	
		eS	03	08.00		
CTA	24.34	120 iPc	58	41.80	0.2	
	1.0s	65.00nm			5.1mb	
		iS	03	21.00		
NWAO	24.67	193 eP	58	44.00	-0.5	
		e	59	10.00	124km	
		eS	03	23.00		
RKG	25.82	193 eP	59	00.00	4.9X	
		eS	03	53.00		
OLP	26.12	135 eP	58	58.00	0.0	
		e	03	49.00		
IPM	26.40	300 ePc	59	01.70	1.0	
SNG	28.13	304 iPd	59	16.80	0.6	
STK	28.18	147 iPd	59	16.10	-0.5	
	1.6s	59.00nm			5.0mb	
ADE	29.29	154 eP	59	22.50	-4.1X	
RMO	29.38	130 eP	59	25.00	-2.4	
		e	00	00.00	168kmX	
		e	04	44.00		
CMS	30.37	141 eP	59	36.00	-0.1	
		i	00	15.70	193kmX	
		eS	05	34.00		
BFD	32.84	152 eP	59	57.00	-0.6	
		e	06	33.00		
BRS	32.93	128 iP	59	59.00	0.5	
NST	33.88	316 eP	00	08.20	1.4	
COO	33.90	133 eP	00	08.00	1.1	
		e	07	18.00		
BWA	33.96	142 iPc	00	09.80	2.4	
		e	01	09.50	303kmX	
TOO	34.60	149 eP	00	14.00	1.3	
CAN	34.92	143 iPc	00	16.60	1.1	
		e	07	21.40		
BDT	35.75	317 eP	00	24.50	1.9	
	0.8s	98.60nm			5.7mb	
CHG	36.91	318 ePd	00	34.00	1.7	
	1.0s	37.50nm			5.2mb	
CHTO	36.91	318 iPd	00	34.00	1.7	
	1.0s	40.00nm			5.2mb	
		e	01	02.00	123km	
KMI	39.59	329 eP	00	57.00	2.1	
SSE	39.86	356 Pc	00	55.50	-1.2	
	1.0s	12.00nm			4.6mb	
DZM	42.93	113 iPc	01	22.00	-0.2	
MAT	47.18	16 iPd	01	53.70	-2.0	
	1.3s	44.23nm			5.1mb	
LZH	48.56	338 eP	02	06.00	-0.5	

	1.5s	28.00nm			4.9mb	
BJI	49.22	352 eP	02	09.50	-1.8	
	0.6s	9.00nm			4.8mb	
GBA	51.21	295 P	02	27.00	0.2	
	0.7s	69.30nm			5.7mb	
HYB	51.84	300 ePd	02	29.50	-2.1	
		e	02	58.50	123km	
GUN	51.85	316 P	02	31.40	-0.6	
PKI	51.96	316 P	02	31.90	-0.9	
KKN	52.18	316 P	02	33.50	-0.8	
DMN	52.19	315 P	02	33.80	-0.6	
GKN	52.76	315 P	02	37.80	-0.7	
NDI	58.48	311 iP	03	17.00	-2.3	
OUE	67.03	308 iPd	04	14.50	-1.5	
MAW	70.98	201 iP	04	40.50	1.1	
MAID	75.24	311 eP	05	05.00	0.1	
TAB	85.75	309 eP	06	02.00	1.4	
FBA	97.31	25 eP	07	08.00	14.4X	
ALQ	127.32	53 ePKP	12	26.00	-0.1	
KIC	129.01	271 (PKP)	12	30.40	0.8	
LKO	130.12	275 PKP	12	32.56	0.8	
	0.6s	8.50nm				
JFO	147.05	202 ePKP	13	01.40	-0.8	
NNA	150.78	135 iPKP	13	14.50	6.4X	
	0.8s	13.43nm				
CNCB	151.90	155 ePKP	13	13.00	2.6X	
		i	13	19.00		
LPB	152.09	155 ePKP	13	13.00	2.5X	
ZOBO	152.32	155 PKP	13	13.00	2.0	
Z	20s	0.12um			4.7Msz	
		LR	24	18.00		
PDCR	152.79	219 ePKP	13	18.50	7.5X	
SIV	154.78	169 PKP	13	19.40	5.7X	
		i	13	39.60		
S.D. = 1.3 on 51 of 64 obs.						
? OCT 21, 1990 22h 58m 18.91± 1.28s						
31.529 S ±21.4km 69.285 W ±25.9km						
DEPTH = 131.3 ± 29.7 km						
SAN JUAN PROVINCE, ARGENTINA (137)						
ZON	0.52	92 eP	58	38.30	-0.2	
		eS	58	51.30		
MDZ	1.40	165 iP	58	46.60	0.2	
		iS	59	04.70		
JACH	1.60	224 iPd	58	48.60	-0.1	
		iS	59	12.40		
PEL	2.00	216 ePd	58	54.00	0.6	
		iS	59	19.00		
ROCH	2.05	225 iPc	58	54.50	0.2	
		iS	59	21.00		
SAN	2.24	211 eP	58	57.00	0.5	
		iS	59	25.40		
LNV	3.01	216 iPc	59	05.00	-1.3	
		i	59	37.70		
		i	59	39.70		
CNCB	14.70	5 P	01	40.00	-2.1	
ZOBO	15.23	4 P	01	51.00	2.2	
S.D. = 1.5 on 9 of 9 obs.						
? OCT 21, 1990 23h 19m 27.80± 1.39s						
3.611 S ±12.8km 130.915 E ±35.3km						
DEPTH = 33.0km (normal)						
4.4mb (1 obs.) 3.4Msz (1 obs.)						
CERAM (272)						
MTN	9.18	179 iPd	21	42.00	1.0	
WB5	16.52	169 eP	23	12.00	-6.7X	
		eS	26	12.50		
ASPA	20.15	172 eP	24	01.70	-0.5	
	0.6s	10.90nm			4.4mb	
Z	21s	0.20um			3.4Msz	
MBL	20.50	211 eP	24	05.00	-0.9	
CHG	38.56	306 eP	26	50.30	0.7	
BJI	45.50	344 eP	27	45.50	-0.4	
CNCB	152.43	138 PKP	39	23.00	6.3X	
ZOBO	152.71	137 PKP	39	26.00	8.9X	
S.D. = 1.2 on 5 of 8 obs.						
• OCT 22, 1990 01h 12m 37.65± 1.42s						
42.694 N ±10.2km 3.279 W ±14.6km						
DEPTH = 10.0km (geophysicist)						
SPAIN (377)						
ML 2.8 (LDG). mbLg 2.6 (MDD).						
ECRI	0.57	98 iP	12	50.00	0.7	
		eS	12	55.50		

ETOR	2.09	154 eP	13	06.50	-6.7	
		eS	13	24.80		
GUD	2.15	198 eP	13	14.00	-0.2	
		eS	13	38.00		
EPF	2.68	82 Pn	13	19.60	-2.1	
		Sn	13	47.80		
EROO	3.33	123 eP	13	31.60	0.7	
		eS	14	01.80		
LPO	3.80	57 Pn	13	38.00	0.5	
		Sn	14	20.50		
RJF	4.33	51 Pn	13	45.00	-0.1	
		Sn	14	31.00		
CAF	4.46	58 Pn	13	46.20	-0.7	
		Sn	14	34.20		
MAF	5.47	48 Pn	14	01.00	-0.2	
		Sn	14	59.40		
BGF	5.83	46 Pn	14	07.60	1.4	
		Sn	15	09.00		
S.D. = 1.2 on 9 of 10 obs.						
• OCT 22, 1990 01h 25m 47.30± 1.70s						
17.813 S ±22.6km 72.192 W ±10.5km						
DEPTH = 33.0km (normal)						
4.5mb (2 obs.)						
NEAR COAST OF PERU (115)						
ARE	1.50	27 iPd	26	12.00	-0.5	
		iS	26	31.50		
LPB	4.12	73 Pc	26	50.50	0.6	
	1.1s	670.89nm				
CNCB	4.15	77 Pc	26	51.00	0.6	
ZOBO	4.18	69 iPc	26	51.20	0.2	
CCH	5.79	87 P	27	12.30	-1.1	
NNA	7.33	322 iP	27	50.00	15.1X	
	0.6s	7.33nm				
		iS	29	06.00		
SIV	10.80	82 Pc	28	17.40	-5.4X	
PPD	20.07	105 eP	30	16.70	-4.2X	
TUL	57.92	337 eP	35	39.00	0.4	
	1.0s	6.30nm			4.6mb	
		e	35	56.40		
ALQ	61.74	328 eP	36	05.00	-0.2	
	1.0s	2.50nm			4.3mb	
GBA	150.48	94 PKPd	45	35.40	3.0X	
	0.4s	0.90nm				
S.D. = 0.8 on 7 of 11 obs.						
OCT 22, 1990 02h 11m 17.40± 0.19s						
44.067 N ± 1.7km 7.216 E ± 1.9km						
DEPTH = 5.7 ± 2.1 km						
NORTHERN ITALY (545)						
ML 3.0 (LDG), 2.9 (GEN). MD 2.5 r (STR).						
TOUF	0.06	156 Pg	11	19.16	0.0	
AUTN	0.17	115 Pg	11	21.15	0.1	
MVIF	0.18	195 Pg	11	21.37	0.2	
		Sg	11	24.70		
STV	0.19	24 P	11	21.75	0.3	
		S	11	24.52		
AURF	0.20	156 Pg	11	21.67	0.2	
		Sg	11	25.29		
ENR	0.22	43 P	11	22.15	0.3	
		S	11	25.39		
SBF	0.26	142 Pg	11	22.70	0.0	
		Sg	11	26.50		
REVF	0.34	161 Pg	11	24.79	0.4	
		Sg	11	30.32		
CALN	0.39	217 Pg	11	25.74	0.4	
		Sg	11	32.31		
PZZ	0.45	349 P	11	26.16	-0.2	
		S	11	32.62		
IMI	0.51	108 P	11	27.80	0.1	
		S	11	34.98		
ROB	0.52	64 P	11	27.90	0.0	
		S	11	35.39		
FRF	0.65	219 Pg	11	30.10	-0.4	
		Sg	11	39.00		
FIN	0.73	78 P	11	30.36	-1.6	
		S	11	40.62		
CKI	0.84	65 P	11	34.50	0.4	
		eSg	11	45.50		
LRG	0.87	226 Pg	11	34.30	-0.2	
		Sg	11	46.60		
LMR	0.89	215 Pg	11	34.80	-0.1	
		Sg	11	47.00		
RRL	0.91	340 P	11	34.87	-0.5	

		S	11 47.69		
BNI	1.06	339 P	11 37.60	-0.2	
		eSg	11 53.00		
PCP	1.07	63 P	11 37.74	-0.2	
		S	11 52.17		
RSP	1.09	2 P	11 35.90	-2.4X	
		S	11 49.40		
LSD	1.39	358 P	11 44.31	0.7	
		S	12 03.09		
LPG	1.47	347 Pn	11 45.50	0.8	
		Pg	11 49.20		
LPL	1.49	347 Pn	11 45.80	0.8	
		Pg	11 49.30		
PGF	2.00	139 Pn	11 49.73	-2.5X	
SMF	3.51	318 Pn	12 13.80	0.2	
LBF	3.70	323 Pn	12 16.40	0.0	
CAF	3.78	285 Pn	12 16.80	-0.8	
AVF	3.85	316 Pn	12 18.40	-0.1	
BGF	3.96	310 Pn	12 20.00	-0.1	
SSF	3.97	320 Pn	12 20.40	0.2	
LOR	3.97	325 Pn	12 20.00	-0.2	
		Sn	13 03.60		
HAU	3.99	352 Pn	12 20.00	-0.4	
		Sn	13 04.80		
TCF	4.18	304 Pn	12 23.10	0.0	
LSF	4.58	300 Pn	12 28.70	-0.1	

S.D. = 0.5 on 33 of 35 obs.

OCT 22, 1990 03h 50m 20.33± 0.29s
36.933 N ± 8.4km 49.298 E ± 4.6km
DEPTH = 10.0km (geophysicist)
4.7mb (28 obs.)
WESTERN IRAN (347)

TEH	2.06	125 iPd	50 57.00	1.4	
TAB	2.62	297 eP	51 07.00	3.4X	
MAIO	8.22	91 ePn	52 22.00	-0.6	
	0.8s	27.45nm		5.6mb	X
		eSn	53 51.00		
BBTK	13.30	288 eP	53 36.00	4.2X	
IZI	15.86	288 iP	54 10.00	4.8X	
QUE	16.17	109 eP	54 12.90	3.5X	
VRI	19.09	305 ePc	54 48.00	2.5X	
PGB	20.09	294 eP	55 02.00	5.2X	
MMB	20.31	291 eP	55 01.00	1.9	
VTS	20.80	294 iP	55 07.00	2.7X	
KKB	20.81	292 eP	55 06.00	1.7	
VAY	21.16	290 eP	55 08.70	0.9	
BMR	21.80	308 ePc	55 18.00	3.8X	
SKO	22.04	292 eP	55 08.50	-8.2X	
BZS	22.45	301 eP	55 21.50	0.8	
OHR	22.49	289 eP	55 24.50	3.3X	
SPC	24.35	309 eP	55 39.68	0.2	
NDI	24.80	101 eP	55 44.00	0.3	
SRO	25.18	305 eP	56 08.40	21.2X	
ZST	26.06	306 eP	56 03.40	8.0X	
		e	24 18.50		
KSP	27.29	311 eP	56 07.80	1.1	
		e	56 30.80		
NUR	28.32	334 eP	56 18.00	2.1	
		e	56 40.00		
KHC	28.55	307 eP	56 12.50	-5.6X	
MNS	28.56	292 P	56 22.50	4.2X	
PGD	29.25	296 P	56 27.00	2.3	
CTI	29.40	300 P	56 45.50	19.6X	
CLL	29.41	311 i(P)	56 26.80	1.0	
	0.9s	11.00nm		4.7mb	
SUF	29.48	338 iP	56 26.30	0.0	
	0.5s	6.50nm		4.7mb	
SOTA	29.82	302 iPc	56 29.50	-0.2	
	0.6s	12.70nm		4.9mb	
		i	56 50.00		
BOB	30.90	297 P	56 52.00	12.8X	
GKN	30.97	96 P	56 39.40	-0.7	
	0.8s	22.00nm		5.1mb	
PGF	31.27	293 eP	56 42.30	-0.2	
	0.7s	4.40nm		4.5mb	
DMN	31.52	97 P	56 44.80	-0.2	
	0.8s	30.00nm		5.3mb	
KKN	31.58	96 P	56 45.60	0.1	
PKI	31.78	97 P	56 46.00	-1.4	
	0.8s	9.00nm		4.7mb	
GUN	32.00	96 P	56 48.80	-0.6	
SBF	32.35	296 eP	56 52.00	0.1	
	0.7s	15.45nm		5.0mb	
HFS	32.43	327 eP	56 51.60	-0.7	
	0.6s	25.60nm		5.3mb	
LPG	32.81	299 eP	56 56.00	-0.1	
	0.6s	4.05nm		4.5mb	
LPL	32.82	299 eP	56 56.20	0.0	
	0.4s	2.30nm		4.5mb	
BNI	32.87	298 P	57 01.00	4.5X	
SOD	33.09	344 iP	57 02.20	4.2X	
		e	57 25.00		
NB2	33.94	327 P	57 04.70	-0.8	
	0.7s	8.90nm		4.8mb	
GBA	34.22	125 Pd	57 10.80	2.5	
	0.9s	7.90nm		4.6mb	
LOR	34.82	302 eP	57 11.90	-1.3	
	0.8s	4.05nm		4.4mb	
SMF	34.83	301 eP	57 12.50	-0.8	
KEV	35.02	347 eP	57 28.00	13.4X	
SSF	35.06	301 eP	57 14.60	-0.6	
AVF	35.16	301 eP	57 15.30	-0.8	
	0.6s	4.50nm		4.5mb	
MAF	35.72	300 eP	57 21.10	0.2	
	0.6s	4.05nm		4.5mb	
TCF	35.96	300 eP	57 23.00	0.0	
	0.6s	2.70nm		4.3mb	
CAF	36.14	298 eP	57 24.50	0.0	
	0.5s	2.20nm		4.3mb	
RJF	36.50	299 eP	57 27.60	0.1	
LFF	37.08	298 eP	57 31.00	-1.3	
	0.6s	7.20nm		4.6mb	
LDF	37.49	304 eP	57 34.50	-1.2	
MFF	37.58	301 eP	57 35.70	-0.8	
FLN	37.73	304 eP	57 36.40	-1.3	
	0.6s	6.30nm		4.6mb	
GRR	37.98	304 eP	57 39.80	-0.1	
LPF	38.12	303 eP	57 41.10	0.1	
EKA	39.65	315 P	57 54.00	0.3	
	0.5s	7.70nm		4.6mb	
BCAO	42.91	229 iPd	58 21.70	0.8	
	0.5s	12.00nm		4.9mb	
CHG	46.90	99 eP	58 52.90	0.0	
LKO	56.42	256 P	00 02.98	-1.6	
	1.0s	17.50nm		5.0mb	
KIC	57.76	252 P	00 13.18	-0.8	
	0.8s	8.50nm		4.8mb	
TIC	57.79	252 P	00 13.08	-1.2	
LIC	58.06	252 P	00 15.18	-1.0	
	0.8s	7.50nm		4.8mb	
MBC	66.87	357 eP	01 14.00	0.0	
	0.5s	4.00nm		4.9mb	
INK	75.06	1 eP	02 03.00	-0.4	
IMA	75.80	9 eP	02 07.90	0.0	
	0.7s	3.60nm		4.6mb	
FBA	77.62	7 eP	02 18.40	0.5	
PMR	80.68	9 eP	02 34.50	0.0	
	0.8s	6.00nm		4.7mb	

S.D. = 1.0 on 52 of 71 obs.

---

* OCT 22, 1990 05h 14m 52.28± 1.73s
6.032 S ±11.3km 128.204 E ±13.4km
DEPTH = 269.6 ± 19.2 km
4.7mb (6 obs.)
BANDA SEA (280)

MTN	7.36	157 eP	16 38.00	-0.4	
KNA	9.67	177 iPc	17 14.80	7.3X	
	0.4s	38.00nm		4.8mb	
WB5	15.01	157 eP	18 13.90	0.5	
		eS	20 48.50		
MBL	17.09	208 eP	18 35.70	-0.7	
	0.4s	9.00nm		4.6mb	
QIS	18.19	144 e(P)	18 48.40	0.5	
		iS	21 54.20		
WARB	20.09	184 eP	19 08.00	1.0	
NANU	20.49	215 eP	19 11.10	0.3	
STK	28.60	156 eP	20 24.20	-1.8	
	1.8s	18.00nm		4.4mb	
BWA	33.88	149 eP	21 12.30	0.5	
CAN	34.88	149 eP	21 20.00	-0.1	
GUN	52.98	312 P	23 44.60	0.4	
	0.5s	20.00nm		4.8mb	
PKI	53.15	311 P	23 45.40	-0.1	
KKN	53.36	311 P	23 47.00	0.1	
	0.4s	7.00nm		4.5mb	
DMN	53.39	311 P	23 46.80	-0.4	
GKN	53.95	311 P	23 51.20	0.1	
	0.4s	17.00nm		4.9mb	

S.D. = 0.8 on 14 of 15 obs.

? OCT 22, 1990 05h 50m 27.10± 4.92s
46.582 N ±37.1km 15.693 E ±18.7km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 1.9 (ZAG).

PTJ	0.71	165 iPgc	50 40.60	-0.5	
		iSg	50 44.80		
ZAG	0.79	165 iPg	50 43.00	0.5	
		iSg	50 48.70		
LJU	0.97	237 iPgc	50 45.40	-0.1	
		eSg	50 55.50		
CEY	1.22	227 ePg	50 49.90	0.1	
		eSg	51 02.90		
VOY	1.36	247 iPnc	50 52.00	-0.2	
		eSn	51 10.30		
RIY	1.54	217 ePg	50 54.30	-0.3	
		iSg	51 09.20		
TRI	1.60	238 iPgc	50 55.90	0.4	
		iSg	51 15.10		
ZST	1.88	30 eP	51 45.50	46.0X	
SPC	4.02	48 eP	51 56.60	26.4X	

S.D. = 0.5 on 7 of 9 obs.

---

* OCT 22, 1990 06h 03m 25.75± 2.29s
17.826 S ±15.7km 178.779 W ±17.4km
DEPTH = 553.1 ± 26.1 km
4.7mb (8 obs.)
FIJI ISLANDS REGION (181)

SGE	3.15	274 iPd	05 43.40	60.7X	
BKM	12.37	269 iPc	06 08.70	0.2	
DZM	14.52	251 iPc	06 30.10	-0.1	
LTZ	26.02	195 eP	08 15.50	-1.3	
BRS	27.88	245 iPc	08 33.50	0.3	
COO	29.51	239 iPd	08 48.10	0.7	
CNB	33.20	232 iPc	09 19.70	1.2	
	0.2s	21.00nm		5.4mb	
CAN	33.47	232 eP	09 21.20	0.4	
BWA	33.58	234 eP	09 21.10	-0.6	
TOO	36.95	231 iPc	09 50.70	1.2	
		e	13 27.00		
STK	38.37	241 iPd	10 02.00	0.9	
	0.5s	20.00nm		5.0mb	
ADE	41.39	237 eP	10 25.70	0.2	
WB5	44.28	260 iPd	10 41.70	-6.7X	
ASPA	44.48	254 iPd	10 48.90	-1.0	
	0.6s	138.60nm		5.7mb	
		iS	16 41.80		
WARB	50.98	250 iPd	11 38.00	-0.8	
	0.3s	11.00nm		4.8mb	
MBL	57.66	256 iPd	12 24.40	-1.4	
	0.4s	11.00nm		4.5mb	
NANU	61.41	254 iPc	12 50.00	-0.7	
	0.4s	12.00nm		4.7mb	
PNT	04.87	34 eP	15 03.00	-0.1	
	0.7s	5.00nm		4.3mb	
ALQ	86.32	52 eP	15 11.00	0.3	
	1.0s	1.75nm		3.7mb	
INK	91.90	15 ePd	15 34.80	-0.7	
CLL	145.30	347 iPKPc	22 02.50	0.7	
	0.8s	19.00nm			
BRG	145.50	346 iPKP	22 03.10	0.9	
PRU	146.17	345 ePKP	22 07.50	4.2X	
KHC	147.21	345 ePKP	22 08.50	3.5X	
CDF	149.10	352 ePKP	22 12.70	4.6X	
	0.5s	5.10nm			
FLN	149.11	2 ePKP	22 12.20	4.3X	
	0.7s	12.15nm			
LDF	149.29	2 ePKP	22 12.70	4.5X	
	0.3s	3.00nm			
GRR	149.47	3 ePKP	22 13.40	4.9X	
	0.3s	4.25nm			
HAU	149.61	353 ePKP	22 13.80	5.0X	
BSF	149.73	353 ePKP	22 14.10	5.0X	
LPF	149.82	3 ePKP	22 14.30	5.3X	
	0.3s	3.40nm			
LOR	150.56	356 ePKP	22 15.90	5.7X	
	0.4s	5.15nm			
SSF	150.78	357 ePKP	22 16.60	6.1X	
	0.5s	5.45nm			
LBF	150.83	356 ePKP	22 16.50	5.8X	
	0.5s	4.00nm			
AVF	151.06	357 ePKP	22 16.80	5.9X	
MFF	151.28	2 ePKP	22 17.60	6.3X	
	0.4s	3.45nm			
BGF	151.32	358 ePKP	22 17.80	6.5X	
	0.6s	4.50nm			

22d 06h

TCF 151.61 359 ePKP 22 18.20 6.4X
LSF 151.66 360 ePKP 22 18.10 6.3X
MAF 151.66 358 ePKP 22 18.60 6.7X
1.0s 9.00nm
S.D. = 0.9 on 20 of 40 obs.

? OCT 22, 1990 06h 12m 00.18± 2.65s
17.212 N ±14.4km 121.050 E ±38.8km
DEPTH = 33.0km (normal)
4.5mb (2 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG 0.92 210 eP 12 17.00 0.1
QCP 2.56 179 eP 12 48.00 7.7X
CHG 21.08 278 eP 16 44.20 0.0
BJI 23.14 350 eP 17 04.00 -0.4
1.0s 12.00nm 4.4mb
LZH 24.22 324 eP 17 16.20 1.1
1.8s 45.00nm 4.7mb
GUN 34.07 294 P 18 46.00 1.8
PKI 34.42 294 P 18 46.20 -1.0
GKN 35.17 294 P 18 51.80 -1.6
S.D. = 1.4 on 7 of 8 obs.

? OCT 22, 1990 07h 20m 48.07± 3.41s
47.861 N ± 9.5km 1.348 W ±37.3km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG).

LPF 0.27 50 Pg 20 53.20 -0.5
Sg 20 57.70
GRR 0.62 32 Pg 21 00.20 -0.4
FLN 1.07 32 Pg 21 08.40 0.2
Sg 21 24.00
LDF 1.10 48 Pg 21 09.50 0.8
Sg 21 25.00
MFF 1.50 147 Pg 21 15.00 0.0
Sg 21 35.00
S.D. = 0.7 on 5 of 5 obs.

& OCT 22, 1990 07h 57m 53.20s
58.969 N 136.940 W
DEPTH = 10.0km (geophysicist)
3.7mb (1 obs.)
SOUTHEASTERN ALASKA (19)
<PGC-P>. ML 4.0 (PGC), 4.5 (PMR). Felt strongly at Haines. Also felt at Juneau. Felt (IV) at Pleasant Comp, British Columbia and mildly at Whitehorse, Yukon Territory.

PLBC 0.57 31 iPg 58 03.50 -1.3
YKU 1.55 293 iP 58 20.76 0.0
WHC 2.00 27 Pnc 58 27.00 -0.5
SIT 2.10 155 eP 58 28.26 -0.6
YAH 2.81 302 eP 58 38.08 -1.1
BALM 3.42 310 eP 58 46.98 -0.7
TGL 3.47 304 eP 58 46.91 -1.5
GLB 4.23 309 eP 58 58.29 -0.9
KLU 5.14 303 eP 59 10.57 -1.5
VLZ 5.18 299 eP 59 11.14 -1.4
DWY 5.24 348 Pc 59 11.90 -1.5
VZW 5.26 298 eP 59 12.52 -1.2
TMW 5.26 329 eP 59 12.35 -1.4
GLI 5.46 295 eP 59 14.04 -2.4
TOA 5.54 309 eP 59 18.00 0.3
MTU 5.56 285 eP 59 15.11 -2.8
KNIM 5.65 289 eP 59 15.86 -3.3
DOT 5.81 327 eP 59 18.99 -2.5
SCM 5.89 304 eP 59 21.52 -1.2
SEW 6.46 285 eP 59 27.00 -3.7
GHO 6.57 300 eP 59 30.90 -1.4
PMR 6.61 299 eP 59 31.80 -0.9
PMS 6.71 295 eP 59 31.56 -2.6
SLKM 6.89 289 eP 59 32.89 -3.8
PWA 6.97 298 eP 59 36.42 -1.3
SUA 7.31 296 eP 59 40.08 -2.6
CNPM 7.35 280 eP 59 39.41 -3.8
CUT 7.39 303 eP 59 40.38 -3.3
SKT 7.81 299 eP 59 46.38 -3.2
FBA 7.84 324 P 59 56.00 6.1
SPU 7.88 293 eP 59 45.78 -4.7
KDC 8.27 268 e(P) 59 58.20 2.3
INK 9.50 8 P 00 10.00 -2.9
TTA 10.07 301 e(P) 00 18.40 -2.5
IMA 10.48 320 e(P) 00 23.40 -3.1
MBC 18.43 13 eP 02 08.00 -1.9
0.5s 3.00nm 3.7mb
36 obs. associated

OCT 22, 1990 09h 10m 19.44± 0.81s
44.576 N ± 6.7km 20.966 E ± 9.8km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MG 2.9 (BEO). Felt in the Smederevo area.

BEO 0.44 304 iPg 10 28.50 0.1
iSg 10 33.50
BZS 1.14 24 iPd 10 41.00 0.3
SKO 2.63 172 iPn 11 09.60 7.0X
iSn 11 37.40
PSZ 3.43 348 eP 11 13.40 -0.6
VAY 3.46 160 ePn 11 15.40 1.0
OHR 3.46 182 ePn 11 13.20 -1.4
HVAR 3.55 248 iPn 11 16.30 0.6
iSn 12 00.90
MLR 3.65 74 eP 11 26.00 8.8X
PTJ 3.78 292 e(Pn) 11 58.50 39.4X
eSn 12 21.80
S.D. = 1.1 on 6 of 9 obs.

% OCT 22, 1990 09h 45m 52.03± 3.07s
23.191 N ±16.5km 122.062 E ±22.7km
DEPTH = 10.0km (geophysicist)
TAIWAN REGION (243)

TWF1 0.72 283 iPd 46 06.20 0.0
eS 46 16.50
TWD 0.98 334 iPd 46 10.00 -0.7
TWG 0.98 248 iPc 46 10.30 -0.4
TWC 1.43 352 iPc 46 17.90 0.0
TWK 1.45 273 iPd 46 18.60 0.3
TWQ 1.56 314 ePc 46 20.50 0.7
eS 46 41.20
TWZ 1.95 347 ePc 46 25.60 0.1
S.D. = 0.5 on 7 of 7 obs.

? OCT 22, 1990 10h 19m 32.37± 9.35s
27.057 S ±53.2km 26.522 E ±57.1km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
ML 3.8 (PRE). mbLg 3.4 (BUL).

PRY 0.86 82 iPd 19 49.00 -0.5
S 19 55.00
KSR 1.23 16 iPc 19 56.00 0.1
S 20 09.00
BPI 1.61 57 iPc 20 01.50 -0.2
EVA 2.35 77 eP 20 12.50 0.1
S 20 40.00
BFT 3.44 67 iPd 20 28.50 0.5
S 21 01.50
JOZ 4.96 96 eP 20 45.00 -4.3X
S 20 59.00
BUL 7.14 16 iPn 21 19.80 -0.4
iSn 22 33.80
iSg 23 11.00
S.D. = 0.5 on 6 of 7 obs.

• OCT 22, 1990 10h 32m 41.09± 1.20s
20.954 S ±13.6km 68.118 W ±15.3km
DEPTH = 115.0 ± 15.8 km
CHILE-BOLIVIA BORDER REGION (124)

ANT 3.47 217 eP 33 34.10 -0.1
CCH 4.01 28 eP 33 55.00 13.0X
CNCB 4.12 2 P 33 50.00 6.3X
ZOBO 4.66 360 P 33 56.00 5.0X
ARE 5.49 324 eP 34 02.00 -0.2
iS 34 59.60
SIV 8.31 55 iPd 34 41.00 0.6
LIC 67.53 74 P 43 26.40 -0.9
TIC 67.71 73 P 43 28.20 -0.3
KIC 67.84 74 P 43 28.60 -0.7
GBA 146.36 97 PKP 52 11.00 1.7
0.5s 0.90nm
S.D. = 1.3 on 7 of 10 obs.

& OCT 22, 1990 11h 15m 35.51s
63.196 N 151.656 W
DEPTH = 9.9km
CENTRAL ALASKA (1
<AGS-P>.

HUR 0.94 103 eP 15 53.49 0.0
eS 16 07.08
CUT 1.02 141 eP 15 55.14 0.4
eS 16 09.84
SKT 1.22 177 eP 15 57.66 -0.6
RND 1.28 79 iP 15 58.74 -0.6
eS 16 16.70
MCK 1.34 65 eP 15 59.97 -0.2
PWA 1.76 151 eP 16 06.85 0.7
SUA 1.79 166 eP 16 07.51 0.7
NEA 1.80 38 eP 16 06.51 -0.2
NCG 1.81 188 eP 16 06.68 -0.5
eS 16 30.40
CGLM 1.90 185 eP 16 09.57 1.2
iS 16 34.01
GHO 1.91 137 eP 16 08.43 -0.1
eS 16 35.13
BGL 1.97 190 eP 16 10.22 0.8
eS 16 35.66
PLRM 1.99 143 eP 16 09.16 -0.4
PMR 1.99 143 P 16 08.60 -1.0
TTA 2.00 264 eP 16 08.99 -0.8
iS 16 34.22
SPU 2.03 185 eP 16 09.90 -0.3
eS 16 36.70
CKL 2.03 189 eP 16 10.38 0.1
WRH 2.03 49 eP 16 10.69 0.5
SML 2.08 131 iP 16 10.50 -0.4
PMS 2.19 152 eP 16 13.77 1.2
CCB 2.24 48 eP 16 11.27 -1.9
FBA 2.41 43 P 16 16.00 0.4
HDA 2.41 58 eP 16 17.74 2.1
IMA 3.01 344 P 16 20.20 -4.1
KLU 3.17 120 iP 16 26.93 0.4
25 obs. associated

% OCT 22, 1990 11h 42m 11.77± 0.82s
38.598 N ± 4.8km 14.516 E ± 8.9km
DEPTH = 19.4 ± 6.7 km
SICILY (398)

MNO 0.68 168 P 42 24.50 -0.5
eSg 42 36.70
ATN 0.86 120 P 42 27.60 -0.3
eSg 42 42.30
MSI 0.91 115 P 42 29.80 1.1
eSg 42 41.50
CZI 1.41 63 P 42 36.20 -0.1
eSg 42 56.00
FAI 1.48 207 P 42 38.10 0.7
MEU 1.53 168 P 42 37.60 -0.7
eSn 42 58.00
MGR 1.74 27 P 42 40.20 -0.9
eSn 43 02.80
TDS 1.77 53 P 42 41.30 -0.3
CSI 1.81 49 P 42 42.70 0.4
ROI 1.87 58 P 42 42.80 -0.4
SGO 2.05 17 P 42 46.20 0.5
ORI 2.09 45 P 42 46.90 0.5
S.D. = 0.7 on 12 of 12 obs.

& OCT 22, 1990 11h 46m 00.47s
58.184 N 142.942 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>.

YKU 2.16 49 eP 46 31.73 -5.2
eS 46 56.04
YAH 2.27 15 eP 46 33.57 -5.3
TGL 2.58 1 iP 46 37.81 -5.3
eS 47 05.84
BALM 2.88 6 iP 46 42.04 -5.3
eS 47 13.56
KNIM 3.28 313 iP 46 47.17 -5.8
eS 47 24.45
GLB 3.30 353 iP 46 47.66 -5.6
VLZ 3.42 331 eP 46 48.93 -5.9
GLI 3.43 324 eP 46 48.82 -6.2
KLU 3.64 337 iP 46 52.56 -5.6
SEW 3.87 303 eP 46 55.34 -5.8
TOA 4.25 339 eP 47 01.85 -4.9
PMS 4.54 315 eP 47 05.50 -5.4
GHO 4.69 323 eP 47 07.92 -5.1

```
CUT      5.58 322 eP     47 21.00   -4.5
SKT      5.74 315 eP     47 22.29   -5.5
        15 obs. associated
-----------------------------------------
&  OCT  22, 1990  12h 09m 23.41s
   66.293 N          144.421 W
   DEPTH =   0.0km
 ALASKA                              (676)
      <AGS-P>.

FYU      0.43 310 eP     09 31.39   -0.5
GLM      1.80 225 eP     09 55.32   -0.6
                 eS     10 20.68
FBA      1.98 227 eP     09 57.59   -0.9
                 eS     10 25.42
HDA      2.17 210 eP     10 00.46   -0.9
                 eS     10 30.46
CCB      2.17 222 eP     10 02.15    0.8
                 eS     10 28.59
WRH      2.39 222 eP     10 06.89    2.4
NEA      2.60 231 eP     10 07.94    0.5
        7 obs. associated
-----------------------------------------
*  OCT  22, 1990  12h 21m 35.18± 0.53s
   13.740 N ± 8.8km  121.029 E ±12.1km
   DEPTH =  33.0km  (normal)
   5.1mb ( 14 obs.)
 MINDORO, PHILIPPINE ISLANDS         (250)

SSE     17.27    0 eP     25 41.00    5.5X
        1.0s    10.00nm           3.9mb X
MKS     18.90 185 iPc     26 01.00    5.3X
KGM     21.03 238 eP      26 20.00    1.3
IPM     21.73 247 ePd     26 28.10    2.4
BJI     26.54 352 eP      27 14.00    2.2
LZH     27.08 328 iPd     27 19.00    2.1
        1.4s    87.00nm           5.2mb
MBL     34.70 182 iPc     28 23.70   -0.5
        0.5s    38.00nm           5.6mb
GUN     35.60 299 P       28 32.40    0.0
        0.4s    17.00nm           5.3mb
WB5     35.89 158 eP      28 34.10   -0.3
                 eS     33 51.10
PKI     35.91 298 P       28 34.40   -0.6
        0.4s    10.00nm           5.1mb
KKN     36.08 298 P       28 35.80   -0.4
        0.5s     9.00nm           4.9mb
DMN     36.18 298 P       28 35.60   -1.5
NANU    36.48 189 eP      28 39.20    0.0
        0.5s    19.00nm           5.2mb
GKN     36.69 299 P       28 40.60   -0.7
        0.4s     6.00nm           4.8mb
OIS     38.67 151 iPc     28 58.50    0.8
ASPA    39.25 161 iPc     29 02.50   -0.1
        0.5s    17.20nm           5.1mb
                 eS     34 43.90
WARB    40.06 172 iPc     29 09.70    0.5
CTA     41.78 143 iPc     29 25.30    1.9
        0.9s    40.34nm           5.2mb
GBA     42.31 275 Pc      29 27.40   -0.5
        0.6s     5.30nm           4.4mb
KLB     45.18 184 eP      29 49.60   -1.2
        0.4s    10.00nm           5.1mb
NWAO    46.54 184 iPd     30 00.90   -0.6
STK     49.46 157 eP      30 23.00   -1.3
        1.8s    31.00nm           5.0mb
INK     82.94  21 eP      33 58.00    0.2
MBC     83.44  12 eP      34 00.50    0.2
HFS     86.59 331 eP      34 14.70   -1.6
        0.4s     1.30nm           4.5mb
NB2     87.37 333 P       34 17.60   -2.5
        0.8s     1.90nm           4.4mb
      S.D. = 1.3  on  24 of  26 obs.
-----------------------------------------
   OCT  22, 1990  12h 41m 41.69± 0.41s
   43.884 N ± 3.4km   20.388 E ± 4.5km
   DEPTH =  10.0km  (geophysicist)
 YUGOSLAVIA                          (383)
      ML 3.0 (TTG).

PLE      0.91 233 iPgd   41 57.70   -1.5
                 eSg    42 10.20
BEO      0.94   3 ePg     42 00.50    0.9
                 eSn    42 16.00
IVA      1.07 200 ePg     42 00.10   -1.8
                 eSg    42 13.60
PVY      1.32 193 iPgd    42 04.90   -1.3
                 eSg    42 21.20
NKY      1.47 224 ePg     42 07.70   -0.7
                 eSg    42 28.00
BCI      1.53 189 iPgc    42 09.40    0.3
BRY      1.67 234 ePn     42 10.50   -0.7
                 eSn    42 32.50
TTG      1.67 210 ePg     42 10.30   -0.8
                 eSg    42 32.00
KKS      1.81 179 ePn     42 14.00    0.9
PUK      1.88 191 ePn     42 15.00    0.9
BZS      1.94  26 iPd     42 23.50    8.5X
BDV      1.97 216 ePn     42 16.40    1.0
                 eSn    42 41.00
SDA      1.98 200 ePn     42 21.70    6.2X
HCY      1.99 225 ePn     42 16.20    0.4
                 eSn    42 41.30
SKO      2.06 158 iPn     42 17.90    1.1
                 iSn    42 47.10
ULC      2.09 204 ePn     42 18.50    1.2
                 eSn    42 45.00
PHP      2.20 179 ePn     42 22.40    3.7X
BLY      2.46 292 eP      42 26.40    4.0X
                 eS     42 51.40
TIR      2.56 189 ePn     42 29.00    5.0X
OHR      2.79 174 iPn     42 26.60   -0.6
                 iSn    43 05.60
DRA      2.89  73 eP      42 37.00    8.4X
HVAR     2.95 258 iPn     42 30.80    1.4
                 iSn    43 05.80
VAY      3.03 147 ePn     42 32.00    1.5
                 i      42 38.00
TPE      3.60 185 ePn     42 39.00    0.4
CMP      3.60  66 ePc     42 58.00   19.3X
LSK      3.73 178 ePn     42 40.70    0.0
PTJ      3.74 304 ePn     42 39.70   -1.1
                 iSn    43 23.90
MLR      4.28  66 ePc     42 47.00   -1.4
                 e      48 37.00
LJU      4.68 299 e(Pn)   42 55.00    0.9
ZST      4.88 333 eP      42 56.40   -0.4
DUI      4.90 245 P       42 57.00   -0.2
VRI      4.92  64 ePd     42 56.50   -0.9
                 ed     48 46.50
TRI      5.05 293 eP      43 00.00    0.7
                 i      43 56.40
VOY      5.08 297 e(Pn)c  42 59.60   -0.2
                 eSn    43 55.80
SDI      5.30 248 P       43 02.00   -0.9
ARV      5.41 268 P       42 55.00   -9.4X
FVI      6.02 299 Pd      43 12.80    0.0
                 eSn    44 40.00
CTI      6.57 292 P       43 22.00    1.2
KHC      7.04 321 ePg     43 27.00   -0.3
                 eSg    44 59.00
      S.D. = 1.0  on  31 of  39 obs.
-----------------------------------------
?  OCT  22, 1990  13h 34m 48.34± 1.01s
   18.484 N ±15.7km  142.924 E ±43.8km
   DEPTH =  33.0km  (normal)
 MARIANA ISLANDS REGION              (215)

GUMO     5.21 159 eP     36 06.30    0.2
        0.6s    31.43nm           5.0mb X
PJG      5.21 159 eP     36 06.10    0.0
GUA      5.28 158 eP     36 06.80   -0.2
                 eS     37 00.20
WB5     39.04 193 eP     42 19.90    6.0X
WARB    47.13 200 eP     43 28.00    8.5X
INK     70.60  23 eP     46 02.00    0.0
MLR     94.52 321 ePd    48 07.00    0.0
      S.D. = 0.2  on   5 of   7 obs.
-----------------------------------------
%  OCT  22, 1990  14h 02m 01.92± 0.80s
   16.260 N ± 6.2km   61.394 W ± 6.2km
   DEPTH =  10.0km  (geophysicist)
 LEEWARD ISLANDS                     ( 92)
      ML 2.6 (FDF). Felt (II) at
      Gosier and St. Anne, Guadeloupe.

SEG      0.18 323 iPd     02 05.89    0.0
                 S      02 07.60
SFG      0.19  92 eP      02 06.13    0.0
                 S      02 08.90
DOG      0.31 224 ePc     02 08.70    0.3
                 S      02 13.60
MGG      0.35 168 iPc     02 09.44    0.4
                 S      02 14.90
PAG      0.36 230 eP      02 09.26    0.0
                 S      02 14.70
BBL      0.74 186 eP      02 15.80   -0.6
                 S      02 24.70
      S.D. = 0.4  on   6 of   6 obs.
-----------------------------------------
   OCT  22, 1990  14h 35m 22.22± 0.16s
   16.244 S ± 5.5km  173.153 W ± 4.2km
   DEPTH =  30.6km  (  7 depth phases)
   5.4mb ( 37 obs.)  5.2Msz ( 11 obs.)
 TONGA ISLANDS                       (173)
      CENTROID, MOMENT TENSOR        (HRV)
      Data Used: GDSN
      L.P.B.: 17S, 38C
      Centroid Location:
      Origin Time        14:35:27.2 0.3
      Lat 15.97S 0.06 Lon 173.40W 0.06
      Dep  15.0 FIX Half-duration  2.0
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 0.60 0.05  Mtt=-0.11 0.05
        Mff=-0.49 0.07  Mrt= 0.32 0.12
        Mrf= 2.38 0.13  Mtf= 0.91 0.04
      Principal Axes:
        T  Val=  2.73   Plg=47   Azm=294
        N        -0.23      21        180
        P        -2.50      35         74
      Best Double Couple:Mo=2.6*10**17
       NP1:Strike=108 Dip=22 Slip=  17
       NP2:          2     84       111

MBU      7.82 264 eP     37 23.50    6.6X
VUN      8.21 256 eP     37 29.90    7.7X
SVA      8.23 256 eP     37 30.00    7.4X
SGE      8.65 260 eP     37 35.00    6.6X
PVC     17.79 263 iPc    39 35.50    6.2X
BKM     17.85 263 iPd    39 34.50    4.4X
DZM     20.12 250 iPd    39 55.60   -1.1
PAE     22.59  97 iP     40 20.90   -0.7
        0.8s    40.00nm           4.9mb
PPT     22.60  97 iP     40 21.10   -0.5
        0.8s    50.00nm           5.0mb
PPN     22.73  97 iP     40 22.40   -0.6
        0.8s    20.00nm           4.7mb
PUZ     23.03 198 eP     40 27.80    2.1
NOZ     23.59 197 P      40 34.10    2.9X
WLZ     23.70 203 eP     40 35.30    3.1X
PMO     24.35  91 iP     40 37.80   -0.9
        0.8s    60.00nm           5.2mb
VAH     24.58  91 iP     40 39.60   -1.3
        0.8s    35.00nm           5.0mb
TPT     24.62  91 iP     40 40.10   -1.2
        0.8s    50.00nm           5.1mb
RUV     24.82  91 iP     40 41.80   -1.5
        0.8s    40.00nm           5.1mb
PGZ     25.96 199 eP     40 55.30    1.5
        0.4s    15.00nm           5.0mb
MNG     26.21 200 eP     40 57.40    1.3
        0.3s     9.00nm           4.9mb
HNR     27.07 281 eP     41 04.00   -0.2
SVO     27.28 282 eP     41 06.00   -0.1
THZ     28.12 282 eP     41 14.10    0.5
KHZ     28.47 201 eP     41 17.10    0.5
        0.4s    30.00nm           5.4mb
LTZ     29.24 202 P      41 23.20   -0.4
BRS     33.42 245 iPd    42 01.00    0.5
                 i      42 09.50   29km
COO     34.95 240 iPd    42 13.80    0.1
                 i      42 23.20   32km
RMO     36.79 247 eP     42 27.00   -2.3
CNB     38.43 233 iPc    42 43.10    0.0
        1.0s   110.00nm           5.6mb
CTA     38.69 258 iPc    42 45.30    0.0
        0.9s    16.81nm           4.8mb
      Z 19s      3.47um           5.2Msz
                 iS     49 00.00
CAN     38.71 233 eP     42 45.00   -0.4
BWA     38.88 235 eP     42 45.30   -1.5
PMG     39.24 275 eP     42 51.00    1.0
        1.2s   125.00nm           5.5mb
CMS     40.21 240 iPc    42 57.40   -0.4
                 i      43 06.90   32km
OLP     40.82 248 iPc    43 02.20   -0.6
TOO     42.12 232 eP     43 13.00   -0.5
                 i      43 22.70   33km
STK     43.83 241 iPc    43 27.50    0.1
        0.9s    30.00nm           5.1mb
      Z 18s     84.00um           6.7MszX
```

22d 14h

Sta	Dist	Az	Phase	Min	Sec	Res
			i	43	36.70	31km
BFD	44.25	233	eP	43	32.00	1.3
			e	43	41.00	30km
OIS	44.91	257	ePc	43	35.40	-0.9
ADE	46.76	237	eP	43	50.50	-0.3
WB5	49.87	258	eP	44	13.90	-1.2
ASPA	50.08	253	iPc	44	15.60	-1.1
	1.0s		138.60nm			5.9mb
Z	19s		3.00um			5.3Msz
			iPcS	49	31.80	
			iS	51	24.20	
GUA	50.93	303	eP	44	22.80	-0.3
GUMO	50.99	303	eP	44	23.50	-0.1
MTN	53.91	266	iPc	44	44.20	-1.2
FORR	55.22	244	iPc	44	53.00	-1.9
	0.5s		73.00nm			6.0mb
WARB	56.57	249	iPc	45	03.80	-0.9
	0.5s		27.00nm			5.5mb
COOL	61.20	243	eP	45	35.20	-1.6
SBA	62.43	185	eP	45	47.30	3.0X
MBL	63.26	254	iPc	45	50.10	-0.5
	0.4s		40.00nm			5.9mb
KLB	64.05	242	eP	45	55.00	-0.7
	0.5s		22.00nm			5.5mb
NWAO	64.42	241	eP	45	56.50	-1.6
Z	20s		0.50um			4.7Msz
N	20s		0.70um			
E	20s		0.40um			
BAL	65.03	243	eP	46	01.00	-1.1
MUN	65.35	242	eP	46	03.60	-0.5
	1.0s		80.00nm			5.8mb
MRWA	65.77	245	iPc	46	05.70	-1.1
NANU	67.02	252	eP	46	15.10	0.2
	0.3s		29.00nm			5.9mb
SYP	71.43	44	eP	46	48.00	6.1X
PRS	71.59	42	eP	46	42.00	-0.7
GCC	71.61	41	eP	46	41.10	-1.7
PCC	71.66	40	eP	46	41.30	-1.8
SAO	71.80	42	eP	46	44.20	0.2
PRI	71.93	42	eP	46	45.30	0.4
BRK	71.97	40	eP	46	45.10	0.2
MHC	72.03	41	eP	46	45.70	0.2
ARN	72.10	41	P	46	46.30	0.5
PAS	72.43	45	eP	46	48.00	0.2
MWC	72.55	45	eP	46	48.00	-0.7
BAR	72.66	47	eP	46	49.00	-0.2
RVR	72.89	46	eP	46	50.00	-0.5
PLM	72.90	47	eP	46	51.00	0.2
BAG	72.96	293	eP	46	51.00	-0.4
SBB	72.97	45	eP	46	50.00	-1.0
FRI	73.05	42	eP	46	51.20	-0.1
ISA	73.09	44	eP	46	51.00	-0.7
CMB	73.24	41	eP	46	52.50	0.0
KKM	73.28	282	eP	46	53.00	-0.2
ORV	73.48	39	eP	46	53.70	-0.1
WDC	73.49	38	eP	46	54.00	0.2
CLC	73.76	44	eP	46	55.00	-0.6
SPA	73.86	180	eP	46	57.80	2.0
	0.8s		38.33nm			5.5mb
TPC	73.87	46	eP	46	56.00	-0.3
MIN	73.90	39	eP	46	55.70	-0.7
GSC	74.01	45	eP	46	57.00	-0.1
LBFM	74.36	38	P	47	00.20	1.1
TNP	75.29	43	P	47	04.00	-0.6
	1.0s		35.00nm			5.3mb
KDC	75.68	11	P	47	07.00	1.0
	1.0s		55.00nm			5.5mb
BMW	76.91	33	P	47	14.20	0.9
LON	77.83	33	P	47	18.70	0.3
GMW	77.84	32	P	47	19.10	0.8
SVW	78.36	9	eP	47	20.70	-0.2
SSE	78.65	307	P	47	23.00	-0.1
Z	20s		0.50um			4.8Msz
			S	58	08.00	
PMR	79.90	11	eP	47	28.20	-1.0
	1.2s		51.60nm			5.4mb
TTA	80.05	8	eP	47	30.30	0.2
DAU	80.45	43	P	47	32.00	-1.1
PNT	80.60	32	iPd	47	34.00	0.8
	0.9s		37.00nm			5.4mb
PV09	80.92	46	iP	47	35.50	-0.1
TOA	80.95	12	eP	47	34.90	0.0
ALO	81.16	50	eP	47	36.00	-0.8
	1.5s		34.72nm			5.1mb
Z	20s		0.80um			5.1Msz
ANMO	81.16	50	P	47	37.10	0.3
NEW	81.27	34	P	47	37.20	0.4

Sta	Dist	Az	Phase	Min	Sec	Res
LRM	82.53	38	eP	47	44.20	0.5
BW06	82.74	42	iP	47	44.70	-0.2
	1.0s		27.50nm			5.3mb
			i	48	25.30	163kmX
FBA	83.18	11	iPc	47	45.80	-0.5
IMA	83.36	8	eP	47	47.30	-0.1
	1.3s		30.50nm			5.3mb
GOL	84.07	46	P	47	51.80	0.1
GLD	84.19	46	P	47	53.30	1.0
	1.0s		30.00nm			5.4mb
SES	85.76	35	eP	48	00.00	0.3
BJI	86.22	313	eP	48	03.50	1.4
	1.2s		89.00nm			5.9mb
Z	24s		0.64um			4.9MszX
			esP	48	14.00	
			eSKS	58	27.00	
			eS	58	40.00	
MEO	86.99	53	iPc	48	16.30	10.3X
MAW	87.07	199	iP	48	08.10	2.2
IPM	87.26	276	ePc	48	10.40	2.6X
	1.1s		42.60nm			5.6mb
SNG	88.39	278	eP	48	17.10	4.0X
INK	89.03	14	eP	48	14.50	-0.5
TUL	89.52	52	e(P)	48	18.00	-0.1
	1.0s		4.00nm			4.7mb
LOE	90.26	288	eP	48	23.50	1.7
KMI	91.60	296	Pc	48	30.00	1.8
	1.5s		80.00nm			5.9mb
BDT	92.72	287	eP	48	30.80	-2.3
	1.0s		83.50nm			6.1mb
CHG	93.20	289	ePc	48	37.50	2.2
	1.0s		45.50nm			5.9mb
LZH	93.91	306	iPc	48	40.00	1.5
	1.5s		42.00nm			5.6mb
Z	30s		0.57um			4.9MszX
			pP	48	49.00	28km
			sP	48	56.00	
PKI	107.28	294	PKP	54	00.00	11.7X
QUE	123.62	296	ePKP	54	20.30	1.1
MAIO	129.39	304	ePKP	54	31.00	1.0
NB2	135.15	357	PKP	54	40.80	0.8
	1.1s		7.70nm			
HFS	135.89	355	ePKP	54	40.90	-0.5
	0.9s		7.40nm			
BUL	137.99	211	iPKPd	54	46.90	0.1
	0.9s		4.62nm			
MJMA	142.99	291	PKP	54	53.00	-2.4
KSP	144.66	350	iPKPd	54	56.50	-0.9
	1.3s		35.00nm			
CLL	144.67	353	iPKP	54	55.00	-2.4
	1.3s		19.00nm			
BRG	144.99	352	iPKP	54	57.40	-0.6
	1.4s		24.00nm			
AFIF	145.09	289	PKP	55	00.80	1.7
BNS	145.36	360	iPKPd	54	58.80	0.2
SPC	145.37	344	ePKP	55	00.20	1.3
MOX	145.47	355	iPKP	54	59.00	0.2
	1.4s		91.00nm			
ENN	145.55	1	ePKP	54	59.00	0.1
	1.0s		50.00nm			
NAI	145.68	242	iPKPd	55	04.00	3.4X
MEM	145.71	1	PKP	55	02.30	3.1X
SNF	145.76	3	PKP	55	01.00	1.7
PRU	145.77	351	ePKP	54	59.00	-0.3
Z	20s		0.60um			5.4Msz
HOF	145.77	354	ePKP	55	00.20	0.8
BMR	145.78	340	ePKPd	55	02.00	2.6X
KAS	145.86	323	ePKP	55	02.50	2.6X
CFR	146.04	333	ePKP	55	03.00	3.1X
VRI	146.10	335	ePKPd	55	01.50	1.5
DOU	146.19	3	PKPc	55	02.30	2.3X
GRF	146.45	355	ePKPc	55	02.50	2.0
Z	20s		0.30um			5.1Msz
PSZ	146.63	344	ePKP	55	01.80	0.9
KHC	146.74	352	PKP	55	03.50	2.5X
	1.4s		58.50nm			
			e	55	10.20	
WET	146.82	353	ePKP	55	03.50	2.4
FLN	147.02	9	ePKP	55	03.20	1.8
	0.7s		17.65nm			
Z	20s		0.43um			5.2Msz
ZST	147.04	347	ePKP	55	04.10	2.7X
SRO	147.13	346	iPKP	55	04.60	3.0X
LDF	147.24	9	ePKP	55	03.90	2.2
	1.0s		24.00nm			
CMP	147.27	336	ePKPc	55	07.00	5.0X
GRR	147.33	10	iPKPc	55	04.40	2.5X

Sta	Dist	Az	Phase	Min	Sec	Res
	1.0s		46.00nm			
BBTK	147.42	321	iPKPc	55	07.00	4.5
			i	55	12.00	
SOP	147.64	348	iPKPc	55	05.80	3.4X
LPF	147.64	10	iPKPc	55	05.30	2.9X
	1.0s		60.00nm			
CDF	147.92	359	iPKPc	55	06.40	3.4X
	1.0s		62.00nm			
FUR	147.96	354	ePKP	55	06.50	3.5X
	1.0s		76.00nm			
BZS	148.20	340	ePKP	55	02.00	-1.4
BHG	148.22	352	iPKPc	55	07.30	3.9X
	1.3s		104.00nm			
HAU	148.32	1	iPKPc	55	07.70	4.1X
	1.0s		56.00nm			
Z	22s		0.28um			5.0Msz
FEL	148.44	359	ePKP	55	07.56	3.7X
BSF	148.50	0	iPKPc	55	08.00	4.0X
	1.0s		30.00nm			
SLE	148.54	358	ePKPd	55	08.20	4.3X
GPA	148.55	324	ePKP	55	08.40	4.2X
SOTA	148.90	354	iPKPc	55	06.00	1.4
	1.2s		67.10nm			
			i	55	09.50	
HRI	148.91	308	iPKPc	55	10.40	5.3X
LOR	148.97	4	iPKPc	55	09.20	4.6X
	1.0s		42.00nm			
Z	21s		0.52um			5.3Msz
SAX	149.01	357	ePKPd	55	10.20	5.2X
SSF	149.15	4	iPKPc	55	09.80	5.0X
	1.2s		80.35nm			
MFF	149.18	9	iPKPc	55	09.50	4.6X
	1.0s		24.00nm			
LBF	149.26	4	iPKPc	55	09.90	4.8X
	1.0s		35.00nm			
OGA	149.27	354	iPKPc	55	10.20	4.9X
	1.2s		80.00nm			
BEO	149.29	341	iPKP	55	10.70	5.6X
FVI	149.34	352	PKP	55	09.60	4.5X
AVF	149.40	5	iPKPc	55	10.00	4.8X
	1.0s		30.00nm			
LLS	149.41	357	ePKPd	55	11.10	5.6X
PTJ	149.47	347	ePKP	55	09.00	3.5X
OSS	149.52	356	ePKPd	55	11.50	5.8X
ZAG	149.54	347	ePKP	55	05.50	0.1
SMF	149.58	4	iPKPc	55	10.60	5.1X
BGF	149.59	5	iPKPc	55	10.70	5.2X
	1.1s		40.85nm			
LJU	149.60	349	ePKP	55	11.00	5.4X
VOY	149.72	350	ePKP	55	11.00	5.1X
LSF	149.76	7	iPKPc	55	10.80	5.0X
	1.1s		42.75nm			
VDL	149.77	356	ePKPd	55	12.10	6.0X
TCF	149.80	6	iPKPc	55	11.10	5.2X
	1.2s		37.20nm			
MAF	149.90	6	iPKPc	55	11.60	5.6X
	1.2s		74.40nm			
DSI	149.90	306	iPKPc	55	12.50	6.1X
CEY	149.92	349	ePKP	55	11.50	5.4X
VVI	149.99	352	PKP	55	11.00	4.8X
VBY	149.99	348	ePKP	55	11.90	5.8X
CTI	150.02	353	PKPc	55	15.00	8.7X
TRI	150.06	350	iPKPd	55	11.90	5.7X
TMA	150.18	357	ePKPd	55	12.60	5.9X
DIX	150.25	359	ePKPd	55	13.90	7.0X
EMS	150.26	360	ePKPd	55	13.60	6.8X
MMK	150.27	358	ePKPd	55	13.90	7.0X
KHL	150.32	322	ePKP	55	12.40	5.4X
MDI	150.46	356	PKP	55	12.50	5.7X
RJF	150.68	8	ePKP	55	13.20	6.0X
	1.2s		59.50nm			
Z	21s		0.40um			5.2Msz
LPL	150.82	0	iPKPc	55	14.90	7.2X
	1.0s		35.00nm			
LPG	150.84	0	iPKPc	55	15.10	7.3X
	1.1s		53.70nm			
LFF	150.93	9	iPKPc	55	13.70	6.1X
	1.0s		46.00nm			
MBH	150.99	303	ePKP	55	15.00	6.9X
EZN	151.02	328	ePKP	55	14.00	6.2X
ELL	151.10	319	ePKP	55	14.70	6.4X
CAF	151.12	7	ePKP	55	14.40	6.5X
LPO	151.25	8	ePKP	55	14.40	6.3X
	1.0s		32.00nm			
BNI	151.28	0	PKP	55	16.50	8.2X
SKO	151.45	337	iPKP	55	14.70	6.2X
	1.2s		79.00nm			

			i	55	21.70	
BOB	151.48	356	PKP	55	16.00	7.5X
VAY	151.56	335	iPKP	55	15.00	6.4X
	1.2s		71.00nm			
LWI	151.58	232	iPKP-	55	17.80	8.0X
SFI	152.09	352	PKP	55	17.00	7.7X
BDI	152.09	354	PKP	55	17.00	7.6X
PGD	152.15	352	PKP	55	17.50	7.8X
ARV	152.34	350	PKP	55	17.50	7.7X
CRE	152.36	352	PKP	55	17.00	7.1X
OHR	152.44	337	ePKPd	55	18.10	8.1X
	1.3s		543.00nm			
ASS	152.80	351	PKP	55	17.50	7.0X
MNS	153.47	350	PKP	55	17.70	6.3X
DUI	153.83	347	PKP	55	17.50	5.5X
SDI	153.93	348	PKP	55	13.00	0.9
SGO	154.68	345	PKP	55	13.00	0.1
BCAO	163.58	226	iPKPd	55	25.20	1.3
	0.7s		21.00nm			
			i	56	17.20	
			i	56	30.20	
LKO	166.17	117	PKP	55	25.82	-0.3
	1.1s		14.00nm			
	S.D. = 1.1		on 135 of 227 obs.			

? OCT 22, 1990 17h 26m 26.46± 6.70s
5.333 S ±54.8km 148.611 E ±15.8km
DEPTH = 109.7 ± 39.6 km
4.3mb (1 obs.)
NEW BRITAIN REGION (192)

PMG	4.30	200	eP	27	31.00	0.1
	0.8s		179.10nm			
			eS	28	22.00	
QIS	17.48	209	iPc	30	24.60	-0.3
MTN	18.80	245	iPc	30	40.20	0.0
WB5	20.03	223	eP	30	52.50	-0.6
ASPA	23.09	216	iPc	31	24.20	0.8
	0.7s		10.30nm		4.3mb	
			iS	35	18.50	
DZM	23.97	136	iPd	31	32.00	-0.1
	S.D. = 0.7		on 6 of 6 obs.			

& OCT 22, 1990 18h 40m 36.79s
59.809 N 151.856 W
DEPTH = 61.5km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

HOM	0.19	144	iP	40	46.12	-0.3
			iS	40	53.66	
NNL	0.37	50	iP	40	48.18	0.5
CNPM	0.42	132	iP	40	47.76	-0.5
			eS	40	56.23	
BRLK	0.49	95	iP	40	48.48	-0.5
			eS	40	58.00	
OPT	0.71	258	iP	40	50.63	-0.8
			eS	41	02.07	
RED	0.76	324	iP	40	51.50	-0.6
			eS	41	03.08	
RSO	0.79	326	iP	40	52.05	-0.5
			eS	41	04.19	
RDT	0.82	341	iP	40	51.99	-0.7
			eS	41	04.22	
AUE	0.89	240	iP	40	53.02	-0.6
AUH	0.92	242	iP	40	53.53	-0.6
			iS	41	06.45	
AUI	0.93	240	eP	40	53.20	-0.9
NKA	0.99	18	eP	40	56.15	1.3
SLKM	1.08	49	eP	40	55.44	-0.7
			eS	41	10.87	
PDB	1.18	270	iP	40	56.37	-1.1
			iS	41	11.82	
SEW	1.25	75	iP	40	58.78	0.5
CDD	1.27	227	eP	40	57.73	-1.0
			eS	41	14.63	
SPU	1.38	356	iP	40	59.75	-0.5
MCNL	1.41	245	eP	40	59.58	-1.0
			eS	41	17.15	
CKL	1.41	350	iP	41	00.37	-0.4
			eS	41	18.98	
CRP	1.47	354	iP	41	01.65	0.1
BGL	1.48	350	eP	41	01.59	-0.1
			iS	41	21.81	
CGLM	1.51	357	iP	41	01.79	-0.2
NCG	1.61	355	iP	41	03.38	0.0
			eS	41	24.40	
SUA	1.75	18	eP	41	05.06	-0.3
PMS	1.83	37	eP	41	06.44	-0.1
			iS	41	28.95	
PWA	2.09	27	eP	41	09.94	0.0
KDC	2.09	189	eP	41	08.10	-1.9
MTU	2.13	83	eP	41	09.70	-0.8
KNIM	2.13	74	eP	41	07.77	-2.9
SKT	2.18	4	iP	41	11.42	0.0
PLRM	2.24	36	eP	41	11.01	-1.0
PMR	2.24	36	iPc	41	11.10	-0.9
SVW	2.28	307	iPc	41	10.90	-1.8
GHO	2.44	35	eP	41	14.14	-0.9
GLI	2.60	64	iP	41	14.53	-2.7
SML	2.65	39	eP	41	16.68	-1.2
CUT	2.72	16	eP	41	18.31	-0.5
VZW	2.91	62	iP	41	19.26	-2.4
SCM	3.01	46	eP	41	22.25	-0.8
VLZ	3.04	62	eP	41	20.84	-2.6
KLU	3.38	57	iP	41	26.35	-1.9
TOA	3.60	48	iPc	41	30.50	-0.9
TTA	3.72	329	eP	41	32.40	-0.6
FBA	5.45	19	iPc	41	55.40	-1.9
	44 obs. associated					

& OCT 22, 1990 18h 44m 36.60s
63.388 N 147.464 W
DEPTH = 70.3km
CENTRAL ALASKA (1)
<AGS-P>.

RND	0.63	272	eP	44	50.95	0.0
			eS	45	01.42	
MCK	0.74	298	eP	44	52.48	0.2
			eS	45	03.67	
DDM	0.82	60	eP	44	53.65	0.4
			eS	45	06.30	
HDA	1.05	12	iP	44	56.14	0.2
			eS	45	10.34	
WRH	1.12	346	iP	44	56.84	-0.1
SDG	1.23	134	eP	44	57.64	-0.8
			eS	45	14.08	
CCB	1.27	353	iP	44	58.69	-0.2
			eS	45	14.96	
NEA	1.39	330	eP	44	59.95	-0.5
			eS	45	17.26	
TOA	1.42	155	iPc	45	00.70	-0.3
FBA	1.53	355	iPc	45	02.30	0.0
DOT	1.55	79	eP	45	01.63	-1.0
			eS	45	20.73	
SCM	1.56	178	eP	45	01.82	-1.1
			eS	45	22.74	
GLM	1.61	1	eP	45	02.53	-0.9
CUT	1.62	234	eP	45	02.97	-0.6
SML	1.64	195	eP	45	03.02	-0.9
GHO	1.76	203	eP	45	04.69	-0.9
			eS	45	28.55	
PLRM	1.96	204	eP	45	08.09	-0.2
PMR	1.96	204	iPd	45	08.20	-0.1
TMW	2.01	90	eP	45	07.76	-1.3
KLU	2.03	159	eP	45	08.12	-1.3
PWA	2.07	214	eP	45	09.64	-0.2
VLZ	2.33	166	eP	45	11.42	-1.9
SKT	2.35	235	eP	45	12.94	-0.7
PMS	2.36	205	eP	45	14.29	0.4
VZW	2.38	169	eP	45	12.33	-1.8
SUA	2.46	220	eP	45	16.11	0.8
GLI	2.52	176	eP	45	14.36	-1.7
GLB	2.59	137	eP	45	15.84	-1.2
NCG	2.96	230	eP	45	23.00	0.8
CGLM	2.97	227	eP	45	23.48	1.0
KNIM	3.05	183	eP	45	21.99	-1.5
SPU	3.08	226	eP	45	24.41	0.5
BGL	3.14	229	eP	45	24.89	0.1
CKL	3.17	228	eP	45	27.41	2.2
SLKM	3.17	205	eP	45	25.26	0.1
FYU	3.33	16	eP	45	27.13	-0.2
IMA	3.79	318	iPc	45	33.00	-0.9
TTA	3.90	267	ePc	45	33.70	-1.8
	38 obs. associated					

& OCT 22, 1990 18h 55m 07.00s
37.692 N 122.513 W
DEPTH = 10.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.4 (BRK). Felt at Daly City, San Francisco and South San Francisco.

PCC	0.22	151	iP	55	11.30	-0.4
BRK	0.27	48	iPc	55	12.50	-0.2
			iS	55	16.50	
BKS	0.29	50	iPc	55	12.40	-0.6
ZSP	0.32	39	iPd	55	13.90	0.2
MHC	0.78	117	iPc	55	21.80	-0.4
			iS	55	33.00	
GCC	0.78	148	e(P)	55	21.40	-0.8
ARN	0.85	113	ePg	55	22.70	-0.7
SAO	1.26	137	eP	55	28.10	-2.3
CMB	1.72	78	ePd	55	36.00	-1.2
			eS	55	57.00	
	9 obs. associated					

? OCT 22, 1990 20h 38m 53.81± 1.59s
20.379 N ±42.1km 97.598 E ±44.5km
DEPTH = 33.0km (normal)
BURMA (296)
Felt in Muong District, Thailand.

CHG	2.01	141	ePn	39	26.00	-0.1
			iPg	39	27.20	
			iSg	39	45.50	
CHTO	2.01	141	iPn	39	26.20	0.1
			iSn	39	45.00	
BDT	3.39	157	ePn	39	45.70	0.0
			ePg	39	52.10	
			eSg	40	30.00	
LOE	4.90	126	ePn	40	20.20	13.0X
			ePg	40	22.60	
			eSg	41	22.00	
NST	5.27	152	eP	40	15.00	2.7X
GUN	13.06	307	P	42	00.00	0.0
GBA	20.41	254	Pd	43	44.90	14.0X
	1.0s		5.30nm			
	S.D. = 0.2		on 4 of 7 obs.			

? OCT 22, 1990 21h 10m 56.09±22.75s
43.342 N ±78.2km 0.666 W ±191.km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.5 (LDG).

EPF	0.80	113	Pg	11	11.60	0.0
			Sg	11	23.00	
LFF	1.89	32	Pg	11	28.00	-0.7
			Sg	11	50.00	
LPO	1.89	44	Pg	11	28.00	-0.7
			Sg	11	50.00	
RJF	2.51	38	Pg	11	39.00	1.4
			Sg	12	08.60	
	S.D. = 1.7		on 4 of 4 obs.			

• OCT 22, 1990 22h 17m 44.69± 2.27s
51.617 N ± 9.8km 7.658 E ±19.3km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.5 (BNS).

WTS	0.65	306	ePg	17	57.50	-0.2
BNS	0.72	205	eP	17	58.60	-0.3
	0.2s		120.00nm			
			iS	18	11.00	
STB	1.15	207	ePd	18	05.90	-0.2
	0.3s		58.00nm			
			iS	18	23.60	
KOE	1.19	178	iPd	18	06.90	0.0
KLL	1.29	222	eP	18	08.50	-0.1
			iS	18	28.10	
ENN	1.38	233	ePn	18	10.00	0.0
	0.7s		26.00nm			
			eSn	18	29.50	
MEM	1.45	227	P	18	11.30	0.4
			S	18	31.40	
DOU	2.47	233	P	18	32.10	6.5X
	S.D. = 0.3		on 7 of 8 obs.			

• OCT 22, 1990 22h 53m 31.25± 0.40s
15.157 S ±14.3km 173.578 W ±14.3km
DEPTH = 33.0km (normal)
4.8mb (7 obs.) 4.5Msz (3 obs.)
TONGA ISLANDS (173)

DZM	20.13	247	iPc	58	06.60	1.0
PUZ	23.94	196	eP	58	43.30	0.0
NOZ	24.51	196	P	58	49.00	0.2

22d 22h

LTZ 30.10 201 eP 59 35.50 -4.5X
STK 44.01 240 eP 01 37.30 -0.3
1.8s 21.00nm 4.6mb
WB5 49.71 257 eP 02 22.00 -0.6
ASPA 50.03 252 eP 02 23.80 -1.2
0.8s 20.50nm 5.2mb
Z 22s 0.30um 4.3Msz
TNP 74.78 43 iP 05 10.50 0.2
1.0s 10.00nm 4.8mb
PNT 79.90 33 eP 05 38.00 -0.3
DAU 79.94 43 iP 05 39.10 0.0
1.0s 1.10nm 3.8mb
PV09 80.46 46 iP 05 41.50 -0.3
ALQ 80.78 50 eP 05 42.80 -0.7
1.0s 7.00nm 4.6mb
MCMT 81.17 39 eP 05 45.70 0.3
FBA 82.19 11 iP 05 50.20 0.3
0.8s 10.34nm 4.9mb
GOL 83.61 46 iP 05 58.00 -0.1
1.0s 18.50nm 5.2mb
SES 85.10 35 eP 06 05.00 -0.1
PRU 144.64 351 ePKP 13 06.00 -0.1
GRF 145.34 355 ePKPc 13 08.70 1.4
KHC 145.62 352 PKP 13 09.50 1.6
FLN 146.01 8 ePKP 13 05.90 -2.5
1.0s 18.00nm
Z 19s 0.08um 4.5Msz
LPF 146.64 9 ePKP 13 10.50 1.0
1.1s 19.55nm
CDF 146.83 359 ePKP 13 12.50 2.6X
1.1s 9.75nm
LOR 147.91 3 ePKP 13 15.30 3.7X
1.4s 32.65nm
Z 19s 0.08um 4.5Msz
SSF 148.10 4 ePKP 13 15.90 4.0X
1.3s 19.85nm
LBF 148.20 3 ePKP 13 16.10 4.0X
1.0s 9.00nm
S.D. = 1.0 on 20 of 25 obs.

% OCT 22, 1990 23h 00m 12.27± 1.46s
42.821 N ± 9.0km 13.738 E ±13.7km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS 0.83 288 P 00 28.00 -0.3
eSg 00 42.00
AZI 0.86 195 P 00 30.50 1.7
eSn 00 44.00
ARV 0.89 328 P 00 30.70 1.3
eSg 00 44.10
MNS 0.89 241 P 00 30.30 0.9
eSg 00 46.10
SDI 1.12 177 P 00 32.50 -0.7
eSn 00 49.50
RMP 1.27 218 P 00 34.50 -1.3
DUI 1.28 155 P 00 36.00 0.0
eSn 00 53.50
PGD 1.81 306 P 00 42.50 -1.4
S.D. = 1.4 on 8 of 8 obs.

% OCT 22, 1990 23h 51m 28.11± 1.39s
44.349 N ± 6.5km 6.236 E ±18.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.1 (LDG).

FRF 0.84 159 Pg 51 44.80 0.4
Sg 51 56.00
LRG 0.90 174 Pg 51 45.00 -0.3
Sg 51 58.00
SBF 0.99 119 Pg 51 46.80 -0.2
LMR 1.03 169 Pg 51 47.60 0.0
Sg 52 01.80
LPG 1.21 17 Pg 51 50.80 0.0
S.D. = 0.4 on 5 of 5 obs.

? OCT 22, 1990 23h 51m 47.59± 1.22s
16.282 N ±21.4km 145.222 E ±79.7km
DEPTH = 33.0km (normal)
4.9mb (2 obs.)
MARIANA ISLANDS (216)

GUMO 2.70 187 eP 52 29.70 0.1
PJG 2.70 187 eP 52 29.70 0.1
GUA 2.74 186 eP 52 30.00 -0.3
eS 53 00.20

WB5 37.49 197 eP 59 00.30 0.2
YKA 80.33 28 eP 03 56.20 -0.4
0.7s 4.60nm 4.6mb
SES 86.09 39 eP 04 27.00 0.5
FFC 89.37 32 eP 04 42.00 -0.1
0.7s 10.00nm 5.2mb
ZOBO 148.01 95 PKP 11 33.20 3.6X
CNCB 148.19 96 PKP 11 34.00 4.1X
SIV 154.74 93 ePKP 11 48.00 9.2X
S.D. = 0.4 on 7 of 10 obs.

• OCT 23, 1990 00h 10m 59.92± 0.55s
15.546 N ± 8.5km 147.706 E ±10.3km
DEPTH = 33.0km (normal)
4.5mb (4 obs.)
MARIANA ISLANDS REGION (215)

GUA 3.36 234 eP 11 51.30 -0.1
eS 12 29.00
PJG 3.37 235 eP 11 51.80 0.3
GUMO 3.37 235 eP 11 52.60 1.1
MAT 22.56 340 eP 15 58.00 -0.6
1.0s 18.00nm 4.5mb
SSE 28.75 307 eP 16 55.00 -1.6
BJI 36.74 318 eP 18 05.50 -0.5
WB5 37.57 201 eP 18 11.80 -1.4
ASPA 41.24 199 iPd 18 43.30 -0.4
1.2s 11.50nm 4.5mb
KMI 43.06 290 eP 19 00.00 1.1
CHG 46.59 281 eP 19 27.40 0.4
STK 47.52 187 eP 19 32.70 -1.3
0.8s 5.00nm 4.6mb
MAIO 79.56 305 eP 23 09.00 3.4X
ALQ 93.68 52 eP 24 15.00 0.0
HFS 96.00 339 eP 24 32.80 7.8X
0.6s 2.40nm 4.8mb
KIC 145.09 307 PKP 30 36.58 0.0
0.8s 6.50nm
TIC 145.13 307 PKP 30 36.54 -0.1
LIC 145.40 307 PKP 30 37.52 0.4
ZOBO 145.56 96 PKP 30 39.00 1.0
LPB 145.60 97 (PKP) 30 40.00 2.1X
CNCB 145.73 97 PKP 30 40.00 1.7
SIV 152.31 95 PKP 30 54.60 6.8X
S.D. = 1.0 on 17 of 21 obs.

? OCT 23, 1990 00h 35m 27.64± 6.36s
34.158 S ±27.3km 72.356 W ±42.7km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

LNV 0.81 76 iPd 35 44.00 0.7
iS 35 52.50
LCCH 0.94 44 iPd 35 46.00 0.4
iS 35 55.00
TACH 1.28 67 iPd 35 50.60 -0.8
CHCH 1.43 81 iP 35 54.00 0.3
iS 36 11.60
SAN 1.58 64 iPd 35 56.30 0.6
PCH 1.62 71 iP 35 55.50 -1.0
iS 36 15.50
ROCH 1.63 44 iPc 35 56.50 -0.2
FCH 1.91 65 iPc 36 01.00 0.1
iS 36 26.00
MDZ 3.19 68 eP 36 24.70 5.8X
S.D. = 0.7 on 8 of 9 obs.

OCT 23, 1990 01h 34m 48.27± 0.47s
39.512 N ± 3.5km 75.506 W ± 6.2km
DEPTH = 10.0km (geophysicist)
CHESAPEAKE BAY REGION (493)
mbLg 2.9 (NEIS). MD 3.2 (NED). Felt (V) at Deepwater and Quinton; (IV) at Greenwich, Hancocks Bridge, Harrisonville, Salem, Shiloh and Woodstown; (III) at Bridgeton, Derrfield Street, Glassboro, Paulsboro, Penns Grove, Pennsauken, Pennsville, Vineland and Williamstown, New Jersey. Also felt (IV) at Beor, Claymont, Delaware City, New Castle, Odessa, Port Penn, Saint Georges and Smyrna, Delaware. Felt (IV) at Concordville and (III) at Chester and Lansdowne,

Pennsylvania.

BBD 0.21 219 iP 34 53.30 0.4
NED 0.25 321 iP 34 53.90 0.4
BVD 0.26 1 iP 34 53.70 -0.1
BWD 0.29 349 iP 34 54.30 -0.1
GTD 0.77 175 iP 35 03.10 -0.2
LVNJ 1.42 23 eP 35 14.10 0.1
GMTN 1.70 36 iP 35 19.60 1.5X
PNJ 1.74 36 i(Pn) 35 20.10 1.5X
Lg 35 42.20
TBR 1.90 31 eP 35 21.50 0.5
NA2 2.23 232 eP 35 25.40 -0.4
WVLY 3.76 323 eP 35 47.20 -0.3
BLA 4.49 241 eP 35 58.10 0.1
RSNY 5.09 8 e(P) 36 06.00 -0.3
HBVT 5.18 20 eP 36 07.60 0.0
S.D. = 0.3 on 12 of 14 obs.

? OCT 23, 1990 02h 32m 46.49± 1.09s
63.336 N ±12.9km 151.120 W ±10.5km
DEPTH = 33.0km (normal)
CENTRAL ALASKA (1)

PMR 1.98 151 iPc 33 17.30 -1.0
FBA 2.14 41 iPd 33 20.20 -0.4
TTA 2.26 262 eP 33 22.60 0.3
TOA 2.59 116 iPd 33 28.20 1.1
IMA 2.96 339 iPd 33 28.30 -4.0X
S.D. = 1.6 on 4 of 5 obs.

OCT 23, 1990 04h 08m 00.50± 0.39s
21.940 S ± 4.2km 179.390 W ± 3.5km
DEPTH = 591.9 ± 5.3 km
5.3mb (54 obs.)
FIJI ISLANDS REGION (181)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 31C
Centroid Location:
Origin Time 04:08: 8.4 0.7
Lat 21.45S 0.07 Lon 179.64W 0.06
Dep 610.0 3.5 Half-duration 1.8
Moment Tensor; Scale 10**17 Nm
Mrr=-0.14 0.05 Mtt= 0.09 0.09
Mff= 0.05 0.09 Mrt=-0.44 0.05
Mrf=-1.61 0.07 Mtf=-0.35 0.08
Principal Axes:
T Val= 1.56 Plg=44 Azm= 93
N 0.26 10 193
P -1.82 44 293
Best Double Couple:Mo=1.7*10**17
NP1:Strike=105 Dip=10 Slip=-178
NP2: 13 90 -80

SVA 4.31 332 iPc 09 28.40 0.4
eS 10 29.00
VUN 4.40 332 iPc 09 28.60 -0.2
SGE 5.01 329 iPc 09 34.80 1.2
NDF 5.11 324 iPc 09 38.30 4.0X
MBU 5.25 340 iPc 09 53.00 17.5X
BKM 12.39 288 iPd 10 45.00 1.9
DZM 13.14 267 iPc 10 51.80 1.2
iS 13 11.10
WLZ 16.43 194 P 11 26.30 3.9X
TAZ 16.62 191 P 11 26.70 2.5
NOZ 16.77 187 P 11 25.70 0.1
MNG 19.12 192 P 11 45.90 -1.9
S 14 45.40
KIW 19.47 193 P 11 49.80 -1.2
CAW 19.68 193 P 11 52.50 -0.4
WDW 19.85 193 P 11 54.20 -0.2
MRW 19.87 193 P 11 53.60 -1.0
S 14 57.50
TCW 19.95 194 P 11 55.30 0.0
TMZ 20.80 196 P 12 03.10 -0.1
S 15 13.80
KMZ 21.26 195 P 12 06.40 -0.9
LTZ 21.92 197 P 12 11.90 -1.4
S 15 31.40
MMCZ 24.86 200 P 12 38.60 -1.1
MMZ 24.87 199 P 12 39.20 -0.5
BRS 25.84 252 iPc 12 49.20 0.9
e(S) 16 39.50
COO 27.09 245 eP 13 00.00 0.8
i 18 47.00
TBI 27.64 99 iP 13 04.40 0.5

Sta	Dist	Az	Phase	Time	Res
	0.5s		45.00nm		5.4mb
AFR	28.19	86	iP	13 08.30	-0.5
	0.8s		75.00nm		5.4mb
PAE	28.34	87	iP	13 09.40	-0.7
	0.8s		35.00nm		5.0mb
PPT	28.37	87	iP	13 09.70	-0.7
	0.8s		60.00nm		5.3mb
PPN	28.51	87	iP	13 10.80	-0.8
	0.8s		35.00nm		5.0mb
TVO	28.62	87	iP	13 11.90	-0.7
	0.8s		75.00nm		5.4mb
RMQ	29.36	255	iPd	13 18.20	-0.6
	1.0s		265.00nm		5.8mb
			e	17 32.00	
CNB	30.35	237	iPc	13 28.80	1.6
	0.6s		134.00nm		5.7mb
PMO	30.62	82	iP	13 29.20	-0.3
	0.8s		85.00nm		5.4mb
VAH	30.79	83	iP	13 30.90	0.0
	0.8s		60.00nm		5.3mb
TPT	30.88	83	iP	13 31.50	-0.2
	0.8s		75.00nm		5.4mb
RUV	31.03	83	iP	13 32.80	-0.2
	0.8s		90.00nm		5.5mb
CTA	32.09	267	iPd	13 41.70	-0.2
	0.7s		123.29nm		5.6mb
			iPcP	16 12.80	
			iS	18 12.00	
			iScP	19 02.40	
			iScS	23 03.40	
OLP	33.41	255	iPd	13 53.50	0.6
			e	19 08.00	
TOO	34.01	235	iPd	13 59.20	1.3
	1.0s		157.00nm		5.6mb
PMG	34.45	286	iPd	14 01.10	-0.5
	1.2s		406.25nm		5.9mb
STK	36.01	246	iPd	14 15.70	1.4
	0.6s		83.00nm		5.5mb
			iS	19 12.80	
			i	20 14.10	
			e	23 24.40	
BFD	36.16	237	eP	14 18.00	2.5
			e	19 18.00	
OIS	38.16	264	iPd	14 31.30	-0.8
	0.3s		16.00nm		5.0mb
			i	16 31.00	
			i	19 24.50	
ADE	38.79	241	iPd	14 37.30	0.2
	1.0s		112.00nm		5.4mb
RKT	40.93	100	iP	14 54.80	0.6
	1.0s		80.00nm		5.2mb
ASPA	42.95	258	iPd	15 09.90	-0.4
	1.2s		262.90nm		5.6mb
			ePcP	16 46.60	
			iScP	19 43.70	
			iS	20 50.90	
			iScS	24 05.40	
WB5	43.12	264	iPd	15 10.90	-0.8
			iScP	19 44.50	
			eS	20 53.30	
FORR	47.51	248	iPd	15 44.70	-0.4
	0.4s		162.00nm		5.9mb
WARB	49.17	254	iPd	15 57.00	-0.6
	0.3s		47.00nm		5.5mb
KNA	49.27	268	iPd	15 57.40	-1.0
	0.3s		132.00nm		5.9mb
GUA	49.69	312	e(P)	16 00.20	-1.2
GUMO	49.76	312	e(P)	16 00.50	-1.4
PJG	49.76	312	e(P)	16 00.70	-1.2
COOL	53.47	247	iPd	16 27.40	-1.3
	0.3s		10.00nm		4.7mb
MBL	56.19	259	iPd	16 46.50	-1.2
	0.3s		80.00nm		5.5mb
KLB	56.28	246	iPd	16 47.30	-0.8X
	0.3s		41.00nm		5.2mb
MEKA	56.31	252	iPd	16 47.20	-1.2
NWAO	56.57	244	iPd	16 49.70	-0.4
RKG	56.65	243	eP	16 50.10	-0.5
	0.4s		33.00nm		5.0mb
BAL	57.29	247	iPd	16 54.10	-1.0
	0.4s		33.00nm		4.9mb
MUN	57.54	245	iPd	16 56.30	-0.4
	0.9s		102.00nm		5.1mb
MRWA	58.11	248	iPd	16 59.70	-0.9
NANU	59.78	256	iPd	17 11.30	-0.5
	0.3s		58.00nm		5.3mb
TRT	66.76	271	iPd	17 55.80	-0.4
	0.7s		126.90nm		5.5mb
SPA	68.19	180	iPc	18 06.20	1.9
	0.8s		25.83nm		4.8mb
KKM	68.89	286	ePd	18 08.50	-0.7
	0.6s		53.80nm		5.3mb
MAT	70.61	325	iPd	18 17.30	-1.5
	1.5s		102.78nm		5.1mb
ADK	73.54	2	iPd	18 32.90	-2.2
	0.4s		42.90nm		5.3mb
SSE	77.63	311	P	18 57.00	-1.0
	1.0s		17.00nm		4.4mb
SDN	78.64	11	iPd	19 01.20	-1.6
SYP	79.60	46	eP	19 09.00	0.5
PRS	79.75	44	eP	19 09.90	0.8
MAW	79.78	200	iP	19 10.00	1.3
PCC	79.81	43	eP	19 09.50	0.2
BCH	79.91	46	iP	19 10.50	0.4
SAO	79.96	44	eP	19 11.80	1.6
BRK	80.11	42	eP	19 11.00	0.1
BKS	80.13	42	e(P)	19 11.50	0.5
	0.9s		47.00nm		4.9mb
AIA	80.15	157	eP	19 12.20	1.5
ARN	80.26	43	iP	19 14.00	2.3
ABL	80.30	46	iP	19 14.40	2.2
PAS	80.61	47	eP	19 13.00	-0.6
MWC	80.73	47	eP	19 14.00	-0.4
PPI	80.75	273	eP	19 13.50	-1.2
BAR	80.83	49	eP	19 15.00	0.2
FHC	80.89	39	eP	19 16.30	1.4
RVR	81.07	48	eP	19 16.00	0.1
PLM	81.07	49	eP	19 17.00	0.8
SBB	81.15	47	eP	19 16.00	-0.4
PEC	81.16	48	iP	19 16.30	-0.1
	0.9s		10.91nm		4.4mb
FRI	81.22	44	eP	19 16.50	-0.1
ISA	81.26	46	eP	19 17.00	0.0
CMB	81.40	43	eP	19 17.70	0.2
WDC	81.61	40	eP	19 18.80	0.3
ORV	81.61	41	eP	19 17.80	-0.7
MIN	82.02	41	eP	19 20.20	-0.6
TPC	82.05	48	eP	19 21.00	0.1
IPM	82.08	278	ePd	19 22.80	1.4
	1.0s		126.00nm		5.4mb
GSC	82.19	47	eP	19 21.00	-0.6
GLA	82.34	50	eP	19 23.00	0.6
LBFM	82.46	40	iPc	19 23.20	0.2
SNG	83.46	280	iPd	19 29.70	1.5
	1.2s		156.25nm		5.5mb
TNP	83.46	45	iPc	19 27.80	-0.3
	1.1s		43.83nm		4.9mb
BMW	84.90	35	iP	19 35.10	0.4
GMW	85.82	35	iP	19 39.40	0.4
LON	85.84	36	iP	19 39.00	-0.2
BJI	86.01	316	P	19 40.00	-0.1
	2.0s		166.00nm		5.4mb
			eSKS	29 08.00	
			eS	29 28.00	
RMW	86.28	35	iP	19 41.70	0.4
MCW	86.51	34	iP	19 42.80	0.5
PMR	86.72	14	iPd	19 41.90	-1.1
	0.7s		19.50nm		4.9mb
NST	87.23	288	eP	19 48.00	1.7
DUG	87.48	45	eP	19 36.00	-11.3X
DPW	88.47	36	iP	19 51.50	-0.1
PNT	88.57	34	ePc	19 52.00	0.1
	0.9s		39.00nm		5.3mb
BDT	88.85	289	eP	19 55.80	2.0
	1.0s		62.10nm		5.5mb
KMI	88.85	298	Pd-	19 55.00	1.0
PTI	89.16	43	iPd	19 55.60	0.6
NEW	89.29	36	eP	19 53.70	-1.6
	0.9s		6.03nm		4.5mb
ALQ	89.31	52	ePc	19 55.80	-0.1
	1.0s		17.50nm		4.9mb
			epP	22 00.00	567kmX
ANMO	89.31	52	iPd	19 55.40	-0.5
	1.0s		17.50nm		4.9mb
CHG	89.52	290	iPd	19 58.10	1.2
	1.2s		101.17nm		5.6mb
IMA	89.88	10	iPc	19 57.10	-0.6
	0.6s		5.00nm		4.6mb
FBA	89.92	13	iPc	19 56.60	-1.2
	0.6s		16.60nm		5.1mb
BW06	90.90	44	eP	20 02.20	-0.9
	1.1s		18.35nm		5.0mb
GOL	92.24	48	iPd	20 09.30	-0.1
	0.9s		11.36nm		4.9mb
LZH	92.62	308	iPd	20 11.50	0.5
	1.5s		45.00nm		5.3mb
			pP	20 20.00	27kmX
			sP	20 26.50	
SES	93.79	37	ePd	20 15.50	-0.4
MDZ	94.21	128	eP	20 19.80	1.4
QUE	120.56	293	ePKP	25 47.50	-0.2
SOB1	128.86	123	ePKP	26 02.20	-1.6
			e	28 27.60	
			e	28 41.90	
BUL	130.02	215	ePKP	26 03.00	-3.0X
SOD	131.71	347	ePKP	26 08.00	0.4
			eSKP	28 38.00	
SUF	135.70	343	ePKP	26 09.00	-6.3X
NUR	137.93	342	ePKP	26 12.00	-7.5X
NUR	137.93	342	ePKP	26 08.00	-11.5X
	0.5s		11.20nm		
			i	26 19.80	
			iSKP	28 57.80	
HFS	140.73	350	ePKP	26 15.60	-9.0X
	0.3s		8.10nm		
LWI	143.45	232	iPKPd	26 32.00	1.0
KAS	146.06	313	ePKP	26 36.00	1.7
EKA	146.53	4	PKPc	26 33.30	-1.2
	0.6s		7.20nm		
HRI	147.03	298	iPKPd	26 39.00	2.8X
BBTK	147.38	311	ePKP	26 40.00	3.4X
DSI	147.62	295	iPKPd	26 40.40	3.4X
VRI	148.02	324	ePKPd	26 40.00	2.7X
HOL	148.18	290	PKP	26 42.10	4.1X
BADA	148.28	289	PKP	26 42.50	4.3X
RMN	148.41	293	iPKPd	26 42.40	4.0X
BMR	148.42	330	ePKPd	26 43.00	5.2X
KSP	148.65	341	iPKPd	26 42.30	4.2X
			i	26 48.30	
			e	29 04.00	
SPC	148.66	335	iPKPd	26 41.80	3.4X
MLR	148.68	325	ePKP	26 37.00	-1.5X
WIT	148.83	353	ePKP	26 42.50	4.3X
GPA	148.89	313	ePKP	26 42.90	4.1X
CLL	149.13	345	ePKP	26 39.00	0.3
BRG	149.29	343	iPKPd	26 43.80	4.8X
	1.4s		70.00nm		
			i	26 49.60	
			e	29 26.00	
WTS	149.62	352	iPKP	26 44.20	4.8X
	0.7s		42.00nm		
			e	26 51.00	
PRU	149.93	342	iPKPd	26 46.00	6.0X
			e	26 51.20	
MOX	150.08	346	ePKP	26 45.00	4.8X
	1.4s		49.00nm		
SRO	150.53	335	iPKP	26 46.40	5.5X
ELL	150.65	307	ePKP	26 47.20	5.5X
ZST	150.66	337	iPKP	26 46.70	5.6X
			e	26 56.50	
BZS	150.80	329	ePKP	26 46.00	4.6X
ENN	150.93	353	ePKP	26 42.00	0.6
	0.8s		21.00nm		
			e	26 57.00	
KHC	150.97	342	ePKP	26 41.70	0.0
			i	26 48.00	
GRF	151.06	346	ePKPd	26 48.00	6.3X
			e	26 58.20	
MEM	151.07	353	PKPd	26 47.60	6.0X
DOU	151.73	355	PKP	26 49.30	6.7X
CDF	153.05	350	ePKP	26 50.50	5.8X
	0.4s		2.85nm		
FLN	153.22	2	ePKP	26 51.70	6.9X
	0.4s		7.45nm		
LDF	153.40	1	ePKP	26 52.00	7.0X
	0.4s		4.60nm		
GRR	153.58	2	ePKP	26 52.80	7.6X
	0.5s		6.55nm		
HAU	153.59	351	ePKP	26 51.30	6.0X
LPF	153.93	3	ePKP	26 53.40	7.7X
	0.5s		8.75nm		
LOR	154.59	355	ePKP	26 54.70	8.0X
	0.6s		3.60nm		
MFF	155.39	1	ePKP	26 56.50	8.7X
BCAO	155.41	228	ePKPd	26 57.60	8.8X
	0.6s		39.00nm		
			i	27 18.50	
LIC	163.45	160	PKP	26 57.60	0.1
KIC	163.67	161	PKP	26 58.00	0.3
TIC	163.85	159	PKP	26 58.00	0.1

S.D. = 1.0 on 134 of 177 obs.

% OCT 23, 1990 05h 59m 33.54± 1.01s
39.047 N ± 8.4km 27.756 E ±12.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.9 (ISK).

IZM	0.75	211	iPg	59 48.20	-0.1
			eSg	59 59.10	
EDC	1.30	4	iPn	59 57.00	-0.6
BNT	1.31	5	ePn	59 58.00	0.2
EZN	1.35	306	ePn	59 58.70	0.3
KHL	1.56	117	ePn	00 07.00	5.6X
IZI	1.85	45	ePn	00 05.90	0.3

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

OCT 23, 1990 06h 34m 26.08± 0.77s
44.323 N ± 5.2km 6.746 E ± 6.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.2 (GEN).

PZZ	0.31	54	P	34 32.78	0.1
			S	34 37.40	
STV	0.42	101	P	34 34.42	-0.3
			S	34 40.27	
ENR	0.49	101	P	34 35.45	-0.7
			S	34 42.01	
SBF	0.68	133	Pg	34 41.20	1.6
FRF	0.77	185	Pg	34 40.80	-0.2
			Sg	34 51.20	
ROB	0.81	92	P	34 41.81	0.0
			S	34 52.78	
LRG	0.91	198	Pg	34 43.10	-0.4
			Sg	34 55.80	
IMI	0.92	116	P	34 43.35	-0.4
			S	34 54.93	
LMR	1.00	190	Pg	34 45.20	0.1
			Sg	34 58.50	
LPL	1.19	360	Pg	34 48.60	0.1

S.D. = 0.7 on 10 of 10 obs.

& OCT 23, 1990 08h 49m 12.50s
38.733 N 111.525 W
DEPTH = 1.0km
UTAH (478)
<SLC-P>. CL 3.2 (SLC).

SGU	0.46	348	P	49 22.00	0.3
MSU	0.55	247	P	49 23.30	-0.3
MMU	0.56	161	P	49 23.30	-0.5
DAU	1.69	7	P	49 44.00	0.4
PV09	1.89	96	P	49 47.50	1.0

5 obs. associated

& OCT 23, 1990 09h 05m 46.48s
60.817 N 151.238 W
DEPTH = 59.1km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NKA	0.07	180	eP	05 56.96	3.2
SPU	0.54	313	iP	05 58.49	-0.5
			eS	06 08.51	
SLKM	0.59	121	iP	05 58.97	-0.5
CGLM	0.62	323	iP	05 59.43	-0.5
RDT	0.62	248	iP	05 59.20	-0.8
			eS	06 09.79	
CRP	0.64	316	eP	05 59.90	-0.3
CKL	0.66	306	iP	05 59.80	-0.6
SUA	0.69	20	iP	06 00.32	-0.5
			eS	06 11.72	
BGL	0.72	309	iP	06 00.65	-0.5
			eS	06 12.20	
NCG	0.74	323	iP	06 00.89	-0.5
			eS	06 12.35	
NNL	0.78	182	eP	06 02.51	0.8
RSO	0.83	245	eP	06 01.87	-0.7
RED	0.86	243	eP	06 01.67	-1.1
PMS	0.92	62	eP	06 03.24	-0.4
			eS	06 16.09	
PWA	1.06	38	eP	06 05.10	-0.4
BRLK	1.07	170	eP	06 05.33	-0.3
SEW	1.14	128	eP	06 05.15	-1.3
SKT	1.18	353	eP	06 06.27	-0.8
HOM	1.18	190	eP	06 07.43	0.4
			eS	06 23.87	
PLRM	1.28	52	eP	06 07.48	-1.0
CNPM	1.30	180	eP	06 08.00	-0.7
			eS	06 24.93	
GHO	1.47	48	eP	06 09.97	-1.2
OPT	1.53	221	eP	06 11.74	-0.2
CUT	1.66	16	eP	06 12.99	-0.7
SML	1.72	53	eP	06 13.25	-1.3
PDB	1.80	236	iP	06 14.10	-1.5
GLI	2.03	86	eP	06 16.07	-2.8
KLU	2.67	73	eP	06 25.36	-2.5
TOA	2.75	60	eP	06 28.41	-0.7

29 obs. associated

• OCT 23, 1990 09h 13m 04.24± 0.61s
3.120 N ± 9.9km 75.282 W ±11.6km
DEPTH = 33.0km (normal)
4.2mb (2 obs.)
COLOMBIA (103)
Felt at Florencio.

BOG	1.92	39	iPc	13 38.00	2.4
			iS	14 09.00	
FUQ	2.80	33	eP	13 57.00	9.1X
PSO	2.80	227	eP	13 48.00	0.0
CAYA	4.05	222	P	14 04.00	-2.0
			eS	15 08.60	
COTA	4.12	228	eP	14 07.60	0.6
			eS	15 14.00	
BMG	4.50	29	eP	14 13.00	1.0
YANA	4.60	226	eP	14 13.80	0.1
			eS	15 21.60	
OUR	4.61	225	eP	14 15.00	1.2
			eS	14 25.00	
VC1	4.86	220	P	14 16.20	-1.3
TUNG	5.51	215	eP	14 19.00	-7.4X
SDV	7.36	39	ePn	14 51.40	-1.0
TOV	8.58	39	iPnd	15 06.90	-2.3
			iSn	16 40.80	
CEOS	9.07	49	eP	15 10.50	-5.5X
			eS	17 50.00	
GUAC	10.61	48	eP	15 32.00	-5.3X
			eS	17 30.00	
OLLA	10.86	50	eP	15 30.00	-10.6X
CAR	11.07	48	eP	15 42.00	-1.6
LLAV	11.14	49	eP	15 39.00	-5.5X
NNA	15.09	186	iP	16 43.00	6.1X
	0.7s		13.70nm		4.3mb
ZOBO	20.52	160	P	17 43.00	-0.2
			e	23 41.00	
LPB	20.78	160	(P)	17 53.00	7.4X
			e	23 13.00	
CNCB	21.07	160	P	17 49.00	0.2
			e	23 40.00	
SIV	23.62	144	iPc	18 15.20	1.7
ALQ	42.89	321	eP	21 02.80	1.1
	0.9s		3.78nm		4.1mb

S.D. = 1.5 on 15 of 23 obs.

? OCT 23, 1990 10h 01m 47.38± 0.89s
42.180 N ± 7.5km 13.402 E ±12.1km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

AQU	0.17	0	P	01 51.30	0.0
			eSg	01 54.10	
AZI	0.19	173	P	01 51.50	-0.1
			eSg	01 56.50	
SDI	0.57	147	P	01 59.00	0.1
			eSg	02 07.50	
MNS	0.57	291	P	01 59.10	0.1
			eSg	02 06.70	

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

% OCT 23, 1990 10h 27m 39.42± 1.00s
37.890 N ± 9.9km 12.773 E ± 9.7km
DEPTH = 10.0km (geophysicist)
SICILY (398)

ERC	0.21	315	P	27 44.10	0.1
CVT	0.21	176	P	27 43.70	-0.3
			eSg	27 50.20	
FAI	0.94	130	P	27 58.70	1.3
GIB	1.00	84	P	27 58.40	0.0
MEU	1.89	114	P	28 10.90	-1.2

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

OCT 23, 1990 10h 52m 33.13± 0.48s
10.072 N ± 6.4km 104.004 W ± 7.8km
DEPTH = 10.0km (geophysicist)
4.6mb (8 obs.) 4.5Msz (1 obs.)
OFF COAST OF MEXICO (63)

III	9.35	28	(P)	54 51.00	-0.2
OXX	9.93	45	(P)	54 59.50	0.3
MRX	9.95	16	(P)	55 02.50	3.2X
PPM	10.34	30	(P)	55 04.00	-1.2
IIJ	10.45	23	(P)	55 08.00	1.3
ALQ	24.86	355	eP	57 57.90	0.5
	1.0s		8.00nm		4.3mb
ANMO	24.86	355	P	57 58.60	1.1
	1.0s		13.13nm		4.6mb
GLA	24.95	338	eP	58 05.00	6.8X
BAR	25.36	334	eP	58 03.00	1.0
PLM	26.02	335	eP	58 09.00	0.7
SIO	26.50	14	eP	58 19.30	6.7X
RVR	26.78	335	eP	58 15.00	-0.2
TUL	26.78	15	e(P)	58 25.80	10.6X
	1.0s		0.50nm		
Z	18s		1.23um		4.5Msz
			LR	06 00.00	
MWC	27.27	334	eP	58 10.00	-9.9X
SBB	27.57	335	eP	58 23.00	0.6
GSC	27.69	337	eP	58 23.00	-0.6
CLC	28.45	336	eP	58 30.00	-0.4
ISA	28.68	335	eP	58 32.00	-0.4
DAU	30.89	349	P	58 52.00	-0.5
DUG	31.00	347	P	58 53.20	0.0
BW06	32.94	352	P	59 09.80	-0.4
	1.0s		6.88nm		4.5mb
LRM	36.35	350	eP	59 40.00	0.5
LON	39.57	341	P	00 06.10	-0.1
NEW	39.63	346	P	00 06.20	-0.5
	1.0s		15.63nm		4.6mb
SES	40.62	353	eP	00 15.00	0.2
ZOBO	44.11	126	P	00 45.00	0.7
	1.0s		14.00nm		4.8mb
			LR	15 20.00	
LPB	44.28	126	P	00 46.00	0.5
CNCB	44.53	127	P	00 49.00	1.3
FFC	44.57	2	eP	00 46.00	-0.9
	1.0s		12.00nm		4.7mb
CCH	46.30	126	P	01 00.70	-0.8
SIV	49.77	121	P	01 26.80	-1.4
YKA	52.89	354	eP	01 49.90	-1.3
	1.0s		3.70nm		4.3mb
MBC	66.67	356	eP	03 26.00	0.2
	1.0s		6.00nm		4.7mb

S.D. = 0.8 on 28 of 33 obs.

OCT 23, 1990 11h 23m 58.80± 0.24s
16.580 S ± 7.7km 173.522 W ± 9.5km
DEPTH = 93.1km (4 depth phases)
5.0mb (12 obs.)
TONGA ISLANDS (173)

DZM	19.67	251	iPc	28 25.00	1.9
HBZ	22.15	197	P	28 51.20	3.4X
PUZ	22.60	197	P	28 52.60	0.3
NOZ	23.17	197	eP	29 00.10	2.3
WLZ	23.25	202	P	29 00.80	2.2
TAZ	23.28	200	eP	29 01.50	2.6X
PGZ	25.53	198	eP	29 19.30	-1.0
MNG	25.78	200	eP	29 23.10	0.5
BLW	26.46	199	eP	29 28.30	-0.6
TCW	26.71	201	eP	29 28.90	-2.2
KHZ	28.03	201	eP	29 41.00	-2.0
LTZ	28.80	202	eP	29 46.80	-3.2X
CMS	39.74	241	iPd	31 22.90	-1.1
STK	43.36	241	eP	31 52.80	-0.7
	0.6s		4.00nm		4.4mb
WB5	49.45	258	eP	32 39.20	-2.5
ASPA	49.65	253	iPd	32 41.50	-1.7
	0.7s		14.60nm		5.1mb
			epP	33 03.80	92km
NANU	66.58	252	eP	34 40.50	-1.0
	0.5s		9.00nm		5.0mb
SYP	71.91	44	eP	35 13.00	-1.1
PRS	72.07	42	eP	35 15.30	0.4
SAO	72.29	42	eP	35 16.20	0.1
PRI	72.41	43	eP	35 17.60	0.6
BRK	72.45	40	eP	35 16.60	-0.4
BKS	72.47	40	e(P)	35 17.50	0.3
LLA	72.52	42	eP	35 17.80	0.3
MWC	73.04	46	eP	35 20.00	-0.8

BAR	73.15	48	eP	35	21.00	-0.3
RVR	73.38	46	eP	35	23.00	0.4
PLM	73.39	47	eP	35	23.00	0.2
SBB	73.46	45	eP	35	23.00	-0.1
SPA	73.52	180	IPc	35	24.40	1.3
	0.8s	17.08nm			5.0mb	
		i		35	48.40	92km
FRI	73.54	42	eP	35	23.40	0.0
ISA	73.58	44	eP	35	23.00	-0.7
CMB	73.72	41	eP	35	24.30	-0.2
WDC	73.97	38	eP	35	25.80	-0.1
CLC	74.25	44	eP	35	27.00	-0.6
TPC	74.36	47	eP	35	28.00	-0.3
MIN	74.38	39	eP	35	27.70	-0.7
GSC	74.50	45	eP	35	29.00	-0.1
GLA	74.66	48	eP	35	31.00	0.9
SVW	78.74	9	iPd	35	51.30	-0.9
PMR	80.29	12	iPc	36	00.00	-0.4
TTA	80.43	8	iPc	36	01.70	0.4
	1.0s	15.30nm			4.8mb	
PNT	81.07	32	ePd	36	04.00	-0.8
	0.8s	14.00nm			4.9mb	
TOA	81.35	13	eP	36	06.20	0.1
ALO	81.65	50	eP	36	08.00	-0.4
	1.3s	12.02nm			4.6mb	
LRM	83.01	38	eP	36	15.30	0.0
FBA	83.57	11	iPd	36	16.80	-0.6
	0.9s	35.40nm			5.3mb	
IMA	83.74	8	iPc	36	19.10	0.7
	1.0s	9.90nm			4.7mb	
BJI	86.19	314	eP	36	31.50	0.5
	1.5s	39.00nm			5.2mb	
SES	86.23	35	ePd	36	30.70	-0.3
		pP		36	56.00	95km
CHTO	92.97	289	iP	37	05.10	1.9
	1.1s	8.54nm			5.0mb	
		e		37	30.50	94km
LZH	93.83	306	eP	37	08.90	1.8
	1.5s	23.00nm			5.4mb	
Z	20s	0.24um			4.7Msz	
WTS	144.67	360	ePKP	43	25.00	-0.9
	1.0s	26.00nm				
KRA	144.88	345	IPKPd	43	25.80	-0.6
	1.0s	50.00nm				
		e		43	32.50	
KSP	144.92	349	iPKP	43	26.20	-0.3
	1.0s	49.00nm				
CLL	144.96	353	iPKP	43	26.00	-0.5
	1.1s	38.00nm				
SPC	145.60	344	ePKP	43	28.50	0.6
MOX	145.77	354	iPKPd	43	29.00	1.1
	1.1s	71.00nm				
ENN	145.89	1	ePKP	43	22.50	-5.6X
	1.0s	60.00nm				
PRU	146.04	351	PKP	43	14.00	-14.4X
		i		43	29.70	
MEM	146.05	1	PKP	43	29.70	1.4
HOF	146.07	354	ePKP	43	29.70	1.2
	1.0s	39.00nm				
DOU	146.53	2	PKPc	43	31.20	2.1
KHC	147.02	351	ePKP	43	20.40	-9.6X
		e		43	33.20	
WET	147.10	352	iPKPc	43	33.10	2.9X
ZST	147.29	347	e(PKP)	43	33.30	2.9X
FLN	147.40	9	ePKP	43	32.80	2.2X
	0.9s	39.30nm				
LDF	147.62	8	iPKPc	43	33.40	2.5X
	0.9s	19.65nm				
GRR	147.71	9	iPKPc	43	34.00	2.9X
	0.9s	39.30nm				
LPF	148.03	10	iPKPc	43	34.70	3.1X
	0.9s	49.15nm				
CDF	148.25	359	ePKP	43	35.80	3.7X
	0.9s	32.75nm				
HAU	148.66	0	ePKP	43	36.80	4.1X
	0.9s	32.75nm				
FEL	148.77	358	ePKP	43	37.09	4.1X
BSF	148.83	360	ePKP	43	37.10	4.0X
	0.9s	26.20nm				
SLE	148.86	357	ePKPc	43	37.60	4.6X
SQTA	149.20	354	iPKPc	43	38.60	4.9X
	1.6s	69.80nm				
LOR	149.32	3	ePKP	43	38.40	4.7X
	1.0s	26.00nm				
SAX	149.33	356	ePKPc	43	39.30	5.2X
SSF	149.51	4	iPKPc	43	39.00	5.0X
	0.9s	27.05nm				
MFF	149.56	9	ePKP	43	38.80	4.8X
	0.9s	22.95nm				
OGA	149.56	354	iPKPc	43	40.30	6.0X
	1.0s	26.00nm				
LBF	149.61	3	ePKP	43	39.20	5.0X
	1.0s	25.00nm				
AVF	149.77	4	ePKP	43	39.20	4.9X
	0.7s	8.80nm				
OSS	149.83	355	ePKPc	43	40.50	5.8X
LJU	149.86	349	e(PKP)	43	39.50	5.0X
SMF	149.94	4	ePKP	43	39.60	4.9X
	0.9s	16.40nm				
BGF	149.96	5	iPKPc	43	39.90	5.2X
	1.0s	37.00nm				
VOY	149.99	350	ePKP	43	39.50	4.6X
VDL	150.08	356	ePKPd	43	41.00	5.9X
LSF	150.13	7	ePKP	43	40.10	5.2X
	0.8s	32.25nm				
TCF	150.17	6	ePKP	43	40.40	5.4X
	1.1s	22.00nm				
VBY	150.24	348	ePKP	43	41.00	5.9X
MAF	150.27	5	ePKP	43	40.80	5.6X
	1.0s	28.00nm				
TMA	150.49	357	ePKPc	43	41.80	6.1X
DIX	150.58	359	ePKPc	43	43.00	7.0X
MMK	150.59	358	ePKPd	43	42.00	6.0X
EMS	150.60	359	ePKPd	43	42.00	6.1X
RJF	151.06	7	ePKP	43	42.40	6.0X
LPL	151.15	360	ePKP	43	43.80	7.0X
	0.8s	12.75nm				
LPG	151.17	360	iPKPc	43	44.00	7.1X
	0.8s	14.80nm				
LFF	151.32	9	iPKPc	43	43.00	6.3X
	0.9s	22.95nm				
CAF	151.50	7	ePKP	43	43.80	6.7X
	0.9s	16.40nm				
LPO	151.63	8	ePKP	43	43.70	6.5X
OHR	152.60	336	e(PKP)	43	45.30	6.5X
BCAO	163.10	226	iPKPc	43	53.00	1.0
	0.5s	4.00nm				

S.D. = 1.1 on 59 of 105 obs.

& OCT 23, 1990 11h 35m 19.07s
19.274 N 155.372 W
DEPTH = 6.8km
HAWAII (613)
<HVO-P>. MD 4.1 (HVO). Felt at Pohola.

HTC	0.04	217	iPd	35	20.68	-0.1
HLP	0.06	67	iPd	35	21.21	0.2
DES	0.06	346	iPd	35	20.91	-0.1
KNH	0.10	52	iPd	35	21.65	0.2
WOH	0.12	260	iPc	35	22.15	0.3
CPK	0.13	19	iPd	35	22.01	0.1
AIN	0.13	320	iPc	35	22.49	0.4
PWH	0.14	86	iPd	35	22.67	0.6
AHA	0.14	46	iPd	35	22.25	0.1
OUT	0.14	36	iPd	35	22.22	0.0
PPL	0.14	217	iPc	35	22.48	0.3
KFH	0.15	343	iPd	35	22.88	0.4
RIM	0.15	36	iPd	35	22.42	0.0
NPH	0.16	31	iPd	35	22.49	-0.1
UWE	0.17	27	iP	35	22.70	0.0
			iS	35	26.20	
PUH	0.18	55	iPd	35	22.73	-0.2
ESR	0.19	43	iPd	35	22.90	-0.1
MLX	0.19	8	iPd	35	23.29	0.2
MKA	0.22	65	iPd	35	23.34	-0.3
TRH	0.22	310	iPc	35	23.98	0.2
MLH	0.22	356	iPd	35	24.02	0.2
			iS	35	27.17	
KAE	0.23	86	iPd	35	24.22	0.5
KHU	0.23	264	iPc	35	23.87	-0.1
PLL	0.27	342	iPc	35	24.72	0.0
WIH	0.28	314	iPc	35	24.76	-0.2
SWH	0.28	309	iPc	35	24.62	-0.4
DAH	0.29	287	iPc	35	24.60	-0.5
MWH	0.30	315	iPc	35	25.03	-0.2
WHA	0.31	79	iPd	35	25.15	-0.2
WOB	0.33	323	iPc	35	25.58	-0.3
HMH	0.35	342	iPc	35	26.04	-0.1
			iS	35	31.29	
MVH	0.37	52	iPd	35	26.03	-0.6
HUL	0.40	69	ePc	35	26.34	-0.8
SPT	0.40	224	iPd	35	27.01	-0.2
KIH	0.44	302	iPc	35	27.09	-0.9
PKL	0.46	67	ePc	35	27.56	-0.8
KUH	0.47	269	iPc	35	27.47	-1.1
HPU	0.51	351	iPd	35	28.67	-0.7
HBH	0.52	60	iPc	35	28.94	-0.5
HIL	0.52	31	ePc	35	29.96	0.5
			eS	35	38.36	
POH	0.52	70	iPd	35	28.76	-0.8
NGH	0.53	37	iPd	35	29.25	-0.6
KPO	0.55	66	iPd	35	29.05	-1.0
CPH	0.56	293	iPc	35	29.09	-1.2
KKU	0.61	3	iPd	35	30.86	-0.5
WKH	0.64	335	iPc	35	30.69	-1.3

46 obs. associated

---

* OCT 23, 1990 14h 30m 41.03± 0.91s
20.113 S ± 9.9km 133.636 E ± 8.5km
DEPTH = 5.0km (geophysicist)
NORTHERN TERRITORY, AUSTRALIA (591)
ML 2.8 (QIS).

WB5	0.73	72	iP	30	56.00	0.5
ASPA	3.55	176	IPc	31	37.50	-0.4
	0.5s	6.30nm				
QIS	5.62	96	eP	32	10.00	2.6X
			eSn	32	54.00	
			eSg	33	12.00	
KNA	6.35	312	eP	32	18.70	1.1
	0.2s	6.00nm			5.1mb	X
			eS	33	30.50	
MTN	7.61	341	eP	32	34.00	-1.4
			eS	33	55.50	
WARB	8.82	225	eP	33	00.20	7.9X
	0.3s	4.00nm			5.3mb	X
			eS	34	40.00	
FORR	11.80	204	eP	33	40.00	7.0X
			eS	35	50.00	
MBL	12.97	263	eP	33	49.00	0.2
			eS	36	07.00	

S.D. = 1.3 on 5 of 8 obs.

OCT 23, 1990 15h 14m 29.40± 0.75s
5.604 S ± 3.0km 153.925 E ± 3.3km
DEPTH = 58.8 ± 6.8 km
5.4mb (33 obs.)
NEW IRELAND REGION (190)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 19S, 37C
Centroid Location:
Origin Time 15:14:32.3 0.2
Lat 5.71S 0.03 Lon 153.77E 0.03
Dep 40.3 2.2 Half-duration 2.0
Moment Tensor; Scale 10**17 Nm
Mrr= 1.52 0.03 Mtt=-0.69 0.05
Mff=-0.83 0.05 Mrt= 0.49 0.07
Mrf=-0.19 0.08 Mtf= 0.87 0.04
Principal Axes:

T	Val= 1.62	Plg=78	Azm= 2
N	0.08	8	135
P	-1.70	8	226

Best Double Couple:Mo=1.7*10**17
NP1:Strike=326 Dip=37 Slip= 104
NP2: 129 54 80

RAB	2.24	309	eP	15	06.00	1.2
			iS	15	20.00	
SVO	6.82	121	eP	16	10.00	0.8
			eS	17	37.00	
HNR	7.08	123	eP	16	14.00	1.2
			iS	17	40.00	
PMG	7.70	240	iPd	16	19.90	-1.5
	0.9s	714.29nm			6.4mb	X
			eS	17	53.00	
MNDI	10.23	266	eP	16	56.50	0.2
CTA	16.21	207	iPd-	18	15.00	0.1
	1.8s	922.73nm			5.6mb	
Z	20s	3.90um			4.9Msz	
			i	18	33.00	
			iS	21	19.00	
BKM	18.43	132	iP	18	42.50	0.0
PVC	18.53	132	iPd	18	44.10	0.5
QIS	20.35	222	iPd	19	02.90	-0.7
DZM	20.36	145	iPc	19	02.90	-0.9
			iS	22	53.70	
GUA	21.02	335	eP	19	10.30	-0.1
	0.8s	208.96nm			5.5mb	
PJG	21.08	335	eP	19	11.00	-0.1

23d 15h

RMO	21.35	193	eP	19	12.50	-1.2
			i	19	25.40	
BRS	21.69	183	iPd	19	18.00	0.8
			i	19	26.00	
			e(S)	23	14.00	
OLP	22.82	203	eP	19	29.00	0.7
WB5	23.73	232	eP	19	37.90	0.7
			iPcP	23	21.20	
			eS	23	49.10	
COO	24.92	184	iPd	19	50.10	1.6
ASPA	26.35	225	iPc	20	01.30	-0.6
	1.1s	44.40nm			4.9mb	
	Z 21s	3.10um			4.8Msz	
			iPcP	23	27.30	
			iPcS	27	06.40	
			eScS	30	54.20	
KNA	26.67	246	eP	20	04.00	-0.8
CMS	26.84	195	ePd	20	06.20	-0.1
			i	20	19.80	
			e	23	28.00	
STK	28.58	202	eP	20	21.10	-0.9
	0.8s	10.00nm			4.5mb	
			i	23	32.10	
			e	27	12.30	
BWA	29.13	189	eP	20	26.20	-0.8
			iPcP	23	33.90	
CNB	29.86	188	iPd	20	34.70	1.1
CAN	29.92	188	eP	20	34.60	0.6
			ePcP	23	31.10	
ADE	32.42	204	eP	20	56.00	0.0
TOO	32.74	192	eP	20	59.00	0.3
			i	23	43.20	
BFD	33.10	197	eP	21	03.00	1.2
			i	23	45.50	
WARB	33.13	229	eP	21	02.10	-0.2
	0.4s	9.00nm			5.0mb	
FORR	34.92	221	iPd	21	16.50	-1.0
	0.5s	36.00nm			5.6mb	
MBL	36.47	242	eP	21	30.00	-0.8
WLZ	37.67	151	P	21	41.50	0.9
OCP	38.28	302	eP	21	37.00	-9.0X
CNZ	38.74	153	P	21	50.70	0.9
WHH	38.93	152	P	21	51.10	-0.2
PUZ	39.17	149	Pc	21	53.10	-0.1
NOZ	39.47	150	Pc	21	56.00	0.3
BAG	39.58	304	eP	21	57.00	-0.1
	1.3s	542.31nm			6.3mb	
COOL	39.74	227	eP	21	58.00	-0.1
THZ	39.78	158	P	21	57.90	-0.4
TCW	39.85	156	P	21	58.80	0.0
MNG	39.87	154	P	21	58.50	-0.5
CAW	40.09	155	P	22	00.30	-0.5
WEL	40.12	155	P	22	00.00	-1.0
WDW	40.19	155	P	22	01.10	-0.5
PGZ	40.21	153	P	22	01.10	-0.7
MTW	40.32	155	P	22	01.80	-0.9
LTZ	40.43	159	P	22	03.30	-0.4
BLW	40.48	155	P	22	03.10	-0.9
KHZ	40.59	158	P	22	03.70	-1.1
			e	22	13.10	
NANU	40.71	242	eP	22	05.40	-0.7
TRT	41.05	265	ePc	22	09.20	0.2
MOZ	41.38	159	P	22	11.00	-0.3
KLB	42.59	228	eP	22	19.90	-1.5
KAGJ	42.69	330	eP	22	22.30	0.1
MRWA	42.83	232	iPd	22	23.00	-0.4
	0.8s	40.00nm			5.2mb	
BAL	42.90	230	eP	22	23.00	-1.0
KUMJ	43.83	331	P	22	31.40	0.0
MUN	43.93	229	eP	22	31.80	-0.5
	1.0s	66.00nm			5.4mb	
RKG	44.38	225	eP	22	38.30	2.3
MAT	44.43	342	eP	22	34.00	-2.3
	0.9s	10.08nm			4.6mb	
MTMJ	44.60	341	P	22	36.20	-1.6
NIIJ	44.84	343	P	22	38.20	-1.3
SHNJ	45.02	333	P	22	40.00	-1.0
YAMJ	45.43	345	P	22	43.40	-0.8
SSE	48.06	321	Pc	23	05.00	0.0
	1.0s	29.00nm			5.2mb	
	Z 20s	0.60um			4.6Msz	
			sP	23	14.00	
			PP	24	55.50	
			eS	27	08.00	
			PcS	30	26.00	
KGM	51.11	277	eP	23	28.20	-0.4
IPM	53.79	280	ePc	23	49.00	0.4

	0.9s	77.20nm			5.7mb	
			e	24	56.20	
SNG	54.69	283	iPd	23	55.20	0.0
	1.0s	100.00nm			5.8mb	
LOE	56.38	295	iPc	24	08.00	0.6
BJI	57.18	326	eP	24	11.50	-1.2
	1.5s	39.00nm			5.3mb	
	Z 24s	0.64um			4.6MszX	
			epP	24	21.50	33kmX
			eS	32	16.00	
NST	57.30	293	eP	24	15.00	1.1
PMO	57.85	104	eP	24	17.00	-0.8
	1.2s	60.00nm			5.6mb	
RUV	58.36	104	eP	24	21.00	-0.3
	1.2s	50.00nm			5.5mb	
KMI	58.36	304	Pc+	24	22.50	1.0
	1.5s	260.00nm			6.1mb	
	Z 24s	1.00um			4.9MszX	
BDT	58.80	294	iPc	24	25.50	1.1
	0.9s	78.70nm			5.8mb	
CHG	59.34	296	iPc	24	29.00	0.8
	1.1s	132.91nm			6.0mb	
ADK	62.52	20	P	24	47.40	-1.7
			pP	25	07.00	75kmX
LZH	62.58	316	iPc	24	51.00	1.0
	1.5s	393.00nm			6.3mb	
	Z 20s	0.73um			4.8Msz	
			pP	25	00.50	31kmX
			sP	25	07.00	
			PcP	25	32.50	
			PP	27	04.00	
			eS	33	15.00	
			sS	33	35.00	
SBA	72.52	177	iPc	25	53.00	1.6
GUN	73.49	301	Pc	25	59.20	0.8
PKI	73.80	301	Pc	26	00.70	0.5
KKN	73.97	301	Pc	26	01.70	0.6
DMN	74.07	301	Pc	26	02.80	1.1
GKN	74.58	301	Pc	26	05.20	0.7
KDC	76.41	26	P	26	14.00	0.0
SVW	77.12	23	eP	26	18.50	0.5
	0.7s	12.10nm			5.0mb	
KOD	77.74	282	eP	26	23.50	0.8
HYB	77.81	289	iPc	26	23.00	0.4
	1.0s	50.00nm			5.5mb	
TTA	78.11	21	iPc	26	23.90	0.4
	0.9s	21.00nm			5.1mb	
GBA	78.26	285	Pc	26	25.30	0.2
	1.5s	91.20nm			5.5mb	
PMR	79.95	24	iPd	26	33.10	-0.3
	0.6s	13.10nm			5.0mb	
IMA	80.84	19	iPc	26	37.10	-1.1
	0.8s	14.30nm			5.0mb	
NDI	81.10	300	iPc	26	40.00	-0.2
TOA	81.42	24	ePd	26	41.60	0.4
	1.2s	95.80nm			5.6mb	
FBA	82.22	21	iPc	26	43.60	-1.6
	0.6s	28.40nm			5.4mb	
POO	82.41	289	iPc	26	47.30	0.1
SPA	84.43	180	iPc	26	57.80	1.1
	1.0s	153.00nm			6.0mb	
			i	27	17.30	
MAW	85.26	203	iPc	27	01.40	0.8
WDC	88.71	49	e(P)	27	01.60	-16.3X
PRS	89.03	54	e(P)	27	19.70	0.1
PRI	89.57	54	e(P)	27	22.80	0.5
CMB	90.03	52	e(P)	27	23.70	-0.5
OUE	90.17	300	iPc	27	25.60	0.3
	0.9s	1105.04nm			7.2mb X	
FRI	90.44	53	e(P)	27	24.70	-1.4
ISA	91.28	54	eP	27	41.00	10.9X
MWC	91.48	56	eP	27	33.00	1.8
SBB	91.71	55	eP	27	33.00	0.9
PNT	91.90	41	eP	27	36.00	3.4X
	0.6s	4.00nm			5.0mb	
CLC	92.01	54	eP	27	34.00	0.6
RVR	92.02	56	eP	27	35.00	1.6
PLM	92.39	57	eP	27	38.00	2.6X
BAR	92.49	58	eP	27	37.00	1.3
TNP	92.52	52	P	27	35.00	-0.9
GSC	92.60	55	eP	27	39.00	2.8X
NEW	93.44	42	P	27	40.00	0.3
MBC	94.62	14	eP	27	43.50	-1.1
	0.9s	12.00nm			5.3mb	
YKA	95.61	28	eP	27	52.20	2.9X
	0.6s	2.50nm			4.9mb	
MAIO	96.85	306	eP	27	56.00	0.4

	0.8s	8.42nm			5.3mb	
ALQ	101.07	56	e(Pdif	28	33.00	18.1X
	Z 22s	0.46um			5.0Msz	
HFS	117.83	339	ePKP	33	09.00	-1.5
	0.8s	4.50nm				
	Z 19s	0.21um			4.8Msz	
		LR		16	28.00	
NAO	118.33	340	PKP	33	11.40	-0.1
	0.5s	0.80nm				
BUL	120.49	243	iPKPc	33	13.80	-3.2X
	1.0s	42.50nm				
KRI	120.62	247	iPKPd	33	20.50	3.2X
CLL	124.09	331	iPKPd	33	26.50	3.7X
SKO	124.47	318	ePKP	33	25.70	1.9
KHC	125.20	329	ePKP	33	27.00	1.9
CNCB	132.97	119	PKP	33	41.00	-0.5
ZOBO	133.07	118	PKP	33	39.00	-2.7X
BCAO	135.55	271	iPKPd	33	28.20	-17.6X
	0.6s	17.00nm				
		i		33	45.60	
SIV	139.25	122	PKP	33	43.80	-8.8X
PPD	143.05	139	(PKP)	33	55.00	-4.2X
VAO	145.00	145	(PKP)	34	02.00	-0.6
IFR	146.08	328	ePKP	34	06.00	1.7
JFO	148.01	149	ePKP	34	11.60	4.1X
BAO	149.73	134	ePKP	34	10.20	-0.2
PDCR	157.80	144	ePKP	34	19.00	-2.4X
KIC	158.77	273	PKP	34	34.76	12.2X
LIC	159.06	273	PKP	34	35.32	12.5X
	Z 20s	0.25um			5.1Msz	
LKO	159.32	282	PKP	34	34.70	11.5X
CAI	163.66	137	ePKP	34	26.70	-0.9
	S.D. = 0.9	on 120 of 140 obs.				

& OCT 23, 1990 15h 14m 46.66s
60.237 N 152.707 W
DEPTH = 100.5km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.19	350	iP	15	00.54	1.0
RSO	0.23	354	iP	15	00.86	1.0
RDT	0.37	24	iP	15	01.31	-0.7
			iS	15	14.26	
OPT	0.64	204	eP	15	03.40	-0.5
			eS	15	16.21	
NNL	0.73	105	iP	15	04.80	0.1
HOM	0.79	137	eP	15	04.88	-0.3
			eS	15	19.23	
PDB	0.87	240	iP	15	05.13	-0.9
NKA	0.89	54	eP	15	07.20	1.0
CKL	0.98	11	iP	15	06.55	-0.8
			eS	15	22.16	
SPU	1.00	18	iP	15	06.55	-0.9
			eS	15	22.25	
CNPM	1.03	133	eP	15	06.87	-0.9
			eS	15	22.89	
BGL	1.04	8	iP	15	07.41	-0.6
CRP	1.07	14	eP	15	07.62	-0.7
CGLM	1.13	17	iP	15	08.08	-0.9
NCG	1.20	13	eP	15	09.19	-0.6
SLKM	1.26	77	eP	15	09.23	-1.3
MCNL	1.34	219	eP	15	10.06	-1.3
CDD	1.40	200	eP	15	10.59	-1.5
SUA	1.56	37	eP	15	13.01	-1.2
SEW	1.63	93	eP	15	12.87	-2.1
SVW	1.68	303	eP	15	13.52	-2.1
SKT	1.84	18	eP	15	16.22	-1.5
PMS	1.85	55	eP	15	16.50	-1.3
			eS	15	38.63	
PWA	1.98	43	eP	15	17.94	-1.5
PLRM	2.21	51	eP	15	20.32	-2.2
GHO	2.40	48	eP	15	22.79	-2.4
CUT	2.47	27	eP	15	25.17	-0.8
KNIM	2.48	85	eP	15	22.59	-3.5
SML	2.65	52	iP	15	25.78	-2.7
GLI	2.85	74	eP	15	28.66	-2.4
KLU	3.55	66	eP	15	37.16	-3.6
	31 obs. associated					

? OCT 23, 1990 15h 32m 16.51± 1.42s
40.290 N ±51.5km 28.122 E ±13.0km
DEPTH = 5.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

BNT	0.17	293	iPg	32	19.70	-0.3

			eSg	32	23.70	
KCT	0.18	103	iPg	32	20.20	-0.1
EDC	0.21	286	iPg	32	21.00	0.3
			iSg	32	24.00	
IZI	1.03	87	ePn	32	36.70	0.1
BBTK	3.59	96	eP	33	56.00	41.9X
S.D. = 0.4			on	4 of	5 obs.	

& OCT 23, 1990 17h 17m 39.07s
61.820 N 150.606 W
DEPTH = 48.9km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.36	190	iP	17	48.97	0.0
			eS	17	57.33	
PWA	0.39	116	eP	17	48.92	-0.1
			iS	17	57.00	
SKT	0.47	291	iP	17	49.14	-0.8
			iS	17	57.59	
CUT	0.61	15	iP	17	50.91	-0.7
PLRM	0.74	107	iP	17	52.51	-0.9
			eS	18	04.57	
PMR	0.74	107	iPc	17	52.50	-0.9
PMS	0.76	139	eP	17	52.98	-0.8
			eS	18	05.49	
GHO	0.80	93	iP	17	53.85	-0.5
			eS	18	06.31	
CGLM	0.84	233	eP	17	54.04	-0.9
			eS	18	06.41	
NCG	0.85	241	iP	17	54.02	-1.0
			iS	18	06.27	
CRP	0.93	234	eP	17	55.62	-0.5
			eS	18	08.47	
SPU	0.94	228	iP	17	55.44	-0.8
			eS	18	08.35	
BGL	1.02	238	eP	17	56.86	-0.5
CKL	1.04	234	eP	17	56.62	-1.0
SML	1.08	90	iP	17	57.32	-0.8
NKA	1.12	196	eP	18	00.66	2.0
HUR	1.25	21	eP	17	59.83	-0.6
			eS	18	16.40	
SLKM	1.33	172	eP	18	00.78	-0.8
RDT	1.52	216	iP	18	03.59	-0.8
			eS	18	23.17	
SCM	1.56	88	eP	18	04.24	-0.6
			eS	18	24.73	
RSO	1.72	218	eP	18	06.12	-1.1
RED	1.76	218	eP	18	06.76	-0.9
RND	1.79	26	eP	18	07.29	-0.8
SEW	1.81	161	eP	18	08.46	0.1
GLI	1.94	118	eP	18	08.34	-1.8
KNIM	2.03	135	eP	18	08.79	-2.7
VZW	2.09	110	eP	18	11.77	-0.6
TOA	2.11	80	iPd	18	12.60	-0.1
VLZ	2.16	107	eP	18	11.67	-1.6
KLU	2.26	96	eP	18	13.47	-1.3
CNPM	2.32	188	eP	18	15.39	-0.2
SDG	2.48	71	eP	18	16.50	-1.3
SVW	2.51	256	iPc	18	16.30	-2.0
TTA	2.75	296	iPd	18	19.60	-2.2
GLB	3.27	94	eP	18	27.74	-1.4
FBA	3.34	21	iPc	18	28.40	-1.7
IMA	4.48	344	iPc	18	41.00	-5.2
37 obs. associated						

? OCT 23, 1990 17h 26m 24.30± 2.34s
5.005 S ±38.5km 103.199 E ±43.6km
DEPTH = 62.8 ± 18.6 km
4.0mb (2 obs.)
SOUTHERN SUMATERA (274)

PPI	5.31	328	eP	27	43.00	0.0
			e(S)	28	46.00	
CHTO	24.04	350	eP	31	34.80	0.1
	1.0s		2.50nm		3.6mb	
WB5	33.74	119	eP	33	01.80	-0.4
ASPA	34.92	125	iPd	33	12.60	0.4
	0.7s		3.40nm		4.4mb	
PKI	36.66	333	P	33	27.00	-0.2
GUN	36.74	334	P	33	28.00	0.1
DMN	36.83	333	P	33	28.60	0.0
KKN	36.91	333	P	33	29.00	-0.1
GKN	37.38	332	P	33	33.20	0.1
S.D. = 0.3			on	9 of	9 obs.	

OCT 23, 1990 19h 08m 25.58± 0.37s
19.160 S ± 5.1km 177.564 W ± 5.0km
DEPTH = 624.1 ± 5.6 km
4.9mb (19 obs.)
FIJI ISLANDS REGION (181)

SVA	3.91	285	iP	09	51.70	-0.9
			eS	10	47.10	
VUN	3.94	286	ePd	09	51.50	-1.3
SGE	4.56	289	iPd	09	56.20	-1.0
NDF	4.93	286	eP	10	02.50	2.7
BKM	13.55	274	iPc	11	19.80	0.5
DZM	15.25	256	iPc	11	37.90	2.1
PUZ	19.19	190	eP	12	14.10	1.6
NOZ	19.76	190	eP	12	17.50	-0.1
PGZ	22.03	193	eP	12	37.60	-0.5
	0.4s		15.00nm		4.9mb	
MNG	22.20	194	eP	12	38.50	-1.3
	0.3s		7.00nm		4.7mb	
KIW	22.57	195	eP	12	42.60	-0.4
CAW	22.77	195	P	12	44.30	-0.5
WDW	22.94	195	eP	12	45.00	-1.3
MRW	22.97	195	eP	12	46.60	0.0
TCW	23.06	196	P	12	47.00	-0.4
THZ	23.95	198	P	12	56.10	0.8
KHZ	24.38	196	P	12	58.70	-0.3
	0.4s		19.00nm		5.1mb	
LTZ	25.07	198	P	13	04.40	-0.7
MQZ	25.82	196	eP	13	11.30	-0.3
AFR	26.41	91	iP	13	17.40	0.4
	0.8s		55.00nm		5.2mb	
PAE	26.58	91	iP	13	11.87	-6.6X
	0.8s		40.00nm		5.1mb	
PPT	26.60	91	iP	13	18.90	0.3
	0.8s		70.00nm		5.3mb	
PPN	26.74	91	iP	13	20.00	0.2
	0.8s		20.00nm		4.8mb	
TVO	26.88	92	iP	13	21.40	0.3
	0.8s		40.00nm		5.1mb	
MMCZ	28.05	200	P	13	30.70	-0.4
MHZ	28.05	200	eP	13	30.70	-0.4
PMO	28.64	86	iP	13	36.50	0.3
	0.8s		55.00nm		5.2mb	
VAH	28.84	87	iP	13	38.00	0.1
	0.8s		60.00nm		5.3mb	
TPT	28.90	86	iP	13	38.80	0.3
	0.8s		20.00nm		4.8mb	
RUV	29.08	87	iP	13	40.20	0.2
	0.8s		45.00nm		5.2mb	
CAN	33.61	234	eP	14	19.00	1.0
BWA	33.77	236	eP	14	18.70	-0.7
CMS	35.13	242	iPc	14	31.60	1.1
	0.7s		19.00nm		4.8mb	
TOO	37.03	232	iPd	14	47.80	1.7
STK	38.76	243	eP	15	01.20	1.1
	0.4s		6.00nm		4.5mb	
WB5	45.19	261	eP	15	49.50	-1.3
ASPA	45.24	255	iPd	15	50.30	-0.9
	0.4s		13.80nm		4.8mb	
			iS	21	44.90	
			eScS	24	39.80	
WARB	51.63	251	eP	16	37.60	-1.0
MBL	58.46	256	eP	17	24.20	-1.7
	0.4s		7.00nm		4.2mb	
NANU	62.15	254	eP	17	49.20	-0.7
SPA	70.96	180	iPd	18	45.70	2.5
	0.9s		19.09nm		4.6mb	
SYP	76.45	46	eP	19	15.00	0.7
PRS	76.57	44	ePd	19	14.50	-0.3
SAO	76.78	43	e(P)	19	15.90	0.0
PRI	76.92	44	eP	19	17.00	0.2
PAS	77.47	47	eP	19	19.00	-0.7
MWC	77.59	47	eP	19	20.00	-0.6
RVR	77.94	47	eP	19	23.00	0.8
PLM	77.96	48	eP	19	23.00	0.5
SBB	78.01	47	eP	19	22.00	-0.6
FRI	78.04	44	ePd	19	22.10	-0.5
ISA	78.11	46	eP	19	23.00	-0.1
CMB	78.20	43	ePd	19	23.00	-0.5
WDC	78.39	40	ePd	19	23.90	-0.4
ORV	78.40	41	eP	19	23.80	-0.6
CLC	78.79	46	eP	19	26.00	-0.6
MIN	78.81	40	eP	19	26.30	-0.5
TPC	78.93	48	eP	19	28.00	0.6
GSC	79.05	47	eP	19	28.00	0.0
PNT	85.32	34	eP	19	59.00	0.0
	0.8s		13.00nm		4.6mb	
ALQ	86.25	51	eP	20	03.00	-1.0
	1.0s		8.25nm		4.4mb	
MCMT	86.67	40	P	20	06.10	0.2
BUL	133.27	215	ePKP	26	30.60	-3.7X
NB2	137.70	354	PKP	26	41.40	0.1
	0.7s		1.70nm			
HFS	138.28	352	ePKP	26	31.00	-11.3X
	0.9s		4.30nm			
EKA	143.64	5	PKPc	26	49.10	-2.7X
	0.6s		6.30nm			
LWI	146.48	233	iPKPd	27	01.30	3.2X
KSP	146.53	344	iPKPd	26	58.40	1.6
CLL	146.85	348	iPKPd	26	59.00	1.8
	0.8s		21.00nm			
			eSg	29	31.30	
ADI	147.61	302	ePKP	27	02.00	2.9X
PRU	147.76	345	PKP	27	01.70	3.0X
			e	30	09.50	
			e	30	38.50	
			eSg	30	54.00	
JVI	147.83	300	iPKPd	27	03.00	3.6X
SRO	148.63	339	ePKP	27	04.20	4.1X
ZST	148.69	341	ePKP	27	04.10	3.9X
			e	30	41.40	
			e	31	06.80	
MBH	148.73	296	ePKP	27	05.00	4.2X
KHC	148.78	346	ePKP	27	04.20	3.8X
FLN	150.38	4	ePKP	27	07.50	4.8X
	0.8s		25.50nm			
CDF	150.56	353	ePKP	27	08.40	5.2X
	0.6s		9.00nm			
LDF	150.57	3	ePKP	27	08.10	5.0X
	0.5s		7.30nm			
GRR	150.72	4	ePKP	27	08.70	5.4X
	0.5s		10.95nm			
HAU	151.05	355	ePKP	27	09.40	5.6X
	0.6s		9.00nm			
LPF	151.06	5	ePKP	27	09.40	5.6X
	0.5s		26.25nm			
SQTA	151.11	348	iPKPd	27	09.70	5.6X
	0.6s		15.60nm			
			ic	27	09.90	
			i	27	18.60	
BSF	151.18	354	ePKP	27	09.70	5.5X
	0.6s		9.00nm			
LOR	151.94	358	ePKP	27	11.30	6.2X
	0.7s		12.15nm			
SSF	152.16	358	ePKP	27	12.00	6.6X
	0.7s		8.80nm			
LBF	152.22	358	ePKP	27	12.10	6.5X
	0.7s		7.15nm			
MFF	152.55	4	ePKP	27	12.50	6.5X
	1.0s		26.00nm			
BGR	152.67	359	ePKP	27	13.00	6.8X
	0.6s		5.85nm			
TCF	152.95	0	ePKP	27	13.60	7.0X
	0.7s		5.50nm			
LSF	152.97	1	ePKP	27	13.40	6.8X
	0.7s		9.90nm			
MAF	153.01	360	ePKP	27	14.10	7.4X
	0.8s		5.35nm			
BCAO	158.53	229	iPKPc	27	14.50	-0.1
	0.8s		11.00nm			
			i	27	55.10	
LIC	165.23	150	PKP	27	21.20	0.1
KIC	165.49	150	PKP	27	21.30	0.0
TIC	165.60	149	PKP	27	21.50	0.1
LKO	167.68	140	PKP	27	21.82	-1.2
S.D. = 0.9			on	69 of	97 obs.	

