UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

EARTHQUAKE DATA REPORT

SEPTEMBER 1990

by

U.S. Geological Survey

NATIONAL EARTHQUAKE INFORMATION CENTER[1]

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U. S. DEPARTMENT OF THE INTERIOR

Geological Survey

EARTHQUAKE DATA REPORT

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

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

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

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

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

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

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

Hypocenter Symbols

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

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

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

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

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

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

References

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

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

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

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

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* SEP 01, 1990 00h 01m 00.36± 0.88s
38.917 N ± 8.5km 22.068 E ± 8.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.0 (ATH).

EVR	0.20	270	iPgd	01 03.60	-1.3
VLS	1.37	238	ePg	01 26.80	1.2
KZN	1.41	351	ePb	01 26.00	-0.1
ATH	1.60	126	ePb	01 28.30	-0.5
KEK	1.93	295	ePg	01 37.20	3.6X
OHR	2.40	336	ePn	01 40.80	0.5
VAY	2.43	9	ePn	01 40.80	0.1

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

SEP 01, 1990 00h 17m 12.32± 0.45s
12.031 N ± 8.8km 140.470 E ± 7.8km
DEPTH = 33.0km (normal)
4.9mb (12 obs.)
WEST CAROLINE ISLANDS (209)

PJG	4.56	70	eP	18 21.40	0.6
GUA	4.58	70	eP	18 21.00	-0.2
	1.0s	376.00nm			
			eS	19 25.00	
SSE	26.03	320	eP	22 43.50	-0.8
WB5	32.27	191	eP	23 39.60	-0.7
WRA	32.34	191	Pc	23 40.30	-0.6
	0.8s	12.40nm		4.9mb	
CTA	32.42	170	iPc	23 42.10	0.5
	0.9s	17 65nm		5.0mb	
ASPA	36.05	190	eP	24 13.80	0.9
	0.6s	1.00nm		3.9mb	
KMI	37.92	296	Pc	24 31.00	2.1
CHG	40.52	285	eP	24 51.50	1.2
CHTO	40.52	285	eP	24 51.70	1.4
	0.8s	3.84nm		4.2mb	
PSI	42.18	261	ePc	25 03.90	0.0
	0.7s	50.50nm		5.4mb	
DZM	42.40	143	iPc	25 06.00	0.3
STK	43.67	179	iPc	25 15.60	-0.2
	1.0s	5.00nm		4.2mb	
GUN	53.27	296	P	26 31.00	0.2
	0.9s	59.00nm		5.6mb	
PKI	53.65	295	P	26 33.00	-0.6
KKN	53.78	296	P	26 34.10	-0.3
	1.0s	42.00nm		5.4mb	
GKN	54.37	296	P	26 38.40	-0.3
	0.9s	31.00nm		5.3mb	
GBA	61.33	279	Pd	27 24.90	-2.7
	1.1s	9.80nm		4.8mb	
YKA	86.19	27	eP	29 50.50	-0.9
	1.1s	3.10nm		4.4mb	
KEV	86.64	341	eP	29 56.00	2.5
SUF	90.11	335	iP	30 08.70	-1.4
	0.7s	6.20nm		5.0mb	
NUR	91.77	334	iP	30 16.80	-1.0
ZOBO	151.97	102	PKP	37 07.10	6.6X
	0.9s	8.22nm			

S.D. = 1.2 on 22 of 23 obs.

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* SEP 01, 1990 01h 12m 41.57± 0.87s
51.546 N ± 7.8km 6.582 E ±13.0km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.9 (LDG), 2.3 (BNS). mbLg 2.1 (UCC).

WTS	0.47	17	ePg	12 51.50	0.3
BNS	0.69	147	iPc	12 55.40	0.1
	0.3s	72.60nm			
			e	13 04.50	
ENN	0.88	208	iPg	13 01.00	2.5
	0.4s	24.00nm			
			iSg	13 15.50	
MEM	1.01	201	iPd	13 02.30	1.7
			iS	13 16.62	
DOU	1.92	222	P	13 20.20	5.6X
			iS	13 42.00	
CDF	3.17	172	Pn	13 32.40	-0.1
LOR	4.64	204	Pn	13 52.70	-0.6
			Sn	14 45.50	
LBF	4.87	201	Pn	13 56.30	-0.4
			Sn	14 51.20	
SSF	4.92	205	Pn	13 56.70	-0.6
AVF	5.21	205	Pn	14 00.50	-0.8
SMF	5.22	201	Pn	14 01.20	-0.4
BGF	5.56	208	Pn	14 05.30	-1.1
			Sn	15 07.30	
MAF	5.95	208	Pn	14 11.00	-0.8

S.D. = 1.2 on 12 of 13 obs.

SEP 01, 1990 01h 50m 31.41± 0.83s
38.744 N ± 5.7km 26.565 E ±11.1km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.6 (ATH).

PRK	0.55	336	iPnd	50 42.00	-0.6
			eSn	50 49.80	
IZM	0.65	122	iPg	50 43.50	-0.9
			iSg	50 53.00	
SMG	1.06	168	ePn	50 51.60	0.3
EZN	1.10	350	iPn	50 52.20	0.2
CIN	1.66	133	eP	51 01.00	0.4
KGT	1.80	18	iPn	51 02.60	-0.1
EDC	1.89	32	ePn	51 04.00	0.0
BNT	1.92	33	ePn	51 05.00	0.5
IZI	2.75	54	ePn	51 21.00	4.5X
YLV	2.83	49	ePn	51 24.00	6.4X

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

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* SEP 01, 1990 02h 43m 44.81± 1.07s
19.291 N ±10.2km 99.257 E ±13.1km
DEPTH = 33.0km (normal)
3.7mb (1 obs.)
SOUTHEAST ASIA (299)

CHG	0.56	212	iPn	43 56.00	-0.3
			iSg	44 17.00	
CHTO	0.56	212	iPd	43 56.10	-0.2
LOE	3.00	128	ePn	44 30.50	-0.7
			ePg	44 41.50	
			eSg	45 34.00	
NST	3.69	167	ePn	44 42.00	1.0
			ePg	45 00.00	
			eSg	46 06.00	
KMI	6.64	28	Pd	45 23.00	0.2
			S	46 32.50	
NNT	6.68	176	eP	46 20.00	56.8X
WRA	51.99	137	Pd	52 49.60	-3.8X
	0.6s	0.60nm		3.7mb	
BCAO	79.80	271	iPd	56 04.50	12.4X
	0.4s	4.00nm			

S.D. = 0.9 on 5 of 8 obs.

SEP 01, 1990 06h 32m 20.11± 0.59s
43.143 N ± 6.8km 0.465 W ± 4.0km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.6 (LDG).

OGE	0.03	347	Pg	32 21.95	-0.2
			Sg	32 22.92	
ESCF	0.10	231	Pg	32 22.49	-0.4
JAU	0.13	146	Pg	32 23.38	0.0
ATE	0.18	252	Pg	32 24.03	-0.2
			Sg	32 26.70	
MADF	0.26	271	Pg	32 25.66	0.0
			Sg	32 29.64	
ISSF	0.27	245	Pg	32 26.05	0.2
			Sg	32 29.86	
ELYF	0.39	274	Pg	32 28.17	0.1
BOH	0.40	264	Pg	32 28.56	0.2
			Sg	32 34.60	
EPF	0.60	101	Pg	32 32.40	0.1
			Sg	32 41.80	
LPO	1.95	37	Pg	33 00.10	6.6X
			Sg	33 25.30	
LFF	2.00	25	Pg	33 00.20	6.0X
			Sg	33 28.00	
CAF	2.55	45	Pg	33 11.30	9.1X
			Sg	33 43.10	
RJF	2.59	33	Pg	33 10.40	7.7X
			Sn	33 32.60	
			Sg	33 45.60	

S.D. = 0.2 on 9 of 13 obs.

SEP 01, 1990 06h 43m 22.45± 1.39s
33.632 S ± 9.7km 70.529 W ± 7 4km
DEPTH = 86.5 ± 12.8 km
CHILE-ARGENTINA BORDER REGION (127)

PCH	0.02	50	iPc	43 35.00	-0.1
			iS	43 45.00	
SAN	0.21	328	iPc	43 35.20	-0.2
			iS	43 45.20	
CHCH	0.32	199	iPc	43 36.20	0.4
			iS	43 46.50	
TACH	0.34	266	iPc	43 36.00	0.1
			iS	43 46.90	
FCH	0.36	33	iPd	43 36.50	0.1
			iS	43 47.50	
PEL	0.50	345	iPc	43 37.00	-0.1
			iS	43 48.50	
ROCH	0.77	328	iPd	43 39.50	-0.4
			iS	43 52.90	
LNV	0.80	246	iPc	43 39.50	-0.4
			iS	43 52.60	
LCCH	0.88	280	iPd	43 40.70	-0.1
			iS	43 54.50	
JACH	0.95	357	iPc	43 41.90	0.2
			iS	43 56.00	
IHA	1.11	303	eP	43 44.00	0.5
			iS	44 00.40	
RTCB	2.59	35	ePc	44 03.50	0.3
RTLL	2.88	38	ePd	44 06.80	-0.4

S.D. = 0.3 on 13 of 13 obs.

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* SEP 01, 1990 06h 43m 27.46± 1.65s
16.709 N ±18.6km 96.111 W ±12.6km
DEPTH = 99.0 ± 12.1 km
4.0mb (2 obs.)
OAXACA, MEXICO (60)

OXX	0.69	302	iP	43 56.87	11.7X
			iS	44 14.51	
PSM	1.03	90	iP	43 48.68	0.2
			iS	43 58.13	
EVV	1.88	23	iP	43 58.76	-0.2
			iS	44 19.55	
LVVM	3.03	354	iP	44 14.51	0.2
			iS	44 47.27	
IIT	3.11	318	(P)	43 58.13	-17.6X
			(S)	44 55.47	
SCX	3.33	89	eP	44 18.29	-0.2
			iS	44 48.53	
PPM	3.35	315	iP	44 31.53	12.2X
IIA	3.43	315	eP	44 31.53	11.7X
IIJ	4.57	312	(P)	44 35.94	-0.1
SIO	18.96	360	eP	47 43.90	0.2
TUL	19.13	1	iP	47 45.30	-0.1
	0.6s	13.20nm		4.4mb	
			e	47 57.30	
ALQ	20.38	335	eP	48 06.00	7.3X
	0.7s	2.23nm		3.6mb	
			e	48 33.00	

S.D. = 0.3 on 7 of 12 obs.

SEP 01, 1990 06h 57m 16.07± 0.71s
43.139 N ± 7.0km 0.468 W ± 5.4km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.5 (LDG).

OGE	0.03	353	Pg	57 17.97	-0.1
			Sg	57 18.90	
ESCF	0.10	232	Pg	57 18.46	-0.3
ATE	0.18	253	Pg	57 20.07	-0.1
			Sg	57 22.47	
LHE	0.25	206	Pg	57 21.39	-0.1
			Sg	57 24.79	
MADF	0.26	272	Pg	57 21.61	0.1
			Sg	57 25.94	
ISSF	0.26	245	Pg	57 22.08	0.4
			Sg	57 25.90	
EPF	0.60	100	Pg	57 28.40	0.1
			Sg	57 38.00	
LPO	1.95	37	Pg	57 54.60	5.0X
			Sg	58 21.50	
LFF	2.00	25	Pg	57 56.40	6.2X
			Sg	58 23.60	
CAF	2.55	45	Pg	58 06.90	8.7X
			Sg	58 39.10	
RJF	2.59	33	Pg	58 06.90	8.1X
			Sn	58 30.00	
			Sg	58 41.00	

S.D. = 0.3 on 7 of 11 obs.

& SEP 01, 1990 09h 12m 52.50s

01d 09h

36.780 N 121.510 W
DEPTH = 8.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.8 (BRK).

SAO	0.05	106	iPd	12 54.00	-0.4
PRS	0.46	166	iPd	13 01.30	-0.5
GCC	0.46	303	iPc	13 01.10	-0.8
			eS	13 07.10	
LLA	0.48	110	iPc	13 01.90	-0.4
ARN	0.57	358	iPc	13 04.10	0.2
MHC	0.57	349	iPd	13 04.30	0.3
			eS	13 12.40	
PRI	0.93	133	eP	13 10.00	-0.6
PCC	1.00	316	ePd	13 10.50	-1.1
BKS	1.24	332	e(P)	13 14.00	-1.7
BRK	1.24	332	eP	13 15.10	-0.7
			eS	13 31.80	
PHAM	1.30	136	eP	13 15.50	-1.3
ZSP	1.31	333	eP	13 15.20	-1.6
FRI	1.46	81	eP	13 17.50	-1.6
			eS	13 37.20	
CMB	1.54	35	e(P)	13 18.90	-1.4
			eS	13 38.70	
BCH	1.97	144	eP	13 24.50	-2.1

15 obs. ossociated

% SEP 01, 1990 09h 13m 28.28± 2.71s
39.171 N ±21.2km 27.668 E ± 8.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.86	59	ePn	13 44.90	0.0
EDC	1.18	7	ePn	13 50.00	-0.4
BNT	1.20	9	ePn	13 51.00	0.4
EZN	1.23	303	ePn	13 51.10	0.0
KGT	1.31	348	iPn	13 52.50	0.0

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

SEP 01, 1990 10h 00m 45.35± 1.91s
2.730 N ± 6.7km 126.319 E ±10.8km
DEPTH = 59.3 ± 18.0 km
4.8mb (17 obs.)
MOLUCCA PASSAGE (266)

MNI	1.95	229	eP	01 18.00	1.3
			eS	01 41.50	
KKM	10.60	288	eP	03 17.50	0.3
MTN	16.20	163	eP	04 28.10	-2.5
	0.4s		38.00nm	4.9mb	
KNA	18.52	173	eP	04 58.60	-0.8
WB5	23.82	161	iPc	05 53.90	0.0
			eS	10 05.60	
WRA	23.87	161	Pc	05 54.10	-0.3
	0.3s		15.40nm	5.0mb	
IPM	25.31	275	ePd	06 11.90	3.7X
QIS	26.56	151	eP	06 19.00	-0.7
	0.2s		5.00nm	4.7mb	
ASPA	27.26	165	iPd	06 25.70	-0.4
	0.3s		40.00nm	5.5mb	
			iS	10 58.50	
NANU	27.26	202	iPc	06 27.00	1.0
	0.4s		9.00nm	4.7mb	
WARB	28.74	179	eP	06 40.00	0.5
	0.3s		7.00nm	4.8mb	
MEKA	30.13	194	eP	06 51.30	-0.5
CHTO	31.20	303	eP	07 01.00	-0.4
	0.9s		3.62nm	4.1mb	
MRWA	33.27	197	eP	07 19.00	-0.3
	0.4s		5.00nm	4.7mb	
FORR	33.43	177	iPd	07 20.10	-0.5
	0.4s		52.00nm	5.8mb	
COOL	33.79	188	eP	07 23.00	-0.8
KLB	35.09	193	eP	07 35.00	0.1
MAT	35.39	17	eP	07 36.00	-1.5
	0.9s		13.45nm	4.9mb	
MUN	35.83	195	eP	07 44.10	2.9
STK	37.35	158	eP	07 52.80	-1.2
	0.9s		8.00nm	4.6mb	
YAMJ	37.44	18	P	07 56.00	1.3
BJI	38.26	347	eP	08 03.00	1.5
	1.4s		11.00nm	4.6mb	
OFUJ	38.79	19	eP	08 07.20	1.2
LZH	39.16	331	(P)	08 20.00	10.7X
ADE	39.26	164	eP	08 11.30	1.3
	0.9s		58.82nm	5.5mb	
BRS	39.33	141	iPc	08 10.50	-0.2
			i	08 17.50	
BWA	42.40	153	eP	08 37.90	2.1
CAN	43.41	153	eP	08 45.00	1.0
GUN	45.99	307	P	09 04.60	-0.5
PKI	46.22	306	P	09 05.80	-1.1
KKN	46.41	307	P	09 07.20	-1.2
	0.8s		24.00nm	5.2mb	
DMN	46.48	306	P	09 08.20	-0.7
GKN	47.02	307	P	09 12.00	-1.1
GBA	49.48	286	Pd	09 41.40	9.3X
	0.6s		1.90nm	4.3mb	
SUF	92.25	333	eP	13 50.00	0.2
UPP	96.93	331	iP	14 34.10	22.8X
HFS	98.71	332	eP	14 20.70	1.4
	0.5s		0.90nm	4.6mb	
NB2	99.49	333	P	14 21.80	-1.2
	0.9s		1.90nm	4.6mb	

S.D. = 1.2 on 34 of 38 obs.

SEP 01, 1990 10h 15m 06.96± 1.24s
24.856 S ± 7.8km 179.697 E ± 5.3km
DEPTH = 538.2 ± 16.5 km
4.6mb (11 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM	12.48	280	iPd	17 51.70	0.6
PGZ	15.98	190	P	18 25.80	0.0
MNG	16.11	192	P	18 26.70	-0.5
	0.2s		4.00nm	4.6mb	
KIW	16.46	193	eP	18 31.20	0.6
CAW	16.66	192	eP	18 32.10	-0.4
WDW	16.83	192	eP	18 34.10	0.0
MRW	16.85	193	P	18 34.60	0.3
WEL	16.89	193	eP	18 35.00	0.3
			S	21 27.00	
TCW	16.93	194	P	18 35.30	0.2
KHZ	18.24	195	P	18 47.40	-0.4
LTZ	18.90	197	eP	18 53.70	-0.5
RIV	26.37	244	iPd	20 19.50	17.6X
CMS	30.50	250	eP	20 38.30	0.6
	0.8s		9.00nm	4.4mb	
STK	34.12	249	eP	21 08.80	0.5
	1.3s		6.00nm	4.0mb	
ASPA	41.62	262	iPd	22 10.10	0.6
	0.3s		41.00nm	5.4mb	
			iS	27 49.30	
WB5	42.07	267	iPd	22 13.10	0.0
			iScP	27 01.10	
WRA	42.07	267	Pd	22 12.70	-0.5
	0.4s		16.70nm	4.9mb	
FORR	45.68	250	iPd	22 46.00	4.9X
	0.4s		54.00nm	5.4mb	
MTN	47.26	275	eP	22 52.30	-1.1
WARB	47.62	256	iPd	22 55.50	-0.5
COOL	51.61	249	eP	23 25.00	-0.6
KLB	54.37	248	eP	23 45.00	-0.2
MEKA	54.65	254	eP	23 46.00	-1.3
MUN	55.60	247	eP	23 53.00	-0.8
NANU	58.31	258	iPd	24 12.70	0.3
	0.3s		9.00nm	4.6mb	
SPA	65.29	180	iPd	24 58.50	1.2
	0.8s		15.42nm	4.6mb	
PRS	82.42	44	e(P)	26 33.90	0.2
PRI	82.75	45	eP	26 35.90	0.4
BAR	83.36	50	eP	26 28.00	-10.5X
PLM	83.61	49	eP	26 40.20	0.2
SBB	83.74	47	eP	26 40.00	-0.4
FRI	83.88	45	ePc	26 40.40	-0.5
ISA	83.88	46	eP	26 41.00	-0.1
CMB	84.08	43	ePc	26 41.40	-0.6
ORV	84.34	42	e(P)	26 43.00	-0.1
WDC	84.36	40	e(P)	26 43.20	0.0
CLC	84.55	47	eP	26 44.00	-0.3
TPC	84.60	49	eP	26 45.00	0.4
MIN	84.77	41	e(P)	26 44.90	-0.5
GSC	84.77	47	eP	26 46.00	0.5
GLA	84.85	50	eP	26 46.00	0.2
KVN	86.12	44	eP	26 51.90	-0.1
RMW	89.14	35	P	27 05.00	-0.8
CHTO	89.76	291	eP	27 11.50	2.4
	0.8s		3.29nm	4.3mb	
ANMO	91.76	52	eP	27 18.80	0.5
	1.0s		1.75nm	4.0mb	
GOL	94.80	48	eP	27 32.10	-0.1
	1.0s		4.00nm	4.6mb	
NUR	140.42	341	ePKP	33 44.00	8.3X
HFS	143.42	348	ePKP	33 37.30	-3.6X
	0.5s		1.60nm		

S.D. = 0.7 on 43 of 48 obs.

SEP 01, 1990 10h 25m 00.57± 0.44s
44.474 N ± 4.0km 7.316 E ± 4.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.3 (LDG), 2.2 (GEN).

DOI	0.06	301	Pc	25 03.50	0.6
			eSg	25 05.00	
PZZ	0.16	282	P	25 04.33	0.0
			S	25 06.49	
STV	0.23	178	P	25 05.46	-0.1
			S	25 08.23	
ENR	0.26	163	P	25 06.08	0.0
			S	25 09.46	
ROB	0.44	114	P	25 09.97	0.5
			S	25 16.74	
RRL	0.59	320	P	25 11.92	-0.7
			S	25 20.02	
RSP	0.68	357	P	25 14.18	0.1
			S	25 23.92	
FIN	0.69	112	P	25 14.28	0.0
			S	25 23.92	
IMI	0.70	144	P	25 13.87	-0.6
			S	25 23.41	
FRF	1.03	208	Pg	25 20.30	0.2
			Sg	25 32.70	
LRG	1.23	214	Pg	25 23.40	0.0
			Sg	25 40.40	

S.D. = 0.4 on 11 of 11 obs.

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* SEP 01, 1990 13h 40m 12.58± 1.04s
38.911 N ± 7.5km 23.384 E ±12.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.8 (ATH).

ATH	0.97	164	ePn	40 31.30	0.2
			eSn	40 45.50	
EVR	1.23	271	ePn	40 34.80	-0.7
PLG	1.46	2	ePn	40 38.00	-1.0
KZN	1.87	319	ePb	40 46.60	1.6
ITM	2.08	214	ePn	40 47.50	-0.4
VLI	2.22	189	ePn	40 50.20	0.3
OHR	2.96	319	e(Pn)	41 05.50	5.0X

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

SEP 01, 1990 13h 42m 36.51± 1.17s
4.637 N ± 5.3km 127.842 E ± 8.2km
DEPTH = 68.8 ± 10.4 km
4.8mb (14 obs.)
TALAUD ISLANDS (263)

DAV	3.32	317	eP	43 27.20	0.1
MNI	4.37	223	eP	43 41.30	-0.6
			eS	44 30.00	
AAI	8.28	178	eP	44 39.00	2.8
KKM	11.66	277	ePd	45 22.40	0.1
BAG	13.70	329	eP	45 54.00	4.7X
MTN	17.67	169	eP	46 37.10	-2.6
	0.4s		39.00nm	5.0mb	
KNA	20.28	177	eP	47 08.50	-0.6
WB5	25.19	165	eP	47 57.00	-0.4
WRA	25.25	166	Pd	47 57.20	-0.7
IPM	26.73	271	ePd	48 12.40	0.8
MBL	26.81	197	eP	48 12.00	-0.3
QIS	27.57	156	eP	48 19.10	-0.1
	0.4s		4.00nm	4.4mb	
LOE	28.55	298	eP	48 27.50	-0.5
ASPA	28.75	168	iPd	48 29.00	-0.8
	0.7s		15.00nm	4.7mb	
Z	19s		0.34um	4.0Msz	
			LR	01 11.50	
NNT	28.87	288	eP	48 25.20	-5.7X
PSI	28.92	267	ePc	48 30.00	-1.5
NST	29.35	294	eP	48 37.00	1.7
NANU	29.59	204	eP	48 37.60	0.3
WARB	30.66	182	eP	48 47.00	0.3
	0.5s		5.00nm	4.5mb	
CHG	31.53	299	eP	48 54.10	-0.5
CHTO	31.53	299	eP	48 54.60	0.0
	0.7s		3.02nm	4.2mb	
MEKA	32.35	196	eP	49 01.00	-0.5
MAT	33.15	15	(P)	49 07.00	-1.4
Z	21s		0.72um	4.4Msz	

FORR	35.29	180	iPc	49	26.60	-0.1
	0.5s		23.00nm			5.4mb
MRWA	35.53	198	iPd	49	29.00	0.1
	0.4s		3.00nm			4.6mb
COOL	35.90	190	eP	49	32.00	0.0
BAL	36.63	196	eP	49	38.00	-0.1
BJI	36.78	345	eP	49	39.00	-0.3
	1.0s		6.00nm			4.5mb
KLB	37.29	194	eP	49	44.00	0.4
MUN	38.06	196	eP	49	51.00	0.9
LZH	38.31	328	P	49	54.00	1.6
	1.5s		48.00nm			5.2mb
Z	20s		0.30um			4.1Msz
			sP	50	07.50	
			i	50	31.00	
			(S)	55	33.00	
			sS	55	43.00	
STK	38.60	161	iPd	49	54.70	0.0
	0.6s		6.00nm			4.7mb
			e	49	59.80	
NWAO	38.66	194	eP	49	56.00	0.6
BRS	39.92	144	iPc	50	05.60	-0.1
			i	50	12.50	
GUN	46.11	305	P	50	56.80	0.5
DZM	46.17	127	iPc	50	57.80	1.3
PKI	46.37	304	P	50	58.20	-0.1
	0.6s		15.00nm			5.1mb
KKN	46.55	304	P	50	59.60	0.0
GKN	47.16	304	P	51	04.20	-0.2
	0.6s		23.00nm			5.3mb
GBA	50.47	284	P	51	29.30	-0.5
NDI	53.56	302	iPc	51	51.50	-1.3
	0.6s		26.67nm			5.4mb
QUE	62.61	302	eP	52	56.70	0.3
KEV	89.42	340	eP	55	36.00	9.3X
			e	55	45.00	
SUF	91.25	333	eP	55	35.00	-0.2
NB2	98.47	334	P	56	15.50	7.2X
	0.9s		1.40nm			4.5mb
LNV	145.78	151	ePKP	02	11.00	1.7
PEL	146.79	151	iPKPd	02	14.00	2.9X
ZOBO	160.53	128	PKP	02	33.80	2.9X
SIV	165.72	143	PKP	02	37.80	2.6X
S.D. = 1.0 on 42 of 49 obs.						

% SEP 01, 1990 14h 08m 16.05± 1.72s
40.323 N ± 8.9km 29.497 E ±13.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.02	308	iPg	08	16.80	-1.3
YLV	0.26	339	iPg	08	21.30	-0.3
HRT	0.52	15	ePg	08	26.60	0.1
DST	0.98	223	ePn	08	34.80	0.1
CTT	1.16	316	ePn	08	37.80	0.1
BNT	1.21	272	ePn	08	39.00	0.5
EDC	1.25	272	iPn	08	38.00	-1.2
KGT	1.68	275	iPn	08	46.30	0.7
S.D. = 0.9 on 8 of 8 obs.						

& SEP 01, 1990 14h 44m 44.16s
59.440 N 152.767 W
DEPTH = 80.2km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.32	312	iP	44	56.13	-0.7
			eS	45	05.15	
AUE	0.32	256	eP	44	56.14	-0.6
AUH	0.35	258	iP	44	56.95	-0.1
AUI	0.35	253	eP	44	56.29	-0.7
XLV	0.53	88	eP	44	57.31	-1.1
HOM	0.61	69	eP	44	58.56	-0.6
			eS	45	09.71	
CDD	0.68	222	iP	44	59.07	-0.8
			iS	45	10.48	
CNPM	0.79	83	eP	44	59.88	-1.1
PDB	0.80	296	iP	45	00.20	-1.0
MCNL	0.84	253	eP	45	00.61	-1.0
NNL	0.96	50	eP	45	03.10	0.1
BRLK	1.01	70	eP	45	02.87	-0.8
RSO	1.03	0	iP	45	03.23	-0.8
RDT	1.15	9	iP	45	04.42	-1.0
			eS	45	20.17	
NKA	1.52	30	eP	45	10.91	0.9
SLKM	1.67	49	eP	45	11.25	-0.9
			eS	45	31.93	
CKL	1.78	7	eP	45	13.09	-0.6
			eS	45	35.15	
SPU	1.78	11	eP	45	12.98	-0.7
SEW	1.81	67	eP	45	13.91	0.0
BGL	1.84	6	eP	45	13.97	-0.6
CRP	1.86	9	eP	45	14.28	-0.6
CGLM	1.91	11	eP	45	14.76	-0.7
NCG	1.99	8	eP	45	15.93	-0.7
SUA	2.26	25	eP	45	19.82	-0.5
PMS	2.41	40	eP	45	21.20	-1.1
SKT	2.62	13	eP	45	23.90	-1.3
PWA	2.64	32	eP	45	24.54	-0.8
PLRM	2.81	38	eP	45	26.18	-1.5
SML	3.23	41	eP	45	31.46	-2.1
VZW	3.50	60	eP	45	34.60	-2.7
VLZ	3.63	59	eP	45	35.64	-3.4
31 obs. associated						

? SEP 01, 1990 16h 34m 12.25± 9.10s
30.269 S ±56.5km 72.374 W ±52.1km
DEPTH = 10.0km (geophysicist)
OFF COAST OF CENTRAL CHILE (134)

IHA	2.82	167	eP	35	02.50	4.4X
			i(S)	35	31.80	
JACH	2.85	148	iPd	34	58.10	-0.6
			iS	35	25.10	
RTBS	2.87	120	ePc	34	59.40	0.6
ROCH	2.93	157	eP	34	59.20	-0.8
			iS	35	32.00	
PEL	3.21	154	iPd	35	03.00	-0.7
			i	35	34.50	
			iS	35	40.00	
LCCH	3.27	168	eP	35	06.00	1.4
			i	35	46.50	
ZON	3.42	113	eP	35	06.00	-0.8
SAN	3.49	156	eP	35	13.80	6.1X
			iS	35	52.20	
RTLL	3.52	108	iPd	35	07.50	-0.7
			S	35	43.90	
FCH	3.53	150	iPd	35	08.20	-0.3
			iS	35	47.00	
TACH	3.59	160	eP	35	08.70	-0.4
			iS	35	44.60	
RTCV	3.65	117	eP	35	11.00	0.9
PCH	3.70	155	eP	35	11.20	0.4
			iS	35	47.50	
			i	35	53.50	
LNV	3.77	168	eP	35	11.50	-0.1
			i	35	59.80	
CFA	3.79	112	eP	35	12.00	-0.1
			S	35	54.70	
CHCH	3.93	159	iPd	35	13.80	-0.2
			iS	35	52.20	
MDZ	3.98	132	eP	35	16.00	1.3
			i	35	29.60	
			i(S)	36	04.00	
S.D. = 0.8 on 15 of 17 obs.						

SEP 01, 1990 17h 24m 42.39± 0.42s
37.053 N ± 4.3km 28.033 E ± 4.3km
DEPTH = 24.5 ± 3.9 km
4.0mb (9 obs.)
TURKEY (366)
ML 3.9 (ATH).

SMG	1.16	305	ePn	25	03.50	0.5
ELL	1.53	101	iPn	25	10.30	1.7
KSL	1.56	126	iPbd	25	10.70	1.9
			eSb	25	34.50	
KAP	1.65	205	iPbc	25	09.90	-0.2
			eSb	25	31.50	
KHL	1.73	43	iPn	25	12.90	1.5
APE	2.00	271	ePb	25	15.40	0.1
ALT	2.59	39	iPn	25	25.20	1.5
DST	2.59	10	iPn	25	23.70	0.0
PRK	2.59	328	ePn	25	24.00	0.4
NPS	2.65	228	ePn	25	24.50	0.0
EZN	3.08	335	ePn	25	29.90	-0.6
EDC	3.29	358	ePn	25	34.00	0.5
BNT	3.30	359	iPn	25	34.30	0.7
KGT	3.44	351	iPn	25	35.80	0.1
IZI	3.47	19	ePn	25	34.00	-2.1
VAM	3.51	243	ePb	25	40.50	3.8X
ATH	3.55	286	ePn	25	38.30	1.0
YLV	3.66	16	ePn	25	38.30	-0.6
GPA	3.69	28	ePn	25	43.00	3.8X
MFT	3.77	351	ePn	25	39.00	-1.5
HRT	3.97	18	ePn	25	44.00	0.8
ISK	4.09	11	ePn	25	45.00	0.2
VLI	4.10	267	ePn	25	45.00	0.0
CTT	4.10	4	ePn	25	44.80	-0.2
PPCY	4.11	120	eP	25	45.00	-0.2
RDO	4.52	335	ePn	25	51.10	0.0
BBTK	4.64	52	iPc	25	54.00	1.2
DMK	4.77	358	ePn	25	52.50	-2.0
CSS	4.77	114	eP	25	54.20	-0.4
VAY	6.01	317	ePn	26	12.40	0.3
ADI	7.11	122	eP	26	25.00	-2.5
JVI	7.91	128	eP	26	36.00	-2.7
MLR	8.58	350	eP	26	18.00	-30.1X
PRNI	8.85	137	eP	26	48.00	-3.8X
KHC	16.00	324	eP	28	32.90	5.5X
CLL	17.82	328	eP	28	59.00	8.9X
LPG	18.05	305	eP	29	00.10	6.8X
	0.8s		4.70nm			3.7mb
LPL	18.07	305	eP	29	00.30	6.8X
	0.7s		4.40nm			3.7mb
SMF	20.34	306	eP	29	19.80	0.3
	0.7s		6.60nm			4.1mb
LBF	20.37	307	eP	29	18.80	-1.0
	0.8s		6.05nm			4.0mb
LOR	20.55	307	eP	29	19.80	-1.8
	0.8s		5.35nm			4.0mb
SSF	20.70	307	eP	29	22.90	-0.3
	0.8s		4.05nm			3.9mb
AVF	20.71	306	eP	29	23.60	0.4
	0.8s		5.35nm			4.0mb
GRR	23.92	307	eP	29	56.20	1.2
	1.0s		12.00nm			4.4mb
BCAO	33.61	197	ePc	31	24.80	1.8
	0.6s		6.00nm			4.7mb
S.D. = 1.2 on 37 of 45 obs.						

SEP 01, 1990 17h 27m 37.59± 1.18s
40.650 N ± 7.9km 30.046 E ± 8.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

HRT	0.33	301	ePg	27	44.00	-0.5
GPA	0.41	151	iPg	27	46.00	0.0
			iSg	27	52.00	
GBZT	0.48	287	ePg	27	48.30	1.0
			iSg	27	54.80	
YLV	0.52	261	iPg	27	47.30	-0.8
IZI	0.54	235	iPg	27	48.50	0.0
			iSg	27	55.30	
ISK	0	86	299 ePg	27	53.80	-0.3
			eSg	28	04.30	
CTT	1.32	293	iPn	28	02.00	0.0
DST	1.51	227	ePn	28	04.70	0.0
BNT	1.65	260	iPn	28	07.30	0.6
KGT	2.10	265	iPn	28	13.30	0.1
S.D. = 0.6 on 10 of 10 obs.						

% SEP 01, 1990 17h 44m 45.24± 0.99s
38.767 N ± 7.2km 23.473 E ±11.4km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.8 (ATH).

ATH	0.82	166	ePn	45	01.00	0.0
			eSn	45	14.10	
EVR	1.31	277	ePn	45	09.60	0.1
PLG	1.60	359	ePn	45	13.70	0.0
ITM	2.00	218	ePn	45	19.20	-0.3
VLI	2.09	192	ePn	45	21.00	0.3
S.D. = 0.3 on 5 of 5 obs.						

& SEP 01, 1990 17h 57m 09.36s
60.452 N 151.561 W
DEPTH = 57.0km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NKA	0.33	28	iP	57	21.09	1.6
NNL	0.43	162	iP	57	21.20	0.7
RDT	0.44	287	eP	57	19.95	-0.6
			iS	57	29.15	
RSO	0.59	272	eP	57	21.74	-0.7
			eS	57	31.88	
SLKM	0.67	85	iP	57	22.58	-0.6
			eS	57	34.01	
BRLK	0.77	154	eP	57	24.21	-0.2

01d 17h

SPU	0.77	342	iP	57 23.53	-1.0
			eS	57 35.50	
HOM	0.80	183	eP	57 24.41	-0.3
			eS	57 36.43	
CKL	0.84	333	iP	57 24.62	-0.8
			eS	57 36.72	
CRP	0.87	341	eP	57 25.20	-0.6
			eS	57 38.94	
CGLM	0.89	346	iP	57 25.34	-0.7
			eS	57 38.60	
BGL	0.91	334	iP	57 25.70	-0.6
			iS	57 39.20	
CNPM	0.94	170	eP	57 26.09	-0.6
			eS	57 39.43	
NCG	1.00	343	iP	57 26.93	-0.6
			eS	57 41.32	
SUA	1.09	21	iP	57 28.26	-0.5
			eS	57 43.52	
SEW	1.11	107	eP	57 27.62	-1.3
OPT	1.16	227	iP	57 28.89	-0.8
			eS	57 44.37	
PMS	1.26	50	eP	57 30.39	-0.7
			eS	57 46.43	
AUE	1.43	221	eP	57 32.44	-0.8
AUH	1.45	222	eP	57 33.03	-0.6
PWA	1.46	33	eP	57 33.30	-0.4
AUI	1.46	221	eP	57 32.93	-0.9
PDB	1.48	244	eP	57 32.18	-1.8
			eS	57 50.32	
SKT	1.53	1	iP	57 33.88	-0.9
PLRM	1.65	45	eP	57 35.02	-1.3
GHO	1.84	43	eP	57 38.20	-1.0
CDD	1.86	216	eP	57 38.32	-1.0
MCNL	1.89	229	eP	57 38.10	-1.7
CUT	2.06	17	eP	57 41.09	-1.0
SML	2.07	48	eP	57 40.77	-1.6
SCM	2.48	54	eP	57 46.43	-1.7
KLU	2.94	67	eP	57 52.11	-2.6
KTH	3.13	5	eP	57 57.61	0.2

33 obs. ossociated

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* SEP 01, 1990 18h 12m 24.63± 3.22s
32.115 S ±14.4km 71.801 W ±25.8km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	1.08	142	eP	12 45.50	0.3
			i	13 08.50	
JACH	1.17	119	iPd	12 46.10	-0.4
			iS	13 07.30	
PEL	1.39	138	eP	12 51.00	0.9
			i	12 57.00	
			iS	13 18.60	
TACH	1.70	155	eP	12 53.80	-0.7
FCH	1.76	134	eP	12 55.00	-0.6
			iS	13 30.00	
PCH	1.85	145	eP	13 00.20	3.4X
			eS	13 32.50	
LNV	1.86	170	eP	12 57.50	0.7
			iS	13 32.00	
RTBS	2.05	78	e(P)	12 58.30	-1.2
CHCH	2.05	152	eP	12 59.00	-0.7
			i	13 40.00	
MDZ	2.61	108	eP	13 13.60	6.0X
			iS	13 55.10	
RTCV	2.78	86	e(P)	13 11.30	1.2
RTLL	2.94	75	ePd	13 11.00	-1.4
			eS	13 53.90	
CFA	3.07	81	e(P)	13 16.00	1.9

S.D. = 1.2 on 11 of 13 obs.

& SEP 01, 1990 18h 12m 29.38s
39.299 N 111.135 W
DEPTH = 7.4km
UTAH (478)
<SLC-P>. CL 3.3 (SLC).

MSU	1.13	226	eP	12 50.30	-0.6

1 obs. ossociated

SEP 01, 1990 20h 05m 12.55± 0.41s
22.584 N ± 5.6km 144.553 E ±11.1km
DEPTH = 55.8km (2 depth phoses)
4.5mb (6 obs.)
VOLCANO ISLANDS REGION (213)

PJG	8.95	178	eP	07 21.50	-0.4
GUMO	8.95	178	eP	07 21.80	-0.1
GUA	9.00	178	eP	07 21.50	-1.1
	0.8s		214.93nm		6.2mb X
CHJJ	14.26	341	P	08 31.00	-2.0
MAT	14.96	340	(P)	08 42.00	-0.1
	1.0s		15.00nm		4.2mb
			eS	11 27.00	
MTMJ	15.13	339	P	08 43.70	-0.7
NIIJ	15.37	343	P	08 48.20	0.8
YAMJ	16.01	347	eP	08 55.10	-0.5
OFUJ	16.63	352	eP	09 07.20	3.9X
SSE	22.47	297	P	10 07.50	-0.7
CHTO	42.71	274	eP	13 08.90	2.9
WB5	43.36	194	eP	13 07.00	-4.1X
WRA	43.43	194	P	13 10.00	-1.7
	0.8s		7.80nm		4.5mb
ASPA	47.13	193	eP	13 42.10	0.9
	0.7s		6.00nm		4.6mb
	Z 18s		0.19um		4.1Msz
			LR	29 10.90	
PNT	76.86	42	eP	16 59.00	-1.3
WDC	77.78	51	eP	17 06.50	1.0
ORV	78.87	52	eP	17 11.60	0.1
MHC	79.53	54	eP	17 15.80	0.5
CMB	80.22	53	eP	17 19.30	0.5
FRI	81.10	54	eP	17 23.70	0.3
SES	81.59	39	ePd	17 26.00	0.2
			pP	17 40.00	48km
LRM	82.67	43	eP	17 31.90	0.2
FFC	84.40	32	eP	17 30.00	-10.0X
	0.8s		15.00nm		
HFS	88.40	338	eP	17 54.70	-4.8X
	0.4s		1.00nm		4.4mb
NB2	88.58	339	P	18 08.00	7.6X
	1.0s		1 70nm		4.3mb
ALQ	91.68	51	eP	18 15.00	-0.6
	1.0s		4.25nm		4.8mb
			e	18 33.00	64km
ZOBO	148.59	84	PKP	24 54.00	1.5

S.D. = 1.2 on 22 of 27 obs.

% SEP 01, 1990 20h 27m 16.16± 0.52s
42.784 N ± 4.2km 12.818 E ± 8.3km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

MNS	0.41	194	Pc	27 23.80	-0.8
			eSg	27 30.00	
AQU	0.61	135	P	27 28.40	-0.1
ARV	0.72	7	P	27 29.60	-0.7
			eSg	27 41.30	
RMP	0.98	185	P	27 34.80	0.1
			eSg	27 49.50	
RDP	1.03	184	P	27 35.80	0.2
			eSg	27 50.50	
CRE	1.05	323	P	27 36.30	0.2
			eSn	27 51.00	
SDI	1.31	145	P	27 41.00	0.6
SFI	1.34	329	P	27 41.00	0.2
PGD	1.35	324	P	27 41.50	0.3

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

& SEP 01, 1990 21h 06m 28.97s
59.857 N 152.279 W
DEPTH = 75.8km
SOUTHERN ALASKA (2)
<AGS-P>.

HOM	0.38	122	eP	06 41.11	-0.4
			eS	06 50.01	
XLV	0.49	145	eP	06 41.38	-1.1
			eS	06 51.13	
OPT	0.52	247	eP	06 42.07	-0.7
			eS	06 52.02	
NNL	0.53	69	iP	06 43.24	0.5
CNPM	0.62	122	eP	06 43.13	-0.6
			eS	06 53.73	
RSO	0.65	339	eP	06 43.88	-0.4
BRLK	0.71	97	eP	06 44.11	-0.6
			eS	06 55.72	
RDT	0.72	355	eP	06 44.44	-0.4
			eS	06 56.64	
AUE	0.75	229	eP	06 44.35	-0.7
AUH	0.77	231	eP	06 44.92	-0.5
AUI	0.78	229	eP	06 44.94	-0.5
PDB	0.97	267	eP	06 46.47	-1.2
			eS	07 00.13	

NKA	1.03	30	eP	06 50.02	1.7
CDD	1.16	217	eP	06 49.19	-0.9
SLKM	1.22	57	eP	06 50.37	-0.5
MCNL	1.25	238	iP	06 49.82	-1.4
			eS	07 05.57	
SPU	1.33	5	eP	06 52.55	0.2
			eS	07 10.55	
CKL	1.34	359	eP	06 52.73	0.1
			eS	07 10.82	
BGL	1.41	358	eP	06 53.05	-0.4
CRP	1.42	2	eP	06 53.86	0.3
SEW	1.44	79	eP	06 53.88	0.1
CGLM	1.46	5	eP	06 53.86	-0.3
			eS	07 13.76	
NCG	1.55	2	eP	06 55.57	0.2
PMS	1.93	43	eP	07 00.43	0.0
SKT	2.16	9	eP	07 04.53	1.0
VZW	3.08	64	eP	07 14.39	-2.0

26 obs. ossociated

SEP 01, 1990 21h 09m 52.71± 0.51s
40.677 N ± 5.5km 19.917 E ± 5.4km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 3.1 (SKO), 2.6 (TTG). MD 3.2 (ATH).

OHR	0.80	57	iPg	10 07.10	-1.1
			iSg	10 19.10	
KEK	0.97	185	ePg	10 12.10	1.0
ULC	1.38	339	ePg	10 18.20	0.2
			eSg	10 40.00	
KZN	1.46	104	ePb	10 18.60	-0.6
SKO	1.73	41	iPn	10 23.50	0.5
			iSn	10 46.50	
			iSg	10 47.50	
BDV	1.80	333	ePn	10 23.50	-0.5
			eSn	10 50.00	
TTG	1.82	345	ePn	10 24.50	0.3
			eSn	10 51.20	
PVY	1.92	1	ePn	10 27.10	1.3
			eSn	10 55.00	
BRT	2.07	276	P	10 34.30	6.4X
VAY	2.11	71	ePn	10 28.20	-0.3
EVR	2.28	140	ePb	10 33.10	2.0
VLS	2.55	168	ePn	10 32.80	-2.0
ORI	2.72	258	P	10 38.50	1.3
MGR	3.37	262	P	10 45.00	-1.5
SGO	3.51	270	P	10 48.60	0.2
SDI	4.72	285	P	11 04.90	-0.8

S.D. = 1.2 on 15 of 16 obs.

SEP 01, 1990 21h 30m 03.35± 0.61s
40.733 N ± 5.5km 21.714 E ± 5.7km
DEPTH = 5.0km (geophysicist)
GREECE (364)
ML 3.7 (SKO). MD 3.0 (ATH).

KZN	0.43	174	iPgc	30 10.20	-1.8
KBN	0.69	261	iPgc	30 14.00	-3.2X
OHR	0.79	299	iPgc	30 16.60	-2.6
			iSg	30 28.70	
VAY	0.87	48	iPn	30 21.00	0.4
			i	30 35.40	
			i	30 38.30	
LSK	1.03	236	iPg	30 26.50	3.2X
SKO	1.26	351	iPg	30 26.60	-0.5
			i	30 27.80	
			iSg	30 44.00	
			iSn	30 46.70	
BERA	1.34	269	ePn	30 28.90	0.4
PLG	1.37	105	ePb	30 29.00	-0.1
			eSb	30 50.80	
TPE	1.37	252	ePn	30 29.00	-0.1
TIR	1.53	294	ePn	30 32.00	0.7
SRN	1.56	238	ePn	30 32.00	0.2
LACI	1.76	301	ePn	30 37.00	2.3X
KEK	1.79	236	ePn	30 37.10	2.0
EVR	1.82	178	ePb	30 36.50	0.9
BCI	2.05	323	ePn	30 41.30	2.5X
ULC	2.23	304	ePn	30 42.20	0.7
			eSn	31 13.50	
PVY	2.27	326	ePn	30 42.50	0.3
			eSn	31 14.00	
TTG	2.50	313	ePn	30 46.00	0.7
			eSn	31 20.00	
VLS	2.70	199	ePg	30 56.00	7.8X

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MGR      4.74 265 P      31 16.00  -1.2
SGO      4.88 270 P      31 19.00  -0.1
      S.D. = 1.2  on  16 of  21 obs.
-------------------------------------
    SEP  01, 1990  21h 32m 49.86± 0.27s
    39.375 N ± 6.4km    74.760 E ± 6.6km
    DEPTH =  17.3km  (  5 depth phases)
    4.7mb ( 32 obs.) 3.8Msz (  5 obs.)
 SOUTHERN XINJIANG, CHINA          (321)

NDI     10.86 168 iPd    35 28.20   0.7
        0.8s     52.24nm          5.9mb X
QUE     11.18 217 eP     35 32.60   0.5
                  e(S)   37 33.70
GKN     14.00 141 P      36 08.00  -1.7
KKN     14.49 140 P      36 14.60  -1.6
DMN     14.55 141 P      36 16.00  -1.1
GUN     14.70 138 P      36 18.90  -0.2
PKI     14.73 140 P      36 18.20  -1.3
POO     20.78 182 iP     37 34.30   1.7
HYB     22.13 170 eP     37 50.00   3.8X
LZH     23.19  89 Pd     37 59.50   2.8
        1.5s     34.00nm          4.7mb
                  pP     38 04.50   18km
GBA     25.78 174 P      38 22.30   0.9
                  S      42 59.30
CHG     29.27 127 eP     39 05.50  12.2X
CHTO    29.27 127 e(P)   38 51.90  -1.4
VRI     35.50 297 ePd    39 47.50   0.1
MLR     36.09 296 eP     39 54.00   1.5
SUF     37.16 325 eP     40 00.00  -1.2
NUR     37.34 321 eP     40 03.00   0.3
SOD     38.48 332 iP     40 10.50  -1.7
KEV     39.31 336 eP     40 18.00  -1.1
VAY     39.33 290 eP     40 21.00   1.4
KRA     39.56 304 eP     40 21.70   0.3
                  e      40 26.90   18km
KSP     41.79 306 iP     40 40.40   0.7
                  e      40 45.80   18km
HFS     42.72 320 eP     40 45.00  -2.2
        0.5s     15.80nm          5.0mb
     Z  18s       0.19um          4.0Msz
                  LR     57 46.00
PRU     43.02 305 iPc    40 51.00   1.2
                  e      40 55.50   15km
BRG     43.25 306 iP     40 52.80   1.1
        0.6s     10.00nm          4.7mb
CLL     43.77 307 iP     40 56.40   0.5
                  e      42 36.00 548kmX
KHC     43.79 304 iP     40 57.50   1.4
                  e      41 02.90   18km
NB2     43.94 321 P      40 55.00  -2.2
        0.5s      7.20nm          4.8mb
MOX     44.75 306 eP     41 05.00   1.2
GRF     45.19 305 ePc    41 07.90   0.5
     Z  19s       0.10um          3.8Msz
SQTA    45.76 302 eP     41 12.50   0.5
CDF     48.02 304 eP     41 29.80   0.0
        0.8s     8.05nm          4.8mb
BSF     48.49 303 eP     41 33.40   0.0
        0.6s     5.40nm          4.8mb
HAU     48.72 304 eP     41 35.00  -0.1
        0.8s     8.05nm          4.8mb
     Z  20s       0.13um          3.9Msz
MAT     49.19  72 (P)    41 41.00   2.2
LPG     49.21 301 eP     41 39.70   0.5
        0.8s     9.40nm          4.9mb
LPL     49.22 301 eP     41 39.30   0.1
        0.6s     6.30nm          4.8mb
DOU     49.25 307 P      41 48.40   9.3X
SBF     49.28 298 eP     41 39.70   0.2
        0.8s    18.80nm          5.2mb
LOR     50.55 304 eP     41 48.20  -0.9
        0.8s     4.70nm          4.5mb
     Z  20s       0.10um          3.8Msz
LBF     50.57 303 eP     41 48.60  -0.7
        0.6s     2.70nm          4.4mb
SMF     50.76 303 eP     41 50.30  -0.5
        1.0s    10.00nm          4.7mb
SSF     50.85 303 eP     41 50.90  -0.5
        0.6s     2.70nm          4.4mb
AVF     51.03 303 eP     41 52.40  -0.4
        0.7s     9.90nm          4.9mb
BGF     51.44 303 eP     41 55.30  -0.6
        0.8s     3.35nm          4.3mb
MAF     51.74 303 eP     41 58.10  -0.1
        0.7s     6.05nm          4.6mb

TCF     51.94 303 eP     41 59.70  -0.1
        0.8s     2.70nm          4.2mb
EKA     52.32 315 Pc     42 02.90   0.5
        1.0s     7.00nm          4.5mb
LSF     52.40 303 eP     42 02.40  -0.8
        0.6s     4.50nm          4.6mb
CAF     52.52 301 eP     42 04.40   0.3
        0.8s     6.70nm          4.6mb
LDF     52.65 306 eP     42 04.20  -0.8
        0.6s     6.30nm          4.7mb
RJF     52.75 302 eP     42 05.90   0.1
        0.6s     3.60nm          4.5mb
     Z  20s       0.08um          3.7Msz
GRR     53.18 306 eP     42 08.10  -0.8
        0.8s     8.05nm          4.7mb
LPO     53.19 301 eP     42 09.00   0.0
        0.6s     4.50nm          4.6mb
LFF     53.39 302 eP     42 10.50   0.0
        0.6s     5.40nm          4.7mb
LPF     53.42 306 eP     42 09.70  -0.9
        0.6s     5.40nm          4.7mb
BCAO    61.44 251 iPd    43 06.20  -1.6
        0.7s     6.00nm          4.8mb
YKA     78.20   4 eP     44 48.60  -0.7
        0.7s     2.90nm          4.4mb
WB5     81.06 125 eP     45 06.00   0.6
WRA     81.09 125 Pc     45 06.30   0.7
        0.7s     7.60nm          4.8mb
ASPA    83.55 128 iPd    45 19.30   1.0
        0.9s     8.00nm          4.9mb
FFC     86.23 358 ePc    45 30.70  -0.5
        0.8s    10.00nm          5.1mb
PNT     90.78   9 eP     45 55.00   1.9
      S.D. = 1.1  on  60 of  63 obs.
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&  SEP  01, 1990  22h 33m 42.89s
    60.234 N          152.122 W
    DEPTH =  71.9km
 SOUTHERN ALASKA                (  2)
      <AGS-P>.

RDT      0.37 338 iP     33 54.36  -0.7
                  eS     34 03.95
RSO      0.39 306 iP     33 54.83  -0.5
                  iS     34 04.57
NNL      0.46 115 iP     33 56.18   0.5
HOM      0.63 157 eP     33 57.34   0.0
                  eS     34 08.07
NKA      0.67  40 iP     33 59.10   1.3
BRLK     0.78 127 eP     33 58.15  -0.9
OPT      0.81 224 iP     33 58.60  -0.8
                  iS     34 11.81
XLV      0.81 165 eP     33 58.65  -0.7
                  eS     34 11.30
CNPM     0.84 147 iP     33 59.03  -0.8
                  iS     34 12.25
SPU      0.95   2 iP     34 00.54  -0.7
                  iS     34 15.20
CKL      0.97 354 iP     34 00.80  -0.7
SLKM     0.98  73 eP     34 00.50  -1.1
CRP      1.04 359 iP     34 01.82  -0.6
                  eS     34 16.78
BGL      1.04 353 iP     34 01.74  -0.6
CGLM     1.08   3 iP     34 02.30  -0.5
AUE      1.08 216 iP     34 01.66  -1.1
AUH      1.10 218 eP     34 02.12  -1.0
AUI      1.12 217 eP     34 02.22  -1.0
PDB      1.13 248 iP     34 02.01  -1.4
                  eS     34 17.45
NCG      1.17 359 iP     34 03.44  -0.7
SEW      1.34  94 eP     34 04.45  -1.7
                  eS     34 25.34
SUA      1.41  28 iP     34 06.69  -0.5
CDD      1.52 211 eP     34 07.12  -1.5
                  eS     34 26.73
MCNL     1.54 228 iP     34 07.20  -1.6
                  eS     34 25.76
PMS      1.62  50 eP     34 09.43  -0.5
                  iS     34 29.24
SKT      1.78   9 iP     34 10.95  -1.1
PWA      1.79  37 eP     34 11.65  -0.6
SVW      1.93 298 iPc    34 12.10  -2.2
PLRM     2.00  46 eP     34 13.60  -1.5
PMR      2.00  46 eP     34 13.60  -1.5
GHO      2.19  44 eP     34 16.43  -1.5
CUT      2.35  21 eP     34 19.05  -1.0
SML      2.43  48 eP     34 19.44  -1.7

SCM      2.83  53 eP     34 25.21  -1.6
VZW      2.86  71 eP     34 24.03  -3.2
VLZ      2.99  70 eP     34 25.94  -2.9
                  eS     35 00.48
HUR      3.00  22 eP     34 29.35   0.3
KLU      3.29  65 iP     34 30.36  -2.8
                  eS     35 07.37
KTH      3.38   9 eP     34 33.67  -0.8
TOA      3.44  54 eP     34 33.90  -1.4
MCK      3.82  22 eP     34 40.28  -0.2
GLB      4.24  70 eP     34 42.91  -3.6
DDM      4.63  37 eP     34 51.14  -0.8
TGL      4.63  79 eP     34 48.91  -3.0
WRH      4.65  22 eP     34 49.78  -2.4
HDA      4.83  28 eP     34 52.51  -2.2
CCB      4.86  22 eP     34 52.22  -2.9
BALM     4.88  76 eP     34 51.12  -4.4
FBA      5.09  21 eP     34 56.10  -2.2
IMA      5.90 354 ePc    35 07.10  -2.6
      50 obs. associated
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&  SEP  01, 1990  23h 13m 28.43s
    61.972 N          149.306 W
    DEPTH =  40.3km
 SOUTHERN ALASKA                (  2)
      <AGS-P>. ML 3.1 (PMR).

GHO      0.27 138 iP     13 36.28  -0.2
                  iS     13 43.23
PLRM     0.39 168 iP     13 36.99  -0.8
                  eS     13 44.38
PMR      0.39 168 iPc    13 37.00  -0.8
PWA      0.42 220 iP     13 38.03  -0.1
                  iS     13 45.53
SML      0.49 109 iP     13 38.26  -0.8
                  eS     13 47.63
CUT      0.63 314 iP     13 39.93  -1.0
                  eS     13 48.85
PMS      0.74 190 eP     13 41.84  -0.7
SUA      0.85 234 eP     13 43.80  -0.4
SCM      0.95  98 eP     13 44.72  -0.8
                  eS     13 58.53
HUR      1.02 352 iP     13 45.58  -0.9
                  eS     13 58.83
SKT      1.05 271 iP     13 45.87  -1.0
CGLM     1.45 244 iP     13 52.85   0.2
NCG      1.47 248 eP     13 52.48  -0.5
                  eS     14 13.10
TOA      1.48  83 iPc    13 53.30   0.2
CRP      1.53 244 eP     13 54.13   0.2
                  eS     14 14.51
SLKM     1.53 197 eP     13 53.36  -0.4
SPU      1.54 240 eP     13 53.80   0.0
                  eS     14 14.83
NKA      1.55 218 eP     13 55.60   1.7
VZW      1.61 124 eP     13 54.25  -0.6
BGL      1.64 246 eP     13 55.53   0.2
CKL      1.65 243 iP     13 55.49   0.0
VLZ      1.65 119 iP     13 54.49  -0.9
KLU      1.68 105 iP     13 55.26  -0.7
KTH      1.75 336 iP     13 56.04  -0.9
MCK      1.78   5 eP     13 56.01  -1.2
SEW      1.88 182 eP     13 58.76   0.2
RDT      2.05 228 eP     14 00.58  -0.7
NNL      2.17 207 eP     14 04.66   1.8
BRLK     2.35 200 eP     14 06.39   0.9
DDM      2.41  39 eP     14 07.42   1.1
WRH      2.57  12 eP     14 07.02  -1.5
CNPM     2.63 202 eP     14 09.45   0.0
HDA      2.67  23 eP     14 09.25  -0.7
GLB      2.67  99 eP     14 08.97  -1.1
RAGM     2.75 123 eP     14 10.94  -0.2
CCB      2.77  13 eP     14 09.38  -1.9
DOT      2.94  53 eP     14 15.02   1.3
HMT      2.95 122 eP     14 12.80  -1.1
FBA      3.02  12 iPc    14 13.00  -1.8
KAIM     3.15 129 eP     14 12.69  -4.0
SVW      3.15 257 ePd    14 15.20  -1.6
GLM      3.15  15 eP     14 15.25  -1.5
TTA      3.26 290 eP     14 17.00  -1.4
AUE      3.30 219 eP     14 18.74  -0.1
AUH      3.32 220 eP     14 19.31   0.1
TGL      3.35 109 eP     14 17.64  -2.1
BALM     3.47 103 eP     14 19.26  -2.1
WAX      3.48 113 eP     14 19.59  -1.9
SNH      3.62 117 eP     14 23.08  -0.4
CDD      3.73 217 eP     14 24.16  -0.9
```

01d 23h

IMA 4.54 337 ePd 14 34.40 -2.2
51 obs. associated

& SEP 02, 1990 00h 03m 39.38s
60.003 N 152.763 W
DEPTH = 93.5km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.42	214	eP	03 53.46	-0.7
			eS	04 04.35	
RSO	0.46	1	iP	03 54.21	-0.5
			iS	04 06.18	
RDT	0.60	17	iP	03 54.96	-0.7
			iS	04 07.44	
HOM	0.66	121	eP	03 55.77	-0.3
			eS	04 08.44	
AUE	0.72	206	eP	03 55.52	-1.0
AUH	0.73	209	eP	03 56.04	-0.8
NNL	0.74	86	iP	03 57.11	0.3
AUI	0.75	207	eP	03 55.92	-1.0
PDB	0.75	254	iP	03 56.01	-0.9
			iS	04 09.12	
XLV	0.76	136	eP	03 56.01	-1.0
			iS	04 10.00	
CNPM	0.91	121	iP	03 57.80	-0.8
			eS	04 12.69	
BRLK	0.98	103	eP	03 58.79	-0.6
			eS	04 13.99	
NKA	1.06	45	iP	04 01.43	1.2
			eS	04 17.36	
MCNL	1.15	225	iP	03 59.87	-1.5
			eS	04 15.71	
CDD	1.17	203	eP	03 59.96	-1.6
			eS	04 17.40	
CKL	1.22	10	iP	04 01.66	-0.6
			iS	04 19.81	
SPU	1.23	16	eP	04 01.68	-0.7
BGL	1.28	8	iP	04 02.59	-0.4
CRP	1.30	13	iP	04 02.89	-0.5
			eS	04 21.99	
CGLM	1.36	16	iP	04 03.48	-0.6
			iS	04 22.10	
SLKM	1.36	67	eP	04 02.92	-1.1
			iS	04 21.89	
NCG	1.44	12	eP	04 04.51	-0.5
SEW	1.67	85	eP	04 06.28	-1.5
SUA	1.77	33	eP	04 08.79	-0.5
			eS	04 31.56	
SVW	1.80	309	iP	04 07.91	-1.7
PMS	2.01	50	eP	04 11.53	-0.9
			iS	04 35.89	
SKT	2.07	16	eP	04 12.19	-1.0
			iS	04 41.08	
PWA	2.17	39	eP	04 13.84	-0.7
PLRM	2.39	47	eP	04 15.34	-2.1
GHO	2.58	45	iP	04 18.57	-1.6
SML	2.82	48	eP	04 21.19	-2.2
SCM	3.23	53	eP	04 26.90	-2.1
VZW	3.25	68	eP	04 26.18	-3.0
VLZ	3.37	68	eP	04 28.24	-2.6
KLU	3.68	63	iP	04 32.22	-2.9
TOA	3.84	54	iP	04 35.56	-1.8
GLB	4.63	68	eP	04 44.80	-3.5
CCB	5.20	24	P	04 53.64	-2.5

38 obs. associated

? SEP 02, 1990 00h 10m 04.96± 3.71s
46.832 N ±10.1km 8.275 E ±34.9km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
ML 2.1 (LDG).

BSF	1.42	315	Pg	10 30.00	-0.9
			Sg	10 45.50	
LPL	1.70	220	Pg	10 35.20	0.2
			Sg	10 51.60	
LPG	1.70	219	Pg	10 35.00	-0.1
			Sg	10 51.50	
HAU	1.76	313	Pg	10 36.60	0.9
			Sg	10 54.10	
LBF	2.95	275	Pg	10 51.80	-0.9
			Sg	11 20.40	
SMF	3.05	268	Pg	10 53.70	-0.5
			Sg	11 23.20	
SSF	3.27	276	Pg	10 58.70	1.4
			Sg	11 31.90	

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

% SEP 02, 1990 01h 26m 56.26± 0.86s
42.294 N ± 8.5km 7.424 W ± 7.1km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.2 (MDD).

ERUA	0.23	65	iPg	27 02.00	0.8
			eSg	27 05.00	
EZAM	0.95	262	ePg	27 15.00	0.6
			eSg	27 27.70	
STS	1.02	306	ePg	27 15.50	-0.1
			eSg	27 27.50	
EMON	1.14	3	iPgd	27 17.00	-0.7
			eSg	27 31.00	
EPLA	2.45	155	ePn	27 36.30	-0.6
			eSn	28 07.50	
GUD	2.96	123	ePg	27 52.70	8.4X
			eSg	28 28.50	

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

SEP 02, 1990 02h 54m 59.89± 1.88s
0.118 S ± 7.5km 123.121 E ±11.2km
DEPTH = 146.7 ± 19.7 km
4.9mb (18 obs.)
MINAHASSA PENINSULA (265)

KKM	9.22	312	ePc	57 11.50	0.6
			e	58 53.20	
MTN	14.93	148	eP	58 23.00	-1.8
	0.4s		94.00nm		5.5mb
MBL	21.16	189	iPd	59 35.00	0.2
	0.4s		20.00nm		4.9mb
WB5	22.52	151	iPd	59 48.80	0.7
			eS	03 41.20	
			e	06 59.00	
IPM	22.56	282	ePd	59 50.60	2.1
WRA	22.56	152	Pc	59 49.40	0.9
	0.5s		22.10nm		4.8mb
NANU	23.50	198	iPd	59 57.80	0.2
	0.5s		32.00nm		5.0mb
ASPA	25.64	157	iPc	00 18.10	0.4
	0.5s		22.00nm		5.0mb
QIS	25.94	143	iPd	00 20.60	0.2
	0.3s		14.00nm		5.1mb
WARB	26.14	173	eP	00 22.50	0.3
	0.4s		4.00nm		4.4mb
MEKA	26.71	189	iPc	00 26.90	-0.5
	0.3s		9.00nm		4.9mb
LOE	27.33	311	eP	00 32.00	-1.1
MRWA	29.73	193	iPd	00 53.40	-1.0
	0.4s		10.00nm		4.9mb
CHG	30.29	310	ePd	01 00.00	0.5
	0.9s		20.38nm		4.9mb
CHTO	30.29	310	iPd	00 59.80	0.3
	0.8s		10.55nm		4.6mb
			pP	01 22.00	98kmX
BAL	30.93	191	iPd	01 03.70	-1.2
	0.4s		16.00nm		5.1mb
KLB	31.71	189	iPd	01 10.70	-1.1
	0.4s		10.00nm		5.0mb
MUN	32.36	191	eP	01 16.00	-1.4
NWAO	33.10	189	iPc	01 23.30	-0.5
STK	36.10	153	iPd	01 49.90	0.6
	0.9s		8.00nm		4.5mb
MAT	39.07	19	eP	02 12.00	-2.2
	0.8s		14.93nm		4.8mb
LZH	40.23	336	Pd	02 24.90	1.0
	2.0s		43.00nm		4.8mb
BWA	41.54	148	eP	02 37.20	2.7
CAN	42.53	148	eP	02 44.20	1.7
GUN	45.29	311	P	03 05.00	-0.2
PKI	45.47	310	P	03 06.20	-0.4
	0.6s		19.00nm		4.9mb
KKN	45.68	311	P	03 07.80	-0.3
DMN	45.72	310	P	03 08.40	-0.1
GKN	46.27	310	P	03 12.40	-0.3
HFS	99.68	331	eP	08 24.00	-4.0X
	0.5s		1.00nm		4.6mb
ALQ	122.27	48	ePKP	13 39.00	-0.6
	1.0s		2.00nm		

S.D. = 1.1 on 30 of 31 obs.

SEP 02, 1990 04h 02m 11.28± 0.75s
37.029 N ± 6.4km 29.446 E ± 8.9km
DEPTH = 10.0km (geophysicist)

TURKEY (366)
MD 4.0 (ATH).

ELL	0.46	127	iPg	02 20.30	-0.5
			iSg	02 28.30	
KSL	0.91	173	ePb	02 28.80	0.0
			eSb	02 46.10	
CIN	1.22	298	ePg	02 34.00	0.0
			iSg	02 51.00	
KHL	1.29	3	iPn	02 34.80	-0.5
ALT	2.09	14	ePn	02 48.80	1.9
KAP	2.35	232	ePn	02 51.00	0.4
DST	2.65	346	ePn	02 53.50	-1.4
IZI	3.30	0	ePn	03 08.00	3.9X

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

SEP 02, 1990 04h 26m 48.07± 0.14s
0.143 S ± 2.5km 80.283 W ± 2.5km
DEPTH = 14.2km (geophysicist)
5.8mb (77 obs.) 6.1Msz (36 obs.)
NEAR COAST OF ECUADOR (105)
Ms 5.9 (BRK). Mo=3.0*10**18 Nm (PPT). Some damage (VI) in the Jomo-Bahio area. Felt (V) at Chone and (IV) at Guayaquil. Depth from broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=160 Dip=82 Slip= 90
NP2: 340 8 90
Principal Axes:
T Plg=53 Azm= 70
P 37 250
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 2.6±0.9*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 7 No. of sta: 11
Moment Tensor; Scale 10**18 Nm
Mrr= 1.09 Mtt=-5.50
Mff= 4.42 Mrt= 3.31
Mrf=-6.20 Mtf= 3.36
Principal axes:
T Vol= 9.21 Plg=36 Azm= 94
N 0.16 40 326
P -9.36 29 208
Best Double Couple:Mo=9.3*10**18
NP1:Strike=244 Dip=40 Slip= 7
NP2: 149 86 130
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 36C M.W.: 11S, 22C
Centroid Location:
Origin Time 04:26:58.0 0.2
Lat 0.15S 0.02 Lon 80.58W 0.02
Dep 21.2 BDY Half-duration 5.0
Moment Tensor; Scale 10**18 Nm
Mrr= 1.88 0.02 Mtt= 0.12 0.02
Mff=-2.00 0.03 Mrt= 0.37 0.06
Mrf=-1.62 0.09 Mtf=-0.30 0.02
Principal Axes:
T Vol= 2.55 Plg=67 Azm= 62
N 0.04 11 180
P -2.59 20 273
Best Double Couple:Mo=2.6*10**18
NP1:Strike= 22 Dip=27 Slip= 115
NP2: 174 65 78

GGP	1.69	91	iPd	27 19.00	1.2
YANA	1.71	89	iPd	27 19.00	1.0
QTO	1.75	92	iPd	27 20.20	1.6
OUR	1.75	91	iPd	27 19.40	0.8
VC1	1.95	105	iPd	27 23.50	2.0
CAYA	2.31	84	iP	27 29.30	2.6
			S	27 36.80	
ANGL	2.75	95	Pn	27 32.20	-0.7
PSO	3.24	66	eP	27 43.50	3.7X
PURC	4.62	58	ePc	28 00.82	1.2
SALC	4.74	49	iPc	28 00.29	-0.6
SILC	4.84	54	ePc	28 03.01	0.4
ANCC	4.99	43	iPc	28 01.61	-2.7
HOQC	5.12	45	iPc	28 04.15	-2.2

02d 04h

DIAC	5.32	50	ePc	28	08.63	-0.5	BDF	35.49	117	iPc	33	45.29	-1.4				eSS	46	08.00										
CLMC	5.46	43	iPc	28	07.55	-3.6X				epPd	33	49.59	15kmX				eLg	48	09.00										
BUGC	5.68	45	ePd	28	12.32	-1.9				esPd	33	51.74					eLR	50	03.00										
HOBC	6.09	43	ePc	28	16.52	-3.5X				ePP	35	04.49		DAU	49.23	329	P	35	37.40	-1.0									
BOG	7.81	53	iPc	28	44.00	-0.3				eS	39	18.16		SBB	49.31	319	eP	35	39.00	0.2									
			iS	30	25.00		PPD	35.64	130	eP	33	45.20	-2.6	CLC	49.84	320	eP	35	43.00	0.2									
FUQ	8.59	49	eP	28	36.00	-19.2X				e	33	48.80	12kmX	DUG	49.89	327	P	35	44.10	0.8									
UPA	9.09	5	iPc	29	04.00	2.2				e	33	52.50			2.3s	250.00nm			5.8mb										
NNA	12.25	164	iPd	29	44.30	-0.8	PWLA	35.69	349	P	33	46.10	-1.9	ISA	50.31	319	eP	35	47.00	0.5									
	1.0s	960.00nm			7.0mb X		TKL	35.77	355	P	33	47.80	-0.8	ABL	50.33	318	P	35	47.00	0.1									
			i	29	48.00		GBTN	35.81	355	P	33	48.50	-0.5	SYP	50.66	317	eP	35	52.00	2.8									
			iS	31	57.00		RSCP	35.90	353	P	33	48.30	-1.5	BCH	51.11	318	P	35	53.70	1.1									
PT08	12.31	163	iPc	29	46.80	0.6		1.9s	720.16nm			6.2mb		FRI	51.90	320	e(P)	35	57.60	-0.8									
			iS	32	01.00			Z 20s	18.98um			5.9Msz		PRI	52.04	318	ePc	36	00.80	1.1									
TOV	14.36	46	eP	30	12.30	-0.8	UYO	36.63	340	iPd	33	55.00	-0.9	KVN	52.15	323	P	36	00.00	-0.6									
FISA	15.71	43	eP	30	32.00	1.3	OLY	36.97	345	P	33	57.30	-1.4	LLA	52.49	319	e(P)	36	02.80	-0.2									
PLAV	16.15	52	eP	30	39.70	3.2X	BLA	37.17	360	ePc	34	00.10	-0.3	PRS	52.62	318	eP	36	03.50	-0.4									
MORO	16.16	47	eP	30	41.00	4.4X		1.3s	144.23nm			5.6mb		CMB	52.95	320	ePc	36	05.62	-0.8									
GUAC	16.52	51	eP	30	45.00	3.8X		Z 18s	26.12um			6.1Msz					epPd	36	09.26	12kmX									
OLLA	16.79	53	iPd	30	46.70	2.2	POW	37.51	345	P	34	02.40	-0.8				esPd	36	12.07										
CAR	16.98	51	iP	30	39.00	-7.9X	ELC	38.15	348	P	34	07.10	-1.5				iS	43	37.02										
			iS	34	03.00		CBN	38.25	4	eP	34	09.00	-0.4				iScS	45	52.76										
LLAV	17.05	51	iPd	30	49.20	1.4				e	34	50.00	192kmX				eSS	47	20.91										
ARE	18.39	152	eP	31	05.00	0.3	TUL	38.67	340	ePc	34	12.50	-0.5				eHSS	47	22.56										
TPX	19.07	322	(P)	31	10.50	-2.3		0.9s	21.00nm			4.9mb		ARN	53.30	319	P	36	11.00	2.1									
GCM	19.34	357	eP	31	17.10	1.1		Z 18s	1.24um			4.8MszX		MHC	53.36	319	ePc	36	10.20	0.7									
ZOBO	20.02	144	iPc	31	22.43	-1.6				e	35	16.80	322kmX	GCC	53.42	318	e(P)	36	08.20	-1.6									
LPB	20.24	144	P	31	27.00	0.8	SIO	38.70	339	eP	34	11.80	-1.5	LRM	53.83	333	ePc	36	12.20	-0.7									
			S	35	12.00		BIX	38.75	340	eP	34	13.80	0.2	BKS	54.06	319	eP	36	16.10	1.7									
			LR	38	15.00		FVM	39.08	347	P	34	14.80	-1.6		1.2s	125.00nm			5.8mb										
CNCB	20.52	144	iPc	31	28.50	-0.8	CCM	39.33	346	iPc	34	17.42	-1.1		Z 20s	9.00um			5.8Msz										
TCE	21.34	59	eP	31	36.48	-0.6				epPd	34	20.90	12kmX		N 20s	10.00um													
TRN	21.62	60	eP	31	39.45	-0.4				esPd	34	24.21			E 20s	9.00um													
TBH	21.83	61	eP	31	42.09	0.0				ePP	35	49.87					eS	43	54.00										
MGP	22.22	35	P	31	46.00	0.1				iS	40	15.78					eSS	47	52.40										
TPR	22.41	59	eP	31	47.69	-0.2				iSS	43	07.94					eLQ	50	51.60										
BOT	22.46	59	eP	31	47.24	-1.0				e	44	22.80					eLR	53	48.00										
PORP	22.52	36	P	31	52.50	3.7X	VAO	39.56	127	eP	34	18.40	-2.3	ZSP	54.11	319	eP	36	20.40	5.7X									
MCP	22.53	34	P	31	48.50	-0.5				e	34	26.40	27kmX	ORV	54.55	321	ePc	36	18.40	0.4									
LRS	22.59	35	P	31	49.00	-0.6				e	34	58.50		MIN	55.08	322	e(P)	36	21.00	-1.1									
SJG	22.85	37	eP	31	52.50	0.3	LPA	40.40	151	iPc+	34	27.60	0.3	WDC	55.80	322	ePc	36	24.80	-2.3									
CPD	22.94	37	P	31	53.00	0.0		1.0s	448.00nm			6.1mb		LBFM	55.85	323	P	36	27.80	0.1									
CSB	22.99	36	P	31	53.00	-0.5		Z 19s	106.94um			6.7Msz		SCH	55.89	9	eP	36	25.00	-2.5									
SVB	23.10	54	eP	31	54.05	-0.5	ACO	40.62	336	eP	34	30.00	0.8	SES	56.76	337	ePc	36	33.20	-0.7									
LPR	23.17	37	P	31	56.00	0.7	GMTN	41.21	7	eP	34	34.00	0.1		1.7s	368.00nm			6.1mb										
OXX	23.56	317	(P)	32	02.00	2.7	PNJ	41.24	7	iP	34	34.60	0.5	FHC	56.82	321	ePc	36	34.30	-0.2									
FDF	24.01	51	eP	32	02.55	-0.9	BMA	41.68	125	eP	34	33.80	-4.3X	FFC	57.52	345	ePc	36	37.70	-1.4									
	0.8s	11.00nm			4.5mb X					e	34	37.90	14kmX		1.2s	102.00nm			5.7mb										
MVM	24.11	52	eP	32	03.51	-0.9				e	34	41.70		RKT	57.79	243	iP	36	48.20	6.7X									
CRM	24.21	51	eP	32	04.78	-0.5	JFO	41.94	123	eP	34	38.80	-1.5		1.2s	175.00nm			6.0mb										
BBL	24.24	49	eP	32	05.00	-0.6				i	34	42.60	13kmX	NEW	57.80	332	P	36	51.00	9.8X									
PAG	24.40	48	eP	32	06.00	-1.3				i	34	48.40			Z 18s	14.81um			6.1Msz										
NEV	24.48	45	eP	32	10.26	2.3				i	34	51.80		COR	58.62	325	iPc	36	46.93	0.0									
NEV	24.48	45	eP	32	07.00	-1.0				e	34	59.20					epPd	36	50.90	13kmX									
SIV	24.64	131	iPc	32	08.80	-0.8				e	35	12.90					esPd	36	53.88										
BPA	24.93	46	eP	32	11.00	-1.3	ALQ	42.62	328	iPc+	34	46.80	1.0				ePPP	40	40.97										
ANT	25.30	158	eP	32	16.00	0.2		1.0s	137.50nm			5.6mb					e	41	24.01										
CPB	25.34	45	eP	32	16.57	0.4				e	34	53.00	21kmX				iS	44	51.36										
ACX	25.65	312	(P)	32	22.50	3.4X				e	35	10.00					iScS	46	34.82										
IIT	25.99	318	(P)	32	25.00	2.4	LDN	43.00	359	P	34	46.60	-1.9				e	47	34.00										
PPM	26.24	318	(P)	32	27.50	2.3	ELF	43.15	359	P	34	47.70	-2.1				eSS	48	41.45										
IIA	26.32	318	(P)	32	28.00	2.7	CAI	43.51	99	iPc	34	50.40	-2.8	LON	59.14	328	iPc	36	49.40	-1.2									
III	26.35	315	eP	32	25.00	-0.8	WNY	44.71	7	P	35	01.30	-1.2				epPd	36	52.54	10kmX									
MEX	26.80	317	(P)	32	30.00	-0.1	HBVT	44.78	7	P	35	02.50	-0.5				esPd	36	56.02										
CRX	27.19	317	(P)	32	39.50	5.8X	RSNY	44.79	6	P	35	12.00	8.9X				ePPP	40	33.01										
IIJ	27.45	317	(P)	32	38.50	2.2		Z 22s	10.05um			5.7Msz		RMW	59.59	329	P	36	52.30	-1.5									
MRX	28.44	315	(P)	32	46.50	1.9	GLD	45.77	333	P	35	11.80	0.6	PNT	59.72	331	ePc	36	54.00	-0.5									
RTLL	32.98	161	ePd	33	24.90	0.2		2.2s	280.49nm			5.8mb			1.3s	240.00nm			6.2mb										
RTBS	32.98	163	e(P)	33	26.30	1.7		Z 19s	7.53um			5.7Msz		BMW	59.73	327	P	36	54.10	-0.6									
CFA	33.31	161	eP	33	28.30	0.7	GOL	45.80	333	P	35	11.60	0.1	EDM	59.87	338	iPc	36	54.20	-1.4									
JACH	33.63	165	eP	33	30.80	0.4		2.5s	223.68nm			5.7mb		GMW	60.16	328	P	36	57.30	-0.3									
IHA	33.71	167	eP	33	30.50	-0.4	MIM	46.28	11	P	35	14.90	0.1	MCW	60.90	329	P	37	02.20	-0.4									
ROCH	33.80	166	eP	33	32.50	0.4	GLA	46.34	319	eP	35	16.00	0.4	PGC	61.20	329	eP	37	05.00	0.5									
PEL	34.05	166	iPc	33	33.60	-0.4	BAR	47.35	317	eP	35	25.00	1.4	MBO	64.26	74	iPc	37	29.80	4.3X									
	1.5s	208.33nm			5.8mb		TPC	47.79	319	eP	35	28.00	1.0	AIA	65.99	173	eP	37	35.60	-0.2									
PRM	34.10	357	P	33	33.70	-0.7	PLM	47.87	318	eP	35	30.00	2.1	YKA	67.59	344	eP	37	43.80	-2.2									
LCCH	34.15	167	ePd	33	34.50	-0.3	MSU	48.35	326	P	35	31.70	0.1		0.8s	35.20nm			5.6mb										
JSC	34.25	359	P	33	34.90	-0.7	RVR	48.60	318	eP	35	33.00	-0.2	RUV	67.89	254	iP	37	55.90	7.2X									
FCH	34.32	165	eP	33	37.50	0.8	GSC	49.01	320	eP	35	38.00	1.5		1.2s	95.00nm			5.8mb										
SAN	34.35	166	ePc	33	36.00	-0.5	MWC	49.19	318	eP	35	39.00	1.0	TPT	68.10	254	iP	37	57.10	7.1X									
MZX	34.41	314	(P)	33	42.00	4.8X	PAS	49.22	318	iPd	35	39.25	1.2		1.2s	100.00nm			5.9mb										
LHS	34.44	359	P	33	36.20	-1.1				epPd	35	43.05	13kmX	VAH	68.14	254	iP	37	57.40	7.1X									
TACH	34.47	166	eP	33	37.00	-0.6				esPd	35	45.37			1.2s	75.00nm			5.7mb										
PCH	34.54	166	eP	33	39.00	0.7				ePP	37	35.69		PMO	68.37	254	iP	37	59.10	7.4X									
LNV	34.65	167	iPc	33	38.10	-1.0				ePPP	39	12.00			1.2s	90.00nm			5.8mb										
CHCH	34.81	166	eP	33	40.00	-0.5				iS	42	46.60		TVO	69.96	251	iP	38	09.00	7.4X									
BAO	35.40	117	eP	33	44.70	-1.2				eScS	45	08.00			1.2s	125.00nm			5.9mb										

02d 04h

PPN		70.10	251	iP	38	09.60	7.3X	SVW		83.06	332	ePc	39	12.80	-1.5			1.4s	50.10nm		5.7mb
		1.2s	80.00nm			5.7mb		GRR		83.08	41	iPc	39	15.00	0.4	LPG		88.02	45	iPc	39	40.40	0.9
PPT		70.24	251	iP	38	10.60	7.4X			1.0s	128.00nm			6.1mb				1.6s	118.15nm		6.0mb
		1.2s	215.00nm			6.2mb		EPF		83.24	47	iPc	39	16.30	0.7	BSF		88.13	42	iPc	39	39.70	-0.1
PAE		70.26	251	iP	38	10.70	7.4X			1.2s	139.45nm			6.0mb				1.2s	53.55nm		5.7mb
		1.2s	180.00nm			6.1mb		MFF		83.32	43	iPc	39	16.30	0.4	LOMF		88.14	43	P	39	40.36	0.5
AFR		70.43	252	iP	38	11.80	7.5X			1.2s	142.80nm			6.0mb		WIT		88.26	37	eP	39	41.00	0.9
		1.2s	180.00nm			6.1mb		FLN		83.38	41	iPc	39	16.50	0.4	WTS		88.31	38	ePc	39	39.50	-0.9
GDH		71.58	10	ePd	38	08.00	-2.4			1.0s	128	00nm		6.1mb				0.9s	47.00nm		5.8mb
		1.0s	20.00nm			5.2mb			Z	20s	8.75um			6.1Msz					e	40	27.50	194kmX
			i	47	25.00			IMA		83.44	337	ePc	39	15.50	-0.8	DOI		88.33	46	P	39	41.50	0.7
			i	52	18.00					1.5s	59.20nm			5.6mb		MOF		88.36	42	P	39	40.66	-0.2
			i	55	45.00			LDF		83.59	41	iPc	39	17.60	0.4	ECH		88.39	42	P	39	40.82	-0.1
SIT		71.88	332	eP	38	12.90	0.5			1.0s	124.00nm			6.1mb		SBF		88.45	46	iPc	39	40.90	-0.5
	Z	18s	30.00um			6.6Msz		TTA		83.65	334	ePc	39	16.10	-1.3			1.0s	38.00nm		5.7mb
LKO		74.93	80	Pc	38	28.20	-2.9			1.2s	47.50nm			5.6mb		CDF		88.48	42	iPc	39	41.40	0.0
		0.9s	79.00nm			5.8mb		LFF		83.74	45	iPc	39	18.50	0.5			1.1s	39.05nm		5.6mb
LIC		75.36	84	Pc	38	32.38	-1.1			1.2s	166.60nm			6.1mb		DIX		88.50	44	ePc	39	42.80	1.0
		0.9s	107.00nm			5.9mb		DAG		83.83	12	iPd	39	16.80	-1.1	BNS		88.50	39	iPc	39	41.50	0.2
TIC		75.38	83	P	38	32.44	-1.2			0.9s	39.50nm			5.6mb			Z	22s	6.90um		6.0Msz
		0.9s	77.00nm			5.8mb			Z	20s	17.02um			6.4Msz					iPP	43	23.30	
TIO		75.54	58	iP	38	33.50	-1.0		N	21s	8.60um								iS	50	37.00	
KIC		75.65	83	Pc	38	34.16	-1.0		E	22s	9.78um					GWF		88.73	41	P	39	42.77	0.2
		0.7s	109.50nm			6.0mb		LPO		84.03	45	iPc	39	19.90	0.4	MMK		88.88	44	ePc	39	44.60	1.0
AVE		75.80	56	iPc	38	36.20	0.5			1.3s	216.60nm			6.2mb		ORO		88.88	45	P	39	44.00	0.6
			i	39	30.00	226kmX		RJF		84.32	45	iPc	39	21.40	0.4	FEL		88.96	42	P	39	43.53	-0.3
EZAM		76.51	47	eP	38	39.20	-0.3			1.2s	148.75nm			6.1mb		CKI		89.07	46	P	39	44.50	0.3
STS		76.78	46	eP	38	40.80	-0.2		Z	20s	8.00um			6.1Msz		ZLA		89.20	43	ePc	39	45.60	0.7
EVAL		77.08	51	iPc	38	42.20	-0.6	LSF		84.43	44	iPc	39	21.60	0.1	SLE		89.28	42	ePc	39	45.90	0.7
INK		77.28	342	eP	38	43.00	-0.2	CAF		84.67	45	iPc	39	23.10	0.3	TMA		89.51	44	ePc	39	46.50	0.0
ERUA		77.69	47	eP	38	46.30	0.2			1.4s	139.40nm			6.0mb		LLS		89.61	43	ePc	39	47.50	0.5
IFR		77.72	56	iPc	38	47.50	0.9	TCF		84.90	44	iPc	39	23.90	0.0	SAX		89.85	43	ePc	39	48.90	0.7
EMON		77.77	45	iPc	38	46.60	0.1	ETER		85.01	48	eP	39	27.00	2.5	SPA		89.86	180	iPc	39	48.80	1.1
EJIF		77.89	53	iPc	38	48.40	1.1	MAF		85.14	44	iPc	39	25.30	0.2			1.0s	55.50nm		5.8mb
VAL		77.91	37	iP	38	48.80	1.8	BGF		85.37	43	iPc	39	26.40	0.2		Z	20s	9.01um		6.2Msz
			S	48	45.00			PYM		85.41	44	P	39	26.51	0.0	VDL		89.93	44	ePc	39	49.70	1.2
			SS	53	59.00			AGO		85.52	44	P	39	27.13	0.1	KONO		90.06	31	iPc	39	48.52	0.0
EPLA		78.03	49	iPc	38	48.10	0.1	LBL		85.53	45	P	39	27.24	0.2				e	42	33.30	
EPRU		78.16	52	eP	38	48.20	-0.6	GRC		85.59	43	P	39	27.29	0.0				ePP	43	16.83	
EHOR		78.29	51	iPc	38	49.20	-0.2	AVF		85.74	43	iPc	39	27.60	-0.4				eHPP	43	18.65	
HON		78.62	292	P	39	01.00	9.5X			1.2s	83.30nm			5.8mb		MDI		90.10	44	P	39	47.70	-1.2
	Z	18s	5.98um			6.0Msz		PLDF		85.85	44	P	39	28.84	0.1	OSS		90.40	44	ePc	39	51.00	0.4
AKU		78.99	22	iPc	38	54.10	1.4	SSF		85.86	43	iPc	39	28.40	-0.3	KBS		90.57	11	eP	39	52.00	1.4
		1.8s	181.82nm			5.8mb				1.4s	139.40nm			6.0mb		SAL		90.67	45	P	39	52.00	0.4
TOA		79.05	334	ePc	38	53.00	-0.2	SMF		86.06	43	iPc	39	29.60	-0.1	PII		90.68	46	P	39	52.00	0.3
ALOJ		79.08	52	iPd	38	55.00	1.0			1.4s	139.40nm			6.0mb		8DI		90.73	46	P	39	51.00	-1.1
AAPN		79.09	52	iP	38	54.70	0.7	LOR		86.12	43	iPc	39	29.70	-0.2	NB2		90.85	29	P	39	53.10	0.9
ATEJ		79.12	52	iPd	38	55.50	1.3			1.4s	139.40nm			6.0mb				1.2s	14.80nm		5.2mb
ACHM		79.29	52	iP	38	56.00	0.9		Z	20s	6.50um			6.0Msz		OGA		91.00	43	eP	39	54.20	0.8
APHE		79.38	52	iPc	38	56.30	0.7	LBF		86.18	43	iPc	39	29.80	-0.5	GRF		91.09	40	ePc	39	54.00	0.5
ASMO		79.40	52	iP	38	56.50	0.8			1.4s	69.70nm			5.7mb				3.8s	841.00nm		6.4mb X
EBAN		79.48	51	iPc	38	55.70	-0.3	SNF		86.64	40	iPc	39	32.51	0.1		Z	22s	6.00um		6.0Msz
ECOG		79.53	52	eP	38	56.80	0.4					id	39	40.23	24kmX	SQTA		91.12	43	iPc	39	54.20	0.4
AFC		79.54	52	iPc	38	57.00	0.5	UCC		86.71	39	Pc+	39	32.80	0.1			2.0s	153.00nm		6.0mb
TOL		79.54	49	iPc	38	57.00	0.7					e+	40	13.00	160kmX				e	43	27.50	
			ipPd	39	00.98	13kmX						SKS	50	10.00					i	43	38.70	
			esPd	39	04.95							SP	51	11.00		FUR		91.15	42	eP	39	54.60	0.8
			iPP	41	36.00			DOU		86.81	40	Pc+	39	33.50	0.3		Z	17s	5.00um		6.0MszX
			eS	49	00.95				Z	20s	3.40um			5.7Msz		MOX		91.32	40	ePc	39	55.00	0.5
			eSKS	49	11.87							e	39	43.80	32kmX			2.9s	321.00nm		6.2mb
			e	49	28.26							e	40	14.00			Z	20s	4.20um		5.9Msz
			eSS	54	49.00							SKS	50	09.00			N	16s	1.90um		
GUD		79.58	49	iPc	38	57.00	0.4					SP	51	14.00			E	20s	4.30um		
PMR		80.19	333	eP	38	58.50	-0.7	DBN		87.31	38	iP+	39	36.00	0.4				e	40	36.00	162kmX
		1.1s	69.30nm			5.6mb			Z	20s	9.20um			6.2Msz					eSKS	50	30.00	
	Z	19s	13.70um			6.3Msz						ePP	43	18.00					eS	50	55.00	
ECP		80.29	37	iPc	38	59.80	-0.1					iS	50	18.00		COP		91.66	34	iP+	39	55.00	-0.9
		0.8s	205.00nm			6.2mb						eSP	51	16.00			Z	21s	5.02um		5.9Msz
ETA		80.50	36	iPc	39	01.10	0.1	VITF		87.61	42	P	39	37.17	0.1	VVI		91.99	44	P	39	58.70	1.0
ENIJ		80.55	53	eP	39	03.00	1.3	LRG		87.65	47	iPc	39	37.50	0.1	HFS		92.11	30	eP	39	56.30	-1.6
COL		80.74	336	iPc	39	01.37	-0.7			1.1s	29.30nm			5.5mb				0.5s	0.90nm		4.4mb X
			ipPd	39	05.34	13kmX	ENN		87.70	39	ePc	39	37.00	-0.5		Z	19s	4.07um		5.9Msz
			esPd	39	08.49				0.9s	86.00nm			6.1mb					LR	13	58.00	
			iS	49	07.15							e	39	44.50	23kmX	CLL		92.17	39	iPc	39	58.70	0.3
			eSS	54	23.63							e	40	11.00				3.0s	230.00nm		6.0mb
FBA		80.74	336	ePc	39	00.30	-1.8	MEM		87.75	40	iPc	39	38.07	0.4		Z	18s	5.00um		6.0Msz
		0.8s	29.70nm			5.4mb						id	39	45.65	24kmX				eSKS	50	31.00	
BST		80.96	41	P	39	04.02	0.4	LMR		87.76	47	iPc	39	37.90	0.0				eS	51	07.00	
ECRI		81.10	47	iPc	39	04.90	0.3			1.4s	34.85nm			5.5mb		WET		92.18	41	iPc	39	59.40	0.8
ETOR		81.19	49	iPc	39	05.80	0.7	HAU		87.84	42	iPc	39	38.40	0.1		Z	18s	4.00um		5.9Msz
ESK		82.77	34	eP	39	12.50	-0.4			1.2s	59.50nm			5.8mb		FVI		92.22	44	P	39	59.10	0.4
		1.0s	80.00nm			5.8mb			Z	20s	8.00um			6.1Msz		BRN		92.25	38	eP	40	00.00	1.3
EKA		82.80	34	P	39	12.00	-1.0	FRF		87.87	47	iPc	39	38.30	-0.2	MNS		92.29	48	P	39	59.00	-0.2
		0.9s	46.90nm			5.6mb				0.9s	22.95nm			5.5mb		KHC		92.64	41	iPc	40	01.50	0.8
LPF		82.91	42	iPc	39	13.90	0.2	BNI		87.94	45	P	39	39.80	0.8			1.4s	29.00nm		5.5mb
		1.0s	112.00nm			6.0mb		BER		87.95	30	eP	39	39.30	0.9		Z	18s	1.70um		5.5Msz
EROQ		83.04	49	eP	39	15.10	0.5	LPL		88.00	45	iPc	39	40.20	0.8		N	18s	1.30um		

E 18s 3.10um
e 40 39.10 147kmX
S 50 38.00
BRG 92.79 39 iPc 40 02.00 0.7
2.8s 220.00nm 6.1mb
Z 20s 6.50um 6.1Msz
N 20s 3.50um
E 20s 0.50um
i 40 09.00 22kmX
i 40 39.20
i 40 57.60
e 43 38.50
eSKS 50 36.00
iS 51 12.00
e 52 32.00
VOY 93.01 44 eP 40 03.20 0.7
KMR 93.07 42 iP+ 40 03.40 0.8
i 42 44.90 790kmX
i 43 15.00
iPP 43 49.10
SDI 93.16 48 P 40 02.90 -0.4
MCT 93.20 52 P 40 04.50 0.8
PRU 93.22 40 iPc 40 03.90 0.6
1.8s 62.50nm 5.7mb
Z 18s 5.80um 6.1Msz
N 18s 1.90um
E 18s 5.00um
PP 43 45.50
SKS 49 40.00
S 51 17.00
PS 53 06.00
FAI 93.24 53 P 40 05.50 1.9
CEY 93.40 44 eP 40 04.40 0.2
LJU 93.45 44 eP 40 04.50 0.0
e(S) 50 12.00
GIB 93.49 52 P 40 04.00 -0.9
DUI 93.65 48 P 40 06.00 0.5
VBY 93.99 45 e(P) 40 16.50 9.6X
KSP 94.27 39 ePc 40 09.20 1.1
0.9s 31.00nm 5.7mb
i 40 11.70 8kmX
SGO 94 35 50 P 40 05.00 -3.6X
PTJ 94.46 44 eP 40 09.50 0.3
ZAG 94.48 44 iPc 40 10.40 1.3
VKA 94.51 42 eP 40 07.00 -2.3
3.5s 522.00nm 6.4mb X
Z 17s 3.80um 5.9MszX
i 40 10.30 10kmX
e 43 09.00
i 43 28.10
i 43 57.60
LR 32 00.00
MGR 94.56 50 P 40 06.60 -3.1X
SBA 94.60 191 e(P) 40 09.80 0.6
TDS 95.20 50 P 40 16.00 3.4X
ORI 95.25 50 P 40 15.00 2.1
BRT 95.76 49 P 40 16.00 0.8
SRO 95.89 42 iP 40 15.40 -0.2
KEV 96.07 20 eP 40 25.00 9.0X
e 44 14.00
e 51 40.00
e 53 04.00
e 58 18.00
KRA 96.68 40 eP 40 19.60 0.5
1.5s 91.00nm 6.1mb
Z 22s 4.70um 5.9Msz
E 22s 5.50um
e 40 27.10 23kmX
e 44 26.00
e 51 00.00
WIN 96.77 113 eP 40 19.00 -1.3
0.9s 8.40nm 5.3mb
Z 18s 32.30um 6.9Msz
SPC 96.99 41 eP 40 21.70 0.9
NUR 97.45 29 eP 40 24.00 1.7
Z 20s 4.30um 5.9Msz
e 44 16.00
e 51 14.00
e 53 20.00
e 58 24.00
LR 19 34.00
OHR 98.45 49 eP 40 28.00 0.6
1.5s 71.00nm 6.1mb
BCAO 98.80 86 iPDIFc40 27.08 -2.4
0.8s 8.00nm 5.4mb
ipPd 40 33.21 19kmX
i 44 31.40

SKO 98.81 48 iP 40 28.50 -0.4
iPP 44 31.00
iSKS 51 07.00
iPS 53 26.00
CMP 100.86 44 ePdiff40 23.00 -15.2X
MLR 101.44 44 ePdiff40 42.00 1.1
BUC1 101.73 45 ePdiff40 44.00 2.0X
KMZ 105.63 104 ePKP 45 16.00 2.3X
SLR 106.62 117 iPdiff41 06.00 1.6
Z 18s 21.99um 6.8Msz
LWI 109.06 92 ePdiff41 22.00 6.4X
CRZF 117.54 145 iPdiff42 10.00 17.7X
ePP 46 45.00
eSKKS 54 20.00
eSP 56 55.00
eSS 03 30.00
eSSS 08 00.00
RIV 121.16 230 iPKPd 45 54.50 11.9X
CMS 126.23 230 ePKP 45 52.00 -0.5
1.1s 14.00nm
MAT 129.18 320 ePKP 45 57.00 -1.0
Z 20s 3.90um 6.1Msz
STK 129.21 227 iPKPd 45 57.20 -0.9
1.4s 18.00nm
e 46 29.80
CTA 130.22 243 iPKP 46 03.00 2.6X
1.2s 70.31nm
iSKS 53 12.00
GUMO 133.34 289 ePKP 46 03.50 -2.9X
QUE 136.83 43 ePKP 46 14.00 1.1
e 48 53.50
BJI 137.55 341 ePKP 46 13.00 -0.7
Z 23s 6.26um 6.3MszX
N 19s 5.10um
ePP 48 58.00
ePKS 49 48.00
SS 06 54.00
WRA 140.65 237 PKPc 46 11.70 -8.2X
0.7s 5.60nm
WB5 140.66 238 ePKP 46 12.30 -7.7X
RKG 142.30 204 ePKP 46 23.00 0.5
SSE 143.09 328 PKP+ 46 16.00 -7.9X
Z 20s 4.60um 6.2Msz
e 46 22.50
sPKP 46 29.00
PP 49 40.00
SKKS 56 24.00
i 02 12.00
i 03 42.00
SS 08 20.00
NWAO 143.20 205 ePKP 46 22.00 -2.0X
Z 20s 3.50um 6.1Msz
LZH 144.03 354 iPKPc 46 21.32 -4.3X
iPP 49 34.54
iHPP 49 35.37
KLB 144.11 207 iPKPd 46 22.30 -3.3X
NDI 144.38 35 iPKPc 46 23.80 -2.4X
ePP 49 38.00
ePS 08 06.00
MUN 144.45 205 ePKP 46 23.50 -2.7X
1.1s 15.00nm
BAL 145.42 206 ePKP 46 23.00 -4.9X
MTN 146.28 246 ePKP 46 29.10 -0.6
0.6s 135.00nm
KNA 147.26 240 ePKP 46 32.40 1.2
0.5s 49.00nm
ANP 147.38 321 ePKP 46 30.40 -0.9
BOM 147.68 53 ePKP 46 32.00 0.2
ePP 47 43.00
MEKA 147.81 213 ePKP 46 31.00 -0.9
GKN 148.75 26 PKP 46 33.00 -0.6
KKN 149.22 26 PKP 46 34.00 -0.4
DMN 149.30 26 PKP 46 34.40 -0.2
GUN 149.37 25 PKP 46 33.20 -1.6
PKI 149.46 26 PKP 46 34.40 -0.5
MBL 151.11 222 ePKP 46 33.00 -4.1X
NANU 152.68 213 ePKP 46 46.00 6.7X
HYB 153.01 49 ePKPc 46 39.50 -0.4
ePP 50 38.00
DAV 153.30 286 ePKP 46 36.00 -4.4X
SHL 153.62 16 iPKP 46 40.00 -0.8
BAG 153.84 309 ePKP 46 39.00 -2.3X
HKC 153.86 328 ePKP 46 42.00 1.0
GBA 154.20 58 PKP 46 41.20 -0.4
OCP 154.43 305 ePKP 46 46.00 4.1X
MNI 154.85 273 ePKP 46 50.70 8.2X
KMI 155.00 354 PKPc+ 46 42.00 -0.7

7.0s 1.30nm
Z 18s 7.00um 6.5Msz
N 18s 2.50um
pPKP 46 51.50
e 47 05.00
PP 50 42.00
CHTO 161.43 2 iPKPc 46 48.38 -1.7
eHP'ab47 32.08
iPKPab47 32.58
LOE 162.73 354 ePKP 46 51.00 -0.4
NST 164.56 358 ePKP 46 35.30 -17.9X
KGM 175.95 297 ePKP 46 58.00 -1.4
e 48 42.80
PSI 177.34 17 ePKPc 46 58.50 -1.2
S.D. = 1.1 on 344 of 401 obs.

SEP 02, 1990 04h 37m 19.10± 0.60s
43.308 N ± 9.4km 17.264 E ± 7.1km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.5 (TTG).

HVAR 0.61 258 iPg 37 31.60 0.2
iSg 37 43.30
HCY 1.25 133 ePg 37 41.50 -0.8
eSg 38 00.00
NKY 1.36 111 ePg 37 44.00 -0.2
eSg 38 03.20
BDV 1.54 131 ePg 37 46.50 -0.1
eSg 38 09.10
TTG 1.71 120 ePn 37 49.30 0.2
eSn 38 14.00
PVY 2.11 109 ePn 37 56.20 1.1
eSn 38 25.50
PTJ 2.75 341 eP 38 03.60 -0.6
CEY 3.17 321 eP 38 46.00 36.1X
VOY 3.63 320 e(Pn) 38 16.90 0.3
eSn 39 15.20
S.D. = 0.7 on 8 of 9 obs.

SEP 02, 1990 05h 07m 16.28± 0.88s
0.087 S ± 5.0km 80.229 W ± 6.6km
DEPTH = 28.0 ± 5.4 km
5.0mb (32 obs.)
NEAR COAST OF ECUADOR (105)

GGP 1.64 93 iPd 07 44.70 0.6
YANA 1.66 91 iPd 07 45.30 1.0
QTO 1.70 94 iPd 07 46.30 1.4
QUR 1.70 93 Pd 07 45.80 0.9
VC1 1.91 107 iPd 07 49.80 1.8
CAYA 2.25 86 iP 07 56.00 3.1X
S 08 04.20
ANGL 2.70 96 eP 07 59.10 -0.1
PURC 4.55 58 ePc 08 27.10 1.6
SALC 4.66 49 iPc 08 26.46 -0.3
SILC 4.77 55 ePd 08 29.62 1.1
ANCC 4.91 43 ePc 08 27.77 -2.4
HOQC 5.04 45 ePc 08 30.36 -1.9
DIAC 5.24 50 eP 08 35.22 0.2
CLMC 5.38 43 ePd 08 34.04 -2.9
BUGC 5.60 45 ePd 08 37.92 -2.1
HOBC 6.02 43 ePc 08 42.69 -3.2X
BOG 7.73 53 eP 09 16.50 6.3X
eS 10 21.50
UPA 9.03 4 ePc 09 31.30 3.4X
0.9s 84.03nm 5.9mb
NNA 12.29 164 iP 10 11.80 -0.7
0.8s 22.39nm 5.4mb
iS 12 26.50
PT08 12.35 163 iPd 10 13.30 -0.3
iS 12 36.00
ARE 18.41 153 eP 11 35.00 3.3X
ZOBO 20.03 144 P 11 50.00 -0.7
LPB 20.25 144 (P) 11 50.00 -2.8
CNCB 20.54 145 P 11 54.80 -1.2
TRN 21.54 60 eP 12 05.61 0.0
SIV 24.64 131 iPd 12 36.00 0.0
JSC 34.20 358 P 14 01.00 -0.5
LHS 34.39 359 P 14 03.00 -0.2
TKL 35.71 355 P 14 13.80 -0.7
GBTN 35.76 354 P 14 14.00 -0.9
RSCP 35.85 353 P 14 15.00 -0.7
1.0s 27.11nm 5.1mb
BLA 37.11 360 P 14 26.30 0.0
POW 37.47 345 P 14 28.00 -1.2
TUL 38.63 340 eP 14 39.40 0.4

02d 05h

	1.0s	2.30nm		3.9mb X	SIO	38.67	339	e(P)	14	30.50	-8.9X	SHL	1.29	214	iP	29	49.50	2.6
SIO	38.67	339	e(P)	14	30.50	-8.9X	FVM	39.03	347	P	14	41.50	-0.9					iS	30	04.50	
FVM	39.03	347	P	14	41.50	-0.9	ALQ	42.60	328	eP	15	13.00	1.0	KMI	9.19	97	Pd	31	38.00	0.0
ALQ	42.60	328	eP	15	13.00	1.0		0.9s	7.77nm		4.4mb			N	12s	0.60um				
	0.9s	7.77nm		4.4mb			Z	18s	17.18um		6.0Msz					pP	31	47.50	
Z	18s	17.18um		6.0Msz	GLA	46.33	319	P	15	41.00	-0.8					SP	31	53.50	
GLA	46.33	319	P	15	41.00	-0.8	PLM	47.87	318	P	15	56.00	1.9					S	33	05.00	
PLM	47.87	318	P	15	56.00	1.9	KVN	52.14	323	P	16	27.00	0.2	CHG	9.70	142	eP	31	43.30	-1.5
KVN	52.14	323	P	16	27.00	0.2	SES	56.73	337	eP	17	01.00	1.0		0.7s	23.63nm				5.4mb
SES	56.73	337	eP	17	01.00	1.0	FFC	57.48	345	ePc	17	04.50	-0.6	CHTO	9.70	142	eP	31	43.20	-1.6
FFC	57.48	345	ePc	17	04.50	-0.6		1.2s	21.00nm		5.0mb			NST	12.94	146	eP	32	29.00	0.5
	1.2s	21.00nm		5.0mb	PNT	59.69	331	ePc	17	21.00	0.4	LZH	13.39	43	iPd	32	33.00	-1.6
PNT	59.69	331	ePc	17	21.00	0.4		0.6s	7.00nm		5.0mb		1.5s	245.00nm				5.9mb	
	0.6s	7.00nm		5.0mb	EDM	59.84	338	ePc	17	20.50	-1.1	Z	16s	1.20um					
EDM	59.84	338	ePc	17	20.50	-1.1	YKA	67.55	344	eP	18	10.50	-1.5					sP	33	02.00	
YKA	67.55	344	eP	18	10.50	-1.5		1.0s	4.50nm		4.5mb							eS	36	38.00	
	1.0s	4.50nm		4.5mb	LKO	74.87	80	Pc	18	54.34	-2.6							sS	37	00.00	
LKO	74.87	80	Pc	18	54.34	-2.6		0.9s	12.50nm		5.0mb							SS	37	26.00	
	0.9s	12.50nm		5.0mb	LIC	75.30	84	P	18	58.52	-0.8	NDI	13.85	282	iPd	32	36.00	-4.4X
LIC	75.30	84	P	18	58.52	-0.8	TIC	75.32	83	P	18	58.56	-0.9		0.5s	17.61nm				5.1mb
TIC	75.32	83	P	18	58.56	-0.9		1.0s	11.00nm		4.8mb							eS	34	59.50	
	1.0s	11.00nm		4.8mb	KIC	75.59	83	Pc	19	00.40	-0.6	HYB	15.98	238	eP	33	05.50	-2.6
KIC	75.59	83	Pc	19	00.40	-0.6		0.7s	12.00nm		5.0mb		1.0s	80.00nm				4.8mb	
	0.7s	12.00nm		5.0mb	EPLA	77.96	49	eP	19	14.00	0.2					e	33	12.50	
EPLA	77.96	49	eP	19	14.00	0.2	TOL	79.46	49	eP	19	23.50	1.5					eS	35	48.50	
TOL	79.46	49	eP	19	23.50	1.5	GUD	79.50	49	eP	19	24.00	1.6	POO	19.15	249	iPd	33	48.50	1.2
GUD	79.50	49	eP	19	24.00	1.6	EKA	82.73	34	Pc	19	38.60	-0.2					iS	37	07.50	
EKA	82.73	34	Pc	19	38.60	-0.2		1.0s	11.60nm		4.9mb	GBA	19.29	231	P	33	49.00	0.2	
	1.0s	11.60nm		4.9mb	LPF	82.83	42	iPc	19	40.10	0.6					S	36	21.00	
LPF	82.83	42	iPc	19	40.10	0.6		0.9s	13.10nm		5.0mb	BOM	19.85	251	eP	33	56.50	1.7
	0.9s	13.10nm		5.0mb	GRR	83.00	41	iPc	19	41.10	0.7	SNG	20.78	157	eP	34	04.20	-0.4
GRR	83.00	41	iPc	19	41.10	0.7		0.9s	19.65nm		5.2mb		0.9s	84.03nm				5.1mb	
	0.9s	19.65nm		5.2mb	EPF	83.16	47	iPc	19	42.60	1.2	QUE	22.88	285	eP	34	27.00	1.4
EPF	83.16	47	iPc	19	42.60	1.2		1.0s	12.00nm		5.0mb	IPM	23.35	159	ePc	34	31.70	1.6
	1.0s	12.00nm		5.0mb	MFF	83.24	43	iPc	19	42.40	0.8		0.6s	41.90nm				5.1mb	
MFF	83.24	43	iPc	19	42.40	0.8		0.8s	8.05nm		4.9mb	BJI	23.66	50	eP	34	34.00	1.2
	0.8s	8.05nm		4.9mb	FLN	83.30	41	eP	19	42.60	0.7		2.0s	138.00nm				5.1mb	
FLN	83.30	41	eP	19	42.60	0.7		0.8s	18.80nm		5.3mb	PSI	24.56	165	ePd	34	42.20	0.5
	0.8s	18.80nm		5.3mb	LDF	83.51	41	iPc	19	43.70	0.7		0.8s	72.30nm				5.3mb	
LDF	83.51	41	iPc	19	43.70	0.7		0.8s	14.80nm		5.2mb	SSE	25.33	73	P	34	49.50	0.6
	0.8s	14.80nm		5.2mb	LFF	83.66	45	eP	19	44.70	0.9		1.0s	32.00nm				4.8mb	
LFF	83.66	45	eP	19	44.70	0.9		0.8s	12.10nm		5.1mb	KGM	26.54	156	ePd	35	01.10	0.9
	0.8s	12.10nm		5.1mb	LPO	83.95	45	iPc	19	46.10	0.8	MAT	39.71	64	eP	36	54.00	-0.5
LPO	83.95	45	iPc	19	46.10	0.8		1.0s	20.00nm		5.3mb		1.0s	8.00nm				4.5mb	
	1.0s	20.00nm		5.3mb	RJF	84.25	45	iPc	19	47.40	0.6	PRNI	50.36	288	eP	38	20.00	0.5
RJF	84.25	45	iPc	19	47.40	0.6		0.8s	8.05nm		5.0mb	VRI	54.97	309	ePd	38	54.00	0.4
	0.8s	8.05nm		5.0mb	LSF	84.35	44	eP	19	47.90	0.6	SUF	55.93	329	iP	39	01.20	0.9
LSF	84.35	44	eP	19	47.90	0.6		0.8s	10.75nm		5.1mb		0.5s	29.00nm				5.6mb	
	0.8s	10.75nm		5.1mb	CAF	84.59	45	iPc	19	49.30	0.7	NUR	56.40	327	iP	39	04.00	0.3
CAF	84.59	45	iPc	19	49.30	0.7		1.0s	10.00nm		5.0mb		0.7s	24.00nm				5.3mb	
	1.0s	10.00nm		5.0mb	TCF	84.83	44	iPc	19	50.10	0.4	SOD	56.50	335	iP	39	04.20	-0.1
TCF	84.83	44	iPc	19	50.10	0.4		0.8s	6.70nm		4.9mb	TNR	56.70	309	ePd	39	06.00	-0.1
	0.8s	6.70nm		4.9mb	MAF	85.07	44	eP	19	51.50	0.6	KEV	56.87	338	eP	39	07.00	0.1
MAF	85.07	44	eP	19	51.50	0.6		0.8s	8.05nm		5.0mb	MEKA	58.51	153	eP	39	18.60	-0.3
	0.8s	8.05nm		5.0mb	BGF	85.29	43	iPc	19	52.50	0.5	KRA	59.19	314	eP	39	22.80	-0.5
BGF	85.29	43	iPc	19	52.50	0.5		1.0s	16.00nm		5.2mb	OHR	59.83	304	eP	39	28.00	0.0
	1.0s	16.00nm		5.2mb	AVF	85.66	43	iPc	19	54.10	0.3	UPP	59.89	326	iPc	39	28.00	0.0
AVF	85.66	43	iPc	19	54.10	0.3		0.8s	5.35nm		4.8mb	ZST	61.27	312	eP	39	36.90	-0.7
	0.8s	5.35nm		4.8mb	SSF	85.78	43	eP	19	54.60	0.2	BAL	61.39	156	eP	39	37.60	-1.0
SSF	85.78	43	eP	19	54.60	0.2		0.8s	5.35nm		4.8mb	KSP	61.41	315	iPc	39	38.60	0.1
	0.8s	5.35nm		4.8mb	SMF	85.98	43	eP	19	55.90	0.5					e	39	50.50	
SMF	85.98	43	eP	19	55.90	0.5		0.8s	5.35nm		4.8mb	WB5	61.43	135	iPc	39	38.90	-0.1
	0.8s	5.35nm		4.8mb	LOR	86.04	43	iPc	19	55.90	0.2	WRA	61.46	135	Pd	39	39.40	0.1
LOR	86.04	43	iPc	19	55.90	0.2		0.6s	3.60nm		4.8mb		0.5s	20.80nm				5.5mb	
	0.6s	3.60nm		4.8mb	LBF	86.10	43	eP	19	56.00	-0.1	HFS	61.85	326	eP	39	40.30	-1.1
LBF	86.10	43	eP	19	56.00	-0.1		1.0s	5.00nm		4.7mb		0.5s	50.60nm				5.9mb	
	1.0s	5.00nm		4.7mb	DOU	86.73	40	Pc	19	59.30	0.3	WARB	61.89	145	eP	39	42.00	0.0
DOU	86.73	40	Pc	19	59.30	0.3	ENN	87.62	39	eP	20	04.50	1.2		0.4s	8.00nm				5.2mb
ENN	87.62	39	eP	20	04.50	1.2		0.9s	12.00nm		5.2mb										
	0.9s	12.00nm		5.2mb					e	20	14.50										
		e	20	14.50	MEM	87.67	40	P	20	03.80	0.3										
MEM	87.67	40	P	20	03.80	0.3	HAU	87.77	42	eP	20	04.60	0.5								
HAU	87.77	42	eP	20	04.60	0.5	BSF	88.06	42	eP	20	06.00	0.4								
BSF	88.06	42	eP	20	06.00	0.4	WTS	88.24	38	eP	20	08.00	1.8								
WTS	88.24	38	eP	20	08.00	1.8		1.0s	7.00nm		4.9mb										
	1.0s	7.00nm		4.9mb	CDF	88.40	42	eP	20	08.00	0.8										
CDF	88.40	42	eP	20	08.00	0.8	WRA	140.73	237	PKPd	26	44.80	-1.3								
WRA	140.73	237	PKPd	26	44.80	-1.3		0.6s	2.30nm												
	0.6s	2.30nm					WB5	140.73	238	ePKP	26	44.10	-2.1X								
WB5	140.73	238	ePKP	26	44.10	-2.1X	LZH	143.98	354	PKP	26	49.00	-2.6X								
LZH	143.98	354	PKP	26	49.00	-2.6X		2.0s	40.00nm												
	2.0s	40.00nm							pP	27	01.00										
		pP	27	01.00	GKN	148.68		26 PKP	26	54.40	-5.1X										
GKN	148.68		26 PKP	26	54.40	-5.1X	KKN	149.14		26 PKP	27	00.00	-0.3								
KKN	149.14		26 PKP	27	00.00	-0.3		0.8s	36.00nm												
	0.8s	36.00nm						S.D. = 1.1 on 75 of 84 obs.												
	S.D. = 1.1 on 75 of 84 obs.																				

? SEP 02, 1990 05h 23m 18.16± 5.09s
0.347 N ±22.7km 81.537 W ±58.9km
DEPTH = 10.0km (geophysicist)
OFF COAST OF ECUADOR (104)

SALC	5.50	62	ePd	24	42.13	-0.2
PURC	5.53	69	eP	24	42.95	-0.2
ANCC	5.63	56	eP	24	43.18	-0.8
SILC	5.69	66	eP	24	45.33	0.1
HOQC	5.80	58	eP	24	45.82	-0.8
CLMC	6.09	55	eP	24	50.11	-0.4
DIAC	6.09	61	eP	24	51.14	0.6
BUGC	6.34	56	eP	24	55.96	1.8
HOBC	6.71	54	eP	24	59.27	0.0
ZOBO	21.16	142	P	28	07.00	0.4
SIV	25.92	130	P	28	52.00	-0.4

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

SEP 02, 1990 05h 36m 59.05± 0.80s
6.048 S ± 7.9km 154.603 E ± 8.8km
DEPTH = 414.6 ± 7.2 km
4.6mb (10 obs.)
SOLOMON ISLANDS (193)

RAB	3.05	307	iP	38	03.50	-0.7
			iS	38	54.00	
LAT	7.58	265	eP	38	52.00	1.6
PMG	8.10	245	eP	38	56.00	-0.3
CTA	16.14	209	iPd	40	25.60	0.7
	1.1s	35.44nm				4.7mb
QIS	20.49	224	iPd	41	08.20	0.4
	0.8s	17.00nm				4.6mb
WB5	24.00	233	eP	41	39.80	-0.6
WRA	24.05	233	Pd	41	40.20	-0.7
	0.5s	1.90nm				3.8mb
ASPA	26.52	227	eP	42	02.00	-1.2
	0.6s	7.00nm				4.3mb
			eS	46	03.40	
TCW	39.18	156	P	43	51.20	0.8
MNG	39.18	155	P	43	50.40	-0.1
MRW	39.36	156	P	43	51.80	-0.1
CAW	39.41	155	P	43	52.30	-0.1
WDW	39.51	156	P	43	52.90	-0.3
PGZ	39.52	154	eP	43	52.70	-0.5
CHTO	60.14	296	eP	46	27.00	-0.3
			pP	47	49.90	388kmX
GUN	74.30	301	P	47	55.00	0.2
	0.8s	24.00nm				4.9mb
PKI	74.61	301	P	47	57.00	0.5
	1.0s	24.00nm				4.8mb
KKN	74.78	301	P	47	57.30	0.0
	0.8s	17.00nm				4.8mb
DMN	74.88	301	P	47	58.20	0.2
GKN	75.38	301	P	48	00.60	0.0
	1.0s	28.00nm				4.9mb
GBA	79.03	285	Pc	48	19.90	-0.5
	1.0s	6.70nm				4.3mb
SPA	83.99	180	iPd	48	46.00	0.9
	1.0s	11.50nm				4.6mb
BMA	146.05	148	(PKP)	55	54.00	2.2X

S.D. = 0.7 on 22 of 23 obs.

* SEP 02, 1990 06h 28m 22.00± 0.94s
36.904 N ±11.0km 21.127 E ± 7.2km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
MD 3.1 (ATH).

ITM	0.70	66	ePg	28	34.30	-1.5
			eSg	28	45.50	
VLS	1.34	342	ePb	28	45.90	-0.8
VLI	1.46	97	ePn	28	49.90	1.5
EVR	2.08	15	ePg	29	00.50	3.1X
VAM	2.90	120	ePn	29	08.50	-0.6
KZN	3.43	8	ePn	29	18.70	2.0
SOI	4.20	288	Pd	29	27.50	0.0
OHR	4.21	357	e(Pn)	29	27.00	-0.7
ATN	4.67	287	P	29	34.00	-0.3
SGO	5.83	311	P	29	50.80	0.3

S.D. = 1.3 on 9 of 10 obs.

SEP 02, 1990 06h 29m 24.83± 0.81s
26.645 N ± 4.0km 92.673 E ± 3.6km
DEPTH = 45.9 ± 7.7 km
5.2mb (60 obs.)
EASTERN INDIA (317)

NB2	62.98	327	P	39	48.50	-0.4
	0.6s	13.50nm				5.3mb
COOL	63.35	153	eP	39	50.50	-1.1
CLL	63.39	316	iPc	39	51.40	-0.3
	0.9s	13.00nm				5.0mb
KHC	63.41	314	iP	39	52.40	0.5
			e	40	05.40	
NWAO	63.68	157	eP	39	52.00	-1.8
WET	63.86	314	iPc	39	55.40	0.5
	0.7s	16.00nm				5.2mb
ASPA	63.95	138	iPc	39	55.60	-0.1

0.6s 50.00nm 5.7mb
TRI 63.97 310 iPc 40 02.00 6.4X
i 43 16.00
i 50 44.00
i 55 22.00
i 58 42.00
SOI 64.06 301 P 39 52.00 -4.3X
BHG 64.15 312 iPc 39 57.00 0.3
0.8s 31.00nm 5.4mb
HOF 64.27 315 iPc 39 57.80 0.3
MOX 64.37 316 iP 39 58.50 0.3
DUI 64.38 306 P 39 57.00 -1.5
FVI 64.45 311 P 39 57.70 -0.9
GRF 64.81 315 iPc 40 02.20 1.2
1.4s 40.00nm 5.3mb
SDI 64.84 306 Pc 40 02.00 0.6
ARV 65.04 308 P 40 02.50 -0.1
QIS 65.35 131 iPc 40 04.40 -0.4
0.8s 29.00nm 5.4mb
SQTA 65.36 312 iPc 40 04.00 -0.7
0.7s 31.70nm 5.5mb
i 40 17.50
i 40 21.80
MNS 65.49 307 P 40 04.60 -0.9
RDP 65.62 306 P 40 06.00 -0.4
CRE 65.70 308 P 40 07.50 0.5
PGD 65.80 308 Pc 40 08.50 0.8
OSS 66.20 312 ePc 40 09.90 -0.3
SAL 66.20 311 P 40 09.00 -0.9
BDI 66.54 309 P 40 12.00 -0.3
SAX 66.59 312 ePc 40 12.50 -0.3
PII 66.68 309 P 40 12.00 -1.0
VDL 66.70 312 ePc 40 13.50 0.1
MDI 66.71 311 P 40 12.50 -0.7
LLS 66.91 312 ePc 40 14.50 -0.3
SLE 67.02 313 ePc 40 15.10 -0.1
WTS 67.02 318 ePc 40 15.50 0.5
0.7s 18 00nm 5.2mb
e 40 31.50
ZLA 67.16 313 ePc 40 16.10 0.0
TMA 67.19 311 ePc 40 16.00 -0.5
GWF 67.27 315 P 40 17.00 0.2
FEL 67.30 313 P 40 16.78 -0.3
CDF 67.64 314 P 40 19.07 -0.1
ECH 67.76 314 P 40 19.75 -0.2
MMK 67.82 312 ePc 40 20.50 0.0
PCP 67.84 310 P 40 19.62 -0.8
MEM 67.86 317 Pc 40 20.30 0.0
ENN 67.87 317 ePc 40 21.00 0.6
0.7s 14.00nm 5.1mb
MOF 67.88 314 P 40 20.69 0.0
ORX 67.92 311 P 40 19.21 -1.8
PGF 68.08 308 iPc 40 21.90 -0.1
0.8s 29.55nm 5.4mb
BSF 68.11 314 P 40 21.53 -0.6
FIN 68.16 310 P 40 21.46 -1.0
DIX 68.18 312 ePc 40 23.40 0.6
HAU 68.34 314 iPc 40 23.50 0.0
0.6s 12.65nm 5.1mb
ROB 68.37 310 P 40 23.41 -0.4
IMI 68.47 309 P 40 24.33 -0.1
VITF 68.52 314 P 40 24.16 -0.4
LSD 68.53 311 P 40 25.26 0.3
RSP 68.54 311 P 40 23.31 -1.6
ENR 68.70 310 P 40 24.64 -1.2
DOI 68.74 310 Pc 40 24.50 -1.6
STV 68.76 310 P 40 24.64 -1.6
LPG 68.79 311 iPc 40 27.00 0.4
0.7s 27.55nm 5.3mb
SBF 68.79 309 iPc 40 26.30 -0.1
0.7s 19.85nm 5.2mb
LPL 68.79 311 iPc 40 27.00 0.4
0.6s 30.65nm 5.5mb
PZZ 68.84 310 P 40 24.33 -2.4
DOU 68.87 316 P 40 27.10 0.5
RRL 68.93 311 P 40 26.90 -0.6
SNF 68.94 317 eP 40 42.40 15.3X
BNI 68.97 311 Pc 40 27.00 -0.6
SURF 69.04 310 P 40 27.91 -0.2
FRF 69.43 309 iPc 40 30.10 -0.1
0.8s 10.75nm 4.9mb
GRN 69.54 311 P 40 31.32 0.3
LMR 69.59 309 iPc 40 31.20 0.0
0.8s 18.80nm 5.1mb
LRG 69.66 309 iPc 40 31.90 0.3
0.6s 18.05nm 5.2mb
CTA 69.69 126 iPc 40 32.40 0.3

0.9s 16.81nm 5.0mb
LOR 70.17 314 iPc 40 34.40 -0.3
0.8s 13.45nm 5.0mb
LBF 70.18 313 iPc 40 34.60 -0.2
0.8s 17.45nm 5.1mb
SMF 70.38 313 iPc 40 35.90 -0.1
0.6s 26.15nm 5.4mb
SSF 70.46 314 iPc 40 36.60 0.1
0.8s 40.30nm 5.4mb
AVF 70.65 313 iPc 40 37.50 -0.1
0.7s 19.85nm 5.2mb
BGF 71.05 313 iPc 40 40.10 0.0
0.8s 14.80nm 5.0mb
MAF 71.35 313 iPc 40 42.40 0.5
0.8s 21.50nm 5.2mb
TCF 71.56 313 iPc 40 43.60 0.5
0.6s 24.80nm 5.3mb
EKA 71.69 323 Pd 40 44.50 0.8
0.7s 12.00nm 5.0mb
LSF 72.02 313 iPc 40 45.80 0.0
0.7s 8.80nm 4.8mb
CAF 72.11 312 iPc 40 47.20 0.7
0.7s 18.75nm 5.1mb
LDF 72.27 316 iPc 40 47.30 0.0
0.8s 26.85nm 5.2mb
RJF 72.35 312 iPc 40 48.70 0.9
0.6s 25.25nm 5.3mb
FLN 72.43 316 eP 40 48.10 -0.1
0.8s 8.05nm 4.7mb
LPO 72.78 312 iPc 40 51.10 0.7
0.7s 19.85nm 5.2mb
GRR 72.80 316 iPc 40 50.60 0.2
0.6s 16.25nm 5.1mb
MFF 72.98 314 iPc 40 51.70 0.2
0.6s 5.40nm 4.7mb
LFF 72.99 312 iPc 40 52.50 0.9
0.6s 18.05nm 5.2mb
LPF 73.04 316 iPc 40 52.30 0.5
0.6s 8.10nm 4.8mb
BCAO 73.85 267 iPc 40 56.60 -0.5
0.5s 38.00nm 5.6mb
ic 41 09.50
ic 41 19.90
STK 74.58 138 iPc 41 00.40 -0.5
1.0s 8.00nm 4.6mb
IMA 74.88 23 eP 41 03.40 1.0
ECRI 76.04 311 eP 41 10.40 1.1
SVW 76.75 28 eP 41 15.00 2.1
CMS 76.90 135 iPd 41 14.80 0.8
0.7s 4.00nm 4.5mb
FBA 77.57 22 eP 41 18.60 1.3
0.8s 6.10nm 4.7mb
GUD 77.97 309 eP 41 21.00 0.9
TOL 78.21 309 eP 41 23.00 1.7
BRS 78.90 128 iPd 41 26.80 1.6
PMR 79.08 25 eP 41 39.20 13.7X
0.5s 11.90nm
INK 79.41 16 eP 41 29.00 1.8
pP 41 42.00 44kmX
TOA 79.87 24 eP 41 45.00 15.1X
BWA 80.48 136 eP 41 35.50 2.0
SLR 81.01 235 iPd 41 37.50 0.9
0.9s 42.02nm 5.4mb
CAN 81.43 137 eP 41 39.20 0.7
YKA 88.53 12 eP 42 26.80 13.3X
0.8s 2.40nm
PPD 146.94 270 ePKP 49 05.30 2.8X
e 49 08.10
SIV 153.40 288 PKP 49 20.00 7.7X
ZOBO 159.39 296 PKP 49 21.00 0.4
S.D. = 0.9 on 144 of 153 obs.

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* SEP 02, 1990 07h 03m 06.75± 0.71s
16.480 N ±11.2km 121.147 E ± 9.7km
DEPTH = 10.0km (geophysicist)
4.6mb (9 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG 0.55 263 iPd- 03 17.50 -0.4
OCP 1.83 182 eP 03 52.00 13.5X
CHG 21.28 280 eP 07 57.00 1.2
CHTO 21.28 280 eP 07 57.50 1.7
1.3s 11.03nm 4.1mb
BJI 23.87 351 eP 08 23.00 1.9
1.6s 73.00nm 5.0mb
LZH 24.86 325 Pd 08 33.50 2.5X
1.5s 28.00nm 4.7mb

sP 08 47.50
PSI 25.79 240 ePd 08 40.80 1.0
SHL 28.72 293 iP 09 06.20 -0.5
GUN 34.46 295 P 09 56.80 -0.6
DMN 35.07 295 P 10 02.00 -0.5
GKN 35.56 295 P 10 05.00 -1.5
0.6s 15.00nm 5.0mb
WB5 38.40 160 eP 10 31.00 0.8
WRA 38.45 160 Pc 10 29.80 -0.8
0.9s 5.60nm 4.3mb
GBA 42.25 272 Pc 11 01.80 -0.3
1.0s 7.00nm 4.3mb
SUF 77.78 332 iP 15 05.20 -0.2
0.4s 1.90nm 4.5mb
VRI 81.37 315 ePd 15 28.00 2.8X
HFS 84.26 331 eP 15 39.10 -0.6
0.4s 1.30nm 4.5mb
NB2 85.00 333 P 15 42.50 -1.0
0.9s 4.50nm 4.7mb
ZOBO 171.10 90 PKP 23 27.00 9.3X
i 24 08.30
CNCB 171.24 93 PKP 23 32.00 14.3X
S.D. = 1.1 on 15 of 20 obs.

SEP 02, 1990 07h 12m 02.10± 1.18s
18.033 N ±13.8km 66.619 W ± 4.9km
DEPTH = 5.0km (geophysicist)
PUERTO RICO REGION (90)

PORP 0.03 320 P 12 01.00 -2.3
S 12 05.90
LRS 0.34 320 P 12 10.00 1.1
S 12 15.00
MGP 0.45 267 P 12 11.10 0.0
S 12 17.40
SJG 0.45 80 iP 12 11.80 0.6
S 12 18.50
CSB 0.51 60 P 12 12.80 0.5
MCP 0.60 309 P 12 14.10 -0.1
S 12 22.60
CPD 0.67 89 P 12 15.10 -0.4
S 12 24.10
LPR 0.76 69 P 12 16.90 -0.5
S.D. = 1.2 on 8 of 8 obs.

? SEP 02, 1990 07h 14m 40.01± 5.18s
43.812 N ±30.0km 8.460 E ±22.0km
DEPTH = 10.0km (geophysicist)
CORSICA (380)
ML 2.1 (GEN).

IMI 0.42 284 P 14 49.06 0.4
S 14 54.92
FIN 0.44 336 P 14 49.06 0.1
S 14 54.92
ROB 0.64 319 P 14 52.67 -0.3
S 15 01.50
PCP 0.73 5 P 14 54.49 0.1
S 15 03.92
ENR 0.86 299 P 14 56.15 -0.4
S 15 07.15
STV 0.93 298 P 14 57.47 -0.3
S 15 09.34
PZZ 1.20 306 P 15 02.88 0.4
S 15 17.88
S.D. = 0.4 on 7 of 7 obs.

SEP 02, 1990 07h 28m 28.71± 0.42s
40.054 N ± 4.5km 21.458 E ± 3.8km
DEPTH = 9.1 ± 3.6 km
GREECE (364)
MD 3.2 (ATH).

KZN 0.35 43 iPgd 28 36.00 0.1
LSK 0.67 279 ePg 28 40.70 -1.4
KBN 0.75 319 iPgc 28 42.40 -1.1
SRN 1.13 262 ePn 28 50.30 0.3
TPE 1.13 283 ePn 28 50.60 0.6
EVR 1.17 166 ePb 28 48.70 -2.0
eSb 29 06.00
OHR 1.17 335 iPgd 28 50.80 0.1
iSg 29 08.00
KEK 1.32 256 ePb 28 54.10 0.9
eSb 29 15.30
VAY 1.52 33 iPn 28 56.30 0.2
PLG 1.56 77 ePb 28 56.00 -0.6
SKO 1.92 360 ePn 29 04.70 2.9X

02d 07h

```
                    iPg    29 07.00
                    i      29 24.00
                    iSg    29 31.00
VLS       1.99 200  ePn    29 03.50   0.6
MMB       2.31  48  iPc    29 07.00  -0.5
                    eS     29 34.00
BCI       2.54 336  ePn    29 18.20   7.5X
VTS       2.86  27  iPd    29 16.00   0.6
                    eSg    29 50.00
ITM       2.89 173  ePg    29 21.00   5.2X
RZN       2.96  55  iPd    29 17.00   0.1
                    S      29 53.00
BRT       3.35 286  P      29 21.00  -1.3
VLI       3.53 160  ePn    29 25.50   0.7
MGR       4.53 273  P      29 39.50   0.5
SOI       4.65 247  P      29 48.00   7.3X
                    eSn    30 30.00
SGO       4.73 278  P      29 41.90   0.0
SDI       6.02 288  P      30 00.00  -0.2
     S.D. = 0.9   on  19 of  23 obs.
-------------------------------------------
&  SEP  02, 1990  08h 08m 24.50s
   36.658 N          121.317 W
   DEPTH =   5.0km
 CENTRAL CALIFORNIA                  ( 39)
      <BRK>. ML 3.4 (BRK).

SAO       0.15 316  iPc    08 27.30  -0.3
                    iS     08 30.00
LLA       0.30  98  iPc    08 30.50  -0.1
PRS       0.33 187  iPd    08 30.90  -0.2
GCC       0.66 304  iPc    08 36.60  -1.1
ARN       0.71 346  iPc    08 38.50  -0.2
MHC       0.73 339  iPd    08 38.77  -0.3
MHC       0.73 339  iPd    08 38.80  -0.3
                    iS     08 50.85
PRI       0.74 134  iPd    08 38.50  -0.7
PHAM      1.11 138  eP     08 44.40  -1.3
PKEM      1.14 121  eP     08 46.20  -0.1
PCC       1.20 315  ePd    08 45.30  -1.9
FRI       1.33  75  iPc    08 47.90  -1.7
                    iS     09 05.50
BKS       1.42 329  ePd    08 48.52  -2.5
                    iS     09 11.70
BRK       1.43 328  ePd    08 48.50  -2.6
ZSP       1.49 330  iPd    08 49.80  -2.1
                    i      08 53.10
                    i      09 15.70
CMB       1.56  28  iPd    08 51.40  -1.6
                    iS     09 11.50
BCH       1.78 145  eP     08 53.70  -2.5
BLP       2.22 160  eP     09 00.00  -2.5
ABL       2.48 136  eP     09 04.00  -2.4
ORV       2.90 357  iPc    09 11.10  -1.0
KVN       3.49  46  eP     09 20.50  -0.3
       21 obs. ossociated
-------------------------------------------
&  SEP  02, 1990  08h 27m 12.50s
   36.658 N          121.320 W
   DEPTH =   5.0km
 CENTRAL CALIFORNIA                  ( 39)
      <BRK>. ML 2.9 (BRK).

SAO       0.15 317  iP     27 15.40  -0.1
                    iS     27 18.00
LLA       0.31  98  iP     27 18.60  -0.1
PRS       0.33 187  iPc    27 19.00  -0.1
GCC       0.66 305  eP     27 25.00  -0.7
ARN       0.71 346  iPc    27 26.40  -0.3
MHC       0.73 339  eP     27 27.00  -0.1
                    iS     27 38.15
PRI       0.74 134  eP     27 27.00  -0.3
PHAM      1.11 137  eP     27 33.00  -0.8
PKEM      1.14 121  eP     27 34.70   0.3
PCC       1.19 315  eP     27 33.60  -1.6
FRI       1.34  75  eP     27 36.00  -1.6
                    iS     27 53.70
BKS       1.42 329  eP     27 39.70   0.7
CMB       1.56  28  eP     27 39.80  -1.2
                    iS     27 59.50
BCH       1.78 145  eP     27 42.60  -1.6
       14 obs. associated
-------------------------------------------
?  SEP  02, 1990  09h 08m 48.29± 4.27s
   39.016 N ±35.2km   27.671 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                              (366)

DST       0.95  51  ePn    09 06.30  -0.1
                    eSg    09 21.30
EZN       1.32 308  iPn    09 12.80   0.2
EDC       1.34   6  ePn    09 13.00   0.1
BNT       1.35   8  iPn    09 13.70   0.5
KGT       1.46 349  iPn    09 14.00  -0.7
     S.D. = 0.6   on   5 of   5 obs.
-------------------------------------------
?  SEP  02, 1990  09h 18m 36.25± 2.26s
    6.069 S ±22.6km  133.801 E ±19.1km
    DEPTH =  33.0km  (normal)
    4.4mb (  3 obs.)
 AROE ISLANDS REGION                 (204)

MTN       7.23 201  eP     20 23.60   1.2
          0.4s    113.00nm          6.2mb X
                    eS     21 55.00
KNA      10.81 207  eP     21 10.90  -1.0
          0.5s     93.00nm          6.3mb X
                    eS     23 10.00
WB5      13.74 178  eP     21 49.70  -1.4
                    i      21 52.20
                    eS     24 30.00
WRA      13.80 178  Pc     21 49.90  -2.1X
          0.7s      4.30nm           4.4mb
QIS      15.46 159  eP     22 15.40   1.7
ASPA     17.50 180  eP     22 39.50   0.0
          0.9s     30.00nm           4.4mb
       Z  20s      0.77um
                    eS     25 58.10
                    LR     30 13.50
CTA      18.45 140  eP     22 50.00  -1.3
          1.2s     34.38nm           4.4mb
QLP      22.70 155  eP     23 37.10   0.8
CNCB    148.68 137  PKP    38 16.00  -3.5X
ZOBO    148.96 136  PKP    38 20.00   0.0
     S.D. = 1.4   on   8 of  10 obs.
-------------------------------------------
?  SEP  02, 1990  09h 52m 42.97± 0.80s
   23.015 S ±30.9km  174.612 W ±16.9km
   DEPTH =  40.0km  (geophysicist)
   4.6mb (  6 obs.)  5.2Msz (  2 obs.)
 TONGA ISLANDS REGION                (174)

DZM      17.53 269  iPc    56 51.00   4.9X
ASPA     47.06 259  iPc    01 12.80  -0.1
          0.7s      7.00nm           4.7mb
       Z  20s      0.29um           4.2Msz
                    LR     19 41.60
WB5      47.40 264  eP     01 15.20  -0.4
WRA      47.41 264  Pd     01 14.80  -0.9
          0.7s      4.10nm           4.5mb
KVN      81.26  41  eP     04 56.60  -0.1
ALQ      86.56  50  eP     05 24.30   0.7
          1.0s      3.50nm           4.5mb
PNT      87.02  32  eP     05 25.00  -0.3
          0.8s      6.00nm           4.9mb
FBA      90.05  11  eP     05 37.90  -1.4
          1.0s      0.80nm           4.0mb
                    pP     05 51.00  43kmX
SES      92.08  35  eP     05 49.00   0.0
CHTO     94.04 289  eP     06 01.20   2.6
          0.7s      2.54nm           4.8mb
LPA      96.81 132  eP-    06 11.00  -0.1
       Z  20s      8.51um           6.2Msz
HFS     142.45 353  ePKP   12 07.70  -5.0X
          0.5s      1.00nm
KSP     150.95 346  iPkPc  12 33.80   7.0X
CLL     151.14 350  ePKP   12 34.00   7.0X
          1.0s     13.00nm
SPC     151.36 339  ePKP   12 34.80   7.1X
BRG     151.40 349  iPKP   12 35.00   7.6X
          0.8s     16.00nm
MOX     151.99 352  ePKP   12 36.00   7.6X
                    e      12 50.00
PRU     152.13 347  ePKP   12 36.50   7.9X
                    e      12 44.50
DOU     152.96   1  PKPc   12 39.00   9.3X
KHC     153.14 348  PKP    12 39.30   9.2X
     S.D. = 1.2   on  10 of  20 obs.
-------------------------------------------
   SEP  02, 1990  09h 56m 31.90± 0.77s
   23.852 S ± 6.2km   70.484 W ± 8.8km
   DEPTH =  43.0 ±  6.8 km
   4.7mb (  5 obs.)
 NEAR COAST OF NORTHERN CHILE        (122)
      Felt (IV) in the Antofogosto
      area.

ANT       0.16  23  iPd    56 38.80  -0.4
CNCB      7.39  19  P      58 23.00   2.5X
CCH       7.61  33  P      58 27.70   4.3X
                    i      58 35.20
LPB       7.62  18  eP     58 30.00   6.4X
       Z  25s     12.85um
                    LR     21 14.00
RTLL      7.66 167  ePc    58 20.10  -3.7X
                    iS     59 57.00
ZON       7.83 169  eP     58 27.50   1.3
RTBS      7.83 174  e(P)   58 33.00   6.9X
ZOBO      7.86  17  Pd     58 28.00   0.9
                    i      00 48.00
CFA       7.98 166  e(P)   58 26.00  -2.2
JACH      8.80 181  eP     58 47.70   8.1X
IHA       9.20 186  eP     58 58.50  13.6X
PEL       9.26 181  eP     58 48.00   2.1X
                    i      00 43.80
SAN       9.57 181  eP     58 58.00   7.9X
                    e      00 50.00
LCCH      9.64 185  eP     58 58.00   7.0X
CHCH     10.05 181  eP     59 03.50   6.8X
                    e      01 04.00
LNV      10.10 184  eP     58 58.00   0.7
                    i      01 06.50
NNA      13.26 332  iP     59 53.00  13.1X
          0.8s     11.19nm
                    iS     13 13.50
PPD      17.75  88  eP     00 39.10   1.5
                    e      00 40.90
VAO      21.59  92  eP     01 19.00  -1.1
BAO      22.67  73  eP     01 30.70  -0.2
BMA      24.21  93  eP     01 45.30  -0.4
JFO      25.12  91  eP     01 54.60   0.1
                    e      02 08.80
CAI      36.35  67  eP     03 34.20   0.2
TUL      64.08 337  eP     07 03.10  -0.6
          0.9s      5.50nm           4.6mb
ALQ      67.70 329  eP     07 27.30   0.1
          1.0s      3.75nm           4.4mb
LIC      70.44  74  P      07 44.00  -0.2
TIC      70.64  73  P      07 45.10  -0.4
KIC      70.75  74  Pc     07 46.20   0.0
          0.6s      7.00nm           4.8mb
LKO      71.52  70  Pc     07 49.26  -1.6
          1.0s     22.50nm           5.1mb
WIN      79.10 110  iPd    08 36.00   1.9
SES      82.17 335  eP     08 50.00   0.5
MAW      82.50 164  iP     08 51.10   0.1
YKA      92.92 341  eP     09 40.50  -0.6
          0.7s      1.80nm           4.6mb
WRA     130.20 211  PkPc   15 40.00   0.3
          0.6s      1.70nm
WB5     130.24 211  ePKP   15 39.80   0.0
GBA     148.03 103  PKPc   16 14.30   2.5X
          0.7s     10.50nm
NDI     150.69  74  ePKP   16 22.00   6.4X
     S.D. = 1.0   on  23 of  37 obs.
-------------------------------------------
   SEP  02, 1990  10h 06m 52.08± 0.41s
   41.210 S ± 8.4km   90.129 W ± 7.6km
   DEPTH =  10.0km  (geophysicist)
   5.0mb (  8 obs.)  5.0Msz (  2 obs.)
 SOUTHERN PACIFIC OCEAN              (692)
      CENTROID, MOMENT TENSOR        (HRV)
      Doto Used: GDSN
      L.P.B.: 17S, 38C
      Centroid Locotion:
      Origin Time        10:06:59.8 0.3
      Lat 40.86S 0.04 Lon  90.37W 0.06
      Dep  15.0 FIX Half-duration  2.0
      Moment Tensor;   Scole 10**17 Nm
        Mrr=-1.46 0.08  Mtt=-0.26 0.09
        Mff= 1.72 0.09  Mrt= 0.62 0.21
        Mrf= 1.02 0.22  Mtf=-1.58 0.08
       Principal Axes:
        T  Val=  2.68  Plg= 9  Azm=243
        N       -0.29      39       340
        P       -2.39      50       143
      Best Double Couple:Mo=2.5*10**17
       NP1:Strike=297 Dip=49 Slip=-145
       NP2:        183     64       -46

LNV      16.49  70  ePc    10 44.00  -1.0
TACH     16.99  70  eP     10 51.00  -0.3
```

```
CHCH    17.04   71 eP     10 51.50   -0.5
SAN     17.29   70 eP     10 54.50   -0.6
PCH     17.30   70 eP     10 57.70    2.4
PEL     17.44   69 iPc    10 57.00    0.0
        1.1s     82.28nm            4.8mb
AIA     28.22  157 eP     12 47.20    0.6
ARE     29.45   39 eP     12 57.00   -1.5
CNCB    30.91   45 P      13 12.20    0.4
ZOBO    31.28   44 iPc    13 15.00   -0.1
        1.2s     20.95nm            4.9mb
                  S       18 00.00
                  LR      21 04.00
CCH     31.45   48 P      13 16.70    0.5
PPD     37.79   72 eP     14 12.10    1.8
BOG     47.92   22 eP     15 35.00    2.1
                  eS      22 05.00
SPA     48.98  180 iPd    15 39.30   -1.1
        1.0s     18.50nm            5.1mb
      Z 20s      2.39um             5.2Msz
SBA     52.76  195 e(P)   16 08.70   -0.1
MAW     69.60  169 iP     18 01.40   -1.4
SGS     74.56    8 P      18 31.30   -1.3
UYO     75.11  356 eP     18 34.70   -1.0
PRM     75.26    7 P      18 36.00   -0.6
JSC     75.56    8 P      18 36.80   -1.5
LHS     75.80    8 P      18 37.70   -2.0
PWLA    75.84    2 P      18 37.80   -2.1
MEO     76.02  353 e(P)   18 40.50   -0.5
OLY     76.35  359 P      18 41.60   -1.1
GBTN    76.69    5 P      18 42.60   -2.1
TKL     76.72    5 P      18 43.80   -1.0
SIO     76.79  355 eP     18 45.20    0.0
TUL     76.92  355 eP     18 44.70   -1.2
        0.7s     10.70nm            5.0mb
                  e       18 48.10
POW     76.99  359 P      18 46.40    0.1
ALQ     77.25  346 eP     18 48.00   -0.1
        1.0s     10.00nm            4.9mb
      Z 18s      0.52um             4.9Msz
ACO     77.97  353 eP     18 52.60    0.8
GOL     81.72  348 P      19 12.70    0.6
        0.7s      3.46nm            4.5mb
GLD     81.74  348 P      19 14.40    2.3
        1.5s     26.56nm            5.1mb
PRI     81.91  335 e(P)   19 07.10   -5.9X
DAU     83.48  344 P      19 23.10    1.8
CMB     83.57  336 e(P)   19 22.60    1.1
DUG     83.61  343 P      19 23.90    2.2
        1.2s     18.91nm            5.2mb
KVN     83.85  338 P      19 25.00    1.9
ORV     85.31  336 ePc    19 36.20    6.1X
WNY     86.46   12 P      19 35.70    0.0
WDC     86.57  336 ePc    19 37.00    0.7
WIN     87.49  118 eP     19 42.00    0.4
LRM     88.92  345 eP     19 53.00    5.2X
LKO     92.14   79 P      20 09.46    6.3X
CLL    128.21   51 e(PKP) 25 59.00   -0.5
BRG    128.61   52 e(PKP) 26 01.10    0.8
        2.0s     35.00nm
OHR    129.31   66 ePKP   26 01.50   -0.5
SKO    130.10   65 iPKP   26 03.00   -0.4
NB2    130.21   39 PKP    26 03.30    0.2
        1.3s     11.90nm
VAY    130.62   66 ePKP   26 04.30   -0.1
KRA    131.96   55 ePKP   26 07.60    0.9
MAT    142.46  279 (PKP)  26 21.00   -5.7X
        0.7s      5.48nm
TAB    146.58   81 ePKP   26 37.00    3.3X
GBA    150.43  155 PKPc   26 37.80   -2.3X
        1.1s      6.80nm
POO    153.56  144 ePKP   26 52.00    7.3X
HYB    154.37  154 ePKP   26 49.50    3.7X
QUE    158.44  113 ePKP   26 52.30    1.4
     S.D. = 1.2  on  48 of  57 obs.
-------------------------------------------
&  SEP  02, 1990  10h 20m 35.30s
   34.140 N          116.990 W
   DEPTH =  14.0km
 SOUTHERN CALIFORNIA                ( 43)
      <PAS-P>. ML 3.2 (PAS).

PEC     0.29  210 iPd    20 41.00   -0.6
RVR     0.35  246 iPc    20 42.00   -0.8
TPC     0.78   92 iPc    20 50.00   -0.2
PLM     0.79  172 iPd    20 50.00   -0.5
SBB     0.88  309 iPd    20 51.30   -0.6
MWC     0.89  276 iPc    20 51.50   -0.6
PAS     0.98  271 iPc    20 52.80   -0.7
GSC     1.17    7 iPd    20 56.50   -0.3
CPE     1.26  184 iPd    20 57.00   -1.3
CIS     1.39  239 iPc    20 59.30   -0.9
BAR     1.48  170 iPd    21 01.00   -0.5
ABL     1.97  292 eP     21 08.30   -0.5
GLA     2.11  120 eP     21 14.00    3.4
BCH     2.76  293 e(P)   21 19.40   -0.5
BLP     2.85  279 eP     21 19.40   -1.8
CMB     4.76  326 e(P)   21 51.50    3.2
MSU     5.84   40 e(P)   22 15.60   11.8
        17 obs. associated
-------------------------------------------
%  SEP  02, 1990  11h 09m 29.87± 1.02s
   46.975 N ± 8.5km     2.702 E ± 6.3km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                             (538)
      ML 2.1 (LDG).

BGF     0.43  167 Pg     09 38.80    0.2
                Sg     09 42.30
AVF     0.48  112 Pg     09 40.00    0.3
                Sg     09 46.00
SSF     0.56   81 Pg     09 41.40    0.2
                Sg     09 48.40
MAF     0.76  187 Pg     09 44.40   -0.3
                Sg     09 53.80
TCF     0.77  206 Pg     09 44.90    0.0
                Sg     09 54.50
LOR     0.84   69 Pg     09 46.20    0.0
                Sg     09 57.10
SMF     0.85  112 Pg     09 46.00   -0.3
                Sg     09 56.10
LBF     0.87   89 Pg     09 46.30   -0.4
                Sg     09 57.50
LSF     1.09  229 Pg     09 50.40    0.1
                Sg     10 04.00
     S.D. = 0.3  on   9 of   9 obs.
-------------------------------------------
?  SEP  02, 1990  11h 37m 52.30± 1.89s
    3.390 S ±31.0km  129.760 E ±51.9km
   DEPTH =  33.0km  (normal)
   4.1mb (  4 obs.)
 CERAM                              (272)

MTN     9.49  172 eP     40 08.70   -1.1
        0.4s     24.00nm            5.8mb X
                  eS     41 59.00
WB5    17.00  165 eP     41 48.80   -0.5
                  eS     44 49.00
WRA    17.05  165 Pd     41 51.70    1.8
        0.7s      2.00nm            3.4mb
QIS    19.58  151 eP     42 20.00   -0.7
        0.7s      8.00nm            4.1mb
ASPA   20.55  169 eP     42 31.50    0.6
        0.7s     34.00nm            4.8mb
                  eS     46 19.70
CHG    37.51  307 eP     45 05.00   -0.2
CHTO   37.51  307 eP     45 05.30    0.1
        0.9s      2.13nm            4.0mb
     S.D. = 1.2  on   7 of   7 obs.
-------------------------------------------
%  SEP  02, 1990  11h 58m 18.64± 2.88s
   39.152 N ±24.6km   27.605 E ± 9.1km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                             (366)

DST     0.91   60 ePn     58 35.30   -0.9
                iSg     58 50.30
EZN     1.20  305 iPn     58 40.80   -0.1
EDC     1.21    9 iPn     58 41.00   -0.2
KGT     1.32  350 iPn     58 43.10    0.1
IZI     1.86   50 ePn     58 52.00    1.1
     S.D. = 1.0  on   5 of   5 obs.
-------------------------------------------
   SEP  02, 1990  12h 49m 42.23± 0.99s
    3.148 S ± 5.1km  148.388 E ± 7.4km
   DEPTH =  41.7 ±  9.6 km
   5.0mb ( 13 obs.)
 BISMARCK SEA                       (203)

LAT     3.75  202 eP     50 39.00   -0.1
RAB     3.91  105 eP     50 40.00   -1.4
                iS     52 00.00
MNDI    5.58  237 eP     51 07.00    1.8
PMG     6.34  191 eP     51 17.00    1.3
GUA    16.93  348 eP     53 37.70   -0.2
        0.8s     89.55nm            4.9mb
CTA    16.97  187 iPd    53 39.50    1.2
        1.2s     78.13nm            4.7mb
GUMO   16.99  348 eP     53 37.50   -1.1
QIS    19.31  206 iPd    54 06.00   -0.9
        0.9s     53.00nm            4.8mb
                  e      55 44.30
MTN    19.60  240 eP     54 05.00   -5.1X
WB5    21.54  218 eP     54 29.20   -0.9
WRA    21.60  218 Pc     54 28.80   -1.9
        0.9s     36.00nm            4.8mb
QLP    23.64  189 eP     54 51.80    1.1
                  i      56 26.60
BRS    24.47  171 iPc    55 10.00   11.2X
                  i      56 06.50
ASPA   24.74  213 eP     55 01.40    0.0
        0.9s     34.00nm            4.9mb
DZM    25.71  138 iPc    55 12.00    1.4
CMS    28.29  185 eP     55 31.70   -2.3
                  e      57 09.00
STK    29.29  192 eP     55 42.30   -0.7
        1.0s      4.00nm            4.1mb
WARB   30.98  220 eP     55 58.00   -0.1
        0.6s      8.00nm            4.7mb
                  e      57 52.00
BWA    31.12  180 eP     55 58.00   -1.2
CAN    32.02  179 eP     56 17.70   10.7X
TOO    34.36  184 eP     56 28.00    0.6
KLB    40.39  222 eP     57 17.00   -1.0
MAT    40.61  347 eP     57 24.00    4.2X
LOE    50.35  296 eP     58 37.00   -0.5
NST    51.26  293 eP     58 44.80    0.4
BJI    52.15  329 eP     58 50.50   -0.3
        2.0s     55.00nm            5.2mb
KMI    52.43  305 eP     58 54.00    0.5
CHG    53.31  296 eP     59 00.80    1.0
CHTO   53.31  296 eP     59 00.10    0.3
LZH    57.01  317 Pd     59 27.00    0.4
        2.0s     54.00nm            5.2mb
SHL    61.69  301 iP     59 58.50   -0.6
GUN    67.51  302 P      00 37.00   -0.1
        0.9s     36.00nm            5.4mb
PKI    67.82  301 P      00 38.40   -0.6
KKN    67.99  302 P      00 39.40   -0.5
        0.8s     34.00nm            5.5mb
GKN    68.59  302 P      00 43.00   -0.6
        0.8s     30.00nm            5.4mb
GBA    72.30  285 P      01 07.00    1.0
                  e      02 41.00
SBA    75.28  176 e(P)   01 22.60    0.3
QUE    84.18  301 eP     02 11.20    0.0
PNT    93.67   41 eP     02 58.00    2.3
YKA    96.02   28 eP     03 06.70    0.6
        0.7s      3.00nm            4.9mb
SLR   115.35  240 iPKPd  08 15.50   -6.6X
      Z 19s      5.56um             6.2MszX
CNCB  138.97  120 ePKP   09 01.00   -6.BX
                  e      10 37.00
ZOBO  139.08  119 PKP    09 04.60   -3.4X
        1.2s     30.41nm
                  i      10 44.00
SIV   145.21  124 iPKP   09 18.80    0.7
                  i      10 58.90
LKO   153.38  285 PKP    09 37.68    7.0X
        0.6s      5.00nm
     S.D. = 1.1  on  37 of  45 obs.
-------------------------------------------
   SEP  02, 1990  12h 51m 17.67± 0.24s
    3.134 S ± 4.3km  148.134 E ± 5.9km
   DEPTH =  40.6km  (  3 depth phases)
   5.3mb ( 21 obs.)  5.4Msz (  4 obs.)
 BISMARCK SEA                       (203)
      CENTROID, MOMENT TENSOR       (HRV)
      Data Used: GDSN
      L.P.B.: 13S, 32C
      Centroid Location:
      Origin Time        12:51:13.7 0.4
      Lat  3.44S 0.04 Lon 148.35E 0.04
      Dep  15.0 BDY Half-durotion  3.0
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 0.32 0.14  Mtt= 3.41 0.15
        Mff=-3.72 0.16  Mrt=-0.15 0.53
        Mrf= 0.88 0.39  Mtf= 3.98 0.14
       Principal Axes:
        T  Val=  5.20  Plg= 3  Azm=336
        N        0.43       81       228
        P       -5.63        8        66
```

02d 12h

Best Double Couple:Mo=5.4*10**17
NP1:Strike=111 Dip=82 Slip= -4
NP2: 201 86 -172

LAT	3.67	198	eP	52	15.00	1.5
MNDI	5.38	236	e(P)	52	37.00	-0.8
GUA	16.87	349	eP	55	12.20	-0.4
	1.6s	933.33nm			5.7mb	
GUMO	16.93	349	eP	55	12.50	-0.8
	1.6s	923.88nm			5.7mb	
PJG	16.93	349	eP	55	13.20	-0.1
CTA	16.95	186	iPd	55	13.90	0.3
	1.6s	833.33nm			5.6mb	
			iS	58	26.00	
WB5	21.39	218	eP	56	04.00	-0.2
WRA	21.46	218	Pc	56	04.50	-0.3
	1.0s	157.90nm			5.4mb	
MNI	23.73	281	eP	56	28.50	1.4
BRS	24.53	170	iPd	56	34.50	-0.4
			e	56	44.00	34km
PVC	24.54	128	iPc	56	34.20	-0.8
ASPA	24.62	213	eP	56	36.70	0.9
	1.0s	214.00nm			5.7mb	
Z	21s	12.74um			5.4Msz	
			eS	01	03.70	
			LR	06	29.60	
DAV	24.70	294	eP	56	39.00	2.4
DZM	25.89	138	iPc	56	46.10	-1.8
STK	29.25	191	iPc	57	17.70	-0.5
	1.4s	15.00nm			4.5mb	
Z	15s	1546.00um			7.7MszX	
BWA	31.13	180	eP	57	33.20	-1.7
CAN	32.04	179	eP	57	41.20	-1.6
BAG	33.45	306	eP	57	52.00	-3.4X
			e	02	42.00	
TOO	34.36	184	eP	58	02.00	-0.9
CHJJ	39.90	348	P	58	49.10	-0.4
TSRJ	40.12	345	P	58	50.00	-1.3
SHK	40.19	340	eP	58	51.00	-0.9
MAT	40.54	348	eP	58	52.00	-2.8
	1.2s	18.75nm			4.7mb	
Z	20s	4.26um			5.3Msz	
			eS	05	00.00	
MTMJ	40.67	347	P	58	53.90	-2.0
NIIJ	41.06	349	P	58	57.00	-1.9
HKC	41.71	309	iP	59	11.00	6.5X
SSE	42.64	325	P	59	12.00	0.0
	1.6s	205.00nm			5.6mb	
Z	20s	8.30um			5.6Msz	
			S	05	36.00	
			SS	08	40.00	
			eScS	09	24.00	
WEL	44.90	151	P	59	29.00	-1.2
			eS	06	10.00	
PSI	49.53	276	ePd	00	09.00	2.1
BJI	52.00	329	eP	00	24.50	-0.8
	2.0s	111.00nm			5.5mb	
Z	28s	6.90um			5.5MszX	
N	14s	2.98um				
KMI	52.22	305	Pc	00	28.00	0.6
	2.0s	0.16nm			2.7mb X	
Z	20s	3.90um			5.4Msz	
N	15s	1.30um				
			pP	00	43.00	57kmX
			SP	00	50.00	
			S	07	58.00	
CHG	53.08	296	ePc	00	34.30	0.6
	1.2s	21.48nm			5.0mb	
			eS	08	08.00	
CHTO	53.08	296	eP	00	34.20	0.5
	1.2s	9.38nm			4.7mb	
			pP	00	47.00	46km
LZH	56.83	317	Pc	01	01.00	0.1
	2.0s	143.00nm			5.7mb	
Z	40s	6.60um			5.4MszX	
N	14s	1.50um				
E	14s	2.30um				
			pP	01	13.00	42km
			sP	01	18.00	
			PcP	02	00.00	
			PP	03	07.00	
			eS	08	48.00	
			sS	09	08.00	
			SS	12	36.00	
SHL	61.46	301	iP	01	32.50	-0.6
			iS	09	59.00	
PPN	62.80	108	eP	01	42.00	0.1
	1.2s	70.00nm			5.7mb	
TVO	62.99	108	eP	01	44.00	0.8
	1.2s	70.00nm			5.7mb	
GUN	67.29	302	P	02	11.60	0.3
PKI	67.59	301	P	02	13.20	0.0
	1.2s	86.00nm			5.7mb	
KKN	67.76	302	P	02	14.20	0.1
GKN	68.37	302	P	02	17.20	-0.6
HYB	71.55	289	eP	02	37.00	-0.2
GBA	72.05	285	Pc	02	38.70	-1.4
	0.4s	3.90nm			4.7mb	
POO	76.15	290	eP	03	02.50	-1.4
SVW	77.17	24	eP	03	09.10	0.3
TTA	77.99	23	eP	03	12.00	-1.3
PMR	80.15	26	eP	03	23.70	-1.2
	1.3s	28.30nm			5.1mb	
IMA	80.49	21	eP	03	26.10	-0.8
	1.2s	20.80nm			5.0mb	
TOA	81.64	26	eP	03	33.50	0.6
FBA	82.12	23	eP	03	34.60	-0.6
	0.9s	14.60nm			5.0mb	
QUE	83.95	301	eP	03	46.90	1.3
INK	88.59	21	eP	04	08.00	0.7
WDC	91.50	50	ePc	04	23.10	1.7
GMW	91.67	43	P	04	23.80	1.7
MCW	91.69	42	P	04	23.50	1.3
LBFM	92.03	49	P	04	25.00	0.9
ORV	92.26	51	e(P)	04	25.90	1.0
RMW	92.33	43	P	04	26.60	1.4
CMB	93.08	52	ePc	04	29.90	1.1
PNT	93.82	41	eP	04	33.00	1.0
KVN	94.88	51	P	04	39.10	1.8
NEW	95.49	42	P	04	41.10	1.4
	1.1s	7 72nm			5.1mb	
YKA	96.12	28	eP	04	42.20	0.0
	0.9s	7.50nm			5.2mb	
SES	99.31	40	eP	04	58.00	1.1
ALQ	104.41	55	ePdiff	05	20.00	-0.3
SKO	118.76	317	ePKP	10	03.50	0.0
CLL	119.11	330	ePKP	10	08.00	4.2X
			e	11	19.00	
KHC	120.07	327	ePKP	10	09.00	3.2X
BSF	124.44	329	ePKP	10	16.50	2.1X
	1.0s	6.00nm				
HAU	124.55	330	ePKP	10	15.90	1.5
	1.0s	8.00nm				
Z	20s	5.25um			6.2MszX	
LOR	126.29	330	ePKP	10	20.40	2.5X
	1.0s	4.00nm				
Z	20s	6.25um			6.3MszX	
PGF	126.49	323	ePKP	10	18.30	-0.2
	1.2s	26.80nm				
SSF	126.60	330	ePKP	10	21.20	2.8X
	0.8s	4.05nm				
TCF	127.78	331	ePKP	10	23.40	2.6X
	1.0s	7.00nm				
BCAO	129.70	273	iPKPc	10	27.80	2.5X
	0.8s	12.00nm				
TIO	143.90	323	iPKP	10	51.50	0.3
CAR	144.45	76	iPKP	10	56.00	3.5X
LLAV	144.57	76	ePKP	10	55.00	2.3X
OLLA	144.65	77	ePKP	10	51.00	-1.9
PPD	148.58	144	ePKP	11	00.20	1.2

S.D. = 1.2 on 69 of 80 obs.

SEP 02, 1990 12h 58m 28.58± 0.69s
38.324 N ± 6.5km 22.102 E ± 9.3km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.9 (ATH).

EVR	0.63	339	ePn	58	40.20	-1.2
			eSn	58	50.50	
ITM	1.15	187	ePn	58	49.60	-0.5
VLS	1.20	263	ePb	58	51.50	0.6
ATH	1.32	105	ePn	58	52.60	-0.4
VLI	1.73	157	ePn	58	58.30	-0.6
KZN	2.00	353	ePn	59	03.00	0.2
OHR	2.96	341	eP	59	15.00	-1.5
VAY	3.02	7	eP	59	21.00	3.8X
VAM	3.36	149	ePn	59	23.30	1.1
SKO	3.68	352	eP	59	29.00	2.3

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

SEP 02, 1990 13h 05m 07.30± 1.30s
3.197 S ± 4.0km 148.225 E ± 5.4km
DEPTH = 22.8 ± 9.4 km

5.4mb (30 obs.) 5.8Msz (16 obs.)
BISMARCK SEA (203)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 28C
Centroid Location:
Origin Time 13:05:12.6 0.6
Lat 2.96S 0.05 Lon 147.97E 0.05
Dep 15.0 FIX Hdif-duration 3.8
Moment Tensor; Scale 10**17 Nm
Mrr= 0.00 0.38 Mtt= 5.89 0.42
Mtf=-5.89 0.42 Mrt=-1.15 1.38
Mrf= 2.32 0.98 Mtf= 8.36 0.42
Principal Axes:
T Val= 10.23 Plg= 0 Azm=333
N 0.62 77 241
P -10.84 13 63
Best Double Couple:Mo=1.1*10**18
NP1:Strike=107 Dip=80 Slip= -9
NP2: 198 81 -170

LAT	3.64	200	eP	06	06.00	2.3
RAB	4.06	104	iPd-	06	06.00	-3.5X
MNDI	5.42	237	eP	06	33.00	4.0X
PMG	6.26	190	eP	06	43.00	2.3
HNR	13.19	119	eP	08	13.00	-2.9
CTA	16.90	186	iPc	09	05.90	1.8
	1.7s	811.54nm			5.6mb	
			iS	12	18.00	
GUA	16.95	349	eP	09	03.80	-0.9
	1.0s	216.00nm			5.2mb	
GUMO	17.01	349	eP	09	04.80	-0.6
	1.1s	329.80nm			5.4mb	
PJG	17.01	349	eP	09	04.60	-0.8
QIS	19.19	205	iPd	09	32.00	-0.4
	1.0s	155.00nm			5.2mb	
			i	10	47.30	
MTN	19.44	239	eP	09	33.00	-2.3
WB5	21.40	218	eP	09	55.00	-0.8
			i	14	01.00	
WRA	21.46	218	Pc	09	55.80	-0.6
	1.2s	252.30nm			5.5mb	
KNA	22.86	236	eP	10	10.00	-0.3
QLP	23.57	189	iPc	10	17.80	0.7
MNI	23.83	281	eP	10	20.20	0.4
PVC	24.43	128	iPd	10	25.50	-0.1
BRS	24.45	170	iPc	10	25.70	0.0
ASPA	24.61	213	eP	10	27.40	0.0
	1.3s	298.00nm			5.7mb	
Z	22s	23.55um			5.6MszX	
			eS	15	00.10	
			LR	20	01.10	
DZM	25.78	138	iPc	10	35.90	-2.6
CMS	28.23	184	eP	11	01.10	0.4
	1.1s	26.00nm			4.9mb	
STK	29.21	192	iPc	11	08.40	-1.1
	0.9s	13.00nm			4.7mb	
Z	15s	2861.00um			8.0MszX	
WARB	30.84	220	eP	11	23.00	-1.1
	0.7s	37.00nm			5.3mb	
BWA	31.07	180	eP	11	24.70	-1.3
CAN	31.97	179	eP	11	35.80	1.9
ADE	32.82	195	eP	11	43.20	1.8
	0.9s	67.23nm			5.6mb	
KKM	33.26	286	eP	11	48.00	2.5
BAG	33.56	306	eP	11	45.00	-3.1X
TOO	34.30	184	ePd	11	53.60	-0.6
			e	11	57.00	
MEKA	36.76	228	eP	12	16.00	0.9
NANU	37.07	236	eP	12	16.70	-1.1
COOL	37.57	220	eP	12	21.50	-0.5
KAGJ	37.97	335	P	12	26.30	1.0
WKYJ	39.07	343	P	12	33.10	-1.4
KUMJ	39.18	336	P	12	36.40	1.1
TKSJ	39.32	341	P	12	34.80	-1.7
CHJJ	39.98	348	P	12	40.60	-1.4
TSRJ	40.20	344	P	12	41.80	-2.0
KLB	40.24	222	eP	12	46.00	1.8
SHK	40.28	340	eP	12	44.50	0.1
SHNJ	40.48	338	P	12	46.20	0.2
YONJ	40.62	341	P	12	45.80	-1.4
MAT	40.62	348	eP	12	46.00	-1.2
	1.1s	16.46nm			4.7mb	
Z	20s	11.35um			5.7Msz	
			eS	18	46.00	
MTMJ	40.75	347	P	12	48.40	0.0
NIIJ	41.14	349	P	12	48.90	-2.5

NWAO	41.42	221	eP	12	53.00	-0.9
YAMJ	41.86	350	P	12	56.00	-1.3
RKG	42.29	220	eP	13	03.00	2.0
OFUJ	42.50	352	eP	13	01.50	-1.1
SSE	42.74	325	P	13	05.00	0.4
	1.0s	64.00nm			5.3mb	
Z	20s	13.80um			5.8Msz	
N	12s	1.70um				
E	14s	7.80um				
		i		13	10.50	
		S		19	32.00	
		SS		22	19.00	
TCW	44.51	152	P	13	17.30	-1.6
KIW	44.54	151	P	13	18.50	-0.7
MNG	44.64	150	P	13	18.10	-1.8
WEL	44.80	151	P	13	20.00	-1.2
		S		19	52.00	
CAW	44.81	151	P	13	19.00	-2.3
WDW	44.89	151	P	13	19.60	-2.4
MTW	45.06	151	P	13	21.00	-2.3
MOW	45.14	151	P	13	21.70	-2.2
BLW	45.20	151	P	13	22.40	-2.1
SNG	48.62	282	eP	13	54.50	2.8X
LOE	50.22	296	eP	14	03.50	-0.5
NST	51.13	293	eP	14	11.50	0.6
BJI	52.11	329	eP	14	17.50	-0.4
	1.6s	48.00nm			5.2mb	
Z	34s	13.90um			5.8MszX	
N	15s	4.00um				
		eS		21	46.00	
KMI	52.33	305	Pd	14	20.00	-0.1
	2.0s	120.00nm			5.5mb	
Z	20s	6.40um			5.7Msz	
E	17s	3.30um				
		eS		21	50.00	
		S		21	52.00	
CHG	53.19	296	eP	14	27.70	1.3
	1.3s	67.31nm			5.4mb	
CHTO	53.19	296	eP	14	27.10	0.8
	1.7s	54.12nm			5.2mb	
HON	57.98	63	P	15	00.10	-0.7
Z	20s	7.45um			5.8Msz	
OPA	58.09	62	P	15	00.60	-1.0
SMY	59.84	18	eP	15	17.10	3.8X
Z	20s	3.20um			5.5Msz	
PPN	62.69	108	eP	15	34.00	0.9
	1.2s	145.00nm			6.0mb	
TVO	62.89	108	eP	15	35.00	0.5
	1.2s	135.00nm			6.0mb	
PMO	63.96	105	iP	15	42.40	0.9
	1.2s	165.00nm			6.0mb	
TPT	64.22	105	iP	15	44.10	0.9
	1.2s	85.00nm			5.8mb	
RUV	64.46	105	iP	15	45.60	0.8
	1.2s	95.00nm			5.8mb	
GUN	67.40	302	P	16	03.40	-0.5
PKI	67.70	301	P	16	04.80	-1.0
KKN	67.87	302	P	16	05.40	-1.3
GKN	68.48	302	P	16	09.60	-0.8
HYB	71.66	289	eP	16	29.00	-0.8
	1.0s	80.00nm			5.7mb	
GBA	72.15	285	P	16	32.70	0.0
NDI	74.99	301	eP	16	47.00	-2.1
SBA	75.25	176	e(P)	16	42.00	-7.6X
POO	76.25	290	eP	16	57.50	1.0
SVW	77.19	24	eP	17	00.50	-0.4
TTA	78.01	23	eP	17	05.90	0.5
PMR	80.17	26	eP	17	17.20	0.2
	1.4s	306.82nm			6.1mb	
IMA	80.52	21	eP	17	19.40	0.3
	1.1s	18.20nm			5.0mb	
TOA	81.66	26	eP	17	25.70	0.7
FBA	82.14	23	ePc	17	26.60	-0.8
	1.2s	35.70nm			5.3mb	
QUE	84.06	301	e(P)	17	37.60	-0.6
SIT	85.33	32	P	17	55.00	11.4X
Z	19s	4.90um			5.9Msz	
SPA	86.82	180	eP	17	51.50	0.4
	1.0s	15.00nm			5.2mb	
Z	20s	6.31um			6.0Msz	
INK	88.62	21	eP	18	01.00	1.5
WDC	91.48	50	ePc	18	15.80	2.4
GMW	91.65	43	P	18	16.00	1.9
LBFM	92.00	49	P	18	12.80	-3.3X
MIN	92.18	50	ePc	18	17.70	0.9
ORV	92.23	51	ePc	18	17.80	0.9
RMW	92.31	43	P	18	18.00	0.8
CMB	93.04	52	ePc	18	22.70	2.0
FRI	93.56	53	ePc	18	24.00	1.0
PNT	93.81	41	eP	18	24.00	0.0
	1.2s	28.00nm			5.6mb	
PAS	94.76	56	eP	18	30.00	1.4
KVN	94.85	51	P	18	31.50	2.3
MWC	94.86	56	eP	18	26.00	-3.3X
S8B	95.05	56	eP	18	30.00	-0.1
CLC	95.24	54	eP	18	25.00	-5.9X
RVR	95.42	56	eP	18	32.00	0.3
NEW	95.47	42	P	18	32.00	0.3
	1.1s	13.89nm			5.3mb	
PEC	95.60	56	P	18	33.70	1.1
	1.2s	9.56nm			5.1mb	
PLM	95.85	57	eP	18	35.00	1.1
GSC	95.89	55	eP	18	35.00	1.1
BAR	96.01	58	eP	18	35.00	0.6
YKA	96.14	28	eP	18	32.90	-1.4
	0.8s	8.30nm			5.2mb	
TPC	96.52	56	eP	18	35.00	-1.8
GLA	97.56	57	eP	18	44.00	2.6
SES	99.30	40	eP	18	50.00	1.1
			pP	19	00.00	31kmX
ALQ	104.38	55	ePdiff	19	12.00	-0.2
Z	20s	2.48um			5.7Msz	
GOL	104.64	50	Pdiff	19	25.00	11.6X
Z	20s	3.00um			5.8Msz	
SLM	116.33	48	Pdiff	20	17.00	12.0X
Z	18s	2.36um			5.8Msz	
KSP	117.77	328	ePKP	23	59.00	5.5X
ZST	118.72	325	ePKP	24	01.80	6.4X
BRG	118.98	329	ePKP	24	01.60	5.8X
	1.0s	10.00nm				
Z	18s	3.00um			6.0Msz	
N	18s	2.50um				
E	18s	1.00um				
		i		25	23.30	
PRU	119.17	328	ePKP	24	01.50	5.3X
Z	20s	5.70um			6.2Msz	
N	20s	2.30um				
E	20s	4.30um				
CLL	119.21	330	e(Pdif	20	28.00	10.5X
CLL	119.21	330	e(PKP)	24	02.00	5.8X
OHR	119.66	316	ePKP	23	58.00	0.5
KHC	120.18	327	PKP	24	03.90	5.7X
	1.2s	7.00nm				
Z	20s	2.30um			5.8Msz	
N	20s	2.40um				
E	20s	3.30um				
MOX	120.31	330	ePKP	24	05.00	6.7X
			e	25	33.00	
RSCP	120.85	50	PKP	24	19.00	19.1X
Z	20s	1.58um			5.7Msz	
GRF	121.09	329	ePKP	24	04.70	4.8X
SOTA	122.58	327	ePKP	24	07.00	4.1X
	1.2s	16.40nm				
		i		24	08.40	
TDS	123.36	317	PKP	24	05.00	0.5
MGR	123.67	317	PKP	24	10.00	4.9X
SDI	124.05	320	PKP	24	10.00	4.1
RSNY	124.26	36	PKP	24	25.00	18.9X
Z	20s	2.37um			5.9Msz	
SOI	124.27	315	PKP	24	06.00	-0.3
MNS	124.42	321	PKP	24	11.00	4.4X
BSF	124.54	329	ePKP	24	11.90	5.2X
	1.0s	12.00nm				
JSC	124.63	50	PKP	24	09.40	2.3X
HAU	124.65	330	ePKP	24	12.00	5.2X
	1.2s	11.90nm				
LHS	124.89	50	PKP	24	08.50	0.9
LPL	126.07	327	ePKP	24	15.50	5.6X
	1.0s	6.00nm				
LPG	126.07	327	ePKP	24	15.60	5.6X
	1.0s	6.00nm				
LOR	126.39	330	ePKP	24	15.80	5.6X
	1.2s	11.90nm				
BNI	126.40	327	PKP	24	13.00	2.5X
LBF	126.52	330	ePKP	24	15.80	5.3X
	1.0s	8.00nm				
PGF	126.59	323	ePKP	24	17.50	6.6X
	1.2s	35.70nm				
SSF	126.70	330	ePKP	24	16.50	5.7X
	1.0s	7.00nm				
SMF	126.83	330	ePKP	24	16.70	5.6X
	1.1s	9.75nm				
LDF	127.28	334	ePKP	24	16.20	4.4X
	1.0s	6.00nm				
FLN	127.31	334	ePKP	24	15.60	3.7X
	1.0s	8.00nm				
LNV	127.47	138	ePKP	24	14.00	1.4
GRR	127.76	334	ePKP	24	17.30	4.6X
	1.0s	12.00nm				
TCF	127.88	331	ePKP	24	18.70	5.6X
	1.0s	6.00nm				
LPF	128.11	334	ePKP	24	19.30	5.9X
	1.1s	19.55nm				
PEL	128.44	138	ePKP	24	17.00	2.4X
MFF	128.78	332	ePKP	24	21.40	6.7X
	1.2s	11.90nm				
CNCB	139.09	120	PKP	24	27.00	-8.8X
ZOBO	139.20	119	PKP	24	27.00	-9.0X
	1.0s	48.75nm				
Z	22s	0.55um			5.3Msz	
		i		24	38.00	
		eLR		57	04.00	
CCH	140.40	122	PKP	24	39.70	1.9
SDV	140.97	80	ePKP	24	39.00	0.2
TOV	141.69	78	ePKP	24	36.30	-3.6X
TIO	144.00	323	iPKP	24	42.40	-1.1
			i	25	19.00	
CAR	144.38	76	iPKP	24	40.00	-4.6X
LLAV	144.50	76	iPKP	24	44.00	-0.8
OLLA	144.57	77	iPKP	24	44.00	-0.9
SIV	145.32	124	PKP	24	44.40	-1.6
NEV	146.75	63	ePKP	24	50.00	1.7
BPA	147.42	63	ePKP	24	51.00	1.6
PAG	147.94	65	ePKP	24	51.50	1.2
PPD	148.48	144	ePKP	24	55.10	4.1X
			e	24	56.80	
VAO	150.04	151	(PKP)	24	56.00	2.6X
JFO	152.77	156	e(PKP)	25	07.00	9.5X
KIC	152.88	278	PKP	25	06.04	8.3X
TIC	153.13	278	PKP	25	06.48	8.4X
LIC	153.18	277	PKP	25	06.70	8.6X
	0.9s	22.50nm				
LKO	153.24	285	PKP	25	03.40	5.1X

S.D. = 1.4 on 123 of 178 obs.

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* SEP 02, 1990 13h 23m 21.26± 0.55s
3.123 S ± 8.3km 148.246 E ±11.1km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
BISMARCK SEA (203)

QIS	19.27	205	eP	27	45.00	-1.2
WB5	21.47	218	eP	28	08.60	-0.6
WRA	21.53	218	Pd	28	09.50	-0.4
	1.2s	38.60nm			4.7mb	
QLP	23.64	189	eP	28	31.60	1.1
BRS	24.52	170	ePc	28	40.00	0.9
ASPA	24.69	213	iPc	28	41.40	0.6
	1.5s	38.00nm			4.8mb	
DZM	25.83	138	iPd	28	51.00	-0.6
KMI	52.30	305	Pd	32	32.50	0.0
CHG	53.17	296	eP	32	39.00	0.2
CHTO	53.17	296	eP	32	39.20	0.4
	0.7s	3.02nm			4.4mb	
PNT	93.74	41	eP	36	37.00	0.9
YKA	96.06	28	eP	36	45.40	-1.0
	0.9s	3.50nm			4.8mb	
CNCB	139.11	120	PKP	42	42.00	-6.2X
ZOBO	139.21	119	ePKP	42	40.00	-8.4X
	1.5s	13.44nm				
		i		42	50.00	
SIV	145.34	124	iPKPd	42	58.00	-0.4
PPD	148.52	143	(PKP)	43	07.00	3.5X
			e	43	11.20	

S.D. = 0.8 on 13 of 16 obs.

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* SEP 02, 1990 13h 49m 48.79± 0.53s
27.672 S ±10.3km 104.448 W ±10.2km
DEPTH = 10.0km (geophysicist)
4.8mb (5 obs.)
EASTER ISLAND REGION (685)

CNCB	35.32	80	P	56	48.60	1.6
ZOBO	35.42	79	P	56	49.00	1.2
SIV	41.71	83	P	57	39.60	-0.1
BAR	61.13	348	eP	00	06.00	0.4
GLA	61.19	350	eP	00	06.00	0.0
PLM	61.82	348	eP	00	11.00	0.5
UYO	62.22	9	iPd	00	12.20	-0.7
ALQ	62.30	358	eP	00	13.00	-0.6
	1.0s	2.50nm			4.4mb	

02d 14h

PEC	62.40	348	P	00	14.00	-0.1
TPC	62.42	349	eP	00	15.00	0.8
SPA	62.49	180	iPd	00	14.70	0.1
	0.5s	14.81nm			5.4mb	
RVR	62.54	348	eP	00	16.00	1.0
SBB	63.30	348	eP	00	20.00	-0.1
SIO	63.54	7	eP	00	21.20	-0.4
GSC	63.71	349	eP	00	23.00	0.2
TUL	63.77	8	ePc	00	22.20	-0.8
	0.7s	8.30nm			5.0mb	
			e	14	23.90	
PWLA	64.21	15	P	00	24.80	-1.2
CLC	64.35	348	eP	00	27.00	0 0
PRI	65.29	346	eP	00	33.50	0.4
RSCP	65.41	17	P	00	32.50	-1.3
JSC	65.41	21	P	00	33.00	-0.7
LHS	65.74	21	P	00	35.50	-0.3
GBTN	65.83	18	P	00	35.50	-0.9
FRI	65.90	347	eP	00	37.00	0.2
ARN	66.64	345	P	00	42.00	0.4
MHC	66.65	345	eP	00	43.20	1.4
GOL	67.03	359	P	00	43.50	-0.8
CMB	67.05	346	eP	00	44.80	0.6
BRK	67.31	345	eP	00	46.00	0.2
KVN	67.59	349	P	00	48.00	0.2
DAU	68.03	354	P	00	50.40	-0.3
BLA	68.37	20	P	00	52.00	-0.6
LBFM	70.55	346	P	01	06.00	0.0
MCMT	72.55	354	eP	01	18.40	0.4
LON	75.72	348	P	01	36.00	-0.1
BMW	75.73	347	P	01	37.00	0.8
NEW	76.44	351	P	01	39.50	-0.6
	0.8s	5.73nm			4.7mb	
PNT	77.83	350	eP	01	49.00	1.3
SES	77.94	356	eP	01	50.00	1.7
YKA	90.22	355	eP	02	50.10	-0.1
	0.9s	3.00nm			4.5mb	
NB2	126.19	33	PKP	08	52.00	-0.6
	0.7s	1.10nm				
HFS	127.54	34	ePKP	08	53.90	-1.2
	0.5s	1.20nm				
BJI	144.37	301	ePKP	09	25.50	-1.3
	1.9s	34.00nm				
PSI	146.60	226	ePKPd	09	34.40	3.1X
	S.D. = 0.8	on	43 of	44	obs.	

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* SEP 02, 1990 14h 15m 54.29± 1.10s
7.532 S ±13.8km 156.308 E ±10.1km
DEPTH = 94.7 ± 10.5 km
4.2mb (2 obs.)
SOLOMON ISLANDS (193)

HNR	4.07	118	eP	16	55.00	-0.4
			eS	17	49.00	
RAB	5.29	309	eP	17	13.00	0.6
DZM	17.45	147	iPc	20	04.30	11.1X
WB5	24.56	238	eP	21	06.50	-0.3
WRA	24.61	238	Pc	21	08.00	0.7
	0.5s	2.50nm			3.9mb	
CHG	62.31	296	eP	26	08.90	-0.3
CHTO	62.31	296	eP	26	08.50	-0.6
	1.0s	4.50nm			4.4mb	
			pP	26	17.20	28kmX
SHL	70.69	300	iP	27	20.00	17.6X
GUN	76.51	301	P	27	36.40	-0.1
PKI	76.82	301	P	27	38.00	-0.1
KKN	76.99	301	P	27	36.80	-2.1
GKN	77.59	301	P	27	42.00	-0.2
ASMO	145.22	332	ePKP	35	23.00	0.0
AAPN	145.43	332	ePKP	35	24.00	0.7
APHE	145.52	331	ePKP	35	24.20	0.7
ALOJ	145.59	332	ePKP	35	24.40	0.7
ATEJ	145.70	331	ePKP	35	24.50	0.6
	S.D. = 0.9	on	15 of	17	obs.	

? SEP 02, 1990 15h 12m 46.59± 0.94s
44.337 N ± 9.6km 7.360 E ± 8.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.5 (GEN).

STV	0.10	195	P	12	49.40	0.1
			S	12	50.73	
ENR	0.12	159	P	12	49.60	-0.1
			S	12	51.35	
PZZ	0.25	312	P	12	51.96	0.0
			S	12	55.96	
ROB	0.37	96	P	12	54.22	0.0
			S	12	59.14	
	S.D. = 0.1	on	4 of	4	obs.	

SEP 02, 1990 15h 33m 28.73± 0.89s
42.982 N ± 7.6km 18.413 E ± 6.6km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.4 (TTG).

BRY	0.13	130	iPgc	33	32.90	1.0
			iSg	33	36.20	
NKY	0.46	111	ePg	33	38.00	-0.2
			eSg	33	45.50	
HCY	0.54	173	iPgd	33	39.50	-0.1
			iSg	33	48.20	
BDV	0.76	156	ePg	33	43.00	-0.6
			eSg	33	56.00	
PLE	0.80	64	ePg	33	44.00	-0.3
			eSg	33	57.00	
TTG	0.83	131	ePg	33	45.00	0.2
			eSg	33	58.00	
HVAR	1.45	278	iPn	33	55.10	0.1
			iSn	34	15.40	
	S.D. = 0.6	on	7 of	7	obs.	

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* SEP 02, 1990 15h 50m 37.08± 1.79s
0.045 S ±15.2km 78.513 W ±10.5km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)
Felt (II) at Quito.

YANA	0.09	220	iP+	50	39.70	-0.4
QUR	0.13	187	iP+	50	40.40	-0.1
GGP	0.15	213	iP+	50	41.00	0.0
QTO	0.16	186	iP	50	41.50	0.5
CAYA	0.54	77	iP	50	49.00	0.8
			S	50	56.40	
VC1	0.60	169	iP+	50	50.00	0.4
ANGL	1.03	110	eP	50	55.60	-1.2
			S	51	10.00	
PSO	1.71	44	eP	51	11.00	3.6X
ZOBO	19.10	148	P	55	06.00	2.7X
			e	00	00.00	
SIV	23.40	133	eP	55	52.00	4.8X
	S.D. = 0.8	on	7 of	10	obs.	

SEP 02, 1990 15h 55m 40.35± 1.02s
32.657 S ± 5.7km 71.618 W ± 9.9km
DEPTH = 26.5 ± 5.3 km
NEAR COAST OF CENTRAL CHILE (135)

IHA	0.37	183	eP	55	48.50	0.0
			iS	55	57.70	
ROCH	0.60	122	iPd	55	52.20	-0.2
			iS	56	03.20	
LCCH	0.82	177	iPd	55	56.00	0.2
			iS	56	07.70	
JACH	0.86	92	iPd	55	55.50	-1.2
			iS	56	08.50	
PEL	0.92	122	iPd	55	57.50	-0.1
			iS	56	12.50	
SAN	1.13	135	ePd	56	00.50	0.0
			iS	56	18.20	
TACH	1.15	150	eP	56	01.00	0.3
			iS	56	19.50	
LNV	1.31	172	ePc	56	02.00	-0.9
			i	56	04.00	
			iS	56	22.00	
PCH	1.33	136	iPc	56	04.10	0.7
			iS	56	25.50	
CHCH	1.51	148	iP	56	07.20	1.3
			iS	56	30.00	
RTBS	2.09	62	e(P)	56	45.00	30.8X
			eS	57	17.40	
MDZ	2.34	96	eP	56	23.00	5.1X
			i	56	30.00	
			iS	56	55.60	
RTCB	2.66	65	e(P)	56	23.00	0.5
			e	56	23.80	
			eS	56	57.20	
ZON	2.73	67	eP	56	23.50	0.1
RTLL	2.98	65	e(P)	57	00.00	33.0X
			eS	57	39.80	
CFA	3.05	71	e(P)	56	29.00	1.0
CNCB	16.12	13	eP	59	27.00	-0.3
AIA	32.93	174	eP	02	04.00	-10.3X
	S.D. = 0.8	on	14 of	18	obs.	

? SEP 02, 1990 15h 56m 09.28± 6.65s
32.475 S ±38.9km 71.738 W ±32.4km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)
Felt (II) at Valparaiso.

IHA	0.56	172	iPd	56	20.80	0.3
			i(S)	56	27.90	
ROCH	0.79	129	iP	56	24.90	0.1
JACH	0.99	102	iPd	56	27.90	-0.2
			iS	56	41.40	
LCCH	1.01	172	iP	56	27.50	-0.8
			iS	56	40.50	
SAN	1.33	137	iPc	56	33.30	-0.5
			iS	56	50.60	
TACH	1.35	150	iP	56	34.50	0.3
			iS	56	50.10	
PCH	1.54	138	iP	56	37.00	0.1
			iS	56	56.50	
CHCH	1.72	148	iP	56	40.20	0.8
			i	57	02.40	
	S.D. = 0.6	on	8 of	8	obs.	

SEP 02, 1990 16h 16m 16.39± 0.78s
38.077 N ± 7.4km 22.592 E ± 9.4km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 2.8 (ATH).

ATH	0.89	96	ePg	16	32.00	-1.5
			eSg	16	44.10	
EVR	1.04	324	ePg	16	36.10	0.0
			eSg	16	51.20	
ITM	1.04	211	ePn	16	37.00	1.0
VLI	1.38	168	ePg	16	41.30	-0.4
VLS	1.58	274	ePb	16	42.60	-1.9
KZN	2.32	344	ePn	16	55.10	-0.1
VAM	2.96	154	ePb	17	05.50	1.2
VAY	3.24	360	ePn	17	10.00	1.8
	S.D. = 1.5	on	8 of	8	obs.	

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* SEP 02, 1990 16h 16m 31.23± 2.07s
2.694 N ±13.5km 125.912 E ±17.2km
DEPTH = 98.3 ± 19.6 km
4.7mb (8 obs.)
TALAUD ISLANDS (263)

MNI	1.64	221	iPd	17	00.00	0.4
			eS	17	21.00	
KKM	10.23	289	ePc	19	00.00	3.2X
	0.9s	94.80nm			5.7mb X	
MTN	16.28	162	iPd	20	13.80	-1.7
	0.3s	14.00nm			4.7mb	
WB5	23.92	160	eP	21	38.00	0.7
			e(S)	25	50.90	
WRA	23.97	160	Pd	21	38.70	0.9
	0.3s	7.00nm			4.6mb	
ASPA	27.33	164	eP	22	08.90	0.0
	0.4s	10.00nm			4.7mb	
CHG	30.88	303	eP	22	42.00	1.4
CHTO	30.88	303	iP	22	42.30	1.7
	0.8s	3.11nm			4.1mb	
MAT	35.54	17	eP	23	21.00	0.3
	0.8s	8.21nm			4.7mb	
BJI	38.21	348	eP	23	42.00	-1.0
	1.1s	8.00nm			4.5mb	
GUN	45.69	307	P	24	44.00	-0.6
PKI	45.91	307	P	24	46.00	-0.4
KKN	46.11	307	P	24	46.40	-1.4
GKN	46.72	307	P	24	52.20	-0.3
GBA	49.10	286	Pc	25	09.30	-1.6
SUF	92.10	333	iP	29	31.30	1.0
	0.4s	2.30nm			4.9mb	
NUR	93.21	331	eP	29	37.00	1.6
NB2	99.34	333	P	30	02.40	-1.1
	0.9s	2.50nm			4.8mb	
	S.D. = 1.2	on	17 of	18	obs.	

? SEP 02, 1990 16h 55m 18.64± 6.35s
32.572 S ±31.0km 72.136 W ±39.3km
DEPTH = 13.0 ± 5.5 km
OFF COAST OF CENTRAL CHILE (134)

IHA	0.61	137	iPc	55	30.10	-0.6
			iS	55	35.10	

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LCCH    1.02 152 iPd    55 36.50  -1.1
                 iS     55 46.30
ROCH    1.03 113 iPd    55 36.00  -1.9
                 iS     55 46.00
JACH    1.31  95 iPd    55 41.00  -1.6
PEL     1.35 115 iPd    55 41.50  -1.7
                 iS     55 55.70
TACH    1.47 137 iP     55 43.00  -1.9
                 iS     55 58.00
LNV     1.51 156 iPc    55 43.50  -1.8
                 iS     56 00.00
SAN     1.52 126 iPd    55 43.60  -1.9
                 iS     56 01.20
PCH     1.72 128 iP     55 47.60  -0.9
                 iS     56 05.70
CHCH    1.84 138 iP     55 49.40  -0.8
                 i      56 11.20
MDZ     2.79  97 e(P)   56 10.30   6.5X
                 e      56 41.90
      S.D. = 0.6  on  10 of  11 obs.
-------------------------------------
&  SEP  02, 1990  17h 15m 41.00s
   36.653 N          121.317 W
   DEPTH =   5.0km
 CENTRAL CALIFORNIA                ( 39)
      <BRK>. ML 3.0 (BRK).

SAO     0.15 317 iPc    15 43.90  -0.3
                 iS     15 46.65
LLA     0.30  97 iPc    15 47.00  -0.1
PRS     0.32 188 iPd    15 47.40  -0.1
GCC     0.66 305 ePc    15 53.60  -0.7
ARN     0.72 346 iPc    15 55.00  -0.3
PRI     0.73 134 iPd    15 54.90  -0.8
MHC     0.73 339 iPd    15 55.40  -0.3
                 iS     16 07.30
PHAM    1.10 137 eP     16 00.80  -1.4
PKEM    1.14 121 eP     16 02.80   0.0
PCC     1.20 315 ePc    16 01.90  -1.9
FRI     1.33  75 iPc    16 04.30  -1.8
                 iS     16 21.90
BKS     1.42 329 eP     16 05.70  -1.8
                 iS     16 28.30
BRK     1.43 329 eP     16 05.50  -2.1
ZSP     1.49 330 eP     16 06.30  -2.1
                 i      16 09.70
CMB     1.57  28 ePd    16 08.00  -1.6
                 iS     16 27.80
BCH     1.77 145 eP     16 10.00  -2.6
BLP     2.22 160 eP     16 16.20  -2.8
ABL     2.48 136 eP     16 20.50  -2.4
ORV     2.90 357 ePc    16 27.60  -1.1
KVN     3.49  46 eP     16 36.80  -0.5
      20 obs. associated
-------------------------------------
   SEP  02, 1990  19h 32m 39.24± 0.69s
   45.191 N ± 4.8km     7.493 E ± 6.1km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 2.2 (GEN).

RSP     0.17 257 P      32 44.10   0.9
                 S      32 46.57
LSD     0.36 318 P      32 46.67   0.0
                 S      32 50.87
ORX     0.56  38 P      32 50.77   0.1
                 S      32 57.23
RRL     0.57 242 P      32 51.28   0.3
                 S      32 58.25
BNI     0.60 257 Pc     32 51.40   0.0
                 eSg    32 58.50
LPG     0.61 301 Pg     32 51.00  -0.7
                 Sg     32 58.30
PZZ     0.74 202 P      32 53.74  -0.1
                 S      33 02.05
ROB     0.94 163 P      32 58.36   1.2
                 S      33 09.53
STV     0.95 187 P      32 56.20  -1.3
                 S      33 06.97
ENR     0.97 183 P      32 57.23  -0.4
                 S      33 08.61
      S.D. = 0.8  on  10 of  10 obs.
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?  SEP  02, 1990  19h 54m 37.77± 1.10s
   20.403 S ±10.2km    70.363 W ±14.4km
   DEPTH =  33.0km  (normal)
 NEAR COAST OF NORTHERN CHILE      (122)

ANT     3.29 181 eP     55 28.50   0.4
CNCB    4.23  33 P      55 46.00   3.9X
LPB     4.41  30 eP     55 46.00   1.5
        1.0s   300.00nm
                 i      55 57.20
ZOBO    4.63  28 P      55 48.00   0.2
                 S      56 52.00
CCH     5.00  54 P      56 02.50   9.7X
SIV     9.86  65 P      56 59.00  -1.4
NNA    10.43 322 iP     57 07.50  -0.7
        0.9s     8.40nm          5.0mb
PPD    17.84  99 (P)   58 52.00   6.8X
      S.D. = 1.5  on   5 of   8 obs.
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?  SEP  02, 1990  20h 34m 52.31± 1.07s
   31.576 N ±16.7km  140.729 E ±22.0km
   DEPTH =  33.0km  (normal)
   4.7mb ( 10 obs.)
 SOUTH OF HONSHU, JAPAN            (211)

MAT     5.38 338 iPd    36 12.50   0.2
                 eS     37 01.00
PKI    47.86 280 P      43 29.00  -0.5
GKN    48.37 281 P      43 33.60   0.4
HFS    78.82 336 eP     46 51.50  -1.6
        0.4s     1.30nm          4.3mb
NB2    79.00 338 P      46 53.60  -0.5
        0.8s     2.70nm          4.3mb
CLL    85.54 330 iPc    47 28.40   0.3
        1.0s    12.00nm          5.1mb
LPL    92.66 330 eP     48 02.30   0.0
        0.6s     1.80nm          4.7mb
LPG    92.66 330 eP     48 02.50   0.1
        0.4s     1.15nm          4.7mb
SMF    92.96 332 eP     48 03.70   0.3
        0.4s     1.15nm          4.7mb
AVF    93.04 332 eP     48 03.80   0.1
        0.4s     1.15nm          4.7mb
MAF    93.81 332 eP     48 08.30   0.9
        0.4s     1.15nm          4.7mb
TCF    93.90 333 eP     48 08.10   0.3
        0.6s     1.80nm          4.7mb
LSF    94.20 333 eP     48 09.30   0.2
        0.6s     2.25nm          4.8mb
      S.D. = 0.7  on  13 of  13 obs.
-------------------------------------
%  SEP  02, 1990  21h 28m 33.81± 2.01s
   39.378 N ±17.1km   28.546 E ±12.9km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)

DST     0.24  16 iPg    28 37.00  -1.9
                 iSg    28 40.00
BNT     1.09 334 ePn    28 54.00  -0.3
EDC     1.10 332 iPn    28 54.00  -0.5
ALT     1.26 104 iPn    28 56.70  -0.5
KGT     1.44 319 iPn    29 00.00   0.1
HRT     1.68  30 ePn    29 04.50   1.1
ISK     1.73  13 ePn    29 06.00   1.9
      S.D. = 1.5  on   7 of   7 obs.
-------------------------------------
?  SEP  02, 1990  22h 42m 18.02± 3.16s
   18.399 N ±61.1km   64.002 W ±21.0km
   DEPTH =  27.5 ± 11.1 km
 VIRGIN ISLANDS                    ( 91)
      ML 4.1 (FDF).

LPR     1.78 267 P      42 47.00  -0.4
                 S      43 07.50
CPD     1.85 259 P      42 47.00  -1.5
NEV     1.85 132 eP     42 49.60   1.1
                 S      43 13.70
CSB     2.05 267 P      42 51.00  -0.4
BPA     2.45 123 eP     42 54.10  -2.9
PORP    2.53 263 P      42 57.20  -1.0
LRS     2.70 268 P      43 00.20  -0.4
MCP     2.95 271 P      43 04.90   0.8
SEG     3.10 129 eP     43 07.20   0.9
PAG     3.24 136 eP     43 08.00  -0.2
                 S      43 42.00
DOG     3.28 136 eP     43 08.10  -0.7
MGG     3.56 133 eP     43 12.90   0.1
BBL     3.74 139 eP     43 14.00  -1.4
      S.D. = 1.3  on  13 of  13 obs.
-------------------------------------
?  SEP  02, 1990  23h 27m 48.35± 0.65s
   19.473 S ±22.7km   178.465 W ±12.1km
   DEPTH = 614.2 ±  7.0 km
   4.1mb (  7 obs.)
 FIJI ISLANDS REGION               (181)

MBU     3.65 312 iP     29 12.60  -0.4
SGE     3.91 298 ePc    29 14.90   0.1
WB5    44.30 261 eP     35 06.00  -1.3
WRA    44.32 261 P      35 08.00   0.6
        0.2s     0.30nm          3.4mb
MAT    69.13 324 (P)    37 56.00  -0.2
        0.8s     5.97nm          4.1mb
PLM    78.80  49 eP     38 50.60   0.1
KVN    81.06  43 iP     39 02.00  -0.1
PMR    84.13  14 eP     39 16.60   0.1
        0.6s     0.80nm          3.5mb
TOA    85.26  15 eP     39 22.90   0.8
IMA    87.31  10 eP     39 32.00   0.1
        0.7s     3.60nm          4.2mb
FBA    87.34  13 ePc    39 31.40  -0.5
        0.7s    18.00nm          4.9mb
BW06   88.52  43 eP     39 37.80  -0.3
        0.8s     2.14nm          4.1mb
CHTO   89.48 290 eP     39 44.70   2.0
        1.1s     5.01nm          4.3mb
CNCB  102.77 113 ePdiff40 48.00   4.4X
LPB   102.78 113 ePdiff40 45.00   1.5
ZOBO  102.87 113 Pdiff  40 43.00  -1.1
        1.2s    10.14nm          5.3mb X
EKA   144.02   5 PKPd   46 14.60  -1.6
        1.1s     6.30nm
KSP   146.59 343 iPKPd  46 23.20   2.7X
SPC   146.76 337 ePKP   46 23.60   2.5X
CLL   146.97 347 iPKPd  46 24.50   3.4X
        1.1s    22.00nm
                 i      46 27.90
BRG   147.16 345 iPKP   46 24.30   2.8X
        1.0s    12.00nm
                 i      46 29.00
PRU   147.83 344 PKPc   46 26.50   3.9X
MOX   147.88 348 ePKP   46 27.00   4.4X
ENN   148.58 355 ePKP   46 28.50   4.8X
        0.9s     7.00nm
                 e      46 34.50
MEM   148.73 355 PKP    46 28.50   4.6X
KHC   148.87 345 iPKP   46 29.20   5.0X
DOU   149.35 356 PKPc   46 30.10   5.2X
FLN   150.74   3 ePKP   46 32.90   5.9X
        0.6s     5.40nm
CDF   150.76 352 ePKP   46 33.60   6.4X
        0.6s     3.60nm
LDF   150.92   2 ePKP   46 33.10   5.8X
        0.8s     4.05nm
GRR   151.09   3 ePKP   46 33.90   6.4X
        0.6s     3.60nm
LPF   151.44   4 ePKP   46 34.80   6.8X
        0.8s    10.75nm
LOR   152.21 357 ePKP   46 36.60   7.4X
        0.8s     3.35nm
SSF   152.44 357 ePKP   46 37.50   8.0X
        1.0s     4.00nm
LBF   152.49 356 ePKP   46 37.50   7.9X
        1.0s     4.00nm
      S.D. = 1.0  on  16 of  35 obs.
-------------------------------------
   SEP  03, 1990  00h 04m 45.45± 0.42s
   37.016 N ± 3.5km   29.531 E ± 3.2km
   DEPTH =  25.2 ±  3.7 km
   4.1mb ( 22 obs.)
 TURKEY                            (366)
      ML 4.5 (ATH). Felt at Cameli.

ELL     0.40 131 iPn    04 53.80  -0.4
KSL     0.90 177 ePg    05 01.40  -0.8
                 eSg    05 19.50
KHL     1.30 360 iPn    05 07.10  -1.1
ALT     2.09  12 ePn    05 20.70   1.2
SMG     2.25 289 ePn    05 21.60  -0.2
KAP     2.40 233 ePn    05 25.00   1.1
DST     2.68 345 iPn    05 29.90   2.0
PPCY    3.12 132 eP     05 36.50   2.4
APE     3.20 272 ePn    05 35.50   0.2
GPA     3.32  10 ePn    05 38.50   1.5
PRK     3.40 312 iPnc   05 37.50  -0.6
BNT     3.56 340 iPn    05 40.90   0.4
EDC     3.57 339 iPn    05 40.00  -0.6
NPS     3.62 242 ePn    05 41.60   0.3
CSS     3.70 123 eP     05 44.00   1.6
```

03d 00h

GBZT	3.77	359	ePn	04	45.10	-58.2X			i	08	53.80		PAG	1.45	169	eP	23	21.10	0.3
EZN	3.77	319	iPn	05	42.70	-0.6	WET	17.13	320	eP	08	45.90	1.3			S	23	39.40	
BBTK	3.79	41	iPd	05	46.00	2.2	MDI	17.22	307	P	08	49.00	3.3X	DOG	1.47	166	eP	23	21.10	0.2
HRT	3.80	2	iPn	05	34.90	-8.9X	OSS	17.34	310	ePd	08	49.00	1.6	MGG	1.66	158	eP	23	23.70	0.0
KGT	3.85	334	iPn	05	44.40	0.0	VDL	17.67	309	ePd	08	55.00	3.5X	BBL	1.99	166	eP	23	28.70	0.2
ISK	4.06	355	ePn	05	43.00	-4.4X	BRG	17.77	326	eP	08	53.40	0.8		S.D. = 0.4		on	7 of	7 obs.	
FAM	4.15	118	eP	05	52.00	3.3X		1.3s		23.00nm			4.1mb							
MFT	4.15	336	ePn	05	48.00	-0.9				e	09	13.80		SEP 03, 1990 00h 27m 00.35± 0.33s						
VAM	4.60	251	ePn	05	56.90	1.7	TMA	17.89	307	ePd	08	58.30	4.1X	42.890 N ± 3.2km 12.940 E ± 3.8km						
ATH	4.72	283	ePn	05	57.10	0.3	SAX	18.08	311	ePd	08	57.30	0.6	DEPTH = 6.1 ± 2.7 km						
DMK	4.99	345	iPn	05	58.50	-2.2	LLS	18.12	309	ePd	08	59.50	2.3	CENTRAL ITALY					(381)	
RDO	5.16	324	ePn	06	02.00	-1.1	SBF	18.13	299	eP	08	57.00	-0.1	MD 3.5 (TRI).						
VLI	5.30	269	ePn	06	05.50	0.5		0.8s		18.80nm			4.3mb							
PLG	5.82	307	ePn	06	11.90	-0.5	ORO	18.29	305	P	09	00.00	0.9	MNS	0.54	201	Pc	27	10.70	-0.5
BHL	5.88	120	P	06	13.00	-0.3	GRF	18.32	320	eP	09	00.40	1.1				eSg	27	18.50	
			S	09	40.00		CLL	18.50	326	eP	09	02.00	0.4	ARV	0.61	0	Pc	27	12.10	-0.4
JMB	5.90	338	iPd	06	13.00	-0.4		1.3s		17.00nm			4.1mb				eSg	27	23.00	
			S	07	30.00					eSg	31	41.00		AQU	0.64	147	P	27	11.70	-1.4
DIM	5.90	330	iP	06	12.00	-1.4	MOX	18.71	322	eP	09	07.00	2.9X				eSg	27	21.30	
RZN	5.97	323	iPc	06	14.00	-0.7				e	12	40.00		AZI	0.97	158	P	27	19.70	0.5
			S	07	19.00		ZLA	18.77	310	ePd	09	06.50	1.6				eSg	27	34.00	
ITM	6.08	274	ePn	06	18.50	2.4	DIX	18.82	306	ePd	09	07.90	2.1	CRE	1.03	316	P	27	20.70	0.4
ADI	6.10	128	eP	06	16.50	0.1	SLE	18.83	311	ePd	09	06.60	0.9				eSn	27	35.60	
PLD	6.30	325	iPd	06	20.00	0.9	BNI	18.98	302	P	09	09.00	1.4	RMP	1.09	189	P	27	21.00	-0.3
			iSg	07	08.00		LPG	19.06	303	eP	09	08.80	0.1				eSn	27	37.50	
EVR	6.39	290	ePn	06	21.20	0.7		1.0s		10.00nm			4.0mb	RSM	1.10	341	P	27	22.30	1.0
MMB	6.41	317	ePc	06	10.00	-10.7X	LPL	19.08	304	eP	09	08.90	0.0				eSn	27	40.70	
			iS	07	28.00			0.9s		9.85nm			4.0mb	RDP	1.14	188	P	27	22.00	-0.2
ZNT	6.58	135	eP	06	20.50	-2.6	CDF	19.85	312	eP	09	17.10	-0.3				eSn	27	38.70	
			eS	07	35.00			0.8s		8.05nm			4.1mb	SFI	1.30	323	P	27	25.60	0.9
PGB	6.90	325	eP	06	25.00	-2.6	BSF	19.89	310	eP	09	18.10	0.2				eSn	27	44.30	
			S	07	40.00			0.6s		3.60nm			3.9mb	PGD	1.33	318	P	27	25.30	0.0
KZN	6.90	301	ePn	06	27.90	0.2	HAU	20.23	310	eP	09	21.00	-0.4	SDI	1.35	151	P	27	26.00	0.3
VAY	6.91	311	eP	06	27.30	-0.3		0.7s		8.80nm			4.2mb				eSn	27	44.50	
PVL	6.98	334	iPd	06	27.00	-1.6	Z	20s		0.08um			3.0Msz	MAO	1.40	251	P	27	25.70	-0.7
VLS	7.19	282	ePn	06	33.20	1.5	SMF	21.34	305	eP	09	31.70	-1.0				eSn	27	44.50	
DSI	7.27	137	eP	06	32.00	-0.8		0.8s		8.05nm			4.2mb	DUI	1.67	137	Pd	27	32.00	1.7
VTS	7.39	321	eP	06	34.00	-0.6	LBF	21.36	306	eP	09	33.70	0.8	RFI	1.77	154	P	27	32.90	1.3
			i	07	54.00			0.8s		4.05nm			3.9mb	PII	1.95	296	P	27	34.00	-0.3
TLB	7.65	352	eP	06	39.00	1.0	LOR	21.53	306	eP	09	35.10	0.5	BDI	2.07	305	P	27	36.20	0.1
BUC1	7.79	341	eP	07	16.00	36.0X		1.0s		6.00nm			4.0mb				eSn	28	01.00	
OHR	7.93	304	eP	06	42.50	0.5	Z	20s		0.08um			3.1Msz	MME	2.09	309	P	27	37.20	0.7
	1.1s		97.00nm			5.9mb X	MEM	21.62	316	P	09	42.00	6.5X	HVAR	2.59	82	iPn	27	44.60	1.1
			i	06	48.00		SSF	21.69	306	eP	09	35.80	-0.4	RIY	2.67	23	ePn	27	44.00	-0.5
			e	07	10.00			1.0s		12.00nm			4.3mb				iSn	28	18.70	
SKO	7.97	311	iP	06	41.50	-1.1	AVF	21.71	305	eP	09	35.70	-0.7	TRI	2.88	12	ePn	27	46.50	-1.1
	1.0s		50 00nm			5.7mb X		0.8s		5.35nm			4.0mb				iSn	28	21.90	
Z	10s		1 48um			5.8Msz	DOU	22.18	314	P	09	42.10	1.1				iSg	28	36.50	
E	10s		1 97um					0.9s		22.50nm			4.6mb	PGF	2.92	265	Pn	27	49.30	1.0
			LR	10	05.00					S	13	39.00		SGO	2.93	142	P	27	48.00	-0.3
MBH	8.50	147	eP	06	48.00	-1.8	NUR	23.72	354	eP	09	58.00	2.0	CEY	3.04	20	e(Pn)	27	49.50	-0.4
MLR	8.89	343	eP	06	54.00	-1.3	MFF	23.98	303	eP	09	58.50	-0.2				eSn	28	26.00	
CMP	8.91	339	ePc	06	59.00	3.4X		0.8s		8.05nm			4.3mb	VBY	3.10	32	e(Pg)	27	59.70	9.0X
VRI	9.09	347	ePc	06	57.00	-1.0	MAIO	24.01	83	eP	10	01.00	1.9				iSn	28	28.50	
TNR	9.49	337	ePd	07	05.00	1.5	LDF	24.48	308	eP	10	04.30	0.8	VVI	3.11	353	P	27	50.70	-0.2
BRT	10.35	296	P	07	14.00	-1.3		0.8s		5.35nm			4.2mb	VOY	3.21	12	ePn	27	51.80	-0.6
TDS	10.69	288	P	07	18.20	-1.9	FLN	24.76	308	eP	10	04.30	-1.9				ePg	28	02.50	
SOI	10.75	280	P	07	20.50	-0.4		0.8s		5.35nm			4.2mb				eSn	28	24.20	
ATN	11.22	280	P	07	25.00	-2.3	GRR	24.89	307	eP	10	05.70	-1.8				eSg	28	47.30	
MGR	11.38	290	P	07	28.40	-1.0		1.0s		12.00nm			4.5mb	SAL	3.22	328	P	27	53.00	0.6
SGO	11.65	292	P	07	32.50	-0.6	HFS	25.26	341	eP	10	10.70	-0.2	LJU	3.35	19	ePn	27	54.00	-0.3
BSS	12.07	293	P	07	37.70	-1.1		1.1s		14.30nm			4.5mb				eSn	28	34.00	
DUI	12.55	296	P	07	53.00	7.7X	Z	15s		0.09um			3.4MszX	MDI	3.70	322	P	27	58.50	-0.7
SDI	13.03	296	P	07	55.00	3.4X				LR	19	03.00		FVI	3.70	358	P	27	59.20	-0.1
AZI	13.38	297	P	08	07.00	10.8X	SUF	25.82	356	eP	10	16.00	0.0				eSn	28	42.00	
SRO	13.59	326	iP	07	58.90	0.1	NB2	26.68	340	P	10	23.00	-1.1	PTJ	3.71	35	e(Pn)	28	01.60	2.2
MNS	14.03	298	P	08	05.00	0.2		0.9s		2.60nm			3.9mb				iSn	28	44.50	
ZST	14.42	325	eP	08	08.40	-1.4	GKN	46.78	84	P	13	14.80	-0.1	CKI	3.71	296	P	27	58.20	-1.3
VOY	14.75	312	eP	08	13.80	-0.5	KKN	47.38	84	P	13	19.40	-0.3	SBF	4.13	285	Pn	28	06.00	0.6
KRA	14.76	335	eP	08	14.20	0.1	PKI	47.58	85	P	13	21.00	-0.4	OSS	4.29	333	eP	28	10.50	2.8
VKA	14.84	323	e(P)	08	10.50	-4.7X		0.7s		27.00nm			5.4mb X	TMA	4.34	319	eP	28	08.50	0.1
			e	08	15.00		GUN	47.81	84	P	13	22.60	-0.6	VDL	4.36	327	ePc	28	10.70	1.8
SFI	15.11	303	P	08	30.00	11.3X	CHG	62.69	86	eP	15	09.80	-0.9	DOI	4.43	293	P	28	09.00	-0.8
PGD	15.18	302	P	08	21.00	1.1		S.D. = 1.2		on 102 of 123 obs.				ORO	4.49	309	P	28	08.00	-2.6
FVI	15.71	313	P	08	30.00	3.5X								SQTA	4.50	345	iPnc	28	11.60	0.9
BDI	16.00	302	P	08	38.00	7.5X	? SEP 03, 1990 00h 22m 56.50± 9.75s										i	28	13.30	
SAL	16.63	307	P	08	38.50	0.2	17.465 N ±89.6km 61.974 W ±35.6km										i	28	36.50	
KSP	16.75	330	eP	08	43.80	4.0X	DEPTH = 33.0km (normal)										iSn	29	02.60	
			e	31	39.20		LEEWARD ISLANDS						(92)				i	29	07.10	
KHC	16.76	321	P	08	43.00	3.0X	ML 3.5 (FDF).							FRF	4.65	280	Pn	28	13.00	0.3
	1.3s		12.00nm			3.9mb								LMR	4.73	278	Pn	28	13.70	-0.2
PRU	16.88	325	eP	08	41.50	0.1	BPA	0.43	165	eP	23	05.40	-0.7	LRG	4.85	279	Pn	28	15.70	0.2
			e	09	08.00					S	23	11.90		SAX	5.05	331	eP	28	20.60	2.0
SQTA	16.95	313	iPc	08	42.50	0.0	NEV	0.66	240	eP	23	09.32	0.0	LPG	5.16	302	Pn	28	22.00	1.8
	1.5s		39.40nm			4.3mb				S	23	17.50		LPL	5.18	303	Pn	28	22.80	2.4
			i	08	45.20		SEG	1.15	157	eP	23	16.35	0.1	SLE	5.80	329	ePc	28	29.50	0.6
			i	08	50.10					S	23	32.00		VKA	5.87	23	e(Pn)	28	29.00	-1.0

		e(Sn)	29	32.00	
KHC	6.26	4 Pg	28	34.00	-1.5
		Sg	29	44.50	
BSF	6.57	321 Pn	28	39.40	-0.5
CDF	6.80	326 Pn	28	42.40	-0.7
		Sn	29	59.00	
HAU	6.90	320 Pn	28	43.40	-1.1
		Sn	30	00.30	
GRF	6.91	351 e(Pg)	28	42.00	-2.6
		e(Sg)	30	01.00	
SMF	7.48	303 Pn	28	51.80	-0.9
		Sn	30	13.60	
LBF	7.56	306 Pn	28	52.80	-1.0

S.D. = 1.2 on 53 of 54 obs.

SEP 03, 1990 00h 39m 01.57± 1.49s
3.140 S ± 6.5km 148.174 E ± 9.3km
DEPTH = 51.6 ± 13.9 km
5.4mb (17 obs.) 5.1Msz (4 obs.)
BISMARCK SEA (203)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 23C
Centroid Location:
Origin Time 00:39: 8.3 1.1
Lat 2.38S 0.11 Lon 148.45E 0.05
Dep 15.0 BDY Half-duration 1.8
Moment Tensor; Scale 10**17 Nm
Mrr= 1.01 0.05 Mtt=-0.64 0.06
Mff=-0.36 0.05 Mrt=-1.57 0.13
Mrf= 0.13 0.11 Mtf= 0.76 0.05
Principal Axes:

	Val=	Plg=	Azm=
T	1.99	57	167
N	-0.07	19	288
P	-1.92	26	28

Best Double Couple:Mo=2.0*10**17
NP1:Strike=155 Dip=25 Slip= 140
NP2: 283 74 70

LAT	3.68	198 eP	39	57.00	-0.4
RAB	4.12	105 e(P)	39	56.00	-7.6X
		iS	41	00.00	
MNDI	5.41	236 eP	40	24.00	2.1
PMG	6.31	189 eP	40	36.00	1.6
		eS	41	52.00	
GUA	16.88	349 e(P)	42	55.50	-0.5
	0.7s	76.71nm		4.9mb	
GUMO	16.94	349 e(P)	42	55.20	-1.5
		eS	46	09.00	
CTA	16.95	186 iPd	42	58.30	1.5
	2 0s	1176.47nm		5.7mb	
		iS	46	10.00	
QIS	19.22	205 iPd	43	22.30	-2.2
		eS	47	04.00	
		ePKKP	15	08.40	
MTN	19.42	239 eP	43	25.00	-1.7
	0.8s	80.00nm		5.0mb	
WB5	21.41	218 eP	43	54.70	7.5X
		e	47	50.00	
WRA	21.48	218 Pc	43	45.90	-2.0
	1.0s	98.50nm		5.1mb	
RMQ	23.22	179 eP	44	08.40	3.3X
	0.7s	54.00nm		5.1mb	
QLP	23.61	189 iPd	44	09.20	0.4
BRS	24.51	170 iP	44	17.00	-0.6
ASPA	24.63	213 eP	44	18.30	-0.5
	1.4s	102.00nm		5.2mb	
	Z 20s	14.97um		5.5Msz	
		eS	48	51.30	
		LR	54	14.90	
DAV	24.74	294 eP	44	22.00	2.2
DZM	25.86	138 iPc	44	28.40	-2.0
COO	27.52	173 eP	44	44.60	-0.8
	0.7s	5.00nm		4.3mb X	
STK	29.25	192 iPc	44	58.30	-2.7X
	1.6s	13.00nm		4.3mb	
		i	45	52.00	
8WA	31.13	180 eP	45	26.80	9.2X
CAN	32.03	179 eP	45	33.80	8.3X
OCP	32.14	304 eP	45	22.50	-4.1X
8AG	33.48	306 eP	45	38.00	-0.5
		eS	51	02.00	
MAT	40.56	348 iP-	46	35.00	-2.6
	2.7s	214.29nm		5.5mb	
	Z 20s	2.13um		5.0Msz	
		eS	52	41.00	
SSE	42.66	325 eP	46	53.50	-1.4
	Z 20s	1.80um		5.0Msz	
		S	53	16.00	
		sS	53	24.00	
		SS	56	36.00	
SNG	48.56	282 eP	47	45.50	3.4X
		eS	54	46.00	
PSI	49.57	276 ePd	47	50.50	0.6
BJI	52.03	329 eP	48	08.00	-0.2
	4.0s	0.47nm		2.9mb X	
	Z 24s	1.59um		5.0MszX	
	E 11s	0.29um			
		eS	55	30.00	
KMI	52.25	305 Pc+	48	12.00	1.6
	2.5s	260.00nm		5.8mb	
	Z 16s	1.50um		5.1MszX	
	N 11s	0.50um			
	E 11s	0.40um			
		pP	48	29.00	66kmX
		sP	48	37.00	
		S	55	43.00	
CHG	53.12	296 ePd	48	18.10	1.5
	1.2s	39.06nm		5.3mb	
		eS	55	54.00	
CHTO	53.12	296 eP	48	18.00	1.4
GUN	67.33	302 P	49	53.40	-0.7
PKI	67.63	301 P	49	54.20	-1.8
KKN	67.80	302 P	49	55.90	-1.1
	1.0s	52.00nm		5.5mb	
GKN	68.41	302 P	49	58.80	-1.8
	0.9s	33.00nm		5.3mb	
HYB	71.59	289 eP	50	20.50	0.5
GBA	72.09	285 P	50	23.60	0.7
NDI	74.91	301 eP	50	39.50	0.2
SVW	77.16	24 ePc	50	52.90	1.6
TTA	77.98	23 ePc	50	57.40	1.6
	2.5s	244.40nm		5.8mb	
PMR	80.14	26 eP	51	07.90	0.5
	2.9s	550.00nm		6.0mb	
	Z 21s	1.00um		5.1Msz	
IMA	80.49	21 eP	51	08.20	-1.2
	2.7s	231.60nm		5.6mb	
TOA	81.63	26 eP	51	17.20	1.8
FBA	82.11	23 eP	51	17.20	-0.5
	3.0s	470.90nm		6.0mb	
INK	88.58	21 eP	51	50.00	0.2
LBFM	92.00	49 P	52	06.00	-0.6
PNT	93.80	41 eP	52	15.00	0.6
KVN	94.86	51 P	52	20.00	0.3
NEW	95.46	42 P	52	23.50	1.4
YKA	96.11	28 eP	52	24.90	0.2
	0.8s	4.60nm		5.1mb	
CIN	115.51	310 ePKP	57	33.00	-6.9X
BCAO	129.74	273 iPKPc	58	09.30	1.4
	0.8s	11.00nm			
CNCB	139.16	120 PKP	58	18.00	-8.2X
LPB	139.18	120 ePKP	58	23.00	-3.1X
ZOBO	139.27	119 PKP	58	20.00	-6.5X
		LR	45	24.00	
CCH	140.48	122 ePKP	58	25.00	-3.3X
SIV	145.39	124 PKP	58	36.60	0.1
PPD	148.55	144 ePKP	58	42.10	0.7
		e	58	47.90	
KIC	152.82	278 PKP	58	53.00	5.0X
LKO	153.17	285 PKP	58	54.40	5.9X

S.D. = 1.3 on 45 of 60 obs.

SEP 03, 1990 01h 02m 51.01± 1.84s
14.488 S ±11.9km 167.799 E ± 7.1km
DEPTH = 83.7 ± 16.6 km
4.9mb (11 obs.)
VANUATU ISLANDS (186)

PVC	3.27	171 iP	03	41.80	0.8
DZM	7.65	189 iPc	04	33.60	-8.3X
		iS	06	00.10	
HNR	9.18	302 eP	06	00.00	57.3X
BRS	18.99	225 iP	07	09.00	0.1
CTA	21.30	252 iPd	07	33.30	0.6
	0.9s	35.29nm		4.7mb	
RMQ	21.43	233 eP	07	37.20	3.2X
	1.1s	85.00nm		5.0mb	
COO	21.69	220 eP	07	37.00	0.5
	0.7s	12.00nm		4.4mb	
STK	29.54	230 iPd	08	50.10	0.2
	1.0s	27.00nm		4.9mb	
WB5	32.35	256 eP	09	12.70	-2.0
WRA	32.38	256 Pc	09	13.40	-1.5
	1.1s	8.30nm		4.5mb	
ASPA	33.24	249 iPc	09	21.10	-1.3
	1.0s	28.00nm		5.1mb	
NANU	50.00	253 iPc	11	37.80	-1.2
SBA	63.38	180 e(P)	13	12.90	-0.3
BJI	72.40	321 eP	14	11.00	1.0
CHG	75.45	294 eP	14	30.00	1.9
CHTO	75.45	294 eP	14	29.20	1.1
	1.2s	5.56nm		4.3mb	
		pP	14	38.20	29kmX
TTA	82.15	16 eP	15	04.30	0.7
PMR	83.10	19 eP	15	07.50	-0.9
	1.3s	52.80nm		5.3mb	
BRK	83.63	48 eP	15	11.00	-0.6
BKS	83.65	48 eP	15	12.20	0.5
	1.0s	39.00nm		5.3mb	
PRS	83.67	50 eP	15	12.30	0.4
SAO	83.79	50 eP	15	12.50	0.0
MHC	83.87	49 eP	15	12.80	-0.2
PRI	84.13	51 eP	15	14.70	0.4
TOA	84.44	20 ePc	15	16.70	1.4
WDC	84.53	46 eP	15	15.80	-0.3
ORV	84.85	47 eP	15	17.50	-0.2
CMB	85.06	49 eP	15	18.50	-0.4
MIN	85.09	46 eP	15	18.80	-0.3
FRI	85.16	50 eP	15	19.30	0.0
IMA	85.29	15 eP	15	19.10	-0.4
	1.4s	15.30nm		4.8mb	
MWC	85.40	53 eP	15	20.00	-0.9
SBB	85.75	53 eP	15	23.00	0.6
RVR	85.85	54 eP	15	23.00	0.2
BAR	85.96	55 eP	15	23.00	-0.4
FBA	85.97	17 eP	15	21.70	-1.1
	1.1s	20.00nm		5.1mb	
PLM	86.03	54 eP	15	24.00	0.0
CLC	86.32	52 eP	15	24.00	-1.2
GSC	86.75	52 eP	15	27.00	-0.3
TPC	86.93	54 eP	15	28.00	-0.2
KVN	87.10	49 iP	15	27.90	-1.2
GLA	87.54	55 eP	15	31.00	-0.1
PNT	89.90	39 eP	15	41.00	-0.9
PGD	144.29	330 PKP	22	19.00	-0.3
TDS	144.58	320 PKP	22	20.00	0.3
SGO	144.64	323 PKP	22	19.00	-0.7
LOR	144.68	341 ePKP	22	18.40	-1.2
	1.2s	8.95nm			
SDI	144.74	325 PKP	22	19.00	-1.0
MGR	144.76	322 PKPd	22	18.00	-2.0X
MNS	144.88	327 PKPd	22	19.00	-1.2
LBF	144.89	341 ePKP	22	19.00	-1.0
	1.0s	8.00nm			
GRR	144.92	347 ePKP	22	19.10	-0.8
	0.8s	6.70nm			
SSF	144.98	341 ePKP	22	19.80	-0.3
	1.0s	16.00nm			
LPL	145.18	336 ePKP	22	20.90	0.1
	1.2s	8.95nm			
LPG	145.19	336 ePKP	22	21.10	0.2
	1.2s	11.90nm			
SMF	145.24	340 ePKP	22	20.40	-0.2
	1.2s	16.35nm			
AVF	145.26	341 ePKP	22	20.40	-0.2
	1.2s	8.95nm			
LPF	145.30	347 ePKP	22	20.50	-0.1
	1.2s	23.80nm			
RDP	145.30	326 PKP	22	21.00	0.1
BNI	145.59	336 PKP	22	22.00	0.6
BGF	145.63	341 ePKP	22	21.70	0.4
	1.2s	14.90nm			
SOI	145.69	318 PKP	22	22.50	0.9
MAF	146.02	342 ePKP	22	23.20	1.3
	1.0s	5.00nm			
TCF	146.06	342 ePKP	22	23.00	1.0
	1.2s	7.45nm			
SBF	146.26	334 ePKP	22	23.40	0.9
	0.9s	16.40nm			
LSF	146.30	343 ePKP	22	23.60	1.2
	1.2s	8.95nm			
MFF	146.43	345 ePKP	22	23.90	1.4
PGF	146.60	331 ePKP	22	24.70	1.6
	0.8s	13.45nm			
FRF	146.83	335 ePKP	22	25.10	1.8
	1.0s	12.00nm			
LRG	147.04	335 ePKP	22	26.00	2.4X
	1.2s	17.85nm			
LMR	147.08	334 ePKP	22	26.00	2.3X
	1.0s	12.00nm			

03d 01h

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RJF   147.16 342 ePKP  22 26.50   2.7X
       1.2s     17.85nm
CAF   147.33 341 ePKP  22 27.00   2.9X
       1.0s      6.00nm
CAI   147.63 129 ePKP  22 25.90   0.5
LFF   147.72 343 ePKP  22 28.00   3.4X
       0.9s      9.85nm
LPO   147.82 342 ePKP  22 28.40   3.6X
       1.0s     12.00nm
BCAO  148.12 255 iPKPd 22 29.30   3.1X
       0.5s     17.00nm
EPF   149.58 342 ePKP  22 33.50   5.8X
       1.0s      6.00nm
     S.D. = 0.9  on  66 of  78 obs.
-------------------------------------------
   SEP  03, 1990  02h 40m 59.11± 0.14s
   36.409 N ± 3.6km   70.671 E ± 2.8km
   DEPTH = 201.6km  (  7 depth phases)
   4.9mb ( 76 obs.)
 HINDU KUSH REGION                (718)
      Felt (III) at Dushanbe, USSR.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.:  9S, 14C
      Centroid Locotion:
      Origin Time        02:41: 3.3 1.3
      Lat 36.38N 0.09 Lan  70.45E 0.13
      Dep 208.2 5.1 Half-duration  1.5
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 3.32 0.63   Mtt=-3.55 0.76
        Mff= 0.23 1.03   Mrt= 8.13 0.84
        Mrf=-1.99 0.82   Mtf= 1.54 0.93
       Principal Axes:
        T  Val=  8.79   Plg=57   Azm= 10
        N        0.74      3       105
        P       -9.53     33       196
      Best Double Couple:Mo=9.2*10**16
       NP1:Strike=298 Dip=12 Slip= 103
       NP2:       104     78        87
QUE     6.94 208 iPd   42 40.10   0.6
NDI     9.48 143 iPd   43 11.50  -0.9
       0.7s   280.82nm          5.7mb
GKN    14.48 121 P     44 14.20  -2.0
KKN    15.06 121 P     44 21.40  -1.9
PKI    15.28 121 P     44 25.20  -1.0
GUN    15.40 119 P     44 26.40  -1.3
BOM    17.55 173 eP    44 48.00  -4.5X
              eS      47 49.50
POO    18.03 170 iPd   44 59.50   1.8
       0.8s   146.27nm          5.5mb
              iS      48 04.00
KER    19.32 271 eP    45 12.00   0.9
TAB    19.44 282 eP    45 18.00   5.7X
              i       45 20.00   7kmX
BBU    20.00 245 iPn   45 16.60  -1.2
              eSn     48 47.20
HYB    20.16 158 iPd   45 20.50   0.9
       1.0s   420.00nm          5.9mb X
              eS      48 54.70
DHR    20.18 246 iPd   45 20.50   0.9
GBA    23.51 163 Pd    45 52.50   0.4
       0.7s   137.00nm          5.7mb
RYD    23.70 247 iPd   45 55.10   1.1
MJMA   24.07 251 eP    45 58.30   0.9
AFIF   26.63 250 ePd   46 24.80   3.9X
KOD    26.78 165 eP    46 24.00   1.5
              eS      50 47.00
KMSA   27.90 242 iPd   46 31.90  -0.5
KMI    29.63 103 Pc    46 47.50  -0.4
       1.5s    50.00nm          5.0mb
              pP      47 01.00  53kmX
              sP      47 05.00
              S       51 29.00
PRNI   30.28 269 eP    46 55.00   1.7
CHG    30.41 118 ePd   46 55.20   0.6
       0.9s    11.34nm          4.6mb
CHTO   30.41 118 eP    46 55.20   0.6
       0.7s     6.51nm          4.5mb
MBH    30.58 268 eP    46 57.00   1.1
HRT    32.13 291 eP    47 11.00   1.6
ELL    32.56 283 iP    47 14.30   1.0
KHL    32.57 286 iP    47 13.50   0.2
DST    33.06 289 eP    47 18.00   0.5
LOE    33.33 116 eP    47 19.00  -0.9
VRI    34.04 300 ePd   47 27.00   1.3
MLR    34.59 299 iPc   47 32.00   1.4
EZN    34.79 289 iP    47 33.70   1.6
KAP    34.99 282 eP    47 34.40   0.6
CMP    35.24 299 ePc   47 42.00   6.2X
NNT    35.28 125 eP    47 38.00   1.6
BJI    35.64  70 eP    47 39.50   0.3
       1.0s    29.00nm          4.9mb
              PcP     50 03.00
              eS      52 59.00
              ScP     53 29.00
              PcS     53 50.00
              esS     54 18.00
              eScS    57 32.00
APE    35.92 285 eP    47 42.10   0.4
NPS    36.30 282 eP    47 45.00   0.2
PLG    36.88 291 eP    47 50.80   1.1
VAM    37.37 283 eP    47 54.00   0.2
VAY    37.39 293 eP    47 54.60   0.7
NUR    37.75 324 iPc   47 57.20   0.6
       0.8s   252.30nm          5.9mb
SUF    37.86 328 iP    47 58.20   0.6
       0.5s   107.90nm          5.7mb
VLI    38.02 285 eP    47 57.90  -1.4
SKO    38.13 294 eP    47 58.50  -1.6
              i       48 00.00   5kmX
KZN    38.16 291 eP    48 01.60   1.2
EVR    38.40 289 eP    48 02.50   0.0
SPC    38.45 306 eP    48 04.50   1.6
KRA    38.65 307 ePc   48 04.70   0.4
       0.8s    57.00nm          5.2mb
              e       48 47.90 204km
ITM    38.70 286 eP    48 03.50  -1.4
VLS    39.49 288 eP    48 10.10  -1.3
SOD    39.71 335 iP    48 13.30   0.6
SRO    39.77 303 iP    48 14.70   1.2
SNG    39.92 129 eP    48 15.50   0.5
ZST    40.56 304 iP    48 20.80   0.8
              e       50 00.60 564kmX
              e       53 47.70
KEV    40.79 338 iPc   48 22.30   0.8
       0.8s   121.80nm          5.5mb
SOP    40.96 303 eP    48 25.00   1.7
UPP    40.98 322 iPc   48 23.30   0.1
KSP    40.98 308 iPc   48 24.00   0.6
              e       49 05.70 194km
              i       50 03.40
VKA    41.08 304 eP    48 25.00   0.7
              e       49 58.00 506kmX
PTJ    41.55 301 iPc   48 28.60   0.4
KTK1   41.59 336 iP    48 28.37   0.2
BSD    41.89 315 iPd   48 30.00  -0.7
       0.9s    90.20nm          5.3mb
SSE    41.95  82 Pc    48 32.50   1.0
       1.5s    49.00nm          4.8mb
VBY    42.08 300 ePc   48 33.40   0.9
PRU    42.14 307 Pc    48 33.80   1.0
       1.0s    28.90nm          4.8mb
              e       49 18.50 209km
ORI    42.20 292 P     48 34.00   0.5
IPM    42.20 131 eP    48 36.00   2.3
       0.8s    51.60nm          5.1mb
TDS    42.37 291 P     48 36.00   1.1
BRG    42.47 308 iPc   48 36.30   0.8
       1.2s    42.00nm          4.8mb
              i       48 47.20
              i(pP)   49 20.00 203km
              i       49 28.20
              e       50 18.00
              i       50 29.00
              e       52 01.00
              iScP    53 55.40
PSI    42.49 136 ePc   48 35.50  -0.5
       1.0s    39.70nm          4.9mb
LJU    42.51 301 eP    48 36.80   0.8
KMR    42.55 304 iP+   48 37.00   0.7
              iPP     50 20.40
CEY    42.63 301 eP    48 37.50   0.6
KHC    42.82 306 iP    48 39.00   0.5
              e       49 48.80 348kmX
MGR    42.85 292 Pc    48 38.70   0.0
SGO    42.94 293 Pd    48 40.50   1.1
VOY    42.96 301 eP    48 39.40  -0.3
HFS    42.97 322 eP    48 38.80  -0.7
       0.8s   241.50nm          5.8mb
CLL    43.04 309 iPc   48 40.30   0.1
       1.8s    66.00nm          4.9mb
              e       49 20.00 182kmX
TRI    43.09 301 iPd   48 41.00   0.4
TRO    43.24 336 iPd   48 42.00   0.5
BSS    43.26 293 P     48 42.70   0.7
COP    43.32 315 iPc   48 43.80   1.5
       0.9s   178.15nm          5.6mb
DUI    43.32 295 P     48 43.50   0.8
ATN    43.41 290 Pc    48 43.50   0.2
FVI    43.64 302 P     48 44.70  -0.3
SDI    43.78 295 P     48 48.00   1.7
HOF    43.82 308 eP    48 47.10   0.6
       0.7s    10.00nm          4.4mb
MOX    43.96 308 ePc   48 48.00   0.4
       1.7s    51.00nm          4.8mb
                e      49 34.00 214kmX
VVI    43.98 301 P     48 48.00   0.2
AZI    44.00 296 P     48 49.00   1.1
ARV    44.05 298 Pd    48 49.00   0.6
NB2    44.29 323 P     48 49.40  -0.7
GRF    44.30 307 ePc   48 51.70   1.4
       0.8s    28.00nm          4.8mb
NSS    44.43 328 iPd   48 50.76  -0.3
MNS    44.46 296 Pc    48 51.00  -0.7
RMP    44.57 295 P     48 52.50   0.0
RDP    44.57 295 P     48 52.40  -0.2
LOF    44.61 333 iPd   48 52.00  -0.4
SOTA   44.62 303 iPc   48 52.30  -0.7
       0.6s    17.70nm          4.7mb
                i      49 05.20  48kmX
                i      49 12.90
                i      49 38.80
                i      50 32.00
                i      50 40.80
CRE    44.73 298 P     48 55.00   1.1
SFI    44.74 299 P     48 55.00   1.2
OGA    44.80 303 iPc   48 53.90  -0.6
       0.7s    30.00nm          4.8mb
PGD    44.84 299 P     48 56.00   1.2
RGS    44.88 326 eP    48 56.20   1.6
SAL    45.35 301 P     48 59.00   0.4
OSS    45.42 303 ePc   48 59.20  -0.2
MME    45.50 299 P     49 01.00   0.9
BDI    45.60 299 P     49 00.30  -0.4
KGM    45.62 131 eP    49 01.50   0.5
PII    45.72 299 P     49 00.00  -1.5
SAX    45.87 304 ePc   49 02.80  -0.2
MDI    45.88 302 P     49 01.70  -1.0
VDL    45.92 303 ePc   49 03.30   0.0
MOL    46.16 325 iPd   49 05.06   0.3
LLS    46.17 303 ePc   49 04.70  -0.6
SLE    46.35 304 ePc   49 06.40  -0.2
TMA    46.39 302 ePc   49 06.20  -0.9
FEL    46.65 305 P     49 08.43  -0.6
GWF    46.73 306 P     49 09.95   0.5
WTS    46.83 310 iPc   49 10.60   0.5
       0.7s    19.00nm          4.6mb
                e      51 02.50 638kmX
PCP    46.94 300 P     49 09.97  -1.2
MMK    47.02 302 ePc   49 11.40  -0.7
CDF    47.05 306 P     49 11.45  -0.6
PGF    47.08 297 iPc   49 11.90  -0.5
       0.6s    21.65nm          4.8mb
ORX    47.10 302 P     49 10.69  -1.8
ORO    47.10 302 P     49 10.30  -2.2
BER    47.15 322 iP    49 12.50   0.0
CKI    47.15 300 P     49 13.00   0.2
ECH    47.16 305 P     49 12.37  -0.5
MOF    47.24 305 P     49 13.25  -0.3
FIN    47.25 300 P     49 12.23  -1.3
DIX    47.39 302 ePc   49 14.70  -0.3
ROB    47.46 300 P     49 15.30   0.0
BSF    47.47 305 P     49 15.16  -0.2
MEM    47.51 309 Pc    49 15.60   0.2
LOMF   47.54 304 P     49 15.01  -0.8
IMI    47.54 299 P     49 15.41  -0.5
ENN    47.54 309 ePc   49 15.50  -0.2
       0.7s    10.00nm          4.4mb
                e      51 11.50 671kmX
RSP    47.70 301 P     49 14.48  -2.7
LSD    47.70 302 P     49 17.35   0.0
HAU    47.73 305 iPc   49 17.20   0.0
       0.7s    22.05nm          4.7mb
ENR    47.79 300 P     49 16.74  -1.1
DOI    47.85 300 P     49 15.00  -3.3X
STV    47.86 300 P     49 16.94  -1.4
SBF    47.87 299 iPc   49 18.40   0.0
       0.7s    37.50nm          4.9mb
VITF   47.93 305 P     49 18.63  -0.1
PZZ    47.95 300 P     49 17.05  -2.1
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LPG	47.97	302	iPc	49	19.40	0.0	ATEJ	58.39	295	iPd	50	34.50	-1.2	LNV	149.04	263	iPKPd	00	22.00	1.9
LPL	47.98	302	iPc	49	19.40	0.0	EPLA	58.62	299	eP	50	37.00	-0.1		S.D. = 1.0		on 252 of 265 obs.			
	0.8s	37.60nm			4.9mb		EHOR	58.92	296	eP	50	38.60	-0.5							
RRL	48.08	301	P	49	19.71	-0.5	EPRU	59.26	295	eP	50	40.00	-1.5	%	SEP 03, 1990		03h 41m 48.22±			0.91s
BNI	48.12	301	P	49	19.90	-0.5	EJIF	59.64	295	e(P)	50	43.00	-1.1		17.153 N ± 9.8km			94.962 W ± 9.8km		
SURF	48.16	300	P	49	20.91	0.1	IFR	60.65	292	iPc	50	51.00	-0.2		DEPTH = 33.0km		(normal)			
DOU	48.49	308	P	49	23.10	0.1	AVE	62.46	292	iP	51	02.80	-0.2		CHIAPAS, MEXICO					(61)
	0.8s	28.30nm			4.7mb		PTZ	62.58	224	iPc	51	11.50	7.5X							
FRF	48.50	299	iPc	49	22.70	-0.5	LSZ	65.20	226	iPd	51	22.00	1.0	PSM	0.45	190	iP	41	59.02	0.8
	0.6s	14.45nm			4.6mb					i	52	09.30	202km				iS	42	06.11	
KBS	48.64	347	eP	49	25.00	1.2	BRW	67.46	15	eP	51	34.90	0.4	EVV	1.35	344	iP	42	12.61	1.8
LMR	48.65	299	eP	49	24.40	0.1	BUL	68.87	222	iPd	51	41.90	-2.1				(S)	42	35.06	
	0.6s	3.60nm			4.0mb			0.9s	22.69nm			4.9mb		OXX	1.69	268	iP	42	14.39	-1.6
GRN	48.72	302	P	49	24.73	-0.2	ANM	70.22	22	eP	51	52.30	0.8				iS	42	36.84	
LRG	48.73	299	iPc	49	24.50	-0.4	IMA	72.29	17	iPc	52	03.60	-0.3	SCX	2.27	100	iP	42	23.52	-0.6
	0.6s	8.10nm			4.3mb			0.8s	29.31nm			5.1mb					iS	42	50.38	
LBF	49.51	304	iPc	49	29.90	-1.0	LKO	73.36	270	Pc	52	07.76	-3.0X	LVVM	2.93	331	iP	42	31.52	-2.0
	0.8s	10.05nm			4.3mb			0.9s	17.50nm			4.8mb					iS	43	08.16	
LOR	49.53	305	eP	49	30.20	-0.8	SLR	73.61	219	eP	52	12.50	0.5	IIT	3.69	301	iP	42	45.12	0.6
	0.8s	5.35nm			4.1mb		MBL	73.72	133	eP	52	12.50	-0.1	PPM	3.97	299	iP	42	49.25	0.4
SMF	49.68	304	iPc	49	31.70	-0.5	INK	74.04	9	iPc	52	14.20	0.4				(S)	43	45.98	
	0.8s	40.30nm			5.0mb			0.4s	84.00nm			5.8mb		IIA	4.04	300	iP	42	49.25	0.0
SSF	49.81	304	iPc	49	32.50	-0.6	TTA	74.20	20	iPc	52	15.20	0.2	IIJ	5.21	300	iP	43	06.98	0.6
	0.8s	10.75nm			4.4mb			1.3s	108.40nm			5.4mb			S.D. = 1.4		on 9 of 9 obs.			
AVF	49.98	304	iPc	49	33.80	-0.6	KIC	74.52	266	P	52	16.36	-1.1							
	0.8s	38.95nm			5.0mb			0.6s	25.00nm			5.1mb		&	SEP 03, 1990		03h 46m 26.66s			
PLDF	49.99	303	P	49	34.17	-0.5	TIC	74.57	267	P	52	16.70	-1.1		62.475 N			151.108 W		
GRC	50.04	305	P	49	34.64	-0.2	FBA	74.63	16	iPc	52	17.40	0.1		DEPTH = 85.7km					
AGO	50.30	303	P	49	36.83	-0.1		1.3s	290.00nm			5.8mb			CENTRAL ALASKA					(1)
BGF	50.37	304	iPc	49	36.80	-0.6	LIC	74.83	267	P	52	18.00	-1.2		<AGS-P>.					
	0.8s	13.45nm			4.5mb			0.6s	27.00nm			5.2mb								
LBL	50.43	302	P	49	37.94	0.1	KNA	75.46	122	eP	52	22.00	-0.6	CUT	0.40	100	iP	46	39.77	-0.6
PYM	50.46	303	P	49	38.01	-0.2	SVW	75.77	21	ePc	52	24.70	0.9				iS	46	49.60	
MAF	50.64	304	iPc	49	39.30	-0.2	PMR	77.14	18	iPc	52	31.00	-0.3	SKT	0.53	202	iP	46	40.83	-0.6
	0.8s	25.50nm			4.8mb			1.2s	116.30nm			5.5mb					iS	46	52.21	
TCF	50.86	304	iPc	49	40.80	-0.4	MEKA	77.22	137	eP	52	30.00	-2.2	HUR	0.85	53	eP	46	43.72	-0.8
	0.8s	26.85nm			4.8mb		TOA	77.42	17	ePc	52	34.00	1.1				iS	46	56.66	
CAF	51.32	302	iPc	49	44.50	-0.1	WIN	77.45	230	iPd	52	36.00	2.2	PWA	1.01	144	eP	46	45.97	-0.4
	0.8s	18.80nm			4.7mb			0.5s	7.04nm			4.6mb					eS	47	01.74	
LSF	51.33	304	iPc	49	43.70	-1.0	YKA	81.35	2	eP	52	53.20	-0.5	SUA	1.03	170	eP	46	46.23	-0.6
	0.8s	21.50nm			4.8mb			0.8s	52.70nm			5.3mb					eS	47	01.84	
KKM	51.41	115	ePd	49	47.20	1.5	SCH	82.07	337	eP	52	58.00	0.2	KTH	1.09	4	iP	46	46.50	-0.9
			e	50	31.50	199km	WB5	82.15	122	iPc	52	57.90	-0.7				iS	47	00.94	
RJF	51.59	303	iPc	49	46.80	0.2	WRA	82.17	122	Pd	52	58.20	-0.5	NCG	1.18	205	iP	46	47.83	-0.9
	0.8s	10.75nm			4.5mb			0.8s	32.60nm			5.1mb		GHO	1.25	124	eP	46	49.13	-0.3
LDF	51.82	307	iPc	49	47.40	-0.9	SIT	84.33	14	eP	53	10.70	1.6				eS	47	06.93	
	0.8s	12.10nm			4.6mb			1.0s	80.00nm			5.4mb		CGLM	1.25	200	iP	46	48.55	-0.9
LPO	51.99	302	iPc	49	49.20	-0.4	ASPA	84.42	125	iPc	53	09.50	-0.5				iS	47	05.08	
	0.6s	7.20nm			4.5mb			0.8s	35.00nm			5.1mb		PLRM	1.29	133	eP	46	49.57	-0.2
FLN	52.01	307	iPc	49	48.60	-1.0	QIS	86.25	119	iPc	53	18.00	-1.1	CRP	1.31	203	eP	46	49.59	-0.7
	0.6s	11.70nm			4.7mb			0.7s	18.00nm			5.0mb		BGL	1.36	207	eP	46	50.35	-0.5
EKA	52.17	316	Pd	49	47.80	-2.9	FFC	89.01	356	iPc	53	32.20	0.3	SPU	1.37	200	iP	46	50.23	-0.8
	0.9s	20.10nm			4.7mb			1.0s	62.00nm			5.5mb		CKL	1.41	205	iP	46	51.02	-0.5
LFF	52.22	302	iPc	49	51.20	0.0	EDM	90.67	2	eP	53	40.60	0.9	PMS	1.44	149	eP	46	51.60	-0.2
	0.6s	17.15nm			4.8mb			0.9s	139.90nm			6.0mb X					eS	47	10.88	
GRR	52.35	307	iPc	49	51.10	-1.0	SES	93.56	1	eP	53	53.00	0.0	SML	1.47	116	eP	46	51.80	-0.4
	0.6s	12.65nm			4.7mb		PNT	94.16	7	eP	53	56.00	0.2	MCK	1.60	37	eP	46	53.41	-0.6
MFF	52.35	305	iPc	49	51.20	-1.0		0.8s	35.00nm			5.6mb		NKA	1.74	182	eP	46	57.71	2.0
	0.8s	10.75nm			4.5mb		PGC	94.39	9	eP	53	58.00	1.2	SCM	1.89	108	eP	46	57.04	-0.8
LPF	52.56	307	iPc	49	52.50	-1.1	MCW	94.44	9	P	53	57.60	0.5	RDT	2.01	199	eP	46	59.26	-0.2
	0.8s	5.35nm			4.2mb		NEW	95.42	5	P	54	01.80	0.2	SLKM	2.02	167	eP	46	59.34	-0.2
EPF	53.06	300	iPc	49	56.20	-1.3		0.9s	23.03nm			5.4mb		RSO	2.17	202	eP	47	01.48	-0.3
	0.6s	7.20nm			4.5mb		GMW	95.56	9	P	54	02.90	0.7	TOA	2.34	97	eP	47	03.70	-0.2
MAT	53.23	68	eP	49	57.00	-1.8	RMW	95.76	8	P	54	03.80	0.5	WRH	2.42	33	eP	47	03.28	-1.7
	1.0s	16.00nm			4.6mb		LON	96.46	9	P	54	06.40	0.0	NNL	2.44	182	eP	47	06.45	1.2
ECHE	55.15	297	eP	50	12.80	0.1	BMW	96.55	10	P	54	06.80	0.0	SEW	2.51	161	eP	47	06.06	-0.1
ECRI	55.19	301	eP	50	13.00	0.0	LRM	98.10	2	eP	54	14.50	0.5	SVW	2.55	239	iP	47	05.55	-1.2
EVIA	56.61	296	eP	50	23.00	-0.2	SPA	126.22	180	iPKPd	59	37.40	-0.7	VZW	2.59	121	eP	47	06.29	-1.1
AKU	56.97	330	iP	50	26.40	1.2		1.0s	34.50nm					CCB	2.63	33	eP	47	06.11	-1.8
	1.0s	36.00nm			5.1mb					i	00	33.00		VLZ	2.64	119	eP	47	05.96	-2.0
		e		52	30.80	677kmX	PPD	128.09	269	ePKP	59	38.70	-4.2X	KLU	2.64	110	eP	47	06.28	-1.8
GUD	57.04	299	eP	50	25.50	-0.7				e	59	44.10		HDA	2.69	42	eP	47	07.31	-1.4
TOL	57.25	298	iPd	50	27.00	-0.5	SIV	132.72	282	PKP	59	51.60	-0.2	CNPM	2.96	181	eP	47	12.60	0.2
BCAO	57.38	249	iPc	50	27.40	-1.3	CCH	137.49	285	ePKP	59	59.50	-1.7	GLM	3.02	32	eP	47	11.71	-1.5
	0.7s	68.00nm			5.5mb		ZOBO	138.37	288	PKP	00	00.10	-3.1X	GLB	3.60	103	eP	47	19.76	-1.5
		id		51	13.20	201km	LPB	138.51	287	PKP	00	04.50	1.3		35 obs. associated					
		ic		52	01.50					e	03	18.00								
EBAN	57.72	296	eP	50	30.30	-0.6	CNCB	138.58	287	PKP	00	04.20	0.6	%	SEP 03, 1990		03h 52m 56.08±			0.80s
ECOG	57.91	295	eP	50	31.00	-1.3				e	03	18.00			36.566 N ± 7.0km			25.577 E ± 9.6km		
ASMO	58.01	295	iPc	50	32.00	-1.0	AIA	140.89	208	PKP	00	03.50	-2.0		DEPTH = 10.0km		(geophysicist)			
TAF	58.06	292	eP	50	36.00	2.6	JACH	148.02	265	iPKPc	00	22.10	3.4X		DODECANESE ISLANDS					(369)
		i		50	59.00	92kmX	PCH	148.23	263	ePKP	00	24.00	5.0X		MD 3.5 (ATH).					
		i		51	09.00		PEL	148.23	264	ePKPc	00	20.60	1.6							
APHE	58.13	295	iPd	50	32.70	-1.2	SAN	148.30	264	ePKP	00	20.50	1.4	APE	0.50	356	iPbd	53	05.20	-1.1
ACHM	58.17	295	iPc	50	33.20	-0.9	ROCH	148.44	265	ePKP	00	24.50	4.9X				eSb	53	11.90	
AAPN	58.31	295	iPc	50	33.70	-1.4	TACH	148.58	264	ePKP	00	21.00	1.5	NPS	1.30	179	ePb	53	20.20	0.0
ALOJ	58.37	295	iPc	50	34.50	-1.1	LCCH	149.04	264	iPKP	00	25.40	5.3X	SMG	1.52	41	ePb	53	24.90	1.6

03d 03h

VAM	1.61	224	ePn	53	25.00	0.4	GHO	1.26	109	iP	22	06.45	-0.5				iS	37	23.00				
KAP	1.64	128	ePn	53	24.10	-1.0				iS	22	24.52		DST	3.58	94	ePn	36	46.80	0.5
VLI	2.13	275	ePn	53	32.20	0.1	PMS	1.31	136	eP	22	06.59	-0.9	CIN	3.96	125	eP	36	51.00	-0.5
S.D. = 1.3 on 6 of 6 obs.							KTH	1.38	10	iP	22	07.22	-1.2	ISK	4.01	72	ePn	36	53.00	0.7
										eS	22	24.45		PVY	4.03	312	ePn	36	56.20	3.5X
? SEP 03, 1990 04h 56m 53.78± 2.26s							NKA	1.46	176	iP	22	10.84	1.5	GBZT	4.24	77	ePn	36	40.40	-15.2X
6.229 S ±27.2km 150.074 E ±14.6km							SML	1.52	104	iP	22	09.29	-0.9	TTG	4.36	306	ePn	36	58.70	1.5
DEPTH = 167.2 ± 14.2 km										eS	22	30.04					eSn	37	58.20	
4.7mb (4 obs.)							RDT	1.70	196	eP	22	11.56	-1.0	HRT	4.41	77	ePn	36	59.80	1.7
NEW BRITAIN REGION (192)										eS	22	34.85		VAM	4.53	178	ePn	37	02.00	2.3
							SLKM	1.79	160	eP	22	13.00	-0.8	BDV	4.56	303	ePn	37	02.50	2.4
LAT	3.08	262	eP	57	44.00	0.6	RSO	1.85	201	iP	22	14.25	-0.5				eSn	37	52.50	
PMG	4.28	222	eP	57	58.00	-0.8				iS	22	38.30		KHL	4.59	109	ePn	37	02.50	1.9
			eS	58	41.00		MCK	1.92	35	eP	22	14.49	-1.0	BUC1	4.65	18	eP	37	25.00	23.6X
MTN	19.80	249	eP	01	12.30	-1.0	SCM	1.97	99	eP	22	14.80	-1.4	NKY	4.73	309	ePn	37	40.00	37.3X
0.5s 30.00nm 5.0mb							NNL	2.16	178	eP	22	19.29	0.5				eSn	38	00.00	
WB5	20.42	227	iPd	01	21.30	1.6	TTA	2.24	291	iPd	22	18.20	-1.7	SRE	4.75	353	ePd	37	22.00	19.2X
WRA	20.48	227	Pd	01	20.00	-0.3	SVW	2.28	243	iPc	22	19.10	-1.2	ALT	4.80	99	ePn	37	05.60	1.9
0.3s 6.00nm 4.5mb							SEW	2.31	154	eP	22	19.41	-1.3	NPS	4.84	164	ePn	37	04.00	-0.1
DZM	22.32	136	iPc	01	38.60	0.2				eS	22	46.09		GPA	4.85	84	iPn	37	04.00	-0.2
ASPA	23.29	220	eP	01	51.00	3.2X	TOA	2.47	90	ePd	22	22.00	-1.0	PSN	4.87	39	iPd	37	02.00	-2.4
0.7s 14.00nm 4.6mb							HOM	2.55	182	eP	22	23.30	-0.7	KAP	5.05	149	ePn	37	05.90	-1.2
MBL	32.82	240	eP	03	14.00	0.4	VZW	2.60	114	eP	22	22.44	-2.3	BRT	5.28	282	P	37	11.00	0.7
NANU	37.05	240	iPd	03	49.00	-0.4	VLZ	2.66	111	eP	22	23.14	-2.3	MTUR	5.34	8	ePd	37	11.00	-0.2
0.3s 8.00nm 4.9mb							CNPM	2.68	178	eP	22	25.42	-0.4	CMP	5.38	8	iPd	37	16.00	4.3X
PPD	144.96	144	ePKP	16	13.00	-0.4	OPT	2.70	200	eP	22	25.61	-0.5	COZ	5.38	3	ePd	37	11.50	-0.3
S.D. = 1.0 on 9 of 10 obs.							KLU	2.71	103	iP	22	24.02	-2.3	ISR	5.52	19	eP	37	13.50	-0.2
							WRH	2.74	32	eP	22	24.64	-1.9	TLB	5.52	31	ePc	37	12.50	-1.1
* SEP 03, 1990 05h 13m 27.15± 1.08s							PDB	2.77	210	iP	22	26.23	-0.7	BEO	5.54	333	ePn	37	34.00	20.1X
16.310 N ±11.9km 120.710 E ±12.0km							CCB	2.95	32	eP	22	27.41	-2.1				i(Sg)	38	51.50	
DEPTH = 24.5 ± 6.3 km							HDA	3.00	40	eP	22	28.28	-1.9	TNR	5.71	2	ePc	37	15.00	-1.3
5.3mb (6 obs.)							DDM	3.00	55	eP	22	29.90	-0.4	MLR	5.73	14	iPc	37	16.50	-0.2
LUZON, PHILIPPINE ISLANDS (249)							FBA	3.17	29	iPc	22	30.50	-2.0	ORI	5.80	274	P	37	17.50	-0.2
							GLM	3.33	31	eP	22	32.72	-2.1	TDS	5.91	270	P	37	19.00	-0.2
BAG	0.16	309	iPc+	13	32.50	0.0	MCNL	3.34	207	eP	22	34.51	-0.4				eSn	38	16.50	
OCP	1.70	168	eP	14	05.00	9.4X	DOT	3.67	63	eP	22	37.60	-1.9	VRI	6.25	18	ePd	37	23.50	-0.5
NNT	20.64	262	eP	17	57.30	-10.4X	GLB	3.70	98	eP	22	37.30	-2.6	SOI	6.47	256	P	37	25.30	-1.7
CHG	20.90	280	eP	18	11.00	0.6	IMA	4.01	347	ePd	22	42.00	-2.3				eSn	38	28.50	
CHTO	20.90	280	eP	18	11.10	0.8	TGL	4.37	105	eP	22	47.00	-2.4	MGR	6.49	274	P	37	27.10	-0.3
0.8s 4.94nm 4.0mb X							BALM	4.49	101	eP	22	48.02	-3.0	HVAR	6.52	302	iPn	37	26.40	-1.5
GUN	34.16	296	P	20	12.80	-0.3	INK	9.66	43	eP	23	59.00	-2.9	SGO	6.68	278	P	37	29.80	-0.3
0.8s 71.00nm 5.6mb							47 obs. ossociated										eSn	38	37.00	
PKI	34.49	295	P	20	15.20	-0.8								ATN	6.88	258	P	37	30.30	-2.6
0.8s 22.00nm 5.1mb							SEP 03, 1990 05h 35m 50.60± 0.31s										eSn	38	39.00	
KKN	34.65	295	P	20	16.60	-0.6	39.943 N ± 3.0km 24.006 E ± 2.6km							BSS	7.08	280	P	37	34.50	-1.1
1.0s 56.00nm 5.4mb							DEPTH = 20.6 ± 3.4 km							DUI	7.44	286	Pc	37	41.80	1.0
DMN	34.76	295	P	20	17.60	-0.6	4.1mb (8 obs.)										eSn	38	57.50	
GKN	35.25	296	P	20	21.40	-0.8	AEGEAN SEA (365)							MNO	7.53	257	P	37	40.50	-1.7
1.0s 63.00nm 5.5mb							ML 4.1 (ATH).							MEU	7.66	251	P	37	40.30	-3.5X
WB5	38.39	159	eP	20	48.40	0.0											eSn	38	56.60	
WRA	38.44	159	Pd	20	48.60	-0.2	PLG	0.61	315	iPbd	36	00.60	-1.9	SDI	7.93	286	P	37	48.10	0.5
0.6s 1.50nm 4.0mb X							RDO	1.68	44	iPbc	36	18.50	-0.5				eSn	39	07.00	
GBA	41.84	272	P	21	17.70	0.6	KZN	1.75	283	ePn	36	20.00	-0.2	AZI	8.26	288	P	37	53.00	0.9
SOO	76.65	337	iP	25	17.80	0.5	VAY	1.76	322	iPn	36	20.40	0.2	PTJ	8.38	318	eP	37	48.40	-5.5X
SUF	77.73	332	iP	25	23.80	0.5				i	36	23.40		VBY	8.50	314	eP	37	57.30	1.8
0.5s 3.30nm 4.6mb										i	36	44.00		SRO	8.87	334	eP	38	40.80	40.3X
NUR	78.91	330	iP	25	30.10	0.3				i	36	46.20					e	39	05.70	
INK	80.67	21	eP	25	45.00	5.8X	EZN	1.79	93	iPn	36	20.70	0.1	MNS	8.88	290	P	38	01.00	0.2
NB2	84.96	333	P	26	01.40	0.0	RZN	1.82	17	eP	36	22.00	0.7				eSn	39	32.50	
0.9s 7.30nm 4.9mb										eS	36	48.00		CEY	9.11	313	e(P)	38	04.50	0.6
S.D. = 0.6 on 15 of 18 obs.							PRK	1.88	111	ePb	36	22.50	0.5	LJU	9.23	314	e(P)	38	11.50	5.9X
							ATH	1.98	187	ePn	36	23.10	-0.3	VOY	9.58	313	e(P)	38	09.00	-1.5
& SEP 03, 1990 05h 21m 43.90s							EVR	1.99	240	ePn	36	23.10	-0.5	SPC	9.62	345	eP	38	15.00	3.9X
62.198 N 151.438 W							KDZ	2.01	32	iPc	36	23.00	-0.9	ZST	9.63	331	eP	38	27.90	17.0X
DEPTH = 86.8km										eS	36	54.00		PGD	9.96	297	P	38	17.00	1.2
CENTRAL ALASKA (1)							KGT	2.58	78	iPn	36	32.80	0.8	SQTA	11.78	312	i(P)	38	41.60	1.0
<AGS-P>.							PGB	2.61	3	iP	36	31.00	-1.5				e(S)	40	53.00	
										S	37	14.00		CLL	13.71	330	eP	39	17.00	11.0X
SKT	0.22	191	iP	21	56.11	1.0	OHR	2.71	297	iPnc	36	35.20	1.3	LBF	16.13	302	eP	39	41.90	4.2X
			eS	22	05.91					i	37	05.10			0.8s		4.05nm			3.6mb
CUT	0.58	69	eP	21	58.57	-0.6	SKO	2.81	317	iPn	36	35.00	-0.2	LOR	16.30	303	eP	39	41.30	1.5
SUA	0.81	156	iP	22	01.25	-0.3	0.8s 260.00nm								1.0s		4.00nm			3.5mb
			eS	22	14.80					i	36	47.50		Z	20s		0.17um			
NCG	0.87	203	iP	22	01.39	-0.9				i	36	49.00		SSF	16.46	302	eP	39	42.30	0.5
PWA	0.92	126	iP	22	02.35	-0.3				iSn	37	08.50			1.0s		5.00nm			3.6mb
CRP	0.99	200	iP	22	03.08	-0.7				iSb	37	15.50		AVF	16.48	301	eP	39	42.40	0.4
			eS	22	18.80					iSg	37	18.00			0.8s		5.35nm			3.7mb
BGL	1.04	206	iP	22	03.64	-0.6	EDC	2.98	81	iPn	36	38.00	0.3	NUR	20.59	1	eP	40	30.00	-0.6
			eS	22	20.02		BNT	3.03	81	iPn	36	37.80	-0.5	HFS	21.22	346	ePKP	40	36.80	-0.3
SPU	1.06	196	iP	22	03.46	-1.0	APE	3.11	157	ePn	36	38.30	-1.3		1.2s		31.20nm			4.6mb
			eS	22	18.89		SMG	3.14	134	ePn	36	40.50	0.5	NB2	22.55	344	P	40	51.40	1.0
CKL	1.09	204	iP	22	04.18	-0.7	VLS	3.19	238	ePn	36	40.90	0.2		1.1s		18.10nm			4.5mb
HUR	1.14	46	iP	22	04.47	-0.9	ITM	3.20	211	ePn	36	41.00	0.1	SUF	22.84	3	eP	40	55.00	1.8
			iS	22	19.93		KEK	3.25	267	ePb	36	43.00	1.5	BCAO	35.69	189	iPd	42	48.40	-1.2
PLRM	1.25	118	eP	22	05.54	-1.1	VLI	3.33	195	ePn	36	41.00	-1.6		0.6s		7.00nm			4.7mb
			eS	22	23.74		DMK	3.41	55	iPn	36	41.50	-2.2	LIC	42.51	226	P	43	45.60	-0.6
PMR	1.25	118	iPc	22	05.90	-0.8	PVL	3.42	17	iPc	36	43.00	-0.8	TUL	86.37	315	eP	48	33.20	0.6

0.8s 2.20nm 4.4mb
S.D. = 1.2 on 73 of 88 obs.

SEP 03, 1990 06h 01m 55.44± 0.39s
19.850 S ± 8.2km 70.520 W ± 7.1km
DEPTH = 33.0km (normal)
4.8mb (8 obs.) 4.4Msz (1 obs.)
NEAR COAST OF NORTHERN CHILE (122)

ARE	3.49	345	eP	02 50.00	0.9
			iS	03 30.80	
CNCB	3.87	39	P	03 02.00	7.4X
LPB	4.02	35	Pc	03 05.70	9.0X
			S	04 04.00	
ZOBO	4.23	33	Pc	03 06.00	6.3X
CCH	4.82	60	P	03 16.00	8.1X
			i	03 35.00	
PT08	9.75	323	iP	04 14.00	-2.9
SIV	9.78	68	P	04 17.50	0.6
NNA	9.90	321	P	04 17.70	-1.0
RTLL	11.58	171	e(P)	04 40.00	-1.5
MDZ	13.07	174	eP	05 06.20	4.8X
			e	08 16.70	
PPD	18.07	100	eP	06 04.50	-1.3
			e	06 07.80	
			e	06 14.70	
			e	06 39.10	
BAO	21.86	83	eP	06 48.40	1.0
PSO	21.95	342	eP	06 56.50	7.9X
VAO	22.14	102	(P)	06 49.00	-1.1
BOG	24.57	351	eP	07 14.00	-0.1
			eS	11 37.00	
BMA	24.72	101	eP	07 16.10	0.9
JFO	25.48	99	eP	07 23.30	0.8
CAI	35.01	72	eP	08 47.00	-0.2
SGS	53.60	350	P	11 16.50	0.9
JSC	54.79	349	P	11 24.20	-0.2
LHS	54.91	350	P	11 25.30	0.1
TKL	56.61	347	P	11 35.00	-2.6
GBTN	56.72	347	P	11 37.20	-1.1
UYO	58.35	337	e(P)	11 48.50	-1.3
ELC	59.50	343	P	11 56.70	-1.0
TUL	60.40	337	eP	12 03.00	-0.9
	1.2s		29.10nm		5.3mb
Z	22s		0.32um		4.4Msz
			e	13 17.80	
			LR	34 00.00	
SIO	60.45	336	e(P)	12 03 20	-1.1
FVM	60.49	342	P	12 03.60	-0.9
MEO	60.53	334	e(P)	12 04.20	-0.6
ANMO	64.30	328	P	12 30.00	-0.2
	1.3s		9.62nm		4.7mb
GLD	67.56	332	P	12 50.30	-0.7
	1.2s		14.14nm		4.9mb
GOL	67.59	332	P	12 50.50	-0.8
	1.0s		6.00nm		4.6mb
TPC	68.97	321	eP	13 02.00	2.3
RVR	69.70	320	eP	13 05.00	0.9
KIC	69.71	75	P	13 04.20	-0.4
MSU	69.97	326	P	13 06.40	0.4
GSC	70.25	321	eP	13 09.00	1.4
MWC	70.27	320	eP	13 09.00	1.2
SPA	70.27	180	iPd	13 06.40	-1.0
	0.9s		6.82nm		4.7mb
SBB	70.44	320	eP	13 10.00	1.3
DAU	70.93	328	P	13 11.00	-0.9
CLC	71.07	321	eP	13 13.00	0.5
KVN	73.58	323	P	13 27.80	0.3
CMB	74.21	321	eP	13 32.80	1.8
LRM	75.61	331	eP	13 40.10	1.0
ORV	75.87	322	eP	13 42.00	1.6
MIN	76.45	322	e(P)	13 44.20	0.4
WDC	77.14	322	eP	13 47.20	-0.3
LBFM	77.27	323	P	13 48.50	0.1
SES	78.54	335	ePd	13 55.60	0.6
NEW	79.57	330	P	14 01.20	0.6
	0.9s		2.85nm		4.3mb
RMW	81.28	328	P	14 10.20	0.4
BMW	81.36	326	P	14 11.80	1.6
PNT	81.48	330	eP	14 11.00	0.3
	0.7s		5.00nm		4.6mb
EDM	81.64	336	eP	14 11.50	0.0
YKA	89.14	341	eP	14 47.50	-1.0
	0.9s		9.20nm		5.1mb
WRA	133.55	213	PKP	21 12.00	1.0
	0.5s		0.90nm		
GBA	148.73	96	PKP	21 41.80	4.0X
NDI	149.38	67	ePKP	21 44.00	5.4X
MAT	149.87	310	ePKP	21 43.00	3.9X
	0.8s		10.45nm		

S.D. = 1.1 on 51 of 60 obs.

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* SEP 03, 1990 06h 11m 23.51± 1.68s
8.706 S ±10.3km 79.877 W ±18.5km
DEPTH = 39.0 ± 13.9 km
4.7mb (7 obs.) 4.6Msz (1 obs.)
NEAR COAST OF NORTHERN PERU (109)

PT10	4.40	140	iP	12 31.50	1.8
			iS	13 22.00	
NNA	4.42	138	i(P)	12 28.00	-2.0
	0.8s		261.19nm		
			iS	13 36.00	
PT08	4.60	135	iP	12 34.30	1.4
VC1	8.15	10	eP	13 22.50	-0.3
GGP	8.57	9	eP	13 30.40	1.7
QUR	8.58	9	eP	13 31.30	2.6X
YANA	8.63	9	eP	13 29.10	-0.3
CAYA	8.93	12	eP	13 28.00	-5.6X
ARE	11.24	134	eP	14 13.00	7.9X
ZOBO	13.71	124	P	14 43.00	4.7X
			i	17 16.00	
LPB	13.87	125	P	14 43.00	2.7X
CNCB	14.12	126	eP	14 50.00	6.4X
CCH	15.91	124	P	15 05.00	-1.7
SIV	19.73	113	P	15 51.00	-2.1
PPD	30.49	119	eP	17 34.60	-0.7
UYO	44.82	343	iPc	19 36.10	0.4
OLY	45.31	347	P	19 38.40	-1.1
POW	45.87	347	P	19 43.70	-0.2
NA2	46.63	2	P	19 49.50	-0.3
MEO	46.74	339	e(P)	19 55.50	4.7X
TUL	46.84	342	eP	19 51.20	-0.4
	0.7s		11.70nm		5.0mb
			e	20 03.20	
ANMO	50.16	331	P	20 18.40	0.8
	1.4s		17.44nm		4.9mb
GOL	53.64	336	P	20 43.00	-0.8
	1.3s		7.81nm		4.6mb
8W06	57.95	335	P	21 12.80	-1.9
	1.0s		4.58nm		4.5mb
SES	64.79	339	eP	22 00.00	-0.5
YKA	75.87	344	eP	23 15.50	8.1X
	0.8s		2.40nm		4.2mb
LIC	76.07	81	P	23 10.10	0.6
Z	20s		0.32um		4.6Msz
TIC	76.16	81	P	23 10.80	0.8
KIC	76.38	81	Pc	23 12.00	0.8
	0.6s		9.50nm		5.0mb
SPA	81.35	180	iPc	23 39.10	1.7
	1.0s		10.00nm		4.8mb
			i	23 48.90	
TOL	84.82	49	eP	23 58.00	2.5
INK	85.51	343	eP	24 09.00	10.7X
BJI	145.67	338	ePKP	30 59.50	-0.2
	1.0s		6.00nm		
SSE	150.31	322	e(PKP)	31 18.00	10.7X
KKN	156.40	35	PKP	31 00.00	-16.3X

S.D. = 1.4 on 24 of 35 obs.

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* SEP 03, 1990 06h 24m 03.10± 1.32s
43.169 N ± 8.8km 25.963 E ±13.2km
DEPTH = 10.0km (geophysicist)
BULGARIA (359)
Felt (III) in the Strozhitsa area.

PVL	0.46	276	iPg	24 13.00	0.5
			iSg	24 22.00	
PGB	1.46	245	iP	24 29.00	-0.5
			eSg	24 50.00	
KDZ	1.57	195	iP	24 32.00	0.9
			iS	24 54.00	
RZN	1.74	212	eP	24 33.00	-0.8
MLR	2.32	360	eP	24 42.00	-0.1

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

SEP 03, 1990 06h 30m 25.24± 0.67s
37.654 N ± 6.1km 14.909 E ± 5.7km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.32	329	P	30 32.10	0.1
			eSg	30 37.50	
MEU	0.55	178	P	30 36.60	0.1
			eSg	30 47.40	
ATN	0.67	41	P	30 38.40	-0.1
			eSg	30 47.50	
GIB	0.77	296	P	30 40.50	0.1
			eSn	30 52.00	
SOI	1.00	65	P	30 44.20	0.1
			eSg	30 56.80	
FAI	1.05	249	P	30 44.90	-0.2
			eSg	30 57.90	
TDS	2.29	29	P	31 39.50	35.8X

S.D. = 0.1 on 6 of 7 obs.

SEP 03, 1990 06h 31m 01.79± 0.67s
37.740 N ± 6.7km 14.965 E ± 5.5km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.29	312	Pc	31 07.80	-0.1
			eSg	31 12.20	
ATN	0.58	43	P	31 13.30	-0.2
			eSg	31 22.70	
MEU	0.64	182	P	31 14.40	-0.3
			eSg	31 23.00	
GIB	0.78	289	P	31 17.00	-0.1
			eSn	31 29.30	
SOI	0.92	69	P	31 19.70	0.3
			eSg	31 33.80	
FAI	1.12	246	P	31 23.20	0.3
			eSg	31 39.50	

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

SEP 03, 1990 06h 36m 35.65± 0.69s
37.738 N ± 6.8km 14.982 E ± 5.6km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.30	310	Pc	36 41.80	-0.2
			eSg	36 47.50	
ATN	0.57	42	P	36 47.00	-0.2
			eSg	36 56.80	
MEU	0.64	184	Pd	36 48.10	-0.4
			eSg	36 57.00	
GIB	0.80	289	P	36 51.00	-0.2
			eSg	37 03.40	
SOI	0.91	68	P	36 53.40	0.3
			eSn	37 08.00	
FAI	1.14	246	Pd	36 57.50	0.6
			eSn	37 13.90	

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

SEP 03, 1990 06h 57m 52.51± 0.73s
37.736 N ± 6.7km 14.958 E ± 6.0km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.28	313	Pc	57 58.80	0.2
			eSg	58 03.70	
ATN	0.58	43	Pd	58 04.30	0.0
			eSg	58 13.00	
MEU	0.63	182	P	58 05.20	-0.1
			eSg	58 14.50	
GIB	0.78	289	Pd	58 07.80	0.0
			eSg	58 20.10	
SOI	0.93	69	P	58 10.60	0.4
MGR	2.44	11	P	58 32.50	-0.5

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

SEP 03, 1990 07h 02m 02.73± 0.87s
43.754 N ± 9.4km 10.896 E ± 5.3km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

PII	0.27	263	Pc	02 08.50	0.1
			eSg	02 12.00	
BDI	0.38	325	Pc	02 10.30	-0.2
			eSg	02 15.70	
MME	0.46	342	P	02 12.30	0.1
			eSg	02 18.80	
PGD	0.61	78	P	02 14.50	-0.6
			eSg	02 24.00	
SFI	0.71	76	Pd	02 17.40	0.7
			eSg	02 27.50	
CRE	0.78	99	P	02 17.90	0.0
			eSg	02 28.50	

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

03d 07h

% SEP 03, 1990 07h 21m 23.39± 1.20s
10.746 N ±11.9km 60.930 W ±14.2km
DEPTH = 33.0km (normal)
TRINIDAD (98)
MD 3.6 (TRN).

TBH	0.29	207	eP	21 30.59	-0.5
			eS	21 44.14	
TPR	0.46	19	eP	21 34.16	0.7
BOT	0.47	26	eP	21 33.90	0.4
			eS	21 48.10	
TRN	0.48	258	eP	21 33.97	0.3
			eS	21 50.53	
TCE	0.81	267	eP	21 38.82	0.4
			eS	21 57.64	
SVB	2.53	353	eP	22 01.71	-1.4
			eS	22 35.77	
S.D. = 1.0			an	6 of 6 obs.	

? SEP 03, 1990 07h 30m 06.58± 4.88s
18.648 N ±75.0km 63.889 W ±25.3km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)

LPR	1.91	260	P	30 39.90	0.4
			S	31 01.20	
NEV	1.96	140	eP	30 42.40	2.2
			S	31 05.80	
CPD	2.02	253	P	30 39.80	-1.3
SJG	2.21	256	iP	30 43.20	-0.7
			S	31 07.20	
BPA	2.51	129	eP	30 46.00	-2.1
PORP	2.68	258	P	30 50.00	-0.5
LRS	2.83	263	P	30 53.00	0.3
MCP	3.06	266	P	30 57.50	1.5
PAG	3.35	141	eP	31 00.20	0.1
S.D. = 1.5			an	9 of 9 obs.	

& SEP 03, 1990 07h 36m 26.47s
62.434 N 148.467 W
DEPTH = 8.5km
CENTRAL ALASKA (1)
<AGS-P>.

SML	0.63	174	iP	36 39.04	-0.1
			iS	36 49.08	
GHO	0.70	198	iP	36 39.95	-0.5
			iS	36 50.78	
HUR	0.77	316	iP	36 40.98	-0.6
			iS	36 52.15	
SCM	0.81	138	eP	36 41.27	-1.0
			eS	36 53.20	
CUT	0.84	269	iP	36 41.96	-0.8
			eS	36 53.63	
PLRM	0.90	201	eP	36 42.42	-1.4
PWA	1.03	221	eP	36 45.91	-0.1
			eS	37 00.86	
TOA	1.12	106	iP	36 46.48	-1.2
PMS	1.30	204	eP	36 48.76	-2.0
			iS	37 07.68	
MCK	1.32	351	eP	36 49.01	-2.0
			iS	37 06.10	
SUA	1.45	229	eP	36 51.70	-1.3
			eS	37 11.86	
SKT	1.51	254	eP	36 51.30	-2.4
KLU	1.53	127	iP	36 51.60	-2.5
KTH	1.59	316	eP	36 52.46	-2.5
VZW	1.65	146	eP	36 52.97	-2.9
			eS	37 14.57	
VLZ	1.65	141	eP	36 52.60	-3.2
CGLM	2.02	238	iP	36 59.34	-1.9
NCG	2.03	241	eP	36 59.15	-2.2
WRH	2.05	5	eP	36 58.37	-3.2
HDA	2.09	18	eP	36 59.54	-2.7
CRP	2.10	238	eP	37 00.51	-2.0
SLKM	2.11	204	eP	37 00.81	-1.6
SPU	2.12	235	eP	37 00.20	-2.4
BGL	2.20	239	eP	37 02.33	-1.5
CKL	2.22	238	eP	37 01.79	-2.3
CCB	2.24	7	eP	37 01.05	-3.3
SEW	2.39	192	eP	37 04.51	-1.9
GLB	2.42	112	iP	37 03.76	-3.1
FBA	2.49	7	eP	37 05.53	-2.4
GLM	2.61	10	eP	37 07.06	-2.5
RDT	2.66	227	eP	37 07.58	-2.7
TGL	3.18	119	eP	37 13.97	-3.7
BALM	3.23	113	eP	37 14.43	-4.1

33 obs. associated

* SEP 03, 1990 07h 46m 04.68± 0.79s
37.942 N ±10.4km 14.932 E ± 5.8km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.19	267	P	46 08.90	-0.1
			eSg	46 13.00	
ATN	0.47	62	P	46 15.00	0.7
			eSg	46 21.80	
GIB	0.72	274	P	46 18.80	-0.1
			eSg	46 29.50	
MEU	0.84	180	P	46 21.20	0.2
			eSg	46 31.10	
SOI	0.90	81	P	46 21.00	-0.8
			eSg	46 35.10	
S.D. = 0.8			on	5 of 5 obs.	

% SEP 03, 1990 07h 46m 35.77± 0.56s
44.240 N ± 6.8km 7.453 E ± 4.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (GEN).

ENR	0.03	241	P	46 37.33	-0.5
			S	46 38.19	
STV	0.09	273	P	46 38.18	-0.3
			S	46 39.72	
ROB	0.30	79	P	46 42.45	0.3
			S	46 46.90	
PZZ	0.37	317	P	46 43.21	-0.1
IMI	0.46	136	P	46 45.52	0.5
			S	46 52.43	
FIN	0.54	93	P	46 46.65	-0.1
			S	46 54.04	
RRL	0.83	325	P	46 52.57	0.6
PCP	0.84	69	P	46 51.31	-0.7
S.D. = 0.5			on	8 of 8 obs.	

SEP 03, 1990 07h 56m 17.68± 0.52s
37.073 N ± 5.8km 29.551 E ± 5.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 4.0 (ATH).

ELL	0.43	138	iPg	56 26.30	-0.2
KSL	0.95	178	eP	56 34.50	-1.3
			eS	56 52.00	
KHL	1.25	359	iPn	56 40.50	-0.4
CIN	1.28	295	ePg	56 39.00	-2.4
			iSg	56 56.00	
ALT	2.03	12	ePn	56 53.60	1.2
SMG	2.25	287	iPd	56 54.40	-1.1
KAP	2.45	232	eP	56 57.90	-0.4
DST	2.63	344	iPn	56 59.70	-1.3
PPCY	3.15	133	eP	57 10.50	2.3
APE	3.22	271	eP	57 08.00	-1.3
EDC	3.53	339	ePn	57 15.00	1.4
NPS	3.66	242	eP	57 17.60	2.0
CSS	3.72	123	eP	57 18.00	1.6
EZN	3.74	318	ePn	57 15.70	-0.9
VAM	4.63	251	eP	57 31.00	1.6
VLI	5.31	268	eP	57 39.30	0.3
ITM	6.09	273	eP	57 50.90	0.9
ADI	6.12	129	eP	57 49.40	-1.0
			eS	58 59.00	
HRI	6.33	125	eP	57 52.00	-1.4
VAY	6.88	310	eP	58 02.70	1.6
DSI	7.30	137	eP	58 05.30	-1.7
HLW	7.35	168	ePnc	58 08.00	0.4
			eS	59 26.00	
S.D. = 1.5			on	22 of 22 obs.	

& SEP 03, 1990 08h 28m 15.77s
62.660 N 149.409 W
DEPTH = 65.0km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.34	342	iP	28 26.96	0.1
			iS	28 35.00	
CUT	0.47	238	iP	28 28.10	0.1
			iS	28 37.48	
GHO	0.92	165	iP	28 33.18	-0.2
			eS	28 47.06	
SML	0.99	149	iP	28 33.92	-0.3
			eS	28 49.17	
PWA	1.04	192	eP	28 34.85	0.1
			iS	28 50.57	
PLRM	1.08	173	iP	28 35.16	-0.1
			eS	28 51.45	
MCK	1.10	11	eP	28 35.56	0.0
KTH	1.13	323	eP	28 36.05	0.0
			iS	28 51.54	
SKT	1.20	236	iP	28 36.80	-0.2
			eS	28 52.94	
SCM	1.28	129	eP	28 37.91	-0.2
			eS	28 55.32	
SUA	1.36	208	eP	28 39.46	0.3
			eS	28 59.04	
PMS	1.42	183	eP	28 40.01	0.0
			eS	28 59.76	
TOA	1.61	109	eP	28 43.48	0.9
			eS	29 04.50	
NCG	1.81	227	eP	28 45.25	-0.1
WRH	1.91	17	iP	28 45.84	-0.8
SPU	1.94	221	iP	28 47.87	0.7
BGL	1.99	226	eP	28 48.68	0.9
KLU	2.02	124	eP	28 47.57	-0.7
CKL	2.02	225	eP	28 48.99	0.7
HDA	2.07	31	iP	28 48.17	-0.7
VZW	2.10	139	eP	28 49.94	0.6
VLZ	2.12	135	eP	28 48.30	-1.2
CCB	2.12	19	eP	28 48.52	-1.0
FBA	2.36	17	iP	28 52.11	-0.8
GLM	2.50	20	iP	28 54.03	-0.9
RDT	2.54	216	eP	28 56.48	1.0
SEW	2.57	180	eP	28 55.96	0.2
GLB	2.91	112	eP	28 59.78	-0.9
CNPM	3.27	197	eP	29 05.48	-0.2
29 obs. associated					

* SEP 03, 1990 09h 42m 52.86± 0.89s
37.725 N ± 8.3km 14.969 E ± 7.2km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.30	314	Pc	42 58.80	-0.4
			eSg	43 04.30	
ATN	0.58	42	P	43 03.80	-0.9
			eSg	43 13.00	
MEU	0.62	183	P	43 05.10	-0.4
			eSg	43 14.20	
GIB	0.79	290	P	43 09.00	0.7
			eSg	43 20.50	
SOI	0.93	68	P	43 11.50	1.0
			eSg	43 24.80	
S.D. = 1.1			on	5 of 5 obs.	

SEP 03, 1990 09h 43m 57.49± 0.76s
37.714 N ± 7.3km 14.955 E ± 6.2km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.30	317	P	44 03.80	0.0
			eSg	44 09.80	
ATN	0.60	42	Pd	44 08.90	-0.7
			eSg	44 18.70	
MEU	0.61	182	P	44 09.30	-0.6
			eSg	44 19.60	
GIB	0.78	291	P	44 12.50	-0.3
			eSg	44 25.40	
SOI	0.94	67	P	44 16.30	0.9
			eSg	44 29.40	
FAI	1.11	247	P	44 19.00	0.7
S.D. = 0.9			on	6 of 6 obs.	

SEP 03, 1990 10h 48m 33.13± 0.25s
45.915 N ± 2.0km 15.873 E ± 1.6km
DEPTH = 20.2 ± 2.4 km
4.8mb (18 obs.)
YUGOSLAVIA (383)
ML 5.1 (FUR), 4.9 (VIE), 4.7 (TTG), 4.5 (KRA). MD 4.7 (TRI). Felt (VII) at Kraljev Vrh and Stubica, (VI) at Zagreb, (V) at Lendava and (IV) at Krska Vas and Ljubljana. Also felt at Trieste, Italy.

PTJ	0.06	105	iPg	48 34.10	-2.9
ZAG	0.13	142	iPgd	48 35.50	-1.9
			iSg	48 37.90	

03d 10h

VBY	0.60	227	iPnc	48	44.80	0.0	PII	4.39	242	P	49	40.50	0.3	LSD	6.13	269	P	50	04.65	-0.3
LJU	0.94	278	iPgc	48	51.30	0.6	SPC	4.41	41	iPn	49	40.30	-0.4	STR	6.13	299	P	50	01.92	-2.9X
			eSg	49	04.50					e	49	51.40		ENR	6.22	257	P	50	04.95	-1.2
CEY	1.03	261	iPnc	48	52.50	0.4				i	49	56.40		EMS	6.23	275	ePc	50	08.50	2.1
RIY	1.19	242	ePgd	48	55.50	0.9				i	50	04.90		DOI	6.26	260	P	50	05.00	-1.7
			iSg	49	12.80					Lg	51	30.00		TDS	6.26	177	P	50	06.00	-0.7
VOY	1.39	276	iPnd	48	58.80	1.3	PVY	4.44	137	iPnd	49	41.50	0.5	STV	6.28	258	P	50	05.67	-1.4
			eSn	49	18.60					eSn	50	30.50		AUTN	6.29	255	P	50	07.62	0.3
BLY	1.49	141	iPn	48	59.70	0.8	SDI	4.46	200	P	49	41.10	-0.2	MOF	6.30	291	P	50	06.55	-0.7
			Sn	49	19.70		VDL	4.48	280	ePd	49	43.60	1.8	SBF	6.34	254	Pn	50	07.40	-0.4
TRI	1.49	263	iPgc	49	00.60	1.7	ULC	4.64	147	iPnd	49	44.50	0.6	PZZ	6.36	260	P	50	07.01	-1.1
			iSg	49	20.60					eSn	50	36.00		CDF	6.37	296	P	50	07.61	-0.7
RBL	1.69	289	P	49	03.10	1.3	BCI	4.66	138	iPnc	49	45.00	1.0	GWF	6.38	302	P	50	07.57	-0.8
SOP	1.83	15	iPn	49	05.60	1.8	SAX	4.70	289	ePd	49	44.00	-0.9	ECH	6.38	294	P	50	07.67	-0.8
FVI	2.25	289	Pc	49	11.50	1.7	SDA	4.69	145	iPnc	49	46.40	1.8	LOMF	6.39	286	P	50	08.12	-0.5
VKA	2.37	7	iPnd	49	12.30	0.7	RMP	4.70	210	P	49	45.20	0.5	AURF	6.40	255	P	50	08.85	0.1
			ic	49	13.40		RDP	4.74	210	P	49	45.50	0.2	LPG	6.40	270	Pn	50	09.20	0.2
			i	49	19.30		RFI	4.81	197	P	49	47.02	0.8	TOUF	6.41	256	P	50	08.98	0.0
			i	49	49.50		PUK	4.84	142	iPn	49	54.20	7.7X	CMP	6.46	92	iPc	50	13.00	3.4X
VVI	2.41	273	Pc	49	13.70	1.6	BAI	4.85	171	P	49	43.00	-3.7X	RRL	6.47	264	P	50	09.88	-0.1
ZST	2.43	20	iPnd	49	12.60	0.2	LLS	4.85	284	ePd	49	48.50	1.5	MTUR	6.49	93	eP	50	13.00	3.0X
	0.6s		1.33nm				MAO	4.87	226	P	49	47.00	-0.1	BSF	6.51	290	Pn	50	08.80	-1.6
			iPb	49	15.70		TMA	4.88	275	ePd	49	48.70	1.3	MVIF	6.51	255	P	50	10.67	0.3
			iPg	49	20.00		GRF	4.91	322	ePn	49	47.50	-0.1	BNI	6.52	266	Pc	50	11.00	0.5
			i(Sn)	49	45.90					ePg	50	07.50		SURF	6.56	261	P	50	09.37	-1.7
			i	49	54.40					eSg	51	12.00		KKB	6.60	125	iP	50	11.00	-0.4
			Lg	50	08.00		KSP	4.94	3	iPnc	49	48.10	0.1	VAY	6.68	131	iPn	50	11.70	-0.9
KMR	2.45	332	iPn+	49	14.80	2.1	KSP	4.94	3	iP	49	55.60	7.6X	BRN	6.74	346	eP	50	14.00	0.6
			iPg	49	20.40			1.1s		389.00nm				CALN	6.74	255	P	50	13.66	0.0
SRO	2.53	41	ePn	49	13.40	-0.5				iPg	50	07.00		SRN	6.75	152	iPn	50	12.00	-1.5
			i	49	19.90					iSn	50	41.00		KEK	6.84	154	eP	50	13.10	-1.7
BHG	2.74	312	ePn	49	18.30	1.5				iSg	51	11.00		PGB	6.84	117	iP	50	14.00	-0.9
HVAR	2.77	171	iPnd	49	18.20	1.0				i	51	26.50		HAU	6.85	291	Pn	50	13.20	-1.7
			i(Sn)	49	51.20		KRA	4.96	32	ePc	49	48.60	0.3	FRF	6.98	254	Pn	50	16.00	-0.8
RSM	3.14	232	P	49	23.70	1.2	Z	10s		5.50um							Sn	51	33.00	
ARV	3.19	222	P	49	24.40	1.1	E	13s		10.20um				MLR	7.07	90	eP	50	18.00	-0.1
WATA	3.28	297	iPnc	49	26.50	1.8				e	49	49.10		KOE	7.07	313	iPc	50	18.40	0.4
			i	49	39.60					i	50	08.30		KZN	7.07	140	iPd	50	18.00	-0.1
			iSn	50	10.40					i	50	10.80		VITF	7.14	292	P	50	17.83	-1.1
PSZ	3.41	53	iPn	49	24.60	-1.8				i	51	14.80		GRN	7.14	268	P	50	19.79	0.7
BEO	3.41	107	ePn	49	26.50	0.2	KKS	5.04	138	ePn	49	55.50	6.0X	BGG	7.15	310	iPc	50	19.50	0.4
			iPg	49	37.50		BRG	5.13	346	iPn	49	50.00	-0.6	LMR	7.16	252	Pn	50	17.50	-1.8
			iSg	50	21.00					i	49	51.20					Sn	51	35.30	
SOTA	3.47	294	iPnc	49	29.40	2.1				i	50	03.60		LRG	7.21	253	Pn	50	19.40	-0.6
			i	49	39.20		BRT	5.13	169	P	49	49.40	-1.3	BUC1	7.35	99	eP	51	20.00	58.0X
			iSn	50	13.60		HOF	5.15	330	iPnd	49	50.80	-0.2	CDR	7.53	256	ePnc	50	23.50	-1.0
SFI	3.48	237	Pc	49	28.30	1.0	SRE	5.32	101	ePd	49	54.00	0.5				eSn	51	46.30	
			eSn	50	09.00		PCP	5.36	258	P	49	54.50	0.5	ISR	7.54	92	eP	50	29.00	4.4X
OGA	3.49	288	ePg	49	29.80	2.2	STU	5.36	305	iPn	49	53.50	-0.5	RZN	7.66	120	iP	50	25.00	-1.5
BRY	3.57	147	ePn	49	29.50	0.7		1.0s		210.00nm			5.7mb	BNS	7.68	314	iPc	50	26.90	0.4
			eSn	50	12.00		SGO	5.37	185	P	49	52.90	-1.2				iS	51	48.50	
KHC	3.57	335	iPn	49	29.60	0.9	ZLA	5.38	290	ePc	49	54.10	-0.3	PLG	7.83	132	eP	50	28.00	-0.7
	1.0s	535	.00nm				SLE	5.39	293	ePc	49	53.80	-0.7	KLL	7.94	310	iPc	50	30.40	0.2
			e	49	44.50		TIR	5.41	146	ePn	49	56.00	1.4	MEM	8.08	309	iPc	50	32.66	0.5
PGD	3.59	237	P	49	29.71	0.7	MQX	5.52	331	iPn	49	56.00	-0.2				iS	51	57.50	
PLE	3.61	135	iPnd	49	30.00	0.7				iPg	50	18.00		KDZ	8.11	118	iPd	50	32.00	-0.6
			eSn	50	13.40					iSn	50	58.00		ENN	8.21	310	iPc	50	34.40	0.4
CRE	3.61	232	P	49	30.10	0.8				iSg	51	31.00			1.0s	101	.00nm			6.0mb X
TIM	3.74	91	eP	49	36.40	5.3X	ORX	5.53	270	P	49	55.21	-1.3				e	51	18.00	
SAL	3.76	267	P	49	32.90	1.7	ORO	5.53	270	P	49	55.10	-1.4				e	52	50.00	
WET	3.81	329	iPnc	49	32.90	0.8	CKI	5.57	257	P	49	57.30	0.3	EVR	8.26	146	eP	50	33.70	-1.0
NKY	3.83	143	ePn	49	32.90	0.6	SKO	5.63	132	iP	49	18.40	-39.4X	LBF	8.29	282	Pn	50	33.20	-1.9
			eSn	50	17.00		Z	11s		5.30um							Sn	52	04.80	
FUR	3.87	307	ePn	49	33.70	0.9	N	11s		76.33um				SMF	8.37	279	Pn	50	34.70	-1.5
HCY	3.95	151	iPnd	49	35.20	1.3	E	13s		8.46um				LOR	8.39	284	Pn	50	34.40	-2.1
			eSn	50	20.50					iPg	49	26.50					Sn	52	05.80	
AOU	3.98	207	P	49	36.50	2.1				iSg	49	30.70		RDO	8.48	121	eP	50	36.50	-1.3
BZS	4.03	92	ePc	49	22.50	-12.6X				iSn	50	03.00		VLS	8.49	154	eP	50	34.50	-3.4X
OSS	4.05	283	ePd	49	37.70	2.2				iS	50	19.00		WTS	8.52	319	eP	50	38.50	0.3
MME	4.05	247	P	49	35.86	0.2				LR	52	02.00			0.9s	153	.00nm			6.3mb X
PRU	4.17	348	iPnd	49	38.30	1.1	SKO	5.63	132	iPnd	49	56.90	-0.9				e	51	24.00	
Z	11s		12.30um				FIN	5.69	255	P	49	57.47	-1.2				e	52	53.00	
N	11s		8.00um				CLL	5.72	342	iPnd	49	58.60	-0.5	PLDF	8.54	275	P	50	37.19	-1.5
E	11s		10.30um					1.2s		160.00nm			5.6mb X	SSF	8.61	282	Pn	50	37.50	-2.1
			Pg	49	50.50					iPg	50	22.00		DOU	8.64	303	P	50	39.80	-0.1
			Sn	50	18.00					iSn	51	01.40					i	50	43.50	
			Sg	50	42.50					iSg	51	35.00					i	51	05.30	
BDI	4.18	246	P	49	37.70	0.4	FEL	5.73	293	P	49	59.18	-0.2	TLB	8.68	94	eP	50	40.00	-0.5
IVA	4.19	135	ePn	49	37.80	0.3	MGR	5.78	182	P	49	59.60	-0.3	AVF	8.71	280	Pn	50	38.60	-2.3
			eSn	50	25.00		ORI	5.86	176	P	50	00.80	-0.3	AGO	8.88	275	P	50	41.86	-1.4
BDV	4.21	149	iPnd	49	38.80	1.1	ROB	5.89	257	P	50	00.75	-0.7	LBL	8.89	270	P	50	41.49	-1.8
			eSn	50	27.50		DIX	5.90	275	ePc	50	02.60	0.8	GRC	8.92	284	P	50	42.26	-1.5
MNS	4.21	214	P	49	38.20	0.4	BBS	5.96	288	P	50	02.46	0.0	PYM	8.99	274	P	50	42.99	-1.8
TTG	4.25	144	ePn	49	39.30	1.0	PGF	5.98	238	P	50	01.70	-1.0	BGF	9.05	279	Pn	50	43.80	-1.9
			eSn	50	28.50		OHR	5.99	142	iPnd	50	03.70	0.8				Sn	52	24.40	
MDI	4.31	270	P	49	39.40	0.4	IMI	6.01	253	P	50	01.78	-1.4	UCC	9.09	307	iP	50	52.00	5.9X
DUI	4.37	194	P	49	40.00	-0.1	RSP	6.10	266	P	50	02.90	-1.6				iS	53	31.00	

03d 10h

WIT	9.14	322	e(P)	50 50.00	3.2X
			e	51 34.00	
MAF	9.26	277	Pn	50 46.30	-2.2
TCF	9.50	277	Pn	50 50.40	-1.5
			Sn	52 34.60	
CAF	9.76	269	Pn	50 54.60	-0.9
EZN	9.79	125	iP	50 53.60	-2.1
ITM	9.83	150	eP	50 53.50	-2.9
LSF	9.98	277	Pn	50 56.40	-2.0
COP	10.02	349	iPd	50 58.10	-0.8
	1.0s	296.00nm		6.6mb	X
			i	51 13.00	
			i	51 23.00	
			i	51 50.00	
RJF	10.08	272	Pn	50 59.20	-0.6
PRK	10.15	127	eP	51 01.00	0.2
VLI	10.61	148	eP	51 04.50	-2.5
LFF	10.69	270	Pn	51 07.30	-0.8
MFF	11.12	279	Pn	51 11.80	-2.1
LDF	11.20	290	Pn	51 14.00	-1.1
FLN	11.46	290	Pn	51 16.80	-1.8
SMG	11.57	131	eP	51 20.10	0.0
GRR	11.66	288	Pn	51 20.40	-0.9
LPF	11.75	286	Pn	51 19.90	-2.6
VAM	12.24	146	eP	51 26.10	-3.1X
NPS	12.95	142	eP	51 38.50	-0.1
UPP	14.01	4	iP	51 52.70	0.3
HFS	14.30	356	eP	51 59.70	3.4X
	1.1s	67.20nm		5.2mb	X
Z	16s	1.62um			
			LR	56 04.00	
EKA	15.27	315	P	52 08.00	-1.0
	1.1s	9.80nm		4.0mb	
NB2	15.40	351	P	52 09.30	-1.3
	1.0s	82.30nm		5.0mb	
NUR	15.51	16	eP	52 10.00	-2.0
	0.8s	36.70nm		4.7mb	
			i	52 17.60	
TOL	15.78	255	eP	52 16.00	0.3
			eS	57 15.00	
ASMO	16.94	247	eP	52 37.00	6.4X
APHE	17.15	245	eP	52 36.00	2.8X
AAPN	17.21	247	eP	52 38.00	4.0X
ALOJ	17.32	247	eP	52 36.00	0.6
ATEJ	17.38	246	eP	52 40.70	4.6X
SUF	17.83	16	iP	52 41.10	-0.2
	1.0s	37.70nm		4.5mb	
ADI	19.62	124	eP	53 05.00	1.8
HLW	20.09	138	ePnc	53 07.00	-1.2
JVI	20.53	126	eP	53 13.20	0.5
PRNI	21.55	130	eP	53 23.30	0.1
AVE	21.83	243	eP	53 21.00	-4.9X
			i	53 36.00	
SOD	22.24	11	iP	53 30.80	1.1
TIO	23.39	238	iP	53 42.30	0.8
KEV	24.55	9	iP	53 55.00	2.9
BCAO	41.38	176	iPd	56 20.90	1.4
	0.8s	20.00nm		4.9mb	
LIC	43.49	211	P	56 37.40	0.7
LWI	49.30	163	eP	57 22.70	-0.1
GKN	56.08	83	P	58 13.20	-0.1
	0.8s	38.00nm		5.5mb	
KKN	56.66	83	P	58 18.80	1.2
	0.8s	18.00nm		5.2mb	
PKI	56.89	83	P	58 20.40	1.1
GUN	57.00	83	P	58 20.20	0.0
GBA	60.62	101	P	58 42.90	-2.0
INK	63.82	348	eP	59 07.00	1.4
YKA	64.93	337	eP	59 12.60	-0.3
	1.0s	4.20nm		4.5mb	
BUL	66.75	167	iPc	59 24.00	-1.2
	1.0s	5.00nm		4.6mb	
FFC	66.80	326	eP	59 25.00	0.0
	1.3s	25.00nm		5.2mb	
IMA	68.06	355	eP	59 34.20	1.3
	1.0s	6.25nm		4.7mb	
BJI	68.72	54	eP	59 37.50	0.3
	1.1s	7.00nm		4.7mb	
N	14s	0.43um			
LHS	70.35	299	P	59 48.00	0.7
JSC	70.75	300	P	59 49.50	-0.3
TKL	71.32	302	P	59 53.00	-0.2
CHG	71.98	81	eP	59 58.00	0.6
CHTO	71.98	81	eP	59 58.00	0.6
	1.1s	4.12nm		4.4mb	
SES	73.64	328	eP	00 07.00	0.4
POW	75.24	307	P	00 16.00	-0.1
OLY	75.87	307	P	00 20.00	0.3
PNT	77.55	332	eP	00 31.00	2.2
NEW	77.61	330	P	00 30.00	0.8
	1.0s	5.00nm		4.5mb	
LRM	77.93	326	eP	00 32.20	0.9
TUL	77.95	310	eP	00 31.80	0.6
	1.0s	19.70nm		5.1mb	
SIO	78.35	310	e(P)	00 30.30	-3.1X
UYO	78.52	307	eP	00 35.70	1.3
GOL	79.86	318	P	00 43.30	1.4
	1.0s	6.25nm		4.6mb	
RMW	79.89	332	P	00 42.00	0.3
MEO	80.29	311	iPd	00 45.50	1.5
ANMO	84.17	316	P	01 06.30	2.0
	1.0s	6.25nm		4.8mb	
LBFM	85.30	329	P	01 11.50	1.6
KVN	85.88	326	P	01 14.00	1.2
WRA	123.77	84	PKPd	07 31.20	0.1
	1.0s	3.70nm			
DZM	146.25	55	iPKPc	08 16.50	3.7X

S.D. = 1.2 on 222 of 246 obs.

SEP 03, 1990 10h 52m 26.44± 0.73s
37.897 N ±15.0km 14.940 E ± 5.9km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.20	280	Pc	52 31.30	0.4
			eSg	52 37.30	
ATN	0.49	57	Pd	52 36.40	0.0
			eSg	52 45.50	
MSI	0.57	58	P	52 38.00	-0.1
			eSg	52 49.00	
GIB	0.73	278	P	52 40.00	-0.8
			eSn	52 54.10	
SOI	0.90	78	P	52 43.70	0.1
MCT	1.07	256	P	52 47.50	0.8
FAI	1.18	239	Pd	52 48.00	-0.5

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

? SEP 03, 1990 11h 03m 30.17± 7.76s
45.950 N ±18.2km 16.158 E ±54.9km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.5 (LJU). Felt at Zogreb.

PTJ	0.15	251	iPg	03 33.00	-0.7
ZAG	0.18	223	iPgd	03 34.30	0.1
			iSg	03 36.50	
VBY	0.77	235	ePg	03 45.00	-0.2
			iSg	03 53.90	
LJU	1.14	275	ePg	03 51.50	0.0
			eSg	04 06.50	
CEY	1.23	261	ePn	03 53.40	0.4
			eSg	04 10.50	
RIY	1.38	245	ePg	03 55.60	0.2
			iSg	04 12.60	
VOY	1.58	274	ePn	03 58.30	-0.1
			eSn	04 18.50	

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

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* SEP 03, 1990 11h 16m 20.20± 0.84s
37.721 N ± 7.8km 14.938 E ± 6.9km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.28	318	P	16 26.20	-0.1
			eSg	16 31.00	
ATN	0.60	43	P	16 31.60	-0.8
			eSg	16 41.00	
MEU	0.62	181	P	16 32.50	-0.2
			eSg	16 42.40	
GIB	0.77	291	P	16 35.50	0.2
			eSg	16 46.50	
SOI	0.95	68	P	16 39.10	0.8
			eSn	16 52.00	

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

? SEP 03, 1990 11h 43m 01.54± 8.87s
45.887 N ±21.6km 16.171 E ±66.0km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)

ZAG	0.15	242	iPgd	43 05.30	0.3
			iSg	43 07.50	
PTJ	0.15	275	iPg	43 04.00	-1.1
VBY	0.75	240	ePg	43 15.70	-0.5
			iSg	43 24.10	
CEY	1.23	264	e(Pg)	43 25.10	0.7
			eSg	43 38.50	
RIY	1.37	247	ePg	43 26.30	-0.3
			iSg	43 46.80	
VOY	1.60	276	ePn	43 30.80	0.8
			eSn	43 49.80	

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

& SEP 03, 1990 11h 56m 13.30s
36.525 N 121.145 W
DEPTH = 7.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

LLA	0.19	61	iP	56 17.10	-0.2
PRS	0.26	223	eP	56 18.60	-0.1
SAO	0.34	315	iP	56 19.10	-1.1
			iS	56 25.40	
PRI	0.54	134	eP	56 24.30	0.0
			eS	56 36.20	
GCC	0.85	307	eP	56 28.90	-1.0
ARN	0.88	339	eP	56 29.50	-1.0
MHC	0.91	334	iPc	56 30.63	-0.4
			iS	56 43.50	
PHAM	0.92	138	eP	56 30.50	-0.6
PKEM	0.96	119	eP	56 32.30	0.5
FRI	1.24	68	eP	56 35.20	-1.5
			eS	56 51.40	
BCH	1.59	147	eP	56 40.00	-2.0
BKS	1.61	328	e(P)	56 49.40	7.3
CMB	1.62	22	eP	56 41.20	-1.3
			eS	57 01.80	

13 obs. associated

? SEP 03, 1990 11h 58m 04.12± 7.33s
45.936 N ±18.7km 16.200 E ±50.3km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.5 (LJU). Felt at Zogreb.

PTJ	0.17	258	iPg	58 07.10	-1.0
ZAG	0.19	232	iPgd	58 08.60	0.2
			iSg	58 11.00	
VBY	0.79	237	ePg	58 18.80	-0.7
			iSg	58 26.50	
LJU	1.17	276	e(Pg)	58 25.30	-0.6
			eSg	58 40.00	
CEY	1.26	262	e(Pg)	58 29.00	1.5
			eSg	58 43.00	
RIY	1.40	246	ePg	58 29.80	0.1
			iSg	58 46.50	
VOY	1.61	274	ePn	58 33.00	0.2
			eSn	58 53.00	

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

SEP 03, 1990 12h 01m 06.55± 0.64s
37.764 N ± 6.8km 15.014 E ± 5.3km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.30	304	Pc	01 13.00	0.0
			eSg	01 17.60	
ATN	0.53	42	Pc	01 17.80	0.5
			eSg	01 27.00	
MSI	0.61	44	P	01 19.40	0.5
			eSn	01 30.40	
MEU	0.66	186	Pd	01 19.10	-0.7
			eSg	01 28.20	
GIB	0.81	286	Pd	01 21.50	-0.9
			eSn	01 35.20	
SOI	0.88	69	P	01 23.90	0.5
			eSn	01 38.30	
MCT	1.10	264	P	01 29.10	1.7
FAI	1.17	246	Pc	01 28.40	0.0
TDS	2.16	28	P	01 42.50	-0.5
MGR	2.41	10	P	01 45.50	-1.1

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

SEP 03, 1990 12h 08m 56.84± 0.58s
37.753 N ± 6.0km 14.998 E ± 4.7km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.30	307	Pc	09 03.10	-0.1
			eSg	09 08.60	
ATN	0.55	42	Pd	09 08.10	0.2

		eSg	09	17.50	
MSI	0.63 44	P	09	10.00	0.5
		eSg	09	20.90	
MEU	0.65 185	P	09	09.20	-0.7
		eSg	09	18.30	
GIB	0.80 287	P	09	11.70	-0.8
		eSg	09	25.10	
SOI	0.89 69	P	09	14.40	0.4
		eSg	09	27.80	
MCT	1.09 264	P	09	18.60	1.2
FAI	1.15 246	Pd	09	18.80	0.4
TDS	2.17 28	P	09	33.00	-0.5
MGR	2.42 10	P	09	36.50	-0.6

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

SEP 03, 1990 14h 16m 15.76± 0.35s
39.534 N ± 3.5km 28.484 E ± 3.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MD 3.8 (ATH).

DST	0.13 57	iPg	16	18.50	-0.5
BNT	0.93 332	iPg	16	34.00	0.5
EDC	0.94 330	iPg	16	34.00	0.3
		iSg	16	47.00	
IZI	1.11 43	iPn	16	36.80	0.2
ALT	1.35 110	iPn	16	40.00	-0.7
GBZT	1.45 30	ePn	16	42.00	0.0
		iPg	16	44.00	
		iSg	17	03.00	
KHL	1.46 146	iPn	16	42.40	0.2
HRT	1.57 35	ePn	16	45.10	1.3
ISK	1.59 16	ePn	16	44.90	0.9
GPA	1.59 61	iPn	16	43.90	-0.2
CTT	1.61 359	ePn	16	44.90	0.6
EZN	1.69 281	iPn	16	46.60	1.2
PRK	1.74 261	iPnd	16	46.80	0.7
CIN	1.96 189	eP	16	48.00	-1.3
SMG	2.23 216	ePn	16	58.00	4.7X
DMK	2.35 347	iPn	16	52.50	-2.5
RDO	2.77 307	ePn	17	01.20	0.3
ELL	3.00 158	iPn	17	05.30	1.0
BBTK	3.31 83	iPc	17	18.00	9.2X
		iS	18	07.00	
APE	3.38 224	ePb	17	20.20	10.5X
KSL	3.52 165	ePn	17	12.00	0.4
RZN	3.59 308	iP	17	12.00	-0.7
PLG	3.96 284	ePn	17	17.30	-0.6
KAP	4.11 195	ePn	17	19.70	-0.3
PVL	4.38 328	iPd	17	24.00	0.3
KKB	4.72 301	eP	17	27.00	-1.7
VAY	4.85 293	ePn	17	31.40	0.9
VTS	5.02 309	eP	17	34.00	0.9
		iSg	18	34.00	
SKO	5.88 297	ePn	18	14.00	29.0X
		eSn	19	23.00	
MLR	6.24 343	eP	17	50.00	-0.2
VRI	6.46 349	ePc	17	52.50	-0.8

S.D. = 0.9 on 27 of 31 obs.

? SEP 03, 1990 14h 22m 14.45± 3.38s
18.125 S ±50.1km 178.598 W ±36.5km
DEPTH = 623.6 ± 39.1 km
4.5mb (10 obs.)
FIJI ISLANDS REGION (181)

DZM	14.59 252	iPc	25	18.70	0.4
COO	29.51 240	iPd	27	33.00	0.4
	0.4s 8.00nm			4.7mb	
CMS	34.76 241	iPd	28	17.00	0.6
	0.5s 10.00nm			4.7mb	
QLP	35.29 249	iPd	28	11.10	-9.7X
QIS	39.44 259	eP	28	54.60	-0.1
	0.6s 3.00nm			4.0mb	
WB5	44.40 260	iPd	29	33.10	-0.5
WRA	44.41 260	Pd	29	32.50	-1.2
	0.3s 4.70nm			4.4mb	
ASPA	44.56 254	iPd	29	34.70	-0.2
	0.7s 80.00nm			5.3mb	
WARB	51.04 251	iPd	30	22.90	-0.3
	0.3s 7.00nm			4.5mb	
MBL	57.75 256	iPd	31	09.30	-0.8
	0.4s 14.00nm			4.5mb	
NANU	61.49 254	iPd	31	34.90	0.3
	0.4s 28.00nm			4.9mb	
PNT	85.01 34	eP	33	46.00	-0.5
	0.8s 6.00nm			4.3mb	
CHTO	88.91 290	eP	34	07.20	1.9
	0.6s 0.56nm			3.6mb	

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

? SEP 03, 1990 14h 53m 49.62± 3.28s
18.389 S ±20.7km 177.746 W ±24.4km
DEPTH = 653.0 ± 36.2 km
4.6mb (11 obs.)
FIJI ISLANDS REGION (181)

DZM	15.28 253	iPd	57	00.50	0.8
THZ	24.63 197	eP	58	24.80	0.6
KHZ	25.07 195	P	58	27.60	-0.4
LTZ	25.75 197	eP	58	33.20	-0.7
MMCZ	28.71 200	P	58	59.40	-0.1
MHZ	28.72 199	eP	58	59.20	-0.4
TLC	28.90 199	eP	59	01.60	0.5
CMS	35.34 241	eP	59	56.00	1.1
	0.7s 16.00nm			4.7mb	
QLP	35.96 250	iPd	00	00.80	0.8
QIS	40.19 260	eP	00	33.60	-0.6
	0.2s 2.00nm			4.2mb	
WB5	45.15 260	iPd	01	12.20	-0.6
WRA	45.16 260	Pd	01	12.00	-1.0
	0.3s 10.70nm			4.8mb	
ASPA	45.27 255	iPd	01	13.80	0.0
	0.3s 48.00nm			5.4mb	
		iS	07	07.70	
MTN	49.42 269	eP	01	43.70	-1.1
	0.3s 19.00nm			5.0mb	
FORR	50.34 245	iPd	01	51.00	-0.4
	0.4s 30.00nm			5.0mb	
WARB	51.72 251	iPd	02	01.40	0.0
	0.3s 7.00nm			4.5mb	
MBL	58.48 256	iPd	02	47.70	-0.3
	0.3s 8.00nm			4.4mb	
NANU	62.20 254	eP	03	12.40	0.2
	0.4s 23.00nm			4.9mb	
MAT	68.67 323	iPd	03	51.10	-0.7
	0.5s 3.52nm			4.0mb	
CHTO	89.76 290	eP	05	44.20	2.3
	0.6s 1.68nm			4.1mb	
KSP	145.74 344	iPKP	12	20.00	3.2X
CLL	146.06 348	iPKPd	12	21.40	4.1X
	0.8s 19.00nm				
BRG	146.28 347	iPKP	12	21.20	3.5X
PRU	146.97 345	PKP	12	23.50	4.7X

S.D. = 0.9 on 20 of 24 obs.

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* SEP 03, 1990 16h 26m 25.32± 0.97s
39.207 N ± 5.8km 23.583 E ±13.8km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.0 (ATH).

PLG	1.17 355	iPbc	26	47.10	-0.1
		eSb	27	02.20	
ATH	1.24 175	iPbc	26	48.90	0.6
EVR	1.41 259	ePn	26	51.60	0.5
KZN	1.78 309	ePb	26	56.70	0.3
VAY	2.25 340	ePn	27	03.50	0.4
RDO	2.45 37	ePb	27	13.40	7.5X
VLI	2.54 192	ePn	27	06.30	-0.9
OHR	2.86 313	ePn	27	11.00	-0.8

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

SEP 03, 1990 18h 33m 26.83± 0.71s
37.734 N ± 7.0km 14.967 E ± 5.8km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.29 313	Pc	33	32.90	-0.1
		eSg	33	36.90	
ATN	0.58 43	P	33	38.10	-0.5
		eSg	33	46.60	
MEU	0.63 183	P	33	39.10	-0.5
		eSg	33	49.00	
GIB	0.79 289	P	33	42.00	-0.2
		eSg	33	55.00	
SOI	0.92 68	P	33	45.10	0.6
		eSg	33	58.60	
FAI	1.12 246	P	33	48.50	0.6

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

SEP 03, 1990 18h 39m 23.66± 0.44s
37.744 N ± 4.5km 15.001 E ± 4.1km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.31 308	Pc	39	30.30	0.2
		eSg	39	35.50	
ATN	0.55 41	Pd	39	35.50	0.6
		eSg	39	45.00	
MSI	0.63 44	P	39	36.50	0.1
MEU	0.64 185	P	39	36.20	-0.4
		eSg	39	45.10	
PZI	0.72 185	P	39	37.40	-0.4
GMB	0.80 58	P	39	39.93	0.6
GIB	0.81 288	P	39	38.70	-0.7
		eSg	39	51.20	
SOI	0.90 68	P	39	41.20	0.4
		eSg	39	56.30	
MCT	1.09 264	P	39	45.30	1.0
FAI	1.15 246	Pc	39	45.70	0.5
TDS	2.18 28	P	39	59.70	-0.7
MGR	2.43 10	P	40	03.00	-1.0
ORI	2.58 26	P	40	06.00	-0.1

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

SEP 03, 1990 18h 43m 39.16± 0.97s
37.793 N ±11.9km 14.951 E ± 5.9km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.24 304	Pc	43	44.80	0.3
		eSg	43	50.80	
ATN	0.55 48	Pd	43	49.70	-0.5
		eSg	43	58.40	
GIB	0.76 285	P	43	54.00	0.0
		eSg	44	06.00	
SOI	0.92 72	P	43	57.20	0.5
		eSg	44	10.70	
FAI	1.14 243	Pd	44	00.20	-0.2
TDS	2.16 30	P	44	15.50	-0.1

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

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* SEP 03, 1990 18h 50m 24.88± 1.30s
2.180 N ±13.6km 125.847 E ±15.9km
DEPTH = 198.4 ± 7.8 km
4.9mb (8 obs.)
TALAUD ISLANDS (263)

MNI	1.25 234	iPc	50	56.50	0.0
MTN	15.82 161	eP	54	04.00	5.5X
	0.4s 21.00nm			4.9mb	
WB5	23.46 160	eP	55	18.00	0.1
WRA	23.51 160	Pc	55	18.50	0.1
	0.2s 0.60nm			3.9mb	X
MBL	23.93 194	eP	55	23.00	0.7
NANU	26.57 202	eP	55	46.40	-0.1
ASPA	26.86 163	iPc	55	49.40	0.2
	0.4s 13.00nm			5.0mb	
CHTO	31.11 304	e(P)	56	27.00	0.1
MRWA	32.61 196	iPc	56	39.60	-0.3
	0.4s 6.00nm			4.6mb	
FORR	32.92 176	iPc	56	42.80	0.4
	0.4s 65.00nm			5.6mb	
COOL	33.18 187	eP	56	44.70	-0.1
BAL	33.75 194	eP	56	49.00	-0.6
	0.4s 9.00nm			4.8mb	
KLB	34.45 192	iPc	56	55.60	0.0
	0.4s 23.00nm			5.2mb	
MUN	35.18 194	eP	57	01.20	-0.5
NWAO	35.85 192	iPc	57	07.80	0.5
	0.4s 18.00nm			5.1mb	
RKG	37.00 192	eP	57	22.30	5.3X
STK	37.02 157	eP	57	16.60	-0.6
	1.6s 32.00nm			4.7mb	

S.D. = 0.4 on 15 of 17 obs.

? SEP 03, 1990 19h 31m 00.21± 1.30s
34.510 N ±14.5km 140.117 E ±24.0km
DEPTH = 33.0km (normol)
4.8mb (3 obs.)
NEAR EAST COAST OF HONSHU, JAPAN (228)

MAT	2.56 323	iPc	31	39.00	-1.2
		(S)	32	08.00	
BJI	19.81 293	eP	35	31.00	0.3
GUN	46.39 277	P	39	35.80	10.0X
PKI	46.91 277	P	39	30.00	0.1
KKN	46.93 277	P	39	30.20	0.3
DMN	47.14 277	P	39	32.40	0.8
GKN	47.37 278	P	39	33.00	-0.3

03d 19h

0.4s 9.00nm 5.1mb
WB5 54.36 187 eP 40 25.40 -0.6
WRA 54.43 187 Pc 40 26.20 -0.3
0.9s 9.00nm 4.8mb
GBA 59.98 266 P 41 20.00 14.0X
NB2 76.10 337 P 42 47.10 1.1
0.8s 2.10nm 4.2mb
ZOBO 148.84 61 PKP 50 35.00 -8.1X
LPB 149.03 62 ePKP 50 39.00 -4.2X
CNCB 149.30 62 PKP 50 35.60 -8.2X
SIV 153.50 51 PKP 50 45.50 -3.8X
S.D. = 0.8 on 9 of 15 obs.

SEP 03, 1990 19h 49m 32.87± 0.69s
37.725 N ± 6.8km 14.988 E ± 5.6km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO 0.31 312 Pc 49 39.10 -0.3
eSg 49 44.00
ATN 0.57 41 Pc 49 44.50 0.0
eSg 49 53.80
MEU 0.62 184 Pd 49 45.10 -0.4
eSg 49 54.30
GIB 0.81 289 P 49 48.50 -0.1
eSg 50 01.00
SOI 0.91 67 P 49 50.50 0.2
eSg 50 04.00
FAI 1.14 247 Pd 49 54.70 0.6
S.D. = 0.5 on 6 of 6 obs.

SEP 03, 1990 21h 50m 32.28± 0.53s
47.207 N ± 5.0km 8.158 E ± 5.4km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
MD 2.7 (STR). ML 2.2 (VIE).

ZLA 0.32 30 iPd 50 40.20 1.3
SLE 0.60 22 iPd 50 44.10 -0.4
LLS 0.67 120 iPd 50 45.60 -0.1
FEL 0.68 352 Pg 50 45.47 -0.3
Sg 50 55.41
SAX 0.81 86 eP 50 48.40 0.2
LOMF 0.92 280 Pg 50 49.11 -0.8
MOF 0.95 313 Pg 50 50.25 -0.2
Sg 51 02.79
BSF 1.12 305 Pg 50 53.80 0.5
Sg 51 06.90
VDL 1.15 128 eP 50 53.80 -0.2
MMK 1.16 187 eP 50 52.20 -2.0
TMA 1.21 156 eP 50 53.60 -1.3
CDF 1.34 334 Pg 50 54.52 -2.6
OSS 1.46 110 eP 50 59.70 0.9
HAU 1.46 304 Pg 51 00.20 1.5
Sg 51 18.20
LPL 1.96 211 Pg 51 08.00 1.9
Sg 51 32.90
LPG 1.97 210 Pg 51 07.70 1.4
Sg 51 32.40
SOTA 2.08 89 ePg 51 12.00 4.2X
eSg 51 39.00
LBF 2.86 267 Pg 51 24.80 5.9X
Sg 52 01.80
LOR 2.93 273 Pg 51 26.00 6.2X
Sg 52 02.80
SMF 3.01 261 Pg 51 27.70 6.8X
Sg 52 05.40
S.D. = 1.4 on 16 of 20 obs.

SEP 03, 1990 22h 14m 43.30± 0.89s
45.725 N ±10.5km 10.910 E ± 7.0km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.7 (VIE).

SAL 0.29 247 P 14 49.00 -0.4
eSg 14 54.50
MDI 0.84 274 P 15 00.00 0.5
eSg 15 12.60
OGA 1.15 4 iPgc 15 04.80 -0.1
SOTA 1.51 8 iPgd 15 10.60 0.1
iSg 15 30.60
FVI 1.56 56 Pd 15 10.50 -0.6
eSg 15 31.60
VOY 2.11 81 ePn 15 19.70 0.6
eSn 15 47.20
S.D. = 0.6 on 6 of 6 obs.

SEP 03, 1990 22h 27m 28.73± 0.75s
24.824 N ± 6.9km 122.630 E ±10.4km
DEPTH = 119.6 ± 7.0 km
4.3mb (10 obs.)
TAIWAN REGION (243)

TWC 0.74 253 iPc 27 48.30 -0.3
eS 28 00.80
TWZ 0.99 286 iPc 27 51.20 0.3
eS 28 06.30
ANP 1.07 290 iP 27 50.20 -1.6
eS 28 04.50
TWQ 1.72 252 iPc 27 59.30 0.1
eS 28 20.50
TWM1 2.84 226 eP 28 14.70 1.2
SSE 6.38 349 Pc 29 02.50 0.9
0.6s 185.00nm 5.6mb X
i 30 15.00
i 30 26.00
i 30 38.00
BJI 16.11 342 eP 31 11.50 2.0X
1.2s 32.00nm 4.5mb
eS 34 16.00
KMI 18.04 275 eP 31 34.50 1.0
i 31 56.50
CHG 22.77 259 ePc 32 22.90 1.2
1.0s 12.50nm 4.2mb
CHTO 22.77 259 eP 32 22.20 0.6
0.6s 5.47nm 4.1mb
pP 32 48.40 128kmX
MTN 38.35 167 eP 34 38.00 -1.7
WB5 45.88 165 eP 35 40.70 -0.2
WRA 45.93 165 Pd 35 40.70 -0.6
0.6s 11.40nm 4.8mb
ASPA 49.43 166 iPc 36 08.70 0.3
0.9s 12.00nm 4.8mb
WARB 50.86 175 eP 36 19.00 -0.3
0.3s 10.00nm 5.2mb
KEV 68.87 338 eP 38 21.00 -0.9
SOD 69.62 336 iP 38 25.30 -1.2
SUF 71.14 331 eP 38 34.00 -1.7
0.4s 2.70nm 4.4mb
INK 72.14 22 eP 38 42.00 0.4
HFS 77.65 331 eP 39 12.00 -1.1
0.5s 1.70nm 4.1mb
NB2 78.27 332 P 39 15.40 -1.2
0.5s 1.90nm 4.1mb
YKA 81.87 23 eP 39 35.20 -0.4
1.2s 3.50nm 4.0mb
WDC 91.15 44 ePd 40 22.80 1.5
MIN 91.87 44 ePd 40 25.70 0.9
ORV 92.39 44 eP 40 27.90 0.8
CMB 93.98 45 ePd 40 35.50 1.0
FRI 95.03 45 eP 40 40.20 1.0
S.D. = 1.1 on 26 of 27 obs.

? SEP 03, 1990 22h 44m 48.94± 1.40s
26.738 S ±49.8km 175.650 W ±16.7km
DEPTH = 21.0km (3 depth phases)
5.2mb (5 obs.) 4.6Msz (1 obs.)
SOUTH OF TONGA ISLANDS (175)

DZM 16.95 282 iPc 48 47.10 0.5
RMO 31.76 262 iPc 51 18.30 4.3X
1.2s 43.00nm 5.2mb
ASPA 45.51 262 eP 53 09.40 0.4
0.5s 14.00nm 5.2mb
Z 20s 0.66um 4.6Msz
LR 10 33.70
WB5 46.17 267 eP 53 12.90 -1.3
WRA 46.18 267 Pd 53 12.80 -1.4
1.2s 13.00nm 4.8mb
PRS 80.93 42 eP 57 03.80 0.6
PRI 81.22 42 eP 57 05.20 0.3
FRI 82.36 42 eP 57 10.60 0.0
CMB 82.66 41 ePd 57 12.20 0.0
e 57 18.30 19km
ORV 83.05 39 e(P) 57 13.90 -0.2
WDC 83.17 38 ePd 57 14.70 0.0
e 57 20.80 19km
SSE 83.32 310 P 57 13.50 -2.2
PNT 90.65 33 eP 57 51.00 0.1
NNT 90.86 284 eP 57 55.30 2.7
BJI 91.80 315 eP 57 55.50 -0.9
KMI 94.05 296 Pd 58 08.50 1.1
CHG 94.34 289 ePc 58 10.00 1.5

1.0s 12.25nm 5.3mb
CHTO 94.34 289 eP 58 09.20 0.7
0.9s 9.80nm 5.2mb
e 58 17.10 25km
NB2 145.39 354 PKP 04 24.60 -1.8
1.4s 15.00nm
HFS 146.00 352 ePKP 04 25.00 -2.3X
0.4s 2.40nm
HRI 152.12 291 ePKP 04 27.00 -10.8X
PRNI 152.88 285 ePKP 04 55.00 16.1X
BBTK 153.02 306 ePKP 04 48.00 9.1X
KRA 153.81 337 ePKP 04 55.20 15.7X
e 05 06.10
KSP 154.26 342 ePKP 04 50.00 9.9X
e 04 57.00
CLL 154.59 347 ePKP 05 00.00 19.5X
e 05 08.00
BRG 154.81 346 ePKP 05 02.40 21.6X
S.D. = 1.3 on 18 of 27 obs.

? SEP 03, 1990 23h 02m 26.01± 7.94s
22.522 N ±56.8km 120.988 E ±23.6km
DEPTH = 10.0km (geophysicist)
TAIWAN (244)

TWG 0.31 15 iPc 02 31.70 -0.7
eS 02 39.30
TWM1 0.60 300 iPd 02 37.70 -0.5
TWK 0.87 328 ePc 02 43.20 0.4
TWF1 0.87 19 ePc 02 42.90 0.1
TWQ 1.75 355 ePd 02 57.30 0.7
SSE 8.54 1 e(P) 05 04.60 32.0X
S.D. = 0.8 on 5 of 6 obs.

& SEP 03, 1990 23h 07m 26.00s
40.338 N 124.160 W
DEPTH = 10.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 3.0 (BRK).

FHC 0.48 16 iPd 07 35.40 -0.4
iS 07 42.20
WDC 1.26 78 iPc 07 47.60 -1.8
eS 08 04.10
LTCM 1.56 94 eP 07 52.00 -1.9
MIN 1.95 89 ePc 07 57.30 -2.4
LBFM 2.00 59 eP 07 58.50 -1.8
ORV 2.19 110 ePc 08 01.30 -1.7
eS 08 27.10
PCC 3.16 153 e(P) 08 13.10 -3.5
MHC 3.58 146 e(P) 08 21.60 -1.2
GCC 3.71 152 eP 08 22.70 -1.9
SAO 4.15 148 e(P) 08 28.30 -2.5
KVN 4.85 103 eP 08 38.00 -2.9
11 obs. ossocioted

SEP 04, 1990 01h 48m 00.76± 0.34s
0.479 S ± 5.3km 29.085 E ± 6.4km
DEPTH = 10.0km (geophysicist)
5.0mb (41 obs.) 5.0Msz (8 obs.)
ZAIRE REPUBLIC (567)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 23C
Centroid Locotion:
Origin Time 01:48: 8.1 1.4
Lot 0.12S 0.13 Lon 29.42E 0.08
Dep 15.0 FIX Holf-durotion 1.9
Moment Tensor; Scole 10**17 Nm
Mrr=-0.08 0.04 Mtt=-1.07 0.04
Mff= 1.15 0.05 Mrt= 0.07 0.12
Mrf=-0.30 0.14 Mtf= 0.12 0.04
Principal Axes:
T Val= 1.23 Plg=13 Azm= 92
N -0.14 76 295
P -1.09 5 184
Best Double Couple:Mo=1.2*10**17
NP1:Strike=229 Dip=77 Slip= 6
NP2: 137 84 167

LWI 1.77 189 iP 48 29.40 -2.4
NAI 7.76 96 iPd 49 50.80 -5.9X
S 51 56.00
BCAO 11.62 295 iPc 50 48.00 -1.7
0.8s 1031.00nm 7.2mb X
id 52 11.60
ic 53 47.70

ic 55 23.60
SONG 15.46 167 eP 51 50.40 9.6X
e(S) 55 43.90
NPA 17.65 146 e(P) 52 02.30 -6.2X
1.0s 550.00nm 5.6mb
e 54 59.50
e 55 31.00
e(S) 56 50.00
ARO 18.15 48 iPd 52 16.50 1.8
WIN 24.86 207 iPc 53 28.90 3.7X
1.0s 25.00nm 4.8mb
S 57 52.00
SLR 25.12 182 iPd- 53 28.00 0.4
1.2s 132.81nm 5.5mb
S 57 48.00
PRNI 31.17 10 e(P) 54 23.00 0.8
DSI 32.43 10 eP 54 33.00 -0.2
KIC 34.44 282 P 54 50.72 -0.2
1.2s 50.00nm 5.3mb
LIC 34.69 282 P 54 52.90 -0.2
Z 20s 1.06um 4.6Msz
S 00 20.40
TIC 34.76 282 P 54 53.60 -0.1
BBTK 40.27 4 eP 55 44.00 4.2X
e 57 20.00
IZI 40.62 0 eP 55 45.00 2.4
TDS 41.61 345 P 55 52.00 1.4
ORI 41.97 345 P 55 55.50 1.9
VAY 42.02 353 iP 55 55.00 1.0
OHR 42.08 351 eP 55 50.90 -3.6X
SGO 42.73 344 P 56 02.00 2.3
SKO 42.82 352 iP 56 00.90 0.4
iS 02 27.00
i 05 45.00
SDI 44.21 344 P 56 14.00 2.2
AZI 44.58 343 P 56 14.00 -0.7
MNS 45.16 343 P 56 19.00 -0.5
CMP 45.69 356 ePc 56 05.00 -18.6X
MLR 45.86 357 eP 56 26.00 0.9
ARV 46.11 344 P 56 25.00 -2.0
VRI 46.20 358 ePd 56 28.50 0.9
BZS 46.37 353 eP 56 24.50 -4.4X
TIO 46.54 315 iP 56 34.50 3.8X
IFR 46.66 320 iP 56 33.50 1.8
i 56 39.00
PGD 46.81 343 P 56 33.00 0.4
PII 47.03 342 P 56 34.00 -0.2
VBY 47.39 347 eP 56 39.00 1.9
CEY 47.81 346 e(P) 56 40.50 0.1
TRI 47.94 346 eP 56 41.00 -0.4
eS 03 41.00
eSS 07 26.00
eLR 11 36.00
APHE 48.04 324 eP 56 46.50 4.0X
LJU 48.07 346 e(P) 56 43.00 0.6
SBF 48.20 339 eP 56 43.20 -0.3
0.8s 16.10nm 5.2mb
ATEJ 48.21 324 eP 56 49.00 5.2X
VOY 48.21 346 eP 56 43.00 -0.6
ACHM 48.23 324 eP 56 47.00 3.2X
ASMO 48.35 325 eP 56 30.50 -14.3X
ALOJ 48.39 324 eP 56 52.00 6.8X
CKI 48.40 340 P 56 46.00 1.1
AAPN 48.54 324 eP 56 47.80 1.5
VVI 48.54 345 P 56 46.50 0.4
EVIA 48.55 327 eP 56 48.00 1.7
SAL 48.74 343 P 56 47.00 -0.5
EBAN 48.93 325 e(P) 56 50.00 0.8
SRO 49.00 350 eP 56 48.70 -0.8
i 57 11.50
FVI 49.02 345 P 56 49.00 -0.6
MDI 49.14 342 P 56 48.00 -2.5
SOP 49.20 339 eP 56 53.00 2.0
BNI 49.50 339 P 56 53.50 -0.1
ORO 49.55 341 P 56 53.50 -0.4
ZST 49.59 349 e(P) 56 52.80 -1.2
TMA 49.69 342 ePd 56 55.80 0.7
OGA 49.74 344 eP 56 55.70 0.2
VKA 49.80 349 iPc 56 55.50 -0.2
0.8s 22.70nm 5.2mb
i 57 04.30
e 58 40.00
OSS 49.83 343 ePd 56 56.20 0.1
VDL 49.85 342 ePd 56 56.80 0.5
LPG 49.86 340 eP 56 55.90 -0.6
0.8s 18.15nm 5.1mb
LPL 49.88 340 eP 56 56.00 -0.6

0.6s 9.90nm 5.0mb
GBA 49.89 72 P 56 58.00 1.1
ETOR 49.90 329 e(P) 56 58.00 1.4
SQTA 50.01 344 iPc 56 57.00 -0.5
0.7s 9.30nm 4.9mb
i 57 09.70
i 57 24.90
i 59 07.20
i 01 23.40
SPC 50.06 352 eP 56 57.70 -0.2
DIX 50.14 340 ePd 56 58.10 -0.6
TOL 50.28 327 eP 57 01.40 1.9
eS 04 13.00
LLS 50.33 342 ePd 56 58.80 -1.2
EPF 50.41 333 eP 57 01.30 0.8
1.0s 14.00nm 4.9mb
SAX 50.57 343 ePd 57 01.10 -0.8
GUD 50.87 327 eP 57 05.00 0.9
KRA 50.95 352 eP 57 03.40 -0.9
Z 18s 0.80um 4.8Msz
E 18s 1.70um
e 57 08.60
e 57 16.60
e 04 21.00
ZLA 51.07 342 ePd 57 04.60 -0.8
CAF 51.17 336 eP 57 06.20 0.0
0.8s 8.05nm 4.7mb
KHC 51.20 347 iP 57 05.40 -0.9
1.0s 14.00nm 4.8mb
Z 17s 0.60um 4.7MszX
N 16s 1.00um
E 16s 0.50um
e 57 18.40
LPO 51.35 335 eP 57 08.00 0.5
0.8s 16.10nm 5.0mb
WET 51.37 346 eP 57 06.70 -0.9
FEL 51.53 342 P 57 07.91 -1.1
EPLA 51.54 326 eP 57 10.00 0.9
RJF 51.71 335 eP 57 10.50 0.3
0.8s 10.75nm 4.8mb
Z 20s 1.25um 4.9Msz
LFF 51.74 335 eP 57 10.90 0.4
0.8s 24.20nm 5.2mb
MOF 51.79 341 P 57 09.66 -1.3
PRU 51.80 348 eP 57 09.50 -1.3
Z 16s 0.60um 4.7MszX
N 13s 0.70um
E 14s 1.20um
e 57 22.50
BSF 51.88 341 eP 57 11.10 -0.6
0.8s 16.10nm 5.0mb
SMF 51.89 338 eP 57 10.70 -0.9
0.8s 9.40nm 4.8mb
MAF 52.03 337 eP 57 13.30 0.6
0.8s 22.15nm 5.1mb
ECH 52.10 342 P 57 12.37 -0.8
LBF 52.13 338 eP 57 12.70 -0.8
0.8s 7.40nm 4.7mb
AVF 52.20 338 eP 57 12.90 -1.0
0.8s 10.75nm 4.8mb
BGF 52.20 337 eP 57 13.80 -0.1
0.8s 6.70nm 4.6mb
TCF 52.23 337 eP 57 14.60 0.4
1.0s 18.00nm 5.0mb
CDF 52.24 342 P 57 13.15 -1.2
KSP 52.28 350 eP 57 13.50 -1.0
GRF 52.28 345 ePd 57 13.60 -0.9
Z 19s 1.30um 5.0Msz
SSF 52.37 338 eP 57 14.40 -0.8
0.8s 8.75nm 4.7mb
LOR 52.41 339 eP 57 14.80 -0.7
0.6s 7.20nm 4.8mb
Z 20s 1.00um 4.9Msz
LSF 52.47 336 eP 57 16.10 0.1
0.8s 13.45nm 4.9mb
VITF 52.48 341 P 57 15.13 -0.9
GWF 52.63 342 P 57 16.53 -0.7
BRG 52.76 348 eP 57 16.60 -1.5
1.0s 12.00nm 4.8mb
i 57 23.00
i 57 30.00
e 58 33.50
i 59 50.40
e 01 16.40
MOX 53.07 346 eP 57 20.00 -0.4
eS 04 55.00
CLL 53.37 347 eP 57 21.00 -1.5

1.3s 15.00nm 4.8mb
MFF 53.44 335 eP 57 22.90 -0.2
0.8s 6.70nm 4.7mb
NDI 54.38 54 eP 57 31.00 0.7
MEM 54.57 342 P 57 32.70 1.4
DOU 54.57 341 Pc 57 30.90 -0.5
ENN 54.73 342 eP 57 34.50 2.0
1.0s 19.00nm 5.1mb
LPF 54.94 336 eP 57 33.00 -1.2
1.0s 14.00nm 4.9mb
UCC 55.25 341 P 57 41.00 4.7X
WTS 55.56 343 eP 57 38.50 0.0
0.8s 18.00nm 5.2mb
GKN 60.25 57 P 58 17.80 5.7X
DMN 60.52 58 P 58 12.90 -1.2
KKN 60.72 58 P 58 13.10 -2.3
PKI 60.77 58 P 58 14.00 -1.9
NUR 60.92 357 eP 58 34.00 18.2X
APO 61.97 352 ePKP 58 22.70 -0.4
0.5s 1.70nm 4.5mb
NB2 62.87 350 P 58 27.90 -1.2
1.2s 17.80nm 5.1mb
SUF 63.08 358 iP 58 29.20 -1.1
CAI 66.33 263 eP 58 52.80 0.5
SOD 67.73 359 iP 58 59.80 -0.4
KEV 70.12 359 eP 59 18.00 3.2X
SOB1 70.17 260 eP 59 15.00 -1.3
MAW 70.96 167 eP 59 20.00 -0.1
1.0s 39.00nm 5.5mb
CHG 71.13 70 eP 59 22.00 0.0
CHTO 71.13 70 eP 59 21.90 -0.1
0.8s 2.93nm 4.5mb
IPM 72.04 85 ePd 59 30.90 3.3X
1.0s 41.50nm 5.5mb
KMI 75.43 64 eP 59 49.00 1.6
2.5s 90.00nm 5.4mb
BAO 77.43 254 eP 59 59.00 0.4
LZH 77.99 53 eP 00 04.60 3.1X
2.0s 43.00nm 5.2mb
Z 20s 1.00um 5.1Msz
N 16s 0.50um
ePP 03 41.50
PPD 80.92 248 eP 00 19.00 1.7
DAG 81.58 350 iPd 00 20.20 0.5
1.1s 11.39nm 4.8mb
BJI 88.07 50 eP 00 56.50 3.6X
1.5s 13.00nm 5.0mb
SPA 89.52 180 eP 01 01.00 1.5
1.0s 11.50nm 5.1mb
Z 19s 1.05um 5.3Msz
SIV 90.02 254 P 01 03.60 1.0
CNCB 96.63 253 eP 01 39.00 5.4X
LPB 96.75 253 (P) 01 40.00 6.0X
Z 24s 1.55um 5.4MszX
LR 35 30.00
ZOBO 96.79 254 P 01 37.00 2.6
Z 22s 0.61um 5.0Msz
LR 35 00.00
S.D. = 1.1 on 117 of 140 obs.

• SEP 04, 1990 01h 51m 58.66± 1.03s
52.471 N ±19.4km 168.401 W ±10.9km
DEPTH = 33.0km (normal)
4.1mb (5 obs.) 4.9Msz (1 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)

ADK 5.13 267 eP 53 14.80 -0.4
TOA 15.33 42 eP 55 32.70 -1.3
IMA 15.51 23 eP 55 41.50 5.2X
1.4s 11.20nm 3.9mb
FBA 16.32 32 eP 55 46.40 -0.1
0.9s 11.90nm 4.0mb
INK 22.94 33 eP 57 01.00 0.6
YKA 29.73 49 eP 58 04.60 1.0
0.8s 1.30nm 3.8mb
KVN 36.81 91 eP 59 04.50 -0.8
GOL 44.17 81 eP 00 06.50 0.4
NUR 66.89 353 iP 02 49.00 0.0
0.7s 10.80nm 5.1mb
HFS 67.74 359 eP 02 53.00 -1.4
0.4s 1.60nm 4.5mb
Z 18s 0.60um 4.9Msz
LR 24 37.00
ZST 79.60 356 e(P) 04 05.40 1.9
S.D. = 1.2 on 10 of 11 obs.

? SEP 04, 1990 02h 23m 52.46± 2.27s

04d 02h

17.423 S ±54.0km 69.572 W ±12.8km
DEPTH = 212.1 ± 28.6 km
PERU-BOLIVIA BORDER REGION (118)

CNCB	1.64	68	P	24	28.50	-0.9
			S	24	54.00	
LPB	1.67	58	P	24	30.00	0.5
			S	24	56.00	
ZOBO	1.80	51	iPd	24	31.10	0.2
			S	24	58.00	
ARE	2.07	297	iPc	24	33.30	0.0
			iS	25	02.50	
CCH	3.27	90	P	24	47.20	0.5
SIV	8.27	81	iPd	25	50.00	-0.2

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

SEP 04, 1990 02h 56m 57.62± 0.35s
49.794 N ± 7.7km 142.392 E ± 5.8km
DEPTH = 15.5km (5 depth phases)
4.9mb (36 obs.) 4.1Msz (2 obs.)
SAKHALIN ISLAND (662)
Felt (VI) at Smirnykh; (V) at Buyukly; (IV) at Uglegorsk, Pobedino, Roshchino and Boshnyokovo; (III) at Leonidovo and Motrosovo; (II) at Onor.

MAT	13.59	194	(P)	00	14.00	2.0
	1.5s	22.22nm			4.9mb	
		(S)		02	40.00	
BJI	20.87	252	eP	01	40.00	-1.2
	1.5s	26.00nm			4.4mb	
Z	14s	2.93um			4.8MszX	
		eS		05	38.00	
		Lg		08	05.00	
LZH	31.00	259	P	03	16.00	-0.5
	2.0s	32.00nm			4.8mb	
Z	14s	1.80um			4.9MszX	
N	10s	1.40um				
		eSS		10	36.60	
		ScS		13	37.00	
TTA	35.09	44	ePc	03	51.10	-0.6
	1.4s	25.20nm			4.9mb	
SVW	35.56	48	eP	03	55.50	-0.1
IMA	35.76	39	ePc	03	57.00	-0.4
	1.0s	21.60nm			5.0mb	
FBA	38.35	40	ePc	04	19.00	0.0
	1.8s	108.80nm			5.3mb	
KMI	39.30	246	Pc	04	26.00	-1.6
	2.0s	110.00nm			5.2mb	
Z	14s	1.80um			5.1MszX	
N	10s	0.60um				
		pP		04	32.00	20km
		eS		10	33.00	
INK	42.96	33	eP	04	57.00	0.1
SHL	45.64	257	iP	05	19.00	-0.3
CHG	46.39	244	ePd	05	25.10	0.1
	1.5s	43.06nm			5.2mb	
CHTO	46.39	244	iP	05	25.20	0.2
	1.5s	39.41nm			5.2mb	
		pP		05	29.00	13km
KKN	48.32	265	P	05	40.60	0.2
	1.0s	50.00nm			5.5mb	
PKI	48.39	265	P	05	41.20	0.2
DMN	48.56	265	P	05	40.80	-1.5
GKN	48.59	266	P	05	42.60	0.2
YKA	52.64	35	eP	06	11.10	-1.5
	0.9s	7.90nm			4.6mb	
NDI	52.94	272	iPc	06	14.00	-1.2
SUF	57.05	330	eP	06	44.00	-0.7
PNT	58.88	49	eP	06	56.00	-1.7
	0.6s	5.00nm			4.8mb	
FHC	62.31	59	e(P)	07	21.60	0.3
FFC	62.76	36	eP	07	23.00	-0.9
	1.5s	56.00nm			5.5mb	
NB2	62.77	336	P	07	23.50	-0.5
	1.2s	7.80nm			4.8mb	
HFS	62.84	334	eP	07	23.10	-1.3
	0.5s	2.60nm			4.7mb	
Z	16s	0.14um			4.2MszX	
		LR		34	29.00	
WDC	63.26	58	ePc	07	27.30	-0.2
GBA	63.59	260	P	07	29.00	-0.9
MIN	63.94	58	e(P)	07	31.20	-0.9
ORV	64.55	58	e(P)	07	34.50	-1.4
LRM	64.79	48	eP	07	37.20	-0.5
MHC	66.03	60	ePc	07	47.90	2.3
CMB	66.24	59	ePc	07	46.60	-0.2
FRI	67.36	59	eP	07	55.50	1.6
KRA	69.02	324	iPd	08	04.60	0.6
	0.6s	29.00nm			5.6mb	
		e		08	08.60	13km
		e		08	14.10	
SPC	69.60	324	eP	08	08.00	0.2
KSP	69.70	327	eP	08	08.80	0.6
CLL	70.44	329	iPc	08	12.00	-0.6
	1.4s	22.00nm			5.1mb	
BRG	70.49	328	eP	08	13.00	0.0
	1.2s	17.00nm			5.1mb	
PRU	71.04	327	eP	08	10.00	-6.3X
		e		08	16.50	21km
SRO	71.47	324	eP	08	19.90	1.0
ZST	71.61	325	eP	08	21.20	1.4
KHC	72.10	327	iPd	08	24.10	1.4
	1.2s	7.00nm			4.6mb	
GRF	72.42	329	ePc	08	25.30	0.7
Z	19s	0.10um			4.1Msz	
SQTA	74.55	328	e(P)	08	34.00	-3.2X
	1.6s	39.10nm			5.2mb	
		i		08	37.50	11km
LOR	76.88	332	eP	08	49.90	-0.4
	1.0s	8.00nm			4.7mb	
Z	20s	0.10um			4.1Msz	
LBF	77.10	332	eP	08	51.00	-0.5
	1.0s	7.00nm			4.7mb	
ARV	77.13	325	P	08	52.00	0.3
SSF	77.17	333	eP	08	51.40	-0.5
	0.8s	2.70nm			4.4mb	
GRR	77.20	336	eP	08	51.00	-0.9
	1.1s	24.40nm			5.2mb	
PGD	77.26	326	P	08	53.00	0.4
SMF	77.45	332	eP	08	53.30	-0.1
	1.2s	16.35nm			5.0mb	
AVF	77.46	333	eP	08	53.70	0.3
	1.2s	8.95nm			4.7mb	
BDI	77.50	327	P	08	55.00	1.2
LPL	77.55	330	eP	08	55.00	0.8
	1.0s	5.00nm			4.5mb	
LPG	77.56	330	eP	08	55.10	0.7
	1.0s	6.00nm			4.6mb	
LPF	77.58	336	eP	08	53.00	-1.0
	1.0s	12.00nm			4.9mb	
BNI	77.98	330	P	08	47.00	-9.5X
MAF	78.21	333	eP	08	58.40	0.8
	1.2s	14.90nm			4.9mb	
MFF	78.64	335	eP	09	00.40	0.5
	0.8s	5.35nm			4.6mb	
CAF	79.54	333	eP	09	06.10	1.2
	1.2s	8.95nm			4.7mb	
LFF	79.91	333	eP	09	07.80	1.0
	1.0s	12.00nm			4.8mb	
LPO	80.02	333	eP	09	08.10	0.7
	1.2s	11.90nm			4.8mb	
TUL	80.37	44	eP	09	10.70	1.3
	1.1s	9.50nm			4.7mb	
TOL	85.94	335	iPd	09	39.50	1.5
	1.2s	46.88nm			5.6mb	
BAO	144.90	18	ePKP	16	34.00	-1.7
PPD	150.25	26	ePKP	16	49.10	5.1X
		e		16	58.30	

S.D. = 1.0 on 61 of 65 obs.

SEP 04, 1990 03h 06m 29.40± 0.59s
10.086 N ± 5.8km 62.325 W ± 8.3km
DEPTH = 10.0km (geophysicist)
3.7Msz (1 obs.)
NEAR COAST OF VENEZUELA (97)
MD 4.3 (TRN).

TCE	0.83	43	P	06	45.88	0.5
TRN	1.07	58	iP	06	48.52	-0.9
			eS	07	00.91	
TBH	1.30	72	eP	06	53.54	0.1
			eS	07	09.53	
PIG	1.81	54	eP	07	01.82	1.0
			eS	07	26.89	
TPR	1.87	54	eP	07	00.27	-1.5
			eS	07	26.28	
BOT	1.91	56	eP	07	03.08	0.8
			eS	07	26.53	
SVB	3.34	18	eP	07	23.62	0.9
BBL	5.47	9	eP	07	54.00	1.0
PAG	5.94	6	eP	08	00.00	0.4
			S	09	06.00	
			eTT	13	00.00	
BPA	6.93	4	eP	08	12.00	-1.6
NEV	7.01	358	eP	08	14.00	-0.7
CPB	7.52	4	eP	08	11.58	-10.3X
SIV	25.94	177	P	12	02.80	-1.0
ZOBO	26.81	192	P	12	13.00	0.6
Z	20s	0.23um			3.7Msz	
		LR		22	36.00	
LPB	27.06	192	P	12	15.00	0.5
		e		20	19.00	
CNCB	27.30	192	P	12	17.00	0.1
		i		20	43.00	
CCH	27.55	188	P	12	22.50	3.6X
PPD	33.70	161	(P)	13	23.00	10.0X

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

SEP 04, 1990 04h 22m 11.00± 1.08s
5.213 S ± 4.4km 152.536 E ± 6.8km
DEPTH = 54.7 ± 9.4 km
5.2mb (14 obs.) 5.1Msz (3 obs.)
NEW BRITAIN REGION (192)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 20C
Centroid Location:
Origin Time 04:22:24.1 1.8
Lat 4.45S 0.12 Lon 152.68E 0.09
Dep 15.0 FIX Half-duration 2.0
Moment Tensor; Scale 10**16 Nm
Mrr= 7.65 0.44 Mtt=-7.78 0.58
Mff= 0.12 0.49 Mrt= 6.80 1.92
Mrf= 2.45 1.48 Mtf=-3.19 0.42
Principal Axes:

	Val=	Plg=	Azm=
T	10.36	69	340
N	1.25	0	71
P	-11.61	21	161

Best Double Couple:Mo=1.1*10**17

	Strike=	Dip=	Slip=
NP1:	251	24	91
NP2:	70	66	90

RAB	1.08	340	iPc+	22	31.20	1.1
PMG	6.77	232	eP	23	50.00	-0.2
			eS	25	08.00	
CTA	16.00	202	iPc	25	54.20	0.1
	1.8s	209.09nm			5.0mb	
		iS		28	53.00	
QIS	19.76	218	iPd	26	38.20	-1.2
	0.8s	85.00nm			5.1mb	
PVC	19.83	130	iPc	26	39.00	-1.1
GUA	20.11	338	eP	26	42.00	-1.1
GUMO	20.17	338	eP	26	42.00	-1.7
RMQ	21.46	189	iPd	26	58.00	1.2
	1.0s	192.00nm			5.4mb	
DZM	21.50	143	iPc	26	56.10	-1.2
BRS	22.06	179	iPd	27	02.00	-0.8
		ipP		27	07.00	18kmX
		e(S)		31	13.00	
MTN	22.44	249	eP	27	08.00	1.4
	0.3s	46.00nm			5.4mb	
QLP	22.68	200	eP	27	09.10	0.2
WB5	22.92	229	eP	27	12.80	1.5
			eS	31	22.00	
WRA	22.97	229	Pc	27	13.50	1.7
	0.6s	9.70nm			4.4mb	
COO	25.24	181	eP	27	36.00	2.4
ASPA	25.67	223	iPd	27	38.30	0.6
	1.0s	20.00nm			4.6mb	
Z	22s	1.35um			4.4Msz	
		eS		32	04.70	
		LR		36	53.30	
CMS	26.88	193	eP	27	47.60	-1.1
STK	28.44	200	iPd	28	00.90	-1.9
	1.1s	4.00nm			4.0mb	X
MBL	35.45	240	eP	29	03.00	-1.3
BAG	38.22	305	eP	29	11.00	-16.8X
MEKA	38.80	233	eP	29	32.00	-0.4
COOL	39.01	225	eP	29	34.00	-0.1
NANU	39.68	241	eP	29	39.20	-0.5
KLB	41.83	227	eP	29	57.00	-0.3
MUN	43.16	227	eP	30	08.00	-0.1
PPI	52.27	273	eP	31	18.00	-1.5
BJI	56.09	327	eP	31	55.00	8.0X
Z	22s	10.43um			5.9Msz	
		eS		39	54.00	
KMI	57.00	304	Pd	31	55.00	0.9
CHG	57.93	296	eP	32	00.20	-0.2
CHTO	57.93	296	eP	32	00.10	-0.3

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        1.4s    23.08nm          5.1mb
LZH    61.34 316 iPc    32 24.00   0.2
        1.5s    39.00nm          5.3mb
                  pP     32 35.00  37kmX
SHL    66.29 301 iP     32 52.20  -4.2X
GUN    72.11 301 P      33 32.00  -0.4
PKI    72.42 301 P      33 33.40  -0.8
KKN    72.59 301 P      33 34.80  -0.3
        0.4s    18.00nm          5.4mb
DMN    72.69 301 P      33 35.40  -0.3
GKN    73.19 301 P      33 38.20  -0.3
SVW    77.30  23 ePc    34 02.10   1.0
TTA    78.25  21 ePc    34 06.70   0.3
        1.3s    36.90nm          5.2mb
PMR    80.17  24 eP     34 16.20  -0.4
IMA    80.93  19 ePc    34 21.20   0.4
        0.9s    17.40nm          5.0mb
TOA    81.64  25 ePc    34 24.60   0.1
FBA    82.36  22 ePc    34 27.20  -0.9
        1.0s    49.90nm          5.5mb
SPA    84.82 180 iPd    34 41.40   0.6
        1.0s    20.00nm          5.2mb
INK    88.93  21 eP     35 01.00   0.5
YKA    95.91  28 eP     35 32.60  -0.2
        0.9s     2.40nm          4.7mb
SPC   120.52 326 ePKP   41 10.70  12.3X
BRG   122.89 330 e(PKP) 41 14.20  11.6X
        1.2s    13.00nm
KHC   124.16 329 PKP    41 06.00   0.8
BSF   128.41 331 ePKP   41 14.00   0.5
        1.0s     8.00nm
HAU   128.50 331 ePKP   41 14.30   0.7
LOR   130.20 332 ePKP   41 17.50   0.7
        1.2s     8.95nm
      Z 20s      0.40um          5.1Msz
LBF   130.36 332 ePKP   41 18.20   1.1
        1.2s    10.40nm
SMF   130.67 332 ePKP   41 18.60   0.9
        1.2s     8.95nm
TCF   131.69 333 ePKP   41 21.90   2.2X
        1.2s     8.95nm
BCAO  134.16 271 ePKPc  41 30.50   5.2X
        0.6s     3.00nm
CNCB  134.37 119 PKP    41 29.00   2.7X
LPB   134.38 119 ePKP   41 27.00   0.9
ZOBO  134.47 119 PKP    41 27.00   0.5
CCH   135.69 121 ePKP   41 32.00   3.5X
SIV   140.63 123 PKP    41 37.60   0.4
PPD   144.24 140 ePKP   41 41.40  -2.0
                  e     41 48.80
AVE   146.39 329 ePKP   41 50.00   3.3X
                  i     42 16.20
BMA   147.82 150 ePKP   41 57.50   8.2X
TIO   148.14 326 ePKP   41 59.00   9.3X
BAO   150.98 136 e(PKP) 42 00.00   5.6X
     S.D. = 1.0  on  53 of  66 obs.
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?  SEP  04, 1990  05h 15m 19.93± 3.58s
   45.483 N ±12.9km    3.703 E ±28.9km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                            (538)
      MD 2.5 (STR).

LBL     0.41 232 Pg     15 28.25   0.0
                Sg      15 33.68
PLDF    0.49 353 Pg     15 29.88   0.0
                Sg      15 36.51
PYM     0.56 299 Pg     15 31.25   0.0
                Sg      15 38.66
AGO     0.70 325 Pg     15 33.78   0.1
                Sg      15 43.11
     S.D. = 0.1  on   4 of   4 obs.
-------------------------------------
*  SEP  04, 1990  06h 44m 16.31± 1.42s
   5.663 S ±18.3km  147.005 E ±11.2km
   DEPTH = 208.0 ±  7.6 km
   4.8mb (  4 obs.)
 EAST PAPUA NEW GUINEA REGION     (207)

LAT     0.98 180 iPd    44 47.00   0.0
                eS      45 08.00
MNDI    3.37 261 eP     45 12.00   0.6
PMG     3.72 178 eP     45 15.00  -0.5
QIS    16.46 205 iPd    47 58.00   0.8
        0.8s    15.00nm          4.5mb
MTN    17.21 244 eP     48 04.30  -1.6
WB5    18.73 220 iPc    48 21.90   0.1
WRA    18.79 220 Pc     48 22.20  -0.3
        0.3s    13.00nm          4.9mb
ASPA   21.90 214 iPd    48 54.70   1.3
        0.5s    40.00nm          5.2mb
                eS      52 44.70
DZM    24.89 133 iPc    49 21.40  -0.5
WARB   28.19 221 eP     49 52.00   0.3
        0.3s     4.00nm          4.6mb
NANU   34.72 238 eP     50 47.60  -0.9
PPD   147.14 147 ePKP   03 35.40   0.8
                e       03 38.10
     S.D. = 0.9  on  12 of  12 obs.
-------------------------------------
   SEP  04, 1990  07h 37m 35.76± 0.79s
   38.380 N ± 7.2km   20.569 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 GREECE                            (364)
      MD 3.2 (ATH).

VLS     0.20 175 ePg    37 40.00  -0.2
EVR     1.11  61 ePb    37 57.00   0.4
KEK     1.46 336 ePb    38 03.40   1.3
                eSb     38 23.50
ITM     1.61 138 ePb    38 04.50   0.2
VLI     2.51 131 ePb    38 20.50   3.3X
OHR     2.73   4 ePn    38 19.10  -1.4
TDS     3.53 292 P      38 52.00  20.2X
SOI     3.57 266 P      39 00.00  27.7X
MGR     4.27 296 P      38 47.00   4.7X
SGO     4.62 300 P      38 47.00  -0.1
     S.D. = 1.1  on   6 of  10 obs.
-------------------------------------
%  SEP  04, 1990  08h 01m 09.21± 0.68s
   41.133 N ± 6.6km   28.473 E ± 5.8km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)

CTT     0.04 293 iPg    01 11.50   0.2
ISK     0.45  98 ePg    01 17.50  -0.8
DMK     0.87 322 iPg    01 26.00   0.0
                iSg     01 38.50
KCT     0.89 186 iPg    01 26.50   0.2
EDC     0.91 211 iPg    01 26.00  -0.7
                eSg     01 41.00
HRT     0.96 109 ePn    01 28.20   0.7
IZI     1.10 136 ePn    01 39.50   9.6X
DST     1.53 176 iPn    01 37.00   0.3
     S.D. = 0.7  on   7 of   8 obs.
-------------------------------------
   SEP  04, 1990  08h 03m 04.26± 0.17s
   19.803 N ± 3.1km   75.690 W ± 3.2km
   DEPTH =  33.3km  (  4 depth phases)
   5.2mb ( 48 obs.)  4.5Msz (  8 obs.)
 CUBA REGION                       ( 85)
      Slight domage and landslides at
      Santiago de Cuba. Felt
      throughout eastern Cuba.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 10S, 15C
      Centroid Location:
      Origin Time        08:03: 5.7 3.5
      Lat 19.86N 0.32 Lon  75.58W 0.26
      Dep  15.0 FIX Half-duration  1.5
      Moment Tensor;  Scale 10**16 Nm
        Mrr= 2.37 0.56  Mtt=-0.70 0.41
        Mff=-1.67 0.79  Mrt=-2.61 1.63
        Mrf=-6.32 1.68  Mtf= 2.29 0.68
       Principal Axes:
        T  Val=  8.31  Plg=49  Azm=123
        N       -2.01       19       10
        P       -6.30       35      265
      Best Double Couple:Mo=7.3*10**16
       NP1:Strike=302 Dip=21 Slip=  21
       NP2:        192     83      109

STH     2.02 212 iP     03 36.19  -0.5
YHJ     2.05 202 iP     03 37.49   0.4
                eS      03 59.08
HOJ     2.05 209 iP     03 36.94  -0.2
PCJ     2.48 215 eP     03 42.06  -1.2
LRS     8.50  99 P      04 58.20  -9.9X
PORP    8.74 100 P      05 09.00  -2.5
SJG     9.18  99 iP     05 03.10 -14.5X
CPD     9.42  99 P      05 19.40  -1.4
UPA    11.38 200 eP     05 46.20  -1.5
NEV    12.73 100 eP     06 05.00  -0.7
CPB    13.31  97 eP     06 20.28   6.9X
BPA    13.41 100 eP     06 10.00  -4.8X
PAG    13.85 103 eP     06 20.00  -0.6
SGS    14.01 343 P      06 23.70   1.1
BBL    14.20 105 eP     06 24.00  -1.1
JSC    15.24 342 P      06 37.70  -1.0
SVB    15.28 113 eP     06 39.89   0.5
GBTN   17.50 336 P      07 07.70   0.4
BLA    17.83 348 eP     07 13.00   1.5
        1.1s    37.97nm          4.4mb
NA2    18.35 355 P      07 12.20  -5.6X
ELC    21.05 329 P      07 46.40  -1.3
                pP      07 53.90  28km
UYO    21.96 314 iPc    07 56.80  -0.1
FVM    22.19 328 P      07 58.70  -0.5
                pP      08 09.60  42km
TUL    23.87 316 eP     08 16.80   1.2
        1.0s    13.30nm          4.4mb
      Z 22s      0.58um          4.0Msz
                  i     08 24.30  27km
                  e(S)  12 43.00
                  LR    14 36.00
SIO    24.11 315 e(P)   08 16.50  -1.5
                  e     08 26.50  37km
MEO    25.15 311 iPd    08 29.20   1.2
ACO    26.54 314 e(P)   08 42.20   1.3
ANMO   31.05 305 P      09 23.00   1.3
        1.0s     2.50nm          4.0mb X
GOL    32.29 314 P      09 31.90  -0.6
        0.6s     1.03nm          3.9mb X
ZOBO   36.61 168 P      10 11.20   1.1
      Z 20s      0.47um          4.3Msz
                  S     15 54.00
                  LR    21 44.00
LPB    36.87 168 P      10 13.00   0.9
        1.0s    60.00nm          5.4mb
      Z 16s      1.01um          4.7MszX
                  LR    23 06.00
CNCB   37.16 168 Pc     10 15.90   1.2
GLA    37.23 299 eP     10 23.00   8.3X
CCH    38.12 165 P      10 24.50   2.0
PLM    38.97 299 eP     10 38.00   8.6X
GSC    39.29 302 eP     10 40.00   8.1X
RVR    39.50 300 eP     10 42.00   8.4X
LRM    39.80 319 eP     10 41.70   5.5X
SBB    39.99 301 eP     10 45.00   7.3X
FFC    40.18 337 eP     10 38.00  -0.9
        0.9s    33.00nm          5.1mb
ISA    40.69 302 eP     10 48.00   4.5X
KVN    41.18 307 P      10 47.90   0.3
CMB    42.68 305 e(P)   10 49.20 -10.5X
                  e     11 07.20  73kmX
NEW    43.76 320 P      11 07.30  -1.0
        1.2s    10.98nm          4.5mb
EDM    44.17 328 iPc    11 11.60   0.1
SOB1   44.78 127 ePd    11 17.60   0.7
PPD    47.92 149 eP     11 42.20   0.6
                  e     13 10.50 453kmX
YKA    50.32 338 eP     11 58.00  -1.6
        0.6s     5.30nm          4.7mb
BMA    52.27 142 eP     12 15.40   0.5
INK    60.06 339 eP     13 08.00  -2.1
AVE    61.58  62 iP     13 21.50   0.5
DAG    63.51  12 iPc    13 30.40  -2.6
        1.0s    24.00nm          5.3mb
TOL    63.69  55 eP     13 35.60   0.7
AAPN   63.86  57 eP     13 36.70   0.5
ALOJ   63.89  58 iP     13 37.50   1.1
ATEJ   63.98  58 iPc    13 38.00   1.0
EKA    64.03  37 P      13 36.00  -0.8
        0.8s    10.20nm          5.0mb
ASMO   64.15  57 iP     13 38.00  -0.1
APHE   64.24  58 iPc    13 39.40   0.7
FBA    64.66 333 eP     13 39.60  -1.1
        0.6s     4.93nm          4.8mb
GRR    65.46  45 eP     13 46.20   0.0
        1.2s    44.65nm          5.4mb
FLN    65.70  45 eP     13 47.50  -0.2
        1.0s    20.00nm          5.2mb
      Z 20s      0.30um          4.5Msz
LDF    65.94  45 eP     13 49.20  -0.1
        1.1s    39.05nm          5.4mb
MFF    66.05  47 eP     13 49.80  -0.2
        1.0s    22.00nm          5.2mb
EPF    66.69  51 eP     13 54.70   0.5
        1.2s    35.70nm          5.3mb
LFF    66.80  49 eP     13 54.90   0.1
```

04d 08h

	1.0s	52.00nm		5.6mb	
LPO	67.14	49 eP	13 57.00	0.0	
	1.1s	43.95nm		5.5mb	
LSF	67.23	47 eP	13 57.10	-0.4	
	1.3s	37.90nm		5.3mb	
RJF	67.31	48 eP	13 58.00	-0.1	
	1.0s	24.00nm		5.2mb	
Z	20s	0.40um		4.6Msz	
TCF	67.70	47 eP	14 00.20	-0.3	
	1.2s	29.75nm		5.3mb	
CAF	67.73	49 eP	14 00.80	0.0	
	1.2s	44.65nm		5.4mb	
MAF	67.95	47 eP	14 01.90	-0.2	
	1.2s	19.35nm		5.1mb	
BGF	68.11	47 eP	14 02.70	-0.3	
	0.8s	16.80nm		5.2mb	
LKO	68.19	87 Pc	14 02.60	-1.5	
	0.6s	66.00nm		5.9mb	
AVF	68.43	47 eP	14 04.50	-0.5	
	1.2s	34.20nm		5.3mb	
SSF	68.50	46 eP	14 04.90	-0.6	
	1.2s	40.15nm		5.4mb	
LOR	68.72	46 eP	14 06.30	-0.5	
	1.2s	38.70nm		5.4mb	
Z	20s	0.43um		4.7Msz	
SMF	68.78	47 eP	14 06.80	-0.4	
	1.0s	34.00nm		5.4mb	
LBF	68.83	46 eP	14 06.90	-0.7	
	1.2s	32.75nm		5.3mb	
TIC	69.62	90 Pc	14 12.56	-0.3	
	0.8s	29.50nm		5.4mb	
LIC	69.74	91 Pc	14 13.54	-0.1	
	0.7s	38.00nm		5.6mb	
Z	21s	0.17um		4.3Msz	
KIC	69.97	90 Pc	14 15.06	0.1	
	0.7s	35.50nm		5.6mb	
VITF	70.03	45 P	14 14.64	-0.1	
HAU	70.30	45 eP	14 16.20	-0.3	
	1.2s	23.80nm		5.1mb	
Z	20s	0.40um		4.7Msz	
BSF	70.62	45 eP	14 18.00	-0.5	
	1.3s	18.05nm		5.0mb	
LOMF	70.71	46 P	14 18.46	-0.6	
ECH	70.81	45 P	14 19.47	-0.1	
MOF	70.84	45 P	14 19.40	-0.5	
CDF	70.85	44 P	14 19.68	-0.3	
LPL	70.93	48 eP	14 20.80	0.2	
	0.7s	7.70nm		4.9mb	
LPG	70.94	48 eP	14 21.30	0.5	
	0.8s	9.40nm		4.9mb	
BNI	70.96	48 P	14 21.50	0.8	
GWF	71.00	44 P	14 20.94	0.2	
DIX	71.31	47 ePc	14 23.80	0.9	
NB2	71.40	31 P	14 23.10	0.2	
	1.2s	35.50nm		5.3mb	
FEL	71.42	45 P	14 23.22	-0.2	
DOI	71.45	49 P	14 24.00	0.4	
MMK	71.69	47 ePd	14 26.10	0.9	
SBF	71.70	49 eP	14 25.20	0.1	
	0.8s	24.20nm		5.3mb	
SLE	71.76	45 ePc	14 25.50	0.2	
CKI	72.19	48 Pd	14 28.00	0.1	
LLS	72.25	46 ePc	14 29.30	0.8	
TMA	72.30	47 ePd	14 29.40	0.6	
SAX	72.42	45 ePd	14 30.30	0.7	
VDL	72.64	46 ePd	14 31.90	1.1	
MDI	72.94	47 P	14 32.00	-0.2	
OSS	73.06	46 ePd	14 34.10	0.9	
PGF	73.06	50 eP	14 33.10	-0.1	
	0.8s	13.45nm		5.0mb	
GRF	73.20	43 ePc	14 34.10	0.4	
	2.0s	68.00nm		5.3mb	
Z	20s	0.20um		4.4Msz	
MOX	73.27	42 eP	14 34.00	-0.1	
	1.4s	28.00nm		5.1mb	
CLL	74.00	41 iP	14 38.50	0.2	
	1.5s	29.00nm		5.1mb	
WET	74.37	43 eP	14 41.00	0.4	
	1.5s	40.00nm		5.2mb	
BRG	74.67	41 iPc	14 42.20	0.0	
	1.4s	24.00nm		5.0mb	
PGD	74.73	48 P	14 42.50	-0.4	
UPP	74.74	31 iP	14 39.70	-2.6	
SFI	74.81	48 P	14 43.50	0.4	
KHC	74.82	43 iP	14 44.00	0.8	
	1.2s	11.00nm		4.7mb	
FVI	74.86	46 P	14 43.00	-0.3	
CRE	74.95	49 P	14 43.00	-1.1	
PRU	75.24	42 ePc	14 45.00	-0.5	
	2.0s	39.10nm		5.1mb	
		e	15 49.50	277kmX	
ARV	75.68	49 P	14 49.00	0.8	
TRI	75.73	46 P	14 49.00	0.7	
VOY	75.74	46 eP	14 43.90	-4.7X	
MNS	75.76	50 P	14 48.50	-0.2	
LJU	76.17	46 e(P)	14 51.50	0.6	
CEY	76.17	46 eP	14 51.80	0.9	
SOD	76.54	23 iP	14 52.40	-0.1	
PTJ	77.16	46 iPc	14 56.80	0.3	
ZST	77.31	43 iP	14 57.60	0.4	
SUF	77.89	27 iP	15 01.00	1.0	
	0.5s	15.00nm		5.3mb	
NUR	77.93	30 eP	15 00.00	-0.3	
SGO	78.13	51 Pd	15 02.50	0.7	
MGR	78.43	51 Pd	15 04.00	0.5	
KRA	78.58	41 eP	15 04.70	0.6	
	1.2s	50.00nm		5.4mb	
SPC	79.03	42 eP	15 08.40	1.6	
OHR	81.94	49 eP	15 25.80	1.5	
MLR	83.93	44 iPd	15 34.50	2.0	
AIA	85.23	175 eP	15 41.40	3.2X	
BCAO	92.48	84 iPc	16 14.00	0.2	
	0.5s	12.00nm		5.6mb	
PKI	129.47	22 PKP	22 00.00	-12.2X	
STK	144.52	243 iPKPd	22 38.00	-1.4	
	1.1s	14.00nm			
QIS	146.90	263 ePKP	22 44.30	0.7	
WB5	151.74	265 ePKP	22 51.00	-0.1	
		i	22 56.90		
WRA	151.77	265 PKPc	22 49.10	-2.1X	
	1.0s	5.10nm			
ASPA	152.27	257 ePKP	22 54.70	2.9X	
	1.0s	9.00nm			

S.D. = 0.9 on 127 of 145 obs.

& SEP 04, 1990 08h 31m 24.05s
59.856 N 153.304 W
DEPTH = 122.5km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.21	170 eP	31 40.59	0.9	
		eS	31 52.41		
PDB	0.45	262 iP	31 41.12	-1.1	
AUE	0.50	184 iP	31 41.69	-0.8	
AUI	0.53	187 eP	31 41.77	-0.9	
RSO	0.67	24 eP	31 43.26	-0.7	
RDT	0.85	32 iP	31 44.40	-0.9	
		eS	31 59.83		
HOM	0.86	103 eP	31 44.57	-0.7	
		eS	32 00.74		
NNL	1.03	79 eP	31 47.03	0.2	
CNPM	1.10	107 eP	31 46.46	-1.2	
		eS	32 03.42		
CKL	1.43	19 iP	31 50.76	-0.5	
		eS	32 11.61		
SPU	1.47	24 iP	31 50.91	-0.8	
		eS	32 12.17		
BGL	1.48	17 iP	31 51.52	-0.4	
CRP	1.53	21 eP	31 51.16	-1.3	
CGLM	1.59	23 iP	31 52.60	-0.6	
NCG	1.65	20 eP	31 53.62	-0.3	
SLKM	1.67	66 eP	31 53.28	-0.8	
SEW	1.95	81 eP	31 56.30	-1.2	
SUA	2.05	37 iP	31 58.18	-0.6	
SKT	2.30	21 eP	32 01.07	-0.9	
PMS	2.32	51 eP	32 01.07	-1.1	
PWA	2.46	42 eP	32 03.67	-0.3	
GHO	2.88	46 eP	32 07.78	-1.8	
CUT	2.95	29 eP	32 09.65	-0.7	
SML	3.12	49 eP	32 10.64	-2.1	
VZW	3.55	67 eP	32 17.34	-1.2	
VLZ	3.68	67 eP	32 17.93	-2.2	
KLU	3.99	62 eP	32 21.34	-3.0	
TOA	4.14	54 eP	32 23.84	-2.6	

28 obs. associated

SEP 04, 1990 09h 29m 23.30± 0.68s
4.861 S ± 6.5km 151.514 E ±11.6km
DEPTH = 159.6 ± 8.1 km
4.9mb (8 obs.)
NEW BRITAIN REGION (192)

RAB	0.93	44 iPd	29 47.80	-0.9	
	0.5s	2535.21nm			
		iS	30 05.00		
PMG	6.26	224 eP	30 56.00	1.6	
		eS	32 08.00		
GUA	19.42	340 eP	33 40.40	0.8	
	0.9s	248.74nm		5.6mb	
GUMO	19.48	340 eP	33 41.00	0.8	
	1.2s	355.56nm		5.6mb	
PJG	19.48	340 eP	33 40.20	0.0	
MTN	21.63	247 eP	34 01.00	-0.8	
RMO	21.67	187 iPd	34 06.00	3.9X	
	0.6s	28.00nm		4.9mb	
WB5	22.40	227 iPd	34 09.70	0.5	
		e	38 00.00		
DZM	22.40	141 iPc	34 10.00	0.7	
WRA	22.46	227 Pd	34 09.90	0.1	
	0.4s	6.10nm		4.4mb	
ASPA	25.26	221 eP	34 40.30	3.9X	
	0.3s	10.00nm		4.9mb	
		eS	38 52.20		
WARB	31.87	226 eP	35 35.00	-0.4	
	0.3s	6.00nm		4.9mb	
MBL	34.75	239 eP	35 59.20	-1.1	
MEKA	38.20	232 eP	36 29.00	-0.3	
	0.3s	9.00nm		5.0mb	
NANU	38.97	240 eP	36 32.00	-3.7X	
MRWA	41.42	230 eP	36 55.00	-0.7	
	0.3s	7.00nm		4.7mb	
GUN	71.06	302 P	40 26.80	0.2	
PKI	71.36	301 P	40 27.60	-0.8	
KKN	71.53	301 P	40 29.40	0.1	
DMN	71.63	301 P	40 30.30	0.3	
GKN	72.14	301 P	40 32.80	0.0	

S.D. = 0.8 on 18 of 21 obs.

? SEP 04, 1990 10h 09m 43.21± 3.73s
22.848 S ±93.9km 178.145 E ±46.3km
DEPTH = 685.5 ± 31.9 km
4.7mb (3 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM	10.85	272 iPd	12 11.00	-0.5	
RMO	26.92	256 eP	14 37.30	0.7	
	1.0s	25.00nm		4.7mb	
ASPA	40.53	260 eP	16 28.10	-0.7	
	0.3s	10.00nm		4.8mb	
WB5	40.77	266 iPd	16 31.10	0.4	
WRA	40.78	266 Pd	16 31.20	0.4	
	0.4s	4.40nm		4.3mb	
PRS	82.00	45 ePc	20 55.50	-0.1	
PCC	82.03	44 eP	20 55.80	0.1	
BRK	82.33	44 ePc	20 57.40	0.3	
PRI	82.35	46 eP	20 57.60	0.1	
MHC	82.41	44 ePc	20 58.20	0.4	
PLM	83.39	50 eP	21 02.10	-0.7	
FRI	83.47	45 eP	21 02.60	-0.2	
CMB	83.63	44 ePc	21 03.60	-0.1	
WDC	83.78	41 ePc	21 04.90	0.6	
ORV	83.81	43 ePc	21 04.70	0.2	
KVN	85.68	44 eP	21 13.60	-0.1	
NB2	140.77	350 PKP	27 57.60	-1.0	
	0.6s	2.00nm			

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

& SEP 04, 1990 10h 32m 57.17s
63.174 N 150.233 W
DEPTH = 113.8km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.34	126 iP	33 13.31	-0.5	
		eS	33 25.33		
KTH	0.49	321 iP	33 14.45	-0.3	
		eS	33 27.35		
CUT	0.77	181 iP	33 16.59	-0.2	
MCK	0.81	46 iP	33 16.75	-0.4	
		eS	33 30.41		
SKT	1.34	207 iP	33 22.05	-0.7	
GHO	1.53	156 iP	33 24.69	-0.4	
		eS	33 46.59		
PWA	1.54	174 eP	33 24.51	-0.5	
WRH	1.61	35 iP	33 25.15	-0.8	
SML	1.63	146 eP	33 25.49	-0.7	
PLRM	1.67	162 iP	33 25.78	-0.8	
SUA	1.73	188 eP	33 27.39	-0.2	
CCB	1.83	35 iP	33 27.67	-0.9	
		eS	33 49.96		

```
SCM      1.90 134 eP     33 28.77  -0.9
HDA      1.91  48 iP     33 28.64  -1.0
PMS      1.96 170 eP     33 29.72  -0.6
NCG      1.99 208 eP     33 30.00  -0.8
FBA      2.04  31 iP     33 30.44  -0.8
                 eS     33 54.74
CGLM     2.05 205 eP     33 31.10  -0.4
DDM      2.06  71 eP     33 31.59   0.0
CRP      2.12 206 eP     33 32.01  -0.4
TOA      2.16 118 iP     33 32.60  -0.3
BGL      2.17 209 eP     33 32.97  -0.1
SPU      2.17 204 eP     33 33.55   0.4
GLM      2.21  33 iP     33 32.62  -0.9
CKL      2.22 207 eP     33 33.59  -0.1
NKA      2.49 191 eP     33 39.09   2.0
KLU      2.63 128 eP     33 37.35  -1.7
TTA      2.64 267 eP     33 38.35  -0.9
SLKM     2.68 180 eP     33 38.92  -0.8
VZW      2.74 139 eP     33 38.72  -1.8
VLZ      2.75 136 eP     33 37.68  -2.9
RDT      2.81 202 eP     33 40.96  -0.5
SEW      3.10 173 eP     33 44.00  -1.3
NNL      3.18 190 eP     33 46.98   0.5
IMA      3.26 334 eP     33 46.39  -1.2
GLB      3.47 117 eP     33 48.70  -1.6
CNPM     3.69 188 iP     33 52.34  -1.0
PDB      3.89 211 eP     33 57.96   1.9
TGL      4.25 121 eP     33 58.45  -2.6
BALM     4.28 117 eP     33 59.20  -2.3
       40 obs. associated
-----------------------------------------
   SEP  04, 1990  10h 59m 17.84± 0.37s
   34.870 N ± 8.3km   70.902 E ± 6.8km
   DEPTH =  33.0km  (normol)
   4.6mb (  9 obs.)
 AFGHANISTAN                        (709)

QUE      5.74 217 eP     00 43.00  -0.1
NDI      8.18 137 eP     01 17.00  -0.2
       0.8s    29.85nm          5.5mb
                 eS     02 46.30
GKN     13.57 117 P      02 30.00  -0.5
DMN     14.13 117 P      02 37.60  -0.4
KKN     14.16 116 P      02 37.80  -0.6
PKI     14.38 116 P      02 40.80  -0.5
GUN     14.54 114 P      02 42.60  -0.9
SHL     20.33 111 iP     03 55.00   0.9
                 iS     07 34.00
GBA     21.98 163 P      04 12.00   1.3
                 S      09 01.00
KOD     25.25 165 eP     04 43.80   1.0
NUR     39.11 325 eP     06 44.00   0.6
SUF     39.27 329 eP     06 45.00   0.3
KEV     42.29 339 eP     07 26.00  16.6X
NB2     45.64 324 P      07 35.80  -0.9
       0.7s     4.40nm          4.5mb
LPG     48.95 303 eP     08 03.00  -0.1
       0.6s     2.70nm          4.5mb
LPL     48.96 303 eP     08 03.00  -0.1
       0.6s     3.60nm          4.6mb
SMF     50.71 305 eP     08 15.90  -0.3
       0.6s     4.95nm          4.7mb
AVF     51.01 305 eP     08 17.60  -0.8
       0.6s     2.70nm          4.4mb
CAF     52.31 303 eP     08 28.40   0.0
       0.7s     4.40nm          4.5mb
LFF     53.21 303 eP     08 35.10   0.1
       0.8s    10.75nm          4.9mb
EPF     54.01 301 eP     08 39.60  -1.4
       0.8s     5.35nm          4.6mb
INK     75.52   9 eP     11 03.00   2.8
     S.D. =  1.0  on   21 of   22 obs.
-----------------------------------------
&  SEP  04, 1990  11h 09m 14.84s
   63.210 N          149.286 W
   DEPTH =  87.5km
 CENTRAL ALASKA                     (  1)
      <AGS-P>.

HUR      0.28 215 eP     09 28.03  -0.1
                 eS     09 37.34
MCK      0.55  17 eP     09 30.17   0.2
                 eS     09 40.83
KTH      0.81 296 eP     09 32.09  -0.6
CUT      0.93 210 iP     09 33.42  -0.4
                 eS     09 48.32
WRH      1.37  22 iP     09 38.85  -0.4
GHO      1.45 173 eP     09 40.66   0.3
                 eS     10 00.37
SML      1.48 162 eP     09 40.90   0.3
                 eS     10 01.59
CCB      1.58  24 iP     09 41.41  -0.5
HDA      1.59  40 eP     09 41.65  -0.3
                 eS     10 02.34
PWA      1.59 190 iP     09 42.31   0.3
SKT      1.61 221 iP     09 41.38  -1.0
PLRM     1.63 177 eP     09 42.77   0.3
DDM      1.64  68 eP     09 42.52  -0.3
SCM      1.65 146 eP     09 43.58   0.6
TOA      1.82 126 eP     09 46.53   1.4
FBA      1.82  20 eP     09 44.34  -0.7
SUA      1.88 202 eP     09 46.36   0.3
GLM      1.97  24 eP     09 46.58  -0.6
PMS      1.98 184 eP     09 47.52   0.3
NCG      2.25 218 eP     09 50.23  -0.8
CGLM     2.29 215 eP     09 51.59   0.0
KLU      2.33 136 eP     09 51.90  -0.2
CRP      2.37 216 eP     09 52.91   0.3
DOT      2.39  77 eP     09 53.06   0.2
SPU      2.41 214 eP     09 53.22   0.1
BGL      2.43 218 eP     09 54.10   0.6
CKL      2.48 217 eP     09 54.26   0.2
VLZ      2.50 145 eP     09 53.49  -0.8
VZW      2.51 148 eP     09 54.55   0.1
SLKM     2.75 190 eP     09 57.94   0.2
RDT      3.03 211 eP     10 01.90   0.3
GLB      3.11 122 eP     10 02.37  -0.4
       32 obs. ossociated
-----------------------------------------
?  SEP  04, 1990  12h 25m 25.45± 1.44s
   42.018 N ±12.9km   19.066 E ±11.0km
   DEPTH =  10.0km  (geophysicist)
 YUGOSLAVIA                         (383)
      ML 2.0 (TTG).

ULC      0.15 112 iPgc   25 28.90   0.0
                 iSg    25 32.00
BDV      0.32 326 ePg    25 32.20   0.1
                 eSg    25 40.00
TTG      0.44  19 ePg    25 34.30   0.0
                 eSg    25 42.20
HCY      0.60 316 ePg    25 37.50  -0.1
                 eSg    25 48.00
       S.D. =  0.2  on   4 of   4 obs.
-----------------------------------------
%  SEP  04, 1990  12h 27m 39.36± 0.82s
   43.388 N ± 6.7km    5.449 E ± 5.4km
   DEPTH =  10.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE         (379)
      MD 2.5 (STR).

GELF     0.02 255 Pg     27 41.14  -0.2
BERF     0.19 113 Pg     27 43.90   0.2
PUYF     0.23  52 Pg     27 43.88  -0.5
PRAF     0.46 334 Pg     27 48.92   0.1
TAVF     0.50  62 Pg     27 49.38  -0.1
VILF     0.50  22 Pg     27 49.66   0.1
GANF     0.69  29 Pg     27 53.44   0.3
       S.D. =  0.3  on   7 of   7 obs.
-----------------------------------------
?  SEP  04, 1990  13h 26m 47.63± 1.02s
     1.669 S ±10.7km  136.219 E ±30.5km
   DEPTH =  33.0km  (normol)
   4.5mb (  5 obs.)
 WEST IRIAN REGION                  (196)

MTN     12.20 204 eP     29 42.10   0.1
       0.3s    70.00nm          6.3mb X
WB5     18.19 186 eP     30 59.10  -0.3
                 eS     34 06.80
WRA     18.26 186 Pc     31 00.20  -0.1
       0.6s     5.30nm          3.9mb
OIS     19.06 170 eP     31 08.60  -1.5
       0.3s     4.00nm          4.1mb
ASPA    21.98 186 iPd    31 41.90   1.2
       0.4s    53.00nm          5.3mb
     Z  16s     0.37um          3.9MszX
                 eS     35 44.20
                 LR     40 51.60
WARB    26.06 200 eP     32 23.00   3.0X
       0.6s    23.00nm          5.0mb
STK     30.48 171 eP     33 00.20   0.4
       0.4s     3.00nm          4.4mb
                 e      33 06.50
BJI     45.38 338 eP     35 04.00  -0.8
CNCB   149.88 129 PKP    46 39.00   6.3X
ZOBO   150.07 127 PKP    46 40.00   7.0X
     Z  24s     0.13um          4.6MszX
                 LR     22 36.00
CCH    150.94 132 ePKP   46 35.00   1.0
     S.D. =  1.1  on   8 of  11 obs.
-----------------------------------------
   SEP  04, 1990  13h 27m 18.28± 0.19s
   51.583 N ± 4.7km  173.847 W ± 2.4km
   DEPTH =  52.9km  ( 26 depth phoses)
   5.0mb ( 44 obs.)
 ANDREANOF ISLANDS, ALEUTIAN IS. (  7)
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.:  9S, 20C
      Centroid Locotion:
      Origin Time        13:27:18.6 0.9
      Lat 51.92N 0.10 Lon 173.91W 0.11
      Dep  33.0 FIX Holf-duration  1.7
      Moment Tensor;   Scale 10**16 Nm
        Mrr= 3.29 0.32  Mtt=-2.73 0.44
        Mff=-0.57 0.30  Mrt= 4.48 0.81
        Mrf= 2.30 0.83  Mtf=-3.60 0.63
       Principol Axes:
        T  Val=  5.70  Plg=63  Azm=351
        N        1.97      10       240
        P       -7.67      25       146
      Best Double Couple:Mo=6.7*10**16
       NP1:Strike=215 Dip=22 Slip=  63
       NP2:        64     70       101

ADK      1.79 281 iPc    27 44.70  -2.5
SMY      7.50 284 eP     29 09.10   1.5
SVW     13.85  39 eP     30 34.00   0.7
TTA     14.84  33 eP     30 47.10   0.8
       0.8s    38.10nm          4.7mb
PMR     16.79  44 eP     31 09.60  -1 3
IMA     17.75  27 ePc    31 22.90   0.0
       0.7s    20.80nm          4.4mb
TOA     18.28  44 eP     31 27.40  -2.0
FBA     18.93  35 eP     31 33.80  -3.4X
INK     25.54  34 eP     32 42.00  -1.1
       0.5s    44.00nm          5.2mb
HON     32.63 152 P      34 00.00  13.0X
     Z  20s     1.06um          4.5Msz
GMW     32.81  77 eP     33 49.00   0.6
YKA     32.83  47 eP     34 00.10  11.7X
       0.8s     5.90nm
RMW     33.44  76 eP     33 55.00   1.0
LON     33.77  77 eP     33 57.00   0.3
PNT     33.95  72 iP     33 59.00   0.8
       0.7s    32.00nm          5.4mb
FHC     35.51  88 eP     34 12.70   1.0
                 e      34 26.20  51km
KAKJ    35.88 263 P      34 14.10  -0.7
NEW     35.89  72 eP     34 14.80  -0.1
       0.8s    26.04nm          5.2mb
NIIJ    35.95 265 P      34 15.30  -0.1
EDM     35.99  63 iPd    34 15.60   0.0
       0.8s   200.40nm          6.1mb X
LBFM    36.51  85 eP     34 20.60   0.3
                 epP    34 35.30  57km
WDC     36.54  87 ePc    34 20.80   0.5
                 e      34 34.30  51km
CHJJ    36.71 264 P      34 22.50   0.7
MAT     36.88 265 eP     34 23.00  -0.3
       1.0s    22.00nm          5.0mb
MIN     37.26  87 eP     34 26.50   0.0
                 e      34 40.40  53km
ORV     37.78  88 ePc    34 30.40  -0.4
                 e      34 44.00  52km
BRK     38.32  90 e(P)   34 36.00   0.7
                 e      34 49.10  49km
BKS     38.34  90 eP     34 35.40   0.0
       0.7s    13.00nm          4.9mb
     Z  20s     0.60um          4.4Msz
     N  20s     0.20um
     E  20s     0.50um
                 i      34 50.40  59km
                 eS     40 38.00
                 eLQ    43 26.00
                 eLR    45 08.00
PCC     38.48  91 e(P)   34 36.80   0.2
                 e      34 49.50  48km
MHC     39.04  90 ePc    34 41.60   0.1
                 e      34 55.50  53km
```

04d 13h

ARN	39.10	90	eP	34	42.00	0.1					e	39	21.00	46km	SDI	86.85	354	P	39	57.80	-0.3
CMB	39.39	89	ePc	34	44.60	0.3	BRG	77.71	355	iPc	39	09.80	-0.6	DUI	86.85	354	P	40	01.50	3.4X
			e	34	58.70	54km		1.0s		30.00nm			5.3mb								
PRS	39.84	91	eP	34	48.20	0.2					i	39	25.70	57km	HYB	87.00	294	eP	39	59.50	0.4
			e	35	01.80	52km	MOX	78.04	356	eP	39	13.00	0.7	ASPA	87.80	227	eP	40	02.90	0.2
KVN	40.20	86	eP	34	50.80	-0.3	KRA	78.06	351	eP	38	53.20	-19.2X		1.1s		8.00nm			4.9mb	
			epP	35	05.20	56km	Z	20s		0.70um			5.0Msz	MGR	88.29	353	P	40	04.00	-1.0
PRI	40.40	91	ePc	34	53.20	0.5					e	39	13.20	74kmX	TDS	88.70	352	P	40	08.00	1.1
FRI	40.46	89	e(P)	34	52.20	-0.8	PRU	78.56	354	ePc	39	15.00	-0.1	POO	88.73	299	eP	40	08.50	1.1
			e	35	06.40	55km	Z	20s		0.60um			4.9Msz	GBA	90.69	293	P	40	17.00	0.5
FFC	41.48	56	iPd	35	00.50	-0.7	SPC	78.89	351	eP	39	16.70	-0.5	BBU	93.31	321	eP	40	28.80	0.3
	0.6s		30.00nm			5.2mb	GRF	79.01	357	iPc	39	18.30	0.7		0.6s		70.00nm			6.3mb	X
ISA	42.07	90	eP	35	21.00	14.6X		0.6s		27.00nm			5.4mb	BJA	93.45	321	eP	40	29.20	0.1
ABL	42.13	91	eP	35	07.50	0.5	Z	19s		0.20um			4.5Msz	BCAO	123.20	345	ePKPc	46	10.30	-0.4
CLC	42.52	89	eP	35	23.00	13.0X					e	39	34.10	56km		0.5s		8.00nm			
DUG	42.79	81	eP	35	12.00	-0.3					e	39	43.30					i	46	27.90	
	0.8s		5.56nm			4.4mb	KHC	79.47	355	P	39	20.50	0.4	PPD	127.07	79	(PKP)	46	18.00	0.0
			epP	35	26.20	54km	LDF	80.06	4	eP	39	23.00	-0.2	MAW	148.54	218	iPKP	46	58.90	3.6X
SBB	43.11	91	eP	35	15.00	0.2		0.6s		7.20nm			4.8mb		0.9s		30.00nm			
PAS	43.25	91	eP	35	31.00	15.1X	CDF	80.38	359	eP	39	24.70	-0.4	SLR	149.18	318	iPKPd	46	58.50	0.6
MWC	43.27	91	eP	35	29.00	12.7X		0.7s		11.00nm			4.9mb		0.9s		29.41nm			
GSC	43.35	89	eP	35	16.00	-0.8	LPF	80.57	5	eP	39	25.50	-0.5		S.D. = 0.8		on 129 of 142 obs.			
DAU	43.62	79	eP	35	19.50	0.3		0.8s		10.75nm			4.8mb	----------						
RVR	43.84	91	eP	35	33.00	12.3X	HAU	80.79	360	eP	39	26.90	-0.3		SEP 04, 1990 15h 16m 50.73± 0.46s					
MSU	44.20	82	eP	35	23.50	-0.4		1.0s		16.00nm			4.9mb		44.332 N ± 3.1km 6.764 E ± 3.2km					
			epP	35	37.50	53km	Z	20s		0.13um			4.3Msz		DEPTH = 10.0km (geophysicist)					
PLM	44.59	91	eP	35	27.00	0.0	BSF	80.96	360	eP	39	27.60	-0.6	FRANCE						(538)
TPC	44.60	90	eP	35	26.00	-0.9		0.8s		18.80nm			5.1mb		ML 2.5 (GEN), 2.3 (LDG).					
			e	35	41.00	58km	SLE	81.01	358	ePd	39	28.30	0.0	PZZ	0.30	54	P	16	57.53	0.5
BAR	45.16	92	eP	35	31.00	-0.3	VRI	81.32	346	iPc	39	30.50	0.5				S	17	02.15	
			e	35	45.00	53km	SOTA	81.48	357	iPd	39	31.60	0.7	DOI	0.38	63	P	16	58.50	-0.2
GLA	46.06	90	eP	35	38.00	-0.4		0.6s		12.80nm			5.1mb				eSg	17	04.50	
			e	35	53.00	58km					i	39	46.90	54km	STV	0.41	102	P	16	59.28	0.1
GOL	47.64	76	eP	35	50.80	-0.3	LOR	81.51	2	eP	39	30.60	-0.3				S	17	05.43	
	0.8s		10.42nm			4.9mb		0.6s		9.45nm			4.9mb	TOUF	0.47	132	Pg	17	00.21	-0.2
			epP	36	04.80	53km	SSF	81.71	2	eP	39	31.50	-0.4	ENR	0.48	102	P	17	00.38	-0.2
BJI	48.34	285	eP	35	56.50	0.4		0.8s		14.80nm			5.0mb				S	17	07.44	
	0.7s		20.00nm			5.2mb	LBF	81.80	2	eP	39	31.90	-0.6	MVIF	0.52	147	Pg	17	01.38	0.1
Z	22s		1.23um			4.8Msz		0.8s		9.40nm			4.8mb	AUTN	0.58	125	Pg	17	02.57	-0.1
N	20s		1.14um				LLS	81.90	358	ePd	39	33.70	0.5				Sg	17	11.93	
			eS	42	52.00		AVF	81.98	2	eP	39	32.90	-0.4	CALN	0.59	171	Pg	17	02.37	-0.3
SSE	51.09	273	Pc	36	18.00	0.7		0.9s		14.75nm			5.0mb				Sg	17	11.11	
	1.0s		48.00nm			5.5mb	FVI	82.04	355	P	39	34.50	0.9	RRL	0.59	1	P	17	02.25	-0.5
Z	20s		0.50um			4.5Msz	MFF	82.05	4	eP	39	33.50	-0.2				S	17	10.15	
			pP	36	31.00	48km		0.7s		8.80nm			4.9mb	AURF	0.60	137	Pg	17	02.72	-0.2
			sS	43	48.00		OSS	82.05	357	ePd	39	34.30	0.3				Sg	17	11.95	
FRB	51.19	33	eP	36	16.00	-1.6	SMF	82.13	2	eP	39	34.10	-0.1	SAOF	0.67	121	Pg	17	03.78	-0.2
MEO	54.94	77	e(P)	36	45.00	-0.9		1.0s		24.00nm			5.2mb	SBF	0.67	134	Pg	17	04.40	0.2
SIO	55.67	74	eP	36	40.50	-10.6X	VDL	82.27	358	ePd	39	36.30	1.2				Sg	17	14.20	
			i	37	03.80	94kmX	TCF	82.45	3	eP	39	36.30	0.4	FRF	0.78	186	Pg	17	05.20	-0.7
TUL	55.86	74	eP	36	51.00	-1.5		0.6s		6.30nm			4.8mb				Sg	17	15.30	
	1.3s		8.40nm			4.6mb	MAF	82.53	3	eP	39	36.90	0.7	ROB	0.79	92	P	17	06.56	0.3
Z	20s		0.63um			4.7Msz		0.6s		8.10nm			4.9mb				S	17	17.43	
			i	37	05.40	53km	TMA	82.66	358	ePd	39	37.80	0.6	IMI	0.91	117	P	17	08.40	0.1
			LR	54	00.00		QUE	82.68	310	eP	39	38.00	0.5				S	17	21.43	
KEV	58.02	352	eP	37	06.00	-1.3	DIX	82.71	359	ePd	39	39.20	1.7	LRG	0.92	199	Pg	17	08.80	0.4
	0.6s		7.80nm			5.0mb	MMK	82.73	359	ePd	39	38.80	1.2				Sg	17	20.90	
			i	37	58.40	232kmX	BNI	83.74	360	Pd	39	44.20	1.5	CDR	0.97	228	ePg	17	09.70	0.5
LZH	58.27	289	Pc	37	09.50	-0.3	LFF	83.74	4	eP	39	43.40	0.9				eSg	17	22.60	
	2.0s	1142	.00nm			6.7mb	X		0.6s		23.45nm			5.4mb	LMR	1.01	191	Pg	17	10.10	0.2
Z	22s		1.20um			5.0Msz	CAF	83.81	3	eP	39	43.80	0.9				Sg	17	22.50	
E	17s		0.60um					0.8s		9.40nm			4.9mb	FIN	1.04	96	P	17	10.66	0.2
			pP	37	18.00	28kmX	LPO	84.02	4	eP	39	44.70	0.8				S	17	25.21	
			sP	38	24.00			0.7s		13.25nm			5.1mb		S.D. = 0.4		on 19 of 19 obs.			
SOD	60.37	351	iP	37	22.30	-1.3	DOI	84.29	359	P	39	45.00	-0.4	----------						
SUF	64.95	350	iP	37	53.00	-1.0	WB5	84.31	228	eP	39	44.70	-0.9		SEP 04, 1990 15h 48m 14.24± 0.16s					
	0.4s		6.00nm			5.0mb	WRA	84.38	228	Pc	39	44.50	-1.4		55.117 N ± 3.9km 161.719 E ± 3.1km					
KMI	66.74	281	Pd	38	00.00	-6.3X		0.6s		2.90nm			4.5mb		DEPTH = 39.7km (8 depth phases)					
	2.5s		0.11nm			2.4mb	X	BDI	84.66	357	P	39	48.00	0.8		5.0mb (49 obs.) 4.2Msz (5 obs.)					
			pP	38	20.00	76kmX	PGD	84.80	356	P	39	49.00	1.0		NEAR EAST COAST OF KAMCHATKA					(218)
NUR	67.27	350	iP	38	07.70	-1.1	SBF	84.93	359	eP	39	48.60	0.1							
	0.6s		27.40nm			5.4mb		0.8s		29.55nm			5.4mb	SMY	7.69	103	eP	50	03.90	-2.6
			i	38	53.00	192kmX	CRE	85.04	356	P	39	50.00	0.9	KUSJ	16.34	230	eP	51	55.30	-6.8X
NB2	67.66	357	P	38	09.90	-1.4	ARV	85.12	355	P	39	51.00	1.6				eS	54	44.70	
	0.5s		3.40nm			4.6mb	CDR	85.12	0	ePd	39	50.70	1.3	ASAJ	16.49	236	P	52	05.00	1.0
UPP	68.53	354	iP	38	15.80	-0.8	FRF	85.24	360	eP	39	50.20	0.2	HOOJ	17.54	231	P	52	13.30	-3.8X
SHL	72.94	290	iP	38	42.80	-1.2		0.8s		18.80nm			5.3mb				S	55	17.90	
LOE	73.13	277	eP	38	45.60	0.7	EPF	85.63	4	eP	39	52.40	0.3	MRRJ	18.52	235	eP	52	26.50	-2.7
CHTO	73.78	280	eP	38	47.70	-1.0		0.7s		7.70nm			5.0mb	OFUJ	20.94	228	P	52	58.40	2.7
	0.9s		9.16nm			4.7mb	SKO	85.88	349	iP	39	53.20	-0.1	YAMJ	22.40	230	P	53	11.50	1.1
GUN	74.61	295	P	38	53.40	-0.5					i	40	06.50	45km	TTA	22.73	53	ePc	53	14.40	0.9
KKN	75.04	296	P	38	55.80	-0.4	PGF	86.22	358	eP	39	54.80	-0.2		1.3s		117.50nm			5.2mb	
PKI	75.14	296	P	38	56.40	-0.5		0.8s		18.80nm			5.4mb	SVW	22.97	57	eP	53	16.70	0.8
GKN	75.24	296	P	38	56.70	-0.5	MNS	86.24	355	P	39	54.40	-0.7	NIIJ	23.63	230	P	53	23.00	0.6
DMN	75.28	296	P	38	57.40	-0.2	VAY	86.38	348	eP	39	56.80	1.1	IMA	23.91	45	iPc	53	25.70	0.7
CLL	77.32	356	iP	39	07.70	-0.6	AZI	86.59	355	P	39	57.00	0.3	CHJJ	24.64	229	iP+	53	32.30	0.2
	0.7s		23.00nm			5.3mb	OHR	86.81	349	eP	39	58.00	0.1	MTMJ	24.71	231	P	53	33.10	0.2

```
IIDJ   25.59 230 P      53 40.90  -0.2
PMR    26.03  56 eP     53 45.10   0.1
       0.6s    14.20nm          4.7mb
FBA    26.33  48 ePc    53 47.50  -0.2
       0.9s   235.83nm          5.8mb
TOA    27.34  54 iPc    53 57.30   0.2
INK    31.69  40 iPc    54 34.80  -0.8
       1.0s    67.00nm          5.4mb
YKA    41.03  45 eP     55 54.70   0.0
       0.6s    28.80nm          5.2mb
LZH    43.33 269 (P)    56 33.00  19.0X
BMW    46.05  68 P      56 36.00   0.4
PNT    46.15  63 iPd    56 36.80   0.6
       0.7s    17.00nm          5.1mb
RMW    46.18  66 P      56 37.00   0.4
LON    46.63  67 P      56 40.00  -0.1
EDM    46.80  55 iPc    56 41.60   0.2
NEW    48.09  63 P      56 51.50  -0.1
       0.8s    15.63nm          5.1mb
DAG    48.38   0 iPc    56 52.20  -1.1
       0.7s    10.96nm          5.0mb
FHC    49.40  74 eP     57 03.10   1.4
SES    49.71  57 eP     57 04.00  -0.1
LBFM   50.18  72 P      57 08.00   0.1
WDC    50.35  73 eP     57 09.20   0.3
FFC    50.94  48 iPd    57 13.10  -0.2
       0.6s    12.00nm          5.1mb
MIN    51.02  73 eP     57 14.30   0.0
KEV    51.20 341 eP     57 25.00  10.0X
ORV    51.63  74 eP     57 18.60  -0.1
LRM    52.10  62 eP     57 21.90  -0.6
MHC    53.12  76 eP     57 30.20   0.2
ARN    53.17  76 P      57 30.00  -0.3
CMB    53.32  74 eP     57 31.60   0.2
SOD    53.32 340 iP     57 30.30  -0.6
KVN    53.85  72 P      57 35.80   0.4
PRS    53.99  76 eP     57 36.20  -0.1
LLA    54.03  76 eP     57 37.00   0.5
FRI    54.44  75 eP     57 39.80   0.2
PRI    54.52  76 eP     57 41.20   0.9
FRB    55.27  25 ePc    57 41.20  -4.0X
       0.8s   101.00nm          5.9mb
BW06   55.72  63 P      57 48.40  -0.7
       0.8s    21.43nm          5.2mb
DUG    55.88  67 P      57 50.00  -0.2
CLC    56.47  74 eP     57 54.00  -0.3
DAU    56.54  66 P      57 55.30   0.1
SBB    57.17  75 eP     57 59.00  -0.3
GSC    57.28  74 eP     58 00.00  -0.1
MWC    57.38  76 eP     58 01.00   0.0
SUF    57.49 338 iP     58 01.20   0.1
       0.5s    11.80nm          5.2mb
TPC    58.58  74 eP     58 08.00  -1.2
CHG    59.25 259 eP     58 13.00  -0.9
                  e     58 33.00  78kmX
CHTO   59.25 259 eP     58 13.70  -0.2
       0.5s     3.70nm          4.8mb
GUN    59.64 276 P      58 16.80  -0.1
NUR    59.79 337 iP     58 16.60  -0.5
       0.7s     1.74nm          4.3mb
                  i     58 28.30  40km
GLA    60.05  74 eP     58 19.00  -0.3
KKN    60.07 276 P      58 17.80  -2.0
       0.6s    12.00nm          5.2mb
GOL    60.12  63 P      58 20.00   0.0
PKI    60.16 276 P      58 18.80  -1.7
GKN    60.27 277 P      58 18.30  -2.8
NB2    61.86 344 P      58 29.40  -1.9
       0.6s     7.20nm          5.0mb
ANMO   63.15  67 P      58 40.00  -0.3
       0.8s     3.73nm          4.6mb
SCH    63.44  29 ePc    58 40.10  -1.6
       0.7s    34.00nm          5.6mb
SIO    67.72  59 eP     59 18.50   9.0X
TUL    67.85  59 eP     59 09.40  -0.8
       1.1s     6.50nm          4.6mb
EKA    69.22 351 P      59 18.00  -0.4
       0.9s    10.50nm          4.8mb
IPM    69.80 248 ePc    59 23.10   0.6
       0.9s    30.40nm          5.3mb
KRA    70.44 335 eP     59 26.70   0.8
                  e     59 39.20  43km
CLL    70.79 340 eP     59 27.00  -1.0
                  i     59 38.30  37km
BRG    71.01 339 e(P)   59 29.40   0.0
       1.4s    12.00nm          4.7mb
                  e     59 41.20  40km

SPC    71.17 334 eP     59 31.40   0.8
MOX    71.69 340 eP     59 34.00   0.5
PRU    71.73 338 eP     59 33.50  -0.2
                  e     59 47.50  49km
MTN    72.45 211 eP     59 31.00  -7.3X
       0.4s    27.00nm          5.6mb
                  i     59 37.80  22kmX
GRF    72.68 340 ePc    59 39.40   0.0
       0.9s    20.00nm          5.1mb
     Z 22s      0.10um          4.0Msz
                  e     59 51.40  40km
MEM    72.71 344 Pd     59 39.50   0.1
KHC    72.74 339 P      59 40.00   0.2
ZST    72.85 336 eP     59 41.80   1.5
MLR    73.01 329 eP     59 42.00   0.5
DOU    73.43 345 Pc     59 43.60   0.0
GWF    74.02 343 P      59 46.83  -0.3
CDF    74.63 343 P      59 50.28  -0.5
ECH    74.84 343 P      59 51.17  -0.7
FEL    75.02 342 P      59 52.21  -0.9
VITF   75.04 343 P      59 52.22  -0.7
SQTA   75.05 340 iPc    59 54.30   1.1
       1.1s    25.80nm          5.1mb
                  i     00 04.80  34km
HAU    75.18 343 iPd    59 53.70  -0.2
       0.8s    10.75nm          4.9mb
     Z 20s      0.10um          4.1Msz
MOF    75.20 343 P      59 53.34  -0.7
BSF    75.27 343 iPd    59 54.20  -0.3
       0.8s     8.05nm          4.7mb
FLN    75.42 348 eP     59 54.60  -0.6
       0.8s    13.45nm          5.0mb
     Z 20s      0.08um          4.0Msz
LDF    75.54 348 eP     59 55.40  -0.5
       1.0s    14.00nm          4.9mb
GBA    75.70 273 Pd     59 53.30  -3.9X
       0.6s     5.50nm          4.7mb
OSS    75.77 340 ePd    59 58.00   0.6
LLS    75.81 341 ePd    59 57.70   0.0
CTA    76.06 195 iPd    59 58.10  -0.9
VDL    76.09 341 ePd    59 59.50   0.2
LPF    76.20 348 eP     59 59.50  -0.1
       1.0s    16.00nm          5.0mb
LOR    76.29 345 iPd    00 00.00  -0.2
       0.8s    14.10nm          5.0mb
     Z 20s      0.17um          4.4Msz
SSF    76.55 345 iPd    00 01.50  -0.1
       0.8s     6.05nm          4.7mb
AVF    76.84 345 iPd    00 03.20   0.0
       0.8s    10.05nm          4.9mb
SMF    76.90 345 iPd    00 03.60   0.0
       1.0s     8.00nm          4.7mb
DZM    76.98 176 iPc    00 04.90   0.7
MAF    77.51 345 iPd    00 07.40   0.5
       0.8s     5.35nm          4.6mb
LPL    77.53 342 iPd    00 08.50   1.2
       0.8s    13.45nm          5.0mb
LPG    77.54 342 iPd    00 08.70   1.2
       0.8s    18.80nm          5.2mb
QIS    77.70 201 iPd    00 06.90  -1.2
       1.1s    25.00nm          5.2mb
BNI    77.99 342 P      00 11.00   1.3
PGD    78.14 338 P      00 12.00   1.4
BDI    78.20 339 P      00 11.50   0.7
ARV    78.24 337 P      00 10.50  -0.4
WB5    78.26 206 eP     00 10.70  -0.5
WRA    78.32 206 Pd     00 11.00  -0.6
       1.0s    44.30nm          5.4mb
CRE    78.33 338 P      00 12.50   0.9
OHR    78.51 331 eP     00 11.80  -0.7
CAF    78.85 345 iPd    00 14.30   0.0
       1.0s     9.00nm          4.7mb
LFF    79.02 346 eP     00 16.00   0.8
       1.0s    16.00nm          4.9mb
LPO    79.21 346 iPd    00 17.10   0.9
       1.0s    10.00nm          4.7mb
MNS    79.35 337 P      00 17.00  -0.1
ORI    80.65 334 P      00 26.00   2.0
ASPA   82.00 206 iPd    00 30.00  -1.1
       1.0s    56.00nm          5.5mb
     Z 20s      0.20um          4.5Msz
                  LR    33 26.80
RMO    82.03 192 iPd    00 34.00   2.8
       1.2s    50.00nm          5.4mb
                 epP    00 44.80  35km
BRS    82.53 188 iP     00 34.00   0.2
QLP    82.74 196 iPd    00 35.30   0.4

TOL    84.59 349 iPd    00 45.50   1.1
       1.0s    30.00nm          5.4mb
WARB   86.37 211 iPd    00 53.50   0.3
       0.5s     8.00nm          5.2mb
CMS    87.33 194 eP     00 58.60   1.0
       0.8s     6.00nm          4.9mb
STK    88.36 197 iPd    01 02.70   0.1
       0.6s     3.00nm          4.8mb
ZOBO  125.71  65 PKP    07 27.00  13.3X
CNCB  126.24  65 PKP    07 15.40   0.7
SIV   129.02  57 PKP    07 18.60  -0.7
SPA   144.94 180 iPKPd  07 45.00  -2.2X
       1.0s    95.00nm
                  i     07 56.40
     S.D. = 0.9  on 125 of 135 obs.
-------------------------------------
%  SEP 04, 1990  16h 18m 04.40± 3.17s
   31.565 S ± 9.8km   68.161 W ±24.0km
   DEPTH =  10.0km  (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA      (137)

CFA    0.08 238 eP     18 07.90   1.0
RTLL   0.35 312 iPc    18 11.40  -0.3
RTCV   0.44 227 iPc    18 12.60  -0.7
RTCB   0.55 278 iPd    18 15.90   0.2
                  eS   18 26.20
RTBS   1.11 265 eP     18 25.00  -0.1
                  S    18 42.80
MDZ    1.44 204 eP     18 30.40  -0.2
                  iS   18 52.50
     S.D. = 0.7  on   6 of   6 obs.
-------------------------------------
?  SEP 04, 1990  16h 21m 49.44± 6.68s
   17.607 N ±52.5km   61.902 W ±18.1km
   DEPTH =  10.0km  (geophysicist)
 LEEWARD ISLANDS                   ( 92)
     ML 3.2 (FDF).

BPA    0.56 176 eP     22 00.90   0.1
                  S    22 07.20
NEV    0.79 234 eP     22 04.88   0.0
                  S    22 13.40
SEG    1.26 162 eP     22 12.80   0.0
                  S    22 28.10
PAG    1.58 172 eP     22 17.77   0.1
                  S    22 37.20
MGG    1.77 161 eP     22 20.73   0.4
BBL    2.11 169 eP     22 24.60  -0.7
     S.D. = 0.5  on   6 of   6 obs.
-------------------------------------
   SEP 04, 1990  17h 51m 41.61± 0.27s
    6.852 N ± 4.8km   72.988 W ± 6.9km
   DEPTH = 156.6km  (  4 depth phases)
   4.9mb (  9 obs.)
 NORTHERN COLOMBIA                 ( 99)
     Felt ot Bogoto.

BOG    2.46 206 iPd    52 25.00   1.6
                  iS   52 54.00
UPA    6.82 289 eP     53 17.90  -2.5
                  i    54 33.80
PSO    7.09 218 eP     53 25.00   0.6
ARE   23.21 176 eP     56 35.00  -1.0
ZOBO  23.47 168 iPc    56 38.40  -0.5
                  i    57 12.00
LPB   23.73 168 P      56 42.00   0.8
       1.0s   120.00nm          5.4mb
CNCB  24.03 168 iPc    56 44.60   0.5
CCH   25.01 164 P      56 44.10  -9.0X
SIV   25.58 153 P      56 56.80  -1.2
BAO   33.35 132 Pd     58 07.80   0.7
TUL   35.68 327 iP     58 26.50   0.0
       0.7s    21.70nm          5.0mb
                  e    58 31.80
PPD   35.71 144 eP     58 26.30  -0.7
SIO   35.84 327 iP     58 27.80  -0.1
CBM   40.15   5 P      59 05.00   1.4
ANMO  41.58 317 P      59 16.30   0.5
       1.0s     5.38nm          4.1mb
GOL   43.75 323 P      59 32.00  -1.5
       0.7s    23.67nm          4.9mb
GLA   46.71 310 P      59 57.50   0.7
                  pP   00 33.00 158km
MSU   47.37 318 P      00 02.70   0.7
DAU   47.79 320 P      00 05.80   0.4
SCH   48.09   5 eP     00 08.00   1.0
BW06  48.14 324 P      00 07.20  -0.7
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04d 18h

	1.0s	15.58nm			4.7mb	
		pP	00	43.00	159km	
PLM	48.40	309 P	00	10.60	0.6	
DUG	48.68	319 P	00	12.50	0.5	
LRM	51.63	325 ePd	00	34.70	0.3	
KVN	51.68	315 P	00	34.80	-0.1	
		pP	01	11.00	158km	
FRI	51.97	312 eP	00	36.20	-0.6	
LLA	52.74	311 eP	00	42.50	0.0	
CMB	52.88	313 eP	00	44.00	0.4	
PRS	52.96	311 eP	00	44.30	0.2	
FFC	53.10	339 iPd	00	44.50	-0.3	
	0.6s	12.00nm			4.9mb	
MHC	53.53	312 eP	00	49.50	1.0	
SES	53.74	331 eP	00	50.00	0.4	
		pP	01	25.00	151km	
BKS	54.17	312 ePc	00	53.80	0.8	
	0.8s	28.00nm			5.1mb	
ORV	54.29	314 eP	00	54.60	0.8	
LBFM	55.29	316 P	01	00.50	-0.8	
WDC	55.43	315 eP	01	00.60	-1.4	
NEW	55.64	326 P	01	02.40	-1.1	
	0.9s	9.54nm			4.7mb	
FHC	56.53	315 eP	01	10.80	0.9	
PNT	57.60	326 iP	01	17.00	-0.3	
LON	57.62	322 P	01	17.00	-0.5	
YKA	63.28	340 eP	01	54.70	-0.8	
	0.6s	18.90nm			5.2mb	
LIC	67.47	86 P	02	22.60	-0.5	
KIC	67.74	86 P	02	24.20	-0.6	
PMR	77.42	332 P	03	21.60	1.0	
NB2	81.24	29 P	03	42.00	0.8	
	0.7s	1.20nm			3.7mb X	
SHL	144.58	24 iPKP	11	00.50	-1.5	
OIS	145.62	243 iPKPc	11	03.30	-0.4	
	0.6s	12.00nm				
ASPA	149.24	234 ePKP	11	09.70	0.3	
	0.7s	14.00nm				
WRA	150.46	241 PKPd	11	16.80	5.5X	
	0.4s	5.30nm				
WB5	150.47	241 ePKP	11	16.60	5.3X	
	S.D. = 0.9	on 47 of 50 obs.				

SEP 04, 1990 18h 07m 39.88± 1.67s
45.410 N ± 6.8km 6.599 E ±13.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)

LPL	0.14	41 Pg	07	43.70	0.3	
		Sg	07	48.70		
BNI	0.36	171 Pc	07	47.00	-0.4	
		eSg	07	51.60		
LSD	0.39	83 P	07	48.06	0.0	
		S	07	53.80		
RRL	0.51	165 P	07	50.21	0.0	
		S	07	56.66		
RSP	0.53	119 P	07	50.93	0.3	
		S	07	57.89		
PZZ	0.97	158 P	07	58.51	0.0	
		S	08	10.81		
ORX	1.00	77 P	07	58.30	-0.6	
		S	08	10.40		
DOI	1.02	153 P	07	59.50	0.3	
		eSg	08	14.50		
	S.D. = 0.4	on 8 of 8 obs.				

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* SEP 04, 1990 18h 43m 30.81± 2.19s
45.535 N ± 8.4km 14.558 E ±19.5km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.2 (LJU).

CEY	0.22	336 iPgc	43	35.30	-0.4	
		iSg	43	39.00		
RIY	0.23	212 ePg	43	35.30	-0.4	
		iSg	43	39.60		
V8Y	0.49	93 eP	43	44.00	3.2X	
		eSg	43	46.30		
LJU	0.51	358 e(Pg)	43	40.70	-0.4	
		eSg	43	46.90		
TRI	0.58	288 ePg	43	41.30	-1.3	
		iSg	43	51.00		
VOY	0.68	317 ePg	43	44.00	-0.4	
		eSg	43	54.50		
VVI	1.56	287 P	44	00.00	1.4	
FVI	1.63	311 P	44	01.00	1.4	
		eSn	44	24.60		

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

SEP 04, 1990 19h 16m 47.37± 0.40s
43.538 N ± 3.5km 0.610 W ± 5.9km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.5 (LDG). mbLg 3.0 (MDD).
Felt at Artix and Mont, France.

OGE	0.38	165 Pg	16	55.53	0.3	
		Sg	17	01.09		
MADF	0.42	201 Pg	16	55.66	-0.3	
		Sg	17	01.49		
ATE	0.46	189 Pg	16	56.29	-0.4	
		Sg	17	02.51		
ESCF	0.46	177 Pg	16	56.77	0.0	
ELYF	0.46	217 Pg	16	56.35	-0.4	
		Sg	17	02.62		
BOH	0.52	214 Pg	16	57.55	-0.5	
		Sg	17	03.94		
ISSF	0.53	195 Pg	16	57.70	-0.4	
JAU	0.53	161 Pg	16	57.94	-0.2	
LHE	0.63	181 Pg	16	59.21	-0.8	
EPF	0.86	126 Pg	17	05.40	1.4	
		Sg	17	17.40		
ECRI	1.67	237 eP	17	18.50	1.6	
		eS	17	41.00		
LFF	1.70	34 Pn	17	19.00	1.7	
		Pg	17	22.90		
		Sg	17	47.50		
LPO	1.73	48 Pn	17	19.70	2.1X	
		Pg	17	23.00		
		Sg	17	47.00		
RJF	2.33	40 Pn	17	26.90	0.5	
		Pg	17	34.20		
		Sg	18	05.70		
CAF	2.37	53 Pn	17	27.80	0.9	
		Pg	17	36.30		
		Sg	18	06.40		
ETOR	2.92	202 eP	17	35.50	0.7	
MFF	3.08	6 Pn	17	37.40	0.5	
		Pg	17	47.90		
		Sg	18	28.20		
LSF	3.11	29 Pn	17	37.80	0.5	
		Pg	17	47.50		
		Sn	18	14.50		
		Sg	18	30.50		
TCF	3.40	35 Pn	17	41.00	-0.6	
		Pg	17	54.50		
		Sg	18	41.70		
GUD	3.91	224 eP	17	49.00	0.0	
AVF	4.29	39 Pn	17	53.20	-1.0	
		Pg	18	10.40		
		Sg	19	06.60		
SMF	4.43	44 Pn	17	55.70	-0.4	
		Pg	18	15.80		
		Sg	19	12.50		
SSF	4.57	38 Pn	17	56.70	-1.3	
		Pg	18	17.00		
		Sn	18	50.80		
		Sg	19	18.70		
LBF	4.73	42 Pg	18	19.70	19.3X	
		Sg	19	23.70		
LOR	4.88	39 Pn	18	00.70	-1.8	
		Pg	18	22.00		
		Sg	19	26.30		
FLN	5.23	1 Pg	18	29.60	22.2X	
		Sg	19	38.90		
	S.D. = 0.9	on 23 of 26 obs.				

SEP 04, 1990 19h 57m 12.26± 0.50s
7.177 S ± 3.0km 146.036 E ± 4.3km
DEPTH = 161.4 ± 5.2 km
5.1mb (28 obs.)
EAST PAPUA NEW GUINEA REGION (207)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 23C
Centroid Location:
Origin Time 19:57:24.7 1.4
Lat 6.33S 0.15 Lon 145.93E 0.09
Dep 170.1 3.0 Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr=-2.83 0.41 Mtt=-1.33 0.54
Mff= 4.16 0.55 Mrt=-4.55 0.44
Mrf= 4.07 0.46 Mtf=-1.60 0.56
Principal Axes:

	T Val=	7.47	Plg=29		Azm=243	
	N	-0.34	21		141	
	P	-7.13	53		20	
	Best Double Couple:Mo=7.3*10**16					
	NP1:Strike= 17		Dip=25		Slip= -31	
	NP2:	136	77		-112	
LAT	1.09	62 iPc	57	40.00	0.9	
PMG	2.48	154 iPd	57	54.40	0.3	
		eS	58	26.00		
MNDI	2.57	293 eP	58	00.00	4.5X	
RAB	6.79	64 iPc	58	49.20	-1.3	
	0.8s	1313.43nm			6.3mb X	
		eS	00	04.00		
QIS	14.69	204 iPd	00	33.30	-0.2	
	0.5s	17.00nm			4.7mb	
		iPcP	03	22.00		
		eScP	07	35.20		
MTN	15.72	248 iPd	00	47.10	0.8	
WB5	16.96	221 eP	01	00.00	-1.5	
		iS	04	22.30		
		e	09	00.00		
WRA	17.02	221 Pd	01	02.00	-0.3	
	0.7s	29.20nm			4.7mb	
KNA	18.93	242 eP	01	22.50	-0.9	
	0.3s	19.00nm			4.9mb	
QLP	19.38	185 iPc	01	28.70	0.8	
RMQ	19.38	173 iPc	01	31.00	3.0X	
	0.7s	223.00nm			5.7mb	
		epP	01	46.00	70kmX	
ASPA	20.11	214 iPd	01	35.40	-0.1	
		i	01	39.30		
		iPP	02	02.90		
		iS	05	10.20		
		iScS	12	47.80		
GUA	20.61	357 eP	01	41.10	0.6	
	0.7s	126.03nm			5.5mb	
GUMO	20.66	357 eP	01	40.80	-0.2	
	0.7s	101.65nm			5.4mb	
PJG	20.66	357 eP	01	40.80	-0.2	
BRS	21.10	163 iPd	01	46.00	0.7	
		i(pP)	01	49.00	11kmX	
		i	02	08.00		
COO	23.92	167 iPd	02	13.50	0.8	
	0.4s	41.00nm			5.3mb	
CMS	24.19	180 iPc	02	15.70	0.6	
	1.1s	58.00nm			5.0mb	
DZM	24.63	129 iPc	02	18.60	-0.9	
STK	24.93	189 iPc	02	22.20	0.2	
	0.6s	36.00nm			5.1mb	
		iS	06	42.80		
WARB	26.43	222 eP	02	35.00	-0.9	
	0.4s	17.00nm			5.1mb	
BWA	27.20	176 eP	02	43.20	0.3	
CAN	28.14	175 eP	02	51.30	0.0	
ADE	28.47	193 eP	02	54.50	0.3	
	1.0s	72.00nm			5.4mb	
FORR	28.93	213 iPd	02	57.30	-1.0	
	0.4s	50.00nm			5.6mb	
8FD	30.03	186 iPc	03	18.90	10.9X	
	0.6s	47.00nm				
TOO	30.26	181 eP	03	10.50	0.5	
NANU	33.11	239 eP	03	34.30	-0.7	
COOL	33.15	221 eP	03	35.00	-0.3	
MRWA	35.79	228 eP	03	57.00	-0.8	
	0.4s	4.00nm			4.5mb	
KLB	35.86	224 eP	03	57.00	-1.3	
BAL	36.03	226 eP	03	59.00	-0.7	
MUN	37.16	224 eP	04	09.00	-0.2	
RKG	37.87	221 iPd	04	18.40	3.3X	
	0.4s	20.00nm			5.2mb	
LTZ	42.33	151 P	04	51.90	0.1	
PUZ	42.38	141 P	04	52.80	0.6	
MNG	42.42	146 P	04	52.90	0.4	
	0.5s	22.00nm			5.0mb	
NOZ	42.58	142 P	04	54.70	0.9	
KHZ	42.68	150 P	04	54.40	-0.1	
PGZ	42.86	146 P	04	56.10	0.1	
CHJJ	43.50	352 P	05	00.00	-1.2	
TSRJ	43.53	348 P	05	00.70	-0.7	
MAT	44.10	351 iPd	05	04.70	-1.4	
	1.4s	81.40nm			5.1mb	
MTMJ	44.21	350 P	05	05.90	-1.2	
NIIJ	44.67	352 P	05	10.00	-0.5	
SSE	44.88	329 Pc	05	13.00	0.8	
	1.0s	29.00nm			4.8mb	
		sP	05	56.50		

```
KMI     52.97 309 Pc     06 17.00    2.3
        1.5s     50.00nm          5.1mb
CHG     53.12 300 ePd    06 17.00    1.3
        0.9s     18.91nm          4.9mb
CHTO    53.12 300 eP     06 16.10    0.4
        0.9s     18.76nm          4.9mb
                  pP     06 54.60 169kmX
BJI     54.47 332 eP     06 25.00   -0.2
        1.5s     65.00nm          5.2mb
                  eS     13 50.00
LZH     58.49 320 P      06 54.50    0.6
ADK     66.92  24 eP     07 48.90   -0.1
GUN     67.72 304 P      07 55.40    0.4
        0.5s     36.00nm          5.4mb
PKI     67.98 303 P      07 56.60    0.0
KKN     68.17 304 P      07 57.80    0.2
        0.8s     39.00nm          5.3mb
DMN     68.25 303 P      07 58.60    0.5
        0.5s     27.00nm          5.3mb
GKN     68.77 304 P      08 01.60    0.4
GBA     71.15 287 P      08 17.00    1.4
        0.5s      1.50nm          4.0mb X
MAW     80.80 203 iPc    09 09.10    0.3
SVW     81.70  25 eP     09 14.50    0.9
TTA     82.50  23 eP     09 18.60    0.8
        0.9s     14.80nm          4.8mb
SPA     82.87 180 iPc    09 19.50   -0.3
        0.7s     38.67nm          5.3mb
                  i      10 02.50
QUE     84.23 301 eP     09 28.90    1.5
PMR     84.68  26 eP     09 27.70   -0.9
        0.9s     38.30nm          5.2mb
IMA     84.99  21 eP     09 30.30   -0.1
        1.3s     36.90nm          5.0mb
TOA     86.17  26 eP     09 36.70    0.5
FBA     86.63  23 eP     09 37.00   -1.3
INK     93.09  22 eP     10 08.00   -0.4
ARV    125.34 319 PKPd   15 37.00  -18.6X
                 eSg     15 46.90
BCAO   127.72 270 ePKPc  16 01.60    0.5
        0.7s      7.00nm
                  i      16 46.20
CNCB   138.77 126 PKP    16 14.00   -8.5X
LPB    138.82 125 (PKP)  16 12.00  -10.5X
ZOBO   138.94 125 PKP    16 14.00   -8.9X
SIV    144.64 131 iPKPc  16 30.80   -1.4
PPD    146.36 150 ePKP   16 34.30   -0.6
KIC    150.97 270 PKPc   16 48.64    6.4X
        0.8s     20.00nm
LIC    151.25 270 PKPc   16 49.26    6.6X
        0.7s     21.00nm
TIC    151.26 271 PKP    16 49.30    6.6X
LKO    151.83 277 PKPc   16 49.04    5.5X
        0.6s     30.50nm
     S.D. = 0.8  on  67 of  79 obs.
-----------------------------------------
*  SEP  04, 1990  20h 22m 03.72± 2.38s
   2.296 N ±13.0km  126.634 E ±19.0km
   DEPTH =  96.6 ± 22.8 km
   4.5mb (  8 obs.)
 MOLUCCA PASSAGE                  (266)

MNI      1.98 245 iPc    22 37.00    0.5
                 eS     23 06.50
MTN     15.69 164 eP     25 39.00   -1.6
WB5     23.31 161 eP     27 04.00    0.0
WRA     23.36 161 Pd     27 04.40   -0.1
        0.5s     6.70nm          4.3mb
QIS     26.03 151 eP     27 30.00    0.3
ASPA    26.76 165 eP     27 36.80    0.4
        0.5s     5.00nm          4.3mb
                 eS     32 05.70
CHG     31.70 303 eP     28 20.20   -0.3
CHTO    31.70 303 eP     28 20.10   -0.4
        0.6s     3.23nm          4.2mb
FORR    32.99 178 eP     28 32.00    0.5
        0.4s    22.00nm          5.3mb
MAT     35.72  16 (P)    28 53.00   -1.8
        0.6s     8.00nm          4.8mb
STK     36.84 159 iPd    29 05.40    1.1
        0.7s     5.00nm          4.6mb
BJI     38.75 347 eP     29 21.50    1.3
        1.0s     6.00nm          4.4mb
LZH     39.69 331 eP     29 31.00    2.7
SHL     40.66 308 eP     29 35.00   -1.4
GBA     49.90 286 Pc     30 48.30   -1.4
        0.7s     4.60nm          4.6mb

     S.D. = 1.4  on  15 of  15 obs.
-----------------------------------------
&  SEP  04, 1990  20h 40m 28.03s
   59.794 N          151.947 W
   DEPTH =  69.9km
 KENAI PENINSULA, ALASKA          ( 14)
      <AGS-P>.

HOM      0.21 131 iP     40 38.46   -0.3
                 iS     40 46.94
XLV      0.36 161 eP     40 38.83   -1.0
                 iS     40 47.36
NNL      0.41  52 iP     40 40.84    0.6
CNPM     0.45 126 iP     40 40.26   -0.3
                 eS     40 49.53
OPT      0.67 258 eP     40 41.87   -0.9
                 iS     40 52.89
RSO      0.78 329 iP     40 43.73   -0.6
                 iS     40 54.81
RDT      0.82 344 iP     40 43.86   -0.7
                 eS     40 56.08
AUE      0.85 240 iP     40 43.94   -0.9
                 eS     40 57.18
AUH      0.88 241 eP     40 44.61   -0.7
                 eS     40 57.10
AUI      0.88 239 eP     40 44.29   -1.0
                 eS     40 56.42
NKA      1.02  20 eP     40 48.43    1.5
SLKM     1.12  50 eP     40 48.29   -0.1
PDB      1.14 271 iP     40 47.11   -1.4
                 eS     41 01.72
CDD      1.23 226 eP     40 48.71   -1.1
SEW      1.29  75 eP     40 51.81    1.2
MCNL     1.36 244 eP     40 49.70   -1.9
SPU      1.39 358 iP     40 51.96   -0.1
CKL      1.42 352 eP     40 52.40    0.0
CRP      1.48 356 eP     40 53.63    0.3
BGL      1.49 352 eP     40 53.60    0.2
CGLM     1.52 359 eP     40 53.87    0.1
NCG      1.62 356 eP     40 55.37    0.2
SUA      1.78  19 eP     40 57.81    0.5
PMS      1.87  38 eP     40 58.94    0.4
PWA      2.12  28 eP     41 02.51    0.6
SKT      2.20   5 eP     41 03.26    0.2
GHO      2.48  35 eP     41 07.43    0.5
CUT      2.74  17 eP     41 11.06    0.5
VZW      2.96  62 eP     41 12.34   -1.3
       29 obs. associated
-----------------------------------------
*  SEP  04, 1990  21h 03m 31.99± 0.83s
   25.965 N ±11.0km  127.807 E ±12.1km
   DEPTH =  33.0km  (normal)
   4.5mb (  7 obs.)
 RYUKYU ISLANDS                   (238)

SSE      7.75 313 P      05 25.00   -0.3
      Z  20s      0.60um
      N  10s      0.30um
      E  10s      0.40um
                  pP     05 31.50
                  PP     06 32.50
                  PcP    08 08.50
MAT     13.78  38 (P)    06 48.00    0.7
BJI     17.07 328 eP     07 29.00   -0.6
        0.8s     7.00nm          3.8mb
      Z  17s     0.41um          4.9MszX
                 eS     10 54.00
LZH     22.83 302 eP     08 33.50    0.1
CHG     27.58 261 eP     09 21.20    3.0X
CHTO    27.58 261 eP     09 20.50    2.3
        0.7s     3.49nm          4.1mb
                 pP     09 30.20   35kmX
PKI     37.76 282 P      10 46.70   -0.5
        0.6s    16.00nm          5.1mb
KKN     37.84 283 P      10 47.40   -0.3
        0.6s    22.00nm          5.2mb
DMN     38.02 282 P      10 49.00   -0.3
        0.8s    17.00nm          5.0mb
GKN     38.38 283 P      10 52.00   -0.2
WB5     46.01 171 eP     11 55.50    1.3
                 e      12 01.00
WRA     46.07 171 Pc     11 52.50   -2.2
        1.0s     2.70nm          4.1mb
NB2     79.38 334 P      15 32.20   -3.8X
        0.8s     2.50nm          4.3mb
     S.D. = 1.3  on  11 of  13 obs.
-----------------------------------------
?  SEP  04, 1990  21h 55m 26.17± 5.03s
   44.067 N ±26.4km     7.603 E ±24.1km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                   (545)
      ML 2.0 (LDG). MD 1.8 (STR).

SAOF     0.09 203 Pg     55 28.48   -0.3
AUTN     0.15 240 Pg     55 29.44   -0.3
SBF      0.24 211 Pg     55 31.00   -0.3
                 Sg     55 33.20
TOUF     0.26 258 Pg     55 31.47   -0.3
AURF     0.27 228 Pg     55 31.41   -0.5
                 Sg     55 34.83
MVIF     0.37 242 Pg     55 33.21   -0.6
                 Sg     55 37.87
FRF      0.86 234 Pg     55 42.70    0.0
                 Sg     55 53.00
LMR      1.08 228 Pg     55 47.20    0.7
                 Sg     56 00.20
LRG      1.09 236 Pg     55 47.50    0.9
                 Sg     56 00.20
     S.D. = 0.6  on   9 of   9 obs.
-----------------------------------------
?  SEP  04, 1990  22h 13m 52.24± 5.26s
   31.486 S ±37.6km  179.940 W ±27.4km
   DEPTH = 238.7 ± 43.4 km
   4.3mb (  4 obs.)
 KERMADEC ISLANDS REGION          (177)

PUZ      6.74 192 eP     15 30.90    0.8
                 eS     16 48.70
MNG      9.84 201 eP     16 07.70   -2.1
                 eS     17 55.30
MRW     10.64 202 eP     16 21.00    1.1
                 eS     18 15.00
MOW     10.64 200 eP     16 20.40    0.4
KHZ     12.09 204 eP     16 37.50   -0.6
STK     32.62 259 eP     20 05.30    1.7
        0.3s     5.00nm          4.6mb
ASPA    41.41 269 eP     21 16.00   -1.0
        0.5s     6.00nm          4.3mb
WRA     42.49 274 Pd     21 25.60   -0.2
        0.4s     2.30nm          3.9mb
WB5     42.50 274 eP     21 25.70   -0.2
SPA     58.69 180 iPc    23 26.90    0.1
        0.6s     4.88nm          4.3mb
SUF    144.57 340 iPKP   32 56.80   -4.0X
        0.4s     8.60nm
NUR    146.72 338 ePKP   33 03.00   -1.4
NB2    149.54 349 PKP    33 10.30    1.3
        0.6s     1.30nm
     S.D. = 1.4  on  12 of  13 obs.
-----------------------------------------
&  SEP  04, 1990  23h 12m 47.28s
   62.035 N          149.256 W
   DEPTH =  44.7km
 CENTRAL ALASKA                   (  1)
      <AGS-P>.

GHO      0.31 149 iP     12 55.61   -0.5
                 iS     13 02.50
PLRM     0.45 172 iP     12 56.76   -0.8
                 eS     13 04.70
PWA      0.49 218 iP     12 57.82   -0.2
                 iS     13 05.96
SML      0.49 117 iP     12 57.34   -0.9
                 eS     13 05.97
CUT      0.60 308 iP     12 58.82   -0.8
                 eS     13 07.74
PMS      0.81 191 eP     13 02.05   -0.4
                 iS     13 13.04
SUA      0.91 232 iP     13 03.72   -0.2
                 iS     13 17.19
SCM      0.93 102 eP     13 03.39   -0.9
HUR      0.96 350 eP     13 03.84   -0.7
                 eS     13 16.83
SKT      1.07 268 iP     13 05.33   -0.8
TOA      1.45  86 eP     13 11.56    0.0
CGLM     1.50 242 eP     13 12.25    0.0
NCG      1.52 247 eP     13 12.36   -0.2
CRP      1.58 242 eP     13 13.56    0.1
SPU      1.59 239 iP     13 13.80    0.4
SLKM     1.60 197 eP     13 13.98    0.4
NKA      1.61 217 eP     13 16.44    2.8
VZW      1.62 126 eP     13 13.64   -0.3
                 eS     13 34.47
VLZ      1.67 122 eP     13 13.64   -0.8
```

04d 23h

			eS	13	34.88					e	20	27.20				0.8s	40.00nm		5.3mb				
KLU	1.68	107	eP	13	14.11	-0 6	BAO	24.74	56	Pd	20	24.00	0.0				ipP	27	00.80	126kmX			
			eS	13	35.71					e	20	44.50		TVO	72.79	259	iP	26	30.20	0.5			
BGL	1.68	244	eP	13	15.45	0.6				e	20	49.00				0.8s	145.00nm		5.8mb				
CKL	1.70	242	iP	13	15.40	0.4				e	21	02.10		PMO	72.96	263	iP	26	30.70	0.1			
			eS	13	37.08					e	22	21.00				0.8s	20.00nm		5.0mb				
KTH	1.71	334	eP	13	14.54	-0.6				e	25	17.10					ipP	27	02.00	125kmX			
SEW	1.94	183	eP	13	18.66	0.3				e	28	23.20		LKO	73.01	67	Pd	26	29.46	-1.5			
RDT	2.11	227	eP	13	20.65	-0.2				e	28	57.40				0.6s	38.50nm		5.4mb				
NNL	2.23	207	eP	13	25.24	2.7	JFO	24.87	74	eP	20	25.80	0.8	PPN	73.06	260	iP	26	31.40	0.2			
RSO	2.31	229	eP	13	24.47	0.6				e	20	49.80				0.8s	50.00nm		5.4mb				
DDM	2.35	40	eP	13	25.41	1.2				e	21	07.30		PAE	73.13	259	iP	26	32.00	0.4			
WRH	2.50	12	eP	13	25.48	-0.9	PSO	33.22	345	eP	21	40.00	0.0			0.8s	115.00nm		5.7mb				
HDA	2.60	23	eP	13	26.97	-0.8	AIA	34.14	176	eP	21	47.70	0.7	PPT	73.17	259	iP	26	32.40	0.6			
GLB	2.66	101	eP	13	27.78	-0.9	SOB1	34.16	56	ePd	21	47.30	-0.5			0.8s	175.00nm		5.9mb				
CNPM	2.70	202	eP	13	29.91	0.7				e	22	11.50		AFR	73.35	259	iP	26	33.10	0.2			
CCB	2.70	13	eP	13	27.70	-1.5				e	22	21.70				0.8s	90.00nm		5.6mb				
DOT	2.88	54	eP	13	31.86	0.0	BOG	36.00	351	eP	22	05.00	1.3	ANMO	74.66	329	P	26	41.40	1.1			
OPT	3.08	221	eP	13	35.91	1.2				iS	27	36.00				0.9s	63.03nm		5.4mb				
TGL	3.35	110	eP	13	37.55	-1.0	BMG	38.31	354	eP	22	21.00	-1.8	MAW	75.07	163	iPd	26	42.10	0.1			
BALM	3.46	104	eP	13	38.57	-1.5	CAI	38.70	57	eP	22	26.00	0.0	HBVT	75.35	357	P	26	44.20	0.5			
	37 obs. associated						UPA	41.25	344	eP	22	48.10	1.2	WIN	75.52	108	iPd	26	47.00	1.4			
----------							SVB	44.91	11	eP	23	14.65	-1.9			1.4s	69.77nm		5.3mb				
SEP 04, 1990 23h 15m 11.35± 0.16s							MGP	49.02	2	P	23	46.70	-1.9	RSNY	75.61	356	P	26	45.20	0.0			
31.262 S ± 2.9km 69.063 W ± 4.0km							PORP	49.09	3	P	23	47.50	-1.6			0.7s	66.90nm		5.6mb				
DEPTH = 112.1km (15 depth phases)							LPR	49.38	4	P	23	49.20	-2.2				pP	27	13.80	112km			
5.5mb (42 obs.)							TPX	51.02	331	(P)	24	04.00	0.1	MIM	76.14	0	P	26	48.40	0.3			
SAN JUAN PROVINCE, ARGENTINA (137)							OXX	54.92	327	(P)	24	34.00	1.0	GLA	77.21	322	eP	26	55.00	0.5			
mb 5.8 (BRK). Felt (V) at San							EVV	55.51	329	(P)	24	37.00	0.1				e	27	24.00				
Juan and (III) in parts of La							ACX	56.26	324	(P)	24	43.00	0.6	CBM	77.83	1	P	26	58.00	0.5			
Rioja and Mendoza Provinces.							IIT	57.34	327	(P)	24	51.50	1.2				pP	27	26.50	111km			
Also felt in the Santiago area,							PPM	57.53	326	(P)	24	53.00	1.1	BAR	77.91	320	eP	26	59.00	0.7			
Chile.							IIA	57.62	326	(P)	24	53.50	1.6				e	27	28.00				
CENTROID, MOMENT TENSOR (HRV)							CRX	58.33	326	(P)	24	59.00	1.7	GOL	78.24	332	P	27	00.20	-0.1			
Data Used: GDSN							IIJ	58.63	326	(P)	25	00.50	0.9			0.9s	53.03nm		5.3mb				
L.P.B.: 14S, 31C							SPA	58.91	180	iPd	25	00.00	-0.7				pP	27	29.80	116km			
Centroid Location:								0.8s		69.17nm			5.8mb	PLM	78.53	321	eP	27	03.00	1.1			
Origin Time 23:15:18.4 0.2										i	25	29.70					e	27	31.00				
Lat 30.92S 0.04 Lon 68.66W 0.04							MRX	59.32	324	(P)	25	05.00	1.3	RVR	79.29	321	eP	27	06.00	0.2			
Dep 118.4 1.1 Half-duration 2.7							MZX	64.91	322	(P)	25	41.00	0.1				e	27	35.00				
Moment Tensor; Scale 10**17 Nm							SGS	65.01	349	P	25	40.40	-0.9	MWC	79.83	321	eP	27	09.00	0.1			
Mrr=-4.19 0.11 Mtt= 1.28 0.23										pP	26	08.60	114km				e	27	38.00				
Mff= 2.91 0.22 Mrt=-0.15 0.09							PRM	66.19	348	P	25	47.50	-1.4	PAS	79.84	320	eP	27	10.00	1.3			
Mrf=-0.08 0.09 Mtf= 2.50 0.19										pP	26	15.70	114km				e	27	38.00				
Principal Axes:							JSC	66.20	349	P	25	47.50	-1.4	GSC	79.98	322	eP	27	10.00	0.4			
T Val= 4.73 Plg= 1 Azm=126							SBA	66.25	191	e(P)	25	37.90	-10.9X				e	27	39.00				
N -0.54 1 216							LHS	66.32	349	P	25	48.40	-1.3	MSU	80.20	327	P	27	11.40	0.6			
P -4.19 88 356							TKL	67.99	347	P	25	58.40	-1.8	CLC	80.79	322	eP	27	14.00	0.2			
Best Double Couple:Mo=4.5*10**17										pP	26	26.70	113km				e	27	43.00				
NP1:Strike=215 Dip=44 Slip= -92							GBTN	68.08	347	P	25	59.00	-1.8	ABL	80.94	320	P	27	15.50	0.7			
NP2: 37 46 -88							PWLA	68.27	343	P	26	00.60	-1.4				pP	27	44.20	111km			
							RSCP	68.29	346	P	26	00.80	-1.3	ISA	81.14	321	eP	27	16.00	0.4			
ZON	0.43	131	iPd	15	29.20	0.9		0.7s		498.27nm			6.5mb X				e	27	45.00				
MDZ	1.63	174	iP	15	41.10	0.8				pP	26	28.60	111km	BCH	81.66	320	P	27	19.60	1.2			
			iS	16	05.40		BLA	68.94	350	ePd	26	05.30	-0.8	PHAM	82.31	320	P	27	22.40	0.7			
JACH	1.92	222	iPc	15	43.80	-0.2		0.8s		42.54nm			5.3mb	BW06	82.53	331	P	27	22.60	-0.3			
FCH	2.31	206	iPc	15	50.00	0.8	NAV	69.10	350	P	26	06.20	-0.8				pP	27	51.00	109km			
PEL	2.33	216	iPc	15	48.40	-0.8	UYO	69.34	338	iPc	26	07.50	-1.0	PRI	82.68	320	eP	27	24.90	1.2			
ROCH	2.37	224	iPc	15	48.70	-1.3	CBN	69.54	353	eP	26	09.00	-0.6				e	27	53.80				
SAN	2.57	211	iP	15	52.00	-0.4	POW	70.20	341	P	26	12.70	-1.0	FRI	82.80	321	eP	27	24.00	-0.1			
			i	16	18.50		TBI	70.44	254	iP	26	16.20	0.7	SLR	82.86	116	iPc+	27	24.00	-1.0			
PCH	2.65	207	iPd	15	53.40	-0.2		0.9s		95.00nm			5.6mb			0.9s	50.42nm		5.4mb				
IHA	2.81	231	iPd	15	53.00	-2.5	MEO	71.33	335	eP	26	19.10	-1.5		Z 20s		2.48um		5.6Msz				
			iS	16	20.40		TUL	71.37	337	iP	26	20.30	-0.5				i	27	53.50				
TACH	2.86	213	iPd	15	55.30	-1.0		1.1s		170.50nm			5.8mb	LLA	83.19	320	eP	27	27.00	0.9			
CHCH	2.98	206	iPd	15	57.70	-0.2	Z	21s		0.46um			4.7Msz				e	27	56.00				
LCCH	3.06	223	eP	15	56.70	-2.2				e	26	49.00		PRS	83.21	320	eP	27	27.40	1.2			
			i	15	57.40					LR	35	37.00					e	27	56.20				
LNV	3.34	216	iP	16	00.00	-2.6	SIO	71.40	337	eP	26	18.90	-2.1	KVN	83.50	324	P	27	28.00	0.1			
ANT	7.62	351	eP	16	55.50	-5.7X	BIX	71.45	337	eP	26	22.00	0.7				pP	27	57.20	113km			
LPA	10.02	114	iPd+	17	32.80	-0.8	LIC	71.51	70	Pd	26	22.00	-0.1	SAO	83.57	320	eP	27	29.40	1.4			
	0.6s	1557.33nm				7.0mb X		0.6s		22.50nm			5.2mb	CMB	83.93	322	eP	27	30.30	0.4			
			eS	19	22.00			Z 21s		0.51um			4.8Msz				e	27	59.20				
CCH	14.07	12	P	18	27.00	-0.1	FVM	71.72	342	P	26	21.70	-1.1	ARN	84.04	321	P	27	31.70	1.2			
CNCB	14.42	4	P	18	32.50	0.6		0.6s		279.58nm			6.3mb	GCC	84.06	320	eP	27	31.30	0.8			
LPB	14.69	4	Pc	18	35.00	-0.2				pP	26	50.50	114km	MHC	84.10	320	eP	27	31.80	1.0			
	1.0s	354.00nm				5.6mb	TIC	71.76	70	P	26	23.54	-0.1				e	28	01.00				
			S	21	23.00		KIC	71.82	71	Pd	26	24.02	0.1	PCC	84.62	320	eP	27	34.50	1.3			
ARE	14.90	351	iP	18	37.20	-0.5		0.6s		33.50nm			5.3mb	BKS	84.81	321	iPc	27	35.60	1.4			
ZOBO	14.95	3	P	18	36.20	-2.4	LVNJ	71.90	355	P	26	23.80	0.0		0.6s		73.00nm		5.8mb				
			i	18	39.00		RUV	72.43	263	iP	26	27.60	0.1				ipP	28	04.40	110km			
			S	20	28.00			0.8s		20.00nm			5.0mb				eSKS	37	49.00				
SIV	16.86	27	P	18	59.40	-2.6				ipP	26	58.80	125kmX				esPS	39	38.00				
PPD	18.32	64	eP	19	18.90	-0.6	VAH	72.62	262	iP	26	28.60	0.0				esSS	43	54.00				
VAO	21.29	73	eP	19	51.20	0.8		0.8s		40.00nm			5.3mb				e	47	48.00				
			e	19	54.10					ipP	26	59.80	125kmX				eLR	56	20.00				
			e	20	12.20		TPT	72.73	263	iP	26	29.40	0.1	BRK	84.82	320	eP	27	35.50	1.3			

TIO	85.20	49	iPd	27	38.60	2.1		0.5s	62.10nm						Sg	53	29.80		
			i	28	06.50		WB5	124.40	207	iPKPd	33	58.10	-1.0	IMI	0.92	116	P	53	17.52	0.0
ORV	85.64	322	eP	27	39.10	0.8	NANU	126.30	185	ePKP	34	01.30	-1.4				S	53	28.92		
			e	28	08.40			0.5s	31.00nm					CDR	0.96	228	ePg	53	18.90	0.8
SCH	85.75	1	ePd	27	38.30	-0.2	QUE	142.36	80	ePKP	34	29.20	-3.6X				eSg	53	31.80		
	0.5s	26.00nm			5.4mb		KOD	142.59	117	ePKP	34	30.00	-3.8X	LMR	1.00	190	Pg	53	19.20	0.3
LRM	86.21	331	eP	27	41.50	0.2	GUA	144.17	248	ePKP	34	33.50	-2.5X				Sg	53	31.50		
			e	28	11.10			0.6s	362.67nm					FIN	1.06	96	P	53	19.88	0.1
MIN	86.27	323	eP	27	40.80	-0.8	GUMO	144.24	248	ePKP	34	33.50	-2.6X				S	53	32.96		
PGZ	86.40	224	eP	27	43.20	1.0		0.7s	416.77nm					LPG	1.17	0	Pg	53	22.20	0.2
	0.5s	53.00nm			5.8mb		PJG	144.24	248	ePKP	34	33.40	-2.7X	LPL	1.19	360	Pg	53	22.40	0.2
MOW	86.49	223	P	27	43.50	0.8	GBA	144.59	112	PKPc	34	34.70	-2.0X				Sg	53	38.20		
AVE	86.65	48	iP	27	44.50	1.1		0.5s	58.40nm					PCP	1.31	80	P	53	24.39	0.3
			i	28	13.00		PPI	146.91	160	ePKP	34	43.50	2.9X				S	53	39.76		
CAW	86.80	223	P	27	45.10	0.9		0.5s	132.00nm					PGF	2.42	136	Pn	53	39.70	-0.5
KHZ	86.83	221	P	27	44.90	0.6	HYB	147.57	108	iPKPd	34	44.50	2.9X				Sn	54	07.40		
	0.5s	57.00nm			5.8mb			1.0s	100.00nm						S.D. = 0.3		on	26	of	26 obs.
MNG	86.86	224	P	27	45.10	0.6	KGM	150.03	165	ePKP	34	50.00	4.5X	---							
	0.5s	19.00nm			5.4mb		NDI	150.74	86	ePKP	34	46.00	-0.2	*	SEP 05, 1990 01h 12m 21.51± 2.24s					
WDC	86.93	322	eP	27	43.90	-0.7	KUSJ	150.80	303	ePKP	34	50.70	4.9X		45.178 N ± 5.4km 6.513 E ±17.8km					
LBFM	87.15	323	P	27	46.20	0.3	IPM	151.87	159	ePKPd	34	55.30	7.0X		DEPTH = 10.0km (geophysicist)					
			pP	28	15.70	113km		0.6s	190.00nm					FRANCE						(538)
TCW	87.19	222	eP	27	46.70	0.6				e	35	24.10								
KMZ	87.23	104	iPc	27	49.00	2.2	HOOJ	151.98	302	ePKP	34	54.70	7.1X	BNI	0.17	137	Pc	12	25.50	0.0
	1.8s	37.00nm			5.1mb		ASAJ	152.00	306	ePKP	34	54.80	7.2X				eSg	12	28.60	
			i	28	18.00		OFUJ	153.79	296	ePKP	34	59.40	9.2X	RRL	0.32	143	P	12	28.46	0.2
LTZ	87.31	220	P	27	47.00	0.3	NST	161.61	145	ePKP	35	01.80	1.7				S	12	32.97		
THZ	87.62	221	P	27	49.00	0.8	SHL	162.31	104	ePKP	35	01.00	0.1	LPG	0.36	28	Pg	12	29.40	0.4
FHC	87.85	322	eP	27	50.80	1.7				ePP	39	34.00					Sg	12	34.60		
LSZ	88.23	107	iPc	27	53.60	2.0	CHG	163.53	136	ePKPd	35	02.20	0.1	RSP	0.53	93	P	12	32.67	0.5
			i	28	13.00			1.6s	51.67nm								S	12	39.54		
			i	28	23.80		BJI	170.26	336	ePKP	35	07.00	0.6	LSD	0.53	58	P	12	32.26	-0.1
IFR	88.25	49	iPc	27	53.00	1.7				esPKP	35	39.00					S	12	38.92		
			i	28	21.50					e	36	20.00		PZZ	0.79	148	P	12	36.77	-0.2
SES	89.39	335	ePd	27	55.70	-0.5				e	36	52.00					S	12	47.64		
	1.1s	76.00nm			5.7mb					ePP	40	08.00		ORO	1.13	66	P	12	42.00	-0.7
			pP	28	25.00	111km				esPP	40	40.00					eSg	12	58.00		
NEW	90.10	330	P	27	59.20	-0.3				eSKKS	46	46.00			S.D. = 0.5		on	7	of	7 obs.
	0.9s	19.74nm			5.2mb		KMI	170.53	128	PKPd-	35	07.50	0.2	---							
FFC	90.21	342	iPc	27	59.80	0.0		2.5s	150.00nm					%	SEP 05, 1990 01h 34m 07.94± 1.32s					
	0.7s	24.00nm			5.4mb					pP	35	40.00			32.984 S ±11.0km 71.116 W ±12.7km					
BCAO	90.22	85	iPd	28	01.60	0.8				PP	36	25.00			DEPTH = 33.0km (normol)					
	0.8s	70.00nm			5.8mb					i	40	10.00		NEAR COAST OF CENTRAL CHILE						(135)
			i	28	31.00		SSE	171.22	272	PKP	35	06.00	-1.1							
			i	29	32.30			Z 20s	0.50um					ROCH	0.09	82	iPc	34	15.60	1.6
			i	30	17.00		LZH	172.38	49	PKPd	35	09.00	1.3				iS	34	23.00	
DPW	90.26	329	P	28	00.00	-0.3				pPKP	35	39.00		JACH	0.53	56	iPc	34	18.20	-0.9
LON	91.06	327	P	28	04.20	0.3		S.D. = 1.0		on 169 of 187 obs.							iS	34	28.10		
			pP	28	33.30	110km	---							LCCH	0.62	218	iPd	34	19.70	-0.6
PTZ	91.35	107	iPc	28	15.40	9.3X		SEP 04, 1990 23h 52m 59.86± 0.28s									iS	34	31.00		
	1.6s	76.90nm			5.7mb			44.324 N ± 1.8km 6.747 E ± 2.5km						TACH	0.68	167	iPd	34	21.50	0.3
			i	28	44.00			DEPTH = 10.0km (geophysicist)									iS	34	33.50	
			i	28	58.20			FRANCE					(538)	FCH	0.77	117	iPc	34	22.60	-0.1
PNT	91.97	330	iPc	28	08.50	0.5		ML 2.5 (GEN), 2.3 (LDG).									iS	34	34.50	
	0.7s	19.00nm			5.5mb									PCH	0.81	142	iPc	34	23.00	0.0
TOL	92.95	44	eP	28	13.00	0.2	PZZ	0.31	54	P	53	06.75	0.3				iS	34	36.50	
			eS	38	37.00					S	53	11.27		CHCH	1.02	158	iPd	34	25.70	-0.3
			ePS	40	05.00		DOI	0.40	63	P	53	08.00	-0.1				iS	34	41.00	
LFF	98.83	42	eP	28	38.90	-0.4				eSg	53	14.00			S.D. = 1.0		on	7	of	7 obs.
	0.6s	7.20nm			5.4mb		STV	0.42	101	P	53	08.40	-0.1	---						
CAF	99.59	43	eP	28	43.20	0.3				S	53	13.93		*	SEP 05, 1990 02h 24m 58.38± 0.56s					
	0.6s	1.80nm			4.9mb		TOUF	0.48	131	Pg	53	09.45	-0.1		13.773 N ±15.5km 89.843 W ±13.7km					
YKA	100.30	340	ePdiff	28	45.20	-0.5	ENR	0.49	101	P	53	09.65	-0.3		DEPTH = 33.0km (normol)					
	0.6s	3.20nm			5.1mb					S	53	16.34			4.1mb (1 obs.)					
SMF	101.59	42	ePdiff	28	52.10	0.2	MVIF	0.52	146	Pg	53	10.62	0.2	EL SALVADOR						(73)
	1.2s	16.35nm			5.6mb					Sg	53	18.43								
SSF	101.62	42	ePdiff	28	51.70	-0.3	CALN	0.58	170	Pg	53	11.55	-0.2	TPX	2.60	296	eP	25	36.50	-2.5
	1.0s	5.00nm			5.2mb					Sg	53	20.34					iS	26	02.00	
LBF	101.85	42	ePdiff	28	52.80	-0.3	AUTN	0.59	124	Pg	53	11.77	-0.2	SCX	3.99	318	eP	25	58.75	0.0
	1.1s	9.75nm			5.4mb					Sg	53	20.98					iS	26	51.50	
LOR	101.94	42	ePdiff	28	53.10	-0.4	RRL	0.60	3	P	53	11.47	-0.6	EVV	7.05	312	(P)	26	47.00	5.1X
	1.0s	7.00nm			5.3mb					S	53	19.06		OXX	7.40	297	eP	26	42.00	-5.1X
	Z 20s	0.28um			4.8Msz		AURF	0.60	136	Pg	53	12.23	0.1				iS	27	56.00	
GRF	107.39	42	e(PKP)	33	44.00	18.2X				Sg	53	21.13		PPM	9.93	303	eP	27	23.00	0.5
	Z 20s	0.20um			4.7Msz		SAOF	0.67	120	Pg	53	13.27	0.0	IIA	10.00	303	(P)	27	24.00	1.1
MLR	114.81	51	ePKP	33	40.00	-0.2	SBF	0.68	133	Pg	53	13.50	0.2	MRX	12.36	300	(P)	27	56.00	1.0
NUR	118.44	34	iPKP	33	46.00	-0.4				Sg	53	23.10		UYO	20.73	349	iPd	29	39.00	0.3
	0.5s	12.60nm					BNI	0.73	356	P	53	14.00	-0.3	TUL	22.68	347	eP	29	58.10	-0.1
SUF	119.61	32	iPKP	33	47.80	-0.8				eSg	53	23.40			0.7s	4.50nm			4.1mb	
	0.5s	4.80nm					REVF	0.74	142	Pg	53	14.61	0.3	ZOBO	36.77	144	P	32	05.60	0.0
SOD	120.60	27	iPKP	33	49.80	-0.6	FRF	0.77	185	Pg	53	14.40	-0.4	LPB	36.99	144	eP	31	51.00	-16.3X
KEV	121.04	24	ePKP	33	51.00	-0.1				Sg	53	24.20		CCH	38.80	142	P	32	23.70	1.3
ASPA	121.12	205	iPKPd	33	51.20	-1.5	ROB	0.81	92	P	53	15.88	0.3	SIV	41.03	135	P	32	40.60	0.1
	0.4s	55.00nm								S	53	26.54		PPD	51.90	133	eP	34	07.10	0.8
			ePKS	37	23.90		RSP	0.90	24	P	53	17.32	0.1	SOB1	53.67	112	eP	34	18.70	-0.9
QIS	121.59	212	ePKP	33	52.00	-1.7				S	53	28.46					e	34	19.80	
WRA	124.35	207	PKPd	33	57.40	-1.7	LRG	0.91	198	Pg	53	16.80	-0.5	JFO	57.68	127	(P)	34	47.00	-1.4

05d 02h

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

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* SEP 05, 1990 02h 39m 52.24± 1.01s
47.541 N ±10.1km 9.139 E ± 8.8km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.7 (LDG), 2.6 (VIE). MD 2.2 (STR).

FEL	0.83	294	Pg	40 07.15	-1.2
BBS	1.11	267	Pg	40 11.11	-1.9
			Sg	40 25.15	
MOF	1.39	284	Pg	40 17.00	-0.7
			Sg	40 35.15	
SOTA	1.44	102	iPgc	40 17.40	-1.1
			iSg	40 37.20	
ECH	1.49	298	Pg	40 19.32	0.2
			Sg	40 38.65	
CDF	1.53	306	Pg	40 19.49	-0.1
			Sg	40 40.60	
LOMF	1.58	264	Pg	40 19.56	-0.9
			Sg	40 39.40	
BSF	1.61	281	Pg	40 21.22	0.3
			Sg	40 41.28	
GWF	1.76	325	Pg	40 25.02	2.1
HAU	1.94	285	Pg	40 26.80	1.2
			Sg	40 52.00	
VITF	2.23	289	Pg	40 33.19	3.5X
GRF	2.56	32	e(P)	41 17.50	43.1X
LPL	2.62	220	P	40 36.70	1.2
			Sg	41 09.50	
LPG	2.63	220	Pg	40 36.80	1.1
LBF	3.56	263	Pg	40 56.50	7.8X
			Sg	41 39.40	
LOR	3.60	268	Pg	40 57.80	8.6X
			Sg	41 41.00	
SMF	3.73	258	Pg	40 59.80	8.7X
			Sg	41 45.00	
BGF	4.41	259	Pg	41 11.00	10.2X

S.D. = 1.4 on 12 of 18 obs.

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* SEP 05, 1990 02h 46m 44.13± 0.91s
47.586 N ±13.8km 9.240 E ± 8.3km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.7 (LDG), 2.3 (VIE).

SOTA	1.39	105	iPgc	47 09.60	0.0
			i	47 10.70	
			iSg	47 29.70	
CDF	1.56	303	Pg	47 12.00	0.0
			Sg	47 32.80	
BSF	1.67	279	Pg	47 13.30	-0.4
			Sg	47 33.60	
HAU	1.99	283	Pg	47 18.60	0.3
			Sg	47 43.60	
LPL	2.70	221	Pg	47 28.60	0.0
LBF	3.63	262	Pg	47 47.00	5.4X
			Sg	48 30.80	

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

SEP 05, 1990 03h 03m 42.73± 0.51s
47.516 N ± 4.4km 13.768 E ± 6.0km
DEPTH = 10.0km (geophysicist)
AUSTRIA (546)
ML 3.5 (VIE), 3.1 (GRF). Felt (V) in the Haus area.

KMR	0.59	24	ePg	03 54.50	-0.2
			iSg	04 03.20	
BHG	0.64	289	ePg	03 54.30	-1.2
FVI	1.14	217	Pd	04 01.50	-2.6
			iSg	04 15.50	
VOY	1.49	177	ePn	04 08.50	-1.1
			e(Sn)	04 28.00	
WATA	1.50	264	iPgc	04 10.10	0.3
			iSg	04 31.70	
LJU	1.56	160	ePn	04 09.80	-0.8
			eSn	04 28.40	
KHC	1.62	356	iPn	04 11.90	0.4
			e	04 13.40	
			iSg	04 34.50	
WET	1.74	340	ePn	04 13.00	-0.1
SOTA	1.76	261	iPgc	04 14.30	0.7
			i	04 16.80	
			iSg	04 39.70	
VVI	1.79	212	P	04 15.00	1.1
			eSn	04 40.00	
FUR	1.80	292	eP	04 15.90	1.8
VKA	1.87	65	ePg	04 15.00	-0.1
			i	04 16.70	
			iSg	04 39.80	
OGA	1.98	252	iPnc	04 18.00	1.2
VBY	2.26	152	e(Pn)	04 22.80	2.1
			eSn	04 52.00	
ZST	2.35	72	eP	04 55.20	33.3X
			e	26 48.20	
			e	26 52.30	
			e	28 37.40	
PRU	2.53	11	Pn	04 24.70	0.3
			Pg	04 31.40	
			Sn	04 58.00	
			Sg	05 04.50	
GRF	2.76	323	ePn	04 27.80	0.0
			ePg	04 34.80	
			eSg	05 10.90	
HOF	3.07	337	iPnd	04 31.40	-0.7
BRG	3.36	2	iPg	04 45.40	9.1X
			iSg	05 26.80	
			i	05 31.00	
MOX	3.44	337	ePn	04 36.50	-0.9
			iSg	05 34.00	
CLL	3.83	353	iPn	04 42.90	-0.1
			iSg	05 45.00	

S.D. = 1.2 on 19 of 21 obs.

SEP 05, 1990 03h 23m 52.62± 0.35s
36.423 N ± 4.1km 22.814 E ± 2.8km
DEPTH = 110.3 ± 4.7 km
4.5mb (27 obs.)
SOUTHERN GREECE (368)
MD 5.0 (TTG).

VLI	0.31	18	iPc	24 09.70	1.0
ITM	1.04	317	iPd	24 16.20	1.7
VAM	1.51	132	iPd	24 19.50	-0.5
ATH	1.71	25	iPd	24 23.60	1.3
			eS	24 44.40	
APE	2.27	73	eP	24 30.00	0.3
VLS	2.49	315	iPd	24 33.50	0.9
NPS	2.55	116	iPc	24 32.50	-0.9
EVR	2.61	343	eP	24 36.10	1.8
SMG	3.46	67	iPc	24 46.20	0.6
KAP	3.64	103	eP	24 47.30	-0.7
PRK	3.93	43	eP	24 52.00	0.1
KZN	3.96	348	eP	24 53.30	0.8
PLG	3.98	7	eP	24 54.00	1.4
KEK	4.06	325	eP	24 54.00	0.3
EZN	4.38	38	iP	24 58.30	0.2
VAY	4.89	358	iPn	25 05.00	-0.1
			i	25 14.70	
			iSn	25 58.50	
OHR	4.94	342	iPnd	25 06.00	0.2
			iSn	25 59.00	
KSL	5.48	91	iPd	25 12.30	-0.9
			eS	26 10.00	
EDC	5.57	44	iP	25 15.00	0.5
DST	5.58	54	iP	25 15.50	0.8
MFT	5.59	37	eP	25 21.00	6.2X
SOI	5.64	289	Pd	25 15.00	-0.4
			eSn	26 09.00	
			eTT	29 05.00	
SKO	5.64	350	iPnd	25 14.80	-0.7
			iSn	26 04.10	
			iSg	26 15.30	
KHL	5.67	68	iP	25 17.10	1.2
ELL	5.72	85	iP	25 17.30	0.7
GMB	5.81	290	P	25 17.79	-0.1
TDS	6.05	304	Pd	25 20.60	-0.4
			eSn	26 17.00	
MSI	6.05	289	P	25 20.70	-0.4
ATN	6.11	289	Pd	25 21.90	0.0
			eSn	26 19.50	
ULC	6.19	335	iPnd	25 21.20	-1.7
			eSn	26 22.00	
ORI	6.19	308	Pc	25 22.50	-0.5
BRT	6.25	317	Pd	25 23.40	-0.4
ALT	6.35	63	eP	25 27.00	1.7
MEU	6.37	278	P	25 25.10	-0.4
			eSn	26 25.60	
CTT	6.44	41	iP	25 31.20	4.8X
IZI	6.53	51	eP	25 33.30	5.6X
PVY	6.54	341	ePn	25 27.30	-0.6
			eSn	26 33.00	
TTG	6.60	336	iPnd	25 27.00	-1.5
			eSn	26 34.00	
LPI	6.60	291	P	25 27.52	-1.1
BAI	6.60	317	Pd	25 27.20	-1.4
			eSn	26 36.00	
BDV	6.62	333	ePn	25 26.50	-2.3
			eSn	26 31.00	
MNO	6.66	285	Pc	25 29.00	-0.6
			eSn	26 31.80	
MGR	6.81	305	Pd	25 30.70	-0.7
IVA	6.82	342	iPnd	25 31.00	-0.7
			eSn	26 41.00	
HCY	6.88	332	iPnd	25 30.00	-2.4
			eSn	26 40.00	
NKY	7.03	336	ePn	25 32.60	-1.9
			eSn	26 45.00	
GPA	7.04	54	iP	25 35.80	1.1
GIB	7.19	285	P	25 36.20	-0.5
SGO	7.19	307	P	25 36.30	-0.3
BRY	7.26	334	ePn	25 35.20	-2.5
			eSn	26 48.00	
FAI	7.38	279	Pc	25 40.50	1.3
PLE	7.38	340	iPnd	25 38.20	-1.2
			eSn	26 53.50	
MCT	7.44	282	P	25 43.06	2.8
BSS	7.64	307	P	25 41.80	-0.9
PPCY	7.91	98	eP	25 40.50	-5.9X
CVT	8.11	282	P	25 50.00	0.8
ERC	8.31	284	P	25 51.70	-0.3
HVAR	8.34	326	iPnd	25 49.30	-2.9
DUI	8.34	311	Pd	25 52.50	0.1
RFI	8.43	308	P	25 53.06	-0.5
BBTK	8.55	63	iP	25 57.00	1.7
CSS	8.68	97	eP	25 51.80	-5.1X
SDI	8.76	310	Pc	25 57.50	-0.6
TLB	9.07	24	ePc	26 01.00	-1.1
AZI	9.16	310	P	26 03.50	0.2
MLR	9.36	14	eP	26 05.00	-1.2
AQU	9.39	312	P	26 07.76	1.3
RDP	9.48	307	P	26 07.00	-0.8
RMP	9.52	307	P	26 08.00	-0.3
MNS	9.84	310	P	26 12.00	-0.6
VRI	9.89	16	ePc	26 12.00	-1.1
KOT	9.95	128	ePn	26 08.50	-5.4X
			eSn	27 47.00	
ARV	10.36	316	P	26 19.50	0.1
VBY	10.72	330	eP	26 23.00	-1.1
			eS	28 13.50	
ADI	10.74	104	eP	26 18.50	-6.1X
MAO	10.82	307	P	26 26.40	0.8
RSM	10.90	317	P	26 26.80	0.2
ZNT	10.93	109	eP	26 21.00	-6.0X
			eS	28 13.00	
RIY	10.95	327	iPnc	26 25.50	-1.8
			iSn	28 21.10	
CRE	11.00	314	P	26 29.10	1.1
SFI	11.24	315	P	26 32.40	1.4
CEY	11.25	328	eP	26 28.50	-2.7
			eS	28 27.50	
PGD	11.28	315	P	26 32.00	0.2
JVI	11.31	110	eP	26 26.00	-6.0X
LJU	11.45	330	eP	26 31.50	-2.3
			eS	28 33.00	
TRI	11.51	326	P	26 32.58	-2.1
BURJ	11.52	107	Pc	26 39.02	4.1X
SALJ	11.53	109	Pc	26 39.14	4.2X
KFNJ	11.59	109	Pd	26 41.14	5.5X
JARJ	11.63	107	Pc	26 40.88	4.5X
VOY	11.71	328	eP	26 35.50	-1.8
			eS	28 38.50	
LISJ	11.73	112	Pc	26 41.61	4.1X
PRNI	11.84	117	eP	26 33.00	-6.1X
SRO	11.86	345	eP	26 38.90	-0.3
			e	26 57.80	
			i	28 41.10	
			i	28 45.20	
			i	28 56.40	
PII	11.90	312	P	26 40.50	0.8
BDI	12.05	313	P	26 43.50	1.7
PGF	12.30	304	eP	26 43.80	-1.3
	0.9s		37.65nm		5.1mb
VVI	12.34	324	P	26 45.50	0.0
FVI	12.63	327	P	26 48.30	-1.0
CSTJ	12.68	111	Pd	26 41.91	-8.2X
SPC	12.90	352	iP	27 02.80	9.8X
SAL	13.04	319	P	26 55.50	0.9
BHG	13.47	330	eP	27 00.30	0.0

MDI	13.58	318	P	27	04.00	2.3	
OGA	13.64	324	eP	27	03.50	0.8	
WATA	13.73	326	iPc	27	04.00	0.2	
	0.4s	46.50nm			5.2mb		
			iS	29	19.40		
			i	29	29.50		
KRA	13.79	352	eP	27	10.80	6.5X	
SOTA	13.81	325	iPd	27	05.40	0.6	
	0.5s	26.80nm			4.8mb		
			iPP	27	15.20		
			iS	29	19.40		
			i	29	30.90		
			iSS	29	36.20		
SBF	13.90	307	eP	27	06.80	0.8	
	0.6s	25.25nm			4.7mb		
OSS	13.95	321	eP	27	07.70	1.0	
VDL	14.17	319	eP	27	10.70	1.2	
TMA	14.25	317	eP	27	10.80	0.3	
FRF	14.29	305	eP	27	10.90	0.1	
	0.9s	16.40nm			4.3mb		
LMR	14.28	304	eP	27	11.20	0.4	
DOI	14.32	309	P	27	13.00	1.6	
KHC	14.38	335	P	27	12.40	0.3	
			Sg	29	45.00		
LRG	14.43	304	eP	27	12.10	-0.6	
ORO	14.47	314	P	27	14.50	1.3	
FUR	14.49	328	eP	27	13.30	-0.1	
	0.5s	31.00nm			4.8mb		
LLS	14.66	320	eP	27	17.30	1.5	
SAX	14.74	321	eP	27	18.70	1.9	
PRU	14.83	339	eP	27	21.50	3.9X	
			e	27	55.00		
BNI	14.95	310	P	27	22.00	2.6	
AMAN	15.20	142	eP	27	22.00	-0.5	
AKRL	15.32	143	eP	27	23.00	-1.0	
AGMR	15.35	144	eP	27	25.00	0.7	
ZLA	15.38	320	eP	27	26.00	1.3	
AKSR	15.49	143	eP	27	24.00	-2.2	
SLE	15.51	321	eP	27	27.60	1.3	
GRF	15.71	331	eP	27	31.00	2.2	
			e	27	34.00		
			e	27	45.70		
BRG	15.79	339	e(P)	27	31.00	1.3	
MOX	16.34	334	eP	27	40.00	3.3X	
BSF	16.43	319	eP	27	38.60	0.7	
	1.0s	32.00nm			4.5mb		
CDF	16.55	321	eP	27	41.20	1.9	
	0.5s	16.75nm			4.5mb		
HAU	16.77	319	eP	27	43.20	1.2	
	0.6s	16.25nm			4.5mb		
SMF	17.45	312	eP	27	48.80	-1.6	
	0.6s	4.50nm			3.9mb		
LBF	17.54	313	eP	27	50.60	-0.9	
	0.6s	9.00nm			4.2mb		
LOR	17.75	313	eP	27	53.30	-0.7	
	0.8s	6.70nm			3.9mb		
AVF	17.82	312	eP	27	53.00	-1.8	
SSF	17.86	313	eP	27	54.40	-0.9	
	0.6s	6.30nm			4.0mb		
BGF	18.02	310	eP	27	55.00	-2.2	
	0.9s	8.20nm			4.0mb		
TCF	18.29	309	eP	27	59.70	-0.8	
MEM	18.64	325	P	28	08.90	4.7X	
ENN	18.78	325	eP	28	09.00	3.3X	
	0.8s	20.00nm			4.5mb		
DOU	18.98	322	Pc	28	08.90	1.1	
WTS	19.27	329	eP	28	13.50	2.7	
	0.7s	14.00nm			4.4mb		
MFF	19.91	308	eP	28	16.20	-1.4	
	0.8s	10.75nm			4.2mb		
ECRI	20.45	295	e(P)	28	24.00	0.8	
LDF	20.74	313	eP	28	25.60	-0.4	
	0.6s	12.65nm			4.4mb		
FLN	21.03	313	eP	28	28.40	-0.5	
	0.6s	14.45nm			4.5mb		
LPF	21.04	311	eP	28	28.80	-0.2	
	0.7s	18.75nm			4.5mb		
GRR	21.08	312	eP	28	28.50	-0.9	
TOL	21.38	287	eP	28	35.00	2.5	
GUD	21.48	290	eP	28	35.00	1.4	
UPP	23.69	353	iP	28	55.00	0.2	
NUR	24.13	2	eP	28	58.00	-1.1	
N82	25.72	347	P	29	14.10	0.1	
	0.6s	5.10nm			4.2mb		
EKA	25.91	325	P	29	17.00	1.3	
	0.6s	9.20nm			4.5mb		
SUF	26.40	3	iP	29	20.30	0.1	
	0.4s	8.00nm			4.6mb		
SOD	31.07	3	iP	30	01.60	-0.2	
BCAO	32.08	188	iPd	30	11.20	0.1	
	0.7s	17.00nm			4.9mb		
			i	30	33.50		
			i	30	42.50		
KEV	33.47	3	eP	30	23.00	0.4	
GBA	53.69	100	Pd	33	03.40	-1.8	
	0.6s	3.40nm			4.5mb		
CHTO	68.12	82	eP	34	42.30	-0.6	
	1.0s	5.00nm			4.4mb		
YKA	75.65	341	eP	35	27.20	0.4	
	0.5s	4.10nm			4.5mb		

S.D. = 1.2 on 143 of 165 obs.

SEP 05, 1990 04h 58m 19.03± 0.62s
44.176 N ± 3.7km 6.322 E ± 4.8km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG).

CALN	0.59	136	Pg	58	30.78	-0.3	
			Sg	58	40.64		
CDR	0.64	219	ePg	58	31.90	0.0	
			e	58	32.40		
			iSg	58	40.70		
PZZ	0.65	59	P	58	31.57	-0.6	
			S	58	39.54		
FRF	0.66	159	Pg	58	31.80	-0.3	
			Sg	58	40.80		
MVIF	0.66	115	Pg	58	32.49	0.2	
TOUF	0.69	103	Pg	58	32.08	-0.7	
			Sg	58	44.87		
LRG	0.72	178	Pg	58	33.00	-0.2	
			Sg	58	44.00		
STV	0.72	84	P	58	32.70	-0.6	
			S	58	41.72		
DOI	0.74	63	P	58	33.50	-0.1	
			eSg	58	42.50		
AURF	0.78	111	Pg	58	34.23	-0.1	
ENR	0.79	86	P	58	33.77	-0.7	
			S	58	43.77		
RRL	0.81	24	P	58	34.54	-0.4	
			S	58	45.18		
AUTN	0.82	102	Pg	58	35.66	0.6	
LMR	0.85	171	Pg	58	35.40	-0.1	
			Sg	58	48.20		
SBF	0.86	111	Pg	58	35.00	-0.7	
			Sg	58	48.00		
REVF	0.87	120	Pg	58	36.98	1.2	
			Sg	58	50.78		
SAOF	0.91	102	Pg	58	37.04	0.6	
			Sg	58	53.25		
ROB	1.12	83	P	58	40.39	0.3	
			S	58	51.84		
IMI	1.16	103	P	58	41.82	1.0	
			S	58	54.79		
FIN	1.36	88	P	58	44.18	0.2	
			S	58	59.66		
LPL	1.37	12	Pg	58	45.30	0.9	
CKI	1.43	79	P	58	43.50	-1.5	
PCP	1.64	76	P	58	49.15	1.1	

S.D. = 0.7 on 23 of 23 obs.

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* SEP 05, 1990 05h 27m 27.26± 0.94s
31.613 S ±13.6km 69.006 W ± 9.8km
DEPTH = 33.0km (normol)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.22	55	iPd	27	35.30	1.1	
ZON	0.29	77	iPd	27	35.90	1.0	
			eS	27	48.90		
RTBS	0.38	263	iPd	27	36.00	-0.1	
RTLL	0.54	59	iPc	27	36.90	-1.6	
CFA	0.65	90	iPd	27	39.90	-0.2	
			S	27	54.50		
MDZ	1.27	174	iP	27	48.70	-0.2	
			i	28	06.60		
			iS	28	12.30		

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

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* SEP 05, 1990 05h 45m 38.64± 1.04s
38.721 N ± 6.5km 142.255 E ±14.0km
DEPTH = 68.6 ± 8.3 km
4.5mb (3 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

OFUJ	0.58	308	iP+	45	51.80	-0.5	
			S	45	59.90		
YAMJ	1.83	253	P	46	07.80	-0.6	
			S	46	29.30		
AOMJ	2.34	322	P	46	15.90	0.3	
NIIJ	2.97	241	P	46	24.70	0.4	
KAKJ	3.01	214	P	46	24.30	-0.6	
			S	46	57.70		
CHJJ	3.72	225	P	46	35.10	0.2	
			S	47	16.00		
HOOJ	3.74	12	P	46	35.50	0.4	
			S	47	16.30		
MAT	3.88	237	eP	46	38.00	0.9	
			(S)	47	25.00		
WB5	58.76	189	eP	55	31.90	0.1	
WRA	58.82	189	Pc	55	32.20	0.0	
	0.5s	3.00nm			4.7mb		
SUF	66.78	333	iP	56	24.60	0.1	
	0.5s	3.00nm			4.5mb		
NUR	68.78	332	eP	56	36.00	-0.9	
NB2	72.89	337	P	57	02.00	0.2	
	0.7s	2.40nm			4.2mb		
LKO	123.41	321	Pdiff	00	56.38	-5.7X	
	0.7s	7.50nm					
LPB	145.45	59	ePKP	05	08.00	-3.2X	
CNCB	145.73	59	PKP	05	16.00	4.1X	

S.D. = 0.6 on 13 of 16 obs.

SEP 05, 1990 05h 49m 19.71± 0.27s
2.213 S ± 4.3km 80.361 W ± 4.6km
DEPTH = 63.6km (3 depth phoses)
4.9mb (10 obs.)
NEAR COAST OF ECUADOR (105)

VC1	2.51	51	iP+	50	01.00	1.6	
GGP	2.69	41	Pnd	50	01.80	-0.2	
			Pg	50	03.00		
QTO	2.71	43	P	50	01.60	-0.6	
OUR	2.73	42	ePn	50	02.30	-0.2	
			Pg	50	03.40		
YANA	2.75	41	ePn	50	02.30	-0.5	
			Pg	50	02.60		
CAYA	3.29	46	eP	50	11.00	0.5	
ANGL	3.35	57	Pn	50	17.80	6.6X	
			Pg	50	19.00		
PSO	4.54	42	eP	50	28.50	0.5	
BOG	9.26	43	eP	51	37.00	3.6X	
			eS	52	28.00		
FUQ	10.10	41	eP	52	09.50	24.6X	
UPA	11.15	4	eP	52	06.00	7.2X	
ARE	16.63	149	eP	53	12.00	1.4	
ZOBO	18.45	140	Pc	53	33.10	-0.2	
Z	22s	0.32um					
			LR	01	24.00		
LPB	18.66	140	P	53	36.00	0.3	
CNCB	18.94	141	P	53	39.10	-0.1	
CCH	20.55	138	P	53	56.70	0.7	
SOB1	39.85	102	eP	56	48.30	-0.8	
TUL	40.57	341	iP	56	55.50	0.8	
	1.2s	29.50nm			5.0mb		
			e	57	12.20	67km	
MEO	40.58	337	iPc	56	55.00	0.2	
SIO	40.60	340	eP	56	55.50	0.6	
			e	57	12.40	68km	
JFO	40.90	121	eP	56	56.50	-1.2	
ANMO	44.33	329	P	57	27.00	1.4	
	1.0s	15.63nm			4.8mb		
			pP	57	40.00	48kmX	
GOL	47.60	334	P	57	52.00	0.5	
PLM	49.36	319	P	58	06.00	0.9	
MSU	50.03	327	P	58	10.50	0.3	
DAU	50.95	330	P	58	17.50	0.2	
BW06	51.95	333	P	58	24.40	-0.3	
	1.0s	9.17nm			4.8mb		
KVN	53.75	324	P	58	38.50	0.4	
LRM	55.62	333	eP	58	51.70	0.0	
LBFM	57.45	324	P	59	04.00	-0.7	
SES	58.63	338	ePc	59	12.30	-0.3	
FFC	59.49	346	iPc	59	17.80	-0.6	
	1.0s	18.00nm			5.2mb		
NEW	59.57	332	P	59	18.00	-1.2	
	0.9s	11.51nm			5.0mb		
LON	60.84	329	P	59	28.00	0.2	
RMW	61.31	329	P	59	30.00	-1.0	
PNT	61.49	332	ePc	59	33.00	0.9	
	0.8s	37.00nm			5.6mb		
EDM	61.75	338	iPc	59	32.80	-1.1	

05d 05h

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GMW     61.87 329 P      59 34.00   -0.7
PGC     62.92 329 eP     59 43.00    1.5
YKA     69.54 344 eP     00 22.10   -1.4
         0.8s     6.80nm          4.6mb
LIC     75.68  83 P      00 59.80   -0.8
TIC     75.71  83 P      01 00.00   -0.8
KIC     75.97  83 Pc     01 01.50   -0.8
         0.6s    10.00nm          4.9mb
INK     79.21 342 ePc     01 19.20    0.1
                  pP     01 35.00   56km
FBA     82.59 337 P      01 37.00    0.0
EKA     84.55  34 Pd     01 47.20    0.2
         1.0s     8.40nm          4.7mb
IMA     85.30 337 P      01 49.50   -1.3
BRG     94.43  39 i(P)   02 35.20    1.3
         0.8s    10.00nm          5.3mb
ASPA   137.89 230 iPKPc  08 40.90    1.1
         0.7s     4.00nm
WRA    139.45 235 PKPd   08 42.30   -0.3
         0.9s     5.00nm
WB5    139.46 236 ePKP   08 42.00   -0.6
SSE    144.79 327 PKPc   08 50.20   -1.4
         0.6s    23.00nm
LZH    146.07 354 PKPc   08 55.00    1.1
         1.5s    59.00nm
                  pP     09 10.50
MBL    149.50 219 ePKP   09 03.50    4.0X
      S.D. = 0.8  on  49 of  54 obs.
-----------------------------------------
*  SEP  05, 1990  05h 52m 25.06± 1.12s
   38.564 N ± 7.2km   26.492 E ±18.7km
   DEPTH =  10.0km  (geophysicist)
 AEGEAN SEA                        (365)

PRK      0.70 346 iPc    52 39.10    0.2
                  eS     52 50.30
SMG      0.90 162 eP     52 42.20    0.0
                  eS     52 55.00
EZN      1.27 354 iPn    52 48.30   -0.3
DST      1.96  57 ePn    53 05.50    6.8X
EDC      2.07  30 ePn    53 00.00   -0.3
BNT      2.10  31 ePn    53 01.10    0.3
MFT      2.30  15 ePn    53 08.00    4.3X
IZI      2.91  52 ePn    53 24.00   11.7X
      S.D. = 0.4  on   5 of   8 obs.
-----------------------------------------
   SEP  05, 1990  07h 11m 05.00± 0.54s
    8.461 N ± 3.4km  126.506 E ± 4.6km
   DEPTH =  84.2 ±  5.0 km
   5.5mb ( 44 obs.)
 MINDANAO, PHILIPPINE ISLANDS      (259)
      Minor domoge (V RF) in the
      Bislig oreo. Felt (IV RF) ot
      Butuon ond (II RF) ot Cogoyon
      de Oro ond on Comiguin.
      CENTROID, MOMENT TENSOR      (HRV)
      Doto Used: GDSN
      L.P.B.: 12S, 30C
      Centroid Locotion:
      Origin Time        07:11:10.0 1.1
      Lot  8.87N 0.08 Lon 126.90E 0.05
      Dep  50.8 4.0 Holf-durotion  3.0
      Moment Tensor;   Scole 10**17 Nm
        Mrr= 4.53 0.19  Mtt= 0.07 0.29
        Mff=-4.59 0.39  Mrt=-0.11 0.30
        Mrf= 1.06 0.26  Mtf=-1.66 0.20
       Principol Axes:
        T  Vol=  4.67  Plg=82  Azm=242
        N         0.56      6       17
        P        -5.22      6      107
      Best Double Couple:Mo=4.9*10**17
       NP1:Strike=204 Dip=40 Slip=  99
       NP2:          12     51      82

DAV      1.65 214 iPd-   11 32.10   -0.7
OCP      8.12 320 eP     13 02.50    0.2
BAG      9.79 324 eP     13 20.00   -5.2X
                  e      15 12.00
KKM     10.49 257 ePc    13 37.20    2.6
         1.1s   162.00nm          5.9mb
MKS     15.29 208 i(P)c  14 42.60    5.1X
ANP     17.30 345 eP     15 00.00   -2.7
                  eS     18 20.00
HKC     18.17 321 ePd    15 12.00   -1.2
GUMO    18.72  73 eP     15 20.50    0.6
         1.3s   457.52nm          5.6mb
PJG     18.72  73 eP     15 21.50    1.6

                  TT     34 11.50
GUA     18.75  73 eP     15 20.50    0.3
         1.3s   600.00nm          5.7mb
TRT     21.19 221 ePd    15 47.20    1.7
         1.1s    53.30nm          4.8mb
MTN     21.66 168 eP     15 49.00   -1.2
SSE     23.06 348 P+     16 02.00   -1.8
         1.0s    39.00nm          4.8mb
      Z  20s     5.50um           5.0Msz
      N  20s     5.00um
                  pP     16 14.50   51kmX
                  sP     16 20.00
                  iS     20 10.00
                  sS     20 32.00
                  SS     21 10.00
KGM     23.95 256 ePd    16 14.80    2.2
         1.2s   710.60nm          6.0mb
KNA     24.16 175 iPd    16 14.40   -0.2
         0.3s    55.00nm          5.5mb
KUMJ    24.29   9 eP     16 15.00   -0.7
IPM     25.60 263 ePd    16 29.90    1.6
         1.0s   156.20nm          5.5mb
                  e      19 05.80
SNG     25.68 269 eP     16 31.60    2.6
         1.5s   272.22nm          5.5mb
SHNJ    25.89   9 eP     16 30.20   -0.5
TKSJ    26.33  14 P      16 34.50   -0.3
SHK     26.56  11 eP     16 36.50   -0.4
WKYJ    26.97  17 eP     16 40.20   -0.5
PMG     27.17 130 eP     16 51.00    8.4X
YONJ    27.36  12 P      16 43.70   -0.4
PPI     27.48 252 eP     16 46.00    0.5
PSI     28.03 260 ePd    16 52.00    1.6
         1.3s   232.80nm          5.7mb
KMI     28.06 309 eP     16 50.50   -0.4
         2.5s    85.00nm          4.9mb
      Z  28s    12.40um           5.4MszX
                  pP     16 59.50   32kmX
                  sP     17 02.00
                  S      21 22.00
BDT     28.17 291 eP     16 29.00 -22.6X
         0.6s   121.50nm
                  e(P)   17 02.00    7.2X
                  e(S)   21 34.00
CHG     28.65 294 iPc    16 55.90   -0.1
         1.0s    72.25nm          5.3mb
                  eS     21 52.00
CHTO    28.65 294 iPc    16 55.70   -0.3
         1.3s   131.94nm          5.4mb
                  pP     17 09.10   53kmX
WB5     29.21 165 eP     16 58.10   -2.8
                  i      17 12.00
                  eS     21 43.00
WRA     29.26 165 Pc     16 58.70   -2.7
         0.7s     6.70nm          4.4mb X
CHJJ    29.73  21 eP     17 03.90   -1.6
MTMJ    29.82  18 eP     17 04.70   -1.7
MAT     29.91  19 iPc    17 04.70   -2.4
         0.8s    45.52nm          5.2mb
      Z  20s     2.48um           4.8Msz
                  eS     21 52.00
MBL     30.16 192 eP     17 08.00   -1.3
         0.4s    17.00nm          5.1mb
NIIJ    30.81  20 eP     17 15.30    0.4
BSI     31.11 267 eP     17 10.50   -7.3X
QIS     31.58 156 iPc    17 20.00   -1.9
                  e      20 13.00
YAMJ    32.00  20 eP     17 25.00   -0.4
NANU    32.65 199 iPd    17 31.50    0.4
         0.4s     9.00nm          4.9mb
ASPA    32.74 167 iPc    17 30.10   -1.8
         0.3s    30.00nm          5.6mb
      Z  22s     2.30um           4.8MszX
                  eS     22 38.90
                  eScS   27 48.90
                  LR     32 17.70
BJI     32.77 345 eP     17 29.00   -3.0X
         1.4s   110.00nm          5.5mb
      Z  24s     3.50um           5.0MszX
                  sP     17 42.00
                  eS     22 33.00
                  eScS   28 18.00
OFUJ    33.39  22 P      17 37.40    0.0
CTA     34.39 146 iPd    17 46.90    0.7
         1.2s    31.25nm          5.1mb
                  iS     23 10.00

LZH     34.40 326 eP     17 44.50   -1.8
         2.0s   103.00nm          5.4mb
      Z  25s     8.80um           5.4MszX
      N  18s     2.90um
      E  19s     4.20um
                  pP     17 58.00   52kmX
                  sP     18 06.50
                  PP     19 00.00
                  eS     23 06.00
                  sS     23 28.00
                  PcS    24 07.50
                  SS     25 27.00
WARB    34.44 180 iPc    17 46.50    0.0
         0.4s    34.00nm          5.6mb
MEKA    35.71 192 eP     17 56.50   -0.9
MRRJ    36.18  18 P      18 01.70    0.6
HOOJ    36.88  21 eP     18 08.70    1.7
SHL     37.06 302 iP     18 08.00   -1.0
KUSJ    38.02  22 eP     18 16.50    0.0
ASAJ    38.20  19 P      18 19.20    1.1
MRWA    38.80 195 eP     18 23.00   -0.3
         0.4s    25.00nm          5.5mb
OLP     38.85 154 eP     18 22.20   -1.6
FORR    39.11 178 iPd    18 25.20   -0.6
         0.5s   172.00nm          6.2mb
COOL    39.46 187 eP     18 28.50   -0.2
BAL     39.97 193 eP     18 32.30   -0.6
KLB     40.69 191 eP     18 38.50   -0.3
         0.4s    34.00nm          5.5mb
RMQ     40.91 149 iPc    18 52.30   11.6X
         1.0s    52.00nm
                  eS     24 29.30
MUN     41.40 193 eP     18 44.20   -0.4
         0.7s    69.00nm          5.6mb
                  e      18 53.00
NWAO    42.09 192 eP     18 50.30    0.0
         0.5s    36.00nm          5.5mb
      N  20s     1.00um
      E  20s     0.90um
                  e      19 01.00
STK     42.63 161 iPc    18 54.10   -0.6
         0.9s    13.00nm          4.8mb
                  iPcP   19 04.70
                  i      24 31.90
                  e      28 17.60
RKG     43.24 192 eP     19 04.50    4.8X
         0.5s    56.00nm          5.6mb
BRS     43.79 145 iP     19 03.00   -1.2
                  i      19 11.50
ADE     44.71 166 iPd    19 10.50   -1.0
         0.7s    38.36nm          5.3mb
COO     45.83 149 eP     19 30.90   10.5X
         0.9s    10.00nm
BWA     47.43 155 eP     19 33.90    0.8
                  i      19 45.70
HYB     47.47 286 eP     19 33.00   -0.6
GBA     48.37 281 P      19 40.00   -0.5
KOD     48.38 276 eP     19 41.00   -0.1
                  eS     26 33.00
CAN     48.45 155 eP     19 41.80    0.9
                  i      19 51.80
                  e      24 56.90
CNB     48.59 155 eP     19 44.30    2.2
         1.0s    32.00nm          5.2mb
                  i      19 52.90
TOO     49.12 160 eP     19 46.60    0.6
DZM     49.54 128 iPc    19 49.60    0.1
NDI     50.45 300 iPc    19 54.60   -1.8
POO     52.01 287 eP     20 08.00   -0.4
SGE     57.01 117 eP     20 52.20    7.4X
SVA     57.68 118 eP     21 04.60   15.3X
SMY     58.55  32 eP     20 56.60    1.7
QUE     59.53 300 eP     21 01.30   -1.1
         1.0s    48.50nm          5.6mb
                  eS     29 31.90
ADK     63.23  36 eP     21 26.60    0.0
         0.6s    71.90nm          5.8mb
MAIO    66.53 306 eP     21 48.00   -0.4
SDN     73.43  35 eP     22 30.60    0.9
DRV     75.57 174 eP     22 42.00    0.2
SVW     76.78  29 eP     22 50.60    1.8
TAB     77.12 307 eP+    22 52.00    0.7
IMA     78.18  24 ePc    22 58.00    1.4
         0.7s    15.30nm          5.0mb
PMR     79.93  29 ePc    23 06.30    0.4
         0.9s    68.30nm          5.5mb
FBA     80.57  26 eP     23 09.40    0.1
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      0.8s    67.24nm          5.6mb
TOA   81.33   28 eP    23 15.10   1.7
KVT   84.85  311 eP    23 32.50   0.7
KEV   85.40  340 iP    23 33.40  -0.5
      0.6s     9.10nm          5.0mb
    Z 18s      2.10um          5.6Msz
                 i     23 47.60
                LR     07 12.00
INK   85.87   22 iPc   23 36.70   0.4
      1.1s    49.00nm          5.4mb
                pP     23 49.00  41kmX
SOD   86.04  338 iP    23 36.20  -0.9
BHL   86.05  304 P     23 38.00   0.0
                S      34 06.00
HRI   86.06  303 eP    23 40.50   2.4
JVI   86.56  302 eP    23 41.50   1.1
SUF   87.26  333 iP    23 42.20  -0.9
RMN   87.37  300 eP    23 45.50   1.1
PMO   87.95  105 iP    24 04.40  17.2X
      1.4s    50.00nm
MAW   88.09  200 iP    23 42.40  -4.5X
TPT   88.21  105 iP    24 05.60  17.1X
      1.4s    85.00nm
VAH   88.24  106 iP    24 05.60  17.0X
      1.4s    40.00nm
RUV   88.47  105 iP    24 06.90  17.2X
      1.4s    75.00nm
NUR   88.48  331 iP    23 48.00  -1.0
      0.8s    46.90nm          5.7mb
                 i     24 02.00
SBA   89.02  172 eP    23 52.90   1.7
MLR   91.36  316 eP    24 02.00  -0.9
UPP   92.03  331 iP    24 04.80  -0.7
DAG   92.58  352 iPc   24 06.10  -1.7
      0.6s    28.67nm          5.8mb
KRA   94.02  322 eP    24 13.20  -1.7
                 e     24 16.60
                 e     24 27.80
SPC   94.10  321 eP    24 15.10  -0.4
NB2   94.47  334 P     24 14.90  -2.0
      0.8s    10.30nm          5.3mb
VAY   94.78  313 eP    24 16.60  -2.0
SKO   95.41  314 iP    24 20.50  -1.0
OHR   96.12  313 eP    24 23.00  -1.8
ZST   96.39  321 eP    24 26.20   0.4
                 e     50 39.70
PRU   97.31  323 eP    24 31.00   1.1
    Z 22s      1.90um          5.5Msz
    N 22s      1.30um
    E 24s      0.90um
                 e     24 43.00
BRG   97.32  324 eP    24 30.10   0.2
      1.2s    22.00nm          5.6mb
    Z 18s      1.00um          5.3Msz
    N 18s      1.00um
    E 18s      1.00um
                 i     24 43.00
GMW   97.44   40 P     24 34.00   3.4X
CLL   97.69  324 eP    24 31.00  -0.6
    Z 20s      1.00um          5.3Msz
                 e     24 44.00
RMW   98.09   40 P     24 36.00   2.4
KHC   98.22  322 P     24 35.30   1.2
    Z 16s      0.30um          4.9MszX
    N 18s      0.40um
    E 19s      0.80um
                 e     24 47.50
LON   98.35   40 P     24 47.50  12.8X
SPA   98.40  180 eP    24 34.20  -0.4
      1.0s     5.00nm          5.0mb
                 e     25 03.60
PNT   98.72   37 eP    24 37.00   0.7
      1.1s    17.00nm          5.5mb
MOX   98.76  324 eP    24 38.00   1.5
    Z 20s      2.00um          5.6Msz
    E 26s      1.30um
                 e     24 49.00
GRA2  99.33  323 ePc   24 41.00   1.9
    Z 22s      1.40um          5.4Msz
                e(PP)  28 51.00
                 e     37 35.00
WDC  100.06   46 ePdiff24 55.70  13.1X
NEW  100.66   38 Pdiff 24 46.00   0.9
      1.0s     7.81nm          5.3mb
MIN  100.81   46 ePdiff24 59.30  13.2X
ORV  101.17   47 ePdiff25 01.00  13.5X
MHC  101.84   49 ePdiff25 04.70  14.0X
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CMB  102.53   48 ePdiff25 07.00  13.3X
SES  103.15   34 ePdiff24 59.00   2.9X
FRI  103.41   49 ePdiff25 11.50  14.0X
PLM  106.93   51 PKP    29 23.00  -0.3
BCAO 107.04  277 iPKPd  29 26.70   2.9X
      0.9s    14.00nm
                id     29 29.00
GLA  108.62   51 PKP    29 28.00   1.7
GOL  112.22   41 PKP    29 33.50   0.3
    Z 22s      1.00um          5.4Msz
ANMO 113.96   46 PKP    29 37.70   1.1
MEO  119.46   42 ePKP   29 46.80  -0.1
SIO  120.35   40 ePKP   29 49.50   1.0
TUL  120.57   39 ePKP   29 49.30   0.4
      0.5s     6.90nm
UYO  122.53   40 iPKPc  29 52.80   0.1
AIA  122.80  175 ePKP   29 52.50   0.3
LKO  129.05  290 PKP    30 04.04  -1.8
      0.5s    10.50nm
KIC  129.21  285 PKP    30 06.18   0.0
      0.5s    14.00nm
TIC  129.40  286 PKP    30 06.46   0.0
      0.5s     9.50nm
LIC  129.52  285 PKP    30 06.86   0.1
UPA  148.81   57 ePKP   30 46.00   4.7X
LNV  149.73  150 ePKP   30 47.50   5.4X
MCP  150.10   27 PKP    30 48.70   5.6X
CHCH 150.12  151 ePKP   30 48.00   5.2X
LRS  150.33   26 PKP    30 49.00   5.5X
SAN  150.51  150 ePKP   30 46.50   3.1X
PORP 150.63   26 PKP    30 49.50   5.6X
PEL  150.74  150 ePKP   30 47.00   3.2X
                 i     30 50.50
CPD  150.95   25 PKP    30 50.30   5.9X
MDZ  151.84  152 ePKP   30 52.90   7.5X
CNCB 163.62  122 PKP    31 02.00   1.5
LPB  163.65  121 ePKP   30 56.00  -4.4X
    Z 21s      1.43um
                LR     29 12.00
ZOBO 163.75  120 PKPc   31 02.70   2.0X
      1.0s    29.00nm
    Z 24s      0.63um
                LR     29 08.00
CCH  164.82  127 PKP    31 04.80   3.5X
PPD  166.34  189 ePKP   31 03.50   1.5
                 e     31 38.70
                 e     32 04.80
SOB1 167.53  266 ePKP   31 03.00  -0.2
                 e     31 05.80
                 e     31 07.30
     S.D. = 1.2  on 128 of 168 obs.
-----------------------------------
*  SEP  05, 1990  09h 00m 32.14± 1.18s
   19.049 N ±21.3km   69.766 W ±11.9km
   DEPTH =  33.0km  (normal)
   3.9mb (  1 obs.)
 DOMINICAN REPUBLIC REGION        ( 88)

MCP    2.59  104 P      01 13.60   0.9
LRS    2.87  105 P      01 17.00   0.4
PORP   3.13  108 P      01 21.80   1.5
CSB    3.50  102 P      01 25.00  -0.7
CPD    3.79  105 P      01 29.20  -0.5
PAG    8.28  110 eP     02 25.00  -8.0X
                S      04 00.00
SVB    9.99  124 eP     02 54.96  -1.6
TUL   28.42  312 e(P)   06 25.70  -0.2
      0.8s     2.20nm          3.9mb
LPB   35.40  177 eP     07 39.00  11.4X
CNCB  35.68  177 P      07 32.00   1.9
PPD   44.64  155 eP     08 41.90  -1.7
     S.D. = 1.5  on  9 of  11 obs.
-----------------------------------
&  SEP  05, 1990  09h 21m 40.60s
   36.822 N          121.583 W
   DEPTH =   4.0km
 CENTRAL CALIFORNIA               ( 39)
      <BRK>. ML 2.7 (BRK).

SAO    0.12  117 iPd    21 43.18   0.0
                iS     21 45.20
GCC    0.39  302 eP     21 48.10  -0.3
PRS    0.52  161 ePd    21 50.70  -0.3
MHC    0.52  355 iPd    21 51.25   0.2
                iS     21 58.80
                 i     21 59.10
ARN    0.53    4 iPc    21 51.20   0.0
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LLA    0.55  112 ePc    21 51.60  -0.1
PCC    0.93  317 eP     21 57.90  -1.0
PRI    1.00  132 eP     22 00.20  -0.1
BKS    1.17  334 iPc    22 03.10   0.0
                iS     22 20.20
BRK    1.18  333 eP     22 03.10  -0.1
PHAM   1.37  135 eP     22 04.50  -2.0
FRI    1.51   83 eP     22 06.70  -1.8
                iS     22 28.00
CMB    1.54   38 eP     22 08.30  -0.7
BCH    2.04  143 eP     22 14.00  -2.2
      14 obs. associoted
-----------------------------------
&  SEP  05, 1990  10h 26m 20.79s
   61.316 N          149.779 W
   DEPTH =  38.7km
 SOUTHERN ALASKA                  (  2)
      <AGS-P>.

PMS    0.13  124 iP     26 27.67   0.2
PWA    0.34  352 iP     26 29.06  -0.3
                iS     26 36.31
PLRM   0.42   48 iP     26 29.55  -0.8
                eS     26 37.42
SUA    0.49  288 iP     26 30.85  -0.6
                eS     26 39.87
GHO    0.61   41 iP     26 32.35  -0.8
                eS     26 42.18
SLKM   0.84  195 iP     26 35.35  -0.9
                eS     26 47.26
SML    0.85   54 iP     26 35.46  -1.0
                eS     26 47.61
NKA    0.91  232 iP     26 38.16   0.9
SKT    1.07  309 iP     26 38.82  -0.7
CGLM   1.07  271 iP     26 39.11  -0.6
SPU    1.11  264 iP     26 39.17  -0.9
                eS     26 54.81
CUT    1.12  348 eP     26 39.73  -0.4
                eS     26 54.83
CRP    1.15  269 eP     26 40.38  -0.4
NCG    1.15  275 iP     26 40.45  -0.3
                eS     26 56.19
SEW    1.23  172 eP     26 41.08  -0.6
CKL    1.24  266 iP     26 41.48  -0.6
                eS     26 57.90
BGL    1.26  269 iP     26 41.82  -0.5
SCM    1.28   65 eP     26 42.04  -0.6
NNL    1.48  211 eP     26 45.63   0.3
RDT    1.48  241 iP     26 44.64  -0.8
VZW    1.58   98 iP     26 46.04  -0.8
                eS     27 06.40
HUR    1.67    2 eP     26 47.03  -1.0
VLZ    1.68   95 eP     26 47.03  -1.1
RSO    1.69  241 eP     26 46.91  -1.6
KLU    1.86   83 eP     26 49.67  -1.3
TOA    1.89   64 eP     26 51.31   0.0
HOM    1.90  210 eP     26 50.18  -1.2
CNPM   1.94  203 eP     26 50.25  -1.7
OPT    2.39  227 eP     26 57.88  -0.5
PDB    2.67  237 eP     27 00.90  -1.4
GLB    2.88   85 eP     27 03.66  -1.7
      31 obs. associated
-----------------------------------
   SEP  05, 1990  11h 32m 38.28± 0.98s
   56.396 N ± 9.8km  156.067 W ± 7.4km
   DEPTH =  71.8 ± 12.6 km
   3.9mb (  2 obs.)
 ALASKA PENINSULA                 ( 12)

SDN    2.71  249 eP     33 20.12  -0.2
                eS     33 53.19
CDD    2.85   26 eP     33 22.98   0.5
                eS     33 57.19
MCNL   2.95   18 iP     33 23.61  -0.1
                eS     34 00.86
AUI    3.27   24 eP     33 28.94   0.8
AUH    3.29   24 eP     33 29.39   0.8
AUE    3.30   25 eP     33 29.34   0.7
PDB    3.54   16 iP     33 31.79  -0.2
OPT    3.60   24 eP     33 33.43   0.6
                eS     34 18.21
HOM    4.03   34 iP     33 40.08   1.3
CNPM   4.06   37 iP     33 39.88   0.6
BRLK   4.35   37 eP     33 39.48  -4.0X
RSO    4.43   22 eP     33 47.23   2.5
NNL    4.44   33 iP     33 45.63   1.0
RDT    4.61   23 eP     33 47.14   0.1
```

05d 11h

SVW	4.73	3	eP	33 47.49	-1.3
SEW	5.10	40	eP	33 53.01	-0.8
SLKM	5.14	34	iP	33 53.75	-0.7
CKL	5.19	20	iP	33 55.09	-0.1
SPU	5.23	22	iP	33 56.16	0.4
BGL	5.24	20	eP	33 55.91	0.0
CRP	5.29	21	eP	33 56.63	0.0
CGLM	5.36	21	iP	33 58.00	0.5
NCG	5.42	20	eP	33 59.08	0.7
PMS	5.92	32	eP	34 04.60	-0.7
SKT	6.07	21	eP	34 07.10	-0.2
PLRM	6.32	32	eP	34 09.36	-1.5
PMR	6.32	32	eP	34 09.50	-1.3
SML	6.73	33	eP	34 15.16	-1.4
VZW	6.81	43	eP	34 16.63	-1.0
CVA	6.82	48	eP	34 16.98	-0.8
VLZ	6.94	43	eP	34 18.53	-0.8
KAIM	7.11	55	eP	34 22.26	0.6
RAGM	7.20	52	eP	34 22.78	-0.2
KLU	7.32	42	eP	34 23.51	-1.2
HMT	7.36	53	eP	34 25.74	0.6
TOA	7.64	37	eP	34 28.64	-0.5
SNH	7.93	56	eP	34 34.45	1.3
WAX	8.03	54	eP	34 34.26	-0.3
GLB	8.11	46	eP	34 34.61	-0.9
TGL	8.18	52	eP	34 36.18	-0.4
BALM	8.52	51	eP	34 41.10	-0.1
FBA	9.44	22	eP	34 49.50	-4.2X
YKA	21.63	57	eP	37 25.80	2.2
	0.5s	3.20nm		4.0mb	
NB2	62.48	7	P	42 55.40	-0.3
	0.6s	0.60nm		3.9mb	
	S.D. = 0.9	on	42 of	44 obs.	

? SEP 05, 1990 13h 01m 28.86± 4.02s
17.383 N ±27.6km 61.220 W ±21.2km
DEPTH = 22.0 ± 7.7 km
LEEWARD ISLANDS (92)
ML 3.7 (FDF).

BPA	0.69	241	eP	01 42.20	0.0
			S	01 55.50	
SEG	1.01	196	eP	01 47.33	-0.2
			S	02 02.90	
SFG	1.12	179	eP	01 49.00	-0.3
NEV	1.31	259	eP	01 51.90	-0.1
			S	02 10.20	
DOG	1.40	196	eP	01 53.11	0.0
PAG	1.42	198	eP	01 53.80	0.3
			S	02 16.50	
MGG	1.46	184	eP	01 53.92	-0.1
BBL	1.87	188	eP	02 00.30	0.3
	S.D. = 0.3	on	8 of	8 obs.	

? SEP 05, 1990 13h 34m 15.86± 2.34s
32.839 N ±21.4km 116.735 W ±15.4km
DEPTH = 5.0km (geophysicist)
CALIFORNIA-MEXICO BORDER REGION (45)
Felt at Alpine, California.

PLM	0.52	348	eP	34 26.80	0.4
PEC	1.11	341	eP	34 36.50	-0.7
GLA	1.62	82	eP	34 45.20	0.0
ABL	2.88	315	eP	35 03.70	0.2
	S.D. = 0.8	on	4 of	4 obs.	

% SEP 05, 1990 13h 56m 31.31± 1.23s
60.499 N ± 7.8km 5.099 E ±13.7km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.5 (BER).

ASK	0.05	108	iPgc	56 33.04	-0.4
			eSg	56 34.34	
SUE	0.58	344	eP	56 43.62	0.5
HYA	0.86	38	eP	56 46.43	-1.3
KMY	1.29	177	eP	56 55.30	0.1
			eS	57 11.66	
BLS2	1.52	142	eP	56 57.83	-0.8
			eS	57 16.76	
NRA0	3.18	83	Pn	57 24.30	1.9
			Lg	58 13.40	
	S.D. = 1.5	on	6 of	6 obs.	

% SEP 05, 1990 15h 02m 26.90± 0.90s
41.199 N ± 7.5km 28.196 E ± 7.5km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

CTT	0.18	106	iPg	02 31.70	0.7
ISK	0.67	101	ePg	02 39.00	-1.1
DMK	0.70	332	iPg	02 41.00	0.2
			iSg	02 53.50	
EDC	0.89	197	iPg	02 43.00	-0.9
KCT	0.96	173	iPg	02 46.20	1.1
GBZT	1.03	113	ePg	02 40.80	-5.6X
HRT	1.18	108	ePg	02 49.00	0.1
IZI	1.30	131	ePn	02 51.00	0.0
	S.D. = 1.0	on	7 of	8 obs.	

& SEP 05, 1990 16h 01m 48.60s
50.558 N 130.034 W
DEPTH = 10.0km (geophysicist)
3.8mb (1 obs.)
VANCOUVER ISLAND REGION (25)
<PGC>. ML 3.6 (PGC).

PHC	1.66	84	Pc	02 18.00	0.1
			S	02 39.14	
EDB	1.99	109	P	02 21.99	-0.7
BBB	2.03	36	P	02 22.40	-0.7
			S	02 48.00	
ETB	2.55	116	P	02 29.33	-1.3
GDR	2.69	105	P	02 31.81	-0.8
CBB	3.04	98	P	02 37.65	0.1
BTB	3.11	109	Pc	02 37.93	-0.8
OZB	3.35	117	P	02 40.76	-1.3
MGB	3.80	112	P	02 47.32	-1.2
STW	4.81	118	P	03 03.19	0.5
MCW	5.04	109	P	03 07.21	1.1
HDW	5.43	120	P	03 11.99	0.4
CMW	5.58	109	P	03 14.58	0.8
JCW	5.80	111	P	03 17.07	0.4
RPW	5.94	108	Pd	03 19.18	0.5
HTW	6.08	114	P	03 21.16	0.5
GSM	6.39	119	P	03 25.94	0.8
RVC	6.44	121	P	03 26.95	1.1
FMW	6.61	120	P	03 29.11	0.7
TDL	6.69	126	P	03 30.92	1.5
STD	6.76	127	P	03 31.25	0.9
SOSW	6.81	126	P	03 32.47	1.5
NLW	6.81	108	P	03 31.11	0.1
WPW	6.82	121	P	03 32.20	1.0
GLK	6.87	122	P	03 33.19	1.3
TWW	6.95	116	P	03 34.95	2.0
ETW	7.02	111	P	03 34.72	0.6
TBM	7.09	115	P	03 35.10	0.2
CBSW	7.11	109	P	03 35.61	0.4
DHW2	7.19	107	P	03 36.42	0.1
NAC	7.20	119	P	03 37.52	1.1
WTV	7.21	110	P	03 36.46	-0.1
EBG	7.25	117	P	03 38.27	1.2
SAW	7.54	108	P	03 40.88	-0.3
YKA	14.63	29	eP	05 14.90	-2.2
	0.6s	1.80nm		3.8mb	
	35 obs. associated				

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* SEP 05, 1990 16h 21m 28.81± 1.97s
40.994 N ±14.8km 28.650 E ±14.8km
DEPTH = 68.8 ± 25.8 km
TURKEY (366)

CTT	0.23	313	iPg	21 39.70	0.1
ISK	0.32	77	ePg	21 39.50	-0.6
GBZT	0.64	109	ePg	21 39.00	-4.1X
			iSg	21 46.50	
KCT	0.78	197	iPg	21 47.20	2.4X
HRT	0.79	102	ePg	21 47.00	2.1X
			eSg	21 57.00	
EDC	0.88	223	iPg	21 43.00	-3.0X
			eSg	21 56.00	
IZI	0.91	136	iPg	21 47.70	1.3
			eSg	21 59.70	
MFT	1.06	259	ePn	21 52.00	3.7X
DMK	1.07	321	iPn	21 48.50	0.2
DST	1.39	181	ePn	21 52.10	-0.6
GPA	1.45	119	ePn	21 53.00	-0.4
	S.D. = 1.1	on	6 of	11 obs.	

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* SEP 05, 1990 16h 26m 20.75± 0.85s
40.723 N ± 7.1km 28.538 E ± 8.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

CTT	0.43	349	iPg	26 30.20	0.7
			eSg	26 35.20	
KCT	0.49	196	iPg	26 38.20	7.4X
ISK	0.52	49	ePg	26 30.30	-1.0
EDC	0.64	234	iPg	26 33.00	-0.5
			iSg	26 47.00	
GBZT	0.69	84	ePg	26 29.50	-4.9X
			iSg	26 37.50	
IZI	0.81	118	iPg	26 38.70	2.2X
			iSg	26 49.70	
HRT	0.86	83	ePg	26 38.00	0.6
			eSg	26 48.50	
MFT	0.96	274	ePn	26 43.00	4.0X
DST	1.12	176	ePn	26 42.10	0.3
DMK	1.25	332	iPg	26 39.50	-4.4X
			iSg	26 55.50	
GPA	1.42	107	ePn	26 43.50	-3.1X
	S.D. = 1.1	on	5 of	11 obs.	

? SEP 05, 1990 17h 06m 43.70± 0.90s
37.804 N ± 7.2km 30.207 E ±11.0km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

KHL	0.75	314	iPg	07 03.00	4.6X
			iSg	07 12.00	
ELL	1.08	193	ePn	07 04.30	0.2
ALT	1.25	357	ePn	07 06.90	-0.1
CIN	1.69	264	eP	07 13.00	-0.4
DST	2.18	326	ePn	07 21.10	0.5
IZI	2.59	347	ePn	07 32.20	5.7X
BBTK	2.85	44	eP	07 30.00	-0.2
			eS	08 17.00	
	S.D. = 0.5	on	5 of	7 obs.	

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* SEP 05, 1990 17h 29m 38.05± 0.72s
4.024 S ±11.5km 152.737 E ±10.9km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
NEW BRITAIN REGION (192)

PMG	7.70	226	eP	31 32.00	1.2
			eS	32 58.00	
OIS	20.82	217	eP	34 18.00	-1.4
DZM	22.33	145	iPd	34 33.10	-1.5
RMQ	22.66	189	eP	34 39.70	1.9
MTN	23.08	246	eP	34 46.00	4.0X
	0.4s	16.00nm		4.9mb	
BRS	23.24	180	iP	34 44.00	0.6
WB5	23.86	227	eP	34 49.80	0.3
			e	39 06.30	
			e	42 17.00	
WRA	23.92	227	Pd	34 49.80	-0.3
	0.7s	16.50nm		4.7mb	
COO	26.42	182	eP	35 21.20	7.5X
	1.1s	19.00nm		4.6mb	
MBL	36.22	239	eP	36 39.00	-1.1
MNG	41.80	154	P	37 25.60	-0.6
PGZ	42.15	153	P	37 28.60	-0.4
LTZ	42.33	159	P	37 30.60	0.0
CHTO	57.60	295	e(P)	39 26.10	-1.5
LZH	60.63	316	(P)	40 03.00	14.5X
SPA	86.00	180	iPd	42 16.90	0.5
	1.0s	6.00nm		4.8mb	
INK	87.76	21	eP	42 26.00	1.4
NB2	116.17	340	PKP	48 20.00	0.6
	0.8s	1.10nm			
SIV	141.09	122	PKP	49 05.40	-2.5X
PPD	145.01	139	ePKP	49 14.70	0.2
BAO	151.67	134	PKPd	49 33.00	7.7X
	S.D. = 1.1	on	16 of	21 obs.	

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* SEP 05, 1990 18h 35m 22.70± 0.88s
42.500 N ± 8.3km 141.060 E ±12.0km
DEPTH = 115.2 ± 7.9 km
4.9mb (32 obs.)
HOKKAIDO, JAPAN REGION (224)

MRRJ	0.08	173	iP+	35 38.50	0.3
			eS	35 50.20	
MAT	6.34	201	iPc	36 55.30	0.1
	0.9s	73.11nm		5.0mb	
			(S)	38 07.00	
BJI	18.85	271	eP	39 36.00	-0.2
	1.4s	24.00nm		4.3mb	
CHG	42.66	250	eP	43 12.00	2.6
CHTO	42.66	250	eP	43 12.10	2.7

```
      0.6s     1.68nm          4.0mb
SHL  43.48 263 iP     43 15.50  -0.7
GUN  46.60 270 P      43 42.60   1.4
KKN  47.11 271 P      43 42.40  -2.7
PKI  47.13 270 P      43 42.60  -2.8
GKN  47.47 271 P      43 49.00   1.2
KEV  58.26 338 iPc    45 05.50  -1.3
      0.6s    14.30nm          5.2mb
QUE  59.20 284 eP     45 14.20   0.2
SOD  59.85 336 iP     45 16.60  -1.1
DAG  60.32 355 iPd    45 18.20  -2.6
      0.8s    17.16nm          5.1mb
GBA  61.53 262 Pd     45 27.40  -2.3
      0.7s     4.00nm          4.5mb
WB5  62.37 187 eP     45 33.00  -2.1
WRA  62.44 187 Pc     45 33.10  -2.5
      0.5s     5.50nm          4.8mb
SUF  63.01 332 iP     45 38.10  -0.9
      0.6s    28.70nm          5.4mb
NUR  65.03 331 iPc    45 51.10  -1.0
      0.6s    49.50nm          5.6mb
UPP  67.95 333 iP     46 09.60  -0.9
RMO  69.01 173 iPd    46 19.00   1.6
      0.5s     8.00nm          4.8mb
KRA  74.44 325 iPc    46 50.30   0.8
BRG  76.23 329 i(P)   46 59.80   0.2
      0.8s    10.00nm          4.7mb
CLL  76.24 329 iPd    46 59.40  -0.3
      1.0s    21.00nm          4.9mb
PRU  76.70 328 Pd     47 02 60   0.3
           e          47 07.00
SRO  76.84 324 iP     47 03.80   0.7
ZST  77.06 325 e(P)   47 05.20   0.9
KHC  77.76 328 P      47 09.00   0.8
EKA  77.90 340 Pc     47 08.70  -0.1
      0.8s     5.50nm          4.4mb
GRF  78.22 329 ePd    47 11.40   0.7
      0.8s    20.00nm          5.0mb
VAY  79.80 318 eP     47 20.40   1.1
CDF  80.73 331 eP     47 24.00  -0.3
      0.8s     5.35nm          4.4mb
SFI  82.68 326 P      47 36.00   1.7
PGD  82.77 326 P      47 36.00   1.0
ORO  82.82 329 P      47 35.50   0.3
CRE  82.87 325 P      47 35.50   0.0
LOR  82.92 332 eP     47 35.00  -0.5
      0.8s     8.75nm          4.7mb
LDF  83.06 335 eP     47 35.80  -0.4
BDI  83.08 326 P      47 37.00   0.5
LBF  83.12 332 eP     47 36.10  -0.5
      0.8s     8.05nm          4.7mb
SSF  83.22 332 eP     47 36.80  -0.2
      0.9s    11.45nm          4.8mb
LPL  83.38 330 eP     47 38.30   0.1
      0.7s     6.60nm          4.6mb
LPG  83.39 330 eP     47 38.60   0.3
      0.5s     8.75nm          4.9mb
SMF  83.46 332 eP     47 38.00  -0.3
      0.8s    10.05nm          4.8mb
GRR  83.47 336 eP     47 38.00  -0.3
      1.0s    18.00nm          4.9mb
AVF  83.50 332 eP     47 38.30  -0.2
      0.8s    20.15nm          5.1mb
AZI  83.57 324 P      47 39.00   0.1
MNS  83.58 324 P      47 38.00  -1.0
SDI  83.63 323 P      47 39.00  -0.3
BNI  83.79 329 P      47 40.50   0.3
LPF  83.84 335 eP     47 40.10  -0.1
      1.1s    29.30nm          5.1mb
BGF  83.88 332 eP     47 40.80   0.4
TDS  84.11 320 P      47 42.50   0.8
MAF  84.27 332 eP     47 42.80   0.4
      0.8s    16.80nm          5.0mb
TCF  84.33 333 eP     47 42.70   0.0
LSF  84.59 333 eP     47 43.90  -0.1
      0.6s     9.00nm          4.8mb
MFF  84.83 334 eP     47 45.30   0.1
LRG  85.27 329 eP     47 47.10  -0.3
      0.8s    13.45nm          4.9mb
LMR  85.31 329 eP     47 47.30  -0.3
      0.8s    14.80nm          5.0mb
RJF  85.43 333 eP     47 48.40   0.2
SOI  85.50 320 P      47 49.00   0.4
CAF  85.57 332 eP     47 49.80   0.9
      0.8s    13.45nm          4.9mb
LFF  86.01 333 eP     47 51.80   0.8
      0.8s    14.80nm          5.0mb

LPO   86.08 333 eP    47 52.00   0.6
      0.7s    16.55nm          5.1mb
EPF   87.83 332 eP    48 00.00   0.0
      0.8s     6.70nm          4.7mb
ZOBO 143.86  53 PKP   54 44.00  -2.8X
SOB1 146.80   4 ePKP  54 52.20   1.1
SIV  147.48  42 PKPc  54 53.20   1.1
     S.D. = 1.1  on  67 of  68 obs.
-------------------------------------
?  SEP  05, 1990  18h 38m 27.53± 5.48s
   44.250 N ±37.5km    7.154 E ±35.6km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                  (545)
     ML 1.6 (GEN).

STV     0.12  93 P     38 30.77   0.1
                S     38 32.51
ENR     0.19  97 P     38 31.69  -0.2
                S     38 34.76
PZZ     0.26 352 P     38 33.02   0.0
                S     38 36.61
ROB     0.52  85 P     38 38.05   0.0
                S     38 44.71
     S.D. = 0.2  on   4 of   4 obs.
-------------------------------------
%  SEP  05, 1990  19h 38m 09.76± 0.92s
   42.669 N ± 6.9km   13.200 E ± 9.8km
   DEPTH =  10.0km  (geophysicist)
 CENTRAL ITALY                   (381)

AOU     0.35 154 P     38 17.50   0.5
                eSg   38 23.90
MNS     0.48 234 Pc    38 19.50   0.0
                eSg   38 27.60
AZI     0.70 165 P     38 23.50  -0.1
                eSg   38 34.00
ARV     0.85 347 P     38 26.20   0.0
                eSg   38 38.00
SDI     1.07 154 P     38 29.40  -0.5
                eSg   38 43.70
     S.D. = 0.5  on   5 of   5 obs.
-------------------------------------
   SEP  05, 1990  21h 08m 10.85± 0.57s
   44.126 N ± 3.9km    6.729 E ± 5.1km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                          (538)
     ML 2.5 (LDG), 2.3 (GEN).

STV     0.44  74 P     08 19.66  -0.3
                S     08 25.38
PZZ     0.46  35 P     08 19.86  -0.5
                S     08 25.79
ENR     0.51  78 P     08 20.77  -0.4
                S     08 27.33
DOI     0.53  44 P     08 21.00  -0.6
                eSg   08 28.50
FRF     0.57 186 Pg    08 21.60  -0.8
                Sg    08 29.20
SBF     0.57 117 Pg    08 22.20  -0.3
                Sg    08 30.20
LRG     0.72 202 Pg    08 25.60   0.6
                Sg    08 34.60
RRL     0.79   3 P     08 26.61   0.2
                S     08 36.68
LMR     0.81 191 Pg    08 26.20  -0.3
                Sg    08 36.40
ROB     0.84  78 P     08 27.33   0.2
                S     08 38.01
IMI     0.86 104 P     08 28.87   1.3
                S     08 40.45
FIN     1.07  85 P     08 31.33   0.3
                S     08 44.86
LPL     1.39   0 Pg    08 37.00   0.5
     S.D. = 0.6  on  13 of  13 obs.
-------------------------------------
*  SEP  05, 1990  21h 16m 36.06± 3.58s
   31.410 S ±25.4km   69.931 W ±15.0km
   DEPTH = 145.8 ± 30.7 km
 SAN JUAN PROVINCE, ARGENTINA    (137)

RTBS    0.48 122 ePd   16 56.90  -0.1
                S     17 08.70
RTC8    0.97  95 iPc   17 00.30  -0.3
                eS    18 15.00
RTLL    1.25  87 iPd   17 03.20   0.1
                eS    18 20.00
JACH    1.39 204 eP    17 04.80   0.3
                i     17 24.00
CFA     1.46  98 e(P)  17 05.60   0.4
                S     17 24.00
MDZ     1.73 148 eP    17 07.90  -0.4
                eS    17 29.20
ROCH    1.81 210 iPd   17 09.40   0.1
                iS    17 31.90
PEL     1.84 200 iPd   17 09.50   0.0
                iS    17 31.10
PCH     2.26 192 iPd   17 15.00   0.4
                iS    17 41.50
TACH    2.39 201 iPc   17 16.00  -0.1
                iS    17 45.00
CHCH    2.59 193 eP    17 19.00   0.4
                iS    17 48.50
LNV     2.83 206 iPc   17 20.90  -0.7
                i     17 52.50
     S.D. = 0.4  on  12 of  12 obs.
-------------------------------------
?  SEP  05, 1990  21h 43m 33.73± 2.74s
   46.467 N ±23.6km    1.728 E ±13.2km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                          (538)
     ML 1.7 (LDG).

LSF     0.26 212 Pg    43 39.20   0.0
                Sg    43 44.00
TCF     0.38 118 Pg    43 41.80   0.3
                Sg    43 48.40
MAF     0.63 113 Pg    43 46.00  -0.4
                Sg    43 56.00
BGF     0.78  83 Pg    43 49.00   0.1
                Sg    43 58.80
     S.D. = 0.5  on   4 of   4 obs.
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&  SEP  05, 1990  22h 28m 20.75s
   59.653 N          152.567 W
   DEPTH =  86.3km
 SOUTHERN ALASKA                 (  2)
     <AGS-P>.

OPT     0.34 270 iP    28 33.51  -0.7
                eS    28 43.09
HOM     0.47  89 eP    28 34.59  -0.4
                iS    28 45.37
XLV     0.47 114 eP    28 34.15  -0.9
                iS    28 44.76
AUE     0.51 235 eP    28 34.61  -0.7
                iS    28 44.75
AUH     0.53 237 iP    28 35.19  -0.5
                eS    28 46.12
AUI     0.54 234 eP    28 34.88  -0.8
                eS    28 45.90
CNPM    0.69 100 eP    28 36.29  -0.8
                eS    28 47.68
NNL     0.75  58 iP    28 38.05   0.4
RSO     0.82 353 eP    28 38.15  -0.5
                eS    28 51.35
PDB     0.83 280 iP    28 37.49  -1.1
                eS    28 50.29
CDD     0.91 218 eP    28 38.41  -1.1
RDT     0.93   5 iP    28 38.91  -0.8
                eS    28 52.69
MCNL    1.02 243 eP    28 39.77  -0.9
                eS    28 53.51
NKA     1.28  31 eP    28 45.06   1.2
SLKM    1.46  53 eP    28 45.62  -0.6
CKL     1.55   4 iP    28 47.17  -0.4
SPU     1.55   9 iP    28 47.11  -0.4
BGL     1.62   3 eP    28 48.08  -0.3
CRP     1.63   7 eP    28 46.99  -1.6
SEW     1.64  73 eP    28 48.37  -0.1
CGLM    1.68   9 eP    28 48.15  -1.1
NCG     1.77   6 eP    28 50.10  -0.3
SUA     2.03  26 eP    28 53.86   0.0
SVW     2.11 315 iP    28 53.62  -1.2
PMS     2.18  42 eP    28 55.49  -0.4
SKT     2.39  12 eP    28 57.98  -0.7
PWA     2.40  32 eP    28 58.54  -0.3
PLRM    2.58  40 eP    28 59.89  -1.3
GHO     2.78  39 eP    29 03.00  -1.1
CUT     2.98  21 eP    29 06.12  -0.6
SML     3.00  42 eP    29 05.95  -1.1
VZW     3.30  62 eP    29 07.42  -3.9
SCM     3.38  47 eP    29 10.77  -1.5
VLZ     3.43  62 eP    29 11.07  -1.9
     34 obs. associated
```

? SEP 05, 1990 22h 41m 42.26± 10.93s
15.416 N ±76.4km 96.724 W ±53.5km
DEPTH = 33.0km (normal)
NEAR COAST OF OAXACA, MEXICO (66)

OXX	1.66	0	iP	42	09.50	-0.1
			iS	42	25.00	
EVV	3.30	23	(P)	42	44.00	11.2X
ACX	3.34	296	eP	42	33.50	0.0
IIT	3.89	337	eP	42	42.50	1.0
			iS	43	23.00	
PPM	4.06	334	eP	42	43.50	-0.6
			iS	43	29.50	
SCX	4.14	71	(P)	43	21.00	36.2X
IIA	4.15	334	eP	42	44.50	-0.3
			(S)	43	31.00	
LVVM	4.31	3	(P)	42	56.00	8.9X
			iS	43	36.50	
CRX	4.87	325	(P)	43	10.00	14.6X
IIJ	5.16	327	eP	43	04.00	4.2X
			iS	43	57.00	
MRX	6.03	316	(P)	43	26.00	14.5X

S.D. = 0.9 on 5 of 11 obs.

SEP 05, 1990 23h 34m 01.46± 0.79s
35.162 N ± 6.3km 23.041 E ± 5.0km
DEPTH = 26.2 ± 6.8 km
4.1mb (8 obs.)
CRETE (370)
ML 3.7 (ATH).

VAM	0.98	75	ePn	34	19.90	0.5
VLI	1.56	357	ePn	34	29.50	1.8
NPS	2.11	87	ePn	34	36.50	0.8
ITM	2.21	336	ePb	34	46.60	9.5X
APE	2.77	46	ePn	34	43.50	-1.6
ATH	2.86	11	ePn	34	46.80	0.6
KAP	3.40	82	ePn	34	52.90	-1.1
VLS	3.60	328	ePn	34	56.80	-0.1
EVR	3.88	346	ePn	35	03.30	2.5X
SMG	3.98	49	ePn	35	01.10	-1.1
PRK	4.82	31	ePn	35	21.20	7.0X
KEK	5.22	331	ePb	35	20.80	0.9
KZN	5.23	349	ePb	35	19.40	-0.7
KHL	6.09	57	ePn	35	30.00	-2.1
VAY	6.16	357	ePn	35	30.50	-2.6
OHR	6.20	344	ePn	35	30.50	-3.1X
SOI	6.32	299	P	35	34.10	-1.3
MFT	6.54	30	eP	35	35.00	-3.5X
ATN	6.79	298	P	35	41.00	-0.9
			eSn	36	49.00	
MEU	6.84	289	P	35	41.30	-1.5
			eSn	36	52.20	
SKO	6.91	350	iPn	35	40.50	-3.2X
TDS	6.97	312	P	35	43.50	-1.0
ORI	7.16	315	P	35	47.00	-0.2
IZI	7.25	43	eP	35	52.00	3.5X
MGR	7.74	312	P	35	54.30	-0.9
SGO	8.15	314	P	36	00.00	-0.9
BBTK	9.02	56	eP	36	12.00	-1.2
KOT	9.07	123	ePn	36	09.00	-4.6X
MLR	10.55	11	eP	36	30.00	-4.2X
JVI	10.76	104	eP	36	30.80	-6.2X
PRNI	11.15	112	eP	36	35.80	-6.5X
KHC	15.60	336	eP	37	45.00	3.8X
PRU	16.07	340	eP	37	48.50	1.4
GRF	16.91	333	ePc	37	59.10	1.4
	1.0s	22.00nm			4.2mb	
CLL	17.69	339	e(P)	38	06.00	-1.4
	1.8s	16.00nm			3.8mb	
ENN	19.93	327	eP	38	34.50	0.6
	0.7s	6.00nm			4.0mb	
DOU	20.09	324	Pc	38	34.30	-1.4
	0.7s	31.10nm			4.8mb	
WTS	20.45	330	eP	38	38.50	-0.8
	0.7s	7.00nm			4.1mb	
NB2	26.99	347	P	39	38.40	-4.3X
	0.5s	1.50nm			3.9mb	
EKA	27.06	326	Pd	39	43.70	0.3
	0.8s	4.30nm			4.1mb	
BCAO	30.86	189	ePd	40	17.70	-0.1
	0.6s	6.00nm			4.6mb	
TIC	38.36	229	P	41	22.50	0.3
KIC	38.41	228	P	41	22.40	-0.2
LIC	38.69	228	P	41	25.00	0.1

S.D. = 1.1 on 31 of 44 obs.

? SEP 05, 1990 23h 43m 31.00± 0.89s
31.658 S ±12.4km 69.019 W ± 9.2km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.25	48	iPd	43	38.70	0.4
ZON	0.31	69	iPd	43	39.60	0.6
			eS	43	52.60	
RTBS	0.37	269	iPd	43	39.40	-0.3
CFA	0.67	86	iPc	43	42.90	-1.1
			S	43	57.20	
MDZ	1.23	173	iP	43	52.40	0.4
			i	44	10.50	
			i(S)	44	17.60	

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

SEP 06, 1990 00h 44m 16.31± 0.61s
38.718 N ± 5.1km 26.514 E ± 7.7km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

PRK	0.56	340	eP	44	27.10	-0.6
			eS	44	36.00	
IZM	0.67	118	iPg	44	30.10	0.5
			iSg	44	40.10	
SMG	1.04	166	eP	44	36.00	0.1
			eS	44	53.00	
EZN	1.12	353	iPg	44	37.10	-0.1
			iSg	44	50.10	
CIN	1.67	132	eP	44	45.00	-0.7
DST	1.87	61	ePn	44	48.90	0.3
EDC	1.93	32	iPn	44	49.00	-0.5
BNT	1.96	33	ePn	44	50.00	0.0
MFT	2.15	16	ePn	45	02.00	9.3X
IZI	2.80	54	ePn	45	15.00	12.9X
CTT	2.84	31	ePn	45	38.00	35.5X
KDZ	3.05	344	iP	45	05.00	-0.4
HRT	3.21	48	ePn	45	33.00	25.2X
RZN	3.27	336	eP	45	09.00	0.2
			eS	46	03.00	
DIM	3.41	348	eP	45	11.00	0.4
KKB	4.10	321	eP	45	34.00	13.7X
			eS	46	27.00	
PVL	4.58	349	eP	45	28.00	0.8

S.D. = 0.5 on 12 of 17 obs.

* SEP 06, 1990 01h 07m 40.60± 1.39s
36.952 N ±12.9km 29.354 E ±10.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

ELL	0.49	114	iPg	07	50.60	0.0
			iSg	07	57.60	
CIN	1.20	303	eP	08	03.00	0.1
KHL	1.37	6	iPn	08	05.00	-0.9
ALT	2.18	16	ePn	08	18.90	1.4
DST	2.71	348	ePn	08	24.90	-0.1
IZI	3.38	2	ePn	08	42.00	7.5X
BBTK	3.93	42	eP	08	42.00	-0.4

S.D. = 1.0 on 6 of 7 obs.

* SEP 06, 1990 01h 31m 28.50± 1.46s
33.059 S ±10.1km 68.647 W ±13.2km
DEPTH = 10.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

MDZ	0.24	316	iP	31	32.80	-0.9
			iS	31	35.90	
CFA	1.49	14	ePc	31	55.70	0.4
			(S)	32	16.30	
ZON	1.51	359	eP	31	54.60	-1.0
			eS	32	16.60	
RTBS	1.55	334	ePc	31	57.30	1.1
RTCB	1.57	355	iPc	31	56.90	0.3
			eS	32	20.00	
RTLL	1.73	5	iPd	31	58.70	-0.1
SAN	1.73	256	iPd	31	59.00	0.1
			iS	32	23.70	
CHCH	1.89	242	iPc	32	00.20	-0.9
			iS	32	25.10	
ROCH	1.99	272	iP	32	02.20	-0.5
			eS	32	30.00	
TACH	2.01	252	iP	32	02.20	-0.6
			eS	32	30.00	
LNV	2.48	248	iPc	32	09.90	0.4
			i	32	44.50	
LCCH	2.48	260	iPc	32	10.10	0.5
			i	32	43.50	
IHA	2.52	270	eP	32	11.50	1.5
			e(S)	32	45.00	

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

SEP 06, 1990 01h 39m 31.80± 0.32s
44.321 N ± 2.3km 6.729 E ± 2.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.6 (LDG), 2.5 (GEN).

PZZ	0.32	55	P	39	38.87	0.3
			S	39	43.24	
DOI	0.41	64	P	39	40.40	0.1
			eSg	39	46.00	
STV	0.43	100	P	39	40.59	-0.1
			S	39	46.32	
ENR	0.51	100	P	39	41.77	-0.3
			S	39	48.38	
RRL	0.60	4	P	39	43.51	-0.6
			S	39	51.24	
SBF	0.68	132	Pg	39	45.50	0.1
			Sg	39	55.00	
BNI	0.73	357	P	39	45.80	-0.5
			eSg	39	55.50	
FRF	0.76	185	Pg	39	46.60	-0.1
			Sg	39	56.80	
ROB	0.82	91	P	39	47.87	0.1
LRG	0.91	197	Pg	39	49.00	-0.1
			Sg	40	02.00	
RSP	0.91	24	P	39	49.53	0.2
			S	40	02.21	
IMI	0.93	116	P	39	49.71	0.1
			S	40	02.73	
CDR	0.95	227	ePg	39	50.50	0.6
			e	39	50.80	
			eSg	40	03.70	
LMR	1.00	189	Pg	39	50.60	-0.1
			Sg	40	03.80	
FIN	1.07	95	P	39	52.07	0.1
LPG	1.18	1	Pg	39	54.20	0.2
			Sg	40	09.00	
LPL	1.20	0	Pg	39	54.40	0.2
PCP	1.32	80	P	39	56.51	0.3
PGF	2.42	136	Pn	40	11.60	-0.6
			Sn	40	39.60	

S.D. = 0.3 on 19 of 19 obs.

SEP 06, 1990 02h 53m 46.33± 0.71s
23.610 N ± 6.1km 121.894 E ±10.0km
DEPTH = 63.7 ± 5.3 km
4.8mb (7 obs.)
TAIWAN (244)

TWD	0.54	330	iPc	53	58.10	-1.1
			eS	54	06.10	
TWF1	0.61	245	iPd	53	59.00	-0.9
TWC	1.00	358	iPc	54	05.20	0.5
			eS	54	18.40	
TWQ	1.17	305	iPd	54	07.00	-0.1
			eS	54	21.30	
TWK	1.34	255	ePc	54	09.30	0.0
TWZ	1.51	349	ePc	54	12.00	0.4
ANP	1.61	348	eP	54	13.00	-0.1
			eS	54	22.20	
SSE	7.48	355	e(P)	55	52.00	16.9X
			eLg	57	48.50	
CHG	21.91	262	eP	58	37.30	1.5
WB5	44.90	163	eP	01	56.20	-0.4
WRA	44.96	163	Pd	01	57.30	0.3
	0.8s	2.90nm			4.2mb	
STK	58.31	160	iPd	03	37.40	0.5
	1.8s	25.00nm			5.0mb	
NB2	79.03	332	P	05	43.40	-1.4
	0.7s	1.30nm			4.0mb	
LPG	89.49	320	eP	06	38.00	-0.2
	0.5s	3.30nm			4.9mb	
LPL	89.49	320	eP	06	37.90	-0.2
	0.5s	2.20nm			4.7mb	
SMF	90.49	323	eP	06	41.80	-0.7
	0.7s	6.60nm			5.1mb	
AVF	90.68	323	eP	06	42.60	-0.7
BGF	91.09	323	eP	06	45.90	0.7
	0.5s	2.55nm			4.9mb	
MAF	91.45	323	eP	06	46.80	-0.1
RJF	92.59	322	eP	06	52.40	0.2

S.D. = 0.7 on 19 of 20 obs.

SEP 06, 1990 03h 01m 41.54± 1.54s
44.045 N ± 8.1km 8.326 E ±11.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.2 (LDG), 1.8 (GEN).

FIN	0.18	333	P	01 45.86	0.2
			S	01 49.45	
IMI	0.34	247	P	01 48.01	-0.6
			S	01 53.35	
ROB	0.41	307	P	01 50.06	0.1
			S	01 55.91	
PCP	0.52	18	P	01 51.91	-0.2
			S	01 59.60	
SBF	0.67	255	Pg	01 55.00	0.1
			Sg	02 04.80	
PZZ	0.99	298	P	02 00.32	-0.1
			S	02 13.76	
FRF	1.31	249	Pg	02 05.60	-0.1
			Sg	02 21.80	
LRG	1.54	248	Pg	02 09.80	0.7
			Sg	02 29.60	
CDR	1.89	260	eP	02 19.30	5.2X
			e	02 40.40	

S.D. = 0.5 on 8 of 9 obs.

& SEP 06, 1990 03h 04m 38.17s
58.242 N 142.768 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>.

WRG	1.84	12	eP	05 05.68	-4.4
			eS	05 25.60	
CYK	1.85	4	eP	05 06.09	-4.1
			eS	05 26.66	
KAIM	1.89	334	eP	05 05.95	-4.8
SNH	1.94	359	eP	05 06.76	-4.8
			eS	05 29.00	
YKU	2.05	49	iP	05 08.04	-5.1
MID	2.20	304	eP	05 09.40	-5.9
			eS	05 34.35	
WAX	2.22	359	iP	05 10.21	-5.4
			eS	05 35.20	
HMT	2.24	341	eP	05 10.08	-5.7
PCA	2.27	34	iP	05 10.82	-5.5
			eS	05 35.59	
RAGM	2.36	336	eP	05 12.25	-5.4
TGL	2.52	359	eP	05 14.55	-5.4
			eS	05 43.25	
CVA	2.77	328	eP	05 16.90	-6.4
BALM	2.81	4	eP	05 18.71	-5.4
			eS	05 49.69	
HIN	2.89	320	eP	05 19.39	-5.7
GLB	3.25	351	eP	05 24.37	-5.9
VLZ	3.42	330	eP	05 26.26	-6.2
VZW	3.42	327	eP	05 25.98	-6.6
KLU	3.63	335	eP	05 29.31	-6.3
TOA	4.23	338	eP	05 38.01	-6.2
SCM	4.27	330	eP	05 38.49	-6.2
SLKM	4.44	304	eP	05 41.58	-5.5
SML	4.54	324	eP	05 41.85	-6.6
PMS	4.57	314	eP	05 42.66	-6.3
CNPM	4.58	290	eP	05 42.45	-6.6
PLRM	4.64	319	eP	05 43.17	-6.7
GHO	4.70	322	eP	05 44.85	-6.0
CUT	5.59	321	eP	05 56.38	-7.0
SKT	5.76	314	eP	05 58.60	-7.2

28 obs. associated

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* SEP 06, 1990 03h 35m 27.18± 0.73s
17.146 N ±10.9km 120.592 E ±14.6km
DEPTH = 33.0km (normal)
4.6mb (9 obs.) 4.0Msz (1 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	0.73	181	iPc+	35 39.90	-1.3
OCP	2.54	169	eP	35 34.00	-32.9X
CHG	20.66	278	eP	40 09.00	2.1
CHTO	20.66	278	eP	40 09.00	2.2
BJI	23.13	351	eP	40 32.00	0.6
	1.5s		42.00nm		4.7mb
			eS	44 40.00	
LZH	24.02	325	Pd	40 39.50	-0.7
	1.5s		28.00nm		4.6mb
	Z 18s		0.50um		4.0Msz
			pP	40 44.50	18kmX
			sP	40 47.50	
			eS	44 56.00	
			sS	45 06.50	
PPI	26.49	231	e(P)	41 08.20	4.6X
GUN	33.70	295	P	42 08.00	0.0
	0.6s		23.00nm		5.3mb
PKI	34.05	294	P	42 10.20	-0.8
KKN	34.20	294	P	42 12.00	-0.2
	0.7s		12.00nm		4.9mb
DMN	34.32	294	P	42 12.00	-1.2
GKN	34.80	295	P	42 14.80	-2.4
	0.7s		15.00nm		5.0mb
WB5	39.20	159	eP	42 54.70	0.5
WRA	39.25	159	P	42 56.00	1.4
	0.7s		1.80nm		3.9mb
ASPA	42.60	162	eP	43 21.40	-0.6
	0.7s		5.00nm		4.4mb
	Z 23s		0.10um		3.6MszX
			LR	58 07.10	
FBA	75.31	26	eP	47 08.90	0.3
	1.0s		0.70nm		3.6mb
INK	79.94	21	eP	47 39.00	4.9X
NB2	84.17	333	P	47 56.20	-0.1
	0.9s		3.00nm		4.5mb

S.D. = 1.4 on 15 of 18 obs.

% SEP 06, 1990 04h 04m 05.36± 0.87s
42.511 N ± 7.6km 13.195 E ± 8.4km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

AQU	0.22	136	P	04 09.50	-0.6
			eSg	04 14.20	
MNS	0.40	252	Pc	04 13.40	-0.2
			eSg	04 20.50	
AZI	0.55	161	P	04 17.00	0.5
			eSg	04 25.00	
SDI	0.93	150	P	04 23.40	0.3
			eSg	04 37.00	
ARV	1.00	349	P	04 24.50	0.1
			eSg	04 40.00	

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

? SEP 06, 1990 05h 08m 55.21± 1.15s
17.193 S ±22.0km 67.486 E ±19.7km
DEPTH = 10.0km (geophysicist)
4.5mb (4 obs.)
MID-INDIAN RISE (429)

CHTO	47.30	42	eP	17 32.80	1.8
	1.0s		2.75nm		4.3mb
PKI	47.77	22	P	17 34.20	-0.8
GKN	47.90	21	P	17 35.00	-0.8
BCAO	52.89	289	ePd	18 14.30	0.3
	0.5s		3.00nm		4.5mb
ASPA	62.10	108	iPd	19 18.20	-0.8
	0.7s		6.00nm		4.9mb
WRA	63.06	104	Pc	19 24.70	-0.7
	0.7s		3.10nm		4.6mb
WB5	63.09	104	eP	19 26.70	1.1
PNT	147.44	9	ePKP	28 46.00	7.6X

S.D. = 1.3 on 7 of 8 obs.

? SEP 06, 1990 05h 11m 41.87± 4.48s
39.719 N ±26.1km 29.615 E ±27.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZI	0.63	350	iPg	11 54.10	-0.4
			iSg	11 58.30	
DST	0.77	262	iPg	11 56.80	-0.1
			iSg	12 07.80	
KCT	1.10	299	iPg	12 02.80	0.2
HRT	1.10	2	ePg	12 03.00	0.4
BNT	1.45	297	ePn	12 08.30	0.2
CTT	1.69	328	iPn	12 11.30	-0.3

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

% SEP 06, 1990 05h 12m 51.89± 1.55s
32.936 S ±13.7km 71.096 W ±15.5km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.08	117	iPc	12 59.10	1.2
			iS	13 06.80	
JACH	0.49	59	iP	13 02.00	-0.5
			iS	13 12.00	
LCCH	0.67	216	iP	13 04.50	-0.4
			iS	13 15.50	
TACH	0.73	170	iPc	13 06.50	0.8
			iS	13 19.50	
PCH	0.84	145	eP	13 06.00	-1.4
			iS	13 23.00	
LNV	1.05	194	eP	13 09.50	-0.8
			iS	13 26.50	
CHCH	1.06	160	eP	13 11.50	1.0
			iS	13 28.50	

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

SEP 06, 1990 05h 19m 06.62± 0.59s
45.540 N ± 4.4km 6.762 E ± 4.3km
DEPTH = 9.9 ± 4.2 km
FRANCE (538)
ML 2.7 (LDG), 2.4 (GEN).

LPL	0.03	221	Pg	19 08.70	-0.1
LPG	0.04	190	Pg	19 09.00	0.0
LSD	0.29	106	P	19 12.61	-0.2
			S	19 16.39	
BNI	0.49	187	Pc	19 16.40	-0.2
			eSg	19 22.10	
RSP	0.52	138	P	19 17.30	0.1
			S	19 23.87	
RRL	0.62	179	P	19 19.16	-0.1
			S	19 27.05	
ORX	0.86	83	P	19 23.08	-0.2
			S	19 34.64	
PZZ	1.06	167	P	19 26.88	0.1
			S	19 40.17	
DOI	1.09	162	P	19 27.50	0.3
			eSg	19 42.00	
STV	1.36	163	P	19 31.87	0.2
			S	19 49.81	
ENR	1.39	160	P	19 32.07	-0.1
SBF	1.74	164	Pg	19 42.40	5.2X
			Sg	20 05.00	
FRF	1.98	182	Pg	19 45.20	4.6X
			Sg	20 12.00	
CDR	2.00	201	eP	19 19.30	-21.5X
			e	19 35.70	
SMF	2.31	300	Pg	19 50.00	4.6X
			Sg	20 19.60	
LBF	2.41	308	Pg	19 51.20	4.4X
			Sg	20 23.00	
HAU	2.48	354	Pn	19 47.60	-0.2
			Pg	19 53.40	
LOR	2.65	312	Pg	19 55.60	5.4X
			Sg	20 29.50	
BGF	2.91	292	Pn	19 54.00	0.2
			Sg	20 39.00	

S.D. = 0.2 on 13 of 19 obs.

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* SEP 06, 1990 05h 24m 31.03± 2.39s
27.197 N ±28.6km 110.560 W ± 9.3km
DEPTH = 10.0km (geophysicist)
4.1mb (2 obs.)
GULF OF CALIFORNIA (49)

GLA	6.91	329	eP	26 11.00	-3.8X
BAR	7.61	317	eP	26 24.00	-0.7
PLM	8.20	320	eP	26 33.00	-0.1
TPC	8.35	327	eP	26 34.00	-1.1
ANMO	8.49	23	e(P)	26 32.50	-4.6X
GSC	9.68	328	eP	26 53.00	-0.5
SBB	9.73	322	eP	26 57.00	2.9X
BCH	11.39	317	eP	27 18.00	1.1
MEO	12.75	51	e(P)	27 34.50	-0.6
GOL	13.20	18	e(P)	27 43.50	2.2X
KVN	13.40	334	eP	27 45.00	1.1
SIO	14.84	51	eP	28 09.00	6.4X
TUL	15.28	52	eP	28 09.20	0.8
	1.2s		8.20nm		4.0mb
UYO	15.49	59	e(P)	28 09.80	-1.3
LRM	18.65	356	eP	28 52.10	1.0
LON	21.44	338	eP	29 20.80	-0.7
NEW	21.64	348	eP	29 23.00	-0.5
	0.9s		10.14nm		4.2mb
RSCP	22.87	62	eP	29 36.00	0.2
SES	23.17	359	eP	29 39.00	0.5
LHS	26.49	67	eP	30 11.00	0.7

S.D. = 0.9 on 15 of 20 obs.

06d 06h

& SEP 06, 1990 06h 13m 04.93s
59.917 N 152.239 W
DEPTH = 88.1km
SOUTHERN ALASKA (2)
<AGS-P>.

HOM	0.40	130	iP	13 18.52	-0.4
			eS	13 29.28	
NNL	0.49	75	iP	13 20.04	0.4
XLV	0.53	150	eP	13 19.29	-0.7
			eS	13 30.05	
OPT	0.57	243	eP	13 19.51	-0.8
			eS	13 30.25	
RSO	0.60	335	eP	13 19.95	-0.9
CNPM	0.64	127	iP	13 20.22	-0.8
			eS	13 31.97	
RDT	0.66	353	iP	13 20.60	-0.7
			eS	13 32.58	
AUE	0.80	226	eP	13 21.59	-1.0
AUH	0.83	228	eP	13 22.54	-0.4
AUI	0.84	226	eP	13 22.38	-0.6
NKA	0.97	31	eP	13 25.57	1.2
PDB	0.99	263	eP	13 23.70	-1.0
			eS	13 37.81	
SLKM	1.17	59	eP	13 26.70	-0.2
			eS	13 42.12	
CDD	1.22	217	iP	13 26.39	-1.1
			eS	13 42.93	
SPU	1.27	4	iP	13 27.98	-0.2
			eS	13 45.23	
CKL	1.28	358	iP	13 28.17	-0.2
			eS	13 45.08	
MCNL	1.30	236	eP	13 27.64	-0.8
BGL	1.35	357	iP	13 29.13	-0.1
CRP	1.36	2	eP	13 29.46	0.1
CGLM	1.40	5	eP	13 29.62	-0.2
SEW	1.41	81	eP	13 28.87	-1.0
NCG	1.49	2	iP	13 30.96	-0.1
SUA	1.72	25	eP	13 33.05	-0.9
PWA	2.09	33	eP	13 38.66	-0.1
SKT	2.10	9	eP	13 38.35	-0.6
CUT	2.67	20	eP	13 45.03	-1.7
SML	2.69	44	eP	13 46.09	-1.0
KLU	3.48	60	eP	13 55.86	-2.2

28 obs. ossocioted

SEP 06, 1990 06h 44m 10.56± 0.44s
43.187 N ± 4.8km 3.477 W ± 5.2km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
ML 3.2 (LDG). mbLg 3.2 (MDD).

ECRI	0.91	129	iPgc	44 29.20	1.1
			eSg	44 41.20	
ETOR	2.59	155	ePn	44 52.60	-0.7
			eSn	45 18.10	
GUD	2.59	191	ePn	44 52.60	-0.8
EPF	2.80	92	Pn	45 00.40	4.1X
			Sn	45 33.90	
ERUA	2.81	255	ePn	44 56.80	0.4
			eSn	45 27.80	
EMON	2.82	276	ePn	44 58.50	1.9
			eSn	45 31.30	
TOL	3.33	188	eP	45 16.00	12.2X
			eSn	45 44.50	
			eSg	46 00.50	
LFF	3.51	59	Pn	45 07.20	1.0
			Sn	45 44.80	
EPLA	3.68	213	eP	45 07.58	-1.1
			eS	45 50.00	
LPO	3.69	64	Pn	45 09.80	1.0
			Sn	45 50.60	
MFF	4.15	34	Pn	45 16.10	0.7
RJF	4.17	58	Pn	45 16.00	0.4
			Sn	46 01.00	
CAF	4.36	65	Pn	45 18.80	0.5
			Sn	46 07.00	
TCF	5.10	51	Pn	45 28.60	-0.3
			Sn	46 24.00	
LPF	5.14	19	Pn	45 29.00	-0.3
MAF	5.27	53	Pn	45 30.40	-0.8
			Sn	46 28.00	
GRR	5.51	18	Pn	45 34.00	-0.7
LDF	5.89	22	Pn	45 39.00	-0.9
FLN	5.95	19	Pn	45 39.60	-1.2
AVF	6.04	51	Pn	45 41.50	-0.5
SMF	6.24	54	Pn	45 44.00	-0.9
SSF	6.28	49	Pn	45 46.00	0.6
LOR	6.59	49	Pn	45 50.40	0.5

S.D. = 0.9 on 21 of 23 obs.

? SEP 06, 1990 07h 07m 22.92± 7.48s
13.036 N ±70.7km 88.863 W ±22.8km
DEPTH = 33.0km (normol)
EL SALVADOR (73)
Felt (II) ot Son Salvador.

OZA	0.50	345	iPd	07 33.60	0.0
SJAS	0.69	335	iPd	07 36.10	-0.3
VSM	0.69	56	iPd	07 36.50	0.0
LFU	0.75	341	iPd	07 37.20	0.1
VSS	0.79	332	iPd	07 37.90	0.1
TME	1.09	334	iPd	07 42.00	0.1

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

% SEP 06, 1990 08h 14m 11.77± 0.71s
39.424 N ± 5.3km 15.812 E ± 8.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

TDS	0.47	60	Pd	14 20.90	-0.4
			eSg	14 26.50	
MGR	0.74	345	P	14 26.60	0.3
			eSg	14 37.50	
ORI	0.81	37	P	14 28.00	0.6
			eSg	14 38.40	
SGO	1.20	341	P	14 33.50	-0.5
			eSn	14 49.50	
ATN	1.29	192	P	14 35.80	0.1
			eSg	14 53.00	
SOI	1.36	172	P	14 36.70	-0.1
			eSn	14 53.50	

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

? SEP 06, 1990 08h 37m 41.50± 0.94s
32.086 N ±12.3km 141.563 E ±24.8km
DEPTH = 33.0km (normol)
4.5mb (3 obs.)
SOUTH OF HONSHU, JAPAN (211)

MAT	5.24	329	iPd	39 00.70	1.1
			eS	39 57.00	
WB5	52.13	189	eP	46 51.50	0.7
WRA	52.19	189	Pc	46 51.80	0.5
	0.4s		2.90nm	4.6mb	
INK	58.76	26	eP	47 38.00	-0.2
GBA	61.07	268	Pc	47 53.60	-1.2
	0.7s		3.40nm	4.6mb	
NB2	78.80	338	P	49 41.40	-0.8
	0.6s		2.30nm	4.4mb	

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

& SEP 06, 1990 09h 06m 12.41s
61.863 N 149.999 W
DEPTH = 36.1km
SOUTHERN ALASKA (2)
<AGS-P>.

PWA	0.22	165	iP	06 19.86	0.4
			eS	06 25.58	
PLRM	0.49	123	eP	06 22.01	-0.9
GHO	0.52	100	iP	06 22.77	-0.6
			eS	06 31.36	
SUA	0.54	222	iP	06 23.36	-0.3
			eS	06 31.98	
CUT	0.56	347	iP	06 23.01	-0.8
			iS	06 31.33	
PMS	0.66	161	eP	06 24.54	-0.7
SKT	0.73	280	iP	06 25.23	-1.1
			iS	06 35.69	
SML	0.79	93	iP	06 26.01	-1.2
			eS	06 37.24	
CGLM	1.11	241	iP	06 31.34	-0.4
NCG	1.13	247	iP	06 31.05	-1.0
HUR	1.13	8	eP	06 31.35	-0.7
			eS	06 46.19	
SPU	1.20	236	eP	06 32.52	-0.5
			iS	06 49.46	
SCM	1.27	90	eP	06 33.43	-0.6
			eS	06 51.14	
NKA	1.27	209	eP	06 35.80	1.8
BGL	1.29	243	iP	06 34.25	-0.1
CKL	1.31	240	iP	06 34.28	-0.3
SLKM	1.36	185	eP	06 34.65	-0.7
RDT	1.74	223	iP	06 40.31	-0.6
			eS	07 02.92	
KTH	1.75	346	eP	06 40.01	-1.0
SEW	1.79	171	eP	06 41.01	-0.4
TOA	1.82	81	eP	06 42.37	0.3
VZW	1.84	114	eP	06 41.53	-0.8
VLZ	1.91	111	iP	06 42.06	-1.0
KLU	1.98	99	iP	06 43.47	-0.8
			eS	07 08.35	
GLB	2.98	95	eP	06 57.06	-1.4

25 obs. associoted

% SEP 06, 1990 09h 18m 06.71± 0.89s
39.247 N ± 7.9km 27.753 E ±12.1km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST	0.77	62	iPg	18 21.60	-0.1
			eSg	18 34.60	
IZM	0.93	204	iPn	18 24.50	0.0
EDC	1.10	4	iPn	18 27.00	-0.4
BNT	1.12	7	iPn	18 28.00	0.4
IZI	1.72	50	ePn	18 37.00	0.1

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

? SEP 06, 1990 11h 35m 04.81± 6.01s
31.923 S ±41.6km 69.774 W ±33.1km
DEPTH = 176.6 ± 57.1 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.38	46	ePd	35 28.70	-0.5
RTCB	0.94	63	ePc	35 32.00	-0.1
			eS	35 42.00	
JACH	1.03	222	iP	35 33.00	0.2
			iS	35 50.00	
RTLL	1.26	62	iPc	35 35.00	0.4
			eS	35 53.00	
ROCH	1.48	225	iPd	35 37.50	0.6
			iS	35 57.60	
PCH	1.80	200	iPc	35 40.10	0.1
			iS	36 03.00	
TACH	1.98	209	eP	35 41.00	-0.8
			iS	36 06.50	
CHCH	2.14	200	iPc	35 44.00	0.4
			iS	36 09.70	
LNV	2.45	214	iPd	35 46.80	-0.3
			iS	36 15.80	

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

& SEP 06, 1990 12h 41m 19.80s
38.770 N 122.937 W
DEPTH = 5.0km (geophysicist)
NORTHERN CALIFORNIA (36)
<BRK>. ML 2.8 (BRK).

NWRM	0.31	173	eP	41 27.00	0.9
ZSP	0.98	147	eP	41 38.20	-0.7
			eS	41 52.90	
BRK	1.04	149	eP	41 39.00	-0.9
			eS	41 53.40	
BKS	1.05	148	iPc	41 39.70	-0.3
			iS	41 54.20	
ORV	1.37	54	eP	41 43.50	-2.0
ARN	1.80	142	eP	41 50.00	-1.8
MIN	1.88	33	eP	41 51.30	-1.7
CMB	2.14	109	eP	41 54.30	-2.3

8 obs. ossocioted

SEP 06, 1990 14h 27m 00.49± 1.01s
12.910 N ±11.1km 88.906 W ±12.1km
DEPTH = 63.7 ± 7.5 km
5.0mb (4 obs.)
OFF COAST OF CENTRAL AMERICA (76)
Felt (II) ot Son Salvador, El Solvodor.

OZA	0.62	352	iPd	27 14.00	-0.2
SJAS	0.79	341	iPd	27 16.50	0.1
VSM	0.80	50	eP	27 17.00	0.3
LFU	0.86	346	iPd	27 17.50	0.3
TME	1.18	338	iPd	27 22.50	1.1
YPE	1.42	328	iPd	27 22.20	-2.6
GCM	9.62	48	eP	29 20.55	1.8
UYO	21.76	347	eP	31 49.20	0.8
MEO	23.48	340	eP	32 05.50	0.2
SIO	23.70	345	eP	32 07.70	0.3
TUL	23.73	346	e(P)	32 02.00	-5.6X

	0.8s	10.50nm		4.4mb		
ANMO	27.09	327 eP	32 40.20	0.8		
	0.9s	1.68nm		3.6mb X		
GOL	30.39	334 iP	33 09.00	0.0		
	0.9s	31.82nm		5.0mb		
LPB	35.76	144 eP	34 08 00	12.1X		
CNCB	36.05	144 P	33 59.00	0.5		
KVN	36.67	321 iP	34 04.20	1.0		
CMB	37.55	317 eP	34 26.90	16.5X		
	0.9s	0.80nm				
CCH	37.57	143 P	34 12.20	1.2		
LRM	38.39	333 eP	34 18.60	1.0		
SIV	39.78	135 iPc	34 29.20	0.1		
SES	41.53	339 ePc	34 43.50	0.3		
FFC	42.96	349 eP	34 54.00	-0.8		
	0.6s	12.00nm		4.9mb		
PNT	44.24	331 eP	35 05.00	-0.2		
EDM	44.67	339 eP	35 08.00	-0.7		
SCH	45.26	18 eP	35 11.00	-2.3		
BAD	49.42	124 eP	35 44.10	-2.4		
PPD	50.65	133 eP	35 53.90	-1.7		
YKA	52.80	345 eP	36 09.60	-1.6		
	0.8s	18.00nm		5.2mb		
INK	62.35	343 iPc	37 16.90	-1.4		
		pP	37 32.00	55kmX		
WB5	138.00	255 ePKP	46 21.30	0.6		
WRA	138.02	255 PKPd	46 22.00	1.3		
	0.7s	3.00nm				
MNI	143.61	291 e(PKP)	46 41.70	10.9X		
CHG	147.54	346 ePKP	46 38.70	1.5		
CHTO	147.54	346 ePKP	46 38.30	1.1		
	0.7s	1.59nm				
		e	46 55.90			
NWAO	148.90	226 ePKP	46 44.20	5.2X		
KLB	149.24	228 ePKP	46 44.00	4.5X		
MUN	150.15	226 ePKP	46 47.40	6.5X		
GBA	150.38	28 PKP	46 41.00	-0.6		
BAL	150.52	229 ePKP	46 48.00	6.5X		
NNT	153.26	341 ePKP	46 49.10	3.3X		
S.D. = 1.3 on 31 of 40 obs.						

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* SEP 06, 1990 15h 58m 05.23± 1.19s
44.075 N ± 9.1km 16.390 E ±14.1km
DEPTH = 33.0km (normol)
YUGOSLAVIA (383)
MD 2.9 (TRI). ML 2.3 (LJU). Felt (IV) in the Knin oreo.

BLY	0.88	40 eP	58 20.30	-0.9	
		eS	58 32.40		
VBY	1.64	331 e(Pg)	58 34.50	2.4X	
		eSg	58 57.40		
PTJ	1.85	351 iPn	58 35.50	0.2	
		iSg	59 01.40		
RIY	1.91	312 ePn	58 39.30	3.3X	
		iSg	59 04.30		
CEY	2.17	321 e(Pn)	58 43.50	3.7X	
		e(Sg)	59 11.00		
LJU	2.37	327 e(Pn)	58 43.00	0.4	
		eSn	59 15.00		
TRI	2.48	312 ePn	58 49.30	5.1X	
		iPg	58 53.30		
		iSn	59 16.00		
		iSg	59 22.00		
ARV	2.56	258 P	58 43.50	-1.9	
		eSg	59 10.00		
VOY	2.64	319 ePn	58 47.70	1.2	
		eSn	59 23.40		
DUI	2.80	211 P	58 50.00	1.3	
SDI	3.03	220 P	58 53.00	1.0	
MNS	3.19	239 P	58 53.00	-1.3	
		eSn	59 30.00		
FVI	3.58	316 P	58 55.40	-4.3X	
		eSn	59 33.00		
S.D. = 1.4 on 8 of 13 obs.					

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* SEP 06, 1990 16h 20m 11.02± 0.90s
2.629 S ± 8.5km 133.971 E ±19.5km
DEPTH = 33.0km (normol)
4.8mb (9 obs.) 4.5Msz (4 obs.)
WEST IRIAN REGION (196)

MNI	9.99	294 ePc	22 35.40	0.1	
MTN	10.53	195 eP	22 42.50	-0.4	
	0.4s	111.00nm		6.4mb X	
		eS	24 42.00		
DAV	12.78	319 eP	23 15.00	1.7	
KNA	14.01	201 eP	23 28.00	-1.4	
WB5	17.15	179 eP	24 08.10	-1.8	
		i	24 14.10		
		eS	27 21.70		
WRA	17.21	179 Pc	24 09.20	-1.5	
	1.4s	20.10nm		4.1mb	
QIS	18.65	163 eP	24 30.00	1.6	
ASPA	20.91	180 iPd	24 55.30	1.9	
	1.2s	169.00nm		5.3mb	
Z	18s	2.79um		4.7Msz	
		eS	28 49.80		
		LR	33 46.10		
CTA	21.09	146 iPc	24 59.00	3.8X	
	1.3s	48.08nm		4.7mb	
		iS	29 02.00		
MBL	23.00	216 eP	25 17.00	2.9X	
BAG	23.09	325 eP	25 14.00	-1.2	
WARB	24.45	196 iPc	25 32.00	3.8X	
	0.4s	5.00nm		4.4mb	
STK	29.97	167 iPc	26 19.20	0.5	
	1.2s	4.00nm		4.1mb	
KLB	32.61	206 eP	26 43.80	1.9	
SSE	35.68	341 P	27 06.50	-1.8	
	1.5s	59.00nm		5.3mb	
Z	20s	0.90um		4.5Msz	
CHG	40.51	303 eP	27 49.00	0.1	
CHTO	40.51	303 eP	27 48.70	-0.2	
	1.2s	3.13nm		3.9mb	
BJI	45.49	341 eP	28 29.00	0.0	
	1.8s	144.00nm		5.6mb	
Z	19s	0.53um		4.5Msz	
		eS	35 02.00		
LZH	47.69	327 P	28 46.30	-0.4	
	2.0s	50.00nm		5.2mb	
Z	20s	0.50um		4.5Msz	
		sP	28 57.00		
		eS	35 08.70		
		sS	36 12.00		
QUE	71.65	303 eP	31 33.00	1.0	
CNCB	150.97	132 PKP	40 06.20	8.5X	
LPB	151.06	132 PKP	40 06.00	8.3X	
CCH	151.91	136 PKP	40 08.60	9.8X	
S.D. = 1.4 on 17 of 23 obs.					

SEP 06, 1990 17h 05m 39.40± 0.39s
44.538 N ± 2.9km 6.950 E ± 4.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.4 (LDG).

DOI	0.21	99 Pd	05 44.60	0.5	
		eSg	05 48.20		
BNI	0.55	339 P	05 50.40	-0.3	
		eSg	05 58.10		
TOUF	0.57	158 Pg	05 50.82	-0.2	
		Sg	05 58.73		
AUTN	0.64	148 Pg	05 51.79	-0.6	
		Sg	06 01.50		
MVIF	0.66	167 Pg	05 52.88	0.3	
AURF	0.70	157 Pg	05 53.42	0.0	
		Sg	06 02.93		
SBF	0.76	152 Pg	05 54.50	0.2	
		Sg	06 04.00		
CALN	0.79	183 Pg	05 54.31	-0.5	
LPG	0.97	352 Pg	05 58.00	0.0	
LPL	0.99	351 Pg	05 58.40	0.1	
FRF	1.00	193 Pg	05 58.20	-0.2	
		Sg	06 10.50		
LRG	1.16	202 Pg	06 00.80	-0.3	
CDR	1.21	225 ePg	06 02.60	0.6	
		eSg	06 18.50		
LMR	1.25	195 Pg	06 03.00	0.5	
		Sg	06 18.00		
S.D. = 0.4 on 14 of 14 obs.					

? SEP 06, 1990 19h 03m 19.75± 0.61s
24.110 N ±10.1km 127.118 E ±12.5km
DEPTH = 50.0km (geophysicist)
4.5mb (8 obs.)
RYUKYU ISLANDS REGION (239)

MAT	15.64	35 eP	07 06.00	7.6X	
BJI	18.37	332 eP	07 31.00	-1.4	
	1.5s	29.00nm		4.2mb	
LZH	23.34	306 eP	08 25.00	0.4	
	1.8s	22.00nm		4.3mb	
Z	12s	0.40um		4.1MszX	
CHG	26.72	264 eP	08 57.30	0.8	
CHTO	26.72	264 eP	08 56.80	0.3	
	0.8s	3.29nm		4.0mb	
		pP	09 09.00	48kmX	
PKI	37.57	284 P	10 32.20	0.6	
KKN	37.67	285 P	10 32.60	0.3	
GKN	38.22	285 P	10 34.40	-2.5	
WB5	44.29	170 eP	11 26.00	-0.5	
WRA	44.35	170 Pc	11 26.70	-0.3	
	0.7s	10.70nm		4.7mb	
WARB	50.00	181 iPc	12 12.00	0.9	
	0.4s	4.00nm		4.8mb	
STK	57.37	165 iPc	13 04.20	-1.1	
	0.6s	3.00nm		4.5mb	
MAIO	58.64	299 eP	13 27.00	12.6X	
INK	71.23	23 eP	14 35.00	-0.2	
NB2	80.76	334 P	15 29.60	0.5	
	0.9s	3.40nm		4.3mb	
BRG	85.04	324 e(P)	15 55.80	4.6X	
		e	16 05.00		
CLL	85.30	325 eP	15 54.00	1.5	
KHC	86.18	323 eP	16 01.40	4.4X	
FFC	90.93	26 eP	16 20.00	0.6	
	0.7s	8.00nm		5.3mb	
S.D. = 1.1 on 15 of 19 obs.					

SEP 06, 1990 19h 28m 20.49± 1.09s
44.015 N ±11.2km 7.188 E ± 4.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.1 (LDG).

TOUF	0.04	92 Pg	28 22.24	-0.6	
		Sg	28 23.45		
MVIF	0.12	192 Pg	28 23.54	-0.1	
		Sg	28 26.07		
AURF	0.16	142 Pg	28 24.71	0.4	
		Sg	28 27.74		
SBF	0.23	130 Pg	28 25.60	0.1	
		Sg	28 29.20		
SADF	0.27	96 Pg	28 26.35	0.2	
		Sg	28 30.23		
FRF	0.60	221 Pg	28 32.00	-0.6	
		Sg	28 40.40		
LRG	0.82	227 Pg	28 36.20	-0.2	
		Sg	28 48.40		
LMR	0.84	216 Pg	28 36.80	0.1	
		Sg	28 48.00		
CDR	1.08	252 eP	28 41.50	0.6	
		e	28 57.10		
S.D. = 0.5 on 9 of 9 obs.					

% SEP 06, 1990 19h 36m 22.75± 0.95s
40.811 N ± 6.8km 28.316 E ± 8.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

CTT	0.35	14 ePg	36 29.70	-0.2	
		eSg	36 33.70		
BNT	0.55	214 iPg	36 34.10	0.3	
KCT	0.56	177 iPg	36 33.70	-0.5	
IZI	1.00	118 ePn	36 41.70	-0.1	
HRT	1.03	89 ePn	36 42.50	0.3	
S.D. = 0.5 on 5 of 5 obs.					

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* SEP 06, 1990 19h 51m 26.81± 1.44s
6.717 S ±12.0km 124.829 E ±17.0km
DEPTH = 590.3 ± 34.3 km
4.6mb (8 obs.)
BANDA SEA (280)

MTN	8.70	135 iPd	53 32.60	-0.5	
	0.4s	179.00nm		5.5mb	
MBL	15.15	198 eP	54 36.40	-0.1	
WB5	16.03	146 eP	54 45.20	0.2	
WRA	16.07	146 Pd	54 45.80	0.4	
	0.4s	3.20nm		4.1mb	
NANU	18.13	209 eP	55 04.90	-0.1	
WARB	19.44	175 iPd	55 17.40	0.2	
	0.3s	3.00nm		4.4mb	
CHG	35.98	315 eP	57 41.10	0.4	
CHTO	35.98	315 iP	57 41.90	1.2	
	0.6s	2.53nm		4.0mb	
GUN	50.99	314 P	59 37.60	-0.2	
	0.6s	32.00nm		4.9mb	
PKI	51.12	314 P	59 38.40	-0.4	
	0.5s	12.00nm		4.6mb	

06d 19h

KKN	51.34	314	P	59 39.50	-0.7
	0.6s	16.00nm		4.6mb	
GKN	51.93	314	P	59 44.00	-0.3
	0.6s	27.00nm		4.9mb	
AIA	107.91	176	ePdiff	04 52.80	7.6X
S.D. = 0.6 on 12 of 13 obs.					

* SEP 06, 1990 21h 24m 42.28± 1.20s
15.237 N ± 6.8km 61.285 W ±20.9km
DEPTH = 131.4 ± 12.2 km
LEEWARD ISLANDS (92)

DBCT	0.07	296	eP	25 00.63	-0.7
			eS	25 16.33	
DPMT	0.10	283	eP	25 00.63	-0.7
			eS	25 16.33	
MDN	0.14	305	eP	25 00.66	-0.7
			eS	25 16.62	
BBL	0.34	327	iPd	25 02.26	0.3
			S	25 17.00	
FDF	0.52	165	iPc	25 02.46	0.6
	0.1s	7.50nm			
			S	25 18.50	
CRM	0.60	143	iPc	25 02.23	-0.1
			S	25 17.00	
MGG	0.68	357	iPd	25 03.34	0.5
			S	25 18.70	
BIM	0.74	164	iPc	25 03.91	0.5
MVM	0.78	151	iPd	25 03.59	-0.1
			S	25 20.70	
DOG	0.85	338	iPd	25 04.81	0.5
PAG	0.88	334	iPd	25 05.20	0.7
			S	25 23.00	
SFG	1.01	5	ePd	25 05.77	0.1
			S	25 23.80	
SEG	1.18	350	iPd	25 07.44	0.1
			S	25 26.40	
BPA	1.88	343	eP	25 14.10	-1.2
			S	25 37.00	
SVB	1.95	179	eP	25 16.40	0.2
NEV	2.26	327	ePd	25 20.42	0.4
			S	25 48.60	
CPB	2.45	348	eP	25 18.48	-3.9X
			eS	25 45.52	
TRN	4.56	181	eP	25 50.21	-0.3
			eS	26 40.75	
S.D. = 0.6 on 17 of 18 obs.					

* SEP 06, 1990 21h 32m 23.97± 0.51s
26.638 S ±12.5km 67.937 E ± 9.0km
DEPTH = 10.0km (geophysicist)
5.1mb (12 obs.)
SOUTH INDIAN OCEAN (425)

NAI	39.12	305	iPc	39 56.20	2.4
IPM	44.59	51	ePc	40 41.10	2.8
	0.8s	21.90nm		5.1mb	
CHG	54.29	37	eP	41 52.40	-0.3
	1.1s	13.29nm		4.9mb	
CHTO	54.29	37	iP	41 52.80	0.1
	1.2s	13.54nm		4.9mb	
PKI	56.45	19	P	42 07.70	-1.0
QUE	56.51	359	eP	42 09.00	0.1
KKN	56.62	18	P	42 08.60	-1.2
GKN	56.65	18	P	42 09.40	-0.5
BCAO	56.87	295	iPc	42 11.10	-0.5
	0.7s	15.00nm		5.1mb	
WRA	60.77	99	Pd	42 37.70	-1.0
	0.9s	18.20nm		5.2mb	
WB5	60.82	99	eP	42 39.10	0.1
KMI	61.45	36	Pc	42 43.50	0.2
SPA	63.52	180	iPd	42 56.80	0.2
	1.2s	15.49nm		5.1mb	
QIS	65.20	102	iPc	43 08.00	0.0
TAB	67.48	342	eP	43 22.00	-0.3
KIC	77.54	284	P	44 22.50	0.4
LIC	77.72	283	P	44 23.80	0.7
VAY	79.61	327	eP	44 32.50	-0.3
LKO	79.81	286	P	44 32.92	-1.6
	1.0s	18.00nm		5.0mb	
BJI	80.10	36	eP	44 36.00	0.5
	1.3s	17.00nm		4.9mb	
SRO	86.48	329	eP	45 07.90	0.0
SPC	86.63	331	iP	45 05.00	-3.9X
CEY	86.88	326	eP	44 58.90	-11.1X
			eSg	45 11.00	
ZST	87.32	329	e(P)	45 11.60	-0.3
KRA	87.41	331	iPc	45 12.40	0.0
			e	45 20.50	
FVI	88.30	326	P	45 14.00	-2.6
BHG	89.01	326	iPc	45 20.30	0.2
	0.9s	16.00nm		5.3mb	
OGA	89.38	325	iPc	45 22.90	0.8
	0.6s	7.00nm		5.1mb	
SOTA	89.52	325	iPc	45 22.90	0.2
	0.7s	12.00nm		5.3mb	
KHC	89.64	328	P	45 22.50	-0.6
PRU	89.78	329	eP	45 24.00	0.4
FUR	90.11	326	iPc	45 26.30	1.0
	0.8s	30.00nm		5.6mb	
YKA	144.11	2	ePKP	51 58.20	-2.7X
	0.9s	5.20nm			
FFC	150.98	348	ePKP	52 17.00	4.9X
	1.2s	28.00nm			
S.D. = 1.1 on 30 of 34 obs.					

? SEP 06, 1990 21h 58m 44.63± 8.09s
0.307 S ±39.7km 79.714 W ±58.6km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

GGP	1.13	83	iP+	59 07.40	1.3
			iS	59 35.00	
YANA	1.16	80	P+	59 07.30	0.7
			eS	59 31.00	
OTO	1.19	85	iP+	59 08.40	1.3
			eS	59 36.60	
QUR	1.19	84	ePn	59 07.80	0.6
			eS	59 32.00	
VC1	1.35	104	eP	59 11.60	1.6
CAYA	1.77	77	eP	59 17.80	1.8
			eS	59 49.20	
ANGL	2.17	92	eP	59 21.50	-0.2
S.D. = 0.8 on 7 of 7 obs.					

* SEP 06, 1990 22h 31m 05.88± 1.21s
12.122 N ±13.6km 93.874 E ±12.8km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
ANDAMAN ISLANDS REGION (703)

NNT	5.74	85	eP	32 29.70	-1.4
CHG	8.25	36	eP	33 06.90	0.6
CHTO	8.25	36	eP	33 07.00	0.7
GBA	16.10	277	P	35 02.00	10.6X
PKI	17.30	334	P	35 05.00	-1.9
GUN	17.40	336	P	35 10.00	1.8
KKN	17.54	334	P	35 10.80	1.0
GKN	18.01	333	P	35 14.00	-1.6
LZH	25.50	19	eP	36 33.00	-0.1
	2.0s	25.00nm		4.5mb	
WB5	50.99	128	eP	40 08.00	1.1
WRA	51.01	128	Pd	40 06.90	-0.1
	0.8s	2.00nm		4.1mb	
S.D. = 1.4 on 10 of 11 obs.					

SEP 07, 1990 00h 12m 26.21± 0.29s
5.443 N ± 4.4km 31.686 E ± 4.0km
DEPTH = 10.0km (geophysicist)
5.2mb (58 obs.) 5.2Msz (9 obs.)
SUDAN (557)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 30C
Centroid Location:
Origin Time 00:12:23.5 1.4
Lat 5.10N 0.09 Lon 31.56E 0.05
Dep 15.0 BDY Half-duration 2.2
Moment Tensor; Scale 10**17 Nm
Mrr=-1.28 0.06 Mtt= 1.86 0.07
Mff=-0.58 0.08 Mrt= 1.09 0.23
Mrf=-1.13 0.17 Mtf= 0.69 0.07
Principal Axes:
T Val= 2.24 Plg=15 Azm=352
N 0.25 35 93
P -2.49 51 243
Best Double Couple:Mo=2.4*10**17
NP1:Strike= 44 Dip=43 Slip=-147
NP2: 289 68 -52

AAE	7.87	63	eP	14 25.50	1.6
NAI	8.41	142	iPd	14 31.00	-0.2
	0.8s	14.93nm		5.3mb	
			S	14 35.00	
ARO	12.58	61	iP+	15 30.50	2.3
BCAO	13.14	266	iPd	15 29.90	-5.7X
	0.5s	955.00nm		7.2mb	X
			id	16 11.60	
			ic	17 48.20	
			ic	19 24.40	
			ic	21 00.30	
AGAL	17.91	3	eP	16 38.00	0.8
AKSR	18.13	4	eP	16 40.00	0.1
AKRL	18.14	3	eP	16 40.20	0.3
AMAN	18.42	4	eP	16 45.00	1.6
SONG	20.94	177	e(P)	17 17.10	5.2X
			e	23 13.10	
WAJH	21.14	12	eP+	17 17.30	3.6X
AFIF	21.60	30	eP+	17 18.00	-0.5
NPA	21.73	160	iPc	17 20.90	1.1
	1.0s	280.00nm		5.6mb	
			e	21 53.10	
			e	22 26.00	
			e	22 49.00	
			e	23 43.10	
RYD	23.93	35	eP+	17 46.00	4.6X
KOT	24.36	0	eP	17 45.50	0.1
PRNI	24.97	7	iPc	17 52.20	0.8
DSI	26.22	7	eP	18 03.40	0.3
HRI	27.94	7	eP	18 19.00	0.1
BHL	28.56	7	P	18 25.50	1.0
			S	23 16.00	
CSS	29.41	3	eP	18 32.00	-0.1
ELL	31.20	357	eP	18 49.00	1.0
KER	32.12	24	eP	18 57.00	0.9
ALT	33.49	358	eP	19 08.80	0.8
BBTK	34.26	1	iPc	19 15.00	0.4
EZN	34.57	353	eP	19 17.90	0.8
IZI	34.80	357	eP	19 20.00	0.8
TAB	35.10	20	eP	19 23.00	1.1
			i	19 29.00	
HRT	35.27	357	eP	19 11.00	-12.2X
MFT	35.41	354	iP	19 25.60	1.2
SOI	35.46	338	P	19 26.10	1.4
ITU	35.59	357	eP	19 28.00	2.2
KVT	35.70	6	iP	19 26.90	0.1
FAI	35.70	335	P	19 27.50	0.6
ATN	35.76	338	P	19 28.00	0.7
GIB	36.17	336	P	19 31.00	0.1
KIC	36.24	273	P	19 31.14	-0.6
	1.2s	29.50nm		5.0mb	
CVT	36.42	334	P	19 33.80	0.9
KDZ	36.48	352	iPd	19 34.00	0.6
TIC	36.52	274	P	19 33.54	-0.5
	1.0s	36.00nm		5.2mb	
LIC	36.53	273	P	19 33.42	-0.7
Z	20s	3.75um		5.2Msz	
			S	25 15.00	
RZN	36.62	351	iPc	19 35.00	0.2
VAY	36.64	348	eP	19 35.00	0.3
TDS	36.77	340	P	19 36.70	0.8
OHR	36.83	346	eP	19 37.20	0.8
PLD	37.03	351	eP	19 38.00	0.0
KKB	37.07	349	iP	19 38.00	-0.4
ORI	37.10	340	P	19 39.00	0.4
LKO	37.16	279	P	19 37.46	-2.1
	1.0s	17.50nm		4.8mb	
MGR	37.47	340	P	19 41.50	-0.2
SKO	37.50	347	iP	19 41.70	-0.3
	1.5s	54.00nm		5.1mb	
Z	11s	3.55um		5.4MszX	
N	12s	3.85um			
E	14s	2.39um			
			i	19 48.50	
			iPP	21 09.00	
			iS	25 27.00	
			LR	38 15.00	
PGB	37.55	351	eP	19 34.00	-8.4X
BRT	37.59	342	P	19 39.00	-3.8X
VTS	37.75	350	eP	19 45.00	0.8
SGO	37.93	340	P	19 46.00	0.5
PVL	38.03	352	iPc	19 42.00	-4.4X
DUI	39.20	339	P	19 55.00	-1.3
SDI	39.47	339	P	19 58.50	0.0
AZI	39.86	339	P	20 02.00	0.4
RDP	39.92	338	P	20 02.00	-0.3
RMP	39.97	338	P	20 03.00	0.4
AQU	40.19	339	P	20 05.10	0.7
BEO	40.44	348	eP	20 07.20	0.9
MNS	40.48	338	Pc	20 07.00	0.2
QUE	41.33	49	iPd	20 16.00	1.9

07d 00h

ARV	41.35	339	P	20	13.00	-0.9
CRE	41.82	338	P	20	17.00	-0.9
PGF	42.08	335	iPc	20	20.20	0.2
	1.0s	32.00nm			5.0mb	
PGD	42.12	338	P	20	14.00	-6.4X
VBY	42.39	343	e(P)	20	23.50	1.1
ZAG	42.47	344	ePcP	20	22.50	-0.5
RIY	42.51	342	ePcP	20	24.10	0.7
PTJ	42.55	344	ePcP	20	24.00	0.1
BDI	42.70	338	P	20	23.00	-2.0
CEY	42.85	342	ePcP	20	26.50	0.3
TRI	43.03	342	iPc	20	27.90	0.3
			ePP	22	08.00	
			eS	26	56.00	
			eSS	29	56.00	
			eLR	33	24.00	
LJU	43.10	343	e(P)	20	29.00	0.8
VOY	43.28	342	ePcP	20	30.00	0.2
VVI	43.71	341	P	20	33.00	-0.2
SRO	43.74	347	ePcP	20	33.60	0.2
			i	22	16.20	
LMR	43.79	333	iPc	20	33.80	0.0
	1.0s	34.00nm			5.1mb	
SBF	43.81	335	ePcP	20	33.70	-0.4
	1.2s	53.55nm			5.2mb	
FRF	43.91	334	iPc	20	34.70	-0.1
	0.8s	32.25nm			5.2mb	
LRG	43.95	333	ePcP	20	35.20	0.1
	1.0s	52.00nm			5.3mb	
SOP	44.04	345	ePcP	20	38.00	2.2
SAL	44.04	339	P	20	35.00	-0.8
FVI	44.13	341	P	20	36.60	0.1
IFR	44.14	314	iPc	20	38.00	1.0
			i	20	45.00	
ZST	44.38	346	ePcP	20	38.00	-0.6
MDI	44.49	338	P	20	37.50	-1.9
SPC	44.66	349	iP	20	40.70	-0.3
OGA	44.95	340	ePcP	20	44.00	0.5
	1.1s	22.00nm			5.0mb	
ECHE	44.97	324	ePcP	20	44.80	1.3
ORO	45.02	336	P	20	42.00	-1.9
APHE	45.03	319	ePcP	20	45.40	1.2
TMA	45.08	338	ePcP	20	43.00	-1.4
OSS	45.10	339	ePcP	20	44.60	0.0
BHG	45.10	342	iPc	20	44.00	-0.4
	0.9s	20.00nm			5.1mb	
AFC	45.12	319	ePcP	20	46.00	1.2
ECOG	45.14	319	ePcP	20	46.00	1.0
SQTA	45.20	340	iPc	20	45.00	-0.3
	1.4s	49.30nm			5.3mb	
			i	20	51.60	
			i	20	54.50	
			i	21	01.60	
			i	22	35.80	
			i	22	54.70	
			i	23	29.80	
			i	23	40.80	
			i	25	10.10	
			i	25	37.80	
ACHM	45.21	319	ePcP	20	48.20	2.7
ATEJ	45.23	319	ePcP	20	47.00	1.3
EVIA	45.29	322	ePcP	20	46.50	0.4
ASMO	45.31	319	ePcP	20	47.00	0.7
NKM	45.35	316	iPc	20	47.50	1.0
			i	21	03.50	
MMK	45.38	337	ePc	20	46.10	-0.8
ALOJ	45.40	319	ePcP	20	48.50	1.5
LPG	45.42	335	iPc	20	46.40	-0.9
	0.9s	35.20nm			5.3mb	
LPL	45.44	335	iPc	20	46.60	-0.8
	0.8s	24.20nm			5.2mb	
AAPN	45.52	319	iP	20	48.70	0.7
KRA	45.55	349	ePd	20	48.00	0.2
	1.1s	43.00nm			5.3mb	
Z	19s	1.50um			5.0Msz	
E	18s	1.40um				
			e	20	57.80	
			e	21	02.40	
			eS	27	49.00	
DIX	45.62	336	ePc	20	47.50	-1.4
LLS	45.67	338	ePc	20	47.90	-1.3
AVE	45.69	312	eP	20	50.00	0.8
GBA	45.78	76	Pd	20	49.30	-0.8
	0.9s	4.80nm			4.5mb	
EBAN	45.81	320	eP	20	50.00	-0.1
SAX	45.87	339	ePc	20	49.50	-1.3
EJIF	45.93	317	eP	20	51.20	0.1

FUR	46.00	341	iPc	20	50.90	-0.6
EPRU	46.06	318	eP	20	52.40	0.3
KHC	46.16	344	iPc	20	52.50	-0.3
	1.4s	51.00nm			5.3mb	
Z	16s	1.00um			4.9MszX	
N	16s	0.90um				
E	17s	1.40um				
			S	27	38.00	
WET	46.38	343	eP	20	53.90	-0.6
	1.5s	37.00nm			5.2mb	
ETOR	46.40	324	eP	20	55.00	0.2
ZLA	46.41	338	eP+	20	53.40	-1.4
EPF	46.56	328	iPc	20	56.20	0.1
	1.3s	28.90nm			5.2mb	
PRU	46.68	345	iPc	21	02.10	5.3X
	2.1s	69.60nm			5.3mb	
Z	14s	2.00um			5.2MszX	
N	12s	1.50um				
E	13s	1.40um				
			PP	22	52.50	
			eS	27	45.00	
BTH	46.92	328	iPc	21	00.20	1.4
			ipP	21	06.50	21kmX
			ePcP	21	26.00	
TOL	47.00	322	iPc	21	00.00	0.5
	1.0s	80.00nm			5.8mb	
			ePP	23	50.00	
			iS	27	51.00	
			iSS	30	25.00	
CAF	47.07	331	iPc	21	00.40	0.4
	1.3s	39.70nm			5.3mb	
BSF	47.30	337	iPc	21	01.20	-0.7
	0.9s	26.20nm			5.3mb	
LPO	47.31	330	iPc	21	02.10	0.2
	1.0s	32.00nm			5.4mb	
GRF	47.36	342	iPc	21	01.40	-0.8
	0.9s	21.00nm			5.2mb	
Z	19s	1.10um			4.8Msz	
			e	21	08.00	
GUD	47.53	323	iPc	21	03.60	-0.2
SMF	47.56	334	iPc	21	03.40	-0.5
	0.8s	47.00nm			5.6mb	
CDF	47.60	338	iPc	21	03.30	-0.9
	0.9s	13.10nm			5.0mb	
RJF	47.61	331	iPc	21	04.40	0.2
	1.0s	20.00nm			5.2mb	
Z	18s	4.50um			5.5Msz	
HAU	47.62	337	eP	21	03.60	-0.7
	1.0s	12.00nm			4.9mb	
Z	20s	1.52um			5.0Msz	
BRG	47.65	345	eP	21	03.80	-0.6
	1.8s	52.00nm			5.3mb	
			e	21	09.60	
			iScP	25	36.50	
			eS	28	12.00	
LFF	47.72	330	iPc	21	05.40	0.3
	1.0s	40.00nm			5.5mb	
LBF	47.77	335	iPc	21	04.80	-0.7
	0.9s	22.95nm			5.3mb	
MAF	47.80	333	iPc	21	06.00	0.2
	0.9s	40.95nm			5.5mb	
ECRI	47.82	326	eP	21	06.00	0.0
AVF	47.89	334	iPc	21	05.90	-0.5
	0.8s	32.25nm			5.5mb	
BGF	47.93	333	iPc	21	06.40	-0.4
	0.8s	18.15nm			5.2mb	
TCF	48.02	333	iPc	21	07.70	0.2
	0.9s	61.40nm			5.7mb	
SSF	48.03	334	iPc	21	06.80	-0.7
	0.8s	16.10nm			5.2mb	
LOR	48.04	335	iPc	21	06.90	-0.7
	0.8s	31.55nm			5.5mb	
Z	20s	1.90um			5.1Msz	
MOX	48.09	343	eP	21	07.00	-0.9
			e	21	13.00	
			eS	28	00.00	
CLL	48.29	344	eP	21	08.00	-1.5
	1.8s	50.00nm			5.3mb	
LSF	48.30	332	iPc	21	09.70	0.1
	0.9s	42.60nm			5.5mb	
EPLA	48.36	321	eP	21	10.00	-0.3
NDI	48.87	56	eP	21	15.00	0.7
MFF	49.35	331	iPc	21	17.30	-0.4
	1.0s	20.00nm			5.1mb	
MEM	49.89	339	P	21	21.00	-0.7
			e	21	26.80	
DOU	49.99	337	P	21	21.80	-0.7

	1.0s	52.80nm			5.5mb	
			e	28	34.00	
ENN	50.05	339	eP	21	22.50	-0.4
	0.9s	14.00nm			4.9mb	
			e	21	31.50	
WTS	50.77	340	eP	21	28.50	0.1
	1.0s	26.00nm			5.1mb	
			e	21	36.00	
LDF	50.79	333	iPc	21	27.70	-0.9
	0.8s	32.25nm			5.3mb	
LPF	50.80	332	iPc	21	28.00	-0.7
	0.9s	40.95nm			5.4mb	
GRR	50.98	333	iPc	21	29.20	-0.8
	0.8s	14.80nm			5.0mb	
FLN	51.08	333	iPc	21	29.60	-1.2
	0.9s	26.20nm			5.2mb	
Z	19s	3.75um			5.4Msz	
BSD	51.33	348	iPd	21	31.00	-1.6
	0.7s	26.40nm			5.3mb	
GKN	54.94	60	P	21	58.40	-1.8
NUR	55.20	356	iP	22	00.20	-1.0
KKN	55.45	60	P	22	02.00	-1.9
PKI	55.51	60	P	22	02.20	-2.3
GUN	55.99	60	P	22	06.20	-1.8
SUF	57.30	357	iP	22	15.50	-0.8
	0.8s	38.80nm			5.5mb	
NB2	57.57	348	P	22	16.40	-1.9
	0.9s	28.00nm			5.3mb	
SHL	60.83	64	iP	22	39.50	-2.1
			iS	30	56.00	
SOD	61.92	358	eP	22	46.00	-2.1
KEV	64.30	358	iP	23	02.60	-1.1
	1.0s	46.00nm			5.6mb	
CHG	66.75	72	eP	23	20.00	-0.4
LZH	72.40	54	eP	23	54.20	-0.8
	2.0s	36.00nm			5.1mb	
Z	22s	2.30um			5.4Msz	
N	16s	1.90um				
			pP	24	00.70	21kmX
			ePP	26	28.00	
			PPP	28	13.00	
			eS	33	13.00	
SOB1	73.78	259	eP	24	03.40	0.2
			e	24	08.60	
MAW	76.15	168	iP	24	16.80	1.0
DAG	76.25	349	iP	24	16.00	-0.3
	1.1s	30.38nm			5.3mb	
JFO	78.19	247	eP	24	29.40	1.3
			e	24	34.40	
BAO	81.57	253	Pc	24	47.90	1.5
BJI	82.31	50	eP	24	50.50	0.9
	1.4s	13.00nm			4.9mb	
Z	28s	1.11um			5.1MszX	
			eSKS	35	22.00	
			eS	35	56.00	
PPD	85.56	247	eP	25	07.50	1.0
SPA	95.41	180	iPc	25	53.20	1.1
	1.0s	6.50nm			5.0mb	
Z	19s	1.60um			5.5Msz	
AIA	97.41	205	eP	26	12.10	11.2X
INK	105.69	354	ePKP	31	06.00	15.1X
S.D. = 1.0 on 171 of 183 obs.						

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* SEP 07, 1990 01h 00m 09.16± 0.90s
33.146 S ± 6.6km 71.019 W ± 7.0km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.17	2	iP	00	13.50	0.3
			iS	00	24.00	
PEL	0.28	90	iPd	00	16.00	0.9
			iS	00	27.60	
SAN	0.43	136	iPd	00	19.20	1.3
			iS	00	34.00	
TACH	0.51	172	iP	00	20.30	0.8
			iS	00	37.50	
LCCH	0.57	234	iPc	00	20.80	0.2
			iS	00	35.60	
JACH	0.59	38	iPd	00	25.10	4.0X
PCH	0.63	138	iP	00	21.60	-0.4
			iS	00	38.00	
FCH	0.64	107	iP	00	20.00	-2.2
			iS	00	35.00	
CHCH	0.84	159	iP	00	25.30	-0.2
			iS	00	44.90	
LNV	0.87	202	iPc	00	25.10	-0.8
			iS	00	44.70	

07d 01h

S.D. = 1.2 on 9 of 10 obs.

? SEP 07, 1990 02h 38m 57.45± 0.89s
16.454 N ±12.5km 120.828 E ±12.6km
DEPTH = 10.0km (geophysicist)
4.7mb (4 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	0.24	260	iPc+	39	03.00	0.3
OCP	1.82	172	eP	39	48.00	18.9X
CHTO	20.99	280	e(P)	43	46.20	2.7X
BJI	23.85	351	eP	44	13.00	1.4
	1.6s		30.00nm			4.6mb
			eS	48	40.00	
LZH	24.71	326	eP	44	19.50	-0.8
	1.8s		32.00nm			4.7mb
	Z 13s		1.10um			4.5MszX
	N 12s		1.70um			
	E 12s		1.60um			
			pP	44	29.00	34kmX
			eS	48	20.00	
			SS	48	57.00	
WB5	38.48	159	eP	46	21.00	-0.6
WRA	38.53	159	Pd	46	22.80	0.8
	0.7s		1.50nm			3.8mb
NB2	84.89	333	P	51	32.50	-1.1
	1.1s		5.90nm			4.7mb

S.D. = 1.3 on 6 of 8 obs.

& SEP 07, 1990 05h 25m 11.90s
36.837 N 121.433 W
DEPTH = 10.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

SAO	0.07	188	iP	25	13.90	-0.4
			iS	25	15.95	
LLA	0.45	119	eP	25	20.50	-0.6
GCC	0.49	293	ePd	25	21.00	-0.9
PRS	0.51	174	eP	25	21.50	-0.7
ARN	0.52	351	iPc	25	22.00	-0.4
MHC	0.53	342	iPd	25	22.28	-0.4
			iS	25	30.90	
PRI	0.93	138	eP	25	30.20	0.5
PCC	1.01	311	eP	25	29.80	-1.1
BKS	1.22	329	iPc	25	33.40	-1.2
			eS	25	51.80	
PHAM	1.30	140	eP	25	34.80	-1.2
FRI	1.39	83	eP	25	36.00	-1.3
CMB	1.46	35	eP	25	37.30	-1.0

12 obs. associated

% SEP 07, 1990 05h 50m 40.78± 2.69s
44.215 N ±12.3km 8.607 E ±17.6km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (GEN).

FIN	0.29	269	P	50	47.29	0.5
PCP	0.33	352	P	50	47.67	0.0
			S	50	52.77	
ROB	0.53	279	P	50	51.35	-0.3
			S	50	59.12	
IMI	0.60	240	P	50	52.89	-0.1
			S	51	01.79	
ENR	0.85	271	P	50	57.14	-0.1
			S	51	09.03	
STV	0.92	272	P	50	58.55	0.1
			S	51	10.52	
PZZ	1.12	286	P	51	01.75	-0.1

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

• SEP 07, 1990 05h 59m 07.07± 2.31s
33.414 S ± 6.2km 71.888 W ±17.3km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

LCCH	0.27	103	iPd	59	14.20	1.4
			iS	59	20.00	
IHA	0.44	28	eP	59	15.80	-0.2
			iS	59	22.50	
LNV	0.67	144	iPd	59	20.30	-0.1
			iS	59	30.80	
TACH	0.83	107	iPd	59	23.30	0.2
ROCH	0.86	59	iPd	59	22.60	-1.1
			iS	59	36.00	
SAN	1.03	93	iPd	59	26.10	-0.4
			iS	59	41.00	
PEL	1.04	75	iPd	59	27.50	0.7
			iS	59	42.50	
CHCH	1.15	117	iP	59	28.00	-0.7
			iS	59	45.50	
			i	59	48.00	
PCH	1.17	101	eP	59	28.50	-0.4
			iS	59	47.00	
JACH	1.31	56	iPd	59	30.40	-1.0
			iS	59	48.80	
FCH	1.34	87	iPd	59	31.50	-0.5
			iS	59	50.50	
RTBS	2.70	50	e(P)	59	52.00	0.7
RTCV	3.22	62	e(P)	00	05.20	4.4X
RTCB	3.24	54	e(P)	00	00.00	0.9
RTLL	3.56	55	ePc	00	04.00	0.4

S.D. = 0.8 on 14 of 15 obs.

% SEP 07, 1990 06h 30m 11.44± 0.82s
60.571 N ± 4.7km 5.049 E ±10.7km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.5 (BER).

ASK	0.11	141	iP	30	14.15	-0.2
			iS	30	16.15	
BER	0.24	143	iP	30	16.15	-0.3
			eS	30	20.75	
SUE	0.51	344	eP	30	21.72	0.0
			eS	30	29.68	
HYA	0.82	43	eP	30	27.28	0.1
			eS	30	39.73	
ODD1	1.03	129	eP	30	30.86	0.0
			eS	30	45.10	
KMY	1.37	176	eP	30	36.40	-0.1
			eS	30	54.34	
BLS2	1.59	143	eP	30	40.51	0.7
			eS	31	00.79	
MOL	2.33	30	eP	30	50.33	-0.1
			eS	31	20.04	

S.D. = 0.4 on 8 of 8 obs.

& SEP 07, 1990 07h 24m 11.78s
61.744 N 149.743 W
DEPTH = 36.7km
SOUTHERN ALASKA (2)
<AGS-P>.

PWA	0.11	215	iP	24	18.29	0.2
			iS	24	24.20	
PLRM	0.33	117	eP	24	19.41	-0.7
			eS	24	26.31	
PMR	0.33	117	eP	24	19.60	-0.5
			eS	24	26.80	
GHO	0.39	85	eP	24	20.52	-0.5
			eS	24	28.26	
PMS	0.51	170	iP	24	21.92	-0.7
			iS	24	30.24	
SUA	0.55	240	eP	24	22.44	-0.9
			eS	24	31.37	
SML	0.67	84	iP	24	23.87	-1.0
			eS	24	33.81	
CUT	0.71	340	iP	24	24.47	-0.8
			eS	24	34.39	
SKT	0.88	286	iP	24	26.57	-1.2
SCM	1.15	84	iP	24	31.11	-0.6
CGLM	1.17	249	eP	24	30.89	-1.1
NCG	1.20	255	iP	24	31.85	-0.7
			eS	24	47.92	
NKA	1.24	216	eP	24	33.91	1.1
HUR	1.24	2	eP	24	32.68	-0.2
			eS	24	49.03	
SPU	1.25	244	iP	24	32.59	-0.4
			eS	24	48.76	
CRP	1.25	249	eP	24	32.71	-0.5
			eS	24	48.68	
BGL	1.36	250	eP	24	34.57	-0.1
CKL	1.36	247	iP	24	34.20	-0.6
			eS	24	51.99	
VZW	1.68	113	eP	24	38.52	-0.8
			eS	25	00.71	
TOA	1.73	76	ePc	24	40.30	0.3
RDT	1.75	229	iP	24	39.53	-0.8
			eS	25	01.12	
VLZ	1.75	109	eP	24	39.08	-1.2
KLU	1.84	96	eP	24	40.78	-0.9
NNL	1.87	205	eP	24	42.58	0.6
RSO	1.95	230	eP	24	42.41	-0.8
CNPM	2.34	199	eP	24	48.52	-0.2
GLB	2.85	93	eP	24	54.33	-1.7
SVW	2.90	260	e(P)	24	54.60	-2.0
PDB	2.94	230	eP	24	57.14	0.0
FBA	3.29	15	eP	25	01.10	-1.0

30 obs. associated

% SEP 07, 1990 07h 49m 37.70± 0.82s
10.925 N ± 7.7km 61.523 W ± 9.3km
DEPTH = 33.0km (normal)
TRINIDAD (98)
MD 3.4 (TRN).

TRN	0.30	157	eP	49	45.90	0.5
			eS	49	52.99	
TCE	0.32	225	eP	49	45.61	-0.1
			eS	49	52.59	
TBH	0.63	134	eP	49	49.67	-0.4
			eS	50	00.24	
TPR	0.78	70	eP	49	52.38	0.2
			eS	50	00.24	
BOT	0.83	73	eP	49	52.77	-0.1
			eS	50	06.36	
SVB	2.35	6	eP	50	14.78	0.0
			eS	50	43.04	

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

SEP 07, 1990 08h 05m 38.05± 0.85s
29.960 S ± 4.8km 72.022 W ±11.4km
DEPTH = 10.0km (geophysicist)
OFF COAST OF CENTRAL CHILE (134)
Felt (III) at La Sereno and Coquimbo.

RTBS	2.79	128	ePd	06	24.10	0.6
JACH	2.98	156	iPc	06	27.50	1.2
			iS	07	01.50	
IHA	3.07	174	eP	06	27.00	-0.5
			e(S)	07	19.20	
ROCH	3.12	164	eP	06	28.40	-0.1
			iS	07	06.00	
			i	07	15.00	
RTCB	3.16	120	iPd	06	28.80	-0.1
			S	07	01.00	
ZON	3.28	120	eP	06	30.60	0.0
RTLL	3.35	115	iPc	06	30.30	-1.3
PEL	3.37	161	iPc	06	32.00	0.1
			iS	07	13.30	
LCCH	3.53	174	iP	06	33.50	-0.5
			i	07	27.50	
			i	07	33.50	
RTCV	3.54	123	ePc	06	34.50	0.2
			eS	07	04.80	
CFA	3.65	118	eP	06	35.00	-0.8
FCH	3.67	157	eP	06	37.50	1.2
			iS	07	19.90	
TACH	3.80	166	eP	06	37.60	-0.3
			i	07	19.00	
PCH	3.87	161	eP	06	39.00	0.0
			i	07	31.00	
MDZ	3.98	138	eP	06	42.20	1.7
			iS	06	47.10	
LNV	4.02	173	iPd	06	39.70	-1.2
			i	07	32.50	
			i	07	39.50	
CHCH	4.13	164	iPd	06	42.10	-0.5
CNCB	13.60	17	P	08	56.00	2.0
LPB	13.84	16	eP	08	55.00	-2.0
ZOBO	14.09	16	P	09	02.00	1.6
	Z 16s		0.13um			
			eLR	14	08.00	
SIV	17.16	38	P	09	38.00	-1.5
PPD	20.20	72	eP	10	09.60	-6.2X
			e	10	15.10	

S.D. = 1.1 on 21 of 22 obs.

? SEP 07, 1990 08h 11m 10.86± 7.76s
44.261 N ±11.8km 8.567 E ±53.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.3 (GEN).

CKI	0.26	309	Pc	11	16.20	-0.2
			eSg	11	19.50	
FIN	0.26	259	P	11	16.27	-0.2
			S	11	19.84	

```
IMI      0.60 235 P      11 23.04   0.0
                 S      11 31.04
DOI      0.98 285 P      11 29.90   0.4
      S.D. = 0.5  on   4 of   4 obs.
-------------------------------------
?  SEP  07, 1990  08h 21m 58.25± 0.71s
   56.316 S ±25.0km  140.768 W ±11.4km
   DEPTH =  10.0km  (geophysicist)
   4.9mb (  4 obs.)  4.6Msz (  1 obs.)
 SOUTH PACIFIC CORDILLERA          (691)

SPA     33.86 180 iPc    28 42.60  -0.1
        1.0s     25.50nm          5.1mb
      Z  20s      1.13um          4.6Msz
CNB     50.60 264 eP     31 00.30   1.2
        0.8s     22.00nm          5.2mb
CAN     50.80 263 eP     31 00.90   0.4
                  i     31 09.30
BWA     51.78 264 eP     31 07.20  -0.8
                  i     31 15.80
CMS     55.42 264 eP     31 35.00   0.2
STK     57.46 260 iPd    31 49.50   0.1
        1.0s     7.00nm          4.6mb
CNCB    66.63  85 P      32 57.00   5.3X
LPB     66.79  85 P      32 53.00   0.5
CCH     67.19  87 eP     32 54.00  -0.9
WRA     70.84 263 Pd     33 15.90  -1.1
        0.7s     5.40nm          4.8mb
WB5     70.87 263 eP     33 16.20  -1.0
PPD     71.66 102 eP     33 12.80  -9.2X
ATEJ   145.27 105 ePKP   41 40.00   2.7X
APHE   145.48 106 ePKP   41 41.00   3.4X
AAPN   145.51 105 ePKP   41 41.00   3.4X
QUE    147.41 228 ePKP   41 42.60   1.6
      S.D. = 1.0  on  11 of  16 obs.
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   SEP  07, 1990  08h 32m 24.88± 0.51s
   40.005 N ± 4.9km   15.140 E ± 6.5km
   DEPTH =  31.7 ±  5.2 km
   3.4mb (  1 obs.)
 SOUTHERN ITALY                    (390)

MGR      0.34  67 Pc     32 32.00  -1.1
                 iSg    32 37.20
SGO      0.57  13 Pc     32 34.50  -2.0
                 iSg    32 45.20
BSS      0.82 342 P      32 38.10  -2.1
                 eSn    32 51.10
TDS      0.99 110 Pc     32 43.00   0.5
                 eSn    32 54.00
ORI      1.01  86 Pd     32 34.50  -8.3X
                 iSg    32 45.50
RFI      1.56 326 P      32 51.11   0.4
BAI      1.72  49 P      32 55.00   1.9
DUI      1.73 343 P      32 54.00   0.7
BRT      1.80  60 P      32 53.30  -0.9
ATN      1.86 172 Pc     32 53.30  -1.8
GMB      1.92 163 P      32 55.68  -0.4
SDI      1.97 330 Pc     32 58.40   1.6
SOI      2.06 159 P      32 57.70  -0.2
MNO      2.10 190 P      32 58.50  -0.2
AZI      2.36 327 P      33 02.50   0.3
RDP      2.54 314 P      33 05.00   0.2
FAI      2.96 203 P      33 12.00   1.3
MNS      3.02 323 P      33 12.00   0.4
ARV      3.86 336 P      33 23.00  -0.4
OHR      4.45  74 ePn    33 32.00   0.0
SKO      5.16  66 ePn    33 43.50   1.6
PTJ      5.92   6 iP     33 54.40   1.6
LJU      6 05 356 eP     34 28.00  33.5X
VOY      6.09 352 e(P)   33 53.00  -2.2
                 e      33 53.70
                 eS     35 08.30
NB2     21.20 355 P      37 08.20  -1.6
        0.7s     1.10nm          3.4mb
      S.D. = 1.4  on  23 of  25 obs.
-------------------------------------
&  SEP  07, 1990  09h 49m 23.69s
   59.315 N          152.973 W
   DEPTH =  83.2km
 SOUTHERN ALASKA                   (  2)
      <AGS-P>.