? OCT 23, 1990 20h 01m 57.47± 4.10s
0.030 N ±17.8km 79.669 W ±29.0km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF ECUADOR (105)

GGP	1.09	101	iP+	02	18.20	-0.2
OUR	1.16	100	iPd	02	19.30	-0.1
			iS	02	42.00	
OTO	1.16	101	eP	02	19.60	0.1
			eS	02	36.80	
COTA	1.37	77	P	02	22.80	-0.2
VC1	1.43	118	P	02	24.30	0.3
			eS	02	53.80	
CAYA	1.69	88	eP	02	27.90	0.3
TUNG	1.89	140	P	02	30.20	-0.2
S.D. = 0.3			on	7 of	7 obs.	

OCT 23, 1990 20h 14m 56.89± 1.22s

23d 20h

30.833 S ± 8.7km 178.065 W ± 8.1km
DEPTH = 16.4 ± 8.4 km
5.4mb (7 obs.) 4.0Msz (1 obs.)
KERMADEC ISLANDS (178)

RAO	1.58	5	P	15	24.00	-0.3
			S	15	38.50	
PUZ	7.83	202	eP	16	51.40	-1.5
			S	18	19.10	
NGZ	9.81	210	eP	17	21.00	0.6
CNZ	9.85	210	eP	17	21.10	0.2
MNG	11.08	206	eP	17	31.70	-5.9X
			eS	19	32.90	
DZM	16.37	299	iPd	18	51.90	4.3X
BRS	25.67	270	iPc	20	30.50	2.8
COO	25.80	263	iPd	20	33.30	4.4X
CAN	27.88	252	eP	20	50.00	2.1
BWA	28.38	254	eP	20	52.20	-0.2
RMQ	29.37	270	iPd	21	01.50	0.1
TOO	30.74	247	eP	21	15.00	1.5
CMS	30.82	259	iPd	21	15.90	1.7
CTA	33.81	280	iPc	21	40.90	0.5
	0.9s		82.35nm			5.7mb
STK	34.33	258	iPc	21	45.00	0.2
	0.8s		75.00nm			5.7mb
QIS	39.29	275	iPc	22	26.30	-0.5
	0.3s		7.00nm			4.8mb
ASPA	43.03	267	iPd	22	56.80	-0.8
	0.4s		20.40nm			5.2mb
Z	21s		0.20um			4.0Msz
WB5	44.06	273	eP	23	04.60	-1.3
			e	25	40.90	
FORR	45.83	255	iPc	23	19.00	-0.9
	0.5s		83.00nm			5.9mb
WARB	48.40	261	eP	23	38.50	-1.7
MBL	56.03	264	eP	24	35.00	-2.4
NANU	59.15	261	eP	24	56.50	-2.8
SPA	59.34	180	iPc	25	01.40	1.1
	0.9s		22.27nm			5.3mb
PRS	85.38	43	ePc	27	34.70	0.2
MHC	85.92	42	ePc	27	37.60	0.3
PLM	86.12	47	eP	27	39.00	0.5
SBB	86.39	46	eP	27	39.00	-0.7
ISA	86.64	45	eP	27	41.00	0.1
FRI	86.80	43	eP	27	41.50	0.0
			e	27	57.90	
TPC	87.12	47	eP	27	44.00	0.8
CMB	87.12	42	ePc	27	42.70	-0.4
CLC	87.28	45	eP	27	44.00	0.1
GSC	87.43	46	eP	27	45.00	0.3
WDC	87.69	39	ePc	27	45.50	-0.2
			e	28	01.10	
MIN	88.03	40	e(P)	27	46.70	-0.8
TNP	89.00	44	iP	27	52.20	-0.1
	1.0s		10.00nm			5.1mb
			i	28	09.00	
SOB1	122.80	127	ePKP	33	53.00	-1.2
			e	34	09.70	
SOD	140.60	345	ePKP	34	19.00	-7.4X
SUF	144.50	341	iPKP	34	31.60	-1.6
	0.5s		33.30nm			
NUR	146.70	340	iPKP	34	36.60	-0.4
	0.8s		48.40nm			
UPP	149.12	345	iPKP	34	42.00	1.2
NB2	149.17	351	PKP	34	43.10	2.1
	0.8s		19.40nm			
BCAO	149.43	214	iPKPc	34	46.50	3.7X
	0.5s		51.00nm			
HFS	149.66	348	ePKP	34	42.50	0.8
	0.9s		25.00nm			
DSI	151.44	280	ePKP	34	50.00	4.8X
MBH	151.59	276	iPKPc	34	50.70	5.2X
RMN	151.93	278	ePKP	34	21.00	-25.1X
LIC	154.66	164	PKP	34	50.20	0.0
KIC	154.86	164	PKP	34	50.60	0.1
TIC	155.07	163	PKP	34	50.90	0.1

S.D. = 1.2 on 42 of 50 obs.

& OCT 23, 1990 22h 18m 50.68s
60.236 N 153.056 W
DEPTH = 132.7km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.23	37	iP	19	08.43	0.8
RSO	0.27	33	iP	19	08.73	0.8
RDT	0.47	43	iP	19	09.44	-0.8
			eS	19	24.42	
OPT	0.59	189	iP	19	10.19	-0.7
			eS	19	24.71	
PDB	0.73	232	iP	19	10.51	-1.3
			eS	19	26.35	
AUE	0.89	190	iP	19	12.15	-1.0
AUH	0.90	193	iP	19	12.37	-0.9
NNL	0.90	102	eP	19	13.27	0.0
HOM	0.92	129	eP	19	13.14	-0.2
			eS	19	30.21	
AUI	0.92	192	iP	19	12.35	-1.0
CKL	1.03	20	iP	19	13.78	-0.7
NKA	1.03	60	iP	19	15.18	0.8
XLV	1.03	139	eP	19	13.50	-0.9
			eS	19	32.14	
SPU	1.07	27	iP	19	13.93	-0.9
			eS	19	32.45	
BGL	1.08	17	iP	19	14.54	-0.5
CRP	1.13	23	iP	19	14.86	-0.7
CNPM	1.16	127	iP	19	15.20	-0.5
CGLM	1.19	25	iP	19	15.24	-0.9
MCNL	1.24	212	iP	19	14.89	-1.6
NCG	1.25	20	iP	19	16.07	-0.7
CDD	1.34	193	iP	19	16.07	-1.6
SLKM	1.43	78	iP	19	17.23	-1.4
SVW	1.54	306	iPd	19	17.70	-2.1
SUA	1.67	42	iP	19	20.45	-1.0
			eS	19	44.34	
SEW	1.81	93	eP	19	21.47	-1.4
SKT	1.90	22	iP	19	22.83	-1.2
			eS	19	50.43	
PMS	1.99	58	iP	19	23.42	-1.8
PWA	2.10	46	eP	19	24.67	-1.8
			eS	19	54.78	
PLRM	2.35	53	eP	19	27.10	-2.5
PMR	2.35	53	iPc	19	26.90	-2.7
KDC	2.51	173	iPd	19	28.60	-3.0
GHO	2.53	51	iP	19	29.52	-2.5
CUT	2.56	30	eP	19	30.62	-1.6
KNIM	2.65	85	eP	19	30.48	-3.0
MTU	2.72	93	eP	19	32.63	-1.7
SML	2.79	54	eP	19	32.62	-2.7
GLI	3.01	75	eP	19	34.80	-3.4
TTA	3.05	334	iPd	19	36.20	-2.5
HUR	3.20	29	eP	19	38.84	-1.8
SCM	3.21	58	iP	19	38.29	-2.6
HIN	3.26	84	eP	19	38.62	-2.9
VZW	3.31	73	eP	19	38.94	-3.1
			eS	20	18.16	
VLZ	3.43	72	eP	19	40.76	-2.8
			eS	20	20.91	
MID	3.49	101	eP	19	44.64	0.3
CVA	3.64	82	eP	19	44.68	-1.7
KLU	3.71	67	iP	19	44.57	-2.9
			eS	20	28.06	
RND	3.75	30	eP	19	46.00	-2.1
TOA	3.82	58	iPc	19	46.80	-2.2
SGAM	3.91	83	iP	19	48.17	-1.9
MCK	4.01	27	eP	19	49.84	-1.6
RAGM	4.17	84	eP	19	51.67	-2.0
SDG	4.28	54	eP	19	53.01	-2.1
KAIM	4.34	90	eP	19	54.76	-1.1
GLB	4.68	71	eP	19	57.86	-2.7
NEA	4.73	21	eP	19	58.31	-2.8
WRH	4.84	26	eP	19	59.91	-2.6
DDM	4.92	40	eP	20	02.83	-0.8
CCB	5.05	27	eP	20	02.58	-2.8
HDA	5.06	32	eP	20	03.00	-2.5
WAX	5.07	83	eP	20	03.71	-2.1
TGL	5.08	80	eP	20	04.12	-1.8
FBA	5.27	25	iPc	20	05.60	-2.8
BALM	5.33	77	eP	20	06.69	-2.7
GLM	5.44	26	eP	20	07.82	-2.9
DOT	5.45	47	eP	20	08.02	-2.8
YAH	5.63	84	eP	20	12.07	-1.4
IMA	5.86	358	iPc	20	14.10	-2.5
SDN	6.32	222	iPc	20	18.30	-4.3
ANM	7.18	312	eP	20	31.20	-3.1
HYT	7.69	79	P	20	40.00	-1.4

70 obs. associated

? OCT 24, 1990 00h 12m 06.93± 1.37s
40.529 N ±12.7km 15.649 E ±10.1km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO	0.26	276	P	12	12.70	0.3
			eSg	12	17.30	
MGR	0.40	191	P	12	15.00	-0.1
			eSg	12	23.50	
BSS	0.69	292	P	12	20.40	-0.2
			eSg	12	30.80	
ORI	0.77	127	P	12	22.00	0.1
			eSg	12	33.40	

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

? OCT 24, 1990 01h 09m 07.15± 4.28s
18.638 N ±26.6km 67.050 W ±17.7km
DEPTH = 10.0km (geophysicist)
MONA PASSAGE (89)

MCP	0.23	195	P	09	12.00	0.0
LRS	0.39	150	P	09	15.30	0.1
PORP	0.70	146	P	09	21.00	0.0
SJG	1.00	121	i(P)	09	26.00	-0.2
LPR	1.17	106	P	09	29.10	0.1

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

• OCT 24, 1990 02h 19m 04.29± 0.77s
38.711 N ± 6.9km 21.917 E ± 8.0km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.0 (ATH).

EVR	0.22	338	ePb	19	09.20	0.1
VLS	1.17	243	ePb	19	26.00	-0.2
NEO	1.18	59	ePn	19	26.10	-0.2
ATH	1.60	117	ePb	19	37.30	4.7X
VLI	2.15	158	ePn	19	40.80	0.2
OHR	2.55	341	ePn	19	49.20	2.8X
VAY	2.65	11	ePn	19	48.00	0.1

S.D. = 0.3 on 5 of 7 obs.

& OCT 24, 1990 02h 20m 41.94s
47.531 N 120.189 W
DEPTH = 11.9km
WASHINGTON (29)
<SEA>. CL 2.8 (SEA).

ETW	0.12	307	Pc	20	44.98	-0.3
WTV	0.23	43	Pc	20	46.93	-0.2
			S	20	50.48	
CBSW	0.29	20	Pc	20	47.74	-0.5
EPH	0.44	114	Pd	20	50.31	-0.7
			S	20	56.28	
TBM	0.46	218	P	20	50.73	-0.6
DHW2	0.54	32	P	20	52.02	-0.8
NLW	0.56	350	Pd	20	52.22	-1.0
			S	20	59.59	
SAW	0.56	72	Pd	20	52.45	-0.8
			S	20	59.99	
VTG	0.59	166	Pd	20	52.85	-0.8
			S	21	00.83	
TWW	0.61	230	P	20	53.82	-0.2
EBG	0.67	203	P	20	54.84	-0.3
BVW	0.75	164	Pd	20	55.82	-0.7
RC1	0.78	139	P	20	56.22	-0.8
WAH2	0.88	151	P	20	58.37	-0.4
CRF	0.89	142	P	20	58.74	-0.1
WRD	0.91	128	Pd	20	58.62	-0.5
NAC	0.91	209	Pc	20	59.04	-0.1
MXC	0.96	184	Pc	20	59.91	-0.1
LOCW	0.96	147	P	20	59.70	-0.4
MDW	0.96	162	P	20	59.92	-0.2
OD2	1.01	97	Pd	21	00.36	-0.6
YAKW	1.04	193	P	21	01.31	-0.1
OT2	1.04	141	P	21	01.18	-0.2
BRVW	1.05	173	P	21	01.52	-0.2
GBL	1.06	152	P	21	01.53	-0.2
RMW	1.10	267	P	21	01.85	-0.6
HTW	1.10	285	P	21	01.40	-1.1
MJ2	1.13	150	P	21	02.61	-0.2
GSM	1.14	254	P	21	02.38	-0.8
FMW	1.18	240	P	21	03.02	-0.8
RSW	1.21	160	P	21	03.59	-0.8
WPW	1.25	229	P	21	04.20	-0.8
WIW	1.26	150	P	21	04.87	-0.3
RPW	1.28	316	Pc	21	04.65	-0.9
ET3	1.28	130	P	21	05.15	-0.4
REMR	1.33	238	P	21	06.14	-0.3
JCW	1.35	300	P	21	05.62	-0.9
RVC	1.35	245	P	21	06.18	-0.4
LON	1.35	235	P	21	06.18	-0.5
DPW	1.38	75	P	21	07.12	0.0

SPW	1.39	272	P	21 08.05	0.9
CMW	1.57	305	P	21 10.50	0.7
GL2	1.63	196	P	21 10.08	-0.6
ASR	1.68	215	P	21 11.71	0.3
MBW	1.70	318	P	21 12.09	0.4
KOSW	1.74	233	P	21 12.96	0.8
GMW	1.76	272	P	21 13.26	0.8
HDW	1.94	275	P	21 15.73	0.6

48 obs. associated

% OCT 24, 1990 02h 38m 17.12± 0.83s
45.885 N ± 5.3km 0.448 E ± 7.8km
DEPTH = 10.0km (geophysicist)
FRANCE (53B)
ML 2.5 (LDG).

MFF	0.83	330	Pg	38 33.00	-0.1
			Sg	38 44.20	
LSF	0.84	64	Pg	38 33.60	0.3
			Sg	38 44.30	
RJF	0.95	127	Pg	38 34.20	-1.0
			Sg	38 46.40	
LFF	0.97	168	Pg	38 36.00	0.5
			Sg	38 47.60	
TCF	1.29	71	Pg	38 42.00	0.9
			Sg	38 58.80	
LPO	1.31	156	Pg	38 41.40	0.1
			Sg	38 58.20	
CAF	1.49	130	Pg	38 44.20	0.3
			Sg	39 04.00	
MAF	1.51	76	Pg	38 46.10	1.8X
			Sg	39 04.50	
BGF	1.80	67	Pg	38 50.70	2.3X
			Sg	39 14.30	
AVF	2.21	65	Pn	38 54.00	-0.3
			Pg	38 59.60	
			Sg	39 26.00	
LPF	2.38	335	Pg	39 01.00	4.3X
			Sg	39 31.80	
SSF	2.42	60	Pg	39 01.70	4.4X
			Sg	39 32.60	
SMF	2.47	71	Pn	38 57.50	-0.6
			Pg	39 03.20	
			Sg	39 34.40	
LBF	2.68	64	Pg	39 06.20	5.1X
			Sg	39 41.40	
LOR	2.73	58	Pg	39 07.50	5.7X
			Sg	39 42.80	

S.D. = 0.7 on 9 of 15 obs.

• OCT 24, 1990 03h 28m 05.75± 3.19s
46.306 N ±27.4km 15.573 E ±13.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (3B3)
MD 2.3 (LJU), 2.2 (TRI).

PTJ	0.49	146	iPgc	28 15.90	0.3
			iSg	28 21.30	
ZAG	0.57	150	e(Pg)	28 17.00	-0.2
			iSg	28 24.00	
LJU	0.77	250	iPg	28 21.00	0.2
			eSg	28 30.50	
VBY	0.83	196	e(Pg)	28 21.80	0.0
			eSg	28 34.30	
CEY	0.98	235	eP	28 28.20	3.8X
			eSg	28 37.60	
VOY	1.20	257	iPnd	28 28.40	0.2
			eSn	28 45.80	
TRI	1.39	245	ePg	28 30.70	-0.5
			iSg	28 49.40	

S.D. = 0.4 on 6 of 7 obs.

OCT 24, 1990 03h 51m 25.78± 1.14s
45.835 N ±11.0km 12.220 E ± 6.0km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.9 (VIE).

VVI	0.21	44	P	51 28.60	-1.7
			eSg	51 31.40	
CTI	0.45	298	P	51 32.60	-2.4
			eSg	51 39.90	
FVI	0.85	27	P	51 40.90	-1.3
			eSg	51 53.30	
TRI	1.09	96	ePg	51 45.80	-0.4
			iSg	52 01.00	
VOY	1.18	80	ePnc	51 47.30	-0.6
			eSn	52 05.80	
SCE	1.25	344	ePg	51 49.50	0.3
OGA	1.32	322	ePg	51 50.60	0.2
SOTA	1.55	334	iPgc	51 53.50	-0.1
			iSg	52 14.90	
WATA	1.57	344	iPgc	51 55.60	1.8
			iSg	52 18.00	
LJU	1.63	82	e(Pn)	51 56.00	1.4
			eSg	52 17.00	
MDI	1.76	269	P	51 57.00	0.6
			eSn	52 20.00	
BHG	1.94	13	eP	52 00.50	1.4
PTJ	2.61	87	eP	52 14.60	5.8X
KHC	3.42	15	eP	52 21.00	0.7
			eSg	53 00.00	

S.D. = 1.4 on 13 of 14 obs.

OCT 24, 1990 04h 07m 04.15± 0.47s
3.132 S ± 6.8km 142.196 E ± 9.0km
DEPTH = 33.0km (normal)
5.1mb (7 obs.)
NEAR N COAST OF PAPUA NEW GUINEA(200)

PMG	7.95	142	eP	09 00.00	-0.3
	1.6s		146.67nm		5.8mb X
MTN	14.59	228	eP	10 29.00	-1.2
	0.5s		122.00nm		5.6mb X
			eS	13 12.00	
CTA	17.31	167	iPc	11 17.50	12.4X
	1.0s		14.00nm		
OIS	17.50	188	eP	11 09.00	1.6
KNA	18.22	226	eP	11 16.80	0.5
WB5	18.32	204	eP	11 16.90	-0.6
			eS	14 43.00	
ASPA	21.93	201	eP	11 51.50	-5.3X
	0.8s		7.60nm		4.2mb
	Z 23s		0.60um		3.9MszX
			eS	15 58.00	
RMO	24.06	165	eP	12 17.00	-0.5
WARB	27.35	212	eP	12 48.30	-0.1
STK	28.60	181	eP	12 58.70	-0.8
	1.1s		9.00nm		4.4mb
			eS	21 59.70	
DZM	30.14	131	iPd	13 12.90	-0.7
BWA	31.67	170	eP	13 27.90	1.1
CAN	32.64	170	eP	13 35.60	0.3
			e	17 38.80	
SNG	42.74	284	eP	14 53.00	-7.4X
LZH	52.95	321	eP	16 20.00	0.0
	1.5s		28.00nm		5.0mb
	Z 16s		0.24um		4.3MszX
			pP	16 23.50	12kmX
			sP	16 28.50	
GUN	62.30	304	P	17 26.02	-0.3
	1.1s		64.00nm		5.6mb
PKI	62.58	303	P	17 27.38	-0.7
KKN	62.76	303	P	17 28.80	-0.3
	0.9s		57.00nm		5.7mb
DMN	62.84	303	P	17 29.52	-0.2
GKN	63.37	303	P	17 32.58	-0.5
	0.8s		55.00nm		5.7mb
GBA	66.34	286	P	17 53.00	0.8
	1.1s		8.80nm		4.8mb
QUE	78.87	301	eP	19 06.90	0.5
CNCB	144.21	125	PKP	26 38.00	-2.1
CCH	145.40	127	PKP	26 42.90	1.2
TIC	147.16	277	PKP	26 45.20	0.8
LIC	147.19	277	PKP	26 46.00	1.6
SIV	150.16	130	PKP	26 52.60	3.6X
PPD	151.72	153	ePKP	26 57.50	6.3X

S.D. = 0.9 on 23 of 28 obs.

% OCT 24, 1990 04h 22m 38.99± 0.41s
46.946 N ± 4.6km 0.447 E ± 4.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 3.0 (LDG).

MFF	0.53	230	Pg	22 49.80	0.0
			Sg	22 56.60	
LSF	1.02	133	Pg	22 59.10	0.8
			Sg	23 12.60	
TCF	1.38	118	Pn	23 05.00	0.7
			Pg	23 06.10	
			Sg	23 23.60	
LPF	1.48	318	Pn	23 05.60	-0.1
			Pg	23 07.60	
			Sg	23 26.60	
MAF	1.63	116	Pn	23 08.20	0.3
			Pg	23 10.30	
			Sg	23 31.00	
GRR	1.69	329	Pn	23 08.50	-0.2
			Pg	23 11.60	
			Sg	23 33.60	
LDF	1.69	347	Pg	23 12.00	3.3X
			Sg	23 33.80	
BGF	1.69	102	Pn	23 09.00	0.2
			Pg	23 11.80	
			Sg	23 32.80	
RJF	1.80	155	Pn	23 09.60	-0.7
			Pg	23 12.40	
			Sg	23 35.80	
FLN	1.92	341	Pn	23 12.60	0.6
			Pg	23 16.20	
			Sg	23 41.00	
AVF	2.00	93	Pn	23 13.20	0.0
			Pg	23 16.40	
			Sg	23 41.50	
LFF	2.02	174	Pg	23 18.20	4.8X
			Sg	23 43.60	
SSF	2.10	86	Pn	23 14.00	-0.6
			Pg	23 19.60	
			Sg	23 45.20	
CAF	2.31	150	Pn	23 17.40	-0.4
			Pg	23 22.00	
			Sg	23 52.00	
LPO	2.32	167	Pg	23 23.60	5.7X
			Sg	23 53.50	
SMF	2.35	96	Pg	23 23.20	4.9X
			Sg	23 52.00	
LOR	2.35	81	Pn	23 18.00	-0.3
			Pg	23 24.00	
			Sg	23 52.50	
LBF	2.42	88	Pn	23 18.70	-0.5
			Pg	23 25.00	
			Sg	23 54.30	

S.D. = 0.5 on 14 of 18 obs.

& OCT 24, 1990 06h 04m 42.77s
60.014 N 152.385 W
DEPTH = 78.4km
SOUTHERN ALASKA (2)
<AGS-P>.

RED	0.45	335	eP	04 55.56	-0.7
RSO	0.49	338	iP	04 56.10	-0.6
			eS	05 06.87	
HOM	0.52	133	iP	04 56.35	-0.3
			eS	05 07.07	
NNL	0.55	87	iP	04 57.28	0.3
OPT	0.56	230	eP	04 56.46	-0.7
RDT	0.56	359	iP	04 56.40	-0.8
			eS	05 07.97	
XLV	0.65	149	eP	04 57.02	-1.0
CNPM	0.76	130	iP	04 58.43	-0.8
BRLK	0.80	108	eP	04 58.90	-0.7
AUE	0.83	218	eP	04 58.93	-1.0
AUH	0.84	220	eP	04 59.53	-0.7
AUI	0.86	218	eP	04 59.53	-0.8
NKA	0.93	37	eP	05 02.32	1.3
PDB	0.94	257	eP	05 00.26	-1.0
			eS	05 13.73	
SPU	1.18	8	iP	05 03.95	-0.4
			eS	05 20.21	
CKL	1.19	1	iP	05 04.08	-0.4
			eS	05 20.28	
SLKM	1.19	64	eP	05 03.77	-0.6
BGL	1.25	360	iP	05 05.04	-0.3
CRP	1.26	5	eP	05 05.22	-0.3
CDD	1.26	211	eP	05 04.15	-1.2
MCNL	1.29	231	eP	05 04.37	-1.4
CGLM	1.31	8	iP	05 05.78	-0.3
			eS	05 22.25	
NCG	1.40	5	iP	05 06.92	-0.3
SEW	1.48	85	eP	05 09.04	1.0
SUA	1.66	28	eP	05 10.68	-0.1
PMS	1.86	47	eP	05 13.08	-0.2
SKT	2.02	12	iP	05 14.75	-0.7
PWA	2.05	36	eP	05 16.29	0.5
PLRM	2.25	44	eP	05 17.18	-1.4
KNIM	2.35	80	eP	05 17.18	-2.8
MTU	2.38	89	eP	05 18.95	-1.4
GHO	2.44	42	eP	05 20.59	-0.8
CUT	2.61	22	eP	05 23.09	-0.4

24d 06h

SML 2.68 46 eP 05 22.59 -1.9
KLU 3.50 62 eP 05 33.47 -2.6
RND 3.80 25 eP 05 39.72 -0.4
36 obs. associated

& OCT 24, 1990 06h 15m 12.90s
38.048 N 119.152 W
DEPTH = 10.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 2.2 (BRK). Foreshock.

CMB 0.97 270 iPc 15 30.50 -0.9
FRI 1.14 203 iPd 15 33.70 -0.6
TNP 1.53 88 eP 15 40.40 0.0
ARN 2.01 250 eP 15 47.80 0.5
LLA 2.02 226 eP 15 48.50 1.1
MHC 2.10 251 eP 15 49.90 1.3
SAO 2.23 236 ePd 15 51.40 0.9
ORV 2.37 310 e(P) 15 52.50 0.0
PLM 5.04 158 eP 16 34.00 3.5
9 obs. associated

& OCT 24, 1990 06h 15m 20.70s
38.047 N 119.157 W
DEPTH = 12.0km
5.4mb (48 obs.) 5.2Msz (6 obs.)
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 5.7 (BRK), 5.6 (PAS).
Mo=2.0*10**17 Nm (BRK). Felt (V) at Avery, Bear Valley, Big Creek, Bridgeport, El Portal, June Lake, Kirkwood, Lee Vining, Mammoth Lakes, Mono City, Murphys, North Fork, Pioneer, Pinecrest, Tuolumne, Twin Bridges and Wilseyville, California. Rockslides blocked roads in parts of Yosemite National Park. Felt throughout much of northern and central California and in western Nevada.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 25C
Centroid Location:
Origin Time 06:15:27.3 0.6
Lat 38.17N 0.06 Lon 119.32W 0.08
Dep 15.0 FIX Half-duration 1.8
Moment Tensor; Scale 10**17 Nm
Mrr=-0.27 0.04 Mtt=-0.77 0.06
Mff= 1.04 0.05 Mrt=-0.29 0.14
Mrf= 0.46 0.18 Mtf= 0.41 0.04
Principal Axes:
T Val= 1.23 Plg=15 Azm=279
N -0.17 58 164
P -1.06 28 18
Best Double Couple:Mo=1.1*10**17
NP1:Strike= 56 Dip=59 Slip= -10
NP2: 151 82 -149

MNA 0.88 64 iPc 15 36.50 -1.0
CMB 0.97 270 iPc 15 38.20 -0.8
FRI 1.14 203 iP 15 41.30 -0.6
ARN 2.01 250 iPd 15 55.50 0.7
LLA 2.02 225 iPc 15 55.50 0.6
MHC 2.09 251 iP 15 57.00 0.9
iS 16 24.20
PKEM 2.12 201 eP 15 57.50 1.1
SAO 2.23 236 iPc 15 58.70 0.7
iS 16 27.70
PRI 2.25 213 iP 15 59.60 1.2
ORV 2.37 310 iP 15 59.90 -0.1
PHAM 2.42 205 eP 16 00.70 0.0
BKS 2.44 267 iPc 16 01.65 0.7
iS 16 32.05
ZSP 2.45 269 iPc 16 01.80 0.7
BRK 2.46 267 iPc 16 01.70 0.5
PRS 2.46 227 iPc 16 01.80 0.5
GCC 2.47 247 iPc 16 01.70 0.3
CLC 2.55 150 eP 16 02.20 -0.4
PCC 2.61 259 iP 16 03.60 0.2
BCH 2.95 195 eP 16 08.20 -0.1
MIN 2.98 321 iP 16 09.30 0.5
ABL 3.19 181 eP 16 11.00 -0.8
GSC 3.33 145 iPc 16 12.90 -0.8
BLP 3.62 196 eP 16 18.00 0.3
WDC 3.64 315 iPc 16 17.50 -0.6
LBFM 3.91 328 eP 16 22.50 0.4
LRM 9.23 31 iPd 17 37.00 0.2
NEW 10.32 8 P 17 51.60 0.1
ALQ 10.68 103 ePc 17 57.20 0.5
PNT 11.27 358 P 18 06.00 1.5
SES 13.64 23 P 18 35.00 -1.2
MEO 16.87 95 iPc 19 18.50 0.3
SIO 18.41 90 eP 19 37.20 -0.2
TUL 18.78 89 ePd- 19 41.50 -0.4
1.2s 37.30nm 4.5mb
Z 19s 3.92um 4.7Msz
i 19 46.50
eS 23 20.00
LR 24 14.00
FFC 20.37 29 iPd 19 55.90 -3.7
0.8s 36.00nm 4.8mb
SIT 21.82 336 P 20 14.00 -0.4
1.0s 45.00nm 4.8mb
OLY 22.29 88 P 20 19.00 -0.3
MRX 24.04 134 (P) 20 39.00 2.6
YKA 24.63 5 eP 20 41.70 -0.2
1.2s 39.50nm 4.9mb
IIJ 24.85 132 (P) 20 55.00 10.1
PPM 26.03 131 (P) 20 57.00 1.0
OXX 28.70 131 (P) 21 22.00 2.0
PMR 29.99 331 iPd 21 31.00 0.1
1.2s 55.60nm 5.3mb
BLA 30.54 79 eP 21 42.50 6.4
Z 20s 4.18um 5.1Msz
INK 31.34 350 ePd 21 41.30 -1.4
FBA 31.72 337 iPd 21 45.10 -1.0
1.5s 65.60nm 5.3mb
SVW 32.34 327 iPd 21 51.30 -0.4
1.2s 18.10nm 4.9mb
TTA 33.41 330 iPd 22 00.50 -0.5
1.0s 14.70nm 4.9mb
IMA 34.34 336 iPd 22 08.80 -0.3
1.1s 26.60nm 5.1mb
PNJ 34.57 71 iP 22 05.60 -5.5
HBVT 34.88 65 P 22 11.00 -2.8
MBC 38.29 360 ePd 22 41.90 -0.2
1.0s 33.00nm 5.0mb
SCH 38.79 47 eP 22 44.00 -2.6
NNA 63.60 133 iP 25 56.50 2.7
1.0s 18.00nm 5.2mb
ARE 70.29 131 eP 26 37.00 0.6
ZOBO 72.18 128 P 26 47.00 -1.1
1.0s 27.50nm 5.3mb
Z 24s 0.43um 4.6MszX
S 36 28.00
LR 52 04.00
EKA 72.19 33 Pc 26 45.20 -1.8
1.2s 20.60nm 5.1mb
LPB 72.40 128 P 26 52.00 2.8
CNCB 72.68 129 eP 26 50.00 -1.1
NB2 73.31 23 P 26 52.20 -1.3
1.1s 27.20nm 5.2mb
CCH 74.26 128 P 27 03.30 3.4
HFS 74.78 22 eP 27 00.30 -1.7
1.0s 43.00nm 5.4mb
Z 17s 0.73um 5.0MszX
LR 00 40.00
MAT 77.01 306 eP 27 16.00 0.9
0.8s 7.46nm 4.8mb
FLN 77.91 36 iPd 27 19.10 -0.7
1.2s 65.45nm 5.6mb
Z 20s 1.08um 5.2Msz
GRR 77.99 37 iPd 27 19.70 -0.5
1.2s 68.45nm 5.6mb
WIT 78.04 30 eP 27 21.50 1.2
LPF 78.16 37 iPd 27 20.60 -0.5
1.2s 77.35nm 5.7mb
LDF 78.20 36 iPd 27 20.70 -0.6
1.2s 65.45nm 5.6mb
UCC 78.60 33 P+ 27 24.00 0.5
WTS 78.72 31 eP 27 24.00 -0.1
1.2s 57.00nm 5.5mb
DOU 79.22 33 P 27 26.50 -0.4
ENN 79.28 32 eP 27 27.50 0.3
1.1s 60.00nm 5.5mb
MEM 79.44 32 Pc 27 28.20 0.2
MFF 79.60 38 iPd 27 28.50 -0.6
1.2s 65.45nm 5.5mb
LSF 80.66 37 iPd 27 34.20 -0.5
1.2s 31.25nm 5.2mb
TCF 80.96 37 iPd 27 35.60 -0.7
1.2s 47.60nm 5.4mb
SSF 80.99 36 iPd 27 35.80 -0.7
1.2s 63.95nm 5.5mb
LOR 81.00 35 iPd 27 36.10 -0.4
1.2s 86.30nm 5.7mb
Z 20s 0.80um 5.1Msz
BGF 81.06 36 iPd 27 36.20 -0.6
1.0s 58.00nm 5.6mb
AVF 81.12 36 iPd 27 36.50 -0.6
1.2s 53.55nm 5.5mb
MAF 81.17 37 iPd 27 36.90 -0.5
1.4s 80.60nm 5.6mb
LFF 81.23 39 iPd 27 37.30 -0.4
1.4s 148.10nm 5.8mb
VITF 81.24 34 P 27 36.47 -1.2
LBF 81.27 35 iPd 27 37.40 -0.5
1.4s 61.00nm 5.5mb
RJF 81.34 38 iPd 27 37.50 -0.8
1.4s 74.05nm 5.5mb
Z 20s 1.00um 5.2Msz
GWF 81.36 32 P 27 37.42 -1.0
SMF 81.45 36 iPd 27 38.20 -0.7
1.3s 54.15nm 5.4mb
HAU 81.56 34 iPd 27 39.30 -0.1
1.0s 28.00nm 5.3mb
Z 20s 1.27um 5.3Msz
LPO 81.63 38 iPd 27 39.50 -0.3
1.2s 44.65nm 5.4mb
CDF 81.65 33 P 27 38.89 -1.1
CLL 81.65 28 iPd 27 39.30 -0.5
1.4s 38.00nm 5.3mb
MOX 81.66 29 iP 27 40.00 0.1
N 19s 1.10um
E 19s 1.10um
WLS 81.68 33 P 27 39.15 -0.9
ECH 81.75 33 P 27 39.26 -1.1
CAF 81.88 38 iPd 27 40.70 -0.5
1.2s 52.05nm 5.5mb
BSF 81.88 33 P 27 40.01 -1.2
MOF 82.02 33 P 27 40.94 -1.0
LOMF 82.27 34 P 27 42.25 -0.9
GRF 82.27 30 iPd 27 43.60 0.5
1.8s 87.00nm 5.6mb
Z 20s 1.00um 5.2Msz
TOL 82.29 45 iPc 27 44.00 0.6
1.1s 101.27nm 5.8mb
BRG 82.36 28 iP 27 43.60 0.1
1.0s 30.00nm 5.4mb
i 27 48.00
FEL 82.38 33 eP 27 39.39 -4.4
FEL 82.38 33 P 27 42.80 -1.0
EPF 82.40 40 iPd 27 42.70 -1.2
1.2s 17.85nm 5.1mb
BBS 82.48 33 P 27 43.57 -0.7
SLE 82.67 33 ePc 27 45.50 0.3
KSP 83.23 27 eP 27 47.50 -0.5
EMS 83.29 35 ePc 27 49.10 0.4
PRU 83.30 28 Pc 27 48.50 0.1
1.2s 16.50nm 5.1mb
Z 16s 0.90um 5.2MszX
N 20s 0.90um
E 20s 1.00um
e 27 54.50
WET 83.36 29 iPc 27 48.80 0.1
DIX 83.50 34 ePd 27 51.20 1.4
LLS 83.58 33 ePd 27 51.50 1.4
LPL 83.63 35 iPd 27 50.90 0.5
1.4s 26.15nm 5.3mb
KHC 83.64 29 eP 27 50.20 0.0
N 22s 0.90um
E 22s 1.10um
LPG 83.65 35 iPd 27 51.00 0.3
1.4s 45.75nm 5.5mb
MMK 83.77 34 ePc 27 52.50 1.3
BNI 83.96 35 P 27 50.00 -2.0
VDL 84.08 33 ePc 27 54.00 1.3
TMA 84.12 33 ePc 27 53.40 0.5
OSS 84.21 32 ePc 27 54.30 1.0
SQTA 84.23 31 eP 27 53.00 -0.3
1.6s 72.70nm 5.7mb
ic 27 54.50
i 28 16.40
MAL 84.27 47 iPc 27 54.50 1.0
OGA 84.44 32 eP 27 55.30 0.8
BHG 84.51 30 eP 27 55.20 0.6
1.7s 100.00nm 5.8mb
KRA 85.15 25 eP 27 58.10 0.4

1.1s 50.00nm 5.6mb
SAL 85.23 33 P 28 03.00 4.9
FVI 85.38 31 P 27 58.50 -0.4
ZST 85.73 28 eP 28 00.60 0.0
SPC 85.99 25 eP 28 02.20 0.0
SRO 86.49 27 iP 28 05.10 0.7
SOB1 86.50 104 eP 28 09.40 4.5
e 28 28.70
PPD 87.28 121 eP 28 12.50 3.9
SKO 92.64 28 eP 28 19.00 -14.5
VAY 93.62 28 eP 28 38.00 0.0
WB5 114.72 263 ePKP 34 05.90 2.9
ASPA 117.12 260 ePKP 34 10.60 3.0
1.2s 5.70nm
BCAO 122.35 53 iPKPc 34 21.80 4.1
0.6s 6.00nm
BUL 146.89 67 ePKP 35 00.40 -2.7
PRY 149.90 78 ePKP 35 15.00 7.4
SLR 149.91 75 iPKPd 35 11.30 3.6
0.9s 37.82nm
BPI 149.94 76 ePKP 35 10.80 3.0
140 obs. associated

& OCT 24, 1990 06h 19m 07.00s
38.048 N 119.088 W
DEPTH = 21.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.3 (BRK).

CMB 1.02 270 iP 19 25.40 -0.6
FRI 1.16 205 iPd 19 27.90 -0.2
LLA 2.06 227 i(P) 19 43.60 2.7
MHC 2.14 252 iP 19 44.90 2.6
iS 20 06.20
SAO 2.27 236 iPc 19 45.90 1.9
ZSP 2.51 269 ePc 19 52.20 4.9
eS 20 26.30
6 obs. associated

& OCT 24, 1990 06h 27m 13.00s
38.055 N 119.147 W
DEPTH = 8.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 2.9 (BRK).

CMB 0.98 269 iPc 27 30.70 -1.1
iS 27 43.80
FRI 1.15 203 iPc 27 33.80 -0.9
iS 27 48.60
LLA 2.03 225 ePd 27 48.60 0.7
MHC 2.10 251 eP 27 49.80 0.7
SAO 2.24 236 iP 27 51.50 0.6
PRI 2.26 213 eP 27 52.70 1.3
ORV 2.37 310 eP 27 53.80 1.0
eS 28 24.40
MIN 2.98 321 eP 28 06.80 5.2
8 obs. associated

& OCT 24, 1990 06h 32m 24.20s
38.063 N 119.158 W
DEPTH = 5.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 2.5 (BRK).

CMB 0.97 269 ePc 32 41.80 -1.3
iS 32 54.90
FRI 1.16 202 eP 32 45.30 -1.0
iS 33 00.50
LLA 2.03 225 eP 33 00.30 0.9
eS 33 27.20
SAO 2.23 235 iP 33 03.00 0.6
PRI 2.26 213 eP 32 56.60 -6.4
ORV 2.36 310 eP 33 04.80 0.6
6 obs. associated

• OCT 24, 1990 06h 55m 36.66± 1.38s
3.165 S ±11.2km 142.076 E ±10.6km
DEPTH = 39.5 ± 13.2 km
5.2mb (4 obs.) 4.1Msz (2 obs.)
NEAR N COAST OF PAPUA NEW GUINEA(200)

JAY 1.51 295 ePc 56 02.20 0.5
MNDI 3.36 152 eP 56 29.00 0.7
PMG 8.00 141 eP 57 30.00 -3.3X
RAB 10.12 96 eP 58 02.00 -0.7
QIS 17.45 188 eP 59 31.50 -7.4X
0.8s 3.00nm 3.5mb X
WB5 18.24 204 eP 59 48.00 -0.6
eS 03 25.10
ASPA 21.86 200 eP 00 26.80 -1.1
1.0s 5.10nm 3.9mb
Z 19s 0.60um 4.0Msz
eS 04 29.30
WARB 27.26 211 eP 01 20.00 0.6
SNG 42.63 284 eP 03 21.80 -9.5X
LZH 52.90 321 eP 04 50.00 -1.4
Z 20s 0.24um 4.2Msz
GUN 62.22 304 P 05 57.46 0.0
PKI 62.50 303 P 06 00.00 0.7
KKN 62.68 303 P 06 00.24 -0.1
0.9s 23.00nm 5.3mb
DMN 62.76 303 P 06 00.98 0.0
0.9s 16.00nm 5.2mb
GKN 63.28 303 P 06 04.24 -0.1
0.9s 21.00nm 5.3mb
CNCB 144.29 125 PKP 15 10.00 -1.9
LPB 144.34 124 ePKP 15 14.00 2.2
ZOBO 144.45 124 PKP 15 11.00 -1.2
CCH 145.47 127 ePKP 15 16.00 2.4
SIV 150.23 130 PKP 15 25.40 4.6X
PPD 151.74 153 ePKP 15 29.30 6.4X
S.D. = 1.3 on 16 of 21 obs.

& OCT 24, 1990 06h 58m 05.00s
38.042 N 119.162 W
DEPTH = 2.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 2.5 (BRK).

CMB 0.97 270 iP 58 22.70 -1.4
iS 58 35.70
FRI 1.13 203 iPc 58 25.70 -1.3
iS 58 40.80
TNP 1.54 88 eP 58 32.50 -1.2
LLA 2.01 225 eP 58 40.80 0.4
eS 59 07.40
SAO 2.22 236 iP 58 43.60 0.2
ORV 2.37 310 eP 58 46.10 0.5
eS 59 15.20
6 obs. associated

& OCT 24, 1990 08h 20m 04.30s
38.310 N 88.990 W
DEPTH = 5.0km (geophysicist)
SOUTHERN ILLINOIS (488)
<SLM-P>. mbLg 3.5 (NEIS), 3.2
(TUL). MD 3.4 (SLM). Felt (IV)
at Bluford, Dix, Richview,
Tamaroa and Woodlawn; (III) at
Centralia, Dahlgren, Irvington,
Johnsonville, Kell, McLeansboro,
Murphysboro, Radom and Texico.

BPIL 0.33 109 iPd 20 11.12 0.1
S 20 14.46
CSIL 0.70 167 ePc 20 17.30 -0.9
WSIL 0.74 75 eP 20 18.13 -1.0
S 20 28.12
NHIL 0.75 120 eP 20 18.03 -1.3
S 20 27.61
WDIN 1.03 102 ePd 20 22.58 -1.6
S 20 36.78
SLM 1.03 289 eP 20 23.12 -1.1
S 20 36.78
ELC 1.04 190 eP 20 23.20 -1.2
GOIL 1.07 162 eP 20 23.29 -1.6
FVM 1.18 254 iPd 20 25.56 -1.2
S 20 41.35
CCMO 1.23 290 iP 20 26.50 -1.1
TYS 1.26 280 eP 20 26.99 -1.1
DON 1.36 214 ePc 20 28.98 -0.8
DWM 1.55 195 eP 20 32.98 0.3
S 20 53.59
THI 1.68 49 P 20 50.00 15.6
S 21 25.00
i 22 03.00
LDMO 1.95 194 eP 20 38.54 0.2
S 21 04.31
ACTN 1.98 188 eP 20 38.55 -0.2
S 21 05.37
UTMA 2.01 180 iPc 20 38.96 -0.3
S 21 05.46
DRTN 2.19 188 iPd 20 41.48 -0.4
S 21 10.50
ECD 2.37 199 eP 20 44.09 -0.4
MILT 2.47 175 ePc 20 45.16 -0.6
S 21 19.50
LRDO 2.70 211 eP 20 49.18 0.0
S 21 27.48
AFAR 2.97 224 eP 20 52.30 -0.7
S 21 28.16
SFTN 3.06 196 eP 20 52.92 -1.3
S 21 29.18
PWLA 3.41 167 eP 20 56.98 -2.2
S 21 37.72
WLA 3.41 204 iPd 20 58.02 -1.2
S 21 47.96
OLY 3.44 216 eP 20 58.40 -1.2
RSCP 3.85 134 eP 21 04.20 -1.3
GBTN 4.65 123 eP 21 15.10 -1.7
TKL 4.94 121 eP 21 19.50 -1.5
TUL 5.94 248 (Pn) 21 35.70 0.7
1.0s 2.30nm 3.9mb X
iLg 22 10.10
NAV 6.57 96 eP 21 43.20 -0.8
BLA 6.88 97 eP 21 44.70 -3.6
MEO 8.48 248 e(P) 22 07.20 -3.6
33 obs. associated

% OCT 24, 1990 08h 32m 03.79± 0.71s
44.371 N ± 7.2km 7.381 E ± 5.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

STV 0.13 198 P 32 07.32 0.3
S 32 09.36
ENR 0.15 169 P 32 07.36 0.1
S 32 09.90
PZZ 0.24 304 P 32 08.90 -0.1
S 32 12.48
ROB 0.36 102 P 32 11.44 0.2
S 32 16.57
IMI 0.59 141 P 32 15.44 -0.3
FIN 0.62 105 P 32 15.87 -0.4
PCP 0.85 78 P 32 20.50 0.3
S.D. = 0.3 on 7 of 7 obs.

& OCT 24, 1990 08h 44m 48.70s
38.028 N 119.157 W
DEPTH = 1.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 2.6 (BRK).

CMB 0.97 271 iPc 45 06.50 -1.5
iS 45 19.60
FRI 1.12 203 iPd 45 09.50 -1.1
iS 45 24.20
TNP 1.53 87 eP 45 15.50 -2.0
LLA 2.00 226 eP 45 24.40 0.3
SAO 2.22 236 iP 45 27.50 0.3
PRI 2.24 213 eP 45 28.50 1.0
ORV 2.38 311 ePd 45 31.00 1.4
7 obs. associated

% OCT 24, 1990 10h 02m 27.68± 1.19s
17.085 N ±13.0km 62.109 W ± 7.6km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.9 (FDF).

BPA 0.24 99 eP 02 33.00 0.1
S 02 39.10
NEV 0.44 277 eP 02 36.71 0.0
S 02 45.00
SEG 0.89 139 eP 02 44.39 -0.4
S 02 58.60
PAG 1.13 159 eP 02 49.20 0.4
S 03 07.30
DOG 1.15 156 eP 02 49.10 -0.1
S.D. = 0.4 on 5 of 5 obs.

? OCT 24, 1990 11h 00m 56.69± 3.34s
25.896 N ±35.0km 109.942 W ±11.5km
DEPTH = 10.0km (geophysicist)
3.4mb (1 obs.)
GULF OF CALIFORNIA (49)

ALO 9.50 18 ePc 03 17.00 0.2
PLM 9.56 323 eP 03 25.00 7.4X
GSC 11.08 329 eP 03 40.00 1.7

24d 11h

SBB	11.09	324	eP	03	38.00	-0.5
CLC	11.87	328	eP	03	49.00	0.0
ISA	12.18	325	eP	03	53.00	-0.2
TUL	15.70	47	eP	04	44.00	4.4X
	1.1s		3.10nm			3.4mb
	Z 20s		0.58um			4.0Msz
			eLg	09	16.90	
			LR	09	17.00	
BW06	16.84	1	eP	04	53.50	-0.8
OLY	18.52	54	eP	05	15.50	0.5
LRM	19.99	355	eP	05	31.90	-0.5
MBC	50.62	357	eP	09	57.00	-0.4
	S.D. = 0.9		on 9 of 11 obs.			

OCT 24, 1990 11h 16m 44.94± 0.38s
39.847 N ± 3.6km 30.251 E ± 3.6km
DEPTH = 25.8 ± 2.7 km
4.4mb (9 obs.) 3.3Msz (1 obs.)
TURKEY (366)
MD 4.4 (ISK). Felt at Burso and Eskisehir.

GPA	0.44	6	iPg	16	51.80	-2.5
IZI	0.77	310	iPg	16	59.30	-0.4
YLV	0.98	317	iPg	17	02.30	-0.8
HRT	1.07	336	iPg	17	04.30	0.0
GBZT	1.12	327	iPgc	17	05.00	0.0
			iSg	17	19.00	
ISK	1.52	324	ePn	17	12.00	1.4
KHL	1.62	201	iPn	17	12.50	0.2
BNT	1.86	287	iPn	17	16.30	0.7
EDC	1.90	286	iPn	17	16.00	-0.2
CTT	1.90	314	iPn	17	16.80	0.6
BBTK	1.93	89	iPc	17	17.00	0.2
BCK	2.40	174	iPn	17	23.30	-0.1
DMK	2.73	317	iPn	17	28.60	0.5
IZM	2.74	239	ePn	17	27.00	-1.2
EZN	3.02	271	ePn	17	32.40	0.2
KAS	3.08	59	ePn	17	33.00	-0.1
			iSg	18	22.00	
SMG	3.42	232	eP	17	48.00	10.2X
KSL	3.76	188	eP	17	42.90	0.3
JMB	3.81	315	eP	17	45.00	1.7
RDO	3.82	291	eP	17	43.80	0.3
KDZ	4.09	298	eP	17	48.00	0.6
PSN	4.13	339	eP	17	50.00	2.1
DIM	4.20	303	eP	17	49.00	0.2
RZN	4.59	295	iPd	17	53.00	-1.6
KVT	4.59	73	ePn	17	54.40	-0.1
APE	4.63	235	eP	18	13.60	18.5X
PLD	4.77	300	eP	17	58.00	1.1
PVL	4.99	314	eP	18	00.00	-0.1
PLG	5.24	278	eP	18	03.00	-0.7
MMB	5.25	291	iPc	18	04.00	0.1
PGB	5.32	302	eP	18	04.00	-0.9
NEO	5.46	267	eP	18	06.40	-0.3
BUC1	5.48	326	ePc	18	48.00	41.0X
BUC	5.51	327	eP	18	36.00	28.6X
KKB	5.80	293	eP	18	10.00	-1.5
ISR	5.95	334	eP	17	21.50	-52.2X
VAY	6.03	287	iPn	18	14.60	-0.2
VRI	6.55	338	ePd	18	21.00	-1.1
CMP	6.64	326	ePc	18	12.00	-11.4X
SKO	7.00	290	ePn	18	25.00	-3.5X
TNR	7.28	325	ePd	18	32.00	-0.3
OHR	7.32	283	ePn	18	33.00	0.1
BZS	8.58	315	eP	18	47.50	-2.9X
LBF	20.31	299	eP	21	21.40	-0.2
	0.8s		7.40nm			4.1mb
LOR	20.45	300	eP	21	22.50	-0.5
	0.8s		80.55nm			5.1mb
	Z 20s		0.13um			3.3Msz
AVF	20.70	298	iPc	21	25.50	-0.1
	0.9s		14.75nm			4.4mb
HFS	22.80	338	eP	21	46.60	0.1
	0.6s		4.00nm			4.1mb
LDF	23.33	302	iPc	21	51.80	0.0
	0.8s		17.45nm			4.6mb
GRR	23.78	301	iPc	21	56.20	0.1
	0.8s		16.10nm			4.6mb
LPF	23.84	300	iPc	21	56.90	0.2
	0.8s		8.05nm			4.3mb
NB2	24.26	337	P	22	00.80	0.1
	0.7s		2.60nm			3.9mb
BCAO	36.81	200	iPc	23	53.20	0.6
	0.5s		7.00nm			4.8mb
GKN	46.01	88	P	25	00.00	-8.2X

S.D. = 0.8 on 44 of 53 obs.

OCT 24, 1990 11h 27m 10.29± 0.70s
36.395 N ± 7.9km 140.529 E ± 8.3km
DEPTH = 101.9 ± 5.7 km
4.5mb (10 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ	0.34	237	iPd	27	25.20	-0.3
			S	27	35.50	
CHJJ	1.29	255	P	27	34.30	-0.1
			S	27	52.10	
NIIJ	1.49	305	P	27	37.80	1.0
			S	27	58.40	
YAMJ	1.82	348	P	27	41.90	0.8
			eS	28	05.50	
MAT	1.88	275	iPd	27	42.50	0.7
			eS	28	05.00	
MTMJ	2.20	276	P	27	47.40	1.2
IIDJ	2.31	247	P	27	48.60	1.0
			S	28	19.60	
OFUJ	2.83	18	P	27	54.00	-0.5
			eS	28	26.20	
TSRJ	3.79	258	P	28	08.80	1.2
AOMJ	4.16	358	eP	28	12.40	-0.3
WKYJ	4.58	243	P	28	17.80	-0.8
			S	29	08.80	
TKSJ	5.83	247	P	28	35.00	-0.7
			S	29	43.40	
YONJ	5.87	260	P	28	36.40	0.1
			S	29	46.70	
MRRJ	6.04	4	eP	28	36.60	-1.9
			eS	29	38.60	
HOOJ	6.35	19	eP	28	40.70	-2.1
			S	29	48.40	
KUSJ	7.43	24	P	28	53.90	-3.7X
			S	30	09.80	
ASAJ	7.88	11	eP	28	59.70	-4.1X
			eS	30	26.40	
BJI	19.46	288	eP	31	27.00	-4.3X
	1.5s		26.00nm			4.3mb
LZH	29.48	280	P	33	13.00	6.2X
GUN	46.51	276	P	35	29.14	-0.4
	0.9s		18.00nm			4.9mb
PKI	47.03	276	P	35	32.58	-1.1
KKN	47.04	276	P	35	32.88	-0.7
DMN	47.26	276	P	35	34.74	-0.6
GKN	47.47	277	P	35	36.26	-0.6
	1.0s		8.00nm			4.5mb
INK	55.28	27	eP	36	35.00	0.3
WB5	56.27	187	eP	36	40.50	-1.9
ASPA	60.06	187	iPd	37	06.80	-1.9
	0.8s		7.00nm			4.8mb
GBA	60.46	265	P	37	18.00	6.4X
HFS	74.37	335	eP	38	37.20	-1.0
	0.8s		5.30nm			4.4mb
NB2	74.50	337	P	38	39.00	0.1
	0.8s		4.60nm			4.4mb
FFC	74.63	32	eP	38	40.00	0.3
	0.8s		12.00nm			4.8mb
LRM	75.10	44	eP	38	43.70	0.8
TNP	76.84	52	iP	38	54.00	1.2
	1.0s		7.00nm			4.4mb
DAU	79.11	48	iP	39	06.80	1.5
	1.0s		1.00nm			3.6mb
PV09	81.59	48	eP	39	19.50	1.0
ALQ	85.54	49	eP	39	39.20	0.7
	1.0s		3.50nm			4.3mb
			e	40	05.00	
ZOBO	147.62	59	PKP	46	44.00	1.5
			i	46	45.80	
LPB	147.82	60	ePKP	46	43.00	0.4
CNCB	148.09	60	PKP	46	45.00	1.8X
			i	46	48.00	
SIV	152.04	49	PKP	46	49.70	1.2
			i	46	56.00	
	S.D. = 1.1		on 34 of 40 obs.			

? OCT 24, 1990 11h 50m 54.47± 0.96s
40.836 N ± 6.5km 28.130 E ±10.3km
DEPTH = 5.0km (geophysicist)
TURKEY (366)
MD 2.1 (ISK).

CTT	0.38	36	iPg	51	02.60	0.4
BNT	0.51	199	iPg	51	04.80	0.2
			eSg	51	12.30	
DMK	1.02	344	ePn	51	14.00	-0.3
IZI	1.14	116	ePn	51	16.00	-0.3
	S.D. = 0.6		on 4 of 4 obs.			

OCT 24, 1990 11h 51m 46.71± 0.28s
44.773 N ± 2.9km 10.311 E ± 2.7km
DEPTH = 11.9 ± 1.9 km
NORTHERN ITALY (545)
MD 3.5 (TRI). ML 3.5 (LDG).

BOB	0.61	270	P	51	59.20	0.2
			eSg	52	08.50	
MME	0.64	154	Pc	51	59.50	-0.1
BDI	0.74	164	Pd	52	01.00	-0.1
			eSg	52	12.00	
SAL	0.85	10	Pd	52	04.70	1.8
			eSg	52	18.80	
PII	1.06	172	Pd	52	07.30	0.8
			eSg	52	21.80	
MDI	1.09	337	P	52	08.20	1.2
			eSg	52	26.00	
PCP	1.28	260	P	52	10.53	0.2
			S	52	27.05	
PGD	1.35	131	P	52	13.50	2.0
			eSg	52	30.50	
SFI	1.40	127	P	52	13.00	1.1
			eSn	52	30.00	
CKI	1.49	257	P	52	14.10	0.8
			eSg	52	34.20	
VAI	1.54	316	P	52	16.20	2.2
			eSn	52	35.00	
CTI	1.59	36	P	52	14.40	-0.4
			eSn	52	38.00	
FIN	1.61	250	P	52	15.13	0.1
			S	52	31.74	
TMA	1.67	323	ePc	52	16.30	0.2
ROB	1.81	256	P	52	17.95	0.0
VDL	1.81	341	ePc	52	19.50	1.4
ORX	1.86	298	P	52	18.33	-0.4
OSS	1.92	357	ePc	52	20.90	1.3
IMI	1.94	244	P	52	19.74	-0.1
MMK	2.09	309	ePc	52	24.40	2.2
SAOF	2.13	249	Pn	52	22.89	0.3
			Sg	52	49.87	
ENR	2.14	256	P	52	23.01	0.2
			S	52	44.90	
OGA	2.15	13	iPnc	52	24.60	1.5
RSP	2.20	281	P	52	23.27	-0.4
			S	52	44.44	
STV	2.20	257	P	52	23.75	0.1
			S	52	47.17	
AUTN	2.21	250	Pn	52	24.04	0.1
			Sg	52	54.29	
SBF	2.26	247	Pn	52	24.40	-0.1
			Sn	52	53.60	
ARV	2.28	123	P	52	24.50	-0.3
LLS	2.29	337	ePd	52	26.90	1.9
PZZ	2.31	264	P	52	24.78	-0.5
			S	52	47.92	
AURF	2.32	249	Pn	52	25.69	0.3
			Sg	52	56.37	
TOUF	2.32	252	Pn	52	27.66	2.1
LSD	2.34	288	P	52	26.60	0.8
REVF	2.35	245	Pn	52	25.84	0.0
			Sg	52	55.46	
ASS	2.40	134	P	52	26.00	-0.5
PGF	2.42	204	Pn	52	26.36	-0.4
			Sg	52	55.35	
DIX	2.42	304	ePc	52	25.00	-2.0
MVIF	2.43	250	Pn	52	27.66	0.7
			Sg	52	59.66	
FVI	2.51	43	P	52	28.40	0.5
RRL	2.51	275	P	52	28.72	0.5
SOTA	2.53	14	iPnc	52	29.50	1.2
	0.3s		18.60nm			
			iSn	53	14.20	
BNI	2.60	277	P	52	29.00	-0.4
			eSn	52	58.50	
TRI	2.61	68	iPnc	52	27.80	-1.6
			iSn	52	59.70	
			iSg	53	12.20	
LPG	2.62	287	Pn	52	30.30	0.4
			Sn	53	01.60	
LPL	2.64	288	Pn	52	30.20	0.1
CALN	2.66	249	Pn	52	30.82	0.5
			Sg	53	05.62	
EMS	2.71	300	ePc	52	33.50	2.4

VOY	2.82	62	ePn	52	30.50	-2.0
			e(Pg)	52	37.00	
			eSn	53	30.80	
FRF	2.90	247	Pn	52	33.60	0.1
			Sn	53	08.40	
MNS	2.94	143	P	52	33.40	-0.8
			eSn	53	07.00	
CEY	3.06	70	eP	52	41.50	5.7X
			e(Sn)	53	21.50	
LMR	3.10	244	Pn	52	35.80	-0.4
			Sn	53	12.40	
LRG	3.14	247	Pn	52	37.40	0.6
LJU	3.23	65	ePn	52	29.40	-8.9X
			e(Sn)	53	29.00	
VBY	3.58	76	eP	52	45.00	1.9
			eSn	53	19.00	
BSF	3.91	323	Pn	52	47.00	-1.0
			Sn	53	30.40	
CDF	4.20	331	Pn	52	50.80	-1.2
			Sn	53	36.00	
HAU	4.24	321	Pn	52	51.50	-1.0
			Sn	53	38.60	
WET	4.71	21	ePn	52	57.30	-2.0
KHC	4.90	26	ePg	53	00.00	-1.9
			Sg	53	55.20	
SMF	4.90	295	Pn	53	01.60	-0.4
			Sn	53	54.80	
LBF	4.94	299	Pn	53	01.80	-0.8
			Sn	53	56.00	
LOR	5.14	301	Pn	53	04.20	-1.1
			Sn	54	01.00	
AVF	5.27	295	Pn	53	06.20	-0.9
SSF	5.27	298	Pn	53	06.20	-1.0
			Sn	54	04.00	
BGF	5.53	291	Pn	53	09.80	-1.0
			Sn	54	10.00	
MAF	5.63	288	Pn	53	10.80	-1.5
CAF	5.87	274	Pn	53	14.60	-0.9
TCF	5.89	288	Pn	53	15.00	-0.9
			Sn	54	20.00	

S.D. = 1.1 on 67 of 69 obs.

OCT 24, 1990 12h 18m 16.41± 0.16s
15.794 S ± 5.4km 172.112 W ± 4.7km
DEPTH = 32.4km (18 depth phases)
5.3mb (33 obs.) 4.9Msz (8 obs.)
SAMOA ISLANDS REGION (169)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 29C
Centroid Location:
Origin Time 12:18:21.3 0.4
Lat 16.16S 0.06 Lon 171.94W 0.04
Dep 45.5 3.0 Half-duration 1.7
Moment Tensor; Scale 10**17 Nm
Mrr= 0.76 0.03 Mtt= 0.27 0.05
Mff=-1.03 0.05 Mrt=-0.28 0.05
Mrf=-0.02 0.06 Mtf= 0.05 0.04
Principal Axes:
T Val= 0.09 Plg=65 Azm=177
N 0.14 25 358
P -1.04 0 268
Best Double Couple:Mo=1.0*10**17
NP1:Strike=335 Dip=50 Slip= 57
NP2: 200 50 123

MBU	8.88	261	eP	20	30.00	4.5X
VUN	9.29	255	eP	20	35.00	3.8X
SVA	9.31	254	eP	20	35.70	4.2X
BKM	18.91	262	iPd	22	32.50	-4.6X
DZM	21.21	250	iPc	23	00.30	-1.6
AFR	21.47	98	iP	23	04.60	0.3
	0.9s		35.00nm			4.8mb
PAE	21.66	98	iP	23	06.40	0.1
	0.9s		45.00nm			4.9mb
PPT	21.66	98	iP	23	06.50	0.2
	0.9s		55.00nm			5.0mb
PPN	21.80	98	iP	23	07.70	0.1
	0.9s		25.00nm			4.6mb
TVO	21.97	98	iP	23	09.60	0.1
	0.9s		55.00nm			5.0mb
HBZ	23.32	200	eP	23	30.00	7.5X
PMO	23.36	91	iP	23	34.20	11.2X
	0.9s		60.00nm			
VAH	23.59	92	iP	23	36.60	11.3X
	0.9s		35.00nm			
TPT	23.63	91	iP	23	37.10	11.5X
	0.9s		70.00nm			
PUZ	23.76	199	eP	23	27.60	0.7
			e	23	38.10	40km
RUV	23.84	92	iP	23	38.70	11.0X
	0.9s		55.00nm			
NOZ	24.33	199	P	23	33.40	1.1
			e	23	40.00	23km
PGZ	26.72	200	P	23	54.00	-0.7
			e	24	05.10	42km
MNG	26.98	201	eP	23	55.50	-1.7
			e	24	05.20	35km
WEL	27.82	201	eP	24	14.00	9.2X
			S	29	07.00	
THZ	28.93	204	eP	24	19.50	4.7X
KHZ	29.26	202	P	24	15.40	-2.2
			e	24	24.80	33km
LTZ	30.04	203	P	24	21.00	-3.8X
			e	24	30.30	32km
BRS	34.51	245	iP	25	04.10	0.1
COO	36.04	240	iPc	25	16.90	0.0
RMQ	37.88	247	iPc	25	30.80	-1.6
CNB	39.50	233	iPc	25	47.20	1.3
			e	26	12.00	107kmX
CAN	39.78	233	eP	25	49.00	0.8
BWA	39.95	235	eP	25	49.00	-0.7
CMS	41.30	240	iPd	26	01.00	0.3
STK	44.92	241	iPd	26	31.30	1.1
	1.3s		32.00nm			5.1mb
BFD	45.31	233	eP	26	35.00	1.8
QIS	45.99	257	iPc	26	38.20	-0.6
	0.9s		6.00nm			4.5mb
ADE	47.84	237	iPc	26	53.20	-0.1
	1.0s		80.00nm			5.7mb
WB5	50.94	257	eP	27	16.50	-0.7
ASPA	51.17	252	iPc	27	18.20	-0.7
	1.1s		168.80nm			5.9mb
Z	21s		0.90um			4.8Msz
			iS	34	30.70	
GUMO	51.59	302	eP	27	35.00	12.9X
MTN	54.94	265	iPd	27	46.80	-0.2
	0.6s		85.00nm			6.0mb
FORR	56.31	243	eP	27	55.60	-1.1
WARB	57.67	249	eP	28	05.80	-0.6
	0.6s		17.00nm			5.3mb
SBA	62.96	185	iPc	28	42.30	0.6
MBL	64.35	254	iPc	28	51.30	-0.4
KLB	65.15	242	eP	28	55.80	-1.0
	0.7s		27.00nm			5.5mb
BAL	66.12	243	eP	29	02.30	-0.7
MUN	66.44	242	iPd	29	04.70	-0.3
	1.0s		68.00nm			5.7mb
MRWA	66.86	245	iPd	29	07.20	-0.6
NANU	68.11	252	eP	29	15.70	0.0
	0.5s		9.00nm			5.1mb
MAT	70.04	319	(P)	29	26.00	-1.3
SYP	70.41	44	eP	29	30.00	0.3
PRS	70.59	42	eP	29	30.10	-0.5
			epP	29	39.50	30km
PCC	70.67	40	eP	29	30.20	-0.8
SAO	70.80	41	eP	29	32.00	0.1
PRI	70.92	42	eP	29	33.80	1.0
			epP	29	42.30	27km
BKS	71.00	40	e(P)	29	33.20	0.1
	1.0s		48.00nm			5.5mb
MHC	71.03	41	eP	29	34.30	0.8
MWC	71.53	45	eP	29	36.00	-0.6
PLM	71.86	46	eP	29	38.00	-0.6
SBB	71.95	45	eP	29	38.00	-0.9
ISA	72.07	44	eP	29	39.00	-0.6
CMB	72.25	41	eP	29	40.20	-0.4
			epP	29	49.80	31km
ORV	72.50	39	eP	29	41.70	-0.3
WDC	72.53	37	eP	29	42.00	-0.1
			epP	29	51.50	31km
CLC	72.74	44	eP	29	44.00	0.4
TPC	72.84	46	eP	29	44.00	-0.2
MIN	72.93	38	eP	29	44.30	-0.4
GSC	72.99	45	eP	29	45.00	-0.1
TNP	74.29	42	P	29	52.00	-0.7
	1.0s		22.50nm			5.1mb
			pP	30	02.30	33km
SPA	74.31	180	iPc	29	52.10	-0.2
	1.1s		77.98nm			5.6mb
KDC	75.05	11	P	29	55.70	-0.7
BMW	75.99	32	P	30	02.00	-0.1
LON	76.91	33	P	30	07.00	-0.2
GMW	76.93	32	P	30	07.30	0.0
RMW	77.38	32	P	30	09.40	-0.4
			pP	30	19.00	31km
SVW	77.77	8	iPc	30	10.50	-1.1
	1.2s		24.70nm			5.1mb
PMR	79.26	11	ePc	30	18.40	-1.3
	1.4s		116.40nm			5.7mb
TTA	79.47	7	iPc	30	21.50	0.5
	1.1s		50.60nm			5.4mb
PNT	79.69	32	ePc	30	22.00	-0.3
	0.8s		19.00nm			5.1mb
PV09	79.89	45	P	30	23.70	-0.4
ALQ	80.11	49	eP	30	24.00	-1.2
	1.5s		48.61nm			5.3mb
Z	20s		0.35um			4.7Msz
			e	30	35.00	36km
ANMO	80.11	49	P	30	25.00	-0.2
	1.3s		38.46nm			5.2mb
			pP	30	35.00	32km
TOA	80.30	12	iPc	30	25.80	0.4
	1.0s		135.80nm			5.9mb
NEW	80.34	34	P	30	25.20	-0.7
	1.2s		13.26nm			4.8mb
LRM	81.56	38	eP	30	32.30	-0.3
BW06	81.74	41	P	30	32.40	-1.2
	1.2s		26.26nm			5.1mb
FBA	82.55	10	iPc	30	36.80	-0.2
	0.8s		83.50nm			5.9mb
IMA	82.78	7	iPc	30	38.70	0.3
	1.3s		38.70nm			5.3mb
GOL	83.04	46	P	30	40.00	-0.4
	1.1s		34.29nm			5.4mb
			pP	30	50.00	32km
GLD	83.16	46	P	30	41.30	0.3
			pP	30	51.40	32km
SES	84.82	34	ePc	30	48.40	-0.5
			pP	30	59.00	33km
MEO	85.92	52	iPc	30	54.40	-0.3
BJI	86.64	313	eP	30	59.00	0.9
	1.2s		49.00nm			5.6mb
Z	24s		0.32um			4.6MszX
			eS	41	40.00	
			eSS	47	24.00	
MAW	87.81	198	iPc	31	03.80	0.5
	1.0s		70.00nm			5.9mb
SIO	88.01	52	eP	31	04.60	-0.2
IPM	88.22	275	ePd	31	09.20	2.9X
INK	88.36	13	eP	31	05.50	-0.2
			pP	31	16.00	33km
TUL	88.46	52	eP	31	08.30	1.3
Z	21s		0.49um			4.9Msz
			LR	59	17.00	
SNG	89.32	278	eP	31	13.80	2.3
LNVI	89.90	125	eP	31	14.00	0.1
SAN	90.65	125	eP	31	17.00	-0.5
PEL	90.74	125	ePc	31	18.00	0.1
FCH	90.99	125	eP	31	19.50	0.1
OLY	91.64	54	P	31	20.00	-1.8
FFC	91.75	33	eP	31	21.00	-0.8
	1.3s		38.00nm			5.6mb
NST	92.08	286	eP	31	27.50	3.4X
CHG	94.01	288	eP	31	35.00	2.0
LZH	94.46	306	eP	31	32.00	-3.0X
	1.5s		17.00nm			5.3mb
Z	35s		0.39um			4.6MszX
MBC	97.07	11	eP	31	46.00	0.2
QUE	124.32	296	ePKP	37	14.80	0.3
MAIO	129.97	304	ePKP	37	25.00	0.0
HFS	135.52	356	ePKP	37	44.00	9.4X
	3.3s		527.10nm			
CLL	144.33	354	iPKPc	37	47.90	-2.9X
	0.9s		11.00nm			
			e	38	06.00	
KSP	144.39	351	ePKP	37	48.80	-2.1
			ec	37	59.40	
			e	38	07.00	
KRA	144.46	347	iPKPd	37	49.20	-1.8
			i	38	07.70	
KVT	144.96	322	ePKP	37	52.40	0.2
ENN	145.08	2	ePKP	37	51.50	-0.5
	1.4s		92.00nm			
MOX	145.11	356	iPKPc	37	51.00	-1.1
	1.6s		59.00nm			
MEM	145.24	2	iPKP	38	02.34	10.1X
SNF	145.25	4	PKP	38	10.30	18.0X
HOF	145.42	355	ePKP	37	51.90	-0.8
PRU	145.47	352	PKPc	37	52.50	-0.2
	2.0s		109.40nm			

24d 12h

		e	38	03.50		
TNS	145.66	359 ePKPc	37	52.80	-0.4	
DOU	145.68	4 PKP	37	53.30	0.2	
		e	38	03.50		
GRF	146.08	356 ePKPc	37	54.80	1.0	
	Z 22s	0.20um			4.9Msz	
		ec	38	06.20		
		e	38	13.40		
KAS	146.10	324 ePKP	37	56.00	1.8	
FLN	146.41	10 ePKP	37	55.20	0.9	
	1.6s	124.40nm				
	Z 20s	0.20um			4.9Msz	
KHC	146.43	353 iPKPc	37	55.20	0.8	
		i	38	05.50		
PSZ	146.47	345 ePKP	37	55.20	0.6	
LDF	146.64	10 ePKP	37	55.80	1.1	
	1.5s	73.10nm				
GRR	146.71	11 ePKP	37	56.20	1.4	
	1.3s	75.80nm				
NAI	146.78	242 iPKPc	37	54.70	-1.6	
VKA	146.88	350 iPKPc	37	57.50	2.4X	
		i	38	08.00		
		i	38	16.00		
GWF	146.91	0 PKP	37	56.80	1.6	
SRO	146.93	347 e(PKP)	37	57.70	2.5X	
LPF	147.02	11 ePKP	37	57.00	1.7	
	1.2s	107.10nm				
CMP	147.26	337 ePKPc	38	04.00	8.1X	
CDF	147.47	1 PKP	37	58.35	2.2	
WLS	147.47	1 PKP	37	58.36	2.2	
FUR	147.60	356 iPKPd	37	59.50	3.2X	
VITF	147.63	2 PKP	37	58.28	2.0	
ECH	147.66	1 PKP	37	58.70	2.3	
BBTK	147.68	323 ePKP	38	00.00	3.2X	
HAU	147.85	2 iPKPc	37	59.80	3.1X	
	1.2s	53.55nm				
	Z 20s	0.20um			4.9Msz	
BHG	147.90	354 ePKP	38	00.50	3.7X	
MOF	148.03	1 PKP	37	59.65	2.6X	
BSF	148.04	1 PKP	37	59.76	2.6X	
BZS	148.11	342 ePKP	37	59.00	1.9	
GRC	148.34	6 PKP	38	01.04	3.6X	
ZLA	148.40	359 ePKPc	38	15.80	18.1X	
BBS	148.42	0 PKP	37	59.51	1.8	
LOR	148.44	5 iPKPc	38	01.30	3.6X	
	1.4s	56.65nm				
	Z 20s	0.30um			5.1Msz	
SQTA	148.54	356 iPKPc	38	01.30	3.3X	
	1.5s	67.50nm				
		i	38	11.90		
MFF	148.56	11 iPKPc	38	01.40	3.5X	
	1.4s	95.85nm				
SSF	148.61	6 iPKPc	38	01.80	3.9X	
	1.6s	136.80nm				
LBF	148.73	5 iPKPc	38	01.90	3.7X	
	1.6s	108.85nm				
AVF	148.86	6 iPKPc	38	02.00	3.7X	
	1.6s	74.65nm				
OGA	148.91	356 iPKPd	38	03.20	4.5X	
LLS	149.00	359 ePKPd	38	03.30	4.5X	
FVI	149.02	353 PKP	38	01.50	3.0X	
BGF	149.04	7 iPKPc	38	02.80	4.2X	
	1.6s	93.30nm				
SMF	149.06	5 ePKP	38	02.70	4.0X	
	1.6s	74.65nm				
OSS	149.14	357 ePKPc	38	03.30	4.3X	
LSF	149.17	9 iPKPc	38	02.70	3.8X	
	1.4s	61.00nm				
TCF	149.23	8 iPKPc	38	03.10	4.1X	
	1.6s	62.20nm				
PTJ	149.23	349 ePKP	38	01.90	2.8X	
LJU	149.33	351 ePKP	38	02.00	2.9X	
MAF	149.34	7 iPKPc	38	03.80	4.7X	
	1.4s	78.40nm				
VDL	149.37	358 ePKPd	38	04.30	4.9X	
VOY	149.44	352 e(PKP)	38	04.50	5.1X	
AGO	149.57	7 PKP	38	04.04	4.6X	
CEY	149.65	351 ePKP	38	04.00	4.4X	
VVI	149.66	354 PKP	38	04.00	4.4X	
CTI	149.67	355 PKP	38	03.50	3.8X	
PLDF	149.70	6 PKP	38	04.53	4.8X	
VBY	149.74	350 ePKP	38	03.50	3.8X	
TMA	149.77	359 ePKPc	38	04.50	4.5X	
TRI	149.77	352 ePKP	37	58.30	-1.4	
DIX	149.80	1 ePKPd	38	06.10	5.9X	
PYM	149.86	7 PKP	38	04.93	4.9X	
VAI	150.01	359 PKP	38	04.50	4.5X	
MDI	150.07	357 PKP	38	03.50	3.4X	
RJF	150.10	9 iPKPc	38	05.20	4.9X	
	1.4s	61.00nm				
	Z 20s	0.20um			4.9Msz	
LFF	150.33	10 iPKPc	38	05.80	5.2X	
	1.4s	87.15nm				
LPL	150.35	2 iPKPc	38	07.20	6.3X	
	1.6s	55.95nm				
LPG	150.37	2 iPKPc	38	07.30	6.2X	
	1.4s	65.35nm				
LBL	150.39	7 PKP	38	06.67	6.0X	
DSI	150.44	307 ePKP	38	07.00	5.8X	
CAF	150.55	8 iPKPc	38	06.60	5.6X	
	1.6s	80.85nm				
LPO	150.65	10 iPKPc	38	06.60	5.5X	
	1.6s	99.50nm				
BNI	150.82	2 PKP	38	07.80	6.3X	
BOB	151.09	358 PKP	38	04.50	2.6X	
PRNI	151.26	305 ePKP	38	09.00	6.5X	
SKO	151.42	339 ePKP	38	08.20	5.9X	
		i	38	17.50		
		i	38	26.70		
VAY	151.57	336 ePKP	38	08.40	5.8X	
MBH	151.58	304 ePKP	38	10.00	7.1X	
SFI	151.76	354 PKP	38	09.50	6.8X	
PGD	151.82	354 PKP	38	09.50	6.4X	
ARV	152.05	352 PKP	38	09.50	6.2X	
EPF	152.10	12 ePKP	38	10.20	6.8X	
	1.6s	43.55nm				
OHR	152.40	339 ePKP	38	08.20	4.3X	
	1.5s	98.00nm				
		i	38	19.80		
		i	38	23.80		
ASS	152.51	352 PKP	38	11.00	7.0X	
LWI	152.64	231 iPKPc	38	13.20	8.0X	
MNS	153.18	352 PKP	38	07.00	2.1	
AZI	153.46	351 PKP	38	11.50	6.3X	
SDI	153.68	350 PKP	38	06.00	0.4	
BCAO	164.61	224 iPKPc	38	18.10	-0.7	
	0.7s	27.00nm				
		i	38	28.10		
		i	39	14.10		

S.D. = 1.0 on 122 of 205 obs.

& OCT 24, 1990 12h 54m 46.29s
59.986 N 151.049 W
DEPTH = 40.0km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NNL	0.14	295	iP	54	53.98	0.8
BRLK	0.24	160	iP	54	53.52	-0.5
HOM	0.45	223	eP	54	56.02	-0.3
			eS	55	03.61	
CNPM	0.47	192	iP	54	55.78	-0.9
XLV	0.63	213	eP	54	57.69	-1.2
SLKM	0.67	38	iP	54	58.89	-0.5
			eS	55	08.55	
NKA	0.77	353	eP	55	01.98	1.3
SEW	0.81	81	eP	55	00.43	-0.9
RDT	0.90	312	eP	55	02.04	-0.6
RED	0.96	298	eP	55	02.73	-0.9
RSD	0.98	300	eP	55	03.07	-0.8
			eS	55	16.45	
OPT	1.15	254	eP	55	05.63	-0.6
SPU	1.30	338	iP	55	07.95	-0.4
AUE	1.34	243	eP	55	08.46	-0.3
CKL	1.37	333	eP	55	08.85	-0.6
			eS	55	27.41	
AUI	1.37	243	eP	55	09.15	-0.2
CRP	1.40	337	eP	55	09.88	0.1
CGLM	1.41	341	iP	55	09.75	-0.2
BGL	1.44	333	eP	55	10.27	-0.1
PMS	1.46	30	eP	55	10.74	0.1
SUA	1.49	6	eP	55	11.01	-0.1
NCG	1.52	340	eP	55	11.40	-0.2
PDB	1.60	264	eP	55	11.75	-0.7
CDD	1.70	232	eP	55	13.70	-0.2
KNIM	1.70	76	eP	55	11.68	-2.2
MTU	1.71	88	eP	55	14.04	0.0
PWA	1.77	18	eP	55	15.45	0.6
MCNL	1.86	246	eP	55	15.81	-0.4
PLRM	1.87	29	eP	55	16.67	0.3
SKT	2.02	354	eP	55	18.94	0.4
GHO	2.07	29	eP	55	18.90	-0.5
GLI	2.16	64	iP	55	18.21	-2.4
SML	2.26	35	eP	55	22.52	0.4
CUT	2.46	8	eP	55	26.95	2.1
VLZ	2.60	62	eP	55	24.87	-1.9
KLU	2.94	57	eP	55	29.04	-2.6

36 obs. assaciated

& OCT 24, 1990 13h 09m 23.20s
38.047 N 119.142 W
DEPTH = 11.0km
CALIFORNIA-NEVADA BORDER REGION (40
<BRK>. ML 3.0 (BRK).

CMB	0.98	270	iP	09	40.90	-0.9
			iS	09	54.00	
FRI	1.15	203	iPc	09	44.00	-0.5
			iS	09	58.90	
LLA	2.02	226	eP	09	58.70	1.0
			eS	10	25.60	
MHC	2.10	251	eP	10	00.20	1.3
SAD	2.24	236	iP	10	01.70	1.0
PRI	2.26	213	eP	10	02.80	1.7
ORV	2.38	310	eP	10	04.50	1.8
			eS	10	36.00	

7 obs. associated

? OCT 24, 1990 14h 20m 53.87±12.83
0.130 N ±39.7km 79.893 W ±98.1k
DEPTH = 33.0km (normal)
NEAR COAST OF ECUADOR (105

YANA	1.34	100	P	21	16.60	-0.3
OUR	1.40	102	iPd	21	17.20	-0.4
			iS	21	40.00	
OTO	1.40	104	eP	21	17.50	-0.2
			S	21	35.00	
COTA	1.57	83	eP	21	20.00	-0.2
			eS	21	45.80	
VC1	1.68	117	P	21	22.30	0.5
			iS	21	51.80	
CAYA	1.91	91	P	21	26.00	0.8
TUNG	2.11	137	eP	21	27.00	-0.1

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

• OCT 24, 1990 14h 31m 48.56± 1.31
10.954 N ±13.2km 73.675 W ± 8.1k
DEPTH = 76.6 ± 11.6 km
NORTHERN COLOMBIA (99
Felt at Cartagena, Santa Marta and Barranquilla.

UAV	3.41	133	iPnd	32	40.30	-0.4
			iSn	33	15.60	
SDV	3.63	124	iPnc	32	44.10	0.3
BMG	3.90	171	iPd	32	46.00	-1.5
TOV	3.99	107	iPnd	32	50.20	1.5
			iSn	33	31.90	
FUO	5.45	181	eP	33	16.50	7.1
CEOS	5.60	109	iPc	33	10.00	-1.2
			iS	34	08.00	
UPA	6.09	252	iPc	33	18.00	0.6
			S	34	20.50	
PLAV	6.17	99	eP	33	20.00	0.8
			eS	34	29.00	
BOG	6.30	184	eP	33	22.00	0.8
			eS	34	34.00	
GUAC	6.34	96	iPd	33	22.50	0.9
			iS	34	31.00	
CAR	6.65	93	iPc	33	26.00	0.2
			iS	34	36.50	
LLAV	6.77	93	iPc	33	27.00	-0.4
			iS	34	38.00	
CUM	9.35	92	iP	34	01.50	-1.4
ZOBO	27.60	168	P	37	33.00	1.6
LP8	27.86	168	eP	37	28.00	-5.6
CNCB	28.15	168	P	37	35.80	-0.6
SIV	29.53	155	P	37	44.00	-4.2
SOB1	38.27	120	eP	39	03.10	-0.5
KIC	68.19	87	P	42	43.00	-0.4
WB5	151.58	248	ePKP	51	37.00	7.2

S.D. = 1.1 on 16 of 20 obs.

% OCT 24, 1990 14h 35m 30.09± 1.7
60.138 N ± 7.0km 4.881 E ±15.9k
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535
MD 2.1 (BER).

BER	0.33	42	eP	35	37.33	0.3

		eSg	35 46.19			
ASK	0.38	24 iPc	35 37.98	0.1		
		eS	35 49.05			
SUE	0.92	356 iPc	35 47.65	-0.1		
		eS	36 01.82			
HYA	1.22	31 eP	35 53.01	0.3		
		eS	36 11.69			
BLS1	1.24	126 iPc	35 53.38	0.2		
		eS	36 10.97			
BLS2	1.34	128 iP	35 55.04	0.2		
		eS	36 13.49			
MOL	2.76	27 eP	36 14.87	-0.2		
NRA0	3.36	77 Pn	36 22.70	-0.9		
		Sn	37 05.60			
		Lg	37 23.20			
	S.D. = 0.5	on	8 of 8 obs.			

OCT 24, 1990 14h 57m 58.11± 0.10s
73.361 N ± 1.8km 54.707 E ± 1.9km
DEPTH = 0.0km (geophysicist)
5.7mb (102 obs.) 4.0Msz (6 obs.)
NOVAYA ZEMLYA (648)

KEV	9.42	261 iP	00 14.60	-3.4X		
		i	01 59.90			
KTK1	10.94	262 eP	00 34.54	-4.3X		
SOD	11.08	251 iP	00 35.00	-5.7X		
KBS	11.36	318 iPc	00 39.90	-4.6X		
LOF	14.28	269 eP	01 18.24	-5.1X		
SUF	14.88	239 iP	01 24.90	-6.3X		
	0.6s	159.60nm		5.8mb		
NUR	17.15	237 iP	01 53.80	-6.5X		
	1.6s	19.00nm		4.0mb X		
		iS	04 56.00			
JNE	18.63	294 eP	02 19.33	0.7		
JNW	18.65	294 iPc	02 20.22	1.5		
JMI	18.79	294 eP	02 22.30	1.8		
RGS	18.86	260 eP	02 16.40	-5.1X		
UPP	19.49	246 iP	02 25.80	-3.3X		
MOL	20.04	262 eP	02 32.80	-2.2		
NB2	20.24	256 P	02 34.00	-3.2X		
	0.4s	385.40nm		6.1mb		
HFS	20.31	251 eP	02 35.50	-2.4		
	0.4s	970.10nm		6.5mb		
	Z 16s	0.40um		3.9MszX		
		LR	10 56.00			
NRA0	20.40	255 Pn	02 36.70	-2.1		
		Sn	06 08.20			
HYA	21.56	261 iPd	02 50.35	-0.3		
SUE	22.05	263 iPd	02 55.16	-0.4		
ASK	22.40	261 eP	02 59.35	0.3		
BLS2	22.89	258 eP	03 04.57	0.5		
COP	24.50	247 iPc	03 20.00	0.4		
	0.7s	301.37nm		6.1mb		
		i	03 28.00			
AKU	24.92	290 iP	03 26.20	2.7		
	1.0s	104.00nm		5.5mb		
		i	07 01.70			
BRN	27.24	242 eP	03 46.00	0.8		
EDR	27.60	265 ePc	03 48.30	-0.2		
	0.8s	78.00nm		5.5mb		
KRA	27.79	232 iPd	03 50.10	-0.1		
	0.6s	193.00nm		6.1mb		
		i	03 54.60			
		i	04 07.10			
KSP	27.91	237 iPc	03 51.30	-0.1		
	0.7s	186.00nm		6.0mb		
		i	07 07.50			
		e	09 05.10			
EDU	28.05	265 ePc	03 52.20	-0.4		
	0.5s	87.00nm		5.8mb		
CLL	28.30	242 iPc	03 54.10	-0.7		
	1.2s	105.00nm		5.5mb		
		i	04 17.30			
		PcP	07 07.00			
EBH	28.45	265 ePc	03 55.70	-0.5		
	0.6s	55.00nm		5.6mb		
ESY	28.48	264 ePc	03 56.10	-0.3		
	0.5s	163.00nm		6.1mb		
WIT	28.61	251 iPc	04 02.10	4.6X		
EDI	28.64	264 ePc	03 57.60	-0.2		
EBL	28.73	264 ePc	03 58.40	-0.2		
EAB	28.74	266 ePc	03 58.30	-0.5		
EAU	28.78	264 ePc	03 59.00	-0.1		
	0.5s	140.00nm		6.0mb		
IAS	28.93	220 eP	04 01.00	0.4		
PRU	29.13	239 iPc	04 02.70	0.4		
	0.6s	73.20nm		5.7mb		
	Z 14s	0.90um		4.5MszX		
	N 14s	0.50um				
		i	04 07.30			
		i	04 24.50			
EKA	29.14	264 Pc	04 02.30	-0.1		
	0.6s	97.30nm		5.8mb		
ESK	29.17	264 iPc	04 02.50	-0.1		
	0.5s	150.00nm		6.1mb		
MOX	29.26	243 iPc	04 03.00	-0.5		
	1.3s	56.00nm		5.2mb		
BMR	29.27	226 iPd	04 04.00	0.4		
WTS	29.30	250 iPc	04 03.90	0.1		
	0.6s	155.00nm		6.0mb		
PTT	29.40	221 eP	04 04.50	-0.3		
HOF	29.50	242 iPc	04 05.80	0.1		
	1.0s	61.00nm		5.4mb		
PSZ	29.81	231 iP	04 08.90	0.3		
BNS	30.14	248 iPc	04 11.40	0.1		
KHC	30.16	239 iPc	04 12.00	0.3		
	1.0s	35.50nm		5.2mb		
		e	04 36.10			
ZST	30.19	234 iP	04 11.20	-0.6		
GRF	30.24	243 iPc	04 12.80	0.5		
	1.0s	141.00nm		5.8mb		
	Z 22s	0.10um		3.4Msz		
SRO	30.27	233 eP	04 12.10	-0.4		
		i	04 42.80			
		i	05 14.60			
VKA	30.31	235 iPd	04 13.00	0.1		
	0.7s	157.00nm		6.0mb		
		i	04 46.00			
WET	30.32	240 iPc	04 13.50	0.4		
	0.6s	66.00nm		5.7mb		
TNS	30.47	246 ePc	04 14.60	0.2		
MBC	30.55	357 iPc	04 15.00	0.2		
	0.5s	170.00nm		6.2mb		
ENN	30.65	250 iPc	04 15.00	-0.9		
	0.6s	166.00nm		6.1mb		
KLL	30.66	249 iPc	04 15.90	0.0		
MEM	30.77	249 iPc	04 16.43	-0.5		
		PcP	07 14.20			
TNR	31.04	224 ePc	04 19.00	-0.4		
UCC	31.05	251 P	04 21.60	2.3		
CMP	31.26	222 iPd	04 26.00	4.6X		
SNF	31.33	251 iPc	04 21.19	-0.6		
		PcP	07 15.70			
STU	31.61	244 iPd	04 24.50	0.2		
	0.9s	67.23nm		5.6mb		
DOU	31.62	250 iPc	04 23.80	-0.6		
	0.4s	67.90nm		5.9mb		
		PcP	07 16.90			
BZS	31.62	227 eP	04 23.50	-0.9		
FUR	31.63	241 iPc	04 24.90	0.3		
	0.8s	43.00nm		5.4mb		
BHG	31.65	239 iPc	04 25.80	1.1		
	0.6s	49.00nm		5.6mb		
GWF	31.83	246 P	04 26.20	-0.1		
DRA	31.98	223 eP	04 30.00	2.4		
KBA	32.13	238 iPc	04 30.50	1.4		
	0.4s	105.00nm		6.1mb		
		i	04 37.00			
PSN	32.21	217 iPc	04 31.00	1.4		
ETA	32.32	264 eP	04 30.20	-0.3		
	0.6s	50.00nm		5.6mb		
WATA	32.33	240 iPc	04 31.10	0.3		
	0.5s	31.50nm		5.5mb		
		i	04 37.10			
WLS	32.42	246 P	04 31.38	-0.1		
CDF	32.44	246 P	04 31.51	-0.2		
SOTA	32.53	241 iPc	04 32.70	0.2		
	0.5s	22.30nm		5.3mb		
		i	04 36.80			
BEO	32.63	228 iP	04 33.70	0.5		
SLE	32.72	244 ePc	04 33.60	-0.5		
FVI	32.72	238 Pc	04 34.70	0.7		
FEL	32.74	245 eP	04 34.50	0.1		
ECB	32.78	264 eP	04 34.20	-0.3		
	0.6s	38.00nm		5.5mb		
LJU	32.81	236 eP	04 35.30	0.4		
ECP	32.83	264 eP	04 34.80	0.0		
	0.6s	173.00nm		6.2mb		
OGA	32.90	241 iPc	04 36.70	0.8		
	0.8s	57.00nm		5.6mb		
VITF	32.96	247 P	04 36.17	0.1		
SAX	32.97	243 ePd	04 36.90	0.3		
VOY	32.98	237 iP	04 36.30	-0.1		
		e	07 19.60			
MOF	32.99	246 P	04 36.17	-0.4		
ZLA	33.01	244 ePd	04 36.40	-0.2		
HAU	33.06	247 iPc	04 36.80	-0.2		
	1.0s	96.00nm		5.7mb		
	Z 20s	0.28um		4.0Msz		
BSF	33.10	246 P	04 37.10	-0.4		
CEY	33.13	236 eP	04 37.50	-0.1		
VBY	33.15	235 ePc	04 38.00	0.2		
PVL	33.18	221 iPc	04 38.00	-0.1		
BBS	33.25	245 P	04 38.18	-0.5		
OSS	33.29	242 ePc	04 39.80	0.5		
TRI	33.31	237 iPc	04 38.90	-0.3		
VVI	33.38	239 P	04 40.00	0.2		
LLS	33.42	243 ePd	04 40.60	0.2		
CTI	33.51	239 Pc	04 40.90	-0.2		
LOMF	33.54	246 P	04 40.93	-0.3		
KVT	33.57	206 iP	04 41.50	0.0		
KAS	33.59	209 eP	04 42.50	0.8		
VDL	33.65	242 ePc	04 43.10	0.7		
JMB	33.68	219 iPc	04 52.00	9.6X		
PGB	34.05	222 eP	04 41.00	-4.7X		
DMK	34.09	217 iP	04 45.90	-0.1		
VAL	34.15	267 iP	04 46.00	-0.4		
TMA	34.16	243 ePd	04 46.60	-0.2		
BRW	34.19	17 eP	04 47.80	1.3		
SAL	34.20	240 P	04 46.30	-0.6		
FLN	34.23	255 iPc	04 46.60	-0.5		
	0.8s	157.40nm		6.0mb		
	Z 20s	0.28um		4.0Msz		
MDI	34.25	242 Pc	04 46.70	-0.6		
LDF	34.28	254 iPc	04 46.80	-0.8		
	0.8s	79.25nm		5.7mb		
LOR	34.40	249 iPc	04 47.80	-0.9		
	0.6s	140.90nm		6.0mb		
	Z 20s	0.20um		3.9Msz		
VAI	34.41	243 P	04 48.30	-0.3		
MMK	34.44	244 ePc	04 49.60	0.3		
DIX	34.56	244 ePc	04 50.80	0.5		
GRC	34.59	250 P	04 49.45	-0.8		
ISK	34.61	215 eP	04 50.20	-0.2		
LBF	34.63	249 iPc	04 49.70	-1.0		
	0.8s	81.35nm		5.6mb		
CTT	34.64	216 eP	04 50.20	-0.5		
GRR	34.67	255 iPc	04 50.00	-0.9		
	1.0s	86.00nm		5.6mb		
KDZ	34.68	220 eP	04 52.00	0.9		
SSF	34.69	249 iPc	04 50.40	-0.7		
	0.8s	188.90nm		6.0mb		
EMS	34.69	245 ePc	04 51.50	0.1		
HRT	34.75	214 iP	04 52.20	0.5		
RZN	34.78	221 iPc	04 52.00	-0.1		
ORX	34.83	243 P	04 51.63	-0.8		
KKB	34.92	223 iPc	04 53.00	-0.1		
AVF	34.98	249 iPc	04 52.60	-0.9		
	0.9s	92.75nm		5.6mb		
SMF	34.98	249 iPc	04 52.60	-1.0		
	1.0s	179.70nm		5.9mb		
YLV	35.04	215 iP	04 53.70	-0.6		
LPF	35.05	255 iPc	04 53.20	-0.9		
	0.8s	73.90nm		5.6mb		
BCI	35.06	227 iP	04 54.90	0.7		
MMB	35.06	222 iPc	04 55.00	0.6		
RDO	35.15	220 eP	04 55.00	0.0		
SKO	35.15	225 iP	04 53.50	-1.6		
	0.9s	112.00nm		5.7mb		
GPA	35.16	213 iP	04 55.00	-0.3		
LSD	35.20	244 P	04 56.14	0.3		
BBTK	35.23	210 iPd	04 57.00	1.1		
LPL	35.26	245 iPc	04 56.60	0.3		
	0.6s	27.95nm		5.3mb		
BOB	35.26	241 Pc	04 56.30	0.2		
LPG	35.27	245 iPc	04 56.90	0.5		
	0.6s	27.95nm		5.3mb		
RSM	35.30	237 P	04 59.10	2.8		
BGF	35.33	250 iPc	04 56.20	-0.4		
	0.6s	183.20nm		6.1mb		
PUK	35.40	227 iPc	04 56.30	-0.9		
SFI	35.46	238 Pc	04 58.50	0.9		
RSP	35.46	244 P	04 56.96	-0.9		
MME	35.48	239 P	04 59.10	0.9		
BNT	35.49	216 iP	04 58.70	0.7		
EDC	35.51	216 iP	04 59.00	0.8		
SDA	35.51	228 eP	04 57.90	-0.2		
PGD	35.53	238 Pc	04 59.30	0.8		
VAY	35.55	224 iPc	04 57.00	-0.6		
	1.1s	87.00nm		5.5mb		

24d 15h

ARV	35.59	236	Pc	04	58.90	0.1		0.6s	32.00nm		5.2mb		MJMA	47.82	191	iP+	06	38.30	-0.7
BDI	35.63	239	Pc	04	59.40	0.1	ROI	38.49	230	P	05	25.00	1.8	KDC	47.87	19	iPc	06	39.10	0.2
PLDF	35.66	249	P	04	58.79	-0.7	ATH	38.56	221	eP	05	23.80	0.0		0.5s	233.60nm				6.6mb
PCP	35.70	242	P	04	58.71	-1.1	CZI	38.92	230	P	05	26.70	-0.1	GKN	48.08	144	Pc	06	41.46	0.2
BNI	35.71	245	P	05	00.40	0.5	VLS	38.98	225	eP	05	27.20	-0.1		0.6s	445.00nm				6.8mb
MAF	35.71	250	iPc	04	59.60	-0.3	APE	39.11	218	eP	05	28.10	-0.4	GUN	48.39	142	Pc	06	44.10	0.3
	0.6s	45.80nm			5.5mb		EPF	39.27	250	iPc	05	29.60	-0.2		0.4s	273.00nm				6.7mb
AGO	35.72	249	P	04	59.44	-0.5		0.4s	35.80nm		5.4mb		KKN	48.40	143	Pc	06	44.24	0.5
TCF	35.75	250	iPc	04	59.70	-0.5	ETER	39.27	247	iPc	05	30.30	0.6	DMN	48.55	143	Pc	06	45.40	0.5
	1.0s	140.65nm			5.7mb		OGE	39.36	251	P	05	30.16	-0.3		0.6s	380.00nm				6.6mb
RRL	35.80	244	P	05	01.17	0.3	JAU	39.46	251	P	05	30.91	-0.5	PKI	48.64	143	Pc	06	46.00	0.3
LACI	35.83	227	iPc	05	00.50	-0.3	ESCF	39.47	251	P	05	30.48	-1.0		0.8s	434.00nm				6.6mb
CKI	35.88	242	Pc	05	00.80	-0.4	MADF	39.48	252	P	05	30.85	-0.6	RYD	48.88	190	iP+	06	47.50	0.3
LSF	35.97	251	iPc	05	01.40	-0.6	ARG	39.50	215	eP	05	31.80	0.2	SDN	49.35	26	iPc	06	49.70	-0.7
	0.8s	272.85nm			6.1mb		ATE	39.50	251	P	05	30.91	-0.8	SIT	49.68	7	iPc	06	54.00	1.1
PII	35.97	239	Pc	05	02.00	0.0	ELYF	39.50	252	P	05	31.04	-0.7	AFIF	49.70	194	iP+	06	56.50	2.9
PYM	36.03	249	P	05	02.65	0.0	IMA	39.57	18	P	05	32.50	0.4	ADK	50.21	39	iPd	06	57.00	0.0
ASS	36.06	236	P	05	03.40	0.5		0.7s	7.99nm			4.5mb	X		1.0s	232.40nm				6.1mb
TIR	36.08	227	iPc	05	03.00	0.1	BOH	39.57	252	P	05	31.76	-0.6	AVE	50.50	254	iP	07	00.00	0.5
FIN	36.10	242	P	05	01.78	-1.4	ISSF	39.58	252	P	05	32.06	-0.4	AKSR	51.15	206	eP	07	04.00	-0.5
ROB	36.10	243	P	05	02.30	-0.9	LHE	39.64	251	P	05	33.62	0.7	FFC	51.21	343	iPc	07	04.30	-0.3
MFF	36.11	253	iPc	05	02.80	-0.3	ITM	39.67	223	eP	05	32.40	-0.7		0.5s	60.00nm				5.8mb
	1.0s	160.15nm			5.8mb		VLI	39.93	221	eP	05	33.40	-1.8	AGAL	51.38	206	eP	07	06.50	0.3
PZZ	36.10	244	P	05	01.89	-1.4	ATN	40.08	231	P	05	34.50	-2.0	SHL	51.80	136	iP	07	09.00	-0.7
ENR	36.28	243	P	05	02.71	-2.1	KAP	40.30	216	eP	05	36.40	-1.9	OFUJ	52.19	80	eP	07	12.80	0.6
EZN	36.29	218	eP	05	04.50	-0.2	ECRI	40.44	253	iPc	05	40.20	0.8	TIO	52.69	252	iPc	07	17.40	1.0
PLG	36.29	222	eP	05	04.60	-0.2	MNO	40.48	232	P	05	40.00	0.0	NIIJ	53.14	83	P	07	19.00	-0.4
STV	36.29	243	P	05	02.71	-2.1	GIB	40.57	232	P	05	46.00	5.4X	KMSA	53.32	192	iP+	07	20.40	-0.5
LBL	36.44	248	P	05	06.33	0.4	NPS	40.85	217	eP	05	30.20	-12.6X	MTMJ	53.41	84	P	07	21.40	-0.1
SAOF	36.47	243	P	05	05.46	-0.8	VAM	40.97	219	eP	05	41.40	-2.3	MAT	53.56	84	iPd	07	22.00	-0.5
AUTN	36.50	243	P	05	06.63	-0.1	MCT	41.00	233	P	05	44.30	0.1	SSE	53.79	103	Pd	07	22.50	-1.7
TOUF	36.53	243	P	05	06.81	-0.1	EMON	41.02	259	eP	05	45.20	1.0		1.0s	19.00nm				5.1mb
AQU	36.56	235	P	05	07.80	0.7	FBA	41.19	14	iPc	05	47.00	1.8	CBM	53.82	314	P	07	23.50	-0.7
KBN	36.57	225	eP	05	06.30	-0.8	MEU	41.22	231	P	05	44.60	-1.3	TSRJ	53.86	87	P	07	24.70	0.0
SBF	36.62	243	iPc	05	07.00	-0.6	EROQ	41.31	249	iPc	05	46.80	0.3	CHJJ	54.25	84	P	07	26.40	-1.1
	0.6s	137.40nm			5.9mb		FAI	41.33	232	P	05	47.00	0.3	IIDJ	54.47	85	P	07	28.70	-0.5
AURF	36.62	243	P	05	07.20	-0.4	ADI	41.56	205	iPc	05	49.40	0.7	KMI	54.62	124	Pc	07	29.00	-1.7
MVIF	36.66	243	P	05	07.91	-0.1	ESEL	41.63	246	iPc	05	49.50	0.3		1.0s	50.00nm				5.5mb
KZN	36.68	224	eP	05	07.90	-0.2	STS	41.87	260	eP	05	52.20	1.1	ABHA	55.53	194	iP+	07	38.10	0.7
MNS	36.71	236	P	05	08.00	-0.3	ERUA	41.93	258	iPc	05	52.50	0.9	KMTA	55.61	194	iP+	07	38.50	0.6
REVF	36.75	243	P	05	07.98	-0.7	ETOR	41.98	252	iPc	05	52.70	0.6	MIM	55.62	315	P	07	36.90	-0.6
RJF	36.84	250	iPc	05	08.90	-0.5	PTS	42.17	234	P	05	54.00	0.4	POO	55.89	158	iPc	07	39.40	-0.3
	0.6s	68.70nm			5.6mb		TTA	42.42	20	iPc	05	56.80	1.3		0.9s	28.57nm				5.3mb
Z	20s	0.30um			4.1Msz			0.8s	27.10nm			5.0mb		BNH	56.70	316	P	07	44.70	-0.6
CALN	36.86	244	P	05	09.23	-0.5	EZAM	42.60	259	eP	05	57.90	0.8	CFTV	56.97	258	iPc	07	47.70	0.3
AZI	36.90	235	P	05	10.90	1.1	GUD	42.72	254	iPc	05	59.00	0.7	HBVT	57.27	318	P	07	48.80	-0.5
DUI	36.97	234	P	05	10.60	0.0	ECHE	42.83	250	eP	05	59.90	0.8	RSNY	57.37	319	P	07	49.50	-0.6
MAO	37.05	238	P	05	11.00	-0.1	DSI	43.03	204	iPc	06	01.10	0.4		1.0s	68.69nm				5.6mb
CAF	37.05	250	iPc	05	11.20	0.1	TOL	43.40	253	iPc	06	04.50	0.8	HYB	57.56	153	iPc	07	50.00	-1.6
	1.1s	58.60nm			5.2mb			1.1s	253.16nm			5.9mb			0.8s	130.80nm				6.0mb
SDI	37.08	234	P	05	11.30	-0.1	QUE	43.71	165	eP	06	07.20	0.8	PNT	57.56	356	iPd	07	51.50	0.2
FRF	37.10	244	iPc	05	11.20	-0.3		1.0s	460.00nm			6.2mb			0.5s	11.00nm				5.1mb
	0.8s	146.90nm			5.8mb		EPLA	43.79	255	iPc	06	07.90	1.1	TBT	57.81	262	eP	07	53.40	0.2
KHL	37.21	214	iP	05	12.60	0.0	TOA	44.07	14	iPc	06	10.30	1.4	NEW	58.54	354	P	07	57.90	-0.3
MAIO	37.22	174	iPc	05	14.00	1.4	EVIA	44.14	251	iPc	06	10.70	0.9		1.0s	105.00nm				5.9mb
	0.8s	98.83nm			5.6mb		YKA	44.22	353	eP	06	07.90	-2.1	GMW	59.38	358	P	08	04.00	0.0
		eS	10	56.00				0.8s	14.00nm			4.9mb		RMW	59.45	357	P	08	03.80	-0.8
RMP	37.24	236	P	05	11.00	-1.7	SVW	44.25	21	iPc	06	11.70	1.4	CHG	59.84	130	iPc	08	06.40	-1.1
LRG	37.28	244	iPc	05	12.90	-0.1		0.9s	71.00nm			5.5mb			0.8s	24.44nm				5.4mb
	0.8s	104.95nm			5.6mb		PMR	44.36	16	iPc	06	11.10	0.0				e	08	52.70	
GAZ	37.29	203	iP	05	14.40	1.3		0.7s	52.20nm			5.5mb		WVLY	60.13	322	ePc	08	09.00	-0.3
LMR	37.35	244	iPc	05	13.20	-0.4	LZH	44.42	119	iPc	06	13.00	0.9	LON	60.16	357	P	08	09.10	-0.4
	0.9s	68.80nm			5.4mb			2.0s	75.00nm			5.2mb		TBR	60.60	318	P	08	12.00	-0.5
NEO	37.36	222	eP	05	13.80	0.0	Z	16s	0.48um			4.5MszX		LRM	60.79	350	iPc	08	13.50	-0.5
LFF	37.39	251	iPc	05	14.10	0.2				pP	06	26.50	51kmX	GBA	61.17	155	Pc	08	15.30	-1.2
	0.8s	125.95nm			5.7mb					sP	06	35.00			0.7s	83.20nm				6.0mb
PGF	37.45	240	P	05	15.17	0.5	MBH	44.87	205	iPc	06	15.00	-0.6	BDT	61.37	131	eP	08	17.30	-0.5
LCI	37.46	229	Pc	05	14.00	-0.5	EBAN	44.93	252	iPc	06	17.10	1.0	VGB	61.38	356	iPc	08	17.70	0.0
SRN	37.46	226	iP	05	14.00	-0.5	KOT	45.11	208	eP	06	17.50	0.0	OBO	61.71	193	iP+	08	20.80	0.7
LPO	37.51	250	iPc	05	15.30	0.4	HLW	45.24	209	eP	06	19.00	0.4	TDD	61.91	193	iP+	08	22.03	0.5
	0.8s	55.05nm			5.3mb		HOL	45.34	204	iP+	06	19.90	0.6	MKL	61.99	193	iP+	08	22.69	0.7
IZM	37.51	216	eP	05	12.00	-3.1X	ENIJ	45.62	250	iPc	06	21.90	0.3	DAF	62.14	194	iP+	08	23.28	0.2
KEK	37.66	226	eP	05	15.50	-0.7	EHOR	45.66	253	eP	06	22.60	0.8	HLD	62.15	194	iP+	08	23.41	0.3
BSS	37.72	233	P	05	17.00	0.3	ECOG	45.70	251	iPc	06	23.50	1.2	KSU	62.23	194	iP+	08	23.97	0.3
TEH	37.74	184	ePc	05	19.00	1.9	AFC	45.72	251	iPc	06	23.50	1.0	SGH	62.30	193	iP+	08	24.77	0.6
SGO	37.83	232	Pc	05	18.10	0.5	HYT	45.83	8	P	06	24.60	1.5	GBR	62.59	194	iP+	08	26.87	0.8
BCK	37.89	212	iP	05	18.30	0.0	SCH	46.07	317	eP	06	24.00	-0.9	NST	63.14	130	eP	08	29.00	-0.6
EVR	38.02	223	eP	05	19.40	0.0	BADA	46.09	204	iP+	06	25.30	0.1	BW06	63.65	347	P	08	33.20	0.1
ORI	38.04	230	P	05	20.70	1.2	NDI	46.28	152	iPc	06	27.30	0.5	PTI	63.73	349	P	08	33.80	0.3
FRB	38.06	323	eP	05	19.00	-0.3	EVAL	46.29	255	iPc	06	27.50	0.7	NA2	64.19	320	ePc	08	35.50	-0.9
	0.5s	32.00nm			5.3mb		MAL	46.45	252	iPd	06	22.95	-5.1X	KOD	64.50	155	eP	08	38.00	-1.0
MGR	38.17	232	P	05	21.20	0.7	EPRU	46.45	253	iPc	06	29.20	1.1	NAV	65.53	322	ePc	08	43.90	-1.2
SMG	38.26	217	eP	05	21.30	0.1	EJIF	47.00	253	iPc	06	33.70	1.3	LBFM	65.57	357	P	08	45.50	0.0
MMN	38.31	231	P	05	22.80	1.1	DHR	47.17	186	iP+	06	33.80	0.0	BLA	65.57	322	P	08	44.30	-1.1
CSI	38.35	231	P	05	23.60	1.5	OASM	47.70	194	ePc	06	38.70	0.6		0.7s	47.22nm				5.8mb
TDS	38.46	230	Pc	05	23.90	1.0	TAF	47.71	249	iP	06	40.00	1.9	DAU	66.11	348	ePc	08	49.20	0.1
INK	38.47	5	iPc	05	22.90	0.2	ASAJ	47.80	76	eP	06	37.40	-1.2	FHC	66.13	359	ePc	08	50.70	1.8

WDC	66.34	358	ePc	08	49.70	-0.5	BFD	124.57	104	iPKP	17	02.00	2.1				eSn	16	51.50				
GOL	66.41	343	P	08	50.30	-0.7		0.6s		94.00nm							PHP	3.38	348	ePn	16	11.30	0.2
	0.7s		8.19nm			5.1mb	CAN	124.67	97	ePKP	16	59.70	-0.5				LACI	3.50	339	ePn	16	12.70	-0.1
DUG	66.42	350	P	08	50.80	-0.1	MNG	137.16	74	PKP	17	22.50	-1.3				APE	3.52	111	ePn	16	13.00	-0.2
FVM	66.42	330	ePc	08	48.50	-2.2	MAW	140.82	175	ePKP	17	23.50	-6.1X				SKO	3.58	0	iPn	16	13.80	-0.2
MIN	66.56	357	ePc	08	51.60	-0.2	MCQ	145.00	100	iPKPd	17	37.10	-0.1							i(Pb)	16	20.70	
ELC	66.93	329	P	08	52.50	-1.5	SPA	163.25	180	ePKP	18	00.40	-1.1							i	16	35.60	
ORV	67.35	357	ePc	08	56.10	-0.5		1.1s		28.57nm										iSn	17	03.20	
TKL	67.66	324	iPc	08	57.30	-1.4					i	18	52.50							i	17	13.60	
GBTN	67.73	325	iPc	08	57.80	-1.3		S.D. = 0.9			on	423	of 445 obs.				MMB	3.66	28	iPc	16	16.00	0.8
RSCP	68.02	326	P	08	58.70	-2.2	---										KKB	3.70	20	eP	16	16.00	0.2
JSC	68.57	322	iPc	09	03.80	-0.5	%	OCT	24,	1990	15h	11m	26.36±	2.06s			VAM	3.72	142	ePn	16	17.60	1.5
TNP	68.71	353	iPc	09	05.70	0.3		60.114	N ±	8.9km		4.886	E ±17.4km				SDA	3.91	339	ePn	16	20.60	2.0
	0.9s		17.25nm			5.3mb		DEPTH =	10.0km		(geophysicist)						ULC	3.94	336	ePn	16	18.00	-1.0
CMB	68.85	356	ePc	09	06.20	0.2		SOUTHERN NORWAY						(535)						eSn	17	03.00	
PRM	68.96	323	iPc	09	05.80	-0.9		MD 2.2 (BER).									ROI	3.95	289	P	16	20.60	1.3
OLY	69.00	331	iPc	09	05.80	-1.2											EZN	4.08	68	ePn	16	20.00	-1.1
BKS	69.04	357	ePc	09	07.80	0.7	BER	0.35	39	iP	11	33.75	0.2				BCI	4.10	346	ePn	16	22.40	1.0
	0.6s		29.00nm			5.6mb				iS	11	40.31					TDS	4.15	289	P	16	23.40	1.3
BRK	69.04	357	ePc	09	07.80	0.7	ASK	0.40	22	iPd	11	34.80	0.2							eSn	17	13.00	
TUL	69.17	335	iPc	09	07.50	-0.5				iS	11	41.05					RZN	4.16	37	iPc	16	23.00	0.6
	1.2s		80.90nm			5.8mb	SUE	0.95	356	iP	11	44.26	-0.1				ORI	4.20	295	P	16	23.00	0.1
	Z 18s		0.26um			4.5Msz				iS	11	59.59								eSn	17	11.50	
			e	09	19.00		HYA	1.23	31	iPc	11	49.79	0.5				RDO	4.21	48	ePn	16	22.10	-0.8
SIO	69.40	335	iP	09	09.40	0.0				iS	12	08.14					CZI	4.21	283	P	16	24.00	1.1
PCC	69.41	358	eP	09	09.00	-0.4	BLS2	1.32	128	iP	11	51.31	0.5				CSI	4.22	291	P	16	24.50	1.4
SGS	69.50	321	P	09	09.80	-0.2				iS	12	10.07					SMG	4.34	97	ePn	16	23.50	-1.2
ARN	69.55	357	iPc	09	11.30	1.0	MOL	2.78	26	eP	12	11.31	-0.4				PVY	4.34	346	ePn	16	25.10	0.2
MHC	69.56	357	ePc	09	11.20	0.7	NRA0	3.36	76	Pn	12	19.00	-0.9							eSn	17	17.00	
FRI	69.87	355	ePc	09	12.70	0.5				Lg	13	16.80					TTG	4.36	339	ePn	16	24.30	-0.7
LLA	70.27	356	ePc	09	15.60	0.9		S.D. = 0.6			on	7	of 7 obs.							eSn	17	15.00	
PRS	70.56	357	ePc	09	16.80	0.4	---										BDV	4.36	334	ePn	16	23.30	-1.8
MEO	70.61	337	iPc	09	17.00	0.2	?	OCT	24,	1990	15h	28m	56.63±	0.99s						eSn	17	12.50	
	1.2s		72.10nm			5.7mb		24.662	N ±	7.6km		121.598	E ± 8.3km				MMN	4.47	291	P	16	28.40	1.7
PRI	70.74	356	ePc	09	18.90	1.2		DEPTH =	10.0km		(geophysicist)						KDZ	4.48	42	eP	16	26.00	-0.7
CLC	70.98	353	eP	09	20.00	0.9		TAIWAN						(244)			PLD	4.48	33	eP	16	29.00	2.2
ISA	71.16	354	eP	09	20.00	-0.2											NPS	4.59	132	ePn	16	29.40	1.0
ANMO	71.22	344	iPc	09	20.40	-0.3	TWC	0.23	103	iPc	29	01.60	0.0				IZM	4.60	88	iPn	16	27.40	-1.1
	1.1s		17.41nm			5.1mb				eS	29	07.10					HCY	4.62	332	ePn	16	26.40	-2.4
ALQ	71.22	344	ePc	09	20.70	0.0	TWZ	0.43	358	ePc	29	05.80	0.3							eSn	17	19.00	
	1.0s		12.50nm			5.0mb	ANP	0.53	352	eP	29	07.00	-0.3				IVA	4.62	346	ePn	16	28.50	-0.4
GSC	71.47	353	eP	09	23.00	1.0				eS	29	17.30								eSn	17	23.00	
SNG	71.47	131	eP	09	21.50	-0.7	TWQ	0.79	241	eP	29	12.10	0.0				PGB	4.66	26	eP	16	33.00	3.6X
ABL	72.00	355	P	09	25.70	0.3		S.D. = 0.5			on	4	of 4 obs.				ATN	4.69	269	P	16	29.20	-0.6
SBB	72.12	354	eP	09	27.00	1.1	---													eSn	17	21.70	
MWC	72.59	354	eP	09	29.00	0.2		OCT	24,	1990	16h	15m	18.05±	0.41s			MGR	4.87	293	P	16	32.40	0.1
TPC	72.63	352	eP	09	30.00	1.1		38.389	N ±	3.8km		21.412	E ± 2.8km				BRY	5.01	335	ePn	16	32.30	-2.0
PAS	72.67	354	eP	09	30.00	1.0		DEPTH =	16.4 ±	3.3 km										eSn	17	30.00	
RVR	72.79	353	eP	09	30.00	0.2		4.2mb (	7 obs.)								SGO	5.20	297	P	16	37.90	1.0
PLM	73.41	353	eP	09	35.00	1.3		GREECE						(364)						eSn	17	34.40	
GLA	73.63	351	eP	09	36.00	1.3		ML 4.1 (ATH).									MEU	5.30	258	P	16	34.80	-3.6X
BAR	74.08	352	eP	09	39.00	1.7														eSn	17	34.20	
IPM	74.08	131	ePc	09	39.00	1.5	EVR	0.61	30	ePg	15	28.00	-2.0				BNT	5.41	67	ePn	16	42.20	2.2
	0.9s		92.30nm			5.8mb	VLS	0.68	252	ePg	15	29.90	-1.2				KAP	5.41	120	ePn	16	42.00	2.0
TIC	75.26	243	Pc	09	43.60	-0.8	AGG	0.96	48	ePc	15	35.10	-0.7				BSS	5.64	297	P	16	43.00	-0.2
	0.6s		34.50nm			5.6mb				eS	15	48.64								eSn	17	45.60	
NAI	75.35	199	iPc	09	47.20	2.2	ITM	1.27	161	ePb	15	40.30	-0.8				PVL	5.67	30	iPc	16	43.00	-0.5
KIC	75.47	242	Pc	09	45.80	-0.5	IGT	1.42	324	ePd	15	44.24	1.1				JMB	5.67	42	eP	16	52.00	8.4X
	0.6s		119.00nm			6.1mb				iS	16	03.46					HVAR	6.09	323	iPn	16	46.60	-2.8X
LIC	75.67	242	Pc	09	46.18	-0.5	NEO	1.69	57	ePb	15	46.70	-0.3							iSn	17	56.40	
	0.6s		143.00nm			6.3mb	KEK	1.82	317	ePb	15	49.20	0.2				DUI	6.26	304	P	16	51.50	-0.5
KGM	77.07	130	eP	09	54.50	0.0	SRN	1.85	324	iPn	15	50.60	1.3				KHL	6.38	88	ePn	16	53.00	-0.7
LWI	77.18	207	iPc	09	56.10	0.7	ATH	1.86	102	ePb	15	49.30	-0.2				BEO	6.47	354	ePn	16	52.00	-2.8X
LWI	77.18	207	iP+	09	56.50	1.1	LSK	1.87	341	ePn	15	51.50	1.8				SDI	6.70	302	P	16	58.90	0.6
PPI	78.83	133	eP	10	02.00	-2.2	LIT	1.90	26	ePd	15	51.26	1.1							eSn	18	11.20	
BUL	94.86	205	iPd	11	19.00	-3.8X				eS	16	15.76					AZI	7.08	303	P	17	04.50	1.0
	0.6s		23.33nm			5.8mb	KZN	1.93	8	ePg	15	52.60	2.0				BLY	7.10	335	eP	17	07.60	3.9X
ASPA	109.43	107	iPKPd	16	30.30	-1.1	VLI	2.06	144	ePn	15	53.20	0.8							eS	18	09.80	
	0.4s		20.60nm				KBN	2.28	348	iPnc	15	58.30	2.8X				BZS	7.22	1	eP	17	05.50	0.1
MRWA	110.12	125	iPKPd	16	31.90	-0.6	FNA	2.39	359	ePc	15	58.04	0.9				CMP	7.39	20	ePc	17	16.00	8.3X
BAL	111.62	125	ePKP	16	54.00	18.7X				eS	16	30.72					TNR	7.56	15	ePc	17	10.00	-0.2
SIV	112.50	290	PKP	16	37.20	-0.1	PLG	2.53	38	ePn	15	59.50	0.3				MNS	7.77	304	P	17	13.50	0.4
MUN	112.82	126	ePKP	16	36.50	-1.0	VLO	2.55	325	iPn	16	00.60	1.2				ASS	8.12	308	P	17	17.40	-0.7
COOL	112.96	121	ePKP	16	36.60	-1.2	GRG	2.68	16	iPd	16	02.68	1.5				ARV	8.19	311	P	17	16.70	-2.3
BKM	113.49	72	iPKP	16	43.50	4.3X	OHR	2.76	350	iPnc	16	03.30	0.9				VBY	8.46	329	ePnc	17	19.90	-2.8X
NWAO	113.97	125	ePKP	16	38.50	-1.3				iSg	16	49.50								eSn	18	52.50	
ZOBO	114.62	297	PKP	16	42.00	-0.1	OUR	2.78	45	ePc	16	03.48	0.8				PTJ	8.53	333	e(Pn)	17	19.10	-4.6X
RKG	115.01	126	ePKP	16	41.70	0.0	SOH	2.85	31	ePc	16	05.48	1.7							eSn	18	54.10	
CNCB	115.10	297	PKP	16	44.00	1.0				iS	16	40.89					CEY	8.99	327	eP	17	27.00	-3.1X
PPD	115.52	279	(PKP)	16	43.00	0.0	KNT	3.00	22	ePd	16	07.10	1.4							eS	19	05.00	
RMQ	116.30	94	ePKP	16	43.00	-1.4				eS	16	43.52					SFI	9.08	311	P	17	30.80	-0.5
DZM	117.18	76	iPKPc	16	45.90	-0.4	VAY	3.06	17	iPn	16	07.30	0.7				PGD	9.13	310	P	17	31.00	-1.2
STK	119.34	103	iPKPc	16	49.30	-0.7				i	16	13.50					LJU	9.19	329	eP	17	29.00	-3.8X
	0.5s		7.00nm							iSn	16	44.40								eS	19	10.00	
CMS	120.17	99	iPKPd	16	51.70	0.1	TIR	3.18	339	ePn	16	08.70	0.3				TRI	9.26	325	P	17	33.50	-0.2
ADE	121.44	107	ePKP	16	54.00	0.0	SRS	3.20	31	iPc	16	10.12	1.5				VOY	9.45	326	eP	17	32.80	-3.7X
BWA	123.66	98	ePKP	16	58.20	-0.1	LCI	3.31	307	P	16	09.00	-1.2							eS	19	16.70	

24d 16h

PSZ 9.59 354 eP 17 43.00 4.6X
SRO 9.69 347 eP 18 05.40 25.8X
ZST 10.29 344 eP 18 04.50 16.6X
FVI 10.38 325 P 17 47.50 -1.6
CTI 10.53 320 P 17 51.50 0.2
SOTA 11.57 323 iPnc 18 03.30 -2.2
i 18 14.40
iSn 19 02.70
KHC 12.13 335 eP 18 09.00 -4.0X
LPL 13.03 308 eP 18 36.10 10.9X
1.0s 6.00nm
CLL 14.21 338 eP 18 44.00 3.5X
1.9s 18.00nm 4.4mb
e 18 52.00
LBF 15.41 309 eP 18 59.70 3.5X
LOR 15.61 310 eP 19 02.10 3.3X
1.2s 14.90nm 4.1mb
Z 20s 0.15um 5.2Msz
AVF 15.70 308 eP 19 04.60 4.6X
1.6s 24.90nm 4.2mb
SSF 15.73 309 eP 19 03.40 3.1X
1.2s 20.85nm 4.2mb
NUR 22.24 4 eP 20 14.00 -1.2
e 20 19.00
HFS 22.31 350 eP 20 13.00 -2.9X
0.5s 2.60nm 3.9mb
Z 16s 0.18um 3.6MszX
LR 28 10.00
NB2 23.56 348 P 20 25.80 -2.4
0.8s 3.10nm 3.9mb
EKA 23.67 324 Pc 20 29.60 0.4
0.9s 9.10nm 4.3mb
SUF 24.53 5 eP 20 35.00 -2.6X
GBA 55.14 101 P 24 48.00 -4.0X
S.D. = 1.2 on 80 of 106 obs.

% OCT 24, 1990 18h 48m 35.02± 1.09s
42.952 N ± 7.9km 13.573 E ±12.0km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS 0.68 280 P 48 48.00 -0.5
eSg 48 58.30
ARV 0.71 320 P 48 49.10 0.0
eSg 48 59.50
MNS 0.87 230 P 48 51.50 -0.3
eSg 49 04.50
AZI 0.97 186 P 48 55.00 1.6
eSg 49 06.00
SDI 1.26 172 P 48 57.50 -0.9
eSg 49 16.20
CRE 1.36 300 P 48 59.70 -0.4
DUI 1.45 153 P 49 01.00 -0.3
SFI 1.58 308 P 49 04.20 1.1
eSn 49 23.50
PGD 1.63 305 P 49 04.00 -0.1
S.D. = 0.9 on 9 of 9 obs.

& OCT 24, 1990 19h 11m 33.71s
61.559 N 152.257 W
DEPTH = 125.0km
SOUTHERN ALASKA (2)
<AGS-P>.

CRP 0.30 170 iP 11 50.76 0.7
BGL 0.30 192 iP 11 50.90 0.9
CKL 0.37 186 iP 11 50.97 -0.9
SKT 0.55 39 iP 11 52.06 -0.7
eS 12 06.73
SUA 0.73 97 iP 11 53.85 -0.4
eS 12 09.68
NKA 0.96 148 eP 11 56.58 0.6
RDT 0.99 184 iP 11 55.42 -1.0
RSO 1.13 193 iP 11 57.09 -0.9
PWA 1.14 84 eP 11 57.41 -0.4
RED 1.17 193 iP 11 57.40 -0.9
eS 12 16.58
CUT 1.27 47 iP 11 58.61 -0.6
PMS 1.34 102 eP 11 59.22 -0.8
SLKM 1.45 136 eP 12 00.02 -1.2
PLRM 1.50 87 eP 12 00.25 -1.5
PMR 1.50 87 iPd 12 00.10 -1.6
NNL 1.59 162 eP 12 02.67 -0.2
GHO 1.60 81 iP 12 01.87 -1.3
eS 12 24.55
SVW 1.68 256 iPc 12 02.50 -1.5
KNK 1.83 93 iP 12 04.46 -1.3
eS 12 29.01
HUR 1.88 40 eP 12 05.38 -1.0
eS 12 29.81
SML 1.89 81 eP 12 05.31 -1.2
BRLK 1.92 159 eP 12 05.84 -1.1
HOM 1.93 171 eP 12 05.78 -1.2
OPT 1.97 195 iP 12 06.84 -0.7
eS 12 32.64
SEW 2.01 135 eP 12 06.24 -1.6
PDB 2.02 209 iP 12 07.17 -0.9
CNPM 2.10 166 eP 12 07.22 -1.9
eS 12 33.80
XLV 2.13 173 eP 12 07.78 -1.7
TTA 2.23 310 iPd 12 09.50 -1.4
AUE 2.28 195 eP 12 10.13 -1.2
AUI 2.31 195 eP 12 10.66 -1.1
SCM 2.36 81 eP 12 10.96 -1.6
RND 2.44 39 eP 12 12.09 -1.4
KNIM 2.52 117 eP 12 11.48 -3.0
GLI 2.59 103 eP 12 12.82 -2.6
MCNL 2.60 204 iP 12 14.43 -1.1
MCK 2.67 34 eP 12 15.33 -1.1
CDD 2.73 195 eP 12 15.48 -1.8
MTU 2.75 123 eP 12 15.30 -2.3
VZW 2.80 98 eP 12 16.31 -1.9
VLZ 2.89 96 eP 12 17.39 -1.9
TOA 2.94 77 iPd 12 19.20 -0.8
KLU 3.04 88 eP 12 19.23 -2.1
SDG 3.31 70 eP 12 23.19 -1.7
NEA 3.36 24 eP 12 22.81 -2.7
WRH 3.49 31 eP 12 25.10 -2.2
DDM 3.70 50 eP 12 30.42 0.2
CCB 3.70 31 eP 12 28.03 -2.1
HDA 3.74 38 eP 12 28.81 -1.9
KDC 3.83 182 P 12 28.20 -3.6
FBA 3.91 29 iPd 12 30.90 -2.1
GLB 4.05 88 eP 12 33.64 -1.3
GLM 4.08 30 eP 12 33.43 -1.9
DOT 4.33 57 eP 12 36.93 -1.7
IMA 4.57 353 iPd 12 40.00 -2.0
TGL 4.64 96 eP 12 41.33 -1.6
TMW 4.65 64 eP 12 41.62 -1.4
BALM 4.81 92 eP 12 43.53 -1.7
DWY 6.39 61 P 13 04.70 -2.0
HYT 7.17 89 P 13 15.70 -1.7
INK 10.40 41 eP 13 59.00 -1.5
61 obs. associated

% OCT 24, 1990 19h 40m 56.02± 1.33s
46.241 N ±15.9km 2.690 E ± 8.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.9 (MDG).

MAF 0.09 257 Pg 40 58.80 0.2
Sg 41 01.00
BGF 0.33 19 Pg 41 02.90 -0.1
Sg 41 08.60
TCF 0.34 278 Pg 41 02.80 -0.2
Sg 41 07.80
AVF 0.72 40 Pg 41 10.40 0.3
Sg 41 21.40
SMF 0.89 63 Pg 41 12.90 -0.2
Sg 41 25.20
S.D. = 0.3 on 5 of 5 obs.

• OCT 24, 1990 19h 57m 30.18± 1.80s
23.978 N ±12.3km 122.816 E ±15.0km
DEPTH = 10.0km (geophysicist)
4.2mb (2 obs.) 3.7Msz (1 obs.)
TAIWAN REGION (243)

TWC 1.08 306 iPd 57 50.50 0.0
TWD 1.12 275 iPc 57 49.60 -1.6
eS 58 00.00
TWZ 1.58 315 eP 57 59.60 1.2
eS 58 18.40
ANP 1.68 316 eP 58 00.50 0.6
eS 58 15.50
TWO 1.83 280 ePc 58 02.00 0.0
eS 58 22.30
TWK 2.25 252 ePd 58 08.50 0.4
SSE 7.24 349 Pc 59 18.10 -0.4
Z 16s 0.40um
N 12s 0.60um
E 12s 0.10um
pP 59 25.50
Lg 01 26.50
LZH 20.34 311 Pc 02 09.00 -0.5
2.0s 36.00nm 4.4mb
Z 18s 0.29um 3.7Msz
CHG 22.80 262 eP 02 35.30 1.0
NB2 79.10 333 P 09 35.40 -0.8
0.7s 1.10nm 4.0mb
S.D. = 1.0 on 10 of 10 obs.

• OCT 24, 1990 20h 20m 02.07± 1.10s
24.034 N ± 9.4km 122.688 E ±11.2km
DEPTH = 10.0km (geophysicist)
4.1mb (2 obs.)
TAIWAN REGION (243)

TWC 0.96 307 iPd 20 20.50 0.3
TWD 1.00 273 iPc 20 19.70 -1.3
eS 20 30.00
TWZ 1.46 317 iPc 20 30.20 1.7
eS 20 48.80
ANP 1.56 317 eP 20 30.20 0.2
TWO 1.71 278 ePc 20 32.00 -0.1
eS 20 52.30
TWK 2.16 250 ePd 20 38.50 -0.1
eS 21 03.60
SSE 7.16 350 Pd 21 49.00 -0.3
0.6s 23.00nm 5.5mb X
Z 20s 0.50um 4.0Msz
N 10s 0.50um
eLg 24 03.00
LZH 20.21 311 eP 24 40.00 -0.1
2.0s 29.00nm 4.3mb
Z 16s 0.29um 3.7MszX
CHG 22.69 261 eP 25 06.20 1.0
WB5 45.11 164 eP 28 21.10 0.6
NB2 79.00 333 P 32 05.50 -2.0
0.8s 1.20nm 4.0mb
S.D. = 1.1 on 11 of 11 obs.

% OCT 24, 1990 20h 26m 02.75± 0.89s
40.271 N ±14.8km 27.352 E ± 8.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.9 (ISK).

EDC 0.40 79 iPg 26 10.00 -0.9
iSg 26 16.00
BNT 0.44 79 iPg 26 10.80 -1.0
iSg 26 15.60
KCT 0.77 91 iPg 26 18.60 0.8
EZN 0.91 241 ePg 26 19.80 -0.3
CTT 1.20 43 iPn 26 24.90 -0.2
ISK 1.52 58 ePn 26 30.00 0.0
YLV 1.57 79 iPn 26 31.60 0.8
IZI 1.62 87 ePn 26 31.00 -0.6
HRT 1.85 72 ePn 26 36.00 1.2
S.D. = 0.9 on 9 of 9 obs.

? OCT 24, 1990 20h 56m 30.10± 1.85s
19.896 N ±22.7km 144.226 E ±44.0km
DEPTH = 453.5 ± 13.3 km
4.8mb (10 obs.)
MARIANA ISLANDS (216)

GUMO 6.30 174 eP 58 08.60 0.0
0.8s 240.12nm 5.4mb
PJG 6.30 174 eP 58 08.70 0.1
GUA 6.36 174 eP 58 09.30 0.1
0.7s 142.47nm 5.2mb
SSE 23.55 303 Pc 01 03.50 -1.2
1.0s 19.00nm 4.6mb
BJI 31.31 316 eP 02 13.00 0.0
1.2s 32.00nm 4.6mb
LZH 38.83 303 iPd 03 17.30 1.3
1.0s 35.00nm 4.8mb
WB5 40.69 194 eP 03 31.10 0.1
CHG 42.64 276 eP 03 47.00 0.3
STK 51.54 183 eP 04 54.10 -0.3
1.8s 53.00nm 4.6mb
GUN 53.52 290 Pd 05 09.72 0.3
0.9s 53.00nm 4.9mb
PKI 53.96 290 Pd 05 12.30 -0.3
0.6s 18.00nm 4.6mb
KKN 54.06 290 Pd 05 13.06 -0.1
0.9s 44.00nm 4.8mb
DMN 54.23 290 Pd 05 14.42 0.0
GKN 54.61 291 Pd 05 16.86 -0.1

1.1s 108.00nm 5.1mb
S.D. = 0.6 on 14 of 14 obs.