AUE      0.21 282 iP     49 35.51   1.0
                 eS     49 44.22
AUI      0.23 275 eP     49 35.58  -0.6
AUH      0.25 282 eP     49 35.84  -0.5
OPT      0.36 339 iP     49 36.35  -0.6
                 eS     49 46.41
CDD      0.52 222 eP     49 37.47  -0.7
                 eS     49 47.84
XLV      0.66  77 eP     49 38.53  -0.8
                 eS     49 50.54
MCNL     0.71 260 iP     49 39.18  -0.8
                 eS     49 51.05
HOM      0.76  63 iP     49 40.03  -0.4
                 eS     49 52.49
PDB      0.78 308 iP     49 39.88  -0.8
                 eS     49 52.46
CNPM     0.91  76 iP     49 41.24  -1.0
                 eS     49 56.03
NNL      1.12  49 eP     49 44.68   0.0
BRLK     1.16  66 eP     49 43.86  -1.3
RSO      1.16   5 iP     49 44.48  -0.8
                 eS     50 00.67
RDT      1.29  12 iP     49 45.92  -1.0
                 iS     50 03.02
NKA      1.68  31 eP     49 52.46   0.6
CKL      1.91   9 iP     49 54.43  -0.7
SPU      1.93  13 eP     49 54.52  -0.8
SEW      1.95  65 eP     49 53.68  -1.9
BGL      1.98   8 eP     49 55.16  -0.8
CRP      2.00  11 eP     49 55.80  -0.6
CGLM     2.06  13 eP     49 56.36  -0.7
NCG      2.13  11 eP     49 57.42  -0.7
SVW      2.23 325 iP     49 58.47  -1.0
SUA      2.42  26 eP     50 01.68  -0.4
PMS      2.58  40 eP     50 03.09  -1.1
GHO      3.17  37 eP     50 10.77  -1.7
CUT      3.37  22 eP     50 14.50  -0.5
SML      3.39  40 eP     50 13.54  -1.9
VZW      3.65  59 eP     50 16.52  -2.5
SCM      3.76  45 eP     50 18.53  -2.0
VLZ      3.78  58 eP     50 18.15  -2.6
KLU      4.12  55 eP     50 22.70  -3.0
GLB      5.02  61 eP     50 35.23  -2.9
TGL      5.29  70 eP     50 38.41  -3.5
BALM     5.58  67 eP     50 42.11  -3.8
        35 obs. associated
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%  SEP  07, 1990  09h 57m 39.14± 0.97s
   43.647 N ±16.9km   6.984 E ±10.4km
   DEPTH =  10.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE        (379)
      ML 2.4 (FDF).

FRF      0.26 251 Pg     57 44.60   0.0
                 Sg     57 48.60
SBF      0.39  56 Pg     57 47.20   0.0
                 Sg     57 54.00
LMR      0.47 228 Pg     57 48.60   0.0
                 Sg     57 55.60
LRG      0.49 247 Pg     57 49.20   0.1
                 Sg     57 56.00
CDR      0.88 272 ePg    57 56.10   0.0
                 eSg    58 08.50
      S.D. = 0.1  on   5 of   5 obs.
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   SEP  07, 1990  10h 03m 09.49± 1.28s
   48.303 N ± 8.7km    7.503 E ± 8.0km
   DEPTH =  10.0km  (geophysicist)
 FRANCE                            (538)
      ML 2.6 (LDG).

CDF      0.19 306 Pg     03 13.68   0.0
ECH      0.25 249 Pg     03 14.97   0.2
                 Sg     03 18.50
MOF      0.52 209 Pg     03 20.03   0.1
                 Sg     03 27.67
FEL      0.55 141 Pg     03 20.62   0.0
                 Sg     03 28.38
BSF      0.67 226 Pg     03 22.66  -0.2
                 Sg     03 32.51
HAU      0.83 249 Pg     03 25.50   0.0
                 Sg     03 36.20
LOR      2.67 249 Pg     03 59.40   6.1X
                 Sg     04 32.00
SMF      2.99 238 Pg     04 05.90   8.1X
      S.D. = 0.2  on   6 of   8 obs.
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?  SEP  07, 1990  10h 10m 27.81± 0.69s
   21.685 N ± 5.5km  142.937 E ± 7.0km
   DEPTH = 327.4 ±  8.5 km
   4.5mb (  8 obs.)
 MARIANA ISLANDS REGION            (215)

GUMO     8.26 167 eP     12 25.80   0.2
        0.7s   233.80nm          5.4mb
PJG      8.26 167 eP     12 25.80   0.2
GUA      8.32 167 eP     12 25.80  -0.5
        0.7s   126.03nm          5.1mb
KAKJ    14.67 351 P      13 42.20  -0.3
                 S      16 22.70
CHJJ    14.72 347 P      13 42.70  -0.4
                 S      16 18.90
MTMJ    15.50 344 P      13 50.70  -0.9
NIIJ    15.87 348 P      13 54.60  -0.8
                 S      16 45.10
YAMJ    16.62 352 P      14 04.40   1.1
OFUJ    17.37 357 P      14 12.10   1.0
CHTO    41.27 274 eP     17 44.90   1.2
        1.1s     5.01nm          3.7mb
WB5     42.15 192 eP     17 59.80   9.1X
WRA     42.22 192 Pd     17 50.10  -1.2
        0.2s     1.60nm          3.9mb
GUN     51.78 289 P      19 07.00   1.5
PKI     52.24 289 P      19 08.60  -0.2
KKN     52.32 289 P      19 09.20  -0.1
DMN     52.50 289 P      19 10.80   0.1
GKN     52.86 289 P      19 13.40   0.2
INK     67.67  24 eP     20 51.00  -0.7
YKA     76.57  28 eP     21 43.20  -0.5
        0.5s     6.20nm          4.6mb
FHC     78.39  51 eP     21 55.20   1.0
WDC     79.50  51 eP     22 00.30   0.3
MIN     80.25  51 eP     22 03.70  -0.5
ORV     80.60  51 eP     22 06.00   0.2
BRK     80.62  53 eP     22 06.00   0.1
PCC     80.66  53 eP     22 06.20   0.1
PRS     81.83  54 eP     22 12.80   0.6
CMB     81.95  52 eP     22 13.40   0.5
FRI     82.83  53 eP     22 17.70   0.4
LRM     84.35  43 eP     22 25.20   0.1
FFC     85.96  32 eP     22 32.50   0.1
        0.5s     6.00nm          4.7mb
HFS     88.65 337 eP     22 43.50  -1.7
        0.6s     4.20nm          4.5mb
NB2     88.87 339 P      22 45.00  -1.3
        0.9s     2.90nm          4.2mb
      S.D. = 0.8  on  31 of  32 obs.
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%  SEP  07, 1990  10h 23m 19.74± 1.03s
   35.503 N ±12.2km   26.100 E ± 7.8km
   DEPTH =  10.0km  (geophysicist)
 CRETE                             (370)
      MD 3.5 (ATH).

NPS      0.46 239 iPbc   23 29.20   0.0
KAP      0.88  87 ePn    23 36.50  -0.1
                 eSn    23 49.90
VAM      1.55 267 ePb    23 48.00   0.5
APE      1.63 344 ePn    23 49.00   0.4
SMG      2.28  15 ePb    24 03.00   5.0X
VLI      2.83 296 ePn    24 04.00  -1.9
ITM      3.76 298 ePn    24 20.10   1.0
      S.D. = 1.3  on   6 of   7 obs.
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   SEP  07, 1990  11h 34m 35.53± 0.18s
   31.071 S ± 6.9km  178.397 W ± 4.6km
   DEPTH =  10.0km  (geophysicist)
   5.5mb ( 25 obs.)  5.3Msz (  2 obs.)
 KERMADEC ISLANDS REGION           (177)
      Ms 4.8 (BRK).
      CENTROID, MOMENT TENSOR      (HRV)
      Data Used: GDSN
      L.P.B.: 13S, 26C
      Centroid Location:
      Origin Time        11:34:52.6 1.6
      Lat 30.88S 0.13 Lon 179.02W 0.12
      Dep  51.2  5.5 Half-duration  1.7
      Moment Tensor;    Scale 10**16 Nm
        Mrr= 5.45 0.46  Mlt= 0.41 0.82
        Mff=-5.87 0.87  Mrt=-2.81 0.73
        Mrf= 4.48 0.78  Mtf=-5.65 0.58
       Principal Axes:
        T  Val=  9.56  Plg=51  Azm=220
        N        0.08       37       19
        P       -9.63       10      117
      Best Double Couple:Mo=9.6*10**16
       NP1:Strike=243 Dip=48 Slip= 145
       NP2:       358     65       48
```

07d 11h

RAO	1.86	13	P	35	07.00	-0.7	SYP	85.34	45	eP	47	15.00	0.8		0.7s	141.50nm							
HBZ	7.06	202	eP	36	18.80	-2.6X	LNV	85.58	127	iPd	47	15.40	0.0	RGS	147.54	353	ePKP	54	21.00	3.0X			
PUZ	7.51	201	P	36	24.40	-3.3X	BCH	85.72	44	P	47	17.00	0.9	MOL	148.26	355	iPKPc	54	21.33	2.2X			
			eS	37	47.50		PRS	85.75	43	eP	47	17.00	1.0	BCAO	149.08	214	iPKPc	54	20.50	-1.5			
NOZ	8.08	200	eP	36	31.90	-3.8X	GCC	85.87	42	eP	47	17.30	0.7		0.2s	256.00nm							
WHH	8.85	207	P	36	42.20	-4.3X	PCC	85.98	41	eP	47	17.70	0.6				ic	54	25.30				
TTH	9.31	203	eP	36	48.60	-4.1X	PHAM	85.98	44	P	47	17.70	0.5				ic	55	56.20				
PGZ	10.46	203	P	37	01.40	-7.1X	SAO	86.00	42	eP	47	18.10	0.8	UPP	149.27	344	iPKPc	54	23.10	2.3X			
MNG	10.74	206	P	37	04.70	-7.7X	ABL	86.02	45	P	47	18.20	0.5	NB2	149.36	351	PKP	54	19.50	-1.5			
			S	39	00.70		PRI	86.03	43	eP	47	19.20	1.6	HYA	149.75	356	ePKP	54	25.17	3.7X			
KIW	11.17	207	P	37	10.40	-7.9X	BAR	86.17	48	eP	47	18.00	-0.3	HFS	149.83	348	ePKP	54	19.60	-2.1X			
MTW	11.21	204	eP	37	10.20	-8.6X	PAS	86.19	46	eP	47	19.00	0.7		0.6s	58.40nm							
CAW	11.32	206	eP	37	12.30	-8.0X	MHC	86.29	42	eP	47	19.90	1.0	SUE	149.93	357	iPKPc	54	25.75	4.0X			
WDW	11.49	206	eP	37	13.70	-8.9X	BRK	86.31	41	eP	47	19.80	1.1	ASK	150.49	356	ePKP	54	27.17	4.6X			
MRW	11.57	207	eP	37	15.60	-8.0X	MWC	86.31	46	eP	47	19.00	-0.1	BER	150.58	356	iPKP	54	27.65	4.9X			
			S	39	21.80		BKS	86.32	41	iPd	47	20.10	1.3	KVT	150.59	299	iPKP	54	28.50	5.0X			
WEL	11.59	207	eP	37	19.00	-4.9X		0.7s		61.00nm			5.9mb	ODD1	150.96	355	iPKPd	54	28.73	5.3X			
			S	39	22.00		Z	20s		0.30um			4.7Msz	HRI	151.09	283	iPKPc	54	30.00	5.4X			
TCW	11.72	208	eP	37	16.30	-9.4X	N	20s		0.20um				BHL	151.21	285	PKP	54	30.00	5.3X			
THZ	12.76	211	eP	37	31.40	-8.3X	E	20s		0.20um				MML	151.28	282	iPKPc	54	30.50	5.7X			
			eS	39	49.60					e	47	26.50		PRNI	151.34	277	iPKPc	54	30.40	5.5X			
KHZ	13.03	207	eP	37	35.20	-8.1X				e	47	31.50		BLS2	151.55	354	iPKPc	54	30.16	5.7X			
LTZ	13.86	210	eP	37	45.80	-8.4X				e	47	35.70		KMY	151.75	356	iPKPc	54	30.30	5.7X			
DZM	16.24	300	iPc	38	32.30	6.9X				eS	58	04.00		KAS	152.23	301	ePKP	54	32.00	6.0X			
BRS	25.39	271	iPd	40	09.00	4.3X				eLR	14	10.00		BBTK	153.26	298	ePKP	54	32.00	4.5X			
			i	40	29.00		ARN	86.36	42	P	47	19.50	0.4	BSD	154.17	342	iPKPc	54	35.10	7.0X			
COO	25.49	263	iPc	40	09.80	4.2X	PCH	86.38	127	eP	47	20.00	0.4		0.5s	34.40nm							
	0.6s	54.00nm				5.4mb	PLM	86.49	47	eP	47	21.00	1.0	LIC	154.51	165	PKP	54	29.42	-0.4			
CNB	27.24	252	eP	40	24.50	2.8	PEL	86.54	127	iPd	47	21.00	0.7	KIC	154.71	165	PKP	54	29.84	-0.2			
	0.9s	31.00nm				5.0mb		0.7s		41.10nm			5.7mb	TIC	154.92	164	PKP	54	30.16	-0.2			
			e	43	40.30		RVR	86.58	47	eP	47	20.00	-0.2	KRA	156.58	329	ePKP	54	30.40	-1.1			
CAN	27.54	252	eP	40	26.30	1.9	PEC	86.65	47	P	47	21.00	0.4	SPC	157.07	327	ePKP	54	31.20	-1.2			
			e	43	41.70		SBB	86.76	46	eP	47	22.00	0.8	LKO	157.56	161	PKP	54	31.80	-2.0X			
BWA	28.04	254	eP	40	29.00	0.0	ISA	87.01	45	eP	47	23.00	0.6	CLL	158.09	341	ePKP	54	32.00	-1.3			
			e	43	42.00		FRI	87.17	43	eP	47	23.50	0.5		0.9s	21.00nm							
TOO	30.39	248	iPd	40	52.00	2.0	SDN	87.42	10	eP	47	23.50	-0.2				e	54	44.00				
	0.8s	52.00nm				5.4mb	CMB	87.49	42	eP	47	24.80	0.2				i	55	05.90				
			e	43	48.20		TPC	87.49	47	eP	47	25.00	0.3	BRG	158.19	339	iPKPd	54	32.80	-0.6			
			e	51	19.20		GLA	87.59	49	eP	47	26.00	0.8		1.4s	24.00nm							
CMS	30.50	260	eP	40	53.00	2.1	CLC	87.65	45	eP	47	26.00	0.6				i	55	06.60				
BFD	32.74	249	eP	41	13.00	2.5	GSC	87.80	46	eP	47	27.00	0.8	PRU	158.75	336	PKP	54	35.70	1.6			
			e	43	56.00		ORV	87.90	40	eP	47	27.00	0.5				e	55	09.00				
QLP	32.94	268	iPc	41	14.00	1.6	WDC	88.05	39	eP	47	27.60	0.5	SRO	158.95	327	ePKP	54	34.20	-0.1			
			e	41	24.00		LBFM	88.94	39	P	47	32.00	0.3	ZST	159.21	330	ePKP	54	33.80	-0.8			
STK	34.00	258	iPc	41	23.60	2.0	KVN	89.49	43	P	47	34.00	-0.3	KHC	159.81	337	iPKPd	54	34.80	-0.6			
	0.8s	86.00nm				5.7mb	NNT	89.58	285	eP	47	35.00	0.1				e	55	14.30				
Z	20s	26.00um				6.0Msz				e	14	24.60		ENN	160.06	352	e(PKP)	54	39.00	3.5X			
ADE	35.98	252	iPc	41	39.70	1.2	NST	90.87	288	eP	47	41.70	0.8		0.9s	8.00nm							
	0.6s	32.00nm				5.4mb	BMW	91.86	35	P	47	45.50	0.6	SKO	160.74	310	ePKP	54	34.50	-2.0X			
PMG	38.59	297	eP	42	01.50	0.9	LDN	92.75	35	P	47	48.30	-0.7				i	55	18.00				
	0.7s	53.42nm				5.4mb	GMW	92.83	34	P	47	49.00	-0.3	DOU	160.86	354	PKP	54	40.80	4.5X			
QIS	39.03	275	iPc	42	05.50	1.3	BJI	93.16	316	eP	47	50.00	-0.9	OHR	161.57	308	ePKP	54	35.50	-1.9X			
WRA	43.78	273	Pd	42	44.40	1.1		1.0s		6.00nm			5.0mb	FLN	162.26	5	ePKP	54	36.70	-1.0			
	0.7s	239.40nm				6.1mb	RMW	93.25	35	P	47	51.50	0.3	VOY	162.27	331	e(PKP)	54	36.50	-1.5			
WB5	43.79	273	iPc	42	43.90	0.6	CHG	93.48	290	eP	47	53.50	0.6	HAU	162.70	349	ePKP	54	37.30	-1.0			
			eS	49	11.00		CHTO	93.48	290	eP	47	53.70	0.8		1.3s	28.90nm							
			eScS	51	29.70			1.2s		14.58nm			5 3mb		Z 21s	0.13um							
FORR	45.50	256	iPc	42	56.20	-0.7	ANMO	94.26	52	P	47	56.50	0.1	BSF	162.80	348	ePKP	54	37.20	-1.3			
	0.4s	84.00nm				6.1mb		0.8s		3.26nm			4.8mb		1.3s	28.90nm							
WARB	48.08	261	iPd	43	16.60	-0.8	PMR	95.34	14	eP	47	59.50	-0.9	LOR	163.73	355	ePKP	54	38.50	-0.8			
	0.4s	16.00nm				5.5mb		1.3s		15.80nm			5.3mb		1.4s	30.50nm							
MTN	49.75	280	eP	43	30.00	-0.3	TTA	95.37	10	e(P)	48	00.20	-0.5		Z 21s	0.20um							
	0.5s	116.00nm				6.1mb	PNT	95.58	34	eP	48	02.00	0.1	SSF	163.96	355	ePKP	54	39.40	-0.1			
KNA	50.38	275	eP	43	35.00	-0.1		0.6s		4.00nm			5.1mb	LBF	164.00	354	ePKP	54	38.80	-0.8			
MEKA	54.78	258	iPc	44	06.00	-1.9	BW06	96.86	44	P	48	07.00	-1.1		1.0s	12.00nm							
	0.6s	17.00nm				5.3mb	CNCB	98.00	115	P	48	15.00	0.7	SMF	164.35	354	ePKP	54	38.80	-1.1			
MUN	54.95	251	iPd	44	07.40	-1.6	LPB	98.06	115	P	48	16.00	1.6	BGF	164.51	357	ePKP	54	39.40	-0.7			
BAL	54.97	252	eP	44	07.00	-2.2	ZOBO	98.20	114	P	48	15.80	0.6		1.0s	14.00nm							
MBL	55.73	264	iPc	44	13.80	-1.0	FBA	98.60	13	eP	48	14.10	-1.0	ARV	164.68	327	PKP	54	39.00	-1.3			
	0.5s	43.00nm				5.7mb		0.8s		6.03nm			5.3mb	TCF	164.80	358	ePKP	54	39.70	-0.7			
MRWA	56.00	254	iPc	44	14.70	-2.0	YKA	106.19	26	ePKP	52	59.10	-1.8		1.0s	10.00nm							
	0.6s	23 00nm				5.4mb		0.6s		2.10nm				PGD	164.92	331	PKP	54	40.00	-0.7			
NANU	58.83	261	iPd	44	35.00	-1.7	KKN	108.78	292	PKP	53	00.00	-7.2X	LPG	165.05	346	ePKP	54	40.10	-0.9			
SPA	59.10	180	iPc	44	38.70	0.4	SOB1	122.89	127	ePKP	53	33.30	-0.8		0.8s	4.70nm							
	1.0s	105.00nm				5.9mb				e	53	40.30		BNI	165.49	346	PKP	54	41.00	-0.1			
			i	45	00.20		QUE	124.53	287	ePKP	53	36.90	-0.2	MNS	165.65	325	PKP	54	39.00	-2.2X			
AIA	71.45	156	eP	45	57.50	-0.2	SCH	126.99	42	ePKP	53	39.00	-1.9X	RJF	165.79	0	ePKP	54	40.60	-0.6			
MAW	71.56	201	iPc	45	57.60	-0.7	LSZ	127.31	213	iPKPd	53	42.10	-0.7		1.0s	14.00nm							
	0.9s	89.00nm				5.9mb		0.6s		24.40nm					Z 21s	0.15um							
KKM	72.44	288	ePd	46	03.20	-1.3	KMZ	129.98	211	iPKPd	53	47.00	-0.9	LFF	166.14	3	ePKP	54	41.10	-0.3			
OFUJ	79.07	329	P	46	40.60	-0.8		0.3s		25.10nm					1.0s	14.00nm							
AOMJ	80.85	329	eP	46	52.10	1.2	KEV	138.70	347	ePKP	53	56.00	-6.6X	CAF	166.16	359	ePKP	54	41.20	-0.3			
ADK	82.61	1	eP	46	58.70	-1.0				i	54	03.20			1.1s	17.10nm							
	0.6s	70.40nm				6.0mb	SOD	140.75	345	iPKP	53	58.30	-8.1X	LPO	166.41	1	ePKP	54	41.60	-0.1			
IPM	84.30	279	ePd	47	09.10	-0.2	SUF	144.63	341	iPKP	54	10.10	-3.1X		1.0s	16.00nm							
	1.0s	33.20nm				5.5mb		0.6s		93.40nm				EPF	168.02	4	ePKP	54	42.90	-0.1			
BLP	85.11	45	P	47	13.50	0.7	NUR	146.82	339	iPKP	54	15.40	-1.5		0.9s	11.45nm							

TOL 170.08 26 ePKP 54 45.50 1.2
IFR 173.80 65 iPKPc 54 47.20 0.9
S.D. = 1.0 on 126 of 176 obs.

? SEP 07, 1990 11h 57m 16.91± 3.29s
14.275 N ±27.6km 60.704 W ±49.4km
DEPTH = 70.0km (geophysicist)
WINDWARD ISLANDS (95)

MVM 0.33 326 iPd 57 28.55 0.1
S 57 38.80
BIM 0.43 304 iPd 57 29.21 -0.1
S 57 39.80
CRM 0.52 337 iPd 57 29.94 -0.1
S 57 41.10
FDF 0.63 317 iPd 57 31.41 0.2
0.1s 3.50nm
S 57 43.70
BBL 1.45 329 eP 57 41.00 -0.6
S 58 00.00
PAG 1.98 332 eP 57 49.50 0.5
S 58 14.00
S.D. = 0.5 on 6 of 6 obs.

? SEP 07, 1990 12h 32m 18.62± 1.44s
4.127 S ±16.6km 135.360 E ±18.0km
DEPTH = 33.0km (normol)
4.6mb (4 obs.)
WEST IRIAN REGION (196)

MTN 9.62 205 eP 34 39.00 1.1
eS 36 28.00
KNA 13.25 209 iPc 35 26.80 -0.2
WB5 15.69 183 iPc 35 58.10 -0.9
eS 38 51.50
WRA 15.75 184 Pc 35 58.90 -0.9
0.7s 21.60nm 4.4mb
QIS 16.85 166 e(P) 36 13.00 -0.7
e 36 20.00
eS 39 23.00
ASPA 19.48 184 iPd 36 46.60 0.7
0.5s 70.00nm 5.2mb
Z 19s 0.30um 4.0Msz
eS 40 23.10
LR 44 59.80
MBL 22.68 220 eP 37 18.00 -0.6
0.5s 6.00nm 4.3mb
WARB 23.47 200 iPd 37 17.40 -8.9X
0.4s 10.00nm 4.7mb
QLP 23.89 160 eP 37 33.00 2.7
e 37 42.00
BRS 28.49 146 eP 38 12.00 -1.1
CNCB 148.94 133 PKP 52 02.00 -0.3
LPB 149.03 132 PKP 52 00.00 -2.2X
ZOBO 149.18 132 PKP 52 02.70 0.0
S.D. = 1.2 on 11 of 13 obs.

% SEP 07, 1990 12h 50m 33.96± 0.76s
44.365 N ± 7.7km 7.380 E ± 5.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (GEN).

STV 0.13 198 P 50 37.53 0.4
S 50 40.19
ENR 0.14 168 P 50 37.50 0.1
S 50 40.00
PZZ 0.24 305 P 50 39.04 -0.2
S 50 43.01
ROB 0.36 101 P 50 41.86 0.5
S 50 46.60
IMI 0.58 141 P 50 45.45 -0.4
S 50 54.35
FIN 0.61 104 P 50 45.45 -0.9
S 50 55.17
PCP 0.85 78 P 50 50.96 0.5
S 51 02.35
S.D. = 0.7 on 7 of 7 obs.

% SEP 07, 1990 13h 03m 12.99± 0.72s
44.341 N ± 6.9km 8.205 E ± 5.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.1 (GEN).

FIN 0.13 179 P 03 16.32 0.1
S 03 18.27
ROB 0.24 259 P 03 18.07 -0.2
S 03 21.73
PCP 0.32 50 P 03 19.50 -0.1
S 03 24.69
IMI 0.49 208 P 03 22.89 0.0
S 03 29.80
ENR 0.58 259 P 03 24.34 -0.4
S 03 32.23
STV 0.64 262 P 03 26.06 0.2
S 03 34.78
PZZ 0.81 282 P 03 29.07 0.3
S 03 39.24
S.D. = 0.3 on 7 of 7 obs.

SEP 07, 1990 13h 07m 42.97± 0.75s
36.298 N ± 7.6km 27.196 E ± 8.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.7 (ATH).

KAP 0.75 181 ePn 07 57.50 -0.1
eSn 08 10.20
SMG 1.44 349 ePb 08 09.70 0.7
CIN 1.48 29 eP 08 08.00 -1.6
APE 1.54 300 ePn 08 10.50 -0.1
NPS 1.65 232 ePn 08 11.50 -0.6
ELL 2.23 78 ePn 08 21.70 1.1
VAM 2.59 251 ePb 08 30.50 4.9X
VLI 3.46 278 ePn 08 38.60 0.7
S.D. = 1.1 on 7 of 8 obs.

SEP 07, 1990 13h 14m 46.74± 0.78s
44.834 N ± 5.6km 111.781 W ± 7.8km
DEPTH = 5.0km (geophysicist)
HEBGEN LAKE REGION (458)
ML 3.0 (BUT).

LTMT 0.39 217 ePc 14 53.60 -1.0
BGMT 0.44 335 iPc 14 56.10 0.5
MCMT 0.76 270 iPd 15 01.90 -0.3
MEMT 0.96 36 ePd 15 04.00 -1.6
LRM 1.10 335 ePnc 15 07.90 -0.1
HBMT 1.12 329 ePnc 15 08.70 0.3
BUT 1.30 335 ePg 15 12.30 0.9
eSg 15 29.50
SXM 1.38 17 ePc 15 16.60 3.8X
HRY 1.88 359 ePn 15 19.70 -0.2
BW06 2.61 141 eP 15 32.00 1.5
S.D. = 1.1 on 9 of 10 obs.

• SEP 07, 1990 13h 23m 28.42± 1.02s
36.378 N ± 7.9km 27.221 E ±11.0km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.8 (ATH).

KAP 0.83 183 iPnd 23 44.80 0.4
SMG 1.36 347 ePn 23 53.20 -0.2
CIN 1.40 29 eP 23 54.00 0.0
APE 1.52 297 ePn 23 55.10 -0.6
NPS 1.72 230 ePn 23 57.60 -0.9
IZM 2.02 1 iPn 24 08.50 5.6X
ELL 2.19 80 ePn 24 08.70 3.1X
VAM 2.64 249 ePb 24 14.60 2.8X
KHL 2.67 43 ePn 24 18.00 5.7X
VLI 3.47 277 ePn 24 22.80 -0.7
ITM 4.32 282 ePn 24 37.80 2.1
S.D. = 1.2 on 7 of 11 obs.

? SEP 07, 1990 14h 17m 19.62± 7.73s
14.140 S ±68.7km 118.312 E ±32.3km
DEPTH = 10.0km (geophysicist)
4.1mb (3 obs.)
NORTHWEST OF AUSTRALIA (588)

MBL 7.13 168 iPd 19 07.10 0.6
0.2s 20.00nm 5.9mb X
eS 20 46.00
NANU 8.78 197 eP 19 29.00 -0.6
eS 21 22.00
WARB 14.30 148 eP 20 41.00 -3.3X
0.3s 4.00nm 4.6mb
eS 23 35.00
MRWA 15.16 188 eP 20 55.00 -0.5
0.3s 2.00nm 4.0mb
eS 23 51.00
BAL 16.46 185 eP 21 13.00 0.8
COOL 16.87 172 eP 21 16.00 -1.5
ASPA 17.52 125 iPc 21 25.70 0.0
0.6s 6.00nm 3.9mb
MUN 17.86 186 eP 21 31.00 1.1
S.D. = 1.1 on 7 of 8 obs.

? SEP 07, 1990 14h 39m 17.47± 8.96s
30.866 S ±73.2km 69.181 W ±20.7km
DEPTH = 158.6 ± 52.8 km
CHILE-ARGENTINA BORDER REGION (127)

RTCB 0.70 152 iPd 39 40.80 -0.5
RTLL 0.77 127 iPc 39 42.00 0.4
ZON 0.80 148 iPd 39 42.10 0.2
eS 39 55.10
RTBS 0.83 196 e(P) 39 41.30 -0.7
CFA 1.09 133 iPd 39 44.60 0.4
S 39 59.90
RTCV 1.13 151 ePd 39 44.00 -0.5
JACH 2.17 213 iPc 39 56.50 0.9
iS 40 20.60
PEL 2.61 209 eP 40 02.00 1.2
i 40 27.50
iS 40 29.30
ROCH 2.61 216 iP 40 01.20 0.1
iS 40 29.60
PCH 2.97 202 eP 40 06.00 0.6
iS 40 39.00
TACH 3.15 208 iP 40 07.20 -0.5
iS 40 42.00
CHCH 3.30 202 eP 40 09.50 -0.1
e 40 44.00
LNV 3.61 211 eP 40 12.00 -1.5
i 40 50.50
S.D. = 0.8 on 13 of 13 obs.

% SEP 07, 1990 14h 58m 41.18± 0.71s
60.654 N ± 5.5km 5.874 E ± 7.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.3 (BER).

ASK 0.38 243 eP 58 48.70 -0.2
HYA 0.54 16 eP 58 52.12 0.1
SUE 0.68 307 eP 58 54.50 -0.1
eS 59 05.20
ODD1 0.83 153 iPc 58 56.72 -0.6
eS 59 07.67
BLS2 1.46 158 iPd 59 07.90 0.2
iS 59 26.69
KMY 1.48 193 eP 59 08.46 0.6
iS 59 28.63
S.D. = 0.5 on 6 of 6 obs.

% SEP 07, 1990 15h 01m 07.66± 0.93s
44.185 N ± 9.0km 8.178 E ± 6.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

FIN 0.03 43 P 01 09.14 -0.6
S 01 10.57
ROB 0.25 296 P 01 13.14 0.2
S 01 17.34
IMI 0.34 217 P 01 14.88 0.1
S 01 19.80
PCP 0.44 36 P 01 17.03 0.3
S 01 23.80
ENR 0.55 275 P 01 18.37 -0.4
S 01 26.47
STV 0.62 276 P 01 20.31 0.2
S 01 28.41
S.D. = 0.5 on 6 of 6 obs.

& SEP 07, 1990 15h 20m 28.83s
61.248 N 141.638 W
DEPTH = 0.0km
SOUTHERN ALASKA (2)
<AGS-P>. ML 3.6 (PMR).

BALM 0.40 239 iP 20 37.59 0.7
TGL 0.76 230 iP 20 43.41 -0.6
eS 20 55.26
GLB 1.07 281 iP 20 49.19 -0.7
SNH 1.22 209 eP 20 51.90 -0.7
eS 21 09.93
WRG 1.23 189 eP 20 50.68 -2.0

07d 15h

			eS	21	09.46			ANT	3.21	279	iPc	10	12.10	1.5		0.8s	45.50nm		5.3mb				
CYK	1.24	200	eP	20	51.93	-0.9					iS	10	42.30			RSNY	68.82	354	P	20	06.10	-2.0
			eS	21	10.52			CCH	6.89	7	P	11	02.10	2.6		1.0s	28.92nm		5.0mb				
HMT	1.58	236	eP	20	58.45	0.3		RTLL	7.17	190	e(P)	11	02.50	-0.5		ANMO	69.78	326	P	20	13.00	-1.4
			eS	21	23.50			RTCB	7.38	192	ePc	11	05.90	0.0					pP	21	21.00	297kmX
RAGM	1.72	241	eP	21	00.61	0.4		CFA	7.41	189	eP	11	05.30	-0.9		CBM	70.86	359	P	20	20.00	-0.4
			eS	21	28.03						S	12	26.70			GLA	73.00	319	eP	20	33.00	-0.4
KAIM	1.91	227	eP	21	03.53	0.6		CNCB	7.47	352	iPd	11	10.00	2.4		GLD	73.01	330	P	20	33.20	-0.3
			eS	21	30.17			RTBS	7.70	196	e(P)	11	10.60	0.6			1.4s	155.41nm			5.5mb	
YKU	1.95	150	eP	21	00.70	-2.7		RTCV	7.70	190	eP	11	10.00	-0.1		GOL	73.03	330	P	20	32.50	-1.3
KLU	2.08	279	eP	21	05.89	0.4		LPB	7.76	352	P	11	12.00	0.7			1.2s	77.87nm			5.3mb	
CVA	2.13	252	eP	21	06.61	0.5					i	11	14.00			BAR	73.85	318	eP	20	39.00	0.7
TMW	2.18	344	eP	21	08.51	1.6					S	13	20.00			TBI	74.31	251	iP	20	42.00	0.8
VLZ	2.28	269	eP	21	08.45	0.2		ZOBO	8.02	352	iPd	11	16.00	1.0			1.1s	195.00nm			5.7mb	
TOA	2.33	294	eP	21	12.30	3.2					i	12	32.00			PLM	74.43	318	eP	20	42.00	0.1
VZW	2.39	268	eP	21	10.15	0.2		MDZ	8.75	191	eP	11	23.60	-0.4		TPC	74.46	319	eP	20	43.00	1.1
HIN	2.53	252	eP	21	12.73	0.8					e	11	40.40			PEC	74.98	319	P	20	44.90	0.1
DOT	2.66	336	eP	21	18.24	4.5		ARE	8.85	330	eP	11	25.00	-0.6		RVR	75.18	319	eP	20	46.00	0.1
SCM	2.79	285	eP	21	17.70	2.1					iS	12	57.00			RUV	75.35	260	iP	20	48.80	1.6
MID	2.97	234	eP	21	18.54	0.5		JACH	8.98	200	eP	11	28.50	1.4			1.3s	145.00nm			5.5mb	
DWY	2.99	19	P	21	16.20	-2.3		PEL	9.44	199	eP	11	31.00	-2.0		MSU	75.46	325	P	20	47.80	0.1
DDM	3.21	324	eP	21	25.45	3.8					i	11	34.00			VAH	75.55	260	iP	20	49.90	1.5
WHC	3.23	96	P	21	22.20	0.4					i(S)	13	11.60				1.3s	250.00nm			5.8mb	
SML	3.26	283	eP	21	23.74	1.5		FCH	9.49	197	iPd	11	35.50	1.4		TPT	75.64	260	iP	20	50.60	1.7
GHO	3.53	282	eP	21	26.52	0.4					i	13	16.50				1.3s	240.00nm			5.8mb	
PLRM	3.62	279	eP	21	28.43	1.2		IHA	9.65	204	eP	11	47.50	11.7X		GSC	75.74	320	eP	20	49.00	-0.2
PMR	3.62	279	eP	21	30.10	2.8					e(S)	13	19.50			MWC	75.75	318	eP	20	50.00	0.6
			i	21	33.00			PCH	9.83	198	eP	11	38.00	-0.3		PAS	75.77	318	eP	20	50.00	0.8
PMS	3.83	273	eP	21	31.78	1.4		SIV	9.91	35	iPc	11	39.40	0.1		PMO	75.88	260	iP	20	51.90	1.7
SEW	4.01	257	eP	21	31.59	-1.2		TACH	9.99	200	eP	11	39.00	-1.2			1.3s	250.00nm			5.8mb	
NCG	5.07	276	eP	21	48.37	0.3		LCCH	10.03	203	eP	11	38.00	-2.8		SBB	75.92	319	eP	20	50.00	-0.2
CRP	5.08	275	eP	21	49.17	1.0		CHCH	10.16	198	eP	11	41.00	-1.6		DAU	76.41	327	P	20	53.00	-0.1
CKL	5.17	274	eP	21	50.08	0.6					e	13	09.00			PAE	76.41	257	iP	20	55.00	1.8
BGL	5.19	275	eP	21	49.54	-0.2		LNV	10.41	201	eP	11	41.50	-4.3X			1.3s	195.00nm			5.7mb	
RDT	5.30	267	eP	21	51.11	-0.1		PPD	14.56	84	eP	12	39.40	0.1		PPT	76.44	257	iP	20	55.20	1.8
SIT	5.31	140	e(P)	21	47.90	-3.4					i	12	43.50				1.3s	205.00nm			5.7mb	
RSO	5.49	267	eP	21	53.58	-0.5					i	14	27.40			CLC	76.56	320	eP	20	54.00	0.3
PDB	6.37	262	eP	22	06.23	0.0		VAO	18.36	90	iPc	13	23.90	-0.8		AFR	76.63	257	iP	20	56.20	1.8
CDD	6.44	254	eP	22	07.36	0.1					e	13	27.40				1.3s	125.00nm			5.5mb	
SVW	6.76	275	eP	22	10.60	-1.3					e	13	34.30			ABL	76.88	318	P	20	55.70	0.0
TTA	6.96	290	e(P)	22	14.70	0.1					e	13	36.70			ISA	76.98	319	eP	20	57.00	1.0
	40 obs. ossociated										e	13	41.50			DUG	77.04	326	P	20	56.00	-0.4
----------											e	13	46.10			SYP	77.13	317	eP	20	58.00	1.0
% SEP 07, 1990 15h 28m 53.49± 1.11s								BAO	19.77	68	iPc	13	39.00	-0.4		BCH	77.63	318	P	21	00.00	0.3
61.316 N ± 9.8km 5.734 E ± 8.7km											e	13	53.70			FRI	78.61	319	eP	21	04.10	-0.7
DEPTH = 10.0km (geophysicist)											e	14	07.90			PRI	78.62	318	eP	21	05.70	0.6
SOUTHERN NORWAY (535)											e	14	18.70			SCH	78.75	0	eP	21	05.00	-0.2
MD 1.6 (BER).											e	14	24.40			PTI	78.81	328	P	21	06.00	0.0
											e	14	31.00			KVN	79.08	322	P	21	07.00	-0.6
HYA	0.27	124	iPc	28	58.20	-0.9					e	14	38.40						pP	22	16.00	295kmX
			eS	29	01.87						e	14	45.00			LLA	79.10	318	eP	21	08.00	0.5
SUE	0.54	242	iPc	29	04.05	-0.3					e	15	30.50			PRS	79.17	318	eP	21	08.60	0.7
			eS	29	11.94			SOB1	29.02	63	eP	15	04.70	-1.9		TIO	79.23	49	iP	21	09.50	1.0
ASK	0.88	198	eP	29	09.93	-0.4					i	21	36.50			ARN	79.93	319	P	21	12.00	0.0
			iS	29	22.23			CAI	33.60	63	ePc	15	45.80	-0.8		MHC	79.99	319	eP	21	13.20	0.7
MOL	1.52	33	eP	29	20.85	0.1		UPA	35.25	338	iPd	16	01.50	1.0		GCC	80.01	318	eP	21	12.80	0.5
			eS	29	40.95				0.9s	194.96nm			5.8mb			AVE	80.55	47	iP	21	16.00	0.7
BLS1	2.01	164	eP	29	29.33	1.5		AIA	41.02	178	iP	16	48.80	0.8		BKS	80.70	319	iPd	21	16.30	0.3
			eSg	29	55.79			HBF	58.30	347	P	18	58.80	-0.7			1.1s	113.00nm			5.5mb	
S.D. = 1.3 on 5 of 5 obs.								SGS	58.57	347	P	19	01.40	-0.1		BRK	80.71	319	eP	21	16.50	0.5
----------								JSC	59.78	346	P	19	08.80	-0.9		LRM	81.06	330	ePd	21	18.30	0.3
SEP 07, 1990 16h 09m 19.62± 0.46s								PRM	59.84	345	P	19	09.20	-1.0		MAW	81.18	163	iPd	21	18.50	0.5
24.260 S ± 3.2km 66.957 W ± 4.4km								LHS	59.88	347	P	19	09.20	-1.2			1.0s	123.00nm			5.6mb	
DEPTH = 161.4 ± 4.6 km								TKL	61.68	344	P	19	20.50	-2.1		ORV	81.36	320	eP	21	19.80	0.4
5.5mb (41 obs.)								GBTN	61.80	344	P	19	21.20	-2.1		IFR	82.22	48	iPc	21	25.00	0.8
SALTA PROVINCE, ARGENTINA (129)								RSCP	62.09	343	P	19	23.00	-2.3		WDC	82.64	321	eP	21	24.80	-1.2
Felt (IV) at Taltal and (III) at									0.9s	102.23nm			5.7mb			EVAL	83.56	44	eP	21	32.00	1.2
Mejillones, Chile.								BLA	62.44	348	P	19	26.80	-0.8		FHC	83.62	320	eP	21	31.80	0.8
CENTROID, MOMENT TENSOR (HRV)									0.9s	49.59nm			5.4mb			SES	83.93	333	ePd	21	31.60	-0.8
Data Used: GDSN								NAV	62.62	348	P	19	27.60	↳1.2			1.0s	89.00nm			5.5mb	
L.P.B.: 12S, 25C								UYO	63.71	335	iPc	19	34.50	-1.5					pP	22	20.00	197kmX
Centroid Location:								OLY	63.81	338	P	19	34.10	-2.5		SLR	84.19	115	iPd	21	34.20	-0.2
Origin Time 16:09:29.7 0.4								POW	64.30	338	P	19	37.80	-1.9			0.9s	85.71nm			5.6mb	
Lat 24.29S 0.07 Lon 66.74W 0.05								ELC	64.71	340	P	19	40.00	-2.3		FFC	84.22	340	iPd	21	33.10	-0.5
Dep 191.4 2.2 Half-duration 1.9								FVM	65.72	340	P	19	47.10	-1.7			1.1s	58.00nm			5.3mb	
Moment Tensor; Scale 10**17 Nm								TUL	65.76	335	iPd	19	48.00	-1.1		EVA	84.53	116	iPd	21	37.00	0.8
Mrr=-0.79 0.05 Mtt=-0.66 0.09									0.8s	96.10nm			5.7mb				0.9s	168.07nm			5.8mb	
Mff= 1.45 0.08 Mrt= 0.20 0.06								SIO	65.82	334	iP	19	48.00	-1.5		ATEJ	84.93	46	iP	21	39.00	1.2
Mrf=-0.82 0.05 Mtf=-0.01 0.08								SPA	65.88	180	iPd	19	49.30	-0.6		ALOJ	84.98	46	iP	21	39.20	1.2
Principal Axes:									1.0s	130.00nm			5.8mb			AAPN	85.09	45	iP	21	39.40	0.9
T Val= 1.72 Plg=18 Azm= 88								MEO	65.94	332	iPd	19	48.30	-2.0		APHE	85.16	46	iP	21	39.50	0.6
N -0.59 20 351								LIC	67.48	72	Pc	19	58.76	-1.7		DPW	85.26	328	P	21	38.80	-0.3
P -1.13 62 217								TIC	67.69	71	P	20	00.26	-1.5		ASMO	85.36	46	iP	21	40.50	0.6
Best Double Couple:Mo=1.4*10**17									0.9s	35.00nm			5.2mb			EPLA	85.47	42	eP	21	41.60	1.3
NP1:Strike=207 Dip=32 Slip= -50								KIC	67.80	72	Pc	20	00.98	-1.4		EBAN	85.80	45	eP	21	43.00	1.1
NP2: 342 66 -112									0.7s	81.50nm			5.6mb			LON	86.29	326	P	21	43.00	-1.2
								LKO	68.65	68	Pc	20	04.22	-3.5X		TOL	86.62	43	eP	21	48.00	2.1

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                eS     32 11.00
BUL    86.75 111 iPd    21 47.00   -0.2
       1.0s     65.00nm          5.5mb
EVIA   86.89  45 eP     21 49.00    1.7
PNT    86.94 329 ePd    21 47.00   -0.2
       0.9s     60.00nm          5.5mb
GUD    87.00  43 eP     21 48.50    0.7
EDM    87.02 334 iPd    21 46.20   -1.3
       1.0s    185.00nm          5.9mb
KMZ    87.06 103 iPd    21 49.90    1.2
BCAO   87.70  84 iPc    21 52.10    0.5
       0.8s     65.00nm          5.6mb
PGC    88.38 326 eP     21 54.00    0.0
       1.1s    124.00nm          5.8mb
LSZ    88.40 106 iPd    21 57.00    1.9
       0.8s     44.70nm          5.5mb
                i      22 09.30
                i      22 43.00
EPF    91.12  43 eP     22 07.40    0.4
       0.6s      4.95nm          4.8mb
PTZ    91.59 106 iPd    22 19.60    9.7X
       1.0s     39.10nm          5.5mb
MFF    92.76  39 eP     22 14.40    0.0
       0.7s      9.90nm          5.1mb
CAF    93.18  42 eP     22 15.60   -0.8
       0.7s      4.95nm          4.8mb
GRR    93.33  38 eP     22 16.20   -0.7
       0.8s     13.45nm          5.2mb
YKA    94.38 340 eP     22 14.10   -7.4X
       0.8s     21.40nm          5.4mb
SMF    95.12  41 eP     22 24.90   -0.4
       0.7s      4.40nm          4.9mb
LPL    96.33  43 eP     22 31.70    0.6
       0.8s      6.70nm          5.1mb
LPG    96.34  43 eP     22 32.00    0.8
       0.8s      6.70nm          5.1mb
SQTA   99.87  43 iPc    22 47.40    0.5
       1.4s     41.70nm          5.8mb
                i      22 50.80
                i      23 35.70
INK   104.14 339 ePdiff23 05.00   -0.3
QIS   128.49 212 iPKPd 28 08.90   -0.5
WRA   131.41 207 PKPc   27 59.50 -15.5X
       0.7s      1.80nm
WB5   131.46 207 ePKP   28 02.30 -12.8X
                i      28 14.00
                eSKP   31 22.10
OUE   138.80  71 iPKPd 28 29.80    0.9
KOD   143.40 106 ePKP   28 35.40   -2.1X
GBA   144.79 101 PKP    28 38.20   -1.2
HYB   147.12  95 ePKP   28 43.50    0.2
       1.0s     80.00nm
                e      29 34.00
NDI   147.71  74 iPKPd 28 43.80   -0.1
       0.7s     65.07nm
KUSJ  147.90 314 ePKP   28 43.30   -0.5
GUA   148.09 256 ePKP   28 47.60    2.7X
       0.8s    405.97nm
GUMO  148.15 256 ePKP   28 47.50    2.6X
       1.0s    696.00nm
PJG   148.15 256 ePKP   28 47.60    2.7X
ASAJ  148.76 317 ePKP   28 45.70    0.6
HOOJ  149.16 313 ePKP   28 46.60    0.9
OFUJ  151.65 308 PKP    28 55.90    6.3X
AOMJ  151.93 312 PKP    28 56.90    6.9X
YAMJ  153.19 308 PKP    28 59.30    7.5X
KAKJ  153.80 303 ePKP   28 58.90    6.2X
GKN   154.25  76 PKP    28 53.80    0.0
NIIJ  154.31 306 ePKP   28 53.30   -0.1
CHJJ  154.75 304 ePKP   28 54.30    0.3
KKN   154.83  76 PKP    28 54.60    0.0
PKI   154.95  76 PKP    28 54.80   -0.2
GUN   155.35  76 PKP    28 55.80    0.3
MTMJ  155.44 306 ePKP   28 58.70    3.6X
IIDJ  155.77 303 ePKP   29 05.00    9.5X
TSRJ  157.21 305 ePKP   28 54.40   -2.9X
SHL   160.76  82 iPKP   29 01.60   -0.1
BJI   164.05 351 ePKP   29 04.50    0.2
       1.8s     41.00nm
LZH   165.79  32 PKPd   29 07.50    1.4
       2.0s     61.00nm
CHG   165.81 110 ePKPd  29 06.80    0.4
       1.3s     23.08nm
     S.D. = 1.1  on 151 of 169 obs.
-------------------------------------
&  SEP 07, 1990  16h 22m 04 44s
   62.111 N          150.874 W

    DEPTH =  64.0km
  CENTRAL ALASKA                    (  1)
       <AGS-P>.

SKT      0.34 247 iP     22 14.83   -0.6
CUT      0.41  44 iP     22 15.51   -0.5
SUA      0.65 174 iP     22 18.39   -0.3
                 iS     22 29.93
PWA      0.66 134 iP     22 18.30   -0.3
                 eS     22 29.69
NCG      0.94 221 iP     22 21.33   -0.9
                 eS     22 35.02
CGLM     0.97 214 iP     22 21.79   -0.8
                 eS     22 35.98
PLRM     0.98 121 eP     22 21.68   -0.9
GHO      0.98 109 iP     22 22.24   -0.5
                 eS     22 35.80
HUR      1.04  33 iP     22 22.51   -1.0
                 eS     22 35.98
CRP      1.04 216 iP     22 22.96   -0.7
                 eS     22 37.68
PMS      1.07 144 eP     22 23.13   -0.8
                 eS     22 37.75
SPU      1.09 212 iP     22 23.25   -0.9
                 eS     22 38.79
BGL      1.12 221 iP     22 24.04   -0.5
CKL      1.15 218 iP     22 24.32   -0.7
SML      1.24 103 eP     22 25.32   -0.8
NKA      1.38 187 eP     22 29.00    1.0
SCM      1.70  98 iP     22 31.49   -1.0
RDT      1.71 206 eP     22 31.54   -1.1
MCK      1.85  28 eP     22 33.35   -1.2
RSO      1.89 210 iP     22 34.29   -0.9
NNL      2.09 186 eP     22 38.07    0.3
SEW      2.13 160 eP     22 38.40    0.1
TOA      2.21  88 eP     22 38.58   -1.0
BRLK     2.36 180 eP     22 41.63    0.1
VLZ      2.38 112 eP     22 39.18   -2.7
KLU      2.43 103 eP     22 40.55   -2.1
SVW      2.48 248 eP     22 41.28   -2.1
HOM      2.49 189 eP     22 43.58    0.2
CNPM     2.60 184 eP     22 44.83   -0.1
WRH      2.68  27 eP     22 44.04   -2.1
OPT      2.72 206 eP     22 46.49   -0.2
PDB      2.84 216 eP     22 46.67   -1.6
DDM      2.84  51 eP     22 47.86   -0.6
CCB      2.90  27 eP     22 46.77   -2.3
HDA      2.91  36 eP     22 47.24   -2.0
FBA      3.12  25 eP     22 50.08   -2.2
GLM      3.28  27 eP     22 52.34   -2.3
GLB      3.42  98 eP     22 55.04   -1.5
BALM     4.22 101 eP     23 04.64   -3.2
        39 obs. associated
-------------------------------------
?  SEP 07, 1990  17h 06m 44.12± 4.98s
    16.282 N ±13.5km   60.621 W ±39.9km
    DEPTH =  29.1 ± 10.7 km
  LEEWARD ISLANDS                   ( 92)
       ML 2.9 (FDF).

SFG      0.55 267 iPd    06 55.28   -0.1
                 S      07 02.00
MGG      0.76 242 iPd    06 58.61   -0.1
                 S      07 07.60
SEG      0.86 278 iPd    07 00.02   -0.1
                 S      07 09.50
DOG      0.99 256 eP     07 02.23    0.2
PAG      1.05 256 ePd    07 02.95    0.0
                 S      07 15.00
BBL      1.12 228 ePd    07 03.84    0.0
                 S      07 16.90
BPA      1.41 303 eP     07 08.00    0.0
      S.D. = 0.1  on   7 of   7 obs.
-------------------------------------
*  SEP 07, 1990  17h 36m 35.81± 1.00s
    4.420 S ±11.5km  147.631 E ±12.7km
    DEPTH =  33.0km  (normal)
    4.9mb (  9 obs.)  4.7Msz (  2 obs.)
  BISMARCK SEA                      (203)

LAT      2.31 196 eP     37 12.00   -0.3
MNDI     4.32 246 eP     37 46.00    5.0X
RAB      4.53  87 eP     37 36.00   -7.9X
                 e(S)   38 28.00
PMG      4.98 185 eP     37 46.00   -4.3X
QIS     17.84 205 eP     40 43.00   -0.3
MTN     18.32 242 eP     40 48.00   -1.3

       0.4s    195.00nm          5.6mb
WB5    20.08 219 eP     41 08.20   -1.3
WRA    20.14 219 Pd     41 08.30   -1.9
       0.7s    125.30nm          5.4mb
OLP    22.28 188 eP     41 33.00    1.2
ASPA   23.27 213 eP     41 42.20    0.6
     Z  18s      2.12um          4.6Msz
                eS     45 59.70
                LR     51 32.00
BRS    23.37 168 iPd    41 42.00   -0.4
DZM    25.30 136 iPc    41 59.00   -2.2
STK    27.90 191 iPc    42 25.30    0.4
       1.3s      8.00nm          4.3mb
     Z  18s     31.00um          5.9MszX
WARB   29.53 221 eP     42 41.00    1.3
       0.4s      7.00nm          4.8mb
BWA    29.86 179 eP     42 42.90    0.3
CAN    30.77 178 eP     42 51.20    0.6
CNB    30.78 177 eP     42 52.00    1.3
       1.1s     26.00nm          4.9mb
TOO    33.05 183 eP     43 11.10    0.6
       1.1s     20.00nm          4.9mb
MRWA   38.81 227 iPc    44 00.60    1.1
       0.7s     12.00nm          4.8mb
CHTO   53.20 297 eP     45 54.00    0.4
       0.9s      1.71nm          4.0mb
LZH    57.44 318 Pc     46 24.00   -0.2
       1.8s     57.00nm          5.3mb
     Z  22s      0.70um          4.7Msz
                pP     46 31.00  23kmX
     S.D. = 1.1  on  18 of  21 obs.
-------------------------------------
    SEP 07, 1990  18h 05m 26.02± 0.35s
    1.078 S ± 3.7km  124.582 E ± 5.0km
    DEPTH =  59.4 ±  3.1 km
    5.5mb ( 32 obs.)
  MOLUCCA SEA                       (269)
      CENTROID, MOMENT TENSOR       (HRV)
      Data Used: GDSN
      L.P.B.: 14S, 25C
      Centroid Location:
      Origin Time        18:05:31.2 0.7
      Lat  1.02S 0.06 Lon 124.71E 0.04
      Dep  56.7 3.6 Half-duration  1.9
      Moment Tensor;    Scale 10**17 Nm
        Mrr= 1.22 0.05  Mtt= 0.24 0.06
        Mff=-1.45 0.09  Mrt= 0.28 0.08
        Mrf= 0.35 0.07  Mtf= 0.08 0.05
      Principal Axes:
        T  Val=  1.33  Plg=74  Azm=333
        N        0.16       14      180
        P       -1.50        7       89
      Best Double Couple:Mo=1.4*10**17
       NP1:Strike=162 Dip=40 Slip=  67
       NP2:          11      54      108

MNI      2.52   6 ePc    06 07.20    1.9
                 eS     06 25.00
MKS      6.55 231 iPd    07 02.30    0.3
                 i(S)   08 13.00
BKB2     7.69 269 iPd    07 18.60    0.8
DAV      8.17   7 eP     07 26.00    1.5
KKM     10.95 310 ePd    08 03.50    0.9
       1.0s     70.60nm          5.7mb
                e      10 20.00
MTN     13.37 151 iPd    08 33.80   -0.9
       0.4s     85.00nm          5.8mb
BAG     17.82 347 eP     09 30.00   -1.8
WB5     21.00 153 iP     10 03.10   -3.7X
                eS     13 56.60
WRA     21.04 154 Pd     09 59.40   -7.8X
       0.7s      4.40nm          3.9mb X
KGM     21.48 278 ePd    10 12.50    0.8
                e      10 25.90
NANU    23.10 202 eP     10 27.40   -0.1
PMG     23.93 111 eP     10 31.00   -4.7X
IPM     24.20 284 ePc    10 39.90    1.6
       0.9s    243.70nm          5.7mb
                e      10 49.50
ASPA    24.20 159 iPc    10 37.30   -1.0
       1.9s    209.00nm          5.3mb
     Z  20s      1.48um          4.5Msz
                ePcP   14 18.80
                eS     14 53.50
                LR     20 48.20
QIS     24.30 144 iPc    10 38.10   -1.1
GUMO    24.83  53 eP     10 54.50   10.1X
```

07d 18h

		eS	15 00.00			
PJG	24.83	53 eP	10 54.50	10.1X		
GUA	24.84	54 eP	10 54.70	10.2X		
	0.8s	83.58nm				
WARB	25.04	176 eP	10 45.00	-1.3		
	0.4s	19.00nm		4.9mb		
SNG	25.28	289 eP	10 48.90	0.3		
	1.1s	118.99nm		5.3mb		
		eS	15 47.00			
MEKA	26.05	192 eP	10 55.00	-0.6		
	0.4s	13.00nm		4.8mb		
NNT	28.15	300 eP	11 14.00	-0.9		
LOE	29.06	310 iPd	11 21.60	-1.5		
MRWA	29.16	196 eP	11 22.00	-1.8		
	0.4s	3.00nm		4.3mb X		
NST	29.34	306 iPd	11 25.00	-0.6		
FORR	29.80	174 eP	11 27.50	-2.0		
	0.4s	50.00nm		5.6mb		
COOL	29.82	186 eP	11 25.00	-4.8X		
BAL	30.30	194 eP	11 32.00	-2.0		
BDT	31.10	307 ePd	11 38.50	-2.6		
	1.0s	103.50nm		5.5mb		
MUN	31.73	194 eP	11 45.00	-1.5		
CHG	32.02	309 ePc	11 48.00	-1.3		
	1.1s	132.28nm		5.7mb		
SSE	32.16	355 Pd	11 51.00	0.8		
	1.4s	9.00nm		4.4mb X		
Z	20s	0.90um		4.5Msz		
		sP	12 04.50			
		eS	17 40.00			
NWAO	32.43	192 eP	11 51.00	-1.5		
KAGJ	32.64	10 eP	11 53.10	-1.3		
KUMJ	33.95	9 P	12 04.50	-1.3		
STK	34.59	154 iPd	12 10.10	-1.2		
	1.6s	19.00nm		4.8mb		
		iPcP	14 45.30			
SHNJ	35.55	9 P	12 18.40	-1.0		
TKSJ	35.99	13 eP	12 22.60	-0.6		
ADE	36.20	160 iPc	12 24.50	-0.5		
SHK	36.23	11 eP	12 24.50	-0.7		
WKYJ	36.60	15 P	12 28.60	0.2		
YONJ	37.02	12 P	12 31.40	-0.4		
BRS	37.62	137 iPc	12 36.50	-0.5		
		e	12 44.00			
TSRJ	37.95	15 P	12 39.60	0.0		
CHJJ	39.30	19 P	12 49.00	-1.9		
MTMJ	39.44	17 P	12 51.20	-1.0		
KAKJ	39.83	20 P	12 52.60	-2.7		
BWA	39.96	149 eP	12 58.00	1.6		
		e	13 21.80			
NIIJ	40.40	18 P	12 58.60	-1.3		
CAN	40.95	149 eP	13 05.50	0.9		
		e	13 29.50			
TOO	41.11	154 eP	13 07.00	1.2		
	1 4s	42.00nm		5.0mb		
CNB	41.14	149 eP	13 07.70	1.6		
	1.2s	28.00nm		4.9mb		
SHL	41.24	312 iP	13 05.50	-1.7		
		iS	18 35.00			
YAMJ	41.58	18 P	13 09.30	-0.3		
BJI	41.64	350 eP	13 08.50	-1.5		
	1.5s	211.00nm		5.7mb		
Z	26s	0.99um		4.6MszX		
LZH	41.72	334 Pd	13 10.50	-0.5		
	2.0s	214.00nm		5.6mb		
Z	22s	3.00um		5.1Msz		
E	11s	0.60um				
		pP	13 26.00	61kmX		
		sP	13 34.00			
		PP	14 44.00			
		eS	19 32.00			
		eSS	22 45.00			
OFUJ	42.94	20 P	13 21.30	0.6		
AOMJ	43.87	17 P	13 28.90	0.7		
DZM	45.76	120 iPc	13 42.90	-0.8		
MRRJ	45.79	17 eP	13 42.90	-0.6		
HOOJ	46.44	19 P	13 49.60	1.0		
GUN	47.01	311 P	13 52.00	-1.9		
PKI	47.20	310 P	13 53.20	-2.1		
KKN	47.41	310 P	13 54.40	-2.5		
KUSJ	47.55	20 eP	13 57.10	-0.4		
ASAJ	47.80	18 P	13 59.00	-0.4		
GKN	48.01	310 P	13 59.20	-2.3		
KOD	48.21	285 eP	14 02.20	-1.2		
HYB	48.91	294 ePc	14 11.50	3.1X		
	1.0s	80.00nm		5.7mb		
GBA	48.94	289 P	14 07.00	-1.6		
POO	53.52	294 eP	14 42.50	-0.7		
NDI	54.12	307 iPd	14 43.80	-3.6X		
	0.7s	20.55nm		5.3mb		
		eS	22 14.50			
MSZ	57.86	145 P	15 13.70	-0.2		
KHZ	60.09	140 P	15 28.50	-0.9		
PGZ	61.06	137 P	15 35.60	-0.5		
QUE	62.99	305 eP	15 46.00	-3.5X		
SMY	67.67	30 P	16 20.00	1.1		
MAIO	70.78	309 eP	16 38.00	-0.5		
	1.2s	18.06nm		4.9mb		
ADK	72.12	34 P	16 46.50	0.5		
	0.9s	62.50nm		5.5mb		
MAW	78.53	200 iP	17 22.70	0.5		
TAB	81.42	309 eP	17 39.00	0.6		
NPA	85.21	255 eP	18 00.20	2.3		
IMA	87.62	24 P	18 10.00	1.0		
NAI	87.76	269 eP	18 15.00	4.2X		
CSTJ	88.76	301 Pd	18 13.00	-2.0		
SPA	88.93	180 iPc	18 15.80	0.6		
	1.1s	56.55nm		5.8mb		
Z	19s	0.76um		5.1Msz		
PMR	89.17	29 P	18 15.70	-0.5		
	1.2s	34.09nm		5.5mb		
SHMJ	89.58	303 Pc	18 20.10	1.3		
HRI	89.61	303 eP	18 20.50	1.4		
BHL	89.70	304 P	18 20.00	0.5		
SHWJ	89.75	300 Pc	18 21.90	2.0		
ATZ	90.00	303 eP	18 22.50	1.7		
RMN	90.50	300 eP	18 24.50	1.3		
AKSR	91.86	293 iPc	18 31.00	1.6		
AMAN	91.94	294 iPd	18 31.50	1.7		
AGAL	92.04	293 iPd	18 32.00	1.8		
BBTK	92.09	310 iPd	18 31.00	0.7		
AKRL	92.14	293 iPc	18 30.70	0.0		
AGMR	92.30	293 eP	18 34.00	2.6		
PTZ	92.88	256 iPc	18 42.90	8.5X		
	1.0s	30.40nm		5.7mb		
		i	19 05.00			
KEV	93.64	340 eP	18 36.00	-0.7		
SOD	94.06	337 eP	18 37.00	-1.7		
ELL	94.39	307 iP	18 41.20	0.2		
SUF	94.83	333 iP	18 41.00	-1.3		
	0.6s	4.70nm		5.1mb		
SLR	95.21	244 iPd	18 44.00	-1.1		
	0.9s	21.01nm		5.6mb		
INK	95.39	21 eP	18 45.00	0.2		
	1.0s	37.00nm		5.8mb		
NUR	95.83	331 eP	18 46.00	-0.9		
LSZ	95.89	255 iPd	18 49.00	0.8		
	0.9s	27.80nm		5.8mb		
		i	19 09.70			
		i	22 40.00			
KMZ	98.26	256 iPc	19 09.00	10.1X		
KRA	100.21	321 ePdiff	19 07.10	0.1		
		e	19 18.10			
HFS	101.22	332 ePdiff	19 09.20	-2.0X		
	0.5s	2.40nm		5.1mb		
DAG	101.71	352 ePdiff	19 12.00	-1.1		
	0.6s	6.67nm		5.5mb		
NB2	102.08	333 Pdiff	19 13.40	-1.7		
	0.7s	2.60nm		5.0mb		
KSP	102.32	322 ePdiff	19 17.50	1.1		
PRU	103.62	321 Pdiffd	19 23.20	1.0		
BRG	103.75	322 iPdiff	19 23.60	0.9		
	2.0s	22.00nm		5.6mb		
		e	23 11.60			
CLL	104.20	323 iPdiff	19 26.50	1.8		
	1.3s	16.00nm		5.7mb		
MOX	105.24	323 ePdiff	19 31.00	1.6		
BCAO	106.08	274 iPdiff	19 35.10	1.1		
	0.8s	7.00nm		5.8mb		
BCAO	106.08	274 iPKPd	23 47.30	1.1		
	0.8s	10.00nm				
BSF	109.14	321 ePKP	23 50.80	-0.3		
LPG	109.97	319 ePKP	23 54.00	1.1		
	0.8s	4.05nm				
LPL	109.98	319 ePKP	23 53.80	0.9		
	0.8s	5.35nm				
LOR	111.20	321 ePKP	23 55.00	0.2		
	1.2s	11.90nm				
Z	21s	0.40um		5.0Msz		
LBF	111.23	321 ePKP	23 55.00	0.1		
SSF	111.50	321 ePKP	23 55.60	0.2		
	1.0s	13.00nm				
KVN	111.66	48 PKP	23 57.80	1.6		
AVF	111.70	321 ePKP	23 56.50	0.8		
	0.8s	2.70nm				
BGF	112.11	321 ePKP	23 57.10	0.5		
	1.0s	14.00nm				
TCF	112.62	321 ePKP	23 58.10	0.5		
	1.1s	12.20nm				
LFF	114.12	320 ePKP	24 01.90	1.4		
ASMO	120.35	314 ePKP	24 12.50	-0.3		
APHE	120.48	313 ePKP	24 13.50	0.4		
GOL	120.54	43 PKP	24 14.50	1.2		
AAPN	120.65	314 ePKP	24 13.20	-0.1		
ALOJ	120.72	313 ePKP	24 14.00	0.5		
ATEJ	120.73	313 ePKP	24 14.00	0.4		
ANMO	121.81	49 PKP	24 17.30	1.6		
SCH	125.63	8 ePKP	24 23.00	0.7		
SIO	128.74	43 ePKP	24 29.70	0.9		
		e	24 44.60			
TUL	129.00	43 ePKP	24 30.60	1.3		
	1.4s	26.70nm				
Z	22s	0.32um		5.0Msz		
		e	24 45.20			
		LR	08 00.00			
KIC	129.18	277 PKP	24 30.92	0.7		
	0.8s	12.50nm				
TIC	129.44	278 PKP	24 31.42	0.7		
LIC	129.48	277 PKP	24 31.44	0.6		
LKO	129.73	281 PKP	24 30.44	-0.9		
POW	131.88	39 PKP	24 35.00	0.3		
TKL	136.67	34 PKP	24 44.70	0.8		
LHS	139.18	33 PKP	24 49.20	0.7		
MDZ	143.92	161 ePKP	24 56.40	-0.6		
PPD	156.68	190 ePKP	25 19.10	2.6X		
CNCB	158.33	146 PKP	25 23.00	3.8X		
LPB	158.49	145 PKP	25 24.00	4.8X		
ZOBO	158.68	144 PKP	25 21.60	2.0		
	1.2s	21.28nm				
CCH	158.83	151 (PKP)	25 04.00	-15.4X		
SIV	162.14	162 PKP	25 24.40	1.9		
SOB1	162.29	234 ePKP	25 25.70	2.9X		
		e	25 39.90			
		e	26 13.10			

S.D. = 1.2 on 137 of 156 obs.

% SEP 07, 1990 18h 42m 27.61± 1.20s
60.017 N ± 4.9km 4.699 E ±11.8km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.1 (BER).

BER	0.48	41 iPc	42 37.41	0.0		
		iS	42 44.96			
ASK	0.53	28 iPc	42 38.16	-0.1		
		eS	42 45.80			
KMY	0.85	161 eP	42 43.88	-0.2		
		iS	42 55.33			
ODD1	0.98	95 eP	42 46.28	0.1		
		iS	43 02.19			
SUE	1.04	2 eP	42 47.65	0.4		
		iS	43 02.52			
BLS2	1.34	122 eP	42 52.63	0.2		
		iS	43 11.45			
HYA	1.37	32 eP	42 52.70	0.1		
		eS	43 12.29			
MOL	2.91	27 iPd	43 14.30	-0.4		
		eS	43 49.77			

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

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* SEP 07, 1990 19h 06m 34.40± 3.06s
0.789 N ± 9.5km 123.788 E ±13.6km
DEPTH = 187.9 ± 32.9 km
4.7mb (8 obs.)
MINAHASSA PENINSULA (265)

MTN	15.38	152 iPd	10 03.70	0.6		
	0.4s	144.00nm		5.7mb X		
MBL	22.15	190 iPc	11 15.70	0.1		
	0.4s	7.00nm		4.5mb		
WB5	23.01	154 iPd	11 23.90	-0.1		
		eS	15 14.20			
WRA	23.06	154 Pd	11 23.70	-0.7		
	0.5s	8.90nm		4 6mb		
NANU	24.57	199 iPc	11 38.60	0.0		
	0.5s	27.00nm		5 1mb		
ASPA	26.22	159 eP	11 53.40	-0 4		
	0 4s	6.00nm		4 7mb		
		eS	16 01 50			
QIS	26.27	145 eP	11 53 70	-0 5		
WARB	26.96	174 eP	12 00 00	-0 4		

```
        0.4s      9.00nm            4.8mb
CHTO   30.25 308 eP      12 30.20    0.4
        0.5s      0.38nm            3.4mb X
MRWA   30.75 193 iPc     12 33.30   -0.9
        0.4s      4.00nm            4.5mb
FORR   31.73 173 iPc     12 41.60   -1.0
        0.4s     19.00nm            5.1mb
STK    36.61 154 iPd     13 24.10   -0.1
        0.4s      6.00nm            4.6mb
                  eS      18 49.40
BJI    39.68 351 eP      13 48.00   -1.6
BWA    41.96 149 eP      14 10.00    1.6
CAN    42.95 149 eP      14 17.00    0.5
TOO    43.12 155 iPc     14 19.00    1.2
GUN    45.21 310 P       14 35.60    0.6
PKI    45.40 309 P       14 37.30    0.8
KKN    45.61 309 P       14 37.80   -0.2
GKN    46.21 309 P       14 42.80    0.1
      S.D. = 0.8  on  20 of  20 obs.
-------------------------------------
?  SEP  07, 1990  22h 16m 11.41± 4.86s
   35.821 S ±45.0km  178.840 E ±30.5km
   DEPTH = 134.5 ± 34.8 km
   4.7mb (  2 obs.)
 OFF E. COAST OF N. ISLAND, N.Z.  (160)

PUZ     2.30 192 eP      16 50.10    0.4
                S       17 27.70
NOZ     2.86 193 eP      16 57.00    0.0
TAZ     3.05 217 eP      17 02.70    3.4X
WLZ     3.30 231 P       17 02.10   -0.6
MNG     5.47 208 eP      17 31.90    0.1
                S       18 44.50
ASPA   40.53 275 eP      23 40.10    1.2
        1.0s     17.00nm            4.7mb
     Z  20s      0.65um             4.5Msz
                LR      39 20.80
                e       43 13.20
WRA    42.02 280 Pc      23 50.60   -0.5
        1.3s     26.00nm            4.8mb
WB5    42.03 280 eP      23 51.00   -0.2
BCAO  143.87 215 iPKPd   35 32.30   -0.5
        0.7s      8.00nm
KIC   150.50 173 PKP     35 51.70    8.3X
      S.D. = 0.8  on   8 of  10 obs.
-------------------------------------
*  SEP  07, 1990  22h 36m 05.47± 1.03s
   38.885 N ± 8.8km   14.860 E ±14.4km
   DEPTH =  10.0km  (geophysicist)
 SICILY                            (398)

ATN     0.86 147 P       36 22.50    0.4
                eSg     36 41.40
MNO     0.96 188 P       36 24.50    0.6
                eSg     36 45.00
GIB     1.11 216 P       36 25.50   -0.8
                eSg     36 48.50
SOI     1.24 130 Pd      36 24.60   -3.9X
                eSg     36 45.30
MGR     1.36  23 P       36 32.00    1.5
TDS     1.38  56 Pd      36 29.90   -0.9
                eSg     36 56.00
ORI     1.70  46 P       36 34.50   -0.9
      S.D  = 1.3  on   6 of   7 obs.
-------------------------------------
&  SEP  07, 1990  22h 47m 02.59s
   61 524 N          150.636 W
   DEPTH =  55.8km
 SOUTHERN ALASKA                   (  2)
      <AGS-P>.

SUA     0.08 221 iP      47 11.27    1.6
                iS      47 18.63
PWA     0.38  70 iP      47 12.77   -0.3
                eS      47 21.21
PMS     0.59 118 iP      47 14.98   -0.4
                eS      47 23.75
SKT     0.62 318 iP      47 14.94   -0.9
                iS      47 25.07
CGLM    0.69 252 eP      47 16.28   -0.5
                iS      47 26.92
PLRM    0.72  84 iP      47 16.13   -0.8
                eS      47 27.30
NCG     0.74 261 iP      47 16.92   -0.4
SPU     0.76 244 iP      47 16.90   -0.7
                iS      47 28.27
CRP     0.78 251 eP      47 17.37   -0.5
                eS      47 29.02
NKA     0.84 201 iP      47 19.71    1.3
GHO     0.85  72 eP      47 18.16   -0.6
                iS      47 31.07
CKL     0.88 249 iP      47 18.50   -0.7
BGL     0.88 254 iP      47 18.59   -0.6
                iS      47 31.49
CUT     0.90  11 iP      47 18.52   -0.8
                iS      47 31.11
SML     1.14  74 eP      47 21.37   -1.2
RDT     1.28 223 iP      47 23.97   -0.7
                eS      47 40.84
RSO     1.48 225 eP      47 27.05   -0.5
                iS      47 46.28
NNL     1.52 193 eP      47 28.21    0.4
HUR     1.53  17 eP      47 27.78   -0.2
                eS      47 46.31
SEW     1.54 157 eP      47 28.74    0.7
SCM     1.61  77 eP      47 28.35   -0.8
                iS      47 48.55
BRLK    1.77 184 eP      47 31.48    0.1
HOM     1.94 195 eP      47 33.99    0.4
VZW     2.03 102 eP      47 33.42   -1.5
CNPM    2.03 189 eP      47 33.56   -1.4
KTH     2.04 356 eP      47 35.07   -0.1
VLZ     2.11  99 eP      47 34.18   -1.9
KLU     2.26  89 eP      47 36.36   -1.9
OPT     2.27 215 eP      47 38.17   -0.2
SVW     2.44 262 iP      47 39.08   -1.7
PDB     2.47 227 iP      47 39.83   -1.3
CDD     3.00 211 eP      47 47.91   -0.9
DDM     3.16  42 eP      47 51.34    0.2
GLB     3.28  88 eP      47 52.26   -0.4
CCB     3.39  21 eP      47 53.22   -1.0
      35 obs. ossocioted
-------------------------------------
*  SEP  07, 1990  23h 17m 23.44± 0.63s
   18.504 S ±12.1km  167.758 E ±14.7km
   DEPTH =  10.0km  (geophysicist)
   4.7mb (  4 obs.)  4.6Msz (  1 obs.)
 VANUATU ISLANDS                   (186)

PVC     0.92  35 iPc     17 40.50   -0.6
                iS      17 53.50
DZM     3.76 199 iPc     18 22.30   -0.5
                iS      19 05.30
QLP    23.14 245 iPc     22 32.00    1.1
BWA    23.41 224 eP      22 33.80    0.3
                e       22 54.00
CAN    23.60 221 eP      22 30.80   -4.6X
                e       22 37.20
CMS    23.65 233 eP      22 37.00    1.2
STK    27.08 235 iPc     23 08.00   -0.2
        1.4s     21.00nm            4 6mb
                eS      27 59.20
WB5    31.54 262 eP      23 46.10   -2.1
WRA    31.56 262 Pc      23 45.70   -2.7X
        1.0s      8.30nm            4.6mb
ASPA   31.96 255 iPc     23 50.10   -1.8
        1.0s     26.00nm            5.1mb
     Z  23s      0.98um             4.4MszX
                eS      29 03.00
                LR      35 21.30
GUMO   39.07 323 eP      25 07.00   14.5X
KMI    76.70 302 eP      29 18.50    1.4
CHG    77.07 295 eP      29 20.00    1.0
CHTO   77.07 295 eP      29 19.00    0.0
        1.7s     12.96nm            4.7mb
SOB1  140.53 132 ePKP    36 55.80    0.0
MEM   144.82 340 PKP     37 14.60   12.5X
SQTA  145.51 331 e(PKP)  37 03.00   -0.6
        1.4s     39.60nm
                i       37 07.70
                i       37 16.50
                i       37 22.50
DOU   145.72 341 PKPc    37 17.20   13.5X
CDF   146.22 336 ePKP    37 04.80    0.1
BRT   146.33 318 PKP     37 35.70   30.7X
                eSg     37 52.70
BAI   146.41 318 PKP     37 36.50   31.4X
BCAO  146.84 249 iPKPd   37 10.90    4.3X
        0.4s      3.00nm
HAU   146.90 337 ePKP    37 06.40    0.7
ORI   147.26 317 PKP     37 34.00   27.5X
                eSg     37 46.50
TDS   147.55 317 PKP     37 12.00    5.0X
TDS   147.55 317 PKP     37 39.50   32.5X
SGO   147.71 319 PKP     37 25.60   18.4X
                eSg     37 30.30
MGR   147.79 318 PKP     37 29.50   22.1X
                eSg     37 38.00
BSS   147.89 319 PKP     37 30.40   22.9X
                eSn     37 42.60
LOR   148.42 339 ePKP    37 10.40    2.2X
        1.0s     10.00nm
     Z  22s      0.10um             4.6Msz
SOI   148.56 314 PKP     37 12.00    3.4X
LBF   148.62 338 ePKP    37 11.20    2.6X
SSF   148.72 339 ePKP    37 11.50    2.9X
        1.0s     18.00nm
LPL   148.79 334 ePKP    37 12.20    3.1X
LPG   148.80 334 ePKP    37 12.40    3.2X
        1.1s     13.45nm
SMF   148.96 338 ePKP    37 11.90    2.8X
BNI   149.19 333 PKP     37 10.00    0.4
BGF   149.38 339 ePKP    37 13.10    3.4X
        1.2s     19.35nm
MAF   149.77 339 ePKP    37 14.20    3.9X
TCF   149.83 340 ePKP    37 14.30    3.9X
        1.1s      9.75nm
LSF   150.08 341 ePKP    37 14.60    3.9X
        0.9s     65.55nm
      S.D. = 1.1  on  16 of  41 obs.
-------------------------------------
*  SEP  07, 1990  23h 22m 28.21± 1.25s
   38.979 N ±11.4km   31.195 E ± 8.6km
   DEPTH =  10.0km  (geophysicist)
 TURKEY                            (366)

ALT     0.85 276 iPg     22 44.10   -0.5
KHL     1.46 244 ePn     22 55.00    0.3
GPA     1.48 333 iPn     22 53.70   -1.2
BBTK    1.49  54 iPgd    22 55.00   -0.1
                iSg     23 15.00
IZI     1.90 316 iPn     23 01.60    0.6
DST     2.09 288 ePn     23 03.60   -0.1
HRT     2.18 328 ePn     23 06.10    1.0
ISK     2.65 322 ePn     23 11.60   -0.1
BNT     2.88 300 ePn     23 22.00    7.0X
KAS     3.10  39 eP      23 27.50    9.4X
      S.D. = 0.8  on   8 of  10 obs.
-------------------------------------
&  SEP  07, 1990  23h 29m 26.10s
   36.563 N          121.190 W
   DEPTH =   7.0km
 CENTRAL CALIFORNIA                ( 39)
      <BRK>. ML 2.5 (BRK).

LLA     0.21  75 iPc     29 30.30   -0.1
PRS     0.27 212 iPd     29 31.70    0.0
SAO     0.29 315 iPc     29 31.80   -0.2
PRI     0.60 135 ePd     29 37.80   -0.3
GCC     0.80 306 ePc     29 40.80   -1.1
ARN     0.83 341 eP      29 42.80    0.3
MHC     0.86 335 ePd     29 43.50    0.5
PHAM    0.97 138 eP      29 44.00   -0.8
PKEM    1.01 120 eP      29 45.80    0.4
FRI     1.26  70 ePc     29 48.50   -1.3
                eS      30 05.00
PCC     1.34 315 e(P)    29 49.80   -1.2
CMB     1.60  23 eP      29 54.80   -0.2
                iS      30 17.20
BCH     1.64 147 eP      29 53.30   -2.3
BLP     2.10 162 eP      30 00.00   -2.1
KVN     3.49  44 eP      30 22.00    0.0
      15 obs. ossocioted
-------------------------------------
    SEP  08, 1990  00h 03m 57.40± 1.03s
    38.061 N ±10.5km   83.731 W ± 6.1km
    DEPTH =   5.0km  (geophysicist)
 KENTUCKY                          (490)
      mbLg 3.3 (BLA). Felt (V) ot Salt
      Lick ond Stonton. Felt (III) ot
      Flemingsburg, Hillsboro,
      Jeffersonville, Mount Sterling,
      Owingsville, Preston ond
      Shorpsburg.

TKL     2.40 181 eP      04 38.40    0.4
GBTN    2.42 189 eP      04 38.70    0.4
NAV     2.45 107 eP      04 39.20    0.5
BLA     2.76 107 eP      04 43.20    0.0
RSCP    2.86 212 eP      04 44.60    0.0
PRM     4.12 164 eP      05 02.50    0.1
```

08d 00h

```
JSC      4.27 151 eP     05 04.00  -0.5
LHS      4.28 146 eP     05 04.00  -0.7
FVM      5.29 271 eP     05 18.80  -0.2
     S.D. = 0.5  on   9 of   9 obs.
-----------------------------------------
*  SEP  08, 1990  00h 33m 58.38± 1.88s
   31.628 S ±10.3km   72.769 W ±18.6km
   DEPTH =  29.7 ±  7.9 km
 OFF COAST OF CENTRAL CHILE          (134)

IHA      1.69 146 eP     34 26.50   0.3
                  eS     34 53.00
ROCH     2.00 132 eP     34 29.50  -1.5
                  iS     34 51.00
LCCH     2.10 152 iPd    34 32.60   0.4
                  iS     34 57.10
JACH     2.12 120 iPc    34 30.60  -2.0
                  iS     34 52.20
PEL      2.32 131 iPd    34 34.00  -1.4
                  i      34 37.50
TACH     2.54 143 eP     34 38.50   0.0
                  iS     35 06.50
LNV      2.59 154 iPd    34 39.00  -0.1
                  iS     35 10.60
                  i      35 20.00
PCH      2.75 137 eP     34 41.50   0.0
                  iS     35 12.00
RTBS     2.83  92 eP     34 41.50  -1.0
CHCH     2.91 143 eP     34 43.70   0.0
                  i      35 16.00
RTCB     3.39  89 e(P)   34 49.00  -1.6
                  e      34 51.70
                  S      35 28.00
ZON      3.49  90 eP     34 52.00   0.0
MDZ      3.55 112 eP     34 55.60   2.7
                  iS     35 39.30
RTCV     3.61  95 e(P)   34 55.20   1.5
RTLL     3.69  86 ePc    34 55.60   0.9
                  eS     35 32.00
CFA      3.86  91 eP     34 58.00   0.7
                  S      35 45.20
ZOBO    15.86  17 P      37 43.00   1.2
SIV     18.86  37 P      38 16.00  -2.8
PPD     21.37  69 (P)    38 47.00   1.5
     S.D. = 1.5  on  19 of  19 obs.
-----------------------------------------
?  SEP  08, 1990  01h 42m 24.84± 2.30s
   35.620 S ±18.7km  178.265 E ±35.2km
   DEPTH =  93.7 ± 14.1 km
   4.6mb (  4 obs.)
 OFF E. COAST OF N. ISLAND, N.Z. (160)

PUZ      2.45 180 P      43 03.50  -0.2
                  S      43 45.10
TAZ      2.96 208 eP     43 15.60   4.9X
NOZ      3.00 183 eP     43 11.30   0.1
DZM     16.99 319 iPd    46 18.30   0.2
STK     30.61 266 iPd    48 35.50   3.6X
       1.1s     4.00nm          4.1mb
ASPA    40.05 275 eP     49 51.80  -0.6
       1.1s    13.00nm          4.7mb
     Z  19s     0.19um          4.0Msz
                  LR     06 10.70
WRA     41.52 280 Pd     50 05.10   0.6
       0.5s     4.60nm          4.6mb
WB5     41.54 280 eP     50 04.80   0.2
SPA     54.56 180 iPd    51 45.80   0.4
       1.0s     9.00nm          4.8mb
CHTO    92.46 291 e(P)   55 25.80  -0.7
BCAO   143.76 216 iPKPc  01 44.90  -6.2X
       0.8s     9.00nm
     S.D. = 0.6  on   8 of  11 obs.
-----------------------------------------
?  SEP  08, 1990  02h 28m 10.86± 3.30s
   35.319 S ±19.2km  178.734 E ±31.6km
   DEPTH =  59.9 ± 22.8 km
   4.9mb (  3 obs.)  4.6Msz (  1 obs.)
 OFF E. COAST OF N. ISLAND, N.Z. (160)

HBZ      2.30 189 eP     28 45.80  -1.2
PUZ      2.78 188 eP     28 55.10   1.3
NOZ      3.34 189 P      29 02.90   1.2
TAZ      3.41 211 eP     29 07.20   4.4X
WLZ      3.57 224 eP     29 07.20   2.2
PGZ      5.64 199 eP     29 32.30  -1.7
MNG      5.88 205 eP     29 35.70  -1.7
                  eS     30 50.60
DZM     17.02 318 iPc    32 06.00  -0.4
CAN     24.22 261 eP     33 28.50   5.4X
BWA     24.85 263 eP     33 31.90   2.8X
ASPA    40.41 274 iPd    35 44.60  -0.2
       0.9s     19.00nm          4.9mb
     Z  20s     0.83um          4.6Msz
                  LR     51 33.60
WRA     41.85 279 Pc     35 56.30  -0.4
       1.0s     18.20nm          4.8mb
WB5     41.86 280 eP     35 56.20  -0.6
SPA     54.86 180 eP     37 37.30   0.1
       1.0s     14.50nm          5.0mb
CHTO    92.70 291 (P)    41 19.00   1.3
BCAO   144.23 215 iPKPc  47 37.00  -5.2X
       0.9s     7.00nm
LIC    150.84 172 PKP    47 57.70   5.0X
KIC    151.00 173 PKP    47 58.00   5.1X
TIC    151.25 172 PKP    47 58.40   5.1X
     S.D. = 1.5  on  12 of  19 obs.
-----------------------------------------
*  SEP  08, 1990  02h 58m 11.45± 0.97s
    7.510 S ±10.5km   73.284 W ± 9.6km
    DEPTH =  10.0km  (geophysicist)
 PERU-BRAZIL BORDER REGION           (112)

PT08     5.47 216 iP     59 36.00   0.7
                  eS     59 39.80
NNA      5.66 218 eP     59 37.50  -0.3
       0.6s     20.00nm          5.0mb X
                  eS     00 42.50
PT10     5.81 218 e(P)   59 40.00   0.2
                  eS     00 45.00
PT02     6.23 210 eP     59 44.20  -1.5
ZOBO    10.06 150 P      00 40.00   0.3
                  i      03 40.00
                  LR     14 24.00
LPB     10.30 151 P      00 50.00   7.2X
                  e      03 17.00
                  i      03 51.00
                  i      06 23.00
CNCB    10.60 151 P      00 48.70   1.7
                  i      03 55.00
                  i      06 30.00
CCH     12.03 145 eP     01 07.00   0.7
SIV     14.62 126 P      01 38.20  -2.2
SES     66.30 335 eP     09 02.00  -0.2
PNT     69.52 330 eP     09 23.00   0.7
     S.D. = 1.3  on  10 of  11 obs.
-----------------------------------------
&  SEP  08, 1990  03h 00m 25.44s
   58.445 N         137.344 W
   DEPTH =   8.2km
 SOUTHEASTERN ALASKA                 ( 19)
      <AGS-P>.

HQN      1.28 322 eP     00 47.14  -2.3
PNL      1.62 320 eP     00 52.94  -1.5
                  eS     01 13.97
BCPM     1.92 323 eP     00 57.21  -1.5
                  eS     01 20.19
PCA      2.23 319 eP     01 01.86  -1.4
                  eS     01 29.35
YAH      2.96 312 eP     01 12.95  -0.8
      5 obs. assaciated
-----------------------------------------
*  SEP  08, 1990  03h 14m 24.72± 2.54s
    7.701 S ±19.8km  128.044 E ±13.2km
   DEPTH = 125.0 ± 25.5 km
   4.2mb (  5 obs.)
 BANDA SEA                           (280)

KUPT     5.02 241 ePc    15 39.00   0.0
MTN      5.95 150 iPc    15 52.70   0.9
       0.4s    229.00nm          5.8mb X
                  eS     16 57.00
KNA      8.03 175 eP     16 21.00   0.9
       0.2s     13.00nm          5.2mb
                  eS     17 45.00
WB5     13.57 154 eP     17 30.80  -2.5
                  eS     19 51.20
WRA     13.62 154 Pc     17 32.40  -1.5
       1.0s     11.50nm          4.2mb
MBL     15.56 210 iPd    17 57.40  -1.1
       0.2s     3.00nm          4.2mb
                  eS     20 43.00
ASPA    16.84 161 eP     18 15.80   1.4
       1 0s     7.00nm          3.9mb
                  eS     21 11.30
QIS     16.99 140 eP     18 17.00   0.8
                  eS     21 15.00
WARB    18.43 184 eP     18 34.00   0.7
       0.3s     3.00nm          4.1mb
                  eS     21 54.00
NANU    19.06 218 eP     18 40.40   0.4
CHTO    38.96 313 e(P)   21 40.30  -0.1
     S.D. = 1.4  on  11 of  11 obs.
-----------------------------------------
?  SEP  08, 1990  04h 11m 01.93± 2.02s
    5.883 S ±14.4km   77.066 W ±24.2km
    DEPTH =  10.0km  (geophysicist)
    4.7mb (  1 obs.)
 NORTHERN PERU                       (111)

PT08     6.06 175 iP     12 35.20   1.1
                  iS     13 43.70
NNA      6.07 178 eP     12 34.00   0.0
       0.5s     8.45nm          4.8mb X
                  eS     13 37.50
PT10     6.15 179 e(P)   12 38.00   2.9X
                  e(S)   13 44.00
PT02     7.04 175 e(P)   12 46.50  -1.2
                  eS     14 07.30
ZOBO    13.54 140 P      14 16.00  -1.2
                  i      18 40.00
LPB     13.75 141 eP     14 23.00   3.1X
CNCB    14.04 141 P      14 25.00   1.3
                  i      14 33.00
CCH     15.64 138 P      14 51.40   6.9X
SIV     18.62 124 P      15 21.70  -0.1
LKO     72.85  78 Pd     22 32.62  -0.9
       0.3s     2.50nm          4.7mb
KIC     73.20  82 P      22 36.50   0.9
     S.D. = 1.2  on   8 of  11 obs.
-----------------------------------------
?  SEP  08, 1990  04h 55m 13.02± 4.65s
   35.162 N ±36.4km   22.737 E ±30.1km
   DEPTH =  33.0km  (normal)
 MEDITERRANEAN SEA                   (400)
      MD 3.4 (ATH).

VAM      1.22  78 iPnc   55 34.10   0.2
VLI      1.56   6 ePn    55 38.00  -0.8
ITM      2.12 342 ePb     55 51.50   4.7X
NPS      2.36  87 ePn    55 50.40   0.2
APE      2.96  49 ePb     55 59.20   0.4
KAP      3.65  83 ePn    56 07.90  -0.6
EVR      3.82 349 ePn    56 11.50   0.5
     S.D. = 0.7  on   6 of   7 obs.
-----------------------------------------
?  SEP  08, 1990  05h 05m 09.16± 1.30s
   50.340 N ±24.2km   18.861 E ± 9.7km
   DEPTH =  10.0km  (geophysicist)
 POLAND                              (548)
      ML 3.2 (KRA).

KRA      0.75 112 ePg    05 23.30  -0.5
                  iSg    05 33.60
SPC      1.46 142 iPn    05 36.40   0.7
                  iSg    05 56.40
KSP      1.71 288 ePn    05 39.70   0.5
                  iPg    05 41.40
                  iS     06 04.20
ZST      2.43 209 eP     06 12.00  22.4X
                  e      06 33.90
SRO      2.55 188 eP     06 40.20  48.9X
                  i      07 29.60
PRU      2.80 264 ePn    05 54.50  -0.3
                  Pg     06 02.20
                  Sg     06 36.20
BUD      2.86 178 e(P)   06 42.00  46.3X
BRG      3.18 282 ePg    06 08.00   7.9X
                  iSg    06 52.00
KHC      3.63 253 ePg    06 06.30  -0.4
                  Sg     07 03.00
CLL      3.84 287 ePg    06 22.00  12.5X
                  eSg    07 15.00
     S.D. = 0.8  on   5 of  10 obs.
-----------------------------------------
?  SEP  08, 1990  05h 15m 09.95± 1.11s
   39.282 N ± 9.0km   27.418 E ±11.0km
   DEPTH =  33.0km  (normal)
 TURKEY                              (366)

PRK      0.89 268 iPd    15 27.50   1.4
```

			eS	15 44.20		
SMG	1.64	196	eP	15 36.00	-0.8	
			eS	15 59.50		
GBZT	2.17	45	ePn	15 45.20	0.8	
RDO	2.35	323	eP	15 48.40	1.3	
KDZ	2.82	328	iP	15 45.00	-8.6X	
RZN	3.17	320	iPd	15 59.00	0.2	
			S	16 51.00		
JMB	3.24	349	eP	16 05.00	5.3X	
			S	16 57.00		
MMB	3.64	310	ePd	16 04.00	-1.4	
			eS	16 53.00		
PGB	4.09	324	eP	16 11.00	-0.8	
			S	17 20.00		
BBTK	4.17	81	eP	16 20.00	7.1X	
			iS	17 12.00		
KKB	4.19	309	eP	16 13.00	-0.2	
			S	17 26.00		
PVL	4.23	339	iPd	16 12.00	-1.7	
VTS	4.59	317	eP	16 20.00	1.0	
			eSg	17 39.00		

S.D. = 1.3 on 10 of 13 obs.

& SEP 08, 1990 05h 29m 27.64s
57.300 N 142.925 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>.

PNL	3.01	36	eP	30 10.87	-5.4	
			eS	30 44.66		
HQN	3.03	43	eP	30 10.87	-5.7	
			eS	30 45.31		
PCA	3.13	25	eP	30 12.64	-5.4	
YAH	3.13	11	eP	30 12.59	-5.6	
BCPM	3.17	31	iP	30 12.98	-5.5	
			eS	30 48.49		

5 obs. associated

? SEP 08, 1990 05h 29m 42.42± 1.09s
35.135 S ±10.6km 178.296 E ±20.1km
DEPTH = 10.0km (geophysicist)
4.7mb (3 obs.) 4.0Msz (1 obs.)
OFF E. COAST OF N. ISLAND, N.Z. (160)

HBZ	2.46	180	P	30 21.50	-1.6	
PUZ	2.93	181	P	30 31.20	1.3	
			S	31 12.40		
NOZ	3.48	183	P	30 39.00	1.3	
PGZ	5.70	196	P	31 08.20	-1.0	
DZM	16.65	318	iPc	33 44.00	6.5X	
CNB	23.60	261	eP	34 59.30	5.0X	
	1.2s		29.00nm		4.7mb	
ASPA	40.04	274	eP	37 20.10	0.7	
	1.0s		20.00nm		4.7mb	
	Z 20s		0.22um		4.0Msz	
			LR	53 37.70		
WRA	41.47	280	Pd	37 31.00	-0.2	
	0.7s		6.70nm		4.5mb	
WB5	41.48	280	eP	37 31.00	-0.2	
BCAO	144.17	216	iPKPd	49 12.60	-8.1X	
	0.7s		11.00nm			
			id	49 17.20		
LIC	151.07	173	PKP	49 31.60	-0.1	
KIC	151.23	174	PKP	49 31.70	-0.2	
TIC	151.48	173	PKP	49 32.40	0.1	
LKO	154.28	171	PKP	49 35.10	-1.2X	

S.D. = 1.0 on 10 of 14 obs.

SEP 08, 1990 06h 47m 27.16± 0.79s
32.396 S ± 9 0km 69.505 W ± 9.1km
DEPTH = 114.0 ± 10.8 km
MENDOZA PROVINCE, ARGENTINA (139)

RTBS	0.73	3	iPd	47 46.90	0.5	
MDZ	0.74	131	iP	47 47.30	0.7	
			iS	47 58.90		
JACH	0.96	252	iPc	47 49.50	0.8	
			iS	48 06.60		
RTCV	0.98	57	iPc	47 48.70	-0.1	
RTCB	1.09	34	iPd	47 49.90	-0.1	
			(S)	48 09.00		
ZON	1.10	40	iPd	47 49.50	-0.6	
			eS	48 05.50		
PEL	1.24	233	iPc	47 52.00	0.4	
			iS	48 10.50		
CFA	1.33	54	iPd	47 52.10	-0.6	
			S	48 10.50		
RTLL	1.38	40	iPc	47 52.80	-0.4	
ROCH	1.39	245	iPc	47 53.50	-0.1	
			iS	48 13.40		
SAN	1.43	222	iPc	47 54.80	1.0	
			iS	48 15.80		
PCH	1.49	214	iP	47 55.70	1.2	
			iS	48 18.50		
TACH	1.74	223	iPd	47 56.00	-1.5	
			i	47 58.00		
			iS	48 21.70		
IHA	1.91	250	eP	47 59.00	-0.6	
			iS	48 23.00		
LCCH	2.04	238	iPc	48 00.70	-0.6	
			iS	48 26.50		
LNV	2.23	225	iPd	48 03.00	-0.7	
			iS	48 30.50		
CCH	15.26	12	P	51 01.80	3.9X	
CNCB	15.58	5	P	51 03.00	0.7	
LPB	15.85	5	eP	51 00.00	-5.4X	
ZOBO	16.10	5	P	51 09.00	0.2	
	Z 20s		0.10um			
			LR	12 12.00		

S.D. = 0.8 on 18 of 20 obs.

SEP 08, 1990 08h 31m 22.73± 0.48s
43.827 N ± 3.9km 7.406 E ± 3.7km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
ML 2.7 (LDG), 2.5 (GEN).

SBF	0.04	31	Pg	31 25.00	0.1	
AURF	0.08	317	Pg	31 25.05	-0.3	
REVF	0.09	198	Pg	31 25.73	0.3	
AUTN	0.17	5	Pg	31 26.59	-0.1	
			Sg	31 29.21		
MVIF	0.20	291	Pg	31 26.90	-0.2	
			Sg	31 30.06		
TOUF	0.22	329	Pg	31 27.31	-0.3	
			Sg	31 30.45		
IMI	0.36	76	P	31 30.16	0.0	
			S	31 35.53		
CALN	0.38	259	Pg	31 30.54	-0.1	
			Sg	31 35.74		
ENR	0.40	1	P	31 30.65	-0.3	
STV	0.42	352	P	31 30.85	-0.5	
			S	31 36.25		
ROB	0.58	35	P	31 34.06	-0.4	
			S	31 41.99		
FRF	0.61	244	Pg	31 34.60	-0.5	
			Sg	31 42.40		
DOI	0.69	350	P	31 35.70	-0.7	
			eSg	31 44.20		
FIN	0.69	56	P	31 36.47	0.0	
			S	31 45.38		
PZZ	0.71	342	P	31 36.35	-0.5	
			S	31 45.27		
LMR	0.82	233	Pg	31 38.40	-0.1	
			Sg	31 48.80		
LRG	0.85	244	Pg	31 38.90	-0.1	
			Sg	31 48.90		
CKI	0.87	46	P	31 38.80	-0.6	
			eSg	31 50.00		
PCP	1.09	49	P	31 43.68	0.5	
RRL	1.18	338	P	31 44.76	-0.2	
			S	31 59.69		
CDR	1.20	263	ePg	31 44.90	-0.2	
			iSg	32 00.70		
RSP	1.33	355	P	31 45.40	-1.9	
BNI	1.33	337	P	31 49.00	1.6	
			eSg	32 05.00		
LPG	1.73	345	Pg	31 55.90	2.5	
LPL	1.76	344	Pg	31 55.40	1.8	

S.D. = 0.9 on 25 of 25 obs.

SEP 08, 1990 08h 59m 15.50± 1.73s
4.112 N ± 9.3km 94.492 E ± 8.9km
DEPTH = 57.9 ± 17.4 km
4.5mb (8 obs.) 4.0Msz (2 obs.)
OFF W COAST OF NORTHERN SUMATERA(705)

IPM	6.53	86	ePd	00 51.30	0.0	
			e	01 06.10		
SNG	6.81	63	eP	00 50.00	-5.2X	
KGM	9.06	103	ePc	01 24.70	-1.5	
NNT	9.89	31	eP	01 37.60	0.0	
CHG	15.25	16	ePd	02 50.00	1.2	
	1.0s		27.00nm		4.4mb	
CHTO	15.25	16	eP	02 50.20	1.4	
	1.1s		29.45nm		4.4mb	
KOD	17.95	291	eP	03 24.00	1.0	
GBA	19.30	300	P	03 38.00	-0.7	
			S	06 22.00		
HYB	20.47	311	eP	03 59.00	8.0X	
	1.4s		100.00nm		5.0mb	
PKI	24.89	341	P	04 34.00	-0.8	
GUN	25.05	342	P	04 35.70	-0.7	
KKN	25.13	340	P	04 35.80	-1.2	
GKN	25.55	339	P	04 39.40	-1.4	
LZH	32.97	14	P	05 44.30	-2.8X	
	1.2s		16.00nm		4.7mb	
	Z 25s		0.50um		4.1MszX	
BJI	40.78	26	eP	06 53.00	0.4	
	1.3s		29.00nm		4.9mb	
	Z 20s		0.30um		4.1Msz	
WB5	45.86	123	eP	07 34.70	0.6	
WRA	45.87	123	Pc	07 33.90	-0.3	
	0.8s		6.40nm		4.6mb	
ASPA	47.30	128	eP	07 46.20	0.7	
	1.0s		5.00nm		4.4mb	
	Z 19s		0.09um		3.8Msz	
			LR	37 11.30		
SLR	70.60	241	eP	10 28.00	0.7	
SPC	76.62	320	eP	11 05.80	3.9X	
ZST	78.54	318	eP	11 18.50	6.2X	
HFS	81.86	330	eP	11 30.20	0.5	
	0.5s		0.70nm		3.9mb	

S.D. = 1.0 on 17 of 22 obs.

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* SEP 08, 1990 09h 51m 49.56± 0.77s
13.964 S ±13.6km 14.402 W ±10.8km
DEPTH = 10.0km (geophysicist)
4.8mb (12 obs.)
SOUTH ATLANTIC RIDGE (410)

LIC	22.11	25	Pc	56 53.00	6.1X	
KIC	22.35	26	P	56 51.00	1.6	
TIC	22.49	25	P	56 51.70	1.0	
LKO	24.94	21	P	57 13.48	-1.1	
SOB1	26.37	277	eP	57 28.70	0.7	
BUL	41.49	105	iPd	59 39.00	0.1	
	0.8s		3.73nm		4.2mb	
LPO	60.06	13	eP	01 58.80	-0.2	
LFF	60.21	12	eP	02 00.20	0.1	
	0.7s		5.50nm		4.8mb	
CAF	60.49	13	eP	02 01.40	-0.6	
RJF	60.73	13	eP	02 03.20	-0.4	
	0.8s		8.05nm		4.9mb	
LSF	61.63	13	eP	02 09.60	-0.1	
TCF	61.81	13	eP	02 11.00	0.0	
	0.7s		4.40nm		4.7mb	
LPG	62.20	17	eP	02 14.40	0.5	
	0.9s		11.45nm		5.1mb	
LPL	62.21	17	eP	02 14.40	0.5	
	0.7s		7.15nm		5.0mb	
AVF	62.54	14	eP	02 15.60	-0.2	
	0.9s		6.55nm		4.8mb	
SSF	62.83	14	eP	02 17.60	-0.1	
	0.7s		6.60nm		4.9mb	
LBF	62.87	14	eP	02 17.60	-0.4	
	0.8s		4.05nm		4.7mb	
HAU	64.41	15	eP	02 27.40	-0.7	
CDF	65.02	16	eP	02 31.30	-0.8	
HFS	77.23	14	eP	03 45.10	-0.1	
	0.8s		4.30nm		4.6mb	
NB2	77.49	12	P	03 47.20	0.5	
	0.9s		4.00nm		4.5mb	
FVM	87.80	310	eP	04 40.00	-0.4	
	0.9s		5.08nm		4.8mb	

S.D. = 0.7 on 21 of 22 obs.

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* SEP 08, 1990 09h 56m 30.81± 1.26s
0.037 S ±11.6km 123.064 E ±13.9km
DEPTH = 246.3 ± 16.3 km
4.7mb (14 obs.)
MINAHASSA PENINSULA (265)

AAI	6.28	125	eP	58 01.80	-1.2	
			eS	59 13.30		
KKM	9.12	312	ePd	58 40.50	1.1	
	0.3s		26.80nm		4.8mb	
PGP	13.61	351	ePc	59 38.00	2.4	
MTN	15.03	148	eP	59 50.50	-2.4	
	0.4s		381.00nm		6.2mb X	

08d 10h

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MBL     21.23 188 iPc    00 57.40  -1.0
        0.4s     2.00nm          4.0mb
IPM     22.49 282 ePd    01 11.30   0.6
        0.9s    31.00nm          4.8mb
WB5     22.62 151 eP     01 11.80  -0.1
                  eS     05 03.20
WRA     22.66 151 Pc     01 12.50   0.2
        0.5s    14.90nm          4.8mb
SNG     23.51 288 eP     01 21.20   0.9
ASPA    25.74 157 eP     01 40.80  -0.1
        0.5s     8.00nm          4.6mb
      Z  17s     0.03um          2.9MszX
                  iPP    02 16.40
                  LR     22 07.70
QIS     26.03 143 ePd    01 43.50   0.0
CHG     30.19 310 eP     02 19.80  -0.9
        1.0s    23.75nm          4.8mb
CHTO    30.19 310 eP     02 19.80  -0.8
        1.0s     7.75nm          4.3mb
STK     36.20 153 iPd    03 12.50   0.7
        0.6s    11.00nm          4.6mb
                  e      04 36.40
MAT     39.01  20 eP     03 33.00  -2.2
        0.8s     5.22nm          4.1mb
BWA     41.64 148 eP     03 59.30   2.5
CAN     42.63 148 eP     04 06.60   1.8
TOO     42.70 153 eP     04 07.40   2.0
        0.5s     2.00nm          3.7mb
GUN     45.19 311 P      04 25.60  -0.1
        0.7s    64.00nm          5.1mb
PKI     45.37 310 P      04 26.70  -0.4
        0.8s    23.00nm          4.6mb
KKN     45.58 311 P      04 28.20  -0.4
        0.8s    38.00nm          4.8mb
GKN     46.18 310 P      04 32.60  -0.7
GBA     47.17 289 P      04 40.00  -0.9
BUL     94.17 250 iPc    09 22.50  -1.0
        0.9s    10.50nm          5.0mb
     S.D. = 1.4  on  24 of  24 obs.
-------------------------------------
   SEP  08, 1990  10h 53m 17.59± 0.34s
   39.798 N ± 7.7km   70.987 E ± 6.7km
   DEPTH =  33.0km  (normal)
   4.4mb (  8 obs.)
 TAJIK SSR                        (715)
     Felt (III) at Fergano and
     Kokond.

MAIO     9.71 253 eP     55 38.00  -0.2
                  eS     57 12.00
QUE     10.14 200 eP     55 58.40  14.2X
                  eS     57 46.80
NDI     12.22 153 e(P)   56 27.00  14.8X
GKN     16.31 132 P      57 05.80  -0.1
KKN     16.84 131 P      57 12.00  -0.7
PKI     17.08 131 P      57 16.40   0.6
SUF     35.16 326 iP     00 10.00   0.1
        0.6s     6.90nm          4.8mb
NUR     35.19 322 eP     00 10.00  -0.2
KRA     36.91 303 eP     00 25.50   0.7
KEV     37.76 337 eP     00 26.00  -5.7X
HFS     40.51 320 eP     00 54.30  -0.4
        0.4s    17.10nm          5.1mb
      Z  17s     0.06um          3.5MszX
                  LR     17 40.00
NB2     41.78 321 P      01 04.40  -0.8
        0.6s     1.30nm          3.8mb
BSF     45.81 302 eP     01 38.10   0.1
LPG     46.47 299 eP     01 43.80   0.4
        0.7s     3.30nm          4.4mb
LPL     46.48 299 eP     01 43.80   0.4
        0.5s     2.20nm          4.4mb
EKA     49.95 314 Pd     02 09.50  -0.5
        0.7s     4.60nm          4.6mb
INK     70.66   9 eP     04 31.00  -0.3
FBA     71.31  16 eP     04 35.90   0.5
        0.7s     1.10nm          4.0mb
YKA     77.96   3 eP     05 13.60   0.1
        0.6s     1.80nm          4.3mb
     S.D. = 0.5  on  16 of  19 obs.
-------------------------------------
?  SEP  08, 1990  11h 37m 42.33± 9.84s
   32.021 S ±72.3km   71.600 W ±29.9km
   DEPTH =  10.0km  (geophysicist)
 NEAR COAST OF CENTRAL CHILE      (135)

ROCH     1.07 152 iPd    38 02.50  -0.1
                  iS     38 22.50
JACH     1.08 128 iP     38 02.50  -0.2
                  iS     38 22.20
PEL      1.36 146 iPd    38 06.50  -0.9
                  iS     38 30.60
TACH     1.72 161 eP     38 15.00   0.5
                  i      38 44.00
PCH      1.84 150 eP     38 15.50   1.2
LNV      1.94 175 eP     38 15.00  -0.6
                  iS     38 47.50
     S.D. = 1.0  on   6 of   6 obs.
-------------------------------------
*  SEP  08, 1990  11h 39m 19.84± 0.62s
   13.972 S ±12.9km   14.506 W ± 9.5km
   DEPTH =  10.0km  (geophysicist)
   5.0mb ( 19 obs.)  4.0Msz (  4 obs.)
 SOUTH ATLANTIC RIDGE             (410)

LIC     22.16  26 P      44 20.62   2.9
KIC     22.41  26 P      44 21.14   1.0
TIC     22.54  25 P      44 22.48   1.0
CAI     23.45 286 eP     44 29.50  -0.9
LKO     24.98  21 P      44 42.88  -2.4
        1.1s    16.00nm          4.6mb
SOB1    26.27 278 eP     44 58.20   0.8
BUL     41.59 105 iPd    47 09.50  -0.4
        1.0s     5.00nm          4.2mb
SIV     44.96 261 eP     47 39.00   1.7
CNCB    51.51 260 P      48 30.00   1.1
LPB     51.65 260 eP     48 28.00  -1.7
ZOBO    51.69 260 P      48 30.00  -0.3
      Z  24s     0.11um          3.8MszX
                  LR     04 24.00
LPO     60.09  13 eP     49 29.20  -0.3
LFF     60.24  12 eP     49 30.50   0.0
        0.9s    11.45nm          5.0mb
CAF     60.52  13 eP     49 31.80  -0.7
RJF     60.76  13 eP     49 33.60  -0.5
        1.0s    14.00nm          5.0mb
      Z  20s     0.10um          4.0Msz
SDI     61.26  24 P      49 38.00   0.4
LSF     61.66  13 eP     49 39.90  -0.3
        1.3s    27.10nm          5.3mb
BNI     61.81  17 P      49 42.50   1.1
TCF     61.84  13 eP     49 41.20  -0.3
        1.1s    14.65nm          5.1mb
LPG     62.24  17 eP     49 44.60   0.1
        0.9s    17.20nm          5.2mb
LPL     62.25  17 eP     49 44.60   0.1
        0.8s    12.10nm          5.1mb
SMF     62.55  14 eP     49 45.80  -0.4
        1.1s    12.20nm          5.0mb
AVF     62.57  14 eP     49 46.00  -0.3
        0.6s     3.15nm          4.7mb
SSF     62.87  14 eP     49 48.00  -0.2
        0.9s    13.90nm          5.1mb
LBF     62.90  14 eP     49 48.10  -0.4
LOR     63.14  14 eP     49 49.40  -0.6
      Z  19s     0.13um          4.1Msz
BSF     64.40  16 eP     49 57.40  -1.0
HAU     64.44  15 eP     49 57.90  -0.7
        1.0s    12.00nm          5.0mb
      Z  22s     0.10um          4.0Msz
CDF     65.06  16 eP     50 01.70  -0.9
FVI     65.09  20 P      50 03.50   0.8
SOTA    65.12  19 iPc    50 02.50  -0.6
        1.5s    55.00nm          5.5mb
                  i      50 09.40
GRF     67.32  18 iPc    50 16.90  -0.1
        1.7s    28.00nm          5.2mb
KHC     67.56  20 P      50 18.00  -0.6
                  e      52 43.00
ZST     67.98  22 eP     50 21.40   0.3
SRO     68.12  23 eP     50 22.70   0.7
MOX     68.29  18 eP     50 23.00   0.0
        1.4s    18.00nm          5.1mb
PRU     68.62  20 P      50 24.80  -0.3
                  e      50 31.00
BRG     69.20  19 eP     50 28.20  -0.4
        1.0s    14.00nm          5.1mb
KSP     69.93  20 eP     50 33.00  -0.1
                  e      50 39.80
SPC     69.99  23 eP     50 34.30   0.6
KRA     70.57  23 eP     50 37.10   0.1
HFS     77.26  14 eP     51 15.20  -0.5
        0.9s     7.40nm          4.8mb
      Z  20s     0.04um          3.7Msz
                  LR     18 53.00
NB2     77.52  12 P      51 17.60   0.4
        0.9s     7.70nm          4.8mb
NUR     80.56  18 eP     51 41.00   7.4X
SUF     82.74  18 iP     51 46.00   1.1
        0.5s     3.30nm          4.8mb
SOD     86.46  15 eP     52 04.00   0.4
                  e      52 11.00
     S.D. = 0.9  on  45 of  46 obs.
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   SEP  08, 1990  12h 11m 23.79± 1.48s
   6.788 S ± 5.2km  106.178 E ± 6.8km
   DEPTH = 115.6 ± 14.2 km
   5.1mb ( 34 obs.)
 JAVA                             (277)

TRT      6.47  98 ePc    13 00.50   2.5
                  eS     14 05.50
IPM     12.41 335 ePc    14 18.00   0.4
        0.7s    37.90nm          5.1mb
SNG     14.94 338 eP     14 24.80 -25.5X
                  e      17 44.10
KKM     16.21  38 ePc    15 09.50   3.2X
        0.8s   310.50nm          5.6mb
KUPT    17.56 102 eP     15 18.00  -4.8X
NANU    18.09 151 eP     15 28.00  -1.2
                  eS     18 32.00
MBL     19.46 139 iPd    15 43.20  -0.8
        0.4s    78.00nm          5.4mb
                  eS     19 01.00
NNT     20.29 342 eP     15 34.80 -17.7X
PPR     20.67  37 iPc    15 59.50   3.1X
        1.0s   173.00nm          5.4mb
MEKA    22.96 151 eP     16 19.50   0.6
        0.4s    23.00nm          4.9mb
                  eS     20 28.00
KNA     23.85 114 iPd    16 27.70   0.1
        0.4s    72.00nm          5.5mb
CGP     23.88  51 ePd    16 32.50   4.6X
        0.8s    40.00nm          4.9mb
MRWA    24.16 159 iPc    16 30.30  -0.2
        0.8s    30.00nm          4.8mb
                  epPP   16 58.00
                  eS     20 56.00
PGP     24.93  36 eP     16 42.00   4.2X
        0.8s    73.00nm          5.2mb
MTN     25.30 106 iPd    16 41.10  -0.2
        0.4s   297.00nm          6.1mb
BAL     25.67 159 eP     16 43.00  -1.6
                  eS     21 35.00
PLP     25.85  46 eP     16 59.00  12.7X
CHG     26.42 344 ePc    16 50.70  -0.9
        1.0s    24.75nm          4.7mb
CHTO    26.42 344 eP     16 50.70  -0.9
        1.0s    27.00nm          4.8mb
MUN     26.75 161 eP     16 54.00  -0.5
                  eS     21 59.00
KLB     26.95 158 eP     16 54.00  -2.3
                  eS     22 04.00
WARB    27.43 137 iPd    16 59.50  -1.3
        0.3s     6.00nm          4.7mb
                  epPP   17 34.00
                  eS     22 18.00
COOL    27.77 152 eP     17 02.00  -1.8
                  eS     22 20.00
NWAO    27.97 160 eP     17 04.00  -1.4
WRA     30.29 118 Pd     17 24.90  -1.5
        0.5s    32.30nm          5.3mb
ASPA    31.47 125 iPd    17 36.40  -0.3
        0.5s    40.00nm          5.4mb
                  e      18 05.90
                  eS     22 32.10
GBA     35.00 305 P      18 07.70   0.6
QIS     35.15 116 eP     18 08.60   0.2
HYB     36.38 312 iPc    18 19.00   0.2
        0.8s    35.70nm          5.3mb
PKI     39.63 330 P      18 45.00  -1.2
GUN     39.68 331 P      18 46.00  -0.6
KKN     39.87 330 P      18 47.10  -0.9
SSE     40.31  20 P      18 53.40   2.1
        1.0s    16.00nm          4.8mb.
GKN     40.36 330 P      18 51.20  -0.8
POO     40.62 309 iP     18 56.00   1.9
PMG     40.63  97 iPd    18 55.00   0.8
        1.0s   100.00nm          5.5mb
ADE     41.01 138 iPd    18 57.30   0.2
        0.6s   126.67nm          5.9mb
```

CTA	41.03	113	iPd	18 58.50	1.0	
	1.0s	26.00nm		5.0mb		
STK	41.39	132	iPd	19 01.00	0.8	
	0.6s	65.00nm		5.6mb		
			ePP	20 32.50		
LZH	42.70	357	iPc	19 12.00	1.0	
	1.5s	62.00nm		5.2mb		
CMS	44.42	129	iPd	19 25.50	0.7	
BFD	44.82	138	eP	19 31.00	3.1X	
NDI	44.98	323	iPc	19 28.00	-1.3	
	0.5s	66.90nm		5.7mb		
TOO	47.02	137	eP	19 46 70	1.3	
	0.5s	6.00nm		4.6mb		
SHNJ	47.04	29	eP	19 45.70	0.3	
BJI	47.50	10	eP	19 49.00	0.0	
	0.8s	39.00nm		5.2mb		
BWA	47.64	131	iPd	19 52.50	2.2	
TKSJ	48.38	31	eP	19 55.40	-0.5	
CAN	48.45	132	iPd	19 57.30	0.8	
BRS	48.66	121	iPc	20 00.30	2.0	
COO	48.89	125	eP	20 01.40	1.4	
	0.6s	4.00nm		4.5mb		
YONJ	49.04	30	eP	20 00.20	-0.7	
WKYJ	49.38	32	eP	20 03.30	-0.3	
TSRJ	50.59	32	eP	20 12.30	-0.4	
IIDJ	51.57	33	eP	20 19.10	-1.2	
MTMJ	52.34	32	eP	20 25.00	-1.1	
MAT	52.53	33	iPc	20 25.60	-1.7	
	1.2s	42.19nm		5.3mb		
CHJJ	52.59	34	eP	20 26.10	-1.7	
QUE	52.60	316	eP	20 28.50	0.3	
YAMJ	54.71	33	P	20 42.30	-1.0	
OFUJ	56.25	33	P	20 53.10	-1.2	
AOMJ	56.65	31	eP	20 56.90	-0.3	
DZM	59.95	111	iPc	21 21.50	0.9	
PTZ	73.71	257	iPd	22 54.50	7.1X	
	1.0s	8.70nm		4.5mb		
BUL	76.05	251	iPd	22 59.90	-0.9	
	0.6s	8.67nm		4.7mb		
LSZ	76.69	256	iPc	23 04.40	-0.1	
	1.0s	14.90nm		4.7mb		
DSI	77.43	304	eP	23 09.00	0.9	
NOH	77.54	303	iPc	23 09.90	1.1	
RMN	77.76	303	eP	23 10.80	0.8	
BCAO	88.18	275	iPd	24 03.60	-0.1	
	0.6s	14.00nm		5.2mb		
			ic	24 11.60		
SUF	91.43	333	iP	24 19.70	2.0	
	0.4s	2.90nm		4.9mb		
NUR	91.70	331	iP	24 21.10	2.2	
	0.7s	13.30nm		5.3mb		
SOD	92.21	338	iP	24 22.60	1.4	
KEV	92.59	340	eP	24 22.00	-0.9	
HFS	97.08	330	eP	24 44.20	0.6	
	1.2s	14.40nm		5.4mb		
EDM	123.67	27	ePKP	30 10.00	0.7	
SOB1	143.54	245	(PKP)	30 54.00	6.5X	
PPD	143.85	217	ePKP	30 45.30	-2.5X	
MEO	143.99	36	iPKPd	30 46.20	-1.6	
TUL	144.71	32	ePKP	30 48.70	-0.2	
	0.8s	49.30nm				
			e	30 58.50		
BAO	146.07	229	PKPd	30 53.50	1.6	
UYO	146.74	32	iPKPd	30 54.80	2.5X	
SIV	154.09	209	ePKP	31 12.00	8.2X	
			i	31 27.00		

S.D. = 1.2 on 69 of 83 obs.

& SEP 08, 1990 12h 48m 22.30s
36.665 N 121.335 W
DEPTH = 8.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 4.0 (BRK).
Mo=2.3*10**15 Nm (BRK).

SAO	0.13	319	iP	48 25.00	-0.3
LLA	0.32	99	iP	48 28.60	-0.2
PRS	0.33	185	iP	48 28.90	-0.2
GCC	0.64	305	iPc	48 34.20	-1.0
ARN	0.70	347	iPc	48 36.10	-0.3
MHC	0.72	340	iPd	48 36.50	-0.2
PRI	0.75	134	iPd	48 36.70	-0.6
PHAM	1.12	137	eP	48 42.60	-0.9
PCC	1.18	315	iPd	48 43.30	-1.2
FRI	1.35	75	ePc	48 45.30	-2.0
BKS	1.41	330	iPd	48 46.30	-1.9
			i	49 06.40	
			iS	49 09.00	
BRK	1.41	329	ePc	48 45.90	-2.4
CMB	1.56	29	iPd	48 49.30	-1.2
NWRM	2.17	326	eP	48 56.20	-3.0
BLP	2.23	160	eP	48 58.00	-2.1
ABL	2.50	136	eP	49 01.70	-2.4
ORV	2.89	357	ePc	49 07.80	-1.6
			i	49 08.80	
KVN	3.50	46	eP	49 18.00	-0.2
MIN	3.68	357	e(P)	49 20.20	-0.6
WDC	4.02	347	e(P)	49 23.90	-1.6

20 obs. ossocioted

& SEP 08, 1990 12h 52m 02.80s
36.667 N 121.338 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.6 (BRK).
Mo=8.0*10**14 Nm (BRK).

SAO	0.13	319	iP	52 05.40	-0.1
LLA	0.32	99	iP	52 09.10	-0.2
PRS	0.34	184	iP	52 09.40	-0.2
GCC	0.64	305	iPc	52 14.70	-0.9
ARN	0.70	347	iPc	52 16.60	-0.2
MHC	0.72	340	iPd	52 17.00	-0.1
PRI	0.75	134	iPd	52 17.10	-0.9
PHAM	1.12	137	eP	52 22.50	-1.9
PKEM	1.16	121	eP	52 25.00	0.0
PCC	1.18	315	iPd	52 23.70	-1.5
FRI	1.35	76	iPc	52 26.30	-1.8
BKS	1.40	330	iPd	52 27.40	-1.6
			iS	52 49.30	
BRK	1.41	329	ePc	52 29.30	0.2
ZSP	1.47	330	iPd	52 28.10	-1.9
CMB	1.56	29	iPd	52 29.90	-1.4
BCH	1.80	145	eP	52 32.00	-2.8
BLP	2.24	160	eP	52 38.50	-2.5
ABL	2.50	136	eP	52 42.70	-2.3
ORV	2.89	358	ePc	52 49.30	-1.0
KVN	3.50	46	eP	53 01.00	1.9

20 obs. associoted

& SEP 08, 1990 13h 05m 46.40s
36.668 N 121.347 W
DEPTH = 4.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.6 (BRK).

SAO	0.12	321	iP	05 48.90	-0.1
LLA	0.33	99	iP	05 52.90	-0.1
PRS	0.34	183	iP	05 53.10	-0.1
GCC	0.63	305	iPd	05 58.50	-0.6
ARN	0.70	348	iPc	06 00.90	0.6
MHC	0.71	341	ePd	06 00.40	-0.2
PRI	0.76	133	eP	06 01.30	-0.3
PKEM	1.17	121	eP	06 08.50	-0.3
PCC	1.17	315	eP	06 07.20	-1.6
FRI	1.35	76	eP	06 10.40	-1.6
			iS	06 28.00	
BKS	1.40	330	iPd	06 13.00	0.3
CMB	1.57	29	eP	06 13.60	-1.5
BCH	1.80	145	eP	06 16.00	-2.6
KVN	3.50	46	e(P)	06 47.00	4.1

14 obs. associoted

SEP 08, 1990 13h 28m 52.93± 0.36s
37.731 N ± 7.8km 69.700 E ± 7.0km
DEPTH = 35.7km (2 depth phases)
4.5mb (15 obs.) 4.1Msz (2 obs.)
AFGHANISTAN-USSR BORDER REGION (717)
Felt (IV) at Kulyob, USSR.

QUE	7.86	198	e(P)	30 54.00	6.0X
			e(S)	32 17.70	
MAIO	8.29	263	iPd	30 51.00	-2.8
	0.8s	21.96nm		5.3mb	
			eS	32 24.00	
NDI	11.00	143	eP	31 31.00	0.1
	0.5s	14.08nm		5.4mb	
			eS	33 29.50	
GKN	15.84	123	P	32 30.00	-5.1X
KKN	16.41	123	P	32 36.40	-6.0X
PKI	16.64	123	P	32 40.00	-5.4X
HYB	21.68	157	eP	33 43.40	0.8
GBA	25.00	162	P	34 16.00	1.1
LZH	27.27	83	eP	34 35.00	-1.0
	2.3s	45.00nm		4.7mb	
Z	18s	0.50um		4.1Msz	
			pP	34 42.50	26km
CHTO	31.72	118	eP	35 15.00	-0.7
	0.8s	1.83nm		4.0mb	
NUR	36.22	324	eP	35 54.00	0.0
SUF	36.33	328	eP	35 55.00	0.1
KRA	37.25	306	ePc	36 03.40	0.7
			e	36 15.70	45km
SOD	38.18	335	eP	36 11.00	0.6
KEV	39.28	338	eP	36 18.00	-1.5
HFS	41.46	321	eP	36 37.40	-0.1
	0.4s	5.20nm		4.6mb	
Z	19s	0.28um		4.2Msz	
			LR	47 28.00	
BSF	46.09	304	eP	37 15.60	0.4
LPG	46.62	300	eP	37 20.30	0.6
	0.4s	1.45nm		4.3mb	
LPL	46.63	301	eP	37 20.50	0.8
	0.4s	2.30nm		4.5mb	
SMF	48.31	303	eP	37 32.60	0.0
	0.7s	3.30nm		4.5mb	
AVF	48.60	303	eP	37 34.80	0.0
	0.7s	3.30nm		4.5mb	
MAF	49.27	302	eP	37 40.80	0.8
	0.7s	3.85nm		4.5mb	
TCF	49.49	303	eP	37 42.30	0.6
	0.8s	5.35nm		4.6mb	
MAT	53.47	69	eP	38 10.00	-1.9
BCAO	57.14	248	iPc	38 38.50	-0.2
	0.7s	8.00nm		4.9mb	
INK	72.86	9	eP	40 20.00	0.5
FBA	73.57	16	iP	40 24.30	0.5
	0.6s	1.30nm		4.1mb	
YKA	80.06	2	eP	41 00.30	0.4
	0.6s	2.10nm		4.3mb	
WRA	83.52	121	P	41 19.00	0.3
	0.4s	0.40nm		3.9mb	

S.D. = 1.0 on 25 of 29 obs.

% SEP 08, 1990 14h 08m 01.53± 1.14s
59.938 N ± 6.3km 7.183 E ±10.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.4 (BER).

ODD1	0.28	265	iP	08 07.13	-0.3
BLS3	0.62	214	eP	08 13.88	-0.1
			eS	08 23.25	
BLS2	0.66	192	iP	08 14.53	-0.2
			iS	08 24.48	
ASK	1.13	300	eP	08 22.67	-0.1
			eS	08 36.18	
KMY	1.23	234	eP	08 24.93	0.6
			eS	08 39.19	
MOL	2.65	4	eP	08 45.04	0.1
			eSg	09 17.76	

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

& SEP 08, 1990 14h 20m 17.90s
36.667 N 121.335 W
DEPTH = 4.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.6 (BRK).
Mo=1.0*10**15 Nm (BRK). Felt (IV) at Carmel Valley, (III) ot Aromos ond Hollister ond (II) at San Juan Bautista.

SAO	0.13	318	iP	20 20.60	0.0
			iS	20 22.80	
LLA	0.32	99	iP	20 24.20	-0.1
PRS	0.34	185	iP	20 24.50	-0.1
GCC	0.64	305	iPc	20 30.10	-0.6
ARN	0.70	347	iPc	20 31.70	-0.2
MHC	0.72	340	iPd	20 32.05	-0.2
			iS	20 43.45	
PRI	0.75	134	iPd	20 32.20	-0.8
PHAM	1.12	137	eP	20 38.10	-1.4
PKEM	1.16	121	eP	20 39.50	-0.6
PCC	1.18	315	iPd	20 38.80	-1.7
FRI	1.34	76	iPc	20 41.60	-1.7
BKS	1.40	330	eP	20 41.90	-2.4
			eS	21 04.40	
BRK	1.41	329	eP	20 41.70	-2.7
ZSP	1.47	330	iP	20 43.20	-2.0
CMB	1.56	29	iPd	20 44.90	-1.6

08d 14h

```
BCH      1.79 145 eP     20 47.40  -2.6
BLP      2.24 160 eP     20 53.70  -2.5
ABL      2.50 136 eP     20 57.00  -3.2
ORV      2.89 357 ePc    21 04.50  -1.0
KVN      3.50  46 eP     21 13.50  -0.8
       20 obs. associated
-------------------------------------
*  SEP  08, 1990  15h 07m 23.44± 1.67s
   45.356 N ±13.2km   14.312 E ± 9.3km
   DEPTH =  10.0km  (geophysicist)
 YUGOSLAVIA                      (383)
      MD 2.8 (LJU), 2.5 (TRI).

RIY      0.05 103 iPgd   07 24.90  -0.7
                 i(Sg)   07 25.60
CEY      0.39  12 iPgd   07 30.80  -0.7
                 iSg     07 36.50
TRI      0.52 313 iPgd   07 34.40   0.4
                 iSg     07 43.70
VBY      0.68  77 e(Pg)  07 41.00   4.1X
                 eSg     07 46.00
LJU      0.70  13 ePg    07 37.00  -0.4
                 eSg     07 48.00
VOY      0.74 337 ePg    07 38.00   0.0
                 eSg     07 50.00
PTJ      1.28  64 iPnd   07 48.40   1.2
                 iSg     08 06.60
FVI      1.63 320 P      07 54.90   2.6X
                 eSn     08 17.70
      S.D. = 0.9   on   6 of   8 obs.
-------------------------------------
?  SEP  08, 1990  15h 25m 53.80± 2.55s
   6.877 S ±21.6km  107.008 E ±21.4km
   DEPTH = 168.9 ± 24.3 km
   4.2mb (  4 obs.)
 JAVA                            (277)

TRT      5.64  99 ePd    27 17.10   0.3
NANU    17.62 153 eP     29 42.50  -7.9X
                 eS      32 45.00
MBL     18.86 140 eP     30 03.00  -0.5
        0.4s     4.00nm          4.2mb
                 eS      33 10.00
MTN     24.48 106 eP     30 59.50   0.6
        0.4s    51.00nm          5.4mb X
CHTO    26.74 343 eP     31 19.20  -0.4
        1.0s     1.25nm          3.5mb
WB5     29.53 119 eP     31 44.00  -0.6
WRA     29.53 119 Pc     31 44.00  -0.6
        0.6s     2.60nm          4.1mb
GBA     35.72 305 P      32 38.00  -0.1
KKN     40.36 330 P      33 00.00 -16.8X
STK     40.72 132 iPc    33 20.00   0.5
        0.4s    15.00nm          5.0mb
SOB1   144.25 244 (PKP)  45 13.00   0.8
      S.D. = 0.7   on   9 of  11 obs.
-------------------------------------
   SEP  08, 1990  15h 50m 30.86± 0.80s
   37.885 N ± 8.8km   14.730 E ± 6.7km
   DEPTH =  10.0km  (geophysicist)
 SICILY                          (398)

MNO      0.05 329 Pd     50 32.50  -0.8
                 eSg     50 34.70
GIB      0.57 281 P      50 42.40   0.0
                 eSg     50 51.60
ATN      0.64  64 P      50 43.40  -0.3
                 eSg     50 53.00
MEU      0.80 168 P      50 45.20  -1.2
                 eSg     50 58.10
FAI      1.04 234 Pd     50 51.60   1.2
SOI      1.06  79 P      50 52.00   1.1
      S.D. = 1.3   on   6 of   6 obs.
-------------------------------------
   SEP  08, 1990  16h 04m 43.05± 0.72s
   18.542 N ± 7.9km   69.061 W ± 8.1km
   DEPTH = 130.5 ±  8.1 km
   4.6mb (  8 obs.)
 DOMINICAN REPUBLIC REGION       ( 88)

MCP      1.85  93 P      05 15.50  -0.2
LRS      2.12  96 P      05 19.20   0.2
PORP     2.35 102 P      05 21.50  -0.4
CSB      2.77  95 P      05 27.20  -0.1
SJG      2.80  98 iP     05 28.90   1.2
LHS     19.01 329 P      08 56.00  -1.2
JSC     19.08 328 P      08 56.70  -1.2
PRM     19.51 325 P      09 01.50  -0.9
NA2     20.94 341 P      09 16.80  -0.1
BLA     21.10 334 P      09 18.80   0.2
        0.8s    36.91nm          4.8mb
PWLA    23.51 318 P      09 43.00   0.9
TUL     29.26 312 ePd    10 34.80  -0.1
        0.8s    12.30nm          4.7mb
SIO     29.54 311 e(P)   10 36.70  -0.7
ZOBO    34.60 178 P      11 22.00  -0.2
LPB     34.87 178 (P)    11 32.00   7.8X
CNCB    35.14 178 P      11 26.00  -0.7
SIV     35.21 167 P      11 26.00  -0.6
SCH     36.25   2 eP     11 36.00   1.0
ANMO    36.93 304 P      11 41.40   0.2
        0.9s    3.15nm          4.1mb
GOL     37.73 312 P      11 48.20   0.2
        0.8s    4.46nm          4.3mb
DAU     42.20 310 P      12 25.80   0.9
MSU     42.32 307 P      12 26.50   0.6
DUG     43.27 309 P      12 34.00   0.6
GLA     43.33 299 P      12 35.00   1.2
FFC     43.99 333 iPd    12 38.00  -0.8
        0.7s    12.00nm          4.7mb
LRM     44.92 317 eP     12 47.00   0.3
KVN     46.95 306 P      13 02.80   0.0
CMB     48.54 305 P      13 16.40   1.5
NEW     48.79 319 P      13 16.00  -0.6
        0.9s    10.96nm          4.7mb
YKA     53.95 336 eP     13 53.70  -1.4
        0.7s    5.20nm           4.5mb
LKO     61.96  89 Pc     14 50.26  -1.6
LIC     63.45  92 P      15 02.10   0.5
KIC     63.68  92 Pc     15 03.20   0.1
BCAO    86.33  87 iPd    17 13.60   1.4
        0.7s    11.00nm          4.9mb
      S.D = 0.9   on  33 of  34 obs.
-------------------------------------
*  SEP  08, 1990  16h 11m 40.00± 1.24s
   7.459 S ±10.4km  130.233 E ±21.8km
   DEPTH = 159.0 ± 14.0 km
   4.3mb (  2 obs.)
 TANIMBAR ISLANDS REGION         (281)

AAI      4.26 331 eP     12 44.70   0.1
MTN      5.43 171 eP     13 01.00   1.0
KNA      8.36 190 eP     13 39.00  -0.3
        0.3s    43.00nm          5.6mb X
                 eS      15 20.00
WB5     12.98 162 eP     14 38.00  -1.8
                 eS      17 10.00
WRA     13.03 163 Pd     14 40.30  -0.2
        0.2s     1.80nm          4.2mb
QIS     15.87 146 eP     15 54.00  38.0X
                 eS      18 38.00
ASPA    16.50 168 eP     15 24.50   0.8
        0.Bs    14.00nm          4.4mb
                 eS      18 32.80
MBL     16.93 215 eP     15 28.00  -1.0
                 e       16 16.70
WARB    18.93 190 eP     15 53.00   1.7
CNCB   149.90 143 ePKP   31 09.80   0.5
LPB    150.05 143 (PKP)  31 04.00  -5.3X
ZOBO   150.23 142 ePKP   31 09.00  -0.8
      S.D. = 1.3   on  10 of  12 obs.
-------------------------------------
   SEP  08, 1990  18h 02m 51.72± 0.60s
   36.444 N ± 7.0km   26.938 E ± 5.0km
   DEPTH = 141.4 ± 11.2 km
 DODECANESE ISLANDS              (369)
      MD 4.3 (HLW).

KAP      0.91 168 iPc    03 15.50   0.3
                 eS      03 27.20
SMG      1.26 356 iPd    03 18.20  -0.2
APE      1.29 299 iPd    03 18.30  -0.5
CIN      1.48  38 eP     03 21.00   0.3
NPS      1.60 223 iPd    03 22.00  -0.1
VAM      2.45 246 eP     03 32.20  -0.1
VLI      3.23 276 eP     03 42.20  -0.1
ITM      4.09 282 eP     03 54.30   0.6
KOT      7.68 146 ePn    04 42.00  -0.1
                 eSn     06 03.00
HRI      7.90 111 eP     04 45.00  -0.1
DSI      8.53 122 eP     04 53.50   0.1
PRNI     9.07 130 eP     05 00.50  -0.2
      S.D. = 0.4   on  12 of  12 obs.
-------------------------------------
   SEP  08, 1990  18h 46m 29.83± 0.19s
    7.338 S ± 3.4km  155.892 E ± 4.6km
   DEPTH =  30.0km  (  6 depth phases)
   5.4mb ( 21 obs.) 5.0Msz (  3 obs.)
 SOLOMON ISLANDS                 (193)
      CENTROID, MOMENT TENSOR    (HRV)
      Dato Used: GDSN
      L.P.B.: 10S, 23C
      Centroid Locotion:
      Origin Time        18:46:27.8 1.3
      Lot  7.98S 0.12 Lon 156.06E 0.06
      Dep  15.0 FIX Holf-durotion  2.0
      Moment Tensor;   Scole 10**17 Nm
        Mrr= 1.77 0.08  Mtt=-1.25 0.11
        Mff=-0.52 0.10  Mrt= 1.55 0.31
        Mrf=-0.98 0.22  Mtf= 0.96 0.08
       Principol Axes:
        T  Vol=  2.53  Plg=68  Azm= 30
        N        0.14      1      124
        P       -2.67     22      214
       Best Double Couple:Mo=2.6*10**17
        NP1:Strike=307 Dip=23 Slip=  94
        NP2:       123     67      89

HNR      4.52 118 eP     48 40.00  62.0X
                 eS      49 40.00
RAB      4.85 310 e(P)   47 44.00   1.4
                 iS      49 00.00
LAT      8.85 274 eP     48 40.00   1.2
PMG      8.89 256 eP     48 38.50  -0.8
        0.8s   186.57nm          6.3mb
MNDI    12.21 275 eP     49 29.00   4.1X
CTA     15.75 215 iPd-   50 12.70   1.5
        1.6s   633.33nm          5.5mb
                 iS      52 48.00
PVC     15.92 132 iPc    50 27.00  13.6X
DZM     17.84 146 iPd    50 38.60   1.0
BRS     20.16 188 iP     51 04.00  -0.7
                 i       51 08.00  15kmX
                 e       51 14.00
QIS     20.53 229 eP     51 08.00  -0.5
                 e       53 43.00
COO     23.42 189 eP     51 37.00  -0.4
        0.4s    8.00nm          4.6mb
WB5     24.31 237 iPd    51 47.00   0.9
                 i       51 56.10  32km
                 e       54 26.50
                 e       54 34.80
WRA     24.36 237 Pc     51 47.40   0.8
        0.9s    34.10nm          4.9mb
MTN     24.98 255 iPd    51 53.50   1.0
        0.4s    47.00nm          5.4mb
CMS     25.80 200 eP     52 00.00  -0.1
                 e       52 07.00  25km
ASPA    26.63 230 iPd    52 06.90  -1.0
        0.6s   13.00nm          4.7mb
     Z  20s    4.43um           5.0Msz
                 ePcP    55 17.20
                 eS      56 30.10
                 LR      01 52.30
BWA     27.82 193 eP     52 19.10   0.4
STK     27.82 207 eP     52 18.40  -0.2
        0.9s    3.00nm          4.0mb X
                 eS      56 56.90
CNB     28.48 191 eP     52 24.00  -0.6
CAN     28.56 192 eP     52 24.30  -1.0
TOO     31.54 196 eP     52 52.60   0.8
ADE     31.71 207 eP     52 59.70   6.4X
DAV     33.46 295 eP     53 07.10  -1.6
MBL     37.44 245 eP     53 42.00  -0.5
                 e       53 52.00  34km
                 e       56 28.00
MEKA    40.33 237 iPc    54 06.40  -0.1
        0.7s   10.00nm          4.7mb
PPR     40.73 294 iPd    54 11.50   1.6
NANU    41.67 244 eP     54 18.00   0.5
KKM     41.76 288 ePc    54 21.00   2.5
BAG     42.16 304 ePc+   54 21.80  -0.1
        1.1s   253.16nm          5.9mb
KLB     42.95 231 eP     54 27.10  -0.9
BAL     43.35 233 eP     54 31.00  -0.2
MRWA    43.38 235 eP     54 31.00  -0.5
        0.6s    6.00nm          4.5mb
NWAO    43.94 229 eP     54 36.00   0.0
MUN     44.31 231 eP     54 54.00  15.0X
KAKJ    45.76 342 P      54 50.50   0.1
IIDJ    45.84 339 P      54 51.40   0.3
```

08d 18h

CHJJ	45.99	341	eP	54	51.20	-1.0
TSRJ	46.59	338	P	54	57.20	0.2
MAT	46.70	340	iPc	54	56.60	-1.3
	0.7s	18.49nm				5.2mb
		eS		01	40.00	
MTMJ	46.87	340	eP	54	56.70	-2.6
NIIJ	47.08	342	P	55	01.10	0.3
HOOJ	50.80	348	eP	55	30.90	1.4
KUSJ	51.22	350	eP	55	34.10	1.5
MRRJ	51.34	346	eP	55	33.50	0.0
ASAJ	52.60	348	eP	55	44.00	0.9
KGM	53.27	278	eP	55	48.00	-0.5
PMO	55.55	103	iP	56	14.60	9.5X
	1.1s	90.00nm				5.7mb
VAH	55.81	103	iP	56	16.00	9.0X
	1.1s	55.00nm				5.5mb
TPT	55.82	103	iP	56	16.20	9.1X
	1.1s	70.00nm				5.6mb
IPM	56.02	281	ePd	56	0B.80	0.2
RUV	56.05	103	iP	56	17.90	9.2X
	1.1s	80.00nm				5.7mb
NNT	59.22	289	eP	56	18.00	-13.1X
		e		59	02.00	
		e		02	32.00	
BJI	59.70	325	eP	56	33.00	-1.0
	2.0s	66.00nm				5.4mb
KMI	60.95	304	Pc	56	43.50	0.4
	1.5s	100.00nm				5.7mb
Z	20s	1.20um				5.0Msz
		pP		56	52.50	29km
		eS		05	18.00	
CHG	61.85	296	ePc	56	48.40	-0.7
	1.2s	31.25nm				5.3mb
		e		59	22.60	
		e		02	51.00	
CHTO	61.85	296	iP	56	48.80	-0.2
	1.0s	28.46nm				5.4mb
		pP		56	58.50	32km
LZH	65.18	315	Pc	57	10.00	-0.9
	2.5s	95.00nm				5.5mb
Z	20s	0.70um				4.9Msz
		sP		57	19.00	
		eS		05	52.00	
HYB	80.22	289	eP	58	40.50	0.8
GBA	80.60	285	P	58	42.00	0.3
SPA	82.71	180	iPc	58	52.30	0.3
	1.0s	28.50nm				5.3mb
		i		01	25.40	761kmX
NDI	83.65	300	eP	58	56.50	-0.9
MAW	84.42	203	eP	59	01.00	0.5
INK	89.73	21	eP	59	26.50	0.4
ISA	90.70	54	eP	59	42.00	10 6X
PAS	90.72	56	eP	59	40.00	8.5X
MWC	90.83	56	eP	59	42.00	9.8X
SBB	91.08	55	eP	59	43.00	9.8X
RVR	91.35	56	eP	59	39.00	4.6X
CLC	91.42	54	eP	59	45.00	10.2X
KVN	91.48	51	eP	59	36.10	1.0
		pP		59	45.10	28km
PLM	91.69	57	eP	59	37.00	0.8
GSC	92.00	55	eP	59	40.00	2.6
TPC	92.46	56	eP	59	49.00	9.4X
QUE	92.73	300	eP	59	41.00	-0.1
YKA	96.22	28	eP	59	56.20	0.1
	0.8s	2.90nm				4.8mb
SUF	113.88	337	ePKP	05	07.00	-0.1
NUR	115.71	336	ePKP	05	10.00	-0.6
HFS	120.14	339	ePKP	05	16.40	-2.7X
	0.8s	4.20nm				
PTZ	120.96	249	ePKP	05	37.00	14.9X
LSZ	123.52	246	ePKP	05	28.00	0.9
KRA	123.82	327	ePKP	05	26.70	0.2
		e		05	35.50	
SPC	124.13	326	ePKP	05	28.10	0.7
		e		05	37.40	
KSP	125.24	330	ePKP	05	29.20	0.0
		e		05	39.00	
		e		08	03.30	
SRO	125.96	326	ePKP	05	29.70	-1.0
		e		05	39.70	
BRG	126.37	331	iPKP	05	31.50	0.1
	1.4s	36.00nm				
		i		08	05.40	
ZST	126.41	327	ePKP	05	31.60	0.0
		i		05	40.90	
CLL	126.53	332	iPKP	05	31.70	0.0
	1.2s	13.00nm				
		i		05	41.00	
PRU	126.65	330	ePKP	05	32.00	0.0
		e		05	41.50	
SKO	127.05	318	e(PKP)	05	32.00	-1.0
MOX	127.63	332	ePKP	05	33.00	-0.9
		e		05	43.00	
KHC	127.68	330	ePKP	05	34.00	-0.1
		e		05	43.70	
SQTA	130.13	329	ePKP	05	38.00	-0.9
	1.4s	27.10nm				
		i		05	48.20	
CNCB	130.42	119	ePKP	05	22.00	-18.8X
		i		05	42.00	
		i		09	20.00	
ZOBO	130.53	119	ePKP	05	20.00	-21.1X
	1.8s	99.33nm				
Z	24s	0.26um				4.8MszX
		i		05	40.00	
		i		09	19.50	
		LR		18	20.00	
DOU	131.10	336	PKP	05	41.80	1.4
CDF	131.21	333	ePKP	05	40.10	-0.7
BSF	131.85	332	ePKP	05	41.30	-0.8
HAU	131.93	333	ePKP	05	41.50	-0.6
	0.8s	5.35nm				
LPL	133.55	330	ePKP	05	45.30	-0.3
LPG	133.56	330	ePKP	05	45.50	-0.2
LOR	133.59	334	ePKP	05	44.80	-0.5
	1.1s	8.55nm				
LBF	133.76	333	ePKP	05	45.20	-0.5
SSF	133.91	334	ePKP	05	45.70	-0.2
	1.1s	13.45nm				
SMF	134.08	333	ePKP	05	45.90	-0.3
FLN	134.14	338	ePKP	05	46.00	-0.3
	0.6s	5.40nm				
LDF	134.15	338	ePKP	05	45.70	-0.6
AVF	134.18	334	ePKP	05	45.80	-0.6
BGF	134.58	334	ePKP	05	47.00	-0.2
	0.6s	4.50nm				
GRR	134.59	338	ePKP	05	47.10	0.0
	0.7s	7.70nm				
LPF	134.96	338	ePKP	05	47.80	0.0
	0.6s	8.10nm				
MAF	134.97	334	ePKP	05	48.00	0.0
TCF	135.07	334	ePKP	05	48.00	-0.2
	0.8s	4.70nm				
LSF	135.39	335	ePKP	05	48.40	-0.4
MFF	135.80	336	ePKP	05	49.30	-0.2
	0.8s	8.05nm				
BCAO	137.50	269	ePKPc	05	53.30	-0.4
	0.6s	4.00nm				
PPD	140.46	138	ePKP	05	58.40	-0.5
JFO	145.51	147	ePKP	06	05.30	-2.4X
		e		06	15.70	
BAO	147.13	134	PKPd	06	11.00	0.5
		e		06	18.50	
		e		06	27.50	
NKM	147.18	331	iPKP	06	13.00	3.1X
		i		08	46.00	
IFR	148.58	329	iPKPc	06	17.00	4.5X
		i		06	26.00	
		i		08	51.50	
AVE	149.89	331	iPKP	06	20.00	5.8X
		i		08	53.50	
TIO	151.73	328	iPKP	06	24.00	6.8X
		i		08	59.00	
SOB1	156.55	134	ePKP	06	25.20	1.0
		e		06	33.00	

S.D. = 0.8 on 97 of 123 obs.

SEP 08, 1990 18h 49m 02.34± 0.34s
7.061 S ± 7.8km 156.143 E ± 8.6km
DEPTH = 21.0km (2 depth phases)
5.2mb (5 obs.)
SOLOMON ISLANDS (193)

LAT	9.09	272	eP	51	14.00	-1.4
PMG	9.20	255	e(P)	51	18.50	1.6
DZM	17.93	147	iPd	53	12.50	0.2
BRS	20.47	189	iP	53	44.00	2.4
			i	53	50.00	22km
COO	23.73	189	eP	54	20.00	6.0X
	0.6s	8.00nm				4.4mb
MMCZ	39.45	165	eP	56	42.40	9.5X
PPR	40.85	294	iPd	56	45.00	0.4
KAKJ	45.58	342	P	57	23.30	0.6
IIDJ	45.67	339	eP	57	24.60	1.1
CHJJ	45.81	341	P	57	25.30	0.7
TSRJ	46.43	337	P	57	31.20	1.7
MAT	46.52	340	iPd	57	30.60	0.4
	1.0s	17.00nm				5.0mb
MTMJ	46.70	340	P	57	32.60	0.9
NIIJ	46.90	341	eP	57	33.90	0.8
KMI	61.00	304	Pc	59	17.00	-0.2
CHTO	61.96	296	eP	59	23.00	-0.5
	1.0s	20.00nm				5.2mb
		pP		59	29.10	20km
GUN	76.13	301	P	00	51.00	-0.3
	0.9s	95.00nm				5.8mb
PKI	76.44	300	P	00	52.40	-0.7
	1.0s	50.00nm				5.5mb
KKN	76.61	301	P	00	53.40	-0.5
GKN	77.21	301	P	00	56.60	-0.5
GBA	80.77	285	P	01	16.00	-0.4
BUL	121.75	241	iPKPd	07	55.70	-1.7
	0.9s	4.62nm				
BSF	131.73	333	ePKP	08	15.80	0.1
	1.0s	12.00nm				
HAU	131.80	333	ePKP	08	15.90	0.1
LPL	133.44	330	ePKP	08	19.80	0.6
	0.9s	4.90nm				
LPG	133.44	330	ePKP	08	19.80	0.5
	1.0s	7.00nm				
LOR	133.46	334	ePKP	08	18.50	-0.4
	0.9s	4.90nm				
LBF	133.62	334	ePKP	08	19.50	0.2
SSF	133.77	334	ePKP	08	19.00	-0.5
	0.9s	6.55nm				
LPF	134.80	338	ePKP	08	22.10	0.7
	0.8s	8.05nm				
TCF	134.93	335	ePKP	08	22.40	0.6
	1.0s	11.00nm				
LSF	135.25	335	ePKP	08	22.80	0.5
MFF	135.64	337	ePKP	08	22.70	-0.4
	1.0s	12.00nm				
BCAO	137.75	269	iPKPd	08	26.60	-1.5
	0.7s	5.00nm				
ASMO	144.73	332	iPKPc	0B	38.50	-1.3
AAPN	144.94	332	iPKPd	08	39.00	-1.2
ACHM	144.97	332	iPKP	08	39.40	-0.8
APHE	145.03	331	iPKPd	08	39.00	-1.4
ALOJ	145.10	332	iPKPd	08	39.70	-0.8
ATEJ	145.21	332	iPKPd	08	40.00	-0.7
BAO	147.14	133	ePKP	08	45.30	0.9

S.D. = 1.0 on 39 of 41 obs.

SEP 0B, 1990 18h 51m 45.24± 0.16s
24.449 S ± 4.0km 177.227 W ± 5.0km
DEPTH = 132.1km (15 depth phases)
5.4mb (15 obs.)
SOUTH OF FIJI ISLANDS (171)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 17C
Centroid Location:
Origin Time 18:51:51.4 0.8
Lat 24.31S 0.10 Lon 177.19W 0.06
Dep 133.4 2.7 Half-duration 2.8
Moment Tensor; Scale 10**17 Nm
Mrr=-2.80 0.17 Mtt=-0.46 0.32
Mff= 3.26 0.31 Mrt=-0.68 0.16
Mrf=-3.27 0.19 Mtf=-0.86 0.24
Principal Axes:

	Val=	Plg=	Azm=
T	4.74	23	84
N	-0.27	15	180
P	-4.46	62	301

Best Double Couple:Mo=4.6*10**17
NP1:Strike=147 Dip=26 Slip=-126
NP2: 6 69 -74

SVA	7.47	327	eP	53	35.20	2.3
VUN	7.56	327	ePc	53	34.50	0.3
OVA	7.69	330	eP	53	21.80	-14.1X
KRO	7.77	335	eP	53	36.50	-0.5
TVI	7.93	340	eP	53	38.80	-0.4
SGE	8.19	326	eP	53	44.70	2.0
NDF	8.31	322	eP	53	49.00	4.9X
NDE	8.47	337	eP	53	44.62	-1.8
UDU	8.65	342	eP	53	44.70	-4.1X
PUZ	14.12	195	eP	55	01.90	1.5
			eS	57	25.50	
PVC	15.05	294	iPc	55	17.50	5.2X
DZM	15.19	276	iPc	55	19.40	5.2X
			iS	58	20.50	

08d 18h

RAR		16.41	82	P	55	25.00	-4.2X					e	04	24.00						e	11	23.40							
				S	58	15.00		WDC		82.27	39	eP	03	53.30	0.3					e	11	31.30							
PGZ		17.02	197	eP	55	35.90	-0.6					epP	04	25.50	126km	RMN		151.16	289	iPKPd	11	25.00	6.6X						
MNG		17.24	199	eP	55	33.80	-5.5X	GLA		82.46	49	eP	03	55.00	0.7	WIT		151.52	355	ePKP	11	26.00	7.8X						
				eS	58	36.60						e	04	28.00						e	12	02.00							
KIW		17.64	200	eP	55	41.80	-2.3	GSC		82.46	46	eP	03	54.00	-0.3	CSS		151.57	299	ePKP	11	25.30	6.4X						
MRW		18.04	200	eP	55	45.00	-3.8X					e	04	24.00		KSP		151.65	342	ePKPd	11	18.60	0.1						
WEL		18.07	200	eP	55	48.00	-1.2	MIN		82.65	39	eP	03	55.70	0.5			0.6s		56.00nm									
				S	58	55.00		LBFM		83.14	39	P	03	58.20	0.4					id	11	25.50							
TCW		18.16	201	eP	55	45.00	-5.2X					pP	04	32.20	134km					i	11	34.60							
THZ		19.12	203	eP	55	58.60	-1.8	KVN		83.92	42	P	04	01.60	-0.1					i	11	59.70							
				eS	59	18.10						pP	04	35.60	133km	CLL		152.05	346	iPKP	11	18.90	-0.1						
KHZ		19.48	201	eP	56	02.90	-1.2	KDC		84.46	13	P	04	03.40	-0.3			2.4s		100.00nm									
LTZ		20.24	203	eP	56	12.40	0.5	BMW		85.83	34	P	04	11.80	0.9					i	11	26.00							
				eS	59	40.90		SNG		85.85	280	eP	04	13.70	2.1					ipPKP	12	01.30							
BRS		27.11	257	iP	57	06.50	-11.2X	LON		86.74	35	P	04	14.80	-0.5	BRG		152.24	345	iPKPd	11	19.30	0.0						
				i	57	14.50						pP	04	49.00	133km			1.4s		85.00nm									
				i	57	50.00		PMR		88.68	13	P	04	23.50	-0.7					i	11	26.50							
COO		28.01	251	iPc	57	29.00	3.3X			1.3s		70.75nm			5.6mb					i	11	36.00							
		0.6s		44.00nm			5.3mb					pP	04	57.30	131km					i	12	01.20							
CNB		30.79	242	eP	57	54.40	3.9X	BJI		89.19	315	eP	04	26.50	-0.6	WTS		152.32	355	ePKP	11	19.50	0.2						
CAN		31.09	242	eP	57	54.90	1.9		Z	22s		0.92um			5.2Msz			0.7s		24.00nm									
				i	58	25.20		ANMO		89.32	51	P	04	26.40	-1.7					i	11	26.40							
BWA		31.40	244	eP	57	55.80	0.0			1.3s		25.24nm			5.1mb	PPCY		152.37	299	ePKP	11	26.70	6.7X						
				i	58	26.20						pP	05	02.40	140km	PRU		152.91	343	ePKP	11	20.80	0.5						
CMS		33.26	249	eP	58	03.00	-8.9X	PNT		89.53	34	ePd	04	28.00	-0.5					P'P'	11	27.70							
				e	58	10.00				0.8s		18.00nm			5.2mb	MOX		152.96	348	iPKPc	11	21.00	0.7						
CTA		34.01	270	iPd	58	19.00	0.5	NEW		90.15	35	P	04	30.60	-0.8			2.1s		72.00nm									
		1.0s		99.00nm			5.5mb	IMW		91.11	41	P	04	36.60	0.3					e	11	28.00							
TOO		34.30	239	eP	58	22.80	1.9					pP	05	10.40	131km					e	11	39.00							
		0.4s		6.00nm			4.7mb	LRM		91.29	39	eP	04	36.90	-0.1	BNS		153.31	354	iPKPc	11	26.90	6.1X						
				i	58	53.20						e	05	11.00			Z	15s		1.40um			5.9MszX						
PMG		37.07	288	e(P)	58	43.00	-1.3	KMI		91.76	297	eP	04	41.50	1.9					i	42	13.40							
ASPA		44.45	261	iPd	59	44.70	-0.2	FBA		91.93	12	P	04	37.50	-1.7	ENN		153.61	355	ePKP	11	29.50	8.3X						
		1.8s		179.00nm			5.5mb			1.2s		53.03nm			5.6mb			0.7s		258.00nm									
	Z	18s		3.42um			5.3Msz	CHTO		92.24	290	eP	04	42.70	1.1					i	11	42.60							
				iPPd	00	16.80				1.1s		18.55nm			5.2mb	SRO		153.62	336	ePKP	11	21.30	0.0						
				eS	05	52.50						pP	05	17.00	133km					i	11	42.70							
				iSS	07	05.80		GOL		92.46	47	P	04	42.40	-0.1					i	12	18.60							
				LR	10	08.80				1.3s		15.63nm			5.1mb	BUD		153.62	335	e(PKP)	11	21.00	-0.3						
WB5		44.88	266	eP	59	48.20	-0.2					pP	05	16.80	133km	PVL		153.65	321	ePKP	11	21.00	-0.5						
FORR		48.45	250	eP	00	16.00	-0.2	GLD		92.58	47	P	04	43.80	0.8	ZST		153.73	338	ePKP	11	21.70	0.2						
		0.4s		45.00nm			5.6mb			1.3s		51.72nm			5.6mb					i	11	42.80							
GUA		52.84	311	eP	00	48.50	-0.9					pP	05	18.40	134km	VKA		153.93	339	e(PKP)	11	13.00	-8.8X						
		0.7s		147.95nm			6.0mb	SES		94.63	36	eP	04	51.50	-0.5			2.8s		272.00nm									
GUMO		52.90	311	eP	00	48.30	-1.6					pP	05	25.00	129km					i	11	22.40							
		0.7s		76.24nm			5.7mb	LPB		99.79	113	P	05	00.00	-16.7X					i	11	44.80							
PJG		52.90	311	eP	00	48.30	-1.6					i	05	50.00		KHC		153.94	344	iPKPd	11	22.50	0.7						
AAI		56.40	282	e(P)	01	14.30	-1.1					e	09	19.00			Z	14s		0.50um			5.5MszX						
KLB		57.11	247	eP	01	29.00	8.8X	PKI		107.05	293	PKP	09	56.60	-1.3		N	16s		1.00um									
BAL		58.18	248	eP	01	21.00	-6.7X	KKN		107.23	293	PKP	09	57.00	-1.0		E	14s		0.70um									
NANU		61.13	257	iPc	01	48.90	1.0	GBA		109.30	277	PKPc	10	01.40	-0.5					e	11	44.30							
SPA		65.70	180	iPd	02	19.20	1.8			0.3s		0.80nm				GRF		153.95	347	ePKP	11	21.70	-0.1						
		1.1s		51.79nm			5.4mb	BUL		129.04	212	iPKPd	10	39.40	-0.4					e	11	29.00							
	Z	20s		0.81um			4.9Msz			0.7s		6.51nm				DIM		154.23	318	ePKP	11	31.00	8.7X						
				i	02	50.20						i	11	14.00		DOU		154.36	357	PKPc	11	31.10	8.9X						
TRT		68.80	271	ePd	02	38.30	0.9	MAIO		130.28	298	ePKP	10	42.00	0.3	KDZ		154.54	318	iPKP	11	21.00	-1.8						
ADK		76.00	0	P	03	17.00	-1.9					e	11	16.00		KMR		154.78	342	iPKP-	11	22.30	-0.6						
				pP	03	51.40	138km	KEV		132.46	349	ePKP	10	43.00	-1.6					i	11	47.60							
MAW		78.11	200	iPd-	03	33.00	2.4	PTZ		132.49	219	iPKPd	10	55.00	8.6X	RZN		154.94	319	iPKPd	11	23.00	-0.5						
PRS		80.20	43	eP	03	43.00	0.7					i	11	31.00		BCAO		154.97	220	iPKPd	11	24.20	0.0						
GCC		80.26	42	eP	03	43.00	0.4	LSZ		133.37	215	iPKP	10	49.10	1.0			1.0s		65.00nm									
BCH		80.27	44	P	03	43.50	0.6					e	11	25.00						ic	11	50.10							
SAO		80.43	42	eP	03	44.30	0.8	SOD		134.59	347	iPKP	10	47.80	-1.0	VTS		155.26	322	ePKP	11	24.00	0.1						
BKS		80.67	41	eP	03	43.00	-1.8	SUF		138.66	344	ePKP	10	46.00	-10.5X	KKB		155.79	321	ePKP	11	24.00	-0.5						
				e	13	13.00		NUR		140.91	343	ePKP	10	54.00	-6.6X	PTJ		156.10	337	ePKP	11	25.00	0.1						
				e	23	22.00		UPP		143.12	348	iPKP	11	00.00	-4.5X	ZAG		156.16	337	ePKP	11	24.50	-0.3						
MHC		80.68	42	eP	03	45.70	0.7	LWI		143.36	227	iPKPd	11	04.90	-1.7	HAU		156.32	354	ePKP	11	25.30	0.3						
PAS		80.87	46	eP	03	48.00	2.1	LWI		143.36	227	iPKP-	11	06.00	-0.6	BSF		156.45	353	ePKP	11	25.40	0.1						
BAR		80.99	48	eP	03	48.00	1.4	HFS		143.53	351	ePKP	10	59.20	-6.0X	LJU		156.46	339	e(PKP)	11	25.00	-0.2						
PLM		81.26	47	eP	03	48.00	-0.2			1.2s		39.60nm				FVI		156.49	343	PKP	11	24.00	-1.2						
				e	04	22.00			Z	17s		1.88um			5.9MszX	SKO		156.65	323	iPKP	11	25.00	-0.6						
RVR		81.30	47	eP	03	48.00	-0.1					LR	00	45.00						i	11	55.50							
				e	04	22.00		BSD		148.08	347	iPKPd	11	16.00	3.2X	VOY		156.67	340	ePKP	11	25.00	-0.6						
S8B		81.42	46	eP	03	48.00	-0.9			0.3s		26.40nm				VBY		156.69	337	e(PKP)	11	26.30	0.8						
				e	04	21.00		EKA		148.84		7 PKPd	11	17.50	3.4X	CEY		156.77	339	e(PKP)	11	24.50	-1.2						
ISA		81.60	45	eP	03	50.00	0.3			1.0s		21.70nm				TRI		157.00	340	ePKP	11	26.00	0.1						
				e	04	22.00		KAS		149.20	311	iPKPd	11	20.10	4.9X					e	11	56.00							
FRI		81.65	43	eP	03	50.10	0.3	MDSJ		149.68	291	PKPd	11	32.25	16.0X					e	16	24.00							
				epP	04	23.80	133km	JARJ		149.88	292	PKPd	11	32.32	15.8X					e	22	12.00							
CMB		81.89	42	eP	03	51.30	0.1	BHL		149.89	296	PKP	11	16.00	-0.5					e	31	48.00							
				epP	04	23.80	128km	SHMJ		149.97	293	PKPd	11	32.74	16.2X	LOR		157.21	358	ePKP	11	26.90	0.7						
ORV		82.20	40	eP	03	52.70	0.0	SALJ		150.12	292	PKPd	11	32.98	16.1X	SSF		157.43	359	ePKP	11	27.40	1.0						
				epP	04	25.00	127km	ADI		150.37	294	iPKPd	11	23.00	5.9X			1.6s		24.90nm									
TPC		82.25	47	eP	03	53.00	-0.1	ZNT		150.65	293	iPKPd	11	24.00	6.4X	LBF		157.49	358	ePKP	11	27.20	0.6						
				e	04	28.00		KRA		151.16	337	ePKP	11	16.00	-1.7			1.5s		26.10nm									
CLC		82.26	45	eP	03	53.00	-0.2			0.8s		52.00nm				AVF		157.70	359	ePKP	11	27.20	0.5						

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        1.5s     15.65nm
SMF   157.83 358 ePKP   11 27.50    0.6
        1.5s     18.30nm
BGF   157.94 360 ePKP   11 28.00    1.0
        1.8s     60.40nm
TCF   158.20   1 ePKP   11 28.20    0.8
MAF   158.27   0 ePKP   11 28.60    1.2
LPL   158.74 352 ePKP   11 29.60    1.4
LPG   158.75 352 ePKP   11 29.80    1.5
BNI   159.20 352 PKPc   11 30.00    1.4
SFI   159.20 341 PKP    11 29.00    0.6
PGD   159.28 341 PKP    11 29.00    0.2
MNS   160.32 338 PKP    11 29.00   -0.8
SDI   160.49 335 PKP    11 29.50   -0.5
TDS   161.01 326 PKP    11 31.00    0.5
MGR   161.02 329 PKP    11 31.00    0.5
SOI   162.33 323 PKP    11 34.00    2.2X
      S.D. = 1.0  on 128 of 168 obs.
-----------------------------------------
*  SEP  08, 1990  18h 52m 30.11± 0.56s
   7.294 S ± 8.8km   156.197 E ±10.7km
   DEPTH =  33.0km  (normal)
   4.9mb ( 12 obs.)  4.8Msz (  1 obs.)
 SOLOMON ISLANDS                  (193)

LAT     9.15 273 eP     54 42.00   -0.9
PMG     9.19 256 e(P)   54 45.00    1.5
CTA    15.96 216 iPc    56 19.00    5.1X
       1.0s     80.00nm          4.8mb
QIS    20.78 229 eP     57 10.00   -1.1
                e       59 09.00
WB5    24.59 237 eP     57 48.60   -0.1
                i       58 01.00
WRA    24.64 237 Pd     57 49.00   -0.2
       1.0s     17.00nm          4.6mb
ASPA   26.89 230 eP     58 11.70    1.6
       1.0s     16.00nm          4.6mb
STK    28.00 207 ePKP   58 22.30    2.2
       1.3s      6.00nm          4.1mb
                i       58 43.00
                i       59 13.90
CNB    28.59 192 iPd    58 23.20   -2.2
       1.2s     69.00nm          5.2mb
FORR   35.22 225 eP     59 36.00   12.5X
       0.4s     26.00nm
PPR    40.99 294 iPc    00 12.00    0.1
MRWA   43.65 235 eP     00 32.00   -1.5
                e       01 35.50
MAT    46.76 340 (P)    00 58.00   -0.2
       0.6s     10.67nm          5.0mb
BJI    59.84 325 eP     02 34.00   -0.8
KMI    61.17 304 eP     02 45.00    0.5
CHTO   62.10 296 eP     02 50.10   -0.5
       1.0s     11.00nm          4.9mb
LZH    65.36 315 Pc     03 11.80   -0.1
       1.5s     23.00nm          5.1mb
                sP      03 19.30
GUN    76.29 301 P      04 18.40    0.1
       0.8s     75.00nm          5.7mb
PKI    76.60 300 P      04 19.20   -0.8
KKN    76.77 301 P      04 20.80    0.0
       0.8s     44.00nm          5.5mb
GKN    77.38 301 P      04 23.80   -0.3
       0.8s     46.00nm          5.6mb
GBA    80.88 285 Pd     04 43.90    0.9
       1.2s      8.30nm          4.6mb
APO   119.83 340 ePdiff07 49.70    8.3X
       1.0s     15.90nm
KMZ   126.58 247 ePKPd 11 32.00   -0.9
CLL   126.64 332 i(Pdif08 05.70   -6.2X
       0.9s      9.00nm
KHC   127.80 330 ePdiff08 08.50   -8.7X
GRF   128.57 332 iPKPd 11 43.30    7.8X
       1.9s    133.00nm
CNCB  130.18 119 ePKP   11 29.00  -11.2X
LPB   130.19 119 ePKP   11 25.00  -15.0X
ZOBO  130.28 118 PKP    11 31.70   -8.7X
    Z  20s      0.20um          4.8Msz
                LR      38 24.00
UCC   130.73 337 PKP+   11 43.00    3.5X
DOU   131.19 336 Pdiff  08 16.20  -16.0X
                ec      08 25.50
CAF   136.29 333 ePdiff08 25.20  -29.9X
ASMO  144.96 332 iPKP   12 06.00   -0.2
AAPN  145.17 332 iPKP   12 06.50    0.0
ACHM  145.20 331 iPKP   12 07.00    0.5
APHE  145.26 331 iPKP   12 07.00    0.3
ALOJ  145.33 332 iPKP   12 07.00    0.2
ATEJ  145.44 331 iPKP   12 07.50    0.4
BAO   146.94 134 PKPc   12 13.80    3.8X
NKM   147.29 332 ePKP   12 13.00    3.1X
IFR   148.70 329 iPKPc  12 14.00    1.5
                i       12 18.00
                i       12 29.00
AVE   150.00 332 iPKP   12 21.00    6.8X
TIO   151.85 329 iPKP   12 26.00    8.8X
      S.D. = 1.0  on 28 of 44 obs.
-----------------------------------------
   SEP  08, 1990  19h 33m 18.85± 1.79s
   27.500 N ± 4.3km   66.092 E ± 2.7km
   DEPTH =  27.9 ± 13.1 km
   5.5mb ( 70 obs.)  5.1Msz ( 14 obs.)
 PAKISTAN                         (710)
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 10S, 23C
      Centroid Location:
      Origin Time        19:33:20.8 0.9
      Lat 27.55N 0.09 Lon  66.23E 0.10
      Dep  15.0 FIX Half-duration  2.4
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 0.59 0.13  Mtt=-1.38 0.16
        Mff= 0.79 0.16  Mrt= 0.31 0.45
        Mrf=-0.35 0.50  Mtf=-1.74 0.16
       Principal Axes:
        T  Val=  1.91  Plg=19  Azm= 60
        N        0.44      71      247
        P       -2.35       2      151
      Best Double Couple:Mo=2.1*10**17
       NP1:Strike=197 Dip=75 Slip=  12
       NP2:       104     78      165

QUE     2.78  15 iPd    34 04.90    2.2
                e(S)    34 41.00
NDI     9.90  81 iPc    35 38.20   -4.1X
       0.6s    513.33nm          7.0mb X
                iS      37 24.00
BOM    10.56 143 iPc    35 50.50   -0.9
                eS      37 43.10
POO    11.43 140 iPd    36 03.70    0.4
       1.2s    140.63nm          6.1mb
                iS      38 23.50
BJA    13.92 267 iPn    36 35.60   -0.9
                eSn     38 58.00
BRF    13.93 268 ePn    36 36.10   -0.5
                eSn     38 57.70
TEH    14.97 307 eP     36 56.00    5.7X
HYB    15.26 129 eP     36 52.00   -2.2
       1.2s    181.80nm          5.2mb
                i       36 58.50
                e       37 19.50
GKN    16.43  84 P      37 04.20   -5.0X
KKN    17.01  85 P      37 11.40   -5.2X
PKI    17.14  85 P      37 13.20   -5.1X
GBA    17.42 140 P      37 20.40   -1.1
                S       41 00.40
GUN    17.53  84 P      37 16.40   -6.8X
KER    17.65 297 eP     37 23.00   -1.5
TAB    19.64 307 eP     37 48.00   -0.5
KOD    20.24 146 eP     37 54.00   -1.1
                eS      41 44.00
HRI    26.75 290 eP     39 02.00    3.8X
BHL    26.88 291 P      39 02.50    3.2X
                S       44 00.00
ARO    26.99 238 eP+    39 04.00    3.6X
PRNI   27.32 283 eP     39 05.00    1.7
RMN    27.64 284 eP     39 08.00    1.8
CSS    28.89 293 eP     39 17.80    0.3
KAS    29.85 306 iPd    39 26.20    0.2
ASW    30.04 271 eP     39 32.00    4.2X
                eS      44 46.00
KOT    30.08 283 eP     39 28.50    0.4
BBTK   30.17 303 eP     39 30.00    1.0
HLW    30.51 283 eP-    39 36.00    4.1X
                eS      44 34.00
CHG    31.34  99 iPc    39 39.00   -0.4
       1.0s    105.00nm          5.6mb
                eS      44 40.00
CHTO   31.34  99 iPc    39 39.30   -0.1
AAE    31.67 240 eP     39 50.00    7.4X
KMI    32.86  86 Pc+    39 52.50   -0.4
       2.0s    300.00nm          5.9mb
    Z  16s      3.40um          5.1MszX
                sP      40 13.50
                S       44 50.00
LZH    33.05  65 iPc    39 55.00    0.7
       2.0s    289.00nm          5.8mb
    Z  18s      7.20um          5.4Msz
    N  15s      3.50um
    E  15s      4.90um
                pP      40 05.00   35kmX
                sP      40 16.00
                PP      41 10.00
                eS      45 10.00
                ScP     46 14.00
                SS      47 14.00
KAP    33.96 294 eP     40 01.90   -0.1
SMG    34.38 297 eP     40 07.50    1.9
NNT    34.77 108 iPc    40 10.00    0.8
PRK    35.00 300 eP     40 11.80    0.9
NPS    35.22 293 eP     40 13.20    0.3
JMB    35.31 305 eP     40 16.00    2.5
RDO    35.83 303 eP     40 18.60    0.7
DIM    35.99 304 eP     40 21.00    1.7
KDZ    36.00 304 iP     40 20.00    0.6
PVL    36.36 306 iPc    40 24.00    1.6
VAM    36.38 293 eP     40 23.00    0.3
RZN    36.53 304 iPc    40 24.00    0.0
PLD    36.61 304 eP     40 25.00    0.5
PGB    37.08 305 iPc    40 29.00    0.5
MMB    37.24 303 ePd    40 30.00    0.1
PLG    37.30 301 eP     40 30.20   -0.1
VLI    37.43 295 eP     40 30.60   -0.8
KKB    37.76 304 iPc    40 34.00   -0.2
VTS    37.78 305 iPd    40 35.00    0.5
ITM    38.25 296 eP     40 38.00   -0.4
SNG    38.45 115 eP     40 40.80    0.6
KZN    38.56 301 eP     40 41.50    0.5
SKO    38.99 304 eP     40 44.00   -0.5
    Z  20s      1.73um          4.9Msz
    N  20s      3.58um
    E  20s      1.82um
                i       46 47.00
                LR      56 57.00
OHR    39.37 302 eP     40 48.00    0.2
       1.2s     79.00nm          5.3mb
KEK    40.03 300 eP     40 53.50    0.4
NAI    40.15 229 eP     41 06.00   11.5X
IPM    40.33 118 ePc    40 58.00    2.2
       1.1s     86.00nm          5.4mb
SPC    41.19 314 eP     41 03.60    0.9
BUD    41.59 312 eP     41 08.00    2.2
KRA    41.60 316 eP     41 07.80    2.0
                e       41 11.40
SRO    42.13 312 iP     41 12.50    2.3
ORI    42.62 300 P      41 17.50    3.1X
GRI    42.62 298 P      41 15.76    1.3
       0.7s     40.20nm          5.3mb
TDS    42.69 300 P      41 16.60    1.6
SOI    42.92 297 P      41 17.50    0.7
BJI    42.95  60 iPc+   41 18.50    1.4
       1.0s    248.00nm          5.9mb
    Z  16s      6.70um          5.6MszX
    N  16s      3.60um
                ePP     43 04.00
                eScP    46 42.00
ZST    43.00 312 eP     41 18.60    1.2
NUR    43.23 331 iP     41 19.80    0.8
       0.8s     35.20nm          5.2mb
    Z  16s      6.00um          5.6MszX
                i       43 01.00
                e       47 52.00
                LR      02 28.00
SOP    43.27 311 eP     41 22.90    3.3X
MGR    43.30 300 P      41 19.90    0.0
ATN    43.38 297 P      41 21.30    0.7
ZAG    43.39 309 eP     41 22.50    2.0
PTJ    43.42 309 iP     41 22.30    1.4
SGO    43.50 301 P      41 22.50    1.0
VKA    43.53 312 eP     41 23.00    1.3
       1.7s     50.70nm          5.0mb
    Z  15s      1.10um          4.9MszX
                i       41 37.60
                e       43 44.00
                LR      06 30.00
KGM    43.71 119 ePd    41 25.00    1.6
SUF    43.83 335 iP     41 24.50    0.7
       0.6s     60.00nm          5.6mb
PZI    43.86 296 P      41 26.02    1.5
       1.1s    104.60nm          5.6mb
VBY    43.86 308 e(P)   41 26.50    2.2
```

08d 19h

BSS	43.89	301	P	41	25.30	0.7	KTK1	48.47	341	iPc	42	00.27	-0.3		1.0s	55.70nm	5.5mb						
MNO	43.99	297	P	41	29.50	3.7X	PCP	48.55	306	P	42	00.34	-1.3	RJF	53.52	308	eP	42	38.60	-0.5			
KSP	44.05	316	eP	41	26.70	0.8	SLE	48.69	311	ePd	42	01.80	-0.8		1.3s	209.40nm	6.0mb						
			ic	41	28.50		CKI	48.74	306	P	42	01.30	-1.7		Z 22s	0.88um	4.8Msz						
DUI	44.17	303	P	41	26.90	-0.1	ZLA	48.74	310	ePd	42	02.10	-0.9	LPO	53.80	307	eP	42	40.70	-0.4			
LJU	44.42	309	eP	41	30.00	1.1	FIN	48.79	306	P	42	02.09	-1.4		1.2s	145.80nm	5.9mb						
CEY	44.46	308	eP	41	29.30	0.0	TNS	48.90	314	eP	42	05.40	1.2	LFF	54.10	307	eP	42	42.80	-0.5			
SDI	44.65	303	P	41	30.90	0.0	ORX	48.96	308	P	42	02.40	-2.4		1.1s	178.25nm	6.0mb						
FAI	44.83	296	P	41	36.00	3.7X	ORO	48.97	308	P	42	03.00	-1.8	LDF	54.46	312	eP	42	44.90	-1.0			
MCT	44.85	297	P	41	35.90	3.2X	MMK	48.98	308	eP	42	04.10	-1.0		0.8s	36.25nm	5.5mb						
TRI	44.92	308	iPd	41	33.00	0.1	IMI	49.03	306	P	42	04.65	-0.6	EPF	54.56	305	eP	42	45.00	-1.9			
AZI	44.94	303	P	41	33.50	0.4	ROB	49.04	306	P	42	04.96	-0.4		1.2s	34.20nm	5.3mb						
KMR	44.94	312	iP-	41	34.50	1.4	SAOF	49.27	306	P	42	06.44	-0.6	MFF	54.59	309	eP	42	45.60	-1.3			
PRU	44.98	314	P	41	33.50	0.1	SBF	49.36	305	eP	42	07.00	-0.8		1.2s	101.15nm	5.7mb						
			e	42	50.30		AUTN	49.36	306	P	42	07.78	-0.3	FLN	54.69	312	eP	42	46.50	-1.1			
ARV	45.36	305	P	41	36.80	0.3	ENR	49.36	306	P	42	06.50	-1.4		1.1s	141.65nm	5.9mb						
KHC	45.46	313	P	41	38.50	1.3	DIX	49.37	308	ePd	42	07.50	-0.7		Z 21s	1.30um	5.0Msz						
	1.3s	24.00nm			5.0mb		REVF	49.41	305	P	42	07.94	-0.2	BTH	54.95	305	eP	42	51.00	1.4			
RDP	45.47	303	P	41	38.00	0.5	STV	49.43	306	P	42	06.91	-1.5				ipP	42	56.00	16kmX			
MNS	45.51	304	P	41	38.00	0.3	AURF	49.43	306	P	42	07.78	-0.7	GRR	54.96	311	eP	42	48.60	-1.0			
BRG	45.52	315	iP	41	38.00	0.4	RSP	49.47	307	P	42	05.98	-2.8		1.2s	59.50nm	5.5mb						
	1.4s	85.00nm			5.5mb		DOI	49.48	306	P	42	06.50	-2.3	JAU	55.08	305	P	42	50.75	0.0			
			i	41	39.70		TOUF	49.49	306	P	42	08.76	-0.2	LPF	55.10	311	eP	42	49.40	-1.2			
			i	41	46.70		CDF	49.54	311	eP	42	01.80	-7.4X		1.3s	46.95nm	5.4mb						
			i	41	54.20		LSD	49.54	308	P	42	09.78	0.3	ESCF	55.22	305	P	42	52.00	0.3			
			e	48	24.00		MVIF	49.56	306	P	42	08.29	-1.2	LHE	55.28	305	P	42	51.94	-0.2			
FVI	45.68	309	P	41	38.80	-0.1	PZZ	49.59	306	P	42	07.83	-1.8	ATE	55.32	305	P	42	52.63	0.3			
RSM	45.73	306	P	41	39.40	0.1	CALN	49.75	305	P	42	09.54	-1.4	ISSF	55.39	305	P	42	52.76	-0.2			
BHG	45.74	311	eP	41	40.40	1.0	SURF	49.79	306	P	42	11.54	0.2	MADF	55.39	305	P	42	53.43	0.6			
	1.4s	165.00nm			5.8mb		RRL	49.81	307	P	42	10.09	-1.4	SHNJ	55.41	66	eP	42	53.70	0.7			
VVI	45.88	309	P	41	41.00	0.5	LPG	49.83	308	eP	42	10.70	-1.0	ELYF	55.52	305	P	42	52.65	-1.1			
BSD	45.90	321	iPc	41	38.30	-2.2		1.0s	93.75nm			5.8mb		KUMJ	55.52	68	P	42	54.20	0.3			
	0.5s	36.00nm			5.6mb		BSF	49.84	311	eP	42	10.50	-1.0	BOH	55.54	305	P	42	54.54	0.5			
WET	45.92	313	iPc	41	42.60	1.8		1.0s	56.00nm			5.5mb		KAGJ	55.89	69	P	42	56.60	0.1			
	1.7s	47.00nm			5.1mb		LPL	49.84	308	eP	42	10.90	-0.8	EKA	56.17	320	Pd	42	57.80	-0.4			
UPP	46.07	328	iP	41	41.50	-0.3	BNI	49.88	307	P	42	10.80	-1.1		1.0s	37.20nm	5.4mb						
CRE	46.08	305	P	41	42.50	0.2	FRF	49.93	305	eP	42	10.80	-1.4	LSZ	56.21	226	iPd	43	01.50	2.4			
SFI	46.16	306	P	41	42.40	-0.3		1.3s	83.05nm			5.6mb			1.0s	27.70nm	5.2mb						
CLL	46.18	316	eP	41	43.00	0.2	LMR	50.04	305	eP	42	11.60	-1.4			i	43	04.50					
	1.4s	32.00nm			5.1mb			1.3s	43.30nm			5.3mb		KMZ	56.40	229	iP	43	03.00	2.4			
	Z 18s	1.50um			5.0Msz		TRO	50.08	340	iP	42	12.71	-0.2			i	43	04.30					
			e	41	52.00		WTS	50.09	316	eP	42	14.50	1.3	KBS	56.55	349	eP	43	01.00	0.3			
			eS	48	30.00			1.0s	80.00nm			5.7mb		SHK	56.59	65	eP	43	01.80	0.2			
PGD	46.26	306	P	41	44.80	1.1	LRG	50.15	305	eP	42	12.70	-1.1	TRT	57.02	121	iPc	43	04.20	-0.6			
SOD	46.46	340	iP	41	45.10	0.3		1.1s	65.95nm			5.6mb		YONJ	57.08	64	eP	43	03.50	-1.6			
			i	41	54.20			Z 21s	0.80um			4.7Msz		TKSJ	57.82	66	P	43	10.60	0.4			
			i	43	34.40		WIT	50.26	317	eP	42	16.00	1.5	ETA	58.08	317	eP	43	12.20	0.5			
SOTA	46.81	310	iPc	41	47.20	-0.8	NSS	50.27	333	iPc	42	13.65	-0.7	ECP	58.22	316	eP	43	12.40	-0.3			
	1.0s	61.20nm			5.6mb		RGS	50.41	331	iP	42	17.00	1.6		1.1s	120.00nm	5.9mb						
			ic	41	48.30		MEM	50.49	314	Pc	42	18.40	2.2	TOL	58.30	302	iP	43	13.50	0.0			
			i	42	01.20		GRN	50.54	307	P	42	16.11	-0.8		1.1s	151.90nm	6.0mb						
			i	43	21.40		ENN	50.55	314	eP	42	18.00	1.3			iS	51	15.00					
			i	43	48.00			1.0s	48.00nm			5.4mb		ECB	58.45	317	eP	43	14.30	-0.1			
OGA	46.91	310	eP	41	48.30	-0.6	CDR	50.57	305	ePc	42	16.20	-0.8		1.2s	173.00nm	6.0mb						
MOX	46.94	315	eP	41	50.00	1.2	BCAO	50.73	252	iPd	42	18.40	-0.2	ASMO	58.57	299	iP	43	14.70	-0.8			
	Z 13s	2.90um			5.4MszX			0.8s	33.00nm			5.4mb		APHE	58.61	298	iP	43	15.40	-0.5			
			e	48	40.00		DOU	51.36	314	Pc	42	23.70	0.8	ACHM	58.69	298	iP	43	15.60	-0.7			
			e	48	53.00			1.0s	180.50nm			6.0mb		AAPN	58.87	299	iP	43	17.00	-0.7			
MME	47.00	306	P	41	49.80	0.1				S	49	43.00		ATEJ	58.87	298	iP	43	16.80	-0.9			
GRF	47.06	313	iPc	41	50.70	0.9	BAG	51.38	90	eP	42	24.00	0.3	ALOJ	58.90	299	iP	43	16.60	-1.3			
	1.4s	90.00nm			5.6mb		SNF	51.58	314	iPc	42	25.24	0.7	WKYJ	59.01	65	eP	43	18.90	0.3			
	Z 21s	0.80um			4.7Msz		LBF	51.74	310	eP	42	24.90	-1.0	TSRJ	59.01	63	P	43	18.30	-0.2			
BDI	47.07	306	P	41	48.10	-2.0	LOR	51.82	310	eP	42	25.30	-1.2	BUL	59.66	221	iPc	43	22.10	-1.2			
PII	47.12	305	P	41	49.00	-1.3		1.0s	62.50nm			5.5mb			1.0s	15.00nm	5.1mb						
SAL	47.18	308	P	41	52.00	1.2		Z 21s	0.80um			4.7Msz				ipP	43	26.70	15kmX				
OSS	47.50	309	iPc	41	53.10	-0.5	SMF	51.84	309	eP	42	25.70	-0.9	DAV	59.74	98	eP	43	24.50	0.7			
MDI	47.76	308	P	41	53.60	-1.7	PLDF	52.01	308	P	42	27.71	-0.3	MTMJ	60.20	62	P	43	26.60	-0.2			
SSE	47.77	72	Pd	41	56.20	0.6	SSF	52.06	310	eP	42	27.40	-0.9	NKM	60.31	297	iP	43	26.50	-0.9			
	1.2s	138.00nm			5.9mb		KKM	52.09	105	ePc	42	29.50	0.5			i	43	28.00					
	Z 20s	3.20um			5.3Msz			1.1s	83.50nm			5.6mb		MAT	60.53	62	iPc	43	27.70	-1.2			
	N 14s	2.60um					AVF	52.17	309	eP	42	27.90	-1.2		1.3s	140.38nm	5.9mb						
	E 13s	1.40um						1.2s	101.15nm			5.6mb			Z 20s	3.55um	5.5Msz						
		pP	42	10.00	52kmX	LBL	52.30	307	P	42	29.86	-0.2				(S)	51	18.00					
		PP	43	48.00		AGO	52.35	308	P	42	30.28	-0.2	IIDJ	60.55	63	P	43	28.70	-0.4			
		eS	48	40.00		GRC	52.35	310	P	42	30.24	-0.2	IFR	60.57	295	iPc	43	30.00	0.5			
		sS	49	04.00		PYM	52.45	308	P	42	30.94	-0.4				i	43	42.50					
		eSS	52	08.00		PPR	52.50	99	ePc	42	31.00	-0.9	VAL	60.62	316	iP	43	31.30	2.0			
KEV	47.89	343	iP	41	56.00	0.0		1.0s	179.00nm			6.0mb		NIIJ	60.98	61	P	43	30.70	-1.2			
	1.0s	90.00nm			5.8mb		BGF	52.53	309	eP	42	30.80	-1.0	AOMJ	61.26	57	eP	43	34.60	0.8			
	Z 20s	7.80um			5.7Msz		MAF	52.74	309	eP	42	32.60	-0.8	CHJJ	61.27	62	P	43	33.30	-0.6			
		i	43	55.40				1.2s	96.70nm			5.6mb		MRRJ	61.37	55	eP	43	34.20	-0.3			
		e	48	56.00		PGP	52.85	94	ePd	42	35.00	0.4	YAMJ	61.56	59	eP	43	35.40	-0.5			
		LR	03	40.00			1.0s	90.00nm				5.7mb		ASAJ	62.13	52	eP	43	38.60	-1.1			
VDL	47.96	309	eP	41	57.00	-0.2	TCF	52.98	309	eP	42	34.40	-0.8	KAKJ	62.15	62	P	43	38.60	-1.3			
SAX	48.08	310	ePd	41	57.60	-0.6	CAF	53.16	307	eP	42	36.00	-0.5	DAG	62.27	345	eP	43	37.00	-3.2X			
LLS	48.30	310	ePd	41	59.10	-0.7	LSF	53.45	309	eP	42	37.50	-1.1		1.0s	75.00nm	5.8mb						
TMA	48.35	308	ePd	41	59.50	-0.7	PTZ	53.46	223	iPc	42	47.50	8.4X		Z 22s	1.19um	5.0Msz						

E 21s 0.86um
AVE 62.47 295 iP 43 41.50 -0.6
OFUJ 62.58 58 eP 43 41.90 -0.8
AKU 62.92 332 iP 43 46.00 1.5
0.9s 26.89nm 5.4mb
HOOJ 62.98 54 eP 43 45.20 0.0
TIO 63.03 293 iP 43 46.00 0.0
KUSJ 63.83 53 eP 43 50.10 -0.8
SLR 64.24 218 iPd 43 56.00 2.1
KIC 70.10 267 Pd 44 31.90 0.9
0.9s 24.00nm 5.3mb
TIC 70.22 267 P 44 32.56 0.8
LIC 70.41 267 Pd 44 33.70 0.8
0.9s 27.50nm 5.4mb
Z 19s 2.50um 5.5Msz
MBL 71.00 127 eP 44 36.00 -0.3
0.7s 7.00nm 4.9mb
MEKA 73.73 132 eP 44 52.00 -0.4
0.9s 34.00nm 5.4mb
MRWA 73.91 136 eP 44 53.00 -0.3
0.5s 5.00nm 4.8mb
GDH 74.18 341 eP 44 55.00 0.7
e 54 35.00
MTN 74.68 114 eP 44 58.00 0.0
0.5s 70.00nm 5.9mb
MUN 76.00 138 eP 45 05.00 -0.2
NWAO 77.28 138 eP 45 13.00 0.6
WARB 79.00 127 eP 45 22.00 0.0
0.7s 14.00nm 5.1mb
WB5 81.13 118 eP 45 33.80 0.3
WRA 81.14 118 Pd 45 34.10 0.5
0.9s 50.60nm 5.5mb
ASPA 82.86 121 iPc 45 42.60 0.1
1.1s 63.00nm 5.6mb
Z 19s 0.92um 5.2Msz
eS 55 56.80
LR 29 42.80
FORR 82.87 130 eP 45 42.00 -0.2
0.5s 26.00nm 5.6mb
INK 83.38 7 eP 45 44.50 0.2
0.6s 19.00nm 5.4mb
QIS 85.65 116 iPc 45 56.90 0.4
PMG 86.47 102 eP 46 02.00 1.3
YKA 90.32 0 eP 46 18.00 -0.3
0.8s 6.30nm 4.9mb
STK 92.99 124 iPd 46 31.40 0.4
0.8s 6.00nm 5.1mb
SIV 129.93 272 PKP 52 27.60 -0.6
AIA 131.21 205 ePdiff 49 31.60 10.6X
ZOBO 136.29 275 PKP 52 40.70 -0.3
LPB 136.37 275 ePKP 52 47.00 6.1X
CNCB 136.37 274 PKP 52 42.00 0.9
TPT 146.32 75 ePKP 53 04.00 6.0X
1.1s 80.00nm
VAH 146.42 76 ePKP 53 04.00 5.9X
1.1s 40.00nm
RUV 146.61 75 ePKP 53 05.00 6.6X
1.1s 65.00nm
S.D. = 1.0 on 262 of 288 obs.

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* SEP 08, 1990 20h 21m 48.30± 0.40s
57.888 S ± 8.0km 25.434 W ±11.7km
DEPTH = 33.0km (normal)
5.1mb (9 obs.) 4.7Msz (2 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

AIA 19.61 232 eP 26 17.20 0.8
SPA 32.29 180 iPc 28 16.00 0.1
1.0s 11.50nm 4.7mb
Z 20s 1.35um 4.6Msz
VAO 38.16 327 (P) 29 08.00 1.8
JFO 38.39 333 (P) 29 09.00 0.9
PPD 40.43 321 eP 29 25.40 0.4
e 29 28.40
e 29 40.60
e 31 27.50
BAO 45.44 329 Pd 30 06.90 1.1
SIV 49.54 313 P 30 36.20 -1.5
i 31 59.40
SOB1 50.01 340 eP 30 40.90 -0.4
CNCB 51.69 304 P 30 54.00 -0.8
LPB 51.99 304 P 30 57.00 0.2
ZOBO 52.23 305 P 30 57.00 -1.9
Z 18s 0.90um 4.9Msz
LR 44 54.00
LIC 66.00 22 P 32 33.42 0.0
0.6s 17.00nm 5.3mb
KIC 66.20 23 P 32 34.66 0.0
0.7s 12.50nm 5.1mb
TIC 66.42 22 P 32 36.00 -0.1
0.6s 16.50nm 5.3mb
BCAO 71.43 47 iPd 33 07.20 0.0
0.6s 22.00nm 5.4mb
id 33 25.00
TOO 84.60 173 eP 34 19.40 0.2
0.8s 7.00nm 4.9mb
CAN 87.03 175 eP 34 31.50 0.2
STK 89.91 169 iPc 34 45.60 0.5
0.9s 3.00nm 4.6mb
ASPA 96.94 161 eP 35 16.80 -0.7
0.8s 8.00nm 5.3mb
WRA 100.65 161 Pdiff 35 34.00 -0.1
0.8s 1.60nm 4.6mb
PVC 103.80 193 iPdiff 35 57.50 9.4X
JAY 118.77 164 ePKPc 40 29.50 -5.1X
0.5s 62.90nm
HFS 121.64 22 ePKP 40 35.20 -3.4X
0.7s 1.40nm
LRM 125.79 301 ePKP 40 46.90 -0.6
PNT 131.66 299 ePKP 40 58.00 -0.2
YKA 138.17 316 ePKP 41 08.20 -1.9
0.8s 13.10nm
INK 147.83 318 ePKP 41 28.50 2.0
0.8s 63.00nm
BJI 149.67 109 ePKP 41 33.50 3.2X
TOA 150.98 304 ePKP 41 38.20 6.5X
PMR 152.15 302 ePKP 41 40.00 6.7X
0.8s 25.70nm
KDC 152.40 293 e(PKP) 41 40.40 6.6X
FBA 152.45 309 ePKP 41 39.90 6.2X
IMA 155.06 311 ePKP 41 46.60 9.2X
S.D. = 1.0 on 24 of 33 obs.

SEP 08, 1990 20h 31m 57.75± 0.12s
20.548 S ± 3.6km 174.173 W ± 3.2km
DEPTH = 33.0km (normal)
5.6mb (51 obs.) 5.7Msz (17 obs.)
TONGA ISLANDS (173)
Ms 5.5 (BRK). Mo=1.8*10**18 Nm
(PPT).
FAULT PLANE SOLUTION: P-Woves
NP1:Strike=340 Dip=76 Slip= 90
NP2: 160 14 90
Principal Axes:
T Plg=59 Azm=250
P 31 70
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 3.4±1.2*10**12 Nm
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 30C
Centroid Location:
Origin Time 20:32: 6.5 0.4
Lat 20.39S 0.03 Lon 173.96W 0.03
Dep 21.2 1.3 Half-duration 4.0
Moment Tensor; Scale 10**17 Nm
Mrr= 8.71 0.18 Mtt= 1.17 0.28
Mff=-9.88 0.33 Mrt= 2.55 0.39
Mrf= 7.30 0.63 Mtf=-3.21 0.17
Principal Axes:
T Val= 11.43 Plg=71 Azm=295
N 2.01 3 197
P -13.43 19 106
Best Double Couple:Mo=1.2*10**18
NP1:Strike=191 Dip=26 Slip= 83
NP2: 18 64 93

SVA 7.37 288 ePc 33 52.30 6.5X
eS 35 15.50
VUN 7.40 289 ePc 33 52.10 5.9X
SGE 8.03 290 eP 34 02.00 6.8X
NDF 8.39 288 eP 34 09.00 9.0X
DZM 18.12 262 iPc 36 10.40 1.6
PUZ 18.66 199 P 36 18.40 3.3X
NOZ 19.22 199 eP 36 23.60 1.7
WLZ 19.39 205 eP 36 26.30 2.5X
PGZ 21.60 200 eP 36 45.50 -1.3
0.7s 138.00nm 5.5mb
MNG 21.87 202 eP 36 47.80 -1.7
0.7s 33.00nm 4.9mb
eS 40 35.50
KIW 22.28 202 eP 36 53.50 -0.1
MTW 22.34 201 P 36 55.20 1.0
CAW 22.45 202 eP 36 55.90 0.7
BLW 22.54 201 eP 36 56.40 0.3
WDW 22.61 202 P 36 57.30 0.5
MRW 22.68 202 eP 36 57.00 -0.5
eS 40 55.70
WEL 22.71 202 P 36 59.00 1.2
S 41 00.00
TCW 22.82 203 P 36 55.50 -3.4X
eS 41 00.00
TBI 23.08 101 iP 37 00.40 -1.2
1.3s 550.00nm 5.9mb
AFR 23.25 87 iP 37 02.80 -0.4
1.2s 340.00nm 5.7mb
PAE 23.41 87 iP 37 03.80 -1.0
1.2s 135.00nm 5.3mb
PPT 23.43 87 iP 37 04.00 -1.0
1.2s 235.00nm 5.6mb
PPN 23.57 87 iP 37 05.10 -1.2
1.2s 90.00nm 5.2mb
TVO 23.69 88 iP 37 06.50 -1.1
1.2s 225.00nm 5.6mb
THZ 23.81 204 eP 37 08.40 -0.2
S 41 20.60
KHZ 24.14 203 P 37 12.10 0.5
0.7s 124.00nm 5.6mb
LTZ 24.93 204 eP 37 17.90 -1.4
PMO 25.60 82 iP 37 23.80 -2.1
1.2s 175.00nm 5.5mb
VAH 25.79 83 iP 37 25.20 -2.3
1.2s 125.00nm 5.4mb
TPT 25.87 82 iP 37 26.20 -2.1
1.2s 185.00nm 5.6mb
RUV 26.03 83 iP 37 27.40 -2.4
1.2s 185.00nm 5.6mb
MHZ 28.01 205 P 37 47.50 -0.3
MMCZ 28.03 206 P 37 47.70 -0.3
TLC 28.20 206 eP 37 49.80 0.2
BRS 30.90 251 iPd 38 14.50 0.8
COO 32.09 245 iPd 38 24.20 0.0
1.2s 61.00nm 5.4mb
CNB 35.20 237 iPd 38 50.80 -0.2
1.1s 140.00nm 5.8mb
CAN 35.49 238 eP 38 52.80 -0.7
BWA 35.74 239 eP 38 52.80 -2.8X
RKT 36.41 101 iP 39 00.90 -0.3
1.3s 115.00nm 5.6mb
RAB 36.55 292 e(P) 39 00.00 -2.6
e(S) 45 00.00
CTA 37.05 264 iPc+ 39 05.60 -1.1
1.0s 170.00nm 5.9mb
iS 44 53.00
CMS 37.38 245 iPc 39 08.50 -0.8
TOO 38.79 235 iPc 39 21.00 -0.2
0.6s 57.00nm 5.5mb
PMG 38.87 281 iPc 39 20.60 -1.4
1.2s 265.63nm 5.9mb
BFD 40.99 237 iPc 39 40.50 1.2
STK 41.01 245 eP 39 38.70 -0.8
0.9s 33.00nm 5.1mb
Z 17s 469.00um 7.4MszX
eS 45 31.40
e 49 51.00
QIS 43.16 262 eP 39 56.00 -1.3
e 41 47.00 655kmX
ADE 43.71 241 eP 40 01.30 -0.4
1.0s 44.00nm 5.2mb
KIP 44.60 22 ePc 40 08.41 -0.4
eS 46 43.84
eSS 50 05.38
ASPA 48.00 256 iPd 40 33.90 -1.9
1.1s 86.00nm 5.7mb
iS 47 26.90
iScS 50 32.30
LR 00 46.50
WB5 48.13 261 eP 40 34.80 -2.1
WRA 48.14 261 Pd 40 35.40 -1.6
2.0s 368.60nm 6.1mb
FORR 52.53 246 eP 41 09.00 -1.2
0.4s 30.00nm 5.6mb
GUA 52.58 307 eP 41 10.30 -0.5
0.7s 153.42nm 6.1mb
GUMO 52.65 307 ePc 41 14.69 3.4X

08d 20h

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      1.0s   232.00nm           6.1mb
PJG   52.65 307 eP    41 10.30  -1.0
MTN   52.75 269 eP    41 11.00  -1.1
      0.4s    93.00nm           6.1mb
KNA   54.21 265 eP    41 21.00  -1.8
      0.6s    54.00nm           5.8mb
WARB  54.23 252 eP    41 21.00  -1.9
      0.4s    12.00nm           5.3mb
MBL   61.24 257 eP    42 10.00  -2.3
      0.4s    33.00nm           5.8mb
KLB   61.27 245 eP    42 11.00  -1.4
MEKA  61.36 250 eP    42 12.00  -1.1
      0.5s    13.00nm           5.3mb
NWAO  61.55 243 eP    42 14.00  -0.3
RKG   61.60 242 eP    42 15.00   0.4
BAL   62.31 245 eP    42 19.00  -0.4
MUN   62.53 244 eP    42 21.00   0.1
MRWA  63.13 247 eP    42 24.00  -0.9
      0.6s    29.00nm           5.6mb
NANU  64.84 254 iPc   42 35.50  -0.6
DAV   65.25 288 eP    42 36.00  -2.8X
CGP   66.63 289 eP    42 28.00 -19.6X
KAKJ  71.06 322 P     43 14.00  -0.6
CHJJ  71.63 321 P     43 17.30  -0.8
TRT   71.64 269 ePc   43 18.50  -0.1
      0.9s    91.10nm           5.8mb
IIDJ  71.88 320 P     43 19.70   0.1
ADK   72.15 358 eP    43 20.00  -0.8
      1.1s   125.00nm           5.8mb
OFUJ  72.29 325 eP    43 21.90   0.0
MAJO  72.43 321 ePc   43 22.25  -0.6
                eSKS  53 22.66
MAT   72.43 321 iPc   43 21.80  -1.0
      1.0s    55.00nm           5.5mb
   Z  20s     4.61um            5.8Msz
                eS    52 40.00
NIIJ  72.45 322 P     43 22.80  -0.1
WKYJ  72.46 318 eP    43 23.60   0.5
PPR   72.50 288 ePd   43 24.00   0.4
YAMJ  72.52 324 eP    43 23.60   0.3
MTMJ  72.69 321 P     43 23.90  -0.6
TSRJ  73.08 319 P     43 26.80   0.2
KKM   73.25 283 ePd   43 28.00  -0.2
TKSJ  73.28 317 P     43 28.50   0.7
CVP   73.38 297 eP    43 30.00   1.3
KUSJ  73.76 330 eP    43 30.60   0.2
BAG   73.82 295 eP    43 30.10  -1.4
HOOJ  73.90 329 eP    43 32.60   1.4
YONJ  74.42 318 eP    43 35.00   0.5
KUMJ  74.50 314 eP    43 34.80  -0.1
SHK   74.51 317 iP    43 35.60   0.6
      0.9s   100.84nm           5.8mb
PIP   74.68 297 iPd   43 36.00  -0.2
MRRJ  75.04 327 eP    43 38.10   0.3
SYP   75.18  44 eP    43 39.00   0.0
SHNJ  75.27 316 eP    43 38.40  -1.0
PRS   75.42  42 eP    43 40.80   0.6
GCC   75.48  41 eP    43 40.60   0.1
ASAJ  75.52 329 eP    43 41.90   1.4
BCH   75.52  43 P     43 41.30   0.4
SAO   75.65  41 eP    43 42.00   0.5
BKS   75.88  40 ePc   43 43.00   0.2
   Z  20s     1.90um            5.4Msz
   N  20s     1.60um
   E  20s     1.60um
                eS    53 21.00
                eLQ   03 06.00
                eLQ   03 22.00
                eLR   06 32.00
MHC   75.90  41 eP    43 43.50   0.4
ARN   75.97  41 P     43 45.00   1.7
PAS   76.13  45 ePc   43 44.09  -0.2
                eS    53 30.07
                e     54 17.75
MWC   76.26  45 eP    43 45.00  -0.2
BAR   76.28  47 eP    43 45.00  -0.2
PLM   76.54  46 eP    43 45.00  -1.8
RVR   76.57  46 eP    43 46.00  -0.7
SBB   76.69  45 eP    43 47.00  -0.5
ISA   76.85  44 eP    43 48.00  -0.3
FRI   76.88  42 eP    43 48.40   0.1
CMB   77.11  41 iPc   43 49.23  -0.5
ORV   77.41  39 eP    43 51.10  -0.2
WDC   77.47  38 eP    43 51.50  -0.1
CLC   77.51  44 eP    43 52.00   0.0
TPC   77.53  46 eP    43 52.00  -0.1
GSC   77.72  45 eP    43 53.00  -0.2
GLA   77.77  48 eP    43 54.00   0.6
LBFM  78.34  37 P     43 56.90   0.3
KVN   79.14  41 P     44 00.20  -0.9
AIA   79.50 156 eP    44 04.40   2.1
COR   79.72  34 ePc   44 03.77   0.0
                eS    54 07.94
                e     54 35.75
                ePS   55 28.72
KDC   80.07  12 e(P)  44 05.30   0.0
SSE   80.50 308 P+    44 08.00  -0.2
      0.8s    27.00nm           5.3mb
   Z  20s     1.80um            5.4Msz
                pP    44 24.00  57kmX
                eSKS  54 28.00
                eS    54 42.00
                sSS   55 14.00
                PS    55 53.00
BMW   81.03  33 P     44 11.20   0.4
LON   81.94  33 ePc   44 14.88  -0.6
PGC   82.40  31 eP    44 18.00   0.3
MSU   82.60  44 P     44 20.50   1.1
MAW   82.71 199 eP+   44 20.00   0.9
KGM   83.69 275 ePd   44 27.10   1.9
DAU   84.23  43 P     44 28.50   0.8
PMR   84.28  12 eP    44 27.10   0.0
      1.0s    26.75nm           5.4mb
ANMO  84.67  50 ePc   44 30.76   0.9
      1.5s    62.15nm           5.6mb
   Z  20s     2.66um            5.6Msz
                eSKS  54 53.46
                eS    55 01.24
PNT   84.73  32 eP    44 30.00   0.4
      1.0s    79.00nm           5.9mb
TOA   85.34  13 eP    44 33.20   0.7
NEW   85.35  34 P     44 32.80   0.0
      1.0s    15.00nm           5.2mb
   Z  20s     6.00um            6.0Msz
                pP    44 49.00  57kmX
LRM   86.50  38 eP    44 39.00   0.2
IPM   86.73 276 ePc   44 42.90   2.6
      1.0s   103.90nm           6.0mb
COL   87.56  11 ePc   44 43.14  -0.1
                iS    55 21.14
                e     56 35.30
FBA   87.56  11 eP    44 43.00  -0.2
GOL   87.74  46 P     44 45.20   0.3
      0.9s     7.77nm           5.0mb
   Z  20s     2.50um            5.6Msz
GLD   87.86  46 P     44 45.20  -0.2
   Z  20s     3.00um            5.7Msz
SNG   88.03 278 iPc   44 49.00   2.5
      1.5s   383.33nm           6.5mb
                e     03 56.90
                e     06 47.20
BJI   88.48 314 iPc   44 49.44   1.4
      2.0s  1499.00nm           7.0mb X
   Z  24s     2.23um            5.5MszX
   E  18s     1.12um
                ePP   48 14.27
                eS    55 00.00
LNV   88.75 126 eP    44 51.00   1.3
SAN   89.52 126 eP    44 56.00   2.6
PEL   89.63 125 eP    44 56.00   2.0
SES   89.83  35 eP    44 54.00  -0.3
      1.6s   197.00nm           6.1mb
EDM   90.23  32 ePc   44 56.30   0.2
MEO   90.35  53 iPc   44 56.60  -0.5
NNT   90.76 283 eP    45 00.00   0.7
HIA   90.85 323 ePc   45 00.02   1.0
                e     45 04.65  14kmX
                iHPP  48 31.64
                iPP   48 32.30
CFA   92.15 125 eP    45 07.10   1.5
SIO   92.45  53 eP    45 06.90   0.2
NNA   92.58 104 eP    45 20.00  12.2X
      1.1s    22.78nm
   Z  18s     0.86um            5.2Msz
KMI   92.58 296 iPc   45 10.25   2.4
      2.5s   500.00nm           6.5mb
   Z  20s     4.30um            5.9Msz
                e     45 13.73  11kmX
                e     45 18.20
                eHPP  48 47.50
                ePP   48 52.96
                SKS   55 36.00
                S     56 28.00
TUL   92.90  53 eP    45 09.40   0.7
      0.9s     7.10nm           5.1mb
   Z  18s     1.00um            5.3Msz
                e     45 15.10  18kmX
                LR    15 36.00
UYO   93.23  55 eP    45 10.50   0.2
INK   93.41  14 eP    45 09.50  -0.9
      0.8s    20.00nm           5.6mb
                pP    45 26.00  57kmX
CHG   93.65 289 ePd   45 14.20   1.7
      1.1s    78.48nm           6.1mb
CHTO  93.65 289 iPc   45 14.26   1.8
                e     45 17.57  10kmX
                e     45 19.73
                e     45 22.37
YKA   95.08  24 eP    45 18.50   0.3
      0.9s     4.70nm           4.9mb
LZH   95.67 306 Pc    45 23.50   1.8
      2.5s   239.00nm           6.2mb
   Z  45s     3.50um            5.5MszX
   N  16s     1.00um
   E  17s     1.80um
                pP    45 32.00  27kmX
                PP    49 17.00
                eSKS  55 58.00
                eS    56 42.00
                sS    56 57.00
                PS    58 06.00
                SS    03 18.00
CNCB  98.63 112 P     45 42.00   6.0X
LPB   98.64 111 P     45 39.00   3.1X
   Z  24s     4.65um            5.9MszX
                LR    18 22.00
ZOBO  98.73 111 P     45 39.00   2.6
   Z  24s     2.06um            5.5MszX
                LR    17 30.00
HYB  111.68 281 ePKP  50 36.50   5.0X
NDI  115.43 293 ePKP  50 38.00  -0.4
QUE  124.50 293 ePKP  50 56.90   1.0
SOB1 125.37 118 ePKP  50 57.80   0.0
KEV  129.14 351 ePKP  51 03.00  -0.4
CAI  129.94 118 ePKP  51 11.50   4.9X
SOD  131.36 349 ePKP  50 52.00 -15.6X
                e     51 10.00
BUL  133.82 210 iPKPd 51 12.50  -1.4
      0.9s    10.50nm
                i     53 46.80
SUF  135.61 347 ePKP  51 14.00  -1.9
PTZ  137.29 218 iPKP  51 29.00   8.4X
                i     53 56.00
                i     54 11.00
NUR  137.91 346 ePKP  51 13.00  -7.3X
                i     51 19.60
LSZ  138.17 213 iPKPd 51 23.00   0.7
                i     51 35.00
                i     54 11.10
HFS  140.06 354 ePKP  51 13.40 -10.8X
      0.6s     4.00nm
KMZ  140.90 212 iPKPd 51 30.00   2.8X
TAB  140.96 306 ePKP  51 20.00  -6.7X
ARO  143.38 262 iPKP+ 51 29.00  -2.5X
EKA  144.61   9 PKPc  51 30.50  -1.8
      0.8s    13.20nm
BSD  144.82 351 iPKPd 51 31.20  -1.4
      0.6s    43.00nm
AAE  146.23 255 ePKP  51 39.00   2.4X
VAL  146.25  18 iPKP  51 37.80   2.7X
ETA  146.58  13 ePKP  51 37.30   1.7
ECB  146.76  14 ePKP  51 37.80   1.9X
ECP  147.03  14 ePKP  51 39.10   2.8X
BRN  147.68 352 ePKP  51 38.00   0.6
WIT  147.79 359 ePKP  51 41.00   3.5X
LWI  148.06 228 e(PKP)51 39.70   0.2
LWI  148.06 228 e(PKP)51 40.80   1.3
KRA  148.50 342 ePKP  51 39.60   0.8
                e     51 43.40
                e     51 53.70
DBN  148.50   1 ePKP  51 46.00   7.3X
KAS  148.52 318 ePKP  51 39.00  -0.2
WTS  148.60 359 ePKP  51 41.50   2.6X
      1.0s    72.00nm
KSP  148.66 347 ePKP  51 39.50   0.5
                ic    51 44.00
CLL  148.79 351 ePKP  51 39.00  -0.2
      2.5s    89.00nm
   Z  22s     2.00um            5.9Msz
                i     51 43.20
                i     51 54.80
```

BRG	149.07	350	iPKP	51	40.30	0.6
	Z 20s	2.00um			5.9Msz	
	N 20s	1.50um				
		i		51	43.70	
		i		51	55.10	
		i		52	06.40	
SPC	149.18	341	ePKP	51	40.70	0.5
		i		51	45.40	
		i		51	52.40	
MOX	149.62	353	ePKP+	51	41.00	0.5
		i		51	46.00	
BNS	149.63	358	iPKPc	51	23.00	-17.5X
	Z 22s	1.70um			5.8MszX	
		i		52	50.40	
		i		55	25.20	
UCC	149.79	2	PKP+	51	47.00	6.3X
PRU	149.82	349	ePKP	51	41.50	0.7
	Z 20s	2.00um			5.9Msz	
	N 20s	1.10um				
	E 20s	0.90um				
		i		51	46.70	
ENN	149.84	360	ePKP	51	43.00	2.2X
	1.5s	200.00nm				
ANTO	149.95	316	iPKPc	51	41.70	0.2
		i		51	47.33	
SNF	150.07	2	iPKPc	51	47.10	5.9X
TNS	150.31	357	ePKPc	51	47.90	6.2X
		e		52	16.40	
PSZ	150.42	341	e(PKP)	51	48.00	6.1X
BHL	150.45	303	PKP	51	43.00	0.6
DOU	150.50	2	PKPc	51	47.80	6.0X
		PP		55	24.00	
		SS		14	57.00	
HRI	150.58	302	ePKP	51	43.00	0.3
GRF	150.60	353	ePKP	51	40.60	-1.4
	Z 22s	1.60um			5.8Msz	
		e		51	42.80	
		e		51	48.80	
KHC	150.81	350	PKP	51	43.50	1.1
	Z 19s	0.50um			5.3Msz	
	N 20s	1.20um				
	E 20s	1.20um				
		i		51	48.80	
ZST	150.95	344	ePKP	51	43.50	0.9
		i		51	49.70	
SRO	150.98	343	ePKP	51	44.80	2.2X
BUD	151.07	341	e(PKP)	51	43.00	0.2
VKA	151.08	345	iPKPc	51	43.60	0.8
	4.4s	1281.00nm				
	Z 15s	0.45um			5.4MszX	
		i		51	50.00	
		i		52	01.90	
		e		55	23.00	
DSI	151.36	299	ePKP	51	44.00	0.3
FLN	151.40	9	ePKP	51	41.40	-1.8
	1.1s	131.85nm				
SOP	151.57	345	ePKP	51	45.00	1.5
ITU	151.58	321	ePKP	51	44.00	0.3
LDF	151.61	8	ePKP	51	41.90	-1.7
	1.1s	92.80nm				
GRR	151.71	9	ePKP	51	42.30	-1.4
	1.1s	117.20nm				
KMR	151.75	348	iPKP+	51	43.60	-0.2
		i		51	51.20	
		i		55	27.90	
CSS	151.86	306	ePKP	51	51.20	6.8X
PRNI	151.98	296	ePKP	51	46.70	2.0X
JMB	152.02	326	iPKPd	51	47.00	2.6X
LPF	152.02	10	ePKP	51	42.80	-1.4
	1.1s	156.30nm				
PVL	152.11	329	iPKPd	51	46.00	1.6
CDF	152.18	358	ePKP	51	43.50	-1.0
	1.3s	101.10nm				
HAU	152.60	359	ePKP	51	44.40	-0.6
	0.9s	49.15nm				
	Z 18s	2.75um			6.1Msz	
PPCY	152.63	307	ePKP	51	54.30	8.9X
BSF	152.77	359	ePKP	51	44.70	-0.7
SQTA	153.04	352	iPKPd	51	46.40	0.6
	1.5s	110.00nm				
		i		51	53.60	
		i		52	05.20	
		i		52	22.80	
		e		55	53.00	
PGB	153.18	329	iPKPd	51	47.00	0.9
KDZ	153.21	326	iPKPc	51	45.00	-1.1
PLD	153.25	328	ePKP	51	47.00	0.9
LOR	153.30	3	ePKP	51	46.00	0.0
	1.0s	54.00nm				
	Z 21s	4.25um			6.2Msz	
PTJ	153.38	344	iPKP	51	44.50	-1.8
FVI	153.41	349	PKP	51	37.00	-9.1X
RBL	153.41	348	PKP	51	57.20	10.9X
ZAG	153.45	344	ePKP	51	43.50	-2.7X
SSF	153.48	4	ePKP	51	46.60	0.3
	0.9s	50.80nm				
RZN	153.55	327	iPKPc	51	47.00	0.2
MFF	153.56	9	ePKP	51	46.40	0.0
	1.3s	65.00nm				
LJU	153.58	346	ePKP	51	47.00	0.5
LBF	153.59	3	ePKP	51	46.40	-0.1
	0.8s	24.20nm				
VTS	153.60	330	ePKP	51	47.00	0.2
		e		03	22.00	
VOY	153.73	347	e(PKP)	51	47.50	0.7
AVF	153.75	4	ePKP	51	46.40	-0.2
	1.0s	28.00nm				
CEY	153.90	346	ePKP	51	47.50	0.6
SMF	153.92	3	ePKP	51	47.10	0.2
	1.0s	30.00nm				
VBY	153.92	345	ePKP	51	48.00	1.1
BGF	153.94	5	ePKP	51	47.20	0.3
	0.7s	16.00nm				
VVI	154.06	349	PKP	51	49.00	1.9X
TRI	154.07	347	PKP	51	49.00	1.9X
TRI	154.07	347	iPKPd	51	55.50	8.4X
		e		55	26.00	
		e		59	02.00	
		e		09	02.00	
MMB	154.12	328	ePKPc	51	56.00	8.6X
LSF	154.12	7	ePKP	51	47.20	0.0
TCF	154.16	6	ePKP	51	47.50	0.2
KKB	154.22	329	ePKP	51	46.00	-1.5
MAF	154.25	5	ePKP	51	48.10	0.7
MDI	154.63	354	PKP	51	49.00	1.2
SAL	154.71	352	PKP	51	50.00	2.1X
SKO	154.89	332	ePKP	51	48.00	-0.3
		e		55	43.50	
ORO	154.93	356	PKP	51	57.50	9.1X
BNI	155.55	359	PKP	51	51.00	1.7
SFI	156.16	349	PKP	51	52.00	2.1X
PGD	156.22	349	PKP	51	51.00	0.7
ARV	156.35	347	PKP	51	51.00	0.7
CDR	156.94	0	ePKPc	52	07.10	16.1X
MNS	157.47	347	PKP	51	51.00	-0.8
AZI	157.68	345	PKP	51	52.00	0.1
DUI	157.72	343	PKP	51	49.00	-3.1X
SDI	157.85	344	PKP	51	52.00	-0.3
ORI	158.53	337	PKP	51	53.00	0.0
MGR	158.77	339	PKP	51	47.00	-6.3X
TDS	158.92	337	PKP	51	52.00	-1.4
TOL	158.95	22	ePKP	51	54.00	0.5
			iPKKP	52	41.00	
			ePP	56	07.00	
			ePPS	16	16.00	
BCAO	159.77	219	iPKPc	51	55.35	0.2
	1.1s	82.00nm				
			id	52	07.60	
			iPKPpb	52	33.51	
			iPKPpb	52	34.09	
			iHP*ob	52	34.75	
			iHPP	56	12.84	
			iPP	56	15.14	
			id	56	22.00	
SOI	160.42	335	PKP	51	58.00	2.9X
AAPN	161.19	25	ePKP	52	12.00	15.9X
ASMO	161.29	24	ePKP	52	12.00	15.8X
APHE	161.67	25	ePKP	52	12.50	15.9X
NKM	162.17	31	ePKP	52	04.00	7.1X
LIC	162.29	142	PKP	51	58.26	0.6
	Z 20s	1.06um				
KIC	162.57	143	PKP	51	58.54	0.6
TIC	162.63	141	PKP	51	58.74	0.7
AVE	162.68	40	ePKP	51	59.00	1.5
			i	52	14.50	
IFR	163.83	35	iPKPc	52	01.50	2.6X
TIO	164.33	46	ePKP	52	01.50	2.1X
			i	52	15.00	

S.D. = 1.0 on 234 of 296 obs.

SEP 08, 1990 21h 01m 43.86± 0.64s
37.182 N ± 7.0km 29.615 E ± 6.6km
DEPTH = 24.4 ± 6.6 km
4.7mb (2 obs.)

TURKEY (366)

CIN	1.29	289	eP	02	05.00	-1.3
SMG	2.27	284	eP	02	20.20	-0.3
KAP	2.56	231	eP	02	23.90	-0.7
PPCY	3.19	135	eP	02	35.50	2.0
APE	3.27	269	eP	02	35.00	0.3
PRK	3.34	309	eP	02	36.40	0.7
BBTK	3.62	42	iPc	02	44.00	4.1X
			eS	03	53.00	
CSS	3.74	125	eP	02	43.50	2.1
NPS	3.76	241	eP	02	41.70	0.0
VAM	4.72	250	eP	02	56.00	0.7
RDO	5.07	323	eP	03	00.80	0.6
KAS	5.28	36	eP	03	13.00	9.7X
VLI	5.37	267	eP	03	05.40	0.9
KDZ	5.52	325	iPc	03	07.00	0.4
JMB	5.77	337	eP	03	15.00	4.9X
RZN	5.88	321	P	03	12.00	0.1
			S	04	18.00	
ITM	6.14	272	eP	03	18.60	3.2X
ADI	6.15	130	eP	03	15.00	-0.6
MMB	6.34	316	ePc	03	18.00	-0.2
ZNT	6.65	136	eP	03	21.00	-1.6
			eS	04	34.00	
PVL	6.86	333	eP	03	26.00	0.6
KKB	6.88	315	eP	03	25.00	-0.8
BURJ	7.09	132	Pd	03	35.90	7.1X
SALJ	7.19	134	Pc	03	39.24	9.1X
MASJ	7.41	135	Pd	03	42.60	9.3X
KOT	7.47	165	ePn	03	30.50	-3.4X
SKO	7.92	310	e(Pn)	03	41.00	0.7
PRNI	8.16	145	eP	03	04.50	-39.2X
GKN	46.69	85	P	10	12.60	-0.1
	0.6s	21.00nm			5.3mb	X
KKN	47.30	85	P	10	17.20	-0.4
	0.4s	11.00nm			5.2mb	
PKI	47.50	85	P	10	18.80	-0.5
CHTO	62.62	86	eP	12	07.10	-1.6
	1.0s	2.00nm			4.2mb	

S.D. = 1.0 on 23 of 32 obs.

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* SEP 08, 1990 21h 38m 42.46± 0.78s
24.779 N ± 8.1km 122.708 E ± 9.3km
DEPTH = 33.0km (normal)
4.7mb (2 obs.)

TAIWAN REGION (243)

TWZ	1.07	287	iPd	39	01.50	0.3
			eS	39	14.30	
ANP	1.15	291	eP	39	01.90	-0.5
			eS	39	14.80	
TWD	1.23	236	ePd	39	02.50	-0.9
TWK	2.53	234	ePc	39	23.20	1.1
SSE	6.43	348	P	40	17.50	0.1
			eS	41	30.50	
			Lg	42	26.40	
W85	45.82	165	eP	47	03.20	0.0
WRA	45.87	165	Pd	47	03.40	-0.2
	0.6s	4.20nm			4.5mb	
ASPA	49.37	166	eP	47	30.90	0.0
	0.5s	7.00nm			4.9mb	

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

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* SEP 08, 1990 21h 47m 05.53± 1.71s
27.760 N ±10.9km 66.543 E ±13.2km
DEPTH = 64.8 ± 16.4 km
4.3mb (5 obs.)

PAKISTAN (710)

QUE	2.45	8	iPd	47	45.30	1.2
			e(S)	48	21.50	
NDI	9.46	82	iPd	49	19.50	-2.1
	0.5s	52.82nm			5.8mb	X
			iS	51	04.00	
POO	11.38	142	eP	49	47.00	-0.6
GBA	17.37	142	P	51	06.00	0.9
	0.9s	6.30nm			3.8mb	
CHG	30.99	100	eP	53	20.10	1.0
CHTO	30.99	100	eP	53	20.00	1.0
	0.8s	3.48nm			4.1mb	
NUR	43.19	331	eP	55	02.00	0.7
SUF	43.76	334	eP	55	05.00	-0.9
SOD	46.35	340	iP	55	25.70	-0.8
KEV	47.76	343	eP	55	27.00	-10.6X
HFS	48.01	328	eP	55	36.40	-3.3X
	0.4s	3.20nm			4.6mb	

08d 21h

```
BCAO    51.19 252 iPc    56 04.20  -0.4
        0.5s      4.00nm          4.7mb
WB5     80.90 118 eP     59 14.70   0.3
WRA     80.91 118 Pc     59 14.30  -0.2
        0.5s      1.30nm          4.1mb
      S.D. = 1.2  on  12 of  14 obs.
-----------------------------------------
&  SEP  08, 1990  22h 32m 14.00s
   32.140 N          117.700 W
   DEPTH =   6.0km  (geophysicist)
 CALIFORNIA-MEXICO BORDER REGION ( 45)
      <PAS-P>. ML 3.2 (PAS).

CPE      0.90  34 eP     32 30.80  -0.7
                eS     32 42.30
BAR      1.02  58 eP     32 32.90  -0.8
SCI      1.10 320 eP     32 34.70  -0.3
CIS      1.40 335 eP     32 38.20  -1.8
PLM      1.40  30 eP     32 38.20  -2.1
IKP      1.44  69 eP     32 39.90  -0.8
                iS     32 58.00
PEC      1.80  14 eP     32 44.50  -1.4
GLA      2.59  69 eP     32 55.80  -1.4
         8 obs. associated
-----------------------------------------
*  SEP  09, 1990  00h 08m 48.69± 0.92s
   19.956 S ±10.0km   69.372 W ± 9.5km
   DEPTH = 138.3 ± 13.3 km
 NORTHERN CHILE                   (123)

CNCB     3.40  23 iPd    09 43.20   1.2
LPB      3.61  20 P      09 47.00   2.3X
        1.0s   270.00nm
ZOBO     3.85  18 P      09 48.20   0.2
ANT      3.85 194 eP     09 48.20   0.8
CCH      3.99  51 P      09 50.00   0.4
ARE      4.02 330 iPc    09 49.50  -0.5
                iS     10 34.00
SIV      8.83  65 iPc    10 49.40  -5.2X
PT02     9.72 315 eP     11 05.20  -1.2
                eS     12 45.20
PT08    10.52 318 iPd    11 17.50   0.1
                iS     13 14.50
NNA     10.69 317 eP     11 18.50  -0.8
        0.6s    13.33nm          4.8mb
                eS     13 23.00
PPD     16.99 100 eP     12 37.80  -1.7
                i      12 39.10
BAO     20.80  82 eP     13 18.50  -2.3X
SOB1    29.51  73 eP     14 39.80  -2.4X
KIC     68.70  75 P      19 38.80  -0.9
PNT     82.12 329 ePc    20 58.00   3.1X
YKA     89.59 341 eP     21 33.70   2.4
        0.7s    3.70nm          4.5mb
LPF     91.05  39 iPc    21 47.50   9.2X
GRR     91.33  38 eP     21 47.00   7.4X
        1.3s    43.30nm         5.5mb
FLN     91.73  38 eP     21 45.20   3.8X
        1.2s    53.55nm         5.6mb
      Z 20s     1.83um          5.5Msz
LDF     91.86  38 eP     21 48.40   6.4X
        1.3s    46.95nm         5.5mb
WRA    134.04 212 PKP    27 57.00   5.0X
        0.6s     0.90nm
      S.D. = 1.4  on  11 of  21 obs.
-----------------------------------------
   SEP  09, 1990  00h 16m 52.51± 0.32s
   56.446 N ± 8.1km   34.351 W ± 4.3km
   DEPTH =  10.0km  (geophysicist)
   4.9mb ( 21 obs.)  4.4Msz (  5 obs.)
 NORTH ATLANTIC OCEAN             (402)

AKU     12.11  34 eP     19 48.40   0.6
        1.7s    92.31nm         5.8mb
GDH     15.43 334 ePc    20 33.00   1.5
                e      24 10.00
EKA     17.46  81 P      21 05.00   7.7X
        0.9s    6.90nm          3.8mb X
SCH     18.29 279 eP     21 07.00  -0.7
MFF     23.22 101 eP     22 00.70   0.5
UCC     23.41  87 P      22 03.00   1.0
SNF     23.50  88 iPc    22 03.42   0.5
DOU     23.89  89 P      22 06.30  -0.3
WTS     24.20  83 eP     22 11.00   1.4
        1.0s    13.00nm         4.5mb
ENN     24.29  86 iPc    22 13.00   2.5
        1.0s    24.00nm         4.8mb

LSF     24.35  99 eP     22 11.70   0.5
        1.0s    16.00nm         4.6mb
MEM     24.41  87 P      22 10.40  -1.3
TCF     24.70  99 iPc    22 15.20   0.6
        1.2s    38.70nm         4.9mb
LFF     24.75 103 iPc    22 16.30   1.3
BGF     24.89  98 iPc    22 16.80   0.4
        1.4s    45.75nm         5.0mb
RJF     24.93 101 iPc    22 17.70   0.8
      Z 21s     1.88um          4.6Msz
MAF     24.94  98 iPc    22 17.40   0.5
        1.3s    50.55nm         5.0mb
SSF     24.95  96 eP     22 17.30   0.3
        1.2s    35.70nm         4.9mb
LOR     25.02  95 iPc    22 17.60  -0.1
        1.4s    39.20nm         4.9mb
      Z 21s     1.23um          4.4Msz
AVF     25.03  97 iPc    22 17.90   0.2
        1.0s    18.00nm         4.7mb
HFS     25.07  61 eP     22 16.10  -1.9
        1.7s    76.80nm         5.1mb
LPO     25.16 103 eP     22 20.20   1.2
        1.1s    19.55nm         4.7mb
LBF     25.26  96 eP     22 20.20   0.2
        1.0s    18.00nm         4.7mb
SMF     25.38  96 eP     22 21.40   0.3
        1.2s    19.35nm         4.7mb
HAU     25.98  92 iPc    22 25.40  -1.3
        0.9s    13.10nm         4.6mb
      Z 20s     1.90um          4.6Msz
CDF     26.27  90 iPc    22 28.30  -1.2
BSF     26.33  92 iPc    22 28.40  -1.6
MOX     27.49  83 eP     22 40.00  -0.5
      Z 16s     1.30um          4.6MszX
GRF     27.77  85 eP     22 43.20   0.2
        1.1s    24.00nm         4.9mb
      Z 18s     0.50um          4.1Msz
CLL     27.93  80 eP     22 43.00  -1.4
        1.6s    16.00nm         4.6mb
      Z 17s     1.00um          4.5MszX
ORO     28.29  94 P      22 55.00   7.1X
KHC     29.37  84 eP     22 57.50   0.0
KSP     29.96  79 eP     23 01.80  -0.9
FVI     30.37  89 P      23 06.50   0.2
PGD     31.46  94 P      23 16.50   0.3
SFI     31.51  94 P      23 17.00   0.7
SKO     38.10  88 eP     24 12.50  -0.4
TUL     45.48 270 ePd    25 14.50   1.1
        1.2s    28.20nm         5.1mb
BBTK    45.81  82 eP     25 20.00   3.9X
SIO     45.89 270 eP     25 17.50   0.9
UYO     46.02 267 e(P)   25 17.80   0.2
MEO     47.86 271 e(P)   25 32.00  -0.2
PNT     48.79 300 eP     25 38.00  -1.2
TIC     54.79 143 P      26 24.20  -0.5
KIC     55.15 143 P      26 27.00  -0.3
LIC     55.19 144 P      26 27.30  -0.2
      Z 20s     0.09um          3.8Msz
BCAO    66.55 120 iPd    27 43.30  -1.4
        0.6s    7.00nm          5.0mb
QUE     71.22  64 eP     28 13.00  -0.7
GKN     81.35  51 P      29 10.00  -0.6
        0.8s    21.00nm         5.2mb
KKN     81.81  51 P      29 12.60  -0.5
        0.8s    29.00nm         5.4mb
GUN     81.96  51 P      29 13.80  -0.3
PKI     82.06  51 P      29 14.20  -0.3
ASPA   146.14  20 iPKPd  36 31.00  -2.2X
        1.2s    9.00nm
      S.D. = 0.9  on  49 of  53 obs.
-----------------------------------------
*  SEP  09, 1990  00h 22m 58.23± 0.67s
   22.395 S ± 6.4km   69.322 W ±21.8km
   DEPTH = 156.4 ± 32.6 km
 NORTHERN CHILE                   (123)

ANT      1.65 217 iPc    23 30.20   0.1
                iS     23 51.50
CNCB     5.70  13 P      24 22.00  -0.4
CCH      5.81  32 eP     24 24.50   0.8
LPB      5.94  11 P      24 27.00   1.4
ZOBO     6.20  11 P      24 26.80  -2.3
ARE      6.25 341 eP     24 30.00   0.5
RTLL     8.93 175 eP     25 04.20  -0.9
RTCB     9.07 177 e(P)   25 06.20  -0.7
RTBS     9.23 181 e(P)   25 10.40   1.4
RTCV     9.45 176 e(P)   25 12.00   0.0

SIV     10.06  52 P      25 14.50  -5.6X
PPD     16.68  92 eP     26 44.50   0.2
WRA    131.99 211 PKP    42 04.00   8.7X
        0.7s     1.10nm
GBA    147.26 100 PKP    42 33.00  10.2X
      S.D. = 1.3  on  11 of  14 obs.
-----------------------------------------
*  SEP  09, 1990  00h 30m 08.79± 0.51s
   56.215 N ±12.3km   34.431 W ± 6.3km
   DEPTH =  10.0km  (geophysicist)
   5.0mb ( 25 obs.)  4.6Msz (  5 obs.)
 NORTH ATLANTIC OCEAN             (402)

AKU     12.33  33 eP     33 04.90  -2.1
        2.6s    700.00nm        6.5mb X
GDH     15.62 334 eP     33 52.00   1.8
                e      36 56.00
ECB     16.54  92 eP     34 06.30   4.2X
ETA     16.73  90 eP     34 05.60   1.2
ECP     16.85  92 eP     34 10.00   4.0X
EKA     17.54  80 P      34 16.00   1.4
        1.5s    50.40nm         4.4mb
GRR     21.79  97 eP     35 01.20  -1.2
        1.4s    61.00nm         4.8mb
FLN     21.80  96 eP     35 00.80  -1.6
        1.4s    91.50nm         5.0mb
      Z 19s     3.00um          4.7Msz
LPF     21.89  98 eP     35 02.10  -1.3
        1.4s    74.05nm         4.9mb
LDF     22.09  96 eP     35 04.30  -1.1
        1.5s    94.00nm         5.0mb
MFF     23.22 100 eP     35 16.00  -0.5
DBN     23.32  83 eP     35 18.00   0.6
UCC     23.46  87 P      35 20.00   1.2
SNF     23.56  88 iPc    35 20.76   1.0
DOU     23.94  88 P+     35 26.10   2.7
WTS     24.27  83 eP     35 27.00   0.3
        1.5s    46.00nm         4.9mb
ENN     24.35  86 eP     35 28.00   0.6
        1.5s    67.00nm         5.0mb
                e      36 48.00
LSF     24.36  99 eP     35 27.80   0.2
MEM     24.47  86 P      35 29.30   0.7
TCF     24.71  98 eP     35 30.90  -0.1
        1.4s    69.70nm         5.1mb
LFF     24.74 102 eP     35 32.00   0.7
BGF     24.90  97 eP     35 32.40  -0.4
        1.4s    63.15nm         5.1mb
RJF     24.93 101 eP     35 33.40   0.2
        1.4s    43.50nm         4.9mb
      Z 20s     2.35um          4.7Msz
MAF     24.95  98 eP     35 33.20  -0.1
        1.4s    82.75nm         5.2mb
SSF     24.97  95 eP     35 33.00  -0.5
        1.5s    73.10nm         5.1mb
AVF     25.04  96 eP     35 33.60  -0.6
        1.5s    75.75nm         5.2mb
LOR     25.05  95 eP     35 33.40  -0.9
        1.5s    73.16nm         5.1mb
      Z 20s     1.55um          4.5Msz
LPO     25.15 102 eP     35 35.80   0.6
        1.3s    43.30nm         5.0mb
LBF     25.28  95 eP     35 35.80  -0.7
        1.5s    62.70nm         5.1mb
SMF     25.40  96 eP     35 37.00  -0.6
        1.6s    74.65nm         5.1mb
CAF     25.47 101 eP     35 38.40   0.1
        1.3s    19.85nm         4.6mb
TOL     25.77 116 eP     35 45.00   3.9X
HAU     26.02  91 eP     35 41.30  -2.1
        1.0s    18.00nm         4.7mb
      Z 19s     3.25um          4.9Msz
CDF     26.31  89 eP     35 44.00  -2.2
BSF     26.37  91 eP     35 44.30  -2.3
MOX     27.57  82 eP     35 57.00  -0.5
        1.8s    46.00nm         4.9mb
LPL     27.69  95 eP     35 59.40   0.5
LPG     27.71  95 eP     35 59.60   0.4
GRF     27.84  84 eP     35 59.90   0.0
        1.6s    45.00nm         5.0mb
      Z 20s     0.60um          4.2Msz
BNI     27.94  96 P      36 02.50   1.4
CLL     28.01  80 eP     36 00.00  -1.5
        2.1s    38.00nm         4.8mb
      Z 17s     1.50um          4.6MszX
                e      36 44.00
ORO     28.32  94 P      36 06.00   1.6
```

BRG	28.74	80	eP	36 07.00	-1.1	
	2.0s	30.00nm		4.7mb		
			e	36 54.00		
SQTA	29.18	88	iPc	36 13.00	0.8	
			e	36 42.00		
MDI	29.19	92	P	36 14.00	1.9	
KHC	29.44	83	eP	36 14.30	-0.1	
KSP	30.05	79	ePc	36 18.50	-1.3	
FVI	30.42	88	Pc	36 23.80	0.7	
PGD	31.49	93	P	36 35.00	2.2	
SFI	31.54	93	P	36 34.50	1.6	
KRA	32.45	78	eP	36 40.20	-0.6	
			e	36 42.90		
AZI	33.68	94	P	36 55.00	3.4X	
SDI	34.08	94	P	36 54.00	-1.2	
SKO	38.16	88	iP	37 29.50	-0.1	
OHR	38.37	89	eP	37 27.50	-4.0X	
TUL	45.44	270	eP	38 29.00	-0.3	
	1.1s	6.50nm		4.5mb		
SIO	45 85	271	e(P)	38 30.70	-1.8	
UYO	45.97	268	e(P)	38 34.80	1.3	
PNT	48.87	300	eP	38 56.00	-0.1	
MML	52.74	86	e(P)	39 27.00	1.3	
PRNI	54.08	88	eP	39 46.00	10.4X	
BCAO	66.47	120	iPd	41 00.10	-0.4	
	0.6s	8.00nm		5.1mb		
QUE	71.37	64	eP	41 31.20	0.3	
ASPA	146.38	20	ePKP	49 49.40	-0.5	
	1.1s	9.00nm				

S.D. = 1.2 on 58 of 64 obs.

? SEP 09, 1990 01h 23m 36.26± 3.20s
32.228 S ±21.4km 71.463 W ±27.4km
DEPTH = 90.9 ± 33.4 km
NEAR COAST OF CENTRAL CHILE (135)

IHA	0.81	191	eP	23 55.00	0.8	
			eS	24 13.00		
ROCH	0.83	153	iPd	23 53.90	-0.8	
			iS	24 14.00		
JACH	0.86	122	iPd	23 54.50	-0.4	
			iS	24 14.50		
PEL	1.12	145	eP	23 58.00	0.2	
			iS	24 23.00		
LCCH	1.25	184	iP	24 00.50	1.3	
			iS	24 25.60		
TACH	1.49	163	eP	24 02.60	0.3	
			iS	24 30.00		
LNV	1.72	179	eP	24 03.00	-2.3	
			i	24 39.10		
RT8S	1.80	72	ePd	24 05.80	-0.5	
CHCH	1.83	158	eP	24 07.50	0.7	
			i	24 35.00		
MDZ	2.30	107	eP	24 20.60	7.4X	
			iS	24 58.90		
RTCB	2.38	73	ePd	24 13.80	-0.5	
			S	24 51.00		
RTCV	2.51	82	eP	24 18.00	2.0	
RTLL	2.70	71	ePd	24 18.00	-0.6	
			(S)	24 57.00		
			e	25 02.00		

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

% SEP 09, 1990 01h 59m 27.09± 1.00s
0.275 S ±12.9km 78.048 W ± 6.4km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

CAYA	0.36	10	P	59 48.40	13.8X	
			S	00 05.20		
QTO	0.49	279	P	59 38.00	0.9	
			S	59 54.60		
OUR	0.49	282	iP+	59 38.00	0.8	
			S	59 55.50		
VC1	0.51	224	iPd	59 37.40	-0.1	
			eS	59 57.20		
ANGL	0.52	103	eP	59 37.80	0.1	
YANA	0.55	287	iP+	59 38.00	-0.3	
			S	59 55.60		
GGP	0.56	280	iP+	59 37.60	-1.2	
			S	59 56.00		

S.D. = 1.0 on 6 of 7 obs.

SEP 09, 1990 02h 14m 51.08± 0.15s
56.654 N ± 5.2km 34.395 W ± 2.0km
DEPTH = 10.0km (geophysicist)
5.4mb (56 obs.) 5.2Msz (14 obs.)

NORTH ATLANTIC OCEAN (402)
Ms 5.4 (BRK).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B : 11S, 29C
Centroid Location:
Origin Time 02:14:56.4 0.4
Lat 56.40N 0.07 Lon 34.43W 0.05
Dep 15.0 FIX Half-duration 2.0
Moment Tensor; Scale 10**17 Nm
Mrr=-1.45 0.05 Mtt= 0.05 0.07
Mff= 1.40 0.05 Mrt= 0.30 0.13
Mrf= 0.52 0.19 Mtf= 0.14 0.06
Principal Axes:
T Val= 1.51 Plg=11 Azm=278
N 0.07 8 9
P -1.58 77 135
Best Double Couple:Mo=1.5*10**17
NP1:Strike=358 Dip=35 Slip=-104
NP2: 194 56 -81

REY	9.70	34	eP	17 17.30	3.7X	
AKU	11.95	34	iP	17 48.10	3.9X	
	1.7s	400.00nm			6.4mb X	
VAL	14.83	98	iP	18 29.80	7.5X	
			S	22 47.00		
GDH	15.23	334	eP	18 26.00	-1.5	
			i	18 36.00		
			i	21 25.00		
ECB	16.54	93	eP	18 47.80	3.4X	
	1.5s	348.00nm			5.3mb	
EAB	16.57	79	eP	18 46.40	1.6	
	1.6s	449.00nm			5.3mb	
ETA	16.71	92	eP	18 48.20	1.6	
	1.5s	290.00nm			5.2mb	
ELO	16.85	78	eP	18 46.90	-1.4	
	1.6s	388.00nm			5.3mb	
ECP	16.85	94	eP	18 51.40	3.1X	
	1.7s	780.00nm			5.6mb	
EBH	17.01	78	iP	18 47.50	-2.8X	
	1.6s	327.00nm			5.2mb	
EDI	17.27	79	eP	18 50.10	-3.4X	
	1.5s	397.00nm			5.3mb	
ESK	17.43	81	ePd	18 59.00	3.5X	
	1.5s	240.00nm			5.1mb	
EKA	17.45	81	P	18 57.00	1.2	
	1.6s	158.80nm			4.9mb	
SCH	18.24	278	ePd	19 05.50	-0.1	
	1.5s	461.00nm			5.4mb	
ASK	20.77	63	eP	19 32.30	-1.9	
BER	20.85	63	eP	19 34.50	-0.5	
DAG	20.97	10	iPd	19 41.00	4.8X	
	1.5s	127.78nm			5.1mb	
FLN	21.82	97	eP	19 44.30	-0.7	
	1.4s	340.35nm			5.6mb	
	Z 18s	20.00um			5.6Msz	
GRR	21.83	98	eP	19 44.80	-0.3	
	1.6s	379.35nm			5.6mb	
LPF	21.94	99	eP	19 45.30	-0.8	
	1.4s	291.90nm			5.5mb	
LDF	22.12	97	eP	19 47.50	-0.4	
CBM	22.79	259	P	19 56.00	1.3	
D8N	23.25	84	eP	20 02.00	3.0X	
	Z 20s	5.50um			5.0Msz	
			eS	24 20.00		
			eSS	25 11.00		
MFF	23.28	101	eP	19 58.20	-1.2	
	1.8s	276.20nm			5.5mb	
UCC	23.42	88	P-	20 01.00	0.3	
			S	24 22.00		
SNF	23.52	89	iPc	20 02.55	0.9	
WIT	23.76	82	eP	20 06.00	2.1	
			e	20 21.00		
DOU	23.91	89	Pc	20 06.30	0.9	
	Z 20s	7.20um			5.1Msz	
			S	24 29.00		
WTS	24.20	84	eP	20 09.50	1.3	
	2.0s	334.00nm			5.6mb	
			e	20 24.00		
ENN	24.30	87	eP	20 10.00	0.8	
	1.5s	287.00nm			5.7mb	
MIM	24.36	257	P	20 11.00	1.2	
LSF	24.41	100	eP	20 09.50	-0.9	
	1.5s	148.85nm			5.4mb	
MEM	24.43	87	P	20 11.50	1.1	
TCF	24.76	99	eP	20 12.90	-0.9	
LFF	24.82	103	eP	20 13.90	-0.4	

	1.7s	242.60nm			5.6mb	
BNS	24.89	85	iPc	20 07.90	-7.1X	
	Z 16s	7.70um			5.3MszX	
			i	20 52.70		
			i	21 21.30		
BGF	24.94	98	eP	20 14.20	-1.3	
MAF	24.99	99	eP	20 15.00	-1.0	
SSF	25.00	96	eP	20 15.00	-1.0	
RJF	25.00	102	eP	20 15.00	-1.1	
	1.5s	161.90nm			5.5mb	
	Z 19s	20.00um			5.6Msz	
LOR	25.07	96	eP	20 15.50	-1.2	
	1.4s	204.20nm			5.6mb	
	Z 20s	12.75um			5.4Msz	
AVF	25.08	97	eP	20 15.60	-1.1	
LPO	25.23	103	eP	20 17.80	-0.4	
	1.2s	86.30nm			5.3mb	
LBF	25.30	96	eP	20 17.80	-1.2	
SMF	25.43	97	eP	20 18.80	-1.3	
CAF	25.54	102	eP	20 20.40	-0.8	
	1.7s	106.60nm			5.3mb	
VITF	25.69	92	P	20 22.26	-0.2	
COP	25.70	72	iPc	20 25.20	2.7	
	1.7s	584.62nm			6.0mb	
EPF	25.89	107	eP	20 23.30	-1.2	
	1.6s	59.10nm			5.0mb	
TOL	25.95	117	iPc	20 26.00	0.9	
	1.6s	400.00nm			5.9mb	
			ePP	21 17.00		
			eS	25 02.00		
TNS	25.97	86	ePc	20 25.60	0.4	
HAU	26.01	92	eP	20 24.50	-1.1	
	1.5s	151.45nm			5.5mb	
	Z 19s	12.50um			5.5Msz	
GWF	26.17	89	P	20 27.02	0.0	
CDF	26.29	90	P	20 28.05	-0.2	
ECH	26.34	91	P	20 28.09	-0.5	
BSF	26.36	92	P	20 28.18	-0.7	
STR	26.47	90	P	20 30.24	0.5	
MOF	26.53	92	P	20 29.86	-0.6	
LOMF	26.65	93	P	20 29.02	-2.5	
UPP	26.97	61	eP	20 34.00	-0.2	
SLE	27.33	91	ePc	20 38.00	0.3	
GRN	27.34	97	P	20 39.04	1.2	
ZLA	27.44	91	eP+	20 38.70	0.0	
EMS	27.48	95	ePc	20 39.90	0.7	
MOX	27.49	83	iPc	20 39.00	-0.1	
	1.9s	99.00nm			5.2mb	
	Z 13s	4.30um			5.2MszX	
	N 13s	3.10um				
	E 16s	6.10um				
			e	21 15.00		
			eS	25 20.00		
LPL	27.71	96	eP	20 40.80	-0.6	
	1.5s	99.25nm			5.4mb	
LPG	27.73	96	eP	20 41.30	-0.4	
	1.4s	58.80nm			5.2mb	
DIX	27.74	94	ePc	20 42.90	1.2	
GRF	27.77	85	iPd	20 41.50	-0.2	
	1.4s	123.00nm			5.5mb	
	Z 22s	3.00um			4.8Msz	
RSNY	27.78	261	P	20 44.20	2.4	
	1.8s	107.14nm			5.3mb	
CLL	27.92	81	iPc	20 42.90	0.0	
	1.7s	86.00nm			5.3mb	
			i	20 53.10		
			eS	25 27.00		
BNI	27.97	97	Pc	20 44.40	0.8	
MMK	28.06	94	ePc	20 46.30	1.8	
LLS	28.14	92	ePc	20 46.40	1.2	
ORO	28.33	95	Pc	20 48.00	1.2	
CDR	28.37	100	eP	20 50.80	3.7X	
SURF	28.41	98	P	20 47.64	0.0	
TMA	28.53	93	ePc	20 51.10	2.4	
VDL	28.63	92	ePc	20 51.20	1.6	
DOI	28.64	97	P	20 49.60	0.0	
BRG	28.65	81	iPc	20 49.40	-0.1	
	1.6s	26.00nm			4.8mb	
			eS	25 52.00		
LRG	28.84	100	eP	20 50.30	-0.9	
NKM	28.86	125	eP	20 45.00	-6.5X	
OSS	28.88	91	ePc	20 52.90	1.1	
FRF	28.92	99	eP	20 50.70	-1.3	
	1.3s	46.95nm			5.1mb	
WET	28.98	85	iPc	20 53.00	0.5	
	1.5s	60.00nm			5.2mb	
LMR	29.00	100	eP	20 51.30	-1.4	

09d 02h

KEV		29.13	39	eP	20	53.00	-0.6	FFC		36.75	296	eP	22	01.00	1.0	RVR		58.67	285	eP	24	51.00	0.3
	Z	20s		3.60um			5.0Msz			1.7s		114.00nm			5.4mb	PRI		58.76	289	eP	24	53.20	1.7
				e	25	52.00		GIB		36.81	99	P	22	01.00	0.2	MWC		58.85	286	eP	24	52.00	-0.2
				LR	30	04.00		FAI		37.14	101	P	22	02.00	-1.4	PLM		58.88	284	eP	24	52.00	-0.4
SOTA		29.15	89	eP	20	53.50	-0.7	MNO		37.22	99	P	22	05.40	1.1	BAR		59.30	284	eP	24	55.00	-0.1
		2.0s		86.70nm			5.2mb	ATN		37.48	98	P	22	05.20	-1.0	CAI		63.00	1B3	e(P)	25	18.40	-1.7
				ic	20	54.70		SOI		37.86	97	P	22	08.00	-1.4	SOB1		65.84	187	eP	25	38.30	-0.4
				i	21	40.60		SKO		38.12	88	iP	22	12.00	0.4	BCAO		66.68	120	iPd	25	42.10	-2.0
MDI		29.19	93	Pd	20	54.60	0.2		Z	16s		6.18um			5 5MszX			1.0s		35.00nm			5.5mb
CKI		29.25	96	P	20	55.20	0.2		N	15s		2.85um								id	25	53.10	
OGA		29.26	90	iPc	20	56.30	1.0		E	16s		5.52um				QUE		71.15	64	eP	26	12.20	0.4
SOD		29.28	44	iP	20	53.10	-1.9					i	23	42.00		SIV		75.74	206	P	26	38.00	-0.4
KHC		29.37	84	iPc	20	56.60	0.5					i	28	13.00		NDI		77.33	57	iPd	26	48.00	0.7
		1.5s		17.50nm			4.6mb					LR	38	40.00		LWI		77.50	114	ePd	26	49.30	0.7
	Z	17s		2.00um			4.8MszX	OHR		38.35	90	eP	22	14.80	1.2	ZOBO		77.93	213	P	26	50.00	-1.3
	N	18s		18.00um						1.7s		152.00nm			5.5mb		Z	18s		0.76um			5.1Msz
	E	17s		4.50um				YKA		38.56	313	eP	22	15.30	0.3					S	36	40.00	
PRU		29.44	82	P	20	56.00	-0.6			1.5s		18.80nm			4.6mb					LR	51	34.00	
	Z	18s		5.80um			5.2Msz	VTS		38.68	86	iP	22	16.00	-0.5	CCH		78.41	211	P	26	55.90	2.3
	N	14s		5.00um				KKB		39.10	87	iPc	22	20.00	0.2	BJI		80.51	22	eP	27	05.00	0.7
	E	20s		4.80um				PGB		39.24	85	iPc	22	22.00	1.0			1.5s		42.00nm			5.2mb
				e	21	10.50		GBTN		39.28	259	P	22	22.00	0.6	LZH		81.07	33	Pd	27	07.20	-0.4
				eS	26	00.00		MMB		39.64	87	ePc	22	26.00	1.6			2.0s		79.00nm			5.4mb
SAL		29.74	92	P	21	01.50	2.1	RZN		40.12	86	iPc	22	29.00	0.5		Z	20s		1.20um			5.2Msz
BHG		29.78	87	eP	21	00.20	0.5	DIM		40.32	85	eP	22	31.00	1.1		N	15s		0.90um			
		1.6s		68.00nm			5.2mb	KDZ		40.53	85	iP	22	30.00	-1.6		E	15s		1.10um			
AVE		29.81	130	eP	20	59.00	-1.1	ELC		40.84	266	P	22	34.20	0.0					pP	27	13.50	20kmX
				i	21	27.50		FVM		41.00	267	P	22	36.20	0.7					PP	30	15.00	
KSP		29.94	79	ePc	21	00.50	-0.6	INK		42.15	327	eP	22	44.00	-0.6					eS	37	19.00	
PNJ		30.05	255	iP	21	05.20	3.1X	SES		43.77	296	ePc	22	59.50	1.5					SS	42	41.00	
GMTN		30.08	255	iP	21	04.40	2.0			1.6s		209.00nm			5.7mb	GKN		81.24	51	P	27	08.80	0.2
SUF		30.12	53	eP	21	03.00	0.5	BIX		45.44	270	eP	23	12.50	0.9	KKN		81.70	51	P	27	11.40	0.3
NUR		30.12	58	eP	21	02.00	-0.5	TUL		45.46	270	eP	23	11.10	-0.6	GUN		81.85	51	P	27	12.80	0.8
		0.7s		14.70nm			4.9mb			1.2s		25.90nm			5.1mb	PKI		81.94	51	P	27	12.80	0.3
	Z	20s		4.30um			5.1Msz		Z	23s		0.56um			4.4MszX			1.5s		149.00nm			5.9mb
				e	26	08.00						i	23	15.80		KMZ		85.75	122	P	27	33.50	1.9
				e	27	32.00						LR	37	00.00		SHL		86.41	47	iP	27	34.50	-0.5
				e	28	48.00		BBTK		45.81	82	eP	23	16.00	1.4	HYB		87.57	62	eP	27	40.00	-0.5
				LR	31	20.00		SIO		45.86	270	e(P)	23	14.20	-0.7	LSZ		88.44	121	iPd	27	46.00	1.3
KMR		30.28	86	iP-	21	03.80	-0.3	MEO		47.83	271	iPc	23	30.40	-0.1	PTZ		89.07	118	iPd	27	56.10	8.5X
FVI		30.39	89	Pc	21	06.00	0.9	GLD		47.87	281	P	23	31.90	0.9	GBA		90.28	64	P	27	54.00	0.7
VVI		30.56	90	P	21	07.00	0.3			1.5s		406.25nm			6.3mb	KMI		90.86	38	Pc	27	56.00	-0.2
IFR		30.61	127	iPc	21	06.50	-0.9	GOL		47.99	281	P	23	32.00	0.0	BUL		92.86	123	eP	28	05.70	0.6
BDI		30.76	95	P	21	06.00	-2.5			1.5s		145.44nm			5.8mb	WRA		142.39	18	PKP	34	28.00	2.5X
PII		30.94	95	P	21	14.00	4.0X	NEW		48.17	297	P	23	32.20	-0.8			1.9s		19.40nm			
VOY		31.34	89	eP	21	13.50	-0.1			1.7s		141.30nm			5.8mb	ASPA		145.96	19	iPKPd	34	31.00	-0.5
VKA		31.36	84	iPd	21	13.30	-0.4	PNT		48.66	300	eP	23	36.00	-0.8			1.4s		31.00nm			
		3.8s		397.00nm			5.7mb X	FBA		48.66	329	eP	23	36.80	0.3	SPA		146.48	180	ePKP	34	32.00	0.9
	Z	14s		4.20um			5.3MszX	IMA		49.39	332	eP	23	42.40	0.2			1.9s		170.83nm			
				e	22	03.00		DAU		50.64	286	P	23	52.40	0.0	BRS		150.31	347	iPKPc	34	44.00	5.8X
				e	22	17.00		PMR		51.56	326	eP	23	58.80	0.1		S.D. = 1.0			on 211 of 231 obs.			
				LR	35	10.00				1.7s		157.40nm			5.7mb	---							
TRI		31.47	90	i(P)c	21	14.00	-0.6	BHL		51.71	85	P	24	00.00	-0.4		SEP 09, 1990 02h 39m 48.36± 0.31s						
				e(PP)	22	14.00		ANMO		52.04	278	P	24	04.00	1.0		15.354 N ± 6.7km 45.392 W ± 8.4km						
				e(S)	26	20.00				1.6s		91.67nm			5.5mb		DEPTH = 10.0km (geophysicist)						
				eLR	30	00.00		ADI		52.10	86	eP	24	04.00	0.8		4.7mb (9 obs.) 4.2Msz (2 obs.)						
PGD		31.50	94	P	21	16.00	0.9	BMW		52.39	299	P	24	04.80	-0.5		NORTH ATLANTIC RIDGE						(403)
SFI		31.54	94	P	21	14.90	-0.3	TTA		52.49	331	eP	24	05.00	-0.9								
LJU		31.69	88	eP	21	16.50	-0.1	MSU		52.51	285	P	24	06.50	0.0	CAI		23.23	159	iPc	44	56.30	-0.4
CRE		31.79	94	P	21	17.50	-0.1	JVI		53.03	87	iPc	24	10.50	0.4	SOB1		24.81	169	eP	45	11.10	-1.0
CEY		31.82	89	e(P)	21	17.00	-0.7	PRNI		54.05	88	iPc	24	18.50	0.9	SIV		34.78	207	P	46	41.00	-0.4
SOP		31.83	84	iP	21	19.60	1.8	TAB		54.40	73	eP	24	21.00	0.7	PPD		37.60	189	eP	47	12.80	7.7X
ZST		31.83	83	eP	21	17.70	-0.1	TIC		54.98	143	P	24	23.40	-1.2	TIO		38.12	59	ePd	47	10.50	0.9
TIO		31.93	132	iP	21	19.00	0.0	KVN		55.23	290	P	24	26.20	-0.3	ZOBO		38.61	216	P	47	14.60	0.3
KRA		32.34	78	eP	21	21.80	-0.3	KIC		55.34	143	P	24	25.82	-1.3	LPB		38.81	216	P	47	17.00	1.2
		1.5s		117.00nm			5.6mb	LIC		55.37	144	P	24	25.62	-1.7	CNCB		38.96	216	P	47	17.50	0.2
	Z	16s		8.40um			5.5MszX		Z	20s		0.39um			4.5Msz	IFR		40.57	56	iPc	47	30.50	0.5
	E	16s		9.60um				LBFM		55.47	294	P	24	27.40	-0.8	NKM		40.93	53	eP	47	35.00	2.3
				e	26	39.00		MIN		56.07	293	eP	24	31.00	-1.5	EPF		47.72	45	eP	48	27.80	0.4
ARV		32.42	93	P	21	24.00	1.0	WDC		56.37	294	eP	24	31.80	-2.6			1.0s		12.00nm			4.9mb
VBY		32.42	89	e(P)	21	23.50	0.6	ORV		56.61	292	eP	24	34.00	-2.2	LFF		48.69	43	eP	48	34.60	-0.2
PTJ		32.56	87	eP	21	21.00	-3.3X	FHC		56.93	295	eP	24	38.00	-0.5	MFF		48.78	41	eP	48	35.30	-0.1
SRO		32.72	83	iP	21	25.40	-0.1	CMB		57.18	290	eP	24	39.70	-0.6	LPF		48.85	39	eP	48	35.40	-0.5
SPC		32.98	79	eP	21	28.70	0.7	FRI		57.62	289	eP	24	43.00	-0.3			0.8s		13.45nm			5.0mb
MNS		33.01	95	Pc	21	27.50	-0.7	TPC		57.87	284	eP	24	46.00	0.8	LPO		48.89	43	eP	48	36.10	-0.2
BUD		33.30	83	eP	21	29.80	-0.7	ISA		57.98	287	eP	24	47.00	1.1	TUL		49.24	304	eP	48	39.00	-0.1
RMP		33.41	96	P	21	33.00	1.4	GLA		58.02	282	eP	24	46.00	-0.2			0.8s		2.80nm			4.3mb
RDP		33.45	96	P	21	31.00	-1.0	BKS		58.25	292	eP	24	45.40	-2.3	RJF		49.34	43	eP	48	39.10	-0.7
AZI		33.69	95	P	21	34.00	0.0		Z	20s		2.40um			5.3Msz			0.9s		8.20nm			4.7mb
SDI		34.09	95	P	21	34.30	-3.3X		N	20s		2.70um					Z	22s		0.22um			4.1Msz
DUI		34.48	95	P	21	41.00	0.1		E	20s		0.70um				FLN		49.50	38	eP	48	40.60	-0.4
SGO		35.70	95	P	21	51.00	-0.2					iS	32	59.00		CAF		49.56	43	eP	48	41.10	-0.4
BLA		36.08	257	P	21	55.80	1.2					e	42	08.00				0.7s		5.50nm			4.7mb
		1.5s		92.11nm			5.4mb					eLR	47	22.00		LSF		49.71	42	eP	48	42.20	-0.4
MGR		36.13	96	P	21	53.00	-1.9	MHC		58.35	291	eP	24	47.80	-0.8	TCF		50.16	42	eP	48	45.70	-0.4
NAV		36.21	258	P	21	56.00	0.4	SBB		58.38	286	eP	24	48.00	-0.7			1.0s		10.00nm			4.7mb
ORI		36.67	95	P	22	01.00	1.5	LLA		58.54	290	eP	24	48.70	-1.1	BGF		50.67	42	eP	48	49.40	-0.5

```
        0.8s     6.70nm          4.6mb
AVF    51.07  42 eP     48 52.60  -0.4
SSF    51.27  41 eP     48 53.70  -0.8
SMF    51.34  42 eP     48 54.60  -0.4
LBF    51.54  42 eP     48 57.00   0.4
LOR    51.57  41 eP     48 55.80  -1.0
     Z  20s     0.32um          4.4Msz
KHC    58.33  41 eP     49 46.70   0.8
FFC    58.50 325 eP     49 55.00   8.0X
       0.9s    17.00nm          5.1mb
CLL    58.52  39 e(P)   49 52.00   4.8X
                e        50 56.00
KRA    62.57  41 eP     50 16.30   1.5
YKA    66.92 332 eP     50 49.00   6.2X
       1.0s     3.90nm          4.6mb
PNT    68.25 317 eP     50 51.00  -0.5
INK    75.17 337 eP     51 32.50   0.1
     S.D. = 0.8  on  30 of  34 obs.
-------------------------------------
   SEP  09, 1990  02h 42m 30.88± 0.46s
   33.573 S ± 7.9km  178.799 W ± 9.6km
   DEPTH =  33.0km  (normal)
   5.1mb ( 11 obs.)
 SOUTH OF KERMADEC ISLANDS          (179)

HBZ     4.66 210 eP     43 40.90   0.2
       0.3s    84.00nm
PUZ     5.09 207 P      43 45.50  -1.3
                eS      44 48.10
NOZ     5.65 206 P      43 55.60   0.9
TAZ     6.01 218 eP     44 01.30   1.5
WLZ     6.24 225 eP     44 04.70   1.6
WHH     6.52 214 eP     44 06.40  -0.7
NGZ     7.19 217 eP     44 15.60  -0.9
CNZ     7.23 217 eP     44 17.40   0.4
PGZ     8.06 208 eP     44 26.30  -2.2
MNG     8.38 211 eP     44 28.70  -4.3X
       0.4s    13.00nm          5.4mb
                eS      46 01.70
WEL     9.24 212 eP     44 50.00   5.2X
                S       46 24.00
KHZ    10.69 212 eP     45 01.30  -3.5X
LTZ    11.57 215 eP     45 11.70  -5.0X
                S       47 15.70
DZM    17.35 308 iPc    46 36.00   3.9X
BRS    25.21 277 iPc    47 59.00   3.8X
CNB    26.26 257 eP     48 08.20   3.3X
       1.0s    25.00nm          4.8mb
CAN    26.55 257 eP     48 10.00   2.4
BWA    27.13 259 iPd    48 12.80  -0.1
TOO    29.21 252 eP     48 33.70   2.1
       0.7s     5.00nm          4.3mb
BFD    31.58 252 eP     48 56.00   3.5X
STK    33.23 262 iPc    49 07.20   0.2
       2.0s    13.00nm          4.5mb
     Z  18s    77.00um          6.4MszX
                LR      02 33.60
CTA    33.78 284 iPc    49 12.90   1.0X
       0.9s    36.13nm          5.3mb
                iS      54 44.00
OIS    38.99 279 iPc    49 56.20   0.2
PMG    39.47 300 eP     49 58.50  -1.5
ASPA   42.37 271 iPc    50 23.70  -0.1
       0.8s    63.00nm          5.4mb
                e       52 16.00
WRA    43.64 276 Pd     50 34.20   0.1
       0.7s    47.00nm          5.4mb
WB5    43.65 276 iPc    50 34.00  -0.2
                i       51 13.90
FORR   44.61 258 eP     50 41.00  -0.8
       0.4s    13.00nm          5.1mb
WARB   47.42 264 eP     51 03.00  -1.3
       0.4s     4.00nm          4.8mb
MBL    55.18 266 eP     52 01.00  -1.9
       0.4s     2.00nm          4.5mb
SPA    56.60 180 eP     52 22.30   9.5X
       0.9s    35.91nm          5.4mb
NANU   58.14 263 eP     52 23.00  -0.8
PRI    88.08  43 eP     55 20.20   0.9
MHC    88.37  42 eP     55 21.80   1.1
BKS    88.42  41 eP     55 22.40   1.7
FRI    89.22  43 eP     55 24.00  -0.5
CMB    89.57  42 eP     55 25.00  -1.2
WDC    90.20  39 eP     55 28.50  -0.5
MIN    90.53  40 eP     55 30.50  -0.3
KVN    91.56  43 eP     55 34.10  -1.5
                e       55 45.50
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                e        56 01.00
                e        56 11.10
SOB1  121.61 129 (PKP)   01 33.00   9.7X
KEV   141.04 346 ePKP    01 59.00   0.6
BCAO  146.81 213 iPKPc   02 10.90   0.9X
       0.8s    24.00nm
                id       03 40.50
                id       05 26.10
SUF   146.86 339 iPKP    02 08.80   0.3
       0.6s    19.40nm
NUR   149.01 338 iPKP    02 14.80   2.8X
                i        02 23.40
BHL   151.42 280 PKP     02 22.00   5.3X
APO   151.77 347 ePKP    02 17.80   1.6
       1.3s    45.80nm
LIC   152.18 167 PKP     02 24.58   6.4X
KIC   152.37 167 PKP     02 24.82   6.4X
TIC   152.59 166 PKP     02 25.02   6.2X
SKO   161.97 304 ePKP    02 29.50   0.2
OHR   162.72 301 ePKP    02 32.20   2.0X
IFR   174.72  89 iPKP    02 40.50   2.3X
     S.D. = 1.2  on  34 of  53 obs.
-------------------------------------
   SEP  09, 1990  02h 50m 26.62± 0.43s
   28.032 N ± 3.5km  139.316 E ± 4.7km
   DEPTH = 532.6 ±  5.2 km
   5.0mb ( 44 obs.)
 BONIN ISLANDS REGION               (212)
      CENTROID, MOMENT TENSOR       (HRV)
      Data Used: GDSN
      L.P.B.: 10S, 18C
      Centroid Location:
      Origin Time        02:50:22.7 2.3
      Lat 27.34N 0.22 Lon 139.26E 0.10
      Dep 531.2 4.7 Half-duration  2.0
      Moment Tensor;   Scale 10**17 Nm
        Mrr=-1.33 0.11  Mtt= 1.64 0.21
        Mff=-0.30 0.21  Mrt= 0.08 0.19
        Mrf=-0.61 0.18  Mtf= 0.36 0.17
       Principal Axes:
        T  Val=  1.70  Plg= 1  Azm=169
        N       -0.07      26       79
        P       -1.63      64      261
      Best Double Couple:Mo=1.7*10**17
       NP1:Strike=283 Dip=50 Slip= -55
       NP2:         56      51      -124

WKYJ    6.94 334 iP+     52 15.70   1.4
                eS       53 44.20
TKSJ    7.46 324 iP+     52 20.90   1.6
                eS       53 51.20
IIDJ    7.52 351 P       52 19.30  -0.7
                eS       53 51.90
KAGJ    7.98 295 P       52 26.40   1.8
CHJJ    8.00 358 iP+     52 23.20  -1.5
                S        53 57.80
TSRJ    8.00 340 iP+     52 25.20   0.5
KAKJ    8.18   5 iP+     52 24.40  -2.2
                S        53 59.60
MAT     8.54 354 iPc+    52 28.50  -1.7
       0.8s   686.57nm          5.9mb
                eS       54 07.00
SHK     8.61 320 eP      53 20.00  49.0X
MTMJ    8.62 352 P       52 29.80  -1.4
YAMJ   10.13   3 iP+     52 46.40  -0.2
                S        54 40.00
OFUJ   11.19   9 iP+     52 57.30  -0.1
AOMJ   12.53   4 P       53 12.20   1.1
GUMO   15.28 159 eP      53 39.30   0.4
PJG    15.27 159 eP      53 39.20   0.3
GUA    15.34 159 eP      53 40.00   0.5
       0.8s  3062.69nm          6.9mb X
                eS       56 21.30
SSE    16.07 285 Pc      53 48.00   1.4
       0.6s    26.00nm          5.0mb
                iS       56 30.00
CVP    19.10 241 eP      54 18.00   2.1
       0.5s     1.86nm          4.0mb X
PIP    19.69 245 iPc     54 22.00   0.4
SZP    20.25 243 iPd     54 28.50   1.8
BAG    20.81 240 eP      54 30.60  -1.6
PLP    21.50 222 ePc     54 39.50   1.2
PGP    22.40 234 ePc     54 47.50   1.0
CGP    23.87 218 ePd     54 58.50  -1.2
       1.0s    38.00nm          4.9mb
KKM    30.96 229 ePd     56 03.10   1.3
       1.0s    80.30nm          5.3mb
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LZH    30.99 294 Pd     56 02.00   0.0
       1.8s   127.00nm          5.2mb
                PcP      58 43.50
                S        00 26.00
                ScS      05 32.00
KMI    32.76 273 Pd     56 18.00   0.9
       2.0s   200.00nm          5.4mb
     Z  24s     0.70um          4.3MszX
                pP       56 27.50  33kmX
                S        00 47.00
                sS       00 58.00
LOE    36.12 261 eP     56 44.50  -0.3
PMG    37.98 167 eP     56 59.00  -1.1
CHG    38.02 265 iPd    57 01.00   0.5
       0.9s   128.78nm          5.5mb
CHTO   38.02 265 eP     57 00.20  -0.3
                pP       58 34.90 531kmX
                PP       59 04.00
                PcP      59 15.00
NST    38.23 260 eP     57 03.50   1.4
BDT    38.57 263 iPd    57 02.70  -2.2
       0.5s    98.60nm          5.7mb
NNT    39.97 256 iPc    57 17.40   1.1
MTN    41.40 192 iPd    57 27.20  -0.5
       0.4s   191.00nm          6.0mb
SNG    42.05 248 eP     57 34.20   1.3
       0.8s   276.12nm          5.8mb
SHL    42.20 278 iP     57 34.00  -0.3
                iS       03 11.00
IPM    43.22 244 ePd    57 44.10   1.9
       0.9s   237.60nm          5.7mb
TRT    43.90 220 ePd    57 46.60  -0.9
GUN    46.86 283 P      58 11.40   0.7
PKI    47.35 283 P      58 14.40   0.1
KKN    47.41 283 P      58 15.00   0.4
WB5    47.87 186 iPd    58 16.50  -1.3
                iPcP     59 36.20
                e        00 15.50
                eScP     02 36.50
                eS       04 27.80
GKN    47.91 284 P      58 16.80  -1.6
WRA    47.94 186 Pc     58 17.00  -1.3
       0.7s    64.80nm          5.2mb
QIS    48.30 180 iPc    58 20.00  -1.1
       0.5s    17.00nm          4.8mb
ASPA   51.66 186 iPc    58 44.60  -1.3
       0.6s   124.00nm          5.5mb
     Z  18s     1.44um          5.0Msz
                ePcP     59 49.70
                eS       05 23.10
                iScS     07 40.50
                LR       09 00.20
MBL    52.40 203 iPd    58 50.40  -0.8
       0.4s    69.00nm          5.4mb
NDI    54.08 286 iPd    59 02.50  -0.7
       0.5s   102.11nm          5.4mb
                eS       05 58.00
DZM    56.28 149 iPd    59 18.90   0.3
HYB    56.54 273 eP     59 20.20  -0.4
       1.0s    80.00nm          5.0mb
                e        00 09.00
BRS    56.60 166 iPc    59 20.50  -0.2
                i        00 09.50
                i        01 12.00
GBA    59.04 269 P      59 37.30  -0.2
FORR   59.52 191 eP     59 39.00  -1.3
       0.4s    86.00nm          5.5mb
STK    59.62 178 iPc    59 39.90  -1.0
       0.7s     9.00nm          4.2mb
                iS       07 07.40
POO    60.27 276 iPd    59 46.30   0.7
       0.7s    76.71nm          5.2mb
KOD    60.46 266 eP     59 47.00  -0.3
COOL   61.10 198 eP     59 50.00  -0.7
MRWA   61.14 203 iPc    59 50.00  -1.0
       0.4s    13.00nm          4.7mb
BAL    62.18 202 eP     59 56.50  -1.2
BWA    62.71 172 eP     00 01.10   0.0
KLB    62.75 201 iPc    00 00.20  -1.1
       0.6s    20.00nm          4.8mb
INK    63.24  25 ePd    00 03.30  -0.8
CAN    63.67 171 eP     00 06.90  -0.3
CNB    63.72 171 eP     00 07.30  -0.2
       0.6s     4.00nm          4.1mb
NWAO   64.15 201 iPc    00 09.60  -0.7
       0.6s    32.00nm          5.1mb
     Z  20s     0.40um          4.6Msz
```

09d 03h

```
      N  20s      0.10um
      E  20s      0.30um
RKG     65.28 200 eP     00 20.00    2.6
TOO     65.51 175 eP     00 19.00    0.2
        0.8s      9.00nm          4.4mb
YKA     72.52  28 eP     00 59.50   -0.8
        0.7s     12.80nm          4.6mb
SOD     72.59 338 iP     01 00.40   -0.3
SUF     75.25 334 iP     01 15.30   -0.3
        0.5s     34.30nm          5.1mb
PNT     75.97  41 eP     01 20.00    0.1
        0.9s     14.00nm          4.4mb
NUR     77.07 333 eP     01 24.00   -1.6
WDC     78.02  50 eP     01 31.80    0.7
                  epP    03 21.30 503kmX
                  i      03 28.90
MIN     78.76  50 eP     01 35.50    0.2
                  epP    03 25.00 502kmX
                  e      03 32.70
ORV     79.20  51 eP     01 37.40    0.1
                  epP    03 27.50 504kmX
                  e      03 35.10
BKS     79.45  53 eP     01 39.70    1.0
                  ipP    03 37.00 545kmX
                  e      09 15.00
                  e      11 42.00
UPP     80.26 334 iP     01 41.90   -0.5
                  i      02 29.30
SES     80.27  38 eP     01 43.00    0.3
CMB     80.67  52 eP     01 46.00    0.9
                  epP    03 36.30 503kmX
                  e      03 43.70
PRS     80.78  54 eP     01 46.50    0.9
                  epP    03 37.00 504kmX
                  i      03 44.30
HFS     81.54 336 eP     01 46.50   -2.5
        0.8s     27.00nm          4.8mb
FRI     81.64  53 eP     01 50.50    0.5
                  epP    03 41.10 503kmX
                  e      03 48.80
LRM     81.91  42 eP     01 52.10    0.6
                  e      03 43.00
KAS     82.56 313 iPc    01 56.20    1.6
CLC     83.70  53 eP     02 02.00    1.6
SBB     84.10  54 eP     02 05.00    2.5
RVR     84.77  54 eP     02 07.00    1.3
AKU     84.97 351 iP     02 09.00    3.0X
        0.9s     16.81nm          4.7mb
KRA     85.53 326 eP     02 09.60    0.6
ADI     85.80 305 eP     02 09.50   -1.1
SPC     85.93 325 eP     02 11.30    0.1
BAR     85.95  55 eP     02 12.00    0.6
ZNT     86.37 305 eP     02 11.50   -1.9
KSP     86.78 328 eP     02 14.30   -0.7
                  e      03 03.00
                  e      04 20.00
GLA     87.08  54 eP     02 18.00    1.2
PRNI    87.36 303 eP     02 14.00   -4.2X
SRO     87.80 325 eP     02 20.50    0.7
BRG     87.85 329 iPc    02 19.50   -0.5
        1.2s     15.00nm          4.7mb
                  i      03 07.20
CLL     87.97 330 iPc    02 20.30   -0.3
ZST     88.16 326 eP     02 21.70    0.2
                  e      29 34.20
PRU     88.19 328 P      02 21.50   -0.1
MOX     89.06 330 eP     02 25.00   -0.6
                  e      03 11.00
KHC     89.23 328 Pc     02 26.70    0.2
        1.0s      7.00nm          4.5mb
                  e      03 15.00
GRF     89.92 329 iPc    02 30.20    0.6
        1.2s     18.00nm          4.9mb
                  e      03 16.30
BHG     90.55 327 eP     02 33.30    0.7
        0.9s     23.00nm          5.1mb
EKA     90.97 340 Pd     02 34.70    0.4
        0.9s      5.00nm          4.5mb
FUR     91.00 328 eP     02 35.30    0.7
        1.0s     28.00nm          5.2mb
SQTA    91.71 328 eP     02 37.50   -0.5
        0.9s      4.60nm          4.5mb
                  i      03 25.10
CDF     92.62 330 eP     02 41.80   -0.4
        1.0s     12.00nm          4.9mb
BSF     93.28 330 eP     02 44.40   -0.8
        0.9s      8.20nm          4.8mb
HAU     93.34 331 eP     02 44.70   -0.7
LOR     94.98 331 eP     02 52.10   -0.8
LPL     95.06 329 eP     02 52.90   -0.6
        0.7s      4.40nm          4.8mb
LPG     95.06 329 eP     02 53.00   -0.6
        0.7s      6.60nm          4.9mb
LBF     95.15 331 eP     02 52.70   -1.0
        1.0s      5.00nm          4.7mb
SSF     95.29 331 eP     02 53.80   -0.4
        1.0s      7.00nm          4.8mb
SMF     95.47 331 eP     02 54.40   -0.7
AVF     95.57 331 eP     02 55.00   -0.5
        1.0s     10.00nm          5.0mb
BUL    116.98 260 iPKPd  08 11.00   -1.8
        0.5s      7.04nm
                  ipP    08 32.00
TIC    131.28 310 PKP    08 40.46    0.3
KIC    131.29 309 PKP    08 40.60    0.4
        0.7s      8.00nm
LIC    131.59 309 PKP    08 41.08    0.3
ARE    149.34  74 ePKP   09 18.00    5.7X
ZOBO   152.09  71 PKP    09 17.60    0.9
        1.1s     30.45nm
                  i      09 25.00
LPB    152.24  71 PKP    09 18.80    2.1X
                  i      11 27.00
CNCB   152.47  72 PKP    09 19.00    1.8
                  i      11 29.00
CCH    154.29  71 ePKP   09 24.00    4.7X
SIV    157.66  62 PKP    09 24.40    1.1
                  e      10 00.00
SOB1   161.27   1 ePKP   09 27.90    0.7
PPD    168.67  61 ePKP   09 35.00    1.8
      S.D. = 1.1  on 125 of 131 obs.
-------------------------------------------
&  SEP  09, 1990  02h 55m 30.92s
   61.999 N          149.488 W
   DEPTH =  42.9km
 SOUTHERN ALASKA                    (  2)
      <AGS-P>.

GHO      0.35 130 iP     55 39.72   -0.4
                  eS     55 47.18
PWA      0.40 208 iP     55 40.42   -0.1
                  eS     55 48.04
PLRM     0.44 157 iP     55 40.34   -0.7
                  eS     55 48.38
CUT      0.55 318 iP     55 41.75   -0.7
                  eS     55 50.12
SML      0.58 109 iP     55 42.05   -0.9
                  eS     55 51.81
PMS      0.76 183 eP     55 44.65   -0.7
                  eS     55 56.36
SUA      0.80 229 eP     55 45.88   -0.2
                  eS     55 58.30
SKT      0.96 270 eP     55 47.30   -0.9
                  eS     56 00.67
HUR      0.98 356 eP     55 47.73   -0.8
                  eS     56 01.27
SCM      1.04  98 eP     55 48.41   -0.9
                  eS     56 02.59
NCG      1.40 246 eP     55 53.98   -0.5
                  eS     56 12.61
CRP      1.47 241 eP     55 55.44   -0.1
                  eS     56 15.44
SPU      1.48 237 eP     55 55.29   -0.2
                  eS     56 15.34
TOA      1.57  85 eP     55 56.83    0.1
                  eS     56 18.92
BGL      1.57 243 eP     55 57.19    0.3
                  eS     56 18.36
CKL      1.58 241 eP     55 57.34    0.3
                  eS     56 18.76
VZW      1.69 123 eP     55 57.95   -0.6
                  eS     56 21.19
KTH      1.69 338 eP     55 57.87   -0.7
                  eS     56 19.10
VLZ      1.74 119 eP     55 58.25   -0.9
                  eS     56 21.65
KLU      1.77 105 iP     55 59.05   -0.7
                  eS     56 21.40
      20 obs. associated
-------------------------------------------
&  SEP  09, 1990  02h 56m 18.30s
   36.663 N          121.323 W
   DEPTH =   5.0km
 CENTRAL CALIFORNIA                 ( 39)

      <BRK>. ML 3.0 (BRK).

SAO      0.14 316 iP     56 21.10   -0.1
LLA      0.31  98 iPc    56 24.50    0.0
PRS      0.33 187 iPd    56 24.90   -0.1
GCC      0.65 304 iPd    56 30.70   -0.7
ARN      0.71 346 iPc    56 32.20   -0.2
MHC      0.72 339 iPd    56 32.50   -0.3
PRI      0.74 134 iPd    56 32.90   -0.3
PHAM     1.11 138 eP     56 38.50   -1.2
PKEM     1.15 121 eP     56 40.00   -0.3
PCC      1.19 315 ePd    56 39.30   -1.6
FRI      1.34  75 ePc    56 41.80   -1.6
BKS      1.41 329 iPd    56 44.70    0.0
                  iS     57 05.50
CMB      1.56  28 ePd    56 45.40   -1.4
BCH      1.78 145 eP     56 47.50   -2.6
BLP      2.23 160 eP     56 54.00   -2.4
ABL      2.49 136 eP     56 58.00   -2.3
KVN      3.49  46 eP     57 14.50   -0.1
      17 obs. associated
-------------------------------------------
*  SEP  09, 1990  03h 16m 49.86± 1.17s
    2.891 N ± 9.8km   99.012 E ±10.2km
   DEPTH = 184.8 ± 10.4 km
   4.8mb (  9 obs.)
 NORTHERN SUMATERA                  (706)

IPM      2.62  50 ePd    17 33.90   -0.7
        0.8s    520.00nm
                  e      18 08.00
KLM      2.64  85 eP     17 35.20    0.4
KGM      4.39 101 eP     17 56.50   -0.2
SNG      4.55  21 eP     17 58.90    0.2
                  eS     18 48.00
NNT      9.66   4 eP     19 02.80   -3.1X
LOE     14.67  10 eP     20 11.00    1.1
CHTO    15.82 360 eP     20 23.30   -0.9
        0.8s      3.29nm          3.8mb
KKM     17.43  79 ePc    20 44.50    1.0
        0.8s    104.20nm          5.3mb
PPR     20.75  70 iPc    21 18.00    0.5
KMI     22.39   9 Pc     21 36.00    2.1
                  sP     22 08.00
KOD     22.60 290 eP     21 38.60    2.6
SHL     23.56 344 eP     21 44.00   -1.1
                  eS     25 45.00
GBA     23.83 298 P      21 48.70    1.2
                  S      25 31.70
PKI     27.77 333 P      22 22.60   -1.3
GUN     27.86 335 P      22 24.00   -0.7
        0.4s     15.00nm          5.1mb
KKN     28.02 333 P      22 24.80   -1.2
        0.4s     12.00nm          5.0mb
GKN     28.49 333 P      22 29.00   -1.2
        0.4s      7.00nm          4.7mb
NDI     32.99 323 eP     23 08.50   -0.9
BJI     40.12  21 eP     24 10.00    1.1
        1.0s     19.00nm          4.6mb
WB5     41.44 125 eP     24 19.50   -0.6
WRA     41.45 125 Pc     24 19.60   -0.6
        0.7s      6.90nm          4.3mb
ASPA    43.02 130 iPd    24 32.70   -0.2
        0.4s     20.00nm          5.0mb
      Z 21s      0.33um          4.2Msz
                  eS     30 41.30
                  LR     40 06.20
QIS     46.12 122 iPc    24 57.00   -0.6
MAT     49.23  42 (P)    25 22.00    0.5
STK     53.18 134 iPc    25 50.60   -0.5
        0.6s      6.00nm          4.5mb
SUF     79.63 333 eP     28 37.00   -0.7
NUR     79.82 331 eP     28 37.00   -1.7
SOD     80.61 338 iP     28 43.60    0.8
KEV     81.12 340 eP     28 49.00    3.6X
PPD    145.47 234 ePKP   36 09.90    1.7
                  e      36 52.70
      S.D. = 1.2  on  28 of  30 obs.
-------------------------------------------
&  SEP  09, 1990  03h 34m 17.29s
   62.198 N          151.038 W
   DEPTH =  71.6km
 CENTRAL ALASKA                     (  1)
      <AGS-P>.

SKT      0.32 227 iP     34 28.23   -0.7
                  iS     34 37.19
```

CUT	0.41	60	iP	34	28.99	-0.6
			iS	34	38.32	
SUA	0.75	169	eP	34	32.79	-0.4
			eS	34	45.18	
PWA	0.78	135	eP	34	32.83	-0.5
			eS	34	44.32	
NCG	0.96	214	iP	34	34.78	-0.9
			eS	34	48.96	
CGLM	1.01	208	eP	34	35.41	-0.9
HUR	1.02	39	eP	34	35.45	-0.9
			eS	34	48.92	
CRP	1.08	210	iP	34	36.51	-0.7
GHO	1.09	112	iP	34	36.83	-0.5
			eS	34	52.72	
PLRM	1.09	123	eP	34	36.44	-0.8
SPU	1.13	206	iP	34	37.03	-0.8
			eS	34	52.76	
BGL	1.14	215	eP	34	37.55	-0.5
			eS	34	53.67	
CKL	1.18	212	iP	34	37.90	-0.7
PMS	1.19	143	eP	34	38.20	-0.4
SML	1.33	106	eP	34	39.86	-0.7
KTH	1.36	2	iP	34	40.08	-0.8
			eS	34	57.25	
NKA	1.46	184	eP	34	43.70	1.5
RDT	1.76	203	eP	34	45.32	-1.0
SCM	1.79	100	eP	34	45.80	-0.9
MCK	1.82	31	eP	34	46.05	-1.0
RSO	1.93	206	eP	34	48.10	-0.7
NNL	2.17	183	eP	34	52.36	0.5
SEW	2.24	159	eP	34	51.90	-0.9
TOA	2.29	90	eP	34	52.91	-0.7
VZW	2.43	116	eP	34	54.13	-1.4
SVW	2.45	245	eP	34	54.07	-1.7
VLZ	2.49	113	eP	34	55.06	-1.2
KLU	2.53	104	eP	34	54.64	-2.3
HOM	2.57	187	eP	34	56.65	-0.7
WRH	2.64	29	iP	34	56.58	-1.8
CNPM	2.68	182	eP	34	58.78	-0.3
OPT	2.77	204	eP	34	58.52	-1.7
CCB	2.86	29	iP	34	59.38	-2.0
HDA	2.88	38	eP	35	00.19	-1.6
FBA	3.08	27	eP	35	02.60	-1.9
GLM	3.24	29	eP	35	04.86	-2.0
GLB	3.51	99	eP	35	09.29	-1.4
CDD	3.52	203	eP	35	09.28	-1.5

38 obs. associated

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* SEP 09, 1990 03h 45m 03.22± 0.61s
0.505 N ± 9.7km 126.124 E ±14.9km
DEPTH = 33.0km (normal)
4.5mb (5 obs.)
MOLUCCA PASSAGE (266)

MTN	14.16	160	eP	48	24.00	0.3
	0.4s	25.00nm			5.2mb	X
WB5	21.81	159	iPd	49	54.00	-0.6
			eS	53	53.00	
WRA	21.86	159	Pd	49	54.50	-0.6
	0.4s	14.50nm			4.8mb	
MBL	22.39	196	eP	50	00.00	-0.4
	0.4s	4.00nm			4.2mb	
OIS	24.74	149	iPd	50	24.50	1.3
ASPA	25.19	163	iPc	50	27.00	-0.5
	0.3s	62.00nm			5.7mb	X
			i	50	29.70	
			eS	54	53.10	
CHTO	32.29	306	eP	51	31.50	0.1
	1.0s	3.00nm			4.1mb	
STK	35.38	157	iPc	51	58.40	0.4
	0.8s	13.00nm			4.9mb	
MAT	37.57	16	eP	52	16.00	-0.4
GBA	49.92	287	Pc	53	56.60	0.4
	0.5s	2.10nm			4.4mb	

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

SEP 09, 1990 04h 03m 23.87± 0.62s
16.198 N ± 4.6km 61.569 W ± 6.9km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.5 (FDF).

DOG	0.17	196	iPc	03	28.25	0.5
PAG	0.20	212	ePd	03	28.61	0.3
			S	03	31.00	
SEG	0.21	17	iPd	03	29.29	0.8
			S	03	32.50	
SFG	0.36	81	iPd	03	31.22	-0.1
			S	03	36.60	
BBL	0.68	173	eP	03	36.60	-0.7
			S	03	44.90	
8PA	0.89	342	eP	03	40.20	-0.7
			S	03	52.40	
NEV	1.34	314	eP	03	48.41	-0.1

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

SEP 09, 1990 04h 39m 42.55± 0.25s
21.519 S ± 3.8km 68.661 W ± 6.7km
DEPTH = 118.8km (9 depth phases)
4.9mb (11 obs.)
CHILE-BOLIVIA BORDER REGION (124)

ANT	2.71	216	iPc	40	25.50	-0.2
			iS	40	51.60	
CNCB	4.73	8	iPc	40	53.40	0.0
CCH	4.75	30	iPc	40	55.30	1.8
LPB	4.99	6	P	40	57.00	0.1
	1.0s	1800.00nm				
			S	41	54.00	
ZOBO	5.25	6	iPd	40	59.20	-1.3
			S	41	40.00	
ARE	5.70	331	eP	41	01.00	-5.5X
			iS	42	03.50	
SIV	9.05	54	iPc	41	48.20	-3.6X
RTLL	9.77	179	ePd	41	59.00	-2.4
RTCB	9.93	181	eP	42	01.50	-2.0
CFA	10.05	178	eP	42	03.10	-2.1
RTBS	10.13	184	e(P)	42	05.00	-1.0
RTCV	10.30	179	e(P)	42	06.20	-2.2
JACH	11.25	188	eP	42	22.50	1.5
PT02	11.31	318	eP	42	16.40	-5.4X
			eS	44	10.40	
MDZ	11.32	181	eP	42	23.60	1.7
			e	42	25.50	
			e	44	19.30	
PEL	11.72	188	eP	42	29.00	1.9
SAN	12.02	188	eP	42	28.50	-2.6
PT08	12.14	320	iPc	42	40.80	7.8X
			iS	44	44.80	
PCH	12.17	187	eP	42	34.50	1.4
LCCH	12.19	192	eP	42	36.00	2.8
TACH	12.25	189	eP	42	34.60	0.5
NNA	12.29	319	eP	42	34.00	-0.8
	0.9s	10.08nm			4.4mb	
			eS	44	39.70	
LNV	12.63	191	eP	42	38.50	-0.4
PPD	16.13	95	eP	43	23.40	-0.3
VAO	20.13	98	eP	44	04.40	-5.0X
			e	44	08.00	14kmX
			i	44	09.80	
			e	44	13.00	
BAO	20.44	77	Pd	44	10.60	-2.1
			e	44	23.00	54kmX
			e	44	36.30	
			e	44	45.30	
			e	44	52.50	
			e	45	27.20	
JFO	23.55	95	eP	44	42.90	-0.3
			e	44	45.90	11kmX
			e	45	05.80	
SOB1	29.38	70	eP	45	35.80	-0.9
CAI	33.92	69	iPd	46	17.00	0.6
AIA	43.81	177	eP	47	41.00	3.2X
HBF	55.29	348	P	49	32.80	27.0X
SGS	55.57	348	P	49	34.50	26.7X
TKL	58.64	346	eP	49	26.90	-2.5
			ipP	49	55.70	119km
ELC	61.62	341	P	49	47.00	-2.7
FVM	62.62	341	P	49	54.00	-2.3
TUL	62.63	335	eP	49	54.30	-2.1
	1.3s	15.10nm			4.8mb	
			e	50	24.70	125km
MEO	62.80	333	e(P)	50	04.30	6.7X
ANMO	66.64	327	P	50	22.30	-0.3
	1.5s	26.04nm			4.9mb	
LIC	68.17	74	P	50	31.62	-0.8
	0.8s	13.50nm			4.9mb	
TIC	68.36	73	P	50	32.92	-0.7
	1.0s	29.50nm			5.1mb	
KIC	68.49	74	Pc	50	33.74	-0.6
	0.8s	28.50nm			5.2mb	
SPA	68.61	180	iPd	50	36.40	1.8
	1.2s	56.34nm			5.3mb	
GLD	69.86	331	P	50	44.00	1.5
	1.6s	46.30nm			5.1mb	
GOL	69.89	331	P	50	41.70	-1.0
	1.3s	39.06nm			5.1mb	
			pP	51	10.00	113km
GLA	69.90	320	eP	50	43.00	0.3
BAR	70.77	318	eP	50	48.00	0.0
			e	51	17.00	115km
PLM	71.34	319	eP	50	51.00	-0.6
TPC	71.36	320	eP	50	53.00	1.5
RVR	72.09	319	eP	50	56.00	0.2
MSU	72.33	325	P	50	57.70	0.3
GSC	72.64	320	eP	50	59.00	-0.1
			e	51	30.00	124km
SBB	72.83	319	eP	51	00.00	-0.2
CLC	73.46	320	eP	51	04.00	0.2
DUG	73.90	326	P	51	07.00	0.6
FRI	75.51	320	eP	51	17.70	2.2
PRI	75.53	319	eP	51	16.30	0.5
IMW	75.75	330	P	51	17.10	0.0
KVN	75.96	322	P	51	18.40	0.2
			pP	51	47.20	113km
LLA	76.01	319	eP	51	18.90	0.5
SCH	76.04	1	eP	51	22.00	3.9X
PRS	76.09	319	e(P)	51	22.30	3.5X
CMB	76.60	320	e(P)	51	21.40	-0.3
LRM	77.91	330	eP	51	29.00	0.0
			e	52	00.00	122km
ORV	78.26	321	ePd	51	31.40	0.7
TIO	78.66	50	eP	51	42.00	8.7X
MIN	78.83	322	eP	51	33.60	-0.4
WDC	79.53	321	ePd	51	36.00	-1.6
LBFM	79.65	322	P	51	38.90	0.4
			pP	52	09.00	118km
AVE	79.87	48	eP	51	41.00	1.4
IFR	81.59	49	iPd	51	50.00	1.2
			i	51	55.00	16kmX
DPW	82.12	329	P	51	51.50	0.5
RMW	83.62	327	P	51	58.60	-0.2
			pP	52	29.70	121km
BMW	83.71	325	P	52	00.00	0.7
PNT	83.80	329	eP	52	00.00	0.5
EDM	83.88	335	eP	51	59.00	-0.9
ALOJ	84.22	47	eP	52	03.30	1.2
AAPN	84.31	46	eP	52	04.00	1.5
APHE	84.42	47	eP	52	04.00	0.9
BUL	89.19	111	iPd	52	26.90	0.2
	0.9s	4.20nm			4.5mb	
LSZ	90.67	107	eP	52	36.00	2.4
			i	52	41.00	16kmX
			i	53	09.00	
YKA	91.28	341	eP	52	35.30	0.1
	0.9s	6.20nm			4.8mb	
PTZ	93.88	107	eP	53	04.00	15.7X
ASPA	130.00	207	ePKP	58	40.30	-0.2
	1.2s	9.00nm				
WRA	133.05	210	PKPd	58	46.60	0.3
	0.8s	3.80nm				
WB5	133.10	210	ePKP	58	47.90	1.5
KOD	145.62	104	ePKP	59	12.00	2.4X
GBA	146.79	98	PKP	59	13.30	2.3X
HYB	148.85	92	ePKP	59	28.70	14.4X

S.D. = 1.3 on 72 of 88 obs.

SEP 09, 1990 04h 52m 52.51± 0.26s
47.117 N ± 6.3km 152.254 E ± 3.6km
DEPTH = 115.9km (2 depth phases)
4.9mb (47 obs.)
KURIL ISLANDS (221)

OFUJ	11.15	228	P	55	25.20	-4.3X
			eS	57	21.00	
YAMJ	12.67	230	iP+	55	46.10	-3.4X
MAT	14.85	230	eP	56	16.00	-1.6X
	0.8s	27.61nm			4.6mb	
BJI	26.90	268	eP	58	25.00	0.9
	1.2s	32.00nm			4.8mb	
PMR	35.75	44	eP	59	41.70	0.4
	0.6s	0.90nm			3.8mb	X
FBA	36.24	39	iP	59	46.70	1.2
	0.6s	9.00nm			4.8mb	
			pP	00	14.30	121km
			sP	00	25.90	
LZH	37.29	271	Pd	59	54.70	-0.1
	1.7s	64.00nm			5.2mb	
INK	41.66	33	iPc	00	31.20	0.9
KMI	44.73	258	Pd	00	56.00	0.0
	1.5s	60.00nm			5.1mb	

09d 05h

YKA	50.98	37	eP	01	43.50	-0.2	FLN	81.61	342	eP	04	58.00	-0.3	PPD	148.57	45	ePKP	12	27.10	3.8X
	0.6s	2.30nm			4.3mb			0.8s	31.45nm			5.2mb			S.D. = 0.7	on 127 of 133 obs.			
CHG	51.63	256	ePd	01	49.90	0.7	TMA	81.76	335	ePc	04	59.50	0.1	---						
	0.9s	33.61nm			5.3mb		LOR	82.02	339	eP	05	00.40	-0.2	%	SEP 09, 1990	05h 03m 11.09± 1.25s				
CHTO	51.63	256	iPd	01	49.90	0.7		0.6s	23.45nm			5.2mb			44.506 N ±11.2km	7.318 E ± 6.3km				
	0.7s	26.52nm			5.3mb		GRR	82.04	342	eP	05	00.80	0.2		DEPTH = 10.0km	(geophysicist)				
		pP		02	21.20	135kmX		0.7s	3.25nm			4.2mb			NORTHERN ITALY				(545)	
SHL	51.80	268	iP	01	49.50	-1.1	MMK	82.07	336	ePc	05	02.20	1.1		ML 2.0 (GEN).					
GUN	54.38	274	P	02	09.20	-0.7	OHR	82.14	325	eP	05	01.00	-0.3							
	0.4s	36.00nm			5.7mb		ADI	82.17	311	eP	05	02.50	0.9	PZZ	0.15	270	P	03	14.78	0.0
KKN	54.87	274	P	02	12.80	-0.4	GRC	82.19	339	P	05	01.83	0.5				S	03	16.83	
PKI	54.92	274	P	02	13.00	-0.7	DIX	82.20	336	ePc	05	02.50	0.7	STV	0.26	179	P	03	16.72	0.0
DMN	55.10	274	P	02	14.80	-0.2	LBF	82.26	339	eP	05	01.60	-0.2				S	03	20.11	
GKN	55.17	275	P	02	15.00	-0.3		0.6s	9.45nm			4.8mb		ENR	0.29	165	P	03	17.34	0.2
PNT	55.46	53	ePc	02	16.00	-1.0	SSF	82.30	339	eP	05	02.00	0.0				S	03	21.03	
	0.6s	4.00nm			4.6mb			0.6s	12.15nm			4.9mb		ROB	0.45	118	P	03	20.31	0.1
EDM	56.48	46	iPd	02	24.10	-0.2	LPF	82.42	342	eP	05	02.80	0.3				S	03	26.87	
NEW	57.42	52	eP	02	40.30	9.4X		0.8s	16.10nm			4.9mb		FIN	0.70	115	P	03	25.13	0.1
	1.0s	5.75nm			4.5mb		ORX	82.45	336	P	05	02.49	-0.4				S	03	34.77	
FHC	57.87	63	eP	02	35.10	0.9	AVF	82.60	339	eP	05	03.60	0.1	IMI	0.72	145	P	03	25.03	-0.3
WDC	58.88	62	ePc	02	41.40	0.2		0.7s	19.85nm			5.1mb					S	03	34.56	
MIN	59.59	62	ePc	02	45.80	-0.4	SMF	82.61	339	eP	05	03.60	0.0		S.D. = 0.2	on 6 of 6 obs.				
ORV	60.14	63	ePc	02	49.30	-0.5		0.9s	31.10nm			5.2mb		---						
BKS	60.73	65	e(P)	03	02.00	8.2X	LSD	82.84	336	P	05	05.67	0.6		SEP 09, 1990	05h 35m 45.91± 0.38s				
FFC	60.83	40	eP	02	54.00	-0.3	SFI	82.84	332	P	05	06.00	1.3		5.178 S ± 2.4km	151.729 E ± 2.7km				
	0.4s	7.00nm			5.0mb		ARV	82.87	331	P	05	05.00	0.0		DEPTH = 73.8 ± 3.2 km					
LRM	61.44	52	ePc	02	58.90	0.0	LPL	82.90	336	eP	05	05.80	0.4		5.8mb (45 obs.)					
		e		03	26.20	111km		0.5s	9.10nm			4.9mb			NEW BRITAIN REGION				(192)	
CMB	61.77	64	ePc	03	01.00	0.1	LPG	82.91	336	eP	05	06.00	0.4		Ms 6.1 (BRK). Mo=9.0*10**17 Nm					
PRS	62.24	66	ePc	03	04.40	0.4		0.6s	14.45nm			5.0mb			(PPT).					
LLA	62.33	65	ePc	03	04.60	0.1	PGD	82.92	332	P	05	06.00	0.6		CENTROID, MOMENT TENSOR				(HRV)	
SUF	62.43	335	eP	03	02.00	-2.8	BGF	82.94	339	eP	05	05.40	0.1		Doto Used: GDSN					
KVN	62.51	61	iP	03	06.00	0.1		0.5s	6.90nm			4.8mb			L.P.B.: 13S, 31C					
FRI	62.85	64	ePc	03	09.30	1.4	CRE	83.07	332	Pd	05	06.50	0.4		Centroid Locotion:					
NUR	64.62	334	eP	03	18.00	-1.1	RSP	83.09	336	P	05	05.57	-0.7		Origin Time	05:35:56.0 0.7				
CLC	64.91	64	eP	03	21.00	-0.4	BDI	83.11	333	Pd	05	07.00	0.7		Lat 4.76S 0.06	Lon 152.03E 0.04				
SBB	65.51	65	eP	03	25.00	-0.3	DSI	83.28	310	iPd	05	08.00	0.8		Dep 38.4 2.3	Half-durotion 3.8				
GSC	65.73	64	eP	03	26.00	-0.8	PCP	83.28	335	P	05	06.49	-0.7		Moment Tensor;	Scale 10**18 Nm				
GLA	68.45	64	eP	03	43.00	-0.8	PLDF	83.30	339	P	05	07.89	0.7		Mrr= 1.05 0.03	Mtt=-0.90 0.04				
WB5	68.61	198	eP	03	44.80	0.1	MAF	83.32	339	eP	05	07.90	0.7		Mff=-0.15 0.04	Mrt= 0.69 0.07				
WRA	68.67	198	Pd	03	45.00	-0.1		0.9s	33.05nm			5.2mb			Mrf=-0.12 0.05	Mtf=-0.29 0.04				
	0.9s	1.70nm			3.9mb	X	AGO	83.34	339	P	05	08.16	0.8		Principal Axes:					
POO	68.84	275	iPc	03	47.80	1.4	TCF	83.34	340	eP	05	07.60	0.2		T Vol= 1.30	Plg=70 Azm= 24				
	0.7s	30.14nm			5.2mb			0.8s	15.45nm			5.0mb			N -0.12	12 260				
GBA	69.84	268	P	03	52.00	-0.4	BNI	83.34	336	P	05	08.30	0.7		P -1.17	16 166				
ANMO	72.14	58	eP	04	04.90	-1.4	RRL	83.44	336	P	05	08.54	0.4		Best Double Couple:Mo=1.2*10**18					
		pP		04	41.50	150kmX	LSF	83.54	340	eP	05	08.70	0.3		NP1:Strike=239 Dip=31 Slip= 67					
KOD	72.22	266	eP	04	07.00	-0.2		0.9s	31.10nm			5.2mb			NP2: 86	62 103				
KSP	75.31	333	eP	04	23.30	-0.8	MFF	83.58	341	eP	05	09.10	0.5							
EKA	75.84	346	Pd	04	26.40	-0.6		0.5s	7.30nm			4.8mb		RAB	1.07	24	iPd-	36	04.30	-1.5
	0.6s	4.80nm			4.5mb		PYM	83.65	339	P	05	09.42	0.4	LAT	4.93	252	eP	37	02.00	2.9X
CLL	75.88	335	iP	04	26.30	-1.0	FIN	83.69	335	P	05	08.24	-0.9	PMG	6.19	227	iPd	37	17.00	0.3
PRU	76.60	333	P	04	31.20	-0.1	ROB	83.70	335	P	05	08.75	-0.5				eS	38	23.00	
MOX	76.87	336	eP	04	30.00	-2.9	PZZ	83.73	336	P	05	08.24	-1.3	MNDI	8.09	263	eP	37	52.00	8.8X
WTS	76.92	339	iPc	04	33.40	0.4	SURF	83.83	336	P	05	10.36	0.3	HNR	9.18	118	eP	38	54.00	56.1X
	0.7s	20.00nm			5.0mb		MNS	83.95	331	Pc	05	10.00	-0.5				eS	40	24.00	
ZST	77.36	331	eP	04	36.50	1.0	DUI	83.99	330	P	05	11.00	0.2	JAY	11.31	283	ePc	38	30.00	3.2X
KHC	77.65	334	iP	04	37.90	0.7	AZI	84.05	330	P	05	11.00	0.1		1.5s	341.50nm			6.1mb	
GRF	77.84	335	iPc	04	38.90	0.7	IMI	84.05	335	P	05	10.90	-0.1	CTA	15.75	199	iPd-	39	24.00	-0.8
	0.8s	17.00nm			4.9mb		SDI	84.17	330	P	05	11.50	-0.2		1.7s	646.15nm			5.5mb	
WET	77.85	334	iPc	04	38.90	0.6	NOH	84.19	310	iPd	05	12.50	0.5		Z 20s	33.69um			4.0Msz	
	0.6s	9.00nm			4.7mb		SBF	84.23	335	eP	05	11.40	-0.5				iS	42	22.00	
ENN	78.27	339	iPc	04	40.60	0.1		0.6s	10.70nm			4.9mb		QIS	19.30	217	iPd	40	07.70	-0.2
	0.6s	18.00nm			5.0mb		RJF	84.43	340	eP	05	13.20	0.4				e	43	43.00	
BHG	79.12	333	iPc	04	46.10	0.9		0.9s	9.85nm			4.7mb		GUA	19.79	340	eP	40	14.60	1.6
	0.9s	18.00nm			4.9mb		RMP	84.46	331	P	05	12.50	-0.5		0.8s	1265.67nm			6.3mb	
DOU	79.21	339	P	04	45.80	0.1	RDP	84.50	331	P	05	12.00	-1.3				eS	44	02.00	
SQTA	80.07	334	iPd	04	50.60	0.1	CAF	84.66	339	eP	05	15.00	1.0	GUMO	19.85	340	eP	40	15.20	1.5
	0.9s	24.50nm			5.0mb			0.7s	11.00nm			4.9mb		PJG	19.85	340	eP	40	15.20	1.5
		ic		04	51.00	1kmX	SGO	84.67	329	P	05	12.00	-2.0	PVC	20.47	129	iPc	40	18.70	-1.3
		i		04	53.50		ORI	84.69	327	P	05	15.00	0.8	DZM	22.02	141	iPc	40	34.00	-1.7
		i		04	55.80		FRF	84.73	336	eP	05	14.00	-0.3				iS	44	36.10	
		i		04	59.40			0.8s	6.70nm			4.6mb		BRS	22.11	178	iP	40	36.00	-0.5
		e		05	07.00		LRG	84.91	336	eP	05	15.40	0.2				i	40	43.00	
FVI	80.16	333	P	04	50.00	-0.7		0.6s	12.65nm			5.0mb					i	41	18.00	
SLE	80.35	336	ePc	04	51.80	0.0	MGR	84.95	328	P	05	15.00	-0.5				i	41	24.00	
OGA	80.44	334	eP	04	52.50	-0.1	LFF	84.96	340	eP	05	16.50	1.0				iS	44	39.00	
	0.5s	14.00nm			5.0mb			0.5s	10.20nm			5.0mb		WB5	22.34	228	eP	40	40.30	1.5
SAX	80.59	335	ePc	04	53.50	0.1	PGF	84.97	334	eP	05	15.30	-0.4				eS	44	43.50	
ZLA	80.64	336	eP+	04	53.60	0.2		0.6s	8.10nm			4.8mb					eScP	48	07.10	
HAU	80.71	338	eP	04	53.40	-0.3	LMR	84.98	336	eP	05	15.70	0.1	ASPA	25.16	221	iPc	41	06.20	0.2
	0.7s	11.00nm			4.8mb			0.8s	16.10nm			5.0mb			1.3s	1173.00nm			6.2mb	
BSF	80.75	337	eP	04	53.40	-0.6	TDS	85.09	327	P	05	16.00	-0.2		Z 23s	15.77um			5.5MszX	
	0.8s	9.40nm			4.6mb		LPO	85.10	340	eP	05	17.10	0.9				eS	45	29.50	
OSS	80.87	335	ePc	04	55.20	0.5		0.5s	5.85nm			4.7mb					ScP	48	23.00	
LLS	81.03	335	ePc	04	56.00	0.4	SOI	86.59	327	P	05	23.00	-0.6				LR	50	47.00	
VDL	81.24	335	ePc	04	57.10	0.4	EPF	86.86	340	eP	05	24.40	-0.5				eScS	52	03.50	

CMS	26.75	191	e(P)	41	20.00	-0.6		E	18s	3.80um								eS	57	50.00		
			e	41	33.00					sP	44	28.00					IMA	81.17	20	eP	47	55.00	0.3
STK	28.21	198	eP	41	32.90	-0.9				PP	46	12.00					FBA	82.63	22	eP	48	00.60	-1.5
	0.8s	11.00nm			4.5mb	X				S	50	52.00					MAW	84.81	203	iPc+	48	13.90	0.8
Z	17s	445.00um			7.1MszX					sS	51	24.00						1.0s	158.00nm			6.0mb	
		e	41	42.30						SS	56	30.00					SPA	84.86	180	iPc	48	13.50	-0.1
		eS	46	10.40			HOOJ	47.95	352	eP	44	20.50	1.6					1.0s	124.00nm			5.9mb	
		LR	53	04.70			MRRJ	48.36	349	P	44	22.10	0.1						i	48	26.10		
DAV	28.80	295	eP+	41	40.00	0.7	KUSJ	48.47	353	P	44	23.60	0.7				SIT	85.15	32	P	48	16.00	1.1
CNB	30.07	184	eP	41	51.20	0.8	KGM	48.88	277	ePd	44	27.60	1.0					0.9s	62.50nm			5.6mb	
	1.0s	13.00nm			4.6mb	X	ASAJ	49.75	351	P	44	34.50	1.8				QUE	88.07	300	eP	48	29.70	-0.4
		i	42	01.30			IPM	51.56	280	ePd	44	48.10	1.1					1.1s	44.30nm			5.5mb	
CAN	30.10	184	eP	41	51.00	0.3		1.0s	119.80nm			5.9mb							e	58	56.00		
		i	42	01.00					e	45	00.20						FHC	89.03	49	ePc	48	35.00	0.8
CGP	30.17	297	eP	41	55.00	3.5X	SNG	52.46	283	eP	44	54.00	0.2				INK	89.19	21	ePd	48	34.10	-0.2
PLP	31.18	301	ePc	42	01.20	0.8		1.2s	203.13nm			6.0mb					PCC	89.86	52	e(P)	48	38.40	0.3
WARB	31.80	226	eP	42	06.00	0.2	LOE	54.22	296	eP	45	07.00	0.3				BRK	90.00	52	ePc	48	38.50	-0.2
	0.4s	37.00nm			5.5mb		NNT	54.60	289	eP	45	08.00	-1.5				Z	20s	9.00um			6.2Msz	
ADE	31.99	200	iPd	42	07.50	0.2	NST	55.12	293	eP	45	14.80	1.6						eS	59	52.00		
	1.1s	189.87nm			5.8mb		BJI	55.62	327	eP	45	16.00	-0.4						ePS	00	50.00		
TOO	32.74	189	eP	42	16.00	2.2		2.0s	55.00nm			5.2mb							ePPS	01	20.00		
	0.9s	12.00nm			4.7mb	X	Z	26s	9.90um			5.8MszX							eSS	05	54.00		
		e	42	24.20			N	21s	5.28um										eLR	16	36.00		
BFD	32.94	194	e(P)	42	17.00	1.6	E	20s	3.82um								BKS	90.02	52	iPc	48	41.00	2.1
		e	42	28.00					eS	52	52.00							0.7s	42.00nm			5.8mb	
FORR	33.85	218	eP	42	22.00	-1.4			esS	53	32.00						Z	20s	8.00um			6.1Msz	
	0.4s	65.00nm			5.9mb				eSS	56	36.00						N	20s	1.30um				
MBL	34.77	240	iPc	42	31.00	-0.5	KMI	56.32	305	Pc	45	23.50	1.5				E	20s	6.00um				
	0.4s	39.00nm			5.7mb			2.0s	150.00nm			5.7mb							i	48	46.00		
PGP	35.75	302	eP	42	42.00	2.2			pP	45	33.50	33kmX							i	48	51.90		
OCP	36.21	303	eP	43	03.80	20.1X			PP	47	28.00								e	49	14.90		
KKM	37.17	287	ePc	42	43.20	-8.7X			S	52	56.00								eScS	59	51.20		
CVP	37.26	308	iPc	42	56.00	3.5X	BDT	56.63	294	eP	45	22.80	-1.3						e	01	48.00		
	0.8s	180.00nm			6.1mb		CHG	57.19	296	iPc	45	28.80	0.8						eSSS	09	05.60		
BAG	37.54	305	eP	42	56.00	0.9		1.1s	79.11nm			5.8mb							eLQ	12	45.20		
	1.1s	351.90nm			6.2mb				eS	53	46.00								eLR	16	24.80		
		eS	48	44.00			CHTO	57.19	296	eP	45	28.80	0.8				WDC	90.09	49	ePc	48	39.40	0.2
MEKA	38.18	232	iPc	43	00.20	0.0		1.2s	45.14nm			5.5mb					GCC	90.11	53	ePc	48	39.40	0.1
	0.4s	43.00nm			5.7mb				pP	45	42.00	47kmX					BMW	90.30	44	P	48	40.50	0.4
COOL	38.47	225	eP	43	02.20	-0.4	AFR	58.44	107	iP	45	37.10	0.4				PGC	90.43	41	eP	48	40.00	-0.5
	0.3s	12.00nm			5.3mb			1.3s	260.00nm			6.2mb					MHC	90.43	53	eP	48	41.40	0.5
TRT	38.92	264	iPd	43	08.30	1.8	PPT	58.63	107	iP	45	38.50	0.4				PRS	90.54	54	ePc	48	42.10	0.8
NANU	39.00	240	eP	43	06.50	-0.5		1.3s	250.00nm			6.2mb					LBFM	90.67	49	P	48	42.70	0.6
TCW	41.16	154	eP	43	24.10	-0.5	PAE	58.63	107	iP	45	38.50	0.4				GMW	90.74	42	P	48	42.10	0.1
MNG	41.23	152	eP	43	24.00	-1.1		1.3s	195.00nm			6.1mb					ORV	90.77	51	ePc	48	42.40	0.1
KLB	41.27	226	iPd	43	25.00	-0.6	PPN	58.76	107	iP	45	39.50	0.5							ePP	52	16.80	
	0.5s	48.00nm			5.6mb			1.3s	270.00nm			6.2mb					MIN	90.78	50	ePc	48	42.20	-0.3
KAGJ	41.28	332	P	43	28.60	3.0X	TVO	58.96	108	iP	45	42.40	2.0				MCW	90.84	41	P	48	42.80	0.3
MRWA	41.39	231	iPc	43	26.40	-0.2		1.3s	425.00nm			6.4mb					LLA	90.91	53	ePc	48	43.70	0.7
	0.4s	31.00nm			5.5mb		PMO	60.08	104	iP	45	49.30	1.3				PRI	91.09	54	ePc	48	44.90	0.9
CAW	41.43	153	eP	43	26.90	0.1		1.3s	280.00nm			6.2mb								ePP	52	20.20	
WDW	41.53	153	eP	43	26.80	-0.7	TPT	60.34	104	iP	45	50.00	0.1				LON	91.31	43	P	48	44.40	-0.3
BAL	41.53	228	eP	43	27.20	-0.5		1.3s	215.00nm			6.1mb					CMB	91.49	52	ePc	48	45.10	-0.6
MTW	41.67	153	eP	43	27.40	-1.3	VAH	60.34	105	iP	45	49.90	0.0							e	50	41.50	
WKYJ	42.05	340	P	43	30.90	-1.1		1.3s	115.00nm			5.8mb								ePP	52	22.40	
ANP	42.11	317	eP	43	36.00	3.4X	RUV	60.58	104	iP	45	51.70	0.2				SYP	91.49	56	eP	48	47.00	1.1
		eS	50	02.00				1.3s	255.00nm			6.2mb					FRI	91.93	53	ePc	48	48.00	0.3
NWAO	42.36	225	eP	43	34.00	-0.6	LZH	60.76	316	Pc	45	53.00	0.4							ePP	52	25.70	
		eS	50	00.00				2.0s	114.00nm			5.7mb					ISA	92.82	55	eP	48	52.00	0.1
TKSJ	42.39	338	P	43	34.50	-0.2	Z	25s	7.30um			5.7MszX					PAS	92.95	56	eP	48	53.00	0.5
KUMJ	42.44	333	P	43	35.40	0.2	E	20s	4.30um								PNT	93.01	41	eP	48	52.00	-0.4
IIDJ	42.48	343	P	43	36.30	0.8			pP	46	07.00	51kmX						1.2s	77.00nm			6.0mb	
KAKJ	42.57	346	P	43	34.90	-1.2			sP	46	14.00						MWC	93.05	56	eP	48	54.00	0.8
MUN	42.59	227	eP	43	36.20	-0.3			PcP	46	35.00						CRZF	93.06	223	iPd	49	05.00	12.3X
	1.0s	374.00nm			6.2mb				PP	48	15.00									ePP	52	55.00	
Z	20s	8.70um			5.6Msz				eS	54	10.00									eS	59	45.00	
N	20s	5.70um							sS	54	33.00									eSP	01	15.00	
E	20s	4.10um							SS	58	10.00									eSS	06	15.00	
CHJJ	42.71	345	P	43	35.30	-2.0	SHL	65.58	301	iP	46	24.00	-0.6				SBB	93.28	56	eP	48	54.00	0.0
TSRJ	43.12	341	P	43	39.30	-1.3			iS	55	09.00						KVN	93.36	51	P	48	55.00	0.5
RKG	43.15	224	iPd	43	43.30	2.3	GUN	71.41	302	P	47	01.20	0.2				CLC	93.54	55	eP	48	56.00	0.8
MAT	43.39	344	eP	43	40.00	-2.8	PKI	71.71	301	P	47	02.70	-0.1				RVR	93.60	56	eP	48	56.00	0.5
	0.7s	19.18nm			5.0mb		KKN	71.88	301	P	47	03.60	0.0				PEC	93.77	56	P	48	57.20	0.9
Z	20s	7.45um			5.6Msz		DMN	71.98	301	P	47	04.50	0.2				DPW	93.85	42	P	48	56.30	-0.1
		eS	49	23.00			GKN	72.49	301	P	47	07.20	0.1				PLM	93.99	57	eP	48	57.00	-0.5
SHK	43.40	337	eP	43	42.80	-0.1	SBA	73.06	177	eP	47	10.10	0.8				BAR	94.11	58	eP	49	01.00	3.2X
MTMJ	43.54	344	P	43	42.50	-1.6	KOD	75.52	282	eP	47	25.00	0.0				GSC	94.15	55	eP	48	58.00	-0.1
YONJ	43.68	338	eP	43	44.90	-0.3	HYB	75.61	289	iPd	47	25.20	0.0				NEW	94.59	42	P	48	59.10	-0.7
SHNJ	43.68	335	eP	43	45.90	0.8	GBA	76.04	285	P	47	27.70	0.1					1.0s	38.75nm			5.8mb	
NIIJ	43.84	345	P	43	45.00	-1.4	KDC	77.02	27	eP	47	31.70	-0.5				TPC	94.71	56	eP	49	01.00	0.4
YAMJ	44.48	347	P	43	53.30	1.7	SVW	77.58	23	eP	47	35.70	0.3				GLA	95.68	57	eP	49	06.00	0.9
OFUJ	45.01	349	P	43	54.80	-1.0	NDI	79.00	300	iPc	47	42.00	-1.7				YKA	96.26	28	eP	49	06.60	-0.4
HKC	45.78	308	iP	44	05.60	3.4X		1.0s	35.00nm			5.2mb						0.8s	8.60nm			5.3mb	
SSE	46.39	323	iP+	44	06.00	-0.8	POO	80.21	290	eP	47	42.00	-8.4X				EDM	97.07	37	ePc	49	11.00	0.1
	1.2s	23.00nm			5.0mb		PMR	80.47	25	eP	47	49.60	-1.3				SES	98.58	40	eP	49	18.00	0.2
Z	20s	3.20um			5.3Msz			1.0s	55.00nm			5.4mb						1.5s	163.00nm			6.3mb	
N	20s	8.90um					PAF	80.57	221	eP	48	00.00	8.3X						pP	49	31.00	43kmX	

09d 05h

DAU	98.67	50	P	49	18.50	-0.3		1.0s	38.00nm				PGF	130.25	324	ePKP	54	48.80	-0.9
IMW	98.85	47	P	49	20.00	0.5	PTJ	124.23	324	ePKP	54	37.50	-0.5		1.0s	56.00nm							
ANMO	102.63	55	Pdiff	49	37.60	1.0	ZAG	124.26	324	ePKP	54	38.00	0.1	SMF	130.25	331	PKP	54	48.90	-0.5			
GOL	103.21	51	Pdiff	49	39.50	0.3	WIT	124.53	335	ePKP	54	40.00	1.8		1.0s	43.00nm							
	1.0s	25.00nm			5.9mb		GRF	124.56	330	iPKPc	54	38.10	-0.3	SBF	130.31	326	ePKP	54	48.60	-1.1			
GLD	103.33	51	Pdiff	49	40.10	0.5		Z 21s	2.80um			5.9Msz			0.8s	22.85nm							
KEV	106.35	343	ePKP	54	05.00	2.0X				e	54	40.70		AVF	130.38	332	ePKP	54	48.80	-0.8			
MEO	109.09	55	e(Pdif	50	07.50	2.4X				e	56	32.00			1.0s	10.00nm							
SUF	110.28	336	ePKP	54	10.00	-0.6	PEL	124.62	137	ePKP	54	39.00	-0.1	LDF	130.55	336	ePKP	54	49.30	-0.6			
TUL	111.19	54	ePKP	54	13.50	0.3	CBN	124.68	46	ePKP	54	39.00	0.1		1.2s	35.70nm							
	0.9s	7.40nm						0.1s	20.00nm					FLN	130.56	336	ePKP	54	49.30	-0.6			
NUR	112.03	335	ePKP	54	16.00	2.0X	VBY	124.86	324	ePKP	54	39.40	0.3		1.0s	40.00nm							
	0.8s	11.70nm					BHG	124.93	327	iPKPd	54	39.00	-0.2	BGF	130.79	332	ePKP	54	50.10	-0.3			
		i		54	19.20			1.0s	43.00nm						1.1s	36.65nm							
UYO	112.55	55	ePKP	54	15.50	-0.4	LJU	124.98	325	ePKP	54	39.00	-0.3	FRF	130.94	327	ePKP	54	50.00	-0.8			
PRNI	115.62	301	ePKP	54	22.00	0.0	WTS	125.06	334	ePKP	54	39.00	-0.2		1.2s	35.70nm							
SLR	117.16	238	iPKPc	54	25.00	-0.2		1.0s	30.00nm					GRR	131.01	336	ePKP	54	50.50	-0.3			
	1.2s	46.88nm					CEY	125.21	324	ePKP	54	39.80	0.0		1.2s	32.75nm							
PTZ	117.81	251	iPKPc	54	34.00	7.4X	VOY	125.35	325	ePKP	54	39.50	-0.7	LMR	131.16	326	ePKP	54	50.70	-0.5			
	1.0s	25.20nm					FUR	125.50	328	ePKP	54	41.00	0.7		1.0s	32.00nm							
BUL	118.72	244	iPKPd	54	26.20	-2.1X		1.2s	56.00nm					LRG	131.17	327	ePKP	54	50.80	-0.4			
	0.9s	29.41nm					TNS	125.56	332	ePKPd	54	40.60	0.2		0.8s	22.85nm							
		i		55	50.70		TRI	125.61	325	iPKPd	54	40.20	-0.4	MAF	131.17	332	ePKP	54	50.90	-0.3			
PVL	119.55	317	ePKP	54	28.00	-0.9				e	56	31.00			1.2s	26.80nm							
KRA	119.76	326	ePKP	54	28.90	-0.2				i	08	20.00		TCF	131.29	332	ePKP	54	51.10	-0.3			
	1.0s	37.00nm								i	09	15.00			1.0s	40.00nm							
	Z 20s	4.30um			6.1Msz					e	18	54.00		LPF	131.37	336	ePKP	54	51.20	-0.2			
	E 20s	5.20um					BNS	125.63	333	iPKPd	54	40.90	0.5		1.0s	52.00nm							
		e	54	30.90				Z 16s	4.20um			6.2MszX		LSF	131.63	333	ePKP	54	51.40	-0.7			
		e	05	53.00						iPPc	56	42.70			1.1s	28.10nm							
DIM	119.86	316	ePKP	54	29.00	-0.6				iPPS	08	10.00		MFF	132.11	334	ePKP	54	52.60	-0.3			
SPC	120.03	325	iPKP	54	30.60	0.6	FVI	125.65	326	PKP	54	39.80	-0.8		1.0s	20.00nm							
KDZ	120.09	316	ePKP	54	30.00	-0.1	GMTN	125.72	42	iPKP	54	41.70	0.8	ARE	132.16	118	ePKP	54	50.00	-4.3X			
LSZ	120.51	249	iPKPd	54	32.60	0.9	PNJ	125.73	42	PKP	54	40.00	-0.9	RJF	132.34	332	ePKP	54	52.40	-1.0			
	1.1s	41.40nm					MDZ	126.02	137	ePKP	54	41.80	-0.1		0.9s	9.85nm							
		i		54	43.80		EKA	126.08	343	PKPd	54	41.00	-0.2	CAF	132.36	331	ePKP	54	53.10	-0.4			
		i		56	07.90			1.1s	20.80nm					LPO	132.96	331	ePKP	54	54.20	-0.4			
RZN	120.56	316	iPKPd	54	30.00	-1.2	VVI	126.22	326	PKP	54	42.00	0.2		0.7s	13.25nm							
TKL	120.76	51	PKP	54	31.40	-0.1	ENN	126.33	334	ePKP	54	42.00	0.2	LFF	132.98	332	ePKP	54	54.10	-0.5			
VTS	121.23	317	iPKP	54	32.00	-0.4		1.0s	50.00nm						0.7s	6.60nm							
KSP	121.28	329	ePKP	54	31.30	-0.7	MEM	126.40	334	PKP	54	41.50	-0.4	BCAO	133.36	271	ePKPc	54	44.20	-12.1X			
MMB	121.28	316	iPKPc	54	31.00	-1.4	GWF	126.80	331	PKP	54	43.25	0.4		0.9s	63.00nm							
SCH	121.61	25	ePKP	54	32.00	-0.6	ORI	126.91	318	PKP	54	43.00	-0.3			id	54	56.10					
KKB	121.61	317	iPKPc	54	32.00	-1.0	UCC	126.98	335	PKP	54	43.00	0.0			id	57	29.10					
SRO	121.84	325	iPKP	54	32.80	-0.4	TDS	127.18	317	PKP	54	44.00	0.2			id	58	23.10					
ZST	122.33	326	iPKP	54	34.10	0.0	SNF	127.23	334	iPKPd	54	43.90	0.4	EPF	134.60	330	ePKP	54	57.00	-0.9			
PRM	122.33	53	PKP	54	34.80	0.2	ARV	127.35	323	PKPc	54	44.70	0.7		1.0s	18.00nm							
BRG	122.46	330	iPKP	54	34.20	-0.1	CDF	127.36	331	PKP	54	43.72	-0.3	CNCB	135.08	120	PKP	54	45.00	-15.1X			
	1.0s	40.00nm					DOU	127.40	334	PKP	54	44.90	1.1	LPB	135.10	120	PKP	54	45.00	-15.0X			
		i		54	36.50					e	56	49.00					LR	33	40.00				
		i		54	39.50		DUI	127.41	320	PKP	54	44.50	0.2	ZOBO	135.19	119	PKP	54	46.00	-14.4X			
		i		54	47.40		SGO	127.43	319	PKP	54	43.00	-1.2		1.0s	40.00nm							
		i		55	25.60		MGR	127.48	318	PKP	54	42.00	-2.3X			LR	39	20.00					
		e		56	16.00		SAL	127.50	326	PKP	54	43.00	-1.2	CCH	136.40	122	PKP	54	50.30	-12.0X			
		e		57	49.00		ECH	127.55	331	PKP	54	44.06	-0.2	TOL	139.13	331	ePKP	55	00.00	-6.4X			
LWI	122.52	264	iPKPd	54	36.70	0.9	SFI	127.76	324	PKP	54	45.00	0.3	ASMO	140.91	328	ePKP	55	05.00	-4.8X			
LWI	122.52	264	iPKP-	54	36.90	1.1	SDI	127.80	321	PKP	54	42.00	-3.0X	AAPN	141.15	329	ePKP	55	03.50	-6.7X			
CLL	122.66	331	ePKP	54	34.00	-0.6	MOF	127.81	330	PKP	54	44.70	-0.2	ACHM	141.15	328	ePKP	55	06.50	-3.7X			
	1.2s	40.00nm					MDI	127.84	327	PKP	54	43.50	-1.3	APHE	141.19	328	ePKP	55	05.20	-5.2X			
		e		54	50.00		PGD	127.86	324	PKP	54	46.50	1.3	ALOJ	141.29	328	ePKP	55	05.50	-5.0X			
SKO	122.68	317	iPKPc	54	34.00	-1.0	CRE	127.87	324	PKP	54	44.50	-0.6	SIV	141.32	124	PKPc	55	03.00	-8.0X			
PRU	122.69	329	PKP	54	34.00	-0.7	AZI	127.89	321	PKP	54	44.50	-0.5	CAR	141.36	80	iPKP	55	04.00	-7.2X			
	Z 19s	4.10um			6.1Msz		BSF	127.99	331	PKP	54	45.17	-0.1	ATEJ	141.39	328	ePKP	55	06.00	-4.7X			
	N 18s	2.60um					HAU	128.09	331	ePKP	54	44.40	-0.9	NKM	143.23	328	iPKP	55	11.00	-2.7X			
	E 18s	1.90um						0.6s	18.05nm					NEV	144.39	68	ePKP	55	14.33	-1.9X			
		e		54	39.80		VITF	128.11	331	PKP	54	45.48	0.3	IFR	144.53	326	iPKPc	55	14.50	-1.8X			
VKA	122.73	326	ePKP	54	34.50	-0.4	SOI	128.13	315	PKP	54	46.10	0.5				i	55	17.50				
	4.0s	358.00nm					MNS	128.14	322	PKPc	54	45.10	-0.5	PPD	144.78	141	ePKP	55	15.30	-1.5X			
	Z 19s	2.10um			5.8Msz		LOMF	128.30	330	PKP	54	45.67	-0.1				i	55	28.90				
		i		56	16.80		BDI	128.40	325	PKP	54	45.00	-1.1				i	56	10.40				
		LR		45	09.00		RMP	128.44	321	PKP	54	46.00	-0.1	MBET	144.87	68	ePKP	55	15.64	-1.4X			
BLA	122.81	49	PKP	54	35.20	-0.2	RDP	128.46	321	PKP	54	46.30	0.1	CPB	144.93	67	ePKP	55	15.57	-1.5			
	0.8s	36.91nm					PII	128.65	324	PKP	54	45.50	-0.9	MDN	145.93	70	ePKP	55	19.48	0.7			
KMZ	123.19	250	iPKPc	54	38.00	1.1	ORO	128.87	328	PKP	54	45.00	-2.0X	AVE	145.94	328	iPKPc	55	19.40	1.0			
	1.0s	8.10nm					UPA	129.02	83	ePKP	54	47.50	-0.5	FDF	146.30	71	ePKP	55	20.24	0.7			
		i		54	51.00		CKI	129.48	326	PKP	54	46.00	-2.0X		0.4s	0.80nm							
OHR	123.49	317	iPKP	54	35.00	-1.6	LPL	129.60	328	ePKP	54	48.00	-0.5	TCE	146.41	79	ePKP	55	19.07	-0.6			
	1.2s	121.00nm						0.7s	13.25nm					BIM	146.42	72	ePKP	55	20.80	1.1			
LNV	123.66	137	ePKP	54	36.50	-0.6	LPG	129.60	328	ePKP	54	48.10	-0.5	CRM	146.52	71	ePKP	55	20.78	1.0			
KHC	123.71	328	iPKPc	54	37.00	0.2		0.4s	6.00nm					VAO	146.56	148	ePKP	55	21.30	1.5			
	1.0s	17.50nm					LOR	129.80	332	ePKP	54	48.00	-0.6				e	55	34.50				
	Z 18s	1.00um			5.5Msz			1.2s	43.15nm					MVM	146.58	71	ePKP	55	21.12	1.2			
	N 20s	1.50um					BNI	129.94	328	PKP	54	49.10	0.1	TRN	146.75	79	ePKP	55	20.98	0.8			
	E 18s	1.80um					LBF	129.95	332	ePKP	54	48.30	-0.6	TIO	147.65	325	iPKP	55	22.00	0.6			
MOX	123.76	331	ePKP	54	38.00	1.2		1.1s	24.40nm								i	55	30.00				
		e		56	24.00		SSF	130.11	332	ePKP	54	48.90	-0.2	JFO	149.46	152	ePKP	55	27.10	2.7X			
WET	124.06	329	iPKPd	54	37.90	0.4		1.1s	51.30nm								TT	55	29.50				

```
                e      55 44.60
BAO   151.56 137 PKPd  55 28.70   0.9
                e      55 41.00
KIC   156.56 274 PKP   55 34.24  -0.3
       1.2s    32.50nm
LIC   156.85 274 PKP   55 34.70  -0.2
       1.0s    18.00nm
     Z 20s     1.50um          5.8Msz
SOB1  160.96 139 ePKP  55 40.30   0.8
                e      55 53.40
                e      56 22.80
     S.D. = 0.8  on 277 of 322 obs.
-------------------------------------
% SEP 09, 1990  06h 01m 29.57± 2.72s
  43.992 N ±15.5km    8.379 E ±15.1km
  DEPTH =  10.0km  (geophysicist)
 CORSICA                        (380)
     ML 1.9 (GEN).

FIN     0.25 331 P     01 35.10   0.2
                S      01 38.49
IMI     0.36 257 P     01 37.05   0.0
                S      01 41.77
ROB     0.47 310 P     01 39.00  -0.2
                S      01 44.85
PCP     0.56  12 P     01 40.95  -0.1
                S      01 47.82
STV     0.80 289 P     01 45.26   0.1
     S.D. = 0.2  on   5 of   5 obs.
-------------------------------------
   SEP 09, 1990  06h 24m 57.53± 0.19s
   56.509 N ± 6.5km   34.423 W ± 2.5km
   DEPTH =  10.0km  (geophysicist)
   5.2mb ( 41 obs.) 5.0Msz (  6 obs.)
 NORTH ATLANTIC OCEAN           (402)

REY     9.83  34 e(P)  27 27.90   6.0X
AKU    12.08  34 iP    27 54.80   2.4
       2.1s   426.67nm          6.4mb X
VAL    14.83  98 eP    28 36.00   7.3X
                S      31 52.00
GDH    15.36 334 ePc   28 40.00   4.5X
       1.9s   305.26nm          5.3mb
ECB    16.55  93 eP    28 56.00   5.1X
ETA    16.73  91 eP    28 54.70   1.5
ECP    16.86  93 eP    28 58.30   3.5X
EKA    17.49  81 P     29 05.00   2.3
       2.6s   404.80nm          5.1mb
SCH    18.24 278 ePd   29 12.10   0.0
       1.5s   152.00nm          4.9mb
ASK    20.85  63 eP    29 41.50   0.0
BER    20.93  63 eP    29 40.70  -1.6
DAG    21.12  10 eP    29 43.00  -1.1
       1.4s    48.84nm          4.7mb
     Z 22s      2.07um          4.5Msz
     N 22s      0.89um
     E 22s      0.59um
FLN    21.82  96 eP    29 50.90  -0.5
       1.3s   101.10nm          5.1mb
     Z 18s      5.75um          5.0Msz
GRR    21.83  98 eP    29 51.20  -0.3
       1.4s   113.25nm          5.1mb
LPF    21.93  99 eP    29 51.90  -0.6
       1.3s   945.25nm          6.1mb
LDF    22.11  96 eP    29 53.80  -0.6
       1.2s    83.30nm          5.1mb
MFF    23.27 101 eP    30 06.00   0.3
       1.6s   124.40nm          5.2mb
DBN    23 28  84 eP    30 08.00   2.2
UCC    23.44  88 P     30 08.00   0.6
                S      34 35.00
SNF    23.54  88 iPc   30 08.95   0.6
WIT    23.79  81 eP    30 15.00   4.3X
DOU    23.92  89 P     30 13.50   1.5
                S      34 46.00
                S      45 14.00
WTS    24.23  83 eP    30 16.00   1.0
       1.5s   110.00nm          5.2mb
ENN    24.32  86 iPc   30 17.00   1.1
       1.2s    75.00nm          5.2mb
LSF    24.40 100 eP    30 17.40   0.7
       1.6s   105.70nm          5.2mb
MEM    24.45  87 Pc    30 18.60   1.5
TCF    24.75  99 eP    30 20.80   0.7
LFF    24.80 103 eP    30 20.40  -0.2
       1.3s    50.55nm          5.0mb
BGF    24.93  98 eP    30 22.10   0.2
       1.4s    82.75nm          5.2mb
MAF    24.99  99 eP    30 21.30  -1.1
       1.4s   117.65nm          5.4mb
RJF    24.99 101 eP    30 21.40  -1.0
       1.4s    43.55nm          5.0mb
     Z 19s      4.75um          5.0Msz
SSF    25.00  96 eP    30 22.50   0.0
       1.2s    86.30nm          5.3mb
LOR    25.07  95 eP    30 23.20   0.0
       1.4s    82.75nm          5.2mb
     Z 20s      4.00um          4.9Msz
AVF    25.07  97 eP    30 23.50   0.3
       1.3s    75.80nm          5.2mb
LPO    25.21 103 eP    30 24.10  -0.4
       1.2s    35.70nm          4.9mb
LBF    25.30  96 eP    30 25.40   0.0
       1.6s   105.70nm          5.3mb
SMF    25.43  96 eP    30 26.80   0.2
       1.3s    55.95nm          5.1mb
CAF    25.53 101 eP    30 26.60  -0.9
       1.4s    39.20nm          4.9mb
VITF   25.70  92 P     30 29.20   0.2
TOL    25.90 117 eP    30 33.00   2.0
HAU    26.02  92 eP    30 30.80  -1.3
       1.2s    41.65nm          5.0mb
     Z 18s      6.75um          5.2Msz
GWF    26.19  89 P     30 32.97  -0.7
CDF    26.31  90 P     30 34.61  -0.2
ECH    26.35  91 P     30 36.12   0.9
BSF    26.37  92 eP    30 34.00  -1.4
       1.0s    16.00nm          4.7mb
STR    26.49  89 P     30 38.50   2.2
MOF    26.54  91 P     30 38.22   1.2
LOMF   26.66  92 P     30 37.71  -0.4
MOX    27.53  83 ePc   30 46.00   0.2
       2.0s    78.00nm          5.1mb
                eS     35 32.00
LPL    27.71  96 eP    30 47.10  -0.7
       1.6s    43.55nm          5.0mb
LPG    27.73  96 eP    30 47.30  -0.8
       1.4s    39.20nm          5.0mb
GRF    27.80  85 eP    30 47.00  -1.4
                e      30 52.40
CLL    27.96  80 eP    30 49.00  -0.7
       1.9s    53.00nm          5.0mb
                e      31 33.00
BNI    27.97  97 P     30 50.50   0.4
ORO    28.33  94 P     30 54.00   0.7
BRG    28.69  81 eP    30 55.60  -0.7
       2.0s    44.00nm          4.9mb
                e      31 41.50
                e      32 37.00
                eS     35 52.00
MDI    29.20  93 P     31 01.00   0.1
CKI    29.25  96 P     31 01.00  -0.5
SOD    29.40  44 eP    30 48.00 -14.5X
KHC    29.40  84 P     31 03.00   0.2
PRU    29.47  82 P     31 02.50  -0.9
KSP    29.98  79 eP    31 05.00  -3.0X
                e      31 07.30
NUR    30.21  58 eP    31 05.00  -4.8X
     Z 20s      3.90um          5.0Msz
                e      31 10.00
                LR     41 28.00
SUF    30.22  53 eP    31 10.00   0.1
KMR    30.31  85 iP    31 11.20   0.4
FVI    30.41  89 P     31 12.00   0.3
PII    30.94  95 P     31 15.00  -1.4
VOY    31.36  89 eP    31 19.40  -0.9
VKA    31.39  83 e(P)  31 07.00 -13.4X
       1.3s   246.00nm
                i      31 21.10
TRI    31.49  89 P     31 21.00  -0.2
PGD    31.51  94 P     31 23.00   1.4
SFI    31.55  94 P     31 23.00   1.3
CRE    31.79  94 P     31 22.00  -2.1
CEY    31.84  89 eP    31 24.50   0.2
ZST    31.86  83 eP    31 23.90  -0.6
KRA    32.38  78 eP    31 28.50  -0.5
                e      31 32.10
ARV    32.43  93 P     31 28.00  -1.5
VBY    32.44  88 e(P)  31 31.00   1.4
PTJ    32.59  87 eP    31 30.50  -0.4
SRO    32.75  83 eP    31 31.00  -1.2
MNS    33.01  95 P     31 34.00  -0.6
BUD    33.33  83 eP    31 28.50  -8.8X
AZI    33.70  95 P     31 43.50   3.0X
SDI    34.09  95 P     31 42.00  -2.1
DUI    34.48  94 P     31 47.00  -0.4
SGO    35.70  95 P     31 56.50  -1.2
GIB    36.81  99 P     32 09.00   1.8
FAI    37.13 100 P     32 08.50  -1.3
SKO    38.14  88 iP    32 17.50  -0.7
     Z 17s      3.26um          5.2MszX
     N 17s      1.38um
     E 16s      2.15um
                i      37 05.00
                i      38 19.00
                i      40 15.00
                LR     48 53.00
OHR    38.36  90 eP    32 14.50  -5.7X
FVM    40.97 268 P     32 42.70   0.9
INK    42.27 327 eP    32 51.00  -1.0
SES    43.82 296 eP    33 06.00   1.1
TUL    45.44 270 eP    33 17.20  -0.9
       1.2s    16.80nm          4.9mb
SIO    45.85 270 e(P)  33 21.00  -0.3
UYO    45.99 267 iPd   33 22.80   0.4
LRM    47.52 292 eP    33 35.00   0.3
MEO    47.82 271 iPc   33 36.80  -0.1
GLD    47.88 281 P     33 38.60   1.0
       1.7s   173.91nm          5.9mb
GOL    48.00 281 P     33 39.00   0.4
       1.6s   114.54nm          5.7mb
NEW    48.22 297 P     33 39.50  -0.4
       1.3s    25.94nm          5.1mb
PNT    48.72 300 eP    33 43.00  -0.7
FBA    48.78 329 P     33 43.90   0.0
       1.0s    30.00nm          5.3mb
IMA    49.51 332 P     33 49.30  -0.3
       1.6s    45.08nm          5.2mb
DAU    50.67 286 P     33 59.10   0.0
PMR    51.68 326 P     34 06.00   0.0
       1.7s    96.15nm          5.5mb
ANMO   52.05 278 P     34 10.80   1.4
       1.0s   500.00nm          6.4mb X
BMW    52.45 299 P     34 11.50  -0.7
JVI    53.06  87 eP    34 17.00   0.2
PRNI   54.07  88 eP    34 25.00   0.8
KIC    55.23 143 P     34 29.00  -3.8X
KVN    55.27 290 P     34 32.40  -0.8
LBFM   55.52 294 P     34 34.20  -0.8
GSC    57.39 286 eP    34 48.00  -0.3
CLC    57.42 287 eP    34 48.00  -0.5
ISA    58.00 287 eP    34 53.00   0.5
GLA    58.04 283 eP    34 53.00   0.2
SBB    58.40 286 eP    34 56.00   0.7
RVR    58.69 285 eP    34 58.00   0.7
PLM    58.90 284 eP    35 03.00   4.0X
SOB1   65.70 187 eP    35 44.30   0.1
BCAO   66.62 120 iPc   35 49.30  -0.9
       0.9s    19.00nm          5.3mb
SIV    75.60 206 P     36 39.40  -4.7X
                i      36 45.20
NDI    77.42  57 iPc   36 54.00  -0.2
CNCB   78.27 213 P     37 01.00   1.4
CCH    78.27 211 eP    36 59.00  -0.3
BJI    80.65  22 eP    37 11.00  -0.5
GKN    81.34  51 P     37 15.60   0.0
       0.8s    28.00nm          5.4mb
KKN    81.80  51 P     37 18.40   0.3
       0.8s    48.00nm          5.6mb
DMN    81.88  51 P     37 19.00   0.4
GUN    81.95  51 P     37 19.50   0.5
       0.8s    38.00nm          5.5mb
PKI    82.05  51 P     37 19.60   0.1
SHL    86.52  47 iP    37 41.50  -0.5
ASPA  146.10  19 iPKPc 44 36.80  -1.4
       1.4s    14.00nm
SPA   146.33 180 ePKP  44 37.10  -0.2
       2.1s   105.56nm
     S.D. = 0.9  on 119 of 135 obs.
-------------------------------------
   SEP 09, 1990  06h 35m 22.51± 0.22s
   56.364 N ± 7.6km   34.454 W ± 3.3km
   DEPTH =  10.0km  (geophysicist)
   5.0mb ( 42 obs.) 5.2Msz (  5 obs.)
 NORTH ATLANTIC OCEAN           (402)

AKU    12.21  33 eP    38 19.00  -0.1
       1.7s   215.38nm          6.1mb X
VAL    14.83  97 eP    39 06.00  12.3X
                S      42 22.00
GDH    15.48 334 ePc   39 05.00   2.9
```

09d 06h

	1.1s	50.63nm		4.7mb		
EKA	17.53	80 P	39 32.00	3.8X		
	1.7s	41.10nm		4.3mb		
SCH	18.25	279 ePd	39 36.50	-0.7		
	1.4s	157.00nm		5.0mb		
FLN	21.82	96 eP	40 15.40	-1.0		
	1.3s	65.00nm		4.9mb		
	Z 20s	9.50um		5.2Msz		
LDF	22.12	96 eP	40 18.20	-1.2		
	1.2s	41.65nm		4.8mb		
MFF	23.26	100 eP	40 30.50	-0.1		
	1.4s	52.30nm		4.9mb		
UCC	23.47	87 P+	40 35.00	2.4		
		S	44 50.00			
SNF	23.57	88 P	40 35.30	1.8		
WTS	24.27	83 eP	40 43.00	2.7		
	1.5s	55.00nm		5.0mb		
ENN	24.35	86 eP	40 40.00	-1.2		
	1.5s	111.00nm		5.3mb		
LSF	24.39	99 eP	40 42.10	0.4		
	1.6s	74.65nm		5.1mb		
MEM	24.48	86 P	40 41.70	-0.6		
TCF	24.75	98 eP	40 45.20	0.1		
	1.4s	78.40nm		5.2mb		
LFF	24.79	102 eP	40 46.30	0.9		
	1.2s	29.75nm		4.8mb		
BGF	24.93	97 eP	40 46.80	-0.1		
	1.4s	82.75nm		5.2mb		
RJF	24.98	101 eP	40 47.80	0.5		
	1.2s	23.80nm		4.8mb		
	Z 20s	7.50um		5.2Msz		
MAF	24.98	98 eP	40 47.40	0.1		
	1.5s	104.45nm		5.3mb		
SSF	25.00	96 eP	40 47.30	-0.2		
	1.6s	77.75nm		5.1mb		
AVF	25.07	96 eP	40 47.90	-0.3		
	1.4s	47.90nm		5.0mb		
LOR	25.07	95 eP	40 47.70	-0.5		
	1.3s	43.30nm		5.0mb		
	Z 20s	7.50um		5.2Msz		
LPO	25.19	102 eP	40 50.20	0.9		
	1.2s	29.75nm		4.9mb		
LBF	25.31	95 eP	40 50.10	-0.3		
	1.8s	86.38nm		5.1mb		
SMF	25.43	96 eP	40 51.70	0.1		
	1.4s	56.65nm		5.1mb		
TOL	25.85	117 iPd	40 59.00	3.4X		
	1.5s	111.11nm		5.3mb		
HAU	26.04	91 eP	40 57.00	-0.2		
	1.4s	39.20nm		4.9mb		
	Z 20s	10.75um		5.4Msz		
MOX	27.56	82 eP	41 12.00	0.8		
	1.8s	42.00nm		4.9mb		
LPL	27.72	95 eP	41 13.40	0.5		
	1.5s	36.55nm		4.9mb		
LPG	27.74	95 eP	41 13.50	0.4		
	1.6s	40.40nm		4.9mb		
BNI	27.97	96 P	41 17.00	1.9		
CLL	28.00	80 eP	41 15.00	-0.1		
	1.8s	30.00nm		4.8mb		
ORO	28.34	94 P	41 19.00	0.6		
BRG	28.73	80 eP	41 21.50	-0.2		
	1.6s	22.00nm		4.7mb		
	Z 18s	3.00um		4.9Msz		
	N 18s	2.50um				
	E 18s	1.00um				
		i	42 13.30			
MDI	29.21	92 P	41 25.50	-0.5		
KHC	29.44	84 P	41 29.00	0.9		
PRU	29.51	81 eP	41 32.00	3.3X		
KSP	30.03	79 eP	41 31.60	-1.8		
FVI	30.43	88 P	41 37.00	0.1		
TRI	31.51	89 eP	41 48.00	1.6		
PGD	31.51	93 P	41 47.00	0.3		
SFI	31.56	93 P	41 47.50	0.7		
ZST	31.90	83 eP	41 50.80	1.0		
		e	44 40.90			
KRA	32.43	78 eP	41 54.10	-0.3		
		e	42 03.10			
ARV	32.43	93 P	41 52.00	-2.6		
SRO	32.79	82 eP	41 57.50	0.0		
MNS	33.02	95 P	41 58.00	-1.6		
SPC	33.07	79 eP	42 01.00	0.8		
AZI	33.70	95 P	42 04.00	-1.5		
SDI	34.10	95 P	42 08.50	-0.6		
DUI	34.49	94 P	42 14.00	1.6		
GIB	36.80	99 P	42 29.00	-3.1X		

MNO	37.21	98 P	42 35.00	-0.7		
SKO	38.16	88 iP	42 42.80	-0.6		
	Z 14s	2.64um		5.2MszX		
	N 15s	1.71um				
	E 16s	2.33um				
		LR	43 18.50			
OHR	38.38	89 eP	42 46.00	0.7		
YKA	38.73	313 eP	42 51.70	3.8X		
	1.1s	5.90nm		4.2mb		
FVM	40.95	268 P	43 06.50	0.0		
INK	42.38	327 eP	43 18.00	0.1		
OLY	43.32	266 P	43 25.80	-0.1		
SES	43.86	296 eP	43 32.00	1.7		
TUL	45.43	270 eP	43 42.60	-0.3		
	1.3s	26.80nm		5.0mb		
		e	44 00.00			
		e	45 22.40			
LRM	47.56	292 eP	43 59.10	-0.9		
MEO	47.80	271 e(P)	44 01.30	-0.4		
GLD	47.90	281 P	44 03.00	0.4		
	1.4s	67.57nm		5.5mb		
GOL	48.01	281 P	44 03.60	0.0		
	1.2s	32.79nm		5.3mb		
NEW	48.27	297 P	44 02.90	-2.4		
	1.2s	16.10nm		5.0mb		
PNT	48.78	300 eP	44 09.00	-0.1		
FBA	48.90	329 P	44 07.90	-1.8		
	1.1s	31.25nm		5.3mb		
IMA	49.63	332 P	44 15.80	0.3		
	1.5s	25.34nm		5.0mb		
LKO	51.86	143 P	44 30.84	-2.1		
	1.7s	63.50nm		5.3mb		
ANMO	52.05	278 P	44 36.70	2.3		
	1.3s	18.03nm		4.8mb		
BMW	52.50	299 P	44 35.80	-1.8		
MML	52.74	86 eP	44 40.00	0.6		
DSI	53.37	87 eP	44 45.00	1.0		
PRNI	54.09	88 eP	44 50.00	0.6		
TIC	54.76	143 P	44 53.90	-0.5		
KIC	55.12	143 P	44 56.20	-0.8		
LIC	55.15	143 P	44 56.50	-0.8		
KVN	55.30	290 P	44 57.00	-1.4		
LBFM	55.56	294 P	44 58.70	-1.6		
MIN	56.16	293 ePc	45 04.30	-0.2		
WDC	56.46	294 eP	45 05.20	-1.3		
CMB	57.25	291 eP	45 12.60	0.4		
GSC	57.41	286 eP	45 15.00	1.6		
CLC	57.45	287 eP	45 15.00	1.4		
FRI	57.68	289 eP	45 14.20	-0.9		
TPC	57.91	284 eP	45 19.00	2.1		
ISA	58.03	287 eP	45 19.00	1.3		
GLA	58.05	283 eP	45 19.00	1.2		
SBB	58.42	286 eP	45 31.00	10.5X		
RVR	58.71	285 eP	45 20.00	-2.4		
MWC	58.90	286 eP	45 26.00	2.0		
BAR	59.33	284 eP	45 28.00	1.2		
SOB1	65.55	187 eP	46 10.90	2.7		
BCAO	66.56	120 iPd	46 13.20	-1.6		
	0.8s	11.00nm		5.1mb		
QUE	71.31	64 eP	46 44.00	-0.2		
SIV	75.46	206 P	47 08.60	0.3		
LWI	77.41	114 e(P)d	47 20.30	0.8		
ZOBO	77.67	213 P	47 20.50	-0.8		
	1.5s	16.13nm		4.9mb		
CNCB	78.14	213 P	47 25.00	1.2		
CCH	78.14	211 P	47 27.30	3.8X		
BJI	80.79	22 eP	47 37.50	0.3		
	1.5s	26.00nm		5.0mb		
LZH	81.34	33 Pc	47 39.20	-1.2		
	1.6s	38.00nm		5.2mb		
		pP	47 45.50	20kmX		
GKN	81.44	51 P	47 40.20	-0.9		
KKN	81.91	51 P	47 42.60	-1.0		
	0.9s	50.00nm		5.6mb		
DMN	81.99	51 P	47 43.50	-0.6		
GUN	82.06	50 P	47 44.20	-0.4		
PKI	82.15	51 P	47 44.30	-0.7		
SHL	86.63	47 eP	48 05.00	-2.5		
LSZ	88.32	121 eP	48 15.00	-0.5		
PTZ	88.97	118 iP	48 28.00	9.4X		
	1.1s	11.80nm		5.1mb		
SPA	146.19	180 iPKPc	55 05.00	2.9X		
	1.3s	40.83nm				
ASPA	146.24	19 ePKP	55 02.20	-1.2		
	1.6s	26.00nm				

S.D. = 1.2 on 103 of 113 obs.

SEP 09, 1990 07h 08m 58.45± 1.02s
35.377 N ± 8.7km 23.589 E ± 7.1km
DEPTH = 18.5 ± 6.6 km
4.9mb (5 obs.)
CRETE (370)
MD 3.9 (ATH).

VAM	0.50	86 iPgc	09 07.50	-0.9		
VLI	1.44	339 iPbd	09 22.30	-1.3		
NPS	1.66	93 iPnc	09 28.60	1.8		
ITM	2.25	324 ePb	09 37.00	1.7		
APE	2.31	42 ePn	09 35.30	-0.9		
ATH	2.59	2 ePb	09 42.20	2.0		
KAP	2.93	86 ePn	09 45.00	0.0		
SMG	3.50	47 ePn	09 54.00	0.9		
EVR	3.81	339 ePn	10 00.00	2.4X		
PRK	4.41	28 ePn	10 05.50	-0.5		
KZN	5.13	344 ePn	10 15.00	-1.2		
OHR	6.13	340 ePn	10 26.50	-3.8X		
MMB	6.20	1 iPd	10 32.00	0.7		
RZN	6.36	8 iPc	10 35.00	1.2		
KKB	6.49	357 iPc	10 36.00	0.6		
SOI	6.62	296 P	10 45.00	7.8X		
ATN	7.09	295 P	10 42.00	-1.8X		
TDS	7.17	309 P	10 47.50	2.5X		
VTS	7.21	358 iP	10 47.00	1.4		
MGR	7.94	309 P	10 54.00	-1.7		
PVL	7.95	9 eP	10 53.00	-2.7X		
SGO	8.34	311 Pc	11 00.40	-0.8		
PRU	16.03	338 P	12 47.00	2.7X		
KSP	16.34	343 ePc	12 50.50	2.2X		
CLL	17.66	338 e(P)	13 04.00	-0.8		
DOU	20.19	323 P	13 34.60	0.0		
EKA	27.13	326 P	14 47.00	5.0X		
	0.5s	1.60nm		3.9mb		
BCAO	31.14	190 ePc	15 20.40	2.1		
	0.5s	3.00nm		4.4mb		
GKN	51.76	80 P	18 06.60	-0.6		
	0.6s	14.00nm		5.1mb		
DMN	52.30	80 P	18 11.00	-0.4		
	0.7s	17.00nm		5.1mb		
KKN	52.36	80 P	18 10.60	-1.3		
	0.8s	19.00nm		5.1mb		
PKI	52.56	80 P	18 12.60	-0.9		
WB5	117.88	95 ePKP	28 06.00	20.2X		
DZM	145.04	78 iPKPc	28 46.40	9.8X		

S.D. = 1.3 on 23 of 34 obs.

SEP 09, 1990 07h 21m 05.64± 1.33s
14.619 N ± 4.3km 146.684 E ± 6.5km
DEPTH = 48.2 ± 11.5 km
5.2mb (24 obs.) 4.8Msz (4 obs.)
MARIANA ISLANDS (216)

GUA	2.03	238 ePc+	21 38.70	0.7		
	0.7s	1600.00nm				
		e(S)	22 48.00			
GUMO	2.04	240 ePc	21 39.00	0.8		
PJG	2.04	240 eP	21 38.80	0.6		
JAY	18.02	200 ePd	25 13.00	-1.5		
PLP	21.43	263 ePc	25 54.00	2.2		
	1.2s	32.00nm		4.6mb		
KAGJ	21.95	321 P	25 57.60	0.8		
DAV	22.03	252 eP	26 00.20	2.5		
KAKJ	22.27	346 eP	25 56.80	-3.2X		
CGP	22.39	257 eP	26 02.00	0.7		
CHJJ	22.42	343 eP	25 58.60	-2.9		
TSRJ	22.94	337 eP	26 06.40	-0.2		
KUMJ	22.95	324 P	26 07.20	0.5		
MAT	23.11	342 eP	26 05.00	-3.2X		
	1.2s	40.63nm		4.7mb		
		eS	30 08.00			
MTMJ	23.27	342 P	26 07.30	-2.6		
SHK	23.51	330 eP	26 11.80	-0.4		
NIIJ	23.54	345 P	26 10.50	-1.9		
PMG	23.88	179 eP	26 08.00	-7.8X		
	1.2s	140.63nm		5.4mb		
SHNJ	23.99	327 eP	26 16.40	-0.4		
CVP	24.07	281 eP	26 21.50	3.8X		
YAMJ	24.19	347 P	26 18.00	-0.7		
OFUJ	24.76	351 P	26 24.20	0.0		
QCP	24.77	273 eP	26 20.00	-4.5X		
BAG	25.21	278 eP	26 29.00	0.2		
	1.4s	669.77nm		6.0mb		
PPR	27.73	263 ePc	26 54.00	2.2		
MRRJ	28.13	351 eP	26 54.50	-0.6		
KUSJ	28.43	357 eP	26 56.70	-1.1		

SSE	28.55	309	P	26	57.50	-1.5
	1.2s	32.00nm				4.8mb
Z	18s	1.30um				4.6Msz
N	13s	1.30um				
E	14s	1.00um				
		eS		31	56.00	
		sS		32	20.00	
		SS		33	40.00	
ASAJ	29.60	354	eP	27	07.80	-0.6
KKM	31.13	257	ePd	27	21.50	-0.8
MTN	31.34	210	iPd	27	23.20	-0.7
	0.5s	70.00nm				5.7mb
QIS	35.64	191	iPc	27	59.90	-1.2
WRA	36.43	200	Pc	28	06.40	-1.4
	1.3s	67.50nm				5.4mb
BJI	36.77	319	P	28	10.00	-0.4
	1.5s	187.00nm				5.8mb
Z	18s	1.17um				4.7Msz
N	16s	0.95um				
E	16s	0.67um				
		eS		33	49.00	
ASPA	40.05	198	ePc	28	37.10	-0.9
Z	22s	0.90um				4.6MszX
		eS		34	39.00	
		LR		43	58.40	
TRT	40.40	239	ePc	28	42.20	1.2
BRS	42.18	172	iPc	28	55.20	-0.2
KMI	42.46	291	Pc	28	59.50	1.4
	1.5s	100.00nm				5.3mb
Z	20s	1.70um				4.9Msz
		pP		29	17.50	73kmX
		eS		34	55.00	
		sS		35	26.00	
LZH	43.78	307	iPc	29	10.00	1.4
	1.5s	307.00nm				5.8mb
Z	20s	1.20um				4.8Msz
N	15s	0.90um				
E	14s	0.70um				
		pP		29	15.00	17kmX
		sP		29	19.50	
		PP		30	51.00	
		S		35	42.00	
		sS		35	53.00	
MBL	44.26	217	iPc	29	12.60	0.2
	0.6s	8.00nm				4.7mb
WARB	45.00	206	eP	29	19.00	0.7
	0.4s	4.00nm				4.6mb
COO	45.21	174	eP	29	18.80	-1.2
	0.7s	7.00nm				4.6mb
NNT	45.62	273	eP	29	25.20	1.8
CHG	45.81	282	iPc	29	25.80	0.9
	1.1s	16.46nm				4.9mb
CHTO	45.81	282	eP	29	25.60	0.7
BDT	45.84	280	eP	29	23.80	-1.2
IPM	46.02	262	ePc	29	30.00	3.4X
STK	46.49	186	iPc	29	28.40	-1.6
	1.5s	9.00nm				4.5mb
NANU	47.93	220	eP	29	41.00	-0.4
BWA	48.80	178	eP	29	46.70	-1.3
CAN	49.71	178	eP	29	53.80	-1.2
ADE	49.89	189	iPc	29	55.70	-0.7
COOL	51.48	208	eP	30	07.00	-1.5
BFD	51.66	184	eP	30	11.00	1.2
TOO	51.92	181	eP	30	12.00	0.2
	0.8s	23.00nm				5.3mb
SHL	52.29	291	iP	30	14.50	-0.6
		iS		37	37.00	
MRWA	52.70	214	iPd	30	17.00	-0.8
	0.8s	24.00nm				5.3mb
BAL	53.42	212	eP	30	22.20	-0.8
GUN	57.68	294	Pd	30	54.80	0.5
PKI	58.10	294	Pd	30	57.20	0.0
KKN	58.21	294	Pd	30	58.00	0.1
DMN	58.37	294	Pd	30	59.20	0.2
GKN	58.78	294	Pd	31	02.00	0.2
HYB	65.24	283	iPd	31	45.00	0.1
	1.0s	70.00nm				5.7mb
NDI	65.29	295	iPc	31	43.00	-2.1
GBA	66.91	279	P	31	55.40	-0.2
KOD	67.52	275	eP	32	00.00	0.1
POO	69.49	285	eP	32	12.50	0.8
QUE	74.05	298	iPd	32	38.80	-0.1
MAIO	79.27	305	iPc	33	09.00	1.1
YKA	81.14	28	eP	33	15.30	-1.8
	0.8s	4.50nm				4.5mb
WDC	81.23	50	ePc	33	20.50	2.4
PNT	81.44	41	eP	33	20.00	0.9
	0.8s	8.00nm				4.7mb
MIN	81.97	50	eP	33	23.60	1.4
ORV	82.22	51	ePc	33	23.40	0.1
CMB	83.41	53	ePc	33	30.30	0.8
FRI	84.18	53	eP	33	33.20	-0.1
ISA	85.47	54	eP	33	42.00	2.1
KEV	86.08	342	iP	33	41.40	-0.8
	0.8s	20.50nm				5.4mb
CLC	86.12	54	eP	33	35.00	-8.2X
MWC	86.16	56	eP	33	46.00	2.4
SBB	86.23	55	eP	33	45.00	1.3
SES	86.50	39	eP	33	45.00	0.3
	1.0s	50.00nm				5.7mb
RVR	86.77	56	eP	33	48.00	1.7
GSC	86.88	54	eP	33	49.00	2.1
LRM	87.04	43	eP	33	47.40	-0.3
SOD	87.50	340	iP	33	48.40	-0.8
BAR	87.69	57	eP	33	53.00	2.2
GLA	89.08	56	eP	33	57.00	-0.4
SUF	90.23	337	iP	34	10.20	8.0X
	0.9s	13.60nm				5.3mb
NUR	92.07	335	iP	34	09.40	-1.3
	0.9s	18.60nm				5.5mb
KRA	100.46	328	ePdiff	34	47.90	-1.1
			ePgd	35	41.30	
			iSg	35	49.20	
LSZ	120.76	261	iPKPc	39	56.10	1.1
BUL	120.92	255	iPKPd	39	54.30	-1.0
	1.0s	5.00nm				
BCAO	125.24	286	iPKPd	40	03.90	0.2
	0.8s	18.00nm				
			id	41	16.60	
			id	41	33.60	
			ic	41	52.10	
LKO	143.50	310	PKP	40	33.16	-4.5X
KIC	144.82	304	PKPc	40	38.98	-1.0
	0.9s	86.00nm				
TIC	144.87	305	PKP	40	39.10	-0.9
	1.0s	86.00nm				
LIC	145.13	305	PKP	40	39.96	-0.5
	0.9s	138.50nm				
ZOBO	146.43	97	PKP	40	43.00	-0.3
	1.0s	32.50nm				
LPB	146.46	98	PKP	40	44.00	0.9
CNCB	146.58	98	PKP	40	44.00	0.5
CCH	148.35	99	PKP	40	51.50	5.5X
SIV	153.20	97	PKP	40	59.20	6.4X
S.D. = 1.2 on 92 of 103 obs.						

& SEP 09, 1990 07h 26m 52.60s
40.513 N 124.895 W
DEPTH = 6.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 2.6 (BRK).

FHC	0.75	67	iPc	27	07.20	-0.4
			eS	27	17.40	
WDC	1.80	87	eP	27	22.30	-2.0
LBFM	2.42	69	eP	27	32.40	-1.2
MIN	2.52	93	eP	27	31.60	-3.3
ORV	2.78	109	e(P)	27	35.80	-2.6
5 obs. associated						

? SEP 09, 1990 08h 34m 44.89± 11.36s
35.782 S ±92.2km 70.024 W ±14.4km
DEPTH = 33.0km (normal)
CHILE-ARGENTINA BORDER REGION (127)

CHCH	1.92	344	iPd	35	17.00	1.2
			iS	35	34.50	
LNV	2.15	328	iP	35	19.50	0.4
			iS	35	38.50	
PCH	2.19	349	iPd	35	20.70	0.9
			iS	35	40.80	
TACH	2.25	340	iPd	35	20.90	0.3
			iS	35	40.40	
SAN	2.38	347	iPd	35	22.50	0.0
			iS	35	43.30	
LCCH	2.63	331	iPd	35	25.50	-0.4
			iS	53	48.00	
PEL	2.69	348	iPd	35	26.30	-0.5
			iS	35	50.40	
ROCH	2.92	343	eP	35	29.00	-1.3
			iS	35	54.50	
JACH	3.13	351	iPc	35	32.50	-0.6
			iS	36	00.10	
RTCV	4.10	18	ePd	35	47.60	0.7
RTBS	4.14	7	eP	35	47.80	0.5
			eS	36	27.60	
RTCB	4.40	14	ePd	35	51.00	-0.3
RTLL	4.63	17	ePc	35	53.60	-0.7
WRA	119.96	207	Pdiff	49	58.00	0.8X
	0.9s	1.20nm				
S.D. = 0.8 on 13 of 14 obs.						

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* SEP 09, 1990 08h 37m 58.05± 1.94s
36.770 N ±19.3km 71.394 E ±10.5km
DEPTH = 189.5 ± 25.1 km
4.6mb (6 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE	7.54	211	iPd	39	46.90	0.4
	0.7s	17.12nm				4.5mb
			eS	41	06.90	
NDI	9.44	147	iPc	40	12.00	1.0
	0.6s	100.00nm				5.4mb
			iS	41	50.00	
MAIO	9.59	271	eP	40	12.00	-1.1
			eS	41	56.00	
GKN	14.19	124	P	41	12.80	0.9
KKN	14.76	123	P	41	18.80	-0.2
DMN	14.76	124	P	41	19.00	-0.1
PKI	14.98	124	P	41	21.20	-0.8
GUN	15.08	122	P	41	23.40	0.2
	0.4s	29.00nm				5.0mb
GBA	23.70	165	Pc	42	54.40	0.6
	0.6s	8.90nm				4.5mb
CHTO	30.07	119	eP	43	49.00	-2.6
	1.0s	2.50nm				3.9mb
INK	73.59	9	eP	49	13.00	1.6
YKA	80.96	3	eP	49	52.20	0.2
	0.5s	3.30nm				4.3mb
S.D. = 1.3 on 12 of 12 obs.						

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* SEP 09, 1990 09h 24m 03.73± 1.67s
36.322 N ±16.6km 70.753 E ±11.8km
DEPTH = 218.9 ± 20.6 km
4.0mb (5 obs.)
HINDU KUSH REGION (718)

QUE	6.90	209	iPd	25	44.00	0.4
MAIO	9.09	273	eP	26	20.00	8.0X
			eS	27	46.00	
NDI	9.37	143	eP	26	33.00	17.5X
GKN	14.38	121	P	27	19.40	0.5
DMN	14.95	121	P	27	26.20	0.2
KKN	14.96	121	P	27	25.60	-0.4
PKI	15.18	121	P	27	28.00	-0.9
GUN	15.30	119	P	27	30.00	-0.4
CHTO	30.31	118	eP	29	58.40	1.6
	1.4s	5.77nm				4.1mb
NUR	37.86	324	eP	30	58.00	-2.6
SUF	37.97	328	iP	31	02.20	0.7
	0.5s	1.80nm				3.9mb
SOD	39.81	335	eP	31	18.00	1.4
INK	74.11	9	eP	35	17.50	0.5
FBA	74.69	16	eP	35	20.40	0.0
	0.7s	0.80nm				3.6mb
WB5	82.04	122	eP	36	01.20	0.4
WRA	82.07	122	Pd	36	00.90	0.0
	0.6s	1.50nm				3.9mb
ASPA	84.31	125	eP	36	10.70	-1.5
	0.5s	4.00nm				4.4mb
S.D. = 1.2 on 15 of 17 obs.						

% SEP 09, 1990 10h 45m 25.46± 1.40s
32.783 S ± 9.2km 68.934 W ±20.3km
DEPTH = 10.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

MDZ	0.12	145	eP	45	28.60	0.0
			i(S)	45	30.40	
RTCV	0.98	20	ePc	45	44.20	0.1
			S	45	59.90	
RTBS	1.20	338	e(P)	45	47.80	0.0
RTCB	1.30	5	ePc	45	49.90	0.3
			(S)	46	11.50	
RTLL	1.50	15	ePd	45	52.00	-0.5
			eS	46	15.10	
S.D. = 0.4 on 5 of 5 obs.						

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* SEP 09, 1990 11h 07m 10.56± 0.54s
6.213 N ± 7.7km 82.506 W ±14.4km
DEPTH = 10.0km (geophysicist)

09d 11h

4.3mb (3 obs.) 4.6Msz (1 obs.)
SOUTH OF PANAMA (83)
MD 4.5 (UPA).

DVD	2.21	1	iPc	07 47.00	-0.8
			S	08 16.00	
UPA	4.03	47	eP	08 14.40	0.8
	0.7s	41.10nm			
			iS	09 00.50	
NNA	18.94	163	e(P)	11 34.00	-0.2
	1.0s	15.00nm		4.2mb	
ZOBO	26.49	148	P	12 50.00	-0.7
			S	17 32.00	
			LR	20 26.00	
LPB	26.72	148	eP	12 54.00	1.4
Z	22s	1.85um		4.6Msz	
			LR	20 36.00	
CNCB	27.01	148	eP	12 56.00	0.5
SIV	30.61	136	eP	13 26.00	-1.3
			i	13 32.00	
LRM	47.21	332	eP	15 46.50	0.8
SES	50.09	337	eP	16 07.00	-0.7
PNT	53.12	330	eP	16 32.00	1.4
EDM	53.19	337	eP	16 30.00	-1.1
YKA	60.90	344	eP	17 30.60	5.0X
	0.9s	2.10nm		4.3mb	
INK	70.59	342	eP	18 28.00	0.4
LKO	76.13	82	P	19 05.98	4.9X
NB2	86.42	29	P	19 54.00	-0.4
	1.3s	7.70nm		4.7mb	
WRA	141.71	246	PKPd	26 38.50	-6.6X
	0.5s	0.50nm			
GKN	143.79	19	PKP	26 47.20	-1.4
KKN	144.20	19	PKP	26 46.40	-3.0X
GUN	144.27	18	PKP	26 46.60	-3.1X
DMN	144.31	19	PKP	26 47.20	-2.5X
PKI	144.44	19	PKP	26 47.00	-3.0X
SHL	147.94	10	iPKP	26 57.00	1.4
S.D. = 1.1 on 15 of 22 obs.					

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* SEP 09, 1990 12h 02m 04.60± 0.42s
56.176 N ±14.1km 34.521 W ± 5.5km
DEPTH = 10.0km (geophysicist)
4.5mb (15 obs.) 3.5Msz (1 obs.)
NORTH ATLANTIC OCEAN (402)

AKU	12.39	33	iP	05 02.80	-0.8
	1.7s	123.08nm		5.9mb X	
ENN	24.40	86	eP	07 24.00	0.3
	1.1s	15.00nm		4.5mb	
LSF	24.40	99	eP	07 24.60	0.8
	1.0s	8.00nm		4.3mb	
MEM	24.53	86	P	07 25.30	0.4
TCF	24.76	98	eP	07 28.00	0.7
	1.2s	22.30nm		4.7mb	
BGF	24.95	97	eP	07 29.20	0.1
	0.9s	8.20nm		4.4mb	
MAF	24.99	98	eP	07 30.70	1.2
	1.2s	23.80nm		4.8mb	
SSF	25.02	95	eP	07 30.10	0.4
	1.2s	20.85nm		4.7mb	
AVF	25.09	96	eP	07 30.80	0.4
	1.2s	11.90nm		4.5mb	
LOR	25.10	94	eP	07 30.60	0.1
	1.2s	20.85nm		4.7mb	
Z	20s	0.15um		3.5Msz	
LBF	25.33	95	eP	07 32.80	0.1
	1.2s	14.90nm		4.6mb	
SMF	25.45	96	eP	07 33.50	-0.3
	1.2s	14.90nm		4.6mb	
CDF	26.37	89	eP	07 40.10	-2.3
	1.0s	8.00nm		4.4mb	
SKO	38.21	88	iP	09 24.50	-1.4
TUL	45.39	270	eP	10 24.50	-0.2
	1.0s	11.30nm		4.8mb	
SIO	45.80	271	eP	10 28.40	0.5
UYO	45.92	267	eP	10 29.50	0.6
MEO	47.77	271	iPc	10 43.70	0.1
NEW	48.33	297	eP	10 45.80	-2.0
	1.2s	6 82nm		4.6mb	
PNT	48.84	300	eP	10 51.00	-0.7
FBA	49.04	329	eP	10 55.70	2.8
	0.8s	1.30nm		4.0mb	
ANMO	52.04	278	eP	11 17.80	1.4
	1.4s	5.23nm		4.3mb	
KVN	55.33	290	eP	11 39.90	-0.8
BMG	57.63	227	eP	11 56.00	-1.2

S.D. = 1.1 on 24 of 24 obs.

? SEP 09, 1990 12h 11m 42.31± 2.74s
16.318 N ±30.4km 98.057 W ±10.9km
DEPTH = 33.0km (normol)
3.6mb (2 obs.)
NEAR COAST OF GUERRERO, MEXICO (58)

OXX	1.49	59	iP	12 06.09	-1.1
			iS	12 24.17	
ACX	1.81	288	iP	12 12.20	0.5
			iS	12 33.62	
PPM	2.79	349	iP	12 26.13	0.1
			iS	13 07.06	
IIA	2.87	349	iP	12 30.00	3.2X
			(S)	13 11.00	
UNM	3.18	340	(P)	12 42.50	11.0X
			(S)	13 19.50	
EVV	3.35	50	iP	12 35.30	1.7
CRX	3.44	334	(P)	12 48.20	13.0X
SMMM	3.46	349	(P)	12 45.31	10.1X
			(S)	13 30.71	
LVVM	3.73	24	iP	12 39.59	0.7
IIJ	3.75	335	iP	12 48.39	8.6X
			(S)	13 35.69	
MRX	4.50	319	iP	12 56.50	6.6X
			(S)	13 53.80	
SIO	19.41	4	eP	16 11.80	3.1X
TUL	19.62	5	eP	16 09.00	-2.0
	1.1s	6.90nm		3.9mb	
ANMO	20.02	339	eP	16 15.60	0.2
	1.0s	1.75nm		3.3mb	
S.D. = 1.5 on 7 of 14 obs.					

SEP 09, 1990 12h 27m 20.15± 0.40s
54.504 N ± 9.9km 168.611 E ± 5.7km
DEPTH = 33.0km (normol)
4.6mb (11 obs.) 4.5Msz (1 obs.)
KOMANDORSKY ISLANDS REGION (4)

SMY	3.72	116	ePd	28 14.20	-2.4
ADK	9.21	101	ePc	29 31.10	-2.5
SVW	19.97	56	eP	31 52.20	0.1
TTA	19.97	51	eP	31 52.50	0.3
IMA	21.59	43	eP	32 07.40	-1.3
KDC	21.71	66	eP	32 11.00	1.1
PMR	23.10	55	eP	32 24.30	0.8
FBA	23.81	47	eP	32 31.20	0.8
TOA	24.48	54	eP	32 39.00	1.9
MAT	27.54	242	eP	33 06.00	0.4
	0.8s	12.69nm		4.6mb	
			(S)	37 59.00	
INK	29.61	40	eP	33 24.00	0.1
YKA	38.62	46	eP	34 59.50	18.1X
	0.8s	2.30nm			
BMW	42.52	72	P	35 15.50	1.7
RMW	42.72	70	P	35 16.40	1.0
PNT	42.81	66	eP	35 16.00	-0.1
	0.7s	9.00nm		4.6mb	
EDM	43.80	58	eP	35 24.00	-0.1
NEW	44.77	66	P	35 31.70	-0.3
	0.9s	4.39nm		4.3mb	
LBFM	46.50	76	P	35 47.30	1.3
WDC	46.64	78	e(P)	35 44.00	-2.8
MIN	47.32	77	e(P)	35 52.00	-0.5
LZH	47.33	275	eP	35 52.00	-0.6
	1.5s	17.00nm		4.8mb	
Z	20s	0.50um		4.5Msz	
			pP	35 56.00	13kmX
ORV	47.91	78	e(P)	35 56.80	-0.1
LRM	48.78	66	eP	36 03.40	-0.5
			e	36 14.50	
CMB	49.59	79	eP	36 10.10	0.2
KVN	50.19	76	P	36 15.20	0.5
FRI	50.70	79	e(P)	36 19.20	1.0
SOD	55.17	343	eP	36 51.00	-0.1
GLA	56.31	79	P	37 00.30	0.5
GOL	56.77	67	P	37 04.00	0.6
	1.3s	41.67nm		5.3mb	
SUF	59.48	341	eP	37 20.00	-1.7
NUR	61.80	341	eP	37 37.00	-0.5
CHG	63.11	265	eP	37 46.50	-0.1
CHTO	63.11	265	eP	37 46.00	-0.6
	1.0s	4.50nm		4.5mb	
NB2	63.41	348	P	37 47.00	-1.2
	0.8s	5.20nm		4.7mb	
GUN	63.67	282	P	37 49.60	-1.1
HFS	63.97	346	eP	37 49.70	-2.1
	0.4s	1.50nm		4.4mb	
MEO	64.04	66	e(P)	37 52.00	-0.6
KKN	64.10	282	P	37 49.00	-4.4X
PKI	64.20	282	P	37 52.60	-1.6
GKN	64.31	283	P	37 53.60	-1.1
TUL	64.65	63	eP	38 05.50	8.9X
	1.2s	7.70nm		4.7mb	
CLL	72.61	344	e(P)	39 00.00	14.5X
SPC	73.31	339	eP	38 50.60	0.7
			e	41 25.70	
KHC	74.62	343	eP	38 58.60	1.2
Z	14s	0.90um		5.2MszX	
N	14s	0.40um			
E	16s	1.50um			
			e	40 54.90	
ZST	74.89	341	eP	39 01.00	2.2
			e	41 15.30	
			e	44 06.10	
WB5	79.68	213	eP	39 27.20	1.5
WRA	79.75	213	Pd	39 27.30	1.2
	1.0s	2.60nm		4.2mb	
ASPA	83.37	212	iPc	39 47.50	2.5
	0.8s	5.00nm		4.7mb	
LPB	122.47	72	ePKP	46 27.00	13.0X
CNCB	122.76	72	ePKP	46 15.00	0.3
SIV	125.83	65	PKP	46 35.40	15.4X
S.D. = 1.3 on 45 of 51 obs.					

SEP 09, 1990 12h 34m 48.93± 0.19s
56.500 N ± 6.5km 34.426 W ± 2.6km
DEPTH = 10.0km (geophysicist)
4.9mb (37 obs.) 4.7Msz (6 obs.)
NORTH ATLANTIC OCEAN (402)

AKU	12.09	34	iP	37 46.60	2.7
	1.9s	336.84nm		6.3mb X	
VAL	14.83	98	eP	38 27.00	6.9X
			S	41 45.00	
EKA	17.49	81	P	38 57.00	2.9
	1.7s	63.70nm		4.5mb	
SCH	18.24	278	ePd	39 03.90	0.4
	1.4s	216.00nm		5.1mb	
FLN	21.82	96	eP	39 42.60	-0.2
	1.2s	65.45nm		4.9mb	
LPF	21.93	99	eP	39 43.80	-0.1
	1.0s	32.00nm		4.7mb	
LDF	22.12	96	eP	39 45.80	0.0
	1.4s	104.55nm		5.1mb	
MFF	23.27	101	eP	39 57.80	0.7
	1.2s	29.75nm		4.7mb	
DBN	23.29	84	eP	40 03.00	5.8X
SNF	23.55	88	iPc	40 00.46	0.7
NB2	23.70	60	P	40 00.60	-0.7
	2.0s	96.60nm		5.0mb	
DOU	23.93	89	P	40 04.20	0.7
			S	44 31.00	
WTS	24.24	83	eP	40 07.50	1.1
	1.0s	17.00nm		4.6mb	
ENN	24.33	86	eP	40 08.00	0.7
	1.2s	56.00nm		5.1mb	
LSF	24.40	99	eP	40 08.10	0.0
	1.2s	26.80nm		4.7mb	
MEM	24.45	87	P	40 09.60	1.1
GRC	24.62	96	P	40 22.16	11.9X
TCF	24.75	99	eP	40 12.20	0.7
	1.2s	74.40nm		5.2mb	
LFF	24.80	103	eP	40 13.20	1.2
	1.2s	41.65nm		5.0mb	
BNS	24.92	85	ePd	40 14.30	1.2
Z	17s	2.80um		4.8MszX	
BGF	24.94	98	eP	40 13.50	0.2
	1.4s	69.70nm		5.2mb	
MAF	24.99	98	eP	40 14.20	0.4
	1.4s	95.85nm		5.3mb	
RJF	24.99	101	eP	40 14.40	0.6
	1.2s	29.75nm		4.9mb	
Z	20s	4.75um		5.0Msz	
SSF	25.00	96	eP	40 14.30	0.4
	1.4s	95.85nm		5.3mb	
LOR	25.07	95	eP	40 14.90	0.3
	1.2s	44.65nm		5.0mb	
Z	20s	3.75um		4.9Msz	
AVF	25.07	97	eP	40 15.00	0.4
	1.2s	46.10nm		5.0mb	
LPO	25.21	103	eP	40 16.70	0.8
	1.2s	41.65nm		5.0mb	

LBF		25.30	96	eP	40 17.10	0.3
		1.3s		50.55nm		5.0mb
AGO		25.40	98	P	40 37.62	19.9X
SMF		25.43	96	eP	40 18.80	0.8
		1.2s		35.70nm		4.9mb
PYM		25.52	99	P	40 36.51	17.6X
CAF		25.53	101	eP	40 19.70	0.8
		1.2s		23.80nm		4.8mb
VITF		25.70	92	P	40 39.71	19.3X
PLDF		25.72	98	P	40 40.62	19.8X
TOL		25.90	117	eP	40 24.00	1.6
				eS	45 05.00	
LBL		25.98	100	P	40 24.61	1.6
HAU		26.02	92	eP	40 23.10	-0.4
		1.2s		29.75nm		4.9mb
	Z	20s		8.00um		5.3Msz
CDF		26.31	90	eP	40 25.40	-0.9
		1.1s		24.40nm		4.8mb
BSF		26.37	92	eP	40 25.90	-0.9
		1.2s		26.80nm		4.8mb
MOX		27.53	83	iPc	40 37.50	0.2
		1.6s		40.00nm		4.9mb
	Z	12s		1.20um		4.7MszX
	E	17s		1.90um		
				e	41 16.00	
GRF		27.80	85	iPd	40 39.80	0.0
		1.3s		27.00nm		4.9mb
	Z	20s		0.90um		4.4Msz
CLL		27.96	80	eP	40 41.00	-0.1
				e	40 49.00	
BNI		27.97	97	P	40 41.00	-0.5
ORO		28.34	94	P	40 45.50	0.8
BRG		28.69	81	eP	40 47.40	-0.3
				eS	45 44.00	
WET		29.01	84	iPc	40 50.80	0.1
MDI		29.20	93	P	40 52.50	0.2
CKI		29.25	96	P	40 50.00	-2.9
KEV		29.26	39	eP	40 51.00	-1.6
	Z	16s		1.30um		4.6MszX
				LR	50 14.00	
SOD		29.40	44	eP	40 52.00	-2.0
KSP		29.99	79	ePc	40 59.20	-0.2
NUR		30.21	58	eP	41 03.00	1.8
SUF		30.22	53	eP	41 02.00	0.7
		0.8s		5.00nm		4.4mb
FVI		30.41	89	Pc	41 03.70	0.6
VOY		31.36	89	e(P)	41 11.50	-0.2
VKA		31.40	83	eP	41 11.00	-0.8
	Z	14s		1.60um		4.8MszX
				LR	54 54.00	
TRI		31.49	89	iPd	41 13.00	0.4
PGD		31.51	94	P	41 13.00	0.0
SFI		31.55	94	P	41 13.50	0.3
LJU		31.71	88	e(P)	41 14.00	-0.6
CRE		31.79	94	P	41 15.00	-0.5
CEY		31.84	89	e(P)	41 15.00	-0.8
KRA		32.38	78	eP	41 19.10	-1.3
ARV		32.43	93	P	41 20.50	-0.4
PTJ		32.59	87	eP	41 21.00	-1.4
SRO		32.75	83	iP	41 23.00	-0.6
MNS		33.01	95	P	41 25.00	-1.0
AZI		33.70	95	P	41 32.00	0.1
SDI		34.10	95	P	41 34.00	-1.5
DUI		34.48	94	P	41 38.00	-0.8
SGO		35.70	95	P	41 49.00	-0.1
MGR		36.13	95	P	41 52.00	-0.7
NAV		36.16	258	P	41 54.70	1.6
SKO		38.14	88	iPc	42 10.00	0.4
	Z	15s		2.35um		5.1MszX
	N	14s		1.14um		
	E	15s		2.04um		
				iPP	43 39.00	
				iS	48 11.00	
				LR	58 44.00	
OHR		38.37	90	eP	42 09.00	-2.6
YKA		38.65	313	eP	42 12.60	-1.1
		0 8s		5.50nm		4.3mb
ELC		40.81	266	P	42 32.40	0.6
FVM		40.97	268	P	42 34.20	1.1
INK		42.27	327	eP	42 42.00	-1.4
EDM		43.20	300	ePc	42 51.50	0.2
OLY		43.34	266	P	42 53.30	0.7
SES		43.82	296	eP	42 57.00	0.7
TUL		45.44	270	eP	43 09.30	-0.2
		0.9s		10.80nm		4.8mb
	Z	19s		0.20um		4.1Msz
				LR	56 00.00	

SIO		45.85	270	eP	43 12.90	0.2
				e	43 18.80	
UYO		45.98	267	e(P)	43 14.30	0.5
LRM		47.52	292	eP	43 26.70	0.6
MEO		47.82	271	iPc	43 28.40	0.1
PNT		48.73	300	eP	43 35.00	-0.1
LKO		51.96	143	P	43 56.90	-3.2X
		1.1s		22.50nm		5.0mb
JVI		53.06	87	eP	44 08.50	0.3
PRNI		54.07	88	eP	44 16.50	0.8
TAB		54.46	73	e(P)	44 18.00	-0.6
TIC		54.86	143	P	44 20.74	-0.8
		1.1s		30.50nm		5.3mb
KIC		55.22	143	Pc	44 23.38	-0.8
		1.2s		25.00nm		5.1mb
LIC		55.25	144	P	44 23.58	-0.8
		0.9s		14.00nm		5.0mb
	Z	20s		0.31um		4.4Msz
MIN		56.12	293	ePc	44 29.90	-0.7
WDC		56.42	294	e(P)	44 31.80	-0.8
CMB		57.22	290	ePc	44 37.60	-0.8
GSC		57.39	286	eP	44 40.00	0.3
CLC		57.42	287	eP	44 41.00	1.1
FRI		57.65	289	ePc	44 41.20	-0.2
TPC		57.89	284	eP	44 44.00	0.8
ISA		58.01	287	eP	44 44.00	0.0
GLA		58.04	283	eP	44 45.00	0.8
SBB		58.40	286	eP	44 46.00	-0.7
RVR		58.69	285	eP	44 44.00	-4.7X
BAR		59.32	284	eP	44 53.00	-0.1
SOB1		65.69	187	eP	45 35.80	0.3
BCAO		66.61	120	iPd	45 40.00	-1.5
		0.7s		10.00nm		5.1mb
QUE		71.24	64	eP	46 10.40	0.2
NDI		77.43	57	iPd	46 46.00	0.3
ZOBO		77.79	213	eP	46 47.00	-1.4
	Z	24s		0.15um		4.2MszX
				LR	02 00.00	
BJI		80.66	22	eP	47 02.00	-1.0
		1.0s		10.00nm		4.8mb
LZH		81.21	33	eP	47 04.00	-2.2
		1.8s		32.00nm		5.1mb
GKN		81.35	51	P	47 07.40	0.4
KKN		81.81	51	P	47 10.40	0.9
GUN		81.96	51	P	47 11.40	0.9
PKI		82.05	51	P	47 11.40	0.5
SHL		86.53	47	eP	47 32.50	-0.9
ASPA		146.11	19	ePKP	54 28.10	-1.5
		1.4s		16.00nm		
		S.D. = 1.0		on 111 of 120 obs.		

SEP 09, 1990 12h 57m 59.33± 0.54s
38.748 N ± 8.0km 26.658 E ±15.0km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.5 (ATH).

PRK		0.58	329	iPgc	58 10.60	-0.5
SMG		1.05	172	ePg	58 18.80	-0.3
				eSg	58 35.20	
CIN		1.61	135	iPd	58 28.00	0.2
ATH		2.44	252	ePg	58 45.00	5.2X
RDO		2.55	341	ePn	58 41.40	0.1
GBZT		2.96	46	ePn	59 25.90	38.7X
KDZ		3.05	342	iP	58 48.00	-0.5
				iS	59 22.00	
RZN		3.29	334	iPd	58 52.00	-0.1
DIM		3.41	346	eP	58 54.00	0.4
				ePg	59 03.00	
MMB		3.62	323	ePc	58 57.00	0.4
				eS	59 54.00	
PLD		3.67	337	eP	59 00.00	2.7X
KKB		4.14	320	eP	59 05.00	1.0
				iSg	00 11.00	
PGB		4.24	334	eP	59 05.00	-0.5
PVL		4.58	348	eP	59 05.00	-5.1X
VTS		4.65	327	eP	59 11.00	-0.4
				eS	00 03.00	
				iSg	00 29.00	
		S.D. = 0.5		on 11 of 15 obs.		

% SEP 09, 1990 14h 35m 34.79± 1.61s
36.429 N ± 7.6km 27.245 E ±16.7km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.9 (ATH).

KAP		0.88	184	eP	35 51.80	0.1
				eS	36 03.50	
SMG		1.32	346	eP	35 59.20	0.1
APE		1.52	295	eP	36 01.80	-0.2
NPS		1.76	229	eP	36 04.50	-1.1
				eS	36 25.30	
VAM		2.67	248	eP	36 20.00	1.3
VLI		3.48	276	eP	36 29.80	-0.2
		S.D. = 1.0		on 6 of 6 obs.		

% SEP 09, 1990 17h 07m 07.81± 0.92s
41.710 N ± 9.2km 13.203 E ± 4.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

AZI		0.33	32	Pc	07 14.50	-0.1
				eSg	07 20.00	
RDP		0.37	278	P	07 15.60	0.2
				eSg	07 21.00	
RMP		0.39	285	Pd	07 15.80	0.0
				eSg	07 22.20	
SDI		0.46	90	Pc	07 16.30	-0.9
				eSg	07 23.00	
AQU		0.66	13	P	07 21.70	0.7
				eSg	07 31.10	
MNS		0.78	330	Pc	07 21.90	-1.1
				eSg	07 35.40	
DUI		0.94	93	P	07 26.50	0.7
				eSn	07 41.00	
ARV		1.80	354	P	07 39.50	0.4
		S.D. = 0.8		on 8 of 8 obs.		

& SEP 09, 1990 18h 27m 34.40s
40.268 N 123.475 W
DEPTH = 13.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 2.6 (BRK).

FHC		0.66	324	ePc	27 46.70	-0.6
				eS	27 56.10	
WDC		0.78	66	iPc	27 49.40	0.1
				iS	28 00.20	
MIN		1.43	86	eP	27 57.90	-2.3
LBFM		1.62	48	eP	28 02.20	-0.7
ORV		1.68	114	eP	28 02.40	-1.2
				eS	28 22.40	
		5 obs. ossociated				

? SEP 09, 1990 18h 30m 42.98± 4.04s
25.860 N ±49.4km 96.137 E ±42.5km
DEPTH = 33.0km (normal)
BURMA (296)

SHL		3.85	267	iP	31 41.50	0.0
				iS	32 14.00	
CHG		7.48	159	eP	32 34.00	1.4
CHTO		7.48	159	eP	32 31.10	-1.4
GUN		9.38	285	P	33 00.60	1.3
PKI		9.74	282	P	33 04.80	0.6
KKN		9.89	284	P	33 06.00	-0.1
DMN		10.01	282	P	33 07.40	-0.5
GKN		10.48	284	P	33 13.00	-1.2
		S.D. = 1.3		on 8 of 8 obs.		

SEP 09, 1990 19h 00m 39.20± 0.32s
39.B96 N ± 3.0km 24.039 E ± 2.8km
DEPTH = 14.3 ± 2.1 km
4.2mb (17 obs.)
AEGEAN SEA (365)
ML 4.5 (ATH), 4.0 (TTG). mbLg
3.9 (HLW). Felt in Kholkidhiki,
Thessoloniki and Pierio
Provinces, Greece.

RDO		1.69	42	iPbc	01 07.50	-0.9
MMB		1.71	352	iPc	01 07.00	-1.7
				eS	01 31.00	
KZN		1.79	284	iPbd	01 09.60	-0.3
VAY		1.81	322	iPn	01 10.70	0.6
PRK		1.84	110	ePn	01 11.00	0.4
RZN		1.86	16	iPc	01 11.00	0.0
				iS	01 40.00	
ATH		1.94	188	ePn	01 12.50	0.6
EVR		1.99	241	ePn	01 12.40	-0.3
KDZ		2.04	30	iPd	01 13.00	-0.5
				iS	01 39.00	
KKB		2.10	340	iPc	01 14.00	-0.3

09d 19h

PLD	2.26	13	iPc	01	18.00	1.3
			iS	01	53.00	
DIM	2.43	27	eP	01	20.00	1.0
			eSg	02	02.00	
PGB	2.65	2	iPc	01	22.00	-0.3
OHR	2.75	297	iPn	01	23.30	-0.4
			i	01	56.00	
			Lg	01	57.20	
VTS	2.77	347	iPc	01	24.00	0.0
			iS	02	07.00	
SKO	2.86	317	iPn	01	24.50	-0.6
			i	01	27.00	
			i	01	36.60	
			eSn	02	03.50	
			iSb	02	09.00	
			iSg	02	12.00	
			Lg	02	23.30	
			LR	02	25.00	
APE	3.06	157	ePn	01	27.50	-0.4
SMG	3.09	134	ePn	01	29.20	0.9
ITM	3.18	212	ePn	01	31.30	1.6
JMB	3.21	36	iP	01	30.00	0.0
KEK	3.27	268	ePb	01	34.00	3.0X
VLI	3.29	196	ePn	01	31.20	0.0
PVL	3.46	16	iPc	01	31.00	-2.6
CIN	3.91	125	eP	01	40.00	0.0
PVY	4.08	313	ePn	01	42.80	0.2
			eSn	02	34.00	
ULC	4.17	301	ePn	01	45.00	1.2
			eSn	02	35.00	
GBZT	4.23	76	ePn	01	34.40	-10.1X
IVA	4.31	315	ePn	01	46.00	0.2
			eSn	02	38.50	
TTG	4.41	307	ePn	01	48.00	1.0
			eSn	02	42.50	
VAM	4.48	178	ePn	01	50.00	1.8
BDV	4.60	303	ePn	01	51.50	1.6
			eSn	02	46.50	
NKY	4.78	309	ePn	01	54.00	1.4
			eSn	02	52.00	
NPS	4.79	164	ePn	01	51.50	-1.1
PSN	4.89	38	iPc	01	53.00	-0.9
HCY	4.90	303	ePn	01	55.40	1.3
			eSn	02	55.00	
KAP	5.00	149	ePn	01	55.30	-0.2
BRT	5.31	283	P	02	00.30	0.4
COZ	5.43	2	iPd	02	01.00	-0.7
BEO	5.59	333	ePn	01	59.00	-4.8X
			iPg	02	24.50	
			iSg	03	42.80	
BAI	5.60	285	P	02	01.50	-2.5
ORI	5.83	274	Pd	02	07.20	-0.1
TDS	5.94	270	P	02	09.00	0.3
GRI	6.00	262	P	02	09.11	-0.5
SOI	6.48	256	P	02	14.40	-2.0
			eSn	03	25.70	
MGR	6.52	275	P	02	16.40	-0.5
HVAR	6.57	302	iPn	02	17.10	-0.6
GMB	6.59	257	P	02	17.10	-1.1
BBTK	6.71	88	ePn	02	19.00	-0.8
			e	02	49.00	
			eSg	04	15.00	
SGO	6.71	278	P	02	18.80	-0.9
ATN	6.90	258	P	02	20.00	-2.3
BLY	7.02	316	eP	02	26.30	2.3
			eS	04	29.30	
BSS	7.11	280	P	02	24.60	-0.6
LPI	7.21	262	P	02	24.68	-2.0
DUI	7.48	287	Pd	02	30.80	0.3
KAS	7.54	76	eP	02	39.00	7.6X
MNO	7.54	258	P	02	30.60	-0.9
MEU	7.67	252	P	02	29.50	-3.6X
PZI	7.71	251	P	02	29.04	-4.6X
RFI	7.78	284	P	02	33.63	-0.9
SDI	7.96	286	P	02	37.00	-0.3
GIB	8.03	259	P	02	36.00	-2.2
AZI	8.29	288	P	02	42.00	0.2
ZAG	8.36	318	eP	02	43.00	0.3
BUD	8.41	336	e(P)	02	41.00	-2.3
PTJ	8.43	318	eP	02	42.30	-1.5
FAI	8.53	255	P	02	43.70	-1.3
VBY	8.55	314	eP	02	45.80	0.4
PSZ	8.56	341	e(P)	02	51.00	5.5X
RDP	8.78	286	P	02	47.50	-1.2
RMP	8.80	286	P	02	48.80	-0.1
MNS	8.92	290	Pd	02	50.80	0.2
SRO	8.93	334	e(Pn)	02	50.90	0.4
RIY	8.96	311	eP	02	01.50	-49.4X
ARV	9.05	297	P	02	51.50	-0.8
CEY	9.16	313	eP	02	52.50	-1.3
LJU	9.29	315	eP	02	53.60	-1.9
			e(S)	05	24.00	
TRI	9.52	311	iPc	02	59.80	1.0
			e	05	24.00	
			e	06	10.00	
VOY	9.63	313	eP	02	57.80	-2.6
SPC	9.68	345	eP	03	03.60	2.6
			e	03	19.00	
			e	04	26.60	
			e	05	33.00	
ZST	9.68	331	eP	03	01.30	0.4
			e	05	32.10	
			e	05	55.40	
CRE	9.77	296	P	03	02.00	-0.3
SFI	9.93	298	P	03	06.00	1.6
PGD	10.01	297	P	03	05.00	-0.6
VKA	10.04	329	eP	03	04.00	-1.8
			LR	07	25.00	
KRA	10.56	345	eP	03	11.90	-1.1
			e	03	27.40	
FVI	10.59	313	P	03	11.50	-1.9
BDI	10.84	297	P	03	15.00	-1.9
SAL	11.45	304	P	03	25.00	-0.2
PGF	11.63	288	eP	03	28.20	0.4
	0.8s		12.10nm			5.2mb X
HLW	11.67	147	eP	03	25.00	-3.1X
OGA	11.75	311	eP	03	29.50	0.1
SQTA	11.83	312	iPd	03	28.50	-2.0
	0.8s		18.50nm			5.4mb X
			i	03	30.20	
			i	03	42.60	
			i	03	45.20	
KHC	11.86	325	P	03	30.70	-0.1
Z	10s		1.40um			
N	10s		1.50um			
E	10s		1.20um			
			e	03	44.90	
MDI	12.04	304	P	03	33.00	-0.1
PRU	12.12	330	eP	03	47.00	12.9X
Z	10s		1.30um			
N	10s		1.50um			
E	10s		0.80um			
KSP	12.22	336	eP	03	36.50	1.0
BRG	13.06	331	iP	03	58.80	12.2X
	1.4s		19.00nm			
			e	07	39.50	
			e	07	53.00	
GRF	13.35	321	eP	04	00.60	10.0X
Z	19s		0.30um			
			e	04	02.80	
CLL	13.76	330	iPc	04	07.60	11.6X
	1.7s		38.00nm			
			e	08	15.00	
BNI	13.81	298	P	03	58.50	1.7
MOX	13.84	325	eP	04	08.00	11.0X
	2.0s		74.00nm			
Z	10s		2.60um			
N	11s		2.10um			
LPG	13.88	299	eP	03	58.30	0.4
	0.8s		8.05nm			4.6mb X
LPL	13.90	299	eP	03	58.90	0.8
	1.0s		8.00nm			4.5mb X
SMF	16.16	301	eP	04	28.50	1.2
	1.0s		9.00nm			3.9mb
LBF	16.18	303	eP	04	28.40	0.9
	0.8s		6.70nm			3.8mb
LOR	16.35	303	eP	04	30.90	1.2
	1.0s		8.00nm			3.8mb
Z	20s		0.88um			
SSF	16.51	302	eP	04	33.80	2.1
	0.8s		5.35nm			3.7mb
AVF	16.53	301	eP	04	33.70	1.8
	0.9s		21.30nm			4.3mb
ENN	16.70	317	eP	04	40.50	6.5X
	0.8s		17.00nm			4.2mb
BGF	16.79	300	eP	04	36.30	1.0
	1.0s		21.00nm			4.2mb
MAF	16.89	299	eP	04	38.60	2.0
	0.9s		11.45nm			4.0mb
WTS	16.98	321	eP	04	42.00	4.5X
DOU	17.07	313	P	04	42.50	3.8X
TCF	17.15	299	eP	04	42.00	2.2
	0.8s		5.35nm			3.7mb
MFF	18.81	299	eP	05	01.90	1.6
	0.8s		5.35nm			3.8mb
NUR	20.64	1	eP	05	22.00	1.5
			e	13	44.00	
TOL	21.52	279	eP	05	34.00	4.3X
			eS	09	40.00	
ASMO	21.82	272	eP	05	34.00	1.2
APHE	21.89	271	eP	05	36.70	3.1X
ACHM	21.95	272	eP	05	36.60	2.5
AAPN	22.12	272	eP	05	37.00	1.1
ATEJ	22.15	271	eP	05	37.50	1.3
ALOJ	22.16	272	eP	05	39.00	2.7X
NB2	22.61	344	P	05	38.70	-1.7
	0.7s		7.00nm			4.3mb
SUF	22.89	3	eP	05	42.00	-1.1
EKA	23.76	320	Pc	05	53.90	2.4
	0.8s		6.30nm			4.2mb
IFR	24.17	264	iP	05	59.00	3.0X
ECP	24.23	311	eP	06	12.10	16.0X
ETA	24.30	312	eP	05	59.50	2.6
TIO	26.92	260	eP	06	20.50	-1.4
SOD	27.57	2	eP	06	26.00	-1.2
BCAO	35.65	189	iPc	07	38.40	-0.3
	0.6s		11.00nm			4.9mb
			ic	07	52.70	
			ic	08	12.30	
LKO	40.11	229	P	08	12.12	-3.9X
GKN	50.78	84	P	09	41.20	0.1
DMN	51.33	84	P	09	46.20	0.8
	1.0s		31.00nm			5.2mb
KKN	51.38	84	P	09	45.80	0.1
	0.6s		89.00nm			5.9mb X
PKI	51.58	84	P	09	47.60	0.2
PTZ	54.29	171	iPd	10	14.90	7.7X
LSZ	55.02	175	eP	10	14.00	1.4
SHL	57.57	82	iP	10	30.00	-1.0
BUL	59.88	175	iPd	10	45.30	-1.5
	1.0s		10.00nm			4.9mb
CHG	66.76	84	eP	11	32.80	0.5
CHTO	66.76	84	eP	11	32.30	0.0
	1.0s		7.25nm			4.8mb
TUL	86.43	315	eP	13	22.50	0.1
	1.3s		12.30nm			5.0mb

S.D. = 1.3 on 120 of 144 obs.

? SEP 09, 1990 19h 25m 08.43± 8.08s
44.442 N ±55.9km 12.752 E ±22.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)

RSM	0.56	203	Pd	25	20.00	0.3
			eSg	25	24.90	
SFI	0.83	232	P	25	24.50	0.0
			eSg	25	33.00	
PGD	0.93	233	P	25	26.50	0.1
			eSg	25	36.70	
ARV	0.95	172	P	25	26.40	-0.2
			eSg	25	36.60	
CRE	1.00	216	P	25	26.70	-0.7
			iSg	25	36.70	
MNS	2.06	181	P	25	43.50	0.0
			eSn	26	06.00	

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

? SEP 09, 1990 19h 51m 35.91± 5.67s
30.819 S ±36.9km 71.843 W ±33.4km
DEPTH = 33.0km (normol)
NEAR COAST OF CENTRAL CHILE (135)

JACH	2.14	150	iPd	52	10.00	-0.1
			i	52	30.00	
ROCH	2.26	162	iPd	52	11.90	0.0
			i	52	38.00	
PEL	2.52	157	eP	52	15.50	0.0
			iS	52	41.50	
LCCH	2.66	175	iPd	52	18.00	0.6
ZON	2.81	106	eP	52	19.00	-0.5
			eS	52	47.00	
SAN	2.81	159	eP	52	20.00	0.5
			iS	52	48.60	
TACH	2.93	165	iP	52	21.00	-0.2
			i	52	54.50	
PCH	3.01	158	iPc	52	22.40	-0.1
			iS	52	55.50	
LNV	3.15	173	iPc	52	23.80	-0.5
			i	53	05.00	
CFA	3.19	105	eP	52	25.30	0.4
CHCH	3.26	162	iPd	52	25.70	-0.3

		iS	52 59.90		
MDZ	3.27	130 eP	52 26.40	0.2	
		i	52 28.00		
		i	52 46.90		
		i(S)	52 57.20		
S.D. = 0.4		on 12 of 12 obs.			

? SEP 09, 1990 19h 53m 30.06± 1.19s
42.549 N ±10.2km 19.147 E ±12.9km
DEPTH = 24.6km (geophysicist)
YUGOSLAVIA (383)
ML 2.1 (TTG).

TTG	0.15	145 iPgc	53 35.00	0.0	
		eSg	53 38.70		
NKY	0.29	337 ePg	53 37.00	0.0	
		eSg	53 41.90		
BDV	0.36	222 ePg	53 38.00	0.1	
		eSg	53 44.00		
HCY	0.49	258 ePg	53 40.00	-0.1	
		eSg	53 48.00		
S.D. = 0.1		on 4 of 4 obs.			

? SEP 09, 1990 20h 16m 39.60± 5.15s
39.949 N ±43.9km 24.017 E ±17.1km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)

MMB	1.65	352 iPc	17 09.00	0.2	
		eS	17 32.00		
RZN	1.82	17 iP	17 12.00	0.7	
KDZ	2.00	32 iP	17 14.00	0.1	
		iS	17 40.00		
KKB	2.04	340 iPc	17 15.00	0.6	
PLD	2.22	13 eP	17 20.00	3.1X	
DIM	2.39	28 ePg	17 27.00	7.6X	
		eSg	18 01.00		
PGB	2.60	2 eP	17 23.00	0.6	
VTS	2.71	347 iP	17 25.00	0.9	
		iSg	18 07.00		
OHR	2.71	296 ePn	17 25.20	1.1	
SKO	2.81	317 ePn	17 23.00	-2.4	
PVL	3.41	16 iPc	17 32.00	-1.8	
S.D. = 1.4		on 9 of 11 obs.			

& SEP 09, 1990 20h 40m 30.50s
37.022 N 121.520 W
DEPTH = 11.0km
CENTRAL CALIFORNIA (39)
<8RK>. ML 2.6 (BRK).

SAO	0.26	167 iPc	40 35.70	-0.4	
ARN	0.33	358 eP	40 36.00	-1.3	
MHC	0.33	343 iPc	40 36.40	-1.1	
		iS	40 42.60		
GCC	0.38	271 ePd	40 37.90	-0.5	
		eS	40 43.40		
LLA	0.61	131 iPc	40 41.20	-1.6	
PRS	0.70	170 eP	40 43.40	-0.8	
		eS	40 53.70		
PCC	0.84	305 eP	40 45.40	-1.2	
BKS	1.03	327 iPc	40 48.40	-1.4	
BRK	1.03	325 ePc	40 49.00	-0.9	
ZSP	1.09	328 ePc	40 50.40	-0.5	
PRI	1.12	142 e(P)	40 50.90	-0.5	
CMB	1.36	41 ePd	40 53.40	-1.9	
		eS	41 11.00		
FRI	1.45	91 ePc	40 54.90	-1.7	
PHAM	1.49	142 e(P)	40 56.00	-1.2	
KVN	3.38	52 e(P)	41 32.00	7.6	
15 obs. associated					

? SEP 09, 1990 21h 38m 52.00± 0.74s
16.564 N ±12.0km 120.203 E ±11.4km
DEPTH = 10.0km (geophysicist)
4.1mb (3 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	0.39	113 iPd-	39 00.10	0.0	
SZP	1.01	14 iPd	39 15.60	4.5X	
		iS	39 35.00		
CVP	1.92	54 eP	39 30.00	5.0X	
		eS	39 57.00		
QCP	2.09	156 eP	39 35.00	7.5X	
PGP	3.13	167 ePc	39 42.50	0.2	
CHTO	20.38	279 eP	43 31.90	0.2	
	1.3s	4.09nm		3.6mb	

BJI	23.65	352 eP	44 05.00	0.7	
LZH	24.28	326 eP	44 11.00	0.3	
	2.0s	32.00nm		4.6mb	
NB2	84.51	332 P	51 24.80	-1.5	
	0.6s	0.80nm		4.1mb	
S.D. = 1.0		on 6 of 9 obs.			

? SEP 09, 1990 22h 24m 54.24± 4.79s
39.769 N ±39.9km 24.033 E ±13.9km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.2 (ATH).

PLG	0.75	323 eP	25 08.00	-1.0	
MMB	1.83	353 eP	25 26.00	0.0	
		eS	25 49.00		
RZN	1.99	15 iPc	25 29.00	0.6	
KDZ	2.15	29 iP	25 31.00	0.3	
		iS	25 57.00		
KKB	2.22	341 iP	25 33.00	1.4	
PLD	2.39	12 eP	25 41.00	7.0X	
DIM	2.55	26 eP	25 44.00	7.8X	
		eSg	26 19.00		
PGB	2.78	2 eP	25 47.00	7.3X	
OHR	2.81	300 ePn	25 40.00	-0.1	
VTS	2.89	348 eP	25 42.00	0.7	
		iS	26 14.00		
SKO	2.95	319 ePn	25 36.50	-5.5X	
PVL	3.58	15 eP	25 49.00	-1.9	
S.D. = 1.2		on 8 of 12 obs.			

SEP 09, 1990 22h 29m 27.40± 0.21s
1.126 N ± 3.9km 123.006 E ± 5.3km
DEPTH = 33.7km (3 depth phases)
5.5mb (36 obs.) 5.1Msz (9 obs.)
MINAHASSA PENINSULA (265)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 14S, 28C
Centroid Locotion:
Origin Time 22:29:31.0 0.5
Lot 1.46N 0.04 Lon 123.17E 0.03
Dep 41.5 2.9 Half-durotion 2.8
Moment Tensor; Scole 10**17 Nm
Mrr= 2.62 0.11 Mtt=-2.40 0.12
Mff=-0.22 0.18 Mrt=-3.22 0.25
Mrf= 0.33 0.15 Mtf= 0.07 0.10
Principol Axes:

T	Vol= 4.20	Plg=64	Azm=188
N	-0.22	2	94
P	-3.98	26	4

Best Double Couple:Mo=4.1*10**17
NP1:Strike= 89 Dip=19 Slip= 85
NP2: 275 71 92

DAV	6.45	23 eP	31 02.00	-0.6	
	1.3s	4738.46nm		7.1mb X	
BKB2	6.55	249 ePc	31 11.00	7.0X	
CGP	7.47	13 iPc	31 18.00	1.1	
KKM	8.35	306 ePd	31 27.50	-1.8	
	0.4s	65.20nm		6.1mb	
PPR	9.59	334 iPd	32 43.00	56.8X	
	1.0s	152.00nm			
PGP	12.46	351 ePd	32 27.00	1.7	
	1.2s	105.00nm		5.8mb	
TRT	13.56	230 iPd	32 42.50	2.6	
MTN	16.05	150 eP	33 15.50	3.1X	
	0.4s	229.00nm		5.7mb	
CVP	16.52	356 ePd	33 22.00	3.8X	
	0.8s	329.00nm		5.5mb	
KGM	19.70	273 ePc	33 58.20	1.1	
IPM	22.22	279 ePd	34 24.40	1.6	
	0.9s	40.10nm		4.9mb	
		e	35 33.10		
MBL	22.37	188 iPd	34 23.70	-0.5	
	1.0s	301.00nm		5.7mb	
HKC	22.74	338 iP	34 30.00	2.2	
		iS	38 36.00		
WB5	23.66	152 eP	34 36.80	-0.1	
		e	36 48.10		
		eS	39 01.50		
WRA	23.71	153 Pd	34 38.20	0.9	
	0.8s	155.90nm		5.6mb	
ANP	23.96	357 eP	34 46.00	6.2X	
NANU	24.65	197 eP	34 46.00	-0.4	
GUA	24.94	59 eP	34 49.70	0.4	
NNT	25.72	297 eP	34 57.00	0.4	

PMG	26.23	114 eP	35 02.00	0.7	
LOE	26.45	309 eP	35 03.50	0.2	
NST	26.80	304 eP	35 07.00	0.5	
ASPA	26.82	157 iPc	35 06.20	-0.6	
	1.1s	69.00nm		5.2mb	
Z	22s	5.27um		5.0MszX	
		eS	39 56.00		
		LR	45 58.80		
QIS	26.99	144 iPd	35 08.80	0.5	
WARB	27.38	173 eP	35 11.00	-0.7	
	0.4s	13.00nm		4.9mb	
MEKA	27.91	189 eP	35 15.00	-1.6	
	0.7s	133.00nm		5.7mb	
CHG	29.42	308 eP	35 33.00	2.7	
CHTO	29.42	308 eP	35 30.70	0.4	
	1.0s	8.00nm		4.4mb X	
SSE	29.86	357 P	35 34.00	0.0	
	1.5s	74.00nm		5.2mb	
Z	20s	3.20um		5.0Msz	
N	16s	2.10um			
E	16s	1.40um			
		pP	35 44.20	36km	
		S	40 18.00		
		esS	40 36.00		
KMI	30.86	322 Pc	35 44.50	1.3	
	1.5s	70.00nm		5.2mb	
Z	18s	2.70um		4.9Msz	
		pP	35 55.00	38km	
		eS	40 31.00		
		sS	40 49.00		
MRWA	30.91	192 eP	35 41.00	-2.3	
	0.7s	99.00nm		5.7mb	
CTA	31.05	134 iPc	35 36.20	-8.4X	
		iS	40 54.00		
COOL	31.88	183 eP	35 50.00	-1.9	
BAL	32.12	190 eP	35 52.00	-1.9	
	0.5s	52.00nm		5.7mb	
FORR	32.17	172 eP	35 54.00	-0.3	
	0.4s	32.00nm		5.6mb	
KLB	32.92	188 eP	35 59.10	-1.8	
	0.6s	65.00nm		5.7mb	
MUN	33.55	190 eP	36 04.00	-2.3	
	0.9s	74.00nm		5.6mb	
NWAO	34.31	189 eP	36 12.00	-0.9	
	0.9s	106.00nm		5.8mb	
Z	20s	3.00um		5.0Msz	
N	20s	2.00um			
E	20s	1.50um			
STK	37.25	153 iPd	36 38.60	0.7	
	1.3s	79.00nm		5.4mb	
		eS	42 10.80		
CHJJ	37.78	21 eP	36 40.10	-2.2	
MTMJ	37.85	20 eP	36 41.60	-1.3	
MAT	37.95	20 eP	36 41.00	-2.7	
	1.5s	77.78nm		5.3mb	
Z	21s	2.51um		5.0Msz	
		eS	42 26.00		
KAKJ	38.36	23 eP	36 43.30	-3.8X	
SHL	38.61	312 eP	36 48.50	-1.1	
		iS	42 44.00		
ADE	38.80	159 eP	36 51.30	0.4	
	0.9s	176.47nm		5.8mb	
NIIJ	38.85	21 eP	36 48.50	-2.7	
CMS	39.00	148 eP	36 53.00	0.5	
LZH	39.06	335 P	36 54.00	0.8	
	2.0s	57.00nm		5.0mb	
Z	22s	4.20um		5.2Msz	
N	16s	1.70um			
E	15s	2.10um			
		pP	37 02.00	27km	
		sP	37 04.00		
		PP	38 26.00		
		S	42 51.50		
		SS	45 36.00		
BJI	39.23	352 eP	36 54.00	-0.3	
	1.5s	57.00nm		5.1mb	
Z	21s	3.00um		5.1Msz	
N	18s	1.67um			
		sP	37 05.00		
		ePP	38 24.00		
		S	42 52.00		
		eSS	45 36.00		
YAMJ	40.05	21 P	37 00.80	-0.4	
BRS	40.29	137 e(P)	36 48.00	-15.4X	
		i	37 04.50		
OFUJ	41.45	22 P	37 12.50	-0.1	
COO	41.83	141 iPc	37 18.00	2.1	

09d 22h

BFD	42.20	157	eP	37	22.00	3.2X	TUL	128.40	40	ePKP	48	34.00	1.2	SGO	5.64	288	P	48	03.00	-1.7
			e	38	59.00			1.3s	12.30nm					SDI	7.05	295	P	48	26.00	1.4
BWA	42.65	148	eP	37	25.40	2.8		Z 22s	0.05um				4.2Msz		S.D. = 1.3		on	16	of	18 obs.
CAN	43.64	149	eP	37	31.50	0.9				e	48	42.70								
TOO	43.77	154	eP	37	33.80	2.2				LR	32	00.00		%	SEP 10, 1990		00h	00m	07.72±	1.09s
	0.8s	23.00nm			5.0mb		LNV	144.66	159	iPKPc	49	02.50	-0.3		33.893 S ± 8.5km			71.446 W ± 9.4km		
CNB	43.83	148	eP	37	34.00	1.8	CHCH	144.95	160	ePKP	49	03.20	-0.2		DEPTH = 33.0km		(normal)			
	1.0s	47.00nm			5.2mb		TACH	145.10	159	ePKP	49	03.70	0.1		NEAR COAST OF CENTRAL CHILE					(135)
MRRJ	44.20	19	eP	37	42.00	7.0X	PCH	145.28	160	ePKP	49	05.00	1.0							
GUN	44.39	310	P	37	37.00	-0.3	SAN	145.38	160	ePKP	49	05.00	0.9	LNV	0.07	155	iPc	00	13.60	0.3
PKI	44.59	310	P	37	38.00	-0.8	PEL	145.65	159	iPKPd	49	06.00	1.4	LCCH	0.43	346	iPc	00	16.90	-0.4
	1.0s	50.00nm			5.3mb			1.0s	80.00nm								iS	00	25.50	
KKN	44.79	310	P	37	39.80	-0.5	ROCH	145.69	159	ePKP	49	08.10	3.2X	TACH	0.49	61	iPd	00	18.20	0.0
DMN	44.84	309	P	37	41.20	0.5	JACH	146.10	159	iPKPd	49	08.10	2.6X				iS	00	27.70	
	1.0s	71.00nm			5.5mb		MDZ	146.50	162	ePKP	49	08.50	2.4X	CHCH	0.66	94	iPc	00	20.30	-0.4
GKN	45.39	310	P	37	44.50	-0.5	PPD	158.50	195	ePKP	49	26.00	2.7X				iS	00	31.40	
KUSJ	46.08	22	eP	37	50.00	0.1				e	49	58.90		SAN	0.79	56	iP	00	22.50	0.1
ASAJ	46.23	20	eP	37	50.90	-0.2	CNCB	161.03	146	PKP	49	29.00	2.2X				iS	00	34.80	
HYB	46.59	293	eP	37	54.50	0.0				i	50	13.00		PCH	0.82	71	iPd	00	22.70	-0.3
GBA	46.76	288	P	37	55.10	-0.6	LPB	161.18	145	PKP	49	27.00	0.2				iS	00	35.00	
DZM	48.23	121	iPc	38	08.60	1.2				i	50	14.00		PEL	0.98	41	iPd	00	25.60	0.4
POO	51.20	293	iP	38	31.00	0.9	ZOBO	161.38	145	PKP	49	29.00	1.8				iS	00	40.50	
NDI	51.55	306	eP	38	32.00	-0.5		1.1s	6.67nm					ROCH	0.99	22	iPd	00	25.50	0.0
			eS	45	48.00					i	50	14.20					iS	00	40.40	
BOM	52.24	293	eP	38	27.80	-10.1X	CCH	161.51	151	(PKP)	49	25.00	-1.9	JACH	1.40	31	iPc	00	31.50	0.2
			eS	46	01.30					e	50	10.00					iS	00	51.00	
QUE	60.45	304	eP	39	36.70	0.0	SOB1	162.08	243	ePKP	49	29.30	2.0X		S.D. = 0.3		on	9	of	9 obs.
	1.2s	35.16nm			5.4mb					e	50	13.60								
			ePP	39	46.60		SIV	164.69	165	PKP	49	30.80	1.1		SEP 10, 1990		00h	01m	49.11±	0.75s
			e(S)	47	48.00					i	50	26.50			41.745 N ± 8.3km			13.496 E ± 5.1km		
THZ	62.04	140	eP	39	47.30	0.2		S.D. = 1.3		on	100	of	128 obs.		DEPTH = 10.0km		(geophysicist)			
LTZ	62.15	141	eP	39	48.40	0.6									SOUTHERN ITALY					(390)
TCW	62.67	139	P	39	51.20	0.0		SEP 09, 1990		22h	33m	42.86±	0.80s							
KHZ	62.78	140	P	39	51.60	-0.2		40.005 N ± 7.9km			23.961 E ± 6.2km			SDI	0.24	99	Pc	01	53.60	-0.7
	0.4s	26.00nm			5.7mb			DEPTH = 10.0km		(geophysicist)							iSg	01	57.40	
KIW	62 93	138	P	39	53.40	0.5		GREECE					(364)	AZI	0.25	350	Pd	01	54.10	-0.3
MRW	62.96	138	eP	39	52.30	-0.8		MD 3.2 (ATH).									eSg	01	58.10	
WEL	63 03	138	P	39	53.00	-0.5								RDP	0.58	272	P	02	01.00	0.0
CAW	63.15	138	P	39	53.60	-0.7	PLG	0.54	313	ePb	33	53.40	-0.4				eSg	02	10.00	
WDW	63.17	138	eP	39	53.90	-0.6	MMB	1.59	354	iPc	34	12.00	0.8	RMP	0.60	277	P	02	01.00	-0.2
MNG	63.20	137	P	39	54.10	-0.6				eS	34	35.00					eSg	02	10.50	
	0.4s	13.00nm			5.4mb		RDO	1.66	46	ePn	34	11.20	-0.8	AQU	0.61	354	P	02	01.50	0.0
MOW	63.42	138	P	39	55.90	-0.2	KZN	1.71	281	ePb	34	13.00	0.1				eSg	02	11.80	
MTW	63.46	138	P	39	55.70	-0.7	RZN	1.78	19	iPd	34	14.00	0.0	DUI	0.73	96	P	02	04.20	0.8
BLW	63.54	138	eP	39	56.00	-0.9	PRK	1.94	112	ePn	34	17.50	1.3				eSg	02	15.50	
PGZ	63.73	137	P	39	57.90	-0.3	KKB	1.98	341	iP	34	17.00	0.3	MNS	0.88	317	P	02	06.40	0.3
MAIO	68.18	309	eP	40	27.00	0.1	KDZ	1.98	33	iP	34	16.00	-0.8				eSg	02	19.50	
			e	49	30.00					iSg	34	44.00			S.D. = 0.6		on	7	of	7 obs.
CRZF	77.91	222	iPd	41	32.00	8.4X	EVR	1.99	238	ePn	34	15.80	-1.2							
			eS	51	45.00		PLD	2.17	15	eP	34	25.00	5.5X		SEP 10, 1990		00h	11m	34.53±	0.76s
TAB	78.83	308	eP	41	25.00	-4.1X	DIM	2.36	30	ePg	34	29.00	6.7X		41.610 N ± 7.9km			12.715 E ± 5.4km		
MAW	80.05	200	iP	41	35.60	0.8				eSg	35	00.00			DEPTH = 10.0km		(geophysicist)			
SBA	82.30	171	e(P)	41	48.00	1.5	PGB	2.55	3	eP	34	31.00	6.1X		SOUTHERN ITALY					(390)
NAI	86.23	269	iPc	42	11.00	3.1X	VTS	2.65	348	iP	34	28.00	1.6							
	1.1s	25.32nm			5.4mb					iSg	35	08.00		RDP	0.15	1	Pc	11	38.00	0.0
BBTK	89.48	310	iP	42	28.00	5.2X	OHR	2.65	296	ePn	34	27.00	0.5				eSg	11	40.80	
KEV	91.04	340	eP	42	41.00	11.7X	SKO	2.74	317	ePn	34	23.00	-4.7X	RMP	0.20	357	Pc	11	38.80	-0.2
	Z 16s	1.00um			5.3MszX		JMB	3.16	38	eP	34	44.00	10.5X				eSg	11	43.40	
			LR	27	24.00		PVL	3.37	17	eP	34	35.00	-1.5	AZI	0.66	55	Pd	11	47.20	-0.4
SPA	91.12	180	iPc	42	30.80	0.9	W85	117.94	93	ePdiff	48	54.50	4.9X				eSg	11	56.40	
	1.2s	100.70nm			6.1mb			S.D. = 1.1		on	12	of	18 obs.	MNS	0.77	358	P	11	49.70	0.0
SOD	91.43	337	eP	42	31.00	-0.1											eSg	12	00.80	
			e	42	44.00			SEP 09, 1990		23h	46m	38.22±	0.86s	SDI	0.83	83	Pc	11	50.30	-0.3
PTZ	91.89	256	iPd	42	41.00	6.6X		39.055 N ± 8.3km			22.367 E ± 6.5km						eSg	12	03.40	
	1.0s	6.90nm			5.0mb			DEPTH = 5.0km		(geophysicist)				AQU	0.90	34	P	11	51.80	-0.1
SUF	92.16	333	eP	42	32.00	-2.5		GREECE					(364)				eSg	12	05.40	
INK	93.93	21	eP	42	41.00	-1.6		ML 3.0 (ATH).						DUI	1.31	87	P	11	59.00	0.2
BUL	94.51	250	iPc	42	44.00	-2.4											eSg	12	16.00	
	1.0s	32.00nm			5.7mb		EVR	0.46	253	ePg	46	45.20	-2.2	MAO	1.42	305	Pd	11	59.60	-0.7
SLR	94.74	244	iPc	42	45.00	-2.4	KZN	1.33	340	ePg	47	03.20	-0.1	ARV	1.90	5	P	12	07.50	0.3
	1.0s	30.00nm			5.7mb					eSg	47	20.30					eSn	12	30.00	
	Z 18s	2.06um			5.6Msz		ATH	1.51	135	ePb	47	06.30	0.3	CRE	2.09	345	P	12	10.00	-0.2
LSZ	94.94	255	iPd	42	48.00	-0.4	PLG	1.56	32	ePb	47	06.70	0.0	SGO	2.22	117	P	12	12.00	0.0
	1.1s	19.30nm			5.4mb		KEK	2.10	289	ePg	47	16.00	1.6	MGR	2.61	123	P	12	18.00	0.6
			i	46	37.00		OHR	2.38	330	iPn	47	18.20	-0.4	PGF	2.92	290	Pn	12	22.00	0.0
KRA	97.51	321	eP	43	05.90	6.6X	MMB	2.74	22	iPd	47	24.00	0.4				Sn	12	58.00	
BRG	101.06	322	e(Pdif	43	06.00	-9.3X				eS	47	56.00		FRF	4.89	296	Pn	12	47.80	-2.0
			e	47	41.40		KKB	2.86	11	iPd	47	25.00	-0.4				Sn	13	43.80	
GRF	103.07	322	e(Pdif	43	26.00	1.7	SKO	3.00	347	ePn	47	26.70	-0.6	FVI	4.98	1	P	12	50.00	-1.0
	Z 22s	0.80um			5.2Msz		RZN	3.18	34	iPc	47	31.00	0.9	LRG	5.04	294	Pn	12	50.20	-1.8
			e	47	39.00		VTS	3.59	10	eP	47	36.00	0.2	LPG	5.82	314	Pn	13	06.00	2.8
LBFM	107.85	46	e(PKP)	48	04.40	10.8X				eSg	48	18.00		LPL	5.84	314	Pn	13	06.20	2.7
KVN	111.34	47	e(PKP)	48	10.50	10.2X	ORI	4.68	284	P	48	01.00	9.7X		S.D. = 1.3		on	18	of	18 obs.
MSU	115.83	46	e(PKP)	48	10.00	1.0	TDS	4.71	279	P	47	54.00	2.3							
GOL	120.00	42	ePKP	48	20.00	3.1X	PVL	4.72	27	iPc	47	50.00	-1.7	?	SEP 10, 1990		00h	13m	55.76±	0.73s
	1.1s	7.91nm					SOI	5.04	261	P	47	59.00	2.7X		20.721 S ±22.7km			174.303 W ±16.4km		
SIO	128.16	41	ePKP	48	33.50	1.1	MGR	5.37	284	P	48	01.00	0.0		DEPTH = 33.0km		(normal)			

4.9mb (11 obs.) 4.7Msz (3 obs.)
TONGA ISLANDS (173)

DZM	17.98	262	iPc	18	07.10	2.1
CNB	35.00	238	eP	20	46.90	-0.5
	0 7s	11.00nm				4.9mb
TOO	38.59	235	iPd	21	17.30	-0.2
	0.7s	12.00nm				4.8mb
STK	40.82	245	iPd	21	35.60	-0.4
	0.8s	4.00nm				4.2mb
ASPA	47.84	256	eP	22	30.20	-2.4
	0.5s	7.00nm				4.9mb
WB5	47.98	262	eP	22	31.00	-2.7
WRA	47.99	261	Pd	22	35.20	1.4
	1.0s	7.10nm				4.7mb
SPA	69.41	180	iPc	25	04.10	1.7
	0.9s	18.64nm				5.2mb
KVN	79.35	41	eP	25	59.00	-1.2
MSU	82.81	44	eP	26	18.80	0.4
TTA	84.61	8	eP	26	27.70	0.9
ANMO	84.87	50	eP	26	28.60	-0.3
	1.3s	7.21nm				4.7mb
PNT	84.94	32	eP	26	30.00	1.3
	0.8s	8.00nm				5.0mb
FBA	87.75	11	eP	26	41.40	-0.7
	1.0s	1.87nm				4.3mb
BJI	88.51	314	eP	26	46.50	0.3
	1.8s	41.00nm				5.4mb
CHG	93.58	289	eP	27	11.40	1.2
		e		32	46.00	
CHTO	93.58	289	eP	27	11.10	0.9
	1.0s	5.50nm				4.9mb
INK	93.61	14	eP	27	23.00	13.7X
EKA	144.80	9	PKP	33	29.00	-1.6
	0.9s	7.40nm				
WTS	148.77	359	ePKP	33	41.00	3.9X
	1.0s	16.00nm				
KSP	148.80	347	iPKPc	33	41.50	4.2X
CLL	148.94	351	iPKPc	33	40.90	3.4X
	1.1s	27.00nm				
BRG	149.21	350	iPKPc	33	42.20	4.3X
	1.0s	20.00nm				
		i		33	53.80	
SPC	149.31	341	ePKP	33	42.00	3.6X
MOX	149.77	353	ePKP	33	44.00	5.2X
PRU	149.96	349	PKPc	33	44.00	5.0X
	1.0s	14.50nm				
ENN	150.02	360	ePKP	33	44.00	4.9X
	0.8s	7.00nm				
BBTK	150.03	315	iPKPd	33	45.00	5.4X
MDSJ	150.60	298	PKPc	33	59.49	18.8X
DOU	150.67	1	PKPc	33	46.20	6.1X
SHMJ	150.71	300	PKP	33	59.77	19.0X
GRF	150.76	353	iPKPc	33	46.10	5.8X
		e		33	53.40	
BURJ	150.81	299	PKPd	34	00.34	19.3X
KHC	150.96	349	iPKP	33	46.90	6.3X
	1.0s	7.50nm				
SALJ	150.97	299	PKPc	34	00.16	18.9X
MASJ	151.01	298	PKPc	34	00.37	19.1X
ZST	151.09	344	e(PKP)	33	46.60	5.8X
		e		33	54.60	
SRO	151.11	342	ePKP	33	47.40	6.6X
		e		33	54.00	
FLN	151.59	9	ePKP	33	47.30	5.8X
	0.8s	13.45nm				
	Z 20s	0.13um				4.7Msz
LDF	151.80	8	ePKP	33	48.00	6.2X
	0 8s	8.05nm				
GRR	151.90	9	ePKP	33	48.40	6.4X
	0.8s	10.75nm				
LPF	152.22	10	ePKP	33	49.00	6.6X
	0.8s	16.10nm				
CDF	152.34	358	ePKP	33	49.70	6.9X
	0.8s	5.35nm				
HAU	152.78	359	ePKP	33	50.50	7.2X
	0.8s	5.35nm				
	Z 20s	0.08um				4.5Msz
BSF	152.94	358	ePKP	33	50.80	7.2X
	1.0s	8.00nm				
LOR	153.48	3	ePKP	33	52.10	7.8X
	1 0s	6.00nm				
	Z 20s	0.15um				4.8Msz
SSF	153.66	3	ePKP	33	52.50	8.0X
	0.8s	6.05nm				
LJU	153.72	346	ePKP	33	52.50	7.8X
LBF	153.76	3	ePKP	33	52.70	8.0X
	0.9s	6.55nm				
AVF	153.93	4	ePKP	33	52.80	7.9X
	1.0s	5.00nm				
LSF	154.31	7	ePKP	33	53.70	8.2X
	0.8s	5.35nm				
TCF	154.34	6	ePKP	33	53.80	8.3X
	0.9s	4.90nm				

S.D. = 1.5 on 18 of 52 obs.

& SEP 10, 1990 01h 43m 14.30s
36.870 N 121.642 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<8RK>. ML 3.5 (BRK).
Mo=6.4*10**14 Nm (BRK). Felt (IV) at Aromos and (III) at Aptos, Costroville, Robertsville, Santo Cruz and San Juan Boutisto. Also felt at Hollister.

SAO	0.19	123	iP	43	18.00	-0.3
GCC	0.33	299	iPc	43	20.60	-0.3
MHC	0.47	0	iPd	43	23.80	0.0
ARN	0.49	10	iPc	43	23.90	-0.2
PRS	0.58	158	iP	43	25.40	-0.5
LLA	0.62	114	iPd	43	26.20	-0.4
PCC	0.86	317	iP	43	30.00	-1.3
PRI	1.07	132	iPc	43	34.10	-0.8
BKS	1.11	335	iPc	43	34.10	-1.4
			iS	43	50.40	
BRK	1.12	334	e(P)	43	33.80	-1.8
ZSP	1.18	336	ePd	43	35.10	-1.6
			i	43	37.10	
			iS	43	54.40	
PKEM	1.48	123	eP	43	41.00	-0.4
CMB	1.53	40	eP	43	40.50	-1.8
FRI	1.55	85	ePc	43	40.30	-2.2
BCH	2.10	143	eP	43	47.80	-2.8
ORV	2.68	2	eP	43	56.70	-2.1
ABL	2.82	135	eP	43	58.20	-2.7
KVN	3.55	51	eP	44	09.00	-2.2

18 obs. associated

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* SEP 10, 1990 02h 44m 31.50± 2.24s
41.260 N ±14.5km 21.044 E ±17.6km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.5 (TTG), 2.5 (SKO).

OHR	0.24	231	iPgc	44	36.70	0.1
			iSg	44	40.40	
SKO	0.77	23	ePg	44	46.50	0.0
			iSg	44	56.50	
			e	45	00.00	
ULC	1.52	298	ePg	44	56.20	-2.5
			eSg	45	20.50	
PVY	1.55	329	ePg	44	59.00	-0.3
			eSg	45	21.00	
TTG	1.77	312	ePn	45	03.00	0.6
			eSn	45	29.20	
BDV	1.95	302	ePn	45	06.20	1.2
			eSn	45	35.00	
HCY	2.24	303	ePn	45	10.10	0.9
			eSn	45	40.30	

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

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* SEP 10, 1990 03h 05m 24.69± 0.68s
36.727 N ±10.9km 70.362 E ± 9.3km
DEPTH = 33.0km (normal)
4.3mb (5 obs.) 4.1Msz (1 obs.)
HINDU KUSH REGION (718)

QUE	7.12	205	iPd	07	09.60	0.3
			eS	08	32.00	
MAIO	8.76	270	eP	07	27.00	-5.1X
			eS	09	06.00	
NDI	9.88	142	iPc	07	48.00	0.5
			eS	09	38.00	
GKN	14.86	122	P	08	53.80	-0.5
DMN	15.43	122	P	09	01.00	-0.8
KKN	15.43	121	P	09	00.00	-1.8
PKI	15.66	121	P	09	03.60	-1.2
GUN	15.78	119	P	09	05.60	-0.7
POO	18.38	169	eP	09	40.00	1.2
HYB	20.55	157	ePd	10	04.50	1.3
SHL	21.47	115	eP	10	14.00	1.4
			eS	14	10.50	
GBA	23.88	163	P	10	39.10	2.9X
			S	15	13.10	
LZH	26.88	81	P	11	25.00	20.5X
	Z 20s	0.50um				4.1Msz
	E 12s	0.40um				
			eS	15	57.00	
NB2	43.89	323	P	13	28.30	-1.2
	0.7s	2.40nm				4.1mb
BCAO	57.26	249	iPc	15	10.90	-0.7
	0.6s	6.00nm				4.8mb
PTZ	62.64	223	iPc	15	55.00	6.6X
LSZ	65.24	226	iPd	16	06.00	0.5
BUL	68.94	222	iPd	16	26.00	-2.8
	0.7s	3.42nm				4.5mb
INK	73.76	9	eP	16	58.00	1.2
YKA	81.04	2	eP	17	38.00	0.8
	0.7s	2.00nm				4.2mb
WB5	82.52	121	eP	17	46.00	0.4
WRA	82.55	122	P	17	48.00	2.2
	0.7s	1.70nm				4.2mb

S.D. = 1.4 on 18 of 22 obs.

SEP 10, 1990 03h 51m 24.06± 0.19s
46.577 N ± 4.7km 155.467 E ± 2.8km
DEPTH = 23.2km (22 depth phases)
5.3mb (53 obs.) 4.6Msz (6 obs.)
KURIL ISLANDS REGION (222)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 24C
Centroid Location:
Origin Time 03:51:27.9 0.4
Lat 46.63N 0.07 Lon 155.65E 0.06
Dep 37.7 4.6 Half-duration 1.6
Moment Tensor; Scale 10**16 Nm
Mrr= 4.63 0.32 Mtt= 2.54 0.56
Mff=-7.17 0.44 Mrt=-3.10 0.73
Mrf=-6.84 0.91 Mtf=-2.69 0.45
Principal Axes:
T Val= 8.33 Plg=62 Azm=133
N 2.99 11 22
P -11.32 25 287
Best Double Couple:Mo=9.8*10**16
NP1:Strike=354 Dip=22 Slip= 60
NP2: 206 71 101

SAP	10.64	256	eP	53	56.00	-2.1X
SMY	13.53	56	P	54	36.00	-0.9
MAT	16.32	238	iPc	55	10.70	-2.5X
	1.1s	88.61nm				4.8mb
		(S)		58	06.00	
ADK	18.88	63	P	55	40.80	-4.1X
BJI	29.10	271	eP	57	24.50	-0.3
	1.4s	210.00nm				5.7mb
	Z 20s	1.20um				4.5Msz
	E 18s	0.93um				
		eS		02	13.00	
SSE	30.57	252	P	57	46.50	8.5X
	1.0s	10.00nm				4.6mb
	Z 20s	0.90um				4.4Msz
		eS		02	40.00	
		sS		02	46.00	
SVW	31.46	45	eP	57	47.20	1.6
TTA	31.48	41	eP	57	53.20	7.3X
IMA	33.00	36	ePc	58	06.10	6.9X
	1.1s	23.40nm				5.0mb
KDC	33.01	51	e(P)	57	56.20	-2.9
GUMO	34.07	199	eP	58	14.00	5.3X
GUA	34.11	199	eP	58	13.60	4.5X
PMR	34.60	44	eP	58	13.00	0.2
FBA	35.29	38	ePc	58	19.00	0.2
	0.8s	35.10nm				5.3mb
LZH	39.52	274	iPd	58	55.50	0.8
	1.5s	265.00nm				5.7mb
	Z 20s	0.90um				4.6Msz
	E 15s	0.70um				
		pP		59	03.00	25km
		sP		59	06.00	
		eS		04	55.00	
		sS		05	07.60	
CVP	39.98	235	iPc	59	10.00	11.5X
INK	40.93	32	ePc	59	06.70	1.0
	0.8s	28.00nm				5.0mb
PLP	43 73	226	eP	59	30.20	1.1
YKA	50.09	37	eP	00	18.40	-0.3
	0.8s	15.70nm				5.1mb

10d 04h

PGC	52.21	56	eP	00	35.00	0.1	DZM	69.04	169	iPd	02	30.20	0.3	SAX	81.96	337	ePd	03	44.00	0.7
GMW	53.16	57	P	00	43.00	0.9	ANMO	70.54	60	P	02	40.00	0.8	ZLA	82.00	338	ePd	03	43.50	0.3
CHG	53.67	259	ePc	00	46.00	-0.1	POO	71.09	277	iPd	02	43.70	1.2	TRI	82.12	334	iPd	03	49.30	5.5X
	0.9s	12.82nm			4.9mb			1.0s	76.00nm			5.8mb		VVI	82.27	335	P	03	44.50	-0.1
CHTO	53.67	259	eP	00	46.00	-0.1	GBA	72.04	271	P	02	47.00	-1.2	OSS	82.27	337	ePd	03	45.30	0.5
	0.8s	20.77nm			5.2mb		ASPA	72.59	201	iPc	02	51.10	-0.1	MMB	82.28	326	ePd	03	45.00	0.2
		pP	00	56.30	34kmX			1.1s	41.00nm			5.4mb		KKB	82.30	326	eP	03	45.00	0.2
RMW	53.77	57	P	00	47.00	0.4	SCH	72.85	24	eP	02	52.00	-0.5	LLS	82.41	338	ePd	03	46.30	0.7
PNT	54.02	54	ePc	00	48.00	-0.4	MEO	75.22	55	eP	03	07.30	0.8	VDL	82.63	337	ePd	03	48.00	1.2
	1.0s	36.00nm			5.4mb		SIO	75.79	53	iP	03	10.00	0.3	BLA	82.70	42	ePc	03	47.60	0.6
LON	54.15	57	P	00	49.20	-0.2	TUL	75.95	52	iP	03	10.60	0.0		1.0s	34.00nm			5.4mb	
EDM	55.26	47	iPc	00	57.10	-0.3		1.1s	31.30nm			5.3mb		FLN	82.76	344	eP	03	47.10	0.0
NEW	55.98	54	P	01	01.80	-0.9				e	03	18.30	25km		1.0s	28.00nm			5.3mb	
	1.2s	30.30nm			5.2mb					e	03	27.00		Z	20s	0.28um			4.6Msz	
FHC	56.13	64	ePc	01	05.10	'1.2				e	03	33.70		SKO	82.83	327	iP	03	47.00	-0.6
GUN	56.63	277	P	01	07.20	-0.8	KRA	76.34	332	eP	03	12.00	-0.5				i	03	54.80	25km
KKN	57.12	277	P	01	11.60	0.3				e	03	18.70	21km	LDF	82.86	344	eP	03	47.40	-0.2
WDC	57.16	64	iPc	01	11.80	0.6				e	03	27.60			1.0s	16.00nm			5.1mb	
PKI	57.17	277	P	01	11.50	-0.3	KSP	76.77	335	iPd	03	15.10	0.2	TMA	83.14	337	ePd	03	49.60	0.2
DMN	57.35	277	P	01	13.20	0.2				id	03	21.00	19km	SAL	83.15	336	P	03	55.00	5 9X
GKN	57.42	278	P	01	13.40	0.0	EKA	76.87	348	Pd	03	23.00	7.6X	GRR	83.19	344	eP	03	49.60	0.3
MIN	57.87	64	ePc	01	15.10	-1.3		0.9s	9.30nm			4.8mb			1.0s	30.00nm			5.4mb	
SES	58.04	49	eP	01	17.00	-0.3	WARB	76.98	206	eP	03	17.40	1.1	MDI	83.22	337	P	03	50.30	0.8
		pP	01	29.00	42kmX		SPC	76.99	332	eP	03	15.60	-0.8	CBN	83.24	39	eP	03	50.00	0.3
KEV	58.04	341	eP	01	16.00	-0.9	CLL	77.28	337	eP	03	16.00	-1.7		1.0s	18.00nm			5.2mb	
		i	01	23.20	24km			1.4s	77.00nm			5.5mb					e	04	06.00	56kmX
ORV	58.41	64	ePc	01	19.90	0.0				i	03	23.80	25km	LOR	83.29	341	eP	03	49.80	-0.1
		e	01	31.70	41kmX		BRG	77.41	336	iP	03	17.50	-1.0		1.0s	23.00nm			5.3mb	
BRK	58.94	66	eP	01	23.90	0.3		1.0s	24.00nm			5.2mb		Z	22s	0.52um			4.9Msz	
KTK1	59.45	342	eP	01	25.64	-1.2				i	03	24.50	22km	MMK	83.43	338	ePd	03	51.90	1.0
MHC	59.65	66	eP	01	29.20	0.5				i	03	30.20		GRC	83.44	341	P	03	59.04	8.4X
FFC	59.82	41	iPc	01	29.20	-0.3				i	03	45.00		LBF	83.53	341	eP	03	50.80	-0.4
	0.9s	65.00nm			5.8mb					i	05	54.20			1.0s	14.00nm			5.1mb	
SOD	59.99	340	iP	01	29.10	-1.4				e	06	12.40		DIX	83.55	338	ePd	03	52.60	1.0
		i	01	37.00	26km		WIT	77.46	341	eP	03	27.50	8.9X	SSF	83.56	341	eP	03	51.20	-0.1
LRM	60.00	54	iPc	01	31.40	0.2	PRU	78.04	335	eP	03	21.50	-0.4		0.9s	13.90nm			5.1mb	
CMB	60.02	65	ePc	01	31.50	0.3				e	03	28.80	23km	LPF	83.57	344	eP	03	51.70	0.5
		e	01	43.50	42kmX		WTS	78.19	341	eP	03	23.50	0.8		1.0s	20.00nm			5.3mb	
PRS	60.44	67	ePc	01	34.10	0.1		0.9s	34.00nm			5.4mb		EMS	83.68	339	ePd	03	52.90	0.8
LLA	60.53	67	ePc	01	35.00	0.3				e	03	30.00	21km	OHR	83.81	327	eP	03	52.00	-0.7
		e	01	47.00	42kmX					e	03	38.50		ORX	83.82	338	P	03	52.52	-0.2
KVN	60.81	63	P	01	36.80	0.0	KAS	78.24	319	eP	03	23.00	-0.3	ORO	83.83	338	P	03	53.00	0.2
SNG	61.06	248	eP	01	37.50	-0.9	MOX	78.25	337	eP	03	23.00	-0.1	RSM	84.13	334	P	04	02.60	8.5X
FRI	61.08	66	ePc	01	38.10	-0.2				i	03	30.00	22km	BGF	84.19	341	eP	03	54.60	0.2
PTI	61.86	56	P	01	44.80	1.0	SRO	78.82	332	eP	03	26.50	0.3		1.0s	10.00nm			5.0mb	
NDI	62.02	283	eP	01	49.00	4.2X				i	03	33.10	21km	LSD	84.19	338	P	03	55.91	1.1
LOF	62.11	345	eP	01	43.00	-1.9	ZST	78.87	333	eP	03	26.20	-0.3	LPL	84.25	338	eP	03	55.90	0.8
ISA	62.69	66	eP	01	48.00	-1.2				i	03	33.60	24km		1.2s	29.75nm			5.4mb	
CLC	63.14	65	eP	01	42.00	-10.2X				e	03	42.70		LPG	84.26	338	eP	03	55.90	0.7
DUG	63.29	59	P	01	53.60	0.4	BUD	78.88	332	eP	03	22.00	-4.6X		1.2s	43.15nm			5.6mb	
	1.0s	22.50nm			5.3mb		KHC	79.08	336	iP	03	28.00	0.3	SFI	84.31	334	P	03	55.00	0.0
BW06	63.52	55	P	01	54.60	-0.3				i	03	35.50	24km	ARV	84.37	334	Pd	03	55.50	0.1
	1.2s	43.38nm			5.5mb		STK	79.09	192	eP	03	27.20	-0.6	PGD	84.39	335	Pd	03	57.00	1.3
SBB	63.72	67	eP	01	56.00	0.0		1.3s	9.00nm			4.6mb		MME	84.40	335	P	03	56.70	0.9
SUF	63.82	337	eP	01	55.00	-1.2	GRF	79.22	337	iPc	03	28.80	0.3	RSP	84.45	338	P	03	58.37	2.4
	0.5s	8.00nm			5.1mb			1.1s	21.00nm			5.1mb		CRE	84.55	334	P	03	56.00	-0.4
PAS	63.84	67	eP	01	50.00	-6.8X	Z	20s	0.30um			4 6Msz		BDI	84.55	335	P	03	57.80	1.4
MWC	63.87	67	eP	01	57.00	-0.2				e	03	35.70	22km	MAF	84.57	341	eP	03	57.30	0.9
GSC	63.97	65	iP+	01	58.00	0.3	WET	79.27	336	eP	03	29.10	0.4		1.1s	22.00nm			5.3mb	
DAU	64.06	58	P	01	59.00	0.4	ENN	79.53	341	eP	03	30.00	-0.1	PLDF	84.57	341	P	04	04.31	7.8X
RVR	64.45	67	eP	02	00.00	-0.7		1.0s	63.00nm			5.6mb		TCF	84.58	342	eP	03	57.00	0.5
PEC	64.65	67	P	02	01.80	-0.3				i	03	37.70	25km		1.0s	8.00nm			4.9mb	
FRB	64.67	20	eP	02	00.00	-1.7				i	03	45.30		AGO	84.60	341	P	04	04.66	8.1X
PLM	65.19	67	eP	02	05.00	-0.8	MEM	79.66	341	P	03	30.50	-0.2	PCP	84.68	337	P	03	57.03	0.0
TPC	65.21	66	eP	02	05.00	-0.8				i	03	38.10	24km	BNI	84.70	338	Pd	03	58.40	1.2
PSI	65.56	246	ePc	02	16.00	8.0X	KMR	79.89	335	iP+	03	39.40	7.3X	LSF	84.76	342	eP	03	57.60	0.3
NSS	65.61	344	eP	02	06.38	-1.3	BBTK	79.92	319	iPd	03	33.00	0.5		1.2s	28.25nm			5.4mb	
BAR	65.75	68	eP	02	09.00	-0.1	SNF	80.14	342	iP	03	41.21	7.9X	MFF	84.77	343	eP	03	57.90	0.6
NUR	66.04	336	eP	02	09.00	-1.5	JMB	80.41	324	eP	03	42.00	7.1X		1.0s	10.00nm			5.0mb	
	0.9s	33.80nm			5.5mb		DOU	80.46	341	P	03	35.60	0.6	RRL	84.79	338	P	03	58.88	1.1
GLA	66.67	66	eP	02	15.00	-0.1				e	03	43.00	24km	CKI	84.86	337	Pd	03	58.00	0.2
OUE	67.81	291	eP	02	22.40	-0.1	VAL	81.10	351	iP	03	38.90	0.6	PII	84.88	335	P	04	01.50	3.6X
GOL	67.92	55	P	02	23.50	0.3	PTJ	81.27	333	iP	03	39.20	-0.3	PYM	84.92	341	P	04	06.05	7.9X
	1.1s	32.05nm			5.4mb		PGB	81.30	326	eP	03	46.00	6.3X	FIN	85.08	337	P	03	58.06	-0.9
AKU	67.96	357	iP	02	31.00	8.4X	ZAG	81.33	333	eP	03	36.50	-3.2X	ROB	85.09	337	P	03	58.78	-0.3
	0.9s	26.89nm			5.4mb		KDZ	81.57	325	iPc	03	30.00	-11.0X	PZZ	85.10	338	P	03	58.57	-0.6
		i	02	40.30	30km		LJU	81.58	334	e(P)	03	48.00	7.0X	SURF	85.19	338	P	04	00.84	1.1
GLD	67.97	55	P	02	24.30	0.9	FVI	81.61	335	P	03	42.00	0.9	AOU	85.26	333	P	03	59.80	-0.1
	1.2s	50.51nm			5.5mb		VTS	81.63	326	iPd	03	41.00	-0.5	ENR	85.27	338	P	03	58.88	-1.1
MOL	68.22	345	eP	02	29.23	4.9X	SLE	81.71	338	ePd	03	41.70	0.0	STV	85.28	338	P	03	58.78	-1.3
UPP	68.47	339	eP	02	24.90	-1.0	VOY	81.79	334	e(P)	03	42.50	0.3	LBL	85.35	341	P	04	08.31	8.1X
WB5	68.84	201	iP	02	27.20	-1.4				e	03	48.60	19km	IMI	85.44	337	P	04	00.52	-0.3
		e	03	00.00	134kmX		RZN	81.81	325	iPd	03	43.00	0.5	MNS	85.46	333	Pd	04	00.00	-0.9
NB2	68.90	342	P	02	26.60	-2.0	VBY	81.84	333	e(P)	03	50.00	7.7X	DUI	85.54	332	P	04	02.00	0.6
	0.9s	23.30nm			5.3mb		OGA	81.86	336	eP	03	43.90	1.2	AZI	85.58	333	P	04	01.50	0.1
WRA	68.91	201	Pd	02	28.10	-0.9				i	03	50.90	22km	SBF	85.61	337	eP	04	01.80	0.1
	0.9s	26.70nm			5.4mb		CEY	81.89	334	e(P)	03	42.50	-0.1		1.0s	18.00nm			5.3mb	

```
SDI     85.71 332 P      04 01.80   -0.4
RDP     86.01 333 P      04 01.00   -2.7
RFI     86.02 332 P      04 04.92    1.3
        1.7s    975.90nm          6.8mb X
FRF     86.09 338 eP     04 05.30    1.3
        1.2s     17.85nm           5.2mb
SGO     86.25 331 P      04 05.00    0.2
LRG     86.27 338 eP     04 05.50    0.7
        1.0s      2.00nm           4.3mb
ORI     86.30 330 P      04 06.00    0.9
LMR     86.34 338 eP     04 05.80    0.6
        1.2s     29.75nm           5.4mb
PGF     86.40 336 eP     04 05.80    0.1
        1.0s     12.00nm           5.1mb
MGR     86.55 330 P      04 06.00   -0.3
TDS     86.70 330 P      04 07.00    0.0
GRI     87.42 329 P      04 26.97   16.4X
        1.1s     76.70nm
SOI     88.22 329 P      04 13.90   -0.4
TOL     92.00 344 eP     04 40.00    7.9X
PTZ    123.53 286 ePKP   10 28.00    6.7X
                  i      10 36.60
TIC    124.24 336 PKP    10 30.80    8.1X
KIC    124.43 336 PKP    10 31.00    7.9X
LIC    124.64 336 PKP    10 31.40    8.0X
LSZ    126.36 288 iPKPd  10 35.50    8.6X
BUL    129.54 283 iPKPd  10 30.90   -1.9
        0.8s      4.10nm
                  ipP    10 39.30
                  i      13 11.90
ZOBO   132.96   65 PKP    10 40.00    0.0
     Z  24s       0.09um           4.4MszX
                  LR     55 56.00
LPB    133.17   65 PKP    10 41.00    0.8
CNCB   133.45   65 PKP    10 41.70    0.8
SLR    133.53 278 ePKP   10 38.00   -2.3X
        0.9s     19.33nm
                  i      10 47.00
SIV    136.99   57 PKP    10 46.00   -0.9
                  i      10 55.60
MDZ    143.76   84 ePKP   10 55.40   -3.3X
PPD    147.29   51 ePKP   11 04.20   -0.6
                  e      11 06.50
                  e      11 13.90
JFO    150.89   38 ePKP   11 24.00   13.6X
AIA    151.65 145 ePKP   11 15.60    5.5X
     S.D. = 0.8  on 181 of 227 obs.
-------------------------------------
   SEP  10, 1990  05h 25m 21.42± 1.28s
    3.853 N ± 6.4km   73.945 W ±12.7km
    DEPTH =  31.3 ±  7.9 km
    4.4mb (  7 obs.)
 COLOMBIA                          (103)
      Felt at Villovicencio.

BOG      0.77 351 iPc    25 36.50    0.2
                 iS      25 49.00
BMG      3.31  15 eP     26 18.00    5.6X
PSO      4.29 232 eP     26 25.50   -1.0
CAYA     5.51 227 eP     26 42.50   -1.4
YANA     6.08 230 eP     26 52.50    0.5
                 eS      28 23.00
OUR      6.08 229 eP     26 54.30    2.3
OTO      6.10 229 eP     26 50.20   -2.1
GGP      6.13 229 eP     26 54.00    1.1
VC1      6.30 225 eP     26 55.00   -0.2
ZOBO    20.80 164 Pc     29 46.30  -17.2X
                 i      34 57.00
                 i      36 04.00
LPB     21.06 164 Pd     29 44.80  -21.1X
        1.1s    101.27nm
CNCB    21.36 164 P      29 41.40  -27.7X
                 i      30 13.00
CCH     22.46 160 P      29 50.30  -29.5X
SIV     23.47 147 P      30 28.80   -0.6
                 i      36 29.00
TUL     37.74 330 eP     32 36.50    0.3
        1.0s     6.30nm           4.4mb
SIO     37.87 330 e(P)   32 36.90   -0.4
ANMO    43.18 320 P      33 22.40    1.0
        1.0s     4.38nm           4.2mb
GLD     45.58 326 P      33 41.40    0.8
        1.2s     32.83nm          5.1mb
GOL     45.63 326 P      33 41.20    0.1
        0.8s     7.07nm           4.6mb
MSU     48.98 320 P      34 07.80    0.4
DAU     49.53 323 P      34 12.00    0.3

BW06    50.03 326 P      34 13.90   -1.5
        0.8s     2.14nm           4.2mb
DUG     50.36 321 P      34 17.90    0.0
SCH     51.14   5 eP     34 24.00    0.6
IMW     51.52 326 P      34 26.00   -0.8
BCH     52.80 312 P      34 41.00    4.6X
KVN     53.18 317 P      34 39.10   -0.1
LRM     53.58 327 eP     34 42.00    0.0
LON     59.42 324 P      35 22.90   -0.6
PNT     59.55 327 eP     35 23.00   -1.4
        0.4s     2.00nm           4.6mb
YKA     65.76 341 eP     36 04.50   -0.8
        0.4s     0.90nm           4.2mb
WRA    148.13 238 PKPc   45 04.90    1.6
        0.4s     2.20nm
WB5    148.13 238 ePKP   45 05.50    2.2X
     S.D. = 1.1  on  26 of  33 obs.
-------------------------------------
&  SEP  10, 1990  06h 53m 04.50s
    35.977 N          120.580 W
    DEPTH =   4.0km
 CENTRAL CALIFORNIA                ( 39)
      <BRK>. ML 3.3 (BRK).

PRI      0.18 337 iPc    53 08.50    0.3
PHAM     0.20 134 iPd    53 08.90    0.3
PKEM     0.39  77 iPc    53 13.50    1.2
LLA      0.70 335 ePd    53 18.20   -0.3
PRS      0.73 299 iPc    53 18.20   -0.9
BCH      0.89 153 iPd    53 21.30   -0.9
FRI      1.23  34 ePd    53 26.30   -1.7
                 eS      53 43.80
BLP      1.42 174 eP     53 29.50   -1.6
GCC      1.55 313 eP     53 31.00   -1.9
ABL      1.58 135 eP     53 32.00   -1.6
MHC      1.61 328 eP     53 30.60   -3.3
CMB      2.06   4 eP     53 40.20   -0.2
                 eS      54 05.20
PCC      2.10 317 ePc    53 42.80    2.0
BKS      2.31 326 ePc    53 43.80   -0.2
KVN      3.65  32 eP     54 04.00    0.9
     15 obs. associated
-------------------------------------
&  SEP  10, 1990  06h 56m 40.30s
    40.495 N          125.268 W
    DEPTH =   5.0km
 OFF COAST OF NORTHERN CALIFORNIA( 34)
      <BRK>. ML 2.6 (BRK).

FHC      1.02  72 ePc    56 59.20   -0.9
                 e(S)    57 12.40
WDC      2.08  87 eP     57 13.70   -2.6
LBFM     2.70  71 eP     57 24.00   -1.3
MIN      2.80  92 eP     57 24.00   -2.8
     4 obs. associated
-------------------------------------
?  SEP  10, 1990  07h 02m 17.65± 1.24s
    16.440 N ± 7.9km  120.395 E ±16.6km
    DEPTH =  10.0km  (geophysicist)
 LUZON, PHILIPPINE ISLANDS         (249)

BAG      0.18  99 iPc+   02 22.00    0.2
SZP      1.11   3 ePd    02 38.00   -0.4
                 iS      03 10.00
CVP      1.86  47 iPd    02 54.00    4.3X
                 iS      03 14.00
PIP      1.89   6 iPc    02 50.60    0.4
        0.9s   402.00nm
OCP      1.91 160 eP     02 49.00   -1.5
PGP      2.97 169 eP     03 07.00    1.3
     S.D. = 1.5  on   5 of   6 obs.
-------------------------------------
*  SEP  10, 1990  07h 16m 11.13± 3.84s
    44.318 N ±11.0km    7.584 E ±31.0km
    DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)
      ML 2.6 (LDG).

DOI      0.31 307 Pc     16 17.30   -0.2
                 eSg     16 21.90
AUTN     0.34 199 Pg     16 17.75   -0.5
                 Sg      16 21.96
TOUF     0.39 219 Pg     16 18.12   -1.0
                 Sg      16 22.72
SBF      0.47 193 Pg     16 21.20    0.5
                 Sg      16 26.90
AURF     0.47 203 Pg     16 20.09   -0.6
                 Sg      16 26.07
FRF      1.02 222 Pg     16 31.50    1.2
                 Sg      16 44.40
LRG      1.24 226 Pg     16 34.70    0.6
                 Sg      16 52.30
LMR      1.25 219 Pg     16 34.50    0.1
                 Sg      16 50.20
     S.D. = 0.9  on   8 of   8 obs.
-------------------------------------
%  SEP  10, 1990  07h 28m 59.44± 0.94s
    42.275 N ± 8.0km   19.552 E ± 6.8km
    DEPTH =  10.0km  (geophysicist)
 YUGOSLAVIA                        (383)
      ML 2.4 (TTG).

TTG      0.27 306 iPgc   29 05.50    0.5
                 iSg     29 10.50
ULC      0.38 216 ePg    29 07.50    0.2
                 eSg     29 14.00
PVY      0.45  44 ePg    29 08.50   -0.1
                 eSg     29 16.00
BDV      0.54 271 ePg    29 10.20   -0.1
                 eSg     29 19.50
IVA      0.65  23 ePg    29 12.50    0.0
                 eSg     29 22.30
HCY      0.80 283 ePg    29 14.50   -0.5
                 eSg     29 27.00
     S.D. = 0.4  on   6 of   6 obs.
-------------------------------------
   SEP  10, 1990  07h 30m 07.60± 0.17s
   52.301 N ± 6.1km  178.692 W ± 2.9km
   DEPTH = 143.3km  (  3 depth phases)
   5.2mb ( 28 obs.)
 ANDREANOF ISLANDS, ALEUTIAN IS. (  7)
      Felt (IV) on Adak.
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 11S, 20C
      Centroid Location:
      Origin Time          07:30: 8.4 1.1
      Lat 52.36N 0.15 Lon 178.62W 0.12
      Dep 142.1 3.7 Half-duration  1.5
      Moment Tensor;    Scale 10**16 Nm
        Mrr=-0.99 0.53  Mtt=-3.79 0.98
        Mff= 4.78 0.76  Mrt= 3.87 0.61
        Mrf=-2.97 0.46  Mtf= 1.84 0.59
       Principal Axes:
        T  Val=  6.04  Plg=22  Azm= 92
        N        1.32      46      337
        P       -7.36      36      199
      Best Double Couple:Mo=6.7*10**16
       NP1:Strike=230 Dip=47 Slip= -12
       NP2:        328     81      -136

ADK      1.31 108 iPd    30 34.60   -0.3
SMY      4.42 278 eP     31 15.20    1.2
SDN     11.17  67 eP     32 43.10   -1.0
SVW     15.36  46 iPc    33 40.90    3.2X
KDC     15.92  60 eP     33 43.00   -1.6
TTA     16.05  40 ePc    33 49.70    3.4X
PMS     18.16  49 eP     34 09.70   -1.7
PMR     18.45  48 eP     34 12.70   -1.8
        0.5s    71.70nm           5.2mb
IMA     18.63  33 iPc    34 18.30    1.8
TOA     19.94  48 ePc    34 30.70    0.7
FBA     20.18  39 eP     34 32.60    0.3
DWY     23.37  45 Pc     35 04.90    1.2
INK     26.67  36 eP     35 34.50    0.2
        1.1s    75.00nm           5.2mb
                pP      36 07.00  157kmX
OFUJ    30.28 260 P      36 06.90    0.1
KAKJ    33.05 257 P      36 30.90   -0.1
NIIJ    33.07 260 iPd    36 31.60    0.4
CHJJ    33.86 258 P      36 38.30    0.3
MAT     34.01 260 iPd    36 39.60    0.3
MTMJ    34.22 260 P      36 41.40    0.2
YKA     34.55  47 eP     36 43.40   -0.2
        0.4s    18.90nm           5.2mb
PGC     34.62  74 eP     36 46.00    1.7
IIDJ    34.89 259 eP     36 47.80    0.9
GMW     35.54  75 eP     36 52.70    0.6
                iScP    42 48.30
BMW     35.80  77 eP     36 55.20    0.8
                iScP    42 49.40
TSRJ    36.02 260 iPd    36 56.70    0.4
RMW     36.16  74 iPc    36 57.80    0.3
                iScP    42 50.20
```

10d 07h

LON	36.51	75 eP	37 00.50	0.1		
		iScP	42 51.00			
PNT	36.55	70 eP	37 00.00	-0.7		
	0.6s	12.00nm		4.8mb		
VGB	37.76	77 eP	37 10.70	-0.2		
EDM	38.31	62 iPc	37 14.40	-1.0		
	0.5s	61.00nm		5.6mb		
FHC	38.46	85 ePc	37 18.70	2.0		
		eScP	42 57.80			
NEW	38.51	71 iPc	37 16.60	-0.5		
	0.8s	28.13nm		5.1mb		
		iScP	42 58.40			
LBFM	39.42	83 iPc	37 26.40	1.5		
WDC	39.47	84 iPc	37 26.50	1.4		
		eScP	43 02.90			
MIN	40.18	84 iPc	37 31.80	0.7		
		eScP	43 05.20			
NWRM	40.55	87 eP	37 34.60	0.7		
ORV	40.73	85 ePc	37 35.80	0.4		
		eScP	43 07.50			
SES	40.90	65 ePc	37 36.00	-0.7		
BRK	41.31	87 ePc	37 40.90	0.8		
		eScP	43 10.40			
BKS	41.32	87 iPc	37 41.00	0.8		
	0.6s	142.00nm		5.8mb		
		iScP	43 10.80			
		eS	43 46.40			
		eSS	47 17.20			
PCC	41.47	88 iPc	37 41.90	0.5		
GCC	42.00	88 ePc	37 46.20	0.4		
MHC	42.02	88 ePc	37 46.80	0.6		
		eScP	43 13.60			
ARN	42.08	87 eP	37 47.20	0.6		
CMB	42.35	86 iPc	37 49.80	1.0		
		eScP	43 14.20			
LRM	42.51	71 eP	37 49.20	-1.0		
SAO	42.51	88 ePc	37 50.40	0.4		
PRS	42.84	88 iPc	37 53.40	0.8		
		eScP	43 16.50			
LLA	42.92	88 iPc	37 54.30	1.0		
		eScP	43 17.10			
KVN	43.11	83 iPc	37 55.80	0.7		
PRI	43.39	88 ePc	37 58.40	1.1		
		e	38 56.70	282kmX		
		eScP	43 19.50			
FRI	43.43	86 ePc	37 58.00	0.6		
		e	38 55.30	276kmX		
		eScP	43 18.40			
FFC	43.55	55 eP	37 57.00	-1.2		
	0.6s	9.00nm		4.6mb		
PHAM	43.76	88 eP	38 00.60	0.5		
PKEM	43.79	88 eP	38 01.70	1.4		
PTI	44.25	75 eP	38 04.80	0.6		
BCH	44.38	89 eP	38 05.70	0.5		
IMW	44.49	73 eP	38 05.80	-0.4		
BLP	44.60	90 eP	38 07.00	0.2		
SYP	44.88	89 eP	38 10.00	0.8		
ISA	45.05	87 iP+	38 10.00	-0.5		
ABL	45.13	88 eP	38 11.60	0.3		
BJI	45.25	281 eP	38 12.50	0.6		
	1.0s	36.00nm		5.0mb		
CLC	45.49	86 eP	38 14.00	0.1		
DUG	45.61	78 iPc	38 15.20	0.3		
		iScP	43 27.90			
BW06	45.97	73 iPc	38 17.20	-0.6		
	0.5s	19.94nm		5.0mb		
		ipP	38 48.30	137km		
		iScP	43 28.00			
SBB	46.09	88 iP+	38 19.00	0.3		
PAS	46.24	88 eP	38 19.00	-0.8		
MWC	46.26	88 iP+	38 20.00	-0.2		
GSC	46.31	86 iP+	38 21.00	0.5		
		e	39 16.00	260kmX		
GSC	46.31	86 eP	38 21.50	1.0		
DAU	46.40	77 iPc	38 21.50	0.1		
		iScP	43 31.00			
RVR	46.84	88 eP	38 23.00	-1.5		
PEC	47.04	88 eP	38 25.70	-0.4		
MSU	47.05	79 iPc	38 27.00	0.6		
		iScP	43 34.40			
TPC	47.57	87 iP+	38 30.00	-0.3		
PLM	47.58	88 iP+	38 30.00	-0.6		
SSE	48.08	268 iPc	38 35.00	0.8		
	1.0s	87.00nm		5.5mb		
PJG	48.35	231 eP	38 33.40	-2.9		
GUMO	48.35	231 eP	38 33.60	-2.7		
	0.7s	68.61nm		5.5mb		
GUA	48.37	231 eP	38 33.80	-2.7		
	0.7s	115.07nm		5.7mb		
GLA	49.04	87 iP+	38 41.00	-0.6		
		e	39 40.00	277kmX		
GOL	50.35	74 eP	38 51.00	-0.8		
	0.5s	14.40nm		5.0mb		
		epP	39 23.40	141km		
GLD	50.41	74 iP	38 52.10	0.0		
	1.6s	120.37nm		5.4mb		
		eScP	43 48.10			
FRB	52.21	32 ePc	39 04.50	-0.6		
ANMO	52.85	79 eP	39 10.00	-0.4		
	1.0s	43.75nm		5.3mb		
LZH	55.20	286 Pd	39 28.00	0.5		
	Z 20s	0.90um		4.8Msz		
KEV	56.82	350 eP	39 51.00	12.5X		
		e	40 18.00	111kmX		
MEO	57.65	74 eP	39 43.40	-1.4		
SIO	58.32	71 e(P)	39 48.00	-1.4		
TUL	58.50	71 ePc	39 48.30	-2.4		
	1.0s	10.00nm		4.7mb		
		e	40 07.80	76kmX		
SOD	59.14	349 eP	39 53.00	-1.7		
		e	40 14.00	83kmX		
		i	40 28.80			
SCH	59.27	39 eP	39 54.00	-1.8		
		pP	40 30.00	153km		
FVM	60.11	66 eP	39 59.40	-2.2		
ELC	61.27	65 eP	40 07.30	-2.2		
SUF	63.66	348 eP	40 26.00	1.1		
KMI	63.67	278 Pd	40 25.50	-0.3		
	1.5s	80.00nm		5.4mb		
GBTN	65.23	63 eP	40 33.90	-1.5		
NUR	65.99	348 eP	40 37.00	-2.9X		
		e	41 20.00	182kmX		
BLA	66.13	60 eP	40 39.90	-1.3		
NB2	66.73	355 P	40 45.10	0.4		
	0.6s	2.60nm		4.3mb		
LHS	67.97	62 eP	40 51.70	-1.0		
SHL	69.86	286 iP	41 04.00	-0.7		
LOE	70.08	273 eP	41 14.00	8.1X		
CHG	70.71	276 ePd	41 09.30	-0.4		
	1.0s	30.25nm		5.1mb		
CHTO	70.71	276 iP	41 09.30	-0.4		
	0.9s	23.87nm		5.0mb		
BDT	71.87	275 eP	41 13.30	-3.3X		
	0.8s	45.50nm		5.3mb		
EKA	72.67	3 Pc	41 22.40	1.7		
	0.7s	3.20nm		4.2mb X		
NNT	75.00	271 iPd	41 34.50	-0.3		
DZM	75.18	194 iPc	41 35.90	0.3		
MTN	77.92	230 iPd	41 50.60	-0.3		
	0.4s	297.00nm		6.4mb X		
SNG	78.67	267 eP	41 55.80	0.7		
VRI	79.80	342 iPd	42 01.50	0.7		
QUE	79.89	307 eP	42 02.30	0.6		
IPM	80.45	265 ePd	42 06.00	1.4		
	0.9s	59.50nm		5.3mb		
CMP	80.69	343 ePc	42 09.00	3.5X		
WB5	82.66	224 eP	42 14.80	-1.1		
WRA	82.72	224 Pc	42 15.70	-0.5		
	0.7s	17.30nm		5.0mb		
BRS	83.19	205 iPc	42 18.50	0.0		
PSI	83.21	266 ePd	42 19.20	0.3		
TRT	83.32	248 iPd	42 19.10	-0.3		
	0.7s	86.30nm		5.7mb		
SFI	83.73	352 P	42 23.50	2.4		
MNS	85.18	352 P	42 29.00	0.5		
POO	85.72	295 eP	42 35.50	4.0X		
ASPA	86.21	223 iPd	42 33.70	0.1		
	0.8s	30.00nm		5.2mb		
COO	86.45	205 iPc	42 36.10	1.4		
MGR	87.11	349 P	42 38.00	0.1		
GBA	87.63	289 P	42 39.00	-1.7		
MBL	90.54	235 iPd	42 53.70	-0.5		
	0.4s	13.00nm		5.4mb		
STK	90.74	213 iPd	42 55.30	0.5		
	0.6s	20.00nm		5.4mb		
WARB	91.56	227 eP	42 59.10	0.3		
CAN	91.71	206 eP	42 59.90	0.7		
SPA	142.11	180 ePKP	49 16.10	-6.8X		
	0.8s	17.50nm				
AIA	145.36	138 ePKP	49 29.50	1.3		
MAW	147.25	219 iPKPd	49 33.90	2.6X		
	1.0s	105.00nm				
PRY	147.95	312 iPKPd	49 45.70	11.8X		
	0.6s	4.29nm				

S.D. = 1.0 on 125 of 136 obs.

SEP 10, 1990 08h 27m 31.13± 0.33s
16.430 N ± 6.0km 120.069 E ± 5.6km
DEPTH = 10.0km (geophysicist)
5.0mb (12 obs.) 4.8Msz (2 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	0.49	92 iPc+	27 39.00	-2.1		
CVP	2.10	53 eP	28 09.00	2.2		
		eS	28 33.00			
PGP	3.03	164 ePd	28 21.80	1.8		
		eS	28 54.00			
PPR	6.74	191 iPd	29 11.00	-1.6		
PLP	7.08	137 eP	29 17.00	-0.3		
ANP	8.82	9 eP	30 12.00	30.3X		
		eS	32 44.00			
CGP	9.12	150 eP	29 47.50	1.7		
DAV	10.73	149 eP	30 10.00	2.0		
SSE	14.64	4 eP	31 02.00	1.9		
	6.0s	0.80nm		2.5mb X		
Z	20s	1.40um		4.1Msz		
N	13s	0.70um				
E	14s	1.80um				
		esP	31 19.50			
		eS	33 54.00			
		esS	34 08.00			
		SS	34 18.00			
KMI	18.35	301 P+	31 51.00	3.2X		
	4.0s	1.90nm		2.6mb X		
KMI	18.35	301 Pd	31 53.50	5.7X		
Z	17s	6.80um				
N	10s	1.30um				
E	11s	1.90um				
NNT	20.05	262 eP	32 04.00	-3.4X		
BDT	20.18	275 eP	32 07.00	-1.7		
SNG	21.13	246 eP	32 19.40	0.8		
TSRJ	23.74	34 P	32 44.60	0.3		
BJI	23.77	353 eP	32 46.00	1.5		
	1.5s	131.00nm		5.3mb		
Z	16s	1.75um		4.6MszX		
E	14s	1.44um				
		eS	37 09.00			
GUMO	24.11	93 eP	32 49.10	1.0		
	1.1s	94.23nm		5.3mb		
PJG	24.11	93 eP	32 48.80	0.7		
GUA	24.16	93 eP	32 48.30	-0.3		
LZH	24.32	327 P	32 52.00	1.8		
	1.3s	133.00nm		5.4mb		
Z	17s	4.70um		5.0MszX		
N	11s	2.30um				
E	12s	2.80um				
		pP	33 02.00	37kmX		
		sP	33 08.00			
		PPP	33 43.00			
		eS	37 09.00			
		sS	37 25.00			
		SS	38 07.00			
PSI	24.88	239 ePd	32 55.70	0.2		
TRT	25.08	198 ePc	32 36.60	-20.8X		
MTMJ	25.51	35 P	33 02.40	1.0		
MAT	25.70	35 eP	33 03.00	-0.1		
	0.7s	10.27nm		4.6mb		
		eS	37 40.00			
CHJJ	25.79	37 P	33 01.20	-2.8X		
KAKJ	26.59	38 eP	33 07.00	-4.4X		
SHL	27.79	294 eP	33 22.00	-0.7		
		eS	38 18.00			
OFUJ	29.43	36 eP	33 35.80	-1.2		
GUN	33.55	296 P	34 14.70	0.8		
PKI	33.89	295 P	34 17.60	0.8		
KKN	34.04	295 P	34 18.40	0.4		
DMN	34.16	295 P	34 19.60	0.6		
GKN	34.64	296 P	34 22.40	-0.7		
MBL	37.36	180 eP	34 42.00	-3.8X		
	0.4s	2.00nm		4.2mb		
WB5	38.72	158 eP	34 52.10	-5.2X		
WRA	38.77	158 Pc	34 53.20	-4.5X		
	0.7s	3.00nm		4.1mb		
GBA	41.22	272 P	35 19.00	1.0		
ASPA	42.08	161 iPd	35 22.40	-2.6		
	0.7s	6.00nm		4.4mb		
Z	21s	0.95um		4.6Msz		
		LR	53 50.00			
QUE	50.26	296 eP	36 33.00	3.0X		
TTA	72.76	28 eP	39 01.00	-0.3		
IMA	73.61	25 eP	39 05.80	-0.5		

	0.8s	15.40nm		5 1mb		
KDC	74.92	34 eP	39	15.20	1.4	
KEV	75.78	339 eP	39	17.00	-1.6	
PMR	76.09	30 eP	39	18.10	-2.3	
FBA	76.17	26 eP	39	19.40	-1.5	
SOD	76.30	337 iP	39	16.80	-4.8X	
		i	39	22.60		
ATZ	77.00	301 eP	39	27.00	0.7	
JVI	77 11	300 eP	39	28.00	1.2	
SUF	77.34	332 eP	39	26.00	-1.4	
TOA	77 38	29 eP	39	28.00	0.2	
RMN	78.01	298 eP	39	33.00	1.2	
NUR	78.50	330 eP	39	37.00	3.2X	
VRI	80.68	315 iPc	39	43.50	-2.4	
INK	80 79	21 eP	39	44.00	-2.0	
MLR	81.30	315 eP	39	50.00	0.6	
KRA	83.91	320 eP	40	01.40	-1.1	
		e	40	03.60		
NB2	84.57	332 P	40	03.70	-2.0	
	1.3s	23.10nm		5.2mb		
SKO	85.42	312 iP	40	07.20	-3.1X	
OHR	86.14	312 eP	40	11.50	-2.5	
ZST	86.28	319 eP	40	15.40	0.9	
PRU	87.20	321 eP	40	19.00	0.1	
	1.5s	22.30nm		5.2mb		
Z	18s	0.60um		5.0Msz		
N	18s	0.30um				
E	18s	0.50um				
BRG	87.21	322 iP	40	18.80	-0.1	
	1.2s	13.00nm		5.1mb		
CLL	87.59	323 eP	40	23.00	2.3	
GRF	89.29	322 e(P)	40	44.00	15.1X	
YKA	90.50	22 eP	40	33.90	-0.4	
	1.2s	5.50nm		4.7mb		
ZOBO	172.13	90 PKP	47	43 00	0.5	
		e	49	08.00		
LPB	172.16	92 PKP	47	42.00	-0.3	
CNCB	172.27	94 ePKP	47	47 00	4.5X	
CCH	173.98	100 (PKP)	47	49.00	6.2X	
S.D. = 1.4		on 52 of 69 obs.				

SEP 10, 1990 08h 28m 35.83± 0.47s
45.842 N ± 4.1km 26.611 E ± 5.5km
DEPTH = 110.8 ± 7.1 km
3.4mb (1 obs.)
ROMANIA (358)
Felt (III) in the Vroncea region.

VRI	0.08	71 iPc	28	49.00	-1.6
BRD	0 45	136 iPc	28	55.00	2.3
MLR	0.59	233 iPd	28	52.50	-1.3
ISR	0.71	184 iPd	28	54.00	-0.6
PTT	1 10	352 iPd	28	59.00	0.5
CMP	1.25	243 iPc	29	04.00	3.9X
CFR	1.27	121 iPd	29	00.00	-0.3
IAS	1.50	26 iPd	29	07.00	3.9X
BUC1	1.55	196 ePd	29	20.00	16.3X
TLB	1 61	141 iPd	29	54.50	50.2X
TNR	1 65	264 iPc	29	04.00	-0.9
COZ	1.68	253 iPd	29	05.50	0.1
DRA	2.03	236 eP	29	27.00	17.3X
PSN	2.43	152 iPd	29	16.00	1.0
DEV	2 59	272 iPc	29	18.50	1.4
PVL	2.78	200 iPd	29	20.00	0.4
BMR	2 82	312 iPd	29	22.00	1.9
JMB	3.38	180 iPd	29	27.00	-0.6
BZS	3.51	268 iPc	29	29.50	0.1
PGB	3.73	209 iPd	29	33.00	0.5
DIM	3.87	192 iP	29	35.00	0.6
VTS	4.07	218 iPc	29	37.00	-0.2
KDZ	4.28	192 iPc	29	40 00	0.0
RZN	4.37	199 iPc	29	41.00	-0.4
KKB	4.72	214 iPc	29	46.00	0.0
MMB	4.74	207 ePc	29	47.00	0.8
RDO	4.76	190 iPnc	29	46.30	-0.2
		eSn	30	36.20	
PSZ	5 05	297 eP	29	50.00	-0.6
GBZT	5 46	157 ePn	29	56.00	-0.1
		iSg	30	54.00	
BUD	5.47	290 eP	29	55.20	-1.1
KRA	6.15	316 ePd	30	05.70	0.1
		e	30	15.00	
PRK	6.60	182 ePn	30	06.50	-5.3X
KAS	6 85	128 eP	30	14.20	-1.1
NEO	6 99	202 ePn	29	46.50	-30.7X
		eSn	30	36.50	
KSP	8.50	310 eP	30	36.70	-0.9
		ic	30	46.30	
		e	40	12.80	
UPP	15.03	342 iP	32	03.60	0.3
NB2	17.70	335 P	32	36.20	-0.2
	0.8s	1.90nm		3.4mb	
S.D. = 1.0		on 30 of 37 obs.			

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* SEP 10, 1990 09h 20m 28.97± 3.00s
12.030 N ± 9.4km 59.467 W ±32.2km
DEPTH = 33.0km (normal)
WINDWARD ISLANDS (95)
MD 3.7 (TRN).

TPR	1.53	237 eP	20	54.15	-0.2
		eS	21	12.00	
SVB	2.13	306 eP	21	02.70	-0.3
		eS	21	27.26	
TRN	2.34	234 eP	21	05.82	-0.1
		eS	21	31.88	
SLW	2.44	324 eP	21	07.18	-0.2
TCE	2.60	240 eP	21	10.08	0.4
MVM	2.87	331 iPc	21	13.39	0.0
BIM	2.92	328 iPc	21	14.50	0.3
		S	21	47.00	
CRM	3.05	333 iPc	21	16.19	0.1
		S	21	50.30	
FDF	3.15	329 eP	21	18.00	0.6
	0.1s	15.00nm			
		S	21	52.90	
MDN	3.77	330 eP	21	25.35	-0.8
BBL	3.98	331 eP	21	29.62	0.3
DOG	4.49	333 eP	21	36.76	0.2
PAG	4.52	332 eP	21	37.57	0.6
		S	22	27.00	
SFG	4.52	338 eP	21	36.10	-0.8
SEG	4.77	336 eP	21	40.54	0.1
WRA	164.58	238 PKP	40	50.00	18.9X
	0.7s	0.90nm			
S.D. = 0.5		on 15 of 16 obs.			

& SEP 10, 1990 09h 27m 47.50s
38.802 N 122.782 W
DEPTH = 3.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.5 (BRK).
Mo=4.2*10**14 Nm (BRK).

NWRM	0.35	194 eP	27	54.90	0.3
ZSP	0.95	154 eP	28	05.50	-0.7
BRK	1.01	156 eP	28	07.00	-0.3
		eS	28	21.20	
ORV	1.25	53 eP	28	10.10	-1.2
PCC	1.34	166 eP	28	10.90	-1.9
MHC	1.71	148 e(P)	28	16.30	-2.2
ARN	1.75	145 eP	28	17.30	-1.7
WDC	1.79	6 eP	28	18.70	-0.7
MIN	1.79	30 eP	28	18.80	-0.8
GCC	1.87	160 eP	28	18.10	-2.6
CMB	2.03	111 eP	28	21.90	-1.2
SAO	2.29	152 eP	28	24.40	-2.4
FRI	3.03	126 e(P)	28	35.60	-1.6
KVN	3.66	85 eP	28	44.50	-1.9
14 obs. ossociated					

SEP 10, 1990 09h 45m 10.57± 1.36s
46.779 N ± 5.6km 2.026 W ±12.2km
DEPTH = 12.6 ± 3.1 km
BAY OF BISCAY (539)
ML 3.3 (LDG).

MFF	1.31	97 Pn	45	35.50	1.0
		Pg	45	36.80	
		Sg	45	52.90	
LPF	1.42	28 Pn	45	36.20	0.1
		Pg	45	38.50	
		Sg	45	56.10	
GRR	1.79	26 Pn	45	41.90	0.5
		Pg	45	45.00	
		Sg	46	07.00	
LDF	2.23	35 Pn	45	48.00	0.3
		Pg	45	52.10	
		Sg	46	19.50	
FLN	2.24	27 Pn	45	47.80	-0.1
		Pg	45	52.30	
		Sg	46	21.00	
LSF	2.51	101 Pg	45	58.40	6.6X
		Sg	46	30.60	
LFF	2.67	133 Pg	46	02.50	8.5X
		Sg	46	37.50	
RJF	2.87	120 Pn	45	57.60	0.7
		Pg	46	05.20	
		Sg	46	41.40	
TCF	2.97	98 Pn	45	58.60	0.4
		Pg	46	07.70	
		Sn	46	31.60	
		Sg	46	44.50	
LPO	3.08	132 Pg	46	09.40	9.7X
		Sg	46	49.10	
MAF	3.22	98 Pn	46	02.20	0.3
		Pg	46	12.40	
		Sn	46	38.30	
		Sg	46	52.40	
BGF	3.36	92 Pn	46	03.20	-0.7
		Pg	46	15.40	
		Sn	46	40.10	
		Sg	46	56.20	
CAF	3.41	121 Pn	46	04.90	0.4
		Pg	46	16.40	
		Sn	46	43.40	
		Sg	46	59.60	
AVF	3.70	88 Pn	46	08.10	-0.5
		Sn	46	48.30	
		Sg	47	06.80	
SSF	3.80	84 Pn	46	09.40	-0.7
		Pg	46	22.90	
		Sn	46	50.60	
		Sg	47	11.00	
SMF	4.04	90 Pn	46	13.40	0.0
		Sn	46	57.50	
		Sg	47	17.60	
LOR	4.05	81 Pn	46	13.20	-0.5
		Pg	46	28.00	
		Sn	46	58.40	
		Sg	47	19.00	
EPF	4.11	155 Pn	46	14.00	-0.4
		Pg	46	28.60	
		Sn	47	00.20	
		Sg	47	21.60	
LBF	4.12	85 Pn	46	14.30	-0.4
		Pg	46	28.60	
		Sn	46	59.80	
		Sg	47	19.00	
S.D. = 0.6		an 16 af 19 obs.			

& SEP 10, 1990 10h 06m 28.42s
60.115 N 153.565 W
DEPTH = 160.6km
SOUTHERN ALASKA (2)
<AGS-P>.

PDB	0.46	224 iP	06	49.89	0.5
		eS	07	06.25	
OPT	0.49	160 iP	06	50.47	-0.8
		eS	07	06.93	
RSO	0.53	49 iP	06	50.74	-0.9
RDT	0.74	51 iP	06	51.57	-1.1
AUH	0.76	175 eP	06	51.92	-0.8
AUE	0.76	173 iP	06	51.78	-0.9
		eS	07	08.83	
AUI	0.79	175 eP	06	51.84	-1.0
MCNL	1.01	203 iP	06	53.44	-1.1
HOM	1.07	114 eP	06	54.34	-0.7
		iS	07	13.96	
NNL	1.14	93 iP	06	55.27	-0.4
XLV	1.14	125 eP	06	54.53	-1.2
		eS	07	14.13	
CDD	1.19	182 iP	06	54.92	-1.2
		eS	07	15.95	
CKL	1.24	29 iP	06	56.09	-0.6
BGL	1.29	26 iP	06	56.76	-0.4
SPU	1.30	34 iP	06	56.25	-1.0
NKA	1.31	60 iP	06	57.55	0.3
CNPM	1.32	116 iP	06	56.20	-1.1
		eS	07	16.94	
CRP	1.35	30 iP	06	57.11	-0.7
BRLK	1.39	103 eP	06	57.19	-0.9
SVW	1.42	315 iPc	06	57.40	-1.0
NCG	1.47	28 iP	06	58.26	-0.6
SUA	1.94	44 iP	07	02.63	-1.3
		eS	07	29.98	
SEW	2.06	89 eP	07	03.46	-1.8
SKT	2.12	27 eP	07	04.92	-1.0
PMS	2.27	58 iPc	07	05.60	-2.2

10d 10h

PWA	2.37	48	iPc	07	06.80	-2.1
KDC	2.44	166	iPd	07	06.80	-2.9
PLRM	2.63	54	eP	07	09.06	-3.0
PMR	2.63	54	ePc	07	09.00	-3.0
CUT	2.80	33	iP	07	12.69	-1.4
GHO	2.81	52	iP	07	11.71	-2.7
SML	3.07	54	iP	07	14.77	-2.8
HUR	3.43	32	eP	07	20.59	-1.7
SCM	3.49	58	eP	07	20.38	-2.7
VZW	3.59	72	eP	07	21.35	-2.9
KTH	3.67	19	eP	07	23.70	-1.7
MID	3.72	98	eP	07	26.80	0.9
KLU	3.99	66	iP	07	26.81	-2.8
TOA	4.10	58	eP	07	29.10	-1.9
MCK	4.24	29	eP	07	31.30	-1.4
GLB	4.96	70	eP	07	39.91	-2.4
WRH	5.06	28	eP	07	41.12	-2.4
DDM	5.17	41	eP	07	44.61	-0.5
CCB	5.28	28	eP	07	44.00	-2.4
HDA	5.30	33	iP	07	44.72	-2.0
TGL	5.36	78	eP	07	45.91	-1.7
FBA	5.49	27	eP	07	47.30	-2.0
BALM	5.61	76	eP	07	48.95	-2.0
GLM	5.66	28	eP	07	49.39	-2.2
DOT	5.72	48	eP	07	50.23	-2.1
INK	11.92	38	ePd	09	13.80	-0.3

51 obs. ossociated

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* SEP 10, 1990 10h 08m 33.40± 0.61s
24.937 N ±11.5km 125.180 E ±11.3km
DEPTH = 33.0km (normal)
4.3mb (6 obs.)
SOUTHWESTERN RYUKYU ISLANDS (246)

MAT	16.08	41	eP	12	21.00	2.4
CHG	25.07	261	eP	13	57.10	0.6
CHTO	25.07	261	eP	13	57.10	0.6
	0.9s	3.20nm				3.9mb
YKN	35.76	283	P	15	32.00	0.4
	0.6s	12.00nm				5.0mb
GKN	36.31	284	P	15	36.60	0.4
WB5	45.43	168	eP	16	51.50	0.4
			e	17	01.30	
WRA	45.49	168	P	16	50.00	-1.5
	0.6s	1.10nm				3.9mb
GBA	46.25	265	Pd	16	58.00	0.4
	0.8s	4.00nm				4.4mb
ASPA	49.05	169	eP	17	28.80	9.4X
WARB	50.84	178	eP	17	34.00	1.0
FBA	66.46	28	eP	19	20.90	-0.5
INK	71.15	23	eP	19	49.00	-1.3
HFS	78.66	332	eP	20	32.20	-1.2
	0.7s	2.70nm				4.4mb
Z	17s	0.05um				3.9MszX
		LR		56	57.00	
NB2	79.23	333	P	20	35.10	-1.5
	0.7s	2.40nm				4.3mb

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

? SEP 10, 1990 11h 40m 23.83± 4.95s
41.747 N ±19.4km 22.582 E ±33.6km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)

KKB	0.39	72	ePg	40	32.00	0.1
MMB	0.87	100	ePgd	40	40.00	-0.6
VTS	0.96	29	iPg	40	42.00	-0.3
PGB	1.43	55	eP	40	50.00	0.2
RZN	1.60	91	eP	40	53.00	0.6
KDZ	2.13	92	eP	41	33.00	33.1X

S.D = 0.7 on 5 of 6 obs.

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* SEP 10, 1990 11h 50m 16.17± 1.25s
31.866 S ± 9.3km 72.191 W ±14.5km
DEPTH = 84.3 ± 16.3 km
4.4mb (2 obs.)
OFF COAST OF CENTRAL CHILE (134)

IHA	1.25	158	eP	50	38.80	0.0
			i(S)	51	01.20	
ROCH	1.49	138	iP	50	41.00	-1.1
			iS	51	01.00	
JACH	1.58	121	iPd	50	41.90	-1.3
			iS	51	01.00	
LCCH	1.69	162	iPc	50	44.50	0.0
			i	51	12.00	
PEL	1.80	135	iPc	50	45.60	-0.5
SAN	2.04	141	eP	50	48.00	-1.3
			iS	51	16.50	
TACH	2.07	150	iP	50	50.00	0.3
LNV	2.18	163	iPd	50	51.60	0.4
PCH	2.25	142	iP	50	52.50	0.3
			iS	51	25.60	
RTBS	2.34	86	e(P)	50	57.60	4.2X
CHCH	2.43	148	eP	50	55.50	0.8
			i	51	24.30	
RTCB	2.92	83	eP	51	01.80	0.4
MDZ	3.00	111	eP	51	04.90	2.3
			i	51	07.90	
			e(S)	51	44.30	
ZON	3.01	85	eP	50	03.30	-59.4X
RTCV	3.11	91	ePd	51	04.20	0.2
			S	51	45.00	
RTLL	3.22	81	iPc	51	06.00	0.5
			eS	51	45.30	
CFA	3.38	87	eP	51	07.80	0.1
ANT	8.28	11	e(P)	52	28.00	12.5X
CNCB	15.47	15	P	53	53.00	1.6
LPB	15.71	15	eP	53	55.00	0.7
			i	54	03.00	
ZOBO	15.96	14	P	53	56.80	-0.8
	1.0s	10.00nm				3.9mb
Z	20s	0.29um				4.5Msz
		LR		58	50.00	
SIV	18.77	35	P	54	29.00	-2.4
PPD	21.00	67	eP	54	52.80	-1.8
KIC	74.54	72	P	01	52.00	4.2X
LKO	75.72	69	P	01	56.36	1.8
	0.9s	12.50nm				4.8mb

S.D. = 1.3 on 21 of 25 obs.

? SEP 10, 1990 12h 00m 33.70± 2.00s
29.698 S ±20.7km 176.469 W ±14.3km
DEPTH = 84.7 ± 16.2 km
4.8mb (5 obs.)
KERMADEC ISLANDS REGION (177)

RAO	1.34	289	P	00	57.50	0.0
			S	01	06.50	
DZM	17.14	292	iPc	04	46.10	16.8X
ASPA	44.48	266	eP	08	39.20	0.8
	1.0s	4.00nm				4.2mb
Z	20s	0.36um				4.3Msz
		LR		25	42.50	
WRA	45.40	271	Pd	08	44.90	-0.9
	0.6s	4.30nm				4.5mb
WB5	45.41	271	eP	08	45.10	-0.7
SPA	60.47	180	iPc	10	37.20	0.5
	1.0s	15.50nm				5.1mb
PLM	84.34	47	P	12	57.70	-0.1
			pP	13	09.20	37kmX
CMB	85.36	41	P	13	02.40	-0.2
	1.1s	11.76nm				4.8mb
			pP	13	13.30	35kmX
GLA	85.44	48	P	13	03.10	0.0
			pP	13	14.40	36kmX
KVN	87.36	42	P	13	11.80	-0.8
			pP	13	22.90	35kmX
MSU	90.55	45	P	13	27.80	0.1
			pP	13	38.80	35kmX
ANMO	92.11	51	eP	13	35.90	1.0
			pP	13	46.20	32kmX
CHTO	94.60	289	eP	13	48.20	1.8
	1.1s	36.22nm				5.7mb
LRM	94.92	39	eP	13	58.90	11.2X
BUL	124.87	209	ePKP	19	24.60	-1.4
NB2	148.24	353	PKP	20	10.40	3.1X
	0.9s	3.40nm				
BCAO	151.14	212	iPKPc	20	20.00	6.9X
	0.7s	17.00nm				
			id	20	50.90	

S.D. = 1.0 on 13 of 17 obs.

SEP 10, 1990 12h 17m 36.61± 0.17s
70.770 N ± 3.5km 13.803 W ± 3.8km
DEPTH = 10.0km (geophysicist)
5.0mb (49 obs.) 4.3Msz (6 obs.)
JAN MAYEN ISLAND REGION (639)

JMI	1.68	82	eP	18	00.23	-5.9X
JNW	1.79	79	eP	18	01.75	-5.9X
			eSg	18	11.60	
JNE	1.83	80	ePg	18	02.55	-5.7X
AKU	5.35	199	iPc	18	57.20	-1.2
	0.9s	605.04nm				6.2mb X
			i	19	02.70	
			iS	20	01.20	
DAG	6.19	349	iPd	19	04.70	-5.4X
	1.0s	190.00nm				5.9mb
REY	7.34	209	iP	19	30.10	3.7X
RGS	12.19	118	eP	20	29.50	-3.4X
KEV	13.64	75	eP	20	52.00	-0.1
	1.3s	62.60nm				5.4mb
			i	21	02.80	
NB2	13.99	122	P	20	51.80	-5.0X
	1.2s	36.60nm				5.0mb
SOD	14.62	84	eP	20	58.00	-7.0X
			i	21	12.00	
HFS	15.43	120	eP	21	05.00	-10.6X
	1.3s	12.00nm				
Z	19s	0.95um				
		LR		24	58.00	
EKA	16.18	158	Pc	21	25.10	-0.2
	1.2s	28.50nm				4.3mb
UPP	16.82	115	iP	21	27.90	-5.4X
SUF	17.37	98	eP	21	35.00	-5.1X
ETA	18.46	165	eP	21	54.50	0.7
	1.0s	46.00nm				4.6mb
NUR	18.50	104	eP	21	49.00	-5.2X
	0.8s	29.30nm				4.5mb
ECB	18.74	167	eP	21	57.30	0.1
ECP	18.96	166	eP	21	59.30	-0.5
	1.1s	58.00nm				4.7mb
VAL	18.97	173	eP	22	01.00	1.1
WIT	20.24	142	eP	22	15.00	0.8
WTS	21.04	143	eP	22	21.50	-1.0
	1.0s	42.00nm				4.8mb
UCC	21.72	148	P	22	29.00	-0.4
			S	26	38.00	
SNF	21.99	148	iP	22	31.42	-0.6
ENN	22.04	145	iPc	22	32.50	-0.1
	1.0s	170.00nm				5.4mb
BNS	22.10	143	iPd	22	33.10	0.0
Z	21s	1.00um				4.2Msz
MEM	22.21	145	Pc	22	29.10	-5.1X
DOU	22.44	148	P+	22	36.40	-0.2
Z	18s	0.50um				4.0Msz
		S		26	45.00	
FLN	22.96	157	eP	22	40.90	-0.8
	0.8s	26.85nm				4.8mb
Z	20s	3.00um				4.7Msz
CLL	23.06	134	iPc	22	41.80	-0.8
	1.3s	100.00nm				5.2mb
			eS	26	54.00	
TNS	23.06	142	ePc	22	42.70	0.0
LDF	23.17	156	eP	22	43.20	-0.6
	1.0s	32.00nm				4.8mb
GRR	23.28	158	eP	22	44.70	-0.1
	1.1s	63.50nm				5.1mb
MOX	23.35	136	eP	22	45.00	-0.5
	2.1s	228.00nm				5.4mb
Z	15s	0.70um				4.2MszX
N	15s	0.50um				
E	15s	0.70um				
LPF	23.61	158	eP	22	48.10	0.1
	1.0s	36.00nm				4.9mb
BRG	23.69	133	iPc	22	48.60	-0.1
	1.6s	85.00nm				5.1mb
			i	23	00.40	
			e	24	02.00	
			e	27	08.00	
HOF	23.72	136	eP	22	49.50	0.4
GWF	24.08	144	P	22	53.40	0.8
GRF	24.15	138	iPc	22	54.40	1.1
Z	21s	0.60um				4.1Msz
			e	22	56.50	
KSP	24.30	129	iPc	22	55.00	0.3
	1.3s	154.00nm				5.5mb
VITF	24.50	147	P	22	57.56	1.0
CDF	24.55	145	P	22	57.87	0.6
PRU	24.65	133	Pc	22	58.50	0.4
	1.8s	118.80nm				5.2mb
Z	16s	1.50um				4.6MszX
N	14s	1.30um				
E	15s	1.30um				
			e	23	11.50	
			ePP	24	01.00	
			eS	27	26.00	
ECH	24.72	145	P	22	59.63	0.8
HAU	24.77	146	eP	22	59.90	0.6
	1.1s	58.60nm				5.2mb

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      Z  20s      1.50um          4.5Msz
BSF     25.02 146 P       23 02.21   0.4
LOR     25.05 151 eP      23 02.00   0.0
        1.2s     65.45nm          5.2mb
      Z  20s      1.75um          4.6Msz
MOF     25.06 145 P       23 02.37   0.2
MFF     25.13 157 eP      23 02.90   0.2
        1.0s     40.00nm          5.1mb
SSF     25.20 151 eP      23 03.10  -0.3
        0.9s     18.85nm          4.8mb
FEL     25.21 144 P       23 03.56   0.0
KHC     25.22 135 iPc     23 04.00   0.4
        1.0s     21.00nm          4.8mb
      Z  14s      0.50um          4.2MszX
      N  14s      0.80um
      E  14s      0.40um
                  e       24 06.00
LBF     25.35 151 eP      23 04.80   0.0
        0.8s     29.55nm          5.0mb
SLE     25.41 143 ePc     23 05.50   0.1
AVF     25.44 152 eP      23 05.20  -0.4
        1.2s     38.70nm          5.0mb
LOMF    25.49 146 P       23 06.46   0.3
BGF     25.59 153 eP      23 06.60  -0.4
        0.9s     42.60nm          5.1mb
FUR     25.61 139 iPc     23 07.80   0.6
SMF     25.66 151 eP      23 07.30  -0.4
        1.0s     62.00nm          5.3mb
LSF     25.70 155 eP      23 07.90  -0.1
        1.0s     58.00nm          5.2mb
TCF     25.76 154 eP      23 08.40  -0.2
        1.0s     32.00nm          5.0mb
MAF     25.87 153 eP      23 09.40  -0.3
        1.0s     55.00nm          5.2mb
KRA     25.98 125 eP      23 10.10  -0.5
        1.1s    100.00nm          5.4mb
      Z  14s      1.70um          4.7MszX
      E  16s      3.20um
                  e       23 11.90
                  e       23 25.50
SAX     26.07 142 ePc     23 11.70  -0.1
KMR     26.35 135 eP      23 10.00  -4.1X
LLS     26.37 143 ePc     23 14.80   0.3
BHG     26.38 137 iPd     23 15.40   1.0
        1.2s     33.00nm          4.9mb
SQTA    26.49 140 iPc     23 15.70   0.2
        1.2s     78.60nm          5.3mb
                  i       23 33.90
RJF     26.62 155 eP      23 16.40  -0.2
        1.2s    119.00nm          5.5mb
OSS     26.77 142 ePc     23 18.40   0.2
DIX     26.82 146 ePc     23 19.30   0.6
VDL     26.83 143 ePc     23 19.00   0.3
SPC     26.85 126 eP      23 16.90  -2.0
LFF     26.87 157 eP      23 19.30   0.4
        1.2s     89.25nm          5.3mb
ZST     26.95 131 eP      23 20.10   0.6
MMK     26.95 145 ePc     23 21.10   1.2
CAF     27.07 155 eP      23 19.80  -0.9
        1.1s     37.85nm          5.0mb
LPL     27.24 147 eP      23 22.90   0.4
        1.2s     23.80nm          4.8mb
LPG     27.26 147 eP      23 23.30   0.5
        1.2s     35.70nm          5.0mb
FVI     27.43 138 P       23 24.50   0.6
MDI     27.55 143 P       23 25.80   0.8
BNI     27.68 148 Pc      23 27.20   0.8
SAL     27.88 142 P       23 29.00   1.0
VVI     27.93 139 P       23 30.00   1.5
VOY     28.21 137 e(P)    23 30.00  -1.1
TRI     28.48 137 eP      23 32.10  -1.3
                  e       28 58.00
                  e       31 22.00
CKI     28.58 146 P       23 33.70  -0.7
EPF     28.70 158 eP      23 35.20  -0.3
        0.8s     17.45nm          4.9mb
PTJ     28.81 134 eP      23 35.50  -1.0
SBF     28.97 147 eP      23 37.70  -0.2
        1.0s     60.00nm          5.3mb
MME     29.27 142 P       23 41.70   0.8
BDI     29.38 143 P       23 42.40   0.8
PII     29.69 143 P       23 43.60  -0.7
SFI     29.77 141 P       23 46.00   1.0
PGD     29.79 141 P       23 46.00   0.6
CRE     30.07 141 P       23 48.00   0.1
ARV     30.40 140 P       23 50.50  -0.2
MNS     31.41 141 Pc      23 58.50  -1.1

VRI     31.68 120 ePd     24 00.00  -1.9
CMP     31.76 123 iPc     24 04.00   1.4
MLR     31.81 121 eP      24 03.00  -0.2
SDI     32.31 139 P       24 07.20  -0.3
DUI     32.49 139 P       24 09.00  -0.1
SKO     33.86 129 iP      24 20.00  -0.9
      Z  14s      0.94um          4.7MszX
      N  15s      0.57um
      E  15s      1.16um
                  LR      40 20.00
MGR     34.19 138 P       24 23.00  -0.7
ORI     34.46 137 P       24 26.50   0.4
OHR     34.50 131 eP      24 25.50  -1.0
        1.3s     89.00nm          5.5mb
TDS     34.82 137 P       24 29.00  -0.2
INK     35.43 326 eP      24 33.00  -1.1
GIB     35.92 141 P       24 38.50  -0.2
YKA     36.22 309 eP      24 40.50  -0.3
        1.4s     14.10nm          4.6mb
SOI     36.27 138 P       24 39.00  -2.5
IFR     37.61 168 iPd     24 53.50   0.5
FFC     39.23 294 eP      25 07.00   0.9
        0.6s      6.00nm          4.4mb
TIO     40.06 171 eP      25 15.00   1.6
IMA     40.71 336 eP      25 18.10  -0.2
        1.3s     30.70nm          4.9mb
FBA     40.96 332 eP      25 20.80   0.6
TOA     43.31 330 eP      25 38.00  -1.6
EDM     43.88 301 eP      25 45.00   0.7
PWA     44.34 332 eP      25 47.50  -0.4
SES     45.72 298 eP      26 01.00   2.0
PNT     49.13 304 eP      26 26.00   0.3
LRM     50.24 296 eP      26 35.70   1.1
MAIO    50.72  92 eP      26 38.00  -0.2
BW06    52.12 292 P       26 46.40  -2.5
        1.4s     17.75nm          4.8mb
GOL     53.61 287 P       27 00.00   0.0
        0.8s      2.98nm          4.3mb
DUG     55.47 293 P       27 13.80   0.3
MEO     55.90 278 e(P)    27 17.00   0.5
MSU     56.82 292 P       27 24.00   0.6
LBFM    57.08 302 P       27 24.30  -0.8
MIN     57.93 301 eP      27 29.60  -1.4
WDC     57.97 302 eP      27 32.50   1.4
KVN     58.11 297 P       27 31.80  -0.5
ANMO    58.31 285 eP      27 35.00   1.3
        1.6s      9.17nm          4.6mb
QUE     58.79  88 eP      27 38.70   1.5
CMB     59.72 299 eP      27 42.80  -0.6
FRI     60.49 298 eP      27 48.10  -0.4
LKO     61.39 171 P       27 52.42  -2.4
GLA     62.68 292 P       28 04.00   0.6
KIC     64.59 170 P       28 15.40  -0.6
LIC     64.71 170 P       28 16.00  -0.7
GKN     66.57  72 P       28 29.70   0.9
KKN     66.97  72 P       28 31.80   0.3
DMN     67.08  72 P       28 31.10  -1.1
PKI     67.21  72 P       28 33.40   0.2
BCAO    69.42 145 iPd     28 46.00  -0.5
        0.6s      7.00nm          5.0mb
SHL     71.09  67 eP      28 56.50  -0.4
CHG     79.57  63 eP      29 46.50   1.5
CHTO    79.57  63 eP      29 45.00   0.0
        1.3s     13.48nm          4.8mb
WRA   125.78  38 PKP     36 42.00   2.5X
        0.8s      0.80nm
      S.D. = 0.8  on 134 of 149 obs.
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   SEP  10, 1990  12h 42m 51.43± 1.14s
   35.703 N ± 7.6km  142.137 E ± 6.1km
   DEPTH =  13.0 ±  6.1 km
   4.9mb ( 10 obs.)  4.6Msz ( 1 obs.)
 OFF EAST COAST OF HONSHU, JAPAN (229)

KAKJ     1.67 288 iP+    43 20.60   0.2
CHJJ     2.57 279 iP+    43 33.60   0.1
NIIJ     2.96 302 iP+    43 39.60   0.7
YAMJ     2.98 326 P      43 39.10  -0.2
MAT      3.29 286 iPc    43 44.50   0.9
                  eS     44 32.00
OFUJ     3.39 354 P      43 43.50  -1.5
IIDJ     3.45 268 P      43 47.10   1.2
MTMJ     3.61 285 iP+    43 49.60   1.2
TSRJ     5.02 270 P      44 09.90   1.8
WKYJ     5.57 256 P      44 16.40   0.3
HOOJ     6.73   7 P      44 29.70  -2.6
                  eS     45 42.20

MRRJ     6.76 353 eP     44 32.40  -0.3
                  eS     45 51.10
TKSJ     6.87 258 P      44 34.60   0.4
YONJ     7.10 268 P      44 39.90   2.4
KUSJ     7.65  14 P      44 40.80  -4.3X
                  eS     46 02.60
ASAJ     8.41   2 eP     44 52.50  -3.3X
                  eS     46 26.50
SHNJ     9.19 263 eP     45 03.60  -3.0X
KUMJ     9.89 255 eP     45 15.10  -1.2
KAGJ    10.42 248 eP     45 17.50  -6.0X
SSE     18.08 261 eP     47 02.00  -1.8
      Z  20s      2.30um
      N  14s      6.00um
      E  14s      3.10um
                  epP    47 12.00
                  S      50 26.00
                  esS    50 40.00
                  SS     50 54.00
BJI     20.92 290 eP     47 32.00  -4.0X
        1.6s     48.00nm          4.6mb
      Z  16s      3.50um          4.8MszX
      N  10s      1.88um
                  eS     51 22.00
GUMO    22.16 173 eP     47 54.00   5.4X
        1.2s    194.44nm          5.4mb
GUA     22.21 173 eP     47 55.00   5.8X
        1.0s    120.00nm          5.3mb
LZH     30.89 282 Pc     49 08.00  -1.9
        2.0s     71.00nm          5.2mb
      Z  15s      3.20um          5.1MszX
      N  13s      2.10um
      E  13s      2.40um
                  sP     49 22.00
                  PP     50 14.00
                  S      54 12.00
KMI     35.37 264 eP     49 48.50  -0.5
      Z  16s      3.10um          5.2MszX
                  pP     49 55.00  22kmX
                  S      55 21.00
CHG     41.56 258 eP     50 42.30   1.9
CHTO    41.56 258 eP     50 38.00  -2.4
SHL     44.00 271 eP     51 01.50   1.0
                  eS     57 34.00
NNT     44.56 250 eP     51 02.00  -2.8X
SVW     46.21  37 eP     51 19.50   1.9
SNG     47.41 243 eP     51 26.50  -0.9
PKI     48.40 277 P      51 35.00  -0.6
KKN     48.42 277 P      51 34.00  -1.6
GKN     48.85 278 P      51 38.40  -0.4
IPM     48.90 240 ePd    51 39.60   0.5
PMR     49.35  36 eP     51 42.50   0.5
FBA     49.92  32 eP     51 47.60   1.3
        0.9s      3.10nm          4.3mb
PSI     51.71 241 ePd    52 02.00   1.5
INK     55.31  27 eP     52 26.00  -0.5
WB5     55.77 189 eP     52 28.90  -1.4
WRA     55.83 189 Pd     52 28.80  -1.9
        0.7s      9.90nm          5.0mb
HYB     58.77 270 eP     52 58.00   6.2X
ASPA    59.56 189 eP     52 55.70  -1.3
        0.8s      6.00nm          4.8mb
MBL     60.37 204 eP     53 02.00  -0.5
        0.7s     12.00nm          5.1mb
GBA     61.71 267 P      53 11.00  -0.9
DZM     61.90 154 iPc    53 14.10   1.1
OUE     61.91 288 eP     53 14.00   0.7
PNT     68.72  44 eP     54 04.00   7.3X
WDC     71.40  53 eP     54 13.30   0.1
LBFM    71.42  52 P      54 14.00   0.4
SES     72.80  40 eP     54 28.00   6.6X
CMB     74.17  54 e(P)   54 23.90  -5.6X
LRM     74.69  44 eP     54 34.00   1.3
KVN     75.10  53 P      54 36.00   0.9
NB2     75.64 338 P      54 37.00  -0.6
        1.1s      7.90nm          4.7mb
VRI     80.12 320 ePc    55 03.00   0.6
KRA     80.52 326 eP     55 09.70   5.2X
KSP     81.54 329 eP     55 13.50   3.7X
CLL     82.54 331 eP     54 58.00 -17.0X
                  i      55 27.10
PRU     82.92 329 eP     55 16.00  -1.0
      Z  14s      2.00um          5.6MszX
      N  14s      1.30um
      E  14s      1.30um
                  e      55 29.00
KHC     83.98 329 eP     55 27.80   5.3X
```

10d 12h

	Z	14s	0.50um		5.0MszX
	N	14s	1.30um		
	E	14s	1.00um		
			e	58 49.20	
ANMO	84.99	50	P	55 29.60	1.5
	1.0s		3.44nm		4.5mb
SKO	85.57	320	iP	55 28.50	-2.1
	Z	15s	1.64um		5.5MszX
	N	15s	1.14um		
	E	15s	1.46um		
			LR	38 04.50	
OHR	86.52	320	eP	55 40.20	4.8X
ZOBO	146.82	62	PKP	02 36.00	1.8
	Z	22s	0.11um		4.6Msz
			LR	52 48.00	
LPB	147.01	63	ePKP	02 38.00	3.7X
CNCB	147.28	63	PKPd	02 39.00	4.1X
SIV	151.46	53	PKP	02 46.40	5.7X
	S.D. = 1.3		on 48 of 68 obs.		

SEP 10, 1990 13h 55m 03.78± 1.16s
16.217 N ± 7.5km 120.258 E ± 8.8km
DEPTH = 19.9 ± 9.2 km
4.9mb (9 obs.) 4.4Msz (1 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	0.36	58	iPd-	55 12.10	0.5
SZP	1.34	8	iPc	55 27.50	0.1
			iS	55 47.00	
OCP	1.76	153	eP	55 31.00	-2.5
CVP	2.10	45	iPd	55 40.00	1.5
			eS	56 05.80	
PGP	2.78	166	ePc	55 54.50	6.4X
PLP	6.80	137	eP	56 47.50	2.5
CGP	8.85	150	eP	57 24.00	10.4X
LOE	17.78	276	eP	59 12.00	0.2
KMI	18.62	301	eP	59 28.00	5.6X
NNT	20.20	262	eP	59 38.20	-2.1
CHTO	20.49	280	eP	59 45.90	2.6
TSRJ	23.82	33	P	00 16 50	0.2
BJI	24.00	352	eP	00 19.00	1.0
	1.6s		120.00nm		5.2mb
LZH	24.60	327	Pc	00 25.50	1.4
	1.5s		102.00nm		5.2mb
	Z	18s	1.20um		4.4Msz
	N	12s	0.50um		
	E	12s	0.60um		
			pP	00 33.00	27kmX
			sP	00 37.00	
			PP	01 04.00	
			eS	04 45.00	
			sS	04 57.00	
TRT	24.94	198	ePd	00 31.70	4.4X
MAT	25.77	35	(P)	00 32.00	-3.0
CHJJ	25.85	37	P	00 34.30	-1.5
WB5	38.46	158	eP	02 27.00	0.7
WRA	38.51	158	P	02 27.00	0.3
	0.9s		3.80nm		4.2mb
GBA	41.41	272	P	02 56.00	5.2X
	1.1s		6.60nm		4.3mb
ASPA	41.82	161	eP	02 53.30	-0.7
	0.6s		5.00nm		4.4mb
TTA	72.85	28	eP	06 33.40	0.4
SVW	73.12	30	eP	06 35.20	0.7
PMR	76.18	30	eP	06 51.00	-1.0
	1.0s		25.00nm		5.2mb
FBA	76 28	26	ePc	06 52.30	-0.3
SOD	76.56	337	eP	06 53.00	-1.1
TOA	77.48	29	ePc	06 59.50	0.1
SUF	77.61	332	eP	07 03.00	3.1X
	0.8s		8.50nm		4.8mb
NUR	78.77	330	eP	07 15.00	8.7X
INK	80.92	21	eP	07 17.00	-0.8
VRI	80.96	315	ePd	07 18.00	-0.4
KRA	84 19	320	eP	07 35.60	0.6
NB2	84.84	332	P	07 37.50	-0.6
	1.3s		15.60nm		5.1mb
SKO	85.69	312	iP	07 39.00	-3.7X
KSP	86.12	322	ePc	07 45.00	0.3
BRG	87.49	323	e(P)	07 54.80	3.5X
	1.4s		12.00nm		5.0mb
	S.D. = 1.4		on 27 of 36 obs.		

% SEP 10, 1990 14h 01m 06.99± 1.03s
59.972 N ± 4.5km 4.877 E ±10.6km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)

	MD 2.0 (BER).				
BER	0.47	29	iPd	01 16.42	-0.2
ASK	0.54	17	eP	01 17.49	-0.4
KMY	0.79	166	eP	01 22.16	-0.1
			eSg	01 33.05	
ODD1	0.88	93	eP	01 24.10	0.1
			eS	01 39.51	
BLS3	1.00	123	eP	01 25.80	-0.1
			eS	01 40.55	
SUE	1.09	357	eP	01 27.51	0.1
			eS	01 42.78	
BLS2	1.24	122	iPc	01 30.22	0.0
			eS	01 47.24	
HYA	1.36	28	iPd	01 31.85	-0.1
			eSg	01 51.91	
MOL	2.91	25	eP	01 54.71	0.6
	S.D. = 0.3		on 9 of 9 obs.		

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* SEP 10, 1990 14h 04m 30.79± 2.11s
0.008 N ±17.8km 80.558 W ±17.5km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF ECUADOR (105)

GGP	1.97	95	iPd	05 05.00	-0.1
			eS	05 28.40	
YANA	1.99	94	iPd	05 05.20	-0.1
OUR	2.04	95	iPd	05 05.70	-0.2
OTO	2.04	96	iPd	05 06.10	0.2
			S	05 27.40	
CAYA	2.58	88	P	05 15.50	1.8
			eS	05 47.50	
ANGL	3.04	98	eP	05 18.80	-1.4
			eS	06 01.50	
NNA	12.47	163	eP	07 31.20	-0.2
	0.5s		4.93nm		5.0mb X
			eS	09 45.00	
ZOBO	20.30	143	P	09 11.00	0.6
CNCB	20.81	144	eP	09 16.00	0.4
CCH	22.36	141	eP	09 35.00	4.0X
SIV	24.95	130	P	09 55.80	-0.2
SOB1	40.54	104	eP	12 11.60	-0.6
KIC	75.90	83	P	16 20.00	-0.1
KKN	149.20	25	PKP	24 24.40	6.6X
	0.8s		15.00nm		
PKI	149.45	25	PKP	24 25.00	6.6X
	S.D. = 0.8		on 12 of 15 obs.		

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* SEP 10, 1990 14h 48m 17.96± 0.94s
24.050 N ±15.1km 95.416 E ±10.3km
DEPTH = 74.3 ± 17.0 km
4.3mb (1 obs.)
BURMA (296)

SHL	3.55	296	iP	49 14.50	2.5
			iS	50 04.50	
CHG	6.16	147	ePn	49 48.10	-0.3
			ePg	50 15.80	
			eSg	51 50.00	
CHTO	6.16	147	ePn	49 48.10	-0.2
KMI	6.75	79	Pc	49 56.50	-0.2
			S	51 10.00	
GUN	9.40	296	P	50 32.40	-0.9
	0.4s		32.00nm		5.6mb X
PKI	9.67	293	P	50 36.40	-0.6
	0.4s		18.00nm		5.4mb X
KKN	9.85	294	P	50 38.80	-0.5
	0.4s		18.00nm		5.4mb X
GKN	10.46	294	P	50 46.80	-0.7
	0.4s		21.00nm		5.5mb X
HYB	17.09	250	eP	52 26.50	12.9X
WB5	57.85	136	eP	58 05.00	0.6
WRA	57.88	136	P	58 05.00	0.4
	0.7s		1.80nm		4.3mb
	S.D. = 1.2		on 10 of 11 obs.		

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* SEP 10, 1990 15h 40m 14.65± 1.46s
42.907 N ±31.6km 17.867 E ±17.2km
DEPTH = 0.8km (geophysicist)
ADRIATIC SEA (382)
ML 2.5 (TTG).

HCY	0.65	134	ePg	40 27.80	0.1
			eSg	40 39.30	
BDV	0.94	131	ePg	40 33.00	-0.4
			eSg	40 49.00	
HVAR	1.08	285	iPg	40 35.70	0.0
			iSg	40 50.40	
TTG	1.13	114	ePg	40 36.70	0.0
			eSg	40 54.30	
ULC	1.39	132	ePg	40 41.50	0.3
			eSg	41 02.60	
	S.D. = 0.4		on 5 of 5 obs.		

SEP 10, 1990 15h 45m 25.51± 2.02s
16.669 N ±17.9km 99.067 W ± 8.2km
DEPTH = 40.7 ± 9.8 km
4.6mb (9 obs.)
NEAR COAST OF GUERRERO, MEXICO (58)
Felt at Acapulco.

ACX	0.78	285	iP	45 38.79	-1.4
			iS	45 46.00	
OXX	2.28	79	iP	46 10.66	8.9X
			iS	46 41.00	
PPM	2.42	10	iP	46 03.66	-0.3
			(S)	46 38.50	
IIA	2.50	9	iP	46 04.50	-0.1
UNM	2.65	358	iP	46 07.50	0.5
			(S)	46 41.00	
CRX	2.78	348	iP	46 09.50	0.6
			iS	46 52.80	
SMMM	3.07	6	iP	46 14.98	2.3
IIJ	3.11	348	iP	46 13.55	-0.3
			(S)	46 56.00	
MRX	3.63	327	iP	46 21.00	0.3
			iS	46 59.00	
LVVM	3.94	39	(P)	46 30.00	5.0X
			(S)	47 16.00	
EVV	3.97	63	(P)	46 25.05	-0.4
SIO	19.16	7	eP	49 46.80	-1.6
ANMO	19.37	341	P	49 49.70	-1.3
	1.0s		6.25nm		3.8mb
TUL	19.38	8	eP	49 48.80	-2.2
	1.4s		47.70nm		4.6mb
OLY	19.94	18	P	49 55.00	-1.9
GLA	21.65	322	P	50 15.60	1.2
RSCP	22.37	30	P	50 20.50	-1.1
	1.0s		48.81nm		4.9mb
PLM	23.09	319	P	50 31.10	2.2
SGS	23.47	42	P	50 33.50	1.2
GOL	23.60	348	P	50 34.00	0.2
	1.2s		12.30nm		4.3mb
LHS	24.13	39	P	50 40.70	2.0
MSU	24.61	335	P	50 46.40	2.8X
BLA	26.27	35	P	50 59.60	0.7
	0.9s		17.36nm		4.6mb
BW06	27.52	343	P	51 09.70	-0.9
	1.2s		17.12nm		4.6mb
KVN	27.82	327	P	51 14.20	0.9
LRM	31.15	342	ePd	51 43.10	0.2
			e	52 00.90	
LBFM	31.48	326	P	51 45.60	-0.3
NEW	34.81	339	P	52 14.60	0.1
	1.2s		8.52nm		4.6mb
SES	35.00	347	eP	52 16.00	-0.1
FFC	38.05	357	iPc	52 41.40	-0.2
	0.9s		18.00nm		5.0mb
YKA	47.06	350	eP	53 54.10	-0.7
	0.9s		4.80nm		4.5mb
INK	56.05	345	eP	55 03.00	0.6
	S.D. = 1.2		on 29 of 32 obs.		

& SEP 10, 1990 15h 57m 42.78s
60.324 N 152.202 W
DEPTH = 80.5km
SOUTHERN ALASKA (2)
<AGS-P>.

RDT	0.27	338	iP	57 54.53	-0.7
			eS	58 04.37	
RSO	0.31	297	iP	57 55.09	-0.5
			iS	58 04.91	
NNL	0.53	122	iP	57 57.45	0.4
NKA	0.64	48	eP	57 59.14	1.2
HOM	0.72	157	iP	57 58.69	-0.2
			eS	58 10.90	
OPT	0.85	218	iP	57 59.62	-0.7
			iS	58 13.40	
SPU	0.86	5	iP	57 59.80	-0.8
BRLK	0.87	130	eP	57 59.80	-0.8
			eS	58 13.06	
CKL	0.88	356	iP	57 59.95	-0.9
			iS	58 13.38	

XLV 0.91 164 eP 57 59.84 -1.1
eS 58 13.96
CNPM 0.94 148 eP 58 00.36 -1.0
iS 58 14.54
BGL 0.95 354 eP 58 00.85 -0.8
iS 58 15.18
CRP 0.95 1 eP 58 01.02 -0.6
iS 58 15.47
CGLM 0.99 5 iP 58 01.39 -0.7
NCG 1.08 1 eP 58 02.39 -0.9
eS 58 18 04
AUE 1.13 212 iP 58 02 62 -1.1
PDB 1.13 243 eP 58 02 37 -1.4
iS 58 18 13
AUH 1 15 214 eP 58 02 93 -1.1
AUI 1.17 212 eP 58 03.21 -1.0
SUA 1.35 31 eP 58 05.96 -0.7
SEW 1.39 98 eP 58 05.42 -1.6
MCNL 1.57 224 eP 58 07.95 -1.5
CDD 1.58 208 iP 58 08.29 -1.3
PMS 1.59 53 eP 58 08.90 -0.9
SKT 1.69 11 eP 58 09.73 -1.4
PWA 1.75 39 eP 58 10.80 -1.0
SVW 1.86 297 iP 58 11.25 -2.1
PLRM 1.97 48 eP 58 12.87 -1.9
GHO 2.16 46 iP 58 15.68 -1.8
CUT 2.29 23 eP 58 18.64 -0.5
SML 2.40 50 iP 58 18.70 -2.1
SCM 2.81 55 eP 58 24.58 -1.9
VZW 2.87 73 eP 58 23.86 -3.5
33 obs. assocloted

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* SEP 10, 1990 17h 11m 16.94± 1.05s
5.426 S ± 8.4km 151.709 E ±15.7km
DEPTH = 55.8 ± 11.4 km
4.5mb (4 obs.)
NEW BRITAIN REGION (192)

RAB 1.31 21 iPd 11 39.40 0.2
iS 11 52.00
PMG 6.01 229 eP 12 45.00 -0.4
1.1s 121.52nm 5.2mb X
GUA 20.01 340 e(P) 15 53.20 5.3X
0.7s 65.75nm 5.1mb X
GUMO 20.07 340 e(P) 15 54.50 5.9X
0.8s 93.70nm 5.2mb X
MTN 21.60 249 iPc 16 00.60 -3.5X
0.3s 152.00nm 5.9mb X
eS 17 05.00
BRS 21.87 177 iP 16 06.50 -0.2
i 16 27.50
WB5 22.16 228 eP 16 10.00 0.3
WRA 22.22 228 Pd 16 10.50 0.2
0.8s 10.50nm 4.3mb
ASPA 24.96 222 iPc 16 37.30 0.4
0.6s 19.00nm 4.8mb
eS 21 26.40
MBL 34.63 240 eP 18 03.00 -0.1
0.4s 4.00nm 4.7mb
CHTO 57.28 296 eP 21 02.60 0.9
1.2s 3.47nm 4.3mb
SHL 65.69 301 eP 21 57.00 -1.4
PKI 71.82 301 P 22 36.40 -0.1
KKN 71.99 301 P 22 37.40 0.0
GKN 72.60 301 P 22 41.00 0.1
S.D. = 0.6 on 12 of 15 obs.

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* SEP 10, 1990 17h 32m 28.92± 1.19s
15.308 S ±35.3km 73.318 W ±21.2km
DEPTH = 33.0km (normal)
SOUTHERN PERU (117)

ARE 2.10 123 iPc 33 02.50 -0.2
iS 33 26.50
PT02 3.83 307 eP 33 26.40 -0.7
eS 34 14.20
PT08 4 58 316 eP 33 37.20 -0.8
iS 34 29.60
NNA 4.76 314 eP 33 40.30 0.1
0.8s 44.78nm
i 33 45.00
eS 34 32.00
PT10 4.79 312 e(P) 33 42.00 1.4
e(S) 34 32.00
ZOBO 5.09 102 P 33 45.20 -0.3
i 35 20.00
LPB 5.17 104 P 33 46.00 -0.4
CNCB 5.34 107 iPc 33 49.20 0.2
CCH 7.19 108 P 34 15.60 0.8
SIV 11.82 95 P 35 10.60 -7.7X
S.D. = 0.8 on 9 of 10 obs.

% SEP 10, 1990 18h 12m 39.45± 0.68s
44.473 N ± 6.8km 7.269 E ± 6.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

DOI 0.04 331 Pc 12 41.50 -0.1
eSg 12 42.80
PZZ 0.12 285 P 12 42.70 0.1
S 12 44.87
STV 0.23 170 P 12 44.54 0.1
S 12 47.29
ENR 0.27 156 P 12 45.03 -0.1
S 12 51.49
ROB 0.47 112 P 12 49.05 0.1
S 12 55.69
PCP 0.92 85 P 12 56.98 0.0
S.D. = 0.1 on 6 of 6 obs.

SEP 10, 1990 18h 28m 09.39± 1.18s
42.279 N ± 6.5km 25.506 E ±10.6km
DEPTH = 10.0km (geophysicist)
BULGARIA (359)
MD 2.9 (ATH).

DIM 0.23 175 Pg 28 06.00 -8.3X
PLD 0.62 254 iPgd 28 22.00 0.1
KDZ 0.63 186 iPgd 28 22.00 -0.1
eS 40 00.00
RZN 0.83 225 iPgc 28 24.00 -1.6
PVL 0.95 352 iPd 28 27.00 -0.4
PGB 1.03 286 iPgd 28 28.00 -0.9
RDO 1.13 179 iPc 28 31.00 0.4
eS 28 45.70
MMB 1.50 243 ePc 28 37.00 0.7
VTS 1.73 281 iP 28 41.00 1.2
KKB 1.85 258 eP 28 42.00 0.6
CMP 3.01 354 ePc 29 18.00 20.0X
SKO 3.04 266 iP 29 07.00 8.6X
MLR 3.23 5 ePd 29 14.00 12.8X
VRI 3.70 13 ePd 29 12.00 4.2X
BZS 4.36 321 ePc 29 31.50 14.3X
S.D. = 1.0 on 9 of 15 obs.

SEP 10, 1990 18h 30m 47.42± 0.53s
16.224 N ± 7.6km 120.396 E ± 8.9km
DEPTH = 33.0km (normal)
4.7mb (7 obs.) 4.0Msz (2 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG 0.26 44 iPc+ 30 54.00 -0.8
SZP 1.32 2 ePc 31 09.00 -0.7
iS 31 27.50
QCP 1.71 157 eP 31 04.00 -11.3X
CVP 2.01 43 eP 31 22.00 2.4
eS 31 59.00
PGP 2.76 169 ePd 31 32.00 1.7
eS 32 13.00
PLP 6.72 138 eP 32 27.50 1.2
KMI 18.73 301 eP 35 07.50 1.5
NNT 20.33 262 eP 35 25.20 1.5
CHG 20.62 280 eP 35 26.40 -0.3
CHTO 20.62 280 eP 35 26.10 -0.6
BJI 24.01 352 eP 36 01.00 0.9
1.1s 35.00nm 4.8mb
Z 19s 0.36um 3.9Msz
eS 40 25.00
LZH 24.67 326 P 36 07.70 0.9
1.5s 37.00nm 4.7mb
Z 18s 0.50um 4.1Msz
pP 36 16.00 30kmX
WB5 38.42 159 eP 38 05.60 -2.2
WRA 38.47 159 P 38 07.00 -1.2
1.0s 3.90nm 4.2mb
GBA 41.54 272 P 38 39.00 5.3X
0.8s 3.00nm 4.1mb
MAIO 57.24 303 eP 40 35.00 0.7
KEV 76.08 339 eP 42 30.00 -3.1X
SOD 76.61 337 iP 42 35.20 -0.9
SUF 77.66 332 iP 42 41.40 -0.6
0.5s 4.80nm 4.8mb
NUR 78.83 330 eP 42 42.00 -6.4X
HFS 84.13 331 eP 43 14.70 -1.5
0.5s 7.90nm 5.1mb
Z 17s 0.07um 4.1MszX
LR 21 44.00
NB2 84.90 333 P 43 18.50 -1.6
0.7s 6.50nm 4.9mb
KSP 86.20 322 iPc 43 26.50 -0.3
S.D. = 1.4 on 19 of 23 obs.

SEP 10, 1990 18h 38m 04.87± 0.79s
43.276 N ± 9.6km 20.866 E ± 6.1km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.3 (TTG).

IVA 0.82 241 ePg 38 19.40 -1.3
eSg 38 30.00
PVY 0.94 224 ePg 38 22.00 -1.0
eSg 38 34.00
PLE 1.08 273 ePg 38 24.60 -0.6
eSg 38 39.00
SKO 1.37 162 iPn 38 28.70 -1.3
i 38 47.80
TTG 1.45 235 ePg 38 33.00 1.9
eSg 38 51.00
BDV 1.80 237 ePn 38 38.00 1.8
eSn 39 03.00
VTS 1.85 111 iP 38 37.00 -0.1
KKB 2.16 130 eP 38 42.00 0.6
BZS 2.40 13 ePc 38 44.50 -0.3
PGB 2.53 106 eP 38 47.00 0.3
MMB 2.71 128 ePd 38 57.00 7.7X
RZN 3.26 118 eP 39 04.00 6.8X
PVL 3.26 90 eP 39 03.00 5.9X
S.D. = 1.3 on 10 of 13 obs.

& SEP 10, 1990 19h 13m 05.20s
40.307 N 124.630 W
DEPTH = 7.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 3.1 (BRK).

FHC 0.70 45 iPc 13 18.90 -0.3
eS 13 28.30
WDC 1.62 80 ePc 13 32.00 -2.2
LTCM 1.92 92 e(P) 13 37.00 -1.6
MIN 2.31 88 e(P) 13 41.70 -2.8
LBFM 2.32 63 eP 13 42.70 -2.0
ORV 2.52 106 ePd 13 45.20 -2.0
ARN 3.82 140 eP 14 02.70 -3.0
CMB 4.00 123 e(P) 14 04.90 -3.4
SAO 4.33 144 eP 14 09.10 -3.8
KVN 5.19 102 eP 14 22.70 -2.7
10 obs. assocloted

% SEP 10, 1990 20h 57m 42.85± 0.71s
46.441 N ± 6.7km 2.028 E ± 5.5km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.7 (LDG).

TCF 0.20 140 Pg 57 47.50 0.3
Sg 57 50.40
LSF 0.39 241 Pg 57 50.80 -0.1
Sg 57 56.00
MAF 0.43 120 Pg 57 51.50 -0.2
Sg 57 57.50
BGF 0.58 78 Pg 57 54.20 -0.4
Sg 58 01.60
AVF 0.98 69 Pg 58 01.20 -0.2
Sg 58 13.20
SSF 1.19 58 Pg 58 05.00 -0.1
Sg 58 20.00
SMF 1.27 80 Pg 58 06.40 0.0
Sg 58 22.00
LBF 1.45 67 Pg 58 09.40 0.3
Sg 58 28.00
LOR 1.50 56 Pg 58 10.20 0.3
Sg 58 29.20
S.D. = 0.3 on 9 of 9 obs.

SEP 10, 1990 21h 28m 01.51± 0.61s
43.241 N ± 7.3km 20.962 E ± 5.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.8 (TTG).

10d 21h

IVA	0.86	245	ePg	28	16.70	-1.5
			eSg	28	27.50	
PVY	0.97	229	ePg	28	19.00	-1.1
			eSg	28	31.40	
PLE	1.15	275	ePg	28	22.00	-1.1
			eSg	28	37.50	
SKO	1.32	164	iPn	28	26.20	0.4
			iSg	28	45.90	
			Lg	28	56.00	
TTG	1.49	238	ePg	28	28.30	0.0
			eSg	28	48.00	
NKY	1.50	254	ePg	28	28.50	-0.1
			eSg	28	48.00	
BEO	1.62	347	ePn	28	31.20	1.0
			eSg	28	54.00	
ULC	1.80	225	ePn	28	35.50	2.7X
			eSn	28	59.30	
BDV	1.84	239	ePn	28	35.00	1.6
			eSn	28	59.20	
HCY	1.98	247	ePn	28	37.00	1.6
			eSn	29	02.20	
KKB	2.08	131	iPd	28	39.00	2.1
OHR	2.13	183	ePn	28	41.50	3.8X
BZS	2.42	11	ePc	28	41.50	-0.2
PGB	2.45	105	eP	28	42.00	-0.3
MMB	2.63	128	ePc	28	49.00	4.2X
PLD	2.98	111	eP	29	01.00	11.3X
DEV	2.98	27	ePc	29	03.00	13.3X
RZN	3.18	118	eP	28	51.00	-1.7
PVL	3.19	89	iPc	28	52.00	-0.7
CMP	3.56	54	ePc	29	07.00	9.0X
KDZ	3.66	114	iPc	29	12.00	12.6X
MLR	4.22	56	ePc	30	02.50	55.1X
PTJ	4.45	308	eP	29	05.90	-4.8X
VRI	4.89	55	ePd	29	07.00	-9.8X

S.D. = 1.3 on 14 of 24 obs.

& SEP 10, 1990 21h 34m 21.24s
59.165 N 153.546 W
DEPTH = 93.3km
SOUTHERN ALASKA (2)
<AGS-P>.

AUI	0.18	20	iP	34	34.02	0.8
AUH	0.21	15	iP	34	34.34	1.0
AUE	0.21	25	iP	34	34.34	1.1
CDD	0.24	192	iP	34	34.13	0.6
			iS	34	44.16	
MCNL	0.41	273	iP	34	35.18	-0.7
			iS	34	46.10	
OPT	0.52	18	iP	34	36.09	-0.6
			eS	34	47.61	
PDB	0.71	332	iP	34	37.51	-0.8
			eS	34	50.02	
XLV	0.98	72	eP	34	40.12	-1.1
			eS	34	55.03	
HOM	1.09	62	eP	34	41.92	-0.6
			iS	34	57.91	
CNPM	1.24	72	eP	34	42.98	-1.3
			iS	34	59.59	
RSO	1.36	17	iP	34	45.16	-0.9
			eS	35	03.09	
NNL	1.44	51	eP	34	46.63	-0.2
BRLK	1.49	65	eP	34	46.68	-0.7
KDC	1.53	158	iP	34	46.36	-1.5
RDT	1.53	22	iP	34	46.75	-1.2
CKL	2.13	16	iP	34	55.06	-0.8
BGL	2.18	15	eP	34	55.89	-0.7
SVW	2.21	333	eP	34	55.82	-1.1
CRP	2.22	18	eP	34	56.38	-0.8
SEW	2.28	64	eP	34	56.18	-1.7
SUA	2.70	30	eP	35	02.61	-1.0
PMS	2.88	42	iP	35	04.63	-1.4
SKT	3.00	19	eP	35	06.17	-1.4
PWA	3.09	35	eP	35	07.66	-1.1

24 obs. associated

SEP 10, 1990 21h 36m 18.25± 0.61s
44.720 N ± 4.7km 10.513 E ±13.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.5 (VIE).

MME	0.54	166	P	36	29.40	0.1
			eSg	36	39.20	
BDI	0.66	175	Pd	36	30.80	-0.7
			eSg	36	42.30	
SAL	0.89	1	P	36	34.90	-0.3
			eSg	36	48.70	
PII	1.00	180	P	36	37.60	0.4
			eSn	36	53.50	
MDI	1.20	332	Pd	36	40.70	0.1
			eSg	36	57.80	
PGD	1.21	134	P	36	41.00	0.1
SQTA	2.55	11	iPgd	37	00.60	0.2
			iSg	37	32.20	

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

% SEP 10, 1990 21h 58m 45.89± 1.65s
40.836 N ±16.0km 14.504 E ±18.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

BSS	0.23	101	P	58	50.50	-0.4
			eSg	58	56.70	
SGO	0.67	114	P	58	59.00	-0.2
			eSg	59	11.00	
DUI	0.83	358	P	59	02.50	0.6
SDI	1.01	329	P	59	04.60	-0.5
			eSg	59	20.60	
MGR	1.06	131	P	59	06.40	0.5
			eSn	59	22.60	

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

SEP 10, 1990 23h 26m 04.26± 0.47s
4.528 N ±10.3km 62.370 E ± 6.1km
DEPTH = 10.0km (geophysicist)
4.8mb (13 obs.) 4.0Msz (1 obs.)
CARLSBERG RIDGE (421)

GBA	17.38	58	P	30	14.00	5.4X
POO	17.88	38	iPc	30	25.70	10.9X
HYB	20.38	50	eP	30	43.00	-1.1
QUE	25.89	9	eP	31	42.00	3.7X
GKN	31.53	40	P	32	30.00	0.9
PKI	31.73	41	P	32	31.90	0.8
KKN	31.80	41	P	32	33.20	1.7
SHL	35.19	51	eP	33	01.50	0.6
PTZ	35.99	238	iP	33	17.00	9.3X
CHG	38.42	65	eP	33	28.80	0.8
CHTO	38.42	65	eP	33	28.20	0.2
	1.2s		11.11nm			4.5mb
LSZ	39.16	239	iP	33	36.00	1.6
BCAO	43.70	272	iPc	34	12.70	1.1
	0.9s		15.00nm			4.8mb
VRI	51.53	329	ePd	35	14.00	1.6
MLR	51.69	328	eP	35	16.00	2.3
CMP	52.03	327	ePc	35	15.00	-1.2
SKO	52.13	322	iP	35	15.20	-1.8
SPC	57.02	328	eP	35	52.40	-0.5
SRO	57.26	326	eP	35	53.70	-0.6
ZST	58.15	326	eP	36	01.40	0.9
BJI	59.85	46	eP	36	12.00	-0.5
OSS	61.49	322	ePc	36	24.00	0.2
CLL	62.06	327	iP	36	27.80	0.5
	1.9s		29.00nm			5.1mb
MMK	62.59	320	ePc	36	31.20	0.0
ZLA	62.92	322	eP+	36	33.10	0.0
DIX	62.95	320	ePc	36	33.70	0.0
SLE	62.98	322	ePc	36	33.40	-0.1
LPG	63.15	319	eP	36	33.80	-1.2
	1.4s		13.05nm			4.9mb
LPL	63.17	319	eP	36	34.00	-1.0
	1.2s		11.90nm			5.0mb
LOR	65.67	320	eP	36	50.40	-0.6
	1.4s		13.05nm			4.9mb
SSF	65.82	320	eP	36	48.20	-3.8X
	1.2s		5.95nm			4.7mb
BGF	66.07	319	eP	36	49.10	-4.5X
	1.4s		30.50nm			5.3mb
HFS	66.59	336	eP	36	55.70	-0.9
	0.5s		2.50nm			4.7mb
Z	19s		0.08um			4.0Msz
			LR	05	51.00	
KIC	66.80	275	P	36	59.20	0.4
TIC	67.06	275	P	37	01.00	0.5
LIC	67.09	275	P	37	01.00	0.3
LKO	67.55	278	P	37	02.44	-1.2
	0.6s		4.50nm			4.8mb
NB2	68.11	336	P	37	05.60	-0.7
	0.9s		4.30nm			4.6mb
EKA	72.52	327	Pc	37	32.80	-0.4
	0.7s		2.20nm			4.4mb
WRA	74.71	112	Pc	37	45.90	-0.7
	0.8s		11.30nm			4.9mb
WB5	74.72	112	eP	37	46.00	-0.6
ASPA	75.03	116	eP	37	47.40	-1.0

S.D. = 1.0 on 36 of 42 obs.

SEP 11, 1990 00h 28m 41.96± 0.52s
37.038 N ±12.9km 23.759 E ± 8.0km
DEPTH = 139.1 ± 10.9 km
SOUTHERN GREECE (368)

VLI	0.73	244	eP	29	02.60	-1.2
ATH	0.93	358	iPd	29	04.00	-1.4
APE	1.42	88	eP	29	10.60	0.4
ITM	1.47	276	iPd	29	11.50	0.7
NPS	2.32	139	eP	29	21.00	0.2
EVR	2.43	321	eP	29	24.20	2.0
VLS	2.76	295	eP	29	26.30	-0.1
KAP	3.13	117	eP	29	33.00	1.8
KEK	4.10	312	eP	29	43.50	-0.5
SOI	6.21	282	Pd	30	12.80	0.4
			eSn	31	11.50	
BRT	6.39	309	Pc	30	14.20	-0.7
TDS	6.39	296	P	30	15.00	0.0
			eSn	31	15.70	
ORI	6.48	300	Pc	30	16.20	0.1
ATN	6.68	282	P	30	19.00	0.1
			eSn	31	23.00	
BAI	6.73	309	P	30	18.00	-1.6
MGR	7.13	298	P	30	24.50	-0.5
			eSn	31	32.00	
DUI	8.56	306	P	30	45.00	0.9
SDI	9.00	304	P	30	51.00	1.0
JVI	10.84	115	eP	31	12.50	-1.7
DSI	11.05	116	eP	31	19.00	2.0
PRNI	11.49	122	eP	31	21.00	-1.9

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

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* SEP 11, 1990 01h 46m 06.97± 0.36s
17.909 S ±16.0km 178.718 W ±10.6km
DEPTH = 600.0km (geophysicist)
5.0mb (12 obs.)
FIJI ISLANDS REGION (181)

DZM	14.55	251	iPc	49	11.40	0.7
BRS	27.89	245	iPc	51	12.00	-0.3
RMO	31.23	248	iPd	51	40.20	-0.5
	0.7s		56.00nm			5.3mb
CNB	33.19	232	iPc	51	58.40	1.2
	0.5s		64.00nm			5.5mb
CAN	33.47	232	eP	52	00.00	0.5
BWA	33.58	234	eP	51	59.00	-1.4
PMG	34.17	280	eP	52	06.50	1.1
STK	38.38	241	iPd	52	41.20	1.5
	0.5s		42.00nm			5.2mb
QIS	39.37	259	eP	52	47.00	-0.9
WB5	44.32	260	iPd	53	26.60	-0.3
WRA	44.34	260	Pc	53	26.90	-0.2
	0.5s		12.30nm			4.7mb
ASPA	44.51	254	iPd	53	28.80	0.4
	0.7s		260.00nm			5.9mb
			eS	01	46.60	
MTN	48.51	269	iPc	53	58.40	-0.4
	0.4s		68.00nm			5.5mb
FORR	49.71	245	iPd	54	07.30	-0.1
	0.4s		58.00nm			5.5mb
KNA	50.18	264	eP	54	10.80	-0.2
WARB	51.00	251	iPd	54	17.00	0.0
COOL	55.69	245	iPd	54	49.10	-1.0
	0.3s		9.00nm			4.6mb
KLB	58.56	244	iPd	55	09.00	-0.6
	0.4s		15.00nm			4.6mb
NWAO	58.95	242	eP	55	12.00	-0.1
BAL	59.52	245	iPd	55	15.40	-0.5
MUN	59.86	243	iPc	55	18.20	0.1
NANU	61.44	254	iPd	55	29.00	0.4
	0.3s		15.00nm			4.8mb
PRS	76.43	44	ePc	56	57.80	0.4
SAO	76.63	44	eP	56	58.50	0.0
BRK	76.73	43	e(P)	56	59.10	0.2
PRI	76.80	45	eP	57	00.10	0.6
FRI	77.91	45	ePc	57	05.10	-0.2
CMB	78.04	43	ePc	57	05.90	-0.1
WDC	78.13	40	ePc	57	06.60	0.2
ORV	78.19	42	eP	57	06.70	0.0
KVN	80.10	44	P	57	17.00	0.1
	0.8s		5.60nm			4.1mb
PSI	83.56	275	ePc	57	36.00	1.4

PNT	84.90	34 eP	57 40.00	-0.4	
	0.4s	4.00nm		4.4mb	
FBA	85.87	13 P	57 43.50	-1.3	
ANMO	86.33	52 P	57 48.10	0.2	
HFS	136.89	351 ePKP	04 16.40	-7.1X	
	0.4s	1.10nm			

S.D. = 0.7 on 35 of 36 obs.

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* SEP 11, 1990 02h 12m 04.69± 1.33s
32.569 S ±13.3km 69.096 W ±16.5km
DEPTH = 33.0km (normal)
MENDOZA PROVINCE, ARGENTINA (139)

RTBS	0.95	341 iPc	12 22.00	0.3	
CFA	1.20	37 eP	12 25.10	-0.2	
JACH	1.27	264 iPc	12 27.10	0.8	
		iS	12 46.50		
PEL	1.46	246 iPd	12 29.50	0.5	
		iS	12 50.80		
PCH	1.59	228 iPc	12 32.50	1.6	
		e	12 57.00		
ROCH	1.66	255 iPd	12 31.00	-1.1	
		iS	12 53.50		
CHCH	1.89	223 iPd	12 36.00	0.8	
		iS	13 03.00		
TACH	1.89	235 iPd	12 35.00	-0.2	
		i	13 01.50		
LNV	2.38	234 iPd	12 39.80	-2.4	
		i	13 09.50		

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

& SEP 11, 1990 03h 09m 33.51s
60.187 N 140.883 W
DEPTH = 18.2km
SOUTHEASTERN ALASKA (19)
<AGS-P>.

PCA	0.33	106 iP	09 40.43	-0.2	
		eS	09 46.69		
BCPM	0.67	110 iP	09 45.54	-0.8	
		eS	09 55.66		
YKU	0.86	137 eP	09 49.40	-0.2	
		eS	10 00.47		
PNL	0.91	124 iP	09 49.15	-1.4	
		eS	10 02.64		
BALM	1.12	320 eP	09 52.30	-1.8	
		eS	10 08.36		
TGL	1 12	301 iP	09 52.37	-1.8	
		eS	10 09.05		
HON	1.25	125 iP	09 54.25	-1.8	
GLB	1.91	313 eP	10 04.41	-1.2	
KLU	2.79	300 eP	10 17.91	-0.3	
VLZ	2.85	292 eP	10 17.94	-0.9	
VZW	2.93	290 eP	10 18.56	-1.5	
TOA	3.21	309 eP	10 21.87	-2.2	
DWY	3.94	9 P	10 33.00	-1.4	

13 obs. associated

& SEP 11, 1990 03h 30m 26.56s
36.125 N 120.669 W
DEPTH = 8.3km
CENTRAL CALIFORNIA (39)
<GS>. ML 3.1 (BRK).

PRI	0.02	11 iPc	30 28.70	0.4	
PHAM	0.36	143 iPd	30 34.00	0.0	
PKEM	0.46	98 eP	30 36.70	0.9	
LLA	0.54	336 iPd	30 37.20	-0.2	
PRS	0.60	290 ePd	30 37.70	-1.0	
		iS	30 49.00		
SAO	0.89	316 iPc	30 43.10	-0.8	
BCH	1.05	153 eP	30 45.70	-0.9	
FRI	1.16	42 iPd	30 46.80	-1.6	
		iS	31 02.30		
GCC	1.40	311 ePc	30 50.60	-1.7	
ARN	1.41	331 eP	30 51.30	-1.1	
MHC	1.44	328 eP	30 52.00	-1.1	
BLP	1.58	172 eP	30 53.30	-1.5	
CMB	1.92	7 ePc	30 59.10	-0.8	
		eS	31 23.70		
PCC	1.94	315 eP	30 58.30	-1.8	
BKS	2.15	325 e(P)	31 02.80	-0.4	
KVN	3.56	34 eP	31 24.50	1.1	

16 obs. associated

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* SEP 11, 1990 03h 38m 11.37± 0.86s
39.946 N ± 9.2km 24.211 E ± 8 6km
DEPTH = 33.0km (normal)
AEGEAN SEA (365)
ML 3.3 (ATH).

PLG	0.73	306 iPnd	38 24.50	-0.7	
RDO	1.57	40 ePn	38 38.00	0.8	
PRK	1.74	113 ePn	38 42.60	2.9X	
KZN	1.90	282 ePn	38 42.80	0.6	
ATH	2.01	191 ePn	38 45.80	2.2	
EVR	2.13	242 ePn	38 44.50	-0.9	
OHR	2.85	295 ePn	39 02.30	6.7X	
SKO	2.92	315 ePn	38 45.50	-11.0X	
		i	38 57.70		
ITM	3.29	214 ePn	39 01.00	-0.8	
VLS	3.33	239 ePn	39 02.50	0.2	
CIN	3.83	126 eP	39 08.00	-1.4	

S.D. = 1.4 on 8 of 11 obs.

? SEP 11, 1990 03h 52m 08.26± 1.95s
15.939 N ±13.0km 120.147 E ±33.3km
DEPTH = 33.0km (normal)
3.9mb (1 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	0.63	42 iPc	52 21.60	0.8	
SZP	1.63	10 iPd	52 35.00	0.0	
		iS	52 53.50		
CVP	2.38	42 eP	52 45.00	-0.8	
		eS	53 12.00		
PGP	2.55	162 eP	52 54.00	5.9X	
WRA	38.29	158 Pd	59 27.60	0.0	
	1.0s	2.00nm		3.9mb	

S.D. = 1.1 on 4 of 5 obs.

& SEP 11, 1990 04h 09m 43.28s
47.185 N 123.102 W
DEPTH = 18.0km
WASHINGTON (29)
<SEA>. CL 3.0 (SEA).

CPW	0.21	186 Pd	09 47.95	-0.6	
MEW	0.31	87 Pc	09 50.41	0.4	
		S	09 55.38		
GMW	0.42	30 Pd	09 50.92	-1.0	
HDW	0.46	4 Pd	09 51.71	-1.0	
ONR	0.55	236 Pc	09 53.70	-0.4	
GHW	0.58	104 Pc	09 54.00	-0.7	
APW	0.62	150 Pd	09 54.27	-1.0	
SPW	0.69	57 P	09 56.53	0.1	
BMW	0.72	187 Pd	09 55.89	-1.1	
PGW	0.72	28 Pd	09 56.36	-0.7	
OSD	0.76	328 Pd	09 56.86	-0.9	
LMW	0.76	133 P	09 56.77	-1.0	
RVC	0.81	107 Pc	09 57.99	-0.6	
BLN	0.83	6 Pd	09 57.43	-1.4	
CZM	0.85	151 Pd	09 58.33	-1.0	
GSM	0.89	88 Pc	09 59.18	-0.8	
OOW	0.92	307 P	10 00.83	0.4	
RMW	0.92	72 Pc	09 59.64	-0.9	
REMR	0.94	113 P	09 59.76	-1.1	
LON	0.99	116 Pc	10 00.46	-1.1	
FMW	1.01	104 Pc	10 00.96	-1.1	
ERK	1.02	149 Pd	10 00.72	-1.5	
TDL	1.03	144 Pd	10 01.18	-1.3	
STW	1.04	339 P	10 02.26	-0.2	
RVW	1.06	166 Pd	10 01.52	-1.4	
HTW	1.10	55 Pc	10 02.16	-1.3	
FL2	1.12	152 Pd	10 02.45	-1.4	
NLO	1.12	192 Pd	10 02.86	-1.1	
STD	1.12	147 Pd	10 02.53	-1.4	
SHW	1.16	149 Pd	10 03.26	-1.3	
SOSW	1.16	145 Pd	10 03.18	-1.4	
REMW	1.17	147 P	10 03.81	-1.1	
WPW	1.17	114 Pc	10 03.71	-1.1	
ESD	1.19	146 P	10 03.96	-1.1	
HSR	1.19	148 P	10 04.01	-1.2	
GLK	1.20	121 Pc	10 04.16	-1.1	
LVP	1.22	157 Pd	10 04.07	-1.4	
JCW	1.28	38 P	10 04.99	-1.3	
CDFW	1.29	145 Pd	10 05.53	-1.0	
MTMW	1.31	152 Pd	10 05.81	-1.0	
CMW	1.41	28 P	10 07.32	-0.8	
ASR	1.47	134 P	10 08.41	-0.6	
MCW	1.51	7 P	10 10.25	0.8	
TWW	1.53	91 P	10 10.19	0.4	
KMOR	1.57	190 Pd	10 09.21	-1.3	
NAC	1.62	105 Pd	10 11.84	0.6	
GULW	1.63	140 P	10 11.52	0.1	
RPW	1.66	40 P	10 11.46	-0.2	
TBM	1.71	90 Pc	10 12.96	0.5	
EBG	1.75	98 P	10 13.75	0.6	
PGO	1.78	165 P	10 13.44	0.1	
VLMM	1.80	156 P	10 13.84	0.0	
ETW	1.93	76 Pc	10 16.61	0.9	
VLL	1.98	150 P	10 17.23	0.7	
GL2	1.99	127 P	10 17.83	1.2	
MXC	2.02	106 P	10 18.09	1.2	
NLW	2.07	63 P	10 18.70	0.9	
TDH	2.10	154 P	10 18.52	0.3	
CBSW	2.17	72 P	10 19.19	0.1	
WTV	2.20	75 P	10 19.46	-0.1	
BVW	2.24	98 P	10 21.57	1.5	
BRVW	2.25	107 P	10 22.18	1.9	
DHW2	2.39	69 P	10 22.39	0.1	
EPH	2.39	85 P	10 22.22	0.0	
WAH2	2.46	99 P	10 24.41	1.2	
RC1	2.52	94 P	10 24.32	0.3	

66 obs. associated

SEP 11, 1990 04h 13m 29.72± 0.68s
44.884 N ± 4.0km 6.699 E ± 9.1km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (LDG), 1.9 (GEN).

RRL	0.07	59 P	13 32.63	0.3	
		S	13 35.09		
PZZ	0.48	143 P	13 38.37	-1.0	
		S	13 45.34		
RSP	0.48	56 P	13 39.09	-0.4	
		S	13 47.91		
LPG	0.62	3 Pg	13 42.30	0.0	
		Sg	13 52.50		
LPL	0.63	2 Pg	13 42.60	0.0	
LSD	0.66	29 P	13 43.09	0.1	
		S	13 53.04		
SBF	1.15	152 Pg	13 53.00	1.7	
FRF	1.32	182 Pg	13 53.70	-0.5	
		Sg	14 10.70		
LRG	1.45	190 Pg	13 56.00	0.0	
		Sg	14 13.80		
LMR	1.56	185 Pg	13 57.20	-0.3	
		Sg	14 16.80		

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

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* SEP 11, 1990 04h 29m 58.27± 1.14s
36.351 N ± 9.1km 27.203 E ±12.4km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.7 (ATH).

KAP	0.80	182 ePb	30 13.70	-0.1	
		eSg	30 26.10		
SMG	1.39	348 ePn	30 24.00	0.4	
CIN	1.43	29 ePn	30 24.00	-0.3	
		iSg	30 46.00		
APE	1.52	299 ePb	30 26.50	0.9	
VAM	2.61	250 ePn	30 42.50	1.2	
VLI	3.46	277 ePn	30 51.00	-2.2	

S.D. = 1.6 on 6 of 6 obs.

SEP 11, 1990 05h 13m 27.03± 0.55s
46.916 N ± 5.3km 8.288 E ± 5.3km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
ML 2.8 (VIE), 2.7 (LDG).

LLS	0.49	95 ePd	13 36.50	-0.5	
ZLA	0.57	7 eP+	13 38.50	-0.1	
SAX	0.80	65 ePc	13 43.00	0.3	
SLE	0.86	9 ePc	13 43.70	0.1	
TMA	0.91	153 ePc	13 43.10	-1.4	
VDL	0.92	117 ePc	13 43.90	-0.9	
BSF	1.37	313 Pg	13 52.00	-0.2	
		Sg	14 09.60		
CDF	1.65	336 Pn	13 55.80	-0.4	
		Sg	14 19.60		
HAU	1.71	310 Pn	13 56.20	-0.8	
		Pg	13 59.00		
		Sg	14 20.20		
LPL	1.77	218 Pg	13 59.00	0.9	
LPG	1.78	218 Pg	13 59.10	0.9	
		Sg	14 21.80		
SQTA	2.02	80 iPgd	14 03.80	2.2	

11d 05h

		iSg	14 34.60		
SSF	3.28 274	Pg	14 26.40	7.0X	
		Sg	15 07.20		
S.D. = 1.1	on 12 of 13 obs.				

SEP 11, 1990 05h 19m 46.79± 1.24s
70.992 N ±15.1km 13.276 W ±11.5km
DEPTH = 10.0km (geophysicist)
4.4mb (16 obs.)
JAN MAYEN ISLAND REGION (639)

JNW	1.59 86	eP	20 13.50	-1.4	
AKU	5.62 201	eP	21 09.30	-3.0	
	1.0s 124.00nm		5.5mb	X	
		i	21 15.00		
		iS	22 13.00		
NB2	13.96 123	P	23 04.40	-2.2	
	0.9s 2.30nm		4.0mb		
HFS	15.40 121	eP	23 24.30	-1.1	
	0.9s 8.10nm		4.0mb		
WTS	21.12 144	eP	24 34.50	1.0	
	0.9s 9.00nm		4.1mb		
ENN	22.13 146	eP	24 44.00	0.4	
	1.0s 31.00nm		4.7mb		
CLL	23.09 135	eP	24 55.00	1.9X	
	1.3s 17.00nm		4.4mb		
BRG	23.71 134	eP	25 03.10	3.9X	
	1.0s 12.00nm		4.4mb		
KSP	24.31 131	eP	25 06.60	1.6	
PRU	24.68 134	eP	25 11.00	2.5X	
BSF	25.11 147	eP	25 13.90	1.1	
	1.0s 12.00nm		4.5mb		
LOR	25.17 152	eP	25 13.60	0.3	
	1.1s 9.75nm		4.4mb		
Z	20s 0.13um		3.4MszX		
KHC	25.26 136	eP	25 17.00	2.9X	
SSF	25.31 153	eP	25 14.80	0.2	
	1.0s 4.00nm		4.1mb		
LBF	25.46 152	eP	25 16.60	0.5	
	0.8s 6.70nm		4.4mb		
BGF	25.71 154	eP	25 18.60	0.3	
	1.0s 10.00nm		4.5mb		
SMF	25.77 152	eP	25 19.50	0.6	
	1.0s 10.00nm		4.5mb		
LSF	25.83 156	eP	25 19.80	0.4	
	1.0s 14.00nm		4.6mb		
TCF	25.88 155	eP	25 20.20	0.2	
	1.0s 14.00nm		4.6mb		
MAF	26.00 154	eP	25 21.10	0.1	
	1.0s 10.00nm		4.5mb		
RJF	26.75 156	eP	25 29.10	1.1	
	0.8s 8.05nm		4.5mb		
Z	20s 0.15um		3.5MszX		
KVN	58.16 298	P	29 42.80	-0.1	
S.D. = 1.3	on 18 of 22 obs.				

SEP 11, 1990 05h 20m 45.25± 1.01s
6.885 S ± 6.0km 126.705 E ±11.0km
DEPTH = 439.4 ± 15.9 km
4.8mb (10 obs.)
BANDA SEA (280)

MTN	7.35 144	iPc	22 34.70	0.0	
	0.3s 122.00nm		5.6mb		
		eS	23 53.00		
KNA	9.04 167	iPd	22 53.30	-0.1	
WB5	14.91 151	iPc	23 56.10	-1 1	
		eS	26 31.80		
		e	31 38.10		
WRA	14.95 151	Pd	23 57.00	-0.6	
	0.6s 27.10nm		4.9mb		
CGP	15.37 352	ePc	24 02.00	0.1	
	1.0s 31.00nm		4.8mb		
MBL	15.67 204	iPc	24 04.50	-0.5	
	0.5s 44.00nm		5.2mb		
ASPA	18.06 158	eP	24 29.70	0.7	
	0.5s 84.00nm		5.5mb		
		iS	27 34.90		
QIS	18.47 139	eP	24 34.00	1.1	
		eS	27 40.00		
NANU	18.95 213	iPc	24 38.50	1.0	
	0.3s 14.00nm		4.9mb		
WARB	19.19 180	eP	24 41.50	1.5	
COOL	24.44 192	eP	25 28.00	-0.9	
KLB	25.96 198	eP	25 41.50	-1.1	
NWAO	27.37 198	iPd	25 54.80	-0.1	
STK	28.49 153	eP	26 05.00	0.2	
	0 6s 6.00nm		4.2mb		
		iS	30 19.90		
CHTO	37.43 313	P	27 21.50	0.8	
MAT	44.52 13	eP	28 17.00	-0.6	
	0.8s 12.69nm		4.4mb		
LZH	47.84 335	P	28 43.50	0.2	
	1.5s 31.00nm		4.5mb		
PKI	52.60 312	P	29 18.80	-0.3	
KKN	52.82 313	P	29 20.40	-0.1	
GKN	53.41 312	P	29 24.60	-0.1	
	0.6s 16.00nm		4.5mb		
S.D. = 0.8	on 20 of 20 obs.				

SEP 11, 1990 06h 09m 29.54± 0.58s
43.225 N ± 7.5km 20.913 E ± 4.9km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.8 (TTG).

IVA	0.82 245	ePg	09 44.20	-1.3	
		eSg	09 55.00		
PVY	0.93 228	ePg	09 46.40	-1.1	
		eSg	09 59.00		
PLE	1.11 276	ePg	09 49.00	-1.5	
		eSg	10 06.00		
SKO	1.31 163	iPn	09 53.00	-0.8	
		i	09 56.50		
		iSn	10 13.00		
		Lg	10 23.50		
TTG	1.45 237	ePg	09 55.80	0.0	
		eSg	10 15.60		
NKY	1.46 254	ePg	09 56.00	-0.1	
		eSg	10 15.20		
BEO	1.63 348	ePn	09 59.00	0.7	
		eSg	10 22.00		
ULC	1.76 225	ePn	10 04.00	3.7X	
		eSn	10 27.00		
BDV	1.80 239	ePn	10 02.80	1.9	
		eSn	10 27.20		
HCY	1.94 247	ePn	10 05.00	2.2	
		eSn	10 30.00		
KKB	2.10 130	iP	10 06.00	0.8	
MMB	2.65 127	ePd	10 13.00	-0.1	
DRA	2.82 58	eP	10 26.00	10.6X	
RZN	3.21 117	eP	10 22.00	0.9	
PVL	3.23 89	iPc	10 20.00	-1.3	
TNR	3.42 44	ePd	10 30.00	6.1X	
MLR	4.26 56	eP	10 37.00	1.0	
PTJ	4.44 309	e(Pn)	10 52.00	13.5X	
VRI	4.92 56	ePd	10 44.00	-1.3	
S.D. = 1.3	on 15 of 19 obs.				

& SEP 11, 1990 07h 13m 31.60s
36.657 N 121.317 W
DEPTH = 9.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.7 (BRK).
Mo=1.6*10**15 Nm (BRK). Felt (V) at Soledad.

SAO	0.15 316	iPc	13 34.70	-0.3	
LLA	0.30 98	iPc	13 37.60	-0.3	
PRS	0.33 188	iPd	13 38.00	-0.3	
GCC	0.66 305	iPc	13 43.80	-1.0	
ARN	0.71 346	iPc	13 45.70	-0.1	
MHC	0.73 339	iPd	13 46.10	-0.1	
PRI	0.74 134	iPd	13 45.70	-0.5	
PHAM	1.11 138	eP	13 51.60	-0.9	
PKEM	1.14 121	eP	13 53.00	-0.1	
PCC	1.20 315	ePc	13 52.20	-1.8	
FRI	1.33 75	ePc	13 54.50	-1.8	
BKS	1.42 329	iPd	13 55.70	-1.9	
		iS	14 13.00		
		i	14 17.80		
		iS	14 18.00		
BRK	1.43 328	eP	13 55.50	-2.2	
ZSP	1.49 330	ePd	13 56.90	-1.6	
CMB	1.56 28	iPd	13 58.70	-0.9	
		iS	14 18.50		
BCH	1.78 145	eP	14 00.70	-2.1	
NWRM	2.19 326	eP	14 05.00	-3.6	
BLP	2.22 160	eP	14 06.80	-2.3	
ABL	2.48 136	eP	14 10.20	-2.8	
ORV	2.90 357	eP	14 17.20	-1.5	
KVN	3.49 46	eP	14 26.10	-1.3	
MIN	3.69 357	eP	14 29.10	-1.1	
PEC	4.38 128	eP	14 36.00	-3.8	
PLM	4.92 131	eP	14 44.80	-2.9	
24 obs. associated					

? SEP 11, 1990 07h 58m 12.18± 3.47s
1.216 N ±52.9km 123.981 E ±179.km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
MINAHASSA PENINSULA (265)

CVP	16.52 353	eP	02 03.00	-0.1	
WB5	23.31 155	eP	03 17.80	-0.5	
WRA	23.35 155	Pc	03 18.10	-0.6	
	0.8s 7.30nm		4.2mb		
QIS	26.50 146	eP	03 48.00	-0.7	
ASPA	26.55 159	eP	03 57.50	8.4X	
	1.4s 16.00nm		4.4mb		
Z	16s 0.37um		4.0MszX		
		LR	17 05.80		
BWA	42.22 149	eP	06 05.70	1.8	
CAN	43.22 150	eP	06 12.20	0.1	
S.D. = 1.2	on 6 of 7 obs.				

* SEP 11, 1990 08h 08m 36.66± 0.63s
6.952 N ±13.8km 77.994 W ±12.7km
DEPTH = 32.6km (2 depth phases)
4.6mb (3 obs.)
NEAR WEST COAST OF COLOMBIA (102)
MD 4.7 (UPA).

UPA	2.53 323	ePd	09 14.40	-1.9	
	1.0s 170.00nm				
		iS	09 46.40		
FUQ	4.48 109	eP	09 50.00	5.6X	
BOG	4.54 120	eP	09 46.50	1.2	
		iS	10 35.00		
DVD	4.66 289	(P)	09 46.00	-0.5	
BMG	4.88 88	iPd	09 49.00	-0.9	
ZOBO	25.05 157	P	13 59.00	-1.4	
Z	20s 0.23um		3.7Msz		
		S	18 36.00		
		LR	24 04.00		
CCH	26.87 154	P	14 18.50	1.6	
SIV	28.29 144	iPc	14 27.20	-2.3	
RSCP	29.35 347	P	14 39.80	0.9	
	1.2s 32.07nm		4.9mb		
OLY	30.99 338	P	14 50.70	-2.7	
UYO	31.06 333	e(P)	14 38.80	-15.2X	
TUL	33.12 333	eP	15 16.40	4.5X	
	1.0s 3.00nm		4.2mb		
ANMO	38.23 321	P	15 56.50	0.8	
		pP	16 06.00	32km	
SOB1	40.30 113	(P)	16 01.00	-12.0X	
GOL	40.83 327	P	16 17.50	0.2	
DAU	44.65 323	P	16 50.00	1.5	
KVN	48.19 318	P	17 16.80	0.5	
		pP	17 26.70	33km	
LBFM	51.85 318	P	17 46.00	1.7	
NB2	83.59 29	P	21 03.60	0.7	
	1.2s 6.30nm		4.6mb		
KKN	141.86 24	PKP	28 00.00	-7.9X	
WB5	146.08 245	ePKP	28 18.00	3.0X	
WRA	146.09 244	PKPd	28 15.30	0.3	
	1.3s 6.00nm				
GBA	148.18 50	PKP	28 22.00	3.6X	
S.D. = 1.5	on 16 of 23 obs.				

& SEP 11, 1990 08h 15m 14.19s
58.253 N 143.152 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>.

KAIM	1.80 339	eP	15 40.73	-4.8	
		eS	16 01.04		
CYK	1.87 10	eP	15 41.77	-4.7	
		eS	16 03.68		
WRG	1.88 17	iP	15 41.84	-4.8	
		eS	16 02.14		
SNH	1.94 5	eP	15 42.92	-4.6	
		eS	16 05.37		
MID	2.03 307	eP	15 44.44	-4.4	
HMT	2.17 345	eP	15 45.76	-5.1	
YKU	2.20 52	eP	15 46.05	-5.2	
WAX	2.21 4	iP	15 46.30	-5.2	
		eS	16 12.53		
RAGM	2.28 341	eP	15 47.20	-5.3	
TGL	2.52 4	iP	15 50.59	-5.3	

CVA	2.66	331	eP	15 51.70	-6.1
HIN	2.75	323	eP	15 53.44	-5.7
BALM	2.82	8	iP	15 54.95	-5.3
			eS	16 25.75	
GLB	3.22	354	eP	16 00.11	-5.7
VZW	3.30	330	eP	16 00.72	-6.3
VLZ	3.31	332	eP	16 00.59	-6.4
KLU	3.54	338	eP	16 04.28	-6.1
TOA	4.15	340	eP	16 12.89	-6.1

18 obs. associated

& SEP 11, 1990 08h 15m 39.14s
60.667 N 151.897 W
DEPTH = 91.1km
4.1mb (1 obs.)
KENAI PENINSULA, ALASKA (14)
<AGS-P>. Felt (IV) at Homer and (III) at Ninilchik.

RDT	0.27	250	iP	15 52.12	-0.7
			eS	16 03.09	
NKA	0.33	76	iP	15 54.46	1.4
RSO	0.47	244	iP	15 53.64	-0.6
SPU	0.52	352	iP	15 53.85	-0.6
			eS	16 05.72	
CGLM	0.65	355	iP	15 55.08	-0.5
NNL	0.69	154	iP	15 56.22	0.3
NCG	0.75	350	eP	15 56.05	-0.6
SLKM	0.84	100	iP	15 56.59	-0.9
HOM	1.02	173	iP	15 59.05	-0.4
			eS	16 14.17	
BRLK	1.04	150	eP	15 58.71	-1.0
CNPM	1.19	164	iP	16 00.50	-1.0
			iS	16 17.42	
OPT	1.22	214	eP	16 01.07	-0.7
			eS	16 18.00	
XLV	1.22	176	eP	16 00.55	-1.3
			eS	16 17.75	
PMS	1.28	62	iP	16 01.95	-0.6
SEW	1.34	114	eP	16 01.60	-1.7
			eS	16 20.02	
PWA	1.39	44	eP	16 03.12	-0.8
PDB	1.45	233	iP	16 03.27	-1.4
			eS	16 22.16	
AUE	1.51	210	eP	16 04.38	-1.0
			eS	16 22.49	
AUH	1.52	211	eP	16 05.29	-0.4
AUI	1.54	211	eP	16 05.22	-0.6
PLRM	1.63	54	eP	16 05.43	-1.6
			eS	16 25.93	
PMR	1.63	54	eP	16 05.50	-1.5
GHO	1.82	51	iP	16 08.06	-1.5
			eS	16 30.50	
SVW	1.87	285	eP	16 08.70	-1.6
CUT	1.91	23	eP	16 09.66	-1.0
MCNL	1.93	221	eP	16 09.61	-1.4
			eS	16 30.12	
CDD	1.95	208	eP	16 09.89	-1.4
SML	2.07	55	iP	16 11.27	-1.6
			eS	16 35.66	
SCM	2.50	60	eP	16 16.90	-1.8
HUR	2.56	24	eP	16 18.81	-0.6
VZW	2.64	79	eP	16 18.13	-2.5
HIN	2.68	93	eP	16 19.73	-1.4
VLZ	2.76	78	eP	16 19.62	-2.5
KTH	2.93	9	eP	16 23.12	-1.5
KDC	2.94	186	eP	16 21.70	-3.0
TTA	3.00	321	eP	16 24.10	-1.4
KLU	3.02	71	eP	16 23.16	-2.7
			eS	16 58.14	
MID	3.05	112	eP	16 24.52	-1.7
TOA	3.11	60	eP	16 25.40	-1.7
MCK	3.38	23	eP	16 29.19	-1.5
RAGM	3.58	91	eP	16 32.05	-1.5
HMT	3.79	92	eP	16 34.54	-1.9
KAIM	3.80	98	eP	16 34.63	-1.8
GLB	4.01	75	eP	16 38.10	-1.4
WRH	4.20	23	eP	16 40.25	-1.9
DDM	4.22	39	eP	16 42.31	0.0
HDA	4.39	29	eP	16 42.76	-2.0
CCB	4.42	24	eP	16 42.30	-2.8
TGL	4.46	85	eP	16 43.27	-2.5
WAX	4.47	89	eP	16 43.52	-2.4
SNH	4.52	92	eP	16 44.77	-1.7
FBA	4.65	22	eP	16 46.70	-1.6
BALM	4.69	81	eP	16 46.50	-2.4
CYK	4.71	93	eP	16 46.96	-2.1
DOT	4.74	47	eP	16 47.43	-2.1
GLM	4.80	24	eP	16 47.72	-2.7
IMA	5.48	352	eP	16 56.10	-3.9
BCPM	6.14	91	eP	17 05.97	-2.9
PNL	6.32	94	eP	17 08.34	-3.1
HQN	6.63	95	eP	17 11.64	-4.1
DWY	6.72	54	P	17 14.00	-2.9
INK	10.97	38	P	18 14.00	-0.6
PNT	21.48	107	eP	20 20.00	-1.4
	0.7s		6.00nm		4.1mb
EDM	22.03	92	eP	20 25.50	-1.3

64 obs. associated

SEP 11, 1990 08h 19m 46.66± 1.21s
37.750 N ± 8.2km 142.311 E ±11.0km
DEPTH = 32.6 ± 7.6 km
4.4mb (3 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)

OFUJ	1.42	339	iPd	20 09.90	-0.5
YAMJ	1.85	284	iPd	20 15.50	-1.1
KAKJ	2.30	229	P	20 22.20	-0.9
			S	20 46.60	
NIIJ	2.68	260	P	20 27.70	-0.7
			S	21 02.10	
CHJJ	3.15	238	P	20 34.20	-1.0
			S	21 10.40	
MAT	3.49	251	(P)	20 40.00	0.0
			eS	21 32.00	
MTMJ	3.78	253	P	20 45.80	1.6
IIDJ	4.20	239	P	20 51.40	1.3
			eS	21 40.10	
HOOJ	4.69	9	P	20 57.70	0.8
			eS	21 48.60	
TSRJ	5.55	248	P	21 10.00	0.9
KUSJ	5.65	18	P	21 09.40	-1.0
			S	22 09.00	
ASAJ	6.37	2	eP	21 21.70	1.1
BJI	20.45	285	eP	24 19.00	-4.9X
	2.0s		55.00nm		4.6mb
WB5	57.81	189	eP	29 36.90	-0.3
WRA	57.87	189	Pc	29 36.80	-0.8
	0.5s		1.50nm		4.3mb
NB2	73.80	338	P	31 18.20	-1.1
	0.9s		3.30nm		4.3mb
CLL	80.83	331	iP	31 57.50	-0.8
KHC	82.30	329	eP	32 06.80	0.6
ZOBO	145.71	60	PKP	39 26.00	1.5
LPB	145.91	60	PKP	39 28.00	3.4X
CNCB	146.18	60	PKP	39 28.00	2.7X

S.D. = 1.1 on 18 of 21 obs.