& OCT 24, 1990 21h 12m 46.01s
63.431 N 150.949 W
DEPTH = 14.2km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.75	127	eP	13 00.28	0.0
			eS	13 11.69	
RND	0.94	91	eP	13 03.72	0.1
			eS	13 18.13	
CUT	1.08	163	iP	13 05.87	0.0
			eS	13 21.77	
NEA	1.42	35	eP	13 11.90	0.7
			eS	13 30.42	
SKT	1.48	191	eP	13 11.85	-0.3
WRH	1.64	49	eP	13 12.87	-1.6
CCB	1.84	47	eP	13 15.51	-1.9
			eS	13 44.18	
PWA	1.85	164	eP	13 17.07	-0.5
GHO	1.91	150	eP	13 18.44	0.0
SUA	1.98	177	eP	13 19.48	0.0
HDA	2.02	59	eP	13 22.95	3.0
FBA	2.02	42	eP	13 22.50	2.5
PLRM	2.03	155	iP	13 20.51	0.4
PMR	2.03	155	iPd	13 20.50	0.4
SML	2.03	142	eP	13 19.50	-0.6
NCG	2.11	196	eP	13 20.81	-0.6
CGLM	2.19	193	eP	13 22.38	-0.1
BGL	2.28	198	eP	13 23.88	0.1
PMS	2.29	163	eP	13 24.84	0.9
CKL	2.33	197	eP	13 25.01	0.4
KNK	2.33	149	eP	13 25.12	0.6
TTA	2.35	260	eP	13 26.50	1.7
TOA	2.57	119	iPd	13 30.40	2.5

23 obs. ossocioted

OCT 24, 1990 21h 47m 15.38± 0.34s
6.958 S ± 5.4km 130.999 E ± 7.0km
DEPTH = 33.0km (normol)
4.9mb (12 obs.)
BANDA SEA (280)

MTN	5.85	179	iPd	48 43.00	0.8
KNA	9.01	194	iPc	49 25.60	-0.6
	0.3s	177.00nm		6.7mb X	
			eS	51 00.00	
WB5	13.25	166	eP	50 18.80	-5.1X
OIS	15.88	149	iPc	50 54.20	-4.0X
	0.2s	10.00nm		4.6mb	
			eS	53 38.00	
PMG	16.17	100	eP	51 03.00	1.1
ASPA	16.85	171	iPc	51 06.80	-3.7X
	0.5s	74.10nm		5.1mb	
Z	18s	0.10um		4.9Msz	
			eS	54 01.00	
MBL	17.78	216	iPc	51 20.30	-1.7
	0.4s	34.00nm		4.8mb	
			eS	54 27.00	
TRT	18.23	267	ePd	51 31.10	3.4X
WARB	19.57	192	eP	51 42.00	-1.6
	0.4s	20.00nm		4.8mb	
			eS	55 11.00	
KKM	19.61	311	ePd	51 45.00	0.8
NANU	21.52	222	iPc	52 05.20	1.5
	0.4s	30.00nm		5.1mb	
MEKA	22.87	210	eP	52 19.00	1.9
	0.4s	21.00nm		5.0mb	
			eS	56 29.00	
COOL	25.53	200	eP	52 43.00	0.2
RMO	25.75	141	eP	52 43.00	-1.9
			eS	57 26.00	
MRWA	26.28	211	eP	52 51.00	1.3
STK	26.70	160	iPc	52 53.30	-0.2
	0.7s	13.00nm		4.7mb	
			eS	57 42.50	
BAL	27.08	208	eP	52 58.00	1.0
KLB	27.45	205	eP	52 59.20	-1.2
			eS	58 13.00	
CMS	28.07	152	eP	53 05.00	-1.0
MUN	28.46	207	eP	53 09.00	-0.5
ADE	28.76	167	iPc	53 12.90	0.6
NWAO	28.83	205	eP	53 12.00	-0.8
BRS	28.98	137	iPc	53 14.50	0.2
BFD	31.86	162	eP	53 42.00	2.3
			e	00 06.00	
DZM	37.33	117	iPc	54 26.00	-0.8
BDT	39.73	308	eP	54 47.80	1.0
CHG	40.68	310	ePc	54 55.00	0.4
	0.9s	13.66nm		4.7mb	
MAT	43.79	8	eP	55 20.00	0.2
LZH	49.84	331	eP	56 07.50	-0.1
	1.5s	23.00nm		5.0mb	
SHL	49.91	312	iP	56 07.50	-0.8
THZ	50.76	140	P	56 14.50	0.0
KHZ	51.50	140	P	56 18.90	-1.1
	0.6s	36.00nm		5.5mb	
MNG	51.89	137	P	56 21.30	-1.7
PUZ	52.72	133	eP	56 27.90	-1.4
GUN	55.67	311	P	56 50.76	-0.7
PKI	55.85	310	P	56 51.62	-1.1
KKN	56.07	310	P	56 53.20	-0.9
DMN	56.10	310	P	56 53.60	-0.9
GKN	56.66	310	P	56 57.50	-0.8
	0.3s	45.00nm		6.0mb	
NDI	62.75	307	iPd	57 38.00	-2.0
OUE	71.58	305	iPd	58 36.50	0.5
MAIO	79.43	309	eP	59 21.00	0.7
SPA	83.09	180	iPc	59 39.70	0.7
	0.8s	21.25nm		5.3mb	
ALQ	120.49	53	ePKP	06 06.00	0.1
LKO	136.98	277	PKP	06 38.62	0.8
CNCB	149.83	142	PKP	07 02.00	1.6
			i	07 07.30	
LPB	149.97	141	ePKP	07 02.00	1.6
			i	07 07.70	
ZOBO	150.15	141	PKP	07 02.00	1.1
			i	07 07.80	
VAO	150.16	184	ePKP	07 06.20	6.1X
			e	07 12.70	
CCH	150.47	145	iPKPd	07 09.20	8.2X
			i	07 31.00	
SIV	154.26	152	PKP	07 07.80	1.7
			i	07 15.60	
			i	07 29.80	

S.D. = 1.2 on 45 of 51 obs.

OCT 24, 1990 23h 09m 42.30± 1.12s
33.544 N ± 6.4km 141.063 E ± 9.3km
DEPTH = 57.6 ± 11.8 km
5.1mb (7 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)

KAKJ	2.75	345	P	10 24.70	-0.2
			eS	11 00.10	
CHJJ	3.02	326	P	10 28.10	-0.7
			S	11 03.40	
IIDJ	3.24	307	P	10 32.60	0.7
			eS	11 11.60	
MAT	3.80	323	iPd	10 39.80	0.1
			eS	11 24.00	
MTMJ	4.04	320	P	10 44.30	1.1
NIIJ	4.05	336	P	10 42.80	-0.4
WKYJ	4.60	280	P	10 49.70	-1.3
			S	11 41.30	
TSRJ	4.64	297	P	10 51.50	0.0
YAMJ	4.69	350	eP	10 52.80	0.6
			eS	11 44.60	
OFUJ	5.55	5	eP	11 02.40	-1.8
			S	12 03.00	
TKSJ	5.86	276	P	11 08.50	-0.1
SHNJ	8.30	277	eP	11 44.20	1.7
KUMJ	8.65	266	P	11 47.40	0.0
KAGJ	8.92	257	P	11 54.80	3.7X
GUMO	20.17	169	eP	14 15.50	0.9
	1.3s	366.01nm		5.5mb	
PJG	20.17	169	eP	14 15.80	1.2
GUA	20.22	169	eP	14 16.00	0.8
PKI	47.82	278	P	18 00.00	-16.5X
WB5	53.51	188	iPc	18 58.20	-0.9
OIS	53.82	182	iPc	19 00.30	-1.0
	1.0s	19.00nm		5.1mb	
ASPA	57.30	188	ePc	19 25.40	-1.1
	0.4s	35.60nm		5.8mb	
MBL	58.04	203	eP	19 30.70	-1.0
	0.4s	6.00nm		5.1mb	
MBC	59.95	16	eP	19 45.50	1.1
WARB	60.96	195	eP	19 52.00	0.3
FORR	65.21	192	iPd	20 19.40	-0.2
BAL	67.83	203	eP	20 35.50	-0.9
KLB	68.42	201	eP	20 39.00	-1.0
NWAO	69.82	201	iPd	20 49.00	0.4
	0.6s	20.00nm		5.2mb	
HFS	77.15	336	eP	21 30.50	-0.5
	0.4s	1.00nm		4.2mb	
NB2	77.29	337	P	21 32.10	0.3
	0.9s	4.50nm		4.5mb	
ZOBO	148.59	64	PKP	29 27.00	5.3X
LPB	148.77	64	PKP	29 32.00	10.2X
CNCB	149.03	65	PKP	29 29.00	6.6X
SIV	153.46	54	ePKP	29 30.00	1.8

S.D. = 1.0 on 29 of 34 obs.

OCT 24, 1990 23h 32m 50.82± 0.41s
49.149 N ± 3.3km 6.962 E ± 4.9km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
MD 2.8 (STR).

GWF	0.47	111	Pg	33 00.76	0.4
RUP	0.56	7	ePg	33 01.59	-0.6
WLF	0.74	315	iPd	33 04.65	-0.6
			iS	33 14.43	
KTD	0.75	76	ePg	33 06.04	0.4
CDF	0.77	164	Pg	33 05.65	-0.2
			Sg	33 17.20	
WLS	0.78	160	Pg	33 06.05	0.0
			Sg	33 18.54	
ABH	0.83	27	ePg	33 06.41	-0.4
ECH	0.94	172	Pg	33 08.91	0.1
TOD	1.29	69	ePg	33 14.06	-0.6
MOF	1.30	175	Pg	33 15.88	0.9
			Sg	33 34.00	
TNS	1.45	41	ePnc	33 16.90	-0.2
			eSn	33 37.20	
FEL	1.45	151	ePg	33 16.74	-0.5
MEM	1.59	337	iP	33 19.70	0.7
ENN	1.75	338	iPn	33 23.50	2.1
	0.9s	53.00nm			
			eSn	33 46.00	
LOMF	1.80	183	Pn	33 21.75	-0.5
DOU	1.81	303	iP	33 21.30	-0.9
			iS	33 45.70	
GRF	2.83	77	ePg	33 46.00	9.0X
			eSg	34 25.60	

S.D. = 0.8 on 16 of 17 obs.

OCT 24, 1990 23h 38m 15.18± 0.12s
44.117 N ± 2.7km 83.856 E ± 2.5km
DEPTH = 20.1km (13 depth phases)
5.2mb (70 obs.) 4.8Msz (5 obs.)
NORTHERN XINJIANG, CHINA (332)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 19C
Centroid Location:
Origin Time 23:38:15.2 2.0
Lat 43.79N 0.15 Lon 83.99E 0.17
Dep 15.0 FIX Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr= 4.36 0.70 Mtt=-6.20 0.59
Mff= 1.84 0.86 Mrt=-0.50 2.80
Mrf=-3.39 1.78 Mtf=-2.38 0.80
Principal Axes:
T Val= 6.79 Plg=54 Azm= 83
N 0.25 35 247
P -7.03 8 342
Best Double Couple:Mo=6.9*10**16
NP1:Strike=106 Dip=48 Slip= 141
NP2: 224 62 49

GKN	16.09	178	P	42 01.34	-0.7
GUN	16.25	174	P	42 04.44	0.2
	1.0s	960.00nm		5.9mb X	
NDI	16.29	201	eP	42 00.00	-4.4X
KKN	16.33	176	P	42 04.68	-0.4
	0.9s	346.00nm		5.5mb	
DMN	16.50	176	P	42 07.76	0.4
PKI	16.56	175	P	42 07.74	-0.4
	0.9s	297.00nm		5.4mb	
LZH	17.24	111	iPc	42 17.40	1.0
	1.5s	466.00nm		5.4mb	
Z	12s	3.28um		4.0Msz	
			pP	42 23.00	
			sP	42 26.00	
			S	45 36.00	
			PcP	46 43.00	
			Lg	47 31.00	
OUE	19.31	230	iPc	42 40.40	-1.6

24d 23h

e(S) 46 20.50
SHL 19.63 158 iP 42 44.00 -1.6
eS 46 21.00
MAIO 20.13 256 iPc 42 51.00 0.3
0.8s 36.60nm 4.8mb
eS 46 47.00
BJI 24.24 88 iPc+ 43 33.00 1.4
1.0s 224.00nm 5.7mb
Z 12s 3.01um 5.0MszX
N 12s 1.91um
eS 47 52.00
KMI 24.40 135 Pc+ 43 34.00 0.5
2.5s 150.00nm 5.1mb
N 12s 1.10um
eS 47 58.00
TEH 26.14 263 eP 43 47.00 -2.8X
BOM 26.80 204 eP 43 55.20 -0.5
eS 49 02.50
POO 26.86 201 iPc 43 58.10 1.7
1.1s 103.80nm 5.4mb
HYB 26.99 191 iPc 43 58.00 0.4
1.0s 70.00nm 5.3mb
eS 48 54.00
CHG 28.22 149 ePc 44 09.00 0.2
1.0s 22.25nm 4.9mb
TAB 28.74 271 eP 44 15.00 1.6
BDT 29.68 150 eP 44 23.00 1.2
LOE 30.60 145 eP 44 30.00 0.0
GBA 30.90 192 Pc 44 32.30 -0.3
0.5s 47.10nm 5.6mb
NST 31.54 149 eP 44 39.20 0.9
SSE 32.03 101 Pd 44 41.60 -0.8
1.0s 77.00nm 5.6mb
Z 20s 0.90um 4.5Msz
N 14s 0.80um
E 14s 0.70um
eS 51 48.00
sS 52 24.00
eSS 55 24.00
DHR 32.49 248 iP+ 44 47.10 0.6
KOD 34.21 191 eP 45 03.00 1.2
RYD 35.91 250 iP+ 45 16.50 0.4
SUF 37.53 320 iP 45 29.30 0.1
BBTK 37.73 282 iPd 45 32.00 0.8
SOD 37.76 328 iP 45 31.20 0.1
KEV 38.05 332 iP 45 34.00 0.5
0.6s 28.70nm 5.3mb
NUR 38.25 317 iP 45 35.20 0.0
0.8s 22.00nm 5.0mb
i 45 50.80 62kmX
AFIF 38.66 252 ePc 45 43.10 3.9X
YONJ 38.72 86 eP 45 36.80 -2.7X
CFR 38.97 292 eP 45 42.00 0.6
MML 39.26 270 eP 45 51.00 7.0X
ZNT 39.63 270 eP 45 55.00 7.9X
TKSJ 39.73 87 P 45 47.80 -0.1
TSRJ 40.36 84 P 45 53.00 0.0
WKYJ 40.72 86 P 45 56.00 -0.1
BNT 40.91 285 eP 45 59.00 1.5
CMP 41.02 293 ePc 46 04.00 5.6X
MBH 41.09 267 eP 46 06.00 7.0X
TNR 41.39 294 ePc 45 52.00 -9.4X
MAT 41.47 81 (P) 46 00.00 -2.2
IIDJ 41.76 83 eP 46 04.20 -0.4
UPP 41.81 316 iP 46 04.50 -0.1
IPM 42.18 154 ePc 46 09.80 1.6
0.9s 31.60nm 5.0mb
CHJJ 42.26 81 eP 46 09.30 0.6
KRA 42.74 301 iPd 46 13.00 0.7
0.8s 42.00nm 5.2mb
Z 18s 1.60um 5.0Msz
E 18s 2.20um
e 46 19.00 20km
ABHA 42.97 246 eP 46 17.60 2.7X
KAKJ 43.03 81 P 46 14.00 -0.9
BZS 43.15 295 eP 46 15.50 -0.2
HFS 43.70 317 eP 46 19.50 -0.6
0.7s 14.90nm 4.9mb
Z 17s 1.09um 4.8MszX
LR 00 40.60
VAY 44.20 289 iP 46 25.00 0.7
1.0s 44.00nm 5.3mb
i 46 45.00 82kmX
BEO 44.21 294 eP 46 24.50 0.2
SRO 44.48 299 iP 46 27.70 1.1
SKO 44.69 290 eP 46 29.00 0.7
KSP 44.70 304 iP 46 28.50 0.2

e 47 46.00 392kmX
NB2 44.72 319 P 46 27.90 -0.5
0.7s 16.10nm 5.0mb
ZST 45.11 300 iP 46 32.60 1.0
VKA 45.57 300 eP 46 36.50 1.2
1.8s 80.60nm 5.4mb
PRU 46.05 303 ePc 46 39.70 0.7
Z 14s 2.00um 5.2MszX
N 14s 0.80um
E 14s 1.80um
S 02 52.00 35kmX
e 46 50.00
CLL 46.50 305 iPc 46 42.60 0.1
0.9s 26.00nm 5.2mb
PTJ 46.70 297 e(P) 46 39.30 -5.0X
KHC 46.94 302 P 46 47.30 1.2
Z 15s 0.40um 4.5MszX
N 15s 0.50um
E 16s 0.80um
VBY 47.31 297 eP 46 50.00 1.0
KKM 47.34 134 ePd 46 50.00 0.3
LJU 47.55 298 e(P) 46 51.00 0.1
MOX 47.56 305 eP 46 52.00 1.1
CEY 47.75 298 e(P) 46 53.00 0.5
BHG 47.92 301 eP 46 55.00 1.2
VOY 47.97 298 e(P) 46 51.90 -2.4
GRF 48.16 304 iPKPc 46 56.90 1.3
e 47 02.70 19km
e 47 07.60
e 47 18.30
TRI 48.18 298 iPc 46 55.30 -0.5
FVI 48.44 299 P 46 56.50 -1.2
WATA 48.88 301 iPc 47 01.40 0.0
0.9s 46.20nm 5.5mb
i 47 06.50 17km
i 47 17.50
i 47 25.40
ORI 48.92 290 P 47 02.00 0.4
SOTA 49.16 301 iPc 47 03.60 0.1
0.6s 22.60nm 5.4mb
i 47 08.60 17km
i 47 16.60
TDS 49.19 290 P 47 04.50 0.8
CTI 49.38 299 P 47 02.50 -2.7X
OGA 49.42 300 eP 47 05.50 -0.1
SGO 49.46 291 P 47 07.50 1.8
MGR 49.49 290 P 47 06.50 0.5
DUI 49.51 293 P 47 06.00 -0.2
CZI 49.54 289 P 47 06.30 0.0
ARV 49.67 296 P 47 08.00 0.6
BSS 49.69 292 P 47 08.00 0.5
WTS 49.83 308 eP 47 09.00 0.6
0.9s 10.00nm 4.8mb
SDI 49.92 293 P 47 06.50 -2.8X
AZI 50.04 294 P 47 11.50 1.4
OSS 50.04 300 ePc 47 10.40 0.0
ASS 50.05 295 P 47 11.00 0.7
SFI 50.18 297 P 47 12.50 1.3
MNS 50.35 294 P 47 11.40 -1.2
ATN 50.51 288 P 47 12.50 -1.3
VDL 50.55 300 ePd 47 14.30 0.0
SLE 50.59 302 ePd 47 14.80 0.5
RMP 50.60 294 P 47 14.50 0.0
LLS 50.67 301 ePd 47 14.90 -0.3
ENN 50.84 307 eP 47 16.00 -0.1
0.9s 14.00nm 4.9mb
BDI 50.93 297 P 47 19.60 2.6X
TMA 51.09 300 ePd 47 17.50 -0.8
PII 51.13 297 P 47 13.00 -5.4X
VAI 51.26 300 P 47 17.00 -2.4
BOB 51.33 299 P 47 25.50 5.4X
GIB 51.58 289 P 47 07.50 -14.6X
MMK 51.68 301 ePd 47 22.50 -0.4
DIX 52.01 301 ePd 47 25.60 0.2
EMS 52.31 301 ePc 47 27.20 -0.4
PGF 52.67 296 eP 47 29.80 -0.4
1.2s 53.55nm 5.3mb
LPG 52.69 300 iPc 47 30.70 0.1
0.5s 23.30nm 5.4mb
LPL 52.69 300 iPc 47 30.60 0.1
BNI 52.94 300 Pd 47 32.00 -0.3
SBF 53.04 298 eP 47 32.40 -0.5
1.0s 36.00nm 5.3mb
LDR 53.62 304 eP 47 35.90 -1.1
0.4s 2.30nm 4.5mb
Z 20s 0.77um 4.8Msz
LBF 53.68 303 eP 47 36.30 -1.2

0.6s 4.50nm 4.6mb
EKA 53.79 315 P 47 38.00 -0.1
0.8s 7.00nm 4.7mb
SMF 53.93 303 eP 47 38.60 -0.7
0.8s 80.50nm 5.8mb
SSF 53.93 304 eP 47 38.20 -1.1
0.4s 1.70nm 4.4mb
AVF 54.15 303 eP 47 40.00 -0.9
0.6s 2.70nm 4.5mb
BGF 54.57 303 eP 47 43.30 -0.7
0.6s 7.20nm 4.9mb
MAF 54.90 303 eP 47 46.00 -0.5
0.4s 4.60nm 4.9mb
TCF 55.08 303 eP 47 47.30 -0.6
0.6s 4.50nm 4.7mb
AKU 55.27 330 eP 47 50.00 1.1
0.7s 10.96nm 5.0mb
LDF 55.32 307 eP 47 48.60 -0.9
0.4s 2.30nm 4.6mb
FLN 55.45 307 eP 47 49.60 -0.8
0.4s 4.00nm 4.8mb
Z 20s 0.85um 4.8Msz
LSF 55.51 303 eP 47 49.70 -1.2
0.4s 2.85nm 4.7mb
RJF 56.00 302 eP 47 54.30 -0.1
0.8s 8.05nm 4.8mb
Z 20s 0.65um 4.7Msz
LPF 56.14 306 eP 47 53.80 -1.5
0.6s 7.20nm 4.9mb
MFF 56.34 305 eP 47 55.80 -1.0
0.6s 3.60nm 4.6mb
LPO 56.52 302 eP 47 57.80 -0.4
0.6s 10.80nm 5.1mb
LFF 56.66 302 eP 47 59.00 -0.1
0.6s 5.40nm 4.8mb
EPF 57.91 301 eP 48 06.90 -1.2
0.6s 6.30nm 4.8mb
MBC 59.00 6 ePc 48 14.50 -0.6
0.7s 30.00nm 5.5mb
IMA 61.60 23 iPc 48 32.60 -0.7
0.8s 21.00nm 5.3mb
TOL 62.40 300 eP 48 38.00 -0.8
TTA 63.17 26 iPc 48 43.50 -0.1
0.8s 3.80nm 4.6mb
FBA 64.10 22 iPc 48 49.20 -0.4
0.7s 18.90nm 5.4mb
INK 64.46 14 iPc 48 51.20 -0.7
0.6s 20.00nm 5.4mb
SVW 64.61 28 iPc 48 53.80 0.7
0.8s 13.00nm 5.1mb
PMR 66.30 25 iPc 49 02.80 -1.0
0.9s 21.50nm 5.3mb
TOA 66.76 23 iPc 49 06.80 -0.1
1.2s 170.00nm 6.1mb
IFR 66.93 295 iP 49 07.50 -1.0
LWI 67.34 243 iP- 49 10.70 -0.6
KDC 68.19 29 P 49 15.50 -0.2
0.9s 95.83nm 5.9mb
pP 49 22.20 22km
JAY 68.70 118 ePd 49 19.20 -0.4
BCAD 69.32 256 iPc 49 22.50 -0.9
0.6s 124.00nm 6.2mb X
i 50 51.40 404kmX
YKA 72.71 9 eP 49 41.10 -2.0
0.8s 16.10nm 5.1mb
MBL 72.84 145 eP 49 43.70 -0.6
PMG 78.07 116 iPd 50 14.50 0.3
1.0s 60.00nm 5.6mb
KRI 78.26 233 iPc 50 19.20 3.8X
SCH 78.32 343 eP 50 15.00 -0.1
WB5 78.66 132 iPc 50 17.00 -0.4
MRWA 78.68 152 eP 50 17.00 -0.2
WARB 80.18 142 eP 50 25.50 0.0
BAL 80.20 152 eP 50 24.50 -0.9
MUN 81.29 153 eP 50 30.00 -1.1
FFC 81.41 3 iPc 50 31.10 -0.5
0.9s 95.00nm 5.8mb
KLB 81.46 151 eP 50 31.00 -1.0
ASPA 81.54 135 iPc 50 32.60 0.0
0.8s 48.10nm 5.6mb
OIS 82.08 129 iPc 50 35.10 -0.4
0.9s 38.00nm 5.5mb
LKO 83.04 276 Pc 50 39.82 -0.9
0.9s 25.00nm 5.3mb
KIC 84.61 274 P 50 48.62 -0.1
TIC 84.62 274 P 50 49.00 0.3
1.1s 23.50nm 5.3mb

```
MCW     84.67  17 P        50 49.30   0.8
PNT     84.71  15 ePc      50 49.00   0.3
        0.8s    38.00nm           5.7mb
               pP          50 56.00  22km
FORR    84.85 143 eP       50 49.00  -0.3
LIC     84.91 274 P        50 50.18   0.0
SES     84.98  10 ePc      50 49.20  -0.8
        0.7s    33.00nm           5.7mb
BFT     85.14 227 eP       50 52.00   0.8
               S           59 34.00
CTA     85.59 123 iPc      50 53.10  -0.3
        1.0s    53.00nm           5.7mb
GMW     85.75  18 P        50 55.10   1.2
               pP          51 02.00  22km
CBM     86.02 341 P        50 55.00  -0.2
RMW     86.04  17 P        50 56.20   0.7
               pP          51 02.40  19km
SLR     86.12 228 eP       50 56.50   0.5
        1.8s    68.18nm           5.6mb
               e           59 26.50
DPW     86.36  15 P        50 57.20   0.2
               pP          51 04.30  22km
BPI     86.61 228 eP       50 58.00  -0.5
               e           59 42.00
LON     86.72  17 P        50 59.30   0.6
               pP          51 04.30  16km
BNH     88.94 342 P        51 09.70   0.3
LRM     89.29  11 ePc      51 11.10  -0.3
               e           51 18.10  22km
LBFM    91.83  19 P        51 23.70   0.5
               pP          51 31.20  23km
FHC     91.83  21 eP       51 25.00   2.1
RMO     91.94 126 iP       51 23.00  -0.4
        1.0s   118.00nm           6.2mb X
STK     92.15 134 iPc      51 23.80  -0.4
        1.0s    14.00nm           5.3mb
WVLY    92.37 347 P        51 25.50   0.1
WDC     92.40  20 eP       51 25.80   0.3
ORV     93.62  19 eP       51 31.70   0.5
DUG     94.74  13 P        51 36.90   0.4
DAU     94.76  12 P        51 37.60   0.8
BRS     95.00 124 iPc      51 38.10   0.7
CMB     95.33  19 eP       51 40.70   1.6
ARN     95.71  20 P        51 41.60   0.7
TNP     95.99  17 P        51 42.50   0.2
        0.8s     5.39nm           5.0mb
GOL     96.15   7 P        51 43.10   0.0
        0.8s     6.32nm           5.1mb
               pP          51 49.50  20km
FRI     96.49  19 eP       51 45.30   1.0
PRI     97.07  20 eP       51 48.80   1.7
ALO    100.76   9 ePdiff52 04.00   0.3
        1.5s     9.03nm           5.1mb
SIV    139.19 302 ePKP     57 43.00   0.3
ZOBO   143.50 311 PKP      57 48.80  -2.2
LPB    143.70 310 PKP      57 51.00  -0.1
CNCB   143.86 310 PKP      57 50.00  -1.6
NNA    143.93 327 ePKP     57 50.30  -0.8
        0.8s    11.19nm
ARE    145.43 315 ePKP     57 55.00   1.1
    S.D. = 0.9  on 185 of 203 obs.
-------------------------------------
   OCT 24, 1990  23h 46m 57.60± 0.14s
   44.119 N ± 2.8km   83.876 E ± 2.7km
   DEPTH =  21.6km  ( 16 depth phases)
   5.3mb ( 77 obs.)  4.6Msz (  7 obs.)
 NORTHERN XINJIANG, CHINA        (332)

GKN     16.09 178 P        50 44.00  -0.3
GUN     16.26 174 P        50 45.80  -0.7
NDI     16.30 201 iPc      50 43.00  -3.7X
KKN     16.33 176 P        50 47.00  -0.4
DMN     16.51 176 P        50 49.40  -0.2
PKI     16.56 175 P        50 49.20  -1.2
LZH     17.23 111 Pc       50 59.00   0.5
        1.5s   384.00nm           5.3mb
    Z   12s      2.26um           4.0Msz
    N   10s      2.53um
    E   10s      1.17um
               pP          51 04.50
               sP          51 07.00
               eS          54 19.00
               Lg          56 13.00
               Lg          56 43.00
QUE     19.32 230 eP       51 22.90  -1.5
        1.0s   865.00nm           6.0mb
               e(S)        55 02.50

SHL     19.62 158 iP       51 26.20  -1.6
               eS          55 04.00
MAIO    20.14 256 eP       51 34.00   0.9
        0.8s    80.53nm           5.1mb
KMI     24.39 135 Pc       52 16.00   0.3
        2.0s    70.00nm           4:9mb
               pP          52 23.00  25km
POO     26.86 201 iPc      52 42.60   4.0X
HYB     27.00 191 eP       52 40.00   0.2
        1.0s    45.00nm           5.1mb
               e           53 03.50 107kmX
CHG     28.22 149 ePc      52 56.20   5.3X
        1.0s    17.25nm           4.8mb
TAB     28.76 271 e(P)     52 57.00   1.2
BDT     29.68 150 eP       53 05.00   1.0
        1.0s    78.00nm           5.5mb
LOE     30.59 145 eP       53 12.00  -0.1
GBA     30.91 192 Pc       53 14.20  -0.6
        0.6s    18.90nm           5.1mb
NST     31.54 149 eP       53 21.80   1.4
SSE     32.01 101 iPc      53 24.50   0.0
        1.0s    48.00nm           5.4mb
               pP          53 30.00  19km
DHR     32.50 248 ePc      53 29.50   0.7
RYD     35.93 250 iP+      53 58.60   0.2
MJMA    36.08 253 iP+      53 59.10  -0.6
OASM    37.15 255 ePc      54 09.00   0.4
SUF     37.54 320 iP       54 11.50   0.0
BBTK    37.74 282 iP       54 15.00   1.4
SOD     37.77 328 iP       54 13.30   0.0
KEV     38.06 332 iP       54 15.80   0.1
        0.7s    49.40nm           5.4mb
NUR     38.26 317 iP       54 17.20  -0.3
        1.0s    50.00nm           5.3mb
AFIF    38.67 252 iP+      54 25.30   3.8X
GLH     38.95 270 eP       54 26.00   2.4
KTK1    39.25 330 iPc      54 25.63  -0.1
HRT     39.52 285 eP       54 28.00  -0.3
SNG     39.60 153 eP       54 30.80   1.6
YLV     39.83 284 iP       54 32.00   1.1
ISK     39.85 285 eP       54 28.00  -3.0X
IZI     39.85 284 eP       54 32.00   0.9
BCK     40.29 279 eP       54 34.00  -0.8
KMSA    40.33 247 eP       54 35.00  -0.2
TSRJ    40.34  84 P        54 34.60  -0.5
PRNI    40.70 267 iPc      54 39.70   1.6
TRO     40.83 331 eP       54 38.79   0.1
BNT     40.92 285 iP       54 41.50   1.7
EDC     40.97 285 iP       54 41.00   0.8
JMB     41.01 288 eP       54 52.00  11.5X
MBH     41.10 267 iPc      54 43.00   1.6
MTMJ    41.15  81 eP       54 49.10   7.3X
HOL     41.26 266 ePc      54 44.10   1.4
TNR     41.40 294 ePc      54 45.00   1.3
BADA    41.72 265 ePc      54 47.90   1.4
KDZ     42.13 288 iPc      54 51.00   1.3
IPM     42.18 154 ePc      54 51.50   1.2
        0.9s    29.80nm           5.0mb
               e           54 53.90   8kmX
EZN     42.26 285 eP       54 51.70   1.0
RZN     42.59 288 iPc      54 56.00   2.3
PGB     42.62 290 iPc      54 56.00   2.2
KRA     42.75 301 iPc      54 55.00   0.4
        0.9s    75.00nm           5.4mb
               e           55 09.60  56kmX
LOF     42.78 329 iPc      54 53.97  -0.7
SMG     42.84 282 eP       54 56.40   0.9
KAP     43.62 279 eP       55 01.90   0.0
KKB     43.63 289 iPc      55 03.00   1.0
HFS     43.71 317 eP       55 01.70  -0.7
        1.2s    62.60nm           5.3mb
    Z   18s      0.39um           4.4Msz
               LR          01 30.40
NSS     43.76 324 iPd      55 02.08  -0.6
PLG     44.02 287 eP       55 05.70   0.6
APE     44.05 282 eP       55 05.80   0.3
VAY     44.21 289 iPc      55 07.50   0.9
        0.8s    68.00nm           5.6mb
SRO     44.50 299 eP       55 05.50  -3.4X
               i           55 09.50  13km
NEO     44.64 286 eP       55 10.00  -0.2
RGS     44.68 322 eP       55 10.40   0.2
SKO     44.70 290 eP       55 09.70  -1.0
KSP     44.71 304 iPc      55 10.80   0.2
        1.0s    31.00nm           5.2mb
               e           01 49.50  21km
               i           55 17.20

               e           56 52.00
NB2     44.73 319 P        55 09.80  -0.8
        1.3s    45.70nm           5.2mb
NPS     44.87 279 eP       55 11.80  -0.3
ATH     44.90 284 eP       55 13.70   1.4
ZST     45.12 300 eP       55 14.30   0.4
               e           57 05.80 646kmX
KZN     45.20 288 eP       55 14.70   0.0
VKA     45.58 300 iPc      55 18.60   1.0
        1.2s    71.60nm           5.5mb
               i           55 24.90  21km
EVR     45.80 286 eP       55 19.20  -0.3
VAM     45.80 280 eP       55 18.90  -0.5
BRN     46.02 307 eP       55 22.50   1.6
VLI     46.05 283 eP       55 18.80  -2.5
PRU     46.06 303 Pc       55 21.50   0.2
        1.0s    18.80nm           5.0mb
    Z   14s      1.80um           5.2MszX
    N   14s      0.30um
    E   14s      1.00um
               e           55 27.50  20km
MOL     46.08 321 iPd      55 21.54   0.3
CLL     46.51 305 iPc      55 24.80   0.0
        0.9s    43.00nm           5.4mb
               i           55 35.80  38kmX
ITM     46.53 284 eP       55 23.80  -1.4
PTJ     46.71 297 iPc      55 26.60   0.0
PPI     46.77 157 eP       55 26.00  -1.1
KHC     46.95 302 P        55 28.60   0.2
               e           55 35.30  22km
VLS     46.99 286 eP       55 27.30  -1.5
HYA     47.06 320 iPd      55 29.00   0.0
VBY     47.32 297 ePc      55 31.90   0.6
WET     47.37 302 iPc      55 32.30   0.6
        1.3s    34.00nm           5.2mb
HOF     47.54 304 eP       55 33.10   0.1
LJU     47.57 298 ePd      55 33.50   0.3
MOX     47.57 305 iPc      55 33.50   0.3
        1.3s    36.00nm           5.3mb
ASK     47.72 319 iPc      55 34.50   0.3
CEY     47.76 298 eP       55 35.00   0.2
KBA     47.90 300 iPd      55 34.10  -1.9
               i           55 48.20  53kmX
BHG     47.93 301 eP       55 36.80   0.7
        1.3s    69.00nm           5.5mb
VOY     47.98 298 e(P)     55 36.00  -0.6
GRF     48.17 304 ePc      55 38.80   0.9
        1.2s    56.00nm           5.5mb
    Z   16s      2.00um           5.2MszX
               e           55 45.20  21km
               e           55 53.60
TRI     48.19 298 iPc      55 37.30  -0.8
FVI     48.45 299 P        55 39.50  -0.5
WATA    48.89 301 iPc      55 43.80   0.1
        0.8s    54.00nm           5.6mb
               i           55 47.80  13km
               i           55 57.90
ORI     48.93 290 P        55 45.00   1.1
ROI     49.09 289 P        55 46.00   0.9
SOTA    49.17 301 iPc      55 45.90   0.1
        0.6s    68.90nm           5.9mb
               i           55 50.20  14km
               i           55 57.50
               i           56 37.00
CSI     49.18 290 P        55 46.50   0.7
TDS     49.20 290 P        55 47.00   1.0
MMN     49.33 290 P        55 48.50   1.6
CTI     49.39 299 P        55 46.90  -0.6
OGA     49.43 300 iPc      55 47.70  -0.2
        1.0s    36.00nm           5.4mb
SGO     49.47 291 P        55 48.50   0.5
MGR     49.50 290 P        55 47.00  -1.3
DUI     49.52 293 P        55 49.20   0.7
GRI     49.55 289 P        55 49.20   0.5
        0.6s    49.50nm           5.7mb
CZI     49.55 289 P        55 49.20   0.6
ARV     49.68 296 P        55 49.50  -0.2
BSS     49.70 292 P        55 49.00  -0.8
AOU     49.90 294 P        55 51.50   0.1
SDI     49.93 293 Pd       55 51.60   0.0
AZI     50.05 294 P        55 53.50   1.1
OSS     50.05 300 ePc      55 52.60  -0.1
ASS     50.06 295 P        55 53.00   0.4
SFI     50.20 297 P        55 54.30   0.8
SAL     50.29 299 P        55 50.70  -3.5X
        0.1s   121.80nm           6.8mb X
SAX     50.30 301 ePd      55 54.00  -0.7
```

24d 23h

MNS	50.36	294	P	55	54.50	-0.4	NAI	61.63	236	iPd	57	17.30	0.9	LLA	96.54	20	eP	00	28.00	1.2
ATN	50.53	288	Pd	55	55.60	-0.5	GUD	62.03	301	eP	57	18.00	-0.8	PRI	97.06	20	eP	00	31.00	1.7
VDL	50.56	300	ePc	55	56.30	-0.2	EVIA	62.16	298	eP	57	19.50	-0.1	ALQ	100.75	9	ePdiff	00	46.00	0.1
SLE	50.60	302	ePd	55	57.00	0.4	TOL	62.41	300	iPc	57	21.00	-0.1		1.0s	3.00nm				4.8mb
RMP	50.62	294	P	55	45.00	-11.8X		1.0s	40.00nm			5.5mb		PDCR	122.18	285	ePKP	05	50.00	-2.5
LLS	50.68	301	ePd	55	57.00	-0.5	TTA	63.16	26	iPc	57	25.60	-0.2	JFO	131.32	280	e(PKP)	06	10.30	0.4
FEL	50.85	303	eP	56	14.41	15.8X		1.2s	29.40nm			5.3mb		PPD	137.12	286	ePKP	06	21.60	0.7
ENN	50.85	307	eP	55	59.00	0.6	EBAN	63.25	298	eP	57	26.50	-0.2	SIV	139.20	302	PKP	06	25.20	0.3
	1.0s	19.00nm				5.0mb	ECOG	63.64	297	eP	57	28.00	-1.4	ZOBO	143.51	311	PKP	06	30.00	-3.2
		e		56	14.00	57kmX	FBA	64.09	22	iPc	57	31.40	-0.4		Z 20s	0.20um				4.9Msz
BDI	50.94	297	Pd	55	59.30	0.0		1.2s	76.30nm			5.7mb					LR	48	40.00	
CDF	51.06	304	eP	55	59.30	-0.9	INK	64.45	14	iPc	57	33.60	-0.4	LPB	143.71	310	PKP	06	32.00	-1.3
	0.8s	5.35nm				4.5mb		0.7s	45.00nm			5.7mb		CNCB	143.87	310	PKP	06	32.00	-1.8
TMA	51.10	300	ePc	55	59.50	-1.1	SVW	64.60	28	iPc	57	36.10	0.9	ARE	145.44	315	iPKPd	06	37.00	0.9
PII	51.14	297	P	56	00.50	-0.2		0.9s	21.00nm			5.3mb			S.D. = 0.9		on 229 of 248 obs.			
VAI	51.27	300	P	56	01.00	-0.6	EPRU	64.89	298	eP	57	37.00	-0.4							
BOB	51.35	299	P	56	02.00	-0.4	EJIF	65.35	297	eP	57	40.00	-0.3	&	OCT 25, 1990 00h 15m 22.25s					
BSF	51.60	303	eP	56	03.60	-0.8	PMR	66.30	25	iPc	57	45.20	-0.8		47.576 N		122.689 W			
	0.6s	3.60nm				4.5mb		0.8s	29.30nm			5.5mb			DEPTH = 18.4km					
MMK	51.69	301	ePd	56	04.70	-0.5	TOA	66.75	23	iPc	57	49.10	0.1		WASHINGTON					(29)
HAU	51.79	303	eP	56	04.80	-0.9		0.9s	155.50nm			6.2mb			<SEA>. CL 2.6 (SEA).					
	0.8s	9.40nm				4.8mb	IFR	66.94	295	iP	57	51.00	0.3							
	Z 20s	0.70um				4.7Msz	LWI	67.35	243	iPd	57	53.50	-0.1	GMW	0.07	247	Pc	15	25.40	-0.5
DOU	51.91	306	P	56	12.20	5.8X	KDC	68.18	29	iPc	57	58.00	0.1	PGW	0.25	14	Pd	15	27.92	-0.2
		e		56	21.70	32km		0.8s	108.50nm			6.0mb		HDW	0.26	286	Pc	15	27.58	-0.7
DIX	52.02	301	ePc	56	07.40	-0.3	AVE	68.56	296	iP	58	08.00	7.3X	SPW	0.30	94	P	15	29.27	0.4
EMS	52.32	301	ePd	56	09.50	-0.4				i	59	14.50	290kmX	MEW	0.38	176	P	15	30.33	0.2
PGF	52.68	296	iPc	56	12.20	-0.3	BCAO	69.34	256	iPc	58	04.70	-1.0	BLN	0.47	336	Pd	15	30.77	-1.0
	0.8s	26.85nm				5.2mb		0.6s	156.00nm			6.3mb	X				S	15	37.48	
LPG	52.70	300	iPc	56	13.29	0.4				i	58	14.50	31km	GHW	0.61	152	P	15	33.09	-0.9
	0.8s	62.95nm				5.6mb				i	59	38.80		RMW	0.61	101	Pc	15	33.50	-0.7
LPL	52.70	300	iPc	56	12.90	0.1	YKA	72.71	9	eP	58	24.20	-1.0				S	15	42.49	
BNI	52.96	300	P	56	14.20	-0.4		0.9s	35.40nm			5.4mb		HTW	0.66	70	P	15	34.13	-0.9
SBF	53.05	298	iPc	56	14.80	-0.4	MBL	72.83	145	eP	58	26.00	-0.4				S	15	43.40	
	1.0s	32.00nm				5.2mb	KRI	78.27	233	iPc	59	01.00	3.4X	CPW	0.68	207	Pd	15	34.19	-1.1
LOR	53.63	304	eP	56	18.00	-1.3				i	59	07.80	22km				S	15	43.97	
	0.8s	8.05nm				4.8mb	SCH	78.33	343	eP	58	57.00	-0.3	GSM	0.71	121	Pc	15	35.17	-0.8
	Z 20s	0.50um				4.6Msz	WB5	78.65	132	iPc	58	59.10	-0.4				S	15	45.43	
LBF	53.69	303	eP	56	18.60	-1.2	WARB	80.17	142	eP	59	07.50	-0.1	OHW	0.76	8	P	15	35.48	-1.1
	0.8s	5.35nm				4.6mb	FFC	81.40	3	iPc	59	13.70	0.0	JCW	0.80	39	Pd	15	36.25	-1.1
EKA	53.80	315	P	56	20.00	-0.4		0.9s	118.00nm			5.9mb		OBH	0.84	253	P	15	37.15	-0.8
	0.9s	16.60nm				5.0mb	BUL	81.48	231	iPc	59	10.40	-4.4X	APW	0.93	178	Pd	15	38.09	-1.4
SMF	53.94	303	iPc	56	20.60	-1.0				i	59	19.00	27km	CMW	0.93	24	Pd	15	38.56	-1.1
	1.0s	22.00nm				5.1mb	ASPA	81.53	135	iPc	59	14.60	-0.2	FMW	0.95	133	Pd	15	38.77	-1.2
SSF	53.94	304	eP	56	20.40	-1.2		0.8s	35.70nm			5.5mb		LMW	0.95	163	Pd	15	38.81	-1.1
	0.8s	6.70nm				4.7mb	QIS	82.07	129	iPc	59	17.10	-0.6	REMR	0.95	142	Pd	15	38.75	-1.3
AVF	54.16	303	iPc	56	22.10	-1.1		1.0s	32.00nm			5.3mb		ONR	1.02	227	P	15	40.28	-0.7
	0.8s	13.45nm				5.0mb	LKO	83.06	276	Pc	59	21.98	-1.0	LON	1.02	144	P	15	39.62	-1.5
BGF	54.58	303	eP	56	25.40	-0.9		0.8s	22.50nm			5.4mb		OOW	1.03	280	P	15	41.86	0.6
	0.8s	10.75nm				4.9mb	KIC	84.63	274	Pc	59	30.78	-0.2	MCW	1.11	355	P	15	41.13	-1.5
MAF	54.91	303	eP	56	28.40	-0.4		0.9s	20.00nm			5.4mb		CZM	1.15	174	Pd	15	41.82	-1.4
	0.8s	14.80nm				5.1mb	TIC	84.63	274	P	59	30.62	-0.4	BMW	1.16	199	P	15	41.98	-1.6
TCF	55.09	303	iPc	56	29.50	-0.6		1.1s	38.00nm			5.5mb		KOSW	1.17	163	Pd	15	42.34	-1.3
	1.0s	24.00nm				5.2mb	MCW	84.66	17	P	59	31.50	0.8	WPW	1.17	138	P	15	42.69	-1.1
AKU	55.28	330	iP	56	32.40	1.3	PNT	84.70	15	ePc	59	31.00	0.2	RPW	1.18	42	P	15	42.59	-1.2
	0.9s	20.17nm				5.2mb		0.8s	46.00nm			5.8mb		GLK	1.25	143	Pd	15	43.88	-1.1
LDF	55.33	307	eP	56	30.60	-1.2				pP	59	38.00	22km	TDL	1.27	165	Pd	15	43.94	-1.2
	0.6s	9.00nm				5.0mb	LIC	84.93	274	Pc	59	32.20	-0.2	ERK	1.29	169	P	15	43.92	-1.6
FLN	55.46	307	eP	56	31.40	-1.3		Z 20s	0.15um			4.4Msz		TWW	1.31	109	P	15	45.62	-0.1
	0.6s	9.00nm				5.0mb	SES	84.97	10	ePc	59	31.50	-0.7	MBW	1.32	23	P	15	45.03	-0.9
	Z 20s	0.60um				4.7Msz	CTA	85.58	123	iPc	59	35.20	-0.3	STD	1.38	166	Pd	15	45.51	-1.1
LSF	55.52	303	iPc	56	31.90	-1.3		1.0s	45.00nm			5.6mb		SOSW	1.39	164	P	15	45.73	-1.1
	0.7s	7.70nm				4.8mb	GMW	85.74	18	P	59	37.30	1.2	SHW	1.42	167	P	15	46.54	-0.7
GRR	55.86	307	eP	56	34.50	-1.1				pP	59	44.00	21km	REMW	1.42	166	P	15	46.74	-0.6
	0.6s	7.20nm				4.9mb	CBM	86.02	341	P	59	37.30	-0.1	ESD	1.43	165	P	15	46.78	-0.6
RJF	56.01	302	eP	56	36.50	-0.2	RMW	86.04	17	P	59	38.30	0.7	TBM	1.48	105	P	15	48.15	0.1
	0.8s	13.45nm				5.0mb	NEW	86.17	14	P	59	38.80	0.6	LVP	1.52	173	P	15	47.90	-0.8
	Z 20s	0.40um				4.5Msz	DPW	86.36	15	P	59	39.50	0.3	CDFW	1.53	163	Pd	15	48.05	-0.7
LPF	56.15	306	eP	56	36.30	-1.3	LON	86.71	17	P	59	41.20	0.3	NAC	1.52	123	P	15	48.87	0.2
	0.6s	7.20nm				4.9mb	BNH	88.94	343	P	59	51.80	0.2	NLO	1.58	200	P	15	49.00	-0.5
MFF	56.35	305	eP	56	37.70	-1.4	LRM	89.28	11	ePc	59	53.30	-0.2	MTMW	1.59	168	P	15	49.18	-0.5
	0.6s	7.20nm				4.9mb	HBVT	89.54	344	P	59	54.20	-0.2	EBG	1.59	114	P	15	50.41	0.7
LPO	56.53	302	eP	56	39.90	-0.5	RSNY	89.65	345	P	59	55.30	0.4	ETW	1.60	88	Pc	15	49.95	0.1
	0.8s	16.10nm				5.1mb	LBFM	91.82	19	P	00	06.00	0.7	ASR	1.61	152	Pd	15	49.67	-0.4
ETA	56.65	313	eP	56	55.00	13.8X	FHC	91.82	21	eP	00	07.00	1.9	NLW	1.66	72	P	15	51.17	0.4
LFF	56.67	302	eP	56	41.00	-0.4	WDC	92.39	20	eP	00	08.20	0.5	WTV	1.85	85	P	15	53.82	0.3
	0.8s	20.15nm				5.2mb	ORV	93.62	19	eP	00	13.70	0.4	MXC	1.92	121	P	15	54.86	0.5
ECP	56.99	313	eP	56	55.40	11.8X	DUG	94.73	13	P	00	19.50	0.9	DHW2	2.01	77	P	15	55.43	-0.3
ECB	57.12	313	eP	56	54.30	9.8X	DAU	94.75	12	P	00	19.60	0.6	EPH	2.11	95	P	15	56.71	-0.5
EPF	57.92	301	eP	56	49.20	-1.1	CMB	95.33	19	eP	00	22.50	1.2	SAW	2.23	86	P	15	57.96	-0.9
	0.9s	18.00nm				5.1mb	PCC	95.35	21	eP	00	21.30	0.0	VBEM	2.63	163	P	16	07.58	2.8
MBC	58.99	6	ePc	56	56.70	-0.6	ARN	95.70	20	P	00	24.00	1.0		54 obs. _associated					
	1.0s	98.00nm				5.9mb	TNP	95.98	17	P	00	24.30	-0.2							
EROO	59.07	298	eP	56	55.50	-2.9		1.0s	10.00nm			5.2mb		•	OCT 25, 1990 00h 41m 59.94± 0.95s					
ECRI	59.90	302	eP	57	04.00	-0.2	GOL	96.15	7	P	00	25.30	0.0		39.823 N ±15.5km 143.806 E ±18.4km					
IMA	61.59	23	iPc	57	14.20	-1.2		0.9s	10.42nm			5.3mb			DEPTH = 33.0km (normal)					
	0.9s	32.20nm				5.5mb	FRI	96.48	19	eP	00	27.20	0.7		4.3mb (2 obs.)					

OFF EAST COAST OF HONSHU, JAPAN (229)

MAT	5.49	235	eP	43	22.00	0.4
			eS	44	28.00	
LZH	31.55	276	P	48	21.50	0.0
INK	51.05	28	ePc	51	01.20	0.7
WB5	60.04	190	eP	52	05.50	-0.4
HFS	72.31	336	eP	53	23.20	-0.5
	0.4s		1.50nm			4.3mb
NB2	72.33	338	P	53	23.70	-0.2
	0.7s		2.30nm			4.3mb
SIV	147.85	49	PKP	01	44.80	4.4X
S.D. = 0.6 on 6 of 7 obs.						

OCT 25, 1990 00h 59m 01.75± 0.70s
51.552 N ± 6.7km 7.480 E ± 4.1km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 3.2 (LDG), 3.0 (BNS).

WTS	0.61	317	iPgd	59	14.30	0.3
	0.8s		113.00nm			
BNS	0.62	198	ePg	59	15.40	1.2
	0.3s		530.00nm			
			iSg	59	26.20	
STB	1.04	203	P	59	22.90	1.5
KOE	1.14	172	ePd	59	22.90	-0.2
KLL	1.17	220	iPd	59	24.90	1.3
			iS	59	43.90	
ENN	1.26	232	iPgd	59	26.50	1.4
	0.4s		35.00nm			
			iSg	59	44.90	
MEM	1.33	225	P	59	27.60	1.4
			S	59	47.80	
TNS	1.47	155	ePnc	59	28.40	0.1
			eSn	59	46.90	
ABH	1.67	179	ePn	59	31.82	0.6
RUP	1.87	188	ePn	59	35.37	1.2
TOD	2.12	156	ePn	59	37.51	-0.3
SNF	2.27	244	P	59	41.00	1.2
DOU	2.34	233	P	59	42.40	1.6
MOX	2.76	108	ePg	59	47.00	0.1
			iSg	00	28.00	
GRF	3.02	127	ePn	59	50.70	0.2
			ePg	00	00.00	
			e(Sn)	00	26.50	
			eSg	00	42.10	
HOF	3.05	112	ePn	59	50.00	-0.9
CDF	3.15	182	Pn	59	51.70	-0.7
			Sg	00	40.90	
HAU	3.63	192	Pn	59	58.10	-1.0
			Sg	00	58.20	
BSF	3.75	187	Pn	00	00.00	-1.0
			Sg	01	01.70	
KHC	4.60	119	eP	00	14.50	1.6
			eSg	01	24.10	
PRU	4.75	107	ePg	00	15.00	0.0
			eSg	01	34.50	
LOR	4.90	210	Pn	00	16.00	-1.1
			Sn	01	10.60	
			Sg	01	38.00	
LBF	5.11	208	Pn	00	19.60	-0.6
			Sn	01	16.00	
SSF	5.19	212	Pn	00	20.20	-1.1
			Sg	01	46.60	
SMF	5.46	207	Pn	00	23.20	-1.9
LDF	5.72	242	Pn	00	28.20	-0.5
FLN	5.83	244	Pn	00	29.40	-0.8
			Sn	01	34.80	
BGF	5.85	213	Pn	00	29.40	-1.2
			Sn	01	33.50	
			Sg	02	08.00	
GRR	6.24	243	Pn	00	35.00	-1.0
			Sn	01	43.50	
LPF	6.55	241	Pn	00	39.00	-1.4
S.D. = 1.1 on 30 of 30 obs.						

% OCT 25, 1990 01h 03m 33.97± 2.38s
40.797 N ±19.0km 28.191 E ±15.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.1 (ISK).

BNT	0.49	205	ePg	03	43.90	0.0
			eSg	03	51.40	
ISK	0.71	68	ePg	03	47.50	-0.5
YLV	0.93	104	iPg	03	51.50	-0.2
			iSg	04	06.00	
IZI	1.08	115	ePn	03	54.00	-0.3
HRT	1.12	88	ePn	03	56.00	1.0
S.D. = 0.8 on 5 of 5 obs.						

% OCT 25, 1990 01h 09m 37.51± 0.71s
43.466 N ± 6.3km 12.714 E ± 6.3km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ARV	0.17	79	Pd	09	41.50	0.1
			eSg	09	45.40	
ASS	0.40	186	P	09	45.80	0.1
			eSg	09	53.00	
CRE	0.58	287	P	09	49.30	0.0
SFI	0.77	306	P	09	52.50	-0.1
MNS	1.08	181	P	09	58.00	0.1
SDI	1.94	155	P	10	10.50	-0.4
S.D. = 0.2 on 6 of 6 obs.						

OCT 25, 1990 01h 37m 16.72± 0.62s
35.098 N ± 5.9km 3.947 W ± 6.7km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
mbLg 3.2 (MDD).

EMEL	0.84	76	iP	37	33.00	0.2
			eS	37	42.00	
TAF	1.29	102	iPg	37	42.00	1.3
			iSg	38	02.00	
DJEN	1.64	308	eP	37	50.00	4.3X
MAL	1.67	347	ePn	37	45.00	-1.1
			iSg	38	04.00	
EJIF	1.83	318	eP	37	50.00	1.5
			eS	38	12.50	
IFR	1.86	212	iPn	37	49.50	0.5
			i	37	53.00	
			iSn	38	13.00	
MOMI	1.89	311	eP	37	55.50	6.2X
EPRU	2.13	331	eP	37	54.00	1.1
			eS	38	20.00	
AFC	2.18	8	eP	37	53.30	-0.3
			eS	38	19.00	
ECOG	2.20	8	eP	37	53.50	-0.4
			eS	38	20.00	
ENIJ	2.34	36	eP	37	54.50	-1.3
			eS	38	18.00	
EHOR	2.91	339	eP	38	05.50	1.6
			eS	38	38.50	
EBAN	3.06	2	eP	38	06.50	0.4
			eS	38	38.80	
AVE	3.39	239	ePn	38	10.00	-0.7
			i	38	13.20	
			iSn	38	42.00	
			i	38	46.50	
TOL	4.78	359	ePb	38	13.00	-17.4X
			ePg	38	29.50	
			eSb	39	21.50	
			eSg	39	40.00	
TIO	5.01	215	iPn	38	32.70	-1.1
			iSn	39	28.90	
GUD	5.54	358	eP	38	39.50	-1.8
			eS	39	40.00	
S.D. = 1.2 on 14 of 17 obs.						

OCT 25, 1990 02h 53m 43.86± 0.32s
58.021 N ± 9.0km 32.349 W ± 4.2km
DEPTH = 10.0km (geophysicist)
4.4mb (22 obs.) 4.0Msz (4 obs.)
NORTH ATLANTIC OCEAN (402)

AKU	10.19	35	iP	56	15.20	2.1
	1.0s		28.00nm			5.6mb X
FLN	20.96	102	eP	58	28.10	-0.9
	0.8s		13.45nm			4.4mb
	Z 20s		0.52um			3.9Msz
NB2	21.99	64	P	58	40.00	0.6
	1.1s		8.20nm			4.1mb
SNF	22.44	94	P	58	44.70	0.8
DOU	22.84	94	P	58	48.30	0.5
WTS	22.99	88	eP	58	50.50	1.2
	1.0s		12.00nm			4.4mb
ENN	23.17	92	eP	58	51.00	0.0
	1.0s		16.00nm			4.5mb
MEM	23.30	92	P	58	43.00	-9.3X
HFS	23.39	65	eP	58	53.30	0.2
	0.6s		1.20nm			3.6mb
	Z 16s		0.24um			3.7MszX
			LR	05	05.00	
BGF	24.10	103	eP	58	59.90	-0.2
	0.8s		8.75nm			4.4mb
SSF	24.11	101	eP	58	59.90	-0.3
	0.8s		2.70nm			3.9mb
LOR	24.16	101	eP	59	00.40	-0.3
	0.8s		5.35nm			4.2mb
	Z 20s		0.47um			4.0Msz
AVF	24.21	102	eP	59	00.80	-0.3
	0.8s		4.05nm			4.1mb
LBF	24.41	101	eP	59	03.40	0.2
	0.8s		5.35nm			4.2mb
SMF	24.56	102	eP	59	03.80	-0.8
	1.0s		10.00nm			4.4mb
HAU	25.01	97	eP	59	09.60	0.7
	0.8s		13.45nm			4.7mb
	Z 20s		0.95um			4.3Msz
BSF	25.35	97	eP	59	13.00	0.7
	0.8s		6.70nm			4.4mb
MOX	26.27	87	e(P)	59	20.00	-0.6
GRF	26.59	89	eP	59	23.00	-0.7
	Z 21s		0.40um			3.9Msz
CLL	26.64	85	eP	59	23.00	-1.1
KSP	28.64	83	eP	59	40.50	-1.7
MBC	34.04	335	eP	00	29.00	-0.4
	1.0s		7.00nm			4.5mb
FFC	37.15	296	iPc	00	56.30	0.3
	0.9s		17.00nm			4.8mb
INK	41.62	327	eP	01	32.00	-0.9
OLY	44.58	266	eP	01	57.50	0.1
FBA	48.07	329	iPc	02	24.60	-0.1
IMA	48.69	332	e(P)	02	52.20	22.5X
GLD	48.70	281	eP	02	31.00	0.9
	1.2s		30.30nm			5.2mb
BW06	48.73	287	iP	02	29.50	-0.9
	1.0s		5.00nm			4.5mb
GOL	48.81	281	iP	02	31.50	0.4
	0.9s		7.20nm			4.7mb
PNT	48.95	300	eP	02	32.00	0.3
	0.7s		8.00nm			4.9mb
DAU	51.33	286	eP	02	50.00	-0.4
	1.0s		1.00nm			3.7mb
TTA	51.84	331	e(P)	02	52.40	-1.3
ALQ	52.96	278	eP	03	02.50	-0.1
	1.6s		12.50nm			4.6mb
BCAO	66.44	122	iPc	04	35.00	-0.3
	0.5s		4.00nm			4.9mb
SIV	77.46	208	Pc	05	43.00	2.2
S.D. = 0.9 on 34 of 36 obs.						

& OCT 25, 1990 03h 00m 49.90s
33.520 N 116.500 W
DEPTH = 16.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.2 (PAS). Felt (III) at Warner Springs and (II) at Palm Springs. Also felt at Cathedral City, Palm Desert and Rancho Mirage.

PLM	0.35	241	iPd	00	56.90	-0.4
PEC	0.66	304	P	01	02.00	-0.7
TPC	0.69	33	iPd	01	03.00	-0.2
CPE	0.81	218	iPd	01	04.30	-0.9
BAR	0.85	190	iPd	01	05.30	-0.5
RVR	0.87	303	iPc	01	05.40	-0.7
IKP	0.93	159	iPd	01	07.40	0.2
VPD	1.09	286	ePc	01	09.71	-0.3
			S	01	24.46	
PCF	1.20	297	eP	01	11.41	-0.4
			S	01	27.05	
PEM	1.31	300	ePc	01	13.03	-0.5
			S	01	30.36	
MWC	1.47	299	iPc	01	15.90	-0.1
GLA	1.48	108	P	01	18.00	2.1
FMA	1.50	278	eP	01	16.54	0.4
PAS	1.53	295	eP	01	16.43	-0.1
			S	01	36.91	
CIS	1.60	266	eP	01	18.04	0.5
PVPS	1.61	280	eP	01	18.36	0.7
CIW	1.72	269	eP	01	19.88	0.6
			S	01	41.98	
GSC	1.80	352	iPc	01	20.00	-0.5
ABL	2.62	301	P	01	31.40	-1.1
BCH	3.40	300	P	01	43.20	-0.2
BLP	3.40	289	P	01	42.50	-0.8

25d 03h

```
TNP      4.59 353 P      02 00.00   -0.4
CMB      5.50 326 P      02 30.00   16.8
        23 obs. associated
-----------------------------------------
   OCT  25, 1990  03h 24m 09.15± 0.42s
   23.830 N ± 6.1km  108.715 W ± 5.9km
   DEPTH =  10.0km  (geophysicist)
   5.0mb ( 28 obs.)  5.1Msz (  4 obs.)
 GULF OF CALIFORNIA                ( 49)
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.: 11S, 24C
      Centroid Location:
      Origin Time        03:24:10.3 1.1
      Lat 23.74N 0.09 Lon 108.25W 0.10
      Dep  15.0 FIX Half-duration  1.7
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-0.02 0.05  Mtt=-1.00 0.06
        Mff= 1.02 0.07  Mrt=-0.06 0.19
        Mrf= 0.05 0.15  Mtf=-0.18 0.05
      Principal Axes:
       T  Val=  1.04  Plg= 3  Azm=265
       N       -0.02      86      135
       P       -1.02       3      355
      Best Double Couple:Mo=1.0*10**17
       NP1:Strike= 40 Dip=86 Slip=   0
       NP2:       130      90     -176

MRX      8.11 119 (P)    26 15.50   5.8X
CRX      9.49 116 (P)    26 44.00  14.8X
III     10.19 120 (P)    26 40.50   1.7
PPM     10.52 115 (P)    26 46.00   2.4
IIT     10.81 114 (P)    26 49.50   2.2
ACX     10.81 128 (P)    26 49.50   2.4
ALQ     11.25  10 ePd    26 53.00  -0.2
ANMO    11.25  10 P      26 53.00  -0.2
BAR     11.26 323 eP     26 53.00  -0.2
IISM    11.61 112 (P)    27 01.00   3.1X
PLM     11.88 325 eP     27 02.00   0.3
TPC     12.08 330 eP     27 05.00   0.7
RVR     12.64 325 eP     27 13.00   1.2
OXX     13.09 119 (P)    27 21.00   3.0X
MWC     13.18 324 eP     27 23.00   3.8X
PAS     13.19 323 eP     27 20.00   0.9
GSC     13.42 330 eP     27 23.00   0.8
SBB     13.42 326 eP     27 23.00   0.8
SYP     14.49 320 eP     27 36.00  -0.4
ISA     14.51 327 eP     27 37.00   0.5
PV09    14.63 359 eP     27 38.00  -0.3
                  i      31 50.00
TNP     15.96 335 P      27 56.00   0.5
        1.4s   118.75nm          4.8mb
SIO     16.01  39 iP     28 01.60   5.6X
PRI     16.04 323 eP     27 57.00   0.6
GOL     16.07   9 P      27 58.00   0.9
        1.8s   148.01nm          4.8mb
GLD     16.15  10 P      27 59.00   1.1
        1.5s   183.59nm          5.0mb
FRI     16.17 327 eP     27 58.60   0.6
TUL     16.43  40 eP     28 03.90   2.6
        1.2s    90.00nm          4.8mb
      Z 18s     2.89um          4.8MszX
                  LR     32 00.00
LLA     16.53 323 eP     28 03.30   0.6
PRS     16.57 322 eP     28 03.20   0.1
DAU     16.67 353 P      28 05.00   0.3
DUG     16.68 349 P      28 06.00   1.4
CMB     17.32 328 eP     28 13.00   0.4
ARN     17.39 324 P      28 14.00   0.5
MHC     17.45 324 eP     28 13.00  -1.3
BKS     18.16 324 eP     28 23.70   0.7
        2.0s   405.00nm          5.2mb
      Z 20s     4.40um          4.8Msz
      N 20s     1.40um
      E 20s     4.20um
                  eLQ    31 52.00
                  eLR    33 36.00
BRK     18.17 324 eP     28 23.80   0.7
BW06    18.91 358 P      28 31.50  -1.0
OLY     18.94  48 P      28 31.00  -1.6
ORV     19.05 328 eP     28 35.10   1.2
MIN     19.72 330 eP     28 41.80  -0.2
WDC     20.35 328 eP     28 46.30  -2.0
LBFM    20.65 331 P      28 50.00  -1.8
FVM     21.05  44 P      28 55.00  -0.6
FHC     21.23 326 P      28 56.00  -1.4
        1.3s   130.43nm          5.2mb

ELC     21.43  47 P      28 59.00  -0.4
LRM     22.15 353 ePd    29 07.30   0.4
RSCP    23.21  54 P      29 17.20  -0.1
        1.0s   249.46nm          5.7mb
GBTN    24.26  55 P      29 25.60  -1.7
TKL     24.58  56 P      29 29.60  -0.9
PRM     25.15  60 P      29 35.60  -0.4
LON     25.17 339 P      29 36.00  -0.2
NEW     25.28 347 P      29 36.00  -1.1
        1.0s    30.00nm          4.9mb
JSC     26.09  60 P      29 43.80  -0.9
LHS     26.50  60 P      29 48.00  -0.5
SES     26.58 357 ePd    29 48.60  -0.6
        1.8s   312.00nm          5.7mb
PNT     26.84 344 eP     29 56.00   4.4X
BLA     27.66  55 eP     29 58.50  -0.7
      Z 16s     5.39um          5.2MszX
WVLY    31.11  46 P      30 30.00   0.0
FFC     31.26   8 eP     30 29.00  -2.1
        1.7s   106.00nm          5.5mb
TBR     33.55  51 P      30 49.00  -2.3
HBVT    35.54  46 P      31 09.00   0.7
YKA     38.85 356 eP     31 34.00  -1.9
        1.0s     8.80nm          4.4mb
SDV     39.29 106 eP     31 41.80   1.4
TOV     39.64 104 eP     31 43.50   0.4
CAR     41.90 101 eP     31 52.00  -9.8X
LLAV    42.02 101 eP     32 01.00  -1.7
PMR     46.67 335 eP     32 39.10  -0.3
        1.0s    20.00nm          5.1mb
INK     47.00 348 ePd    32 42.00   0.1
FBA     48.20 339 iPd    32 50.20  -1.2
        0.8s     7.80nm          4.8mb
SVW     49.08 332 iPd    32 57.10  -1.2
        0.8s     9.80nm          4.9mb
TTA     50.11 334 iPc    33 05.10  -1.1
        0.8s    10.50nm          4.9mb
MBC     52.74 357 ePd    33 24.60  -1.2
        1.0s    28.00nm          5.1mb
ZOBO    56.22 131 Pc     33 50.70  -2.0
        1.3s    42.59nm          5.3mb
      Z 20s     0.50um          4.6Msz
                  LR     47 40.00
LPB     56.42 131 P      33 52.00  -2.0
CNCB    56.69 132 Pc     33 54.60  -1.5
CCH     58.35 131 P      34 06.00  -1.5
SIV     61.09 126 iPc    34 24.00  -2.0
ROCH    66.96 146 eP     35 06.50   2.1
SAN     67.51 146 eP     35 06.70  -1.0
TACH    67.53 146 eP     35 07.00  -0.8
LNV     67.54 147 eP     35 04.00  -3.7X
BAO     71.10 117 eP     35 30.00  -0.2
SOB1    73.89 108 eP     35 45.50  -1.1
PDCR    76.99 110 eP     36 02.00  -2.2
KEV     01.47  14 eP     36 32.00   4.5X
NB2     82.61  25 P      36 32.90  -0.8
        1.3s    10.10nm          5.1mb
FLN     83.59  39 eP     36 41.60   2.7X
        0.8s    10.80nm          5.4mb
      Z 20s     0.77um          5.1Msz
LPF     83.62  40 eP     36 42.40   3.4X
        0.9s    16.40nm          5.2mb
LDF     03.88  39 eP     36 43.00   2.6
        1.0s    16.00nm          5.2mb
APO     83.97  25 eP     36 39.80  -0.8
        2.0s   112.30nm          5.7mb
TCF     06.41  40 eP     36 55.10   2.0
        0.9s     6.55nm          4.8mb
RJF     86.49  42 eP     36 55.60   2.1
        0.8s     6.70nm          4.9mb
      Z 20s     0.73um          5.1Msz
SUF     86.63  19 eP     36 56.00   2.2
SSF     86.77  39 eP     36 57.00   2.2
        1.0s     9.00nm          4.9mb
AVF     06.82  40 eP     36 57.90   2.9X
        1.0s    14.00nm          5.1mb
LOR     06.86  39 eP     36 57.40   2.1
        0.8s     6.70nm          4.9mb
      Z 20s     0.73um          5.1Msz
LBF     87.08  39 eP     36 58.40   2.0
        1.0s    10.00nm          5.0mb
NUR     87.82  21 eP     37 15.00  15.4X
MAT     92.92 312 (P)    37 30.00   6.1X
WB5    121.73 261 ePKP   43 07.00   1.4
      S.D. = 1.3  on  86 of 101 obs.
-----------------------------------------
*  OCT  25, 1990  04h 52m 06.03± 0.59s
   76.243 N ± 9.3km    8.409 E ±14.4km
   DEPTH =  10.0km  (geophysicist)
   4.6mb (  7 obs.)
 SVALBARD REGION                   (643)

KBS      2.79  14 iPc    52 52.30   0.8
TRO      7.31 150 eP     53 55.74   0.4
LOF      8.30 167 eP     54 07.59  -1.6
KEV      8.44 131 iP     54 10.80  -0.7
        0.7s     17.40nm          5.4mb
                  i      54 16.70
                  e      55 51.00
KTK1     8.47 141 eP     54 10.69  -0.9
SOD     10.50 138 iP     54 38.10  -1.3
                  e      56 29.00
SUF     14.82 147 iP     55 37.40   0.4
        0.6s     10.00nm          4.5mb
NB2     15.31 175 P      55 46.00   2.5
        0.8s     4.70nm          3.9mb
NRA0    15.62 174 Pn     55 52.20   4.7X
EKA     21.44 198 P      56 59.00   3.1X
        1.4s    29.70nm          4.5mb
MBC     24.82 333 eP     57 31.00   2.2
        1.0s    24.00nm          4.8mb
CLL     25.10 173 eP     57 37.00   5.3X
        1.9s    18.00nm          4.4mb
MOX     25.73 175 eP     57 40.00   2.3
INK     33.77 336 eP     58 49.00  -0.2
FFC     42.05 306 eP     59 58.00  -0.7
        0.7s    92.00nm          5.6mb X
SES     47.88 311 eP     00 45.00  -0.5
LRM     52.54 311 eP     01 21.00  -0.4
                  e      01 26.90
ALQ     61.91 302 eP     02 26.00  -1.9
        1.5s     6.94nm          4.6mb
LKO     67.11 195 P      03 00.64  -0.9
        0.9s    15.00nm          5.2mb
      S.D. = 1.5  on  16 of  19 obs.
-----------------------------------------
   OCT  25, 1990  04h 53m 59.98± 0.12s
   35.121 N ± 2.9km   70.486 E ± 2.1km
   DEPTH = 113.9km  (geophysicist)
   6.0mb ( 95 obs.)
 HINDU KUSH REGION                 (718)
      Eleven people killed, more then
      250 injured and domage in the
      Chitral-Mordon-Malokond area,
      Pokiston. Felt throughout
      northern and central Pokiston.
      Also felt in northwestern India.
      Felt (IV) at Ishkoshim; (III) at
      Andizhan, Dushanbe, Dzhirgotol,
      Fergana, Khorog, Kulyab, Nurek
      and Toshkent; (II) at Samarkand,
      USSR. Depth from broadband
      displacement seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike= 65 Dip=60 Slip=  90
       NP2:       245     30       90
       Principal Axes:
        T              Plg=75  Azm=335
        P                  15      155
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to reverse
        faulting. The preferred fault
        plane is NP2.
      RADIATED ENERGY
       No. of sta:   4  Focal mech.  C
       Energy       2.8±0.7*10**12 Nm
      CENTROID, MOMENT TENSOR    (HRV)
      Data Used: GDSN
      L.P.B.: 16S, 33C
      Centroid Location:
      Origin Time       04:54: 5.1 0.3
      Lat 35.19N  FIX;Lon  70.74E  FIX
      Dep 135.7 1.2 Half-duration  3.0
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 5.35 0.20  Mtt=-5.04 0.24
        Mff=-0.32 0.26  Mrt= 2.01 0.19
        Mrf= 2.35 0.20  Mtf=-2.63 0.26
       Principal Axes:
        T  Val=  6.30  Plg=72  Azm=289
        N        0.56      12        61
        P       -6.86      13       154
       Best Double Couple:Mo=6.6*10**17
        NP1:Strike=260 Dip=34 Slip= 113
```

25d 04h

NP2: 53 59 75

QUE	5.75	212	iPd-	55	23.20	-1.3
NDI	8.60	136	iPd	56	00.00	-3.1X
			iS	57	30.00	
MHI	9.02	281	iPnd	56	06.40	-2.5X
	0.8s	298.51nm			6.1mb	
			eSn	57	43.00	
GKN	13.99	117	P	57	10.36	-4.1X
DMN	14.55	117	P	57	18.02	-3.7X
KKN	14.58	116	P	57	17.56	-4.5X
	0.6s	1012.00nm			6.3mb	
PKI	14.80	116	P	57	20.94	-4.0X
GUN	14.96	114	P	57	22.52	-4.5X
TEH	15.59	278	ePc	57	37.00	2.3
WMO	15.85	52	ePc	57	37.72	-0.2
			eS	00	40.26	
POO	16.79	169	iPd	57	47.50	-2.1
	1.2s	1265.63nm			6.1mb	
HYB	19.04	156	iPd	58	13.50	-2.4
	0.8s	769.20nm			6.1mb	
			esP	58	45.00	
			eS	01	44.00	
KER	19.23	274	ePd	58	18.00	0.2
BRF	19.33	248	(P)	58	10.40	-8.4X
BBU	19.36	248	iP	58	16.40	-2.6X
	0.4s	502.00nm			6.2mb	
DHR	19.55	249	iP+	58	18.60	-2.5
TAB	19.61	286	iP+	58	24.00	2.2
RYD	23.09	250	iP+	58	55.50	-0.9
MJMA	23.54	254	iP+	59	00.00	-0.8
OASM	24.82	256	iP+	59	12.30	-0.7
UOSK	25.90	257	iP+	59	23.70	0.7
AFIF	26.08	252	iP+	59	27.70	3.0X
GAZ	26.87	284	iP	59	33.50	1.8
LZH	27.07	78	Pc	59	35.50	1.8
	2.0s	235.00nm			5.4mb	
Z	12s	1.79um			4.9MszX	
N	10s	3.36um				
			pP	00	00.00	113kmX
			sP	00	13.00	
			PP	00	25.00	
			PcP	02	59.00	
			S	04	04.00	
			sS	05	51.00	
KMSA	27.19	244	iP+	59	33.10	-1.7
KVT	27.63	293	iP	59	38.80	0.2
HLBJ	28.55	274	Pc	59	48.00	1.0
HRI	28.72	276	iPc	59	49.50	1.0
SHMJ	28.83	275	Pc	59	49.70	0.3
DSI	29.45	273	iPc	59	55.50	0.6
KMI	29.51	101	iPc	59	54.61	-1.2
	2.0s	235.00nm			5.5mb	
Z	12s	1.79um			4.9MszX	
N	10s	3.36um				
			ipPd	00	19.11	111kmX
			esPd	00	32.85	
			iS	04	42.67	
			esS	05	28.97	
SHWJ	29.71	271	Pc	59	57.40	-0.1
ABHA	29.80	243	iP+	59	59.10	0.7
CHG	29.97	115	ePd	59	59.90	0.2
	0.9s	57.77nm			5.3mb	
			eS	04	52.00	
CHTO	29.97	115	iPd	59	59.69	0.0
			epPd	00	24.35	112kmX
			e	00	34.78	
ANTO	30.13	290	iPc	00	01.37	0.4
			epPc	00	24.88	106kmX
			isPd	00	38.28	
BBTK	30.15	290	eP	59	59.00	-2.2
CSS	30.31	281	eP	00	02.00	-0.5
RMN	30.38	272	iPc	00	04.00	0.7
HQL	30.44	269	ePc	00	03.50	-0.2
BADA	30.75	268	iP+	00	06.40	0.0
GPA	32.01	291	iP	00	17.70	0.4
BCK	32.08	286	iP	00	17.20	-0.9
HRT	32.46	292	iP	00	20.80	-0.5
GBZT	32.63	292	iPc	00	22.50	-0.2
IZI	32.64	292	eP	00	21.00	-1.9
YLV	32.70	292	iP	00	23.40	0.0
KHL	32.80	288	iP	00	23.90	-0.5
KOT	32.86	272	eP	00	24.50	-0.3
ISK	32.91	293	eP	00	19.00	-6.1X
ITU	32.94	293	iPc	00	28.00	2.6X
KSL	33.09	284	eP	00	26.00	-0.8
HLW	33.28	272	eP	00	30.00	1.5
CTT	33.38	293	iP	00	28.90	-0.3
PSN	33.49	298	eP	00	33.00	2.9X
BNT	33.82	292	iP	00	33.80	0.7
DMK	33.84	294	eP	00	33.00	-0.2
EDC	33.87	292	iP	00	34.00	0.6
IAS	34.08	304	eP	00	37.00	1.8
TDD	34.12	234	iP+	00	36.93	1.1
ARG	34.23	284	eP	00	36.30	-0.3
AMAN	34.34	261	iPc	00	38.00	0.4
AKSR	34.41	261	iPc	00	37.50	-0.7
PCT	34.43	118	ePc	00	40.40	1.9
	0.5s	3.40nm			4.4mb X	
DAF	34.52	234	iP+	00	40.34	1.1
IZM	34.55	288	iP	00	39.40	0.0
SGH	34.57	234	iP+	00	40.98	1.2
HLD	34.59	234	iP+	00	40.82	1.0
KSU	34.64	234	iP+	00	41.14	0.9
AKRL	34.65	261	iPc	00	41.00	0.8
AGAL	34.66	261	iPc	00	41.00	0.6
JMB	34.69	296	iPc	00	42.00	1.6
PTT	34.86	303	eP	00	43.50	1.6
GBR	34.89	234	iP+	00	43.54	1.1
SMG	34.99	287	eP	00	43.10	0.1
EZN	35.09	291	iP	00	44.50	0.6
KAP	35.12	284	eP	00	43.90	-0.3
DIM	35.49	295	eP	00	48.00	0.8
RDO	35.56	293	eP	00	48.20	0.4
PVL	35.57	297	iPc	00	49.00	1.1
KDZ	35.60	294	iP	00	49.00	0.8
CMP	35.74	301	iPc	00	56.00	6.6X
PLD	36.10	295	eP	00	54.00	1.7
RZN	36.12	294	iPc	00	54.00	1.2
APE	36.12	287	eP	00	52.80	0.1
BJI	36.23	68	iPc	00	55.11	1.7
	1.2s	267.00nm			6.0mb	
Z	20s	1.49um			4.8Msz	
			ipPd	01	19.94	107kmX
			esPd	01	32.52	
			eScP	06	52.00	
TNR	36.29	301	ePd	00	55.00	1.1
DRA	36.30	300	ePd	00	57.00	3.0X
NPS	36.43	284	eP	00	54.90	-0.3
PGB	36.46	296	iPc	00	57.00	1.5
BMR	36.87	305	iPd	01	01.00	2.3
MMB	36.87	294	iPc	01	00.00	1.1
VTS	37.17	296	iPc	01	03.00	1.5
PLG	37.22	292	eP	01	02.40	0.6
DEV	37.24	302	iPd	01	04.00	2.1
KKB	37.32	295	iPc	01	03.00	0.3
ATH	37.38	288	eP	01	03.80	0.7
VAM	37.52	284	eP	01	04.20	-0.2
NEO	37.54	291	eP	01	04.60	0.1
VAY	37.76	294	iPc	01	06.70	0.4
	1.3s	642.00nm			6.3mb	
			i	01	15.00	28kmX
			i	01	27.40	
			i	01	41.00	
VLI	38.23	287	eP	01	08.40	-1.9
TIM	38.42	301	iPc	01	15.00	3.2X
MIA	38.44	53	iPc	01	13.39	1.4
			ipPd	01	39.22	113kmX
			iPcP	03	21.17	
			eS	07	02.77	
			esS	07	45.09	
KZN	38.50	293	eP	01	12.50	-0.1
SKO	38.53	295	eP	01	10.00	-2.8X
	1.7s	758.00nm			6.3mb	
			i	01	12.70	9kmX
			i	01	30.30	
			i	01	37.30	
			i	03	19.50	
			i	03	30.20	
			i	07	07.00	
			i	10	20.00	
EVR	38.69	290	eP	01	13.90	-0.3
NUR	38.71	325	iP	01	13.60	-0.4
	0.9s	334.50nm			6.2mb	
			i	01	55.20	195kmX
			e	02	22.00	
			i	03	21.50	
			e	07	00.00	
			e	10	14.00	
SUF	38.88	329	iP	01	15.10	-0.2
	0.5s	100.20nm			5.9mb	
AAE	38.92	236	eP	01	18.00	1.4
ITM	38.93	288	eP	01	14.60	-1.5
BEO	39.00	300	eP	01	19.00	2.4
OHR	39.12	294	iP	01	17.20	-0.5
	1.9s	774.00nm			6.2mb	
			i	01	24.80	26kmX
			e	01	34.50	
SNG	39.23	128	eP	01	19.80	1.0
	1.0s	160.00nm			5.8mb	
			eS	07	06.20	
KKS	39.28	296	eP	01	19.00	0.1
PSZ	39.30	305	iP	01	20.00	0.8
PHP	39.31	295	eP	01	17.80	-1.3
KRA	39.32	308	ePc	01	19.40	0.2
	1.0s	465.00nm			6.2mb	
Z	22s	3.40um			5.1Msz	
			i	01	21.30	6kmX
			i	02	01.90	
			e	03	17.00	
			eS	07	15.00	
LSK	39.41	293	iPc	01	20.10	0.0
BCI	39.50	296	iPd	01	22.60	2.1
PVY	39.54	296	eP	01	22.50	1.2
IVA	39.57	297	eP	01	22.40	1.0
VLS	39.76	290	eP	01	21.80	-1.2
TIR	39.78	295	eP	01	22.60	-0.5
TPE	39.83	293	eP	01	22.40	-1.1
LACI	39.86	295	eP	01	22.60	-1.1
PLE	39.89	298	eP	01	25.50	1.4
BUD	39.89	304	e(P)	01	26.00	2.1
SRN	39.90	292	iP	01	22.40	-1.7
KEK	40.09	292	eP	01	24.30	-1.3
TTG	40.09	296	eP	01	25.50	0.0
ULC	40.15	296	eP	01	25.30	-0.9
NKY	40.23	297	eP	01	27.10	0.2
SRO	40.37	305	iP	01	29.20	1.4
			i	02	09.60	188kmX
			i	03	43.30	
SOD	40.81	336	iP	01	31.20	0.0
ZST	41.17	305	iP	01	34.80	0.4
			i	02	16.50	194kmX
			i	03	14.20	
BLY	41.33	300	eP	01	38.60	2.8X
LCI	41.37	293	P	01	34.50	-1.6
IPM	41.48	130	ePd	01	39.50	2.3
	1.0s	407.90nm			6.2mb	
			e	02	04.10	106kmX
KSP	41.67	309	iPc	01	39.00	0.5
	1.2s	171.00nm			5.7mb	
			id	01	40.80	6kmX
			i	02	21.50	
			i	03	24.00	
VKA	41.69	305	iPc	01	39.10	0.4
	4.0s	3492.00nm			6.5mb X	
'			i	01	41.40	8kmX
			i	02	17.20	
			i	02	22.50	
			i	03	04.80	
			i	03	36.00	
			i	04	01.50	
UPP	41.91	323	iP	01	39.60	-0.6
			i	01	41.30	6kmX
			iS	07	46.00	
KEV	41.93	339	ePc	01	40.96	0.6
	0.8s	269.90nm			6.1mb	
			esPd	02	20.36	
			e	03	42.00	
			e	07	50.00	
			eSS	10	59.93	
HVAR	42.04	298	iPc	01	41.50	-0.1
ZAG	42.08	302	iPc	01	44.00	2.2
PTJ	42.09	302	iPc	01	42.20	0.1
SSE	42.29	81	Pc	01	45.50	1.7
	1.0s	106.00nm			5.6mb	
Z	20s	1.00um			4.7Msz	
N	13s	1.30um				
			pP	02	08.00	95kmX
			sP	02	20.00	
			S	07	58.00	
			sS	08	38.00	
			eSS	11	05.00	
			ScS	11	30.00	
ORI	42.56	293	P	01	47.30	1.5
ROI	42.56	293	P	01	47.00	1.1
VBY	42.61	301	iPc	01	46.90	0.7
BSD	42.69	316	ePd	01	45.00	-1.7
	0.7s	200.00nm			6.0mb	
			i	02	28.00	200kmX
KTK1	42.72	337	iPc	01	46.31	-0.5

25d 05h

TDS	42.72	293	Pc	01	48.30	1.1		0.6s	943.50nm		6.7mb		ASK	48.15	323	eP	02	29.20	-0.7
CSI	42.73	293	P	01	47.90	0.6	GIB	44.85	291	P	02	09.30	4.8X	MEM	48.21	310	iPc	02	30.57	0.1
PRU	42.80	308	Pc	01	48.50	0.8	KGM	44.90	130	ePd	02	06.80	1.9				i	02	32.43	6kmX
	1.0s	173.40nm			5.8mb					e	02	32.00	108kmX	ENN	48.24	310	iPc	02	31.00	0.2
			pP	02	31.00	197kmX	MNS	44.91	297	Pc	02	05.00	0.2		1.1s	183.00nm			5.8mb	
			ePP	04	00.00		WATA	44.95	304	iPc	02	04.40	-0.8	SAOF	48.27	301	P	02	31.20	0.0
			eS	08	04.00			1.3s	323.00nm		5.9mb			BAG	48.28	99	eP	02	33.20	1.6
			eSS	08	40.00					i	02	06.20	6kmX	EMS	48.30	303	ePc	02	31.30	-0.2
GRI	42.83	292	P	01	48.59	0.5				i	02	34.40		ENR	48.32	301	P	02	30.70	-0.9
	0.8s	557.20nm			6.4mb		GRF	44.96	308	iPc	02	06.60	1.5	HAU	48.36	306	iPc	02	31.60	-0.2
MMN	42.93	293	P	01	50.40	1.5		1.6s	923.00nm		6.3mb				0.8s	209.90nm			6.0mb	
CZI	42.96	292	P	01	50.40	1.3	Z	22s	1.00um		4.7Msz			Z	20s	1.25um			4.9Msz	
LJU	43.06	302	iPc	01	50.60	0.7				i(pP)	d02	49.80	199kmX	AUTN	48.36	301	P	02	31.36	-0.7
			e	02	32.00	191kmX	RMP	45.00	297	P	02	06.00	0.5	SUE	48.37	324	eP	02	31.20	-0.4
			e	03	39.50		CTI	45.06	303	P	02	06.00	0.0	STV	48.38	301	P	02	30.70	-1.4
			e	04	11.50		FUR	45.06	306	iPc	02	06.50	0.6	SBF	48.38	300	iPc	02	31.90	-0.1
			eS	08	08.00			1.5s	640.00nm		6.2mb			AURF	48.45	300	P	02	31.87	-0.8
			e	11	24.00		SQTA	45.21	304	iPc	02	06.40	-0.8	REVF	48.45	300	P	02	31.17	-1.4
KMR	43.16	305	iP+	01	51.20	0.5		1.2s	368.00nm		6.0mb			TOUF	48.48	301	P	02	33.10	0.1
			ipP	02	23.00	142kmX				i	02	08.40	7kmX	PZZ	48.48	301	P	02	31.01	-1.9
			i	02	32.20					i	02	37.60		LPG	48.53	303	iPc	02	33.40	0.0
			ipPP	03	59.80					i	02	47.30			0.8s	262.35nm			6.1mb	
			ipPcP	04	08.80					i	03	44.80		LPL	48.54	303	iPc	02	33.50	0.1
CEY	43.17	302	iPc	01	51.40	0.6				i	04	19.80		DBN	48.55	312	eP	02	34.00	0.9
MGR	43.21	294	Pc	01	51.50	0.3				i	04	27.40		Z	20s	1.00um			4.8Msz	
RIY	43.24	301	eP	01	50.80	-0.5				i	04	36.20					e(pP)	03	12.00	169kmX
SGO	43.32	294	Pc	01	52.90	1.0	CRE	45.21	299	P	02	08.40	1.1				e	05	04.00	
KHC	43.46	307	iP	01	53.50	0.4	SFI	45.23	300	Pc	02	08.40	1.1				e(S)	09	10.00	
	1.3s	84.50nm			5.4mb		NB2	45.24	324	P	02	06.00	-1.2				e	13	13.00	
			e	02	36.60	200kmX	MCT	45.24	291	P	02	08.90	1.2	VITF	48.56	306	P	02	33.12	-0.1
VOY	43.51	302	ePc	01	53.50	-0.1	FAI	45.30	290	P	02	09.40	1.5	MVIF	48.57	301	P	02	33.56	-0.1
BRN	43.61	312	eP	01	55.00	0.9	PGD	45.33	300	Pc	02	09.50	1.2	BNI	48.67	302	Pc	02	33.90	-0.4
MSI	43.63	291	P	01	54.60	0.1	NSS	45.45	329	eP	02	07.71	-1.0	CALN	48.79	300	P	02	35.10	-0.2
TRI	43.63	302	iPc	01	54.50	0.0	RGS	45.87	327	eP	02	11.00	-1.0	FRF	49.00	300	iPc	02	36.20	-0.6
			ipP	02	22.30	121kmX	CVT	45.88	291	P	02	10.90	-1.5	LMR	49.15	300	eP	02	37.40	-0.5
			iPPP	04	12.00		SAL	45.90	302	P	02	14.20	1.7		1.2s	124.95nm			5.7mb	
			eS	08	06.00		KONO	45.90	322	ePc	02	13.01	0.7	DOU	49.17	309	Pc	02	38.20	0.2
			i	12	08.00					esPd	02	52.74					id	02	39.90	6kmX
			eLR	15	36.00		OSS	46.00	304	ePc	02	13.20	-0.4				e	03	18.00	
BSS	43.64	295	P	01	55.20	0.6	MME	46.01	300	P	02	14.80	1.1				e	04	42.00	
RBL	43.69	303	P	02	06.40	11.4X	MAO	46.01	298	P	02	13.10	-0.4				S	09	39.00	
ATN	43.71	291	P	01	55.60	0.4	BDI	46.10	300	Pc	02	13.90	-0.4	UCC	49.22	310	Pc+	02	39.20	0.9
DUI	43.74	296	Pc	01	56.20	0.7	LVI	46.15	291	P	02	14.70	0.2				e	03	21.00	188kmX
CLL	43.74	310	iPc	01	55.10	-0.2	PII	46.22	300	P	02	14.30	-0.7				e	05	15.00	
	1.4s	240.00nm			5.8mb		STU	46.37	307	ePd	02	16.50	0.3	LRG	49.23	300	eP	02	37.90	-0.6
			ipP	02	23.40	124kmX		1.0s	290.00nm		6.0mb				1.0s	187.50nm			5.9mb	
			e(S)	08	17.00		MDI	46.43	303	P	02	17.40	0.7	Z	20s	1.00um			4.8Msz	
KBA	43.78	304	iPc	01	56.20	0.3	SAX	46.47	305	ePc	02	17.00	-0.4	SNF	49.31	310	Pc	02	39.10	0.1
			i	01	58.00	6kmX	VDL	46.49	304	ePc	02	17.10	-0.4	OCP	49.64	101	eP	02	40.00	-1.9
			i	02	22.10		TNS	46.70	309	ePd	02	19.70	0.8	KBS	49.86	348	iPd	02	43.30	0.4
			i	02	28.10		PTS	46.73	290	P	02	19.88	0.7	LBF	50.12	305	iPc	02	44.70	-0.6
HFS	43.90	323	eP	01	54.80	-1.7		1.1s	645.30nm		6.3mb			LOR	50.15	305	iPc	02	44.80	-0.7
	0.9s	423.00nm			6.2mb		LLS	46.76	304	ePc	02	18.80	-0.8		1.0s	93.75nm			5.7mb	
Z	18s	2.63um			5.2Msz		BOB	46.79	301	P	02	20.40	0.7	Z	20s	1.25um			4.9Msz	
			LR	17	14.00		TMA	46.96	303	ePc	02	20.30	-0.8	SMF	50.28	305	iPc	02	46.20	-0.3
WET	43.92	307	eP	01	56.80	0.0	SLE	46.97	305	ePd	02	20.70	-0.3	SHK	50.29	72	eP	02	46.90	0.2
			i	01	58.10	4kmX	VAI	47.07	303	P	02	21.00	-0.7	SSF	50.42	305	iPc	02	47.10	-0.4
BHG	44.03	305	eP	01	57.90	0.2	ZLA	47.08	305	ePd	02	21.40	-0.5	PLDF	50.58	304	P	02	48.70	-0.1
	1.8s	859.00nm			6.2mb		MOL	47.13	326	iPd	02	21.48	-0.5	AVF	50.58	305	iPc	02	48.50	-0.2
LPI	44.04	291	P	01	58.41	0.5	BLS2	47.24	321	eP	02	23.20	0.1	GRC	50.66	306	P	02	49.24	-0.1
COP	44.14	316	iPd	01	59.70	1.3	FEL	47.27	306	eP	02	22.86	-0.6	AGO	50.89	304	P	02	51.10	0.0
	0.9s	302.52nm			6.1mb		STR	47.33	307	P	02	23.99	0.2	BGF	50.97	305	iPc	02	51.30	-0.4
			i	02	39.00	179kmX	GWF	47.38	307	P	02	24.57	0.4	LBL	51.00	303	P	02	52.13	0.3
			i	04	11.00		BNS	47.43	310	iPd	02	24.90	0.4	KKM	51.02	114	ePc	02	54.00	1.4
			i	08	25.00		PGF	47.54	298	P	02	25.17	-0.5		1.1s	111.90nm			5.7mb	
			i	11	55.00		WTS	47.56	311	ePc	02	26.00	0.5	PYM	51.04	304	P	02	52.18	-0.2
RFI	44.16	296	P	01	59.61	0.9		1.2s	587.00nm		6.2mb			MAF	51.24	304	iPc	02	53.80	0.1
	1.8s	********	nm		7.4mb	X	WIT	47.57	312	eP	02	27.00	1.4	TCF	51.46	305	iPc	02	55.40	-0.1
SDI	44.20	296	P	02	00.20	1.0	MMK	47.59	303	ePd	02	25.60	-0.6	CAF	51.88	303	iPc	02	58.90	0.2
FVI	44.21	303	P	01	58.90	-0.2	WLS	47.63	306	P	02	25.31	-0.9	LSF	51.93	305	iPc	02	58.50	-0.5
MNO	44.36	291	P	02	02.70	2.0	BBS	47.67	305	P	02	25.64	-0.9	ETER	52.01	299	iPc	02	58.90	-0.7
TRO	44.36	337	iPc	01	59.64	-0.4	CKI	47.67	301	P	02	25.87	-0.6	RJF	52.17	303	iPc	03	00.90	0.1
MEU	44.38	289	P	02	01.50	0.7		1.0s	55.80nm		5.3mb			Z	20s	0.75um			4.7Msz	
AQU	44.39	297	P	02	01.50	0.8	HYA	47.68	324	eP	02	25.60	-0.7	LDF	52.48	308	iPc	03	02.40	-0.6
PZI	44.41	289	P	02	01.15	0.2	CDF	47.68	306	P	02	25.88	-0.8	LPO	52.55	303	iPc	03	03.50	-0.1
	0.8s	1235.10nm			6.7mb		FIN	47.76	301	P	02	26.09	-1.2	ESY	52.59	317	eP	03	02.20	-1.5
AZI	44.43	297	P	02	02.00	1.1	ECH	47.79	306	P	02	26.77	-0.6		0.9s	249.00nm			6.2mb	
HOF	44.50	309	eP	02	01.90	0.5	MOF	47.86	306	P	02	27.69	-0.3	FLN	52.68	308	iPc	03	03.50	-1.0
	1.0s	126.00nm			5.6mb		DIX	47.97	303	ePc	02	28.80	-0.3		0.8s	209.90nm			6.2mb	
ARV	44.52	299	P	02	02.30	0.6	ROB	47.98	301	P	02	27.83	-1.2	Z	20s	1.50um			5.0Msz	
VVI	44.53	302	P	02	01.90	0.1	NAI	47.99	228	P	02	32.40	3.0X	EDU	52.71	318	eP	03	03.40	-1.2
MOX	44.65	309	iPc	02	03.00	0.4	IMI	48.05	300	P	02	29.06	-0.4		0.8s	205.00nm			6.1mb	
	1.5s	340.00nm			5.9mb		BER	48.07	323	iP	02	28.60	-0.7	ESEL	52.72	296	iPc	03	04.40	-0.5
			ipP	02	46.00	198kmX	CGL	48.09	294	P	02	29.57	-0.3	LFF	52.79	303	iPc	03	05.40	0.1
			eS	08	32.00			1.3s	171.00nm		5.7mb		EDI	52.91	317	eP	03	05.00	-1.0
ASS	44.80	298	P	02	05.40	1.4	BSF	48.09	306	P	02	29.52	-0.3		0.8s	214.00nm			6.2mb	
RSM	44.81	300	P	02	06.63	2.8X	LOMF	48.14	305	P	02	29.50	-0.7	MFF	52.97	305	iPc	03	05.90	-0.7

EKA	52.99	317	Pd	03	05.70	-1.0			1.0s	314.00nm		6.1mb				i	06	55.20	107km>
	1.0s	269.60nm			6.2mb					pP	05	21.50	117kmX	FFC	90.28	356	iPc	06	48.50	-0.3
GRR	53.01	308	iPc	03	06.00	-0.8	GUMO	69.62	87	eP	04	46.50	-12.5X		1.2s	176.00nm			6.1mb				
ESK	53.02	317	eP	03	06.00	-0.9	CFTV	70.16	291	iPd	05	05.00	2.8X	CTA	90.35	114	iPc	06	49.10	-0.4			
	1.0s	250.00nm			6.1mb		SMY	70.29	39	P	05	01.50	-1.0		1.1s	126.58nm			6.0mb				
EBH	53.03	318	eP	03	05.90	-1.1	GGC	71.49	292	eP	05	08.80	-1.5				i	07	18.20	110kmX			
	0.8s	317.00nm			6.3mb		NANU	71.52	136	eP	05	10.30	0.0				iS	17	10.00				
LPF	53.21	307	iPc	03	07.30	-1.0		0.5s	20.00nm			5.2mb		QLP	92.84	121	iPd	07	01.50	0.7			
EAB	53.50	318	eP	03	09.30	-1.1	BFT	71.58	218	iPc	05	11.00	0.1	STK	94.31	126	iPd	07	07.40	-0.1			
	0.9s	214.00nm			6.1mb		SLR	72.52	219	iPc+	05	14.50	-1.8		0.9s	13.00nm			5.3mb				
EPF	53.59	301	iPc	03	10.10	-1.2		1.5s	263.89nm			5.8mb					iPP	07	36.10				
	0.8s	104.95nm			5.9mb		EVA	72.74	218	iPc	05	07.50	-10.2X				iScS	17	30.40				
MAT	53.86	67	eP	03	13.00	-0.3		0.6s	73.33nm					ADE	94.41	130	iPd	07	08.50	0.5			
			eS	09	55.00		TBT	72.93	293	iPd	05	16.80	-1.9	SES	94.84	1	eP	07	09.00	-1.0			
LWI	53.88	235	iP+	03	13.40	-0.5	MBL	72.97	132	eP	05	18.40	-0.4				pP	07	39.00	114kmX			
BTH	53.95	301	iPc	03	14.30	0.5		0.5s	39.00nm			5.5mb		PNT	95.46	7	eP	07	13.00	0.2			
			i(sP)	03	21.50					e	05	47.00	113kmX		0.9s	43.00nm			5.9mb				
			ePPP	06	32.00		BPI	73.01	219	iPc	05	19.50	0.3	MCW	95.73	9	P	07	15.00	0.9			
			eS	10	38.00		LKO	73.21	270	Pc	05	18.28	-2.3	RMO	96.01	118	eP	07	14.70	-0.7			
			eSS	14	33.00		CHIE	73.46	292	ePd	05	20.00	-1.7				e	08	08.00	216kmX			
JAU	54.09	301	P	03	15.16	0.1	IMA	73.56	17	iPc	05	20.70	-1.2	NEW	96.71	5	iPc	07	18.80	0.3			
OGE	54.12	301	P	03	14.21	-0.9		0.7s	73.50nm			5.6mb			1.2s	53.03nm			5.9mb				
EROO	54.20	298	iPc	03	15.20	-0.5	PRY	73.91	219	iPc	05	23.50	-0.9				ipP	07	47.60	109kmX			
ESCF	54.22	301	P	03	15.96	0.1	KIC	74.29	267	Pc	05	25.72	-1.0				i	08	07.60				
LHE	54.30	301	P	03	16.53	0.0		0.7s	76.50nm			5.6mb					e(PP)	11	10.00				
ATE	54.31	301	P	03	16.66	0.1	TIC	74.36	267	Pc	05	26.04	-1.1	GMW	96.85	9	P	07	20.00	0.9			
MADF	54.37	301	P	03	15.66	-1.3		0.4s	60.50nm			5.8mb		RMW	97.06	8	P	07	20.40	0.3			
ISSF	54.39	301	P	03	17.22	0.0	LIC	74.60	267	Pc	05	27.38	-1.2				pP	07	52.50	123kmX			
BOH	54.52	301	P	03	18.59	0.4		0.5s	67.50nm			5.7mb		LON	97.75	8	P	07	22.80	-0.5			
ETA	55.30	314	eP	03	22.20	-1.3	Z	20s	0.43um			4.7Msz		LRM	99.39	2	eP	07	30.40	-0.6			
	1.0s	139.00nm			5.9mb		MTN	74.61	118	eP	05	29.00	0.5	BW06	102.48	0	Pdiff	07	43.00	-1.6			
ECP	55.52	313	eP	03	23.60	-1.5		0.4s	34.00nm			5.5mb		DAU	104.82	1	Pdiff	07	58.00	2.9X			
	1.1s	609.00nm			6.5mb		KNA	74.90	122	eP	05	30.20	0.1	GOL	105.45	357	Pdiff	07	59.30	1.4			
ECHE	55.60	297	iPc	03	26.10	0.2	INK	75.33	9	iPc	05	31.30	-0.5		1.3s	10.42nm			5.7mb				
ECRI	55.72	301	iPc	03	26.80	0.0		1.0s	361.00nm			6.1mb		BRK	106.42	10	ePKP	12	00.90	-11.7X			
ECB	55.72	314	eP	03	25.40	-1.2				pP	05	56.00	95kmX	CMB	106.52	9	ePKP	12	01.00	-11.9X			
	1.0s	476.00nm			6.4mb		ADK	75.39	36	P	05	29.50	-2.9X	TNP	106.82	6	Pdiff	08	10.80	6.9X			
ETOR	55.97	299	iPc	03	27.80	-0.9		1.0s	60.00nm			5.4mb		PRS	108.06	10	e(PKP)	12	12.80	-3.0X			
EALH	56.53	296	iPd	03	32.50	-0.1	JAY	75.39	104	ePc	05	33.00	-0.1	PRI	108.34	9	e(PKP)	12	15.30	-1.2			
BCAO	56.79	250	iPc	03	32.80	-1.9	TTA	75.46	20	iPc	05	32.20	-0.6	CLC	109.03	7	ePKP	12	12.00	-5.7X			
	0.9s	894.00nm			6.8mb			0.9s	66.30nm			5.4mb		ISA	109.09	8	ePKP	12	28.00	10.2X			
			i	04	58.70	413kmX	COL	75.91	16	iPc	05	34.64	-0.5	GSC	109.61	6	ePKP	12	21.00	2.2			
			i	06	34.60					ePPd	06	03.11	111kmX	UYO	109.65	347	e(PKP)	12	07.50	-11.3X			
EVIA	57.05	297	iPc	03	36.00	-0.3				e	06	17.34		SBB	110.12	7	ePKP	12	02.00	-17.8X			
ENIJ	57.44	295	iPc	03	38.10	-0.9	FBA	75.91	16	iPc	05	34.50	-0.7	ALQ	110.24	357	ePdiff	08	21.00	1.8			
GUD	57.53	300	iPc	03	39.10	-0.6		0.7s	220.90nm			6.1mb		ALQ	110.24	357	e(PKP)	12	34.00	13.8X			
DAV	57.60	105	eP	03	43.00	2.7X	FRB	76.25	343	eP	05	37.00	-0.1	MWC	110.55	8	ePKP	12	34.00	13.2X			
TOL	57.73	299	ePc	03	39.74	-1.2		0.5s	50.00nm			5.6mb		TPC	110.86	6	ePKP	12	21.00	-0.2			
	1.2s	1346.15nm			6.8mb		MEKA	76.38	137	eP	05	38.00	-0.3	BAR	112.22	7	ePKP	12	26.00	2.2			
			e	04	04.41	100kmX		1.0s	93.00nm			5.5mb		SOB1	112.71	275	ePKP	12	25.20	0.0			
			iS	11	32.00		SVW	77.02	21	ePc	05	41.50	0.0	PDCR	113.09	271	ePKP	12	25.50	-0.4			
			iSS	12	15.00			0.9s	37.40nm			5.2mb					e	13	15.20				
VAL	57.89	314	eP	03	41.00	-0.9	MRWA	77.05	140	eP	05	41.00	-1.0	LTZ	120.72	123	PKP	12	39.00	-0.7			
AKU	58.02	331	eP	03	42.80	0.2	PMR	78.41	18	iPc	05	47.90	-1.1				e	13	08.70				
	1.9s	842.11nm			6.4mb			0.9s	227.50nm			6.0mb		THZ	120.79	122	PKP	12	39.20	-0.7			
			i	03	44.90	7kmX	BAL	78.53	141	eP	05	48.00	-2.1	JFO	121.23	264	ePKP	12	42.00	0.7			
			i	04	25.90		TOA	78.69	17	iPc	05	50.80	0.1	KHZ	121.47	122	PKP	12	40.60	-0.4			
NPA	58.07	216	iP	03	39.20	-4.3X		0.9s	497.40nm			6.3mb					e	13	10.20				
	1.0s	330.00nm			6.3mb		MUN	79.37	142	iPd	05	53.40	-1.2	TCW	121.55	121	PKP	12	40.20	-1.1			
EBAN	58.16	297	iPc	03	43.40	-0.6	KLB	79.86	140	eP	05	56.00	-1.2	MRW	121.86	121	PKP	12	41.10	-0.7			
TRT	58.26	129	ePc	03	44.00	-0.9	SDN	79.91	27	eP	05	57.90	0.8	BAO	122.00	273	ePKP	12	43.60	0.6			
AFC	58.32	296	iPc	03	43.80	-1.5	NWAO	80.64	142	eP	06	01.50	0.2	MNG	122.20	120	PKP	12	41.30	-1.3			
ECOG	58.33	296	iPd	03	43.70	-1.6	KDC	80.69	22	iPc	06	00.80	-0.4		0.5s	14.00nm							
EMEL	58.63	293	iPd	03	46.60	-0.7		0.8s	318.00nm			6.2mb					e	13	11.40				
ERUA	59.02	302	eP	03	49.60	-0.3	WARB	80.86	131	eP	06	03.10	0.5	MOW	122.32	121	ePKP	12	42.30	-0.5			
EPLA	59.11	300	iPc	03	50.40	-0.2		0.4s	15.00nm			5.1mb		MTW	122.40	120	PKP	12	42.80	-0.1			
MAL	59.16	295	iPc	03	49.00	-1.9	COOL	81.13	138	iPc	06	03.50	-0.4	BLW	122.46	120	PKP	12	43.00	0.0			
			iS	11	46.00		RKG	81.44	142	eP	06	07.20	1.8	PGZ	122.76	119	ePKP	12	43.20	-0.4			
EHOR	59.36	297	iPc	03	51.40	-0.8	WB5	81.60	121	iPc	06	06.10	-0.5				e	13	13.80				
EPRU	59.68	296	iPc	03	52.70	-1.8				eS	09	22.90		VAO	124.80	265	ePKP	12	49.00	0.8			
EJIF	60.05	295	eP	03	55.30	-1.7				e	17	00.00					e	12	50.70				
OJEN	60.24	295	eP	04	00.00	1.6	HYT	81.69	13	Pc	06	06.90	0.3				e	13	27.60				
MOMI	60.29	295	eP	03	59.50	0.9	YKA	82.64	2	eP	06	10.30	-1.0	SPA	124.94	180	iPKPd	12	47.60	0.4			
PLAT	60.40	295	eP	04	00.00	0.6		0.8s	74.10nm			5.6mb			0.8s	104.17nm							
CNIL	60.52	296	eP	04	01.00	0.9	CRZF	82.89	193	iPc	06	20.00	7.3X	OXX	126.68	345	iPKP	12	54.50	2.3			
EVAL	60.54	297	iPc	03	59.60	-0.7				eS	16	30.00		PPD	127.91	268	ePKP	12	54.60	0.4			
IFR	60.99	292	iPc	04	03.50	-0.2				eSP	17	15.00					i	12	56.50				
LIS	61.83	299	iPd	04	09.50	0.5	SCH	83.19	337	eP	06	14.00	-0.4				e	12	59.50				
AVE	62.82	293	iPc	04	15.00	-0.6	ASPA	83.81	124	iPc	06	17.80	-0.1	SIV	132.83	281	PKP	12	55.00	-8.6X			
			i	04	29.00	50kmX		1.0s	106.50nm			5.7mb					i	13	04.40				
TIO	63.74	291	iPc	04	21.00	-0.9				i	06	45.80	107kmX	CCH	137.65	283	PKP	13	03.00	-10.1X			
KRI	64.60	224	iPc	04	30.40	2.8X				iS	16	26.80					i	13	15.00				
BUL	67.82	223	iPc	04	43.80	-4.2X	PMG	84.63	105	eP	06	22.50	0.4	ZOBO	138.60	286	PKP	13	05.20	-10.0X			
GDH	68.18	341	iPd	04	49.20	-0.2		1.2s	65.63nm			5.4mb			1.2s	71.62nm							
	1.0s	78.00nm			5.6mb		FORR	85.10	133	iPd	06	24.10	0.0		Z 24s	0.25um			4.9MszX				
			i	05	33.00	184kmX	OIS	85.76	119	eP	06	27.20	-0.5				i	13	16.00				
MBC	68.73	3	ePc	04	52.30	-0.4		1.0s	82.00nm			5.6mb					LR	50	34.00				

25d 05h

LPB	138.73	286	ePKP	13	06.00	-9.3X
	1.2s	125.00nm				
			i	13	16.00	
CNCB	138.80	285	PKP	13	05.00	-10.6X
ARE	141.35	289	ePKP	13	16.00	-3.8X
CYA	142.48	268	ePKPc	13	15.50	-5.7X
NNA	142.50	300	iPKPd	13	18.30	-3.3X
	0.9s	23.53nm				
ANT	144.30	278	iPKP	13	23.50	-0.8
RTLL	145.63	264	iPKPd	13	27.00	0.5
RTCV	145.84	264	e(PKP)	13	28.20	1.4
ZON	145.86	264	ePKP	13	30.00	3.1X
RTCB	145.95	264	iPKPc	13	28.60	1.5
MDZ	146.38	262	ePKP	13	30.60	2.9X
			e	14	00.10	
RTBS	146.53	264	e(PKP)	13	30.60	2.8X
JACH	147.74	263	ePKPd	13	34.50	4.6X
PEL	147.93	262	iPKPd	13	32.00	1.9
	1.5s	1027.78nm				
SAN	147.99	262	ePKP	13	31.50	1.3
			i	13	35.70	
CHCH	148.10	261	ePKP	13	32.40	2.0
ROCH	148.15	263	ePKP	13	32.00	1.3
			i	13	36.30	
TACH	148.26	261	ePKP	13	32.00	1.4
			i	13	36.10	
LNV	148.71	261	iPKP	13	32.50	1.3
LCCH	148.73	262	ePKP	13	34.00	2.7X
	S.D. = 1.0	on 444 of 499 obs.				

& OCT 25, 1990 04h 57m 28.28s
63.196 N 150.479 W
DEPTH = 119.9km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.44	119	eP	57	45.65	-0.5
RND	0.76	73	eP	57	48.01	-0.5
			eS	58	03.46	
CUT	0.80	173	iP	57	48.52	-0.2
			eS	58	04.79	
MCK	0.88	51	eP	57	49.07	-0.4
SKT	1.31	202	iP	57	53.27	-0.7
			eS	58	13.17	
NEA	1.52	23	eP	57	55.01	-1.3
PWA	1.58	170	eP	57	57.38	0.4
GHO	1.60	153	eP	57	57.22	-0.1
			eS	58	19.87	
WRH	1.66	39	iP	57	57.06	-0.9
SML	1.71	143	iP	57	58.13	-0.5
PLRM	1.73	158	eP	57	58.03	-0.7
			eS	58	21.42	
PMR	1.73	158	iPd	57	59.70	0.9
SUA	1.74	184	eP	57	59.09	0.0
CCB	1.88	38	eP	57	59.22	-1.4
NCG	1.96	204	eP	58	00.96	-0.9
			eS	58	28.14	
SCM	2.00	132	eP	58	02.11	-0.2
PMS	2.01	167	eP	58	01.95	-0.4
			eS	58	27.31	
KNK	2.02	151	eP	58	01.98	-0.5
			eS	58	28.14	
CGLM	2.03	201	eP	58	02.27	-0.3
FBA	2.08	33	iPd	58	02.20	-1.0
CRP	2.09	203	eP	58	03.87	0.4
BGL	2.14	206	eP	58	04.54	0.5
SPU	2.15	201	eP	58	04.31	0.1
CKL	2.19	204	eP	58	05.02	0.3
GLM	2.25	36	eP	58	04.31	-1.2
TOA	2.27	117	iPc	58	05.70	0.0
SDG	2.36	104	eP	58	07.74	0.9
TTA	2.53	266	eP	58	09.30	0.2
SLKM	2.70	177	eP	58	10.65	-0.7
KLU	2.73	127	eP	58	10.31	-1.4
RDT	2.79	200	eP	58	12.81	0.4
GLI	2.82	144	eP	58	10.52	-2.3
RSO	2.95	202	eP	58	15.35	0.6
RED	2.99	202	eP	58	16.71	1.5
SEW	3.14	171	eP	58	15.83	-1.3
SVW	3.20	231	eP	58	16.80	-1.1
	36 obs. associated					

& OCT 25, 1990 06h 05m 41.18s
57.375 N 150.382 W
DEPTH = 0.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>.

KDC	1.20	289	eP	06	00.03	-4.4
			eS	06	15.84	
XLV	2.20	342	eP	06	14.80	-4.7
CNPM	2.20	349	iP	06	14.55	-5.0
CDD	2.33	313	eP	06	16.50	-4.9
			eS	06	43.91	
HOM	2.38	344	eP	06	16.85	-5.3
BRLK	2.41	354	eP	06	17.11	-5.5
AUE	2.54	323	eP	06	19.84	-4.5
AUH	2.57	322	eP	06	21.02	-3.8
NNL	2.72	350	eP	06	22.38	-4.5
OPT	2.73	328	eP	06	22.19	-4.9
MCNL	2.77	313	iP	06	22.59	-5.0
SEW	2.78	10	eP	06	21.32	-6.5
			eS	06	54.04	
PDB	3.14	322	eP	06	27.07	-5.7
SLKM	3.14	1	eP	06	26.57	-6.4
BGM	3.26	310	eP	06	28.93	-5.6
KNIM	3.28	24	eP	06	27.96	-7.0
RED	3.30	339	eP	06	29.01	-6.2
RSO	3.33	339	eP	06	29.61	-6.2
RDT	3.38	343	eP	06	29.88	-6.4
PMS	3.90	6	eP	06	37.56	-6.2
SPU	3.91	348	eP	06	37.27	-6.7
CKL	3.96	346	eP	06	38.67	-6.0
CRP	4.01	348	eP	06	39.39	-6.0
CGLM	4.03	349	eP	06	39.18	-6.4
BGL	4.03	346	eP	06	39.46	-6.2
SUA	4.11	358	eP	06	39.75	-6.9
NCG	4.14	348	eP	06	41.08	-6.1
KNK	4.17	13	eP	06	40.81	-6.7
VZW	4.19	26	eP	06	40.80	-6.9
PLRM	4.28	8	eP	06	42.95	-6.0
VLZ	4.30	27	eP	06	42.64	-6.7
GHO	4.47	9	eP	06	45.85	-6.0
SML	4.57	12	eP	06	46.88	-6.3
KLU	4.72	27	eP	06	48.31	-7.0
SCM	4.73	18	eP	06	49.26	-6.3
TGL	5.16	46	eP	06	53.83	-7.9
YAH	5.39	53	eP	06	56.58	-8.5
BALM	5.52	45	eP	06	58.98	-7.8
	38 obs. associated					

OCT 25, 1990 06h 25m 25.54± 0.31s
43.794 N ± 4.3km 98.472 W ± 3.2km
DEPTH = 5.0km (geophysicist)
3.6mb (1 obs.)
SOUTH DAKOTA (462)
mbLg 3.9 (NEIS), 3.9 (TUL), 3.8 (OTT). Felt (V) at Mount Vernon; (IV) at Gann Valley, Plankinton and White Lake; (III) at Alpena, Arlington, Corsica, Freeman, Geddes, Gregory, Harrison, Kimball, Lane, Letcher, Lower Brule, Morty, Miller, Oacoma, Pukwana, Stickney and Woonsocket.

GLD	6.46	234	eP	27	04.00	0.1
GOL	6.58	234	eP	27	05.10	-0.5
ULM	6.70	14	Pd	27	07.50	0.6
			S	28	20.00	
BMS	6.95	323	Pd	27	12.20	1.6
			S	28	29.60	
TUL	8.14	164	ePn	27	27.40	0.2
	0.7s	4.80nm			4.9mb	X
			eSn	28	55.00	
			eLg	29	44.50	
BW06	8.15	267	eP	27	27.50	-0.1
SIO	8.21	168	(Pn)	27	27.30	-0.8
			e	27	28.20	
			eLg	29	46.00	
FVM	8.41	131	eP	27	32.00	1.0
MEO	9.00	181	iP	27	38.80	-0.3
MEMT	9.08	286	ePn	27	40.20	-0.3
SXM	9.33	289	ePn	27	44.40	0.5
ELC	9.58	130	eP	27	47.20	0.2
BGMT	9.80	283	ePn	27	52.50	2.1
LTMT	9.83	279	ePn	27	54.10	3.2X
HRY	9.86	292	ePn	27	49.00	-2.1
OLY	9.88	145	eP	27	49.00	-2.2
DAU	10.08	255	eP	27	54.70	0.3
LRM	10.14	286	ePn	27	54.30	-0.8
HBMT	10.25	286	ePn	27	56.40	-0.2
MCMT	10.36	281	ePn	28	00.80	2.7X
ANMO	10.78	218	e(P)	28	05.00	1.3

ALQ	10.78	218	eP	28	04.00	0.2
SES	10.81	312	Pd	28	03.60	-0.4
			S	29	59.50	
FFC	11.18	349	eP	28	08.00	-0.9
	0.4s	9.00nm			5.5mb	
RSCP	12.86	125	eP	28	33.00	1.2
GBTN	13.64	122	eP	28	42.40	0.4
TKL	13.91	121	eP	28	47.00	1.4
EEO	13.97	71	P	28	46.63	0.3
CKO	15.06	74	P	29	01.53	1.0
BLA	15.21	109	eP	29	00.50	-2.2
FCC	15.23	9	P	29	06.11	3.4
TNP	15.26	254	e(P)	29	03.50	0.0
PNT	15.54	298	P	29	21.00	14.1
GRQ	16.18	72	P	29	15.08	0.0
TRQ	17.07	73	P	29	26.00	-0.5
MIN	17.51	267	e(P)	29	52.10	20.1X
CMB	17.51	258	ePc	29	36.00	4.0X
FRI	17.52	254	eP	29	36.40	4.4X
JAQ	17.95	48	P	29	36.44	-0.8
WDC	18.11	268	e(P)	29	39.00	-0.3
YKA	20.97	339	eP	30	19.20	7.6X
	0.4s	1.20nm			3.6mb	
	S.D. = 1.1	on 33 of 41 obs.				

& OCT 25, 1990 06h 45m 08.70s
40.705 N 124.738 W
DEPTH = 18.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 3.1 (BRK).

FHC	0.58	80	iPc	45	19.80	-0.3
			iS	45	27.50	
WDC	1.68	94	iPc	45	35.40	-2.0
LTCM	2.06	103	eP	45	41.00	-1.8
LBFM	2.25	72	eP	45	44.90	-0.9
MIN	2.42	98	iPd	45	45.80	-2.3
ORV	2.74	114	ePd	45	49.90	-2.7
	6 obs. associated					

• OCT 25, 1990 07h 28m 24.16± 0.42s
51.841 N ±13.5km 156.716 E ±11.4km
DEPTH = 33.0km (normal)
4.7mb (12 obs.)
KAMCHATKA (217)

KUSJ	11.92	228	P	31	15.20	0.6
			eS	33	16.10	
ASAJ	12.18	236	eP	31	25.30	7.2X
HOOJ	13.14	229	eP	31	32.50	1.7
			eS	33	47.10	
MRRJ	14.19	235	eP	31	48.00	3.4
NIIJ	19.22	228	P	32	49.30	1.2
KAKJ	19.57	223	P	32	51.40	-0.6
MAT	20.16	228	eP	32	59.00	0.7
CHJJ	20.21	226	P	32	59.40	0.6
MTMJ	20.31	229	P	33	00.20	0.2
IIDJ	21.17	227	P	33	09.70	1.0
FBA	30.76	43	iP	34	39.50	1.3
	1.0s	12.50nm			4.7mb	
INK	36.12	36	eP	35	26.00	1.7
MBC	39.00	22	eP	35	34.00	-14.4
YKA	45.47	41	eP	36	42.50	1.1
	0.7s	2.80nm			4.3mb	
LRM	56.34	57	eP	38	04.10	-0.2
GUN	56.95	274	P	38	08.38	-0.5
	0.6s	6.00nm			4.8mb	
KKN	57.40	275	P	38	11.38	-0.6
	0.6s	15.00nm			5.2mb	
PKI	57.48	274	P	38	11.68	-1.0
	0.6s	4.00nm			4.7mb	
DMN	57.64	275	P	38	12.88	-0.8
	0.5s	11.00nm			5.2mb	
GKN	57.65	275	P	38	12.92	-0.7
	0.6s	8.00nm			4.9mb	
TNP	58.98	67	iP	38	22.50	-0.4
	0.8s	5.15nm			4.7mb	
BW06	59.93	58	iP	38	29.00	-0.4
	0.8s	5.71nm			4.8mb	
DAU	60.68	61	eP	38	34.70	0.1
	0.6s	1.00nm			4.1mb	
ALO	67.26	62	eP	39	17.00	-0.6
	0.7s	3.08nm			4.5mb	
GBA	72.81	270	P	40	09.00	17.7
	0.5s	1.00nm				
WB5	74.04	202	eP	39	55.70	-2.6
ASPA	77.80	201	eP	40	17.80	-1.7

0.6s 6.10nm 4.8mb
S.D. = 1.1 on 23 of 27 obs.

---

* OCT 25, 1990 09h 05m 25.44± 1.79s
24.174 S ±11.7km 179.731 W ±14.6km
DEPTH = 537.9 ± 22.1 km
5.0mb (6 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM	12.89	277	iPc	08 14.60	0.8
BKM	12.96	298	iPd	08 14.00	-0.4
WLZ	14.20	195	eP	08 28.80	2.0
NOZ	14.52	187	eP	08 29.80	-0.2
PGZ	16.74	191	P	08 51.20	-0.5
	0.4s	34.00nm		5.3mb	
MNG	16.88	193	eP	08 51.40	-1.8
KIW	17.24	194	P	08 55.70	-0.9
BLW	17.61	192	eP	09 00.60	0.4
WDW	17.61	193	eP	08 59.80	-0.4
MRW	17.64	194	P	08 59.90	-0.5
WEL	17.67	194	P	09 02.00	1.2
			S	12 02.00	
KHZ	19.03	195	P	09 14.20	0.4
LTZ	19.70	198	P	09 20.00	-0.2
MMCZ	22.67	201	P	09 46.80	-0.7
MHZ	22.67	201	P	09 46.60	-0.9
BRS	24.94	257	iP	10 08.50	0.5
RMQ	28.54	259	iPd	10 38.90	-0.6
CAN	29.22	240	eP	10 47.00	1.7
BWA	29.49	242	eP	10 46.90	-0.7
CTA	31.72	271	iPd	11 06.80	0.1
	0.8s	89.55nm		5.4mb	
TOO	32.51	237	iPc	11 15.40	2.2
PMG	34.82	289	iPd	11 31.40	-1.3
	0.9s	67.23nm		5.2mb	
STK	34.85	248	iPd	11 34.20	1.4
	0.6s	4.00nm		4.2mb	
ASPA	42.24	261	eP	12 32.20	-0.7
	0.9s	34.30nm		4.9mb	
			iS	18 13.20	
WB5	42.62	266	iPd	12 35.20	-0.8
WARB	48.29	256	iPd	13 19.10	-0.5
KNA	48.91	270	eP	13 23.60	-0.7
NANU	58.96	257	eP	14 35.40	0.1
	0.4s	11.00nm		4.6mb	
ALQ	90.93	52	eP	17 34.00	1.0
HFS	142.86	349	ePKP	23 55.10	-3.4X
	0.9s	4.80nm			

S.D. = 1.1 on 29 of 30 obs.

OCT 25, 1990 09h 33m 14.59± 1.30s
14.100 N ± 9.9km 92.323 W ±11.6km
DEPTH = 58.7 ± 11.0 km
4.6mb (15 obs.) 3.7Msz (2 obs.)
NEAR COAST OF CHIAPAS, MEXICO (69)

TPX	0.80	4	iP	33 30.00	-0.1
			iS	33 53.50	
SCX	2.64	354	eP	33 57.50	2.0
			(S)	34 31.50	
OXX	5.17	306	eP	34 26.50	-5.1X
EVV	5.22	327	(P)	34 39.50	7.6X
IISM	6.86	316	(P)	35 01.00	6.1X
IIT	7.54	311	(P)	35 05.00	0.4
PPM	7.80	310	eP	35 06.50	-2.0
III	8.07	303	(P)	35 52.00	40.1X
MRX	10.15	305	eP	35 37.50	-2.7X
OLY	21.33	2	eP	37 59.00	0.4
MEO	21.36	346	iPd	37 57.50	-1.4
SIO	21.85	351	eP	38 02.70	-1.1
TUL	21.94	352	eP	38 03.30	-1.4
	0.5s	7.70nm		4.4mb	
Z	19s	0.28um		3.7Msz	
			LR	50 00.00	
RSCP	22.25	15	iP	38 08.60	0.7
	0.9s	32.53nm		4.8mb	
ALQ	24.36	331	eP	38 28.50	0.0
	0.8s	3.54nm		3.9mb	
BLA	25.35	23	eP	38 37.10	-0.6
	0.9s	7.56nm		4.2mb	
GOL	27.96	338	eP	39 01.50	-0.4
	1.0s	11.00nm		4.4mb	
PV09	28.50	332	eP	39 07.00	0.2
DAU	31.01	331	eP	39 31.00	1.9
	1.2s	2.00nm		3.7mb	
BW06	32.21	336	eP	39 38.50	-1.0
	1.0s	2.75nm		4.0mb	
TNP	32.52	322	eP	39 42.00	-0.2
LRM	35.89	336	ePc	40 11.50	0.3
ZOBO	38.50	141	P	40 33.80	0.1
Z	18s	0.10um		3.7Msz	
			eLR	53 00.00	
LPB	38.72	141	P	40 38.00	2.7
CNCB	39.00	141	eP	40 36.00	-1.9
SES	39.27	341	eP	40 39.00	-0.2
FFC	41.23	352	eP	40 55.00	-0.2
	0.5s	7.00nm		4.7mb	
PNT	41.64	333	eP	41 00.00	1.3
	1.0s	14.00nm		4.7mb	
SIV	42.99	133	P	41 10.20	0.2
YKA	50.86	347	eP	42 10.40	-0.8
	0.8s	19.20nm		5.2mb	
SOB1	56.03	111	e(P)	42 48.00	-2.1
SOB1	56.03	111	eP	42 51.50	1.4
PDCR	58.98	114	eP	43 09.60	-1.2
INK	60.25	344	ePc	43 18.20	-0.6
PMR	62.19	333	eP	43 33.20	1.3
FBA	63.03	337	eP	43 38.50	1.0
	0.8s	7.76nm		4.8mb	
MBC	63.78	353	eP	43 42.50	0.3
	1.0s	13.00nm		4.9mb	
TTA	65.67	333	eP	43 55.90	1.1
	0.8s	8.62nm		4.8mb	
EKA	78.07	36	P	45 08.00	-0.5
	0.8s	8.80nm		4.8mb	
LKO	84.58	82	P	45 43.96	0.5
	0.7s	7.50nm		4.9mb	
GBA	150.67	21	PKPd	53 03.00	6.3X
	0.7s	5.50nm			

S.D. = 1.2 on 35 of 41 obs.