? SEP 11, 1990 08h 48m 30.99± 3.66s
17.172 N ±34.0km 61.715 W ±24.9km
DEPTH = 38.9 ± 19.9 km
LEEWARD ISLANDS (92)
ML 3.1 (FDF).

BPA	0.18	227	ePd	48 38.09	0.0
			S	48 44.30	
SEG	0.79	165	ePd	48 45.65	-0.1
			S	48 58.00	
NEV	0.82	268	ePd	48 46.15	0.0
			S	48 58.70	
SFG	1.04	151	eP	48 49.30	0.0
			S	49 03.60	
PAG	1.14	178	eP	48 50.77	0.1
			S	49 07.80	
DOG	1.14	175	eP	48 50.70	0.0
BBL	1.66	172	eP	48 58.06	0.0

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

? SEP 11, 1990 12h 29m 02.06± 0.91s
2.990 N ± 9.6km 99.309 E ±10.0km
DEPTH = 33.0km (normal)
NORTHERN SUMATERA (706)

PSI	0.48	233	ePd	29 12.80	0.4
			eS	29 26.50	
TSI	0.90	304	eP	29 18.00	-0.3
IPM	2.33	47	ePd	29 39.10	0.2
	0.7s		34.90nm		
PPI	3.59	162	eP	29 56.50	-0.3

S.D. = 0.6 on 4 of 4 obs.

? SEP 11, 1990 13h 22m 50.28± 1.16s
41.699 N ±168.km 13.866 E ±18.1km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SDI	0.04	280	Pd	22 52.00	-0.4
			eSg	22 54.40	
DUI	0.45	95	P	22 59.30	-0.1
			eSg	23 07.50	
RDP	0.86	274	P	23 07.00	0.1
			eSg	23 18.00	
RMP	0.88	278	P	23 07.00	-0.2
			eSg	23 19.50	

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

% SEP 11, 1990 13h 30m 34.70± 1.29s
18.059 N ± 7.9km 99.927 W ±15.8km
DEPTH = 33.0km (normal)
GUERRERO, MEXICO (59)
Felt at Mexico City.

ACX	1.19	177	iP	30 54.90	-0.1
			iS	31 09.20	
CRX	1.36	10	(P)	31 03.00	5.2X
PPM	1.59	51	iP	31 01.00	-0.4
			(S)	31 23.50	
IIA	1.62	48	iP	31 01.20	-0.1
			iS	31 18.00	
IIJ	1.68	6	iP	31 02.84	0.3
			iS	31 19.60	
OXX	3.21	107	eP	31 24.50	0.3

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

? SEP 11, 1990 13h 56m 48.36± 6.80s
24.985 S ±49.0km 179.980 W ±52.1km
DEPTH = 558.1 ± 58.4 km
4.8mb (3 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM	12.79	280	iPc	59 35.30	0.0
CTA	31.52	272	iPd	02 27.00	0.3
	0.6s		52.00nm		5.3mb
ASPA	41.89	262	iPd	03 52.30	0.5
	1.0s		14.00nm		4.4mb
WB5	42.35	267	iPd	03 55.20	-0.3
WRA	42.36	267	Pd	03 55.10	-0.5
	0.7s		17.50nm		4.7mb
MAT	72.80	326	eP	07 22.00	0.1
NB2	143.15	351	PKP	15 19.60	-0.3
	0.9s		2.30nm		
HFS	143.61	348	ePKP	15 20.90	0.3
	0.5s		5.70nm		

S.D. = 0.4 on 8 of 8 obs.

SEP 11, 1990 14h 09m 02.53± 0.40s
22.692 N ± 2.3km 120.909 E ± 2.9km
DEPTH = 33.0 ± 2.8 km
5.8mb (95 obs.) 5.6Msz (13 obs.)
TAIWAN (244)
Felt in central Taiwan. Complex event, observed on broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=195 Dip=70 Slip= 90
NP2: 15 20 90
Principal Axes:
T Plg=65 Azm=105
P 25 285
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
RADIATED ENERGY
No. of sta: 6 Focal mech. C
Energy 9.9±2.0*10**12 Nm
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 19C
Centroid Location:
Origin Time 14:08:59.0 1.2
Lat 22.24N 0.12 Lon 120.42E 0.05
Dep 39.4 4.2 Half-duration 3.7
Moment Tensor; Scale 10**17 Nm
Mrr= 3.89 0.21 Mtt=-0.05 0.31
Mff=-3.84 0.40 Mrt=-2.02 0.35
Mrf=-3.25 0.44 Mtf=-0.03 0.22
Principal Axes:
T Val= 5.70 Plg=64 Azm=136

11d 14h

N -0.57 14 15
P -5.13 21 279
Best Double Couple:Mo=5.4*10**17
NP1:Strike=345 Dip=27 Slip= 57
NP2: 201 68 105

TWG	0.20	50	iPd	09	10.10	1.0
			eS	09	14.40	
TWK	0.69	326	iPc	09	14.00	-1.9
			eS	09	22.00	
TWF1	0.75	29	iPd	09	17.30	0.7
TWD	1.52	24	ePd	09	28.80	1.2
TWQ	1.58	358	ePc	09	28.70	0.2
			eS	09	48.40	
ANP	2.55	13	iPc	09	43.00	0.5
			eS	10	11.50	
CVP	5.04	170	ePd	10	18.30	0.5
			iS	10	52.00	
SZP	5.13	185	ePc	10	20.80	1.7
			eS	11	20.00	
HKC	6.24	268	iP	10	31.50	-3.3X
BAG	6.26	183	eP	10	35.10	-0.1
			eS	11	43.00	
OCP	8.01	179	eP	10	35.00	-24.6X
SSE	8.37	2	Pc	11	01.00	-3.5X
	1.0s	39.00nm			5.5mb	
Z	10s	43.60um			3.4MszX	
N	10s	65.80um				
E	10s	40.70um				
		pP	11	05.80		
		esP	11	20.00		
PGP	9.14	180	ePc	11	20.00	4.8X
	1.2s	105.00nm			5.9mb	
PLP	12.10	161	ePc	11	56.00	0.3
	1.0s	31.00nm			5.4mb	
PPR	13.01	190	iPd	12	09.00	1.2
			eS	13	02.00	
CGP	14.62	165	ePd	12	30.00	1.1
	1.5s	562.00nm			5.8mb	
DAV	16.15	163	eP+	12	50.00	1.2
			e	16	01.60	
KMI	16.79	282	iPd	12	54.30	-2.7
	3.5s	2870.00nm			5.8mb	X
Z	16s	50.00um			5.2Msz	
N	11s	22.60um				
		pP	13	01.00		
		eS	16	15.38		
KKM	17.16	196	ePd	13	04.00	2.4X
			e	13	17.00	
BJI	17.76	348	ePc	13	09.10	0.4
			eS	16	27.91	
TSM	18.56	189	ePc	13	20.00	1.1
LOE	18.76	257	iPd	13	21.00	-0.3
LZH	19.94	316	iPd	13	34.34	-0.4
	2.0s	482.00nm			5.5mb	
Z	18s	19.40um			5.0MszX	
N	10s	10.90um				
E	11s	17.60um				
		pP	13	39.00	18kmX	
		sP	13	42.50		
		PP	13	52.00		
		eS	17	13.92		
		sS	17	16.00		
		e	17	25.51		
		SS	17	36.00		
		Lg	19	49.00		
MAJO	20.37	43	iPc	13	37.09	-2.0
			eS	17	26.80	
			esS	17	37.28	
MAT	20.37	43	iPc	13	37.50	-1.6
	1.3s	769.23nm			5.9mb	
Z	19s	6.60um			5.0Msz	
		eS	17	26.00		
NST	20.81	254	iPc	13	45.00	1.3
CHG	20.90	263	iPd	13	43.90	-0.7
	1.0s	67.00nm			5.0mb	
		eS	16	27.90		
CHTO	20.90	263	iPd	13	43.61	-1.0
		pP	13	47.60	15kmX	
BDT	21.28	259	eP	13	47.00	-1.5
	1.0s	96.60nm			5.2mb	
NNT	22.51	247	eP	14	02.30	1.5
		e	21	27.40		
BKB2	24.13	190	ePc	14	22.20	5.7X
GUMO	24.47	108	ePc	14	20.49	0.6
PJG	24.47	108	eP	14	20.60	0.7
		TT	37	27.60		

GUA	24.53	108	ePc	14	20.50	0.0
	0.8s	1689.55nm			6.7mb	
Z	20s	13.30um			5.4Msz	
		e	14	30.30		
		eS	18	40.00		
SNG	24.89	235	eP	14	25.40	1.5
	1.2s	175.00nm			5.5mb	
		eS	18	49.90		
IPM	26.34	230	ePd	14	38.90	1.4
	0.9s	87.50nm			5.4mb	
HIA	26.54	358	iPc	14	36.66	-2.4
		eS	19	09.83		
		e	19	24.72		
		eSS	19	38.24		
		e	20	31.49		
KGM	26.72	222	ePc	14	41.90	0.9
MKS	27.77	183	iPc	14	51.90	1.4
TSI	28.85	232	eP	15	01.00	0.7
PSI	29.15	230	ePc	15	02.50	-0.5
BSI	30.06	239	eP	15	07.00	-4.2X
PPI	30.47	224	eP	15	04.00	-10.7X
GUN	32.02	287	P	15	27.40	-1.3
PKI	32.43	286	P	15	30.80	-1.5
KKN	32.55	286	P	15	31.60	-1.6
GKN	33.12	287	P	15	36.40	-1.7
WMQ	34.52	316	iPd	15	50.04	0.1
		epPd	15	56.33	22kmX	
		ePP	17	09.44		
		eS	21	15.28		
		eSS	24	42.62		
MTN	36.71	163	iPd	16	05.00	-3.5X
	0.4s	182.00nm			6.3mb	
KNA	38.97	168	iPc	16	25.80	-1.7
NDI	39.66	288	iPd	16	32.50	-0.7
		ePP	18	10.00		
		eS	22	42.00		
		eSS	25	46.00		
HYB	40.03	270	iPc	16	37.50	1.0
	1.4s	125.00nm			5.5mb	
RAB	40.58	127	iPd	16	41.60	0.7
	0.9s	537.82nm			6.3mb	
		e(S)	22	44.00		
PMG	40.97	138	iPc	16	41.50	-2.6
	1.3s	326.92nm			5.9mb	
GBA	42.16	265	P	16	53.50	-0.4
KOD	43.31	261	eP	17	04.80	1.2
		eS	23	32.00		
MBL	43.60	181	iPd	17	04.40	-1.0
	0.8s	88.00nm			5.6mb	
		i	19	52.30		
WB5	44.31	162	iPc	17	09.30	-1.9
		e	22	44.50		
WRA	44.36	162	Pc	17	07.70	-4.0X
	0.9s	172.30nm			5.9mb	
NANU	45.28	187	eP	17	18.50	-0.5
QIS	46.70	156	iPc	17	29.20	-1.0
	1.0s	175.00nm			6.0mb	
ASPA	47.78	164	ePc	17	37.70	-1.1
	1.0s	194.00nm			6.1mb	
Z	22s	2.25um			5.1MszX	
		ePcP	19	07.50		
		eScP	23	00.00		
		iS	24	31.50		
		eScS	27	25.70		
		LR	36	21.40		
QUE	48.52	291	eP	17	44.80	0.1
	1.5s	1583.33nm			6.8mb	X
		eS	24	46.00		
WARB	48.90	173	iPc	17	46.70	-0.7
MEKA	49.07	183	eP	17	48.00	-0.6
CTA	49.19	148	iPc+	17	49.90	0.2
	1.2s	421.88nm			6.3mb	
		iS	24	52.00		
MRWA	51.83	185	eP	18	08.00	-1.6
BAL	53.15	185	eP	18	17.00	-2.4
COOL	53.27	180	eP	18	18.20	-2.1
FORR	53.68	172	iPc	18	21.70	-1.6
	0.5s	86.00nm			6.0mb	
KLB	54.06	183	iPc	18	24.60	-1.5
MAIO	54.34	299	eP	18	29.00	0.6
	1.2s	52.78nm			5.4mb	
		e	27	12.00		
MUN	54.55	185	eP	18	28.00	-1.7
NWAO	55.42	184	eP	18	34.00	-2.0
Z	20s	0.90um			4.8Msz	
N	20s	1.10um				
E	20s	0.40um				

ADK	55.52	42	P	18	34.00	-2.6
	1.0s	120.00nm			5.9mb	
RMO	55.83	150	iPd	18	37.30	-1.8
RKG	56.57	184	eP	18	47.70	3.4X
STK	57.76	159	iPc	18	51.60	-1.2
	0.8s	60.00nm			5.7mb	
		eS	26	48.60		
BRS	58.54	147	iPc	18	57.00	-1.3
		i	19	19.50		
CMS	58.92	155	eP	19	01.00	0.1
ADE	59.78	163	eP	19	06.00	-0.8
	1.0s	170.00nm			6.1mb	
COO	60.75	149	iPc	19	13.70	0.2
TEH	60.93	299	e(P)	19	11.00	-3.9X
BWA	62.53	155	eP	19	25.80	0.4
ANM	62.76	28	eP	19	25.80	-0.7
DZM	62.82	132	iPc	19	27.10	-0.5
BFD	62.94	161	iPc	19	30.00	2.0
BJA	63.43	289	iP	19	30.70	-0.8
	1.0s	108.00nm			5.9mb	
BRF	63.43	289	eP	19	30.60	-0.9
BBU	63.51	289	eP	19	31.20	-0.8
	1.0s	208.00nm			6.2mb	
CAN	63.55	155	eP	19	31.90	-0.2
CNB	63.69	154	eP	19	32.70	-0.4
	0.8s	139.00nm			6.1mb	
TAB	64.58	303	eP	19	39.00	-0.1
KER	64.62	298	eP	19	37.00	-2.5
SDN	65.22	38	eP	19	40.00	-2.7
TTA	66.92	30	ePc	19	52.70	-0.9
	1.7s	326.10nm			6.2mb	
SVW	67.28	32	iPc	19	55.90	0.0
	0.9s	99.20nm			5.9mb	
IMA	67.65	26	iPc	19	57.80	-0.4
KDC	69.32	35	iPc	20	07.40	-1.1
	1.3s	201.20nm			6.0mb	
COL	70.24	27	iPc	20	12.58	-1.5
		epPd	20	19.37	22kmX	
		iS	29	23.44		
		esS	29	35.36		
FBA	70.24	27	iPc	20	13.20	-0.9
	0.8s	117.24nm			6.0mb	
KEV	70.26	338	ePc	20	13.22	-0.9
	1.0s	110.00nm			5.9mb	
		e	24	44.00		
		iS	29	25.43		
		esS	29	37.51		
		eScS	30	10.78		
PMR	70.30	31	ePc	20	13.00	-1.4
	0.8s	77.90nm			5.8mb	
SOD	70.91	336	iP	20	18.20	0.1
KBS	71.45	349	eP	20	21.20	0.0
TOA	71.56	30	eP	20	21.90	-0.2
SUF	72.23	331	iP	20	25.00	-1.0
	0.6s	41.10nm			5.6mb	
TRO	73.01	339	eP	20	29.50	-1.0
KAS	73.31	308	iPc	20	32.80	-0.1
NUR	73.53	329	iP	20	33.00	-0.6
	1.2s	176.30nm			5.9mb	
Z	16s	6.40um			6.0MszX	
		e	25	16.00		
		e	30	00.00		
		LR	56	04.00		
BHL	73.95	300	P	20	36.00	-0.8
		S	30	08.00		
HRI	74.06	300	eP	20	37.00	-0.5
HON	74.21	73	P	20	48.00	9.7X
Z	20s	2.93um			5.6Msz	
BBTK	74.47	307	eP	20	28.00	-11.7X
		e	20	42.00	49kmX	
INK	74.70	22	ePc	20	38.40	-1.9
	0.9s	192.00nm			6.1mb	
		pP	21	18.00	162kmX	
ARO	74.73	276	iP+	20	40.00	-1.5
DSI	74.85	298	iPd	20	41.70	-0.2
CSS	75.47	302	eP	20	44.80	-0.6
MBH	75.81	297	iPd	20	48.00	0.6
CFR	76.13	313	eP	20	49.00	0.1
TLB	76.39	313	eP	20	50.00	-0.4
ITU	76.81	309	eP	21	00.00	7.2X
VRI	76.86	314	ePc	20	53.00	0.0
UPP	77.05	330	iP	20	52.50	-1.2
		iS	30	40.00		
ISR	77.22	314	eP	20	53.00	-2.1
MLR	77.50	314	ePc	20	57.00	0.3
JMB	78.08	311	iP	21	00.00	0.2
CMP	78.18	314	ePc	21	08.00	7.7X

SIT	78.39	33	P	21	01.00	-0.1	LJU	84.61	318	ePc	21	34.40	0.4	PGF	89.78	317	iPc	21	59.80	0.5
	1.0s	180.00nm			6.0mb		CEY	84.82	318	ePc	21	35.40	0.3		1.0s	86.00nm			6.0mb	
TNR	78.55	315	ePc	21	03.00	0.7	BHG	84.84	320	iPd	21	35.50	0.4	ENR	89.89	319	P	21	58.69	-1.1
HLW	78.69	298	eP+	21	03.00	-0.4		1.4s	117.00nm			5.9mb		BNI	89.89	320	P	21	59.90	0.1
			e	21	12.00		GRF	84.86	322	iPc	21	36.10	0.9	RRL	89.90	320	P	21	59.68	-0.3
			eS	31	01.00			1.5s	114.00nm			5.8mb		PZZ	89.93	319	P	21	59.30	-0.7
DIM	78.96	311	iPd	21	05.00	0.4	Z	21s	2.80um			5.6Msz		BMW	90.07	38	P	22	01.00	0.5
RDO	79.27	310	eP	21	06.00	-0.3				e	21	50.70	50kmX	SBF	90.07	318	iPc	22	00.40	-0.2
ASW	79.35	292	iPd	21	16.00	9.0X	VOY	85.02	318	eP	21	36.00	-0.1		0.9s	40.95nm			5.7mb	
			eS	31	08.00		NAI	85.05	267	iP	21	39.80	2.8X	LOR	90.29	323	iPc	22	01.20	-0.3
DEV	79.36	315	ePd	21	16.50	9.8X		1.8s	150.00nm			5.9mb			1.2s	28.25nm			5.4mb	
AMAN	79.36	291	eP	21	08.00	0.9				iS	32	20.00		Z	20s	3.50um			5.8Msz	
AKSR	79.39	291	eP	21	08.50	1.3	TRI	85.24	318	iPc	21	36.40	-0.7	RMW	90.32	37	P	22	02.00	0.3
PRk	79.41	308	iPd	21	07.00	-0.1				i	25	00.00					pP	22	17.50	53kmX
NB2	79.42	332	P	21	05.40	-1.4				e	32	54.00		LBF	90.39	322	iPc	22	01.70	-0.3
	1.1s	95.30nm			5.7mb		FVI	85.43	319	P	21	38.00	0.0		1.0s	33.00nm			5.6mb	
PLD	79.52	311	iPc	21	08.00	0.4	FUR	85.57	321	eP	21	39.70	0.9	PNT	90.42	35	iPc	22	02.50	0.5
KRA	79.63	320	iPc	21	08.20	0.1		1.3s	133.00nm			6.0mb			1.2s	221.00nm			6.3mb	
	1.2s	141.00nm			5.8mb		WIT	85.72	326	eP	21	41.00	1.7	SSF	90.61	323	iPc	22	02.90	0.0
Z	18s	2.50um			5.6Msz					e	21	55.00	48kmX		1.3s	39.70nm			5.6mb	
E	18s	2.40um					VVI	85.94	318	P	21	41.00	0.3	SMF	90.66	322	iPc	22	03.20	0.0
			i	21	14.70		SQTA	86.08	320	iPc	21	41.30	-0.1		1.4s	87.15nm			5.9mb	
			eS	31	08.00			2.0s	229.00nm			6.1mb		FRF	90.71	318	iPc	22	03.50	0.0
AKRL	79.65	291	iPd	21	08.50	-0.1				i	21	55.20	47kmX		1.3s	57.75nm			5.8mb	
RZN	79.66	311	iP	21	08.00	-0.7				i	24	47.70		LON	90.72	38	iPc	22	03.71	0.2
PGB	79.73	312	iPc	21	09.00	0.2				i	25	04.70					ePP	25	36.98	
SPC	79.78	319	iP	21	09.10	-0.1	WTS	86.08	326	eP	21	41.50	0.3	AVF	90.85	322	iPc	22	03.90	-0.1
AGMR	79.84	291	eP	21	12.00	2.4X		0.9s	18.00nm			5.3mb			1.3s	61.35nm			5.8mb	
KAP	80.04	304	eP	21	10.00	-0.6	TDS	86.30	312	Pc	21	43.80	1.2	LMR	90.92	318	iPc	22	04.70	0.3
JNW	80.15	345	eP	21	11.50	1.0	OGA	86.36	320	iPc	21	43.30	0.3		1.2s	53.55nm			5.8mb	
BZS	80.30	315	eP	21	10.50	-1.2		0.1s	64.00nm			6.8mb	X	LRG	90.95	319	iPc	22	05.00	0.5
VTS	80.37	312	iPc	21	13.00	0.6	BNS	86.44	325	iPd	21	41.50	-1.5		1.2s	95.20nm			6.0mb	
MMB	80.38	311	ePd	21	12.00	-0.3	Z	17s	4.30um			5.9MszX		EDM	91.03	29	iPc	22	05.20	0.4
KKB	80.73	311	iPc	21	14.00	-0.1				iPP	25	13.50			1.1s	440.00nm			6.7mb	
BUD	81.21	318	iPd	21	17.00	0.5				eS	32	19.00		COR	91.07	40	iPc	22	06.28	1.2
COP	81.35	327	iPc	21	18.10	1.1				iPS	33	13.00					ePS	34	21.87	
	0.8s	83.58nm			5.8mb		SGO	86.61	313	P	21	44.00	0.0	MAF	91.62	322	iPc	22	08.10	0.5
KSP	81.44	322	eP	21	14.50	-3.1X	DUI	86.67	314	Pc	21	45.00	0.6		1.1s	43.95nm			5.8mb	
	1.1s	108.00nm			5.8mb		ARV	86.80	316	Pc	21	46.00	1.0	LDF	91.67	325	eP	22	07.60	-0.2
			ic	21	18.10		DBN	86.87	326	eP-	21	48.00	3.0X		1.4s	34.85nm			5.6mb	
			e	24	18.50		Z	20s	4.00um			5.8Msz		TCF	91.79	323	iPc	22	08.60	0.2
SRO	81.51	318	eP	21	17.60	-0.4				ePP	25	11.00			1.2s	41.65nm			5.7mb	
SKO	81.82	312	iP	21	22.70	2.9X				eS	32	21.00		ETA	92.00	331	eP	22	10.00	0.9
	1.2s	103.00nm			5.7mb					eSP	33	14.00			1.2s	51.00nm			5.8mb	
ZST	82.09	319	iP	21	21.70	0.7	AQU	87.05	315	P	21	47.90	1.7	GRR	92.19	325	eP	22	10.20	0.1
KZN	82.24	310	eP	21	21.00	-1.1	SDI	87.08	314	P	21	46.70	0.3		1.4s	26.15nm			5.5mb	
VKA	82.53	319	iPc	21	24.20	0.8	SOI	87.21	310	P	21	47.90	0.9	LSF	92.19	323	eP	22	10.10	-0.1
	1.0s	52.60nm			5.6mb		ENN	87.21	325	eP	21	47.00	0.3		1.2s	32.75nm			5.6mb	
SOP	82.64	319	eP	21	25.00	1.1		1.0s	30.00nm			5.5mb		NEW	92.37	35	P	22	11.20	0.1
BRG	82.76	322	iPc	21	24.90	0.4	MEM	87.26	325	P	21	47.10	0.2		1.0s	81.25nm			6.1mb	
	1.8s	90.00nm			5.6mb		SAL	87.28	319	Pd	21	48.00	0.8	ECP	92.42	331	eP	22	11.10	0.0
			i	21	39.50	51kmX	SFI	87.29	317	Pc	21	49.00	1.8		1.2s	68.00nm			6.0mb	
			i	31	42.00		CRE	87.37	317	P	21	48.00	0.2	ECB	92.48	331	eP	22	12.10	0.7
PRU	82.82	321	Pc	21	25.50	0.7	PGD	87.40	317	Pc	21	49.50	1.5		1.1s	35.00nm			5.7mb	
	1 3s	63.20nm			5.5mb		MNS	87.50	315	P	21	48.50	0.1	LPF	92.50	325	eP	22	11.70	0.1
Z	14s	2.00um			5.6MszX		MDI	87.69	319	P	21	48.00	-1.1		1.2s	17.85nm			5.4mb	
N	12s	1.80um					CDF	87.74	322	eP	21	49.70	0.2	CAF	92.67	321	iPc	22	13.20	0.7
E	14s	2.30um						1.4s	34.85nm			5.4mb			1.4s	30.50nm			5.5mb	
			e	21	41.00	54kmX	RDP	87.78	315	P	21	49.00	-0.7	FHC	92.74	43	ePc	22	14.00	1.1
			ePP	24	42.00		MME	87.88	318	P	21	51.80	1.4	RJF	92.76	322	iPc	22	13.70	0.8
			S	31	42.00		BDI	88.01	317	P	21	50.00	-0.8		1.2s	86.30nm			6.1mb	
CLL	83.09	323	iPc	21	26.10	0.0	PII	88.23	317	P	21	51.00	-0.7	Z	20s	4.00um			5.9Msz	
	1.2s	69.00nm			5.6mb		DOU	88.29	325	P	21	52.30	0.4	MFF	92.90	324	iPc	22	13.50	0.0
			i	21	40.70	51kmX	Z	19s	2.00um			5.6Msz			1.4s	61.00nm			5.8mb	
ITM	83.36	307	eP	21	26.50	-1.4				e	22	03.00	34kmX	LPO	93.32	322	eP	22	16.20	0.8
KHC	83.77	321	iPc	21	30.40	0.6				PP	25	28.00			1.3s	28.90nm			5.5mb	
	1.2s	30.00nm			5.3mb					SKS	32	22.00		LFF	93.42	322	eP	22	16.80	0.9
Z	16s	1.00um			5.3MszX		BSF	88.33	322	eP	21	52.00	-0.3		1.2s	47.60nm			5.8mb	
N	17s	1.70um						1.4s	26.15nm			5.3mb		LBFM	93.75	42	P	22	18.20	0.4
E	18s	2.00um					HAU	88.49	322	eP	21	52.70	-0.3	WDC	93.78	43	iPc	22	17.90	0.3
			e	21	44.80	50kmX		1.2s	14.90nm			5.2mb		SES	93.99	30	eP	22	19.00	0.5
			S	31	51.00		Z	20s	5.00um			5.9Msz			1.3s	220.00nm			6.4mb	
PTJ	83.79	317	iPc	21	30.90	0.9	PGC	88.74	37	eP	21	55.00	0.9				pP	22	33.00	47kmX
ZAG	83.81	317	iPc	21	30.50	0.5		1.1s	153.00nm			6.2mb		MIN	94.50	43	ePc	22	20.80	-0.4
VLS	83.93	309	eP	21	21.00	-9.8X	EKA	88.90	332	P	21	55.00	0.2	FFC	94.59	23	eP	22	20.00	-1.1
KMR	83.94	320	iP+	21	31.60	1.0		1.7s	109.90nm			5.9mb			0.8s	46.00nm			6.0mb	
			ePP	24	48.00		PCP	89.03	319	P	21	55.71	0.0	ORV	95.01	43	ePc	22	22.80	-0.5
WET	84.17	321	iPc	21	32.40	0.6	MCW	89.06	36	P	21	56.20	0.5	BRK	95.47	45	ePc	22	24.50	-1.0
	1.5s	88.00nm			5.7mb		LSD	89.39	320	P	21	58.28	0.7	BKS	95.49	45	e(P)	22	26.10	0.5
MOX	84.17	323	iPc+	21	32.00	0.3	FIN	89.41	318	P	21	57.15	-0.3				eS	33	32.00	
	1.5s	76.00nm			5.6mb		ROB	89.58	319	P	21	57.76	-0.5	GCC	96.12	46	ePc	22	28.00	-0.4
Z	16s	4.10um			5.9MszX		LPG	89.61	320	iPc	21	59.10	0.4	MHC	96.18	45	ePc	22	29.00	0.1
N	20s	2.90um						1.0s	38.00nm			5.6mb		ARN	96.25	45	P	22	29.50	0.4
E	18s	3.50um					LPL	89.61	320	iPc	21	59.10	0.5	LRM	96.39	34	eP	22	30.30	0.5
HOF	84.19	322	iPc	21	32.20	0.4		1.0s	30.00nm			5.5mb		CMB	96.60	44	iPc	22	30.07	-0.6
	1.2s	61.00nm			5.6mb		GMW	89.72	37	P	21	59.70	0.9				eHPP	26	22.21	
VBY	84.41	317	eP	21	34.00	1.0				pP	22	14.00	48kmX				ePP	26	24.20	

11d 14h

PRS	96.93	46	ePc	22	32.00	-0.1
KVN	97.45	42	P	22	34.40	-0.3
PRI	97.51	46	eP	22	35.50	0.6
FRI	97.64	45	eP	22	35.10	-0.2
IMW	98.48	35	P	22	40.00	0.7
TOL	99.33	320	eP	22	45.00	2.0
			ePP	26	55.00	
			eSKS	33	20.00	
			eS	34	09.00	
			ePS	35	37.00	
			eSS	40	45.00	
BUL	99.56	252	eP	22	41.20	-3.1X
BCAO	99.66	279	ePc	22	53.50	8.7X
	0.6s		6.00nm			5.3mb
CLC	99 71	45	eP	22	44.00	-0.8
			e	25	48.00	
			e	26	45.00	
BW06	99.98	35	P	22	45.00	-1.2
SBB	100.23	46	ePdiff	22	48.00	0.9
			e	26	46.00	
GSC	100.53	45	ePdiff	22	48.00	-0.5
			e	26	53.00	
SLR	101.76	247	ePdiff	22	51.68	-2.5X
AVE	105.67	317	ePKP	27	35.00	10.6X
ANMO	107.17	39	ePdiff	23	15.13	-3.0X
			eHPP	27	41.12	
			ePP	27	43.27	
MEO	111.64	34	e(PKP)	27	34.60	-1.1
TUL	112.16	32	e(PKP)	27	34.60	-2.0
	1.3s		11.70nm			
	Z 22s		0.37um			4.9Msz
			LR	03	00.00	
SPA	112.56	180	ePKP	27	35.80	-0.7
	0.8s		9 17nm			
UYO	114.21	32	ePKP	27	39.20	-1.4
LKO	118.59	295	PKP	27	45.58	-4.0X
	0.9s		11.50nm			
KIC	119.52	292	PKP	27	50.92	-0.4
	0.6s		12.00nm			
TIC	119.62	292	PKP	27	51.24	-0.3
LIC	119.84	292	PKP	27	51.76	-0.1
	0.6s		9.50nm			
	Z 20s		1.00um			5.4Msz
AIA	137.32	177	ePKP	28	24.30	0.6
UPA	142.69	35	ePKPd	28	29.60	-5.3X
	0.9s		35.29nm			
FISA	144.79	18	iPKPc	28	37.50	-1.1
TOV	146.06	19	iPKPd	28	41.40	0.6
CAR	146.13	14	iPKPd	28	41.00	0.1
LLAV	146.18	14	iPKPd	28	40.90	-0.1
TPR	146.29	3	PKP	28	43.03	2.0
BOT	146.31	3	ePKP	28	43.20	2.2
GUAC	146.35	15	iPKPc	28	42.00	0.6
OLLA	146.62	14	iPKPc	28	42.00	0.3
SDV	146.64	21	ePKP	28	43.00	1.1
GUAN	146.92	12	ePKP	28	42.50	0.3
BMG	147.41	26	iPKPd	28	44.00	1.0
BOG	149.16	30	ePKP	28	50.50	4.4X
QUR	150.69	43	PKP	28	49.60	1.1
OTO	150.72	43	iPKPd	28	50.30	1.7
CAYA	150.84	42	ePKP	28	50.00	1.1
VC1	151.13	43	ePKP	28	51.00	1.7
CAI	153.43	304	iPKPc	28	52.90	1.0
SOB1	157.99	305	ePKP	28	58.90	1.0
			e	29	07.80	
			e	29	15.50	
			e	29	31.20	
NNA	160.01	61	ePKP	29	01.00	0.9
	1.3s		51.92nm			
LNV	164.41	139	ePKP	29	04.50	0.6
TACH	164.90	139	ePKP	29	05.20	0.8
ROCH	165.31	137	ePKP	29	05.20	0.2
JFO	165.36	271	ePKP	29	06.50	1.3
PEL	165.40	138	iPKPd	29	06.10	1.2
	1.2s		39.06nm			
MDZ	166.68	142	i(PKP)	29	08.00	2.1
ARE	166.78	64	ePKP	29	08.00	1.3
BAO	167.38	302	PKPc	29	07.50	0.6
			e	30	12.50	
ZOBO	169.35	55	iPKPc	29	09.74	1.0
	1.5s		145.16nm			
			ePKPab	30	20.59	
			eHPP	34	07.18	
			ePP	34	08.67	
			LR	27	54.00	
LPB	169.53	56	PKP	29	11.00	2.4X
	Z 18s		2.06um			
			i	30	22.00	
			LR	27	32.00	
CNCB	169.79	57	PKPc	29	11.20	2.2
			i	30	24.00	
			i	41	14.00	
CCH	171.53	53	PKP	29	13.40	3.9X
			i	30	32.10	
SIV	173.08	16	PKP	29	10.00	0.2
			i	30	36.00	

S.D. = 1.0 on 295 of 329 obs.

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* SEP 11, 1990 15h 26m 10.73± 1.66s
3.528 S ±12.9km 101.638 E ±14.3km
DEPTH = 65.3 ± 13.2 km
5.1mb (9 obs.)
SOUTHERN SUMATERA (274)

PPI	3.29	338	iP	27	01.00	0.0
			eS	27	44.50	
KGM	5.76	17	ePc	27	36.30	0.7
PSI	6.75	336	ePc	27	48.00	-1.4
IPM	8.08	356	ePc	28	09.10	1.3
	0.8s		30.20nm			5.1mb
			e	28	33.10	
CHG	22.36	353	eP	31	04.50	-0.1
MTN	30.59	109	eP	32	19.00	-1.8
	0.4s		17.00nm			5.1mb
WARB	32.90	136	eP	32	42.00	1.1
PKI	34.65	334	P	32	55.90	-0.5
	0.6s		18.00nm			5.2mb
GUN	34.75	335	P	32	57.20	-0.1
KKN	34.90	334	P	32	58.00	-0.4
GKN	35.37	333	P	33	02.20	-0.1
WB5	35.82	120	iPd	33	06.00	-0.1
WRA	35.82	120	Pd	33	04.90	-1.2
	0.3s		4.50nm			4.9mb
ASPA	37.03	126	iPc	33	16.00	-0.3
	0.3s		37.00nm			5.8mb
			eS	38	56.30	
NDI	39.70	325	eP	33	38.50	0.0
QIS	40.65	118	iPc	33	46.30	-0.1
BJI	45.36	16	eP	34	24.00	-0.3
	0.7s		6.00nm			4.6mb
STK	46.92	132	iPc	34	38.20	1.4
	0.5s		12.00nm			5.1mb
MAT	52.46	37	(P)	35	15.00	-4.2X
BRS	54.21	121	iP	35	32.50	0.2
DZM	65.36	113	iPc	36	49.10	0.2
SUF	86.50	333	iP	38	48.20	0.8
	0.7s		5.20nm			4.8mb
NUR	86.67	331	eP	38	49.00	0.8
	0.6s		9.10nm			5.1mb
SOD	87.50	338	iP	38	52.60	0.4
KEV	88.01	340	eP	38	54.00	-0.5
NB2	93.27	331	PKP	39	35.70	16.5X
	0.7s		1.50nm			

S.D. = 0.8 on 24 of 26 obs.

? SEP 11, 1990 15h 50m 35.00± 0.91s
16.101 N ± 7.6km 61.523 W ± 8.1km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 1.7 (FDF).

DOG	0.11	233	iPd	50	38.09	0.2
PAG	0.17	245	eP	50	38.70	-0.1
			S	50	41.30	
MGG	0.27	132	iPc	50	40.64	0.0
			S	50	44.00	
SEG	0.30	3	iPc	50	41.27	0.0
			S	50	46.70	

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

? SEP 11, 1990 15h 55m 43.14± 5.55s
31.387 S ±40.2km 69.143 W ±16.4km
DEPTH = 124.9 ± 44.4 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.38	224	ePd	56	01.00	-0.2
ZON	0.43	112	iPd	56	01.40	-0.1
			eS	56	12.40	
CFA	0.80	106	iPc	56	04.60	0.5
			S	56	19.80	
MDZ	1.51	171	eP	56	10.30	-1.2
			i	56	13.60	
JACH	1.78	223	iPd	56	15.10	0.4
			i	56	40.30	
PEL	2.18	216	iPd	56	20.50	0.8
			iS	56	48.50	
ROCH	2.24	225	iPd	56	20.50	0.0
			iS	56	49.00	
PCH	2.51	207	iPc	56	25.20	1.3
			iS	56	58.40	
TACH	2.72	213	iP	56	25.50	-1.1
			i	56	58.00	
CHCH	2.84	206	iP	56	29.80	1.6
			iS	57	04.50	
LCCH	2.92	224	eP	56	28.50	-0.7
LNV	3.20	216	iPc	56	31.50	-1.3
			iS	57	03.30	
			i	57	09.00	

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

& SEP 11, 1990 17h 11m 13.71s
60.298 N 152.952 W
DEPTH = 126.6km
SOUTHERN ALASKA (2)
<AGS-P>.

RSO	0.19	31	iP	11	30.82	0.8
RDT	0.39	44	iP	11	31.26	-0.9
			iS	11	45.79	
OPT	0.66	192	iP	11	33.14	-0.6
			eS	11	48.85	
PDB	0.81	231	eP	11	33.68	-1.2
			iS	11	49.35	
NNL	0.87	107	eP	11	35.17	-0.2
HOM	0.92	134	iP	11	35.38	-0.4
			eS	11	52.09	
CKL	0.95	18	iP	11	35.45	-0.8
NKA	0.96	61	eP	11	36.78	0.6
AUE	0.97	193	eP	11	35.23	-1.0
AUH	0.97	195	eP	11	35.58	-0.8
SPU	0.99	26	iP	11	35.55	-1.0
AUI	1.00	194	eP	11	35.64	-0.9
BGL	1.01	16	iP	11	36.17	-0.6
CRP	1.05	22	iP	11	36.46	-0.8
			eS	11	53.78	
XLV	1.05	143	eP	11	35.87	-1.2
CGLM	1.11	24	iP	11	36.82	-1.0
CNPM	1.16	131	iP	11	37.35	-0.9
			eS	11	56.42	
BRLK	1.17	116	eP	11	37.33	-1.0
			eS	11	55.86	
NCG	1.18	19	eP	11	37.65	-0.8
MCNL	1.32	213	iP	11	38.51	-1.4
			eS	11	57.81	
SLKM	1.37	80	eP	11	39.06	-1.5
			eS	11	58.85	
CDD	1.42	195	eP	11	39.65	-1.4
			eS	12	00.61	
SUA	1.59	42	iP	11	41.99	-1.1
			eS	12	04.58	
SEW	1.76	95	eP	11	43.29	-1.7
SKT	1.82	22	iP	11	44.36	-1.4
PMS	1.92	59	eP	11	44.99	-2.0
			eS	12	09.42	
PWA	2.02	46	eP	11	46.19	-2.0
PLRM	2.27	53	eP	11	48.57	-2.8
			eS	12	17.22	
GHO	2.46	51	eP	11	51.08	-2.7
			eS	12	21.03	
CUT	2.48	30	eP	11	52.35	-1.6
SML	2.71	54	iP	11	54.18	-2.9
HUR	3.12	29	eP	12	00.61	-1.8
SCM	3.14	58	eP	11	59.87	-2.9
VZW	3.24	74	eP	12	00.75	-3.3
VLZ	3.36	73	eP	12	02.82	-2.7
KLU	3.64	68	eP	12	06.15	-3.3
TOA	3.75	58	eP	12	07.13	-3.8
MCK	3.93	27	eP	12	11.85	-1.5
GLB	4.61	72	eP	12	20.33	-2.2
WRH	4.76	26	eP	12	21.45	-3.0
CCB	4.97	26	eP	12	24.06	-3.3
HDA	4.98	32	eP	12	24.52	-2.9
TGL	5.02	80	eP	12	24.77	-3.4
FBA	5.20	25	eP	12	27.38	-3.0
BALM	5.27	77	eP	12	29.17	-2.3
GLM	5.36	26	eP	12	29.53	-3.1

46 obs. associated

SEP 11, 1990 17h 15m 22.71± 0.31s
71.658 N ± 4.3km 2.540 W ± 4.9km
DEPTH = 10.0km (geophysicist)

4.7mb (47 obs.) 4.1Msz (8 obs.)
JAN MAYEN ISLAND REGION (639)
MD 3.8 (BER).

JNW	2.00	254	eP	15	54.30	-2.5
LOF	6.56	115	eP	17	00.42	-1.1
DAG	6.75	327	iPc	17	01.20	-2.9
	0.8s	57.46nm			5.7mb	
TRO	7.40	96	eP	17	11.62	-1.5
AKU	8.23	231	eP	17	24.80	0.0
	0.9s	23.53nm			5.4mb	
		eS		18	47.20	
NSS	8.95	136	iPc	17	33.51	-1.3
		eS		19	07.12	
KTK1	9.04	95	iP	17	35.33	-0.8
KEV	9.90	87	iP	17	47.00	-0.9
	0.5s	15.40nm			5.7mb	
		i		17	54.30	
MOL	9.92	152	iPd	17	45.63	-2.5
		eS		19	31.29	
RGS	9.98	144	eP	17	50.00	1.0
SOD	11.00	99	iP	18	01.20	-1.7
		i		18	11.00	
SUE	11.03	161	iPd	18	00.75	-2.6
		eS		19	55.29	
HYA	11.08	158	eP	18	02.47	-1.6
ASK	11.64	161	eP	18	08.41	-3.2X
BER	11.75	160	iPc	18	09.89	-3.2X
ODD1	12.36	158	eP	18	19.43	-1.9
KMY	12.89	162	eP	18	25.78	-2.6
BLS2	12.99	158	eP	18	27.80	-2.1
HFS	13.26	142	eP	18	31.20	-2.1
	0.8s	65.40nm			5.8mb	X
Z	19s	2.42um			4.4Msz	
		LR		21	42.00	
SUF	14.11	115	iP	18	43.70	-0.7
	0.6s	18.20nm			5.0mb	
UPP	14.33	135	iP	18	46.20	-1.1
NUR	15.50	122	eP	19	02.00	-0.5
	0.7s	24.00nm			4.6mb	
Z	16s	2.70um			5.2Msz	
		i		19	12.00	
		LR		24	16.00	
EKA	16.39	181	Pc	19	12.20	-1.9
	0.6s	6.90nm			4.0mb	
ETA	19.10	187	eP	19	46.30	-1.4
ECB	19.45	188	eP	19	50.10	-1.8
ECP	19.62	187	eP	19	54.00	0.2
DBN	19.93	166	eP	19	58.00	1.0
Z	20s	0.50um				
		eS		23	40.00	
		ePcP		24	16.00	
VAL	20.09	194	iP	19	57.20	-1.5
WTS	20.17	163	iP	19	59.90	0.3
	1.0s	26.00nm			4.5mb	
		e		20	10.50	
BNS	21.23	163	iPc	20	10.60	0.1
ENN	21.31	165	iPc	20	11.60	0.3
	0.7s	43.00nm			4.9mb	
		i		20	17.40	
MEM	21.48	165	P	20	13.30	0.3
CLL	21.58	153	iPc	20	14.10	0.0
	1.7s	120.00nm			5.0mb	
		eS		24	16.00	
DOU	21.88	168	P	20	15.50	-1.6
Z	22s	0.70um			4.0Msz	
		S		24	23.00	
MOX	22.04	155	iPc	20	20.00	1.3
	1.9s	164.00nm			5.1mb	
Z	14s	1.10um			4.4MszX	
TNS	22.08	161	ePc	20	20.00	0.8
BRG	22.15	152	iP	20	19.80	0.1
	1.4s	60.00nm			4.8mb	
		i		20	26.70	
		e		22	24.00	
HOF	22.40	155	eP	20	23.20	0.9
KSP	22.55	148	iPc	20	24.50	0.7
	1.6s	155.00nm			5.2mb	
GRF	22.93	157	iPc	20	28.70	1.2
	1.8s	71.00nm			4.9mb	
Z	16s	0.80um			4.3MszX	
		e		20	36.60	
FLN	22.99	177	eP	20	27.90	-0.2
	0.8s	13.45nm			4.5mb	
Z	20s	0.52um			4.0Msz	
PRU	23.10	151	Pc	20	30.80	1.7
	1.5s	51.30nm			4.8mb	
Z	18s	0.80um			4.2Msz	
N	18s	0.50um				
E	18s	0.40um				
		e		20	32.20	
		eS		24	44.00	
LDF	23.17	176	eP	20	29.90	0.1
	1.0s	18.00nm			4.6mb	
GRR	23.36	177	eP	20	31.20	-0.4
	0.9s	9.85nm			4.4mb	
WET	23.68	154	iPc	20	37.10	2.3X
LPF	23.71	177	eP	20	35.30	0.2
	1.0s	20.00nm			4.6mb	
CDF	23.76	164	eP	20	37.60	1.9
	1.4s	34.85nm			4.7mb	
KHC	23.79	153	iPc	20	38.30	2.4X
KRA	23.97	143	eP	20	38.70	1.2
	1.0s	56.00nm			5.1mb	
Z	20s	2.60um			4.7Msz	
E	18s	2.00um				
		i		20	45.50	
		e		24	44.00	
		e		25	09.00	
HAU	24.09	165	eP	20	40.40	1.6
	1.2s	11.90nm			4.4mb	
Z	20s	0.68um			4.1Msz	
BSF	24.30	165	eP	20	42.30	1.4
	1.4s	26.15nm			4.7mb	
FUR	24.43	157	iPd	20	45.30	3.2X
SLE	24.52	162	ePc	20	44.20	1.2
LOR	24.65	170	eP	20	44.80	0.6
	1.0s	14.00nm			4.6mb	
Z	20s	0.50um			4.0Msz	
ZLA	24.79	162	eP+	20	46.70	1.1
SSF	24.84	170	eP	20	46.50	0.5
	0.8s	14.80nm			4.7mb	
SPC	24.86	143	iP	20	46.80	0.4
LBF	24.94	169	eP	20	47.60	0.5
	0.8s	14.80nm			4.7mb	
BHG	25.07	155	eP	20	50.60	2.3X
AVF	25.10	170	eP	20	48.70	0.2
	0.9s	9.85nm			4.5mb	
SAX	25.12	161	ePc	20	49.70	0.7
MFF	25.16	176	eP	20	49.00	-0.1
	0.8s	12.10nm			4.6mb	
ZST	25.25	148	iP	20	51.90	2.0
SMF	25.27	170	eP	20	50.90	0.7
	1.0s	16.00nm			4.7mb	
BGF	25.31	171	eP	20	50.70	0.2
	0.7s	18.40nm			4.9mb	
SQTA	25.35	158	iPd	20	53.20	2.1
	1.4s	83.60nm			5.2mb	
		ic		20	54.20	
		i		20	58.60	
		i		21	27.80	
		e		23	48.00	
TCF	25.55	172	eP	20	52.80	0.0
	0.8s	16.10nm			4.8mb	
LSF	25.56	173	eP	20	52.60	-0.3
MAF	25.63	172	eP	20	53.70	0.2
	0.9s	14.75nm			4.7mb	
SRO	25.83	147	eP	20	56.70	1.4
VDL	25.88	161	ePc	20	56.70	0.6
MMK	26.17	163	ePc	21	00.40	1.6
FVI	26.17	156	P	21	01.00	2.5X
RJF	26.50	174	eP	21	01.50	-0.1
	0.7s	11.00nm			4.7mb	
Z	20s	0.70um			4.2Msz	
ORO	26.59	163	P	21	07.00	4.5X
LPL	26.59	165	eP	21	03.70	1.0
	0.7s	4.40nm			4.3mb	
MDI	26.61	161	P	21	06.00	3.5X
LPG	26.61	165	eP	21	04.20	1.2
	0.7s	5.50nm			4.4mb	
LFF	26.84	175	eP	21	04.90	0.2
	0.8s	8.05nm			4.5mb	
CAF	26.90	173	eP	20	54.00	-11.3X
	1.0s	8.00nm				
BNI	27.05	166	P	21	08.00	1.2
BZS	28.55	143	eP	21	21.50	1.4
EPF	28.74	176	eP	21	21.50	-0.5
	0.8s	10.75nm			4.7mb	
VRI	29.36	136	ePd	21	28.50	1.1
CMP	29.57	139	ePc	21	21.00	-8.4X
TOL	31.86	182	eP	21	55.00	5.4X
INK	36.55	332	eP	22	30.00	0.4
IMA	41.16	343	P	23	09.20	1.1
	1.4s	9.94nm			4.4mb	
FBA	41.67	339	P	23	14.00	1.8
	1.0s	15.00nm			4.7mb	
FFC	42.05	301	eP	23	16.00	0.6
	0.9s	12.00nm			4.6mb	
TTA	44.45	343	P	23	36.00	1.1
	1.6s	45.08nm			5.1mb	
PRNI	46.06	133	eP	23	49.00	0.9
MBH	46.59	133	e(P)	23	53.00	0.9
MAIO	47.23	104	eP	24	05.00	7.7X
SES	48.35	306	eP	24	06.00	0.1
PNT	51.47	312	eP	24	32.00	2.3X
NEW	51.85	309	P	24	32.50	-0.2
	1.0s	11.88nm			4.8mb	
BW06	54.99	301	P	24	53.00	-3.2X
	1.3s	8.20nm			4.6mb	
QUE	55.21	99	eP	25	01.30	3.5X
LBFM	59.51	310	P	25	26.20	-2.0
WDC	60.39	311	ePc	25	33.10	-0.9
BJI	60.59	51	eP	25	42.00	6.7X
KVN	60.74	306	P	25	35.00	-1.6
LZH	61.06	63	Pc	25	47.00	8.3X
	1.5s	25.00nm			5.1mb	
Z	18s	0.50um			4.7Msz	
		sP		25	59.00	
ANMO	61.42	295	P	25	40.30	-1.0
	1.6s	16.67nm			4.9mb	
CMB	62.28	308	ePc	25	46.90	0.1
FRI	63.09	307	ePc	25	53.20	1.1
GLA	65.54	301	P	26	09.50	1.3
BCAO	68.45	157	iPd	26	26.80	0.2
	0.8s	9.00nm			5.0mb	
MAT	68.60	33	(P)	26	27.00	-0.4
	1.5s	41.67nm			5.4mb	
CHG	75.86	73	eP	27	14.00	3.4X
	S.D. = 1.3	on	92 of 111 obs.			

% SEP 11, 1990 17h 32m 34.69± 1.37s
22.924 N ±10.4km 120.868 E ± 9.2km
DEPTH = 10.0km (geophysicist)
TAIWAN (244)

TWG	0.21	119	iPd	32	39.30	0.0
			eS	32	43.10	
TWK	0.49	314	ePc	32	44.70	0.1
			eS	32	53.40	
TWF1	0.58	43	ePc	32	46.70	0.2
			eS	32	57.30	
TWD	1.33	30	eP	32	59.10	-0.1
TWQ	1.34	359	eP	32	59.30	-0.2
	S.D. = 0.2	on	5 of 5 obs.			

? SEP 11, 1990 18h 08m 07.19± 2.11s
34.303 S ±22.4km 70.921 W ±13.6km
DEPTH = 80.0km (geophysicist)
CHILE-ARGENTINA BORDER REGION (127)

CHCH	0.43	31	iPd	08	20.70	0.1
			iS	08	31.00	
LNV	0.53	310	iPc	08	21.50	0.1
			iS	08	32.00	
TACH	0.65	359	iPc	08	22.30	-0.2
			iS	08	33.50	
PCH	0.76	27	iPd	08	23.60	-0.2
			iS	08	35.70	
LCCH	0.99	327	iPd	08	26.20	-0.1
			iS	08	40.80	
PEL	1.17	10	iP	08	28.90	0.2
			iS	08	44.60	
ROCH	1.33	357	iPd	08	30.90	0.0
			iS	08	48.50	
JACH	1.64	10	iPc	08	35.00	0.1
			iS	08	55.50	
	S.D. = 0.2	on	8 of 8 obs.			

? SEP 11, 1990 18h 11m 37.71± 3.56s
23.343 S ±48.6km 179.771 W ±42.5km
DEPTH = 500.0km (geophysicist)
4.3mb (4 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM	12.79	273	iPd	14	27.20	1.5
CAN	29.60	239	eP	17	03.80	0.7
BWA	29.85	241	eP	17	03.90	-1.3
STK	35.13	247	iPd	17	50.30	0.5
	0.7s	3.00nm			3.9mb	
ASPA	42.34	260	eP	18	47.90	-0.6
	0.9s	8.00nm			4.2mb	

11d 18h

WB5 42.64 266 eP 18 50.50 -0.5
WRA 42.65 265 Pd 18 50.30 -0.8
0.6s 5.50nm 4.3mb
WARB 48.46 255 eP 19 46.40 10.6X
NANU 59.11 257 iPc 20 51.30 -0.3
0.4s 8.00nm 4.5mb
MAW 78.34 200 eP 22 47.00 0.7
S.D. = 1.0 on 9 of 10 obs.

• SEP 11, 1990 19h 20m 27.96± 0.74s
11.210 N ±15.4km 141.226 E ±13.9km
DEPTH = 33.0km (normal)
4.2mb (1 obs.)
WEST CAROLINE ISLANDS (209)

GUMO 4.27 56 eP 21 32.30 0.0
0.3s 66.36nm
PJG 4.27 56 eP 21 32.50 0.2
GUA 4.28 57 eP 21 32.30 -0.2
0.6s 69.33nm
eS 22 28.50
PPR 22.16 268 ePc 25 23.00 0.2
WB5 31.62 192 eP 26 51.00 0.7
WRA 31.69 192 Pc 26 51.50 0.6
0.4s 1.60nm 4.2mb
WARB 39.78 201 eP 27 58.30 -1.4
S.D. = 0.9 on 7 of 7 obs.

• SEP 11, 1990 20h 29m 23.65± 0.94s
36.882 N ±11.9km 29.381 E ±11.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

CIN 1.26 305 ePg 29 47.00 0.0
iSg 30 05.00
PPCY 3.12 129 eP 30 18.00 4.2X
CSS 3.73 120 eP 30 26.00 3.4X
BBTK 3.97 41 eP 30 26.00 0.0
ADI 6.12 127 eP 30 57.00 0.7
MML 6.66 130 iPd 31 03.00 -1.0
DSI 7.26 135 iPd 31 12.60 0.3
S.D. = 0.9 on 5 of 7 obs.

? SEP 11, 1990 21h 07m 24.06± 3.72s
75.383 N ±43.7km 12.256 E ±27.5km
DEPTH = 10.0km (geophysicist)
4.5mb (8 obs.)
SVALBARD REGION (643)

KEV 7.16 135 eP 09 18.00 6.9X
SOD 9.23 143 eP 09 41.00 1.0
i 09 46.10
SUF 13.59 152 iP 10 37.00 -2.0
0.6s 4.40nm 4.6mb
HFS 15.33 177 eP 11 02.50 0.8
1.7s 75.90nm 4.8mb
NUR 15.58 157 eP 11 14.00 9.0X
EKA 20.99 205 P 12 02.00 -7.4X
1.1s 6.20nm 3.9mb
CLL 24.17 179 eP 12 40.00 -0.8
1.6s 19.00nm 4.5mb
BRG 24.61 177 eP 12 48.00 2.9X
1.6s 22.00nm 4.6mb
KSP 24.69 174 eP 12 45.30 -0.6
MOX 24.83 181 iPc 12 47.00 -0.3
1.4s 16.00nm 4.5mb
PRU 25.51 177 P 12 58.00 4.3X
KRA 25.62 169 eP 12 54.80 0.1
GRF 25.79 182 eP 12 55.20 -1.1
0.9s 8.00nm 4.4mb
e 12 59.10
KHC 26.35 178 eP 13 03.00 1.4
SPC 26.50 168 eP 13 04.80 1.7
ZST 27.36 173 eP 13 15.10 4.4X
e 29 40.20
BCAO 70.98 173 ePd 18 43.10 -0.3
0.6s 7.00nm 5.0mb
id 18 48.10
S.D. = 1.3 on 11 of 17 obs.

? SEP 11, 1990 22h 17m 37.24± 1.08s
39.004 N ± 9.3km 21.083 E ±12.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.1 (ATH).

EVR 0.57 99 ePg 17 49.30 0.4
VLS 0.91 205 ePg 17 54.50 -0.2
eSg 18 10.20
KZN 1.41 22 ePg 18 01.70 -1.2
ITM 1.94 160 ePg 18 17.00 6.4X
OHR 2.12 354 ePn 18 14.20 1.0
VLI 2.71 147 ePb 18 28.00 6.3X
S.D. = 1.7 on 4 of 6 obs.

% SEP 11, 1990 22h 20m 38.42± 0.66s
42.007 N ± 6.2km 24.239 E ± 5.0km
DEPTH = 10.0km (geophysicist)
BULGARIA (359)

PLD 0.36 74 iPg 20 46.00 0.2
PGB 0.55 354 iPg 20 49.00 -0.5
MMB 0.57 223 iPgc 20 50.00 0.1
KDZ 0.95 112 iPd 20 56.00 -0.5
VTS 0.96 308 iPgc 20 57.00 0.2
DIM 0.96 87 iPd 20 57.00 0.2
PVL 1.45 33 iP 21 05.00 0.3
S.D. = 0.4 on 7 of 7 obs.

? SEP 11, 1990 22h 28m 42.96±13.41s
31.793 S ±107.km 71.466 W ±47.1km
DEPTH = 80.0km (geophysicist)
NEAR COAST OF CENTRAL CHILE (135)

JACH 1.15 140 iPd 29 04.60 0.3
iS 29 24.40
ROCH 1.24 162 iPd 29 04.00 -1.5
iS 29 23.70
PEL 1.50 154 iPd 29 09.00 0.3
iS 29 32.50
LCCH 1.68 183 eP 29 11.00 -0.1
i 29 29.00
TACH 1.91 167 eP 29 13.50 -0.7
iS 30 04.50
PCH 1.99 156 eP 29 16.00 0.6
e 29 42.50
LNV 2.16 179 eP 29 18.50 1.0
CHCH 2.24 162 eP 29 18.70 -0.1
i 29 50.50
MDZ 2.47 117 eP 29 30.90 9.0X
iS 30 09.20
S.D. = 0.9 on 8 of 9 obs.

SEP 11, 1990 22h 37m 19.54± 1.60s
8.476 S ± 7.2km 158.932 E ± 8.4km
DEPTH = 162.5 ± 14.5 km
4.9mb (12 obs.)
SOLOMON ISLANDS (193)

RAB 7.95 302 iPd 39 13.00 -0.4
iS 39 39.00
LAT 11.97 278 eP 40 11.00 4.9X
DZM 15.33 153 iPc 40 47.10 -1.7
CTA 16.84 225 iPc 41 09.00 1.7
1.1s 58.23nm 4.8mb
iS 44 22.00
BRS 19.70 196 iPc 41 38.50 0.1
e 42 11.00
e 42 38.00
RMO 20.35 207 iPc 41 45.20 0.2
QIS 22.20 235 iPc 42 04.50 1.2
0.7s 26.00nm 4.8mb
COO 22.95 196 eP 42 12.00 1.4
WB5 26.33 242 iPc 42 42.00 -0.3
WRA 26.38 242 Pc 42 42.10 -0.6
0.9s 24.20nm 4.9mb
STK 28.32 212 iPd 43 00.20 0.1
0.4s 7.00nm 4.7mb
ASPA 28.33 235 eP 42 58.80 -1.5
0.5s 19.00nm 5.1mb
Z 21s 0.16um 3.6Msz
LR 53 18.00
WARB 35.35 236 eP 44 01.00 -0.3
FORR 36.37 228 iPd 44 09.70 0.0
0.4s 18.00nm 5.1mb
MRWA 45.24 237 eP 45 22.00 -0.4
KMI 64.08 303 Pd 47 39.50 0.6
pP 47 48.50 29kmX
CHG 65.06 295 eP 47 45.00 0.1
CHTO 65.06 295 P 47 44.40 -0.5
e 48 15.20
e 48 20.00
LZH 68.12 314 Pc 48 05.00 0.8
1.4s 66.00nm 5.2mb
PP 48 34.50
TTA 79.08 19 P 49 07.00 0.0
0.7s 7.99nm 4.6mb
PKI 79.53 300 P 49 10.60 0.1
KKN 79.70 300 P 49 11.20 -0.1
GKN 80.31 300 P 49 14.40 0.0
PMR 80.61 22 P 49 14.50 -0.5
0.8s 19.83nm 4.9mb
IMA 81.98 18 P 49 22.20 -0.1
0.8s 3.88nm 4.2mb
FBA 83.11 20 P 49 27.00 -0.9
0.8s 22.41nm 5.0mb
GBA 83.80 285 P 49 32.00 -0.3
0.9s 2.10nm 3.9mb
PLM 89.80 56 P 50 02.80 1.4
KVN 89.86 51 P 50 02.40 0.9
e 50 33.20
GLA 91.43 57 P 50 10.80 2.1
BW06 96.79 48 P 50 32.50 -0.8
HFS 122.24 340 ePKP 55 55.20 -1.0
0.9s 4.90nm
NB2 122.34 342 PKP 55 56.20 -0.2
0.7s 1.20nm
BCAO 140.46 267 ePKPc 56 29.30 -2.9
0.5s 4.00nm
ETOR 143.63 335 e(PKP)56 36.00 -1.0
GUD 144.61 338 e(PKP)56 39.00 0.3
TOL 145.22 337 PKPd+ 56 40.50 0.9
1.0s 40.00nm
EVIA 145.64 334 e(PKP)56 42.00 1.5
EVAL 148.25 338 e(PKP)56 50.00 5.4X
IFR 151.06 332 iPKPc 56 57.00 7.8X
AVE 152.26 335 iPKP 56 59.00 8.2X
SOB1 153.57 131 ePKP 57 01.40 8.3X
e 57 34.80
S.D. = 1.0 on 37 of 42 obs.

? SEP 11, 1990 22h 53m 08.61± 1.80s
36.637 N ±15.4km 21.954 E ±16.1km
DEPTH = 5.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.3 (ATH).

ITM 0.54 358 ePg 53 18.60 -0.9
VLI 0.79 84 ePg 53 25.30 0.8
VLS 1.88 325 ePb 53 42.50 0.8
ATH 1.94 46 ePg 53 48.80 6.3X
VAM 2.20 123 ePn 53 45.50 -0.8
EVR 2.28 357 ePb 53 51.50 3.9X
OHR 4.56 349 e(Pn) 54 26.00 6.2X
S.D. = 1.6 on 4 of 7 obs.

SEP 12, 1990 00h 39m 24.26± 0.42s
0.478 S ± 6.5km 98.315 E ± 6.6km
DEPTH = 33.0km (normal)
5.1mb (19 obs.) 5.0Msz (3 obs.)
SOUTHERN SUMATERA (274)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 18C
Centroid Locotion:
Origin Time 00:39:26.0 0.8
Lat 0.86S 0.10 Lon 98.01E 0.10
Dep 15.0 FIX Half-duration 1.8
Moment Tensor; Scale 10**16 Nm
Mrr= 3.16 0.56 Mtt=-3.47 0.44
Mff= 0.30 0.70 Mrt= 6.40 1.96
Mrf=-0.95 1.22 Mtf= 3.18 0.52
Principal Axes:
T Vol= 7.17 Plg=56 Azm=346
N 1.36 17 103
P -8.53 28 203
Best Double Couple:Mo=7.8*10**16
NP1:Strike=330 Dip=23 Slip= 139
NP2: 99 75 72

PPI 2.08 89 ePc 39 59.50 2.0
0.7s 829.00nm
PSI 3.21 11 ePc 40 14.00 0.5
TSI 3.96 4 eP 40 31.00 6.8X
KLM 4.87 43 eP 40 55.00 17.9X
KGM 5.58 64 ePd 40 48.30 1.1
e 41 15.80
IPM 5.71 28 ePd 40 50.50 1.5
0.8s 74.00nm 5.3mb
e 41 29.60
e 42 33.60

SNG		7.94	17	eP	41 20.20 -0.1
NNT		13.06	6	eP	42 24.80 -5.4X
PCT		15.37	11	eP	43 04.50 4.0X
NST		16.15	6	eP	43 10.00 -0.5
BDT		17.62	2	eP	43 27.40 -1.6
		0.8s	48.30nm		4.7mb
LOE		18.09	11	iPd	43 33.50 -1.3
KKM		19.01	70	ePc	43 45.00 -1.2
		0.7s	88.00nm		5.1mb
CHG		19.18	2	ePc	43 47.00 -1.2
		1.0s	21.50nm		4.4mb
MKS		21.64	103	ePc	44 16.40 2.5
PPR		22.73	63	iPd	44 25.50 0.8
		1.0s	76.00nm		5.1mb
KOD		23.31	298	eP	44 31.50 0.7
				eS	48 48.00
GBA		24.98	305	P	44 49.00 2.5
KMI		25.81	9	Pc+	44 56.00 1.5
		1.0s	160.00nm		5.6mb
	Z	18s	5.70um		5.1Msz
	N	11s	1.80um		
	E	11s	0.60um		
				eS	49 21.00
				S	49 32.00
HYB		26.36	313	eP	45 12.00 12.5X
QCP		27.07	55	eP	45 09.00 3.1X
BAG		27.64	52	eP	45 10.50 -0.9
PKI		30.52	337	P	45 37.40 0.1
GUN		30.65	338	P	45 38.20 -0.2
		0.6s	40.00nm		5.4mb
KKN		30.77	337	P	45 39.40 0.1
		0.8s	36.00nm		5.2mb
GKN		31.21	336	P	45 43.20 0.1
		0.8s	47.00nm		5.4mb
NDI		35.34	327	eP	46 18.00 -0.7
LZH		36.74	7	Pc	46 31.00 0.4
		1.5s	85.00nm		5.4mb
	N	14s	1.90um		
	E	13s	1.10um		
				pP	46 36.00 17kmX
				sP	46 38.00
				PP	47 52.50
				eS	52 10.00
SSE		38.18	33	P	46 42.70 0.2
		1.2s	42.00nm		5.2mb
	Z	20s	2.30um		5.0Msz
	N	14s	3.40um		
	E	15s	1.90um		
				sP	47 13.70
				ePP	48 20.00
				eS	52 44.00
WB5		40.21	121	eP	46 58.00 -1.7
WRA		40.22	121	Pd	46 58.50 -1.2
		0.7s	12.70nm		4.8mb
ASPA		41.50	126	iPc	47 09.60 -0.7
		0.8s	17.00nm		4.8mb
				iS	53 21.30
QUE		42.68	318	eP	47 19.60 -0.4
BJI		43.50	20	eP	47 27.00 0.7
		1.3s	58.00nm		5.2mb
	Z	16s	1.46um		5.0MszX
	E	15s	1.35um		
				epP	47 34.00 23kmX
				eS	54 08.00
				eSS	57 24.00
GUMO		48.18	71	eP	48 10.00 6.1X
STK		51.41	132	iPc	48 28.10 -0.3
		0.8s	9.00nm		4.8mb
MAT		52.20	41	(P)	48 33.00 -1.3
BWA		57.67	131	eP	49 15.00 0.9
CAN		58.47	132	eP	49 19.50 -0.2
BRS		58.63	122	iP	49 20.50 -0.4
DZM		69.60	113	iPd	50 32.60 -0.2
BUL		70.81	249	eP	50 44.00 3.7X
VRI		77.60	317	ePd	51 11.50 -7.4X
BCAO		79.85	275	iPc	51 39.50 7.6X
		0.8s	14.00nm		5.0mb
				id	51 47.90 27kmX
SUF		82.31	334	eP	51 42.00 -1.7
SOD		83.46	338	iP	51 49.90 0.3
SRO		83.63	318	e(P)	51 50.50 -0.3
				e	52 06.10 55kmX
KEV		84.04	341	eP	51 54.00 1.5
ZST		84.49	318	eP	51 56.50 1.4
				e	52 08.50 39kmX
KSP		85.32	321	eP	51 58.00 -1.3
				e	52 12.50 50kmX

BRG		86.80	321	e(P)	52 08.40 1.8
		1.6s	17.00nm		5.0mb
KHC		86.90	319	eP	52 22.00 14.8X
HFS		87.72	330	eP	52 11.00 0.2
		0.9s	9.20nm		5.1mb
	Z	18s	0.22um		4.6Msz
				LR	29 27.00
NB2		89.00	331	P	52 16.80 -0.2
		0.9s	3.60nm		4.7mb
KVN		129.18	37	PKP	58 29.80 -1.6
GOL		135.38	26	PKP	58 42.00 -1.3
ANMO		138.64	31	(PKP)	58 49.00 -0.5
TUL		142.38	19	ePKP	58 51.70 -4.2X
		0.7s	2.80nm		
UYO		144.41	18	iPKPd	58 57.00 -2.4
MDZ		144.68	199	ePKP	59 04.10 4.2X
SIV		153.89	230	PKP	59 21.80 7.3X
CNCB		158.15	218	ePKP	59 30.00 9.3X
LPB		158.43	218	ePKP	59 35.00 14.2X
ZOBO		158.65	218	PKP	59 24.00 2.8
		S.D. = 1.3	on	48 of	64 obs.

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* SEP 12, 1990 00h 40m 33.80± 1.80s
36.656 N ±15.2km 21.298 E ±15.3km
DEPTH = 33.0km (normal)
3.7mb (2 obs.)
SOUTHERN GREECE (368)
ML 3.6 (ATH).

ITM		0.73	44	ePn	40 46.80 -0.8
VLI		1.32	87	iPbd	40 56.70 0.7
EVR		2.29	10	ePb	41 14.30 4.1X
ATH		2.33	55	ePn	41 10.00 -0.6
VAM		2.66	117	ePn	41 15.50 0.2
KZN		3.66	6	ePn	41 31.30 1.7
OHR		4.47	355	ePn	41 42.00 1.0
SKO		5.31	1	ePn	41 52.00 -0.8
HFS		24.00	351	eP	45 46.00 -0.1
		0.5s	1.10nm		3.6mb
NB2		25.23	348	P	45 56.80 -1.2
		0.8s	1.60nm		3.7mb
		S.D. = 1.1	on	9 of	10 obs.

SEP 12, 1990 00h 49m 09.11± 0.58s
38.842 N ± 6.4km 21.161 E ± 4.7km
DEPTH = 10.0km (geophysicist)
3.8mb (2 obs.)
GREECE (364)
ML 3.3 (ATH).

EVR		0.51	81	iPgc	49 18.70 -0.8
VLS		0.80	214	ePg	49 25.20 0.5
KEK		1.37	310	ePb	49 36.30 2.1
				eSb	49 58.90
KZN		1.54	18	ePb	49 37.80 1.1
ITM		1.77	160	ePg	49 43.50 3.6X
ATH		2.19	113	ePb	49 46.50 0.5
OHR		2.28	353	iPn	49 49.20 1.7
				i(Sn)	50 27.00
PLG		2.34	48	ePn	49 47.30 -0.9
VLI		2.54	146	ePb	49 52.40 1.3
SKO		3.13	4	ePn	50 01.00 1.6
				i	50 08.00
KKB		3.36	25	eP	50 03.00 0.3
MMB		3.38	35	ePc	50 03.00 0.1
TDS		3.83	284	P	50 11.00 1.6
RZN		3.93	43	iP	50 11.00 0.0
BAI		4.01	306	P	50 12.00 0.2
VTS		4.06	22	eP	50 14.00 1.3
RDO		4.07	54	ePn	50 11.70 -1.1
SOI		4.08	261	P	50 13.00 0.1
				eSn	51 00.00
KDZ		4.30	48	eP	50 14.00 -2.0
ATN		4.52	263	P	50 19.00 -0.2
				eSn	51 10.50
MGR		4.53	288	P	50 20.00 0.8
				eSn	51 11.00
MEU		5.22	252	P	50 27.20 -2.0
				eSn	51 25.40
BSS		5.27	294	P	50 30.20 0.5
HVAR		5.61	322	ePn	50 33.50 -1.1
				iSn	51 35.40
DUI		5.85	301	P	50 38.50 0.5
SDI		6.30	299	P	50 44.80 0.4
BZS		6.78	3	eP	50 52.00 1.0
MLR		7.53	27	eP	51 04.00 2.3
ARV		7.75	310	P	51 02.50 -2.2

VOY		8.97	326	ePn	51 18.90 -2.7
				eSn	52 57.60
HFS		21.83	350	eP	54 01.00 -2.2
		0.4s	2.30nm		3.9mb
NB2		23.07	348	P	54 13.00 -2.5
		0.5s	0.90nm		3.6mb
		S.D. = 1.5	on	31 of	32 obs.

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* SEP 12, 1990 02h 09m 19.80± 1.89s
32.988 N ± 8.3km 141.162 E ±12.8km
DEPTH = 37.1 ± 16.8 km
5.0mb (6 obs.)
SOUTH OF HONSHU, JAPAN (211)

MAT		4.30	326	iPc	10 24.90 0.4
				(S)	11 11.00
GUMO		19.61	169	eP	13 48.00 0.0
		0.8s	73.21nm		5.0mb
PJG		19.60	169	eP	13 48.00 0.0
GUA		19.66	169	eP	13 49.00 0.4
BJI		21.24	296	eP	14 04.00 -0.7
		1.0s	6.00nm		3.9mb X
	Z	18s	0.53um		4.0Msz
CHG		40.24	260	eP	16 55.60 0.7
PKI		47.98	279	P	17 57.60 0.1
		1.0s	24.00nm		5.2mb
KKN		48.01	279	P	17 57.80 0.2
		0.8s	38.00nm		5.5mb
WB5		52.97	188	eP	18 33.80 -1.2
WRA		53.03	188	Pd	18 34.70 -0.7
		0.5s	7.50nm		4.9mb
ASPA		56.76	188	eP	19 01.60 -0.9
		0.6s	8.00nm		4.9mb
WAR8		60.44	195	eP	19 29.00 0.9
GBA		60.77	268	P	19 31.00 0.5
QUE		62.02	289	eP	19 39.00 -0.1
WDC		73.69	52	ePc	20 55.80 4.2X
KVN		77.40	52	P	21 11.90 -1.1
NB2		77.84	338	P	21 13.80 -1.0
		0.9s	6.10nm		4.6mb
KSP		83.43	328	eP	21 43.50 -1.1
CLL		84.50	330	iPd	21 49.80 -0.1
ZOBO		148.75	65	PKP	29 05.00 2.9
LPB		148.93	65	PKP	29 03.00 0.8
CNCB		149.19	66	PKP	29 07.50 4.7X
CCH		150.93	64	ePKP	29 11.00 6.0X
SIV		153.71	55	PKP	29 14.00 5.3X
		S.D. = 1.0	on	20 of	24 obs.

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* SEP 12, 1990 02h 35m 36.16± 1.32s
36.701 S ±13.4km 177.164 E ±12.9km
DEPTH = 162.4 ± 10.2 km
5.1mb (7 obs.)
OFF E. COAST OF N. ISLAND, N.Z. (160)

WTZ		1.29	186	Pd	36 05.00 0.1
WEL		4.94	201	P	36 50.00 0.2
				S	37 48.00
DZM		17.29	325	iPc	39 28.00 -1.4
COO		21.88	279	iPd	40 22.80 6.2X
		1.0s	64.00nm		5.0mb
CNB		22.51	265	iPc	40 29.50 6.8X
		1.0s	48.00nm		4.9mb
BRS		22.61	287	iPd	40 27.90 4.2X
CAN		22.80	265	eP	40 31.20 5.7X
RMQ		26.17	285	iPc	40 58.20 1.1
QIS		36.41	286	iPc	42 27.40 0.7
		1.0s	60.00nm		5.3mb
ASPA		39.27	277	iPc	42 51.50 1.0
		0.7s	138.00nm		5.8mb
				eS	48 46.70
FORR		40.84	263	iPd	43 02.70 -0.6
WRA		40.86	282	Pd	43 04.10 0.6
		0.5s	50.90nm		5.4mb
WB5		40.87	282	iPc	43 04.00 0.3
NWAO		48.65	256	eP	44 06.00 0.6
KLB		48.75	258	eP	44 05.00 -1.2
MUN		49.82	257	iPd	44 14.90 0.6
BAL		49.98	258	eP	44 16.00 0.5
MBL		51.80	271	iPd	44 28.00 -1.4
MAW		64.98	203	iP	45 58.00 -2.1
		1.0s	26.00nm		5.1mb
CHG		92.02	292	eP	48 27.00 -0.8
		1.0s	10.75nm		4.9mb
SOB1		122.02	134	(PKP)	54 07.00 -6.2X
BCAO		142.36	217	iPKPd	54 42.70 -8.8X
		0.6s	8.00nm		

12d 02h

KEV	143.18	343	ePKP	54	47.00	-4.2X
SOD	145.03	341	iPKP	54	47.30	-7.1X
MBH	147.86	269	ePKP	55	00.00	-0.1
JVI	148.25	273	ePKP	55	00.50	-0.2
HRI	148.35	275	ePKP	55	01.00	0.0
SUF	148.44	335	iPKP	54	57.30	-2.8
LIC	149.60	176	PKP	55	03.22	-0.1
KIC	149.75	176	PKP	55	03.52	0.0
TIC	150.02	176	PKP	55	04.36	0.4
NUR	150.44	332	ePKP	55	03.00	-0.2
LKO	152.85	174	PKP	55	08.92	0.8
	0.5s		5.00nm			
NB2	154.06	344	PKP	55	10.50	2.1
	0.6s		2.30nm			
HFS	154.26	341	ePKP	55	10.80	2.1
	0.5s		2.10nm			

S.D. = 1.2 on 27 of 35 obs.

SEP 12, 1990 02h 59m 44.06± 0.20s
42.798 N ± 2.2km 12.648 E ± 1.7km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)
MD 4.0 (TRI). ML 3.8 (LDG), 3.8 (VIE), 3.7 (TTG).

MNS	0.41	177	Pc	59	52.30	-0.2
			eSg	59	58.30	
CIO	0.54	42	P	59	53.90	-1.1
ALP	0.68	91	P	59	56.20	-1.5
			eSg	00	05.60	
AQU	0.71	128	P	59	56.90	-1.2
			eSg	00	08.70	
ARV	0.73	17	Pc	59	58.20	-0.3
			eSg	00	10.70	
SSO	0.75	49	P	59	58.80	0.0
			eSg	00	11.50	
CRE	0.97	329	P	00	04.00	1.4
			eSg	00	19.20	
RMP	0.99	178	P	00	02.70	-0.1
			eSg	00	16.30	
AZI	1.00	144	P	00	05.50	2.6X
			eSn	00	16.00	
AOI	1.03	43	P	00	03.10	-0.4
			eSg	00	19.80	
RDP	1.04	177	Pc	59	53.00	-10.7X
			eSg	00	04.80	
RSM	1.14	353	P	00	06.80	1.5
MAO	1.17	251	Pd	00	06.40	0.5
			eSn	00	24.10	
SFI	1.26	333	Pc	00	08.50	1.0
			eSn	00	27.30	
PGD	1.27	328	P	00	08.20	0.4
SDI	1.39	141	P	00	09.30	-0.3
			eSn	00	28.00	
DUI	1.76	130	P	00	15.00	0.1
RFI	1.80	146	P	00	16.68	1.4
PII	1.81	301	Pc	00	16.50	1.1
BDI	1.96	311	Pc	00	18.30	0.6
			eSn	00	45.10	
MME	1.99	315	P	00	20.00	1.7
BSS	2.57	140	P	00	27.60	1.1
HVAR	2.81	81	iPn	00	30.10	0.2
RIY	2.84	26	ePn	00	30.70	0.5
			iSn	01	06.00	
TRI	3.02	15	iPnc	00	32.60	-0.1
			iPgPg	00	43.90	
			iSn	01	08.60	
			iSg	01	24.00	
VVI	3.19	357	P	00	35.00	-0.2
SAL	3.20	332	P	00	35.70	0.4
CEY	3.21	23	ePnc	00	35.90	0.4
			iSn	01	14.40	
VBY	3.29	34	e(Pn)	00	38.00	1.3
			i	00	47.00	
			eSn	01	18.00	
VOY	3.35	15	ePnc	00	37.00	-0.6
			eSn	01	18.00	
MGR	3.44	140	P	00	39.00	0.2
PCP	3.45	302	P	00	39.00	0.0
LJU	3.51	22	ePn	00	40.40	0.6
			iSn	01	23.00	
FIN	3.52	295	P	00	39.66	-0.3
CKI	3.56	299	Pc	00	40.80	0.3
BAI	3.57	117	P	00	41.00	0.5
IMI	3.64	289	P	00	41.66	-0.1
MDI	3.65	326	P	00	41.50	-0.2
			eSn	01	23.50	
RBL	3.70	10	P	00	43.00	0.4
ROB	3.78	295	P	00	43.99	0.3
FVI	3.80	1	P	00	43.80	0.0
ZAG	3.85	37	e(Pn)	00	46.20	1.6
			iPg	00	59.20	
			iSn	01	32.00	
PTJ	3.91	36	ePn	00	45.50	0.1
			iPg	00	57.80	
			iSn	01	30.00	
			iSg	01	48.40	
BRT	3.91	118	P	00	43.00	-2.4
ENR	4.06	292	P	00	48.33	0.7
STV	4.13	292	P	00	49.49	0.8
TDS	4.19	137	P	00	49.00	-0.4
TMA	4.27	322	ePc	00	50.00	-0.7
DOI	4.27	295	Pc	00	50.90	0.2
OSS	4.28	336	ePc	00	51.80	1.0
VDL	4.33	330	ePc	00	52.20	0.6
HCY	4.33	93	ePn	00	51.50	0.1
			eSn	01	38.50	
BRY	4.34	87	ePn	00	52.00	0.3
PZZ	4.37	295	P	00	51.99	-0.2
ORO	4.39	312	P	00	52.00	-0.3
ORX	4.39	312	P	00	52.16	-0.2
SQTA	4.54	348	iPnc	00	55.10	0.7
			iSn	01	46.80	
			iSg	02	12.00	
RSP	4.55	303	P	00	55.33	0.7
BDV	4.60	94	ePn	00	56.00	0.8
			eSn	01	48.00	
WATA	4.60	351	iPnc	00	56.60	1.2
			iSn	01	49.60	
NKY	4.67	88	ePn	00	56.50	0.1
			eSn	01	49.20	
RRL	4.74	299	P	00	57.99	0.5
LSD	4.76	306	P	00	56.49	-1.4
BNI	4.87	300	P	00	59.70	0.5
TTG	4.89	92	ePn	01	00.00	0.6
			eSn	01	55.50	
BHG	4.93	2	ePn	01	00.30	0.4
PLE	4.97	82	ePn	01	01.70	1.1
			eSn	01	59.00	
LPG	5.03	304	Pn	01	02.80	1.2
			Sn	02	01.00	
LPL	5.05	305	Pn	01	03.00	1.2
			Sn	02	01.30	
CDR	5.10	282	iPnc	01	02.10	-0.3
IVA	5.33	87	ePn	01	07.00	1.3
			eSn	02	08.00	
KMR	5.36	11	ePn	01	06.00	0.0
			iSn	02	08.40	
PVY	5.40	90	ePn	01	07.60	0.8
			eSn	02	08.50	
SOP	5.61	28	iP	01	09.90	0.4
SLE	5.77	331	ePc	01	10.00	-1.7
VKA	6.04	24	ePn	01	15.00	-0.6
			iSn	02	22.30	
OHR	6.31	103	eP	01	19.30	-0.1
WET	6.35	1	ePn	01	19.30	-0.7
KHC	6.37	6	Pn	01	19.00	-1.2
			e	01	25.50	
			Sn	02	31.30	
			Sg	22	17.80	
BSF	6.51	323	Pn	01	21.10	-1.2
			Sn	02	33.70	
SKO	6.56	94	iP	01	22.20	-0.8
CDF	6.76	328	Pn	01	23.90	-1.9
			Sn	02	38.80	
GRA4	6.82	353	e(Pn)	01	31.80	5.2X
HAU	6.84	322	Pn	01	25.30	-1.5
			Sn	02	40.20	
BZS	7.03	63	eP	01	28.00	-1.6
PRU	7.31	10	ePn	01	32.00	-1.4
			e	02	41.50	
			eSn	02	52.00	
			eSg	21	54.00	
LBF	7.44	307	Pn	01	34.60	-0.7
			Sn	02	57.00	
LOR	7.66	309	Pn	01	37.00	-1.4
			Sn	03	02.50	
AVF	7.72	304	Pn	01	38.00	-1.2
MOX	7.88	355	ePn	01	40.00	-1.4
			eSn	03	07.00	
CAF	7.94	289	Pn	01	41.90	-0.4
MAF	7.98	299	Pn	01	42.40	-0.4
BRG	8.13	6	ePn	01	48.00	3.2X
			iSn	03	11.00	
			i	03	28.00	
			i	03	42.00	
			i	03	54.00	
			iSg	22	09.80	
TCF	8.23	299	Pn	01	46.10	-0.3
RJF	8.40	291	Pn	01	48.60	-0.1
LPO	8.51	287	Pn	01	49.60	-0.6
LSF	8.66	297	Pn	01	52.50	0.2
LFF	8.87	288	Pn	01	54.50	-0.6
DOU	9.17	326	eP	02	03.60	4.3X
			e	03	37.30	
MLR	9.93	70	ePc	02	11.00	1.0
SUF	21.47	17	eP	04	33.00	-1.5
	0.7s		39.90nm			4.9mb X

S.D. = 0.9 on 96 of 101 obs.

SEP 12, 1990 04h 44m 06.36± 1.11s
5.216 S ± 6.4km 151.950 E ± 8.6km
DEPTH = 62.6 ± 9.6 km
4.9mb (14 obs.)
NEW BRITAIN REGION (192)

RA8	1.04	12	iPd-	44	25.10	-0.2
PMG	6.32	229	eP	45	39.00	-0.2
	0.8s		97.01nm			5.3mb
			eS	46	51.00	
QIS	19.40	217	eP	48	30.00	-0.4
GUA	19.90	340	e(P)	48	37.30	1.7
	0.8s		131.34nm			5.3mb
GUMO	19.96	339	e(P)	48	34.00	-2.2
	1.0s		132.00nm			5.2mb
PJG	19.96	339	e(P)	48	38.30	2.1
RMQ	21.37	188	eP	48	50.00	-0.6
DZM	21.85	141	iPc	48	55.80	0.3
WB5	22.48	228	iPc	49	02.00	0.4
			i	49	03.80	
			i	49	13.20	
			e	53	05.00	
WRA	22.54	228	Pc	49	02.40	0.2
	0.7s		17.50nm			4.6mb
ASPA	25.28	222	iPd	49	29.10	0.5
	0.9s		22.00nm			4.7mb
			iPP	49	41.00	
			eS	53	58.60	
			iScP	55	56.30	
WARB	31.94	227	eP	50	28.50	0.0
PPR	36.29	294	ePd	51	07.50	1.5
MRWA	41.53	231	eP	51	49.10	-0.3
CHG	57.40	296	eP	53	51.00	-0.2
GUN	71.61	302	P	55	23.60	-0.3
	0.6s		22.00nm			5.3mb
PKI	71.92	301	P	55	25.10	-0.7
KKN	72.09	301	P	55	26.10	-0.5
	0.6s		17.00nm			5.2mb
DMN	72.19	301	P	55	27.10	-0.2
	0.7s		17.00nm			5.1mb
GKN	72.69	301	P	55	29.80	-0.3
	0.6s		15.00nm			5.1mb
GBA	76.26	285	Pd	55	50.10	-0.5
	0.9s		3.90nm			4.3mb
PMR	80.41	25	P	56	10.70	-1.7
	1.0s		10.00nm			4.7mb
FBA	82.58	22	P	56	22.00	-1.7
	0.9s		7.29nm			4.7mb
INK	89.14	21	eP	56	56.00	0.1
LBFM	90.53	49	P	57	04.00	0.8
KVN	93.21	51	P	57	16.10	0.5
TNP	93.83	52	P	57	19.80	1.3
	0.9s		3.26nm			4.8mb
BW06	99.75	48	P	57	44.30	-1.1
	0.8s		2.14nm			4.8mb
RSSD	103.67	46	Pdiff	58	02.90	0.1
NB2	117.01	340	PKP	02	44.80	-0.7
	0.8s		1.40nm			
EKA	126.18	343	PKP	03	04.00	0.8
	1.5s		10.90nm			
BCAO	133.58	271	iPKPd	03	18.40	-0.2
	0.7s		8.00nm			
CNCB	134.87	120	PKP	03	23.80	2.2
LPB	134.89	119	ePKP	03	15.00	-6.5X
ZOBO	134.98	119	PKP	03	20.00	-1.8
CCH	136.19	122	ePKP	03	25.00	1.2
PPD	144.61	141	ePKP	03	37.20	-1.2
IFR	144.68	326	ePKP	03	37.00	-1.4
AVE	146.09	328	iPKP	03	41.80	1.3
VAO	146.41	147	(PKP)	03	43.00	1.5
KIC	156.78	274	PKP	04	11.00	14.3X

S.D. = 1.1 on 39 of 41 obs.

? SEP 12, 1990 05h 00m 45.67± 4.39s
47.802 N ± 8.2km 1.289 W ±52.9km
DEPTH = 5.0km (geophysicist)
FRANCE (538)
ML 2.1 (LDG).

LPF	0.28	36	Pg	00 51.20	-0.2
			Sg	00 56.20	
GRR	0.65	26	Pg	00 58.80	0.0
			Sg	01 08.80	
FLN	1.10	29	Pg	01 06.80	0.0
			Sg	01 22.00	
LDF	1.11	44	Pg	01 07.20	0.2
			Sg	01 24.10	
MFF	1.43	147	Pg	01 12.30	0.0
			Sg	01 32.10	

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

? SEP 12, 1990 05h 45m 42.19± 1.87s
53.831 N ±36.6km 158.890 E ±32.4km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
NEAR EAST COAST OF KAMCHATKA (218)

INK	33.73	38	eP	52 22.00	0.0
CHG	57.36	257	eP	55 29.90	0.4
CHTO	57.36	257	P	55 29.00	-0.4
	1.1s		11.78nm		4.8mb
			e	55 38.90	
GUN	58.11	275	P	55 44.00	8.9X
KKN	58.55	275	P	55 50.00	12.0X
	0.4s		13.00nm		
PKI	58.64	275	P	55 48.10	9.3X
	0.4s		7.00nm		5.1mb
GKN	58.77	276	P	55 58.40	18.9X
DMN	58.79	275	P	55 52.20	12.5X
NB2	62.63	343	P	56 05.20	0.1
	0.7s		2.30nm		4.4mb
HFS	63.02	341	eP	56 07.50	-0.1
	0.4s		2.00nm		4.6mb

S.D. = 0.5 on 5 of 10 obs.

? SEP 12, 1990 05h 51m 29.99±15.77s
15.773 N ±28.7km 60.638 W ±129.km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 2.5 (FDF).

BBL	0.85	253	eP	51 45.51	0.0
			S	51 56.80	
DOG	0.98	285	eP	51 47.70	0.3
			S	52 01.20	
PAG	1.03	284	eP	51 48.00	-0.3
			S	52 02.40	
SEG	1.04	307	eP	51 48.30	0.0
			S	52 04.80	

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

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* SEP 12, 1990 06h 06m 59.24± 0.76s
14.819 N ±16.9km 91.479 W ± 9.3km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
GUATEMALA (70)

TPX	0.76	277	iP	07 14.05	0.5
			iS	07 23.68	
SCX	2.21	330	iP	07 43.23	9.0X
			iS	08 15.28	
EVV	5.18	315	(P)	08 26.00	9.5X
			iS	09 14.50	
OXX	5.52	295	iP	08 21.00	-0.5
			iS	09 15.00	
LVVM	6.82	317	iP	08 38.00	-1.5
			(S)	09 50.63	
PPM	8.04	303	iP	08 58.62	1.5
IIA	8.11	303	(P)	08 58.00	0.4
IIJ	9.28	303	(P)	09 13.00	-1.3
MEO	20.88	343	e(P)	11 42.00	0.8
TUL	21.36	350	eP	11 56.40	10.5X
	0.9s		4.00nm		
			e	12 08.00	
			e	12 12.10	
PNT	41.38	332	ePd	14 45.00	1.1
	0.7s		8.00nm		4.6mb
SOB1	55.54	112	eP	16 34.30	0.2
INK	59.80	343	eP	17 03.50	0.2
EKA	77.01	36	P	18 50.00	-0.4
	0.9s		2.50nm		4.2mb
GKN	137.27	5	PKP	26 27.80	5.9X
GUN	137.45	3	PKP	26 22.60	0.1
KKN	137.53	4	PKP	26 23.00	0.5
DMN	137.70	5	PKP	26 23.00	0.1
PKI	137.76	4	PKP	26 21.40	-1.7
GBA	149.70	22	PKP	26 47.00	3.8X

S.D. = 1.0 on 15 of 20 obs.

? SEP 12, 1990 06h 20m 33.28± 4.64s
1.110 N ±49.7km 100.354 E ±58.5km
DEPTH = 237.2 ± 41.1 km
4.2mb (3 obs.)
NORTHERN SUMATERA (706)

KGM	3.10	73	ePd	21 27.00	0.5
	0.6s		344.40nm		
IPM	3.51	11	ePd	21 30.90	-0.3
	0.6s		51.00nm		
WB5	39.33	124	eP	27 41.80	0.4
WRA	39.34	124	Pc	27 41.30	-0.1
	0.5s		2.60nm		4.0mb
FORR	41.31	143	iPd	27 56.00	-1.3
	0.2s		10.00nm		4.9mb
NUR	82.02	331	eP	32 27.00	-0.8
SOD	82.75	338	eP	32 22.00	-9.5X
HFS	87.37	330	eP	32 54.50	0.1
	0.4s		0.90nm		4.0mb
PPD	145.46	231	(PKP)	39 47.00	1.6

S.D. = 1.2 on 8 of 9 obs.

% SEP 12, 1990 07h 06m 59.35± 3.66s
47.761 N ± 8.7km 2.526 W ±31.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 3.1 (LDG).

LPF	1.04	74	Pn	07 19.70	0.8
			Pg	07 20.40	
			Sg	07 34.30	
GRR	1.28	60	Pn	07 23.40	0.3
			Pg	07 24.40	
			Sg	07 41.70	
FLN	1.69	53	Pn	07 28.90	-0.2
			Pg	07 31.10	
			Sg	07 53.00	
LDF	1.81	62	Pn	07 30.80	0.0
			Pg	07 33.60	
			Sg	07 57.40	
MFF	2.00	125	Pg	07 39.50	6.0X
			Sg	08 05.20	
TCF	3.56	113	Pg	08 08.80	13.0X
			Sn	08 37.40	
			Sg	08 55.10	
RJF	3.72	130	Pn	07 59.20	1.2
			Pg	08 11.60	
			Sg	08 59.00	
MAF	3.81	112	Pn	07 59.20	-0.2
			Pg	08 13.10	
			Sn	08 43.80	
			Sg	09 01.00	
BGF	3.86	106	Pn	07 59.60	-0.4
			Pg	08 13.70	
			Sn	08 43.80	
			Sg	09 03.50	
LPO	4.01	139	Pn	08 02.40	0.2
			Sg	09 10.20	
AVF	4.12	101	Pn	08 03.70	0.1
			Sg	09 12.70	
CAF	4.26	130	Pn	08 05.20	-0.5
			Pg	08 22.40	
			Sn	08 53.90	
			Sg	09 17.60	
LOR	4.36	94	Pn	08 05.90	-1.2
			Sn	08 55.10	
			Sg	09 18.30	

S.D. = 0.7 on 11 of 13 obs.

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* SEP 12, 1990 07h 47m 37.21± 1.55s
15.355 N ±19.0km 94.093 W ±12.3km
DEPTH = 75.9 ± 10.7 km
4.2mb (2 obs.)
NEAR COAST OF OAXACA, MEXICO (66)

TPX	1.82	104	iP	48 07.00	-0.2
			iS	48 27.00	
SCX	1.96	45	iP	48 09.11	0.1
			iS	48 31.85	
OXX	3.06	305	iP	48 25.00	0.6
			iS	49 07.00	
EVV	3.31	339	iP	48 28.00	0.3
LVVM	4.90	333	iP	48 49.09	-0.9
PPM	5.69	311	iP	49 08.64	7.1X
IIA	5.77	312	(P)	49 08.00	5.9X
IIJ	6.92	310	(P)	49 22.50	3.9X
MRX	8.03	304	eP	49 40.20	6.8X
MEO	19.76	349	iPd	52 02.80	-1.0
TUL	20.53	356	eP	52 13.20	1.6
	0.7s		5.90nm		4.0mb
ANMO	22.45	333	(P)	52 35.20	4.1X
INK	58.58	344	eP	57 27.00	-1.0
			pP	57 45.50	71kmX
NB2	83.92	28	P	00 00.40	0.5
	0.9s		3.60nm		4.4mb

S.D. = 1.1 on 9 of 14 obs.

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* SEP 12, 1990 08h 22m 15.06± 0.68s
36.200 N ± 9.4km 31.767 E ±13.4km
DEPTH = 94.6 ± 14.2 km
4.1mb (7 obs.)
TURKEY (366)
MD 4.1 (HLW).

PPCY	1.39	160	eP	22 41.30	1.2
CSS	1.78	134	eP	22 44.20	-0.8
			eS	23 06.00	
CIN	3.26	296	eP	23 05.00	-0.1
BBTK	3.72	12	eP	23 11.00	-0.5
			eS	23 43.00	
ADI	4.22	137	eP	23 19.00	0.7
SHMJ	4.79	135	Pc	23 39.02	12.9X
JARJ	5.25	138	P	23 46.39	13.7X
SALJ	5.29	141	Pd	23 46.77	13.5X
KFNJ	5.41	142	Pc	23 48.47	13.7X
DSI	5.51	146	eP	23 37.00	0.9
MASJ	5.54	143	Pc	23 50.09	13.4X
LISJ	5.83	147	Pc	23 54.20	13.6X
KOT	6.25	179	ePn	23 45.00	-1.4
			eSn	24 45.50	
MBH	6.92	157	eP	23 55.00	-0.6
LPG	21.01	304	eP	26 56.40	3.5X
	0.9s		8.20nm		4.1mb
LPL	21.03	304	eP	26 55.80	2.8
	1.0s		8.00nm		4.0mb
SMF	23.28	305	eP	27 14.60	-0.3
	0.6s		8.10nm		4.3mb
LBF	23.29	306	eP	27 14.40	-0.6
	0.4s		3.45nm		4.1mb
LOR	23.46	307	eP	27 15.90	-0.7
	0.6s		3.60nm		3.9mb
SSF	23.62	306	eP	27 17.80	-0.4
	0.4s		3.70nm		4.1mb
AVF	23.65	305	eP	27 18.10	-0.3
	0.6s		5.40nm		4.1mb

S.D. = 1.2 on 14 of 21 obs.

SEP 12, 1990 08h 34m 13.60± 0.45s
42.793 N ± 3.9km 12.837 E ± 5.9km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

MNS	0.42	196	Pc	34 21.30	-1.0
			eSg	34 28.20	
AQU	0.61	136	P	34 25.60	-0.3
			eSg	34 37.50	
ARV	0.71	6	P	34 27.50	-0.1
			eSg	34 38.80	
RDP	1.04	185	P	34 34.00	0.8
			eSg	34 49.00	
CRE	1.06	323	P	34 34.00	0.4
			eSg	34 48.00	
RSM	1.17	346	P	34 36.10	0.7
MAO	1.30	254	P	34 37.60	-0.1
SDI	1.31	146	P	34 39.10	1.3
			eSn	34 57.50	
SFI	1.34	328	P	34 37.70	-0.5
			eSn	34 56.60	
PGD	1.35	323	P	34 38.70	0.1
			eSn	34 57.50	
DUI	1.65	133	P	34 42.00	-0.8
			eSn	35 04.00	
PII	1.93	300	P	34 48.00	1.3

12d 08h

BDI	2.07	309	P	34 47.50	-1.3
			eSn	35 13.00	
VOY	3.33	13	ePn	35 06.40	-0.4
			eSn	35 47.30	
S.D. = 0.9			on 14 of 14 obs.		

? SEP 12, 1990 08h 51m 40.84± 1.55s
24.129 S ±15.2km 66.933 W ±21.4km
DEPTH = 211.0 ± 37.5 km
SALTA PROVINCE, ARGENTINA (129)

ANT	3.21	277	iPc	52 34.30	0.3
			iS	53 12.00	
CCH	6.75	6	P	53 19.30	0.3
CNCB	7.35	352	iPd	53 28.10	1.1
			S	54 48.60	
LPB	7.64	352	P	53 32.00	1.3
ZOBO	7.90	352	P	53 34.10	-0.3
			S	55 01.00	
ARE	8.74	330	eP	53 43.00	-1.9
			iS	55 15.40	
SIV	9.79	35	P	53 56.80	-1.4
			i	54 00.00	
VAO	18.34	91	iPd	55 42.10	0.0
			i	55 43.70	
			e	55 51.70	
BAO	19.70	68	iPd	55 57.20	1.1
BMA	20.95	91	eP	56 07.80	-0.6
			e	56 10.70	
S.D. = 1.3			on 10 of 10 obs.		

% SEP 12, 1990 09h 10m 00.64± 0.56s
44.674 N ± 4.0km 7.238 E ± 7.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

PZZ	0.19	210	P	10 05.11	0.1
			S	10 07.84	
RRL	0.41	308	P	10 08.96	-0.1
			S	10 14.71	
STV	0.43	172	P	10 09.58	0.1
			S	10 15.73	
ENR	0.47	164	P	10 09.99	-0.1
			S	10 16.35	
RSP	0.48	2	P	10 10.50	0.1
			S	10 16.76	
ROB	0.59	130	P	10 12.65	0.0
			S	10 20.65	
LSD	0.79	356	P	10 16.04	-0.1
			S	10 25.57	
S.D. = 0.1			on 7 of 7 obs.		

SEP 12, 1990 09h 42m 27.30± 0.63s
4.306 N ± 7.8km 96.460 E ± 9.3km
DEPTH = 33.0km (normal)
5.0mb (4 obs.)
NORTHERN SUMATERA (706)

IPM	4.56	86	ePc	43 36.10	0.3
	0.4s	146.00nm			
			e	44 28.30	
			e	44 50.90	
SNG	5.02	55	eP	43 41.20	-1.2
	0.6s	184.00nm			5.7mb X
KLM	5.31	103	eP	44 08.00	21.6X
KGM	7.22	108	eP	44 20.00	6.8X
NNT	8.84	21	eP	44 31.00	-4.9X
CHG	14.62	9	iPc	45 54.40	0.6
			e	50 17.20	
GBA	20.92	297	P	47 09.00	-0.7
KMI	21.56	16	Pc	47 17.00	0.6
			sP	47 32.00	
BJI	39.78	24	eP	50 06.00	7.1X
WB5	44.33	124	eP	50 36.10	-0.3
WRA	44.34	124	Pd	50 36.20	-0.3
	0.5s	9.70nm			4.9mb
ASPA	45.88	129	iPc	50 48.70	0.0
	0.4s	24.00nm			5.5mb
FORR	46.20	141	eP	50 51.00	-0.1
	0.2s	4.00nm			5.0mb
BWA	62.22	133	eP	52 49.50	1.1
CAN	63.06	133	eP	52 53.80	-0.1
BCAO	77.66	274	iPd	54 29.30	6.4X
	0.5s	4.00nm			4.7mb
PPD	144.15	238	ePKP	02 05.20	2.9X
S.D. = 0.7			on 11 of 17 obs.		

SEP 12, 1990 09h 52m 11.67± 0.57s
42.793 N ± 5.5km 12.783 E ± 9.0km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

MNS	0.41	191	Pc	52 19.30	-0.9
			eSg	52 26.00	
AQU	0.63	134	P	52 23.80	-0.6
			eSg	52 33.20	
ARV	0.72	9	P	52 25.20	-0.6
			eSg	52 36.90	
CRE	1.03	324	P	52 31.70	0.5
			eSg	52 47.00	
RDP	1.03	183	P	52 32.00	0.7
			eSg	52 47.50	
SFI	1.32	329	P	52 36.20	0.2
			eSn	52 55.50	
SDI	1.33	144	P	52 37.50	1.3
PGD	1.33	325	P	52 37.50	1.2
DUI	1.68	132	P	52 41.00	-0.3
BDI	2.04	309	P	52 45.00	-1.5
LPG	5.11	304	Pg	53 35.80	5.4X
LPL	5.13	304	Pg	53 36.30	5.7X
S.D. = 1.0			on 10 of 12 obs.		

? SEP 12, 1990 10h 18m 22.60± 0.99s
56.322 N ±26.3km 158.413 E ±23.0km
DEPTH = 92.1km (2 depth phases)
4.3mb (8 obs.)
KAMCHATKA (217)

TTA	23.53	55	P	23 22.70	-2.1
	0.9s	11.46nm			4.3mb
IMA	24.42	47	P	23 32.20	-1.2
	0.6s	6.77nm			4.3mb
			pP	23 52.20	90km
FBA	26.94	49	P	23 54.80	-1.8
	0.9s	10.00nm			4.3mb
			pP	24 15.80	94km
INK	31.98	41	ePd	24 42.20	1.0
YKA	41.49	44	eP	26 02.70	1.4
	0.8s	4.10nm			4.3mb
FHC	50.85	73	eP	27 16.10	0.6
LBFM	51.57	71	P	27 21.20	0.0
WDC	51.78	72	eP	27 22.50	0.0
MIN	52.44	72	ePd	27 27.10	-0.6
ORV	53.07	72	eP	27 31.50	-0.6
ARN	54.67	74	P	27 43.90	0.0
CMB	54.77	73	ePd	27 44.80	0.1
KVN	55.23	70	P	27 47.90	-0.3
PPR	55.76	230	iPd	27 51.00	-0.9
TNP	56.41	71	P	27 56.70	0.0
	0.8s	11.27nm			5.0mb
BW06	56.81	62	P	27 59.00	-0.5
	0.8s	4.29nm			4.6mb
DUG	57.11	66	P	28 02.00	0.4
DAU	57.74	65	P	28 06.70	0.6
PKI	58.20	273	P	28 00.00	-9.5X
RSSD	58.44	57	P	28 11.40	0.5
ANMO	64.37	65	P	28 52.40	1.7
	0.8s	1.87nm			4.1mb
TUL	68.79	57	eP	29 20.20	1.8
	1.0s	5.00nm			4.3mb
S.D. = 1.1			on 21 of 22 obs.		

SEP 12, 1990 10h 21m 49.30± 0.41s
6.355 N ± 3.5km 126.379 E ± 4.5km
DEPTH = 90.4 ± 3.8 km
5.6mb (36 obs.)
MINDANAO, PHILIPPINE ISLAND$ (259)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 18C
Centroid Locotion:
Origin Time 10:21:53.2 1.0
Lat 6.62N 0.10 Lon 126.39E 0.06
Dep 58.7 6.6 Half-duration 1.8
Moment Tensor; Scale 10**17 Nm
Mrr= 0.43 0.05 Mtt= 0.23 0.07
Mff=-0.65 0.09 Mrt=-0.15 0.07
Mrf= 1.23 0,10 Mtf=-0.22 0.07
Principal Axes:

	Val=	Plg=	Azm=
T	1.28	54	247
N	0.18	13	356
P	-1.46	33	94

Best Double Couple:Mo=1.4*10**17
NP1:Strike=224 Dip=17 Slip= 139
NP2: 353 79 77

DAV	1.08	312	iPd	22 10.10	-0.1
PLP	4.98	344	ePc	23 01.30	-1.7
			eS	23 14.00	
PPR	8.30	295	iPc	23 49.00	0.1
			iS	24 45.00	
PGP	8.89	323	iPd	24 01.00	4.1X
	1.2s	211.00nm			5.8mb
QCP	9.74	328	eP	24 11.00	2.5X
AAI	10.14	170	eP	24 11.00	-2.9X
			eS	25 54.50	
BAG	11.49	331	eP	24 32.90	0.7
CVP	12.13	339	eP	24 47.50	7.2X
			eS	25 01.00	
SZP	12.54	333	ePc	24 47.20	1.4
PIP	13.16	335	ePd	24 57.00	3.2X
MKS	13.41	211	iPc	24 58.00	0.9
GUMO	19.56	67	eP	26 11.00	-1.7
	1.3s	594.77nm			5.7mb
PJG	19.56	67	eP	26 10.30	-2.4
GUA	19.59	67	eP	26 11.30	-1.7
MTN	19.65	166	eP	26 12.60	-1.0
HKC	19.76	325	iP	26 15.60	1.0
			iS	30 00.00	
KNA	22.09	174	iPc	26 38.40	0.2
KGM	23.39	260	ePc	26 52.00	1.1
KLM	24.86	264	eP	27 05.50	0.5
SSE	25.09	349	Pd	27 09.00	2.0
	1.4s	185.00nm			5.3mb
Z	20s	0.50um			4.0Msz
			epP	27 28.00	85kmX
			sP	27 36.30	
			PcP	30 41.00	
			eS	31 28.00	
			esS	31 58.00	
			eSS	32 36.00	
			ScP	34 14.50	
IPM	25.30	267	ePc	27 10.10	0.9
	0.7s	159.60nm			5.6mb
SNG	25.59	273	eP	27 12.30	0.4
	0.8s	356.72nm			5.9mb
			e	30 42.00	
			e	34 15.20	
PCT	25.88	291	iPc	27 16.00	1.5
	0.5s	3.50nm			4.1mb X
PMG	25.96	127	eP	27 15.00	-0.2
LOE	26.46	297	eP	27 19.00	-0.9
			e	30 43.00	
			e	34 18.00	
NNT	26.99	285	eP	27 23.40	-1.3
			e	30 40.20	
WB5	27.23	163	eP	27 26.00	-0.8
			e	31 05.10	
			eS	31 55.90	
WRA	27.28	163	Pc	27 24.70	-2.6
	0.7s	10.20nm			4.5mb X
NST	27.34	292	eP	27 27.40	-0.5
MBL	28.09	193	iPc	27 33.40	-1.1
BDT	28.85	294	eP	27 38.00	-3.5X
	0.5s	32.00nm			5.2mb
KMI	29.33	312	Pc	27 45.50	-0.5
CHG	29.44	297	ePd	27 46.30	-0.5
	0.8s	24.25nm			4.9mb
			e	30 51.10	
			e	34 27.40	
QIS	29.74	154	eP	27 48.60	-0.7
	0.6s	106.00nm			5.7mb
			e	29 27.00	
NANU	30.64	200	iPc	27 55.00	-2.2
ASPA	30.73	166	iPc	27 57.20	-0.9
	0.7s	83.00nm			5.6mb
Z	23s	0.48um			4.1MszX
			iPcP	30 54.30	
			iS	32 51.60	
			iScS	38 24.90	
			LR	41 25.60	
MAT	31.94	18	(P)	28 17.00	8.5X
	0.8s	5.22nm			4.4mb X
			eS	32 50.00	
WARB	32.34	180	iPc	28 12.30	0.2
CTA	32.75	144	iPc	28 16.70	0.9
	1.5s	158.33nm			5.6mb
			iS	33 29.00	
MEKA	33.64	193	iPc	28 22.40	-1.0
BJI	34.77	346	eP	28 32.50	-0.4

1.0s 332.00nm 6.2mb
Z 22s 0.43um 4.1Msz
eS 33 54.00
ScP 34 47.50
eScS 38 50.00
LZH 36.09 328 iPc 28 45.00 0.7
1.5s 158.00nm 5.7mb
N 10s 0.70um
E 10s 0.60um
pP 28 58.00 49kmX
sP 29 05.00
PP 30 13.00
PcP 31 10.00
S 34 22.00
sS 34 35.00
ScP 34 50.00
ScS 38 56.00
MRWA 36.75 195 iPc 28 49.70 -0.1
FORR 37.03 178 iPc 28 51.00 -1.0
COOL 37.36 187 iPc 28 54.20 -0.7
BAL 37.90 194 iPc 28 58.90 -0.5
KLB 38.62 192 iPc 29 05.00 -0.4
RMO 39.20 147 eP 29 09.00 -1.3
e 35 02.00
MUN 39.33 194 iPc 29 11.20 -0.1
NWAO 40.02 192 iPc 29 17.40 0.4
STK 40.70 160 iPd 29 23.10 0.6
1.0s 36.00nm 5.2mb
eScP 35 07.40
iS 35 25.70
iScS 39 18.50
RKG 41.17 192 iPc 29 31.50 5.1X
0.6s 221.00nm 6.2mb
BRS 42.16 144 iPc 29 35.00 0.4
i 29 40.00 17kmX
e 30 19.00
ADE 42.71 165 eP 29 40.00 0.9
0.9s 157.98nm 5.8mb
GUN 43.94 304 P 29 49.00 -0.6
COO 44.11 148 iPc 29 51.70 1.2
0.6s 14.00nm 5.0mb
PKI 44.21 303 P 29 50.60 -1.1
KKN 44.39 304 P 29 52.00 -1.1
DMN 44.47 303 P 29 52.80 -1.0
GKN 45.00 304 P 29 56.80 -1.0
BWA 45.60 154 eP 30 04.30 2.1
BFD 45.87 162 eP 30 08.00 3.8X
e 30 14.00 20kmX
CAN 46.61 154 eP 30 11.70 1.5
CNB 46.76 154 eP 30 12.70 1.2
1.1s 59.00nm 5.4mb
HYB 47.95 288 eP 30 20.00 -1.0
1.0s 100.00nm 5.6mb
DZM 48.36 127 iPc 30 23.00 -1.1
KOD 48.52 278 iP 30 25.80 0.0
GBA 48.67 282 Pc 30 25.50 -1.0
0.8s 241.60nm 6.2mb
POO 52.52 288 iPd 30 55.40 -0.4
0.9s 80.67nm 5.8mb
QUE 60.48 301 eP 31 52.00 -0.5
ADK 65.01 35 P 32 19.40 -2.4
1.0s 80.00nm 5.6mb
MAIO 67.66 307 iPc 32 38.00 -1.1
0.9s 14.92nm 4.9mb
SVW 78.67 29 eP 33 45.00 2.2
TTA 78.74 27 eP 33 44.10 0.9
KDC 79.92 33 ePc 33 51.30 1.8
IMA 80.14 24 eP 33 51.20 0.4
0.6s 9.10nm 4.8mb
PMR 81.82 29 eP 33 56.20 -3.2X
0.9s 41.67nm 5.3mb
F8A 82.51 25 eP 34 02.00 -1.0
0.9s 41.67nm 5.3mb
TOA 83.23 28 eP 34 08.10 1.3
MAW 86.08 200 iPc 34 21.60 0.8
SBA 86.97 172 e(P) 34 26.30 1.3
KEV 87.32 340 iP 34 26.80 -0.1
0.8s 19.10nm 5.2mb
INK 87.86 21 eP 34 29.00 -0.5
SOD 87.92 338 iP 34 29.30 -0.5
SUF 89.07 333 iP 34 35.30 0.0
0.5s 11.80nm 5.3mb
TRO 90.08 340 eP 34 39.70 -0.2
NUR 90.25 331 iP 34 40.20 -0.7
0.8s 48.40nm 5.7mb
VRI 92.17 316 ePd 34 50.00 0.0
MLR 92.78 316 ePd 34 52.50 -0.5

UPP 93.80 331 iP 34 57.40 0.2
HFS 95.55 332 eP 35 03.70 -1.6
1.0s 32.00nm 5.8mb
Z 18s 0.80um 5.2MszX
LR 14 26.00
KRA 95.58 322 eP 35 05.70 0.1
NB2 96.29 334 P 35 07.70 -1.1
0.9s 15.90nm 5.5mb
SPA 96.31 180 iPc 35 09.20 0.4
1.0s 16.00nm 5.5mb
PTZ 96.40 256 iPc 35 16.00 5.9X
i 35 21.90 18kmX
YKA 97.27 24 eP 35 13.60 0.6
0.6s 4.20nm 5.1mb
KSP 97.55 323 ePc 35 14.50 0.0
PRU 98.90 323 eP 35 20.50 -0.1
BRG 98.93 324 iP 35 20.30 -0.5
1.1s 21.00nm 5.6mb
i 35 26.00 18kmX
CLL 99.32 324 eP 35 22.00 -0.5
0.9s 15.00nm 5.6mb
i 36 09.60 191kmX
BUL 99.43 251 iPc 35 18.90 -4.9X
0.9s 23.11nm 5.8mb
KHC 99.79 322 eP 35 25.00 0.2
MOX 100.39 324 e(Pdif35 28.00 0.6
GRF 101.00 323 ePdiff35 30.20 0.1
0.9s 8.00nm 5.3mb
Z 22s 0.10um 4.3Msz
KMZ 101.68 258 ePdiff35 34.00 0.0X
LPG 105.51 321 ePKP 40 07.70 3.8X
0.8s 2.70nm
LPL 105.51 321 ePKP 40 07.00 3.2X
1.0s 6.00nm
L8F 106.53 323 ePKP 40 04.90 -0.5
0.8s 2.70nm
BCAO 107.17 277 iPKPc 40 09.50 1.9
0.6s 8.00nm
ic 40 23.10
TCF 107.93 323 ePKP 40 08.70 0.6
0.8s 4.05nm
RSSD 112.33 37 ePKP 40 16.90 0.2
GOL 113.88 41 ePKP 40 20.30 0.3
0.7s 3.64nm
ANMO 115.50 46 ePKP 40 24.30 1.2
0.8s 2.80nm
SIO 122.03 41 ePKP 40 36.50 1.3
TUL 122.26 40 ePKP 40 37.00 1.3
0.9s 6.50nm
UYO 124.20 41 iPKPd 40 39.80 0.3
LKO 129.60 288 PKP 40 49.60 -0.8
0.6s 27.50nm
KIC 129.61 284 PKP 40 50.98 0.5
0.6s 30.00nm
TIC 129.81 284 PKP 40 51.32 0.5
LIC 129.92 284 PKP 40 51.36 0.3
0.6s 28.00nm
LNV 147.97 151 ePKPd 41 27.50 4.6X
TACH 148.45 152 ePKP 41 29.00 5.3X
PCH 148.67 152 ePKP 41 30.00 5.8X
SAN 148.74 152 ePKP 41 29.50 5.3X
ROCH 148.97 151 ePKP 41 32.50 7.6X
PEL 148.98 151 iPKPd 41 30.50 5.8X
JACH 149.41 151 ePKP 41 32.00 6.6X
UPA 150.01 60 iPKPc 41 32.50 5.9X
0.9s 100.84nm
MDZ 150.04 154 i(PKP) 41 33.50 7.2X
CNCB 162.53 128 PKP 41 46.50 3.6X
LPB 162.59 127 PKP 41 45.00 2.2
ZOBO 162.71 126 PKP 41 46.00 2.8X
1.0s 11.25nm
Z 24s 0.18um
i 42 34.00
LR 03 36.00
PPD 164.26 188 ePKP 41 45.50 1.7
e 42 38.60
SOB1 167.08 257 ePKP 41 47.00 0.6
e 42 50.30
SIV 167.96 143 PKP 41 48.40 1.5
BAO 169.25 210 PKPd 41 48.90 1.1
e 43 01.50
S.D. = 1.1 on 110 of 136 obs.

? SEP 12, 1990 10h 50m 23.51± 2.76s
30.229 S ±18.7km 116.709 E ±27.1km
DEPTH = 10.0km (geophysicist)
WESTERN AUSTRALIA (590)

BAL 0.38 180 iPd 50 30.80 -0.4
MRWA 1.18 328 eP 50 55.90 10.3X
KLB 1.63 147 iPd 50 52.70 0.3
eS 51 10.00
MUN 1.80 194 eP 50 55.00 0.3
eS 51 10.00
WARB 9.64 68 eP 52 45.20 -0.2
eS 54 28.50
S.D. = 0.6 on 4 of 5 obs.

? SEP 12, 1990 11h 33m 25.46± 0.94s
37.761 N ±13.8km 6.247 W ± 7.9km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.3 (MDD).

EVAL 0.43 246 iPgc 33 34.30 0.0
eSg 33 41.00
EHOR 0.79 85 ePg 33 41.30 0.4
eSg 33 52.50
EBAN 1.99 78 ePn 33 59.00 -0.5
EPLA 2.31 3 ePn 34 04.20 0.1
eSn 34 33.00
GUD 3.31 29 eP 34 24.00 5.6X
eS 35 03.00
S.D. = 0.6 on 4 of 5 obs.

% SEP 12, 1990 11h 53m 41.69± 0.80s
37.906 N ± 9.9km 14.401 E ± 5.7km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO 0.23 84 P 53 47.70 0.9
eSg 53 52.60
GIB 0.31 286 P 53 47.70 -0.4
eSg 53 52.90
FAI 0.85 223 P 53 59.00 0.9
ATN 0.88 73 Pc 53 58.10 -0.4
eSg 54 11.00
MEU 0.91 152 Pd 53 58.20 -0.9
eSg 54 13.50
SOI 1.32 82 P 54 06.00 0.0
eSg 54 22.00
S.D. = 1.0 on 6 of 6 obs.

% SEP 12, 1990 12h 05m 34.48± 1.23s
18.694 S ±15.5km 122.937 E ± 9.9km
DEPTH = 10.0km (geophysicist)
WESTERN AUSTRALIA (590)

MBL 3.81 229 eP 06 36.50 1.9
NANU 7.93 240 eP 07 33.00 0.3
eS 08 55.00
WARB 8.20 156 iPd 07 37.40 1.0
eS 09 07.00
MTN 9.80 55 eP 07 58.00 -0.5
eS 09 42.00
WB5 10.86 98 eP 08 13.40 0.3
eS 10 08.30
ASPA 11.36 118 eP 08 20.10 0.1
0.4s 5.00nm 5.2mb X
iS 10 22.40
MRWA 12.24 210 eP 08 30.00 -1.8
eS 10 37.00
MUN 14.55 203 eP 09 01.00 -1.4
S.D. = 1.4 on 8 of 8 obs.

? SEP 12, 1990 12h 48m 03.45± 1.14s
30.551 S ± 9.7km 116.769 E ±13.2km
DEPTH = 10.0km (geophysicist)
WESTERN AUSTRALIA (590)

8AL 0.08 224 iPd 48 05.40 -0.5
KLB 1.34 141 eP 48 28.00 -0.2
eS 48 44.00
MRWA 1.49 333 eP 48 30.30 0.1
eS 48 48.70
MUN 1.50 199 eP 48 31.00 0.6
eS 48 50.00
S.D. = 0.8 on 4 of 4 obs.

? SEP 12, 1990 13h 40m 14.35± 3.79s
16.222 N ±10.0km 119.398 E ±49.0km
DEPTH = 33.0km (normal)
LUZON, PHILIPPINE ISLANDS (249)

SZP 1.66 37 iPd 40 41.70 0.1

12d 13h

		iS	41 03.00		
PIP	2.39	29 ePc	40 52.00	-0.1	
CVP	2.75	57 eP	40 57.00	0.0	
		eS	41 20.00		
PGP	3.09	151 eP	41 02.00	0.0	
S.D. = 0.1		on 4 of 4 obs.			

* SEP 12, 1990 14h 37m 39.37± 1.03s
6.282 S ±10.1km 148.109 E ± 9.4km
DEPTH = 78.0 ± 9.4 km
4.6mb (6 obs.)
NEW BRITAIN REGION (192)

LAT	1.16	251 iPd	38 01.50	0.9	
PMG	3.25	197 iPc	38 28.20	-0.8	
		eS	39 07.00		
RAB	4.55	63 iPc	38 47.00	-0.2	
QIS	16.41	209 eP	41 26.00	-0.4	
	0.8s	29.00nm	4.5mb		
		e	44 20.00		
MTN	17.96	247 eP	41 45.50	0.0	
WB5	19.00	223 eP	41 56.10	-1.7	
		e	45 20.20		
WRA	19.06	223 Pc	41 57.20	-1.3	
	0.6s	18.80nm	4.5mb		
RMQ	20.10	178 eP	42 09.00	-0.4	
		e	42 26.00		
ASPA	22.03	217 iPd	42 29.60	0.7	
	0.5s	66.00nm	5.3mb		
Z	18s	0.13um	3.4Msz		
		iS	46 26.50		
		LR	51 57.50		
DZM	23.67	133 iPd	42 45.70	0.8	
STK	26.19	193 eP	43 10.10	1.6	
	0.5s	6.00nm	4.4mb		
WARB	28.48	224 eP	43 30.50	1.1	
FORR	30.82	215 iPc	43 49.90	-0.1	
	0.3s	10.00nm	5.0mb		
MBL	31.11	239 eP	43 53.00	0.2	
NANU	35.34	239 eP	44 28.50	-0.8	
MRWA	37.92	229 eP	44 52.00	1.0	
KLB	37.93	225 eP	44 51.00	-0.1	
MAT	43.60	348 iPd	45 37.70	0.2	
	1.0s	10.00nm	4.6mb		
BUL	115.00	244 iPKPc	56 14.70	0.6	
APO	115.91	337 ePKP	56 13.00	-1.4	
	0.5s	1.30nm			
BCAO	129.77	271 iPKPd	56 43.10	0.7	
	0.2s	8.00nm			
CNCB	137.58	123 PKP	56 48.00	-9.8X	
ZOBO	137.72	122 PKP	56 39.00	-19.1X	
SIV	143.61	128 PKP	57 05.20	-2.7	
PPD	146.03	146 ePKP	57 13.90	2.1	
KIC	153.02	272 PKP	57 31.40	8.7X	
LIC	153.30	271 PKP	57 32.00	8.9X	
TIC	153.30	272 PKP	57 32.10	9.0X	
LKO	153.75	279 PKP	57 30.80	7.0X	
	0.6s	6.00nm			
S.D. = 1.2		on 23 of 29 obs.			

SEP 12, 1990 15h 28m 35.53± 0.26s
15.120 N ± 5.6km 59.267 E ± 3.5km
DEPTH = 10.0km (geophysicist)
5.5mb (75 obs.) 4.7Msz (10 obs.)
ARABIAN SEA (417)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 20C
Centroid Location:
Origin Time 15:28:27.7 1.4
Lat 14.53N 0.10 Lon 59.11E 0.05
Dep 15.0 FIX Half-duration 2.2
Moment Tensor; Scale 10**17 Nm
Mrr=-1.39 0.06 Mtt= 1.29 0.06
Mff= 0.09 0.09 Mrt=-1.15 0.27
Mrf= 0.12 0.18 Mtf= 0.09 0.07
Principal Axes:

	Val=	Plg=	Azm=
T	1.72	20	178
N	0.10	5	270
P	-1.83	69	12

Best Double Couple:Mo=1.8*10**17
NP1:Strike=260 Dip=25 Slip=-101
NP2: 92 65 -85

BEE	13.58	324 ePn	31 49.50	-1.1	
		eSn	34 11.10		
BBU	13.77	325 ePn	31 51.50	-1.7	
		eSn	34 13.50		
DHR	14.02	324 eP	31 57.50	1.1	
POO	14.37	74 eP	31 55.00	-6.1X	
		iS	34 31.00		
KMSA	15.01	292 eP+	32 08.50	-1.0	
RYD	15.25	311 iP+	32 11.50	-1.2	
		eS	34 50.00		
KMTA	16.01	283 eP	32 24.90	2.2	
ARO	16.37	259 ePd	32 39.00	11.8X	
OUE	16.58	24 eP	32 29.20	-0.7	
	1.0s	2735.00nm	6.3mb		
		eS	35 20.20		
AFIF	17.58	303 eP+	32 42.80	0.4	
GBA	17.67	93 P	32 43.00	-0.4	
		S	35 05.00		
QASM	18.31	309 eP+	32 52.00	0.5	
KOD	18.40	103 eP	32 54.50	1.6	
		eS	36 24.00		
HYB	18.66	80 eP	32 56.50	0.8	
	1.2s	151.50nm	5.1mb		
UQSK	19.05	307 eP	33 01.70	1.2	
AAE	20.93	256 eP	33 25.50	4.1X	
NDI	21.40	48 iPd	33 26.80	1.1	
	0.9s	84.03nm	5.1mb		
TEH	21.71	342 e(P)	33 45.00	16.1X	
KER	22.07	332 eP	33 35.00	2.5	
WAJH	23.88	301 eP+	33 53.00	2.8	
AYN	25.48	306 ePd	34 08.50	3.0X	
BADA	26.11	305 iPd	34 14.30	2.9X	
HOL	26.40	306 ePd	34 16.50	2.4	
MDSJ	26.68	312 Pc	34 31.38	14.6X	
GKN	26.78	57 P	34 19.00	1.2	
PRNI	26.95	308 iPd	34 21.80	2.7	
MKRJ	27.07	311 Pd	34 35.74	15.4X	
MASJ	27.11	312 Pd	34 36.12	15.4X	
JARJ	27.22	313 Pd	34 37.76	16.0X	
KKN	27.23	58 P	34 23.00	1.0	
PKI	27.25	59 P	34 23.20	0.9	
JVI	27.48	312 eP	34 26.50	2.5	
NAI	27.55	236 eP	34 20.00	-5.0X	
SHMJ	27.62	314 Pc	34 41.60	16.3X	
MML	27.71	313 iPd	34 28.40	2.3	
GUN	27.76	58 P	34 28.00	1.0	
BHL	28.37	315 P	34 35.00	2.9X	
		S	39 34.00		
KOT	29.22	305 eP	34 40.50	0.9	
HLW	29.57	304 eP-	34 41.50	-1.4	
		e	35 52.00		
		e	36 16.00		
		eS	39 50.00		
VAM	37.32	309 eP	35 52.40	2.6	
CHG	38.07	79 ePd	35 56.60	0.2	
	1.2s	27.34nm	4.9mb		
BDT	38.18	81 iPc	35 58.80	1.6	
	1.0s	65.60nm	5.3mb		
VLI	38.78	311 eP	36 03.00	0.9	
NNT	39.33	88 eP	36 07.20	0.3	
NST	39.36	84 eP	36 08.00	0.9	
KDZ	39.40	319 iPc	36 09.00	1.8	
RZN	39.87	318 iPd	36 13.00	1.7	
PTZ	40.18	225 eP	36 23.00	9.0X	
		i	36 35.00		
		i	38 07.10		
		i	38 26.00		
		i	38 39.10		
PVL	40.30	321 iPd	36 17.00	2.4	
MMB	40.45	318 eP	36 17.00	1.1	
EVR	40.51	313 eP	36 17.30	0.8	
PGB	40.66	319 iPd	36 19.00	1.3	
LOE	40.77	81 eP	36 18.00	-0.8	
KKB	41.01	318 iPd	36 21.00	0.6	
VRI	41.03	325 ePd	36 21.50	0.9	
KZN	41.15	315 eP	36 21.80	0.1	
MLR	41.24	324 iPc	36 25.50	3.0X	
VTS	41.29	319 iPd	36 24.00	1.1	
IAS	41.41	327 eP	36 26.00	2.4	
BCAO	41.44	259 iPd	36 24.50	0.1	
	0.6s	31.00nm	5.2mb		
		id	36 37.00		
CMP	41.63	323 ePc	36 26.00	0.5	
KMI	41.86	69 Pd	36 28.50	0.6	
Z	20s	1.20um	4.8Msz		
		sP	36 39.50		
		eS	42 20.00		
SKO	42.13	317 iPd	36 30.20	0.5	
	1.2s	117.00nm	5.5mb		
Z	16s	1.59um	5.0MszX		
N	15s	1.43um			
E	16s	1.45um			
		i	36 46.30		
		iS	42 58.00		
		iSS	46 15.00		
		LR	57 02.00		
OHR	42.17	316 eP	36 24.00	-6.0X	
KEK	42.26	313 eP	36 32.00	1.3	
TNR	42.29	323 ePd	36 31.00	0.1	
KMZ	43.59	231 eP	36 41.00	-1.0	
		i	36 56.00		
		i	38 39.00		
BZS	43.83	322 eP	36 44.50	1.1	
BMR	43.89	325 ePd	36 45.00	1.1	
BEO	44.14	320 eP	36 47.00	1.1	
GRI	44.36	311 P	36 50.06	2.2	
	0.9s	94.00nm	5.7mb		
SOI	44.38	309 P	36 48.00	0.0	
TDS	44.71	312 P	36 53.10	2.4	
LZH	44.83	54 iPd	36 52.00	0.1	
	2.0s	71.00nm	5.2mb		
N	15s	0.90um			
E	15s	1.00um			
		pP	36 59.00	23kmX	
		sP	37 04.00		
		PcP	38 33.70		
		PP	38 40.00		
		eS	43 30.00		
		sS	43 42.00		
		eSS	46 45.00		
ATN	44.85	309 P	36 52.00	0.2	
MGR	45.44	312 Pd	36 57.60	1.1	
BUL	46.22	222 iPc	37 02.50	-0.5	
	1.0s	20.50nm	5.1mb		
		ipP	37 14.90	45kmX	
BUD	46.33	323 e(P)	37 04.00	0.6	
DUI	46.76	314 P	37 11.00	4.0X	
SRO	46.91	323 iP	37 08.40	0.5	
RFI	46.96	313 P	37 09.69	1.2	
	0.2s	42.30nm	6.2mb		
KRA	47.18	326 ePd	37 09.90	-0.1	
	0.7s	30.00nm	5.5mb		
Z	18s	1.20um	4.9Msz		
E	18s	1.40um			
		e	37 23.40		
		e	39 08.00		
		eS	44 14.00		
SDI	47.22	313 Pc	37 11.00	0.4	
ZAG	47.39	319 iPd	37 12.70	0.9	
PTJ	47.44	319 iPd	37 12.80	0.5	
VBY	47.72	319 ePd	37 15.00	0.6	
ZST	47.81	323 iP	37 15.10	0.1	
MNS	48.25	314 P	37 19.00	0.4	
VKA	48.30	322 iPd	37 19.20	0.3	
	1.5s	213.00nm	6.0mb		
CEY	48.34	319 ePd	37 19.40	0.1	
LJU	48.40	319 iPd	37 20.40	0.7	
ARV	48.46	315 Pc	37 21.40	1.2	
TRI	48.76	318 iPd	37 22.20	-0.2	
		e	39 16.00		
		e	44 11.00		
		e	47 54.00		
		e	52 08.00		
VOY	48.80	319 ePc	37 22.60	-0.3	
CRE	49.18	315 P	37 26.00	0.1	
SFI	49.35	315 Pd	37 28.80	1.8	
PGD	49.42	315 P	37 28.00	0.2	
KMR	49.51	321 iP-	37 28.70	0.5	
		e	39 14.00		
BFT	49.55	215 iPc	37 29.00	0.0	
	1.0s	25.00nm	5.2mb		
KSP	49.57	325 iPd	37 29.20	0.6	
	1.2s	110.00nm	5.7mb		
VVI	49.73	318 P	37 30.20	0.3	
FVI	49.74	319 Pd	37 30.00	0.1	
BHG	50.13	320 iPd	37 32.80	-0.2	
	0.8s	98.00nm	5.8mb		
PRU	50.14	324 Pd	37 32.70	-0.3	
	1.5s	42.40nm	5.2mb		
Z	16s	1.00um	4.9MszX		
N	16s	0.30um			
E	16s	0.30um			
		e	37 42.10		
		PP	39 32.00		
		eS	44 44.00		
PIL	50.19	315 P	37 32.40	-1.0	
MME	50.22	315 P	37 33.90	-0.1	

BDI		50.25 315 P	37 33.10	-0.9		
KHC		50.31 322 iPd	37 33.70	-0.7		
		1.3s 59.00nm		5.4mb		
	Z	16s 0.30um		4.4MszX		
	N	16s 0.40um				
	E	18s 0.60um				
SLR		50.59 217 iPd	37 44.50	7.6X		
	Z	20s 3.19um		5.3Msz		
EVA		50.73 216 iPd	37 39.40	1.5		
		0.5s 28.17nm		5.5mb		
WET		50.73 322 iPd	37 36.50	-1.1		
		1.4s 44.00nm		5.2mb		
WATA		50.79 320 iPd	37 37.10	-1.1		
		0.9s 76.80nm		5.6mb		
		i	37 47.20			
SAL		50.82 317 P	37 38.50	0.3		
PGF		50.89 313 eP	37 38.60	-0.3		
		1.4s 87.15nm		5.5mb		
BRG		50.89 325 iPd	37 38.30	-0.4		
		1.2s 52.00nm		5.3mb		
		i	37 50.00			
		i	38 55.40			
		e	45 12.00			
		e	49 00.00			
OGA		50.96 319 iPd	37 39.30	-0.2		
		1.3s 131.00nm		5.7mb		
SQTA		50.97 319 iPd	37 38.60	-0.9		
		0.6s 73.20nm		5.8mb		
		i	37 50.10			
		i	37 54.60			
		i	38 11.20			
BPI		51.07 217 eP	37 53.00	12.4X		
FUR		51.30 320 iPd	37 41.30	-0.6		
		0.8s 157.00nm		6.0mb		
MDI		51.42 317 Pc	37 42.70	0.0		
OSS		51.45 318 ePd	37 43.20	-0.1		
CLL		51.62 325 iPd	37 44.20	0.0		
		1.5s 165.00nm		5.7mb		
		e	37 55.00			
NUR		51.79 339 iP	37 45.20	-0.2		
		0.9s 38.90nm		5.3mb		
PCP		51.80 315 P	37 44.17	-1.6		
HOF		51.82 323 iPd	37 46.00	0.2		
		1.0s 188.00nm		6.0mb		
VDL		51.82 318 eP	37 45.30	-0.8		
FIN		51 93 315 P	37 45.81	-0.9		
CKI		51.94 315 Pd	37 48.00	1.2		
GRF		51.94 322 iPd	37 46.30	-0.4		
		1 4s 180.00nm		5.8mb		
	Z	17s 0.60um		4.7MszX		
IMI		52.06 314 P	37 47.66	-0.1		
TMA		52.08 317 ePd	37 46.80	-1.2		
MOX		52.11 323 iP	37 48.00	0.0		
		1.3s 53.00nm		5.3mb		
	Z	16s 1.10um		5.0MszX		
		eS	45 05.00			
SAX		52.17 319 ePd	37 47.80	-1.0		
ROB		52.18 315 P	37 48.07	-0.6		
LLS		52.26 318 ePd	37 48.20	-1.2		
SBF		52.36 314 eP	37 50.10	0.1		
		1.2s 119.00nm		5.7mb		
ORX		52.52 316 P	37 48.99	-2.3		
MMK		52.66 317 eP	37 50.80	-1.7		
DOI		52.67 315 P	37 51.60	-0.8		
PZZ		52.77 315 P	37 52.58	-0.6		
FRF		52.83 314 eP	37 53.50	0.1		
		1.2s 89.25nm		5.6mb		
RSP		52.86 316 P	37 51.56	-2.2		
ZLA		52.86 319 ePd	37 52.80	-0.9		
LMR		52.86 313 eP	37 53.70	0.0		
		1.4s 143.75nm		5.7mb		
SLE		52.89 319 ePd	37 52.90	-1.0		
SUF		52.93 342 iP	37 53.90	0.0		
		0.9s 66.00nm		5.6mb		
LRG		53.00 313 eP	37 54.90	0.2		
		1.3s 122.75nm		5.7mb		
LSD		53.01 316 P	37 54.84	-0.3		
RRL		53.11 315 P	37 55.14	-0.7		
BNI		53.22 315 Pd	37 55.60	-0.9		
LPG		53.30 316 eP	37 56.20	-1.1		
		0.8s 62.95nm		5.6mb		
LPL		53.32 316 eP	37 56.30	-1.0		
CDR		53.47 313 iPd	37 58.30	0.1		
TNS		53.80 322 ePd	37 59.90	-0.6		
CDF		53.87 319 eP	38 00.10	-1.1		
		0.8s 43.00nm		5.5mb		
UPP		53.98 336 iP	38 01.00	-0.6		
BSF		53.99 319 eP	38 00.60	-1.4		
		0.8s 18.80nm		5.2mb		
HAU		54.33 319 eP	38 03.00	-1.5		
		0.8s 10.75nm		4.9mb		
	Z	20s 0.77um		4.8Msz		
BNS		54.83 322 iPd	38 08.00	0.0		
BJI		55.18 52 eP	38 01.00	-9.8X		
		0.9s 25.00nm		5.2mb		
	Z	22s 2.46um		5.2Msz		
	N	15s 1.10um				
			epP	38 10.00 29kmX		
			eS	45 58.00		
MEM		55.40 322 Pc	38 11.80	-0.3		
WTS		55.42 323 eP	38 12.00	-0.3		
		0.7s 18.00nm		5.2mb		
ENN		55.50 322 iPd	38 13.10	0.2		
		0.8s 39.00nm		5.5mb		
			e	38 23.00		
PLDF		55.54 316 P	38 13.07	-0.3		
SMF		55.56 317 eP	38 12.50	-1.0		
LBF		55.57 317 eP	38 12.70	-0.8		
LBL		55.61 315 P	38 13.96	0.2		
LOR		55.72 317 eP	38 13.70	-0.9		
		1.2s 11.90nm		4.8mb		
	Z	20s 0.35um		4.4Msz		
WIT		55.80 324 eP	38 15.50	0.5		
			e	38 27.00		
AGO		55.89 316 P	38 15.66	-0.2		
PYM		55.90 315 P	38 15.75	-0.2		
SSF		55.90 317 eP	38 15.10	-0.7		
AVF		55.93 317 eP	38 14.90	-1.2		
		0.9s 49.15nm		5.5mb		
DOU		56.08 321 Pc	38 16.90	-0.2		
		1.0s 72.20nm		5.7mb		
			S	46 18.00		
BGF		56.20 316 eP	38 17.60	-0.5		
GRC		56.24 317 P	38 18.13	-0.2		
MAF		56.31 316 eP	38 18.40	-0.5		
		1.2s 62.50nm		5.5mb		
CAF		56.35 314 eP	38 18.70	-0.5		
		1.4s 54.45nm		5.4mb		
SOD		56.38 345 iP	38 18.30	-0.7		
			i	38 30.10		
TCF		56.57 316 eP	38 20.10	-0.6		
		1.2s 41.65nm		5.3mb		
RJF		56.81 315 eP	38 22.10	-0.4		
		1.3s 79.40nm		5.6mb		
	Z	20s 0.47um		4.6Msz		
LPO		56.91 314 eP	38 22.60	-0.6		
		1.4s 113.25nm		5.7mb		
LSF		57.02 316 eP	38 23.10	-0.8		
		1.2s 62.50nm		5.5mb		
NB2		57.27 335 P	38 24.00	-1.5		
		1.1s 25.70nm		5.2mb		
LFF		57.27 314 eP	38 25.30	-0.4		
		1.3s 158.85nm		5.9mb		
KEV		58.18 347 iP	38 31.00	-0.7		
		1.0s 48.00nm		5.5mb		
MFF		58.22 316 eP	38 31.20	-1.2		
		1.2s 26.80nm		5.2mb		
SSE		58.45 63 Pd	38 32.50	-1.7		
		1.0s 31.00nm		5.3mb		
	Z	16s 0.50um		4.7MszX		
	E	12s 0.20um				
			pP	38 45.50 46kmX		
			eS	46 40.00		
			esS	47 02.00		
			eScS	48 16.00		
LDF		58.64 318 eP	38 34.20	-1.1		
		1.2s 184.45nm		6.1mb		
FLN		58.91 318 eP	38 36.00	-1.1		
		1.2s 113.05nm		5.9mb		
	Z	20s 0.43um		4.6Msz		
GRR		59.08 318 eP	38 37.00	-1.3		
		1.3s 57.75nm		5.5mb		
LPF		59.12 317 eP	38 37.40	-1.2		
		1.2s 83.30nm		5.7mb		
TOL		60.05 307 eP	38 45.00	-0.2		
IFR		60.58 300 iPc	38 49.00	-0.1		
ESY		61.93 326 ePd	38 56.60	-1.1		
		0.7s 51.00nm		5.8mb		
EKA		62.08 325 Pd	38 57.40	-1.3		
		0.8s 16.00nm		5.3mb		
EBL		62.13 326 ePd	38 58.20	-0.8		
EAU		62.37 326 eP	38 59.60	-1.0		
TIO		62.41 297 iPc	39 01.30	-0.2		
EBH		62.50 326 ePd	39 00.40	-1.0		
		0.7s 58.00nm		5.9mb		
ELO		62.67 326 ePd	39 01.40	-1.2		
		0.7s 55.00nm		5.9mb		
ETA		63.28 322 iPd	39 06.10	-0.5		
		0.8s 142.00nm		6.2mb		
ECP		63.28 321 iPd	39 05.80	-0.8		
		0.7s 76.00nm		6.0mb		
KIC		63.31 270 P	39 07.38	-0.1		
		0.9s 28.00nm		5.4mb		
LKO		63.42 273 P	39 06.36	-1.8		
		0.6s 20.50nm		5.5mb		
TIC		63.51 270 P	39 08.92	0.1		
ECB		63.56 321 iPd	39 08.00	-0.5		
		0.9s 47.00nm		5.7mb		
LIC		63.62 270 P	39 09.52	0.0		
		0.9s 31.50nm		5.5mb		
	Z	20s 0.10um		4.0Msz		
AKU		71.13 335 iP	39 57.90	2.0		
		0.9s 26.89nm		5.4mb		
		i	40 09.50			
MAT		72.37 56 eP	40 02.00	-1.9		
		0.7s 10.27nm		5.0mb		
		eS	49 32.00			
WRA		81.60 113 Pd	40 54.30	-1.2		
		0.9s 19.30nm		5.2mb		
WB5		81.60 113 eP	40 54.30	-1.3		
		i	41 07.80			
ASPA		82.46 117 iPd	40 58.80	-1.2		
		1.1s 23.00nm		5.2mb		
	Z	21s 0.45um		4.8Msz		
		i	41 11.50			
		LR	13 04.20			
MAW		82.53 179 eP	41 02.00	2.7		
IMA		95.39 13 P	42 01.00	-0.4		
INK		96.29 5 eP	42 05.00	-0.2		
BW06		121.48 350 ePKP	47 29.50	-1.8		
		0.9s 7.20nm				
DAU		124.06 351 e(PKP)	47 35.70	-0.8		
KVN		126.06 357 ePKP	47 40.00	-0.3		
ANMO		128.40 345 PKP	47 45.00	0.2		
CNCB		129.38 261 PKP	47 48.70	1.1		
LPB		129.46 261 ePKP	48 02.00	14.4X		
GSC		129.72 356 ePKP	47 48.00	0.8		
SBB		130.39 357 ePKP	47 47.00	-1.5		
GLA		131.77 353 ePKP	47 53.00	1.9		
		S.D. = 1.1 on 204 of 225 obs.				

% SEP 12, 1990 16h 09m 36.55± 0.95s
0.062 S ±11.6km 78.391 W ± 5.6km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

QUR		0.18 232 iPd	09 40.60	-0.2		
YANA		0.19 254 iPd	09 40.70	-0.3		
QTO		0.20 225 iPd	09 41.60	0.5		
GGP		0.23 241 iPd	09 41.70	-0.2		
CAYA	0.43	71 iP	09 46.10	0.6		
		S	09 52.50			
VC1	0.57	181 iP+	09 49.00	0.5		
		S	09 58.20			
ANGL	0.91	111 P	09 53.30	-0.9		
		eS	10 07.00			
	S.D. = 0.7	on 7 of 7 obs.				

? SEP 12, 1990 17h 05m 40.80± 1.15s
27.852 N ±12.2km 17.962 W ±17.5km
DEPTH = 33.0km (normal)
CANARY ISLANDS REGION (394)
mbLg 3.3 (MDD).

CVVD	0.04	144 eP	05 46.80	0.4		
		eS	05 52.30			
CHIE	0.12	179 iP	05 46.40	-0.3		
		iS	05 49.90			
TBT	0.83	3 eP	05 56.00	0.0		
		iS	06 07.40			
CFTV	3.47	80 iP	06 33.80	-0.1		
	S.D. = 0.5	on 4 of 4 obs.				

SEP 12, 1990 17h 39m 25.66± 0.29s
45.001 N ± 3.2km 9.416 E ± 2.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 3.0 (LDG), 3.0 (VIE), 2.9 (GEN).

PCP	0.77	234 P	39 39.82	-0.9		

12d 17h

			S	40	48.42	
MDI	0.80	15	Pd	39	41.70	0.5
			iSg	39	54.30	
SAL	0.99	52	P	39	44.60	0.2
			eSg	39	59.20	
CKI	0.99	235	Pc	39	46.00	1.5
			eSg	40	01.60	
FIN	1.17	228	P	39	47.33	-0.2
			S	40	00.93	
ORO	1.19	302	P	39	48.30	0.4
			eSg	40	05.80	
ORX	1.19	302	P	39	48.26	0.3
			S	40	02.34	
MME	1.22	131	P	39	48.60	0.0
BDI	1.26	138	P	39	48.90	-0.3
			eSg	40	07.50	
ROB	1.31	238	P	39	49.99	0.1
			S	40	05.63	
PII	1.51	148	P	39	53 00	0.3
			eSg	40	13.40	
RSP	1.54	276	P	39	50.92	-2.3
			S	40	07.03	
IMI	1.54	226	P	39	52.18	-1.1
			S	40	08.44	
ENR	1.62	242	P	39	54.99	0.5
			S	40	12.51	
DOI	1.62	253	P	39	56.00	1.5
			eSn	40	16.30	
LSD	1.66	287	P	39	53.90	-1.3
			S	40	11.26	
STV	1.67	244	P	39	55.93	0.7
			S	40	13.76	
PZZ	1.72	254	P	39	55.46	-0.5
			S	40	12.98	
SBF	1.82	232	Pn	39	57.50	0.2
			Sn	40	20.70	
RRL	1.87	268	P	39	59.21	1.0
			S	40	18.45	
BNI	1.94	272	P	39	59.30	0.1
LPG	1.95	286	Pn	39	59.40	0.0
			Sn	40	25.60	
LPL	1.96	286	Pn	40	02.00	2.4
			Sn	40	25.90	
PGD	2.00	123	P	40	00.00	0.0
SFI	2.05	121	P	40	02.00	1.4
CRE	2.28	126	P	40	04.00	0.0
FRF	2.46	235	Pn	40	06.00	-0.4
			Sn	40	36.40	
PGF	2.47	187	Pn	40	05.10	-1.6
			Sn	40	33.90	
SOTA	2.55	29	iPnd	40	10.00	2.2
	0.3s	16.20nm				
			iPg	40	16.90	
			i	40	25.90	
			iSn	40	40.80	
			i	40	42.60	
			iSg	40	52.20	
LMR	2.67	232	Pn	40	09.60	0.1
			Sn	40	41.80	
LRG	2.69	236	Pn	40	10.20	0.5
			Sn	40	42.00	
FVI	2.84	55	P	40	11.00	-0.9
CDR	2.93	244	eP	40	14.00	0.8
			eSn	40	48.00	
VOY	3.31	70	e(Pn)	40	17.00	-1.7
			eSn	41	11.40	
BSF	3.36	328	Pn	40	19.80	0.4
			Sn	40	58.90	
HAU	3.68	326	Pn	40	23.50	-0.3
			Sn	41	06.50	
CDF	3.72	337	Pn	40	23.60	-0.8
			Sn	41	06.70	
SMF	4.23	295	Pn	40	31.10	-0.5
			Sn	41	19.50	
L8F	4.28	300	Pn	40	31.60	-0.7
			Sn	41	21.30	
LOR	4.48	302	Pn	40	34.60	-0.5
			Sn	41	25.90	
AVF	4.60	295	Pn	40	36.40	-0.4
SSF	4.60	299	Pn	40	36.50	-0.4
			Sn	41	28.40	
MAF	4.96	287	Pn	40	42.00	0.1
			Sn	41	37.20	
TCF	5.21	287	Pn	40	45.30	-0.3
			Sn	41	43.90	
S.D. = 1.0 on 44 of 44 obs.						

SEP 12, 1990 18h 07m 29.45± 0.91s
14.607 N ± 6.9km 123.343 E ±10.2km
DEPTH = 71.6 ± 8.4 km
4.9mb (6 obs.)
LUZON, PHILIPPINE ISLANDS (249)

PGP	2.57	245	iPd	08	09.00	-0.6
			iS	08	23.00	
CVP	3.41	335	eP	08	22.00	0.7
			eS	08	59.00	
PLP	3.77	155	ePd	08	26.50	0.0
			eS	08	42.00	
SZP	4.03	317	eP	08	29.00	-1.1
			eS	09	19.80	
PIP	4.53	325	iPc	08	37.00	-0.1
PPR	6.59	224	iPd	09	07.50	1.7
NNT	23.03	268	eP	12	28.00	-1.3
CHG	23.73	284	eP	12	36.50	0.4
WB5	35.95	162	eP	14	24.70	-0.4
WRA	36.00	162	Pc	14	24.00	-1.5
	0.6s		2.00nm		4.2mb	
GUN	37.18	297	P	14	36.40	0.5
	0.8s		48.00nm		5.5mb	
PKI	37.52	296	P	14	38.40	-0.3
	0.6s		15.00nm		5.1mb	
KKN	37.67	297	P	14	39.80	-0.1
	0.8s		30.00nm		5.3mb	
GKN	38.27	297	P	14	44.80	-0.1
WARB	40.67	175	eP	15	05.00	0.6
GBA	44.48	275	Pc	15	35.40	-0.3
	0.9s		3.90nm		4.2mb	
FORR	45.42	174	eP	15	43.00	0.2
SLL	86.93	332	eP	20	09.20	1.6
	0.6s		4.80nm		4.8mb	
S.D. = 1.0 on 18 of 18 obs.						

SEP 12, 1990 18h 23m 44.10± 0.50s
41.280 N ± 5.4km 20.923 E ± 4.3km
DEPTH = 5.0km (geophysicist)
ALBANIA (391)
ML 3.3 (SKO), 3.0 (TTG). MD 3.3 (ATH).

OHR	0.19	209	iPgc	23	47.80	-0.3
			iSg	23	51.40	
SKO	0.79	29	iPg	23	57.70	-2.3
			iSg	24	08.00	
			Lg	24	11.50	
KZN	1.17	146	ePb	24	05.50	-0.9
			eSb	24	26.00	
ULC	1.43	299	ePg	24	11.20	0.5
			eSg	24	32.00	
PVY	1.49	332	ePg	24	11.50	-0.2
			eSg	24	32.50	
TTG	1.69	313	ePn	24	13.70	-0.7
			eSn	24	37.00	
KKB	1.72	69	iP	24	15.00	0.1
IVA	1.76	335	ePn	24	15.00	-0.6
			eSn	24	39.00	
KEK	1.79	209	ePn	24	20.00	4.2X
BDV	1.86	303	ePn	24	17.00	0.1
			eSn	24	43.00	
NKY	2.10	318	ePn	24	21.20	0.8
			eSn	24	50.00	
MMB	2.13	81	eP	24	21.00	0.1
VTS	2.15	52	iP	24	21.00	-0.2
HCY	2.15	304	ePn	24	21.30	0.1
			eSn	24	50.00	
BRY	2.40	313	ePn	24	25.50	0.7
			eSn	24	57.00	
RZN	2.88	81	eP	24	33.00	1.3
PVL	3.80	58	eP	24	46.00	1.4
BZS	4.36	6	ePc	24	49.00	-3.5X
S.D. = 1.0 on 16 of 18 obs.						

? SEP 12, 1990 19h 25m 57.32± 4.29s
15.292 N ±15.2km 61.384 W ±37.8km
DEPTH = 162.0 ± 39.9 km
LEEWARD ISLANDS (92)

BBL	0.25	338	eP	26	19.80	-0.6
FDF	0.60	158	eP	26	20.56	-0.3
	0.1s		0.20nm			
			S	26	37.70	
MGG	0.63	6	ePc	26	20.85	0.0
			S	26	28.70	
CRM	0.70	140	eP	26	20.98	-0.4
DOG	0.77	343	ePc	26	21.99	0.2
PAG	0.79	339	eP	26	22.40	0.4
			S	26	41.50	
BIM	0.83	159	eP	26	23.30	1.1
MVM	0.87	147	eP	26	22.13	-0.4
SFG	0.97	11	eP	26	23.63	0.4
			S	26	43.20	
SEG	1.11	354	ePc	26	24.57	0.2
			S	26	44.80	
BPA	1.80	345	eP	26	30.90	-0.5
			S	26	53.50	
S.D. = 0.6 on 11 of 11 obs.						

SEP 12, 1990 19h 48m 51.78± 0.61s
41.305 N ± 6.5km 20.913 E ± 5.5km
DEPTH = 5.0km (geophysicist)
ALBANIA (391)
MD 3.2 (ATH). ML 2.9 (SKO), 2.5 (TTG).

OHR	0.21	204	iPgc	48	55.40	-0.7
			iSg	48	58.80	
SKO	0.78	30	iPg	49	05.40	-1.9
			iSg	49	15.70	
KZN	1.19	147	ePb	49	13.60	-0.9
			eSb	49	34.00	
PVY	1.47	332	ePg	49	18.50	-0.5
			eSg	49	38.50	
TTG	1.67	313	ePn	49	22.00	0.2
			eSn	49	44.70	
KKB	1.72	70	iPc	49	23.00	0.4
IVA	1.74	335	ePn	49	22.50	-0.4
			eSn	49	46.00	
KEK	1.80	208	ePn	49	31.00	7.3X
BDV	1.84	303	ePn	49	25.00	0.7
			eSn	49	50.00	
HCY	2.13	303	ePn	49	28.80	0.3
			eSn	49	58.80	
MMB	2.14	81	ePg	49	30.00	1.4
VTS	2.14	52	eP	49	28.00	-0.8
BRY	2.38	313	ePn	49	33.00	0.8
			eSn	50	04.50	
PGB	2.73	62	eP	49	36.00	-1.1
RZN	2.88	81	eP	49	42.00	2.6
KDZ	3.40	83	eP	49	50.00	3.4X
S.D. = 1.3 on 14 of 16 obs.						

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* SEP 12, 1990 19h 57m 38.42± 1.67s
32.585 S ± 8.1km 72.178 W ±17.3km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

LCCH	1.02	150	iPc	57	57.20	0.7
			iS	58	10.50	
ROCH	1.06	112	iPd	57	55.00	-2.2
			iS	58	07.50	
JACH	1.34	95	iPd	57	58.80	-2.3
			iS	58	14.50	
PEL	1.37	114	iPd	58	00.50	-1.0
			iS	58	16.50	
TACH	1.49	136	iPc	58	03.50	0.3
			iS	58	22.00	
LNV	1.51	155	iP	58	03.50	0.1
			iS	58	24.50	
SAN	1.54	125	iPc	58	03.60	-0.3
			iS	58	22.70	
PCH	1.74	127	iPc	58	06.70	-0.1
			iS	58	29.50	
FCH	1.75	116	iP	57	57.20	-10.0X
			iS	58	28.00	
CHCH	1.85	137	iPd	58	09.40	0.9
			iS	58	32.40	
			i	58	35.60	
MDZ	2.82	97	eP	58	23.90	1.7
			i	58	26.90	
			iS	59	00.80	
ZON	3.15	72	eP	58	28.50	1.6
CFA	3.48	75	e(P)	58	33.00	1.3
CNCB	16.16	15	eP	01	24.00	-1.3
LPB	16.40	14	eP	01	16.00	-12.2X
ZOBO	16.65	14	P	01	32.00	0.5
S.D. = 1.4 on 14 of 16 obs.						

SEP 12, 1990 20h 16m 18.96± 0.26s
60.447 S ± 5.4km 65.029 W ± 8.8km
DEPTH = 10.0km (geophysicist)
5.5mb (19 obs.) 5.2Msz (9 obs.)

DRAKE PASSAGE (149)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 17C
Centroid Location:
Origin Time 20:16:24.7 0.2
Lat 60.47S 0.03 Lon 65.29W 0.09
Dep 15.0 FIX Half-duration 3.1
Moment Tensor; Scale 10**17 Nm
Mrr= 0.57 0.14 Mtt= 2.22 0.19
Mff=-2.78 0.23 Mrt=-1.71 0.54
Mrf=-0.52 0.54 Mtf= 5.24 0.12
Principal Axes:
T Val= 6.07 Plg=17 Azm=148
N 0.06 72 314
P -6.12 4 57
Best Double Couple:Mo=6.1*10**17
NP1:Strike=191 Dip=75 Slip= 170
NP2: 284 81 15

AIA		4.83	176	eP	17 31.80 -1.6
LNV		26.83	348	eP	21 59.00 -1.9
PCH		27.08	350	eP	22 02.00 -1.4
SAN		27.26	350	ePc	22 04.50 -0.4
LCCH		27.32	348	eP	21 57.00 -8.5X
FCH		27.35	350	eP	22 05.50 -0.6
PEL		27.57	350	iPc	22 06.00 -1.8
		0.7s		44.52nm	5.3mb
MDZ		27.69	353	i(P)	22 07.90 -1.0
JACH		28.02	350	eP	22 00.00 -11.9X
SPA		29.72	180	iPc	22 26.40 -0.7
		2.1s		330.56nm	5.8mb
	Z	18s		3.80um	5.1Msz
SBA		38.39	196	P	23 43.20 1.9
VAO		39.49	27	eP	23 52.00 0.8
PPD		39.58	20	eP	23 51.60 -0.2
				e	23 57.30
CCH		43 02	358	P	24 21.50 1.1
CNCB		43.63	356	Pc	24 26.30 0.6
				i	25 22.00
LPB		43.91	356	P	24 29.00 1.3
		1.0s		100.00nm	5.6mb
	Z	18s		8.93um	5.7Msz
				S	31 10.00
				LR	40 20.00
ARE		44.17	351	eP	24 30.00 0.3
ZOBO		44.17	356	P	24 29.90 -0.2
		1.3s		86.75nm	5.4mb
	Z	20s		5.40um	5.5Msz
				LR	40 30.00
SIV		44.49	5	iPc	24 31.00 -1.0
BAO		46.43	23	Pd	24 47.20 -0.3
				e	25 11.50
MAW		46.73	155	iP	24 49.30 0.2
NNA		49.15	345	eP	25 20.50 11.8X
		1.0s		20.00nm	
	Z	20s		0.89um	4.8Msz
SOB1		54.22	30	eP	25 45.50 -1.3
				e	25 52.60
				e	25 56.00
				e	26 01.30
CER		58.91	103	iPd	26 18.00 -2.2
		0.4s		15.91nm	5.5mb
PSO		62.20	346	eP	26 43.00 -0.2
BOG		65.26	350	eP	27 06.00 2.8
				eS	35 50.00
KIM		65.35	105	iPc	27 04.00 0.5
		1.0s		65.00nm	5.8mb
BLF		65.73	106	iPc	27 06.00 0.1
		0.7s		12.50nm	5.2mb
WIN		66.79	95	iPd	27 13.50 0.7
TBI		67.27	263	eP	27 18.00 2.5
		1.4s		120.00nm	5.9mb
KSR		68.79	105	iPc	27 24.00 -1.3
BPI		69.07	106	iPc	27 26.00 -1.0
EVA		69.29	107	iPc	27 27.00 -1.3
		1.0s		52.00nm	5.7mb
SLR		69.56	106	iPc	27 29.50 -0.4
		0.9s		42.02nm	5.6mb
	Z	20s		2.48um	5.5Msz
UPA		70.16	345	eP	27 32.00 -1.4
		1.0s		50.00nm	5.6mb
BFT		70.44	107	iPc	27 36.00 0.6
PPN		72.17	266	eP	27 47.00 1.4
		1.2s		75.00nm	5.7mb
BUL		74.47	103	iPd	27 58.60 -0.6
		1.0s		30.50nm	5.3mb
PAG		76.26	3	eP	28 00.00 -9.1X
LSZ		78.43	100	iPc	28 24.00 2.6
		1.0s		16.20nm	5.0mb
KMZ		78.84	97	eP	28 26.00 2.3
CNB		80.49	208	eP	28 33.00 0.8
		0.8s		17.00nm	5.1mb
PTZ		80.85	103	iPc	28 44.00 9.6X
LIC		81.21	61	P	28 37.40 1.3
	Z	20s		0.70um	5.0Msz
OXX		81.38	329	(P)	28 38.20 1.0
KIC		81.45	61	P	28 38.60 1.2
TIC		81.59	60	P	28 39.24 1.1
PPM		83.77	328	eP	28 50.50 0.7
LKO		83.94	59	P	28 49.56 -0.7
		1.2s		46.00nm	5.6mb
DZM		87.82	227	iPc	29 10.00 0.5
MUN		87.91	181	eP	29 10.00 0.3
KLB		88.27	182	eP	29 11.00 -0.4
BAL		89.27	181	eP	29 16.00 -0.2
LWI		89.96	94	e(P)d	29 21.70 1.8
BCAO		90.65	82	iPd	29 24.30 1.5
		0.7s		24.00nm	5.6mb
				ic	29 31.90
ASPA		94.78	197	eP	29 39.00 -2.8
		1.5s		14.00nm	5.2mb
WRA		98.37	198	Pd	29 56.80 -1.3
		0.9s		7.80nm	5.4mb
WB5		98.42	198	eP	29 57.50 -0.9
ANMO		100.94	326	(Pdiff	30 10.00 0.5
KOD		122.71	135	ePKP	35 16.50 -0.1
IPM		123.26	163	ePKPc	35 17.80 0.4
		0.9s		24.30nm	
SQTA		123.71	53	iPKPd	35 17.00 -0.4
		1.3s		23.20nm	
				i	35 20.00
				i	35 35.00
MEM		124.52	47	PKP	35 07.70 -10.9X
EKA		125.39	38	PKP	35 20.00 -0.2
		0.9s		3.50nm	
GRF		125.72	51	e(PKP)	35 20.70 -0.4
	Z	20s		0.30um	5.0Msz
GBA		125.82	133	PKPd	35 21.70 -0.5
		0.9s		8.20nm	
KHC		126.19	53	ePKP	35 22.00 -0.1
MOX		126.64	51	ePKP	35 24.00 1.1
	Z	25s		1.30um	5.5MszX
BZS		126.75	61	ePKP	35 23.50 0.3
PRU		127.26	53	ePKP	35 23.50 -0.5
	Z	18s		0.50um	5.2Msz
BBTK		127.30	74	ePKP	35 20.00 -4.6X
CLL		127.70	51	ePKP	35 25.00 0.2
				i	35 32.50
BRG		127.72	52	ePKP	35 25.50 0.6
YKA		128.31	333	ePKP	35 24.10 -1.5
		0.8s		6.10nm	
MLR		128.55	64	ePKP	35 27.50 0.7
KSP		128.62	53	ePKP	35 27.00 0.4
BMR		129.16	61	ePKPd	35 30.00 2.3
VRI		129.19	64	ePKPc	35 26.50 -1.4
KRA		129.49	56	ePKP	35 28.90 0.6
				e	35 38.90
HYB		129.73	133	ePKP	35 29.50 -0.2
TAB		132.51	86	ePKP	35 35.00 0.4
				e	39 03.00
N82		134.53	42	PKP	35 37.90 0.3
		1.3s		15.90nm	
HFS		134.70	44	ePKP	35 28.20 -9.6X
		0.4s		0.60nm	
CHG		136.86	158	ePKP	35 33.70 -9.5X
NUR		138.88	49	ePKP	35 43.00 -2.7
				i	35 48.80
SOD		143.74	41	iPKP	35 51.40 -2.7
				i	35 59.00
SSE		150.35	191	PKP	36 11.00 5.2X
		1.3s		66.00nm	
	Z	20s		0.60um	5.4Msz
	N	20s		1.00um	
				sPKP	36 25.00
				ePP	39 44.00
				SS	59 00.00
WKYJ		150.53	216	ePKP	36 11.30 5.2X
TKSJ		150.75	214	ePKP	36 12.10 5.7X
CHJJ		151.14	223	PKP	36 12.10 5.2X
MAT		151.85	222	ePKP	36 14.00 6.0X
		1.3s		34.62nm	
MTMJ		152.02	222	PKP	36 14.20 5.9X
YONJ		152.04	214	ePKP	36 14.50 6.2X
LZH		154.59	159	ePKP	36 11.50 -0.5
				pPKP	36 21.00
BJI		159.55	183	ePKP	36 18.00 0.3
				epPKP	36 39.00
		S.D. = 1.2		on 79 of 95 obs.	

% SEP 12, 1990 21h 36m 37.50± 0.67s
37.908 N ± 7.3km 14.681 E ± 6.0km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO		0.03	26	Pd	36 39.50 -0.2
				eSg	36 41.70
GIB		0.52	279	P	36 47.80 -0.3
				eSg	36 55.50
ATN		0.67	68	Pc	36 50.70 -0.1
				eSg	37 01.30
MSI		0.75	67	P	36 53.30 1.1
MEU		0.83	166	Pd	36 52.10 -1.5
				eSg	37 04.50
FAI		1.02	232	Pd	36 58.20 1.5
SOI		1.10	81	P	36 58.70 0.6
				eSg	37 13.30
TDS		2.18	36	P	37 14.00 -0.2
MGR		2.33	17	P	37 15.40 -1.0
		S.D. = 1.1		on 9 of 9 obs.	

SEP 12, 1990 21h 38m 57.62± 0.35s
39.701 N ± 4.6km 106.206 W ± 3.5km
DEPTH = 5.0km (geophysicist)
COLORADO (479)
ML 3.0 (NEIS). Felt (V) at Vail, (IV) at Frisco and Minturn and (III) at Silverthorne. Also felt at Avon, Dillon and Copper Mountain.

GOL		0.64	90	iPd	39 10.60 0.1
GLD		0.76	86	eP	39 13.00 0.0
RW2		1.83	221	iPc	39 29.87 -0.3
RW3		1.85	219	P	39 30.34 -0.2
RW4		1.89	216	iPc	39 31.18 0.0
RW1		1.90	221	ePc	39 30.96 -0.2
RW6		2.01	223	P	39 32.92 -0.1
RW5		2.06	219	P	39 34.05 0.4
PV06		2.22	233	P	39 36.04 0.1
PV01		2.42	230	P	39 39.08 0.4
PV04		2.47	239	P	39 39.64 0.2
PV03		2.52	236	P	39 39.98 -0.1
PV10		2.57	240	P	39 41.56 0.7
PV09		2.57	243	eP	39 40.00 -1.0
DAU		3.94	282	eP	40 00.60 0.2
BW06		3.98	322	eP	40 00.70 -0.1
RSSD		4.70	19	eP	40 11.10 0.0
ANMO		4.75	182	e(P)	40 10.00 -1.8X
IMW		5.48	321	e(P)	40 25.50 3.2X
MEO		7.81	127	e(P)	41 03.70 9.0X
		S.D. = 0.4		on 17 of 20 obs.	

% SEP 12, 1990 22h 07m 17.10± 0.96s
43.177 N ± 7.3km 19.553 E ± 7.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.0 (TTG).

PLE		0.19	323	iPgc	07 21.50 0.1
				iSg	07 24.00
IVA		0.40	140	ePg	07 25.20 0.0
				eSg	07 31.00
NKY		0.55	228	ePg	07 28.30 0.1
				eSg	07 36.30
PVY		0.66	152	ePg	07 30.20 -0.1
				eSg	07 39.00
TTG		0.78	196	ePg	07 32.50 0.3
				eSg	07 43.00
BRY		0.79	250	ePg	07 32.30 -0.3
				eSg	07 43.00
		S.D. = 0.2		on 6 of 6 obs.	

? SEP 12, 1990 22h 10m 29.87± 0.83s
26.723 N ±10.5km 142.025 E ±26.7km
DEPTH = 33.0km (normal)
4.6mb (4 obs.)
BONIN ISLANDS REGION (212)

CHTO		40.34	268	P	18 06.30 0.0
WB5		46.92	190	eP	18 59.00 -0.2

12d 22h

WRA	46.98	190	Pc	19	00.00	0.2	SZP	45.53	234	ePc	53	23.00	0.7		0.9s	7.60nm		4.5mb	
	0.6s	1.40nm				4.1mb	PGC	47.82	61	eP	53	40.00	0.1	KRA	71.62	333	eP	56	22.20	-0.5
KEV	73.28	341	eP	21	53.00	-6.4X	KMI	49.31	258	Pc	53	51.00	-1.0		1.2s	41.00nm				5.1mb
SOD	74.69	339	eP	22	08.00	0.4				pP	54	23.00	139km	KSP	71.87	335	eP	56	23.50	-0.8
SUF	77.46	335	iP	22	23.40	0.2	PNT	49.44	59	iP	53	52.00	-0.5	FVM	72.16	50	P	56	24.80	-1.4
	0.6s	6.10nm				4.8mb		0.9s	78.00nm				5.5mb	CLL	72.24	338	iPd	56	25.60	-0.8
NUR	79.33	333	eP	22	33.00	-0.5	NEW	51.39	58	P	54	07.00	-0.4		1.4s	22.00nm				4.7mb
HFS	83.71	337	eP	22	56.20	-0.3		0.9s	66.89nm				5.5mb	BRG	72.42	337	eP	56	26.60	-0.9
	0.8s	5.20nm				4.7mb	FHC	52.43	70	ePc	54	16.50	1.3		1.0s	10.00nm				4.5mb
NB2	83.90	338	P	22	57.60	0.1	KEV	52.78	341	eP	54	31.00	13.7X	WTS	72.91	342	eP	56	30.00	-0.3
	0.6s	2.60nm				4.6mb	SES	53.09	53	iPc	54	20.00	0.1		1.0s	11.00nm				4.6mb
	S.D. = 0.3	on	8 of	9 obs.				0.7s	90.00nm				5.8mb	PRU	73.10	336	eP	56	30.00	-1.4
----------							LBFM	53.26	68	P	54	22.20	0.7	MOX	73.18	338	eP	56	32.00	0.1
? SEP 12, 1990 22h 26m 06.14± 1.89s							WDC	53.40	69	iPc	54	23.00	0.7	UYO	73.24	56	iPd	56	32.00	-0.5
49.873 N ±38.8km 18.823 E ±17.6km							MIN	54.09	69	ePc	54	27.40	-0.1	GBA	73.41	271	P	56	33.00	-0.7
DEPTH = 10.0km (geophysicist)							FFC	54.38	45	iPc	54	29.10	-0.2	OLY	73.65	53	P	56	34.40	-0.5
CZECHOSLOVAKIA						(547)		0.8s	81.00nm				5.7mb	HBVT	73.99	35	P	56	36.40	-0.3
							ORV	54.68	69	iPc	54	31.30	-0.4				pP	57	09.50	133km
SPC	1.15	126	iPn	26	27.80	0.0	SOD	54.82	339	iP	54	41.00	8.7X	ZST	74.09	334	eP	56	37.20	0.0
			iSg	26	45.90					i	55	05.00	98kmX	SRO	74.11	333	iP	56	35.90	-1.4
ZST	2.02	215	e(P)	27	00.60	19.9X	BRK	55.39	71	ePc	54	36.80	0.1	KHC	74.13	336	P	56	37.50	0.0
PRU	2.77	274	Pg	26	50.40	-0.9	BKS	55.40	71	iPc	54	36.70	-0.1		1.2s	10.00nm				4.5mb
			e	27	20.00			0.9s	65.00nm				5.5mb	GRF	74.16	338	eP	56	37.90	0.3
			Sg	27	24.00		LRM	55.40	58	iPc	54	36.90	-0.2		1.4s	34.00nm				4.9mb
BRG	3.28	290	ePg	26	59.00	0.4	PCC	55.57	72	ePc	54	37.90	-0.1	ENN	74.25	342	eP	56	38.50	0.4
			iSg	27	42.00		MHC	56.11	71	ePc	54	42.30	0.2		1.0s	20.00nm				4.8mb
KHC	3.50	260	ePg	27	02.20	0.5	GCC	56.12	72	ePc	54	42.00	0.0				e	56	49.50	36kmX
			Sg	27	46.00		ARN	56.17	71	P	54	42.80	0.4	WET	74.29	337	iPc	56	37.80	-0.6
	S.D. = 1.2	on	4 of	5 obs.						pP	55	14.70	135km		1.0s	16.00nm				4.7mb
----------							CMB	56.35	70	ePc	54	44.00	0.2	MEM	74.39	342	Pc	56	39.20	0.4
SEP 12, 1990 22h 45m 14.73± 0.13s							CHG	56.38	257	iPd	54	43.10	-1.0	WB5	75.01	203	eP	56	42.50	-0.2
52.635 N ± 3.5km 157.693 E ± 2.4km								1.0s	35.50nm				5.3mb				e	57	15.00	130km
DEPTH = 134.3km (12 depth phases)							SAO	56.62	72	ePc	54	45.30	-0.3	WRA	75.07	203	Pd	56	42.70	-0.4
4.9mb (66 obs.)							KVN	56.95	68	P	54	48.90	0.8		0.8s	8.00nm				4.5mb
KAMCHATKA						(217)				pP	55	20.70	134km	DOU	75.14	342	Pc	56	43.10	-0.1
							PRS	56.96	72	ePc	54	48.00	0.0	CDF	76.23	340	eP	56	49.30	-0.2
SMY	9.97	83	iPd	47	36.70	1.1	LLA	57.01	71	ePc	54	48.80	0.4		1.2s	14.90nm				4.6mb
ASAJ	13.12	235	P	48	19.20	2.3	FRI	57.46	70	ePc	54	51.40	0.0	RSCP	76.35	49	P	56	50.00	-0.3
HOOJ	14.11	229	eP	48	25.60	-4.0X	PRI	57.50	72	e(P)	54	52.10	0.2	TBR	76.37	38	P	56	49.00	-1.2
			eS	50	51.30		KKN	57.94	275	P	54	53.60	-1.6	SQTA	76.48	337	iPd	56	51.20	0.2
MRRJ	15.14	234	eP	48	37.10	-5.4X	PKI	58.02	274	P	54	54.20	-1.7		1.2s	30.70nm				4.9mb
ADK	15.68	83	iPc	48	49.30	0.0	TNP	58.12	68	P	54	56.80	0.4				i	56	55.50	14kmX
	1.0s	160.00nm				5.3mb	GKN	58.17	275	P	54	55.00	-1.8				i	56	59.00	
OFUJ	17.50	226	eP	49	11.50	-0.1	SUF	58.84	336	eP	55	01.00	0.2				e	57	30.00	
NIIJ	20.20	228	P	49	40.40	-0.2	BW06	59.01	59	P	55	02.80	0.3	PTJ	76.51	334	eP	56	50.60	-0.5
KAKJ	20.56	224	P	49	43.70	-0.5				pP	55	34.20	131km	HAU	76.80	341	eP	56	52.40	-0.2
MAT	21.14	228	iPd-	49	50.00	-0.1	ISA	59.10	71	eP	55	02.00	-1.0		1.2s	11.90nm				4.5mb
	1.8s	613.64nm				5.7mb	ABL	59.25	72	P	55	04.10	-0.1	BSF	76.88	340	eP	56	52.80	-0.3
			eS	53	32.00		CLC	59.50	70	iP+	55	05.00	-0.7		1.2s	11.90nm				4.5mb
CHJJ	21.20	226	P	49	50.50	-0.1				e	55	38.00	138km	TKL	77.11	47	P	56	54.40	-0.1
MTMJ	21.29	229	P	49	51.80	0.2	SBB	60.17	71	iP+	55	10.00	-0.3	BLA	77.27	44	P	56	55.20	-0.1
TSRJ	22.99	231	P	50	09.90	1.8				e	55	42.00	133km		1.0s	45.00nm				5.2mb
WKYJ	24.26	229	eP	50	20.60	0.2	GSC	60.32	70	iP+	55	11.00	-0.3	FLN	77.29	345	eP	56	55.20	0.0
YONJ	24.49	234	eP	50	22.90	0.4				e	55	43.00	133km		1.2s	17.85nm				4.7mb
TKSJ	25.18	232	eP	50	28.80	-0.1	PAS	60.35	72	eP	55	11.00	-0.5	LDF	77.40	345	eP	56	55.70	-0.1
TTA	26.15	49	iPc	50	38.30	0.6	MWC	60.37	72	eP	55	11.00	-0.8		1.2s	17.85nm				4.7mb
	0.7s	116.28nm				5.6mb				e	55	43.00	133km	CBN	77.68	41	eP	56	58.00	0.5
SVW	26.35	53	eP	50	39.60	0.1	NNT	60.83	251	eP	55	15.00	0.2	GRR	77.71	346	eP	56	57.80	0.3
IMA	27.36	42	iPc	50	48.70	0.0	RSSD	60.87	55	P	55	15.40	0.3		1.0s	20.00nm				4.8mb
	0.7s	58.60nm				5.3mb				pP	55	47.40	133km	LOR	77.99	342	eP	56	59.10	0.0
KDC	28.35	60	iPc	50	55.90	-1.6	RVR	60.93	71	iP+	55	14.00	-1.3		1.2s	31.25nm				4.9mb
	0.7s	77.10nm				5.5mb	NUR	61.11	336	eP	55	27.00	10.8X	LPF	78.09	346	eP	56	59.90	0.3
PMR	29.43	51	ePc	51	04.70	-2.4	TPC	61.61	70	iP+	55	19.00	-1.0		1.2s	26.80nm				4.9mb
	0.7s	68.31nm				5.5mb	PLM	61.68	71	eP	55	20.00	-0.7	GRC	78.11	343	P	57	00.18	0.4
FBA	29.77	44	iPc	51	10.40	0.3	BAR	62.28	72	eP	55	24.00	-0.4	LBF	78.25	342	eP	57	00.50	-0.1
TOA	30.75	50	iPc	51	19.30	0.4	GLA	63.07	70	iP+	55	30.00	0.3		1.2s	14.90nm				4.6mb
BJI	30.87	263	eP	51	11.00	-8.9X	GOL	63.41	59	P	55	32.60	0.5	SSF	78.26	342	eP	57	00.70	0.1
	1.5s	40.00nm				4.9mb		0.9s	22.73nm				5.1mb		1.0s	11.00nm				4.6mb
		epP		51	53.00	205kmX	NB2	63.56	343	P	55	30.90	-1.6	AVF	78.55	342	iPd	57	02.40	0.3
		eS		56	03.00			0.7s	4.70nm				4.5mb		1.0s	20.00nm				4.8mb
		eScP		57	43.00		HFS	63.92	341	ePKP	55	29.50	-5.3X	SMF	78.60	342	iPd	57	02.60	0.2
SSE	34.14	245	eP	51	48.50	0.1		1.5s	27.20nm				5.0mb		1.2s	20.85nm				4.8mb
	1.2s	14.00nm				4.6mb	SNG	64.72	247	eP	55	41.30	0.9	ASPA	78.76	202	eP	57	03.00	-0.5
INK	35.12	37	iPc	51	56.90	0.6		1.2s	134.38nm				5.7mb		1.0s	14.00nm				4.7mb
	0.8s	77.00nm				5.5mb	ANMO	66.36	63	P	55	51.60	0.6				i	57	37.50	138km
SIT	37.42	56	iPc	52	17.80	2.1		0.9s	34.66nm				5.3mb	BGF	78.87	343	eP	57	04.30	0.4
	0.8s	17.24nm				4.9mb	MAIO	66.60	299	eP	55	51.00	-1.4		0.8s	6.70nm				4.5mb
LZH	40.87	268	Pd	52	44.50	-0.3	IPM	66.63	245	ePd	55	54.00	1.3	LPL	79.10	340	iPd	57	06.30	0.8
	1.5s	110.00nm				5.3mb		1.1s	43.40nm				5.3mb		1.3s	25.25nm				4.8mb
N	10s	0.20um					QUE	67.06	290	eP	55	54.00	-1.5	LPG	79.11	340	iPd	57	06.50	0.9
		pP		53	17.50	149kmX	HYB	69.79	272	eP	56	11.00	-1.3		1.2s	29.75nm				4.9mb
		PP		54	23.00					e	56	33.50	86kmX	MAF	79.24	343	iPd	57	06.70	0.8
		ScP		58	19.50		MEO	70.66	58	iPc	56	17.20	-0.1		0.8s	12.10nm				4.7mb
		eS		58	36.00		SIO	71.07	56	iP	56	19.40	-0.3	TCF	79.24	343	eP	57	06.40	0.5
		ScS		02	31.50		TUL	71.20	55	iPc	56	20.20	-0.3		1.1s	14.65nm				4.7mb
YKA	44.48	41	eP	53	13.60	0.1		1.0s	73.30nm				5.5mb	PLDF	79.29	342	P	57	06.98	0.7
	0.8s	46.10nm				5.2mb	EKA	71.24	349	Pc	56	20.30	-0.1	AGO	79.30	342	P	57	07.29	1.0

```
MFF     79.34 345 eP      57 07.00    0.6
        1.2s     26.80nm            4.9mb
JSC     79.39  46 P       57 06.80   -0.1
LSF     79.40 343 eP      57 07.30    0.5
LHS     79.41  46 P       57 07.00    0.0
SFI     79.42 336 P       57 08.50    1.7
ARV     79.54 335 Pd      57 08.00    0.4
BNI     79.55 340 P       57 09.00    1.2
BDI     79.60 337 P       57 07.50   -0.4
PYM     79.62 342 P       57 08.87    0.8
CRE     79.67 335 P       57 09.00    0.6
DOI     79.95 339 P       57 08.50   -1.4
ASS     80.01 335 P       57 11.00    0.9
LBL     80.07 342 P       57 11.66    1.4
RJF     80.32 343 iPd     57 12.30    0.6
        1.2s     35.70nm            5.0mb
SBF     80.52 339 eP      57 13.90    1.1
        1.2s     17.85nm            4.7mb
CAF     80.58 343 eP      57 14.30    1.2
        1.2s     35.70nm            5.0mb
MNS     80.65 334 P       57 13.00   -0.5
LFF     80.80 344 eP      57 15.40    1.2
        1.2s     41.65nm            5.1mb
DUI     80.84 333 P       57 13.00   -1.5
LPO     80.98 343 eP      57 16.10    1.0
        1.2s     38.70nm            5.0mb
SDI     80.98 333 P       57 14.50   -0.7
FRF     80.98 339 eP      57 16.10    0.9
        1.0s     10.00nm            4.5mb
LRG     81.15 339 eP      57 16.30    0.3
        1.0s     16.00nm            4.7mb
RDP     81.22 334 P       57 12.50   -4.0X
LMR     81.23 339 eP      57 16.90    0.5
        1.0s     12.00nm            4.6mb
PGF     81.41 337 eP      57 17.60    0.1
        1.1s     14.65nm            4.7mb
MGR     81.94 332 P       57 20.00   -0.2
DSI     82.24 313 eP      57 22.00    0.1
EPF     82.73 343 eP      57 24.80    0.5
        1.2s     29.75nm            5.0mb
NOH     83.18 313 eP      57 27.00    0.2
MBH     84.00 313 eP      57 31.00    0.1
PTZ    122.97 291 iPKPc   04 04.00    7.5X
                  i       04 41.00
ZOBO   128.95  62 PKP     04 08.00   -0.6
SIV    132.39  55 ePKP    04 04.00  -10.5X
                  i       04 14.40
                  i       04 50.50
CER    144.62 286 iPKPc   04 32 60   -3.7X
VAO    144.92  42 ePKP    04 37.20    0.0
JFO    145.16  36 (PKP)   04 38.00    0.4
BMA    145.75  38 ePKP    04 39.60    1.1
     S.D. = 0.8  on 168 of 179 obs.
-----------------------------------------
&  SEP  13, 1990  00h 34m 34 24s
   60.638 N          152.128 W
   DEPTH =  76.5km
 SOUTHERN ALASKA                  (  2)
     <AGS-P>.

RDT     0.15 245 iP       34 45.27    1.2
                 iS       34 54.79
RSO     0.36 241 iP       34 46.43   -0.5
                 iS       34 56.00
NKA     0.45  76 iP       34 48.67    1.3
SPU     0.55   4 eP       34 47.68   -0.7
                 eS       34 59.17
CKL     0.57 350 iP       34 47.99   -0.6
CRP     0.63 359 iP       34 48.81   -0.5
                 iS       35 00.78
BGL     0.64 349 iP       34 48.78   -0.5
CGLM    0.67   5 iP       34 49.07   -0.6
NCG     0.77 359 iP       34 49.94   -0.8
SLKM    0.95  97 iP       34 51.91   -0.9
                 eS       35 06.19
HOM     1.01 166 iP       34 53.13   -0.3
SUA     1.07  39 eP       34 53.85   -0.5
OPT     1.13 210 iP       34 54.29   -0.7
                 eS       35 11.08
CNPM    1.20 158 eP       34 54.89   -1.0
XLV     1.20 170 eP       34 54.84   -1.1
PDB     1.34 231 iP       34 56.17   -1.5
                 eS       35 13.89
SKT     1.38  12 eP       34 56.97   -1.3
PMS     1.39  63 iP       34 57.65   -0.8
AUE     1.43 207 eP       34 57.66   -1.2
SEW     1.43 111 eP       34 57.67   -1.2

AUH     1.44 208 eP       34 58.14   -0.9
AUI     1.46 207 eP       34 57.99   -1.3
PWA     1.49  46 eP       34 58.83   -0.8
PLRM    1.74  55 eP       35 01.68   -1.4
MCNL    1.83 218 iP       35 02.79   -1.5
GHO     1.92  52 iP       35 03.94   -1.7
SML     2.18  56 eP       35 07.32   -1.8
HUR     2.63  26 eP       35 14.30   -1.0
VZW     2.76  79 eP       35 14.24   -2.9
VLZ     2.88  78 eP       35 15.62   -3.0
KTH     2.98  10 eP       35 18.51   -1.7
KLU     3.14  71 eP       35 19.33   -3.1
TOA     3.22  60 eP       35 21.79   -1.8
GLB     4.12  75 eP       35 32.48   -3.7
WRH     4.28  24 eP       35 35.12   -3.2
          35 obs. ossocioted
-----------------------------------------
    SEP  13, 1990  00h 44m 01.55± 0.80s
    49.046 N ± 4.6km  127.531 W ± 7.7km
    DEPTH =  10.0km  (geophysicist)
    4.2mb (  6 obs.)
  VANCOUVER ISLAND REGION          ( 25)

ETB     0.73  63 Pc       44 18.94    3.1
EDB     0.87  18 Pd       44 19.61    1.3
GDR     1.22  52 P        44 25.39    1.1
                 S        44 43.41
OZB     1.34  93 Pc       44 26.21   -0.1
BTB     1.38  71 Pc       44 27.90    0.9
                 S        44 48.12
PHC     1.66   2 P        44 30.15   -0.7
                 S        44 52.08
CBB     1.72  54 P        44 33.21    1.5
ALB     1.79  82 P        44 32.97    0.4
MGB     1.87  90 Pc       44 33.44   -0.5
                 S        44 57.77
PFB     2.10 102 Pc       44 35.74   -1.4
NAB     2.32  84 P        44 40.89    0.5
SHB     2.45  76 Pc       44 43.04    0.7
PGC     2.72  97 P        44 45.00   -1.1
        0.2s     13.70nm
MCW     3 12  95 eP       44 51.30   -0.5
BBB     3.16 353 P        44 50.70   -1.6
                 S        45 29.00
HNB     3.26  84 P        44 53.77    0.1
GMW     3.50 114 eP       44 55.70   -1.5
RMW     4.14 110 eP       45 05.50   -0.8
LON     4 48 119 eP       45 10.50   -0.6
PNT     5.20  84 P        45 20.00   -1.2
VGB     5.79 125 eP       45 29.30   -0.3
DPW     6.32  97 eP       45 35.50   -1.5
NEW     6.94  93 eP       45 44.50   -1.3
WDC     9.18 155 ePd      46 17.90    1.1
MIN     9.66 152 ePd      46 24.60    0.9
ORV    10.42 153 eP       46 34.70    0.7
LRM    10.71 102 eP       46 37.10   -1.1
KVN    12.07 142 eP       46 57.40    0.8
TNP    13.25 142 eP       47 13.30    0.9
        0.9s     5.86nm             4.7mb
DUG    13.70 125 eP       47 19.50    1.3
BW06   13.98 110 eP       47 21.00   -1.1
        1.0s     18.50nm            4.8mb
YKA    15.27  23 eP       47 36.90   -1.6
        1.0s     5.40nm             3.9mb
RSSD   16.86  98 eP       48 00.50    1.3
GOL    18.33 112 eP       48 17.50   -0.2
        0.9s     5.68nm             3.7mb
INK    19.55 353 eP       48 32.00    0.1
ANMO   20.97 124 eP       48 47.40    0.1
        1.0s     7.50nm             4.0mb
TUL    26.62 108 eP       49 42.30    0.5
        1.0s     7.70nm             4.3mb
      S.D. = 1.1  on  37 of  37 obs.
-----------------------------------------
?  SEP  13, 1990  01h 13m 27.23± 1.81s
   24.453 S ±33.6km  179.904 E ±10.8km
   DEPTH = 562.1 ± 24.6 km
   4.8mb (  7 obs.)
 SOUTH OF FIJI ISLANDS             (171)

DZM    12.60 278 iPc      16 12.10   -0.2
RMO    28.16 259 iPd      18 37.00    0.3
PMO    31.67  79 iP       19 06.60    0.0
        0.8s     20.00nm            4.8mb
TPT    31.92  79 iP       19 08.10   -0.6
        0.8s     30.00nm            5.0mb
RUV    32.06  79 iP       19 09.20   -0.7

        0.8s     25.00nm            4.9mb
STK     34.44 249 iPd      19 30.90    1.1
        0.6s     8.00nm             4.5mb
PMG     34.60 290 eP       19 31.00   -0.2
ASPA    41.86 261 iPd      20 30.70    0.5
        1.0s     19.00nm            4.6mb
WB5     42.27 267 iPd      20 33.50    0.0
                 eScP     25 21.90
WRA     42.28 267 Pd       20 33.20   -0.4
        0.6s     18.00nm            4.8mb
FORR    46.00 250 eP       21 00.90   -1.3
        0.4s     20.00nm            5.0mb
NANU    58.58 258 iPd      22 33.50    0.8
TNP     85.70  45 P        25 10.50    2.3
KVN     85.70  44 P        25 09.60    1.4
CHG     89.79 291 eP       25 31.00    3.6X
SOB1   128.00 125 ePKP     31 32.80    1.0
NB2    142.61 351 PKP      31 55.40   -2.1
        0.9s     3.10nm
HFS    143.07 349 ePKP     31 56.20   -2.0
        0.6s     10.60nm
      S.D. = 1.3  on  17 of  18 obs.
-----------------------------------------
    SEP  13, 1990  02h 58m 46.55± 0.11s
    33.495 N ± 2.5km  140.992 E ± 2.6km
    DEPTH =  50.9km  ( 14 depth phoses)
    5.4mb ( 74 obs.)
 SOUTH OF HONSHU, JAPAN             (211)
      CENTROID, MOMENT TENSOR       (HRV)
      Data Used: GDSN
      L.P.B.:  9S, 18C
      Centroid Locotion:
      Origin Time        02:58:45.8 0.6
      Lat 33.43N 0.06 Lon 141.04E 0.05
      Dep  35.8 3.7 Half-duration  2.1
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 1.37 0.06  Mtt=-0.17 0.12
        Mff=-1.19 0.09  Mrt=-0.41 0.13
        Mrf=-0.72 0.20  Mtf=-0.52 0.08
       Principal Axes:
        T  Val=  1.60  Plg=74  Azm=126
        N        0.04      3       25
        P       -1.64     15      294
      Best Double Couple:Mo=1.6*10**17
       NP1:Strike= 19 Dip=30 Slip=  84
       NP2:       206     60       93

KAKJ    2.79 346 P        59 28.10   -1.5
CHJJ    3.03 328 iPd      59 32.30   -0.9
                 S        00 07.10
IIDJ    3.22 309 iPd      59 37.50    1.5
                 S        00 17.60
MAT     3.80 324 iPd-     59 44.40    0.3
                 iS       00 29.30
MTMJ    4.04 321 iPd      59 48.20    0.7
                 eS       00 36.90
NIIJ    4.07 337 iPd      59 46.40   -1.5
WKYJ    4.55 281 iPd      59 55.80    1.2
TSRJ    4.61 298 iPd      59 56.10    0.7
YAMJ    4.73 351 P        59 55.30   -1.9
OFUJ    5.60   5 P        00 05.60   -3.8X
                 eS       01 03.50
TKSJ    5.81 277 P        00 13.20    0.9
YONJ    6.45 287 P        00 22.20    0.9
AOMJ    7.07 356 eP       00 27.40   -2.5
SHNJ    8.25 277 iP+      00 47.50    1.2
SSE    16.92 267 P        02 42.80    1.6
        1.2s     36.00nm            4.4mb X
      Z 20s      2.30um             4.6Msz
      N 13s      2.20um
                 pP       02 50.50
                 sP       02 56.00
                 ePP      03 05.00
                 eS       05 44.00
                 sS       05 56.00
                 SS       06 06.00
ANP    18.87 249 eP       03 18.00   12.6X
GUMO   20.13 169 eP       03 19.20    0.1
        1.0s     656.00nm           5.9mb
PJG    20.13 169 eP       03 18.80   -0.2
GUA    20.19 169 eP       03 19.60    0.0
        0.5s     478.87nm           6.1mb
BJI    20.89 295 eP       03 24.00   -2.7
      Z 24s      3.50um             4.7MszX
      N 16s      1.31um
      E 16s      0.94um
                 eS       07 10.00
```

13d 03h

CVP		23.31	232	iPd	03	53.00	2.3			0.4s	10.00nm		5.2mb	TLB		81.29	318	eP	10	59.00	0.4
		1.0s	58.00nm				5.0mb	YKA		67.05	29	eP	09 34.60 -1.5	TPC		81.31	55	eP	10	59.00	-0.1
SZP		24.33	234	eP	04	00.00	-0.7			1.0s	9.00nm		4.8mb	BBTK		81.42	312	iPd	11	00.00	0.4
BAG		25.06	232	eP	04	04.80	-3.1X	BAL		67.76	203	iPc	09 40.80 -0.2					e	11	12.00	40kmX
PLP		26.63	217	ePc	04	23.00	0.7			0.6s	57.00nm		5.8mb	BAR		81.69	56	eP	11	01.00	0.0
PGP		26.99	227	iPc	04	24.00	-1.5	BWA		67.92	173	eP	09 39.30 -2.6	BMR		81.71	323	ePd	11	02.00	1.2
CGP		29.11	215	iPc	04	41.50	-3.2X	SOD		68.09	338	iP	09 41.90 -0.7	PSN		81.78	317	iP	11	02.00	0.8
LZH		30.50	285	eP	04	55.00	-2.1	ADE		68.14	182	iPc	09 44.00 0.8	KRA		81.83	326	iPd	11	01.90	0.6
		2.0s	39.00nm				4.8mb			1.0s	60.00nm		5.6mb					e	11	04.30	8kmX
	Z	18s	4.20um				5.1Msz	KLB		68.35	201	iPc	09 44.30 -0.3					e	11	15.00	
	N	14s	1.60um							0.7s	92.00nm		5.9mb	MLR		81.86	320	ePc	11	03.50	1.7
	E	14s	2.40um					CAN		68.87	173	eP	09 48.50 0.7	SPC		82.29	325	iP	11	04.60	0.6
			sP	05	12.50			PGC		69.06	45	eP	09 49.00 0.2	CMP		82.49	320	ePc	11	04.00	-1.0
			PP	05	57.00			MUN		69.19	202	eP	09 49.00 -0.8	TNR		82.65	321	ePc	11	07.00	1.2
			eS	09	40.00					0.9s	48.00nm		5.4mb	RSSD		82.70	41	P	11	05.10	-1.2
			sS	09	57.00				Z	20s	1.50um		5.2Msz	GLA		82.75	55	eP	11	07.00	0.5
			ScS	15	32.00				N	20s	0.70um			KSP		82.92	328	iPc	11	07.40	0.4
KMI		34.23	266	Pc	05	30.00	0.1		E	20s	0.70um							i	11	22.00	51km
	Z	18s	3.30um				5.1Msz	MCW		69.41	45	P	09 51.20 0.1					ePP	14	14.50	
	N	13s	0.70um					NWAO		69.75	201	iPc	09 53.20 0.0	AFIF		83.15	294	eP+	11	11.00	2.2
	E	13s	0.50um							0.7s	104.00nm		5.9mb	DEV		83.21	322	ePc	11	11.00	2.4
			sP	05	40.00				Z	20s	0.20um		4.4Msz	PSZ		83.33	325	iP	11	10.20	0.9
			PP	06	52.50				N	20s	0.10um			JMB		83.46	317	iP	11	10.00	0.1
			S	10	48.00				E	20s	0.10um			PVL		83.67	318	iPd	11	11.00	0.0
KKM		35.71	226	ePd	05	44.00	1.7	GMW		69.96	46	P	09 54.90 0.4	BRG		83.92	329	iPc	11	12.00	-0.1
JAY		35.82	180	ePd	05	42.00	-1.1	RMW		70.59	46	P	09 58.60 0.2			1.8s	85.00nm			5.5mb	
AAI		38.91	201	eP	06	09.20	0.1	RKG		70.88	201	iPd	10 03.50 3.4X					i	11	26.90	52km
CHG		40.19	259	ePc	06	19.00	-0.8	LON		70.92	46	P	10 00.00 -0.4					i	12	21.70	
		1.0s	22.25nm				4.9mb	PNT		70.97	43	eP	10 00.00 -0.6					i	14	14.50	
BDT		40.94	257	eP	06	21.90	-3.9X			0.8s	25.00nm		5.2mb					i	14	26.50	
PMG		43.07	171	eP	06	43.00	-0.2	SUF		70.99	334	iP	10 00.00 -0.4					i	14	34.60	
SHL		43.13	273	eP	06	41.00	-2.9			0.7s	22.40nm		5.2mb	CLL		83.99	330	iPc	11	12.20	-0.2
			eS	13	02.00			EDM		72.35	37	iPc	10 08.20 -0.5			1.5s	55.00nm			5.4mb	
SNG		45.59	244	eP	07	02.90	-0.6	NUR		72.91	332	iP	10 11.00 -0.8					i	11	27.00	51km
IPM		47.00	241	ePd	07	14.80	0.1			0.9s	38.90nm		5.3mb	BZS		84.06	322	eP	11	13.00	0.1
		0.8s	28.10nm				5.2mb	NEW		72.92	43	P	10 11.80 -0.4	BUD		84.06	325	ePd	11	13.70	0.8
			e	07	28.30	50km				1.0s	29.38nm		5.2mb	SRO		84.17	325	iPc	11	13.60	0.2
MTN		47.03	193	eP	07	14.00	-0.8	WDC		73.49	52	ePc	10 16.10 0.5					i	11	28.70	52km
GUN		47.25	279	P	07	17.00	-0.1	TA8		73.52	305	eP	10 18.00 2.0					e	14	31.60	
PKI		47.77	278	P	07	20.40	-0.7	LBFM		73.53	51	P	10 16.50 0.4	KMSA		84.18	290	eP+	11	14.40	0.4
KKN		47.79	279	P	07	20.60	-0.5	MIN		74.22	52	ePc	10 20.00 0.0	PRU		84.32	329	Pc	11	14.50	0.4
DMN		48.00	279	P	07	22.30	-0.5	ORV		74.69	53	ePc	10 22.50 -0.1			1.2s	26.40nm			5.2mb	
GKN		48.25	279	P	07	24.20	-0.4	BRK		75.04	54	eP	10 25.10 0.5		Z	18s	0.90um			5.2Msz	
BRW		49.81	22	P	07	36.60	0.9	BKS		75.06	54	iPc	10 25.20 0.5		N	17s	0.40um				
PSI		49.81	241	ePc	07	34.20	-2.3			1.2s	94.00nm		5.6mb		E	18s	0.30um				
IMA		49.93	29	P	07	35.80	-1.1				e	20	54.00					e	11	17.50	9kmX
KDC		50.04	40	P	07	37.00	-0.7	SES		75.10	39	eP	10 25.00 0.2					PP	14	30.50	
		0.8s	24.14nm				5.3mb					pP	10 43.00 66kmX	DIM		84.32	317	eP	11	16.00	1.7
KNA		50.34	195	iPd	07	40.80	0.4	MHC		75.74	55	ePc	10 29.00 0.2	ZST		84.46	326	iP	11	15.90	1.0
PMR		51.69	35	P	07	48.50	-1.7	ARN		75.81	55	P	10 29.30 0.3					i	11	30.20	49km
		1.3s	80.19nm				5.6mb	UPP		75.98	334	iP	10 28.30 -1.2					e	14	34.10	
FBA		52.30	31	P	07	54.40	-0.3	CMB		76.23	53	iPc	10 32.10 0.7	KDZ		84.65	317	iPd	11	17.00	1.0
WB5		53.45	188	iP	08	02.10	-1.6	PRS		76.45	55	ePc	10 32.80 0.2	PGB		84.75	319	iP	11	18.00	1.5
WRA		53.52	188	Pc	08	03.30	-0.9	LLA		76.59	55	ePc	10 33.80 0.4	VKA		84.78	327	iPc	11	17.10	0.6
		0.6s	202.50nm				6.3mb	LRM		76.93	43	iPc	10 36.20 0.7			1.2s	80.60nm			5.7mb	
QIS		53.76	182	iPc	08	05.20	-0.8	PRI		77.03	55	ePc	10 36.90 0.9					i	11	32.70	54km
NDI		54.08	283	iPc	08	07.00	-1.3	HFS		77.17	336	eP	10 35.10 -1.0	GOL		84.78	45	P	11	17.20	0.2
			eS	15	38.00					0.7s	22.80nm		5.3mb			1.1s	17.63nm			5.1mb	
ASPA		57.24	188	iPc	08	30.50	-0.6		Z	18s	0.87um		5.1Msz	GLD		84.84	45	P	11	18.40	1.2
		0.6s	342.00nm				6.6mb X				LR	39	36.00			1.3s	81.90nm			5.7mb	
	Z	23s	0.93um				4.8MszX	KVN		77.20	52	P	10 37.30 0.3	RZN		85.02	318	iP	11	19.00	1.0
			iS	16	20.50			FRI		77.23	54	ePc	10 37.20 0.3	MOX		85.06	330	iPc	11	18.00	0.1
			LR	30	57.30			NB2		77.31	337	P	10 36.70 -0.3			1.4s	28.00nm			5.2mb	
INK		57.70	26	iPc	08	32.90	-0.9			0.8s	36.20nm		5.5mb		Z	18s	0.80um			5.2Msz	
			pP	08	47.50	54km		BCH		77.94	56	P	10 41.70 0.7					eS	21	40.00	
HYB		57.82	270	eP	08	34.50	-1.0	TNP		78.31	52	P	10 43.40 0.3	SOP		85.09	326	eP	11	20.00	2.0
MBL		57.98	203	eP	08	36.60	0.4			1.3s	61.22nm		5.4mb	BEO		85.20	322	eP	11	19.00	0.4
RMQ		60.11	172	iPc	08	50.00	-0.9	SYP		78.37	56	eP	10 45.00 1.6	HOF		85.21	330	iPc	11	18.80	0.2
DZM		60.35	153	iPc	08	54.00	1.3	PTI		78.67	46	P	10 46.10 1.1			0.8s	21.00nm			5.3mb	
GBA		60.65	267	P	08	55.00	0.1	ABL		78.72	56	P	10 45.90 0.5	EDU		85.24	341	eP	11	18.70	0.0
NANU		60.80	207	iPd	08	55.40	-0.3	ISA		78.79	55	eP	10 45.00 -0.6			0.9s	60.00nm			5.7mb	
		0.5s	19.00nm				5.5mb	CLC		79.30	54	eP	10 48.00 -0.4	VTS		85.25	319	iP	11	20.00	0.8
WARB		60.90	195	iPc	08	56.60	0.3	SBB		79.77	55	iP+	10 52.00 1.1	WIT		85.29	334	eP	11	20.50	1.6
POO		61.22	274	eP	08	58.50	-0.3	AKU		79.82	351	iP	10 54.70 4.3X					e	11	35.50	52km
BRS		61.58	168	iPd	09	02.00	1.1			1.9s	273.68nm		5.9mb	KHC		85.37	328	iPc	11	20.00	0.5
KOD		62.38	264	eP	09	06.80	-0.2				i	11	07.00 41km			1.0s	10.50nm			5.0mb	
MEKA		63.47	202	eP	09	12.90	-0.6	PAS		79.83	56	eP	10 51.00 -0.2		N	18s	0.50um				
COO		64.55	170	eP	09	21.00	0.5	MWC		79.86	56	eP	10 52.00 0.4		E	18s	0.60um				
CMS		64.79	175	iPc	09	22.80	0.8	DUG		79.95	48	P	10 52.50 0.6					e	14	41.40	
		1.0s	55.00nm				5.5mb	GSC		80.12	54	iP+	10 53.00 0.2	ELO		85.50	341	ePc	11	20.20	0.2
STK		65.03	179	iPc	09	23.50	0.0	BW06		80.40	45	P	10 53.10 -1.3			1.0s	42.00nm			5.6mb	
		0.8s	28.00nm				5.3mb	RVR		80.46	56	eP	10 54.00 -0.5	MMB		85.64	318	eP	11	21.00	0.0
FORR		65.15	192	eP	09	23.00	-1.2	PEC		80.67	56	P	10 55.20 -0.5	EBH		85.64	341	eP	11	20.80	0.1
KEV		66.63	340	eP	09	33.00	-0.4	DAU		80.78	47	P	10 57.00 0.5	WET		85.67	329	eP	11	21.40	0.5
			e	09	47.00	49km		PLM		81.18	56	eP	10 58.00 -0.5	ESY		85.68	340	eP	11	20.80	-0.1
MRWA		66.71	204	iPc	09	34.00	-0.4				e	11	14.00 57km	AYN		85.74	302	eP	11	22.10	0.5
COOL		66.72	199	iPd	09	34.30	-0.1	VRI		81.20	320	ePc	10 57.50 -0.7	KKB		85.81	319	iPd	11	22.00	0.2

WTS	85.89	334	eP	11 22.00	0.1
	1.0s	25.00nm		5.4mb	
EAB	85.92	341	ePc	11 22.40	0.4
	0.9s	62.00nm		5.8mb	
EBL	85.93	341	ePc	11 22.40	0.3
GRF	85.96	330	iPc	11 22.80	0.5
	1.2s	74.00nm		5.8mb	
Z	19s	0.40um		4.8Msz	
		e		11 38.10 53km	
EAU	85.98	341	ePc	11 22.70	0.3
	0.8s	45.00nm		5.7mb	
EKA	86.35	340	Pd	11 24.80	0.7
	1.3s	42.60nm		5.5mb	
BNS	86.58	333	ePc	11 24.80	-0.6
SKO	86.64	319	eP	11 26.00	0.2
PTJ	86.67	325	eP	11 25.30	-0.7
BHG	86.74	328	eP	11 27.00	0.8
ANMO	87.14	49	P	11 29.00	0.4
	1.2s	13.67nm		5.1mb	
ENN	87.21	333	ePc	11 28.00	-0.4
	0.9s	33.00nm		5.6mb	
MEM	87.31	333	Pc	11 28.70	-0.2
VOY	87.54	326	e(P)	11 28.80	-1.4
OHR	87.58	319	eP	11 28.50	-2.0
FVI	87.63	327	P	11 30.00	-0.5
TRI	87.84	326	eP	11 44.60	13.1X
		e		14 56.00	
		e		22 10.00	
		e		23 00.00	
SQTA	87.86	328	iPd	11 31.60	-0.2
	1.7s	69.70nm		5.6mb	
		i		11 45.80 48km	
		e		14 46.50	
		i		15 08.90	
		i		15 14.40	
DOU	88.25	334	P	11 33.30	-0.1
CDF	88.58	331	eP	11 34.80	-0.4
	0.8s	8.05nm		5.1mb	
HAU	89.27	331	eP	11 37.80	-0.6
	1.0s	8.00nm		5.0mb	
Z	20s	0.30um		4.7Msz	
SAL	89.40	328	P	11 37.00	-2.0
MDI	89.63	328	P	11 47.00	7.0X
ARV	89.89	325	P	11 41.00	-0.4
SFI	90.09	326	P	11 42.00	-0.2
CRE	90.26	326	P	11 43.00	-0.2
ASS	90.35	325	P	11 43.00	-0.5
ORO	90.50	329	P	11 43.50	-0.7
DUI	90.52	323	P	11 44.00	-0.4
BDI	90.56	327	P	11 47.00	2.5
ORI	90.66	321	P	11 45.00	0.0
SDI	90.80	323	P	11 48.00	2.3
LOR	90.85	332	eP	11 45.10	-0.6
	1.2s	14.90nm		5.3mb	
Z	20s	0.30um		4.7Msz	
MNS	90.85	324	P	11 46.00	0.1
LBF	91.04	332	eP	11 46.40	-0.2
	0.8s	5.35nm		5.0mb	
LPL	91.12	330	eP	11 47.10	-0.1
	1.0s	14.00nm		5.3mb	
LPG	91.12	330	eP	11 47.30	-0.1
	1.0s	21.00nm		5.5mb	
SSF	91.16	332	eP	11 47.10	0.0
	0.8s	6.70nm		5.1mb	
FLN	91.19	336	eP	11 46.80	-0.4
	0.8s	8.05nm		5.2mb	
Z	20s	0.70um		5.1Msz	
LDF	91.21	335	eP	11 47.00	-0.3
	1.0s	20.00nm		5.5mb	
CKI	91.32	328	P	11 46.50	-1.4
SMF	91.37	332	eP	11 47.80	-0.3
	1.0s	10.00nm		5.2mb	
AVF	91.44	332	eP	11 48.20	-0.2
	0.8s	16.10nm		5.5mb	
BNI	91.51	330	P	11 49.00	0.0
GRR	91.64	336	eP	11 49.50	0.2
	0.9s	22.95nm		5.6mb	
BGF	91.83	333	eP	11 50.20	0.0
	1.0s	8.00nm		5.1mb	
LPF	92.01	336	eP	11 51.20	0.2
	0.9s	29.50nm		5.7mb	
MEO	92.08	45	iPd	11 52.10	0.5
SBF	92.13	328	eP	11 51.10	-0.6
	0.6s	14.45nm		5.6mb	
MAF	92.22	333	eP	11 52.40	0.4
	1.1s	17.10nm		5.4mb	
TCF	92.30	333	eP	11 52.40	0.0
	0.8s	5.35nm		5.0mb	
SOI	92.32	320	P	11 52.00	-0.6
PGF	92.47	327	eP	11 52.80	-0.6
	0.6s	5.40nm		5.2mb	
LSF	92.59	333	eP	11 53.70	0.0
	0.8s	22.85nm		5.7mb	
FRF	92.72	329	eP	11 53.80	-0.6
	0.8s	8.05nm		5.2mb	
SIO	92.74	43	iP	11 55.20	0.6
MFF	92.91	334	eP	11 55.30	0.1
	1.0s	18.00nm		5.5mb	
TUL	92.92	43	iP	11 55.70	0.3
	1.3s	18.40nm		5.4mb	
LRG	92.93	329	eP	11 55.00	-0.3
	0.8s	13.45nm		5.4mb	
LMR	92.96	329	eP	11 55.10	-0.4
	0.8s	13.45nm		5.4mb	
CDR	93.01	329	ePc	11 55.10	-0.6
RJF	93.39	333	eP	11 57.80	0.4
	1.0s	14.00nm		5.3mb	
Z	20s	0.55um		5.0Msz	
CAF	93.49	332	eP	11 58.60	0.6
	1.0s	15.00nm		5.4mb	
LFF	93.99	333	eP	12 00.00	-0.2
	0.8s	8.05nm		5.2mb	
LPO	94.04	333	eP	12 00.90	0.5
HBVT	96.54	24	P	12 10.70	-1.2
BUL	119.14	264	iPKPc	17 31.00	-1.0
	0.8s	5.22nm			
SPA	123.32	180	iPKPc	17 38.20	-0.4
	0.8s	20.42nm			
KIC	128.75	314	PKP	17 50.50	0.0
LIC	129.03	314	PKP	17 51.00	0.0
NNA	139.39	67	ePKP	18 08.70	-1.8
	1.0s	18.00nm			
AIA	144.73	162	ePKP	18 17.90	-0.4
ARE	146.21	68	ePKP	18 24.00	1.3
ZOBO	148.66	64	PKPc	18 28.00	1.1
LPB	148.84	64	PKP	18 25.00	-2.0
	1.1s	202.53nm			
		i		18 33.00	
CNCB	149.10	65	PKPc	18 29.00	1.4
		i		18 33.90	
CCH	150.83	63	PKPc	18 37.00	7.2X
LNV	153.10	100	iPKP	18 40.00	7.7X
CAI	153.11	356	ePKP	18 39.00	6.1X
TACH	153.45	99	ePKP	18 41.20	8.4X
SIV	153.54	54	PKP	18 34.40	1.0
PEL	153.58	98	iPKPd	18 42.00	8.9X
SAN	153.65	99	ePKP	18 41.50	8.4X
PCH	153.79	99	ePKP	18 42.70	9.3X
SOB1	155.77	5	ePKP	18 36.60	0.1
PPD	164.24	47	ePKP	18 46.90	1.4
	S.D. = 0.9	on 252 of 268 obs.			

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* SEP 13, 1990 03h 26m 09.78± 1.24s
13.810 N ±22.8km 90.622 W ±13.1km
DEPTH = 33.0km (normal)
4.0mb (5 obs.)
NEAR COAST OF GUATEMALA (71)

TPX	1.93	305	iP	26 39.20	-1.6
			(S)	27 01.50	
SCX	3.50	327	eP	27 08.70	5.5X
			iS	27 50.70	
OXX	6.72	300	eP	27 48.30	-0.7
			(S)	29 03.80	
PPM	9.29	305	iP	28 25.30	0.3
			iS	30 07.00	
IIA	9.36	306	(P)	28 28.00	2.6
IIJ	10.53	305	(P)	28 43.00	1.0
OLY	21.61	358	P	31 00.70	1.7
MEO	22.09	342	e(P)	31 03.20	-0.6
TUL	22.49	349	e(P)	31 06.70	-1.1
	1.3s	4.50nm		3.8mb	
GBTN	22.51	14	P	31 11.90	3.9X
TKL	22.61	15	P	31 12.70	3.7X
ANMO	25.44	329	P	31 37.50	1.0
	0.5s	2.11nm		4.0mb	
TNP	33.78	321	P	32 51.50	0.5
	0.6s	1.57nm		4.1mb	
KVN	34.92	321	P	33 01.00	0.2
CMB	35.76	318	e(P)	33 05.30	-2.5
LON	41.95	328	P	33 59.00	-0.2
PNT	42.66	332	eP	34 05.00	0.1
	0.7s	8.00nm		4.6mb	
YKA	51.52	346	eP	35 13.00	-1.3
	0.7s	1.30nm		4.0mb	
SOB1	54.39	112	eP	35 36.40	0.1
KIC	84.52	85	P	38 42.00	0.5
GBA	150.31	24	PKP	46 06.00	11.3X
	S.D. = 1.3	on 17 of 21 obs.			

? SEP 13, 1990 03h 47m 32.99± 0.91s
35.406 N ±19.5km 25.488 E ± 9.3km
DEPTH = 33.0km (normal)
CRETE (370)
MD 3.6 (ATH).

NPS	0.18	145	ePb	47 39.00	-0.4
VAM	1.05	270	ePn	47 52.00	0.5
KAP	1.38	84	ePn	47 56.50	0.3
VLI	2.45	303	ePn	48 11.00	-0.5
	S.D. = 0.9	on 4 of 4 obs.			

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* SEP 13, 1990 04h 37m 24.30± 0.53s
13.001 N ± 9.5km 88.710 W ±10.9km
DEPTH = 73.2km (5 depth phases)
4.6mb (6 obs.)
EL SALVADOR (73)
Felt (II) at San Salvador.

QZA	0.59	332	iPd	37 38.00	-0.5
VSM	0.60	45	iPd	37 39.00	0.1
SJAS	0.80	326	iPd	37 40.50	-0.4
LFU	0.84	332	iPd	37 41.50	0.2
VSS	0.90	325	iPd	37 42.50	0.4
TME	1.19	328	iPd	37 46.30	0.6
TPX	3.93	299	eP	38 27.20	3.7X
DVD	7.64	126	(P)	39 20.00	4.8X
OXX	8.74	299	(P)	39 32.50	2.0
UPA	9.85	113	eP	39 47.50	2.0
PPM	11.28	304	eP	40 08.20	2.9
UYO	21.71	347	eP	42 12.00	1.1
JSC	22.24	16	P	42 17.50	1.4
OLY	22.54	354	P	42 20.40	1.3
			pP	42 40.70	94kmX
LHS	22.55	17	P	42 20.70	1.5
			pP	42 39.00	83km
RSCP	22.68	7	P	42 21.20	0.7
	0.6s	21.14nm		4.7mb	
TKL	22.99	10	P	42 24.20	0.7
SIO	23.66	344	eP	42 29.70	-0.2
TUL	23.69	346	eP	42 30.00	-0.2
	1.0s	4.30nm		3.8mb	
GOL	30.39	334	P	43 31.00	-0.9
	0.7s	3.64nm		4.2mb	
RSSD	33.68	340	P	44 00.00	-0.6
BW06	34.72	333	P	44 08.00	-1.5
ZOBO	35.50	144	P	44 17.00	0.3
TNP	35.59	320	P	44 17.30	0.4
LPB	35.72	145	eP	44 20.00	1.6
			e	44 37.00	68km
CNCB	36.01	145	P	44 22.00	1.0
IMW	36.23	332	P	44 21.50	-0.8
KVN	36.72	320	P	44 26.50	0.1
CCH	37.52	143	P	44 35.00	1.6
LRM	38.40	333	eP	44 40.50	0.0
SIV	39.71	136	iPd	44 50.60	-0.8
			i	45 08.60	73km
PNT	44.25	331	eP	45 27.00	-1.1
	0.6s	4.00nm		4.4mb	
EDM	44.66	339	iPc	45 30.10	-1.3
	0.6s	40.00nm		5.4mb	
PPD	50.57	133	eP	46 15.40	-2.4
			e	46 33.40	71km
YKA	52.76	345	eP	46 31.20	-2.5
	0.5s	5.80nm		4.9mb	
VAO	54.32	131	eP	46 43.50	-2.3
INK	62.32	343	eP	47 38.50	-2.3
			pP	47 57.00	71km
FBA	65.43	336	P	47 59.00	-2.2
	S.D. = 1.4	on 36 of 38 obs.			

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* SEP 13, 1990 07h 11m 24.63± 0.47s
6.912 N ±11.1km 78.053 W ±12.7km
DEPTH = 32.0km (4 depth phases)
4.5mb (5 obs.)
SOUTH OF PANAMA (83)
MD 4.9 (UPA).

UPA	2.53	325	iPd	12 01.50	-2.8
	1.0s	170.00nm			
			iS	12 42.60	

13d 07h

BOG	4.57	120	eP	12	39.00	5.3X
			eS	13	24.00	
DVD	4.61	289	ePc	12	33.50	-0.5
LPB	25.29	157	P	16	50.00	-0.5
CNCB	25.59	157	P	16	54.00	0.6
CCH	26.85	154	P	17	04.80	0.0
TUL	33.13	333	eP	18	08.00	7.9X
	1.2s	7.70nm		4.5mb		
SIO	33.23	332	e(P)	18	14.10	13.2X
ANMO	38.23	321	P	18	43.40	-0.3
			pP	18	53.30	34km
SOB1	40.34	113	eP	19	00.70	-0.6
GLO	40.79	327	P	19	06.00	1.1
			pP	19	15.60	32km
GOL	40.83	327	P	19	14.70	9.3X
	1.0s	7.50nm		4.4mb		
GLA	42.88	312	P	19	25.00	3.0X
RSSD	43.47	333	P	19	26.50	-0.3
DAU	44.64	323	(P)	19	37.50	1.0
BW06	45.24	327	P	19	50.30	9.2X
DUG	45.44	322	P	19	45.10	2.4X
TNP	47.09	317	P	19	56.40	0.6
			pP	20	05.50	30km
KVN	48.18	318	P	20	05.00	0.7
			pP	20	14.50	32km
LBFM	51.84	318	P	20	34.00	1.7
YKA	61.56	342	eP	21	42.30	1.4
	0.8s	3.40nm		4.5mb		
EKA	75.76	35	P	23	08.00	-0.9
	1.4s	12.10nm		4.7mb		
NB2	83.65	29	P	23	51.20	0.0
	1.0s	3.50nm		4.5mb		
KHC	85.90	41	eP	24	03.10	0.3
ASPA	145.09	238	ePKP	31	00.00	-1.4
	1.1s	8.00nm				
WRA	146.02	244	PKPd	31	02.80	-0.2
	1.0s	2.90nm				

S.D. = 1.1 on 19 of 26 obs.

? SEP 13, 1990 08h 12m 38.92± 1.00s
37.192 N ± 9.3km 23.760 E ±11.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
MD 3.0 (ATH).

ATH	0.78	357	ePg	12	54.50	0.4
			eSg	13	06.00	
VLI	0.81	235	ePg	12	54.00	-0.6
APE	1.42	94	ePb	13	04.00	-0.8
VAM	1.82	169	ePn	13	11.50	1.0

S.D. = 1.5 on 4 of 4 obs.

? SEP 13, 1990 09h 00m 12.23± 8.37s
44.619 N ±50.3km 9.150 E ±48.6km
DEPTH = 5.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.8 (GEN).

PCP	0.44	260	P	00	21.09	0.0
			S	00	24.93	
FIN	0.79	239	P	00	28.13	0.1
			S	00	37.16	
ENR	1.30	253	P	00	36.66	-0.2
STV	1.36	255	P	00	38.00	0.1

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

? SEP 13, 1990 09h 33m 19.78± 1.17s
35.463 N ±30.8km 26.478 E ± 9.1km
DEPTH = 33.0km (normal)
CRETE (370)

KAP	0.58	81	eP	33	31.50	0.0
			eS	33	46.80	
NPS	0.73	254	eP	33	33.00	-0.7
VAM	1.86	269	eP	33	51.00	1.1
VLI	3.13	295	eP	34	07.50	-0.4

S.D. = 1.4 on 4 of 4 obs.

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* SEP 13, 1990 10h 04m 43.42± 1.28s
45.665 N ±13.0km 15.575 E ± 8.4km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.5 (LJU).

VBY	0.28	234	e(Pg)	04	49.00	-0.2
			iSg	04	53.30	
PTJ	0.36	49	iPgd	04	50.80	0.0
			iSg	04	56.20	
CEY	0.81	276	e(Pg)	04	59.90	0.8
			eSg	05	09.80	
LJU	0.82	298	ePg	04	59.50	0.2
			eSg	05	07.00	
VOY	1.23	288	ePg	05	05.30	-1.1
			eSg	05	20.50	
TRI	1.27	273	e(Pg)	05	07.30	0.3
			i(Sg)	05	24.40	

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

? SEP 13, 1990 10h 34m 08.80± 1.05s
17.534 N ±12.7km 61.957 W ±10.7km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
MD 3.5 (TRN).

CPB	0.16	50	eP	34	15.05	0.0
			eS	34	22.02	
BPA	0.49	169	eP	34	19.34	0.0
			eS	34	26.62	
NEV	0.71	236	eP	34	22.45	0.1
			eS	34	38.96	
SKI	0.77	255	eP	34	23.16	-0.1
			eS	34	33.97	

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

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* SEP 13, 1990 12h 07m 45.71± 1.63s
14.390 N ±10.7km 146.713 E ±12.2km
DEPTH = 64.4 ± 13.5 km
4.7mb (3 obs.)
MARIANA ISLANDS (216)

GUA	1.94	244	eP	08	17.20	0.1
			eS	08	44.50	
GUMO	1.96	246	eP	08	17.60	0.3
PJG	1.96	246	eP	08	17.20	-0.1
MAT	23.33	343	(P)	12	44.00	-5.0X
WB5	36.16	200	eP	14	43.00	-0.9
WRA	36.22	200	Pd	14	44.10	-0.3
	0.9s	2.90nm		4.2mb		
BJI	36.97	320	eP	14	49.00	-1.5
	1.0s	12.00nm		4.8mb		
LZH	43.94	307	Pc	15	49.00	0.7
	1.5s	37.00nm		4.9mb		
			pP	15	52.50	12kmX
			sP	15	54.00	
GUN	57.80	294	P	17	33.80	0.4
PKI	58.21	294	P	17	36.20	-0.1
KKN	58.33	294	P	17	37.00	0.0
DMN	58.48	294	P	17	38.40	0.3
GKN	58.90	294	P	17	40.80	-0.1
FBA	66.75	25	(P)	18	32.60	0.6
INK	72.95	23	eP	19	09.00	-0.7
KVN	85.02	51	P	20	15.90	-0.1
SES	86.66	39	eP	20	23.00	-0.6
KIC	144.97	304	PKP	27	18.20	0.0
	0.9s	14.00nm				
TIC	145.03	305	PKP	27	18.22	-0.1
LIC	145.28	304	PKP	27	19.16	0.4
ZOBO	146.37	98	PKP	27	23.00	1.8
LPB	146.41	98	ePKP	27	32.00	11.0X
CNCB	146.52	99	PKP	27	23.00	1.6
SIV	153.15	97	ePKP	27	29.00	-1.8

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

SEP 13, 1990 12h 10m 00.51± 0.49s
31.996 N ± 4.3km 34.184 E ± 5.1km
DEPTH = 10.0km (geophysicist)
DEAD SEA REGION (373)
ML 3.9 (CSS). MD 3.7 (HLW). Felt (III) in the Herzliyyo-Kefor Sovo-Tel Aviv area, Israel.

ZNT	0.76	71	iPc	10	16.10	0.8
			iS	10	25.00	
JVI	0.99	94	iPd	10	19.70	0.4
ATZ	1.23	48	iPc	10	22.80	-0.7
SALJ	1.27	89	Pd	10	38.24	14.0X
KFNJ	1.28	96	Pd	10	38.09	13.9X
MASJ	1.33	101	Pd	10	39.00	13.9X
LISJ	1.34	124	Pd	10	39.56	14.4X
BURJ	1.40	79	Pd	10	25.50	-0.6
SHMJ	1.52	61	Pc	10	26.80	-1.0
QTRJ	1.70	114	Pc	10	44.19	13.7X
MDSJ	1.80	101	Pd	10	45.44	13.6X
HLBJ	1.80	87	Pd	10	33.90	2.0
JRSJ	1.95	152	Pc	10	35.00	1.0
SHWJ	1.96	145	Pc	10	34.90	0.5
BHL	2.27	33	Pg	10	38.00	-0.7
			Sg	11	04.00	
CSTJ	2.30	112	P	10	38.35	-0.7
MBH	2.30	165	iPc	10	39.10	0.1
HQL	2.82	164	ePd	10	46.30	-0.1
KOT	2.89	225	ePb	10	47.00	-0.3
			eSb	11	11.00	
CSS	3.04	347	eP	10	49.50	-0.1
			eSn	11	25.00	
HLW	3.24	230	ePn	10	53.00	0.6
			eSn	11	26.00	
PPCY	3.27	332	eP	10	53.50	0.8
AYN	3.49	153	eP	10	55.60	-0.3
BADA	3.53	168	iPd	10	54.80	-1.7

S.D. = 0.9 on 18 of 24 obs.

% SEP 13, 1990 12h 10m 13.20± 1.05s
38.664 N ± 7.3km 14.497 E ±10.5km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO	0.75	168	P	10	28.30	0.3
			eSg	10	37.50	
GIB	0.77	209	P	10	28.00	-0.3
			eSg	10	40.10	
ATN	0.91	123	P	10	30.70	0.1
			eSg	10	44.20	
SOI	1.36	115	P	10	38.10	0.0
			eSn	10	57.30	
MGR	1.68	29	P	10	43.40	0.6
			eSn	11	06.00	
TDS	1.74	55	P	10	43.00	-0.7
			eSn	11	08.00	

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

? SEP 13, 1990 12h 13m 23.00± 2.11s
42.737 N ±14.1km 19.154 E ±17.6km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.0 (TTG)

NKY	0.14	304	ePg	13	26.50	0.1
			eSg	13	30.00	
TTG	0.32	166	ePg	13	29.50	-0.1
			eSg	13	35.30	
BRY	0.48	290	ePg	13	32.50	-0.2
			eSg	13	40.60	
HCY	0.56	239	ePg	13	34.50	0.1
			eSg	13	45.00	

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

% SEP 13, 1990 12h 44m 31.59± 1.05s
60.479 N ± 5.6km 4.941 E ±10.5km
DEPTH = 5.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.2 (BER).

ASK	0.13	88	eP	44	34.68	0.5
			eS	44	36.66	
SUE	0.59	351	eP	44	43.38	0.1
HYA	0.92	41	eP	44	49.40	-0.2
			eS	45	02.81	
ODD1	1.02	123	eP	44	50.67	-0.7
			eS	45	07.26	
KMY	1.28	173	eP	44	55.78	0.0
			eS	45	13.48	
BLS3	1.32	142	eP	44	56.87	0.3
			eS	45	13.83	

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

? SEP 13, 1990 12h 54m 03.05± 3.76s
51.226 N ±27.8km 16.049 E ±23.6km
DEPTH = 10.0km (geophysicist)
POLAND (548)

KSP	0.41	158	iPd	54	11.50	0.0
			iS	54	19.70	
PRU	1.57	218	Pn	54	30.80	-0.2
			Pg	54	32.60	
			Sn	54	49.90	
			Sg	54	55.40	
CLL	1.92	274	ePg	54	36.00	0.0
			eSg	55	03.00	
KHC	2.63	218	ePg	54	46.50	0.2
			Sg	55	21.50	

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

? SEP 13, 1990 13h 00m 32.94± 1.16s
30.533 S ± 9.7km 116.794 E ±13.2km
DEPTH = 10.0km (geophysicist)
WESTERN AUSTRALIA (590)

BAL	0.11	226	iPd	00 35.30	-0.4
			iS	00 36.80	
KLB	1.34	142	eP	00 57.50	-0.2
			iS	01 14.40	
MRWA	1.48	332	eP	00 59.70	0.0
			iS	01 18.60	
MUN	1.53	199	iP	01 00.80	0.5
			iS	01 19.80	

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

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* SEP 13, 1990 13h 12m 26.80± 0.72s
16.540 N ± 6.9km 120.954 E ±18.2km
DEPTH = 33.0km (normal)
4.3mb (1 obs.)
LUZON, PHILIPPINE ISLANDS (249)

SZP	1.11	335	iPd	12 45.50	-0.6
			iS	12 59.00	
CVP	1.42	36	iPd	12 50.30	-0.3
			eS	13 09.00	
OCP	1.90	176	eP	12 57.00	-0.4
PGP	3.02	180	ePc	13 13.80	0.4
			eS	13 23.00	
BJI	23.78	351	eP	17 38.50	1.2
SLL	84.15	332	eP	24 55.40	-0.3
	0.4s		1.00nm		4.3mb

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

SEP 13, 1990 13h 47m 16.04± 0.75s
38.027 N ± 6.0km 21.615 E ± 8.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.3 (ATH).

VLS	0.82	281	ePg	47 32.40	0.4
ITM	0.88	164	ePg	47 31.70	-1.3
EVR	0.90	10	ePg	47 32.50	-0.9
ATH	1.66	91	ePb	47 45.80	0.5
VLI	1.68	141	ePn	47 46.50	0.9
KEK	2.20	320	ePg	47 58.00	4.8X
KZN	2.28	3	ePn	47 55.50	1.1
PLG	2.74	31	ePb	48 03.00	2.1
OHR	3.14	349	ePn	48 07.20	0.6
MMB	3.91	24	eP	48 16.00	-1.5
SKO	3.94	358	ePn	48 16.50	-1.4
KKB	4.00	16	eP	48 19.00	0.4
RZN	4.37	32	iP	48 23.00	-1.1
VTS	4.72	14	eP	48 29.00	-0.1
VOY	9.84	327	e(P)	49 37.50	-3.1X
			eS	51 27.00	

S.D. = 1.2 on 13 of 15 obs.

? SEP 13, 1990 14h 11m 11.29±27.78s
44 154 N ±151.km 7.439 E ±68.3km
DEPTH = 5.0km (geophysicist)
NORTHERN ITALY (545)
MD 1.0 (STR).

AUTN	0.16	183	Pg	11 14.66	0.0
TOUF	0.20	224	Pg	11 15.44	0.1
AURF	0.28	197	Pg	11 17.00	0.0
			Sg	11 23.34	
MVIF	0.33	219	Pg	11 17.91	-0.1
			Sg	11 25.14	

S.D. = 0.1 on 4 of 4 obs.

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* SEP 13, 1990 15h 01m 00.79± 1.95s
45.906 N ±12.4km 16.158 E ±16.4km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 3.2 (LJU), 2.9 (TRI). ML 2.8 (VIE). Felt (V) at Zagreb.

PTJ	0.14	268	iPgd	01 03.20	-1.0
ZAG	0.15	234	iPgd	01 04.60	0.3
			iSg	01 06.70	
VBY	0.75	238	ePg	01 14.50	-0.9
			eSg	01 25.00	
LJU	1.14	278	ePg	01 21.30	-0.9
			e	01 22.50	
			eSg	01 36.40	
CEY	1.22	263	ePg	01 24.30	0.7
			eSg	01 38.40	
RIY	1.36	246	iPgd	01 25.60	-0.2
			iSg	01 43.10	
VOY	1.58	275	ePn	01 29.00	0.0
			eSg	01 49.90	
TRI	1.69	264	ePg	01 31.30	0.9
			iSg	01 50.50	
SOP	1.80	9	eP	01 36.10	4.0X
ZST	2.38	15	i(Pn)	01 40.60	0.2
			i	01 58.00	
			i	02 21.50	
SRO	2.41	37	eP	01 46.70	5.8X
			i	01 55.70	
			e	02 34.80	
FVI	2.44	288	P	01 43.90	2.6
			eSn	02 21.00	
VVI	2.61	273	P	01 42.00	-1.7
			eSn	02 22.00	
SOTA	3.66	293	iPnd	02 02.00	3.2X
			iSn	02 43.00	
			iSg	03 01.70	
KHC	3.67	332	Pg	01 59.00	0.2
			Sg	02 26.00	
PRU	4.23	346	eP	02 05.50	-1.2
			eSg	02 21.00	
			e	02 43.40	
			eSg	03 19.00	

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

? SEP 13, 1990 16h 36m 53.39± 5.59s
59.923 N ±14.1km 8.757 E ±45.2km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.8 (BER).

ODD1	1.07	270	eP	37 13.19	-0.4
			eS	37 28.58	
BLS2	1.12	237	iPd	37 14.11	-0.4
			iS	37 30.38	
HYA	1.78	316	eP	37 24.00	-0.4
			iSg	37 49.48	
ASK	1.87	289	eP	37 26.74	1.1
			iSg	37 51.84	
KMY	1.92	250	eP	37 26.92	0.5
			eSg	37 53.55	
SUE	2.28	302	eP	37 31.20	-0.4
			iSg	38 04.08	

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

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* SEP 13, 1990 17h 08m 47.21± 0.69s
36.540 S ±15.2km 97.690 W ±14.0km
DEPTH = 10.0km (geophysicist)
5.0mb (4 obs.)
WEST CHILE RISE (686)

ZOBO	33.09	60	Pc	15 27.30	1.3
	1.0s		22.50nm		5.1mb
			S	20 28.00	
			LR	24 16.00	
CCH	33.76	64	(P)	15 25.00	-6.6X
SIV	38.37	68	P	16 10.20	-0.2
PPD	42.56	83	eP	16 45.80	0.9
SPA	53.64	180	iPd	18 11.30	0.4
	1.1s		17.26nm		5.0mb
SOB1	58.02	77	eP	18 40.40	-2.4
PLM	71.80	343	P	20 19.00	7.0X
JSC	72.10	14	P	20 12.50	-1.0
LHS	72.39	15	P	20 14.00	-1.1
RSCP	72.65	10	P	20 19.00	2.2
TKL	72.99	12	P	20 20.00	1.3
PRI	75.40	341	e(P)	20 32.50	-0.3
PRS	75.76	340	e(P)	20 35.50	0.8
TNP	76.42	344	P	20 38.40	-0.2
CMB	77.12	342	eP	20 42.60	0.3
ORV	78.83	341	eP	20 52.50	0.8
BW06	79.68	351	P	20 55.30	-1.2
	0.7s		3.65nm		4.5mb
WDC	80.07	341	eP	20 58.10	-0.2
RSSD	80.49	355	P	21 00.00	-0.7
NEW	86.19	347	P	21 29.00	-0.6
	1.2s		12.31nm		5.0mb
GRF	128.34	52	ePKP	27 55.80	0.6
MOX	128.80	50	ePKP	27 56.00	0.0
CLL	129.80	50	ePKP	27 57.00	-0.8
BJI	153.28	288	ePKP	28 45.00	6.1X
	1.2s		10.00nm		

S.D. = 1.1 on 21 of 24 obs.

SEP 13, 1990 17h 40m 29.24± 0.37s
11.003 N ± 6.3km 92.426 E ± 5.9km
DEPTH = 33.0km (normal)
4.6mb (14 obs.) 4.0Msz (4 obs.)
ANDAMAN ISLANDS REGION (703)

NST	8.82	57	eP	42 40.00	2.5X
BDT	8.90	45	eP	42 36.00	-2.5
	0.9s		60.50nm		5.8mb X
SNG	8.94	114	eP	42 32.60	-6.5X
CHG	10.00	38	eP	42 53.90	0.1
PSI	10.47	142	ePc	43 04.10	3.9X
IPM	10.64	126	ePc	43 05.80	3.2X
LOE	11.04	54	eP	43 10.80	2.8X
SHL	14.49	358	iP	43 58.00	3.8X
			eS	46 12.50	
KOD	14.72	268	eP	43 57.00	-0.3
GBA	14.87	282	P	43 57.90	-1.1
			S	45 29.90	
HYB	14.88	297	eP	43 57.50	-1.6
			e	44 05.50	
			eS	46 41.00	
KMI	17.11	33	Pd	44 29.00	1.2
PKI	17.75	339	P	44 36.60	0.7
GKN	18.42	338	P	44 43.60	-0.4
POO	19.45	295	eP	44 56.50	0.2
NDI	22.63	323	eP	45 32.50	3.9X
LZH	27.03	21	Pc	46 10.50	-0.1
	1.5s		34.00nm		4.8mb
Z	20s		0.30um		3.9Msz
			pP	46 17.50	25kmX
BJI	35.76	32	eP	47 27.50	0.4
	0.8s		16.00nm		5.0mb
Z	20s		0.30um		4.1Msz
MBL	41.79	140	eP	48 17.10	-0.4
MUN	48.42	153	eP	49 11.00	0.6
NWAO	49.69	152	eP	49 20.00	-0.1
WB5	51.45	126	iPc	49 33.00	-0.8
ASPA	53.22	131	iPc	49 46.10	-0.9
	0.6s		17.00nm		5.2mb
Z	19s		0.21um		4.2Msz
			LR	59 59.80	
FORR	53.90	142	eP	49 51.50	-0.3
STK	63.48	134	iPd	50 58.80	0.2
	1.3s		10.00nm		4.8mb
RMO	66.19	125	iPc	51 16.40	0.2
SUF	69.49	333	iP	51 44.50	8.3X
	0.5s		3.30nm		4.7mb
NUR	69.60	331	eP	51 47.00	10.1X
BRS	69.81	125	iP	51 40.00	1.1
BUL	69.99	244	iPc	51 48.00	7.8X
	1.0s		17.00nm		5.1mb
SOD	70.69	338	eP	51 43.00	-0.5
BCAO	73.37	271	iPc	52 08.50	8.0X
	0.6s		6.00nm		4.8mb
HFS	74.92	329	eP	52 11.20	2.7X
	0.3s		1.30nm		4.4mb
NB2	76.19	330	P	52 23.40	7.6X
	0.6s		1.40nm		4.1mb
LPG	79.23	314	eP	52 34.80	1.6
	0.8s		3.35nm		4.4mb
LPL	79.24	314	eP	52 34.90	1.7
	0.8s		2.70nm		4.3mb
LOR	81.05	316	eP	52 43.70	1.2
	1.0s		4.00nm		4.4mb
Z	20s		0.08um		4.0Msz
SSF	81.31	316	eP	52 43.60	-0.2
	0.8s		4.05nm		4.5mb
EKA	84.20	325	P	53 06.00	7.5X
	0.6s		1.90nm		4.4mb

S.D. = 1.0 on 25 of 39 obs.

SEP 13, 1990 19h 07m 49.16± 0.32s
43.942 N ± 5.8km 81.779 E ± 6.4km
DEPTH = 33.0km (normal)
4.8mb (12 obs.)
NORTHERN XINJIANG, CHINA (332)

NDI	15.66	195	eP	11 29.00	0.0
			eS	14 13.00	
GKN	16.07	171	P	11 35.70	1.3
GUN	16.33	167	P	11 41.40	3.5X
KKN	16.36	169	P	11 39.60	1.5
PKI	16.60	169	P	11 40.60	-0.6

13d 19h

LZH	18.60	107	Pc	12	05.00	-0.9
	1.5s		42.00nm			4.4mb
Z	17s		0.20um			4.4Msz
E	10s		0.30um			
			sP	12	12.00	
			eS	15	17.50	
MAIO	18.64	253	eP	12	07.00	0.7
BJI	25.75	87	eP	13	19.00	0.8
CHG	28.90	145	eP	13	47.50	0.4
GBA	30.46	188	Pd	13	59.90	-1.1
	0.8s		2.60nm			4.1mb
SUF	36.71	320	iP	14	55.50	1.0
	0.5s		10.50nm			5.0mb
SOD	37.12	328	eP	14	51.00	-6.9X
NUR	37.35	317	iP	15	00.80	0.9
	0.8s		19.10nm			5.0mb
KEV	37.51	332	eP	14	50.00	-11.1X
HFS	42.81	317	eP	15	45.00	-0.1
	0.6s		4.80nm			4.4mb
NB2	43.86	319	P	15	53.80	0.2
	0.6s		8.40nm			4.7mb
SQTA	47.95	300	iPc	16	26.50	0.1
	0.5s		11.70nm			5.2mb
			id	16	26.70	
			i	16	33.10	
			i	16	36.50	
LPG	51.48	300	eP	16	53.90	0.3
	0.6s		5.40nm			4.7mb
LPL	51.48	300	eP	16	54.00	0.4
	0.6s		9.45nm			4.9mb
INK	64.99	14	eP	18	27.50	0.0
BCAO	67.83	254	iPc	18	44.90	-1.4
	0.2s		44.00nm			6.2mb X
			id	18	51.60	
NANU	73.06	148	eP	19	18.00	0.4
WB5	79.67	131	eP	19	55.20	0.3
LKO	81.57	275	Pc	20	02.82	-2.4
	0.6s		7.00nm			4.9mb
MUN	81.84	151	iPd	20	05.90	-0.2
ASPA	82.49	133	iPc	20	09.10	-0.6
	0.8s		7.00nm			4.8mb
NWAO	83.06	151	eP	20	12.00	-0.4
KIC	83.13	272	P	20	13.10	-0.1
TIC	83.13	273	P	20	13.30	0.0
LIC	83.43	272	P	20	14.80	0.0
FORR	85.63	141	iPd	20	25.00	-0.3
	0.3s		5.00nm			5.2mb
S.D. = 0.8			on 28 of 31 obs.			

SEP 13, 1990 19h 12m 10.96± 0.46s
43.894 N ± 4.9km 11.952 E ± 4.2km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

SFI	0.08	291	Pd	12	14.40	1.0
			eSg	12	18.00	
PGD	0.17	264	Pd	12	15.60	0.7
			eSg	12	19.00	
CRE	0.27	180	Pd	12	16.50	-0.1
			eSg	12	20.80	
RSM	0.36	84	P	12	19.60	1.2
			eSg	12	26.00	
ARV	0.82	118	P	12	26.80	-0.1
			iSg	12	40.40	
MME	0.95	289	P	12	30.10	0.9
ASS	0.97	148	P	12	29.50	0.0
			eSn	12	43.00	
BDI	0.99	280	P	12	30.00	0.2
			eSg	12	43.60	
PII	1.05	261	P	12	30.10	-0.6
			eSg	12	44.70	
MNS	1.60	160	P	12	39.00	-0.4
TRI	2.23	35	P	12	48.00	-0.4
MDI	2.47	321	P	12	51.00	-0.8
VOY	2.54	32	ePn	12	51.60	-1.4
			e(Sn)	13	32.00	
FVI	2.76	12	P	12	56.00	0.0
ORO	3.32	303	P	13	02.00	-2.0
SQTA	3.37	351	iPnc	13	06.60	1.8
			iSn	13	50.10	
S.D. = 1.1			on 16 of 16 obs.			

SEP 13, 1990 19h 21m 26.37± 0.65s
47.031 N ± 5.4km 9.541 E ± 5.6km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 2.2 (VIE).

SAX	0.26	329	iP	21	30.80	-1.1
LLS	0.41	247	eP	21	34.90	0.2
OSS	0.54	130	iP	21	36.50	-0.8
VDL	0.55	185	iP	21	37.10	-0.4
ZLA	0.91	300	iP	21	45.00	1.3
SLE	1.02	316	iP	21	45.10	-0.6
TMA	1.03	207	eP	21	46.10	0.1
SQTA	1.15	80	iPgc	21	49.20	1.2
			i	21	50.00	
			iSg	22	07.70	
MMK	1.46	229	eP	21	53.50	0.5
S.D. = 1.0			on 9 of 9 obs.			

% SEP 13, 1990 19h 28m 17.82± 0.73s
32.397 S ± 6.9km 149.142 E ± 9.4km
DEPTH = 10.0km (geophysicist)
NEW SOUTH WALES, AUSTRALIA (601)
ML 3.5 (RIV).

BWA	2.11	196	iP	28	54.00	0.3
RIV	2.21	131	e(P)	28	55.00	-0.1
			ePg	28	59.70	
			eSn	29	20.00	
			iSg	29	23.60	
CNB	2.92	176	eP	29	04.50	-0.7
	0.2s		71.00nm			
			e	29	08.20	
			eS	29	27.70	
			e	29	45.30	
CAN	2.92	182	ePn	29	05.00	-0.2
			ePg	29	08.30	
			eSn	29	27.00	
			iSg	29	44.00	
COO	2.97	53	e(P)	29	07.00	1.1
			eS	29	47.00	
RMQ	5.90	357	eP	29	46.00	-1.3
			e	30	09.00	
			e	31	19.00	
STK	6.42	273	iPc	29	55.60	0.8
	0.9s		8.00nm			4.6mb X
			iS	31	06.00	
S.D. = 1.0			on 7 of 7 obs.			

& SEP 13, 1990 19h 55m 32.02s
65.537 N 144.695 W
DEPTH = 40.7km
ALASKA (676)
<AGS-P>.

FYU	1.06	348	eP	55	50.26	-0.3
			eS	56	04.52	
GLM	1.26	245	eP	55	54.09	0.6
			eS	56	10.04	
FBA	1.45	245	eP	55	57.45	1.3
			eS	56	14.51	
CCB	1.59	237	eP	55	58.26	0.1
			eS	56	17.81	
WRH	1.80	235	iP	55	58.97	-2.1
			eS	56	18.05	
DOT	1.92	172	eP	56	05.83	3.0
6 obs. ossocioted						

? SEP 13, 1990 20h 05m 56.53± 7.04s
32.498 S ±46.6km 71.704 W ±38.6km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.75	129	iPd	06	09.30	-1.6
			iS	06	20.50	
JACH	0.96	101	iPd	06	14.00	0.3
			iS	06	26.80	
LCCH	0.98	173	iP	06	14.00	0.0
			iS	06	27.00	
PEL	1.07	127	iPd	06	15.50	0.2
			iS	06	30.00	
FCH	1.45	125	iPd	06	21.10	0.1
			iS	06	40.30	
LNV	1.47	170	iPd	06	20.60	-0.4
			iS	06	40.50	
PCH	1.50	139	eP	06	22.00	0.5
			iS	06	41.80	
CHCH	1.68	149	iP	06	25.00	0.9
			iS	06	47.20	
MDZ	2.44	100	eP	06	42.20	7.2X
S.D. = 0.9			on 8 of 9 obs.			

SEP 13, 1990 21h 18m 18.20± 0.49s
47.471 N ± 4.5km 7.247 E ± 4.9km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
MD 1.8 (STR).

LOMF	0.31	247	Pg	18	23.89	-0.8
			Sg	18	28.58	
MOF	0.39	349	Pg	18	26.21	0.0
ECH	0.75	355	Pg	18	33.12	0.3
			Sg	18	43.64	
SLE	0.89	70	eP	18	34.30	-1.0
CDF	0.94	1	Pg	18	36.17	0.0
			Sg	18	49.92	
VITF	1.13	312	Pg	18	39.97	0.6
			Sg	18	56.46	
LLS	1.34	116	eP	18	43.00	0.0
SAX	1.44	98	eP	18	44.30	-0.3
MMK	1.50	161	iP	18	45.10	-0.3
TMA	1.76	140	iP	18	50.10	0.9
VDL	1.81	122	eP	18	50.60	0.7
S.D. = 0.7			on 11 of 11 obs.			

% SEP 13, 1990 21h 44m 43.55± 1.07s
41.889 N ± 9.2km 14.070 E ± 9.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SDI	0.26	226	Pc	44	49.10	-0.1
			eSg	44	54.50	
DUI	0.37	128	Pd	44	50.90	-0.3
			eSg	44	55.90	
AZI	0.48	282	P	44	49.10	-4.3X
			eSg	44	54.50	
AQU	0.68	313	P	44	55.20	-1.9
			eSg	45	08.00	
RDP	1.02	263	P	45	03.00	0.1
			eSn	45	17.50	
RMP	1.02	266	P	45	03.70	0.8
MNS	1.15	296	P	45	05.00	0.0
ASS	1.58	319	P	45	10.50	-1.1
ARV	1.81	333	P	45	17.50	2.5
S.D. = 1.5			on 8 of 9 obs.			

% SEP 13, 1990 21h 47m 03.38± 1.04s
43.398 N ± 5.8km 5.414 E ± 7.5km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.5 (STR).

GELF	0.02	144	Pg	47	04.68	-0.7
8ERF	0.22	113	Pg	47	09.08	0.9
TREF	0.23	355	Pg	47	08.53	0.2
PUYF	0.25	57	Pg	47	08.17	-0.5
CDR	0.38	43	ePg	47	10.90	-0.2
			eSg	47	16.40	
PRAF	0.44	336	Pg	47	12.57	0.1
VILF	0.50	26	Pg	47	13.78	0.2
TAVF	0.52	65	Pg	47	13.65	-0.2
GANF	0.70	31	Pg	47	17.22	0.0
S.D. = 0.5			on 9 of 9 obs.			

? SEP 13, 1990 21h 57m 38.96± 2.57s
16.181 N ±25.7km 98.594 W ±10.9km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	1.39	300	iP	58	02.30	0.0
			iS	58	18.23	
OXX	2.00	63	iP	58	11.36	0.0
			(S)	58	32.00	
PPM	2.87	359	iP	58	23.96	0.1
			(S)	58	48.42	
IIA	2.95	359	iP	58	24.52	-0.1
			iS	58	58.42	
CRX	3.37	342	(P)	58	35.20	4.3X
IIJ	3.70	343	iP	58	42.00	6.4X
			(S)	59	24.50	
EVV	3.84	53	(P)	58	58.30	21.2X
LVVM	4.08	30	(P)	58	44.70	4.0X
S.D. = 0.1			on 4 of 8 obs.			

SEP 13, 1990 22h 05m 13.41± 0.54s
39.526 N ± 4.4km 28.489 E ± 5.4km
DEPTH = 10.0km (geophysicist)
4.1mb (12 obs.)
TURKEY (366)
ML 4.2 (ATH).

GBZT	1.46	30	ePn	05	40.00	0.2
			ePg	05	42 00	
			iSg	06	00.00	
ITU	1.63	14	iPnd	05	44.50	2.3
			iSg	06	04.50	
PRK	1.74	261	iPbd	05	44.60	0.8
			eSb	06	06 80	
CIN	1.95	189	iPd	05	46.00	-0.8
RDO	2.78	307	ePn	05	59.10	0.4
KDZ	3.16	313	iPd	06	05.00	0.9
JMB	3.27	334	iP	06	06.00	0.3
BBTK	3.31	83	ePn	06	06.00	-0.4
			i	06	15 00	
			iS	07	04.00	
DIM	3.38	319	iP	06	07.00	-0.2
APE	3.38	224	ePb	06	15.00	7.7X
RZN	3.59	308	iP	06	11.00	0.5
PLD	3.86	313	iP	06	14.00	-0.1
PLG	3.97	284	ePn	06	15.20	-0.5
			eSn	06	59.50	
ATH	4.04	249	ePn	06	17.20	0.6
			eSn	07	03.50	
KAP	4.10	195	ePn	06	17.50	0.0
PSN	4.16	357	iP	06	18.00	-0.3
MMB	4.17	301	iPc	06	18.00	-0.5
PVL	4.39	328	iPc	06	22.00	0.5
KAS	4.43	64	eP	06	34.00	11.8X
KKB	4.73	301	iP	06	27.00	0.5
VTS	5.03	309	eP	06	32.00	1.2
TLB	5.07	356	eP	06	30.00	-1.2
VLI	5.20	239	ePn	06	31.80	-1.3
EVR	5.22	265	ePn	06	34.20	0.7
KZN	5.22	281	ePn	06	33.30	-0.2
ISR	5.79	346	eP	06	40.00	-1.4
SKO	5.88	297	ePn	06	40.00	-2.7
N	11s		1.80um			
E	11s		1.11um			
			LR	08	58 00	
DRA	6.03	330	eP	06	44.00	-0.8
OHR	6.09	288	ePn	06	44.20	-1.5
MLR	6.25	343	iPc	06	48.00	0.0
VRI	6.47	349	ePd	06	50.00	-1.0
			ec	14	36.00	
DEV	7.57	329	ePd	07	06.00	-0.3
BZS	7.92	322	ePc	07	09.00	-2.3
			e	14	56.00	
BEO	7.97	314	eP	07	17.00	5.0X
LPG	17.08	298	eP	09	17.80	3.8X
	0.8s		2.70nm		3.4mb	
LPL	17.10	298	eP	09	17.90	3.7X
CDF	17.62	307	eP	09	24.60	4.1X
	1.0s		8.00nm		3.8mb	
AVF	19.67	300	eP	09	46.50	1.1
	0.8s		4.05nm		3.8mb	
DOU	19.89	310	Pc	09	48.70	1.1
	0.8s		10.00nm		4.2mb	
MAF	20.09	298	eP	09	51.80	2.0
	1.0s		10.00nm		4.1mb	
TCF	20.35	298	eP	09	54.20	1.7
	0.7s		3.30nm		3.8mb	
LDF	22.36	303	eP	10	13.20	0.3
	1.0s		8.00nm		4.1mb	
GRR	22.79	303	eP	10	17.10	0.0
	0.8s		10.75nm		4.4mb	
LPF	22.84	302	eP	10	17.50	-0.1
	0.8s		8.05nm		4.3mb	
SLL	23.02	341	eP	10	18.20	-1.0
	0.9s		10.20nm		4.4mb	
NB2	24.05	339	P	10	30.80	1.5
	0.9s		5.30nm		4.1mb	
BCAO	36.08	197	ePc	12	17.40	0.2
	0.6s		6.00nm		4.6mb	
S.D. = 1.1			on	41	of	47 obs.

SEP 13, 1990 22h 10m 07.15± 0.39s
27.161 N ± 6.3km 35.125 E ± 5.1km
DEPTH = 10.0km (geophysicist)
4.6mb (25 obs.)
WESTERN ARABIAN PENINSULA (555)
MD 4.2 (HLW).

BADA	1.36	355	iPd	10	31.70	-0.4
WAJH	1.62	127	iP+	10	33.50	-2.3
AYN	1.87	24	iPd	10	39.90	0.5
HQL	2.10	358	iPd	10	42.30	-0.5
MBH	2.61	355	iP	10	49.50	-0.5
NOH	3.52	358	iPc	11	02.50	-0.5
MKT	3.77	0	iP	11	06.00	-0.7
			eS	11	50.60	
KOT	4.00	314	ePnc	11	08.00	-1.8
			eSn	11	44.00	
LISJ	4.08	4	Pd	11	24.23	13.4X
QTRJ	4.20	10	Pc	11	25.16	12.5X
HLW	4.28	310	ePn	11	11.00	-2.8
			eSn	11	45.00	
MKRJ	4.40	6	Pd	11	28.00	12.4X
DSI	4.40	3	iP	11	14.40	-1.1
MDSJ	4.56	12	Pc	11	30.17	12.3X
MASJ	4.58	6	Pc	11	30.15	12.0X
SALJ	4.86	6	Pc	11	34.87	12.8X
ZNT	5.06	359	iPc	11	24.00	-0.9
			eS	12	22.00	
BURJ	5.10	6	Pd	11	39.44	14.0X
SHBJ	5.55	22	Pc	11	43.62	11.7X
SHMJ	5.57	6	Pc	11	44.61	12.4X
BHL	6.74	4	Pn	11	56.00	7.4X
			Sn	14	04.00	
QASM	7.60	96	iP+	12	01.10	0.4
AFIF	7.88	111	iP+	12	03.70	-1.0
			iS	14	04.00	
RYD	10.62	101	eP	12	45.00	2.5
KMTA	11.45	140	eP	12	53.70	-0.3
TAB	14.39	38	eP	13	49.00	16.0X
			e	17	35.00	
OHR	18.25	323	eP	14	15.50	-6.6X
SKO	18.55	326	iP	14	24.00	-1.7
			i	14	33.00	
SOI	19.36	309	P	14	35.00	-0.7
ATN	19.82	309	Pd	14	40.90	0.1
ORI	20.14	314	P	14	54.00	9.9X
MNO	20.25	307	P	14	46.00	0.4
FAI	20.72	304	P	14	50.00	-0.2
MGR	20.75	314	P	14	50.00	-0.5
GIB	20.76	307	P	14	51.00	0.3
MCT	20.89	305	Pd	14	54.60	2.4
BEO	21.19	330	eP	14	53.50	-1.4
DUI	22.28	316	P	15	08.00	2.0
SDI	22.71	315	P	15	12.80	2.6
MNS	23.78	315	P	15	22.00	1.3
PTJ	24.12	326	eP	15	24.00	0.1
ASS	24.17	317	P	15	26.00	1.5
VBY	24.20	324	eP	15	26.50	1.8
ARV	24.24	318	P	15	26.50	1.4
SRO	24.45	332	eP	15	39.70	12.6X
CEY	24.79	324	e(P)	15	31.50	1.1
SPC	24.82	336	eP	15	31.70	0.8
LJU	24.94	324	e(P)	15	33.00	1.2
TRI	25.13	323	eP	15	34.20	0.6
PGD	25.19	318	P	15	36.00	1.6
ZST	25.27	331	e(P)	15	35.60	0.7
VOY	25.27	324	eP	15	35.30	0.3
VVI	26.03	322	P	15	42.00	0.0
FVI	26.22	324	P	15	44.00	0.3
SAL	26.87	320	P	15	52.00	2.3
SQTA	27.45	323	iPc	15	55.60	0.4
	0.9s		12.90nm		4.7mb	
			i	15	59.00	
			i	16	27.90	
KHC	27.54	329	iPc	15	56.00	0.1
	1.0s		5.50nm		4.3mb	
BCAO	27.60	218	ePd	15	54.40	-2.3
	0.8s		11.00nm		4.7mb	
			ic	16	19.10	
KSP	27.65	334	eP	15	57.00	0.1
PRU	27.72	331	P	15	56.50	-1.0
			e	16	05.20	
GRC1	28.43	326	eP	16	03.80	-0.1
	1.7s		26.00nm		4.7mb	
			e	16	07.80	
			e	16	11.80	
BNI	28.89	316	P	16	09.00	0.8
LPG	29.06	317	eP	16	10.90	1.0
	1.0s		4.00nm		4.2mb	
LPL	29.08	317	eP	16	10.90	0.8
	0.8s		2.70nm		4.1mb	
CLL	29.36	331	eP	16	11.00	-1.2
	1.3s		17.00nm		4.7mb	
MOX	29.51	329	iPc	16	13.50	-0.1
	1.7s		31.00nm		4.8mb	
BSF	30.24	321	eP	16	19.40	-0.9
	0.8s		8.05nm		4.6mb	
LBF	31.46	317	eP	16	29.90	-1.1
	1.0s		7.00nm		4.5mb	
LOR	31.66	318	eP	16	31.80	-0.9
	1.0s		6.00nm		4.5mb	
SSF	31.78	317	eP	16	32.50	-1.2
	0.9s		4.90nm		4.4mb	
BGF	31.96	316	eP	16	34.80	-0.5
	0.8s		30.20nm		5.3mb	
MAF	31.99	315	eP	16	34.90	-0.7
	1.0s		4.00nm		4.3mb	
LPO	32.27	312	eP	16	38.10	0.0
	1.0s		16.00nm		4.9mb	
RJF	32.29	313	eP	16	38.00	-0.2
	1.0s		8.00nm		4.6mb	
LSF	32.65	315	eP	16	41.30	-0.1
	1.0s		14.00nm		4.8mb	
LFF	32.66	312	eP	16	41.70	0.3
	0.8s		10.75nm		4.8mb	
DOU	32.69	323	P	16	40.80	-0.8
LDF	34.65	318	eP	16	56.50	-2.1
	0.8s		5.35nm		4.5mb	
TOL	34.77	302	eP	17	01.60	1.8
FLN	34.94	318	eP	16	59.90	-1.2
	0.8s		9.40nm		4.7mb	
NB2	37.53	341	P	17	21.00	-1.8
	1.3s		7.30nm		4.3mb	
EKA	39.44	326	Pd	17	39.10	0.2
	0.9s		3.80nm		4.1mb	
HYB	41.16	94	eP	17	54.00	0.5
GBA	41.69	100	Pc	17	56.60	-1.2
	0.8s		3.70nm		4.2mb	
GKN	43.65	77	P	18	14.20	0.3
DMN	44.13	77	P	18	20.20	2.2
KKN	44.25	77	P	18	19.20	0.3
	0.7s		15.00nm		5.0mb	
LZH	58.12	63	Pc	20	03.00	-0.4
	1.5s		23.00nm		5.0mb	
			pP	20	08.50	18kmX
S.D. = 1.2			on	74	of	88 obs.

& SEP 13, 1990 22h 15m 30.09s
58.373 N 153.655 W
DEPTH = 60.2km
KODIAK ISLAND REGION (13)
<AGS-P>.

CDD	0.56	1	iP	15	42.56	-0.3
			iS	15	53.09	
KDC	0.88	135	eP	15	44.96	-1.7
MCNL	0.89	337	iP	15	46.20	-0.6
			iS	15	58.31	
AUI	0.97	7	eP	15	47.13	-0.8
			iS	16	01.40	
AUE	1.00	8	iP	15	47.80	-0.5
			iS	16	02.41	
AUH	1.00	6	eP	15	47.66	-0.7
OPT	1.30	10	iP	15	51.37	-1.1
			iS	16	08.47	
PDB	1.45	349	eP	15	52.87	-1.5
			S	16	11.45	
CNPM	1.71	46	eP	15	56.10	-1.9
CKL	2.91	13	eP	16	11.83	-3.2
SPU	2.93	15	iP	16	12.68	-2.6
BGL	2.97	12	iP	16	13.50	-2.4
NCG	3.13	13	eP	16	15.63	-2.6
13 obs. associated						

? SEP 13, 1990 23h 28m 46.69± 1.16s
41.838 N ±12.8km 14.083 E ± 9.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

SDI	0.24	237	Pc	28	51.50	-0.3
			eSg	28	56.50	
DUI	0.33	122	Pc	28	53.70	0.1
			eSg	28	59.10	
AQU	0.72	316	P	28	59.90	-1.0
			eSg	29	10.40	
MNS	1.18	298	P	29	10.00	1.3
			eSn	29	26.00	
S.D. = 1.7			on	4	of	4 obs.

% SEP 14, 1990 00h 17m 27.70± 0.68s
23.164 N ± 5.8km 120.963 E ± 6.0km
DEPTH = 10.0km (geophysicist)
TAIWAN (244)

TWG	0.36	164	iPd	17	35.10	0.1
			eS	17	40.50	
TWF1	0.36	59	iPc	17	34.80	-0.3

14d 00h

TWK	0.45	283	iPc	17	36.30	-0.6			1.1s	11.04nm		4.6mb			1.2s	26.00nm		5.1mb
			eS	17	43.50		FFC	38.45	59	eP	25	44.00	-1.4	KHC	79.09	359	iPc	30	28.00	0.4
TWM1	0.60	236	eP	17	40.10	0.3		0.6s	7.00nm		4.7mb				1.2s	21.00nm		5.0mb
TWD	1.08	32	ePd	17	47.90	-0.1	IMW	38.53	79	eP	25	46.50	-0.1	LDF	79.17	8	iPc	30	27.40	-0.6
TWO	1.11	354	iPc	17	49.20	0.6	CLC	39.30	94	eP	25	55.00	2.2		0.8s	13.45nm		5.0mb
ANP	2.08	14	eP	18	06.10	3.0X	DUG	39.51	85	eP	25	54.70	0.1	GRR	79.31	8	iPc	30	28.50	-0.2
S.D. = 0.5 on 6 of 7 obs.							SBB	39.90	95	eP	26	05.00	7.2X		0.9s	19.65nm		5.1mb
----------							BW06	39.99	79	eP	25	58.50	-0.2	LPF	79.64	8	iPc	30	30.40	-0.1
? SEP 14, 1990 00h 35m 39.72±19.76s								1.1s	23.91nm		4.9mb				0.9s	19.65nm		5.1mb
0.876 S ±135.km 78.315 W ±21.9km							GSC	40.12	94	eP	26	03.00	3.4X	CDF	79.77	3	iPc	30	31.20	-0.1
DEPTH = 10.0km (geophysicist)							MAT	40.15	269	eP	26	01.00	1.2		1 0s	16.00nm		5.0mb
ECUADOR (107)								0.9s	25.21nm		5.0mb			ZST	79.92	356	iP	30	32.60	0.6
							DAU	40.33	83	eP	26	02.30	0.7	HAU	80.14	3	iPc	30	33.10	-0.2
VC1	0.25	340	iP+	35	45.00	-0.3	RVR	40.64	96	eP	26	13.00	9.2X		0.8s	18.80nm		5.1mb
			S	35	50.80		PLM	41.39	96	eP	26	17.00	6.8X	SRO	80.25	355	iP	30	34.20	0.4
OUR	0.73	343	eP	35	56.00	1.6	GLA	42.84	95	eP	26	23.00	1.1	BSF	80.33	3	iPc	30	34.10	-0.3
			eS	36	05.00		GOL	44.35	80	eP	26	34.00	-0.4		0.8s	20.15nm		5.2mb
GGP	0.75	338	P+	35	54.40	-0.4		1.0s	12.75nm		4.7mb			SLE	80.44	2	ePc	30	34.90	0.0
			eS	36	06.00		GLD	44.41	80	eP	26	35.00	0.2	SOP	80.46	356	iP	30	35.80	0.9
YANA	0.80	341	eP	35	54.70	-0.9		1.0s	24.00nm		5.0mb			BHG	80.51	359	iPd	30	35.90	0.7
			S	36	06.80		DAG	49.94	9	iPc	27	15.60	-1.7		1.0s	20.00nm		5.1mb
CAYA	1.01	19	eP	35	59.00	-0.1		1.0s	23.00nm		5.2mb			ZLA	80.72	2	ePc	30	36.40	0.0
			eS	36	14.00		BJI	51.28	288	eP	27	27.50	-0.5	LOR	80.76	5	iPc	30	36.50	-0.1
S.D. = 1.3 on 5 of 5 obs.								1.0s	22.00nm		5.1mb				1.0s	24.00nm		5.1mb
----------								Z 16s	0.35um		4.5MszX				Z 20s	0.10um		4.2Msz
• SEP 14, 1990 01h 18m 05.13± 0.62s							SIO	52.39	78	eP	27	35.00	-1.4	SSF	80.95	5	iPc	30	37.70	0.2
27.971 N ± 7.1km 139.596 E ±12.0km							TUL	52.59	78	eP	27	36.40	-1.5		1.0s	30.00nm		5.2mb
DEPTH = 500.0km (geophysicist)								1.0s	5.70nm		4.5mb			SAX	80.97	1	ePc	30	38.30	0.3
4.6mb (5 obs.)								Z 21s	0.10um		3.8Msz			SOTA	81.02	0	iPc	30	38.50	0.5
BONIN ISLANDS REGION (212)							SSE	54.28	276	Pc	27	50.50	0.1		0.9s	45.10nm		5.5mb
								1.5s	49.00nm		5.3mb					i	30	47.40	
CHJJ	8.07	357	P	20	02.50	-0.9	SCH	55.32	44	eP	27	56.00	-1.8	LBF	81.05	5	iPc	30	37.80	-0.3
			S	21	34.50		SOD	60.26	353	iP	28	30.60	-1.7		1.0s	18.00nm		5.0mb
KAKJ	8.22	3	P	20	04.50	-0.4	BLA	60.68	66	eP	28	33.80	-1.8	MFF	81.14	8	iPc	30	38.70	0.2
			S	21	38.10			0.9s	20.17nm		5.3mb				0.9s	32.75nm		5.3mb
MAT	8.63	353	iPd	20	08.50	-0.7	LZH	61.10	292	iPc	28	37.50	-1.1	AVF	81.21	6	iPc	30	38.70	-0.2
YAMJ	10.18	2	P	20	26.40	0.8		1.3s	53.00nm		5.5mb				1.0s	26.00nm		5.2mb
			eS	22	22.70			Z 17s	0.50um		4.7MszX			LLS	81.35	2	ePc	30	40.40	0.5
OFUJ	11.21	8	P	20	37.40	1.0		N 12s	0.30um					OGA	81.37	0	iPd	30	41.00	1.0
			eS	22	43.50			E 12s	0.20um						0.6s	11.00nm		5.0mb
CVP	19.28	242	eP	22	13.00	15.4X			pP		28	45.00	24kmX	SMF	81.38	5	iPc	30	39.60	-0.2
CHG	38.26	265	eP	24	40.00	-3.1X	CBN	61.68	63	e(P)	28	40.00	-2.3		0.9s	29.50nm		5.3mb
CHTO	38.26	265	P	24	43.30	0.3	SUF	64.89	353	iP	28	58.20	-4.9X	BGF	81.41	6	iPc	30	40.10	0.1
GUN	47.12	283	P	25	53.40	0.0	NUR	67.20	353	iP	29	16.00	-1.8		1.2s	29.75nm		5.2mb
	0.4s	18.00nm			4.9mb			0.8s	76.30nm		5.8mb			OSS	81.55	1	ePc	30	41.40	0.5
PKI	47.60	283	P	25	57.00	-0.1	HFS	68.06	359	iPc	29	21.00	-2.2	LSF	81.63	7	iPc	30	41.10	0.0
	0.4s	6.00nm			4.4mb			0.4s	33.10nm		5.8mb				1.0s	52.00nm		5.5mb
KKN	47.66	283	P	25	57.50	0.1		Z 17s	0.07um		4.0MszX			TCF	81.64	6	iPc	30	41.00	-0.2
	0.4s	12.00nm			4.7mb				LR	53	36.00				0.9s	13.90nm		5.0mb
W85	47.84	187	eP	25	58.20	-0.2	UPP	68.24	357	iP	29	22.10	-2.2	FVI	81.64	359	P	30	40.50	-0.6
DMN	47.86	283	P	25	59.00	0.1	KMI	69.77	285	Pc	29	34.00	-0.5	MAF	81.73	6	eP	30	41.90	0.3
	0.4s	13.00nm			4.7mb			1.5s	50.00nm		5.4mb				0.7s	8.80nm		4.9mb	
WRA	47.90	187	Pc	25	58.80	-0.1	EKA	72.22	9	Pd	29	47.90	-0.6	VDL	81.74	1	ePc	30	42.50	0.6
	0.5s	2.00nm			3.8mb			0.9s	12.00nm		4.9mb			AGO	81.93	6	P	30	43.09	0.4
GKN	48.17	284	P	26	01.20	0.1	ETA	74.50	11	iPd	30	01.50	-0.3	PLDF	82.04	5	P	30	43.84	0.5
NUR	77.24	333	eP	29	08.00	0.1		0.9s	58.00nm		5.6mb			DIX	82.10	3	ePc	30	44.60	0.7
S.D. = 0.5 on 14 of 16 obs.							ECB	74.75	11	iPd	30	03.00	-0.3	TMA	82.11	2	eP	30	44.30	0.5
----------								1.1s	58.00nm		5.5mb			MMK	82.14	2	ePc	30	45.30	1.2
SEP 14, 1990 01h 18m 25.44± 0.25s							ECP	74.99	11	iPd	30	04.30	-0.3	VOY	82.18	358	e(P)	30	42.50	-1.6
52.140 N ± 5.7km 168.622 W ± 3.3km								1.0s	63.00nm		5.6mb			PYM	82.22	6	P	30	44.48	0.2
DEPTH = 33.0km (normal)							WTS	76.17	3	eP	30	11.00	-0.3	VVI	82.25	359	P	30	44.50	0.1
5.1mb (65 obs.) 4.0Msz (3 obs.)								1.0s	17.00nm		5.0mb			PTJ	82.26	357	eP	30	44.50	0.0
FOX ISLANDS, ALEUTIAN ISLANDS (9)							CHTO	76.84	284	iPc	30	15.80	0.1	ZAG	82.34	357	eP	30	45.00	0.2
							CLL	76.92	359	eP	30	15.00	-0.6	MDI	82.45	1	P	30	45.00	-0.3
ADK	4.99	270	iPc	19	39.90	0.0		1.3s	24.00nm		5.1mb			ORX	82.56	2	P	30	46.68	0.6
SDN	5.79	53	iPc	19	50.90	-0.3	GUN	77.24	299	P	30	18.20	0.0	RJF	82.57	7	eP	30	45.90	-0.1
KDC	10.83	52	eP	20	56.70	-4.4X	KSP	77.31	357	iPc	30	17.20	-0.6		1.0s	8.00nm		4.7mb	
SVW	11.47	33	iPc	21	10.80	1.0	MEM	77.53	4	P	30	19.00	0.1	ORO	82.57	2	P	30	47.00	0.9
TTA	12.73	27	iPd	21	26.90	0.1	MOX	77.59	360	iPd	30	19.50	0.2	SAL	82.63	1	P	30	46.00	-0.3
	1.1s	28.13nm			5.3mb			1.1s	33.00nm		5.3mb			LPL	82.64	3	eP	30	47.90	1.2
TOA	15.66	42	iPd	22	01.40	-3.7X	KKN	77.65	299	P	30	20.50	0.2		1.0s	10.00nm		4.8mb	
	0.6s	102.60nm			5.2mb		PKI	77.76	299	P	30	20.60	-0.5	LPG	82.66	3	eP	30	48.10	1.2
IMA	15.86	23	iPd	22	09.00	1.3	GKN	77.83	300	P	30	21.10	-0.1		1.1s	12.20nm		4.9mb	
FBA	16.67	32	iPd	22	14.60	-3.2X	DMN	77.89	299	P	30	21.70	0.0	LSD	82.71	3	P	30	48.01	0.9
	0.9s	77.71nm			4.8mb		KRA	77.92	354	ePd	30	20.90	-0.2	LBL	82.76	6	P	30	47.30	0.4
INK	23.29	33	eP	23	27.00	-3.6X				e	30	39.40		LFF	82.87	8	iPc	30	48.00	0.5
	0.7s	28.00nm			4.9mb										0.6s	21.65nm		5.4mb	
YKA	30.05	49	eP	24	33.40	0.2	DOU	77.98	4	P	30	21.00	-0.4	CAF	82.98	7	iPc	30	48.80	0.6
	0.5s	2.90nm			4.3mb		BDT	78.02	283	eP	30	19.10	-3.0X		0.8s	10.75nm		5.0mb	
PNT	30.68	75	eP	24	40.00	1.1	PRU	78.21	358	iPc	30	22.40	-0.3	RSP	83.02	3	P	30	49.34	0.8
NEW	32.62	76	eP	24	54.80	-1.2		1.2s	24.80nm		5.1mb			BEO	83.10	354	i(P)	30	49.00	0.3
LBFM	33.25	90	eP	25	02.20	0.5	GRF	78.55	0	iPc	30	24.90	0.3	BNI	83.10	3	Pc	30	50.30	1.4
WDC	33.29	92	eP	24	56.50	-5.3X		1.1s	42.00nm		5.4mb			LPO	83.16	7	iPc	30	49.20	0.1
SES	35.26	69	eP	25	18.00	-0.7	SPC	78.77	354	iP	30	26.10	0.0		0.6s	16.13nm		5.3mb	
CMB	36.16	94	ePc	25	34.70	8.2X	FLN	78.97	8	iPc	30	26.40	-0.5	RRL	83.24	3	P	30	51.39	1.6
LRM	36.60	77	eP	25	30.10	-0.2		0.8s	12.10nm		4.9mb			PZZ	83.66	3	P	30	51.91	0.1
TNP	38.09	91	eP	25	44.50	1.7		Z 20s	0.08um		4.0Msz			PCP	83.67	2	P	30	51.60	-0.1
							WET	79.09	359	eP	30	27.80	0.2							

```
DOI    83.67    3 P      30 52.00    0.2
CKI    83.78    2 P      30 52.00   -0.2
ROB    83.90    3 P      30 52.63   -0.3
STV    83.93    3 P      30 52.01   -1.1
ENR    83.95    3 P      30 52.01   -1.2
FIN    83.99    2 P      30 52.52   -0.8
MME    84 05    0 P      30 54.60    0.7
BDI    84.18    1 P      30 54.00   -0.3
IMI    84.28    3 P      30 54 78   -0.1
RSM    84.31 359 P      30 55.90    1.1
SBF    84.32    3 iPc    30 55.60    0.6
       0.8s     32.25nm            5.6mb
SFI    84.32 360 P      30 56.00    1.1
PGD    84.36 360 Pc     30 56.50    1.1
PII    84.52    1 P      30 55.50   -0.4
FRF    84.59    3 eP     30 56.90    0.6
       0.6s     18.05nm            5.4mb
CRE    84.61 360 P      30 57.40    0.9
LRG    84.69    4 eP     30 57.70    0.9
       1.0s     26.00nm            5.4mb
EPF    84.73    8 iPc    30 56.80   -0.3
       0.8s     18.80nm            5.3mb
ARV    84.73 359 P      30 58.00    1.0
LMR    84.81    4 iPc    30 58.30    0.9
       0.8s     14.80nm            5.2mb
SNG    84 86 275 eP     31 02.80    4.8X
ASS    85.16 359 P      30 59.30    0.0
PGF    85.67    2 iPc    31 02.40    0.5
       0.8s     53.75nm            5.8mb
MNS    85.85 359 Pc     31 02.50   -0.2
SKO    85.86 352 iPd    31 01.90   -0.8
AQU    85.87 358 P      31 03.20    0.4
AZI    86.23 358 P      31 04.50    0.0
SDI    86.51 358 P      31 05.10   -0.9
BBTK   86.52 344 eP     31 07.00    0.8
DUI    86.54 358 P      31 06.50    0.3
OHR    86.77 353 eP     31 03.80   -3.5X
WB5    87 16 232 eP     31 08.80   -0.4
WRA    87.22 232 Pc     31 08.60   -0.9
       0.9s     4.50nm             4.7mb
MGR    88.03 357 P      31 12.00   -1.2
ASPA   90.60 231 iPc    31 25.60    0.2
       0.7s     8.00nm             5.2mb
GBA    93.39 297 P      31 38.10   -0.4
BFT   150.04 325 iPKPc  38 14.00    5.1X
       0.7s     17.12nm
KSR   151.25 330 iPKPd  38 16.00    5.3X
       0.5s     4.05nm
     S.D. = 0.8  on 150 of 166 obs.
-----------------------------------------
•  SEP 14, 1990  01h 21m 32.86± 1.79s
   43.363 N ±11.6km    5.428 E ±10.7km
   DEPTH =  10.0km  (geophysicist)
 NEAR SOUTH COAST OF FRANCE        (379)
      MD 2.7 (STR).

GELF    0.02 358 Pg      21 34.30   -0.5
BERF    0 20 105 Pg      21 37.16   -0.1
PUYF    0.26  49 Pg      21 37.21   -1.2
TREF    0.26 353 Pg      21 37.37   -1.1
PRAF    0.48 337 Pg      21 42.49   -0.1
TAVF    0.52  61 Pg      21 42.79   -0.7
GANF    0.72  29 Pg      21 46.09   -1.0
CALN    1.13  69 Pg      21 54.65    0.5
MVIF    1.36  66 Pn      21 58.34    0.4
                Sg       22 18.29
REVF    1.46  74 Pn      21 59.40    0.1
TOUF    1 47  63 Pn      21 59.96    0.4
AURF    1.48  69 Pn      21 59.72    0.2
                Sg       22 21.37
AUTN    1.58  66 Pn      22 01.46    0.2
DOI     1.74  48 Pd      22 05.00    1.6
BNI     1.91  28 Pd      22 08.50    2.6
CKI     2.32  62 P       22 10.50   -1.2
PGF     2.75 106 Pn      22 17.09   -0.8
     S.D. = 1.1  on  17 of  17 obs.
-----------------------------------------
   SEP  14,  1990   02h 01m 53.60± 0.52s
   52.372 N ±10.5km  168.578 W ± 6.4km
   DEPTH =  33.0km  (normal)
   4.8mb ( 41 obs.)
 FOX ISLANDS, ALEUTIAN ISLANDS    ( 9)

ADK     5.02 268 iPc     03 07.40   -1.1
KDC    10.67  53 ePd     04 23.30   -3.8X
SVW    11.26  34 iPd     04 37.60    2.4
       0.7s     5.30nm             4.8mb

TTA    12.51  27 P      04 55.50    3.5X
TOA    15.47  42 iPd    05 28.50   -2.3
       0.7s     62.20nm            4.9mb
IMA    15.64  23 ePd    05 31.20   -1.8
FBA    16.46  32 iPd    05 42.20   -1.1
       1.0s     18.00nm            4.2mb
INK    23.08  33 eP     06 55.00   -1.7
YKA    29.87  49 eP     08 01.00    1.2
       0.5s     1.60nm             4.1mb
NEW    32.54  76 eP     08 22.00   -1.4
LBFM   33.22  90 eP     08 29.50   -0.1
TNP    38.06  91 eP     09 10.50   -0.3
       1.0s     2.92nm             4.1mb
IMW    38.46  79 eP     09 13.80   -0.3
BW06   39.92  80 eP     09 25.50   -0.8
DAU    40.28  84 eP     09 30.00    0.7
GOL    44.29  80 eP     10 01.50   -0.5
       0.8s     4.46nm             4.3mb
DAG    49.71   9 iP     10 41.50   -2.2
       0.8s     7.46nm             4.8mb
KEV    57.65 354 iP     11 40.80   -1.5
SOD    60.03 353 iP     11 57.40   -1.5
LZH    61.04 292 Pc     12 05.00   -1.3
       1.5s     23.00nm            5.1mb
     Z 17s      0.20um             4.3MszX
SUF    64.67 353 iP     12 28.60   -1.2
       0.4s     14.40nm            5.4mb
NB2    66.94   0 P      12 42.70   -1.7
       0.7s     6.20nm             4.8mb
NUR    66.97 353 iP     12 43.10   -1.4
       0.7s     33.40nm            5.5mb
HFS    67.83 359 eP     12 48.00   -1.9
       0.4s     15.50nm            5.5mb
EKA    71.98   9 Pd     13 14.70   -0.6
       0.9s     4.90nm             4.5mb
CHG    76.81 284 eP     13 42.80   -0.9
KSP    77.08 357 eP     13 44.30   -0.3
MEM    77.29   4 P      13 46.60    0.8
MOX    77.36 360 eP     13 46.00   -0.2
KRA    77.69 354 eP     13 47.80   -0.2
DOU    77.74   4 Pc     13 48.60    0.3
PRU    77.98 358 P      13 49.60    0.0
GRF    78.31   0 iPc    13 52.00    0.5
       1.0s     13.00nm            4.9mb
SPC    78.54 354 eP     13 52.80   -0.2
FLN    78.73   8 eP     13 53.60   -0.2
       0.8s     10.75nm            4.9mb
KHC    78.86 359 P      13 55.50    1.0
       1.2s     7.50nm             4.6mb
LDF    78.93   8 eP     13 54.60   -0.3
       0.7s     6.60nm             4.7mb
LPF    79.41   8 eP     13 57.70    0.3
       0.6s     3.60nm             4.5mb
CDF    79.53   3 eP     13 58.30    0.1
       0.6s     3.60nm             4.5mb
ZST    79.69 356 eP     14 00.70    1.7
HAU    79.91   3 eP     14 00.40    0.2
       0.8s     5.35nm             4.6mb
SRO    80.02 355 eP     14 02.30    1.6
BSF    80.10   3 eP     14 01.30    0.0
       0.8s     6.70nm             4.7mb
LOR    80.53   5 eP     14 03.40   -0.1
       0.9s     8.20nm             4.7mb
SSF    80.71   5 eP     14 04.60    0.2
       0.8s     6.70nm             4.7mb
SOTA   80.79   0 iPc    14 05.50    0.5
       0.9s     18.60nm            5.1mb
                id       14 05.70
                i        14 19.20
LBF    80.82   5 eP     14 04.90   -0.2
       0.8s     4.05nm             4.5mb
MFF    80.91   8 eP     14 05.80    0.3
       0.8s     12.10nm            4.9mb
AVF    80.97   6 eP     14 05.90    0.1
       0.8s     8.05nm             4.8mb
SMF    81.15   5 eP     14 06.80    0.0
       1.0s     16.00nm            5.0mb
LSF    81.39   7 eP     14 08.10    0.1
       0.8s     13.45nm            5.0mb
TCF    81.40   6 eP     14 08.10    0.0
       0.8s     2.70nm             4.3mb
FVI    81.41 359 P      14 09.50    1.5
MAF    81.49   6 eP     14 09.00    0.4
       0.6s     3.15nm             4.5mb
AGO    81.70   6 P      14 10.26    0.6
PLDF   81.81   5 P      14 10.83    0.5
PYM    81.99   6 P      14 11.61    0.4

LPL    82.41   3 eP     14 15.00    1.4
       1.0s     4.00nm             4.4mb
LBL    82.52   6 P      14 14.54    0.7
LFF    82.63   8 eP     14 15.00    0.5
       0.8s     13.45nm            5.1mb
CAF    82.75   7 eP     14 15.70    0.6
       0.8s     5.35nm             4.7mb
BNI    82.87   3 P      14 17.50    1.6
LPO    82.92   7 eP     14 16.30    0.3
       0.6s     7.20nm             4.9mb
DOI    83.44   3 P      14 19.00    0.2
BDI    83.94   1 P      14 22.00    0.7
SBF    84.08   3 eP     14 22.60    0.6
       0.6s     7.20nm             5.0mb
SFI    84.09 360 P      14 23.00    1.1
PGD    84.13 360 P      14 24.00    1.6
FRF    84.36   3 eP     14 23.90    0.6
       0.8s     13.45nm            5.2mb
CRE    84.38 360 P      14 25.00    1.5
EPF    84.49   8 eP     14 23.90   -0.2
       0.8s     6.70nm             4.9mb
ARV    84.50 359 Pc     14 25.50    1.5
LMR    84.58   4 eP     14 25.20    0.8
       0.8s     8.05nm             5.0mb
ASS    84.93 359 P      14 27.50    1.3
PGF    85.44   2 eP     14 30.50    1.6
       0.6s     12.65nm            5.3mb
MNS    85.62 359 P      14 29.50   -0.2
SDI    86.28 358 P      14 33.00    0.0
MGR    87.80 357 P      14 39.00   -1.3
GBA    93.31 297 Pd     15 05.20   -1.1
       0.4s     1.10nm             4.6mb
BUL   145.16 331 iPKPd  21 26.80   -2.5
       1.0s     10.00nm
     S.D. = 1.1  on  78 of  80 obs.
-----------------------------------------
   SEP  14,  1990   02h 14m 42.94± 0.44s
   48.097 N ± 4.5km    7.615 E ± 3.4km
   DEPTH =  10.5 ±  3.6 km
 FRANCE                            (538)
     ML 3.0 (LDG). MD 2.6 (STR).

ECH     0.33 291 Pg      14 50.09    0.3
                Sg       14 54.76
FEL     0.35 129 Pg      14 49.75   -0.4
CDF     0.39 324 Pg      14 51.13    0.2
MOF     0.41 233 Pg      14 51.45    0.1
                Sg       14 57.26
BSF     0.61 245 Pg      14 55.01   -0.3
                Sg       15 03.46
SLE     0.68 119 iP      14 55.80   -0.5
ZLA     0.81 139 iP      14 58.70    0.1
HAU     0.85 264 Pg      14 59.70    0.3
                Sg       15 11.20
GWF     0.88   0 Pg      14 59.52   -0.3
                Sg       15 12.09
LOMF    0.92 216 Pg      15 00.84    0.4
                Sg       15 13.35
VITF    1.10 277 Pg      15 03.93    0.4
                Sg       15 19.28
SAX     1.44 125 iPd     15 10.80    1.5
LLS     1.55 142 eP      15 14.60    3.9X
MMK     2.06 173 eP      15 22.20    4.0X
LPG     2.67 193 Pg      15 35.80    8.9X
                Sg       16 08.40
LOR     2.67 253 Pn      15 27.00    0.3
                Pg       15 33.00
                Sg       16 06.90
LBF     2.70 247 Pn      15 26.20   -1.0
                Pg       15 33.90
                Sg       16 07.20
SMF     2.95 242 Pn      15 30.80    0.2
                Pg       15 38.50
                Sg       16 16.10
SSF     2.97 251 Pn      15 31.00    0.1
                Pg       15 39.00
                Sg       16 15.60
AVF     3.17 247 Pg      15 43.20    9.4X
                Sg       16 23.00
BGF     3.59 246 Pn      15 39.00   -0.7
                Pg       15 50.60
                Sg       16 35.80
MAF     3.92 243 Pg      15 56.80   12.4X
                Sg       16 46.60
TCF     4.11 246 Pg      16 00.00   13.0X
                Sg       16 51.20
LSF     4.54 248 Pg      16 07.70   14.5X
```

14d 02h

Sg 17 04.80
S.D. = 0.6 on 17 of 24 obs.

% SEP 14, 1990 02h 37m 07.37± 2.05s
0.626 S ±12.0km 78.375 W ±16.1km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

VC1	0.03	243	iP+	37 09.70	-0.1
OUR	0.48	341	eP	37 15.20	-2.0
			S	37 28.80	
GGP	0.50	334	P+	37 18.80	1.1
			S	37 31.70	
YANA	0.54	339	iP+	37 19.20	0.7
			S	37 32.00	
CAYA	0.80	29	P	37 23.50	0.2
			eS	38 40.00	

S.D. = 1.7 on 5 of 5 obs.

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* SEP 14, 1990 02h 52m 21.88± 1.32s
71.734 N ±17.7km 2.679 W ±16.3km
DEPTH = 10.0km (geophysicist)
4.8mb (1 obs.)
JAN MAYEN ISLAND REGION (639)

DAG	6.66	327	iP	54 02.10	0.1
	0.3s		11.69nm		5.4mb X
			i	55 07.30	
KEV	9.94	87	eP	54 47.00	-0.6
SOD	11.05	99	iP	55 02.70	-0.1
HFS	13.35	142	eP	55 33.00	-0.6
	0.4s		3.40nm		4.8mb
	Z 19s		0.12um		
			LR	59 22.00	
SUF	14.18	115	iP	55 45.80	1.2
NUR	15.57	122	eP	56 14.00	11.3X
CLL	21.67	153	eP	57 23.00	8.9X
MOX	22.13	155	eP	57 23.00	4.3X
PRU	23.19	151	P	57 34.10	4.9X

S.D. = 1.1 on 5 of 9 obs.

? SEP 14, 1990 03h 11m 10.80± 1.09s
44.414 N ± 9.6km 7.329 E ± 8.6km
DEPTH = 5.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

STV	0.17	181	P	11 14.36	0.0
			S	11 16.61	
PZZ	0.19	299	P	11 14.69	0.0
			S	11 17.30	
ENR	0.20	161	P	11 14.90	0.0
			S	11 17.51	
ROB	0.41	107	P	11 18.98	0.0
			S	11 25.07	

S.D. = 0.0 on 4 of 4 obs.

% SEP 14, 1990 04h 10m 30.00± 0.82s
36.917 N ± 6.8km 5.900 W ± 8.0km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
mbLg 2.0 (MDD).