% OCT 25, 1990 10h 14m 36.69± 0.94s
40.849 N ± 6.7km 28.320 E ± 8.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

CTT	0.31	15	iPg	14 43.20	0.1
BNT	0.58	212	iPg	14 48.70	0.3
			iSg	14 57.20	
ISK	0.60	69	ePg	14 48.50	-0.3
			eSg	14 57.70	
KCT	0.60	177	iPg	14 48.20	-0.6
IZI	1.02	120	ePg	14 56.70	0.7
			eSg	15 09.70	
HRT	1.02	91	ePg	14 55.90	-0.2

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

OCT 25, 1990 11h 01m 38.72± 0.11s
8.307 N ± 2.8km 126.462 E ± 3.3km
DEPTH = 44.1km (geophysicist)
5.9mb (76 obs.) 6.1Msz (27 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)
Ms 5.7 (PAS). Mo=5.0•10••18 Nm
(PPT). Some minor damage
reported on Mindanao. Depth from
broadband displacement
seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=350 Dip=64 Slip= 90
NP2: 170 26 90
Principal Axes:
T Plg=71 Azm=260
P 19 80
Comment: The focal mechanism is
poorly controlled and
corresponds to reverse
faulting. The preferred fault
plane is NP2.
RADIATED ENERGY
No. of sta: 4 Focal mech. C
Energy 2.1±1.0•10••13 Nm
MOMENT TENSOR SOLUTION
Dep 45 No. of sta: 17
Moment Tensor; Scale 10••18 Nm
Mrr= 5.26 Mtt=-1.66
Mff=-3.60 Mrt= 1.99
Mrf= 1.37 Mtf= 3.54
Principal axes:
T Val= 6.35 Plg=66 Azm=324
N -0.06 24 142
P -6.30 1 232
Best Double Couple:Mo=6.3•10••18
NP1:Strike=345 Dip=49 Slip= 123
NP2: 120 50 58
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 42C M.W.: 11S, 18C
Centroid Location:
Origin Time 11:01:46.8 0.2
Lat 8.09N 0.02 Lon 127.02E 0.02
Dep 45.7 1.1 Half-duration 5.5
Moment Tensor; Scale 10••18 Nm
Mrr= 2.97 0.05 Mtt= 0.46 0.05
Mff=-3.42 0.06 Mrt= 1.46 0.09
Mrf= 0.75 0.08 Mtf=-0.29 0.05
Principal Axes:
T Val= 3.68 Plg=66 Azm=349
N -0.12 23 190
P -3.57 8 97
Best Double Couple:Mo=3.6•10••18
NP1:Strike=163 Dip=42 Slip= 55
NP2: 26 57 118

DAV	1.50	216	eP	02 08.80	5.3X
QCP	8.21	320	eP	03 45.00	6.8X
BAG	9.89	325	eP	04 02.00	0.5
KKM	10.41	258	ePd	04 15.00	6.4X
	1.5s	1145.10nm		6.8mb X	
			e	04 51.50	
BKB2	13.46	226	ePc	04 56.50	7.1X
MKS	15.14	208	iPc	05 17.50	6.2X
TATO	17.24	345	iPc	05 38.21	0.2
	1.3s	692.81nm		5.6mb	
ANP	17.43	345	iPc	05 41.60	1.1
			eS	08 54.00	
JAY	17.81	127	eP	05 47.20	2.0
HKC	18.26	321	iP	05 53.90	3.3X
			iS	09 16.00	
KUPT	18.56	189	eP	05 46.50	-7.8X
	1.3s	802.10nm		5.7mb	
GUMO	18.81	72	iPd	05 59.08	1.6
PJG	18.81	72	e(P)	05 57.80	0.4
GUA	18.84	72	e(P)	05 56.50	-1.3
	1.2s	500.00nm		5.6mb	
Z	21s	64.34um		4.0MszX	
			eS	09 27.00	
TRT	21.05	221	iPd	06 22.30	0.9
	1.0s	124.70nm		5.2mb	
MNDI	22.37	129	eP	06 38.00	3.1X
KAGJ	23.14	10	eP	06 43.00	1.0
SSE	23.20	348	iP+	06 42.00	-0.6
	1.0s	270.00nm		5.7mb	
Z	20s	37.50um		5.8Msz	
N	22s	5.70um			
			pP	06 55.10	54kmX
			PP	07 16.00	
			S	10 50.00	
			sS	11 14.00	
			SS	11 44.00	
KGM	23.87	256	ePd	06 53.60	4.3X
	1.2s	1353.50nm		6.3mb	
KNA	24.01	175	iPc	06 50.60	0.0
	0.4s	216.00nm		6.0mb	
KUMJ	24.45	9	eP	06 54.70	0.0
KLM	25.22	260	ePd	07 05.50	3.3X
	1.0s	1020.00nm		6.3mb	
PCT	25.34	287	ePc	07 07.40	4.1X
	0.7s	5.10nm		4.2mb X	
IPM	25.54	263	ePd	07 08.90	3.6X
	0.9s	577.20nm		6.1mb	
			e	11 38.00	
SNG	25.63	269	iPc	07 10.00	3.9X
	1.0s	364.00nm		5.9mb	
			eS	11 32.20	
SHNJ	26.05	9	P	07 09.10	-0.6
TKSJ	26.49	14	P	07 14.20	0.3
SHK	26.72	11	iPc	07 16.00	0.1
	1.3s	1307.69nm		6.4mb	
PMG	27.10	130	eP	07 18.00	-1.6
	0.8s	67.16nm		5.3mb	
WKYJ	27.12	17	P	07 19.90	0.2
YONJ	27.51	12	iP+	07 23.60	0.4
KMI	28.13	309	iPc	07 29.44	0.3
			eS	12 12.43	
TSRJ	28.47	16	P	07 31.60	-0.2
RAB	28.49	115	e(P)	07 32.00	-0.2
			iS	12 12.00	
CHG	28.67	294	iPc	07 35.10	1.3
			eS	22 24.00	
CHTO	28.67	294	iPc	07 35.04	1.2

25d 11h

IIDJ		29.01	20	P	07	35.30	-1.4			0.9s	105.00nm		5.6mb	WEL		66.31	142	P	12	23.00	-1.9
WB5		29.07	165	iPc	07	34.60	-2.8X		Z	20s	7.40um		5.5Msz					S	21	06.00	
				i	07	37.90	12kmX		N	20s	4.70um							SS	26	08.00	
				eS	12	17.00			E	20s	4.10um			MNG		66.36	141	P	12	23.50	-1.8
CHJJ		29.89	21	P	07	43.40	-1.1	NWAO		41.94	192	iPc	09 26.88 0.0	MOZ		66.55	145	P	12	26.40	0.1
MTMJ		29.98	18	P	07	43.80	-1.7			1.0s	200.00nm		5.8mb	MAIO		66.58	306	iPc	12	26.40	-0.6
MBL		30.00	192	iPc	07	45.60	0.0		Z	20s	7.10um		5.5Msz					eS	21	12.00	
		0.5s	45.00nm			5.5mb			N	20s	7.30um			PGZ		66.86	141	P	12	27.60	-0.8
MAT		30.07	19	iPc	07	44.30	-1.9		E	20s	3.50um			TEH		73.09	305	eP	13	08.00	1.2
				eS	12	28.00					epPd	09	38.14 40kmX	ANM		73.24	25	iPc	13	09.60	2.7
KAKJ		30.46	22	P	07	47.30	-2.2				esPd	09	46.25	SDN		73.58	35	iPc	13	08.90	-0.1
NIIJ		30.97	20	P	07	51.70	-2.3	STK		42.50	161	iPd	09 31.20 -0.3			0.9s	264.60nm			6.2mb	
OIS		31.46	156	iPc	07	56.60	-1.9			1.0s	50.00nm		5.2mb	HON		73.59	70	P	13	20.00	10.3
				eS	10	52.00			Z	18s	425.00um		7.4MszX		Z	20s	7.98um			6.0Msz	
YAMJ		32.16	20	P	08	04.10	-0.4				iScP	15	10.20	DHR		74.14	295	iP+	13	12.50	-0.3
NANU		32.49	199	eP	08	08.10	0.6				iS	15	44.10	DRV		75.43	174	eP	13	19.00	-0.4
		0.4s	22.00nm			5.4mb		GUN		42.95	302	Pc	09 36.86 1.1	PAF		75.46	214	iPc	13	25.00	5.1
ASPA		32.60	167	iPc	08	06.30	-2.2	RKG		43.09	192	iPd	09 41.30 5.0X					eS	22	56.00	
		0.6s	64.90nm			5.7mb				0.5s	219.00nm		6.1mb					eSS	28	00.00	
	Z	23s	15.80um			5.6MszX		PKI		43.23	302	Pc	09 38.64 0.6					eSSS	31	24.00	
				iS	13	11.00		KKN		43.41	302	Pc	09 39.96 0.6	KER		76.59	303	eP	13	27.00	0.1
				iPcS	14	35.90				1.3s	3323.00nm		6.9mb X	SVW		76.93	29	iPc	13	29.60	1.5
				iScS	18	29.70		DMN		43.50	302	Pc	09 40.86 0.7			0.8s	45.80nm			5.6mb	
BJI		32.91	345	iPc	08	09.82	-1.1			1.1s	2829.00nm		6.9mb X	TTA		76.97	27	iPc	13	29.10	0.8
		1.0s	387.00nm			6.2mb		BRS		43.69	145	iPc	09 40.00 -1.3			0.8s	43.40nm			5.5mb	
	Z	24s	25.40um			5.8MszX						i	09 49.00 30kmX	TAB		77.18	307	iP+	13	30.00	-0.1
	N	19s	13.10um									e(S)	15 17.00	RYD		77.39	293	iP+	13	30.60	-0.8
				epPd	08	21.40	43kmX	CMS		43.69	156	eP	09 40.00 -1.2	BRW		77.95	19	eP	13	35.10	1.7
				esPd	08	27.36						e	11 28.00 622kmX	KDC		78.24	33	iPc	13	36.10	0.8
				iPcP	10	56.00		GKN		44.02	302	Pc	09 44.60 0.4			0.7s	220.90nm			6.3mb	
				eS	13	23.28		ADE		44.57	166	iPc+	09 48.00 -0.3	IMA		78.34	24	iPc	13	36.80	0.9
OFUJ		33.55	22	P	08	16.70	0.2			0.7s	124.66nm		5.8mb	MJMA		78.52	295	iP+	13	37.00	-0.5
WARB		34.28	180	iPc	08	22.80	-0.2	COO		45.72	149	e(P)	09 43.00 -14.6X	KMSA		79.66	289	iP+	13	42.90	-0.9
CTA		34.29	146	iPd	08	22.50	-0.6					e	11 35.00 647kmX	QASM		80.08	295	ePc	13	45.70	-0.3
		1.0s	59.00nm			5.5mb		BWA		47.31	155	iP	10 10.80 0.7	PMR		80.09	29	iPc	13	45.10	-0.1
				iS	13	30.00						eScP	15 31.80			0.8s	313.28nm			6.3mb	
				iScP	14	40.10		HYB		47.47	286	iPc	10 11.80 0.2	AFIF		80.56	293	ePc	13	50.00	1.4
				iScS	18	44.60				1.0s	170.00nm		6.0mb	COL		80.73	26	iPc	13	48.30	-0.3
CTAO		34.29	146	iPc	08	21.45	-1.7					e	10 33.00 87kmX					ePP	16	53.60	
				e	08	31.05						e	12 00.00					eS	23	52.59	
				epPd	08	34.53	50kmX					eS	17 04.00					e	24	52.67	
				esPd	08	38.00		BFD		47.69	163	eP	10 14.00 1.1	FBA		80.73	26	iP	13	48.30	-0.3
				ePP	09	35.19				1.0s	174.00nm		6.0mb			1.0s	102.50nm			5.7mb	
AOMJ		34.43	19	eP	08	25.80	1.7					i	10 29.00 58kmX					ePP	16	52.20	
LZH		34.50	327	iPc	08	24.30	-0.7					e	12 20.00	UQSK		81.15	295	ePc	13	52.30	0.6
		1.5s	508.00nm			6.2mb		CAN		48.33	155	eP	10 17.50 -0.5	KMTA		81.41	287	ePc	13	54.10	0.8
	Z	25s	76.80um			6.3MszX						i	10 31.30 52kmX	TOA		81.49	28	iPc	13	54.00	1.3
	N	18s	24.38um									eScP	15 34.90			1.1s	417.80nm			6.3mb	
	E	18s	37.12um					GBA		48.36	281	Pd	10 19.20 0.8	ABHA		81.51	287	iP+	13	55.70	1.8
				epPd	08	36.05	43kmX			0.9s	204.90nm		6.2mb	OBO		81.68	281	iP+	13	55.86	1.4
				esPd	08	41.85		CNB		48.47	155	iPc	10 19.00 -0.2	MKL		81.85	281	iP+	13	56.69	1.4
				eS	13	49.24						i	10 37.00 72kmX	TDD		82.07	281	iP+	13	58.12	1.6
				sS	14	06.00		PVC		48.77	122	iPd	10 36.00 14.4X	SGH		82.38	280	iP+	13	59.69	1.5
				SS	15	55.00		WMQ		48.89	323	iPc	10 22.31 0.0	DAF		82.46	281	iP+	14	00.19	1.6
MEKA		35.56	192	eP	08	33.00	-0.9					epPd	10 34.06 42kmX	GBR		82.58	280	iP+	14	00.52	1.3
MRRJ		36.34	18	eP	08	40.50	0.2					esPd	10 39.52	OBN		83.18	325	iPc	14	00.00	-1.5
SAP		36.99	18	eP	08	47.00	1.2					eS	17 23.44			1.0s	120.00nm			5.9mb	
				eS	14	30.00						e	18 04.33		Z	26s	23.00um			6.4MszX	
HOOJ		37.04	21	eP	08	48.10	2.0	TOO		48.99	160	iPd	10 23.60 0.6					eS	24	12.00	
SHL		37.10	302	iP	08	47.70	0.5					i	10 36.30 46kmX	DWY		84.39	26	Pc	14	08.80	1.3
				iS	14	28.00		DZM		49.47	128	iPc	10 26.90 -0.2	KVT		84.92	311	iP	14	11.00	0.3
SVO		37.48	117	eP	08	49.00	-1.2	NDI		50.49	300	iPc	10 33.60 -1.1	CRZF		85.52	222	iPc	14	18.00	4.6X
HNR		37.72	117	eP	08	55.00	2.8X			1.0s	320.00nm		6.3mb					ePP	17	40.00	
				eS	14	38.00						eS	17 40.00					eS	24	40.00	
KUSJ		38.17	22	P	08	57.00	1.3	PET		51.66	24	iPc	10 44.00 0.9					eSP	25	40.00	
ASAJ		38.36	19	P	08	58.60	1.3					iS	18 00.00					eSS	30	45.00	
MRWA		38.65	195	iPc	09	00.30	0.5	POO		52.01	287	iPc	10 46.50 0.1	KEV		85.53	340	iP	14	11.80	-1.3
OLP		38.74	154	eP	08	59.00	-1.6	NDF		56.62	118	eP	11 24.00 3.9X			0.8s	73.30nm			5.9mb	
				e	14	55.00		FRU		56.84	316	iPc	11 21.00 -0.4		Z	20s	15.70um			6.4Msz	
FORR		38.96	178	eP	09	01.70	-0.7					iS	19 13.00					e	17	28.00	
COOL		39.30	187	iPd	09	05.10	-0.2	SMY		58.70	32	P	11 40.00 5.9X					e	24	38.00	
BAL		39.81	193	iPc	09	10.30	0.8		Z	20s	7.00um		5.8Msz					LR	58	08.00	
KLB		40.54	191	iPd	09	15.90	0.5	QUE		59.57	300	iPc+	11 40.30 -0.5	HYT		85.75	29	P	14	15.90	1.4
		0.9s	233.00nm			5.9mb				1.4s	2616.28nm		7.2mb X	SIM		85.85	315	iPc	14	14.00	-1.2
RMQ		40.80	149	ePd	09	15.00	-2.7X		Z	20s	167.38um		7.2MszX					eS	24	49.00	
				i	11	18.40						ePP	11 54.30	PUL		85.98	330	eP	14	14.00	-1.4
				e	15	03.00						ePP	13 55.80					eS	24	58.00	
YSS		41.00	17	iPc	09	19.00	0.0					eS	19 49.80	INK		86.03	22	eP	14	16.00	0.4
				eS	15	06.00		TIK		63.28	1	iPc	12 04.00 -0.8			1.1s	208.00nm			6.3mb	
HIA		41.21	353	iPc	09	20.46	-0.4					eS	20 32.00	HRI		86.11	303	iPc	14	19.00	2.2
				epPd	09	32.05	42kmX	ADK		63.38	35	iPc	12 05.90 0.1	SOD		86.16	338	iP	14	15.20	-1.1
				esPd	09	38.51				0.9s	433.90nm		6.6mb	AYN		86.45	299	iP+	14	18.80	0.4
				ePP	10	58.87		THZ		65.48	143	eP	12 18.00 -1.7	AAE		86.46	279	eP	14	21.50	2.4
				eS	15	30.19		LTZ		65.75	145	Pd	12 20.20 -1.1	KAS		86.59	311	iPc	14	19.20	0.2
				esS	15	51.71		KHZ		66.26	144	P	12 22.80 -1.7	JVI		86.61	302	iPc	14	19.40	0.3
				eSS	18	45.53		SNZO		66.29	142	ePc	12 22.89 -1.8	KTK1		87.00	339	eP	14	19.26	-1.1
MUN		41.24	193	iPc	09	22.60	1.4					epPd	12 35.47 43kmX	TVO		87.12	108	iP	14	27.40	5.5X

0.8s 40.00nm 5.7mb
HOL 87.22 299 iP+ 14 22.70 0.6
SUF 87.38 333 iP 14 20.90 -1.3
0.7s 105.00nm 6.2mb
RMN 87.41 300 iPc 14 23.10 0.0
ANTO 87.54 310 iPc 14 22.61 -1.0
epPd 14 34.20 37kmX
ePP 17 47.94
BBTK 87.57 310 eP 14 26.00 2.2
MBC 87.57 13 ePc 14 23.50 0.5
0.9s 259.00nm 6.5mb
CSS 87.85 305 eP 14 25.00 -0.1
MAW 87.93 200 eP 14 25.50 0.8
PMO 87.95 105 iP 14 31.80 6.0X
0.8s 20.00nm 5.4mb
TPT 88.21 105 iP 14 33.20 6.2X
0.8s 30.00nm 5.6mb
VAH 88.24 106 iP 14 33.10 5.9X
0.8s 30.00nm 5.6mb
TRO 88.28 340 eP 14 27.59 1.2
RUV 88.47 105 iP 14 34.30 6.0X
0.8s 30.00nm 5.6mb
NUR 88.60 331 iP 14 27.20 -0.9
1.0s 236.00nm 6.4mb
SBA 88.88 172 iPc 14 30.30 1.2
eS 24 56.80
HRT 89.74 311 eP 14 26.00 -8.0X
NAI 89.84 269 iPc 14 36.00 0.8
1.0s 30.00nm 5.6mb
CFR 89.98 316 eP 14 34.00 -0.9
ISK 90.14 311 eP 14 35.00 -0.8
ITU 90.17 311 iPc 14 36.00 0.1
ELL 90.30 307 eP 14 36.10 -0.7
KHL 90.31 309 eP 14 35.00 -1.8
HLW 90.32 300 eP 14 49.00 12.1X
e 18 14.00
e 18 35.00
CTT 90.59 312 eP 14 36.20 -1.7
LOF 90.65 340 eP 14 36.38 -1.2
DMK 90.95 312 eP 14 38.00 -1.5
BNT 91.13 311 iP 14 39.00 -1.4
EDC 91.18 311 iP 14 40.00 -0.6
BUC 91.58 315 ePc 14 40.50 -1.8
JMB 91.67 313 eP 14 42.00 -0.8
ARG 91.81 307 eP 14 42.70 -0.9
IZM 92.04 309 eP 14 44.00 -0.6
CMP 92.11 316 ePc 14 53.00 8.2X
UPP 92.14 331 iP 14 42.90 -1.6
PVL 92.39 314 iPc 14 43.00 -3.1X
EZN 92.44 311 eP 14 44.00 -2.4
SMG 92.51 308 eP 14 45.80 -0.9
TNR 92.54 317 ePc 14 48.00 1.2
KDZ 92.70 313 eP 14 44.00 -3.6X
KAP 92.70 306 eP 14 46.70 -1.0
RDO 92.73 312 eP 14 46.20 -1.5
DAG 92.73 352 iPd+ 14 45.80 -1.2
1.0s 140.00nm 6.3mb
Z 21s 4.30um 5.9Msz
N 22s 3.85um
E 21s 2.87um
iS 18 33.00
NSS 92.75 337 iPc 14 48.23 0.9
UZH 93.05 320 iPc 14 50.00 1.0
eS 25 50.00
RZN 93.20 313 iPd 14 49.00 -1.1
PGB 93.38 314 eP 14 50.00 -0.8
APE 93.67 308 eP 14 50.80 -1.4
HFS 93.87 332 eP 14 50.70 -1.8
0.9s 139.00nm 6.4mb
Z 21s 11.87um 6.3Msz
LR 53 13.00
MMB 93.94 313 eP 14 52.00 -1.3
NPS 94.01 306 eP 14 53.40 -0.4
RGS 94.03 336 eP 14 51.50 -1.8
VTS 94.06 314 ePg 14 54.00 0.0
KRA 94.11 322 eP 14 52.90 -1.0
0.9s 75.00nm 6.1mb
i 15 09.70 59kmX
i 15 11.70
KKB 94.34 313 eP 14 54.00 -1.1
PLG 94.46 312 eP 14 54.00 -1.7
TIM 94.57 317 iPc 14 58.00 1.9
NB2 94.59 334 P 14 54.10 -1.9
0.9s 42.20nm 5.9mb
PSZ 94.80 320 eP 14 57.60 0.4
VAY 94.85 313 iP 14 55.70 -1.8
0.8s 112.00nm 6.3mb
i 15 06.50 34kmX
ATH 94.85 309 eP 14 56.40 -1.1
NEO 94.89 311 eP 14 56.90 -0.8
VAM 95.10 307 eP 14 58.10 -0.6
BSD 95.25 328 iPd 14 57.80 -1.2
1.0s 73.00nm 6.1mb
JNW 95.32 347 eP 15 00.00 0.9
MOL 95.42 336 eP 14 57.26 -2.4
YKA 95.46 24 eP 14 59.50 -0.4
0.8s 27.60nm 5.8mb
SKO 95.49 314 iP 14 58.50 -1.9
Z 22s 9.52um 6.2Msz
N 22s 6.55um
E 22s 6.53um
i 15 01.00 8kmX
i 18 51.00
i 20 53.00
i 27 47.00
KZN 95.71 312 eP 15 00.20 -1.3
VLI 95.77 308 eP 14 59.40 -2.4
SRO 95.84 320 iP 15 02.50 0.6
e 19 16.10
KSP 96.05 323 iPc 15 02.50 -0.3
1.2s 68.00nm 6.0mb
e 18 45.50
EVR 96.06 311 eP 15 02.10 -1.1
OHR 96.19 313 iP 15 01.20 -2.5
1.0s 88.00nm 6.2mb
ITM 96.43 309 eP 15 03.20 -1.6
ZST 96.48 321 eP 15 03.80 -1.0
e 19 01.40
VKA 96.95 321 iPc 15 07.50 0.6
4.0s 746.00nm 6.6mb X
e 19 00.00
i 19 06.10
BRN 97.23 325 ePc 15 09.00 1.0
KEK 97.33 312 eP 15 07.10 -1.7
PRU 97.40 323 P 15 08.50 -0.4
1.4s 58.00nm 5.9mb
Z 21s 11.40um 6.3Msz
N 22s 5.90um
E 20s 6.70um
PP 19 11.20
SKS 26 00.00
S 26 36.00
PS 28 28.00
SS 33 31.00
GMW 97.58 40 P 15 11.50 1.7
BMW 97.68 41 P 15 11.60 1.3
CLL 97.79 324 eP 15 09.00 -1.6
1.4s 56.00nm 5.9mb
Z 21s 5.50um 6.0Msz
e 15 20.00 35kmX
iPP 19 24.60
LWI 97.90 269 iP+ 15 13.00 0.9
COR 98.29 43 ePc 15 16.74 3.8X
ePP 19 11.78
eHPP 19 12.06
eS 26 39.57
ePS 28 06.22
KHC 98.31 322 P 15 12.60 -0.5
1.2s 24.00nm 5.6mb
Z 22s 1.50um 5.4Msz
N 22s 6.80um
E 22s 4.50um
e 19 12.50
S 26 08.00
KMR 98.38 321 iP+ 15 12.80 -0.6
iPP 19 14.90
LON 98.49 40 P 15 14.30 0.3
VBY 98.61 318 eP 15 16.40 2.0
e 19 16.00
WET 98.73 322 iPc 15 15.00 0.1
Z 19s 7.00um 6.2Msz
MOX 98.86 324 iP+ 15 15.00 -0.5
1.4s 57.00nm 5.9mb
Z 26s 9.10um 6.2MszX
N 28s 3.20um
E 26s 8.60um
eS 26 45.00
PNT 98.86 37 eP 15 16.00 0.5
0.7s 13.00nm 5.6mb
LJU 98.88 319 eP 15 16.50 0.8
CEY 99.07 319 eP 15 16.00 -0.5
BHG 99.29 321 eP 15 17.60 0.1
VOY 99.30 319 eP 15 16.80 -0.9
GRF 99.49 323 ePc 15 18.60 0.2
1.6s 59.00nm 5.9mb
Z 22s 10.00um 6.3Msz
e 15 29.90 36kmX
e 15 53.20
e(PP) 19 23.00
GRFO 99.50 323 ePDIFc15 17.09 -1.3
epP 15 28.51 36kmX
TRI 99.51 319 iPd 15 15.00 -3.5X
iPP 19 22.00
iSP 28 18.00
iSPP 29 20.00
iSS 34 08.00
iSSS 38 32.00
ORI 99.67 313 P 15 21.00 1.6
FVI 99.80 320 P 15 19.90 0.1
e 19 25.00
CSI 99.88 313 P 15 18.10 -2.3
TDS 99.88 313 P 15 20.00 -0.4
MMN 100.06 313 Pdiff 15 23.80 2.7X
BUL 100.14 251 iPdiff15 16.40 -5.7X
CZI 100.18 312 Pdiff 15 20.80 -0.8
WDC 100.20 46 ePdiff15 22.90 1.1
e 15 36.70
ePP 19 20.60
ePKKP 31 38.50
MGR 100.29 313 Pdiff 15 21.00 -1.2
SGO 100.32 314 Pdiff 15 22.00 -0.2
LBFM 100.39 45 Pdiff 15 23.00 0.1
CTI 100.73 320 Pdiff 15 24.50 0.4
OGA 100.79 321 ePdiff15 24.70 0.2
1.1s 24.00nm 5.7mb
NEW 100.80 38 Pdiff 15 24.60 0.3
1.0s 23.13nm 5.7mb
Z 20s 6.00um 6.1Msz
ARV 100.89 317 Pdiff 15 25.50 0.7
SLR 100.89 245 iPdiff15 26.50 1.1
Z 20s 13.83um 6.5Msz
i 19 07.00
WTS 100.95 327 ePdiff15 24.50 -0.2
SDI 100.96 315 Pdiff 15 24.00 -1.2
AZI 101.12 316 Pdiff 15 27.00 1.2
BNS 101.24 326 iPdiff15 26.80 0.7
Z 22s 16.00um 6.5MszX
i 19 33.50
ASS 101.24 317 Pdiff 15 31.00 4.6X
ORV 101.31 47 e(Pdif15 25.40 -1.3
BKS 101.35 49 e(Pdif15 27.20 0.3
e 19 47.20
e 26 25.60
e 27 01.60
e 28 17.60
e 28 50.40
e 29 24.00
e 29 36.00
e 30 24.40
e 33 43.60
e 34 20.40
e 37 54.00
eLQ 43 24.00
eLR 47 52.00
OSS 101.42 321 ePdiff15 28.00 0.7
SFI 101.46 318 Pdiff 15 32.00 4.8X
MNS 101.49 316 Pdiff 15 29.00 1.5
ABH 101.54 325 ePdiff15 29.06 1.5
PGD 101.56 318 Pdiff 15 28.00 0.0
SAX 101.67 322 ePdiff15 28.30 -0.2
DBN 101.77 327 ePdiff15 29.00 0.6
Z 20s 4.70um 6.0Msz
ePP 19 40.00
ePS 28 59.00
eSS 34 08.00
VDL 101.92 321 ePdiff15 30.00 0.4
MHC 101.97 49 ePdiff15 30.00 0.1
ePKKP 31 35.90
ENN 102.03 326 ePdiff15 29.00 -0.6
0.9s 10.00nm 5.4mb
LLS 102.05 322 ePdiff15 31.00 0.9
ARN 102.05 49 Pdiff 15 30.80 0.7
CDF 102.39 323 ePdiff15 31.40 0.0
1.0s 6.00nm 5.2mb
TMA 102.46 321 ePdiff15 32.50 0.6
GDH 102.63 360_ePdiff15 32.00 0.2
i 19 44.00
i 29 05.00
CMB 102.66 48 ePdiff15 33.00 0.1
e 18 40.30
ePP 19 44.90

25d 11h

			ePKKP	31	32.50		
BSF	102.94	323	ePdiff	15	33.50	-0.4	
	1.0s		14.00nm			5.6mb	
MMK	103.05	321	ePdiff	15	35.20	0.6	
DOU	103.10	326	Pdiff	15	34.60	0.2	
	Z 18s		6.20um			6.2Msz	
			S	26	37.00		
SES	103.30	34	ePdiff	15	35.00	-0.4	
DIX	103.38	321	ePdiff	15	37.20	1.1	
FRI	103.54	49	ePdiff	15	37.00	0.3	
			ePKKP	31	31.40		
EMS	103.68	321	ePdiff	15	37.00	-0.4	
BCH	103.90	51	Pdiff	15	40.50	2.0	
LPG	104.06	321	ePdiff	15	39.30	0.1	
	1.2s		17.85nm			5.8mb	
LPL	104.06	321	ePdiff	15	38.30	-0.8	
	1.0s		11.00nm			5.6mb	
BNI	104.31	321	Pdiff	15	44.00	3.9X	
			e	20	00.00		
LRM	104.76	38	ePdiff	15	45.10	2.8X	
LOR	104.95	324	ePdiff	15	44.00	1.2	
	1.2s		20.85nm			5.9mb	
	Z 20s		8.75um			6.3Msz	
TNP	104.96	47	Pdiff	15	43.60	0.3	
	1.0s		5.42nm			5.4mb	
LBF	105.03	323	ePdiff	15	43.70	0.6	
	1.0s		12.00nm			5.8mb	
SSF	105.27	324	ePdiff	15	44.60	0.5	
	1.0s		11.00nm			5.8mb	
FFC	105.30	27	ePdiff	15	44.00	-0.1	
	1.5s		44.00nm			6.2mb	
FFC	105.30	27	ePKP	19	54.00	-4.0X	
	1.3s		53.00nm				
AVF	105.50	323	ePdiff	15	45.50	0.4	
	0.8s		33.60nm			6.4mb	
CLC	105.56	49	ePKP	20	10.00	10.8X	
PAS	105.75	51	ePKP	20	01.00	1.4	
			ePPP	22	54.00		
			eSKS	26	48.00		
			eS	27	36.00		
			ePPS	29	24.00		
			ePKKP	30	20.00		
			eSS	34	24.00		
			eSKKP	34	48.00		
			eSSS	38	02.00		
			eLg	45	15.00		
			eLR	49	32.00		
MWC	105.81	51	ePKP	20	01.00	1.1	
SBB	105.81	51	ePKP	20	01.00	1.2	
GSC	106.35	50	ePKP	20	03.00	2.2	
PLM	107.06	51	ePKP	20	03.00	0.7	
DUG	107.16	44	Pdiff	15	53.50	0.6	
TPC	107.39	50	ePKP	20	04.00	1.3	
BAR	107.46	52	ePKP	20	03.00	0.1	
PV09	110.47	44	e(Pdif	16	09.00	1.1	
WIN	110.98	249	ePdiff	16	12.00	1.6	
	Z 22s		7.78um			6.2Msz	
GOL	112.36	41	PKP	20	20.00	7.7X	
	Z 20s		4.25um			6.0Msz	
GLD	112.43	41	PKP	20	20.00	7.7X	
	Z 20s		5.00um			6.1Msz	
ANMO	114.10	46	PKP	20	20.00	4.3X	
	Z 20s		4.26um			6.0Msz	
ANMO	114.10	46	ePdiff	16	28.36	4.3X	
			eHPP	21	09.14		
			ePP	21	10.96		
ALQ	114.10	46	ePKPc	20	16.00	0.3	
	Z 22s		4.35um			6.0Msz	
MAL	115.77	318	ePKP	20	20.50	2.0	
SCH	116.14	8	ePKP	20	18.00	-0.7	
MEO	119.61	42	iPKPd	20	25.80	-0.1	
SIO	120.50	40	iPKP	20	27.70	0.1	
			e	20	41.90		
TUL	120.72	39	ePKP	20	28.00	0.0	
	1.2s		36.40nm				
	Z 20s		11.80um			6.5Msz	
			e	22	03.70		
			LR	56	00.00		
TIO	120.96	314	iPKP	20	30.00	1.2	
FVM	122.51	34	PKP	20	30.20	-1.1	
OLY	123.64	37	PKP	20	32.00	-1.6	
ELC	123.68	34	PKP	20	32.80	-0.8	
RSNY	124.08	18	PKP	20	33.50	-0.7	
WVLY	124.53	22	PKP	20	34.30	-0.9	
HBVT	124.68	17	PKP	20	34.80	-0.5	
MIM	124.90	13	PKP	20	36.20	0.5	
BNH	124.97	15	PKP	20	35.60	-0.3	
MRX	125.45	59	(PKP)	20	38.00	0.5	
EMM	125.72	12	PKP	20	37.00	-0.3	
RSCP	126.91	33	PKP	20	39.00	-1.0	
TBR	127.24	20	PKP	20	40.20	-0.2	
LVNJ	127.36	20	PKP	20	40.30	-0.3	
III	127.50	59	(PKP)	20	43.00	1.2	
GBTN	127.57	32	PKP	20	40.00	-1.2	
TKL	127.81	31	PKP	20	41.10	-0.6	
PPM	127.90	58	(PKP)	20	44.00	1.1	
NAV	127.94	28	PKP	20	41.20	-0.7	
BLA	128.19	27	PKP	20	41.30	-1.1	
IISM	128.98	57	(PKP)	20	46.00	1.7	
LKO	129.06	289	PKP	20	44.12	-0.5	
KIC	129.21	285	PKP	20	31.20	-13.7X	
TIC	129.40	286	PKP	20	31.10	-14.2X	
LIC	129.52	285	PKP	20	31.60	-13.9X	
	Z 20s		3.00um			6.0Msz	
OXX	130.41	59	(PKP)	20	50.00	2.7X	
ECO	148.59	57	(PKP)	21	19.50	-0.3	
UPA	148.93	57	iPKPc+	21	19.00	-1.3	
	1.0s		80.00nm				
	Z 20s		3.55um			6.2Msz	
LNV	149.62	150	ePKP	21	22.00	1.3	
			i	21	25.00		
LCCH	149.92	149	ePKP	21	21.00	-0.2	
CHCH	150.01	151	ePKP	21	22.80	1.3	
TACH	150.10	150	ePKP	21	23.00	1.4	
SAN	150.40	150	ePKP	21	24.00	2.0	
ROCH	150.61	149	ePKP	21	23.00	0.4	
PEL	150.63	150	ePKP	21	23.00	0.6	
	1.1s		158.23nm				
			i	21	28.50		
PORP	150.79	26	PKP	21	22.00	-0.9	
			i	21	29.00		
MDZ	151.73	152	ePKP	21	31.60	7.5X	
COTA	153.84	72	ePKP	21	29.50	1.3	
VC1	154.09	74	ePKP	21	30.20	1.7	
CAYA	154.25	72	ePKP	21	30.50	1.7	
BMG	155.25	52	ePKP	21	28.00	-1.5	
FUO	155.65	56	ePKP	21	30.50	0.1	
TOV	155.81	42	ePKP	21	32.60	2.4	
BOG	155.83	59	iPKP	21	32.00	1.4	
			ePP	25	36.00		
GUAC	157.09	37	ePKP	21	33.00	1.0	
LLAV	157.14	36	ePKP	21	31.00	-1.0	
CEOS	157.33	41	ePKP	21	32.00	-0.2	
BMA	163.09	211	ePKP	21	39.70	1.7	
CNCB	163.57	122	PKPc	21	41.20	1.9	
LPB	163.61	121	PKPc	21	41.00	1.9	
	1.1s		101.27nm				
	Z 20s		8.16um				
			LR	19	50.00		
ZOBO	163.71	120	iPKPc	21	40.64	1.2	
			eSKP	25	05.63		
VAO	164.09	203	ePKP	21	41.00	2.0	
			e	22	33.00		
CCH	164.77	128	PKP	21	42.50	2.4	
PDCR	165.22	252	ePKP	21	40.20	0.1	
			e	21	50.80		
			e	22	19.40		
PPD	166.19	189	ePKP	21	41.10	0.4	
			e	22	39.50		
SOB1	167.47	265	ePKP	21	41.60	-0.4	
SIV	169.39	137	PKPc	21	44.20	1.1	
BAO	170.92	216	ePKP	21	44.50	0.5	
			e	23	03.50		

S.D. = 1.1 on 344 of 398 obs.

OCT 25, 1990 11h 27m 57.81± 0.85s
36.304 N ± 7.0km 5.874 W ± 6.7km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
mbLg 2.2 (MDD).

CNIL	0.16	295	iP	28	01.00	-0.5	
PLAT	0.20	153	iP	28	01.00	-1.3	
SFS	0.31	301	iP	28	04.00	-0.3	
OJEN	0.34	127	iP	28	06.50	1.6	
EJIF	0.36	66	eP	28	05.00	-0.2	
			eS	28	11.20		
ALJ	0.43	30	iP	28	04.00	-2.6	
GIBL	0.53	353	iP	28	09.50	1.0	
EPRU	0.84	38	eP	28	14.90	0.9	
			eS	28	28.60		
EVAL	1.46	332	eP	28	25.00	0.9	
			eS	28	43.60		
EHOR	1.59	18	eP	28	26.50	0.4	

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

• OCT 25, 1990 13h 39m 23.65± 1.50s
44.227 N ± 6.3km 7.592 E ±15.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.4 (LDG).

SAOF	0.24	186	Pg	39	28.83	0.0	
AUTN	0.26	207	Pg	39	28.81	-0.4	
			Sg	39	34.44		
TOUF	0.33	229	Pg	39	29.35	-1.2	
SBF	0.38	197	Pg	39	31.60	0.1	
			Sg	39	37.60		
AURF	0.39	209	Pg	39	31.49	-0.2	
FRF	0.95	226	Pg	39	42.70	0.9	
			Sg	39	55.60		
LRG	1.18	230	Pg	39	46.40	0.8	
			Sg	40	02.00		
LMR	1.19	222	Pg	39	46.00	0.2	
			Sg	40	02.00		
LPG	1.40	335	Pg	39	49.40	-0.1	

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

? OCT 25, 1990 14h 09m 39.91± 1.13s
39.133 N ± 7.7km 27.570 E ±14.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

IZM	0.77	198	ePg	09	55.00	0.0	
			eSg	10	06.00		
EZN	1.19	306	ePn	10	02.00	0.0	
EDC	1.23	10	iPn	10	03.00	0.2	
BNT	1.25	12	iPn	10	03.00	-0.2	

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

OCT 25, 1990 14h 15m 29.37± 0.80s
28.307 N ± 5.8km 54.198 E ± 3.6km
DEPTH = 45.4 ± 8.6 km
4.7mb (23 obs.) 4.0Msz (1 obs.)
SOUTHERN IRAN (353)

BRF	3.91	236	(P)	16	29.40	0.9	
BBU	3.93	239	iP	16	28.90	0.2	
	0.9s		871.00nm				
DHR	4.13	242	ePc	16	32.50	1.0	
RYD	7.68	244	iP+	17	18.70	-2.8	
TEH	7.78	343	eP	17	22.00	-1.0	
MJMA	8.31	255	iP+	17	26.30	-3.9X	
MAIO	9.14	28	eP	17	41.00	-0.7	
			eS	19	51.00		
QASM	9.75	259	ePd	17	45.70	-4.3X	
AFIF	10.74	250	ePc	18	04.70	1.1	
QUE	11.29	77	eP	18	11.20	0.0	
	0.7s		349.32nm			6.6mb X	
			e(S)	20	10.10		
KMSA	11.85	230	ePd	18	13.70	-4.9X	
KMTA	14.49	228	ePc	18	49.90	-3.8X	
ABHA	14.51	229	eP	18	52.00	-1.9	
MKT	16.77	284	eP	19	22.00	-0.6	
PRNI	16.87	282	eP	19	24.50	0.6	
RMN	17.19	282	eP	19	31.00	3.1X	
NDI	20.23	83	eP	19	59.00	-4.4X	
POO	20.46	114	eP	20	06.50	0.6	
BBTK	21.10	309	iPd	20	14.00	1.6	
ELL	22.10	299	eP	20	23.00	0.6	
KHL	22.85	302	eP	20	30.60	0.9	
GPA	22.99	308	eP	20	32.50	1.5	
HRT	23.66	308	eP	20	37.00	-0.5	
BNT	24.71	306	iP	20	49.00	1.4	
HYB	24.87	111	eP	20	50.00	0.6	
EZN	25.69	304	eP	20	57.50	0.7	
GBA	26.10	119	P	21	03.00	2.2	
GKN	26.81	83	P	21	07.02	-0.4	
	0.7s		23.00nm			4.9mb	
KDZ	26.94	307	eP	21	10.00	1.7	
DMN	27.28	84	P	21	12.08	0.2	
KKN	27.40	84	P	21	12.56	-0.4	
	0.5s		18.00nm			4.9mb	
RZN	27.44	307	eP	21	14.00	0.9	
PKI	27.55	84	P	21	13.80	-0.6	
PVL	27.58	310	eP	21	14.00	-0.1	
GUN	27.91	83	P	21	17.82	0.1	
	0.4s		13.00nm			4.9mb	
VTS	28.80	308	eP	21	27.00	1.6	
			e	34	00.00		

VAY	28.86	305	eP	21 26.30	0.6
SKO	29.86	306	eP	21 32.50	-2.2
OHR	30.09	304	iP	21 36.50	-0.3
	1.1s	65.00nm		5.3mb	
TDS	33.15	300	P	22 04.50	1.0
MGR	33.81	301	P	22 08.50	-0.8
KRA	33.86	319	eP	22 15.20	5.7X
SGO	34.06	301	P	22 12.00	0.6
ZST	34.80	315	eP	22 22.30	4.7X
DUI	34.87	303	P	22 20.00	1.5
SDI	35.35	303	P	22 22.50	0.0
AZI	35.68	303	P	22 25.50	0.3
MNS	36.30	304	P	22 29.00	-1.5
ARV	36.30	306	P	22 28.00	-2.4
ASS	36.42	305	P	22 32.00	0.5
CRE	37.03	306	P	22 37.40	0.7
SFI	37.16	306	P	22 39.00	1.5
PGD	37.24	306	P	22 40.00	1.5
KHC	37.32	315	P	22 38.70	-0.2
	1.0s	7.50nm		4.6mb	
CTI	37.73	310	P	22 42.50	0.0
NUR	37.86	337	iP	22 43.30	0.0
	0.8s	19.10nm		5.1mb	
			i	22 50.00	
SQTA	38.30	311	iPc	22 46.50	-0.8
	0.6s	11.30nm		4.9mb	
CLL	38.40	318	eP	22 48.00	0.1
	0.9s	8.00nm		4.6mb	
			e	22 54.00	
SUF	38.99	340	eP	22 52.60	-0.1
	0.7s	5.00nm		4.4mb	
BOB	39.00	307	P	22 52.00	-1.2
BNI	40.99	307	P	23 09.00	-0.6
LPG	41.00	308	eP	23 09.40	-0.5
	0.8s	14.80nm		4.8mb	
LPL	41.01	308	eP	23 10.50	0.6
	1.0s	14.00nm		4.6mb	
BCAO	41.37	242	iPc	23 12.60	-0.3
	0.4s	8.00nm		4.8mb	
CHG	41.89	93	ePd	23 17.50	0.3
	1.0s	18.75nm		4.8mb	
HFS	41.93	331	eP	23 16.20	-0.7
	0.8s	11.10nm		4.6mb	
Z	21s	0.20um		4.0Msz	
		LR	40	00.00	
LZH	42.35	66	eP	23 21.00	0.1
	2.0s	39.00nm		4.8mb	
Z	30s	0.29um		4.0MszX	
		sP	23	40.00	
SOD	42.49	345	iP	23 21.40	0.0
SMF	43.16	309	eP	23 24.50	-2.7
	0.8s	10.75nm		4.6mb	
SSF	43.44	310	eP	23 23.20	-6.2X
	1.0s	16.00nm		4.7mb	
NB2	43.45	331	P	23 28.30	-1.0
	0.8s	7.10nm		4.5mb	
KEV	44.34	347	iP	23 37.20	0.8
	0.7s	9.30nm		4.7mb	
EKA	48.78	320	P	24 11.00	-0.6
	0.9s	4.20nm		4.5mb	
BJI	51.66	60	eP	24 34.00	0.2
SSE	57.45	70	eP	25 15.00	-1.0
DAG	58.77	345	iPc	25 23.70	-1.0
	0.7s	5.48nm		4.8mb	
LKO	58.98	264	PKP	25 23.16	-3.9X
KIC	59.73	260	P	25 31.10	-1.1
TIC	59.84	261	P	25 32.00	-0.9
YKA	89.07	355	eP	28 21.30	0.6
	0.8s	2.40nm		4.6mb	
WB5	91.02	112	eP	28 30.00	-0.4
ASPA	92.51	115	eP	28 36.70	-0.5
	0.7s	5.30nm		5.1mb	
S.D. = 1.1 on 72 of 82 obs.					

OCT 25, 1990 14h 32m 42.83± 0.73s
38.591 N ± 5.8km 25.541 E ± 8.6km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 4.0 (ATH). MD 3.5 (ISK).

SMG	1.35	130	eP	33 06.70	-0.9
IZM	1.36	98	iPn	33 07.50	-0.4
EZN	1.38	26	iPn	33 09.00	1.0
APE	1.52	180	eP	33 09.30	-0.8
ATH	1.56	247	eP	33 18.10	7.4X
NEO	1.94	292	eP	33 24.90	8.7X
CIN	2.24	115	eP	33 23.00	2.5
EDC	2.51	45	ePn	33 25.00	0.7
BNT	2.55	46	ePn	33 24.50	-0.4
RDO	2.55	360	eP	33 25.40	0.5
MFT	2.57	31	ePn	33 29.00	3.7X
VLI	2.79	229	eP	33 29.10	0.8
KDZ	3.06	358	eP	33 33.00	0.9
KHL	3.14	94	ePn	33 38.00	4.7X
CTT	3.38	40	ePn	33 36.00	-0.8
PVL	4.62	358	eP	33 53.00	-1.3
S.D. = 1.2 on 12 of 16 obs.					

% OCT 25, 1990 15h 15m 01.24± 1.43s
41.341 N ±12.6km 16.041 E ±10.8km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SGO	0.96	216	P	15 19.90	0.4
			eSg	15 33.50	
DUI	1.23	286	P	15 23.00	-1.2
MGR	1.26	197	P	15 24.10	-0.5
			eSg	15 41.70	
SDI	1.71	283	P	15 32.50	1.2
LCI	1.77	124	P	15 32.00	0.0
			eSn	15 56.70	
S.D. = 1.3 on 5 of 5 obs.					

OCT 25, 1990 15h 51m 16.19± 0.67s
43.445 N ± 4.5km 5.438 E ± 5.2km
DEPTH = 8.3 ± 4.2 km
NEAR SOUTH COAST OF FRANCE (379)
MD 2.5 (STR).

GELF	0.06	187	Pg	51 18.12	-0.1
TREF	0.18	348	Pg	51 19.91	-0.3
PUYF	0.21	65	Pg	51 20.22	-0.4
BERF	0.23	126	Pg	51 21.55	0.5
PRAF	0.41	332	Pg	51 24.87	0.4
VILF	0.45	26	Pg	51 25.19	-0.2
TAVF	0.48	69	Pg	51 25.63	-0.3
CALN	1.10	73	Pg	51 37.41	0.3
MVIF	1.32	69	Pn	51 40.92	0.0
			Sg	52 00.45	
TOUF	1.43	66	Pn	51 42.79	0.2
			Sg	52 03.70	
AURF	1.44	71	Pn	51 42.61	0.0
			Sg	52 03.61	
AUTN	1.54	68	Pn	51 44.11	-0.1
			Sg	52 06.54	
SAOF	1.63	70	Pn	51 45.19	0.0
PGF	2.76	108	Pn	52 00.25	-1.4
S.D. = 0.5 on 14 of 14 obs.					

& OCT 25, 1990 16h 31m 54.58s
62.801 N 149.747 W
DEPTH = 77.9km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.18	16	iP	32 06.23	1.7
			eS	32 14.84	
CUT	0.47	212	iP	32 07.97	0.0
			eS	32 17.92	
RND	0.73	33	eP	32 10.38	-0.3
			eS	32 22.63	
MCK	1.00	21	eP	32 13.80	-0.1
GHO	1.10	159	eP	32 14.81	-0.3
			eS	32 31.08	
PWA	1.16	183	eP	32 15.61	-0.1
SKT	1.17	226	iP	32 15.70	-0.2
			eS	32 31.84	
SML	1.20	146	eP	32 16.01	-0.3
PLRM	1.25	166	eP	32 16.70	-0.2
			eS	32 34.30	
SUA	1.42	200	eP	32 19.44	0.1
SCM	1.49	130	eP	32 20.29	0.1
			eS	32 39.86	
KNK	1.52	156	eP	32 20.16	-0.4
			eS	32 41.02	
PMS	1.56	177	eP	32 20.98	-0.1
			eS	32 43.45	
NCG	1.80	220	eP	32 24.32	-0.1
TOA	1.80	111	eP	32 25.12	0.8
NEA	1.81	9	eP	32 24.98	0.6
WRH	1.83	23	iP	32 24.04	-0.6
			eS	32 45.04	
CGLM	1.84	216	eP	32 25.10	0.2
SPU	1.96	215	eP	32 26.09	-0.3
SDG	1.96	96	eP	32 26.14	-0.3
			eS	32 51.84	
BGL	1.98	220	eP	32 27.81	1.0
DDM	2.01	59	eP	32 27.43	0.2
CKL	2.02	218	eP	32 27.10	-0.3
HDA	2.04	37	eP	32 26.57	-0.9
CCB	2.04	24	eP	32 26.71	-0.8
KLU	2.23	124	eP	32 28.67	-1.5
			eS	32 55.86	
FBA	2.28	21	eP	32 30.08	-0.7
GLI	2.30	146	eP	32 29.49	-1.6
VZW	2.31	138	eP	32 29.51	-1.8
SLKM	2.31	186	eP	32 33.20	1.9
VLZ	2.33	135	eP	32 29.65	-1.7
GLM	2.43	24	eP	32 32.12	-0.8
RDT	2.57	211	eP	32 36.21	1.3
KNIM	2.64	158	eP	32 37.48	1.7
34 obs. associated					

OCT 25, 1990 16h 33m 33.45± 0.11s
6.189 S ± 2.6km 154.960 E ± 3.4km
DEPTH = 142.0km (geophysicist)
5.8mb (46 obs.)
SOLOMON ISLANDS (193)
Mo=1.6•10••18 Nm (PPT). Depth from broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=170 Dip=32 Slip=-117
NP2: 21 62 -74
Principal Axes:
T Plg=15 Azm= 99
P 69 324
Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting with a moderate left-lateral strike-slip component. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sta: 6 Focal mech. F
Energy 7.0±2.2•10••11 Nm
MOMENT TENSOR SOLUTION
Dep 143 No. of sta: 15
Moment Tensor; Scale 10••17 Nm
Mrr=-7.03 Mtt=-1.21
Mff= 8.23 Mrt=-3.24
Mrf=-2.25 Mtf= 1.35
Principal axes:

	Vol= 8.90	Plg=10	Azm=101
T			
N	-0.28	21	195
P	-8.62	67	347

Best Double Couple:Mo=8.8•10••17
NP1:Strike=167 Dip=39 Slip=-124
NP2: 28 58 -65
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 18S, 43C
Centroid Location:
Origin Time 16:33:38.6 0.3
Lat 6.41S 0.03 Lon 155.13E 0.02
Dep 152.6 0.7 Half-duration 3.3
Moment Tensor; Scale 10••17 Nm
Mrr=-6.83 0.15 Mtt= 0.51 0.18
Mff= 6.32 0.18 Mrt=-3.82 0.16
Mrf=-1.09 0.16 Mtf=-0.03 0.22
Principal Axes:

	Vol= 6.43	Plg= 6	Azm= 93
T			
N	2.10	22	186
P	-8.53	67	350

Best Double Couple:Mo=7.5•10••17
NP1:Strike=160 Dip=44 Slip=-123
NP2: 23 55 -62

RAB	3.41	305	iP+	34 30.00	3.5X
SVO	5.64	122	iP	34 53.00	-3.2X
HNR	5.90	123	iPc	34 59.00	-0.7
			iS	36 29.00	
PMG	8.37	247	iPc	35 38.00	4.9X
			eS	36 22.00	
MNDI	11.24	270	eP	36 16.50	5.2X
CTA	16.20	211	iPd-	37 18.60	4.2X
	1.0s	576.00nm		5.8mb	
			iS	40 19.00	
CTAO	16.20	211	iPd	37 19.75	5.4X
PVC	17.37	133	iPc	37 29.20	0.4
DZM	19.30	146	iPc	37 48.70	-1.3

25d 16h

iS 41 17.50
ScP 45 30.60
OIS 20.64 225 iPd 38 05.00 1.5
iS 41 50.50
RMQ 21.04 196 iPd 38 08.00 0.5
0.9s 524.00nm 5.9mb
i 38 28.10 96kmX
BRS 21.19 185 iPd 38 10.50 1.5
i 38 23.50 55kmX
i 38 47.00
eS 42 00.00
GUA 21.99 333 eP 38 19.30 2.4
1.3s 1107.69nm 6.1mb
GUMO 22.06 333 iPd 38 18.48 0.9
1.3s 86.46nm 5.0mb
PJG 22.06 333 eP 38 19.70 2.1
QLP 22.71 206 iPd 38 25.40 1.5
e 38 51.00 125kmX
e 39 09.00
WB5 24.20 234 iPd 38 39.70 1.4
eS 42 53.00
COO 24.43 186 iPc 38 40.90 0.5
i 41 02.40
CMS 26.58 198 iPc 39 00.20 0.1
0.9s 172.00nm 5.7mb
i 39 32.00 153kmX
i 40 17.10
ASPA 26.69 227 iPd 39 01.00 -0.3
0.7s 118.30nm 5.6mb
Z 21s 2.80um 4.8Msz
iS 43 26.30
iScS 49 39.00
i 50 47.60
KNA 27.38 248 eP 39 07.20 -0.3
STK 28.45 204 iPc 39 16.80 -0.2
1.3s 71.00nm 5.2mb
ePP 39 53.50
iS 43 53.40
iScP 45 54.50
BWA 28.74 191 eP 39 19.20 -0.5
i 39 55.00 174kmX
CNB 29.44 189 iPd 39 28.00 2.1
e 40 03.00 168kmX
e 41 22.00
i 42 26.80
CAN 29.51 190 eP 39 27.00 0.6
i 40 03.10 175kmX
KUPT 31.27 261 eP 39 35.00 -7.1X
ADE 32.32 205 eP 39 50.70 -0.4
0.7s 212.33nm 6.0mb
TOO 32.41 194 iPc 39 52.70 0.9
0.9s 74.00nm 5.5mb
BFD 32.86 198 eP 39 58.00 2.3
WARB 33.54 230 iPd 40 02.10 0.3
0.4s 68.00nm 5.7mb
FORR 35.17 222 eP 40 15.00 -0.5
WLZ 36.67 152 eP 40 29.00 1.0
MBL 37.11 243 iPd 40 31.70 -0.3
0.3s 78.00nm 5.9mb
TAZ 37.41 152 P 40 36.80 2.5X
CNZ 37.76 153 P 40 38.20 0.9
NGZ 37.76 153 P 40 38.40 1.0
PUZ 38.14 150 P 40 39.80 -0.6
e 41 12.90 151kmX
BKB2 38.28 276 ePc 40 44.00 2.1
NOZ 38.45 150 P 40 43.00 0.0
e 41 17.40 157kmX
THZ 38.86 158 P 40 45.90 -0.5
e 41 19.70 154kmX
KIW 38.87 156 P 40 46.90 0.5
MNG 38.90 155 P 40 45.90 -0.8
0.3s 26.00nm 5.5mb
TCW 38.91 157 P 40 46.90 0.2
MRW 39.09 156 P 40 47.40 -0.8
CAW 39.14 156 P 40 47.90 -0.7
SNZO 39.16 156 ePd 40 48.73 0.0
epPc 41 19.68 139kmX
esPc 41 36.73
WEL 39.16 156 P 40 48.00 -0.8
S 46 33.00
PGZ 39.24 154 P 40 48.90 -0.5
0.3s 109.00nm 6.1mb
WDW 39.24 156 P 40 48.90 -0.6
CCW 39.34 157 P 40 50.90 0.6
MTW 39.36 155 P 40 49.40 -1.1
MOW 39.47 156 P 40 50.80 -0.6
BLW 39.52 156 P 40 50.80 -1.0
LTZ 39.53 160 P 40 51.90 0.0
e 41 25.20 151kmX
KHZ 39.66 158 P 40 51.80 -1.1
e 41 25.40 152kmX
COOL 40.10 228 iPc 40 56.60 -0.2
MEKA 40.19 235 eP 40 58.00 0.5
MQZ 40.48 160 P 40 59.20 -0.4
e 41 31.30 144kmX
KKM 40.54 287 ePd 41 01.50 0.9
0.6s 77.40nm 5.6mb
MMCZ 40.59 165 P 41 01.50 0.8
BAG 40.76 304 eP 41 02.20 -0.2
eS 47 03.00
NANU 41.35 243 eP 41 05.20 -1.8
0.3s 43.00nm 5.6mb
TRT 42.03 265 iPc 41 11.60 -1.1
0.7s 161.40nm 5.8mb
KLB 42.97 229 iPd 41 19.80 -0.4
0.8s 530.00nm 6.3mb
MRWA 43.30 233 iPd 41 22.30 -0.6
BAL 43.33 231 iPd 41 22.90 -0.2
KAGJ 43.71 330 P 41 27.20 1.1
NWAO 44.00 228 ePd 41 29.08 0.6
Z 20s 2.10um 5.0Msz
N 20s 1.00um
E 20s 2.20um
MUN 44.32 230 iPd 41 31.30 0.2
0.9s 419.00nm 6.1mb
KAKJ 44.39 343 P 41 30.40 -1.1
IIDJ 44.44 340 eP 41 29.30 -2.7X
CHJJ 44.61 341 P 41 33.30 0.1
RKG 44.72 227 iPd 41 36.90 2.7X
0.4s 220.00nm 6.2mb
KUMJ 44.84 331 P 41 36.70 1.6
TATO 44.95 315 ePd 41 36.25 0.2
esPc 42 23.76
TSRJ 45.18 338 P 41 37.70 0.0
MAT 45.31 341 eP 41 38.00 -0.8
eS 47 46.00
MTMJ 45.48 341 P 41 39.00 -1.3
NIIJ 45.70 342 P 41 40.80 -1.0
SHNJ 46.01 332 P 41 44.40 0.1
YAMJ 46.27 344 P 41 45.90 -0.4
OFUJ 46.69 346 eP 41 52.00 2.3
SSE 49.16 321 Pd 42 10.00 1.1
1.0s 21.00nm 4.9mb
Z 18s 1.00um 4.9Msz
N 14s 0.80um
sP 42 59.00
sS 49 54.00
KGM 52.20 277 eP 42 33.50 1.3
OPA 53.78 58 P 42 43.00 -0.6
pP 43 22.00 171kmX
IPM 54.90 280 ePd 42 51.50 -0.5
0.9s 254.00nm 6.1mb
e 43 04.10 45kmX
e 44 08.20
SNG 55.82 283 eP 42 57.70 -0.9
0.9s 183.19nm 6.0mb
BJI 58.24 326 eP 43 14.00 -1.1
1.5s 78.00nm 5.4mb
epP 44 06.00 230kmX
eS 50 48.00
KMI 59.54 304 ePd 43 25.99 1.3
1.5s 170.00nm 5.8mb
Z 22s 0.90um 4.9Msz
esPc 44 12.18
iS 51 27.71
esS 52 28.13
sS 52 28.90
CHG 60.52 296 ePd 43 30.50 -0.7
1.1s 37.97nm 5.3mb
eS 51 42.00
CHTO 60.52 296 iPd 43 30.70 -0.5
isPc 44 18.38
SMY 60.91 13 P 43 34.40 1.2
1.0s 466.67nm 6.4mb
DRV 61.26 187 eP 43 35.20 -0.2
ADK 62.72 19 P 43 44.00 -1.3
0.8s 372.41nm 6.4mb
pP 44 26.00 179kmX
HIA 63.18 335 ePd 43 48.56 0.1
esPc 44 35.90
iS 52 09.02
esS 53 12.48
i 53 29.19
LZH 63.72 315 ePd 43 53.22 0.8
1.5s 260.00nm 5.9mb
Z 30s 0.56um 4.6Msz
esPc 44 41.39
PP 46 16.50
eS 52 13.13
eScS 53 30.37
eSS 56 24.19
SHL 68.86 300 iP 44 24.40 -0.8
iS 53 17.00
eS 54 20.00
SDN 71.52 25 iPd 44 41.40 1.0
0.8s 208.00nm 6.0mb
SBA 71.89 177 eP 44 43.20 0.9
eS 54 57.20
GUN 74.67 301 P 44 58.60 -1.3
PKI 74.99 301 P 45 00.04 -1.6
KKN 75.15 301 P 45 00.98 -1.5
0.7s 87.00nm 5.6mb
DMN 75.26 301 P 45 01.92 -1.2
GKN 75.76 301 P 45 04.30 -1.5
ANM 76.47 16 ePd 45 11.30 2.5X
KDC 76.48 26 iPd 45 09.30 0.4
0.9s 249.70nm 6.0mb
SVW 77.26 22 iPd 45 13.30 0.0
1.5s 310.70nm 5.8mb
WMQ 78.22 317 ePd 45 19.73 0.8
esPc 46 10.06
TTA 78.29 21 iPd 45 18.30 -0.6
1.1s 147.20nm 5.6mb
HYB 78.98 289 eP 45 21.70 -1.8
1.0s 50.00nm 5.2mb
e 46 01.00 159kmX
GBA 79.41 285 P 45 25.00 -0.8
PMR 80.07 24 iPd 45 27.00 -1.4
1.0s 477.25nm 6.2mb
IMA 81.06 19 iPd 45 32.70 -1.0
1.2s 126.40nm 5.5mb
TOA 81.53 24 iPd 45 35.90 -0.3
0.9s 301.90nm 6.0mb
NDI 82.28 300 eP 45 40.00 -0.7
COL 82.38 21 ePc 45 39.22 -1.2
FBA 82.38 21 iPd 45 38.60 -1.9
1.0s 321.00nm 6.1mb
POO 83.57 289 iPd 45 48.00 0.5
SPA 83.85 180 iPd 45 47.20 -1.0
1.3s 107.50nm 5.5mb
Z 20s 4.55um 5.8Msz
i 46 24.60 148kmX
SIT 84.34 31 iPd 45 52.00 1.6
HYT 84.68 27 P 45 52.00 -0.3
MAW 85.12 203 iPd 45 54.00 -0.3
PCC 87.93 52 eP 46 08.00 -0.5
BRK 88.09 52 eP 46 09.30 0.1
BKS 88.11 52 eP 46 10.90 1.6
0.8s 100.00nm 5.9mb
GCC 88.16 53 eP 46 09.70 0.1
WDC 88.31 49 eP 46 11.80 1.5
MHC 88.49 52 eP 46 12.50 1.1
PRS 88.55 53 eP 46 11.80 0.3
LLA 88.93 53 eP 46 13.80 0.5
ORV 88.94 50 eP 46 13.00 -0.3
INK 88.98 21 eP 46 11.50 -1.4
PRI 89.08 54 eP 46 16.30 2.1
SYP 89.41 55 eP 46 18.00 2.2
BCH 89.42 55 iP 46 17.80 2.0
ipP 46 58.60 161kmX
CMB 89.57 52 eP 46 16.30 -0.1
RMW 89.95 42 P 46 17.00 -0.9
FRI 89.96 53 eP 46 17.70 -0.4
ISA 90.78 54 eP 46 23.00 1.0
PAS 90.85 56 ePd 46 23.07 0.8
epPc 47 00.65 147kmX
MWC 90.95 56 eP 46 23.00 0.0
SBB 91.20 55 eP 46 23.00 -0.9
QUE 91.36 300 eP 46 23.60 -1.3
eS 56 44.50
KVN 91.48 51 eP 46 25.20 -0.1
epP 47 07.80 169kmX
RVR 91.49 56 eP 46 25.00 -0.2
CLC 91.51 54 eP 46 26.00 0.7
PEC 91.65 56 eP 46 26.00 0.0
epP 47 05.70 156kmX
PNT 91.67 41 ePd 46 25.00 -0.7
0.9s 45.00nm 5.6mb
PLM 91.84 57 eP 46 27.00 -0.1
BAR 91.93 58 eP 46 29.00 1.7
TNP 92.06 52 iP 46 27.60 -0.4

1.0s 66.67nm 5.8mb
ipP 47 08.00 159kmX
e 47 25.00
GSC 92.10 55 eP 46 29.00 0.9
TPC 92.59 56 eP 46 31.00 0.6
NEW 93.19 42 P 46 31.60 -1.2
1.0s 40.00nm 5.6mb
pP 47 11.60 157kmX
MBC 94.94 14 eP 46 39.00 -1.2
1.0s 24.00nm 5.5mb
YKA 95.64 28 eP 46 42.40 -1.3
0.8s 58.20nm 6.0mb
MAIO 98.03 306 eP 46 56.00 0.9
PV09 98.43 52 ePKP 46 58.40 1.2
epP 47 37.20 152kmX
ALO 100.54 56 ePdiff47 07.00 0.2
ANMO 100.54 56 ePdiff47 07.80 1.1
1.0s 6.50nm 5.2mb
e 47 51.00
GOL 101.36 51 Pdiff 47 11.50 1.1
KEV 108.26 343 ePKP 51 45.00 -0.7
DAG 109.38 358 ePKP 51 48.00 0.4
1.3s 17.31nm
SOD 109.72 341 ePKP 51 50.00 1.5
SUF 112.47 337 ePKP 51 51.10 -2.7X
0.6s 7.70nm
NUR 114.29 336 iPKP 51 58.00 0.5
0.7s 21.40nm
BBTK 118.44 312 ePKP 52 06.00 -0.2
e 52 48.00
HFS 118.74 339 ePKP 52 03.40 -2.6X
0.5s 7.60nm
Z 20s 0.35um 5.0Msz
LR 36 52.00
CLE 118.88 46 iPdiff48 31.50 3.7X
PRNI 118.89 301 ePKP 52 08.00 0.8
NB2 118.93 341 PKP 52 04.20 -2.2
0.8s 10.50nm
MBH 119.09 301 ePKP 52 08.00 0.5
SCH 121.11 27 ePKP 52 10.00 -0.7
BUL 121.13 242 iPKPd 52 06.30 -5.6X
JSC 121.19 54 PKP 52 10.00 -1.4
KRI 121.33 246 iPKPd 52 16.00 3.6X
LHS 121.49 53 PKP 52 10.00 -2.0
KRA 122.36 327 ePKP 52 13.70 0.6
KDZ 123.05 316 ePKP 52 12.00 -2.8X
RZN 123.51 317 ePKPc 52 15.00 -0.9
KSP 123.79 330 iPKPc 52 16.50 0.6
e 53 03.70
VTS 124.13 318 ePKP 52 16.00 -1.1
SRO 124.50 326 ePKP 52 17.50 0.1
KKB 124.54 318 ePKPc 52 16.00 -1.7
ZST 124.95 327 ePKP 52 18.50 0.3
CLL 125.09 332 iPKP 52 16.70 -1.7
0.8s 51.00nm
i 52 19.90
VAY 125.12 317 ePKP 52 16.50 -2.3
0.8s 54.00nm
i 52 19.80
PRU 125.20 330 ePKP 52 17.50 -1.2
VKA 125.33 327 ePKPc 52 19.00 0.0
e(pP) 53 06.60
SKO 125.58 318 ePKP 52 16.00 -3.7X
1.0s 150.00nm
i 52 19.60
MOX 126.19 332 ePKP 52 21.50 0.9
KHC 126.23 329 PKP 52 20.00 -0.8
1.0s 21.00nm
e 53 04.50
HOF 126.29 331 ePKP 52 21.60 0.7
BCI 126.30 319 ePKP 52 20.20 -0.8
PHP 126.38 318 ePKP 52 18.30 -2.9X
OHR 126.41 318 iPKP 52 20.00 -1.4
0.8s 102.00nm
WET 126.57 330 iPKPc 52 22.40 1.0
WIT 126.77 337 ePKP 52 25.00 3.4X
LACI 126.88 319 ePKP 52 21.60 -0.6
PTJ 126.92 325 ePKP 52 21.00 -1.3
TIR 126.92 318 ePKP 52 20.00 -2.3
GRF 127.02 331 ePKP 52 22.30 0.1
Z 20s 0.10um 4.5Msz
e(PP) 54 24.00
WTS 127.33 336 ePKP 52 25.00 2.3
1.0s 40.00nm
BHG 127.49 328 ePKP 52 23.50 0.3
1.0s 41.00nm
LJU 127.64 326 e(PKP)52 42.50 19.0X

EKA 127.96 344 PKP 52 25.00 1.2
0.9s 15.70nm
VOY 128.00 326 ePKP 52 23.00 -1.3
FVI 128.26 327 PKP 52 24.50 -0.1
TRI 128.27 326 PKP 52 25.00 0.3
ABH 128.58 334 ePKP 52 26.19 1.0
ENN 128.62 335 ePKP 52 26.00 0.8
1.1s 49.00nm
SOTA 128.68 329 iPKPd 52 23.80 -1.8
0.8s 26.90nm
i 52 25.80
i 52 27.60
MEM 128.70 335 PKP 52 26.20 0.9
OGA 129.00 329 iPKPc 52 27.20 0.8
CTI 129.21 328 PKP 52 26.50 -0.1
SNF 129.49 336 PKP 52 28.30 1.5
OSS 129.58 329 ePKPd 52 27.00 -0.4
SAX 129.60 330 ePKPc 52 28.50 0.9
SLE 129.66 331 ePKPd 52 29.40 2.1
DOU 129.68 336 PKPd 52 29.00 1.8
CDF 129.77 332 ePKP 52 26.90 -0.7
0.8s 12.10nm
ZLA 129.91 331 ePKPd 52 28.70 0.8
LLS 130.03 330 ePKPc 52 28.30 0.0
VDL 130.05 329 ePKPc 52 29.00 0.6
CSI 130.06 318 PKP 52 29.00 0.6
ARV 130.07 324 PKP 52 29.00 0.7
TDS 130.09 318 PKP 52 29.00 0.6
DUI 130.23 321 PKP 52 28.00 -0.7
SGO 130.29 320 PKP 52 29.00 0.3
BSF 130.41 332 ePKP 52 28.30 -0.6
0.9s 36.05nm
SFI 130.44 325 PKP 52 30.00 1.1
CZI 130.45 318 PKP 52 28.20 -0.8
HAU 130.49 333 ePKP 52 28.50 -0.4
0.8s 26.85nm
Z 20s 0.40um 5.1Msz
ASS 130.49 324 PKP 52 29.00 -0.1
PGD 130.54 325 PKP 52 30.20 0.9
CRE 130.56 325 PKP 52 27.50 -1.8
SDI 130.60 322 PKP 52 28.50 -0.9
TMA 130.62 329 ePKPd 52 29.20 -0.2
AZI 130.67 322 PKP 52 30.50 1.1
MNS 130.89 323 PKP 52 30.00 0.1
BDI 131.05 326 PKP 52 27.50 -2.7X
MMK 131.11 330 ePKPd 52 32.30 1.8
BOB 131.22 328 PKP 52 31.00 0.5
DIX 131.37 330 ePKPc 52 30.50 -0.5
EMS 131.61 330 ePKPc 52 33.30 2.0
CNCB 131.79 119 PKP 52 23.00 -9.9X
i 52 34.00
i 52 47.80
LPB 131.80 119 PKP 52 33.00 0.2
ZOBO 131.88 118 PKP 52 23.00 -10.2X
LR 36 04.00
LPL 132.10 330 ePKP 52 31.60 -0.7
0.8s 14.80nm
LPG 132.11 330 ePKP 52 32.40 0.0
0.6s 17.15nm
LOR 132.16 334 ePKP 52 31.90 -0.2
0.8s 17.45nm
Z 20s 0.38um 5.1Msz
LBF 132.32 333 ePKP 52 32.20 -0.3
0.8s 8.05nm
BNI 132.46 330 PKP 52 34.00 1.1
SSF 132.47 334 ePKP 52 32.80 0.1
0.8s 20.15nm
SMF 132.64 333 ePKP 52 32.90 -0.1
1.0s 30.00nm
FLN 132.74 338 ePKP 52 32.80 -0.3
0.8s 18.80nm
Z 20s 0.20um 4.8Msz
LDF 132.74 338 ePKP 52 32.90 -0.2
0.8s 16.10nm
AVF 132.75 334 ePKP 52 32.80 -0.4
0.8s 9.40nm
PGF 132.92 326 ePKP 52 34.40 0.6
0.7s 30.85nm
BGF 133.15 334 ePKP 52 33.30 -0.7
0.8s 22.85nm
GRR 133.19 338 ePKP 52 33.90 -0.1
0.8s 18.80nm
FRF 133.52 328 ePKP 52 34.40 -0.4
0.8s 21.50nm
LPF 133.55 338 ePKP 52 33.90 -0.8
0.8s 40.30nm
TCF 133.64 334 ePKP 52 34.50 -0.5

0.8s 21.50nm
LRG 133.74 328 ePKP 52 34.90 -0.3
0.8s 40.30nm
Z 20s 0.17um 4.8Msz
LMR 133.75 328 ePKP 52 35.80 0.6
1.0s 48.00nm
MFF 134.38 336 ePKP 52 36.20 -0.1
0.8s 18.80nm
BCAO 136.59 270 ePKPc 52 27.80 -13.7X
0.6s 28.00nm
i 52 42.50
i 55 24.80
i 56 01.00
BCAO 136.59 270 iPKPd 52 39.84 -1.7
SIV 138.07 122 PKP 52 34.60 -9.6X
GUD 140.93 335 e(PKP)52 45.00 -3.8X
PPD 141.93 138 ePKP 52 46.00 -5.0X
EPRU 144.42 332 e(PKP)52 55.00 0.2
EVAL 144.59 335 e(PKP)52 54.50 -0.5
EJIF 144.95 332 e(PKP)52 56.00 0.3
JFO 146.97 148 ePKP 53 00.30 0.8
AVE 148.44 331 iPKP 53 06.50 5.0X
i 53 23.00
i 53 45.00
BAO 148.58 134 ePKP 53 01.40 -0.9
e 53 43.00
TIO 150.27 328 iPKP 53 07.70 3.2X
i 53 58.00
PDCR 156.72 143 ePKP 53 13.40 -0.3
e 54 03.20
SOB1 158.01 134 ePKP 53 14.70 -0.7
e 53 48.40
KIC 159.82 272 PKP 53 19.70 2.4X
LIC 160.10 271 PKP 53 18.00 0.4
Z 20s 0.25um
LKO 160.45 281 PKP 53 16.52 -1.5
S.D. = 1.0 on 253 of 284 obs.

% OCT 25, 1990 16h 37m 11.18± 1.21s
44.148 N ± 9.4km 8.192 E ± 9.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.8 (GEN).

FIN 0.06 11 P 37 12.72 -0.8
S 37 14.16
ROB 0.27 303 P 37 16.62 -0.4
S 37 21.23
IMI 0.32 223 P 37 17.64 -0.3
S 37 22.77
PCP 0.47 33 P 37 20.72 0.0
S 37 27.08
STV 0.63 279 P 37 23.59 -0.3
S.D. = 0.4 on 5 of 5 obs.

OCT 25, 1990 16h 54m 43.68± 0.68s
49.430 N ± 6.0km 8.156 E ± 6.4km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.8 (LDG).

TOD 0.46 67 ePn 54 52.98 0.0
ABH 0.60 319 ePn 54 55.74 -0.1
RUP 0.76 291 ePn 54 58.97 0.3
CDF 1.17 210 Pg 55 06.20 0.6
Sg 55 23.20
FEL 1.56 184 ePn 55 11.96 0.4
BSF 1.84 210 Pn 55 15.20 -0.4
Pg 55 19.80
Sg 55 44.80
HAU 1.86 221 Pn 55 15.20 -0.7
Pg 55 19.80
Sg 55 44.50
S.D. = 0.6 on 7 of 7 obs.

OCT 25, 1990 17h 00m 06.87± 1.39s
41.278 N ±10.3km 29.345 E ± 8.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.9 (ISK).

ISK 0.30 225 ePg 00 14.00 0.8
GBZT 0.49 171 ePg 00 16.60 -0.3
iSg 00 23.00
HRT 0.52 152 ePg 00 16.50 -0.9
CTT 0.70 260 iPg 00 20.20 -0.5
eSg 00 29.90

25d 17h

IZI	0.95	174	iPg	00 24.50	-0.4	
			iSg	00 37.00		
GPA	1.23	143	ePn	00 31.00	1.2	
KCT	1.27	216	iPn	00 30.50	0.0	
DMK	1.31	295	ePn	00 31.00	-0.1	
BNT	1.42	230	ePn	00 32.90	0.2	

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

• OCT 25, 1990 17h 29m 17.56± 1.07s
35.846 N ±13.1km 140.002 E ±12.3km
DEPTH = 109.7 ± 9.6 km
4.3mb (3 obs.)
NEAR EAST COAST OF HONSHU, JAPAN (228)

KAKJ	0.38	21	iP+	29 33.80	0.0	
			S	29 42.80		
CHJJ	0.84	284	P	29 36.50	-0.9	
			S	29 47.90		
MAT	1.61	296	iPd	29 45.10	-1.0	
			eS	30 04.00		
NIIJ	1.61	330	iPd	29 45.00	-1.0	
			S	30 05.50		
IIDJ	1.74	259	iPd	29 48.90	1.1	
			S	30 10.00		
MTMJ	1.92	293	P	29 49.70	-0.4	
YAMJ	2.32	1	P	29 55.70	0.5	
TSRJ	3.29	266	P	30 09.80	1.7	
OFUJ	3.49	22	P	30 11.90	1.0	
			eS	30 50.20		
PKI	46.66	276	P	37 43.20	6.0X	
	1.0s		27.00nm		5.0mb	
WB5	55.68	186	eP	38 39.50	-5.0X	
ASPA	59.47	186	eP	39 10.20	-0.9	
	1.4s		3.50nm		4.3mb	
NB2	74.84	337	P	40 47.30	0.0	
	0.9s		1.50nm		3.8mb	

S.D. = 1.1 on 11 of 13 obs.

• OCT 25, 1990 17h 36m 20.29± 0.87s
11.141 S ±10.4km 162.121 E ±11.5km
DEPTH = 33.0km (normal)
4.2mb (2 obs.)
SOLOMON ISLANDS (193)

HNR	2.73	308	iPc	37 03.00	0.2	
			iS	37 35.00		
SVO	3.01	311	iP	37 07.00	0.2	
BKM	8.79	138	iPd	38 27.40	-0.7	
DZM	11.63	160	iP	39 08.10	1.0	
			iS	41 14.90		
CTA	17.67	238	iPd	40 29.30	3.6X	
	1.1s		170.89nm		5.1mb X	
RMO	19.80	218	iP	40 51.40	0.4	
	0.9s		111.00nm		5.2mb X	
COO	21.55	205	eP	41 08.00	-1.0	
			i	41 15.70		
QIS	23.57	244	eP	41 30.80	1.8	
CMS	25.24	214	eP	41 46.00	1.1	
STK	28.02	219	eP	42 10.60	0.1	
	1.4s		10.00nm		4.3mb	
ASPA	29.60	241	eP	42 22.40	-2.5	
	1.3s		4.20nm		4.0mb	
FORR	37.11	233	eP	43 29.80	0.2	
MBL	41.71	251	eP	44 07.00	-0.9	
NANU	45.84	249	eP	44 41.00	-0.3	
AQU	138.64	324	PKP	55 39.60	-5.4X	
			eSg	55 41.90		
SDI	138.81	323	PKP	55 51.00	5.7X	
MNS	139.03	325	PKP	55 45.50	-0.2	
			eSg	55 54.90		
BCAO	143.34	262	ePKPd	55 49.20	-4.9X	
	0.4s		4.00nm			
SOB1	149.46	131	ePKP	56 04.60	0.5	

S.D. = 1.1 on 15 of 19 obs.

OCT 25, 1990 17h 41m 48.74± 0.23s
63.069 N ± 2.5km 151.005 W ± 2.9km
DEPTH = 138.3 ± 2.8 km
4.3mb (16 obs.)
CENTRAL ALASKA (1)
Felt (IV) at Skwentna and (III) at Anchorage. Also felt at Palmer.

HUR	0.63	98	eP	42 10.15	0.4	
			eS	42 25.33		
CUT	0.75	153	iP	42 10.91	0.3	
RND	1.03	70	iP	42 13.65	0.6	
SKT	1.12	193	iP	42 13.84	0.0	
			eS	42 32.18		
MCK	1.15	54	iP	42 14.96	0.9	
			eS	42 32.85		
PWA	1.52	159	iP	42 18.19	0.3	
SUA	1.62	176	eP	42 19.34	0.1	
			eS	42 42.10		
GHO	1.62	142	iP	42 19.44	0.2	
			eS	42 42.07		
PLRM	1.72	149	iP	42 19.98	-0.3	
			eS	42 44.02		
PMR	1.72	149	iPc	42 20.00	-0.2	
NEA	1.74	29	iP	42 20.79	0.3	
			eS	42 43.98		
NCG	1.76	198	iP	42 20.60	-0.2	
			eS	42 44.67		
SML	1.77	134	iP	42 20.88	-0.1	
CGLM	1.83	195	eP	42 21.32	-0.3	
			eS	42 46.19		
CRP	1.89	197	eP	42 22.37	0.0	
WRH	1.91	41	iP	42 23.14	0.6	
BGL	1.93	200	eP	42 22.96	0.2	
PMS	1.95	159	eP	42 22.89	-0.2	
SPU	1.96	195	iP	42 22.80	-0.3	
			eS	42 48.42		
CKL	1.98	199	iP	42 23.42	-0.1	
KNK	2.05	143	iP	42 23.95	-0.2	
			eS	42 51.02		
SCM	2.11	124	eP	42 24.76	-0.3	
			eS	42 51.77		
CCB	2.13	40	iP	42 25.62	0.5	
			eS	42 53.50		
HDA	2.25	52	eP	42 26.98	0.4	
			eS	42 54.38		
TTA	2.29	269	iPd	42 27.10	-0.1	
FBA	2.32	36	iPc	42 28.10	0.6	
NKA	2.34	183	eP	42 30.10	2.4	
DDM	2.42	70	eP	42 29.39	0.5	
			eS	42 59.56		
TOA	2.44	111	iPc	42 29.80	0.7	
GLM	2.50	38	iP	42 30.47	0.6	
SDG	2.57	100	eP	42 31.05	0.4	
RDT	2.59	195	eP	42 30.75	-0.3	
			eS	43 02.48		
SLKM	2.60	171	eP	42 30.67	-0.4	
			eS	43 01.18		
RSO	2.75	198	eP	42 32.80	-0.3	
RED	2.79	198	eP	42 33.41	-0.2	
KLU	2.85	121	eP	42 33.60	-0.8	
GLI	2.87	138	eP	42 33.81	-0.7	
VZW	2.91	132	eP	42 34.23	-0.9	
SVW	2.93	230	iPd	42 35.00	-0.4	
VLZ	2.93	129	eP	42 34.30	-1.0	
NNL	3.04	183	eP	42 37.94	1.2	
SEW	3.07	165	eP	42 36.58	-0.5	
KNIM	3.14	149	eP	42 36.63	-1.5	
			eS	43 13.43		
DOT	3.18	76	eP	42 38.67	0.0	
IMA	3.23	340	iPc	42 39.50	0.2	
BRLK	3.32	179	eP	42 38.19	-2.2	
HIN	3.43	139	eP	42 41.56	-0.4	
HOM	3.44	185	eP	42 42.31	0.4	
MTU	3.48	151	eP	42 41.70	-0.9	
CVA	3.55	133	iP	42 43.32	-0.1	
CNPM	3.56	182	eP	42 43.16	-0.4	
			eS	43 23.86		
OPT	3.59	198	eP	42 44.38	0.4	
PDB	3.63	206	eP	42 44.47	0.0	
TMW	3.64	82	eP	42 44.38	-0.2	
XLV	3.64	186	eP	42 47.08	2.4	
GLB	3.74	113	iP	42 45.78	-0.2	
			eS	43 27.85		
SGAM	3.77	131	eP	42 45.54	-0.8	
AUE	3.89	198	eP	42 50.79	2.8	
RAGM	4.04	129	eP	42 49.50	-0.5	
MCNL	4.22	204	eP	42 52.41	0.1	
FYU	4.29	33	eP	42 53.17	-0.1	
MID	4.29	146	ePd	42 53.90	0.6	
CDD	4.35	198	eP	42 53.44	-0.7	
KAIM	4.46	132	eP	42 54.70	-0.9	
TGL	4.51	117	eP	42 55.64	-0.7	
BALM	4.56	113	eP	42 56.34	-0.7	
WAX	4.68	120	eP	42 57.88	-0.7	
WRG	5.26	121	eP	43 06.69	0.4	
DWY	5.27	74	P	43 06.20	-0.2	
KDC	5.39	189	iPc	43 06.40	-1.6	
ANM	6.53	290	eP	43 24.06	0.5	
HYT	6.75	103	P	43 26.00	-0.7	
INK	8.90	46	P	43 55.00	-0.3	
SIT	9.87	120	iPd	44 07.80	-0.4	
YKA	16.52	76	eP	45 33.40	0.1	
	0.4s		8.20nm		4.4mb	
PNT	21.94	114	eP	46 35.00	3.6X	
	0.7s		8.00nm		4.2mb	
NEW	23.80	113	P	46 51.00	1.5	
	0.8s		7.50nm		4.2mb	
			pP	47 19.00	137km X	
FFC	26.05	86	eP	47 11.00	0.7	
	0.8s		10.00nm		4.5mb	
LBFM	27.69	128	P	47 27.50	1.9	
CMB	31.16	129	P	47 59.00	2.8	
	0.8s		3.33nm		4.1mb	
TNP	32.28	125	P	48 07.00	1.0	
	0.7s		3.15nm		4.2mb	
			pP	48 37.00	139km X	
GOL	35.70	109	P	48 37.00	1.6	
	0.8s		3.13nm		4.1mb	
DAG	37.26	16	iPc	48 47.60	-0.2	
	0.5s		14.79nm		5.0mb	
ANMO	39.26	114	P	49 06.00	0.9	
	0.8s		2.52nm		4.0mb	
ALO	39.27	114	eP	49 06.00	0.8	
	0.8s		3.17nm		4.1mb	
FVM	43.75	96	P	49 41.00	-0.5	
RSNY	45.69	76	P	49 57.00	0.2	
	0.6s		4.03nm		4.3mb	
KEV	47.45	1	eP	50 27.00	16.7X	
TKL	48.68	91	P	50 20.20	-0.1	
BLA	48.93	87	P	50 22.30	0.1	
	0.6s		8.64nm		4.7mb	
SOD	49.84	1	iP	50 28.20	-0.5	
JSC	50.97	90	P	50 37.60	-0.1	
SUF	54.51	2	iP	51 02.40	-1.1	
	0.6s		3.30nm		4.4mb	
SUF	54.51	2	ePc	51 02.90	-0.6	
	0.3s		2.80nm		4.6mb	
			eScS	52 03.50		
NB2	55.48	10	P	51 09.00	-1.6	
	0.8s		2.70nm		4.2mb	
APO	56.18	9	eP	51 13.20	-2.4	
	1.3s		14.20nm		4.8mb	
NUR	56.70	3	eP	51 18.00	-1.2	

S.D. = 0.9 on 95 of 97 obs.

? OCT 25, 1990 17h 47m 33.09± 3.42s
38.769 N ±19.3km 30.229 E ±36.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.1 (ISK).

KHL	0.71	231	iPg	47 47.00	-0.2	
			iSg	47 58.00		
GPA	1.52	2	ePn	48 01.20	0.9	
IZI	1.67	340	iPn	48 00.50	-2.1	
MRT	2.09	348	ePn	48 08.90	0.2	
BBTK	2.24	61	iPc	48 18.00	7.1X	
			iS	48 51.00		
IZM	2.35	262	ePn	48 15.00	2.6X	
BNT	2.39	312	ePn	48 14.00	1.1	

S.D. = 1.8 on 5 of 7 obs.

• OCT 25, 1990 18h 17m 09.06± 0.93s
37.028 N ±10.0km 29.443 E ± 7.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.4 (ISK).

ELL	0.47	127	iPg	17 18.60	0.0	
			eSg	17 26.60		
BCK	1.01	64	iPn	17 28.20	-0.1	
CIN	1.22	298	eP	17 32.00	0.2	
KHL	1.29	3	iPn	17 33.20	0.1	
IZM	2.20	309	ePn	17 46.00	-0.3	
BNT	3.53	341	ePn	18 15.00	10.0X	

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

• OCT 25, 1990 18h 38m 54.94± 1.11s
36.948 N ±12.4km 29.424 E ± 7.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.6 (ISK).

ELL	0.44	117	iPg	39 04.00	0.1	

BCK	1.06	61	iPn	39	14.80	-0.2
CIN	1.25	302	eP	39	18.00	-0.1
KHL	1.37	3	iPn	39	19.70	-0.5
IZM	2.24	311	ePn	39	32.40	-0.3
BNT	3.60	341	ePn	39	53.00	1.1
BBTK	3.90	41	eP	40	16.00	19.7X
S.D. = 0.7 on 6 of 7 obs.						

& OCT 25, 1990 18h 57m 19.36s
60.127 N 150.809 W
DEPTH = 36.6km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NNL	0.26	251	iP	57	27.62	0.7
BRLK	0.37	186	iP	57	27.70	-0.5
			eS	57	34.27	
SLKM	0.48	37	iP	57	29.37	-0.4
HOM	0.63	222	eP	57	30.90	-0.9
CNPM	0.64	200	iP	57	31.15	-0.8
			eS	57	40.29	
NKA	0.65	341	eP	57	33.29	1.2
SEW	0.68	91	iP	57	31.53	-1.0
			eS	57	41.46	
XLV	0.82	215	iP	57	33.41	-1.1
			eS	57	44.00	
RDT	0.91	300	iP	57	35.19	-0.7
RED	1.02	288	eP	57	36.59	-0.9
RSO	1.03	290	eP	57	36.86	-0.8
SPU	1.22	330	iP	57	39.78	-0.5
			eS	57	55.84	
PMS	1.28	28	eP	57	40.88	-0.2
			eS	57	57.18	
OPT	1.31	250	eP	57	40.90	-0.6
CKL	1.31	326	eP	57	41.01	-0.6
			eS	57	58.02	
CGLM	1.32	334	eP	57	41.34	-0.4
SUA	1.34	1	eP	57	41.64	-0.4
BGL	1.38	326	eP	57	42.26	-0.3
NCG	1.44	333	eP	57	43.38	-0.1
			eS	58	02.34	
AUI	1.55	240	eP	57	44.63	-0.3
KNIM	1.55	80	eP	57	43.32	-1.7
MTU	1.59	94	eP	57	46.37	0.8
PLRM	1.68	28	eP	57	45.97	-0.9
KNK	1.73	41	eP	57	46.58	-1.1
PDB	1.74	260	eP	57	46.59	-1.1
			eS	58	08.12	
CDD	1.88	231	eP	57	49.54	-0.2
GHO	1.89	28	eP	57	49.06	-0.9
GLI	1.99	66	eP	57	48.68	-2.5
MCNL	2.02	244	eP	57	50.96	-0.8
SML	2.07	35	eP	57	50.68	-1.8
VZW	2.30	64	eP	57	53.45	-2.2
CUT	2.30	6	eP	57	55.59	-0.1
VLZ	2.43	64	eP	57	55.39	-2.8
KLU	2.76	58	eP	58	00.50	-1.8
34 obs. associated						

% OCT 25, 1990 19h 48m 40.35± 0.65s
16.199 N ± 6.6km 61.406 W ± 5.6km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 1.9 (FDF).

SFG	0.21	75	ePd	48	45.27	0.4
			S	48	49.40	
SEG	0.22	335	iPc	48	45.16	0.0
			S	48	49.10	
DOG	0.26	231	ePd	48	46.12	0.2
PAG	0.31	237	eP	48	46.70	-0.2
			S	48	51.10	
DEG	0.35	71	iPd	48	47.25	-0.4
BBL	0.68	186	eP	48	53.70	-0.1
S.D. = 0.3 on 6 of 6 obs.						

% OCT 25, 1990 20h 28m 10.89± 0.97s
41.895 N ± 9.5km 13.982 E ± 8.2km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SDI	0.23	213	Pc	28	15.60	-0.2
			eSg	28	19.10	
AZI	0.42	283	P	28	19.40	0.0
			eSg	28	26.10	
DUI	0.43	123	P	28	19.70	0.1
			eSg	28	25.50	
AQU	0.63	317	P	28	23.00	-0.6
			eSg	28	33.90	
MNS	1.09	297	P	28	32.00	0.7
S.D. = 0.6 on 5 of 5 obs.						

OCT 25, 1990 21h 10m 25.30± 0.54s
19.064 S ± 8.3km 169.253 E ± 8.0km
DEPTH = 245.1 ± 6.2 km
4.6mb (5 obs.)
VANUATU ISLANDS (186)

PVC	1.59	326	iPc	11	04.50	0.4
			iS	11	33.50	
BKM	1.69	325	iPd	11	04.30	-0.6
			iS	11	32.00	
DZM	3.98	221	iPc	11	29.40	0.1
			iS	12	23.00	
HNR	13.15	315	eP	13	25.00	0.6
RMO	20.28	245	eP	14	43.00	-0.6
MNG	22.14	167	P	15	02.20	0.6
	0.4s		11.00nm			4.7mb
KIW	22.26	169	P	15	03.30	0.5
PGZ	22.31	166	P	15	03.50	0.2
TCW	22.49	170	eP	15	05.30	0.3
CAW	22.53	168	P	15	05.30	-0.1
MRW	22.58	169	P	15	06.00	0.1
MTW	22.66	168	P	15	06.10	-0.6
WDW	22.67	169	eP	15	06.50	-0.2
BLW	22.86	168	eP	15	07.90	-0.7
MOW	22.87	168	P	15	08.20	-0.5
PMG	23.45	291	eP	15	15.50	1.2X
LTZ	23.78	174	P	15	17.50	0.2
BWA	24.02	226	eP	15	18.80	-0.8
CAN	24.15	224	eP	15	21.90	1.1
CMS	24.47	235	ePc	15	24.10	0.4
STK	27.95	237	iPd	15	55.60	0.3
	0.7s		11.00nm			4.6mb
WB5	32.87	263	eP	16	37.10	-1.3
ASPA	33.19	256	iPd	16	40.70	-0.4
	0.3s		217.50nm			6.3mb X
FORR	38.91	244	eP	17	29.00	0.0
	0.4s		9.00nm			4.7mb
WARB	39.83	252	iPc	17	37.30	0.7
	0.4s		9.00nm			4.6mb
MBL	46.31	259	iPd	18	29.00	0.3
	0.3s		10.00nm			4.6mb
S.D. = 0.6 on 25 of 26 obs.						

& OCT 25, 1990 21h 11m 39.30s
38.032 N 119.163 W
DEPTH = 10.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.9 (BRK), 3.3 (PAS).

MNA	0.89	63	ePc	11	55.40	-1.0
CMB	0.96	271	iP	11	56.70	-1.0
FRI	1.13	203	iP	11	59.70	-0.7
KVN	1.32	39	eP	12	02.80	-0.9
TNP	1.54	88	eP	12	05.00	-2.0
ARN	2.00	251	eP	12	13.80	0.3
LLA	2.00	226	iP	12	14.60	1.0
MHC	2.08	251	ePc	12	15.50	0.7
			iS	12	42.20	
PKEM	2.11	201	eP	12	16.50	1.4
SAO	2.21	236	iP	12	17.50	0.9
PRI	2.24	213	iPc	12	18.60	1.5
ORV	2.38	311	iP	12	19.80	0.9
PHAM	2.40	205	eP	12	19.90	0.6
ISA	2.43	167	eP	12	21.90	2.2
BKS	2.43	267	eP	12	20.60	0.9
ZSP	2.45	269	eP	12	21.00	1.1
PRS	2.45	227	iPc	12	20.90	1.0
BRK	2.45	267	e(P)	12	20.20	0.2
GCC	2.46	247	ePd	12	20.20	0.1
PCC	2.61	259	ePc	12	22.60	0.4
BCH	2.94	195	eP	12	26.80	-0.2
MIN	2.99	321	eP	12	32.50	4.8
ABL	3.18	181	eP	12	29.80	-0.7
WDC	3.65	315	e(P)	12	39.20	2.2
24 obs. associated						

% OCT 25, 1990 21h 56m 31.63± 0.77s
40.746 N ± 6.4km 23.185 E ± 6.3km
DEPTH = 10.0km (geophysicist)
GREECE (364)

SOH	0.15	59	iPd	56	34.85	-0.3
			eS	56	36.72	
THE	0.20	236	iPc	56	35.46	-0.6
			eS	56	38.85	
KNT	0.47	333	iPc	56	40.93	-0.2
			eS	56	47.48	
SRS	0.48	40	iPc	56	41.57	0.1
			iS	56	47.36	
GRG	0.63	290	iPd	56	44.10	-0.2
			iS	56	54.21	
VAY	0.74	321	ePn	56	46.70	0.6
LIT	0.83	220	ePd	56	48.40	0.6
S.D. = 0.6 on 7 of 7 obs.						

OCT 25, 1990 22h 11m 18.78± 0.71s
33.981 N ± 5.9km 25.962 E ± 4.3km
DEPTH = 34.2 ± 7.7 km
4.4mb (22 obs.) 3.3Msz (3 obs.)
EASTERN MEDITERRANEAN SEA (371)
MD 4.3 (ATH), 4.2 (HLW).

NPS	1.31	347	ePb	11	42.50	1.5
KAP	1.86	32	ePn	11	50.30	1.5
VAM	2.03	315	ePn	11	53.40	2.1
ARG	2.85	38	ePn	12	04.30	1.4
APE	3.10	354	ePn	12	06.70	0.2
KSL	3.66	53	ePn	12	14.60	0.3
VLI	3.68	319	ePn	12	14.70	0.0
SMG	3.79	11	ePn	12	15.50	-0.7
CIN	4.00	25	eP	12	20.00	0.7
ELL	4.25	48	iPn	12	23.60	0.7
IZM	4.53	13	ePn	12	27.00	0.1
ITM	4.58	315	ePn	12	27.10	-0.4
BCK	5.12	46	iPn	12	35.20	-0.1
KHL	5.20	33	iPn	12	32.80	-3.6X
NEO	5.75	338	ePn	12	44.70	0.6
EZN	5.84	3	iP	12	44.70	-0.6
EVR	5.95	327	ePn	12	48.40	1.4
HLW	6.15	130	ePc	12	50.50	0.8
			eS	13	55.00	
CSS	6.16	79	eP	12	50.00	0.1
			eSn	13	57.80	
KOT	6.42	127	ePn	12	51.00	-2.4
			eSn	13	55.00	
KZN	7.14	333	ePn	13	05.30	1.6
KEK	7.56	321	ePn	13	08.70	-0.7
RZN	7.76	353	eP	13	13.00	0.6
MMB	7.80	348	eP	13	12.00	-0.8
VAY	7.80	341	ePn	13	14.40	1.6
			i	13	31.00	
ZNT	7.81	100	eP	13	09.00	-3.9X
			eS	14	32.00	
BBTK	7.99	41	eP	13	16.00	0.4
KKB	8.19	345	eP	13	17.00	-1.3
OHR	8.21	332	ePn	13	19.00	0.4
DSI	8.29	104	eP	13	16.30	-3.2
BURJ	8.44	99	P	13	17.90	-3.8X
MBH	8.67	117	eP	13	23.50	-1.3
SKO	8.74	337	ePn	13	22.40	-3.4X
N	14s		1.71um			
E	14s		2.27um			
SHWJ	8.84	111	P	13	15.30	-12.1X
VTS	8.86	347	eP	13	37.00	9.3X
LCI	9.00	317	P	13	25.50	-3.9X
HOL	9.06	119	ePd	13	28.00	-2.2
BADA	9.46	123	ePd	13	31.50	-4.2X
ATN	9.47	299	P	13	34.10	-1.7
CZI	9.47	306	P	13	33.60	-2.3
			eS	15	08.00	
MEU	9.51	292	P	13	34.20	-2.4
MMN	9.92	309	P	13	40.20	-1.8
MGR	10.34	309	P	13	44.50	-3.3X
GIB	10.46	296	P	13	51.00	1.4
FAI	10.53	292	P	13	52.00	1.6
DUI	11.89	313	P	14	12.40	3.5X
SDI	12.31	312	P	14	11.00	-3.5X
MNS	13.39	313	P	14	28.50	-0.3
ASS	13.80	315	P	14	44.50	10.3X
ARV	13.90	317	P	14	36.00	0.5
TRI	14.98	325	P	14	50.00	0.5
VOY	15.16	326	e(P)	14	56.30	4.3X
ZST	15.68	338	eP	15	03.60	5.0X
FVI	16.09	325	P	15	08.00	4.1X
CTI	16.26	322	P	15	05.50	-0.7
KRA	16.66	346	eP	15	10.10	-1.1
SOTA	17.29	324	iPc	15	21.80	2.6X
	0.8s		20.80nm			4.3mb
			i	15	32.50	

25d 22h

OSS		17.46	321	ePc	15	24.50	3.1X
VDL		17.69	320	ePd	15	27.50	3.2X
KHC		17.71	332	eP	15	24.00	-0.3
				e	19	03.40	
FUR		17.94	327	eP	15	27.20	0.1
		1.3s		48.00nm		4.5mb	
WET		18.00	331	iPc	15	28.90	1.1
PRU		18.07	336	eP	15	25.00	-3.7X
	N	13s		0.40um			
	E	13s		0.60um			
				e	15	47.50	
LLS		18.19	320	ePc	15	31.60	1.3
SAX		18.25	322	ePc	15	30.70	-0.5
KSP		18.27	340	eP	15	29.00	-2.2
BNI		18.49	312	P	15	32.00	-2.0
LPL		18.69	314	eP	15	38.65	2.1
		0.8s		4.05nm		3.7mb	
EMS		18.87	315	ePd	15	40.40	1.7
SLE		19.02	322	ePc	15	39.00	-1.4
GRF		19.10	330	eP	15	40.80	-0.5
	Z	15s		0.40um			
FEL		19.34	321	P	15	42.28	-1.9
LOMF		19.65	318	P	15	46.47	-1.2
MOX		19.69	332	e(P)	15	52.00	4.1X
CLL		19.72	335	iP	15	47.60	-0.6
		1.3s		17.00nm		4.2mb	
				e	16	03.00	
MOF		19.79	320	P	15	49.11	0.1
BSF		19.96	320	eP	15	49.90	-1.0
		1.0s		12.00nm		4.2mb	
ECH		20.00	321	P	15	49.98	-1.2
WLS		20.02	322	P	15	50.26	-1.2
CDF		20.06	322	P	15	50.77	-1.1
GWF		20.25	323	P	15	52.51	-1.3
HAU		20.30	319	eP	15	56.20	1.8
		0.8s		13.45nm		4.3mb	
	Z	20s		0.03um		2.7Msz	
LOR		21.30	315	eP	16	04.20	-0.4
		1.0s		8.00nm		4.1mb	
	Z	20s		0.17um		3.4Msz	
SSF		21.40	314	eP	16	05.50	-0.1
		1.0s		12.00nm		4.3mb	
BGF		21.56	313	eP	16	09.50	2.3
		0.8s		21.50nm		4.6mb	
RJF		21.87	308	eP	16	10.10	-0.2
		0.8s		13.45nm		4.4mb	
	Z	20s		0.25um		3.6Msz	
MEM		22.11	325	P	16	12.80	0.2
ENN		22.26	325	eP	16	15.00	1.0
		1.0s		22.00nm		4.6mb	
				e	16	28.50	
DOU		22.49	322	P	16	12.80	-3.5X
WTS		22.69	328	eP	16	30.00	11.7X
				e	16	45.00	
NUR		26.55	359	iP	16	53.30	-1.7
				e	16	59.00	
HFS		27.37	347	eP	17	01.40	-1.1
		0.4s		1.10nm		3.9mb	
MAIO		27.44	76	eP	17	05.00	1.4
NB2		28.71	345	P	17	12.20	-2.4
		0.4s		0.80nm		3.8mb	
SUF		28.76	0	eP	17	12.90	-2.1
		0.6s		3.30nm		4.2mb	
BCAO		30.20	195	iPc	17	30.30	1.9
		0.5s		10.00nm		4.9mb	
				i	17	37.50	
SOD		33.43	0	eP	17	55.00	-1.1
KEV		35.83	1	eP	18	21.00	4.4X
LKO		37.81	237	P	18	35.38	1.5
TIC		39.50	234	P	18	52.70	4.7X
KIC		39.52	233	P	18	50.00	1.8
GKN		50.07	80	P	20	13.96	1.3
		1.0s		25.00nm		5.2mb	
DMN		50.61	80	P	20	18.26	1.4
		0.9s		16.00nm		5.0mb	
KKN		50.68	80	P	20	18.32	1.0
		0.7s		14.00nm		5.1mb	
PKI		50.87	80	P	20	19.80	0.9
		0.7s		7.00nm		4.7mb	
GUN		51.12	80	P	20	21.66	0.8
		0.9s		22.00nm		5.1mb	
CHG		65.88	83	eP	22	15.70	12.2X
YKA		78.77	343	eP	23	22.50	3.4X
		0.6s		1.10nm		4.0mb	
FFC		80.98	332	eP	23	33.00	1.9
		0.7s		6.00nm		4.7mb	
	S.D. = 1.4		on	83 of 109 obs.			

? OCT 25, 1990 22h 45m 39.68± 4.76s
41.397 N ±32.6km 29.442 E ±17.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.1 (ISK).

ISK		0.44	221	iPg	45	48.50	-0.1
HRT		0.60	163	ePg	45	51.60	-0.2
				eSg	45	58.60	
CTT		0.80	252	ePg	45	55.30	0.0
IZI		1.06	179	ePg	46	00.00	0.3
	S.D. = 0.4		on	4 of	4 obs.		

OCT 26, 1990 00h 09m 26.17± 0.97s
34.094 N ± 6.6km 25.821 E ± 4.3km
DEPTH = 27.5 ± 7.4 km
4.2mb (10 obs.)
CRETE (370)
MD 4.2 (ATH).

NPS		1.18	352	ePn	09	48.30	1.4
KAP		1.83	37	ePn	09	56.70	0.4
VAM		1.87	315	ePn	09	59.90	3.0X
ARG		2.84	41	ePb	10	15.70	5.1X
APE		2.98	356	ePn	10	14.80	2.1
VLI		3.52	319	ePn	10	21.70	1.3
KSL		3.69	56	ePn	10	21.10	-1.6
ELL		4.26	50	iPn	10	30.00	-1.0
IZM		4.45	15	ePn	10	34.70	1.1
BCK		5.13	48	iPn	10	42.20	-1.0
KHL		5.17	34	ePn	10	43.00	-0.9
EZN		5.74	4	eP	10	50.80	-0.9
CSS		6.26	80	eP	10	57.50	-1.6
				eSn	12	04.70	
HLW		6.31	131	eP	11	00.40	0.6
				eS	12	01.00	
KOT		6.58	127	ePn	10	58.50	-5.0X
KEK		7.40	321	ePn	11	15.40	0.4
VAY		7.66	341	ePn	11	20.00	1.3
ZNT		7.94	101	eP	11	16.00	-6.7X
BBTK		7.98	42	eP	10	28.00	-55.4X
OHR		8.06	332	ePn	11	24.20	-0.1
JVI		8.29	102	eP	11	21.00	-6.5X
				eS	12	48.00	
SKO		8.59	338	ePn	11	23.00	-8.6X
PRNI		8.62	113	eP	11	26.00	-6.2X
				eS	12	56.00	
LCI		8.84	317	P	11	32.30	-2.7X
HOL		9.22	119	eP	11	34.00	-6.3X
ATN		9.31	299	P	11	40.70	-0.9
				eSn	13	19.40	
CZI		9.31	306	P	11	40.60	-1.0
				eSn	13	12.50	
MEU		9.36	292	P	11	41.20	-1.2
				eSn	13	22.20	
TDS		9.41	309	P	11	43.60	0.7
				eSn	13	23.30	
ORI		9.57	311	P	11	44.10	-1.0
BADA		9.62	123	eP	11	40.70	-5.1X
MGR		10.17	309	P	11	52.00	-1.5
GIB		10.31	296	P	11	56.50	1.1
SGO		10.56	311	P	11	56.70	-2.1
SOTA		17.13	324	iPc	13	28.10	2.9X
		0.9s		8.80nm		3.9mb	
				i	13	30.90	
KHC		17.56	333	eP	13	35.00	4.6X
BSF		19.80	320	eP	13	58.20	0.9
		0.8s		8.05nm		4.1mb	
CDF		19.90	322	eP	13	57.80	-0.6
		0.8s		6.70nm		4.0mb	
HAU		20.14	319	eP	14	00.20	-0.6
		0.8s		5.35nm		3.9mb	
MEM		21.95	325	P	14	22.60	3.4X
DOU		22.33	322	P	14	32.60	9.7X
HFS		27.24	347	eP	15	06.90	-2.6X
		0.4s		1.10nm		3.9mb	
NB2		28.57	345	P	15	19.20	-2.4X
		0.5s		0.70nm		3.6mb	
BCAO		30.28	195	iPc	15	36.70	-0.6
		0.6s		4.00nm		4.4mb	
LKO		37.77	237	P	16	41.94	0.1
KIC		39.50	233	P	16	56.40	0.2
GKN		50.17	80	P	18	22.36	0.7
		0.9s		13.00nm		5.0mb	
DMN		50.70	80	P	18	26.72	0.9
		0.8s		9.00nm		4.8mb	

KKN		50.77	80	P	18	28.06	1.7
PKI		50.96	80	P	18	27.70	-0.2
GUN		51.22	80	P	18	31.04	1.2
		0.7s		7.00nm		4.7mb	
	S.D. = 1.2		on	34 of	51 obs.		

OCT 26, 1990 00h 17m 50.58± 0.68
33.979 N ± 4.4km 25.941 E ± 3.5k
DEPTH = 30.9 ± 5.4 km
4.5mb (29 obs.) 3.9Msz (4 obs.
EASTERN MEDITERRANEAN SEA (371
ML 4.3 (ATH). MD 4.2 (HLW).

NPS		1.31	348	ePn	18	14.00	1.1
KAP		1.87	33	ePn	18	22.80	1.8
VAM		2.02	315	ePn	18	25.60	2.4
ARG		2.86	38	ePn	18	36.70	1.6
APE		3.10	354	ePn	18	38.60	0.0
KSL		3.67	53	ePn	18	46.80	0.2
VLI		3.67	319	ePn	18	47.20	0.6
SMG		3.79	11	ePn	18	47.80	-0.4
CIN		4.01	25	eP	18	53.00	1.6
ELL		4.26	48	iPn	18	56.00	0.9
ATH		4.37	336	ePn	19	00.00	3.4
IZM		4.54	13	ePn	18	59.20	0.2
BCK		5.13	46	iPn	19	08.20	0.8
KHL		5.21	33	ePn	19	07.30	-1.3
NEO		5.75	338	ePn	19	16.80	0.8
EZN		5.84	3	ePn	19	16.30	-1.0
EVR		5.95	327	ePn	19	20.70	1.8
HLW		6.16	130	ePd	19	22.00	0.2
				eS	20	23.00	
CSS		6.18	79	eP	19	21.80	-0.4
				eSn	20	29.00	
KOT		6.43	127	ePn	19	23.50	-2.1
				eSn	20	58.50	
BNT		6.56	13	eP	19	26.00	-1.4
KZN		7.14	333	ePn	19	37.40	1.8
HRT		7.45	22	eP	19	39.00	-0.9
LSK		7.49	327	ePn	19	40.00	-0.6
KEK		7.55	321	ePn	19	40.30	-1.0
SRN		7.57	323	ePn	19	40.80	-0.7
KDZ		7.67	357	eP	19	48.00	5.0
RZN		7.76	353	ePd	19	44.00	-0.4
MMB		7.80	348	eP	19	44.00	-0.8
VAY		7.80	341	ePn	19	46.00	1.2
				i	19	53.60	
ZNT		7.82	100	eP	19	41.00	-4.1
				eS	21	01.00	
KKB		8.19	345	eP	19	50.00	-0.3
OHR		8.21	332	iPn	19	50.10	-0.4
BERA		8.23	326	ePn	19	49.50	-1.3
VLO		8.27	323	ePn	20	01.40	10.1
DSI		8.30	104	eP	19	49.00	-2.8
SHMJ		8.31	96	Pc	19	48.70	-3.3
BURJ		8.45	99	Pc	19	50.00	-4.0
PGB		8.67	351	eP	20	07.00	10.1
MBH		8.68	116	eP	19	55.00	-2.0
SKO		8.73	337	ePn	19	55.70	-2.0
	N	14s		2.57um			
	E	14s		3.06um			
TIR		8.79	329	ePn	20	05.00	6.5
PHP		8.84	332	ePn	20	03.40	4.3
VTS		8.86	347	eP	20	04.00	4.3
LCI		8.99	317	P	19	57.40	-3.9
				eSn	21	31.10	
GRI		9.07	305	P	20	00.59	-1.8
HOL		9.07	119	ePc	20	00.00	-2.4
ROI		9.36	309	P	20	06.50	0.1
				eSn	21	42.00	
MSI		9.40	300	P	20	05.40	-1.6
ATN		9.45	299	P	20	06.00	-1.7
CZI		9.46	306	P	20	05.80	-1.9
				eSn	21	37.00	
BADA		9.47	123	ePc	20	03.80	-4.1
PZI		9.49	292	P	20	05.86	-2.4
SDA		9.50	330	ePn	20	06.00	-2.2
MEU		9.50	292	P	20	07.10	-1.3
				eSn	21	48.90	
TDS		9.56	309	P	20	08.20	-0.9
				eSn	21	47.20	
CSI		9.65	310	P	20	14.10	3.6
ORI		9.72	311	P	20	08.70	-2.6
MMN		9.91	309	P	20	13.80	-0.1
MNO		9.93	297	P	20	15.50	1.0
MGR		10.32	310	P	20	16.10	-3.5
GIB		10.45	296	P	20	22.30	0.0

FAI	10.51	292	P	20	24.00	1.8
SGO	10.71	311	P	20	22.40	-2.5
CMP	11.30	357	ePc	20	37.00	4.1X
AMAN	11.73	147	eP	20	39.00	0.2
DUI	11.88	314	P	20	37.60	-3.2X
AKSR	12.02	147	eP	20	43.00	0.3
SDI	12.29	312	P	20	45.70	-0.7
MNS	13.38	313	P	21	00.00	-0.7
ASS	13.79	315	P	21	07.50	1.3
ARV	13.89	317	P	21	07.00	-0.4
VBY	14.13	328	eP	21	12.90	2.4
			eS	23	39.50	
PTJ	14.14	330	eP	21	06.10	-4.7X
CEY	14.68	327	e(P)	21	19.00	1.2
			eS	23	49.50	
LJU	14.87	328	e(P)	21	19.50	-0.7
			e(S)	23	50.50	
SRO	14.96	340	eP	21	31.60	10.2X
TRI	14.97	325	P	21	22.50	1.0
VOY	15.15	326	eP	21	22.30	-1.7
			eS	24	00.50	
ZST	15.67	338	eP	21	37.40	6.8X
VKA	15.99	336	eP	21	37.00	2.3
			e	21	44.00	
			e	21	49.00	
FVI	16.08	325	P	21	36.90	1.0
CTI	16.25	322	P	21	38.70	0.5
KRA	16.66	346	eP	21	41.60	-1.6
			e	21	51.10	
TAB	16.98	70	e(P)	21	52.00	4.5X
SQTA	17.28	324	iPc	21	52.90	1.7
	0.6s		17.70nm		4.4mb	
			i	21	58.90	
			e	24	52.00	
OSS	17.46	321	ePc	21	57.20	3.8X
KHC	17.71	332	P	21	57.50	1.2
			e	25	36.10	
TMA	17.77	318	ePd	22	01.00	3.7X
WET	17.99	331	iPc	22	01.80	2.0
PRU	18.07	336	eP	21	57.50	-3.2X
			e	22	03.50	
SAX	18.24	322	ePd	22	04.00	0.8
MMK	18.25	317	ePd	22	05.80	2.5X
KSP	18.27	340	eP	22	03.00	-0.2
			e	22	05.80	
BNI	18.48	312	P	22	10.00	4.0X
MJMA	18.60	111	eP	22	10.00	2.4X
LPG	18.66	314	eP	22	09.50	1.1
	0.6s		4.95nm		3.9mb	
LPL	18.68	314	eP	22	09.90	1.3
	0.6s		3.60nm		3.7mb	
EMS	18.86	315	ePd	22	10.40	-0.3
ZLA	18.88	321	ePc	22	10.30	-0.6
SLE	19.01	322	ePc	22	10.70	-1.7
GRF	19.10	330	eP	22	13.30	0.0
Z	16s		0.70um			
FEL	19.33	321	P	22	14.84	-1.4
BBS	19.34	320	P	22	17.40	1.1
LOMF	19.64	319	P	22	19.11	-0.6
MOX	19.68	332	e(P)	22	23.00	3.0X
CLL	19.71	335	eP	22	18.00	-2.3
			e	22	32.00	
			e	26	09.00	
MOF	19.78	320	P	22	22.15	1.0
STR	19.91	323	P	22	23.07	0.7
BSF	19.95	320	eP	22	21.90	-1.0
	0.6s		8.10nm		4.2mb	
ECH	19.99	321	P	22	23.98	0.7
WLS	20.01	322	P	22	23.38	-0.1
CDF	20.05	322	P	22	23.45	-0.5
GWF	20.24	323	P	22	25.39	-0.5
HAU	20.29	320	eP	22	25.30	-1.1
	0.6s		9.00nm		4.3mb	
Z	20s		0.55um		3.9Msz	
TNS	20.70	327	eP	22	30.00	-0.6
ABH	20.88	325	eP	22	27.89	-4.6X
LBF	21.08	315	eP	22	33.30	-1.2
	1.0s		10.00nm		4.2mb	
LOR	21.29	315	eP	22	35.80	-0.8
	0.8s		6.70nm		4.1mb	
Z	20s		0.40um		3.8Msz	
CAF	21.36	308	eP	22	37.20	-0.2
	0.9s		14.75nm		4.4mb	
SSF	21.39	314	eP	22	36.50	-1.2
	0.8s		10.75nm		4.3mb	
BGF	21.55	313	eP	22	39.30	0.1
	0.6s		11.70nm		4.5mb	
LPO	21.85	307	eP	22	42.20	0.0
	1.0s		28.00nm		4.6mb	
RJF	21.86	308	eP	22	42.30	-0.1
	0.8s		13.45nm		4.4mb	
MEM	22.10	325	P	22	45.80	1.1
LFF	22.24	307	eP	22	46.40	0.3
	1.0s		20.00nm		4.5mb	
ENN	22.25	325	eP	22	47.50	1.4
	1.0s		32.00nm		4.7mb	
DOU	22.48	322	P	22	49.80	1.4
WTS	22.69	328	eP	22	55.00	4.6X
LDF	24.27	315	eP	23	05.70	-0.2
	0.6s		9.00nm		4.5mb	
FLN	24.56	315	eP	23	08.30	-0.4
	0.6s		18.05nm		4.8mb	
Z	20s		0.45um		4.0Msz	
TOL	24.62	293	eP	23	11.00	1.6
NUR	26.56	359	iP	23	25.60	-1.6
	0.4s		6.30nm		4.6mb	
HFS	27.37	347	eP	23	33.60	-1.1
	0.4s		3.80nm		4.4mb	
MAIO	27.46	76	eP	23	40.00	4.1X
NB2	28.70	345	P	23	44.30	-2.5
	0.5s		1.90nm		4.1mb	
SUF	28.76	0	iP	23	45.20	-2.0
	0.6s		6.60nm		4.5mb	
EKA	29.38	325	P	23	58.00	5.2X
	1.1s		11.30nm		4.5mb	
BCAO	30.19	195	iPc	24	02.60	2.1
	0.5s		7.00nm		4.7mb	
SOD	33.44	0	iP	24	27.20	-1.1
			e	24	39.00	
KEV	35.83	1	eP	24	48.00	-0.8
LKO	37.79	237	P	25	06.94	1.0
	0.4s		3.50nm		4.5mb	
TIC	39.48	233	P	25	22.50	2.4X
KIC	39.51	233	P	25	22.00	1.7
LIC	39.80	233	P	25	24.50	1.8
Z	20s		0.35um		4.2Msz	
DAG	47.36	347	eP	26	23.00	-0.1
	0.7s		3.42nm		4.5mb	
HYB	49.67	96	eP	26	46.50	4.8X
GKN	50.09	80	P	26	46.12	1.1
	0.7s		22.00nm		5.3mb	
DMN	50.62	80	P	26	50.34	1.2
KKN	50.70	80	P	26	50.70	1.0
	0.6s		10.00nm		5.0mb	
PKI	50.89	80	P	26	52.00	0.7
	0.8s		14.00nm		5.0mb	
GUN	51.14	80	P	26	54.12	0.9
	0.8s		27.00nm		5.3mb	
SCH	64.48	320	eP	28	21.00	-5.3X
FFC	80.97	332	eP	30	06.00	2.7X
	0.7s		5.00nm		4.6mb	
BAO	85.84	248	e(P)	30	33.00	4.2X

S.D. = 1.3 on 119 of 155 obs.

? OCT 26, 1990 01h 43m 37.59± 5.95s
43.852 N ±30.7km 13.048 E ±37.8km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ARV	0.36	192	P	43	44.90	-0.1
			eSg	43	52.00	
CRE	0.83	255	P	43	53.00	-0.6
			eSg	44	01.50	
ASS	0.83	200	P	43	54.50	0.8
SFI	0.87	275	P	43	54.70	0.5
PGD	0.96	272	P	43	58.60	2.6X
			eSg	44	09.00	
MNS	1.49	191	P	44	04.00	-0.5

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

? OCT 26, 1990 02h 02m 22.82± 4.30s
9.759 S ±49.8km 124.266 E ± 9.1km
DEPTH = 10.0km (geophysicist)
3.6mb (1 obs.)
TIMOR (289)

KUPT	0.76	239	ePd	02	37.00	-0.6
			eS	02	43.00	
KNA	7.40	144	eP	04	13.40	-0.1
			eS	05	38.00	
MTN	7.40	115	eP	04	14.00	0.5
	0.3s		91.00nm		6.4mb X	
			eS	05	35.00	
WB5	14.01	137	eP	05	42.90	-0.9
NANU	15.24	212	eP	06	00.80	1.1
ASPA	16.61	148	eP	06	19.90	2.4X
	0.6s		3.10nm		3.6mb	
			eS	09	19.10	

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

• OCT 26, 1990 02h 11m 06.01± 1.22s
25.715 N ±17.0km 94.929 E ±10.5km
DEPTH = 75.2 ± 29.3 km
BURMA-INDIA BORDER REGION (294)

SHL	2.75	268	iP	11	51.00	2.1
			iS	12	22.00	
KMI	7.09	93	Pd	12	51.00	1.6
	1.0s		450.00nm		6.1mb X	
CHG	7.81	151	ePn	12	57.50	-1.7
			eSg	15	04.60	
GUN	8.38	287	P	13	07.26	0.0
PKI	8.72	284	P	13	11.14	-0.8
	0.4s		76.00nm		5.8mb X	
KKN	8.87	286	P	13	13.28	-0.6
	0.4s		223.00nm		6.3mb X	
DMN	8.99	284	P	13	15.02	-0.6
	0.2s		98.00nm		6.2mb X	
BDT	9.24	155	eP	13	17.80	-1.0
GKN	9.47	286	P	13	21.04	-1.0
	0.4s		103.00nm		6.1mb X	
NDI	16.03	285	eP	14	47.00	-1.3
HYB	17.31	245	ePc	15	06.00	1.7
			eS	18	05.00	
GBA	20.38	237	P	15	40.00	1.0

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

OCT 26, 1990 03h 22m 47.92± 0.39s
44.340 N ± 4.7km 114.168 W ± 3.9km
DEPTH = 5.0km (geophysicist)
WESTERN IDAHO (33)
ML 3.4 (BUT).

HPI	1.00	129	eP	23	07.30	-0.2
MCMT	1.06	62	iPd	23	08.50	-0.1
LTMT	1.49	82	iPd	23	16.40	0.8
TID	1.53	237	iPc	23	16.10	0.2
CPI	1.61	254	iP	23	16.70	-0.3
BGMT	1.76	59	ePn	23	19.60	0.1
HBMT	1.83	37	ePnd	23	20.20	-0.3
LRM	1.92	39	iPnd	23	21.30	-0.5
PTI	1.97	138	eP	23	22.50	0.1
BUT	2.02	34	ePg	23	27.50	4.3X
			eSn	23	49.30	
			eSg	23	53.30	
WPI	2.14	242	eP	23	24.50	-0.3
SXM	2.77	48	ePn	23	33.70	-0.2
HRY	2.88	34	ePn	23	35.30	-0.2
BW06	3.70	113	eP	23	52.20	5.0X
NEW	4.43	334	e(P)	23	58.00	0.7
DPW	4.51	323	eP	24	01.00	2.5X

S.D. = 0.4 on 13 of 16 obs.

% OCT 26, 1990 03h 24m 59.07± 1.66s
42.326 N ±11.4km 13.482 E ±15.7km
DEPTH = 5.0km (geophysicist)
CENTRAL ITALY (381)

AQU	0.07	295	P	24	59.40	-1.4
			eSg	25	01.50	
AZI	0.34	186	P	25	05.50	-0.4
			eSg	25	12.00	
MNS	0.60	276	P	25	11.90	0.9
			eSg	25	18.70	
SDI	0.67	158	P	25	12.70	0.3
			eSg	25	24.70	
ASS	0.96	321	P	25	18.30	0.5

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

OCT 26, 1990 03h 37m 27.49± 0.77s
33.795 N ± 7.0km 25.921 E ± 4.8km
DEPTH = 41.9 ± 11.5 km
4.2mb (11 obs.) 3.4Msz (1 obs.)
EASTERN MEDITERRANEAN SEA (371)
MD 4.2 (ATH), 4.1 (HLW).

NPS	1.49	350	ePb	37	53.10	1.0
KAP	2.03	30	ePn	38	00.40	0.5
VAM	2.15	319	ePb	38	03.50	2.0
ARG	3.02	36	ePn	38	14.40	0.4
APE	3.28	355	ePn	38	19.70	2.0

26d 03h

KSL	3.80	51	ePn	38	24.60	-0.4
VLI	3.80	321	ePn	38	24.90	-0.2
SMG	3.98	11	ePn	38	30.70	3.2
CIN	4.19	24	eP	38	30.00	-0.5
ELL	4.39	47	iPn	38	33.60	0.0
ITM	4.69	317	ePn	38	37.70	0.0
IZM	4.72	13	ePn	38	38.00	-0.1
BCK	5.27	45	ePn	38	45.20	-0.8
KHL	5.38	32	ePn	38	46.00	-1.5
PPCY	5.42	77	eP	38	49.50	1.5
EZN	6.03	3	eP	38	54.80	-1.7
HLW	6.06	129	eP	39	03.50	6.6X
			eS	50	05.50	
EVR	6.09	328	ePn	39	00.70	3.2X
CSS	6.24	77	eP	39	00.00	0.6
KOT	6.33	126	ePn	39	03.00	2.3
			eSn	40	08.00	
KZN	7.30	334	ePn	39	14.50	0.2
ZNT	7.81	99	eP	39	20.00	-1.4
			eS	40	43.00	
VAY	7.97	341	ePn	39	22.40	-1.2
JVI	8.15	101	eP	39	25.00	-1.1
			eS	40	52.00	
SHMJ	8.31	95	P	39	27.50	-0.9
OHR	8.36	332	ePn	39	27.50	-1.6
PRNI	8.43	112	eP	39	29.00	-1.1
BURJ	8.44	98	Pc	39	29.30	-1.0
SKO	8.90	338	ePn	39	33.00	-3.4X
N	14s		1.20um			
E	14s		1.60um			
HOL	9.00	118	eP	39	38.80	0.9
LCI	9.11	318	P	39	35.50	-3.9X
BADA	9.39	122	eP	39	43.50	0.3
ATN	9.53	300	P	39	44.40	-0.8
			eSn	41	22.90	
MEU	9.55	293	P	39	44.80	-0.8
			eSn	41	25.30	
CZI	9.56	307	P	39	44.50	-1.0
TDS	9.66	310	P	39	46.90	-0.1
			eSn	41	25.80	
CSI	9.76	310	P	39	48.50	0.2
ORI	9.83	312	P	39	48.70	-0.5
MGR	10.43	310	P	39	55.00	-2.5
GIB	10.52	297	P	40	00.00	1.2
SGO	10.82	312	P	40	00.60	-2.2
FVI	16.22	326	P	41	18.00	4.2X
CTI	16.39	323	P	41	20.00	3.9X
SQTA	17.42	325	i(P)	41	29.50	0.5
	0.6s		7.90nm		4.0mb	
			i	41	32.20	
			i	41	38.10	
KHC	17.86	333	eP	41	35.20	0.8
BNI	18.59	313	P	41	48.00	4.5X
GRF	19.25	330	eP	41	52.20	1.1
Z	20s		0.20um			
CLL	19.87	336	eP	42	03.00	5.2X
	1.0s		9.00nm		4.0mb	
			e	42	13.00	
BSF	20.08	320	eP	42	00.60	0.4
	1.6s		37.30nm		4.5mb	
CDF	20.19	322	eP	42	01.60	0.4
	0.8s		5.35nm		3.9mb	
BGF	21.66	313	eP	42	17.80	1.6
	0.8s		12.10nm		4.4mb	
RJF	21.96	309	eP	42	19.80	0.6
	0.8s		8.05nm		4.2mb	
LDF	24.39	315	eP	42	44.10	1.2
	0.6s		5.40nm		4.3mb	
FLN	24.68	315	eP	42	46.10	0.5
	0.6s		10.80nm		4.6mb	
HFS	27.55	347	eP	43	10.50	-1.5
	0.4s		1.30nm		3.9mb	
Z	18s		0.09um		3.4Msz	
			LR	52	54.00	
NB2	28.88	345	P	43	23.30	-0.8
	0.8s		2.10nm		3.9mb	
BCAO	30.01	195	iPc	43	40.10	5.5X
	0.5s		4.00nm		4.4mb	
KIC	39.38	233	P	45	00.00	5.0X
S.D. = 1.3 on 48 of 58 obs.						

% OCT 26, 1990 04h 22m 00.69± 0.58s
0.045 S ± 5.6km 78.406 W ± 5.9km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

OUR	0.18	224	iPd	22	04.80	-0.1
			eS	22	07.30	
YANA	0.18	247	iPd	22	04.80	-0.2
OTO	0.20	219	iPd	22	05.50	0.2
			iS	22	08.00	
GGP	0.23	236	iP+	22	05.80	-0.1
COTA	0.38	10	iPd	22	08.90	0.2
			eS	22	13.70	
CAYA	0.44	74	iP	22	09.60	-0.2
			S	22	15.20	
VC1	0.59	179	iP+	22	12.80	-0.2
			eS	22	22.20	
TUNG	1.36	182	eP	22	26.50	0.4
S.D. = 0.3 on 8 of 8 obs.						

? OCT 26, 1990 05h 09m 35.77± 3.30s
61.701 N ±14.1km 4.439 E ±28.1km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.2 (BER).

SUE	0.66	166	iP	09	49.10	0.1
			iS	09	59.86	
HYA	1.00	122	iP	09	55.60	1.0
			iSg	10	11.36	
ASK	1.28	163	eP	09	59.90	0.5
			eS	10	19.09	
MOL	1.70	58	iP	10	06.15	0.6
			iSg	10	30.37	
BLS2	2.71	152	eP	10	19.44	-0.8
			eS	10	52.74	
NRA0	3.57	103	Pn	10	31.00	-1.3
			Lg	11	31.20	
S.D. = 1.1 on 6 of 6 obs.						

• OCT 26, 1990 05h 25m 11.78± 0.80s
9.922 S ± 9.2km 118.186 E ±12.8km
DEPTH = 33.0km (normal)
4.4mb (1 obs.)
SUMBAWA ISLAND REGION (285)

MKS	4.84	15	iPd	26	25.00	0.7
TRT	5.91	291	ePd	26	38.70	-0.7
			eS	27	41.70	
MBL	11.29	172	eP	27	53.40	-0.5
	0.3s		5.00nm		5.2mb X	
			eS	29	52.00	
NANU	12.82	191	iPd	28	15.30	0.8
	0.3s		5.00nm		5.1mb X	
			eS	30	28.00	
MTN	13.02	104	eP	28	11.00	-6.1X
	0.4s		42.00nm		5.9mb X	
			eS	30	25.00	
MEKA	16.61	179	eP	29	09.40	5.6X
			eS	31	56.00	
WARB	18.05	155	eP	29	23.00	1.2
WB5	18.49	124	eP	29	25.80	-1.5
			eS	32	37.30	
MRWA	19.31	186	eP	29	42.00	4.9X
			eS	33	01.00	
ASPA	20.30	134	eP	29	43.80	-3.9X
	0.4s		7.60nm		4.4mb	
S.D. = 1.4 on 6 of 10 obs.						

• OCT 26, 1990 05h 42m 03.46± 0.87s
33.877 N ± 9.9km 26.115 E ±10.2km
DEPTH = 33.0km (normal)
3.7mb (1 obs.)
EASTERN MEDITERRANEAN SEA (371)
MD 4.0 (ATH).

NPS	1.44	343	ePn	42	25.80	-1.7
KAP	1.88	27	ePn	42	35.50	1.6
VAM	2.20	315	ePn	42	37.30	-1.0
ARG	2.86	35	ePn	42	52.80	5.1X
ELL	4.22	46	ePn	43	08.60	1.4
KOT	6.25	127	ePn	43	35.50	-0.3
JVI	8.00	102	eP	43	59.00	-1.3
PRNI	8.32	113	eP	44	04.00	-0.7
			eS	45	33.00	
MBH	8.51	116	eP	44	07.00	-0.3
SQTA	17.45	324	iPd	46	06.40	0.5
	0.6s		4.20nm		3.7mb	
BCAO	30.13	195	ePc	48	14.50	1.9
	0.6s		5.00nm		4.5mb X	
S.D. = 1.5 on 10 of 11 obs.						

• OCT 26, 1990 05h 49m 37.94± 0.50s
35.143 S ±10.4km 16.426 W ± 8.5km
DEPTH = 10.0km (geophysicist)
5.1mb (11 obs.) 5.6Msz (10 obs.)
SOUTH ATLANTIC RIDGE (410)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 40C
Centroid Location:
Origin Time 05:49:47.8 0.2
Lat 35.22S 0.03 Lon 15.94W 0.03
Dep 15.0 FIX Half-duration 4.8
Moment Tensor; Scale 10**18 Nm
Mrr= 0.08 0.02 Mtt=-0.79 0.03
Mff= 0.71 0.03 Mrt=-0.09 0.03
Mrf=-0.06 0.07 Mtf= 1.23 0.03
Principal Axes:
T Val= 1.41 Plg= 4 Azm=119
N 0.07 85 276
P -1.48 2 29
Best Double Couple:Mo=1.4**18
NP1:Strike=164 Dip=86 Slip= 178
NP2: 254 88 4

VAO	29.19	286	eP	55	43.20	1.4
			e	56	29.30	
PDCR	30.48	312	eP	55	54.20	1.0
			e	56	52.40	
WIN	31.77	76	iPc	56	10.20	5.4X
	1.0s		15.00nm		4.9mb	
PPD	33.13	284	eP	56	16.70	0.3
SOB1	34.15	313	eP	56	24.90	-0.5
			e	56	34.80	
			e	57	41.60	
BAO	34.29	296	eP	56	27.30	0.6
SLR	39.39	89	iPc+	57	06.00	-3.8X
	1.2s		54.69nm		5.1mb	
Z	22s		20.00um		5.9Msz	
			S	03	04.00	
EVA	39.73	90	iPd	57	08.50	-4.1X
	1.5s		69.44nm		5.1mb	
AIA	41.29	208	eP	57	25.50	0.9
BUL	42.25	81	iPc	57	26.80	-6.4X
			i	57	33.90	
LIC	42.52	17	P	57	35.44	0.2
Z	20s		5.00um		5.4Msz	
KIC	42.72	17	P	57	36.48	-0.5
TIC	42.93	17	P	57	37.60	-1.0
FCH	44.11	256	eP	57	49.50	1.0
SIV	44.14	284	Pc	57	49.60	1.1
SAN	44.37	256	eP	57	50.00	-0.3
PEL	44.48	256	iP	57	51.60	0.4
TACH	44.53	256	eP	57	50.00	-1.5
KMI	44.79	78	iPc	58	00.90	7.0X
LNV	44.81	255	eP	57	52.00	-1.7
LKO	45.61	15	P	57	58.22	-2.0
CCH	47.46	279	P	58	16.30	1.0
ANT	47.88	269	e(P)	58	16.00	-2.1
CNCB	49.25	278	P	58	29.00	-0.5
LPB	49.49	278	P	58	30.00	-1.2
Z	20s		14.89um		6.0Msz	
			S	05	40.00	
			LR	20	12.00	
ZOBO	49.65	279	Pc	58	32.00	-0.6
	1.8s		79.97nm		5.4mb	
			LR	12	06.00	
BCAO	51.27	47	iPc	58	42.10	-2.1
	0.8s		8.00nm		4.7mb	
			i	00	17.70	
CRZF	51.42	125	iPc	58	48.00	3.0X
			ePP	00	35.00	
			ePPP	01	40.00	
			eS	06	05.00	
			eSS	09	00.00	
			eS	20	50.00	
ARE	52.29	276	eP	58	52.00	-0.3
MAW	54.01	152	iP	59	03.00	-1.0
TIO	66.28	9	iP	00	39.50	10.9X
SBA	67.25	181	eP	00	35.20	1.1
			e(S)	09	43.20	
AVE	68.60	8	eP	00	48.00	5.0X
MAL	72.37	10	eP	01	16.00	10.2X
			iS	10	32.00	
TOL	75.52	10	e(P)	01	35.00	11.0X
			eS	11	05.00	
			iSS	16	02.00	
			iSSS	19	40.00	
LPG	82.96	16	eP	02	13.80	9.3X

	1.2s	22.30nm		5.2mb		
OHR	83.24	27 eP	02	05.00	-0.7	
SMF	83.43	14 eP	02	09.20	2.7X	
	1.0s	11.00nm		5.0mb		
AVF	83.48	14 eP	02	09.60	2.9X	
	1.0s	14.00nm		5.1mb		
IZM	83.61	33 eP	02	13.00	5.3X	
SSF	83.77	14 eP	02	09.40	1.2	
	1.0s	10.00nm		5.0mb		
LOR	84.03	14 eP	02	08.90	-0.7	
	1.0s	8.00nm		4.9mb		
Z	20s	3.00um		5.7Msz		
VAY	84.10	28 eP	02	12.00	2.1	
SKO	84.22	27 iP	02	12.00	1.4	
		i	02	19.30		
		iS	12	33.00		
		i	13	28.00		
		i	17	30.00		
		i	18	01.00		
EZN	84.38	32 eP	02	12.00	0.6	
SOTA	85.66	18 e(P)	02	20.00	2.2	
	1.6s	56.00nm		5.5mb		
		i	02	27.10		
		i	02	46.20		
		i	02	56.10		
BEO	86.33	25 eP	02	28.50	7.5X	
WET	87.87	19 eP	02	32.00	3.6X	
GRF	87.95	18 eP	02	31.90	3.1X	
Z	21s	1.00um		5.2Msz		
VKA	88.04	21 eP	02	40.00	10.8X	
Z	20s	1.60um		5.4Msz		
		LR	39	50.00		
KHC	88.05	19 eP	02	36.50	7.2X	
Z	18s	0.50um		5.0Msz		
N	20s	1.50um				
E	19s	1.00um				
		e	05	59.00		
		S	13	32.00		
ZST	88.21	22 eP	02	39.30	9.3X	
		e	17	12.60		
		e	17	23.50		
SRO	88.24	23 eP	02	41.60	11.4X	
CMP	88.40	28 ePc	02	50.00	19.0X	
PRU	89.09	19 eP	02	38.00	3.8X	
Z	20s	2.60um		5.7Msz		
N	19s	2.70um				
E	18s	0.90um				
		e	02	44.00		
CLL	89.89	18 ePKP	02	41.00	3.1X	
Z	17s	1.50um		5.5MszX		
		e	03	08.00		
		PKKS	17	22.00		
KSP	90.34	20 eP	02	49.50	9.4X	
KRA	90.73	22 eP	02	42.00	0.2	
		e	02	51.20		
TAB	93.19	45 eP	02	46.00	-7.6X	
ALQ	109.09	300 e(PKP)	08	20.00	10.2X	
Z	22s	2.04um		5.6Msz		
LZH	132.12	71 ePKP	09	10.00	16.2X	
Z	36s	2.33um		5.6MszX		
N	20s	1.41um				
		ePP	11	30.00		
		i	12	07.00		
		i	27	20.00		
		SS	28	57.00		
INK	132.12	333 ePKP	08	48.00	-4.5X	
BJI	142.47	68 ePKP	09	18.50	6.0X	
Z	24s	1.97um		5.8MszX		
		e	31	03.00		
SSE	144.46	84 PKP	09	22.50	6.3X	
Z	20s	0.90um		5.5Msz		
N	18s	1.50um				
		pPKP	09	47.00		
		SS	31	22.00		
		i	36	48.00		

S.D. = 1.2 on 33 of 64 obs.

& OCT 26, 1990 05h 58m 53.52s
64.852 N 150.629 W
DEPTH = 38.8km
3.5mb (1 obs.)
CENTRAL ALASKA (1)
<AGS-P>.

NEA	0.72	112 iP	59	06.76	-0.5	
WRH	1.16	108 eP	59	13.13	-0.3	
FBA	1.21	86 iPc	59	14.30	0.1	
CCB	1.23	98 eP	59	14.30	-0.2	
MCK	1.35	146 eP	59	16.03	-0.1	
GLM	1.39	83 eP	59	16.89	0.1	
HDA	1.65	104 eP	59	19.73	-0.7	
		eS	59	41.36		
RND	1.65	151 eP	59	20.55	0.0	
IMA	1.76	315 iPc	59	23.90	1.6	
HUR	1.93	166 eP	59	25.30	0.7	
		eS	59	47.39		
DDM	2.33	115 eP	59	29.80	-0.6	
CUT	2.46	176 eP	59	32.72	0.6	
FYU	2.82	50 eP	59	36.89	-0.3	
SKT	2.91	188 eP	59	39.15	0.6	
PAX	2.96	127 eP	59	39.21	-0.1	
TTA	3.06	233 eP	59	40.04	-0.7	
DOT	3.11	110 eP	59	40.45	-0.9	
GHO	3.19	165 eP	59	42.00	-0.4	
PWA	3.23	174 eP	59	42.75	-0.2	
SDG	3.25	134 eP	59	43.41	0.1	
PLRM	3.34	168 eP	59	44.46	-0.1	
PMR	3.34	168 iPd	59	44.40	-0.2	
SCM	3.38	152 eP	59	44.66	-0.5	
SUA	3.40	181 eP	59	45.76	0.2	
TOA	3.41	142 iPd	59	46.10	0.5	
NCG	3.53	192 eP	59	47.61	0.2	
KNK	3.59	163 eP	59	48.39	0.2	
CGLM	3.61	191 eP	59	48.17	-0.4	
PMS	3.65	172 eP	59	49.43	0.4	
CRP	3.67	192 eP	59	49.53	0.2	
TMW	3.68	111 eP	59	49.45	0.0	
BGL	3.69	193 eP	59	50.19	0.6	
SPU	3.74	191 eP	59	50.16	-0.2	
CKL	3.75	193 eP	59	50.89	0.4	
KLU	3.99	146 eP	59	54.30	0.4	
VLZ	4.22	150 eP	59	56.68	-0.3	
VZW	4.24	152 eP	59	57.23	-0.1	
GLI	4.30	156 eP	59	58.60	0.4	
SLKM	4.37	177 eP	59	59.23	0.1	
RDT	4.37	192 eP	59	59.64	0.4	
SVW	4.39	213 iPd	59	59.30	-0.2	
GLB	4.61	135 eP	00	02.85	0.2	
KNIM	4.71	162 eP	00	04.21	0.1	
DWY	4.91	94 P	00	06.00	-0.9	
MTU	5.07	163 eP	00	10.08	1.0	
CNPM	5.35	183 eP	00	14.20	1.2	
BALM	5.38	132 eP	00	13.73	0.2	
ANM	6.33	274 ePc	00	27.40	0.7	
HYT	7.23	118 P	00	40.00	0.5	
INK	7.63	55 P	00	44.00	-1.0	
TNP	33.20	127 P	05	31.00	2.4	
	0.6s	0.46nm		3.5mb		

51 obs. associated

---

* OCT 26, 1990 06h 04m 15.73± 0.55s
35.368 S ±14.7km 16.108 W ± 7.2km
DEPTH = 10.0km (geophysicist)
5.1mb (12 obs.) 5.5Msz (3 obs.)
SOUTH ATLANTIC RIDGE (410)

VAO	29.50	286 eP	10	15.60	-6.8X	
PDCR	30.82	312 eP	10	32.50	-1.6	
		e	11	32.70		
WIN	31.58	75 iPc	10	41.60	0.7	
	0.9s	25.21nm		5.1mb		
Z	22s	7.41um		5.3Msz		
PPD	33.43	284 eP	10	56.40	-0.5	
SOB1	34.50	313 eP	11	04.50	-1.6	
		i	11	06.00		
		e	12	22.10		
BAO	34.62	296 eP	11	07.20	-0.1	
BPI	38.75	89 iPc	11	41.00	-1.2	
SLR	39.14	88 iPc	11	43.50	-1.9	
	1.0s	40.00nm		5.0mb		
Z	20s	15.60um		5.8Msz		
		S	17	32.00		
EVA	39.47	90 iPc	11	46.60	-1.6	
	1.1s	63.29nm		5.2mb		
BUL	42.02	81 iPc	12	04.60	-4.6X	
		i	12	12.00		
LIC	42.67	16 P	12	13.44	-0.8	
Z	20s	5.00um		5.4Msz		
KIC	42.86	17 P	12	15.18	-0.7	
	0.8s	24.00nm		5.0mb		
TIC	43.07	16 P	12	16.64	-0.9	
	1.0s	32.00nm		5.0mb		
FCH	44.31	256 eP	12	29.00	1.1	
SIV	44.44	284 iPc	12	30.00	1.2	
SAN	44.57	256 eP	12	32.50	2.9X	
KRI	44.58	78 iPc	12	33.20	3.2X	
PEL	44.68	256 ePd	12	31.50	0.9	
TACH	44.72	256 eP	12	31.00	0.1	
LNV	45.00	255 iPd	12	33.00	-0.1	
LKO	45.76	15 P	12	34.00	-5.2X	
	0.9s	21.00nm		5.1mb		
CCH	47.75	279 P	12	56.00	0.7	
CNCB	49.54	278 P	13	08.00	-1.5	
LPB	49.78	278 P	13	10.00	-1.2	
ZOBO	49.94	278 P	13	11.80	-0.8	
BCAO	51.23	47 iPd	13	21.60	-0.1	
	0.8s	24.00nm		5.2mb		
		i	14	51.40		
ARE	52.57	276 eP	13	32.00	-0.2	
MBH	80.64	43 eP	16	41.00	10.9X	
PRNI	81.14	43 eP	16	37.00	4.2X	
LPG	83.10	16 eP	16	44.80	1.8	
	0.8s	6.70nm		4.9mb		
LPL	83.12	16 eP	16	45.00	2.0	
	0.8s	4.70nm		4.7mb		
OHR	83.32	27 eP	16	48.00	4.1X	
SMF	83.59	14 eP	16	45.90	0.8	
	1.0s	8.00nm		4.9mb		
AVF	83.64	13 eP	16	47.10	1.8	
	1.2s	17.85nm		5.2mb		
IZM	83.66	33 eP	16	59.00	13.3X	
VAY	84.17	28 eP	16	49.40	1.3	
SKO	84.30	27 iP	16	50.00	1.2	
SOTA	85.79	18 i(P)	17	02.20	5.9X	
	1.8s	70.30nm		5.5mb		
		e	17	08.50		
		i	17	13.30		
KHC	88.17	19 eP	17	15.00	7.3X	
		e	20	32.00		
SRO	88.35	22 e(P)	17	15.00	6.5X	
PRU	89.21	19 eP	17	17.50	4.9X	
BRS	116.70	169 iPKPc	22	59.50	-2.6X	
INK	132.44	333 ePKP	23	28.00	-2.9X	
BJI	142.32	68 ePKP	23	51.50	1.4	
	1.3s	10.00nm				

S.D. = 1.2 on 29 of 44 obs.

? OCT 26, 1990 06h 59m 47.63± 3.77s
1.168 S ±18.6km 77.876 W ±33.6km
DEPTH = 33.0km (normal)
ECUADOR (107)

TUNG	0.62	246 P	00	00.20	-0.1	
		S	00	20.80		
VC1	0.74	315 iP+	00	04.00	1.9	
OTO	1.16	326 eP	00	07.20	-0.8	
OUR	1.19	327 iPd	00	07.90	-0.5	
GGP	1.22	324 iP+	00	08.30	-0.7	
CAYA	1.24	355 iP	00	09.20	-0.1	
YANA	1.26	326 Pd	00	08.70	-0.7	
COTA	1.56	343 P	00	14.90	1.0	

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

? OCT 26, 1990 07h 00m 18.03± 6.53s
33.796 S ±21.4km 72.736 W ±49.6km
DEPTH = 20.9 ± 7.9 km
OFF COAST OF CENTRAL CHILE (134)

LCCH	1.02	72 iPc	00	36.90	0.0	
		iS	00	48.50		
LNV	1.11	99 iPc	00	38.50	0.1	
		iS	00	51.20		
IHA	1.20	50 eP	00	39.40	-0.1	
		eS	00	55.70		
TACH	1.51	85 iPc	00	43.10	-0.9	
		iS	01	00.70		
ROCH	1.66	61 ePd	00	46.50	0.1	
		i	01	10.50		
SAN	1.76	79 eP	00	48.00	0.3	
PEL	1.83	70 iPd	00	49.00	0.2	
		iS	01	09.20		
PCH	1.86	85 iPd	00	49.50	0.3	
		i	01	13.00		
FCH	2.09	78 ePc	00	52.90	0.1	

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

? OCT 26, 1990 08h 12m 52.86± 4.62s
36.310 N ±31.7km 141.844 E ±39.7km
DEPTH = 89.1 ± 18.2 km
NEAR EAST COAST OF HONSHU, JAPAN(228)

26d 08h

KAKJ	1.35	266	iPd	13 16.20	-0.9
			S	13 30.10	
CHJJ	2.32	264	iPd	13 30.10	0.2
			S	13 54.60	
YAMJ	2.35	323	P	13 29.20	-1.2
			S	13 54.50	
NIIJ	2.46	293	P	13 32.00	0.2
			S	13 57.80	
OFUJ	2.77	357	P	13 36.70	0.7
			S	14 05.60	
MAT	2.94	276	iPc	13 39.40	1.0
			eS	14 13.00	
MTMJ	3.27	276	P	13 43.30	0.3
			eS	14 19.70	
IIDJ	3.30	257	P	13 46.90	3.5X
			eS	14 24.70	
GUN	47.58	277	P	21 23.60	1.7
PKI	48.10	276	P	21 23.60	-2.3
GKN	48.53	277	P	21 29.20	0.2

S.D. = 1.4 on 10 of 11 obs.

? OCT 26, 1990 10h 47m 35.04± 1.10s
39.113 N ± 8.3km 27.620 E ±13.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZM	0.77	201	ePg	47 50.00	0.0
			eSg	48 02.80	
EZN	1.23	306	ePn	47 58.00	0.1
BNT	1.26	10	ePn	47 58.00	-0.5
KCT	1.27	26	iPn	47 59.00	0.4

S.D. = 0.6 on 4 of 4 obs.

& OCT 26, 1990 11h 02m 15.30s
38.402 N 119.338 W
DEPTH = 5.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.1 (BRK).

CMB	0.90	246	iPc	02 31.80	-1.3
			iS	02 43.80	
KVN	1.17	56	eP	02 36.20	-1.5
FRI	1.44	192	eP	02 41.30	-0.7
			iS	02 59.90	
TNP	1.70	100	eP	02 44.50	-1.5
ARN	2.03	239	eP	02 51.30	0.7
ORV	2.04	305	eP	02 51.00	0.3
MHC	2.11	241	eP	02 52.70	0.9
SAO	2.34	226	eP	02 55.70	0.7
BKS	2.34	258	e(P)	02 51.10	-4.0

9 obs. associated

OCT 26, 1990 11h 08m 49.34± 0.94s
18.772 N ± 8.0km 58.965 W ± 8.6km
DEPTH = 33.0km (normal)
NORTH ATLANTIC OCEAN (402)

DEG	3.16	220	iPc	09 37.80	-0.2
			S	10 08.90	
BPA	3.24	239	ePc	09 39.82	0.7
			S	10 12.70	
SFG	3.29	221	eP	09 39.20	-0.5
SEG	3.38	226	ePc	09 41.55	0.5
			S	10 14.50	
DOG	3.72	223	iPc	09 46.77	0.9
PAG	3.76	224	eP	09 47.30	0.8
			S	10 27.00	
NEV	3.80	245	ePc	09 48.30	1.3
			S	10 28.20	
BBL	4.03	217	ePc	09 49.86	-0.4
			S	10 30.00	
FDF	4.53	208	iPc	09 57.00	-0.5
	0.1s		4.80nm		
			S	10 28.00	
LPR	6.57	267	P	10 25.00	-1.2
SJG	6.85	266	iP	10 30.20	0.0
PORP	7.32	266	P	10 36.20	-0.5
CUM	9.67	212	eP	11 08.00	-1.3
SIV	34.61	184	P	15 37.40	-0.2
			i	15 51.80	
ZOBO	35.97	195	P	15 50.00	0.2
LPB	36.22	195	eP	15 52.00	0.3
CNCB	36.45	195	P	15 54.00	0.1
TUL	36.64	305	eP	16 05.90	11.2X
	1.0s		6.70nm		
SIO	36.98	305	eP	16 08.80	11.2X
INK	67.00	337	eP	19 41.00	0.2

S.D. = 0.7 on 18 of 20 obs.

& OCT 26, 1990 11h 57m 48.90s
38.037 N 119.160 W
DEPTH = 9.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.6 (BRK).

MNA	0.88	63	eP	58 04.80	-1.3
CMB	0.97	270	iPc	58 06.50	-0.9
			iS	58 19.30	
FRI	1.13	203	iPc	58 09.50	-0.7
			iS	58 24.30	
KVN	1.31	39	eP	58 12.30	-1.1
TNP	1.53	88	iPc	58 15.40	-1.3
ARN	2.00	251	eP	58 23.50	0.2
LLA	2.01	226	ePd	58 24.40	1.0
MHC	2.09	251	ePc	58 25.30	0.7
SAO	2.22	236	ePc	58 27.30	0.9
PRI	2.24	213	eP	58 28.30	1.4
ORV	2.38	310	iP	58 29.70	1.1
PHAM	2.41	205	eP	58 29.80	0.6
BKS	2.44	267	eP	58 30.40	0.9
BRK	2.46	267	eP	58 31.30	1.6
BCH	2.94	195	eP	58 37.40	0.6
ABL	3.18	181	eP	58 41.00	0.7

16 obs. associated

? OCT 26, 1990 12h 56m 11.86± 5.40s
21.314 S ±46.3km 68.427 W ±18.4km
DEPTH = 33.0km (normal)
CHILE-BOLIVIA BORDER REGION (124)

CCH	4.47	29	P	57 25.40	6.0X
CNCB	4.50	5	Pc	57 21.00	0.9
LPB	4.77	4	P	57 23.00	-0.6
ZOBO	5.03	3	P	57 27.20	-0.3
	1.0s		22.50nm	4.6mb	
ARE	5.63	328	iPc	57 35.80	0.0
			eS	58 34.00	
SIV	8.75	54	P	58 19.20	0.0

S.D. = 0.8 on 5 of 6 obs.

• OCT 26, 1990 13h 04m 33.72± 0.91s
62.720 N ± 9.7km 149.329 W ±11.1km
DEPTH = 33.0km (normal)
CENTRAL ALASKA (1)

PMR	1.14	175	iPc	04 53.50	0.2
TOA	1.59	111	iPc	04 59.50	-0.5
FBA	2.29	17	iPc	05 11.20	1.2
TTA	3.07	277	iPd	05 21.70	0.6
IMA	3.86	333	eP	05 30.80	-1.4

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

% OCT 26, 1990 13h 19m 08.74± 1.21s
46.430 N ±11.2km 3.471 E ± 7.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.2 (LDG).

SMF	0.33	50	Pg	19 16.00	0.3
			Sg	19 20.80	
AVF	0.37	347	Pg	19 16.40	0.1
			Sg	19 21.50	
BGF	0.45	287	Pg	19 18.00	0.1
			Sg	19 24.00	
LBF	0.65	32	Pg	19 21.40	-0.4
			Sg	19 30.10	
MAF	0.66	252	Pg	19 21.80	-0.1
			Sg	19 30.40	
TCF	0.88	261	Pg	19 25.80	0.1
			Sg	19 37.20	

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

? OCT 26, 1990 13h 22m 54.04± 4.23s
42.684 N ±36.7km 24.089 E ±10.0km
DEPTH = 10.0km (geophysicist)
BULGARIA (359)

SRS	1.61	193	ePd	23 22.74	0.2
			eS	23 44.98	
KNT	1.76	211	ePc	23 25.42	0.6
			iS	23 48.58	
VAY	1.77	220	ePn	23 22.20	-2.7X
			i	23 26.40	
SOH	1.94	197	ePc	23 27.26	-0.2
			eS	23 53.98	
SKO	2.09	251	ePn	23 34.00	4.5X
GRG	2.14	217	ePd	23 30.86	0.6
			eS	23 58.58	
THE	2.22	203	ePd	23 30.62	-0.7
			eS	24 00.62	
ALN	2.31	140	ePd	23 32.58	-0.1
			eS	24 04.98	
OUR	2.35	182	ePc	23 33.94	0.7
			eS	24 05.14	
FNA	2.78	228	ePc	23 39.30	-0.2
LIT	2.85	206	ePc	23 40.02	-0.4
AGG	3.89	201	ePc	23 54.58	-0.6

S.D. = 0.6 on 10 of 12 obs.

? OCT 26, 1990 13h 40m 39.55±11.98s
8.017 S ±108.km 129.473 E ±19.5km
DEPTH = 190.9 ± 40.9 km
5.4mb (4 obs.)
TIMOR SEA (290)

MTN	5.07	161	iPd	41 56.10	0.8
	0.3s		302.00nm	5.9mb	
KNA	7.72	185	iPd	42 30.10	-0.1
	0.3s		73.00nm	5.4mb	
			eS	44 00.00	
WB5	12.71	159	eP	43 32.90	-1.9
			eS	45 57.00	
OIS	15.86	143	eP	44 14.00	0.0
	0.2s		6.00nm	4.7mb	
			eS	47 04.00	
MBL	16.04	214	eP	44 15.70	-0.5
ASPA	16.13	165	eP	44 18.20	0.9
	0.4s		48.20nm	5.3mb	
			eS	47 15.90	
WARB	18.27	188	eP	44 42.20	0.7

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

? OCT 26, 1990 13h 49m 46.78± 2.74s
39.912 N ± 8.8km 30.515 E ±30.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.9 (ISK).

GPA	0.41	337	iPg	49 54.40	-0.7
			eSg	50 01.40	
IZI	0.90	298	ePn	50 03.40	-0.8
HRT	1.12	325	ePn	50 08.30	0.6
ISK	1.60	317	ePn	50 15.00	-0.1
BBTK	1.73	92	eP	50 26.00	8.8X
			iS	50 50.00	
KHC	1.76	206	ePn	50 17.50	-0.2
CTT	2.01	308	ePn	50 22.40	1.2

S.D. = 1.0 on 6 of 7 obs.

OCT 26, 1990 14h 21m 51.88± 1.58s
43.648 N ±10.9km 7.022 E ± 5.5km
DEPTH = 11.1 ± 4.1 km
NEAR SOUTH COAST OF FRANCE (379)
MD 1.7 (STR).

CALN	0.14	317	Pg	21 55.50	0.0
			Sg	21 59.64	
MVIF	0.27	21	Pg	21 58.29	0.7
			Sg	22 02.89	
REVF	0.27	70	Pg	21 57.60	0.0
AURF	0.33	43	Pg	21 58.66	-0.1
TOUF	0.40	24	Pg	22 00.16	0.0
			Sg	22 07.44	
AUTN	0.45	40	Pg	22 01.15	-0.1
			Sg	22 09.23	
SAOF	0.51	49	Pg	22 01.93	-0.4
			Sg	22 10.90	
STV	0.63	20	P	22 04.21	-0.4
			S	22 12.92	
ENR	0.65	26	P	22 04.51	-0.3
			S	22 13.23	
IMI	0.68	67	P	22 05.13	-0.2
			S	22 14.77	
PZZ	0.86	4	P	22 08.62	0.2
ROB	0.89	43	P	22 09.44	0.5
FIN	1.02	56	P	22 11.59	0.4
RRL	1.28	352	P	22 15.49	-0.2
PCP	1.42	50	P	22 18.05	0.5

S.D. = 0.4 on 15 of 15 obs.

% OCT 26, 1990 15h 11m 47.07± 2.07s
43.095 N ±10.7km 1.013 W ±14.0km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

BOH	0.01	4	Pg	11	48.95	-0.1
			Sg	11	52.00	
MADF	0.15	70	Pg	11	50.73	0.1
			Sg	11	55.19	
ISSF	0.17	113	Pg	11	51.42	0.4
			Sg	11	56.14	
ATE	0.23	92	Pg	11	52.07	0.1
			Sg	11	57.49	
ESCF	0.32	93	Pg	11	53.39	-0.4
			Sg	12	00.59	
LHE	0.34	122	Pg	11	53.91	-0.2
			Sg	12	00.91	
OGE	0.40	79	Pg	11	55.32	0.0

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

? OCT 26, 1990 16h 03m 27.65±18.93s
33.734 S ±29.6km 72.513 W ±150.km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

LCCH	0.83	72	iPc	03	42.10	-0.8
			iS	03	55.00	
LNV	0.94	104	iP	03	44.50	0.0
			iS	03	58.00	
TACH	1.32	87	iP	03	49.50	-0.4
			iS	04	08.10	
ROCH	1.47	59	iPd	03	52.30	0.0
			iS	04	16.50	
CHCH	1.56	98	eP	03	45.36	-8.1X
			iS	04	15.80	
PEL	1.64	69	ePc	03	55.00	0.4
			iS	04	18.50	
PCH	1.67	87	iPc	03	55.40	0.3
			iS	04	19.00	
FCH	1.90	78	iP	03	59.00	0.4
			i	04	27.50	

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

% OCT 26, 1990 16h 36m 37.62± 0.70s
46.593 N ± 5.9km 9.204 E ± 6.2km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)

VDL	0.21	120	iP	36	42.70	0.4
LLS	0.31	333	iP	36	43.50	-0.7
TMA	0.54	205	iP	36	48.70	0.1
OSS	0.65	81	iP	36	50.30	-0.5
MMK	1.02	238	eP	36	56.70	-0.3
SLE	1.27	338	eP	37	02.20	1.0

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

OCT 26, 1990 18h 17m 35.13± 0.22s
56.121 N ± 4.1km 110.048 E ± 3.9km
DEPTH = 21.1km (6 depth phases)
5.1mb (55 obs.) 4.8Msz (5 obs.)
LAKE BAIKAL REGION (327)
Felt (V) at Nizhne-Angarsk and Kumora and (III) at Bodaybo.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 23C
Centroid Location:
Origin Time 18:17:36.8 0.7
Lat 56.26N 0.10 Lon 110.62E 0.21
Dep 15.0 FIX Half-duration 1.6
Moment Tensor; Scale 10**16 Nm
Mrr=-3.35 0.59 Mtt= 5.68 0.66
Mff=-2.34 0.74 Mrt=-2.48 2.50
Mrf= 4.77 1.65 Mtf= 3.41 0.69
Principal Axes:

	Val=	Plg=	Azm=
T	7.00	5	162
N	1.82	45	258
P	-8.82	44	67

Best Double Couple:Mo=7.9**16
NP1:Strike=215 Dip=56 Slip=-149
NP2: 106 65 -38

BJI	16.59	163	eP	21	26.50	-1.3
	1.2s		65.00nm			4.6mb
	Z 15s		9.02um			
			eS	24	39.00	
LZH	20.48	194	eP	22	13.00	-1.1
	1.8s		95.00nm			4.9mb
	Z 14s		6.34um			5.1MszX
			pP	22	19.00	22km
			PP	22	35.00	
			S	25	58.00	
			sS	26	04.00	
			Lg	27	43.00	
			e	28	20.00	
SSE	26.22	158	eP	23	16.00	6.0X
	Z 14s		4.40um			5.2MszX
	N 12s		3.60um			
	E 12s		1.00um			
			pP	23	44.80	137kmX
			sP	24	01.50	
			PP	24	17.30	
			S	27	56.00	
GUN	33.08	222	P	24	12.72	1.1
KKN	33.41	222	P	24	14.40	0.0
	0.5s		36.00nm			5.5mb
GKN	33.46	223	P	24	14.36	-0.4
PKI	33.56	222	P	24	15.90	0.1
	0.7s		11.00nm			4.9mb
DMN	33.64	222	P	24	16.12	-0.3
	0.8s		25.00nm			5.2mb
KEV	36.84	325	iP	24	43.60	0.6
	0.6s		24.80nm			5.2mb
			i	24	52.60	30km
SOD	37.93	321	iP	24	52.40	0.3
CHG	38.18	197	eP	24	56.00	1.3
MAIO	39.13	261	eP	25	05.00	2.4
			eS	31	22.00	
QUE	39.78	248	eP	25	09.10	0.9
SUF	40.30	315	eP	25	12.30	0.5
	0.6s		11.20nm			4.8mb
NUR	42.08	313	iP	25	24.90	-1.6
	1.0s		18.20nm			4.8mb
			e	25	37.00	44kmX
IMA	42.99	36	iPc	25	34.30	0.2
DAG	43.50	345	iPd	25	37.00	-0.9
	0.7s		14.38nm			4.9mb
TTA	44.02	41	ePc	25	42.40	0.0
MBC	44.18	15	ePc	25	43.50	0.1
	0.7s		16.00nm			5.0mb
TAB	45.22	274	eP	26	03.00	10.6X
UPP	45.31	315	iP	25	52.80	0.2
HYB	45.38	224	eP	25	53.00	-0.7
FBA	45.65	36	iPc	25	55.60	0.3
HFS	46.67	317	eP	26	02.70	-0.7
	0.7s		23.30nm			5.3mb
	Z 16s		0.67um			4.7MszX
			LR	46	00.00	
NB2	47.01	319	P	26	06.30	0.2
	0.7s		16.80nm			5.2mb
PMR	47.37	40	iPc	26	08.90	0.1
INK	47.44	27	ePd	26	18.90	9.6X
TOA	48.06	38	iPc	26	14.70	0.3
BMR	50.70	299	ePc	26	45.00	10.2X
KRA	50.75	304	iPd	26	35.90	0.8
	0.7s		30.00nm			5.4mb
	Z 15s		2.90um			5.4MszX
	E 22s		3.80um			
			e	26	41.70	19km
SPC	51.21	303	eP	26	38.80	-0.1
BBTK	51.42	286	eP	26	43.00	2.5
CMP	51.61	296	ePc	26	49.00	7.2X
KSP	51.87	306	iPc	26	44.20	0.6
	0.7s		38.00nm			5.4mb
			i	26	50.50	21km
KOD	52.36	222	eP	26	48.00	0.0
CLL	53.00	309	iP	26	52.40	0.4
	1.1s		21.00nm			5.0mb
SRO	53.09	303	iP	26	53.60	0.8
			e	42	01.80	
			e	42	33.20	
PRU	53.27	307	Pd	26	55.00	1.0
	Z 15s		1.60um			5.2MszX
	N 14s		1.00um			
	E 16s		1.00um			
			e	28	22.40	432kmX
ZST	53.38	304	eP	27	01.80	6.9X
			e	41	58.80	
VKA	53.70	304	iP	27	04.70	7.5X
			e	27	09.00	14km
MOX	54.09	309	iP	27	01.00	1.0
	0.7s		27.00nm			5.4mb
HOF	54.21	309	iPd	27	01.80	0.8
	0.7s		8.00nm			4.9mb
KHC	54.32	307	P	27	03.00	1.1
	N 14s		1.00um			
	E 14s		1.10um			
			e	27	09.10	20km
RZN	54.33	293	iPc	27	03.00	0.8
VTS	54.45	295	iPd	27	04.00	1.0
WET	54.63	307	eP	27	04.30	0.2
	0.7s		24.00nm			5.3mb
MMB	54.91	294	iPd	27	07.00	0.7
GRF	54.96	308	eP	27	07.40	0.9
	0.9s		17.00nm			5.1mb
	Z 18s		1.20um			5.0Msz
WTS	55.12	313	eP	27	07.50	-0.1
	0.7s		19.00nm			5.2mb
PTJ	55.59	302	eP	27	11.40	0.2
VAY	55.70	294	eP	27	13.00	1.1
SKO	55.80	296	eP	27	12.00	-0.6
	Z 16s		2.66um			5.4MszX
	N 21s		4.87um			
	E 19s		4.68um			
			eS	34	50.00	
			e	41	20.00	
			LR	53	46.00	
EKA	56.37	321	Pc	27	17.00	0.4
	0.8s		15.00nm			5.1mb
ENN	56.41	312	eP	27	17.00	0.1
	1.0s		22.00nm			5.1mb
MEM	56.50	312	P	27	17.90	0.4
FVI	56.56	305	P	27	18.00	0.0
OHR	56.76	295	eP	27	20.00	0.4
TRI	56.76	304	P	27	19.50	0.0
SOTA	56.80	306	iPc	27	20.50	0.5
	0.8s		18.20nm			5.2mb
			i	27	33.80	48kmX
UCC	57.03	313	P-	27	26.00	4.7X
OGA	57.15	306	eP	27	23.40	0.9
	0.6s		7.00nm			4.9mb
PRNI	57.23	277	eP	27	24.00	1.0
SNF	57.28	313	P	27	23.30	0.2
DOU	57.48	313	Pd	27	24.30	-0.2
CTI	57.49	305	Pc	27	24.30	-0.5
CDF	57.64	310	eP	27	25.40	-0.4
	1.0s		18.00nm			5.1mb
MBH	57.73	276	eP	27	28.00	1.5
BSF	58.29	310	eP	27	29.80	-0.6
	1.0s		18.00nm			5.1mb
HAU	58.35	310	eP	27	30.10	-0.6
	0.8s		10.75nm			5.0mb
	Z 20s		0.55um			4.7Msz
MDI	58.57	306	P	27	17.50	-14.7X
ARV	58.81	302	P	27	32.00	-2.0
SFI	59.00	303	P	27	36.00	0.8
PGD	59.10	303	P	27	35.50	-0.7
CRE	59.18	303	P	27	37.50	0.9
ASS	59.27	302	P	27	38.50	1.3
ORX	59.46	307	P	27	38.21	-0.3
BOB	59.47	306	P	27	37.00	-1.6
BDI	59.48	304	P	27	40.00	1.3
DUI	59.49	300	P	27	39.00	0.3
AZI	59.73	301	P	27	40.00	-0.3
SDI	59.76	301	P	27	40.00	-0.6
PII	59.78	304	P	27	38.00	-2.6
SGO	59.91	299	Pc	27	42.20	0.7
LSD	59.96	308	P	27	42.92	0.7
LOR	59.98	311	eP	27	40.90	-1.1
	0.8s		20.15nm			5.3mb
	Z 20s		0.60um			4.7Msz
ROI	60.04	297	P	27	48.90	6.4X
TDS	60.09	297	P	27	44.00	1.2
LPL	60.10	308	eP	27	43.30	0.2
	1.0s		19.00nm			5.2mb
LPG	60.11	308	eP	27	43.30	0.1
	0.8s		11.40nm			5.1mb
MGR	60.11	298	P	27	43.00	0.1
LBF	60.15	311	eP	27	42.10	-1.1
	0.9s		18.85nm			5.2mb
RSP	60.16	307	P	27	42.21	-1.1
SSF	60.29	311	eP	27	43.10	-1.0
	0.9s		25.40nm			5.4mb
FIN	60.46	306	P	27	44.46	-0.8
SMF	60.48	311	eP	27	44.40	-1.0
	0.8s		14.10nm			5.1mb
BNI	60.49	308	Pc	27	46.20	0.6
CZI	60.53	297	P	27	46.50	0.8
ROB	60.55	306	P	27	45.38	-0.5
RRL	60.55	307	P	27	46.61	0.5

26d 18h

AVF			60.57	311	eP	27 45.00 -0.9
			1.0s	14.00nm		5.0mb
LDF			60.57	314	eP	27 44.70 -1.2
			0.4s	17.20nm		5.5mb
FLN			60.58	315	eP	27 44.70 -1.3
			0.6s	17.15nm		5.4mb
	Z	20s		0.75um		4.8Msz
PZZ			60.73	307	P	27 45.69 -1.6
ENR			60.80	307	P	27 45.59 -2.1
STV			60.83	307	P	27 46.10 -1.8
IMI			60.84	306	P	27 47.85 -0.1
BGF			60.97	311	eP	27 47.90 -0.8
			0.8s	14.80nm		5.2mb
GRR			61.03	315	eP	27 47.80 -1.2
			0.4s	6.30nm		5.1mb
SBF			61.08	306	eP	27 49.20 -0.4
			0.8s	29.55nm		5.5mb
MAF			61.35	311	eP	27 50.90 -0.4
			0.8s	18.80nm		5.3mb
LPF			61.39	314	eP	27 49.50 -2.0
			0.4s	3.45nm		4.8mb
PGF			61.39	304	eP	27 51.30 -0.4
			0.7s	17.65nm		5.3mb
TCF			61.45	311	eP	27 51.50 -0.5
			0.8s	10.75nm		5.0mb
FRF			61.67	307	eP	27 52.90 -0.6
			0.8s	16.10nm		5.2mb
LSF			61.77	312	eP	27 52.90 -1.2
			0.8s	16.80nm		5.2mb
MFF			62.18	313	eP	27 56.10 -0.7
			0.4s	9.15nm		5.3mb
EPF			64.86	310	eP	28 14.20 -0.4
			0.6s	13.55nm		5.3mb
EDM			65.34	27	eP	28 17.00 -0.4
FFC			66.46	20	eP	28 24.00 -0.5
			0.6s	17.00nm		5.4mb
LON			68.67	35	P	28 38.00 -0.6
SCH			69.39	358	eP	28 43.00 0.2
DUG			77.40	32	P	29 30.80 0.8
DAU			77.66	31	P	29 32.00 0.4
TNP			77.94	36	P	29 33.00 0.0
			0.9s	10.09nm		4.9mb
WB5			78.45	157	eP	29 34.20 -1.5
ISA			79.70	38	eP	29 43.00 0.5
CLC			79.86	38	eP	29 44.00 0.6
GOL			79.92	27	P	29 43.90 0.0
			0.8s	7.81nm		4.8mb
GSC			80.60	37	eP	29 48.00 0.7
SBB			80.81	38	eP	29 49.00 0.6
MWC			81.15	39	eP	29 50.00 -0.4
TPC			81.94	37	eP	29 54.00 -0.3
ASPA			82.01	158	eP	29 53.60 -1.0
			0.6s	8.80nm		5.0mb
PLM			82.35	38	eP	29 57.00 0.4
BAR			83.03	38	eP	30 01.00 1.0
ANMO			84.11	29	P	30 06.40 0.8
			1.1s	11.87nm		5.0mb
ALO			84.11	29	eP	30 06.00 0.3
			1.0s	10.25nm		5.0mb
TUL			85.72	21	eP	30 14.30 0.8
			1.0s	9.30nm		5.0mb
	Z	22s		0.39um		4.8Msz
				LR	59	00.00
SIO			85.78	21	e(P)	30 13.90 0.1
MEO			86.22	23	iPc	30 17.40 1.4
OLY			86.91	17	P	30 09.00 -10.3X
BCAO			87.20	274	iPc	30 21.80 0.8
			0.6s	7.00nm		5.1mb
SIV			139.38	347	PKP	37 02.80 0.4
			S.D. = 0.9	on 132 of 143 obs.		

& OCT 26, 1990 18h 20m 19.76s
59.974 N 152.821 W
DEPTH = 97.2km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT			0.38	213	iP	20 34.02 -0.7
					eS	20 44.84
RED			0.45	3	iP	20 34.49 -0.7
					eS	20 46.02
RSO			0.49	4	iP	20 35.03 -0.6
					iS	20 46.73
RDT			0.64	19	iP	20 35.83 -0.8
HOM			0.67	118	iP	20 36.61 -0.3
					eS	20 49.44
AUE			0.68	205	iP	20 36.04 -0.9
AUH			0.69	208	iP	20 36.37 -0.8
AUI			0.71	206	iP	20 36.37 -0.9
PDB			0.72	255	iP	20 36.66 -0.6
XLV			0.76	133	eP	20 36.73 -1.0
					eS	20 50.08
NNL			0.77	84	iP	20 37.87 0.0
CNPM			0.92	119	eP	20 38.52 -0.9
BRLK			1.00	101	iP	20 39.50 -0.8
					eS	20 54.18
NKA			1.10	45	iP	20 42.35 1.0
MCNL			1.11	225	iP	20 40.48 -1.0
					eS	20 56.08
CDD			1.13	202	iP	20 40.53 -1.2
CKL			1.25	11	eP	20 42.71 -0.6
					eS	21 00.96
BGL			1.31	9	iP	20 43.69 -0.3
CRP			1.34	14	eP	20 44.16 -0.3
					eS	21 03.00
SEW			1.70	84	eP	20 47.15 -1.6
SUA			1.81	33	eP	20 50.01 -0.4
					eS	21 12.69
PMS			2.05	50	iP	20 52.57 -0.9
					iS	21 16.58
SKT			2.11	17	eP	20 53.51 -0.7
PWA			2.22	39	eP	20 55.10 -0.5
PLRM			2.43	47	eP	20 56.68 -1.8
					eS	21 24.02
KNIM			2.57	79	iP	20 57.49 -2.9
KNK			2.59	54	eP	20 58.55 -2.1
MTU			2.60	87	eP	20 59.11 -1.7
GHO			2.62	45	eP	20 59.69 -1.5
CUT			2.73	26	eP	21 02.14 -0.4
SML			2.86	48	eP	21 02.62 -1.8
GLI			2.98	70	eP	21 02.64 -3.3
SCM			3.27	53	P	21 08.03 -1.9
VZW			3.28	68	eP	21 07.32 -2.8
VLZ			3.41	67	eP	21 08.95 -2.8
KLU			3.72	63	iP	21 13.25 -2.9
TOA			3.88	54	eP	21 16.19 -2.1
RND			3.93	27	eP	21 17.73 -1.3
GLB			4.67	68	eP	21 25.93 -3.2
			39 obs. associated			

• OCT 26, 1990 18h 41m 12.63± 1.07s
50.122 N ±15.0km 19.158 E ± 7.2km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.0 (VKA).

KRA			0.51	97	iPg	41 23.40 0.5
					iSg	41 30.70
SPC			1.17	142	ePn	41 33.80 -0.8
					i(Sg)	41 51.40
KSP			1.97	293	ePn	41 46.20 -0.2
			0.8s	45.00nm		
					iPg	41 49.20
					iS	42 16.20
					i	42 19.80
PSZ			2.26	167	eP	41 56.10 5.5X
VKA			2.63	226	ePg	41 57.00 1.1
					iSg	42 39.60
PRU			2.98	269	ePg	42 06.90 6.2X
					e	42 45.50
					Sg	42 48.60
KHC			3.76	257	Pn	42 11.30 -0.7
					Pg	42 22.00
					Sn	42 54.00
					Sg	43 12.20
CLL			4.09	289	(Pg)	42 32.00 15.5X
					eSg	43 24.00
			S.D. = 1.2	on 5 of 8 obs.		

• OCT 26, 1990 20h 00m 42.02± 1.66s
33.687 S ± 6.6km 71.593 W ±13.0km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

LCCH			0.21	5	iP	00 46.50 -0.1
					iS	00 57.50
LNV			0.31	151	iPc	00 48.50 0.1
					iS	01 02.00
TACH			0.55	87	iPd	00 53.50 0.4
					iS	01 12.00
CHCH			0.82	108	eP	00 57.60 -0.3
					i	01 15.70
ROCH			0.86	34	iPd	00 59.50 0.7
					iS	01 22.80
PCH			0.90	86	iPc	00 59.58 -0.1
					iS	01 22.80
PEL			0.93	55	eP	00 59.00 -0.9
					iS	01 22.50
MDZ			2.43	72	eP	01 28.00 5.5X
			S.D. = 0.6	on 7 of 8 obs.		

• OCT 26, 1990 20h 06m 59.60± 0.54s
56.136 S ±14.2km 27.737 W ±14.2km
DEPTH = 110.0km (geophysicist)
4.9mb (3 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

MAW			40.26	144	iP	14 27.60 1.2
SIV			47.41	314	P	15 25.40 0.9
SOB1			47.94	342	eP	15 29.10 0.5
CNCB			49.65	306	P	15 45.00 2.6X
LPB			49.95	306	P	15 43.00 -1.4
ZOBO			50.19	306	P	15 47.00 0.5
					i	16 14.80
BUL			54.89	73	iPd	16 15.70 -5.2X
KRI			58.15	72	iPd	16 36.50 -7.6X
LIC			64.90	25	P	17 29.40 0.4
KIC			65.10	25	P	17 30.80 0.5
			0.8s	10.50nm		4.8mb
TIC			65.31	25	P	17 32.00 0.4
LKO			67.98	24	P	17 47.68 -0.9
			0.7s	11.00nm		4.9mb
BCAO			71.20	50	iPc	18 08.20 -0.1
			0.7s	16.00nm		5.0mb
					i	19 02.80
DMN			125.09	92	PKP	25 48.60 0.3
GKN			125.13	91	PKP	25 47.60 -0.6
PKI			125.23	92	PKP	25 48.50 -0.2
KKN			125.33	92	PKP	25 48.50 -0.2
GUN			125.75	92	PKP	25 47.70 -2.1
MBC			143.93	336	ePKP	26 21.00 -0.6
			0.6s	3.00nm		
INK			145.67	321	ePKP	26 26.00 1.3
BJI			151.44	109	ePKP	26 41.00 6.4X
			0.8s	6.00nm		
			S.D. = 1.0	on 17 of 21 obs.		

? OCT 26, 1990 21h 07m 27.04± 5.08s
9.792 S ±48.2km 121.736 E ±24.2km
DEPTH = 33.0km (normal)
5.0mb (1 obs.)
SAVU SEA (288)

KUPT			1.88	101	eP	07 57.50 0.1
KNA			9.06	132	eP	09 40.00 1.4
					eS	11 24.00
MTM			9.70	109	eP	09 47.50 0.1
			0.3s	79.00nm		6.4mb X
					eS	11 33.00
MBL			11.45	109	eP	10 12.00 0.6
			0.3s	3.00nm		5.0mb
					eS	12 19.00
NANU			14.02	204	eP	10 45.50 -0.1
					eS	13 17.00
WB5			15.79	131	eP	11 08.70 0.0
					eS	14 00.00
ASPA			18.84	141	eP	11 34.80 -2.2
			0.9s	6.60nm		3.8mb X
			S.D. = 1.3	on 7 of 7 obs.		

• OCT 26, 1990 21h 40m 53.31± 0.57s
29.711 N ±11.4km 50.845 E ± 7.7km
DEPTH = 33.0km (normal)
4.6mb (6 obs.)
SOUTHERN IRAN (353)

DHR			3.45	191	eP	41 50.00 4.0X
BBU			3.50	186	(Pn)	40 59.60 -47.1X
					(Sn)	41 48.40
RYD			6.24	218	eP	42 24.50 -1.0
MJMA			6.24	233	eP	42 27.00 1.4
OASM			7.41	243	eP	42 40.00 -1.9
AFIF			8.83	233	ePd	43 03.30 1.6
TAB			9.14	337	eP	43 10.00 11.9X
MAIO			9.79	46	eP	43 48.00 33.0X
BBTK			17.94	309	eP	45 00.00 -1.9
GKN			29.59	85	P	46 58.66 0.9
			0.8s	11.00nm		4.7mb
DMN			30.07	85	P	47 01.66 -0.5
			0.9s	10.00nm		4.6mb
KKN			30.19	85	P	47 03.60 0.4

PKI	30.35	85	P	47	04.46	-0.2
	1.0s	14.00nm			4.7mb	
GUN	30.68	85	P	47	06.30	-1.4
HFS	39.29	331	eP	48	21.70	1.3
	0.8s	6.90nm			4.5mb	
NB2	40.81	332	P	48	34.10	1.1
	0.9s	2.20nm			3.9mb	
LKO	56.24	261	P	50	32.84	-0.3
	0.5s	6.00nm			4.8mb	
LIC	57.43	258	P	50	42.00	0.5
TUL	107.57	332	e(PKP)	59	24.20	5.7X
	1.0s	6.00nm				
	S.D. = 1.3	on	14 of	19	obs.	

OCT 26, 1990 22h 18m 09.15± 1.30s
28.355 N ± 7.2km 52.400 E ± 4.6km
DEPTH = 26.2 ± 10.7 km
4.6mb (14 obs.)
SOUTHERN IRAN (353)

BBU	2.74	219	iPn	18	52.40	0.0
			(Sn)	19	41.40	
BRF	2.79	216	(Pn)	18	50.60	-2.4
BJA	2.84	215	ePn	18	54.20	0.4
			(Sn)	19	40.80	
DHR	2.87	225	eP	18	57.10	3.0X
RYD	6.32	236	iP+	19	43.40	0.2
MJMA	6.81	250	ePd	19	48.80	-1.2
TEH	7.41	354	e(P)	19	51.00	-7.5X
QASM	8.21	256	eP	20	07.50	-2.1
AFIF	9.30	245	ePd	20	27.10	2.5
MAIO	9.93	35	eP	20	32.00	-1.4
			eS	22	46.00	
QUE	12.83	78	eP	21	13.00	0.2
ABHA	13.40	223	eP	21	20.00	-0.4
CSTJ	13.94	285	Pc	21	38.90	11.6X
SHMJ	14.98	291	Pc	21	37.40	-3.4X
DSI	15.10	286	eP	21	48.00	5.7X
MML	15.21	290	eP	21	43.00	-0.9
HQL	15.24	278	eP	21	47.40	3.2X
BADA	15.31	275	eP	21	46.70	1.6
ZNT	15.49	289	eP	21	50.60	2.5
BBTK	19.85	310	iPd	22	49.00	7.9X
ELL	20.69	300	eP	22	50.00	0.1
KHL	21.49	303	iP	22	58.70	0.7
NDI	21.80	83	iPd	23	03.50	2.4
	0.8s	26.12nm			4.7mb	
POO	21.94	112	eP	23	04.50	1.9
IZM	23.19	302	eP	23	18.00	3.2X
CFR	25.53	318	eP	23	38.00	0.9
HYB	26.38	109	ePc	23	47.00	1.7
GBA	27.52	117	Pc	23	57.50	1.8
	0.6s	5.10nm			4.4mb	
DMN	28.85	84	P	24	07.88	-0.1
	0.8s	13.00nm			4.7mb	
KKN	28.97	83	P	24	08.42	-0.6
	0.6s	12.00nm			4.8mb	
PKI	29.12	84	P	24	08.16	-2.3
	0.6s	10.00nm			4.7mb	
GUN	29.48	83	P	24	13.68	0.0
SPC	32.21	319	eP	24	37.30	-0.1
SRO	32.75	316	eP	24	47.00	5.1X
KRA	32.80	320	eP	24	42.10	-0.2
			e	24	45.60	
ZST	33.65	316	eP	24	54.20	4.5X
VKA	34.16	316	e(P)	25	01.30	7.2X
KSP	35.23	320	eP	25	02.80	-0.5
KHC	36.17	316	eP	25	11.80	0.5
SOTA	37.08	312	iPc	25	18.70	-0.4
	0.5s	7.90nm			4.8mb	
			i	25	33.10	
NUR	37.20	338	eP	25	19.20	-0.5
CLL	37.32	319	iPd	25	21.00	0.2
SUF	38.41	341	iP	25	29.40	-0.5
	0.4s	3.10nm			4.5mb	
LPG	39.72	308	eP	25	43.10	1.7
	0.6s	3.60nm			4.3mb	
LPL	39.74	308	eP	25	43.60	2.2
	0.6s	2.25nm			4.1mb	
BCAO	40.01	240	ePd	25	43.00	-0.7
	0.6s	4.00nm			4.3mb	
HFS	41.13	332	eP	25	51.50	-0.8
	0.5s	8.20nm			4.7mb	
Z	17s	0.07um			3.6MszX	
		LR		43	23.00	
SOD	42.03	345	eP	26	03.00	3.3X
NB2	42.65	332	P	26	04.00	-0.9
	0.6s	3.60nm			4.3mb	
CHG	43.48	92	eP	26	11.90	-0.2
	1.0s	14.75nm			4.7mb	
LZH	43.78	66	eP	26	13.50	-1.1
KEV	43.94	348	eP	26	15.00	-0.2
LKO	57.41	263	PKP	27	56.48	-1.7
KIC	58.18	259	PKP	28	04.20	0.7
TIC	58.28	260	PKP	28	04.00	-0.3
LIC	58.49	259	PKP	28	04.60	-1.1
SLR	58.57	206	eP	28	11.50	5.3X
SSE	58.91	69	eP	28	06.50	-1.9
YKA	88.87	354	eP	31	06.10	4.1X
	0.7s	2.70nm			4.7mb	
	S.D. = 1.3	on	45 of	59	obs.	

OCT 26, 1990 23h 07m 16.67± 0.60s
43.816 N ± 4.2km 110.163 W ± 6.6km
DEPTH = 5.0km (geophysicist)
WYOMING (460)
ML 3.0 (BUT).

IMW	0.57	278	eP	07	27.20	-0.9
BW06	1.13	157	eP	07	38.00	-0.5
LTMT	1.57	298	iPd	07	45.20	-0.3
PTI	1.87	240	eP	07	50.00	0.3
MEMT	1.88	342	ePn	07	50.20	0.3
BGMT	1.95	317	iPd	07	51.30	0.3
HPI	2.13	268	eP	07	54.00	0.4
MCMT	2.18	299	ePn	07	54.60	0.3
SXM	2.45	343	ePn	07	58.00	-0.1
LRM	2.58	322	ePn	08	00.20	0.1
HBMT	2.63	319	ePn	08	01.10	0.3
BUT	2.78	323	ePg	08	06.80	3.9X
			eS	08	42.20	
HRY	3.13	338	ePn	08	07.10	-0.5
DAU	3.50	194	e(P)	08	13.50	0.4
GOL	5.45	137	e(P)	08	45.00	4.1X
	S.D. = 0.5	on	13 of	15	obs.	

? OCT 26, 1990 23h 53m 18.44± 1.97s
1.145 N ±35.4km 129.122 E ±60.1km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
HALMAHERA (267)

WB5	21.52	166	eP	58	07.00	0.1
QIS	23.89	155	ePd	58	43.00	12.8X
ASPA	25.10	170	eP	58	52.40	10.6X
	0.6s	9.00nm				
CHTO	34.41	303	iP	00	07.00	1.9
	1.0s	6.25nm			4.5mb	
BJI	40.47	345	eP	01	11.00	15.4X
LZH	41.93	329	(P)	01	08.50	0.6
GUN	49.17	307	P	02	05.48	-0.5
	0.6s	19.00nm			5.3mb	
PKI	49.41	306	P	02	06.94	-0.9
	0.6s	4.00nm			4.7mb	
KKN	49.60	306	P	02	08.48	-0.7
DMN	49.67	306	P	02	09.26	-0.4
GKN	50.21	306	P	02	13.58	-0.1
	0.6s	6.00nm			4.8mb	
HYB	52.25	291	eP	02	36.00	6.8X
	S.D. = 1.1	on	8 of	12	obs.	

? OCT 26, 1990 23h 56m 15.94± 3.16s
45.988 N ±32.2km 27.338 E ±14.8km
DEPTH = 33.0km (normal)
ROMANIA (358)

VRI	0.44	255	iPd	56	25.00	-0.7
CVD	0.83	259	iPd	56	32.00	0.8
CFR	0.99	144	iPd	56	33.00	-0.4
ISR	1.02	214	ePc	56	34.00	0.0
MLR	1.10	244	iPd	56	35.00	-0.1
TLB	1.48	160	ePc	56	41.00	0.5
	S.D. = 0.7	on	6 of	6	obs.	

• OCT 27, 1990 00h 27m 34.70± 2.28s
21.384 S ±12.0km 67.916 W ±14.8km
DEPTH = 291.8 ± 47.5 km
CHILE-BOLIVIA BORDER REGION (124)

ANT	3.27	225	eP	28	33.00	0.0
			eS	29	12.50	
CCH	4.32	23	P	28	44.60	-0.3
CNCB	4.55	359	iPc	28	48.20	0.4
			S	29	40.00	
LPB	4.83	358	P	28	51.00	0.1
ZOBO	5.09	358	Pc	28	54.00	-0.1
ARE	5.95	325	eP	29	04.00	-0.1
			eS	30	06.00	
SIV	8.42	52	iPd	29	34.20	0.1
	S.D. = 0.3	on	7 of	7	obs.	

OCT 27, 1990 01h 13m 25.44± 0.28s
40.500 N ± 3.1km 19.558 E ± 2.4km
DEPTH = 15.5 ± 3.3 km
4.0mb (2 obs.)
ALBANIA (391)
ML 4.3 (ATH). Felt (V) at Vlore, Brotaj and Sevaster; (IV) at Sinanaj, Dhemblan and Kalivac; (III) at Tepelina.

VLO	0.06	237	iPgc	13	28.00	-0.5
BERA	0.36	56	iPg	13	31.40	-1.6
TPE	0.40	121	iPgc	13	30.00	-3.7X
SRN	0.71	151	iPg	13	36.80	-2.1
KEK	0.81	167	ePn	13	39.00	-1.6
LSK	0.87	113	iPgd	13	38.70	-3.1X
TIR	0.88	15	iPnc	13	42.50	0.7
KBN	0.96	82	iPnc	13	41.00	-2.3
OHR	1.12	57	iPnc	13	45.10	-0.9
			iSg	14	05.50	
IGT	1.13	148	ePc	13	44.96	-1.3
			eS	14	01.92	
LCI	1.24	263	Pc	13	46.50	-1.4
			eSn	14	02.00	
FNA	1.41	78	iPd	13	49.58	-1.0
			iS	14	08.37	
ULC	1.48	351	ePg	13	51.60	0.2
			eSg	14	15.50	
KKS	1.70	22	iPn	13	57.00	2.4
KZN	1.70	96	ePn	13	55.00	0.3
BDV	1.86	343	ePn	13	57.00	0.0
			eSn	14	25.00	
BCI	1.90	11	iPnd	14	00.00	2.5X
TTG	1.94	353	ePn	13	58.80	0.7
			eSn	14	26.00	
HCY	2.10	338	ePn	14	00.20	-0.2
			eSn	14	29.00	
PVY	2.12	8	ePn	14	02.50	1.7
			eSn	14	30.00	
GRG	2.21	77	iPd	14	02.10	0.1
			eS	14	30.76	
LIT	2.28	99	iPd	14	03.02	0.0
			eS	14	31.10	
EVR	2.35	132	ePn	14	04.70	0.6
NKY	2.35	350	ePn	14	04.00	-0.1
IVA	2.38	6	ePn	14	06.30	1.8
			eSn	14	36.00	
ORI	2.42	261	P	14	05.30	0.3
			eSn	14	34.00	
VLS	2.45	161	ePn	14	03.20	-2.3
ROI	2.48	249	P	14	07.00	1.2
BRY	2.52	343	ePn	14	06.60	0.1
			eSn	14	37.00	
AGG	2.60	124	ePd	14	07.84	0.3
THE	2.60	86	ePc	14	07.60	0.1
			iS	14	38.45	
CSI	2.61	255	P	14	10.20	2.5X
TDS	2.61	252	P	14	07.50	-0.2
KNT	2.62	74	iPc	14	07.62	-0.2
			eS	14	40.20	
MMN	2.80	259	P	14	11.80	1.4
			eSn	14	46.80	
PLE	2.83	358	ePn	14	12.50	1.6
			eSn	14	48.00	
SOH	2.91	82	iPd	14	11.70	-0.2
			eS	14	47.10	
CZI	2.93	245	P	14	12.90	0.7
GRI	2.95	236	P	14	12.46	0.0
PLG	2.97	91	ePn	14	13.00	0.2
KKB	2.99	62	iPc	14	14.00	0.9
NEO	3.06	112	ePn	14	14.00	-0.1
MGR	3.08	265	P	14	14.70	0.3
			eSn	14	48.50	
SRS	3.12	77	ePd	14	14.58	-0.4
SGO	3.24	272	P	14	16.70	0.1
			eSn	14	52.50	
MMB	3.34	70	iPc	14	19.00	0.9
VTS	3.45	51	iP	14	20.00	0.3
HVAR	3.54	320	ePn	14	19.50	-1.4
ITM	3.80	150	ePn	14	23.70	-0.9

27d 01h

ATN	3.94	235	P	14	24.90	-1.7
			eSn	15	07.60	
PGB	4.02	58	iPc	14	28.00	0.3
DUI	4.03	288	P	14	28.80	1.0
RZN	4.07	71	iPc	14	29.00	0.4
ATH	4.10	127	ePn	14	28.60	-0.2
PLD	4.19	66	iP	14	31.00	0.8
RFI	4.30	283	P	14	33.79	2.1
BEO	4.37	8	eP	14	50.00	17.4X
SDI	4.50	287	P	14	34.80	0.2
			eSn	15	22.50	
KDZ	4.57	74	iP	14	35.00	-0.6
RDO	4.58	80	ePn	14	34.90	-0.8
VLI	4.61	144	ePn	14	34.10	-2.0
AZI	4.85	290	P	14	40.50	1.0
ALN	4.95	83	eP	14	39.30	-1.5
PZI	5.02	228	P	14	37.91	-4.0X
MNS	5.50	292	P	14	48.80	0.0
ASS	5.76	299	P	14	52.70	0.3
ARV	5.77	303	P	14	50.50	-2.0
			eSn	15	52.50	
VBY	5.91	329	e(Pn)	14	51.00	-3.4X
			eSn	15	00.40	
PTJ	6.00	335	eP	14	54.20	-1.6
CEY	6.44	326	ePn	15	00.00	-2.0
			eSn	16	13.50	
CRE	6.47	301	P	15	01.00	-1.4
LJU	6.64	328	ePn	15	02.60	-2.2
			eSn	16	18.00	
SFI	6.66	303	P	15	05.30	0.2
			eSn	16	14.00	
TRI	6.71	323	iPnc	15	01.70	-4.0X
			iSn	16	17.30	
PGD	6.73	303	P	15	05.00	-1.2
VOY	6.90	325	ePn	15	06.10	-2.4
			eSn	16	23.20	
VVI	7.56	319	P	15	14.60	-3.0X
FVI	7.83	323	P	15	19.80	-1.5
			eSn	16	43.30	
CTI	8.00	316	P	15	20.50	-3.4X
MDI	8.92	309	P	15	34.10	-2.4
SOTA	9.02	321	iPnc	15	36.60	-1.5
			i	15	42.90	
			iSn	17	04.50	
HFS	19.99	351	eP	18	00.20	0.3
	1.4s		22.10nm			4.3mb
NB2	21.20	349	P	18	09.70	-2.7
	0.7s		3.00nm			3.8mb
SUF	22.60	8	eP	18	13.40	-12.9X
BCAO	35.92	182	ePd	20	45.70	18.7X
	0.5s		53.00nm			
			i	22	12.80	

S.D. = 1.2 on 73 of 85 obs.

OCT 27, 1990 02h 15m 30.27± 0.98s
39.034 N ± 5.8km 29.923 E ±10.9km
DEPTH = 10.3 ± 5.4 km
TURKEY (366)
MD 3.5 (ISK).

KHL	0.78	204	iPg	15	43.80	-1.6
			iSg	15	54.30	
GPA	1.29	13	iPn	15	54.20	0.1
IZI	1.35	345	iPn	15	54.50	-0.6
BCK	1.66	161	iPn	16	00.10	0.6
KCT	1.71	316	iPn	15	59.00	-1.3
GBZT	1.79	348	ePn	16	03.40	2.0
HRT	1.80	354	iPn	16	01.00	-0.5
BNT	2.03	311	ePn	16	04.00	-0.9
CIN	2.03	226	eP	16	06.00	1.1
EDC	2.06	310	ePn	16	06.00	0.7
IZM	2.18	254	ePn	16	07.00	0.0
BBTK	2.34	69	eP	16	15.00	5.5X
			eS	16	50.00	
CTT	2.40	332	ePn	16	09.50	-0.7
EZN	2.90	287	ePn	16	19.00	1.8

S.D. = 1.3 on 13 of 14 obs.

? OCT 27, 1990 03h 01m 16.11± 2.49s
46.246 N ±22.6km 2.774 E ±16.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)

MAF	0.15	260	Pg	01	19.90	0.4
			Sg	01	22.10	
BGF	0.32	9	Pg	01	23.00	0.3
			Sg	01	27.40	
TCF	0.39	276	Pg	01	23.80	-0.4
			Sg	01	28.70	
AVF	0.68	36	Pg	01	29.20	-0.3
			Sg	01	38.00	

S.D. = 0.7 on 4 of 4 obs.

• OCT 27, 1990 03h 42m 13.21± 0.92s
37.139 N ±12.8km 71.759 E ± 9.0km
DEPTH = 33.0km (normal)
5.0mb (6 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE	8.01	211	iPd	44	10.30	0.0
			eS	45	35.70	
NDI	9.60	150	iPc	44	36.00	3.9X
	0.5s		14.08nm			5.4mb
MAIO	9.88	269	eP	44	33.00	-3.1X
			eS	46	14.00	
GKN	14.16	126	P	45	34.36	0.7
	0.3s		36.00nm			5.6mb
KKN	14.72	125	P	45	40.84	-0.2
	0.5s		27.00nm			4.9mb
DMN	14.73	126	P	45	41.26	0.0
	0.5s		29.00nm			4.9mb
PKI	14.95	126	P	45	44.18	0.0
	0.4s		22.00nm			4.8mb
GUN	15.04	124	P	45	44.76	-0.5
	0.6s		38.00nm			4.9mb
HFS	42.94	321	eP	50	10.30	0.0
	0.4s		0.80nm			3.8mb X

S.D. = 0.5 on 7 of 9 obs.

• OCT 27, 1990 03h 43m 16.15± 2.55s
37.017 N ±25.3km 29.467 E ± 8.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

BCK	1.00	63	iPn	43	35.10	0.0
CIN	1.24	298	ePn	43	39.00	-0.3
			iSg	43	59.00	
KHL	1.30	2	iPn	43	40.30	0.0
IZM	2.23	309	ePn	43	54.00	0.3

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

? OCT 27, 1990 03h 50m 39.42± 3.33s
18.025 N ±15.4km 101.636 W ±27.6km
DEPTH = 33.0km (normal)
GUERRERO, MEXICO (59)

MRX	1.72	14	iP	51	07.12	-0.4
			iS	51	27.00	
ACX	2.05	124	iP	51	12.50	0.2
			iS	51	39.00	
III	2.09	80	iP	51	13.08	0.1
			iS	51	41.92	
CRX	2.31	53	iP	51	18.00	1.8
			iS	51	46.00	
IIA	3.04	68	iP	51	26.02	-0.3
PPM	3.04	70	iP	51	25.60	-1.2
			(S)	52	07.96	
IIT	3.31	72	iP	51	30.15	-0.3
IISM	4.15	76	(P)	51	48.00	5.9X
			(S)	52	44.66	
OXX	4.78	101	(P)	51	56.50	5.3X

S.D. = 1.1 on 7 of 9 obs.

• OCT 27, 1990 03h 59m 39.18± 1.62s
45.039 N ± 9.3km 146.182 E ± 8.4km
DEPTH = 143.9 ± 16.2 km
4.7mb (39 obs.)
KURIL ISLANDS (221)

OFUJ	6.84	211	P	01	17.70	-0.4
			S	02	28.70	
MAT	10.41	218	(P)	02	07.00	1.2
BJI	22.60	268	eP	04	28.50	0.6
	1.0s		24.00nm			4.6mb
LZH	33.06	269	iPd	06	03.50	0.5
	1.0s		38.00nm			5.1mb
KMI	40.15	255	Pc	07	03.00	0.4
FBA	40.47	37	eP	07	06.10	1.5
	0.9s		10.42nm			4.5mb
INK	45.65	31	eP	07	46.00	-0.2
CHG	47.00	252	iPd	07	58.10	0.6
	0.9s		21.43nm			4.8mb
GUN	50.27	272	P	08	22.98	0.0
	0.4s		53.00nm			5.7mb
KKN	50.76	272	P	08	26.60	0.0
	0.5s		18.00nm			5.1mb
PKI	50.80	272	P	08	26.88	-0.2
	0.5s		14.00nm			5.0mb
DMN	50.99	272	P	08	28.56	0.1
GKN	51.09	273	P	08	28.96	-0.1
	0.4s		37.00nm			5.5mb
NDI	55.92	278	iPd	09	04.00	-0.3
KEV	57.26	339	eP	09	11.00	-2.2
SOD	59.01	337	iP	09	23.90	-1.5
SUF	62.46	333	iP	09	46.80	-1.9
	0.6s		4.30nm			4.6mb
NUR	64.57	332	iP	10	00.50	-2.0
	0.4s		7.60nm			5.0mb
WB5	65.50	192	eP	10	06.40	-2.4
GBA	65.50	265	Pd	10	08.10	-0.9
	0.6s		3.90nm			4.5mb
UPP	67.31	335	iP	10	18.20	-1.6
NB2	68.15	338	P	10	23.70	-1.5
	0.7s		9.70nm			4.8mb
HFS	68.23	337	eP	10	23.80	-1.8
	0.4s		8.90nm			5.0mb
TNP	68.36	57	iP	10	27.00	0.0
ASPA	69.28	192	eP	10	30.80	-1.6
	1.1s		4.90nm			4.2mb
KRA	74.40	327	eP	11	02.50	0.1
SPC	74.98	327	eP	11	06.60	0.5
KSP	75.10	330	ePd	11	06.50	0.0
CLL	75.85	332	iPd	11	10.20	-0.5
	1.0s		15.00nm			4.7mb
BRG	75.90	331	i(P)	11	11.00	0.0
PRU	76.44	330	Pd	11	14.40	0.4
			e	11	16.70	
ALQ	76.80	54	e(P)	11	17.00	0.4
SRO	76.85	327	eP	11	16.80	0.5
ZST	76.99	328	eP	11	17.30	0.2
KHC	77.50	330	eP	11	20.90	1.0
GRF	77.83	332	eP	11	21.90	0.2
	1.1s		21.00nm			4.8mb
ADI	80.20	307	eP	11	36.00	1.2
CDF	80.22	334	eP	11	34.60	-0.1
	1.0s		14.00nm			4.7mb
VAY	80.32	320	eP	11	35.50	0.3
HAU	80.87	334	eP	11	37.80	-0.2
BSF	80.88	334	eP	11	37.80	-0.4
JVI	80.98	306	iPd	11	40.00	1.2
FLN	82.14	338	eP	11	44.00	-0.6
	0.5s		7.30nm			4.7mb
LDF	82.20	338	eP	11	44.70	-0.2
LOR	82.29	335	eP	11	45.10	-0.3
	0.7s		5.50nm			4.4mb
LBF	82.51	335	eP	11	46.30	-0.3
	0.8s		7.40nm			4.5mb
SSF	82.58	335	eP	11	46.80	-0.1
	0.9s		8.20nm			4.5mb
GRR	82.58	339	eP	11	47.10	0.2
	0.7s		11.00nm			4.8mb
MBH	82.85	305	iPd	11	49.60	1.0
SMF	82.85	335	eP	11	48.50	0.2
	0.9s		19.65nm			4.9mb
AVF	82.87	335	eP	11	48.60	0.2
	0.7s		6.60nm			4.6mb
LPL	82.95	333	eP	11	49.60	0.4
	0.7s		6.60nm			4.6mb
LPF	82.96	339	eP	11	49.10	0.3
	0.6s		6.30nm			4.6mb
LPG	82.96	333	eP	11	49.70	0.4
	0.6s		6.30nm			4.6mb
MAF	83.61	336	eP	11	52.90	0.7
	0.7s		18.20nm			5.0mb
TCF	83.66	336	eP	11	52.80	0.3
	0.5s		4.35nm			4.6mb
LSF	83.89	336	eP	11	54.00	0.4
	0.6s		9.90nm			4.8mb
MFF	84.03	337	eP	11	55.00	0.7
	0.6s		9.00nm			4.8mb
FRF	84.71	332	eP	11	58.00	0.3
	0.9s		9.85nm			4.7mb
RJF	84.75	336	eP	11	58.50	0.6
	0.7s		6.60nm			4.6mb
LRG	84.91	332	eP	11	58.80	0.1
	0.6s		6.30nm			4.6mb
CAF	84.94	335	eP	11	59.60	0.7
	0.5s		8.40nm			4.8mb
LMR	84.96	332	eP	11	58.90	-0.1
	0.9s		13.10nm			4.8mb
LFF	85.31	336	eP	12	01.60	0.9

```
       0.5s    10.20nm          4.9mb
LPO    85.42 336 eP     12 02.30   1.0
       0.5s     8.00nm          4.8mb
EPF    87.18 336 eP     12 09.90   0.0
       0.9s     9.00nm          4.7mb
PDCR  147.29  10 ePKP   19 06.80   2.1
     S.D. = 0.9  on  67 of  67 obs.
-------------------------------------
?  OCT  27, 1990  04h 02m 46.21± 2.70s
   22.537 S ±53.9km   63.772 W ±18.8km
   DEPTH = 543.3 ± 52.8 km
 SALTA PROVINCE, ARGENTINA          (129)

CCH    5.59 336 P       04 23.00   1.1
CNCB   6.94 324 P       04 36.00   1.2
SIV    6.99  22 P       04 34.40  -0.3
LPB    7.23 325 eP      04 35.00  -2.5
ZOBO   7.46 326 P       04 40.20   0.2
                i       06 10.00
ARE    9.46 308 iPc     05 00.00   0.2
                eS      06 48.00
PPD   11.55  90 eP      05 20.40  -0.3
BAO   16.41  68 eP      06 10.00   0.5
     S.D. = 1.5  on   8 of   8 obs.
-------------------------------------
?  OCT  27, 1990  04h 35m 38.06± 4.84s
   40.278 N ±39.6km   23.932 E ±11.8km
   DEPTH =  10.0km  (geophysicist)
 GREECE                             (364)

OUR    0.07  34 iPc     35 40.09  -0.3
                eS      35 41.22
SOH    0.70 321 ePc     35 51.06  -0.8
                eS      35 59.74
SRS    0.88 343 ePc     35 55.86   1.0
                eS      36 04.70
KNT    1.18 319 ePd     35 59.50  -0.6
                eS      36 14.86
GRG    1.35 301 ePd     36 03.58   0.7
     S.D. = 1.1  on   5 of   5 obs.
-------------------------------------
&  OCT  27, 1990  06h 43m 10.36s
   59.110 N          152.503 W
   DEPTH =  82.2km
 SOUTHERN ALASKA                    (  2)
      <AGS-P>.

AUE    0.51 300 eP      43 24.06  -0.5
AUI    0.53 296 eP      43 24.14  -0.6
XLV    0.53  49 eP      43 24.29  -0.5
AUH    0.55 298 eP      43 24.97   0.0
CDD    0.62 253 eP      43 25.03  -0.6
OPT    0.66 326 iP      43 25.50  -0.5
                eS      43 37.42
HOM    0.70  38 eP      43 26.24  -0.2
                eS      43 37.80
CNPM   0.77  57 eP      43 26.52  -0.7
                eS      43 38.81
PDB    1.10 309 iP      43 29.91  -1.1
                eS      43 44.84
NNL    1.12  33 eP      43 31.21   0.0
RED    1.32 354 eP      43 33.08  -0.8
RSO    1.36 355 eP      43 33.84  -0.7
RDT    1.47   2 iP      43 34.93  -0.9
                eS      43 53.91
CKL    2.10   2 eP      43 43.53  -0.7
BGL    2.16   1 eP      43 44.50  -0.7
CRP    2.17   4 eP      43 44.76  -0.6
       16 obs. ossociated
-------------------------------------
?  OCT  27, 1990  07h 30m 11.66± 4.91s
   31.372 S ±27.5km   178.960 W ±74.1km
   DEPTH = 503.2 ± 21.4 km
   4.8mb (  2 obs.)
 KERMADEC ISLANDS REGION            (177)

HBZ    6.61 199 eP      31 55.30   0.3
                eS      33 10.40
PUZ    7.07 198 eP      32 00.60   1.0
                eS      33 19.70
NOZ    7.64 198 P       32 05.60   0.2
TAZ    7.79 207 eP      32 08.40   1.4
WLZ    7.86 213 eP      32 07.90   0.1
                eS      33 40.80
UTU    7.87 209 eP      32 10.40   2.5
WHH    8.37 205 eP      32 12.70  -0.4
NGZ    8.97 208 eP      32 19.30  -0.2
CNZ    9.01 208 eP      32 19.50  -0.4
PGZ   10.00 201 eP      32 29.70  -0.5
MNG   10.26 204 P       32 30.50  -2.4
                S       34 21.10
MTW   10.74 203 eP      32 38.20   0.3
CAW   10.84 205 eP      32 37.60  -1.4
MRW   11.08 206 eP      32 40.50  -1.0
                eS      34 35.30
TCW   11.23 207 eP      32 41.60  -1.5
                S       34 39.00
KHZ   12.55 206 P       32 57.80   1.0
DZM   15.98 302 iPc     33 30.20  -1.7
BRS   24.92 272 iPd     34 56.50   0.8
ASPA  42.25 268 eP      37 20.60  -0.9
      0.4s     32.50nm          5.2mb
                eS      43 00.20
WARB  47.56 262 eP      38 02.70   0.0
MTN   49.33 280 eP      38 16.30   0.2
MBL   55.22 265 eP      38 59.10   0.6
NANU  58.31 261 iPc     39 21.60   1.9
      0.4s     6.00nm          4.3mb
KEV  138.88 347 ePKP    48 56.00  15.3X
SUF  144.75 340 iPKP    48 59.50   8.4X
      0.6s     30.70nm
NUR  146.93 339 ePKP    49 06.40  11.7X
      0.8s     36.90nm
BCAO 148.56 215 iPKPd   49 12.50  13.7X
      0.6s     13.00nm
NB2  149.58 350 PKP     49 13.40  14.5X
      0.7s      5.20nm
HFS  150.02 347 ePKP    49 13.60  14.1X
      1.0s     11.60nm
JVI  150.86 280 ePKP    49 17.00  15.3X
MML  150.87 281 ePKP    49 18.00  16.2X
MBH  150.88 276 ePKP    49 17.00  15.2X
     S.D. = 1.3  on  23 of  32 obs.
-------------------------------------
&  OCT  27, 1990  07h 50m 37.27s
   63.079 N          150.054 W
   DEPTH = 100.0km
 CENTRAL ALASKA                     (  1)
      <AGS-P>.

HUR    0.22 118 eP      50 51.39   1.4
                eS      51 02.27
RND    0.64  58 iP      50 54.12  -0.3
                eS      51 06.91
CUT    0.68 188 iP      50 54.58  -0.2
                eS      51 07.83
MCK    0.83  37 iP      50 55.79  -0.4
                eS      51 09.39
SKT    1.30 212 iP      51 00.77  -0.7
                eS      51 18.73
GHO    1.41 158 eP      51 02.83  -0.1
PWA    1.44 177 eP      51 03.22   0.1
SML    1.51 147 eP      51 03.51  -0.5
PLRM   1.55 163 eP      51 03.84  -0.7
PMR    1.55 163 iPd     51 03.90  -0.6
NEA    1.57  16 iP      51 03.80  -0.9
WRH    1.65  31 iP      51 04.73  -1.0
SUA    1.65 192 eP      51 05.63  -0.3
SCM    1.78 133 eP      51 06.82  -0.7
KNK    1.83 155 eP      51 07.63  -0.6
PMS    1.86 173 eP      51 08.08  -0.4
                eS      51 31.31
CCB    1.86  31 iP      51 07.31  -1.2
HDA    1.92  45 iP      51 08.17  -1.1
DDM    2.01  67 eP      51 10.69   0.1
TOA    2.04 117 iPc     51 10.60  -0.4
CRP    2.07 209 eP      51 10.76  -0.7
FBA    2.08  28 iPd     51 10.40  -1.0
PAX    2.09  91 eP      51 11.27  -0.4
BGL    2.13 212 eP      51 11.83  -0.3
SDG    2.14 103 eP      51 11.79  -0.5
CKL    2.17 211 eP      51 12.73   0.0
GLM    2.25  30 iP      51 12.51  -1.2
KLU    2.50 128 iP      51 15.67  -1.5
GLI    2.61 146 eP      51 16.47  -2.1
VLZ    2.62 137 eP      51 16.38  -2.2
TTA    2.72 270 iPd     51 19.20  -0.9
RDT    2.75 205 eP      51 20.69   0.2
KNIM   2.95 157 eP      51 20.91  -2.3
SEW    3.00 174 eP      51 22.50  -1.2
NNL    3.11 192 eP      51 25.74   0.5
GLB    3.35 117 eP      51 27.00  -1.6
CNPM   3.61 190 iP      51 30.94  -1.2
TGL    4.13 121 eP      51 37.02  -2.4
BALM   4.17 116 iP      51 37.70  -2.2
       39 obs. ossociated
-------------------------------------
%  OCT  27, 1990  08h 59m 03.39± 2.05s
   41.688 N ± 9.2km   27.619 E ±18.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      MD 2.2 (ISK).

DMK    0.17  38 iPg     59 07.00  -0.2
                iSg     59 10.30
CTT    0.81 131 iPg     59 18.40  -0.8
ISK    1.25 119 ePn     59 26.00  -0.6
BNT    1.35 170 iPn     59 28.40   0.2
EDC    1.35 172 ePn     59 28.00  -0.2
HRT    1.77 119 ePn     59 36.00   1.7
     S.D. = 1.1  on   6 of   6 obs.
-------------------------------------
%  OCT  27, 1990  09h 05m 58.79± 0.69s
   40.427 N ±11.0km   15.472 E ±13.4km
   DEPTH =   9.4 ±  6.8 km
 SOUTHERN ITALY                     (390)

SGO    0.18 316 P       06 02.00  -0.8
                eSg     06 07.00
MGR    0.30 168 P       06 04.30  -0.7
                eSg     06 11.10
MMN    0.67 143 P       06 10.60  -1.5
ORI    0.83 116 P       06 14.00  -0.9
                eSg     06 25.50
CSI    0.90 136 P       06 15.90  -0.3
TDS    1.02 139 P       06 18.60   0.5
                eSg     06 31.50
ROI    1.20 135 P       06 22.70   1.5
CZI    1.31 157 P       06 23.70   0.6
DUI    1.45 328 P       06 25.00  -0.2
                eSn     06 43.50
SDI    1.79 316 P       06 31.00   1.0
                eSn     06 52.50
     S.D. = 1.1  on  10 of  10 obs.
-------------------------------------
?  OCT  27, 1990  09h 22m 56.32± 6.50s
    0.831 N ±43.1km   78.551 W ±16.4km
   DEPTH =  10.0km  (geophysicist)
 COLOMBIA-ECUADOR BORDER REGION  (106)
      Felt (IV) at Otavalo, Ecuador.

COTA   0.54 157 iP+     23 07.40   0.1
                S       23 11.50
CAYA   0.94 143 iP      23 14.50  -0.1
                S       23 18.80
YANA   0.94 181 P       23 14.70   0.1
QUR    1.00 179 eP      23 15.30  -0.2
                S       23 22.50
GGP    1.00 183 iPd     23 15.80   0.1
OTO    1.03 179 iPd     23 15.80  -0.2
                iS      23 23.10
VC1    1.47 174 P       23 23.40   0.1
                S       23 36.60
TUNG   2.24 177 eP      23 37.80   3.5X
     S.D. = 0.2  on   7 of   8 obs.
-------------------------------------
?  OCT  27, 1990  09h 41m 08.80± 6.44s
   44.170 N ±18.6km    7.771 E ±69.3km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                     (545)
      ML 2.2 (LDG).

SBF    0.39 210 Pg      41 16.70  -0.1
                Sg      41 23.00
FRF    1.02 234 Pg      41 28.30   0.3
                Sg      41 39.60
LMR    1.24 228 Pg      41 32.00   0.2
                Sg      41 48.00
LRG    1.25 235 Pg      41 31.60  -0.3
                Sg      41 47.20
LPG    1.51 332 Pg      41 36.20   0.0
                Sg      41 55.00
     S.D. = 0.4  on   5 of   5 obs.
-------------------------------------
%  OCT  27, 1990  10h 12m 19.21± 1.26s
    0.310 N ± 9.4km   78.359 W ±10.8km
   DEPTH =  10.0km  (geophysicist)
 COLOMBIA-ECUADOR BORDER REGION  (106)

COTA   0.03  41 iP+     12 21.70   0.0
                eS      12 25.20
```

27d 10h

CAYA	0.44	121	P	12	28.20	-0.1
			eS	12	33.50	
QUR	0.51	199	eP	12	29.40	-0.2
			S	12	36.40	
GGP	0.54	206	P+	12	30.10	-0.1
			S	12	38.30	
VC1	0.94	183	P	12	38.00	0.4
			eS	12	51.00	

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

? OCT 27, 1990 10h 38m 21.49± 1.23s
39.111 N ± 8.2km 27.585 E ±15.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZM	0.76	200	ePg	38	36.30	0.0
			iSg	38	46.80	
EZN	1.21	307	ePn	38	44.00	0.0
EDC	1.25	10	ePn	38	44.00	-0.8
BNT	1.27	12	iPn	38	45.80	0.7

S.D. = 1.1 on 4 of 4 obs.

? OCT 27, 1990 11h 26m 45.15± 7.20s
0.152 N ±20.8km 77.875 W ±47.5km
DEPTH = 10.0km (geophysicist)
COLOMBIA-ECUADOR BORDER REGION (106)

CAYA	0.13	237	iP	26	48.60	-0.1
			S	26	51.50	
COTA	0.50	291	iP	26	55.40	0.0
QUR	0.73	244	eP	27	00.00	0.2
			S	27	10.50	
YANA	0.75	249	eP	27	00.00	-0.1
			eS	27	11.00	
GGP	0.79	246	iP+	27	00.80	-0.1
			S	27	12.90	
VC1	0.95	214	iP+	27	03.60	0.1
			eS	27	18.00	

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

% OCT 27, 1990 11h 29m 27.62± 1.54s
40.237 N ±17.1km 29.230 E ± 7.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.4 (ISK).

IZI	0.21	62	iPg	29	32.40	0.1
			iSg	29	35.90	
KCT	0.67	271	iPg	29	40.30	-0.6
MRT	0.67	30	ePg	29	40.80	-0.2
BNT	1.01	277	iPg	29	47.80	1.1
			iSg	30	01.80	
EDC	1.05	276	iPg	29	47.00	-0.4
CTT	1.09	326	iPg	29	48.20	0.0

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

OCT 27, 1990 12h 21m 41.40± 0.92s
38.094 N ± 5.4km 22.053 E ± 5.9km
DEPTH = 82.6 ± 17.9 km
GREECE (364)

EVR	0.84	347	eP	21	59.50	0.4
ITM	0.92	186	eP	22	00.40	0.5
AGG	0.95	13	iPd	21	59.62	-0.7
			eS	22	13.20	
VLS	1.16	275	eP	22	02.90	0.1
ATH	1.32	95	eP	22	04.90	0.1
NEO	1.52	37	eP	22	07.00	-0.5
VLI	1.54	153	eP	22	07.40	-0.4
IGT	1.97	317	ePd	22	13.05	-0.4
IGT	1.97	317	ePd	22	13.24	-0.2
LIT	2.03	9	ePd	22	14.00	-0.4
			eS	22	39.40	
KZN	2.22	354	eP	22	18.40	1.4
FNA	2.74	349	ePc	22	24.53	0.5
SOH	2.90	20	ePd	22	26.52	0.2
KNT	3.13	12	ePd	22	29.64	0.2
OHR	3.16	343	ePn	22	29.00	-1.0
SRS	3.24	21	ePc	22	31.00	0.0
VAY	3.25	7	ePn	22	32.00	1.0
SKO	3.90	353	ePn	22	39.50	-0.7

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

OCT 27, 1990 12h 22m 18.18± 1.81s
45.380 N ± 6.5km 6.559 E ±14.1km
DEPTH = 10.0km (geophysicist)

FRANCE (538)
ML 2.5 (GEN).

LPL	0.18	42	Pg	22	22.40	0.0
			Sg	22	25.80	
BNI	0.34	166	P	22	24.80	-0.4
			eSg	22	30.00	
LSD	0.43	79	P	22	26.61	-0.4
			S	22	33.48	
RRL	0.49	161	P	22	27.94	-0.2
			S	22	35.22	
RSP	0.54	115	P	22	29.27	0.1
			S	22	37.58	
PZZ	0.96	156	P	22	36.76	0.3
			S	22	49.27	
ORX	1.03	75	P	22	38.00	0.2
			S	22	51.43	
STV	1.26	154	P	22	41.85	0.2
ENR	1.31	152	P	22	42.59	0.2

S.D. = 0.3 on 9 of 9 obs.

OCT 27, 1990 12h 47m 20.35± 0.12s
18.321 N ± 2.5km 63.304 W ± 2.3km
DEPTH = 63.2km (10 depth phases)
5.2mb (59 obs.)
LEEWARD ISLANDS (92)
Felt (IV) on St. Martin and (II) on Guadeloupe. Felt on St. Barthelemy. Also felt at Roosevelt Roads, Puerto Rico.

NEV	1.37	149	ePc	47	44.95	1.2
BPA	1.87	132	eP	47	51.14	0.4
LPR	2.44	270	P	47	58.90	0.2
CPD	2.50	264	P	48	00.40	0.9
SEG	2.57	138	ePc	48	00.91	0.5
			S	48	30.90	
SJG	2.71	266	iP	48	03.30	0.8
PAG	2.76	145	eP	48	03.90	0.7
			S	48	38.00	
BTG	2.77	147	eP	48	04.02	0.8
DOG	2.79	144	ePc	48	03.91	0.3
SFG	2.88	135	ePc	48	05.52	0.7
DEG	2.93	133	eP	48	05.31	-0.3
MGG	3.05	141	ePc	48	08.06	0.8
PORP	3.18	266	P	48	09.80	0.7
BBL	3.29	148	eP	48	11.17	0.6
MCP	3.62	272	P	48	14.80	-0.4
FDF	4.12	150	eP	48	22.41	0.0
	0.2s		9.25nm			
			S	49	09.40	
BIM	4.35	150	eP	48	25.48	-0.1
MVM	4.40	148	eP	48	26.15	-0.1
			S	49	15.80	
UPA	18.29	242	(P)	51	31.00	-0.4
BLA	24.08	325	P	52	31.50	0.4
	1.2s		113.64nm			5.2mb
FVM	30.73	315	P	53	32.00	0.3
NNA	32.95	205	eP	53	50.50	-0.7
	0.8s		11.19nm			4.7mb
			i	54	06.10	64km
TUL	33.60	308	iPc	53	56.80	0.1
	1.3s		55.80nm			5.3mb
SIO	33.92	307	eP	54	00.00	0.4
SIV	34.17	176	P	53	59.00	-2.7
ZOBO	34.70	188	P	54	04.70	-2.2
	0.9s		26.60nm			5.2mb
			S	59	32.00	
			LR	03	52.00	
LPB	34.95	188	P	54	07.00	-1.9
			e	59	44.00	
SOB1	35.18	139	eP	54	11.00	0.5
CNCB	35.21	188	P	54	10.00	-1.3
			i	59	36.00	
MEO	35.34	305	iPd	54	10.30	-1.4
CCH	35.59	185	P	54	14.00	-0.2
CAI	35.72	131	iPd	54	15.00	0.0
SCH	36.53	357	eP	54	22.00	0.6
PDCR	38.84	140	eP	54	39.80	-1.4
			e	56	51.30	
ALQ	41.63	302	ePc	55	04.00	-0.3
	0.9s		20.59nm			4.9mb
			e	55	21.00	68km
ANMO	41.63	302	P	55	05.20	0.9
	1.0s		27.50nm			5.0mb
PPD	41.78	163	eP	55	05.20	-0.2
GOL	42.03	309	P	55	07.80	0.2
	1.0s		13.75nm			4.7mb
VAO	44.06	158	eP	55	24.20	0.2
FRB	45.53	357	eP	55	36.00	0.9
	0.5s		22.00nm			5.3mb
BW06	45.97	312	P	55	39.40	0.2
	1.0s		33.33nm			5.2mb
FFC	46.79	330	eP	55	44.50	-0.7
	0.5s		10.00nm			5.0mb
DUG	47.68	308	P	55	53.20	0.6
	1.0s		17.50nm			5.0mb
			pP	56	10.00	66km
LRM	48.86	315	eP	56	02.00	0.2
TPC	49.34	299	eP	56	06.00	0.5
BAR	49.77	298	eP	56	09.00	0.3
PLM	49.96	298	eP	56	11.00	0.6
GSC	50.07	301	eP	56	11.00	0.0
PEC	50.25	299	P	56	13.20	0.8
			pP	56	28.00	56km
RVR	50.43	299	eP	56	14.00	0.3
CLC	50.76	302	eP	56	16.00	-0.2
SBB	50.85	300	eP	56	16.00	-1.0
MWC	51.01	299	eP	56	18.00	-0.4
ISA	51.45	301	eP	56	22.00	0.5
ABL	52.01	300	P	56	26.00	0.0
			pP	56	43.20	67km
FRI	52.55	303	eP	56	29.50	-0.2
NEW	52.61	317	P	56	29.20	-0.9
	1.0s		18.75nm			5.1mb
			pP	56	45.60	63km
SYP	52.62	300	eP	56	31.00	0.6
BCH	52.73	301	P	56	31.80	0.6
			pP	56	49.00	67km
CMB	53.18	304	eP	56	34.50	0.1
EPLA	53.49	53	eP	56	37.00	0.4
LLA	53.51	302	eP	56	37.20	0.4
EJIF	53.66	58	eP	56	39.00	1.2
PRS	53.84	302	eP	56	38.70	-0.5
ORV	54.18	306	eP	56	41.80	0.1
MIN	54.34	307	eP	56	42.00	-1.0
PNT	54.48	318	eP	56	48.00	4.3
	0.5s		3.00nm			4.6mb
LBFM	54.66	308	P	56	45.50	0.1
			pP	57	01.20	59km
GUD	55.01	53	eP	56	48.20	0.3
TOL	55.02	54	iPd	56	48.50	0.6
	1.0s		50.00nm			5.5mb
WDC	55.07	307	eP	56	45.80	-2.4
EBAN	55.10	56	eP	56	49.00	0.5
FHC	56.19	307	eP	56	56.80	0.6
YKA	56.46	334	eP	56	56.50	-1.3
	0.6s		12.50nm			5.1mb
LKO	56.50	91	Pc	56	57.18	-1.7
	0.7s		28.50nm			5.4mb
ETOR	56.62	53	eP	57	00.40	1.0
TIC	57.86	94	Pc	57	07.32	-1.0
	0.9s		44.00nm			5.6mb
LIC	57.98	94	Pc	57	08.22	-0.9
	0.6s		20.50nm			5.4mb
	Z 22s		0.10um			3.9Msz
LPF	58.11	44	eP	57	09.00	-0.6
	0.9s		16.40nm			5.2mb
KIC	58.21	94	Pc	57	09.98	-0.8
	0.6s		30.50nm			5.6mb
EKA	58.22	36	P	57	11.00	0.7
	1.4s		54.60nm			5.5mb
GRR	58.28	44	eP	57	10.40	-0.4
	0.8s		18.80nm			5.3mb
MFF	58.53	46	eP	57	12.40	-0.2
	1.1s		51.30nm			5.6mb
EPF	58.56	50	eP	57	13.10	0.2
	0.9s		39.30nm			5.5mb
FLN	58.58	44	eP	57	12.40	-0.5
	0.9s		32.75nm			5.5mb
LDF	58.79	44	eP	57	13.90	-0.5
	0.9s		22.95nm			5.3mb
LFF	58.99	48	eP	57	15.20	-0.6
	0.9s		16.40nm			5.2mb
LPO	59.28	48	eP	57	17.40	-0.5
	0.8s		16.10nm			5.2mb
RJF	59.56	48	eP	57	19.10	-0.7
	0.8s		17.45nm			5.2mb
LSF	59.65	47	eP	57	19.80	-0.6
CAF	59.92	48	eP	57	21.80	-0.5
TCF	60.12	47	eP	57	22.90	-0.7
	0.8s		22.15nm			5.3mb
MAF	60.36	47	eP	57	24.60	-0.6
	0.7s		5.50nm			4.8mb

```
BGF     60.58  46 eP     57 25.80  -0.9
        0.8s    11.40nm         5.1mb
PYM     60.64  47 P      57 27.56   0.4
AGO     60.74  47 P      57 28.06   0.2
LBL     60.78  48 P      57 28.47   0.5
GRC     60.79  46 P      57 27.80  -0.3
AVF     60.95  46 eP     57 28.30  -0.8
        0.9s    21.30nm         5.3mb
SSF     61.07  46 eP     57 28.90  -1.1
        1.1s    31.75nm         5.4mb
PLDF    61.08  47 P      57 30.20   0.0
SMF     61.27  46 eP     57 30.60  -0.8
        0.9s    19.65nm         5.2mb
LOR     61.32  46 eP     57 30.60  -1.2
        0.9s    35.20nm         5.5mb
      Z  20s     0.20um         4.3Msz
LBF     61.39  46 eP     57 30.90  -1.3
        0.9s    13.90nm         5.1mb
DOU     62.02  43 Pd     57 36.30   0.0
                  ec     58 16.60 171kmX
DAG     62.61  10 iPd    57 39.90   0.0
        1.0s    39.00nm         5.5mb
MEM     62.96  42 P      57 42.40  -0.1
HAU     63.04  45 eP     57 42.00  -1.2
        1.0s    14.00nm         5.0mb
      Z  20s     0.20um         4.3Msz
LPL     63.24  48 eP     57 44.70  -0.1
        0.7s    17.10nm         5.2mb
LPG     63.26  48 eP     57 44.90  -0.1
        0.6s    12.15nm         5.1mb
BSF     63.34  45 eP     57 43.80  -1.4
        0.9s    14.75nm         5.0mb
CDF     63.68  45 eP     57 46.40  -1.0
        1.0s    16.00nm         5.0mb
MBC     64.51 347 ePc    57 52.50   0.2
        0.7s    38.00nm         5.5mb
INK     65.82 337 ePd    58 00.00  -0.8
        1.1s    47.00nm         5.4mb
                  pP     58 18.00  67km
GRF     66.29  43 eP     58 04.10   0.0
        1.4s    28.00nm         5.0mb
      Z  18s     0.10um         4.1Msz
SOTA    66.33  46 iPc    58 04.60   0.0
        0.7s    18.60nm         5.2mb
WATA    66.57  46 iPc    58 05.70  -0.5
        0.8s     9.60nm         4.8mb
NB2     66.65  31 P      58 06.70   0.4
        0.9s    31.20nm         5.3mb
CLL     67.40  41 iPd    58 10.90  -0.2
        1.3s    31.00nm         5.1mb
HFS     67.82  32 eP     58 13.30  -0.3
        0.5s     2.70nm         4.5mb
KHC     67.84  44 P      58 14.50   0.5
PRU     68.42  43 Pc     58 17.50  -0.1
        1.1s    22.90nm         5.0mb
                  e      58 39.50  85kmX
LJU     68.68  47 e(P)   58 19.50   0.3
KSP     69.49  42 ePd    58 24.30   0.2
UPP     69.80  32 iP     58 25.50  -0.2
ZST     70.24  45 eP     58 28.10  -0.6
SRO     71.09  45 eP     58 31.20  -2.6
FBA     71.25 333 iPd    58 34.30  -0.2
KRA     71.89  42 eP     58 39.10   0.5
        0.7s    21.00nm         5.2mb
SPC     72.19  43 eP     58 40.60  -0.1
KEV     73.08  21 iP     58 46.20   1.0
        0.7s    25.40nm         5.3mb
SOD     73.23  24 iP     58 46.70   0.6
NUR     73.25  31 eP     58 46.00  -0.3
        0.8s    21.90nm         5.1mb
IMA     73.58 335 iPc    58 48.40   0.0
        0.7s    12.40nm         4.9mb
SUF     73.65  29 iP     58 49.20   0.6
        0.7s    13.00nm         5.0mb
OHR     73.84  51 eP     58 50.30   0.0
SKO     74.15  51 iP     58 52.00   0.0
VAY     75.11  51 eP     58 57.70   0.2
VTS     75.32  50 iPd    59 00.00   1.1
KKB     75.38  50 iPd    59 01.00   1.9
MMB     75.91  51 iPd    59 03.00   0.9
PGB     76.03  50 iPd    59 04.00   1.2
RZN     76.61  50 iPd    59 07.00   0.8
BCAO    80.88  88 iPc    59 30.00   0.3
        0.6s    48.00nm         5.6mb
                  i      59 45.60  55km
ELL     81.76  54 eP     59 35.60   1.6
ADI     87.05  56 iPd    00 02.60   2.0
JVI     87.54  57 iPd    00 05.20   2.3
MBH     87.89  59 iPd    00 06.80   2.2
WIN     88.44 114 iPd    00 09.10   1.5
        0.5s    14.08nm         5.4mb
MAW    120.23 159 iPKPd  06 05.40   0.3
GKN    124.47  35 PKP    06 14.68   0.0
        0.8s    29.00nm
KKN    124.98  34 PKP    06 15.76   0.0
        0.6s     9.00nm
DMN    125.03  35 PKP    06 15.84  -0.1
GUN    125.20  34 PKP    06 16.38   0.0
PKI    125.23  34 PKP    06 15.96  -0.4
COO    145.86 242 iPKPc  06 55.00   0.9
CAN    146.76 233 ePKP   06 56.00   0.6
BWA    147.54 234 ePKP   06 57.20   0.6
TOO    148.34 227 ePKP   06 59.00   1.2
RMQ    149.33 249 e(PKP) 06 59.00  -0.6
                  i      07 04.00
                  i      07 21.00
CMS    150.61 238 ePKP   07 02.50   1.1
        1.1s     8.00nm
                  i      07 07.40
ASPA   163.08 249 ePKP   07 16.30  -0.7
        1.3s     8.40nm
WB5    163.23 262 ePKP   07 17.50   0.3
     S.D. = 0.8  on 162 of 163 obs.
-----------------------------------------
   OCT  27, 1990  13h 25m 25.93± 0.31s
   44.204 N ± 3.6km   10.881 E ± 3.1km
   DEPTH =  17.4 ±  3.5 km
 NORTHERN ITALY                     (545)
       ML 3.3 (LDG). MD 3.0 (TRI).

MME      0.13 266 Pc     25 37.60   7.4X
                  eSg    25 43.80
BDI      0.25 235 Pd     25 36.90   5.2X
                  eSg    25 44.20
PII      0.55 208 Pd     25 39.20   2.5
                  eSg    25 47.30
PGD      0.69 118 P      25 40.70   1.5
                  eSg    25 48.90
SFI      0.75 112 P      25 41.40   1.2
                  eSg    25 49.90
CRE      0.96 126 Pd     25 44.20   0.3
                  eSg    25 56.20
RSM      1.17 103 P      25 47.60   0.4
BOB      1.17 299 P      25 50.80   3.4X
ARV      1.65 115 P      25 54.30   0.0
                  eSn    26 12.30
PCP      1.71 282 P      25 55.72   0.6
                  S      26 15.53
ASS      1.72 131 P      25 53.50  -1.8
                  eSn    26 12.60
MDI      1.78 333 P      25 57.10   1.0
                  eSn    26 19.00
FIN      1.92 271 P      25 58.49   0.3
CTI      1.92  16 P      25 57.90  -0.4
                  eSn    26 20.60
PGF      2.15 220 Pn     26 00.80  -0.8
                  Sn     26 24.80
ROB      2.17 273 P      26 01.87   0.1
IMI      2.18 263 P      26 01.77  -0.2
MNS      2.24 144 P      26 01.00  -1.9
TMA      2.37 324 iP     26 05.40   0.6
ENR      2.49 272 P      26 07.28   0.9
VDL      2.49 337 iP     26 07.60   1.1
ORX      2.51 306 P      26 06.49  -0.2
SBF      2.51 263 Pn     26 06.90   0.3
                  Sn     26 35.10
OSS      2.54 348 iP     26 09.00   1.9
TRI      2.54  53 iPnd   26 05.00  -2.0
                  iSn    26 33.00
STV      2.56 272 P      26 07.92   0.5
OGA      2.67   2 iPnc   26 10.00   1.0
PZZ      2.73 278 P      26 11.31   1.4
FVI      2.74  29 P      26 09.30  -0.5
                  eSn    26 41.60
SCE      2.89  11 iPnd   26 12.90   0.7
LSD      2.93 297 P      26 11.59  -1.2
LLS      2.98 334 iP     26 14.20   0.8
SOTA     3.03   4 iPc    26 14.50   0.5
        0.3s    27.70nm
                  i      26 15.40
                  i      26 16.70
                  i      26 51.60
                  e      27 08.00
DIX      3.09 309 eP     26 15.80   0.7
FRF      3.13 260 Pn     26 15.20  -0.2
                  Sn     26 49.60
WATA     3.17   9 iPc    26 17.10   1.0
        0.2s    17.40nm
                  i      26 17.90
                  i      26 57.00
                  i      27 12.00
LPG      3.21 295 Pn     26 16.80   0.0
LPL      3.23 295 Pn     26 17.00   0.0
                  Sn     26 53.20
SAX      3.23 341 eP     26 18.50   1.4
LMR      3.28 256 Pn     26 17.00  -0.6
                  Sn     26 53.00
LRG      3.36 259 Pn     26 18.50  -0.1
                  Sn     26 55.20
ZLA      3.71 333 iP     26 23.50  -0.2
SLE      3.93 336 iP     26 26.10  -0.7
FEL      4.18 332 eP     26 29.35  -1.1
BSF      4.61 323 Pn     26 35.70  -0.9
                  Sn     27 25.20
CDF      4.89 331 Pn     26 39.30  -1.2
                  Sn     27 31.70
HAU      4.94 322 Pn     26 39.80  -1.3
                  Sn     27 33.20
LBF      5.59 302 Pn     26 49.20  -1.1
                  Sn     27 48.20
LOR      5.79 304 Pn     26 51.30  -1.8
                  Sn     27 53.60
     S.D. = 1.1  on  46 of  49 obs.
-----------------------------------------
*  OCT  27, 1990  14h 04m 41.81± 0.98s
   34.154 N ±11.4km  139.336 E ±12.3km
   DEPTH =  10.0km  (geophysicist)
   4.6mb (  7 obs.)  3.9Msz (  1 obs.)
 NEAR S. COAST OF HONSHU, JAPAN   (230)

IIDJ     1.77 319 iPd    05 12.10  -0.6
                  S      05 41.30
CHJJ     1.91 352 iPd    05 15.60   0.9
                  S      05 45.90
KAKJ     2.16  18 P      05 16.90  -1.4
                  S      05 47.50
MAT      2.55 339 iPd    05 24.70   0.7
                  iS     06 06.00
TKSJ     4.39 269 P      05 44.70  -5.3X
OFUJ     5.26  20 P      06 00.40  -2.0
                  S      07 02.80
SSE     15.59 264 eP     08 21.00  -2.2
BJI     19.36 294 eP     09 03.00  -7.4X
LZH     29.00 284 eP     10 42.50  -1.5
        2.0s    21.00nm         4.6mb
      Z  18s     0.24um         3.9Msz
                  pP     10 52.50  36kmX
GUN     45.80 277 P      13 06.64   0.6
PKI     46.31 277 P      13 09.92  -0.1
        0.8s     5.00nm         4.6mb
KKN     46.34 277 P      13 10.48   0.4
        0.8s    10.00nm         4.9mb
DMN     46.55 277 P      13 12.04   0.2
GKN     46.78 278 P      13 14.00   0.4
        0.8s     8.00nm         4.8mb
KEV     65.53 339 eP     15 28.00   0.9
SOD     66.96 337 iP     15 38.40   2.1X
SUF     69.79 333 iP     15 55.20   1.3
        0.7s     5.20nm         4.8mb
NUR     71.68 332 eP     15 59.90  -5.5X
HFS     76.00 335 eP     16 31.70   1.2
        0.5s     2.00nm         4.5mb
NB2     76.17 337 P      16 33.20   1.7
        0.7s     1.90nm         4.3mb
ZOBO   149.58  61 PKP    24 29.00  -0.5
LPB    149.77  61 (PKP)  24 38.00   8.4X
CNCB   150.03  62 PKP    24 30.00  -0.2
     S.D. = 1.2  on  18 of  23 obs.
-----------------------------------------
?  OCT  27, 1990  14h 49m 00.57± 2.83s
   8.451 S ±22.7km  128.127 E ±13.2km
   DEPTH =  62.9 ± 22.2 km
   4.4mb (  4 obs.)
 TIMOR SEA                          (290)

MTN      5.27 146 eP     50 20.00   1.3
KNA      7.28 175 iPd    50 47.50   0.8
        0.3s    72.00nm         5.9mb X
                  eS     52 08.00
WB5     12.87 153 eP     51 58.90  -3.7X
                  eS     54 17.50
```

27d 14h

MBL 14.96 211 eP 52 28.20 -1.6
0.3s 10.00nm 4.5mb
eS 55 05.00
TRT 15.36 272 ePd 52 34.70 -0.3
ASPA 16.11 161 ePd 52 42.20 -2.4
0.4s 20.80nm 4.6mb
eS 55 32.00
QIS 16.37 139 eP 52 44.00 -3.8X
i 52 51.00
eS 55 41.00
WARB 17.69 184 eP 53 04.00 -0.3
0.4s 9.00nm 4.3mb
eS 56 12.00
NANU 18.53 219 eP 53 15.00 0.4
0.3s 7.00nm 4.3mb
e 53 19.50
eS 56 34.00
MEKA 20.23 206 eP 53 33.60 0.5
eS 57 10.00
OLP 23.64 142 iPd 54 09.60 2.6X
BAL 24.49 204 eP 54 21.50 6.2X
eS 58 58.00
KLB 24.97 201 eP 54 20.50 0.7
eS 59 03.00
MUN 25.90 204 eP 54 29.00 0.6
eS 59 23.00
NWAO 26.36 201 eP 54 33.50 0.8
eS 59 35.00
RMO 26.55 135 eP 54 34.00 -0.5
S.D. = 1.3 on 12 of 16 obs.

? OCT 27, 1990 15h 07m 55.03± 0.85s
0.892 S ±13.7km 129.148 E ±27.1km
DEPTH = 33.0km (normal)
5.0mb (2 obs.) 3.7Msz (1 obs.)
HALMAHERA (267)

MTN 12.04 171 eP 10 45.50 -1.8
eS 13 00.00
KNA 14.77 181 eP 11 22.00 -1.4
TRT 17.79 247 ePc 12 08.90 7.0X
0.7s 64.70nm 4.9mb
WB5 19.55 165 eP 12 18.00 -5.2X
eS 15 53.00
QIS 22.06 153 iPc 12 49.20 0.4
ASPA 23.10 169 iPc 13 00.20 1.0
0.6s 42.00nm 5.1mb
Z 21s 0.30um 3.7Msz
eS 17 14.30
OLP 29.38 152 eP 13 56.00 -1.5
KLB 32.38 198 iPd 14 24.90 1.0
CHG 35.55 305 eP 14 52.80 1.3
KMI 36.36 317 eP 14 53.50 -5.0X
BWA 37.91 154 eP 15 12.60 1.4
CAN 38.92 154 eP 15 19.80 0.2
TOO 39.49 159 eP 15 25.80 1.5
BJI 42.43 345 eP 15 48.00 -0.3
LZH 43.69 330 eP 15 57.00 -1.8
Z 16s 0.24um 4.2MszX
i 16 21.00
MAIO 74.23 308 eP 19 26.00 -5.0X
S.D. = 1.5 on 12 of 16 obs.

? OCT 27, 1990 15h 09m 02.85± 2.86s
29.273 N ±46.4km 83.614 E ±18.6km
DEPTH = 33.0km (normal)
NEPAL (310)

GKN 1.55 144 P 09 29.24 0.6
KKN 2.08 135 P 09 36.26 -0.1
DMN 2.12 141 P 09 36.24 -0.6
PKI 2.32 137 P 09 39.76 0.0
GUN 2.41 124 P 09 41.30 0.1
NDI 5.64 266 eP 10 26.50 0.0
S.D. = 0.5 on 6 of 6 obs.

OCT 27, 1990 15h 49m 14.02± 0.39s
23.467 S ± 3.9km 178.917 E ± 5.3km
DEPTH = 560.9 ± 5.2 km
4.9mb (19 obs.)
SOUTH OF FIJI ISLANDS (171)

SVA 5.34 355 eP 50 47.70 -0.3
eS 52 04.50
VUN 5.45 355 eP 50 48.30 -0.7
SGE 5.92 351 eP 50 54.00 0.7
MBU 6.46 358 eP 50 58.50 0.3
DZM 11.59 274 iPd 51 52.90 4.0X
PUZ 14.57 182 eP 52 17.90 -0.6
WLZ 14.61 191 eP 52 22.20 3.3X
NOZ 15.12 183 P 52 24.80 0.9
MNG 17.34 189 eP 52 44.30 -1.2
0.2s 7.00nm 4.9mb
KIW 17.67 190 eP 52 48.70 0.0
MTW 17.87 188 eP 52 49.90 -0.7
WDW 18.05 198 eP 52 52.70 0.4
MRW 18.06 198 eP 52 52.90 0.5
BLW 18.08 188 P 52 52.20 -0.4
TCW 18.12 191 eP 52 52.90 0.0
THZ 18.92 194 eP 53 00.60 -0.1
KHZ 19.42 192 P 53 04.40 -0.8
0.2s 26.00nm 5.5mb
LTZ 20.04 194 P 53 10.10 -0.9
MMCZ 22.92 198 P 53 36.40 -0.8
MHZ 22.93 198 P 53 36.40 -0.9
BRS 23.91 255 iPc 53 47.50 1.3
COO 25.06 248 ePd 53 57.60 1.2
0.7s 38.00nm 5.1mb
RMQ 27.48 257 eP 54 17.00 -0.6
0.8s 64.00nm 5.3mb
e 54 31.00
CNB 28.22 239 iPc 54 25.90 1.9
0.8s 181.00nm 5.5mb
CAN 28.51 239 eP 54 27.30 0.8
eScP 00 09.30
BWA 28.73 241 eP 54 27.30 -1.2
eScP 00 09.70
CMS 30.34 247 iPc 54 42.60 0.4
0.9s 90.00nm 5.4mb
eS 00 15.10
CTA 30.48 276 iPc 54 43.40 -0.1
1.0s 60.00nm 5.2mb
iS 59 05.60
iScP 00 16.80
OLP 31.52 257 eP 54 53.00 0.8
TOO 31.86 236 iPd 54 56.60 1.6
ADE 36.69 243 iPc 55 35.80 0.6
ASPA 41.13 260 iPc 56 11.00 -0.3
0.7s 31.40nm 5.0mb
iS 01 41.80
iScS 05 05.80
WB5 41.43 266 eP 56 11.00 -2.7X
WARB 47.26 255 eP 56 58.00 -0.9
MBL 54.38 260 eP 57 49.20 -1.6
SBA 54.75 183 iP 57 55.10 2.5
NANU 57.91 257 iPd 58 14.30 -0.0
0.4s 19.00nm 4.8mb
MAT 70.98 326 iPc 59 35.70 -1.2
PRS 81.93 45 eP 00 37.30 1.0
GCC 81.95 44 eP 00 37.10 0.7
PCC 81.99 43 eP 00 37.20 0.6
BCH 82.10 46 ePc 00 37.80 0.5
SAO 82.14 44 eP 00 37.50 0.1
PRI 82.27 45 eP 00 39.30 1.1
BRK 82.29 43 eP 00 38.90 0.8
BKS 82.31 43 eP 00 38.10 -0.1
0.8s 41.00nm 5.0mb
LLA 82.38 45 eP 00 39.30 0.7
ARN 82.44 44 eP 00 39.40 0.5
ABL 82.48 47 iPc 00 39.60 0.2
PLM 83.25 49 eP 00 43.00 -0.2
RVR 83.25 49 eP 00 42.00 -1.0
SBB 83.33 48 eP 00 43.00 -0.5
PEC 83.34 49 ePc 00 43.50 0.0
FRI 83.40 45 eP 00 44.00 0.4
ISA 83.44 47 eP 00 44.00 0.0
CMB 83.57 44 eP 00 44.50 -0.1
WDC 83.78 41 eP 00 46.20 0.8
ORV 83.78 42 eP 00 45.80 0.3
CLC 84.12 47 eP 00 47.00 -0.3
MIN 84.20 41 eP 00 47.80 0.1
GSC 84.37 48 eP 00 49.00 0.4
LBFM 84.63 41 iPc 00 50.20 0.3
TNP 85.64 45 iPc 00 54.40 -0.4
0.8s 9.80nm 4.6mb
GMW 87.96 35 iPc 01 05.30 0.0
LON 87.99 36 iPc 01 05.20 -0.3
TTA 88.37 11 eP 01 06.30 -0.7
RMW 88.43 36 iPc 01 07.50 -0.1
PMR 88.58 15 iPc 01 06.40 -1.4
0.9s 15.63nm 4.9mb
CHTO 88.60 291 iP 01 09.00 0.2
1.0s 3.00nm 4.1mb
PNT 90.71 35 ePc 01 18.00 0.1
0.8s 11.00nm 4.9mb
DAU 90.80 46 iP 01 19.50 0.5
ALO 91.48 52 eP 01 21.80 -0.3
1.0s 5.00nm 4.5mb
ANMO 91.48 52 iP 01 21.80 -0.3
0.8s 4.20nm 4.5mb
IMA 91.66 11 iP 01 21.00 -1.1
0.9s 4.69nm 4.5mb
FBA 91.76 14 e(P) 01 20.30 -2.1
0.9s 7.29nm 4.7mb
LZH 92.33 308 (P) 01 26.00 0.1
1.0s 18.00nm 5.1mb
SLR 123.42 212 ePKP 07 09.00 -0.7
SOD 132.82 346 ePKP 07 19.00 -7.2X
SUF 136.69 342 ePKP 07 33.30 -0.4
1.2s 21.40nm
NUR 138.89 341 ePKP 07 37.00 -0.8
0.4s 7.40nm
NUR 138.89 341 ePKP 07 19.00 -18.8X
NB2 141.50 350 PKP 07 36.20 -6.3X
0.8s 9.20nm
HFS 141.92 348 ePKP 07 36.90 -6.3X
0.7s 10.90nm
JVI 146.78 293 iPKPc 07 55.00 2.8X
ZNT 147.02 293 iPKPc 07 55.70 3.1X
RMN 147.51 290 iPKPc 07 56.80 3.3X
EKA 148.14 2 PKP 07 56.00 2.4
0.9s 14.60nm
KRA 148.79 334 ePKP 07 58.70 3.9X
KSP 149.52 338 iPKP 08 00.60 4.7X
0.7s 43.00nm
CLL 150.15 342 iPKPd 08 01.60 4.8X
0.9s 58.00nm
i 08 10.10
PRU 150.84 339 iPKPc 08 04.00 6.1X
MOX 151.12 343 ePKP 08 04.00 5.7X
VKA 151.65 335 iPKP 08 22.20 23.1X
0.7s 18.20nm
e(Sg) 18 24.00
KHC 151.90 339 PKP 08 06.50 7.0X
LIC 162.44 167 PKP 08 12.90 -0.1
KIC 162.63 168 PKP 08 13.00 -0.3
TIC 162.85 167 PKP 08 13.10 -0.4
S.D. = 0.9 on 80 of 97 obs.

• OCT 27, 1990 16h 15m 49.78± 2.70s
1.031 S ±13.6km 121.393 E ±16.8km
DEPTH = 70.6 ± 25.3 km
4.4mb (1 obs.)
SULAWESI (268)

BKB2 4.50 267 iPd 17 07.00 10.0X
MKS 4.58 265 iPc 16 58.00 -0.2
IPM 21.10 285 ePd 20 31.90 1.3
WB5 22.63 147 eP 20 45.50 -0.3
ASPA 25.56 153 eP 21 13.70 -0.2
0.4s 5.50nm 4.4mb
MEKA 25.58 106 eP 21 13.80 -0.3
CHG 29.59 313 eP 21 51.00 0.5
BJI 41.15 354 eP 23 29.00 0.4
CAN 42.71 146 eP 23 42.60 1.0
e 24 10.80
GUN 44.61 313 P 23 57.14 -0.3
PKI 44.77 312 P 23 57.96 -0.8
KKN 44.98 312 P 24 00.24 -0.1
DMN 45.01 312 P 24 00.22 -0.4
GKN 45.57 312 P 24 04.30 -0.6
S.D. = 0.7 on 13 of 14 obs.

OCT 27, 1990 16h 31m 21.70± 0.51s
6.750 N ± 3.2km 71.949 W ± 3.7km
DEPTH = 40.5 ± 4.7 km
5.0mb (55 obs.) 4.3Msz (8 obs.)
NORTHERN COLOMBIA (99)
Felt at Bucaramongo.

SDV 2.49 31 iPnc 32 02.80 1.9
iSn 32 38.10
TOV 3.70 35 iPnd 32 18.60 0.7
iSn 33 15.50
CEOS 4.24 57 iPd 32 25.50 -0.1
FISA 5.18 30 iPd 32 39.70 0.9
iS 33 16.00
PLAV 5.38 54 eP 32 42.00 0.1
eS 33 45.00
MORO 5.45 41 iPc 32 42.50 -0.2
GUAC 5.75 53 iPc 32 47.00 -0.1

OLLA	6.04	57	iPc	32	50.50	-0.5	MFF	72.64	43	eP	42	46.70	-0.4	SOD	87.12	23	iP	44	05.70	1.4
CAR	6.21	53	iPc	32	53.00	-0.5		0.8s	43.00nm			5.5mb		NUR	87.42	29	eP	44	06.80	0.9
			eS	34	44.00		FLN	72.76	41	eP	42	47.20	-0.6	SUF	87.76	27	eP	44	08.40	1.0
LLAV	6.29	54	iPc	32	54.00	-0.5		0.6s	28.85nm			5.4mb			0.6s	3.70nm			4.8mb	
UPA	7.83	287	ePc+	33	12.00	-4.1X	Z	20s	0.28um			4.5Msz		BCAO	89.97	86	iPd	44	20.20	1.2
CUM	8.53	64	iP	33	23.00	-2.7X	LDF	72.96	41	eP	42	48.30	-0.7		1.3s	24.00nm			5.3mb	
			iS	34	57.60			0.7s	26.45nm			5.3mb				i		44	32.10	
CAYA	8.95	222	eP	33	31.50	-0.5	LFF	73.02	45	eP	42	48.60	-0.8	GKN	138.71	32	PKP	50	46.30	0.1
COTA	9.01	225	P	33	34.00	1.1		1.0s	30.00nm			5.2mb		KKN	139.22	32	PKP	50	47.12	-0.1
YANA	9.50	224	eP	33	39.00	-0.5	LPO	73.30	45	eP	42	50.30	-0.7	DMN	139.27	32	PKP	50	47.40	0.1
GGP	9.55	224	eP	33	39.00	-1.4		1.0s	38.00nm			5.3mb		GUN	139.43	31	PKP	50	47.70	0.0
VC1	9.76	221	eP	33	41.40	-1.8	INK	73.49	340	eP	42	51.50	-0.2	PKI	139.46	32	PKP	50	47.46	-0.3
DVD	10.54	280	P	33	49.50	-3.9X	RJF	73.61	45	eP	42	52.00	-0.8	KOD	145.18	61	ePKP	50	59.00	1.0
PORP	12.37	24	P	34	12.50	-5.6X		0.7s	8.80nm			4.8mb		DIS	146.49	243	ePKP	51	00.00	0.3
FDF	13.24	52	ePc	34	25.80	-3.9X	Z	20s	0.43um			4.7Msz		ASPA	150.01	233	iPKPc	51	05.10	-0.1
	0.1s	1.90nm			4.9mb		LSF	73.74	44	eP	42	52.80	-0.7		0.6s	16.00nm				
			S	34	58.50			0.8s	20.15nm			5.1mb		WB5	151.32	240	ePKP	51	06.00	-1.2
BBL	13.47	49	eP	34	28.00	-4.7X	CAF	73.95	45	eP	42	54.40	-0.4				i	51	18.80	
DEG	14.28	47	eP	34	36.00	-7.3X		0.9s	14.75nm			5.0mb		CHG	153.06	19	ePKP	51	17.40	7.7X
NNA	19.24	195	eP	35	48.00	2.3	MBC	74.08	349	eP	42	55.50	0.5		S.D. = 1.0		on 111 of 122 obs.			
	0.7s	8.22nm			4.1mb			0.8s	15.00nm			5.0mb		----------						
ARE	23.07	179	eP	36	23.00	-2.1	TCF	74.21	44	eP	42	55.60	-0.7		OCT 27, 1990 19h 16m 53.29± 1.43s					
ZOBO	23.18	171	iPc	36	27.00	0.5		1.1s	20.75nm			5.0mb			1.494 N ± 8.7km 99.033 E ±10.5km					
Z	16s	2.03um			4.7MszX		MAF	74.45	44	eP	42	57.10	-0.6		DEPTH = 128.8 ± 13.4 km					
			S	40	38.00			0.7s	7.15nm			4.7mb			4.9mb (19 obs.)					
			LR	45	50.00		BGF	74.68	44	eP	42	58.30	-0.7		NORTHERN SUMATERA					(706)
LPB	23.44	171	P	36	29.80	0.9		0.7s	18.20nm			5.2mb								
CNCB	23.73	171	P	36	33.80	1.9	AVF	75.05	43	eP	43	00.10	-1.0	KLM	3.06	58	eP	17	42.00	0.7
			i	43	30.00			0.8s	9.40nm			4.8mb		IPM	3.65	33	ePc	17	49.10	-0.1
CCH	24.65	167	P	36	42.50	2.0	SSF	75.18	43	eP	43	00.80	-1.1		0.3s	38.60nm				
SIV	25.03	155	P	36	43.20	-0.6		0.6s	4.05nm			4.6mb		KGM	4.31	83	ePd	17	58.80	0.7
JSC	28.71	344	P	37	15.00	-2.3	SMF	75.37	44	eP	43	02.10	-0.9	SNG	5.86	16	eP	18	10.60	-8.5X
RSCP	31.32	338	P	37	39.00	-1.5		0.8s	16.10nm			5.0mb		BDT	15.65	360	eP	20	28.90	0.9
PWLA	31.77	334	P	37	45.00	0.5	LOR	75.44	43	eP	43	02.30	-1.1	LOE	16.03	9	eP	20	33.00	0.2
BAO	32.52	133	eP	37	53.50	2.2		0.7s	15.45nm			5.1mb		CHG	17.21	360	eP	20	46.30	-1.1
SOB1	34.77	117	eP	38	10.60	-0.1	Z	20s	0.13um			4.2Msz		KOD	23.12	293	eP	21	50.70	1.4
PPD	35.03	145	eP	38	12.10	-0.7	DAG	75.48	11	eP	43	02.40	-0.6	GBA	24.52	300	P	22	02.60	0.3
			e	38	18.40			0.7s	5.48nm			4.6mb		HYB	25.61	309	ePd	22	12.00	-0.5
FVM	35.33	334	P	38	15.00	-0.2	LBF	75.50	43	eP	43	02.60	-1.1				e	22	36.00	
TUL	36.33	326	eP	38	23.60	-0.1		0.8s	7.40nm			4.7mb		NANU	28.82	147	eP	22	41.90	0.4
	1.0s	13.30nm			4.8mb		TOA	76.70	332	iPd	43	11.40	1.2	PKI	29.03	334	Pd	22	42.36	-1.4
SIO	36.50	326	eP	38	25.20	0.1		0.8s	28.70nm			5.3mb			0.5s	13.00nm			4.9mb	
MEO	37.15	322	iPd	38	29.70	-0.9	LRG	76.91	47	eP	43	11.20	-0.4	GUN	29.13	336	Pd	22	43.74	-0.9
PDCR	37.84	120	eP	38	35.00	-1.6		0.7s	6.60nm			4.8mb			0.5s	65.00nm			5.6mb	
VAO	38.36	141	eP	38	38.80	-2.1	Z	20s	0.35um			4.7Msz		DMN	29.19	334	Pd	22	43.88	-1.2
JFO	39.86	136	e(P)	38	53.30	-0.1	LMR	77.01	47	eP	43	11.80	-0.4		0.3s	8.00nm			4.9mb	
CBM	40.17	4	P	38	56.60	1.0		0.9s	9.85nm			4.8mb		KKN	29.28	334	Pd	22	44.58	-1.2
ALQ	42.36	316	eP	39	14.00	0.0	FRF	77.12	47	eP	43	12.40	-0.4		0.5s	36.00nm			5.4mb	
	0.9s	6.30nm			4.3mb			0.8s	14.80nm			5.1mb		GKN	29.74	334	Pd	22	48.72	-1.1
ANMO	42.36	316	P	39	14.60	0.6	HAU	77.19	42	eP	43	12.30	-0.9		0.3s	25.00nm			5.4mb	
	1.0s	5.63nm			4.3mb			0.9s	9.85nm			4.8mb		MBL	30.35	139	eP	22	53.70	-1.3
GOL	44.45	323	P	39	31.00	-0.1	Z	20s	0.17um			4.4Msz		MEKA	33.69	147	eP	23	24.30	0.2
	0.7s	11.83nm			4.8mb		LPL	77.29	45	eP	43	14.30	0.3		0.3s	8.00nm			5.0mb	
SCH	48.11	4	eP	40	00.00	0.6		0.7s	12.70nm			5.1mb		NDI	34.13	324	iPd	23	26.80	-1.0
PLM	49.26	309	eP	40	09.00	0.2	LPG	77.30	45	eP	43	14.50	0.3	MTN	34.89	115	iPd	23	32.90	-1.6
GSC	49.98	311	eP	40	15.00	0.8		0.7s	7.70nm			4.8mb			0.3s	19.00nm			5.4mb	
SBB	50.51	310	eP	40	20.00	1.8	BSF	77.47	43	eP	43	13.80	-1.0	COOL	38.46	149	eP	24	04.80	0.4
CLC	50.78	311	eP	40	24.00	3.8X		0.7s	12.15nm			5.0mb		WB5	40.65	123	eP	24	21.50	-1.0
ISA	51.38	311	eP	40	43.00	18.2X	CDF	77.83	42	eP	43	16.00	-0.8				e	26	24.00	
TNP	51.44	314	P	40	25.00	-0.4		0.7s	9.90nm			5.0mb		BJI	41.41	20	eP	24	30.00	1.6
	0.8s	4.51nm			4.5mb		FBA	77.92	335	iPc	43	17.50	0.7		1.0s	7.00nm			4.3mb	
FFC	53.57	339	eP	40	40.00	-0.7		0.4s	2.60nm			4.6mb		QUE	41.73	316	eP	24	31.00	-0.4
	0.8s	16.00nm			5.1mb		PMR	78.00	332	iPc	43	18.00	0.7	ASPA	42.12	129	iPc	24	33.30	-1.3
NEW	56.31	325	P	41	00.00	-0.9		0.8s	11.70nm			5.0mb			0.7s	13.50nm			4.8mb	
	0.8s	8.33nm			4.8mb		ABH	78.10	41	eP	43	19.14	1.0	MAIO	50.35	318	eP	25	38.00	-1.3
			pP	41	27.00	112kmX	IMA	80.51	336	iPc	43	32.00	1.0	BWA	58.44	133	eP	26	39.00	1.0
PNT	58.27	325	ePd	41	15.00	0.4		0.6s	4.10nm			4.6mb		CAN	59.27	133	eP	26	43.70	-0.1
	0.7s	12.00nm			5.1mb		GRC2	80.57	42	eP	43	32.50	1.0	BUL	72.19	248	iPc	28	02.10	-4.5X
YKA	63.73	339	eP	41	50.10	-1.3		1.2s	18.00nm			4.9mb		BCAO	80.41	274	iPd	28	52.90	0.2
	0.7s	24.00nm			5.4mb		Z	18s	0.10um			4.2Msz			0.5s	15.00nm			5.0mb	
LKO	65.67	83	Pd	42	04.38	-0.4	NB2	80.82	29	P	43	34.00	1.4	SUF	80.88	334	eP	28	54.10	0.1
	0.6s	42.50nm			5.7mb			0.9s	25.40nm			5.2mb			0.8s	6.50nm			4.5mb	
TIC	66.42	86	Pd	42	09.58	0.0	BHG	81.57	43	iPc	43	38.90	2.1	NUR	81.04	331	eP	28	55.20	0.3
	0.8s	18.00nm			5.2mb			0.9s	18.00nm			5.1mb		SOD	81.90	338	eP	29	02.00	2.7
LIC	66.45	86	Pd	42	09.98	0.3	CLL	81.62	39	iP	43	37.90	1.0	HFS	86.38	330	eP	29	22.20	0.2
	0.7s	35.00nm			5.5mb					e	43	45.00			0.4s	3.60nm			4.7mb	
Z	22s	0.13um			4.1Msz		HFS	82.02	30	eP	43	38.70	-0.1	NB2	87.64	331	P	29	28.50	0.4
KIC	66.72	86	Pd	42	11.88	0.4		0.8s	10.00nm			4.9mb			0.8s	3.20nm			4.4mb	
	0.7s	50.00nm			5.7mb		Z	18s	0.10um			4.2Msz		CDF	90.06	318	eP	29	39.90	0.0
LPF	72.27	42	eP	42	44.10	-0.8				LR	12	24.00		BSF	90.41	318	eP	29	42.20	0.7
	0.7s	17.65nm			5.1mb		PRU	82.62	41	eP	43	42.50	0.3	LPG	90.55	315	eP	29	43.00	0.6
GRR	72.45	41	eP	42	45.30	-0.6				e	43	51.40			0.8s	6.70nm			4.8mb	
	0.6s	18.95nm			5.2mb		KSP	83.71	40	eP	43	48.50	0.8	LPL	90.56	315	eP	29	43.00	0.6
EKA	72.47	34	Pc	42	46.20	0.2	UPP	84.00	30	iP	43	49.00	0.1		0.7s	7.70nm			4.9mb	
	1.0s	14.20nm			4.9mb		ZST	84.39	42	eP	43	52.10	0.9	HAU	90.70	318	eP	29	43.00	0.3
EPF	72.49	47	eP	42	46.30	-0.1	KRA	86.09	40	eP	44	01.60	2.0		0.8s	8.05nm			4.9mb	
	1.1s	20.75nm			5.0mb		KEV	86.81	20	eP	44	07.00	4.2X	LBF	92.38	317	eP	29	51.00	0.5

27d 19h

	0.7s	3.30nm		4.7mb		
LOR	92.43	317	eP	29 51.30	0.6	
	0.8s	9.40nm		5.1mb		
SMF	92.50	317	eP	29 51.50	0.5	
	0.7s	5.50nm		4.9mb		
S.D. = 1.0 on 41 of 43 obs.						

• OCT 27, 1990 19h 52m 42.92± 2.56s
17.292 N ±27.8km 62.313 W ± 9.1km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 3.0 (FDF).

NEV	0.29	238	ePd	52 50.57	0.0
			S	52 53.10	
BPA	0.50	119	eP	52 53.30	-0.3
SEG	1.17	139	eP	53 03.00	-0.1
			S	53 15.60	
PAG	1.39	154	eP	53 06.00	-0.3
			S	53 21.80	
DOG	1.42	152	eP	53 06.31	-0.4
			S	53 22.20	
DEG	1.55	129	ePd	53 08.97	0.5
			S	53 27.30	
BBL	1.93	155	eP	53 14.70	0.6
S.D. = 0.5 on 7 of 7 obs.					

OCT 27, 1990 20h 51m 12.32± 0.91s
43.556 N ± 5.6km 7.797 E ± 4.7km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
ML 2.6 (LDG), 2.5 (GEN).

IMI	0.36	11	P	51 19.91	0.2
			S	51 24.52	
REVF	0.36	301	Pg	51 20.43	0.6
			Sg	51 26.18	
SBF	0.40	320	Pg	51 20.80	0.2
			Sg	51 26.20	
SAOF	0.46	338	Pg	51 21.55	-0.2
			Sg	51 27.61	
AURF	0.47	314	Pg	51 22.02	0.0
AUTN	0.51	329	Pg	51 22.56	-0.2
MVIF	0.58	306	Pg	51 24.28	0.1
			Sg	51 32.10	
TOUF	0.61	319	Pg	51 24.45	-0.2
			Sg	51 32.66	
CALN	0.69	287	Pg	51 26.49	0.5
			Sg	51 36.00	
FIN	0.72	24	P	51 26.36	-0.1
			S	51 35.08	
ENR	0.72	338	P	51 26.26	-0.4
			S	51 35.18	
ROB	0.74	4	P	51 26.78	-0.1
			S	51 36.00	
STV	0.77	334	P	51 27.08	-0.3
			S	51 36.41	
FRF	0.84	271	Pg	51 28.40	-0.1
			Sg	51 38.80	
LMR	0.96	257	Pg	51 30.20	-0.4
			Sg	51 42.00	
LRG	1.05	265	Pg	51 32.10	0.0
			Sg	51 44.60	
PZZ	1.07	332	P	51 32.52	-0.1
			S	51 45.74	
PCP	1.12	28	P	51 33.85	0.4
			S	51 47.59	
S.D. = 0.3 on 18 of 18 obs.					

? OCT 27, 1990 20h 58m 37.51± 4.95s
35.146 S ±25.6km 179.089 W ±56.1km
DEPTH = 272.4 ± 17.8 km
4.3mb (1 obs.)
EAST OF NORTH ISLAND, N.Z. (688)

HBZ	3.23	220	eP	59 32.10	-2.1
PUZ	3.62	215	P	59 38.40	-0.1
			eS	00 30.10	
NOZ	4.16	213	eP	59 46.00	1.4
TAZ	4.69	228	P	59 51.50	0.7
WLZ	5.06	236	P	59 54.70	-0.6
WHH	5.14	222	eP	59 55.80	-0.5
KETZ	5.76	225	P	00 04.90	1.0
NGZ	5.85	225	eP	00 05.70	0.8
DRZ	5.93	224	eP	00 07.90	1.7
PGZ	6.58	212	P	00 15.50	1.7
MNG	6.95	217	eP	00 17.70	-0.7
			S	01 41.90	
MTW	7.36	214	eP	00 21.90	-1.6
KIW	7.42	218	eP	00 22.70	-1.5
BLW	7.54	213	eP	00 27.00	1.2
MOW	7.68	214	eP	00 28.40	0.8
WDW	7.68	216	eP	00 26.40	-1.2
MRW	7.80	217	eP	00 29.20	0.3
			eS	02 02.20	
WEL	7.81	216	eP	00 30.00	0.9
			S	02 03.00	
TCW	8.00	219	eP	00 30.20	-1.3
THZ	9.11	221	eP	00 45.50	-0.1
KHZ	9.26	216	eP	00 47.60	0.2
LTZ	10.16	219	eP	00 57.70	-1.1
			eS	02 55.70	
DZM	18.17	312	iPd	02 20.50	-12.1X
ASPA	42.17	273	eP	06 09.20	3.8X
	0.3s	5.10nm		4.3mb	
WB5	43.60	278	eP	06 17.00	0.2
KEV	142.51	345	ePKP	17 50.00	11.7X
SOD	144.50	343	ePKP	17 51.00	9.2X
BCAO	145.36	212	iPKPc	17 58.80	13.9X
	0.4s	4.00nm			
SUF	148.23	338	ePKP	17 57.40	9.4X
	0.4s	6.00nm			
NUR	150.36	336	ePKP	18 03.50	12.2X
	0.5s	10.90nm			
NB2	153.26	349	PKP	18 10.30	14.7X
	0.6s	3.40nm			
HFS	153.65	346	ePKP	18 10.40	14.3X
	0.7s	6.80nm			
S.D. = 1.2 on 23 of 32 obs.					

OCT 27, 1990 23h 59m 26.78± 0.65s
41.418 N ± 6.9km 4.178 E ± 5.1km
DEPTH = 33.0km (normal)
WESTERN MEDITERRANEAN SEA (387)
ML 3.0 (LDG).

ETER	1.32	312	eP	59 49.70	0.6
			eS	00 05.00	
ESEL	1.92	211	eP	59 58.00	0.3
			eS	00 18.00	
LMR	2.58	41	Pn	00 07.40	0.3
			Sn	00 34.60	
LRG	2.60	38	Pn	00 08.00	0.6
			Sn	00 35.60	
FRF	2.81	40	Pn	00 10.60	0.2
			Sn	00 40.70	
EROO	2.91	259	eP	00 10.80	-1.0
EPF	3.27	301	Pn	00 18.60	1.6
			Sn	00 55.30	
SBF	3.43	43	Pn	00 19.00	-0.3
			Sn	00 54.80	
PGF	3.77	71	Pn	00 23.60	-0.5
			Sn	01 01.50	
CAF	3.83	337	Pn	00 24.60	-0.3
			Sn	01 05.60	
LPO	3.93	327	Pn	00 25.90	-0.4
			Sn	01 07.40	
LFF	4.33	326	Pn	00 31.60	-0.3
			Sn	01 16.80	
RJF	4.34	334	Pn	00 31.20	-0.9
			Sn	01 16.80	
S.D. = 0.8 on 13 of 13 obs.					

? OCT 28, 1990 01h 18m 35.63± 2.29s
14.254 N ±20.5km 90.038 W ±38.5km
DEPTH = 184.6 ± 32.9 km
4.5mb (2 obs.)
GUATEMALA (70)

TPX	2.25	287	(P)	19 16.00	-0.1
			iS	19 25.00	
PWLA	20.71	5	P	23 03.50	0.6
PRM	20.93	18	P	23 05.60	0.6
JSC	21.46	20	P	23 10.00	-0.2
RSCP	21.63	10	P	23 12.00	0.0
	0.7s	27.68nm		4.9mb	
LHS	21.80	21	P	23 13.60	0.1
TKL	22.04	14	P	23 16.00	0.1
TUL	22.18	348	eP	23 17.50	0.3
	0.8s	7.10nm		4.2mb	
SIV	41.50	135	P	25 43.20	-23.2X
SCH	44.35	19	eP	26 27.00	-1.9
KIC	83.92	85	P	30 47.10	0.5
S.D. = 0.9 on 10 of 11 obs.					

OCT 28, 1990 01h 34m 45.06± 0.78s
7.260 N ± 8.8km 72.853 W ± 6.6km
DEPTH = 184.3 ± 7.9 km
4.5mb (9 obs.)
NORTHERN COLOMBIA (99)

SDV	2.73	54	ePn	35 32.30	1.0
			iSn	36 09.80	
TOV	3.93	50	iPnd	35 47.20	1.1
CEOS	4.81	68	iPd	35 56.50	-0.9
			i(S)	36 36.00	
FISA	5.28	41	eP	36 04.00	0.4
MORO	5.74	51	iP	36 10.00	0.4
			eS	37 20.00	
GUAC	6.24	62	eP	36 16.00	-0.2
OLLA	6.58	65	iPc	36 19.50	-1.1
			iS	37 38.00	
CAR	6.68	61	eP	36 21.20	-0.8
LLAV	6.77	61	iPc	36 23.00	-0.2
			eS	37 41.00	
UPA	6.83	285	eP	36 23.50	-0.3
ZOBO	23.84	169	P	39 37.80	-5.7X
Z	20s	0.12um		3.4Msz	
			i	40 09.00	
			LR	56 04.00	
LPB	24.10	169	eP	39 46.00	0.2
SIV	25.88	153	P	40 04.60	2.9X
RSCP	30.52	339	iP	40 44.00	0.9
	0.9s	27.88nm		5.0mb	
OLY	32.89	331	eP	41 04.00	0.3
FVM	34.48	335	iP	41 17.90	0.6
	1.0s	25.00nm		4.8mb	
TUL	35.41	327	eP	41 24.70	-0.4
	0.7s	6.90nm		4.4mb	
GOL	43.51	323	iP	42 32.00	-0.2
	0.9s	29.55nm		4.8mb	
DAU	47.57	320	eP	43 04.50	0.2
	0.8s	1.80nm		3.6mb	
BW06	47.89	324	eP	43 06.00	-0.6
	1.0s	3.00nm		3.8mb	
DUG	48.46	319	eP	43 10.00	-1.0
TNP	50.45	314	eP	43 26.10	-0.2
	0.8s	1.76nm		3.7mb	
PNT	57.34	326	eP	44 16.00	0.0
YKA	62.95	340	eP	44 52.90	-0.9
	0.5s	7.70nm		4.8mb	
INK	72.71	340	eP	45 54.00	-0.2
MBC	73.42	350	eP	45 59.00	0.8
	0.6s	6.00nm		4.5mb	
ASPA	149.58	235	ePKP	54 11.10	1.1
	0.8s	7.20nm			
WB5	150.78	242	ePKP	54 14.20	2.4X
S.D. = 0.7 on 25 of 28 obs.					

• OCT 28, 1990 02h 27m 44.33± 0.90s
4.816 S ±11.8km 76.898 W ±25.8km
DEPTH = 33.0km (normal)
4.8mb (1 obs.)
NORTHERN PERU (111)

TUNG	3.71	335	eP	28 40.30	-0.8
VC1	4.41	340	P	28 50.60	-0.7
GGP	4.91	340	eP	28 58.10	-0.3
			S	29 36.00	
YANA	4.96	340	eP	28 58.30	-0.7
			S	29 34.20	
CAYA	4.98	347	eP	28 59.00	-0.3
COTA	5.31	344	eP	29 06.80	2.8
NNA	7.13	180	eP	29 29.30	0.3
	0.9s	10.08nm		4.8mb	
			eS	30 48.50	
SIV	19.10	127	P	32 07.00	-0.3
S.D. = 1.4 on 8 of 8 obs.					

? OCT 28, 1990 02h 39m 27.42± 0.94s
45.781 N ±16.2km 15.795 E ±10.0km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.7 (ZAG).