GIBL	0.10	205	iP	10 30.00	-2.7
EPRU	0.54	85	eP	10 40.00	-0.9
			eS	10 47.00	
CNIL	0.56	193	iP	10 41.50	0.2
EJIF	0.58	143	eP	10 40.20	-1.5
			eS	10 48.60	
EVAL	0.95	315	eP	10 47.00	-1.1
			eS	11 00.00	
EHOR	1.04	30	eP	10 48.20	-1.4
			eS	11 03.00	

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

? SEP 14, 1990 06h 47m 38.51±10.76s
1.047 S ±70.1km 78.373 W ±22.9km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

VC1	0.41	356	iP+	47 47.00	0.0
			eS	47 56.30	
OUR	0.88	350	eP	47 55.70	-0.1
			eS	48 07.00	
GGP	0.89	346	eP	47 56.30	0.2
			eS	48 08.00	
YANA	0.95	348	iP+	47 56.70	-0.2
			S	48 09.00	
CAYA	1.19	19	eP	48 01.00	0.0
			eS	48 16.40	

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

SEP 14, 1990 07h 00m 02.69± 0.14s
51.457 N ± 3.3km 164.118 W ± 2.5km
DEPTH = 33.0km (normal)
5.7mb (100 obs.) 5.0Msz (14 obs.)
SOUTH OF ALASKA (17)
Ms 5.1 (BRK).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 18C
Centroid Location:
Origin Time 07:00: 3.4 0.4
Lat 51.86N 0.04 Lon 164.02W 0.05
Dep 21.8 BDY Half-duration 2.8
Moment Tensor; Scale 10**17 Nm
Mrr=-0.91 0.07 Mtt= 2.20 0.07
Mff=-1.29 0.08 Mrt= 0.76 0.25
Mrf=-0.15 0.13 Mtf= 2.16 0.12
Principal Axes:
T Val= 3.32 Plg= 8 Azm=335
N -0.86 71 90
P -2.46 17 243
Best Double Couple:Mo=2.9*10**17
NP1:Strike= 20 Dip=72 Slip=-174
NP2: 288 84 -18

SDN	4.45	28	iPc	01 06.50	-3.1X
ADK	7.83	278	iPd	01 54.20	-2.8X
KDC	9.22	42	iPc	02 10.50	-5.8X
MCNL	9.53	32	eP	02 15.89	-4.7X
			eS	03 51.37	
CDD	9.58	35	eP	02 16.51	-4.8X
			eS	03 52.78	
AUI	9.95	33	eP	02 22.26	-4.1X
AUH	9.97	33	eP	02 21.89	-4.8X
AUE	9.99	33	eP	02 22.65	-4.2X
PDB	10.05	30	eP	02 23.65	-4.0X
OPT	10.26	33	eP	02 26.36	-4.2X
XLV	10.65	36	eP	02 31.42	-4.5X
SVW	10.75	23	iPd	02 34.40	-3.0X
	0.6s		73.20nm		6.1mb
HOM	10.82	36	eP	02 33.30	-4.9X
			eS	04 20.92	
CNPM	10.88	37	eP	02 33.76	-5.3X
RSO	11.03	31	eP	02 37.28	-4.0X
RDT	11.22	31	iP	02 40.17	-3.6X
CKL	11.73	29	iP	02 46.89	-3.7X
BGL	11.76	29	eP	02 47.82	-3.3X
SPU	11.80	30	iP	02 47.63	-4.0X
CRP	11.84	29	eP	02 48.48	-3.7X
CGLM	11.91	29	iP	02 49.05	-4.1X
SLKM	11.92	35	iP	02 49.45	-3.8X
SEW	11.94	38	eP	02 48.73	-4.6X
NCG	11.94	29	eP	02 50.01	-3.5X
TTA	12.30	18	iPc	02 53.60	-4.7X
	0.8s		189.31nm		6.3mb
SUA	12.43	31	eP	02 54.56	-5.5X
SKT	12.58	28	eP	02 58.34	-3.6X
PMS	12.67	34	eP	02 57.91	-5.2X
MID	12.83	45	eP	03 02.50	-2.8X
PWA	12.85	32	eP	03 00.10	-5.4X
PLRM	13.06	33	eP	03 02.01	-6.2X
PMR	13.06	33	iPd	03 01.90	-6.3X
	0.5s		37.90nm		5.7mb
ANM	13.16	358	eP	03 07.65	-2.0X
GHO	13.26	33	eP	03 05.11	-5.8X
CUT	13.29	29	iP	03 06.82	-4.4X
SMY	13.44	284	iPd	03 10.70	-2.7X
	0.6s		119.60nm		6.0mb
SML	13.48	34	eP	03 06.63	-7.3X
VZW	13.66	38	eP	03 10.84	-5.3X
VLZ	13.79	38	eP	03 13.32	-4.5X
SCM	13.86	35	eP	03 13.44	-5.4X
KTH	14.00	25	eP	03 17.38	-3.4X
KLU	14.16	38	eP	03 17.98	-4.9X
TOA	14.45	36	iPd	03 21.60	-5.0X
	0.6s		351.80nm		6.1mb
GLB	14.96	40	eP	03 28.45	-4.8X
TGL	15.02	43	eP	03 30.35	-3.7X
BALM	15.36	43	eP	03 34.82	-3.7X
WRH	15.50	27	eP	03 33.47	-6.7X
IMA	15.58	16	iPc	03 37.40	-4.0X
	1.4s		125.80nm		4.9mb
CCB	15.71	27	eP	03 36.05	-6.8X
HDA	15.78	28	eP	03 36.97	-6.8X
FBA	15.91	26	iPc	03 39.40	-6.0X
	0.6s		19.33nm		4.4mb X
GLM	16.09	26	eP	03 41.24	-6.5X
DOT	16.18	33	eP	03 44.60	-4.3X
TMW	16.36	35	eP	03 47.42	-3.7X
SIT	17.65	60	eP	04 07.10	-0.1
	1.0s		200.00nm		5.2mb
DWY	18.08	36	P	04 10.50	-2.0
BRW	20.20	7	iPd	04 36.20	-0.7
INK	22.42	30	P	04 58.00	-1.4
PGC	26.03	80	eP	05 35.00	0.9
GMW	26.86	82	eP	05 42.70	0.8
BMW	27.04	84	eP	05 44.00	0.4
RMW	27.51	82	eP	05 48.00	0.1
LON	27.80	83	eP	05 51.70	1.2
PNT	28.13	77	ePc	05 54.00	0.6
	0.8s		48.00nm		5.2mb
YKA	28.42	48	eP	05 54.50	-1.3
	1.2s		60.00nm		5.2mb
FHC	29.43	95	eP	06 05.50	0.3
	0.8s		52.94nm		5.3mb
NEW	30.06	77	eP	06 10.80	0.0
	1.0s		100.00nm		5.6mb
LBFM	30.43	93	eP	06 14.70	0.4
WDC	30.46	94	iPc	06 15.40	1.1
			ePcP	09 11.70	
MIN	31.18	94	ePc	06 21.40	0.6
			ePcP	09 13.20	
ORV	31.71	95	ePc	06 25.40	0.1
			ePcP	09 14.40	
BRK	32.26	98	eP	06 30.20	0.2
			ePcP	09 16.90	
BKS	32.27	98	iPd	06 31.00	0.8
	0.8s		59.00nm		5.5mb
	Z 18s		3.20um		5.1Msz
	N 18s		2.10um		
	E 18s		3.30um		
			iS	11 55.00	
			eLQ	13 32.00	
			eLR	14 14.00	
PCC	32.41	99	ePc	06 31.40	0.0
SES	32.87	71	ePd	06 34.20	-1.1
	0.6s		150.00nm		6.1mb
GCC	32.95	99	eP	06 36.70	0.6
MHC	32.97	99	eP	06 37.00	0.5
			ePcP	09 18.90	
ARN	33.03	98	eP	06 37.40	0.5
CMB	33.32	96	eP	06 40.00	0.6
	0.8s		45.33nm		5.4mb
SAO	33.46	99	eP	06 41.10	0.6
PRS	33.78	100	eP	06 44.00	0.6
			ePcP	09 21.10	
LLA	33.86	99	eP	06 44.90	0.8
LRM	34.00	79	eP	06 45.00	-0.5
PRI	34.34	99	ePc	06 50.00	1.7
FRI	34.39	97	eP	06 49.10	0.5
			ePcP	09 22.50	
PHAM	34.70	99	eP	06 52.00	0.7
TNP	35.26	94	eP	06 56.60	0.3
	1.0s		115.00nm		5.8mb
BCH	35.32	100	eP	06 57.50	0.8
SYP	35.82	101	eP	07 12.00	11.0X
IMW	35.90	81	eP	07 02.00	0.3
ISA	36.00	98	eP	07 03.00	0.6
			e	09 27.00	
ABL	36.07	100	eP	07 03.80	0.6
FFC	36.39	60	eP	07 04.50	-0.8
	0.9s		37.00nm		5.3mb
FFC	36.39	60	eP	07 16.00	10.7X
	0.9s		52.00nm		
CLC	36.45	97	eP	07 07.00	0.8
			e	09 29.00	
SBB	37.04	99	iPd	07 12.00	0.8
			e	09 31.00	
PAS	37.19	100	eP	07 13.00	0.7
MWC	37.21	99	eP	07 13.00	0.3
GSC	37.27	97	iPd	07 14.00	0.9
			e	09 32.00	
BW06	37.35	81	eP	07 13.80	-0.1
	1.0s		91.67nm		5.6mb
DAU	37.61	86	eP	07 16.70	0.5
RVR	37.78	99	iPd	07 17.00	-0.3
			e	09 32.00	
PEC	37.98	99	eP	07 19.30	0.3
PLM	38.53	99	iPd	07 25.00	1.2

TPC		38.53	98	iPd	07 24.00	0.4
CPE		38.70	100	eP	07 19.20	-5.8X
BAR		39.10	100	eP	07 29.00	0.6
OFUJ		39.24	273	eP	07 28.70	-0.7
IKP		39.47	99	eP	07 25.70	-5.8X
GLA		39.99	98	eP	07 37.00	1.2
				e	09 40.00	
RSSD		40.01	76	eP	07 35.40	-0.6
		1.0s	108.46nm			5.6mb
GOL		41.69	83	eP	07 50.00	0.1
		0.8s	104.17nm			5.6mb
	Z	18s	1.73um			5.0Msz
GLD		41.75	82	eP	07 51.00	0.7
KAKJ		41.94	271	P	07 51.50	-0.1
NIIJ		42.02	273	P	07 52.50	0.2
CHJJ		42.77	272	P	07 58.10	-0.4
MAT		42.95	273	iPd	07 59.50	-0.5
		0.9s	38.66nm			5.1mb
				eS	14 24.00	
MTMJ		43.18	273	P	08 01.90	0.0
ANMO		43.97	89	eP	08 08.80	0.4
		1.2s	62.50nm			5.3mb
FRB		47.80	37	eP	08 37.00	-1.3
		1.0s	128.00nm			5.9mb
SHNJ		48.94	276	P	08 47.30	-0.1
MEO		48.98	83	iPd	08 47.40	-0.4
SIO		49.77	81	iP	08 53.10	-0.7
KBS		49.87	1	eP	08 54.50	0.5
TUL		49.98	80	iPc	08 54.50	-0.9
		0.8s	53.90nm			5.6mb
	Z	20s	0.86um			4.8Msz
				LR	20 00.00	
DAG		50.17	10	iPd	08 55.80	-0.5
		0.5s	105.63nm			6.1mb
	Z	19s	3.19um			5.3Msz
	N	18s	1.79um			
	E	19s	0.69um			
KUMJ		50.18	274	eP	08 56.60	-0.3
KAGJ		51.05	273	eP	09 03.00	-0.6
FVM		51.91	74	eP	09 07.20	-2.9
OLY		52.90	78	eP	09 14.20	-3.3X
ELC		53.09	74	eP	09 16.30	-2.5
SCH		53.85	45	ePc	09 22.20	-2.0
		1.0s	140.00nm			5.9mb
BJI		54.15	291	eP	09 26.00	-0.6
		1.3s	88.00nm			5.6mb
	Z	30s	1.08um			4.7MszX
	N	22s	2.43um			
				ePP	11 32.00	
				S	17 04.00	
				eScS	19 08.00	
				eSS	20 48.00	
PWLA		55.32	76	eP	09 32.50	-2.7
				e	09 37.60	
				e	09 44.30	
GUMO		55.61	246	eP	09 34.00	-3.5X
GUA		55.62	246	eP	09 35.00	-2.6
		0.6s	80.00nm			5.9mb
RSCP		56.41	74	iPc	09 40.00	-3.1X
		1.0s	249.46nm			6.2mb
RSNY		56.73	59	eP	09 42.40	-2.9
		0.8s	25.37nm			5.3mb
SSE		57.14	280	iPd	09 48.00	-0.3
		1.5s	158.00nm			5.8mb
	Z	20s	0.50um			4.6Msz
	N	14s	0.40um			
				pP	10 23.80	153kmX
				esP	10 37.00	
				S	17 42.00	
GBTN		57.17	73	eP	09 45.30	-3.2X
				e	09 50.30	
				e	09 57.10	
HBVT		57.64	58	eP	09 48.50	-3.2X
NAV		58.07	69	eP	09 52.30	-2.5
BLA		58.36	69	ePc	09 54.30	-2.6
		0.9s	117.65nm			6.0mb
BNH		58.44	57	eP	09 54.40	-2.9
CBM		58.45	53	eP	09 54.00	-3.3X
KEV		58.83	355	iP	09 58.80	-0.8
		0.8s	86.50nm			5.9mb
				i	10 09.40	
IIJ		58.89	97	iP	10 00.20	-1.1
CRX		59.17	97	(P)	10 03.20	0.2
TBR		59.19	62	eP	09 59.00	-3.6X
TRO		59.20	359	eP	10 02.00	-0.2
GMTN		59.39	62	iP	10 02.40	-1.5
PNJ		59.39	62	iP	10 02.50	-1.4

CBN		59.44	66	iP	10 02.30	-2.0
		1.0s	82.00nm			5.8mb
JSC		59.89	72	eP	10 04.30	-3.1X
LHS		60.01	71	eP	10 05.00	-3.3X
PPM		60.08	97	eP	10 10.50	1.0
AKU		60.31	15	iP	10 11.20	1.3
		0.9s	67.23nm			5.8mb
SOD		61.22	355	iP	10 15.20	-0.8
				i	10 19.80	
LZH		63.93	296	iPd	10 34.50	-0.2
		1.5s	54.00nm			5.4mb
	Z	20s	1.30um			5.1Msz
	N	14s	0.70um			
	E	14s	0.70um			
				pP	10 39.00	15kmX
				sP	10 44.00	
				PcP	11 14.00	
				ePP	12 58.00	
				S	19 10.00	
				sS	19 23.00	
				SS	23 20.00	
RGS		65.79	3	eP	10 47.20	1.2
SUF		65.88	355	iP	10 46.00	-0.6
		0.7s	52.00nm			5.7mb
PMO		67.68	163	iP	10 58.80	0.3
		0.9s	45.00nm			5.6mb
TPT		67.71	163	iP	10 58.90	0.2
		0.9s	45.00nm			5.6mb
NB2		67.79	2	P	10 58.10	-0.7
		0.8s	67.80nm			5.8mb
RUV		67.95	163	iP	11 00.60	0.4
		0.9s	55.00nm			5.7mb
VAH		67.95	163	iP	11 00.60	0.4
		0.9s	50.00nm			5.6mb
NUR		68.16	355	iP	11 01.00	-0.1
		0.9s	104.80nm			5.9mb
				i	11 04.40	
BER		68.19	6	eP	11 01.30	0.1
HFS		68.75	1	eP	11 03.50	-1.2
		0.6s	102.60nm			6.1mb
	Z	22s	0.73um			4.9Msz
				LR	33 09.00	
UPP		69.03	359	iP	11 06.70	0.3
				i	11 09.80	
				i	11 16.20	
BLS2		69.37	5	eP	11 08.50	-0.2
AFR		69.84	165	iP	11 12.40	0.6
		0.9s	75.00nm			5.8mb
PPN		69.88	165	iP	11 12.60	0.5
		0.9s	85.00nm			5.8mb
PPT		69.90	165	iP	11 12.60	0.4
		0.9s	70.00nm			5.7mb
PAE		69.99	165	iP	11 13.10	0.4
		0.9s	55.00nm			5.6mb
TVO		70.16	165	iP	11 14.60	0.7
		0.9s	95.00nm			5.9mb
EDR		70.93	11	eP	11 16.80	-1.3
		0.8s	163.00nm			6.1mb
EDU		71.24	11	eP	11 19.10	-0.8
EAB		71.42	12	eP	11 20.50	-0.6
		0.9s	155.00nm			6.0mb
EBH		71.47	11	eP	11 20.50	-0.8
		0.7s	134.00nm			6.1mb
EDI		71.83	11	eP	11 22.70	-0.7
		0.9s	97.00nm			5.8mb
EAU		71.87	11	eP	11 23.20	-0.5
EBL		71.99	11	eP	11 23.80	-0.7
EKA		72.41	11	Pd	11 26.70	-0.2
		1.0s	65.40nm			5.6mb
ESK		72.42	11	ePc	11 27.00	0.0
		1.0s	80.00nm			5.7mb
KMI		72.65	289	Pd-	11 28.00	-1.1
		2.0s	180.00nm			5.7mb
	Z	20s	0.70um			4.9Msz
				pP	11 39.00	36kmX
				PP	14 11.00	
				S	20 54.00	
				sS	21 11.00	
PMG		73.71	231	eP	11 34.00	-1.0
ETA		74.57	14	iPc	11 39.90	0.4
		0.8s	158.00nm			6.1mb
VAL		74.64	16	iP	11 40.20	0.3
ECB		74.80	14	iPc	11 41.00	0.1
		1.2s	221.00nm			6.0mb
ECP		75.04	14	iPc	11 42.40	0.2
		1.1s	232.00nm			6.1mb
WIT		75.81	6	eP	11 48.50	1.9

				e	11 53.00	
				e	12 00.00	
WTS		76.64	6	eP	11 51.50	0.3
		0.8s	85.00nm			5.8mb
				i	11 56.00	
				i	12 03.00	
				i	12 10.00	
CLL		77.58	2	iPd	11 56.60	0.1
		1.3s	27.00nm			5.1mb
				i	12 01.40	
				e	12 06.00	
DZM		77.64	208	iPc	11 57.80	0.6
BNS		77.69	6	iPd	11 57.30	0.2
ENN		77.80	6	iPd	11 58.00	0.3
		1.0s	170.00nm			6.0mb
				i	12 02.90	
				i	12 09.80	
				i	12 16.30	
SNF		77.93	8	Pc	11 59.10	0.7
MEM		77.97	6	Pc	11 59.20	0.6
				i	12 03.30	
				i	12 10.20	
KSP		78.08	360	iPd	11 59.40	0.2
		1.0s	89.00nm			5.7mb
				i	12 03.70	
				i	12 10.70	
				i	12 17.30	
MOX		78.21	3	iPd	12 00.00	0.0
		1.6s	99.00nm			5.6mb
DOU		78.37	7	Pd	12 01.00	0.1
		0.9s	70.00nm			5.7mb
				ic	12 05.60	
TNS		78.50	5	ePc	12 01.80	0.1
				ec	12 06.80	
HOF		78.55	3	iPc	12 02.50	0.6
SHL		78.57	297	iP	12 01.40	-1.2
				iS	21 45.20	
KRA		78.81	357	ePd	12 03.60	0.4
		0.7s	59.00nm			5.7mb
	Z	18s	1.00um			5.2Msz
	E	18s	1.00um			
				i	12 08.50	
				i	12 14.70	
				eS	22 05.00	
KKM		78.86	266	ePd	12 04.50	0.3
PRU		78.93	1	iPd	12 04.40	0.5
	Z	18s	0.50um			4.9Msz
	N	17s	0.50um			
	E	18s	0.60um			
				e	12 09.00	
				S	22 00.00	
GRF		79.15	3	eP	12 05.90	0.7
		1.1s	84.00nm			5.7mb
FLN		79.18	11	eP	12 04.70	-0.6
		1.2s	53.55nm			5.4mb
	Z	20s	1.02um			5.2Msz
LDF		79.39	11	eP	12 06.00	-0.5
		1.0s	40.00nm			5.4mb
GRR		79.51	11	eP	12 06.80	-0.3
		1.2s	65.45nm			5.5mb
SPC		79.66	357	iPd	12 08.90	0.7
CHG		79.72	287	ePd	12 08.00	-0.7
		1.1s	34.81nm			5.3mb
WET		79.74	2	eP	12 09.00	0.6
		1.8s	129.00nm			5.6mb
KHC		79.77	2	iPd	12 09.60	1.0
		1.2s	65.00nm			5.5mb
	N	16s	0.40um			
	E	18s	0.40um			
				e	12 21.40	
LPF		79.83	11	eP	12 08.60	-0.2
		1.0s	52.00nm			5.5mb
GUN		79.99	302	P	12 10.60	0.1
CDF		80.24	6	P	12 10.90	-0.2
VITF		80.34	7	P	12 11.67	0.1
MGP		80.40	73	P	12 11.40	-0.9
KKN		80.40	303	P	12 12.60	0.1
ECH		80.43	6	P	12 12.23	0.2
PKI		80.51	303	P	12 13.00	-0.2
GKN		80.57	303	P	12 13.40	0.1
HAU		80.58	6	eP	12 12.80	-0.1
		1.0s	38.00nm			5.3mb
	Z	20s	0.45um			4.8Msz
PORP		80.63	73	P	12 13.00	-0.5
DMN		80.64	303	P	12 14.00	0.2
VKA		80.66	360	iPd	12 14.00	0.8
		1.8s	107.00nm			5.5mb

14d 07h

			i	12	25.70		CKI	84.27	5	P	12	32.20	0.2	TIO	95.48	20	iP	13	25.00	-0.5
FUR	80.68	3	eP	12	14.50	1.1	EZAM	84.35	18	eP	12	33.80	1.4				i	17	10.00	
ZST	80.72	359	eP	12	14.50	1.0	ERUA	84.41	17	eP	12	33.50	0.8	GBA	96.17	301	P	13	28.00	-0.6
			i	12	19.60		MAIO	84.61	326	eP	12	54.00	20.1X	ZOBO	106.26	96	ePdiff	14	15.00	0.6
			i	12	32.60					e	23	04.00			Z 24s		2.06um			5.6MszX
CSB	80.74	72	P	12	13.00	-1.1	TOUF	84.62	6	P	12	34.87	0.9				e	17	56.00	
BSF	80.78	6	eP	12	13.80	-0.3	MME	84.62	4	P	12	34.60	0.5				LR	46	24.00	
	1.0s	48.00nm			5.4mb		AUTN	84.65	6	P	12	34.96	0.8	CCH	108.33	95	ePdiff	14	04.00	-19.3X
MOF	80.79	6	P	12	14.30	0.2	MVIF	84.73	6	P	12	35.18	0.7	SIV	110.45	90	ePKP	18	39.00	5.8X
KMR	80.86	1	iP-	12	15.00	0.7	AURF	84.75	6	P	12	35.18	0.7	TIC	119.40	24	PKP	18	49.00	-1.4
			i	12	19.80		BDI	84.75	4	P	12	34.20	-0.3	KIC	119.75	24	PKP	18	50.00	-1.0
BDT	80.90	286	eP	12	11.10	-3.8X	SBF	84.78	6	eP	12	34.70	0.1	LIC	119.80	24	PKP	18	50.80	-0.3
	1.0s	6.00nm			4.5mb	X		1.0s	102.00nm				6.0mb	PPD	121.06	87	ePKP	18	52.20	-1.1
PSZ	80.94	357	iP	12	16.30	1.5	CDR	84.84	7	iPc	12	35.90	1.0	BCAO	124.28	357	iPKPc	18	58.50	-1.3
SLE	80.95	5	ePd	12	14.90	0.1	REVF	84.90	6	P	12	35.68	0.5		0.8s	41.00nm				
BMR	81.03	355	eP	12	17.00	1.8	EPF	84.93	11	eP	12	34.60	-0.8				id	20	42.40	
SRO	81.09	358	iP	12	16.60	1.1		1.0s	18.00nm				5.2mb	AIA	138.82	141	ePKP	19	24.50	-1.3
LOR	81.11	8	eP	12	15.40	-0.3	SFI	84.94	3	P	12	36.00	0.7	SPA	141.27	180	ePKP	19	22.80	-7.5X
	1.0s	52.00nm			5.5mb		RSM	84.95	2	P	12	36.90	1.6		0.8s	13.33nm				
	Z 20s	1.02um			5.2Msz		ECRI	84.96	14	eP	12	36.00	0.5	BFT	152.09	332	iPKPc	19	51.00	1.7
ZLA	81.23	5	ePd	12	16.70	0.4	PGD	84.98	3	P	12	37.30	1.6		1.0s	50.00nm				
SOP	81.24	360	iP	12	18.00	1.7	FRF	85.02	7	eP	12	35.90	0.1	MAW	152.14	217	iPKPc	19	55.00	7.3X
LOMF	81.27	6	P	12	17.03	0.5		0.9s	42.60nm				5.6mb		0.8s	31.00nm				
SSF	81.29	9	eP	12	16.60	0.0	PII	85.09	4	P	12	35.60	-0.4	SLR	152.63	335	iPKPd	19	56.50	6.6X
MFF	81.35	11	eP	12	16.90	0.0	LRG	85.11	7	eP	12	36.80	0.7		0.9s	33.61nm				
	0.8s	56.40nm			5.6mb			1.0s	52.00nm				5.7mb	KSR	153.10	338	iPKPc	19	55.50	4.9X
LBF	81.41	8	eP	12	16.90	-0.3	PAG	85.15	70	eP	12	34.00	-2.8		0.6s	5.36nm				
	1.0s	46.00nm			5.4mb		CRE	85.23	3	P	12	38.00	1.1	BPI	153.11	335	ePKP	19	50.00	-0.6
AVF	81.54	9	eP	12	17.70	-0.2	LMR	85.24	7	eP	12	37.30	0.5		S.D. = 0.9	on 292 of 371 obs.				
	0.9s	54 05nm			5.6mb			1.0s	52.00nm				5.7mb	----------						
SQTA	81.62	3	iPc	12	19.80	1.3	ARV	85.39	2	P	12	38.00	0.4	* SEP 14, 1990 07h 37m 27.79± 1.43s						
	1.1s	108.00nm			5.8mb		BBL	85.67	71	eP	12	35.00	-4.4X	35.795 N ±15.9km 23.017 E ±11.1km						
			i	12	24.20		HVAR	85.74	360	iP	12	38.50	-0.8	DEPTH = 5.0km (geophysicist)						
			i	12	31.00		ASS	85.81	2	P	12	40.00	0.2	4.6mb (2 obs.)						
			i	12	37.80		PGB	86.10	354	eP	12	39.00	-2.2	CRETE						(370)
BGF	81.72	9	eP	12	18.70	-0.1	VTS	86.12	355	iP	12	41.00	-0.4							
	0.9s	40.95nm			5.4mb		PGF	86.18	5	P	12	42.48	0.8	VLI	0.92	356	iPgc	37	44.50	-1.4
SMF	81.73	8	eP	12	18.70	-0.2	CAR	86.31	78	eP	12	42.00	-0.7	VAM	1.04	112	ePg	37	47.50	-0.4
LLS	81.88	5	ePd	12	20.40	0.5	LLAV	86.41	78	iP	12	42.60	-0.6	ITM	1.64	328	ePg	37	59.30	1.9
LSF	81.89	10	eP	12	19.40	-0.3	MNS	86.50	2	P	12	43.00	-0.1	ATH	2.24	14	ePn	38	04.50	-1.6
TCF	81.93	10	eP	12	19.60	-0.3	CEOS	86.60	80	eP	12	43.10	-1.0	APE	2.39	57	ePb	38	09.50	1.2
	1.0s	29.00nm			5.3mb		OLLA	86.77	78	iP	12	44.30	-0.6	VLS	3.07	321	ePn	38	18.20	0.3
MAF	82.03	9	eP	12	20.40	-0.1	ETOR	86.78	14	eP	12	44.00	-0.6	EVR	3.26	343	ePn	38	22.60	1.9
	0.8s	18.15nm			5.2mb		SKO	86.83	356	ePKP	12	45.60	0.9	KAP	3.39	93	ePn	38	23.00	0.5
OSS	82.11	4	ePd	12	21.90	0.8		1.1s	192.00nm				6.2mb	KZN	4.61	348	ePb	38	45.00	5.2X
VDL	82.28	4	ePd	12	22.90	0.9				i	12	50.80		KEK	4.67	328	ePn	38	40.60	0.0
FVI	82.29	2	P	12	22.00	0.3				i	12	57.00		OHR	5.59	343	e(P)	38	54.70	1.1
DIX	82.57	6	ePd	12	24.40	0.8				iSKS	19	30.00		ORI	6.72	311	P	39	23.00	13.5X
VRI	82.60	352	ePc	12	25.00	1.6				i	23	08.00		MGR	7.32	309	P	39	16.50	-1.4
TMA	82.63	5	ePd	12	24.30	0.5				i	23	23.00		SLL	25.48	349	eP	42	55.80	-2.3
MMK	82.63	6	ePd	12	25.40	1.5	KKB	86.85	355	eP	12	45.00	0.2		0.5s	3.20nm			4.3mb	
RJF	82.82	10	eP	12	24.30	-0.3	EPLA	86.86	17	eP	12	45.00	0.0	EKA	26.52	326	P	43	08.00	0.1
	1.0s	36.00nm			5.4mb		KDZ	86.90	353	eP	12	46.00	0.9		2.2s	62.40nm			4.9mb	
	Z 20s	1.15um			5.2Msz		RZN	86.92	353	iPd	12	46.00	0.6		S.D. = 1.5	on 13 of 15 obs.				
LJU	82.87	1	eP	12	25.00	0.2	MMB	87.08	354	ePc	12	47.00	1.0	----------						
VOY	82.88	1	eP	12	24.50	-0.5	RDP	87.12	2	P	12	46.00	-0.2	? SEP 14, 1990 07h 46m 55.91± 1.42s						
VVI	82.90	2	P	12	26.00	1.0	SDI	87.20	2	P	12	46.40	-0.2	32.704 S ±17.2km 68.716 W ±25.6km						
MDI	83.00	4	P	12	26.00	0.6	DUI	87.25	1	P	12	47.40	0.5	DEPTH = 100.0km (geophysicist)						
PTJ	83.02	360	iP	12	25.50	-0.2	TOL	87.39	15	eP	12	47.50	0.0	MENDOZA PROVINCE, ARGENTINA						(139)
MLR	83.04	353	eP	12	27.00	1.1				ePP	16	16.00								
ORO	83.06	6	P	12	27.00	1.1				eSKS	23	05.00		MDZ	0.21	212	i(P)	47	10.60	0.0
LPL	83.09	6	eP	12	27.30	1.1				eS	23	34.00		RTCV	0.85	10	e(P)c	47	15.20	0.1
	1.0s	18.00nm			5.1mb					ePS	24	35.00					S	47	31.70	
LFF	83.10	11	eP	12	26.10	0.1				iSS	25	15.00		CFA	1.17	20	eP	47	18.50	-0.1
	1.0s	72.00nm			5.7mb		GUAN	87.52	77	iP	12	48.50	-0.1				S	47	38.00	
LPG	83.11	6	eP	12	27.60	1.2	OHR	87.71	356	eP	12	45.30	-3.8X	RTBS	1.21	329	e(P)	47	19.00	0.0
	1.2s	29.75nm			5.3mb			1.3s	89.00nm				5.9mb		S.D. = 0.1	on 4 of 4 obs.				
ZAG	83.11	360	iP	12	27.00	1.0				i	12	49.10		----------						
CEY	83.18	1	eP	12	26.50	0.1	RMQ	87.97	221	iPc	12	49.60	-0.6	& SEP 14, 1990 09h 11m 53.32s						
TRI	83.20	1	P	12	25.00	-1.5	ECHE	88.14	13	eP	12	51.00	-0.2	63.476 N 150.924 W						
SAL	83.21	4	P	12	26.90	0.4	ESEL	88.45	10	e(P)	12	53.00	0.5	DEPTH = 12.2km						
CAF	83.26	10	eP	12	26.90	0.0	MGR	88.78	0	P	12	53.50	-0.6	CENTRAL ALASKA						(1)
	1.1s	43.95nm			5.5mb		ORI	88.86	360	P	12	57.00	2.5X	<AGS-P>.						
EMON	83.36	17	eP	12	27.80	0.3	WB5	89.02	236	eP	12	53.90	-1.5							
LPO	83.40	10	eP	12	27.40	-0.2	WRA	89.08	236	Pc	12	55.10	-0.6	KTH	0.08	1	iP	11	55.90	-0.3
	1.1s	78.15nm			5.7mb			0.9s	12.50nm				5.2mb	HUR	0.77	130	eP	12	07.78	-0.3
VBY	83.42	0	ePd	12	28.00	0.4	IPM	89.48	277	ePd	13	02.10	4.3X	MCK	0.93	73	eP	12	10.66	-0.2
CTA	83.42	226	iPd	12	27.00	-0.9	AAPN	89.89	16	eP	13	00.00	0.4	CUT	1.12	164	iP	12	13.90	-0.1
	0.9s	19.33nm			5.2mb		ALOJ	90.08	16	eP	13	00.40	-0.1				eS	12	29.75	
BNI	83.54	7	P	12	30.00	1.5	ATEJ	90.29	16	eP	13	01.00	-0.5	SKT	1.53	191	eP	12	20.19	-0.2
STS	83.67	18	eP	12	30.00	1.0	APHE	90.31	16	eP	13	00.70	-0.9	WRH	1.60	50	eP	12	20.41	-1.0
NEV	83.76	70	eP	12	28.00	-1.8	AVE	93.16	19	eP	13	13.00	-1.5	CCB	1.81	48	eP	12	22.92	-1.5
BEO	84.02	357	e(P)	12	31.50	0.8				e	17	01.00					eS	12	48.72	
NNT	84.06	283	eP	12	30.70	-0.6	IFR	93.40	17	eP	13	17.00	1.1	PWA	1.90	165	eP	12	25.33	-0.4
DOI	84.13	6	P	12	31.50	0.1				i	17	02.50		GHO	1.94	151	eP	12	26.41	-0.1
FISA	84.25	79	eP	12	32.00	-0.3	POO	93.92	306	iPc	13	19.00	0.7	FBA	1.98	42	eP	12	27.13	0.2
BPA	84.25	70	eP	12	30.00	-2.3		0.8s	23.88nm				5.7mb	HDA	1.99	60	eP	12	27.35	0.3

SUA	2.02	178	eP	12	27.51	-0.2			TT	28	09.00			1.1s	103.80nm			5.9mb	
SML	2.06	143	eP	12	27.76	-0.4			e	28	21.50		CAN	84.10	173	iPd	32	47.80	0.4
PLRM	2.07	155	eP	12	27.82	-0.3	SBA	41.58	183	P	28	06.30	2.0			e	33	02.00	
NCG	2.16	196	eP	12	28.47	-1.2	JACH	41.70	290	iPd	28	06.10	0.1			e	33	22.00	
GLM	2.17	44	eP	12	29.42	-0.3	ZON	41.78	293	eP	27	55.50	-11.1X	MRWA	84.31	145	eP	32	48.60	0.2
CGLM	2.23	194	eP	12	30.97	0.2	KIM	44.92	67	iPd	28	34.50	2.3	AAE	84.51	61	eP	32	53.50	3.6X
BGL	2.32	198	eP	12	32.70	0.7		1.0s	195.00nm			6.0mb		BWA	84.96	173	eP	32	52.20	0.5
PMS	2.33	164	eP	12	32.34	0.3	BLF	45.26	68	iPd	28	35.50	0.6	FORR	85.73	155	eP	32	56.50	1.0
SCM	2.34	133	eP	12	34.50	2.3		1.0s	110.00nm			5.7mb		MEKA	87.48	146	iPd	33	03.10	-1.0
SPU	2.36	193	eP	12	31.19	-1.3	KSR	48.36	67	iPc	28	58.50	-0.8		1.0s	76.00nm			5.9mb	
TTA	2.37	259	eP	12	32.26	-0.4		1.0s	205.00nm			6.1mb		CMS	87.69	170	iPc	33	05.90	0.8
CKL	2.38	197	eP	12	33.51	0.7	BAO	48.54	327	Pc	29	02.20	1.5	ARO	88.51	63	iPd	33	13.50	4.4X
TOA	2.58	120	eP	12	36.15	0.5	EVA	48.80	70	iPd	29	04.00	1.3	COO	88.96	175	iPc	33	11.70	0.4
IMA	2.86	337	eP	12	37.99	-1.6		0.5s	154.93nm			6.3mb		WARB	89.92	153	eP	33	18.00	2.2
KLU	3.06	128	eP	12	43.11	0.7	SLR	49.10	68	ePc	29	02.46	-2.5	BRS	92.17	176	iP	33	25.20	-0.9
	26 obs. assaciated							1.1s	167.09nm			6.0mb		RUV	92.47	233	iP	33	29.10	1.5
----------								Z 17s	39.73um			6.5MszX			1.2s	60.00nm			5.9mb	
SEP 14, 1990 09h 20m 18.91± 0.16s									S	36	20.00			VAH	92.52	232	iP	33	29.10	1.3
60.689 S ± 5.2km 22.794 W ± 4.9km							ANT	49.31	297	e(P)	29	06.00	-0.4		1.2s	70.00nm			6.0mb	
DEPTH = 33.0km (normal)							BFT	49.95	70	iPc	29	12.50	0.9	TPT	92.75	233	iP	33	30.50	1.7
5.9mb (28 abs.) 5.5Msz (12 obs.)								1.0s	275.00nm			6.2mb			1.2s	60.00nm			5.9mb	
SOUTH SANDWICH ISLANDS REGION (153)							PAF	50.08	122	eP	29	30.00	17.9X	RMQ	92.87	172	iPd	33	29.20	-0.2
FAULT PLANE SOLUTION: P-Waves										eS	36	35.00					e	37	07.00	
NP1:Strike= 30 Dip=80 Slip= 5										eSSS	40	24.00		MBL	93.01	145	eP	33	30.10	0.1
NP2: 299 85 170							SIV	52.42	311	iPc	29	29.20	-1.0		1.0s	48.00nm			5.9mb	
Principal Axes:							CCH	53.12	305	Pc	29	35.70	0.0	ASPA	93.83	159	iPd	33	33.50	-0.4
T Plg=11 Azm=254							SOB1	53.12	337	eP	29	35.80	0.5		1.2s	50.00nm			5.8mb	
P 4 345										i	29	38.70			Z 22s	0.88um			5.2Msz	
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.										i	29	53.90					LR	46	07.20	
										e	30	30.90		AVE	94.49	13	eP	33	39.00	2.7
							BUL	54.10	65	iPc	29	41.10	-1.6	IFR	94.98	15	iPd	33	42.00	3.2X
								1.0s	154.50nm			6.0mb		DZM	97.20	189	iPc	33	49.40	0.1
							LPB	54.68	303	P	29	47.80	0.5	WRA	97.55	158	Pc	33	50.50	-0.3
								1.2s	375.00nm			6.3mb			1.0s	14.90nm			5.5mb	
								Z 18s	6.19um			5.7Msz		WB5	97.62	158	eP	33	50.90	-0.2
MOMENT TENSOR SOLUTION										S	37	26.00		CTA	99.02	170	iPKPd	33	57.10	-0.4
Dep 13 No. of sta: 3										LR	47	16.00			1.2s	43.75nm			5.9mb	
Moment Tensor; Scale 10**18 Nm							ZOBO	54.93	303	iPc	29	48.93	-0.4	JSC	105.96	313	PKP	38	38.00	-2.1
Mrr=-0 31 Mtt=-1 53								1.1s	63.81nm			5.6mb		OHR	107.51	33	e(PKP)	39	01.30	18.4X
Mff= 1.84 Mrt= 0.00								Z 20s	3.33um			5.4Msz		ITU	109.89	39	ePKP	39	04.00	16.7X
Mrf= 0.41 Mtf=-0.70										S	37	22.00		MAIO	117.37	64	ePKP	39	03.00	1.1
Principal axes:										LR	47	16.00		BDT	120.28	110	ePKP	39	04.50	-3.3X
T Val= 2.05 Plg=10 Azm=259							CAI	55.11	343	eP	29	50.10	0.2	GOL	120.32	298	iPKPd	39	06.30	-1.4
N -0.37 80 58							ARE	56.16	300	ePc	29	58.00	0.1				i	49	14.20	
P -1.68 4 168							PT08	62.36	297	P	30	40.60	-0.2	SCH	120.33	332	ePKP	39	06.00	-0.9
Best Double Couple:Mo=1.9*10**18							LIC	68.15	19	Pd	31	18.28	0.7	TPC	120.60	286	ePKP	39	08.00	-0.1
NP1:Strike=303 Dip=81 Slip= 176								Z 20s	5.50um			5.8Msz		RVR	121.14	285	ePKP	39	08.00	-1.0
NP2: 34 86 9										S	40	19.00		CHG	121.62	109	ePKP	39	10.80	0.4
CENTROID, MOMENT TENSOR (HRV)							KIC	68.33	19	Pd	31	19.32	0.6		1.1s	20.57nm				
Data Used: GDSN							TIC	68.57	19	Pd	31	20.70	0.5	SBB	121.92	285	ePKP	39	10.00	-0.6
L.P.B.: 12S, 29C								0.8s	109.00nm			6.0mb		GSC	121.94	286	ePKP	39	11.00	0.4
Centroid Locotian:							LWI	70.17	56	iPd	31	32.60	2.3	DMN	122.38	91	PKP	39	11.60	-0.3
Origin Time 09:20:20.6 0.2							LKO	71.32	18	Pd	31	35.80	-1.2	GKN	122.48	90	PKP	39	11.00	-1.0
Lat 61.38S 0.04 Lon 22.38W 0.08								1.4s	212.00nm			6.0mb		PKI	122.50	91	PKP	39	11.40	-0.8
Dep 15.0 BDY Half-duration 3.6							BCAO	72.45	44	iPd	31	43.96	0.2	KKN	122.62	91	PKP	39	11.40	-0.9
Moment Tensor; Scale 10**17 Nm								1.0s	113.00nm			5.8mb			1.0s	60.00nm				
Mrr=-6.36 0.25 Mtt= 5.57 0.33										ic	33	18.30		ABL	122.72	284	PKP	39	12.00	-0.3
Mff= 0.79 0.22 Mrt= 8.25 0.84										ic	34	04.10		CLC	122.73	286	ePKP	39	12.00	-0.1
Mrf= 3.43 0.76 Mtf= 5.48 0.27										ePP	34	30.32		GUN	123.01	91	PKP	39	12.60	-0.6
Principal Axes:							NAI	74.44	64	iPc	32	01.00	5.4X		1.0s	84.00nm				
T Val= 13.15 Plg=24 Azm=329							PSO	74.49	302	eP	31	58.00	1.9	ISA	123.02	285	ePKP	39	13.00	0.3
N -2.54 9 64							MBO	74.97	6	eP	32	01.50	3.3X	RSSD	123.37	302	ePKPd	39	11.20	-2.1
P -10.61 64 172							BOG	76.28	307	eP	32	07.00	0.8				iSKKS	49	03.00	
Best Double Couple:Mo=1.2*10**18										iS	41	52.00		DAU	123.51	294	PKP	39	12.70	-1.1
NP1:Strike= 41 Dip=22 Slip=-114							WEL	77.37	193	P	32	12.00	0.5	HFS	123.76	21	ePKP	39	11.00	-2.2
NP2: 247 70 -80							GUAN	78.12	317	eP	32	17.30	1.2		1.1s	23.50nm				
							CEOS	78.19	314	iP	32	17.40	1.0	SHL	124.00	98	iPKP	39	14.80	-0.2
AIA	19.11	238	eP	24	40.30	-1.0	OLLA	78.57	316	eP	32	19.60	1.0	DUG	124.04	292	PKP	39	14.00	-0.7
			eS	28	01.30		LLAV	79.00	316	iP	32	22.00	1.1	NB2	124.19	19	PKP	39	13.80	-0.3
SPA	29.48	180	iPd	26	22.10	0.4	CAR	79.07	316	eP	32	22.00	0.7		0.8s	11.40nm				
	1.2s	107.75nm				5.5mb				iS	42	20.00		UPP	124.23	23	iPKP	39	13.50	-0.6
	Z 18s	10.12um				5.5Msz	FISA	80.61	314	iP	32	30.30	0.8	TNP	124.38	288	ePKPd	39	14.80	-0.7
		i		27	01.90		NWAO	81.15	147	iPc	32	32.20	0.1				iSKKS	48	59.00	
LPA	34.24	303	iP+	27	03.20	-0.2		1.0s	28.00nm			5.2mb		PRI	124.45	283	ePKPc	39	17.00	1.5
	Z 20s	4.26um				5.2Msz		Z 20s	1.60um			5.4Msz		BW06	124.65	297	PKP	39	13.40	-2.5
		iS		32	28.20		TOO	81.62	171	eP	32	34.00	-0.5	FRI	124.68	285	ePKPc	39	16.50	0.8
MAW	35.08	138	iP	27	10.80	0.6	BFO	81.75	168	iPd	32	35.80	0.7	PRS	124.94	283	ePKPc	39	16.60	0.3
	1.0s	35.00nm				5.2mb	MUN	81.77	146	iPd	32	34.70	-0.6	ARN	125.84	284	PKP	39	18.50	0.4
CER	38.55	64	iPc	27	39.00	-0.8		1.0s	120.00nm			5.9mb		CMB	125.84	285	ePKPc	39	19.00	0.9
	0.9s	61.54nm				5.4mb	UPA	82.44	304	ePc	32	40.00	1.1	MHC	125.88	284	ePKPc	39	19.50	1.2
CHCH	40.69	289	eP	27	56.40	-1.2		Z 20s	1.77um			5.4Msz		IMW	126.16	297	iPKP	39	17.80	-1.1
PCH	40.89	289	iPd	27	59.20	-0.1	KLB	82.56	147	eP	32	40.00	0.6				iSKKS	48	52.00	
FCH	41.03	290	iPd	28	00.80	0.1		1.0s	68.00nm			5.7mb		NUR	126.29	27	iPKP	39	18.00	-0.1
LNV	41.03	288	iPc	27	59.00	-1.3	PAG	82.56	322	eP	32	40.00	0.4		1.2s	69.40nm				
SAN	41.09	289	iPd	28	00.50	-0.4	BAL	83.20	146	iPd	32	42.80	0.0	BKS	126.59	284	ePKPc	39	19.50	0.0
PEL	41.36	290	iPc	28	02.60	-0.5		1.0s	53.00nm			5.6mb					i	58	38.00	
LCCH	41.50	288	eP	28	09.00	4.9X								BRK	126.60	284	ePKP	39	20.50	1.1
JFO	41.51	331	eP	28	07.20	2.8	ADE	83.49	165	iPd	32	44.20	-0.1							

14d 09h

ORV	127.57	285	ePKP	39	21.90	0.6
LRM	128.33	297	ePKP	39	23.50	0.6
SUF	128.59	26	iPKP	39	22.00	-0.4
	0.9s		20.40nm			
KMI	128.82	109	ePKP	39	23.50	-0.9
	1.5s		60.00nm			
	Z 22s		1.90um			5.7Msz
			sP	39	38.00	
			eS	51	11.00	
			sS	51	33.00	
WDC	128.87	285	ePKPc	39	23.80	0.1
LBFM	129.16	286	PKP	39	23.40	-1.1
FFC	130.96	311	ePKP	39	27.00	-0.2
	1.0s		22.00nm			
SES	131.24	302	ePKPc	39	27.50	-0.5
NEW	132.26	296	PKP	39	22.00	-8.0X
SOD	132.76	24	iPKP	39	29.20	-1.0
LON	133.24	291	PKP	39	30.00	-1.9
RMW	133.77	292	PKP	39	30.40	-2.5
PNT	134.15	295	ePKP	39	33.00	-0.5
	1.0s		17.00nm			
EDM	134.30	303	ePKP	39	33.00	-0.7
KEV	134.87	22	ePKP	39	32.00	-2.2
MCW	135.13	292	PKP	39	34.70	-0.7
DAG	137.23	1	ePKP	39	37.20	-1.3
	1.0s		20.00nm			
LZH	138.45	102	ePKP	39	32.00	-10.2X
	Z 22s		1.40um			5.7Msz
	N 20s		1.00um			
	E 20s		1.90um			
			sPKP	39	42.00	
			PP	42	31.00	
			PKS	43	06.50	
			eSKKS	49	20.00	
			PS	52	36.00	
			SS	00	45.00	
YKA	141.10	312	ePKP	39	38.60	-7.3X
	0.8s		11.10nm			
SSE	142.07	125	ePKP	39	42.00	-6.6X
	Z 20s		0.90um			5.5Msz
	N 19s		1.70um			
			ePP	42	54.00	
			eSS	01	40.00	
KAGJ	145.75	138	ePKP	39	55.70	0.8
KUMJ	146.96	136	ePKP	39	58.90	2.1
BJI	147.44	111	ePKPd	39	56.35	-1.0
	Z 18s		1.47um			5.8Msz
	N 16s		10.60um			
			ePP	43	24.00	
			eSS	02	32.00	
SHNJ	148.51	136	ePKP	40	03.20	4.0X
TKSJ	149.35	140	PKP	40	05.50	4.9X
WKYJ	150.04	142	PKP	40	07.80	6.1X
YONJ	150.27	138	PKP	40	07.70	5.8X
INK	150.80	315	ePKP	40	07.00	5.4X
	0.9s		102.00nm			
			pP	40	19.00	
TSRJ	151.38	142	iPKPd	40	10.70	7.1X
CHJJ	152.73	146	iPKPd	40	13.40	7.9X
MTMJ	152.90	144	PKP	40	13.50	7.7X
MAT	152.97	145	iPKPd	40	13.50	7.7X
TOA	153.58	298	iPKPd	40	15.10	9.1X
	1.1s		76.60nm			
NIIJ	153.85	146	iPKPd	40	15.40	8.4X
PMR	154.69	296	iPKPd	40	14.30	7.0X
FBA	155.20	304	iPKPd	40	16.90	9.0X
	1.2s		62.50nm			
IMA	157.85	305	iPKPd	40	07.40	-4.2X
	1.8s		35.20nm			

S.D. = 1.1 on 130 of 159 obs.

& SEP 14, 1990 09h 20m 24.19s
58.692 N 142.933 W
DEPTH = 10.0km (geophysicist)
3.3mb (1 obs.)
GULF OF ALASKA (15)
<AGS-P>.

WRG	1.43	18	eP	20	45.58	-4.6
			eS	21	01.18	
KAIM	1.45	329	eP	20	45.91	-4.6
SNH	1.49	2	eP	20	46.15	-4.9
			eS	21	04.14	
WAX	1.76	1	iP	20	50.58	-4.5
			eS	21	11.40	
YKA	14.36	63	eP	23	50.00	0.7
	0.5s		0.40nm			3.3mb

5 obs. associated

SEP 14, 1990 09h 43m 47.99± 0.57s
39.137 N ± 5.5km 21.974 E ± 7.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.3 (ATH).

EVR	0.25	210	iPgc	43	52.80	-0.6
KZN	1.18	352	ePb	44	10.00	0.0
			eSb	44	29.20	
VLS	1.45	229	ePb	44	13.00	-1.2
PLG	1.68	42	ePb	44	16.50	-1.0
KEK	1.78	290	ePg	44	22.70	3.7X
ATH	1.79	130	ePn	44	19.20	0.0
ITM	1.95	181	ePg	44	23.50	2.0
OHR	2.17	336	iPn	44	28.00	3.3X
			i	44	53.00	
			Lg	45	04.10	
			LR	45	09.60	
VLI	2.53	162	ePn	44	28.80	-1.0
MMB	2.79	28	ePc	44	33.00	-0.6
KKB	2.85	17	eP	44	32.00	-2.4
SKO	2.86	352	ePn	44	34.00	-0.5
			i	44	42.00	
RZN	3.30	39	P	44	40.00	-0.9
RDO	3.39	53	ePb	44	45.00	3.0X
VTS	3.58	15	eP	44	46.00	1.2
KDZ	3.63	45	eP	44	48.00	2.5
VAM	4.12	154	ePb	44	58.50	6.1X
ORI	4.37	284	P	45	11.00	15.1X
			eSn	46	07.00	
PVL	4.80	31	eP	45	03.00	1.0
MGR	5.06	283	P	45	07.00	1.4
DUI	6.27	296	P	45	23.00	0.2
SDI	6.73	295	P	45	34.00	4.6X
MLR	7.00	24	eP	45	38.00	4.9X

S.D. = 1.4 on 16 of 23 obs.

% SEP 14, 1990 09h 46m 17.55± 1.43s
42.478 N ± 6.5km 12.510 E ±15.2km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

MNS	0.16	127	Pc	46	20.40	-0.8
			eSg	46	23.30	
ASS	0.60	11	P	46	29.30	-0.5
			eSg	46	39.20	
AQU	0.67	100	P	46	31.70	0.7
			eSg	46	41.50	
RDP	0.74	168	P	46	32.40	0.4
			eSn	46	44.00	
ARV	1.07	17	P	46	38.00	0.3
			eSn	46	53.90	
SDI	1.24	128	P	46	40.50	-0.2
			eSn	46	59.00	

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

& SEP 14, 1990 10h 31m 44.02s
58.876 N 136.667 W
DEPTH = 8.5km
SOUTHEASTERN ALASKA (19)
<AGS-P>.

PNL	1.61	301	eP	32	11.07	-1.7
			eS	32	33.22	
BCPM	1.86	307	eP	32	14.99	-1.4
			eS	32	40.64	

2 obs. associated

? SEP 14, 1990 10h 43m 43.81±20.06s
31.326 S ±55.4km 67.922 W ±122.km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.39	224	iPd	43	52.30	0.5
ZON	0.68	251	eP	43	57.00	-0.4
			eS	44	07.00	
RTCV	0.75	224	ePc	43	58.00	-0.5
RTBS	1.35	255	ePd	44	09.00	0.4

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

& SEP 14, 1990 12h 24m 19.53s
62.555 N 149.640 W
DEPTH = 64.4km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.33	243	iP	24	30.41	0.0
			iS	24	38.51	
HUR	0.42	0	iP	24	31.28	0.0
			iS	24	39.86	
GHO	0.85	157	iP	24	36.22	0.0
PWA	0.91	187	iP	24	36.88	0.0
SML	0.97	140	iP	24	37.48	-0.2
			eS	24	51.45	
PLRM	1.00	166	iP	24	37.88	0.0
			eS	24	52.63	
SKT	1.06	238	iP	24	38.81	0.0
KTH	1.16	330	eP	24	40.23	0.0
SUA	1.21	206	iP	24	41.11	0.2
MCK	1.22	15	eP	24	41.54	0.5
			eS	24	56.89	
SCM	1.30	123	eP	24	42.44	0.3
PMS	1.32	178	eP	24	42.46	0.2
NCG	1.66	227	eP	24	46.94	-0.1
CGLM	1.68	223	eP	24	47.22	-0.1
TOA	1.68	104	iP	24	48.59	1.3
CRP	1.76	224	eP	24	48.89	0.4
BGL	1.84	226	eP	24	50.30	0.8
CKL	1.87	224	eP	24	50.25	0.3
NKA	1.97	203	eP	24	53.71	2.5
WRH	2.05	19	eP	24	51.65	-0.6
KLU	2.05	120	eP	24	52.44	0.0
SLKM	2.07	188	eP	24	52.82	0.1
VZW	2.10	134	eP	24	53.03	0.0
VLZ	2.12	131	eP	24	52.91	-0.4
HDA	2.21	32	iP	24	54.16	-0.5
CCB	2.25	21	eP	24	54.35	-0.8
RDT	2.39	215	eP	24	57.86	0.7
SEW	2.46	178	eP	24	59.68	1.6
FBA	2.49	18	eP	24	57.89	-0.6
RSO	2.58	217	eP	25	01.16	1.3
GLM	2.64	21	iP	24	59.90	-0.7
DOT	2.76	64	eP	25	02.70	0.3
GLB	2.97	110	eP	25	05.81	0.5
HOM	3.07	199	eP	25	06.25	-0.3
CNPM	3.14	195	eP	25	08.08	0.5
OPT	3.39	212	eP	25	13.07	1.8
PDB	3.55	220	eP	25	14.03	0.7
AUE	3.69	211	eP	25	17.14	1.9
DWY	4.84	67	P	25	30.50	-1.1

39 obs. associated

% SEP 14, 1990 13h 09m 23.34± 1.93s
41.864 N ±10.3km 12.613 E ±22.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

RMP	0.09	128	P	09	25.80	-0.1
			eSg	09	28.50	
RDP	0.13	144	P	09	26.50	-0.1
			eSg	09	29.00	
MNS	0.52	5	P	09	33.30	-0.6
			eSg	09	42.20	
SDI	0.91	100	P	09	41.00	0.1
			eSg	09	54.00	
ASS	1.21	2	P	09	46.50	0.7
			eSg	10	03.00	

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

? SEP 14, 1990 13h 34m 41.23± 1.99s
14.841 N ±14.6km 147.957 E ±21.7km
DEPTH = 28.6 ± 11.2 km
4.3mb (5 obs.)
MARIANA ISLANDS REGION (215)

GUA	3.23	247	eP	35	31.80	0.7
			eS	36	11.10	
GUMO	3.25	248	eP	35	30.70	-0.7
PJG	3.25	248	eP	35	30.50	-0.9
MAT	23.30	340	eP	39	53.00	5.3X
	0.8s		7.46nm			4.3mb
WRA	37.07	202	Pd	41	50.70	-0.2
	0.7s		4.80nm			4.5mb
ASPA	40.66	200	eP	42	21.20	0.4
	0.7s		4.00nm			4.3mb
LZH	44.63	307	Pc	42	54.50	1.2
	1.2s		21.00nm			4.9mb
			pP	42	59.50	17kmX
			sP	43	03.00	
CHG	46.97	282	eP	43	11.20	-0.7
YKA	80.37	28	eP	46	49.90	-1.2
	0.4s		0.50nm			3.9mb
ZOBO	145.24	97	PKP	54	20.00	0.5

KIC 145.70 306 PKP 54 19.60 0.0
LIC 146.01 306 PKP 54 20.60 0.5
S.D. = 0.9 on 11 of 12 obs.

% SEP 14, 1990 13h 37m 29.92± 0.87s
41.915 N ± 5.5km 12.694 E ±13.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

RMP 0.10 177 P 37 33.00 0.3
eSg 37 36.50
RDP 0.16 174 P 37 33.30 -0.3
eSg 37 36.90
MNS 0.47 359 Pd 37 39.00 -0.5
eSg 37 47.00
SDI 0.86 104 P 37 46.60 0.0
eSg 38 00.00
ASS 1.15 359 P 37 52.00 0.5
eSn 38 08.50
S.D. = 0.6 on 5 of 5 obs.

? SEP 14, 1990 13h 54m 57.60± 0.97s
44.300 N ±14.2km 7.587 E ± 6.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.5 (GEN).

ENR 0.14 238 P 55 00.98 0.0
S 55 03.13
STV 0.20 254 P 55 02.00 0.0
S 55 04.77
ROB 0.20 91 P 55 02.10 0.0
S 55 04.98
PZZ 0.40 301 P 55 05.90 0.0
S 55 11.23
S.D. = 0.0 on 4 of 4 obs.

% SEP 14, 1990 14h 01m 39.03± 0.65s
44.247 N ± 8.2km 7.609 E ± 4.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

ENR 0.14 261 P 01 42.68 0.3
S 01 45.03
ROB 0.19 76 P 01 43.80 0.5
S 01 46.88
STV 0.20 269 P 01 43.80 0.2
S 01 46.67
IMI 0.39 149 P 01 46.78 -0.3
S 01 52.52
PZZ 0.45 305 P 01 47.70 -0.5
S 01 53.75
PCP 0.73 66 P 01 53.24 -0.2
S.D. = 0.5 on 6 of 6 obs.

? SEP 14, 1990 14h 03m 20.61± 0.99s
44.299 N ±14.4km 7.616 E ± 6.3km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.4 (GEN).

ENR 0.16 243 P 03 24.23 -0.1
S 03 26.48
ROB 0.18 91 P 03 24.74 0.0
S 03 27.41
STV 0.22 255 P 03 25.46 0.1
S 03 28.23
PZZ 0.42 299 P 03 29.25 0.0
S 03 35.71
S.D. = 0.1 on 4 of 4 obs.

% SEP 14, 1990 14h 11m 41.20± 0.84s
44.381 N ± 8.3km 7.393 E ± 6.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

STV 0.15 200 P 11 44.88 0.2
S 11 47.65
ENR 0.16 173 P 11 44.68 -0.2
S 11 47.35
PZZ 0.24 301 P 11 46.42 0.0
S 11 49.91
ROB 0.35 104 P 11 48.88 0.4
S 11 54.11
IMI 0.59 143 P 11 53.19 0.0
S 12 01.80
FIN 0.61 106 P 11 53.19 -0.3
S 12 01.91
S.D. = 0.3 on 6 of 6 obs.

SEP 14, 1990 14h 18m 06.81± 0.48s
44.271 N ± 5.0km 7.612 E ± 3.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.3 (GEN), 2.3 (LDG).

ENR 0.15 252 P 18 10.39 0.1
S 18 12.75
ROB 0.19 83 P 18 11.62 0.6
S 18 14.49
STV 0.21 263 P 18 11.52 0.1
S 18 14.29
IMI 0.41 151 P 18 15.01 -0.3
S 18 20.65
SBF 0.43 197 Pg 18 15.60 0.0
Sg 18 21.20
FIN 0.43 98 P 18 15.31 -0.3
S 18 21.16
PZZ 0.43 303 P 18 15.42 -0.3
S 18 21.36
PCP 0.72 68 P 18 20.95 -0.1
S 18 30.49
FRF 1.00 225 Pg 18 25.00 -0.7
Sg 18 38.60
LRG 1.22 228 Pg 18 30.00 0.5
Sg 18 45.20
LMR 1.23 221 Pg 18 30.00 0.3
Sg 18 46.00
S.D. = 0.4 on 11 of 11 obs.

SEP 14, 1990 14h 23m 17.31± 0.89s
40.045 N ± 7.8km 23.818 E ± 8.5km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 2.8 (ATH).

PLG 0.44 319 ePg 23 25.90 -0.3
eSg 23 34.00
MMB 1.54 357 eP 23 45.00 0.1
KZN 1.59 280 ePb 23 46.50 0.9
RDO 1.71 49 ePb 23 47.30 0.0
eSb 24 10.50
RZN 1.78 22 iPc 23 47.00 -1.4
KKB 1.90 343 eP 23 50.00 -0.1
KDZ 2.01 37 eP 23 54.00 2.3
ATH 2.07 182 ePb 23 52.00 -0.5
PLD 2.16 18 eP 24 05.00 11.1X
VTS 2.59 350 eP 24 00.00 0.0
PVL 3.37 19 eP 24 10.00 -0.9
S.D. = 1.2 on 10 of 11 obs.

? SEP 14, 1990 15h 07m 18.83± 1.84s
36.705 N ±17.0km 4.366 W ±13.2km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
mbLg 2.8 (MDD).

ECOG 0.86 48 eP 07 39.20 3.8X
eS 07 53.00
EJIF 0.92 254 eP 07 36.50 0.0
eS 07 51.30
EHOR 1.32 328 eP 07 43.00 -0.1
eS 08 00.40
EBAN 1.53 17 iP 07 46.60 0.4
eS 08 06.50
EVIA 2.43 37 eP 07 59.00 -0.3
eS 08 28.00
S.D. = 0.5 on 4 of 5 obs.

? SEP 14, 1990 15h 22m 59.17± 0.97s
44.296 N ±14.2km 7.582 E ± 6.5km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.5 (GEN).

ENR 0.14 239 P 23 02.42 -0.1
S 23 04.78
STV 0.19 254 P 23 03.55 0.1
S 23 06.31
ROB 0.21 90 P 23 03.75 0.0
S 23 06.62
PZZ 0.40 301 P 23 07.44 0.0
S 23 13.39
S.D. = 0.1 on 4 of 4 obs.

? SEP 14, 1990 16h 08m 54.18± 5.65s
31.105 S ±18.6km 179.019 W ±25.1km
DEPTH = 370.4 ± 51.3 km
4.4mb (6 obs.)
KERMADEC ISLANDS REGION (177)

DZM 15.80 301 iPc 12 18.40 -0.4
BRS 24.86 271 iP 13 47.80 1.4
RMQ 28.56 271 eP 14 19.00 -0.3
CMS 29.96 260 eP 14 33.00 1.4
CTA 33.06 281 iPc 14 57.90 -0.4
0.8s 34.33nm 4.7mb
QIS 38.50 276 iPc 15 43.30 -0.4
ASPA 42.20 268 eP 16 13.80 -0.1
0.4s 12.00nm 4.5mb
Z 21s 0.12um 3.7MszX
LR 32 33.80
WRA 43.25 273 Pd 16 21.70 -0.5
0.4s 11.50nm 4.5mb
WB5 43.26 274 eP 16 21.90 -0.4
FORR 44.97 256 eP 16 36.00 0.4
COOL 50.72 254 eP 17 19.50 -0.2
0.3s 2.00nm 3.9mb
KLB 53.29 252 eP 17 38.00 -0.4
0.3s 3.00nm 4.1mb
MUN 54.44 251 eP 17 46.00 -0.6
MRWA 55.48 254 eP 17 54.00 -0.1
SPA 59.07 180 iPc 18 18.30 -0.3
0.8s 9.58nm 4.3mb
SOD 140.65 345 ePKP 27 48.00 7.3X
SUF 144.48 340 iPKP 27 46.30 -1.2
0.4s 4.60nm
NUR 146.66 339 iPKP 27 53.00 1.9
0.7s 26.70nm
BCAO 148.74 215 iPKPc 28 03.30 7.4X
0.4s 27.00nm
ic 28 18.60
NB2 149.31 350 PKP 28 00.30 4.9X
0.8s 9.90nm
HFS 149.75 347 ePKP 28 00.70 4.7X
0.9s 18.30nm
KIC 154.81 167 PKP 28 15.00 10.5X
S.D. = 0.9 on 17 of 22 obs.

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* SEP 14, 1990 16h 46m 57.13± 2.22s
38.719 N ± 9.7km 142.378 E ±26.7km
DEPTH = 66.2 ± 20.3 km
4.2mb (1 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

OFUJ 0.66 303 iP+ 47 11.30 -0.2
S 47 19.30
YAMJ 1.92 254 iPd 47 27.10 -1.1
S 47 47.30
AOMJ 2.40 321 iPd 47 35.30 0.4
NIIJ 3.05 242 P 47 43.60 -0.4
KAKJ 3.06 216 P 47 44.10 0.0
CHJJ 3.79 226 P 47 54.50 0.1
MAT 3.96 238 iPd 47 57.20 0.4
0.8s 44.78nm
eS 48 58.00
MTMJ 4.21 241 P 48 00.90 0.5
IIDJ 4.82 229 P 48 09.30 0.4
WRA 58.84 189 Pd 56 50.80 -0.3
0.5s 0.90nm 4.2mb
S.D. = 0.6 on 10 of 10 obs.

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* SEP 14, 1990 17h 38m 12.81± 2.08s
32.749 S ± 9.2km 71.720 W ±19.0km
DEPTH = 33.0km (normol)
NEAR COAST OF CENTRAL CHILE (135)

IHA 0.28 167 iPc 38 19.70 -0.6
iS 38 27.70
ROCH 0.64 111 iPd 38 24.70 -0.9
iS 38 36.00
LCCH 0.73 170 iPc 38 26.50 -0.2
iS 38 39.60
JACH 0.95 86 iPd 38 28.10 -1.9
iS 38 43.10
PEL 0.95 115 iPd 38 30.00 0.1
TACH 1.11 144 eP 38 42.50 10.3X
FCH 1.33 116 eP 38 35.50 -0.1
iS 38 56.70

14d 17h

PCH	1.33	131	iPd	38 36.20	0.8
			iS	38 57.40	
CHCH	1.48	143	iPc	38 38.60	1.1
			i	39 02.00	
			i	39 04.20	
RTBS	2.21	61	eP	38 48.10	0.3
MDZ	2.42	94	iP	38 54.20	3.2X
			iS	39 29.60	
RTCB	2.78	64	eP	38 55.80	-0.2
			S	39 32.30	
RTCV	2.84	73	e(P)	38 57.70	0.9
ZON	2.85	66	eP	38 57.50	0.6
RTLL	3.10	64	ePd	39 00.20	-0.4
			eS	39 42.10	
CFA	3.16	70	e(P)	39 02.00	0.5
			S	39 45.50	

S.D. = 0.9 on 14 of 16 obs.

? SEP 14, 1990 17h 43m 40.36± 4.07s
20.681 S ±67.6km 178.627 W ±50.5km
DEPTH = 540.9 ± 27.8 km
4.5mb (5 obs.)
FIJI ISLANDS REGION (181)

VUN	3.82	314	eP	45 00.00	-0.9
SGE	4.48	313	ePc	45 07.10	0.9
ASPA	43.91	257	iPd	51 01.30	0.4
	0.7s		16.00nm	4.7mb	
WB5	43.98	262	eP	51 01.20	-0.2
WRA	43.99	262	Pc	51 01.30	-0.2
	0.5s		3.10nm	4.1mb	
FORR	48.65	247	iPc	51 36.30	-0.6
	0.3s		16.00nm	5.0mb	
WARB	50.22	253	eP	51 51.00	2.4
MBL	57.15	258	eP	52 36.50	-1.3
	0.4s		9.00nm	4.5mb	
NANU	60.78	255	eP	53 01.50	-0.6
	0.3s		5.00nm	4.4mb	
CHG	89.75	290	eP	55 42.30	-0.1
HFS	139.62	351	ePKP	01 54.20	-13.3X
	0.5s		0.80nm		
KSP	147.69	342	iPKP	02 21.30	-0.2
CLL	148.10	346	iPKP	02 21.30	-0.8
PRU	148.94	343	iPKPd	02 24.60	1.2

S.D. = 1.2 on 13 of 14 obs.

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* SEP 14, 1990 17h 59m 26.59± 0.58s
22.123 S ± 9.1km 68.644 W ± 9.5km
DEPTH = 108.6km (3 depth phases)
4.6mb (7 obs.)
NORTHERN CHILE (123)

ANT	2.27	226	eP	00 04.00	0.5
			i	00 06.30	
			iS	00 28.00	
CCH	5.27	27	P	00 47.50	2.8
CNCB	5.32	7	P	00 48.00	2.4
LPB	5.58	5	eP	00 47.00	-2.1
			i	00 52.00	
ZOBO	5.84	5	iPd	00 53.20	0.4
ARE	6.24	334	eP	00 56.00	-2.0
			iS	02 01.40	
PPD	16.07	93	eP	03 07.80	0.2
			e	03 10.80	
			e	03 14 20	
VAO	20.04	97	eP	03 52.50	-0.9
LHS	57.46	348	P	09 05.00	-1.3
RSCP	59.60	344	P	09 20.00	-1.3
ANMO	67.15	327	P	10 11.60	0.6
	0.8s		4.66nm	4.4mb	
			pP	10 37.40	102km
LIC	68.33	73	Pc	10 18.00	-0.5
	0.7s		6.00nm	4.6mb	
TIC	68.52	73	P	10 19.20	-0.5
KIC	68.64	73	Pc	10 20.00	-0.5
	0.6s		11.00nm	4.9mb	
LKO	69.34	70	P	10 22.40	-2.4
GOL	70.42	331	P	10 31.00	-0.1
	0.7s		3.94nm	4.4mb	
DAU	73.78	327	P	10 52.00	0.9
DUG	74.41	326	P	10 55.20	0.7
BW06	74.78	330	P	10 56.00	-0.7
	1.0s		5.67nm	4.3mb	
TNP	75.27	322	P	11 00.00	0.4
IMW	76.28	330	P	11 06.00	0.7
			pP	11 34.00	109km
LBFM	80.13	322	P	11 26.60	0.3
SES	81.34	334	ePc	11 31.50	-0.7
			pP	12 01.00	115km
BUL	88.96	111	iPd	12 11.10	0.2
	1.0s		8.00nm	4.8mb	
YKA	91.85	340	eP	12 23.00	0.0
	1.0s		3.60nm	4.6mb	
GBA	146.68	99	PKP	18 58.80	2.7

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

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* SEP 14, 1990 17h 59m 28.55± 2.58s
36.722 N ±25.3km 71.427 E ±14.3km
DEPTH = 73.9 ± 32.5 km
3.9mb (1 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

NDI	9.38	147	eP	01 45.50	2.3
	0.4s		16.95nm	5.3mb	X
			eS	03 19.00	
MAIO	9.62	271	eP	01 46.00	-0.5
			eS	03 25.00	
GKN	14.14	124	P	02 47.00	0.3
KKN	14.71	123	P	02 52.60	-1.6
PKI	14.94	124	P	02 56.20	-1.0
GUN	15.04	122	P	02 58.20	-0.3
SHL	20.70	117	eP	04 06.00	1.0
			eS	07 55.50	
GBA	23.64	165	P	04 33.00	-0.9
			S	08 18.00	
NB2	44.41	323	P	07 34.00	0.7
	0.7s		1.30nm	3.9mb	

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

? SEP 14, 1990 19h 27m 08.44± 4.64s
21.683 S ±34.3km 178.934 W ±78.9km
DEPTH = 600.0km (geophysicist)
4.4mb (3 obs.)
FIJI ISLANDS REGION (181)

VUN	4.40	326	eP	28 36.40	-0.8
SGE	5.04	323	iPc	28 43.40	1.2
ASPA	43.41	258	eP	34 21.70	0.3
WB5	43.57	264	eP	34 22.00	-0.6
WRA	43.58	263	Pc	34 22.20	-0.5
	0.3s		2.40nm	4.2mb	
FORR	47.99	248	iPd	34 57.00	0.8
	0.4s		9.00nm	4.7mb	
WARB	49.65	254	eP	35 12.00	3.5X
NANU	60.25	256	eP	36 22.30	0.1
	0.4s		8.00nm	4.3mb	
CHTO	89.83	290	(P)	39 05.10	-0.4

S.D. = 0.9 on 8 of 9 obs.

? SEP 14, 1990 20h 27m 18.13± 3.68s
21.277 S ±45.9km 178.221 W ±51.5km
DEPTH = 579.8 ± 22.8 km
4.5mb (4 obs.)
FIJI ISLANDS REGION (181)

VUN	4.51	316	eP	28 46.00	-0.4
SGE	5.17	315	ePc	28 52.00	0.2
DZM	14.28	264	iPc	30 20.90	1.3
ASPA	44.15	258	iPd	34 38.20	0.2
	0.5s		26.00nm	5.0mb	
			eS	40 26.80	
WB5	44.28	263	iPd	34 38.20	-0.8
WRA	44.29	263	Pd	34 38.10	-1.0
	0.3s		7.50nm	4.7mb	
WARB	50.40	253	eP	35 29.00	3.9X
MBL	57.39	258	eP	36 13.50	-0.9
	0.4s		9.00nm	4.4mb	
KLB	57.54	245	eP	36 15.00	-0.3
	0.4s		4.00nm	4.0mb	
NWAO	57.84	244	eP	36 18.00	0.7
MUN	58.81	245	eP	36 24.00	0.2
NANU	61.00	255	eP	36 38.00	-0.3
CHG	90.31	290	eP	39 20.30	1.1

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

SEP 14, 1990 20h 40m 18.35± 0.23s
13.382 N ± 3.9km 51.456 E ± 2.9km
DEPTH = 10.0km (geophysicist)
5.4mb (67 obs.) 4.8Msz (13 obs.)
EASTERN GULF OF ADEN (415)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 28C
Centroid Location:

Origin Time 20:40:22.4 0.6
Lat 13.66N 0.05 Lon 51.06E 0.03
Dep 15.0 FIX Half-duration 2.3
Moment Tensor; Scale 10**17 Nm
Mrr=-0.04 0.06 Mtt= 1.61 0.07
Mff=-1.57 0.08 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf= 1.18 0.07
Principal Axes:

	Vol=	Plg=	Azm=
T	2.00	0	162
N	-0.04	90	180
P	-1.96	0	72

Best Double Couple:Mo=2.0*10**17
NP1:Strike=207 Dip=90 Slip=-180
NP2: 297 90 0

OBO	8.09	261	eP+	42 20.26	1.6
MKL	8.28	259	iP+	42 21.99	0.7
ATA	8.28	258	eP+	42 19.86	-1.5
TDD	8.49	260	iP+	42 25.58	1.2
ARO	8.61	259	iPd	42 26.00	0.0
DHJN	8.78	300	eP+	42 27.30	-1.3
SGH	8.83	258	ePd	42 28.24	-0.8
DAF	8.89	260	ePd	42 29.84	-0.1
HLD	8.99	260	iPd	42 31.11	-0.1
KSU	8.99	259	iPd	42 30.77	-0.5
GBR	9.06	257	eP+	42 29.91	-2.4
SRAT	9.23	301	eP+	42 36.70	1.9
KMTA	9.54	301	eP	42 37.50	-1.5
ABHA	9.67	301	eP+	42 41.60	0.7
RYD	12.17	339	iPd	43 09.00	-5.8X
BEE	12.60	356	iPn	43 15.10	-5.4X
			eSn	45 29.30	
BRF	12.65	356	ePn	43 16.10	-5.1X
BBU	12.80	356	ePn	43 16.30	-6.9X
			eSn	45 28.70	
DHR	12.92	355	eP	43 18.50	-6.2X
AAE	13.18	252	eP	43 30.00	1.5
AFIF	13.23	325	eP+	43 22.10	-6.8X
MJMA	13.70	336	eP+	43 31.30	-3.8X
QASM	14.67	331	eP	43 46.70	-1.2
WAJH	18.91	315	eP+	44 43.10	1.6
AKSR	20.22	303	iPc	44 58.40	2.0
AGAL	20.28	302	iPd	44 59.50	2.4
AKRL	20.48	303	iPc	45 00.50	1.4
ASW	20.53	304	iPc	45 02.00	2.4
			eS	49 06.00	
AKUR	20.53	303	iPc	45 01.00	1.3
NAI	20.57	226	iPd	45 01.00	0.7
AYN	21.07	319	eP+	45 05.50	0.4
BOM	21.23	72	eP	45 07.00	0.2
KER	21.25	350	iPc	45 07.30	0.2
BADA	21.48	317	eP+	45 10.90	1.6
HOL	21.94	319	eP+	45 15.10	1.1
POO	22.12	74	iP	45 17.00	1.1
			iS	49 26.00	
TEH	22.26	360	eP	45 20.00	2.8X
CSTJ	22.29	325	Pd	45 36.90	19.4X
MBH	22.39	319	iPc	45 19.50	1.1
OTFJ	22.39	327	Pd	45 33.69	15.2X
QTRJ	22.80	324	Pc	45 36.63	14.1X
MDSJ	22.91	325	Pc	45 38.34	14.7X
LISJ	23.06	323	Pc	45 39.47	14.5X
MKRJ	23.20	324	Pc	45 40.84	14.4X
HLBJ	23.22	326	Pc	45 41.16	14.5X
MASJ	23.29	324	Pc	45 41.77	14.5X
SALJ	23.51	325	Pc	45 44.13	14.7X
JARJ	23.54	325	Pc	45 44.39	14.7X
BURJ	23.62	325	Pd	45 44.80	14.3X
JVI	23.64	324	iPc	45 32.20	1.6
SHMJ	24.01	326	Pc	45 49.00	14.8X
KOT	24.51	315	eP	45 40.00	0.9
ADI	24.57	326	eP	45 42.50	2.8X
HLW	24.80	315	eP+	45 41.00	-0.9
			eS	50 14.00	
BHL	24.97	328	Pc	45 45.00	1.4
			S	50 19.00	
TAB	25.01	350	iP+	45 43.60	-0.4
GBA	25.26	86	P	45 47.70	1.3
KOD	25.65	94	eP	45 50.50	0.1
			eS	49 48.00	
HYB	26.42	78	eP	45 57.80	0.6
	1.0s		70.00nm	5.3mb	
LWI	27.31	237	iP+	46 05.00	-0.7
NDI	28.37	53	iPc	46 16.00	1.1
			eS	51 10.00	
BBTK	31.07	331	eP	46 40.00	1.0
KAS	31.87	334	eP	46 45.00	-0.9

BCAO 33.68 258 iPd 47 01.40 -0.5
1.2s 69.00nm 5.5mb
id 48 23.00
GKN 34.14 60 P 47 06.00 0.0
KKN 34.62 60 P 47 10.20 0.0
PKI 34.66 61 P 47 10.40 -0.3
GUN 35.16 60 P 47 15.00 0.0
JMB 36.10 328 iPc 47 23.00 0.7
KDZ 36.14 326 iPd 47 24.00 1.3
PSN 36.21 331 iPd 47 24.00 0.8
DIM 36.35 327 eP 47 26.00 1.6
RZN 36.55 326 iPc 47 27.00 0.7
PLD 36.84 326 eP 47 31.00 2.5
TLB 36.97 332 ePc 47 30.00 0.5
MMB 37.03 325 eP 47 31.00 0.8
PVL 37.28 328 iPc 47 31.00 -1.2
CFR 37.37 333 eP 47 34.00 1.1
PGB 37.43 326 iPc 47 34.00 0.4
KKB 37.58 324 iPc 47 35.00 0.2
BUC 37.76 330 eP 47 39.00 2.9X
VTS 37.99 325 iPd 47 34.00 -4.3X
ISR 38.08 331 ePc 47 41.00 2.1
PPE 38.41 333 eP 47 42.50 0.8
OHR 38.44 322 eP 47 42.20 0.1
1.7s 117.00nm 5.3mb
VRI 38.54 332 ePc 47 44.00 1.2
SKO 38.59 323 iP 47 43.00 -0.3
1.7s 126.00nm 5.4mb
iPP 49 18.00
eSS 56 36.00
MLR 38.62 331 iPc 47 45.00 1.4
CLI 38.81 333 ePc 47 46.50 1.4
CMP 38.89 330 iPc 47 45.00 -0.8
PTT 39.51 333 eP 47 54.00 3.2X
TNR 39.54 330 ePd 47 52.00 0.8
SHL 39.84 66 iP 47 53.50 -0.6
SOI 39.89 315 P 47 55.00 0.9
BUL 40.18 214 iPc 47 55.30 -1 6
1.0s 30.50nm 4.9mb
ORI 40.61 317 P 48 08.00 8.0X
BZS 40.86 328 eP 48 02.00 0.1
BEO 40.95 326 eP 48 03.00 0.3
FAI 41.21 312 P 48 07.00 2.0
MGR 41.24 317 P 48 06.00 0.9
BMR 41.37 331 ePd 48 08.00 1.9
DUI 42.72 318 P 48 18.50 1.1
SDI 43.16 318 P 48 21.10 0.2
BUD 43.44 328 iPc 48 23.50 0.5
SPC 43.98 331 iP 48 28.60 1.0
e 50 11.30
ZAG 44.06 324 iPc 48 28.50 0.5
BFT 44.08 208 iPc 48 29.00 0.3
1 0s 80.00nm 5.5mb
PTJ 44.12 324 eP 48 29.20 0.5
MNS 44.23 318 P 48 29.00 -0.6
VBY 44.29 324 eP 48 30.60 0.6
ASS 44.58 319 P 48 31.50 -0.9
ARV 44.61 320 Pd 48 33.00 0.3
KRA 44.72 331 eP 48 32.50 -0.9
1.4s 89.00nm 5.5mb
Z 18s 1.50um 5.0Msz
e 48 45.20
i 50 20.20
eS 55 20.00
ZST 44.89 328 iP 48 34.70 -0.1
e 50 20.70
e 01 07.80
CEY 44.91 323 eP 48 35.50 0.5
SLR 44.96 210 iPd 48 37.00 1.3
1.5s 138.89nm 5.7mb
S 55 20.00
LJU 45.01 324 eP 48 36.00 0.1
TRI 45.28 323 iPc 48 38.00 0.1
e 50 27.00
e 00 44.00
CRE 45.30 319 P 48 40.00 1.7
VKA 45.34 327 iPc 48 38.30 -0.1
2.0s 284.00nm 5.9mb
i 48 44.90
i 50 27.00
VOY 45.38 323 eP 48 38.50 -0.3
SFI 45.51 320 P 48 40.00 0.3
PGD 45.57 320 P 48 43.00 2.5
KSR 45.75 212 iPc 48 41.50 -0.6
1.0s 25.00nm 5.1mb
CHG 45.84 77 ePc 48 42.50 -0.3
1.1s 15.82nm 4.9mb

BDT 45.93 79 eP 48 40.20 -3.2X
1.0s 6.00nm 4.5mb
VVI 46.21 323 P 48 45.50 0.2
FVI 46.33 323 P 48 46.10 -0.1
PRY 46.35 210 iPd 49 01.00 14.3X
0.9s 29.23nm
KMR 46.39 326 iP+ 48 47.20 0.5
iPP 50 37.20
PGF 46.72 317 eP 48 49.10 -0.4
1.4s 34.85nm 5.2mb
BHG 46.89 325 eP 48 50.60 -0.1
1.6s 120.00nm 5.7mb
KSP 46.98 330 iP 48 51.10 -0.2
1.5s 147.00nm 5.8mb
e 50 37.50
NNT 46.99 85 eP 48 54.00 2.1
NST 47.10 81 eP 48 52.80 0.1
SAL 47.16 321 P 48 53.00 0.2
KHC 47.31 327 P 48 53.00 -1.0
e 50 48.80
PRU 47.32 328 Pc 48 53.50 -0.5
1.7s 108.90nm 5.7mb
e 49 31.80
PP 50 47.60
OGA 47.50 323 eP 48 55.80 0.0
1.7s 139.00nm 5.8mb
SQTA 47.58 323 iPc 48 55.40 -0.8
1.5s 90.00nm 5.6mb
i 49 33.80
i 49 47.10
e 50 18.00
WET 47.70 326 iPd 48 56.10 -0.9
2.0s 110.00nm 5.6mb
MDI 47.74 321 P 48 57.50 0.1
OSS 47.93 322 ePc 48 59.00 -0.1
FUR 48.04 324 eP 48 59.10 -0.6
SBF 48.32 318 eP 49 01.60 -0.4
1.4s 61.00nm 5.5mb
TMA 48.42 321 eP 49 02.30 -0.6
SAX 48.69 323 ePc 49 04.30 -0.8
LLS 48.71 322 ePc 49 04.20 -0.9
LMR 48.71 317 eP 49 04.30 -0.6
1.4s 43.55nm 5.3mb
FRF 48.71 317 eP 49 04.50 -0.5
1.4s 69.70nm 5.5mb
BLF 48.79 210 iPd 49 06.50 0.7
1.0s 50.00nm 5.5mb
LRG 48.86 317 eP 49 05.80 -0.3
1.3s 65.00nm 5.5mb
CLL 48.90 329 iPc 49 05.40 -0.8
2.2s 220.00nm 5.8mb
e 49 13.00
HOF 48.90 327 eP 49 06.50 0.2
GRF 48.90 326 iPc 49 05.20 -1.1
1.4s 79.00nm 5.6mb
Z 19s 0.50um 4.5Msz
e 49 19.50
e 49 30.50
MMK 48.95 321 eP 49 07.30 0.3
SURF 48.99 318 P 49 07.22 -0.1
MOX 49.23 327 eP 49 09.00 0.2
1.7s 134.00nm 5.7mb
eS 56 15.00
DIX 49.31 320 ePc 49 09.20 -0.6
BNI 49.32 319 P 49 10.00 0.2
CDR 49.34 317 ePc 49 09.10 -0.7
ZLA 49.37 322 ePc 49 09.00 -1.0
SLE 49.44 323 ePc 49 09.80 -0.8
LPG 49.46 319 eP 49 09.90 -1.2
1.6s 93.30nm 5.5mb
LPL 49.48 319 eP 49 10.10 -1.0
1.4s 39.20nm 5.2mb
KMI 49.54 68 Pc+ 49 11.00 -0.9
1.5s 100.00nm 5.6mb
Z 20s 0.30um 4.3Msz
pP 49 21.00 34kmX
sP 49 25.00
S 56 16.00
GRN 49.99 319 P 49 14.60 -0.3
CDF 50.47 323 eP 49 17.80 -0.7
1.6s 155.45nm 5.7mb
BSF 50.48 322 eP 49 17.70 -0.9
1.4s 52.30nm 5.3mb
HAU 50.83 322 eP 49 20.10 -1.0
1.4s 26.15nm 5.0mb
Z 20s 0.38um 4.4Msz
NUR 50.98 343 iPc 49 21.30 -0.7

LBL 51.61 318 P 49 26.37 -0.7
PLDF 51.65 319 P 49 26.32 -1.2
SMF 51.78 320 eP 49 27.00 -1.4
1.6s 37.30nm 5.1mb
LBF 51.83 320 eP 49 27.60 -1.2
1.6s 115.05nm 5.6mb
PYM 51.96 318 P 49 28.58 -1.3
LZH 51.98 55 iPc 49 30.00 -0.2
2.0s 121.00nm 5.5mb
Z 20s 2.20um 5.2Msz
N 15s 0.80um
E 15s 0.90um
pP 49 35.00 17kmX
sP 49 39.00
PP 51 31.00
eS 56 50.00
ScS 59 16.00
SS 00 25.00
AGO 52.00 319 P 49 28.98 -1.1
LOR 52.02 320 eP 49 29.00 -1.2
1.4s 78.40nm 5.4mb
Z 20s 0.82um 4.8Msz
AVF 52.15 320 eP 49 29.50 -1.6
1.4s 26.15nm 5.0mb
SSF 52.16 320 eP 49 29.90 -1.3
1.4s 43.55nm 5.2mb
MEM 52.25 325 P 49 31.80 0.0
ec 49 42.20
CAF 52.28 317 eP 49 31.30 -0.9
1.4s 19.60nm 4.8mb
ENN 52.37 325 eP 49 32.00 -0.7
1.3s 66.00nm 5.4mb
e 49 43.00
BGF 52.38 319 eP 49 32.10 -0.8
1.6s 108.85nm 5.5mb
MAF 52.43 319 eP 49 32.50 -0.8
1.4s 26.15nm 5.0mb
SUF 52.45 346 iP 49 32.80 -0.3
1.0s 85.50nm 5.6mb
WTS 52.49 327 eP 49 33.00 -0.6
1.0s 22.00nm 5.0mb
GRC 52.52 320 P 49 32.81 -1.1
UPP 52.66 339 iP 49 33.20 -1.5
TCF 52.68 319 eP 49 34.20 -1.0
1.4s 13.05nm 4.7mb
RJF 52.77 317 eP 49 35.00 -0.9
1.4s 30.50nm 5.0mb
Z 22s 0.50um 4.5Msz
LPO 52.78 316 eP 49 35.20 -0.7
1.4s 43.55nm 5.2mb
ECHE 52.80 310 eP 49 37.20 1.0
DOU 52.81 324 Pc 49 35.50 -0.5
1.2s 138.90nm 5.8mb
e 49 45.70
S 57 07.00
LSF 53.11 318 eP 49 37.30 -1.0
1.6s 55.95nm 5.3mb
LFF 53.16 317 eP 49 38.00 -0.7
1.2s 29.75nm 5.1mb
SNF 53.17 324 P 49 38.80 0.1
e 49 48.70
UCC 53.26 325 P+ 49 39.00 -0.3
S 57 13.00
ETOR 53.92 311 eP 49 44.50 0.1
HFS 54.26 338 eP 49 44.50 -2.0
0.9s 33.30nm 5.4mb
Z 17s 1.61um 5.2MszX
LR 09 06.00
MFF 54.31 318 eP 49 45.70 -1.4
1.4s 34.85nm 5.2mb
APHE 54.32 306 eP 49 49.00 1.4
ASMO 54.44 306 eP 49 48.20 -0.2
ACHM 54.46 306 eP 49 50.20 1.7
ATEJ 54.57 306 eP 49 49.90 0.5
ALOJ 54.68 306 eP 50 01.00 10.8X
ECRI 54.71 313 eP 49 50.00 -0.2
AAPN 54.73 306 eP 49 49.50 -1.0
IFR 54.96 302 iPc 49 53.00 0.6
LDF 55.01 321 eP 49 50.80 -1.4
1.2s 50.60nm 5.4mb
FLN 55.29 321 eP 49 52.80 -1.5
1.4s 82.75nm 5.6mb
Z 22s 0.60um 4.6Msz
LPF 55.38 320 eP 49 53.40 -1.5
1.2s 41.65nm 5.3mb
GRR 55.39 320 eP 49 53.80 -1.2
1.2s 41.65nm 5.3mb

14d 20h

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GUD     55.42 310 eP     49 55.00   -0.6
EJIF    55.65 305 eP     49 57.40    0.3
KIC     55.71 269 P      49 58.26    0.5
NB2     55.77 338 P      49 55.10   -2.5
        1.5s     66.00nm          5.4mb
TIC     55.92 269 P      50 00.00    0.6
LKO     55.94 273 P      49 57.56   -2.0
        1.0s     19.50nm          5.1mb
LIC     56.01 269 Pc     50 00.50    0.5
        0.8s     14.50nm          5.1mb
     Z  20s       0.63um          4.7Msz
SOD     56.37 349 iP     50 01.30   -0.5
TIO     56.51 298 iPd    50 04.50    1.0
EVAL    56.83 306 eP     50 05.00   -0.6
KEV     58.40 350 iP     50 15.10   -1.0
        0.9s     86.20nm          5.8mb
EKA     59.29 327 Pc     50 20.70   -1.7
        1.1s     17.50nm          5.1mb
BJI     62.20  52 iPc    50 42.50    0.0
        1.5s    195.00nm          6.1mb
     Z  22s       1.28um          5.0Msz
     N  14s       0.51um
                    eS    59 08.00
SSE     65.96  62 iPc    51 07.30    0.1
        1.2s     69.00nm          5.7mb
     Z  20s       0.90um          5.0Msz
     E  14s       0.70um
                   ePP    53 36.00
                   ePP    55 12.00
                    S     59 50.00
                   PS     00 27.00
                   eSS    04 14.00
MAT     79.59  55 eP     52 26.00   -1.6
        1.6s     86.67nm          5.5mb
     Z  20s       1.06um          5.2Msz
                    eS    02 27.00
WRA     87.97 111 Pd     53 11.20    0.9
        1.2s     13 20nm          5.1mb
WB5     87.98 111 eP     53 11.10    0.7
ASPA    88.54 115 eP     53 11.40   -1.6
        1.6s     14.00nm          5.0mb
     Z  21s       0.61um          5.0Msz
                    LR    26 40.30
ZOBO   121.70 259 PKP    59 06.00   -9.7X
     Z  24s       0.35um          4.9MszX
                    LR    38 42.00
CLC    129.99 348 ePKP   59 32.00    1.5
GSC    130.32 347 ePKP   59 43.00   11.8X
SBB    131.12 348 ePKP   59 35.00    2.3
PLM    132.21 347 ePKP   59 52.00   17.0X
     S.D. = 1.0  on 206 of 237 obs.
-------------------------------------
*  SEP  14, 1990  21h 02m 23.48± 0.73s
   36.275 N ±24.2km   69.924 E ±14.8km
   DEPTH =  33.0km  (normal)
   4.3mb (  6 obs.)
 HINDU KUSH REGION                (718)

MAIO     8.42 273 eP     04 26.00   -0.3
        0.8s     9.15nm           5.0mb
                    eS    06 01.00
NDI      9.75 139 eP     04 49.50    4.9X
        0.5s     14.08nm          5.5mb X
                    eS    06 39.00
GKN     14.93 119 P      05 52.80   -1.2
KKN     15.51 119 P      06 00.20   -1.4
PKI     15.74 119 P      06 03.40   -1.2
        0.6s     25.00nm          4.6mb
GUN     15.87 117 P      05 54.20  -12.2X
HYB     20.28 156 eP     07 03.50    4.3X
SHL     21.60 113 iP     07 14.50    1.7
                   iS     11 09.00
GBA     23.56 161 P      07 39.00    7.2X
CHTO    30.89 116 (P)    08 41.00    1.8
HFS     42.71 322 eP     10 18.20   -0.5
        0.7s     5.40nm           4.4mb
NB2     44.04 323 P      10 29.40   -0.1
        0.7s     2.30nm           4.1mb
FBA     74.92  16 (P)    13 58.50   -4.0X
YKA     81.51   2 eP     14 38.00   -0.4
        0.6s     1.30nm           4.1mb
WRA     82.61 121 Pc     14 46.50    1.6
        0.8s     2.30nm           4.3mb
     S.D. = 1.4  an  10 of  15 obs.
-------------------------------------
   SEP  14, 1990  22h 33m 18.53± 0.88s
   32.352 S ± 4.9km   72.004 W ±11.9km
   DEPTH =  10.0km  (geophysicist)
 OFF COAST OF CENTRAL CHILE       (134)

ROCH    1.04 127 iPc     33 38.50    0.2
                   iS     33 55.20
LCCH    1.18 162 iPc     33 40.00   -0.5
                   iS     33 57.00
JACH    1.24 106 iPc     33 41.20   -0.4
                   iS     33 59.50
PEL     1.36 126 iPc     33 43.50   -0.1
                   iS     34 04.10
TACH    1.58 146 eP      33 46.50   -0.1
                   iS     34 09.00
LNV     1.67 163 eP      33 48.00    0.0
                   iS     34 12.50
PCH     1.78 136 eP      33 50.20    0.6
                   iS     34 16.60
CHCH    1.94 145 eP      33 52.30    0.4
                    i     34 16.70
                    i     34 23.20
CNCB   15.90  14 P       37 05.00    0.5
LPB    16.14  14 eP      37 08.00    0.4
ZOBO   16.39  13 P       37 10.00   -0.9
     S.D. = 0.5  on  11 of  11 obs.
-------------------------------------
*  SEP  14, 1990  22h 57m 37.29± 1.63s
   50.403 N ±28.2km   18.903 E ±11.7km
   DEPTH =  10.0km  (geophysicist)
 POLAND                           (548)
      ML 3.1 (KRA), 2.7 (VKA).

KRA     0.75 117 ePg     57 51.30   -0.7
                   iSg    58 02.30
SPC     1.49 144 iPn     58 05.20    0.9
                   eSg    58 26.20
KSP     1.72 286 ePn     58 08.20    0.8
                   iPg    58 10.00
                   iS     58 33.80
VKA     2.73 219 ePg     58 25.50    3.6X
                   eSg    59 09.00
PRU     2.83 263 ePn     58 22.50   -0.9
                   Pg     58 30.70
                   Sn     58 57.50
                   Sg     59 06.50
KHC     3.68 252 Pn      58 35.40   -0.1
                   Sg     59 33.20
GRF     5.00 265 e(Pg)   59 14.10   20.0X
                   eSg    00 17.00
     S.D. = 1.1  on   5 of   7 obs.
-------------------------------------
?  SEP  15, 1990  00h 20m 33.56± 1.63s
   15.189 N ±14.9km  148.176 E ±20.5km
   DEPTH =  33.0km  (normal)
   4.3mb (  1 obs.)
 MARIANA ISLANDS REGION           (215)

GUA     3.56 243 eP      21 27.80   -0.1
                   eS     22 05.10
GUMO    3.58 244 eP      21 28.00   -0.1
PJG     3.58 244 eP      21 28.40    0.3
MAT    23.05 339 (P)     25 37.00    0.0
WRA    37.47 202 Pc      27 46.00    0.0
        1.0s     5.20nm           4.3mb
     S.D. = 0.2  an   5 of   5 obs.
-------------------------------------
*  SEP  15, 1990  00h 45m 07.78± 1.49s
   43.741 N ±11.0km   12.633 E ±14.2km
   DEPTH =  32.4 ± 10.8 km
 CENTRAL ITALY                    (381)

RSM     0.23 325 P       45 14.70    0.1
                   eSg    45 19.50
ARV     0.33 137 Pd      45 15.70   -0.2
                   iSg    45 23.30
CRE     0.51 257 Pc      45 18.50   -0.1
                   eSg    45 28.20
SFI     0.59 288 P       45 20.00    0.2
                   eSg    45 29.00
ASS     0.67 178 P       45 21.30    0.4
                   eSg    45 32.10
PGD     0.67 282 P       45 20.70   -0.4
                   eSg    45 31.10
MNS     1.36 179 P       45 30.50   -0.2
                   eSg    45 48.00
     S.D. = 0.4  an   7 af   7 obs.
-------------------------------------
   SEP  15, 1990  01h 22m 37.42± 0.67s
   24.851 N ± 6.1km  122.075 E ± 8.5km
   DEPTH =  10.0km  (geophysicist)
   4.5mb (  7 obs.)
 TAIWAN REGION                    (243)

TWC     0.32 221 iPc     22 44.00    0.0
                   eS     22 48.70
TWZ     0.51 299 iPc     22 47.20   -0.6
                   eS     22 55.10
ANP     0.60 304 iPc     22 49.20   -0.5
TWD     0.88 210 ePc     22 54.60    0.2
TWF1    1.65 206 eP      23 07.30    0.7
TWG     2.22 205 ePc     23 15.60    0.8
SSE     6.27 353 eP      24 07.50   -4.7X
        0.8s    16.00nm           4.9mb
     Z  16s       0.90um          3.7MszX
     E  14s       2.30um
BJI    15.94 343 eP      26 27.50    4.3X
        1.2s    13.00nm           4.0mb
     N  10s       0.54um
LZH    19.26 310 Pc      27 05.90    0.8
        2.0s   111.00nm           4.8mb
     Z  18s       0.80um          3.4Msz
                   pP     27 12.00   23kmX
                   sP     27 15.00
                   esS    30 45.00
CHG    22.28 259 ePc     27 39.50    3.1X
        1.1s    15.51nm           4.4mb
GBA    43.43 264 Pc      30 42.00   -0.3
        0.6s     2.00nm           4.1mb
WB5    46.04 164 eP      31 01.50   -1.7
ASPA   49.57 166 iPc     31 29.90   -0.9
        0.9s     7.00nm           4.7mb
FBA    67.85  27 (P)     33 40.00    2.4
INK    72.31  22 eP      34 04.00   -0.7
YKA    82.04  23 eP      34 58.50   -0.4
        0.9s     2.70nm           4.3mb
     S.D. = 1.1  on  13 of  16 obs.
-------------------------------------
   SEP  15, 1990  02h 33m 14.23± 0.86s
   37.070 N ± 8.2km   20.834 E ± 4.7km
   DEPTH =  42.3 ±  8.5 km
   3.9mb (  2 obs.)
 IONIAN SEA                       (399)
      MD 3.6 (ATH).

ITM     0.88  82 ePg     33 30.00   -0.3
VLS     1.12 350 ePg     33 33.00   -0.7
EVR     2.00  22 ePg     33 49.70    3.5X
ATH     2.46  68 ePg     34 01.80    9.0X
KEK     2.76 343 ePn     33 58.00    0.9
VAM     3.19 120 ePn     34 11.00    7.9X
KZN     3.31  12 ePn     34 06.00    1.0
PLG     3.88  31 ePn     34 13.00    0.1
SOI     3.93 286 P       34 13.40   -0.1
                  eSn     34 52.50
                   e      37 41.00
OHR     4.04 360 ePn     34 15.80    0.6
MEU     4.72 272 P       34 24.20   -0.7
                  eSn     35 09.90
BRT     4.74 324 P       34 25.00   -0.1
SKO     4.92   5 ePn     34 26.50   -1.1
MNO     4.96 282 P       34 29.20    0.9
                  eSn     35 16.10
BAI     5.09 324 P       34 29.00   -0.9
MGR     5.15 308 P       34 30.80    0.0
SGO     5.54 311 P       34 36.90    0.5
FAI     5.72 274 P       34 39.40    0.5
BSS     5.99 310 P       34 42.20   -0.5
DUI     6.74 315 P       34 54.00    0.8
SDI     7.14 313 P       34 57.90   -0.9
HFS    23.53 351 eP      38 20.90   -0.2
        0.4s     3.90nm           4.3mb
NB2    24.75 349 P       38 33.20    0.2
        0.6s     1.10nm           3.6mb
SUF    25.89   6 eP      38 44.00    0.5
SOD    30.53   4 eP      39 25.00   -0.3
     S.D. = 0.7  an  22 af  25 obs.
-------------------------------------
   SEP  15, 1990  02h 44m 49.27± 0.30s
   25.246 N ± 5.9km  124.084 E ± 4.5km
   DEPTH = 132.0km  (  3 depth phases)
   4.7mb ( 25 obs.)
 NORTHEAST OF TAIWAN              (245)

TWC     2.13 253 iPc     45 24.70   -0.6
                   eS     45 52.20
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U. S. DEPARTMENT OF THE INTERIOR

Geological Survey

EARTHQUAKE DATA REPORT

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

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

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

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

Two types of magnitude are computed: body-wave magnitude (m_b) and surface-wave magnitude (M_{S2}). 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.

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TWZ	2.27	267	iPc	45	27.70	0.5
TWO	3.11	253	eP	45	38 00	0.0
TWK	3.83	240	ePc	45	47.20	-0.4
SSE	6.36	337	P	46	23.00	1.1
	0.8s	88.00nm				5.1mb
			pP	46	30.30	
BJI	16.17	338	eP	48	32.00	1.8
	1.5s	52.00nm				4.6mb
MAT	16.52	44	(P)	48	33.00	-1.6
KMI	19.32	274	eP	49	06.50	-0.3
LZH	20.45	307	Pc	49	19.00	0.7
	1.8s	48.00nm				4.6mb
Z	16s	0.20um				3.6MszX
			pP	49	25.00	22kmX
			eS	55	52.00	
PJG	22.74	117	eP	49	42.00	1.2
GUA	22.80	117	eP	49	42.30	0.9
	0.9s	134.45nm				5.3mb
CHG	24.15	260	eP	49	56.80	2.4
	1.0s	15.00nm				4.4mb
CHTO	24.15	260	P	49	54.20	-0.2
			e	50	22.20	136km
SHL	29.05	278	iP	50	39.10	-0.3
PKI	34.63	282	P	51	28.20	0.1
KKN	34.72	283	P	51	28.40	-0.4
	0.8s	36.00nm				5.2mb
GKN	35.27	283	P	51	32.60	-0.7
GBA	45.28	264	P	52	56.10	0.5
ASPA	49.54	168	iPc	53	27.90	-0.7
	0.6s	18.00nm				5.1mb
FBA	66.65	28	P	55	27.90	0.5
KEV	68.97	338	eP	55	42.00	0.3
SOD	69.78	336	iP	55	46.30	-0.3
INK	71.25	23	eP	55	55.00	-0.5
SUF	71.41	331	eP	55	53.00	-3.5X
NUR	72.83	329	eP	56	04.00	-0.9
DSI	76.20	299	eP	56	25.00	0.2
PRNI	76.96	297	eP	56	29.00	-0.1
MBH	77.26	297	eP	56	30.00	-0.7
HFS	77.92	331	eP	56	32.50	-1.2
	0.4s	4.30nm				4.6mb
NB2	78.51	333	P	56	35.30	-1.7
	0.9s	6.00nm				4.4mb
YKA	80.96	24	eP	56	49.30	-0.6
	0.8s	9.70nm				4.6mb
SKO	82.25	313	eP	56	57.20	0.1
CDF	87.47	323	eP	57	23.00	-0.1
	0.7s	4.40nm				4.6mb
BSF	88.07	323	eP	57	25.40	-0.6
	0.8s	5.35nm				4.6mb
LPG	89.48	321	eP	57	33.10	0.1
	0.6s	12.65nm				5.2mb
LPL	89.48	321	eP	57	33.00	0.1
	0.7s	11.00nm				5.0mb
PGF	89.88	318	eP	57	34.60	-0.1
	0.6s	3.60nm				4.6mb
SBF	90.05	320	eP	57	34.80	-0.6
	0.8s	12.10nm				5.0mb
LBF	90.11	324	eP	57	35.00	-0.5
	0.6s	1.80nm				4.3mb
SMF	90.39	323	eP	57	36.60	-0.2
	0.6s	2.25nm				4.4mb
AVF	90.56	324	eP	57	37.20	-0.3
	0.6s	1.80nm				4.4mb
FRF	90.69	320	eP	57	37.70	-0.5
	0.8s	5.35nm				4.7mb
LMR	90.91	320	eP	57	39.10	-0.1
LRG	90.92	320	eP	57	39.00	-0 3
	0.8s	8.05nm				4.9mb
FFC	91.09	25	iPd	57	40.00	0.1
	0.7s	8.00nm				5.0mb
MAF	91.34	324	eP	57	41.60	0.4
	1.0s	6.00nm				4.7mb
CAF	92.44	323	eP	57	47.00	0.7
	0.6s	3.15nm				4.7mb
RJF	92.49	323	eP	57	47.40	0.9
	0.6s	3.60nm				4.8mb
LRM	92.64	36	eP	57	49.00	1.5
			e	58	22.40	129km
TNP	94.74	44	P	57	57.40	0.1
			pP	58	31.40	131km
	S.D. = 0.8	on	49 of	50	obs.	

• SEP 15, 1990 02h 52m 47.12± 1.23s
31.413 S ±12.6km 68.138 W ±13.4km
DEPTH = 33.0km (normal)
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	0.21	204	iPd	52	53.20	-0.7
RTLL	0.30	286	iPc	52	53.80	-1.1
ZON	0.48	254	iPd	52	56.80	-0.7
			eS	53	04.80	
RTCV	0.56	217	eP	52	59.00	0.3
RTCB	0.57	262	ePd	52	58.80	0.0
			S	53	07.50	
RTBS	1.15	257	ePd	53	08.80	1.9
			eS	53	24.50	
SIV	16.65	24	P	56	40.00	0.3
	S.D. = 1.2	on	7 of	7	obs.	

• SEP 15, 1990 03h 04m 55.24± 1.47s
12.073 S ± 9.7km 167.620 E ±11.1km
DEPTH = 356.1 ± 12.9 km
4.6mb (8 obs.)
SANTA CRUZ ISLANDS (184)

HNR	7.98	288	eP	06	49.00	-1.0
			eS	08	23.00	
DZM	10.01	186	iPd	07	15.10	0.8
PMG	20.28	276	eP	09	06.00	0.3
	1.1s	50.63nm				4.8mb
BRS	20.64	220	iPc	09	10.20	1.0
RMO	22.82	228	iPc	09	30.00	0.1
CMS	27.88	223	iPc	10	16.10	0.6
	0.9s	56.00nm				4.9mb
ASPA	34.01	246	iPc	11	07.60	-1.1
	0.3s	20.00nm				4.9mb
			e	11	45.70	
MTN	35.62	265	eP	11	22.80	0.6
KNA	37.85	260	iPc	11	40.90	0.1
MBL	46.53	252	eP	12	50.60	0.3
COOL	46.74	239	eP	12	51.30	-0.6
	0.3s	4.00nm				4.1mb
KLB	49.73	239	eP	13	13.70	-1.0
	0.3s	2.00nm				3.9mb
NWAO	50.43	237	eP	13	19.00	-1.0
	0.4s	2.00nm				3.8mb
NANU	50.59	251	eP	13	21.30	0.1
MUN	51.10	239	eP	13	24.00	-0.9
KMI	73.22	301	eP	15	51.00	0.6
CHG	74.32	294	iPc	15	57.20	0.7
	1.1s	14.56nm				4.6mb
LZH	76.81	312	P	16	11.50	1.2
	1.5s	28.00nm				4.8mb
FBA	83.73	18	P	16	45.50	-0.2
PKI	88.74	298	P	17	12.00	0.9
GKN	89.51	299	P	17	15.30	0.9
BGF	143.29	342	ePKP	23	47.60	-1.5
	0.6s	3.60nm				
MAF	143.68	342	ePKP	23	48.50	-1.3
	0.6s	2.70nm				
TCF	143.72	343	ePKP	23	48.60	-1.3
	0.8s	4.05nm				
LSF	143.95	344	ePKP	23	49.00	-1.2
	0.6s	9.00nm				
SBF	144.01	335	ePKP	23	49.30	-1.2
	0.8s	10.75nm				
MFF	144.06	346	ePKP	23	49.70	-0.7
	0.4s	4.60nm				
PGF	144.40	332	ePKP	23	50.90	-0.3
	0.7s	6.60nm				
FRF	144.58	336	ePKP	23	51.00	-0.4
	0.6s	5.40nm				
SOB1	144.64	125	ePKP	23	51.50	-0.8
LRG	144.78	336	ePKP	23	52.00	0.3
	0.8s	8.05nm				
RJF	144.82	343	ePKP	23	52.50	0.8
	0.8s	8.05nm				
LMR	144.83	336	ePKP	23	52.00	0.2
	0.6s	4.50nm				
CAF	145.00	342	ePKP	23	53.30	1.2
	0.8s	4.05nm				
LFF	145.37	344	ePKP	23	54.60	2.0
	0.4s	3.45nm				
LPO	145.48	343	ePKP	23	54.40	1.6
	0.6s	5.40nm				
BCAO	148.50	259	iPKPc	24	03.60	5.0X
	0.5s	25.00nm				
			id	24	08.50	
	S.D. = 1.0	on	36 of	37	obs.	

% SEP 15, 1990 03h 11m 00.76± 0.89s
38.151 N ± 9.5km 15.891 E ± 8.6km
DEPTH = 23.4 ± 8.1 km
SICILY (398)

SOI	0 15	121	Pc	11	05.40	-0.3
			eSg	11	09.30	
MSI	0.27	281	P	11	07.20	0.0
			eSg	11	12.30	
MNO	0.97	257	Pc	11	19.10	0.1
			eSn	11	32.50	
MEU	1.30	216	P	11	24.40	0.8
			eSg	11	41.30	
GIB	1.48	264	P	11	26.80	0.6
			eSn	11	45.50	
FAI	1.96	244	P	11	32.00	-1.1
MGR	2.00	353	P	11	33.80	0.1
			eSn	12	00.00	
	S.D. = 0.9	on	7 of	7	obs.	

SEP 15, 1990 03h 11m 16.55± 0.20s
4.421 S ± 3.2km 144.082 E ± 5.4km
DEPTH = 113.2km (4 depth phases)
5.3mb (27 obs.)
NEAR N COAST OF PAPUA NEW GUINEA(200)

MNDI	1.77	194	eP	11	49.00	1.5
			eS	12	03.00	
LAT	3.65	127	eP	12	13.00	0.8
JAY	3.87	299	ePc	12	13.70	-1.4
PMG	5.82	149	iPc	12	39.30	-2.6
			eS	13	45.00	
CTA	15.72	172	iPd	14	52.90	0.0
	1.0s	83.00nm				4.9mb
OIS	16.62	195	iPd	15	02.40	-1.8
	0.5s	41.00nm				4.9mb
			e	18	09.00	
GUA	17.86	3	eP	15	19.70	0.2
	0.8s	179.10nm				5.4mb
GUMO	17.91	2	eP	15	20.10	0.1
PJG	17.91	2	eP	15	20.00	0.0
WB5	18.05	211	iPd	15	20.00	-1.7
			eS	19	05.00	
KNA	18.80	232	eP	15	28.50	-1.5
MNI	20.09	286	e(P)	15	42.30	-1.2
ASPA	21.51	206	iPd	15	57.40	-0.4
	0.7s	217.00nm				5.6mb
Z	15s	1.69um				4.6MszX
			eS	19	45.20	
			LR	25	09.20	
			eScS	27	09.40	
OLP	22.04	180	iPc	16	03.70	0.8
RMO	22.39	169	ePd	16	06.10	-0.3
	0.8s	346.00nm				5.8mb
BRS	24.30	161	iPc	16	24.20	-0.7
			i	16	54.00	146kmX
CMS	26.97	177	ePd	16	49.50	0.0
	0.8s	40.00nm				5.0mb
COO	27.04	165	eP	16	54.00	3.8X
DZM	27.88	131	iPc	16	56.10	-1.8
MBL	28.83	233	iPd	17	05.90	-0.5
BWA	30.12	173	eP	17	18.80	1.1
FORR	30.30	208	eP	17	19.00	-0.2
ADE	30.80	189	eP	17	24.00	0.3
	0.9s	107.56nm				5.6mb
CAN	31.08	172	eP	17	26.80	0.7
BFD	32.63	182	ePd	17	41.00	1.5
MEKA	32.92	225	eP	17	42.00	-0.2
NANU	32.99	234	iPd	17	42.50	-0.3
	0.4s	38.00nm				5.6mb
TOO	33.02	178	iPd	17	44.40	1.4
	0.8s	56.00nm				5.4mb
COOL	34.05	217	iPd	17	52.00	0.0
	0.3s	38.00nm				5.7mb
MRWA	36.28	224	iPd	18	10.90	0.1
	0.3s	17.00nm				5.4mb
KLB	36.62	219	iPd	18	18.30	4.6X
	0.4s	34.00nm				5.6mb
BAL	36.66	222	iPd	18	14.30	0.3
	0.7s	122.00nm				5.9mb
NWAO	37.85	218	iPd	18	24.40	0.4
	0.7s	46.00nm				5.5mb
Z	20s	0.40um				4.2Msz
N	20s	0.20um				
E	20s	0.20um				
MUN	37.87	220	iPd	18	24.30	0.1
RKG	38.77	217	iPc	18	35.50	3.9X
	0.6s	96.00nm				5.8mb
TSRJ	40.47	350	P	18	45.40	-0.1
CHJJ	40.54	354	P	18	45.80	-0.3
MAT	41.12	353	eP	18	49.00	-1.9
	1.5s	55.56nm				5.1mb

15d 03h

MTMJ	41.21	352	P	18	50.70	-1.1
SSE	41.53	330	eP	18	55.00	0.7
NIIJ	41.72	354	P	18	55.60	-0.1
PSI	45.67	278	ePc	19	27.80	-0.2
MRW	45.78	148	P	19	29.00	0.6
CHTO	50.08	299	P	20	00.70	-1.5
			pP	20	29.00	121km
BJI	51.14	333	eP	20	09.00	-0.9
	1.4s	27.00nm			5.0mb	
LZH	55.14	320	eP	20	40.00	0.3
	2.0s	29.00nm			4.9mb	
			pP	21	08.00	117km
SHL	58.73	303	eP	21	07.50	2.3
PKI	64.85	303	P	21	48.20	1.8
KKN	65.04	303	P	21	49.60	2.2
	1.0s	44.00nm			5.3mb	
GKN	65.64	303	P	21	51.60	0.4
GBA	68.51	286	P	22	11.00	1.8
SVW	80.04	25	iPc	23	15.80	1.0
	0.8s	27.50nm			5.1mb	
TTA	80.76	24	iPc	23	18.90	0.3
	0.9s	12.20nm			4.7mb	
MAW	82.58	202	iP	23	29.00	1.1
PMR	83.07	26	iPc	23	29.90	-0.5
	0.7s	20.30nm			5.1mb	
IMA	83.13	21	iPc	23	31.20	0.3
	0.9s	11.70nm			4.8mb	
TOA	84.56	26	iPc	23	38.80	0.7
	0.6s	52.40nm			5.6mb	
FBA	84.88	23	P	23	38.80	-0.7
	0.9s	2.99nm			4.2mb	X
			pP	24	07.00	108km
SPA	85.61	180	iPd	23	42.70	-0.7
	0.6s	16.26nm			5.2mb	
INK	91.26	22	eP	24	09.50	-0.4
			pP	24	38.00	108km
PNT	97.44	41	eP	24	39.00	0.4
	0.7s	5.00nm			5.1mb	
YKA	99.13	27	eP	24	45.00	-0.9
	0.8s	1.80nm			4.7mb	
APO	112.61	336	ePKP	29	39.00	-1.8
	0.5s	1.90nm				
EKA	122.82	338	PKPd	30	00.40	-0.1
	1.6s	20.50nm				
BSF	123.38	327	ePKP	30	01.60	-0.4
	0.8s	5.35nm				
HAU	123.52	327	ePKP	30	01.90	-0.3
	0.6s	6.30nm				
LPL	124.75	325	ePKP	30	04.70	-0.2
	0.6s	1.80nm				
PGF	124.98	320	ePKP	30	05.10	-0.2
	0.6s	3.60nm				
LOR	125.31	328	ePKP	30	05.40	-0.3
	0.8s	2.70nm				
LBF	125.42	327	ePKP	30	05.70	-0.2
	0.8s	4.05nm				
SSF	125.62	328	ePKP	30	06.10	-0.2
	0.8s	4.05nm				
SMF	125.70	327	ePKP	30	06.20	-0.3
	0.8s	4.05nm				
BCAO	125.72	272	iPKPd	30	07.50	0.0
	0.6s	8.00nm				
			ic	30	36.90	
AVF	125.87	328	ePKP	30	06.20	-0.6
	0.6s	1.80nm				
BGF	126.29	328	ePKP	30	07.50	-0.1
	0.7s	3.30nm				
MAF	126.66	327	ePKP	30	08.20	-0.1
	0.8s	2.70nm				
TCF	126.80	328	ePKP	30	08.80	0.2
	0.8s	6.70nm				
GRR	126.95	331	ePKP	30	08.60	-0.2
	0.8s	5.35nm				
LPF	127.29	331	ePKP	30	09.50	0.1
	0.6s	8.10nm				
CAF	127.75	326	ePKP	30	10.80	0.3
	0.8s	2.70nm				
LPO	128.38	327	ePKP	30	12.20	0.6
	0.6s	5.40nm				
CNCB	141.94	124	PKP	30	34.20	-4.3X
LPB	141.98	124	PKP	30	35.00	-3.4X
ZOBO	142.09	124	PKP	30	34.00	-4.8X
CCH	143.12	127	PKP	30	39.00	-1.2
MGP	146.65	64	PKP	30	45.90	0.3
PORP	147.04	63	PKP	30	47.00	0.7
KIC	148.90	275	PKPc	30	53.80	4.4X
	0.5s	9.00nm				
TIC	149.17	276	PKPc	30	54.40	4.6X
	0.5s	15.50nm				
LIC	149.19	275	PKPc	30	54.48	4.6X
	0.6s	19.50nm				
LKO	149.48	281	PKPc	30	53.20	2.9
	0.6s	21.00nm				
PPD	149.70	151	ePKP	30	51.40	1.0
			i	30	55.80	

S.D. = 1.0 on 83 of 92 obs.

• SEP 15, 1990 05h 03m 59.98± 0.50s
42.649 N ±10.9km 144.382 E ± 8.9km
DEPTH = 64.5km (4 depth phases)
4.7mb (19 obs.)
HOKKAIDO, JAPAN REGION (224)

KUSJ	0.51	28	iPd	04	14.50	2.0
			S	04	23.60	
HOOJ	0.85	252	iPd	04	19.10	2.6
			eS	04	32.20	
MAT	7.74	220	iPc	05	51.40	-0.9
	0.8s	201.49nm			5.9mb	X
			(S)	07	20.00	
BJI	21.30	273	eP	08	42.00	-1.0
	1.2s	13.00nm			4.2mb	
LZH	31.79	272	eP	10	21.00	0.6
	1.5s	28.00nm			4.8mb	
			pP	10	37.50	69km
TTA	39.55	38	iPc	11	27.20	1.2
	0.8s	10.10nm			4.8mb	
SVW	39.71	41	eP	11	28.40	1.1
	0.8s	17.20nm			5.0mb	
IMA	40.72	33	iPd	11	36.10	0.5
	1.2s	38.50nm			5.1mb	
FBA	43.17	35	P	11	56.10	0.6
			pP	12	13.50	70km
CHG	45.03	253	eP	12	12.00	1.0
			e	24	50.30	
INK	48.37	30	iPc	12	36.20	-0.4
	0.4s	16.00nm			5.4mb	
YKA	57.83	33	eP	13	45.70	-1.0
	0.5s	2.70nm			4.6mb	
KEV	59.02	339	iP	13	54.10	-0.8
	0.7s	10.70nm			5.1mb	
SOD	60.69	337	iP	14	05.30	-1.0
HYB	60.71	267	eP	14	24.00	16.9X
PNT	62.62	47	eP	14	19.00	-0.5
	0.7s	5.00nm			4.7mb	
WB5	62.90	191	eP	14	20.90	-0.6
GBA	63.98	265	P	14	46.10	17.3X
SUF	64.01	333	iP	14	27.30	-1.1
	0.5s	14.00nm			5.2mb	
NUR	66.07	332	eP	14	51.00	9.3X
SES	66.43	43	eP	14	44.00	-0.3
FFC	67.78	35	eP	14	52.00	-0.6
	0.7s	7.00nm			4.7mb	
LRM	68.59	47	eP	14	58.40	0.2
			e	15	14.90	60km
NB2	69.88	338	P	15	04.80	-0.7
	0.6s	5.50nm			4.7mb	
HFS	69.90	336	eP	15	03.80	-1.8
	0.5s	15.60nm			5.2mb	
TNP	70.76	56	P	15	12.10	0.6
			e	15	28.40	59km
BW06	72.15	48	eP	15	19.80	0.0
DAU	72.77	51	e(P)	15	28.20	4.6X
RSSD	74.17	44	e(P)	15	30.00	-1.4
KSP	76.50	329	eP	15	44.50	0.2
GOL	76.56	48	e(P)	15	49.00	3.8X
	0.9s	2.27nm			4.1mb	
CLL	77.33	331	eP	15	48.00	-0.8
EKA	78.56	342	Pc	15	56.40	0.8
	0.6s	2.30nm			4.3mb	
KHC	78.91	330	eP	15	58.50	0.8
SIO	84.33	45	e(P)	16	34.50	8.4X
SMF	84.44	334	eP	16	26.20	-0.3
	1.0s	4.00nm			4.4mb	
TUL	84.48	45	eP	16	32.40	5.6X
	1.0s	4.70nm			4.5mb	
			i	16	44.90	42kmX
MAF	85.23	334	eP	16	31.50	1.0
	0.8s	2.70nm			4.4mb	
CAF	86.54	334	eP	16	28.40	-8.6X
	0.8s	4.05nm			4.6mb	
SOB1	146.37	9	(PKP)	23	39.00	4.9X

S.D. = 1.1 on 31 of 40 obs.

& SEP 15, 1990 05h 20m 54.71s
59.918 N 152.128 W
DEPTH = 69.5km
SOUTHERN ALASKA (2)
<AGS-P>.

HOM	0.36	137	iP	21	05.95	-0.4
			eS	21	14.27	
XLV	0.51	156	eP	21	06.64	-1.1
CNPM	0.60	131	iP	21	07.93	-0.8
			eS	21	18.08	
OPT	0.62	245	eP	21	08.20	-0.7
			eS	21	19.13	
RSO	0.63	330	eP	21	08.67	-0.6
BRLK	0.65	103	eP	21	08.88	-0.3
			eS	21	19.34	
RDT	0.67	348	iP	21	08.77	-0.8
			eS	21	20.06	
AUE	0.84	229	eP	21	10.82	-0.7
AUH	0.87	231	eP	21	10.89	-1.0
AUI	0.88	229	eP	21	11.10	-0.8
NKA	0.94	28	iP	21	13.88	1.3
PDB	1.05	264	eP	21	12.84	-1.2
			eS	21	27.13	
SLKM	1.12	57	eP	21	14.25	-0.8
SPU	1.27	2	eP	21	16.48	-0.5
CKL	1.29	355	eP	21	17.15	-0.2
MCNL	1.34	238	eP	21	16.45	-1.5
CRP	1.35	359	eP	21	18.29	0.0
BGL	1.36	355	eP	21	18.36	0.1
SEW	1.36	81	eP	21	18.11	0.0
CGLM	1.40	2	eP	21	18.51	-0.2
			eS	21	37.56	
NCG	1.49	359	iP	21	20.14	0.1
SUA	1.69	23	eP	21	23.05	0.2
PMS	1.84	42	eP	21	24.60	-0.1
SML	2.65	43	eP	21	35.15	-0.9

24 obs. associated

? SEP 15, 1990 05h 35m 49.04± 1.80s
41.189 N ±14.5km 15.073 E ±24.1km
DEPTH = 33.0km (normal)
SOUTHERN ITALY (390)

BSS	0.45	207	P	35	58.60	-0.2
			eSg	36	08.50	
DUI	0.66	316	P	36	01.50	-0.5
			eSg	36	11.50	
SDI	1.08	299	P	36	08.50	0.6
			eSg	36	24.90	
MGR	1.11	161	P	36	08.50	0.2
			eSn	36	26.50	

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

• SEP 15, 1990 06h 11m 13.79± 1.00s
30.448 N ±13.0km 85.460 E ±12.5km
DEPTH = 33.0km (normal)
4.3mb (2 obs.)
TIBET (306)

NDI	7.39	258	eP	13	03.50	1.4
	0.7s	27.40nm			5.4mb	X
			eS	14	32.80	
SHL	7.47	129	iP	13	03.50	0.1
HYB	14.42	207	eP	14	35.80	-1.8
CHG	16.85	130	eP	15	14.00	5.3X
GBA	18.33	206	P	15	26.00	-1.2
			S	17	14.00	
KOD	21.45	202	eP	16	03.70	2.0
MAIO	22.42	292	eP	16	15.00	3.9X
NUR	49.72	326	eP	20	12.00	7.6X
HFS	55.13	325	eP	20	44.10	-0.8
	0.7s	2.40nm			4.3mb	
NB2	56.32	326	P	20	53.00	-0.5
	0.6s	1.50nm			4.2mb	
WB5	68.67	130	eP	22	17.00	0.8

S.D. = 1.5 on 8 of 11 obs.

? SEP 15, 1990 06h 49m 59.10±16.92s
17.337 N ±141.km 99.163 W ±31.1km
DEPTH = 33.0km (normal)
GUERRERO, MEXICO (59)
Felt in Guerrero.

PPM	1.79	16	eP	50	28.50	-0.2
IIA	1.87	15	eP	50	29.50	0.2
UNM	1.98	359	(P)	50	35.00	3.7X

CRX	2.12	347	(P)	50 38.00	4.8X
			(S)	51 21.50	
IIJ	2.45	347	iP	50 38.00	0.0
			iS	51 11.50	
MRX	3.04	321	(P)	50 46.00	0.0

S.D. = 0.3 on 4 of 6 obs.

& SEP 15, 1990 07h 12m 48.40s
58.790 N 148.359 W
DEPTH = 26.9km
GULF OF ALASKA (15)
<AGS-P>.

MID	1.22	58	eP	13 08.07	-1.7
SEW	1.43	338	iP	13 11.35	-1.4
			iS	13 28.85	
BRLK	1.62	308	eP	13 14.10	-1.5
CNPM	1.66	298	eP	13 14.53	-1.5
			iS	13 35.03	
HIN	1.87	30	eP	13 17.60	-1.5
			eS	13 40.75	
SLKM	1.97	332	eP	13 19.05	-1.5
			eS	13 42.92	
CVA	2.20	36	eP	13 22.24	-1.6
			eS	13 48.07	
KAIM	2.32	59	eP	13 23.83	-1.7
			eS	13 51.80	
KDC	2.42	246	eP	13 25.07	-1.9
NKA	2.44	325	eP	13 27.40	0.1
VZW	2.45	21	eP	13 26.04	-1.5
			eS	13 53.92	
PMS	2.54	347	iP	13 27.10	-1.6
VLZ	2.56	23	eP	13 27.63	-1.3
			eS	13 57.00	
HMT	2.60	52	eP	13 27.59	-2.0
OPT	2.65	291	eP	13 29.67	-0.6
			eS	14 00.30	
AUE	2.65	285	eP	13 29.70	-0.5
RDT	2.72	313	eP	13 29.99	-1.4
RSO	2.79	309	eP	13 30.85	-1.6
PLRM	2.84	353	eP	13 31.28	-1.6
SUA	2.94	337	eP	13 32.88	-1.5
KLU	2.97	23	iP	13 33.60	-1.3
GHO	3.01	355	iP	13 34.76	-0.6
SML	3.03	0	eP	13 34.47	-1.2
SPU	3.03	324	eP	13 34.60	-1.2
SCM	3.10	9	eP	13 35.79	-0.9
CGLM	3.12	326	eP	13 35.42	-1.6
CKL	3.13	322	eP	13 35.32	-1.9
SNH	3.14	61	eP	13 35.47	-1.8
PDB	3.16	291	eP	13 36.92	-0.5
BGL	3.20	323	eP	13 36.70	-1.5
NCG	3.24	326	eP	13 37.39	-1.3
TGL	3.42	52	eP	13 39.11	-2.2
WRG	3.47	66	eP	13 39.23	-2.7
TOA	3.50	17	eP	13 42.40	0.0
GLB	3.50	39	eP	13 40.47	-2.0
SKT	3.57	335	eP	13 41.55	-1.8
CUT	3.75	346	eP	13 44.55	-1.2
BALM	3.77	51	eP	13 44.39	-1.9
KTH	4.94	347	eP	14 01.28	-1.5

39 obs. associated

• SEP 15, 1990 07h 15m 52.35± 1.25s
2.766 S ±16.2km 139.512 E ±12.4km
DEPTH = 33.0km (normal)
4.9mb (1 obs.)
NEAR N. COAST OF WEST IRIAN (197)

JAY	1.22	78	ePd	16 14.00	0.8
			iS	16 28.50	
MNDI	5.33	129	eP	17 11.00	-0.9
PMG	10.06	131	eP	18 22.50	4.8X
MTN	13.00	219	eP	18 58.50	1.0
			eS	21 20.00	
KNA	16.69	219	eP	19 49.30	3.9X
OIS	17.68	180	eP	19 55.00	-2.9X
			e	19 59.00	
			eS	22 52.00	
WB5	17.74	196	eP	19 57.00	-1.6
			eS	23 13.40	
ASPA	21.48	194	iPc	20 42.00	1.6
	0.5s		28.00nm	4.9mb	
Z	19s		0.31um	3.7Msz	
			eS	24 33.00	
			LR	29 05.20	
KKN	60.33	304	P	26 00.00	-1.0
FBA	85.22	24	(P)	28 31.80	5.3X
CNCB	146.60	127	PKP	35 40.00	7.7X
LPB	146.66	126	ePKP	35 44.00	11.8X
ZOBO	146.78	126	ePKP	35 39.00	6.4X

S.D. = 1.7 on 6 of 13 obs.

? SEP 15, 1990 08h 15m 36.90± 1.94s
43.889 N ±19.6km 148.237 E ±16.3km
DEPTH = 68.8 ± 17.6 km
4.4mb (12 obs.)
KURIL ISLANDS REGION (222)

KUSJ	2.69	254	P	16 17.30	-1.3
			S	16 48.00	
HOOJ	3.92	249	P	16 37.00	1.1
			S	17 22.10	
ASAJ	4.04	275	P	16 38.90	1.2
MAT	10.61	230	eP	18 07.00	-1.4
	1.0s		7.00nm	4.6mb	
FBA	40.52	36	P	23 11.00	0.7
INK	45.89	30	eP	23 53.50	-0.1
CHG	48.08	255	eP	24 13.00	1.5
YKA	55.25	34	eP	25 04.20	-0.5
	0.6s		1.80nm	4.3mb	
TNP	67.72	58	P	26 30.00	0.7
NB2	69.76	339	P	26 39.40	-1.7
	0.6s		1.20nm	4.0mb	
HFS	69.86	338	eP	26 39.80	-1.9
	0.4s		1.10nm	4.1mb	
CLL	77.55	333	eP	27 25.00	-1.5
EKA	78.22	344	Pc	27 29.40	-0.7
	0.9s		3.40nm	4.3mb	
SSF	84.23	337	eP	28 02.30	0.5
	0.8s		2.70nm	4.3mb	
SMF	84.51	336	eP	28 03.50	0.3
	0.8s		4.05nm	4.5mb	
AVF	84.52	337	eP	28 04.20	1.0
	0.8s		4.05nm	4.5mb	
LPL	84.64	334	eP	28 04.70	0.5
	0.6s		1.80nm	4.3mb	
LPG	84.65	334	eP	28 04.90	0.6
	0.8s		4.05nm	4.5mb	
MAF	85.26	337	eP	28 07.80	0.8
	0.6s		1.80nm	4.3mb	
MFF	85.65	339	eP	28 09.10	0.2
	0.6s		3.60nm	4.6mb	

S.D. = 1.2 on 20 of 20 obs.

SEP 15, 1990 08h 45m 55.00± 0.67s
13.764 N ± 9.9km 90.686 W ± 6.6km
DEPTH = 85.9 ± 5.5 km
4.7mb (4 obs.)
NEAR COAST OF GUATEMALA (71)
Felt (II) at San Salvador, El Salvador.

YPE	1.04	70	iPd	46 15.50	0.2
TME	1.32	79	iPd	46 19.00	0.4
VSS	1.40	91	iPd	46 20.30	0.4
SJAS	1.48	94	iPd	46 21.00	0.2
LFU	1.53	90	iPd	46 21.20	-0.2
OZA	1.66	98	iPd	46 22.80	-0.3
TPX	1.90	307	iPc	46 24.00	-2.3
			iS	46 44.00	
SCX	3.50	328	iP	46 49.50	1.3
			iS	47 32.50	
EVV	6.47	317	eP	47 25.50	-4.0X
LVVM	8.11	318	iPd	47 49.92	-2.1
			(S)	49 13.95	
PPM	9.26	306	(P)	48 08.46	0.1
			(S)	49 23.46	
IIA	9.33	306	(P)	48 09.50	0.7
UNM	9.85	305	(P)	48 17.00	0.9
GCM	10.48	57	eP	48 25.10	0.9
IIJ	10.50	306	(P)	48 25.50	0.4
MRX	11.67	302	(P)	48 43.50	3.4X
UYO	20.60	351	iPc	50 28.50	-0.8
MEO	22.11	343	eP	50 43.20	-1.2
SIO	22.46	348	eP	50 49.00	1.1
TUL	22.52	349	eP	50 48.40	0.0
	0.5s		10.00nm	4.5mb	
			e	51 11.30	
ANMO	25.45	329	P	51 17.20	0.5
TNP	33.77	321	P	52 32.00	1.1
			pP	52 48.00	65kmX
LRM	36.87	334	eP	52 58.30	1.3
ZOBO	37.25	142	P	53 02.00	1.1
Z	24s		0.12um	3.6Msz	
			LR	05 28.00	
CNCB	37.76	143	P	53 05.00	-0.2
FFC	41.81	350	iPd	53 37.20	-0.4
	0.6s		9.00nm	4.8mb	
PNT	42.67	332	eP	53 46.00	1.3
	0.6s		6.00nm	4.6mb	
YKA	51.55	346	eP	55 10.50	16.5X
	0.7s		1.40nm		
PPD	52.50	132	eP	55 02.30	0.6
SOB1	54.43	112	eP	55 14.40	-1.6
INK	61.03	343	eP	56 00.00	-1.5
FBA	63.97	337	(P)	56 20.00	-1.0
LKO	83.06	82	P	58 09.04	-3.9X
	0.3s		3.50nm	4.8mb	
TIC	84.25	85	P	58 17.90	-1.1
LIC	84.34	85	P	58 18.40	-1.0
KIC	84.59	85	P	58 19.80	-0.9
KKN	138.51	5	PKP	05 00.00	-13.4X
CHG	146.27	343	ePKP	05 28.00	1.2
GBA	150.37	24	PKPd	05 34.30	1.0
	0.7s		2.00nm		

S.D. = 1.1 on 34 of 39 obs.

? SEP 15, 1990 09h 42m 18.51± 1.05s
36.144 N ± 8.8km 27.087 E ±16.6km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)

KAP	0.60	173	ePb	42 30.70	0.1
APE	1.56	307	ePb	42 45.70	-0.6
SMG	1.57	353	ePb	42 47.70	1.2
CIN	1.66	29	eP	42 47.00	-0.7

S.D. = 1.6 on 4 of 4 obs.

SEP 15, 1990 10h 10m 26.66± 0.94s
32.965 S ± 8.8km 70.196 W ± 7.2km
DEPTH = 119.7 ± 11.5 km
CHILE-ARGENTINA BORDER REGION (127)

FCH	0.37	192	iPd	10 44.00	-0.5
			iS	10 56.60	
JACH	0.44	310	iPc	10 43.70	-0.9
			iS	10 56.00	
PEL	0.45	247	iPc	10 44.10	-0.5
			iS	10 56.00	
SAN	0.62	219	iPd	10 45.50	-0.2
			iS	10 59.20	
ROCH	0.69	269	iPc	10 46.00	-0.4
			iS	10 59.50	
PCH	0.71	202	iPd	10 46.30	-0.1
			iS	11 00.50	
TACH	0.93	222	iPc	10 48.80	0.5
			iS	11 03.70	
CHCH	1.04	201	iPc	10 49.30	-0.1
			iS	11 06.10	
MDZ	1.13	86	iP	10 50.60	0.2
			i	11 05.70	
IHA	1.22	267	eP	10 51.20	0.0
			iS	11 07.80	
LCCH	1.26	246	iP	10 53.50	1.8
			iS	11 10.00	
LNV	1.42	225	iPd	10 53.00	-0.4
RTBS	1.44	26	iPc	10 55.00	1.3
RTCV	1.78	52	e(P)	10 58.00	0.1
RTCB	1.89	39	eP	10 59.90	0.6
			S	11 23.50	
ZON	1.91	43	iPc	10 59.50	0.0
			eS	11 23.50	
CFA	2.14	51	eP	11 01.90	-0.5
			S	11 28.00	
RTLL	2.19	42	ePc	11 03.00	-0.1
ZOBO	16.73	7	P	14 15.00	-0.8

S.D. = 0.7 on 19 of 19 obs.

SEP 15, 1990 10h 59m 52.01± 0.94s
25.672 S ± 9.3km 179.749 E ± 7.0km
DEPTH = 476.8 ± 10.9 km
4.6mb (9 obs.)
SOUTH OF FIJI ISLANDS (171)

VUN	7.72	351	eP	01 45.20	-1.0
SGE	8.22	348	ePd	01 52.00	0.4
DZM	12.69	284	iPd	02 42.00	2.5
WEL	16.11	194	P	03 14.00	-0.4
			eS	06 02.00	
BRS	24.18	260	iPd	04 32.00	1.0

15d 11h

RMO	27.82	261	iPc	05	03.80	0.5
TVO	29.79	81	iP	05	19.80	-0.8
	0.8s	60.00nm			5.1mb	
CTA	31.30	273	iPd	05	33.00	-0.5
	1.0s	21.00nm			4.6mb	
TPT	32.31	77	iP	05	41.40	-0.6
	0.8s	25.00nm			4.7mb	
RUV	32.43	78	iP	05	42.30	-0.7
	0.8s	20.00nm			4.7mb	
ASPA	41.55	263	iPd	06	57.00	-1.3
	0.5s	11.00nm			4.6mb	
		eS		12	36.10	
WB5	42.08	268	eP	07	01.50	-1.0
MBL	54.77	261	iPc	08	36.00	-1.9
SPA	64.48	180	iPc	09	43.50	1.2
	0.8s	15.00nm			4.7mb	
MAT	73.23	326	iPc	10	33.30	-1.7
	0.8s	7.46nm			4.3mb	
PRS	82.97	44	eP	11	27.40	0.4
PRI	83.29	45	eP	11	29.20	0.4
BKS	83.41	43	eP	11	30.00	0.8
MHC	83.43	43	eP	11	30.30	0.8
PLM	84.11	49	eP	11	34.00	1.0
SBB	84.25	47	eP	11	34.00	0.4
ISA	84.41	46	eP	11	35.00	0.7
FRI	84.42	44	eP	11	34.50	0.3
CMB	84.64	43	eP	11	35.30	-0.1
ORV	84.91	42	eP	11	36.80	0.2
WDC	84.95	40	eP	11	36.50	-0.3
CLC	85.07	46	eP	11	38.00	0.5
TPC	85.10	49	eP	11	39.00	1.3
GSC	85.29	47	eP	11	39.00	0.4
MIN	85.35	41	eP	11	39.00	0.1
TNP	86.66	45	P	11	45.00	-0.3
	0.8s	6.13nm			4.4mb	
LON	89.32	36	P	11	56.50	-0.8
RMW	89.77	35	P	11	59.30	-0.1
ANMO	92.22	52	P	12	11.00	-0.2
NEW	92.75	37	P	12	13.00	-0.1
IMW	93.85	43	P	12	18.00	-0.6
GOL	95.31	48	P	12	24.30	-0.9
	0.6s	1.29nm			4.3mb	
NUR	141.21	341	ePKP	18	10.00	-18.3X
NB2	143.79	351	PKP	18	29.40	-3.4X
	0.6s	2.10nm				
HFS	144.23	348	ePKP	18	30.20	-3.3X
	1.7s	99.20nm				
	S.D. = 0.9	on	37 of	40	obs.	

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* SEP 15, 1990 11h 12m 38.41± 0.55s
86.397 N ± 9.5km 71.738 E ±13.1km
DEPTH = 10.0km (geophysicist)
4.6mb (10 obs.)
NORTH OF SEVERNAYA ZEMLYA (651)

SOD	20.36	232	eP	17	15.00	-2.1
		e		17	24.00	
SUF	25.02	231	eP	18	02.00	-1.3
INK	25.15	22	eP	18	04.00	-0.4
IMA	26.74	40	P	18	20.00	0.6
	1.0s	8.44nm			4.4mb	
FBA	28.14	35	P	18	32.00	0.1
YKA	31.27	6	eP	18	59.90	0.1
	1.2s	8.20nm			4.5mb	
CLL	37.11	243	eP	19	59.00	8.9X
		e		20	55.00	
MOX	37.85	244	eP	19	58.00	1.7
KRA	37.98	235	eP	20	05.40	8.0X
PRU	38.34	241	eP	20	05.00	4.6X
EDM	40.58	5	ePd	20	19.50	0.5
			pP	20	39.40	83kmX
FVI	41.82	242	P	20	31.00	1.8
SES	43.42	3	eP	20	43.00	0.7
PNT	44.44	11	eP	20	51.00	0.5
NEW	45.52	8	P	21	00.50	1.3
	0.8s	15.63nm			5.0mb	
LON	46.98	13	P	21	10.00	-0.7
BJI	47.61	133	eP	21	15.50	-0.2
	1.2s	10.00nm			4.8mb	
LRM	47.99	4	eP	21	18.20	-0.8
RSSD	49.69	356	P	21	32.00	-0.1
IMW	49.92	3	P	21	35.00	1.1
BW06	51.04	1	P	21	42.00	-0.4
	1.0s	7.08nm			4.6mb	
GOL	54.11	357	P	22	05.00	-0.4
	0.9s	3.79nm			4.4mb	
TNP	55.69	9	P	22	16.00	-0.9
	1.0s	4 58nm			4.5mb	
TUL	57.82	348	eP	22	31.40	-0.3
	1.3s	17.90nm			4.9mb	
ANMO	58.86	358	P	22	38.00	-1.3
	1.0s	4.06nm			4.5mb	
UYO	59.54	347	iPd	22	43.20	-0.6
BCAO	83.43	233	iPc	25	08.00	1.1
	1.0s	15.00nm			5.2mb	
	S.D. = 1.0	on	24 of	27	obs.	

? SEP 15, 1990 11h 51m 13.14± 5.67s
34.065 S ±32.7km 71.039 W ± 9.6km
DEPTH = 72.1 ± 42.8 km
NEAR COAST OF CENTRAL CHILE (135)

LNV	0.33	289	iPc	51	25.00	0.2
CHCH	0.35	68	iP	51	25.10	0.0
			iS	51	33.70	
TACH	0.42	12	iPd	51	25.50	-0.1
			iS	51	33.50	
PCH	0.62	45	iPc	51	27.40	-0.3
			iS	51	37.60	
SAN	0.69	27	eP	51	28.50	0.2
			iS	51	39.50	
LCCH	0.74	323	iPd	51	28.50	-0.3
			iS	51	40.00	
FCH	0.96	40	eP	51	32.00	0.1
			iS	51	45.50	
PEL	0.97	18	iPd	51	31.60	0.0
			iS	51	45.50	
ROCH	1.09	1	iPc	51	33.80	0.4
			iS	51	49.00	
JACH	1.43	15	iPc	51	37.50	-0.2
			iS	51	55.50	
	S.D. = 0.3	on	10 of	10	obs.	

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* SEP 15, 1990 12h 21m 43.67± 0.70s
24.455 S ±12.7km 117.578 W ±11.3km
DEPTH = 10.0km (geophysicist)
5.0mb (8 obs.)
EASTER ISLAND CORDILLERA (684)

TPT	29.75	283	eP	27	53.00	0.4
	0.8s	20.00nm			5.0mb	
LPB	46.81	90	P	30	18.00	1.8
CNCB	46.84	90	eP	30	13.00	-3.5X
ZOBO	46.87	90	P	30	17.20	0.3
	1.0s	21.25nm			5.2mb	
Z	24s	0.13um			3.8MszX	
		LR		40	16.00	
SIV	53.39	92	P	31	05.80	-0.2
BAR	56.82	1	eP	31	16.00	-14.6X
GLA	57.25	3	eP	31	35.00	1.4
PLM	57.49	1	eP	31	39.00	3.5X
TPC	58.25	1	eP	31	42.00	1.3
SBB	58.82	360	eP	31	45.00	0.4
ABL	59.00	358	P	31	45.50	-0.6
GSC	59.43	1	eP	31	50.00	1.1
ISA	59.80	359	eP	31	52.00	0.6
CLC	59.94	360	eP	31	51.00	-1.4
ANMO	60.01	11	P	31	53.50	0.5
	0.8s	3.03nm			4.5mb	
PRI	60.34	357	eP	31	53.50	-1.6
PPD	60.40	102	eP	31	55.20	-0.7
		e		32	35.10	
PRS	60.56	356	eP	31	57.30	0.8
SAO	61.00	356	eP	31	59.90	0.4
FRI	61.15	358	eP	31	59.70	-0.7
MHC	61.58	356	eP	32	04.30	0.7
BKS	62.15	356	eP	32	07.80	0.5
TNP	62.20	0	P	32	08.00	0.1
	0.8s	7.72nm			4.9mb	
CMB	62.21	357	eP	32	08.00	0.3
SIO	63.17	19	eP	32	14.60	0.6
TUL	63.47	20	eP	32	16.50	0.4
	0.8s	31.10nm			5.5mb	
DUG	64.47	4	P	32	23.50	0.8
OLY	64.55	23	P	32	23.50	0.4
DAU	64.80	5	P	32	25.50	0.4
GOL	64.83	10	P	32	25.00	-0.2
	0.8s	4.09nm			4.7mb	
WDC	64.86	356	eP	32	24.50	-0.5
BAO	65.39	97	Pd	32	28.50	-0.6
LBFM	65.59	356	P	32	29.00	-0.9
FVM	67.14	23	P	32	40.00	0.3
BW06	67.30	6	P	32	39.50	-1.4
GBTN	67.62	29	P	32	42.70	0.0
JSC	67.84	32	P	32	44.50	0.4
LHS	68.22	32	P	32	47.00	0.5
IMW	68.29	5	P	32	46.50	-0.7
RSSD	69.36	10	P	32	52.50	-1.2
LRM	70.09	4	eP	32	58.20	0.1
BLA	70.61	31	P	33	01.00	-0.2
LON	70.97	357	P	33	02.50	-0.7
RMW	71.68	357	P	33	05.80	-1.7
NEW	72.38	0	P	33	11.00	-0.6
	0.8s	19.79nm			5.3mb	
PGC	72.96	356	eP	33	15.00	0.1
PNT	73.46	359	eP	33	18.00	0.2
	0.8s	10.00nm			4.9mb	
SOB1	74.18	93	eP	33	22.00	-0.8
SES	74.74	4	eP	33	25.00	-0.3
EDM	77.43	3	eP	33	39.40	-1.0
RSNY	79.14	30	P	33	50.70	0.7
HBVT	79.67	31	P	33	53.50	0.7
PTJ	137.14	48	ePKP	41	06.20	-2.7
MLR	143.91	45	ePKPc	41	17.00	-4.1X
CHG	145.66	268	ePKP	41	19.40	-5.3X
	1.0s	39.50nm				
CHTO	145.66	268	iPKPd	41	19.40	-5.2X
SHL	153.30	279	iPKP	41	39.20	2.8
	S.D. = 1.0	on	51 of	57	obs.	

SEP 15, 1990 12h 23m 09.00± 0.44s
17.063 N ± 7.7km 93.710 W ± 5.1km
DEPTH = 173.4km (2 depth phases)
4.2mb (6 obs.)
CHIAPAS, MEXICO (61)
Felt in Chiopos.

SCX	1.08	107	iP	23	36.84	-0.1
			iS	23	51.92	
EVV	2.09	312	eP	23	45.66	-1.3
			iS	24	08.08	
TPX	2.56	147	eP	23	52.44	0.0
			iS	24	21.78	
LVVM	3.72	316	iP	24	04.84	-2.1
			iS	24	46.48	
PPM	5.08	294	iPd	24	25.18	0.0
			(S)	25	09.00	
IIA	5.14	295	iPc	24	25.50	0.1
			(S)	25	07.00	
SMMM	5.47	300	eP	24	30.56	0.9
			(S)	25	12.07	
UNM	5.67	294	(P)	24	33.00	0.3
CRX	6.13	293	(P)	24	39.00	0.2
IIJ	6.31	296	iP	24	42.58	1.3
MRX	7.57	291	(P)	24	57.50	-0.2
GCM	11.93	77	eP	25	54.70	0.0
UPA	15.97	118	(P)	26	45.00	-0.6
UYO	17.05	358	iPd	26	57.50	-1.1
MEO	18.18	347	iPd	27	10.50	-0.7
OLY	18.47	6	P	27	13.00	-1.3
SIO	18.75	353	eP	27	20.50	3.3X
			e	27	33.50	
TUL	18.86	355	eP	27	21.50	3.2X
	0.7s	8.30nm			4.3mb	
			i	27	33.60	
			i	27	42.20	
GBTN	20.37	23	P	27	35.50	1.8
TKL	20.52	24	P	27	35.50	0.3
ANMO	21.14	330	P	27	42.00	0.4
	0.8s	4.66nm			4.0mb	
GOL	24.73	338	P	28	16.00	-0.2
CBN	25.48	31	e(P)	28	40.00	17.3X
PLM	26.40	312	P	28	32.00	0.6
DAU	27.79	330	P	28	44.20	0.2
			pP	29	20.00	175km
TNP	29.39	320	P	28	58.50	0.3
			pP	29	34.20	172km
IMW	30.46	335	P	29	08.50	0.8
LRM	32.66	335	eP	29	28.00	1.2
LBFM	34.23	321	P	29	40.00	-0.3
SES	36.05	341	eP	29	55.00	-0.3
PNT	38.41	333	eP	30	16.00	0.9
	0.8s	5.00nm			4.2mb	
YKA	47.69	347	eP	31	28.40	-1.1
	0.6s	2.50nm			4.0mb	
INK	57.05	344	eP	32	37.00	-1.7
NB2	82.25	28	P	35	12.80	0.9
	0.9s	6.30nm			4.4mb	
HFS	83.73	29	eP	35	19.30	0.0
	0.8s	3.40nm			4.2mb	
KEV	84.07	18	eP	35	22.00	1.1

SOD	85.30	20	eP	35	27.00	-0.1
NUR	88.36	26	eP	35	44.00	2.0
WB5	134.43	259	ePKP	42	07.70	-1.1
HYB	144.90	13	ePKP	42	26.50	-1.2
GBA	148.30	17	PKP	42	36.00	2.8X
MUN	149.12	236	ePKP	42	37.50	3.4X

S.D. = 1.0 on 37 of 42 obs.

SEP 15, 1990 12h 50m 58.59± 0.27s
19.205 N ± 5.5km 69.332 W ± 4.1km
DEPTH = 82.7km (3 depth phases)
4.5mb (6 obs.)
DOMINICAN REPUBLIC REGION (88)
Felt at Santo Domingo and throughout northern and eastern Dominican Republic.

MCP	2.24	110	P	51	36.00	1.5
MGP	2.44	119	P	51	39.00	1.9
LRS	2.53	111	P	51	40.00	1.7
PORP	2.80	114	P	51	44.00	1.9
CSB	3.14	106	P	51	47.00	0.1
SJG	3.21	109	iP	51	48.70	0.9
LPR	3.40	105	P	51	50.80	0.3
NEV	6.75	107	eP	52	35.87	-1.1
			S	53	51.00	
BPA	7.42	106	eP	52	45.30	-1.0
			S	54	03.00	
PAG	7.95	112	eP	52	53.24	-0.4
			S	54	24.00	
SEG	7.96	109	eP	52	53.82	0.2
DOG	8.00	112	eP	52	54.10	-0.2
SFG	8.29	109	eP	52	57.50	-0.7
MGG	8.31	112	eP	52	58.64	0.1
			S	54	30.50	
BBL	8.34	115	eP	52	58.52	-0.5
MDN	8.51	116	eP	53	01.21	0.0
FDF	9.00	118	eP	53	06.70	-1.3
	0.2s		0.55nm			4.0mb
			S	54	36.00	
BIM	9.18	119	eP	53	09.29	-1.1
CRM	9.19	118	eP	53	11.30	0.8
MVM	9.30	119	eP	53	11.20	-0.9
SVB	9.75	126	eP	53	16.32	-1.8
TRN	11.45	137	eP	53	43.65	2.7X
TBH	11.79	136	eP	53	50.80	5.3X
BMG	12.60	197	eP	53	58.00	1.7
UPA	14.18	226	(P)	54	10.50	-6.3X
BOG	15.21	198	eP	54	37.50	7.0X
CBN	20.18	341	eP	55	28.00	-0.9
BLA	20.40	334	eP	55	30.50	-0.6
	0.9s		17.65nm			4.4mb
LVNJ	22.03	349	P	55	53.00	5.6X
TUL	28.63	311	eP	56	49.50	0.2
	0.8s		11.40nm			4.6mb
SIO	28.92	310	eP	56	52.10	0.1
ZOBO	35.27	178	P	57	48.00	-0.1
LPB	35.53	178	(P)	57	50.00	-0.1
CNCB	35.81	178	P	57	53.40	0.8
SIV	35.91	166	P	57	51.00	-1.8
ANMO	36.35	303	P	57	57.00	0.4
			pP	58	18.00	88km
CCH	36.49	175	(P)	58	01 00	3.0X
GOL	37.10	311	P	58	03.00	0.0
	0.7s		3.03nm			4.3mb
SOB1	39.79	133	(P)	58	25.00	-0.3
BW06	41.19	314	P	58	36.50	-0.3
DAU	41.58	310	P	58	40 80	0.6
IMW	42.55	315	P	58	48.00	0.0
LRM	44.26	317	eP	59	02.60	0.7
PPD	44.61	156	eP	59	04.00	-0.6
SES	45.35	323	eP	59	10.00	-0.2
TNP	45.50	305	P	59	12.00	0.3
			pP	59	31.30	79km
NEW	48.12	318	P	59	31.00	-1.0
	0.8s		7.29nm			4.6mb
PEL	52.07	181	iPd	00	02.00	-0.2
SAN	52.38	181	eP	00	04.00	-0.4
LCCH	52.43	182	iPc	00	04.80	0.1
TACH	52.58	182	ePd	00	05.50	-0.4
CHCH	52.86	181	eP	00	07.80	-0.2
YKA	53.25	336	eP	00	30.40	19.9X
	0.7s		3.60nm			
LKO	62.21	89	P	01	12.32	-1.9
INK	62.84	338	eP	01	35.00	17.5X
KIC	63.96	92	P	01	26.30	0.6
MLR	80.14	45	eP	03	03.00	1.7
BCAO	86.55	87	iPd	03	35 70	1.3
	0.6s		17.00nm			5.3mb
			id	03	57.90	82km

S.D. = 1.0 on 50 of 58 obs.

SEP 15, 1990 12h 55m 19.75± 0.36s
41.311 N ± 9.3km 29.352 W ± 4.3km
DEPTH = 10.0km (geophysicist)
4.5mb (16 obs.) 4.0Msz (1 obs.)
AZORES ISLANDS REGION (404)

PDA	4.56	140	iPd	56	28.80	-1.5
			iS	56	30.10	
TOL	19.25	86	eP	59	46.00	-1.0
			eS	02	40.00	
TIO	20.58	113	iP	00	02.40	0.9
IFR	20.71	104	iPd	00	03.00	0.1
MFF	21.61	66	eP	00	13.20	1.5
	1.0s		16.00nm			4.4mb
EPF	22.03	76	eP	00	15.50	-0.5
	1.2s		26.80nm			4.6mb
LPO	22.52	71	eP	00	21.40	0.5
	1.0s		12.00nm			4.3mb
LSF	22.75	67	eP	00	24.00	0.9
	1.0s		24.00nm			4.7mb
TCF	23.23	67	eP	00	28.40	0.6
	1.2s		20.85nm			4.6mb
MAF	23.47	67	eP	00	30.70	0.6
	0.8s		5.35nm			4.2mb
AVF	24.02	66	eP	00	35.10	-0.3
	1.0s		7.00nm			4.2mb
SSF	24.14	65	eP	00	36.40	-0.1
	1.0s		12.00nm			4.5mb
SMF	24.36	66	eP	00	38.50	-0.2
	1.0s		8.00nm			4.3mb
LOR	24.38	65	eP	00	38.70	-0.3
	1.2s		11.90nm			4.4mb
Z	20s		0.45um			4.0Msz
LBF	24.46	65	eP	00	38.50	-1.2
	1.2s		10.40nm			4.3mb
KHC	30 89	61	eP	01	45.00	6.6X
			e	02	43.40	
SES	54.90	309	ePd	04	51.70	-1.0
BW06	57.36	301	P	05	09.50	-1.1
	1.0s		6.67nm			4.6mb
IMW	57.72	302	P	05	12.80	-0.4
LRM	57.77	305	eP	05	13.50	0.0
ANMO	59.13	291	P	05	24.00	1.0
	1.0s		3.75nm			4.5mb
NEW	59.41	309	P	05	24.00	-0.6
	1.0s		24.38nm			5.3mb
DAU	59.62	299	P	05	26.50	-0.1
PNT	60.33	311	eP	05	31.00	0.1
DUG	60.76	299	P	05	34.20	0.1
TNP	64.78	299	P	06	00.50	-0.4
	1.0s		7.08nm			4.8mb
LBFM	65.94	305	P	06	08.00	-0.3
GLA	65.99	294	P	06	09.50	1.0
ZOBO	67.60	221	P	06	21.20	1.7
	1.5s		27.96nm			5.2mb

S.D. = 0.9 on 28 of 29 obs.

SEP 15, 1990 13h 09m 07.18± 0.42s
19.214 N ± 8.2km 69.361 W ± 6.2km
DEPTH = 76.9km (3 depth phases)
4.7mb (4 obs.)
DOMINICAN REPUBLIC REGION (88)
Felt at Santo Domingo and throughout northern and eastern Dominican Republic.

MCP	2.27	110	P	09	45.00	1.7
LRS	2.55	111	P	09	49.00	1.8
PORP	2.83	114	P	09	52.70	1.7
CSB	3.17	106	P	09	57.00	1.2
SJG	3.24	109	iP	09	57.80	1.1
LPR	3.43	105	P	09	59.70	0.3
NEV	6.78	107	eP	10	45.00	-1.1
BPA	7.45	106	eP	10	53.00	-2.4
PAG	7.98	112	eP	11	01.00	-1.7
			S	12	30.00	
MGG	8.34	112	eP	11	07.00	-0.6
BBL	8.37	115	eP	11	06.00	-2.1
SVB	9.77	126	eP	11	26.80	-0.4
TRN	11.47	137	eP	11	52.20	2.1
BMG	12.60	197	eP	12	07.00	1.9
UPA	14.16	225	iPc	12	20.00	-5.5X
	0.9s		33.61nm			4.6mb
BOG	15.21	198	eP	12	46.00	6.6X
LVNJ	22.02	349	P	14	06.50	10.1X
TBR	22.25	350	P	14	09.00	10.3X
TUL	28.60	311	ePd	14	58.40	0.2
	1.2s		15.00nm			4.5mb
SIO	28.89	310	eP	15	01.20	0.3
ZOBO	35.28	178	P	15	56.00	-1.3
LPB	35.54	178	eP	16	01.00	1.6
CNCB	35.82	178	P	16	03.00	1.1
SIV	35.92	166	P	16	00.60	-1.5
ANMO	36.32	303	P	16	06.00	0.4
			pP	16	24.50	76km
GOL	37.07	311	P	16	12.00	0.1
BW06	41.16	314	P	16	45.00	-0.8
IMW	42.52	315	P	16	56.50	-0.5
FFC	43.27	333	eP	17	17.00	14.5X
	0.5s		4.00nm			
LRM	44.24	317	eP	17	19.20	8.3X
PPD	44.63	156	eP	17	12.80	-1.1
SES	45.33	323	eP	17	20.00	0.8
TNP	45.47	305	P	17	21.20	0.5
			pP	17	40.00	76km
NEW	48.10	318	P	17	39.50	-1.5
	0.9s		10.42nm			4.8mb
ROCH	51.91	182	iPd	18	00.50	-9.9X
PEL	52.08	181	iPc	18	10.90	-0.5
LCCH	52.43	182	iPc	18	13.50	-0.5
TACH	52.59	182	iPd	18	14.00	-1.2
CHCH	52.86	181	eP	18	16.50	-0.8
YKA	53.23	336	eP	18	37.60	18.0X
	0.8s		2.40nm			
EKA	60.90	37	P	19	44.00	30.0X
	0.9s		5.20nm			
MFF	62.09	47	eP	19	41.90	19.8X
	0.6s		5.40nm			
LKO	62.24	89	P	19	21.32	-2.4
EPF	62.43	51	eP	19	45.20	20.6X
	1.0s		7.00nm			
KIC	63.99	92	P	19	41.00	5.8X
AVF	64.49	47	eP	19	58.00	20.1X
	1 0s		4.00nm			
LOR	64.83	46	eP	19	59.40	19.3X
	0.6s		5.40nm			
SMF	64.83	47	eP	19	59.40	19.2X
	1.0s		6.00nm			
LPL	66.90	48	eP	20	14.00	20.3X
	1.1s		4.90nm			
KHC	71.16	44	eP	20	20.50	0.9
OHR	77.74	51	eP	21	25.50	27.9X
MLR	80.15	45	eP	21	13.00	2.4
BCAO	86.58	87	iPd	21	44.30	0.5
	0.5s		6.00nm			4.9mb
			id	22	05.80	79km

S.D. = 1.4 on 36 of 53 obs.

• SEP 15, 1990 14h 33m 02.51± 1.47s
33.158 S ± 9.8km 72.216 W ±14.4km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

IHA	0.50	75	iPc	33	11.40	-1.7
LCCH	0.63	120	iPd	33	14.00	-0.9
ROCH	1.03	80	iPd	33	19.70	-1.2
LNV	1.04	140	iPd	33	21.30	0.5
TACH	1.18	115	iPd	33	23.00	0.3
PEL	1 28	90	iPd	33	24.50	0.2
SAN	1.33	103	iPd	33	25.50	0.5
			iS	33	42.00	
JACH	1.45	71	iPd	33	26.00	-0.7
			iS	33	43.00	
CHCH	1.52	121	iPc	33	28.60	0.9
			iS	33	48.40	
FCH	1.62	96	iPd	33	30.00	0.5
			iS	33	51.50	
RTBS	2.77	58	ePd	33	47.80	2.3
RTCV	3.37	68	e(P)	33	58.40	4.3X
ZON	3.40	63	eP	33	54.50	-0.1
RTLL	3.66	61	ePc	34	00.80	2.6
			eS	34	45.40	
CFA	3.70	66	e(P)	34	03.00	4.2X
CNCB	16.72	14	P	36	59.00	2.5
LPB	16.97	14	eP	36	58.00	-1.4
ZOBO	17.22	13	P	37	02.00	-0.7
Z	18s		0.38um			
			LR	42	28.00	
PPD	21.55	64	eP	37	48.50	-2.6

15d 14h

KIC	74.96	72	P	44	42.20	-0.3
LKO	76.20	69	P	44	47.50	-2.1
GBA	146.21	118	PKP	52	41.90	1.4

S.D. = 1.5 on 20 of 22 obs.

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* SEP 15, 1990 15h 36m 04.29± 0.77s
7.372 S ±14.0km 154.701 E ±11.1km
DEPTH = 33.0km (normal)
4.2mb (1 obs.)
SOLOMON ISLANDS (193)

HNR	5.58	112	eP	37	26.00	-1.2
PMG	7.74	254	eP	37	55.00	-2.5
QIS	19.63	227	iPc	40	33.20	-0.1
RMO	19.84	196	eP	40	35.00	-0.4
			e	40	46.00	
			e	40	56.00	
WB5	23.31	236	eP	41	11.40	1.0
CMS	25.38	198	eP	41	32.00	1.7
ASPA	25.71	229	iPc	41	33.40	-0.1
	1.4s		10.00nm			4.2mb
	Z 22s		0.16um			3.5MszX
			LR	50	07.90	
CHG	60.80	296	eP	46	19.60	3.6X
CHTO	60.80	296	P	46	16.60	0.6
			pP	46	27.40	36kmX
PKI	75.37	301	P	47	47.00	-0.2
KKN	75.54	301	P	47	48.80	0.8
GKN	76.14	301	P	47	50.20	-1.2
TNP	92.99	52	P	49	15.00	-1.1
IFR	147.98	327	iPKP	55	48.00	2.5

S.D. = 1.5 on 13 of 14 obs.

? SEP 15, 1990 15h 38m 07.72± 6.79s
29.546 S ±15.0km 108.678 E ±60.6km
DEPTH = 10.0km (geophysicist)
WEST OF AUSTRALIA (589)

MRWA	6.39	89	iPd	39	46.00	1.7
			eS	40	52.00	
MUN	6.92	112	iPd	39	51.40	-0.2
	0.3s		79.00nm			6.4mb
			eS	41	02.50	
BAL	7.04	101	iPc	39	54.00	0.7
	0.3s		114.00nm			6.6mb
			eS	41	07.80	
NWAO	8.06	117	iPd	40	06.60	-1.1
	0.2s		31.00nm			6.2mb
			eS	41	28.40	
KLB	8.09	107	eP	40	07.60	-0.5
	0.2s		23.00nm			6.1mb
			eS	41	30.40	
RKG	8.40	125	eP	40	14.00	1.6
	0.3s		18.00nm			5.8mb
			eS	41	40.00	
MEKA	9.18	74	eP	40	23.50	0.3
			eS	41	58.00	
NANU	9.29	43	eP	40	25.00	0.4
	0.3s		4.00nm			5.3mb
			eS	41	52.00	
COOL	10.87	100	eP	40	44.20	-2.2
	0.2s		13.00nm			5.9mb
			eS	42	39.00	
MBL	13.09	53	eP	41	15.50	-0.8
			eS	43	28.00	

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

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* SEP 15, 1990 16h 28m 03.12± 2.26s
7.158 S ±17.3km 154.493 E ±11.9km
DEPTH = 73.7 ± 22.6 km
4.5mb (2 obs.)
SOLOMON ISLANDS (193)

HNR	5.85	113	eP	29	30.00	0.8
PMG	7.60	252	eP	29	52.50	-0.9
QIS	19.63	226	iPd	32	28.30	-0.3
RMO	19.99	195	eP	32	30.00	-2.3
			e	32	42.00	
			e	32	51.00	
WB5	23.26	235	eP	33	06.80	1.8
			i	33	29.00	
MTN	23.68	254	eP	33	12.50	3.4X
CMS	25.52	197	ePd	33	27.20	0.7
ASPA	25.70	228	iPc	33	29.10	0.9
	1.0s		5.00nm			4.0mb
	Z 16s		0.30um			3.9MszX
			LR	43	55.40	
CHG	60.52	296	eP	38	11.80	3 5X
LZH	64.08	316	eP	38	33.00	1.0
	2.0s		36.00nm			5.0mb
			sP	38	42.80	
FBA	83.45	21	(P)	40	22.00	-1.5
TNP	93.02	52	P	41	10.00	-0.2
IFR	147.69	327	iPKPd	47	44.00	5.3X
TIO	150.83	326	ePKP	47	59.00	15.5X

S.D. = 1.6 on 10 of 14 obs.

SEP 15, 1990 17h 52m 03.11± 0.76s
63.813 N ± 6.7km 22.494 W ± 9.8km
DEPTH = 10.0km (geophysicist)
4.4mb (30 obs.) 3.9Msz (4 obs.)
ICELAND REGION (637)

REY	0.42	38	iP	52	10.60	-1.0
			iS	52	16.80	
AKU	2.66	43	iP	52	46.90	0.2
	0.8s		492.54nm			
			iS	53	22.20	
EKA	12.92	122	P	55	09.00	-0.2
	0.8s		6.60nm			4.9mb
FLN	19.24	131	eP	56	28.00	-1.9
	0.8s		10.75nm			4.2mb
	Z 20s		0.80um			3.8MszX
WTS	19.34	114	eP	56	30.50	-0.5
	1.0s		12.00nm			4.1mb
SNF	19.50	120	P	56	34.40	1.5
LDF	19.51	131	eP	56	29.00	-4.1X
	1.0s		12.00nm			4.1mb
LPF	19.70	133	eP	56	33.20	-1.9
	1.0s		16.00nm			4.3mb
KEV	19.88	51	eP	56	37.00	0.2
	1.0s		34.00nm			4.6mb
ENN	19.93	118	eP	56	38.50	1.0
	1.0s		24.00nm			4.5mb
DOU	19.95	121	P	56	36.20	-1.6
MEM	20.09	118	Pc	56	42.00	2.8
SOD	20.16	58	iP	56	38.30	-1.5
MFF	21.25	134	eP	56	50.00	-1.2
	1.0s		12.00nm			4.2mb
TNS	21.36	115	ePd	56	55.20	2.8
SUF	21.49	71	eP	56	54.00	0.5
NUR	21.86	77	eP	56	56.00	-1.2
	1.0s		46.00nm			4.9mb
LOR	22.03	126	eP	56	57.90	-1.2
	0.9s		11.45nm			4.3mb
	Z 20s		0.52um			3.9Msz
SSF	22.08	127	eP	56	58.40	-1.2
	1.0s		6.00nm			4.0mb
LSF	22.10	131	eP	56	58.80	-1.0
	1.2s		17.85nm			4.4mb
AVF	22.26	128	eP	57	00.30	-1.0
	1.0s		10.00nm			4.2mb
BGF	22.28	129	eP	57	00.60	-1.0
	1.2s		35.70nm			4.7mb
TCF	22.30	130	eP	57	01.00	-0.8
	1.2s		26.80nm			4.6mb
LBF	22.31	127	eP	57	00.90	-1.0
	0.8s		8.05nm			4.2mb
HAU	22.33	121	eP	57	02.20	0.2
	0.9s		13.10nm			4.4mb
	Z 20s		0.35um			3.8Msz
MOX	22.34	110	eP	57	03.00	0.9
CDF	22.35	120	eP	57	02.40	0.1
	0.8s		13.45nm			4.5mb
CLL	22.42	107	iPd	57	04.10	1.2
	1.7s		48.00nm			4.7mb
MAF	22.48	130	eP	57	02.90	-0.6
	1.0s		15.00nm			4.4mb
SMF	22.55	127	eP	57	03.50	-0.8
	1.0s		12.00nm			4.3mb
BSF	22.64	121	eP	57	06.10	0.9
	0.8s		8.05nm			4.3mb
GRF	22.90	112	iPc	57	09.10	1.4
	1.1s		11.00nm			4.3mb
	Z 20s		0.20um			3.6Msz
RJF	22.93	133	eP	57	08.30	0.3
	1.0s		16.00nm			4.5mb
	Z 20s		0.65um			4.1Msz
LFF	23.01	134	eP	57	09.80	1.1
	0.8s		8.05nm			4.3mb
LPO	23.38	134	eP	57	11.80	-0.5
	0.8s		13.45nm			4.5mb
CAF	23.45	132	eP	57	12.50	-0.6
	0.8s		4.05nm			4.0mb
PRU	24.06	108	eP	57	20.00	1.1
KSP	24.17	104	eP	57	19.50	-0.5
KHC	24.31	110	P	57	24.40	3.0X
BTH	24.36	138	Pc	57	26.50	4.7X
EPF	24.61	137	eP	57	24.20	-0.1
	0.8s		5.35nm			4.2mb
SOTA	24.86	116	e(P)	57	27.00	0.2
	1.4s		14.60nm			4.5mb
ORO	24.93	122	P	57	30.00	2.5
MDI	25.46	120	P	57	34.00	1.7
CTI	25.99	117	P	57	38.00	0.5
FVI	26.00	115	P	57	40.40	3.0X
SDI	30.49	119	P	58	15.00	-3.1X
FFC	39.02	295	eP	59	31.00	0.1
	0.8s		7.00nm			4.4mb
PNT	50.09	302	eP	01	00.00	0.3

S.D. = 1.2 on 44 of 49 obs.

% SEP 15, 1990 18h 29m 44.47± 1.34s
45.058 N ± 4.2km 6.645 E ±12.6km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.0 (GEN).

BNI	0.02	103	Pc	29	46.40	-0.2
			eSg	29	47.80	
RRL	0.17	144	P	29	48.45	0.0
			S	29	51.53	
RSP	0.44	78	P	29	53.68	0.1
			S	30	00.35	
LPG	0.45	10	Pg	29	53.70	0.1
			Sg	30	00.00	
LSD	0.54	42	P	29	55.32	-0.1
			S	30	02.81	
PZZ	0.64	149	P	29	57.27	-0.2
			S	30	06.09	
STV	0.95	149	P	30	02.71	0.1
			S	30	14.81	
ENR	1.00	146	P	30	03.53	0.1

S.D. = 0.1 on 8 of 8 obs.

& SEP 15, 1990 19h 01m 41.10s
34.280 N 117.050 W
DEPTH = 2.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 3.2 (PAS). Felt (IV) at Loke Arrowhead. Also felt ot Redlonds.

RVR	0.39	223	iPd	01	48.90	-0.1
PEC	0.40	193	iPd	01	49.00	-0.1
PCF	0.65	250	iPc	01	53.78	-0.4
			S	02	02.83	
PEM	0.69	261	iPc	01	54.25	-0.6
VPD	0.75	232	ePc	01	55.64	-0.5
			S	02	05.81	
SBB	0.76	303	iPc	01	55.40	-0.9
MWC	0.84	266	iPc	01	56.90	-0.9
PLM	0.94	170	iPd	01	58.80	-1.1
PAS	0.94	262	iPc	01	58.60	-1.2
GSC	1.04	11	iPd	02	00.70	-0.8
PVPS	1.23	247	eP	02	03.62	-1.0
			S	02	20.08	
CPE	1.40	182	iPd	02	05.80	-1.8
ABL	1.88	288	eP	02	13.50	-1.3
GLA	2.22	123	eP	02	17.70	-1.9
BCH	2.66	291	eP	02	25.00	-0.8
BLP	2.78	277	eP	02	26.00	-1.5
TNP	3.80	358	e(P)	02	42.00	-0.1
CMB	4.62	325	e(P)	02	53.50	-0.1

18 obs. ossocioted

SEP 15, 1990 19h 22m 52.84± 0.38s
5.205 S ± 6.1km 133.816 E ± 6.9km
DEPTH = 30.1km (2 depth phoses)
5.3mb (15 obs.)
AROE ISLANDS REGION (204)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.8.: 12S, 20C
Centroid Location:
Origin Time 19:22:55.7 0.7
Lat 4.98S 0.10 Lon 133.80E 0.08
Dep 15.0 FIX Holf-duration 1.6
Moment Tensor; Scole 10**16 Nm
Mrr=-5.94 0.41 Mtt= 0.38 0.46
Mff= 5.56 0.57 Mrt=-3.19 1.36

Mrf= 5.03 1.59 Mtf= 2.26 0.41
Principal Axes:
T Val= 7.61 Plg=18 Azm=279
N 1.70 23 181
P -9.31 60 44
Best Double Couple:Mo=8.5•10••16
NP1:Strike= 41 Dip=34 Slip= -45
NP2: 171 67 -115

JAY	7.37	69	ePc	24	39.00	-2.3
MTN	8.04	199	eP	24	49.00	-1.6
MNDI	9.84	96	eP	25	16.00	0.3
MNI	11.14	306	eP	25	32.70	-0.5
KNA	11.59	205	eP	25	36.50	-2.9
			e	27	41.00	
WB5	14.60	178	eP	26	14.80	-4.5X
			eS	28	57.00	
QIS	16.27	160	eP	26	38.00	-2.9
			e	26	43.00	
			e	29	40.00	
			e	31	32.00	
ASPA	18.36	180	eP	27	04.80	-2.2
	0.9s	130.00nm			5.1mb	
Z	17s	3.62um			3.9MszX	
			eS	30	41.00	
			LR	38	11.60	
CTA	19.11	142	iPc	27	16.90	0.7
	0.7s	19.18nm			4.4mb	
			iS	31	00.00	
KKM	20.82	302	ePd	27	35.50	0.8
MBL	20.87	219	eP	27	36.00	1.0
			eS	31	22.00	
GUA	21.64	31	eP	27	46.50	3.7X
	1.0s	216.00nm			5.5mb	
GUMO	21.65	30	eP	27	46.50	3.5X
	1.2s	411.11nm			5.7mb	
Z	20s	0.86um			4.1Msz	
PJG	21.66	30	eP	27	46.50	3.5X
OLP	23.47	156	eP	28	03.00	2.1
NANU	24.70	224	eP	28	14.00	1.2
RMO	25.53	148	eP	28	22.00	1.4
			e	28	30.00	28km
			e	35	07.00	
FORR	26.07	191	eP	28	26.00	0.4
HNR	26.25	101	eP	28	28.00	0.6
CMS	28.47	158	e(P)	28	48.00	0.5
			e	38	37.00	
BRS	28.51	143	iPc	28	47.70	-0.2
MRWA	29.24	213	eP	28	56.00	1.6
ADE	29.96	172	eP	29	02.00	1.1
	0.8s	46.27nm			5.3mb	
BFD	32.81	167	eP	29	27.00	1.3
IPM	34.16	286	ePd	29	39.70	1.9
PSI	35.73	282	eP	29	52.00	0.8
DZM	35.74	121	iPc	29	51.60	0.3
SSE	38.06	342	eP	30	11.50	1.0
	0.8s	10.00nm			4.7mb	
Z	20s	0.90um			4.6Msz	
			eS	35	49.00	
NST	39.27	302	eP	30	21.50	0.6
BDT	40.99	304	eP	30	33.00	-2.0
MAT	41.73	5	iPd	30	40.00	-0.9
	1.0s	15.00nm			4.7mb	
Z	20s	0.71um			4.5Msz	
			eS	37	30.00	
CHG	41.83	306	eP	30	42.40	0.4
	1.1s	21.52nm			4.8mb	
BJI	47.86	342	eP	31	30.00	0.0
	1.1s	49.00nm			5.4mb	
Z	20s	0.30um			4.3Msz	
			eS	38	25.00	
LZH	49.76	328	P	31	46.00	1.1
	1.5s	65.00nm			5.4mb	
Z	23s	0.60um			4.5MszX	
			pP	31	55.50	32km
			sP	31	59.50	
			ePP	33	40.00	
			eS	38	52.00	
SHL	50.91	309	iP	31	53.00	-0.9
GUN	56.73	308	P	32	36.60	-0.4
	0.8s	51.00nm			5.6mb	
PKI	56.95	308	P	32	37.80	-0.7
KKN	57.15	308	P	32	39.60	-0.2
	0.9s	48.00nm			5.5mb	
GKN	57.75	308	P	32	44.00	0.1
	1.0s	60.00nm			5.6mb	
KOD	58.18	285	eP	32	50.00	2.8X
GBA	59.00	289	P	32	52 00	-0.5
HYB	59.00	294	eP	32	52.00	-0.6
			e	33	03.00	37kmX
QUE	72.92	304	eP	34	21.00	-0.8
MAW	78.00	202	iP	34	45.00	-4.7X
	0.7s	48.00nm			5.6mb	
SPA	84.83	180	eP	35	26.60	0.9
	0.7s	8.98nm			5.1mb	
KIC	138.76	274	PKP	42	22.00	3.0X
LIC	139.04	273	PKP	42	22.40	2.9X
LKO	139.53	279	PKP	42	17.64	-2.8
UPA	146.70	82	ePKPd	42	35.00	2.3X
ARE	146.99	131	ePKP	42	37.00	3.5X
CNCB	149.30	136	PKPc	42	44.00	6.5X
LPB	149.40	135	PKP	42	43.00	5.5X
ZOBO	149.56	135	PKPc	42	41.80	5.9X
	1.2s	34.46nm				
CCH	150.13	139	PKPc	42	46.50	8.1X
PPD	152.47	170	(PKP)	42	50.00	8.6X
SIV	154.30	145	PKP	42	46.00	1.9
S.D. = 1.4 on 41 of 56 obs.						

• SEP 15, 1990 20h 21m 18.49± 1.00s
40.332 N ±10.3km 21.973 E ± 8.5km
DEPTH = 5.0km (geophysicist)
GREECE (364)
MD 3.0 (ATH).

KZN	0.16	261	iPgd	21	20.70	-1.1
PLG	1.13	87	ePb	21	39.00	-1.1
OHR	1.18	311	iPn	21	40.80	-0.3
EVR	1.42	185	ePg	21	46.30	1.2
SKO	1.69	346	ePn	21	50.00	1.2
S.D. = 1.7 on 5 of 5 obs.						

& SEP 15, 1990 20h 21m 43.29s
65.993 N 147.555 W
DEPTH = 8.1km
ALASKA (676)
<AGS-P>.

GLM	1.01	176	eP	22	02.49	-0.2
FBA	1.10	185	iP	22	04.34	0.2
FYU	1.10	57	eP	22	04.07	-0.1
CCB	1.36	185	eP	22	07.52	-0.9
WRH	1.54	189	eP	22	10.12	-1.0
HDA	1.61	171	eP	22	11.85	-0.3
			eS	22	29.72	
DDM	2.33	161	eP	22	22.76	0.2
			eS	22	54.01	
MCK	2.35	195	eP	22	21.66	-1.1
IMA	2.50	275	eP	22	25.18	0.2
DOT	2.79	146	eP	22	27.45	-1.6
TMW	3.32	142	eP	22	36.41	-0.1
CUT	3.79	199	eP	22	42.61	-0.6
TOA	3.95	171	eP	22	44.87	-0.7
SCM	4.18	179	eP	22	48.43	-0.3
SML	4.22	185	eP	22	50.03	0.8
GHO	4.28	189	eP	22	49.14	-1.1
SKT	4.39	205	eP	22	50.16	-1.6
PLRM	4.47	190	eP	22	51.68	-1.2
PWA	4.48	194	eP	22	54.30	1.4
KLU	4.58	170	eP	22	53.49	-0.9
PMS	4.85	192	eP	22	58.76	0.5
NCG	5.04	206	eP	22	59.61	-1.4
CGLM	5.10	205	eP	23	00.00	-1.9
23 abs. associated						

? SEP 15, 1990 21h 32m 55.03±10.18s
30.604 S ±65.3km 68.438 W ±46.8km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.72	182	ePd	33	08.50	-0.8
			eS	33	23.00	
RTCB	0.93	199	eP	33	13.50	0.6
RTCV	1.26	184	ePc	33	18.30	-0.1
RTBS	1.37	219	e(P)	33	19.60	-0.5
MDZ	2.30	189	eP	33	34.40	0.8
JACH	2.77	221	ePc	33	43.50	3.1X
S.D. = 1.0 on 5 of 6 obs.						

? SEP 15, 1990 21h 47m 23.69± 2.70s
31.447 S ±51.8km 69.617 W ±33.6km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.26	147	e(P)	47	40.80	-0.1
RTCB	0.70	93	ePd	47	43.80	0.4
			(S)	47	56.50	
RTLL	0.99	84	iPc	47	45.70	-0.3
			eS	48	01.00	
RTCV	1.01	114	iPd	47	46.10	-0.1
S.D. = 0.5 on 4 of 4 obs.						

& SEP 15, 1990 21h 59m 37.83s
58.536 N 142.787 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>.

YKU	1.88	56	eP	00	05.05	-5.2
			eS	00	26.55	
TGL	2.23	359	iP	00	10.24	-5.2
			eS	00	35.05	
BALM	2.52	5	iP	00	14.37	-5.2
			eS	00	44.12	
GLB	2.96	350	iP	00	20.31	-5.5
VLZ	3.16	327	iP	00	22.75	-5.7
			eS	00	58.83	
VZW	3.17	325	iP	00	22.89	-5.8
KLU	3.36	333	iP	00	26.02	-5.4
TOA	3.96	336	eP	00	35.05	-4.9
SCM	4.01	328	eP	00	34.87	-5.8
SLKM	4.27	301	eP	00	37.82	-6.6
SML	4.29	322	eP	00	38.90	-5.8
PMS	4.36	311	eP	00	40.49	-5.2
PLRM	4.42	317	eP	00	40.85	-5.5
GHO	4.46	319	eP	00	41.75	-5.4
CNPM	4.48	286	eP	00	41.35	-5.9
SUA	4.96	310	eP	00	48.55	-5.6
RDT	5.30	297	eP	00	52.26	-6.8
CUT	5.36	320	eP	00	55.39	-4.4
SPU	5.37	304	eP	00	53.96	-6.0
CGLM	5.41	305	eP	00	53.70	-6.8
RSO	5.43	295	eP	00	54.50	-6.5
CKL	5.50	303	eP	00	55.45	-6.4
NCG	5.51	305	eP	00	56.35	-5.7
BGL	5.55	304	eP	00	57.00	-5.6
SKT	5.56	312	eP	00	56.03	-6.5
CDD	5.67	279	eP	00	58.87	-5.3
PDB	6.00	287	eP	01	01.81	-6.9
27 abs. associated						

SEP 15, 1990 22h 35m 13.73± 1.07s
21.616 N ± 7.3km 143.000 E ± 6.5km
DEPTH = 326.9 ± 12.0 km
4.7mb (15 obs.)
MARIANA ISLANDS REGION (215)

GUMO	8.18	167	eP	37	11.30	0.8
	1.1s	838.63nm			5.7mb	X
PJG	8.18	167	eP	37	11.80	0.5
GUA	8.24	167	eP	37	10.90	-0.3
	1.0s	280.00nm			5.3mb	
MAT	15.45	345	eP	38	35.00	-1.8
	0.8s	47.76nm			4.9mb	
			eS	41	19.80	
SSE	21.67	300	Pd	39	39.50	-0.1
	1.4s	82.00nm			4.9mb	
			sS	43	19.00	
LZH	36.94	302	P	41	55.00	0.8
	1.5s	42.00nm			4.6mb	
NST	40.95	269	eP	42	22.80	-4.2X
CHG	41.34	274	eP	42	31.00	0.8
CTA	41.57	175	iPc	42	31.20	-0.8
	1.0s	26.00nm			4.4mb	
QIS	42.05	185	iPc	42	34.70	-1.1
SNG	43.33	257	eP	42	48.10	1.9
IPM	44.06	253	ePc	42	54.20	2.2
	1.0s	34.60nm			4.6mb	
ASPA	45.87	192	iPc	43	04.10	-2.1
	0.6s	14.00nm			4.4mb	
PSI	46.77	252	ePc	43	13.60	0.3
NANU	51.43	213	eP	43	47.30	-1.1
GUN	51.86	289	P	43	53.60	1.6
PKI	52.31	289	P	43	55.00	-0.4
KKN	52.40	289	P	43	55.80	-0.1
	1.0s	36.00nm			4.7mb	
GKN	52.94	289	P	43	59.80	0.0
FORR	54.09	196	eP	44	06.50	-1.2
IMA	59.68	25	iPc	44	46.30	-0.2
HYB	60.52	278	ePd	44	52.20	-0.5
PMR	60.71	31	iPc	44	51.50	-1.7

15d 22h

	1.0s		44.25nm			4.9mb		MHC	71.39	41	eP	03	24.30	0.7		CMP	146.10	336	ePKPd	11	45.00	2.9X
FBA	61.83	27	P	45	00.00	-0.6		ARN	71.46	41	P	03	24.00	0.0		LDF	146.16	8	ePKP	11	58.80	16.8X
TOA	62.16	30	iPc	45	04.30	1.4		ABL	71.54	45	P	03	24.50	-0.2			1.4s		113.25nm			
GBA	62.62	275	P	45	05.60	-0.9		PLM	72.36	47	eP	03	30.00	0.4		BBTK	146.32	322	iPKPd	11	45.00	2.3
KOD	63.64	271	eP	45	13.00	-0.6		SBB	72.41	46	eP	03	29.00	-0.7		SOP	146.46	348	ePKP	11	46.00	3.5X
INK	67.71	24	eP	45	37.00	-0.9		FRI	72.43	43	eP	03	29.50	-0.2		KMR	146.54	351	ePKP	11	44.00	1.4
YKA	76.61	28	eP	46	29.20	-0.6		CMB	72.60	41	eP	03	30.50	-0.2		CDF	146.78	359	ePKP	11	44.80	1.7
	0.6s		9.00nm			4.7mb		WDC	72.80	38	eP	03	31.70	-0.1			1.0s		12.00nm			
KEV	78.38	341	eP	46	40.00	0.5		ORV	72.81	40	eP	03	31.80	0.0		BZS	147.02	340	ePKP	11	44.00	0.5
PNT	78.54	41	eP	46	41.00	0.3		CLC	73.18	45	eP	03	33.00	-1.2		BHG	147.05	352	iPKPc	11	46.40	2.9X
	0.4s		2.00nm			4.3mb		GSC	73.44	45	eP	03	35.00	-0.8					i	12	56.80	
WDC	79.50	51	eP	46	46.70	0.7		LBFM	73.66	38	P	03	37.00	-0.1		HAU	147.19	0	ePKP	11	46.00	2.3
SOD	79.76	339	iP	46	46.90	0.1		GLA	73.66	48	eP	03	37.00	0.0			1.2s		26.80nm			
ORV	80.60	51	eP	46	52.30	0.5		KDC	74.63	11	P	03	42.00	0.0		BSF	147.36	360	ePKP	11	47.60	3.5X
PCC	80.65	53	eP	46	52.50	0.5		TNP	74.68	43	P	03	42.60	-0.5			0.8s		6.70nm			
GCC	81.10	54	eP	46	54.50	0.1			1.0s		25.00nm			5.2mb		SLE	147.39	358	ePKP	11	46.70	2.7X
MHC	81.26	53	eP	46	56.00	0.6		SPA	75.00	180	iPc	03	44.70	0.3		WATA	147.58	354	ePKP	11	45.50	1.0
PRS	81.82	54	eP	46	58.80	0.6			1.0s		34.50nm			5.3mb		ZLA	147.68	358	ePKP	11	48.20	3.7X
CMB	81.95	52	eP	46	59.50	0.6		BMW	76.14	33	P	03	50.80	-0.2		SOTA	147.74	354	iPKPd	11	49.20	4.5X
SUF	82.45	335	iP	47	09.40	8.6X		LON	77.07	34	P	03	55.50	-0.7			1.5s		35.00nm			
	0.6s		9.70nm			4.8mb		PGC	77.43	31	eP	03	58.00	0.0					i	12	08.30	
FRI	82.83	53	eP	47	03.80	0.5		RMW	77.51	33	P	03	58.70	0.1		LOR	147.85	3	ePKP	11	47.90	3.1X
SES	83.24	38	eP	47	20.00	14.9X		DUG	78.70	43	P	04	05.00	-0.4			0.8s		9.40nm			
TNP	84.25	51	P	47	10.80	0.1		PMR	78.85	12	P	04	05.00	-0.5		SAX	147.86	356	ePKP	11	48.70	3.5X
LRM	84.36	43	eP	47	11.50	0.4			1.0s		40.00nm			5.4mb		HRI	147.94	310	iPKPc	11	49.70	4.2X
FFC	85.99	32	iPc	47	18.60	0.0		TTA	78.97	8	P	04	06.20	-0.1		SSF	148.04	4	ePKP	11	48.40	3.3X
	0.6s		8.00nm			4.8mb			1.0s		31.25nm			5.3mb			1.0s		14.00nm			
HFS	88.74	337	ePKP	47	29.70	-1.9		PNT	79.81	32	ePd	04	11.00	-0.1		MFF	148.10	9	ePKP	11	48.00	2.8X
	0.6s		4.60nm			4.6mb			0.7s		23.00nm			5.3mb		OGA	148.10	354	iPKPc	11	49.60	4.1X
NB2	88.96	339	P	47	30.70	-2.0		DAU	79.84	43	P	04	11.50	-0.3		LBF	148.14	3	ePKP	11	48.70	3.4X
	0.7s		2.50nm			4.3mb		NEW	80.51	34	P	04	13.90	-1.0			0.8s		6.70nm			
ZOBO	150.12	85	PKP	54	23.60	0.3			0.9s		9.87nm			4.8mb		FVI	148.17	352	PKP	11	49.00	3.8X
	0.9s		19.90nm					ANMO	80.68	50	P	04	16.00	-0.2		PTJ	148.28	347	ePKPc	11	49.50	3.9X
			i	54	29.20				1.0s		14.00nm			4.9mb		AVF	148.30	4	ePKP	11	48.70	3.2X
			LR	49	10.00			IMW	81.78	40	P	04	22.00	0.1			0.8s		5.35nm			
LPB	150.21	86	ePKP	54	27.00	3.8X		LRM	81.84	38	eP	04	21.90	-0.2		ZAG	148.36	347	ePKP	11	50.50	4.9X
	Z 20s		1.77um			5.9Msz		BW06	82.11	42	P	04	23.00	-0.6		LJU	148.42	349	ePKP	11	46.50	0.8
			i	54	30.00				0.8s		16.67nm			5.1mb					e	13	15.00	
			LR	49	10.00			FBA	82.12	11	P	04	22.70	-0.1		SMF	148.47	4	ePKP	11	49.20	3.4X
CNCB	150.39	86	ePKP	54	26.00	2.3			1.0s		72.50nm			5.7mb			0.8s		4.05nm			
			i	54	31.00			IMA	82.28	8	P	04	23.50	-0.3		BGF	148.49	5	ePKP	11	49.50	3.7X
	S.D. = 1.1		on 46 of 50 obs.					GOL	83.51	46	P	04	31.00	0.1			0.8s		7.40nm			
									0.9s		21.78nm			5.3mb		VOY	148.55	350	e(PKP)	11	47.50	1.5
%	SEP 15, 1990		22h 39m	25.03±		0.63s		GLD	83.64	46	P	04	31.50	0.0		VDL	148.61	356	ePKP	11	50.80	4.5X
	42.087 N ± 4.7km			12.885 E ±		6.6km			1.0s		75.00nm			5.8mb		LSF	148.67	7	ePKP	11	49.40	3.3X
	DEPTH = 10.0km		(geophysicist)					SES	85.01	35	ePd	04	37.70	-0.2			0.8s		10.75nm			
	CENTRAL ITALY					(381)		BJI	85.20	313	eP	04	39.00	0.0		TCF	148.70	6	ePKP	11	49.80	3.6X
									1.3s		15.00nm			5.0mb			1.0s		6.00nm			
RMP	0.31	206	P	39	31.40	0.0		RSSD	86.30	43	P	04	44.00	-0.7		CEY	148.74	349	ePKP	11	50.50	4.2X
			eSg	39	36.50			MEO	86.56	53	iPc	04	46.00	0.1		MAF	148.80	5	ePKP	11	50.10	3.8X
MNS	0.33	333	Pc	39	31.80	-0.2		INK	88.00	14	eP	04	52.00	-0.1			1.0s		10.00nm			
			eSg	39	38.20			YKA	89.86	23	eP	05	00.80	-0.2		VBY	148.81	348	ePKP	11	52.00	5.7X
RDP	0.35	201	P	39	32.50	0.2			0.9s		5.10nm			4.8mb					e	13	22.00	
			eSg	39	39.10			TRO	124.94	355	ePKP	11	20.60	18.4X		VVI	148.81	352	PKP	11	50.00	3.6X
AQU	0.47	55	P	39	34.80	0.2		AKU	126.82	12	iPdiff	08	00.10	13.5X		CTI	148.85	353	PKP	11	51.00	4.5X
			eSg	39	41.50			WIT	142.38	360	ePKP	11	44.00	8.6X		TRI	148.88	350	ePKP	11	50.90	4.5X
SDI	0.79	118	P	39	40.20	-0.3		WTS	143.20	360	ePKP	11	52.00	15.2X					e	12	12.50	
			eSg	39	52.00				2.0s		723.00nm					DSI	148.96	307	iPKPc	11	52.00	5.0X
ASS	1.00	351	P	39	44.00	0.0		KSP	143.48	350	ePKP	11	35.50	-1.9		TMA	149.03	357	ePKP	11	51.30	4.4X
			eSg	39	59.50			SPC	144.19	345	e(PKP)	11	33.50	-5.4X		DIX	149.11	359	ePKP	11	52.80	5.6X
	S.D. = 0.3		on 6 of 6 obs.								e	13	10.10			RIY	149.13	349	ePKP	11	51.40	4.6X
											i	13	12.80			MDI	149.30	356	PKP	11	51.00	4.0X
	SEP 15, 1990		22h 52m	04.54±		0.29s					e	17	48.90			LPL	149.68	360	ePKP	11	53.80	5.8X
	15.101 S ±12.2km			173.493 W ±		9.5km		MEM	144.58	1	PKPc	11	38.20	-1.0			0.8s		6.70nm			
	DEPTH = 33.0km		(normal)					PRU	144.60	351	ePKP	11	38.50	-0.8		LPG	149.70	360	ePKP	11	53.90	5.8X
	5.2mb (15 obs.)							SNF	144.64	2	PKP	11	38.60	-0.7			0.6s		4.50nm			
	TONGA ISLANDS					(173)		KAS	144.76	323	ePKP	11	40.00	0.0		LFF	149.86	8	ePKP	11	53.10	5.2X
								TNS	144.93	358	ePKPc	11	39.30	-0.7			1.2s		17.85nm			
DZM	20.23	247	iPc	56	41.80	1.9		VRI	144.94	335	ePKPc	11	40.00	0.0		CAF	150.03	6	ePKP	11	53.70	5.4X
CAN	39.14	232	eP	59	29.00	-2.0		DOU	145.06	2	PKP	11	39.70	-0.4			1.1s		6.10nm			
CMS	40.50	239	eP	59	41.00	-1.2		GRF	145.29	355	iPKPd	11	42.00	1.5		MBH	150.09	304	ePKP	11	55.00	6.3X
			i	59	55.70				1.7s		55.00nm					BNI	150.14	360	PKP	11	55.00	6.4X
WB5	49.80	257	eP	00	55.70	-0.9		MLR	145.56	336	ePKPc	11	43.00	1.7		LPO	150.17	8	ePKP	11	53.80	5.4X
ASPA	50.12	252	iPc	00	57.20	-1.8					e	14	59.00				1.2s		17.85nm			
	1.0s		29.00nm			5.3mb		KHC	145.57	352	PKP	11	42.40	1.3		SKO	150.28	337	ePKP	11	54.50	5.8X
	Z 22s		0.36um			4.3MszX		ISR	145.60	335	ePKP	11	43.00	1.7					e	12	08.00	
			LR	20	08.90						e	14	05.00						i	12	16.00	
FORR	55.44	243	eP	01	37.00	-1.4		ZST	145.86	347	ePKP	11	43.50	2.0					i	12	21.50	
MBL	63.26	254	eP	02	32.50	-0.1					e	12	02.50			BDI	150.92	354	PKP	11	55.00	5.3X
ADK	66.76	358	P	02	54.00	-0.5					e	13	07.30			PGD	150.98	352	PKP	11	57.00	7.1X
MAT	68.65	320	eP	03	07.00	0.2					e	17	43.50			ARV	151.17	350	PKP	11	57.00	7.0X
	1.1s		15.19nm			5.0mb		FLN	145.94	8	ePKP	11	55.20	13.6X		OHR	151.26	337	iPKP	11	56.30	6.0X
PRS	70.96	42	eP	03	21.50	0.6			1.6s		205.20nm						1.2s		48.00nm			
BCH	71.15	44	P	03	22.00	-0.2			Z 20s		12.50um			6.7MszX					i	12	17.50	
SAO	71.17	42	eP	03	22.10	-0.1		VKA	145.95	348	e(PKP)	11	41 00	-0.7		PGF	152.56	356	ePKP	12	00.70	8.5X
BRK	71.32	41	eP	03	23.20	0.2					i	12	04.90				1.2s		23.80nm			
BKS	71.33	41	eP	03	23.30	0.2		BUD	146.08	345	ePKP	11	42.00	0.1		SDI	152.75	348	PKP	12	02.00	9.6X

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MGR   153.83 344 PKP    12 05.00   11.1X
BCAO  164.11 229 ePKPd 12 06.40    0.0
       0.6s      6.00nm
                 id     13 00.50
     S.D. = 0.9   on  78 of 134 obs.
-----------------------------------------
   SEP  15, 1990  23h 07m 42.86± 0.18s
   64.655 N ± 4.4km    17.617 W ± 3.3km
   DEPTH =  10.0km  (geophysicist)
   5.5mb ( 58 obs.)  5.2Msz ( 13 obs.)
 ICELAND                            (638)
      Ms 5.6 (BRK).
      CENTROID, MOMENT TENSOR       (HRV)
      Data Used: GDSN
      L.P.B.: 11S, 29C
      Centroid Location:
      Origin Time        23:07:49.8 0.4
      Lat 64.48N 0.06 Lon  17.35W 0.13
      Dep  15.0 FIX Half-duration  2.3
      Moment Tensor;   Scale 10**17 Nm
        Mrr= 3.07 0.11  Mtt=-1.90 0.18
        Mff=-1.17 0.14  Mrt= 1.21 0.46
        Mrf= 0.66 0.49  Mtf= 0.01 0.11
       Principal Axes:
        T  Val=  3.44   Plg=75   Azm=328
        N       -1.24      6        80
        P       -2.20     14       172
       Best Double Couple:Mo=2.8*10**17
        NP1:Strike=270 Dip=32 Slip= 101
        NP2:          77     59        83

REY     1.93 256 iP     08 15.30  -0.8
                iS     08 44.40
ELO   10.66 134 eP     10 14.90  -3.6X
      0.7s     83.00nm          6.2mb
EDR   10.67 130 eP     10 13.40  -5.3X
      1.0s     72.00nm          6.0mb
EAB   10.71 136 eP     10 16.60  -2.5
      0.8s    115.00nm          6.3mb
EDI   11.28 134 eP     10 23.60  -3.3X
      0.9s     68.00nm          6.0mb
EKA   11.79 136 Pc     10 30.30  -3.5X
      0.5s     16.30nm          5.6mb
ESK   11.79 136 ePd    10 31.50  -2.3
      0.7s    100.00nm          6.2mb
DAG   12.18 359 eP     10 41.00   1.9
      1.4s    295.35nm          6.4mb
                eS     13 25.00
RGS   12.44  85 eP     10 43.40   0.9
VAL   13.31 160 iP     10 58.20   4.0X
                S      13 59.00
ETA   13.35 149 eP     10 59.10   4.5X
      1.8s    518.00nm          6.3mb
ECB   13.53 150 eP     10 59.70   2.6X
      1.4s    238.00nm          6.0mb
NB2   13.58  92 P      10 52.60  -5.2X
      1.0s     25.30nm          5.1mb
ECP   13.79 150 eP     11 02.90   2.4X
      1.6s    302.00nm          5.9mb
GDH   14.63 304 ePc    11 17.00   5.7X
      1.0s     36.00nm          4.9mb
                i      14 12.00
                i      15 16.00
KBS   16.66  19 iPd    11 42.50   5.0X
UPP   16.93  90 iP     11 41.50   0.6
                iS     15 00.00
DBN   17.21 126 eP-    11 45.00   0.5
    Z  18s     5.50um
                iS     15 08.00
COP   17.27 107 iPd-   11 48.20   3.0X
      0.8s    140.30nm          5.1mb
                iS     15 14.00
KEV   17.67  54 eP     11 43.00  -7.2X
    Z  18s    13.10um
                e      11 54.00
                LR     17 04.00
SOD   17.89  61 iP     11 50.10  -2.9
UCC   18.03 130 iP-    11 55.00   0.3
                S      15 19.00
SNF   18.25 131 P      11 55.60  -1.9
                S      15 30.40
ENN   18.58 127 ePc    11 59.50  -2.0
      2.2s  1612.00nm          5.8mb
DOU   18.71 131 Pc-    12 04.00   0.9
                S      15 26.00
MEM   18.75 127 Pd     12 02.50  -1.0
                S      15 42.40

BNS     18.86 125 iPd    12 06.80   1.9
      Z  12s     9.70um
                 iS     15 45.80
SUF     19.21  76 iP     12 07.20  -1.9
NUR     19.61  83 eP     12 13.00  -0.8
        1.2s     95.40nm          5.0mb
      Z  18s     7.90um           5.0Msz
                 LR     19 22.00
TNS     19.92 124 ePd    12 18.80   1.5
BRN     19.96 113 ePd    12 19.00   1.4
MFF     20.47 144 eP     12 21.10  -1.9
        1.4s    130.70nm          5.1mb
GWF     20.69 127 P      12 24.79  -0.4
MOX     20.74 119 eP-    12 25.00  -0.8
        2.1s    821.00nm          5.7mb
      Z  19s     12.20um          5.3Msz
      N  18s     10.60um
      E  17s      6.40um
                 iS     16 24.00
CLL     20.74 115 iPd    12 24.40  -1.3
        2.1s    520.00nm          5.5mb
      Z  18s     9.00um           5.2Msz
                 eS     16 21.00
VITF    20.80 131 P      12 25.41  -0.9
LOR     20.98 136 eP     12 26.30  -1.9
        1.6s    291.50nm          5.4mb
      Z  20s     17.50um          5.4Msz
CDF     21.06 129 eP     12 28.40  -0.7
        2.0s    443.15nm          5.5mb
SSF     21.06 137 eP     12 27.30  -1.7
STR     21.07 128 P      12 28.88  -0.2
HAU     21.10 131 eP     12 28.70  -0.8
        1.8s    500.65nm          5.6mb
      Z  20s     12.50um          5.3Msz
HOF     21.11 119 eP     12 29.00  -0.5
ECH     21.19 129 P      12 29.89  -0.4
LSF     21.24 141 eP     12 29.30  -1.6
AVF     21.26 137 eP     12 29.30  -1.7
LBF     21.27 136 eP     12 29.40  -1.8
BGF     21.32 138 eP     12 30.10  -1.6
GRF     21.37 121 iPc    12 31.40  -0.8
      Z  18s     8.00um           5.2Msz
                 e      12 38.60
                 eS     16 35.00
TCF     21.39 140 eP     12 30.90  -1.5
BSF     21.40 130 eP     12 31.70  -0.9
        2.0s    524.80nm          5.6mb
MOF     21.49 130 P      12 33.30  -0.2
MAF     21.55 139 eP     12 32.70  -1.3
FRB     21.71 291 eP     12 38.00   2.6X
        1.4s    205.00nm          5.3mb
FEL     21.77 128 P      12 36.94   0.6
AGO     21.86 139 P      12 36.18  -1.0
EMON    22.04 160 eP     12 41.20   2.2
PLDF    22.08 138 P      12 37.94  -1.5
PYM     22.10 139 P      12 39.08  -0.6
RJF     22.11 142 eP     12 38.30  -1.3
        1.4s    217.80nm          5.4mb
      Z  20s     10.00um          5.2Msz
PRU     22.39 116 eP     12 42.00  -0.4
        2.5s    980.40nm          5.8mb
      Z  17s     10.50um          5.3MszX
      N  15s      4.80um
      E  16s      9.00um
                 S      16 52.00
KSP     22.41 112 ePd    12 41.80  -0.7
        1.6s    362.00nm          5.6mb
                 eS     16 55.00
STS     22.41 162 eP     12 46.40   3.8X
LBL     22.65 139 P      12 46.12   1.2
KHC     22.71 118 P      12 46.00   0.4
      Z  20s      2.70um           4.7Msz
      N  19s      7.00um
      E  18s      2.60um
                 S      17 00.00
ERUA    23.09 160 eP     12 51.20   1.9
EZAM    23.12 163 eP     12 52.60   3.0X
SOTA    23.44 124 iPc    12 54.50   1.7
        2.1s    418.00nm          5.6mb
                 i      13 09.90
                 i      13 21.80
                 i      14 23.00
                 i      17 20.60
                 e      20 52.00
WATA    23 47 124 iPc    12 54.30   1.1
        2.5s   1020.00nm          5.9mb
                 e      17 21.00

ELYF    23.50 148 P      12 52.57  -0.7
BOH     23.56 148 P      12 58.23   4.3X
MADF    23.56 148 P      12 53.98   0.1
ISSF    23.68 148 P      12 57.36   2.2
ESCF    23.68 148 P      12 58.49   3.4X
BTH     23.72 147 Pc     12 58.50   3.1X
                 sP     13 13.50
                 PPP    14 47.50
                 e      16 20.00
                 (sPcP) 16 49.00
                 (SP)   17 09.00
                 S      17 21.00
                 SS     18 19.00
                 SSS    18 41.00
ORO     23.73 131 P      12 57.80   2.2
JAU     23.77 147 P      12 56.17   0.1
VAI     23.78 130 P      12 58.30   2.4X
KMR     23.81 119 iP+    12 55.40  -0.8
                 i      14 20.70
                 esS    17 22.00
BNI     23.83 134 P      12 58.00   1.4
MDI     24.17 128 P      13 02.20   2.5X
VKA     24.47 116 iPc    13 03.40   0.7
        5.2s   2445.00nm          6.1mb X
                 i      13 19.40
                 i      13 34.40
                 i      17 34.00
                 i      17 37.80
                 i      18 21.50
KRA     24.49 109 eP     13 02.10  -0.7
        2.0s    540.00nm          5.8mb
      Z  20s      5.00um           5.0Msz
      E  16s      4.40um
                 e      13 05.00
                 e      13 13.70
                 eS     17 26.00
DOI     24.50 133 P      13 05.80   2.8X
FVI     24.54 123 P      13 05.10   1.8
CTI     24.60 125 P      13 06.00   1.9
CDR     24.80 137 ePc    13 06.90   1.0
CKI     24.90 132 P      13 08.80   2.0
VVI     24.93 124 P      13 09.00   1.8
GUD     25.29 155 eP     13 12.00   1.3
ETOR    25.52 152 eP     13 16.00   3.2X
EPLA    25.53 159 eP     13 16.00   3.1X
TRI     25.65 123 iPc    13 14.00   0.1
                 iPP    14 00.00
                 iS     17 50.00
                 iLR    20 40.00
CEY     25.87 122 eP     13 17.40   1.5
MME     25.90 129 P      13 17.50   1.0
BDI     25.98 129 P      13 19.70   2.7X
SCH     25.98 271 ePd    13 16.10  -0.8
        0.9s     74.00nm          5.4mb
TOL     26.05 156 iP     13 18.00   0.3
                 eS     17 54.00
PSZ     26.16 112 eP     13 09.80  -8.9X
BUD     26.17 113 eP     13 19.80   1.1
PII     26.26 129 P      13 21.00   1.5
PGD     26.52 127 P      13 25.00   2.8X
SFI     26.53 127 P      13 24.50   2.5X
CRE     26.82 127 P      13 25.50   0.7
ARV     27.27 126 P      13 30.50   1.6
ASS     27.55 127 P      13 31.00  -0.5
BMR     27.82 108 ePc    13 37.00   3.3X
MNS     28.17 128 P      13 38.00   1.0
AQU     28.44 127 P      13 41.80   2.3
TIM     28.47 113 iPd    13 41.00   1.4
AAPN    28.54 157 eP     13 43.20   2.7X
ASMO    28.56 156 eP     13 43.70   3.1X
ALOJ    28.74 157 eP     13 48.40   6.1X
ATEJ    28.94 157 eP     13 48.60   4.4X
APHE    28.96 157 eP     13 51.00   6.7X
SDI     29.16 127 P      13 45.00  -0.9
EJIF    29.17 160 eP     13 49.80   3.8X
DUI     29.42 126 P      13 49.00   0.6
COZ     30.06 110 eP     13 56.00   1.8
MTUR    30.43 109 eP     14 01.00   3.7X
VRI     30.59 106 ePc    13 58.00  -0.6
MGR     31.16 126 P      14 03.00  -0.6
BUC     31.52 109 ePd    14 08.00   1.3
ORI     31.54 125 P      14 07.50   0.5
BUC1    31.55 109 ePd    14 08.00   1.0
SKO     31.72 117 eP     14 06.50  -2.1
      Z  18s      4.56um           5.2Msz
      E  18s      5.87um
                 i      14 08.50
```

15d 23h

			i	14	20.50	
			i(PcP)	16	38.00	
			i	19	22.00	
			LR	28	42.50	
CFR	31.73	106	eP	14	07.00	-1.6
IFR	32.10	160	iPd	14	13.00	0.9
OHR	32.21	118	iP	14	11.30	-1.7
	1.2s	277.00nm				6.1mb
CBM	32.33	261	P	14	16.60	2.7X
GIB	32.56	130	P	14	22.00	5.9X
MNO	32.84	129	P	14	19.00	0.4
ATN	32.89	128	P	14	19.40	0.6
KEK	33.06	121	eP	14	22.20	2.0
SOI	33.18	127	P	14	20.40	-0.8
KZN	33.28	118	eP	14	22.80	0.5
TIO	34.37	164	eP	14	33.00	1.2
EVR	34.50	119	eP	14	35.10	2.2
VLS	34.70	121	eP	14	36.00	1.5
ATH	36.05	118	eP	14	48.80	2.9X
			eS	20	28.00	
HBVT	36.48	264	P	14	49.00	-0.5
RSNY	36.96	265	P	14	53.50	0.0
	1.2s	43.73nm				5.1mb
KAS	37.20	103	eP	14	56.00	0.3
BBTK	38.06	106	eP	15	16.00	13.0X
YKA	39.18	313	eP	15	11.10	-0.8
	1.1s	19.20nm				4.7mb
TBR	39.60	262	P	15	20.00	4.4X
INK	39.82	329	eP	15	17.00	-0.2
	1.3s	72.00nm				5.2mb
			pP	16	48.00	495kmX
FFC	40.56	297	iPc	15	24.00	0.6
	1.5s	142.00nm				5.4mb
BHL	44.34	107	Pd	15	56.00	1.4
			S	22	33.00	
HRI	44.92	108	eP	15	59.00	-0.3
TAB	45.30	94	eP	15	49.00	-13.3X
			e	16	03.00	
BLA	45.53	264	P	16	04.00	0.0
FBA	45.74	333	iPc	16	06.40	1.1
	1.1s	78.10nm				5.6mb
IMA	45.76	337	ePc	16	06.60	1.0
HLW	46.16	115	eP-	16	11.00	2.0
			eS	23	00.00	
DSI	46.26	109	eP	16	09.60	-0.1
SES	47.38	300	eP	16	18.00	-0.6
	1.4s	106.00nm				5.7mb
MBH	47.64	111	eP	16	17.40	-3.3X
TOA	47.90	330	ePc	16	22.70	0.2
LHS	48.01	263	P	16	21.00	-2.5
TKL	48.28	266	P	16	25.00	-0.6
GBTN	48.46	267	P	16	27.00	0.0
PMR	48.98	332	iPc	16	31.10	0.4
TTA	49.05	336	ePd	16	31.00	-0.3
FVM	49.18	274	P	16	32.00	-0.5
TEH	49.43	91	eP	16	35.00	0.3
RSSD	49.79	290	P	16	36.50	-1.0
MBO	50.21	179	eP	16	45.60	5.0X
SVW	50.68	335	ePd	16	44.50	0.7
NEW	51.39	302	P	16	50.00	0.6
	1.0s	9.38nm				4.7mb
PNT	51.39	305	eP	16	49.00	-0.4
LRM	51.69	297	eP	16	51.90	-0.1
ASW	51.95	116	iPc	16	54.00	0.3
			eS	24	22.00	
MAIO	52.44	83	eP	16	57.00	-0.5
			e	24	32.00	
IMW	52.73	295	P	16	59.00	-0.8
BW06	53.13	293	P	17	01.50	-1.2
	1.0s	66.67nm				5.5mb
GLD	53.93	288	P	17	09.00	0.4
	1 2s	45.45nm				5.4mb
GOL	54.04	288	P	17	09.00	-0.4
	1.0s	8.13nm				4.7mb
LON	54.35	305	P	17	10.00	-1.4
BMW	55.09	306	P	17	17.80	0.9
MEO	55.38	279	iPd	17	18.80	-0.2
LKO	55.67	166	P	17	17.94	-3.3X
	0.9s	26.00nm				5.3mb
DAU	55.81	293	P	17	22.00	-0.4
ANMO	58.54	286	P	17	41.50	-0.2
	1.0s	16.25nm				5.1mb
TIC	58.60	165	P	17	40.52	-1.5
	0.9s	25.00nm				5.3mb
KIC	58.91	165	P	17	42.64	-1.5
	0.9s	31.50nm				5.4mb
LIC	59.01	165	P	17	43.42	-1.4
	0.9s	29 50nm				5.4mb
Z	21s	1.04um				4.9Msz
			S	25	52.00	
LBFM	59.06	302	P	17	44.00	-1.3
MIN	59.83	301	eP	17	53.20	2.6X
WDC	59.97	302	eP	17	53.00	1.7
TNP	60.15	296	P	17	52.00	-0.8
	1.0s	8.75nm				4.8mb
ORV	60.48	300	eP	17	59.00	4.2X
QUE	60.86	81	eP	17	55.50	-2.2
CMB	61.40	299	eP	18	01.00	-0.1
FRI	62.06	298	eP	18	07.30	1.8
BKS	62.23	300	eP	18	06.00	-0.7
Z	20s	3.80um				5.6Msz
N	20s	2.90um				
E	20s	2.20um				
			iS	26	42.00	
			e	28	08.00	
			eLO	37	30.00	
BRK	62.24	300	eP	18	12.30	5.6X
CLC	62.27	295	eP	18	09.00	2.0
GSC	62.42	294	eP	18	08.00	0.0
MHC	62.48	299	eP	18	09.50	1.0
PRI	63.17	298	eP	18	13.20	0.2
PRS	63.27	299	ePd	18	17.00	3.5X
SBB	63.35	295	eP	18	14.00	-0.2
GLA	63.60	292	eP	18	16.00	0.2
PLM	64.15	293	eP	18	21.00	1.4
BAR	64.66	293	eP	18	23.00	0.3
BCAO	65.43	140	iPd	18	27.80	0.1
	0.6s	8.00nm				5.1mb
NDI	66.48	73	iPc	18	33.50	-0.8
	0.9s	12.60nm				5.1mb
			ePP	21	03.00	
			eS	27	32.00	
			eSS	31	56.00	
BJI	69.53	36	eP	18	53.00	-0.2
	2.0s	139.00nm				5.8mb
Z	17s	4.73um				5.8MszX
N	16s	2.98um				
			PP	21	22.00	
			eS	28	07.00	
			eSS	32	16.00	
LZH	69.67	47	Pc	18	54.30	-0.1
	3.0s	464.00nm				6.1mb
Z	26s	2.10um				5.3MszX
N	15s	1.50um				
E	14s	1.70um				
			pP	19	02.00	25kmX
			sP	19	07.50	
			PPP	23	10.00	
			S	28	10.00	
			sS	28	30.00	
			PS	28	40.00	
			SS	32	42.00	
GKN	70.07	67	P	18	56.00	-0.9
	0.8s	27.00nm				5.4mb
UPA	70.11	248	eP-	19	00.00	3.0X
Z	20s	1.06um				5.1Msz
KKN	70.52	66	P	18	59.00	-0.7
	1.0s	41.00nm				5.5mb
GUN	70.65	66	P	19	00.40	-0.3
	1.2s	86.00nm				5.8mb
PKI	70.76	66	P	19	00.60	-0.8
	1.2s	37.00nm				5.4mb
BOG	71.98	241	eP	19	10.00	1.2
			iS	28	40.00	
SHL	75.07	62	iP	19	25.00	-1.5
			eS	29	06.00	
HYB	77.03	77	eP	19	37.00	-0.5
MAT	77.36	20	iP+	19	39.00	0.0
			eS	29	31.00	
SSE	79.28	35	P	19	49.00	-0.5
	1.1s	23.00nm				5.1mb
Z	20s	2.30um				5.5Msz
N	18s	2.90um				
			ePP	22	53.00	
			S	29	52.00	
			SS	35	04.00	
GBA	79.97	80	P	19	55.00	1.5
	1.7s	33.70nm				5.0mb
CHG	83.86	58	ePc	20	13.10	-0.6
	1.2s	27.34nm				5.4mb
SIV	86.94	221	P	20	30.80	1.9
SPA	154.51	180	ePKP	27	39.80	5.2X
	2.2s	106.25nm				
	S.D. = 1.2	on 172 of 223 obs.				

? SEP 16, 1990 02h 33m 43.49± 1.00s
37.117 N ±11.2km 23.797 E ± 8.8km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
ML 2.7 (ATH).

VLI	0.80	240	ePb	33	58.50	-0.5
ATH	0.86	356	ePg	33	59.70	-0.3
			eSb	34	11.00	
APE	1.39	91	ePb	34	09.00	0.1
ITM	1.50	273	ePb	34	11.00	0.6
VAM	1.74	169	ePg	34	17.60	3.7X
S.D. = 0.8	on 4 of 5 obs.					

• SEP 16, 1990 02h 50m 51.84± 2.48s
47.928 N ± 8.5km 2.096 W ±20.3km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 3.1 (LDG).

LPF	0.72	81	Pg	51	07.00	1.1
			Sg	51	18.80	
GRR	0.95	61	Pg	51	11.20	1.3
			Sg	51	23.00	
FLN	1.36	52	Pn	51	16.20	-0.6
			Pg	51	17.50	
			Sg	51	36.40	
LDF	1.48	62	Pn	51	18.40	-0.1
			Pg	51	20.20	
			Sg	51	40.00	
MFF	1.88	134	Pn	51	26.40	2.1
			Pg	51	29.40	
			Sg	51	56.00	
LSF	2.99	123	Pn	51	41.20	1.0
			Pg	51	50.70	
			Sg	52	31.00	
TCF	3.37	118	Pn	51	46.00	0.4
			Pg	51	57.80	
			Sg	52	42.40	
GRC	3.55	98	P	51	48.42	0.3
			S	52	30.16	
LFF	3.58	146	Pn	51	50.00	1.6
			Pg	52	01.50	
			Sg	52	51.20	
MAF	3.61	116	Pn	51	49.20	0.2
			Pg	52	02.00	
			Sg	52	49.20	
RJF	3.62	135	Pn	51	49.30	0.2
			Pg	52	02.40	
			Sg	52	50.00	
BGF	3.64	110	P	51	49.30	0.0
			Pg	52	01.60	
			Sg	52	50.00	
AVF	3.87	105	Pn	51	52.50	-0.2
SSF	3.90	101	Pn	51	52.70	-0.3
LPO	3.96	144	Pn	51	54.30	0.3
			Pg	52	09.20	
			Sg	53	01.60	
AGO	4.04	116	P	51	55.03	0.0
LOR	4.08	97	Pn	51	54.80	-0.9
			Sn	52	41.00	
			Sg	53	03.80	
PYM	4.12	120	P	51	54.89	-1.4
CAF	4.16	135	Pn	51	56.80	0.0
			Sg	53	07.20	
LBF	4.23	101	Pn	51	57.00	-0.8
			Sn	52	43.50	
SMF	4.24	105	Pn	51	57.30	-0.6
PLDF	4.38	114	P	51	59.39	-0.6
LBL	4.57	124	P	52	00.42	-2.0
EPF	5.19	160	Pn	52	10.40	-1.0
S.D. = 1.0	on 24 of 24 obs.					

? SEP 16, 1990 03h 04m 13.58± 1.98s
0.151 S ±18.5km 122.867 E ±26.3km
DEPTH = 169.3 ± 29.0 km
4.6mb (2 obs.)
MINAHASSA PENINSULA (265)

MNI	2.53	51	eP	04	56.00	-0.5
AAI	6.38	123	ePc	05	47.10	0.8
			eS	06	50.00	
MBL	21.09	188	eP	08	45.60	-0.3
WB5	22.61	151	eP	09	00.70	-0.1
ASPA	25.71	156	iPc	09	29.70	-0.3
0.4s	6.00nm					4.6mb

```
OIS     26.06 142 iPc    09 33.20   0.0
        0.6s      9.00nm          4.6mb
CHG     30.12 310 eP     10 10.00   0.4
     S.D. = 0.6  on   7 of   7 obs.
-------------------------------------
?  SEP  16, 1990  03h 24m 28.59± 2.90s
   42.548 N ±24.1km  140.290 E ±15.5km
   DEPTH = 118.3 ± 35.6 km
   4.0mb (  4 obs.)
 HOKKAIDO, JAPAN  REGION          (224)

MAT      6.21 196 (P)   25 59.00  -0.2
        1.0s      7.00nm          3.9mb
                  eS     27 07.00
BJI     18.28 270 eP     28 36.00   0.3
        1.2s     18.00nm          4.2mb
CHTO    42.14 249 P      32 10.90   0.1
FBA     44.99  35 P      32 33.90   0.7
GUN     46.03 270 P      32 42.60   0.3
KKN     46.54 270 P      32 46.40   0.2
PKI     46.56 270 P      32 46.40  -0.1
GKN     46.90 271 P      32 48.80  -0.1
HFS     68.73 334 eP     35 20.30  -0.6
        0.3s      0.80nm          4.0mb
NB2     68.79 336 P      35 20.70  -0.7
        0.7s      1.50nm          3.9mb
     S.D. = 0.5  on  10 of  10 obs.
-------------------------------------
    SEP  16, 1990  03h 42m 16.71± 0.15s
     6.161 S ± 2.9km  146.782 E ± 3.7km
    DEPTH = 104.2km  (  3 depth phases)
    5.6mb ( 33 obs.)
  EAST PAPUA NEW GUINEA REGION     (207)
       CENTROID, MOMENT TENSOR     (HRV)
       Doto Used: GDSN
       L.P.B.: 14S, 26C
       Centroid Locotion:
       Origin Time        03:42:21.5 0.3
       Lot  6.01S 0.03 Lon 146.75E 0.03
       Dep  99.6 2.2 Holf-durotion  2.2
       Moment Tensor;   Scole 10**17 Nm
         Mrr=-0.59 0.05  Mtt= 1.15 0.08
         Mff=-0.56 0.09  Mrt=-0.48 0.05
         Mrf=-0.59 0.05  Mtf=-1.98 0.07
        Principol Axes:
         T  Vol=  2.45   Plg= 2   Azm=213
         N       -0.24      65       120
         P       -2.21      25       304
       Best Double Couple:Mo=2.3*10**17
        NP1:Strike=346 Dip=71 Slip= -17
        NP2:        81     74      -161

LAT      0.53 156 iPd    42 33.80   0.4
MNDI     3.11 270 eP     43 07.50   2.5
                  eS     43 55.00
PMG      3.25 174 iPc+   43 05.30  -1.4
                  eS     43 43.00
RAB      5.71  70 iPc+   43 40.50  -0.1
                  iS     44 44.00
JAY      7.06 301 ePd    43 47.00 -12.1X
HNR     13.44 105 eP     45 24.00  -0.4
                  eS     45 58.00
CTA     13.85 182 iPc+   45 28.70  -1.1
        0.6s    210.00nm          5.6mb
                  iS     48 00.00
OIS     15.91 205 iPc    45 54.20  -1.8
                  eS     48 45 00
MTN     16.80 246 eP     46 07.00   0.0
                  eS     49 05.00
WB5     18.21 220 eP     46 22.10  -2.1
AAI     18.68 277 ePc    46 30.90   1.2
GUA     19.66 355 eP     46 40.10   0.1
        1.0s    320.00nm          5.6mb
GUMO    19.71 354 eP     46 40.60   0.1
        0.9s    272.80nm          5.6mb
PJG     19.71 354 eP     46 40.60   0.1
KNA     20.07 240 eP     46 42.60  -1.6
                  eS     50 13.00
RMO     20.30 175 iPc    46 45.00  -1.5
        1 0s    618.00nm          5.9mb
                  e      54 27.00
OLP     20.45 187 iPc    46 47.70  -0.4
                  e      47 04.00  78kmX
ASPA    21.37 214 eP     46 57.30   0.0
        0.5s    514.00nm          6.1mb
     Z  16s       6.42um          5.1MszX
                  eS     50 43.90

                  LR     56 03 60
                  eScS   58 15.40
BRS     21.87 166 iPd    47 01.30  -0.9
                  i      47 14.00  53kmX
                  i      47 21.00
                  i      47 34.00
                  e(S)   50 00.00
                  i(ScP)54 32.00
PVC     23.97 121 iPc    47 24.70   2.0
DZM     24.72 132 iPd    47 29.20  -0.7
COO     24.76 169 iPd    47 30.40   0.2
                  e      54 39.00
DAV     24.92 302 eP     47 31.50  -0.2
CMS     25.21 182 iPc    47 34.20  -0.1
        1.0s    274.00nm          5.7mb
BWA     28.17 177 iPc    48 00.80  -0.5
CNB     29.11 176 iPd    48 09.70  -0.1
ADE     29.62 193 iPc    48 13.90  -0.4
        0.8s    137.31nm          5.7mb
MBL     30.05 238 iPc    48 18.40   0.2
BFD     31.11 187 iPc    48 28.20   0.9
        0.8s    143.00nm          5.8mb
TOO     31.29 182 iPc    48 29.00   0.1
        0.9s    147.00nm          5.7mb
KKM     32.83 291 ePd    48 41.50  -1.2
MEKA    33.73 230 eP     48 50.90   0.6
TRT     33.93 265 ePc    48 52.00  -0.1
BAG     34.28 311 eP     48 54.00  -1.3
COOL    34.40 221 iPc    48 55.80  -0.2
        0.3s     17.00nm          5.4mb
MRWA    37.01 228 iPc    49 18.60   0.5
KLB     37.10 223 iPc    49 18.60  -0.2
        0.4s     65.00nm          5.9mb
BAL     37.26 226 iPc    49 20.40   0.3
NWAO    38.26 222 iPc    49 29.00   0.5
        0.6s     38.00nm          5.5mb
MUN     38.40 224 iPc    49 30.10   0.5
        1.0s    262.00nm          6.1mb
RKG     39.11 221 iPc    49 39.30   3.7X
        0.4s     87.00nm          5.9mb
WKYJ    41.53 346 eP     49 54.20  -1.3
TKSJ    41.71 344 eP     49 56.10  -0.7
IIDJ    42.25 349 P      50 00.80  -0.5
KAKJ    42.60 352 P      50 03.50  -0.5
CHJJ    42.62 351 P      50 04.30   0.1
SHNJ    42.72 341 eP     50 04.60  -0.5
WEL     42.96 149 P      50 08.00   1.0
                  e      50 29.00  88kmX
YONJ    43.00 344 eP     50 06.60  -0.8
MAT     43.23 350 iPd    50 08.20  -1.0
        1.2s     62.50nm          5.3mb
                  eS     56 26.00
MTMJ    43.35 349 P      50 09.60  -0.6
NIIJ    43.78 351 P      50 13.60   0.0
KGM     44.15 279 ePd    50 18.90   1.9
SSE     44.40 328 iPc    50 18.80   0.1
        1.0s    325.00nm          6.1mb
     Z  20s       0.50um          4.4Msz
                  sP     50 47.50
                  esS    56 40.00
YAMJ    44.55 352 P      50 20.20   0.4
OFUJ    45.26 354 P      50 25.90   0.5
IPM     46.91 282 ePd    50 39.90   1.0
        1.0s    427.30nm          6.2mb
                  e      52 12.90 487kmX
SNG     47.93 285 eP     50 48.00   1.2
        0.9s    305.88nm          6.1mb
                  e      52 15.50 447kmX
                  eS     57 39.70
TSI     49.09 280 eP     50 57.00   1.2
NST     51.03 296 eP     51 12.00   1.5
BDT     52.62 297 eP     51 19.90  -2.5
KMI     52.92 308 Pd     51 25.50   0.7
        1.5s    130.00nm          5.7mb
                  e      51 26.00
                  pP     51 54.00 120kmX
                  eS     57 59.50
CHG     53.27 299 ePd    51 27.90   0.7
        0.9s     39.92nm          5.4mb
CHTO    53.27 299 ePd    51 27.60   0.4
                  pP     51 55.00 115km
BJI     53.94 331 eP     51 31.00  -0.7
        1.5s    290.00nm          6.1mb
     Z  22s       0.31um          4.3Msz
                  esP    52 08.00
                  eS     58 56.00
                  esS    59 44.00

LZH     58.19 320 iPd    52 02.00  -0.4
        1.5s    154.00nm          5.8mb
                  pP     52 16.00  51kmX
DRV     60.59 183 iPd    52 18.20   0.0
SMY     63.09  18 ePd    52 35.90   0.8
TVO     63.37 107 eP     52 38.00   0.3
        0.8s     25.00nm          5.2mb
PMO     64.62 104 iP     52 47.80   2.1
        0.8s     25.00nm          5.2mb
TPT     64.89 104 iP     52 59.30  11.9X
        0.8s     20.00nm
RUV     65.12 104 iP     52 50.60   1.7
        0.8s     15.00nm          5.0mb
GUN     67.77 303 P      53 06.20   0.1
PKI     68.05 303 P      53 07.40  -0.4
KKN     68.23 303 P      53 08.60  -0.2
GKN     68.84 303 P      53 12.40   0.0
KOD     70.92 283 iP     53 27.00   1.5
HYB     71.31 291 iPd    53 27.60   0.1
        1.0s    100.00nm          5.6mb
GBA     71.57 286 P      53 29.80   0.8
SBA     72.41 176 e(P)   53 34.20   1.3
NDI     75.28 302 iPd    53 50.00  -0.4
        0.6s     56.67nm          5.6mb
SVW     80.47  25 ePd    54 18.10  -0.2
TTA     81.28  23 ePd    54 19.90  -2.6
MAW     82.02 203 iP     54 27.10   1.0
PMR     83.44  26 iPc    54 33.50   0.0
        0.6s      9.80nm          4.9mb
IMA     83.78  21 iPd    54 35.90   0.5
SPA     83.88 180 iPd    54 36.80   0.9
        0.7s     23.05nm          5.2mb
                  i      55 01.90  95km
QUE     84.34 301 eP     54 38.00  -1.0
TOA     84.93  26 iPd    54 31.90  -9.2X
        0.6s     22.50nm          5.3mb
FBA     85.41  23 iPc    54 43.00  -0.4
        0.5s     16.40nm          5.2mb
INK     91.88  21 eP     55 13.50  -0.5
                  pP     55 41.00 103km
PNT     96.98  41 eP     55 39.00   1.3
        0.6s      4.00nm          5.1mb
YKA     99.41  28 eP     55 48.50   0.1
        0.9s      2.90nm          4.9mb
SLR    112.45 239 ePKP   00 43.40   0.3
BUL    113.86 245 iPKPc  00 44.00  -2.0
        0.9s     13.03nm
APO    115.28 336 ePKP   00 45.80  -1.5
        0.4s      0.80nm
UYO    117.15  55 e(PKP)00 51.00  -0.7
SPC    117.96 323 e(PKP)00 52.90  -0.1
KSP    119.46 326 ePKP   00 54.00  -1.6
ZST    120.27 323 ePKP   00 57.30   0.1
                  e      01 07.80
                  e      01 26.90
PRU    120.86 326 ePKP   00 58.00  -0.2
                  e      01 28.70
CLL    120.98 328 ePKP   00 58.00  -0.4
                  e      01 28.00
KHC    121.84 326 ePKP   01 00.60   0.4
                  e      01 30.80
SQTA   124.20 325 e(PKP)01 04.00  -1.0
        1.0s     10.70nm
                  i      01 34.80
MEM    124.96 331 PKP    01 06.60   0.6
                  e      01 36.90
DOU    125.98 331 PKP    01 08.40   0.3
BSF    126.29 327 ePKP   01 08.60  -0.4
        0.9s      6.55nm
HAU    126.42 328 ePKP   01 08.80  -0.3
        0.8s      5.35nm
     Z  20s       0.17um          4.7Msz
LPL    127.72 325 ePKP   01 11.90   0.0
LPG    127.72 325 ePKP   01 12.00   0.0
PGF    128.02 321 ePKP   01 12.40   0.0
        0.9s      8.20nm
LOR    128.19 329 ePKP   01 12.60   0.1
     Z  22s       0.17um          4.7Msz
SBF    128.26 323 ePKP   01 11.80  -1.0
        0.9s      9.85nm
LBF    128.31 328 ePKP   01 12.80   0.0
BCAO   128.45 271 iPKPc  01 13.30  -0.7
        0.9s     78.00nm
                  id     01 40.80
                  id     03 18.20
                  id     04 27.50
SSF    128.51 329 ePKP   01 13.40   0.3
```

16d 04h

	0.8s	4.05nm				
SMF	128.60	328	ePKP	01	13.20	-0.1
	0.8s	4.05nm				
AVF	128.77	328	ePKP	01	13.30	-0.2
FRF	128.90	323	ePKP	01	13.90	0.0
LMR	129.12	323	ePKP	01	14.40	0.1
LRG	129.14	323	ePKP	01	14.70	0.4
	0.9s	8.20nm				
BGF	129.18	328	ePKP	01	14.60	0.2
	0.7s	4.95nm				
TCF	129.69	329	ePKP	01	15.70	0.3
	0.7s	3.85nm				
LSF	130.07	329	ePKP	01	16.10	0.0
	0.7s	2.75nm				
LPF	130.08	332	ePKP	01	16.40	0.4
	0.8s	10.75nm				
LPO	131.30	328	ePKP	01	19.40	1.0
NNA	133.02	113	iPKPc	01	24.00	1.4
	1.0s	17.00nm				
ARE	135.97	121	ePKP	01	30.00	1.5
CNCB	138.74	124	PKP	01	28.00	-6.0X
			e	04	56.00	
LPB	138.78	124	PKP	01	27.00	-6.9X
			e	05	02.00	
ZOBO	138.89	123	PKP	01	28.00	-6.3X
	1.1s	13.92nm				
			i	02	03.00	
			i	05	02.00	
CCH	139.93	126	PKP	01	32.50	-3.3X
SIV	144.72	129	PKP	01	42.40	-1.4
MGP	144.92	67	PKP	01	42.90	-1.1
PORP	145.33	67	PKP	01	43.00	-1.8
CSB	145.70	66	PKP	01	46.00	0.6
PPD	146.84	148	ePKP	01	47.30	0.1
			e	02	16.70	
			e	02	26.60	
			e	02	43.50	
PAG	150.44	68	ePKP	01	57.00	4.0X
JFO	150.57	161	ePKP	01	59.10	6.0X
KIC	151.69	272	PKPc	01	55.82	0.9
TIC	151.97	273	PKP	01	56.08	0.8
LKO	152.43	279	PKP	01	54.82	-1.1
BAO	153.86	146	ePKP	02	00.00	2.0
SOB1	162.92	153	ePKP	02	10.10	1.7
CAI	166.80	163	ePKP	02	12.80	1.0

S.D. = 1.0 on 135 of 145 obs.

SEP 16, 1990 05h 07m 52.94± 0.52s
43.156 N ± 6.7km 0.209 W ± 4.3km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.0 (LDG). Felt (IV) at Arthez d'Asson, France.

JAU	0.17	225	Pg	07	56.55	-0.3
			Sg	07	58.46	
OGE	0.19	274	Pg	07	58.27	1.0
ESCF	0.28	254	Pg	07	58.81	0.0
			Sg	08	02.51	
ATE	0.37	259	Pg	08	00.61	0.1
			Sg	08	05.66	
LHE	0.39	231	Pg	08	00.04	-0.9
EPF	0.42	107	Pg	08	02.20	0.6
			Sg	08	08.80	
MADF	0.45	269	Pg	08	02.44	0.4
			Sg	08	09.10	
ISSF	0.45	254	Pg	08	02.06	-0.1
			Sg	08	08.23	
LPO	1.83	33	Pg	08	30.00	5.3X
			Sg	08	54.20	
LFF	1.91	21	Pg	08	31.70	5.9X
			Sg	08	57.60	
CAF	2.41	42	Pn	08	33.60	0.5
			Pg	08	40.40	
			Sg	09	13.50	
RJF	2.48	29	Pg	08	42.00	8.0X
			Sg	09	15.20	
LSF	3.33	21	Pn	08	45.20	-0.9
			Pg	08	58.00	
			Sg	09	41.20	
MFF	3.45	1	Pg	09	00.00	12.3X
			Sg	09	44.60	
TCF	3.57	28	Pg	09	02.20	12.6X
			Sg	09	48.40	
MAF	3.65	32	Pg	08	50.20	-0.4
BGF	4.04	32	Pg	09	10.00	13.9X
			Sg	10	03.00	

S.D = 0.7 on 11 of 17 obs.

& SEP 16, 1990 05h 10m 25.38s
63.223 N 150.513 W
DEPTH = 140.7km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.47	121	eP	10	45.10	-0.7
			iS	11	00.11	
CUT	0.83	172	eP	10	47.85	-0.2
			iS	11	05.99	
MCK	0.87	53	iP	10	47.51	-1.0
			eS	11	04.25	
SKT	1.33	201	eP	10	52.38	-0.4
PWA	1.61	169	eP	10	55.83	0.1
			eS	11	19.00	
GHO	1.63	152	eP	10	55.96	-0.2
			iS	11	19.88	
WRH	1.65	40	iP	10	54.84	-1.4
SML	1.74	144	iP	10	56.81	-0.6
PLRM	1.76	158	eP	10	56.95	-0.5
			eS	11	21.52	
SUA	1.77	184	iP	10	58.59	0.8
			iS	11	23.46	
CCB	1.86	39	iP	10	57.24	-1.5
HDA	1.98	51	eP	10	58.61	-1.5
			eS	11	25.15	
NCG	1.98	204	eP	10	59.92	-0.3
SCM	2.03	132	iP	11	00.26	-0.6
			iS	11	28.80	
PMS	2.04	167	eP	11	00.75	-0.1
CGLM	2.05	201	eP	11	00.93	-0.1
FBA	2.07	34	eP	10	59.77	-1.4
CRP	2.11	202	eP	11	01.82	0.0
BGL	2.15	205	eP	11	02.57	0.2
DDM	2.16	73	eP	11	01.94	-0.4
SPU	2.17	200	eP	11	02.07	-0.4
CKL	2.21	204	eP	11	03.03	0.0
GLM	2.24	36	iP	11	02.06	-1.3
TOA	2.30	117	iP	11	04.03	0.0
NKA	2.51	188	iP	11	08.94	2.3
TTA	2.52	266	eP	11	05.47	-1.4
SLKM	2.73	177	iP	11	09.41	-0.1
KLU	2.76	127	iP	11	08.86	-1.0
RDT	2.81	199	eP	11	10.22	-0.3
VZW	2.86	138	eP	11	09.89	-1.3
VLZ	2.87	135	eP	11	09.84	-1.4
DOT	2.93	79	eP	11	10.88	-1.2
RSO	2.97	202	eP	11	12.08	-0.7
SEW	3.17	170	eP	11	14.82	-0.3
SVW	3.20	231	eP	11	14.75	-0.9
GLB	3.60	117	iP	11	20.28	-0.6
CNPM	3.73	186	iP	11	22.13	-0.4
OPT	3.81	201	eP	11	23.89	0.2
TGL	4.39	121	iP	11	30.24	-1.2
BALM	4.42	116	eP	11	30.53	-1.3
CDD	4.57	201	eP	11	33.20	-0.5

41 obs. associated

SEP 16, 1990 05h 14m 31.90± 0.28s
22.924 S ± 4.1km 66.157 W ± 6.3km
DEPTH = 257.0km (2 depth phases)
4.6mb (12 obs.)
JUJUY PROVINCE, ARGENTINA (128)

ANT	3.99	258	iPd	15	34.30	-2.1
			iS	16	19.00	
CCH	5.51	0	iPc	15	55.00	-0.1
CNCB	6.32	344	iPc	16	04.80	-0.6
LPB	6.62	344	iPc	16	08.30	-0.6
	1.0s	250.00nm			5.2mb	
			i	17	19.00	
ZOBO	6.87	344	iPc	16	10.70	-1.6
			i	17	25.00	
ARE	8.16	321	iPc	16	24.00	-4.3X
			iS	17	49.00	
SIV	8.40	36	iPd	16	29.00	-2.0
RTLL	8.62	193	ePc	16	32.00	-1.8
			eS	18	06.90	
CFA	8.84	192	eP	16	35.10	-1.6
RTCB	8.85	195	ePc	16	35.90	-0.9
			S	18	11.00	
ZON	8.88	194	eP	16	36.50	-0.6
RTBS	9.18	198	e(P)	16	40.20	-0.7
MDZ	10.20	193	e(P)	16	53.70	-0.2
JACH	10.48	201	iPc	16	58.50	1.0
ROCH	10.89	202	eP	17	03.40	0.7
PEL	10.94	200	iPc	17	03.50	0.4
	1.0s	60.00nm			4.7mb	
			i	19	19.00	
SAN	11.21	200	eP	17	03.00	-3.6X
			i	19	23.50	
PCH	11.33	199	eP	17	09.00	1.0
TACH	11.49	200	eP	17	09.00	-1.0
CHCH	11.66	199	eP	17	13.00	0.9
LNV	11.92	202	iP	17	14.00	-1.3
PPD	13.75	89	eP	17	38.50	0.4
			e	17	42.10	
			i	17	45.80	
PT08	14.73	316	iPd	17	49.70	-0.6
NNA	14.90	315	iP	17	50.80	-1.2
	0.9s	7.56nm			4.1mb	
			iS	20	17.50	
BAO	18.61	70	Pd	18	33.10	0.4
			e	18	45.00	
			e	18	54.10	
			e	19	35.80	
			e	20	05.50	
			e	25	15.20	
JFO	21.15	91	eP	19	00.00	2.1
SOB1	27.78	65	eP	19	57.30	-2.2
CAI	32.35	64	eP	20	38.30	-1.2
UYO	62.83	334	iPc	24	31.40	-1.2
FVM	64.74	339	P	24	43.00	-1.8
			pP	25	42.00	257km
TUL	64.89	334	eP	24	44.80	-1.0
	1.1s	16.40nm			4.7mb	
SIO	64.96	333	iP	24	45.60	-0.7
LIC	66.37	72	P	24	54.36	-1.3
KIC	66.68	72	P	24	56.54	-1.1
LKO	67.48	68	P	24	59.82	-2.8
ANMO	69.10	325	P	25	12.80	0.5
			pP	26	12.30	257km
GOL	72.26	329	P	25	31.00	-0.2
PEC	74.48	318	P	25	44.60	0.7
RSSD	75.20	333	P	25	48.00	0.0
DAU	75.71	326	P	25	51.50	0.4
FRI	78.08	319	eP	26	05.70	1.9
PRI	78.12	318	eP	26	05.80	1.6
LLA	78.60	318	eP	26	08.10	1.4
PRS	78.68	317	eP	26	08.50	1.4
CMB	79.17	319	eP	26	10.50	0.8
MHC	79.49	318	eP	26	10.90	-0.7
GCC	79.51	318	eP	26	13.00	1.5
BKS	80.19	318	eP	26	16.70	1.6
LRM	80.29	329	eP	26	16.90	1.2
ORV	80.81	320	eP	26	20.10	1.8
BLF	81.12	118	eP	26	21.50	1.1
	0.5s	2.70nm			4.2mb	
MIN	81.38	320	eP	26	21.80	0.4
WDC	82.08	320	eP	26	24.50	-0.3
FHC	83.07	320	eP	26	31.30	1.4
FFC	83.21	340	eP	26	30.00	-0.3
	1.0s	12.00nm			4.6mb	
TOL	85.15	43	iPd	26	42.30	2.0
	1.2s	93.75nm			5.5mb	
BFT	85.58	116	eP	26	45.50	2.4
	0.5s	7.04nm			4.7mb	
PNT	86.19	328	eP	26	46.00	0.8
	0.7s	4.00nm			4.4mb	
BUL	86.53	110	iPc	26	46.80	-0.9
	0.8s	11.19nm			4.8mb	
BCAO	86.83	84	iPd	26	51.00	2.0
	0.8s	11.00nm			4.7mb	
YKA	93.39	340	eP	27	18.50	0.1
	0.8s	2.80nm			4.4mb	
WB5	132.98	207	ePKP	33	19.80	1.0
GBA	144.29	99	PKP	33	39.20	-0.3
HYB	146.48	93	ePKP	33	46.50	3.4X
NDI	146.62	72	iPKPc	33	46.00	3.0X
	0.5s	31.69nm				
GKN	153.18	73	PKP	34	00.00	6.8X

S.D. = 1.3 on 61 of 66 obs.

? SEP 16, 1990 07h 08m 51.65± 4.44s
33.232 S ± 9.9km 71.973 W ±39.6km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

IHA	0.35	54	iPc	08	57.40	-2.6
			iS	09	03.40	
LCCH	0.42	126	iP	09	00.00	-1.0
			iS	09	08.50	

ROCH	0.85	72	iPd	09	05.20	-2.2
			iS	09	18.50	
LNV	0.86	147	iPd	09	07.10	-0.2
TACH	0.96	116	iPd	09	08.80	-0.1
			iS	09	24.00	
PEL	1.08	86	iPd	09	10.40	-0.2
			iS	09	26.00	
SAN	1.12	102	eP	09	11.20	0.1
			iS	09	28.00	
PCH	1.28	108	iP	09	13.90	0.5
			iS	09	33.50	
JACH	1.28	65	iPd	09	12.00	-1.5
			iS	09	29.50	
CHCH	1.31	123	iPc	09	14.50	0.7
			i	09	36.60	
FCH	1.41	94	eP	09	16.00	0.4
			iS	09	36.70	
RTBS	2.64	54	e(P)	09	34.00	1.1
MDZ	2.65	83	eP	09	38.30	5.3X
			iS	10	17.00	
RTCB	3.20	58	ePd	09	43.10	2.2
RTCV	3.21	66	e(P)	09	44.40	3.5X
RTLL	3.52	58	ePc	09	46.40	1.0

S.D. = 1.4 on 14 of 16 obs.

SEP 16, 1990 07h 25m 13.85± 0.72s
38.733 N ± 7.4km 20.431 E ± 6.2km
DEPTH = 16.2 ± 7.3 km
3.8mb (2 obs.)
GREECE (364)
ML 3.7 (ATH), 3.5 (TTG).

EVR	1.09	80	ePg	25	31.50	-2.5
KEK	1.10	334	ePb	25	36.10	2.1
KZN	1.88	33	ePg	25	48.60	2.9X
ITM	1.95	142	ePb	25	48.70	2.1
OHR	2.39	7	iPn	25	55.10	2.1
			i	26	26.40	
			Lg	26	40.80	
			LR	26	41.00	
ATH	2.69	105	ePb	25	59.20	2.0
VLI	2.83	135	ePb	26	03.20	4.1X
PLG	2.85	54	ePn	25	59.70	0.2
BRT	3.28	312	P	26	07.20	1.6
			eSn	26	49.10	
SKO	3.33	13	iPn	26	06.00	-0.2
			iSg	26	45.50	
			Lg	27	16.70	
ULC	3.35	345	ePn	26	06.70	0.1
			eSn	26	44.00	
ORI	3.36	295	P	26	09.40	2.7X
SOI	3.50	261	P	26	07.60	-1.1
			eSn	26	51.00	
			e	29	35.00	
BAI	3.63	312	P	26	12.00	1.4
KKB	3.73	32	iP	26	14.00	2.0
BDV	3.75	341	ePn	26	11.60	-0.7
			eSn	26	53.20	
TTG	3.80	347	ePn	26	13.30	0.4
			eSn	26	57.50	
MMB	3.81	40	eP	26	16.00	2.9X
PVY	3.87	355	ePn	26	15.40	1.3
			eSn	27	02.00	
ATN	3.94	263	P	26	15.60	0.6
			eSn	27	01.40	
HCY	3.99	339	ePn	26	14.80	-0.8
			eSn	27	00.50	
MGR	4.03	292	P	26	17.70	1.5
			eSn	27	07.00	
VTS	4.40	28	eP	26	22.00	0.5
RZN	4.41	47	iPc	26	24.00	2.2
MEU	4.64	251	P	26	23.20	-1.9
			eSn	27	15.90	
KDZ	4.80	51	eP	26	26.00	-1.2
HVAR	5.37	327	iPn	26	33.90	-1.2
ASS	7.31	309	P	27	04.00	1.5
ARV	7.39	312	P	27	03.00	-0.6
VBY	7.78	332	ePn	27	08.50	-0.5
			eSn	28	48.00	
VOY	8.75	329	ePnc	27	20.20	-2.4
			eSn	28	56.70	
FVI	9.66	327	P	27	35.00	-0.1
HFS	21.84	351	eP	30	03.70	-3.4X
	0.4s		1.20nm		3.7mb	
EKA	22.94	324	Pc	30	18.50	0.5
	0.8s		3.50nm		3.9mb	
SUF	24.27	6	eP	30	30.00	-0.8

S.D. = 1.5 on 30 of 35 obs.

? SEP 16, 1990 08h 06m 27.73± 1.96s
16.358 N ±23.4km 122.216 E ±19.6km
DEPTH = 33.0km (normal)
4.1mb (2 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	1.57	272	ePd	06	52.10	-1.7
QCP	2.03	213	eP	07	01.00	0.7
BDT	22.24	276	eP	11	23.30	0.0
CHTO	22.32	280	P	11	25.90	1.8
	0.9s		5.33nm		4.0mb	
WB5	37.94	161	eP	13	44.20	0.1
ASPA	41.39	164	eP	14	11.80	-0.9
	0.8s		5.00nm		4.3mb	
HFS	84.85	332	eP	19	05.80	5.6X
	1.8s		66.90nm		5.5mb X	

S.D. = 1.6 on 6 of 7 obs.

? SEP 16, 1990 08h 43m 46.39±11.94s
43.350 N ±51.1km 3.092 E ±98.0km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
ML 2.3 (LDG).

CAF	1.74	335	Pg	44	16.50	-0.4
			Sg	44	36.80	
LPO	1.91	315	Pg	44	19.20	-0.1
			Sg	44	41.60	
EPF	2.04	262	Pg	44	21.20	0.0
			Sg	44	46.20	
RJF	2.26	330	Pg	44	24.80	0.5
			Sg	44	52.00	

S.D. = 0.6 on 4 of 4 obs.

? SEP 16, 1990 09h 21m 57.01± 1.56s
31.287 S ±38.2km 68.847 W ±18.2km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.20	169	iPd	22	12.00	-1.0
ZON	0.30	151	eP	22	13.50	0.2
			eS	22	25.50	
RTLL	0.33	98	iPc	22	12.00	-1.2
			eS	22	23.70	
CFA	0.61	122	e(P)	22	14.30	-0.6
RTCV	0.63	155	eP	22	14.30	-0.8
RTBS	0.64	234	iPc	22	14.20	-0.9

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

? SEP 16, 1990 09h 35m 45.46± 4.13s
32.294 S ±53.2km 68.884 W ±18.7km
DEPTH = 100.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

RTCV	0.52	34	ePc	36	01.70	0.0
			S	36	16.80	
RTBS	0.79	322	ePc	36	03.90	-0.1
RTCB	0.81	5	ePd	36	04.50	0.2
			S	36	22.10	
CFA	0.88	39	eP	36	04.90	0.0
			S	36	23.00	
RTLL	1.02	20	iPc	36	06.30	-0.2
			iS	36	26.00	

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

• SEP 16, 1990 09h 42m 32.31± 1.04s
5.348 S ±10.2km 133.720 E ±17.2km
DEPTH = 33.0km (normal)
4.5mb (2 obs.)
AROE ISLANDS REGION (204)

AAI	5.75	286	eP	43	58.50	0.9
MTN	7.88	199	eP	44	29.00	1.5
			eS	45	58.00	
KNA	11.42	205	iPc	45	15.20	-1.1
			eS	47	19.00	
WB5	14.46	178	eP	45	54.00	-2.6
			eS	48	30.00	
OIS	16.16	160	eP	46	23.00	4.3X
			eS	49	17.00	
ASPA	18.21	179	eP	46	43.80	-0.6
	0.8s		48.00nm		4.7mb	
Z	16s		0.40um		4.4Msz	
			eS	49	59.60	
			LR	55	29.80	

CTA	19.06	141	iP	46	56.80	2.1
	1.1s		21.52nm		4.3mb	
MBL	20.70	219	eP	47	14.00	1.6
CHTO	41.84	306	P	50	21.90	0.8
GUN	56.75	308	P	52	16.20	0.1
PKI	56.96	308	P	52	16.80	-0.8
KKN	57.16	308	P	52	18.40	-0.5
DMN	57.22	308	P	52	18.80	-0.5
GKN	57.76	308	P	52	22.40	-0.6
CNCB	149.26	136	PKP	02	24.50	8.0X
LPB	149.37	136	PKP	02	23.00	6.6X
ZOBO	149.53	135	PKP	02	24.00	7.1X
CCH	150.08	139	PKP	02	26.50	9.2X

S.D. = 1.4 on 13 of 18 obs.

? SEP 16, 1990 10h 16m 22.74± 2.80s
32.112 S ±39.7km 68.428 W ±20.7km
DEPTH = 100.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

RTCV	0.27	340	iPc	16	37.50	-0.2
CFA	0.53	18	eP	16	39.10	0.1
			S	16	52.60	
ZON	0.60	339	iPd	16	40.20	0.6
			eS	16	54.20	
RTCB	0.70	333	ePd	16	40.20	-0.3
			S	16	54.00	
RTLL	0.78	357	iPc	16	41.00	-0.2
			eS	16	55.90	
RTBS	0.98	297	eP	16	43.20	0.0

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

? SEP 16, 1990 10h 40m 09.37± 1.78s
31.653 S ±42.6km 69.578 W ±23.9km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.11	94	iPd	40	26.30	0.1
RTCB	0.68	76	ePd	40	28.90	-0.1
			S	40	43.50	
ZON	0.77	82	eP	40	29.50	-0.2
			eS	40	43.50	
RTCV	0.91	103	ePc	40	30.70	-0.2
			S	40	45.70	
RTLL	1.00	71	iPc	40	31.70	-0.1
			eS	40	47.50	
CFA	1.14	88	e(P)	40	33.60	0.4
			S	40	50.00	

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

& SEP 16, 1990 10h 49m 29.61s
60.203 N 153.331 W
DEPTH = 143.2km.
SOUTHERN ALASKA (2)
<AGS-P>.

RSO	0.39	48	iP	49	49.38	0.8
OPT	0.55	175	iP	49	49.90	-0.9
			iS	50	05.67	
RDT	0.59	51	iP	49	50.17	-0.9
			iS	50	06.78	
PDB	0.60	226	iP	49	50.06	-0.9
AUH	0.84	184	eP	49	51.64	-1.1
AUE	0.85	181	eP	49	51.74	-1.0
HOM	1.01	122	iP	49	53.19	-0.9
			eS	50	11.49	
CKL	1.11	26	iP	49	54.55	-0.6
			eS	50	13.96	
BGL	1.16	23	iP	49	55.56	-0.1
SPU	1.17	32	iP	49	55.02	-0.6
			eS	50	14.52	
NKA	1.17	61	eP	49	56.33	0.8
CRP	1.21	28	iP	49	55.99	-0.2
CNPM	1.26	122	iP	49	55.14	-1.3
			eS	50	14.51	
CGLM	1.29	30	eP	49	56.20	-0.6
CDD	1.29	187	eP	49	55.49	-1.3
SLKM	1.58	77	eP	49	58.49	-1.4
SUA	1.79	44	iP	50	01.42	-1.0
SEW	1.94	91	eP	50	02.13	-1.9
SKT	1.99	25	iP	50	04.22	-0.4
PMS	2.13	59	iP	50	04.64	-1.7
PWA	2.23	48	eP	50	05.86	-1.6
PLRM	2.48	54	eP	50	07.95	-2.6
CUT	2.66	32	eP	50	12.02	-0.8
GHO	2.66	52	iP	50	10.64	-2.4
SML	2.92	54	eP	50	13.63	-2.6

16d 10h

VZW 3.45 73 eP 50 21.26 -1.9
VLZ 3.57 72 eP 50 22.31 -2.3
27 obs. associated

SEP 16, 1990 10h 54m 58.54± 0.61s
7.015 S ± 5.3km 124.913 E ± 9.1km
DEPTH = 546.5 ± 11.8 km
5.0mb (5 obs.)
BANDA SEA (280)

AAI 4.65 45 ePd 56 26.40 0.5
eS 57 45.80
MTN 8.43 134 iPd 57 00.80 -0.5
KNA 9.47 157 iPd 57 11.30 -0.5
0.5s 183.00nm 5.6mb X
MBL 14.90 199 eP 58 08.30 1.6
WB5 15.74 145 iPc 58 15.00 -0.1
ASPA 18.67 153 iPc 58 44.10 0.6
0.5s 101.00nm 5.7mb
eS 01 44.80
e 09 05.50
QIS 19.59 135 eP 58 51.00 -1.1
0.9s 56.00nm 5.2mb
MRWA 23.63 200 eP 59 28.70 -0.2
COOL 24.01 188 eP 59 31.50 -0.8
BAL 24.70 197 eP 59 38.30 -0.2
KLB 25.35 194 eP 59 43.00 -1.2
MUN 26.13 197 iPc 59 50.80 -0.2
NWAO 26.75 194 iPc 59 56.60 0.1
QLP 26.77 139 iPc 59 56.70 0.0
ADE 30.58 157 ePc 00 29.90 0.3
0.6s 30.67nm 5.1mb
BWA 34.84 145 eP 01 07.20 1.8
BDT 35.17 314 eP 01 06.70 -1.5
CAN 35.82 145 eP 01 14.00 0.5
CHG 36.25 315 eP 01 18.30 1.1
e 06 23.80
SSE 38.06 355 Pd 01 32.20 0.4
1.0s 19.00nm 4.7mb
MAT 45.09 15 iPd 02 26.30 -1.3
0.8s 7.46nm 4.3mb
GUN 51.25 314 P 03 14.80 0.3
PKI 51.39 314 P 03 15.20 -0.2
GBA 51.39 294 Pc 03 15.10 -0.1
0.5s 1.60nm 3.7mb X
KKN 51.61 314 P 03 17.00 0.1
DMN 51.63 314 P 03 17.60 0.5
HYB 51.84 299 eP 03 18.00 -0.4
GKN 52.20 314 P 03 21.40 0.4
PPD 150.90 187 (PKP) 13 42.00 -3.1X
S.D. = 0.8 on 28 of 29 obs.

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* SEP 16, 1990 13h 43m 11.27± 1.24s
21.329 S ±10.0km 69.558 W ±23.5km
DEPTH = 128.9 ± 48.0 km
NORTHERN CHILE (123)

ANT 2.49 198 e(P) 43 51.80 0.0
CNCB 4.74 19 P 44 23 B0 1.5
LPB 4.97 16 eP 44 23.00 -2.3
i 44 28.00
CCH 5.08 40 P 44 27.00 0.2
ARE 5.18 339 iP 44 28.30 0.3
iS 45 27.40
ZOBO 5.21 15 P 44 29.20 0.4
i 45 32.00
NNA 11.61 322 iP 46 04.50 10.2X
0.5s 3.52nm
e 48 07.50
PPD 16.98 96 eP 47 02.40 0.0
e 47 05.80
S.D. = 1.6 on 7 of 8 obs.

& SEP 16, 1990 14h 30m 16.35s
62.159 N 149.539 W
DEPTH = 60.2km
CENTRAL ALASKA (1)
<AGS-P>.

CUT 0.42 306 iP 30 27.11 -0.5
eS 30 35.69
GHO 0.48 143 eP 30 27.88 -0.5
eS 30 37.69
PWA 0.53 198 eP 30 28.58 -0.2
iS 30 38.21
PLRM 0.60 161 iP 30 28.79 -0.7
eS 30 39.33
SML 0.67 121 iP 30 29 59 -0.8
iS 30 40.92
HUR 0.82 357 eP 30 31.45 -0.8
iS 30 43.78
SUA 0.90 220 iP 30 33.20 -0.2
eS 30 46.76
PMS 0.92 181 eP 30 33.07 -0.4
iS 30 46.48
SKT 0.95 260 eP 30 33.20 -0.8
eS 30 47.22
SCM 1.09 106 eP 30 34.91 -1.0
CGLM 1.45 235 eP 30 40.05 -0.8
NCG 1.46 240 eP 30 41.04 0.2
SPU 1.55 232 eP 30 41.46 -0.6
TOA 1.58 90 eP 30 42.41 -0.2
MCK 1.60 10 eP 30 42.37 -0.5
BGL 1.63 238 eP 30 43.08 -0.2
CKL 1.65 235 iP 30 42.98 -0.5
SLKM 1.69 192 eP 30 44.42 0.4
VZW 1.80 126 eP 30 44.15 -1.5
KLU 1.84 110 iP 30 44.74 -1.5
VLZ 1.85 123 iP 30 44.33 -1.8
RDT 2.11 222 eP 30 48.88 -1.0
22 obs. associated

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* SEP 16, 1990 14h 45m 22.91± 2.43s
17.050 S ±32.6km 71.289 W ±16.2km
DEPTH = 33.0km (normal)
NEAR COAST OF PERU (115)

ARE 0.62 342 iPd 45 35.00 -0.5
iS 45 50.50
LPB 3.10 81 P 46 11.00 0.0
ZOBO 3.13 76 P 46 12.00 0.4
Z 24s 0.08um
LR 54 42.00
CNCB 3.18 86 P 46 13.00 0.8
CCH 4.93 95 P 46 36.00 -0.9
NNA 7.36 312 P 47 11.30 0.3
0.7s 6.16nm 4.7mb X
iS 48 35.00
SIV 9.86 85 P 47 38.50 -7.0X
S.D. = 0.8 on 6 of 7 obs.

SEP 16, 1990 15h 33m 46.64± 0.38s
80.100 N ± 9.6km 0.831 E ± 9.4km
DEPTH = 10.0km (geophysicist)
4.4mb (12 obs.)
NORTH OF SVALBARD (641)

KBS 2.35 115 eP 34 24.00 -1.8
eS 34 51.50
KEV 12.21 133 eP 36 42.00 -1.2
e 36 49.00
SOD 14.43 137 iP 37 10.80 -1.7
i 37 18.00
SUF 18.88 142 eP 38 11.00 2.2
NB2 19.40 165 P 38 15.60 0.4
0.7s 4.60nm 3.9mb
HFS 20.43 161 eP 38 24.50 -1.6
0.8s 10.30nm 4.2mb
Z 17s 0.20um 3.5MszX
LR 43 28.00
NUR 20.90 146 iP 38 30.00 -0.9
0.8s 17.60nm 4.5mb
UPP 20.95 156 iP 38 34.00 2.5
MOX 29.80 166 e(P) 39 56.00 0.7
PRU 30.60 163 eP 40 02.50 0.2
e 40 11.80
SPC 31.75 156 eP 40 25.20 12.6X
ZST 32.53 160 eP 40 27.00 7.8X
SRO 32.99 158 eP 40 40.20 17.1X
SOTA 33.21 167 eP 40 26.00 0.7
0.7s 3.10nm 4.3mb
e 40 34.00
FBA 34.13 337 P 40 35.30 2.4
0.8s 6.03nm 4.6mb
VOY 34.51 164 eP 40 36.90 0.4
FFC 38.74 295 iPd 41 12.30 0.3
0.6s 6.00nm 4.5mb
SES 44.32 302 eP 41 58.00 0.2
NEW 47.27 307 P 42 21.70 0.4
0.8s 5.47nm 4.7mb
RMW 48.69 310 P 42 22.30 -10.1X
GMW 48.73 311 P 42 33.30 0.6
RSSD 49.36 293 P 42 37.10 -0.7
LON 49.39 310 P 42 37.30 -0.5
BW06 51.53 298 P 42 53.00 -1.4
PTI 51.86 301 P 42 57.00 0.2
GOL 53.89 293 P 43 11.00 -1.0
0.8s 3.16nm 4.4mb
TNP 57.27 304 P 43 35.00 -1.4
0.7s 1.48nm 4.1mb
ANMO 58.71 293 P 43 46.00 -0.5
0.7s 3.00nm 4.5mb
GKN 61.54 91 P 44 06.40 0.4
PLM 61.86 303 P 44 23.50 15.4X
KKN 61.86 90 P 44 08.80 0.6
0.8s 24.00nm 5.4mb
HYB 70.84 99 eP 45 05.00 -0.2
e 45 13.00
CHG 72.99 79 eP 45 18.00 0.1
GBA 74.39 101 Pd 45 26.50 0.5
0.9s 4.20nm 4.5mb
S.D. = 1.2 on 29 of 34 obs.

% SEP 16, 1990 15h 44m 08.38± 0.81s
37.990 N ± 8.2km 1.853 W ± 8.2km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.5 (MDD).

EVIA 0.82 322 ePg 44 23.40 -1.0
eSg 44 35.00
ENIJ 1.06 196 ePg 44 27.00 -1.3
eSg 44 43.00
ACU 1.25 65 ePn 44 31.80 0.2
AFC 1.53 242 ePn 44 37.20 1.3
EBAN 1.53 277 ePn 44 35.50 -0.4
eSn 44 55.20
ECOG 1.54 243 ePn 44 36.80 0.9
eSn 44 57.60
ECHE 1.74 23 ePn 44 39.20 0.4
eSn 45 03.50
S.D. = 1.2 on 7 of 7 obs.

? SEP 16, 1990 15h 51m 16.35± 0.74s
42.183 N ±34.1km 79.328 E ±31.7km
DEPTH = 33.0km (normal)
4.6mb (7 obs.)
ALMA-ATA REGION (330)

CHTO 28.64 138 (P) 57 12.00 0.0
KRA 40.94 302 eP 58 56.70 -0.3
SLL 43.04 318 eP 59 14.70 0.5
1.4s 13.60nm 4.5mb
NB2 44.01 319 P 59 21.60 -0.4
0.8s 2.00nm 4.0mb
BSF 49.86 303 eP 00 08.50 0.2
LPG 50.79 300 eP 00 16.00 0.3
LPL 50.80 300 eP 00 15.80 0.2
0.8s 4.70nm 4.5mb
SMF 52.18 302 eP 00 25.40 -0.4
0.9s 4.90nm 4.5mb
AVF 52.42 303 eP 00 27.20 -0.4
0.8s 6.70nm 4.7mb
MAF 53.16 302 eP 00 33.10 0.0
RJF 54.22 302 eP 00 41.20 0.4
LPO 54.70 301 eP 00 44.20 -0.3
0.8s 6.70nm 4.7mb
LFF 54.87 302 eP 00 45.80 0.1
1.0s 10.00nm 4.8mb
S.D. = 0.4 on 13 of 13 obs.

SEP 16, 1990 15h 57m 22.88± 0.47s
41.832 N ± 6.0km 139.486 E ± 4.1km
DEPTH = 193.6 ± 5.1 km
4.5mb (31 obs.)
HOKKAIDO, JAPAN REGION (224)

MRRJ 1.32 63 P 57 54.40 -0.3
S 58 17.60
AOMJ 1.44 152 iPd 57 56.10 0.4
MAT 5.38 191 eP 58 44.00 1.3
0.7s 18.49nm 4.4mb
SSE 18.17 240 P 01 21.00 -2.3
CHG 41.33 249 eP 04 51.30 0.2
0.8s 13.43nm 4.5mb
CHTO 41.33 249 P 04 51.30 0.2
e 05 34.00 199kmX
KDC 44.70 45 P 05 17.00 -0.7
0.7s 17.44nm 4.6mb
NNT 45.18 242 eP 05 25.80 3.8X
GUN 45.43 270 P 05 24.30 -0.1

PMR 45.76 39 iPc 05 25.70 -0 4
0.5s 15.40nm 4.7mb
FBA 45.92 35 iPc 05 27.90 0.6
KKN 45.94 270 P 05 28.50 0.2
PKI 45.96 270 P 05 28.20 -0.4
DMN 46.17 270 P 05 30.40 0.3
GKN 46.31 271 P 05 30.80 -0.3
TOA 47.06 38 iPc 05 37.30 0.9
0.4s 31.80nm 5.1mb
INK 50.85 29 eP 06 05.00 -0.2
0.3s 9.00nm 4.8mb
ND1 51.48 276 iPd 06 10.00 -0.5
0.5s 49.30nm 5.4mb
HYB 57.02 264 eP 06 50.00 -0.8
KEV 58.44 338 eP 06 51.00 -8.9X
SOD 59.98 336 iP 07 09.60 -0.9
GBA 60.27 262 P 07 12.70 -0.4
YKA 60.44 31 eP 07 12.50 -1.2
0.6s 3.10nm 4.2mb
WB5 61.58 185 eP 07 20.50 -1.2
SUF 63.04 332 iP 07 30.20 -0.8
0.3s 4.10nm 4.7mb
NUR 65.03 330 eP 07 43.00 -0.8
GMW 65.12 48 P 07 44.80 0.1
MBL 65.26 200 eP 07 45.10 -0.5
BMW 65.50 49 P 07 46.80 -0.3
RMW 65.72 47 P 07 48.00 -0.5
PNT 65.80 45 eP 07 48.00 -1.0
0.5s 5.00nm 4.5mb
LON 66.13 48 P 07 50.40 -0.8
DPW 67.42 45 P 07 58.40 -0.9
NEW 67.75 45 P 07 59.80 -1.5
0.8s 8.85nm 4.6mb
FHC 68.41 54 eP 08 06.50 1.1
HFS 69.11 334 eP 08 08.20 -1.1
0.3s 5.40nm 4.8mb
NB2 69.20 336 P 08 09.10 -0.8
0.6s 2.50nm 4.1mb
LBFM 69.33 53 P 08 11.40 0.1
WDC 69.42 54 eP 08 12.00 0.5
LTCM 69.89 54 P 08 19.10 4.6X
MIN 70.12 53 eP 08 15.70 -0.3
ORV 70.68 54 eP 08 18.80 -0.4
GCC 71.95 56 eP 08 26.80 0.0
CMB 72.31 55 eP 08 29.20 0.3
PRS 72.78 57 eP 08 31.70 0.0
LLA 72.87 56 eP 08 32.70 0.5
IMW 73.85 45 P 08 38.40 0.3
TNP 74.19 53 P 08 40.00 -0.1
0.7s 5.00nm 4.4mb
KRA 74.31 324 eP 08 40.60 0.4
ABL 75.07 57 P 08 44.80 -0.4
DUG 75.34 49 P 08 46.40 -0.1
BW06 75.36 45 P 08 45.90 -0.8
DAU 76.06 48 P 08 50.50 -0.3
CLL 76.21 329 iP 08 51.10 0.2
e 09 40.00 204kmX
RSSD 77.23 41 P 08 56.20 -0.8
GLA 78.99 55 P 09 06.80 0.2
GOL 79.76 45 P 09 10.80 -0.1
0.8s 2.60nm 4.0mb
BSF 81.40 330 eP 09 18.80 -0.3
HAU 81.42 330 eP 09 19.20 0.1
ANMO 82.61 49 P 09 27.00 1.3
e 10 08.40 167kmX
LOR 82.95 331 eP 09 27.00 0.0
0.6s 5.40nm 4.5mb
FLN 83.13 335 eP 09 27.70 -0.1
0.7s 5 50nm 4.4mb
LBF 83.15 331 eP 09 28.00 0.0
0.6s 2.70nm 4.2mb
LDF 83.17 334 eP 09 27.80 -0.2
SSF 83.25 331 eP 09 28.60 0.1
0.6s 2.70nm 4.2mb
LPL 83.35 329 eP 09 29.90 0.6
0.5s 2.20nm 4.2mb
LPG 83.36 329 eP 09 30.00 0.6
0.5s 3.65nm 4.4mb
SMF 83.49 331 eP 09 30.00 0.3
0.6s 3.60nm 4.3mb
AVF 83.54 331 eP 09 30.30 0.4
0.5s 6.55nm 4.6mb
GRR 83.58 335 eP 09 30.40 0.3
0.6s 7.20nm 4.6mb
LPF 83.95 335 eP 09 32.40 0.4
0.5s 4.35nm 4.5mb
MAF 84.31 332 eP 09 34.60 0.8
0.5s 5.85nm 4.6mb
TCF 84.38 332 eP 09 34.60 0.4
LSF 84.65 332 eP 09 35.90 0.4
0.4s 5.15nm 4.6mb
MFF 84.91 333 eP 09 37.60 0.8
0.7s 6.60nm 4.5mb
RJF 85.47 332 eP 09 40.40 0.8
CAF 85.60 331 eP 09 41.60 1.3
0.5s 5.40nm 4.6mb
LFF 86.06 332 eP 09 43.80 1.3
0.6s 5.40nm 4.6mb
LPO 86.12 332 eP 09 44.10 1.3
0.6s 9.00nm 4.8mb
ZOBO 145.19 51 PKP 16 39.50 -0.2
LPB 145.41 51 (PKP) 16 48.00 8.1X
CNCB 145.70 52 PKP 16 42.50 2.0
CCH 147.21 50 (PKP) 16 47.00 4.4X
SOB1 147.51 1 (PKP) 16 44.00 1.1
SIV 148.75 41 iPKPc 16 48.80 4.0X
S.D. = 0.7 on 79 of 85 obs.

& SEP 16, 1990 15h 58m 07.48s
63.173 N 150.882 W
DEPTH = 21.1km
CENTRAL ALASKA (1)
<AGS-P>.

SUA 1.72 178 eP 58 36.19 -0.4
eS 59 00.68
PLRM 1.78 152 eP 58 36.95 -0.5
eS 59 01.35
WRH 1.80 42 eP 58 36.82 -0.8
eS 59 00.78
SML 1.81 138 eP 58 36.80 -1.1
eS 59 01.07
NCG 1.87 199 eP 58 38.64 -0.2
CGLM 1.94 196 eP 58 39.75 -0.1
eS 59 05.26
CRP 2.00 198 eP 58 41.27 0.5
CCB 2.01 41 eP 58 40.23 -0.5
eS 59 05.80
PMS 2.03 162 eP 58 41.72 0.6
BGL 2.04 201 eP 58 41.83 0.5
eS 59 08.63
SPU 2.07 196 eP 58 41.09 -0.6
eS 59 09.13
HDA 2.14 53 eP 58 43.63 1.1
eS 59 10.63
FBA 2.20 37 eP 58 43.50 0.0
eS 59 11.63
TTA 2.35 266 eP 58 46.12 0.5
eS 59 14.52
GLM 2.38 39 eP 58 46.49 0.4
eS 59 17.28
TOA 2.43 114 eP 58 46.46 -0.2
RDT 2.71 196 eP 58 50.75 0.0
KLU 2.86 124 eP 58 52.95 0.0
VZW 2.94 134 eP 58 52.68 -1.3
19 obs. ossocioted

SEP 16, 1990 16h 11m 18.73± 0.31s
41.482 N ± 6.2km 79.510 E ± 7.5km
DEPTH = 13.9km (5 depth phases)
4.9mb (29 obs.)
KIRGHIZ-XINJIANG BORDER REGION (320)

GKN 14.09 161 P 14 41.60 1.5
KKN 14.46 159 P 14 45.30 0.3
GUN 14.51 157 P 14 46.80 0.9
DMN 14.58 160 P 14 46.20 -0.5
PKI 14.70 159 P 14 47.40 -0.9
MAIO 16.41 258 eP 15 11.00 0.8
LZH 19.69 98 eP 15 49.50 -1.2
2.5s 33.00nm 4.2mb
CHG 28.03 138 eP 17 20.20 8.8X
CHTO 28.03 138 P 17 15.20 3.8X
e 17 19.80 16km
SUF 37.60 323 eP 18 35.00 0.8
VRI 37.85 295 ePd 18 35.00 -1.5
NUR 38.05 319 eP 18 42.00 4.0X
SOD 38.38 330 eP 18 44.00 3.4X
KRA 41.43 303 eP 19 06.70 0.6
e 19 12.20 19km
UPP 41.55 318 iP 19 08.10 1.2
HFS 43.50 318 eP 19 23.20 0.3
0.8s 11.80nm 4.7mb
Z 18s 0.10um 3.8Msz
LR 37 04.00
KSP 43.53 305 eP 19 23.30 0.0
e 19 26.80 12km
NB2 44.63 320 P 19 32.40 0.3
0.9s 13.30nm 4.8mb
PRU 44.83 304 P 19 34.60 0.8
e 19 38.50 13km
PTJ 45.09 298 eP 19 36.80 0.8
CLL 45.44 306 eP 19 39.00 0.4
e 21 31.00 649kmX
KHC 45.67 303 eP 19 42.00 1.5
WET 46.10 303 eP 19 45.50 1.6
MOX 46.46 306 e(P) 19 51.00 4.3X
GRF 46.98 304 iPc 19 52.30 1.5
1.0s 9.00nm 4.8mb
e 19 55.30 10km
OSS 48.63 301 eP 20 03.90 -0.1
VDL 49.14 301 eP 20 07.70 -0.2
LLS 49.31 301 eP 20 08.90 -0.3
SLE 49.31 303 eP 20 09.40 0.4
CDF 49.85 304 eP 20 13.30 0.1
1.0s 12.00nm 4.8mb
BSF 50.36 303 eP 20 17.20 0.1
0.8s 20.15nm 5.1mb
HAU 50.57 304 eP 20 18.60 -0.1
0.9s 8.20nm 4.7mb
DOU 50.90 307 Pc 20 25.60 4.6X
LPG 51.27 301 eP 20 24.50 0.2
1.1s 22.00nm 5.0mb
LPL 51.27 301 eP 20 24.40 0.2
0.9s 21.30nm 5.1mb
SBF 51.47 298 eP 20 25.50 -0.1
0.9s 22.95nm 5.1mb
BNI 51.49 300 Pd 20 25.80 0.0
FRF 52.12 298 eP 20 29.90 -0.5
0.9s 13.10nm 4.9mb
LMR 52.30 298 eP 20 31.40 -0.4
1.0s 8.00nm 4.6mb
LRG 52.35 298 eP 20 31.80 -0.3
LOR 52.41 304 eP 20 31.60 -1.0
0.9s 6.55nm 4.6mb
LBF 52.45 303 eP 20 32.00 -0.9
0.9s 9.85nm 4.7mb
SMF 52.67 303 eP 20 33.90 -0.6
0.9s 18.85nm 5.0mb
SSF 52.71 304 eP 20 34.40 -0.4
0.9s 8.20nm 4.7mb
AVF 52.92 303 eP 20 35.90 -0.5
0.9s 31.95nm 5.3mb
BGF 53.33 303 eP 20 38.80 -0.6
0.9s 12.30nm 4.9mb
EKA 53.39 315 Pc 20 40.20 0.5
0.9s 6.50nm 4.6mb
MAF 53.65 303 eP 20 41.70 0.0
0.9s 14.75nm 5.0mb
TCF 53.84 303 eP 20 42.90 -0.3
1.0s 15.00nm 5.0mb
LSF 54.29 303 eP 20 45.60 -0.8
LDF 54.32 306 eP 20 46.10 -0.5
0.9s 11.45nm 4.9mb
CAF 54.52 302 eP 20 48.40 0.2
RJF 54.70 302 eP 20 49.80 0.3
0.9s 16.40nm 5.1mb
GRR 54.85 307 eP 20 49.90 -0.7
1.0s 18.00nm 5.1mb
LPF 55.11 306 eP 20 51.50 -1.0
MFF 55.18 304 eP 20 52.20 -0.8
1.0s 14.00nm 4.9mb
LPO 55.19 302 eP 20 53.00 -0.1
0.9s 16.40nm 5.1mb
LFF 55.36 302 eP 20 54.50 0.2
0.8s 18.80nm 5.2mb
EPF 56.48 300 eP 21 01.50 -1.0
0.9s 7.35nm 4.7mb
INK 67.77 13 eP 22 19.00 1.5
LKO 80.09 274 P 23 26.14 -3.8X
KIC 81.52 271 P 23 36.50 -0.9
LIC 81.83 271 P 23 38.00 -1.0
ASPA 82.08 131 eP 23 45.20 5.2X
0.9s 5.00nm 4.6mb
S.D. = 0.8 on 56 of 64 obs.

% SEP 16, 1990 16h 15m 47.84± 1.70s
0.571 S ±12.7km 78.219 W ±13.6km
DEPTH = 33.0km (normal)
ECUADOR (107)

16d 16h

VC1	0.19	250	iPd	15	55.00	0.0
			eS	16	02.20	
OTO	0.48	320	iPd	15	58.90	0.3
OUR	0.50	322	Pd	15	58.90	0.0
GGP	0.55	316	iPd	15	59.50	-0.1
YANA	0.57	322	iPd	15	59.70	-0.3
CAYA	0.69	20	P	16	01.60	0.0
ANGL	0.78	75	eP	16	18.60	17.0X
COTA	0.91	352	iPd	15	59.10	-5.6X

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

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* SEP 16, 1990 17h 26m 44.82± 1.00s
51.589 N ± 6.3km 6.848 E ±12.7km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
MD 2.6 (UCC).

WTS	0.41	357	ePg	26	53.00	-0.2
BNS	0.66	162	iPc	26	58.20	0.3
	0.2s		35.40nm			
			iS	27	07.60	
ENN	1.01	216	iPg	27	03.30	-0.6
	0.4s		14.00nm			
			eSg	27	16.50	
MEM	1.12	209	iP	27	05.40	-0.3
			iS	27	20.50	
SNF	1.94	237	P	27	19.20	1.0
			S	27	41.70	
DOU	2.07	225	P	27	19.70	-0.3

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

SEP 16, 1990 17h 29m 35.10± 0.67s
34.871 N ±11.3km 26.537 E ± 7.2km
DEPTH = 33.0km (normal)
3.9mb (3 obs.)
CRETE (370)
ML 4.0 (ATH).

NPS	0.85	298	iPgc	29	51.50	0.8
KAP	0.86	37	ePg	29	49.70	-1.0
VAM	1.99	286	ePn	30	12.00	4.9X
APE	2.34	340	ePn	30	13.00	0.9
CIN	3.00	24	iPd	30	23.00	1.6
VLI	3.46	303	ePn	30	30.00	2.0
ATH	3.84	325	ePb	30	37.00	3.7X
ITM	4.39	303	ePn	30	45.20	4.0X
EVR	5.54	318	ePn	31	00.70	3.3X
CSS	5.58	87	eP	30	57.50	-0.5
DSI	8.11	111	eP	31	33.00	-0.4
SKO	8.14	332	eP	31	38.00	4.2X
PRNI	8.44	120	eP	31	38.00	-0.1
MBH	8.70	123	eP	31	43.00	1.4
PGF	15.67	304	eP	33	19.00	3.9X
LPG	18.42	311	eP	33	49.60	-0.2
LPL	18.44	311	eP	33	49.90	-0.1
SMF	20.75	311	eP	34	13.60	-1.8
	0.5s		2 20nm		3.8mb	
LBF	20.82	312	eP	34	14.20	-2.0
	0.8s		5 35nm		4.0mb	
LOR	21.02	313	eP	34	16.40	-1.8
	0.7s		3.30nm		3.8mb	
MFF	23.25	308	eP	34	42.30	2.0
LDF	24.01	313	eP	34	47.40	-0.2
FLN	24.30	313	eP	34	50.00	-0.4
LPF	24.35	311	eP	34	51.00	0.1
GRR	24.37	312	eP	34	50.70	-0.4

S.D. = 1.3 on 19 of 25 obs.

? SEP 16, 1990 17h 44m 09.48± 3.05s
43.972 N ±17.0km 8.389 E ±16.7km
DEPTH = 10.0km (geophysicist)
CORSICA (380)
ML 1.6 (GEN).

FIN	0.27	331	P	44	15.30	0.1
			S	44	19.10	
IMI	0.37	260	P	44	17.05	0.0
			S	44	22.79	
ROB	0.49	311	P	44	19.41	-0.1
			S	44	26.17	
PCP	0.58	11	P	44	21.25	0.0
			S	44	28.84	

S.D. = 0.1 on 4 of 4 obs.

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* SEP 16, 1990 18h 42m 56.67± 1.76s
38.373 N ±10.4km 73.210 E ± 6.3km
DEPTH = 44.6 ± 19.0 km
4.4mb (8 obs.)
TAJIK-XINJIANG BORDER REGION (719)

QUE	9.66	214	eP	45	16.00	-0.3
NDI	10.22	160	eP	45	26.00	2.2
	0.5s		28.17nm		5.7mb X	
			iSn	47	08.50	
MAIO	11.11	263	eP	45	36.00	0.0
			eS	47	23 00	
GKN	14.08	134	P	46	14.80	-0.6
KKN	14.61	133	P	46	21.40	-1.0
DMN	14.64	134	P	46	23.60	0.7
PKI	14.85	133	P	46	24.80	-0.8
GUN	14.87	131	P	46	25.20	-0.7
HYB	21.40	166	eP	47	43.00	0.3
			e	48	09.50	
GBA	24.95	170	P	48	17.40	0.0
			S	52	37.40	
SUF	37.31	326	eP	50	07.00	1.1
SSE	39.73	86	eP	50	17.50	-9.0X
HFS	42.71	321	eP	50	50.50	-0.1
	0.9s		9.80nm		4.5mb	
NB2	43.97	322	P	51	01.10	0.2
	0.7s		3.20nm		4.2mb	
BSF	48.03	304	eP	51	33.20	-0.2
HAU	48.28	304	eP	51	35.00	-0.1
LPG	48.68	301	eP	51	39.00	0.4
	0.8s		3.35nm		4.4mb	
LPL	48.69	301	eP	51	39.00	0.4
	0.8s		4.70nm		4.6mb	
LOR	50.10	304	eP	51	48.10	-1.0
SMF	50.29	303	eP	51	50.20	-0.4
AVF	50.57	303	eP	51	52.20	-0.4
	0.8s		4.70nm		4.6mb	
MAF	51.26	303	eP	51	58.00	0.1
	0.8s		3.35nm		4.4mb	
TCF	51.47	303	eP	51	59.40	-0.2
	0.9s		3.30nm		4.3mb	
LSF	51.93	303	eP	52	02.20	-0.8
INK	71.77	10	eP	54	16.50	0.7
FBA	72.17	17	P	54	19.00	0.7
YKA	79.28	4	eP	54	58.30	-0.1
	0.6s		1.90nm		4.2mb	

S.D. = 0.8 on 26 of 27 obs.

? SEP 16, 1990 19h 31m 12.64± 3.08s
37.714 N ±15.1km 21.370 E ±34.6km
DEPTH = 5.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.1 (ATH).

ITM	0.69	140	ePg	31	25.50	-1.0
EVR	1.25	16	ePb	31	32.30	-4.1X
VLI	1.60	128	ePn	31	43.00	1.4
ATH	1.88	81	ePn	31	45.50	-0.1
KZN	2.61	7	ePb	31	56.00	-0.2

S.D. = 1.7 on 4 of 5 obs.

& SEP 16, 1990 21h 13m 32.40s
34.800 N 95.530 W
DEPTH = 5.0km
OKLAHOMA (499)
<TUL>. mbLg 2.5 (TUL). Felt (IV) at Dow and Hartshorne; (III) at Alderson and Haileyville.

UYO	1.09	125	iPg	13	52.00	-1.3
TUL	1.13	349	iPg	13	52.80	-1.2
SIO	1.14	326	iPg	13	52.70	-1.5
BIX	1.20	348	ePg	13	54.50	-0.8
FKO	1.59	287	P	14	01.00	-0.3
OLY	3.40	77	ePn	14	28.20	1.0
			ePg	14	37.10	
			eLg	15	21.20	
ELC	5.68	62	ePn	14	58.10	-1.4
			eLg	16	30.50	
GOL	9.24	305	ePn	15	45.80	-3.8
	8 obs. associated					

? SEP 16, 1990 21h 30m 20.42± 1.06s
51.505 N ± 6.6km 6.868 E ±15.0km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 1.8 (BNS).

WTS	0.49	356	iPg	30	30.40	0.0
	0.5s		14.00nm			
BNS	0.58	160	iPd	30	32.10	0.0
	0.3s		83.50nm			
			iS	30	38.30	
ENN	0.95	219	iPg	30	38.80	0.3
			iSg	30	53.70	
MEM	1.05	212	Pc	30	39.80	-0.4
			iS	30	56.80	

S.D. = 0.5 on 4 of 4 obs.

? SEP 17, 1990 00h 05m 24.58± 2.31s
18.336 S ±13.4km 169.119 E ±20.5km
DEPTH = 41.8 ± 17.2 km
5.1mb (2 obs.)
VANUATU ISLANDS (186)

PVC	0.97	308	iP	05	42.00	0.1
			iS	05	59.00	
DZM	4.49	214	iPd	06	31.90	-0.1
			iS	07	27.20	
WRA	32.86	261	eP	11	56.20	-0.7
ASPA	33.25	255	iPc	12	00.80	0.6
	0.5s		43.00nm		5.6mb	
	Z 21s		0.24um		3.9Msz	
			LR	24	31.00	
MBL	46.33	258	eP	13	40.00	-8.5X
CHTO	78.18	294	(P)	17	21.00	-0.7
TNP	88.92	49	P	18	15.60	-0.8
	1.0s		3.00nm		4.6mb	
GRF	144.03	335	iPKPd	24	55.30	-1.9
	0.9s		9.00nm			
			e	25	00.70	
OHR	144.65	317	ePKP	24	57.20	-1.4
BHG	144.85	332	iPKPc	24	58.20	-0.5
MEM	145.10	341	PKP	24	58.50	-0.4
FUR	145.21	334	iPKPc	24	59.80	0.5
LJU	145.28	328	e(PKP)	25	04.50	5.0X
VOY	145.60	329	e(PKP)	25	03.70	3.5X
SOTA	145.97	333	iPKPd	25	02.30	1.5
	1.1s		11.50nm			
			i	25	06.10	
DOU	145.97	342	PKPc	25	01.00	0.5
			i	25	06.40	
CDF	146.57	338	ePKP	25	02.20	0.6
	0.9s		9.85nm			
BSF	147.23	338	ePKP	25	03.90	1.2
HAU	147.24	338	ePKP	25	04.10	1.5
BCAO	148.10	248	iPKPc	25	09.00	4.0X
	0.5s		5.00nm			
LOR	148.71	341	ePKP	25	08.00	3.0X
	0.9s		4.90nm			
LBF	148.92	340	ePKP	25	08.70	3.3X
SSF	149.01	341	ePKP	25	08.90	3.4X
	0.9s		5.75nm			
LPL	149.19	335	ePKP	25	10.00	3.9X
	0.9s		5.75nm			
LPG	149.20	335	ePKP	25	10.10	3.9X
	0.8s		4.70nm			
TCF	150.10	342	ePKP	25	11.40	4.2X
LSF	150.33	342	ePKP	25	11.20	3.7X
	0.9s		4.10nm			
PGF	150.55	329	ePKP	25	12.60	4.5X
	0.8s		8.05nm			

S.D. = 1.1 on 16 of 28 obs.

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* SEP 17, 1990 00h 44m 56.26± 1.07s
20.749 S ±12.1km 68.841 W ±21.6km
DEPTH = 120.0km (geophysicist)
CHILE-BOLIVIA BORDER REGION (124)

ANT	3.28	206	eP	45	47.00	0.0
CNCB	4.00	12	P	45	57.00	-0.3
			S	46	45.00	
LPB	4.25	10	P	46	02.00	1.5
ZOBO	4.51	9	P	46	03.00	-1.2
SIV	8.76	59	P	47	01.60	0.0

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

SEP 17, 1990 00h 55m 08.78± 0.44s
38.107 N ± 4.7km 1.799 W ± 4.5km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 3.9 (MDD). ML 3.7 (LDG). Felt (IV) at Bullas, Caravaco and Morotollo.

EALH	0.39	130	iPgc	55	16.20	-0.6
			eSg	55	21.80	

EVIA	0.77	314	iPgd	55	24.50	0.7
			eSg	55	35.80	
ACU	1.16	69	iPgd	55	32.90	2.3
			eSg	55	47.30	
ENIJ	1.18	196	iPgd	55	29.00	-1.8
			eSg	55	45.30	
EBAN	1.57	273	iPnc	55	36.80	0.1
			eSn	55	56.30	
ECHE	1.62	23	iPnc	55	38.90	1.5
			eSn	56	00.90	
AFC	1.63	239	iPnd	55	38.50	0.8
			eSn	55	58.30	
ECOG	1.63	240	iPnc	55	38.50	0.8
			eSn	55	58.20	
TOL	2.49	316	ePn	55	50.00	0.0
			iPg	55	56.50	
			eSn	56	18.00	
			iSg	56	29.00	
MAL	2.49	237	iPnc	55	51.50	1.5
			iSg	56	26.50	
ETOR	2.72	356	iPnc	55	54.90	1.6
EHOR	2.74	265	iPnc	55	52.30	-1.3
			eSn	56	25.80	
EPRU	2.96	248	ePn	55	57.00	0.3
GUD	3.12	325	iPnc	55	59.30	0.2
			eSn	56	35.70	
MOMI	3.60	242	eP	56	07.50	1.7
CNIL	3.81	244	eP	56	09.00	0.2
EPLA	3.86	302	iPnc	56	08.50	-1.1
EVAL	3.95	264	ePn	56	08.60	-2.1
			eSn	56	53.20	
ESEL	4.02	64	ePn	56	12.10	0.4
ECRI	4.53	353	iPnc	56	20.80	1.8
EPF	5.18	18	Pn	56	29.60	1.4
LPO	6.94	18	Pn	56	53.00	0.0
			Sg	58	42.00	
LFF	7.09	15	Pn	56	55.10	0.1
			Sg	58	48.00	
CAF	7.40	22	Pn	56	58.20	-1.3
RJF	7.61	18	Pn	57	01.00	-1.3
LMR	8.19	48	Pn	57	10.00	-0.4
LSF	8.50	16	Pn	57	13.40	-1.4
MFF	8.58	8	Pn	57	15.50	-0.3
TCF	8.70	19	Pn	57	16.00	-1.5
MAF	8.73	20	Pn	57	16.80	-1.2
BGF	9.12	21	Pn	57	22.00	-1.3
PGF	9.36	58	Pn	57	27.00	0.2

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

SEP 17, 1990 02h 07m 56.43± 0.70s
38.327 N ± 5.2km 21.921 E ±10.4km
DEPTH = 5.0km (geophysicist)
GREECE (364)
ML 3.1 (ATH).

EVR	0.60	352	ePb	08	07.80	-0.6
VLS	1.06	262	ePn	08	17.00	0.1
ITM	1.15	180	ePb	08	18.00	-0.3
ATH	1.46	103	ePg	08	27.50	4.1X
VLI	1.80	153	ePn	08	28.50	0.2
KZN	1.98	357	ePb	08	31.50	0.5
OHR	2.91	343	ePn	08	47.80	3.5X
SKO	3.66	354	ePn	08	55.00	0.1

S.D. = 0.5 on 6 of 8 obs.

• SEP 17, 1990 02h 09m 14.07± 0.47s
18.385 S ±16.2km 169.383 E ± 8.7km
DEPTH = 33.0km (normal)
5.4mb (1 obs.)
VANUATU ISLANDS (186)

PVC	1.20	302	iP	09	33.50	-1.1
			iS	09	50.00	
DZM	4.59	216	iPc	10	23.20	0.1
			iS	11	18.50	
SGE	8.17	86	eP	11	11.00	-2.4
VUN	8.64	89	eP	11	20.50	0.7
BWA	24.58	225	eP	14	37.70	5.3X
CAN	24.72	223	eP	14	37.70	3.9X
WRA	33.10	262	eP	15	48.00	-1.3
ASPA	33.48	255	iPc	15	51.90	-0.7
	0.7s		40.00nm			5.4mb
	Z 20s		0.30um			4.0Msz
			LR	28	35.90	
CHTO	78.42	294	(P)	21	14.80	1.2
KHC	143.64	333	ePKP	28	44.50	-2.8
SKO	144.00	318	iPKP	28	45.90	-2.1
OHR	144.85	317	ePKP	28	48.00	-1.6
BHG	145.01	332	iPKPc	28	49.40	-0.2
MEM	145.22	341	PKP	28	49.80	0.0
FUR	145.36	334	iPKPc	28	50.90	0.7
LJU	145.45	329	e(PKP)	28	50.50	0.1
CEY	145.72	328	e(PKP)	28	52.00	1.1
VOY	145.77	329	ePKP	28	51.00	-0.1
			i	28	55.00	
			e	29	08.00	
SNF	145.81	343	PKP	28	51.60	0.8
FVI	145.90	331	PKP	28	51.50	0.5
DOU	146.10	342	PKP	28	52.30	1.0
SOTA	146.12	333	iPKPc	28	52.80	1.2
	1.4s		32.40nm			
			i	29	01.90	
OGA	146.48	333	ePKP	28	54.50	2.2X
CDF	146.70	338	ePKP	28	53.10	0.6
	0.9s		6.55nm			
BSF	147.37	338	ePKP	28	55.00	1.4
HAU	147.38	339	ePKP	28	55.10	1.6
BCAO	148.31	248	iPKPc	29	04.60	8.6X
	0.7s		6.00nm			
PGD	148.40	328	PKP	29	02.40	7.0X
ASS	148.49	326	PKP	29	02.00	6.5X
FLN	148.60	347	ePKP	28	56.70	1.3
LOR	148.84	341	ePKP	28	58.70	2.9X
LBF	149.05	340	ePKP	28	59.50	3.3X
SSF	149.13	341	ePKP	28	59.90	3.6X
	1.6s		31.10nm			
LPL	149.34	336	ePKP	29	01.00	4.1X
	1.4s		17.45nm			
LPG	149.35	336	ePKP	29	01.00	3.9X
	1.3s		10.85nm			
SMF	149.40	340	ePKP	29	00.30	3.6X
	1.4s		13.05nm			
LPF	149.41	347	ePKP	29	00.20	3.6X
	1.3s		28.90nm			
BNI	149.75	335	PKP	29	03.20	5.8X
BGF	149.79	341	ePKP	29	01.30	4.0X
MAF	150.17	341	ePKP	29	02.50	4.6X
	1.5s		20.90nm			
TCF	150.22	342	ePKP	29	02.40	4.4X
	1.5s		20.90nm			
LSF	150.45	343	ePKP	29	02.70	4.4X
MFF	150.56	345	ePKP	29	03.00	4.6X
PGF	150.72	330	ePKP	29	05.20	6.3X
	0.7s		6.60nm			

S.D. = 1.3 on 24 of 44 obs.

• SEP 17, 1990 03h 04m 24.70± 1.57s
30.535 N ± 9.7km 141.003 E ± 8.2km
DEPTH = 63.8 ± 11.5 km
4.8mb (19 obs.)
SOUTH OF HONSHU, JAPAN (211)

IIDJ	5.57	333	eP	05	49.20	2.2
KAKJ	5.70	353	P	05	47.00	-1.7
			S	06	50.20	
CHJJ	5.75	344	P	05	48.70	-0.8
			S	06	57.60	
WKYJ	5.87	310	P	05	52.40	1.2
MAT	6.43	339	eP	05	58.00	-0.9
	0.5s		19.72nm			4.9mb
			(S)	07	10.00	
TSRJ	6.53	321	eP	06	02.80	2.5
MTMJ	6.60	337	P	06	01.70	0.3
TKSJ	6.82	302	P	06	06.50	2.2
NIIJ	6.89	347	P	06	03.10	-2.2
YAMJ	7.66	354	eP	06	13.80	-2.2
YONJ	7.86	308	eP	06	22.70	4.0X
OFUJ	8.54	3	eP	06	22.90	-5.2X
			eS	07	53.40	
KAGJ	8.72	277	eP	06	34.10	3.5X
KUMJ	8.91	286	P	06	40.10	6.9X
SHNJ	9.10	296	eP	06	42.40	6.6X
BJI	22.31	302	eP	09	18.00	0.1
	0.9s		18.00nm			4.5mb
LZH	31.41	290	P	10	42.50	0.4
	1.5s		20.00nm			4.7mb
CHTO	39.75	263	P	11	52.30	-0.6
GUN	47.78	281	P	12	57.80	-0.2
	0.6s		25.00nm			5.4mb
PKI	48.28	281	P	13	00.80	-1.0
KKN	48.32	281	P	13	01.00	-1.0
	0.6s		25.00nm			5.4mb
DMN	48.52	281	P	13	02.80	-0.8
GKN	48.80	282	P	13	05.10	-0.5
	0.6s		16.00nm			5.2mb
WRA	50.59	188	eP	13	18.20	-0.9
ASPA	54.32	188	eP	13	46.80	-0.1
	0.6s		8.00nm			4.9mb
NDI	54.81	285	eP	13	49.50	-1.0
FBA	54.84	30	P	13	49.50	-0.8
	0.8s		7.33nm			4.8mb
MBL	55.28	204	eP	13	53.40	-0.4
INK	60.36	25	eP	14	28.00	-0.9
SOD	70.83	338	eP	15	36.00	-0.1
GMW	72.02	45	P	15	44.10	0.5
PNT	73.13	42	eP	15	52.00	1.9
	0.8s		6.00nm			4.6mb
SUF	73.65	334	iP	15	52.80	0.0
	0.5s		3.00nm			4.5mb
NEW	75.08	43	P	16	03.40	2.0
	1.0s		6.38nm			4.5mb
NUR	75.53	333	eP	16	03.00	-0.6
SES	77.40	39	eP	16	14.00	-0.3
LRM	79.07	43	eP	16	24.50	0.6
MFS	79.87	336	eP	16	26.50	-1.0
	0.5s		3.50nm			4.5mb
TNP	80.12	52	P	16	29.50	-0.1
IMW	81.03	44	P	16	35.20	0.8
DUG	81.91	48	P	16	40.00	1.2
DAU	82.78	47	P	16	44.30	0.7
BBTK	83.42	313	iPc	16	48.00	1.4
VRI	83.47	320	ePc	16	49.00	2.4
KSP	85.44	328	eP	16	56.70	0.3
			e	17	12.50	
ALQ	89.05	49	e(P)	17	21.00	6.5X
	0.7s		1.20nm			4.3mb
LOR	93.47	332	eP	17	34.00	-0.4
LBF	93.65	332	eP	17	34.70	-0.6
	0.7s		2.75nm			4.8mb
LPL	93.67	330	eP	17	35.40	-0.2
LPG	93.68	330	eP	17	35.50	-0.3
	0.7s		3.30nm			4.9mb
SSF	93.78	332	eP	17	35.70	-0.1
	0.7s		3.30nm			4.9mb
SMF	93.98	332	eP	17	36.60	-0.2
AVF	94.06	332	eP	17	37.10	0.0
	0.7s		5.50nm			5.1mb
BGF	94.45	333	eP	17	38.70	-0.3
	0.7s		3.30nm			4.9mb
MAF	94.84	332	eP	17	41.00	0.2
TCF	94.93	333	eP	17	41.10	-0.1
LSF	95.23	333	eP	17	42.30	-0.2
	0.8s		4.05nm			4.9mb
ZOBO	149.84	69	PKP	24	10.00	4.7X
LPB	150.01	69	ePKP	24	11.00	5.6X
CNCB	150.25	69	PKP	24	13.00	7.1X
CCH	152.04	68	ePKP	24	19.00	10.8X

S.D. = 1.1 on 51 of 61 obs.

• SEP 17, 1990 04h 42m 52.20± 0.38s
16.318 S ±17.5km 173.801 W ±10.1km
DEPTH = 128.8km (4 depth phases)
4.5mb (11 obs.)
TONGA ISLANDS (173)

DZM	19.51	250	iPc	47	12.80	0.9
PMO	24.97	91	iP	48	05.20	-0.2
	1.2s		25.00nm			4.6mb
VAH	25.20	91	iP	48	06.80	-0.7
	1.2s		15.00nm			4.4mb
TPT	25.24	91	iP	48	07.50	-0.4
	1.2s		40.00nm			4.8mb
RUV	25.44	91	iP	48	09.30	-0.5
	1.2s		15.00nm			4.4mb
TOO	41.59	231	iPd	50	29.00	0.1
STK	43.25	241	iPc	50	42.20	-0.3
	1.0s		13.00nm			4.6mb
WRA	49.26	258	eP	51	28.00	-1.9
ASPA	49.47	253	iPc	51	29.70	-1.8
	1.0s		26.00nm			5.0mb
	Z 20s		0.13um			3.9Msz
			LR	09	28.00	
FORR	54.63	244	eP	52	08.00	-1.9
WARB	55.96	249	eP	52	16.00	-3.6X
MBL	62.64	254	iPc	53	04.20	-1.3
	0.4s		4.00nm			4.7mb
CMB	73.70	41	P	54	12.70	-1.1
GLA	74.69	48	P	54	19.00	-0.6
LBFM	74.80	38	P	54	20.00	-0.2
TNP	75.77	43	P	54	25.20	-0.6
			e	54	56.50	124km

17d 04h

RMW	78.69	33	P	54	40.40	-1.2
PNT	80.99	32	eP	54	54.00	0.3
	0.8s	5.00nm			4.3mb	
ALQ	81.68	50	eP	54	57.60	-0.3
	1.1s	5.70nm			4.3mb	
		e		55	08.00	33kmX
ANMO	81.68	50	P	54	58.00	0.2
	1.1s	8.31nm			4.4mb	
IMW	82.89	40	P	55	03.60	-0.5
BW06	83.21	42	P	55	04.30	-1.3
	1.0s	9.00nm			4.6mb	
FBA	83.36	11	P	55	04.80	-0.8
		e		55	38.00	130km
GOL	84.57	46	P	55	12.30	-0.2
		e		55	45.20	128km
SES	86.17	35	eP	55	19.00	-1.0
		pP		55	53.00	133km
MAW	86.80	199	iP	55	24.10	1.3
KRA	144.56	345	ePKP	02	13.30	-1.5
KSP	144.62	349	ePKPd	02	14.00	-0.9
		e		02	49.00	
CLL	144.67	353	ePKP	02	14.00	-1.0
SPC	145.27	344	ePKP	02	14.70	-1.6
MOX	145.48	354	iPKP	02	16.50	0.1
	1.4s	31.00nm				
PRU	145.74	350	PKPc	02	17.30	0.5
	1.2s	16.50nm				
		e		02	21.70	
MEM	145.79	0	PKP	02	17.40	0.5
SNF	145.86	2	PKPc	02	17.60	0.6
DOU	146.28	2	PKP	02	19.60	1.9
GRF	146.46	354	iPKPd	02	20.70	2.6
		e		02	55.40	
KHC	146.73	351	PKP	02	21.00	2.5
		e		02	56.50	
ZST	146.97	347	ePKP	02	21.10	2.2
SRO	147.04	345	ePKP	02	20.50	1.5
FLN	147.18	8	iPKPc	02	21.10	1.9
	1.1s	24.40nm				
LDF	147.40	8	iPKPc	02	21.70	2.2
	1.0s	16.00nm				
GRR	147.50	9	iPKPc	02	22.30	2.6
	1.1s	34.25nm				
LPF	147.82	9	iPKPc	02	23.10	2.9X
	0.9s	26.20nm				
CDF	147.98	359	ePKP	02	23.80	3.2X
	0.9s	14.75nm				
HAU	148.40	360	iPKPc	02	25.10	3.9X
	0.8s	12.10nm				
BSF	148.57	359	ePKP	02	25.30	3.7X
LOR	149.08	3	iPKPc	02	26.60	4.3X
	0.9s	13.10nm				
SSF	149.26	4	iPKPc	02	27.40	4.8X
	1.0s	23.00nm				
MFF	149.35	9	ePKP	02	27.00	4.3X
	1.1s	14.65nm				
LBF	149.37	3	ePKP	02	27.40	4.6X
	1.0s	14.00nm				
DSI	149.44	305	ePKP	02	28.00	4.7X
AVF	149.52	4	ePKP	02	27.50	4.6X
	1.0s	11.00nm				
SMF	149.70	3	ePKP	02	28.20	5.0X
	1.1s	17.10nm				
BGF	149.72	5	iPKPc	02	28.30	5.0X
	1.0s	19.00nm				
LSF	149.90	6	ePKP	02	28.40	4.8X
	0.9s	16.40nm				
TCF	149.93	6	iPKPc	02	28 60	5.0X
	1.1s	11.00nm				
MAF	150.03	5	ePKP	02	29.20	5.4X
	1.0s	18.00nm				
PRNI	150.20	303	ePKP	02	30.00	5.5X
MBH	150.50	302	ePKP	02	30.00	5.1X
RJF	150.84	7	ePKP	02	31.00	6.0X
LPL	150.89	359	ePKP	02	32.10	6.7X
	0.9s	9.85nm				
LPG	150.91	359	ePKP	02	32.30	6.8X
	0.8s	8.75nm				
LFF	151.10	8	ePKP	02	31.60	6.2X
	0.9s	13.10nm				
CAF	151.27	6	iPKPc	02	32.10	6.4X
	1.0s	8.00nm				
LPO	151.41	7	iPKPc	02	32.20	6.3X
	0.7s	6.60nm				
OHR	152.26	336	ePKP	02	33.20	5.9X
	0.9s	400.00nm				
	S.D. = 1.4	on	41 of	66	obs.	

SEP 17, 1990 05h 56m 04.59± 0.32s
44.347 N ± 3.7km 10 059 E ± 3.0km
DEPTH = 33.0km (normal)
NORTHERN ITALY (545)
ML 3.3 (LDG). MD 2.8 (STR).

BDI	0.48	126	P	56	16.30	1.3
			eSg	56	24.50	
MME	0.49	108	P	56	17.50	2.3
			eSg	56	25.60	
BOB	0.61	314	P	56	19.30	2.5
			eSg	56	31.00	
PII	0.71	152	P	56	18.60	0.5
			eSg	56	28.30	
PCP	1.10	281	P	56	24.94	1.1
			S	56	39.30	
CKI	1.28	274	P	56	26.90	0.7
			eSg	56	43.40	
PGD	1.29	111	P	56	25.50	-1.0
			eSg	56	40.40	
FIN	1.34	265	P	56	27.59	0.5
			S	56	43.68	
SFI	1.36	108	P	56	27.00	-0.4
MDI	1.45	350	P	56	29.60	0.9
			eSg	56	47.60	
CRE	1.54	117	P	56	29.60	-0.6
			eSg	56	48.00	
ROB	1.57	269	P	56	30.92	0.4
			S	56	47.61	
IMI	1.62	255	P	56	31.20	-0.1
			S	56	48.37	
VAI	1.77	329	P	56	34.10	0.7
			eSn	56	56.00	
ENR	1.90	267	P	56	35.89	0.5
			S	56	54.72	
AUTN	1.93	260	Pn	56	36.24	0.4
			Sg	56	59.17	
TMA	1.95	335	iPd	56	36.70	0.6
SBF	1.95	257	Pn	56	36.20	0.1
			Sn	56	59.50	
ORX	1.96	312	P	56	36.15	-0.1
			S	56	59.36	
PGF	1.96	204	Pg	56	35.05	-1.1
			Sg	56	57.00	
STV	1.97	268	P	56	36.76	0.4
			S	56	56.69	
AURF	2.02	258	Pn	56	37.19	0.1
			Sg	57	01.03	
DOI	2.02	275	P	56	37.00	-0.1
			eSn	57	02.10	
REVF	2.03	254	Pn	56	37.06	-0.2
CTI	2.04	33	Pd	56	36.80	-0.6
			eSn	57	00.00	
TOUF	2.05	262	Pn	56	38.19	0.6
			Sg	57	02.59	
PZZ	2.13	275	P	56	38.22	-0.4
			S	56	58.81	
MVIF	2.14	259	Pn	56	39.25	0.4
			Sg	57	04.45	
VDL	2.18	349	iPd	56	40.50	1.1
OSS	2.34	1	ePd	56	43.20	1.5
LSD	2.34	299	P	56	40.44	-1.4
			S	57	03.04	
CALN	2.36	257	Pn	56	42.09	0.1
RRL	2.41	285	P	56	45.92	3.2X
FRF	2.59	254	Pn	56	44.70	-0.3
			Sn	57	13.80	
LPG	2.62	297	Pn	56	45.30	-0.4
LMR	2.76	250	Pn	56	46.90	-0.5
			Sn	57	17.20	
EMS	2.80	309	ePd	56	50.20	2.0
LRG	2.82	253	Pn	56	48.00	-0.3
			Sn	57	20.00	
SAX	2.95	350	ePd	56	51.40	1.0
FVI	2.95	39	P	56	48.80	-1.4
			eSn	57	21.90	
CDR	3.17	259	ePn	56	53.00	-0.3
			eSn	57	28.00	
VOY	3.19	57	ePn	56	51.80	-1.9
			eSn	57	26.90	
BSF	4.16	328	Pn	57	07.50	0.0
			Sn	57	51.20	
HAU	4.48	326	Pn	57	10.80	-1.1
			Sn	57	58.40	
CDF	4.50	336	Pn	57	10.80	-1.5
			Sn	57	58.40	

SMF	4.94	300	Pn	57	16.80	-1.6
			Sn	58	08.00	
LBF	5.01	304	Pn	57	18.30	-1.2
AVF	5.30	300	Pn	57	22.00	-1.6
BGF	5.53	296	Pn	57	25.20	-1.6
	S.D. = 1.1	on	48 of	49	obs.	

? SEP 17, 1990 06h 57m 16.69± 2.67s
15.172 S ±146.km 72.107 W ±76.5km
DEPTH = 130.0km (geophysicist)
SOUTHERN PERU (117)

ZOBO	3.99	106	Pc	58	17.10	-0.6
LPB	4.09	110	P	58	20.00	1.1
CNCB	4.29	113	P	58	21.80	0.1
PT0B	5.37	306	iP	58	36.70	0.5
			iS	59	27.70	
NNA	5.59	304	iP	58	38.30	-0.5
	0.5s	11.97nm			4.4mb	X
CCH	6.13	112	P	58	46.00	-0.6
	S.D. = 0.9	on	6 of	6	obs.	

• SEP 17, 1990 07h 03m 32.05± 1.28s
37.384 N ±13.0km 48.929 E ±10.5km
DEPTH = 60.7 ± 13.7 km
4.5mb (18 obs.)
NORTHWESTERN IRAN (345)
Felt at Rudbar.

TAB	2.17	289	eP	04	05.00	-1.6
TEH	2.57	129	ePc	04	11.50	-0.7
KER	3.37	207	ePd	04	25.00	1.5
MLR	19.00	302	eP	07	54.00	2.4
OHR	22.06	288	eP	08	24.50	1.4
KSP	26.77	311	ePc	09	09.50	1.7
CLL	28.89	310	eP	09	28.00	1.8
	1.3s	12.00nm			4.4mb	
PGF	30.83	292	eP	09	43.60	-0.8
	1.0s	10.00nm			4.5mb	
HFS	31.89	327	eP	09	53.20	-0.1
	0.4s	1.90nm			4.3mb	
SBF	31.89	295	eP	09	53.50	-0.1
	0.8s	21.50nm			5.0mb	
LPG	32.33	298	eP	09	57.80	0.1
	0.8s	4.05nm			4.3mb	
FRF	32.48	294	eP	09	58.00	-0.7
	0.8s	8.05nm			4.6mb	
SOD	32.58	344	eP	10	09.00	9.8X
LMR	32.60	294	eP	09	58.90	-0.8
N82	33.40	327	P	10	06.30	-0.2
	0.8s	2.10nm			4.1mb	
LOR	34.33	301	eP	10	13.90	-0.8
	1.0s	8.00nm			4.6mb	
KEV	34.52	347	eP	10	11.00	-4.9X
AVF	34.68	300	eP	10	17.00	-0.6
	0.8s	4.05nm			4.4mb	
GBA	34.73	125	P	10	19.00	0.7
			S	10	49.00	
MAF	35.24	299	eP	10	22.20	-0.2
	1.0s	4.05nm			4.3mb	
TCF	35.48	300	eP	10	24.50	0.0
	0.8s	4.05nm			4.4mb	
RJF	36.03	298	eP	10	29.50	0.4
	1.0s	8.00nm			4.6mb	
LFF	36.61	297	eP	10	33.90	0.0
	0.9s	13.10nm			4.9mb	
LDF	36.99	304	eP	10	37.50	0.3
	0.8s	5.35nm			4.5mb	
MFF	37.09	300	eP	10	37.70	-0.3
	0.8s	8.05nm			4.7mb	
FLN	37.23	304	eP	10	39.00	-0.1
	0.6s	5.40nm			4.7mb	
GRR	37.49	303	eP	10	41.30	0.0
	0.8s	16.10nm			5.0mb	
LPF	37.62	303	eP	10	42.80	0.4
	1.0s	12.00nm			4.8mb	
KIC	57.62	251	P	13	16.00	-2.3
	S.D. = 1.1	on	27 of	29	obs.	

• SEP 17, 1990 07h 57m 08.64± 1.58s
24.667 S ±16.9km 66.283 W ±11.7km
DEPTH = 200.0km (geophysicist)
SALTA PROVINCE, ARGENTINA (129)

ANT	3.89	283	iPc	58	09.80	0.2
			iS	58	48.50	
CCH	7.25	1	P	58	54.50	1.2

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CNCB     7.98 348 P      59 03.00   -0.2
                  e      00 25.00
LPB      8.27 348 P      59 07.00    0.2
ZOBO     8.53 348 P      59 09.00   -1.3
                  e      00 34.00
SIV      9.92  30 P      59 31.00    3.2X
PPD     14.00  82 eP     00 19.60   -0.1
      S.D. = 1.0  on   6 of   7 obs.
-------------------------------------------
*  SEP  17, 1990  08h 07m 25.21± 2.35s
   32.345 S ±10.0km   72.619 W ±21.8km
   DEPTH =  33.0km  (normal)
 OFF COAST OF CENTRAL CHILE          (134)

IHA      1.07 130 iPd    07 44.40    0.5
                  iS     07 53.50
LCCH     1.43 142 iP     07 51.50    2.4
                  iS     08 06.00
ROCH     1.49 115 iPd    07 48.50   -1.7
JACH     1.74 102 iPd    07 51.00   -2.7
                  iS     08 05.50
PEL      1.81 117 iPd    07 53.70   -1.0
TACH     1.92 133 eP     07 59.80    3.6X
SAN      1.98 124 eP     07 56.50   -0.6
                  iS     08 16.00
PCH      2.18 126 iPc    08 00.20    0.3
                  iS     08 21.00
FCH      2.19 117 iPd    07 59.20   -1.1
                  iS     08 20.20
RTBS     2.77  77 e(P)   08 09.80    1.5
MDZ      3.23 101 eP     08 17.00    2.2
                  e      08 18.80
                  iS     08 51.20
RTCB     3.36  76 ePc    08 17.50    0.8
ZON      3.44  78 eP     08 18.50    0.6
RTCV     3.50  83 eP     08 19.50    0.8
RTLL     3.67  75 ePd    08 21.00   -0.1
                  eS     09 03.90
CFA      3.79  80 e(P)   08 23.20    0.4
ARE     15.85   4 eP     11 19.00   11.2X
CCH     16.01  23 P      11 19.00    9.1X
CNCB    16.03  16 eP     11 15.00    4.6X
LPB     16.27  16 P      11 24.00   10.7X
ZOBO    16.52  15 P      11 17.00    0.4
      Z  16s      0.22um
                  LR     16 20.00
SIV     19.37  35 P      11 50.80   -0.4
PPD     21.52  67 eP     12 11.00   -2.5
      S.D. = 1.5  on  18 of  23 obs.
-------------------------------------------
*  SEP  17, 1990  08h 19m 51.64± 1.68s
   27.833 N ± 9.3km  139.231 E ±18.2km
   DEPTH = 526.4 ± 20.6 km
   4.3mb ( 10 obs.)
 BONIN ISLANDS REGION                (212)

MAT      8.73 355 iPd    21 57.10    0.0
       0.7s     21.23nm          4.5mb
                  eS     23 36.00
WRA     47.73 186 iP     27 41.80   -0.4
ASPA    51.46 186 iPd    28 09.60   -0.3
       0.6s     18.00nm          4.7mb
MBL     52.19 203 eP     28 15.80    0.6
       0.4s      6.00nm          4.3mb
FBA     57.95  29 P      28 55.00    0.1
GBA     58.97 270 Pd     29 03.90    1.4
FORR    59.31 191 eP     29 04.20   -0.2
       0.3s     22.00nm          5.0mb
STK     59.43 178 eP     29 04.00   -1.1
       1.8s     15.00nm          4.1mb
MRWA    60.93 203 iPc    29 15.70    0.5
YKA     72.73  28 eP     30 25.30   -1.8
       0.7s      4.10nm          4.1mb
SOD     72.75 338 eP     30 28.00    0.9
SUF     75.39 334 iP     30 42.80    0.8
       0.4s      5.80nm          4.4mb
PNT     76.17  41 eP     30 48.00    1.5
NUR     77.21 333 eP     30 49.00   -2.9
HFS     81.69 336 eP     31 14.60   -0.8
       0.3s      3.10nm          4.3mb
NB2     81.94 337 P      31 16.60   -0.1
       0.6s      2.60nm          3.9mb
HBMT    82.03  42 eP     31 18.30    0.6
TNP     83.02  51 P      31 23.20    0.4
ALQ     91.99  49 eP     32 06.00    0.7
       0.8s      1.49nm          4.1mb
      S.D. = 1.2  on  19 of  19 obs.
-------------------------------------------
    SEP  17, 1990  08h 52m 56.71± 0.45s
     9.445 N ± 9.7km   83.852 W ± 7.3km
    DEPTH =  33.0km  (normal)
    4.8mb ( 25 obs.)
  COSTA RICA                         ( 78)
       MD 4.7 (UPA).

DVD      1.71 126 iPc    53 22.30   -2.3
                  S      53 44.00
UPA      4.29  96 iPc    54 02.00    0.7
       1.0s    480.00nm
                  S      55 11.00
BOG     10.83 116 eP     55 35.00    2.1
BMG     10.92 102 eP     55 34.00    0.0
OXX     14.64 303 eP     56 27.50    3.9X
PAG     22.58  71 eP     58 00.00    4.2X
                  eTT    20 00.00
UYO     26.46 340 iPd    58 33.10    0.4
ARE     28.50 155 eP     58 53.00    1.3
TUL     28.50 339 eP     59 00.30    9.1X
       1.1s      5.00nm          4.1mb
MEO     28.60 334 eP     58 51.00   -1.1
ZOBO    29.92 149 P      59 03.00   -1.7
      Z  22s      0.26um          3.8Msz
                  LR     03 50.00
LPB     30.15 149 (P)    58 54.00  -12.6X
                  e      59 09.00
ALQ     32.73 324 eP     59 28.00   -0.9
       1.0s      2.50nm          4.1mb
ANMO    32.73 324 P      59 28.20   -0.7
SIV     33.87 138 P      59 34.00   -4.7X
GOL     35.72 331 P      59 52.70   -1.9
       0.8s      3.42nm          4.3mb
GLA     36.97 314 eP     00 06.00    1.0
TPC     38.39 315 eP     00 18.00    1.1
PLM     38.58 313 eP     00 20.00    1.3
RVR     39.28 314 eP     00 24.00   -0.2
MWC     39.88 313 eP     00 31.00    1.5
SBB     39.95 314 eP     00 31.00    1.1
CLC     40.38 316 eP     00 34.00    0.6
ISA     40.91 315 eP     00 38.00    0.3
TNP     41.38 319 P      00 41.30   -0.4
       0.7s      3.33nm          4.2mb
PHAM    42.35 314 P      00 50.50    1.0
PPD     44.69 135 eP     01 07.70   -0.9
ORV     44.98 318 P      01 11.60    0.8
LBFM    46.18 320 P      01 19.60   -0.9
SO81    46.61 112 eP     01 19.90   -4.1X
SCH     47.25  13 ePd    01 28.70    0.2
       0.8s     32.00nm          5.4mb
FFC     47.41 346 eP     01 28.00   -1.8
       0.9s     10.00nm          4.8mb
PNT     49.67 330 eP     01 46.00   -1.3
       0.7s      5.00nm          4.7mb
INK     67.12 342 eP     03 47.00   -1.9
TOL     76.20  51 eP     04 44.00    0.3
ALOJ    76.21  54 eP     04 45.50    1.5
ATEJ    76.29  54 eP     04 46.00    1.5
ASMO    76.49  54 eP     04 49.00    3.4X
APHE    76.55  54 eP     04 47.00    1.1
EKA     77.00  35 Pd     04 47.50   -0.3
       1.3s     27.40nm          5.1mb
LKO     77.01  82 P      04 45.52   -3.2X
LPF     78.25  43 eP     04 54.60   -0.2
       0.8s      8.05nm          4.8mb
GRR     78.36  42 eP     04 55.50    0.0
       0.9s      9.85nm          4.8mb
FLN     78.60  42 eP     04 56.70   -0.1
       1.0s     16.00nm          5.0mb
LDF     78.85  42 eP     04 58.00   -0.1
       1.0s     16.00nm          5.0mb
MFF     78.89  44 eP     04 58.30   -0.1
       1.0s     12.00nm          4.9mb
EPF     79.39  48 eP     05 01.60    0.3
       1.2s     14.90nm          4.9mb
LPO     79.91  46 eP     05 03.70   -0.3
       1.2s     29.75nm          5.2mb
CAF     80.52  46 eP     05 07.10   -0.2
       1.2s      5.95nm          4.5mb
TCF     80.53  45 eP     05 06.80   -0.5
       1.0s      9.00nm          4.7mb
MAF     80.79  45 eP     05 08.30   -0.3
       1.2s     13.40nm          4.8mb
SSF     81.37  44 eP     05 10.70   -0.9
       0.8s      3.35nm          4.4mb
LOR     81.59  43 eP     05 12.00   -0.8
       1.0s      6.00nm          4.6mb
NB2     84.26  29 P      05 26.40    0.1
       1.0s      9.90nm          4.9mb
HFS     85.63  30 eP     05 31.70   -1.3
       1.0s      7.90nm          4.9mb
PGF     85.78  48 eP     05 34.30    0.0
       1.0s      8.00nm          4.9mb
MOX     86.22  39 eP     05 37.00    0.8
CLL     86.96  39 iPd    05 40.30    0.5
       1.5s     19.00nm          5.1mb
UPP     87.61  30 iP     05 44.90    2.2
BRG     87.63  39 eP     05 42.60   -0.4
       1.0s     10.00nm          5.0mb
SHL    144.95   7 iPKP   12 29.50   -3.7X
GBA    150.52  39 PKP    12 46.20    4.2X
      S.D. = 1.1  on  52 of  62 obs.
-------------------------------------------
    SEP  17, 1990  09h 22m 53.34± 0.38s
    35.961 N ± 6.4km  100.084 E ± 6.2km
    DEPTH =  16.5km  (  2 depth phases)
    4.8mb ( 19 obs.)
  QINGHAI PROVINCE, CHINA             (325)
       ML 4.9 (BJI).

LZH      3.05  87 Pnc    23 44.00    2.1
       1.0s  4680.00nm
                  Pg     23 49.00
                  Sn     24 19.70
                  Sg     24 27.00
SHL     12.53 216 eP     25 53.50   -0.3
BJI     13.33  67 eP     26 02.00   -2.2
                  eLg    29 44.00
GUN     14.48 240 P      26 20.40    0.7
KKN     14.97 241 P      26 25.60   -0.5
PKI     15.01 240 P      26 26.60   -0.1
DMN     15.20 241 P      26 27.30   -1.9
GKN     15.31 243 P      26 29.60   -0.8
CHG     17.11 184 iPc    26 58.50    5.1X
       1.0s     34.50nm          4.4mb
BDT     18.67 183 eP     27 12.00   -0.6
GBA     30.16 228 P      29 07.00    2.2
SOD     51.06 332 iP     31 55.30   -1.0
SUF     51.51 326 eP     32 04.00    4.2X
       0.6s      3.80nm          4.5mb
NUR-    52.48 323 eP     32 07.00   -0.2
       0.6s     10.40nm          4.9mb
UPP     56.05 323 iP     32 32.90   -0.4
                  i      32 37.70   16km
HFS     57.88 324 eP     32 44.70   -1.6
       0.4s      2.70nm          4.6mb
NB2     58.77 325 P      32 51.60   -1.0
       0.5s      1.50nm          4.4mb
WRA     64.37 144 eP     33 30.00   -0.6
FBA     66.52  26 P      33 43.20   -0.8
                  e      33 48.60   17km
PGF     67.51 307 eP     33 51.40    0.7
       0.6s      7.20nm          5.0mb
LPG     67.52 311 eP     33 51.70    0.7
       0.8s      8.05nm          4.9mb
LPL     67.52 311 eP     33 51.70    0.8
       0.8s      6.70nm          4.9mb
SBF     67.88 309 eP     33 53.20    0.2
       0.8s     13.45nm          5.2mb
INK     68.67  19 eP     33 56.50   -0.9
SMF     68.72 313 eP     33 58.20    0.1
       0.8s      5.35nm          4.8mb
AVF     68.94 313 eP     33 59.40    0.0
       0.8s      2.70nm          4.5mb
MAF     69.69 313 eP     34 04.70    0.6
       0.8s      6.70nm          4.8mb
TCF     69.87 313 eP     34 05.60    0.4
       0.8s      4.05nm          4.6mb
GRR     70.54 316 eP     34 09.40    0.2
       0.6s      5.40nm          4.9mb
CAF     70.67 312 eP     34 11.10    1.0
       0.8s      5.35nm          4.7mb
MFF     71.09 314 eP     34 13.10    0.6
       0.8s      8.05nm          4.9mb
LPO     71.33 312 eP     34 14.90    0.9
       1.0s     16.00nm          5.1mb
LFF     71.46 312 eP     34 15.80    1.0
       0.8s      8.05nm          4.9mb
FORR    71.48 155 iPd    34 15.50    0.6
       0.4s     11.00nm          5.3mb
PPD    151.51 291 (PKP)  42 48.00    6.0X
SIV    153.97 315 (PKP)  42 54.00    8.4X
                  e      43 56.00
```

17d 09h

S.D. = 1.0 on 32 of 36 obs.