ZAG	0.14	75	ePg	39 30.70	0.1
			iSg	39 35.00	
PTJ	0.16	44	iPgc	39 31.20	-0.1
			iSg	39 36.70	
VBY	0.47	234	e(Pg)	39 36.90	0.0
			eSg	39 39.90	

```
VOY      1.35 281 e(P)  39 52.40   0.0
                  eS    40 13.40
      S.D. = 0.1  on   4 of   4 obs.
-------------------------------------
*  OCT  28, 1990  05h 09m 19.18± 0.86s
   35.855 N ±12.7km   26.155 E ± 7.8km
   DEPTH =  33.0km  (normal)
 CRETE                            (370)
      MD 3.2 (ATH).

NPS      0.74 217 ePb   09 33.50   0.3
KAP      0.88 110 iPnd  09 36.20   1.0
                  eSn   09 49.00
APE      1.31 338 ePb   09 43.20   1.8
ARG      1.64  77 iPnc  09 46.30   0.3
                  eSn   10 07.50
VAM      1.65 255 ePn   09 46.50   0.2
VLI      2.74 289 ePn   10 00.00  -1.7
ELL      3.16  73 ePn   10 06.00  -1.9
DSI      8.79 116 eP    11 19.50  -7.4X
PRNI     9.23 124 eP    11 26.00  -7.0X
      S.D. = 1.7  on   7 of   9 obs.
-------------------------------------
   OCT  28, 1990  05h 52m 34.08± 1.01s
   43.540 N ± 6.2km    7.805 E ± 5.2km
   DEPTH =  10.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE       (379)
      ML 2.3 (GEN), 2.0 (LDG).

IMI      0.37   9 P     52 41.97   0.2
                  S     52 46.28
REVF     0.37 302 Pg    52 42.83   1.0
                  Sg    52 48.12
SBF      0.42 320 Pg    52 42.80   0.1
                  Sg    52 48.00
SAOF     0.48 338 Pg    52 43.61  -0.3
                  Sg    52 49.79
AURF     0.49 315 Pg    52 44.15   0.1
                  Sg    52 50.72
AUTN     0.53 329 Pg    52 44.87   0.0
                  Sg    52 51.35
MVIF     0.59 307 Pg    52 46.28   0.1
                  Sg    52 53.97
TOUF     0.62 320 Pg    52 46.38  -0.3
FIN      0.73  23 P     52 48.23  -0.2
                  S     52 56.94
ENR      0.74 338 P     52 48.38  -0.3
                  S     52 56.99
ROB      0.76   4 P     52 48.53  -0.4
                  S     52 57.20
STV      0.78 334 P     52 49.05  -0.4
                  S     52 57.92
FRF      0.84 272 Pg    52 50.30   0.0
                  Sg    53 00.80
LMR      0.97 258 Pg    52 52.00  -0.4
                  Sg    53 04.00
LRG      1.05 266 Pg    52 54.10   0.2
                  Sg    53 07.40
PZZ      1.09 332 P     52 54.48  -0.2
                  S     53 07.61
PCP      1.13  28 P     52 56.12   0.8
      S.D. = 0.4  on  17 of  17 obs.
-------------------------------------
   OCT  28, 1990  06h 06m 38.32± 0.55s
   39.537 N ± 6.7km   25.159 E ± 4.6km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                       (365)
      ML 3.2 (ATH).

PRK      0.91 108 ePn   06 55.50  -0.2
EZN      0.94  72 ePg   06 56.50   0.2
                  eSg   07 10.00
OUR      1.21 312 eP    07 00.92   0.2
PLG      1.56 303 ePn   07 06.00  -0.2
RDO      1.63  10 ePn   07 07.20   0.0
ATH      1.93 216 ePn   07 11.50   0.1
SRS      1.98 323 eP    06 58.52 -13.7X
                  e     07 43.28
GRG      2.54 305 eP    07 20.04  -0.3
VAY      2.66 313 ePn   07 30.00   8.0X
EVR      2.68 258 ePn   07 22.50   0.2
      S.D. = 0.2  on   8 of  10 obs.
-------------------------------------
%  OCT  28, 1990  06h 08m 28.54± 1.67s
   15.428 N ± 7.4km   60.743 W ±23.1km
   DEPTH =  33.0km  (normal)
 LEEWARD ISLANDS                  ( 92)
      ML 2.8 (FDF).

BBL      0.71 278 eP    08 42.70   0.5
FDF      0.79 210 iPc   08 43.58   0.2
         0.1s     3.30nm
                  S     08 58.00
MVM      0.88 190 iPc   08 44.71   0.1
                  S     09 01.10
DEG      0.93 341 eP    08 46.20   0.9
                  S     09 02.30
BIM      0.96 199 iPc   08 45.23  -0.5
                  S     09 02.30
SEG      1.22 323 eP    08 48.00  -1.3
                  S     09 05.60
      S.D. = 1.0  on   6 of   6 obs.
-------------------------------------
   OCT  28, 1990  06h 53m 01.29± 0.12s
   49.682 N ± 3.1km  155.885 E ± 2.5km
   DEPTH =  47.6km  ( 15 depth phases)
   5.5mb ( 85 obs.)  4.8Msz ( 12 obs.)
 KURIL ISLANDS                    (221)
      Felt (III) at Severo-Kurilsk.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 19S, 33C
      Centroid Location:
      Origin Time        06:53: 4.4 0.4
      Lat 49.46N 0.04 Lon 156.51E 0.05
      Dep  42.7 3.1 Half-duration  1.7
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.16 0.04  Mtt=-0.25 0.05
        Mff=-0.92 0.05  Mrt= 0.15 0.08
        Mrf= 0.10 0.09  Mtf=-0.76 0.05
       Principal Axes:
        T  Val=  1.18  Plg=84  Azm=352
        N        0.25      4      213
        P       -1.42      4      123
      Best Double Couple:Mo=1.3*10**17
       NP1:Strike=209 Dip=41 Slip=  84
       NP2:         37     49       96

KUSJ    10.14 234 P     55 22.60  -4.4X
                  S     57 08.80
ASAJ    10.63 243 P     55 36.20   2.5
HOOJ    11.39 235 P     55 40.40  -3.6X
                  S     57 43.10
SMY     11.82  68 iP    55 46.60  -3.2X
        0.8s   367.82nm          6.5mb X
MRRJ    12.58 240 eP    55 57.90  -2.0X
                  S     58 13.70
OFUJ    14.66 229 eP    56 21.00  -6.2X
NIIJ    17.41 231 iPd   56 58.20  -4.0X
KAKJ    17.66 226 P     57 00.00  -5.3X
CNJJ    18.35 228 P     57 10.60  -3.2X
MAT     18.35 231 eP    57 12.00  -1.8
                  eS    00 26.00
MTMJ    18.52 232 P     57 13.50  -2.5X
IIDJ    19.34 230 P     57 23.90  -1.6
YONJ    21.88 237 P     57 51.70   0.1
SHNJ    23.96 239 eP    58 12.50   0.6
SHNJ    23.96 239 P     58 13.60   1.7
ANM     25.24  39 ePc   58 25.30   1.4
KUMJ    25.31 237 P     58 25.60   0.7
KAGJ    26.32 235 eP    58 34.80   0.5
TTA     29.01  45 iPc   58 58.70   0.3
        0.7s     46.80nm          5.2mb
SVW     29.11  48 iPc   59 00.00   0.7
        0.8s     22.80nm          4.9mb
BJI     29.45 266 eP    59 01.00  -1.4
        1.0s     12.00nm          4.5mb
      Z  22s      1.78um          4.6Msz
      N  16s      0.72um
                  PcP   02 06.00
                  eS    03 44.00
                  PcS   05 49.00
IMA     30.35  38 iPc   59 10.40   0.0
        0.8s     42.00nm          5.2mb
BRW     30.51  28 iPc   59 11.90   0.4
SSE     31.91 247 Pd    59 24.50   0.3
        1.0s     70.00nm          5.4mb
      Z  20s      0.90um          4.4Msz
      N  17s      0.60um
      E  16s      0.50um
                  esP   59 47.00
                  ePP   00 36.00
                  PcP   02 13.70
                  S     04 35.00
                  eSS   06 43.00
PMR     32.22  47 iPc   59 26.90   0.3
        0.7s     25.90nm          5.2mb
FBA     32.72  41 iPc   59 31.40   0.4
        0.7s    194.40nm          6.1mb
TOA     33.58  46 iPc   59 39.30   0.7
        0.8s    108.40nm          5.8mb
GUMO    37.11 198 eP    00 13.00   4.1X
INK     38.18  35 eP    00 18.50   1.2
LZH     39.69 270 eP    00 30.50   0.0
        1.6s     44.00nm          5.0mb
      Z  25s      2.23um          4.9MszX
      N  14s      0.53um
      E  17s      0.91um
                  pP    00 44.00  51km
                  sP    00 47.00
                  ePP   02 08.00
                  PcS   06 26.50
                  eS    06 37.00
                  SS    09 30.00
MBC     41.20  21 ePc   00 43.00   0.8
        0.7s     25.00nm          5.1mb
BAG     43.76 233 eP    01 03.20  -0.7
YKA     47.47  39 eP    01 33.00   0.3
        0.8s     32.80nm          5.4mb
KMI     47.61 259 Pc+   01 34.00  -0.6
        1.8s     80.00nm          5.4mb
      Z  20s      0.70um          4.6Msz
                  pP    01 50.00  62kmX
                  eS    07 14.00
DAV     49.48 221 eP    01 48.60  -0.2
BMW     51.64  60 eP    02 04.80  -0.2
RMW     51.87  59 iPc   02 19.60  12.8X
PNT     52.00  56 eP    02 07.00  -0.7
        0.9s     35.00nm          5.4mb
EDM     52.97  49 iPc   02 14.60  -0.3
                  pP    02 27.50  46km
DAG     53.78 358 iPd   02 18.00  -2.4
        0.8s     25.37nm          5.3mb
                  i     03 25.00 313kmX
LOE     53.90 253 eP    02 21.50  -0.5
NEW     53.96  56 iPc   02 21.50  -0.7
        1.1s     33.95nm          5.3mb
                  ipP   02 34.50  47km
CHG     54.59 257 ePc   02 27.50   0.3
        0.9s    147.06nm          6.0mb
                  eS    10 04.00
KEV     55.19 341 eP    02 37.00   6.1X
LBFM    55.49  65 iPc   02 34.30   0.6
                  ipP   02 48.10  50km
WDC     55.59  66 eP    02 34.60   0.5
BDT     55.73 256 eP    02 36.00   0.7
        1.0s     55.90nm          5.5mb
NST     56.20 253 eP    02 39.00   0.3
MIN     56.29  66 eP    02 39.20  -0.2
GUN     56.59 275 P     02 40.54  -1.4
        0.5s     37.00nm          5.7mb
ORV     56.85  66 eP    02 42.80  -0.4
KKN     57.06 275 P     02 43.86  -1.3
PKI     57.13 275 P     02 44.08  -1.6
SOD     57.18 339 iP    02 43.50  -1.6
DMN     57.30 275 P     02 45.22  -1.6
        0.7s     99.00nm          6.0mb
FFC     57.31  42 eP    02 46.00  -0.2
        1.3s    106.00nm          5.7mb
GKN     57.33 276 P     02 45.96  -1.0
        0.5s     40.00nm          5.8mb
BRK     57.48  68 e(P)  02 47.50  -0.1
LRM     57.97  56 iPc   02 51.40   0.1
                  e     03 04.50  47km
MHC     58.20  68 eP    02 52.50  -0.3
ARN     58.26  68 eP    02 52.90  -0.2
CMB     58.50  67 eP    02 54.50  -0.3
SAO     58.69  69 eP    02 55.80  -0.3
HPI     58.99  58 iPc   02 59.10   0.6
PRS     59.02  69 eP    02 58.50   0.1
LLA     59.09  69 eP    02 59.00   0.1
KVN     59.19  65 eP    03 00.10   0.3
                  ePP   03 13.80  49km
PMG     59.33 190 iPc   03 00.00  -0.6
        0.6s     53.33nm          5.8mb
FRI     59.59  68 eP    03 02.10  -0.2
PTI     59.94  58 iP    03 06.00   1.1
                  ipP   03 19.60  49km
TNP     60.35  65 iPc   03 07.60  -0.2
        0.8s     18.14nm          5.3mb
                  ipP   03 21.70  51km
```

28d 07h

BCH		60.56	69	ePc	03	09.00	-0.1		Z	23s		0.40um		4.7MszX	LOR		80.44	341	iPc	05	09.10	0.1
SUF		61.09	336	iP	03	09.90	-2.3	ELC		76.08	48	iPc	04	45.00	-0.3			0.9s		53.25nm			5.5mb
		0.6s		7.60nm			5.0mb	RMQ		76.09	187	iPc	04	44.20	-1.1		Z	20s		0.85um			5.1Msz
ISA		61.22	68	eP	03	13.00	-0.5			0.9s		87.00nm		5.7mb	MDI		80.48	337	Pc	05	09.00	-0.2
DUG		61.48	61	iPc	03	15.40	0.0	SRO		76.20	332	eP	04	46.80	1.0		VAY		80.53	326	iP	05	09.70	0.1
NDI		61.63	282	eP	03	15.00	-1.3	CMP		76.21	327	ePd	04	49.00	3.0X				0.8s		76.00nm			5.7mb
CLC		61.64	67	eP	03	16.00	-0.4	ZST		76.22	333	iP	04	46.80	0.9		KNT		80.55	326	ePc	05	09.38	-0.3
FRB		61.66	21	eP	03	14.00	-2.0	BUD		76.28	331	eP	04	54.80	8.6X		GRC		80.58	342	P	05	10.56	0.9
		0.8s		108.00nm			6.0mb	KHC		76.37	336	P	04	47.00	0.2		NA2		80.58	40	iP	05	10.00	0.2
DAU		62.21	60	iP	03	20.70	0.2	OLY		76.38	51	iPc	04	46.30	-0.7						ipP	05	23.50	46km
				epP	03	34.10	48km	VKA		76.39	334	ePc	04	47.00	0.1		VAI		80.63	337	P	05	10.00	0.0
SBB		62.27	68	eP	03	20.00	-0.6					i	04	53.10	20kmX		LPF		80.65	345	iPc	05	10.50	0.4
PAS		62.42	69	eP	03	21.00	-0.5	GRF		76.47	337	eP	04	47.60	0.3				0.9s		119.55nm			5.8mb
MWC		62.44	69	eP	03	22.00	0.1			0.7s		37.00nm		5.5mb	MMK		80.66	338	iPd	05	11.70	1.2
GSC		62.46	67	eP	03	22.00	0.1		Z	20s		0.50um		4.8Msz	SOH		80.69	325	ePc	05	09.70	-0.7
SNG		62.51	247	eP	03	24.00	1.7	CBM		76.50	29	iPc	04	47.30	-0.2		LBF		80.69	341	iPc	05	10.40	0.0
RVR		63.01	69	eP	03	24.00	-1.4	WVLY		76.58	38	iPc	04	47.60	-0.5				0.8s		20.80nm			5.1mb
NUR		63.33	335	eP	03	25.20	-1.9	ENN		76.69	341	iPd	04	49.30	0.8		SSF		80.71	341	iPc	05	10.70	0.3
		0.5s		8.30nm			5.1mb			1.0s		69.00nm		5.6mb					0.9s		36.85nm			5.3mb
TPC		63.73	68	eP	03	29.00	-1.2					i	04	50.20	3kmX		DIX		80.77	338	iPd	05	12.40	1.3
PLM		63.76	69	eP	03	29.00	-1.6	BRS		76.78	183	iPc	04	49.00	-0.2		EMS		80.89	339	iPd	05	12.70	1.1
BAR		64.34	69	eP	03	34.00	-0.2	HBVT		77.07	34	iPc	04	50.50	-0.2		GRG		80.91	326	ePd	05	10.86	-0.8
IPM		64.34	245	ePc	03	35.90	1.6	ABH		77.17	340	eP	04	50.61	-0.6		PRK		80.94	323	eP	05	11.50	-0.2
		1.2s		64.50nm			5.5mb	ECB		77.27	349	eP	04	51.70	0.1		AVF		81.00	341	iPc	05	12.40	0.5
UPP		65.68	338	iP	03	38.90	-3.4X			0.8s		47.00nm		5.6mb	SMF		81.04	341	iPc	05	12.60	0.4
				i	04	11.40	134kmX	ECP		77.40	349	eP	04	52.40	0.0				1.2s		108.60nm			5.7mb
GOL		65.95	57	iPc	03	44.70	0.0			1.0s		116.00nm		5.9mb	PLG		81.04	325	iPd	05	12.00	-0.3
		0.8s		16.74nm			5.1mb	MBL		77.45	214	iPc	04	52.90	-0.1		ORX		81.05	338	P	05	12.44	0.1
MTN		65.96	207	iPc	03	44.10	-0.5			0.7s		48.00nm		5.6mb	IZM		81.27	322	eP	05	13.20	-0.4
		0.6s		101.00nm			6.0mb	BNH		77.51	32	iPc	04	53.40	0.2		CMS		81.30	189	iPc	05	14.30	0.8
NB2		66.03	342	P	03	42.40	-2.3	DOU		77.60	342	Pc	04	54.90	1.4				0.9s		22.00nm			5.1mb
		0.5s		4.70nm			4.8mb	MIM		77.69	31	eP	04	54.50	0.4		TPT		81.30	125	eP	05	13.00	-0.8
HFS		66.34	340	eP	03	44.20	-2.3	BHG		77.85	335	eP	04	56.30	1.3				1.2s		35.00nm			5.2mb
		0.7s		9.60nm			4.9mb			0.8s		18.00nm		5.2mb	BGF		81.33	342	eP	05	14.00	0.3
	Z	18s		0.44um			4.7Msz	VAL		78.07	351	iP	04	57.00	1.0				0.6s		18.50nm			5.2mb
				LR	29	22.00		BEO		78.18	329	e(P)	04	56.00	-0.8		OHR		81.35	327	eP	05	11.00	-2.9
MAIO		67.06	299	eP	03	52.00	0.3	HRT		78.24	321	eP	04	59.00	1.7		LSD		81.41	338	P	05	15.62	1.2
				eS	12	47.00		PWLA		78.48	49	iPc	04	58.10	-0.5		FNA		81.43	327	iPc	05	13.14	-1.2
ANMO		68.75	61	iP	04	02.70	0.4	WATA		78.55	336	iPc	04	59.20	0.2		LPL		81.46	339	iPc	05	15.70	1.0
		1.0s		18.13nm			5.0mb			1.0s		52.10nm		5.5mb	LPG		81.47	339	iPc	05	15.90	1.1
ALQ		68.75	61	iPc	04	02.50	0.1					id	04	59.90	2kmX				0.6s		63.40nm			5.8mb
		1.0s		17.50nm			5.0mb	CDF		78.61	339	iPc	04	59.40	0.2		BOB		81.49	337	P	05	14.90	0.3
HYB		68.77	272	iPc	04	02.50	0.1			1.0s		36.00nm		5.3mb	VAH		81.51	126	eP	05	13.00	-1.9
		0.9s		125.00nm			5.9mb	PTJ		78.63	333	eP	04	57.90	-1.5				1.2s		15.00nm			4.9mb
		-		e	04	23.00	78kmX	EMM		78.65	30	ePc	04	59.80	0.5		CSS		81.57	316	eP	05	15.20	0.1
PPI		68.78	242	eP	04	01.00	-1.4	ZAG		78.70	333	eP	05	00.10	0.5		ELL		81.58	319	iP	05	15.00	-0.3
SCH		69.90	25	ePc	04	08.90	0.1	SQTA		78.75	336	iPc	05	00.40	0.3		RUV		81.60	125	eP	05	15.00	-0.4
		0.5s		31.00nm			5.5mb			1.0s		55.40nm		5.5mb					1.2s		40.00nm			5.3mb
CTA		69.98	190	iPc	04	08.80	-0.8					id	05	01.20	3kmX		SFI		81.63	335	P	05	16.50	1.3
		1.0s		90.00nm			5.7mb					i	05	12.90			LIT		81.63	326	iPd	05	13.09	-2.3
POO		71.00	276	eP	04	16.50	0.5	FVI		78.91	335	P	05	00.70	0.0		RSP		81.67	338	P	05	15.72	0.1
QIS		71.40	196	eP	04	12.00	-6.2X	OGA		79.13	336	eP	05	03.30	1.1		MME		81.69	335	P	05	16.70	0.8
		1.0s		52.00nm			5.4mb			0.8s		23.00nm		5.2mb	ARV		81.71	334	P	05	16.50	0.8
WBS		71.84	201	iPc	04	20.00	-0.8	SAX		79.20	338	iPd	05	03.30	0.6		MAF		81.71	342	iPc	05	16.60	0.9
DZM		72.04	170	iPd	04	23.00	0.9	HAU		79.20	340	iPc	05	02.40	0.0		KZN		81.71	326	eP	05	15.00	-0.9
GBA		72.29	270	P	04	25.00	1.3			0.9s		31.10nm		5.2mb	TCF		81.72	342	iPc	05	16.40	0.7
MEO		73.22	56	iPc	04	29.20	0.2		Z	20s		0.40um		4.8Msz	PLDF		81.73	341	P	05	16.91	1.0
SIO		73.70	54	eP	04	31.50	-0.2	ZLA		79.22	338	iPd	05	03.20	0.7		AGO		81.75	341	P	05	17.00	1.1
				e	04	45.30	48km	BSF		79.26	339	eP	05	02.60	-0.2		BDI		81.84	335	P	05	16.90	0.4
KRA		73.72	332	eP	04	30.90	-0.6			0.8s		16.10nm		5.0mb	HRI		81.85	313	iPc	05	17.50	0.8
				e	04	32.50	5kmX	TBR		79.42	36	ePc	05	03.20	-0.4		CRE		81.87	334	P	05	16.90	0.3
TUL		73.85	53	iPc	04	32.40	-0.2	TRI		79.44	334	ePd	05	03.00	-0.7		MFF		81.87	344	iPc	05	17.30	0.8
		1.0s		60.00nm			5.5mb	VVI		79.57	335	P	05	02.50	-1.9				0.8s		81.95nm			5.8mb
				i	04	45.80	46km	RDO		79.59	324	iPd	05	05.00	0.5		LSF		81.89	342	iPc	05	17.30	0.7
EKA		73.90	348	P	04	32.00	-0.5	ALN		79.61	324	ePc	05	03.58	-1.0		BNI		81.91	339	P	05	17.80	0.9
		0.6s		11.80nm			5.0mb	LLS		79.64	338	iPd	05	05.90	0.9		PCP		81.93	337	P	05	16.85	0.0
KSP		74.07	335	eP	04	33.00	-0.6	CTI		79.72	336	P	05	05.00	-0.3		PRM		81.93	45	iPc	05	17.40	0.4
		1.0s		21.00nm			5.0mb	GBTN		79.77	46	ePc	05	05.40	-0.2						ipP	05	30.80	46km
				ic	04	34.70	6kmX	FLN		79.85	344	iPc	05	05.80	0.0		RRL		82.01	338	P	05	18.69	1.2
SPC		74.39	332	eP	04	36.10	0.4			0.9s		1013.20nm		6.8mb X	NEO		82.06	325	eP	05	16.50	-1.1
CLL		74.53	337	iP	04	35.40	-0.8		Z	20s		0.73um		5.0Msz	PYM		82.07	341	P	05	18.59	1.0
		1.5s		48.00nm			5.2mb	WARB		79.89	206	iPc	05	07.40	1.2		PPCY		82.08	316	eP	05	17.50	-0.2
KOD		74.78	268	iPc	04	39.00	0.4			0.6s		40.00nm		5.5mb	CKI		82.10	337	P	05	16.70	-1.0
		1.0s		180.00nm			6.0mb	LDF		79.95	344	iPc	05	06.40	0.1		ASS		82.18	334	P	05	18.80	0.6
FVM		74.94	49	iPc	04	38.30	-0.6			0.9s		68.80nm		5.6mb	KSL		82.25	319	eP	05	18.00	-0.6
PRU		75.33	335	iP	04	41.30	0.5	NAV		79.95	43	iP	05	06.70	0.1		JSC		82.27	45	iPc	05	18.50	-0.3
		0.9s		16.80nm			5.0mb	COO		79.98	183	eP	05	08.00	1.4		LHS		82.31	44	iP	05	18.20	-0.8
	Z	20s		1.60um			5.3Msz	BLA		80.20	42	eP	05	08.30	0.3		PZZ		82.32	338	P	05	18.59	-0.5
	N	20s		1.00um						1.0s		33.00nm		5.2mb	FIN		82.32	337	P	05	18.69	-0.2
	E	20s		0.60um				GRR		80.27	345	iPc	05	08.60	0.5		ROB		82.33	337	P	05	18.90	-0.1
				i	04	48.90	24kmX	SRS		80.34	325	ePc	05	07.86	-0.7		ENR		82.50	338	P	05	18.49	-1.5
WTS		75.34	341	eP	04	42.00	1.1	SKO		80.36	327	iP	05	09.00	0.3		LBL		82.51	341	P	05	21.14	1.3
		0.7s		29.00nm			5.3mb		Z	21s		1.33um		5.3Msz	STV		82.51	338	P	05	18.80	-1.2
MOX		75.49	337	eP	04	42.50	0.7					LR	43	40.00			AGG		82.64	325	ePc	05	18.70	-2.0
	Z	24s		1.20um			5.1MszX	TMA		80.38	337	iPd	05	09.60	0.7		IMI		82.68	337	P	05	20.85	0.0
ASPA		75.59	201	iPc	04	42.90	0.3	EZN		80.42	323	eP	05	19.00	10.0X		ARG		82.79	320	iPd	05	21.00	-0.4
		0.8s		69.20nm			5.6mb	SAL		80.42	336	P	05	09.50	0.6		RJF		82.80	342	iPc	05	21.70	0.3

0.9s 67.15nm 5.7mb
MNS 82.80 333 P 05 21.50 0.0
SBF 82.84 338 iPc 05 21.70 0.0
0.9s 67.15nm 5.7mb
MJMA 82.88 302 PKP 05 22.30 0.1
IGT 82.91 327 ePd 05 21.06 -1.0
EVR 82.92 326 eP 05 21.00 -1.2
DUI 82.94 332 P 05 22.00 -0.2
AZI 82.95 333 P 05 23.00 0.9
ZNT 83.03 313 iPc 05 23.70 0.9
ATH 83.04 324 eP 05 22.50 -0.2
CAF 83.05 342 iPc 05 23.80 1.1
SDI 83.09 332 P 05 22.50 -0.5
APE 83.11 322 eP 05 21.00 -2.2
LFF 83.30 343 iPc 05 24.70 0.8
0.8s 95.35nm 5.9mb
FRF 83.32 338 iPc 05 24.20 0.2
1.4s 104.55nm 5.7mb
RMP 83.33 333 P 05 24.50 0.4
RDP 83.37 333 P 05 24.50 0.1
RFI 83.41 332 P 05 25.97 1.5
1.3s 624.50nm 6.5mb X
LPO 83.46 342 iPc 05 25.80 1.0
LRG 83.49 338 iPc 05 25.40 0.5
0.9s 101.55nm 5.9mb
Z 20s 0.70um 5.0Msz
SGS 83.52 45 iPc 05 26.00 0.8
ipP 05 39.50 46km
LMR 83.57 338 iPc 05 25.70 0.4
1.1s 134.30nm 5.9mb
PGF 83.67 336 eP 05 25.90 -0.1
0.6s 37.00nm 5.6mb
SGO 83.68 331 P 05 25.50 -0.3
KAP 83.75 320 iPd 05 25.00 -1.4
ORI 83.76 330 P 05 27.00 0.7
HBF 83.80 45 iPc 05 27.40 0.8
epP 05 40.60 44km
FORR 83.90 204 eP 05 27.00 0.1
0.4s 19.00nm 5.5mb
MGR 83.98 331 P 05 27.50 0.1
BWA 84.00 186 eP 05 28.10 0.7
CSI 84.07 330 P 05 28.20 0.3
TDS 84.16 330 P 05 27.90 -0.5
ROI 84.16 330 P 05 29.60 1.2
ITM 84.41 325 eP 05 28.00 -1.7
VLI 84.43 324 iPc 05 27.50 -2.3
UOSK 84.54 304 PKP 05 31.50 0.9
NPS 84.64 321 iPc 05 29.00 -1.9
RMN 84.66 312 iPc 05 31.60 0.5
CAN 84.85 186 eP 05 32.80 1.2
VAM 85.09 322 eP 05 32.50 -0.6
EPF 85.22 342 eP 05 34.20 0.5
0.8s 24.20nm 5.4mb
AFIF 85.43 302 PKP 05 37.30 2.2
HOL 85.47 311 PKP 05 36.10 1.0
ATN 85.81 330 P 05 36.50 -0.1
BADA 86.11 311 PKP 05 39.50 1.2
GIB 86.42 331 P 05 43.50 3.7X
MEU 86.94 330 P 05 41.20 -1.1
LVI 86.95 332 P 05 41.30 -0.9
FAI 87.19 331 P 05 44.50 1.1
BAL 87.19 213 eP 05 43.00 -0.2
KLB 87.72 212 eP 05 45.70 -0.1
0.7s 44.00nm 5.8mb
TOL 89.08 345 iPd 05 53.00 0.5
1.2s 78.13nm 5.9mb
NWAO 89.12 212 eP 05 53.00 0.6
BCAO 114.71 312 ePKPd 11 38.20 -0.1
0.5s 3.00nm
TIC 121.49 338 PKP 11 51.10 0.0
KIC 121.69 337 PKP 11 51.30 -0.2
LIC 121.90 337 PKP 11 52.00 0.1
Z 20s 0.13um 4.6Msz
KRI 125.93 288 iPKPd 12 03.30 3.5X
BUL 129.04 286 iPKPd 12 00.50 -5.2X
ZOBO 131.33 63 PKP 12 11.00 0.4
1.1s 11.60nm
LR 57 20.00
LPB 131.55 63 ePKP 12 12.00 1.1
e 12 24.00
CNCB 131.84 63 PKPc 12 13.00 1.4
e 15 34.00
SIV 135.02 55 PKPc 12 04.20 -12.8X
i 12 17.20
SPA 139.49 180 ePKP 12 14.70 -9.2X
1.0s 8.50nm
BAO 140.89 38 ePKP 12 22.00 -5.9X
PDCR 140.95 24 ePKP 12 20.30 -7.6X
PPD 145.05 48 iPKPc 12 34.70 -0.1
e 12 48.60
VAO 147.88 42 ePKP 12 42.90 3.4X
JFO 148.23 36 ePKP 12 41.50 1.4
BMA 148.78 38 ePKP 12 45.40 4.5X
S.D. = 0.9 on 294 of 320 obs.

OCT 28, 1990 07h 41m 09.07± 0.44s
2.662 S ± 7.9km 88.362 E ± 6.1km
DEPTH = 10.0km (geophysicist)
5.3mb (11 obs.)
SOUTH INDIAN OCEAN (425)
PSI 11.82 63 ePc 44 00.50 -0.3
PPI 12.23 80 eP 44 05.30 -1.0
e(S) 46 15.00
IPM 14.56 60 ePd 44 31.80 -5.3X
SNG 15.66 51 eP 44 52.80 1.3
KGM 15.66 73 eP 44 52.50 1.0
KOD 16.79 320 iPc 45 05.20 -1.1
0.5s 158.45nm 5.4mb
NST 21.62 32 eP 46 01.00 -0.5
HYB 22.17 334 ePc 46 13.00 5.9X
1.0s 80.00nm 5.1mb
BDT 22.39 28 eP 46 10.00 0.8
CHG 23.75 26 ePc 46 24.10 1.6
0.8s 9.89nm 4.4mb
eS 50 32.00
POO 25.45 326 eP 46 39.00 0.1
SHL 28.27 7 iP 47 04.50 -0.4
PKI 30.19 355 P 47 21.66 -0.7
0.8s 8.00nm 4.6mb
DMN 30.26 354 P 47 23.24 0.4
0.8s 32.00nm 5.2mb
KKN 30.42 355 P 47 24.44 0.2
0.8s 47.00nm 5.4mb
GUN 30.49 356 P 47 25.30 0.3
0.7s 74.00nm 5.7mb
GKN 30.70 354 P 47 26.84 0.3
0.8s 59.00nm 5.5mb
KMI 30.94 26 eP 47 46.00 17.2X
QUE 38.54 330 eP 48 35.80 1.9
LZH 41.17 19 eP 48 54.00 -1.6
WARB 43.54 126 eP 49 16.00 1.0
SSE 45.86 40 eP 49 32.00 -1.4
Z 16s 0.40um 4.5MszX
eS 56 30.00
MAIO 47.20 328 eP 49 44.00 0.0
WB5 48.04 114 eP 49 49.20 -1.7
ASPA 48.71 119 iPc 49 56.80 0.8
0.5s 4.30nm 4.8mb
Z 23s 0.10um 3.7MszX
BJI 49.55 28 eP 50 01.50 -0.6
KRI 59.36 252 iPd 51 17.30 2.8
BUL 60.75 248 iPc 51 17.70 -6.2X
SLR 62.01 242 iPc 51 31.50 -0.9
0.9s 26.89nm 5.4mb
BRS 66.13 119 iPd 52 00.50 1.3
BCAO 70.13 276 iPc 52 23.60 -0.8
0.5s 15.00nm 5.4mb
NUR 79.70 333 iP 53 17.80 -0.5
SUF 80.00 336 eP 53 19.20 -0.7
KSP 80.83 322 ePc 53 25.50 0.9
ARV 81.29 315 P 53 27.00 -0.2
PRU 81.70 321 eP 53 39.00 9.9X
SOD 81.92 340 iP 53 30.00 0.1
i 53 41.00
FVI 82.06 318 P 53 30.50 -0.5
KHC 82.10 320 eP 53 32.00 0.7
SFI 82.15 315 P 53 33.50 1.9
CTI 82.71 317 P 53 34.00 -0.6
CLL 82.96 322 eP 53 46.00 10.4X
MOX 83.67 321 eP 53 51.00 11.7X
AIA 109.37 192 e(PKP)00 05.00 24.2X
SIV 144.55 237 PKP 00 46.00 -2.6
ALQ 145.05 22 ePKP 00 48.00 -1.2
1.0s 10.00nm
TUL 146.69 6 e(PKP)01 16.50 24.9X
1.3s 6.70nm
MEO 147.39 11 e(PKP)01 03.60 10.8X
CNCB 149.67 230 PKP 01 03.00 5.5X
LPB 149.93 230 (PKP) 01 02.00 4.3X
ZOBO 150.10 230 ePKP 00 58.00 -0.2
S.D. = 1.2 on 39 of 51 obs.

• OCT 28, 1990 07h 48m 59.95± 1.23s
16.684 N ±25.0km 93.777 W ± 9.7km
DEPTH = 175.5 ± 11.3 km
3.9mb (1 obs.)
CHIAPAS, MEXICO (61)
Felt in Chiapas, Oaxaca, Tabasco and Veracruz.
SCX 1.10 87 iP 49 28.60 0.4
iS 49 49.20
TPX 2.29 140 (P) 50 13.00 32.6X
EVV 2.31 320 iP 49 40.00 -0.6
iS 50 01.50
OXX 2.85 278 iP 49 47.00 -0.2
iS 50 20.00
LVVM 3.96 321 (P) 49 55.00 -6.0X
(S) 50 40.00
IISM 4.12 304 iP 50 01.84 -1.3
(S) 50 42.50
IIT 4.90 299 iP 50 14.00 0.5
PPM 5.19 298 iP 50 18.20 0.6
(S) 51 02.00
III 5.68 288 iP 50 24.00 0.2
(S) 51 09.00
ACX 5.83 273 (P) 50 24.50 -1.0
CRX 6.23 297 (P) 51 19.00 47.9X
MRX 7.66 294 iP 50 51.50 1.7
NB2 82.61 28 P 01 04.10 -0.4
0.7s 1.80nm 3.9mb
S.D. = 1.1 on 10 of 13 obs.

& OCT 28, 1990 08h 29m 32.09s
59.789 N 151.663 W
DEPTH = 46.8km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.
HOM 0.13 176 iP 29 39.60 1.5
iS 29 45.97
NNL 0.31 36 iP 29 41.97 0.9
XLV 0.34 185 eP 29 39.96 -1.4
CNPM 0.34 140 iP 29 40.59 -0.8
eS 29 48.01
BRLK 0.39 93 iP 29 41.32 -0.7
OPT 0.81 261 eP 29 46.20 -1.1
eS 29 58.07
RED 0.84 319 eP 29 47.07 -0.8
RSO 0.87 322 eP 29 47.81 -0.5
eS 30 01.09
RDT 0.87 335 eP 29 47.59 -0.6
iS 30 00.15
AUE 0.97 244 iP 29 48.56 -1.0
NKA 0.98 12 eP 29 51.31 1.7
AUH 1.00 246 eP 29 49.14 -0.9
AUI 1.01 244 eP 29 49.01 -1.0
SLKM 1.02 44 eP 29 49.47 -0.8
SEW 1.16 73 eP 29 51.52 -0.6
PDB 1.28 271 eP 29 52.50 -1.3
eS 30 08.54
CDD 1.33 230 iP 29 53.40 -1.2
SPU 1.41 352 eP 29 55.27 -0.5
CKL 1.45 347 eP 29 55.90 -0.5
CRP 1.50 351 eP 29 56.29 -0.9
BGL 1.52 347 eP 29 57.18 -0.2
CGLM 1.53 354 eP 29 57.31 -0.2
NCG 1.64 352 eP 29 59.16 0.1
PMS 1.79 35 eP 30 00.92 -0.2
KNIM 2.05 72 eP 30 01.84 -2.9
KLU 3.30 56 eP 30 20.15 -2.5
26 obs. associated

• OCT 28, 1990 08h 59m 37.49± 0.83s
20.639 S ±12.1km 66.867 W ±13.7km
DEPTH = 258.1 ± 20.1 km
SOUTHERN BOLIVIA (125)
CCH 3.31 12 iPd 00 35.10 0.5
CNCB 3.95 344 P 00 43.00 0.8
i 01 32.00
LPB 4.25 344 eP 00 46.00 0.5
e 01 40.00
ANT 4.49 226 iP 00 47.80 0.0
iS 01 39.30
ZOBO 4.51 344 P 00 49.00 0.3
1.0s 27.50nm
i 01 40.40
ARE 6.04 313 eP 01 06.00 -1.2
eS 02 13.00

28d 09h

```
SIV      7.19  51 Pc     01 19.80   -1.5
VAO     18.63 101 (P)    03 39.00    0.6
SOB1    27.50  69 eP     05 02.60    0.1
     S.D. = 1.1  on   9 of   9 obs.
-------------------------------------------
   OCT 28, 1990  09h 16m 29.29± 1.26s
   34.006 N ± 6.6km   25.814 E ± 4.9km
   DEPTH =  23.3 ± 10.1 km
   4.1mb (  5 obs.)
 CRETE                              (370)

NPS      1.26 352 eP     16 54.00    2.4
KAP      1.90  36 iPd    17 02.00    1.2
VAM      1.93 317 eP     16 58.00   -3.2X
ARG      2.91  40 iPc    17 15.50    0.4
APE      3.06 356 eP     17 18.00    0.6
VLI      3.58 320 eP     17 21.60   -3.1X
KSL      3.74  55 eP     17 25.80   -1.1
SMG      3.79  12 eP     17 32.50    5.0X
CIN      4.03  27 eP     17 32.00    0.9
ELL      4.32  50 iP     17 35.00   -0.3
ITM      4.48 316 eP     17 38.50    1.0
IZM      4.54  15 eP     17 39.00    0.7
BCK      5.19  47 eP     17 47.10   -0.5
EZN      5.82   4 eP     17 57.00    0.6
HLW      6.26 130 eP     18 02.30   -0.2
                 eS     19 05.50
CSS      6.28  79 eP     17 58.50   -4.4X
KZN      7.07 334 eP     18 17.50    3.5X
ZNT      7.93 100 eP     18 21.50   -4.5X
DSI      8.41 104 eP     18 28.00   -4.7X
                 eS     19 57.00
SKO      8.67 338 iP     18 53.50   17.3X
MBH      8.79 116 eP     18 35.50   -2.4
ATN      9.35 299 P      18 44.80   -0.8
                 eSn    20 21.10
MEU      9.39 292 P      18 45.80   -0.5
TDS      9.46 309 P      18 46.50   -0.7
ORI      9.62 312 P      18 48.00   -1.4
MGR     10.22 310 P      18 56.00   -1.7
SGO     10.62 311 P      19 02.30   -0.7
VOY     15.07 326 e(P)   20 00.80   -1.6
FVI     16.00 326 P      20 24.00    9.7X
CTI     16.17 322 P      20 19.50    2.9X
WATA    17.11 325 eP     20 32.00    3.5X
        0.8s    12.60nm          4.1mb
                 i      20 39.00
SOTA    17.20 324 eP     20 31.00    1.4
        0.7s    12.90nm          4.2mb
                 i      20 40.30
                 i      20 43.60
CLL     19.64 336 eP     21 02.00    2.8X
HFS     27.32 347 eP     22 12.80   -1.2
        0.5s    1.70nm           4.0mb
NB2     28.65 345 P      22 24.70   -1.3
        0.5s    1.20nm           3.9mb
BCAO    30.19 195 ePd    22 41.80    1.6
        0.5s    6.00nm           4.7mb
TIC     39.42 233 P      24 01.00    1.7
KIC     39.44 233 P      24 01.00    1.5
GKN     50.19  80 P      25 25.60    0.1
DMN     50.72  80 P      25 30.10    0.4
KKN     50.80  80 P      25 30.26    0.1
PKI     50.98  80 P      25 31.24   -0.5
GUN     51.24  80 P      25 33.86    0.1
     S.D. = 1.2  on  31 of  43 obs.
-------------------------------------------
?  OCT 28, 1990  09h 59m 08.60± 1.25s
   39.086 N ± 8.0km   27.645 E ±15.7km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      MD 2.1 (ISK).

IZM      0.75 204 ePg    59 23.30    0.0
                 eSg    59 33.80
EZN      1.26 306 ePn    59 32.00    0.0
EDC      1.27   8 ePn    59 32.00   -0.2
BNT      1.29   9 iPn    59 32.60    0.2
     S.D. = 0.2  on   4 of   4 obs.
-------------------------------------------
•  OCT 28, 1990  11h 43m 38.01± 0.72s
    7.561 S ± 8.9km  129.204 E ± 9.6km
   DEPTH =  33.0km  (normal)
   4.5mb (  5 obs.)
 BANDA SEA                          (280)

MTN      5.58 160 eP     45 02.00    1.0
KNA      8.15 183 eP     45 37.00    0.0
        0.3s    88.00nm          6.4mb X
                 eS     47 02.00
MBL     16.27 213 eP     47 25.20   -0.6
        0.4s    13.00nm          4.4mb
                 eS     50 14.00
OIS     16.38 143 eP     47 24.00   -3.2X
                 e      47 31.00
                 eS     50 12.00
ASPA    16.64 165 eP     47 27.90   -2.5
        0.5s    15.90nm          4.4mb
                 iS     50 22.60
PMG     17.85  97 eP     47 46.00    0.4
WARB    18.68 187 eP     47 54.00   -1.8
        0.3s    6.00nm           4.3mb
                 eS     51 11.00
CTA     20.69 129 iPd    48 18.80    0.8
        0.8s    25.37nm          4.6mb
MEKA    21.49 207 eP     48 21.50   -4.6X
FORR    23.19 182 eP     48 44.00    1.1
        0.4s    43.00nm          5.3mb
OLP     23.71 145 eP     48 49.00    1.1
                 e      53 06.00
MRWA    24.88 208 eP     48 59.00   -0.2
                 eS     53 35.00
BAL     25.74 205 eP     49 08.00    0.6
                 eS     53 57.00
KLB     26.19 203 iPc    49 12.80    1.3
                 eS     54 04.00
RMO     26.46 138 eP     49 12.00   -2.0
MUN     27.14 205 eP     49 21.00    0.8
                 eS     54 26.00
NWAO    27.58 202 eP     49 25.00    0.9
BFD     31.08 160 eP     50 06.80    4.4X
GUN     54.73 312 P      53 07.00   -0.3
PKI     54.89 311 P      53 08.00   -0.4
GKN     55.70 311 P      53 13.80   -0.2
CNCB   150.42 145 PKP    03 31.00    7.1X
LPB    150.57 145 ePKP   03 30.00    6.1X
ZOBO   150.76 144 PKP    03 31.00    6.6X
SIV    154.48 157 ePKP   03 38.40    9.4X
                 i      03 53.40
     S.D. = 1.2  on  18 of  25 obs.
-------------------------------------------
?  OCT 28, 1990  12h 49m 31.93± 3.13s
   40.384 N ±10.7km   27.823 E ±27.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      MD 2.1 (ISK).

EDC      0.05 140 iPg    49 34.00   -0.1
                 iSg    49 37.00
BNT      0.08 110 iPg    49 34.60    0.2
                 iSg    49 38.00
KCT      0.43 108 iPg    49 40.60   -0.1
CTT      0.89  31 iPg    49 49.00    0.0
                 eSg    50 03.00
     S.D. = 0.2  on   4 of   4 obs.
-------------------------------------------
&  OCT 28, 1990  13h 55m 23.10s
   36.180 N          120.178 W
   DEPTH =   4.0km
 CENTRAL CALIFORNIA                 ( 39)
      <BRK>. ML 2.5 (BRK).

PKEM     0.13 155 iP     55 25.60   -0.2
PHAM     0.39 208 iPd    55 30.50   -0.4
PRI      0.40 265 iPd    55 30.50   -0.6
LLA      0.76 305 eP     55 36.30   -1.9
FRI      0.89  25 eP     55 38.30   -2.5
                 iS     55 49.90
PRS      0.98 279 eP     55 41.10   -1.1
BCH      1.00 176 eP     55 40.50   -2.1
SAO      1.18 300 iP     55 43.60   -2.0
ABL      1.54 149 eP     55 48.00   -3.6
CMB      1.86 355 eP     55 54.00   -2.0
                 eS     56 19.00
TNP      3.03  50 eP     56 16.00    3.0
     11 obs. associated
-------------------------------------------
?  OCT 28, 1990  14h 24m 54.52± 8.95s
    3.833 S ±89.3km  134.871 E ±26.8km
   DEPTH =  33.0km  (normal)
   4.3mb (  1 obs.)
 WEST IRIAN REGION                  (196)

MTN      9.69 202 eP     27 14.00   -0.8
        0.3s    66.00nm          6.3mb X
                 eS     29 02.00
KNA     13.28 206 eP     28 04.00    0.7
                 eS     30 24.00
WB5     15.96 182 eP     28 33.10   -5.2X
                 eS     31 23.50
OIS     17.25 165 eP     28 55.00    0.3
                 eS     32 01.00
CTA     19.60 146 eP     29 23.00   -0.2
ASPA    19.74 183 eP     29 24.60   -0.1
        0.8s    14.70nm          4.3mb
                 eS     32 55.40
     S.D. = 0.8  on   5 of   6 obs.
-------------------------------------------
%  OCT 28, 1990  14h 53m 28.80± 0.81s
   41.162 N ± 8.6km   28.509 E ± 5.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)
      MD 2.3 (ISK).

CTT      0.06 256 iPg    53 30.40   -0.7
                 eSg    53 36.00
ISK      0.43 103 ePg    53 37.80    0.3
DMK      0.87 320 iPg    53 45.70    0.2
BNT      0.92 209 iPn    53 47.00    0.6
MFT      1.00 248 iPn    53 48.00    0.1
IZI      1.10 138 ePn    53 49.00   -0.6
     S.D. = 0.7  on   6 of   6 obs.
-------------------------------------------
•  OCT 28, 1990  15h 02m 38.38± 0.97s
   33.937 N ±10.1km   26.056 E ± 8.0km
   DEPTH =  10.0km  (geophysicist)
 EASTERN MEDITERRANEAN SEA          (371)
      MD 3.8 (ATH).

NPS      1.37 345 ePn    03 03.20   -0.3
KAP      1.85  29 ePn    03 10.70    0.2
ARG      2.84  36 ePn    03 24.50    0.0
KSL      3.62  52 ePn    03 35.90    0.2
VLI      3.77 318 ePn    03 38.00    0.2
ELL      4.22  47 eP     03 44.00   -0.2
GKN     50.00  80 P      11 35.20    0.1
DMN     50.54  80 P      11 39.60    0.3
KKN     50.61  80 P      11 39.60   -0.2
PKI     50.80  80 P      11 41.20   -0.2
     S.D. = 0.3  on  10 of  10 obs.
-------------------------------------------
?  OCT 28, 1990  15h 29m 21.73±10.41s
   32.758 N ±89.2km   26.024 E ±15.5km
   DEPTH =  33.0km  (normal)
 EASTERN MEDITERRANEAN SEA          (371)

NPS      2.52 352 eP     30 01.00   -0.3
KAP      2.94  19 eP     30 07.70    0.5
VAM      3.05 331 eP     30 08.80    0.1
ARG      3.86  26 eP     30 20.00   -0.2
ELL      5.11  38 ePn    30 38.00   -0.1
     S.D. = 0.4  on   5 of   5 obs.
-------------------------------------------
   OCT 28, 1990  15h 47m 27.39± 0.78s
   35.740 N ± 7.7km   22.109 E ± 5.5km
   DEPTH =  73.2 ± 13.8 km
   4.0mb (  2 obs.)
 MEDITERRANEAN SEA                  (400)
      MD 4.1 (ATH).

VLI      1.18  34 iPnd   47 49.50    0.9
ITM      1.44 354 ePn    47 52.50    0.4
VAM      1.74 100 ePn    47 56.00   -0.1
ATH      2.57  30 ePb    48 14.00    6.4X
NPS      2.90  98 ePn    48 12.00   -0.2
APE      3.06  63 ePn    48 18.50    4.0X
EVR      3.18 356 ePn    48 19.00    2.8X
AGG      3.28   3 iPd    48 18.78    1.3
                 eS     48 54.66
NEO      3.67  14 ePn    48 24.00    1.1
IGT      4.04 340 ePd    48 27.69   -0.4
                 eS     49 10.82
KAP      4.13  91 ePn    48 29.50    0.1
LIT      4.36   4 iPc    48 33.26    0.6
KZN      4.57 357 ePn    48 36.50    0.9
PLG      4.74  12 ePn    48 38.70    0.7
PRK      4.82  42 ePn    48 42.50    3.5X
IZM      4.90  56 eP     48 57.00   16.8X
ARG      4.90  83 ePn    48 40.00   -0.2
THE      4.93   8 ePd    48 37.78   -2.8X
FNA      5.07 354 iPc    48 42.26   -0.3
```

SOH 5.17 11 iPd 48 44.01 0.1
GRG 5.21 2 ePc 48 43.94 -0.6
EZN 5.27 38 eP 48 49.00 3.7X
KNT 5.45 6 ePd 48 47.66 -0.2
OHR 5.46 350 ePn 48 46.20 -1.9
SRS 5.49 12 iPd 48 48.05 -0.4
VAY 5.58 4 iPn 48 49.40 -0.3
LCI 5.64 326 P 48 47.50 -2.9X
eSn 49 44.60
ATN 5.84 296 P 48 54.50 1.1
TDS 6.02 312 P 48 56.00 0.2
eSn 50 00.00
KSL 6.08 84 ePn 48 55.70 -0.9
CSI 6.12 313 P 49 00.30 3.1X
ORI 6.22 316 P 48 58.50 0.0
eSn 50 04.00
SKO 6.24 355 iPn 48 57.70 -1.2
MMN 6.37 312 P 49 03.20 2.6X
ELL 6.38 79 eP 48 58.00 -3.0X
MGR 6.79 312 P 49 06.50 0.1
SGO 7.20 314 P 49 11.50 -0.6
eSn 50 26.10
DUI 8.41 317 P 49 28.00 -0.8
SDI 8.80 315 P 49 35.50 1.3
VOY 12.01 331 eP 50 16.40 -1.0
eS 52 20.00
FVI 12.91 330 P 50 27.50 -1.7
WATA 14.00 329 eP 51 01.50 17.8X
0.8s 8.60nm
e 53 08.00
i 53 15.00
SQTA 14.06 328 iP 50 51.40 6.9X
0.6s 4.00nm 3.9mb
i 50 56.30
i 53 04.10
i(Sg) 53 12.40
HFS 25.01 350 eP 52 47.90 2.3
0.3s 2.00nm 4.0mb
S.D. = 1.0 on 31 of 44 obs.

• OCT 28, 1990 15h 54m 22.81± 0.91s
62.110 N ± 9.7km 149.665 W ±10.3km
DEPTH = 33.0km (normal)
CENTRAL ALASKA (1)

PMR 0.58 154 iPd 54 34.40 -0.1
TOA 1.64 89 iPc 54 50.40 0.6
FBA 2.92 16 iPd 55 06.60 -1.4
SVW 3.02 253 iPd 55 09.10 -0.3
IMA 4.35 338 eP 55 29.60 1.3
S.D. = 1.4 on 5 of 5 obs.

OCT 28, 1990 15h 57m 24.66± 0.59s
7.440 S ± 3.8km 128.379 E ± 4.5km
DEPTH = 156.2 ± 5.6 km
5.4mb (33 obs.)
BANDA SEA (280)

MTN 6.02 153 iPd 58 52.30 -0.2
KNA 8.27 177 iPd 59 21.40 -1.3
eS 00 45.00
MKS 9.13 283 ePd 59 43.00 8.9X
BKB2 12.99 298 iPd 00 35.70 11.1X
0.7s 925.50nm
WB5 13.66 155 eP 00 29.60 -3.6X
DAV 14.70 349 eP 00 50.50 4.2X
MNDI 15.23 86 eP 00 55.50 2.4
TRT 15.61 268 iPc 00 59.10 1.5
0.8s 93.80nm 5.2mb
MBL 15.95 210 iPc 01 00.60 -1.1
0.3s 33.00nm 5.2mb
eS 03 46.00
QIS 16.98 141 iPc 01 13.80 -0.6
eS 04 11.00
ASPA 16.98 162 iPd 01 12.70 -1.8
0.5s 215.40nm 5.7mb
Z 18s 0.30um 5.0MszX
iS 04 04.20
YYYY 17.50 87 eP 01 20.50 -0.4
KKM 18.07 318 ePc 01 29.50 2.3
0.9s 322.00nm 5.7mb
e 01 35.00
PMG 18.67 97 eP 01 32.50 -1.0
0.9s 537.82nm 5.9mb
WARB 18.71 185 iPd 01 34.10 0.2
0.4s 39.00nm 5.1mb
eS 04 54.00

MEKA 21.24 205 eP 01 59.90 0.3
0.3s 22.00nm 5.1mb
eS 05 51.00
CTA 21.41 128 iPc 02 02.20 1.0
0.7s 26.03nm 4.8mb
iS 05 50.00
OCP 23.10 342 eP 02 21.00 3.4X
FORR 23.29 181 eP 02 20.00 0.6
0.4s 65.00nm 5.5mb
OLP 24.29 143 iPc 02 29.20 0.2
i 03 12.10
e 07 30.00
COOL 24.29 195 eP 02 28.70 -0.3
0.4s 12.00nm 4.8mb
MRWA 24.60 207 eP 02 31.40 -0.6
BAG 24.92 342 eP 02 35.00 -0.2
BAL 25.51 204 eP 02 40.00 -0.3
0.4s 21.00nm 5.1mb
e 03 10.00
eS 07 33.00
KLB 25.99 201 iPd 02 44.50 -0.2
0.4s 29.00nm 5.3mb
e 03 15.00
KGM 26.71 290 eP 02 52.80 1.4
MUN 26.92 203 eP 02 52.30 -0.8
0.8s 85.00nm 5.4mb
e 03 29.00
eS 08 02.00
RMO 27.10 137 eP 02 53.00 -1.8
e 03 23.00
e 06 11.00
NWAO 27.39 201 iPc 02 56.90 -0.5
0.7s 57.00nm 5.4mb
Z 22s 0.30um 3.8Msz
eS 03 34.50
eS 08 15.00
RKG 28.50 200 eP 03 12.00 4.6X
CMS 28.94 148 iPc 03 11.00 -0.4
0.7s 11.00nm 4.7mb
ADE 29.00 162 iPd 03 11.80 0.0
IPM 29.79 293 ePd 03 19.80 0.8
0.8s 49.00nm 5.3mb
BRS 30.47 134 iP 03 24.00 -0.9
i 04 10.50
e(S) 11 29.50
PSI 31.07 288 ePd 03 29.50 -0.7
SNG 31.26 297 eP 03 34.20 2.3
COO 31.86 139 iPd 03 38.00 1.0
i 04 14.60
e 10 28.00
BFD 32.28 159 eP 03 43.00 2.4
BWA 32.59 148 iP 03 45.00 1.7
eScP 09 53.90
CAN 33.59 149 iP 03 52.30 0.4
e 04 28.00
eScP 09 56.20
TOO 33.78 155 iPc 03 55.10 1.6
0.5s 30.00nm 5.3mb
LOE 36.10 313 eP 04 14.00 0.7
NST 36.20 309 eP 04 15.00 0.9
BDT 38.01 310 eP 04 31.00 1.7
1.0s 125.60nm 5.6mb
SSE 38.93 350 iPc 04 37.50 0.7
1.0s 68.00nm 5.3mb
eS 10 18.00
CHG 39.03 312 ePc 04 39.00 1.2
1.0s 75.75nm 5.4mb
eS 10 20.00
DZM 39.44 116 iPd 04 42.00 0.7
KMI 40.88 323 Pc+ 04 55.00 1.8
1.5s 110.00nm 5.3mb
pP 05 07.00 44kmX
IIDJ 43.62 11 P 05 14.70 -0.5
CHJJ 44.39 12 P 05 20.00 -1.3
MTMJ 44.68 11 P 05 22.80 -0.9
MAT 44.71 11 iPd 05 22.60 -1.2
KAKJ 44.81 14 P 05 23.40 -1.1
NIIJ 45.54 12 P 05 29.90 -0.4
OFUJ 47.90 14 P 05 48.90 0.1
SHL 48.33 314 iP 05 51.50 -1.1
iS 07 17.00
BJI 48.57 347 ePc 05 53.50 -0.4
1.0s 97.00nm 5.4mb
PcP 07 18.00
eScP 10 55.00
eS 12 39.50
eScS 15 27.00

LZH 49.06 334 iPc 05 58.50 0.5
1.5s 184.00nm 5.6mb
pP 06 37.50 174kmX
sP 06 57.00
ScP 10 58.00
S 12 45.00
KOD 53.65 288 eP 06 32.00 -0.9
GUN 54.04 312 P 06 35.12 -0.6
0.7s 257.00nm 6.1mb
PKI 54.20 312 P 06 35.82 -1.0
0.7s 86.00nm 5.7mb
KKN 54.42 312 P 06 37.58 -0.7
0.7s 130.00nm 5.8mb
DMN 54.45 312 P 06 37.86 -0.7
0.8s 153.00nm 5.9mb
GBA 54.73 292 P 06 39.60 -0.7
GKN 55.01 312 P 06 41.70 -0.7
0.7s 255.00nm 6.2mb
HYB 55.07 297 iPd 06 42.00 -0.9
1.0s 100.00nm 5.6mb
POO 59.65 296 iPc 07 13.20 -1.8
NDI 60.99 308 iPc 07 22.00 -1.9
0.6s 56.67nm 5.7mb
QUE 69.74 306 eP 08 20.00 -0.1
SBA 73.12 172 iP 08 40.30 1.2
e(S) 18 40.40
MAW 73.96 201 iPc 08 44.40 0.3
MAIO 77.71 310 iPc 09 06.50 0.6
SPA 82.61 180 iPc 09 31.00 -0.4
1.0s 49.50nm 5.2mb
Z 20s 0.77um 5.1Msz
i 10 10.70
IMA 91.89 24 eP 10 15.70 -0.4
0.8s 5.17nm 4.7mb
PMR 92.92 28 iP 10 19.50 -1.2
0.7s 13.81nm 5.3mb
FBA 94.06 25 eP 10 23.50 -2.4
SLR 95.81 243 iPc 10 35.00 0.0
NB2 109.43 333 PKP 15 36.10 -1.6
0.9s 5.00nm
LJU 111.81 317 e(PKP) 15 42.70 0.1
VOY 112.25 317 ePKP 15 43.00 -0.6
GRC1 113.07 320 ePKP 15 44.90 0.0
Z 19s 0.10um 4.4Msz
WATA 113.48 319 iPKP 15 45.20 -0.8
0.5s 5.00nm
SQTA 113.75 319 iPKP 15 45.30 -1.2
0.7s 5.20nm
CDF 115.93 321 ePKP 15 49.10 -1.5
BSF 116.43 320 ePKP 15 50.30 -1.3
0.8s 14.80nm
HAU 116.65 320 ePKP 15 50.90 -1.0
0.8s 8.05nm
DUG 116.66 49 ePKP 15 53.00 0.7
LPG 117.21 318 ePKP 15 52.90 -0.5
0.7s 7.15nm
LPL 117.21 318 ePKP 15 52.80 -0.5
0.5s 4.35nm
BW06 118.34 45 ePKP 15 54.30 -1.2
LOR 118.48 320 ePKP 15 54.70 -0.7
0.8s 6.70nm
Z 20s 0.25um 4.8Msz
LBF 118.51 320 ePKP 15 54.80 -0.7
0.9s 12.30nm
SMF 118.72 320 ePKP 15 54.90 -0.9
SSF 118.78 320 ePKP 15 55.50 -0.4
0.9s 21.30nm
AVF 118.98 320 ePKP 15 55.40 -0.9
0.8s 7.40nm
BGF 119.39 320 ePKP 15 56.90 -0.2
0.7s 19.30nm
MAF 119.70 320 ePKP 15 57.20 -0.5
TCF 119.90 320 ePKP 15 57.70 -0.4
1.0s 19.00nm
LDF 120.40 323 ePKP 15 58.40 -0.5
0.9s 16.40nm
CAF 120.51 318 ePKP 15 59.30 0.0
0.9s 13.10nm
LPO 121.18 318 ePKP 16 00.70 0.1
0.7s 8.80nm
LPF 121.20 323 ePKP 16 00.20 -0.2
1.0s 28.00nm
MFF 121.27 321 ePKP 16 00.20 -0.4
0.7s 12.15nm
GDL 122.29 47 iPKPd 16 03.80 0.6
1.1s 17.63nm
EPF 122.38 317 ePKP 16 03.40 0.4

28d 16h

	0.9s	9.00nm				
ALQ	122.86	53	ePKP	16	05.00	0.7
ANMO	122.86	53	iPKP	16	05.00	0.7
	0.9s	6.83nm				
SIO	130.42	49	ePKP	16	20.00	1.4
TUL	130.73	48	ePKPc	16	20.00	0.8
	1.3s	21.20nm				
ANT	144.01	150	iPKPc	16	42.50	-1.4
MBO	145.30	284	iPKP	16	46.60	0.4
NNA	148.35	127	iPKP	16	52.50	1.2
	0.9s	12.60nm				
			i	16	55.50	
ARE	149.17	140	ePKP	16	55.00	2.1
BMA	149.17	194	ePKP	16	57.80	5.4X
			e	17	03.40	
VAO	149.41	188	ePKP	16	58.70	5.9X
JFO	149.89	196	ePKP	17	00.20	6.7X
PPD	150.71	181	ePKP	16	55.70	1.0
			e	17	00.90	
CNCB	150.98	146	PKP	16	57.80	1.9
			i	17	03.00	
LPB	151.14	146	PKP	16	58.00	2.0
	1.0s	160.00nm				
			i	17	03.50	
ZOBO	151.33	145	PKP	16	57.50	1.0
	1.0s	70.00nm				
CCH	151.47	150	PKP	17	04.80	8.5X
UPA	152.33	85	ePKPd	17	04.50	7.3X
SIV	154.91	158	PKP	17	02.00	1.3
			i	17	10.40	
			i	17	26.50	
SOB1	160.31	213	ePKP	17	07.60	0.3
	S.D. = 1.1		on 113 of 124 obs.			

• OCT 28, 1990 16h 03m 41.92± 0.40s
57.911 S ±11.2km 23.151 W ±10.4km
DEPTH = 33.0km (normal)
5.3mb (1 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

AIA	20.56	232	eP	08	19.00	-0.8
VAO	38.87	324	eP	11	06.90	1.1
PPD	41.23	318	eP	11	25.50	0.3
			e	11	31.60	
BAO	46.12	326	eP	12	05.50	0.7
PDCR	46.89	338	eP	12	10.30	-0.4
SIV	50.47	310	P	12	37.00	-1.4
SOB1	50.48	337	iPd	12	37.70	-0.8
CCH	51.40	304	P	12	46.10	0.3
CNCB	52.73	302	P	12	56.00	-0.2
LPB	53.02	302	P	12	58.00	-0.2
LKO	68.74	19	Pd	14	43.62	-0.7
BCAO	70.58	45	iPd	14	55.30	-0.3
	0.5s	13.00nm			5.3mb	
			i	15	07.80	
			i	15	40.20	
APO	121.64	20	ePKP	22	30.40	-1.8
	2.1s	223.20nm				
DMN	122.56	89	PKP	22	35.20	-0.1
GKN	122.63	89	PKP	22	35.18	-0.1
PKI	122.69	90	PKP	22	35.60	-0.1
DUG	122.76	294	ePKP	22	35.50	0.3
KKN	122.80	89	PKP	22	35.80	0.1
GUN	123.21	90	PKP	22	36.96	0.2
TNP	123.32	290	ePKP	22	37.20	0.8
NUR	123.88	26	ePKP	22	49.00	12.5X
ARN	124.95	286	ePKP	22	40.70	1.3
SUF	126.16	26	ePKP	22	38.10	-2.8X
SOD	130.27	23	ePKP	22	49.00	0.4
SSE	143.77	122	ePKP	23	13.30	-1.3
MBC	146.60	334	ePKP	23	19.50	1.5
	1.2s	27.00nm				
BJI	148.50	107	ePKP	23	23.50	1.4
	1.2s	26.00nm				
INK	148.66	318	ePKP	23	26.00	4.5X
FBA	153.41	308	ePKP	23	36.00	7.4X
			i	23	49.40	
IMA	156.00	310	ePKP	23	42.30	10.0X
			i	24	00.30	
TTA	156.64	302	ePKP	23	50.70	17.5X
			e	24	00.30	
	S.D. = 0.9		on 25 of 31 obs.			

? OCT 28, 1990 16h 43m 42.22± 1.26s
17.140 S ±22.2km 178.962 W ±24.0km
DEPTH = 522.1 ± 10.2 km
4.3mb (2 obs.)

FIJI ISLANDS REGION (181)

VUN	2.60	250	iPd	44	52.70	-0.4
SGE	3.01	261	iPd	44	56.10	0.3
DZM	14.60	248	iPc	46	49.00	0.8
WB5	44.23	259	eP	51	03.00	-3.6X
ASPA	44.50	254	eP	51	07.80	-0.8
	0.8s	5.20nm			4.1mb	
MAT	66.98	323	eP	53	44.00	-0.5
SPA	72.97	180	iPc	54	19.40	-0.3
	0.7s	8.59nm			4.4mb	
KSP	144.23	343	iPKPd	02	19.30	-0.3
	0.9s	27.00nm				
CLL	144.60	347	iPKPd	02	19.90	-0.3
	0.9s	24.00nm				
PRU	145.47	345	PKPc	02	23.20	1.5
KHC	146.50	345	ePKP	02	26.50	3.0X
GRC4	147.01	347	e(PKP)	02	27.50	3.2X
	0.7s	11.00nm				
CDF	148.40	352	ePKP	02	31.00	4.4X
FLN	148.44	2	ePKP	02	30.00	3.5X
LDF	148.61	1	ePKP	02	30.40	3.6X
	0.8s	12.10nm				
WATA	148.66	346	iPKP	02	32.10	5.0X
	0.5s	2.80nm				
GRR	148.80	2	ePKP	02	31.20	4.2X
	0.6s	8.10nm				
SOTA	148.85	347	iPKP	02	31.90	4.5X
	0.5s	4.90nm				
LPF	149.14	3	ePKP	02	31.90	4.3X
	0.4s	5.15nm				
LOR	149.87	356	ePKP	02	34.50	5.8X
	0.9s	11.45nm				
SSF	150.09	357	ePKP	02	35.10	6.0X
	0.9s	8.20nm				
LBF	150.14	356	ePKP	02	35.00	5.8X
	1.1s	17.10nm				
AVF	150.37	357	ePKP	02	35.40	5.9X
	0.7s	5.50nm				
BGF	150.63	357	ePKP	02	36.10	6.2X
	0.7s	7.70nm				
TCF	150.92	358	ePKP	02	36.70	6.3X
LSF	150.97	359	ePKP	02	36.60	6.2X
MAF	150.97	358	ePKP	02	37.20	6.8X
LPL	151.31	352	ePKP	02	38.70	7.5X
	0.9s	6.55nm				
LPG	151.33	352	ePKP	02	38.70	7.3X
	S.D. = 0.9		on 9 of 29 obs.			

• OCT 28, 1990 17h 12m 26.56± 0.85s
37.103 N ± 6.7km 29.834 E ±10.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 4.4 (ATH).

ELL	0.36	170	iPg	12	35.00	1.0
			iSg	12	42.00	
BCK	0.70	59	ePn	12	40.10	-0.3
KSL	1.00	192	eP	12	44.50	-1.0
			eS	13	00.00	
KHL	1.24	349	iPn	12	50.00	0.3
ARG	1.63	238	eP	12	55.50	0.1
			eS	13	04.50	
	S.D. = 1.1		on 5 of 5 obs.			

% OCT 28, 1990 17h 12m 49.52± 1.24s
33.360 S ± 6.8km 71.262 W ±13.7km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

LCCH	0.28	246	iPd	12	05.00	-52.1X
			iS	13	06.00	
TACH	0.40	137	iPc	12	59.40	0.7
			iS	13	07.00	
ROCH	0.44	29	iP	13	00.00	0.5
			iS	13	07.90	
PEL	0.53	66	iPc	13	00.70	0.1
			i	13	12.00	
LNV	0.61	192	iPd	13	01.50	-0.1
			i	13	10.50	
PCH	0.68	113	iP	13	02.50	-0.2
			iS	13	12.50	
CHCH	0.77	139	iPc	13	03.50	-0.4
			iS	13	14.60	
JACH	0.88	40	iPd	13	05.00	-0.6
			iS	13	17.00	
	S.D. = 0.6		on 7 of 8 obs.			

OCT 28, 1990 17h 14m 50.91± 0.41s
30.682 N ± 8.7km 81.555 E ± 6.9km
DEPTH = 33.0km (normal)
4.5mb (8 obs.) 4.0Msz (1 obs.)
TIBET (306)

GKN	3.79	134	P	15	50.00	1.4
NDI	4.27	243	iPnd	15	55.70	0.5
KKN	4.35	131	P	15	57.48	0.9
	0.4s	173.00nm				
DMN	4.36	134	P	15	57.94	1.1
	0.4s	167.00nm				
PKI	4.58	132	P	16	00.58	0.6
	0.4s	106.00nm				
GUN	4.68	125	P	16	02.10	0.7
SHL	10.44	117	iP	17	17.00	-4.6X
			iS	19	11.00	
QUE	12.61	271	eP	17	46.00	-5.0X
HYB	13.49	192	eP	17	56.50	-5.9X
			eS	20	17.00	
POO	13.97	212	eP	18	04.50	-4.3X
			iS	20	29.50	
BOM	14.16	216	eP	17	58.30	-12.8X
			eS	22	04.00	
GBA	17.42	193	P	18	44.00	-9.0X
			S	21	34.00	
KMI	19.52	101	eP	19	17.50	-1.2
	2.0s	70.00nm			4.6mb	
Z	16s	0.80um			3.7Msz	
CHG	19.69	123	eP	19	18.10	-2.3
	1.2s	26.56nm			4.4mb	
			eS	29	12.00	
KOD	20.70	191	eP	19	30.00	-1.3
BDT	20.77	126	eP	19	30.80	-0.8
BJI	29.58	62	eP	20	50.50	-4.4X
	1.1s	7.00nm			4.3mb	
HFS	52.98	325	eP	24	07.00	0.8
	0.5s	2.00nm			4.3mb	
Z	18s	0.13um			4.0Msz	
			LR	44	19.00	
NB2	54.22	326	P	24	15.60	0.2
	0.9s	3.60nm			4.4mb	
BCAO	64.62	260	iPc	25	26.20	-1.6
	0.5s	3.00nm			4.6mb	
WB5	71.43	128	eP	26	09.10	-1.1
MBC	72.52	5	eP	26	16.00	0.2
	1.0s	12.00nm			4.8mb	
IMA	74.74	20	iPd	26	29.50	0.4
	0.8s	3.80nm			4.4mb	
TTA	76.11	23	eP	26	24.10	-12.7X
FBA	77.30	19	ePd	26	43.40	0.1
LKO	82.76	277	P	27	13.52	0.1
KIC	83.62	274	P	27	18.50	0.7
TIC	83.71	274	P	27	19.00	0.7
LIC	83.93	274	P	27	20.00	0.6
ZOBO	148.83	290	ePKP	34	33.00	-0.9
LPB	148.95	290	ePKP	34	39.00	5.1X
CNCB	149.00	289	ePKP	34	30.00	-4.2X
	S.D. = 1.1		on 22 of 32 obs.			

OCT 28, 1990 17h 56m 42.90± 0.54s
10.100 N ± 8.7km 93.789 E ± 7.6km
DEPTH = 33.0km (normal)
4.6mb (10 obs.)
ANDAMAN ISLANDS REGION (703)

SNG	7.35	113	eP	58	30.20	-0.5
IPM	9.03	127	ePc	58	53.00	-1.1
	0.5s	12.00nm			5.3mb	
CHTO	10.00	29	eP	59	09.50	2.1
	1.1s	10.31nm			5.0mb	
KOD	16.07	272	eP	00	30.00	1.6
GBA	16.38	284	P	00	32.00	0.0
			S	03	12.00	
KMI	17.19	29	Pc	00	47.00	4.5X
	1.5s	50.00nm			4.4mb	
PKI	19.09	337	P	01	05.26	-0.7
	0.6s	11.00nm			4.3mb	
GUN	19.22	338	P	01	07.28	-0.2
	0.6s	31.00nm			4.8mb	
DMN	19.24	336	P	01	07.56	-0.1
	0.8s	19.00nm			4.4mb	
KKN	19.33	337	P	01	08.20	-0.5
	0.6s	19.00nm			4.6mb	
GKN	19.78	335	P	01	13.22	-0.3
	0.6s	43.00nm			4.9mb	

LZH	27.43	18	eP	02 27.50	-0.4
WB5	49.84	127	eP	05 36.90	1.7
LPG	80.81	315	eP	08 55.20	-0.1
	0.5s	2.55nm		4.5mb	
LPL	80.83	315	eP	08 55.30	0.0
	0.5s	4.00nm		4.7mb	
LBF	82.58	316	eP	09 03.70	-0.5
LOR	82.62	317	eP	09 03.40	-1.0
	S.D. = 1.0	on	16 of	17 obs.	

% OCT 28, 1990 19h 33m 10.54± 2.08s
44.553 N ±16.3km 7.615 E ± 6.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.1 (GEN).

ROB	0.32	145	P	33 16.69	-0.5
			S	33 21.41	
ENR	0.35	203	P	33 17.97	0.1
			S	33 22.72	
PZZ	0.37	263	P	33 18.13	-0.1
			S	33 22.85	
STV	0.37	214	P	33 18.29	0.1
			S	33 23.29	
FIN	0.55	129	P	33 21.95	0.3
			S	33 28.59	
	S.D. = 0.4	on	5 of	5 obs.	

• OCT 28, 1990 20h 12m 30.18± 1.45s
40.321 N ±18.4km 139.101 E ±14.6km
DEPTH = 178.7 ± 21.1 km
4.5mb (14 obs.)
NEAR WEST COAST OF HONSHU, JAPAN(226)

MAT	3.84	191	iPc	13 29.90	0.1
			eS	14 17.00	
SSE	17.19	243	P	16 20.50	-0.5
	1.0s	19.00nm		4.4mb	
LZH	27.91	273	eP	18 06.00	0.5
	1.0s	18.00nm		4.8mb	
			pP	18 10.00	14kmX
CHG	40.53	250	eP	19 53.50	0.3
CHTO	40.53	250	eP	19 53.00	-0.2
	0.9s	9.16nm		4.4mb	
GUN	45.15	271	P	20 31.28	0.3
	0.4s	66.00nm		5.5mb X	
KKN	45.67	271	P	20 35.14	0.2
	0.6s	74.00nm		5.3mb	
PKI	45.68	271	P	20 35.04	-0.1
	0.6s	15.00nm		4.7mb	
DMN	45.90	271	P	20 36.84	0.1
	0.4s	13.00nm		4.8mb	
GKN	46.06	272	P	20 37.90	0.0
	0.4s	23.00nm		5.1mb	
GBA	59.77	262	P	22 18.00	-0.6
WB5	60.05	185	eP	22 16.70	-3.6X
SOD	61.23	336	eP	22 28.00	0.1
SUF	64.24	332	eP	22 47.30	-0.3
NUR	66.20	331	iP	22 59.90	-0.3
	0.3s	4.50nm		4.8mb	
			i	23 13.30	
HFS	70.35	334	eP	23 25.20	-0.6
	0.4s	1.50nm		4.1mb	
NB2	70.46	336	P	23 26.60	0.1
	0.6s	1.50nm		3.9mb	
FLN	84.37	334	eP	24 42.90	-0.2
LDF	84.40	334	eP	24 43.10	-0.1
	0.8s	6.70nm		4.5mb	
SSF	84.44	331	eP	24 43.60	0.2
LPL	84.49	329	eP	24 44.40	0.4
	0.5s	1.45nm		4.0mb	
LPG	84.50	329	eP	24 44.40	0.3
	0.6s	2.70nm		4.2mb	
AVF	84.72	331	eP	24 45.10	0.2
	0.5s	3.65nm		4.4mb	
	S.D. = 0.3	on	22 of	23 obs.	

OCT 28, 1990 20h 46m 45.50± 1.01s
34.661 N ±10.1km 24.049 E ± 6.0km
DEPTH = 66.6 ± 12.9 km
4.3mb (3 obs.)
CRETE (370)
MD 3.9 (ATH).

VAM	0.75	9	iPnc	47 00.40	-0.6
NPS	1.42	64	iPbc	47 11.90	2.2X
VLI	2.24	337	ePn	47 22.50	1.5
APE	2.69	26	ePn	47 27.00	-0.3
KAP	2.71	70	ePn	47 29.20	1.6
			eSn	48 03.50	
ATH	3.32	355	iPnd	47 36.40	0.3
ARG	3.67	64	ePn	47 41.50	0.4
			eSn	48 24.50	
SMG	3.79	36	ePn	47 45.50	2.9X
IZM	4.54	34	iPn	47 54.00	0.7
EVR	4.61	338	ePn	47 55.00	0.6
NEO	4.68	352	ePn	47 54.30	-1.0
KSL	4.75	71	ePn	47 55.50	-0.7
ELL	5.20	65	iPn	48 03.00	0.3
KZN	5.92	343	ePn	48 11.50	-1.2
BCK	5.99	60	iPn	48 12.00	-1.7
ATN	7.75	299	P	48 38.90	0.9
MEU	7.79	291	P	48 36.80	-1.8
			eSn	49 54.20	
ZNT	9.49	102	eP	49 01.00	-0.9
DSI	9.99	105	eP	49 05.00	-3.7X
WATA	15.75	327	iP	50 30.60	5.9X
SOTA	15.83	326	iP	50 30.20	4.5X
KHC	16.40	335	eP	50 36.50	3.8X
HFS	26.37	348	eP	52 17.20	0.3
	0.4s	4.60nm		4.4mb	
NB2	27.66	347	P	52 28.40	-0.3
	0.5s	1.20nm		3.8mb	
BCAO	30.51	191	iPc	52 55.30	0.8
	0.6s	5.00nm		4.4mb	
	S.D. = 1.1	on	19 of	25 obs.	

• OCT 28, 1990 21h 17m 29.02± 3.44s
33.739 S ±10.3km 72.046 W ±23.8km
DEPTH = 10.0km (geophysicist)
OFF COAST OF CENTRAL CHILE (134)

LCCH	0.48	57	iP	17 39.50	0.8
			iS	17 48.50	
LNV	0.57	112	iPd	17 41.30	0.7
			i	17 49.00	
TACH	0.93	85	iPd	17 46.50	-0.3
			iS	18 01.00	
ROCH	1.16	49	iPd	17 50.50	-0.3
			iS	18 08.00	
CHCH	1.18	100	iPd	17 50.60	-0.4
			iS	18 08.40	
SAN	1.19	77	iPd	17 50.70	-0.5
			iS	18 09.60	
PCH	1.28	85	iPd	17 52.50	-0.4
			iS	18 12.20	
PEL	1.28	63	iPd	17 53.00	0.1
JACH	1.61	50	iPd	17 57.50	-0.2
			iS	18 20.50	
MDZ	2.81	73	iP	18 20.80	5.9X
			iS	18 57.50	
RTCB	3.54	52	iPd	18 25.60	0.3
			(S)	19 24.00	
ZON	3.59	53	eP	18 31.00	5.1X
RTLL	3.86	52	ePd	18 29.80	0.0
	S.D. = 0.5	on	11 of	13 obs.	

• OCT 28, 1990 21h 40m 45.69± 0.78s
19.967 S ± 9.8km 133.572 E ± 8.1km
DEPTH = 5.0km (geophysicist)
NORTHERN TERRITORY, AUSTRALIA (591)
ML 3.0 (DIS).

WB5	0.75	84	iP	41 00.90	0.1
ASPA	3.69	175	eP	41 51.40	6.7X
	0.3s	32.90nm			
			eS	42 30.00	
DIS	5.69	97	e(P)	42 13.00	-0.1
			eS	43 07.70	
			e	43 43.00	
KNA	6.21	312	eP	42 21.70	1.5
			eS	43 26.50	
MTN	7.46	341	eP	42 36.90	-0.9
	0.3s	7.00nm		5.4mb X	
			iS	43 56.70	
WARB	8.88	225	iPc	43 01.40	3.6X
	0.3s	7.00nm		5.6mb X	
			eS	44 42.00	
FORR	11.91	203	iPc	43 40.60	1.5
	0.3s	13.00nm		5.7mb X	
			eS	45 48.50	
COOL	15.61	223	eP	44 26.40	-1.8
MRWA	18.43	237	eP	45 02.50	-1.2
MUN	19.63	229	eP	45 19.20	1.0
	S.D. = 1.5	on	8 of	10 obs.	

% OCT 28, 1990 22h 55m 14.72± 0.85s
39.947 N ± 8.3km 28.747 E ± 4.9km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.9 (ISK).

KCT	0.43	315	iPg	55 23.30	-0.1
IZI	0.68	55	iPg	55 28.50	0.3
			iSg	55 38.40	
BNT	0.75	303	iPg	55 29.30	-0.2
			iSg	55 40.30	
EDC	0.79	301	iPg	55 30.00	0.0
			iSg	55 42.00	
HRT	1.12	39	ePn	55 35.80	0.0
ISK	1.14	12	ePn	55 36.60	0.5
GPA	1.25	74	ePn	55 37.00	-0.9
ALT	1.38	130	iPn	55 40.50	0.4
	S.D. = 0.5	on	8 of	8 obs.	

% OCT 28, 1990 22h 55m 42.69± 0.88s
39.337 N ± 6.4km 15.756 E ± 8.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

TDS	0.55	54	Pd	55 53.90	0.0
			eSg	56 02.00	
MMN	0.58	18	P	55 55.60	1.2
CSI	0.60	43	P	55 55.40	0.5
ROI	0.67	69	P	55 55.20	-0.9
MGR	0.81	349	P	55 57.30	-1.2
			eSg	56 11.10	
ORI	0.90	36	P	55 59.80	-0.2
			eSn	56 14.30	
ATN	1.20	191	P	56 05.20	0.2
			eSn	56 22.50	
SGO	1.27	344	P	56 06.40	0.2
			eSn	56 23.30	
	S.D. = 0.9	on	8 of	8 obs.	

% OCT 28, 1990 23h 15m 16.75± 0.94s
43.898 N ±11.0km 11.784 E ± 6.2km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

PGD	0.05	243	P	15 17.80	-1.3
			eSg	15 21.50	
SFI	0.05	65	Pc	15 18.30	-0.6
			eSg	15 21.00	
CRE	0.30	156	P	15 22.40	-0.6
			eSg	15 28.10	
PII	0.93	259	P	15 34.30	-0.2
			eSg	15 46.30	
ARV	0.93	115	P	15 34.00	-0.5
	S.D. = 0.6	on	5 of	5 obs.	

• OCT 29, 1990 00h 11m 54.65± 0.95s
11.428 S ±10.1km 161.196 E ±18.4km
DEPTH = 33.0km (normal)
4.8mb (9 obs.) 3.4Msz (1 obs.)
SOLOMON ISLANDS (193)

HNR	2.33	328	eP	12 30.00	-1.5
			eS	13 04.00	
DZM	11.71	155	iPd	14 34.90	-7.7X
			iS	16 40.20	
RMD	19.03	216	iPd	16 15.80	-0.8
	1.0s	118.00nm		5.1mb	
			e	16 23.00	
			e	16 30.00	
COO	20.92	203	iPc	16 36.00	-1.0
	1.0s	26.00nm		4.6mb	
DIS	22.63	244	eP	16 55.60	1.4
			e	20 57.00	
WB5	27.13	249	eP	17 37.20	0.3
			eS	21 54.00	
ASPA	28.67	241	iPd	17 49.30	-1.5
	1.0s	6.80nm		4.3mb	
	Z 22s	0.10um		3.4Msz	
CHG	68.33	296	eP	22 56.20	0.9
GUN	82.63	300	P	24 17.42	0.5
	0.7s	7.00nm		4.8mb	
PKI	82.93	300	P	24 19.06	0.6
	0.6s	5.00nm		4.8mb	
KKN	83.10	300	P	24 19.70	0.5
	0.8s	7.00nm		4.8mb	

29d 00h

DMN	83.20	300	P	24	20.60	0.9	
	0.9s	14.00nm			5.1mb		
GKN	83.71	300	P	24	22.42	0.2	
	0.6s	17.00nm			5.3mb		
FBA	85.12	19	eP	24	26.80	-1.5	
	0.9s	4.58nm			4.7mb		
BCAO	142.40	262	iPKPc	31	21.30	-5.6X	
	0.5s	4.00nm					
			i	32	36.50		
PDCR	148.80	139	ePKP	31	17.50	-19.9X	
			e	31	36.80		
SOB1	149.95	132	ePKP	31	40.20	1.0	
	S.D. = 1.1	on	14 of	17	obs.		

• OCT 29, 1990 00h 26m 00.76± 0.63s
63.497 S ±11.1km 172.276 E ±13.2km
DEPTH = 10.0km (geophysicist)
5.0mb (4 obs.) 4.5Msz (2 obs.)
BALLENY ISLANDS REGION (702)

DRV	13.87	243	eP	29	20.40	1.1	
SBA	14.53	185	iPc	29	27.30	-0.6	
SPA	26.66	180	iPc	31	41.00	-0.2	
	1.1s	28.57nm			4.9mb		
	Z 20s	1.71um			4.6Msz		
COO	35.41	329	eP	32	59.60	1.1	
	0.9s	12.00nm			4.8mb		
DZM	41.59	352	iPc	33	53.80	3.6X	
ASPA	47.22	309	eP	34	33.90	-1.5	
	1.0s	17.90nm			5.1mb		
	Z 20s	0.40um			4.4Msz		
WB5	50.56	312	eP	35	00.00	-1.2	
CNCB	87.50	124	P	38	51.00	0.6	
CCH	87.65	125	eP	38	52.00	1.2	
LPB	87.71	123	P	38	50.00	-1.2	
ZOBO	87.94	123	P	38	52.00	-0.5	
	1.2s	20.27nm			5.3mb		
		LR		07	36.00		
SIV	90.74	129	eP	39	00.00	-5.0X	
MBC	145.91	23	ePKP	45	40.50	1.3	
	1.0s	12.00nm					
VAY	151.60	233	ePKP	45	53.70	4.6X	
	S.D. = 1.2	on	11 of	14	obs.		

OCT 29, 1990 00h 26m 12.94± 0.93s
34.183 N ± 6.1km 25.618 E ± 4.0km
DEPTH = 21.4 ± 7.6 km
4.0mb (13 obs.)
CRETE (370)
ML 4.2 (ATH). MD 4.1 (HLW).

NPS	1.08	360	iPnd	26	33.70	1.0	
VAM	1.69	317	ePn	26	45.00	3.5X	
KAP	1.87	43	ePn	26	46.00	1.9	
APE	2.88	359	ePn	26	59.10	0.6	
ARG	2.89	45	ePn	27	00.20	1.6	
VLI	3.34	320	ePn	27	06.00	0.9	
SMG	3.65	15	ePn	27	09.00	-0.5	
KSL	3.78	58	ePn	27	11.50	0.2	
CIN	3.95	30	eP	27	14.00	0.3	
ATH	4.08	338	ePb	27	22.70	7.1X	
ELL	4.34	53	iPn	27	20.50	1.2	
IZM	4.41	17	iPn	27	20.00	-0.3	
PRK	5.08	6	ePn	27	29.50	-0.2	
BCK	5.20	50	iPn	27	31.00	-0.5	
KHL	5.20	36	iPn	27	30.60	-0.9	
NEO	5.46	340	ePn	27	35.50	0.3	
PPCY	5.60	81	eP	27	37.50	0.5	
EVR	5.63	328	ePb	27	41.00	3.4X	
EZN	5.66	6	ePn	27	36.40	-1.5	
ALT	6.06	35	eP	27	43.00	-0.6	
EDC	6.41	16	eP	27	47.00	-1.5	
CSS	6.41	81	eP	27	48.30	-0.2	
			eSn	28	55.20		
PLG	6.42	345	ePb	27	50.00	1.4	
BNT	6.43	16	eP	27	52.00	3.2X	
HLW	6.50	130	eP	27	58.00	8.3X	
			eS	29	00.00		
KOT	6.77	127	ePn	27	55.50	2.0	
			eSn	29	00.00		
SRN	7.24	323	ePn	28	00.50	0.3	
VAY	7.52	342	eP	28	13.40	9.3X	
TPE	7.56	325	ePn	28	08.00	3.4X	
OHR	7.90	332	eP	28	08.00	-1.4	
ADI	8.09	95	eP	28	10.00	-2.1	
ZNT	8.12	101	eP	28	10.00	-2.5X	
			eS	29	36.00		
SKO	8.44	338	eP	28	22.00	5.0X	
SHMJ	8.60	97	Pc	28	17.00	-2.2	
DSI	8.61	105	iP	28	17.60	-1.7	
			eS	29	48.00		
LCI	8.66	317	P	28	18.30	-1.6	
			eSn	29	44.10		
BURJ	8.75	100	Pc	28	16.80	-4.5X	
LACI	8.78	330	ePn	28	20.10	-1.5	
PRNI	8.81	113	eP	28	21.50	-0.6	
MBH	9.01	117	eP	28	25.00	0.2	
ROI	9.02	309	P	28	27.20	2.2	
PUK	9.05	332	ePn	28	22.20	-3.0X	
ATN	9.12	299	P	28	26.10	-0.2	
			eSn	29	54.80		
MEU	9.17	292	P	28	26.10	-1.0	
			eSn	29	58.00		
SHWJ	9.18	112	P	28	27.20	-0.2	
TDS	9.22	309	P	28	27.30	-0.4	
CSI	9.32	310	P	28	29.60	0.5	
ORI	9.38	311	P	28	28.80	-1.1	
			eSn	30	04.50		
HOL	9.41	119	eP	28	30.20	0.0	
			eS	30	13.30		
MMN	9.57	309	P	28	31.80	-0.7	
BADA	9.81	123	eP	28	34.00	-1.7	
			eS	30	35.70		
MGR	9.99	309	P	28	35.50	-2.7X	
SGO	10.38	311	P	28	41.20	-2.4X	
DUI	11.54	314	P	28	59.00	-0.6	
SDI	11.96	312	P	29	03.20	-2.0	
AKSR	12.34	146	eP	29	13.50	3.2X	
AGAL	12.43	148	eP	29	14.60	3.1X	
ARV	13.55	317	P	29	25.50	-0.8	
SFI	14.44	316	P	29	39.50	1.6	
ZST	15.38	338	eP	30	13.50	23.3X	
			e	54	57.40		
FVI	15.76	326	P	29	59.00	3.9X	
CTI	15.93	322	P	30	01.00	3.6X	
WATA	16.87	325	i(P)	30	14.90	5.5X	
	0.5s	6.30nm			4.0mb		
			i	30	31.30		
SQTA	16.96	324	i(P)	30	14.80	4.3X	
	0.5s	4.30nm			3.8mb		
			i	30	27.10		
KHC	17.40	333	eP	30	36.50	20.6X	
			e	30	54.00		
PRU	17.77	336	P	30	21.40	0.9	
			e	30	31.00		
KSP	17.99	341	eP	30	22.00	-1.1	
			e	30	32.50		
LPG	18.33	314	eP	30	30.10	2.4	
	0.8s	4.05nm			3.6mb		
LPL	18.35	314	eP	30	30.10	2.3	
	0.5s	2.20nm			3.6mb		
BRG	18.73	336	e(P)	31	15.00	42.8X	
CLL	19.41	336	eP	31	20.00	39.5X	
BSF	19.62	320	eP	30	41.60	-1.4	
	0.6s	3.60nm			3.8mb		
CDF	19.73	322	eP	30	43.10	-1.0	
	0.8s	8.05nm			4.1mb		
LBF	20.74	315	eP	30	55.10	0.5	
	0.6s	4.50nm			4.0mb		
LOR	20.95	315	eP	30	56.50	-0.3	
	0.6s	3.60nm			4.0mb		
SSF	21.06	314	eP	30	58.10	0.3	
	0.6s	4.50nm			4.1mb		
MEM	21.78	325	Pd	31	05.40	0.4	
DOU	22.15	322	Pd	31	09.70	1.0	
NUR	26.35	359	eP	31	58.00	9.1X	
NB2	28.44	345	P	32	07.80	-0.2	
	0.6s	1.30nm			3.9mb		
SUF	28.56	1	eP	32	07.30	-1.7	
KIC	39.42	232	P	33	47.40	4.2X	
GKN	50.32	80	P	35	10.88	0.5	
	0.5s	7.00nm			4.9mb		
KKN	50.93	80	P	35	17.42	2.3	
	0.9s	12.00nm			4.8mb		
PKI	51.12	80	P	35	18.78	2.1	
	0.8s	10.00nm			4.8mb		
GUN	51.37	80	P	35	20.94	2.3	
	S.D. = 1.3	on	61 of	86	obs.		

& OCT 29, 1990 00h 39m 40.36s
60.701 N 142.944 W
DEPTH = 6.7km
SOUTHERN ALASKA (2)
<AGS-P>.

TGL	0.08	46	iP	39	43.23	0.7	
			iS	39	45.95		
BALM	0.45	41	iP	39	49.63	0.3	
			eS	39	57.02		
YAH	0.68	119	iP	39	52.61	-1.5	
WRG	0.81	145	iP	39	55.85	-0.5	
			eS	40	00.40		
GLB	0.85	331	iP	39	55.58	-1.6	
			eS	40	07.46		
RAGM	0.91	251	iP	39	57.15	-1.0	
KAIM	1.07	224	eP	39	59.58	-1.2	
SGAM	1.13	261	iP	40	00.97	-0.9	
			eS	40	17.43		
CVA	1.39	265	iP	40	05.25	-0.9	
KLU	1.65	300	eP	40	07.73	-2.2	
VLZ	1.71	286	eP	40	10.09	-0.6	
HIN	1.78	262	iP	40	10.27	-1.6	
VZW	1.80	283	eP	40	10.27	-1.9	
			eS	40	35.57		
YKU	1.98	124	iPd	40	15.80	1.2	
GLI	2.04	277	eP	40	14.37	-1.2	
TOA	2.10	314	iPd	40	15.70	-0.7	
MID	2.13	235	iPd	40	15.20	-1.6	
SDG	2.21	327	eP	40	17.60	-0.5	
KNIM	2.40	264	iP	40	18.31	-2.4	
SCM	2.40	300	eP	40	20.60	-0.3	
PAX	2.57	333	eP	40	23.47	0.2	
HYT	2.67	85	P	40	25.30	0.6	
KNK	2.77	287	eP	40	25.55	-0.5	
SML	2.83	295	eP	40	27.00	0.1	
GHO	3.08	293	eP	40	29.83	-0.6	
PLRM	3.13	289	eP	40	30.60	-0.4	
PMR	3.13	289	iPd	40	30.30	-0.7	
PMS	3.27	282	eP	40	32.60	-0.5	
SEW	3.28	262	eP	40	30.06	-3.2	
DWY	3.74	24	P	40	41.10	1.3	
SUA	3.86	285	eP	40	42.49	0.8	
RND	3.89	317	eP	40	42.18	0.3	
CUT	3.90	299	eP	40	41.60	-0.4	
SKT	4.33	291	eP	40	47.49	-0.7	
CGLM	4.45	282	eP	40	47.91	-2.0	
SPU	4.47	280	eP	40	47.95	-2.2	
NCG	4.53	283	eP	40	48.99	-2.1	
CKL	4.61	280	eP	40	49.72	-2.4	
RDT	4.66	273	eP	40	49.29	-3.6	
FBA	4.77	334	iPd	40	55.30	1.0	
SIT	5.38	129	iPd	41	02.10	-0.9	
SVW	6.20	279	eP	41	12.40	-2.2	
	42 obs. associated						

• OCT 29, 1990 01h 05m 00.47± 0.37s
15.271 S ±17.9km 173.666 W ±14.3km
DEPTH = 42.3km (3 depth phases)
4.9mb (9 obs.) 5.4Msz (1 obs.)
TONGA ISLANDS (173)

SGE	8.39	253	eP	07	13.00	10.4X	
DZM	20.01	247	iPd	09	34.10	1.4	
CAN	38.91	232	eP	12	23.90	-0.1	
BWA	39.04	234	eP	12	23.00	-2.1	
WB5	49.60	257	eP	13	50.00	0.1	
ASPA	49.91	252	eP	13	52.10	-0.2	
	0.7s	14.10nm			5.1mb		
	Z 23s	0.30um			4.2Msz		
FORR	55.21	243	eP	14	31.00	-0.7	
	0.4s	15.00nm			5.4mb		
BCH	71.39	44	eP	16	18.10	-0.4	
PRI	71.55	43	eP	16	21.50	2.0	
MHC	71.63	41	eP	16	19.50	-0.4	
ARN	71.70	42	eP	16	20.00	-0.2	
ABL	71.78	45	eP	16	20.00	-1.0	
FHC	72.32	37	eP	16	24.40	0.6	
FRI	72.67	43	eP	16	25.50	-0.4	
CMB	72.84	41	eP	16	26.70	-0.3	
WDC	73.04	38	eP	16	28.00	0.0	
ORV	73.04	40	eP	16	27.80	-0.3	
MIN	73.46	39	eP	16	30.20	-0.4	
LBFM	73.90	38	iP	16	32.70	-0.6	
SPA	74.83	180	iPc	16	38.90	0.7	
	0.8s	12.92nm			4.9mb		
	Z 20s	1.80um			5.4Msz		
TNP	74.92	43	iPd	16	38.50	-0.8	
	0.8s	9.80nm			4.8mb		
DUG	78.94	43	eP	17	01.30	-0.3	
PNT	80.04	33	eP	17	07.00	-0.1	
DAU	80.08	43	eP	16	50.50	-17.4X	
ALQ	80.91	50	eP	17	12.00	-0.3	

	1.0s	5.00nm		4.4mb		
ANMO	80.92	50 eP	17	12.40	0.1	
FBA	82.32	11 iP	17	18.10	-0.6	
	0.8s	25.00nm		5.3mb		
		e	17	29.00	35km	
BW06	82.35	42 iP	17	19.20	-0.4	
	0.8s	4.61nm		4.6mb		
IMA	82.47	8 e(P)	17	20.00	0.4	
GOL	83.75	46 eP	17	27.30	0.4	
	0.9s	4.73nm		4.6mb		
		ipP	17	41.00	47km	
GLD	83.88	46 eP	17	28.90	1.4	
	0.8s	14.71nm		5.1mb		
		epP	17	42.30	45km	
KSP	143.62	349 ePKP	24	32.00	-0.4	
PRU	144.74	351 ePKP	24	36.00	1.7	
GRF	145.44	354 ePKP	24	36.70	1.2	
KHC	145.72	352 PKP	24	38.00	1.9X	
ZST	145.99	347 ePKP	24	39.30	2.8X	
SRO	146.07	345 PKP	24	46.30	9.7X	
		e	24	49.60		
CDF	146.94	359 ePKP	24	42.10	4.0X	
	0.8s	5.35nm				
HAU	147.36	360 ePKP	24	42.40	3.7X	
	0.7s	6.60nm				
LOR	148.03	3 ePKP	24	43.60	3.8X	
	0.8s	5.35nm				
SSF	148.22	4 ePKP	24	42.80	2.7X	
	0.8s	10.75nm				
LPL	149.85	359 ePKP	24	49.70	6.7X	
	0.8s	4.05nm				
LPG	149.87	359 ePKP	24	50.10	7.0X	
	0.8s	6.05nm				

S.D. = 0.9 on 32 of 43 obs.

OCT 29, 1990 02h 13m 00.45± 0.25s
44.602 N ± 1.8km 6.911 E ± 3.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.8 (LDG), 2.7 (GEN).

PZZ	0.17	125 Pc	13	04.59	0.2	
		S	13	07.12		
RRL	0.33	344 P	13	07.71	0.3	
		S	13	12.86		
STV	0.46	140 P	13	09.61	-0.3	
		S	13	15.73		
BNI	0.48	340 P	13	10.00	-0.3	
		eSg	13	15.80		
ENR	0.52	136 P	13	10.61	-0.5	
		S	13	17.68		
RSP	0.60	24 P	13	12.86	0.2	
		S	13	21.33		
TOUF	0.64	158 Pg	13	12.86	-0.5	
		Sg	13	21.68		
AUTN	0.71	148 Pg	13	14.53	-0.1	
		Sg	13	24.52		
MVIF	0.73	166 Pg	13	14.57	-0.3	
		Sg	13	24.82		
ROB	0.75	114 P	13	15.32	0.1	
		S	13	25.47		
SAOF	0.77	143 Pg	13	15.65	0.2	
		Sg	13	26.51		
AURF	0.77	157 Pg	13	15.83	0.2	
		Sg	13	26.47		
SBF	0.83	153 Pg	13	16.40	-0.1	
		Sg	13	28.00		
CALN	0.85	181 Pg	13	17.32	0.4	
LSD	0.87	11 P	13	17.94	0.5	
		S	13	30.06		
LPG	0.90	353 Pg	13	18.40	0.5	
REVF	0.92	159 Pg	13	18.41	0.3	
		Sg	13	31.12		
LPL	0.92	352 Pg	13	18.80	0.5	
		Sg	13	31.60		
IMI	0.99	134 P	13	19.17	0.0	
		S	13	31.71		
CKI	0.99	100 P	13	18.70	-0.6	
		eSg	13	32.90		
FIN	1.01	112 P	13	19.63	0.1	
		S	13	32.65		
FRF	1.06	190 Pg	13	20.30	-0.1	
		Sg	13	33.20		
PCP	1.17	92 P	13	22.50	0.2	
		S	13	37.72		
LRG	1.21	199 Pg	13	23.00	0.0	
		Sg	13	38.90		
ORX	1.28	36 P	13	23.55	-0.7	
		S	13	39.25		
LMR	1.30	193 Pg	13	25.20	0.7	
		Sg	13	41.20		
PGF	2.55	143 Pn	13	43.20	0.5	
		Sn	14	13.00		
BGF	3.46	306 Pn	13	54.00	-1.4	

S.D. = 0.5 on 28 of 28 obs.

OCT 29, 1990 02h 21m 28.55± 0.49s
18.941 N ± 4.8km 102.004 W ± 4.3km
DEPTH = 98.6 ± 4.1 km
5.1mb (39 obs.)
MICHOACAN, MEXICO (57)

MRX	1.08	45 iP	21	50.00	0.0	
		iS	22	07.00		
COLM	1.61	279 iP	21	54.80	-1.8	
CRX	2.25	78 iP	22	06.50	1.3	
		(S)	22	27.00		
III	2.47	103 iP	22	07.50	-0.6	
		(S)	22	27.00		
UNM	2.70	81 (P)	22	12.00	0.8	
		(S)	22	59.00		
ACX	2.90	135 iPc	22	11.50	-2.2	
		(S)	22	49.00		
IIA	3.17	86 (P)	22	20.60	3.2X	
PPM	3.20	87 iP	22	19.00	0.7	
		(S)	22	45.00		
IIT	3.50	88 iP	22	20.50	-1.7	
		(S)	22	58.00		
IISM	4.38	89 (P)	22	07.50	-26.5X	
		(S)	23	05.00		
LVVM	5.31	80 iP	22	47.00	0.2	
OXX	5.35	109 iP	22	48.50	0.8	
		(S)	23	48.00		
MZX	5.92	317 (P)	22	55.00	-0.2	
EVV	6.33	93 (P)	23	03.00	2.1	
VNM	6.99	10 iP	23	15.00	5.0X	
MEO	16.07	10 iPc	25	09.30	-0.7	
ALQ	16.42	347 iPc	25	17.30	2.7X	
	1.0s	38.25nm		4.6mb		
ANMO	16.42	347 P	25	17.70	3.1X	
	1.5s	138.89nm		5.0mb		
SIO	17.48	16 iP	25	27.50	0.0	
TUL	17.77	17 iPc	25	30.50	-0.5	
	0.6s	189.20nm		5.5mb		
Z	19s	0.50um		5.4Msz		
		e	25	40.30		
		LR	30	00.00		
PLM	19.56	320 eP	25	52.00	0.7	
PEC	20.11	321 P	25	57.00	0.2	
GOL	20.89	353 P	26	05.00	0.0	
	1.0s	72.50nm		5.0mb		
GSC	20.91	324 eP	26	06.00	1.0	
GLD	20.92	353 P	26	05.70	0.5	
	1.2s	80.81nm		4.9mb		
SBB	21.06	321 eP	26	07.00	0.5	
CLC	21.73	324 eP	26	13.00	-0.1	
ABL	22.01	319 P	26	16.80	0.7	
ISA	22.12	322 eP	26	18.00	1.0	
BCH	22.76	319 P	26	24.40	1.1	
TNP	23.23	328 P	26	29.20	1.3	
	0.8s	25.98nm		4.6mb		
PHAM	23.38	320 P	26	31.00	1.8	
PRI	23.75	320 eP	26	34.70	1.8	
FRI	23.76	323 eP	26	33.50	0.7	
LLA	24.23	320 eP	26	38.00	0.6	
CMB	24.87	324 eP	26	44.10	0.6	
ARN	25.07	321 P	26	46.50	1.2	
MHC	25.13	321 eP	26	47.00	1.0	
BLA	26.24	42 ePc	26	58.30	2.2	
	0.5s	45.77nm		5.3mb		
ORV	26.56	325 eP	27	00.80	1.8	
WDC	27.85	325 eP	27	09.30	-1.4	
LBFM	28.05	327 P	27	12.70	-0.1	
NEW	31.72	341 P	27	43.40	-1.6	
	0.7s	19.00nm		4.9mb		
LON	32.15	334 P	27	48.50	-0.3	
TBR	32.44	41 P	27	51.00	-0.3	
		pP	28	10.00	81kmX	
BMW	32.54	332 P	27	52.00	-0.2	
PNT	33.45	339 eP	28	00.00	0.0	
	0.8s	18.00nm		5.0mb		
EDM	35.33	348 iPc	28	15.20	-0.8	
FFC	35.72	0 iPc	28	18.20	-1.0	
	0.8s	56.00nm		5.5mb		
NNA	39.49	139 eP	28	52.00	0.7	
	0.8s	9.70nm		4.7mb		
		e(S)	31	18.50		
YKA	44.39	352 eP	29	28.60	-2.0	
	0.8s	28.10nm		5.1mb		
ARE	46.25	138 eP	29	47.00	0.8	
ZOBO	48.32	134 P	30	02.70	-0.1	
	0.9s	16.22nm		4.9mb		
		i	30	22.00		
LPB	48.53	134 P	30	05.00	0.8	
CNCB	48.80	135 iPd	30	07.00	0.5	
CCH	50.45	133 P	30	19.00	0.2	
		i	30	38.00		
TOA	52.84	336 iPc	30	36.60	0.7	
	0.6s	40.00nm		5.6mb		
SIV	53.17	128 iPd	30	38.00	-0.8	
		i	30	57.00		
PMR	53.75	334 iPc	30	41.90	-0.5	
	0.6s	35.71nm		5.6mb		
FBA	55.02	338 iPc	30	50.50	-1.2	
		i	31	51.80		
SVW	56.31	332 iPc	31	00.00	-1.2	
	0.7s	16.80nm		5.2mb		
TTA	57.22	334 ePc	31	05.80	-1.8	
	0.7s	15.26nm		5.1mb		
IMA	57.72	338 iPc	31	09.30	-1.8	
	0.7s	5.45nm		4.7mb		
		i	32	02.90		
MBC	58.03	355 ePc	31	11.70	-1.2	
	0.7s	36.00nm		5.5mb		
		pP	32	04.00	232kmX	
PEL	59.81	150 ePc	31	26.00	0.2	
LNV	60.14	151 iPc	31	27.80	-0.1	
CHCH	60.48	150 eP	31	30.00	-0.3	
ANM	61.69	334 eP	31	38.50	0.3	
PPD	64.15	127 eP	31	53.80	-1.2	
ADK	65.91	319 iPc	32	04.60	-1.2	
	0.7s	160.40nm			6.1mb X	
SOB1	66.41	109 eP	32	09.20	-0.4	
		e	32	28.60		
VAO	68.01	125 eP	32	20.80	1.2	
		e	32	39.10		
PDCR	69.41	112 eP	32	24.40	-3.8X	
		e	32	48.00		
DAG	70.14	14 iPd	32	29.90	-1.9	
	0.7s	12.33nm		4.9mb		
GRR	83.19	41 eP	33	45.40	0.4	
	0.8s	16.10nm		5.0mb		
LPF	83.20	42 eP	33	44.70	-0.4	
	0.8s	16.10nm		5.0mb		
FLN	83.29	41 eP	33	45.50	0.0	
	0.8s	21.50nm		5.1mb		
Z	20s	0.28um		4.6Msz		
AVE	83.52	57 iP	33	48.20	1.2	
NB2	84.25	27 P	33	50.60	0.4	
	0.8s	3.30nm		4.3mb		
LFF	85.48	44 eP	33	56.60	0.0	
	0.8s	24.20nm		5.2mb		
LSF	85.49	43 eP	33	56.80	0.1	
	1.0s	30.00nm		5.2mb		
RJF	85.85	43 eP	33	58.50	0.1	
	0.8s	13.45nm		5.0mb		
Z	20s	0.22um		4.6Msz		
LPO	85.87	44 eP	33	58.90	0.3	
	1.0s	30.00nm		5.3mb		
TCF	85.91	42 eP	33	58.50	-0.3	
	0.8s	14.80nm		5.1mb		
EPF	85.93	46 eP	33	58.60	-0.4	
	1.0s	26.00nm		5.2mb		
SOD	86.05	18 iP	33	58.30	-0.7	
MAF	86.17	42 eP	33	59.60	-0.4	
	1.0s	16.00nm		5.0mb		
BGF	86.21	42 eP	33	59.90	-0.3	
	1.0s	20.00nm		5.1mb		
SSF	86.42	41 eP	34	00.90	-0.3	
	0.8s	12.00nm		5.0mb		
AVF	86.44	42 eP	34	00.50	-0.8	
	1.0s	8.00nm		4.7mb		
LOR	86.56	41 eP	34	01.70	-0.2	
	0.8s	18.15nm		5.2mb		
Z	20s	0.10um		4.2Msz		
LBF	86.75	41 eP	34	02.30	-0.6	
	0.8s	10.75nm		4.9mb		
SMF	86.80	42 eP	34	02.10	-1.0	
	0.8s	5.35nm		4.6mb		
SUF	89.03	21 eP	34	12.60	-0.8	
	0.4s	5.60nm		5.1mb		

29d 02h

NUR 89.96 23 eP 34 12.60 -5.2X
LKO 92.93 79 P 34 32.02 -0.3
0.8s 12.50nm 5.3mb
WB5 127.04 259 ePKP 40 23.90 0.4
OUE 130.01 13 ePKP 40 30.30 1.2
GUN 132.80 350 PKP 40 34.80 0.1
GKN 132.89 352 PKP 40 34.60 0.0
KKN 133.01 351 PKP 40 35.20 0.3
PKI 133.21 351 PKP 40 36.00 0.6
DMN 133.22 351 PKP 40 36.40 1.1
HYB 143.87 359 iPKPd 40 51.40 -3.3X
0.8s 38.50nm
GBA 147.66 1 PKP 41 04.00 3.1X
PSI 150.23 314 ePKPc 41 10.70 5.7X
S.D. = 1.0 on 96 of 106 obs.

& OCT 29, 1990 02h 51m 20.39s
59.897 N 152.761 W
DEPTH = 88.2km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT 0.34 224 iP 51 33.44 -0.6
eS 51 43.33
RED 0.52 359 iP 51 34.70 -0.8
eS 51 45.51
RSO 0.57 0 iP 51 35.36 -0.6
HOM 0.61 112 iP 51 35.81 -0.3
eS 51 47.14
AUE 0.62 210 eP 51 35.45 -0.8
eS 51 46.27
AUH 0.64 213 eP 51 35.86 -0.6
AUI 0.66 211 eP 51 35.74 -0.8
XLV 0.69 130 eP 51 35.97 -0.9
eS 51 49.04
RDT 0.70 14 iP 51 36.33 -0.8
PDB 0.73 262 iP 51 36.58 -0.7
eS 51 48.87
NNL 0.75 78 iP 51 37.78 0.3
CNPM 0.86 115 iP 51 37.90 -0.8
eS 51 51.78
BRLK 0.96 97 eP 51 38.92 -0.9
CDD 1.07 205 iP 51 39.86 -1.3
MCNL 1.07 229 iP 51 40.03 -1.1
eS 51 54.62
NKA 1.14 41 iP 51 42.85 1.0
CKL 1.32 9 iP 51 43.52 -0.8
SPU 1.34 15 iP 51 43.57 -0.8
eS 52 01.91
BGL 1.38 7 iP 51 44.44 -0.6
CRP 1.41 12 iP 51 44.78 -0.7
SLKM 1.41 63 eP 51 44.29 -1.0
CGLM 1.46 14 iP 51 45.37 -0.7
NCG 1.54 11 iP 51 46.42 -0.7
SEW 1.68 81 eP 51 47.37 -1.4
SUA 1.86 31 eP 51 50.62 -0.7
SVW 1.87 312 iPc 51 49.90 -1.4
PMS 2.08 48 eP 51 53.23 -1.0
KDC 2.16 176 iPd 51 52.90 -2.3
SKT 2.18 16 iP 51 54.27 -1.2
PWA 2.26 38 eP 51 55.89 -0.6
PLRM 2.46 45 eP 51 57.42 -1.9
PMR 2.46 45 iPc 51 57.50 -1.8
KNIM 2.56 78 eP 51 57.66 -3.0
KNK 2.61 52 eP 51 59.82 -1.5
GHO 2.66 43 eP 52 00.17 -1.9
CUT 2.79 25 eP 52 02.70 -1.1
SML 2.89 47 iP 52 03.25 -2.0
GLI 2.98 68 eP 52 03.61 -2.8
VZW 3.29 67 eP 52 07.55 -3.2
SCM 3.29 51 eP 52 08.64 -2.2
VLZ 3.41 66 eP 52 09.40 -2.9
HUR 3.44 25 eP 52 11.46 -1.3
KLU 3.72 62 eP 52 13.87 -2.9
TOA 3.90 53 iPd 52 17.00 -2.2
RND 3.98 26 eP 52 18.99 -1.4
PAX 4.66 45 eP 52 27.48 -2.4
GLB 4.67 67 eP 52 26.22 -3.6
TGL 5.01 76 eP 52 31.35 -3.3
WRH 5.08 23 eP 52 32.90 -2.7
BALM 5.28 73 eP 52 35.29 -3.2
CCB 5.30 24 eP 52 35.55 -3.0
FBA 5.53 23 iPc 52 39.20 -2.5
IMA 6.21 357 iPc 52 49.50 -1.8
53 obs. associated

• OCT 29, 1990 03h 17m 37.23± 1.99s
32.574 S ±13.5km 70.122 W ±16.0km
DEPTH = 127.9 ± 24.8 km
CHILE-ARGENTINA BORDER REGION (127)

JACH 0.41 255 iPd 17 56.00 0.0
iS 18 09.00
PEL 0.74 220 iPd 17 57.50 -0.5
iS 18 12.00
ROCH 0.85 242 iPd 17 59.20 0.1
iS 18 14.80
SAN 0.99 207 iPc 18 00.40 0.3
iS 18 16.70
PCH 1.09 197 iPd 18 01.40 0.1
iS 18 19.00
TACH 1.28 212 iPc 18 03.00 -0.1
iS 18 21.80
CHCH 1.43 198 iPc 18 04.90 0.1
iS 18 25.40
LCCH 1.51 233 iPd 18 06.00 0.3
iS 18 27.50
RTCB 1.56 46 iPc 18 06.50 0.1
S 18 27.80
LNV 1.75 218 iPc 18 08.00 -0.4
iS 18 30.50
RTLL 1.87 49 iPd 18 09.90 -0.1
eS 18 33.80
S.D. = 0.3 on 11 of 11 obs.

? OCT 29, 1990 05h 23m 52.11± 6.18s
44.545 N ±47.2km 15.396 E ±21.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.4 (LJU), 2.3 (TRI).

VBY 0.96 354 ePg 24 10.40 0.0
eSg 24 19.80
CEY 1.38 330 eP 24 17.50 0.1
eSg 24 33.50
PTJ 1.41 16 ePg 24 17.90 0.0
iSg 24 33.00
LJU 1.62 330 eP 24 26.50 5.8X
iSg 24 39.00
TRI 1.64 316 iPgd 24 21.00 0.0
iSg 24 40.70
VOY 1.83 325 ePn 24 23.80 -0.1
eSn 24 46.60
S.D. = 0.1 on 5 of 6 obs.

% OCT 29, 1990 05h 36m 39.30± 0.73s
16.229 N ±13.7km 61.417 W ± 9.5km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 1.6 (FDF).

SEG 0.19 334 iPc 36 45.81 0.0
S 36 47.60
SFG 0.21 83 ePd 36 45.93 -0.1
DOG 0.27 225 ePd 36 46.80 0.0
S 36 51.00
PAG 0.32 232 eP 36 47.40 0.0
S 36 51.70
DEG 0.35 76 ePd 36 47.88 0.1
S 36 52.90
S.D. = 0.1 on 5 of 5 obs.

• OCT 29, 1990 05h 47m 27.98± 0.65s
63.653 S ±11.3km 172.650 E ±14.6km
DEPTH = 10.0km (geophysicist)
5.2mb (3 obs.) 4.9Msz (4 obs.)
BALLENY ISLANDS REGION (702)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 29C
Centroid Location:
Origin Time 05:47:34.5 0.5
Lat 63.72S 0.08 Lon 171.74E 0.07
Dep 15.0 FIX Half-duration 2.1
Moment Tensor; Scale 10**17 Nm
Mrr= 0.02 0.08 Mtt= 1.79 0.12
Mff=-1.81 0.08 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf=-0.15 0.07
Principal Axes:
T Val= 1.80 Plg= 0 Azm=182
N 0.02 90 180
P -1.82 0 92
Best Double Couple:Mo=1.8*10**17
NP1:Strike=227 Dip=90 Slip=-180
NP2: 317 90

DRV 13.94 243 eP 50 48.40 0.9
SBA 14.39 185 iPd 50 53.00 -0.3
SNZO 22.41 4 eP 52 28.00 0.3
eS 56 28.00
SPA 26.50 180 iPc 53 06.70 -0.3
1.4s 100.00nm 5.3mb
Z 22s 9.79um 5.3Msz
ASPA 47.45 309 eP 55 56.30 -8.1X
1.0s 6.80nm 4.7mb
Z 20s 0.90um 4.7Msz
WB5 50.79 311 eP 56 24.50 -5.6X
ARE 86.26 120 eP 00 12.00 0.8
CNCB 87.27 123 P 00 17.00 0.5
CCH 87.42 125 P 00 23.00 6.1X
LPB 87.48 123 eP 00 11.00 -6.3X
Z 20s 0.71um 5.1Msz
LR 28 40.00
ZOBO 87.71 123 P 00 18.00 -0.6
1.1s 29.00nm 5.5mb
Z 22s 0.40um 4.8Msz
LR 28 56.00
SIV 90.51 129 P 00 32.60 1.4
MBC 145.98 23 ePKP 07 06.00 -0.6
1.5s 49.00nm
OHR 152.06 230 ePKP 07 15.20 -1.9
S.D. = 1.1 on 10 of 14 obs.

• OCT 29, 1990 06h 19m 11.21± 0.49s
63.490 S ±10.6km 172.361 E ±12.1km
DEPTH = 10.0km (geophysicist)
5.2mb (3 obs.) 5.4Msz (3 obs.)
BALLENY ISLANDS REGION (702)

DRV 13.90 243 eP 22 31.60 1.4
SBA 14.54 185 iP 22 34.90 -3.6X
e(S) 22 45.10
SPA 26.66 180 iPc 24 50.10 -1.7
1.1s 72.62nm 5.3mb
Z 20s 12.52um 5.5Msz
CAN 31.65 322 eP 25 38.00 1.6
BWA 32.66 322 eP 25 43.80 -1.4
BRS 38.29 331 iP 26 33.00 -0.2
MAW 39.82 214 iP 26 44.00 -1.5
Z 14s 10.00um 5.8MszX
DZM 41.59 352 iPd 26 59.80 -0.8
ASPA 47.24 309 iPc 27 43.70 -2.3X
1.2s 10.10nm 4.8mb
Z 21s 1.80um 5.0Msz
WB5 50.59 311 eP 28 09.00 -2.8X
ARE 86.45 120 eP 31 55.00 -0.4
CNCB 87.47 124 P 32 01.50 0.8
CCH 87.62 125 P 32 02.50 1.4
LPB 87.68 123 P 32 02.00 0.5
ZOBO 87.91 123 P 32 03.00 0.2
1.1s 27.84nm 5.5mb
SIV 90.72 129 P 32 15.60 0.2
MBC 145.89 23 ePKP 38 48.50 -1.2
1.2s 19.00nm
IZM 147.35 236 ePKP 38 53.00 -0.2
TIO 147.42 181 iPKP 39 02.00 8.3X
EZN 148.95 237 ePKP 38 57.00 1.4
SKO 152.61 232 ePKP 39 11.60 10.6X
Z 19s 1.22um 5.7Msz
N 19s 1.08um
LR 39 39.00
S.D. = 1.2 on 16 of 21 obs.

• OCT 29, 1990 06h 42m 41.71± 0.51s
55.981 S ±23.6km 143.243 W ± 7.8km
DEPTH = 10.0km (geophysicist)
5.3mb (4 obs.) 5.2Msz (3 obs.)
SOUTH PACIFIC CORDILLERA (691)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 21C
Centroid Location:
Origin Time 06:42:50.0 0.6
Lat 55.96S FIX;Lon 143.20W FIX
Dep 15.0 FIX Half-duration 2.7
Moment Tensor; Scale 10**17 Nm
Mrr= 0.36 0.17 Mtt= 0.98 0.21
Mff=-1.34 0.12 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf= 1.34 0.19
Principal Axes:
T Val= 1.59 Plg= 0 Azm=155

N 0.36 90 180
P -1.95 0 65
Best Double Couple:Mo=1.8*10**17
NP1:Strike=200 Dip=90 Slip=-180
NP2: 290 90 0

SPA 34.20 180 iPc 49 28.60 -0.5
1.2s 45.77nm 5.3mb
Z 18s 4.00um 5.2Msz
AIA 37.30 137 eP 49 55.60 0.6
CN8 49.26 265 eP 51 33.00 0.8
CAN 49.46 265 eP 51 34.80 1.1
TOO 49.79 260 eP 51 38.00 1.8
BWA 50.44 265 eP 51 40.80 -0.4
LNV 52.73 97 ePd 51 58.50 0.0
TACH 53.22 97 eP 52 03.00 0.8
BRS 53.29 275 iP 52 04.00 1.2
SAN 53.53 97 eP 52 05.00 0.6
PEL 53.74 97 iPc 52 06.00 0.0
CMS 54.07 266 eP 52 09.00 0.6
ADE 55.43 257 e(P) 52 13.20 -5.2X
OIS 66.06 269 eP 53 30.00 -0.7
ARE 66.31 84 eP 53 31.00 -1.7
ASPA 66.78 262 iPc 53 33.20 -2.2
1.0s 23.30nm 5.3mb
NNA 66.99 77 eP 53 38.00 1.2
1.0s 12.00nm 5.0mb
Z 20s 0.89um 5.0Msz
CNCB 68.00 88 P 53 41.00 -2.7
i 53 45.00
LPB 68.15 87 eP 53 41.00 -3.5X
Z 22s 1.85um 5.3Msz
e 53 46.00
LR 00 30.00
ZOBO 68.35 87 eP 53 36.00 -10.0X
1.6s 112.78nm 5.8mb
i 53 46.00
LR 00 38.00
CCH 68.57 89 P 53 49.00 2.0
WB5 69.53 265 eP 53 50.90 -1.6
SIV 72.54 93 P 54 10.80 0.1
MTN 77.03 266 eP 54 35.70 -0.7
PDCR 87.45 109 eP 55 21.70 -8.8X
BCAO 126.57 157 iPKPc 01 49.90 3.2X
0.7s 6.00nm
i 01 58.70
LZH 131.47 275 e(PKP)02 04.00 8.4X
Z 23s 0.89um 5.4MszX
E 15s 0.40um
PP 04 39.50
PKI 135.27 251 Pdiff 59 00.00 -5.4X
TOL 148.83 104 ePKP 02 32.00 5.8X
S.D. = 1.3 on 21 of 29 obs.

& OCT 29, 1990 06h 49m 13.39s
59.932 N 152.545 W
DEPTH = 79.8km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT 0.45 231 iP 49 26.23 -0.7
eS 49 37.06
RED 0.50 347 eP 49 26.96 -0.5
HDM 0.53 121 eP 49 27.16 -0.4
eS 49 37.95
RSO 0.54 349 iP 49 27.51 -0.4
XLV 0.64 139 eP 49 27.55 -1.0
NNL 0.64 79 iP 49 28.84 0.2
RDT 0.65 6 iP 49 28.11 -0.7
eS 49 39.72
AUE 0.71 217 eP 49 28.59 -0.8
AUH 0.73 219 eP 49 30.12 0.5
AUI 0.75 217 eP 49 29.03 -0.7
CNPM 0.78 121 eP 49 29.33 -0.8
eS 49 42.39
PDB 0.84 261 iP 49 29.90 -0.9
eS 49 42.78
BRLK 0.85 101 eP 49 30.22 -0.8
NKA 1.04 38 eP 49 33.95 0.8
CDD 1.15 210 eP 49 33.14 -1.5
MCNL 1.18 231 eP 49 33.52 -1.4
eS 49 49.25
CKL 1.27 5 iP 49 35.51 -0.7
eS 49 53.21
SPU 1.28 11 iP 49 35.47 -0.8
eS 49 52.65
SLKM 1.30 63 eP 49 35.46 -1.0

BGL 1.34 3 eP 49 36.42 -0.7
CRP 1.35 8 eP 49 36.84 -0.5
CGLM 1.41 11 iP 49 37.27 -0.7
PMS 1.98 47 iP 49 44.89 -0.7
SKT 2.11 13 eP 49 46.21 -1.2
KNIM 2.44 78 iP 49 48.90 -3.0
MTU 2.46 87 eP 49 50.08 -2.1
KNK 2.50 52 iP 49 50.87 -1.9
CUT 2.72 23 eP 49 54.14 -1.5
VZW 3.17 67 eP 49 58.91 -3.1
KLU 3.61 61 eP 50 04.96 -3.2
30 obs. associated

OCT 29, 1990 07h 20m 21.89± 0.84s
34.019 N ± 9.5km 25.482 E ± 7.2km
DEPTH = 33.0km (normal)
CRETE (370)
MD 4.0 (ATH).

NPS 1.25 5 ePn 20 42.10 -1.0
VAM 1.74 323 ePb 20 53.50 3.2X
APE 3.04 1 ePn 21 08.00 -0.9
VLI 3.40 323 ePn 21 14.00 0.1
SMG 3.84 16 ePn 21 22.00 1.9
KSL 3.96 57 ePn 21 23.50 1.6
ELL 4.53 52 eP 21 29.50 -0.5
IZM 4.60 18 ePn 21 22.20 -8.8X
CSS 6.55 80 eP 21 58.00 -0.4
KOT 6.76 125 ePn 22 02.50 1.2
ZNT 8.21 100 eP 22 20.00 -1.6
eS 23 41.00
JVI 8.55 101 eP 22 25.00 -1.3
MBH 9.04 115 eP 22 34.00 0.9
ATN 9.10 300 P 22 33.70 -0.2
eSn 24 03.10
MEU 9.13 293 P 22 34.60 0.2
eSn 24 06.80
S.D. = 1.2 on 13 of 15 obs.

& OCT 29, 1990 07h 20m 27.43s
66.065 N 150.177 W
DEPTH = 3.4km
ALASKA (676)
<AGS-P>.

IMA 1.43 272 iPd 20 53.70 -0.6
iPnd 20 53.90
Sn 21 13.90
Sg 21 14.90
FBA 1.54 139 iPd 20 54.90 -0.8
iPnd 20 55.00
NEA 1.56 162 eP 20 56.90 0.8
GLM 1.59 132 eP 20 55.51 -1.0
eS 21 17.87
CCB 1.74 144 eP 20 57.63 -1.0
WRH 1.83 150 eP 21 00.44 0.5
FYU 2.06 74 eP 21 03.02 -0.2
HDA 2.15 139 eP 21 03.32 -1.3
RND 2.73 167 eP 21 13.12 0.1
9 obs. associated

OCT 29, 1990 08h 16m 14.12± 0.65s
36.232 N ± 4.9km 14.671 E ± 3.3km
DEPTH = 23.9 ± 4.5 km
4.5mb (6 obs.)
SICILY (398)

PZI 0.82 14 P 16 30.63 1.0
MEU 0.89 13 P 16 31.30 0.4
FAI 1.31 323 Pd 16 37.50 0.5
eSn 17 03.50
MCT 1.62 330 P 16 42.90 1.2
MNO 1.70 1 P 16 44.80 2.0
eSn 17 14.20
GIB 1.83 344 P 16 46.10 1.5
eSn 17 17.50
ATN 2.03 18 P 16 49.40 2.0
CVT 2.09 314 P 16 47.60 -0.6
MSI 2.09 19 P 16 50.10 1.8
eSn 17 20.50
PTS 2.23 286 P 16 49.10 -1.2
ERC 2.45 318 P 16 52.80 -0.7
eSn 17 27.80
LVI 2.56 314 P 16 53.60 -1.3
CZI 3.20 21 P 17 04.60 0.6
ROI 3.66 24 P 17 14.50 3.9X
TDS 3.67 21 P 17 11.70 1.0

CSI 3.76 19 P 17 14.30 2.3
MMN 3.80 16 P 17 13.70 1.2
MGR 3.96 10 P 17 16.90 2.1
ORI 4.07 20 P 17 17.50 1.1
SGO 4.35 6 P 17 22.00 1.7
LCI 4.84 31 P 17 26.90 -0.4
eSn 18 27.00
DUI 5.42 358 P 17 37.50 1.9
SDI 5.51 353 P 17 36.50 -0.3
IGT 5.56 52 iPc 17 35.64 -1.8
iS 18 39.53
SRN 5.56 48 ePn 17 36.40 -1.1
VLO 5.68 40 ePn 17 43.80 4.7X
RDP 5.72 345 P 17 40.50 0.7
RMP 5.78 345 P 17 41.00 0.5
AZI 5.83 351 P 17 42.00 0.8
TPE 5.84 44 ePn 17 39.00 -2.4
ITM 5.91 79 eP 17 43.20 0.8
BERA 6.09 41 iPnc 17 43.90 -1.0
EVR 6.27 63 eP 17 58.10 10.5X
MNS 6.33 347 P 17 50.00 1.6
KBN 6.52 46 ePn 17 50.00 -0.9
TIR 6.52 37 ePn 17 48.00 -3.0X
LACI 6.67 35 ePn 17 53.70 0.6
VLI 6.68 83 eP 17 53.50 0.2
AGG 6.69 63 ePc 17 53.24 -0.2
eS 19 06.88
MAO 6.75 337 P 17 55.00 0.8
OHR 6.83 43 iPn 17 53.30 -2.2
eSn 18 53.00
HCY 6.88 24 ePn 17 56.00 0.0
eSn 19 08.50
SDA 6.89 32 ePn 17 58.30 2.2
KZN 6.91 52 eP 17 57.50 1.0
FNA 6.95 47 ePd 17 54.88 -2.2
eS 19 11.72
ASS 7.00 348 P 17 57.70 -0.1
PHP 7.06 38 ePn 17 56.40 -2.2
PUK 7.08 33 ePn 17 55.30 -3.5X
TTG 7.14 28 ePn 17 58.00 -1.6
eSn 19 13.00
LIT 7.27 56 iPc 18 01.38 -0.2
BRY 7.30 23 ePn 17 59.50 -2.5
eSn 19 15.00
KKS 7.34 36 ePn 18 02.60 0.1
NKY 7.37 26 ePn 18 00.00 -3.0
eSn 19 16.00
ARV 7.38 350 P 18 04.60 1.6
BCI 7.42 33 ePn 18 05.00 1.5
NEO 7.44 63 eP 18 03.20 -0.7
PVY 7.56 31 ePn 18 04.30 -1.4
eSn 19 25.00
CRE 7.68 345 P 18 07.00 -0.3
PGF 7.68 327 Pn 18 06.80 -0.6
Sn 19 30.00
IVA 7.76 30 ePn 18 07.00 -1.5
eSn 19 28.00
SKO 7.78 40 iPn 18 10.50 1.9
iSg 19 26.00
i 19 29.50
VAM 7.78 93 eP 18 09.70 1.0
PLE 7.97 26 ePn 18 10.00 -1.3
eSn 19 32.00
SFI 7.98 345 P 18 12.40 1.0
VAY 7.99 48 iPn 18 09.20 -2.4
PLG 8.04 56 eP 18 11.50 -0.9
KNT 8.10 50 ePc 18 10.96 -2.2
eS 19 37.92
PII 8.13 338 P 18 14.50 1.0
SOH 8.20 53 ePd 18 13.48 -1.1
OUR 8.39 58 ePc 18 19.04 1.9
BDI 8.42 340 P 18 17.80 0.2
SRS 8.51 52 ePd 18 19.04 0.2
eS 19 50.20
KKB 8.63 47 iP 18 19.00 -1.5
APE 8.77 81 eP 18 23.00 0.5
MMB 8.85 50 ePd 18 24.00 0.4
NPS 8.95 93 eP 18 27.00 2.1
VTS 9.16 44 iPc 18 23.00 -4.9X
VBY 9.27 3 e(P) 18 36.00 6.7X
BOB 9.40 337 P 18 30.50 -0.7
SBF 9.42 326 Pn 18 29.30 -2.2
Sn 20 09.60
LMR 9.47 321 Pn 18 29.50 -2.5X
Sn 20 09.20
RZN 9.53 52 eP 18 35.00 1.9
FRF 9.57 322 Pn 18 31.20 -2.2

29d 08h

		Sn	20	13.00		
LRG	9.63	321 Pn	18	32.60	-1.7	
PGB	9.68	46 eP	18	30.00	-5.1X	
PTJ	9.71	5 eP	18	48.00	12.6X	
VOY	9.81	357 e(P)	18	39.00	2.2	
EZN	9.87	65 ePn	18	34.00	-3.6X	
KDZ	9.96	54 eP	18	35.00	-3.9X	
CTI	10.07	348 P	18	40.00	-0.4	
DIM	10.24	52 eP	18	42.00	-0.6	
MDI	10.24	340 P	18	42.50	-0.1	
IZM	10.26	74 ePn	18	43.90	0.9	
FVI	10.45	353 P	18	46.00	0.6	
BNI	10.70	328 P	18	47.50	-1.5	
BZS	10.74	27 ePc	18	49.00	-0.5	
PVL	10.77	46 iPd	18	45.00	-4.9X	
MFT	10.87	61 eP	18	49.50	-1.9	
LPG	11.02	330 Pn	18	54.00	0.4	
EDC	11.15	64 eP	18	55.00	-0.1	
BNT	11.19	64 eP	18	54.00	-1.7	
SOTA	11.28	348 i(P)	19	03.80	6.9X	
	1.0s	41.90nm			5.6mb X	
		i	19	14.30		
WATA	11.33	349 i(P)	19	06.50	8.8X	
KSL	12.05	86 eP	19	05.50	-1.8	
ELL	12.28	83 eP	19	10.50	0.0	
ALT	12.56	72 eP	19	17.00	2.8X	
BCK	12.81	80 eP	19	20.00	2.4	
EPF	12.96	306 Pn	19	14.60	-4.9X	
BSF	12.98	336 Pn	19	21.60	1.9	
LPO	13.28	314 Pn	19	22.00	-1.6	
CDF	13.33	338 Pn	19	27.60	3.2X	
AVF	13.52	325 Pn	19	26.80	0.1	
PRU	13.75	360 eP	19	37.00	7.2X	
		e	19	43.60		
KRA	14.34	14 eP	19	50.10	12.6X	
PPCY	14.45	90 eP	19	41.00	1.9	
MOX	14.58	352 eP	19	48.00	7.4X	
BRG	14.65	358 i(P)	19	49.10	7.6X	
	1.0s	14.00nm			4.4mb	
KSP	14.65	4 eP	19	45.50	3.9X	
CLL	15.12	356 iP	19	53.30	5.6X	
	1.6s	31.00nm			4.4mb	
		i	20	03.10		
CSS	15.24	89 eP	19	47.30	-2.1	
ADI	17.20	95 eP	20	13.50	-0.9	
RMN	17.61	103 eP	20	20.50	0.9	
		eS	23	20.00		
MBH	18.12	105 eP	20	27.00	1.2	
TIO	19.01	260 iP	20	37.00	0.1	
NB2	24.92	356 P	21	35.20	-1.4	
	0.7s	5.00nm			4.3mb	
LKO	32.32	220 P	22	43.36	-0.3	
	0.4s	6.00nm			4.8mb	
KIC	34.65	216 P	23	04.00	0.2	
LIC	34.90	216 P	23	06.50	0.6	
GKN	58.68	77 P	26	13.40	1.1	
DMN	59.23	77 P	26	17.20	0.9	
KKN	59.29	76 P	26	17.40	0.8	
PKI	59.49	77 P	26	18.40	0.3	
GUN	59.70	76 P	26	20.20	0.6	
GBA	60.18	95 P	26	27.00	4.5X	
	0.9s	8.20nm			4.9mb	
KOD	62.12	98 eP	26	41.00	4.9X	
BW06	86.37	322 iP	28	56.80	0.9	
	1.2s	4.57nm			4.6mb	
	S.D. = 1.4	on 110 of 136 obs.				

? OCT 29, 1990 08h 21m 09.59± 4.11s
36.689 N ±34.0km 14.602 E ±11.3km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MEU	0.49	33 P	21	19.20	-0.3	
		eSg	21	29.50		
FAI	0.94	309 P	21	27.50	-0.1	
		eSn	21	42.00		
MNO	1.24	3 P	21	33.70	0.9	
		eSn	21	50.50		
GIB	1.38	341 P	21	34.00	-0.9	
ATN	1.62	25 P	21	38.60	0.3	
CVT	1.75	305 P	21	40.50	0.4	
TDS	3.27	24 P	22	02.00	0.2	
MGR	3.52	12 P	22	05.00	-0.5	
	S.D. = 0.7	on 8 of 8 obs.				

? OCT 29, 1990 08h 31m 17.29± 4.67s
36.624 N ±36.6km 14.624 E ± 9.6km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MEU	0.54	27 Pc	31	27.90	-0.2	
		eSg	31	37.10		
FAI	1.00	311 P	31	36.00	-0.2	
MCT	1.28	322 P	31	41.90	0.8	
MNO	1.31	2 P	31	42.00	0.4	
		eSn	31	59.50		
GIB	1.44	341 P	31	42.80	-0.7	
ATN	1.67	23 P	31	47.50	0.8	
TDS	3.32	24 P	32	10.50	0.2	
MGR	3.58	11 P	32	13.50	-0.5	
SGO	3.96	8 P	32	19.00	-0.4	
	S.D. = 0.6	on 9 of 9 obs.				

OCT 29, 1990 08h 52m 40.18± 0.45s
40.289 N ± 6.8km 77.887 E ± 8.4km
DEPTH = 33.0km (normal)
5.1mb (8 obs.) 3.9Msz (1 obs.)
KIRGHIZ-XINJIANG BORDER REGION (320)

NDI	11.59	183 eP	55	27.00	0.7	
		eS	57	33.00		
GKN	13.46	153 P	55	50.66	-0.8	
	0.6s	67.00nm			5.8mb X	
KKN	13.88	152 P	55	57.24	0.2	
	0.5s	36.00nm			5.4mb	
DMN	13.99	153 P	55	58.16	-0.3	
	0.6s	33.00nm			5.3mb	
GUN	14.00	149 P	55	58.66	-0.1	
	0.4s	26.00nm			5.3mb	
PKI	14.13	152 P	56	00.30	-0.1	
MAIO	14.98	260 eP	56	12.00	0.8	
		eS	58	52.00		
LZH	20.80	93 eP	57	21.50	0.2	
	1.5s	28.00nm			4.4mb	
Z	20s	0.49um			3.9Msz	
N	10s	0.29um				
E	11s	0.23um				
		pP	57	26.50	18kmX	
		sP	57	29.00		
		PP	57	44.50		
		eS	01	16.00		
		Lg	04	22.00		
POO	21.96	190 eP	57	38.50	5.6X	
HYB	22.80	178 eP	57	48.00	6.8X	
GBA	26.58	181 P	58	16.00	-1.2	
SSE	36.04	91 eP	59	41.50	1.2	
SUF	37.82	324 eP	59	55.00	0.1	
NUR	38.16	320 eP	59	56.00	-1.8	
SOD	38.82	331 eP	00	04.00	0.8	
KEV	39.48	335 eP	00	09.00	0.3	
NAO	44.96	320 P	00	52.30	-1.2	
	0.7s	2.90nm			4.3mb	
MBC	63.22	5 eP	03	02.50	-4.4X	
	0.5s	7.00nm			5.0mb	
BCAO	64.01	253 iPc	03	14.00	1.1	
	0.8s	15.00nm			5.1mb	
FFC	85.36	360 eP	05	11.00	-3.9X	
	0.9s	13.00nm			5.1mb	
	S.D. = 0.9	on 16 of 20 obs.				

% OCT 29, 1990 10h 02m 17.87± 1.08s
39.108 N ± 7.1km 27.600 E ±14.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

IZM	0.76	201 ePg	02	32.70	0.0	
		eSg	02	43.40		
EZN	1.22	306 ePn	02	40.50	0.0	
EDC	1.25	9 ePn	02	41.00	-0.2	
BNT	1.27	11 ePn	02	41.50	0.0	
KGT	1.36	350 iPn	02	43.00	0.2	
	S.D. = 0.2	on 5 of 5 obs.				

% OCT 29, 1990 10h 04m 46.93± 1.20s
39.103 N ± 8.0km 27.603 E ±15.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.1 (ISK).

IZM	0.75	201 ePg	05	01.70	0.0	
		eSg	05	13.00		
EZN	1.22	307 ePn	05	10.00	0.3	
EDC	1.26	9 ePn	05	10.00	-0.3	
BNT	1.28	11 iPn	05	11.50	0.9	
KGT	1.37	350 iPn	05	11.00	-1.0	
	S.D. = 1.0	on 5 of 5 obs.				

• OCT 29, 1990 10h 07m 53.20± 1.93s
15.527 S ±15.6km 167.430 E ± 8.7km
DEPTH = 127.3 ± 16.9 km
4.8mb (6 obs.)
VANUATU ISLANDS (186)

PVC	2.36	159 iP	08	32.00	0.0	
		iS	09	02.00		
DZM	6.58	188 iPc	09	28.90	0.0	
		iS	10	42.00		
BRS	18.02	227 iPc	11	58.50	1.4	
RMO	20.54	235 iPd	12	23.60	0.1	
COO	20.67	221 iPc	12	26.20	1.4	
	0.7s	23.00nm			4.7mb	
CMS	25.32	227 eP	13	10.00	0.3	
MNG	25.96	166 eP	13	13.70	-1.8	
OIS	26.91	255 eP	13	24.00	-0.3	
WB5	31.76	257 eP	14	06.10	-1.4	
ASPA	32.55	250 iPd	14	13.40	-0.9	
	0.4s	51.80nm			5.7mb	
KNA	37.20	264 eP	14	53.20	-0.7	
FORR	39.01	240 eP	15	09.00	0.1	
	0.4s	30.00nm			5.4mb	
WARB	39.41	248 eP	15	12.40	0.0	
	0.3s	3.00nm			4.5mb	
MBL	45.40	255 eP	16	00.80	-0.1	
	0.4s	10.00nm			4.9mb	
NANU	49.36	253 eP	16	31.00	-0.8	
SPA	74.57	180 iPd	19	19.40	-0.3	
	1.0s	6.00nm			4.3mb	
		e	19	50.00		
NB2	131.43	345 PKP	26	50.20	-1.6	
	0.7s	2.10nm				
FLN	145.40	346 ePKP	27	16.10	-1.4	
	0.6s	27.05nm				
LDF	145.47	345 ePKP	27	16.40	-1.2	
	0.8s	26.85nm				
LOR	145.54	340 ePKP	27	17.20	-0.6	
	0.8s	16.10nm				
MNS	145.55	326 PKP	27	35.40	17.4X	
		eSg	27	40.50		
LBF	145.75	340 ePKP	27	18.30	0.1	
	0.8s	22.85nm				
SSF	145.83	340 ePKP	27	18.10	-0.2	
	0.6s	17.15nm				
GRR	145.84	346 ePKP	27	17.90	-0.3	
	0.8s	29.55nm				
RMP	145.93	325 PKP	27	25.80	7.2X	
f		eSg	27	27.50		
RDP	145.96	325 PKP	27	26.30	7.5X	
		eSg	27	28.80		
LPL	145.98	335 ePKP	27	19.50	0.6	
	0.6s	7.20nm				
LPG	145.99	335 ePKP	27	19.30	0.3	
	0.6s	9.45nm				
SMF	146.09	340 ePKP	27	19.00	0.2	
	0.8s	16.10nm				
AVF	146.12	340 ePKP	27	18.70	-0.1	
	0.4s	5.15nm				
LPF	146.22	346 ePKP	27	19.10	0.2	
	0.6s	17.15nm				
BGF	146.49	341 ePKP	27	19.80	0.4	
	0.6s	20.75nm				
MAF	146.88	341 ePKP	27	21.10	1.1	
	0.6s	7.20nm				
TCF	146.93	341 ePKP	27	21.30	1.2	
	0.8s	9.40nm				
LSF	147.17	342 ePKP	27	21.80	1.3	
	0.5s	14.60nm				
MFF	147.33	344 ePKP	27	21.50	0.8	
	0.6s	19.85nm				
BCAO	147.50	253 iPKPc	27	24.00	2.0	
	0.6s	4.00nm				
RJF	148.03	341 ePKP	27	24.10	2.2X	
	0.6s	7.20nm				
LFF	148.60	342 ePKP	27	25.60	2.8X	
	0.8s	12.10nm				
LPO	148.69	341 ePKP	27	26.10	3.1X	
	0.8s	12.10nm				
	S.D. = 1.0	on 34 of 40 obs.				

% OCT 29, 1990 10h 57m 19.06± 0.69s
40.653 N ± 6.3km 29.182 E ± 5.6km

DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.1 (ISK).

IZI	0.39	145	iPg	57 27.00	0.0
			iSg	57 32.00	
HRT	0.41	65	ePg	57 27.50	0.1
ISK	0.42	347	ePg	57 27.50	-0.2
			eSg	57 33.00	
KCT	0.75	238	iPg	57 32.50	-1.2
CTT	0.75	311	iPg	57 33.50	-0.3
BNT	1.01	253	ePn	57 39.00	0.9
KGT	1.45	263	iPn	57 46.00	0.7

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

OCT 29, 1990 11h 18m 32.34± 0.72s
44.359 N ± 9.3km 10.088 E ± 4.9km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.8 (LDG).

MME	0.47	110	Pd	18 42.10	0.2
			eSg	18 49.10	
BDI	0.47	129	Pd	18 41.90	0.0
			eSg	18 47.50	
BOB	0.61	312	P	18 44.60	-0.2
			eSg	18 55.00	
PII	0.71	154	P	18 45.70	-0.6
			eSg	18 55.80	
CKI	1.30	274	P	18 57.60	1.2
CRE	1.53	118	P	19 00.00	0.2
SBF	1.97	256	Pn	19 06.00	-0.2
			Sn	19 28.80	
PGF	1.98	204	Pn	19 07.50	1.2
FRF	2.61	253	Pn	19 14.00	-1.3
			Sn	19 44.00	
LPG	2.63	297	Pg	19 20.00	4.2X
LPL	2.65	297	Pg	19 20.00	3.9X
LMR	2.78	250	Pn	19 17.20	-0.6
			Sn	19 47.50	
LRG	2.84	253	Pn	19 18.70	0.1
			Sn	19 48.00	

S.D. = 0.8 on 11 of 13 obs.

? OCT 29, 1990 11h 24m 43.12± 7.92s
39.508 N ±55.6km 26.458 E ±30.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.8 (ISK).

EZN	0.33	342	iPg	24 50.00	0.0
			eSg	24 55.00	
KGT	1.14	34	iPn	25 04.50	0.0
EDC	1.37	52	ePn	25 09.00	0.8
BNT	1.41	53	ePn	25 08.00	-0.8
MFT	1.42	26	ePn	25 11.50	2.4X

S.D. = 1.1 on 4 of 5 obs.

• OCT 29, 1990 11h 31m 38.64± 1.53s
36.512 N ± 9.8km 141.838 E ±11.7km
DEPTH = 16.4 ± 8.4 km
4.6mb (1 obs.)
NEAR EAST COAST OF HONSHU, JAPAN (228)

KAKJ	1.38	258	iPd	32 02.00	-1.1
YAMJ	2.19	320	P	32 14.90	0.0
			eS	32 39.30	
CHJJ	2.34	259	iPd	32 15.90	-1.1
			S	32 39.80	
NIIJ	2.39	289	P	32 17.10	-0.5
			S	32 43.00	
OFUJ	2.57	357	P	32 21.10	0.9
			eS	32 53.40	
MAT	2.92	272	iPd	32 25.00	-0.3
			eS	32 58.00	
MTMJ	3.25	272	P	32 29.80	-0.2
IIDJ	3.35	253	P	32 32.60	1.3
			S	33 11.90	
TSRJ	4.84	260	P	32 53.00	0.5
MRRJ	5.94	355	eP	33 09.70	1.9
			eS	34 17.70	
HOOJ	5.97	10	P	33 07.90	-0.4
			eS	34 12.00	
KUSJ	6.94	18	P	33 20.60	-1.4
			S	34 34.00	
ASAJ	7.62	4	P	33 30.90	-0.7
WB5	56.53	188	eP	41 23.00	0.6
NB2	74.80	337	P	43 19.40	0.0
	0.7s		4.60nm		4.6mb
ZOBO	146.65	61	PKP	51 24.00	3.5X
LPB	146.84	61	ePKP	51 28.00	7.4X
CNCB	147.11	61	PKP	51 26.20	4.9X

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

OCT 29, 1990 11h 32m 54.62± 0.54s
26.521 N ± 9.8km 92.405 E ± 5.6km
DEPTH = 33.0km (normal)
4.9mb (18 obs.)
EASTERN INDIA (317)
Felt at Gauhati.

GUN	5.97	285	P	34 24.70	1.3
PKI	6.33	281	P	34 28.66	0.3
KKN	6.47	283	P	34 31.00	0.7
DMN	6.60	281	P	34 32.50	0.4
GKN	7.07	284	P	34 38.94	0.3
CHG	9.76	140	eP	35 25.60	9.8X
NDI	13.64	283	eP	36 07.50	-0.6
			eS	38 28.00	
LZH	13.65	43	eP	36 08.00	-0.3
	2.0s		50.00nm	5.0mb	
	Z 18s		0.19um	3.9Msz	
			pP	36 15.00	
HYB	15.71	238	iPc	36 30.00	-5.2X
	1.0s		45.00nm	4.6mb	
			e	36 39.50	
			eS	39 08.00	
GBA	19.02	230	Pd	37 16.20	-0.3
	0.5s		3.50nm	3.8mb X	
KOD	21.49	224	eP	37 44.00	1.0
BJI	23.92	50	eP	38 08.50	2.1
	1.0s		6.00nm	4.1mb	
SSE	25.59	73	eP	38 20.00	-2.5X
MAT	39.98	64	eP	40 28.00	0.1
SOD	56.51	335	iP	42 36.00	0.4
KEV	56.89	338	eP	42 29.00	-9.3X
WB5	61.52	134	eP	43 07.50	-3.4X
HFS	61.82	326	eP	43 11.30	-1.1
	0.5s		17.00nm	5.4mb	
HAU	68.26	314	eP	43 53.70	-0.6
	0.8s		10.75nm	5.0mb	
LPG	68.69	311	eP	43 57.20	-0.1
	0.6s		6.30nm	4.9mb	
LPL	68.69	311	eP	43 57.30	0.0
	0.6s		9.00nm	5.0mb	
LBF	70.09	313	eP	44 04.90	-0.7
	0.4s		2.85nm	4.7mb	
SMF	70.28	313	eP	44 06.20	-0.5
	0.6s		8.10nm	5.0mb	
SSF	70.37	313	eP	44 06.90	-0.3
	0.7s		8.80nm	4.9mb	
AVF	70.56	313	eP	44 07.80	-0.5
	0.8s		10.75nm	5.0mb	
MAF	71.25	313	eP	44 12.60	0.0
	0.8s		9.40nm	4.9mb	
TCF	71.47	313	eP	44 14.00	0.1
	0.4s		3.45nm	4.7mb	
CAF	72.01	312	eP	44 17.20	0.0
	0.4s		3.70nm	4.7mb	
LDF	72.19	316	eP	44 17.80	-0.3
	0.8s		13.45nm	5.0mb	
RJF	72.25	312	eP	44 18.80	0.2
	0.9s		13.10nm	4.9mb	
LPO	72.68	312	eP	44 21.20	0.1
	0.4s		2.30nm	4.5mb	
BCAO	73.60	267	iPd	44 25.10	-1.9
	0.9s		18.00nm	5.1mb	
			i	46 59.60	
			i	47 30.50	

S.D. = 0.8 on 27 of 32 obs.

• OCT 29, 1990 12h 02m 42.98± 1.32s
66.133 N ±14.6km 154.978 W ± 7.0km
DEPTH = 33.0km (normal)
ALASKA (676)

IMA	0.53	96	iPd	02 54.40	0.2
NEA	2.92	120	eP	03 29.16	1.0
FBA	3.24	109	iPd	03 32.10	-0.5
TTA	3.25	188	iPd	03 31.80	-1.0
WRH	3.34	117	eP	03 34.37	0.3
CCB	3.35	113	eP	03 33.88	-0.4
GLM	3.36	107	eP	03 33.37	-1.1
SKT	4.44	158	eP	03 51.05	1.4
ANM	4.63	255	eP	03 52.70	0.3
SVW	5.05	184	iPd	03 58.10	-0.4

S.D. = 0.9 on 10 of 10 obs.

OCT 29, 1990 12h 38m 32.91± 0.68s
41.113 N ± 6.3km 23.547 E ± 6.3km
DEPTH = 10.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)

SRS	0.03	83	ePc	38 32.50	-2.5
			eS	38 33.15	
SOH	0.33	207	iPc	38 39.10	-0.6
			eS	38 44.34	
KNT	0.49	276	ePc	38 42.37	-0.5
			eS	38 49.74	
MMB	0.50	16	ePgd	38 42.00	-1.0
KKB	0.83	335	iPgd	38 48.00	-1.0
OUR	0.84	157	ePc	38 50.21	1.0
GRG	0.88	260	ePc	38 50.18	0.3
RZN	1.05	56	iP	38 54.00	1.1
VTS	1.50	350	eP	39 02.00	2.0
KDZ	1.51	69	iP	39 00.00	0.0
PG8	1.51	18	eP	39 01.00	1.0

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

? OCT 29, 1990 13h 01m 26.91± 2.18s
36.381 N ±45.5km 70.352 E ±16.0km
DEPTH = 206.7 ± 23.1 km
4.8mb (2 obs.)
HINDU KUSH REGION (718)

MAIO	8.76	273	eP	03 31.00	0.0
NDI	9.61	141	iPc	03 42.00	0.1
	0.5s		17.61nm	4.6mb	
			iS	05 23.00	
GKN	14.69	121	P	04 46.28	0.0
DMN	15.26	121	P	04 52.90	-0.5
KKN	15.27	120	P	04 53.02	-0.5
PKI	15.49	120	P	04 56.72	0.4
GUN	15.62	118	P	04 58.50	0.6
	0.9s		56.00nm	5.0mb	
KIC	74.26	266	P	12 43.20	0.0

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

• OCT 29, 1990 13h 27m 43.18± 0.79s
26.293 N ±16.6km 95.750 E ± 8.4km
DEPTH = 33.0km (normal)
BURMA-INDIA BORDER REGION (294)

KMI	6.41	99	ePg	29 18.00	0.0
			Sg	30 29.00	
CHG	8.01	158	eP	29 40.20	0.0
GUN	8.94	283	P	29 53.84	0.4
	0.4s		10.00nm	5.3mb X	
PKI	9.32	280	P	29 58.22	-0.4
KKN	9.45	281	P	30 00.22	-0.1
DMN	9.59	280	P	30 02.06	-0.2
GKN	10.04	282	P	30 08.72	0.3
	0.4s		16.00nm	5.6mb X	

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

? OCT 29, 1990 14h 21m 00.86± 2.79s
0.537 S ±18.6km 80.800 W ±25.3km
DEPTH = 23.1 ± 9.1 km
NEAR COAST OF ECUADOR (105)

GGP	2.23	81	eP	21 36.50	-1.2
YANA	2.27	79	P	21 36.00	-2.1
QTO	2.29	82	eP	21 38.00	-0.4
OUR	2.30	81	eP	21 35.60	-2.9
VC1	2.40	92	iP+	21 40.00	0.0
TUNG	2.51	110	eP	21 41.20	-0.2
			eS	22 13.00	
COTA	2.61	71	eP	21 43.80	0.8
CAYA	2.88	78	eP	21 47.70	0.9
			S	22 19.80	
ZOBO	20.01	142	P	25 35.00	-0.7
LPB	20.23	142	eP	25 47.00	9.2X
CNCB	20.52	143	P	25 40.50	-0.4
SIV	24.79	129	P	26 23.00	0.3
TIC	75.94	83	P	32 48.00	-0.3
KIC	76.21	83	P	32 49.40	-0.4

S.D. = 1.2 on 13 of 14 obs.

OCT 29, 1990 15h 22m 12.40± 0.72s
46.581 N ± 4.9km 2.115 E ± 5.4km
DEPTH = 10.0km (geophysicist)

29d 15h

FRANCE (538)
ML 2.7 (LDG).

TCF	0.30	167	Pg	22	18.20	-0.5
			Sg	22	22.20	
MAF	0.48	139	Pg	22	21.40	-0.7
			Sg	22	27.40	
BGF	0.51	92	Pg	22	22.00	-0.6
			Sg	22	28.40	
LSF	0.52	231	Pg	22	22.70	-0.3
			Sg	22	29.50	
AVF	0.88	76	Pg	22	28.80	-0.4
			Sg	22	40.00	
AGO	0.88	127	Pg	22	29.59	0.3
			Sg	22	40.76	
GRC	0.97	42	Pg	22	31.66	0.8
PYM	1.04	143	Pg	22	33.07	1.0
			Sg	22	45.52	
SSF	1.07	63	Pg	22	33.00	0.5
			Sg	22	46.80	
SMF	1.19	86	Pg	22	34.50	-0.1
			Sg	22	50.00	
PLDF	1.21	120	Pn	22	35.82	0.8
			Sg	22	51.20	
LBF	1.34	72	Pg	22	37.00	-0.1
			Sg	22	54.50	
RJF	1.34	198	Pg	22	37.40	0.3
			Sg	22	54.00	
LOR	1.38	59	Pn	22	36.80	-0.9
			Pg	22	38.40	
			Sg	22	55.80	
LFF	1.90	211	Pg	22	48.40	3.2X

S.D. = 0.7 on 14 of 15 obs.

OCT 29, 1990 16h 53m 57.08± 1.90s
8.815 N ± 6.0km 126.637 E ±10.2km
DEPTH = 75.0 ± 18.0 km
5.0mb (10 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

MNI	7.54	194	eP	55	46.70	0.2
MTN	21.98	168	eP	58	46.50	0.2
SSE	22.74	348	P	58	54.50	0.8
	1.0s	10.00nm			4.2mb	
LOE	25.69	292	eP	59	21.50	-0.5
CHG	28.63	293	eP	59	48.70	-0.1
WB5	29.51	165	eP	59	55.00	-1.7
MAT	29.54	19	eP	59	57.00	0.2
QIS	31.85	157	iPd	00	17.00	-0.2
ASPA	33.05	168	eP	00	26.60	-1.1
	0.6s	4.20nm			4.5mb	
WARB	34.79	180	iPd	00	43.20	0.6
	0.3s	7.00nm			5.1mb	
MRWA	39.18	195	eP	01	19.00	-0.4
FORR	39.46	178	eP	01	22.00	0.3
	0.4s	39.00nm			5.7mb	
BAL	40.34	193	eP	01	30.00	1.0
MUN	41.77	193	eP	01	41.50	0.8
NWAO	42.46	192	eP	01	47.00	0.6
GUN	42.83	302	P	01	49.92	0.0
	0.7s	46.00nm			5.4mb	
PKI	43.12	301	P	01	51.78	-0.5
	0.7s	14.00nm			4.9mb	
KKN	43.29	301	P	01	53.40	-0.1
	0.8s	17.00nm			4.9mb	
DMN	43.39	301	P	01	54.46	0.1
	0.8s	17.00nm			4.9mb	
GKN	43.90	301	P	01	57.84	-0.5
	0.7s	16.00nm			5.0mb	
NDI	50.39	300	iPc	02	49.00	0.1
	0.5s	17.61nm			5.3mb	
HFS	93.50	332	ePKP	07	05.40	-0.1
	2.6s	652.40nm			6.6mb	X

S.D. = 0.7 on 22 of 22 obs.

& OCT 29, 1990 18h 44m 41.61s
59.922 N 153.587 W
DEPTH = 139.4km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.32	146	iP	45	00.54	0.9
			eS	45	15.09	
PDB	0.33	246	iP	45	00.25	0.6
			eS	45	14.83	
AUH	0.56	173	eP	45	01.83	-0.6
AUE	0.58	169	eP	45	01.54	-0.8
AUI	0.59	172	eP	45	01.69	-0.8
RED	0.64	39	iP	45	02.03	-0.9
RSO	0.68	37	eP	45	02.44	-0.9
			eS	45	18.24	
MCNL	0.83	208	eP	45	03.13	-1.1
CDD	1.00	182	eP	45	04.51	-1.2
HOM	1.02	104	iP	45	04.88	-0.9
			eS	45	24.17	
XLV	1.06	116	eP	45	04.74	-1.4
NNL	1.16	83	eP	45	06.90	-0.2
CNPM	1.26	107	iP	45	06.75	-1.4
			eS	45	26.07	
BRLK	1.37	95	iP	45	08.08	-1.3
CKL	1.42	25	iP	45	09.42	-0.6
NKA	1.43	54	eP	45	10.92	1.0
BGL	1.47	23	eP	45	10.15	-0.4
SPU	1.47	30	iP	45	09.69	-0.8
CRP	1.52	27	eP	45	10.71	-0.4
CGLM	1.59	29	iP	45	11.19	-0.7
NCG	1.65	25	eP	45	12.00	-0.5
SLKM	1.78	69	eP	45	12.28	-1.7
SEW	2.09	83	eP	45	15.76	-1.8
SUA	2.09	41	iP	45	16.64	-1.0
			eS	45	43.86	
SKT	2.30	25	iP	45	19.16	-1.0
PMS	2.39	55	eP	45	19.49	-1.9
PWA	2.51	45	eP	45	21.02	-1.8
PLRM	2.76	51	eP	45	24.19	-1.7
KNK	2.93	57	eP	45	25.59	-2.7
GHO	2.94	49	eP	45	25.73	-2.7
KNIM	2.96	79	eP	45	25.76	-2.8
CUT	2.96	31	eP	45	27.07	-1.6
MTU	2.99	86	eP	45	27.31	-1.7
SML	3.19	51	eP	45	28.63	-3.0
GLI	3.36	71	eP	45	31.31	-2.6
VZW	3.66	69	eP	45	35.88	-2.0
VLZ	3.79	68	eP	45	37.34	-2.1
KLU	4.08	64	eP	45	40.58	-2.9
RND	4.16	31	eP	45	42.43	-2.1
GLB	5.04	68	eP	45	53.35	-3.0
NEA	5.12	22	eP	45	54.68	-2.7
WRH	5.24	27	eP	45	56.17	-2.8
DDM	5.33	40	eP	45	59.80	-0.4
CCB	5.45	27	eP	45	58.98	-2.8
HDA	5.47	32	eP	45	59.41	-2.6
BALM	5.67	74	eP	46	02.85	-2.0
FBA	5.67	26	eP	46	02.09	-2.7
GLM	5.84	27	eP	46	04.19	-2.9

48 obs. associated

OCT 29, 1990 18h 48m 03.50± 0.56s
39.992 N ± 4.5km 22.419 E ± 5.6km
DEPTH = 10.0km (geophysicist)
GREECE (364)

LIT	0.12	27	iPd	48	06.29	-0.2
			eS	48	08.68	
KZN	0.59	303	eP	48	15.50	0.0
THE	0.76	33	ePd	48	18.24	-0.2
			eS	48	29.36	
NEO	0.92	138	eP	48	21.70	0.5
SOH	1.09	40	ePc	48	24.08	0.0
FNA	1.12	315	ePd	48	24.92	0.3
EVR	1.17	204	eP	48	25.00	-0.5
			eS	48	41.70	
KNT	1.22	17	ePc	48	25.84	-0.4
			eS	48	43.46	
VAY	1.33	5	ePn	48	28.50	0.4

S.D. = 0.4 on 9 of 9 obs.

? OCT 29, 1990 19h 16m 57.18± 6.06s
36.694 N ±46.4km 14.485 E ±11.1km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MEU	0.54	41	P	17	07.20	-0.9
			eSg	17	19.70	
FAI	0.87	312	P	17	13.70	-0.2
			eSg	17	30.40	
MNO	1.25	8	P	17	21.50	1.0
GIB	1.34	344	P	17	21.50	-0.5
ATN	1.66	28	P	17	27.30	0.9

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

OCT 29, 1990 19h 57m 47.02± 0.55s
40.645 N ± 5.7km 29.101 E ± 4.2km
DEPTH = 10.0km (geophysicist)

TURKEY (366)
MD 2.6 (ISK).

GBZT	0.30	61	ePg	57	54.70	1.5
			iSg	57	59.10	
IZI	0.42	137	iPg	57	54.80	-0.8
			iSg	57	59.80	
ISK	0.42	356	ePg	57	55.20	-0.4
			eSg	58	01.20	
HRT	0.47	68	ePg	57	55.50	-1.0
KCT	0.69	235	iPg	58	00.80	0.1
CTT	0.71	315	iPg	58	00.80	-0.3
			eSg	58	09.20	
BNT	0.95	253	ePn	58	05.30	0.2
GPA	0.99	111	ePn	58	06.30	0.5
EDC	0.99	253	iPn	58	06.00	0.2

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

OCT 29, 1990 20h 46m 37.16± 0.67s
41.668 N ± 5.1km 19.694 E ± 6.2km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 2.7 (TTG).

LACI	0.03	160	iPgc	46	38.10	-1.1
TIR	0.35	158	ePg	46	44.50	0.2
SDA	0.38	337	ePg	46	45.50	0.6
PUK	0.40	22	iPgc	46	43.00	-2.4
ULC	0.44	312	ePg	46	46.00	-0.2
			eSg	46	52.00	
PHP	0.56	88	iPgc	46	47.90	-0.6
KKS	0.67	53	ePg	46	50.70	0.2
BCI	0.75	22	ePg	46	51.40	-0.4
TTG	0.83	337	ePg	46	53.00	-0.1
			eSg	47	06.00	
PVY	0.95	13	ePg	46	55.00	-0.3
			eSg	47	10.00	
OHR	1.00	123	ePg	46	56.20	0.0
			eSg	47	11.50	
IVA	1.21	7	ePg	47	01.50	1.7
			eSg	47	21.50	
NKY	1.26	336	ePg	47	00.10	-0.5
			eSg	47	19.00	
SKO	1.34	76	iPn	47	03.60	1.8
			iSg	47	21.00	
BRY	1.50	326	ePg	47	05.00	0.8
			eSg	47	29.00	

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

? OCT 29, 1990 21h 59m 55.01± 3.84s
45.519 N ±25.2km 26.434 E ±12.0km
DEPTH = 114.1 ± 38.6 km
ROMANIA (358)

ISR	0.39	168	eP	00	12.00	0.0
VRI	0.41	30	iPc	00	12.00	0.0
MTUR	1.01	254	eP	00	17.00	0.0
CFR	1.26	105	iPc	01	20.00	60.4X
TLB	1.47	129	iPc	00	22.00	0.0
COZ	1.49	263	iPc	00	22.50	0.0

S.D. = 0.1 on 5 of 6 obs.

OCT 29, 1990 22h 04m 25.21± 0.44s
31.888 S ± 7.0km 70.269 W ± 8.4km
DEPTH = 116.3 ± 6.6 km
4.5mb (4 obs.)
CHILE-ARGENTINA BORDER REGION (127)

RTBS	0.73	72	ePd	04	45.80	1.1
JACH	0.84	199	iPd	04	45.60	-0.2
ROCH	1.25	210	iPd	04	50.00	-0.1
PEL	1.30	196	iPd	04	50.30	-0.2
RTCB	1.32	73	iPd	04	51.00	0.3
ZON	1.40	76	eP	04	53.00	1.4
FCH	1.44	181	iPd	04	52.60	0.2
RTCV	1.47	89	ePc	04	53.00	0.5
SAN	1.60	192	iPd	04	54.00	0.0
			iS	05	15.10	
IHA	1.62	225	iPc	04	54.10	-0.1
			i(S)	05	13.00	
RTLL	1.63	71	iPc	04	54.80	0.4
PCH	1.74	187	iPd	04	56.00	0.2
			iS	05	19.00	
TACH	1.85	198	iPd	04	56.50	-0.6
LCCH	1.93	214	iPd	04	57.60	-0.4
			iS	05	21.10	
CHCH	2.07	189	iPd	05	00.00	0.2

			iS	05 25.20		
LNV	2.27	205	iPd	05 01.50	-1.0	
			i	05 25.50		
			iS	05 30.50		
CYA	5.18	50	iPd	05 39.80	-1.9	
ANT	8.15	359	e(P)	06 20.20	-2.1	
CNCB	15.15	8	iPc	07 58.00	3.1X	
LPB	15.41	8	P	08 03.00	5.0X	
	1.0s		44.00nm		4.7mb	
ZOBO	15.67	8	P	08 03.00	1.6	
	1.0s		18.75nm		4.3mb	
Z	20s		0.09um		4.6Msz	
			LR	11 10.00		
SIV	17.90	30	P	08 27.80	-0.6	
PPD	19.52	64	eP	08 45.50	-0.3	
NNA	20.71	342	eP	09 00.00	1.9	
	0.8s		5.97nm		4.0mb	
VAO	22.46	73	(P)	09 13.00	-2.4	
SPA	58.29	180	iPd	14 11.10	1.3	
	1.2s		12.68nm		4.8mb	
			e	14 42.50		
GBA	145.29	114	PKPc	23 51.90	0.7	
	0.4s		1.90nm			
	S.D. = 1.1		on	25 of	27 obs.	

? OCT 29, 1990 22h 26m 19.21± 2.43s
20.666 S ±18.1km 168.729 E ±24.6km
DEPTH = 43.3 ± 16.4 km
4.5mb (1 obs.) 3.9Msz (1 obs.)
LOYALTY ISLANDS (188)

DZM	2.55	236	iPd	26 59.20	0.1	
			iS	27 34.00		
PVC	2.94	352	iPc	27 04.40	-0.1	
			iS	27 39.50		
WB5	32.21	265	eP	32 45.40	-0.2	
ASPA	32.35	258	eP	32 47.30	0.5	
	0.6s		4.40nm		4.5mb	
Z	18s		0.20um		3.9Msz	
CHG	78.81	295	eP	38 19.60	0.0	
BRG	143.92	333	iPKP	45 45.30	-6.1X	
	0.8s		16.00nm			
			i	45 54.60		
CLL	143.99	334	iPKPc	45 44.50	-7.0X	
	0.8s		15.00nm			
			e	45 53.00		
PRU	144.30	331	PKPd	45 46.10	-5.9X	
	0.8s		11.10nm			
VKA	144.65	328	i(PKP)	45 48.20	-4.5X	
EKA	144.85	352	PKP	45 47.00	-5.8X	
	0.6s		10.00nm			
MOX	145.07	334	ePKP	45 49.00	-4.3X	
KHC	145.36	331	PKP	45 50.20	-3.7X	
WTS	145.71	340	ePKP	45 50.00	-4.3X	
	0.9s		19.00nm			
GRF	145.96	334	ePKP	45 51.70	-3.2X	
	0.9s		15.00nm			
BCAO	146.83	245	iPKPc	45 55.60	-1.8	
	0.8s		14.00nm			
ENN	147.05	340	ePKP	45 56.00	-0.5	
	0.9s		9.00nm			
MEM	147.16	340	PKPc	45 54.80	-1.9	
CDF	148.55	336	ePKP	45 58.10	-1.1	
	0.7s		9.90nm			
BSF	149.22	336	ePKP	45 59.60	-0.7	
	0.8s		13.45nm			
HAU	149.24	337	ePKP	45 59.70	-0.5	
	0.6s		5.40nm			
FLN	150.66	345	ePKP	46 02.40	0.1	
	0.5s		7.30nm			
LDF	150.73	345	ePKP	46 02.70	0.3	
LOR	150.76	339	ePKP	46 03.20	0.7	
	0.8s		9.40nm			
SSF	151.05	339	ePKP	46 04.00	1.1	
	0.8s		5.35nm			
GRR	151.10	346	ePKP	46 03.80	0.9	
LPL	151.12	333	ePKP	46 04.80	1.4	
	0.9s		6.55nm			
LPF	151.48	346	ePKP	46 04.60	1.1	
	0.5s		7.30nm			
MAF	152.10	339	ePKP	46 05.40	0.9	
	1.0s		10.00nm			
	S.D. = 1.0		on	19 of	28 obs.	

• OCT 29, 1990 22h 32m 31.12± 1.34s
39.532 N ± 6.4km 26.123 E ±14.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.0 (ISK). ML 2.9 (ATH).

PRK	0.31	158	iPgc	32 36.70	-0.8	
			eSg	32 40.80		
EZN	0.33	28	iPg	32 37.30	-0.7	
IZM	1.44	142	ePn	32 57.90	0.6	
MFT	1.54	35	iPn	32 58.20	-0.5	
EDC	1.57	58	ePn	32 59.00	0.0	
BNT	1.61	59	ePn	32 58.70	-0.9	
RDO	1.67	345	ePn	33 01.00	0.5	
KCT	1.86	67	ePn	33 05.20	1.9	
CTT	2.39	47	ePn	33 14.00	3.1X	
	S.D. = 1.1		on	8 of	9 obs.	

OCT 29, 1990 22h 58m 29.51± 0.72s
39.503 N ± 5.0km 26.167 E ± 8.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.3 (ISK), 3.0 (ATH).

PRK	0.27	162	iPgc	58 35.40	0.2	
EZN	0.34	21	iPg	58 36.00	-0.6	
IZM	1.40	142	iPn	58 54.60	-0.5	
MFT	1.54	33	iPn	58 57.70	0.6	
EDC	1.55	57	ePn	58 58.00	0.8	
BNT	1.59	57	iPn	58 57.20	-0.6	
RDO	1.71	344	ePn	58 59.70	0.2	
			eSb	59 21.50		
KDZ	2.22	345	eP	59 07.00	0.1	
PLG	2.27	293	ePb	59 12.00	4.4X	
CTT	2.39	46	ePn	59 12.70	3.4X	
RZN	2.45	334	eP	59 10.00	-0.3	
MMB	2.79	319	eP	59 19.00	3.9X	
HRT	2.99	63	ePn	59 25.00	7.2X	
PGB	3.40	334	eP	59 30.00	6.3X	
	S.D. = 0.6		on	9 of	14 obs.	

• OCT 29, 1990 23h 29m 33.93± 0.47s
9.090 S ±10.1km 108.926 E ±13.7km
DEPTH = 33.0km (normal)
4.9mb (11 obs.) 3.7Msz (1 obs.)
SOUTH OF JAVA (282)

NANU	14.82	155	eP	33 02.00	-0.9	
	0.3s		4.00nm		4.4mb	
			eS	35 35.00		
MBL	15.95	140	eP	33 18.00	0.4	
	0.4s		3.00nm		3.8mb X	
			eS	36 04.00		
MTN	22.11	102	eP	34 33.00	4.7X	
	0.4s		47.00nm		5.3mb	
			eS	38 40.40		
WB5	26.82	116	eP	35 20.00	6.6X	
ASPA	27.93	124	eP	35 28.60	5.1X	
	1.2s		5.60nm		4.1mb	
Z	20s		0.20um		3.7Msz	
CHG	29.42	340	eP	35 35.90	-1.0	
			e	38 45.30		
KOD	36.73	301	eP	36 41.60	1.0	
GBA	38.54	305	P	36 56.00	0.5	
PKI	42.98	329	P	37 32.32	0.0	
	0.5s		5.00nm		4.5mb	
GUN	43.02	329	P	37 32.52	-0.1	
	0.7s		22.00nm		5.0mb	
DMN	43.16	328	P	37 33.42	-0.3	
	0.6s		14.00nm		4.8mb	
KKN	43.22	329	P	37 33.80	-0.3	
	0.8s		19.00nm		4.9mb	
GKN	43.73	328	P	37 38.02	-0.1	
	0.7s		23.00nm		5.1mb	
POO	44.17	309	eP	37 41.50	-0.2	
BRS	45.16	120	iP	37 57.00	7.4X	
LZH	45.19	354	eP	37 51.40	1.6	
	1.5s		28.00nm		4.9mb	
Z	17s		0.19um		4.1MszX	
NDI	48.45	322	iPc	38 14.00	-1.4	
	0.8s		65.67nm		5.7mb	
BJI	49.34	7	eP	38 22.50	0.5	
	1.0s		18.00nm		5.1mb	
			e	41 55.00		
MAT	53.08	30	eP	38 50.00	-0.5	
MAIO	64.76	317	eP	40 11.00	-0.7	
BUL	77.89	251	iPd	41 26.40	-4.4X	
SOB1	144.88	240	ePKP	49 11.70	1.3	
BAO	146.44	223	ePKP	49 18.40	5.4X	
SIV	153.18	202	ePKP	49 27.00	3.9X	
	S.D. = 0.9		on	17 of	24 obs.	

% OCT 30, 1990 00h 07m 50.06± 1.19s
45.920 N ± 9.5km 2.896 E ± 7.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.0 (LDG).

MAF	0.38	323	Pg	07 58.00	0.2	
			Sg	08 03.30		
TCF	0.60	308	Pg	08 02.00	-0.3	
			Sg	08 10.00		
AVF	0.93	20	Pg	08 07.60	-0.1	
			Sg	08 19.50		
SMF	0.98	42	Pg	08 08.50	-0.1	
			Sg	08 21.30		
RJF	1.15	238	Pg	08 11.60	0.1	
			Sg	08 26.80		
SSF	1.22	20	Pg	08 13.00	0.3	
			Sg	08 28.40		
	S.D. = 0.3		on	6 of	6 obs.	

OCT 30, 1990 01h 01m 00.69± 0.71s
17.451 S ± 7.3km 70.236 W ± 7.1km
DEPTH = 125.0 ± 7.1 km
4.5mb (8 obs.)
NEAR COAST OF PERU (115)

ARE	1.55	309	iPc	01 29.00	-0.7	
			iS	01 49.00		
LPB	2.24	66	iPc	01 40.10	1.8	
CNCB	2.25	74	iPc	01 40.70	2.1	
ZOBO	2.34	60	iPc	01 41.20	1.5	
ANT	6.22	182	iPc	02 26.10	-5.4X	
NNA	8.39	309	iP	03 00.00	-0.9	
	0.8s		10.45nm		4.6mb	
SIV	8.90	82	Pc	03 04.60	-3.2X	
PEL	15.63	181	eP	04 35.00	-0.4	
	1.0s		25.00nm		4.4mb	
			i	04 37.70		
FCH	15.81	180	eP	04 37.00	-0.9	
			i	04 40.60		
SAN	15.94	181	eP	04 41.00	1.8	
BAO	21.40	88	eP	05 40.30	0.4	
VAO	22.51	108	(P)	05 49.00	-1.7	
BMA	25.03	106	eP	06 14.40	-0.4	
JFO	25.69	104	e(P)	06 20.00	-1.0	
SOB1	29.67	78	eP	06 54.30	-2.6	
JSC	52.50	348	P	10 02.70	-0.2	
PRM	52.53	347	P	10 02.40	-0.8	
NA2	55.73	353	P	10 03.40	-23.0X	
OLY	56.38	339	P	10 29.70	-1.5	
ELC	57.31	342	P	10 36.40	-1.2	
FVM	58.31	341	P	10 43.70	-1.0	
ALQ	62.44	327	eP	11 12.80	-0.1	
	0.7s		2.91nm		4.3mb	
GLD	65.60	331	P	11 33.70	0.3	
GOL	65.63	331	P	11 32.80	-0.9	
	0.8s		4.09nm		4.4mb	
LIC	68.54	76	P	11 51.20	-1.0	
KIC	68.86	76	P	11 53.30	-0.8	
DAU	69.06	328	P	11 56.30	1.1	
LKO	69.27	72	P	11 55.56	-1.1	
	0.4s		6.50nm		4.8mb	
DUG	69.71	326	P	12 00.30	1.3	
BW06	70.00	330	P	12 00.80	0.0	
	0.7s		2.92nm		4.2mb	
BCH	70.54	318	P	12 05.80	1.7	
TNP	70.68	322	P	12 06.00	0.9	
	0.8s		6.25nm		4.5mb	
SPA	72.66	180	iPd	12 17.20	0.8	
	1.1s		14.88nm		4.7mb	
ORV	74.17	321	P	12 27.30	2.0	
LBFM	75.54	322	P	12 27.20	-6.2X	
YKA	86.97	341	P	13 33.40	1.0	
ASPA	132.82	211	ePKP	20 03.90	0.6	
	1.3s		5.10nm			
WB5	135.73	214	ePKP	20 09.60	0.7X	
MAT	148.50	313	ePKP	20 35.00	4.3X	
GBA	148.64	92	PKPd	20 36.20	4.8X	
	0.8s		11.40nm			
HYB	150.24	85	ePKP	20 40.00	6.2X	
	1.0s		25.00nm			
	S.D. = 1.3		on	33 of	41 obs.	

& OCT 30, 1990 01h 47m 25.16s
60.552 N 151.889 W

30d 01h

DEPTH = 85.1km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

RDT	0.26	275	iP	47	37.58	-0.5
			eS	47	47.80	
NKA	0.37	59	iP	47	40.07	1.5
RSO	0.44	258	eP	47	38.79	-0.6
			eS	47	49.86	
RED	0.46	253	iP	47	38.70	-0.7
NNL	0.59	150	eP	47	40.99	0.6
SPU	0.64	353	iP	47	40.20	-0.7
			eS	47	52.56	
CKL	0.68	341	iP	47	40.71	-0.7
CRP	0.73	350	iP	47	41.39	-0.6
			eS	47	53.92	
BGL	0.75	341	iP	47	41.48	-0.7
CGLM	0.76	356	iP	47	41.58	-0.6
SLKM	0.83	92	iP	47	42.16	-0.7
NCG	0.86	351	iP	47	42.57	-0.8
BRLK	0.94	147	eP	47	43.31	-0.8
SUA	1.07	31	iP	47	45.31	-0.5
			eS	48	00.44	
CNPM	1.08	162	eP	47	45.04	-0.7
			eS	48	00.81	
XLV	1.10	176	eP	47	45.09	-1.0
OPT	1.12	217	iP	47	45.70	-0.6
			eS	48	01.92	
SEW	1.29	109	eP	47	47.03	-1.4
PMS	1.33	58	iP	47	48.35	-0.6
PDB	1.38	237	iP	47	48.16	-1.4
AUE	1.41	213	eP	47	48.94	-0.9
SKT	1.44	7	iP	47	49.25	-1.1
AUI	1.45	213	eP	47	49.50	-0.9
PWA	1.47	41	eP	47	50.44	-0.3
PLRM	1.70	51	eP	47	52.38	-1.3
PMR	1.70	51	iPc	47	52.30	-1.4
MCNL	1.85	223	eP	47	54.28	-1.4
CDD	1.85	209	iP	47	54.66	-1.1
KNK	1.88	61	eP	47	54.68	-1.5
GHO	1.89	48	eP	47	54.71	-1.6
SVW	1.91	289	iPd	47	54.40	-2.2
CUT	2.02	22	eP	47	56.61	-1.3
KNIM	2.07	94	eP	47	55.72	-3.0
SML	2.13	52	eP	47	57.61	-2.0
MTU	2.19	103	eP	47	58.04	-2.2
GLI	2.38	80	eP	47	59.52	-3.4
KLU	3.05	69	eP	48	09.47	-2.8
TTA	3.09	322	iPd	48	10.70	-2.0
TOA	3.17	58	iPd	48	17.00	3.2
RND	3.20	25	eP	48	12.74	-1.6
WRH	4.31	22	eP	48	27.14	-2.5
HDA	4.49	28	eP	48	29.38	-2.8
CCB	4.52	23	eP	48	29.79	-2.8
FBA	4.75	22	eP	48	32.73	-3.1

44 obs. associated

? OCT 30, 1990 01h 52m 08.37± 4.73s
39.568 N ±11.8km 25.940 E ±46.9km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.1 (ISK).

EZN	0.39	49	iPg	52	15.90	-0.5
			eSg	52	20.40	
IZM	1.56	138	ePn	52	36.00	-0.2
MFT	1.59	40	ePn	52	36.60	-0.1
EDC	1.67	62	ePn	52	38.00	0.2
BNT	1.71	62	ePn	52	39.00	0.6

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

? OCT 30, 1990 03h 24m 02.68± 2.83s
44.143 N ±32.1km 150.031 E ±35.0km
DEPTH = 33.0km (normal)
KURIL ISLANDS REGION (222)

KUSJ	4.00	257	P	25	02.90	-0.3
			eS	25	44.00	
HOOJ	5.23	253	P	25	22.80	2.2X
			eS	26	19.00	
ASAJ	5.32	272	eP	25	25.00	3.2X
MRRJ	6.76	258	eP	25	42.40	0.3
			eS	26	54.30	
OFUJ	8.05	234	P	26	00.20	0.0
			S	27	23.90	
GUN	53.06	275	P	33	20.00	0.7
KKN	53.56	275	P	33	21.40	-1.4
PKI	53.60	275	P	33	23.20	0.0
GKN	53.90	276	P	33	26.00	0.8

S.D. = 0.9 on 7 of 9 obs.

OCT 30, 1990 03h 45m 22.66± 0.85s
33.341 N ±11.6km 132.080 E ± 5.6km
DEPTH = 70.1 ± 8.6 km
4.4mb (6 obs.)
SHIKOKU, JAPAN (236)

SHNJ	1.13	314	iP	45	43.30	0.3
SHK	1.29	23	iPc	45	45.40	0.2
	0.6s	1733.33nm				
TKSJ	1.76	68	iP+	45	51.20	-0.4
YONJ	2.17	31	iPd	45	57.20	-0.1
			S	46	21.20	
WKYJ	3.06	72	iPd	46	09.60	-0.1
TSRJ	3.90	55	P	46	21.40	0.0
			eS	47	04.80	
IIDJ	5.27	65	eP	46	38.20	-2.5
			eS	47	34.70	
MTMJ	5.71	54	P	46	47.60	0.7
MAT	5.96	56	iPd	46	50.30	0.0
			(S)	47	55.00	
CHJJ	6.30	63	P	46	55.70	0.6
KAKJ	7.25	65	eP	47	07.00	-1.1
YAMJ	8.07	51	P	47	20.40	1.0
SSE	9.50	259	eP	47	38.60	-0.4
Z	16s	0.40um				
			pP	47	43.50	
			sP	47	49.50	
OFUJ	9.63	51	P	47	42.40	1.6
BJI	14.40	302	eP	48	52.00	7.9X
	1.0s	61.00nm			4.9mb	
GUN	39.87	275	P	52	52.20	0.6
PKI	40.38	275	P	52	55.80	0.1
KKN	40.41	275	P	52	56.20	0.3
DMN	40.62	275	P	52	55.80	-1.8
GKN	40.88	276	P	52	59.80	0.2
WB5	52.97	177	eP	54	35.00	0.8
GBA	53.21	262	Pd	54	37.30	1.2
	0.8s	1.90nm			4.2mb	
FBA	56.22	30	eP	55	14.50	17.1X
	1.2s	8.33nm				
MBC	62.14	15	eP	55	39.00	0.9
	0.9s	3.00nm			4.4mb	
DAG	68.66	353	eP	56	20.00	0.1
	1.0s	8.00nm			4.6mb	
HFS	74.07	333	eP	56	51.10	-1.4
	0.5s	1.50nm			4.2mb	
NB2	74.40	334	P	56	53.30	-1.2
	0.7s	2.50nm			4.3mb	
TNP	84.12	48	eP	58	05.00	17.5X
	1.0s	7.75nm				
PV09	88.69	43	eP	58	25.00	15.0X

S.D. = 1.0 on 25 of 29 obs.

• OCT 30, 1990 04h 05m 16.81± 0.53s
14.694 N ± 9.2km 146.894 E ± 9.5km
DEPTH = 40.9km (2 depth phases)
5.6mb (7 obs.)
MARIANA ISLANDS (216)

GUA	2.24	239	eP	05	53.30	1.0
			eS	06	25.80	
PJG	2.25	241	eP	05	53.50	1.0
GUMO	2.25	241	eP	05	53.20	0.7
MAT	23.10	342	eP	10	18.00	-2.0
PMG	23.95	179	eP	10	27.00	-1.3
SSE	28.66	309	eP	11	06.00	-5.9X
			epP	11	17.00	41km
			i	11	42.50	
			e(S)	16	27.00	
WB5	36.50	200	eP	12	18.20	-2.1
			e	13	10.00	248kmX
BJI	36.85	319	eP	12	22.00	-1.0
	1.0s	18.00nm			4.9mb	
LZH	43.89	307	eP	13	22.50	1.0
	1.5s	59.00nm			5.1mb	
Z	16s	0.19um			4.1MszX	
			pP	13	34.00	41km
			sP	13	39.50	
GUN	57.83	294	P	15	06.52	-0.9
	0.8s	76.00nm			5.8mb	
PKI	58.25	293	P	15	09.94	-0.4
	0.9s	33.00nm			5.4mb	
KKN	58.37	294	P	15	10.66	-0.3
	0.9s	45.00nm			5.6mb	
DMN	58.52	294	P	15	11.88	-0.2
	0.8s	53.00nm			5.7mb	
GKN	58.93	294	P	15	14.62	-0.2
	1.0s	129.00nm			6.0mb	
FBA	66.40	25	eP	16	04.50	0.9
GBA	67.10	279	P	16	09.20	0.4
KOD	67.72	275	eP	16	13.70	0.6
MBC	76.73	14	eP	17	05.00	-0.1
	1.0s	4.00nm			4.4mb	X
YKA	80.98	28	P	17	36.00	7.7X
TNP	85.61	52	eP	17	54.00	1.1
SES	86.32	39	eP	17	56.00	0.1
DUG	88.30	49	eP	18	08.00	2.2
KIC	144.95	305	PKP	24	51.70	-0.5
TIC	145.00	305	PKP	24	52.20	-0.1
LIC	145.26	305	PKP	24	52.90	0.1
LPB	146.27	98	PKP	25	00.00	5.1X
CNCB	146.39	98	PKP	24	59.00	3.7X
SIV	153.01	96	PKP	25	13.40	8.7X

S.D. = 1.1 on 23 of 28 obs.

• OCT 30, 1990 04h 29m 02.40± 0.69s
21.829 S ±12.4km 170.036 E ±12.5km
DEPTH = 33.0km (normal)
5.0mb (7 obs.) 4.0Msz (1 obs.)
LOYALTY ISLANDS REGION (189)

DZM	3.34	265	iPc	29	52.90	-0.8
			iS	30	29.50	
HNR	15.68	320	eP	32	45.00	2.4
BRS	16.64	247	iP	32	55.00	0.2
RMO	19.96	252	iPc	33	34.20	-0.5
CTA	22.27	270	iPc	34	01.00	2.7X
	0.9s	15.13nm			4.4mb	
CNB	22.53	229	iPc	34	04.00	3.2X
BWA	22.77	232	eP	34	02.30	-0.8
CAN	22.79	229	eP	34	05.00	1.7
CMS	23.63	241	iPc	34	13.00	1.5
			e	34	20.00	
TOO	26.36	228	eP	34	38.00	0.6
STK	27.21	242	iPc	34	48.80	3.6X
	1.3s	11.00nm			4.3mb	
ASPA	33.32	260	eP	35	38.50	-1.1
	0.8s	8.20nm			4.7mb	
Z	22s	0.30um			4.0Msz	
WB5	33.34	267	eP	35	38.00	-1.8
MTN	38.11	277	eP	36	20.00	-0.2
	0.5s	40.00nm			5.5mb	
FORR	38.46	248	eP	36	22.00	-1.0
	0.5s	20.00nm			5.2mb	
SBA	56.10	181	iP	38	40.00	-0.3
MAT	65.38	332	eP	39	41.00	-2.8
SSE	70.46	317	e(P)	40	14.50	-1.2
BJI	79.41	321	(P)	41	05.50	-1.3
KMI	80.27	302	Pd	41	14.00	1.9
	1.5s	40.00nm			5.2mb	
CHG	80.40	295	eP	41	14.50	1.9
LZH	85.01	312	eP	41	37.50	1.4
	2.0s	36.00nm			5.2mb	
			pP	41	41.00	11kmX
			sP	41	45.50	
KSP	144.51	331	ePKP	48	34.80	-2.1
			e	48	39.30	
BZS	144.97	320	ePKP	48	37.00	-0.8
BRG	145.51	333	iPKP	48	38.40	-0.2
	1.1s	30.00nm				
			i	48	45.80	
SRO	145.55	326	ePKP	48	38.30	-0.4
CLL	145.56	334	iPKP	48	38.40	-0.2
	0.9s	23.00nm				
PRU	145.90	331	ePKP	48	40.00	0.7
			e	48	42.90	
EKA	146.16	353	PKPd	48	39.40	-0.1
	0.5s	4.60nm				
VKA	146.27	328	e(PKP)	48	41.50	1.6
VAY	146.43	313	ePKP	48	40.00	-0.4
MOX	146.63	335	ePKP	48	43.00	2.6X
KHC	146.96	331	PKP	48	43.50	2.5X
			e	48	50.00	
BCAO	147.41	242	iPKPd	48	45.00	2.2
	0.4s	9.00nm				
GRF	147.54	334	ePKP	48	44.80	2.9X
			e	48	47.20	
			e	48	51.90	
WATA	149.19	331	e(PKP)	48	50.50	5.7X
			i	49	10.10	

```
SOTA  149 44 331 ePKP   48 49.00    3.8X
      0.9s     13.80nm
                 i      48 58.80
     S.D. = 1.4  on  29 of  37 obs.
-------------------------------------
*  OCT  30, 1990  06h 55m 52.77± 0.88s
   37.136 N ± 7.7km    89.621 W ± 8.8km
   DEPTH =   5.0km  (geophysicist)
 CAPE GIRARDEAU, MISSOURI  REGION(487)
      mbLg 2.3 (NEIS). Felt at New
      Hamburg and in the Cape
      Girardeau area.

ELC     0.35  65 eP     56 00.40    0.6
GRT     0.88 170 eP     56 10.00   -0.2
FVM     1.06 323 eP     56 12.60   -0.6
OLY     2.21 223 eP     56 31.70    1.1
PWLA    2.49 149 eP     56 33.80   -0.9
     S.D. = 1.2  on   5 of   5 obs.
-------------------------------------
   OCT  30, 1990  07h 30m 06.51± 0.33s
    3.796 N ± 4.0km   123.235 E ± 4.5km
   DEPTH = 550.9 ±  4.6 km
   5.3mb ( 37 obs.)
 CELEBES SEA                      (262)
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 13S, 22C
      Centroid Location:
      Origin Time        07:30:11.1 0.6
      Lat  3.95N 0.06 Lon 122.76E 0.09
      Dep 544.2 4.8 Half-duration  1.7
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-0.11 0.06  Mtt=-0.05 0.10
        Mff= 0.16 0.11  Mrt= 0.24 0.11
        Mrf=-1.17 0.09  Mtf= 0.59 0.09
       Principal Axes:
        T  Val=  1.28  Plg=37  Azm=107
        N        0.13      27      354
        P       -1.40      41      238
      Best Double Couple:Mo=1.3*10**17
       NP1:Strike=259 Dip=27 Slip=  -5
       NP2:      353     88     -117

MNI     2.83 146 eP     31 21.40    0.2
DAV     4.01  35 eP     31 29.00   -0.1
KKM     7.34 288 ePc    31 58.60   -0.1
        1.0s   567.90nm          5.7mb
AAI     8.93 146 ePd    32 15.50    1.0
OCP    10.98 349 eP     32 45.00    9.8X
BAG    12.80 348 eP     32 52.80   -1.1
                eS      35 08.80
TRT    15.57 223 ePc    33 20.60   -0.6
        0.8s   176.10nm          5.6mb
MTN    18.30 155 iPd    33 48.10    0.4
        0.4s   194.00nm          6.1mb
KGM    19.97 265 eP     34 04.80    1.4
IPM    22.16 273 ePd    34 25.10    1.6
        0.9s    75.30nm          5.3mb
SNG    22.76 279 eP     34 29.20    0.3
        1.2s   237.50nm          5.7mb
                e       40 46.30
PPI    23.21 260 eP     34 32.50   -0.5
                e(S)    35 16.50
PSI    24.30 268 ePd    34 42.50   -0.2
        0.9s    69.50nm          5.3mb
MBL    25.02 188 iPd    34 48.10   -1.0
        0.3s     5.00nm          4.6mb
LOE    25.05 304 eP     34 44.00   -5.4X
NST    25.61 299 eP     34 54.50    0.2
WB5    25.95 155 iPc    34 56.00   -1.3
                eS      38 44.80
PMG    27.21 119 iPc    35 07.60   -0.8
        1.1s   121.52nm          5.4mb
SSE    27.22 356 eP     35 09.00    0.7
                i       35 15.00
                esP     36 08.00
                S       41 51.00
                ScS     44 48.00
NANU   27.26 196 iPc    35 08.30   -0.4
        0.4s    20.00nm          5.1mb
BDT    27.26 301 iPd    35 09.00    0.2
        0.9s   125.30nm          5.5mb
CHG    28.04 304 ePd    35 16.00    0.3
        1.0s    97.50nm          5.4mb
                eS      39 20.00
KMI    28.95 319 Pd-    35 25.00    1.3
        1.5s   170.00nm          5.5mb
     Z  14s     0.40um          4.2MszX
                pP      36 21.00 290kmX
                sP      36 53.50
                S       39 40.00
QIS    29.05 147 iPc    35 23.80   -0.5
        0.9s   118.00nm          5.5mb
                e       36 20.00
                i       41 04.20
ASPA   29.21 160 iPc    35 25.40   -0.3
        0.4s    44.70nm          5.4mb
                iS      39 37.30
                iScS    44 57.40
WARB   29.98 174 eP     35 32.20   -0.1
        0.3s    24.00nm          5.3mb
MEKA   30.57 188 eP     35 36.90   -0.4
        0.3s    14.00nm          5.1mb
CTA    32.78 137 iPc    35 56.80    0.8
        1.2s   110.94nm          5.4mb
                iS      40 36.00
                iScP    41 17.60
                iScS    45 20.60
MRWA   33.55 191 iPd    36 02.10   -0.2
COOL   34.54 183 eP     36 09.00   -1.6
FORR   34.76 173 iPd    36 12.50    0.1
        0.5s    99.00nm          5.7mb
BAL    34.77 190 eP     36 12.00   -0.5
                eS      41 24.00
MAT    35.38  21 eP     36 16.00   -1.5
                eS      41 09.00
KLB    35.58 188 iPd    36 19.00   -0.1
        0.4s    19.00nm          5.1mb
MUN    36.20 190 eP     36 24.10   -0.1
BJI    36.64 351 eP     36 27.50   -0.2
        1.0s    24.00nm          4.8mb
                eS      41 28.00
                ScP     41 31.00
                sS      44 24.00
                ScS     45 40.00
LZH    36.78 333 iPd    36 30.00    0.8
        1.5s   158.00nm          5.4mb
                (PP)    38 22.00
                ScP     41 32.20
                S       41 35.00
                PcS     42 23.00
                SS      44 35.00
                ScS     45 39.00
NWAO   36.96 188 iPd    36 31.00    0.5
        0.5s    17.00nm          4.9mb
RKG    38.12 188 eP     36 45.00    5.0X
RMO    38.94 142 iPc    36 45.70   -1.0
STK    39.54 155 iPc    36 55.50    3.9X
        0.6s    38.00nm          5.2mb
                iS      42 18.40
BRS    42.12 139 iP     37 13.50    1.3
                i(S)    41 53.80
GUN    42.90 308 Pd     37 19.24    0.4
        0.5s   419.00nm          6.3mb
PKI    43.12 307 Pd     37 20.48   -0.1
        0.4s    99.00nm          5.7mb
KKN    43.32 307 Pd     37 22.06    0.1
DMN    43.38 307 Pd     37 22.62    0.1
        1.0s   478.00nm          6.0mb
COO    43.79 143 iPc    37 27.10    1.7
        0.6s    32.00nm          5.0mb
GKN    43.92 307 Pd     37 26.66    0.0
BFD    44.55 158 iPd    37 35.80    4.7X
        0.5s    12.00nm          4.7mb
BWA    44.81 150 iPc    37 35.30    2.1
                eScP    42 04.80
CAN    45.81 150 iPc    37 42.30    1.4
                eScP    42 08.30
HYB    45.82 291 iPd    37 41.20    0.0
        1.0s   270.00nm          5.7mb
KOD    45.83 281 iPd    37 41.20   -0.5
        1.0s    90.00nm          5.3mb
TOO    46.06 155 eP     37 44.00    1.2
GBA    46.23 285 Pd     37 43.70   -0.6
        0.8s    77.30nm          5.3mb
DZM    49.45 123 iPc    38 09.10    0.4
NDI    50.19 305 iPd    38 12.50   -1.4
        0.7s    82.19nm          5.4mb
                iS      44 42.00
POO    50.43 291 iPd    38 14.50   -1.3
        1.0s    66.00nm          5.1mb
QUE    59.17 303 iPd    39 16.40   -0.7
                e(S)    46 41.00
THZ    63.93 141 P      39 47.00   -0.6
LTZ    64.08 142 P      39 48.30   -0.2
TCW    64.52 139 P      39 50.30   -0.9
KHZ    64.68 141 P      39 51.60   -0.6
        0.4s    15.00nm          4.9mb
KIW    64.76 139 P      39 52.10   -0.7
MRW    64.81 139 P      39 52.10   -0.9
CAW    64.98 139 P      39 53.20   -1.0
MOW    65.26 139 P      39 54.90   -1.0
MTW    65.29 139 P      39 55.60   -0.5
BLW    65.38 139 P      39 56.60    0.0
PGZ    65.54 138 P      39 57.40   -0.2
HBZ    65.55 134 P      39 58.10    0.4
        0.4s    38.00nm          5.3mb
NOZ    65.81 135 P      39 59.50    0.2
MAIO   66.71 308 iPd    40 04.80   -0.3
        0.8s    18.30nm          4.7mb
                eS      48 16.00
HRI    85.85 303 eP     41 50.00    0.6
ADI    86.28 303 iPd    41 51.70    0.3
NAI    86.52 269 iPd    41 54.60    1.4
RMN    86.90 300 iPd    41 54.50    0.0
KEV    88.63 340 eP     41 55.00   -6.7X
SOD    89.07 337 iP     42 02.90   -0.8
NUR    90.95 331 eP     42 11.00   -1.4
MBC    92.64  12 eP     42 21.00    1.0
KRA    95.60 321 ePc    42 33.90   -0.1
NB2    97.16 333 P      42 39.30   -1.6
        0.8s     4.40nm          4.8mb
BRG    99.09 323 iP     42 50.00    0.3
ALQ   119.52  46 ePKP   47 57.00    1.2
KIC   127.09 281 PKPc   48 11.40    0.7
TIC   127.31 281 PKPc   48 11.40    0.3
LKO   127.31 285 PKP    48 10.98   -0.2
        0.5s     7.00nm
LIC   127.39 281 PKPc   48 11.50    0.2
CNCB  163.02 140 PKP    49 11.00    3.0X
LPB   163.14 139 (PKP)  49 10.00    2.0
ZOBO  163.32 139 ePKP   49 10.00    1.7
     S.D. = 0.9  on  85 of  92 obs.
-------------------------------------
   OCT  30, 1990  07h 49m 40.02± 0.68s
   37.021 N ± 7.8km   29.526 E ± 7.3km
   DEPTH =  21.6 ± 10.8 km
 TURKEY                           (366)
      MD 3.4 (ISK).

ELL     0.41 131 iPg    49 47.80   -0.9
                eSg     49 56.00
KSL     0.90 177 eP     49 57.70    0.8
                eS      50 13.00
BCK     0.96  62 iPn    49 58.00    0.2
CIN     1.28 297 ePg    50 02.00   -0.7
                iSg     50 18.00
KHL     1.30 360 iPn    50 03.50    0.5
ALT     2.08  13 ePn    50 09.00   -5.4X
SMG     2.25 289 eP     50 16.50   -0.1
IZM     2.26 308 ePn    50 17.00    0.2
NPS     3.62 242 eP     50 23.70  -12.5X
     S.D. = 0.9  on   7 of   9 obs.
-------------------------------------
   OCT  30, 1990  08h 27m 47.66± 0.72s
   39.151 N ± 5.8km   20.570 E ± 6.7km
   DEPTH =  13.6 ±  3.2 km
 GREECE-ALBANIA BORDER REGION     (392)
      ML 3.7 (ATH).

IGT     0.42 334 ePc    27 54.32   -2.1
                eS      28 01.84
SRN     0.85 329 iPg    28 03.20   -0.5
VLS     0.97 179 ePg    28 06.20    0.4
EVR     0.99 103 ePg    27 59.80   -6.4X
TPE     1.22 340 ePn    28 10.00    0.0
AGG     1.38  95 iPd    28 11.64   -0.8
                eS      28 33.64
KZN     1.48  38 ePb    28 14.20    0.2
KBN     1.48   7 iPnd   28 16.00    2.1
BERA    1.62 343 eP     28 17.30    1.4
FNA     1.74  21 ePc    28 18.66    0.9
LIT     1.76  57 iPc    28 18.41    0.4
                eS      28 41.40
OHR     1.97   5 iPn    28 23.10    2.1
                iSn     28 50.30
ITM     2.24 151 ePg    28 29.00    4.1X
TIR     2.26 346 ePn    28 26.50    1.4
GRG     2.29  37 ePd    28 26.16    0.6
PLG     2.53  60 ePb    28 29.50    0.5
```

30d 08h

PHP 2.54 358 iPnd 28 29.00 0.0
LACI 2.57 345 iPnc 28 29.80 0.3
VAY 2.65 35 iPn 28 31.70 0.9
KNT 2.69 41 iPd 28 30.85 -0.4
SOH 2.71 51 iPc 28 32.01 0.3
eS 29 05.72
e 29 07.46
ATH 2.73 115 ePb 28 32.20 0.3
SKO 2.89 13 iPn 28 34.70 0.5
iSn 29 13.20
KKS 2.92 358 ePn 28 36.80 2.3
PUK 2.93 350 ePn 28 32.50 -2.2
SRS 3.04 49 ePc 28 35.44 -0.7
VLI 3.07 142 ePn 28 37.70 1.1
BCI 3.23 353 ePn 28 40.30 1.3
ALN 4.55 66 iPc 28 56.66 -1.0
S.D. = 1.2 on 27 of 29 obs.

---

* OCT 30, 1990 08h 31m 34.76± 2.01s
38.533 N ± 9.3km 25.324 E ±21.7km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

PRK 1.03 46 ePb 31 55.20 1.1
SMG 1.45 124 ePb 32 01.00 0.0
APE 1.47 174 ePb 32 01.60 0.3
EZN 1.51 31 ePn 32 01.00 -0.8
IZM 1.53 94 ePn 32 01.60 -0.5
S.D. = 1.0 on 5 of 5 obs.

% OCT 30, 1990 09h 02m 04.58± 1.96s
41.421 N ±12.8km 29.347 E ±12.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

ISK 0.42 212 ePg 02 12.70 -0.4
HRT 0.65 158 ePg 02 17.70 0.1
IZI 1.09 175 ePn 02 24.70 -0.4
DMK 1.26 289 iPn 02 27.70 -0.3
KCT 1.39 213 iPn 02 30.20 0.2
BNT 1.52 226 ePn 02 32.80 1.0
EDC 1.55 227 ePn 02 32.00 -0.3
S.D. = 0.6 on 7 of 7 obs.

% OCT 30, 1990 09h 03m 06.47± 2.05s
41.449 N ±13.5km 29.340 E ±13.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.6 (ISK).

ISK 0.44 209 ePg 03 15.20 -0.2
HRT 0.67 158 ePg 03 19.50 -0.4
IZI 1.12 175 ePn 03 28.00 0.6
DMK 1.24 288 iPn 03 29.60 0.0
BNT 1.53 225 ePn 03 34.30 0.4
EDC 1.57 226 iPn 03 34.00 -0.4
S.D. = 0.5 on 6 of 6 obs.

% OCT 30, 1990 09h 05m 10.49± 1.07s
39.070 N ± 7.9km 27.649 E ±13.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.5 (ISK).

IZM 0.74 204 ePg 05 25.00 0.0
eSg 05 37.60
EZN 1.27 307 ePn 05 34.00 -0.1
EDC 1.29 7 iPn 05 34.00 -0.3
KCT 1.30 25 iPn 05 34.20 -0.3
BNT 1.30 9 iPn 05 35.30 0.7
S.D. = 0.6 on 5 of 5 obs.

---

* OCT 30, 1990 09h 46m 52.88± 0.95s
36.745 N ±13.4km 71.890 E ± 9.1km
DEPTH = 33.0km (normal)
4.7mb (6 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

OUE 7.73 214 eP 48 46.10 0.0
NDI 9.20 149 e(P) 48 48.00 -18.4X
GKN 13.85 125 P 50 09.82 0.6
0.4s 21.00nm 5.2mb
KKN 14.41 124 P 50 17.16 0.5
0.5s 16.00nm 4.8mb
DMN 14.42 125 P 50 16.74 0.0
0.4s 14.00nm 4.8mb

PKI 14.64 125 P 50 19.66 -0.1
0.4s 8.00nm 4.5mb
GUN 14.73 123 P 50 20.02 -1.0
0.4s 13.00nm 4.7mb
NB2 44.62 323 P 55 03.60 0.0
0.7s 1.80nm 4.0mb
S.D. = 0.6 on 7 of 8 obs.

OCT 30, 1990 11h 05m 22.95± 1.26s
10.396 S ± 7.0km 124.137 E ± 6.9km
DEPTH = 18.9 ± 10.7 km
4.6mb (8 obs.)
TIMOR (289)

KUPT 0.58 295 eP 05 34.00 -0.2
KNA 6.98 140 eP 07 07.70 1.0
eS 08 17.00
MTN 7.27 110 eP 07 11.80 0.9
0.3s 55.00nm 6.2mb X
eS 08 30.00
MBL 11.47 201 iPc 08 08.40 -0.5
0.3s 4.00nm 5.2mb
WB5 13.65 135 eP 08 37.10 -0.9
eS 10 55.00
NANU 14.64 213 eP 08 52.00 1.1
eS 11 25.00
WARB 15.88 172 eP 09 06.90 -0.3
0.3s 4.00nm 4.1mb
eS 11 51.00
ASPA 16.15 146 eP 09 10.50 -0.2
0.5s 8.00nm 4.1mb
eS 11 56.80
QIS 17.99 126 eP 09 33.00 -0.8
eS 12 41.00
CHTO 38.21 319 iP 12 44.20 0.7
0.8s 2.01nm 4.0mb
GUN 53.12 317 P 14 42.16 -0.1
0.7s 13.00nm 5.0mb
PKI 53.22 316 P 14 42.54 -0.4
0.6s 7.00nm 4.8mb
KKN 53.45 316 P 14 44.94 0.4
0.6s 5.00nm 4.7mb
DMN 53.45 316 P 14 44.32 -0.3
GKN 54.02 316 P 14 48.36 -0.3
0.5s 8.00nm 5.0mb
S.D. = 0.7 on 15 of 15 obs.

OCT 30, 1990 12h 30m 36.37± 0.58s
63.013 N ± 7.0km 24.514 W ± 9.6km
DEPTH = 5.0km (geophysicist)
4.8mb (28 obs.) 4.5Msz (8 obs.)
ICELAND REGION (637)

AKU 3.87 43 eP 31 35.60 -2.1
0.9s 356.30nm
eS 32 36.10
DAG 13.95 5 eP 33 57.00 0.3
0.8s 4.48nm 4.3mb
FLN 19.45 126 eP 35 05.00 -1.4
0.9s 16.40nm 4.3mb
Z 19s 4.50um 5.5Msz
GRR 19.63 127 eP 35 07.00 -1.4
LDF 19.73 126 eP 35 07.90 -1.6
LPF 19.86 128 eP 35 09.80 -1.0
0.9s 21.30nm 4.5mb
KEV 21.09 49 eP 35 21.00 -2.4
SOD 21.36 56 iP 35 25.60 -0.6
MFF 21.40 129 eP 35 26.50 -0.3
0.9s 29.50nm 4.7mb
TNS 21.89 110 ePc 35 35.70 3.9X
LSF 22.31 127 eP 35 37.20 1.3
LOR 22.33 122 eP 35 35.40 -0.8
1.5s 83.55nm 5.0mb
Z 21s 2.25um 4.6Msz
SSF 22.37 122 eP 35 35.60 -0.9
1.1s 35.40nm 4.7mb
TCF 22.52 126 eP 35 39.40 1.3
1.3s 36.10nm 4.7mb
AVF 22.53 123 eP 35 37.40 -0.7
1.3s 57.75nm 4.9mb
BGF 22.54 124 eP 35 37.60 -0.5
1.3s 108.30nm 5.2mb
LBF 22.61 122 eP 35 38.40 -0.6
1.3s 45.15nm 4.8mb
MAF 22.71 125 eP 35 39.70 -0.2
1.2s 23.80nm 4.6mb
HAU 22.73 117 eP 35 40.40 0.3
0.9s 21.30nm 4.6mb
Z 21s 1.48um 4.4Msz
CDF 22.79 115 eP 35 41.00 0.3
0.9s 18.00nm 4.6mb
SMF 22.84 123 eP 35 39.90 -1.3
1.1s 43.95nm 4.9mb
NUR 22.94 74 eP 35 30.00 -12.0X
MOX 22.96 106 eP 35 44.00 1.8
1.7s 62.00nm 4.9mb
Z 21s 1.90um 4.5Msz
BSF 23.05 117 eP 35 43.70 0.4
CLL 23.09 103 eP 35 47.00 3.5X
1.6s 40.00nm 4.7mb
Z 18s 1.00um 4.3Msz
RJF 23.11 128 eP 35 44.20 0.4
Z 22s 1.90um 4.5Msz
LFF 23.15 130 eP 35 44.30 0.2
1.0s 30.00nm 4.8mb
GRF 23.48 108 eP 35 51.30 3.9X
2.1s 77.00nm 4.9mb
Z 22s 0.90um 4.2Msz
BRG 23.82 103 eP 35 53.80 3.2X
1.6s 42.00nm 4.8mb
PRU 24.72 103 eP 36 01.40 2.0
Z 14s 1.50um 4.6MszX
N 14s 0.70um
E 14s 1.10um
KSP 24.89 100 eP 35 56.00 -5.0X
LPL 24.90 120 eP 36 02.80 1.4
LPG 24.93 120 eP 36 03.30 1.6
1.1s 15.85nm 4.6mb
KHC 24.93 106 P 36 03.00 1.6
WATA 25.43 111 i(P) 36 09.80 3.4X
FBA 45.73 330 iPc 38 59.50 0.0
IMA 45.98 334 iPc 39 04.60 2.9X
PMR 48.89 329 eP 39 28.20 3.9X
TTA 49.23 333 eP 39 26.70 -0.4
BW06 50.86 289 e(P) 39 35.00 -5.0X
MEO 52.53 274 iPd 39 52.00 -0.4
LKO 55.09 157 P 40 10.96 -0.5
1.1s 18.50nm 5.0mb
NDI 69.92 66 eP 41 51.00 0.9
BJI 72.59 31 eP 42 08.00 2.0
2.0s 44.00nm 5.2mb
Z 18s 0.29um 4.6Msz
LZH 72.99 42 e(P) 42 08.50 -0.2
2.0s 29.00nm 5.0mb
Z 18s 0.44um 4.8Msz
GKN 73.54 61 P 42 12.32 0.3
0.8s 25.00nm 5.3mb
KKN 73.99 60 P 42 15.20 0.5
0.8s 24.00nm 5.3mb
DMN 74.08 60 P 42 15.54 0.3
0.9s 32.00nm 5.4mb
GUN 74.12 60 P 42 16.28 0.7
1.0s 64.00nm 5.6mb
PKI 74.24 60 P 42 16.70 0.5
0.9s 11.00nm 4.9mb
CHG 87.31 52 eP 43 26.00 0.8
SPA 152.86 180 ePKP 50 25.00 -1.8
1.0s 6.00nm
i 50 46.90
S.D. = 1.1 on 42 of 52 obs.

---

* OCT 30, 1990 12h 54m 46.69± 0.77s
63.102 N ± 8.2km 24.671 W ±11.0km
DEPTH = 5.0km (geophysicist)
4.7mb (15 obs.) 3.9Msz (2 obs.)
ICELAND REGION (637)

REY 1.62 49 iP 55 14.30 -1.6
iS 55 35.80
iS 07 58.70
LJO 2.69 67 eP 55 29.50 -1.9
DAG 13.87 6 eP 58 06.00 0.
0.6s 4.67nm 4.5mb
MFF 21.51 129 eP 59 37.50 -0.7
1.3s 57.75nm 4.8mb
LOR 22.44 122 eP 59 46.80 -0.7
0.9s 17.20nm 4.5mb
Z 20s 0.50um 3.9Msz
SSF 22.48 122 eP 59 47.00 -0.9
0.9s 11.45nm 4.4mb
AVF 22.64 123 eP 59 48.70 -0.8
1.1s 22.00nm 4.6mb
BGF 22.64 124 eP 59 48.90 -0.6
1.1s 51.30nm 4.9mb

```
LBF     22.72 122 eP     59 49.70  -0.6
        1.1s     23.20nm          4.6mb
MAF     22.82 125 eP     59 50.90  -0.4
        1.1s     17.10nm          4.5mb
HAU     22.83 117 eP     59 51.50   0.1
        1.0s     14.00nm          4.4mb
     Z  20s      0.35um           3.8Msz
CDF     22.89 115 eP     59 52.20   0.2
SMF     22.95 122 eP     59 52.10  -0.4
        1.0s     28.00nm          4.7mb
MOX     23.05 106 eP     59 56.00   2.5
BSF     23.15 117 eP     59 54.70   0.1
CLL     23.18 103 eP     59 57.00   2.3
KSP     24.98 100 eP     00 12.50   0.3
KHC     25.02 106 P      00 14.00   1.4
BW06    50.77 289 e(P)   03 48.80  -0.8
LKO     55.20 157 P      04 21.80  -0.8
GKN     73.56  60 P      06 22.90   0.5
        0.6s     7.00nm           4.9mb
KKN     74.01  60 P      06 25.74   0.7
        0.7s    10.00nm           5.0mb
DMN     74.10  60 P      06 26.34   0.7
        0.7s    11.00nm           5.0mb
GUN     74.13  59 P      06 26.84   0.9
        0.9s    20.00nm           5.1mb
PKI     74.25  60 P      06 27.28   0.6
        0.9s     4.00nm           4.4mb
     S.D. = 1.1  on  25 of  25 obs.
-------------------------------------
?  OCT  30, 1990  13h 01m 30.94± 2.41s
   3.146 S ±14.5km   78.935 W ±90.2km
   DEPTH = 112.8 ± 58.4 km
 PERU-ECUADOR BORDER REGION        (110)

TUNG    1.78  16 P      02 02.00  -0.2
                eS     02 23.00
VC1     2.55  12 P      02 12.40   0.2
GGP     2.97   7 eP     02 18.40   0.5
                S      03 00.00
OUR     2.98   8 eP     02 20.80   2.9X
YANA    3.03   7 eP     02 18.50  -0.2
CAYA    3.34  17 eP     02 23.10   0.2
COTA    3.51  10 eP     02 24.60  -0.5
NNA     9.03 167 eP     03 40.00   0.0
        0.4s     6.78nm           4.8mb X
SIV    21.72 127 P      06 26.00  11.7X
                i      07 19.80
     S.D. = 0.5  on   7 of   9 obs.
-------------------------------------
   OCT  30, 1990  13h 07m 10.05± 0.35s
  63.045 N ± 9.3km   24.588 W ± 6.2km
   DEPTH =   5.0km  (geophysicist)
   4.7mb ( 18 obs.)  4.1Msz (  2 obs.)
 ICELAND REGION                    (637)

HAH     1.83  52 eP     07 32.00 -10.3X
LJO     2.68  66 eP     07 50.00  -4.6X
DAG    13.92   6 eP     10 31.00   1.0
        0.9s     6.72nm           4.5mb
KEV    21.09  49 eP     11 44.00 -13.1X
SOD    21.37  56 eP     11 49.00 -11.0X
MFF    21.45 129 eP     12 00.90   0.0
        1.1s    31.75nm           4.6mb
LOR    22.38 122 eP     12 10.00  -0.3
        1.1s    26.85nm           4.6mb
     Z  21s      0.75um           4.1Msz
SSF    22.41 122 eP     12 10.20  -0.4
        1.1s    25.65nm           4.6mb
AVF    22.58 123 eP     12 11.80  -0.4
        1.4s    52.30nm           4.8mb
BGF    22.58 124 eP     12 12.20  -0.1
        1.0s    25.00nm           4.7mb
SUF    22.65  68 eP     11 54.00 -18.8X
LBF    22.66 122 eP     12 11.80  -1.3
        1.2s    26.80nm           4.6mb
MAF    22.76 125 eP     12 14.80   0.8
        1.1s    20.75nm           4.6mb
SMF    22.89 123 eP     12 14.50  -0.8
        1.1s    40.30nm           4.9mb
MOX    23.00 106 eP     12 18.00   1.7
CLL    23.13 103 eP     12 23.00   5.4X
        1.7s    41.00nm           4.7mb
RJF    23.16 128 eP     12 18.80   0.9
     Z  21s      0.68um           4.1Msz
BRG    23.86 103 eP     12 24.50  -0.2
PRU    24.76 103 eP     12 34.00   0.5
     Z  12s      0.70um           4.4MszX

KHC    24.97 106 eP     12 38.50   3.0
                e      12 42.50
GBTN   45.22 262 P      15 31.00   1.4
FBA    45.68 330 P      15 23.30  -9.6X
FVM    46.14 269 P      15 35.70  -1.1
ELC    46.16 268 P      15 38.10   1.1
OLY    48.65 268 P      15 56.60   0.1
PMR    48.84 328 P      15 58.80   1.2
        0.8s     6.03nm           4.7mb
TTA    49.19 333 P      15 58.70  -1.7
LRM    49.60 293 eP     16 03.50  -0.5
BW06   50.82 289 P      16 11.30  -2.1
        0.7s     8.04nm           4.8mb
GLD    51.38 283 P      16 19.40   1.8
DAU    53.49 288 P      16 33.50   0.0
DUG    54.34 290 P      16 40.60   1.1
LKO    55.14 157 P      16 43.72  -1.7
ALQ    55.91 281 eP     16 51.00  -0.1
        1.0s     4.25nm           4.4mb
LZH    72.99  42 e(P)   18 41.50  -0.9
        2.0s    29.00nm           5.0mb
GKN    73.56  61 P      18 44.82  -0.9
        0.8s    20.00nm           5.2mb
KKN    74.00  60 P      18 47.86  -0.6
        0.8s    31.00nm           5.4mb
DMN    74.10  60 P      18 48.62  -0.4
        0.8s    29.00nm           5.3mb
GUN    74.13  60 P      18 49.08  -0.2
        1.0s    43.00nm           5.4mb
PKI    74.25  60 P      18 49.26  -0.7
     S.D. = 1.2  on  33 of  40 obs.
-------------------------------------
•  OCT  30, 1990  13h 35m 52.09± 0.74s
   63.347 N ±12.2km   24.466 W ± 9.8km
   DEPTH =   5.0km  (geophysicist)
   5.1mb (  6 obs.)  4.0Msz (  2 obs.)
 ICELAND REGION                    (637)

REY     1.39  54 iP     36 18.40   0.3
                iS     36 39.50
LJO     2.52  72 eP     36 31.20  -3.1X
AKU     3.62  47 eP     36 49.70  -0.1
        1.0s   508.00nm
                e      37 48.90
MOX    23.03 107 eP     41 03.00   4.3X
     Z  22s      0.90um           4.2Msz
CLL    23.15 104 eP     41 04.00   4.2X
        1.3s    17.00nm           4.4mb
GRF    23.57 109 eP     41 04.80   0.9
        2.1s    49.00nm           4.7mb
     Z  22s      0.40um           3.8Msz
KSP    24.93 101 eP     41 16.00  -1.1
KHC    25.00 107 eP     41 18.00   0.1
                e      41 24.50
LRM    49.53 293 eP     44 45.60   0.1
GKN    73.36  61 P      47 26.32  -0.3
        0.8s    16.00nm           5.1mb
KKN    73.80  60 P      47 29.42   0.1
        0.8s    14.00nm           5.1mb
DMN    73.90  60 P      47 30.16   0.3
        0.7s    19.00nm           5.2mb
GUN    73.93  60 P      47 29.88  -0.3
        0.9s    51.00nm           5.5mb
PKI    74.05  60 P      47 31.00   0.1
VAO    87.87 201 (P)    49 16.00  32.6X
     S.D. = 0.6  on  11 of  15 obs.
-------------------------------------
   OCT  30, 1990  13h 57m 55.17± 0.60s
  63.252 N ± 7.7km   24.509 W ± 8.1km
   DEPTH =   5.0km  (geophysicist)
   4.9mb ( 21 obs.)  4.2Msz (  5 obs.)
 ICELAND REGION                    (637)

REY     1.46  51 iP     58 21.40  -0.8
                iS     58 42.60
HAH     1.68  57 eP     58 23.60  -1.7
LJO     2.57  70 eP     58 35.40  -2.7
AKU     3.69  46 iP     58 53.60  -0.5
        1.1s   865.82nm
                e      59 52.90
DAG    13.71   6 eP     01 08.00  -4.4X
        0.8s     5.97nm           4.6mb
KEV    20.93  50 eP     02 44.00   3.4X
MFF    21.55 129 eP     02 46.20  -0.9
        1.1s    39.05nm           4.7mb
TNS    21.98 111 ePKPc  02 51.20  -0.2
LOR    22.46 122 eP     02 55.20  -1.0

        1.2s    55.05nm           4.9mb
     Z  21s      1.05um           4.2Msz
SSF    22.50 123 eP     02 55.60  -0.9
        1.0s    24.00nm           4.6mb
TCF    22.66 126 eP     02 57.40  -0.8
AVF    22.66 124 eP     02 56.80  -1.4
BGF    22.67 125 eP     02 57.20  -1.1
        1.0s    49.00nm           5.0mb
LBF    22.74 122 eP     02 58.00  -1.0
        0.9s    19.65nm           4.6mb
HAU    22.84 117 eP     02 59.80  -0.1
     Z  20s      0.68um           4.1Msz
MAF    22.85 126 eP     02 59.40  -0.6
        1.3s    45.15nm           4.8mb
CDF    22.89 116 eP     03 00.60   0.1
        1.1s    24.40nm           4.6mb
SMF    22.97 123 eP     03 00.50  -0.7
        1.1s    37.85nm           4.8mb
MOX    23.02 106 eP     03 05.00   3.3X
     Z  21s      1.10um           4.3Msz
CLL    23.15 103 eP     03 04.00   1.2
        2.0s    40.00nm           4.6mb
BSF    23.15 117 eP     03 03.20   0.1
RJF    23.26 128 eP     03 04.00   0.0
        0.9s    27.85nm           4.8mb
     Z  21s      0.90um           4.2Msz
LFF    23.30 130 eP     03 04.40   0.0
        0.9s    31.10nm           4.9mb
GRF    23.56 108 eP     03 09.00   2.1
        2.4s   128.00nm           5.1mb
     Z  22s      0.70um           4.1Msz
LPO    23.68 130 eP     03 08.30   0.2
BRG    23.87 103 iP     03 12.00   2.1
        1.6s    42.00nm           4.8mb
                i      03 19.50
                e      03 34.70
PRU    24.78 104 Pd     03 20.70   2.0
                e      03 49.50
KSP    24.93 101 eP     03 22.50   2.3
KHC    25.00 106 eP     03 20.00  -0.9
                e      03 24.50
LPL    25.02 120 eP     03 22.30   0.9
LPG    25.05 120 eP     03 22.80   1.1
KRA    27.13  98 eP     03 41.40   0.9
     Z  15s      1.10um           4.5MszX
LRM    49.55 293 eP     06 48.70  -0.1
BW06   50.79 289 e(P)   06 56.50  -1.7
LKO    55.31 157 P      07 29.92  -1.9
        1.0s    15.00nm           5.0mb
LZH    72.81  42 eP     09 27.50   1.1
        2.5s    58.00nm           5.2mb
GKN    73.42  61 P      09 30.90   0.8
        0.9s    28.00nm           5.3mb
KKN    73.87  60 P      09 33.80   1.0
        0.9s    42.00nm           5.5mb
DMN    73.96  60 P      09 34.68   1.3
        0.8s    36.00nm           5.5mb
GUN    73.99  60 P      09 34.04   0.4
        1.0s    46.00nm           5.5mb
PKI    74.11  60 P      09 35.24   0.9
        1.1s    17.00nm           5.0mb
SIV    83.95 215 P      10 28.20   0.9
SPA   153.10 180 ePKP   17 45.50  -0.5
        0.8s     3.75nm
     S.D. = 1.2  on  40 of  43 obs.
-------------------------------------
   OCT  30, 1990  14h 03m 35.63± 0.27s
  63.116 N ± 6.5km   24.302 W ± 4.6km
   DEPTH =   5.0km  (geophysicist)
   4.9mb ( 37 obs.)  4.4Msz (  8 obs.)
 ICELAND REGION                    (637)
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.: 13S, 20C
      Centroid Location:
      Origin Time          14:03:43.5 1.7
      Lat 63.59N 0.22 Lon  25.14W 0.21
      Dep  15.0 FIX Half-duration  1.5
      Moment Tensor:   Scale 10**16 Nm
        Mrr=-2.84 0.36  Mtt= 0.33 0.58
        Mff= 2.51 0.37  Mrt= 0.00 0.00
        Mrf= 0.00 0.00  Mtf= 0.70 0.38
        Principal Axes:
          T  Val=  2.71  Plg= 0  Azm=106
          N        0.13       0       16
          P       -2.84      90      180
      Best Double Couple:Mo=2.8*10**16
```

30d 14h

NP1:Strike=196 Dip=45 Slip= -90
NP2: 16 45 -90

HAH		1.68	52	eP	04	03.70	-2.1
LJO		2.53	67	eP	04	15.70	-2.3
AKU		3.73	43	iP	04	33.30	-1.7
		1.8s	3127.27nm				
				e	05	33.20	
NB2		16.63	81	P	07	34.40	3.7X
		1.0s	6.90nm				3.7mb X
FLN		19.44	127	eP	08	03.90	-1.6
		1.0s	32.00nm				4.5mb
	Z	20s	3.25um				3.9Msz
GRR		19.61	128	eP	08	05.60	-1.9
		1.2s	38.70nm				4.6mb
LDF		19.71	126	eP	08	06.80	-1.7
		1.2s	56.55nm				4.7mb
LPF		19.85	129	eP	08	08.60	-1.4
		1.0s	32.00nm				4.6mb
KEV		20.95	49	eP	08	23.00	1.8
SOD		21.22	56	iP	08	19.50	-4.6X
MFF		21.39	129	eP	08	25.00	-0.9
		1.1s	73.25nm				5.0mb
ABH		21.72	113	eP	08	30.36	1.1
TNS		21.84	111	ePc	08	31.50	1.0
LSF		22.29	127	eP	08	35.60	0.6
LOR		22.31	122	eP	08	34.10	-1.0
		1.2s	77.35nm				5.0mb
	Z	21s	1.77um				4.5Msz
SSF		22.34	123	eP	08	34.40	-1.1
		1.2s	46.10nm				4.8mb
TCF		22.51	126	eP	08	37.90	0.8
		1.4s	84.95nm				5.0mb
AVF		22.51	124	eP	08	36.10	-1.0
		1.1s	30.50nm				4.7mb
BGF		22.51	125	eP	08	36.40	-0.8
		0.9s	40.95nm				4.9mb
LBF		22.59	122	eP	08	37.00	-0.9
		1.1s	34.20nm				4.8mb
HAU		22.69	117	eP	08	39.20	0.3
		1.5s	88.80nm				5.0mb
	Z	20s	1.15um				4.3Msz
MAF		22.69	126	eP	08	39.60	0.6
		1.3s	43.30nm				4.8mb
CDF		22.74	116	eP	08	39.80	0.3
		1.0s	32.00nm				4.8mb
SMF		22.82	123	eP	08	39.40	-0.8
		1.0s	45.00nm				4.9mb
MOX		22.89	106	eP	08	43.00	2.1
	Z	20s	1.70um				4.5Msz
BSF		23.01	117	eP	08	42.40	0.2
		1.7s	132.35nm				5.2mb
CLL		23.02	103	eP	08	44.00	1.9
		2.2s	92.00nm				4.9mb
	Z	18s	1.00um				4.3Msz
RJF		23.10	128	eP	08	43.10	0.2
		1.2s	59.50nm				5.0mb
	Z	22s	1.58um				4.4Msz
LFF		23.14	130	eP	08	42.40	-0.9
GRF		23.42	108	eP	08	48.90	2.8X
		2.1s	121.00nm				5.1mb
	Z	22s	0.70um				4.1Msz
LPO		23.52	130	eP	08	47.40	0.4
		1.1s	26.85nm				4.7mb
CAF		23.62	128	eP	08	48.40	0.4
SLE		23.76	115	ePd	08	52.10	2.8X
ZLA		23.94	115	ePc	08	53.20	2.1
EMS		24.49	119	ePc	09	00.20	3.5X
PRU		24.65	104	eP	09	00.00	2.0
	Z	13s	1.30um				4.6MszX
	E	13s	1.10um				
				e	10	09.20	
KSP		24.82	101	eP	08	59.00	-0.5
				id	09	02.50	
KHC		24.87	106	eP	09	02.50	2.4
LPL		24.87	120	eP	09	01.40	1.0
LPG		24.90	120	eP	09	01.80	1.1
		1.1s	17.10nm				4.7mb
VDL		25.18	115	ePc	09	05.50	2.2
BNI		25.24	121	P	09	15.00	11.2X
OSS		25.30	114	ePd	09	07.60	3.2X
CTI		26.43	113	P	09	18.00	3.1X
FVI		26.48	111	P	09	20.00	4.9X
NAV		42.46	260	P	11	32.00	-0.8
GBTN		45.36	262	P	11	57.30	1.0
FBA		45.69	330	eP	11	57.80	-0.7
		0.9s	20.20nm				5.1mb

PRM	45.86	259	P	11	55.00	-5.2X
IMA	45.93	334	iPc	12	02.40	1.9
	1.4s	24.40nm				5.0mb
FVM	46.27	270	P	12	02.80	-0.6
OLY	48.79	269	P	12	22.30	-0.8
PMR	48.85	329	ePd	12	24.30	1.1
	1.6s	46.60nm				5.3mb
TTA	49.19	333	iPc	12	26.80	0.8
	0.9s	8.80nm				4.8mb
LRM	49.69	294	eP	12	30.80	0.5
SVW	50.74	332	eP	12	37.90	0.1
BW06	50.92	289	P	12	37.30	-2.4
	1.2s	18.84nm				4.9mb
MEO	52.61	274	iPc	12	51.30	-1.1
DUG	54.44	290	P	13	07.00	1.1
LKO	55.15	157	P	13	10.64	-0.5
	1.0s	15.50nm				5.0mb
MAIO	55.62	77	eP	13	16.00	1.5
ALO	56.03	281	eP	13	17.00	-0.5
	1.1s	6.33nm				4.6mb
TNP	58.07	292	P	13	30.70	-1.3
CMB	59.44	294	P	13	41.40	0.0
	1.0s	8.33nm				4.8mb
GSC	60.25	290	eP	13	48.00	1.0
ISA	60.66	291	eP	13	51.00	1.3
TPC	60.95	288	eP	13	53.00	1.3
SBB	61.21	290	eP	13	55.00	1.5
MWC	61.71	290	eP	13	56.00	-1.1
BCAO	66.37	132	iPc	14	26.90	-0.5
	0.7s	6.00nm				4.9mb
BJI	72.45	31	eP	15	02.50	-1.9
	2.0s	55.00nm				5.3mb
	Z 18s	0.29um				4.6Msz
LZH	72.85	42	eP	15	06.50	-0.6
	2.5s	53.00nm				5.2mb
	Z 18s	0.39um				4.7Msz
		i		15	47.50	
GKN	73.41	61	P	15	09.96	-0.5
	0.9s	29.00nm				5.4mb
KKN	73.85	60	P	15	13.00	-0.1
	0.8s	28.00nm				5.4mb
DMN	73.95	61	P	15	13.38	-0.3
	1.0s	49.00nm				5.5mb
GUN	73.98	60	P	15	14.26	0.2
	1.1s	95.00nm				5.7mb
PKI	74.10	60	P	15	14.06	-0.7
	1.0s	15.00nm				5.0mb
ZOBO	86.16	222	P	16	18.00	-1.4
CHG	87.17	52	eP	16	25.00	1.2
SPA	152.96	180	ePKP	23	25.60	-0.6
	1.0s	6.00nm				

S.D. = 1.3 on 70 of 80 obs.

OCT 30, 1990 14h 40m 02.01± 0.74s
39.521 N ± 5.9km 26.162 E ± 7.9km
DEPTH = 6.3 ± 4.4 km
TURKEY (366)
MD 3.7 (ISK), 3.2 (ATH).

PRK	0.29	163	ePg	40	06.20	-1.7
EZN	0.33	22	iPg	40	07.00	-1.7
IZM	1.41	142	iPn	40	28.30	0.0
EDC	1.55	57	ePn	40	30.00	-0.1
BNT	1.59	58	iPn	40	30.10	-0.6
RDO	1.69	344	ePn	40	33.00	0.8
			eSb	40	55.50	
KDZ	2.20	345	iP	40	39.00	-0.6
PLG	2.26	293	ePb	40	45.60	5.2X
CTT	2.38	46	ePn	40	43.00	0.9
RZN	2.43	334	eP	40	42.00	-1.0
DIM	2.57	350	iP	40	45.00	0.2
DMK	2.60	27	ePn	40	44.80	-0.4
ISK	2.70	54	ePn	40	51.00	4.3X
MMB	2.78	319	eP	40	51.00	3.2X
KHL	2.88	113	ePn	40	50.00	0.6
JMB	2.96	6	eP	40	57.00	6.6X
HRT	2.98	63	ePn	40	53.00	2.2X
ALT	3.10	97	ePn	40	54.00	1.6
VAY	3.28	304	ePn	41	06.40	11.5X
KKB	3.31	316	eP	40	57.00	1.6
PGB	3.38	334	eP	40	59.00	2.6X
PVL	3.75	351	eP	41	01.00	-0.5
VTS	3.79	325	eP	41	05.00	2.6X

S.D. = 1.2 on 15 of 23 obs.

• OCT 30, 1990 15h 47m 30.56± 1.15s
63.303 N ± 8.8km 24.148 W ±15.7km
DEPTH = 5.0km (geophysicist)
4.7mb (8 obs.) 4.2Msz (1 obs.)
ICELAND REGION (637)

REY	1.30	49	iP	47	55.70	0.6
			iS	48	17.60	
HAH	1.52	56	eP	47	58.20	-0.1
LJO	2.40	70	eP	48	10.00	-1.1
AKU	3.54	45	iP	48	27.80	0.5
	0.9s	255.46nm				
			eS	49	27.60	
LOR	22.35	123	eP	52	31.00	0.5
	1.0s	20.00nm				4.5mb
	Z 21s	0.98um				4.2Msz
SSF	22.39	124	eP	52	31.40	0.6
	1.0s	16.00nm				4.4mb
MAF	22.75	126	eP	52	34.10	-0.3
	1.0s	13.00nm				4.4mb
CLL	23.00	104	eP	52	48.00	11.2X
	1.6s	21.00nm				
BRG	23.73	104	eP	52	58.80	14.9X
KHC	24.85	107	eP	53	01.00	6.1X
GKN	73.26	61	P	59	04.04	-0.5
	0.9s	11.00nm				4.9mb
KKN	73.70	61	P	59	06.92	-0.3
	0.7s	9.00nm				4.9mb
DMN	73.79	61	P	59	07.62	-0.1
	0.5s	10.00nm				5.1mb
GUN	73.83	60	P	59	08.30	0.2
	0.9s	33.00nm				5.4mb
PKI	73.95	61	P	59	08.74	0.0
	0.7s	3.00nm				4.4mb

S.D. = 0.6 on 12 of 15 obs.

• OCT 30, 1990 16h 01m 23.83± 0.69s
21.401 N ± 7.9km 121.742 E ±22.6km
DEPTH = 33.0km (normal)
TAIWAN REGION (243)

TWG	1.54	336	iPd	01	49.80	0.5
			eS	02	02.90	
TWF1	1.99	348	ePc	01	55.50	-0.3
TWK	2.19	328	iPd	01	58.50	-0.2
TWD	2.67	357	ePd	02	05.30	-0.1
TWQ	2.98	344	eP	02	09.60	-0.3
TWC	3.20	2	ePd	02	13.20	0.3
WB5	42.84	162	eP	09	20.30	-0.4
WARB	47.54	174	eP	09	58.50	0.4

S.D. = 0.4 on 8 of 8 obs.

OCT 30, 1990 17h 11m 32.72± 1.18s
37.788 N ± 9.2km 20.611 E ± 8.8km
DEPTH = 10.0km (geophysicist)
IONIAN SEA (399)
ML 3.7 (ATH).

VLS	0.39	357	ePg	11	41.80	1.1
ITM	1.21	120	ePb	11	54.50	-0.8
EVR	1.47	40	iPgd	12	02.20	2.9X
IGT	1.76	353	ePc	12	03.14	-0.2
			eS	12	34.30	
AGG	1.83	47	ePc	12	05.46	1.0
			eS	12	40.10	
KEK	2.02	342	ePg	12	12.00	4.7X
VLI	2.14	119	ePn	12	10.80	1.8
SRN	2.14	347	ePn	12	10.60	1.7
ATH	2.46	85	ePg	12	21.70	8.2X
TPE	2.55	350	ePn	12	13.00	-1.7
KZN	2.67	19	ePn	12	18.20	1.6
LIT	2.73	32	ePd	12	16.86	-0.6
			eS	13	00.58	
BERA	2.96	350	ePn	12	21.20	0.7
FNA	3.05	11	iPd	12	21.14	-0.8
			iS	13	08.02	
LCI	3.28	322	P	12	31.00	5.9X
			eSn	13	15.00	
OHR	3.32	2	ePn	12	27.50	1.7
			eSn	13	32.50	
PLG	3.40	40	ePn	12	27.70	0.9
GRG	3.46	23	ePc	12	26.78	-0.9
TIR	3.60	351	ePn	12	36.70	7.0X
ROI	3.63	301	P	12	29.30	-0.9
SOH	3.70	34	iPd	12	31.05	-0.2
VAM	3.74	128	ePb	12	37.00	5.3X
CZI	3.79	294	P	12	25.00	-7.4X
KNT	3.81	27	ePc	12	31.69	-1.0
VAY	3.84	23	ePn	12	32.00	-1.1

ORI	3.96	306	P	13	01.00	26.2X
SRS	4.05	34	ePd	12	34.85	-1.2
ATN	4.09	277	P	12	27.50	-9.1X
			eSn	13	04.70	
SKO	4.23	8	ePn	12	32.00	-6.6X
PUK	4.29	353	ePn	12	41.50	2.1
MMB	4.49	31	eP	12	42.00	-0.4
KKB	4.50	24	eP	12	17.00	-25.4X
BCI	4.59	355	ePn	12	45.50	1.8
RZN	5.02	38	eP	12	50.00	0.0
VTS	5.19	22	eP	12	52.00	-0.4
KDZ	5.35	42	iP	12	53.00	-1.5
SDI	6.54	309	P	13	14.00	2.7X
PTJ	8.82	338	eP	13	40.50	-2.6

S.D. = 1.3 on 26 of 38 obs.

& OCT 30, 1990 17h 22m 25.78s
61.601 N 149.837 W
DEPTH = 38.4km
SOUTHERN ALASKA (2)
<AGS-P>.

PWA	0.05	338	iP	22	32.08	0.0
			eS	22	37.54	
PLRM	0.34	91	iP	22	33.58	-0.8
			eS	22	40.70	
PMS	0.38	159	iP	22	34.68	-0.3
SUA	0.46	253	iP	22	35.53	-0.5
			eS	22	44.48	
GHO	0.47	68	iP	22	35.18	-0.9
			eS	22	43.59	
KNK	0.69	105	iP	22	38.30	-0.8
			eS	22	48.54	
SML	0.75	73	iP	22	38.67	-1.3
CUT	0.83	346	eP	22	40.25	-0.8
SKT	0.89	296	iP	22	41.01	-1.0
			eS	22	53.50	
CGLM	1.08	255	eP	22	44.40	-0.4
NKA	1.10	219	eP	22	45.85	1.0
SLKM	1.11	190	eP	22	44.17	-1.0
NCG	1.13	261	iP	22	45.08	-0.4
			eS	22	59.13	
SPU	1.15	249	iP	22	45.14	-0.5
			eS	23	00.52	
CRP	1.16	254	eP	22	45.73	-0.3
SCM	1.22	78	eP	22	45.78	-0.9
			eS	23	01.39	
CKL	1.27	252	eP	22	46.98	-0.5
BGL	1.27	256	eP	22	47.07	-0.4
HUR	1.39	4	eP	22	48.88	-0.1
			eS	23	06.27	
GLI	1.51	117	eP	22	49.45	-1.3
			eS	23	08.45	
SEW	1.51	173	eP	22	50.42	-0.4
RDT	1.62	232	eP	22	51.52	-0.8
KNIM	1.62	140	iP	22	50.15	-2.2
VZW	1.67	108	eP	22	52.19	-0.9
NNL	1.72	205	eP	22	53.70	-0.1
VLZ	1.75	104	eP	22	52.80	-1.4
TOA	1.81	72	eP	22	54.91	-0.2
RSO	1.82	232	eP	22	54.75	-0.7
RED	1.86	232	eP	22	55.05	-0.8
RND	1.87	14	eP	22	55.34	-0.7
KLU	1.88	92	iP	22	54.67	-1.5
BRLK	1.91	196	eP	22	56.63	0.0
MTU	1.94	146	eP	22	54.89	-2.1
CNPM	2.19	199	eP	23	00.31	-0.3
SDG	2.22	63	eP	23	00.83	-0.2
PAX	2.46	54	eP	23	04.07	-0.4
GLB	2.89	91	eP	23	09.53	-1.0
CCB	3.19	16	eP	23	12.47	-2.2
TGL	3.50	101	eP	23	18.75	-0.5
BALM	3.66	96	eP	23	20.10	-1.3

40 obs. associated

OCT 30, 1990 17h 38m 30.98± 0.70s
24.030 N ± 5.7km 121.571 E ±10.6km
DEPTH = 18.4 ± 9.3 km
TAIWAN (244)

TWD	0.05	24	iPc	38	34.50	0.1
			eS	38	37.10	
TWC	0.63	24	ePd	38	43.20	0.1
			eS	38	52.20	
TWO	0.71	290	iPd	38	44.70	0.1
TWF1	0.72	201	iPc	38	44.50	-0.2
			eS	38	54.40	
TWZ	1.06	0	ePc	38	50.40	-0.1
ANP	1.15	358	eP	38	52.10	0.0
TWG	1.29	201	eP	38	54.20	0.2
SSE	7.05	357	eP	40	11.30	-4.4X
			eLg	42	18.20	

S.D. = 0.2 on 7 of 8 obs.

OCT 30, 1990 18h 24m 14.53± 0.91s
34.835 N ± 9.6km 140.077 E ± 8.4km
DEPTH = 141.1 ± 6.3 km
4.9mb (4 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ	1.37	3	P	24	42.10	-0.2
			S	25	01.50	
CHJJ	1.50	324	iPd	24	43.40	-0.3
			S	25	04.10	
IIDJ	1.89	291	iPd	24	48.30	0.1
			S	25	13.00	
MAT	2.28	319	iPd	24	52.70	-0.3
			eS	25	20.00	
MTMJ	2.54	314	P	24	56.60	0.2
			eS	25	27.00	
NIIJ	2.55	340	P	24	56.30	-0.1
			S	25	28.20	
YAMJ	3.33	359	P	25	07.40	1.0
			eS	25	45.90	
TSRJ	3.42	283	P	25	06.90	-0.8
WKYJ	3.75	262	P	25	12.00	-0.1
			S	25	54.00	
OFUJ	4.42	16	P	25	20.70	-0.2
			S	26	08.40	
TKSJ	5.06	262	P	25	30.20	0.8
YONJ	5.44	276	P	25	34.80	0.2
GUN	46.32	277	P	32	28.68	0.4
	0.6s	26.00nm			5.1mb	
PKI	46.84	277	P	32	31.90	-0.5
	0.5s	13.00nm			4.9mb	
KKN	46.86	277	P	32	32.28	-0.1
	0.6s	23.00nm			5.0mb	
DMN	47.07	277	P	32	34.20	0.1
	0.5s	9.00nm			4.7mb	
GKN	47.30	278	P	32	35.66	-0.1
WB5	54.68	187	eP	33	31.00	0.0

S.D. = 0.5 on 18 of 18 obs.

---

* OCT 30, 1990 19h 09m 34.00± 0.78s
12.566 N ±12.4km 48.253 E ± 9.7km
DEPTH = 10.0km (geophysicist)
4.7mb (4 obs.) 4.3Msz (1 obs.)
EASTERN GULF OF ADEN (415)

DHJN	6.84	318	eP	11	13.30	-3.9X
KMSA	8.56	336	eP	11	33.30	-7.6X
MJMA	13.51	348	eP	12	52.70	4.4X
NAI	17.84	220	iPc	13	44.00	-0.3
PRNI	21.53	327	eP	14	25.00	-0.5
KER	21.71	357	eP	14	26.00	-1.4
JVI	22.63	330	e(P)	14	35.00	-1.4
MML	23.02	331	eP	14	42.00	1.7
POO	25.35	73	eP	15	02.00	-0.9
TAB	25.45	356	eP	15	07.00	3.1X
MAIO	25.71	21	eP	15	11.00	4.8X
	1.3s	21.24nm			4.7mb	
			eS	19	44.00	
GBA	28.44	85	P	15	35.00	3.8X
	1.2s	7.80nm			4.4mb	
GKN	37.25	60	P	16	48.54	0.5
DMN	37.54	61	P	16	52.50	1.9
	0.9s	13.00nm			4.7mb	
KKN	37.74	61	P	16	51.56	-0.6
	0.8s	10.00nm			4.6mb	
PKI	37.79	61	P	16	52.26	-0.5
GUN	38.28	61	P	16	52.36	-4.6X
KRA	44.00	334	eP	17	43.30	0.1
Z	14s	1.40um			5.0MszX	
E	14s	1.90um				
			e	17	52.30	
KHC	46.34	329	eP	18	02.50	0.6
CLL	48.03	331	eP	18	16.00	0.8
LZH	54.99	55	e(P)	19	27.00	18.8X
	2.0s	25.00nm				
Z	18s	0.24um			4.3Msz	
MBC	91.05	357	eP	22	46.00	6.5X

S.D. = 1.2 on 13 of 22 obs.

OCT 30, 1990 19h 15m 49.92± 0.39s
63.234 N ± 5.5km 24.308 W ± 5.6km
DEPTH = 5.0km (geophysicist)
4.8mb (37 obs.) 4.3Msz (3 obs.)
ICELAND REGION (637)

REY	1.40	49	iP	16	15.60	-0.5
			iS	16	36.90	
HAH	1.61	55	eP	16	18.00	-1.1
LJO	2.49	69	eP	16	30.30	-1.4
AKU	3.64	45	eP	16	47.00	-1.1
	0.9s	285.71nm				
			iS	17	46.00	
DAG	13.72	5	eP	19	12.00	4.8X
	1.0s	8.00nm			4.6mb	
NB2	16.62	81	P	19	44.10	-0.7
	1.1s	9.00nm			3.8mb	
FLN	19.51	127	iPd	20	19.00	-1.6
	1.2s	47.60nm			4.6mb	
Z	22s	1.25um			4.1Msz	
LDF	19.78	127	iPd	20	22.20	-1.3
	1.2s	38.70nm			4.6mb	
LPF	19.93	129	eP	20	23.30	-1.8
	1.2s	53.55nm			4.7mb	
MEM	20.57	114	P	20	33.20	1.5
KEV	20.87	50	eP	20	31.00	-3.8X
	0.6s	17.00nm			4.6mb	
			i	20	40.60	
SOD	21.16	56	iP	20	36.60	-1.1
MFF	21.47	130	eP	20	39.80	-1.2
	1.2s	71.40nm			4.9mb	
ABH	21.77	113	eP	20	43.61	-0.4
TNS	21.88	111	ePc	20	47.40	2.2
LSF	22.36	127	iPd	20	51.20	1.2
	1.2s	47.60nm			4.8mb	
LOR	22.37	122	iPd	20	49.90	-0.2
	1.1s	56.15nm			4.9mb	
Z	22s	1.25um			4.3Msz	
SSF	22.41	123	iPd	20	50.00	-0.4
	1.1s	36.65nm			4.8mb	
VITF	22.43	118	P	20	50.51	-0.1
SUF	22.46	68	iP	20	53.00	2.2
GWF	22.49	114	P	20	51.01	-0.3
AVF	22.58	124	iPd	20	51.80	-0.3
	1.4s	69.70nm			5.0mb	
TCF	22.58	126	eP	20	52.50	0.4
	1.1s	26.85nm			4.6mb	
BGF	22.58	125	iPd	20	52.00	-0.2
	1.1s	48.85nm			4.9mb	
LBF	22.65	123	iPd	20	52.60	-0.3
	1.1s	42.75nm			4.9mb	
HAU	22.75	118	eP	20	53.60	-0.2
	1.2s	41.65nm			4.8mb	
Z	21s	0.82um			4.1Msz	
MAF	22.76	126	eP	20	53.90	-0.1
	1.0s	23.00nm			4.6mb	
NUR	22.79	74	iP	20	36.60	-17.4X
CDF	22.80	116	P	20	53.93	-0.4
SMF	22.88	123	iPd	20	55.00	-0.1
	1.1s	53.70nm			5.0mb	
ECH	22.91	116	P	20	55.01	-0.3
MOX	22.93	106	iP	20	59.00	3.5X
	1.3s	46.00nm			4.8mb	
CLL	23.05	104	eP	20	59.00	2.3
	1.7s	33.00nm			4.6mb	
BSF	23.06	117	P	20	56.14	-0.9
RJF	23.17	129	eP	20	57.70	-0.2
	1.4s	61.00nm			5.0mb	
Z	21s	1.10um			4.3Msz	
MOF	23.19	117	P	20	57.09	-1.1
LFF	23.22	130	eP	20	58.40	0.0
	1.4s	69.70nm			5.0mb	
PYM	23.33	126	P	21	00.26	0.7
PLDF	23.37	125	P	20	59.44	-0.5
LOMF	23.47	118	P	20	59.29	-1.6
LPO	23.60	130	eP	21	03.10	1.0
	1.2s	32.75nm			4.8mb	
CAF	23.69	128	eP	21	04.10	1.1
	1.3s	25.25nm			4.6mb	
BRG	23.78	103	iP	21	06.80	3.0X
	1.4s	26.00nm			4.6mb	
			i	21	14.00	
			i	21	24.10	
LBL	23.86	126	P	21	04.78	0.3
PRU	24.69	104	eP	21	14.80	2.2
Z	13s	1.00um			4.5MszX	
			e	22	24.00	
EPF	24.77	133	eP	21	14.00	0.5

30d 19h

	0.9s	8.20nm			4.4mb	
KSP	24.84	101	eP	21	13.50	-0.6
KHC	24.90	107	P	21	15.50	0.8
LPL	24.94	121	eP	21	15.90	0.6
	1.3s	27.10nm			4.8mb	
BNI	25.30	121	P	21	24.00	5.3X
SOTA	25.36	112	iPd	21	22.40	3.2X
	1.3s	26.40nm			4.8mb	
			i	21	42.70	
WATA	25.43	112	iPd	21	23.20	3.4X
	1.1s	20.90nm			4.8mb	
VAI	25.45	117	P	21	24.00	4.1X
CTI	26.48	113	P	21	33.00	3.4X
FVI	26.52	111	P	21	33.50	3.7X
KRA	27.03	98	eP	21	39.30	4.8X
			e	21	50.30	
FBA	45.58	330	ePc	24	12.20	0.3
	1.1s	15.63nm			4.9mb	
IMA	45.82	334	ePc	24	13.90	-0.1
	1.2s	9.47nm			4.7mb	
PMR	48.75	329	e(P)	24	36.80	0.1
TTA	49.08	333	e(P)	24	35.30	-4.1X
BW06	50.88	289	iP	24	51.60	-2.1
	0.8s	7.14nm			4.7mb	
MEO	52.60	274	iPc	25	05.30	-1.3
LKO	55.26	157	P	25	24.04	-2.2
	0.6s	11.50nm			5.0mb	
TIC	58.20	157	P	25	47.00	-0.1
KIC	58.52	157	P	25	49.00	-0.4
LIC	58.61	157	P	25	49.80	-0.1
GKN	73.35	61	P	27	25.24	0.8
	0.7s	25.00nm			5.4mb	
KKN	73.80	60	P	27	28.06	1.0
	0.7s	34.00nm			5.5mb	
DMN	73.89	61	P	27	28.98	1.3
	0.8s	41.00nm			5.5mb	
GUN	73.93	60	P	27	30.08	2.1
	1.0s	71.00nm			5.7mb	
PKI	74.04	60	P	27	29.56	0.9
	1.0s	15.00nm			5.0mb	
BAO	80.75	203	eP	28	07.50	1.9
SIV	83.99	215	P	28	22.80	0.6
ZOBO	86.24	222	P	28	35.00	0.9
Z	24s	0.06um			3.9MszX	
			LR	58	20.00	
SPA	153.08	180	ePKP	35	40.00	-0.7
	1.0s	4.00nm				
			i	36	01.20	

S.D. = 1.1 on 62 of 75 obs.

---

* OCT 30, 1990 19h 41m 52.87± 0.74s
44.612 N ± 6.6km 12.595 E ±12.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.9 (VIE). MD 2.6 (TRI).

SFI	0.87	218	P	42	08.90	-0.7
			eSg	42	21.60	
CRE	1.09	205	P	42	12.90	-0.5
			eSg	42	28.90	
ARV	1.14	167	P	42	14.60	0.4
			eSg	42	32.00	
TRI	1.37	37	iPgc	42	18.70	0.7
			i	42	34.50	
			iSg	42	39.30	
ASS	1.54	178	P	42	21.30	0.8
			eSg	42	42.50	
CTI	1.58	335	P	42	22.10	1.0
VOY	1.69	32	ePn	42	21.00	-1.7
			ePg	42	24.20	
			eSn	42	46.50	
			eSg	42	49.30	
FVI	1.99	4	P	42	30.70	3.9X
			eSn	42	55.60	
SOTA	2.78	340	i(Pg)	42	45.10	6.7X
			iSn	43	12.20	
			iSg	43	21.20	

S.D. = 1.2 on 7 of 9 obs.

OCT 30, 1990 20h 08m 56.58± 0.74s
38.070 N ± 5.8km 21.749 E ± 9.4km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.2 (ATH).

EVR	0.85	3	ePg	09	13.00	0.0
ITM	0.90	171	ePg	09	12.50	-1.3
VLS	0.92	277	iPgc	09	13.50	-0.7
AGG	1.05	25	ePd	09	16.52	0.0
			eS	09	30.24	
ATH	1.56	93	ePb	09	25.00	0.7
			eSb	09	47.50	
VLI	1.65	145	ePb	09	26.00	0.3
IGT	1.83	323	ePc	09	32.25	3.9X
			eS	10	01.60	
LIT	2.11	16	ePd	09	31.68	-0.7
KZN	2.23	0	ePb	09	36.50	2.3
PAIG	2.39	38	ePc	09	33.82	-2.5
FNA	2.73	354	ePd	09	42.32	1.1
			iS	10	16.42	
SOH	3.02	24	ePc	09	43.48	-1.8
			eS	10	21.88	
OHR	3.13	347	ePn	09	54.30	7.5X
VAM	3.31	143	ePn	09	51.00	1.6
VAY	3.31	11	ePn	09	50.30	0.9
SKO	3.91	357	ePn	09	58.00	0.1

S.D. = 1.4 on 14 of 16 obs.

---

* OCT 30, 1990 20h 40m 09.02± 3.00s
51.197 N ±23.8km 15.973 E ±16.2km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.4 (GRF), 3.2 (VKA).

KSP	0.41	150	iP	40	17.00	-0.4
			iS	40	26.00	
			i	40	33.00	
BRG	1.32	257	iPg	40	32.50	-0.9
			iSg	40	52.30	
PRU	1.52	218	Pg	40	37.40	1.2
			eSn	40	54.00	
			Sg	41	01.80	
CLL	1.87	275	e(Pg)	40	42.00	0.7
			eSg	41	07.00	
KHC	2.58	218	ePn	40	52.00	0.5
			ePg	40	57.50	
			eSn	41	21.00	
			eSg	41	36.00	
MOX	2.81	260	ePg	41	00.00	5.2X
			iSg	41	40.00	
WET	2.86	225	eP	40	55.00	-0.5
VKA	2.94	175	ePg	41	06.80	10.1X
			iSg	41	50.80	
ZST	3.09	166	eP	41	54.00	55.3X
			e	42	30.00	
			e	42	41.70	
GRF	3.39	245	ePn	41	02.40	-0.6
			ePg	41	15.10	
			eSg	42	00.30	
SPC	3.40	125	eP	41	31.40	28.0X

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

OCT 30, 1990 21h 23m 36.78± 0.65s
63.224 N ± 8.0km 24.405 W ± 9.9km
DEPTH = 5.0km (geophysicist)
4.7mb (15 obs.) 4.4Msz (4 obs.)
ICELAND REGION (637)

HAH	1.66	56	eP	24	04.90	-1.7
LJO	2.53	69	eP	24	16.00	-3.2X
AKU	3.68	45	iP	24	34.00	-1.5
	0.9s	322.69nm				
			eS	25	33.10	
FLN	19.54	127	eP	28	06.90	-0.9
KEV	20.91	50	eP	28	18.00	-4.0X
SOD	21.20	56	eP	28	20.00	-5.0X
MFF	21.49	129	eP	28	28.00	-0.1
	1.3s	61.35nm			4.8mb	
LSF	22.39	127	eP	28	37.60	0.5
LOR	22.40	122	eP	28	36.20	-1.1
	1.1s	31.75nm			4.7mb	
Z	22s	0.17um			3.4Msz	
SSF	22.44	123	eP	28	36.30	-1.3
	1.3s	37.90nm			4.7mb	
SUF	22.50	68	eP	28	40.00	1.9
TCF	22.61	126	eP	28	38.80	-0.5
	1.0s	16.00nm			4.5mb	
AVF	22.61	124	eP	28	38.20	-1.0
	1.4s	39.20nm			4.7mb	
BGF	22.61	125	eP	28	38.50	-0.8
	1.0s	30.00nm			4.7mb	
HAU	22.78	118	eP	28	40.20	-0.8
	1.2s	29.75nm			4.7mb	
MAF	22.80	126	eP	28	40.60	-0.5
	1.4s	34.85nm			4.7mb	
CDF	22.83	116	eP	28	41.40	-0.2
	1.0s	18.00nm			4.5mb	
NUR	22.84	74	eP	28	47.00	5.7X
SMF	22.91	123	eP	28	41.70	-0.6
	1.0s	23.00nm			4.7mb	
MOX	22.97	106	eP	28	45.00	2.3
Z	20s	1.70um			4.5Msz	
CLL	23.09	104	e(P)	28	49.00	5.1X
RJF	23.20	128	eP	28	44.20	-0.9
GRF	23.50	108	eP	28	50.00	2.0
	2.3s	105.00nm			5.0mb	
Z	20s	1.00um			4.3Msz	
BRG	23.82	103	iP	28	52.20	1.2
	1.6s	42.00nm			4.8mb	
PRU	24.73	104	ePd	29	01.20	1.4
Z	14s	1.00um			4.5MszX	
N	13s	0.60um				
E	13s	0.60um				
EPF	24.79	133	eP	29	00.50	-0.1
KHC	24.94	107	P	29	04.00	2.0
KRA	27.08	98	eP	29	24.30	2.6X
Z	16s	1.30um			4.6MszX	
E	16s	2.20um				
			e	29	34.80	
FBA	45.57	330	eP	31	58.50	-0.2
IMA	45.81	334	eP	32	00.40	-0.4
	1.5s	12.80nm			4.7mb	
LKO	55.27	157	P	33	10.42	-2.7X
	0.9s	11.50nm			4.9mb	
TNP	57.99	292	eP	33	33.00	0.4
LZH	72.80	42	eP	35	07.50	-0.5
	2.0s	32.00nm			5.1mb	
Z	18s	0.34um			4.7Msz	
GKN	73.40	61	P	35	11.92	0.4
KKN	73.84	60	P	35	14.70	0.5
DMN	73.93	61	P	35	14.82	0.0
GUN	73.97	60	P	35	15.66	0.5
PKI	74.09	60	P	35	15.60	-0.2

S.D. = 1.1 on 31 of 38 obs.

& OCT 30, 1990 21h 41m 08.62s
60.069 N 152.045 W
DEPTH = 66.8km
SOUTHERN ALASKA (2)
<AGS-P>.

NNL	0.38	94	iP	41	20.72	0.5
HOM	0.46	154	eP	41	20.84	-0.1
			eS	41	30.19	
RED	0.50	314	iP	41	20.87	-0.6
RSO	0.53	318	iP	41	21.29	-0.6
r			iS	41	31.70	
RDT	0.54	341	iP	41	21.11	-0.7
			eS	41	31.33	
XLV	0.64	165	eP	41	22.04	-0.8
BRLK	0.66	117	eP	41	22.77	-0.3
CNPM	0.68	143	iP	41	22.74	-0.6
OPT	0.73	236	eP	41	23.14	-0.7
NKA	0.79	30	iP	41	25.72	1.2
AUE	0.98	224	eP	41	26.27	-0.7
SLKM	1.01	63	eP	41	26.30	-1.1
AUI	1.02	224	eP	41	26.91	-0.5
SPU	1.12	360	iP	41	28.39	-0.4
CKL	1.14	353	iP	41	28.62	-0.6
CRP	1.20	357	eP	41	29.74	-0.3
BGL	1.21	352	iP	41	29.60	-0.5
CGLM	1.24	1	iP	41	30.22	-0.3
SEW	1.30	87	eP	41	30.77	-0.4
NCG	1.34	358	eP	41	31.43	-0.4
CDD	1.40	216	eP	41	31.44	-1.2
MCNL	1.46	234	eP	41	32.41	-1.0
SUA	1.54	24	eP	41	34.26	-0.3
PMS	1.70	45	iP	41	36.40	-0.3
SKT	1.93	7	eP	41	38.95	-1.0
PLRM	2.09	42	eP	41	40.55	-1.5
KNIM	2.17	81	iP	41	40.28	-2.9
MTU	2.21	90	eP	41	41.77	-1.9
KNK	2.22	51	eP	41	42.22	-1.6

29 obs. associated

& OCT 30, 1990 21h 43m 36.90s
59.342 N 150.555 W
DEPTH = 19.0km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

CNPM	0.39	298	iP	43 44.84	-0.3
			eS	43 51.07	
BRLK	0.46	338	iP	43 45.77	-0.4
XLV	0.61	281	eP	43 47.55	-1.2
HOM	0.64	300	eP	43 49.41	0.2
			eS	43 57.82	
NNL	0.80	332	eP	43 51.63	-0.3
SEW	0.95	36	eP	43 53.17	-1.3
			eS	44 05.73	
SLKM	1.18	8	iP	43 56.58	-1.8
OPT	1.40	284	eP	44 00.29	-1.2
AUE	1.44	272	eP	44 01.22	-0.8
AUI	1.47	271	eP	44 01.50	-1.0
AUH	1.48	272	eP	44 02.16	-0.5
RDT	1.55	324	eP	44 01.80	-1.9
			eS	44 21.06	
RED	1.55	315	eP	44 01.32	-2.5
RSO	1.58	316	eP	44 02.82	-1.4
CDD	1.64	257	eP	44 03.25	-1.8
KNIM	1.74	53	eP	44 07.58	1.1
PMS	1.97	14	eP	44 07.91	-1.9
SPU	1.99	339	eP	44 08.16	-1.9
CKL	2.06	335	eP	44 09.67	-1.5
CRP	2.09	338	eP	44 10.26	-1.4
CGLM	2.10	341	eP	44 10.18	-1.5
BGL	2.13	335	eP	44 10.79	-1.4
NCG	2.22	340	eP	44 11.56	-1.8
GHO	2.57	18	eP	44 17.00	-1.4
SKT	2.69	350	eP	44 17.86	-2.2
KLU	3.15	45	eP	44 23.86	-2.8

26 obs. associated

& OCT 30, 1990 22h 10m 29.51s
59.863 N 153.430 W
DEPTH = 131.1km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.23	154	iP	10 47.09	0.8
PDB	0.39	259	iP	10 47.31	-1.1
			eS	11 01.10	
AUH	0.50	181	eP	10 48.34	-0.7
AUE	0.51	177	iP	10 48.10	-0.8
AUI	0.53	180	eP	10 48.14	-1.0
RED	0.65	30	eP	10 49.18	-0.8
RSO	0.69	29	eP	10 49.77	-0.7
			eS	11 05.09	
RDT	0.88	35	iP	10 50.97	-0.8
HOM	0.93	102	eP	10 51.43	-0.7
CDD	0.94	187	iP	10 51.18	-1.1
XLV	0.96	115	eP	10 51.33	-1.1
NNL	1.09	80	eP	10 53.63	0.0
CNPM	1.16	106	iP	10 53.25	-1.2
			eS	11 11.25	
BRLK	1.29	93	eP	10 54.68	-1.1
NKA	1.40	50	eP	10 58.34	1.4
CKL	1.44	22	iP	10 57.04	-0.5
			eS	11 18.88	
SPU	1.49	27	eP	10 57.20	-0.8
BGL	1.50	20	eP	10 57.85	-0.3
CRP	1.54	24	eP	10 57.85	-0.9
CGLM	1.61	25	eP	10 58.84	-0.6
NCG	1.67	22	eP	10 59.70	-0.4
SLKM	1.73	67	eP	10 59.98	-0.7
SEW	2.02	81	eP	11 02.71	-1.4
SUA	2.08	38	eP	11 04.36	-0.7
SKT	2.32	23	eP	11 06.94	-1.0
PMS	2.36	52	eP	11 07.24	-1.3
KNIM	2.89	78	eP	11 13.45	-1.9
KNK	2.90	55	eP	11 13.18	-2.3
MTU	2.91	85	eP	11 14.40	-1.2
GHO	2.92	47	eP	11 13.60	-2.2
CUT	2.98	30	eP	11 15.55	-0.9
SML	3.17	50	eP	11 16.15	-2.9
VLZ	3.73	67	eP	11 24.69	-1.8
KLU	4.04	63	eP	11 28.08	-2.6
GLB	4.99	67	eP	11 41.69	-1.8

35 obs. associated

• OCT 30, 1990 23h 08m 59.01± 0.75s
40.085 S ±11.8km 78.294 E ±16.9km
DEPTH = 10.0km (geophysicist)
4.7mb (5 obs.) 4.9Msz (2 obs.)
MID-INDIAN RISE (429)

ASPA	49.20	88	eP	17 49.90	-0.3
	0.9s		7.50nm		4.7mb
	Z 21s		1.10um		4.8Msz
SPA	50.11	180	iPc	17 56.70	-0.1
	1.0s		15.00nm		4.9mb
	Z 20s		1.31um		4.9Msz
STK	50.92	102	eP	18 04.00	0.8
	1.1s		8.00nm		4.6mb
WB5	51.70	84	eP	18 08.80	-0.5
GBA	53.42	359	Pd	18 21.90	0.0
	0.6s		1.50nm		4.1mb
PKI	67.63	7	P	19 58.82	-0.4
DMN	67.64	7	P	19 59.96	0.8
KKN	67.84	7	P	20 00.12	-0.3
GKN	67.99	6	P	20 01.00	-0.3
GUN	68.01	7	P	20 01.94	0.3
BCAO	70.37	294	iPc	20 24.10	8.1X
	0.6s		8.00nm		5.0mb

S.D. = 0.5 on 10 of 11 obs.

• OCT 30, 1990 23h 10m 04.62± 1.00s
63.197 N ±10.4km 24.378 W ±14.0km
DEPTH = 5.0km (geophysicist)
4.6mb (9 obs.) 3.6Msz (2 obs.)
ICELAND REGION (637)

REY	1.45	48	iP	10 31.00	-0.5
			iS	10 52.20	
AKU	3.69	45	iP	11 02.40	-1.1
	0.9s		144.54nm		
			iS	12 01.60	
DAG	13.76	5	eP	13 29.00	6.5X
	0.9s		5.88nm		4.5mb
MFF	21.47	129	eP	14 54.80	-0.9
	1.2s		29.75nm		4.6mb
LOR	22.38	122	eP	15 04.40	-0.5
	1.4s		47.90nm		4.8mb
	Z 20s		0.30um		3.7Msz
SSF	22.42	123	eP	15 04.50	-0.7
	1.2s		28.25nm		4.6mb
AVF	22.58	124	eP	15 06.00	-0.8
BGF	22.59	125	eP	15 06.30	-0.6
	1.0s		19.00nm		4.5mb
HAU	22.76	118	eP	15 08.40	-0.2
	1.2s		20.85nm		4.5mb
	Z 21s		0.22um		3.6Msz
MAF	22.77	126	eP	15 08.50	-0.2
	1.2s		20.85nm		4.5mb
MOX	22.95	106	eP	15 12.00	1.6
CLL	23.07	104	e(P)	15 19.00	7.4X
RJF	23.17	128	eP	15 12.20	-0.5
BRG	23.80	103	eP	15 20.00	1.3
	1.4s		24.00nm		4.6mb
			i	15 38.60	
KSP	24.87	101	eP	15 31.00	2.0
KHC	24.92	107	P	15 32.50	2.9X
KRA	27.06	98	eP	15 48.80	-0.6
LRM	49.62	293	eP	18 58.80	0.0
LZH	72.81	42	e(P)	21 33.50	-2.4
	2.0s		29.00nm		5.0mb
GKN	73.40	61	P	21 40.00	0.6
KKN	73.84	60	P	21 43.00	0.9
GUN	73.97	60	P	21 45.50	2.5

S.D. = 1.3 on 19 of 22 obs.

• OCT 31, 1990 00h 43m 46.93± 1.43s
31.573 S ±16.2km 70.190 W ±13.5km
DEPTH = 120.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

RTBS	0.63	98	iPd	44 06.70	0.7
JACH	1.16	197	iP	44 11.20	0.2
			iS	44 28.00	
RTCB	1.19	06	ePd	44 11.10	-0.2
			S	44 28.20	
RTCV	1.44	102	ePd	44 13.90	-0.1
RTLL	1.49	81	ePd	44 14.40	-0.3
ROCH	1.56	206	iP	44 16.00	0.3
			iS	44 36.50	
PEL	1.62	195	iPc	44 16.20	0.0
			iS	44 36.70	
MDZ	1.73	139	iP	44 17.50	-0.1
			iS	44 39.80	
FCH	1.75	183	iPc	44 10.60	0.5
			iS	44 41.70	
PCH	2.06	188	iPc	44 22.00	0.3
			iS	44 47.50	
TACH	2.17	197	iP	44 22.70	-0.3
			iS	44 49.10	
CHCH	2.39	189	iPd	44 25.80	0.0
			iS	44 54.00	
LNV	2.59	203	iP	44 27.50	-0.9
			iS	44 57.00	

S.D. = 0.5 on 13 of 13 obs.

OCT 31, 1990 00h 51m 43.36± 0.51s
63.221 N ± 6.0km 24.352 W ± 7.1km
DEPTH = 5.0km (geophysicist)
5.0mb (27 obs.) 4.2Msz (5 obs.)
ICELAND REGION (637)

REY	1.43	49	eP	52 09.00	-0.9
			iS	52 29.70	
HAH	1.64	55	eP	52 10.80	-2.1
LJO	2.51	69	eP	52 23.00	-2.5
AKU	3.67	45	eP	52 40.30	-1.6
	1.0s		436.00nm		
			iS	53 38.90	
APO	18.06	81	eP	55 58.70	2.5
	0.5s		0.50nm		2.9mb X
KEV	20.90	50	eP	56 30.00	1.6
SOD	21.18	56	iP	56 32.20	0.8
MFF	21.47	129	eP	56 34.20	-0.3
	1.1s		61.05nm		4.9mb
TNS	21.90	111	ePc	56 38.70	-0.1
LSF	22.37	127	eP	56 43.40	-0.1
LOR	22.38	122	eP	56 43.30	-0.3
	1.5s		133.20nm		5.2mb
	Z 21s		0.95um		4.2Msz
SSF	22.42	123	eP	56 43.60	-0.4
	1.4s		76.25nm		5.0mb
VITF	22.44	118	P	56 42.65	-1.5
SUF	22.48	68	eP	56 46.00	1.6
GWF	22.51	114	P	56 43.43	-1.4
TCF	22.59	126	eP	56 45.60	-0.1
	1.2s		29.75nm		4.7mb
AVF	22.59	124	eP	56 45.20	-0.4
	1.4s		52.30nm		4.8mb
BGF	22.59	125	eP	56 45.40	-0.3
	1.4s		91.50nm		5.1mb
LBF	22.66	123	eP	56 46.00	-0.4
	1.5s		62.70nm		4.9mb
HAU	22.76	118	eP	56 48.20	0.9
	Z 20s		0.68um		4.1Msz
MAF	22.77	126	eP	56 48.20	0.7
CDF	22.81	116	P	56 46.16	-1.8
WLS	22.84	116	P	56 46.25	-1.9
SMF	22.89	123	eP	56 48.40	-0.3
	1.2s		40.15nm		4.8mb
ECH	22.92	116	P	56 46.88	-2.0
MOX	22.94	106	eP	56 49.00	-0.1
/	1.6s		37.00nm		4.7mb
	Z 20s		1.10um		4.3Msz
CLL	23.07	104	eP	56 52.00	1.7
	2.0s		60.00nm		4.8mb
BSF	23.08	117	eP	56 51.60	1.0
	1.5s		78.35nm		5.0mb
BSF	23.08	117	P	56 48.23	-2.3
RJF	23.18	129	eP	56 52.00	0.5
	Z 21s		0.85um		4.2Msz
MOF	23.20	117	P	56 47.86	-3.9X
LOMF	23.48	118	P	56 50.48	-3.9X
GRF	23.48	109	iPc	56 55.40	1.1
	2.0s		95.00nm		5.0mb
	Z 21s		0.40um		3.9Msz
BBS	23.66	117	P	56 52.54	-3.6X
BRG	23.80	103	eP	56 57.40	0.0
	1.4s		36.00nm		4.8mb
			e	57 09.00	
SLE	23.82	115	ePc	56 58.50	0.8
ZLA	24.00	116	ePd	57 00.90	1.4
EMS	24.57	120	ePc	57 06.50	1.4
PRU	24.70	104	Pc	57 06.80	0.6
	2.3s		80.50nm		5.0mb
	Z 14s		0.80um		4.4MszX
KSP	24.86	101	iPc	57 08.00	0.3
KHC	24.92	107	P	57 09.50	1.2
			e	57 11.30	
VDL	25.24	116	ePd	57 13.40	1.8
BNI	25.31	121	P	57 27.00	14.8X
SQTA	25.38	112	iPc	57 11.80	-1.0
	1.3s		23.70nm		4.7mb
			i	57 35.70	
WATA	25.44	112	eP	57 14.00	0.6
	1.3s		24.10nm		4.7mb
VAI	25.46	117	P	57 19.00	5.6X

31d 00h

MDI 25.92 116 P 57 17.00 -0.6
TOL 26.33 143 eP 57 23.00 1.5
CTI 26.50 113 P 57 23.50 0.3
FVI 26.54 111 P 57 24.00 0.7
KRA 27.05 98 eP 57 27.30 -0.8
Z 16s 1.30um 4.6MszX
E 16s 1.60um
e 57 29.90
ZST 27.16 104 eP 57 32.80 3.7X
SPC 27.82 99 eP 57 34.90 -0.4
e 01 53.70
MBC 31.11 333 eP 58 05.00 0.8
1.5s 16.00nm 4.7mb
FBA 45.58 330 eP 00 05.30 -0.1
IMA 45.82 334 eP 00 07.30 -0.1
1.8s 32.30nm 5.0mb
JVI 48.43 101 eP 00 28.00 -0.1
PRNI 49.63 103 eP 00 38.00 0.6
LKO 55.26 157 P 01 17.76 -1.9
1.1s 18.50nm 5.0mb
ALQ 55.98 281 eP 01 23.30 -1.7
1.0s 3.75nm 4.4mb
QUE 64.08 74 eP 02 21.40 0.9
BCAO 66.46 132 iPd 02 34.80 -0.9
0.6s 7.00nm 5.0mb
LZH 72.79 42 e(P) 03 14.00 -0.5
1.8s 35.00nm 5.2mb
GKN 73.38 61 P 03 18.60 0.6
1.0s 42.00nm 5.5mb
KKN 73.82 60 P 03 21.22 0.5
0.9s 34.00nm 5.4mb
DMN 73.91 61 P 03 22.46 1.2
1.0s 42.00nm 5.4mb
GUN 73.95 60 P 03 22.22 0.6
0.9s 46.00nm 5.5mb
PKI 74.07 60 P 03 22.88 0.6
1.3s 26.00nm 5.1mb
SIV 83.96 215 P 04 15.80 0.3
S.D. = 1.2 on 63 of 69 obs.

& OCT 31, 1990 01h 03m 06.90s
34.167 N 117.633 W
DEPTH = 6.0km (geophysicist)
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 2.9 (PAS). Felt (IV) at Mt. Baldy and (II) at Rancho Cucamonga.

PEM 0.20 270 iPc 03 10.94 0.0
S 03 13.74
MWC 0.36 279 iPc 03 13.74 -0.4
S 03 18.62
VPD 0.37 197 eP 03 14.39 0.1
S 03 19.73
PEC 0.48 125 iPd 03 15.80 -0.7
PVPS 0.74 240 eP 03 20.54 -1.2
S 03 31.12
PLM 1.04 141 iPd 03 25.60 -1.3
CIW 1.04 228 eP 03 25.35 -1.5
S 03 39.31
ABL 1.48 298 eP 03 32.80 -1.5
BCH 2.26 297 eP 03 44.20 -1.3
BLP 2.32 281 e(P) 03 42.50 -3.8
TNP 3.92 5 e(P) 04 10.00 0.8
11 obs. associated

OCT 31, 1990 02h 11m 52.51± 1.46s
8.738 S ± 7.6km 124.065 E ± 7.6km
DEPTH = 49.3 ± 14.6 km
4.8mb (9 obs.) 4.7Msz (1 obs.)
TIMOR (289)

KUPT 1.48 198 ePc 12 16.80 -0.3
eS 12 28.00
MTN 8.05 121 iPd 13 50.30 0.7
KNA 8.35 147 eP 13 53.10 -0.6
0.2s 118.00nm 6.4mb X
eS 15 17.00
TRT 11.36 274 ePc 14 45.50 10.5X
MBL 13.01 198 eP 14 57.00 0.1
0.3s 6.00nm 5.1mb
eS 17 13.00
WB5 14.90 139 eP 15 17.50 -4.3X
eS 17 51.00
NANU 16.00 210 eP 15 37.50 1.6
0.3s 7.00nm 4.3mb
eS 18 13.00
WARB 17.52 172 eP 15 55.90 0.9
0.4s 22.00nm 4.6mb
eS 18 59.00
ASPA 17.58 149 iPd 15 54.10 -1.6
0.4s 64.50nm 5.1mb
eS 18 51.30
MEKA 18.54 196 eP 16 07.00 -0.5
eS 19 25.00
QIS 19.06 130 iPc 16 13.60 -0.2
0.2s 19.00nm 5.0mb
iS 19 31.50
MRWA 21.74 199 eP 16 41.70 0.1
eS 20 40.00
COOL 22.20 187 eP 16 45.00 -1.2
FORR 22.32 171 iPc 16 46.20 -1.1
BAL 22.82 197 iPd 16 52.80 0.6
0.4s 15.00nm 4.8mb
KLB 23.48 194 iPc 16 59.40 0.7
eS 21 16.00
CTA 24.24 120 eP 17 08.00 1.9
MUN 24.25 196 iPc 17 06.20 0.1
eS 21 38.70
NWAO 24.89 194 eP 17 12.00 -0.2
0.5s 7.00nm 4.4mb
RKG 26.03 193 eP 17 27.50 4.6X
GUN 51.88 316 P 20 59.14 0.3
PKI 51.99 315 P 20 59.54 -0.1
0.5s 9.00nm 5.0mb
KKN 52.21 315 P 21 01.38 0.1
DMN 52.22 315 P 21 00.38 -1.0
0.5s 5.00nm 4.8mb
GKN 52.79 315 P 21 05.42 0.0
ZOBO 152.38 154 PKP 31 47.00 7.8X
Z 20s 0.12um 4.7Msz
LR 36 34.00
S.D. = 0.9 on 22 of 26 obs.

& OCT 31, 1990 02h 42m 01.70s
40.352 N 124.495 W
DEPTH = 30.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 2.9 (BRK).

FHC 0.59 41 iPc 42 12.50 -1.2
iS 42 20.00
WDC 1.51 81 iPc 42 25.40 -1.6
eS 42 44.00
LTCM 1.82 94 eP 42 30.00 -1.4
MIN 2.21 89 eP 42 35.00 -2.2
LBFM 2.21 62 eP 42 36.60 -0.7
ORV 2.44 108 eP 42 38.30 -2.0
ARN 3.79 141 e(P) 42 57.60 -1.8
7 obs. associated

• OCT 31, 1990 03h 44m 17.30± 1.43s
63.303 N ± 8.5km 24.153 W ±19.5km
DEPTH = 5.0km (geophysicist)
4.7mb (12 obs.) 4.0Msz (3 obs.)
ICELAND REGION (637)

AKU 3.54 45 iP 45 11.70 -2.3
0.9s 225.21nm
iS 46 15.10
NB2 16.54 B2 P 48 12.40 1.2
1.4s 9.30nm 3.7mb
LOR 22.35 123 eP 49 16.60 -0.6
1.2s 38.70nm 4.7mb
Z 21s 0.60um 4.0Msz
SSF 22.39 124 eP 49 16.80 -0.8
1.2s 29.75nm 4.6mb
AVF 22.56 124 eP 49 18.50 -0.8
TCF 22.56 127 eP 49 19.10 -0.3
1.3s 25.25nm 4.5mb
BGF 22.57 125 eP 49 18.60 -0.8
1.1s 29.30nm 4.7mb
LBF 22.63 123 eP 49 19.30 -0.8
1.3s 30.70nm 4.6mb
HAU 22.72 118 eP 49 21.20 0.3
Z 21s 0.45um 3.9Msz
MAF 22.75 126 eP 49 21.40 0.2
CDF 22.76 116 eP 49 21.90 0.5
SMF 22.86 124 eP 49 21.70 -0.6
1.1s 22.00nm 4.6mb
MOX 22.88 107 eP 49 23.00 0.6
CLL 23.00 104 eP 49 25.00 1.4
2.1s 50.00nm 4.7mb
BSF 23.03 118 eP 49 24.80 0.7
RJF 23.16 129 eP 49 23.90 -1.3
Z 21s 0.52um 4.0Msz
BRG 23.73 104 eP 49 30.50 -0.1
2.0s 44.00nm 4.7mb
PRU 24.64 105 Pc 49 40.00 0.6
Z 12s 0.60um 4.3MszX
EPF 24.77 133 eP 49 41.00 0.2
KSP 24.79 101 eP 49 41.00 0.1
KHC 24.86 107 P 49 42.50 0.8
LKO 55.30 158 P 53 48.78 -5.1X
1.0s 16.00nm 5.0mb
GKN 73.26 61 P 55 50.94 -0.3
1.0s 18.00nm 5.1mb
KKN 73.70 61 P 55 54.38 0.5
0.9s 22.00nm 5.2mb
OMN 73.80 61 P 55 54.62 0.1
GUN 73.83 60 P 55 56.14 1.3
PKI 73.95 61 P 55 55.92 0.4
S.D. = 0.9 on 26 of 27 obs.

• OCT 31, 1990 04h 00m 45.01± 1.51s
63.294 N ± 9.0km 24.638 W ±21.2km
DEPTH = 5.0km (geophysicist)
4.8mb (13 obs.) 4.0Msz (3 obs.)
ICELAND REGION (637)

REY 1.48 54 iP 01 12.60 0.3
iS 01 32.80
LJO 2.61 71 eP 01 22.80 -5.7X
AKU 3.71 47 iP 01 43.10 -1.0
0.9s 154.62nm
iS 02 40.40
LSF 22.52 127 eP 05 46.90 0.3
1.2s 26.80nm 4.6mb
LOR 22.53 122 eP 05 46.90 0.2
1.4s 43.55nm 4.7mb
Z 20s 0.57um 4.0Msz
SSF 22.57 123 eP 05 47.00 -0.1
1.2s 20.85nm 4.5mb
AVF 22.74 123 eP 05 48.60 -0.1
BGF 22.74 125 eP 05 48.80 0.0
1.2s 38.70nm 4.8mb
LBF 22.81 122 eP 05 49.60 0.1
1.2s 29.75nm 4.7mb
HAU 22.91 117 eP 05 51.50 1.1
Z 20s 0.38um 3.8Msz
CDF 22.96 115 eP 05 52.00 1.0
0.8s 9.40nm 4.4mb
SMF 23.04 123 eP 05 51.90 0.1
1.3s 34.30nm 4.7mb
CLL 23.21 103 eP 05 59.00 5.7X
BSF 23.22 117 eP 05 54.70 1.1
RJF 23.33 128 eP 05 55.60 1.1
Z 20s 0.52um 4.0Msz
BRG 23.94 103 eP 06 02.40 2.0X
1.3s 11.00nm 4.3mb
PRU 24.85 104 eP 06 08.00 -1.2
KHC 25.06 106 P 06 08.50 -2.8
LKO 55.37 157 P 10 20.10 -2.0
1.1s 22.50nm 5.1mb
GKN 73.46 61 P 12 19.84 -0.3
0.8s 13.00nm 5.1mb
KKN 73.90 60 P 12 23.40 0.6
0.8s 16.00nm 5.1mb
DMN 73.99 60 P 12 24.60 1.2
0.4s 13.00nm 5.3mb
GUN 74.02 60 P 12 23.94 0.3
0.9s 23.00nm 5.2mb
PKI 74.14 60 P 12 24.64 0.3
S.D. = 1.1 on 21 of 24 obs.