% SEP 17, 1990 09h 59m 44.09± 1.39s
16.951 N ±14.5km 99.733 W ±13.8km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	0.14	236	iP	59	50.09	-0.1
			iS	59	54.30	
PPM	2.35	26	iP	00	20.27	-1.4
			(S)	00	54.08	
UNM	2.42	12	(P)	00	18.50	-4.0X
			(S)	01	04.50	
CRX	2.44	1	(P)	00	24.50	1.7
			(S)	01	07.50	
OXX	2.88	87	iP	00	29.30	0.4
			(S)	01	09.50	
MRX	3.07	333	iP	00	30.90	-0.5
			(S)	01	15.50	
LVVM	4.17	48	(P)	01	03.50	16.5X
			(S)	02	39.00	
EVV	4.44	70	(P)	01	11.00	20.1X
TPX	7.47	105	(P)	01	03.50	-30.1X

S.D. = 1.6 on 5 of 9 obs.

? SEP 17, 1990 10h 06m 29.52± 1.19s
2.435 S ±18.4km 127.770 E ±26.7km
DEPTH = 33.0km (normal)
4.7mb (1 obs.)
CERAM SEA (270)

WRA	18.55	160	eP	10	44.80	-0.9
			eS	14	10.50	
MBL	20.15	202	eP	11	04.00	0.0
QIS	21.39	148	eP	11	17.00	0.3
ASPA	21.92	165	iPd	11	22.80	0.8
	0.4s		14.00nm			4.7mb
			eS	15	20.10	
CHG	35.35	308	eP	13	24.80	0.5
SHL	44.52	311	iP	14	39.60	-0.7

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

SEP 17, 1990 10h 19m 31.66± 1.38s
13.701 N ± 6.2km 146.273 E ± 8.1km
DEPTH = 61.6 ± 11.6 km
5.0mb (6 obs.)
SOUTH OF MARIANA ISLANDS (210)

GUA	1.33	263	ePc	19	54.70	0.3
			eS	20	17.00	
GUMO	1.37	265	ePc	19	55.10	0.2
PJG	1.37	265	iPc	19	55.00	0.1
KAGJ	22.43	323	eP	24	28.10	1.8
PMG	22.98	178	eP	24	27.00	-4.8X
KUMJ	23.47	326	eP	24	36.20	-0.2
MAT	23.87	344	(P)	24	37.00	-3.3X
			(S)	28	56.00	
SHNJ	24.55	329	eP	24	46.20	-0.7
QIS	34.67	191	eP	26	17.00	-0.5
WRA	35.43	200	eP	26	23.00	-1.0
			e	26	55.90	
BJI	37.22	320	eP	26	38.00	-0.8
	1.8s		78.00nm			5.3mb
Z	18s		0.59um			4.4Msz
			eS	32	20.00	
			eS	35	00.00	
ASPA	39.06	198	iPc	26	54.50	0.1
Z	20s		0.27um			4.1Msz
			LR	44	34.90	
BRS	41.33	171	iP	27	13.00	-0.1
MBL	43.30	217	eP	27	30.20	1.0
LZH	44.02	308	P	27	36.20	1.0
	2.0s		36.00nm			4.8mb
STK	45.54	186	eP	27	45.80	-1.2
	1.8s		48.00nm			5.1mb
CHG	45.62	283	eP	27	49.00	1.0
FORR	47.62	201	eP	28	04.00	0.6
MRWA	51.73	214	eP	28	35.00	0.0
SHL	52.25	292	iP	28	37.80	-1.5
GUN	57.69	294	P	29	18.60	-0.3
PKI	58.10	294	P	29	21.00	-0.8
KKN	58.22	294	P	29	22.00	-0.4
DMN	58.37	294	P	29	23.00	-0.6
GKN	58.79	295	P	29	25.80	-0.6
	0.8s		31.00nm			5.5mb
HYB	65.05	283	eP	30	08.50	0.3
GBA	66.66	279	Pc	30	18.50	0.0
	0.7s		3.80nm			4.5mb
KOD	67.21	275	eP	30	23.50	1.1
FBA	67.55	25	P	30	27.20	3.9X
INK	73.74	22	eP	31	00.00	-0.6
PNT	82.39	41	eP	31	49.00	0.6
	0.7s		5.00nm			4.6mb
ISA	86.32	54	eP	32	13.00	4.4X
TNP	86.70	52	P	32	11.00	0.5
CLC	86.98	54	eP	32	10.00	-1.7
S8B	87.08	55	eP	32	14.00	1.7
SES	87.47	39	eP	32	13.00	-0.8
RVR	87.61	56	eP	32	14.00	-0.8
HBMT	87.88	43	eP	32	16.20	0.0
SOD	88.22	340	eP	32	13.00	-4.0X
TPC	88.65	55	eP	32	21.00	1.2
GLA	89.92	56	eP	32	26.00	0.2
SUF	90.91	337	eP	32	29.00	-0.7
NUR	92.73	335	eP	32	29.00	-9.1X
			e	32	38.00	
ALQ	95.90	52	e(P)	32	52.00	-1.5
KIC	144.99	303	PKP	39	04.68	0.2
TIC	145.06	304	PKP	39	04.90	0.2
LIC	145.31	303	PKP	39	05.90	0.9
ZOBO	146.70	99	PKP	39	10.80	2.8
LPB	146.72	99	ePKP	39	08.00	0.2
CNCB	146.83	100	PKP	39	12.20	4.0X
SIV	153.48	98	PKP	39	25.80	8.3X

S.D. = 1.0 on 43 of 51 obs.

& SEP 17, 1990 10h 26m 59.67s
61.235 N 151.470 W
DEPTH = 67.9km
SOUTHERN ALASKA (2)
<AGS-P>.

CGLM	0.27	286	iP	27	10.37	-0.3
			eS	27	18.90	
SPU	0.29	260	iP	27	10.31	-0.5
			eS	27	19.34	
CRP	0.33	276	eP	27	10.93	-0.3
NCG	0.37	297	iP	27	10.95	-0.5
			eS	27	20.17	
SUA	0.42	56	iP	27	11.73	-0.1
			eS	27	21.75	
CKL	0.42	265	eP	27	11.21	-0.7
			eS	27	20.50	
BGL	0.45	274	eP	27	11.39	-0.7
NKA	0.51	167	eP	27	13.81	1.3
SKT	0.75	358	iP	27	14.28	-1.0
RDT	0.81	215	eP	27	15.20	-0.8
			iS	27	28.03	
PWA	0.87	61	iP	27	16.74	0.1
			eS	27	30.36	
PMS	0.92	89	eP	27	17.05	-0.3
			eS	27	31.61	
SLKM	0.95	140	eP	27	16.83	-0.9
			eS	27	31.14	
PLRM	1.18	71	iP	27	19.74	-0.9
			eS	27	35.64	
CUT	1.30	25	eP	27	21.66	-0.7
			eS	27	39.63	
GHO	1.33	65	eP	27	21.95	-0.9
SEW	1.51	138	eP	27	23.43	-1.6
			eS	27	42.87	
HOM	1.58	183	eP	27	25.57	-0.5
			eS	27	45.24	
SML	1.61	68	eP	27	25.11	-1.4
CNPM	1.72	176	eP	27	26.78	-1.2
OPT	1.81	210	eP	27	28.84	-0.4
SVW	2.02	268	eP	27	30.16	-2.0
VZW	2.39	92	eP	27	34.90	-2.4
VLZ	2.49	90	eP	27	36.15	-2.5
TOA	2.67	69	eP	27	40.60	-0.7
KLU	2.69	82	iP	27	39.03	-2.5

26 obs. associated

? SEP 17, 1990 10h 58m 23.45± 1.83s
13.701 N ±19.2km 145.959 E ±20.0km
DEPTH = 78.9 ± 14.2 km
MARIANA ISLANDS (216)

GUA	1.03	261	ePc	58	43.20	0.1
			eS	59	09.50	
GUMO	1.07	264	ePc	58	43.60	0.1
PJG	1.07	264	iPc	58	43.70	0.2
WRA	35.33	199	eP	05	11.60	-1.6
BJI	37.02	321	eP	05	27.00	-0.2
PKI	57.82	294	P	08	09.60	-0.1
DMN	58.09	294	P	08	11.40	-0.1
GKN	58.51	295	P	08	14.40	0.1
FBA	67.68	25	P	09	17.50	3.5X
TNP	86.94	52	P	11	01.20	-0.3
SES	87.66	39	eP	11	02.00	-2.4
KIC	144.74	303	PKP	17	53.60	-0.1
TIC	144.80	303	PKP	17	54.00	0.1
LIC	145.05	303	PKP	17	54.60	0.4
ZOBO	147.00	99	PKP	18	00.00	1.9
LPB	147.02	99	ePKP	18	00.00	2.1
CNCB	147.13	100	PKP	18	04.00	5.7X

S.D. = 1.2 on 15 of 17 obs.

SEP 17, 1990 11h 57m 24.11± 0.12s
5.917 S ± 3.2km 103.796 E ± 3.1km
DEPTH = 59.0km (11 depth phases)
5.7mb (55 obs.)
SOUTHERN SUMATERA (274)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 32C
Centroid Location:
Origin Time 11:57:25.8 0.3
Lat 6.39S 0.03 Lon 103.83E 0.04
Dep 53.6 2.8 Half-duration 3.8
Moment Tensor; Scale 10**17 Nm
Mrr=-3.51 0.17 Mtt= 4.90 0.19
Mff=-1.39 0.26 Mrt= 1.25 0.27
Mrf=-4.19 0.24 Mtf=-1.86 0.22
Principal Axes:

	Vol=	Plg=16	Azm= 23
T	6.09		
N	0.69	33	124
P	-6.77	52	271

Best Double Couple:Mo=6.4*10**17
NP1:Strike= 75 Dip=41 Slip=-147
NP2: 319 69 -54

KGM	7.89	357	ePc	59	19.30	0.5
TRT	8.95	102	ePc	59	33.70	0.3
			eS	00	34.20	
KLM	9.21	346	eP	59	40.50	3.6X
TSI	10.72	331	eP	59	56.00	-1.4
IPM	10.79	345	ePd	59	56.20	-2.2
	1.2s		71.90nm			5.6mb
SNG	13.39	346	eP	00	30.10	-3.0
			eS	02	58.10	
KKM	17.17	46	ePc	01	23.50	1.8
	1.0s		120.50nm			5.0mb
NNT	18.82	348	eP	01	39.20	-2.7
NANU	20.05	147	iPc	01	55.10	-0.1
KUPT	20.06	103	iPc	01	45.00	-10.2X
	0.4s		1257.60nm			
			eS	05	20.00	
MBL	21.71	136	eP	02	11.50	-0.5
			eS	06	04.00	
NST	21.75	350	eP	02	26.50	14.0X
BDT	23.50	348	eP	02	23.10	-6.4X
	0.8s		136.00nm			5.5mb
MEKA	24.92	147	eP	02	42.00	-1.3
			eS	07	19.00	
CHG	25.04	349	iPd	02	43.40	-1.0
	1.0s		187.50nm			5.5mb
			eS	07	04.00	
DAV	25.28	60	eP+	02	48.90	2.2
MRWA	25.89	155	eP	02	50.00	-2.3
			eS	07	35.00	
KNA	26.37	114	eP	02	56.00	-0.8
QCP	26.66	40	eP	03	03.00	3.6X
BAL	27.40	155	eP	03	05.00	-1.1
BAG	27.71	37	eP	03	10.00	0.8
			eS	07	40.00	
MTN	27.81	106	eP	03	09.20	-0.8
			i	03	15.40	22kmX
			eS	08	35.00	
MUN	28.41	157	eP	03	13.00	-2.2
Z	20s		8.10um			5.3Msz
KLB	28.70	155	eP	03	15.60	-2.2
NWAO	29.65	157	eP	03	24.00	-2.3
Z	20s		4.50um			5.1Msz
			eS	08	42.00	
WARB	29.70	135	eP	03	23.50	-3.4X
KOD	30.74	301	iP	03	37.10	0.6
			eS	08	34.00	
KMI	30.87	358	Pd	03	37.50	0.1
	2.5s		250.00nm			5.5mb
Z	18s		22.60um			5.9Msz

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                 e       03 38.00    2kmX
                 sP      03 52.50
                 PP      04 48.00
                 iS      07 42.00
                 S       08 40.00
GBA    32.57 307 P       03 51.90   -0.2
WRA    32.79 118 eP      03 53.50   -0.5
                 e       04 02.50   31kmX
                 eS      09 13.50      -
SHL    33.37 340 iP      03 57.00   -2.2
                 iS      09 12.30
ASPA   33.91 124 iPd     04 03.30   -0.5
       0.9s   154.00nm          5 9mb
    Z  22s     7.06um           5.3MszX
                 ePcP    06 42.40
                 iS      09 24.50
                 eSS     11 11.30
                 LR      17 21.20
HYB    34.05 313 iPd     04 04 20   -0.8
       1.4s   125.00nm         5.7mb
OIS    37.65 116 eP      04 35.00   -0.5
       1.3s   132.00nm         5.7mb
                 e       04 47.00   44kmX
                 e       06 53.00
                 e       10 23.00
PKI    37.74 333 P       04 35.80   -0.6
GUN    37.82 334 P       04 36.60   -0.6
DMN    37.91 332 P       04 37.40   -0.4
KKN    37.98 333 P       04 37.80   -0.6
POO    38.24 310 iPd     04 41.00    0.6
GKN    38.46 332 P       04 41.70   -0.6
BOM    39.24 310 eP      04 48.30   -0.4
                 eS      10 46.30
SSE    40.39  23 iPc     04 59.40    1.4
       1.5s  1737.00nm         6.7mb
    Z  20s     7.80um          5.6Msz
    N  14s     3.40um
    E  14s     2.60um
                 S       11 00.00
                 sS      11 06.00
                 SS      14 12.00
LZH    41.78   0 iPd     05 09.00   -0.6
       2.5s   345.00nm         5.7mb
    Z  16s    13.30um          5.9MszX
    N  15s     0.70um
    E  14s     4.00um
                 sP      05 34.50
                 S       11 23.00
                 SS      15 08.00
NDI    42.88 325 iPd     05 17.50   -1.0
       0.5s   443.66nm         6.5mb
PMG    43.09  97 eP      05 20.50    0.1
ADE    43.25 137 iPd     05 21.30   -0.2
       0.4s   133.90nm         6.1mb
CTA    43.55 113 iPc     05 24.90    0.8
       1.3s   173.08nm         5.7mb
                 i       05 45.00   83kmX
                 iS      11 52.00
QLP    43.65 123 iPc     05 26.10    1.3
STK    43.74 131 ePd     05 25.50    0.1
       1.1s    57.00nm         5.3mb
    Z  20s   109.00um          6.8MszX
                 i       05 48.20   96kmX
                 iS      11 53.90
KAGJ   45.07  33 eP      05 36 30    0.1
GUMO   45.15  64 eP      05 35.00   -2.0
       0.7s    91.49nm         5 7mb
PJG    45.15  64 eP      05 34.50   -2.5
GUA    45.17  64 eP      05 35 30   -1.8
       0.7s    60.27nm         5 6mb
KUMJ   46.08  32 eP      05 44.50    0.4
CMS    46.81 128 eP      05 50 00    0.1
BFD    47.06 137 iPd     05 54 00    2.2
       1.0s    87.00nm         5.6mb
BJI    47.13  13 eP      05 52.00   -0.3
       1.2s   162.00nm         5.8mb
    Z  24s    10.50um          5.7MszX
    N  15s     5.53um
                 epP     06 08.00   62km
                 esP     06 14.00
                 ePP     07 44.00
                 eS      12 42.00
                 eScS    15 38.00
RMO    47.45 121 iPc     05 55.00   -0.1
SHNJ   47.47  31 P       05 55.50    0.5
RAB    48.21  90 e(P)    06 08.00    6.8X
SHK    48.60  32 eP      06 03.00   -0.8
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TKSJ   48.93  34 eP      06 06.80    0.5
TOO    49.28 136 eP      06 10.00    0.9
YONJ   49.52  32 eP      06 10.60   -0.3
WKYJ   49.97  35 eP      06 13.90   -0.5
QUE    50.36 318 iPc     06 14.00   -3.6X
                 eS      13 30.50
CAN    50.79 132 iPd     06 21.20    0.5
                 i       06 36.10   56km
CNB    51.06 131 eP      06 23.00    0.2
BRS    51.14 121 iP      06 23.80    0.3
                 i       06 34 80   38kmX
TSRJ   51.14  34 P       06 22.60   -0.6
COO    51.33 125 eP      06 27.00    2.1
PAF    51.73 207 eP      06 40.00   12.6X
                 eS      13 28.00
IIDJ   52.19  35 P       06 31.10   -0.2
MTMJ   52.92  34 P       06 35.40   -1.3
MAT    53.12  35 iPd+    06 35.80   -2.2
       1.2s    68.75nm         5.6mb
    Z  20s     2.13um          5.2Msz
                 eS      13 56.00
CHJJ   53.22  36 P       06 36.90   -1.9
KAKJ   54.02  36 P       06 40.60   -4.0X
NIIJ   54.06  35 P       06 46.20    1.3
YAMJ   55.30  35 P       06 53.20   -0.8
OFUJ   56.85  35 P       07 03.90   -1.2
AOMJ   57.16  33 eP      07 08.80    1.6
MRRJ   58.85  32 eP      07 18.80   -0.2
MAIO   59.02 319 iPd-    07 18.90   -1.5
                 eS      15 18.90
HOOJ   60.00  33 P       07 27.00    0.1
BEE    60.62 304 eP      07 29.00   -2.4
       1.5s   399.00nm         6.3mb
ASAJ   60.86  31 eP      07 31.30   -1.4
DHR    61.05 304 ePd     07 33.50   -0.9
KUSJ   61.26  33 P       07 34.80   -0.6
DZM    62.47 112 iPd     07 45.00    0.9
RYD    63.41 301 eP      07 49.00   -1.2
KMSA   63.83 296 iPd     07 51.10   -2.0
DHJN   63.96 293 iPd     07 54.10   -0.1
SRAT   64.37 293 iPd     07 57.00    0.2
KMTA   64.67 293 iPd     07 58.90    0.1
ABHA   64.80 293 ePd     08 00.50    0.9
DRV    65.57 165 eP      08 02.00   -1.4
AFIF   66.14 299 iPd     08 08.30    0.3
AAE    66.50 282 eP      08 11.00    0.4
KER    66.77 311 eP      08 10.00   -1.9
UQSK   67.39 301 iPd     08 16.10    0.2
MAW    67.50 196 iPd     08 14.80   -0.9
    Z  18s     8.00um          6.0Msz
MSZ    67.57 136 P       08 17.50    1.0
TAB    68.94 315 eP-     08 25.00   -0.4
THZ    70.53 132 P       08 34.20   -0.7
                 e       08 51.40   63km
CNZ    72.15 129 P       08 45.20    0.4
                 e       09 00.60   55km
NGZ    72.19 129 P       08 45.50    0.4
RUWJ   72.48 307 P       08 50.00    3.2X
BFT    72.83 245 iPd     08 48.50   -0.6
       1.0s    60.00nm         5.5mb
PGZ    72.88 131 P       08 48.40   -0.5
EVA    73.72 244 iPd     08 54.00   -0.2
       1.0s    50.00nm         5.4mb
BUL    74.09 251 iPc     08 52.00   -4.5X
       1.0s    45.00nm         5.4mb
    Z  18s     0.41um          4.8Msz
    N  18s     0.27um
                 ipP     09 07.30   55km
HBZ    74.14 127 P       08 56.20    0.0
PUZ    74.15 128 P       08 55.40   -0.9
SLR    74.42 245 iPd     08 57.00   -1.3
       1.1s    75.95nm         5.5mb
    Z  22s     9.26um          6.0Msz
HOL    74.62 302 ePd     08 58.70   -0.5
BURJ   74.84 306 P       09 03.20    2.7X
LWI    74.85 269 iP-     09 04.00    2.9X
MBH    74.90 303 iPd     08 59.70   -1.0
SHMJ   75.01 306 P       09 03.10    1.7
JVI    75.12 305 eP      09 01.00   -1.0
PRY    75.16 244 iPc     09 04.00    1.4
BHL    75.45 307 Pd      09 03.00   -1.0
                 S       18 41.00
ADI    75.55 306 eP      09 04.00   -0.5
KSR    75.67 245 iPc     09 03.00   -2.5
BLF    76.33 242 iPd     09 08.00   -1.1
       0.8s     9.38nm         4.8mb
SWZ    77.08 244 iPd     09 17.00    3.7X
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       1.0s   110.00nm         5.8mb
KOT    77.50 302 eP      09 14.00   -1.3
CSS    77.60 308 eP      09 16.00    0.2
HLW    77.89 302 eP+     09 17.00   -0.5
                 eS      19 07.00
PPCY   78.35 307 eP      09 19.70   -0.3
SBA    78.70 169 e(P)    09 21.70    0.6
KAS    79.15 314 eP      09 24.50    0.2
BBTK   79.42 312 eP      09 25.00   -0.9
GBZT   82.12 312 iPd     09 39.50   -0.4
ITU    82.52 313 iPd     09 40.00   -1.9
KAP    82.62 307 eP      09 43.00    0.4
SMG    83.36 309 eP      09 47.00    0.7
NPS    83.81 306 eP      09 49.20    0.5
SPA    84.12 180 eP      09 48.10   -1.8
       2.0s   152.50nm         5.7mb
    Z  20s     4.10um          5.8Msz
PRK    84.13 310 eP      09 50.40    0.2
CFR    84.14 316 ePd     09 51.00    0.9
JMB    84.60 314 iPd     09 54.00    1.5
VAM    84.97 306 eP      09 55.20    0.7
CLI    85.07 318 ePd     09 56.00    1.2
RDO    85.08 312 eP      09 54.60   -0.3
ISR    85.24 316 iPd     09 57.50    1.8
DIM    85.27 313 iP      09 57.00    1.1
KDZ    85.28 313 iPc     09 57.00    1.1
VRI    85.28 317 iPd     09 57.50    1.7
BUC    85.39 315 iPd     09 58.00    1.7
BUC1   85.42 315 iPd     09 58.00    1.5
PVL    85.67 314 iPd     09 59.00    1.2
BCAO   85.75 275 iPd     09 58.20   -0.7
       1.4s   270.00nm         6.2mb
                 id      10 24.90  101kmX
                 ic      11 22.60
RZN    85.80 312 iPd     09 59.00    0.3
ATH    85.83 309 eP      09 59.20    0.5
PLD    85.89 313 eP      09 58.00   -0.9
VLI    86.21 307 eP      10 00.20   -0.5
MTUR   86.28 316 ePc     10 01.50    0.6
CMP    86.30 316 iPc     09 59.00   -2.0
PGB    86.37 313 iPd     10 02.00    0.6
PLG    86.48 311 eP      10 01.60   -0.4
MMB    86.50 312 iPc     10 03.00    1.0
COZ    86.80 316 ePd     10 03.50    0.0
TNR    86.91 316 ePd     10 04.00    0.1
KKB    87.03 312 Pd      10 05.00    0.5
VTS    87.07 313 iPd     10 05.00    0.1
ITM    87.09 308 eP      10 04.60   -0.3
EVR    87.47 309 iPd     10 06.90    0.1
KZN    87.73 311 eP      10 07.60   -0.4
DEV    87.90 316 iPd     10 01.10   -7.5X
SKO    88.26 312 iPd     10 09.60   -0.8
       1.5s   217.00nm         6.1mb
    Z  21s     2.53um          5.6Msz
    N  21s     1.58um
    E  21s     2.07um
                 i       10 26.00   57km
                 iPP     13 41.00
                 iSKS    20 34.00
                 iSS     26 50.00
                 LR      50 41.00
VLS    88.30 308 eP      10 10.70    0.0
KBN    88.50 311 iPc     10 12.20    0.6
OHR    88.59 311 iPd     10 11.60   -0.5
       1.3s   273.00nm         6.3mb
                 i       10 15.60   13km
                 i       10 27.50
BZS    88.74 316 eP      10 13.00    0.4
TIM    89.03 316 iPd     10 15.40    1.4
KEK    89.14 310 iPd     10 14.90    0.2
BERA   89.17 311 eP      10 14.00   -0.7
TIR    89.32 312 iPc     10 16.20    0.7
PUK    89.41 312 iP      10 16.40    0.6
BEO    89.42 315 eP      10 16.00    0.2
LACI   89.48 312 iPd     10 16.20    0.0
SUF    89.59 333 iP      10 17.00    0.8
       0.8s    40.40nm         5.8mb
SDA    89.69 312 iPd     10 17.80    0.6
NUR    89.79 331 iP      10 17.90    0.7
       0.8s    66.00nm         6.0mb
                 e       21 04.00
                 e       27 00.00
TTG    89.93 313 eP      10 18.70    0.5
SPC    90.23 319 iP      10 20.20    0.4
                 e       14 09.40
PSZ    90.27 318 iP      10 20.80    1.0
SOD    90.51 338 iP      10 21.00    0.5
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17d 12h

KRA	90.55	320	eP	10	21.60	0.6	
	1.4s	190.00nm			6.3mb		
	Z 20s	1.60um			5.5Msz		
	E 20s	1.70um					
		e	10	33.80	40kmX		
		e	20	50.00			
BUD	90.79	318	iPd	10	22.80	0.7	
KEV	90.97	340	iP	10	23.20	0.7	
	1.0s	24.00nm			5.5mb		
		i	10	38.20	51km		
		e	21	12.00			
		e	22	24.00			
SRO	91.31	318	iP	10	25.60	1.1	
ORI	91.74	310	P	10	28.20	1.5	
SOI	91.83	308	P	10	28.50	1.4	
HVAR	92.07	313	eP	10	27.80	-0.3	
ZST	92.16	318	iP	10	29.10	0.7	
ATN	92.30	308	P	10	31.60	2.3X	
MGR	92.43	310	P	10	29.50	-0.3	
SOP	92.47	318	eP	10	29.70	-0.2	
ZAG	92.67	316	iPKPd	10	31.70	0.9	
VKA	92.69	318	iPd	10	30.50	-0.4	
	2.0s	134.00nm			6.0mb		
		i	10	44.60	47kmX		
		i	10	50.50			
PTJ	92.70	316	iPKPd	10	31.80	0.7	
MNO	92.89	308	P	10	33.50	1.2	
KSP	92.96	321	iPd	10	32.50	0.4	
	1.3s	55.00nm			5.8mb		
		e	10	49.60	60km		
		id	11	18.00			
		e	14	14.00			
UPP	93.15	330	iP	10	32.70	0.1	
		i	10	51.00	65km		
VBY	93.15	315	ePd	10	34.10	1.0	
		i	10	52.90	67km		
DUI	93.39	311	P	10	35.00	0.6	
GIB	93.42	308	P	10	34.00	-0.6	
LJU	93.70	316	ePc	10	36.50	0.9	
CEY	93.75	315	eP	10	36.00	0.1	
SDI	93.88	311	P	10	36.50	-0.1	
PRU	94.01	320	Pd	10	38.00	1.1	
	1.2s	33.00nm			5.6mb		
	Z 21s	0.90um			5.2Msz		
	N 21s	0.90um					
	E 19s	0.80um					
		e	10	47.00	28kmX		
		PP	14	23.00			
		S	21	40.00			
KMR	94.13	318	eP	10	36.00	-1.5	
		ePP	14	19.00			
VOY	94.15	316	ePc	10	37.80	0.0	
		i	10	57.90	72kmX		
TRI	94.21	315	eP	10	37.20	-0.7	
		eLR	43	38.00			
BRG	94.45	321	iPd	10	39.50	0.6	
	1.3s	56.00nm			5.8mb		
		i	10	56.20	58km		
		i	14	26.60			
		i	14	42.10			
		e	21	08.00			
KHC	94.57	319	P	10	40.40	0.8	
	Z 22s	0.50um			4.9Msz		
	N 23s	1.60um					
	E 22s	0.80um					
		e	10	50.90	33kmX		
ARV	94.65	313	P	10	40.50	0.5	
MNS	94.77	312	P	10	41.00	0.4	
BHG	94.95	317	eP	10	41.30	0.0	
	1.6s	97.00nm			6.0mb		
FVI	94.95	316	P	10	41.60	0.3	
WET	95.03	319	iPd	10	42.50	0.8	
	1.5s	119.00nm			6.1mb		
CLL	95.07	321	iPd	10	41.90	0.2	
	1.6s	50.00nm			5.7mb		
	Z 18s	1.50um			5.5Msz		
HFS	95.14	330	eP	10	41.50	-0.4	
	0.9s	39.60nm			5.9mb		
	Z 19s	1.80um			5.6Msz		
		LR	49	54.00			
CRE	95.37	313	P	10	44.50	1.0	
SFI	95.46	313	Pd	10	45.20	1.5	
PGD	95.55	313	P	10	45.50	1.1	
CTI	95.71	316	Pd	10	45.50	0.5	
		e	14	29.50			
MOX	95.92	320	iPd	10	46.50	0.8	
	1.4s	52.00nm			5.9mb		
	Z 24s	1.30um			5.3MszX		
	N 24s	1.70um					
	E 24s	1.70um					
GRF	96.14	319	iPd	10	47.70	1.0	
	1.3s	39.00nm			5.8mb		
	Z 21s	1.00um			5.3Msz		
OGA	96.17	316	eP	10	47.80	0.6	
BDI	96.37	314	P	10	47.60	-0.4	
NB2	96.39	331	P	10	47.10	-0.5	
	1.0s	15.60nm			5.5mb		
BOB	97.21	314	P	10	51.50	-0.2	
PGF	97.50	312	eP	10	53.30	0.2	
	1.3s	18.05nm			5.4mb		
SBF	98.65	313	eP	10	58.40	0.2	
	1.5s	41.80nm			5.7mb		
CDF	98.72	318	eP	10	58.60	0.1	
LPG	99.13	315	eP	11	00.80	0.2	
	1.3s	18.05nm			5.4mb		
LPL	99.14	315	eP	11	00.80	0.2	
	1.3s	18.05nm			5.4mb		
BNI	99.19	315	P	11	06.50	5.8X	
		e	14	40.50			
FRF	99.23	313	eP	11	01.10	0.3	
	1.5s	36.55nm			5.7mb		
HAU	99.35	318	eP	11	01.30	0.0	
	1.2s	23.80nm			5.6mb		
	Z 22s	0.70um			5.1Msz		
LRG	99.43	313	eP	11	00.80	-0.9	
LBF	101.00	317	ePdiff	11	08.90	0.1	
LOR	101.06	317	ePdiff	11	09.00	0.0	
	1.4s	28.30nm			5.7mb		
	Z 22s	1.15um			5.3Msz		
SMF	101.11	316	ePdiff	11	09.30	0.1	
	1.3s	18.05nm			5.5mb		
SSF	101.32	317	ePdiff	11	10.40	0.3	
AVF	101.44	316	ePdiff	11	10.70	0.0	
	1.3s	18.05nm			5.6mb		
BGF	101.80	316	ePdiff	11	12.80	0.5	
	1.4s	30.50nm			5.8mb		
CAF	102.46	315	ePdiff	11	12.00	-3.3X	
INK	107.14	19	ePKP	15	45.00	0.4	
LKO	110.03	278	PKP	15	49.68	-2.0	
YKA	116.91	19	ePKP	16	18.10	14.7X	
	0.9s	5.50nm					
CFTV	117.27	299	iPKPd	16	05.70	0.5	
MCW	121.97	35	PKP	16	14.10	0.6	
GMW	122.58	36	PKP	16	15.40	0.7	
BMW	122.87	37	PKP	16	16.20	0.9	
RMW	123.20	35	PKP	16	16.20	0.3	
PNT	123.39	33	ePKP	16	16.00	-0.2	
	0.7s	17.00nm					
LON	123.57	36	PKP	16	16.50	-0.2	
EDM	123.96	26	iPKPd	16	17.30	0.1	
DPW	124.99	33	PKP	16	19.60	0.2	
FHC	125.04	43	ePKP	16	20.70	1.0	
NEW	125.34	32	PKP	16	20.30	0.2	
WDC	126.12	43	ePKP	16	22.50	0.7	
LBFM	126.20	42	PKP	16	22.50	0.3	
MIN	126.86	43	ePKP	16	23.70	0.3	
SES	126.96	27	ePKP	16	22.00	-1.1	
			pP	16	40.00		
FFC	127.09	18	ePKP	16	23.00	-0.2	
	0.8s	18.00nm					
ORV	127.30	44	ePKP	16	24.60	0.5	
BRK	127.51	46	ePKP	16	25.90	1.4	
SAO	128.57	47	ePKP	16	27.70	1.1	
CMB	128.77	45	ePKP	16	27.70	0.7	
PRS	128.81	47	ePKP	16	28.90	1.9	
HBMT	129.30	32	ePKP	16	28.60	0.6	
SYP	130.60	49	ePKP	16	24.00	-6.7X	
SCH	130.65	353	ePKP	16	31.00	1.0	
TNP	130.94	43	PKP	16	31.30	0.0	
ISA	131.21	47	ePKP	16	32.00	0.3	
PTI	131.29	35	PKP	16	34.10	2.3X	
IMW	131.43	33	PKP	16	32.20	0.0	
CLC	131.77	46	ePKP	16	34.00	1.2	
SBB	132.13	48	ePKP	16	35.00	1.5	
MWC	132.17	48	ePKP	16	36.00	2.3X	
DUG	132.65	38	PKP	16	36.30	1.9	
RVR	132.78	48	ePKP	16	37.00	2.4X	
PEC	132.98	48	PKP	16	37.00	1.9	
TPC	133.70	47	ePKP	16	39.00	2.5X	
BAR	133.89	49	ePKP	16	40.00	3.2X	
GLA	135.10	48	ePKP	16	40.00	0.9	
CBM	138.55	352	PKP	16	45.00	-0.1	
CAI	139.10	253	ePKP	16	43.90	-3.2X	
ALQ	139.85	40	ePKP	16	42.50	-5.6X	
	Z 22s	1.67um			5.7Msz		
		e	16	49.00			
TACH	140.33	187	ePKP	16	42.00	-6.8X	
MDZ	140.79	190	ePKP	16	45.20	-4.5X	
PEL	140.80	187	ePKP	16	43.00	-6.7X	
PPD	143.04	221	ePKP	16	49.00	-4.9X	
		e	16	53.50			
BAO	144.80	232	iPKPd	16	56.20	-0.9	
		e	17	05.50			
		e	18	03.00			
TXNY	144.85	357	iPKP	16	55.70	-0.6	
TBR	144.88	357	PKP	16	54.50	-1.9	
PNJ	145.11	357	iPKP	16	55.40	-1.4	
GMTN	145.14	357	iPKP	16	55.20	-1.6	
LVNJ	145.24	358	PKP	16	55.40	-1.6	
MZX	146.20	56	(PKP)	17	02.50	3.4X	
CBN	147.84	2	e(PKP)	17	05.00	3.7X	
BLA	148.62	6	ePKP	17	03.60	0.9	
	0.8s	28.36nm					
MRX	152.11	58	(PKP)	17	11.00	2.7X	
SIV	153.58	214	PKPd	17	10.60	0.1	
CCH	154.81	203	PKP	17	15.00	2.5X	
CNCB	156.00	200	PKP	17	18.00	3.5X	
LPB	156.30	200	PKP	17	16.00	1.3	
	Z 20s	4.96um			6.3Msz		
		LR	13	10.00			
ZOBO	156.55	200	PKPd	17	16.00	0.8	
	1.2s	25.34nm					
	Z 21s	2.31um			6.0Msz		
		LR	12	04.00			
OXX	157.06	59	(PKP)	17	18.50	3.1X	
EVV	157.55	55	(PKP)	17	18.00	2.3X	
CAR	169.75	297	iPKPc	17	27.00	0.1	
UPA	175.51	47	ePKPc	17	29.00	0.0	
FUQ	177.51	260	ePKP	17	30.00	0.2	
	S.D. = 1.0	on 279 of 318 obs.					

& SEP 17, 1990 13h 04m 29.20s
36.630 N 121.313 W
DEPTH = 5.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

SAO	0.17	322	iP	04	32.60	-0.2
LLA	0.30	92	iPc	04	35.10	-0.1
PRS	0.30	189	iP	04	35.10	-0.2
GCC	0.68	306	ePd	04	42.00	-0.8
PRI	0.71	133	ePd	04	43.30	-0.2
ARN	0.74	346	eP	04	43.50	-0.5
MHC	0.76	340	eP	04	44.00	-0.5
PHAM	1.08	137	eP	04	49.20	-0.9
PKEM	1.13	120	eP	04	51.00	0.2
PCC	1.22	316	eP	04	50.50	-1.8
BKS	1.45	330	eP	04	54.30	-1.8
		e(S)		05	10.40	
CMB	1.59	28	eP	04	56.70	-1.3
BCH	1.75	145	eP	04	59.00	-1.5
ABL	2.46	136	eP	05	08.70	-2.1
14 obs. associated						

SEP 17, 1990 13h 04m 52.67± 0.21s
18.293 N ± 3.7km 68.154 W ± 3.2km
DEPTH = 148.2km (9 depth phases)
4.9mb (46 obs.)
MONA PASSAGE (89)
Felt throughout much of Puerto Rico. Also felt at Santo Domingo and in eastern Dominicon Republic.

MGP	1.05	106	iP	05	18.90	0.9
MEP	1.12	97	iP	05	19.50	0.9
LRS	1.24	90	iP	05	20.90	1.1
PORP	1.46	99	iP	05	23.00	1.0
CSB	1.90	90	iP	05	26.80	-0.1
SJG	1.91	95	iP	05	27.40	0.3
LPR	2.17	89	iP	05	30.00	-0.2
SKI	5.25	100	eP	06	10.92	0.7
		eS		07	12.74	
NEV	5.44	101	eP	06	13.30	0.4
		S		07	18.00	
CPB	6.06	95	eP	06	18.15	-2.9
		eS		07	24.65	
BPA	6.13	101	eP	06	20.80	-1.3
PAG	6.58	109	eP	06	27.71	-0.6
		S		07	40.00	
SEG	6.62	105	eP	06	28.80	0.0

DOG	6.64	109	eP	06	28.31	-0.8
SFG	6.95	106	eP	06	32.30	-0.9
MGG	6.95	109	eP	06	33.60	0.4
BBL	6.96	112	eP	06	32.96	-0.4
			eTT	11	48.00	
MDN	7.11	114	eP	06	35.76	0.3
			eS	07	54.72	
DPMT	7.15	114	eP	06	35.78	-0.1
			eS	07	54.72	
DBCT	7.17	114	eP	06	35.79	-0.5
			eS	07	54.78	
FDF	7.59	117	eP	06	41.20	-0.7
BIM	7.76	118	eP	06	43.48	-0.7
CRM	7.78	116	eP	06	43.00	-1.4
MVM	7.89	117	eP	06	47.20	1.3
TCE	9.77	140	eP	07	15.11	4.3X
			eS	09	02.00	
TRN	10.02	138	eP	07	15.80	1.7
			eS	09	05.00	
TPR	10.04	134	eP	07	15.33	1.0
BOT	10.09	134	eP	07	15.45	0.4
TBH	10.36	138	eP	07	21.00	2.4
			eS	09	12.00	
BMG	12.14	204	iPd	07	44.00	2.0
UPA	14.41	232	iPd	08	12.20	1.2
	1.0s	100.00nm			5.1mb	
BOG	14.76	204	eP	08	20.00	4.2X
			eS	11	00.00	
PSO	19.23	209	eP	09	08.00	-0.4
BLA	21.71	333	P	09	30.00	-2.8
	0.7s	28.89nm			4.8mb	
RSCP	23.13	322	P	09	45.00	-1.6
TUL	30.07	311	eP	10	50.00	0.0
	0.9s	22.20nm			4.9mb	
MEO	31.63	307	e(P)	11	04.00	0.3
ZOBO	34.34	180	Pc	11	26.00	-1.9
	0.9s	24.22nm			4.9mb	
			i	12	59.00	535kmX
			e	16	49.00	
CNCB	34.88	180	P	11	32.00	-0.4
			e	16	51.00	
CCH	35.51	177	P	11	37.50	0.1
SCH	36.47	1	ePd	11	45.70	0.9
	0.6s	30.00nm			5.2mb	
ALQ	37.78	304	ePc	11	56.80	0.5
	1.0s	7.50nm			4.4mb	
			epP	12	29.30	148km
ANMO	37.78	304	P	11	57.00	0.7
	0.8s	13.99nm			4.8mb	
			pP	12	30.00	150km
SOB1	38.35	133	eP	11	59.30	-1.7
GOL	38.54	311	P	12	01.00	-1.7
	0.8s	11.16nm			4.6mb	
			pP	12	35.00	155km
BW06	42.62	314	P	12	36.00	-0.1
			pP	13	08.00	143km
PPD	43.33	157	eP	12	39.30	-2.4
FFC	44.60	333	eP	12	50.50	-1.1
	0.7s	10.00nm			4.6mb	
HBMT	45.78	317	eP	13	02.40	1.1
SES	46.75	323	eP	13	09.00	0.4
			pP	13	41.00	141km
SBB	46.89	301	eP	13	10.00	0.0
TNP	46.93	305	P	13	11.00	0.5
	0.8s	7.84nm			4.4mb	
			pP	13	45.00	151km
MWC	47.02	300	eP	13	12.00	0.8
BCH	48.79	301	P	13	26.00	1.3
			pP	13	59.50	147km
NEW	49.54	319	P	13	30.00	-0.2
	0.8s	14.58nm			4.8mb	
			pP	14	03.60	147km
PEL	51.20	183	ePc	13	40.50	-2.4
YKA	54.53	336	eP	14	06.00	-1.1
	0.6s	3.10nm			4.3mb	
AAPN	58.67	57	eP	14	38.00	1.0
ALOJ	58.68	57	eP	14	38.00	0.9
ATEJ	58.75	58	iP	14	39.00	1.4
TOL	58.77	54	eP	14	39.50	2.0
ASMO	58.97	57	eP	14	40.50	1.4
APHE	59.02	57	iP	14	40.40	1.0
EKA	60.95	36	P	14	53.00	0.9
	0.9s	10.90nm			4.8mb	
LKO	61.11	89	Pc	14	50.74	-3.1X
LPF	61.36	45	eP	14	54.60	-0.4
	0.7s	8.80nm			4.8mb	
GRR	61.51	44	eP	14	55.90	-0.1
	0.7s	17.65nm			5.1mb	
FLN	61.79	44	eP	14	57.60	-0.2
	0.6s	16.25nm			5.1mb	
MFF	61.88	46	eP	14	58.40	-0.1
	0.6s	25.25nm			5.3mb	
LDF	62.01	44	eP	14	59.20	-0.1
	0.6s	16.25nm			5.1mb	
EPF	62.13	51	eP	15	00.60	0.4
	0.7s	23.15nm			5.2mb	
LFF	62.44	48	eP	15	02.20	0.0
	0.6s	11.70nm			5.0mb	
LPO	62.76	49	eP	15	04.10	-0.2
	0.6s	16.25nm			5.1mb	
KIC	62.81	92	Pc	15	04.80	-1.1
RJF	63.00	48	eP	15	05.60	-0.3
	0.6s	12.65nm			5.0mb	
LSF	63.03	47	eP	15	05.50	-0.6
	0.6s	7.20nm			4.8mb	
CAF	63.38	48	eP	15	08.20	-0.3
	0.6s	11.70nm			5.0mb	
TCF	63.50	47	eP	15	08.80	-0.4
	0.8s	20.80nm			5.1mb	
MAF	63.75	47	eP	15	10.30	-0.5
	0.9s	7.35nm			4.6mb	
BGF	63.94	47	eP	15	11.40	-0.6
	0.7s	11.60nm			4.9mb	
INK	64.10	338	eP	15	11.50	-1.1
AVF	64.29	46	eP	15	13.70	-0.6
	0.8s	10.75nm			4.8mb	
SSF	64.40	46	eP	15	14.60	-0.4
	0.7s	7.70nm			4.7mb	
SMF	64.63	46	eP	15	16.00	-0.5
	0.7s	16.00nm			5.1mb	
LOR	64.64	46	eP	15	15.80	-0.8
	0.6s	17.60nm			5.2mb	
LBF	64.72	46	eP	15	16.20	-0.9
	0.6s	5.40nm			4.7mb	
ENN	66.01	42	eP	15	26.00	0.8
	0.7s	11.00nm			4.9mb	
HAU	66.32	45	eP	15	26.70	-0.6
LRG	66.51	50	eP	15	28.50	0.0
	7.0s	7.70nm			3.7mb	X
WTS	66.57	41	eP	15	29.50	0.8
	0.7s	29.00nm			5.3mb	
			e	15	36.50	22kmX
BSF	66.62	45	eP	15	28.40	-0.9
	0.7s	8.80nm			4.7mb	
LMR	66.63	50	eP	15	29.10	-0.2
LPL	66.67	48	eP	15	30.00	0.2
	0.7s	11.00nm			4.8mb	
LPG	66.68	48	eP	15	30.20	0.2
	0.7s	8.80nm			4.7mb	
FRF	66.71	50	eP	15	29.30	-0.5
	0.6s	5.40nm			4.6mb	
CDF	66.93	44	eP	15	30.60	-0.6
	0.8s	9.40nm			4.7mb	
SBF	67.27	49	eP	15	33.00	-0.4
	0.7s	12.15nm			4.8mb	
PGF	68.51	51	eP	15	40.60	-0.6
	0.7s	7.70nm			4.6mb	
FBA	69.20	333	P	15	44.00	-0.8
	0.9s	7.29nm			4.5mb	
			pP	16	21.00	153km
HFS	70.27	32	eP	15	51.20	-0.2
	0.7s	4.40nm			4.4mb	
CLL	70.46	41	iPd	15	52.80	0.1
KHC	71.04	43	iPd	15	57.00	0.7
BRG	71.09	42	iPd	15	57.10	0.6
	0.8s	16.00nm			4.9mb	
PRU	71.56	42	eP	16	00.00	0.6
			e	16	54.20	230kmX
VOY	71.62	47	eP	16	00.00	0.1
ZST	73.48	44	iP	16	10.50	-0.1
KEV	74.77	21	eP	16	19.00	1.4
SOD	75.11	24	iP	16	20.70	1.1
NUR	75.63	31	eP	16	23.00	0.3
SUF	75.88	28	iP	16	25.30	1.3
	0.6s	5.30nm			4.4mb	
OHR	77.44	51	e(P)	16	34.50	1.3
MLR	79.98	45	ePd	16	49.00	2.0
			e	35	23.50	
AIA	83.33	178	eP	17	03.70	0.2
BCAO	85.49	87	iPc	17	15.60	0.0
	0.7s	24.00nm			5.1mb	
			ic	17	27.00	37kmX
GKN	126.97	30	PKP	23	41.40	0.1
	0.4s	13.00nm				
KKN	127.46	30	PKP	23	42.20	-0.1
	0.4s	7.00nm				
PKI	127.70	30	PKP	23	42.40	-0.6
GBA	133.57	49	PKPd	23	53.20	-0.7
	0.7s	2.60nm				
STK	149.97	237	ePKP	24	26.30	4.2X
	1.8s	21.00nm				
WRA	158.68	262	e(PKP)	24	48.00	13.8X

S.D. = 1.0 on 115 of 120 obs.

? SEP 17, 1990 13h 18m 32.03± 1.33s
41.449 N ± 8.5km 1.767 W ±16.5km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.6 (MDD).

ETOR	0.67	199	eP	18	45.00	-0.3
			eS	18	55.60	
ECRI	1.29	335	iP	18	55.80	-0.1
			eS	19	14.50	
ECHE	1.95	162	eP	19	05.80	0.2
GUD	1.98	247	eP	19	06.30	0.3
			eS	19	33.30	

S.D. = 0.5 on 4 of 4 obs.

SEP 17, 1990 13h 23m 39.08± 0.25s
18.846 N ± 4.0km 62.733 W ± 4.3km
DEPTH = 53.8km (4 depth phases)
4.7mb (12 obs.)
LEEWARD ISLANDS (92)
MD 5.2 (TRN).

CPB	1.48	144	eP	24	02.57	-1.1
SKI	1.50	180	eP	24	05.42	1.3
NEV	1.71	175	eP	24	08.12	1.2
BPA	1.98	155	eP	24	10.01	-0.7
SEG	2.70	154	eP	24	20.95	0.1
PAG	2.98	160	eP	24	24.80	-0.2
			S	25	00.60	
DOG	2.99	159	eP	24	24.80	-0.4
LPR	3.02	260	iP	24	24.30	-1.3
MGG	3.21	155	eP	24	28.00	-0.2
CSB	3.29	261	iP	24	28.00	-1.5
SJG	3.32	258	iP	24	29.00	-0.9
BBL	3.52	160	eP	24	32.50	-0.1
MDN	3.73	160	eP	24	36.81	1.2
PORP	3.79	259	iP	24	35.00	-1.4
LRS	3.94	263	iP	24	36.80	-1.7
MEP	4.09	261	iP	24	39.60	-1.0
MGP	4.22	259	iP	24	41.60	-0.8
TRN	8.25	171	eP	25	41.30	2.5
			eS	27	18.30	
BLA	23.98	323	P	28	50.00	0.4
SOB1	35.23	140	eP	30	44.40	13.9X
ZOBO	35.29	189	P	30	31.00	-0.7
LPB	35.55	189	P	30	31.00	-2.7
			e	30	35.00	14kmX
CNCB	35.81	189	P	30	37.00	1.0
ALQ	41.81	302	ePc	31	26.10	0.6
	0.9s	7.77nm			4.5mb	
ANMO	41.81	302	P	31	26.00	0.5
			e	31	39.80	52km
PPD	42.13	164	eP	31	28.80	0.9
			e	31	43.20	55km
RSSD	42.68	315	P	31	32.40	-0.1
BW06	46.02	312	P	31	59.00	-0.4
	0.9s	9.18nm			4.7mb	
IMW	47.30	313	P	32	09.30	-0.3
GLA	48.47	298	eP	32	20.00	1.5
HBMT	48.97	315	eP	32	22.90	0.5
TPC	49.56	299	eP	32	28.00	1.1
BAR	50.01	297	eP	32	32.00	1.7
PLM	50.19	298	P	32	34.00	2.1
TNP	50.85	304	P	32	37.50	0.7
	0.8s	3.68nm			4.5mb	
SBB	51.06	300	eP	32	39.00	0.7
NEW	52.60	317	P	32	49.50	-0.2
			pP	33	03.00	49km
BCH	52.94	300	P	32	53.50	1.0
CMB	53.33	304	eP	32	56.50	1.3
PRI	53.45	301	eP	32	58.30	2.1
PRS	54.03	302	eP	33	06.60	6.3X
MHC	54.29	303	eP	33	04.00	1.6
ORV	54.32	306	eP	33	03.60	1.2
PNT	54.45	318	eP	33	02.00	-1.3
LBFM	54.77	308	P	33	06.20	0.2
WDC	55.19	307	eP	33	07.30	-1.5

17d 13h

LKO 55.97 91 P 33 12.16 -2.6
YKA 56.23 334 eP 33 14.90 -1.0
0.8s 6.30nm 4.7mb
EPF 57.81 51 eP 33 27.60 0.2
1.0s 14.00nm 5.0mb
LPO 58.53 49 eP 33 32.00 -0.4
RJF 58.81 48 eP 33 33.80 -0.6
Z 20s 0.50um 4.6Msz
CAF 59.17 48 eP 33 36.60 -0.3
TCF 59.37 47 eP 33 37.80 -0.4
AVF 60.19 46 eP 33 42.80 -1.0
0.9s 6.55nm 4.8mb
SSF 60.32 46 eP 33 43.90 -0.8
1.0s 8.00nm 4.8mb
SMF 60.52 47 eP 33 45.20 -0.9
LOR 60.57 46 eP 33 45.60 -0.8
1.0s 7.00nm 4.7mb
Z 20s 0.52um 4.7Msz
LBF 60.63 46 eP 33 45.80 -1.1
INK 65.55 337 ePd 34 18.70 -0.1
SQTA 65.58 46 e(P) 34 20.00 0.4
1.4s 25.00nm 5.0mb
i 34 35.90 58km
NB2 65.92 31 P 34 21.30 -0.1
1.0s 3.40nm 4.3mb
CLL 66.65 41 e(P) 34 41.00 14.8X
KHC 67.09 44 eP 34 42.40 13.3X
PRU 67.67 43 P 34 36.00 3.3X
e 34 45.50 30kmX
FBA 71.02 333 P 34 52.50 -0.4
0.8s 7.76nm 4.7mb
OHR 73.09 52 eP 35 06.50 0.8
BCAO 80.33 89 ePd 35 48.60 2.0
0.8s 11.00nm 4.8mb
ic 36 00.90 41kmX
S.D. = 1.2 on 62 of 67 obs.

SEP 17, 1990 13h 47m 26.64± 0.21s
53.155 S ± 4.4km 159.632 E ± 4.0km
DEPTH = 10.0km (geophysicist)
6.0mb (40 obs.) 6.0Msz (21 obs.)
MACQUARIE ISLANDS REGION (167)
Ms 6.0 (BRK). Mo=1.0*10**19 Nm (PPT). Felt (V) on Macquarie Island. Complex event, observed on broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=115 Dip=87 Slip= 10
NP2: 24 80 177
Principal Axes:
T Plg= 9 Azm=340
P 5 249
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: 3 Focal mech. F
Energy 2.0±1.0*10**15 Nm
MOMENT TENSOR SOLUTION
Dep 21 No. of sta: 4
Moment Tensor; Scale 10**18 Nm
Mrr= 0.23 Mtt= 2.96
Mff=-3.19 Mrt= 0.77
Mrf= 0.49 Mtf= 2.06
Principal axes:
T Val= 3.80 Plg=14 Azm=343
N 0.03 76 178
P -3.83 4 73
Best Double Couple:Mo=3.8*10**18
NP1:Strike=119 Dip=78 Slip= 7
NP2: 27 83 168
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 35C M.W.: 13S, 33C
Centroid Location:
Origin Time 13:47:35.4 0.2
Lat 53.22S 0.01 Lon 159.16E 0.02
Dep 18.5 1.1 Half-duration 5.6
Moment Tensor; Scale 10**18 Nm
Mrr=-0.40 0.04 Mtt= 3.91 0.04
Mff=-3.51 0.04 Mrt= 1.15 0.15
Mrf=-0.05 0.12 Mtf= 2.22 0.04
Principal Axes:
T Val= 4.76 Plg=12 Azm=345
N -0.60 77 139
P -4.16 6 254
Best Double Couple:Mo=4.5*10**18
NP1:Strike= 29 Dip=77 Slip= 175
NP2: 120 86 13

MCQ 1.40 196 iPd 47 46.50 -5.7X
MSZ 10.08 36 P 49 52.10 -2.3
MMCZ 10.26 41 eP 49 53.10 -3.8X
MHZ 10.27 42 eP 49 52.40 -4.7X
MQZ 12.79 48 eP 50 27.90 -3.2X
TAU 13.13 316 eP 50 31.62 -4.0X
LTZ 13.37 44 P 50 35.40 -3.5X
KHZ 14.21 46 P 50 48.60 -1.3
0.2s 111.00nm 6.2mb
THZ 14.48 43 eP 50 51.70 -1.7
WEL 15.67 47 eP 51 09.30 0.5
MRW 15.68 47 eP 51 10.00 1.0
WDW 15.78 47 eP 51 09.60 -0.7
BLW 15.91 49 eP 51 12.20 0.1
CAW 15.94 47 eP 51 11.80 -0.6
KIW 16.07 46 eP 51 14.30 0.2
MTW 16.09 48 eP 51 14.20 -0.2
MNG 16.52 47 eP 51 20.20 0.4
0.2s 9.00nm 4.6mb X
DRV 16.62 208 eP 51 22.60 1.7
PGZ 16.88 49 eP 51 23.20 -1.1
CNZ 17.72 44 eP 51 37.10 2.1
TOO 18.43 322 iPd 51 45.10 1.5
1.0s 618.00nm 5.7mb
eS 55 08.00
eTT 04 40.00
CNB 19.26 334 iPd 51 54.60 0.7
eS 55 26.50
eTT 07 40.00
NOZ 19.29 48 P 51 55.20 1.0
CAN 19.35 333 iPc 51 55.20 0.2
iS 55 24.00
eTT 07 08.00
e 08 19.00
PUZ 19.84 48 eP 52 01.00 0.7
BFD 19.93 316 iPc 52 03.60 2.4X
e 52 18.00
RIV 20.25 339 eP 52 05.00 0.5
eS 55 56.00
eTT 09 11.00
HBZ 20.25 47 eP 52 05.60 1.0
1.1s 582.00nm 5.8mb
COO 23.26 343 iPc 52 35.60 0.7
eTT 11 49.00
ADE 23.44 313 iPc 52 37.60 0.9
1.0s 340.00nm 5.9mb
CMS 23.86 330 eP 52 42.00 1.3
0.5s 45.00nm 5.3mb
e 53 05.00
SBA 24.94 176 iPc 52 51.80 1.1
S 57 05.20
STK 24.94 321 iPc 52 52.40 1.2
1.1s 287.00nm 5.9mb
Z 15s 8944.00um 8.4MszX
eS 57 29.10
BRS 26.24 346 iPc 53 03.00 -0.4
i 53 09.00
i 53 20.50
iPP 53 48.00
RMO 27.85 339 iPc 53 16.50 -1.6
0.9s 262.00nm 6.0mb
e 53 34.00
OLP 28.92 331 iPc 53 28.20 0.4
DZM 31.47 12 iPc 53 51.00 0.5
FORR 31.92 302 eP 53 54.50 0.2
CTA 34.59 337 iPc+ 54 17.20 -0.4
1.3s 826.92nm 6.5mb
iS 59 48.00
ASPA 35.31 316 iPc 54 22.70 -1.0
1.0s 713.00nm 6.5mb
Z 15s 84.34um 6.6MszX
eS 59 58.60
eLR 08 33.40
COOL 35.61 293 eP 54 26.30 0.1
RKG 35.61 285 iPd 54 23.00 -3.2X
PVC 35.99 14 iPc 54 32.00 2.6X
QIS 36.01 327 iPc 54 28.70 -1.0
1.0s 131.00nm 5.8mb
e 54 36.00
NWAO 36.30 287 eP 54 30.90 -1.1
1.0s 129.00nm 5.7mb
eS 00 16.00
WARB 36.46 305 eP 54 31.00 -2.5
KLB 36.98 289 eP 54 36.50 -1.2
1.1s 87.00nm 5.4mb
SPA 37.03 180 iPd 54 35.00 -3.1
0.9s 320.45nm 6.1mb
Z 20s 24.68um 6.0Msz
i 55 51.20
MUN 37.58 287 eP 54 42.00 -0.8
1.0s 424.00nm 6.2mb
eS 00 35.00
BAL 38.31 289 eP 54 47.50 -1.4
WRA 38.47 320 iPc 54 49.30 -1.0
MRWA 39.76 289 eP 55 00.60 -0.4
0.7s 75.00nm 5.5mb
MEKA 40.36 295 eP 55 06.50 0.5
HNR 43.60 0 eP 55 31.00 -1.5
eS 02 02.00
MBL 44.08 301 eP 55 35.50 -0.9
RAR 44.45 60 P 55 41.00 1.6
S 02 16.00
MAW 44.75 213 iPd- 55 39.80 -1.5
1.0s 105.00nm 5.7mb
Z 12s 22.00um 6.3MszX
PMG 44.78 342 iPc 55 42.30 0.3
1.3s 461.54nm 6.2mb
NANU 45.23 295 eP 55 45.00 -0.6
MTN 46.17 320 eP 55 52.00 -1.1
LAT 47.50 343 eP 56 04.00 0.4
TBI 48.42 72 iP 56 11.80 1.0
1.0s 130.00nm 5.9mb
RAB 49.19 350 iP+ 56 16.00 -0.7
iS 03 28.00
PAF 52.56 235 iPd 56 52.00 10.0X
ePPP 59 40.00
eS 04 12.00
eSS 08 16.00
AFR 52.85 68 iP 56 44.00 -0.5
1.3s 315.00nm 6.1mb
PAE 52.86 68 iP 56 44.00 -0.6
1.3s 165.00nm 5.8mb
PPT 52.94 68 iP 56 44.40 -0.8
1.3s 345.00nm 6.1mb
TVO 52.95 68 iP 56 44.50 -0.8
1.3s 525.00nm 6.3mb
PPN 53.05 68 iP 56 45.20 -0.8
1.3s 290.00nm 6.1mb
VAH 55.91 68 iP 57 07.00 0.1
1.3s 180.00nm 5.9mb
PMO 55.95 68 iP 57 07.50 0.3
1.3s 220.00nm 6.0mb
RUV 56.09 68 iP 57 08.30 0.1
1.3s 250.00nm 6.1mb
TPT 56.12 68 iP 57 08.70 0.3
1.3s 255.00nm 6.1mb
AIA 57.22 160 eP 57 14.80 -0.9
TRT 59.11 302 ePd 57 30.30 0.8
DAV 66.59 323 eP+ 58 18.00 -1.0
GUA 67.62 344 eP 58 26.50 1.0
1.2s 437.50nm 6.5mb
eS 07 26.00
GUMO 67.67 344 eP 58 25.57 -0.3
PJG 67.67 344 eP 58 26.50 0.7
KKM 69.42 313 ePd 58 36.20 -0.7
KGM 72.19 299 eP 58 55.00 1.5
KLM 73.99 298 eP 59 08.50 4.5X
OCP 75.20 321 eP 59 12.10 1.2
IPM 75.56 299 ePd 59 17.50 4.4X
1.5s 80.40nm 5.6mb
TSI 75.97 296 eP 59 21.00 5.6X
BAG 77.01 322 eP 59 18.00 -3.4X
eS 09 08.00
SNG 77.96 300 eP 59 26.20 -0.3
e 09 20.80
HON 82.74 39 P 00 05.00 13.3X
Z 19s 3.65um 5.8Msz
LCCH 82.94 139 ePc 59 57.50 4.7X
NNT 82.99 302 eP 59 54.30 1.1
TACH 83.03 140 ePd 59 54.50 1.2
PCH 83.23 140 ePc 59 55.00 0.6
SAN 83.32 140 ePd 59 55.00 0.2
PEL 83.58 139 iPc 59 55.70 -0.5
JACH 84.03 139 eP 00 03.00 4.5X
MDZ 84.52 141 i(P) 00 01.80 0.9
RTBS 85.37 140 e(P) 00 06.50 1.4
NST 85.40 304 eP 00 07.00 1.7

17d 14h

RTCB	85 78 140	ePd	00 07.80	0.5				e	07 03.00		SOB1	115.46 157	(PKP)	06 15.00	4.6X	VRI	149.05 276	ePKP	07 16.50	5.1X
CFA	85.89 141	ePd	00 07.60	-0.2				ePP	07 31.87		COR	117.53 52	ePdiff	02 34.43	3.8X	CLI	149.06 277	ePKP	07 17.50	6.1X
RTLL	86.05 140	ePd	00 07.60	-1.0				eHPP	07 32.37							MLR	149.32 275	ePKPc	07 16.50	4.5X
LPA	86.42 150	eP+	00 16.00	5.8X												VTS	149.37 268	ePKP	07 11.00	-1.2
Z	20s 2.13um		5.5Msz													KBN	149.63 262	iPKPd	07 18.40	6.1X
	PcP	00 40.00			ALQ	119.27 70	e(PKP)	06 18.00	0.7							KEK	149.66 260	ePKP	07 18.30	5.8X
CER	87.20 212	iPd	00 12.00	-2.1		Z 19s	9.51um		6.4Msz							MTUR	149.71 273	ePKP	07 16.00	3.5X
BDT	87.30 304	eP	00 11.40	-3.2X	ANMO	119.27 70	PKP	06 20.00	2.7X							CMP	149.75 273	ePKPc	07 18.00	5.5X
	1.0s 89.70nm		6.0mb		Z	19s 8.85um			6.4Msz							TPE	149.90 261	PKP	07 17.40	4.6X
BLF	88.63 219	iPd	00 21.50	0.3	ANMO	119.27 70	ePdiff	02 37.59	-1.3X							DRA	149.91 272	ePKP	07 18.00	5.3X
CHG	88.66 304	iPd	00 21.90	0.8			iPP	07 42.81								OHR	149.94 263	iPKP	07 16.80	3.9X
	1.0s 47.50nm		5.7mb				iHPP	07 43.64									2.2s 1463.00nm			
	eS	11 12.00					eSKS	13 22.03										i	07 23.00	
EVA	89.80 223	iPc	00 26.50	-0.4			ePS	17 31.58								SKO	150.07 265	iPKP	07 12.50	-0.5
	0.9s 84.03nm		6.0mb		LON	119.83 51	PKP	06 15.90	-1.9								1.3s 265.00nm			
PRY	90.07 221	eP	00 33.50	5.4X	PGC	120.47 49	ePKP	06 18.00	-0.8							Z	18s 3.02um		6.1Msz	
BFT	90.12 224	iPc	00 27.50	-0.9	MCW	120.77 49	PKP	06 18.50	-1.0							N	18s 2.37um			
	1.3s 153.85nm		6.1mb		PMR	121.39 26	PKP	06 15.00	-5.2X							E	18s 2.00um			
SSE	90.32 328	P	00 30.00	1.4	Z	20s 4.00um			6.1Msz									i	07 18.50	
	1.5s 993.00nm		6.9mb		BCAO	121.91 228	ePKP	06 19.43	-3.3X									i	09 44.00	
Z	20s 3.70um		5.8Msz				iPP	07 50.06										i	10 39.00	
N	18s 4.40um				NEW	123.14 52	PKP	06 22.00	-2.0									i	20 55.00	
	sP	00 37.50			Z	22s 14.47um			6.6Msz									i	23 42.00	
	ePP	04 04.00			IMW	123.18 60	PKP	06 24.00	-0.6									LR	43 31.00	
	SKS	11 00.00			GOL	123.26 67	PKP	06 20.00	-4.9X							BERA	150.19 262	ePKP	07 16.90	3.7X
	S	11 20.00			Z	18s 3.90um			6.1Msz							COZ	150.19 273	ePKP	07 20.00	6.7X
	PS	12 30.00			GLD	123.37 67	PKP	06 20.00	-5.0X							TNR	150.41 274	ePKPc	07 20.00	6.6X
	SS	17 20.00			Z	19s 7.63um			6.4Msz							SRE	150.53 271	ePKP	07 20.00	6.4X
SWZ	90.69 220	iPc	00 36.00	5.1X	HBMT	123.64 57	ePKP	06 25.20	-0.3							TIR	150.64 263	ePKP	07 18.00	4.1X
	1.5s 180.56nm		6.1mb		MAIO	123.79 287	ePKP	06 27.00	1.2							MEU	150.75 251	PKP	07 21.10	6.8X
SLR	90.81 223	iPd	00 31.50	0.0	FBA	124.47 24	ePKP	06 24.30	-1.8							SOI	150.77 254	PKP	07 20.20	6.1X
	0.9s 21.01nm		5.4mb		TUL	126.10 77	ePKP	06 35.60	5.4X							LACI	150.91 263	ePKP	07 18.90	4.7X
Z	17s 18.37um		6.6MszX			1.2s 20.50nm										GRI	151.06 255	PKP	07 19.62	5.0X
	S	10 05.60			Z	21s 1.02um			5.5Msz								0.1s 14.20nm			
MAJO	91.25 343	iPc	00 34.12	1.3			LR	46 20.00								ATN	151.17 253	PKP	07 21.20	6.4X
	ePP	04 14.34			RSSD	126.99 64	PKP	06 29.50	-2.4							DEV	151.35 273	ePKP	07 23.50	8.7X
	iS	11 41.75			SES	127.51 54	ePKP	06 31.00	-1.5							MNO	151.46 252	PKP	07 20.00	4.5X
	ePS	12 27.77			INK	130.77 27	ePKP	06 36.00	-2.0							FAI	151.58 250	PKP	07 24.00	8.6X
	e	14 13.71			LIC	131.56 201	PKP	06 41.40	0.2							TTG	151.65 264	ePKP	07 22.00	6.7X
	e	14 29.93			Z	20s 5.80um			6.3Msz							LPI	151.70 253	PKP	07 22.73	7.1X
MAT	91.25 343	eP	00 32.00	-0.8	KIC	131.63 201	PKP	06 41.46	0.1							MCT	151.86 250	PKP	07 11.20	-4.9X
	1.0s 30.00nm		5.6mb		RSCP	131.95 84	PKP	06 40.00	-1.4							ORI	151.86 257	PKP	07 23.00	7.2X
Z	20s 2.13um		5.6Msz		Z	20s 3.39um			6.0Msz							GIB	151.88 251	PKP	07 22.20	6.2X
	eS	11 34.00			TIC	131.96 201	PKP	06 41.74	-0.2							BZS	151.99 272	ePKP	07 21.00	5.3X
KSR	91.25 221	iPc	00 30.50	-3.1	TA8	132.71 279	ePKP	06 50.00	7.1X							BEO	152.27 269	ePKP	07 24.50	8.3X
KMI	92.23 311	Pd	00 41.50	3.7X	GBTN	132.81 85	PKP	06 39.50	-3.5X							TIM	152.29 271	iPKPc	07 21.40	5.2X
Z	18s 4.80um		6.0Msz		MBH	133.86 262	e(PKP)	06 49.00	3.9X							CVT	152.36 249	PKP	07 33.10	16.6X
	S	11 42.00			PRNI	134.20 263	e(PKP)	06 50.00	4.2X							MGR	152.43 256	PKP	07 22.40	5.8X
	SS	17 46.00			FFC	134.53 54	ePKP	06 51.00	5.4X							LVI	152.84 249	PKP	07 25.50	8.3X
BUL	95.63 225	iPd	00 49.50	-4.2X		0.7s 11.00nm										KEV	152.92 326	ePKP	07 23.00	6.7X
	1.2s 42.97nm		5.8mb		LKO	134.90 201	PKP	06 32.12	-15.4X								1.1s 60.00nm			
Z	18s 1.10um		5.4Msz		BHL	136.32 267	PKP	06 52.00	2.2									e	30 36.00	
N	18s 0.41um				NA2	138.32 87	PKP	06 49.00	-4.3X							SCH	153.04 68	ePKPc	07 17.70	0.7
E	18s 0.48um				ANTO	141.96 272	ePKP	06 59.53	-0.4X								1.1s 91.00nm			
GBA	96.15 284	P	01 04.00	8.3X	BBTK	141.97 271	ePKP	06 58.00	-2.0							BSS	153.29 257	PKP	07 29.60	11.9X
	1.5s 42.10nm		5.7mb		KAS	142.30 274	ePKP	07 02.50	2.1							FR8	153.33 48	ePKP	07 21.00	4.0X
GBA	96.15 284	P	00 56.00	0.3	RSNY	144.12 81	PKP	06 58.00	-5.3X							SOD	153.52 321	iPKP	07 25.20	8.0X
SHL	97.85 302	iP	01 04.50	1.0	SMG	144.17 264	ePKP	07 02.60	-1.0									i	07 37.00	
	eS	11 38.00			VAM	144.19 258	ePKP	07 03.50	-0.2							HVAR	153.77 263	iPKP	07 26.00	7.7X
ARE	97.92 131	eP	01 04.00	-0.3	HBVT	144.89 83	PKP	07 01.00	-3.7X							DUI	154.04 258	PKP	07 26.50	7.6X
HYB	98.53 287	eP	01 06.50	0.0	ITU	145.00 270	iPKPd	07 04.00	-0.9							PSZ	154.14 275	ePKP	07 26.10	7.3X
ZOBO	99.59 134	ePDIFc	01 17.73	5.5	PRK	145.50 265	ePKP	07 06.70	0.9							SDI	154.45 257	PKP	07 24.70	5.3X
BJI	100.13 328	ePdiff	01 15.50	2.2	VLI	145.83 259	ePKP	07 06.80	0.3							BUD	154.46 273	e(PKP)	07 25.00	5.9X
Z	21s 3.64um		5.9Msz		BNH	146.10 84	PKP	07 06.10	-0.6							SPC	154.48 278	ePKP	07 26.70	7.3X
N	18s 2.33um				ATH	146.20 261	ePKP	07 08.70	1.7									i	07 42.30	
	ePP	05 22.10			ITM	146.74 259	ePKP	07 07.80	-0.2									e	11 08.80	
	eSKS	11 52.00			PSN	147.00 273	ePKP	07 11.00	2.9X							NUR	154.74 305	ePKP	07 37.00	18.0X
	eS	12 44.00			RDO	147.11 267	ePKP	07 10.30	1.9								1.2s 66.50nm			
	esS	12 52.00			JMB	147.27 270	iPKPc	07 12.00	3 4X									i	07 49.10	
	eSS	20 41.00			KDZ	147.49 268	iPKPc	06 56.00	-13.0X							GGC	154.75 190	iPKPc	07 29.00	8.9X
PPD	100.46 151	ePdiff	01 10.60	-4.6X	DIM	147.66 269	iPKP	07 13.00	3.8X							CFTV	154.85 193	iPKPc	07 34.20	13.9X
LZH	101.18 317	Pdiff	01 20.00	1.7	MIM	147.77 84	PKP	07 11.00	1.7							KRA	155.01 279	ePKP	07 20.80	1.1
	2.8s 134.00nm		6.0mb		CFR	147.83 276	ePKP	07 13.50	4.1X								1.3s 125.00nm			
Z	24s 4.60um		5.9MszX		PLG	147.90 264	ePKP	07 11.90	2.1									e	07 27.20	
E	31s 13.30um				RZN	147.93 267	iPKP	07 13.00	3.0X									e	07 44.80	
	PP	05 29.00			EVR	147.95 261	ePKP	07 13.20	3.2X							SRO	155.04 273	ePKP	07 35.40	15.6X
	SKKS	12 07.50			PLD	148.19 268	ePKP	07 14.00	3.9X									i	07 45.20	
SIV	102.74 140	(Pdiff	01 09.00	-16.5X	VLS	148.19 259	ePKP	07 13.90	3.6X									e	11 20.20	
	i	01 30.00			EMM	148.44 86	PKP	07 12.70	2.3X							RDP	155.12 256	PKP	07 32.70	12.4X
NAI	107.99 242	iPKPd	05 37.00	-19.4X	PVL	148.45 270	iPKPc	07 15.00	4.5X							ZAG	155.48 267	ePKP	07 25.00	4.5X
NDI	108.14 294	ePKP	06 12.00	16.0X	MMB	148.47 267	ePKP	07 03.00	-7.6X							MNS	155.53 257	PKP	07 28.50	7.7X
LWI	111.25 234	e(PKP)	06 19.20	16.6X	8UC	148.65 273	ePKPd	07 15.00	4.3X							VBY	155.76 266	ePKP	07 30.00	9.0X
PRS	112.22 59	e(PKP)	06 16.30	12.8X	BUC1	148.66 273	ePKPc	07 16.00	5.2X									i	07 48.40	
PRI	112.43 59	ePKP	06 18.30	14.2X	PGB	148.77 268	iPKPc	07 15.00	3.9X									i(PP)	11 25.00	
CMB	114.02 58	ePKP	06 23.80	16.7X	ISR	148.77 274	ePKP	07 17.00	6.0X							ZST	155.94 273	ePKP	07 27.20	6.1X
WDC	114.87 55	ePKP	06 26.30	17.8X	KZN	148.86 263	ePKP	07 15.50	4.1X									i	07 48.70	
QUE	115.08 287	ePKP	06 16.50	7.0X	KKB	149.02 266	iPKPc	07 15.00	3.5X									e	11 24.50	

17d 14h

ASS	155.95	259	PKP	07	28.50	7.1X
SOP	156.04	272	ePKP	07	25.00	3.7X
ARV	156.04	260	PKP	07	28.50	7.1X
VKA	156.44	273	ePKP	07	27.00	5.2X
	Z 18s		2.00um			6.0Msz
			e	08	12.00	
			i	11	26.80	
			i	11	41.30	
LJU	156.47	267	ePKP	07	27.50	5.6X
VOY	156.85	266	ePKP	07	24.30	1.8
			i	07	52.50	
SFI	156.93	259	PKP	07	27.50	5.0X
PGD	156.98	259	PKP	07	27.00	4.1X
KSP	157.47	279	ePKP	07	23.50	0.5
			ic	07	56.30	
			ePP	11	29.50	
			e	11	34.00	
KMR	157.66	271	ePKP	07	25.00	1.7
			i	07	56.40	
			iPP	11	34.20	
VVI	157.70	265	PKP	07	42.00	-18.5X
GDH	157.75	31	ePKP	07	05.00	-17.7X
			e	11	30.00	
			e	18	30.00	
			e	31	40.00	
FVI	157.80	266	PKP	07	28.90	5.4X
CTI	158.20	264	PKP	07	32.50	8.3X
PRU	158.20	276	ePKP	07	27.00	3.1X
	Z 21s		3.20um			6.1Msz
	N 20s		2.10um			
	E 17s		1.30um			
			e	07	59.50	
KHC	158.45	273	iPKPc	07	31.50	7.2X
	N 20s		1.80um			
	E 18s		1.80um			
			e	08	00.00	
			i	11	38.60	
BRG	158.88	278	ePKP	07	26.00	1.4
	1.4s		70.00nm			
			i	08	01.20	
			i	11	42.60	
			e	31	38.00	
			i	38	06.00	
OGA	158.98	265	ePKP	07	29.00	3.9X
SQTA	159.04	266	ePKP	07	31.00	5.9X
	1.4s		97.90nm			
			i	07	34.10	
			i	07	47.10	
			i	08	02.10	
			i	11	15.30	
			i	11	43.70	
CLL	159.58	278	ePKP	07	29.00	3.7X
	2.4s		58.00nm			
	Z 20s		3.00um			6.1Msz
			i	08	04.80	
VAI	159.83	261	PKP	07	30.00	4.3X
APHE	160.05	222	ePKP	07	32.00	5.5X
MAL	160.14	221	ePKP	07	31.50	5.1X
ATEJ	160.15	222	ePKP	07	38.00	11.4X
MOX	160.19	276	ePKP	07	29.00	3.0X
	Z 20s		3.90um			
	N 20s		2.70um			
ALOJ	160.35	222	ePKP	07	30.50	3.7X
ASMO	160.42	223	ePKP	07	32.50	5.6X
AAPN	160.53	222	ePKP	07	31.50	4.6X
BNI	160.62	256	PKP	07	29.10	2.3X
LPG	160.82	257	ePKP	07	33.10	5.9X
LPL	160.84	257	ePKP	07	32.70	5.5X
TOL	162.67	227	ePKP	07	36.00	7.1X
			iPKKP	08	19.50	
			iPP	12	03.00	
			ePPP	15	40.00	
			iPS	23	15.00	
			iSS	32	20.00	
EPF	162.92	242	ePKP	07	32.60	3.5X
CAF	163.20	250	ePKP	07	33.00	3.7X
	1.4s		21.80nm			
LBF	163.24	258	ePKP	07	32.20	2.9X
	1.8s		64.75nm			
LOR	163.45	259	ePKP	07	32.30	2.9X
	Z 20s		6.25um			5.4Msz
AVF	163.51	257	ePKP	07	32.10	2.6X
	1.5s		26.10nm			
LPO	163.54	248	ePKP	07	33.30	3.7X
	1.6s		74.65nm			
MEM	163.55	272	PKP	07	37.20	7.9X
SSF	163.56	258	ePKP	07	32.60	3.1X
	1.8s		51.80nm			
BGF	163.68	255	ePKP	07	32.80	3.1X
TCF	163.90	254	ePKP	07	32.80	2.9X
DOU	164.23	269	PKP	07	27.00	-3.0
			ec	08	23.80	
			PP	12	07.30	
			e	13	43.00	
			SS	32	41.00	
LSF	164.28	253	ePKP	07	33.00	2.8X
UCC	164.60	271	PKP	07	39.00	8.7X
			i+	08	27.00	

S.D. = 1.3 on 140 of 304 obs.

& SEP 17, 1990 15h 26m 29.80s
61.124 N 150.783 W
DEPTH = 51.0km
SOUTHERN ALASKA (2)
<AGS-P>.

SUA	0.34	3	iP	26	39.48	-0.2
			eS	26	47.89	
NKA	0.44	210	iP	26	42.00	1.5
PMS	0.60	78	eP	26	42.56	0.0
SPU	0.62	276	iP	26	42.28	-0.4
			eS	26	52.74	
CGLM	0.62	288	iP	26	42.33	-0.4
SLKM	0.68	156	eP	26	42.76	-0.7
CRP	0.68	283	eP	26	43.38	-0.2
			eS	26	54.10	
PWA	0.68	39	iP	26	43.06	-0.4
NCG	0.72	294	iP	26	43.48	-0.6
			eS	26	54.53	
CKL	0.76	276	iP	26	43.91	-0.7
			iS	26	54.97	
BGL	0.79	281	iP	26	44.31	-0.7
			eS	26	55.43	
PLRM	0.92	59	iP	26	45.80	-0.9
			eS	26	58.87	
SKT	0.93	338	iP	26	46.09	-0.7
RDT	0.97	236	iP	26	46.52	-0.9
			eS	27	00.28	
GHO	1.10	53	iP	26	48.22	-1.1
			eS	27	02.71	
SEW	1.22	147	eP	26	49.20	-1.5
CUT	1.31	11	eP	26	50.76	-1.2
SML	1.36	59	eP	26	51.49	-1.3
CNPM	1.62	188	eP	26	55.22	-1.2
VZW	2.06	90	eP	27	00.16	-2.4
VLZ	2.16	88	eP	27	01.71	-2.3
KLU	2.38	79	eP	27	04.91	-2.2

22 obs. associated

& SEP 17, 1990 16h 00m 48.60s
36.647 N 121.305 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).

SAO	0.16	316	iP	00	51.90	-0.1
LLA	0.29	96	iPc	00	54.40	-0.2
PRS	0.32	189	iPd	00	54.90	-0.2
GCC	0.67	305	ePc	01	01.20	-0.9
PRI	0.72	134	ePd	01	02.50	-0.5
ARN	0.72	345	iPc	01	02.90	-0.2
MHC	0.74	339	ePd	01	03.30	-0.2
			eS	01	14.20	
PHAM	1.09	138	eP	01	08.00	-1.5
PKEM	1.13	121	eP	01	10.20	0.1
PCC	1.21	315	ePc	01	10.00	-1.5
FRI	1.33	74	ePc	01	11.70	-1.8
			iS	01	29.00	
BKS	1.43	329	eP	01	03.20	-12.0
			e(S)	01	29.70	
BRK	1.44	328	ePc	01	13.50	-1.7
CMB	1.57	28	iPc	01	16.00	-1.1
			eS	01	35.30	
BCH	1.76	145	eP	01	18.00	-2.0
ABL	2.47	136	eP	01	24.00	-6.2

16 obs. associated

& SEP 17, 1990 18h 05m 47.38s
60.080 N 152.686 W
DEPTH = 101.5km
SOUTHERN ALASKA (2)
<AGS-P>.

RSO	0.38	355	iP	06	02.41	-0.7
OPT	0.51	213	eP	06	02.86	-0.8
			eS	06	15.22	
RDT	0.51	16	iP	06	02.95	-0.8
			eS	06	15.85	
HOM	0.68	128	eP	06	04.40	-0.5
			eS	06	17.19	
XLV	0.79	142	eP	06	04.72	-1.4
AUE	0.80	206	eP	06	05.23	-0.9
PDB	0.81	250	iP	06	05.36	-0.9
			eS	06	19.40	
AUH	0.81	208	eP	06	05.92	-0.4
AUI	0.84	207	eP	06	05.14	-1.3
CNPM	0.92	127	iP	06	06.39	-1.0
			eS	06	21.41	
NKA	0.98	47	iP	06	08.88	1.0
CKL	1.13	9	iP	06	09.09	-0.7
			eS	06	26.59	
SPU	1.15	15	iP	06	09.14	-0.8
			iS	06	26.24	
BGL	1.20	7	iP	06	10.00	-0.5
CRP	1.22	12	eP	06	10.31	-0.6
			eS	06	27.69	
CDD	1.25	203	eP	06	09.37	-1.8
CGLM	1.28	15	iP	06	10.84	-0.6
			eS	06	27.83	
SLKM	1.30	70	eP	06	10.07	-1.6
NCG	1.35	11	iP	06	12.04	-0.4
SEW	1.62	88	iP	06	13.96	-1.6
SUA	1.68	34	eP	06	15.82	-0.7
PMS	1.93	51	eP	06	18.33	-1.3
PWA	2.09	40	eP	06	20.69	-1.0
GHO	2.50	46	eP	06	25.17	-2.1
SML	2.74	49	eP	06	28.03	-2.4

25 obs. associated

• SEP 17, 1990 18h 33m 49.74± 2.53s
44.098 N ±10.3km 8.636 E ±17.2km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.5 (LDG), 2.1 (GEN).

FIN	0.33	290	P	33	56.49	0.0
			S	34	00.80	
PCP	0.45	352	P	33	58.87	0.0
			S	34	05.31	
IMI	0.57	251	P	34	00.90	-0.5
			S	34	09.00	
ROB	0.58	290	P	34	00.90	-0.7
			S	34	08.90	
ENR	0.88	279	P	34	06.56	-0.2
			S	34	17.53	
SBF	0.90	255	Pg	34	07.60	0.6
			Sg	34	19.80	
STV	0.95	279	P	34	09.00	1.0
			S	34	20.59	
PZZ	1.17	291	P	34	11.77	0.0
			S	34	24.81	
FRF	1.54	250	Pg	34	16.80	-0.4
			Sg	34	37.00	
LRG	1.77	249	Pg	34	24.00	3.4X

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

SEP 17, 1990 18h 41m 54.73± 1.14s
5.648 N ± 4.6km 124.729 E ± 5.8km
DEPTH = 42.1 ± 11.4 km
5.2mb (11 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

DAV	1.66	30	iPd-	42	21.70	-0.1
KKM	8.48	273	ePd	43	58.70	0.6
	1.0s		96.90nm			5.8mb
KUPT	15.73	184	eP	45	39.00	3.9X
TRT	17.93	222	ePc	46	07.50	4.8X
MTN	19.44	161	eP	46	20.40	-0.5
KNA	21.63	169	iPd	46	43.30	-0.1
IPM	23.63	269	ePd	47	06.90	3.7X
NNT	25.61	287	eP	47	22.50	0.4
NST	26.11	294	eP	47	27.50	0.8
PMG	26.89	124	eP	47	33.50	-0.4
MBL	27.07	190	eP	47	35.00	-0.4
WRA	27.13	160	iPd	47	35.00	-1.0
BDT	27.68	297	eP	47	41.80	0.8
CHG	28.34	300	eP	47	47.00	0.0
KMI	28.62	315	eP	47	45.50	-4.3X
NANU	29.45	197	eP	47	57.00	0.1
QIS	29.86	151	eP	48	00.00	-0.7
ASPA	30.48	163	ePd	48	05.80	-0.3

	0.7s	31.00nm		5.2mb	
Z	22s	0.20um		3.7MszX	
		LR	01 37.80		
WARB	31.70	177 eP	48 16.00	-0.7	
MEKA	32.63	190 eP	48 23.00	-1.9	
MAT	33.14	20 (P)	48 29.00	-0.2	
BJI	35.10	349 eP	48 42.00	-4.0X	
	1.4s	35.00nm		5.1mb	
Z	28s	0.41um		4.0MszX	
		eS	54 56.00		
MRWA	35.67	193 eP	48 50.00	-1.0	
LZH	35.86	330 Pc	48 53.50	0.8	
	1.5s	71.00nm		5.4mb	
FORR	36.43	175 eP	48 57.40	0.0	
	0.4s	22.00nm		5.4mb	
BAL	36.86	192 eP	49 00.70	-0.3	
SHL	37.14	306 iP	49 03.00	-0.7	
KLB	37.62	190 eP	49 07.00	-0.4	
MUN	38.29	192 eP	49 13.30	0.3	
NWAO	39.02	190 eP	49 19.50	0.4	
STK	40.64	158 iPd	49 33.50	1.0	
	0.8s	25.00nm		5.0mb	
		ePcP	51 04.70		
		iS	55 40.30		
ADE	42.49	163 iPd	49 49.20	1.5	
	0.9s	62.18nm		5.3mb	
GUN	42.99	306 P	49 52.20	-0.1	
	0.6s	32.00nm		5.2mb	
PKI	43.24	305 P	49 53.80	-0.5	
KKN	43.43	305 P	49 55.20	-0.5	
	0.8s	21.00nm		4.9mb	
DMN	43.50	305 P	49 56.00	-0.4	
	1.0s	28.00nm		5.0mb	
GKN	44.04	305 P	50 00.00	-0.6	
COO	44.43	146 iPc	50 04.30	0.8	
BFD	45.74	160 iPc	50 17.20	3.5X	
HYB	46.61	289 eP	50 21.50	0.5	
CAN	46.71	152 eP	50 23.00	1.4	
TOO	47.15	157 iPc	50 27.10	2.1	
GBA	47.22	283 P	50 26.00	0.2	
DZM	49.26	125 iPd	50 41.20	-0.5	
QUE	59.45	302 eP	51 44.00	-12.2X	
KEV	87.42	340 eP	54 30.00	-8.5X	
SOD	87.94	337 eP	54 44.00	2.9X	
SUF	88.95	333 eP	54 45.00	-1.0	
NUR	90.07	331 eP	55 08.00	16.7X	
HFS	95.40	332 eP	55 15.00	-0.9	
	0.3s	0.50nm		4.4mb	
TACH	148.56	154 ePKPc	01 39.20	3.7X	
PEL	149.11	154 iPKPc	01 40.40	4.0X	
ZOBO	163.56	131 PKP	01 57.00	1.4	
	S.D. = 0.8	on 41 of 53 obs.			

& SEP 17, 1990 19h 05m 09.90s
40.443 N 126.660 W
DEPTH = 37.0km
OFF COAST OF NORTHERN CALIFORNIA(34)
<BRK>. ML 3.4 (BRK).

FHC	2.07	79 ePc	05 41.10	-1.8	
		eS	06 03.60		
WDC	3.14	86 ePd	05 56.90	-1.3	
LBFM	3.73	74 eP	06 06.00	-0.7	
ORV	4.06	101 e(P)	06 08.70	-2.6	
		eS	06 54.10		
PCC	4.44	130 ePc	06 14.50	-2.1	
GCC	4.99	132 ePc	06 21.90	-2.5	
MHC	4.99	127 eP	06 22.50	-2.0	
ARN	5.05	126 eP	06 23.00	-2.3	
SAO	5.49	130 eP	06 28.40	-3.0	
	9 obs. associated				

? SEP 17, 1990 19h 53m 12.01±12.14s
33.197 S ±78.8km 69.701 W ±63.3km
DEPTH = 33.0km (normal)
CHILE-ARGENTINA BORDER REGION (127)

MDZ	0.78	67 eP	53 26.50	-0.1	
		eS	53 53.40		
RTBS	1.55	8 e(P)	53 37.80	0.3	
RTCV	1.66	37 ePc	53 40.30	1.1	
RTCB	1.87	24 ePc	53 42.00	-0.3	
		eS	54 03.00		
CFA	2.01	38 e(P)	53 44.50	0.2	
RTLL	2.13	30 iPc	53 45.00	-1.1	
		eS	54 08.20		
	S.D. = 0.9	on 6 of 6 obs.			

% SEP 17, 1990 20h 08m 28.08± 0.61s
38.705 N ± 4.9km 15.162 E ± 6.7km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MSI	0.59	148 P	08 39.90	-0.1	
		eSg	08 47.20		
ATN	0.59	156 P	08 40.10	0.0	
		eSg	08 47.00		
MNO	0.86	206 P	08 44.90	0.2	
		eSg	08 58.10		
SOI	0.94	132 P	08 46.10	0.0	
		eSg	08 59.10		
GIB	1.14	232 P	08 49.40	-0.1	
MGR	1.46	12 Pd	08 54.60	0.1	
		eSg	09 13.00		
MEU	1.61	187 P	08 56.70	0.0	
		eSg	09 16.90		
ORI	1.68	36 P	08 57.60	-0.1	
	S.D. = 0.1	on 8 of 8 obs.			

& SEP 17, 1990 20h 14m 21.42s
60.587 N 152.888 W
DEPTH = 159.8km
SOUTHERN ALASKA (2)
<AGS-P>.

CUT	2.21	33 eP	14 57.21	-2.8	
		eS	15 27.08		
SML	2.52	59 eP	15 00.70	-3.1	
VZW	3.14	79 eP	15 08.87	-2.6	
		eS	15 47.71		
VLZ	3.25	77 eP	15 10.39	-2.5	
		eS	15 50.45		
KLU	3.51	72 eP	15 13.84	-2.4	
TOA	3.58	62 eP	15 14.72	-2.4	
WRH	4.49	28 eP	15 24.93	-4.0	
GLB	4.50	75 eP	15 27.79	-1.4	
DDM	4.60	43 eP	15 29.61	-0.9	
CCB	4.70	28 eP	15 27.69	-4.1	
HDA	4.72	33 eP	15 28.52	-3.5	
FBA	4.92	26 eP	15 30.85	-3.8	
TGL	4.95	84 eP	15 33.32	-1.9	
BALM	5.18	80 iP	15 37.02	-1.3	
	14 obs. associated				

• SEP 17, 1990 21h 26m 18.93± 1.49s
25.386 N ±10.6km 124.798 E ±10.7km
DEPTH = 72.4 ± 13.9 km
4.4mb (3 obs.)
NORTHEAST OF TAIWAN (245)

TWC	2.79	255 ePc	27 01.50	-0.6	
		eS	27 19.40		
TWO	3.77	254 ePc	27 16.00	0.1	
MAT	15.98	43 eP	30 00.00	-0.6	
BJI	16.30	336 eP	30 06.00	1.4	
CHTO	24.81	260 P	31 35.00	-0.7	
PKI	35.23	282 P	33 09.00	0.2	
KKN	35.32	283 P	33 10.00	0.6	
DMN	35.49	283 P	33 11.40	0.5	
GBA	45.94	264 P	34 36.00	-0.5	
WRA	46.00	167 eP	34 39.20	2.3	
ASPA	49.55	169 eP	35 03.40	-1.2	
	0.5s	6.00nm		4.9mb	
HFS	78.11	331 eP	38 10.20	-1.0	
	0.4s	1.40nm		4.3mb	
NB2	78.68	333 P	38 14.00	-0.4	
	0.8s	2.60nm		4.2mb	
	S.D. = 1.2	on 13 of 13 obs.			

& SEP 17, 1990 21h 29m 53.62s
60.003 N 152.782 W
DEPTH = 92.9km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.42	213 eP	30 07.53	-0.8	
		eS	30 18.54		
RSO	0.46	2 iP	30 08.35	-0.5	
		iS	30 19.91		
RDT	0.60	18 iP	30 09.04	-0.8	
		iS	30 21.47		
HOM	0.67	121 eP	30 09.82	-0.5	
		eS	30 22.30		
AUH	0.72	208 eP	30 09.47	-1.5	
PDB	0.74	254 iP	30 10.09	-1.0	
		eS	30 22.89		
AUI	0.75	206 eP	30 09.92	-1.1	
XLV	0.77	135 eP	30 10.06	-1.3	
CNPM	0.92	121 iP	30 11.89	-1.0	
		eS	30 25.99		
NKA	1.07	45 eP	30 15.55	1.0	
MCNL	1.14	225 eP	30 13.31	-2.1	
CDD	1.16	203 eP	30 14.27	-1.5	
CKL	1.22	10 iP	30 15.85	-0.7	
SPU	1.24	17 iP	30 15.89	-0.8	
BGL	1.28	9 eP	30 16.75	-0.5	
CRP	1.31	13 iP	30 17.05	-0.6	
CGLM	1.36	16 iP	30 17.67	-0.6	
SLKM	1.37	67 eP	30 17.49	-0.9	
NCG	1.44	12 iP	30 18.61	-0.6	
SUA	1.78	33 eP	30 22.98	-0.6	
SVW	1.79	310 iP	30 22.18	-1.5	
PMS	2.02	50 eP	30 25.85	-0.9	
SKT	2.08	17 iP	30 26.40	-1.1	
PWA	2.18	39 iP	30 28.42	-0.4	
PLRM	2.40	47 eP	30 30.23	-1.5	
GHO	2.59	45 eP	30 32.79	-1.7	
SML	2.83	48 eP	30 35.64	-2.1	
VZW	3.26	68 eP	30 40.48	-3.1	
	28 obs. associated				

? SEP 17, 1990 21h 57m 39.69± 6.19s
20.877 S ±51.8km 69.145 W ±21.7km
DEPTH = 33.0km (normal)
NORTHERN CHILE (123)

CNCB	4.19	15 P	58 43.20	-0.3	
LPB	4.43	13 P	58 47.00	0.2	
	1.0s	120.00nm			
CCH	4.49	40 P	58 49.50	2.0	
ZOBO	4.68	12 Pd	58 49.10	-1.4	
ARE	4.92	333 eP	58 54.00	0.4	
		iS	59 46.90		
SIV	9.07	59 Pc	59 50.50	-1.0	
	S.D. = 1.5	on 6 of 6 obs.			

• SEP 18, 1990 02h 47m 37.85± 1.12s
4.615 S ± 8.5km 143.611 E ±11.0km
DEPTH = 115.0 ± 13.1 km
4.9mb (4 obs.)
PAPUA NEW GUINEA (202)

MNDI	1.53	178 eP	48 06.50	0.6	
		eS	48 28.00		
LAT	3.93	121 eP	48 38.00	0.7	
PMG	5.92	144 eP	49 03.00	-1.6	
MTN	14.79	236 eP	51 01.50	-1.0	
QIS	16.32	193 eP	51 24.00	2.4	
		eS	54 16.00		
WRA	17.71	210 iPc	51 36.80	-2.0	
		eS	54 44.10		
ASPA	21.13	205 iPd	52 14.80	-0.3	
	0.7s	14.00nm		4.4mb	
Z	21s	0.14um		3.3Msz	
		eS	56 09.00		
		LR	00 36.20		
MBL	28.34	232 iPc	53 23.20	0.1	
	0.4s	10.00nm		4.8mb	
FORR	29.91	207 eP	53 36.20	-0.7	
NANU	32.50	234 eP	54 00.00	0.3	
COOL	33.62	216 eP	54 09.40	0.0	
MRWA	35.81	224 iPd	54 28.90	0.9	
	0.4s	7.00nm		4.9mb	
KLB	36.18	219 eP	54 31.00	-0.1	
BAL	36.21	221 eP	54 31.50	0.2	
MUN	37.42	220 eP	54 42.20	0.7	
SSE	41.46	330 P	55 15.50	0.6	
PSI	45.24	278 ePc	55 46.50	0.8	
BJI	51.10	333 eP	56 30.50	-0.1	
	0.8s	15.00nm		5.0mb	
GUN	64.29	304 P	58 04.40	0.5	
PKI	64.57	303 P	58 04.00	-1.6	
KKN	64.75	304 P	58 06.20	-0.4	
GKN	65.36	304 P	58 10.60	0.2	
GBA	68.11	287 P	58 28.00	0.2	
APO	112.59	336 ePKP	06 01.50	-0.4	
	0.5s	1.30nm			
SIV	148.13	130 PKP	07 13.60	4.4X	
		i	07 39.20		
KIC	148.45	275 PKP	07 15.00	5.2X	
TIC	148.72	275 PKP	07 15.50	5.3X	

18d 03h

LIC 148.74 274 PKP 07 15.70 5.5X
PPD 149.76 152 ePKP 07 16.80 5.2X
e 07 35.90
S.D. = 1.0 on 24 of 29 obs.

SEP 18, 1990 03h 18m 39.73± 0.13s
51.453 N ± 3.2km 177.899 E ± 2.1km
DEPTH = 40.9km (13 depth phases)
5.6mb (106 obs.) 5.4Msz (23 obs.)
RAT ISLANDS, ALEUTIAN ISLANDS (6)
Ms 5.1 (BRK). Felt strongly on Amchitka. Felt (III) on Adak.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 30C
Centroid Location:
Origin Time 03:18:42.1 0.3
Lat 51.76N 0.04 Lon 177.85E 0.04
Dep 43.2 4.2 Half-duration 2.8
Moment Tensor; Scale 10**17 Nm
Mrr= 0.81 0.08 Mtt=-1.96 0.13
Mff= 1.14 0.08 Mrt= 4.24 0.33
Mrf=-0.89 0.14 Mtf=-0.81 0.12
Principal Axes:
T Val= 4.34 Plg=49 Azm= 32
N 0.70 17 281
P -5.04 36 178
Best Double Couple:Mo=4.7*10**17
NP1:Strike=215 Dip=19 Slip= 22
NP2: 103 83 107

SMY 2.67 300 iPd 19 21.20 0.0
ADK 3.40 81 iPc 19 33.00 1.4
SDN 13.45 65 iPd 21 49.40 -0.6
1.3s 2912.70nm 7.0mb X
ANM 15.78 27 eP 22 19.30 -1.0
SVW 17.47 46 iPc 22 44.30 2.7
PDB 17.72 51 iP 22 46.27 1.6
CDD 17.78 54 eP 22 45.98 0.5
AUH 17.98 53 eP 22 49.65 1.7
AUI 17.98 53 eP 22 50.28 2.4
AUE 18.01 53 eP 22 50.46 2.2
TTA 18.06 40 iPc 22 50.80 1.8
1.4s 1522.10nm 5.9mb
OPT 18.15 52 eP 22 51.65 1.6
KDC 18.17 58 iPd 22 47.70 -2.5
0.7s 105.40nm 5.1mb
RSO 18.59 50 eP 22 56.59 1.0
RDT 18.79 49 iP 22 58.67 0.8
XLV 18.86 53 eP 22 58.09 -0.6
HOM 18.94 52 eP 22 59.83 0.2
BGL 19.00 47 eP 23 01.27 0.9
CKL 19.00 48 eP 23 01.13 0.7
CNPM 19.11 53 eP 23 00.27 -1.4
SKT 19.61 46 iP 23 07.90 0.7
IMA 20.50 34 iPc 23 16.70 0.1
0.9s 238.80nm 5.5mb
PMR 20.59 48 iP 23 15.00 -2.4
e 27 10.00
iScP 30 57.20
TOA 22.08 47 ePc 23 31.70 -0.7
1.1s 1210.50nm 6.2mb
FBA 22.18 40 iP 23 32.50 -0.9
iScP 30 59.90
BRW 22.97 21 eP 23 42.30 1.3
KUSJ 23.85 263 eP 23 48.80 -1.0
ASAJ 24.61 267 eP 23 57.90 0.7
HOOJ 25.12 262 eP 24 01.80 -0.2
DWY 25.46 44 P 24 05.10 0.1
SAP 25.97 266 eP 24 09.00 -1.0
MRRJ 26.47 265 eP 24 13.90 -0.7
SIT 27.45 60 eP 24 24.00 0.7
0.8s 108.97nm 5.6mb
OFUJ 28.04 258 eP 24 28.10 -0.8
INK 28.59 36 ePc 24 33.00 -0.6
0.8s 176.00nm 5.8mb
pP 24 55.00 98kmX
NIIJ 30.83 258 P 24 53.30 -0.5
CHJJ 31.61 256 P 25 00.10 -0.6
MAT 31.77 258 iPd 25 01.50 -0.6
1.2s 181.25nm 5.8mb
Z 21s 5.38um 5.2Msz
eS 30 11.00
OPA 35.13 139 P 25 33.00 1.8
SHK 36.48 260 eP 25 43.00 0.4
YKA 36.67 46 eP 25 43.20 -0.7
0.8s 62.90nm 5.6mb

PGC 36 90 71 eP 25 47.00 1.1
MCW 37.25 70 eP 25 48.70 -0.2
SHNJ 37.72 261 eP 25 52.90 -0.1
GMW 37.81 72 eP 25 53.50 -0.1
BMW 38.06 74 eP 25 56.00 0.2
RMW 38.43 71 eP 25 59.00 0.1
LON 38.78 72 eP 26 01.40 -0.4
PNT 38.83 68 iPc 26 01.80 -0.4
0.7s 167.00nm 6.0mb
KUMJ 38.97 260 P 26 04.10 0.7
KAGJ 39.86 258 P 26 11.90 1.0
EDM 40.57 60 iPc 26 15.30 -1.2
0.7s 314.00nm 6.2mb
FHC 40.66 82 eP 26 19.00 1.7
0.9s 195.38nm 5.9mb
NEW 40.79 68 iPc 26 17.70 -0.6
0.8s 218.75nm 6.0mb
e 28 06.50
iScP 32 03.00
LBFM 41.63 80 eP 26 26.80 1.2
WDC 41.68 81 ePc 26 26.80 1.1
eScP 32 08.30
MIN 42.39 81 ePc 26 32.20 0.5
eScP 32 10.50
ORV 42.93 81 ePc 26 36.20 0.3
eScP 32 12.60
SES 43.17 62 ePc 26 35.50 -2.3
0.6s 79.00nm 5.6mb
BJI 43.33 280 eP 26 39.00 -0.1
1.2s 97.00nm 5.4mb
Z 24s 2.55um 5.0MszX
N 16s 2.15um
epP 26 49.00 34km
eScP 32 15.00
eS 33 06.00
esS 33 24.00
eScS 36 33.50
BRK 43.48 84 ePc 26 41.00 0.6
eScP 32 13.90
BKS 43.49 84 ePc 26 41.50 1.0
0.8s 347.00nm 6.2mb
Z 20s 3.00um 5.2Msz
N 20s 0.70um
E 20s 2.60um
iS 33 10.00
iLQ 36 40.00
eLR 39 06.00
PCC 43.63 84 eP 26 41.80 0.2
GCC 44.17 85 eP 26 46.30 0.3
MHC 44.19 84 ePc 26 47.00 0.6
eScP 32 20.60
ARN 44.25 84 eP 26 47.00 0.2
CMB 44.54 82 ePc 26 50.00 0.9
i 27 04.40 55kmX
eScP 32 19.40
eS 33 25.90
SAO 44.68 85 eP 26 50.30 0.2
LRM 44.78 69 ePc 26 49.40 -1.8
PRS 45.00 85 ePc 26 53.30 0.6
eScP 32 23.50
LLA 45.08 84 ePc 26 54.20 0.8
PRI 45.56 85 ePc 26 58.20 0.9
eScP 32 25.00
HPI 45.60 71 eP 26 57.80 0.1
FRI 45.61 83 ePc 26 57.90 0.4
eScP 32 24.10
eS 33 40.00
FFC 45.76 53 eP 26 57.00 -1.5
0.9s 55.00nm 5.5mb
SSE 45.93 266 Pc 27 00.50 0.4
1.0s 241.00nm 6.1mb
Z 20s 2.30um 5.1Msz
S 33 36.00
sS 34 04.00
SS 36 58.00
GUMO 46.20 227 eP 27 00.00 -2.3
Z 23s 4.73um 5.4MszX
GUA 46.22 227 eP 27 00.20 -2.3
0.8s 149.25nm 6.0mb
TNP 46.47 80 iPc 27 04.80 0.2
1.0s 150.00nm 5.9mb
iScP 32 27.90
BCH 46.53 85 ePc 27 05.40 0.4
eScP 32 29.70
BLP 46.74 86 eP 27 06.50 0.0
IMW 46.76 70 eP 27 05.50 -1.4
SYP 47.03 86 eP 27 10.00 1.1

ISA 47.23 84 eP 27 10.00 -0.4
ABL 47.29 85 eP 27 11.50 0.4
CLC 47.67 83 eP 27 13.00 -0.9
BW06 48.24 70 ePc 27 16.60 -1.9
0.8s 89.29nm 5.8mb
e 28 34.00 383kmX
iScP 32 34.20
e(S) 34 12.60
SBB 48.26 84 eP 27 18.00 -0.5
MWC 48.42 85 eP 27 20.00 0.1
GSC 48.50 83 eP 27 20.00 -0.3
DAU 48.66 74 ePc 27 21.00 -0.8
eScP 32 35.00
eS 34 21.00
CIS 48.75 86 eP 27 23.20 1.0
RVR 49.00 85 eP 27 24.00 -0.1
PEC 49.20 85 iPc 27 25.00 -0.7
ePcP 28 50.00
eScP 32 40.50
KBS 49.62 356 eP 27 27.60 -0.7
PLM 49.74 85 eP 27 30.00 -0.1
TPC 49.75 83 eP 27 29.00 -1.0
CPE 49.91 85 eP 27 32.50 1.4
BAR 50.31 85 eP 27 35.00 0.8
RSSD 50.63 66 iPc 27 34.00 -2.7
0.8s 40.06nm 5.5mb
epP 27 46.00 43km
iPcP 28 53.00
iScP 32 44.20
IKP 50.69 85 eP 27 37.90 0.8
PV09 51.14 74 iP 27 39.80 -1.0
iScP 32 47.30
GLA 51.21 84 eP 27 40.00 -1.1
GOL 52.62 71 iPc 27 50.70 -1.2
0.8s 80.36nm 5.8mb
Z 18s 2.38um 5.3Msz
i 28 18.50 117kmX
i 28 30.50
e 28 39.00
iPcP 29 03.00
iScP 32 52.40
GLD 52.68 71 iPc 27 51.80 -0.4
1.2s 121.21nm 5.8mb
Z 20s 3.00um 5.3Msz
iScP 32 54.60
LZH 53.37 284 iPd 27 57.00 -0.3
1.3s 187.00nm 5.9mb
Z 20s 4.90um 5.6Msz
N 15s 2.60um
pP 28 08.50 40km
sP 28 15.00
PcP 29 04.00
PP 30 06.00
S 35 27.00
PS 35 43.00
ScS 37 41.50
GDH 53.86 20 iPc 27 59.10 -1.1
0.5s 29.58nm 5.6mb
e 29 05.00 307kmX
e 31 22.00
e 35 34.00
FRB 54.02 30 ePc 28 00.20 -1.3
0.8s 282.00nm 6.3mb
ANMO 55.09 76 eP 28 09.30 -0.7
1.2s 58.59nm 5.5mb
e 28 21.50 43km
ALO 55.10 76 eP 28 08.00 -2.1
0.9s 27.31nm 5.3mb
Z 18s 1.75um 5.2Msz
e 28 20.50 44km
BAG 57.09 254 eP 28 22.40 -2.1
KEV 57.25 348 iP 28 23.30 -1.5
1.0s 60.00nm 5.6mb
TRO 58.25 352 iP 28 30.33 -1.4
KTK1 58.41 350 iPd 28 31.11 -1.8
SOD 59.54 348 iP 28 38.90 -1.9
MEO 59.93 71 iPc 28 42.70 -1.2
LOF 60.17 353 iP 28 43.47 -1.5
SIO 60.59 69 iP 28 47.00 -1.4
e 33 30.20
TUL 60.78 68 iPc 28 48.40 -1.2
0.9s 94.60nm 5.9mb
Z 18s 0.44um 4.6Msz
e 33 30.00
LR 48 00.00
SCH 61.23 37 ePc 28 50.40 -2.1
0.8s 272.00nm 6.4mb

DAV 61.63 243 eP 28 55 00 -0.6
KMI 61.66 275 Pc 28 55.50 -0.5
2.5s 200.00nm 5.8mb
Z 20s 2.10um 5.3Msz
pP 29 07.00 39km
S 37 14.00
FVM 62.38 63 eP 28 58.00 -2.4
AKU 62.55 7 iP 29 00.90 -0.2
0.7s 21.92nm 5.4mb
UYO 62.78 69 iPd 29 01.60 -1.5
MZX 63.39 86 (P) 29 07.00 -0.1
ELF 63.49 53 P 29 06.75 -0.9
ELC 63.55 63 eP 29 05.50 -2.5
OLY 63.55 66 eP 29 05.00 -3.1
DLA 63.60 54 P 29 08.00 -0.4
LDN 63.67 53 P 29 07.80 -1.0
NSS 63.84 353 eP 29 08.02 -1.6
SUF 64.00 346 iP 29 09.50 -1.2
0.5s 90.80nm 6.1mb
RGS 65.44 354 eP 29 21.20 1.3
RSNY 65.78 48 eP 29 20.00 -2.4
0.8s 40.06nm 5.5mb
Z 20s 9.04um 6.0Msz
MOL 66.07 355 iPd 29 23.02 -0.9
PMG 66.17 213 eP 29 24.00 -1.1
1.0s 80.00nm 5.7mb
NUR 66.34 346 iP 29 23.80 -1.9
0.8s 158.40nm 6.1mb
Z 22s 4.90um 5.7Msz
e 38 10.00
LR 58 14.00
HBVT 66.60 48 eP 29 24.60 -3.1X
CBM 66.81 43 eP 29 26.30 -2.6
BNH 67.25 46 eP 29 29.50 -2.3
HYA 67.54 356 eP 29 33.40 0.1
TKL 67.73 61 eP 29 32.80 -2.2
KKM 67.87 251 iPd 29 35.80 -0.3
1.0s 94.20nm 5.8mb
UPP 67.90 349 iP 29 33.80 -1.8
IS 38 49.00
HFS 68.04 352 eP 29 34.50 -2.0
0.7s 97.30nm 6.0mb
Z 20s 2.32um 5.4Msz
LR 52 29.00
NAV 68.10 57 eP 29 35.50 -1.8
ASK 68.26 356 eP 29 38.00 0.2
BLA 68.37 57 ePd 29 37.60 -1.4
0.7s 26.03nm 5.4mb
Z 20s 3.26um 5.6Msz
TBR 68.52 51 eP 29 37.30 -2.5
CHG 68.68 274 ePd 29 40.00 -1.1
1.1s 72.15nm 5.6mb
PNJ 68.73 51 iP 29 42.10 1.1
CBN 69.20 55 eP 29 42.00 -1.9
MRX 69.23 84 (P) 29 46.50 2.1
AAI 69.27 234 ePd 29 44.00 -0.6
BLS2 69.37 355 eP 29 44.50 -0.3
KMY 69.53 356 eP 29 47.50 1.9
BDT 69.82 272 eP 29 43.90 -4.1X
1.0s 41.40nm 5.4mb
GUN 69.90 290 P 29 48.40 -0.4
IIJ 70.12 83 (P) 29 51.00 0.6
JSC 70.13 60 eP 29 48.00 -1.7
LHS 70.22 59 eP 29 48.30 -1.9
PCT 70.25 269 eP 29 50.50 -0.1
KKN 70.34 290 P 29 51.00 -0.4
CRX 70.40 83 (P) 30 03.00 11.1X
PKI 70.43 290 P 29 51.50 -0.5
GKN 70.56 291 P 29 52.20 -0.4
LVVM 72.15 81 (P) 30 03.00 1.0
ACX 72.19 85 (P) 30 04.50 2.2
PMO 72.58 145 iP 30 04.80 0.4
1.0s 60.00nm 5.5mb
TPT 72.66 145 iP 30 05.30 0.4
1.0s 100.00nm 5.7mb
VAH 72.89 145 iP 30 06.60 0.4
1.0s 75.00nm 5.6mb
RUV 72.93 145 iP 30 07.00 0.5
1.0s 95.00nm 5.7mb
EKA 73.58 1 Pd 30 09.10 -0.7
0.7s 13.60nm 5.0mb
EVV 73.79 81 (P) 30 07.75 -3.9X
DZM 73.89 191 iPc 30 13.50 1.4
OXX 73.98 83 (P) 30 15.00 2.0
AFR 74.28 148 iP 30 14.70 0.4
1.0s 195.00nm 6.0mb
NDI 74.30 296 iPd 30 14.00 -0.5

1.2s 70.31nm 5 5mb
iS 39 42.00
PPT 74.38 148 iP 30 15.20 0.3
1.0s 60.00nm 5.5mb
PPN 74.39 148 iP 30 15.30 0.4
1.0s 30.00nm 5.2mb
PAE 74.46 148 iP 30 15.70 0.3
1.0s 60.00nm 5.5mb
MKS 75.18 241 iPd 30 28.50 8.9X
MTN 75.78 227 eP 30 22.40 -0.6
WIT 75.85 355 eP 30 23.50 0.6
CTA 76.45 210 iPd- 30 26.20 -0.4
0.9s 205.88nm 6.1mb
iS 40 11.00
WTS 76.65 354 eP 30 28.00 0.6
0.8s 32.00nm 5.4mb
e 30 47.50 72kmX
CLL 76.82 350 iP 30 27.80 -0.6
1.8s 90.00nm 5.5mb
i 30 38.40 34km
e(S) 40 08.00
KSP 76.89 348 iP 30 28.00 -0.8
0.8s 47.00nm 5.6mb
e 32 52.50 724kmX
KRA 77.14 346 ePd 30 29.90 -0.3
0.9s 102.00nm 5.9mb
Z 22s 3.20um 5.6Msz
E 22s 3.10um
e 30 33.70 12kmX
e 40 44.00
BRG 77.15 350 iPc 30 29.40 -0.8
MAIO 77.33 313 iPc+ 30 32.40 0.8
eS 40 24.00
MOX 77.61 351 iPc 30 33.00 0.2
1.8s 123.00nm 5.6mb
HOF 77.92 351 eP 30 34.50 0.0
ENN 77.93 355 ePc 30 34.50 0.0
0.7s 50.00nm 5.7mb
e 30 45.00 34km
e 30 53.50
SPC 77.94 345 eP 30 35.00 0.1
e 40 56.90
PRU 77.95 349 Pc 30 34.50 -0.1
1.0s 36.10nm 5.4mb
Z 20s 2.00um 5.4Msz
N 20s 1.60um
E 20s 0.60um
e 30 40.00 18kmX
eS 41 20.00
UCC 77.98 356 P 30 35.60 0.8
MEM 78.08 355 iPd 30 35.61 0.3
SNF 78.27 356 P 30 36.96 0.6
TNS 78.31 353 ePc 30 36.30 -0.4
TPX 78.40 81 (P) 30 39.50 1.9
GRF 78.60 351 iPc 30 37.80 -0.4
1.7s 163.00nm 5.7mb
Z 22s 1.10um 5.1Msz
DOU 78.67 356 Pc 30 38.30 -0.3
0.7s 31.10nm 5.4mb
S 40 40.00
KGM 78.84 259 ePc 30 40.20 0.1
KHC 78.90 350 iPc 30 40.50 0.5
1.2s 41.00nm 5.3mb
N 24s 1.50um
E 23s 1.10um
e 30 45.00 14kmX
WET 78.97 350 eP 30 40.50 0.2
1.3s 77.00nm 5.5mb
CLI 79.15 340 ePc 30 42.00 0.7
QIS 79.17 216 iPd 30 40.70 -0.9
1.0s 52.00nm 5.5mb
PSZ 79.23 345 eP 30 43.00 1.2
ZST 79.38 347 iP 30 42.80 0.3
e 41 14.00
VKA 79.42 348 iPc 30 43.00 0.3
2.8s 209.00nm 5.6mb
SRO 79.58 346 iP 30 43.70 0.2
BUD 79.79 346 iPc 30 46.80 2.1
KMR 79.90 349 iP+ 30 45.70 0.4
ipP 31 15.20 115kmX
VRI 79.92 340 ePc 30 46.00 0.5
SOP 79.95 347 iPc 30 46.00 0.4
FUR 80.10 351 eP 30 46.80 0.4
FLN 80.16 359 eP 30 45.70 -0.9
0.8s 24.20nm 5.2mb
Z 20s 1.50um 5.3Msz
BRD 80.19 340 eP 30 49.50 2.6

CDF 80.19 354 eP 30 46.50 -0.5
0.6s 19.85nm 5.3mb
CFR 80.26 339 ePc 30 48.00 0.8
LDF 80.32 359 eP 30 46.70 -0.8
0.8s 32.25nm 5.3mb
BHG 80.37 350 eP 30 48.30 0.4
1.5s 85.00nm 5.5mb
MLR 80.45 340 iPd 30 50.50 2.1
GRR 80.53 359 eP 30 48.00 -0.6
0.8s 30.90nm 5.3mb
TNR 80.63 342 ePc 30 50.00 0.7
ISR 80.66 340 ePd 30 51.00 1.6
HAU 80.66 354 eP 30 49.00 -0.4
0.8s 18.80nm 5.1mb
Z 20s 1.00um 5.2Msz
WRA 80.67 221 iPd 30 48.20 -1.5
BSF 80.80 354 eP 30 49.90 -0.3
0.8s 21.50nm 5.2mb
CMP 80.85 341 P 30 53.00 2.6
MTUR 80.88 341 eP 30 53.00 2.3
LPF 80.89 359 eP 30 49.80 -0.7
1.1s 39.05nm 5.3mb
COZ 80.94 341 iPc 30 52.50 1.4
PSI 81.03 263 ePc 30 51.50 -0.2
1.0s 55.20nm 5.5mb
SQTA 81.04 351 iPc 30 51.80 0.3
0.8s 55.40nm 5.6mb
id 30 52.50 2kmX
i 31 01.60
e 33 23.50
e 33 45.00
TIM 81.12 344 iPc 30 52.70 0.9
BZS 81.17 343 eP 30 52.00 0.0
TAB 81.30 323 eP 30 54.00 0.9
OGA 81.41 351 eP 30 54.40 0.8
0.7s 25.00nm 5.3mb
BUC 81.44 340 eP 30 55.00 1.5
FVI 81.50 350 Pc 30 53.90 0.2
LOR 81.53 356 eP 30 53.70 -0.2
0.8s 22.85nm 5.2mb
Z 20s 1.25um 5.3Msz
BRS 81.56 202 iP 30 55.00 0.8
i 31 08.50 46km
DRA 81.57 341 ePd 30 55.00 0.9
PSN 81.67 338 iPd 30 56.00 1.3
RMQ 81.73 206 iPd 30 54.90 -0.2
1.0s 255.00nm 6.2mb
SSF 81.75 356 eP 30 55.00 0.0
1.0s 35.00nm 5.3mb
PTJ 81.78 347 iP 30 55.60 0.2
SRE 81.79 342 eP 30 50.00 -5.3X
LBF 81.80 356 eP 30 55.20 -0.2
1.0s 17.00nm 5.0mb
LJU 81.83 348 eP 30 55.50 0.0
ZAG 81.86 347 iPc 30 56.50 0.9
VOY 81.92 349 eP 30 55.80 -0.3
AVF 82.03 356 eP 30 56.30 -0.2
1.0s 30.00nm 5.3mb
VVI 82.14 350 Pc 30 57.60 0.5
BEO 82.14 344 iP 30 57.00 -0.1
CEY 82.14 348 eP 30 57.50 0.3
SMF 82.15 356 eP 30 56.90 -0.3
0.8s 40.30nm 5.5mb
CTI 82.16 350 P 30 57.00 -0.4
HYB 82.24 288 iPd 30 57.50 -0.6
1.0s 130.00nm 5.9mb
e 31 10.00 42km
TRI 82.26 349 iPd 30 57.70 0.0
VBY 82.27 348 iPc 30 58.30 0.5
e 31 23.50 95kmX
e 31 55.50
BGF 82.28 357 eP 30 57.50 -0.3
0.8s 18.80nm 5.2mb
MFF 82.31 359 eP 30 57.90 -0.1
0.8s 18.80nm 5.2mb
RIY 82.54 348 eP 30 58.70 -0.5
TCF 82.57 357 eP 30 59.40 0.0
1.0s 13.00nm 4.9mb
VAI 82.61 352 P 30 59.50 0.0
MDI 82.62 352 P 30 59.50 0.0
MAF 82.62 357 eP 30 59.80 0.2
0.8s 18.80nm 5.2mb
LSF 82.63 357 eP 30 59.60 -0.1
0.8s 18.80nm 5.2mb
SAL 82.71 351 P 31 00.80 0.8
ORX 82.91 353 P 31 01.17 -0.1
ORO 82.91 353 P 31 02.20 0.9

18d 03h

LPL 83.11 354 eP 31 03.10 0.6
0 6s 13.10nm 5.2mb
LPG 83.13 354 eP 31 03.50 0.9
1.1s 48.85nm 5.5mb
LSD 83.14 353 P 31 03.53 0.9
OLP 83.16 210 iPd 31 03.50 1.1
JMB 83.19 339 iPc 31 03.00 0.4
RSP 83.44 353 P 31 04.56 0.6
RJF 83.57 357 eP 31 04.50 0.0
1.2s 35.70nm 5.3mb
Z 20s 1.50um 5.4Msz
BNI 83.58 354 Pc 31 05.80 1.1
PGB 83.63 341 iPd 31 06.00 1.1
BOB 83.64 352 P 31 05.80 0.8
RRL 83.70 354 P 31 06.61 1.1
PLE 83.77 344 eP 31 06.70 1.0
VTS 83.79 341 iPd 31 05.00 -0.8
DIM 83.82 340 eP 31 07.00 1.2
ITU 83.91 337 eP 31 08.00 1.7
CAF 83.94 357 eP 31 06.90 0.5
1.4s 74.05nm 5.6mb
PCP 83.94 352 P 31 06.61 0.1
PLD 83.95 340 iPd 31 07.00 0.6
LFF 83.96 358 eP 31 06.90 0.5
1.0s 42.00nm 5.5mb
CKI 84.08 353 P 31 07.50 0.4
DOI 84.08 353 P 31 06.00 -1.2
MME 84.09 351 P 31 08.30 0.8
PZZ 84.09 353 P 31 06.10 -1.2
GBZT 84.11 336 eP 31 07.00 -0.3
BBTK 84.12 334 ePc 31 00.00 -7.5X
i 31 09.00 28kmX
POO 84.13 292 iPd 31 07.80 0.0
0.9s 67.23nm 5.8mb
iS 41 40.00
IVA 84.13 344 eP 31 08.50 1.0
ASPA 84.18 220 iPd 31 08.10 0.3
1.3s 92.00nm 5.7mb
eS 41 25.30
KDZ 84.23 340 iPc 31 10.00 2.1
BDI 84.23 351 Pc 31 08.50 0.5
SFI 84.24 350 Pc 31 10.00 2.1
ROB 84.24 353 P 31 07.43 -0.6
KER 84.27 321 eP 31 13.00 4.6X
PGD 84.30 350 Pc 31 10.00 1.6
FIN 84.30 353 P 31 06.81 -1.4
BRY 84.33 345 eP 31 08.60 0.0
STV 84.34 353 P 31 07.22 -1.3
NKY 84.34 345 eP 31 08.70 0.1
RZN 84.34 340 eP 31 09.00 0.3
ENR 84.35 353 P 31 07.12 -1.4
HVAR 84.38 346 iP 31 08.10 -0.5
BOM 84.44 293 iPd 31 09.30 0.1
iS 41 32.00
KKB 84.51 341 iPd 31 10.00 0.7
CRE 84.52 350 Pc 31 11.00 1.6
ARV 84.53 349 P 31 10.20 0.8
PII 84.58 351 P 31 09.60 0.0
BCI 84.59 344 iP 31 11.00 1.4
IMI 84.62 353 P 31 09.28 -0.6
MMB 84.64 341 ePc 31 11.00 1.0
TTG 84.67 344 eP 31 10.60 0.6
RDO 84.68 339 eP 31 10.80 0.7
SBF 84.71 353 eP 31 10.40 0.1
0.8s 48.35nm 5.7mb
SKO 84.72 343 iPc 31 10.90 0.5
Z 22s 2.97um 5.6Msz
N 21s 2.21um
E 22s 1.10um
iS 41 37.50
iSS 47 20.00
LR 09 25.00
HCY 84.78 345 eP 31 10.60 0.0
KKS 84.81 343 iP 31 12.00 1.2
COO 84.83 202 iPd 31 12.80 2.0
0.9s 73.00nm 5.8mb
e 31 25.00 40km
PUK 84.94 344 eP 31 12.50 1.1
ASS 84.99 349 Pc 31 12.50 0.8
CDR 85.01 354 ePc 31 12.40 0.6
SDA 85.03 344 iPd 31 12.20 0.4
FRF 85.06 354 eP 31 12.30 0.3
0.8s 36.25nm 5.6mb
LRG 85.19 354 eP 31 13.20 0.6
1.2s 59.50nm 5.6mb
LMR 85.30 354 eP 31 13.50 0.3
1.2s 56.55nm 5.6mb

AQU 85.61 349 P 31 15.80 1.0
TIR 85.62 344 eP 31 15.00 0.2
OHR 85.68 343 iPc 31 15.00 -0.2
1.8s 222.00nm 6.1mb
eS 41 35.00
PLG 85.87 341 eP 31 15.50 -0.7
EPF 85.87 358 eP 31 15.70 -0.5
0.8s 12.10nm 5.2mb
GBA 85.88 287 P 31 16.00 -0.5
PGF 85.88 352 eP 31 16.30 0.0
1.1s 161.15nm 6.2mb
AZI 85.96 348 Pc 31 17.00 0.5
KBN 86.15 343 eP 31 16.90 -0.5
DUI 86.15 348 P 31 18.00 0.4
SDI 86.19 348 Pc 31 17.70 -0.1
BERA 86.23 343 eP 31 16.30 -1.5
KZN 86.27 342 eP 31 17.50 -0.7
PRK 86.33 338 eP 31 19.40 1.0
RFI 86.57 348 P 31 20.68 1.2
0.1s 37.00nm 6.6mb
NEO 86.94 341 eP 31 11.00 -10.4X
ORI 87.43 346 P 31 24.60 0.8
MGR 87.49 347 P 31 23.70 -0.3
EVR 87.61 342 eP 31 24.40 -0.3
KOD 88.50 284 eP 31 29.50 -0.1
BHL 88.76 329 P 31 30.00 -0.3
TOL 89.03 1 eP 31 33.00 1.6
ePP 35 05.00
iS 43 00.00
ePS 43 33.00
BWA 89.35 204 iPd 31 33.80 1.1
e 31 48.20 49km
SOI 89.44 346 P 31 32.00 -1.4
ATN 89.45 346 P 31 30.00 -3.4X
WARB 89.45 224 iPc 31 34.00 0.6
VLI 89.50 340 eP 31 31.50 -2.2
ADI 89.66 329 eP 31 34.00 -0.5
CNB 89.96 203 iPc 31 37.30 1.7
CAN 90.06 203 iPd 31 36.90 0.9
e 31 50.50 45km
NPS 90.29 338 eP 31 33.00 -4.4X
VAM 90.48 339 eP 31 37.10 -1.1
DSI 91.00 329 eP 31 40.00 -0.7
RMN 92.23 329 eP 31 45.00 -1.4
ADE 92.68 211 e(P) 31 47.20 -0.8
1.2s 46.88nm 5.8mb
TOO 93.09 205 eP 31 51.00 1.1
ZOBO 117.48 82 PKP 37 22.00 -1.4
Z 24s 0.88um 5.3MszX
LR 18 04.00
LPB 117.69 82 ePKP 37 24.00 0.4
Z 24s 1.94um 5.6MszX
LR 18 06.00
CNCB 117.98 82 PKP 37 25.00 0.7
CCH 119.55 81 ePKP 37 30.00 3.1X
SIV 121.59 75 PKP 37 30.00 -0.5
i 38 59.00
TIC 122.08 3 PKP 37 30.82 -0.7
KIC 122.37 3 PKP 37 31.38 -0.6
LIC 122.50 3 PKP 37 31.60 -0.6
Z 21s 0.94um 5.4Msz
SOB1 127.27 51 ePKP 37 41.40 -0.1
e 39 40.90
MDZ 129.00 96 e(PKP) 37 45.60 1.2
SBA 129.22 183 iPKPc 37 44.30 0.9
PPD 132.08 71 ePKP 37 50.60 0.1
e 37 54.90
e 41 11.70
JFO 136.44 63 (PKP) 38 01.00 2.2
BUL 140.58 311 ePKP 38 01.80 -4.8X
i 41 35.30
SPA 141.26 180 iPKPc 38 01.30 -5.1X
1.0s 24.00nm
Z 20s 1.44um 5.7Msz
e 38 58.50
BFT 144.52 304 iPKPc 38 12.50 -0.9
1.3s 96.15nm
SLR 145.46 306 iPKPd 38 15.00 0.1
1.1s 170.89nm
EVA 145.69 305 iPKPd 38 16.50 1.2
1.5s 583.33nm
AIA 146.15 138 ePKP 38 16.40 1.8X
KSR 146.26 308 iPKPd 38 15.00 -1.2
1.0s 55.00nm
PRY 146.85 306 iPKPd 38 22.00 4.9X
1.0s 45.00nm
SWZ 148.12 309 iPKPc 38 25.50 6.4X

1.2s 125.00nm
S.D. = 1.1 on 379 of 396 obs.

& SEP 18, 1990 04h 04m 42.09s
58.990 N 152.087 W
DEPTH = 55.6km
KODIAK ISLAND REGION (13)
<AGS-P>.

XLV 0.50 22 eP 04 53.10 -0.7
eS 05 01.87
CNPM 0.69 39 iP 04 55.55 -0.6
eS 05 05.81
HOM 0.71 19 iP 04 55.77 -0.5
eS 05 06.69
AUE 0.76 300 iP 04 56.34 -0.6
AUI 0.77 297 eP 04 56.36 -0.8
AUH 0.79 299 eP 04 56.99 -0.5
CDD 0.81 266 eP 04 56.80 -0.8
eS 05 08.39
OPT 0.89 319 iP 04 57.83 -0.8
eS 05 10.20
PDB 1.34 308 eP 05 03.78 -1.1
eS 05 20.62
RSO 1.52 347 eP 05 06.55 -0.9
eS 05 25.11
RDT 1.60 354 eP 05 07.50 -1.0
SEW 1.75 49 eP 05 09.07 -1.4
SLKM 1.79 31 eP 05 10.01 -1.1
NCG 2.42 359 eP 05 17.17 -2.9
PMS 2.59 28 eP 05 19.24 -3.2
15 obs. associated

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* SEP 18, 1990 04h 36m 05.02± 3.81s
31.679 S ±19.6km 68.958 W ±13.0km
DEPTH = 101.6 ± 37.3 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.23 35 ePd 36 20.10 0.0
ZON 0.27 61 iPd 36 19.80 -0.4
eS 36 32.80
RTCV 0.40 117 ePc 36 20.10 -0.5
RTBS 0.42 272 ePd 36 21.00 0.4
RTLL 0.54 50 iPc 36 21.80 0.2
CFA 0.62 84 iPc 36 22.30 0.2
S 36 35.90
MDZ 1.20 176 iP 36 28.70 0.5
iS 36 44.50
PEL 2.07 225 iPc 36 38.70 -0.4
iS 37 03.60
S.D. = 0.5 on 8 of 8 obs.

SEP 18, 1990 04h 49m 15.32± 0.72s
35.074 N ± 8.6km 27.160 E ± 7.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
ML 4.1 (CSS). MD 4.0 (ATH).

KAP 0.48 1 iPgd 49 25.10 0.1
NPS 1.28 279 iPbd 49 39.40 0.3
eSb 49 59.00
APE 2.39 327 ePn 49 54.00 -1.1
VAM 2.45 279 ePn 49 59.10 3.2X
CIN 2.63 16 ePg 49 59.00 0.5
iSg 50 10.00
SMG 2.64 354 ePb 49 57.70 -1.0
VLI 3.80 297 ePn 50 14.30 -0.9
ITM 4.73 298 ePn 50 30.30 1.9
CSS 5.07 89 eP 50 34.50 1.4
eSn 51 32.00
DSI 7.72 115 eP 51 10.00 -0.4
eS 52 35.00
OHR 7.84 322 eP 51 17.00 4.9X
PRNI 8.11 123 e(P) 51 17.00 1.0
MBH 8.40 127 eP 51 18.00 -1.9
e(S) 52 50.00
S.D. = 1.3 on 11 of 13 obs.

SEP 18, 1990 04h 55m 42.03± 0.40s
4.061 S ± 6.5km 29.483 E ± 6.4km
DEPTH = 10.0km (geophysicist)
5.0mb (34 obs.) 4.3Msz (2 obs.)
LAKE TANGANYIKA REGION (572)

NAI 7.82 69 iPd 57 40.00 1.2
1.0s 23.00nm 5.3mb
S 59 06.00

```
BCAO   13.81 308 iPc    58 57.50  -2.9
       0.3s      2.00nm          4.5mb
                 iS     01 41.00
                 Lg     02 55.00
AAE    15.96  35 eP     59 28.00  -0.7
BUL    16.01 183 iP     59 30.00   0.9
                 iLg    04 01.60
SLR    21.58 183 iPd    00 33.00  -1.2
                 S      04 27.50
SWZ    23.33 189 eP     00 57.00   5.5X
                 S      05 18.50
KIC    35.70 287 P      02 43.18   0.2
       0.6s     11.00nm          4.9mb
LIC    35.94 286 P      02 45.10   0.1
       0.8s     20.50nm          5.1mb
TIC    36.05 287 P      02 46.18   0.3
       0.6s     31.00nm          5.3mb
KDZ    45.64 356 iPc    04 06.00   1.5
OHR    45.65 351 eP     04 05.50   0.8
RZN    45.74 355 iPc    04 06.00   0.5
KKB    46.08 353 iPd    04 09.00   1.0
PLD    46.15 355 eP     04 05.00  -3.5X
SKO    46.40 352 iP     04 11.20   0.7
PVL    47.21 356 iPd    04 17.00   0.2
VRI    49.77 357 ePd    04 37.50   0.8
BZS    49.95 353 eP     04 38.50   0.4
ZAG    51.09 348 eP     04 48.00   1.3
PTJ    51.18 348 iPc    04 48.60   1.1
BUD    52.15 351 iPd    04 55.50   0.8
SRO    52.58 351 eP     04 58.50   0.5
ZST    53.16 350 eP     05 02.30   0.0
LPG    53.34 340 eP     05 11.10   7.1X
       1.0s      6.00nm          4.5mb
LPL    53.36 340 eP     05 11.30   7.2X
       1.0s      8.00nm          4.6mb
SOTA   53.54 345 iPd    05 05.30   0.0
       1.2s     14.30nm          4.8mb
SPC    53.64 352 eP     05 06.00   0.0
EPF    53.77 334 eP     05 07.00   0.1
       1.0s      9.00nm          4.7mb
KRA    54.53 352 eP     05 12.40   0.1
       1.0s     43.00nm          5.4mb
                 e      05 18.90
CAF    54.58 336 eP     05 12.90   0.0
       1.0s      8.00nm          4.7mb
LPO    54.74 336 eP     05 13.70  -0.3
       0.8s     13.45nm          5.0mb
KHC    54.75 347 iP     05 14.20   0.1
       1.2s     25.00nm          5.1mb
RJF    55.11 336 eP     05 16.40  -0.3
       0.8s      5.35nm          4.6mb
     Z 20s       0.30um          4.4Msz
LFF    55.13 335 eP     05 15.70  -1.1
       0.8s     10.75nm          4.9mb
SMF    55.35 339 eP     05 18.70   0.3
       1.0s     10.00nm          4.8mb
PRU    55.36 348 eP     05 17.50  -0.9
MAF    55.46 338 eP     05 19.20   0.0
       0.8s     10.05nm          4.9mb
LBF    55.59 339 eP     05 20.40   0.2
       0.8s      5.35nm          4.6mb
BGF    55.64 338 eP     05 19.90  -0.6
       0.8s      8.05nm          4.8mb
AVF    55.65 338 eP     05 19.80  -0.7
       1.0s     10.00nm          4.8mb
TCF    55.66 337 eP     05 20.90   0.3
       0.8s      6.05nm          4.7mb
SSF    55.82 339 eP     05 20.80  -1.0
       1.0s      6.00nm          4.6mb
GRF    55.83 346 eP     05 21.80   0.0
       1.1s     24.00nm          5.1mb
KSP    55.85 350 eP     05 21.50  -0.4
LOR    55.87 339 eP     05 21.70  -0.5
       0.8s      5.35nm          4.6mb
     Z 20s       0.20um          4.2Msz
LSF    55.89 337 eP     05 21.90  -0.4
       1.0s     12.00nm          4.9mb
NDI    56.23  51 eP     05 25.00   0.0
MOX    56.62 346 eP     05 28.00   0.5
CLL    56.93 348 eP     05 29.00  -0.7
ENN    58.24 343 eP     05 40.00   1.1
       1.0s     16.00nm          5.0mb
WTS    59.08 344 eP     05 46.00   1.3
       1.0s     36.00nm          5.5mb
GKN    61.89  55 P      06 03.60  -1.0
       1.0s     48.00nm          5.6mb
DMN    62.13  56 P      06 05.70  -0.6
KKN    62.34  56 P      06 06.80  -0.9
       1.2s     68.00nm          5.7mb
PKI    62.37  56 P      06 06.00  -2.0
GUN    62.88  56 P      06 10.00  -1.4
       1.0s     68.00nm          5.8mb
NUR    64.49 357 eP     06 20.00  -0.8
       0.6s     13.00nm          5.3mb
HFS    65.20 351 eP     06 24.60  -0.9
       1.1s     13.10nm          5.0mb
NB2    66.45 350 P      06 30.70  -2.8
       0.9s     21.80nm          5.3mb
SUF    66.64 358 iP     06 35.00   0.4
       0.7s     16.00nm          5.3mb
SOD    71.30 359 iP     07 03.90   0.6
KEV    73.68 359 eP     07 18.00   0.7
PPD    79.96 248 eP     07 56.40   2.9X
SIV    89.43 254 (P)    08 45.00   3.9X
MAT   107.43  53 (Pdiff10 05.00    2.7X
ALQ   128.98 313 ePKP   14 54.00   1.4
TNP   134.52 323 PKP    15 05.30   2.3
                 e      15 10.90
     S.D. = 1.0  on  60 of  67 obs.
---------------------------------------
? SEP 18, 1990  05h 37m 35.13± 6.03s
    0.129 N ±39.8km  123.111 E ±24.3km
    DEPTH = 122.7 ± 44.7 km
    4.6mb (  2 obs.)
  MINAHASSA PENINSULA              (265)

MKS     6.44 214 iPc    39 09.00   0.1
MBL    21.40 188 eP     42 14.00  -0.4
PPI    22.72 269 eP     42 27.30  -0.1
WRA    22.78 152 eP     42 28.00   0.0
                 e      42 37.30
ASPA   25.87 157 eP     43 01.30   4.1X
       1.0s      9.00nm          4.3mb
OIS    26.14 143 iPd    42 58.80  -0.9
STK    36.32 153 eP     44 28.90   0.1
       1.8s     39.00nm          4.9mb
ADE    37.84 159 e(P)   44 42.00   0.5
CAN    42.74 148 eP     45 22.50   0.6
     S.D. = 0.6  on   8 of   9 obs.
---------------------------------------
% SEP 18, 1990  05h 58m 03.82± 1.36s
   42.050 N ± 6.3km   23.066 E ±13.2km
    DEPTH =  10.0km  (geophysicist)
  BULGARIA                         (359)

KKB     0.18 176 iPgc   58 08.00   0.1
VTS     0.55  11 iPc    58 15.00  -0.1
MMB     0.68 133 ePd    58 17.00  -0.3
PGB     0.96  58 ePg    58 22.00  -0.1
RZN     1.28 106 eP     58 28.00   0.2
     S.D. = 0.3  on   5 of   5 obs.
---------------------------------------
? SEP 18, 1990  10h 05m 50.97± 1.10s
   40.250 N ± 8.7km   20.292 E ±11.5km
    DEPTH =  10.0km  (geophysicist)
  GREECE-ALBANIA BORDER REGION     (392)

SRN     0.43 211 iPg    05 59.80   0.0
BERA    0.52 330 ePg    06 01.20  -0.3
KBN     0.55  47 ePg    06 01.30  -0.7
OHR     0.94  24 ePg    06 10.00   1.0
                 eSg    06 23.50
     S.D. = 1.3  on   4 of   4 obs.
---------------------------------------
• SEP 18, 1990  10h 33m 06.82± 0.99s
   35.559 N ±10.6km  142.785 E ± 9.0km
    DEPTH =  33.0km  (normal)
  OFF EAST COAST OF HONSHU, JAPAN  (229)

KAKJ    2.22 288 iP+    33 41.30  -0.7
                 S      34 03.90
CHJJ    3.12 280 P      33 54.90   0.1
                 S      34 28.70
YAMJ    3.41 321 eP     33 58.90  -0.1
                 eS     34 36.20
NIIJ    3.48 300 iPd    34 00.70   0.7
                 S      34 38.30
OFUJ    3.63 346 P      34 01.20  -0.8
                 eS     34 40.20
MAT     3.84 286 eP     34 05.00   0.0
                 eS     34 47.00
IIDJ    3.98 270 P      34 07.40   0.4
                 eS     34 51.00
MTMJ    4.16 286 iP+    34 10.10   0.4
HOOJ    6.83   3 P      34 46.10  -1.0
                 S      35 58.20
INK    55.20  27 eP     42 41.00   2.8
WRA    55.78 190 eP     42 42.10  -0.8
ZOBO  146.42  63 PKP    52 50.00   4.2X
LPB   146.61  63 ePKP   52 45.00  -0.9
CNCB  146.87  64 PKP    52 52.00   5.5X
SIV   151.13  54 PKP    53 01.40   8.9X
     S.D. = 1.2  on  12 of  15 obs.
---------------------------------------
• SEP 18, 1990  12h 31m 03.33± 1.91s
    0.453 N ±12.0km  126.101 E ±11.7km
    DEPTH =  62.6 ± 18.0 km
    4.6mb (  3 obs.)
  MOLUCCA PASSAGE                  (266)

AAI     4.61 153 eP     32 13.00   0.8
MKS     8.69 230 i(P)   33 08.00  -1.0
WRA    21.82 159 eP     35 50.80  -1.3
                 e      39 50.70
MBL    22.34 196 eP     35 57.00  -0.2
OIS    24.71 148 eP     36 20.00  -0.3
ASPA   25.14 163 eP     36 25.00   0.6
       0.5s     25.00nm          5.0mb
                 eS     40 53.40
STK    35.35 157 iPd    37 55.10   0.3
       0.6s      5.00nm          4.6mb
MAT    37.62  16 (P)    38 13.00  -0.9
HYB    49.70 293 eP     39 52.00   0.5
GBA    49.91 287 P      39 54.00   1.0
       0.7s      3.00nm          4.4mb
     S.D. = 1.0  on  10 of  10 obs.
---------------------------------------
  SEP 18, 1990  13h 06m 15.34± 0.38s
   11.546 N ± 3.2km   61.285 W ± 7.6km
    DEPTH =  33.0km  (normal)
  WINDWARD ISLANDS                 ( 95)
      ML 4.5 (FDF).

PIG     0.58 131 eP     06 27.24   0.2
                 eS     06 36.10
TPR     0.61 126 eP     06 27.15  -0.4
                 eS     06 35.96
BOT     0.67 124 eP     06 28.07  -0.3
                 eS     06 37.44
TRN     0.90 187 eP     06 31.82   0.2
                 eS     06 43.86
TCE     0.96 209 eP     06 32.51   0.0
                 eS     06 44.77
TBH     1.08 168 eP     06 34.33   0.2
                 eS     06 49.67
BIM     2.96   4 eP     07 01.15   0.0
MVM     3.01   7 eP     07 02.92   1.0
                 S      07 36.90
FDF     3.17   2 eP     07 03.80  -0.3
       0.2s      0.45nm
                 S      07 38.30
CRM     3.21   6 eP     07 04.74   0.1
BBL     3.96 357 eP     07 15.47   0.2
MGG     4.35 360 eP     07 21.62   0.8
DOG     4.47 356 eP     07 22.50  -0.1
PAG     4.47 355 eP     07 22.51  -0.2
                 S      08 11.00
SEG     4.83 357 eP     07 28.41   0.7
BPA     5.50 354 eP     07 36.00  -1.1
NEV     5.70 348 eP     07 38.90  -1.0
     S.D. = 0.6  on  17 of  17 obs.
---------------------------------------
• SEP 18, 1990  15h 48m 51.91± 0.84s
    6.853 S ± 8.6km  129.015 E ±18.2km
    DEPTH = 200.3 ± 11.3 km
    5.0mb (  2 obs.)
  BANDA SEA                        (280)

AAI     3.25 345 iPd    49 45.50   0.5
MTN     6.31 161 iPd    50 24.20   0.3
KNA     8.85 182 iPd    50 56.40  -0.7
                 eS     52 30.00
WRA    14.00 159 eP     52 01.20  -1.9
                 eS     54 31.80
MBL    16.77 211 eP     52 37.00   0.0
       0.3s      7.00nm          4.6mb
                 e      52 41.00
                 eS     55 33.00
OIS    17.06 144 iPc    52 40.70   0.4
                 iS     55 42.00
ASPA   17.36 165 iPd    52 44.40   0.8
```

18d 15h

0.6s 86.00nm 5.4mb

		epP	53	15.90	
		eS	55	51.50	
WARB	19.36	186 eP	53	06.00	1.6
MRWA	25.41	207 eP	54	35.00	32.2X
KLB	26.77	202 eP	54	55.00	39.9X
MUN	27.71	204 eP	55	05.40	41.9X
GUN	54.12	312 P	57	59.10	0.0
PKI	54.29	311 P	57	59.80	-0.4
KKN	54.50	311 P	58	01.40	-0.2
DMN	54.54	311 P	58	01.90	0.0
GKN	55.10	311 P	58	05.40	-0.4

S.D. = 0.9 on 13 of 16 obs.

& SEP 18, 1990 16h 58m 50.40s
59.449 N 152.927 W
DEPTH = 82.5km
SOUTHERN ALASKA (2)
<AGS-P>.

AUE	0.24	249 eP	59	02.45	-0.4
OPT	0.26	323 iP	59	02.35	-0.6
		iS	59	10.92	
AUH	0.28	252 eP	59	03.26	0.2
AUI	0.28	246 eP	59	02.77	-0.2
XLV	0.62	89 iP	59	04.96	-0.7
		eS	59	16.30	
CDD	0.64	216 iP	59	04.91	-1.0
		iS	59	16.68	
HOM	0.69	72 iP	59	06.06	-0.3
		eS	59	17.67	
PDB	0.73	298 iP	59	05.87	-0.9
		eS	59	17.87	
MCNL	0.77	250 iP	59	06.25	-1.0
		eS	59	18.32	
CNPM	0.87	84 iP	59	07.48	-0.8
		eS	59	21.25	
RSO	1.02	5 iP	59	09.59	-0.7
BRLK	1.09	72 eP	59	09.68	-1.3
		iS	59	25.35	
RDT	1.16	13 iP	59	10.94	-1.0
		eS	59	26.90	
NKA	1.55	32 iP	59	17.83	1.0
KDC	1.72	172 iP	59	17.38	-1.7
SLKM	1.73	51 eP	59	18.14	-1.1
CKL	1.78	9 iP	59	19.34	-0.7
SPU	1.79	14 iP	59	19.35	-0.8
BGL	1.84	8 iP	59	20.26	-0.6
CRP	1.86	12 iP	59	20.62	-0.6
SEW	1.88	68 eP	59	19.58	-1.6
CGLM	1.92	13 iP	59	21.24	-0.7
NCG	2 00	11 iP	59	22.34	-0.7
SVW	2.14	322 iP	59	23.82	-1.0
		eS	59	48.20	
SUA	2.29	27 eP	59	26.33	-0.7
		eS	59	54.08	
PMS	2.46	41 eP	59	28.06	-1.2
SKT	2.63	15 eP	59	30.35	-1.2
PWA	2.67	33 eP	59	31.21	-0.9
PLRM	2.85	39 eP	59	33.83	-0.8
GHO	3.05	39 eP	59	35.70	-1.8
SML	3.27	42 eP	59	38.55	-1.9
MID	3.37	88 eP	59	39.49	-2.2
VZW	3.56	60 eP	59	41.78	-2.7
SCM	3.65	47 eP	59	43.77	-2.0
VLZ	3.69	60 eP	59	44.25	-1.9
KLU	4.03	56 eP	59	48.40	-2.6
TOA	4.25	48 eP	59	52.38	-1.7
GL8	4.94	62 eP	00	00.71	-3.0
TGL	5.22	71 eP	00	04.52	-3.1
BALM	5.51	69 eP	00	08.34	-3.3
HDA	5.72	27 eP	00	11.37	-3.1
CCB	5.74	23 eP	00	11.74	-3.1

42 obs. associated

• SEP 18, 1990 17h 26m 04.60± 2.13s
42.229 N ±18.5km 7.140 E ±10.1km
DEPTH = 33.0km (normal)
WESTERN MEDITERRANEAN SEA (387)
ML 2.9 (LDG). MD 2.3 (STR).

LMR	1.20	337 Pn	26	25.00	-0.1
		Sn	26	39.30	
LRG	1.35	335 Pn	26	27.60	0.3
		Sn	26	42.80	
FRF	1.38	345 Pn	26	27.50	-0.2
		Sn	26	43.00	
PGF	1.41	76 Pg	26	28.36	0.0
		Sg	26	45.76	
CALN	1.53	353 Pg	26	30.33	0.2
		Sg	26	48.68	
SBF	1.65	7 Pn	26	31.40	-0.3
		Sn	26	50.00	
AURF	1.66	5 Pg	26	31.78	-0.1
MVIF	1.67	0 Pg	26	32.30	0.3
		Sg	26	52.30	
CDR	1.76	326 ePn	26	33.10	-0.2
		i	26	34.30	
		eSn	26	53.90	
AUTN	1.78	7 Pg	26	33.53	-0.2
TOUF	1.79	3 Pg	26	34.03	0.2
		Sg	26	55.59	

S.D. = 0.2 on 11 of 11 obs.

• SEP 18, 1990 19h 06m 13.08± 1.47s
24.907 N ± 8.2km 122.192 E ±17.3km
DEPTH = 24.9 ± 11.9 km
4.7mb (1 obs.)
TAIWAN REGION (243)

TWC	0.43	226 ePc	06	20.30	-1.8
		eS	06	26.10	
TWZ	0.59	289 eP	06	24.90	0.2
ANP	0.67	295 iPc	06	26.80	0.7
		eS	06	43.60	
TWD	0.99	214 ePc	06	30.80	-0.4
		eS	06	44.00	
TWF1	1.75	208 eP	06	43.40	1.1
TWG	2.32	207 eP	06	51.20	0.8
SSE	6.23	352 P	07	45.00	-0.8
		Lg	09	39.50	
BJI	15.91	343 eP	10	06.00	9.1X
LZH	19.31	310 eP	10	46.50	7.1X
	3.0s	143.00nm			4.7mb
WRA	46.12	164 eP	14	37.00	-0.3
INK	72.21	22 eP	17	38.00	0.5

S.D. = 1.2 on 9 of 11 obs.

% SEP 18, 1990 19h 52m 59.85± 0.51s
43.436 N ± 3.3km 5.450 E ± 3.8km
DEPTH = 5.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.6 (STR).

GELF	0.06	197 Pg	53	01.32	-0.1
TREF	0.19	346 Pg	53	04.10	0.3
PUYF	0.21	62 Pg	53	03.87	-0.2
BERF	0.21	125 Pg	53	04.33	0.1
CDR	0.33	44 iPg	53	06.40	-0.1
		iSg	53	10.10	
PRAF	0.42	331 Pg	53	08.31	0.0
VILF	0.46	25 Pg	53	08.91	-0.1
TAVF	0.48	68 Pg	53	09.66	0.2
GANF	0.65	31 Pg	53	12.66	-0.2
CALN	1.09	73 Pg	53	21.50	0.6
MVIF	1.32	69 Pn	53	24.97	0.2
		Sg	53	45.10	
REVF	1.43	77 Pn	53	26.03	-0.5
		Sg	53	48.81	
TOUF	1.43	66 Pn	53	26.66	0.0
AURF	1.44	71 Pn	53	26.42	-0.2
AUTN	1.54	68 Pn	53	28.33	0.1

S.D. = 0.3 on 15 of 15 obs.

% SEP 18, 1990 19h 57m 41.12± 0.77s
44.807 N ± 4.6km 7.277 E ±10.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.7 (GEN).

PZZ	0.33	203 P	57	48.57	0.6
		S	57	52.88	
RSP	0.35	358 P	57	48.67	0.4
		S	57	53.29	
RRL	0.37	288 P	57	48.47	-0.3
		S	57	52.88	
STV	0.56	177 P	57	52.47	-0.2
		S	58	00.77	
ENR	0.59	170 P	57	52.77	-0.3
		S	58	00.46	
LSD	0 66	353 P	57	54.21	-0.2
		S	00	02.41	

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

? SEP 18, 1990 20h 07m 23.34± 1.20s
41.886 N ±16.2km 13.671 E ± 9.3km
DEPTH = 5.0km (geophysicist)
SOUTHERN ITALY (390)

AZI	0.20	300 Pd	07	26.80	-0.7
		eSg	07	32.00	
SDI	0.21	149 P	07	26.90	-0.8
		eSg	07	28.60	
DUI	0.63	111 P	07	36.60	0.6
		eSg	07	48.10	
RMP	0.73	264 P	07	38.70	0.8
		eSg	07	50.60	
MNS	0.89	304 P	07	44.40	3.5X
ASS	1.40	328 P	07	53.20	3.6X
ARV	1.70	342 P	07	56.70	2.9X

S.D. = 1.5 on 4 of 7 obs.

% SEP 18, 1990 20h 45m 59.06± 1.50s
41.938 N ± 5.4km 23.055 E ±13.3km
DEPTH = 5.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)

KKB	0.07	164 iPgc	46	01.00	0.1
MMB	0.61	124 iPgc	46	11.00	-0.3
VTS	0.66	10 iPg	46	12.00	-0.3
PGB	1.03	53 eP	46	19.00	0.0
RZN	1.27	101 eP	46	23.00	-0.2
KDZ	1.79	98 eP	46	31.00	0.2
PVL	2.11	52 eP	46	36.00	0.5

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

• SEP 18, 1990 20h 58m 46.99± 1.47s
8.205 S ±11.0km 121.854 E ±13.8km
DEPTH = 53.1 ± 16.7 km
4.9mb (9 obs.)
FLORES ISLAND REGION (286)

MKS	3.80	321 iPc	59	46.00	1.6
MTN	10.22	118 eP	01	13.00	-0.8
MBL	13.03	188 eP	01	50.20	-1.3
		eS	04	07.00	
NANU	15.52	202 eP	02	19.00	-4.9X
WRA	16.80	135 eP	02	38.30	-2.0
		eS	05	36.80	
		i	05	40.40	
WARB	18.45	166 eP	03	01.50	0.8
ASPA	19.23	144 iPc	03	11.00	1.1
	0.7s	9.00nm			4.1mb
Z	17s	0.16um			3.3Msz
		eS	06	40.30	
		LR	11	33.20	
OIS	21.10	127 iPc	03	30.00	0.6
	0.3s	14.00nm			4.8mb
MRWA	21.62	194 eP	03	34.00	-0.5
STK	29.87	145 eP	04	53.00	1.3
	1.6s	32.00nm			4.8mb
GUN	49.99	317 P	07	37.20	-1.3
	0.6s	14.00nm			5.2mb
PKI	50.09	317 P	07	38.80	-0.5
	0.6s	7.00nm			4.9mb
KKN	50.32	317 P	07	40.40	-0.5
	0.6s	10.00nm			5.0mb
DMN	50.32	316 P	07	40.60	-0.4
	0.6s	11.00nm			5.1mb
GKN	50.89	316 P	07	44.80	-0.4
	0.6s	9.00nm			5.0mb
SPA	81.85	180 iPd	11	03.90	2.1
	0.4s	8.55nm			5.1mb

S.D. = 1.3 on 15 of 16 obs.

SEP 18, 1990 21h 57m 13.57± 0.27s
44.103 N ± 1.9km 6.956 E ± 2.3km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.7 (LDG), 2.4 (GEN).

TOUF	0.23	113 Pg	57	18.52	-0.1
		Sg	57	22.78	
MVIF	0.25	145 Pg	57	18.99	0.0
		Sg	57	23.67	
STV	0.30	62 P	57	19.67	-0.2
		S	57	23.87	
AURF	0.34	129 Pg	57	20.99	0.3
CALN	0.35	188 Pg	57	20.94	0.0
AUTN	0.36	107 Pg	57	20.86	-0.1
		Sg	57	26.99	

ENR	0.36	70	P	57	20.77	-0.2
			S	57	25.69	
PZZ	0.42	14	P	57	21.82	-0.3
			S	57	27.54	
SBF	0.42	125	Pg	57	22.00	-0.2
			Sg	57	28.20	
DOI	0.45	27	P	57	22.40	-0.4
			eSg	57	27.90	
REVF	0.47	141	Pg	57	22.76	-0.4
			Sg	57	30.24	
FRF	0.59	203	Pg	57	25.20	-0.2
			Sg	57	33.60	
ROB	0.69	73	P	57	27.15	0.0
			S	57	36.59	
IMI	0.70	106	P	57	27.26	-0.2
			S	57	36.89	
LRG	0.78	214	Pg	57	29.00	0.3
			Sg	57	40.00	
RRL	0.83	352	P	57	29.41	-0.3
			S	57	40.59	
LMR	0.83	203	Pg	57	29.70	0.0
			Sg	57	41.50	
FIN	0.91	83	P	57	30.84	-0.1
			S	57	42.43	
CDR	0.96	244	ePg	57	32.00	0.2
			e	57	32.50	
			eSg	57	46.20	
			e	57	46.90	
			e	57	47.10	
BNI	0.97	348	P	57	32.20	0.1
			eSg	57	39.30	
CKI	1.00	71	P	57	33.10	0.5
RSP	1.07	11	P	57	34.02	0.2
			S	57	47.55	
PCP	1.22	68	P	57	37.61	1.3
			S	57	52.94	
PGF	2.15	135	Pn	57	50.00	-0.1
			Sn	58	16.00	

S.D. = 0.4 on 24 of 24 obs.

SEP 18, 1990 22h 59m 05.12± 0.48s
41.963 N ± 4.5km 23.103 E ± 4.7km
DEPTH = 10.0km (geophysicist)
GREECE-BULGARIA BORDER REGION (363)
MD 3.2 (ATH), ML 2.9 (SKO). Felt (IV) at Blagoevgrad, Bulgaria.

KKB	0.10	189	iPgc	59	08.00	0.2
MMB	0.60	128	iPgc	59	17.00	-0.2
VTS	0.63	7	iPgc	59	18.00	0.1
KNT	0.81	191	ePg	59	20.20	-0.7
			eSg	59	30.50	
SRS	0.92	156	ePg	59	22.00	-0.7
			eSg	59	33.60	
PGB	0.98	53	iPgd	59	23.00	-0.8
GRG	1.14	208	ePb	59	26.20	-0.2
SOH	1.16	171	ePb	59	26.20	-0.6
			eSg	59	41.10	
PLD	1.20	83	iPgd	59	27.00	-0.5
RZN	1.24	102	iPgc	59	28.00	-0.2
SKO	1.24	271	iPg	59	28.20	0.0
			iSg	59	43.70	
			i	59	46.00	
THE	1.33	185	ePb	59	29.30	-0.4
			eSg	59	46.50	
PLG	1.61	171	ePb	59	32.80	-0.9
			eSb	59	56.00	
FNA	1 75	228	ePb	59	35.90	0.1
			eSg	59	58.70	
KDZ	1.76	99	eP	59	35.00	-0.8
DIM	1.81	86	eP	59	38.00	1.4
LIT	1.92	194	ePb	59	38.00	-0.1
			eSb	00	01.30	
OHR	1.93	245	iPn	59	38.50	0.2
KZN	1.94	212	ePg	59	40.50	2.0
RDO	2.00	113	ePn	59	41.00	1.7
			eSn	00	07.80	
PVL	2.07	52	iPd	59	40.00	-0.3
ALN	2.46	115	ePb	59	49.10	3.3X
			eSg	00	21.10	
JMB	2.63	78	eP	59	51.00	2.6
BZS	3.81	344	ePc	00	23.50	18.5X
ISR	4.04	37	eP	00	21.00	12.6X
MLR	4.08	29	eP	00	10.00	1.0
PSN	4.11	64	eP	00	13.00	3.7X
VRI	4.70	33	ePc	00	15.00	-2.8

S.D. = 1.2 on 24 of 28 obs.

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* SEP 18, 1990 23h 16m 30.23± 0.94s
13.658 N ±41.0km 143.371 E ± 9.0km
DEPTH = 33.0km (normal)
SOUTH OF MARIANA ISLANDS (210)

GUMO	1.46	93	eP	16	54.20	-0.3
PJG	1.46	93	eP	16	54.70	0.2
GUA	1.50	94	eP	16	55.20	0.0
			eS	17	18.30	
GUN	55.14	295	P	26	02.80	0.3
	0.4s	10.00nm			5.2mb	
PKI	55.54	294	P	26	05.20	-0.2
KKN	55.66	294	P	26	06.00	-0.1
	0.6s	10.00nm			5.0mb	
DMN	55.81	294	P	26	07.40	0.2
GKN	56.24	295	P	26	10.00	-0.2
	0.6s	9.00nm			5.0mb	
INK	74.86	22	eP	28	09.00	0.0

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

% SEP 19, 1990 00h 27m 33.35± 1.00s
38.710 N ± 7.0km 15.229 E ±11.9km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MSI	0.57	153	P	27	44.90	0.1
			eSg	27	53.30	
ATN	0.58	161	P	27	44.80	-0.3
			eSg	27	52.10	
MNO	0.88	209	P	27	50.50	0.0
SOI	0.91	134	P	27	50.80	0.1
			eSg	28	04.20	
MGR	1.45	10	P	27	59.50	-0.1

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

SEP 19, 1990 00h 57m 18.77± 0.91s
5.675 S ± 4.4km 146.157 E ± 6.0km
DEPTH = 54.9 ± 9.4 km
5.1mb (12 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT	1.28	139	iPc	57	41.30	0.6
PMG	3.84	165	iPc	58	16.50	-0.3
			eS	59	05.00	
RAB	6.17	76	iPc	58	48.20	-1.3
CTA	14.33	180	iPc	00	42.00	1.7
	0.7s	30.82nm			4.9mb	
QIS	16.10	203	eP	01	02.00	-1.1
			eS	03	59.00	
MTN	16.45	243	eP	01	07.00	-0.5
	0.5s	163.00nm			5.4mb	
WRA	18.25	218	eP	01	29.10	-0.8
			eS	04	46.90	
GUA	19.13	356	eP	01	42.10	1.7
	0.8s	119.40nm			5.2mb	
GUMO	19.18	356	eP	01	42.10	1.1
RMO	20.85	173	eP	01	58.00	-0.4
			e	02	10.00	
QLP	20.87	185	eP	01	58.40	-0.2
ASPA	21.43	212	eP	02	03.80	-0.5
	1.1s	79.00nm			5.0mb	
Z	23s	1.00um			4.1MszX	
			eS	05	56.20	
			LR	10	34.40	
			eScS	13	25.20	
DZM	25.51	132	iPd	02	43.60	-0.4
STK	26.42	189	eP	02	51.60	-0.6
	0.6s	7.00nm			4.4mb	
			e	07	33.40	
BWA	28.68	176	eP	03	14.50	1.7
CAN	29.62	175	eP	03	23.00	1.9
FORR	30.25	212	eP	03	26.00	-0.7
COOL	34.36	220	eP	04	02.00	-0.6
MRWA	36.88	227	eP	04	24.60	0.6
KLB	37.04	222	eP	04	24.50	-0.7
	0.4s	17.00nm			5.3mb	
NWAO	38.21	221	eP	04	36.00	0.9
Z	20s	0.40um			4.2Msz	
N	20s	0.20um				
E	20s	0.10um				
MAT	42.65	351	eP	05	12.00	0.4
TCW	43.39	149	P	05	17.60	0.0
SSE	43.66	328	P	05	20.00	0.1
MTW	43.99	148	eP	05	21.90	-0.6
PGZ	44.03	147	eP	05	22.50	-0.2
MOW	44.05	148	eP	05	23.20	0.2
IPM	46.21	282	ePd	05	42.10	1.6
	0.8s	27.10nm			5.2mb	
PSI	47.90	279	ePd	05	54.50	0.6
CHG	52.49	299	ePc	06	29.00	0.1
	1.0s	14.75nm			5.0mb	
BJI	53.21	331	eP	06	33.00	-0.7
	1.0s	13.00nm			4.9mb	
SHL	61.14	303	iP	07	29.70	-0.7
GUN	66.99	303	P	08	08.20	-0.6
PKI	67.27	303	P	08	09.80	-0.7
	0.8s	20.00nm			5.2mb	
KKN	67.45	303	P	08	11.00	-0.5
DMN	67.53	303	P	08	11.80	-0.3
	0.7s	51.00nm			5.6mb	
GKN	68.05	303	P	08	14.60	-0.6
KOD	70.21	283	eP	08	29.50	0.7
HYB	70.56	291	ePc	08	30.00	-0.6
	0.8s	35.70nm			5.3mb	
GBA	70.84	286	P	08	33.10	0.9
FBA	85.21	23	P	09	49.10	-1.2
INK	91.66	22	eP	10	19.00	-1.9
TNP	98.68	52	P	10	54.30	0.5
TUL	115.93	53	e(PKP)	16	03.60	6.0X
	0.9s	2.50nm				
CNCB	139.53	124	PKP	16	35.00	-8.7X
LPB	139.57	124	ePKP	16	27.00	-16.5X
ZOBO	139.68	123	PKP	16	34.00	-9.9X
PPD	147.58	149	ePKP	16	59.00	2.4
			e	17	03.70	
KIC	151.05	273	PKP	17	07.64	5.5X
JFO	151.23	161	(PKP)	17	09.00	6.7X
TIC	151.33	273	PKP	17	08.18	5.6X
LIC	151.34	273	PKP	17	08.18	5.6X
LKO	151.74	280	PKP	17	06.84	3.6X

S.D. = 1.0 on 44 of 53 obs.

SEP 19, 1990 04h 12m 11.02± 0.18s
23.656 S ± 4.8km 179.988 E ± 5.4km
DEPTH = 550.0km (geophysicist)
4.8mb (14 obs.)
SOUTH OF FIJI ISLANDS (171)

DZM	12.59	275	iPc	14	58.70	2.6
PUZ	14.45	185	P	15	14.80	0.2
			eS	17	42.80	
TAZ	14.83	191	P	15	19.50	1.2
NOZ	15.01	186	P	15	20.40	0.3
PGZ	17.20	190	P	15	41.10	-0.3
	0.4s	101.00nm			5.8mb	
KIW	17.68	193	P	15	44.10	-2.0
MTW	17.85	191	P	15	47.00	-0.8
CAW	17.89	192	P	15	47.30	-0.8
MRW	18.08	193	P	15	49.40	-0.5
TCW	18.15	194	P	15	50.30	-0.3
THZ	19.00	196	P	15	59.50	0.7
KHZ	19.46	194	P	16	02.90	-0.1
LTZ	20.12	197	P	16	08.30	-0.9
BRS	24.82	256	eP	16	53.00	1.2
RMQ	28.40	258	iPd	17	22.70	-0.4
TPT	31.70	80	iP	17	50.00	-1.4
	1.2s	50.00nm			5.0mb	
RUV	31.84	81	iP	17	51.10	-1.5
	1.2s	35.00nm			4.9mb	
PMG	34.41	289	iPd	18	13.00	-1.1
	1.0s	110.00nm			5.4mb	
STK	34.81	248	iPd	18	18.20	0.9
	0.6s	4.00nm			4.2mb	
ASPA	42.07	260	iPd	19	16.30	-0.1
	0.7s	36.00nm			5.0mb	
			iS	24	55.40	
WRA	42.41	266	iPd	19	18.10	-1.0
			iScP	24	02.00	
			eS	24	59.00	
FORR	46.35	249	iPd	19	48.50	-1.0
MTN	47.43	274	iPc	19	56.70	-1.2
WARB	48.17	255	eP	20	02.50	-0.9
GUA	50.43	314	eP	20	16.40	-3.8X
	0.7s	109.59nm			5.5mb	
GUMO	50.49	314	eP	20	15.70	-4.9X
SBA	54.62	183	P	20	52.10	2.6
MBL	55.31	260	iPd	20	53.90	-1.2
	0.4s	6.00nm			4.3mb	
SPA	66.49	180	iPc	22	09.00	1.2
	0.9s	60.45nm			5.1mb	
MAW	77.97	200	iP	23	09.50	-3.8X
AIA	78.80	157	eP	23	19.30	1.6
PRS	81.37	44	eP	23	32.40	0.9

19d 04h

BCH	81.52	46	P	23	32 80	0 4
SAO	81.59	44	eP	23	32.70	0.1
PRI	81.71	45	eP	23	34.00	0.7
BRK	81.76	43	eP	23	33.80	0.5
MHC	81.82	43	eP	23	34.80	0.9
ABL	81.89	46	P	23	34.20	-0.2
ARN	81.89	43	P	23	33.80	-0.3
PLM	82.63	49	eP	23	39.00	0.9
RVR	82.64	48	eP	23	37.00	-0.9
PEC	82.73	48	P	23	37.80	-0.6
	0.9s	6.94nm			4 2mb	
SBB	82.73	47	eP	23	38.00	-0.4
FRI	82.84	45	eP	23	38.90	0.1
ISA	82.86	46	eP	23	39.00	0.0
CMB	83.03	43	eP	23	39.90	0.1
ORV	83.27	42	eP	23	41.40	0.5
WDC	83.28	40	eP	23	41.30	0.4
CLC	83.53	46	eP	23	43.00	0.6
TPC	83.61	49	eP	23	43.00	0.2
MIN	83.69	41	eP	23	43.40	0.2
GSC	83.77	47	eP	23	44.00	0.4
GLA	83.88	50	eP	23	45.00	0.9
LBFM	84.14	40	P	23	45.00	-0.5
TNP	85.08	45	P	23	49.70	-0.4
BMW	86.63	35	P	23	56.80	-0.3
GMW	87.55	35	P	24	01.20	-0.2
LON	87.56	36	P	24	00.90	-0.6
RMW	88.01	35	P	24	03.00	-0.6
DAU	90.23	45	P	24	14.00	-0.3
PNT	90.30	35	eP	24	15.00	1.0
PTI	90.80	43	P	24	16.70	0.0
ALO	90.81	52	eP	24	16.80	-0.2
	1.0s	7.50nm			4.7mb	
ANMO	90.82	52	P	24	16.80	-0.2
	1.0s	7.50nm			4.7mb	
BW06	92.53	44	P	24	23.80	-0.9
	1.0s	6.00nm			4.6mb	
GOL	93.81	48	P	24	30.00	-0.8
	0.9s	4.73nm			4.6mb	
SOB1	128.39	124	ePKP	30	16.50	-1.0
NUR	139.38	342	ePKP	30	38.00	1.3
N82	141.84	351	PKP	30	35.80	-5.4X
	0.6s	2.10nm				
HFS	142.30	349	ePKP	30	36.80	-5.1X
	0.3s	13.30nm				
DSI	147.77	292	ePKP	30	55.00	3.2X
PRNI	148.19	290	ePKP	30	56.00	3.4X
EKA	148.28	3	PKP	30	55.00	3.1X
	1.2s	40.20nm				
KRA	149.39	334	iPKPc	30	58.50	4.7X
KSP	150.06	339	iPKPc	31	00.40	5.6X
		e		33	09.00	
CLL	150.62	343	iPKPc	31	01.50	5.9X
	1.1s	32.00nm				
PRU	151.36	340	PKP	31	03.00	6.3X
KHC	152.41	341	ePKP	31	06.00	7.7X
BCAO	153.82	226	iPKPd	31	01.30	0.1
	0.9s	14.00nm				
		id		31	10.00	
		id		31	25.90	
LIC	162.01	164	PKP	31	11.20	0.5
	0.8s	12.00nm				
KIC	162.21	164	PKP	31	11.30	0.4
TIC	162.41	163	PKP	31	11.50	0.4
LKO	164.99	158	PKP	31	09.70	-3.8X
	1.4s	26.50nm				

S.D. = 0.9 on 69 of 83 obs.

? SEP 19, 1990 05h 15m 36.80± 3.89s
14.946 N ±58.1km 60.810 W ±53.9km
DEPTH = 80.0km (geophysicist)
WINDWARD ISLANDS (95)

CRM	0.22	208	eP	15	48.76	0.0
			S	16	00.20	
FDF	0.39	237	iPd	15	49.76	-0.1
			S	16	11.70	
MVM	0.40	192	iPd	15	49.76	-0.2
			S	16	01.70	
BIM	0.50	211	eP	15	50.57	-0.1
			S	16	03.60	

S.D. = 0.1 on 4 of 4 obs.

? SEP 19, 1990 06h 41m 01.60± 5.65s
32.575 S ±38.1km 71.607 W ±32.3km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.64	128	eP	41	14 30	-0.1
			iS	41	23.50	
JACH	0.86	97	iPd	41	17.60	0.2
			iS	41	30.00	
LCCH	0.90	178	iPc	41	18.10	0.3
			iS	41	30.00	
PEL	0.96	126	iPd	41	19.00	0.2
			iS	41	32.60	
SAN	1.18	138	eP	41	22.00	0.1
			iS	41	38.00	
FCH	1.34	125	eP	41	25.20	0.8
			i	41	42.90	

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

& SEP 19, 1990 07h 04m 19.68s
62.125 N 149.734 W
DEPTH = 50.6km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.38	318	iP	04	29.18	-0.5
			iS	04	36.51	
PWA	0.48	188	iP	04	30.56	-0.2
			eS	04	39.08	
GHO	0.52	132	iP	04	30.90	-0.5
			eS	04	40.82	
PLRM	0.61	152	iP	04	31.57	-0.8
			eS	04	41.74	
PMR	0.61	152	iPc	04	31.50	-0.8
SML	0.73	115	iP	04	33.12	-0.9
SUA	0.82	216	eP	04	35.10	-0.2
			eS	04	47.89	
HUR	0.86	3	eP	04	34.86	-0.8
			eS	04	46.06	
SKT	0.86	261	iP	04	34.85	-0.9
			eS	04	47.43	
PMS	0.89	175	iP	04	35.56	-0.6
SCM	1.17	103	eP	04	39.32	-0.8
			eS	04	55.84	
CGLM	1.36	234	eP	04	42.10	-0.6
NCG	1.36	239	eP	04	41.96	-0.8
CRP	1.44	234	eP	04	43.45	-0.5
SPU	1.46	230	eP	04	43.31	-0.7
BGL	1.53	237	eP	04	44.67	-0.5
CKL	1.55	234	eP	04	45.04	-0.4
NKA	1.56	208	eP	04	48.00	2.5
SLKM	1.64	188	eP	04	46.00	-0.6
MCK	1.65	12	eP	04	45.78	-1.0
TOA	1.67	89	iPd	04	47.20	0.1
VZW	1.86	124	eP	04	48.59	-1.1
			eS	05	11.58	
VLZ	1.91	120	eP	04	48.90	-1.4
			eS	05	13.66	
KLU	1.92	108	iP	04	49.52	-1.1
			eS	05	14.25	
RDT	2.02	221	eP	04	51.42	-0.6
SEW	2.03	176	eP	04	52.40	0.3
DDM	2.43	45	eP	04	57.21	-0.6
WRH	2.47	17	eP	04	56.37	-1.9
HDA	2.61	28	eP	04	58.89	-1.4
CCB	2.68	18	eP	04	59.19	-2.0
			eS	05	29.65	
CNPM	2.71	196	eP	05	01.78	0.1
GLB	2.90	101	iP	05	02.84	-1.6
FBA	2.92	16	iPc	05	02.90	-1.8
SVW	2.99	253	iPc	05	04.30	-1.5
TTA	3.02	288	iPc	05	04.00	-2.2
GLM	3.06	19	eP	05	04.85	-1.9
TGL	3.59	109	eP	05	11.89	-2.4
BALM	3.70	104	iP	05	13.37	-2.5
IMA	4.32	338	iPc	05	22.40	-2.2

39 obs. associated

? SEP 19, 1990 08h 05m 57.31± 1.27s
38.001 N ±38.1km 88.940 E ±13.5km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
SOUTHERN XINJIANG, CHINA (321)

LZH	12.06	95	eP	08	50.00	0.0
			PP	09	05.00	
			eS	11	08.50	
MAIO	23.49	275	eP	11	05.00	0.0
HFS	50.84	321	eP	14	56.80	0.4
	0.5s	2.80nm			4.5mb	
N82	51.88	323	P	15	04.00	-0.4
	0.9s	4.10nm			4.4mb	

S.D. = 0.5 on 4 of 4 obs.

& SEP 19, 1990 09h 02m 14.80s
38.807 N 122.830 W
DEPTH = 5.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.6 (BRK).
Mo=5.0*10**14 Nm (BRK).

NWRM	0.35	187	iPd	02	21.40	-0.5
ZSP	0.97	152	ePc	02	32.80	-0.9
			iS	02	47.30	
BRK	1.03	154	ePd	02	33.50	-1.3
			iS	02	47.20	
BKS	1.04	153	ePc	02	33.70	-1.2
			iS	02	46.90	
ORV	1.28	54	eP	02	37.00	-1.9
PCC	1.35	165	eP	02	38.30	-1.9
MHC	1.74	147	eP	02	44.10	-1.8
ARN	1.78	144	eP	02	43.70	-2.8
WDC	1.78	7	eP	02	48.80	2.3
MIN	1.80	31	eP	02	45.00	-1.9
			eS	03	07.90	
CMB	2.07	111	eP	02	48.30	-2.4
FHC	2.18	336	eP	02	51.50	-0.8
LBFM	2.64	16	eP	03	00.00	1.1

13 obs. associated

& SEP 19, 1990 10h 18m 26.55s
62.861 N 149.735 W
DEPTH = 78.7km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.13	21	iP	18	37.95	1.6
			eS	18	46.31	
CUT	0.52	209	iP	18	40.49	0.0
			eS	18	50.51	
MCK	0.95	22	eP	18	45.06	-0.1
			eS	18	57.81	
GHO	1.16	161	eP	18	47.84	0.0
SKT	1.22	224	iP	18	48.33	-0.2
			eS	19	04.49	
PWA	1.22	183	eP	18	48.58	0.1
			eS	19	05.42	
SML	1.24	148	eP	18	48.64	-0.3
			eS	19	05.73	
PLRM	1.30	167	eP	18	49.76	0.2
			eS	19	08.03	
SUA	1.48	199	eP	18	52.22	0.1
			eS	19	12.12	
SCM	1.52	131	eP	18	52.56	-0.1
			eS	19	14.20	
PMS	1.62	177	eP	18	54.62	0.7
WRH	1.78	24	iP	18	55.00	-0.9
			eS	19	15.26	
TOA	1.82	113	eP	18	57.36	0.8
NCG	1.85	219	eP	18	57.04	0.0
			eS	19	21.02	
CRP	1.96	217	eP	18	59.46	0.8
			eS	19	24.92	
CCB	1.99	25	iP	18	57.69	-1.1
			eS	19	19.66	
HDA	1.99	37	eP	18	57.77	-1.0
SPU	2.01	214	eP	18	59.70	0.6
			eS	19	26.16	
BGL	2.03	219	eP	19	00.59	1.1
CKL	2.07	217	eP	19	01.02	0.9
FBA	2.22	22	eP	19	01.01	-1.0
NKA	2.24	199	eP	19	06.50	4.3
KLU	2.26	126	eP	19	02.15	-0.4
VZW	2.35	139	eP	19	04.92	1.1
VLZ	2.36	136	eP	19	02.85	-1.1
GLM	2.37	25	iP	19	03.15	-1.0
SLKM	2.37	186	eP	19	05.42	1.3
RDT	2.62	210	eP	19	08.93	1.3
DOT	2.68	70	eP	19	08.32	-0.1
SEW	2.77	177	eP	19	09.72	0.2
GLB	3.12	114	eP	19	14.43	-0.1
CNPM	3.42	193	eP	19	19.21	0.5

32 obs. associated

? SEP 19, 1990 12h 19m 11.35± 5.28s
37.828 N ±33.5km 6.718 W ±37.5km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.5 (MDD).

EVAL	0.24	185	iPgc	19 16.50	-0.1
			eSg	19 19.00	
EHOR	1.17	90	ePg	19 32.90	-0.2
			eSg	19 48.00	
EPRU	1.46	126	ePn	19 38.00	0.2
			eSn	19 57.00	
EPLA	2.29	12	ePn	19 59.00	9.2X
			eSn	20 28.00	
EBAN	2.34	81	ePn	19 50.60	0.1
			eSn	20 18.90	

S.D. = 0.3 on 4 of 5 obs.

? SEP 19, 1990 13h 44m 57.97± 4.34s
19.375 S ±52.6km 67.312 W ±15.6km
DEPTH = 230.0km (geophysicist)
SOUTHERN BOLIVIA (125)

CNCB	2.63	346	P	45 47.80	1.6
			S	46 20.00	
LPB	2.92	345	P	45 48.00	-1.3
			S	46 26.00	
ZOBO	3.18	346	Pc	45 52.20	-0.2
			S	46 29.00	
ARE	4.92	305	iPc	46 13.00	-0.1
			iS	47 06.90	
SIV	6.83	61	P	46 37.00	-0.1

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

• SEP 19, 1990 14h 44m 21.83± 1.53s
44.813 N ±12.5km 2.834 E ±11.2km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.8 (LDG).

LBL	0.51	35	Pg	44 31.07	-1.1
			Sg	44 37.08	
CAF	0.56	282	Pg	44 32.40	-0.8
			Sg	44 40.40	
PYM	0.95	7	Pg	44 40.17	0.3
			Sg	44 53.46	
RJF	1.05	298	Pg	44 41.60	-0.1
			Sg	44 57.00	
LPO	1.18	264	Pg	44 42.00	-1.9
			Sg	44 59.20	
AGO	1.26	9	Pg	44 45.35	0.1
			Sg	45 03.01	
PLDF	1.28	25	Pg	44 43.86	-1.8
			Sg	45 02.62	
MAF	1.42	353	Pg	44 48.40	0.7
			Sg	45 08.20	
LFF	1.49	276	Pg	44 48.60	-0.1
			Sg	45 09.60	
TCF	1.54	344	Pg	44 51.20	1.8
			Sg	45 12.80	
BGF	1.75	0	Pg	44 53.60	1.3
			Sg	45 18.60	
SMF	1.96	21	Pg	44 58.00	2.5X
			Sg	45 23.70	
AVF	2.01	10	Pg	44 58.60	2.4X
			Sg	45 26.50	
EPF	2.53	226	Pg	45 05.20	1.5
			Sg	45 36.80	

S.D. = 1.4 on 12 of 14 obs.

SEP 19, 1990 15h 48m 31.32± 0.57s
43.286 N ± 9.1km 17.357 E ± 6.0km
DEPTH = 5.0km (geophysicist)
YUGOSLAVIA (383)
MD 3.4 (TRI). ML 3.0 (LJU).

HVAR	0.67	261	iPgd	48 44.60	-0.2
			iSg	48 56.70	
BRY	0.95	114	ePg	48 49.00	-1.0
			eSg	49 02.50	
HCY	1.19	135	ePg	48 53.20	-0.7
			eSg	49 10.20	
NKY	1.29	111	ePg	48 56.40	0.6
			eSg	49 15.00	
BDV	1.48	132	ePg	48 58.50	-0.1
			eSg	49 21.30	
PLE	1.49	88	ePg	48 58.20	-0.7
			eSg	49 20.00	
TTG	1.64	121	ePn	49 02.30	1.4
			eSn	49 25.30	
ULC	1.92	133	ePn	49 05.50	0.5
			eSn	49 33.50	
SDA	2.03	128	ePn	49 12.80	6.3X
PUK	2.25	123	ePn	49 12.60	2.9X
KKS	2.56	117	ePn	49 19.00	4.9X
VBY	2.68	327	e(Pn)	49 16.40	0.5
			eSn	49 49.50	
CEY	3.23	320	eP	49 28.00	4.4X
			eSn	50 07.50	
TRI	3.53	315	e(Pn)	49 37.70	9.8X
			e	50 23.10	
			i(Sg)	50 27.60	
VOY	3.69	319	ePn	49 30.00	-0.4
			eSn	50 15.00	

S.D. = 0.8 on 10 of 15 obs.

SEP 19, 1990 16h 09m 03.56± 0.66s
37.134 N ± 8.2km 21.266 E ± 5.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.5 (ATH).

ITM	0.53	85	iPgc	09 12.90	-1.4
VLS	1.17	333	ePg	09 26.00	0.6
VLI	1.40	107	ePb	09 28.00	-1.1
EVR	1.83	13	ePg	09 37.00	1.6
ATH	2.12	66	ePn	09 40.00	0.5
VAM	2.93	125	ePb	09 53.00	2.0
KZN	3.19	7	ePn	09 54.00	-0.8
OHR	3.99	355	ePn	10 05.80	-0.3
SOI	4.24	284	P	10 09.40	-0.2
			eSn	10 55.60	
ATN	4.72	284	P	10 16.50	0.0
			eSn	11 07.00	
ORI	4.77	309	P	10 17.20	-0.1
			eSn	11 10.50	
SKO	4.83	2	ePn	10 10.00	-8.1X
MEU	5.06	272	P	10 21.00	-0.4
			eSn	11 17.20	
MGR	5.38	306	P	10 25.50	-0.4
			eSn	11 23.00	

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

& SEP 19, 1990 16h 14m 22.00s
39.542 N 120.407 W
DEPTH = 9.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.0 (BRK).

ORV	0.85	271	iPc	14 37.40	-1.0
			iS	14 48.60	
MIN	1.22	311	ePc	14 44.00	-0.9
			iS	15 00.20	
CMB	1.50	179	iPd	14 48.90	-0.3
			iS	15 08.70	
WDC	1.94	303	eP	14 55.70	0.3
LBFM	2.13	328	eP	14 59.30	0.9
ARN	2.36	202	eP	15 02.00	0.4
MHC	2.40	204	eP	15 03.00	0.8
FRI	2.60	168	ePc	15 06.90	1.9
			eS	15 41.00	
TNP	2.89	119	e(P)	15 10.50	1.3

9 obs. ossociated

SEP 19, 1990 17h 01m 31.24± 0.65s
35.894 N ±10.3km 31.016 E ± 7.4km
DEPTH = 33.0km (normal)
CYPRUS (372)

PPCY	1.48	132	eP	01 58.00	2.2
CSS	2.11	116	eP	02 02.80	-2.1
CIN	2.90	307	iPd	02 16.00	-0.2
KAP	3.14	265	iPd	02 20.00	0.4
SMG	3.81	300	eP	02 27.50	-1.5
BBTK	4.18	19	eP	02 36.00	1.7
			iS	03 19.00	
NPS	4.45	263	eP	02 38.50	0.3
ADI	4.47	128	eP	02 38.00	-0.5
PRK	5.04	313	eP	02 45.70	-0.8
VAM	5.57	267	eP	02 56.00	2.0
DSI	5.64	139	eP	02 55.00	0.1
			eS	03 54.00	
PRNI	6.46	148	eP	03 06.00	-0.6
VLI	6.58	280	eP	03 07.00	-1.1

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

SEP 19, 1990 17h 49m 51.33± 1.36s
31.002 N ± 8.5km 131.554 E ± 6.2km
DEPTH = 47.2 ± 14.2 km
4.7mb (7 obs.)

KYUSHU, JAPAN (235)

MAT	7.82	43	iPd	51 45.30	0.0
SSE	8.89	273	P	52 00.00	-0.1
	Z 20s		0.90um		
	E 14s		0.70um		
BJI	15.41	310	eP	53 32.00	4.9X
	1.0s		36.00nm		4.5mb
	Z 16s		1.10um		4.3Msz
LZH	23.61	290	eP	54 59.40	0.5
	2.4s		72.00nm		4.7mb
CHTO	31.85	255	ePd	56 13.70	-0.4
GUN	39.68	277	P	57 21.60	0.5
	0.6s		41.00nm		5.4mb
PKI	40.17	277	P	57 25.40	0.3
KKN	40.22	278	P	57 24.80	-0.6
DMN	40.42	277	P	57 27.40	0.3
GKN	40.71	278	P	57 29.60	0.3
WRA	50.72	177	eP	58 48.00	-0.5
OIS	51.84	170	iPd	58 57.00	0.0
GBA	52.47	263	Pd	59 01.10	-0.8
	0.8s		3.40nm		4.4mb
ASPA	54.40	177	iPd	59 16.10	0.2
	1.1s		12.00nm		4.8mb
WARB	57.06	185	eP	59 35.50	0.5
STK	63.26	170	eP	00 17.40	0.2
	0.8s		6.00nm		4.8mb
NB2	76.31	334	P	01 36.40	-0.3
	0.7s		2.10nm		4.2mb

S.D. = 0.5 on 16 of 17 obs.

? SEP 19, 1990 18h 07m 38.35± 2.53s
35.191 N ±36.4km 26.315 E ±11.0km
DEPTH = 10.0km (geophysicist)
CRETE (370)
MD 3.9 (ATH).

NPS	0.58	277	iPgc	07 48.90	-1.2
KAP	0.79	63	ePb	07 53.50	-0.2
VAM	1.74	278	ePg	08 10.00	1.2
APE	1.98	342	ePb	08 19.20	6.9X
SMG	2.55	9	ePg	08 32.00	11.7X
CIN	2.80	30	eP	08 24.00	0.1
VLI	3.14	300	ePn	08 28.80	0.1

S.D. = 1.2 on 5 of 7 obs.

• SEP 19, 1990 18h 43m 10.43± 0.58s
12.405 N ± 6.9km 144.641 E ±29.3km
DEPTH = 33.0km (normal)
4.4mb (2 obs.)
SOUTH OF MARIANA ISLANDS (210)

GUA	1.16	13	iPc	43 31.40	1.0
			eS	43 46.30	
GUMO	1.20	11	iPc	43 30.40	-0.5
PJG	1.20	11	iPc	43 30.40	-0.5
OIS	33.13	189	eP	49 46.00	0.1
WRA	33.71	198	eP	49 50.50	-0.4
ASPA	37.36	196	iPc	50 22.30	0.4
	0.8s		6.00nm		4.5mb
BRS	40.34	169	iP	50 47.50	0.8
DZM	40.39	148	iPc	50 46.80	-0.5
STK	44.13	184	iPc	51 17.20	-0.4
	0.7s		4.00nm		4.3mb

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

• SEP 19, 1990 19h 01m 02.23± 2.31s
37.224 N ±18.5km 71.964 E ±10.0km
DEPTH = 113.7 ± 30.4 km
4.1mb (3 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE	8.16	212	eP	02 59.70	0.0
			eS	04 27.90	
NDI	9.59	151	eP	03 21.20	2.5
			eS	04 58.80	
MAIO	10.05	268	eP	03 24.00	-1.0
GKN	14.08	127	P	04 17.40	-0.5
KKN	14.64	126	P	04 24.00	-1.1
DMN	14.65	127	P	04 25.60	0.3
PKI	14.87	126	P	04 28.20	0.1
GUN	14.95	124	P	04 28.20	-0.9
GBA	24.02	167	Pc	06 07.00	-0.7
	1.0s		3.70nm		3.8mb
HFS	42.98	321	eP	08 52.00	0.8
	0.5s		5.70nm		4.6mb
NB2	44.27	323	P	09 02.20	0.4

19d 19h

0.6s 1.70nm 4.0mb
S.D. = 1.2 on 11 of 11 obs.

SEP 19, 1990 19h 04m 16.71± 0.66s
44.860 N ± 4.6km 7.619 E ± 6.4km
DEPTH = 11.5 ± 6.1 km
NORTHERN ITALY (545)
ML 2.3 (GEN), 2.0 (LDG).

RSP	0.39	319	P	04 25.39	0.6
			S	04 30.72	
PZZ	0.51	226	P	04 26.82	-0.4
			S	04 33.80	
ROB	0.59	162	P	04 29.29	0.7
			S	04 37.69	
RRL	0.60	276	P	04 29.49	0.7
			S	04 37.08	
ENR	0.65	193	P	04 29.29	-0.3
			S	04 37.39	
STV	0.65	199	P	04 28.98	-0.6
			S	04 36.77	
LSD	0.68	331	P	04 28.26	-2.0
			S	04 38.51	
PCP	0.73	115	P	04 31.64	0.6
			S	04 41.18	
FIN	0.78	147	P	04 32.67	1.0
			S	04 42.61	
ORX	0.81	18	P	04 31.34	-1.1
			S	04 40.87	
LPG	0.88	316	Pg	04 35.20	1.4
			Sg	04 44.90	
LPL	0.91	317	Pg	04 35.20	1.1
SBF	1.01	188	Pg	04 35.50	-0.2
			Sg	04 46.00	
FRF	1.48	209	Pg	04 42.00	-1.1
			Sg	04 59.90	
LRG	1.67	213	Pg	04 46.20	0.3
			Sg	05 06.20	

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

? SEP 19, 1990 19h 23m 24.17± 3.70s
5.873 S ±40.0km 146.710 E ±32.3km
DEPTH = 217.8 ± 15.9 km
4.8mb (1 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT	0.83	160	iP	23 55.20	0.2
			eS	24 18.00	
MNDI	3.05	265	eP	24 16.00	0.0
			eS	24 59.00	
PMG	3.54	173	iPc	24 21.10	-0.4
			eS	25 08.00	
QIS	16.14	205	iPd	27 01.40	0.5
WRA	18.44	220	iPd	27 25.00	-1.0
ASPA	21.56	214	iPd	27 58.60	1.4
	1.0s		34.00nm		4.8mb
			eS	31 48.60	
WARB	27.84	221	eP	28 55.00	-0.6

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

% SEP 19, 1990 19h 46m 00.67± 0.95s
45.995 N ± 7.1km 2.961 E ± 7.7km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.9 (LDG).

MAF	0.36	310	Pg	46 08.40	0.4
			Sg	46 13.70	
BGF	0.57	352	Pg	46 12.40	0.2
			Sg	46 20.00	
TCF	0.60	300	Pg	46 12.40	-0.4
			Sg	46 20.20	
AVF	0.84	19	Pg	46 16.50	-0.4
			Sg	46 27.20	
SMF	0.89	43	Pg	46 18.00	0.2
			Sg	46 28.40	
CAF	1.24	211	Pg	46 23.80	0.0
			Sg	46 39.40	

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

? SEP 19, 1990 19h 57m 28.48± 2.18s
45.993 N ± 8.2km 3.024 E ±19.7km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.8 (LDG).

MAF	0.39	306	Pg	57 36.80	0.3
			Sg	57 42.00	
BGF	0.58	348	Pg	57 40.20	0.0
			Sg	57 48.20	
TCF	0.64	298	Pg	57 41.00	-0.3
			Sg	57 49.20	
CAF	1.26	213	Pg	57 52.00	0.0
			Sg	58 07.60	

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

? SEP 19, 1990 20h 13m 44.37± 2.89s
31.150 S ±42.9km 68.275 W ±38.2km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.24	223	iPc	13 58.80	-0.5
CFA	0.46	176	eP	14 00.50	0.4
			S	14 12.00	
ZON	0.52	221	iPd	14 01.10	0.5
			eS	14 13.10	
RTCB	0.56	233	iPd	14 01.00	0.0
			eS	14 12.50	
RTCV	0.74	197	e(P)	14 02.00	-0.5
MDZ	1.80	196	eP	14 36.90	22.0X

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

? SEP 19, 1990 23h 31m 41.44± 1.40s
63.053 N ±16.3km 156.851 W ± 9.5km
DEPTH = 10.0km (geophysicist)
CENTRAL ALASKA (1)
ML 3.4 (PMR).

TTA	0.40	108	iPd	31 49.50	-0.2
SVW	2.04	163	eP	32 20.40	4.2X
IMA	3.32	23	e(P)	32 34.20	-0.4
			i	32 41.10	
PMR	3.89	109	e(P)	32 46.80	4.3X
			i	32 52.90	
ANM	4.07	296	eP	32 45.10	0.1
FBA	4.40	61	eP	32 50.30	0.6
TOA	5.03	96	eP	33 01.00	2.3X

S.D. = 0.7 on 4 of 7 obs.

? SEP 20, 1990 00h 27m 37.57± 1.86s
31.205 S ±39.7km 68.665 W ±18.8km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.21	127	iPc	27 53.20	-0.3
			eS	28 05.00	
RTCB	0.30	202	ePd	27 53.80	-0.1
			eS	28 04.30	
ZON	0.34	182	iPd	27 54.70	0.9
			eS	28 06.20	
CFA	0.54	138	eP	27 55.00	0.0
			S	28 08.00	
RTCV	0.66	171	ePc	27 55.60	-0.3
RTBS	0.81	236	ePd	27 57.00	-0.1
			S	28 10.50	

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

? SEP 20, 1990 01h 01m 49.58± 5.74s
33.580 S ±15.8km 70.560 W ±20.8km
DEPTH = 90.4 ± 49.1 km
CHILE-ARGENTINA BORDER REGION (127)

PCH	0.06	136	iPd	02 02.50	-0.2
			iS	02 12.00	
SAN	0.15	326	eP	02 03.00	0.2
			iS	02 12.00	
FCH	0.34	42	iPd	02 04.10	0.2
			iS	02 14.00	
CHCH	0.36	192	iPd	02 03.60	-0.1
			iS	02 13.80	
PEL	0.45	346	iPc	02 04.10	-0.1
			iS	02 15.00	
ROCH	0.71	328	iP	02 06.70	-0.1
			iS	02 19.50	
LCCH	0.85	277	iPc	02 08.00	0.1
			iS	02 21.10	
JACH	0.90	358	iPd	02 08.50	0.0
			iS	02 22.20	
MDZ	1.59	65	eP	02 41.90	24.9X

S.D. = 0.2 on 8 of 9 obs.

% SEP 20, 1990 01h 19m 32.06± 0.65s
43.066 N ± 7.0km 0.674 W ± 5.9km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

ATE	0.03	314	Pg	19 33.92	-0.2
			Sg	19 35.16	
ESCF	0.07	80	Pg	19 33.99	-0.5
			Sg	19 36.05	
ISSF	0.10	247	Pg	19 34.96	0.1
			Sg	19 37.01	
MADF	0.13	307	Pg	19 35.26	0.0
			Sg	19 37.32	
LHE	0.16	166	Pg	19 35.87	0.1
OGE	0.18	55	Pg	19 36.57	0.5
			Sg	19 39.49	

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

• SEP 20, 1990 01h 25m 27.07± 0.93s
22.494 S ±13.1km 65.819 W ±13.1km
DEPTH = 298.0 ± 22.5 km
JUJUY PROVINCE, ARGENTINA (128)

ANT	4.40	253	iPc	26 38.20	0.1
			iS	27 31.20	
CCH	5.09	357	iPd	26 46.20	-0.3
CNCB	6.01	340	P	26 59.00	1.4
ZOBO	6.56	340	Pd	27 04.80	0.5
			S	28 18.00	
SIV	7.87	36	Pc	27 18.90	-0.9
ARE	8.04	317	eP	27 21.00	-1.2
			eS	28 48.00	
PPD	13.44	91	eP	28 28.30	0.0
			e	28 30.30	
VAO	17.40	95	eP	29 12.30	-0.3
			e	29 15.80	
BAO	18.17	71	eP	29 22.20	1.5
SOB1	27.31	65	eP	30 46.40	-0.7

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

• SEP 20, 1990 02h 43m 40.67± 1.63s
3.234 S ±10.0km 138.525 E ± 9.4km
DEPTH = 40.9 ± 15.7 km
5.0mb (4 obs.) 4.7Msz (2 obs.)
WEST IRIAN (201)

JAY	2.29	72	iPc	44 15.20	-1.7
MNDI	5.88	120	eP	45 08.00	0.1
PMG	10.54	126	eP	46 15.00	2.7
MTN	12.03	217	iPc	46 32.80	0.3
KNA	15.71	217	eP	47 21.00	0.1
			eS	50 10.00	
WRA	17.10	193	eP	47 35.90	-2.6
QIS	17.25	177	iPd	47 38.70	-1.6
	0.8s		76.00nm		4.9mb
			e	50 47.00	
			e	53 06.00	
CTA	18.37	156	iPc	47 55.90	1.7
	1.2s		81.25nm		4.8mb
			iS	51 18.00	
ASPA	20.80	192	iPd	48 20.60	-0.5
	1.1s		93.00nm		5.1mb
	Z 18s		0.50um		3.9Msz
			eS	52 07.30	
			LR	56 48.80	
KKM	24.11	292	ePd	48 55.90	1.9
MBL	25.46	224	eP	49 06.00	-0.7
WARB	25.51	205	eP	49 07.50	0.4
BRS	27.62	152	iP	49 28.50	2.0
			i	49 51.50	
NANU	29.43	227	eP	49 43.30	0.5
ADE	31.57	180	eP	49 56.00	-5.7X
MRWA	33.55	217	eP	50 28.20	9.2X
BFD	33.98	174	eP	50 22.00	-0.5
			e	51 29.00	
CHG	44.69	301	eP	51 52.30	0.5
GBA	62.86	287	P	54 06.00	0.8
MAW	81.57	202	iP	55 55.50	0.2
FBA	86.04	24	(P)	56 16.30	-1.7
SPA	86.79	180	iPd	56 20.30	-1.6
	0.8s		13.33nm		5.2mb
LKO	143.81	282	PKP	03 09.20	-5.1X
	0.9s		12.00nm		
ARE	144.46	124	ePKP	03 15.00	-0.7
CNCB	147.11	128	PKP	03 24.20	3.8X
ZOBO	147.30	127	PKP	03 21.00	0.3
	1.0s		17.50nm		
	Z 22s		0.79um		5.5Msz
			LR	36 28.00	

CCH 148.19 131 (PKP) 03 27.20 5.4X
SIV 152.79 135 PKP 03 36.60 8.3X
PPD 153.11 159 ePKP 03 28.70 0.0
e 03 36.40
S.D. = 1.4 on 23 of 29 obs.

• SEP 20, 1990 02h 55m 20.32± 1.73s
37.381 N ±13.0km 71.999 E ± 8.0km
DEPTH = 107.9 ± 20.4 km
4.8mb (7 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE 8.31 212 iPd 57 20.10 0.2
0.8s 110.82nm 5.6mb
eS 58 48.00
NDI 9.71 152 eP 57 40.50 1.9
0.6s 14.67nm 5.0mb
MAIO 10.08 268 eP 57 43.00 -0.6
0.8s 12.81nm 4.9mb
eS 59 28.00
GKN 14.15 128 P 58 37.20 0.0
KKN 14.71 127 P 58 43.40 -0.9
0.6s 20.00nm 4.5mb
DMN 14.72 128 P 58 44.20 -0.4
PKI 14.94 127 P 58 46.40 -1.0
0.6s 27.00nm 4.7mb
GUN 15.01 125 P 58 48.60 0.3
SHL 20.60 119 eP 59 53.00 0.1
eS 03 53.00
HYB 20.71 162 eP 59 54.50 0.6
GBA 24.17 167 P 00 26.50 -1.2
S 04 36.50
HFS 42.88 321 eP 03 09.30 0.2
0.7s 16.40nm 4.9mb
FBA 73.40 17 (P) 06 42.50 0.7
YKA 80.33 3 eP 07 20.20 0.0
0.7s 1.20nm 3.8mb
S.D. = 0.9 on 14 of 14 obs.

• SEP 20, 1990 03h 20m 22.13± 0.52s
9.189 N ±11.1km 83.794 W ± 9.9km
DEPTH = 33.0km (normal)
4.6mb (10 obs.) 4.1Msz (1 obs.)
COSTA RICA (78)
MD 4.5 (UPA).

DVD 1.52 119 iPd 20 46.20 -1.1
(S) 21 00.00
UPA 4.21 92 ePc- 21 26.00 0.4
S 22 32.00
PSO 10.22 141 eP 22 50.00 -0.1
BMG 10.82 100 iPc 23 00.00 2.0
OXX 14.83 303 eP 23 56.00 4.5X
PPM 17.40 306 iP 24 27.00 2.3
ACX 17.40 298 (P) 24 33.00 8.8X
IIJ 18.64 306 eP 24 42.00 2.0
MRX 19.81 304 eP 24 57.00 4.1X
JSC 25.08 5 P 25 45.50 0.3
TKL 26.35 0 P 25 58.50 1.5
G8TN 26.36 359 P 25 57.70 0.6
UYO 26.72 340 eP 26 01.00 0.5
OLY 27.11 346 P 26 02.00 -2.0
BLA 28.06 6 P 26 11.00 -1.7
CNCB 30.20 149 P 26 35.00 2.4
i 29 33.20
ALQ 32.97 324 eP 26 55.00 -1.4
0.9s 2.73nm 4.2mb
Z 18s 0.34um 4.1Msz
ANMO 32.97 324 P 26 53.90 -2.5
1.0s 4.38nm 4.3mb
SIV 33.65 138 P 27 00.30 -1.9
GLD 35.94 331 P 27 19.50 -2.3
1.0s 20.00nm 5.0mb
GOL 35.97 331 P 27 19.80 -2.4
0.9s 6.63nm 4.6mb
GLA 37.19 314 eP 27 35.00 2.8X
BAR 38.32 312 eP 27 46.00 4.3X
TPC 38.61 315 eP 27 51.00 6.8X
PLM 38.80 313 eP 27 48.00 2.1
RSSD 38.99 337 P 27 46.00 -1.4
PEC 39.29 314 P 27 50.00 0.2
DAU 39.52 326 P 27 50.00 -2.0
GSC 39.78 316 eP 27 55.00 1.1
SBB 40.17 314 eP 27 58.00 0.9
BW06 40.35 330 P 27 55.40 -3.3X
1.0s 5.20nm 4.2mb
TNP 41.61 319 P 28 09.00 0.0
0.9s 11.07nm 4.6mb
IMW 41.86 330 P 28 11.80 0.7
BCH 42.02 314 P 28 13.80 1.4
FRI 42.67 316 eP 28 17.40 -0.1
BAO 43.20 125 eP 28 21.30 -0.9
CMB 43.67 317 eP 28 25.90 0.2
MDZ 44.20 162 eP 28 31.60 1.6
PPD 44.47 135 eP 28 29.30 -3.0X
† ORV 45.21 318 eP 28 39.70 1.7
WDC 46.42 319 e(P) 28 56.70 9.1X
SOB1 46.46 112 eP 28 45.50 -2.7
SES 46.87 336 eP 28 50.00 -1.0
SCH 47.48 13 eP 28 55.00 -0.8
FFC 47.67 346 eP 28 57.50 0.3
0.8s 11.00nm 4.9mb
VAO 48.20 132 eP 29 05.10 3.3X
YKA 57.71 344 eP 30 11.40 -0.3
1.0s 3.30nm 4.3mb
INK 67.38 342 eP 31 15.00 -1.0
FBA 70.85 336 P 31 39.70 2.3
1.2s 17.05nm 5.0mb
TTA 73.80 333 P 31 53.40 -1.6
AAPN 76.30 54 eP 32 12.20 2.3
ALOJ 76.31 54 eP 32 12.00 2.0
TOL 76.32 51 eP 32 11.00 1.2
ATEJ 76.39 54 eP 32 12.00 1.5
APHE 76.65 54 eP 32 12.70 0.8
LKO 76.99 82 P 32 12.14 -1.8
CLL 87.12 39 eP 33 06.00 0.0
1.7s 35.00nm 5.3mb
KHC 87.91 41 P 33 11.30 1.4
ZST 90.40 41 eP 33 23.00 1.4
WRA 141.66 249 ePKP 39 50.30 -2.6
SHL 145.20 7 iPKP 39 56.50 -2.5
KMI 145.31 350 PKPc 39 58.00 -1.3
1.5s 70.00nm
pP 40 07.00
S.D. = 1.6 on 52 of 62 obs.

SEP 20, 1990 03h 27m 43.98± 0.46s
38.090 N ± 4.7km 22.899 E ± 4.8km
DEPTH = 10.0km (geophysicist)
4.1mb (7 obs.)
GREECE (364)
MD 3.7 (ATH).

ATH 0.66 100 ePg 27 58.50 1.5
EVR 1.19 314 ePn 28 06.60 0.4
ITM 1.19 221 iPbc 28 05.00 -1.2
NEO 1.24 12 ePb 28 05.00 -2.1
VLI 1.37 179 ePb 28 08.40 -0.7
VLS 1.82 273 ePn 28 17.50 1.9
PLG 2.32 10 ePn 28 22.40 -0.4
APE 2.33 115 ePn 28 23.30 0.4
KZN 2.38 339 ePn 28 24.00 0.3
VAM 2.87 158 ePn 28 30.00 -0.7
PRK 2.88 65 ePg 28 40.00 9.3X
SRN 2.88 309 ePn 28 32.50 1.8
KEK 2.91 305 ePn 28 32.00 0.8
KBN 3.00 328 ePn 28 34.70 2.3
SMG 3.14 96 ePb 28 36.60 2.3
OHR 3.43 332 iPn 28 40.80 2.3
iSg 29 24.30
LR 29 36.40
BERA 3.47 320 ePn 28 39.80 0.8
MM8 3.55 10 iPc 28 40.00 -0.3
VLO 3.55 313 ePn 28 43.90 3.7X
NPS 3.57 141 ePn 28 41.00 0.5
RDO 3.67 33 ePn 28 40.50 -1.4
KK8 3.77 2 iPd 28 44.00 0.5
RZN 3.86 21 iP 28 45.00 0.2
TIR 4.01 325 ePn 28 55.00 8.3X
SKO 4.04 344 iPn 28 47.80 0.7
KDZ 4.05 28 iP 28 46.00 -1.3
KAP 4.26 125 ePb 28 53.50 3.1X
DIM 4.44 26 eP 28 53.00 0.1
LCI 4.45 302 P 28 51.70 -1.3
VTS 4.50 3 iP 28 54.00 0.1
PUK 4.57 331 ePn 28 56.00 1.3
ORI 5.39 293 P 29 05.20 -1.2
PVL 5.45 19 iPc 29 05.00 -2.1
ATN 5.86 273 P 29 12.80 -0.2
MGR 6.07 292 P 29 15.40 -0.5
MLR 7 74 16 eP 29 41.00 1.6
e 57 56.50
SDI 7.86 300 P 29 44.10 3.0X
VRI 8 28 19 ePd 29 43.00 -3.9X
VOY 10.38 323 eP 30 13.70 -2.2
e(S) 31 06.00
LBF 16.50 309 eP 31 30.30 -6.8X
0.8s 6.05nm 3.8mb
LOR 16.70 309 eP 31 31.70 -7.8X
SSF 16.83 308 eP 31 35.80 -5.3X
0.7s 5.50nm 3.8mb
MFF 18.99 304 eP 32 04.20 -3.7X
LDF 19.69 310 eP 32 11.60 -4.6X
FLN 19.98 310 eP 32 15.40 -3.7X
0.9s 22.95nm 4.5mb
LPF 20.04 307 eP 32 15.90 -3.9X
GRR 20.06 308 eP 32 16.50 -3.5X
0.6s 7.20nm 4.2mb
HFS 22.83 348 eP 32 46.30 -1.6
0.7s 4.50nm 4.1mb
YKA 74.10 341 eP 39 19.70 -1.9
0.6s 1.00nm 4.0mb
TUL 87.07 315 eP 40 30.70 -0.4
1.0s 6.70nm 4.8mb
S.D. = 1.4 on 36 of 50 obs.

SEP 20, 1990 05h 43m 46.20± 0.50s
43.409 N ± 3.7km 5.466 E ± 3.6km
DEPTH = 5.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.5 (STR).

GELF 0.04 227 Pg 43 47.51 0.0
BERF 0.19 120 Pg 43 50.59 0.4
PUYF 0.21 54 Pg 43 50.37 -0.1
TREF 0.22 345 Pg 43 50.37 -0.4
CDR 0.34 39 ePg 43 52.50 -0.6
iSg 43 56.30
PRAF 0.45 331 Pg 43 55.70 0.5
TAVF 0.48 64 Pg 43 55.92 0.1
VILF 0.48 22 Pg 43 55.70 -0.1
GANF 0.67 28 Pg 43 59.89 0.3
CALN 1.09 71 Pg 44 07.92 0.7
MVIF 1.32 68 Pn 44 11.19 0.1
Sg 44 30.56
TOUF 1.43 64 Pn 44 13.05 0.1
Sg 44 33.29
AURF 1.43 70 Pn 44 12.83 -0.2
Sg 44 33.07
AUTN 1.54 67 Pn 44 14.48 -0.1
Sg 44 37.36
DOI 1.69 49 P 44 16.90 0.3
eSg 44 18.60
PGF 2.73 107 Pn 44 30.73 -0.9
S.D. = 0.4 on 16 of 16 obs.

? SEP 20, 1990 07h 36m 47.26± 4.75s
16.802 S ±35.3km 178.810 W ±34.0km
DEPTH = 319.5 ± 43.3 km
4.9mb (7 obs.)
FIJI ISLANDS REGION (181)

PVC 12.34 264 iPc 39 34.00 -0.7
BRS 28.29 243 iPc 42 16.00 1.8
RMO 31.57 247 iPd 42 44.00 1.1
0.7s 30.00nm 4.9mb
PMG 33.91 278 eP 43 10.00 7.1X
CAN 34.08 231 eP 43 05.00 0.8
BWA 34.16 233 e(P) 43 04.20 -0.7
CMS 35.25 239 iPd 43 14.80 0.8
0.8s 31.00nm 4.8mb
TOO 37.58 229 iPc 43 33.00 -0.5
STK 38.84 240 iPd 43 44.70 0.9
0.5s 18.00nm 4.6mb
WRA 44.46 258 iPd 44 30.20 0.8
ASPA 44.73 253 iPd 44 32.30 0.8
0.7s 132.00nm 5.3mb
FORR 50.11 244 iPc 45 10.60 -2.2
0.4s 28.00nm 5.0mb
WARB 51.30 250 eP 45 20.40 -1.4
NANU 61.67 253 eP 46 32.50 -2.0
0.3s 12.00nm 4.9mb
TNP 79.45 45 P 48 21.00 0.7
FBA 84.82 13 P 48 47.80 0.9
pP 49 57.00 291kmX
ALQ 85.71 52 eP 48 51.00 -1.2
1.0s 1.75nm 3.9mb
S.D. = 1.4 on 16 of 17 obs.

• SEP 20, 1990 08h 09m 59.61± 1.76s
16.928 N ± 9.5km 61.210 W ±18.2km

20d 08h

DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
MD 3.2 (TRN). ML 2.9 (FDF).

SEG	0.59	208	eP	10 11.27	-0.3
			S	10 20.10	
BPA	0.63	281	eP	10 11.21	-0.9
			S	10 19.50	
SFG	0.67	179	eP	10 12.70	0.1
CPB	0.92	320	eP	10 15.90	-0.3
			eS	10 26.08	
DOG	0.97	204	eP	10 16.79	-0.2
PAG	1.00	207	eP	10 17.18	-0.2
			S	10 30.50	
NEV	1.32	279	eP	10 22.47	0.6
			S	10 37.80	
BBL	1.42	190	eP	10 23.80	0.4
SKI	1.52	286	eP	10 25.39	0.6
			eS	10 43.60	

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

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* SEP 20, 1990 08h 15m 19.62± 0.96s
36.356 N ± 9.6km 27.288 E ± 9.6km
DEPTH = 33.0km (normal)
DODECANESE ISLANDS (369)
ML 4.2 (ATH), 4.0 (CSS).

KAP	0.81	187	iPnd	15 34.50	-0.1
			eSn	15 45.50	
SMG	1.40	345	ePn	15 41.90	-1.1
APE	1.58	297	ePn	15 44.20	-1.5
			eSn	16 08.40	
NPS	1.75	232	ePn	15 47.20	-0.9
			eSn	16 09.10	
VAM	2.68	250	ePn	16 02.50	1.1
PRK	3.00	345	ePb	16 14.70	8.9X
ATH	3.28	301	ePb	16 19.60	9.8X
VLI	3.52	277	ePn	16 12.10	-1.3
ITM	4.38	282	ePn	16 27.00	1.4
CSS	5.11	104	eP	16 36.20	0.3
			eSn	17 35.50	
OHR	6.95	315	eP	17 03.80	2.1
KHC	16.23	326	eP	19 11.80	5.2X

S.D. = 1.5 on 9 of 12 obs.

SEP 20, 1990 08h 16m 48.72± 0.31s
27.716 N ± 7.2km 44.084 W ± 4.0km
DEPTH = 10.0km (geophysicist)
4.9mb (20 obs.) 4.3Msz (7 obs.)
NORTH ATLANTIC RIDGE (403)

MIM	26.46	318	P	22 27.70	0.2
CBM	26.90	322	P	22 32.00	0.4
BLA	31.92	297	ePd	23 18.20	1.5
	1.2s	54.69nm		5.4mb	
Z	20s	0.35um		4.0Msz	
LHS	32.04	291	P	23 18.00	0.4
JSC	32.40	291	P	23 21.70	0.9
TKL	34.51	293	P	23 39.80	0.7
GBTN	34.86	293	P	23 41.80	-0.4
RJF	40.05	52	eP	24 25.40	-0.2
	1.5s	31.35nm		4.8mb	
Z	22s	0.55um		4.4Msz	
CAF	40.37	52	eP	24 28.40	0.1
	1.4s	19.60nm		4.6mb	
LKO	40.48	109	P	24 27.34	-2.2
SSF	41.72	49	eP	24 39.50	0.2
	1.3s	14.45nm		4.5mb	
SMF	41.87	50	eP	24 40.80	0.2
	1.6s	46.65nm		5.0mb	
LOR	41.99	49	eP	24 41.60	0.0
	1.4s	19.60nm		4.6mb	
Z	20s	0.38um		4.3Msz	
LBF	42.02	50	eP	24 41.60	-0.3
	1.5s	26.10nm		4.7mb	
HAU	43.78	48	eP	24 55.90	-0.2
Z	21s	0.17um		3.9Msz	
BSF	44.05	49	eP	24 58.20	-0.2
TUL	44.27	294	eP	25 07.00	6.8X
	1.3s	40.20nm		5.1mb	
Z	19s	1.10um		4.8Msz	
		e	25 07.20		
		LR	37 36.00		
CDF	44.45	48	eP	25 01.50	-0.2
	1.5s	31.35nm		5.0mb	
SIO	44.70	294	e(P)	25 04.10	0.4
MEO	46.65	293	iPc	25 20.00	0.8
KHC	48.68	48	P	25 35.40	0.5
PRU	49.36	47	eP	25 40.00	-0.1
FFC	49.45	320	eP	25 41.00	0.3
	1.2s	34.00nm		5.2mb	
NB2	49.47	32	P	25 41.60	0.7
	1.3s	26.20nm		5.1mb	
ZOBO	49.55	211	eP	25 40.00	-2.5
	1.2s	12.16nm		4.8mb	
Z	20s	0.19um		4.1Msz	
		i	25 43.20		
		LR	40 30.00		
CCH	49.67	208	P	25 45.80	2.7
CNCB	49.95	210	P	25 46.00	0.3
HFS	50.42	33	eP	25 49.20	1.1
	0.5s	1.80nm		4.3mb	
ZST	50.97	49	eP	26 01.30	8.9X
GLD	51.35	300	P	25 55.90	0.2
	1.3s	24.14nm		5.0mb	
GOL	51.47	300	P	25 55.80	-0.9
	1.1s	5.61nm		4.4mb	
SRO	51.78	49	eP	25 59.10	0.5
ANMO	53.02	294	P	26 08.70	0.4
	1.3s	25.24nm		5.0mb	
ALQ	53.02	294	eP	26 08.00	-0.4
	1.5s	33.33nm		5.0mb	
Z	20s	0.66um		4.7Msz	
SPC	53.05	48	eP	26 08.40	0.1
OHR	54.03	58	eP	26 09.50	-5.9X
BW06	54.26	304	P	26 16.00	-1.4
	1.1s	42.86nm		5.4mb	
SES	54.72	314	eP	26 20.00	-0.4
IMW	55.14	306	P	26 22.90	-1.0
DAU	55.85	302	P	26 28.70	-0.3
LRM	56.00	308	eP	26 30.20	0.3
EDM	56.06	317	eP	26 30.00	0.0
DUG	57.06	302	P	26 36.70	-0.8
MLR	57.19	52	eP	26 40.00	1.6
NEW	58.87	312	P	26 48.70	-1.2
GLA	60.22	294	eP	27 03.00	3.6X
PNT	60.35	313	eP	27 00.00	-0.1
TNP	60.85	300	P	27 03.20	-0.6
	1.0s	4.17nm		4.5mb	
TPC	60.92	295	eP	27 05.00	0.8
GSC	61.21	297	eP	27 07.00	0.8
PLM	61.78	295	eP	27 10.00	-0.2
BAR	61.81	294	eP	27 19.00	8.7X
PEC	61.87	296	P	27 10.80	0.1
SBB	62.18	297	eP	27 13.00	0.2
ISA	62.43	298	eP	27 15.00	0.6
FRI	63.04	300	e(P)	27 16.90	-1.4
CMB	63.28	301	ePd	27 20.30	0.3
		e	27 26.90		
LBFM	63.55	305	P	27 21.70	-0.2
MIN	63.59	304	ePd	27 21.80	-0.3
		e	27 28.40		
ORV	63.72	303	ePd	27 22.30	-0.5
		e	27 29.00		
BCAO	63.77	99	iPd	27 23.20	-0.3
	0.7s	5.00nm		4.8mb	
LLA	64.09	299	e(P)	27 25.90	0.6
WDC	64.22	304	e(P)	27 23.90	-2.2
INK	64.36	336	eP	27 26.00	-0.5
MHC	64.43	300	e(P)	27 28.20	0.6
MDZ	64.70	203	eP	27 30.50	1.3

S.D. = 0.9 on 61 of 66 obs.

? SEP 20, 1990 09h 03m 13.14± 1.40s
38.162 N ±48.3km 15.327 E ±14.1km
DEPTH = 33.0km (normal)
SICILY (398)

ATN	0.11	91	Pd	03 18.80	-0.2
			eSg	03 26.00	
MSI	0.18	77	P	03 19.70	0.1
			eSg	03 25.80	
MNO	0.55	245	P	03 24.70	0.0
SOI	0.58	99	Pd	03 24.90	0.0
			eSg	03 38.20	

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

? SEP 20, 1990 09h 33m 23.97±12.66s
16.125 N ±81.7km 100.113 W ±75.9km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (58)

ACX	0.78	18	iP	33 38.81	0.3
			iS	33 43.94	
PPM	3.25	26	eP	34 15.34	1.0
			eS	34 46.53	
UNM	3.31	15	(P)	34 18.00	3.1X
			(S)	34 52.00	
IIA	3.31	25	eP	34 13.42	-1.3
IIT	3.36	31	(P)	34 21.00	5.4X
			(S)	34 53.50	
OXX	3.39	73	(P)	34 16.00	0.0
			(S)	34 49.50	
IIJ	3.61	6	eP	34 19.32	-0.1
			(S)	35 00.68	
MRX	3.70	344	(P)	34 30.00	9.7X
			(S)	35 17.00	

S.D. = 1.2 on 5 of 8 obs.

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* SEP 20, 1990 09h 45m 51.52± 1.84s
53.895 N ±18.4km 165.668 W ±11.4km
DEPTH = 80.3 ± 15.8 km
4.7mb (7 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)

ADK	6.96	258	eP	47 32.50	-0.3
KDC	8.36	57	eP	47 50.00	-2.0
TTA	10.37	25	eP	48 20.50	1.1
PMR	11.70	42	eP	48 38.00	1.0
IMA	13.57	21	eP	49 04.00	2.3
FBA	14.23	32	eP	49 09.00	-1.2
INK	20.84	34	eP	50 26.00	-2.1
	0.5s	28.00nm		4.8mb	
ALO	44.89	90	eP	54 00.60	0.9
	0.9s	2.52nm		4.0mb	
		e	55 41.30		
TUL	50.51	81	eP	54 44.00	0.9
	0.8s	4.30nm		4.5mb	
SCH	52.81	46	eP	55 01.00	0.7
NB2	65.39	2	P	56 26.10	-0.9
	0.7s	2.10nm		4.2mb	
NUR	65.65	354	iP	56 37.00	8.4X
	0.7s	34.70nm		5.4mb	
HFS	66.32	0	eP	56 31.50	-1.4
	0.4s	9.00nm		5.1mb	
GUN	77.91	301	P	57 42.00	-0.4
KKN	78.31	301	P	57 45.80	1.4
PKI	78.42	301	P	57 45.20	0.0
GKN	78.46	302	P	57 45.00	-0.1
	0.4s	6.00nm		4.9mb	
BUL	144.57	336	iPKPd	05 15.00	-5.2X
	0.8s	7.46nm			

S.D. = 1.4 on 16 of 18 obs.

& SEP 20, 1990 09h 49m 36.25s
60.516 N 150.882 W
DEPTH = 47.2km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NKA	0.29	323	iP	49 46.48	1.5
SLKM	0.33	91	iP	49 44.95	-0.5
RDT	0.76	275	iP	49 49.95	-0.9
			eS	50 01.68	
SEW	0.82	119	eP	49 50.25	-1.4
SPU	0.88	320	eP	49 51.95	-0.6
			eS	50 04.66	
RSO	0.93	267	iP	49 52.29	-1.0
HOM	0.94	204	iP	49 52.54	-0.7
			eS	50 05.77	
SUA	0.95	4	iP	49 53.27	-0.3
CGLM	0.97	326	eP	49 53.36	-0.4
			eS	50 06.81	
PMS	0.98	41	eP	49 53.22	-0.6
CRP	0.98	321	eP	49 53.62	-0.3
			iS	50 06.53	
CKL	0.99	314	eP	49 53.33	-0.7
CNPM	1.01	190	iP	49 52.94	-1.3
			eS	50 06.18	
BGL	1.05	316	eP	49 54.54	-0.4
NCG	1.09	326	eP	49 54.84	-0.6
			eS	50 10.13	
XLV	1.15	202	eP	49 54.42	-1.7
PWA	1.24	23	eP	49 57.35	-0.1
PLRM	1.38	38	eP	49 58.78	-0.6
OPT	1.46	235	eP	50 00.13	-0.5
SKT	1.50	348	iP	50 01.35	0.2
GHO	1.58	36	eP	50 01.74	-0.6
AUE	1.71	228	eP	50 02.91	-1.1
AUH	1.73	229	eP	50 04.05	-0.4
AUI	1.75	228	eP	50 04.75	0.2

SML	1.79	43	eP	50 04.57	-0.7
PDB	1 81	248	eP	50 04.39	-1.1
CUT	1.92	9	eP	50 07.56	0.5
CDD	2.12	223	eP	50 08.95	-1.0
SCM	2.17	51	eP	50 09.15	-1.6
VZW	2.19	74	eP	50 08.59	-2.4
MCNL	2.20	234	eP	50 11.45	0.5
VLZ	2.31	73	eP	50 10.42	-2.2
SVW	2.40	286	eP	50 12.80	-1.1
KLU	2.61	66	iP	50 15.04	-1.9
TOA	2.78	53	eP	50 18.74	-0.6
GLB	3.57	72	eP	50 27.63	-2.9

36 obs. associated

? SEP 20, 1990 09h 53m 28.07± 2.22s
31.667 S ±49.3km 69.633 W ±31.6km
DEPTH = 120.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS	0.15	88	eP	53 45.00	0.0
			eS	53 56.00	
RTCB	0.73	76	eP	53 48.00	-0.1
			eS	54 03.20	
RTCV	0.95	102	eP	53 50.00	0.0
			S	54 06.30	
RTLL	1.05	72	ePd	53 51.00	0.1
			eS	54 08.80	

S.D. = 0.1 on 4 of 4 obs.

% SEP 20, 1990 10h 01m 26.35± 0.57s
0.042 S ± 5.6km 78.387 W ± 4.9km
DEPTH = 10 0km (geophysicist)
ECUADOR (107)

OUR	0.19	228	iPd	01 30.60	-0.2
			iS	01 33.50	
YANA	0.20	249	iPd	01 30.80	-0.2
OTO	0.21	222	Pd	01 31.40	0.2
			eS	01 34.10	
GGP	0.25	238	iPd	01 31.70	-0.2
COTA	0.38	8	iPd	01 34.30	0.0
			S	01 40.10	
CAYA	0.42	73	iP	01 35.60	0.5
			eS	01 41.60	
VC1	0.59	181	P	01 38.80	0.1
			S	01 47.60	
ANGL	0.91	112	P	01 43.10	-1.0
			eS	01 55.00	
TUNG	1.37	182	eP	01 52.60	0.8
			eS	02 11.50	

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

? SEP 20, 1990 10h 35m 22.86± 1.14s
12.518 N ±24.5km 90.947 W ±22.5km
DEPTH = 33.0km (normal)
4.3mb (6 obs.)
OFF COAST OF CENTRAL AMERICA (76)

TPX	2.69	332	(P)	36 31.50	26.7X
SCX	4.50	339	(P)	36 40.00	9.5X
			(S)	37 25.50	
OXX	7.20	310	(P)	37 08.70	0.0
TUL	23.70	350	eP	40 30.90	-1.7
	1.1s		2.70nm		3.7mb
ALO	26.38	330	eP	40 58.00	-0.3
	0.9s		3.15nm		3.9mb
ANMO	26.39	330	P	40 59.00	0.7
LRM	37.88	335	eP	42 39.80	1.0
SIV	40.93	133	P	43 04.00	-0.2
SES	41.20	340	eP	43 07.00	1.0
PNT	43.65	333	eP	43 26.00	0.0
	0.8s		6.00nm		4.4mb
YKA	52.70	346	eP	44 35.50	-0.7
	0.9s		3.60nm		4.3mb
INK	62.14	343	eP	45 42.00	-0.8
FBA	65.00	337	P	46 01.00	-0.6
LKO	83.49	82	P	47 48.30	-1.0
NB2	84.95	29	P	47 58.00	2.1
	1.0s		6.20nm		4.8mb
HFS	86.39	29	eP	48 03.70	0.7
	0.5s		1.20nm		4.4mb
HYB	148.50	19	ePKP	55 08.00	2.9X
GBA	151.61	24	PKP	55 15.90	6.2X

S.D. = 1.1 on 14 of 18 obs.

• SEP 20, 1990 11h 40m 56.97± 0.93s
55.941 N ±10.2km 135.626 W ±13.6km
DEPTH = 10.0km (geophysicist)
3.9mb (2 obs.)
OFF COAST OF SOUTHEASTERN ALASKA(20)

SIT	1.13	8	iPc	41 18.40	0.3
FBA	10.79	331	eP	43 33.80	-0.6
INK	12.45	4	P	43 57.00	0.2
IMA	13.34	327	eP	44 09.00	0.2
SES	15.71	100	eP	44 39.00	-0.7
IMW	19.82	117	e(P)	45 31.70	1.0
BW06	21.33	117	eP	45 45.20	-1.1
	1.0s		3.70nm		3.7mb
TNP	21.71	138	eP	45 50.50	0.4
	0.9s		7.79nm		4.1mb
RSSD	23.26	107	eP	46 05.80	0.4

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

• SEP 20, 1990 11h 55m 15.34± 1.96s
16.293 N ±18.7km 98.082 W ± 9.1km
DEPTH = 69.2 ± 16.8 km
3.9mb (1 obs.)
NEAR COAST OF GUERRERO, MEXICO (58)

OXX	1.52	59	iPc	55 41.40	0.2
			iS	56 00.08	
ACX	1.80	289	iP	55 44.63	-0.2
			iS	56 04.98	
IIT	2.72	355	eP	55 58.23	0.4
			eS	56 32.31	
PPM	2.81	349	iP	55 59.61	0.3
			eS	56 32.39	
UNM	3.20	341	(P)	56 05.00	0.4
			(S)	56 50.00	
EVV	3.38	50	(P)	56 26.39	19.5X
CRX	3.45	334	(P)	56 16.00	7.9X
SMMM	3.49	350	eP	56 07.61	-0.7
			(S)	56 56.77	
LVVM	3.76	24	iP	56 11.58	-0.6
			(S)	56 20.96	
IIJ	3.77	336	(P)	56 16.42	3.7X
MRX	4.50	319	(P)	56 31.50	8.9X
			(S)	57 29.00	
TUL	19.64	6	eP	59 41.30	0.1
	0.7s		4.50nm		3.9mb

S.D. = 0.6 on 8 of 12 obs.

? SEP 20, 1990 12h 13m 25.41± 0.72s
4.208 N ±28.6km 9.062 E ± 9.2km
DEPTH = 10.0km (geophysicist)
4.7mb (2 obs.)
NORTHWEST AFRICA (550)

BCAO	9.45	88	iPc	15 44.10	-0.6
	0.6s		178.00nm		6.6mb X
			iS	17 25.00	
			Lg	18 18.40	
KIC	13.91	279	P	16 45.74	0.8
			S	19 11.00	
LIC	14.17	279	Pc	16 48.58	0.1
	0.7s		12.00nm		4.7mb
			S	19 17.00	
TIC	14.23	280	P	16 49.06	-0.1
LKO	15.48	291	P	17 04.78	-0.8
LWI	20.74	108	iPc	18 10.60	1.4
BUL	30.90	142	iPc	19 43.80	-0.9
	0.9s		7.98nm		4.6mb

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

? SEP 20, 1990 12h 22m 47.96± 1.06s
48.620 N ±24.0km 155.677 E ±17.0km
DEPTH = 33.0km (normal)
4.9mb (14 obs.)
KURIL ISLANDS (221)

KUSJ	9.43	238	eP	25 08.30	3.8X
			eS	26 49.90	
ASAJ	10.07	248	P	25 19.50	6.2X
FBA	33.62	40	eP	29 24.70	-2.2
	0.8s		8.97nm		4.7mb
INK	39.14	34	eP	30 13.50	0.0
CHG	54.23	257	eP	32 15.40	2.7
GUN	56.55	276	P	32 27.20	-2.8
KKN	57.03	276	P	32 30.80	-2.4
	0.6s		17.00nm		5.3mb
PKI	57.09	276	P	32 31.00	-2.8
DMN	57.27	276	P	32 32.80	-2.1
GKN	57.31	276	P	32 32.60	-2.5
	0.6s		18.00nm		5.3mb
LRM	58.69	55	eP	32 36.40	-8.3X
BW06	62.25	56	eP	33 08.00	-1.0
	0.8s		3.57nm		4.5mb
RSSD	64.30	52	eP	33 21.00	-1.4
WRA	70.87	201	eP	34 05.50	2.1
GBA	72.16	270	P	34 14.00	2.6
TUL	74.59	53	eP	34 24.20	-1.1
	1.2s		6.80nm		4.5mb
CLL	75.45	337	iP	34 29.40	-0.5
	1.5s		20.00nm		4.9mb
ZST	77.11	333	eP	34 40.30	1.0
KHC	77.28	336	eP	34 41.50	1.2
CDF	79.55	339	eP	34 52.80	0.0
	1.0s		12.00nm		4.8mb
HAU	80.15	340	eP	34 56.00	0.1
LDF	80.93	344	eP	34 59.00	-1.0
	1.2s		26.80nm		5.1mb
SKO	81.19	327	iP	35 01.00	-0.4
LOR	81.40	341	eP	35 02.80	0.3
	1.2s		13.40nm		4.8mb
AVF	81.97	341	eP	35 06.10	0.7
	1.3s		14.45nm		4.8mb
SMF	82.00	341	eP	35 06.30	0.7
	1.4s		23.95nm		5.0mb
LPL	82.40	339	eP	35 09.40	1.4
LPG	82.41	339	eP	35 09.60	1.4
	1.2s		16.35nm		5.0mb
MAF	82.67	342	eP	35 10.40	1.2
	1.0s		12.00nm		4.9mb
TCF	82.69	342	eP	35 10.20	1.0
LSF	82.86	342	eP	35 11.00	0.9
CAF	84.02	341	eP	35 17.80	1.7
	1.1s		12.20nm		5.0mb
LPO	84.43	342	eP	35 19.50	1.4

S.D. = 1.7 on 30 of 33 obs.

& SEP 20, 1990 15h 22m 45.20s
36.535 N 120.983 W
DEPTH = 9.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.7 (BRK).

LLA	0.09	21	iP	22 47.40	-0.3
PRS	0.37	237	eP	22 52.50	-0.3
SAO	0.44	302	iPc	22 53.70	-0.4
PRI	0.47	147	eP	22 54.80	0.1
PKEM	0.85	124	eP	23 02.00	0.3
ARN	0.92	332	eP	23 02.70	-0.3
GCC	0.95	302	eP	23 02.10	-1.3
MHC	0.96	327	eP	23 03.20	-0.5
FRI	1.12	66	eP	23 05.00	-1.3
			iS	23 19.80	
BCH	1.53	151	eP	23 11.70	-1.1
CMB	1.57	17	eP	23 13.20	-0.1
			eS	23 34.20	
BKS	1.67	324	iPd	23 13.50	-1.2
ABL	2.21	139	eP	23 20.90	-1.9
TNP	3.38	62	e(P)	23 42.00	2.7

14 obs. associated

SEP 20, 1990 15h 36m 15.19± 0.65s
43.919 N ± 8.6km 16.593 E ± 9.9km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.7 (TTG), 2.5 (LJU). Felt at Sinj.

HVAR	0.75	188	iPgc	36 27.10	-2.7
			iSg	36 40.00	
VBY	1.85	329	ePn	36 48.50	1.3
			i	36 51.80	
			iSn	37 10.10	
			i	37 13.30	
ZAG	1.95	347	e(Pn)	36 47.50	-1.1
			iSn	37 15.00	
HCY	2.03	136	ePn	36 50.00	0.2
			eSn	37 16.80	
PTJ	2.03	347	ePn	36 47.90	-2.0
			iPg	36 51.20	
			iSn	37 17.00	
NKY	2.07	121	ePn	36 51.30	0.8
			eSn	37 20.00	
RIY	2.12	313	ePn	36 52.20	1.0
			iSg	37 21.20	
BDV	2.31	134	ePn	36 55.00	1.1
			eSn	37 25.00	

20d 15h

CEY	2 39 320	e(Pn)	36	55.50	0.5	
		e	37	02.50		
		eSn	37	27.50		
TTG	2.45 126	ePn	36	57.50	1.6	
		eSn	37	29.50		
LJU	2.58 326	e(Pn)	37	00.30	2.6X	
		eSn	37	33.00		
VOY	2.85 319	ePn	37	01.40	-0.3	
		ePg	37	08.20		
		eSn	37	40.30		
BZS	3.96 63	ePc	37	15.50	-1.7	
SKO	4.05 117	ePn	37	40.00	21.4X	
OHR	4.19 131	ePn	37	31.20	10.7X	
WATA	4.90 316	iPnc	37	30.70	-0.1	
		iSn	38	27.10		
		i	38	35.90		
SOTA	5.02 313	iPnd	37	33.80	1.4	
		i	37	41.50		
		i	37	51.00		
		iSn	38	30.80		
KHC	5.61 339	ePg	37	46.00	5.3X	
		Sg	38	41.50		

S.D. = 1.5 on 14 of 18 obs.

? SEP 20, 1990 16h 00m 01.70± 7.39s
32.565 S ±45.3km 71.601 W ±38.2km
DEPTH = 24.7 ± 7.4 km
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.64 129	iPd	00	14.10	-0.3	
		iS	00	23.50		
JACH	0.86 98	iPd	00	17.80	-0.2	
		iS	00	30.00		
LCCH	0.91 178	iPc	00	18.20	-0.5	
		iS	00	30.00		
PEL	0.96 127	iPd	00	19.40	-0.2	
		iS	00	32.80		
SAN	1.19 139	eP	00	22.00	-0.8	
		iS	00	38.40		
TACH	1.22 153	iPd	00	23.00	-0.3	
		iS	00	38.60		
FCH	1.34 125	iPd	00	25.00	-0.2	
		iS	00	42.80		
PCH	1.39 139	iPc	00	25.70	-0.1	
		iS	00	44.00		
		i	00	47.50		
CHCH	1.58 150	iPc	00	28.90	0.4	
		iS	00	49.70		

S.D. = 0.4 on 9 of 9 obs.

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* SEP 20, 1990 17h 02m 03.05± 1.18s
28.513 S ± 8.0km 71.888 W ±15.3km
DEPTH = 69.8 ± 17.8 km
4.7mb (1 obs.)
NEAR COAST OF CENTRAL CHILE (135)

RTCB	3.99 139	ePc	03	03.20	-0.1	
		eS	03	39.00		
RTLL	4.08 134	iPc	03	04.00	-0.5	
		eS	03	49.10		
ZON	4.11 138	eP	03	07.00	2.2	
JACH	4.30 165	eP	03	11.00	3.4X	
		iS	04	03.50		
CFA	4.42 135	eP	03	08.50	-0.7	
RTCV	4.42 140	eP	03	09.80	0.6	
ROCH	4.51 171	eP	03	16.50	5.9X	
		i	04	06.00		
PEL	4.73 168	eP	03	14.00	0.4	
		iS	04	19.00		
LCCH	4.95 177	eP	03	16.00	-0.6	
SAN	5.04 168	eP	03	17.50	-0.3	
		i	04	23.50		
TACH	5.19 171	ePd	03	19.50	-0.4	
		i	03	24.50		
		i	04	28.50		
PCH	5.23 167	eP	03	25 00	4.5X	
		i	04	21.00		
CHCH	5.51 169	eP	03	24.00	-0.4	
		i	04	33.60		
ARE	12.00 2	e(P)	04	55.00	1.5	
ZOBO	12.67 17	P	05	01.00	-1.6	
Z	20s 0.26um					
		i	05	09.00		
		LR	09	08.00		
SIV	15.97 41	P	05	40.00	-4.9X	
PPD	19.68 76	eP	06	27.70	-1.6	
VAO	23.09 82	(P)	07	04.00	0.5	
SOB1	34.88 63	(P)	09	03.00	13.1X	
LKO	74.29 70	Pc	13	36.02	1.0	
	0.7s	7.50nm			4.7mb	
GBA	147.88 111	PKP	21	48.00	8.8X	

S.D. = 1.2 on 15 of 21 obs.

SEP 20, 1990 17h 52m 03.00± 0.38s
43.898 N ± 4.5km 16.461 E ± 4.6km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 3.6 (TRI). ML 3.0 (TTG). Felt ot Drnis ond Sinj.

HVAR	0.72 181	iPgc	52	14.90	-2.3	
		iSg	52	27.20		
VBY	1.82 332	ePn	52	35.90	1.3	
		i	52	39.50		
		eSn	52	59.70		
		i	53	01.40		
ZAG	1.95 350	e(Pn)	52	35.50	-0.9	
		iSn	53	02.80		
PTJ	2.03 350	ePn	52	35.50	-2.3	
		iPg	52	39.20		
		iSn	53	05.00		
RIY	2.07 315	ePn	52	40.10	1.9	
		iSg	53	09.80		
HCY	2.08 134	ePn	52	38.20	-0.1	
		eSn	53	06.00		
NKY	2.14 119	iPnc	52	39.40	0.0	
		iSn	53	08.50		
PLE	2.20 104	ePn	52	40.80	0.5	
		eSn	53	08.50		
CEY	2.34 323	ePn	52	44.40	2.2	
		eSn	53	13.50		
BDV	2.37 132	ePn	52	41.80	-0.7	
		eSn	53	12.20		
TTG	2.52 125	ePn	52	46.00	1.4	
		eSn	53	18.50		
LJU	2.54 328	ePn	52	45.50	0.5	
		eSn	53	17.50		
ARV	2.58 262	P	52	46.10	0.5	
TRI	2.64 314	ePn	52	48.10	1.8	
		iSn	53	20.70		
		iSg	53	32.70		
VOY	2.81 320	ePn	52	49.20	0.4	
		ePg	52	56.10		
		eSn	53	27.30		
ULC	2.82 132	ePn	52	51.00	2.1	
		eSn	53	25.00		
PVY	2.88 116	ePn	52	51.00	1.1	
		eSn	53	25.00		
ASS	2.89 255	P	52	50.80	0.9	
		eSn	53	23.70		
SDI	2.93 223	P	52	50.00	-0.5	
		eSn	53	24.80		
MNS	3.15 243	P	52	54.00	0.3	
SFI	3.33 272	P	52	57.00	0.9	
BSS	3.34 202	P	52	56.00	-0.3	
VVI	3.54 307	P	52	58.70	-0.5	
FVI	3.74 317	P	53	01.30	-0.7	
		eSn	53	45.80		
MGR	3.82 190	P	53	02.00	-1.1	
CTI	4.03 304	P	53	05.50	-0.7	
		eSn	53	51.00		
BZS	4.05 63	ePc	53	02.00	-4.4X	
SRO	4.12 18	i(P)	53	05.10	-2.2	
		e	54	11.90		
SKO	4.13 116	ePn	53	16.00	8.5X	
BDI	4.24 274	P	53	09.60	0.5	
		eSn	53	57.10		
OHR	4.25 129	ePn	53	09.00	-0.2	
ZST	4.32 6	eP	53	06.00	-4.2X	
		e	54	17.00		
WATA	4.85 317	iPnc	53	18.40	0.5	
		iSn	54	16.30		
SOTA	4.96 314	iPnc	53	19.90	0.5	
		i	53	22.70		
		iSn	54	19.00		
BOB	5.11 282	P	53	19.50	-1.9	
MDI	5.15 294	P	53	21.00	-1.0	
KHC	5.60 340	ePn	53	26.70	-1.7	
		Pg	53	32.50		
		Sg	54	28.30		

S.D. = 1.3 on 34 of 37 obs.

? SEP 20, 1990 18h 27m 20.80± 3.31s
35.555 N ±24.1km 27.622 E ±22.1km
DEPTH = 5.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.8 (ATH).

KAP	0.36 270	iPgc	27	27.90	-0.2	
NPS	1.67 261	ePb	27	51.10	0.3	
CIN	2.08 10	iPd	27	56.00	-0.7	
SMG	2.24 344	ePb	28	00.40	1.3	
APE	2.27 312	ePn	27	58.30	-1.2	
VAM	2.80 268	ePn	28	06.90	-0.2	
VLI	3.97 288	ePn	28	23.00	-0.6	
ITM	4.87 291	ePn	28	37.80	1.3	

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

? SEP 20, 1990 18h 47m 08.29± 1.75s
15.022 N ±23.1km 93.448 W ±14.2km
DEPTH = 82.1 ± 12.6 km
4.4mb (1 obs.)
NEAR COAST OF CHIAPAS, MEXICO (69)

TPX	1.15 96	iPd	47	29.32	-0.3	
		iS	47	44.68		
SCX	1.88 25	iP	47	39.92	0.8	
		iS	48	04.34		
OXX	3.76 303	eP	48	06.00	0.7	
		(S)	48	58.00		
EVV	3.87 332	eP	48	05.09	-1.5	
		(S)	48	38.00		
LVVM	5.50 329	(P)	48	25.51	-3.8X	
		(S)	49	23.66		
PPM	6.38 310	eP	48	45.74	3.6X	
IIJ	7.61 309	(P)	49	39.40	40.3X	
		(S)	50	13.77		
ANMO	23.03 332	P	52	08.00	0.8	
YKA	49.72 347	eP	55	53.00	-0.8	
	0.8s	3.40nm			4.4mb	
INK	59.07 344	eP	57	02.00	0.2	

S.D. = 1.3 on 7 of 10 obs.

& SEP 20, 1990 18h 56m 52.41s
64.656 N 150.305 W
DEPTH = 45.9km
CENTRAL ALASKA (1)
<AGS-P>.

WRH	0.97 100	eP	57	09.71	-0.2	
		eS	57	23.62		
CCB	1.08 89	eP	57	10.42	-0.9	
		eS	57	26.28		
FBA	1.10 76	eP	57	10.51	-1.2	
		eS	57	26.33		
MCK	1.10 146	eP	57	12.17	0.4	
		eS	57	26.46		
GLM	1.29 74	eP	57	14.43	0.0	
HDA	1.47 98	eP	57	16.78	-0.1	
		eS	57	36.73		
CUT	2.26 180	eP	57	26.77	-1.3	
SML	3.00 162	eP	57	37.57	-1.0	

8 obs. associated

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* SEP 20, 1990 19h 59m 29.34± 1.87s
31.966 S ±13.8km 67.069 W ±25.7km
DEPTH = 129.5 ± 15.2 km
SAN JUAN PROVINCE, ARGENTINA (137)

CFA	1.06 289	iPd	59	53.00	-0.1	
		S	00	09.50		
RTCV	1.25 274	iPd	59	55.00	-0.1	
RTLL	1.35 298	ePd	59	55.40	-0.8	
ZON	1.43 287	iPd	59	58.00	0.9	
RTCB	1.55 288	ePc	59	58.30	-0.1	
FCH	3.04 243	iPd	00	18.20	0.8	
JACH	3.07 256	iPd	00	18.50	0.9	
PEL	3.27 248	iPc	00	20.00	-0.2	
		iS	00	58.10		
PCH	3.34 239	iP	00	21.60	0.5	
		iS	01	01.50		
		i	01	05.80		
SAN	3.37 243	eP	00	22.00	0.5	
		e	00	58.00		
ROCH	3.48 252	iPd	00	22.40	-0.8	
		iS	01	02.50		
CHCH	3.60 236	iPc	00	24.60	0.1	
		iS	01	08.80		
TACH	3.67 242	iPc	00	24.60	-0.9	
		iS	01	08.10		
LCCH	4.08 247	iP	00	30.10	-0.9	

		i	01 08.50			
CNCB	15.11	357 P	02 57.70	-0 1		
ZOBO	15.66	356 P	03 05.10	0.5		
SIV	16.81	20 P	03 18.20	-0.2		

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

SEP 20, 1990 20h 06m 06.72± 0.33s
40.720 N ± 3.5km 15.793 E ± 3.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

MGR	0.61	197 P	06 18.20	-0.8		
		eSg	06 27.60			
BSS	0.75	276 P	06 22.00	0.6		
		eSg	06 34.40			
ORI	0.83	142 P	06 23.00	0.3		
		eSg	06 34.10			
BAI	0.91	64 P	06 25.00	1.0		
		eSg	06 38.00			
BRT	1.08	81 P	06 26.80	-0.3		
		eSg	06 42.50			
DUI	1.38	313 P	06 33.80	1.8		
		eSn	06 53.10			
LCI	1.69	102 P	06 37.40	1.0		
SDI	1.79	304 P	06 38.50	0.6		
GRI	1.96	166 P	06 41.08	0.7		
LPI	2.32	197 P	06 46.04	0.4		
AQU	2.43	313 P	06 48.00	0.9		
HVAR	2.50	11 i(Pn)	06 48.20	0.1		
GMB	2.55	179 P	06 49.15	0.2		
ATN	2.57	186 P	06 48.50	-0.6		
		eSn	07 18.30			
SOI	2.65	176 P	06 50.10	-0.1		
MNS	2.87	306 P	06 53.70	0.3		
SDA	3.07	64 ePn	07 05.40	9.2X		
LACI	3.09	72 ePn	07 02.00	5.5X		
TIR	3.14	77 ePn	07 04.20	7.0X		
BERA	3.16	89 ePn	06 58.10	0.7		
KEK	3.23	107 eP	06 58.00	-0.4		
ASS	3.31	316 P	07 00.10	0.4		
SRN	3.33	103 ePn	06 59.80	0.0		
ARV	3.49	324 P	07 02.80	0.6		
MEU	3.68	191 P	07 04.20	-0.7		
PZI	3.75	191 P	07 07.11	1.2		
OHR	3.81	82 ePn	07 08.00	1.2		
SFI	4.33	319 P	07 14.80	0.7		
SKO	4.43	72 ePn	07 09.00	-6.5X		
VLS	4.50	123 eP	07 15.00	-1.5		
KZN	4.58	93 eP	07 18.00	0.4		
VBY	4.80	355 ePn	07 22.80	2.1		
		e	07 40.00			
		e(Sn)	08 15.60			
		e	08 46.70			
PTJ	5.18	1 iPn	07 25.10	-1.1		
TRI	5.20	344 e(Pn)	07 25.30	-1.1		
		e(Sn)	08 23.90			
ITM	5.95	125 eP	07 35.00	-1.9		
CTI	6.12	332 Pc	07 37.30	-2.1		
		eSn	08 45.20			
FVI	6.26	341 P	07 38.90	-2.4		
		eSn	08 49.50			
MDI	6.73	321 P	07 45.60	-2.3		

S.D. = 1.2 on 34 of 38 obs.

? SEP 20, 1990 21h 21m 24.96± 3.42s
51.188 N ±31.3km 15.928 E ±19.5km
DEPTH = 5.0km (geophysicist)
POLAND (548)

KSP	0.42	146 iP	21 33.00	-0.3		
	0.3s	34.00nm				
		iS	21 41.50			
		eLR	21 48.50			
BRG	1.29	257 iPg	21 48.20	-1.1		
		iSg	22 18.20			
PRU	1.49	217 ePn	21 53.30	0.9		
		Pg	21 55.00			
		Sn	22 12.00			
CLL	1.84	275 e(Pg)	21 58.00	0.5		
		eSg	22 23.00			
KHC	2.55	217 ePg	22 11.60	3.9X		
		Sg	22 41.00			
MOX	2.78	260 ePg	22 16.00	5.0X		
		iSg	22 56.00			

S.D. = 1.6 on 4 of 6 obs.

• SEP 20, 1990 22h 37m 34.32± 2.24s
32 808 S ± 9.9km 71 531 W ±20.5km
DEPTH = 28.5 ± 8.0 km
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.47	111 iPd	37 44.00	-0.3		
		iS	37 54.70			
LCCH	0.67	183 ePd	37 46.50	-0.9		
		iS	37 58.60			
PEL	0.79	115 iPd	37 49.00	-0.4		
		iS	38 08.70			
JACH	0.80	81 iPd	37 47.80	-1.8		
		iS	38 01.20			
TACH	0.98	150 iPd	37 52.00	-0.1		
		iS	38 09.00			
PCH	1.18	134 iPc	37 55.70	0.7		
		iS	38 15.80			
		i	38 17.50			
CHCH	1.34	147 iP	37 58.80	1.5		
		iS	38 21.60			
RTBS	2.10	58 e(P)	38 08.90	0.7		
RTCB	2.67	61 ePc	38 16.50	0.1		
		(S)	38 54.00			
RTCV	2.70	70 e(P)	38 17.30	0.4		
ZON	2.73	63 eP	38 18.30	1.1		
RTLL	2.99	61 ePc	38 19.90	-1.0		
		eS	39 03.80			

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

SEP 20, 1990 23h 13m 40.67± 0.31s
41.690 N ± 2.4km 126.946 W ± 3.9km
DEPTH = 10.0km (geophysicist)
5.2mb (38 obs.) 4.9Msz (9 obs.)
OFF COAST OF NORTHERN CALIFORNIA(34)
ML 4.9 (BRK).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 19C
Centroid Location:
Origin Time 23:13:47.2 0.6
Lat 42.08N 0.06 Lon 127.44W 0.07
Dep 15.0 FIX Half-duration 1.7
Moment Tensor; Scale 10**16 Nm
Mrr=-9.22 0.43 Mtt=-0.65 0.55
Mff= 9.87 0.61 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf= 1.04 0.46
Principal Axes:

	Val=	Plg=	Azm=
T	9.98	0	96
N	-0.76	0	6
P	-9.22	90	180

Best Double Couple:Mo=9.6*10**16
NP1:Strike=186 Dip=45 Slip= -90
NP2: 6 45 -90

FHC	2.40	111 iPc	14 19.60	-1.1		
		eS	14 53.50			
WDC	3.51	107 iPc	14 35.70	-0.6		
		eS	15 23.90			
LBFM	3.81	93 ePc	14 41.70	0.8		
LTCM	3.94	110 ePc	14 41.70	-0.8		
MIN	4.26	107 iPc	14 45.90	-1.3		
		eS	15 39.60			
GROR	4.37	32 P	14 49.67	1.0		
TCO	4.61	57 P	14 51.62	-0.6		
ORV	4.66	115 ePc	14 50.70	-2.1		
		eS	15 46.50			
KMOR	4.67	31 P	14 48.97	-4.0X		
GT2	4.86	43 P	14 55.20	-0.4		
PGO	4.99	39 P	14 58.72	1.4		
NLO	5.07	29 P	14 58.89	0.3		
VBEM	5.16	47 P	14 59.37	-0.5		
TDH	5.20	44 P	15 00.01	-0.4		
VLMM	5.24	41 P	15 01.04	0.0		
BKS	5.26	135 iPc	15 03.20	2.0		
		iS	16 07.60			
VLL	5.37	44 P	15 02.60	-0.3		
VFP	5.39	46 P	15 02.39	-0.8		
RVW	5.39	33 P	15 03.45	0.4		
VIPM	5.42	57 P	15 03.08	-0.6		
CROR	5.45	51 P	15 04.29	0.3		
LVP	5.47	35 P	15 04.47	0.2		
PCC	5.47	138 eP	15 02.30	-1.9		
BMW	5.48	28 P	15 03.90	-0.5		
MTMW	5.52	37 P	15 04.39	-0.6		
APM	5.56	42 P	15 05.30	-0.2		
FL2	5.59	35 P	15 06.39	0.4		
SHW	5.64	35 P	15 07.47	0.8		
HSR	5.65	36 P	15 07.26	0.4		
CDFW	5.66	37 P	15 06.76	-0.2		
REMW	5.67	36 P	15 07.93	0.8		
YEL	5.67	36 P	15 07.70	0.5		
ESD	5.68	36 P	15 07.55	0.3		
STD	5.68	35 P	15 07.02	-0.2		
ERK	5.68	34 P	15 07.33	0.0		
CZM	5.72	32 P	15 08.04	0.3		
GULW	5.73	41 P	15 07.68	-0.3		
TDL	5.77	35 P	15 08.61	0.1		
VTHM	5.81	51 P	15 08.20	-0.8		
APW	5.84	30 P	15 09.15	-0.2		
VGB	5.89	47 eP	15 10.00	-0.1		
ASR	5.90	39 P	15 09.95	-0.4		
CPW	5.95	26 Pd	15 10.47	-0.4		
LMW	6.00	32 Pc	15 12.08	0.5		
ARN	6.02	134 eP	15 10.30	-1.7		
GCC	6.03	139 eP	15 10.30	-1.7		
GLK	6.20	36 P	15 14.47	-0.1		
CMB	6.23	124 eP	15 14.00	-0.9		
LON	6.26	34 P	15 15.25	-0.1		
REMR	6.30	34 P	15 17.34	1.3		
GHW	6.31	30 P	15 17.99	2.0		
WPW	6.33	36 P	15 16.07	-0.4		
RVC	6.35	33 P	15 17.00	0.4		
JBO	6.39	51 P	15 17.23	0.0		
FMW	6.46	34 P	15 18.57	0.2		
GSM	6.63	32 P	15 20.87	0.3		
NAC	6.69	39 P	15 20.91	-0.5		
RMW	6.84	31 eP	15 24.00	0.5		
FRI	7.31	128 eP	15 29.80	-0.2		
TNP	8.30	113 eP	15 45.00	0.9		
BCH	8.43	138 eP	15 44.50	-1.4		
ISA	8.95	130 eP	15 55.00	2.1		
SYP	9.01	140 eP	15 52.00	-1.9		
PNT	9.20	31 eP	15 56.00	-0.3		
	0.9s	72.00nm		6.0mb		
CLC	9.36	126 eP	16 01.00	2.3		
NEW	9.57	43 eP	16 00.00	-1.5		
SBB	10.02	131 eP	16 08.00	0.3		
GSC	10.19	125 eP	16 11.00	1.0		
MWC	10.23	134 eP	16 13.00	2.2		
RVR	10.78	132 eP	16 24.00	5.9X		
LRM	11.27	64 ePc	16 24.50	-0.5		
TPC	11.46	128 eP	16 32.00	4.6X		
PLM	11.54	133 eP	16 35.00	6.4X		
IMW	11.97	74 eP	16 33.20	-1.3		
BAR	12.16	134 eP	16 35.00	-1.8		
GLA	12.92	128 eP	16 50.00	2.9X		
SES	14.04	46 eP	17 02.00	0.2		
GOL	16.48	90 eP	17 34.00	0.3		
	1.0s	51.25nm		4.6mb		
ANMO	17.41	106 eP	17 47.00	1.6		
	1.8s	79.55nm		4.5mb		
ALQ	17.41	106 eP	17 46.50	1.1		
	1.5s	41.67nm		4.3mb		
FFC	21.00	43 eP	18 25.00	-1.4		
	0.8s	24.00nm		4.6mb		
FFC	21.00	43 eP	18 31.00	4.6X		
	0.9s	82.00nm		5.1mb		
YKA	22.09	15 eP	18 36.00	-1.3		
	0.9s	15.10nm		4.4mb		
MEO	23.25	98 iPc	18 50.70	1.7		
PMR	23.99	334 eP	18 57.00	1.1		
	1.6s	196.72nm		5.4mb		
	Z 20s	3.00um		4.8Msz		
SIO	24.55	94 eP	19 03.30	1.7		
TUL	24.87	93 eP+	19 06.40	1.7		
	0.9s	4.90nm		4.2mb X		
	Z 18s	1.96um		4.7Msz		
		e	19 15.50			
		eS	23 41.00			
		LR	26 31.00			
FBA	26.12	340 eP	19 16.00	-0.1		
UYO	26.59	96 iPd	19 21.40	0.7		
INK	26.91	355 eP	19 22.00	-1.3		
OLY	28.27	91 eP	19 36.50	0.5		
IMA	28.62	337 eP	19 38.00	-1.0		
	2.6s	188.36nm		5.4mb		
RSCP	32.65	87 eP	20 14.00	-0.8		
	1.1s	136.65nm		5.8mb		
HON	33.10	242 P	20 30.00	11.2X		
	Z 20s	2.13um		4.8Msz		
BLA	35.86	81 eP	20 43.50	1.0		
	Z 22s	5.04um		5.2Msz		
JSC	36.42	86 eP	20 47.40	0.3		
LHS	36.67	86 eP	20 49.20	0.0		
HBVT	38.89	67 eP	21 06.00	-1.8		

20d 23h

SCH	40.89	50	eP	21	23.00	-1.2
KEV	67.24	10	eP	24	38.00	1.3
SOD	69.43	11	iP	24	49.30	-1.0
			i	24	55.20	
NAO	72.19	20	P	25	06.80	-0.4
	1.0s	17.90nm			5.1mb	
HFS	73.51	19	eP	25	11.70	-3.2X
	0.8s	4.10nm			4.5mb	
SUF	73.72	13	eP	25	15.00	-1.1
NUR	75.53	14	eP	25	18.00	-8.5X
GRR	78.47	33	eP	25	43.40	0.3
	1.4s	69.70nm			5.5mb	
ZOBO	79.17	123	P	25	47.50	-0.5
	1.5s	27.96nm			5.1mb	
		S		36	00.00	
		LR		53	46.00	
LPB	79.38	123	P	25	51.00	2.0
CNCB	79.66	123	P	25	52.00	1.3
CLL	81.03	24	iP	25	56.80	0.0
LSF	81.16	33	eP	25	57.10	-0.5
	1.2s	26.80nm			5.2mb	
CCH	81.25	122	P	26	01.00	2.2
LOR	81.26	31	eP	25	58.20	0.0
	1.7s	69.85nm			5.4mb	
Z	18s	1.25um			5.3Msz	
SSF	81.30	32	eP	25	58.40	0.1
TCF	81.41	33	eP	25	58.70	-0.2
	1.4s	21.80nm			5.0mb	
BGF	81.44	32	eP	25	59.00	-0.1
	1.2s	29.75nm			5.2mb	
AVF	81.46	32	eP	25	58.90	-0.2
	0.9s	11.45nm			4.9mb	
LBF	81.54	32	eP	25	59.40	-0.2
	1.5s	33.95nm			5.2mb	
CDF	81.60	29	eP	25	58.70	-1.3
	1.1s	17.10nm			5.0mb	
HAU	81.60	30	eP	25	58.80	-1.1
	1.3s	21.65nm			5.1mb	
Z	21s	0.35um			4.7Msz	
MAF	81.60	33	eP	26	00.00	0.1
	1.2s	20.85nm			5.1mb	
BRG	81.70	24	iP	26	01.00	0.7
	1.4s	34.00nm			5.2mb	
		i		26	10.80	
SMF	81.77	32	eP	26	00.40	-0.4
	1.1s	17.10nm			5.0mb	
GRF	81.87	26	eP	26	02.10	0.8
	2.3s	93.00nm			5.5mb	
Z	22s	0.40um			4.7Msz	
		e		26	13.20	
LFF	81.88	35	eP	26	01.50	0.2
	1.2s	20.85nm			5.1mb	
BSF	81.91	29	eP	26	00.20	-1.4
	1.2s	20.85nm			5.1mb	
RJF	81.91	34	eP	26	01.30	-0.2
Z	20s	1.63um			5.4Msz	
KSP	82.42	23	eP	26	04.30	0.2
CAF	82.45	34	eP	26	04.20	-0.2
	1.2s	14.90nm			5.0mb	
PRU	82.66	24	eP	26	06.00	0.7
	2.1s	78.30nm			5.5mb	
		e		26	11.50	
KHC	83.12	25	iP	26	09.00	1.2
SIV	83.51	118	P	26	10.80	0.6
TOL	83.68	41	iPc	26	12.00	1.2
	1.8s	227.27nm			6.1mb	
LPL	83.83	31	eP	26	10.80	-0.9
LPG	83.85	31	eP	26	10.90	-1.0
	1.1s	12.20nm			5.0mb	
SOTA	84.00	27	iPc	26	13.50	1.1
	1.2s	36.40nm			5.5mb	
		i		26	19.60	
KRA	84.13	21	eP	26	12.70	-0.2
	0.7s	30.00nm			5.6mb	
		i		26	19.00	
SSE	84.19	307	Pc	26	18.20	4.7X
	1.2s	28.00nm			5.4mb	
Z	18s	0.40um			4.8Msz	
		eS		36	14.00	
BNI	84.20	31	P	26	14.50	1.0
VAI	84.30	29	P	26	15.00	1.3
DOI	84.88	31	P	26	17.00	0.2
SPC	85.01	21	eP	26	17.30	-0.2
		e		32	19.20	
ZST	85.02	23	eP	26	18.00	0.7
FVI	85.08	27	P	26	17.50	-0.1
SAL	85.16	28	P	26	21.00	3.0X
CTI	85.17	28	Pd	26	20.20	1.9
SOP	85.32	24	eP	26	21.50	2.6X
LRG	85.41	32	eP	26	18.40	-1.0
	1.2s	44.65nm			5.5mb	
FRF	85.44	32	eP	26	18.30	-1.2
	1.0s	30.00nm			5.5mb	
LMR	85.57	32	eP	26	19.10	-1.1
	1.2s	38.70nm			5.5mb	
SRO	85.72	23	eP	26	20.70	-0.1
VRI	89.71	18	ePc	26	30.50	-9.7X
GKN	104.76	331	Pdiff	28	00.00	11.2X
BCAO	124.36	43	ePKPc	32	40.90	-1.0
	0.7s	3.00nm				
SPA	131.50	180	ePKP	32	53.80	-0.3
	1.0s	20.00nm				
	S.D. = 1.0	on 141 of 155 obs.				

SEP 20, 1990 23h 19m 40.22± 1.05s
41.622 N ± 4.6km 127.143 W ±10.1km
DEPTH = 10.0km (geophysicist)
3.8mb (3 obs.)
OFF COAST OF NORTHERN CALIFORNIA(34)

FHC	2.52	108	eP	20	21.00	-0.9
LBFM	3.96	92	eP	20	43.70	1.2
ORV	4.77	114	eP	20	52.50	-1.3
GT2	5.01	44	P	20	57.37	0.2
NLO	5.20	30	P	21	00.10	0.1
TDH	5.35	45	P	21	01.52	-0.7
VLMM	5.39	42	P	21	02.81	0.1
VLL	5.52	44	P	21	04.45	-0.1
RVW	5.53	34	P	21	04.56	0.0
LVP	5.61	36	P	21	06.16	0.4
BMW	5.61	29	P	21	05.18	-0.6
MTMW	5.66	37	P	21	05.89	-0.7
APM	5.71	42	P	21	07.37	0.2
FL2	5.73	36	P	21	07.82	0.3
SHW	5.78	36	P	21	08.97	0.8
HSR	5.79	37	P	21	08.63	0.3
CDFW	5.81	38	P	21	08.19	-0.3
STD	5.82	36	P	21	08.87	0.1
ERK	5.82	35	P	21	09.03	0.3
CZM	5.86	33	Pc	21	09.53	0.4
GULW	5.88	41	P	21	09.36	-0.2
APW	5.98	31	P	21	11.17	0.3
ASR	6.05	40	P	21	11.65	-0.3
CPW	6.07	27	P	21	11.60	-0.6
LMW	6.13	33	Pc	21	13.45	0.3
GL2	6.30	44	P	21	14.66	-0.9
CMB	6.32	122	P	21	24.10	8.4X
GLK	6.35	37	P	21	15.93	-0.2
LON	6.40	35	P	21	16.87	0.0
REMR	6.44	34	P	21	17.96	0.4
WPW	6.48	37	P	21	17.56	-0.4
RVC	6.48	33	P	21	18.39	0.3
FMW	6.60	35	P	21	20.15	0.3
GSM	6.77	33	Pc	21	22.28	0.2
NAC	6.84	39	P	21	27.68	4.7X
JCW	7.54	28	P	21	32.97	0.2
RPW	7.90	28	P	21	37.61	-0.3
WTV	7.94	38	P	21	37.93	-0.6
GOL	16.63	89	eP	23	36.00	0.8
	0.8s	4.46nm			3.6mb	
ANMO	17.54	106	eP	23	50.50	4.0X
ALQ	17.54	106	e(P)	23	46.00	-0.5
	1.0s	6.75nm			3.7mb	
FFC	21.15	43	eP	24	27.00	-0.5
	0.8s	19.00nm			4.5mb	
INK	26.96	355	eP	25	23.00	-0.3
RSCP	32.80	87	eP	26	16.00	0.3
	1.2s	36.44nm			5.2mb X	
JSC	36.57	86	eP	26	49.00	1.0
LHS	36.82	86	eP	26	51.00	0.9
	S.D. = 0.6	on 43 of 46 obs.				

SEP 21, 1990 00h 31m 35.33± 0.57s
37.018 N ± 5.8km 21.421 E ± 3.8km
DEPTH = 10.0km (geophysicist)
4.0mb (2 obs.)
SOUTHERN GREECE (368)
ML 3.7 (ATH).

ITM	0.44	68	iPgc	31	42.50	-1.7
VLI	1.25	103	iPbd	31	58.50	-0.1
VLS	1.33	331	ePb	31	59.80	-0.1
			eSb	32	20.50	
EVR	1.92	9	ePn	32	10.20	1.7
ATH	2.06	62	ePn	32	11.30	0.9
VAM	2.76	125	ePn	32	21.60	1.1
KEK	2.98	335	ePn	32	27.00	3.6X
SRN	3.07	339	ePn	32	25.40	0.7
LSK	3.19	349	ePn	32	28.00	1.4
APE	3.29	88	ePn	32	27.70	-0.3
KZN	3.30	5	ePn	32	29.00	0.9
KBN	3.63	353	ePn	32	34.00	1.3
PLG	3.71	25	ePn	32	33.70	-0.2
NPS	3.82	116	ePb	32	38.90	3.4X
BERA	3.85	343	ePn	32	37.70	1.8
OHR	4.12	353	iPn	32	40.20	0.6
			Lg	33	53.30	
			LR	34	17.60	
LCI	4.28	322	P	32	41.30	-0.7
			eSn	33	28.50	
SMG	4.37	79	ePn	32	43.20	0.0
SOI	4.39	285	P	32	43.70	0.1
			eSn	33	33.00	
			e	37	07.00	
PRK	4.42	58	ePb	32	48.40	4.4X
TIR	4.49	345	ePn	32	45.20	0.3
LACI	4.80	344	ePn	32	48.50	-0.8
ATN	4.87	285	P	32	50.50	0.2
KAP	4.87	106	ePn	32	51.50	1.1
MMB	4.90	21	iPd	32	50.00	-0.8
ORI	4.94	309	Pd	32	52.00	0.6
SKO	4.95	0	iPn	32	50.50	-0.9
KKB	5.01	14	iP	32	52.00	-0.3
MEU	5.19	273	P	32	54.30	-0.7
			eSn	33	52.80	
SDA	5.21	344	ePn	32	52.00	-3.1X
RDO	5.22	37	ePn	32	54.50	-0.7
RZN	5.32	28	iPd	32	57.00	0.2
BAI	5.42	321	P	32	58.00	0.0
BCI	5.44	349	ePn	33	00.00	1.6
MGR	5.55	306	P	33	00.10	0.1
KDZ	5.57	33	iPc	32	59.00	-1.2
VTS	5.73	13	eP	33	03.00	0.3
PVL	6.88	25	eP	33	14.00	-4.6X
SDI	7.52	311	Pd	33	26.90	-0.9
VRI	9.70	23	ePd	33	53.00	-4.8X
VOY	10.62	330	e(Pn)	34	09.20	-1.4
			e	36	03.20	
NUR	23.60	4	eP	36	50.00	3.2X
HFS	23.66	350	eP	36	45.30	-2.1
	0.4s	2.10nm			4.1mb	
NAO	24.76	348	P	36	56.00	-2.0
	0.7s	1.90nm			3.9mb	
	S.D. = 1.1	on 37 of 44 obs.				

? SEP 21, 1990 01h 22m 11.54± 1.61s
23.767 S ±16.1km 66.611 W ±24.5km
DEPTH = 206.4 ± 40.6 km
JUJUY PROVINCE, ARGENTINA (128)

ANT	3.49	270	iPc	23	07.70	0.0
			iS	23	47.20	
CNCB	7.04	349	P	23	55.20	1.5
			e	25	15.00	
LPB	7.33	349	P	23	56.00	-1.4
			e	25	18.00	
ZOBO	7.59	349	P	24	01.00	0.0
			e	25	27.00	
SIV	9.33	35	P	24	22.80	-0.1
PPD	14.21	86	(P)	25	29.00	4.0X
VAO	18.05	92	eP	26	10.20	0.1
			e	26	11.60	
SOB1	28.52	64	(P)	27	50.00	-0.1
	S.D. = 1.2	on 7 of 8 obs.				

SEP 21, 1990 01h 47m 27.62± 0.60s
44.716 N ± 4.3km 111.056 W ± 6.8km
DEPTH = 5.0km (geophysicist)
HEBGEN LAKE REGION (458)
ML 3.0 (BUT).

LTMT	0.78	256	eP	47	43.40	0.0
IMW	0.82	174	iPc	47	43.40	-0.9
BGMT	0.87	307	ePc	47	44.50	-0.5
MEMT	0.89	4	iPc	47	44.30	-1.0
MCMT	1.28	276	ePn	47	52.50	0.5
SXM	1.44	356	ePnc	47	54.50	-0.1
LRM	1.48	319	ePnc	47	55.60	0.4
HBMT	1.54	315	ePn	47	56.90	0.9
BUT	1.68	321	ePg	48	01.10	3.2X
			eSn	48	21.60	

eSg 48 22.40
HPI 1.78 236 eP 47 58.50 -1.0
HRY 2.07 345 ePnc 48 03.80 0.3
PTI 2.08 208 eP 48 04.00 0.3
BW06 2.22 150 eP 48 07.00 1.1
S.D. = 0.8 on 12 of 13 obs.

• SEP 21, 1990 02h 59m 34.82± 2.78s
37.250 N ±16.9km 69.006 E ± 9.6km
DEPTH = 101.7 ± 33.6 km
4.3mb (6 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE 7.25 194 e(P) 01 20.00 0.0
GKN 16.06 121 P 03 15.40 -0.7
0.4s 13.00nm 4.5mb
DMN 16.63 121 P 03 23.20 0.0
KKN 16.63 120 P 03 23.20 -0.1
0.6s 15.00nm 4.4mb
PKI 16.86 120 P 03 25.60 -0.6
0.6s 19.00nm 4.5mb
GUN 16.98 118 P 03 29.00 1.3
SHL 22.67 114 eP 04 40.00 11.6X
GBA 24.72 160 P 04 48.00 0.0
0.3s 1.90nm 4.0mb
HFS 41.49 322 eP 07 12.90 0.0
0.8s 3.80nm 4.3mb
NAO 42.98 322 P 07 25.00 -0.1
0.8s 2.30nm 4.1mb
S.D. = 0.7 on 9 of 10 obs.