OCT 31, 1990 04h 15m 55.51± 0.41s
36.331 N ± 5.6km 29.448 E ± 4.8km
DEPTH = 75.0 ± 11.2 km
TURKEY (366)
MD 4.0 (ISK), 4.0 (HLW).

KSL 0.24 153 iPd 16 06.50 -0.5
ELL 0.56 42 iPg 16 09.50 -0.2
BCK 1.45 39 iPn 16 22.00 1.5
CIN 1.67 320 ePn 16 23.00 -0.3
iSg 16 46.00
KHL 1.99 2 iPn 16 27.00 -0.8
SMG 2.50 304 eP 16 35.50 0.8
IZM 2.70 320 ePn 16 36.70 -0.9
PPCY 2.77 121 eP 16 39.50 1.1
ALT 2.77 11 ePn 16 42.70 4.1X

APE	3.23	284	eP	16 48.00	3.0X
NPS	3.30	252	iPd	16 46.30	0.5
			eS	17 22.20	
CSS	3.44	112	eP	16 48.50	0.6
PRK	3.85	320	eP	16 57.20	3.7X
BNT	4.19	344	ePn	16 58.00	-0.4
EZN	4.27	326	ePn	17 03.00	3.5X
VAM	4.36	259	eP	17 01.70	0.9
VLI	5.26	276	eP	17 13.10	-0.2
ADI	5.76	123	eP	17 19.50	-0.8
ZNT	6.17	130	eP	17 26.00	0.1
			eS	18 30.00	
KOT	6.69	162	ePn	17 32.50	-0.6
			eSn	18 37.50	
PRNI	7.56	141	eP	17 44.50	-0.7

S.D. = 0.8 on 17 of 21 obs.

? OCT 31, 1990 04h 50m 10.90± 1.07s
62.891 N ±29.9km 24.634 W ± 9.8km
DEPTH = 5.0km (geophysicist)
5.0mb (7 obs.)
ICELAND REGION (637)

FBA	45.81	330	e(P)	58 34.10	-0.6
IMA	46.06	334	e(P)	58 37.10	0.2
	1.8s	20.60nm		4.8mb	
NEW	49.61	299	e(P)	59 05.80	1.1
	0.7s	14.00nm		5.1mb	
BW06	50.85	289	eP	59 13.70	-0.8
	1.0s	8.33nm		4.6mb	
ALO	55.92	281	eP	59 52.00	-0.1
GKN	73.65	60	P	01 46.92	-0.2
	1.0s	20.00nm		5.1mb	
KKN	74.10	60	P	01 49.82	0.0
	0.9s	14.00nm		5.0mb	
DMN	74.19	60	P	01 50.18	-0.2
	0.4s	6.00nm		5.0mb	
GUN	74.23	59	P	01 51.42	0.7
	1.0s	42.00nm		5.4mb	
PKI	74.34	60	P	01 51.26	-0.1

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

% OCT 31, 1990 05h 26m 57.46± 1.03s
39.515 N ±13.6km 20.655 E ± 7.4km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)

IGT	0.25	274	iPd	27 02.69	-0.1
			eS	27 09.04	
FNA	1.38	23	ePc	27 22.90	0.1
			eS	27 41.72	
AGG	1.39	110	ePd	27 23.28	0.4
LIT	1.53	67	iPd	27 23.93	-0.9
			eS	27 45.00	
GRG	1.97	42	ePc	27 31.76	0.6
			iS	27 59.93	

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

? OCT 31, 1990 05h 52m 17.39± 3.25s
63.239 N ±24.7km 24.548 W ±55.1km
DEPTH = 5.0km (geophysicist)
4.7mb (8 obs.) 3.7Msz (2 obs.)
ICELAND REGION (637)

LOR	22.47	122	eP	57 18.40	-0.1
	1.0s	16.00nm		4.5mb	
	Z 21s	0.35um		3.8Msz	
AVF	22.67	123	eP	57 20.20	-0.3
BGF	22.68	125	eP	57 20.40	-0.1
	0.8s	12.10nm		4.4mb	
LBF	22.75	122	eP	57 21.20	-0.1
HAU	22.85	117	eP	57 23.30	1.1
	Z 20s	0.20um		3.6Msz	
MAF	22.86	125	eP	57 22.40	0.1
	0.9s	9.00nm		4.3mb	
SMF	22.98	123	eP	57 23.20	-0.3
	1.1s	24.40nm		4.6mb	
PRU	24.79	104	eP	57 40.00	-1.1
KHC	25.01	106	eP	57 44.00	0.8
GKN	73.45	61	P	03 52.30	-0.2
	0.8s	13.00nm		5.0mb	
KKN	73.89	60	P	03 55.12	0.0
	1.0s	25.00nm		5.2mb	
DMN	73.98	60	P	03 55.82	0.1
	0.8s	16.00nm		5.1mb	
PKI	74.14	60	P	03 56.72	0.0
	0.9s	5.00nm		4.6mb	

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

OCT 31, 1990 06h 00m 01.58± 0.58s
19.889 S ± 7.5km 133.573 E ± 5.9km
DEPTH = 5.0km (geophysicist)
4.3mb (2 obs.)
NORTHERN TERRITORY, AUSTRALIA (591)

WB5	0.75	89	iP	00 15.60	-0.9
ASPA	3.77	175	iPc	01 07.80	6.1X
	0.3s	104.40nm			
			eS	01 50.50	
OIS	5.70	98	eP	01 30.00	0.9
			eS	02 27.00	
			e	02 57.00	
KNA	6.16	311	eP	01 36.00	0.6
	0.3s	14.00nm		5.3mb X	
			eS	02 47.00	
MTN	7.38	341	eP	01 52.00	-0.7
	0.3s	29.00nm		6.0mb X	
			eS	03 13.00	
WARB	8.94	224	eP	02 18.10	3.7X
	0.3s	10.00nm		5.8mb X	
			eS	03 58.00	
FORR	11.98	203	eP	02 57.20	1.2
MBL	12.94	262	eP	03 08.70	-0.2
	0.3s	2.00nm		4.9mb	
			eS	05 22.00	
COOL	15.67	223	eP	03 44.00	-0.8
NANU	17.03	258	eP	04 05.50	3.3X
	0.3s	2.00nm		3.8mb	
			eS	07 06.00	
KLB	18.38	228	eP	04 18.00	-0.9
MRWA	18.47	236	eP	04 19.00	-1.1
			eS	07 36.00	
NWAO	19.53	225	eP	04 32.70	-0.3
MUN	19.69	229	eP	04 36.00	1.3
GKN	67.13	314	P	11 00.00	1.1

S.D. = 1.0 on 12 of 15 obs.

• OCT 31, 1990 06h 23m 37.32± 1.30s
63.198 N ±11.5km 24.192 W ±18.9km
DEPTH = 5.0km (geophysicist)
4.8mb (9 obs.) 3.6Msz (2 obs.)
ICELAND REGION (637)

LJD	2.45	68	eP	24 16.90	-1.7
LOR	22.31	122	eP	28 36.20	-0.6
	Z 20s	0.30um		3.7Msz	
AVF	22.51	124	eP	28 38.60	-0.2
TCF	22.51	126	eP	28 38.60	-0.3
	1.3s	23.45nm		4.5mb	
BGF	22.52	125	eP	28 38.80	-0.1
	1.1s	22.00nm		4.6mb	
HAU	22.68	118	eP	28 41.60	1.0
	Z 19s	0.20um		3.6Msz	
SMF	22.82	123	eP	28 42.00	0.1
	1.1s	15.85nm		4.4mb	
MOX	22.87	107	eP	28 46.00	3.7X
CLL	22.99	104	e(P)	28 51.00	7.5X
	2.2s	57.00nm		4.7mb	
BSF	23.00	117	eP	28 45.00	1.2
BRG	23.72	103	eP	28 50.20	-0.4
KHC	24.84	107	eP	29 03.50	2.0
LKO	55.21	157	P	33 12.00	-1.2
	0.7s	8.00nm		4.9mb	
BCAO	66.39	132	ePc	34 28.20	-1.0
	0.5s	3.00nm		4.8mb	
GKN	73.33	61	P	35 11.70	0.0
	0.9s	16.00nm		5.1mb	
KKN	73.77	60	P	35 14.50	0.2
	0.7s	8.00nm		4.9mb	
DMN	73.86	61	P	35 15.16	0.2
GUN	73.90	60	P	35 16.38	1.1
	0.9s	29.00nm		5.3mb	
PKI	74.02	60	P	35 15.72	-0.2

S.D. = 1.0 on 17 of 19 obs.

OCT 31, 1990 06h 46m 45.89± 0.23s
43.491 N ± 2.2km 0.550 W ± 3.0km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 4.1 (LDG). Felt (IV) in the Pardies oreo, France.

OGE	0.33	170	Pg	46 52.75	0.1
MADF	0.40	210	Pg	46 54.18	0.1
ESCF	0.41	183	Pg	46 54.26	-0.1
			Sg	46 59.55	
ATE	0.42	196	Pg	46 54.39	-0.1
			Sg	47 00.46	
BTH	0.44	146	iPgc	46 54.00	-0.9
			iSg	47 05.00	
JAU	0.47	164	Pg	46 55.24	-0.3
BDH	0.51	221	Pg	46 56.50	0.2
			Sg	47 03.47	
LHE	0.58	185	Pg	46 57.00	-0.7
			Sg	47 04.38	
EPF	0.80	125	Pg	47 02.10	0.7
			Sg	47 13.20	
ECRI	1.69	239	iPnc	47 18.00	2.4
			eSn	47 38.60	
LFF	1.72	32	Pn	47 17.50	1.5
			Pg	47 21.20	
			Sg	47 45.30	
LPO	1.73	46	Pn	47 18.00	1.9
			Pg	47 21.70	
			Sg	47 45.20	
RJF	2.34	39	Pn	47 25.50	0.5
			Pg	47 32.50	
			Sg	48 03.60	
CAF	2.36	52	Pn	47 26.00	0.6
			Pg	47 33.10	
			Sg	48 04.00	
ETER	2.77	114	ePn	47 32.30	1.2
			eSn	48 06.80	
ETOR	2.89	203	ePn	47 34.20	1.2
			eSn	48 07.70	
MFF	3.12	5	Pn	47 36.50	0.4
			Pg	47 47.60	
			Sg	48 30.00	
LSF	3.13	27	Pn	47 36.20	0.0
			Pg	47 45.40	
			Sn	48 12.20	
			Sg	48 28.30	
TCF	3.42	34	Pn	47 39.60	-0.7
			Pg	47 52.10	
			Sn	48 19.80	
			Sg	48 38.40	
MAF	3.52	38	Pn	47 41.00	-0.7
			Pg	47 54.80	
			Sg	48 40.00	
BGF	3.90	37	Pn	47 46.60	-0.5
			Pg	48 01.40	
			Sg	48 53.20	
ECHE	3.91	185	ePn	47 47.00	-0.3
			eSn	48 32.40	
GUD	3.91	225	iPnd	47 47.90	0.5
			eSn	48 32.30	
AVF	4.30	39	Pn	47 52.20	-0.6
			Sg	49 03.50	
SMF	4.43	43	Pn	47 53.80	-0.9
			Sg	49 08.80	
TOL	4.46	217	ePg	48 16.00	20.9X
			eSn	48 45.50	
			iSg	49 13.50	
ESEL	4.53	144	ePn	47 56.00	0.0
			eSn	48 46.60	
LPF	4.55	356	Pn	47 56.40	0.0
			Sn	48 47.10	
SSF	4.58	37	Pn	47 55.50	-1.2
			Pg	48 15.00	
			Sg	49 15.80	
LBF	4.74	41	Pn	47 58.10	-1.0
			Pg	48 16.60	
			Sn	48 52.70	
			Sg	49 16.60	
GRR	4.90	358	Pn	48 01.00	-0.3
			Sn	48 55.00	
			Sg	49 25.20	
EMON	4.94	272	ePn	48 01.80	-0.1
			eSn	48 56.10	
ERUA	4.96	259	ePn	48 02.20	0.0
LRG	5.03	88	Pn	48 03.00	-0.1
EVIA	5.07	198	ePn	48 02.80	-1.0
LDF	5.11	3	Pn	48 03.60	-0.7
			Sn	49 00.80	
			Sg	49 33.20	
LMR	5.14	89	Pn	48 04.60	-0.2
FRF	5.23	87	Pn	48 06.40	0.4
FLN	5.27	0	Pn	48 06.50	-0.1
			Sn	49 03.90	
			Sg	49 37.80	
EPLA	5.37	232	ePn	48 06.70	-1.3

31d 06h

			eSn	49	05.70	
LPL	5.59	66	Pn	48	11.70	0.4
LPG	5.59	66	Pn	48	11.80	0.3
EBAN	5.86	206	ePn	48	14.00	-0.9
			eSn	49	18.30	
DOU	7.49	26	iP	48	37.80	0.1
MEM	8.41	30	iP	48	53.80	3.3X

S.D. = 0.8 on 43 of 45 obs.

OCT 31, 1990 06h 58m 53.48± 0.28s
63.260 N ± 6.4km 24.341 W ± 4.2km
DEPTH = 5.0km (geophysicist)
4.7mb (21 obs.) 3.7Msz (2 obs.)
ICELAND REGION (637)

HAH	1.61	56	eP	59	20.80	-1.8
LJO	2.49	70	eP	59	33.10	-2.2
AKU	3.64	45	eP	59	49.80	-1.7
	1.0s	264.00nm				
			eS	00	47.20	
EKA	13.36	117	P	02	16.00	9.8X
	0.9s	11.20nm			4.9mb	
DAG	13.70	5	eP	02	12.00	1.5
	0.9s	5.88nm			4.5mb	
NBO	16.43	82	P	02	48.00	1.9
	1.0s	7.10nm			3.8mb	
LSF	22.39	127	eP	03	54.40	0.6
LOR	22.40	122	eP	03	52.80	-1.1
	1.0s	19.00nm			4.5mb	
Z	20s	0.35um			3.8Msz	
SSF	22.44	123	eP	03	53.00	-1.3
	1.0s	15.00nm			4.4mb	
TCF	22.61	126	eP	03	56.50	0.5
	1.2s	23.80nm			4.6mb	
BGF	22.61	125	eP	03	55.00	-1.0
	1.1s	34.20nm			4.8mb	
LBF	22.68	123	eP	03	55.90	-0.8
HAU	22.77	118	eP	03	58.00	0.4
	0.9s	13.10nm			4.4mb	
Z	21s	0.28um			3.7Msz	
MAF	22.79	126	eP	03	57.70	-0.1
CDF	22.82	116	eP	03	58.50	0.3
SMF	22.91	123	eP	03	58.00	-0.9
	1.0s	32.00nm			4.8mb	
MOX	22.95	107	eP	04	01.00	1.7
CLL	23.07	104	eP	03	59.00	-1.5
			e	04	08.00	
BSF	23.09	117	eP	04	01.80	1.0
BRG	23.80	103	iP	04	10.10	2.6
	1.6s	30.00nm			4.6mb	
PRU	24.71	104	eP	04	17.00	0.7
EPF	24.80	133	eP	04	17.10	-0.2
	1.0s	16.00nm			4.7mb	
KHC	24.92	107	P	04	20.00	1.5
KHC	24.92	107	eP	03	59.00	-19.5X
			e	04	08.00	
LPL	24.96	121	eP	04	20.00	0.9
LPG	24.98	121	eP	04	20.30	0.9
MBC	31.08	332	eP	05	14.00	0.0
	1.5s	13.00nm			4.6mb	
NA2	40.45	257	P	06	34.80	0.7
NAV	42.47	260	P	06	51.50	0.8
GBTN	45.37	262	P	07	13.40	-0.8
FBA	45.55	330	eP	07	15.40	0.1
IMA	45.79	334	eP	07	17.00	-0.3
	1.6s	14.40nm			4.7mb	
PRM	45.87	259	P	07	18.60	0.5
FVM	46.25	269	P	07	20.60	-0.5
OLY	48.77	268	P	07	40.50	-0.4
TTA	49.05	333	P	07	42.20	-0.6
NEW	49.55	299	P	07	46.50	-0.3
PNT	49.67	301	eP	07	49.00	1.3
BW06	50.86	289	P	07	56.10	-1.0
	0.8s	6.10nm			4.6mb	
GLD	51.44	283	P	08	01.50	0.0
GOL	51.55	283	P	08	02.30	-0.1
	0.6s	1.80nm			4.2mb	
MEO	52.59	274	iPd	08	09.00	-1.0
DAU	53.52	289	P	08	16.80	-0.4
DUG	54.37	290	P	08	25.00	1.8
LKO	55.29	157	P	08	28.40	-1.6
	0.8s	12.00nm			5.0mb	
ALQ	55.98	281	eP	08	44.30	9.2X
	1.0s	3.25nm			4.3mb	
TNP	58.00	292	P	08	49.80	0.4
BCAO	66.48	132	ePc	09	44.80	-1.2
	0.7s	6.00nm			4.9mb	
GKN	73.35	61	P	10	28.36	0.3
	0.9s	34.00nm			5.4mb	
KKN	73.80	60	P	10	31.32	0.7
	0.7s	20.00nm			5.3mb	
DMN	73.89	61	P	10	32.12	0.9
GUN	73.93	60	P	10	32.28	0.7
	1.0s	63.00nm			5.6mb	
PKI	74.04	60	P	10	32.60	0.4
SPA	153.10	180	ePKP	18	42.00	-2.3
	0.9s	4.09nm				

S.D. = 1.1 on 51 of 54 obs.

& OCT 31, 1990 08h 22m 40.20s
40.477 N 125.440 W
DEPTH = 16.0km
OFF COAST OF NORTHERN CALIFORNIA(34)
<BRK>. ML 3.3 (BRK).

FHC	1.15	73	iPc	22	59.50	-1.9
			iS	23	13.40	
WDC	2.21	86	iPc	23	14.00	-2.8
			iS	23	40.80	
LTCM	2.55	95	eP	23	19.50	-2.0
LBFM	2.83	71	eP	23	22.50	-3.2
MIN	2.93	91	iPc	23	24.30	-2.8
ORV	3.16	106	eP	23	28.30	-2.0
			eS	24	03.80	
ARN	4.36	134	eP	23	43.20	-4.2
	7 obs. associated					

OCT 31, 1990 08h 34m 22.07± 0.55s
14.992 N ± 4.9km 60.887 W ±12.4km
DEPTH = 71.7 ± 4.4 km
4.9mb (11 obs.)
WINDWARD ISLANDS (95)
Felt (III) on Martinique.

CRM	0.24	187	iPd	34	31.50	-1.7
PCM	0.36	241	eP	34	33.74	-0.3
FDF	0.36	225	iPd	34	34.00	-0.1
			S	34	43.80	
MVM	0.43	181	iPd	34	32.89	-1.7
BIM	0.50	201	iPd	34	34.86	-0.4
BBL	0.78	313	iPd	34	39.33	1.1
			S	34	52.62	
DOG	1.25	326	eP	34	45.06	0.9
PAG	1.28	324	ePd	34	45.69	1.0
			S	35	02.74	
SFG	1.29	347	iPd	34	43.63	-1.0
DEG	1.32	353	ePd	34	43.64	-1.5
SEG	1.52	337	ePd	34	48.20	0.4
			S	35	07.42	
BPA	2.25	336	eP	34	57.73	0.0
			eS	35	24.67	
NEV	2.68	323	ePd	35	05.48	1.7
GRW	2.91	195	iP	35	06.68	-0.5
			eS	35	46.57	
SKI	2.93	323	eP	35	09.07	1.8
			eS	35	45.43	
TRN	4.35	187	eP	35	26.31	-0.8
			eS	36	17.33	
TBH	4.48	182	eP	35	31.29	2.2
			eS	36	21.31	
TPP	4.68	187	eP	35	34.51	2.7
ZOBO	31.87	193	P	40	42.50	-0.9
Z	22s	0.08um			3.4Msz	
			LR	51	28.00	
CNCB	32.36	193	P	40	47.20	-0.4
CCH	32.58	189	eP	40	50.00	0.8
OLY	34.16	312	P	41	02.30	-0.2
FVM	34.72	317	P	41	05.50	-1.7
ALQ	45.39	304	eP	42	35.80	0.3
	1.0s	3.25nm			4.2mb	
BW06	49.92	314	P	43	10.50	-0.3
	1.0s	10.63nm			4.8mb	
DUG	51.56	310	P	43	23.20	0.0
SES	53.57	322	eP	43	38.00	0.2
TNP	54.50	306	P	43	44.50	-0.6
BCH	56.44	302	P	43	47.80	-11.2X
NEW	56.62	318	P	43	58.30	-1.7
	0.8s	9.38nm			4.9mb	
ORV	58.02	307	P	44	10.20	0.3
YKA	60.45	335	eP	44	24.30	-2.0
	0.4s	2.40nm			4.7mb	
BGF	61.24	45	eP	44	39.10	7.2X
	1.0s	22.00nm			5.2mb	
AVF	61.62	45	eP	44	38.70	4.2X
	1.1s	19.55nm			5.1mb	
SSF	61.76	44	eP	44	37.40	1.9
	1.0s	13.00nm			5.0mb	
SMF	61.93	45	eP	44	42.00	5.4X
	1.1s	19.55nm			5.1mb	
LOR	62.03	44	eP	44	36.80	-0.5
	1.0s	14.00nm			5.0mb	
Z	21s	0.22um			4.3Msz	
LBF	62.07	45	eP	44	39.80	2.2
HAU	63.79	44	eP	44	40.60	-8.3X
Z	21s	0.20um			4.3Msz	
CDF	64.46	43	eP	44	41.20	-12.1X
MBC	68.25	347	eP	45	16.50	-0.3
	0.5s	2.00nm			4.3mb	
FBA	75.24	334	eP	45	58.00	-0.6
IMA	77.56	335	eP	46	11.50	-0.2
	1.1s	5.00nm			4.4mb	

S.D. = 1.3 on 37 of 43 obs.

? OCT 31, 1990 08h 39m 37.67± 0.84s
63.610 N ±26.2km 24.499 W ±10.0km
DEPTH = 5.0km (geophysicist)
4.7mb (1 obs.)
ICELAND REGION (637)

HAH	1.51	69	eP	40	04.00	-1.4
LJO	2.46	78	eP	40	16.10	-3.0X
MOX	23.12	107	eP	44	44.00	-1.1
CLL	23.23	104	e(P)	44	51.00	4.9X
BRG	23.95	104	eP	44	54.20	1.0
KHC	25.10	107	e(P)	44	51.00	-13.3X
LRM	49.41	293	eP	48	30.50	0.3
LKO	55.64	157	P	49	11.90	-4.8X
	0.6s	5.50nm			4.7mb	
ALQ	55.85	281	e(P)	49	17.00	-1.3
GKN	73.24	61	P	51	11.82	0.3
KKN	73.69	60	P	51	14.60	0.4
DMN	73.78	61	P	51	15.52	0.7
GUN	73.81	60	P	51	15.86	0.8
PKI	73.93	60	P	51	16.08	0.3

S.D. = 1.0 on 10 of 14 obs.

& OCT 31, 1990 08h 51m 11.56s
60.727 N 147.313 W
DEPTH = 3.2km
SOUTHERN ALASKA (2)
<AGS-P>. ML 3.4 (PMR).

GLI	0.19	35	iP	51	16.70	1.4
KNIM	0.43	209	iP	51	20.36	0.1
VZW	0.50	48	iP	51	21.23	-0.3
HIN	0.52	129	iP	51	22.10	0.1
VLZ	0.63	49	iP	51	23.24	-0.9
MTU	0.76	193	iP	51	26.60	-0.2
CVA	0.79	103	iP	51	26.50	-0.9
KNK	0.88	322	eP	51	28.37	-0.8
KLU	1.02	41	iP	51	29.67	-1.9
SCAM	1.06	101	iP	51	30.96	-1.3
			eS	51	47.00	
SCM	1.11	360	iP	51	32.90	-0.2
SML	1.19	336	eP	51	33.96	-0.5
PMS	1.21	296	iP	51	34.73	-0.1
SEW	1.23	240	eP	51	34.25	-0.8
			eS	51	50.85	
PLRM	1.24	315	eP	51	34.70	-0.5
PMR	1.24	315	ePc	51	34.80	-0.4
GHO	1.31	324	eP	51	36.08	-0.3
			eS	51	55.52	
RAGM	1.35	104	eP	51	35.39	-1.7
			eS	51	55.39	
MID	1.39	159	iP	51	36.50	-1.3
SLKM	1.45	263	iP	51	38.16	-0.6
			eS	51	57.84	
TOA	1.49	21	iPc	51	39.00	-0.3
PWA	1.55	308	eP	51	40.00	-0.1
HMT	1.56	103	eP	51	38.14	-2.1
KAIM	1.65	118	eP	51	38.95	-2.5
SUA	1.82	295	eP	51	43.99	-0.2
GLB	1.85	66	eP	51	42.99	-1.4
NKA	1.93	272	eP	51	46.69	1.2
SDG	1.99	24	eP	51	46.44	-0.1
			eS	52	11.79	
BRLK	2.03	243	eP	51	45.59	-1.4
NNL	2.09	253	eP	51	47.56	-0.4
CUT	2.20	321	iP	51	50.01	0.6
TGL	2.20	87	eP	51	47.33	-2.3
WAX	2.22	95	eP	51	47.24	-2.6

CNPM	2.30	240	eP	51 49.45	-1.6
SPU	2.36	283	iP	51 50.58	-1.3
CGLM	2.36	286	eP	51 50.91	-1.0
SKT	2.39	304	iP	51 51.46	-0.8
PAX	2.42	20	iP	51 52.71	0.0
CRP	2.42	285	eP	51 52.03	-0.8
BALM	2.45	81	iP	51 51.03	-2.2
NCG	2.45	288	eP	51 52.06	-1.1
CKL	2.50	283	eP	51 52.56	-1.3
HUR	2.51	335	eP	51 54.50	0.5
RDT	2.51	269	eP	51 52.13	-1.9
BGL	2.53	284	eP	51 52.96	-1.4
XLV	2.55	242	eP	51 56.72	2.2
RSO	2.70	267	eP	51 54.71	-2.1
WRG	2.71	102	eP	51 54.77	-2.1
RED	2.71	266	eP	51 54.92	-2.0
RND	2.79	346	eP	51 58.16	0.2
MCK	3.11	347	eP	52 03.07	0.6
DDM	3.15	12	eP	52 03.34	0.4
DOT	3.30	26	eP	52 05.27	0.0
TMW	3.31	36	eP	52 04.80	-0.4
AUE	3.33	248	eP	52 05.34	-0.3
CDD	3.67	243	eP	52 09.56	-0.8
HDA	3.70	2	eP	52 10.08	-0.7
WRH	3.78	355	eP	52 11.23	-0.7
CCB	3.94	357	eP	52 13.16	-1.1
NEA	3.95	349	eP	52 13.37	-1.0
KDC	4.00	224	eP	52 17.10	2.1
SVW	4.07	279	eP	52 14.40	-1.7
FBA	4.20	357	iPc	52 16.70	-1.1
GLM	4.28	360	eP	52 17.65	-1.4
TTA	4.68	302	eP	52 22.10	-2.7
HYT	4.81	85	P	52 24.70	-2.0
IMA	6.07	335	eP	52 43.10	-1.4

67 obs. associated

OCT 31, 1990 08h 59m 14.40± 0.70s
47.052 N ± 6.1km 8.987 E ± 7.1km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
ML 2.8 (VIE).

LLS	0.18	178	ePc	59 18.10	-0.5
SAX	0.31	51	ePd	59 19.70	-1.4
ZLA	0.59	317	ePd	59 26.40	0.0
VDL	0.66	149	ePc	59 26.20	-1.4
SLE	0.79	335	ePd	59 29.60	-0.2
OSS	0.87	114	ePd	59 29.50	-1.8
TMA	0.95	185	ePd	59 33.70	1.1
FEL	1.06	322	ePg	59 34.33	-0.1
MMK	1.22	216	ePd	59 40.00	2.7X
OGA	1.41	97	iPc	59 41.90	1.6
DIX	1.46	229	ePc	59 44.50	3.5X
SOTA	1.53	83	iPnc	59 42.80	1.0
			iPgc	59 43.50	
			iSn	00 04.70	
			iSg	00 05.50	
WATA	1.79	80	iP	59 49.10	3.4X
	0.6s		15.00nm		
			i	59 55.60	
			iSg	00 11.60	
CTI	2.09	118	P	59 55.00	4.9X
FVI	2.65	99	P	59 59.50	1.7
			eSn	00 36.00	
KHC	3.71	54	ePg	00 28.00	14.9X
			eSg	01 14.00	

S.D. = 1.4 on 11 of 16 obs.

? OCT 31, 1990 09h 20m 32.45± 6.91s
6.057 S ±68.6km 127.802 E ±16.1km
DEPTH = 221.1 ± 22.1 km
4.8mb (6 obs.)
BANDA SEA (280)

KUPT	5.81	225	ePd	21 57.20	-1.1
			eS	22 59.50	
MTN	7.50	154	iPd	22 22.00	1.9
KNA	9.68	174	eP	22 48.30	0.0
			eS	24 23.00	
WB5	15.15	156	iPd	23 55.70	-1.3
			eS	26 30.00	
MBL	16.88	206	iPc	24 17.40	-0.1
	0.3s		6.00nm	4.5mb	
QIS	18.41	143	iPc	24 33.70	0.0
			e	24 37.00	
ASPA	18.47	162	iPc	24 33.50	-0.8
	0.5s		79.00nm	5.5mb	
			eS	27 39.10	
WARB	20.05	183	eP	24 50.30	0.0
	0.4s		9.00nm	4.7mb	
NANU	20.24	215	eP	24 54.00	1.8
	0.3s		7.00nm	4.7mb	
MEKA	22.27	202	eP	25 13.00	0.9
	0.4s		15.00nm	4.9mb	
FORR	24.67	179	eP	25 33.50	-1.1
	0.4s		15.00nm	4.9mb	
MRWA	25.60	204	eP	25 43.00	-0.2

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

? OCT 31, 1990 09h 33m 14.33± 1.11s
39.074 N ± 8.2km 27.623 E ±13.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.3 (ISK).

IZM	0.73	203	ePg	33 28.70	0.0
			eSg	33 41.20	
EZN	1.25	307	ePn	33 37.70	0.1
BNT	1.30	10	iPn	33 38.10	-0.3
KCT	1.30	26	iPn	33 38.70	0.2

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

& OCT 31, 1990 09h 37m 59.57s
59.654 N 153.051 W
DEPTH = 107.3km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.09	269	eP	38 14.00	0.9
AUE	0.34	209	eP	38 14.55	-0.8
AUH	0.35	215	eP	38 15.23	-0.3
AUI	0.37	211	eP	38 14.87	-0.7
PDB	0.59	284	eP	38 16.08	-1.0
XLV	0.71	106	eP	38 17.06	-0.9
HOM	0.71	89	eP	38 17.55	-0.5
			eS	38 31.38	
RED	0.78	10	iP	38 17.88	-0.9
CDD	0.79	203	iP	38 17.74	-1.0
MCNL	0.81	235	eP	38 17.98	-0.9
RSO	0.82	10	eP	38 18.07	-1.2
CNPM	0.93	97	iP	38 19.35	-0.8
			eS	38 34.27	
NNL	0.97	66	eP	38 20.75	0.3
RDT	0.98	19	eP	38 19.74	-0.9
BRLK	1.10	83	eP	38 20.95	-1.0
NKA	1.42	39	eP	38 26.33	0.8
CKL	1.59	13	iP	38 27.11	-0.7
SPU	1.61	17	eP	38 27.18	-0.8
BGL	1.65	11	eP	38 28.04	-0.5
SLKM	1.66	58	eP	38 27.81	-0.8
CRP	1.68	15	eP	38 28.57	-0.4
			S	38 50.21	
CGLM	1.74	17	eP	38 28.98	-0.7
NCG	1.81	14	eP	38 29.41	-1.2
SEW	1.87	75	eP	38 29.91	-1.3
SUA	2.14	31	eP	38 34.37	-0.6
PMS	2.35	46	eP	38 36.68	-0.9
SKT	2.45	17	eP	38 37.93	-0.9
PWA	2.54	37	eP	38 39.08	-0.9
PLRM	2.74	43	eP	38 40.80	-1.9
MTU	2.75	81	eP	38 41.33	-1.5
KNIM	2.76	73	eP	38 40.93	-2.1
KNK	2.88	50	eP	38 42.44	-2.1
GHO	2.94	42	eP	38 43.48	-2.0
SML	3.17	45	eP	38 46.21	-2.3
VZW	3.52	64	eP	38 50.63	-2.7
SCM	3.56	50	eP	38 52.40	-1.5
VLZ	3.65	63	eP	38 53.03	-2.0

37 obs. associated

% OCT 31, 1990 09h 38m 34.73± 2.07s
40.937 N ±16.1km 13.259 E ±15.3km
DEPTH = 10.0km (geophysicist)
TYRRHENIAN SEA (389)

SDI	0.87	28	P	38 52.00	0.4
			eSg	39 06.50	
RDP	0.92	334	P	38 52.00	-0.3
			eSg	39 07.00	
AZI	1.06	7	P	38 54.00	-0.6
			eSn	39 10.50	
MNS	1.51	343	P	39 02.50	0.6
SGO	1.60	103	P	39 03.00	-0.1

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

% OCT 31, 1990 09h 48m 22.61± 0.74s
43.395 N ± 5.6km 5.443 E ± 5.5km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.5 (STR).

GELF	0.02	227	Pg	48 24.40	-0.2
BERF	0.20	114	Pg	48 27.18	0.2
PUYF	0.23	54	Pg	48 27.33	-0.3
TREF	0.23	349	Pg	48 27.33	-0.3
PRAF	0.46	334	Pg	48 32.28	0.4
TAVF	0.50	63	Pg	48 32.89	0.1
VILF	0.50	23	Pg	48 32.73	0.0

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

? OCT 31, 1990 10h 05m 48.04± 2.87s
7.435 S ±17.5km 127.872 E ±19.5km
DEPTH = 130.6 ± 29.9 km
4.6mb (4 obs.)
BANDA SEA (280)

MTN	6.26	149	iPc	07 20.50	1.2
KNA	8.31	174	eP	07 46.50	-0.6
	0.3s		45.00nm	5.7mb X	
			eS	09 12.00	
WB5	13.88	154	eP	08 58.50	-1.9
			eS	11 23.00	
ASPA	17.15	161	iPc	09 42.10	0.9
	0.6s		33.20nm	4.8mb	
			iS	12 39.10	
QIS	17.30	140	eP	09 43.00	0.0
			eS	12 46.00	
WARB	18.68	183	eP	09 59.20	0.3
	0.4s		8.00nm	4.4mb	
NANU	19.17	217	eP	10 04.00	0.0
	0.3s		7.00nm	4.5mb	
FORR	23.30	180	eP	10 45.30	0.3
	0.4s		17.00nm	4.8mb	
MRWA	24.39	206	eP	10 55.50	-0.1
PKI	53.82	312	P	15 00.00	-0.1
CNCB	151.26	147	PKP	25 30.30	7.4X
ZOBO	151.62	146	PKP	25 31.00	7.6X

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

& OCT 31, 1990 10h 06m 16.69s
63.504 N 150.794 W
DEPTH = 15.2km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.0 (PMR).

HUR	0.74	135	eP	06 30.85	0.0
			eS	06 41.60	
MCK	0.86	74	eP	06 33.40	0.6
RND	0.88	96	eP	06 33.22	0.1
CUT	1.13	168	eP	06 37.24	-0.1
			eS	06 53.21	
NEA	1.32	34	eP	06 39.71	-0.7
			eS	06 57.31	
WRH	1.54	50	eP	06 44.04	0.5
SKT	1.57	193	eP	06 43.64	-0.3
CCB	1.74	48	eP	06 44.39	-2.1
PWA	1.91	167	eP	06 49.29	0.4
FBA	1.92	42	eP	06 50.60	1.5
HDA	1.92	60	eP	06 49.68	0.6
GHO	1.94	153	eP	06 49.71	0.2
SML	2.05	145	eP	06 50.93	0.0
SUA	2.05	179	eP	06 50.84	-0.2
PLRM	2.07	157	eP	06 51.10	-0.1
PMR	2.07	157	eP	06 51.30	0.1
GLM	2.10	43	eP	06 53.98	2.2
NCG	2.20	197	eP	06 51.47	-1.8
DDM	2.22	80	eP	06 53.14	-0.3
CGLM	2.28	195	eP	06 50.76	-3.6
SCM	2.32	135	eP	06 58.16	3.3
PMS	2.34	165	eP	06 55.67	0.5
KNK	2.36	152	eP	06 56.19	0.7
BGL	2.37	199	eP	06 55.47	-0.2
SPU	2.40	195	eP	06 55.78	-0.3
CKL	2.43	198	eP	06 56.29	-0.2
TTA	2.43	259	eP	06 56.50	0.0
PAX	2.47	100	eP	06 58.54	1.5
TOA	2.55	121	eP	07 01.30	3.2
SDG	2.59	110	eP	06 59.92	1.2
IMA	2.86	336	eP	06 59.00	-3.6
SLKM	3.02	175	eP	07 05.76	1.0
KLU	3.03	130	eP	07 06.26	1.3

31d 10h

RDT	3.04	195	eP	07	05.37	0.3
VLZ	3.16	137	eP	07	11.02	4.3
SVW	3.30	225	eP	07	12.50	3.8

36 obs. associated

? OCT 31, 1990 12h 18m 16.41± 1.06s
39.102 N ± 7.4km 27.490 E ±14.2km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.8 (ISK).

IZM	0.73	194	ePg	18	30.70	0.0
			eSg	18	42.70	
EZN	1.16	309	ePn	18	38.00	0.0
EDC	1.28	13	iPn	18	40.00	-0.1
BNT	1.30	15	iPn	18	40.50	0.1

S.D. = 0.1 on 4 of 4 obs.

OCT 31, 1990 12h 25m 14.38± 0.40s
17.813 S ± 7.2km 178.798 W ± 4.9km
DEPTH = 540.1 ± 5.0 km
4.8mb (29 obs.)
FIJI ISLANDS REGION (181)

MBU	2.51	289	iP	26	27.80	1.5
			eS	27	29.00	
SVA	2.63	263	eP	26	28.00	1.1
			eS	27	30.80	
NDF	3.58	270	eP	26	34.50	1.5
DZM	14.51	251	iPd	28	18.80	-0.2
KHZ	25.38	193	eP	29	58.80	-1.6
	0.3s	14.00nm			5.0mb	
LTZ	26.02	195	eP	30	04.40	-1.8
AFR	27.64	94	iP	30	20.30	-0.2
	0.6s	40.00nm			5.2mb	
PAE	27.82	94	iP	30	21.90	-0.1
	0.6s	25.00nm			5.0mb	
PPT	27.83	94	iP	30	22.00	-0.2
	0.6s	40.00nm			5.2mb	
BRS	27.86	245	iPc	30	23.50	1.0
			i	31	28.00	
PPN	27.97	94	iP	30	23.10	-0.3
	0.6s	5.00nm			4.3mb	
TVO	28.12	95	iP	30	24.80	0.0
	0.6s	25.00nm			5.0mb	
COO	29.50	239	iPd	30	37.40	0.7
PMO	29.76	89	iP	30	38.10	-0.8
	0.6s	5.00nm			4.3mb	
VAH	29.97	90	iP	30	40.50	-0.2
	0.6s	10.00nm			4.6mb	
TPT	30.02	89	iP	30	41.30	0.2
	0.6s	10.00nm			4.6mb	
RUV	30.22	90	iP	30	42.90	0.1
	0.6s	15.00nm			4.8mb	
RMO	31.20	248	iPd	30	49.90	-1.2
	0.7s	81.00nm			5.4mb	
CAN	33.47	232	eP	31	10.70	0.6
BWA	33.57	234	eP	31	09.50	-1.6
CMS	34.75	240	iPd	31	21.30	0.4
	0.8s	62.00nm			5.3mb	
TOO	36.94	231	iPd	31	40.10	1.2
	0.7s	50.00nm			5.2mb	
WB5	44.26	260	eP	32	36.00	-1.7
			e	34	10.20	
			e	38	29.00	
ASPA	44.46	254	iPd	32	38.70	-0.6
	0.6s	109.40nm			5.6mb	
			iS	38	30.70	
FORR	49.68	244	iPd	33	17.90	-0.8
	0.4s	34.00nm			5.2mb	
WARB	50.96	250	eP	33	27.40	-0.8
MBL	57.64	256	eP	34	13.00	-2.3
NANU	61.40	254	eP	34	39.80	-0.4
MAT	67.61	324	iPc	35	17.60	-1.4
ADK	69.42	1	eP	35	27.30	-2.2
	0.7s	35.50nm			5.0mb	
SPA	72.30	180	iPc	35	47.60	1.1
	0.8s	16.67nm			4.6mb	
PRS	76.42	44	eP	36	10.30	0.6
SAO	76.61	44	eP	36	11.40	0.6
BCH	76.65	46	P	36	12.00	0.8
PRI	76.79	45	eP	36	12.50	0.6
MHC	76.81	43	eP	36	12.40	0.4
LLA	76.86	44	eP	36	12.50	0.3
ARN	76.89	43	P	36	12.70	0.4
ABL	77.07	47	P	36	13.60	0.0
PAS	77.43	48	eP	36	15.00	-0.3
MWC	77.55	48	eP	36	16.00	-0.1
BAR	77.75	50	eP	36	17.00	0.0
FRI	77.90	45	eP	36	17.50	-0.2
PLM	77.95	49	eP	36	18.00	-0.3
SBB	77.96	47	eP	36	18.00	-0.1
PEC	78.01	48	P	36	18.10	-0.3
ISA	78.02	46	eP	36	18.00	-0.5
CMB	78.03	43	eP	36	18.40	0.0
WDC	78.11	40	eP	36	18.80	0.1
KDC	78.39	14	e(P)	36	18.70	-1.1
CLC	78.70	47	eP	36	22.00	-0.1
TPC	78.92	49	eP	36	23.00	-0.2
GSC	78.99	47	eP	36	24.00	0.4
TNP	80.15	45	P	36	29.80	0.0
	0.8s	9.80nm			4.3mb	
SVW	80.82	11	eP	36	31.10	-1.4
BMW	81.23	35	P	36	35.00	0.1
GMW	82.12	35	P	36	39.40	0.1
TTA	82.44	10	ePc	36	40.50	-0.2
PMR	82.60	14	ePc	36	40.30	-1.1
	1.0s	36.10nm			4.9mb	
RMW	82.60	35	P	36	41.70	-0.1
ANM	82.77	6	e(P)	36	41.60	-0.5
MCW	82.78	34	P	36	43.10	0.5
BJI	83.46	316	eP	36	46.50	0.4
	1.0s	18.00nm			4.6mb	
PSI	83.47	275	ePd	36	46.80	0.0
AIA	83.73	157	eP	36	44.10	-3.0X
TOA	83.74	15	ePc	36	46.90	-0.3
DPW	84.83	36	P	36	52.60	-0.2
PNT	84.87	34	iPc	36	53.00	0.1
	0.7s	17.00nm			4.8mb	
NEW	85.65	36	P	36	56.00	-0.7
	0.8s	13.28nm			4.7mb	
IMA	85.74	10	eP	36	55.90	-1.0
	0.7s	3.90nm			4.2mb	
PTI	85.76	43	P	36	58.20	0.7
FBA	85.80	13	eP	36	55.50	-1.5
ALO	86.33	52	ePc	37	00.30	-0.2
	1.0s	7.00nm			4.3mb	
LRM	87.14	40	eP	37	04.20	0.0
BW06	87.54	44	P	37	05.80	-0.4
	0.7s	9.99nm			4.7mb	
CHTO	88.62	290	iP	37	11.80	0.5
	1.0s	6.25nm			4.4mb	
GOL	89.07	48	P	37	13.60	0.3
	0.8s	6.88nm			4.6mb	
GLD	89.20	48	P	37	14.80	1.0
MEO	92.26	54	iPc	37	27.50	-0.3
YKA	94.40	25	eP	37	35.90	-1.0
	0.9s	5.20nm			4.7mb	
MBC	100.33	12	ePdiff	38	02.00	-1.3
	0.5s	2.00nm			4.8mb	
SOB1	130.51	119	ePKP	43	24.40	-1.6X
NB2	136.24	353	PKP	43	24.20	-11.3X
	0.7s	2.30nm				
HFS	136.78	351	ePKP	43	24.10	-12.4X
	0.4s	2.40nm				
EKA	142.40	4	PKP	43	43.00	-3.7X
	0.9s	9.00nm				
KAS	143.56	317	ePKP	43	48.50	-0.7
KRA	144.49	339	ePKP	43	49.90	-0.5
ETA	144.71	8	ePKP	43	50.60	-0.1
	1.0s	104.00nm				
ECB	144.95	9	ePKP	43	50.70	-0.4
	1.0s	97.00nm				
SPC	145.11	338	e(PKP)	43	50.90	-0.9
ECP	145.19	8	ePKP	43	51.50	0.0
	0.7s	38.00nm				
CLL	145.29	347	iPKPc	43	52.20	0.5
	0.8s	68.00nm				
BRG	145.48	346	iPKPc	43	52.00	0.7
	0.9s	32.00nm				
ADI	145.90	303	iPKPc	43	54.70	1.3
JVI	146.14	301	iPKPc	43	55.70	2.0
PRU	146.16	344	iPKPc	43	55.00	1.8
			i	43	57.00	
MOX	146.20	348	ePKP	43	55.00	1.7
	1.4s	31.00nm				
SRO	146.96	339	iPKP	43	56.90	2.4
ZST	147.03	340	iPKP	43	57.30	2.7
MEM	147.06	354	PKP	43	57.20	2.7
RMN	147.12	299	iPKPc	43	58.20	2.8
TNS	147.15	351	ePKPc	43	58.00	3.2X
KHC	147.19	345	iPKPc	43	52.20	-2.7X
	0.8s	68.00nm				
ABH	147.60	352	ePKP	43	58.91	3.3X
DOU	147.68	356	iPKPc	43	59.10	3.5X
DIM	148.15	324	ePKP	43	52.00	-4.6X
KDZ	148.48	324	iPKPc	44	01.00	3.8X
PGB	148.54	326	iPKP	44	02.00	4.7X
VTS	149.01	327	iPKP	44	03.00	4.9X
CDF	149.08	352	ePKP	44	02.80	4.8X
	0.4s	16.60nm				
FLN	149.10	2	iPKPc	44	02.40	4.6X
	0.6s	20.75nm				
LDF	149.28	2	iPKPc	44	02.80	4.7X
	0.3s	12.35nm				
WATA	149.35	346	iPKPc	44	02.80	4.3X
	0.5s	19.40nm				
MMB	149.45	326	iPKPc	44	03.00	4.3X
GRR	149.46	3	iPKPc	44	03.40	5.0X
	0.5s	26.95nm				
SLE	149.53	350	ePKPc	44	03.40	4.8X
SOTA	149.54	346	iPKPc	44	03.50	4.8X
	0.5s	27.40nm				
			i	44	10.70	
			i	44	16.90	
HAU	149.59	353	iPKPc	44	03.80	5.1X
	0.4s	12.60nm				
BSF	149.71	353	iPKPc	44	04.00	5.0X
	0.6s	12.65nm				
FVI	149.74	344	PKP	44	04.00	5.2X
LPF	149.81	3	iPKPc	44	04.20	5.3X
	0.4s	24.65nm				
SAX	149.89	349	ePKPd	44	05.00	5.5X
OGA	149.91	346	iPKPc	44	05.10	5.7X
	0.8s	16.00nm				
VOY	149.95	342	e(PKP)	44	04.10	4.7X
VAY	150.25	326	ePKP	44	04.60	4.8X
OSS	150.27	348	ePKPc	44	05.80	5.9X
TRI	150.28	342	PKP	44	04.50	4.8X
LLS	150.32	349	ePKPc	44	05.60	5.6X
SKO	150.36	329	ePKP	44	05.50	5.5X
CTI	150.54	345	PKP	44	05.50	5.2X
LOR	150.54	356	iPKPc	44	06.20	6.1X
VDL	150.60	348	ePKPd	44	06.70	6.2X
GRG	150.60	326	ePKPd	44	04.44	4.0X
SSF	150.77	357	iPKPc	44	06.70	6.3X
LBF	150.82	356	iPKPc	44	06.80	6.2X
	0.4s	9.45nm				
AVF	151.05	357	iPKPc	44	07.00	6.2X
	0.4s	4.85nm				
TMA	151.08	349	ePKPc	44	07.20	6.0X
LIT	151.16	325	ePKPc	44	05.52	4.3X
SMF	151.17	356	iPKPc	44	07.10	6.0X
FNA	151.27	327	iPKPc	44	06.30	4.8X
MFF	151.27	2	iPKPc	44	07.70	6.5X
	0.5s	18.95nm				
MMK	151.29	350	ePKPd	44	08.70	7.1X
BGF	151.30	358	iPKPc	44	07.80	6.6X
	0.6s	22.10nm				
OHR	151.32	328	ePKPc	44	07.50	6.0X
	0.6s	83.00nm				
VAI	151.33	349	PKP	44	07.50	6.3X
DIX	151.35	351	ePKPc	44	08.70	7.0X
TCF	151.59	359	iPKP	44	08.30	6.6X
	0.6s	8.10nm				
LSF	151.64	360	iPKPc	44	08.20	6.5X
MAF	151.65	358	ePKP	44	08.80	7.0X
	0.7s	11.60nm				
AGG	151.99	323	ePKPd	44	07.62	5.1X
LPL	151.99	352	ePKP	44	01.00	-1.6
	0.7s	7.70nm				
LPG	152.01	352	ePKP	44	10.10	7.4X
	0.7s	9.90nm				
BNI	152.46	352	PKP	44	11.00	7.9X
ARV	152.54	341	PKP	44	11.00	7.9X
RJF	152.59	360	ePKP	44	10.60	7.5X
	0.7s	8.80nm				
BDI	152.66	345	PKP	44	16.00	12.7X
IGT	152.73	326	ePKPc	43	59.64	-3.8X
LFF	152.95	1	ePKP	44	10.90	7.3X
CAF	152.96	359	ePKP	44	11.50	7.8X
	0.5s	4.75nm				
LPO	153.21	0	ePKP	44	11.90	7.9X
	0.5s	5.85nm				
BCAO	158.44	234	iPKPd	44	11.50	-0.1
	0.4s	6.00nm				

S.D. = 1.0 on 98 of 161 obs.

& OCT 31, 1990 12h 58m 02.50s
38.028 N 119.170 W
DEPTH = 5.0km

CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 2.6 (BRK).

CMB	0.96	271	iPc	58 20.00	-1.3
			iS	58 32.90	
FRI	1.12	203	iPd	58 23.00	-0.9
			iS	58 37.70	
KVN	1.32	39	e(P)	58 26.30	-1.2
TNP	1.54	87	eP	58 30.00	-0.9
ARN	1.99	251	eP	58 38.00	0.7
MHC	2.08	251	eP	58 40.40	1.8
			eS	59 07.80	
SAO	2.21	236	eP	58 41.00	0.7
ORV	2.38	311	eP	58 43.30	0.5
			eS	59 15.20	

8 obs. associated

OCT 31, 1990 13h 57m 07.12± 2.19s
42.479 N ±21.6km 24.185 E ± 8.5km
DEPTH = 10.0km (geophysicist)
BULGARIA (359)

SRS	1.43	198	ePd	57 32.46	-0.7
			eS	57 54.46	
KNT	1.63	217	iPd	57 35.46	-0.5
			eS	58 01.20	
VAY	1.67	227	ePn	57 36.70	0.2
SOH	1.77	201	ePc	57 37.10	-0.9
			eS	58 04.85	
SKO	2.10	257	ePn	57 43.00	0.2
ALN	2.11	138	ePc	57 42.38	-0.5
			eS	58 14.38	
OUR	2.15	184	ePd	57 46.54	3.1X
PAIG	2.58	189	ePd	57 51.54	2.0
MFT	2.87	125	ePn	57 54.00	0.1
BZS	3.64	330	ePc	58 08.00	3.3X

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

OCT 31, 1990 14h 39m 27.22± 0.17s
26.634 S ± 3.5km 70.481 W ± 4.9km
DEPTH = 59.9km (21 depth phases)
5.5mb (26 obs.)
NEAR COAST OF NORTHERN CHILE (122)
Felt (VI) at Copiopo and (III) at Toltal.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 33C
Centroid Location:
Origin Time 14:39:35.9 0.3
Lat 27.05S 0.03 Lon 71.07W 0.05
Dep 73.3 2.1 Half-duration 2.2
Moment Tensor; Scale 10**17 Nm
Mrr=-1.54 0.06 Mtt= 2.28 0.13
Mff=-0.73 0.14 Mrt= 0.16 0.07
Mrf=-1.01 0.07 Mtf=-0.88 0.08
Principal Axes:

T	Val= 2.56	Plg= 6	Azm= 17
N	-0.30	35	111
P	-2.26	54	278

Best Double Couple:Mo=2.4**10**17
NP1:Strike= 74 Dip=50 Slip=-140
NP2: 315 60 -48

ANT	2.92	1	iPc	40 12.00	-0.2
			i	40 36.00	
			i	40 57.20	
RTLL	5.00	160	iPd	40 42.60	1.1
RTCB	5.05	163	iPc	40 43.30	1.0
RTBS	5.09	170	iPc	40 44.00	1.3
ZON	5.14	163	iPc	40 45.50	2.0X
RTCV	5.48	162	ePd	40 48.90	0.7
JACH	6.03	181	iPc	40 53.30	-2.7
ROCH	6.33	184	iPd	40 56.40	-3.9X
			i	42 18.60	
FCH	6.67	179	iPc	41 02.60	-2.6
			iS	42 40.50	
SAN	6.80	181	iP	41 02.70	-3.9X
			iS	42 22.20	
LCCH	6.88	188	iP	41 02.20	-5.6X
PCH	6.96	180	iPc	41 05.50	-3.5X
			iS	42 47.60	
TACH	7.01	183	iPc	41 05.00	-4.5X
			i	42 51.00	
CHCH	7.28	181	iP	41 02.70	-10.6X
			iS	42 22.20	
LNV	7.34	186	iPc	41 08.10	-6.0X
			iS	42 34.50	
CCH	10.05	24	Pc	42 01.00	9.3X
CNCB	10.05	14	iPc	41 51.00	-0.9
ARE	10.17	354	iPc	41 49.50	-3.8X
			iS	43 40.00	
LPB	10.29	13	P	41 54.00	-1.1
	1.0s		396.00nm		6.4mb
Z	22s		10.37um		4.4Msz
			S	44 05.00	
			LR	45 24.00	
ZOBO	10.54	12	Pc	41 56.70	-2.0
			eS	44 36.00	
			LR	54 34.00	
LPA	13.57	130	iP+	42 37.60	-0.8
	1.0s		384.00nm		6.0mb
SIV	13.74	41	iPc	42 36.20	-4.5X
NNA	15.75	336	iPc	43 06.50	-0.3
	0.7s		66.44nm		4.9mb
			eS	46 10.00	
PPD	18.06	79	eP	43 35.30	-0.2
			e	43 39.40	
			e	43 53.00	
VAO	21.64	85	iPc	44 15.00	0.7
			e	44 15.40	
			e	44 17.40	
			ipP	44 29.20	62km
			i	44 36.50	
BAO	23.62	67	iPc	44 34.20	0.4
BMA	24.23	86	eP	44 41.70	2.1
			e	44 42.60	3kmX
			i	44 55.30	
			e	45 03.60	
JFO	25.23	85	eP	44 50.30	1.1
			e	45 04.60	60km
			e	45 12.90	
PDCR	32.60	71	eP	45 54.10	-1.2
SOB1	32.93	64	eP	45 55.30	-2.9X
			e	46 03.30	28kmX
			e	46 17.60	
			e	46 19.80	
			e	48 28.50	
			e	48 40.50	
			e	48 57.90	
CAI	37.50	64	eP	46 38.10	1.0
AIA	38.83	176	e(P)	46 50.00	2.4X
OXX	50.38	327	(P)	48 22.00	1.3
ACX	51.81	323	(P)	48 48.00	16.6X
IIT	52.81	326	(P)	48 41.00	1.9
PPM	53.01	326	(P)	48 42.00	1.1
CRX	53.83	325	(P)	48 48.50	1.9
JSC	61.43	350	P	49 37.80	-1.8
TKL	63.21	348	P	49 49.70	-1.7
			pP	50 05.00	56km
RSCP	63.52	346	iPd	49 51.50	-1.9
	0.7s		262.98nm		6.4mb
			ipP	50 07.20	58km
SPA	63.52	180	iPd	49 52.60	-0.8
	1.0s		74.50nm		5.7mb
Z	21s		1.13um		5.0Msz
			i	50 15.20	89kmX
OLY	64.91	341	ePd	50 00.00	-2.4X
ELC	65.98	344	P	50 07.30	-1.9
			pP	50 23.00	57km
MBO	66.08	58	eP	50 26.60	16.3X
MEO	66.63	335	iPd	50 12.00	-1.5
FVM	66.94	343	iPd	50 14.00	-1.4
	1.0s		190.00nm		6.0mb
			ipP	50 30.50	61km
			esP	50 38.80	
CLE	68.55	351	iP	50 24.40	-1.0
WVLY	69.16	354	P	50 28.60	-0.6
ALQ	70.07	329	iPd	50 35.50	0.4
	0.9s		45.59nm		5.4mb
			e	50 51.50	58km
SBA	70.54	191	iPd	50 38.10	0.9
RSNY	70.93	357	iPd	50 39.30	-0.6
	1.0s		61.46nm		5.5mb
			epP	50 55.30	58km
LIC	71.24	73	P	50 26.40	-15.9X
Z	20s		0.60um		4.9Msz
TIC	71.46	72	P	50 27.40	-16.3X
KIC	71.55	73	P	50 28.20	-16.0X
VAH	72.02	262	eP	50 47.30	0.3
	0.9s		30.00nm		5.2mb
TPT	72.11	262	iP	50 48.10	0.5
	0.9s		30.00nm		5.2mb
PMO	72.35	262	iP	50 49.40	0.4
	0.9s		20.00nm		5.0mb
TVO	72.46	259	iP	50 49.90	0.2
	0.9s		35.00nm		5.3mb
LKO	72.47	69	P	50 49.26	-0.5
	1.0s		50.00nm		5.4mb
PPT	72.82	259	iP	50 52.00	0.2
	0.9s		50.00nm		5.4mb
AFR	73.01	259	iP	50 53.00	0.2
	0.9s		25.00nm		5.1mb
CBM	73.25	2	P	50 53.70	0.2
GLD	73.56	333	P	50 55.90	0.2
	1.2s		101.01nm		5.6mb
BAR	73.56	321	eP	50 55.00	-0.7
GOL	73.57	333	iPd	50 55.50	-0.4
	0.8s		27.53nm		5.2mb
			ipP	51 12.10	60km
			esP	51 19.60	
PLM	74.17	321	eP	51 00.00	0.6
PV09	74.21	329	iPd	50 59.20	-0.5
			i	51 08.70	31kmX
TPC	74.27	322	eP	51 01.00	1.2
PEC	74.73	321	P	51 02.50	0.0
RVR	74.93	321	eP	51 04.00	0.4
MWC	75.48	321	eP	51 07.00	0.0
GSC	75.58	322	eP	51 08.00	0.6
MSU	75.65	327	P	51 08.50	0.6
SBB	75.69	321	eP	51 08.00	0.0
CLC	76.39	322	eP	51 12.00	0.1
ABL	76.59	321	P	51 13.70	0.4
DAU	76.72	329	P	51 14.50	0.5
ISA	76.76	322	eP	51 15.00	1.0
DUG	77.28	328	P	51 17.20	0.4
BCH	77.33	320	iPd	51 17.10	-0.1
TNP	77.86	324	iPd	51 20.40	0.2
	0.8s		40.44nm		5.5mb
			ipP	51 37.70	63km
			esP	51 45.70	
PRI	78.34	321	eP	51 23.30	0.6
FRI	78.41	322	eP	51 22.30	-0.6
LLA	78.83	321	eP	51 25.80	0.5
PRS	78.87	320	eP	51 26.30	0.8
KVN	79.04	324	eP	51 26.50	-0.1
			epP	51 44.00	63km
PTI	79.19	330	P	51 27.50	0.2
CMB	79.53	322	eP	51 29.20	0.1
GCC	79.72	320	eP	51 31.00	0.9
MHC	79.74	321	eP	51 30.70	0.4
MAW	79.84	164	iPd	51 30.50	0.3
	1.1s		148.00nm		5.8mb
PCC	80.27	321	eP	51 32.70	-0.3
LTMT	80.39	331	ePd	51 35.20	1.4
BKS	80.45	321	eP	51 34.40	0.5
	0.8s		41.00nm		5.4mb
MEMT	80.77	332	eP	51 36.40	0.7
BGMT	80.92	332	iPd	51 37.20	0.6
			e	51 53.80	59km
MCMT	80.95	331	iPd	51 37.90	1.2
			e	51 54.80	61km
ORV	81.23	323	eP	51 38.50	0.5
SXM	81.31	333	iPd	51 39.30	0.8
LRM	81.57	332	iPd	51 40.70	0.8
			e	51 57.60	60km
HBMT	81.61	332	iPd	51 41.10	0.9
			e	51 58.20	61km
BUT	81.77	332	ePd	51 42.10	1.2
HRY	82.02	333	ePd	51 43.00	0.9
WDC	82.51	323	eP	51 43.70	-0.9
LBFM	82.71	324	P	51 46.00	0.1
TIO	83.19	51	iP	51 50.40	1.9
			i	52 07.50	61km
FHC	83.46	322	eP	51 50.80	1.3
AVE	84.50	49	iP	51 56.00	1.1
			i	52 13.00	60km
SES	84.68	335	eP	51 55.00	-0.5
	1.3s		149.00nm		5.9mb
FFC	85.44	342	iPd	51 58.30	-0.8
	1.2s		48.00nm		5.5mb
NEW	85.47	331	iP	51 58.80	-0.7
	1.0s		47.50nm		5.6mb
			ipP	52 15.30	58km
			e	52 52.70	
DPW	85.65	330	P	52 00.30	-0.1
			pP	52 16.80	58km
SLR	86.01	117	iPc	52 00.50	-2.4
IFR	86.17	50	iPd	52 04.00	0.6
			i	52 22.00	64km
RMW	87.02	328	P	52 06.20	-0.9

31d 14h

PNT	87.36	330	ePd	52 08.00	-0.6
	0.6s	24.00nm		5.6mb	
EDM	87.81	336	iPd	52 09.60	-1.1
LTZ	90.00	221	eP	52 21.90	0.3
TOL	90.54	45	iP	52 43.00	19.1X
	1.4s	93.02nm			
BCAO	91.08	86	iPd	52 27.80	0.8
	0.7s	48.00nm		6.0mb	
			i	52 45.00	60km
YKA	95.54	341	eP	52 44.80	-1.5
	0.9s	12.90nm		5.4mb	
PMR	107.90	330	PKP	58 09.50	20.7X
ASPA	124.72	207	iPKPd	58 20.70	-1.5
	1.2s	22.00nm			
			i	58 38.80	
QIS	124.76	215	iPKPd	58 21.50	-0.8
WB5	127.86	210	ePKP	58 27.00	-1.3
			e	58 46.50	
MAIO	136.67	64	iPKPd	58 45.00	0.3
			e	01 26.00	
QUE	142.55	74	ePKP	58 51.40	-4.3X
			eS	02 20.00	
GUA	144.43	256	iPKPd	58 56.70	-2.3
	0.8s	334.33nm			
			pP	59 14.20	
GUMO	144.49	256	iPKPd	58 56.80	-2.3
	1.2s	755.56nm			
PJG	144.49	256	iPKPd	58 56.70	-2.4
KOD	145.63	112	iPKPd	59 02.00	0.5
	1.0s	190.00nm			
TRT	145.73	185	iPKPd	59 01.60	0.3
	1.3s	331.20nm			
POO	146.18	96	iPKPd	59 02.00	0.1
GBA	147.31	107	PKP	59 04.00	0.3
HYB	149.93	101	ePKP	59 07.00	-0.8
	1.0s	160.00nm			
			e	59 12.00	
NDI	151.36	78	iPKP	59 11.00	1.3
PPI	151.67	160	ePKP	59 16.50	6.0X
MAT	153.72	299	(PKP)	59 11.00	-1.8
PSI	154.12	155	ePKPc	59 14.50	0.5
KGM	154.81	165	ePKPc	59 23.70	8.8X
IPM	156.61	158	ePKPc	59 18.90	1.5
GKN	157.86	81	PKP	59 18.66	0.0
	1.1s	71.00nm			
DMN	158.25	82	PKP	59 19.48	0.2
	1.3s	80.00nm			
KKN	158.42	81	PKP	59 19.36	-0.1
	1.1s	71.00nm			
PKI	158.52	82	PKP	59 19.42	-0.3
	1.3s	65.00nm			
GUN	158.95	81	PKP	59 20.38	0.2
	1.2s	118.00nm			
BJI	165.53	339	ePKP	59 26.00	0.3
	Z 15s	0.29um			
CHG	167.52	126	iPKPd	59 28.50	0.5
	1.1s	18.99nm			
SSE	168.85	296	ePKP	59 25.00	-3.4X
LZH	169.41	26	PKPd	59 30.50	1.6
			pPKP	59 47.50	
KMI	173.71	102	PKPd	59 31.00	-0.2
			pP	59 50.00	

S.D. = 1.1 on 126 of 151 obs.

OCT 31, 1990 15h 09m 52.84± 0.71s
30.893 N ± 7.6km 109.254 W ± 3.4km
DEPTH = 5.0km (geophysicist)
NORTHWESTERN MEXICO (50)
ML 3.6 (NEIS). MD 3.8 (SNM).

TUC	1.92	318	P	10 26.40	-0.2
TDM	2.12	310	P	10 30.00	0.6
SMNM	3.44	33	P	10 48.60	0.2
SBM	3.54	29	P	10 50.40	0.5
CRNM	3.72	34	P	10 52.20	-0.2
WTX	3.72	31	P	10 52.20	-0.2
BMNM	3.77	26	P	10 53.30	0.2
BNM	3.93	34	P	10 55.10	-0.2
LAZ	3.93	26	P	10 55.40	0.1
LPM	4.06	32	P	10 56.40	-0.8
ALQ	4.67	29	eP	11 05.30	-0.6
CLN4	4.69	71	P	11 08.20	2.2X
CLNB	4.79	72	P	11 08.60	1.2
LTX	5.08	106	ePn	11 11.10	-0.5
			ePg	11 29.00	
GLA	5.20	296	eP	11 13.00	-0.2
PLM	6.90	293	e(P)	11 37.50	0.1
PLM	6.90	293	eP	11 42.00	4.6X
PV09	7.59	1	(Pn)	11 47.50	0.4
			ePg	12 15.80	
			eLg	13 56.00	
GSC	7.71	307	eP	11 48.00	-0.6
SBB	8.15	300	eP	11 55.00	0.3
ISA	9.06	304	eP	12 17.00	9.6X
TNP	9.72	320	e(P)	12 18.50	1.9X
MEO	9.78	64	e(P)	12 15.50	-1.7X

S.D. = 0.5 on 18 of 23 obs.

OCT 31, 1990 15h 15m 11.32± 0.38s
51.984 N ± 7.8km 158.683 E ± 5.3km
DEPTH = 33.0km (normal)
5.1mb (32 obs.) 4.2Msz (2 obs.)
NEAR EAST COAST OF KAMCHATKA (218)
Felt (III) at
Petropavlovsk-Kamchatskiy.

MAT	21.18	231	(P)	19 57.00	1.1
TTA	26.14	48	eP	20 43.60	-0.2
IMA	27.45	41	eP	20 55.20	-0.6
	0.7s	7.00nm		4.4mb	
KDC	28.16	59	e(P)	21 10.10	7.9X
PMR	29.37	50	e(P)	21 12.00	-1.0
FBA	29.82	44	eP	21 16.30	-0.8
			e	21 33.10	
TOA	30.72	49	eP	21 24.50	-0.5
			e	21 54.20	
MBC	38.40	22	ePc	22 30.50	-0.1
	0.7s	5.00nm		4.4mb	
YKA	44.57	41	eP	23 21.30	0.0
	0.6s	3.70nm		4.4mb	
NEW	51.21	59	eP	24 14.00	0.6
	1.0s	7.00nm		4.6mb	
DAG	51.51	359	iPd	24 14.20	-0.9
	0.8s	25.37nm		5.2mb	
			ipP	24 34.00	79kmX
			isP	24 48.20	
FFC	54.42	45	eP	24 36.00	-1.0
	0.7s	8.00nm		4.9mb	
CHG	56.83	258	iPc	24 55.40	0.5
TNP	57.80	68	eP	25 02.00	0.2
	1.0s	7.50nm		4.7mb	
			e	25 14.00	
GUN	58.15	276	P	25 02.98	-1.5
KKN	58.60	276	P	25 06.38	-1.1
PKI	58.68	276	P	25 06.94	-1.3
DMN	58.84	276	P	25 08.22	-1.0
GKN	58.85	277	P	25 07.82	-1.3
SUF	59.68	337	iP	25 13.80	-0.5
NUR	61.95	336	eP	25 25.00	-4.7X
PV09	62.05	63	eP	25 32.00	0.9
NB2	64.36	343	P	25 44.80	-0.8
	0.7s	25.50nm		5.4mb	
HFS	64.74	341	eP	25 46.20	-1.8
	0.4s	6.70nm		5.1mb	
EKA	71.99	349	P	26 33.00	-0.1
	0.7s	8.40nm		4.8mb	
CLL	73.07	338	iP	26 39.00	-0.5
	1.4s	27.00nm		5.1mb	
BRG	73.26	338	eP	26 40.30	-0.3
OLY	73.56	53	eP	26 42.00	-0.6
PRU	73.94	337	eP	26 44.50	0.0
MOX	74.01	339	eP	26 45.00	0.0
GBA	74.03	272	Pc	26 45.10	-0.4
	0.7s	10.50nm		4.9mb	
WB5	74.64	204	eP	26 49.00	0.1
KHC	74.97	337	eP	26 51.00	0.4
GRF	74.99	339	eP	26 50.90	0.2
	0.9s	13.00nm		4.9mb	
MEM	75.19	342	Pc	26 52.10	0.4
SNF	75.60	343	Pc	26 54.20	0.1
DOU	75.94	343	P	26 55.00	-1.0
GWF	76.44	341	P	26 58.97	0.1
WLS	77.03	341	P	27 02.42	0.2
CDF	77.05	341	eP	27 01.90	-0.5
	0.8s	14.80nm		5.1mb	
WATA	77.13	338	iPd	27 03.50	0.6
	1.0s	16.50nm		5.0mb	
ECH	77.26	341	P	27 03.53	0.1
SQTA	77.32	338	iPc	27 04.40	0.5
	0.8s	21.80nm		5.2mb	
FEL	77.40	340	P	27 03.94	-0.5
VITF	77.49	342	P	27 05.14	0.5
FVI	77.53	337	P	27 06.50	1.6
MOF	77.61	341	P	27 05.32	-0.2
HAU	77.62	341	eP	27 04.90	-0.5
	0.8s	18.80nm		5.2mb	
	Z 18s	0.10um		4.2Msz	
OGA	77.69	338	iPd	27 07.30	1.2
	0.8s	16.00nm		5.1mb	
BSF	77.70	341	P	27 05.87	-0.1
LOMF	78.15	341	P	27 07.91	-0.5
CTI	78.32	337	P	27 08.50	-0.9
ASPA	78.39	203	eP	27 24.40	14.5X
	0.7s	4.40nm			
	Z 23s	0.40um		4.7MszX	
LOR	78.80	343	eP	27 11.50	-0.4
	0.9s	33.60nm		5.3mb	
	Z 22s	0.15um		4.3Msz	
GRC	78.92	343	P	27 13.04	0.5
MDI	79.02	338	P	27 13.00	-0.1
LBF	79.05	343	eP	27 12.70	-0.6
	0.7s	8.80nm		4.9mb	
SSF	79.06	343	eP	27 13.10	-0.2
	0.7s	16.55nm		5.1mb	
VAI	79.15	339	P	27 14.00	0.2
AVF	79.35	343	eP	27 14.90	0.0
	0.8s	27.55nm		5.3mb	
SMF	79.40	343	eP	27 15.10	-0.1
	0.8s	12.10nm		4.9mb	
VAY	79.56	328	eP	27 16.00	-0.1
BGF	79.67	343	eP	27 16.50	-0.1
	0.7s	12.15nm		5.0mb	
LPL	79.92	340	eP	27 18.80	0.5
	0.8s	17.45nm		5.1mb	
LPG	79.93	340	eP	27 19.00	0.6
	0.7s	11.60nm		5.0mb	
TCF	80.04	344	eP	27 18.70	0.0
	0.8s	14.80nm		5.0mb	
MAF	80.04	343	eP	27 19.20	0.5
	0.7s	18.20nm		5.2mb	
PLDF	80.10	343	P	27 19.97	0.9
AGO	80.11	343	P	27 20.11	1.1
LSF	80.19	344	eP	27 19.60	0.1
SFI	80.27	336	P	27 25.50	5.7X
BNI	80.38	340	P	27 22.00	1.4
ARV	80.39	335	P	27 21.00	0.5
PYM	80.42	343	P	27 21.79	1.0
BDI	80.44	337	P	27 22.00	1.1
LBL	80.88	343	P	27 24.28	1.3
RJF	81.11	344	eP	27 24.80	0.5
	0.9s	16.40nm		5.0mb	
CAF	81.39	343	eP	27 26.70	0.9
	0.8s	19.80nm		5.2mb	
LFF	81.60	344	eP	27 27.50	0.7
	0.9s	26.20nm		5.3mb	
AZI	81.67	335	P	27 27.50	0.3
LPO	81.77	344	eP	27 28.40	0.6
	0.8s	20.15nm		5.2mb	
SDI	81.83	334	P	27 28.00	-0.2
JVI	82.84	314	eP	27 39.00	5.5X
TDS	83.02	332	P	27 35.00	0.7
PRNI	84.35	314	eP	27 46.50	5.3X
MBH	84.89	314	eP	27 49.00	5.1X

S.D. = 0.7 on 79 of 86 obs.

• OCT 31, 1990 17h 16m 00.07± 2.53s
38.635 N ±14.5km 26.569 E ±26.4km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.5 (ISK).

IZM	0.59	113	iPg	16 12.30	0.2
			iSg	16 20.80	
EZN	1.20	351	ePn	16 22.40	-0.1
CIN	1.58	130	ePn	16 28.00	-0.2
			iSg	16 48.00	
EDC	1.98	30	ePn	16 35.00	1.0
BNT	2.01	31	ePn	16 33.00	-1.4
MFT	2.22	14	ePn	16 37.90	0.4
KHL	2.34	97	ePn	16 43.00	3.7X
CTT	2.89	29	ePn	16 51.00	4.1X

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

• OCT 31, 1990 17h 29m 14.26± 0.63s
36.576 N ±20.0km 54.722 E ± 7.0km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
IRAN (348)

TEH	2.83	254	eP	29 58.00	-0.2
MAIO	3.86	93	ePn	30 12.00	-0.8

	0.6s	12.63nm				
			eSn	31	00.00	
GKN	26.61	100	P	34	51.18	-0.5
DMN	27.16	100	P	34	57.52	0.7
KKN	27.22	100	P	34	57.36	0.1
PKI	27.42	100	P	34	59.64	0.4
	0.8s	10.00nm			4.5mb	
GUN	27.64	99	P	35	01.60	0.3
NB2	36.64	326	P	36	19.20	0.0
	1.2s	4.20nm			4.2mb	
	S.D. = 0.6	on	8 of	8 obs.		

? OCT 31, 1990 17h 52m 19.06± 7.55s
39.763 N ±47.1km 27.876 E ±36.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 2.2 (ISK).

EDC	0.58	359	iPg	52	31.00	0.1
			iSg	52	41.00	
BNT	0.59	3	ePg	52	30.90	-0.2
			iSg	52	41.40	
KCT	0.61	37	iPg	52	31.40	0.0
IZI	1.35	64	ePn	52	44.00	0.0
	S.D. = 0.2	on	4 of	4 obs.		

• OCT 31, 1990 18h 23m 17.00± 1.06s
38.731 N ± 8.3km 26.505 E ±11.1km
DEPTH = 12.0 ± 5.1 km
AEGEAN SEA (365)
MD 3.9 (ISK).

IZM	0.68	119	iPg	23	31.30	1.0
			eSg	23	40.30	
EZN	1.10	353	iPn	23	38.30	0.8
CIN	1.68	132	eP	23	46.00	-0.3
EDC	1.93	33	iPn	23	51.00	1.1
BNT	1.96	34	iPn	23	51.40	1.1
KCT	2.09	43	iPn	23	51.40	-0.8
MFT	2.14	16	iPn	23	53.40	0.4
KHL	2.40	99	ePn	23	57.50	0.7
CTT	2.83	31	ePn	24	01.90	-0.9
ALT	2.83	82	ePn	24	04.00	1.1
KDZ	3.03	344	iP	24	05.00	-0.6
ISK	3.05	39	ePn	24	15.00	9.2X
GBZT	3.06	47	ePg	24	16.50	10.5X
HRT	3.21	48	ePn	24	18.00	9.8X
RZN	3.26	336	iP	24	09.00	0.0
VAY	3.98	312	eP	24	33.00	14.0X
VTS	4.60	328	eP	24	29.00	0.9
	S.D. = 0.9	on	13 of	17 obs.		

OCT 31, 1990 18h 27m 12.51± 0.47s
42.352 N ± 4.7km 19.404 E ± 4.0km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.5 (TTG).

TTG	0.13	306	iPgd	27	15.70	0.1
			iSg	27	19.80	
ULC	0.41	197	ePg	27	19.50	-1.3
			eSg	27	25.00	
BDV	0.43	261	ePg	27	21.50	0.2
			eSg	27	29.50	
PVY	0.49	60	ePg	27	22.00	-0.4
			eSg	27	29.00	
BCI	0.49	88	iPgc	27	22.10	-0.4
NKY	0.55	327	ePg	27	23.50	-0.1
			eSg	27	32.50	
HCY	0.68	278	ePg	27	26.50	0.5
			eSg	27	38.00	
LACI	0.75	162	ePg	27	27.50	0.3
BRY	0.84	311	ePg	27	28.60	-0.2
			eSg	27	44.80	
TIR	1.06	161	ePg	27	33.70	1.2
SKO	1.56	103	ePn	27	41.60	1.3
			iSg	28	02.50	
OHR	1.62	139	ePn	27	40.20	-1.1
	S.D. = 0.9	on	12 of	12 obs.		

? OCT 31, 1990 18h 32m 51.99±10.25s
61.847 N ±23.3km 1.708 E ±85.1km
DEPTH = 10.0km (geophysicist)
NORWEGIAN SEA (642)
MD 2.6 (BER).

SUE	1.67	117	iPd	33	21.31	0.0
			eS	33	39.53	
ASK	2.17	127	eP	33	28.87	0.2
			eS	33	52.39	
HYA	2.25	106	iPc	33	29.75	-0.1
			iS	33	54.12	
MOL	2.83	73	eP	33	38.04	0.0
			eS	34	08.69	
ODD1	3.09	127	eP	33	41.78	0.0
			eS	34	15.10	
BLS1	3.53	132	iPc	33	47.94	0.0
			iS	34	25.19	
BLS2	3.63	133	iPc	33	49.41	-0.1
			iS	34	27.46	
	S.D. = 0.1	on	7 of	7 obs.		

• OCT 31, 1990 18h 44m 23.09± 1.75s
30.679 S ±12.7km 68.979 W ±19.8km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.78	146	iPc	44	37.60	-0.1
RTCB	0.82	169	iPd	44	39.00	0.7
ZON	0.90	163	iPd	44	39.00	-0.5
			eS	44	52.00	
RTBS	1.06	202	iPd	44	41.50	-0.1
RTCV	1.24	162	iPc	44	40.00	-4.2X
MDZ	2.20	177	eP	45	10.00	11.9X
			i	45	12.70	
			i(S)	45	16.90	
CYA	3.56	52	e(P)	45	17.40	0.0
	S.D. = 0.6	on	5 of	7 obs.		

• OCT 31, 1990 20h 53m 28.54± 1.68s
8.734 S ±11.1km 123.973 E ± 9.9km
DEPTH = 75.5 ± 17.7 km
5.4mb (6 obs.)
FLORES ISLAND REGION (286)

KUPT	1.45	194	ePc	53	52.50	-1.0
			eS	54	06.50	
MTN	8.13	121	iPc	55	28.10	2.0
	0.3s	102.00nm			6.0mb X	
KNA	8.40	147	eP	55	29.50	-0.3
	0.2s	29.00nm			5.7mb X	
			eS	56	54.00	
MBL	12.98	197	eP	56	31.40	-0.1
			eS	58	44.00	
WB5	14.96	139	eP	56	55.00	-2.3
			eS	59	30.00	
NANU	15.96	210	eP	57	12.00	2.0
			eS	59	55.00	
WARB	17.54	172	eP	57	30.30	0.7
ASPA	17.63	149	iPd	57	30.80	0.0
	0.5s	22.10nm			4.6mb	
			eS	00	34.50	
QIS	19.13	130	iPd	57	49.20	0.6
			eS	01	08.00	
MRWA	21.71	199	eP	58	14.60	-0.4
FORR	22.34	171	eP	58	20.30	-0.8
GUN	51.81	316	P	02	31.78	0.2
	0.6s	40.00nm			5.7mb	
PKI	51.92	315	P	02	32.14	-0.2
	0.4s	28.00nm			5.6mb	
KKN	52.15	315	P	02	33.86	-0.1
	0.5s	14.00nm			5.2mb	
DMN	52.16	315	P	02	33.80	-0.2
	0.6s	16.00nm			5.2mb	
GKN	52.73	315	P	02	38.04	-0.1
	0.4s	33.00nm			5.7mb	
	S.D. = 1.2	on	16 of	16 obs.		

& OCT 31, 1990 21h 07m 04.23s
62.299 N 151.129 W
DEPTH = 84.4km
CENTRAL ALASKA (1)
<AGS-P>.

SKT	0.37	211	iP	07	16.94	-0.7
CUT	0.41	75	iP	07	17.23	-0.7
SUA	0.86	168	eP	07	22.06	-0.2
PWA	0.88	137	eP	07	21.99	-0.4
HUR	0.97	45	eP	07	22.62	-0.9
			eS	07	36.06	
NCG	1.02	209	iP	07	23.27	-0.9
CGLM	1.08	203	iP	07	23.99	-0.9
CRP	1.14	206	eP	07	25.00	-0.8
GHO	1.17	116	iP	07	25.49	-0.4
			eS	07	42.64	
PLRM	1.18	126	eP	07	25.00	-1.0
BGL	1.20	211	eP	07	25.92	-0.5
SPU	1.20	202	iP	07	25.52	-0.9
			eS	07	42.07	
CKL	1.25	208	iP	07	26.24	-0.7
PMS	1.29	144	eP	07	26.71	-0.8
SML	1.41	109	eP	07	28.01	-0.9
RND	1.52	42	eP	07	29.35	-1.2
KNK	1.55	124	eP	07	29.79	-1.0
NKA	1.56	182	eP	07	32.60	1.7
RDT	1.84	200	eP	07	33.87	-0.8
SCM	1.85	103	eP	07	33.57	-1.3
SLKM	1.85	166	eP	07	33.85	-1.0
TOA	2.33	93	eP	07	39.58	-1.8
SEW	2.35	159	eP	07	43.57	2.1
GLI	2.40	125	eP	07	39.73	-2.5
NEA	2.47	21	eP	07	40.75	-2.4
VZW	2.51	118	eP	07	41.78	-2.0
KNIM	2.55	139	eP	07	40.98	-3.3
VLZ	2.57	115	eP	07	42.17	-2.3
WRH	2.57	31	eP	07	42.58	-2.0
KLU	2.60	106	eP	07	42.50	-2.5
SDG	2.61	83	eP	07	44.61	-0.5
PAX	2.70	73	eP	07	45.76	-0.7
CCB	2.79	31	eP	07	45.43	-2.1
HDA	2.83	40	eP	07	46.25	-1.9
	34 obs. associated					

OCT 31, 1990 21h 20m 06.74± 0.97s
42.744 N ± 9.0km 142.590 E ± 8.2km
DEPTH = 99.9 ± 8.3 km
4.5mb (8 obs.)
HOKKAIDO, JAPAN REGION (224)

SAP	0.98	289	eP	20	28.00	0.9
			iS	20	42.60	
MAT	7.06	210	(P)	21	48.00	-1.1
			eS	23	06.00	
BJI	19.98	271	eP	24	31.50	-1.7
	0.8s	11.00nm			4.2mb	
LZH	30.46	271	(P)	26	12.50	0.4
	1.0s	20.00nm			4.8mb	
SVW	40.51	41	eP	27	37.70	0.7
IMA	41.37	34	eP	27	43.10	-1.0
PMR	43.59	40	eP	28	01.40	-0.6
	0.6s	4.80nm			4.5mb	
CHG	43.80	251	eP	28	05.50	1.2
FBA	43.86	35	eP	28	03.80	-0.3
			e	28	25.40	
TOA	44.91	39	eP	28	12.90	0.2
GUN	47.72	271	P	28	36.06	0.4
KKN!	48.23	271	P	28	39.48	0.1
	0.8s	30.00nm			5.2mb	
PKI	48.26	271	P	28	39.72	0.0
DMN	48.46	271	P	28	41.56	0.3
GKN	48.59	272	P	28	42.12	0.1
NDI	53.66	277	eP	29	20.00	0.0
PSI	55.67	237	ePc	29	34.60	-0.2
GBA	62.68	263	Pc	30	23.00	-0.1
	0.9s	9.30nm			4.7mb	
ASPA	66.56	189	eP	30	47.70	-0.3
	0.9s	7.90nm			4.6mb	
HFS	69.27	335	eP	31	03.70	-0.8
	0.4s	1.60nm			4.2mb	
NB2	69.28	337	P	31	03.80	-0.8
	1.0s	3.60nm			4.2mb	
WARB	70.14	195	eP	31	10.50	0.4
SIV	146.52	44	PKP	39	38.60	2.1
	S.D. = 0.9	on	23 of	23 obs.		

OCT 31, 1990 22h 13m 09.31± 0.56s
45.955 N ± 6.5km 15.565 E ± 4.4km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 3.0 (LJU), 2.7 (TRI). Felt at Bistrico ob Sotli.

PTJ	0.28	101	iPgc	13	14.90	-0.3
			iSg	13	19.50	
ZAG	0.32	115	ePg	13	15.90	-0.1
			iSg	13	21.10	
VBY	0.50	206	iPgc	13	20.10	0.7
			eSg	13	27.60	
LJU	0.72	277	iPgd	13	22.90	-0.7
			iSg	13	33.40	
CEY	0.82	255	ePg	13	24.50	-0.8

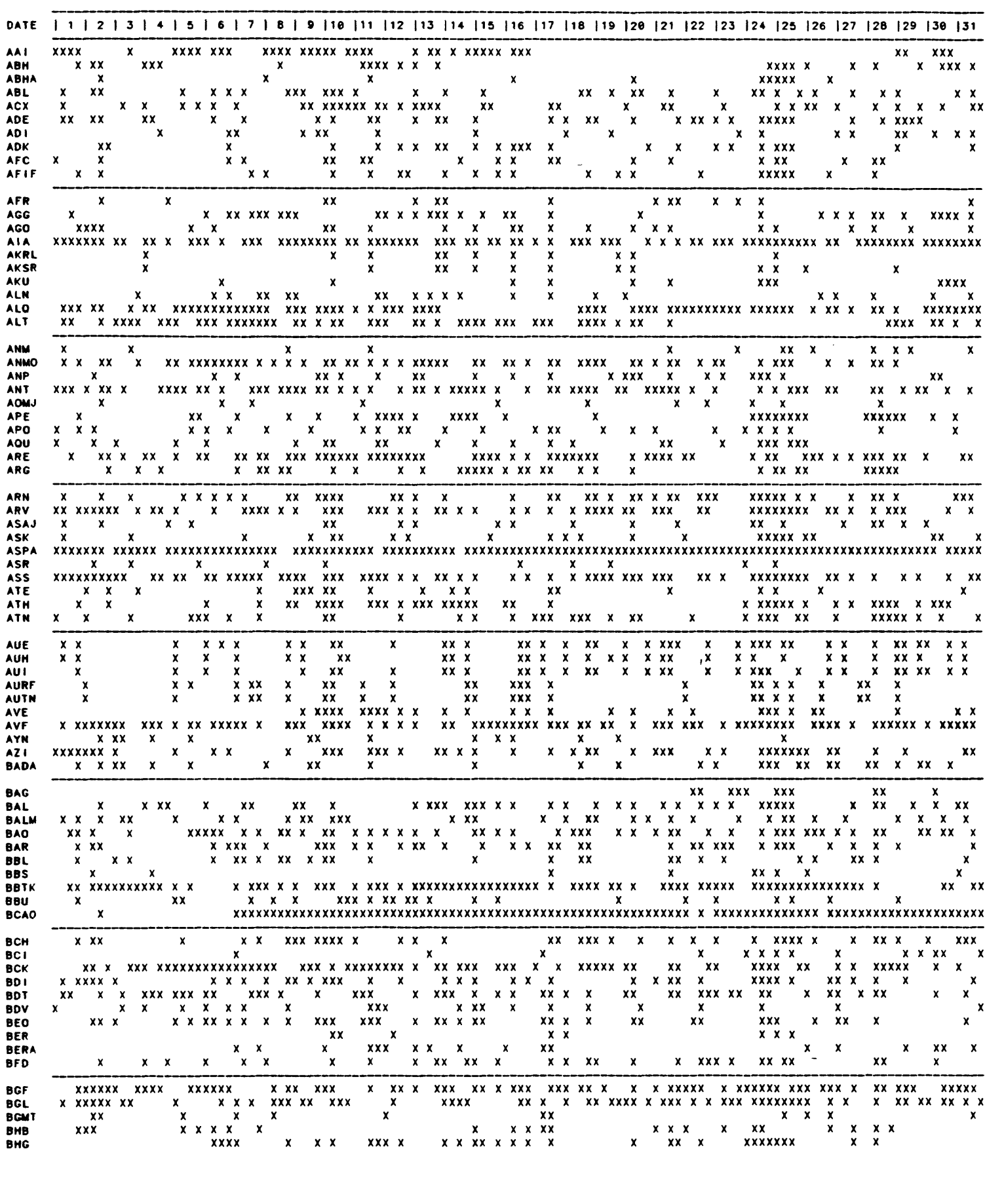
31d 22h

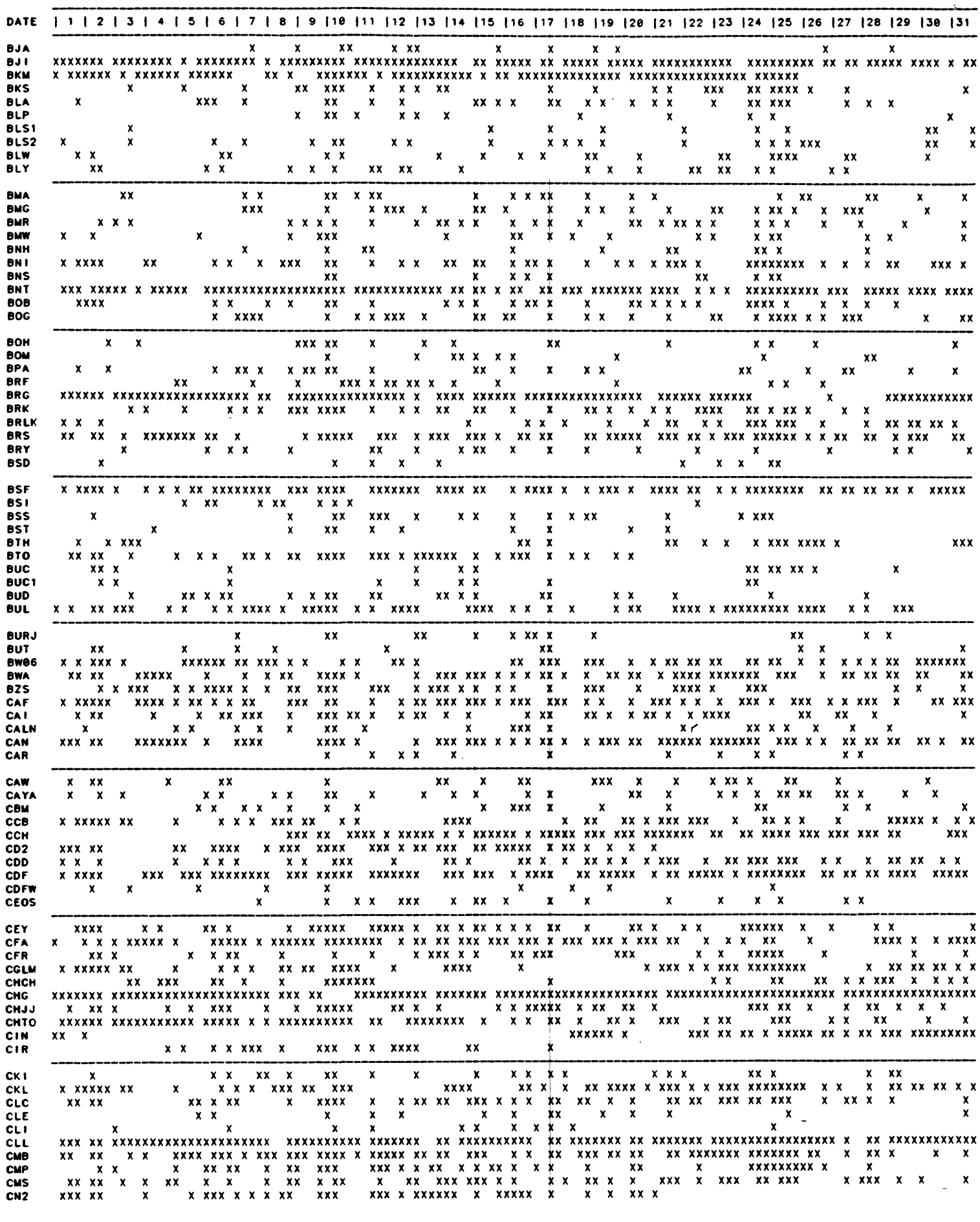
			i	13 26.80		
			eSg	13 37.30		
VOY	1.17	274	iPnc	13 30.00	-1.2	
			eSn	13 48.30		
TRI	1.28	260	iPgc	13 32.80	-0.3	
			iSg	13 51.10		
FVI	2.03	289	P	13 45.40	1.4	
			eSn	14 17.00		
VKA	2.37	12	e(Pn)	13 49.00	0.2	
			e	14 14.00		
			e	14 34.00		
CTI	2.73	273	P	13 55.30	1.2	
			eSn	14 32.50		
KHC	3.45	338	eP	14 04.00	-0.2	
			e	14 13.50		
PRU	4.09	351	Pd	14 25.00	11.8X	
			e	14 55.50		
	S.D. = 0.9		on	11 of 12 obs.		

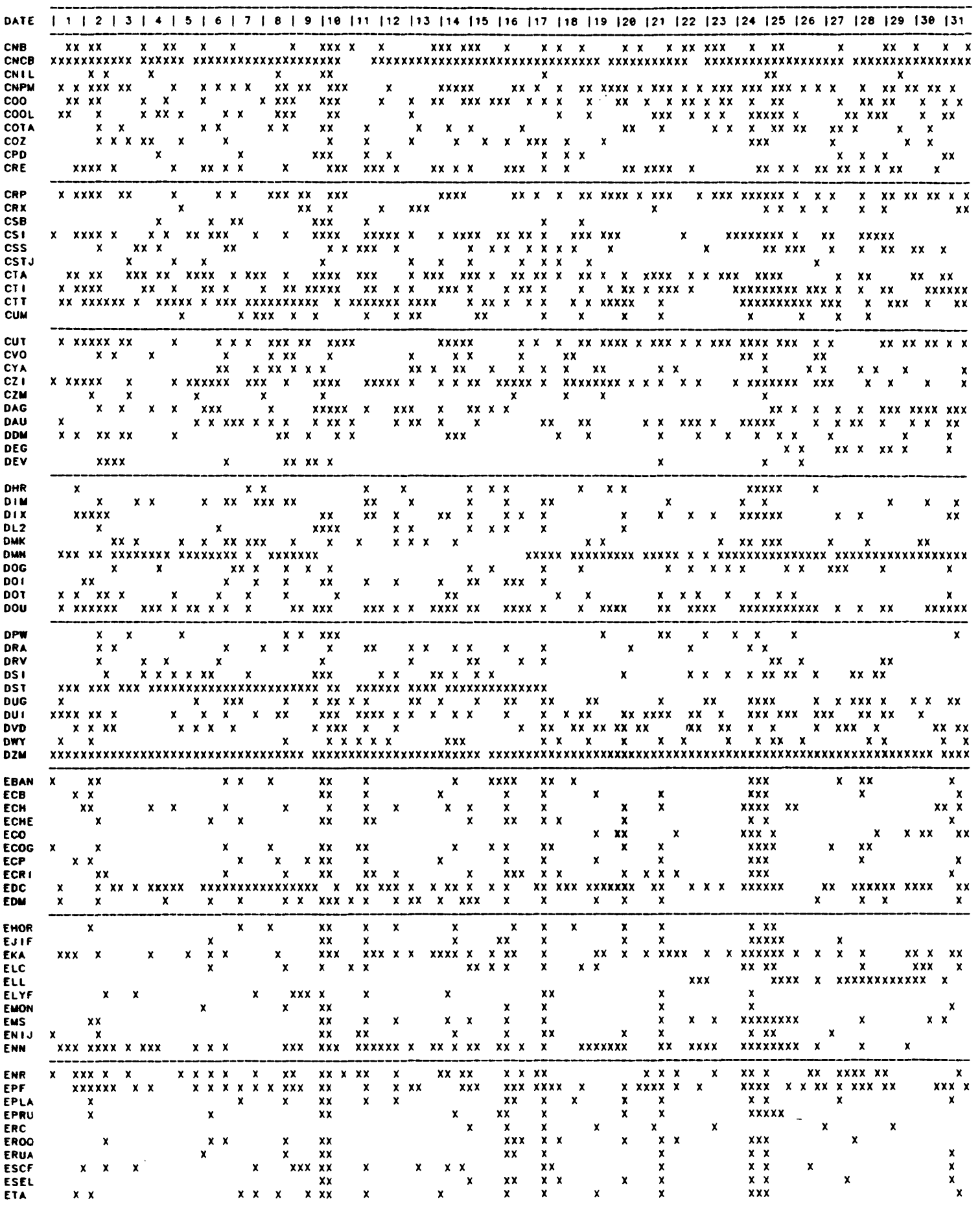
STATION DATA REPORT FOR OCTOBER, 1990

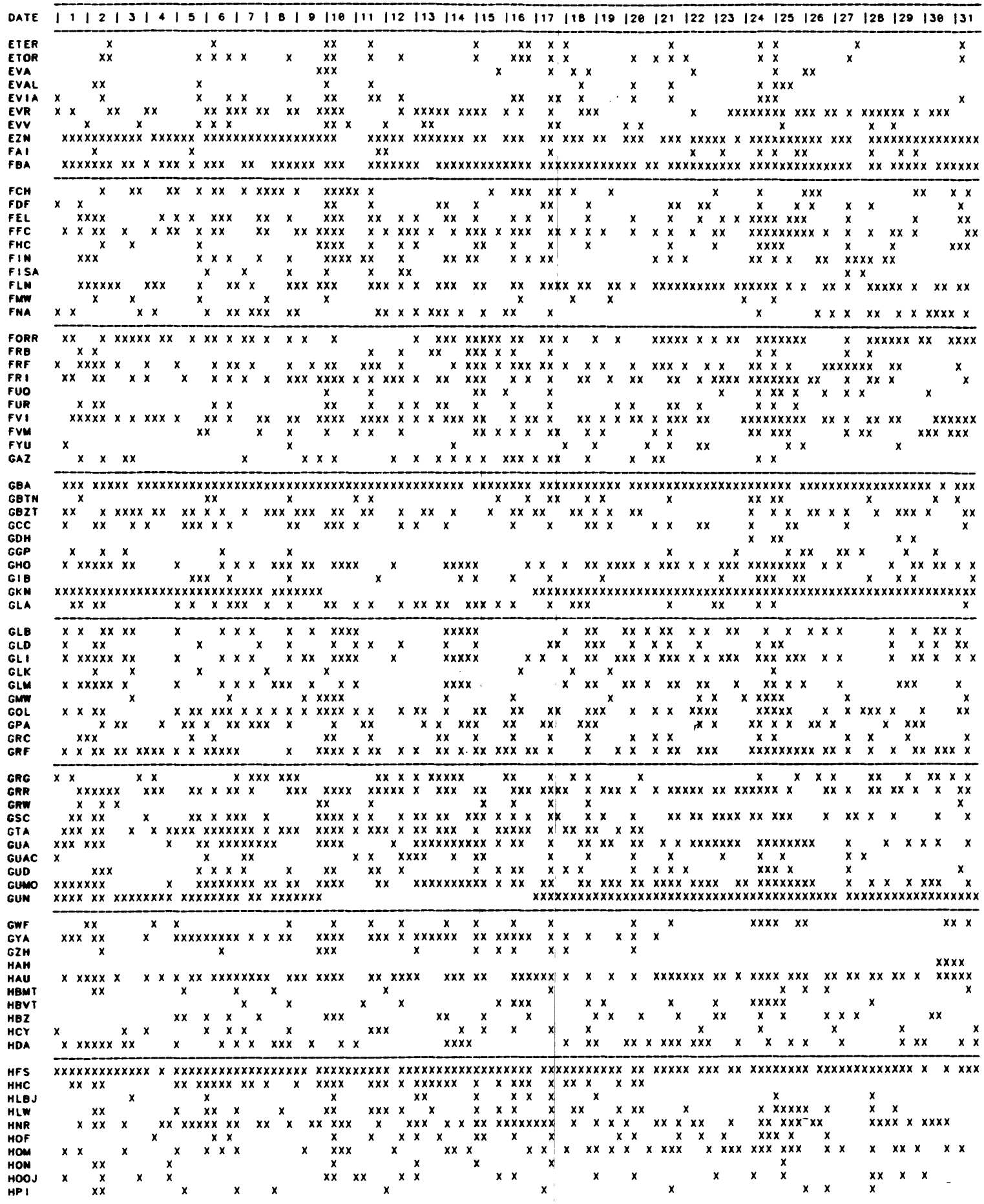
1400 stations reported 57164 reading arrival groups

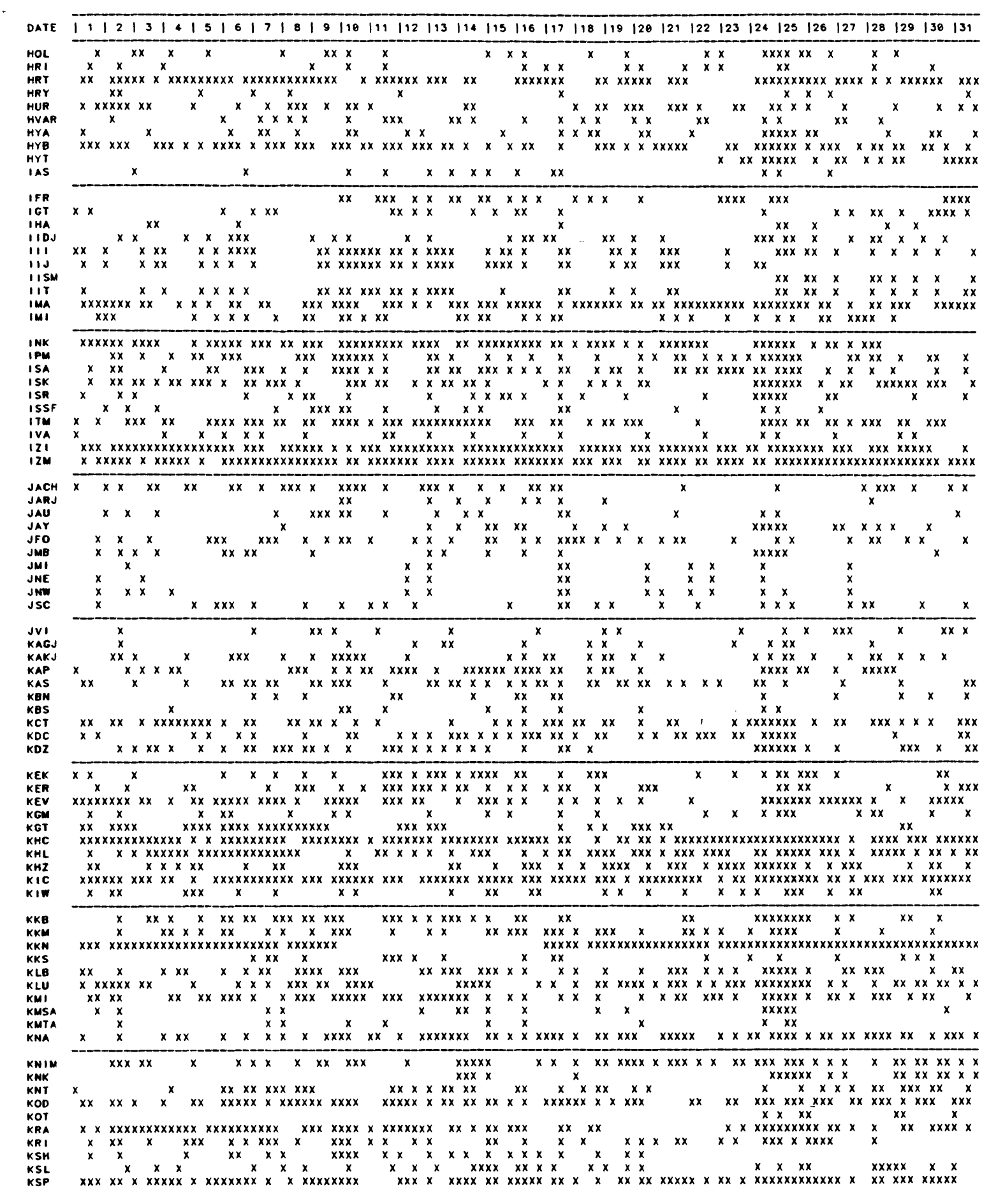
X = data received for this 6-hour time period

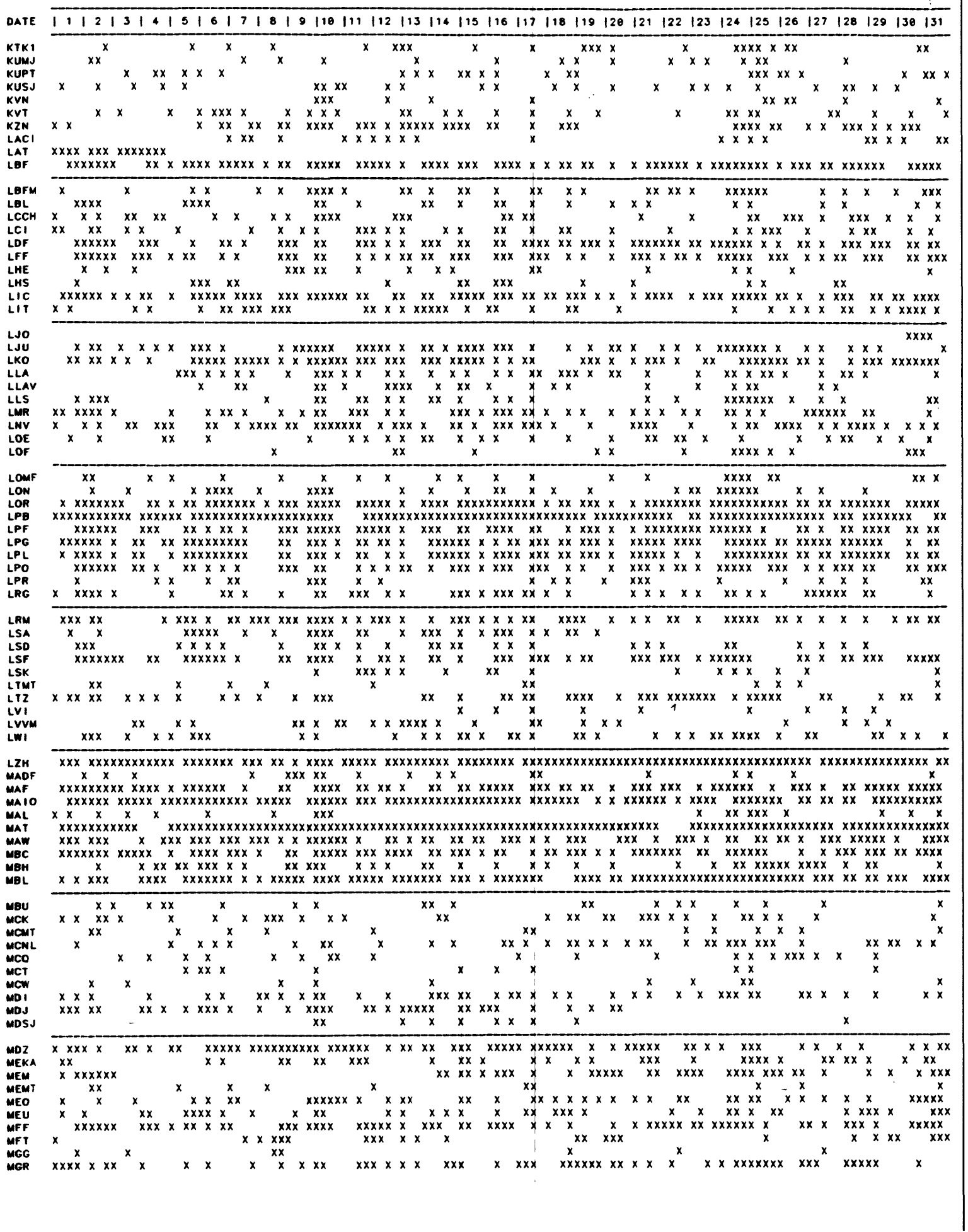


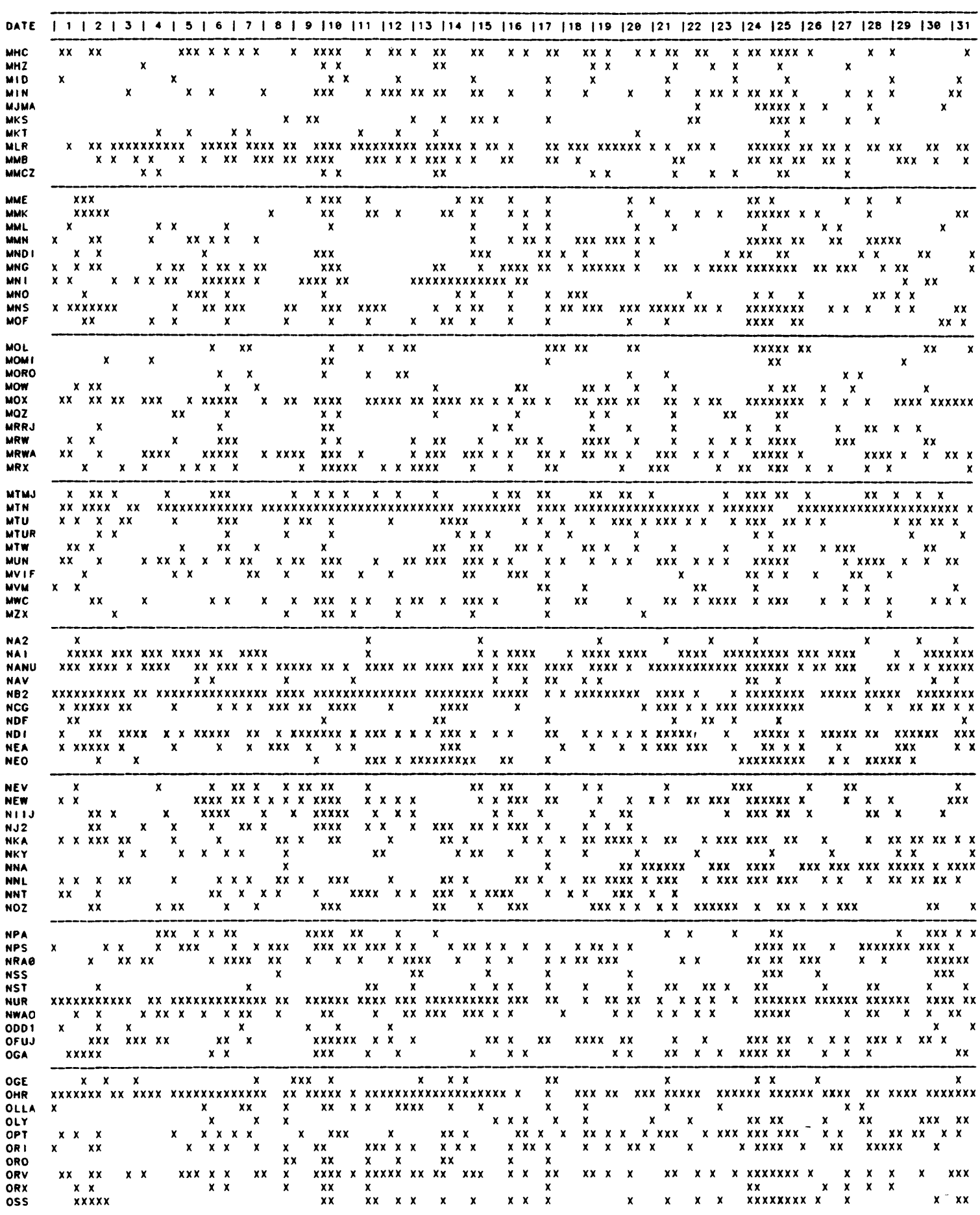

DATE
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31
BJA
BJI
BKM
BKS
BLA
BLP
BLS1
BLS2
BLW
BLY
BMA
BMG
BMR
BMW
BNH
BNI
BNS
BNT
BOB
BOG
BOH
BOM
BPA
BRF
BRG
BRK
BRLK
BRS
BRY
BSD
BSF
BSI
BSS
BST
BTH
BTO
BUC
BUC1
BUD
BUL
BURJ
BUT
BW06
BWA
BZS
CAF
CAI
CALN
CAN
CAR
CAW
CAYA
CBM
CCB
CCH
CD2
CDD
CDF
CDFW
CEOS
CEY
CFA
CFR
CGLM
CHCH
CHG
CHJJ
CHTO
CIN
CIR
CKI
CKL
CLC
CLE
CLI
CLL
CMB
CMP
CMS
CN2

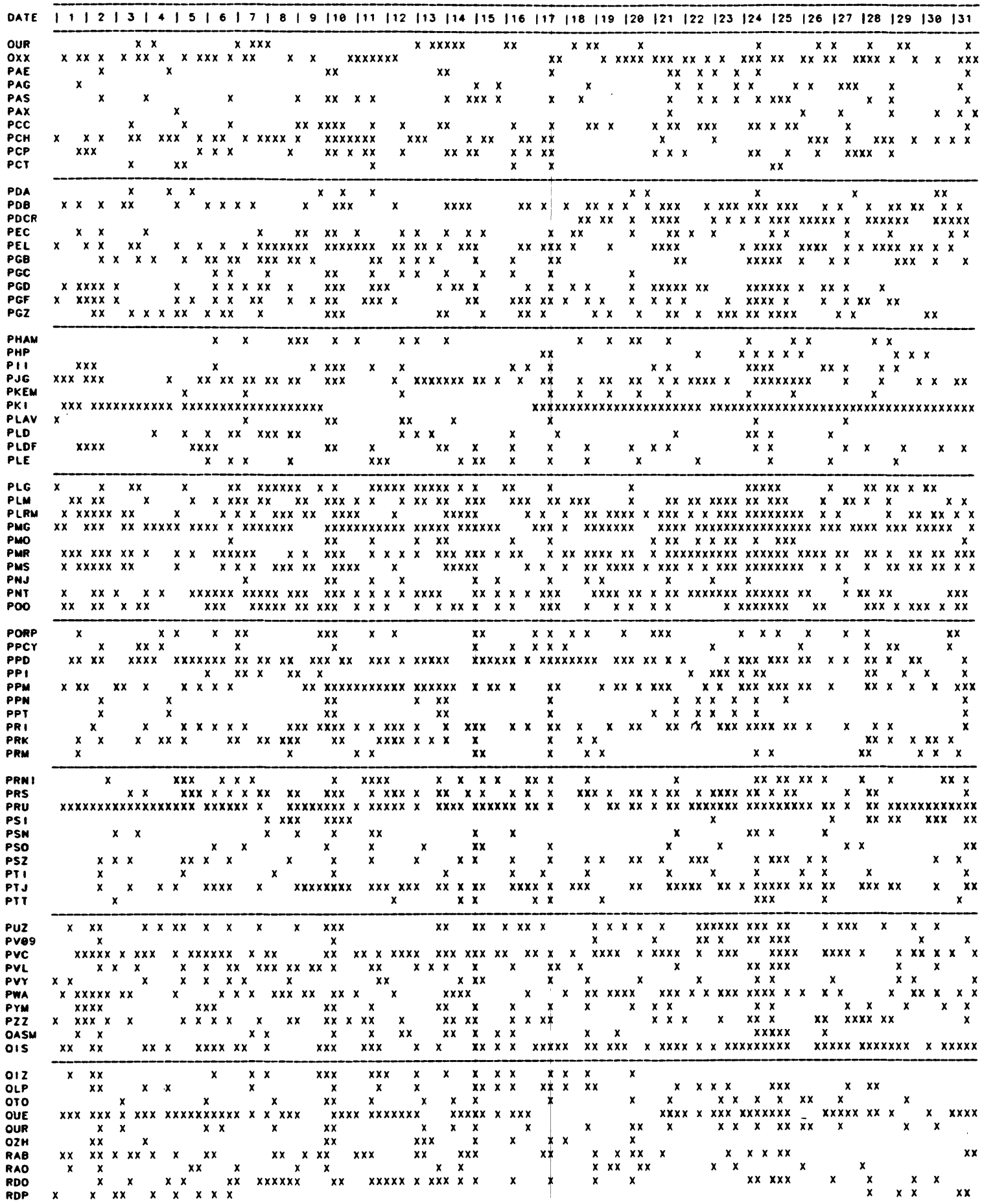

DATE
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
CNB
CNCB
CNIL
CNPM
COO
COOL
COTA
COZ
CPD
CRE
CRP
CRX
CSB
CSI
CSS
CSTJ
CTA
CTI
CTT
CUM
CUT
CVO
CYA
CZI
CZM
DAG
DAU
DDM
DEG
DEV
DHR
DIM
DIX
DL2
DMK
DMN
DOG
DOI
DOT
DOU
DPW
DRA
DRV
DSI
DST
DUG
DUI
DVD
DWY
DZM
EBAN
ECB
ECH
ECHE
ECO
ECOG
ECP
ECRI
EDC
EDM
EHOR
EJIF
EKA
ELC
ELL
ELYF
EMON
EMS
ENIJ
ENN
ENR
EPF
EPLA
EPRU
ERC
EROO
ERUA
ESCF
ESEL
ETA

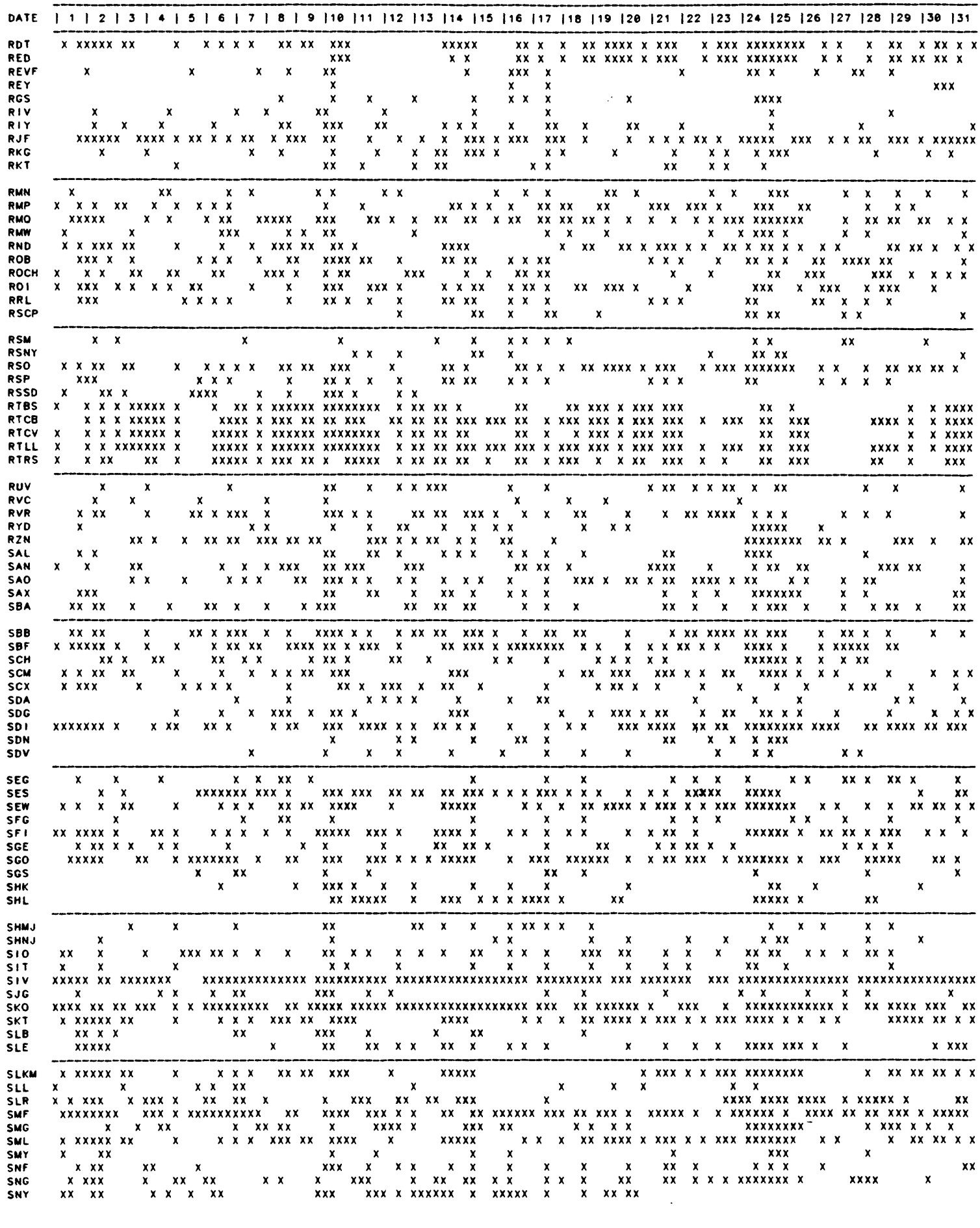

DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31
ETER
ETOR
EVA
EVAL
EVIA
EVR
EVV
EZN
FAI
FBA
FCH
FDF
FEL
FFC
FHC
FIN
FISA
FLN
FMW
FNA
FORR
FRB
FRF
FRI
FUO
FUR
FVI
FVM
FYU
GAZ
GBA
GBTN
GBZT
GCC
GDH
GGP
GHO
GIB
GKN
GLA
GLB
GLD
GLI
GLK
GLM
GMW
GOL
GPA
GRC
GRF
GRG
GRR
GRW
GSC
GTA
GUA
GUAC
GUD
GUMO
GUN
GWF
GYA
GZH
HAH
HAU
HBMT
HBVT
HBZ
HCY
HDA
HFS
HHC
HLBJ
HLW
HNR
HOF
HOM
HON
HOOJ
HPI

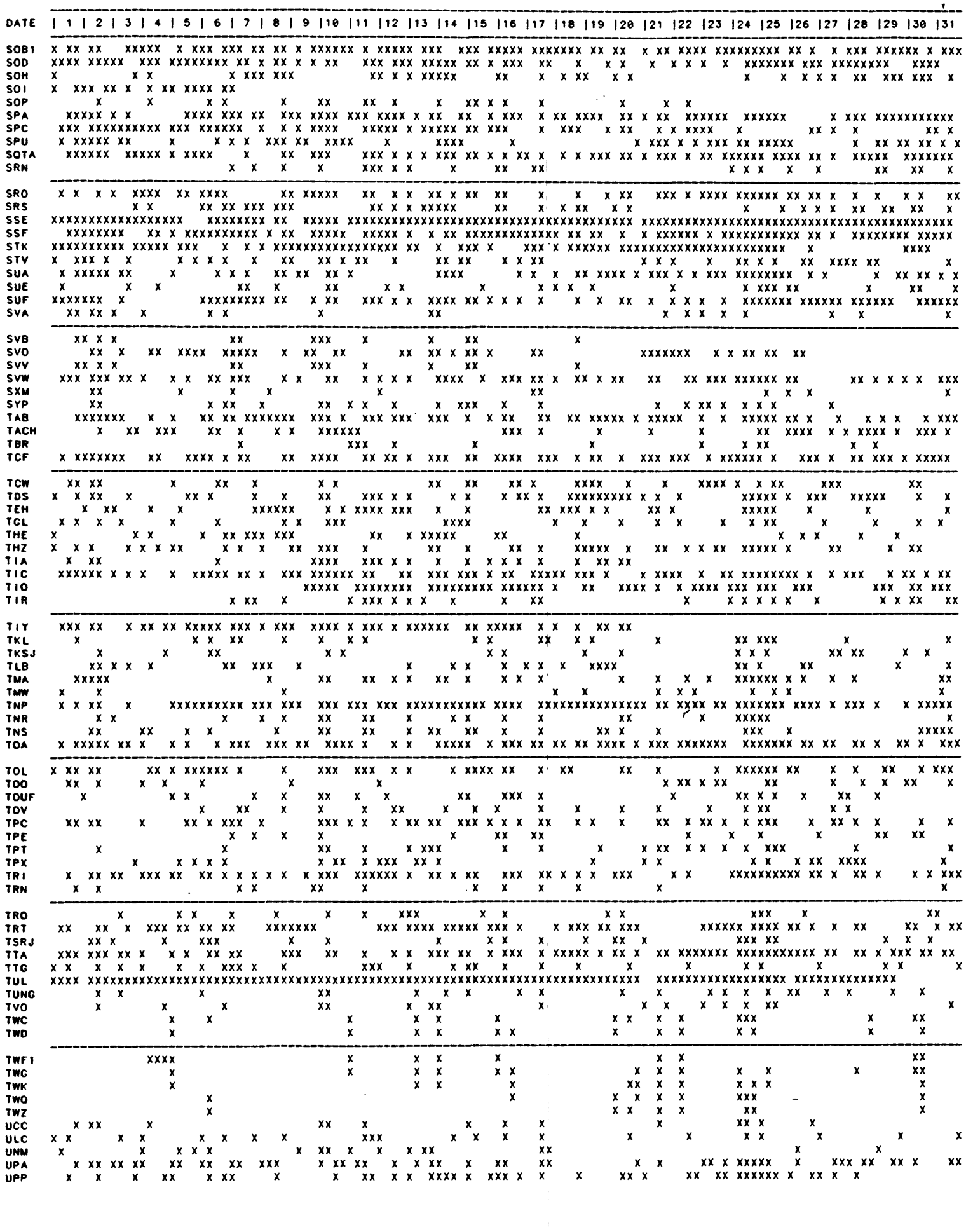

DATE
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
HOL
HRI
HRT
HRY
HUR
HVAR
HYA
HYB
HYT
IAS
IFR
IGT
IHA
IIDJ
III
IIJ
IISM
IIT
IMA
IMI
INK
IPM
ISA
ISK
ISR
ISSF
ITM
IVA
IZI
IZM
JACH
JARJ
JAU
JAY
JFO
JMB
JMI
JNE
JNW
JSC
JVI
KAGJ
KAKJ
KAP
KAS
KBN
KBS
KCT
KDC
KDZ
KEK
KER
KEV
KGM
KGT
KHC
KHL
KHZ
KIC
KIW
KKB
KKM
KKN
KKS
KLB
KLU
KMI
KMSA
KMTA
KNA
KNIM
KNK
KNT
KOD
KOT
KRA
KRI
KSH
KSL
KSP

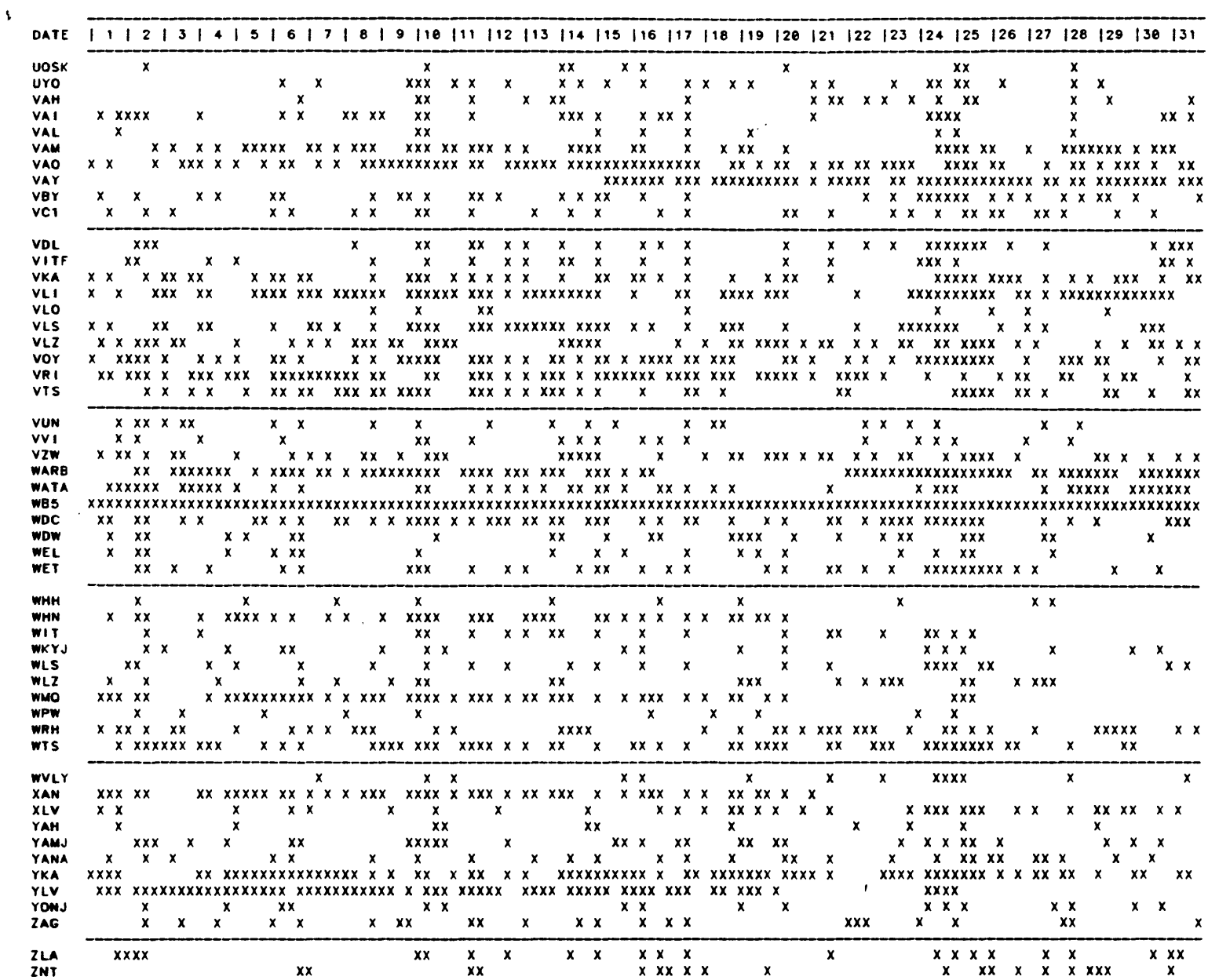

DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31
KTK1
KUMJ
KUPT
KUSJ
KVN
KVT
KZN
LACI
LAT
LBF
LBFM
LBL
LCCH
LCI
LDF
LFF
LHE
LHS
LIC
LIT
LJO
LJU
LKO
LLA
LLAV
LLS
LMR
LNV
LOE
LOF
LOMF
LON
LOR
LPB
LPF
LPG
LPL
LPO
LPR
LRG
LRM
LSA
LSD
LSF
LSK
LTMT
LTZ
LVI
LVVM
LWI
LZH
MADF
MAF
MAIO
MAL
MAT
MAW
MBC
MBH
MBL
MBU
MCK
MCMT
MCNL
MCO
MCT
MCW
MDI
MDJ
MDSJ
MDZ
MEKA
MEM
MEMT
MEO
MEU
MFF
MFT
MGG
MGR


DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31
MHC
MHZ
MID
MIN
MJMA
MKS
MKT
MLR
MMB
MMCZ
MME
MMK
MML
MMN
MNDI
MNG
MNI
MNO
MNS
MOF
MOL
MOMI
MORO
MOW
MOX
MQZ
MRRJ
MRW
MRWA
MRX
MTMJ
MTN
MTU
MTUR
MTW
MUN
MVIF
MVM
MWC
MZX
NA2
NAI
NANU
NAV
NB2
NCG
NDF
NDI
NEA
NEO
NEV
NEW
NIIJ
NJ2
NKA
NKY
NNA
NNL
NNT
NOZ
NPA
NPS
NRA0
NSS
NST
NUR
NWA0
ODD1
OFUJ
OGA
OGE
OHR
OLLA
OLY
OPT
ORI
ORO
ORV
ORX
OSS


DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31
OUR
OXX
PAE
PAG
PAS
PAX
PCC
PCH
PCP
PCT
PDA
PDB
PDCR
PEC
PEL
PGB
PGC
PGD
PGF
PGZ
PHAM
PHP
PII
PJG
PKEM
PKI
PLAV
PLD
PLDF
PLE
PLG
PLM
PLRM
PMG
PMO
PMR
PMS
PNJ
PNT
POO
PORP
PPCY
PPD
PPI
PPM
PPN
PPT
PRI
PRK
PRM
PRNI
PRS
PRU
PSI
PSN
PSO
PSZ
PTI
PTJ
PTT
PUZ
PV09
PVC
PVL
PVY
PWA
PYM
PZZ
OASM
OIS
OIZ
OLP
OTO
OUE
OUR
OZH
RAB
RAO
RDO
RDP


DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31
RDT
RED
REVF
REY
RGS
RIV
RIY
RJF
RKG
RKT
RMN
RMP
RMO
RMW
RND
ROB
ROCH
ROI
RRL
RSCP
RSM
RSNY
RSO
RSP
RSSD
RTBS
RTCB
RTCV
RTLL
RTRS
RUV
RVC
RVR
RYD
RZN
SAL
SAN
SAO
SAX
SBA
SBB
SBF
SCH
SCM
SCX
SDA
SDG
SDI
SDN
SDV
SEG
SES
SEW
SFG
SFI
SGE
SGO
SGS
SHK
SHL
SHMJ
SHNJ
SIO
SIT
SIV
SJG
SKO
SKT
SLB
SLE
SLKM
SLL
SLR
SMF
SMG
SML
SMY
SNF
SNG
SNY


DATE
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31
SOB1
SOD
SOH
SOI
SOP
SPA
SPC
SPU
SQTA
SRN
SRO
SRS
SSE
SSF
STK
STV
SUA
SUE
SUF
SVA
SVB
SVO
SVV
SVW
SXM
SYP
TAB
TACH
TBR
TCF
TCW
TDS
TEH
TGL
THE
THZ
TIA
TIC
TIO
TIR
TIY
TKL
TKSJ
TLB
TMA
TMW
TNP
TNR
TNS
TOA
TOL
TOO
TOUF
TOV
TPC
TPE
TPT
TPX
TRI
TRN
TRO
TRT
TSRJ
TTA
TTG
TUL
TUNG
TVO
TWC
TWD
TWF1
TWG
TWK
TWO
TWZ
UCC
ULC
UNM
UPA
UPP



The following stations each reported less than 10 readings:

AAE	ACI	ACO	ACTN	ACU	ADH	AFAR	AGAL	AGX	AHA	AIN	ALJ	ALM	ALPW	AMAN	ANGL	ANGW	ANMR
ANTO	APA	APM	APW	ARO	ATZ	AWKL	BAC	BBD	BCPM	BDF	BERF	BFT	BGIO	BGM	BIM	BIX	BKB2
BKR	BLE	BLF	BLH	BLN	BLS3	BMNM	BMS	BNM	BOT	BPI	BPIL	BRD	BRN	BRT	BRVW	BRW	BTG
BVD	BVW	BWD	CALA	CBN	CBSW	CBTI	CBX	CCMO	CCW	CDR	CEI	CFTV	CGL	CGX	CHIE	CHOI	CIS
CIW	CKO	CLN4	CLNB	CMW	CNZ	COL	COLM	COLW	COP	COR	CPB	CPBX	CPE	CPH	CPI	CPK	CPW
CRF	CRM	CRNM	CROR	CRZF	CSIL	CTAO	CTFE	CVA	CVT	DAF	DAH	DAV	DBN	DBO	DES	DHH	DHJN
DHW2	DLA	DON	DPO	DRTN	DRZ	DSH	DWM	EAB	EALH	EAU	EBG	EBH	EBL	ECBX	ECD	EDI	EDR
EDU	EEO	ELF	ELO	EMEL	EMM	EMX	ENX	EPH	ERK	ESD	ESK	ESR	ESY	ET3	ETW	EZAM	FAM
FCC	FL2	FLR	FMA	FOO	FRS	FRU	GANF	GBL	GBR	GELF	GGC	GHW	GIBL	GL2	GLH	GMD	GMTN
GOIL	GRAI	GRC1	GRC2	GRC4	GRFO	GRI	GRN	GROR	GRQ	GRT	GSH	GSM	GT2	GTD	GUAN	GULW	HATZ
HAY	HBF	HBH	HBO	HDW	HIA	HIL	HIN	HITZ	HKC	HKL	HLD	HLP	HMH	HMT	HOR	HPU	HON
HRV	HSR	HTC	HTW	HUA	HUL	HUTZ	IIA	IKP	ILT	IMW	IRK	ITU	JAO	JBO	JCW	JGI	JLK
JOZ	JRSJ	KAE	KAI	KAIM	KBA	KBR	KETZ	KFH	KFNJ	KHU	KIH	KIP	KIS	KKH	KKU	KLL	KLM
KMOR	KMR	KNH	KOE	KONO	KOSW	KPO	KRO	KSR	KSU	KTD	KUH	LAV	LAZ	LCL	LDMO	LDN	LFU
LIJA	LIS	LISJ	LMW	LMX	LNOR	LOCW	LPA	LPI	LPM	LRDO	LRS	LTCM	LTX	LVNJ	LVP	LVV	MAJO
MAO	MASJ	MBO	MBW	MBZ	MCO	MCP	MD2	MD3	MDW	MEP	MEW	MEX	MGP	MHA	MHI	MILT	MIM
MJ2	MKA	MKL	MKRJ	MLH	MLX	MMU	MNA	MNT	MOH	MOO	MOOW	MOT	MPOR	MSI	MSL	MSU	MTMW
MUDI	MVH	MWH	MXC	NAC	NAO	NBO	NDE	NED	NGH	NGZ	NHIL	NKM	NLO	NLW	NOH	NPH	NSC
NWRM	OBH	OBN	OBO	OD2	OHW	OJEN	ONR	OOW	OPA	OSD	OT2	OTT	OUT	PACW	PAF	PAIG	PAT
PATW	PBX	PCA	PCF	PCM	PEM	PET	PFH	PGO	PGW	PICO	PIG	PINI	PKL	PLAT	PLBC	PLH	PLL
PNL	POF	PDH	PPK	PPL	PRAF	PRW	PRY	PT06	PT08	PT10	PTS	PUH	PUK	PUL	PUYF	PV01	PV02
PV03	PV04	PV05	PV06	PV07	PV08	PV10	PVPS	PWH	PWLA	PZI	QCP	QTFJ	QTRJ	QUA	QZA	RAGM	RAMW
RAR	RATZ	RBL	RC1	RDX	REDW	REMR	REMW	RFI	RIM	ROSA	RPW	RRO	RSW	RUP	RUWJ	RVW	RW1

RW2	RW3	RW4	RW5	RW6	SALJ	SAOF	SAP	SAW	SBM	SCE	SCI	SFS	SFTN	SGAM	SGH	SGU	SHBJ
SHW	SHWJ	SIM	SJAS	SKI	SLM	SMNM	SNOW	SNZO	SOA	SONG	SOSW	SPT	SPW	SPX	SRAT	SRE	SSB
SSG	STB	STD	STEW	STR	STS	STU	STW	SURF	SWH	TAC	TAF	TARW	TATO	TAVF	TAZ	TBH	TBI
TBM	TBT	TCE	TCO	TDD	TDH	TDL	TDM	THI	TID	TIK	TIM	TLC	TLG	TME	TMP	TOD	TPAW
TPP	TPR	TREF	TRH	TRO	TRXW	TSI	TUC	TWM1	TWW	TXNY	TYS	UAV	ULM	UTMA	UTU	UWE	UZH
VBEM	VFP	VGB	VILF	VIPM	VLL	VLMM	VNM	VPD	VSM	VSS	VTG	VTHM	WAH2	WAJH	WAX	WBO	WDIN
WES	WG3	WHA	WHC	WIH	WIN	WIW	WKH	WLA	WLF	WOB	WOH	WPI	WRA	WRD	WRG	WSIL	WTV
WTX	YAK	YAKW	YKU	YPE	YSA	YSS	YYYY	ZGN									