SEP 21, 1990 03h 19m 00.37± 0.27s
12.995 S ± 5.7km 165.984 E ± 6.0km
DEPTH = 33.0km (normal)
5.2mb (22 obs.) 5.3Msz (11 obs.)
SANTA CRUZ ISLANDS (184)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 36C
Centroid Location:
Origin Time 03:19: 2.9 0.3
Lat 13.06S 0.05 Lon 166.09E 0.05
Dep 15.0 FIX Half-duration 2.3
Moment Tensor; Scale 10**17 Nm
Mrr= 1.81 0.06 Mtt= 0.06 0.09
Mff=-1.87 0.09 Mrt= 0.85 0.18
Mrf=-2.09 0.25 Mtf= 0.30 0.06
Principal Axes:
T Val= 2.91 Plg=64 Azm= 59
N 0.04 7 163
P -2.95 25 257
Best Double Couple:Mo=2.9*10**17
NP1:Strike= 2 Dip=21 Slip= 110
NP2: 161 71 83

PVC 5.22 155 iPc 20 27.10 8.8X
HNR 6.90 300 eP 20 40.00 -1.8
eS 22 14.00
DZM 9.04 177 iPc 21 10.90 -0.8
RAB 16.21 301 eP 22 44.00 -3.4X
PMG 18.81 279 eP 23 20.00 0.2
1.0s 120.00nm 5.1mb
RMO 21.02 228 eP 23 42.00 -1.7
i 23 45.20
COO 21.81 214 eP 23 54.00 2.3
OLP 24.47 233 iPd 24 19.80 2.1
CMS 26.12 222 eP 24 35.00 1.8
OIS 26.32 250 iPc 24 36.20 1.0
1.0s 41.00nm 5.0mb
i 24 52.00
PGZ 28.96 164 eP 24 57.00 -1.9
STK 29.23 226 iPc 25 01.00 -0.5
1.2s 28.00nm 4.9mb
iS 30 11.10
LTZ 30.18 171 P 25 08.40 -1.4
TOO 30.56 213 eP 25 14.00 0.8
WRA 31.08 253 eP 25 15.90 -2.1
MMCZ 32.01 176 P 25 25.00 -1.0
MHZ 32.08 176 P 25 25.30 -1.3
ASPA 32.18 246 iPc 25 26.40 -1.2
1.1s 50.00nm 5.3mb
Z 19s 10.08um 5.5Msz
eS 30 39.00
LR 38 04.00
TLC 32.20 176 P 25 27.20 -0.4
ADE 32.97 224 iPc 25 35.80 1.4
GUMO 33.70 321 eP 25 38.00 -2.8X
Z 18s 4.66um 5.2Msz
eS 31 07 00
MTN 33.96 266 eP 25 43.30 0.2
KNA 36.13 261 iPc 26 02.10 0.5
WARB 39.16 244 eP 26 26.50 -0.5
MBL 44.73 253 eP 27 14.00 1.4
PMO 44.73 98 iP 27 13.90 1.2
1.0s 70.00nm 5.5mb
DAV 44.83 294 eP 27 19.00 5.5X
VAH 44.98 99 iP 27 15.50 0.9
1.0s 60.00nm 5.4mb
TPT 45.00 98 iP 27 15.80 0.9
1.0s 55.00nm 5.4mb
RUV 45.22 99 iP 27 17.60 1.0
1.0s 60.00nm 5.5mb
KLB 47.88 239 eP 27 38.00 0.5
NWAO 48.59 237 eP 27 44.00 1.1
Z 20s 4.30um 5.4Msz
N 20s 1.60um
E 20s 3.40um
MRWA 48.98 243 eP 27 46.00 0.1
RKG 49.03 236 eP 27 49.00 2.7X
MUN 49.25 239 eP 27 49.00 1.0
QCP 52.26 300 eP 28 03.00 -8.0X
BAG 53.55 302 eP 28 20.00 -0.8
KAKJ 54.67 334 eP 28 28.30 -0.2
CHJJ 55.04 333 eP 28 30.70 -0.5
MAT 55.80 333 eP 28 35.00 -1.7
0.9s 20.17nm 5.2mb
Z 21s 1.43um 5.0Msz
eS 36 16.00
MTMJ 56.02 333 P 28 36.90 -1.5
NIIJ 56.04 334 P 28 38.00 -0.4
YAMJ 56.41 336 eP 28 40.80 -0.3
OFUJ 56.56 337 eP 28 41.10 -1.0
SSE 61.41 316 P 29 16.50 0.6
1.0s 14.00nm 5.0mb
Z 20s 0.50um 4.7Msz
N 14s 0.70um
S 37 30.00
sS 37 44.00
KGM 63.93 279 eP 29 34.80 1.9
SBA 64.86 180 e(P) 29 38.10 0.1
IPM 66.82 281 ePc 29 53.40 1.8
BJI 70.14 321 eP 30 14.00 2.4
5.0s 0.83nm 3.1mb X
Z 18s 1.10um 5.2Msz
N 18s 0.83um
esP 30 23.00
eS 39 24.00
eSKS 40 12.00
NNT 70.44 288 eP 30 31.80 17.9X
KMI 72.34 302 eP 30 27.50 2.0
2.0s 140.00nm 5.6mb
Z 20s 0.90um 5.0Msz
sP 30 37.50
eS 39 48.00
sS 40 04.00
CHTO 73.23 294 eP 30 31.00 0.4
1.0s 8.75nm 4.7mb
LZH 76.23 312 eP 30 46.00 -1.7
6.0s 0.68nm 2.8mb X
E 15s 0.51um
pP 30 50.50 14kmX
sP 30 58.50
eS 40 30.00
ScS 40 57.00
SPA 77.09 180 iPc 30 51.20 -0.8
1.1s 51.79nm 5.5mb
Z 20s 1.80um 5.4Msz
SHL 81.65 299 eP 31 18.80 1.5
eS 41 31.20
FBA 85.09 18 eP 31 29.80 -4.0X
1.3s 58.96nm 5.6mb
ABL 85.23 53 eP 31 39.40 3.9X
LBFM 85.51 46 e(P) 31 38.00 1.3
PLM 86.61 55 e(P) 31 44.00 1.7
GUN 87.47 299 P 31 47.60 0.9
PKI 87.77 299 P 31 48.70 0.5
0.4s 5.00nm 5.1mb
RMW 87.82 40 eP 31 49.70 2.0
KKN 87.94 299 P 31 49.40 0.5
0.6s 10.00nm 5.3mb
DMN 88.04 299 P 31 49.80 0.4
0.4s 8.00nm 5.4mb
GLA 88.15 56 eP 31 51.00 1.5
GKN 88.55 299 P 31 51.80 0.1
1.0s 42.00nm 5.7mb
HYB 91.42 287 eP 32 09.50 4.5X
GBA 91.62 283 P 32 09.00 3.1X
0.7s 1.80nm 4.6mb
INK 91.66 19 eP 31 48.00 -17.1X
LRM 93.42 44 eP 32 16.10 2.1
ALQ 95.35 56 eP 32 23.00 -0.1
1.0s 4.00nm 4.8mb
Z 18s 3.01um 5.8Msz
ANMO 95.35 56 e(P) 32 26.40 3.3X
0.8s 3.26nm 4.8mb
YKA 96.59 27 eP 32 28.30 0.5
0.7s 1.40nm 4.6mb
CNCB 119.01 118 ePKP 37 46.00 -3.0X
ZOBO 119.12 117 PKP 38 03.00 13.8X
Z 22s 0.45um 5.1Msz
LR 15 32.00
SUF 122.79 339 ePKP 37 50.00 -4.0X
NUR 124.80 338 ePKP 37 44.00 -14.0X
SIV 125.28 120 (PKP) 37 59.00 -1.3
i 38 15.00
HFS 128.71 343 ePKP 38 03.60 -2.0
0.5s 1.00nm
NAO 128.92 345 PKP 38 04.60 -1.4
0.9s 4.00nm
PPD 129.50 133 ePKP 38 07.00 -1.3
e 38 10.20
e 38 22.70
e 41 37.60
SPC 134.20 329 ePKP 38 15.40 -1.2
ZST 136.42 330 ePKP 38 20.20 -0.4
KHC 137.38 333 PKP 38 21.80 -0.7
N 19s 0.50um
OHR 138.68 319 ePKP 38 18.00 -7.2X
CDF 140.51 338 ePKP 38 20.00 -8.3X
VAI 141.98 334 PKPd 38 25.00 -5.8X
ORX 142.50 334 PKP 38 26.09 -5.8X
FLN 142.62 345 ePKP 38 25.40 -6.4X
LDF 142.68 345 ePKP 38 25.80 -6.2X
LOR 142.69 340 ePKP 38 26.20 -5.9X
0.5s 3.65nm
LSD 142.98 335 PKP 38 29.16 -3.8X
SSF 142.99 340 ePKP 38 27.50 -5.0X
1.1s 19.55nm
GRR 143.06 345 ePKP 38 27.20 -5.4X
0.7s 15.45nm
LPL 143.11 335 ePKP 38 28.40 -4.7X
LPG 143.11 335 ePKP 38 28.50 -4.7X
1.1s 28.10nm
PCP 143.12 333 PKP 38 28.65 -4.3X
RSP 143.19 335 PKP 38 28.55 -4.6X
SMF 143.24 339 ePKP 38 27.80 -5.2X
0.7s 8.25nm
AVF 143.28 340 ePKP 38 27.80 -5.2X
LPF 143.43 345 ePKP 38 28.20 -5.0X
0.8s 18.80nm
BNI 143.51 335 PKPd 38 30.80 -2.9X
RRL 143.57 335 PKP 38 30.50 -3.4X
ROB 143.61 333 PKP 38 29.37 -4.4X
BGF 143.65 340 ePKP 38 29.60 -4.1X
0.6s 13.10nm
PZZ 143.77 334 PKP 38 29.47 -4.7X
ENR 143.86 334 PKP 38 31.21 -3.0X
IMI 143.90 333 PKP 38 30.39 -3.9X
MAF 144.04 340 ePKP 38 31.00 -3.4X
0.9s 22.95nm
TCF 144.09 341 ePKP 38 31.00 -3.5X
0.8s 26.20nm
SBF 144.14 333 ePKP 38 30.90 -3.8X
0.9s 98.30nm
LSF 144.34 341 ePKP 38 31.70 -3.2X
PGF 144.44 330 ePKP 38 32.40 -2.9X
0.9s 88.45nm
MFF 144.52 343 ePKP 38 32.20 -2.9X
0.8s 88.65nm
MEU 144.70 318 PKP 38 32.70 -3.2X
FRF 144.73 334 ePKP 38 33.20 -2.4X
LRG 144.94 334 ePKP 38 34.10 -1.8
1.0s 156.25nm
LMR 144.97 334 ePKP 38 34.10 -1.9
1.1s 158.75nm
CDR 145.01 335 iPKPc 38 34.90 -1.2
RJF 145.19 341 ePKP 38 34.80 -1.6
1.2s 145.80nm
Z 20s 1.75um 5.8Msz
CAF 145.35 340 ePKP 38 35.60 -1.1
1.1s 74.50nm

21d 03h

SOB1	145.37	128	ePKP	38	35.20	-2.4X
			e	38	40.70	
			e	42	27.00	
LFF	145.76	341	ePKP	38	36.60	-0.7
	1.3s	155.25nm				
LPO	145.85	341	ePKP	38	36.90	-0.6
	0.7s	29.75nm				
BCAO	146.75	258	iPKPc	38	39.60	-0.3
	0.4s	7.00nm				
EPF	147.60	340	ePKP	38	41.70	1.3
	1.3s	41.50nm				
ECRI	148.85	343	ePKP	38	46.50	4.0X
EMON	149.12	350	ePKP	38	46.50	3.7X
EROO	149.53	338	e(PKP)	38	47.80	4.3X
STS	149.84	352	ePKP	38	48.00	4.1X
CAI	149.94	129	ePKP	38	47.50	2.7X
ERUA	150.11	350	ePKP	38	49.00	4.7X
ETOR	150.36	341	ePKP	38	50.00	5.2X
ECHE	151.11	339	ePKP	38	52.00	6.1X
GUD	151.13	344	ePKP	38	51.00	4.9X
TOL	151.81	344	iPKPd	38	54.00	7.1X
	1.2s	62.50nm				
EVIA	152.49	340	ePKP	38	55.40	7.3X
LKO	171.05	248	PKP	39	03.54	-3.5X
	S.D. = 1.3	on	76 of 138 obs.			

SEP 21, 1990 03h 21m 38.16± 0.81s
13.465 N ± 9.4km 90.397 W ± 6.8km
DEPTH = 67.5 ± 6.8 km
4.3mb (6 obs.)
NEAR COAST OF GUATEMALA (71)
Felt (II) at San Salvador, El Salvador.

YPE	0.95	47	iPd	21	56.70	0.3
TME	1.15	61	iPd	21	59.50	0.7
VSS	1.16	76	eP	21	59.30	0.3
SJAS	1.21	80	eP	21	59.60	-0.1
OZA	1.36	87	iPd	22	01.00	-0.6
VSM	2.07	91	eP	22	12.00	0.5
TPX	2.31	309	iP	22	11.00	-3.6X
			iS	22	38.00	
SCX	3.90	327	iP	22	40.00	3.0X
			iS	23	32.50	
EVV	6.88	317	(P)	23	39.50	20.9X
OXX	7.08	301	iP	23	22.00	0.3
			(S)	24	37.00	
LVVM	8.52	318	eP	23	40.00	-1.2
PPM	9.67	306	iP	23	59.50	2.0X
			(S)	26	10.50	
ACX	9.74	292	iP	23	57.00	-1.0
III	10.00	300	iP	24	02.00	0.3
IIJ	10.90	306	(P)	24	17.00	2.7X
UYO	20.94	351	iPd	26	27.30	9.8X
OLY	21.96	358	eP	26	27.00	-0.8
RSCP	22.47	10	iP	26	34.00	1.2
	1.0s	108.46nm			5.2mb	
MEO	22.48	342	eP	26	32.00	-0.9
SIO	22.82	348	e(P)	26	36.20	0.1
TUL	22.87	349	eP	26	36.10	-0.5
	0.5s	6.90nm			4.3mb	
Z	19s	4.02um			4.9Msz	
			e	26	50.50	
			LR	07	00.00	
BLA	25.27	19	eP	27	14.60	14.8X
ALQ	25.85	329	eP	27	06.20	0.9
	0.8s	3.73nm			4.0mb	
ANMO	25.85	329	eP	27	07.00	1.7
CBN	27.22	23	eP	27	31.00	13.4X
GOL	29.27	336	eP	27	34.00	-2.5
BW06	33.57	334	eP	28	15.00	0.9
TNP	34.18	321	eP	28	20.60	1.2
	0.9s	3.52nm			4.3mb	
ZOBO	36.84	143	eP	28	41.00	-1.5
LRM	37.26	334	eP	28	46.40	1.1
CNCB	37.35	143	eP	28	48.00	1.2
SIV	41.20	134	P	29	18.00	0.0
PNT	43.06	332	eP	29	34.00	1.0
	0.7s	5.00nm			4.4mb	
SCH	45.20	19	eP	29	48.00	-2.1
YKA	51.91	346	eP	30	40.20	-1.6
	0.6s	1.60nm			4.2mb	
SOB1	54.06	112	eP	30	56.90	-1.5
LIC	84.09	85	P	34	03.60	0.1
KIC	84.34	85	P	34	04.70	-0.1
BBTK	105.19	42	ePKP	40	00.00	5.1X
GKN	138.50	7	PKP	41	00.40	1.6
GUN	138.71	5	PKP	41	00.20	0.8
PKI	139.01	6	PKP	41	00.00	0.1
GBA	150.53	25	PKP	41	24.60	5.6X
NNT	152.23	338	ePKP	41	30.60	9.0X
	S.D. = 1.1	on	33 of 44 obs.			

SEP 21, 1990 03h 48m 25.49± 1.35s
10.260 S ± 3.7km 161.160 E ± 4.8km
DEPTH = 54.7 ± 11.9 km
5.4mb (21 obs.)
SOLOMON ISLANDS (193)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 26C
Centroid Location:
Origin Time 03:48:34.5 1.0
Lat 10.38S 0.09 Lon 161.08E 0.08
Dep 97.2 4.5 Half-duration 1.9
Moment Tensor; Scale 10**16 Nm
Mrr=-2.64 0.56 Mtt=-1.11 1.25
Mff= 3.75 1.29 Mrt=-6.72 0.60
Mrf=-0.28 0.60 Mtf= 9.99 0.85
Principal Axes:
T Val= 12.94 Plg=17 Azm=132
N -0.92 54 247
P -12.02 31 32
Best Double Couple:Mo=1.2*10**17
NP1:Strike=176 Dip=55 Slip=-169
NP2: 80 81 -35

HNR	1.45	304	eP	48	50.00	0.3
PVC	10.17	138	iPc	50	54.30	2.8X
DZM	12.79	157	iPd	51	30.00	3.1X
			iS	53	46.10	
PMG	13.83	272	eP	51	46.50	6.1X
	1.0s	90.00nm			5.4mb	
RMO	19.95	214	eP	52	57.20	1.3
			e	53	16.00	
COO	21.98	202	eP	53	18.00	1.5
			i	53	37.00	
QLP	22.79	222	eP	53	27.70	3.3X
			i	53	38.50	
QIS	23.14	241	eP	53	31.00	3.1X
			e	53	42.00	
CMS	25.46	212	eP	53	51.00	0.9
BWA	26.73	204	e(P)	54	04.80	3.0X
			e	54	18.20	
CAN	27.30	202	e(P)	54	08.80	1.8
			e	54	26.20	
WRA	27.59	246	eP	54	10.00	0.3
			e	54	25.80	
			e	54	32.80	
STK	28.12	217	iPd	54	26.60	12.2X
	1.8s	130.00nm				
			i	54	38.60	
GUA	28.62	325	eP	54	37.20	18.2X
ASPA	29.21	239	iPc	54	24.30	-0.1
	1.0s	51.00nm			5.1mb	
			i	54	46.30	
PUZ	31.67	154	eP	54	44.90	-1.0
ADE	32.00	216	eP	54	50.00	1.1
KNA	32.01	257	eP	54	50.00	1.0
MNG	32.79	160	eP	54	54.70	-0.9
TCW	32.93	162	eP	54	56.80	0.0
WDW	33.21	161	P	54	58.50	-0.7
MTW	33.28	160	eP	54	58.60	-1.2
MOW	33.43	161	eP	54	59.90	-1.3
BLW	33.46	160	eP	55	00.30	-1.1
KHZ	33.82	163	eP	55	02.60	-1.9
	1.2s	39.00nm			5.2mb	
MMCZ	35.29	170	eP	55	16.30	-1.0
MHZ	35.37	170	eP	55	17.30	-0.6
TLC	35.46	170	eP	55	17.50	-1.3
WARB	36.26	239	eP	55	25.80	0.2
MBL	41.12	250	eP	56	06.40	0.4
NANU	45.28	248	eP	56	40.70	1.0
MRWA	46.17	239	iPd	56	47.10	0.4
KAKJ	50.27	338	eP	57	18.30	-0.1
CHJJ	50.58	337	P	57	20.00	-0.8
MAT	51.32	336	iPd	57	25.00	-1.4
	1.2s	56.25nm			5.5mb	
TSRJ	51.39	334	eP	57	26.70	-0.2
MTMJ	51.52	336	iPd	57	27.30	-0.7
YAMJ	52.07	339	P	57	32.00	-0.1
SHK	52.10	330	iP	57	31.70	-0.6
	1.0s	100.00nm			5.8mb	
OFUJ	52.33	341	P	57	33.40	-0.6
SSE	56.21	318	Pc	58	00.60	-1.9
	1.2s	42.00nm			5.3mb	
KGM	58.84	279	eP	58	21.70	0.4
SNG	62.72	284	eP	59	06.40	18.8X
ADK	64.78	15	P	58	59.60	-0.8
NNT	65.09	289	eP	59	20.00	17.0X
NST	65.69	292	eP	59	08.50	1.7
KMI	66.89	303	Pc	59	15.00	0.2
	2.0s	6.00nm			4.3mb	X
			pP	59	34.00	72kmX
			sP	59	40.00	
SBA	67.64	179	e(P)	59	17.10	-1.2
CHTO	67.80	295	iP	59	19.50	-0.8
	1.2s	12.50nm			4.8mb	
			e	59	41.00	
LZH	70.93	314	Pd	59	39.00	-0.4
	1.5s	56.00nm			5.3mb	
KDC	77.59	23	P	00	16.90	-0.2
	0.8s	56.90nm			5.6mb	
SPA	79.81	180	iPc	00	29.30	-0.1
	1.0s	29.50nm			5.2mb	
			i	00	49.10	
TTA	80.04	18	P	00	30.20	-0.3
	0.9s	43.75nm			5.4mb	
PMR	81.43	22	P	00	36.60	-1.1
	0.9s	43.75nm			5.4mb	
PKI	82.32	300	P	00	42.60	-1.0
DMN	82.59	300	P	00	44.20	-0.7
IMA	83.02	17	P	00	44.10	-2.0
	0.8s	17.24nm			5.1mb	
GKN	83.10	300	P	00	46.40	-0.9
	1.2s	80.00nm			5.6mb	
MAW	83.74	202	iPd	00	50.50	0.9
			e	01	18.00	
FBA	84.04	19	P	00	49.80	-1.3
FHC	85.41	47	eP	01	00.20	1.7
NWRM	85.53	50	P	00	59.70	0.6
PCC	85.64	51	eP	01	00.50	0.9
GCC	85.80	51	eP	01	01.50	1.0
BRK	85.84	51	eP	01	01.50	0.9
BKS	85.86	51	iPc	01	01.80	1.1
	0.7s	153.00nm			6.3mb	
PRS	86.10	52	eP	01	03.20	1.2
MHC	86.16	51	eP	01	03.40	1.0
ARN	86.25	51	P	01	02.80	0.1
GBA	86.37	284	P	01	04.00	0.4
WDC	86.39	48	eP	01	04.30	1.0
BLP	86.40	54	P	01	04.10	0.6
LLA	86.51	52	eP	01	05.00	1.0
PRI	86.60	53	eP	01	06.00	1.4
SYP	86.72	54	eP	01	06.00	0.7
BCH	86.81	54	P	01	06.30	0.7
ORV	86.87	49	eP	01	06.10	0.4
MIN	87.01	48	eP	01	06.70	0.1
LBFM	87.08	47	P	01	07.40	0.5
CMB	87.31	51	eP	01	08.30	0.4
ABL	87.41	54	P	01	09.20	0.5
FRI	87.56	52	eP	01	09.50	0.5
PGC	88.15	40	eP	01	12.00	0.4
MWC	88.19	55	eP	01	13.00	0.6
ISA	88.20	53	eP	01	13.00	0.8
GMW	88.25	41	P	01	12.20	0.1
SBB	88.49	55	eP	01	13.00	-0.6
MCW	88.55	40	P	01	13.60	0.0
RVR	88.69	55	eP	01	15.00	0.5
PEC	88.84	55	P	01	15.30	0.0
RMW	88.86	41	P	01	14.70	-0.5
CLC	88.93	53	eP	01	16.00	0.3
PLM	88.96	56	eP	01	17.00	0.9
BAR	88.97	57	eP	01	17.00	1.1
GSC	89.44	54	eP	01	19.00	0.8
TNP	89.74	51	P	01	19.90	0.2
	0.9s	21.81nm			5.5mb	
TPC	89.79	55	eP	01	20.00	0.2
GLA	90.56	57	eP	01	24.00	0.6
INK	90.66	20	eP	01	22.00	-1.0
PNT	90.77	40	ePd	01	23.00	-0.9
	0.9s	29.00nm			5.7mb	
DPW	91.32	42	P	01	26.00	-0.5
NEW	92.12	41	P	01	29.70	-0.5
	0.9s	35.09nm			5.8mb	
LRM	94.77	44	eP	01	42.90	0.2
IMW	95.52	47	P	01	46.80	0.5
BW06	96.36	48	P	01	49.20	-0.8
	0.7s	4.09nm			5.1mb	
YKA	96.36	28	eP	01	47.70	-1.6
	0.8s	8.50nm			5.3mb	

SES	96 42	40	eP	01	49.00	-0 9
ALO	97 73	56	eP	01	56.00	-0.3
	1.0s	5.25nm			5.0mb	
ANMO	97.73	56	P	01	56.30	0.0
RSSD	100.49	47	Pdiff	02	09.80	1.1
BUL	124 38	237	iPKPd	07	14.20	-6.9X
	1.0s	10.00nm				
CNCB	124 46	119	ePKP	07	35.00	13.2X
NAO	124.98	343	PKP	07	18.70	-2.1
	0.8s	1.90nm				
PPD	134.78	135	(PKP)	07	40.00	-0.7
BCAO	142.51	264	iPKPc	07	49.50	-5.6X
	0.7s	23.00nm				
			id	08	21.80	
ECRI	144.75	339	ePKP	07	57.00	-1.1
EROO	145.13	334	ePKP	07	57.50	-1.2
EMON	145.46	345	ePKP	07	59.00	-0.3
ETOR	146.14	337	ePKP	08	01.00	0.4
STS	146.28	346	ePKP	08	01.30	0.7
GUD	147.06	339	ePKP	08	03.50	1.4
TOL	147.70	338	ePKP	08	05.50	2.5X
ASMO	149.78	336	ePKP	08	10.00	3.5X
AAPN	149.98	336	ePKP	08	10.50	3.7X
ACHM	150.03	336	ePKP	08	10.50	3.7X
APHE	150.11	335	ePKP	08	10.60	3.6X
ALOJ	150.14	336	ePKP	08	11.00	4.0X
ATEJ	150.27	336	ePKP	08	11.20	3.9X
EPRU	150.71	337	ePKP	08	12.50	4.7X
SOB1	150.75	131	ePKP	08	12.30	3.9X
			e	08	20.60	
			e	08	35.00	
	S.D. = 0.9	on	108 of	130	obs.	

? SEP 21, 1990 05h 06m 21.52± 2.59s
31.084 S ±44.7km 68.614 W ±19.6km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.27	153	iPc	06	37.60	-0.1
RTCB	0.43	202	ePd	06	38.00	-0.3
			S	06	49.00	
ZON	0.46	187	iPd	06	39.30	0.9
			eS	06	51.30	
CFA	0.61	148	eP	06	39.30	-0.2
			S	06	51.80	
RTCV	0.78	175	e(P)	06	40.70	-0.2
RTBS	0.92	231	ePd	06	42.00	-0.1
	S.D. = 0.6	on	6 of	6	obs.	

% SEP 21, 1990 05h 35m 40.87± 0.95s
46.563 N ± 6.6km 8.503 E ± 9.0km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)

LLS	0.46	48	eP	35	49.60	-0.6
TMA	0.52	151	eP	35	52.20	0.7
MMK	0.63	216	eP	35	53.20	-0.6
VDL	0.67	96	eP	35	54.20	-0.2
SLE	1.20	360	eP	36	04.00	0.7
	S.D. = 0.9	on	5 of	5	obs.	

SEP 21, 1990 05h 39m 37.49± 1.19s
18.992 N ±12.1km 62.899 W ± 7.2km
DEPTH = 45.1 ± 10.5 km
3.9mb (1 obs.)
LEEWARD ISLANDS (92)
MD 4.3 (TRN).

SKI	1.66	175	eP	40	05.12	0.5
			eS	40	26.82	
CPB	1.69	143	eP	40	04.65	-0.3
			eS	40	26.48	
NEV	1.87	170	eP	40	08.37	0.7
			S	40	32.70	
BPA	2.17	153	eP	40	12.00	0.0
LPR	2.90	257	iP	40	22.20	-0.1
SEG	2.90	153	eP	40	22.18	-0.1
CSB	3.17	258	iP	40	25.50	-0.7
PAG	3.17	158	eP	40	26.20	0.0
			S	41	02.60	
DOG	3.19	157	eP	40	26.20	-0.3
SJG	3.21	255	iP	40	26.90	0.2
PORP	3.67	256	iP	40	33.20	0.0
BBL	3.71	158	eP	40	33.40	-0.3
LRS	3.81	260	iP	40	34.70	-0.5
MEP	3.96	258	iP	40	37.90	0.5
MGP	4.10	257	iP	40	39.50	0.2
SIV	34.81	177	P	46	25.40	-0.8
PPD	42.32	164	eP	47	29.30	0.5
YKA	56.03	334	eP	49	14.10	0.3
	0.7s	0.90nm			3.9mb	
	S.D. = 0.5	on	18 of	18	obs.	

SEP 21, 1990 06h 15m 46.37± 0.57s
14.065 N ± 8.4km 93.743 W ± 9.7km
DEPTH = 33.0km (normal)
4.3mb (6 obs.)
NEAR COAST OF CHIAPAS, MEXICO (69)

TPX	1.66	60	iP	16	13.50	-0.1
			iS	16	37.00	
SCX	2.86	22	iP	16	31.00	0.3
			iS	17	06.00	
OXX	4.15	317	(P)	16	13.00	-36.3X
PPM	6.83	317	iP	17	27.00	-0.4
UYO	20.02	358	iPc	20	17.70	-1.6
SIO	21.71	354	e(P)	20	33.10	-3.5X
TUL	21.83	356	eP	20	34.00	-3.8X
	0.5s	5.40nm			4.2mb	
			i	20	38.60	
ALO	23.74	333	eP	20	56.50	-0.3
	1.0s	4.50nm			3.9mb	
LRM	35.38	337	eP	22	41.60	0.3
ZOBO	39.36	139	P	23	15.00	-0.4
PNT	41.06	334	eP	23	30.00	1.6
	0.5s	3.00nm			4.3mb	
CCH	41.45	138	P	23	32.40	0.1
SIV	43.98	132	Pd	23	52.40	-0.2
YKA	50.59	348	eP	24	42.80	-0.9
	0.5s	1.70nm			4.3mb	
SOB1	57.30	111	(P)	25	33.00	-0.8
INK	59.90	344	eP	25	51.00	-0.1
NAO	84.79	28	P	28	19.80	1.3
	1.0s	8.60nm			4.9mb	
LKO	85.95	81	P	28	32.76	7.6X
HFS	86.36	29	eP	28	26.80	0.5
	0.4s	1.00nm			4.4mb	
KIC	87.51	84	P	28	33.40	0.6
NUR	91.06	26	eP	28	56.00	7.4X
	S.D. = 0.9	on	16 of	21	obs.	

? SEP 21, 1990 07h 46m 45.47± 1.77s
31.384 S ±51.3km 68.608 W ±20.1km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.13	65	iPc	47	08.00	6.8X
			eS	47	11.00	
ZON	0.17	200	iPd	47	01.80	0.5
			eS	47	13.80	
RTCB	0.19	238	ePd	47	00.90	-0.5
			eS	47	11.00	
CFA	0.39	125	eP	47	02.00	0.1
			S	47	14.00	
RTCV	0.48	173	ePc	47	02.30	-0.2
			S	47	13.70	
RTBS	0.77	249	ePd	47	04.80	0.1
	S.D. = 0.5	on	5 of	6	obs.	

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* SEP 21, 1990 07h 55m 11.95± 1.51s
42.910 N ±14.5km 0.250 W ± 5.4km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.0 (LDG).

JAU	0.16	326	Pg	55	15.22	-0.4
			Sg	55	29.95	
LHE	0.27	271	Pg	55	18.59	0.8
ESCF	0.29	305	Pg	55	17.49	-0.6
			Sg	55	34.26	
OGE	0.31	328	Pg	55	17.23	-1.1
			Sg	55	33.42	
ATE	0.38	298	Pg	55	19.16	-0.5
			Sg	55	37.60	
ISSF	0.42	287	Pg	55	20.55	0.0
EPF	0.45	74	Pg	55	19.40	-1.7
			Sg	55	25.00	
MADF	0.48	300	Pg	55	21.11	-0.6
LPO	2.06	30	Pg	55	48.00	1.1
			Sg	56	13.80	
LFF	2.15	19	Pg	55	50.00	1.7
			Sg	56	15.60	
CAF	2.62	39	Pg	55	58.70	3.7X
			Sg	56	30.80	
RJF	2.71	27	Pg	56	00.40	4.1X
			Sg	56	33.00	
	S.D. = 1.2	on	10 of	12	obs.	

& SEP 21, 1990 08h 22m 13.47s
60.125 N 151.715 W
DEPTH = 76.1km
3.6mb (1 obs.)
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

HOM	0.47	176	iP	22	26.53	-0.2
RDT	0.57	323	iP	22	27.04	-0.7
			iS	22	38.09	
RSO	0.62	304	iP	22	27.79	-0.6
CNPM	0.65	158	eP	22	27.83	-0.7
			iS	22	39.34	
NKA	0.66	21	iP	22	29.89	1.3
XLV	0.67	180	eP	22	27.62	-1.1
			eS	22	39.52	
SLKM	0.84	62	iP	22	29.71	-0.9
OPT	0.90	239	iP	22	30.50	-0.9
			eS	22	42.47	
SPU	1.07	351	iP	22	33.01	-0.5
			eS	22	48.23	
CKL	1.12	344	iP	22	33.70	-0.5
SEW	1.13	90	eP	22	32.94	-1.3
AUE	1.14	228	iP	22	33.26	-1.0
			eS	22	48.93	
AUH	1.16	230	eP	22	33.74	-0.9
CRP	1.17	349	iP	22	34.63	-0.2
AUI	1.17	228	eP	22	33.62	-1.1
			eS	22	49.57	
BGL	1.19	344	iP	22	34.70	-0.4
CGLM	1.20	353	eP	22	34.84	-0.3
PDB	1.29	256	iP	22	34.74	-1.5
			eS	22	51.56	
NCG	1.30	351	iP	22	36.22	-0.3
			eS	22	54.40	
SUA	1.43	19	iP	22	37.77	-0.4
			eS	22	56.46	
PMS	1.54	42	iP	22	38.99	-0.7
MCNL	1.63	236	eP	22	38.81	-2.0
			eS	22	58.32	
PWA	1.77	30	eP	22	41.81	-0.9
SKT	1.86	3	iP	22	43.31	-0.7
PLRM	1.94	40	iP	22	43.55	-1.4
GHO	2.14	38	eP	22	46.44	-1.4
SVW	2.16	299	iP	22	46.07	-2.1
SML	2.36	43	eP	22	49.21	-1.6
CUT	2.39	16	eP	22	50.06	-1.1
KDC	2.42	190	eP	22	48.37	-3.2
VZW	2.71	68	eP	22	52.99	-2.7
SCM	2.74	49	eP	22	54.72	-1.4
MID	2.81	102	eP	22	55.61	-1.3
VLZ	2.84	67	eP	22	54.92	-2.4
HUR	3.03	18	eP	22	59.66	-0.4
KLU	3.15	62	eP	22	59.54	-2.3
TOA	3.34	51	eP	23	02.97	-1.5
TTA	3.49	326	eP	23	04.72	-1.8
MCK	3.85	19	eP	23	10.60	-0.9
GLB	4.09	68	eP	23	11.87	-3.1
TGL	4.45	78	eP	23	17.90	-2.1
WRH	4.68	20	eP	23	21.02	-2.1
BALM	4.71	75	eP	23	21.55	-2.2
HDA	4.84	25	eP	23	23.36	-2.0
CCB	4.89	20	eP	23	23.60	-2.4
FBA	5.12	19	eP	23	27.01	-2.3
GLM	5.27	20	eP	23	29.04	-2.4
YKA	17.81	66	eP	26	14.80	-2.5
	0.4s	1.70nm			3.6mb	
	48 obs. associated					

? SEP 21, 1990 08h 58m 00.12± 3.18s
0.637 S ±21.4km 119.669 E ±16.3km
DEPTH = 77.8 ± 26.5 km
4.7mb (2 obs.)
MINAHASSA PENINSULA (265)

MKS	4.55	183	iPc	59	08.00	-0.1
TRT	9.92	225	ePc	00	22.40	0.3
MTN	16.62	137	eP	01	50.00	0.3
NANU	22.16	190	eP	02	51.00	0.1
WRA	23.97	144	iPd	03	07.30	-1.2
WARB	26.27	166	eP	03	29.30	-0.8
ASPA	26.74	150	iPd	03	33.30	-1.1
	0.7s	11.00nm			4.5mb	

21d 09h

```
      Z  22s      0.14um          3.4MszX
                   LR     14 05.90
STK     37.35 148 iPd     05 07.10    0.3
        0.8s     14.00nm          4.9mb
BJI     40.61 356 eP      05 58.50   24.7X
        1.1s     16.00nm
BWA     43.04 144 eP      05 57.70    3.8X
PKI     43.23 313 P       06 05.40    9.5X
CAN     44.01 145 eP      06 04.10    2.4
                  e       06 19.90
GKN     44.04 313 P       06 02.00   -0.3
GBA     44.17 290 P       06 11.30    8.1X
      S.D. = 1.2  on  10 of  14 obs.
-------------------------------------------
*  SEP  21, 1990  10h 51m 07.77± 1.14s
   16.509 S ±19.6km  176.639 E ± 7.9km
   DEPTH =  33.0km  (normal)
   4.7mb (  2 obs.)
 FIJI ISLANDS REGION                (181)

NDF     1.46 148 eP      51 32.00   -0.1
                 eS      51 52.00
SGE     1.63 131 iPd     51 34.00   -0.7
VUN     2.29 131 iPc     51 44.20    0.1
                 eS      52 13.50
SVA     2.36 133 eP      51 45.20    0.2
                 eS      52 12.50
NDE     2.57  92 eP      51 49.30    1.2
                 eS      52 21.00
KRO     2.75 107 ePc     51 49.70   -0.9
                 eS      52 20.00
CMS    31.72 236 eP      57 32.30    1.4
STK    35.26 238 iPd     58 02.90    1.4
       0.8s     10.00nm          4.8mb
WRA    40.25 259 eP      58 42.00   -1.5
ASPA   40.65 253 eP      58 45.60   -1.1
       0.9s     10.00nm          4.6mb
      S.D. = 1.2  on  10 of  10 obs.
-------------------------------------------
?  SEP  21, 1990  11h 31m 50.53±15.47s
   30.583 S ±126.km   69.056 W ±26.4km
   DEPTH =  33.0km  (normal)
 CHILE-ARGENTINA BORDER REGION      (127)

RTLL    0.90 146 iPd     32 07.00    0.1
                 eS      32 20.00
RTCB    0.93 166 iPc     32 07.00   -0.3
                 eS      32 21.00
ZON     1.01 161 eP      32 09.30    0.8
                 eS      32 13.30
RTBS    1.13 197 eP      32 09.80   -0.2
CFA     1.24 146 eP      32 11.00   -0.7
                 S       32 28.00
RTCV    1.35 161 ePd     32 12.00   -1.3
                 S       32 29.50
      S.D. = 0.9  on   6 of   6 obs.
-------------------------------------------
   SEP  21, 1990  12h 02m 28.53± 0.18s
   61.849 N ± 2.2km  148.498 W ± 2.0km
   DEPTH =  55.5 ±  2.5 km
   4.6mb ( 22 obs.)
 SOUTHERN ALASKA                    (  2)
      Felt (IV) at Anchorage,
      Chickaloon, Palmer and Sutton;
      (III) at Fort Richardson and
      Wasilla; (II) at Willow.

SML     0.09 118 iP      02 35.43    0.0
GHO     0.22 249 iP      02 36.38   -1.4
PLRM    0.40 230 iP      02 37.70   -1.4
PMR     0.40 230 iP      02 37.70   -1.4
SCM     0.56  91 iP      02 39.73   -1.2
PWA     0.69 254 iP      02 41.72   -0.7
PMS     0.79 220 iP      02 43.24   -0.6
CUT     1.00 305 eP      02 47.06    0.5
TOA     1.13  76 iP      02 48.82    0.4
SUA     1.14 251 iP      02 48.44   -0.1
HUR     1.25 335 iP      02 50.94    0.9
VLZ     1.26 124 eP      02 48.77   -1.4
KLU     1.28 105 iP      02 49.81   -0 7
                 eS      03 06.70
SKT     1.44 277 iP      02 53.25    0.6
                 eS      03 11.57
SLKM    1.58 213 eP      02 54.73    0.1
NKA     1.73 231 eP      02 58.86    2.3
CGLM    1.76 254 eP      02 58.55    1.3
NCG     1.80 257 iP      02 58.90    1.1
SEW     1.81 195 eP      02 57 05   -0.7
SPU     1.83 250 eP      02 58.94    0.8
CRP     1.85 253 eP      02 59.40    0.9
MCK     1.90 354 iP      03 00.51    1.4
CKL     1.95 252 eP      03 00 05    0.1
BGL     1.95 254 eP      03 00.51    0.6
KTH     2.04 328 eP      03 03.04    1.9
                 eS      03 30.16
GLB     2.27  98 iP      03 04.23   -0.2
RDT     2.28 238 eP      03 04.79    0.3
DDM     2.29  31 iP      03 07.01    2.4
RSO     2.49 238 eP      03 07.57    0.0
WRH     2.64   4 eP      03 10.11    0.6
MID     2.65 155 eP      03 09.70    0.1
HDA     2.66  15 eP      03 10.90    1.1
HOM     2.69 216 eP      03 10.44    0.3
CNPM    2.69 211 eP      03 10.02   -0.2
DOT     2.73  47 eP      03 10.95    0.2
CCB     2.83   6 eP      03 12.36    0.2
XLV     2.88 215 eP      03 13.44    0.5
TMW     2.94  57 eP      03 14.07    0.2
TGL     2.95 109 eP      03 13.00   -1.0
BALM    3.07 103 iP      03 14.62   -1.1
FBA     3.08   6 iPc     03 16.00    0.2
GLM     3.19   9 eP      03 17.58    0.2
OPT     3.20 229 eP      03 17.48   -0.1
AUE     3.47 226 eP      03 21.75    0.5
PDB     3.47 236 eP      03 20.40   -0.9
AUH     3.49 227 eP      03 22.20    0.6
SVW     3.50 261 eP      03 21.01   -0.7
AUI     3.50 226 eP      03 22.28    0.5
TTA     3.66 291 eP      03 23.40   -0.7
CDD     3.88 223 eP      03 26.75   -0.4
MCNL    3.93 230 eP      03 26.79   -1.0
KDC     4.58 208 eP      03 35.00   -1.8X
DWY     4.69  58 Pc      03 37.80   -0.7
IMA     4.81 334 eP      03 39.40   -0.9
FYU     4.95  15 eP      03 41.91   -0.1
ANM     8.09 297 eP      04 25.50   -0.3
SIT     8.25 120 eP      04 25.10   -2.9X
INK     9.03  38 P       04 37.00   -1.7X
YKA    15.74  73 eP      06 04.60   -3.1X
       0.6s     12.50nm          4.2mb
PGC    19.29 122 eP      06 51.00   -0.2
MCW    19.51 121 eP      06 54.00    0.2
PNT    20.37 115 eP      07 03.00    0.3
       0.7s     12.00nm          4.3mb
GMW    20.44 123 eP      07 04.30    0.9
EDM    20.51  99 iPd     07 03.20   -0.9
LON    21.47 122 eP      07 15.00    1.1
NEW    22.25 113 iP      07 23.50    1.9
       1.0s     30.00nm          4.7mb
                 ePP     07 43.30
SES    23.45 102 ePd     07 34.00    0.7
FFC    24.98  85 eP      07 49.00    1.0
       0.9s     13.00nm          4.4mb
LRM    26.17 111 ePd     08 00.00    0.6
IMW    28.35 112 eP      08 20.00    0.8
ARN    29.69 133 eP      08 32.00    1.0
BW06   29.85 112 eP      08 33.00    0.4
       1.0s     10.00nm          4.5mb
                 epP     08 46.00   51kmX
TNP    30.62 126 eP      08 39.50    0.1
                 e       08 50.00
RSSD   31.29 104 eP      08 45.50    0.2
BCH    32.15 133 iP      08 53.70    1.0
                 epP     09 03.20   33kmX
GSC    33.22 128 eP      09 03.00    1.0
SBB    33.40 130 eP      09 03.00   -0.5
RVR    34.18 130 eP      09 10.00   -0.2
GOL    34.19 110 eP      09 11.30    0.7
       1.0s      7.50nm          4.6mb
TPC    34.57 128 eP      09 14.00    0.4
PLM    34.94 130 eP      09 18.00    1.0
BAR    35.62 130 eP      09 24.00    1.5
GLA    35.96 128 eP      09 26.00    0.6
ANMO   37.69 116 eP      09 41.00    0.9
       1.0s      6.25nm          4.5mb
ALO    37.69 116 eP      09 40.00   -0.1
       1.3s     10.10nm          4.6mb
SIO    41.54 104 eP      10 11.70    0.0
TUL    41.64 104 eP      10 12.70    0.2
       1.2s     17.30nm          4.7mb
FVM    42.46  97 eP      10 18.70   -0.5
       0.6s     10.40nm          4.8mb
                 e       10 31.60
RSCP   46.68  94 eP      10 52.00   -1.1
GBTN   47.27  93 eP      10 57.20   -0.5
TKL    47.48  92 eP      10 58.80   -0.6
PRM    49.43  92 eP      11 14.00   -0.5
JSC    49.80  91 eP      11 16.50   -0.7
LHS    49.85  91 eP      11 17.50   -0.1
MAT    50.82 276 eP      11 24.00   -1.1
HFS    57.58  10 eP      12 12.10   -2.1
       0.4s      1.70nm          4.5mb
BJI    57.97 296 eP      12 16.00   -1.2
       1.0s      6.00nm          4.7mb
EKA    60.03  22 P       12 31.00   -0.2
       1.3s     40.00nm          5.4mb
LZH    66.44 303 Pd      13 12.50   -1.4
       1.0s     25.00nm          5.2mb
MOX    66.74  14 e(P)    13 15.00   -0.4
KSP    67.00  10 eP      13 17.00   -0.1
CDF    68.39  17 eP      13 24.70   -1.2
KHC    68.44  13 eP      13 27.40    1.3
HAU    68.65  18 eP      13 26.80   -0.6
LOR    68.99  20 eP      13 29.10   -0.4
       0.8s      4.70nm          4.5mb
SSF    69.13  20 eP      13 30.00   -0.4
       1.0s     17.00nm          4.9mb
LBF    69.29  20 eP      13 29.90   -1.4
       0.8s      4.05nm          4.4mb
AVF    69.37  20 eP      13 31.30   -0.5
       0.9s      4.90nm          4.4mb
LSF    69.59  22 eP      13 32.40   -0.7
SMF    69.59  20 eP      13 31.30   -1.9
MAIO   79.60 337 iPc     14 32.00    1.2
SHL    80.44 307 eP      14 35.00   -0.6
GUN    80.48 313 P       14 35.70   -0.3
KKN    80.79 314 P       14 37.20   -0.3
       0.6s     22.00nm          5.3mb
GKN    80.82 314 P       14 37.40   -0.1
       0.8s     28.00nm          5.2mb
PKI    80.95 313 P       14 38.30   -0.2
       0.6s     10.00nm          4.9mb
DMN    81.02 314 P       14 38.60   -0.1
       0.6s     17.00nm          5.2mb
SPA   151.69 180 iPKPd   22 16.00    6.1X
       1.0s     11.00nm
                 i       22 25.80
      S.D. = 0.9  on 113 of 118 obs.
-------------------------------------------
*  SEP  21, 1990  12h 35m 09.42± 1.63s
   51.226 N ±17.9km   15.686 E ± 7.9km
   DEPTH =  10.0km  (geophysicist)
 POLAND                             (548)
      ML 3.6 (GRF).

KSP     0.54 135 iPd     35 17.80   -2.6
       0.3s   182.00nm
                 iS      35 27.10
BRG     1.15 253 iPn     35 31.40    0.4
                 iPg     35 32.00
                 iSg     35 50.30
PRU     1.44 211 Pn      35 36.10    0.6
                 Pg      35 37.20
                 Sn      35 54.40
                 Sg      36 02.00
CLL     1.69 274 iPn     35 37.40   -1.7
                 iPg     35 40.20
                 iSg     36 05.70
KHC     2.50 214 Pn      35 50.80    0.0
                 Pg      35 57.40
                 Sn      36 27.30
                 Sg      36 35.60
HOF     2.59 251 iPnc    35 51.40   -0.6
MOX     2.64 259 ePn     35 53.00    0.2
                 ePg     36 00.00
                 iSg     36 39.00
WET     2.76 222 ePn     35 54.80    0.3
KRA     2.95 112 eP      35 59.40    2.3
                 iS      36 36.00
ZST     3.17 163 eP      36 27.40   27.1X
                 i       36 53.80
GRF     3.24 243 ePn     36 01.30    0.0
                 ePg     36 12.20
                 eSg     36 58.40
OGA     5.33 217 iPc     36 32.10    1.0
      S.D. = 1.4  on  11 of  12 obs.
-------------------------------------------
*  SEP  21, 1990  12h 59m 09.08± 0.78s
   8.075 N ±17.1km   37.816 W ±15.8km
   DEPTH =  10.0km  (geophysicist)
   4.4mb (  2 obs.)
```

CENTRAL MID-ATLANTIC RIDGE (406)

SOB1	17.44	190	eP	03	21.90	7.7X
BAO	25.62	203	eP	04	41.00	0.3
SIV	33.20	224	P	05	48.60	0.2
ZOBO	38.54	231	P	06	34.60	0.1
LPB	38.67	231	(P)	06	35.00	-0.4
CNCB	38.75	230	eP	06	36.00	-0.2
BCAO	56.10	90	ePd	08	51.30	-0.1
	0.6s	7.00nm			4.9mb	
YKA	76.78	332	eP	11	02.50	0.2
	0.8s	1.10nm			4.0mb	

S.D. = 0.3 on 7 of 8 obs.

& SEP 21, 1990 13h 03m 13.32s
63.043 N 150.915 W
DEPTH = 128.0km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.59	96	eP	03	32.45	-0.5
			eS	03	47.25	
CUT	0.71	155	iP	03	33.51	-0.3
			eS	03	49.10	
SKT	1.10	195	eP	03	36.70	-0.7
MCK	1.13	51	iP	03	37.09	-0.5
			eS	03	54.78	
PWA	1.48	160	eP	03	41.17	-0.2
GHO	1.58	143	iP	03	42.29	-0.3
			eS	04	05.02	
SUA	1.59	177	eP	03	43.02	0.2
PLRM	1.68	149	eP	03	42.76	-0.9
SML	1.73	135	iP	03	43.48	-0.9
NCG	1.75	200	iP	03	43.82	-0.8
CRP	1.88	199	eP	03	45.48	-0.8
			eS	04	09.97	
WRH	1.91	40	iP	03	45.26	-1.2
PMS	1.91	160	eP	03	46.12	-0.5
			eS	04	10.43	
BGL	1.92	202	iP	03	46.54	-0.2
CKL	1.97	200	eP	03	46.51	-0.9
SCM	2.06	124	eP	03	47.25	-1.2
CCB	2.12	39	iP	03	47.74	-1.3
TOA	2.39	111	eP	03	52.10	-0.5
GLM	2.49	37	iP	03	52.61	-1.3
SLKM	2.57	172	eP	03	52.92	-1.9
KLU	2.81	121	eP	03	56.06	-2.0
VZW	2.86	132	eP	03	57.02	-1.7
VLZ	2.89	130	eP	03	56.76	-2.2
DOT	3.15	76	eP	04	00.81	-1.7
CNPM	3.53	183	eP	04	05.02	-2.6
GLB	3.69	113	eP	04	08.14	-1.6

26 obs. associated

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* SEP 21, 1990 14h 51m 52.06± 0.92s
6.282 S ±18.7km 103.436 E ±14.5km
DEPTH = 33.0km (normal)
4.9mb (4 obs.) 3.6Msz (1 obs.)
SOUTHWEST OF SUMATERA (273)

KGM	8.24	359	ePc	54	07.80	15.5X
TRT	9.24	99	ePd	54	07.50	1.4
KUPT	20.33	102	eP	56	18.00	-10.3X
CHTO	25.33	350	eP	57	16.80	-0.8
	1.0s	27.50nm			4.8mb	
MTN	28.06	106	eP	57	42 00	-0.7
	0.4s	42.00nm			5.5mb	
GBA	32.51	308	P	58	25.00	2.8
WRA	32.94	117	eP	58	26.10	0.1
SHL	33.59	341	eP	58	30.50	-1.2
ASPA	34.00	124	iPd	58	46.40	11.2X
	0.3s	13.00nm				
	Z 20s	0.11um			3.6Msz	
		LR		11	59.20	
PKI	37.90	333	P	59	08.70	0.2
GUN	37.99	334	P	59	10.00	0.8
KKN	38.15	333	P	59	10.40	0.0
	0.6s	11.00nm			4.9mb	
GKN	38.62	333	P	59	14.40	0.1
NDI	42.97	325	iPc	59	50.50	0.5
BJI	47.57	13	eP	00	25.00	-1.4
	1.0s	12.00nm			4.9mb	
BUL	73.64	251	iPd	03	23.00	-1.8
TUL	145.63	28	ePKP	11	44.60	15.4X
	1.0s	9.30nm				

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

? SEP 21, 1990 15h 30m 43.06± 2.09s
31.304 S ±41.6km 68.189 W ±27.1km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.24	264	iPc	30	57.80	-1.3
CFA	0.30	188	e(P)	30	59.60	0.2
			S	31	12.00	
† RTCB	0.55	251	iPd	31	00.00	-0.6
			eS	31	11.50	
RTCV	0.63	208	e(P)	30	59.90	-1.2
RTBS	1.14	251	ePd	31	06.00	0.0
			S	31	21.70	

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

SEP 21, 1990 16h 08m 20.75± 0.23s
29.741 N ± 5.0km 79.791 E ± 4.1km
DEPTH = 33.0km (normal)
5.1mb (33 obs.)
NORTHERN INDIA (308)

NDI	2.48	246	iPc	09	06.20	6.4X
			iS	09	44.50	
GKN	4.59	111	P	09	31.00	1.2
DMN	5.13	113	P	09	38.40	0.8
KKN	5.20	111	P	09	39.00	0.6
PKI	5.39	112	P	09	41.00	-0.3
GUN	5.64	107	P	09	45.40	0.5
QUE	11.15	275	eP	11	01.10	0.0
			eS	13	04.00	
SHL	11.50	108	eP	11	20.00	14.2X
HY8	12.32	186	iPc	11	16.50	-0.3
	0.8s	114.20nm			6.1mb X	
			iS	13	29.00	
POO	12.40	207	iP	11	17.00	-0.9
BOM	12.52	212	eP	11	17.60	-1.8
			iS	13	24.30	
GBA	16.21	188	P	12	06.20	-1.4
			S	14	42.20	
MAIO	18.22	296	iPd	12	33.20	0.4
	0.7s	7.94nm			4.0mb X	
			eS	18	50.00	
CHTO	20.54	118	eP	12	59.00	-0.1
	1.0s	27.50nm			4.6mb	
LZH	21.14	66	iPd	13	03.00	-2.3
	1.5s	56.00nm			4.7mb	
			pP	13	12.50	36kmX
			sP	13	19.00	
BDT	21.53	121	eP	13	09.20	0.1
NST	23.36	122	eP	13	34.80	7.6X
NNT	25.17	128	eP	13	48.00	3.3X
BJI	31.37	61	eP	14	40.00	-0.6
	1.0s	11.00nm			4.6mb	
VRI	44.09	307	ePc	16	28.50	1.1
SUF	47.50	330	iP	16	54.20	0.0
	0.4s	14.40nm			5.3mb	
NUR	47.56	327	iP	16	54.40	-0.3
	0.8s	24.90nm			5.3mb	
SOD	48.94	336	iP	17	04.60	-0.7
KEV	49.77	339	eP	17	13.00	1.3
UPP	50.87	325	iP	17	19.90	-0.3
PRU	52.27	312	P	17	31.60	0.7
BRG	52.60	313	iPc	17	33.70	0.3
	1.0s	12.00nm			4.8mb	
HFS	52.87	325	eP	17	34.20	-1.0
	0.7s	40.50nm			5.5mb	
	Z 17s	0.26um			4.3MszX	
		LR		40	19.00	
NAO	54.32	326	P	17	44.70	-1.2
	0.8s	12.00nm			5.0mb	
CDF	57.17	311	eP	18	06.60	-0.1
BSF	57.58	310	iPc	18	09.50	-0.2
	0.7s	9.90nm			5.0mb	
HAU	57.85	311	iPc	18	11.20	-0.2
	0.8s	16.10nm			5.1mb	
SBF	57.89	306	iPc	18	12.00	0.2
	0.8s	26.85nm			5.4mb	
LPG	58.04	308	iPc	18	13.50	0.4
	0.5s	12.05nm			5.2mb	
LPL	58.05	308	iPc	18	13.60	0.5
	0.6s	32.90nm			5.6mb	
FRF	58.52	305	iPc	18	16.00	-0.1
	0.6s	7.20nm			4.9mb	
LBF	59.62	310	eP	18	23.20	-0.6
LOR	59.64	310	iPc	18	23.20	-0.7
	0.8s	8.05nm			4.9mb	
SMF	59.79	309	eP	18	24.60	-0.3
	0.9s	15.55nm			5.1mb	
SSF	59.92	310	iPc	18	25.50	-0.2
	0.9s	21.30nm			5.3mb	
AVF	60.08	310	iPc	18	26.40	-0.4
	0.6s	7.20nm			5.0mb	
BGF	60.48	309	iPc	18	29.20	-0.3
	0.5s	5.85nm			5.0mb	
MAF	60.74	309	iPc	18	31.60	0.2
	0.5s	6.20nm			5.0mb	
TCF	60.97	309	iPc	18	33.20	0.3
	0.9s	13.10nm			5.1mb	
CAF	61.40	308	eP	18	36.20	0.3
LSF	61.43	309	eP	18	35.70	-0.4
LDF	61.95	312	iPc	18	39.00	-0.5
	0.6s	16.25nm			5.3mb	
FLN	62.14	312	iPc	18	40.00	-0.8
	0.5s	5.85nm			5.0mb	
LFF	62.30	308	eP	18	42.30	0.4
	0.4s	5.75nm			5.1mb	
MFF	62.47	310	iPc	18	42.50	-0.5
	0.6s	9.00nm			5.1mb	
GRR	62.48	312	iPc	18	42.40	-0.6
	0.7s	15.45nm			5.2mb	
LPF	62.69	312	iPc	18	44.20	-0.2
	0.5s	6.55nm			5.0mb	
BCAO	62.94	259	iPc	18	47.40	0.8
	0.6s	13.00nm			5.2mb	
BUL	69.92	231	iPd	19	27.70	-3.3X
WRA	72.11	126	eP	19	44.10	0.0
INK	79.17	12	eP	20	23.00	-0.3
LKO	81.35	276	Pc	20	35.76	-0.2
	0.6s	9.50nm			5.0mb	
KIC	82.14	273	Pc	20	42.50	2.5
	0.7s	15.00nm			5.2mb	
TIC	82.25	273	Pc	20	42.96	2.4
	0.6s	14.50nm			5.2mb	
LIC	82.46	273	Pc	20	43.98	2.3
	0.8s	17.00nm			5.1mb	
YKA	87.36	7	eP	21	03.50	-1.9
	0.7s	2.00nm			4.5mb	
ZOBO	147.69	287	PKP	28	04.00	2.0
LPB	147.80	287	ePKP	28	07.00	5.1X
CNCB	147.84	286	PKP	28	05.20	3.0X

S.D. = 1.0 on 57 of 64 obs.

& SEP 21, 1990 16h 52m 33.00s
38.802 N 122.937 W
DEPTH = 5.0km (geophysicist)
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.3 (BRK).

NWRM	0.35	174	eP	52	40.50	0.5
ZSP	1.01	148	eP	52	51.50	-1.1
BRK	1.07	150	eP	52	52.60	-1.0
BKS	1.08	149	eP	52	52.20	-1.5
			iS	53	07.80	
ORV	1.35	56	eP	52	56.20	-2.1
PCC	1.37	161	eP	52	53.50	-5.2
ARN	1.83	142	eP	53	03.20	-2.1
CMB	2.15	110	eP	53	07.80	-2.2
LBFM	2.67	17	e(P)	53	22.50	4.9

9 obs. associated

? SEP 21, 1990 16h 56m 18.89± 4.77s
51.358 N ±32.5km 16.058 E ±29.6km
DEPTH = 10.0km (geophysicist)
POLAND (548)

KSP	0.54	164	iP	56	29.70	0.0
			iS	56	39.00	
BRG	1.42	251	iPg	56	44.40	-0.3
			iSg	57	14.40	
PRU	1.68	216	ePn	56	48.80	0.4
			Pg	56	58.30	
			eSn	57	06.50	
			eSg	57	14.50	
CLL	1.92	270	ePg	56	52.00	0.1
			eSg	57	19.00	
KHC	2.74	216	Pn	57	03.50	-0.2
			Pg	57	10.40	
			Sn	57	40.00	
			Sg	57	49.50	
MOX	2.90	257	ePg	57	12.00	6.1X
			iSg	57	52.00	
GRF	3.51	243	e(Pg)	57	24.00	9.5X
			eSg	58	12.30	

S.D. = 0.4 on 5 of 7 obs.

& SEP 21, 1990 16h 57m 25.75s
60.797 N 150.725 W
DEPTH = 50.9km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NKA	0.26	258	eP	57 35.77	1.1
SLKM	0.38	139	iP	57 35.40	-0.5
			eS	57 43.27	
SUA	0.67	359	eP	57 38.72	-0.7
			eS	57 49.00	
PMS	0.72	51	eP	57 39.31	-0.7
			eS	57 49.98	
SPU	0.75	301	iP	57 39.66	-0.8
			iS	57 50.97	
CRP	0.84	305	eP	57 41.40	-0.3
			eS	57 53.11	
RDT	0.86	256	iP	57 40.86	-1.0
CKL	0.88	298	iP	57 41.35	-0.8
NCG	0.92	312	eP	57 42.24	-0.5
			eS	57 55.25	
BGL	0.94	301	eP	57 42.26	-0.7
			eS	57 56.05	
SEW	0.94	137	eP	57 41.90	-0.9
			eS	57 55.44	
PWA	0.95	25	iP	57 42.74	-0.2
RSO	1.06	252	eP	57 43.74	-0.9
			eS	57 58.14	
PLRM	1.11	43	eP	57 44.30	-0.9
HOM	1.23	202	eP	57 46.81	-0.1
SKT	1.25	342	eP	57 46.50	-0.7
CNPM	1.30	192	eP	57 47.11	-0.8
GHO	1.31	41	eP	57 47.08	-1.0
SML	1.54	48	eP	57 50.09	-1.1
CUT	1.63	7	eP	57 52.00	-0.4
PDB	2.00	241	eP	57 56.85	-0.9
VZW	2.05	81	eP	57 56.31	-2.2
VLZ	2.17	79	eP	57 58.12	-1.9
KLU	2.43	71	eP	58 01.90	-2.0

24 obs. associated

SEP 21, 1990 20h 13m 16.28± 0.40s
13.291 N ± 7.4km 123.816 E ±10.3km
DEPTH = 33.0km (normal)
4.8mb (10 obs.) 3.6Msz (1 obs.)
LUZON, PHILIPPINE ISLANDS (249)

OCP	2.98	297	eP	14 31.50	29.2X
BAG	4.41	315	eP	14 22.80	0.0
DAV	6.40	164	eP	15 02.00	11.2X
SSE	17.88	353	Pc	17 24.50	0.3
	0.6s		14.00nm		4.3mb
	Z 18s		0.40um		3.9Msz
			pP	17 30.00	
			eS	20 44.00	
GUMO	20.48	87	eP	17 43.30	-10.8X
PJG	20.48	87	eP	17 43.50	-10.6X
NNT	23.48	271	eP	18 34.90	10.9X
SNG	23.61	257	eP	18 34.90	9.6X
CHTO	24.51	286	eP	18 34.80	0.7
	0.9s		8.10nm		4.3mb
MAT	26.51	27	(P)	18 59.00	6.3X
MTN	26.96	164	eP	18 56.30	-0.6
BJI	27.48	347	eP	19 01.00	-0.4
	1.3s		29.00nm		4.8mb
LZH	28.94	325	eP	19 14.50	-0.4
			pP	19 21.00	23kmX
SHL	32.40	297	iP	19 44.00	-1.7
WRA	34.61	162	eP	20 02.90	-1.7
			e	22 38.50	
OIS	37.05	155	iPc	20 25.20	0.0
ASPA	38.03	165	iPd	20 33.70	0.2
	0.8s		11.00nm		4.8mb
	Z 21s		0.11um		3.6Msz
			LR	36 33.40	
GUN	38.20	298	P	20 35.00	-0.3
	0.7s		42.00nm		5.4mb
PKI	38.52	298	P	20 37.60	-0.4
	0.6s		16.00nm		5.0mb
KKN	38.68	298	P	20 39.00	-0.2
	0.8s		26.00nm		5.1mb
DMN	38.79	298	P	20 39.80	-0.3
GKN	39.29	298	P	20 43.20	-0.9
WARB	39.33	176	eP	20 44.60	0.3
HYB	43.77	281	eP	21 22.00	1.2
GBA	45.06	276	P	21 32.40	1.2
STK	48.04	160	iPd	21 54.80	0.3
	0.7s		8.00nm		4.9mb
KEV	79.98	339	eP	25 28.00	4.6X
SOD	80.59	337	iP	25 27.20	0.5
SUF	81.78	333	eP	25 33.00	0.0
INK	82.37	21	eP	25 36.00	0.0
NUR	83.00	331	eP	25 54.00	14.7X
VRI	85.44	316	ePc	25 53.50	1.5
HFS	88.27	332	eP	26 04.70	-0.8
	0.5s		1.20nm		4.5mb
NAO	89.26	333	P	26 09.40	-0.8
	0.7s		2.40nm		4.6mb
ZOBO	168.08	106	PKP	33 24.00	2.1
	S.D. = 0.9		on 26 of 35 obs.		

% SEP 21, 1990 21h 48m 58.86± 1.39s
38.105 N ±12.1km 20.656 E ±12.2km
DEPTH = 5.0km (geophysicist)
GREECE (364)
MD 2.9 (ATH).

VLS	0.09	324	iPgd	49 00.00	-0.9
EVR	1.21	48	ePg	49 22.10	0.1
ITM	1.37	132	ePb	49 24.50	-0.1
KEK	1.74	338	ePg	49 31.20	1.3
KZN	2.36	21	ePn	49 38.50	-0.5
	S.D. = 1.2		on 5 of 5 obs.		

SEP 21, 1990 22h 46m 26.82± 1.43s
32.285 S ± 9.1km 71.336 W ±10.5km
DEPTH = 21.1 ± 6.3 km
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.74	158	iPd	46 41.00	0.0
			iS	46 54.80	
JACH	0.74	122	iPd	46 41.10	0.1
			iS	46 55.00	
IHA	0.78	199	iPd	46 41.70	0.1
			iS	46 56.20	
PEL	1.02	148	iPc	46 45.50	-0.1
			iS	47 02.40	
LCCH	1.20	189	iP	46 48.50	0.1
			iS	47 07.00	
FCH	1.36	140	eP	46 51.00	0.0
			eS	47 12.50	
TACH	1.40	166	iPc	46 51.00	-0.3
			iS	47 13.00	
PCH	1.50	153	eP	46 52.70	-0.1
RTBS	1.72	69	eP	46 55.20	-0.6
CHCH	1.74	161	iP	46 56.40	0.2
			iS	47 23.00	
RTCV	2.41	81	eP	47 06.50	0.6
	S.D. = 0.4		on 11 of 11 obs.		

? SEP 21, 1990 23h 17m 22.06± 2.14s
31.202 S ±43.1km 68.490 W ±21.9km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL	0.13	172	iPc	17 37.40	-0.4
ZON	0.38	205	eP	17 39.40	0.9
			eS	17 51.40	
CFA	0.46	152	eP	17 39.00	0.1
			S	17 50.80	
RTCV	0.66	184	e(P)	17 40.00	-0.4
RTBS	0.94	241	ePc	17 42.70	-0.2
	S.D. = 0.8		on 5 of 5 obs.		

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* SEP 21, 1990 23h 50m 02.04± 1.35s
19.139 N ±13.8km 62.845 W ± 8.2km
DEPTH = 13.0 ± 4.5 km
LEEWARD ISLANDS (92)
ML 4.2 (FDF). MD 4.1 (TRN).

CPB	1.78	147	eP	50 31.61	-1.0
SKI	1.80	177	eP	50 33.91	0.9
NEV	2.01	173	eP	50 39.00	3.0X
			S	51 03.50	
BPA	2.28	156	eP	50 39.50	-0.5
			S	51 04.50	
LPR	2.98	254	iP	50 49.80	-0.1
SEG	3.01	155	eP	50 50.00	-0.2
CSB	3.25	255	iP	50 53.80	0.0
PAG	3.29	160	eP	50 53.90	-0.4
			S	51 30.60	
SJG	3.30	252	iP	50 54.60	0.2
PORP	3.75	254	iP	51 01.00	0.1
BBL	3.83	160	eP	51 02.60	0.7
LRS	3.88	258	iP	51 02.00	-0.7
MEP	4.04	257	iP	51 04.80	-0.1
MGP	4.18	255	iP	51 06.80	-0.1
ALQ	41.57	301	e(P)	57 52.00	0.6
	S.D. = 0.6		on 14 of 15 obs.		

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* SEP 22, 1990 00h 00m 09.21± 1.46s
21.695 S ±23.7km 169.671 E ±12.0km
DEPTH = 49.8 ± 12.0 km
4.8mb (2 obs.) 4.6Msz (1 obs.)
LOYALTY ISLANDS REGION (189)

DZM	3.02	262	iPc	00 55.00	-0.8
			iS	01 30.00	
SGE	8.78	64	ePc	02 17.00	0.5
RMQ	19.68	252	ePc	04 38.20	1.1
	0.8s		58.00nm		4.9mb
CMS	23.40	240	iPc	05 18.20	3.7X
ASPA	33.01	260	eP	06 53.90	11.9X
	1.0s		9.00nm		
	Z 22s		0.28um		3.9MszX
			LR	18 50.20	
SPA	68.44	180	eP	11 08.00	0.0
	0.9s		8.18nm		4.7mb
CHG	80.04	295	eP	12 17.00	1.5
KEV	127.01	345	ePKP	19 20.00	11.4X
SUF	132.13	338	ePKP	19 18.00	-0.5
NUR	134.14	337	iPKP	19 22.80	0.4
	0.8s		22.00nm		
APO	137.61	342	ePKP	19 27.40	-1.7
	1.0s		8.90nm		
NAO	138.19	345	PKP	19 30.00	-0.1
	1.1s		5.10nm		
BRG	145.23	333	iPKP	19 41.50	-1.3
	0.8s		30.00nm		
SRO	145.25	325	ePKP	19 42.90	0.0
CLL	145.30	334	iPKP	19 41.80	-1.0
	1.0s		31.00nm		
PRU	145.62	331	PKPc	19 43.00	-0.5
ZST	145.63	327	iPKP	19 43.80	0.3
EKA	145.98	353	PKPd	19 43.30	-0.6
	0.9s		20.30nm		
MOX	146.37	335	ePKP	19 46.00	1.3
KHC	146.68	331	iPKPc	19 46.50	1.2
	1.0s		10.50nm		
BCAO	147.17	243	iPKPd	19 50.00	2.9X
	0.7s		7.00nm		
GRF	147.27	334	ePKPc	19 48.50	2.3X
	Z 18s		0.10um		4.6Msz
MEM	148.42	340	PKP	19 51.30	3.4X
VOY	148.71	327	ePKP	19 50.30	1.6X
WATA	148.90	331	iPKPc	19 52.00	3.0X
SNF	149.03	342	PKP	19 52.20	3.3X
SOTA	149.16	331	iPKPc	19 52.80	3.4X
	0.8s		18.50nm		
			i	20 03.10	
DOU	149.31	341	PKP	19 52.90	3.6X
CDF	149.85	336	ePKP	19 54.00	3.7X
	0.9s		16.40nm		
BSF	150.51	336	ePKP	19 55.60	4.2X
	0.9s		22.95nm		
HAU	150.53	337	ePKP	19 55.60	4.3X
	0.8s		26.85nm		
FLN	151.87	346	ePKP	19 58.40	5.2X
	0.7s		28.65nm		
LDF	151.95	346	ePKP	19 58.60	5.3X
	0.9s		19.65nm		
LOR	152.03	339	ePKP	19 59.00	5.5X
	0.8s		14.10nm		
LBF	152.23	339	ePKP	19 59.50	5.6X
	0.9s		9.85nm		
GRR	152.31	346	ePKP	19 59.60	5.7X
	0.7s		13.25nm		
SSF	152.32	339	ePKP	19 59.90	5.9X
	0.9s		17.20nm		
LPL	152.43	334	ePKP	20 00.70	6.2X
	0.8s		10.05nm		
LPG	152.44	333	ePKP	20 00.80	6.2X
	0.8s		12.10nm		
SMF	152.58	339	ePKP	20 00.20	5.9X
	1.0s		13.00nm		
AVF	152.61	339	ePKP	20 00.00	5.7X
	0.9s		8.20nm		
LPF	152.68	346	ePKP	20 00.40	6.0X
	0.7s		20.95nm		
BGF	152.98	340	ePKP	20 01.10	6.2X

0 8s 14 80nm
MAF 153 37 340 ePKP 20 02.10 6.6X
TCF 153.42 340 ePKP 20 02.20 6.7X
1.0s 11.00nm
LSF 153.67 341 ePKP 20 02.40 6.5X
0.8s 8.75nm
MFF 153.81 344 ePKP 20 02.80 6.8X
0.9s 8.20nm
S.D. = 1.0 on 17 of 47 obs.

• SEP 22, 1990 00h 21m 12.84± 3.62s
19.212 N ±35.5km 62.815 W ±18.9km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)

CPB 1.82 149 eP 21 41.98 -0.4
SKI 1.87 178 eP 21 43.11 0.0
NEV 2.08 174 eP 21 45.82 -0.3
BPA 2.34 157 eP 21 50.48 0.7
LPR 3.03 253 iP 21 59.50 -0.2
CSB 3.30 254 iP 22 03.20 -0.2
PORP 3.80 253 iP 22 10.80 0.3
MGP 4.23 254 iP 22 16.70 0.1
S.D. = 0.4 on 8 of 8 obs.

? SEP 22, 1990 01h 44m 59.10±10.47s
43.974 N ±31.7km 115.348 W ±81.2km
DEPTH = 10.0km (geophysicist)
WESTERN IDAHO (33)
ML 3.0 (BUT).

HPI 1.65 98 eP 45 28.40 -0.1
MCMT 1.98 64 ePc 45 32.60 -0.7
LTMT 2.39 76 eP 45 39.20 0.0
HBMT 2.66 46 ePn 45 43.50 0.4
BGMT 2.68 61 ePn 45 43.90 0.7
LRM 2.77 47 ePn 45 44.70 0.2
BUT 2.84 43 (P) 45 45.00 -0.5
eSg 46 18.70
IMW 3.19 90 eP 45 50.70 0.2
MEMT 3.52 61 ePn 45 55.00 -0.1
S.D. = 0.5 on 9 of 9 obs.

• SEP 22, 1990 02h 00m 16.53± 1.32s
4.507 S ± 9.1km 149.388 E ±14.6km
DEPTH = 72.3 ± 17.2 km
4.7mb (5 obs.)
BISMARCK SEA (203)

RAB 2.79 84 iPc 01 00.00 0.2
1.0s 1280.00nm
iS 01 36.00
LAT 3.19 228 eP 01 30.00 24.6X
eS 02 31.00
PMG 5.35 204 eP 01 35.00 -0.7
1.0s 110.00nm 5.1mb
eS 02 34.00
GUA 18.47 346 eP 04 29.50 0.2
GUMO 18.53 346 eP 04 30.00 0.1
OIS 18.58 210 eP 04 31.60 1.1
WRA 21.22 222 eP 05 03.40 5.0X
RMQ 21.87 182 ePd 04 55.00 -9.8X
0.9s 56.00nm 5.0mb
ASPA 24.21 217 iPc 05 33.50 5.8X
0.8s 17.00nm 4.5mb
Z 22s 0.20um 3.5MszX
LR 14 03.10
STK 28.20 194 iPd 06 03.10 -1.3
1.0s 6.00nm 4.2mb
SPA 85.52 180 eP 12 49.30 1.6
1.0s 5.50nm 4.6mb
INK 89.41 21 eP 13 05.00 -1.2
S.D. = 1.4 on 8 of 12 obs.

• SEP 22, 1990 02h 09m 27.74± 0.98s
33.022 S ±11.7km 70.972 W ±11.0km
DEPTH = 96.6 ± 12.2 km
CHILE-ARGENTINA BORDER REGION (127)

ROCH 0.06 326 iPc 09 40.70 -1.2
iS 09 50.00
PEL 0.27 117 iPc 09 41.00 -1.0
JACH 0.47 43 iPc 09 41.60 -1.7
iS 09 51.50
SAN 0.50 149 iPd 09 43.00 -0.4
iS 09 53.10
IHA 0.56 269 eP 09 45.00 1.2
iS 09 57.60
FCH 0.65 118 iPd 09 44.20 -0.8
iS 09 55.20
LCCH 0.67 228 iP 09 46.00 1.2
iS 09 59.20
PCH 0.71 147 iPd 09 44.60 -0.7
iS 09 55.70
CHCH 0.95 164 iPd 09 47.80 0.1
iS 10 02.40
LNV 1.00 201 iPc 09 49.00 0.9
i 10 03.00
RTBS 1.87 44 ePd 10 00.80 1.9
RTCV 2.36 61 ePc 10 06.10 0.5
RTCB 2.39 51 eP 10 08.00 1.9
eS 10 36.30
ZON 2.44 53 eP 10 07.40 0.8
CFA 2.71 59 ePc 10 10.50 0.2
e 38 25.00
RTLL 2.71 52 iPc 10 10.20 -0.1
CNCB 16.37 10 P 13 15.00 1.4
ZOBO 16.88 9 eP 13 17.00 -3.0
i 13 50.00
SIV 19.18 30 P 13 45.20 -1.3
S.D. = 1.4 on 19 of 19 obs.

• SEP 22, 1990 02h 46m 01.22± 0.76s
42.538 N ±14.0km 46.449 E ±14.4km
DEPTH = 33.0km (normal)
4.3mb (5 obs.)
EASTERN CAUCASUS (337)

TAB 4.47 181 eP 47 09.00 0.5
MAIO 11.85 117 iPc 48 49.50 -1.4
MLR 15.04 288 eP 49 10.00 -23.1X
SPC 19.36 299 eP 50 33.80 6.7X
e 50 47.10
KRA 19.73 302 eP 50 29.70 -1.1
e 50 37.70
SRO 20.46 295 eP 50 45.20 6.7X
ZST 21.30 296 e(P) 50 49.90 2.8X
e 50 55.90
KSP 22.17 302 eP 51 06.50 10.8X
NUR 22.34 331 eP 51 05.00 7.7X
SUF 23.47 336 eP 51 12.00 3.7X
CLL 24.29 303 e(P) 51 27.00 10.6X
HFS 26.59 323 eP 51 38.30 0.4
0.6s 1.50nm 3.8mb
Z 16s 0.09um 3.4MszX
LR 02 22.00
SOD 27.10 343 iP 52 02.00 19.5X
NAO 28.16 323 P 51 52.40 0.2
1.2s 7.80nm 4.3mb
KEV 29.06 346 eP 52 31.00 30.8X
GBA 39.33 128 Pd 53 28.70 -0.3
1.0s 3.70nm 4.1mb
BCAO 45.34 221 ePd 54 27.10 9.1X
0.5s 3.00nm 4.5mb
id 54 32.60
CHTO 50.05 101 iP 54 56.50 1.7
0.9s 4.26nm 4.5mb
S.D. = 1.3 on 7 of 18 obs.

• SEP 22, 1990 02h 49m 54.32± 2.15s
13.706 N ±20.4km 90.778 W ±22.7km
DEPTH = 94.4 ± 14.3 km
4.1mb (2 obs.)
NEAR COAST OF GUATEMALA (71)

YPE 1.14 69 iPd 50 16.20 -0.3
TME 1.42 77 iPd 50 19.90 0.2
VSS 1.49 88 eP 50 20.60 -0.1
LFU 1.62 88 eP 50 22.50 0.2
OZA 1.74 96 iPd 50 23.20 -0.6
VSM 2.45 96 eP 50 34.00 0.5
UYO 20.64 351 eP 54 28.40 0.1
MEO 22.14 343 iPd 54 42.90 -0.4
TUL 22.56 349 eP 55 01.70 14.3X
0.8s 5.50nm
ALQ 25.45 329 eP 55 14.30 -1.0
0.7s 2.57nm 3.8mb
LRM 36.88 335 eP 56 56.90 1.3
SIV 41.63 134 P 57 35.60 0.6
PNT 42.68 332 eP 57 44.00 0.8
0.6s 4.00nm 4.4mb
SCH 45.10 19 eP 58 03.00 0.4
LKO 83.16 82 P 02 09.78 -2.0
KIC 84.68 85 P 02 20.60 1.1
SSE 125.90 326 ePdiff05 25.00 -0.9
Z 14s 0.40um 5.2MszX
N 12s 0.50um
LZH 128.59 345 Pdiff 05 29.00 -9.0X
Lg 07 50.00
GBA 150.46 24 PKPc 09 38.40 6.7X
0.8s 7.40nm
NANU 153.53 247 iPKPc 09 25.90 -10.0X
S.D. = 0.9 on 16 of 20 obs.

? SEP 22, 1990 04h 12m 20.06±11.65s
40.153 N ±91.7km 20.369 E ±18.2km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)

TPE 0.31 298 iPgc 12 19.00 -7.5X
KBN 0.58 36 ePg 12 32.20 0.4
BERA 0.64 330 ePg 12 25.00 -7.8X
OHR 1.01 19 iPn 12 39.00 -0.2
iSg 12 58.50
KKS 1.92 1 ePn 12 54.30 1.2
SDA 1.97 341 ePn 12 54.30 0.5
SKO 1.99 24 ePn 12 53.50 -0.6
i 13 24.50
BCI 2.22 354 ePn 12 55.80 -1.7
S.D. = 1.3 on 6 of 8 obs.

? SEP 22, 1990 05h 47m 47.41± 0.99s
17.000 N ±12.1km 121.108 E ±24.2km
DEPTH = 33.0km (normal)
4.7mb (3 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG 0.77 221 iPc+ 48 02.00 0.0
iS 48 16.00
OCP 2.35 181 eP 48 33.80 9.3X
GUMO 23.16 95 eP 53 42.00 49.9X
BJI 23.35 350 eP 52 53.50 -0.2
1.4s 22.00nm 4.5mb
Z 24s 0.32um 3.7MszX
eS 57 00.00
WRA 38.95 160 eP 55 12.20 0.0
SLL 83.82 332 eP 00 13.80 -0.9
1.4s 30.70nm 5.3mb
NAO 84.79 333 P 00 20.70 1.2
1.0s 4.10nm 4.6mb
S.D. = 1.1 on 5 of 7 obs.

SEP 22, 1990 07h 13m 01.42± 1.08s
6.223 S ± 5.0km 124.287 E ± 6.5km
DEPTH = 35.5 ± 11.0 km
5.2mb (13 obs.) 4.1Msz (2 obs.)
BANDA SEA (280)

KUPT 3.96 190 eP 13 55.00 -6.3X
AAI 4.64 57 ePd 14 11.30 0.4
eS 15 10.50
MKS 4.90 282 iPd 14 15.00 0.3
MTN 9.42 135 eP 15 16.30 -1.6
KNA 10.44 155 iPc 15 28.60 -3.2X
TRT 11.66 262 ePc 15 48.90 0.4
KKM 14.61 326 ePd 16 28.20 0.5
MBL 15.46 196 eP 16 37.00 -1.7
0.6s 27.00nm 4.6mb
WRA 16.78 145 eP 16 50.00 -5.5X
eS 19 48.10
NANU 18.31 207 eP 17 16.70 2.2
ASPA 19.66 153 iPc 17 29.00 -1.5
0.8s 204.00nm 5.5mb
Z 18s 1.46um 4.4Msz
eS 20 56.70
LR 25 42.30
WARB 19.98 174 eP 17 33.00 -0.8
OIS 20.59 135 iPd 17 39.80 -0.4
1.2s 261.00nm 5.5mb
MEKA 21.01 194 iPd 17 44.10 -0.3
KGM 22.48 291 ePc 18 02.00 2.8X
PMG 22.87 99 eP 18 08.00 4.9X
MRWA 24.18 198 iPc 18 15.00 -0.6
0.5s 11.00nm 4.7mb
FORR 24.76 172 eP 18 20.80 -0.4
BAL 25.28 195 eP 18 26.00 -0.2
KLB 25.97 193 eP 18 32.00 -0.6
MUN 26.71 195 eP 18 38.80 -0.7
PSI 26.83 289 ePc 18 41.90 1.2
0.7s 38.70nm 5.1mb
NWAO 27.37 193 eP 18 44.80 -0.6

22d 07h

	Z 20s	0.40um			4.0Msz	
	N 20s	0.30um				
	E 20s	0.50um				
RKG	28.52	193	eP	19 00.00	4.2X	
STK	30.22	150	iPd	19 11.60	0.5	
	1.0s	34.00nm			5.1mb	
			iS	25 19.80		
ADE	31.55	157	iPd	19 23.70	0.9	
	1.0s	46.00nm			5.3mb	
BDT	34.18	313	eP	19 42.90	-2.8X	
BFD	35.02	154	eP	19 55.00	2.2	
			i	21 15.30		
CHG	35.26	315	eP	19 55.10	0.1	
BWA	35.84	145	eP	20 03.80	3.9X	
TOO	36.69	151	eP	20 09.00	2.0	
CAN	36.82	145	eP	20 10.50	2.4	
SSE	37.22	356	P	20 11.50	0.1	
	0.8s	8.00nm			4.6mb	
			pP	20 22.00	36kmX	
			sP	20 30.00		
			S	26 06.00		
KMI	37.55	327	eP	20 26.00	11.4X	
MAT	44.50	16	eP	21 07.00	-4.3X	
SHL	44.61	316	eP	21 12.00	-0.6	
LZH	46.26	337	iPc	21 27.00	1.5	
			pP	21 37.00	33kmX	
			sP	21 42.50		
BJI	46.64	351	eP	21 27.50	-0.7	
	1.0s	8.00nm			4.6mb	
	Z 20s	0.30um			4.2Msz	
GUN	50.26	314	P	21 56.60	-0.4	
	0.8s	83.00nm			5.8mb	
PKI	50.40	314	P	21 57.40	-0.6	
	0.6s	28.00nm			5.4mb	
GBA	50.51	293	P	21 57.80	-0.8	
KKN	50.62	314	P	21 59.00	-0.5	
DMN	50.64	314	P	21 59.40	-0.3	
	0.8s	61.00nm			5.6mb	
HYB	50.91	298	eP	22 02.00	0.3	
GKN	51.20	314	P	22 03.00	-0.9	
MAW	73.64	201	iP	24 33.70	0.9	
SPA	83.82	180	iPd	25 29.60	1.1	
	1.1s	19.05nm			5.1mb	
			i	25 47.10		
ALQ	125.33	51	ePKP	32 00.00	-1.0	
PPD	151.59	189	ePKP	32 54.80	6.9X	
CNCB	154.10	152	PKP	32 55.00	2.7X	
ZOBO	154.50	151	ePKP	32 51.00	-1.8	
SIV	157.30	167	ePKP	33 04.00	8.2X	
			i	33 27.80		

S.D. = 1.1 on 39 of 52 obs.

& SEP 22, 1990 07h 51m 23.67s
61.930 N 149.137 W
DEPTH = 45.4km
SOUTHERN ALASKA (2)
<AGS-P>.

GHO	0.19	147	iP	51 31.07	-0.5	
			eS	51 37.65		
PLRM	0.34	180	iP	51 31.88	-0.9	
			iS	51 39.30		
SML	0.40	107	iP	51 32.91	-0.7	
			eS	51 41.28		
PWA	0.45	232	iP	51 33.85	-0.2	
			iS	51 41.82		
CUT	0.71	312	iP	51 36 60	-0.9	
			iS	51 46 59		
PMS	0.72	197	iP	51 37.12	-0.5	
			iS	51 47.73		
SCM	0.86	96	eP	51 38.80	-0.9	
			eS	51 50.86		
SUA	0.90	239	eP	51 39.70	-0.5	
			eS	51 53.32		
HUR	1.08	348	eP	51 41.79	-0.8	
			eS	51 56.06		
SKT	1.13	274	iP	51 42.50	-0.9	
			iS	51 57.58		
TOA	1.41	82	iP	51 47.54	0.2	
CGLM	1.51	247	eP	51 47.96	-0.8	
VZW	1.52	124	eP	51 48.20	-0.6	
			eS	52 08.47		
SLKM	1.52	201	eP	51 48.59	-0.3	
NCG	1.53	251	eP	51 49.01	-0.1	
NKA	1.56	221	eP	51 51.61	2.2	
VLZ	1.56	120	iP	51 48.52	-0.9	
SPU	1.59	243	eP	51 49.66	-0.1	
CRP	1.59	247	eP	51 50.25	0.3	
KLU	1.59	105	iP	51 49.29	-0.7	
BGL	1.69	248	eP	51 51.65	0.3	
CKL	1.70	246	eP	51 51.20	-0.3	
MCK	1.81	3	eP	51 52.49	-0.5	
SEW	1.84	185	eP	51 52.88	-0.4	
RDT	2.09	231	eP	51 56.57	-0.3	
RSO	2.29	232	eP	52 00.14	0.2	
GLB	2.59	99	eP	52 03.07	-1.0	
WRH	2.60	10	eP	52 02.71	-1.4	
CNPM	2.62	204	eP	52 04.66	0.1	
HDA	2.68	21	eP	52 03.79	-1.5	
CCB	2.79	12	eP	52 05.28	-1.6	
TGL	3.26	108	eP	52 11.89	-1.8	

32 obs. associated

• SEP 22, 1990 08h 18m 15.56± 1.22s
21.506 S ± 8.5km 70.724 W ±21.0km
DEPTH = 33.0km (normal)
NEAR COAST OF NORTHERN CHILE (122)

ANT	2.21	173	eP	18 50.50	-0.1	
ARE	5.07	352	iPc	19 32.00	0.4	
			eS	20 27.00		
CNCB	5.34	29	P	19 35.00	-0.6	
ZOBO	5.76	26	P	19 41.00	-0.6	
	Z 24s	0.09um				
			LR	35 16.00		
CCH	5.96	47	eP	19 45.00	0.9	

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

SEP 22, 1990 08h 52m 36.90± 0.48s
50.008 N ± 7.6km 178.051 W ± 6.3km
DEPTH = 25.5km (2 depth phases)
4.7mb (12 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)

ADK	2.07	24	ePc	53 10.30	-0.3	
			eS	53 36.70		
SMY	5.62	302	eP	54 02.90	2.0	
SDN	11.91	57	eP	55 23.70	-4.1X	
SVW	16.76	40	eP	56 31.20	-0.1	
			i	56 35.90		
KDC	16.86	53	eP	56 34.40	1.9	
	0.8s	23.45nm			4.4mb	
TTA	17.64	35	eP	56 42.50	0.2	
PMR	19.77	43	P	57 07.20	-0.4	
IMA	20.40	29	eP	57 12.00	-2.3	
	1.1s	57.20nm			4.9mb	
			i	57 17.20		
TOA	21.27	43	eP	57 25.90	2.7X	
FBA	21.76	35	eP	57 28.10	0.1	
INK	28.33	33	ePd	58 30.70	0.6	
GMW	35.80	72	eP	59 36.00	0.2	
PNT	36.99	68	eP	59 46.00	0.2	
EDM	39.08	60	eP	00 02.50	-0.8	
	0.7s	37.00nm			5.2mb	
WDC	39.35	82	eP	00 06.70	1.1	
LBFM	39.35	81	eP	00 06.00	0.2	
			epP	00 14.30	28km	
MIN	40.07	82	eP	00 12.70	1.0	
ORV	40.58	83	eP	00 16.50	0.8	
BRK	41.05	85	eP	00 20.50	0.9	
SES	41.56	63	eP	00 23.00	-0.7	
GCC	41.72	86	eP	00 25.20	0.2	
MHC	41.76	85	eP	00 26.80	1.2	
ARN	41.83	85	eP	00 26.80	0.8	
CMB	42.16	84	eP	00 30.20	1.4	
PRS	42.54	86	eP	00 32.20	0.4	
FRI	43.21	85	eP	00 38.00	0.7	
TNP	44.16	82	eP	00 45.00	-0.2	
FFC	44.57	53	eP	00 42.00	-6.1X	
	1.1s	13.00nm			4.7mb	
IMW	44.82	71	eP	00 50.50	-0.2	
DUG	45.72	76	eP	00 57.00	-0.6	
SBB	45.83	86	eP	00 59.00	0.6	
GSC	46.10	84	eP	01 01.00	0.4	
BW06	46.28	71	eP	01 00.50	-1.6	
	1.0s	12.50nm			4.8mb	
RVR	46.55	86	eP	01 04.00	-0.1	
DAU	46.57	75	eP	01 05.00	0.5	
PLM	47.29	86	eP	01 10.00	-0.1	
TPC	47.33	85	eP	01 09.00	-1.3	
GLA	48.79	85	eP	01 21.50	-0.1	
			epP	01 28.40	23km	
GOL	50.63	72	eP	01 35.00	-1.0	
	1.0s	12.50nm			4.8mb	
ANMO	52.92	78	eP	01 52.40	-0.7	
	1.0s	7.50nm			4.6mb	
ALQ	52.92	78	eP	01 52.00	-1.2	
	1.3s	10.10nm			4.6mb	
MEO	57.93	73	eP	02 28.60	-0.5	
SIO	58.69	70	eP	02 33.90	-0.5	
TUL	58.89	70	eP	02 35.00	-0.8	
	0.9s	5.90nm			4.7mb	
NUR	68.32	348	eP	03 52.00	14.6X	
NAO	69.29	355	P	03 43.60	0.3	
	0.9s	4.00nm			4.5mb	
SLL	69.49	354	eP	03 40.30	-4.3X	
	0.5s	1.40nm			4.3mb	
SHL	70.90	287	iP	03 53.00	-0.9	
GUN	72.82	293	P	04 00.00	-5.6X	
KHC	80.74	352	eP	05 02.00	13.0X	
STK	89.04	213	eP	05 30.00	-0.5	
	1.8s	43.00nm			5.5mb	
MAW	145.67	216	iPKPc	12 12.40	-0.7	

S.D. = 0.9 on 45 of 52 obs.

% SEP 22, 1990 10h 05m 25.39± 0.98s
38.709 N ± 7.0km 15.249 E ±11.8km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MSI	0.56	154	P	05 36.80	0.1	
			eSg	05 44.50		
ATN	0.57	163	Pd	05 37.00	0.0	
			eSg	05 44.60		
MNO	0.89	209	P	05 42.60	0.0	
			eSg	05 52.10		
SOI	0.90	135	P	05 42.50	-0.1	
			eSg	05 56.30		
MGR	1.45	9	Pd	05 51.60	0.0	
			eSg	06 10.10		

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

• SEP 22, 1990 11h 24m 43.35± 3.64s
19.210 N ±36.1km 62.757 W ±19.5km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 4.2 (FDF).

CPB	1.79	150	eP	25 11.47	-1.0	
SKI	1.87	179	eP	25 14.46	0.9	
NEV	2.07	175	eP	25 14.74	-1.7	
BPA	2.32	158	eP	25 21.47	1.5	
SEG	3.04	157	eP	25 30.52	0.3	
LPR	3.08	254	iP	25 31.00	0.1	
PAG	3.33	162	eP	25 34.50	0.1	
			S	26 12.20		
DOG	3.34	161	eP	25 34.50	-0.1	
CSB	3.35	255	iP	25 34.30	-0.4	
PORP	3.85	253	iP	25 42.30	0.5	
BBL	3.86	161	eP	25 41.90	-0.1	
LRS	3.98	257	iP	25 43.20	-0.4	
MEP	4.14	256	iP	25 46.00	0.1	
MGP	4.28	254	iP	25 48.00	0.2	

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

• SEP 22, 1990 11h 46m 07.56± 1.25s
5.299 S ±13.3km 151.637 E ±20.5km
DEPTH = 117.5 ± 10.8 km
4.4mb (3 obs.)
NEW BRITAIN REGION (192)

RAB	1.22	26	iPc	46 31.80	-0.2	
			iS	46 50.00		
LAT	4.80	254	eP	47 19.00	0.1	
PMG	6.04	227	eP	47 46.00	10.2X	
	0.9s	43.70nm				
GUA	19.87	340	eP	50 32.80	0.9	
	0.8s	83.58nm			5.1mb	
GUMO	19.93	340	eP	50 32.30	-0.2	
MTN	21.58	248	eP	50 49.00	-0.1	
WRA	22.25	228	eP	50 55.90	0.2	
ASPA	25.01	221	eP	51 23.20	1.0	
	0.7s	9.00nm			4.3mb	
MBL	34.63	240	eP	52 46.50	-1.1	
GBA	75.99	285	Pd	57 43.30	-0.6	
	0.8s	2.80nm			4.1mb	

S.D. = 0.8 on 9 of 10 obs.

• SEP 22, 1990 13h 36m 09.92± 0.99s
2.563 S ±13.9km 121.860 E ±13.0km
DEPTH = 33.0km (normal)

4.2mb (1 obs.)
SULAWESI (268)

MKS	3.56	222	iPc	37 04.30	0.2
			i(S)	37 55.00	
WRA	21.14	146	eP	40 51.70	-2.9X
IPM	21.99	289	ePd	41 06.90	3.8X
PSI	23.51	283	ePc	41 17.60	-0.4
ASPA	24.00	152	eP	41 22.70	0.0
	0.9s		7.00nm		4.2mb
OIS	24.89	137	iPd	41 31.30	0.0
CHG	30.98	314	eP	42 27.00	0.3

S.D. = 0.4 on 5 of 7 obs.

SEP 22, 1990 14h 02m 24.88± 1.55s
32.836 S ± 9.6km 70.168 W ±10.0km
DEPTH = 116.5 ± 20.4 km
CHILE-ARGENTINA BORDER REGION (127)

JACH	0.39	293	iPd	02 41.60	-0.6
			iS	02 54.00	
PEL	0.53	235	iPd	02 43.00	0.0
			iS	02 55.50	
ROCH	0.72	259	iPc	02 44.30	-0.3
			iS	02 58.90	
SAN	0.74	214	iPc	02 44.70	0.2
			iS	02 59.10	
PCH	0.83	200	iPd	02 45.50	0.1
			iS	03 01.00	
CHCH	1.17	200	iPd	02 49.30	0.6
IHA	1.25	261	eP	02 50.00	0.4
			iS	03 11.50	
RTBS	1.32	28	ePd	02 51.30	1.0
LCCH	1.34	241	iPc	02 50.50	0.0
			iS	03 09.00	
LNV	1.53	223	iPc	02 52.10	-0.6
			iS	03 12.50	
RTCV	1.69	55	ePd	02 54.50	-0.3
CFA	2.04	54	eP	02 59.00	-0.2
RTLL	2.08	44	ePd	02 59.50	-0.2
			eS	03 25.20	

S.D. = 0.5 on 13 of 13 obs.

& SEP 22, 1990 14h 13m 27.10s
60.700 N 151.870 W
DEPTH = 76.9km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

RDT	0.29	245	iP	13 38.70	-0.6
NKA	0.31	82	iP	13 40.67	1.4
RSO	0.50	242	iP	13 40.41	-0.5
			eS	13 50.98	
CKL	0.55	336	iP	13 40.78	-0.5
			eS	13 51.73	
CRP	0.59	346	eP	13 41.37	-0.4
			eS	13 52.85	
BGL	0.62	336	eP	13 41.44	-0.6
SUA	0.94	35	iP	13 45.16	-0.5
			eS	13 59.40	
HOM	1.05	174	eP	13 46.55	-0.3
CNPM	1.22	165	eP	13 47.99	-1.1
OPT	1.25	213	iP	13 48.78	-0.7
PMS	1.25	63	eP	13 48.73	-0.7
SKT	1.30	7	eP	13 49.14	-0.9
SEW	1.34	115	eP	13 49.37	-1.2
PWA	1.36	44	eP	13 50.79	0.0
PDB	1.48	233	iP	13 50.90	-1.5
			eS	14 09.66	
AUE	1.54	210	eP	13 51.88	-1.4
PLRM	1.60	55	eP	13 52.29	-1.7
GHO	1.79	52	P	13 55.06	-1.6
CUT	1.87	23	eP	13 56.48	-1.2
MCNL	1.96	220	eP	13 57.56	-1.4
CDD	1.99	208	eP	13 58.22	-1.1
SML	2.04	55	eP	13 58.25	-1.8
VZW	2.62	80	eP	14 04.96	-3.2
VLZ	2.74	78	eP	14 06.77	-2.9
KLU	3.00	72	eP	14 09.93	-3.4

25 obs. associated

? SEP 22, 1990 15h 55m 04.70± 2.07s
5.151 S ±27.2km 152.126 E ±42.9km
DEPTH = 92.2 ± 17.3 km
4.7mb (1 obs.)
NEW BRITAIN REGION (192)

RAB	0.95	3	iPd-	55 24.30	0.0
			iS	55 40.00	
PMG	6.50	229	eP	56 39.50	0.0
	0.8s		52.24nm		5.0mb X
			eS	57 50.00	
OIS	19.56	217	iPc	59 28.00	0.1
MTN	22.09	248	eP	59 53.70	0.2
WRA	22.71	228	eP	59 58.80	-0.8
ASPA	25.44	222	eP	00 26.30	0.6
	0.5s		13.00nm		4.7mb
WARB	32.11	227	eP	01 25.20	-0.2

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

? SEP 22, 1990 18h 21m 49.88± 0.79s
13.414 N ± 8.6km 144.064 E ±36.7km
DEPTH = 133.0 ± 22.8 km
4.6mb (3 obs.)
MARIANA ISLANDS (216)

GUMO	0.80	77	iPc	22 11.20	-0.4
GUA	0.83	81	iPc	22 12.20	0.3
			eS	22 27.20	
MAT	23.62	348	eP	26 50.00	0.2
WRA	34.50	196	eP	28 26.00	-1.2
BJI	36.10	322	eP	28 41.00	0.5
	0.9s		5.00nm		4.3mb
MBL	41.80	215	eP	29 28.30	0.3
WARB	42.85	203	eP	29 37.20	0.7
NANU	45.39	218	eP	29 57.50	0.7
	0.4s		5.00nm		4.6mb
GUN	55.85	295	P	31 16.40	-0.1
PKI	56.26	294	P	31 19.00	-0.3
KKN	56.38	295	P	31 19.80	-0.3
DMN	56.53	294	P	31 21.20	0.0
GKN	56.96	295	P	31 23.40	-0.6
	0.4s		10.00nm		5.1mb
HYB	63.02	283	eP	32 05.50	0.2
ZOBO	148.77	99	PKP	41 24.80	4.2X
CNCB	148.90	100	PKP	41 25.00	4.2X

S.D. = 0.6 on 14 of 16 obs.

& SEP 22, 1990 18h 44m 12.34s
57.490 N 152.173 W
DEPTH = 42.9km
KODIAK ISLAND REGION (13)
<AGS-P>.

KDC	0.31	327	iP	44 20.42	-0.5
			iS	44 26.79	
CDD	1.64	332	eP	44 38.18	-1.0
AUI	1.96	341	eP	44 42.59	-1.2
AUE	1.98	342	eP	44 43.11	-0.8
XLV	1.98	7	eP	44 43.44	-0.6
AUH	1.99	341	eP	44 43.27	-1.0
MCNL	2.05	327	eP	44 43.06	-1.9
CNPM	2.10	13	iP	44 44.63	-1.1
HOM	2.19	7	eP	44 46.35	-0.7
OPT	2.24	346	eP	44 46.61	-1.1
			eS	45 12.42	
PDB	2.54	336	eP	44 49.63	-2.3
SEW	2.98	27	eP	44 55.43	-2.8
RSO	3.00	354	eP	44 56.59	-2.1
RDT	3.10	358	iP	44 57.55	-2.4
SPU	3.70	1	eP	45 05.78	-2.8
BGL	3.79	358	eP	45 07.22	-2.6
CRP	3.79	0	eP	45 07.57	-2.3
CGLM	3.83	1	eP	45 08.33	-2.1
NCG	3.93	0	eP	45 09.26	-2.5
PMS	4.00	18	eP	45 10.00	-2.7
SVW	4.04	335	eP	45 10.30	-3.0
PLRM	4.40	19	eP	45 14.71	-3.6
VZW	4.59	36	eP	45 17.54	-3.6
VLZ	4.72	37	eP	45 20.40	-2.4
SML	4.75	23	eP	45 20.38	-2.9
KLU	5.12	36	eP	45 25.94	-2.7

26 obs. associated

% SEP 22, 1990 19h 42m 57.95± 1.08s
46.603 N ±16.8km 1.100 E ± 7.0km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.1 (LDG).

LSF	0.46	140	Pg	43 07.10	-0.2
			Sg	43 12.40	
TCF	0.83	112	Pg	43 14.20	0.2
			Sg	43 24.20	
MFF	0.86	270	Pg	43 14.50	0.0
			Sg	43 26.60	
MAF	1.08	110	Pg	43 18.80	0.5
			Sg	43 32.20	
BGF	1.21	92	Pg	43 20.00	-0.4
			Sg	43 36.40	

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

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* SEP 22, 1990 20h 47m 25.10± 2.95s
43.792 N ±17.0km 126.325 W ±17.9km
DEPTH = 10.0km (geophysicist)
3.3mb (1 obs.)
OFF COAST OF OREGON (30)

GROR	2.46	50	P	48 05.88	-0.1
KMOR	2.74	47	P	48 09.45	-0.5
NLO	3.07	41	P	48 14.76	0.2
GT2	3.21	63	P	48 16.96	0.4
TCO	3.43	83	P	48 18.55	-1.3
BMW	3.46	38	P	48 19.62	-0.6
RVW	3.47	46	P	48 20.45	0.3
VLMM	3.52	59	P	48 21.44	0.4
TDH	3.57	64	P	48 22.17	0.4
ONR	3.57	29	P	48 20.91	-0.7
LVP	3.59	49	P	48 22.51	0.4
VBEM	3.62	68	P	48 22.37	-0.2
MTMW	3.68	51	P	48 23.46	0.1
FL2	3.70	48	P	48 24.21	0.5
VLL	3.71	62	P	48 24.25	0.4
SHW	3.76	49	P	48 25.16	0.6
ERK	3.78	47	P	48 25.00	0.2
CZM	3.78	44	P	48 24.60	-0.1
HSR	3.78	50	P	48 25.59	0.7
VFP	3.79	65	P	48 25.03	0.0
REMW	3.80	49	P	48 25.87	0.7
STD	3.80	49	P	48 25.32	0.3
YEL	3.80	49	P	48 26.53	1.4
ESD	3.81	49	P	48 25.88	0.6
CDFW	3.82	51	P	48 25.48	0.2
APM	3.84	58	P	48 25.86	0.3
SOSW	3.85	49	P	48 26.31	0.6
APW	3.86	41	P	48 25.77	-0.1
TDL	3.87	47	P	48 26.33	0.2
CPW	3.89	34	P	48 25.49	-0.8
GULW	3.98	56	P	48 28.09	0.5
CROR	4.01	71	P	48 26.86	-1.1
LMW	4.05	43	P	48 28.69	0.2
ASR	4.10	53	P	48 29.70	0.4
VIPM	4.17	78	P	48 28.85	-1.5
OOW	4.22	20	P	48 29.63	-1.3
VGB	4.32	65	P	48 32.11	-0.2
GLK	4.34	49	P	48 33.05	0.4
LON	4.35	46	P	48 33.23	0.5
VTHM	4.35	69	P	48 32.12	-0.7
REMR	4.38	45	P	48 33.61	0.3
OSD	4.43	24	P	48 32.76	-1.2
WPW	4.45	48	P	48 34.50	0.2
GL2	4.47	59	P	48 34.41	-0.1
HDW	4.48	30	P	48 33.63	-1.1
FMW	4.54	45	P	48 35.75	0.2
GSM	4.67	41	P	48 37.35	0.0
MXC	5.09	55	P	48 43.53	0.3
PATW	5.11	64	P	48 43.33	-0.2
EBG	5.12	50	P	48 44.00	0.4
TBM	5.25	48	P	48 46.36	0.7
JCW	5.36	33	P	48 46.49	-0.6
RSW	5.43	59	P	48 47.66	-0.5
MCW	5.46	25	P	48 47.20	-1.2
GBL	5.60	58	P	48 50.18	-0.3
WAH2	5.62	56	P	48 51.07	0.4
PNT	7.20	38	eP	49 11.00	-2.0
	0.6s		7.00nm		5.0mb X
YKA	19.95	16	eP	52 02.70	2.9
	0.9s		1.30nm		3.3mb

S.D. = 0.8 on 58 of 58 obs.

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* SEP 22, 1990 20h 53m 57.58± 0.55s
15.469 N ± 9.8km 119.327 E ± 8.5km
DEPTH = 33.0km (normal)
4.7mb (1 obs.) 5.3Msz (5 obs.)
LUZON, PHILIPPINE ISLANDS (249)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 25C
Centroid Location:
Origin Time 20:53:58.0 0.5
Lat 15.17N 0.06 Lon 119.06E 0.09

22d 20h

Dep 15.0 FIX Half-duration 2.0
Moment Tensor; Scale 10**17 Nm
Mrr= 0.92 0.09 Mtt= 0.25 0.08
Mff=-1.17 0.13 Mrt=-1.16 0.19
Mrf=-2.93 0.25 Mtf= 0.02 0.09
Principal Axes:
T Val= 3.29 Plg=53 Azm=120
N 0.06 8 19
P -3.35 36 283
Best Double Couple:Mo=3.3*10**17
NP1:Strike=335 Dip=12 Slip= 45
NP2: 200 82 98

BAG	1.53	52	iPc+	54	22.08	-0.9
MAN	1.87	115	P	54	28.00	0.1
OCP	1.88	116	eP	54	40.00	12.0X
HKC	8.37	325	P	55	58.00	-1.5
ANP	9.88	12	eP	56	26.00	5.4X
DAV	10.34	143	eP	56	26.00	-0.7
			e	00	05.00	
MNI	14.96	158	eP	57	32.50	4.0X
SSE	15.65	6	P-	57	40.00	2.7X
	8.0s		1.60nm			2.3mb X
	Z 18s		9.90um			4.4Msz
	N 10s		9.20um			
			S	00	38.00	
KMI	18.27	304	P-	58	10.00	-0.5
	8.0s		4.00nm			2.6mb X
	Z 12s		22.00um			3.5MszX
			sP	58	22.50	
			PPP	58	58.50	
			S	01	40.00	
			sS	01	52.00	
NST	18.49	273	eP	58	13.00	-0.1
CHG	19.76	283	eP	58	26.00	-1.9
KGM	20.68	231	eP	58	49.50	12.0X
IPM	21.00	241	ePd	58	51.00	10.2X
PSI	23.77	240	eP	59	09.00	0.8
BJI	24.63	354	eP	59	18.00	1.7
	1.5s		36.00nm			4.7mb
	Z 10s		11.38um			5.7MszX
	N 11s		10.90um			
			ePP	59	59.00	
			eS	03	48.00	
LZH	24.75	329	eP	59	17.00	-0.7
	8.0s		1.87nm			2.7mb X
	N 11s		29.78um			
	E 10s		8.12um			
			sP	59	25.00	
			PP	00	00.00	
			S	03	45.00	
			sS	03	58.00	
			SS	04	52.00	
GUMO	24.79	91	eP	59	13.50	-4.5X
	Z 19s		9.30um			5.3Msz
			eS	04	06.00	
KUPT	25 80	170	eP	59	27.00	-0.6
MAT	26.89	35	eP	59	32.00	-5.5X
	Z 20s		3.90um			5.0Msz
			eS	04	18.00	
SHL	27.54	296	iP	59	43.00	-0.7
			eS	04	28.00	
WRA	38.16	157	eP	01	10.60	-5.2X
HYB	39.10	279	eP	01	31.50	7.6X
NDI	40.97	296	eP	01	40.00	0.9
ASPA	41.42	160	eP	01	38.80	-4.0X
	Z 20s		1.88um			4.9Msz
			LR	16	05.90	
OUE	50.04	297	eP	03	04.00	12.5X
TAB	67.34	305	eP	04	54.00	2.0
BHL	76.38	302	P	05	50.00	4.2X
			S	15	30.00	
BBTK	77.67	308	iP	05	52.00	-0.8
ITU	80.23	310	eP	06	12.00	5.4X
VRI	80.85	315	ePc	06	10.00	0.2
KRA	84.19	320	eP	06	29.00	2.1
			e	06	39.80	
			e	06	57.80	
			e	12	01.00	
SKO	85.53	312	eP	06	35.00	1.2
			i	08	20.00	
KSP	86.15	322	eP	06	44.50	7.8X
			e	07	07.50	
VKA	87.01	319	e(P)	06	58.00	17.0X
	Z 13s		1.50um			5.6MszX
			LR	49	08.00	
PRU	87.50	321	eP	06	41.00	-2.3
	Z 14s		3.00um			5.9MszX
	N 16s		2.60um			
	E 14s		2.00um			
			e	06	51.00	
			S	17	22.00	
CLL	87.92	323	e(P)	07	00.00	14.8X
			eS	17	27.00	
MOX	88.99	323	eP	06	52.00	1.6
-	Z 15s		2.90um			5.8MszX
	N 14s		2.80um			
	E 14s		2.90um			
			e	12	00.00	
GRF	89.60	322	eP	06	59.00	5.7X
	Z 18s		2.30um			5.6Msz
ALQ	113.66	40	e(PKP)	12	30.00	-5.0X
	Z 21s		1.25um			5.5Msz
UPA	149.35	39	ePKP-	13	48.00	6.9X
CAR	153.46	14	ePKP	13	32.00	-15.3X
	S.D. = 1.4		on 20 of 41 obs.			

& SEP 22, 1990 21h 12m 25.10s
36.652 N 121.315 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.1 (BRK).

SAO	0.15	317	iP	12	28.20	-0.2
LLA	0.30	97	iPc	12	31.00	-0.2
PRS	0.32	188	iPd	12	31.40	-0.2
GCC	0.66	305	iPd	12	37.50	-0.9
ARN	0.72	346	iPc	12	39.20	-0.2
PRI	0.73	134	ePd	12	39.00	-0.7
MHC	0.74	339	ePd	12	39.50	-0.3
PHAM	1.10	137	eP	12	45.30	-0.9
PKEM	1.14	121	eP	12	47.00	0.2
PCC	1.20	315	iPc	12	46.20	-1.6
FRI	1.33	75	ePc	12	48.30	-1.8
			iS	13	05.60	
BKS	1.43	329	iPd	12	51.20	-0.3
			eS	13	13.00	
ZSP	1.49	330	eP	12	54.10	1.7
CMB	1.57	28	ePc	12	52.30	-1.3
			eS	13	11.00	
BCH	1.77	145	eP	12	53.90	-2.7
ABL	2.48	136	eP	13	04.50	-2.3
TNP	3.56	65	eP	13	24.50	2.2
	17 obs. associated					

& SEP 22, 1990 21h 14m 11.50s
36.650 N 121.315 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.2 (BRK).

SAO	0.16	318	iP	14	14.60	-0.2
LLA	0.30	96	iPc	14	17.40	-0.2
PRS	0.32	188	iPd	14	17.80	-0.2
GCC	0.67	305	iPd	14	24.00	-0.8
ARN	0.72	346	iPc	14	25.70	-0.2
PRI	0.73	134	ePd	14	25.40	-0.7
MHC	0.74	339	ePc	14	26.00	-0.3
PHAM	1.10	137	eP	14	31.50	-1.0
PKEM	1.14	121	eP	14	33.00	-0.2
PCC	1.20	315	ePd	14	32.50	-1.8
FRI	1.33	75	ePc	14	34.80	-1.7
			iS	14	52.00	
BKS	1.43	329	ePc	14	36.30	-1.7
			eS	15	06.40	
ZSP	1.49	330	eP	14	37.80	-1.1
CMB	1.57	28	eP	14	38.80	-1.2
			eS	14	57.70	
BCH	1.77	145	eP	14	40.40	-2.6
ABL	2.47	136	eP	14	50.50	-2.7
	16 obs. associated					

& SEP 22, 1990 22h 11m 49.50s
36.645 N 121.317 W
DEPTH = 6.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.1 (BRK).

SAO	0.16	319	iP	11	52.70	-0.2
LLA	0.30	95	iPc	11	55.40	-0.2
PRS	0.32	188	iPd	11	55.70	-0.2
GCC	0.67	305	iPd	12	02.00	-0.9
ARN	0.72	346	iPc	12	03.70	-0.3
PRI	0.73	133	ePd	12	03.30	-0.8
MHC	0.74	340	ePd	12	04.10	-0.2
PHAM	1.10	137	eP	12	09.80	-0.7
PKEM	1.14	120	eP	12	11.10	0.0
PCC	1.21	315	ePd	12	10.50	-1.8
FRI	1.34	75	ePc	12	12.80	-1.7
			iS	12	30.10	
BKS	1.43	329	ePc	12	15.50	-0.5
ZSP	1.50	330	eP	12	15.10	-1.8
CMB	1.57	28	ePc	12	16.80	-1.3
			eS	12	35.80	
BCH	1.77	145	eP	12	18.20	-2.7
ABL	2.47	136	eP	12	28.50	-2.7
TNP	3.57	65	eP	12	47.00	0.3
	17 obs. associated					

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* SEP 22, 1990 22h 57m 16.37± 0.70s
15.428 N ±12.1km 119.212 E ± 8.6km
DEPTH = 33.0km (normal)
4.5mb (1 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	1.64	53	eP+	57	42.00	-1.4
OCP	1.97	113	eP	57	48.80	0.8
DAV	10.37	142	eP	59	46.00	0.0
SSE	15.70	6	P	01	03.00	6.3X
	8.0s		0.60nm			1.8mb X
	Z 18s		2.30um			3.7MszX
	N 11s		3.00um			
	E 11s		2.20um			
			S	04	03.00	
KMI	18.20	305	eP	01	29.00	0.5
	9.0s		1.50nm			2.1mb X
	Z 10s		5.10um			4.3MszX
			PPP	01	47.50	
			S	05	00.00	
CHG	19.66	283	eP	01	46.00	0.4
BJI	24.66	354	eP	02	39.50	4.1X
	1.4s		20.00nm			4.5mb
	Z 10s		4.48um			5.3MszX
	N 10s		4.82um			
			esP	02	57.00	
			eS	07	10.00	
			esS	07	29.00	
LZH	24.73	329	eP	02	37.50	1.2
	8.0s		0.75nm			2.3mb X
	N 12s		5.06um			
	E 11s		4.03um			
			sP	02	48.00	
			PP	03	18.50	
			S	07	05.00	
GUMO	24.90	91	e(P)	02	34.00	-3.9X
GUA	24.95	91	e(P)	02	26.80	-11.6X
MAT	26.99	35	eP	02	58.00	0.9
			eS	07	36.00	
HYB	39.00	279	eP	04	40.00	-1.8
KRA	84.15	320	eP	09	45.00	-0.5
			e	10	06.00	
	S.D. = 1.2		on 9 of 13 obs.			

SEP 22, 1990 23h 28m 27.32± 1.19s
35.919 N ±10.1km 141.897 E ± 9.5km
DEPTH = 12.6 ± 4.2 km
4.7mb (6 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ	1.43	282	P	28	51.90	-1.0
CHJJ	2.36	274	iPd	29	05.30	-1.0
NIIJ	2.68	300	iPd	29	10.70	-0.2
YAMJ	2.70	327	P	29	11.50	0.3
MAT	3.05	283	iPc	29	15.90	-0.2
OFUJ	3.16	357	P	29	17.60	-0.1
			eS	29	56.30	
IIDJ	3.27	263	P	29	21.10	1.7
MTMJ	3.37	283	P	29	21.00	0.1
TSRJ	4.83	267	iP+	29	42.90	1.5
BJI	20.66	289	eP	33	06.00	-3.3X
	1.2s		15.00nm			4.2mb
PKI	48.18	277	P	37	09.40	-0.5
	0.8s		15.00nm			5.1mb
KKN	48.20	277	P	37	09.60	-0.2
	0.8s		24.00nm			5.3mb
GKN	48.63	278	P	37	13.00	0.0
	0.8s		42.00nm			5.5mb
WRA	56.02	189	eP	38	08.00	0.0
HYB	58.57	269	eP	38	25.70	-0.7
GBA	61.53	266	P	38	46.20	-0.4
YKA	64.58	30	eP	39	07.20	1.1

0.9s 0.80nm 3.9mb
SUF 69.15 334 eP 39 35.00 0.0
LRM 74.67 44 eP 40 11.90 3.4X
HFS 75.26 336 eP 40 11.70 0.4
0.4s 1.10nm 4.3mb
NAO 75.65 338 P 40 13.80 0.2
0.6s 0.20nm 3.4mb X
CLL 82.25 330 iP 41 01.40 11.9X
PRU 82.64 329 eP 40 50.00 -1.5
Z 14s 0.80um 5.2MszX
N 14s 0.30um
E 14s 1.00um
e 41 04.00
KHC 83.70 329 eP 41 09.30 12.3X
OHR 86.23 320 eP 41 16.50 6.6X
ZOBO 146.89 62 PKP 48 14.70 4.4X
CNCB 147.35 62 PKP 48 17.00 6.0X
SIV 151.49 52 PKP 48 35.30 18.6X
i 48 36.40
S.D. = 0.9 on 20 of 28 obs.

SEP 23, 1990 00h 01m 12.74± 0.38s
53.295 N ± 8.6km 159.189 E ± 7.4km
DEPTH = 33.0km (normal)
4.6mb (14 obs.)
NEAR EAST COAST OF KAMCHATKA (218)

OFUJ 18.61 227 eP 05 28.20 -1.1
NIIJ 21.32 229 P 06 05.00 6.3X
MAT 22.26 230 eP 06 10.00 1.9
CHJJ 22.31 227 P 06 10.40 1.8
MTMJ 22.41 230 P 06 11.50 1.8
YKA 43.38 42 eP 09 13.30 0.2
0.3s 1.30nm 4.2mb
PNT 48.33 60 ePc 09 52.00 -0.6
SES 51.97 54 eP 10 19.00 -1.5
ORV 53.60 71 eP 10 32.50 -0.1
LRM 54.29 59 eP 10 38.20 0.3
TNP 57.04 69 eP 10 58.00 0.2
1.0s 7.75nm 4.7mb
e 11 27.20
GUN 58.33 275 P 11 06.20 -1.0
SUF 58.60 337 eP 11 09.00 0.8
KKN 58.78 276 P 11 09.00 -1.2
0.4s 11.00nm 5.3mb
PKI 58.86 275 P 11 09.60 -1.3
GKN 59.01 276 P 11 10.40 -1.3
DMN 59.02 275 P 11 10.80 -1.1
RSSD 59.74 56 iP 11 16.50 -0.2
1.0s 75.92nm 5.8mb X
e 11 45.00
PVB9 61.18 64 eP 11 27.00 0.4
NAO 63.46 343 P 11 40.30 -0.8
0.7s 2.00nm 4.3mb
HFS 63.59 342 ePKP 11 39.80 -2.1
0.4s 2.80nm 4.7mb
ALO 65.26 64 eP 11 52.80 -0.6
0.8s 3.54nm 4.5mb
CLL 71.97 338 eP 12 35.00 0.6
GBA 74.30 272 Pc 12 46.80 -1.7
0.6s 2.60nm 4.4mb
CDF 75.90 341 eP 12 57.50 0.1
WRA 76.04 204 eP 12 57.00 -1.3
HAU 76.47 342 eP 13 00.50 0.0
0.4s 2.30nm 4.5mb
FLN 76.87 346 eP 13 02.70 0.1
LDF 76.98 346 eP 13 02.70 -0.6
GRR 77.29 347 eP 13 05.20 0.3
LOR 77.63 343 eP 13 07.20 0.3
0.4s 2.30nm 4.6mb
SSF 77.90 343 eP 13 08.70 0.4
AVF 78.18 343 eP 13 10.60 0.7
LPL 78.78 341 eP 13 14.80 1.3
0.8s 6.70nm 4.7mb
LPG 78.80 341 eP 13 14.90 1.2
0.9s 13.90nm 5.0mb
TCF 78.87 344 eP 13 13.30 -0.4
MAF 78.87 344 eP 13 14.10 0.4
0.7s 6.60nm 4.7mb
MFF 78.93 346 eP 13 14.70 0.7
LSF 79.01 344 eP 13 15.00 0.5
0.4s 1.70nm 4.4mb
RJF 79.94 344 eP 13 20.60 1.1
LFF 80.42 345 eP 13 23.20 1.2
LPO 80.59 344 eP 13 23.80 0.8
0.4s 3.45nm 4.7mb
EPF 82.34 345 eP 13 32.00 -0.2

SPA 143.11 180 iPKPd 20 38.30 -5.2X
0.9s 5.45nm
S.D. = 1.0 on 42 of 44 obs.

% SEP 23, 1990 00h 35m 56.39± 0.80s
59.435 N ± 6.6km 5.416 E ± 8.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.8 (BER).

KMY 0.24 201 iPd 36 01.12 -0.4
BLS3 0.56 91 eP 36 07.97 0.1
eS 36 16.82
ODD1 0.78 52 iPd 36 12.43 0.8
iS 36 23.52
BER 0.95 358 eP 36 14.59 0.1
iS 36 27.93
ASK 1.06 354 eP 36 16.27 0.0
iS 36 29.84
SUE 1.66 349 eP 36 24.37 -1.2
iSg 36 48.62
OSG 1.66 311 eP 36 27.14 1.5
eS 36 45.39
HYA 1.78 12 eP 36 26.42 -0.9
iSg 36 52.78
FOO 2.18 355 eP 35 46.90 -46.2X
S.D. = 1.0 on 8 of 9 obs.

? SEP 23, 1990 02h 38m 43.74± 1.03s
45.352 N ± 7.9km 14.390 E ±10.9km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 1.5 (TRI), 1.4 (LJU).

RIY 0.01 200 iPgc 38 45.30 -0.3
iSg 38 48.80
CEY 0.39 4 ePg 38 51.00 -0.7
iSg 38 59.00
TRI 0.57 309 e(Pg) 39 00.50 5.3X
i(Sg) 39 07.50
VBY 0.63 76 eP 38 56.60 0.2
iSg 38 57.80
VOY 0.76 333 e(Pg) 38 59.40 0.7
eSg 39 13.20
S.D. = 1.0 on 4 of 5 obs.

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* SEP 23, 1990 02h 46m 35.02± 1.38s
0.860 S ±12.2km 98.265 E ±11.7km
DEPTH = 33.0km (normal)
SOUTHERN SUMATERA (274)

PPI 2.17 79 ePc 47 09.60 0.1
eS 47 32.30
PSI 3.59 11 ePd 47 30.20 0.5
TSI 4.34 4 e(P) 47 22.00 -18.4X
KGM 5.80 61 eP 48 01.00 -0.1
IPM 6.07 27 ePc 48 04.60 -0.2
0.9s 31.60nm 5.0mb
BSI 6.98 335 eP 48 17.50 -0.1
CHG 19.56 2 eP 51 03.10 -0.2
GBA 25.15 306 P 52 15.00 16.0X
0.7s 1.70nm
WRA 40.06 121 eP 54 09.30 0.0
S.D. = 0.3 on 7 of 9 obs.

& SEP 23, 1990 02h 59m 53.00s
36.795 N 121.560 W
DEPTH = 7.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.6 (BRK).
Mo=2.4*10**15 Nm (BRK). Double event, second event obout 45 seconds loter, ML 3.5 (BRK). Felt (IV) ot Son Corlos ond Son Juon Boutisto.

GCC 0.42 304 iPc 00 00.90 -0.6
PRS 0.49 162 iPc 00 02.30 -0.5
LLA 0.53 110 iPc 00 03.10 -0.5
MHC 0.55 353 iPd 00 04.18 0.1
iS 00 12.00
ARN 0.55 2 iPc 00 04.00 -0.1
PCC 0.96 317 ePc 00 10.20 -1.4
PRI 0.97 132 iPd 00 11.20 -0.6
eS 00 26.00
BRK 1.21 333 eP 00 13.70 -2.1
ZSP 1.28 334 iP 00 15.20 -1.7

PHAM 1.34 135 eP 00 16.40 -1.6
PKEM 1.38 122 eP 00 18.00 -0.6
FRI 1.50 82 iPc 00 18.30 -2.0
CMB 1.55 37 ePd 00 19.30 -1.8
iS 00 42.00
BLP 2.42 157 eP 00 31.00 -2.6
ABL 2.72 135 eP 00 34.90 -3.2
ORV 2.76 1 eP 00 37.00 -1.4
TNP 3.69 68 eP 00 51.20 -0.6
PEC 4.62 128 eP 01 03.50 -1.4
PLM 5.16 130 eP 01 08.50 -4.2
19 obs. associated

& SEP 23, 1990 04h 06m 37.60s
36.788 N 121.573 W
DEPTH = 9.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.1 (BRK).

GCC 0.42 306 ePc 06 45.40 -0.7
PRS 0.48 160 iPd 06 47.00 -0.4
LLA 0.53 108 ePc 06 47.80 -0.6
MHC 0.56 354 iPd 06 48.70 -0.1
ARN 0.56 3 iPc 06 48.40 -0.5
PCC 0.96 318 ePc 06 54.70 -1.2
PRI 0.98 131 ePd 06 55.70 -0.6
BKS 1.21 334 iPc 07 00.50 0.3
eS 07 17.30
BRK 1.21 333 ePd 07 00.20 -0.1
PKEM 1.39 121 eP 07 03.30 0.2
FRI 1.51 82 eP 07 02.90 -1.9
CMB 1.56 37 eP 07 04.00 -1.6
BCH 2.00 143 eP 07 10.00 -2.1
ABL 2.72 135 eP 07 20.50 -2.0
14 obs. associated

% SEP 23, 1990 06h 28m 59.58± 0.82s
38.684 N ± 6.2km 15.260 E ± 7.4km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MSI 0.53 154 P 29 10.60 0.2
eSg 29 17.70
ATN 0.55 163 Pd 29 10.60 0.0
eSg 29 19.00
MNO 0.87 211 P 29 16.00 -0.5
eSg 29 28.80
SOI 0.87 134 P 29 16.50 0.1
eSg 29 29.50
GIB 1.19 235 P 29 22.50 0.6
eSg 29 39.00
MGR 1.47 9 P 29 26.00 -0.1
eSg 29 44.00
MEU 1.60 189 P 29 27.70 -0.4
S.D. = 0.5 on 7 of 7 obs.

? SEP 23, 1990 06h 43m 36.57± 1.83s
13.045 N ±26.5km 49.874 E ±22.2km
DEPTH = 10.0km (geophysicist)
4.9mb (4 obs.)
EASTERN GULF OF ADEN (415)

QUE 23.25 40 eP 48 52.30 7.0X
MAIO 24.72 19 eP 49 01.00 1.6
GKN 35.64 60 P 50 37.00 -0.1
DMN 35.93 61 P 50 39.60 0.0
0.8s 21.00nm 5.1mb
KKN 36.13 61 P 50 40.80 -0.4
0.8s 39.00nm 5.3mb
PKI 36.17 61 P 50 41.00 -0.8
0.8s 9.00nm 4.7mb
GUN 36.67 61 P 50 45.60 -0.3
HFS 53.99 339 eP 53 01.80 -1.0
0.4s 0.90nm 4.2mb
WRA 89.29 111 eP 56 35.80 0.9
S.D. = 1.0 on 8 of 9 obs.

SEP 23, 1990 06h 50m 33.09± 0.20s
14.989 S ± 7.4km 173.632 W ± 5.0km
DEPTH = 33.0km (normal)
5.6mb (31 obs.) 5.8Msz (18 obs.)
SAMOA ISLANDS REGION (169)
Ms 5.8 (BRK), 5.6 (PAS).
Mo=1.0*10**18 Nm (PPT).
CENTROID, MOMENT TENSOR (HRV)
Dotо Used: GDSN
L.P.B.: 18S, 44C

23d 06h

Centroid Location:
Origin Time 06:50:37.5 0.2
Lat 14.89S 0.03 Lon 173.55W 0.02
Dep 15.0 FIX Half-duration 3.5
Moment Tensor; Scale 10**17 Nm
Mrr= 0.83 0.09 Mtt= 2.99 0.12
Mff=-3.82 0.14 Mrt= 1.73 0.31
Mrf= 7.79 0.34 Mtf= 4.59 0.09
Principal Axes:
T Val= 9.44 Plg=38 Azm=315
N 0.76 35 192
P -10.20 33 75
Best Double Couple:Mo=9.8*10**17
NP1:Strike=109 Dip=35 Slip= 5
NP2: 14 87 125

VUN	8.15	247	eP	52	38.40	6.3X	
SGE	8.51	251	eP	52	44.30	7.1X	
NDF	8.99	251	eP	52	37.00	-6.7X	
RAR	14.55	117	P	53	49.00	-9.6X	
			S	56	24.00		
PVC	17.54	259	iPc	54	45.00	8.2X	
DZM	20.15	247	iPc	55	06.00	-1.6	
AFR	23.04	100	iP	55	38.10	1.6	
	1.5s	225.00nm			5.4mb		
PPT	23.23	100	iP	55	40.30	1.9	
	1.5s	310.00nm			5.6mb		
PAE	23.23	100	iP	55	40.00	1.6	
	1.5s	310.00nm			5.6mb		
PPN	23.37	100	iP	55	41.50	1.8	
	1.5s	115.00nm			5.2mb		
TVO	23.55	100	iP	55	43.20	1.6	
	1.5s	435.00nm			5.7mb		
PMO	24.86	93	iP	55	52.00	-2.2	
	1.5s	660.00nm			6.0mb		
VAH	25.10	94	iP	55	54.10	-2.4	
	1.5s	370.00nm			5.8mb		
TPT	25.12	93	iP	55	54.70	-2.0	
	1.5s	825.00nm			6.1mb		
RUV	25.34	94	iP	55	56.50	-2.2	
	1.5s	660.00nm			6.0mb		
HNR	26.39	279	eP	56	10.00	1.4	
			eS	00	44.00		
CNB	38.82	232	eP	57	55.00	-1.9	
MHA	39.06	27	P	58	01.00	2.2	
CAN	39.10	232	eP	57	58.30	-0.9	
HON	39.21	23	P	58	08.00	8.0X	
Z	20s	3.19um			5.1Msz		
BWA	39.23	233	eP	57	58.10	-2.2	
TOO	42.55	230	eP	58	26.00	-1.5	
STK	44.05	240	iPc	58	38.60	-1.1	
	1.8s	21.00nm			4.6mb		
			iS	05	15.30		
BFD	44.64	232	eP	58	45.00	0.6	
OIS	44.76	256	eP	58	44.00	-1.6	
WRA	49.72	256	eP	59	21.20	-3.3X	
GUA	49.86	303	eP	59	25.80	0.2	
GUMO	49.93	303	eP	59	25.00	-1.0	
	2.0s	688.37nm			6.3mb		
FORR	55.37	243	eP	00	04.00	-2.5	
WARB	56.59	248	eP	00	13.00	-2.4	
SBA	63.64	185	e(P)	01	03.20	0.4	
DAV	64.12	286	eP	01	06.00	-0.8	
KAKJ	67.05	321	P	01	23.00	-2.3	
CHJJ	67.68	320	P	01	29.20	-0.1	
MAT	68.48	320	iPc	01	33.70	-0.6	
	1.5s	136.11nm			5.8mb		
Z	20s	6.38um			5.9Msz		
		eS		10	38.00		
MTMJ	68.76	320	P	01	36.10	0.0	
TSRJ	69.28	318	P	01	40.20	1.0	
SYP	70.86	45	eP	01	50.00	0.9	
PRS	70.97	42	eP	01	51.20	1.6	
GCC	70.98	42	eP	01	50.70	1.2	
PCC	71.02	41	eP	01	49.50	-0.2	
BCH	71.16	44	P	01	49.20	-1.7	
SAO	71.18	42	eP	01	50.80	0.0	
BRK	71.32	41	eP	01	51.50	-0.1	
PRI	71.32	43	eP	01	51.70	-0.1	
BKS	71.34	41	ePd	01	53.00	1.3	
	0.9s	69.00nm			5.7mb		
Z	20s	5.00um			5.8Msz		
N	20s	3.20um					
E	20s	4.30um					
		eS		11	05.20		
		e		11	11.20		
		e		11	36.00		
		e		11	44.00		
		eSS		15	23.00		
		eLQ		19	52.00		
		eLR		22	54.00		
MHC	71.39	41	eP	01	52.50	0.3	
ARN	71.47	42	P	01	52.70	0.1	
ABL	71.56	45	P	01	52.00	-1.4	
PAS	71.89	46	eP	01	54.00	-1.1	
			ePcP	02	09.00		
			eS	11	18.00		
			eScS	11	54.00		
			eSS	15	22.00		
			eLg	20	08.00		
			eLR	22	12.00		
MWC	72.01	46	eP	01	56.00	-0.1	
BAG	72.05	293	eP	01	56.00	-0.5	
			eS	11	22.00		
BAR	72.17	48	eP	01	56.00	-0.8	
RVR	72.36	46	eP	01	56.00	-1.9	
PLM	72.38	47	eP	01	56.00	-2.3	
SBB	72.43	46	eP	01	57.00	-1.4	
FRI	72.44	43	eP	01	57.00	-1.3	
PEC	72.46	47	P	01	56.00	-2.5	
ISA	72.52	44	eP	01	57.00	-1.9	
CMB	72.61	42	eP	01	58.50	-0.8	
WDC	72.80	38	eP	01	59.50	-0.8	
ORV	72.81	40	eP	02	01.30	0.9	
CLC	73.20	45	eP	02	02.00	-0.8	
MIN	73.22	39	eP	02	01.30	-1.7	
TPC	73.36	47	eP	02	03.00	-0.8	
GSC	73.46	46	eP	02	02.00	-2.4	
LBFM	73.66	38	P	02	03.20	-2.4	
GLA	73.69	48	eP	02	05.00	-0.7	
TNP	74.69	43	P	02	10.00	-1.7	
	1.2s	40.05nm			5.3mb		
ANP	74.73	302	eP	02	12.00	0.0	
SPA	75.11	180	eP	02	14.90	1.3	
	1.5s	113.64nm			5.6mb		
Z	20s	1.58um			5.3Msz		
GMW	77.04	33	P	02	25.90	1.4	
LON	77.05	34	P	02	25.60	1.0	
SVW	77.19	9	eP	02	25.70	0.6	
RMW	77.50	33	P	02	26.80	-0.3	
SSE	77.53	307	P+	02	28.00	0.5	
	1.6s	62.00nm			5.4mb		
Z	20s	1.40um			5.3Msz		
N	16s	1.00um					
E	18s	0.90um					
		S		12	24.00		
		sS		12	40.00		
DUG	78.71	43	P	02	35.20	1.2	
PMR	78.77	12	eP	02	33.60	0.0	
	1.2s	56.30nm			5.4mb		
TTA	78.88	8	eP	02	34.30	-0.1	
	1.4s	63.64nm			5.4mb		
PNT	79.79	33	eP	02	40.00	0.5	
	0.9s	25.00nm			5.2mb		
HKC	79.82	296	iP	02	43.00	2.8X	
TOA	79.83	13	eP	02	39.30	-0.2	
NEW	80.50	34	P	02	44.00	0.7	
	1.0s	11.25nm			4.8mb		
ALQ	80.71	50	eP	02	44.00	-1.0	
	1.5s	75.00nm			5.5mb		
Z	22s	1.11um			5.2Msz		
ANMO	80.71	50	P	02	44.60	-0.3	
	1.4s	81.40nm			5.5mb		
Z	20s	5.32um			5.9Msz		
LRM	81.83	38	eP	02	49.80	-0.8	
FBA	82.04	11	eP	02	50.30	-0.7	
	0.9s	95.30nm			5.8mb		
IMA	82.19	8	eP	02	51.90	0.0	
	0.9s	15.90nm			5.1mb		
GOL	83.53	46	P	02	59.20	-0.4	
Z	20s	4.00um			5.8Msz		
GLD	83.66	46	P	02	59.90	-0.2	
Z	20s	6.00um			6.0Msz		
AIA	84.36	156	eP	03	06.50	3.5X	
SES	84.99	35	eP	03	05.00	-1.4	
	1.5s	217.00nm			6.1mb		
BJI	85.03	314	eP	03	09.00	2.3X	
	3.0s	443.00nm			6.1mb		
Z	24s	2.55um			5.5MszX		
N	18s	1.00um					
		esP		03	28.00		
		eSKS		13	32.00		
		eS		13	45.00		
EDM	85.26	32	eP	03	06.50	-1.1	
MEO	86.60	53	eP	03	14.00	-0.7	
SNG	87.76	278	eP	03	23.00	2.4X	
INK	87.93	14	eP	03	20.00	-0.3	
	1.3s	55.00nm			5.7mb		
MAW	88.11	199	iP	03	20.40	-0.9	
SIO	88.68	53	eP	03	23.70	-0.9	
TUL	89.13	53	eP	03	24.20	-2.6	
	1.2s	21.40nm			5.3mb		
			e	04	00.00		
UYO	89.61	55	e(P)	03	24.00	-5.0X	
YKA	89.81	23	eP	03	28.60	-0.7	
	1.1s	15.60nm			5.2mb		
FFC	91.88	33	eP	03	38.00	-1.1	
	1.5s	56.00nm			5.8mb		
OLY	92.35	54	P	03	43.10	1.4	
CHG	92.36	289	eP	03	45.50	3.5X	
CHTO	92.36	289	eP	03	43.00	1.0	
	1.2s	6.94nm			5.0mb		
FVM	93.85	52	P	03	48.80	0.3	
PWLA	94.90	55	P	03	54.30	0.9	
TKL	98.46	55	P	04	10.90	1.4	
ZOBO	100.17	110	ePdiff	04	21.00	2.5X	
			SKS	15	04.00		
			LR	37	20.00		
GKN	107.08	295	Pdiff	05	00.00	11.4X	
QUE	122.66	296	ePKP	09	31.00	3.2X	
KEV	123.76	352	ePKP	09	25.00	-3.5X	
			e	11	08.00		
SOD	126.00	350	ePKP	09	25.00	-7.9X	
SOB1	127.35	114	ePKP	09	32.00	-5.1X	
SUF	130.33	348	ePKP	09	42.00	0.7	
NUR	132.64	348	ePKP	09	55.00	9.3X	
			e	13	16.00		
NAO	134.12	357	PKP	09	51.30	2.7X	
	1.4s	13.90nm					
HFS	134.61	355	ePKP	09	50.30	0.8	
	1.4s	38.60nm					
TAB	137.94	311	ePKP	09	58.00	1.2	
			i	13	34.00		
WTS	143.08	360	ePKP	10	04.50	-0.7	
	1.4s	47.00nm					
KRA	143.32	345	ePKP	10	01.00	-4.7X	
	1.4s	78.00nm					
			e	10	06.50		
			e	10	17.80		
			e	31	57.00		
KSP	143.35	349	ePKP	10	04.50	-1.2	
			i	10	08.00		
CLL	143.38	353	ePKP	10	03.00	-2.7	
	1.6s	40.00nm					
Z	18s	1.50um			5.8Msz		
			e	10	09.00		
BRG	143.69	352	ePKP	10	05.20	-1.1	
			i	10	11.20		
			i	12	14.40		
SPC	144.05	344	ePKP	10	06.20	-1.0	
MOX	144.18	354	ePKP	10	07.00	-0.2	
	2.0s	83.00nm					
UCC	144.25	2	PKP	10	22.00	14.8X	
ENN	144.31	0	ePKP	10	06.50	-0.8	
	0.9s	25.00nm					
PRU	144.47	351	PKP	10	07.00	-0.6	
Z	21s	3.00um			6.0Msz		
N	21s	2.40um					
E	20s	0.60um					
			e	10	17.50		
MEM	144.47	0	PKPc	10	08.40	0.8	
SNF	144.53	2	PKPc	10	09.00	1.3	
KAS	144.59	323	iPKPc	10	07.40	-0.8	
CFR	144.72	333	ePKP	10	07.00	-1.2	
VRI	144.78	335	ePKPd	10	08.50	0.2	
TNS	144.82	358	ePKPd	10	08.10	-0.2	
DOU	144.96	2	PKP	10	08.70	0.2	
GRF	145.17	354	ePKP	10	09.40	0.5	
Z	22s	2.00um			5.8Msz		
			e	10	23.90		
PSZ	145.31	344	iPKP	10	09.30	0.1	
MLR	145.40	335	iPKP	10	10.00	0.4	
KHC	145.44	352	iPKP	10	10.10	0.7	
	1.3s	72.00nm					
N	19s	0.70um					
E	18s	1.10um					
ISR	145.45	335	ePKPc	09	54.00	-15.5X	
WET	145.52	352	ePKP	10	10.20	0.7	
Z	20s	2.00um			5.9Msz		
BST	145.68	12	PKP	10	11.06	1.3	
ZST	145.72	347	ePKP	10	10.70	0.9	

SRO	145.81	346	iPKP	10	12.40	2.4X
			i	11	32.00	
VKA	145.82	348	ePKPc	10	11.00	1.0
	3.0s	985.00nm				
NAI	145.83	244	iPKP	10	13.00	1.7
FLN	145.85	8	ePKP	10	09.50	-0.5
	1.5s	235.05nm				
	Z 19s	3.25um			6.1Msz	
PSN	145.87	331	iPKPd	10	11.00	0.8
TNR	145.92	337	ePKPd	10	11.00	0.7
CMP	145.95	336	ePKPc	10	09.00	-1.4
LDF	146.07	8	ePKP	10	10.20	-0.2
	1.5s	198.50nm				
GWF	146.09	359	PKP	10	10.78	0.3
BBTK	146.15	322	ePKP	10	13.00	2.0
GRR	146.17	9	ePKP	10	10.90	0.3
	1.5s	146.25nm				
DEV	146.21	339	ePKPc	10	15.00	4.3X
BUC	146.22	334	ePKPc	10	12.00	1.3
SOP	146.32	348	ePKP	10	17.80	7.0X
KMR	146.41	351	iPKP+	10	13.60	2.6X
			ipPKP	10	27.30	
LPF	146.49	9	ePKP	10	11.60	0.5
	1.0s	68.00nm				
WLS	146.66	359	PKP	10	13.07	1.6
CDF	146.66	359	PKP	10	12.14	0.6
ECH	146.86	359	PKP	10	12.72	1.0
VITF	146.87	0	PKP	10	13.33	1.7
BZS	146.87	340	ePKP	10	12.00	0.2
TIM	146.90	341	iPKPd	10	15.50	3.7X
BHG	146.92	352	ePKP	10	14.60	2.8X
HAU	147.08	0	ePKP	10	13.60	1.5
	1.1s	90.35nm				
	Z 20s	0.98um			5.6Msz	
FEL	147.18	358	PKP	10	13.07	0.7
MOF	147.23	359	PKP	10	13.50	1.1
BSF	147.25	359	PKP	10	14.35	1.9
WATA	147.46	353	ePKPc	10	16.00	3.1X
	1.3s	116.00nm				
			i	10	23.10	
PVL	147.51	334	iPKPd	10	17.00	4.1X
BHL	147.54	311	PKP	10	14.00	0.6
JMB	147.56	332	iPKP	10	17.00	4.0X
BBS	147.61	359	PKP	10	14.44	1.5
SQTA	147.61	354	iPKPc	10	16.20	3.1X
	1.5s	105.00nm				
			e	10	23.50	
LOMF	147.73	359	PKP	10	15.28	2.1
LOR	147.75	3	ePKP	10	15.60	2.4X
	1.2s	92.25nm				
	Z 20s	2.50um			6.0Msz	
HRI	147.77	310	ePKP	10	14.00	0.2
SSF	147.93	4	ePKP	10	16.30	2.9X
BEO	147.96	341	ePKP	10	17.00	3.5X
MFF	148.02	8	ePKP	10	15.90	2.3X
	1.5s	120.15nm				
FVI	148.04	352	PKP	10	16.50	2.9X
LBF	148.04	3	ePKP	10	16.40	2.7X
	1.2s	68.45nm				
PTJ	148.15	347	ePKP	10	15.00	1.1
AVF	148.20	4	ePKP	10	16.40	2.6X
	1.1s	68.35nm				
ZAG	148.22	347	ePKPc	10	17.00	3.1X
LJU	148.29	349	e(PKP)	10	16.50	2.4X
SMF	148.37	3	ePKP	10	17.20	3.0X
	1.3s	124.55nm				
BGF	148.39	5	ePKP	10	17.20	3.0X
VOY	148.41	350	ePKP	10	15.30	0.9
PGB	148.55	334	iPKP	10	19.00	4.3X
LSF	148.57	6	ePKP	10	17.40	2.9X
TCF	148.60	6	ePKP	10	17.50	2.9X
	1.4s	95.85nm				
CEY	148.60	349	ePKP	10	17.50	2.9X
CSS	148.66	314	ePKP	10	18.50	3.5X
VBY	148.67	348	ePKPd	10	16.50	1.8
			i	10	20.30	
MAF	148.70	5	ePKP	10	18.20	3.5X
CTI	148.72	353	PKP	10	19.80	4.9X
TRI	148.75	350	ePKP	10	20.30	5.5X
DSI	148.79	307	ePKP	10	18.00	2.7X
RZN	149.02	333	iPKP	10	16.00	0.4
RDO	149.08	331	iPKPc	10	20.00	4.6X
VAI	149.15	357	PKP	10	20.00	4.6X
MDI	149.18	355	PKP	10	19.60	4.2X
SAL	149.28	354	PKP	10	21.30	5.7X
EMON	149.32	20	e(PKP)	10	22.60	6.8X
PPCY	149.38	315	ePKP	10	20.80	4.7X
STS	149.39	22	ePKP	10	23.20	7.3X
ORX	149.42	358	PKP	10	21.15	5.1X
ORO	149.43	358	PKP	10	22.00	6.0X
RJF	149.50	7	ePKP	10	20.10	4.1X
	1.4s	87.15nm				
	Z 21s	3.25um			6.1Msz	
KKB	149.57	335	iPKP	10	19.00	2.8X
LPL	149.57	359	ePKP	10	21.50	5.1X
	1.2s	74.40nm				
LPG	149.59	359	ePKP	10	21.60	5.1X
	1.2s	83.30nm				
LSD	149.62	359	PKP	10	22.27	5.8X
LFF	149.77	8	ePKP	10	21.00	4.7X
	1.4s	143.75nm				
MBH	149.92	304	ePKP	10	18.50	1.5
RSP	149.92	359	PKP	10	24.22	7.5X
CAF	149.94	6	ePKP	10	21.30	4.6X
BNI	150.03	360	PKP	10	19.60	2.6X
LPO	150.08	7	ePKP	10	21.40	4.6X
	1.4s	104.55nm				
SKO	150.12	337	ePKP	10	18.00	1.0
	Z 21s	2.84um			6.0Msz	
	N 21s	1.33um				
	E 21s	2.84um				
			i	10	20.50	
			i	10	30.40	
			iSKS	20	51.00	
RRL	150.16	359	PKP	10	23.50	6.2X
PRK	150.18	328	ePKP	10	22.50	5.4X
BOB	150.20	356	PKP	10	22.80	5.7X
ERUA	150.31	20	ePKP	10	25.50	8.2X
KKS	150.41	339	ePKP	10	22.00	4.6X
PCP	150.49	357	PKP	10	23.40	5.9X
DOI	150.57	359	PKP	10	22.50	4.8X
PZZ	150.57	359	PKP	10	22.89	5.1X
CKI	150.62	357	PKP	10	23.50	5.8X
PLG	150.64	333	ePKP	10	23.00	5.1X
MME	150.66	354	PKP	10	19.10	1.0
ROB	150.76	358	PKP	10	23.40	5.4X
SDA	150.78	340	ePKP	10	25.00	7.1X
SFI	150.79	352	PKP	10	22.70	4.8X
BDI	150.80	354	PKP	10	19.50	1.4
STV	150.83	359	PKP	10	24.02	5.9X
FIN	150.83	357	PKP	10	24.02	6.0X
ENR	150.85	358	PKP	10	24.94	6.8X
PGD	150.85	352	PKP	10	19.90	1.6
SMG	151.00	325	ePKP	10	24.20	5.8X
ARV	151.04	350	PKP	10	22.00	3.7X
LACI	151.04	339	ePKP	10	22.70	4.4X
OHR	151.11	337	ePKP	10	15.50	-3.1X
	1.6s	412.00nm				
			i	10	25.30	
			i	10	34.50	
IMI	151.15	358	PKP	10	22.38	3.8X
SBF	151.21	358	ePKP	10	24.90	6.2X
	1.3s	90.25nm				
TIR	151.24	339	ePKP	10	25.00	6.3X
CDR	151.41	1	ePKPc	10	28.80	9.9X
KZN	151.41	335	ePKP	10	25.00	5.9X
ASS	151.50	350	PKP	10	21.80	2.7X
FRF	151.52	360	ePKP	10	25.00	5.9X
	1.3s	57.75nm				
EPF	151.58	9	ePKP	10	25.40	6.2X
	1.3s	32.50nm				
NEO	151.61	332	ePKP	10	20.50	1.1
LRG	151.63	0	ePKP	10	26.30	7.1X
	1.3s	72.20nm				
LMR	151.75	360	ePKP	10	26.30	6.9X
	1.3s	57.75nm				
LWI	151.96	234	iPKPd	10	20.70	-0.2
AOU	152.06	349	PKP	10	23.90	3.9X
KAP	152.30	321	ePKP	10	29.00	8.6X
AZI	152.41	349	PKP	10	22.00	1.7
ATH	152.44	329	ePKP	10	26.20	5.7X
PGF	152.44	356	ePKP	10	27.00	6.4X
	1.3s	86.65nm				
DUI	152.51	347	PKP	10	24.80	4.2X
EVR	152.56	333	ePKP	10	28.30	7.5X
SDI	152.61	348	PKP	10	22.50	1.8
KEK	152.70	337	ePKP	10	31.50	10.6X
GUD	152.84	18	ePKP	10	31.00	9.8X
ETOR	153.24	14	e(PKP)	10	31.00	9.3X
BSS	153.26	346	PKP	10	23.00	1.4
NPS	153.43	323	ePKP	10	26.00	4.0X
ORI	153.51	342	PKP	10	23.00	1.0
TOL	153.58	18	ePKP	10	34.00	11.9X
			iPKKP	10	45.50	
			ePP	15	00.00	
MGR	153.69	344	PKP	10	25.00	2.8X
ITM	153.93	331	ePKP	10	26.70	4.0X
VAM	154.13	325	ePKP	10	27.50	4.5X
SOI	155.46	341	PKP	10	25.80	1.2
BCAO	164.08	230	iPKPc	10	35.10	0.2
	1.0s	29.00nm				
			id	10	39.00	
			id	11	09.50	

S.D. = 1.3 on 163 of 280 obs.

SEP 23, 1990 07h 19m 37.19± 0.38s
44.604 N ± 2.3km 6.824 E ± 3.8km
DEPTH = 10.1 ± 3.7 km
FRANCE (538)
ML 2.3 (GEN), 2.1 (LDG).

PZZ	0.22	116	P	19	42.23	0.2
			S	19	45.82	
DOI	0.32	108	P	19	43.70	-0.1
			eSg	19	48.60	
RRL	0.32	355	P	19	44.08	0.2
			S	19	49.41	
BNI	0.46	347	P	19	46.90	0.3
			eSg	19	53.70	
STV	0.51	135	P	19	47.46	0.0
			S	19	54.23	
ENR	0.57	131	P	19	48.38	-0.4
			S	19	55.95	
RSP	0.63	29	P	19	49.72	-0.2
			S	19	58.51	
ROB	0.81	112	P	19	52.90	0.0
			S	20	03.77	
SBF	0.86	149	Pg	19	54.40	0.6
			Sg	20	05.00	
LSD	0.89	15	P	19	54.02	-0.3
			S	20	05.61	
LPG	0.90	357	Pg	19	54.60	0.0
LPL	0.92	356	Pg	19	54.80	0.0
IMI	1.03	132	P	19	57.10	0.4
			S	20	10.18	
FRF	1.05	187	Pg	19	56.50	-0.5
			Sg	20	10.00	
FIN	1.07	111	P	19	57.20	-0.1
			S	21	00.31	
LRG	1.20	196	Pg	19	59.20	-0.3
			Sg	20	15.80	
PCP	1.23	92	P	20	00.31	0.2
			S	20	16.07	
LMR	1.29	190	Pg	20	01.50	0.4
			Sg	20	18.60	

S.D. = 0.3 on 18 of 18 obs.

? SEP 23, 1990 07h 24m 40.67± 5.19s
32.965 S ±31.5km 179.345 W ±77.3km
DEPTH = 491.8 ± 23.6 km
SOUTH OF KERMADEC ISLANDS (179)

HBZ	5.01	202	eP	26	07.00	-1.0
PUZ	5.46	200	P	26	11.40	-0.9
			eS	27	22.90	
NOZ	6.03	200	P	26	17.90	0.1
TAZ	6.25	212	eP	26	20.40	0.5
WLZ	6.39	219	eP	26	21.40	0.0
MOH	6.78	204	eP	26	27.00	1.7
WHH	6.80	209	eP	26	25.10	-0.6
TTH	7.25	204	eP	26	32.40	2.2
NGZ	7.43	212	eP	26	32.80	0.6
CNZ	7.47	212	eP	26	33.30	0.7
PGZ	8.41	203	eP	26	43.10	0.8
MNG	8.69	207	eP	26	43.00	-2.3
KIW	9.12	209	eP	26	48.80	-1.1
MTW	9.16	205	eP	26	49.80	-0.5
CAW	9.27	207	eP	26	51.10	-0.4
BLW	9.35	205	eP	26	54.40	2.0
WDW	9.44	207	eP	26	52.50	-0.8
MRW	9.52	208	eP	26	53.10	-1.0
WEL	9.54	208	eP	26	54.20	-0.1
TCW	9.68	210	eP	26	54.50	-1.3
KHZ	10.99	209	eP	27	09.50	-0.1
LTZ	11.82	212	eP	27	20.00	1.5
MQZ	12.42	208	eP	27	28.90	4.2X
WRA	43.12	276	eP	31	58.20	0.0
BCAO	147.07	214	iPKPd	43	40.00	13.5X
	0.4s	8.00nm				

S.D. = 1.2 on 23 of 25 obs.

23d 08h

? SEP 23, 1990 08h 02m 55.86± 5.68s
15.946 N ±10.0km 60.949 W ±42.6km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.3 (FDF).

SFG	0.39	322	eP	03 04.39	0.6
			S	03 07.00	
DOG	0.65	278	eP	03 09.05	0.2
			S	03 18.20	
BBL	0.66	231	eP	03 09.10	0.1
			S	03 19.00	
SEG	0.70	310	eP	03 08.90	-0.8
			S	03 17.50	
PAG	0.71	277	eP	03 09.81	-0.1
			S	03 19.90	

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

• SEP 23, 1990 08h 26m 39.53± 0.73s
16.379 N ±11.7km 121.037 E ±10.5km
DEPTH = 33.0km (normal)
5.1mb (9 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	0.44	274	iPd	26 47.00	-2.4
OCP	1.73	179	eP	26 44.00	-23.8X
SSE	14.65	1	P	30 07.00	0.8
	1.1s	16.00nm			4.4mb
Z	20s	0.50um			4.0Msz
N	14s	0.40um			
E	16s	0.50um			
			eS	33 12.00	
LOE	18.50	276	eP	31 01.00	5.8X
NNT	20.96	262	eP	31 23.00	0.7
BDT	21.11	276	eP	31 22.00	-1.8
CHG	21.20	280	eP	31 27.00	2.3
BJI	23.95	351	eP	31 53.50	1.9
	1.5s	104.00nm			5.1mb
MAT	25.21	34	eP	32 01.00	-2.9
PSI	25.65	240	ePc	32 11.50	3.4X
GUN	34.41	296	P	33 26.60	0.1
	0.6s	22.00nm			5.3mb
PKI	34.75	295	P	33 28.80	-0.6
KKN	34.90	295	P	33 30.40	-0.2
	0.8s	24.00nm			5.2mb
DMN	35.02	295	P	33 30.80	-0.8
GKN	35.50	295	P	33 35.20	-0.4
	0.6s	16.00nm			5.1mb
OIS	40.98	153	iPc	34 22.00	0.8
GBA	42.15	272	P	34 33.00	2.2
WARB	42.66	173	eP	34 25.00	-9.8X
STK	51.88	158	eP	35 46.40	-0.6
	1.6s	40.00nm			5.1mb
ADE	53.75	162	eP	36 07.50	6.6X
FBA	75.81	26	eP	38 34.00	10.2X
	1.0s	5.50nm			
KEV	76.16	339	eP	38 26.00	0.3
SOD	76.71	337	iP	38 29.20	0.4
SUF	77.82	332	iP	38 35.20	0.3
	0.6s	6.60nm			4.8mb
INK	80.50	21	eP	39 00.50	11.1X
VRI	81.37	315	iPc	38 59.00	4.6X
HFS	84.29	331	eP	39 08.30	-0.9
	0.5s	2.10nm			4.6mb
KRA	84.54	321	eP	39 11.00	0.4
			e	39 20.30	
NAO	85.31	333	P	39 13.80	-0.4
	0.9s	9.70nm			5.0mb
KSP	86.45	322	eP	39 21.00	0.9
			e	39 31.50	

S.D. = 1.4 on 22 of 30 obs.

? SEP 23, 1990 08h 29m 45.46± 0.92s
14.275 S ±46.3km 173.861 W ±31.9km
DEPTH = 33.0km (normal)
5.2mb (1 obs.)
SAMOA ISLANDS REGION (169)

DZM	20.24	245	iPc	34 21.00	0.1
WRA	49.67	256	eP	38 31.00	-5.5X
PNT	79.31	33	eP	41 51.00	1.7
BJI	84.38	314	eP	42 15.50	-0.3
	1.5s	26.00nm			5.2mb
Z	16s	0.47um			5.0MszX
SES	84.54	35	eP	42 15.00	-1.5
KAS	143.88	324	iPKPc	49 16.20	-3.2X
MLR	144.67	336	ePKP	49 10.50	-10.2X
KHC	144.71	352	iPKP	49 19.50	-1.0
ZST	144.98	347	ePKP	49 24.10	3.2X
SRO	145.06	346	ePKP	49 22.10	1.0
CMP	145.21	336	ePKPc	49 23.00	1.5
CDF	145.95	359	ePKP	49 21.70	-1.0
	0.8s	5.35nm			
HAU	146.37	360	ePKP	49 23.10	-0.2
BSF	146.54	359	ePKP	49 23.40	-0.3
LOR	147.05	3	ePKP	49 24.40	0.0
SSF	147.24	3	ePKP	49 25.20	0.5
	0.9s	6.55nm			
LBF	147.34	3	ePKP	49 25.20	0.3
	1.0s	8.00nm			
LSF	147.89	6	ePKP	49 26.20	0.4
	0.7s	5.50nm			
TCF	147.92	5	ePKP	49 26.50	0.6
MAF	148.01	5	ePKP	49 25.60	-0.4
LPG	148.87	359	ePKP	49 26.60	-1.2
	0.7s	4.95nm			
SKO	149.38	337	iPKP	49 30.50	2.2X
OHR	150.37	337	ePKP	49 33.50	3.6X

S.D. = 1.0 on 17 of 23 obs.

SEP 23, 1990 10h 06m 02.08± 1.11s
39.444 N ± 9.3km 143.005 E ± 7.3km
DEPTH = 53.0 ± 10.5 km
4.5mb (11 obs.) 4.2Msz (1 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)

OFUJ	1.10	251	iPd	06 20.60	-0.8
			S	06 36.90	
AOMJ	2.31	300	P	06 38.30	-0.1
			S	07 08.80	
MAT	4.77	234	iPc	07 14.40	1.2
	0.8s	95.52nm			
			eS	08 19.00	
SSE	19.63	252	P	10 37.00	8.0X
	1.0s	12.00nm			4.1mb
Z	18s	0.40um			5.0MszX
N	12s	0.30um			
E	11s	0.20um			
			sP	10 45.50	
			eS	14 23.00	
GUA	25.86	176	eP	10 50.50	-39.9X
CHG	43.12	255	eP	14 09.00	10.1X
GUN	48.19	274	P	14 40.00	0.4
	0.5s	42.00nm			5.7mb X
KKN	48.72	275	P	14 43.40	-0.1
GKN	49.11	275	P	14 46.50	0.1
	0.5s	20.00nm			5.4mb
INK	51.68	28	eP	15 05.00	-0.2
WRA	59.63	189	eP	16 01.90	-1.0
QUE	61.44	287	eP	16 24.20	8.6X
KEV	61.64	339	eP	16 21.00	4.9X
GBA	62.66	265	P	16 32.40	8.8X
SOD	63.23	337	iP	16 26.20	-0.5
PNT	65.58	45	eP	16 42.00	-0.3
SUF	66.40	333	eP	16 51.00	3.8X
NUR	68.41	332	eP	17 05.00	5.1X
WDC	68.64	55	eP	17 02.20	0.5
			e	17 11.20	
MIN	69.36	54	eP	17 06.20	-0.1
ORV	69.88	55	eP	17 09.50	0.2
			e	17 18.20	
FFC	71.01	34	iPc	17 15.70	-0.1
	0.8s	8.00nm			4.7mb
GCC	71.01	57	eP	17 16.80	0.6
CMB	71.47	56	eP	17 19.50	0.5
			e	17 28.70	
LRM	71.56	46	eP	17 19.60	-0.1
			e	17 28.40	
PRS	71.82	58	eP	17 21.30	0.2
HFS	72.41	336	eP	17 23.20	-0.9
	0.5s	2.30nm			4.4mb
Z	19s	0.13um			4.2Msz
			LR	50 36.00	
FRI	72.51	56	eP	17 25.00	-0.1
NAO	72.73	338	P	17 25.90	-0.1
	0.8s	4.20nm			4.4mb
TNP	73.45	54	iP	17 32.00	1.1
	1.0s	7.50nm			4.6mb
RSSD	77.21	43	eP	17 52.00	-0.1
	0.9s	4.18nm			4.5mb
KSP	78.71	329	eP	17 59.00	-0.9
GOL	79.49	47	eP	18 02.50	-2.3
	1.0s	4.50nm			4.4mb
PRU	80.07	329	eP	18 08.50	1.2
KHC	81.14	329	eP	18 23.30	10.3X
ALQ	82.09	51	eP	18 19.30	0.8
	1.1s	5.70nm			4.5mb
LOR	86.30	333	eP	18 39.80	0.5
	0.9s	5.75nm			4.8mb
LPL	86.76	331	eP	18 42.60	0.8
AVF	86.89	334	eP	18 42.70	0.6
	0.7s	5.50nm			4.9mb
ZOBO	144.37	58	PKP	25 30.00	-5.0X
LPB	144.58	59	ePKP	25 39.00	3.9X
CNCB	144.85	59	PKP	25 35.00	-0.8
SIV	148.56	49	iPKPc	25 45.80	4.7X

S.D. = 0.8 on 31 of 43 obs.

SEP 23, 1990 11h 01m 32.60± 1.08s
15.911 S ± 7.6km 72.791 W ± 9.0km
DEPTH = 116.5 ± 10.7 km
4.7mb (10 obs.)
SOUTHERN PERU (117)
Felt (III) at Arequipo.

ARE	1.36	114	iPd	01 58.00	-0.9
			i(S)	02 16.40	
ZOBO	4.50	95	iPc	02 42.00	1.6
			i	03 36.00	
LPB	4.55	98	iPc	02 42.10	1.2
	1.0s	700.00nm			
			i	03 34.00	
CNCB	4.70	102	iPc	02 45.60	2.5X
ANT	8.07	164	iPd	03 24.30	-4.2X
SIV	11.27	92	Pc	04 07.80	-3.7X
RTLL	15.85	166	ePc	05 10.00	-0.4
CFA	16.17	166	ePc	05 14.50	0.1
PEL	17.26	174	iPc	05 27.50	-0.4
	1.0s	20.00nm			4.3mb
PPD	21.19	110	eP	06 09.20	-1.2
			e	06 10.70	
BAO	23.86	93	Pd	06 37.10	0.5
VAO	25.32	110	(P)	06 51.00	0.7
BMA	27.82	109	eP	07 12.70	-0.3
			e	07 20.50	
JFO	28.46	106	eP	07 16.60	-2.2
			e	07 26.30	
SOB1	31.81	82	eP	07 46.90	-1.5
BLA	53.32	352	eP	10 41.00	-0.8
OLY	54.11	341	eP	10 46.50	-1.1
TUL	55.95	337	iPc	11 00.80	-0.1
	1.2s	31.80nm			5.2mb
SIO	56.00	337	eP	11 00.90	-0.4
FVM	56.11	343	eP	11 01.00	-1.0
	1.2s	30.88nm			5.2mb
ALO	59.83	328	eP	11 27.30	-1.0
	1.0s	6.75nm			4.7mb
GOL	63.12	332	eP	11 50.00	-0.3
	1.0s	5.50nm			4.4mb
RSSD	66.21	336	eP	12 10.00	-0.1
	1.5s	17.28nm			4.8mb
TNP	67.98	323	eP	12 22.20	0.8
	1.0s	3.00nm			4.1mb
ORV	71.45	322	eP	12 43.00	0.7
SES	74.08	336	eP	12 58.00	0.5
SPA	74.19	180	iPd	12 59.40	1.3
	1.0s	10.00nm			4.6mb
PNT	77.01	331	eP	13 15.00	1.0
EDM	77.18	336	iPd	13 14.90	0.0
TOL	84.58	46	iPd	13 56.20	2.1
	1.0s	40.00nm			5.3mb
YKA	84.74	342	eP	13 54.80	0.4
	0.6s	5.30nm			4.6mb
MAT	145.66	313	ePKP	21 00.00	0.9
	0.9s	10.08nm			
GBA	151.13	91	PKP	21 15.40	7.2X

S.D. = 1.1 on 29 of 33 obs.

& SEP 23, 1990 12h 54m 37.86s
60.008 N 152.754 W
DEPTH = 90.7km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.43	214	iP	54 51.75	-0.7
RSO	0.46	0	iP	54 52.22	-0.6
RDT	0.59	17	iP	54 52.96	-0.8
			eS	55 04.92	
HOM	0.66	122	iP	54 53.87	-0.4
			eS	55 06.09	
AUE	0.72	206	eP	54 54.02	-0.8

AUH	0 73 209	eP	54	54.51	-0.6	
AUI	0.76 207	eP	54	54.66	-0.6	
PDB	0.76 254	iP	54	54.49	-0.8	
		eS	55	06.93		
XLV	0.76 136	eP	54	54.34	-1.0	
CNPM	0.91 122	iP	54	55.97	-0.9	
		eS	55	10.51		
NKA	1.05 45	eP	54	59.55	1.1	
MCNL	1.15 225	iP	54	58.61	-1.1	
		eS	55	14.70		
CDD	1.17 203	eP	54	58.67	-1.3	
CKL	1.21 10	iP	54	59.86	-0.7	
		eS	55	16.85		
SPU	1.23 16	iP	54	59.93	-0.7	
		eS	55	17.42		
BGL	1.27 8	iP	55	00.78	-0.5	
CRP	1.30 13	iP	55	01.13	-0.5	
CGLM	1.36 15	iP	55	01.68	-0.6	
SLKM	1.36 67	eP	55	01.09	-1.2	
		eS	55	19.97		
NCG	1.43 12	iP	55	02.63	-0.6	
SEW	1.66 85	eP	55	04.60	-1.5	
SUA	1.76 33	eP	55	07.02	-0.6	
SVW	1.80 309	iP	55	06.55	-1.4	
		eS	55	28.90		
PMS	2.00 50	eP	55	09.85	-0.9	
SKT	2.07 16	iP	55	10.46	-1.1	
PWA	2.17 39	eP	55	12.40	-0.4	
PLRM	2.38 47	eP	55	14.10	-1.7	
GHO	2.58 45	eP	55	16.92	-1.6	
CUT	2.69 25	eP	55	18.82	-1.1	
SML	2.82 48	eP	55	19.88	-1.9	
SCM	3.22 53	eP	55	25.41	-1.9	
VZW	3.24 68	eP	55	24.91	-2.7	
VLZ	3.36 68	eP	55	26.18	-3.0	
KLU	3.67 63	iP	55	30.71	-2.8	
TOA	3.83 54	eP	55	33.61	-2.1	

35 obs. associated

? SEP 23, 1990 12h 57m 54.02± 5.63s
33.000 S ±15.3km 72.377 W ±40.9km
DEPTH = 10.0km (geophysicist)
OFF COAST OF CENTRAL CHILE (134)

IHA	0.62 93	iPc	58	06.80	0.3
		iS	58	12.50	
LCCH	0.83 125	iPd	58	10.00	0.0
		iS	58	19.00	
ROCH	1.15 89	iPd	58	15.00	-0.7
		i	58	26.50	
		iS	58	27.50	
LNV	1.25 140	iPd	58	17.00	-0.2
		iS	58	32.00	
TACH	1.37 119	iPc	58	24.00	4.8X
		iS	58	34.50	
PEL	1.43 96	iPd	58	20.00	0.0
		iS	58	36.50	
SAN	1.51 108	iPc	58	21.10	0.0
		iS	58	38.00	
JACH	1.53 79	iPc	58	21.50	-0.1
		iS	58	35.00	
PCH	1.68 112	iPc	58	23.70	0.1
		iS	58	44.00	
FCH	1.78 101	iPd	58	26.00	0.7
RTBS	2.81 62	e(P)	58	45.00	5.2X
		S	59	21.70	
RTCB	3.39 64	e(P)	58	52.90	4.8X
RTCV	3.44 72	e(P)	58	55.60	6.8X
RTLL	3.71 64	ePd	58	57.10	4.5X

S.D. = 0.4 on 9 of 14 obs.

& SEP 23, 1990 13h 35m 47.60s
37.395 N 122.163 W
DEPTH = 4.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.3 (BRK).
Mo=1.4•10••14 Nm (BRK). Felt (IV) at Lomo Mar and (III) at Half Moon Bay and San Gregorio. Also felt at Palo Alto.

PCC	0.20 301	iPc	35	51.40	-0.3
GCC	0.39 160	iPc	35	54.50	-0.9
MHC	0.42 97	iPc	35	56.20	0.2
BKS	0.48 353	iPd	35	57.20	-0.1
		iS	36	04.20	
BRK	0.48 351	ePd	35	57.10	-0.2
		iS	36	02.60	
ARN	0.50 95	eP	35	57.40	-0.3
ZSP	0.55 352	iP	35	58.80	0.1
SAO	0.85 137	eP	36	02.70	-1.8
NWRM	1.21 332	eP	36	09.70	-0.9
PRS	1.24 149	eP	36	09.50	-1.7
LLA	1.25 128	eP	36	09.50	-1.9
CMB	1.55 65	ePd	36	14.40	-1.7
		iS	36	34.50	
PRI	1.74 136	eP	36	17.70	-1.1
FRI	2.00 101	eP	36	20.20	-2.3
ORV	2.22 13	eP	36	23.00	-2.7
BCH	2.77 142	eP	36	30.00	-3.7
ABL	3.48 136	eP	36	40.00	-3.9
LBFM	3.95 3	eP	36	50.50	0.0
TNP	3.98 79	e(P)	36	51.50	0.6

19 obs. associated

% SEP 23, 1990 14h 22m 29.37± 0.90s
44.621 N ± 6.4km 7.227 E ±13.1km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 1.9 (GEN).

PZZ	0.15 218	P	22	33.26	0.3
		S	22	36.13	
STV	0.38 170	P	22	37.36	0.1
		S	22	42.59	
ENR	0.42 161	P	22	37.56	-0.4
		S	22	42.90	
RRL	0.43 314	P	22	37.87	-0.4
		S	22	43.31	
LSD	0.84 357	P	22	46.07	0.3

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

& SEP 23, 1990 15h 26m 30.90s
39.808 N 123.302 W
DEPTH = 2.0km (geophysicist)
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 3.5 (BRK).

WDC	0.97 37	iP	26	49.10	-0.9
FHC	1.12 332	ePd	26	51.50	-1.2
		eS	27	04.50	
MIN	1.41 67	iPc	26	55.90	-1.8
ORV	1.41 100	eP	26	54.90	-2.7
BRK	2.10 157	e(P)	27	07.40	-0.1
BKS	2.10 156	ePc	27	10.50	3.0
CMB	2.88 127	eP	27	17.00	-1.8

7 obs. associated

? SEP 23, 1990 17h 37m 17.84± 1.36s
23.000 S ±15.6km 66.044 W ±24.5km
DEPTH = 225.9 ± 51.9 km
JUJUY PROVINCE, ARGENTINA (128)

ANT	4.08 259	iP	38	22.00	0.0
		iS	39	07.70	
CCH	5.59 359	P	38	41.60	0.3
		e	39	43.00	
CNCB	6.42 343	P	38	52.00	-0.1
LPB	6.72 343	eP	38	57.00	1.2
ZOBO	6.98 343	P	38	58.00	-1.2
		e	40	13.00	
SIV	8.40 35	iPc	39	17.00	-0.3
VAO	17.57 94	(P)	41	10.00	0.1

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

• SEP 23, 1990 17h 45m 43.53± 0.33s
55.945 S ± 7.4km 27.068 W ±11.5km
DEPTH = 33.0km (normal)
5.4mb (11 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

SPA	34.23 180	iPc	52	27.60	-0.4
	1.0s 119.00nm			5.8mb	
PPD	38.35 322	eP	53	04.90	2.0
		e	53	12.20	
MAW	40.19 144	iPc	53	18.90	1.2
	0.8s 48.00nm			5.3mb	
		eS	59	01.00	
SBA	46.19 184	iP	54	06.70	0.5
SIV	47.55 313	P	54	17.80	0.1
		i	54	41.00	
SOB1	47.87 341	eP	54	18.30	-1.9
CNCB	49.85 305	P	54	37.20	1.2
CAI	49.93 347	e(P)	54	42.10	6.1X
LPB	50.14 305	P	54	37.00	-1.1
ZOBO	50.38 305	iPc	54	40.60	0.5
	1.0s 39.25nm			5.4mb	
ARE	51.80 301	eP	54	50.00	-0.6
BUL	54.48 72	iPc	55	04.10	-6.1X
	1.0s 23.50nm			5.2mb	
LIC	64.57 24	Pd	56	20.30	0.8
	0.6s 26.50nm			5.5mb	
KIC	64.77 25	Pd	56	21.50	0.7
	0.8s 25.00nm			5.4mb	
TIC	64.98 24	Pd	56	22.86	0.7
	0.6s 27.50nm			5.5mb	
LKO	67.66 23	Pd	56	38.00	-1.2
	0.6s 21.00nm			5.4mb	
BCAO	70.79 49	iPd	56	59.10	0.5
	0.2s 52.00nm			6.3mb	
		ic	57	23.00	
TOO	86.63 174	ePd	58	24.20	-0.4
		e	59	53.00	
BFD	86.82 172	eP	58	27.00	1.5
	0.7s 29.00nm			5.6mb	
		e	00	12.00	
KLB	87.79 151	eP	58	29.00	-1.3
ADE	88.64 168	ePc	58	34.20	-0.2
CAN	89.03 177	eP	58	36.00	-0.2
BWA	89.91 176	eP	58	40.60	0.2
FORR	90.99 159	eP	58	45.00	-0.3
		e	01	24.00	
STK	91.99 170	eP	58	49.40	-0.5
	0.7s 5.00nm			5.1mb	
WRA	102.79 162	ePdiff	59	39.20	0.3
QIS	102.97 167	iPdiff	59	43.00	3.3X
		e	00	17.00	
GBA	109.28 94	Pdiff	00	12.00	4.2X
	0.2s 1.30nm				
HFS	120.16 22	ePKP	04	28.00	-3.1X
	0.5s 0.90nm				
NAO	120.21 20	PKP	04	29.50	-1.7
	0.7s 1.40nm				
NUR	123.09 28	ePKP	04	46.00	9.4X
SOD	129.30 24	iPKP	04	48.00	-0.4
INK	145.76 321	ePKP	05	18.50	0.0
	0.9s 25.00nm				
		pP	05	41.50	

S.D. = 1.0 on 27 of 33 obs.

SEP 23, 1990 17h 54m 02.96± 0.15s
17.732 S ± 4.1km 167.612 E ± 4.3km
DEPTH = 10.0km (geophysicist)
5.4mb (18 obs.) 6.2Msz (26 obs.)
VANUATU ISLANDS (186)
Ms 6.2 (BRK). Mo=6.0•10••18 Nm (PPT).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 41C M.W.: 12S, 24C
Centroid Location:
Origin Time 17:54:12.6 0.1
Lat 17.75S 0.02 Lon 167.59E 0.02
Dep 15.0 FIX Half-duration 5.2
Moment Tensor; Scale 10••18 Nm
Mrr= 1.85 0.02 Mtt= 0.14 0.03
Mff=-1.99 0.03 Mrt= 0.95 0.08
Mrf=-3.16 0.10 Mtf= 0.14 0.02
Principal Axes:

	Val=	Plg=	Azm=
T	3.79	59	66
N	0.06	6	167
P	-3.85	30	260

Best Double Couple:Mo=3.8•10••18
NP1:Strike= 8 Dip=16 Slip= 113
NP2: 165 75 84

PVC	0.67 91	iP	54	16.20	0.0
		iS	54	26.00	
DZM	4.45 194	iPd	55	09.50	-2.7
		iS	55	58.10	
NDF	9.37 92	ePd	56	37.00	15.9X
SGE	9.83 91	eP	56	31.50	3.9X
VUN	10.34 93	eP	56	36.10	1.7
MBU	10.64 88	eP	56	40.50	1.9
HNR	11.11 317	eP	56	44.00	-1.0
		eS	58	42.00	
RMO	19.51 240	iPd	58	32.70	-0.7
	0.4s 80.00nm			5.4mb	
		i	58	47.00	
		i	02	17.80	
		i	03	40.00	

```
23d 17h

RAB     20.24 310 iP-     58 40.00   -1.3
                  iS      02 32.00
WLZ     21.22 162 eP      58 50.30   -0.9
PMG     21.52 290 eP      58 51.00   -3.4X
RIV     21.78 219 e(P)    59 00.00    3.2X
    Z  18s     8.59um              5.2MszX
                  eS      03 00.00
                  e       08 08.00
HBZ     21.91 157 eP      58 59.30    1.2
PUZ     22.31 157 P       59 01.90   -0.3
NOZ     22.71 158 eP      59 06.80    0.7
LAT     22.93 296 eP      59 12.00    3.6X
MNG     23.80 165 P       59 16.70    0.0
        0.6s    45.00nm            5.2mb
CNB     23.87 219 eP      59 20.00    2.5
                  e       59 44.00
                  eS      04 26.00
BWA     23.88 222 eP      59 17.80    0.2
KIW     23.90 166 P       59 19.80    2.2
PGZ     24.00 164 eP      59 17.50   -1.1
CMS     24.02 231 eP      59 19.00    0.1
                  e       03 05.00
                  e       04 25.00
TCW     24.09 168 eP      59 20.10    0.6
CAN     24.10 220 eP      59 21.80    2.1
CAW     24.16 166 eP      59 21.70    1.5
MRW     24.20 167 eP      59 22.10    1.6
WEL     24.27 167 P       59 22.00    0.8
                  PP      00 16.00
                  S       03 40.00
WDW     24.30 166 eP      59 22.90    1.4
MTW     24.31 165 eP      59 20.80   -0.9
BLW     24.51 166 eP      59 22.60   -0.9
KHZ     25.12 170 eP      59 29.10   -0.3
LTZ     25.28 172 eP      59 30.30   -0.7
STK     27.41 234 iPd     59 50.40   -0.4
        2.0s   195.00nm            5.5mb
                  iS      04 36.80
ADE     30.91 231 eP      00 23.50    1.3
        1.0s    44.00nm            5.3mb
RAR     30.91 102 P       00 20.00   -2.2
                  S       05 28.00
WRA     31.54 261 eP      00 25.00   -2.8X
MTN     35.49 273 eP      01 02.00    0.0
KNA     37.21 267 eP      01 16.00   -0.5
GUA     38.30 323 eP      01 28.00    2.3
    Z  21s    20.88um              5.9Msz
GUMO    38.37 323 eP      01 27.80    1.6
        1.1s   160.19nm            5.7mb
PJG     38.37 323 eP      01 27.20    1.0
WARB    38.79 250 eP      01 30.00    0.3
COOL    44.03 244 eP      02 11.50   -1.2
MBL     45.05 258 eP      02 21.30    0.2
        0.6s    32.00nm            5.4mb
MNI     46.23 290 eP      02 30.80    0.4
KLB     46.98 243 eP      02 34.00   -2.2
NWAO    47.55 241 eP      02 38.50   -2.2
        0.6s    31.00nm            5.6mb
                  eS      09 44.00
BAL     47.81 245 eP      02 34.00   -8.8X
DAV     48.29 297 eP      02 51.10    4.5X
MUN     48.33 243 eP      02 46.00   -0.8
MKS     48.65 279 iPc     02 55.00    5.6X
NANU    48.94 255 eP      02 52.00    0.5
HON     51.39  42 P       03 12.00    1.8
DRV     52.11 194 iPd     03 26.20   11.1X
OCP     56.04 302 eP      03 32.00  -12.6X
BAG     57.42 304 eP      03 54.00   -0.7
                  eS      11 46.00
KAKJ    59.59 334 eP      04 08.00   -1.3
IIDJ    59.95 332 P       04 14.40    2.6
CHJJ    59.96 333 P       04 11.40   -0.4
SBA     60.15 180 e(P)    04 12.00   -0.6
MAT     60.71 333 iPd     04 16.00   -1.0
        1.1s    50.63nm            5.6mb
    Z  20s     5.67um              5.7Msz
                  eS      12 32.00
TSRJ    60.88 331 P       04 15.90   -2.1
MTMJ    60.92 333 P       04 17.00   -1.5
NIIJ    60.96 334 P       04 15.60   -3.0X
YAMJ    61.34 335 P       04 21.70    0.5
OFUJ    61.51 337 P       04 21.50   -0.8
SHK     61.69 328 eP      04 26.00    2.4
ANP     61.92 312 eP      04 28.00    2.5
                  eS      12 48.00
HOOJ    63.89 340 eP      04 41.20    3.2X
KUSJ    64.09 342 eP      04 38.50   -0.8

MRRJ    64.67 339 eP      04 42.90   -0.2
ASAJ    65.65 341 eP      04 49.20   -0.3
HKC     65.70 305 iP      04 56.00    5.8X
SSE     65.92 317 P-      04 52.00    0.6
        1.2s    19.00nm            5.2mb
    Z  20s     9.70um              6.0Msz
    N  18s     8.00um
    E  18s     5.70um
                  iS      13 38.00
                  ScS     14 28.00
                  sS      14 52.00
                  SS      17 52.00
KGM     66.26 280 eP      04 55.00    1.0
PPI     68.19 277 eP      05 04.00   -2.2
YSS     68.24 342 P       05 06.00    0.2
IPM     69.30 282 ePc     05 14.70    1.7
        1.0s    37.40nm            5.5mb
SMY     70.39   4 P       05 28.00    9.1X
    Z  20s    13.00um              6.2Msz
SNG     70.61 284 eP      05 22.60    1.6
PSI     70.62 279 ePc     05 20.20   -0.9
TSI     71.23 280 e(P)    05 25.00    0.2
SPA     72.38 180 iPc     05 29.50   -1.5
        1.0s    30.00nm            5.3mb
    Z  19s    14.05um              6.3Msz
LOE     73.63 295 eP      05 41.50    2.6
NST     74.31 292 eP      05 45.00    2.2
BDT     75.94 293 eP      05 50.00   -2.1
CHG     76.62 295 iPd     05 56.20    0.1
        1.0s    27.50nm            5.3mb
                  eS      15 52.00
MAW     79.24 202 eP      06 11.00    1.4
    Z  18s    16.00um              6.4Msz
                  eS      11 24.00
PAF     81.45 221 iPd     06 32.00   10.4X
                  ePP     09 28.00
                  ePPP    11 20.00
                  eS      16 52.00
                  eSS     21 52.00
                  eSSS    26 00.00
SVW     83.90  17 eP      06 33.50   -0.6
TTA     85.30  16 e(P)    06 42.40    1.3
GCC     85.73  49 e(P)    06 46.30    2.7X
PRS     85.88  50 eP      06 44.80    0.4
BRK     85.91  48 eP      06 47.30    2.8X
BKS     85.93  48 ePd     06 44.50   -0.1
        0.8s    56.00nm            5.8mb
    Z  20s    11.00um              6.3Msz
    N  20s     6.00um
    E  20s     9.00um
                  eS      17 06.40
                  ePPS    18 17.20
                  eLQ     29 22.00
                  eLR     33 08.60
MHC     86.12  49 eP      06 45.80    0.0
SYP     86.16  52 eP      06 46.00    0.0
ARN     86.20  49 P       06 46.60    0.6
PMR     86.21  19 P       06 56.00   10.5X
        1.0s    22.00nm
PRI     86.32  50 eP      06 47.50    0.8
BCH     86.35  51 P       06 47.10    0.2
ABL     86.86  52 P       06 48.40   -1.1
WDC     86.91  46 eP      06 49.20   -0.2
ORV     87.18  47 eP      06 50.30   -0.4
CMB     87.32  49 eP      06 51.00   -0.5
PAS     87.37  53 eP      06 50.00   -1.7
                  ePP     09 30.00
                  ePPP    10 52.00
                  eS      15 00.00
                  eScS    17 11.00
                  eSS     20 00.00
                  eSSS    23 02.00
                  eLg     24 00.00
                  eLR     26 34.00
FRI     87.37  50 eP      06 51.70    0.0
MIN     87.45  46 eP      06 51.50   -0.7
MWC     87.49  53 eP      06 54.00    1.4
ISA     87.75  52 eP      06 54.00    0.4
SBB     87.85  53 eP      06 53.00   -1.1
RVR     87.92  53 eP      06 53.00   -1.4
BAR     87.96  55 eP      06 55.00    0.4
PEC     88.04  54 P       06 54.50   -0.5
        1.7s    50.00nm            5.6mb
PLM     88.07  54 eP      06 55.00   -0.3
SIT     88.30  27 P       07 08.00   12.4X
    Z  20s    15.00um              6.4Msz
IMA     88.45  15 eP      06 55.00   -1.4

        3.1s   294.80nm            6.1mb X
AIA     88.46 161 eP      06 58.80    2.3X
CLC     88.46  52 eP      06 56.00   -1.0
GSC     88.86  52 eP      06 56.00   -3.0X
TPC     88.98  54 eP      06 59.00   -0.5
FBA     89.10  17 P       06 57.90   -1.5
        1.0s    19.00nm            5.3mb
GLA     89.54  55 eP      07 01.00   -1.2
TNP     89.62  50 P       06 59.00   -3.7X
        1.3s    40.82nm            5.5mb
LON     90.11  40 P       07 06.00    1.5
RMW     90.42  40 P       07 05.80   -0.2
GUN     91.13 299 P       07 12.00    2.0
PKI     91.41 298 P       07 11.20   -0.1
KKN     91.59 299 P       07 12.10    0.1
DMN     91.68 298 P       07 11.20   -1.2
GKN     92.20 299 P       07 14.40   -0.3
PNT     92.53  39 eP      07 15.00   -0.6
        1.1s    23.00nm            5.5mb
DUG     93.58  49 P       07 23.50    2.7X
NEW     93.63  40 P       07 18.10   -2.6X
        1.2s     7.77nm            5.0mb
    Z  20s     6.00um              6.0Msz
GBA     94.22 283 P       07 25.00    1.0
HYB     94.31 287 eP      07 27.00    2.6X
                  e       07 39.00
LRM     95.73  44 eP      07 30.80    0.1
IMW     96.13  46 P       07 36.20    3.6X
ALQ     96.72  56 eP      07 35.00   -0.4
    Z  18s     6.53um              6.2Msz
ANMO    96.72  56 P       07 46.00   10.7X
    Z  20s     6.38um              6.1Msz
NDI     98.65 297 eP      07 48.00    4.1X
GOL     98.88  51 P       07 55.00   10.0X
    Z  20s     6.00um              6.1Msz
POO     98.91 287 iPc     07 46.00    0.7
        1.2s   221.88nm            6.7mb X
GLD     99.00  51 P       07 55.00    9.5X
    Z  20s    12.00um              6.4Msz
QUE    107.71 297 ePKP    12 18.90  -13.9X
                  eS      19 10.00
UPA    114.37  88 ePdiff08 48.00   -6.4X
    Z  20s     3.55um              6.0Msz
                  S       23 47.00
CNCB   115.39 119 ePKP    12 47.00   -1.2
LPB    115.43 119 (PKP)   12 50.00    1.9
    Z  24s     5.43um              6.1MszX
                  SKS     23 20.00
                  LR      47 50.00
ZOBO   115.54 118 PKP     12 47.00   -1.5
    Z  24s     3.40um              5.9MszX
                  LR      48 14.00
CCH    116.63 121 (PKP)   12 49.00   -1.3
GDH    122.59  16 ePKP    13 20.00   20.4X
                  e       20 05.00
                  e       31 15.00
KEV    122.69 345 ePKP    13 02.00    2.2
        0.8s    14.70nm
    Z  20s     5.30um              6.2Msz
                  i       13 09.20
                  e       14 36.00
                  e       22 44.00
                  LR      10 28.00
SOD    124.45 343 ePKP    13 03.00   -0.3
BUL    124.90 229 ePKP    13 00.90   -4.9X
PPD    125.11 135 ePKP    13 04.70   -1.3
TAB    125.21 304 ePKP    13 05.00   -0.9
VAO    127.26 139 (PKP)   13 07.00   -3.2X
SUF    127.75 339 ePKP    13 09.00   -0.8
NAI    128.03 254 ePKP    13 18.00    5.9X
NUR    129.75 337 ePKP    13 15.00    1.3
    Z  20s     5.70um              6.3Msz
                  i       13 22.20
                  LR      14 12.00
                  e       15 40.00
                  e       16 36.00
UPP    132.67 340 iPKP    13 22.10    2.9X
HFS    133.67 342 ePKP    13 14.70   -6.5X
        0.8s     7.10nm
    Z  19s     4.42um              6.2Msz
                  LR      03 44.00
NAO    133.87 344 PKP     13 21.20   -0.3
        0.8s     9.40nm
DSI    134.79 297 e(PKP)13 23.00   -1.2
LWI    134.83 248 iPKPd 13 27.60    2.5X
PRNI   135.24 295 e(PKP)13 23.00   -2.1
BBTK   135.29 309 ePKP    13 12.00  -13.1X
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		e	13	27.00		
M8H	135.39	295	e(PKP)	13	25.00	-0.3
VRI	137.16	320	iPKPd	13	30.00	1.7
COP	137.68	339	iPKP+	13	30.00	1.1
MLR	137.82	319	ePKP	13	30.50	0.8
BUC	138.23	318	ePKP	13	28.00	-2.3
HLW	138.44	295	ePKP-	13	34.00	2.9X
			eS	21	20.00	
CMP	138.49	320	ePKPc	13	40.00	9.2X
KRA	138.64	329	ePKP	13	29.00	-1.8
			e	13	33.40	
			e	13	38.40	
			e	13	47.90	
TNR	138.77	321	iPKPd	13	34.00	2.7X
SPC	139.03	327	ePKP	13	36.00	4.1X
			e	25	23.50	
KSP	139.84	332	ePKP	13	29.30	-3.7X
			e	13	37.50	
			e	16	24.00	
8ZS	140.37	322	ePKP	13	34.00	-0.1
TIM	140.53	322	iPKPd	13	34.00	-0.4
BUD	140.73	326	e(PKP)	13	38.00	3.3X
BRG	140.84	334	ePKP	13	34.00	-0.8
N	18s	2.00um				
E	18s	1.00um				
		i	13	38.50		
		i	13	43.80		
		i	13	50.20		
		i	14	18.60		
		i	14	39.80		
		e	16	45.20		
		e	17	12.60		
SRO	140.89	327	e(PKP)	13	41.30	6.3X
			e	25	09.40	
CLL	140.90	335	ePKP	13	31.00	-3.9X
	2.0s	78.00nm				
Z	19s	4.50um			6.2Msz	
		i	13	37.90		
SOB1	141.15	131	ePKP	13	29.80	-6.7X
PRU	141.23	332	ePKP	13	28.50	-7.0X
Z	18s	6.60um			6.4Msz	
N	19s	4.10um				
E	18s	1.90um				
		e	13	44.50		
ZST	141.26	328	ePKP	13	33.80	-1.8
		e	25	18.10		
		e	25	27.70		
VKA	141.61	329	ePKP	13	27.00	-9.3X
	7.0s	1567.00nm				
		e(PP)	16	42.50		
SOP	141.88	328	ePKP	13	29.10	-7.7X
MOX	141.98	335	ePKP	13	28.00	-8.9X
NPS	142.05	305	ePKP	13	38.00	0.5
KHC	142.29	332	PKP	13	33.20	-4.3X
	1.2s	15.00nm				
N	24s	1.70um				
E	22s	1.80um				
SKO	142.38	317	iPKP	13	32.00	-5.9X
ATH	142.56	310	ePKP	13	36.00	-2.2
WET	142.59	333	ePKP	13	36.00	-2.0
Z	18s	5.00um			6.3Msz	
WTS	142.60	340	ePKP	13	38.00	0.2
	1.0s	20.00nm				
		e	17	09.00		
KMR	142.81	330	iPKP-	13	35.20	-3.2X
GRF	142.88	334	ePKP	13	34.80	-3.7X
Z	21s	3.00um			6.0Msz	
DBN	143.01	342	ePKP	13	37.00	-1.5
		e(SS)	35	35.00		
VAM	143.11	306	ePKP	13	40.00	0.7
OHR	143.22	316	ePKP	13	37.00	-2.4
		e	45	04.00		
8NS	143.36	339	iPKPc	13	34.60	-4.6X
Z	18s	5.30um			6.3Msz	
PTJ	143.36	326	ePKP	13	36.00	-3.5X
ZAG	143.40	326	ePKP	13	37.00	-2.4
TNS	143.53	337	ePKPd	13	37.30	-2.3
TTG	143.53	319	ePKP	13	36.00	-3.7X
VLI	143.61	308	ePKP	13	39.00	-1.1
ENN	143.94	340	ePKP	13	39.00	-1.2
	1.1s	82.00nm				
		e	17	02.00		
V8Y	143.99	326	ePKPd	13	39.40	-1.0
		i	13	43.40		
LJU	144.01	328	ePKP	13	38.00	-2.5
ITM	144.18	310	ePKP	13	40.00	-1.1
CEY	144.27	327	ePKP	13	37.90	-3.1X
VOY	144.34	328	ePKP	13	38.30	-2.9X
UCC	144.40	342	PKP	13	41.00	0.1
STU	144.42	335	iPKPd+	13	39.00	-2.1
	1.2s	156.25nm				
FVI	144.50	330	PKP	13	38.60	-2.6
WATA	144.52	332	ePKPd	13	39.00	-2.5
	2.2s	431.50nm				
		i	13	43.30		
		e	17	25.00		
		i	17	29.20		
RIY	144.56	327	ePKP	13	39.80	-1.6
KEK	144.57	315	ePKP	13	41.00	-0.6
TRI	144.63	328	ePKP	13	38.80	-2.7X
VLS	144.73	312	ePKP	13	42.00	0.0
SQTA	144.77	332	ePKPc	13	39.50	-2.4
	1.1s	41.70nm				
		i	13	44.30		
		i	13	55.50		
		e	17	22.00		
		i	17	29.30		
		i	17	33.80		
ETA	144.77	353	ePKP	13	41.30	-0.2
	0.9s	154.00nm				
HVAR	144.80	322	iPKP	13	43.70	1.8
DOU	144.95	341	PKP+	13	41.90	0.0
		e	36	02.00		
VVI	145.11	329	PKP	13	41.70	-0.7
STR	145.13	336	PKP	13	42.18	-0.1
ECB	145.16	354	ePKP	13	41.90	-0.3
	1.0s	225.00nm				
ECP	145.30	353	ePKP	13	41.80	-0.6
	1.0s	500.00nm				
WLS	145.43	337	PKP	13	42.71	-0.2
CTI	145.43	330	PKP	13	42.80	-0.2
CDF	145.46	337	PKP	13	42.78	-0.2
LCI	145.48	317	PKP	13	49.00	5.9X
FEL	145.61	335	PKP	13	43.28	0.0
ECH	145.66	337	PKP	13	43.28	0.0
CAI	145.67	132	iPKPc	13	41.60	-2.6
VAL	145.83	358	iPKP	13	45.20	1.9
MOF	145.97	336	PKP	13	44.51	0.6
VITF	146.10	338	PKP	13	44.84	1.0
8SF	146.12	337	PKP	13	44.51	0.4
HAU	146.14	337	ePKP	13	42.60	-1.5
Z	19s	1.40um			5.8Msz	
SAL	146.29	330	PKP	13	49.00	4.7X
LOMF	146.50	336	PKP	13	45.84	1.1
RSM	146.53	327	PKP	13	47.70	3.0X
MDI	146.54	331	PKP	13	45.60	0.9
ARV	146.56	326	PKPc	13	45.90	1.0
ORI	146.60	318	PKPc	13	47.40	2.4X
VAI	146.89	333	PKP	13	45.50	0.3
DUI	146.89	322	PKP	13	47.90	2.4
PGD	146.95	327	PKP	13	48.40	2.7X
8CAO	146.98	250	iPKPc	13	46.80	0.4
	0.8s	154.00nm				
		ic	14	09.50		
		id	18	57.60		
ASS	147.00	325	PKP	13	47.30	1.7
MGR	147.12	319	PKP	13	46.20	0.4
BSS	147.21	320	PKP	13	48.40	2.5X
MME	147.24	329	PKP	13	49.80	3.6X
SDI	147.24	322	PKP	13	48.10	2.0
AZI	147.28	323	PKP	13	48.00	2.0
BDI	147.39	329	PKP	13	50.50	4.3X
ORX	147.42	333	PKP	13	47.55	1.3
8OB	147.42	331	PKP	13	51.10	4.8X
ORO	147.42	333	PKP	13	49.00	2.7X
MNS	147.45	324	PKP	13	48.20	1.9
FLN	147.57	345	ePKP	13	46.60	0.3
	1.2s	163.65nm				
Z	18s	7.00um			6.5Msz	
LDF	147.64	345	ePKP	13	46.90	0.5
	1.1s	107.45nm				
LOR	147.65	339	ePKP	13	47.10	0.6
	0.9s	76.80nm				
Z	18s	5.75um			6.4Msz	
RMP	147.81	323	PKP	13	50.30	3.4X
LBF	147.86	339	ePKP	13	47.80	0.9
GRC	147.89	340	PKP	13	50.44	3.6X
LSD	147.91	334	PKP	13	49.90	2.6X
SOI	147.92	315	PKPc	13	51.70	4.6X
SSF	147.95	339	ePKP	13	48.00	1.1
GRR	148.01	345	ePKP	13	48.00	1.0
	1.1s	144.15nm				
PCP	148.01	331	PKP	13	50.83	3.6X
LPL	148.04	334	ePKP	13	48.90	1.5
LPG	148.05	334	ePKP	13	49.00	1.5
	0.8s	62.95nm				
RSP	148.11	333	PKP	13	52.67	5.2X
SMF	148.20	339	ePKP	13	48.50	1.1
AVF	148.24	339	ePKP	13	48.40	1.0
MAO	148.26	326	PKP	13	55.00	7.4X
ATN	148.27	316	PKP	13	55.00	7.2X
LPF	148.39	345	ePKP	13	49.00	1.4
FIN	148.42	331	PKP	13	50.62	2.8X
8NI	148.44	334	PKPc	13	51.70	3.7X
RRL	148.50	333	PKP	13	53.39	5.2X
RO8	148.51	332	PKP	13	51.65	3.6X
8GF	148.61	340	ePKP	13	49.60	1.6
DOI	148.63	332	PKP	13	51.50	3.3X
PZZ	148.69	333	PKP	13	52.57	4.2X
ENR	148.77	332	PKP	13	54.62	6.1X
STV	148.80	332	PKP	13	54.42	5.9X
IMI	148.80	331	PKP	13	53.59	5.1X
PLDF	148.86	338	PKP	13	53.73	5.2X
MNO	148.91	316	PKP	13	57.60	8.6X
AUTN	148.94	332	PKP	13	50.74	1.8
AGO	148.96	339	PKP	13	53.46	4.8X
MAF	149.00	340	ePKP	13	50.90	2.2
	1.2s	77.35nm				
TOUF	149.01	332	PKP	13	53.53	4.5X
SBF	149.04	332	ePKP	13	50.60	1.7
	1.1s	134.30nm				
TCF	149.06	340	ePKP	13	50.90	2.1
AURF	149.07	332	PKP	13	49.03	0.1
MVIF	149.15	332	PKP	13	48.66	-0.5
MEU	149.19	314	PKP	13	39.90	-9.5X
PYM	149.26	339	PKP	13	53.96	4.8X
PGF	149.29	328	PKP	13	49.26	-0.1
LSF	149.31	341	ePKP	13	51.00	1.9
GIB	149.31	316	PKP	13	53.00	3.5X
CALN	149.38	332	PKP	13	54.27	4.8X
MFF	149.48	343	ePKP	13	51.80	2.4X
	1.2s	184.45nm				
LBL	149.63	338	PKP	13	54.38	4.8X
FRF	149.64	332	ePKP	13	52.20	2.5X
	1.6s	286.05nm				
LRG	149.85	332	ePKP	13	52.90	2.9X
	1.7s	382.30nm				
LMR	149.88	332	ePKP	13	52.80	2.8X
	1.2s	124.95nm				
CDR	149.93	333	ePKPc	13	54.50	4.4X
FAI	149.94	316	PKP	13	55.00	4.7X
RJF	150.16	340	ePKP	13	53.70	3.3X
	1.1s	100.10nm				
Z	19s	6.50um			6.4Msz	
CVT	150.30	317	PKP	13	50.00	-0.8
CAF	150.31	339	ePKP	13	54.40	3.7X
LFF	150.73	341	ePKP	13	55.10	3.8X
	1.2s	122.00nm				
LPO	150.81	340	ePKP	13	55.40	4.0X
	1.0s	60.00nm				
EPF	152.56	339	ePKP	13	59.00	4.9X
	1.2s	50.60nm				
MADF	152.83	341	PKP	14	09.85	15.4X
ISSF	152.93	341	PKP	14	05.04	10.3X
LHE	152.98	341	PKP	14	05.17	10.4X
ETOR	155.33	341	e(PKP)	14	11.00	13.0X
GUD	156.09	344	e(PKP)	14	07.00	7.9X
TOL	156.78	344	ePKP	14	00.00	0.1
			ePKKP	14	31.50	
			ePP	18	12.00	
			eSKS	21	20.00	
			iPPS	31	08.00	
			iSS	37	30.00	
MAL	159.81	341	iPKP+	14	02.00	-1.4
			iSS	38	32.00	
KIC	166.45	214	PKP	14	11.60	1.2
CHIE	168.81	26	ePKP	14	17.30	5.7X
CFTV	169.25	8	ePKP	14	15.40	3.5X
			i	15	27.60	
			iS	19	15.00	
LKO	169.52	220	PKP	14	12.76	0.3
M8O	174.49	126	ePKP	14	14.20	-0.2

S.D. = 1.3 on 214 of 332 obs.

? SEP 23, 1990 18h 07m 46.55± 0.65s
18.068 S ±21.1km 167.806 E ±22.5km
DEPTH = 33.0km (normal)
VANUATU ISLANDS (106)

PVC	0.58	56	iP	07	57.50	-0.8
			iS	08	07.50	

23d 18h

DZM	4.18	198	iPd	08	50.30	0.6
			iS	09	40.30	
RMO	19.50	241	eP	12	12.00	-2.1
BWA	23.76	223	eP	12	57.20	0.3
CMS	23.95	232	eP	12	59.00	0.2
CAN	23.96	220	eP	13	05.50	6.6X
STK	27.37	235	eP	13	26.90	-3.9X
	1.6s	1160.00nm			6.3mb X	
			e	13	39.40	
WRA	31.67	261	eP	14	04.70	-4.6X
CNCB	115.07	119	ePdiff	23	22.00	43.8X
ZOBO	115.22	118	Pdiff	23	33.00	54.1X
CAI	145.31	133	ePKP	27	21.90	-1.7
CDF	145.84	337	ePKP	27	21.50	-2.1
	0.6s	9.00nm				
BSF	146.50	337	ePKP	27	23.60	-1.1
HAU	146.52	337	ePKP	27	23.80	-0.8
	0.7s	4.40nm				
BCAO	147.03	249	ePKPc	27	37.00	10.6X
	0.8s	12.00nm				
			ic	27	44.30	
LOR	148.03	339	ePKP	27	27.90	0.9
	0.8s	8.05nm				
SSF	148.33	339	ePKP	27	28.80	1.3
	0.8s	8.05nm				
LPL	148.42	334	ePKP	27	29.70	1.7
	0.7s	4.40nm				
LPG	148.43	334	ePKP	27	29.80	1.7
	0.7s	4.95nm				
AVF	148.62	339	ePKP	27	29.80	1.9
	S.D. = 1.5	on	14 of	20	obs.	

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* SEP 23, 1990 18h 44m 03.42± 1.27s
38.972 N ± 7.6km 23.644 E ±15.9km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.0 (ATH).

ATH	1.00	177	iPgc	44	22.60	0.3
PLG	1.41	354	ePb	44	28.60	-0.5
EVR	1.43	268	ePg	44	29.00	-0.5
KZN	1.97	313	ePb	44	38.20	1.0
PRK	2.06	82	ePb	44	45.60	7.1X
ITM	2.24	218	ePn	44	41.00	-0.2
VLI	2.32	194	ePg	44	46.50	4.3X
OHR	3.06	315	eP	45	04.00	11.3X
	S.D. = 0.9	on	5 of	8	obs.	

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* SEP 23, 1990 19h 12m 48.04± 1.01s
41.158 N ±10.4km 25.040 E ± 8.0km
DEPTH = 33.0km (normal)
GREECE-BULGARIA BORDER REGION (363)
MD 2.6 (ATH).

RDO	0.38	92	iPbc	12	57.00	0.2
			eSb	13	03.00	
KDZ	0.57	30	iPc	12	59.00	-0.6
RZN	0.58	335	iPg	12	58.00	-2.0
DIM	0.96	22	iP	13	28.00	22.8X
PLD	0.98	345	iPc	13	07.00	1.6
MMB	1.08	294	ePgd	13	06.00	-0.9
PLG	1.44	238	ePn	13	12.20	0.1
			eSn	13	30.00	
PGB	1.54	335	iPd	13	14.00	0.5
KKB	1.63	296	iP	13	15.00	0.2
JMB	1.74	41	iP	13	22.00	5.6X
VTS	1.98	317	eP	13	21.00	1.0
	S.D. = 1.2	on	9 of	11	obs.	

SEP 23, 1990 20h 33m 49.73± 0.38s
6.726 S ± 5.4km 130.373 E ± 8.4km
DEPTH = 33.0km (normal)
4.9mb (8 obs.) 6.5Msz (1 obs.)
BANDA SEA (280)

AAI	3.72	324	ePd	34	58.50	12.3X
	1.0s	138.70nm				
MTN	6.13	173	eP	35	21.50	1.1
KNA	9.11	190	iPd	36	02.30	0.4
WRA	13.69	164	iPd	36	58.30	-5.7X
QIS	16.41	148	eP	37	35.00	-4.2X
			eS	40	21.00	
PMG	16.83	100	eP	37	46.00	1.5
MBL	17.61	214	eP	37	54.00	-0.3
	0.4s	43.00nm			4.9mb	
			eS	40	57.00	
WARB	19.67	190	eP	38	18.00	-1.2
NANU	21.28	221	eP	38	37.20	1.5
MEKA	22.77	208	eP	39	10.00	19.5X
FORR	24.09	185	eP	39	02.60	-0.7
			i	39	11.00	
RMO	26.32	140	e(P)	39	36.00	11.5X
			e	43	13.00	
BAL	27.00	207	eP	39	30.00	-0.6
STK	27.13	159	eP	39	29.80	-2.0
	1.8s	48.00nm			4.8mb	
			e	39	54.80	
			eS	44	31.70	
KLB	27.41	204	eP	39	34.10	-0.2
MUN	28.39	206	eP	39	44.50	1.3
NWAO	28.79	203	eP	39	46.50	-0.3
ADE	29.14	166	eP	39	51.00	1.0
BWA	32.21	151	eP	40	17.50	0.4
BFO	32.28	162	eP	40	14.00	-3.6X
			e	46	38.00	
PSI	32.76	286	ePc	40	23.10	1.0
CAN	33.21	152	eP	40	25.20	-0.7
BDT	39.09	308	eP	41	14.00	-1.9
CHG	40.05	310	iPc	41	25.90	2.1
	1.0s	13.75nm			4.7mb	
MAT	43.66	9	eP	41	52.00	-1.1
	0.7s	6.85nm			4.5mb	
BJI	48.34	345	eP	42	31.00	0.8
	1.0s	12.00nm			4.9mb	
GUN	55.05	311	P	43	21.20	-0.1
	0.6s	52.00nm			5.7mb	
PKI	55.23	310	P	43	22.60	0.0
	0.6s	14.00nm			5.2mb	
KKN	55.44	310	P	43	24.00	0.0
DMN	55.48	310	P	43	24.60	0.3
GKN	56.04	310	P	43	28.20	0.0
HYB	56.53	296	eP	43	31.00	-0.7
QUE	70.94	305	eP	45	07.30	0.8
MAW	75.34	201	iP	45	31.00	-0.3
SPA	83.32	180	iPc	46	12.80	-1.8
	0.7s	8.98nm			5.0mb	
Z	21s	21.57um			6.5Msz	
SLL	108.95	332	ePdiff	48	10.50	-2.1
	1.4s	18.30nm			6.1mb X	
KIC	135.42	272	PKP	53	09.40	0.2
LIC	135.69	272	PKP	53	09.80	0.1
TIC	135.71	273	PKP	53	09.90	0.2
CNCB	150.40	142	PKP	53	36.00	0.4
			i	53	41.20	
LPB	150.54	142	PKP	53	40.00	4.4X
ZOBO	150.72	141	PKP	53	37.00	0.9
	1.0s	25.00nm				
			i	53	41.00	
CCH	151.01	146	PKP	53	42.50	6.3X
PPD	151.37	177	ePKP	53	40.80	4.6X
	S.D. = 1.1	on	35 of	44	obs.	

SEP 23, 1990 21h 13m 07.46± 0.19s
33.267 N ± 3.9km 138.643 E ± 3.9km
DEPTH = 10.0km (geophysicist)
6.0mb (75 obs.) 6.5Msz (22 obs.)
SOUTH OF HONSHU, JAPAN (211)

Ms 6.3 (BRK), 5.9 (PAS).
Mo=6.0•10••18 Nm (PPT). Felt (III JMA) on Hachijo-jima and Miyake-jima and in the Osaka-Owase-Yokkaichi area, Honshu. A slight tsunami was reported on Hachijo-jima and Oshima. Complex event, observed on broadband displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=152 Dip=84 Slip=-176
NP2: 62 86 -6
Principal Axes:
T Plg= 1 Azm=107
P 7 17
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a small normal component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 12 Focal mech. F
Energy 1.7±0.5•10••15 Nm
MOMENT TENSOR SOLUTION
Dep 16 No. of sta: 20
Moment Tensor; Scale 10••18 Nm
Mrr=-0.89 Mtt=-6.55
Mff= 7.46 Mrt=-0.98
Mrf= 1.40 Mtf=-0.84
Principal axes:
T Val= 7.76 Plg=10 Azm=266
N -1.01 77 130
P -6.74 9 358
Best Double Couple:Mo=7.2•10••18
NP1:Strike= 42 Dip=77 Slip= 0
NP2: 312 90 167
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 35C M.W.: 12S, 26C
Centroid Location:
Origin Time 21:13:15.3 0.2
Lat 33.19N 0.02 Lon 138.34E 0.02
Dep 16.9 1.8 Half-duration 7.4
Moment Tensor; Scale 10••18 Nm
Mrr= 0.49 0.09 Mtt=-6.93 0.10
Mff= 6.44 0.10 Mrt=-0.49 0.44
Mrf= 0.19 0.45 Mtf=-2.29 0.07
Principal Axes:
T Val= 6.83 Plg= 2 Azm=260
N 0.51 86 134
P -7.34 3 351
Best Double Couple:Mo=7.1•10••18
NP1:Strike= 36 Dip=86 Slip= -1
NP2: 126 89 -176

IIDJ	2.29	345	P	13	45.00	-0.9
WKYJ	2.71	291	P	13	50.50	-1.4
CHJJ	2.79	6	P	13	52.30	-0.7
TSRJ	3.16	317	P	13	57.10	-1.0
KAKJ	3.19	23	P	13	56.70	-1.9
MAJO	3.29	354	ePd	14	01.07	1.0
MAT	3.29	354	P	14	00.00	0.0
			S	14	40.00	
MTMJ	3.38	348	P	14	00.50	-0.9
			S	14	45.90	
NIIJ	3.97	4	P	14	10.30	0.6
YAMJ	5.03	13	P	14	24.50	-0.2
SHK	5.12	286	iPc	14	25.00	-1.0
	0.8s	1641.79nm			6.7mb	
OFUJ	6.30	22	P	14	40.70	-1.9
SHNJ	6.34	280	iPd	14	41.60	-1.6
			S	15	53.70	
SAP	10.00	11	eP	15	31.00	-3.1X
			eS	17	29.00	
YSS	14.08	12	iPd	16	26.00	-3.0X
			eS	19	28.00	
SSE	14.94	266	iP+	16	38.00	-2.4X
	1.6s	554.00nm			5.8mb	
N	14s	324.70um				
E	14s	100.70um				
			pP	16	52.00	
			sP	17	00.00	
			S	19	24.00	
			sS	19	44.00	
ANP	16.96	246	iPc	17	06.00	-0.5
			eS	20	08.00	
BJI	19.23	297	iP+	17	34.00	-0.3
	1.2s	170.00nm			5.2mb	
E	14s	242.00um				
			S	21	10.00	
BJI	19.23	297	eP	17	28.65	-5.6X
	1.2s	170.00nm			5.2mb	
E	14s	262.00um				
			e	17	34.12	
			e	17	36.10	
			i	17	41.07	
			iS	21	11.11	
GUMO	20.39	162	eP	17	43.12	-4.1X
PJG	20.39	162	eP	17	43.50	-3.8X
GUA	20.45	162	e(P)	17	44.50	-3.4X
	1.1s	951.90nm			6.1mb	
Z	18s	110.50um			6.3Msz	
HIA	21.29	324	eP	17	54.57	-1.7
			e	17	58.54	
			eS	21	53.80	
BAG	23.40	229	ePc+	18	16.00	-1.5
	2.3s	3545.46nm			6.5mb	
			e	22	32.00	
HKC	24.19	249	iP	18	26.50	1.5
PET	24.40	30	eP	18	28.00	1.3
			eS	22	51.00	
OCP	24.46	225	eP	18	18.00	-9.6X
MCO	24.77	250	eP	18	33.00	2.4

LZH	28.67	285	ePc	19	05.68	-1.0	OPA	56.62	84	P	22	53.00	-0.1				e	38	36.00				
			e	19	08.99		KIP	56.74	85	ePc	23	01.07	7.1X				LR	04	12.00				
			e	19	14.29					eS	30	56.03		PNT	72.47	42	eP	24	34.00	-2.0			
			iS	23	51.32		HON	56.79	85	P	22	56.00	1.7	LON	72.49	45	eP	24	38.39	2.2			
DAV	28.73	208	eP	19	06.00	-1.1	Z	20s		18.09um			6.2Msz	COR	72.66	48	eP	24	36.58	-0.5			
IRK	31.15	318	eP	19	29.00	0.6	MBL	57.02	201	eP	22	53.50	-2.3				e	24	42.21				
			eS	24	38.00			0.7s		38.00nm			5.5mb				eS	34	11.05				
SMY	31.96	42	P	19	45.00	9.5X	GBA	58.67	266	P	23	06.00	-1.6				eSKS	34	44.05				
Z	20s		28.00um			5.9Msz	INK	58.76	26	eP	23	06.00	-1.6				e	36	02.95				
KMI	32.25	265	iPc	19	37.06	-1.6		1.1s		168.00nm			6.1mb				eSS	38	45.15				
			e	19	42.68		MHA	59.06	85	P	23	17.00	6.8X				eHSS	38	46.47				
			e	19	46.49		POO	59.27	273	iPd	23	07.20	-4.6X	KER	73.26	300	ePd	24	42.50	1.5			
			iPP	20	37.26			0.9s		129.41nm			6.1mb	JNW	73.38	349	eP	24	45.00	4.1X			
			eS	24	56.27		NANU	59.73	205	eP	23	15.50	0.8	EDM	73.71	37	eP	24	42.00	-1.2			
MNI	34.21	205	eP	19	54.50	-0.8	QUE	59.93	288	eP	23	14.90	-1.5	FHC	74.11	52	eP	24	50.30	4.6X			
LOE	36.69	254	iPc	20	16.20	-0.3				eS	31	27.80		NEW	74.43	42	iP	24	47.00	-0.4			
ADK	37.09	46	eP	20	18.30	-1.1	RMQ	60.20	170	eP	23	17.00	-0.9		1.0s		77.50nm			5.7mb			
	1.2s		312.70nm			6.0mb	SIT	60.73	39	P	23	31.00	9.8X	DHR	74.91	292	eP+	24	50.00	-0.5			
CHG	38.22	258	iPc	20	28.00	-1.4	Z	20s		22.50um			6.3Msz	WDC	75.17	51	eP	24	51.30	-0.5			
	0.8s		61.57nm			5.4mb	DZM	61.09	150	iPc	23	22.00	-2.1	LBFM	75.19	50	P	24	52.00	-0.2			
			eS	26	50.00		MAIO	63.31	297	iPc+	23	39.00	0.1	UPP	75.32	333	iP	24	51.40	-0.8			
CHTO	38.22	258	ePc	20	28.60	-0.8				eS	32	18.00					iS	34	25.00				
			e	20	33.90		KBS	63.98	350	iPc	23	45.50	2.9X	RGS	75.55	338	eP	24	57.00	3.5X			
			e	20	37.71		FORR	64.54	190	eP	23	45.20	-1.5	ORV	76.38	52	eP	24	57.50	-1.2			
			iPP	22	00.91		CMS	64.76	173	eP	23	50.00	1.8	SIM	76.40	315	eP	24	58.00	-0.7			
			ePcP	22	38.99		STK	64.86	177	eP	23	45.90	-2.9X				eS	34	42.00				
TIK	38.78	355	iPc	20	32.00	-1.4		0.7s		21.00nm			5.4mb	SES	76.51	38	eP	24	59.00	-0.3			
			eS	26	36.00					iS	28	10.30			1.5s		602.00nm			6.5mb			
NST	38.91	253	eP	20	35.70	0.6	APA	65.22	336	iPd	23	50.70	-0.1	HFS	76.56	335	eP	24	57.20	-2.1			
BDT	38.98	256	eP	20	31.00	-4.7X	COOL	65.91	196	eP	23	53.00	-2.6X		0.8s		37.30nm			5.5mb			
	0.8s		207.60nm			5.9mb	KEV	66.15	339	eP	23	58.31	1.6	Z	20s		55.75um			6.9Msz			
RAB	39.40	158	eP	20	36.00	-3.1X		1.2s		216.80nm			6.2mb				LR	55	54.00				
			eS	26	32.00		Z	20s		69.50um			6.9Msz	BRK	76.77	53	eP	25	02.40	1.6			
LAT	40.49	167	eP	20	44.00	-4.1X				iPP	26	22.64		MOL	76.77	339	eP	25	03.06	2.7X			
WMQ	40.64	300	ePc	20	50.37	1.0				iHPP	26	24.63		BKS	76.78	53	iPc	25	02.50	1.5			
			e	20	53.35					iS	32	44.49			0.9s		44.00nm			5.5mb			
			e	20	57.33					eSS	36	54.86		Z	20s		14.00um			6.3Msz			
			iS	27	01.77					eHSS	36	57.76		N	20s		7.00um						
			eSS	30	01.87		BAL	66.83	201	eP	23	59.00	-2.5	E	20s		11.00um						
			eHSS	30	07.83		KLB	67.46	199	eP	24	03.00	-2.4				iS	34	36.00				
NNT	41.00	249	eP	20	50.00	-2.4	SOD	67.55	337	iP	24	04.20	-1.5				e	35	22.00				
MKS	42.37	209	iPd	21	04.70	1.1				i	24	11.00					eScS	35	36.00				
ILT	42.40	22	iPd	21	06.00	2.8X	KTK1	67.68	339	eP	24	05.25	-1.2				eSS	39	28.00				
			eS	27	12.00		RIV	67.77	169	eP	24	12.00	4.7X				eLQ	44	52.00				
PMG	43.20	168	eP	21	10.00	-0.4				eS	33	00.00					eLQ	45	52.00				
SNG	43.73	242	eP	21	14.50	-0.2				e	38	00.00					eLR	47	56.00				
	2.0s	1529.41nm				6.5mb				e	46	28.00		NAO	77.04	337	P	24	59.80	-2.2			
IPM	45.18	239	ePc	21	26.70	0.2	ADE	67.88	180	iPd	24	10.00	2.0		1.2s		170.10nm			6.0mb			
	1.3s		415.30nm			6.2mb		1.0s		80.00nm			5.9mb	GCC	77.39	54	eP	25	07.00	2.7X			
GUN	45.34	278	P	21	27.00	-1.1	BWA	67.96	171	eP	24	07.80	-0.8	GDH	77.39	4	iPd	25	05.00	1.3			
KGM	45.39	234	ePc	21	27.60	-0.5				e	24	11.10			1.0s		40.00nm			5.5mb			
KLM	45.77	237	eP	21	32.00	0.9	YKA	68.20	29	eP	24	13.60	3.8X				i	25	24.00				
PKI	45.85	278	P	21	30.30	-1.8		1.2s		29.10nm			5.3mb				i	34	57.00				
KKN	45.88	278	P	21	30.60	-1.6	MUN	68.26	200	eP	24	16.00	5.5X	MHC	77.46	54	eP	25	06.70	1.8			
ANM	45.99	30	e(P)	21	32.90	0.7	TRO	68.53	341	eP	24	12.70	1.0	ARN	77.53	54	P	25	06.80	1.6			
DMN	46.09	278	P	21	32.90	-1.0	NWAO	68.86	199	eP	24	11.56	-2.6	CMB	77.93	52	eP	25	04.10	-3.3X			
GKN	46.34	279	P	21	34.60	-1.1	CAN	68.92	171	eP	24	16.20	1.7				iS	35	04.53				
MTN	46.41	190	eP	21	33.00	-3.0X	CNB	68.96	171	eP	24	18.00	3.2X				ePS	35	36.48				
	0.4s		100.00nm			6.2mb	DAG	69.32	355	iPc	24	15.50	-1.0				eSS	40	05.45				
SDN	47.07	43	eP	21	38.80	-2.0		1.0s		195.00nm			6.2mb				eHSS	40	09.92				
Z	20s		25.00um			6.2Msz	Z	22s		26.67um			6.4Msz	FFC	78.10	31	eP	25	06.00	-1.8			
TSI	47.70	240	e(P)	21	48.00	1.7	N	22s		19.26um					0.6s		8.00nm			5.0mb X			
PSI	47.99	239	iPc	21	49.20	0.6	TEH	69.51	300	e(P)	24	25.00	6.5X	PRS	78.19	54	eP	25	08.30	-0.4			
	0.9s		37.80nm			5.5mb	OBN	69.74	323	eP	24	19.00	-0.3	LRM	78.44	42	eP	25	09.50	-0.8			
KNA	49.64	193	eP	22	03.00	1.8		2.0s		240.00nm			6.0mb	RYD	78.46	292	ePd	25	10.40	-0.1			
TTA	49.81	33	eP	22	01.60	-0.6	Z	16s		111.00um			7.2MszX	KAS	78.60	312	eP	25	12.00	1.0			
SVW	49.87	35	eP	22	02.40	-0.3				iS	33	23.00		PRI	78.77	54	eP	25	14.30	2.2			
FRU	50.23	301	eP	22	05.00	-0.6	BFD	70.17	177	eP	24	28.00	5.9X	IAS	78.83	320	eP	25	16.00	4.0X			
			iS	29	20.00		PUL	70.27	329	eP	24	24.00	1.5	FRI	78.95	53	eP	25	12.00	-0.9			
IMA	51.08	29	eP	22	11.00	-0.8				eS	33	33.00		8ER	79.14	338	eP	25	18.70	5.3X			
	1.3s		197.70nm			5.9mb	SUF	70.32	333	iP	24	21.40	-1.3	CLI	79.37	319	eP	25	20.00	5.0X			
			i	22	16.90		PGC	70.60	44	eP	24	25.00	0.3	PPE	79.39	319	eP	25	18.00	2.9X			
KDC	51.48	40	eP	22	12.20	-2.6X	TOO	70.76	174	eP	24	29.00	3.3X	PTT	79.62	320	eP	25	23.00	6.7X			
	1.0s		100.00nm			5.7mb	LOF	70.99	341	eP	24	27.71	0.9	BSD	79.66	331	iPc	25	16.00	-0.3			
NDI	52.21	282	iPd	22	19.00	-1.8	GMW	71.52	45	P	24	30.00	-0.4		1.0s		111.00nm			5.8mb			
PMR	53.00	35	eP	22	24.00	-2.2	TAB	72.03	304	iP+	24	35.00	1.2	CFR	79.71	318	eP	25	14.00	-2.8X			
	1.7s		595.40nm			6.2mb	RMW	72.14	45	P	24	34.00	-0.2	AKU	79.73	350	iP	25	21.70	5.2X			
Z	20s		16.50um			6.1Msz	BKR	72.18	308	iPd	24	34.00	-0.6		1.8s		418.18nm			6.1mb			
WRA	53.07	185	eP	22	22.50	-4.6X				iS	33	59.00		TNP	79.99	51	P	25	18.60	-0.2			
			i	22	27.50		NUR	72.19	332	eP	24	32.00	-2.0	ANTO	80.07	311	ePc	25	19.36	0.4			
FBA	53.49	31	eP	22	29.40	-0.4		1.2s		216.80nm			6.1mb				iPP	28	25.15				
OIS	53.53	179	eP	22	27.00	-3.5X	Z	16s		42.30um			6.8MszX	VRI	80.09	319	iPc	25	18.50	-0.4			
TOA	54.37	34	eP	22	34.10	-2.3				i	24	51.20		BBTK	80.10	311	eP	25	19.00	-0.2			
DSH	55.60	297	iPc	22	45.80	0.2				e	27	12.00		SYP	80.12	55	eP	25	18.00	-1.5			
			eS	30	31.50					e	29	08.00		TLB	80.14	317	eP	25	20.00	0.9			
HYB	55.86	269	eP	22	45.00	-2.7X				e	30	14.00		COP	80.23	332	iPc-	25	23.00	3.6X			
	1.0s		170.00nm			6.0mb				e	33	56.00			0.7s		172.60nm			6.1mb			

23d 21h

	Z 19s 40.28um 6.8Msz		eS 35 55.00	BHG 85.87 327 eP 25 49.40 0.9	
	iS 35 45.00	SRO 83.22 324 eP 25 35.30 0.2		EKA 85.88 339 Pc 25 51.00 2.5X	
CVO 80.42 319 eP 25 22.00 1.3			i 25 52.30	1.5s 74.00nm 5.6mb	
IMW 80.45 43 P 25 21.30 0.1		PPCY 83.25 307 eP 25 35.00 -0.6		TNS 85.92 331 ePd 25 50.10 1.3	
ISR 80.64 318 eP 25 25.00 3.1X		BAR 83.44 55 eP 25 38.00 1.3		KKS 86.02 319 eP 25 53.00 3.7X	
UZH 80.68 323 iP 25 24.00 2.1		KDZ 83.46 316 eP 25 37.00 0.4		KAP 86.22 310 eP 25 57.00 6.5X	
iS 35 28.00		PRU 83.47 327 eP 25 36.50 0.1		NEO 86.25 315 eP 25 40.80 -9.8X	
MLR 80.76 319 iPd 25 25.00 2.4		2.0s 210.90nm 6.0mb		FUR 86.27 328 eP 25 52.00 1.5	
KRA 80.91 325 eP 25 22 90 -0.2		Z 17s 54.60um 7.0MszX		LJU 86.30 325 e(P) 25 52.50 1.8	
0.9s 91.00nm 5.8mb		N 16s 36.00um		GOL 86.32 44 P 25 54.00 2.7X	
Z 16s 55.60um 7.0MszX		E 16s 47.20um		Z 20s 15.75um 6.4Msz	
E 18s 68.60um		e 25 38.00		VBY 86.34 324 eP 25 53.60 2.7X	
i 25 24.40		PP 28 55.40		GLD 86.38 44 P 25 54.00 2.5X	
i 25 33.40		S 35 59.00		Z 20s 18.00um 6.5Msz	
e 28 33.00		ZST 83.54 325 eP 25 37.30 0.5		TTG 86.41 320 eP 25 52.00 0.7	
eS 35 31.00		Z 13s 33.40um 6.9MszX		e(S) 36 11.00	
e 36 14.00		i 25 52.90		KZN 86.43 317 eP 25 49.00 -2.6	
FRB 80.94 12 eP 25 22.00 -1.0		i(PP) 28 58.00		OHR 86.45 318 iP 25 50.80 -0.8	
1.3s 248.00nm 6.1mb		PLD 83.59 317 eP 25 39.00 1.8		1.0s 83.00nm 5.9mb	
CLC 81.02 53 eP 25 24.00 -0.1		PGB 83.61 317 iP 25 39.00 1.6		i 26 03.30	
WEL 81.31 153 eP 25 34.00 8.9X		RDO 83.71 316 iPc 25 39.60 1.8		i 26 08.80	
S 35 32.00		RZN 83.84 316 iP 25 38.00 -0.8		ENN 86.51 332 eP 25 50.00 -1.6	
SPC 81.34 324 eP 25 27.60 2.0		VKA 83.87 325 eP 25 39.00 0.5		1.0s 71.00nm 5.8mb	
Z 13s 17.50um 6.6MszX		2.5s 1679.00nm 6.8mb		ePP 29 09.00	
i 25 57.00		Z 15s 39.20um 6.9MszX		SDA 86.56 319 eP 25 51.80 -0.2	
i 28 31.70		id 25 40.50		CEY 86.57 325 eP 25 52.40 0.3	
i 28 59.10		i 25 55.40		MEM 86.61 332 P 25 53.50 1.4	
CMP 81.39 319 ePc 25 39.00 13.2X		ePP 28 59.00		VOY 86.62 325 eP 25 52.50 0.1	
BUC1 81.42 318 ePc 25 34.00 8.1X		LR 07 44.00		e 29 18.00	
AFIF 81.44 293 ePd 25 29.00 2.5		VTS 84.12 318 eP 25 40.00 -0.1		LACI 86.70 319 eP 25 46.90 -5.8X	
SBB 81.50 54 eP 25 26.00 -0.6		SOP 84.16 325 eP 25 41.90 1.9		FVI 86.74 326 P 25 52.90 0.1	
TNR 81.57 320 ePc 25 28.00 1.3		MOX 84.27 329 eP 25 40.00 -0.5		WATA 86.75 327 eP 25 53.00 -0.1	
PAS 81.57 55 eP 25 30.00 3.1X		2.3s 249.00nm 6.0mb		2.5s 633.00nm 6.4mb	
ePcP 25 36.00		Z 16s 39.10um 6.9MszX		i 25 59.50	
ePP 28 51.00		N 15s 57.90um		i 26 09.20	
ePPP 30 54.00		E 16s 48.70um		i 26 25.50	
eSKS 35 33.00		iS 36 10.00		iPP 29 24.50	
ePPS 37 10.00		HOF 84.41 329 eP 25 40.80 -0.4		TIR 86.81 319 eP 25 53.20 -0.1	
eSS 41 10.00		MBH 84.47 302 eP 25 37.00 -4.8X		ATH 86.82 314 eP 26 00.00 6.6X	
eSSS 44 48.00		PRK 84.47 314 eP 25 43.00 1.3		ePP 29 28.00	
eSKSP 46 52.00		MMB 84.48 317 iP 25 41.00 -0.7		eSKS 36 28.00	
eLg 47 00.00		GLA 84.48 54 eP 25 41.00 -0.9		eSS 42 18.00	
eLR 49 58.00		KHC 84.52 327 iP 25 42.00 0.2		eLQ 48 40.00	
BHL 81.58 305 P 25 45.00 17.9X		1.3s 102.50nm 5.9mb		HLW 86.91 304 eP- 25 49.00 -4.9X	
S 35 44.00		N 18s 42.50um		e 29 22.00	
MWC 81.61 55 eP 25 26.00 -1.4		E 17s 35.50um		e 32 20.00	
ITU 81.67 314 eP 25 28.00 0.8		e 26 07.50		eS 36 30.00	
LTZ 81.71 156 eP 25 29.30 2.0		S 36 10.00		TRI 86.92 325 eP 25 56.70 3.0X	
GSC 81.84 53 ePc 25 28.77 0.3		WIT 84.62 333 eP 25 44.00 1.9		SOTA 87.00 327 iPc 25 55.70 1.4	
e 25 36.39		SRAT 84.73 288 ePd 25 45.50 1.9		0.8s 55.80nm 5.8mb	
iS 35 46.94		WET 84.82 328 eP 25 45.20 1.9		i 26 01.50	
KSP 82.07 327 iP 25 28.40 -0.8		PV09 84.85 47 iP 25 44.00 0.0		i 26 18.10	
1.2s 120.00nm 5.9mb		KMTA 84.89 288 ePd 25 43.00 -1.4		iPP 29 27.00	
i 25 40.00		KMR 85.04 326 iP+ 25 44.20 -0.2		i 29 45.00	
ePP 28 27.00		iPP 29 09.30		UCC 87.09 333 P 25 55.00 0.6	
i 28 43.30		iS 36 13.40		e 29 19.00	
DEV 82.15 321 ePd 25 33.00 3.3X		iPS 37 15.70		S 36 30.00	
SHMJ 82.16 304 P 25 36.50 6.5X		SMG 85.08 312 eP 25 46.50 1.8		e 37 39.00	
DRA 82.20 319 eP 25 43.00 13.1X		BADA 85.10 301 eP 25 44.00 -1.0		LSK 87.21 317 eP 25 55.40 0.1	
RVR 82.20 54 eP 25 29.00 -1.2		GRF 85.15 329 ePc 25 45.70 0.8		GWF 87.23 330 P 25 57.27 2.1	
JMB 82.27 316 iP 25 31.00 0.6		Z 21s 32.00um 6.7Msz		EVR 87.33 316 eP 26 01.00 5.0X	
BRN 82.30 330 eP 25 32.00 1.7		WTS 85.20 332 eP 25 45.50 0.4		SNF 87.35 333 P 25 57.00 1.3	
ePP 28 42.00		0.9s 36.00nm 5.6mb		e 26 21.70	
ADI 82.34 305 eP 25 27.00 -4.0X		ePP 29 04.00		VVI 87.36 326 P 25 57.10 1.2	
PSZ 82.36 323 iP 25 32.80 1.9		PLG 85.42 316 eP 25 45.50 -1.0		NPS 87.39 311 eP 25 58.00 1.8	
DAU 82.37 46 iP 25 31.10 -0.3		SKO 85.52 318 iP 25 46.00 -0.9		TPE 87.44 318 eP 25 56.00 -0.4	
BURJ 82.41 304 P 25 37.00 5.6X		9.0s 4110.00nm 6.6mb X		DOU 87.56 332 P 26 01.10 4.4X	
CSTJ 82.43 302 P 25 35.80 4.3X		Z 14s 29.94um 6.8MszX		e 26 31.00	
PVL 82.52 317 iPd 25 34.00 2.4		N 17s 46.18um		e 29 23.00	
CSS 82.55 307 eP 25 33.00 1.0		E 16s 33.46um		CTI 87.67 326 P 25 58.10 0.6	
PLM 82.92 55 eP 25 36.00 1.8		iPcP 25 49.30		WLS 87.78 330 P 25 58.90 1.0	
BZS 83.01 321 eP 25 33.00 -1.1		i 26 04.00		CDF 87.81 330 eP 25 56.80 -1.3	
TPC 83.04 54 eP 25 34.00 -0.6		iPP 28 54.00		1.7s 250.00nm 6.2mb	
DSI 83.09 303 eP 25 34.00 -0.8		iS 36 19.00		CDF 87.81 330 P 25 59.90 1.8	
BUD 83.09 324 eP 25 35.00 0.5		iSS 41 46.00		FEL 87.91 329 P 26 00.31 1.7	
BRG 83.10 328 iPd 25 36.00 1.5		iSSS 44 49.00		KEK 87.96 317 eP 26 00.00 1.2	
2.0s 480.00nm 6.3mb		i 48 28.00		ECH 88.01 330 P 25 59.40 0.4	
i 25 50.70		PTJ 85.71 324 eP 25 48.70 0.8		VLI 88.11 314 eP 26 00.00 0.4	
i 29 16.40		DBN 85.74 333 eP 25 51.00 3.2X		VAM 88.18 312 eP 26 02.50 2.5	
i 30 30.00		Z 20s 22.00um 6.6Msz		MOF 88.31 330 P 26 02.11 1.6	
eSKS 35 52.00		ePP 29 14.00		ITM 88.41 314 eP 25 59.00 -2.1	
iS 36 04.00		iS 36 22.00		BSF 88.47 330 eP 25 59.50 -1.8	
TIM 83.14 321 iPd 25 36.30 1.5		eSP 37 20.00		1.7s 147.05nm 6.0mb	
DIM 83.14 316 iP 25 37.00 2.1		eSS 42 00.00		VITF 88.50 331 P 26 02.95 1.7	
CLL 83.19 329 iPd 25 36.00 1.1		ZAG 85.75 324 ePd 25 49.00 1.0		HAU 88.52 330 eP 25 59.80 -1.6	
1.5s 240.00nm 6.2mb		BNS 85.87 332 iPd 25 49.80 1.4		1.6s 130.60nm 6.0mb	
Z 18s 30.00um 6.7Msz		Z 22s 32.80um 6.7Msz		Z 20s 50.00um 6.9Msz	

SAL		88.52	326	P	26	02.80	1.4	TUL		94.40	41	eP	26	30.00	1.1	OFUJ		6.35	21	P	10	38.50	-1.7
LCI		88.56	319	P	26	05.50	3.8X			1.5s		105.00nm			6.0mb	SHNJ		6.39	280	iPd	10	38.80	-1.9
ANMO		88.77	48	P	26	04.60	1.5X					e	27	12.50		KUMJ		6.64	267	P	10	43.10	-1.2
	Z	20s		10.64um			6.3Msz	CCM		95.22	37	ePd	26	34.12	1.5	KAGJ		6.90	255	P	10	46.70	-1.3
MDI		88.77	327	P	26	03.00	0.4					eSKS	37	10.60		MRRJ		9.41	11	eP	11	19.80	-3.0X
ALO		88.77	48	eP	26	03.00	-0.1					eS	37	50.88		HOOJ		9.87	20	eP	11	24.70	-4.5X
		1.6s		77.50nm			5.7mb	FVM		95.69	37	P	26	43.00	8.2X					eS	13	12.40	
	Z	18s		8.76um			6.2Msz	UYO		96.42	42	e(P)	26	43.50	5.3X	SAP		10.07	11	eP	11	31.00	-0.9
LOMF		88.83	330	P	26	04.66	1.7	CBM		96.61	18	eP	26	50.00	11.2X	KUSJ		10.97	24	eP	11	39.00	-5.2X
ARV		88.93	324	P	26	05.20	1.7	OLY		97.05	39	P	26	45.20	4.2X					eS	13	35.60	
ETA		89.07	339	eP	26	11.90	8.0X	TOL		99.45	332	eP	26	52.00	0.2	ASAJ		11.34	15	eP	11	44.90	-4.4X
		1.3s		185.00nm			6.2mb					iPP	31	00.00		YSS		14.15	11	eP	12	23.00	-3.7X
VAI		89.13	328	P	26	04.50	0.2					eSKS	37	41.00						eS	15	24.00	
SFI		89.15	325	P	26	06.70	2.3					eS	38	34.00		SSE		14.97	267	Pc	12	37.50	-0.1
PGD		89.25	325	P	26	05.50	0.3					ePS	39	58.00				1.4s		328.00nm			5.6mb
ASS		89.38	324	P	26	06.80	1.1					iPPS	40	29.00			Z	20s		29.90um			5.7MszX
DUI		89.49	322	P	26	08.00	1.7					iSS	45	11.00			N	14s		105.60um			
ECB		89.53	340	eP	26	11.60	5.5X	BCAO		112.15	291	iPKPc	31	53.00	7.5X		E	13s		33.50um			
		1.4s		166.00nm			6.1mb			1.2s		21.00nm								S	15	23.00	
ECP		89.57	339	eP	26	08.00	1.7					ic	32	26.20						sS	15	42.00	
		1.6s		369.00nm			6.4mb	BUL		117.16	263	ePKP	31	50.00	-5.1X	GUMO		20.31	162	eP	13	39.00	-4.2X
ORI		89.57	319	P	26	09.50	2.9	TIC		127.42	312	PKP	32	15.40	0.6			1.2s		1122.22nm			6.1mb
BDI		89.65	325	P	26	09.40	2.5	KIC		127.47	312	PKP	32	15.54	0.7					i	13	43.20	
BOB		89.66	326	P	26	10.00	3.0X	LIC		127.75	312	PKP	32	14.96	-0.5	PJG		20.31	162	eP	13	39.00	-4.2X
ORO		89.67	328	P	26	08.00	1.0	AIA		145.10	163	ePKP	32	44.30	-1.5	GUA		20.37	162	eP	13	40.00	-3.8X
AZI		89.78	322	P	26	08.50	1.0	ARE		148.10	66	ePKP	32	56.00	3.5X			1.2s		675.00nm			5.9mb
SDI		89.80	322	P	26	07.70	0.1	ZOBO		150.51	61	PKP	32	58.00	1.4		Z	22s		36.94um			5.7Msz
MNS		89.88	323	P	26	08.00	0.0					LR	22	40.00		BAG		23.37	229	eP	14	12.60	-1.5
BSS		89.94	321	P	26	12.00	3.8X	LPB		150.70	62	ePKP	32	56.00	-0.7			1.7s		938.46nm			6.1mb
RFI		90.00	322	P	26	11.15	2.7X			1.0s		430.00nm				HKC		24.20	250	eP	14	22.80	1.0
		1.7s		986.80nm			6.8mb					i	33	02.00		DAV		28.68	208	eP	15	04.90	1.4
MGR		90.01	320	P	26	08.80	0.2					LR	23	41.00		YAK		29.41	351	iPd	15	07.00	-2.7X
LOR		90.12	331	eP	26	07.10	-1.9	CNCB		150.96	62	PKP	33	02.00	4.8X	IRK		31.23	318	eP	15	25.00	-0.9
		1.2s		65.45nm			5.7mb	CCH		152.68	61	PKP	33	07.50	8.1X	MNI		34.15	205	eP	15	51.00	-0.7
	Z	20s		50.00um			6.9Msz	ANT		152.82	77	e(PKP)	33	16.00	17.0X	LOE		36.70	254	iPc	16	14.00	0.6
LPL		90.30	328	eP	26	08.40	-1.7	CAI		153.11	351	ePKP	33	05.80	6.1X	ADK		37.11	46	eP	16	16.00	-0.5
		1.7s		205.85nm			6.1mb	SIV		155.24	51	PKP	33	06.60	4.0X			0.8s		111.00nm			5.7mb
LBF		90.30	331	eP	26	07.80	-2.1	SAN		155.56	99	ePKP	33	19.00	16.4X	AAI		38.00	197	eP	16	23.50	-0.7
LPG		90.31	328	eP	26	08.60	-1.7	SOB1		156.05	359	ePKP	33	09.60	5.8X	CHG		38.24	258	iPc	16	25.60	-0.7
		1.4s		204.20nm			6.2mb	PPD		165.76	41	ePKP	33	16.70	3.0X			1.0s		119.75nm			5.6mb
SSF		90.43	331	eP	26	08.60	-1.8	JFO		168.37	9	ePKP	33	20.90	5.2X	TIK		38.86	355	iPd	16	29.00	-1.9
		1.1s		46.40nm			5.7mb			S.D. = 1.3		on 286 of 386 obs.								eS	22	27.00	
GRI		90.47	319	P	26	12.97	2.2	----------								NST		38.92	253	eP	16	33.60	1.6
		0.8s		24.90nm			5.5mb	*	SEP	23,	1990	21h	53m	02.76±	1.10s	BDT		38.99	256	eP	16	28.30	-4.3X
FLN		90.56	334	eP	26	09.50	-1.5		33.056	N	±11.2km		138.775	E	±11.4km			0.7s		103.10nm			5.6mb
	Z	19s		70.00um			7.1Msz		DEPTH =		10.0km		(geophysicist)			NNT		41.01	249	iPc	16	48.70	-0.5
LDF		90.57	334	eP	26	09.50	-1.5		4.2mb	(	1 obs.)					MKS		42.32	209	ePc	17	01.50	1.5
		1.6s		155.45nm			6.0mb		SOUTH OF HONSHU, JAPAN						(211)	PMG		43.12	168	eP	17	15.00	8.5X
SMF		90.63	331	eP	26	09.50	-1.9									SNG		43.72	242	eP	17	11.00	-0.5
		1.8s		263.25nm			6.2mb	WKYJ		2.90	294	iP+	53	48.50	-1.3			1.5s		333.33nm			5.9mb
BNI		90.69	328	P	26	12.40	0.6					S	54	20.10		IPM		45.17	239	ePc	17	23.50	0.3
AVF		90.71	331	eP	26	09.90	-1.8	MAT		3.51	353	iPd	53	58.20	-0.2			1.1s		199.60nm			6.0mb
DOI		90.86	328	P	26	11.50	-1.1					eS	54	37.00		KGM		45.38	234	ePd	17	25.70	0.9
VAL		90.88	341	eP	26	20.00	7.7X	YAMJ		5.21	11	eP	54	24.10	1.5	GUN		45.39	278	P	17	25.00	-0.2
				PP	29	51.00		OFUJ		6.45	20	eP	54	40.00	-0.1	PKI		45.90	278	P	17	27.80	-1.4
				S	36	54.00		SHNJ		6.49	282	P	54	39.60	-1.0	KKN		45.93	278	P	17	28.20	-1.1
				SS	42	00.00		KUMJ		6.71	268	P	54	44.90	1.1	ANM		46.04	30	eP	17	30.10	0.7
GRR		91.01	334	eP	26	11.70	-1.4	KAGJ		6.94	257	eP	54	49.10	2.1	DMN		46.14	278	P	17	30.00	-1.0
BGF		91.11	331	eP	26	11.90	-1.6	BJI		19.42	297	eP	57	31.00	-1.0	GKN		46.39	279	P	17	31.80	-1.1
		1.3s		72.20nm			5.8mb	CHG		38.29	258	eP	00	26.00	0.8	SDN		47.10	43	eP	17	36.00	-1.9
SOI		91.20	318	P	26	15.10	1.1	WRA		52.87	185	eP	02	19.70	-1.3	TSI		47.69	240	ePc	17	43.00	-0.1
SBF		91.27	327	eP	26	12.10	-2.3	QUE		60.10	288	eP	03	12.20	-0.7	TTA		49.85	33	eP	17	59.50	0.2
LPF		91.38	334	eP	26	13.40	-1.3	KEV		66.39	339	eP	03	50.00	-3.6X	SVW		49.92	35	eP	18	00.10	0.3
		1.0s		68.00nm			5.9mb	SOD		67.79	337	eP	04	19.00	16.6X	IMA		51.13	29	eP	18	08.60	-0.4
ATN		91.46	319	P	26	19.50	4.2X	NUR		72.43	332	eP	04	37.00	6.2X			1.3s		66.00nm			5.4mb
MAF		91.49	331	eP	26	14.00	-1.3	HFS		76.80	335	eP	05	12.40	16.5X	KDC		51.52	40	eP	18	11.10	-0.8
PGF		91.56	325	eP	26	13.40	-2.4			2.0s		78.50nm				NDI		52.26	283	iPc	18	16.00	-2.0
		1.5s		135.80nm			6.1mb	NAO		77.28	337	P	04	58.60	0.0	WRA		53.00	185	eP	18	20.20	-3.2X
TCF		91.58	331	eP	26	14.30	-1.5			0.7s		1.50nm			4.2mb	PMR		53.05	35	eP	18	22.40	-0.9
		1.2s		66.95nm			5.9mb	ZOBO		150.51	62	PKP	13	00.00	8.1X			1.1s		101.10nm			5.7mb
FRF		91.87	327	eP	26	14.90	-2.2	LPB		150.70	62	ePKP	13	02.00	10.0X	QIS		53.45	179	eP	18	23.80	-2.9X
		1.4s		113.25nm			6.0mb	CNCB		150.96	63	PKP	13	02.50	9.9X	FBA		53.54	31	eP	18	26.70	-0.3
LSF		91.88	332	eP	26	15.60	-1.5			S.D. = 1.3		on 12 of 19 obs.				TOA		54.41	34	eP	18	32.00	-1.5
MNO		92.05	319	P	26	20.10	1.8	----------								HYB		55.89	269	ePc	18	42.50	-2.3
LRG		92.08	327	eP	26	16.20	-1.8		SEP	23,	1990	22h	09m	04.27±	0.18s			1.0s		120.00nm			5.9mb
		1.4s		156.85nm			6.2mb		33.189	N	± 3.9km		138.685	E	± 3.6km	ASPA		56.72	185	iPd	18	48.70	-1.8
LMR		92.11	327	eP	26	16.30	-1.9		DEPTH =		10.0km		(geophysicist)					0.5s		17.00nm			5.3mb
		1.4s		174.25nm			6.2mb		5.6mb	(	49 obs.)		6.2Msz	(	7 obs.)		Z	24s		7.47um			5.7MszX
CDR		92.17	328	ePd	26	18.50	0.0		SOUTH OF HONSHU, JAPAN						(211)					LR	39	22.90	
				e	26	26.50			Felt (III JMA) on Hachijo-jimo.							MBL		56.96	201	eP	18	50.00	-2.2
MFF		92.24	333	eP	26	17.70	-1.1									GBA		58.70	266	Pc	19	03.20	-1.4
		1.3s		144.40nm			6.2mb	IIDJ		2.37	345	P	09	42.40	-1.5			1.0s		113.20nm			5.9mb
GIB		92.37	319	P	26	20.00	0.4					S	10	11.20		INK		58.82	26	eP	19	04.00	-0.7
MEU		92.51	318	P	26	23.30	3.0X	CHJJ		2.86	5	P	09	51.20	0.4			1.1s		52.00nm			5.6mb
FAI		93.08	319	P	26	27.50	4.7X	MAT		3.37	353	iPd	09	57.60	-0.4	POO		59.31	273	iPc	19	04.50	-4.4X
MEO		93.63	44	e(P)	26	25.00	-0.4					eS	10	38 00		QUE		59.99	288	eP	19	12.30	-1.3
SIO		94.24	42	eP	26	28.50	0.4	YAMJ		5.09	12	P	10	22.10	-0.3					eS	27	25.10	

23d 22h

RMO	60.12	170	eP	19	10.00	-4.1X				i	21	41.20					i	21	58.00				
DZM	61.00	150	iPc	19	20.20	-0.1	CMP	81.48	319	ePd	21	25.00	1.9				i	22	08.20				
MAIO	63.37	297	eP	19	36.00	-0.1	AFIF	81.51	293	eP+	21	25.00	1.4	ENN	86.60	332	eP	21	50.00	1.1			
			i	19	55.00		SBB	81.52	54	eP	21	23.00	-0.5		1.0s	34.00nm			5.5mb				
KBS	64.06	350	eP	19	40.00	0.0	PAS	81.59	55	eP	21	23.00	-0.8				e	22	05.50				
FORR	64.47	190	eP	19	42.00	-1.1	MWC	81.62	55	eP	21	24.00	-0.2	MEM	86.69	332	P	21	51.70	2.4			
STK	64.78	177	eP	19	41.20	-3.9X	GSC	81.86	53	eP	21	25.00	-0.3	FVI	86.82	326	P	21	49.60	-0.4			
	1.8s	58.00nm			5.5mb					e	24	33.00		WATA	86.83	327	iPd	21	50.50	0.2			
KEV	66.24	339	iP	19	53.60	-0.5	KSP	82.15	327	iP	21	26.20	-0.2		1.5s	62.50nm			5.6mb				
	0.9s	32.10nm			5.5mb			1.2s	86.00nm			5.7mb					i	22	08.10				
SOD	67.63	337	iP	20	01.40	-1.6				ic	21	42.90		SOTA	87.09	327	i(P)	21	51.80	0.3			
ADE	67.80	180	iPc	20	05.00	0.7				iPP	24	32.20			1.4s	38.40nm			5.4mb				
BWA	67.88	171	eP	20	05.00	0.1	RVR	82.22	54	eP	21	25.00	-2.1				i	22	02.10				
YKA	68.25	29	eP	20	05.20	-1.7	DEV	82.24	321	ePc	21	29.00	2.1	SNF	87.44	333	P	21	54.50	1.6			
	1.1s	13.80nm			5.1mb		JMB	82.36	316	eP	21	28.00	0.4	DOU	87.65	332	P	21	55.90	1.9			
TRO	68.62	341	eP	20	08.30	-0.8	DAU	82.40	46	P	21	28.50	0.1	CTI	87.75	326	P	21	55.00	0.3			
CAN	68.83	171	eP	20	12.80	2.0	ADI	82.41	305	eP	21	24.00	-4.1X	CDF	87.89	330	eP	21	42.60	-12.7X			
DAG	69.40	355	iPd	20	12.50	-1.3	PEC	82.42	54	P	21	28.00	-0.2		1.5s	73.10nm							
	0.6s	50.67nm			5.9mb		PSZ	82.45	324	eP	21	12.90	-15.2X	BSF	88.55	330	eP	21	45.30	-13.2X			
OBN	69.82	323	eP	20	12.00	-4.7X	PLM	82.94	55	eP	21	31.00	-0.1	HAU	88.60	330	eP	21	45.50	-13.1X			
	1.0s	25.00nm			5.3mb		TPC	83.06	54	eP	21	31.00	-0.5		Z 22s	6.50um			6.0Msz				
	Z 16s	32.40um			6.7MszX		BZS	83.09	321	eP	21	31.00	-0.4	SAL	88.61	326	P	21	57.50	-1.1			
		eS		29	22.00		DSI	83.16	303	eP	21	29.00	-3.0X	ANMO	88.79	48	P	22	00.00	0.0			
BFD	70.09	177	e(P)	20	27.00	8.6X	BUD	83.17	324	eP	21	33.00	1.2	ALO	88.79	48	eP	22	00.00	0.0			
SUF	70.40	333	iP	20	18.90	-1.2	BRG	83.18	328	iP	21	32.10	0.4		1.2s	11.72nm			5.0mb				
PGC	70.63	44	eP	20	22.00	0.3		1.4s	48.00nm			5.5mb			Z 20s	3.90um			5.8Msz				
TOO	70.68	174	eP	20	21.70	-0.3				i	21	38.50		MDI	88.85	327	P	22	04.00	4.2X			
TAB	72.10	304	eP	20	31.00	0.0				i	21	49.20		ARV	89.01	324	P	22	02.00	1.3			
NUR	72.27	332	iP	20	30.80	-0.6				i	22	15.60		VAI	89.21	328	P	22	00.00	-1.5			
	0.8s	49.90nm			5.7mb					i	22	28.60		SFI	89.24	325	P	22	04.00	2.3			
PNT	72.50	42	iPd	20	33.00	0.0				i	24	42.50		PGD	89.33	325	P	22	02.50	0.1			
	0.9s	74.00nm			5.8mb		CLL	83.27	329	iPc	21	31.70	-0.5	ASS	89.47	324	P	22	03.20	0.3			
JNW	73.47	349	eP	20	40.50	2.3		1.5s	62.00nm			5.6mb		DUI	89.58	322	P	22	03.60	0.1			
EDM	73.75	37	iPd	20	39.60	-0.6				i	21	48.30		MME	89.59	325	P	22	05.30	1.6			
FHC	74.13	52	eP	20	44.00	1.3	SRO	83.30	324	eP	21	32.00	-0.4	AQU	89.62	323	P	22	04.80	1.2			
NEW	74.46	42	P	20	44.00	-0.4	BAR	83.45	55	eP	21	34.00	0.4	ORI	89.66	320	P	21	57.00	-6.8X			
	1.0s	62.50nm			5.6mb					e	24	46.00		BDI	89.73	325	P	22	05.00	0.9			
WDC	75.19	51	eP	20	49.30	0.6	KDZ	83.54	316	eP	21	35.00	1.2	BOB	89.74	327	P	22	05.50	1.3			
UPP	75.40	333	iP	20	48.80	-0.7	PRU	83.55	327	eP	21	33.50	-0.2	AZI	89.87	322	P	22	03.50	-1.2			
MIN	75.92	51	eP	20	53.00	-0.1				e	21	39.70		SDI	89.88	322	P	22	01.50	-3.3X			
ORV	76.41	52	eP	20	55.50	-0.1	ZST	83.62	325	iP	21	34.30	0.2	MNS	89.96	323	P	22	05.40	0.2			
SES	76.55	38	eP	20	55.00	-1.3	RZN	83.93	317	iP	21	36.00	0.0	LOR	90.21	331	eP	21	53.10	-13.1X			
	1.2s	126.00nm			5.9mb		VKA	83.95	325	iPd	21	38.00	2.3		1.7s	62.50nm							
HFS	76.64	335	eP	20	54.50	-2.1		Z 15s	10.70um			6.3MszX			Z 20s	15.75um			6.4Msz				
	0.8s	24.10nm			5.3mb					e	25	04.00		LPL	90.39	328	eP	21	54.60	-12.7X			
	Z 19s	15.36um			6.3Msz					LR	03	36.00			1.2s	40.15nm							
		LR		52	29.00		RSSD	84.19	40	P	21	36.60	-0.7	LBF	90.39	331	eP	21	54.00	-13.1X			
BRK	76.78	53	eP	20	58.00	0.3		1.0s	33.89nm			5.5mb		LPG	90.39	328	eP	21	54.80	-12.7X			
BKS	76.80	53	iPd	20	58.20	0.3	VTS	84.20	318	iPc	21	38.00	0.7		1.3s	57.75nm							
	1.1s	92.00nm			5.8mb		SOP	84.24	325	eP	21	39.10	1.9	SSF	90.52	331	eP	21	54.80	-12.8X			
NAO	77.13	337	P	20	57.20	-2.1	MOX	84.36	329	eP	21	38.00	0.3		1.3s	27.10nm							
	1.3s	108.00nm			5.8mb			1.8s	50.00nm			5.4mb		FLN	90.65	334	eP	21	55.50	-12.7X			
GCC	77.41	54	eP	21	01.70	0.5	HOF	84.49	329	eP	21	28.30	-10.1X		1.4s	39.20nm							
CMB	77.95	52	eP	21	04.60	0.3	GLA	84.50	54	eP	21	39.00	0.2		Z 20s	20.25um			6.6Msz				
FFC	78.14	31	eP	21	04.00	-0.9				e	24	54.00		LDF	90.66	334	eP	21	55.70	-12.5X			
	1.0s	29.00nm			5.3mb		MBH	84.54	302	eP	21	35.00	-4.0X	SMF	90.72	331	eP	21	55.90	-12.7X			
PRS	78.20	54	eP	21	06.20	0.6	MMB	84.56	317	ePc	21	39.00	0.0		1.4s	39.20nm							
LLA	78.34	54	eP	21	06.90	0.5	KHC	84.60	327	iP	21	39.10	0.1	BNI	90.77	328	P	22	13.40	4.4X			
LRM	78.47	42	eP	21	07.30	0.0		1.2s	24.50nm			5.3mb		AVF	90.80	331	eP	21	56.20	-12.7X			
KAS	78.68	312	eP	21	09.00	0.7				e	24	55.00			1.7s	99.25nm							
PRI	78.79	54	eP	21	09.80	0.8	KKB	84.74	317	iP	21	40.00	0.1	GRR	91.10	334	eP	21	58.00	-12.3X			
FRI	78.97	53	eP	21	09.80	0.0	SRAT	84.79	288	eP+	21	41.10	0.4		1.4s	61.00nm							
BCH	79.70	55	P	21	14.50	0.5	PV09	84.87	47	iP	21	41.00	0.0	BGF	91.19	331	eP	21	58.40	-12.3X			
BSD	79.75	331	eP	21	14.20	0.6	WET	84.91	328	eP	21	42.30	1.8		1.6s	62.20nm							
	0.7s	15.00nm			5.1mb		KMTA	84.95	288	eP+	21	47.00	5.5X	SOI	91.28	318	P	22	10.40	-0.8			
CFR	79.79	318	eP	21	16.00	1.9	ABHA	85.00	288	eP+	21	43.10	1.3	SBF	91.36	327	eP	21	58.10	-13.5X			
AKU	79.82	350	eP	21	21.00	7.2X	KMR	85.13	326	iP-	21	43.60	2.0		1.3s	75.80nm							
	1.3s	61.54nm			5.4mb		GRF	85.24	329	eP	21	43.20	1.0	LPF	91.47	334	eP	21	59.60	-12.3X			
TNP	80.01	51	iP	21	15.80	0.1		Z 19s	9.00um			6.2Msz			1.4s	78.40nm							
	1.0s	45.00nm			5.4mb					e	21	49.70		MAF	91.58	331	eP	22	00.40	-12.1X			
SYP	80.14	55	eP	21	16.00	-0.3	WTS	85.29	332	eP	21	44.00	1.7		1.4s	56.65nm							
VRI	80.17	319	ePd	21	16.00	-0.1		1.0s	15.00nm			5.2mb		TCF	91.67	331	eP	22	00.30	-12.7X			
BBTK	80.18	311	eP	21	16.00	-0.5				e	22	02.00		FRF	91.95	327	eP	22	01.00	-13.3X			
COP	80.32	332	iPd	21	17.20	0.6	SKO	85.60	318	iP	21	44.50	0.4		1.3s	54.15nm							
	0.8s	74.63nm			5.7mb					i	21	56.00		LSF	91.97	332	eP	22	01.80	-12.5X			
CVO	80.51	319	eP	21	19.00	1.0	PTJ	85.79	324	iP	21	46.30	1.2		1.1s	30.50nm							
ISR	80.72	318	eP	21	20.00	0.9	ZAG	85.84	324	eP	21	46.00	0.8	LRG	92.17	327	eP	22	02.20	-13.0X			
UZH	80.77	323	iP	21	27.00	7.8X	BHG	85.95	327	eP	21	47.00	1.2		1.3s	72.20nm							
MLR	80.84	319	eP	21	21.00	1.2	EKA	85.97	339	P	21	47.00	1.3	LMR	92.19	327	eP	22	02.40	-13.0X			
KRA	80.99	325	eP	21	20.00	-0.4		1.1s	10.40nm			4.9mb			1.3s	46.95nm							
	0.8s	33.00nm			5.4mb		TNS	86.01	331	ePc	21	47.90	1.8	CDR	92.26	328	ePc	22	27.00	11.3X			
		i		21	21.00		GOL	86.35	44	eP	21	48.80	0.5	MFF	92.33	333	eP	22	03.70	-12.3X			
		e		21	26.40			1.5s	78.62nm			5.7mb			1.0s	26.00nm							
FRB	81.00	12	ePc	21	19.40	-0.7	GLD	86.41	44	P	21	50.00	1.6	SIO	94.27	42	eP	22	25.50	0.4			
CLC	81.04	53	eP	21	20.00	-1.0		1.0s	100 00nm			6.0mb		TUL	94.44	42	eP	22	30.50	4.6X			
		e		24	26.00		OHR	86.53	318	iP	21	47.50	-1.3		1.2s	21.80nm			5.4mb				
SPC	81.42	324	e(P)	21	23.00	0.1		0.8s	49.00nm			5.8mb		BUL	117.19	263	ePKP	27	45.00	-7.0X			

SPA	123.01	180	iPKPd	28	00.50	-1.1
	0.7s	12.11nm				
			i	28	05.10	
KIC	127.55	312	PKP	28	10.20	-1.6
AIA	145.01	163	ePKP	28	41.40	-1.0
ARE	148.10	66	ePKP	28	54.00	4.6X
ZOBO	150.52	62	PKP	28	54.00	0.6
	1.2s	116.55nm				
			i	28	59.20	
LPB	150.70	62	PKP	28	52.00	-1.5
	1.1s	215.19nm				
			i	28	59.00	
CNCB	150.97	62	PKP	28	54.00	-0.1
			i	29	01.20	
CCH	152.68	61	PKP	29	04.50	8.3X
CAI	153.19	351	ePKP	28	58.80	2.1
SIV	155.26	51	PKP	29	00.00	0.6
SOB1	156.13	359	ePKP	28	48.20	-12.5X
PPD	165.80	41	ePKP	29	09.80	-0.7
	S.D. = 1.1	on 186 of 245 obs.				

? SEP 23, 1990 22h 09m 11.53± 1.65s
16.431 S ±16.1km 168.113 E ±22.0km
DEPTH = 33.0km (normal)
4.7mb (3 obs.)
VANUATU ISLANDS (186)

PVC	1.32	172	iP	09	33.30	-0.4
			iS	09	43.00	
DZM	5.83	195	iPc	10	26.10	-11.9X
			iS	11	14.10	
RMQ	20.58	238	eP	13	49.00	-1.4
BWA	25.17	221	eP	14	33.80	-1.7
CNB	25.18	218	iPc	14	36.10	0.4
CMS	25.21	230	eP	14	35.00	-0.9
			e	19	43.00	
CAN	25.40	219	eP	14	38.50	0.8
STK	28.57	233	iPc	15	07.10	0.5
	1.0s	17.00nm			4.7mb	
WRA	32.24	259	eP	15	41.10	1.8
ASPA	32.87	252	eP	15	45.80	1.0
	0.9s	20.00nm			5.0mb	
SHK	60.86	327	iP	19	22.00	-1.2
	1.0s	800.00nm			6.8mb X	
SPA	73.67	180	eP	20	45.00	1.3
	1.0s	7.50nm			4.6mb	
CNCB	115.59	118	PKP	27	35.00	-18.6X
ZOBO	115.72	118	ePKP	27	34.00	-19.8X
SQTA	143.84	333	ePKP	28	56.00	10.7X
	0.7s	6.40nm				
			i	29	04.90	
DOU	143.87	342	PKP	28	56.80	11.8X
ECP	144.07	354	ePKP	28	57.60	12.4X
	0.8s	79.00nm				
CDF	144.45	338	ePKP	28	57.60	11.4X
	0.9s	29.50nm				
BSF	145.11	338	ePKP	28	59.50	12.1X
HAU	145.12	338	ePKP	28	59.80	12.5X
	0.9s	11.45nm				
FLN	146.43	346	ePKP	29	03.30	13.9X
LOR	146.60	340	ePKP	29	03.90	14.1X
	1.2s	20.85nm				
LBF	146.82	340	ePKP	29	04.80	14.7X
	0.9s	14.75nm				
GRR	146.87	347	ePKP	29	04.50	14.4X
SSF	146.90	341	ePKP	29	04.80	14.6X
	0.9s	13.10nm				
LPL	147.07	336	ePKP	29	05.60	14.8X
LPG	147.08	336	ePKP	29	06.30	15.4X
SMF	147.16	340	ePKP	29	05.20	14.5X
AVF	147.19	341	ePKP	29	05.00	14.3X
	1.2s	20.85nm				
LPF	147.25	346	ePKP	29	05.80	15.1X
BGF	147.56	341	ePKP	29	06.50	15.2X
	1.0s	18.00nm				
LSF	148.23	342	ePKP	29	08.20	15.8X
	0.9s	13.10nm				
MFF	148.37	344	ePKP	29	08.40	15.8X
	0.9s	13.10nm				
	S.D. = 1.3	on 11 of 33 obs.				

SEP 23, 1990 22h 52m 37.65± 1.54s
17.834 S ±10.7km 167.678 E ± 8.7km
DEPTH = 28.1 ± 10.9 km
4.9mb (9 obs.)
VANUATU ISLANDS (186)

PVC	0.61	81	iPc	52	50.30	0.5
			iS	53	00.50	
DZM	4.37	195	iP	53	42.00	-1.9
			iS	54	28.00	
COO	19.16	226	eP	57	03.00	1.2
RMQ	19.51	240	iPd	57	05.20	-0.6
	1.0s	137.00nm			5.2mb	
CNB	23.83	219	eP	57	51.00	1.6
BWA	23.85	222	eP	57	49.90	0.4
CMS	24.00	231	iPc	57	52.00	1.0
	1.0s	48.00nm			5.0mb	
CAN	24.06	220	eP	57	53.80	2.2
QIS	26.64	260	eP	58	15.00	-1.0
STK	27.40	234	iPd	58	22.00	-0.9
	1.1s	18.00nm			4.6mb	
WRA	31.58	261	eP	58	58.00	-2.3
ASPA	32.06	254	iPd	59	02.30	-2.2
	1.0s	20.00nm			5.0mb	
FORR	38.12	243	eP	59	56.00	-0.1
SBA	60.05	180	e(P)	02	43.50	-0.5
PSI	70.70	279	ePc	03	55.60	2.1
SPA	72.28	180	iPc	04	01.70	-0.7
	1.0s	15.50nm			5.0mb	
BJI	74.92	322	PKP	04	18.00	0.2
	2.0s	55.00nm			5.2mb	
CHG	76.72	295	eP	04	30.00	1.5
PRS	85.90	50	eP	05	13.50	-2.9X
MHC	86.14	49	eP	05	18.00	0.3
PRI	86.34	50	eP	05	19.50	0.8
WDC	86.93	46	eP	05	21.50	0.1
ORV	87.20	47	eP	05	22.50	-0.2
CMB	87.34	49	eP	05	23.70	0.3
FRI	87.39	50	eP	05	13.60	-10.0X
MIN	87.47	46	eP	05	23.50	-0.7
SBB	87.86	53	eP	05	26.00	0.0
PLM	88.08	54	eP	05	27.00	-0.3
CLC	88.47	52	eP	05	29.00	0.0
GSC	88.87	52	eP	05	31.00	0.1
TPC	88.99	54	eP	05	31.00	-0.5
FBA	89.18	17	eP	05	30.00	-1.6
	1.0s	6.00nm			4.9mb	
GLA	89.54	55	eP	05	34.00	-0.1
TNP	89.64	50	eP	05	34.00	-0.6
	1.0s	3.00nm			4.5mb	
PNT	92.57	39	eP	05	48.00	0.4
ALQ	96.73	56	eP	06	06.00	-1.3
	1.0s	2.50nm			4.7mb	
CNCB	115.29	119	ePKP	11	20.00	0.2
LPB	115.33	119	ePKP	11	20.00	0.3
ZOBO	115.43	118	PKP	11	22.00	1.9
KEV	122.81	345	ePKP	11	37.00	5.2X
NUR	129.87	337	ePKP	11	46.00	0.3
NAO	133.99	344	PKP	11	53.80	0.2
	1.0s	2.90nm				
BRG	140.96	334	ePKP	12	07.00	0.2
	1.2s	15.00nm				
CLL	141.02	335	ePKP	12	06.00	-0.9
SOB1	141.03	131	ePKP	12	07.50	-0.6
ZST	141.38	328	e(PKP)	12	07.40	-0.2
KHC	142.41	332	PKP	12	07.20	-2.3
ENN	144.06	340	ePKP	12	11.00	-1.1
	1.4s	46.00nm				
MEM	144.17	340	PKP	12	11.00	-1.3
FVI	144.61	330	PKP	12	11.20	-2.0
WATA	144.63	332	ePKPd	12	12.00	-1.5
ETA	144.88	354	ePKP	12	13.60	0.1
	1.0s	84.00nm				
SQTA	144.89	332	iPKPc	12	13.10	-0.8
	1.1s	34.60nm				
DOU	145.06	341	PKPc	12	13.10	-0.8
			i	14	49.20	
OGA	145.24	332	ePKP	12	15.00	0.4
ECB	145.27	354	ePKP	12	10.60	-3.5X
ECP	145.41	354	ePKP	12	14.60	0.2
	1.0s	130.00nm				
CTI	145.55	330	PKP	12	15.50	0.5
CAI	145.56	132	iPKPc	12	14.40	-1.4
CDF	145.58	337	iPKPc	12	15.20	0.2
	1.0s	58.00nm				
BSF	146.24	337	ePKP	12	17.00	0.9
	1.0s	14.00nm				
HAU	146.26	337	ePKP	12	17.00	1.0
	1.0s	20.00nm				
MDI	146.66	331	PKP	12	27.50	10.9X
ARV	146.68	326	PKP	12	18.50	1.7
ORI	146.71	318	PKP	12	19.50	2.5X
SFI	146.97	327	PKP	12	21.00	3.8X

BCAO	147.00	250	iPKPd	12	20.10	1.9
	0.9s	22.00nm				
			ic	12	39.10	
VAI	147.01	332	PKP	12	17.00	-0.2
PGD	147.07	327	PKP	12	20.00	2.4X
ASS	147.12	325	PKP	12	18.00	0.4
AQU	147.18	324	PKP	12	21.10	3.4X
BSS	147.33	320	PKP	12	20.00	2.1
SDI	147.36	322	PKPc	12	20.00	2.0
AZI	147.40	323	PKPc	12	20.80	2.9X
BDI	147.51	328	PKP	12	20.00	1.8
FLN	147.68	345	iPKPc	12	21.00	2.8X
	1.0s	28.00nm				
LDF	147.75	345	iPKPc	12	21.10	2.8X
	1.1s	26.85nm				
LOR	147.77	339	iPKPc	12	21.40	2.9X
	1.1s	37.85nm				
LBF	147.97	339	ePKP	12	22.00	3.2X
	0.9s	20.45nm				
GRC	148.01	340	PKP	12	23.02	4.2X
SOI	148.04	315	PKPc	12	23.00	3.9X
SSF	148.07	339	iPKPc	12	22.40	3.5X
	1.0s	31.00nm				
GRR	148.12	345	iPKPc	12	22.30	3.4X
	1.1s	46.40nm				
LPL	148.16	334	iPKPc	12	23.20	3.8X
	1.1s	13.45nm				
LPG	148.16	334	iPKPc	12	23.40	3.9X
	1.1s	19.55nm				
SMF	148.31	339	iPKPc	12	22.80	3.5X
	1.0s	29.00nm				
AVF	148.36	339	iPKPc	12	22.80	3.4X
	1.0s	21.00nm				
LPF	148.50	345	iPKPc	12	23.40	3.9X
	1.0s	40.00nm				
BNI	148.55	334	PKP	12	24.10	4.1X
BGF	148.73	340	iPKPc	12	23.90	3.9X
	1.0s	26.00nm				
PLDF	148.97	338	PKP	12	24.75	4.2X
AGO	149.07	339	PKP	12	25.64	5.1X
MAF	149.12	340	iPKPc	12	25.30	4.7X
	1.1s	19.55nm				
SBF	149.16	332	iPKPc	12	24.90	4.1X
	1.2s	47.60nm				
TCF	149.17	340	iPKPc	12	25.20	4.5X
	1.1s	29.30nm				
PYM	149.38	339	PKP	12	25.80	4.7X
PGF	149.41	328	ePKP	12	25.70	4.4X
	1.2s	59.50nm				
LSF	149.42	341	iPKPc	12	25.40	4.3X
	1.1s	35.40nm				
MFF	149.60	343	iPKPc	12	26.20	4.9X
	1.0s	30.00nm				
LBL	149.74	338	PKP	12	26.93	5.4X
FRF	149.75	332	iPKPc	12	26.50	4.9X
	1.2s	29.75nm				
LRG	149.97	332	iPKPc	12	27.20	5.3X
	1.1s	29.30nm				
LMR	150.00	332	iPKPc	12	27.20	5.2X
	1.1s	31.75nm				
	S.D. = 1.2	on 65 of 103 obs.				

? SEP 23, 1990 22h 56m 26.03±14.34s
32.945 N ±120.km 138.503 E ±27.4km
DEPTH = 33.0km (normal)
SOUTH OF HONSHU, JAPAN (211)

CHJJ	3.12	7	P	57	14.00	-0.1
			S	57	50.50	
TSRJ	3.32	322	P	57	17.00	0.1
			S	57	55.30	
MAT	3.60	356	iPd	57	20.20	-0.6
			eS	57	59.00	
YAMJ	5.36	13	P	57	47.20	1.4
OFUJ	6.64	22	P	58	03.00	-0.8
			eS	59	19.90	
ZOBO	150.77	62	PKP	16	24.00	12.1X
LPB	150.95	62	ePKP	16	26.00	14.0X
CNCB	151.21	63	PKP	16	25.00	12.4X
	S.D. = 1.2	on 5 of 8 obs.				

• SEP 23, 1990 23h 14m 38.17± 1.07s
17.640 S ±18.8km 167.675 E ±11.1km
DEPTH = 33.0km (normal)
4.8mb (3 obs.)
VANUATU ISLANDS (186)

23d 23h

PVC	0.62	99	iP	14	50.00	-0.4
			iS	15	00.00	
DZM	4.56	195	iP	15	46.00	-0.7
			iS	16	36.40	
RMQ	19.60	240	iPc	19	07.00	0.2
	1.0s	49.00nm			4.8mb	
BWA	23.99	222	eP	19	52.30	1.5
CAN	24.21	220	eP	19	56.30	3.4X
STK	27.51	234	eP	20	24.80	1.1
	1.8s	67.00nm			5.0mb	
WRA	31.61	260	eP	20	59.10	-1.4
ASPA	32.12	253	eP	21	03.50	-1.4
	0.8s	9.00nm			4.7mb	
CDF	145.40	337	ePKP	34	15.50	1.1
	0.8s	8.05nm				
LOR	147.59	339	ePKP	34	21.80	3.9X
	0.6s	3.60nm				
SSF	147.89	339	ePKP	34	22.80	4.4X
LPL	147.98	334	ePKP	34	23.60	4.7X
LPG	147.99	334	ePKP	34	23.60	4.6X
S.D. = 1.3 on 8 of 13 obs.						

• SEP 23, 1990 23h 47m 58.84± 1.34s
33.228 N ±13.9km 138.470 E ±15.4km
DEPTH = 10.0km (geophysicist)
4.3mb (3 obs.)
SOUTH OF HONSHU, JAPAN (211)

IIDJ	2.29	349	P	48	37.00	-0.3
			S	49	04.20	
CHJJ	2.85	9	P	48	45.80	0.6
			eS	49	18.80	
TSRJ	3.09	319	P	48	48.80	0.3
KAKJ	3.28	25	P	48	50.70	-0.6
MAT	3.31	356	eP	48	52.00	0.2
			eS	49	32.00	
MTMJ	3.39	351	P	48	53.40	0.4
NIIJ	4.03	6	eP	49	02.50	0.7
YAMJ	5.10	14	P	49	18.30	1.3
OFUJ	6.39	23	P	49	33.10	-2.2
BJI	19.12	297	eP	52	31.00	6.7X
KKN	45.74	278	P	56	00.00	-22.5X
QLP	59.73	174	iPd	57	45.90	-20.1X
KEV	66.14	339	eP	58	46.00	-2.0
SUF	70.28	333	eP	59	13.00	-0.9
NUR	72.15	332	eP	59	26.00	0.8
PNT	72.59	42	eP	59	30.00	1.9
	0.4s	2.00nm			4.6mb	
HFS	76.53	335	eP	59	49.40	-1.1
	0.4s	0.80nm			4.2mb	
NAO	77.02	337	P	59	52.80	-0.4
	0.9s	2.60nm			4.3mb	
KHC	84.47	327	eP	00	34.50	1.5
ZOBO	150.66	61	PKP	07	54.00	5.8X
CNCB	151.11	62	PKP	07	46.00	-2.8X
S.D. = 1.3 on 16 of 21 obs.						

• SEP 24, 1990 00h 47m 58.40± 2.26s
17.619 S ±10.0km 167.732 E ± 8.0km
DEPTH = 31.5 ± 16.2 km
4.8mb (5 obs.)
VANUATU ISLANDS (186)

PVC	0.57	102	iPd	48	10.00	0.0
			iS	48	19.00	
DZM	4.59	195	iPd	49	06.10	-1.4
			iS	49	56.80	
HNR	11.11	316	eP	50	29.00	-9.3X
SVO	11.41	317	eP	50	43.00	0.7
RMQ	19.66	240	iPd	52	27.50	-0.3
	0.8s	53.00nm			4.9mb	
CTA	20.47	260	iPc	52	35.80	-0.5
	1.0s	30.00nm			4.6mb	
CNB	24.03	219	eP	53	14.00	2.3
BWA	24.04	222	eP	53	12.80	1.1
CMS	24.18	231	eP	53	14.00	1.0
CAN	24.26	220	eP	53	17.50	3.7X
STK	27.57	234	iPc	53	45.30	0.6
	0.9s	5.00nm			4.2mb	
WRA	31.67	260	eP	54	19.00	-2.4
ASPA	32.17	253	iPd	54	24.00	-1.8
	0.8s	14.00nm			4.9mb	
SPA	72.49	180	iPd	59	24.00	0.1
	0.8s	9.17nm			4.8mb	
			i	59	28.70	
CHG	76.68	295	eP	59	49.80	1.2
KEV	122.62	345	ePKP	06	37.00	-14.7X
NUR	129.69	337	ePKP	07	05.00	-0.6
APO	133.20	343	ePKP	07	12.00	-0.3
	0.6s	1.00nm				
NAO	133.80	345	PKP	07	13.70	0.3
	0.8s	2.70nm				
SOB1	141.13	131	(PKP)	07	29.00	0.5
MEM	143.99	340	PKP	07	31.30	-0.9
ETA	144.68	354	ePKP	07	31.50	-1.9
	1.2s	102.00nm				
SOTA	144.72	332	iPKPd	07	33.00	-0.8
	1.2s	23.20nm				
			i	07	43.70	
DOU	144.88	341	PKP	07	33.80	0.0
ECB	145.06	354	ePKP	07	33.60	-0.4
	1.3s	103.00nm				
			e	20	23.00	
ECP	145.20	354	iPKPd	07	34.30	0.0
	0.7s	65.00nm				
CDF	145.40	337	ePKP	07	35.40	0.5
	1.0s	46.00nm				
CAI	145.66	132	iPKPd	07	35.70	-0.6
BSF	146.06	337	ePKP	07	37.20	1.1
	0.8s	8.05nm				
HAU	146.08	337	ePKP	07	37.30	1.3
	0.7s	7.70nm				
FLN	147.49	345	ePKP	07	41.00	2.8X
	0.8s	16.10nm				
LDF	147.56	345	ePKP	07	41.20	2.9X
	1.0s	20.00nm				
LOR	147.59	339	ePKP	07	41.60	3.2X
	1.0s	15.00nm				
LBF	147.79	339	ePKP	07	42.20	3.4X
	0.9s	15.55nm				
SSF	147.89	340	ePKP	07	42.70	3.8X
	0.9s	18.00nm				
GRR	147.93	346	ePKP	07	42.40	3.5X
	0.8s	12.10nm				
LPL	147.99	334	ePKP	07	43.40	4.0X
	0.9s	5.75nm				
LPG	147.99	334	ePKP	07	43.50	4.0X
	1.0s	12.00nm				
SMF	148.13	339	ePKP	07	43.00	3.7X
	0.8s	10.05nm				
AVF	148.17	339	ePKP	07	43.00	3.7X
	1.0s	13.00nm				
LPF	148.31	346	ePKP	07	43.60	4.1X
	0.8s	18.80nm				
BGF	148.55	340	ePKP	07	44.30	4.3X
	0.8s	10.75nm				
MAF	148.93	340	ePKP	07	45.40	4.8X
	1.0s	10.00nm				
TCF	148.99	340	ePKP	07	45.40	4.7X
	0.8s	9.40nm				
LSF	149.24	341	ePKP	07	45.80	4.7X
	1.0s	24.00nm				
PGF	149.25	328	ePKP	07	46.10	4.8X
	1.2s	53.55nm				
MFF	149.41	343	ePKP	07	46.30	5.0X
	0.8s	18.80nm				
FRF	149.59	332	ePKP	07	46.80	5.2X
	1.0s	16.00nm				
LMR	149.83	332	ePKP	07	47.50	5.5X
	1.0s	10.00nm				
S.D. = 1.2 on 27 of 49 obs.						

SEP 24, 1990 00h 59m 21.86± 0.98s
35.660 N ± 8.2km 140.597 E ± 8.3km
DEPTH = 71.4 ± 6.5 km
4.5mb (5 obs.)
NEAR EAST COAST OF HONSHU, JAPAN(228)

KAKJ	0.64	328	iP+	59	36.60	0.2
			S	59	45.70	
CHJJ	1.36	287	P	59	45.10	-0.3
			eS	00	00.00	
NIIJ	2.03	321	P	59	54.30	-0.3
MAT	2.12	295	iPd	59	55.80	-0.1
			eS	00	23.00	
IIDJ	2.20	266	P	59	57.90	1.0
			S	00	24.50	
MTMJ	2.44	293	P	00	00.50	0.2
YAMJ	2.55	350	eP	00	02.40	0.7
OFUJ	3.52	14	P	00	15.00	-0.3
			S	00	53.20	
TSRJ	3.76	269	P	00	19.10	0.4
WKYJ	4.35	252	P	00	26.90	-0.2
TKSJ	5.64	255	P	00	44.10	-0.9
			S	01	45.30	
YONJ	5.84	267	eP	00	46.80	-1.1
BJI	19.75	290	eP	03	48.00	-0.5
PKI	47.16	276	P	07	49.60	0.1
KKN	47.18	277	P	07	49.80	0.4
	0.6s	14.00nm			5.1mb	
GKN	47.61	277	P	07	53.20	0.4
	0.8s	19.00nm			5.1mb	
WRA	55.62	187	eP	08	53.00	0.5
GBA	60.45	266	P	09	27.20	0.6
HFS	75.06	336	eP	10	57.00	-0.2
	0.5s	0.90nm			4.0mb	
NAO	75.48	337	P	10	59.60	0.0
	0.7s	2.20nm			4.2mb	
ALO	85.98	49	eP	11	55.00	-0.8
	1.0s	2.50nm			4.2mb	
S.D. = 0.6 on 21 of 21 obs.						

• SEP 24, 1990 01h 00m 38.72± 0.56s
17.732 S ±12.2km 167.598 E ± 9.7km
DEPTH = 33.0km (normal)
4.8mb (5 obs.) 4.4Msz (1 obs.)
VANUATU ISLANDS (186)

PVC	0.68	91	iPc	00	51.30	-0.6
			iS	01	03.20	
DZM	4.45	194	iPd	01	42.10	-3.7X
			iS	02	33.70	
HNR	11.10	317	eP	03	14.00	-4.3X
SVO	11.40	317	eP	03	22.00	-0.4
BRS	16.71	232	eP	04	31.00	-1.1
			e	04	36.00	
RMQ	19.49	240	iPc	05	05.20	-0.9
CTA	20.33	260	iPd	05	16.20	1.3
	1.0s	20.00nm			4.4mb	
OLP	23.33	244	eP	05	46.00	1.0
			e	05	49.00	
CNB	23.86	219	eP	05	59.00	8.8X
BWA	23.87	222	eP	05	50.20	0.0
CMS	24.01	231	eP	05	53.00	1.5
			e	06	03.00	
CAN	24.09	220	eP	05	54.30	2.0
OIS	26.58	259	eP	06	15.00	-0.9
STK	27.40	234	iPc	06	23.30	0.0
	1.8s	34.00nm			4.7mb	
WRA	31.52	261	eP	06	57.50	-2.7
ASPA	32.02	254	iPc	07	02.50	-2.1
	1.1s	16.00nm			4.8mb	
Z	21s	0.82um			4.4Msz	
			LR	19	01.40	
SPA	72.38	180	eP	12	04.00	0.7
	1.0s	10.00nm			4.8mb	
BJI	74.79	322	eP	12	18.50	1.0
KMI	76.16	302	eP	12	26.50	0.6
	2.0s	90.00nm			5.4mb	
			pP	12	35.50	29kmX
CHG	76.61	295	eP	12	29.90	1.6
PNT	92.54	39	eP	13	56.00	8.2X
CNCB	115.41	119	PKP	19	06.80	-13.6X
			i	19	26.00	
LPB	115.44	119	PKP	19	04.00	-16.3X
ZOBO	115.55	118	PKP	19	04.00	-16.7X
CCH	116.64	121	(PKP)	19	10.00	-12.4X
SIV	121.50	122	PKP	19	14.20	-17.1X
MEM	144.05	340	PKPc	20	19.70	7.3X
FVI	144.49	330	PKP	20	12.00	-1.3
WATA	144.51	332	ePKP	20	08.50	-5.1X
			e	20	15.00	
SOTA	144.76	332	iPKPd	20	13.10	-0.9
	1.1s	16.40nm				
DOU	144.94	341	PKP	20	12.50	-1.5
ECP	145.30	353	ePKP	20	24.40	9.9X
	1.2s	204.00nm				
CTI	145.42	330	PKP	20	15.00	-0.1
CDF	145.45	337	ePKP	20	15.80	0.7
	1.2s	41.65nm				
CAI	145.68	132	ePKP	20	14.00	-2.4
BSF	146.11	337	ePKP	20	17.90	1.7
	1.2s	11.90nm				
HAU	146.14	337	ePKP	20	18.00	1.8
	1.2s	23.80nm				
ORI	146.59	318	PKP	20	20.20	3.1X
SFI	146.84	327	PKP	20	20.50	3.2X
PGD	146.94	327	PKP	20	23.50	5.7X
BCAO	146.96	250	iPKPc	20	22.60	4.1X
	0.5s	9.00nm				
SDI	147.23	322	PKP	20	19.00	0.8

LOR	147.65	339	ePKP	20 22.10	3.5X
	1.0s	14.00nm			
LBF	147.85	339	ePKP	20 22.80	3.8X
	1.0s	18.00nm			
SOI	147.91	315	PKP	20 23.90	4.7X
SSF	147.95	339	ePKP	20 23.30	4.3X
	1.0s	8.00nm			
LPL	148.03	334	ePKP	20 22.70	3.2X
	1.2s	11.90nm			
LPG	148.04	334	ePKP	20 22.70	3.1X
	1.2s	20.85nm			
SMF	148.19	339	ePKP	20 23.10	3.6X
	1.2s	23.80nm			
AVF	148.23	339	ePKP	20 24.50	5.0X
	1.0s	14.00nm			
LPF	148.38	345	ePKP	20 23.80	4.1X
	1.1s	29.30nm			
BGF	148.61	340	ePKP	20 25.90	5.8X
	0.8s	2.40nm			
MAF	149.00	340	ePKP	20 26.90	6.1X
	1.0s	8.00nm			
PGF	149.28	328	ePKP	20 28.80	7.3X
	0.8s	13.45nm			

S.D. = 1.4 on 26 of 54 obs.

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* SEP 24, 1990 01h 26m 17.26± 0.47s
58.820 S ±12.2km 23.438 W ±13.7km
DEPTH = 33.0km (normal)
5.0mb (4 obs.)
SOUTH SANDWICH ISLANDS REGION (153)

SPA	31.35	180	iPd	32 36.80	0.2
	1.0s	29.50nm		5.1mb	
MAW	36.71	140	iPc	33 22.80	0.4
	0.9s	14.00nm		4.8mb	
PPD	41.82	319	eP	34 06.50	1.2
SIV	50.94	311	P	35 18.00	0.6
SOB1	51.26	338	eP	35 20.70	0.9
CCH	51.78	304	eP	35 23.00	-1.1
CNCB	53.09	303	P	35 35.00	0.9
LPB	53.38	303	(P)	35 34.00	-2.1
ZOBO	53.63	303	P	35 38.20	0.1
LIC	66.50	20	Pd	37 05.58	0.0
KIC	66.68	20	Pd	37 06.58	-0.1
	0.9s	12.00nm		5.0mb	
TIC	66.91	20	P	37 08.12	-0.1
	0.9s	18.50nm		5.2mb	
HFS	122.12	21	ePKP	45 06.40	-2.0
	0.4s	0.80nm			
Z	17s	0.21um		4.9MszX	
		LR		15 21.00	
GKN	122.79	89	PKP	45 11.60	0.6
PKI	122.85	90	PKP	45 11.00	-0.3
KKN	122.96	90	PKP	45 11.00	-0.4
SUF	127.05	26	ePKP	45 12.00	-5.9X
PNT	133.03	297	ePKP	45 31.00	1.2
YKA	139.58	314	ePKP	45 41.50	-0.1
	0.8s	5.40nm			
BJI	148.37	108	ePKP	46 01.00	3.8X
	1.0s	18.00nm			
INK	149.23	317	ePKPd	46 02.60	4.9X
FBA	153.85	307	ePKP	46 11.50	6.9X
	1.0s	15.00nm			

S.D. = 1.0 on 18 of 22 obs.

? SEP 24, 1990 01h 37m 29.45± 1.82s
17.939 N ±22.6km 66.953 W ±12.1km
DEPTH = 33.0km (normal)
PUERTO RICO REGION (90)

MGP	0.15	298	P	37 35.20	-0.3
MEP	0.21	353	P	37 36.90	0.8
PORP	0.32	69	P	37 40.80	3.3X
LRS	0.37	16	P	37 37.50	-0.6
CSB	0.83	65	P	37 45.50	0.7
LPR	1.09	70	P	37 48.00	-0.5

S.D. = 1.0 on 5 of 6 obs.

SEP 24, 1990 01h 44m 20.25± 1.55s
17.609 S ± 9.0km 167.696 E ± 8.0km
DEPTH = 20.7 ± 11.4 km
5.1mb (4 obs.) 4.8Msz (1 obs.)
VANUATU ISLANDS (186)

PVC	0.60	103	iP	44 32.50	0.5
			iS	44 41.50	
DZM	4.59	195	iP	45 28.60	-1.8
			iS	46 18.80	
HNR	11.08	316	eP	47 05.00	4.3X
SVO	11.38	317	eP	47 04.00	-0.7
RMQ	19.64	240	eP	48 50.00	-0.7
CTA	20.44	260	iPc	49 00.00	0.8
			iS	52 57.00	
QLP	23.47	244	e(P)	49 29.00	-0.4
CNB	24.02	219	eP	49 36.00	1.3
BWA	24.02	222	eP	49 35.30	0.5
CMS	24.16	231	eP	49 38.00	2.0
CAN	24.24	220	eP	49 41.00	4.1X
STK	27.55	234	iPc	50 07.70	0.0
	1.2s	9.00nm		4.3mb	
WRA	31.64	260	eP	50 43.90	-0.5
ASPA	32.14	253	eP	50 47.80	-1.0
	0.6s	18.00nm		5.2mb	
Z	20s	1.98um		4.8Msz	
		LR		02 55.40	
MAT	60.64	333	eP	54 31.00	-1.1
	1.0s	13.00nm		5.0mb	
SPA	72.50	180	eP	55 46.30	-1.1
	1.0s	19.00nm		5.1mb	
BJI	74.76	321	eP	56 02.00	1.4
CHG	76.64	295	eP	56 13.00	1.2
PNT	92.39	39	eP	57 30.00	-0.5
KEV	122.60	345	ePKP	03 21.00	5.9X
SUF	127.66	339	iPKP	03 25.20	0.0
	0.5s	3.00nm			
NUR	129.67	337	ePKP	03 29.00	0.0
HFS	133.58	342	ePKP	03 36.40	-0.1
	0.5s	0.50nm			
NAO	133.78	345	PKP	03 37.60	0.7
	0.8s	3.80nm			
KSP	139.77	332	ePKP	03 44.50	-3.9X
BRG	140.77	334	ePKP	03 49.60	-0.6
PRU	141.16	332	ePKP	03 36.00	-14.9X
KHC	142.22	332	ePKP	03 48.70	-4.2X
OHR	143.19	316	ePKP	03 52.30	-2.5X
MEM	143.96	340	PKP	03 52.90	-2.8X
FVI	144.43	330	PKPd	03 56.20	-0.4
WATA	144.45	332	ePKPd	03 55.00	-1.9
ETA	144.66	354	ePKP	03 55.70	-1.1
	0.9s	71.00nm			
SQTA	144.70	332	iPKPd	03 55.80	-1.5
	1.0s	30.80nm			
DOU	144.86	341	PKP	03 56.80	-0.5
ECB	145.05	354	ePKP	03 56.50	-1.0
OGA	145.05	332	iPKPd	03 58.00	0.0
ECP	145.19	354	ePKP	03 56.90	-0.8
	0.7s	83.00nm			
CDF	145.38	337	ePKP	03 58.00	-0.4
	1.0s	94.00nm			
BSF	146.04	337	ePKP	03 59.70	0.2
	0.8s	13.45nm			
HAU	146.06	337	ePKP	03 59.90	0.4
	0.8s	18.80nm			
VAI	146.82	333	PKP	04 01.40	0.8
PGD	146.89	327	PKP	04 03.50	2.4X
MGR	147.08	319	PKP	04 04.00	2.7X
BCAO	147.09	250	iPKPd	04 04.20	2.1
	0.9s	19.00nm			
AZI	147.23	323	PKP	04 03.80	2.4X
FLN	147.47	345	ePKP	04 03.70	2.1
	0.9s	37.65nm			
LDF	147.54	345	ePKP	04 03.70	2.0
	0.8s	16.10nm			
LOR	147.57	339	ePKP	04 04.10	2.2X
	1.0s	32.00nm			
LBF	147.77	339	ePKP	04 04.90	2.6X
	0.8s	20.80nm			
GRC	147.80	340	PKP	04 05.72	3.5X
SSF	147.86	340	ePKP	04 05.20	2.9X
	0.9s	36.05nm			
SOI	147.89	315	PKP	04 05.90	3.3X
GRR	147.91	346	ePKP	04 05.00	2.7X
	0.8s	21.50nm			
LPL	147.96	334	ePKP	04 06.00	3.2X
	1.0s	22.00nm			
LPG	147.97	334	ePKP	04 06.20	3.3X
	1.0s	26.00nm			
SMF	148.11	339	ePKP	04 05.60	2.8X
	1.0s	20.00nm			
AVF	148.15	339	ePKP	04 05.70	2.9X
	1.0s	23.00nm			
LPF	148.29	346	ePKP	04 06.20	3.3X
	0.8s	32.25nm			
BNI	148.36	334	PKP	04 07.40	4.0X
BGF	148.52	340	ePKP	04 06.80	3.4X
	0.8s	20.15nm			
PLDF	148.77	338	PKP	04 07.85	3.9X
AGO	148.87	339	PKP	04 08.37	4.4X
MAF	148.91	340	ePKP	04 08.00	3.9X
	0.9s	15.55nm			
TCF	148.97	340	ePKP	04 08.10	3.9X
	0.9s	22.95nm			
SBF	148.97	332	ePKP	04 07.60	3.3X
	1.0s	38.00nm			
PYM	149.18	339	PKP	04 09.29	4.7X
LSF	149.22	341	ePKP	04 08.60	4.1X
	0.9s	28.65nm			
PGF	149.23	328	ePKP	04 08.70	3.9X
	0.8s	38.95nm			
MFF	149.39	343	ePKP	04 08.90	4.2X
	0.8s	28.20nm			
LBL	149.54	338	PKP	04 10.51	5.5X
FRF	149.57	332	ePKP	04 09.20	4.1X
	0.8s	18.80nm			
LRG	149.78	332	ePKP	04 10.00	4.6X
	0.9s	39.30nm			
LMR	149.81	332	ePKP	04 10.00	4.5X
	0.8s	26.85nm			

S.D. = 1.1 on 37 of 74 obs.

SEP 24, 1990 01h 58m 01.92± 1.36s
17.590 S ± 5.7km 167.833 E ± 5.0km
DEPTH = 25.7 ± 9.4 km
5.2mb (15 obs.) 5.5Msz (13 obs.)
VANUATU ISLANDS (186)
Mo=1.6•10••18 Nm (PPT).
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 34C
Centroid Location:
Origin Time 01:58:10.1 0.3
Lat 17.66S 0.04 Lon 167.62E 0.04
Dep 15.0 FIX Half-duration 4.0
Moment Tensor; Scale 10••17 Nm
Mrr= 4.79 0.14 Mtt= 0.96 0.21
Mff=-5.75 0.20 Mrt= 1.68 0.44
Mrf=-6.05 0.67 Mtf= 0.13 0.15
Principal Axes:

	Val=	Plg=	Azm=
T	7.86	63	62
N	0.71	9	170
P	-8.58	25	265

Best Double Couple:Mo=8.2•10••17
NP1:Strike= 14 Dip=22 Slip= 115
NP2: 167 70 80

PVC	0.48	108	iPd	58 12.00	0.2
			iS	58 20.00	
DZM	4.65	196	iPc	59 09.00	-3.3X
			iS	00 00.90	
NDF	9.17	92	eP	00 21.00	5.4X
SGE	9.62	92	eP	00 33.70	11.7X
VUN	10.13	94	eP	00 33.70	4.7X
HNR	11.16	316	eP	00 42.00	-0.9
SVO	11.45	316	eP	00 48.00	1.0
COO	19.44	225	eP	02 30.00	0.4
RMQ	19.76	240	iPd	02 32.10	-1.0
	1.0s	333.00nm		5.6mb	
RAB	20.32	309	e(P)	02 36.00	-3.0X
CTA	20.57	260	iPd	02 41.40	-0.2
	1.2s	203.13nm		5.4mb	
			iS	06 32.00	
PMG	21.67	289	eP	02 51.50	-1.3
PUZ	22.36	158	eP	02 57.50	-2.0
QLP	23.60	244	ePd	03 12.40	0.7
			e	03 17.00	
KIW	23.98	167	eP	03 17.20	1.9
PGZ	24.08	164	P	03 14.50	-1.7
CNB	24.12	219	iPd	03 18.40	1.7
			i	03 26.60	
BWA	24.13	222	iPd	03 16.30	-0.5
			i	03 21.50	
TCW	24.19	168	P	03 17.20	0.0
CMS	24.27	231	iPc	03 18.50	0.3
			i	03 26.50	
CAN	24.34	220	eP	03 20.70	1.8
			i	03 27.00	
WEL	24.36	167	eP	03 18.00	-0.9
			S	03 36.00	
THZ	24.48	171	eP	03 22.50	2.3
BLW	24.59	166	P	03 18.50	-2.7X
LTZ	25.39	172	eP	03 31.60	2.7X

24d 02h

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OIS     26.83 259 eP     03 41.00  -1.3
STK     27.66 234 iPd    03 49.40  -0.4
         1.1s     58.00nm          5.2mb
       Z  17s    617.00um          7.2MszX
                  iS     08 33.80
TOO     27.95 220 eP     03 52.80   0.4
BFD     29.59 224 e(P)   04 08.00   0.9
ADE     31.17 231 eP     04 21.00  -0.1
         1.0s     42.00nm          5.2mb
WRA     31.77 260 eP     04 24.00  -2.6
ASPA    32.27 253 eP     04 27.70  -3.3X
         0.6s     26.00nm          5.3mb
       Z  20s    27.33um           5.9Msz
                  eS     09 44.30
                  LR     16 40.40
KNA     37.43 267 eP     05 04.60 -10.4X
WARB    39.03 250 eP     05 28.00  -0.5
MBL     45.29 257 eP     06 18.50  -1.1
KLB     47.24 243 eP     06 34.00  -0.9
NWAO    47.80 241 iPd    06 38.90  -0.5
         0.6s     13.00nm          5.1mb
       Z  22s     5.60um           5.5Msz
       N  22s     4.20um
       E  22s     6.40um
MUN     48.58 243 eP     06 47.00   1.6
MRWA    48.62 246 eP     06 45.00  -0.7
NANU    49.18 255 eP     06 50.20   0.2
DRV     52.30 194 eP     07 21.00   7.8X
KKM     56.11 290 ePd    07 43.10   1.1
BAG     57.52 303 eP     07 52.00   0.0
                  eS     15 48.00
SBA     60.29 180 P      08 09.70  -0.5
MAT     60.68 333 eP     08 11.00  -2.4
         1.2s     15.63nm          5.0mb
       Z  20s     1.06um           5.0Msz
                  eS     16 24.00
SSE     65.96 317 eP     08 48.00  -0.2
         1.2s     22.00nm          5.2mb
       Z  20s     1.40um           5.2Msz
       N  14s     0.70um
                  S      17 36.00
                  sS     18 48.00
                  SS     22 02.00
KGM     66.44 280 eP     08 57.00   5.3X
IPM     69.47 282 ePc    09 12.10   1.4
SNG     70.78 284 eP     09 20.00   1.4
                  e      18 34.40
PSI     70.80 279 ePd    09 19.50   0.7
SPA     72.52 180 iPc    09 21.70  -6.7X
         1.0s     70.00nm          5.6mb
       Z  20s     1.89um           5.4Msz
                  i      09 38.70
SPA     72.52 180 iPc    09 26.00  -2.4
NNT     73.60 289 eP     09 28.60  -6.7X
NST     74.45 292 eP     09 42.20   2.0
BJI     74.82 321 eP     09 43.00   1.1
         6.0s     0.55nm           2.8mb X
       Z  26s     1.65um           5.2MszX
       N  19s     0.30um
                  eS     19 20.00
BDT     76.07 293 eP     09 47.60  -1.9
KMI     76.27 302 Pc     09 58.50   7.7X
         1.5s    110.00nm          5.7mb
       Z  20s     1.60um           5.3Msz
       N  11s     0.40um
                  S      19 38.00
                  iS     19 40.00
                  sS     20 13.00
CHG     76.75 295 ePc    09 54.20   0.9
         1.0s     12.00nm          4.9mb
MAW     79.45 202 iP+    10 07.10  -0.2
LZH     80.64 312 eP     10 18.00   3.6X
         7.0s     0.60nm           2.7mb X
       E  16s     1.01um
                  S      20 25.00
PRS     85.63  50 eP     10 40.90   1.2
BRK     85.66  48 eP     10 40.30   0.5
MHC     85.87  49 eP     10 41.60   0.6
                  e      10 53.00
ARN     85.95  49 P      10 41.70   0.4
PRI     86.07  50 eP     10 43.00   1.0
BCH     86.10  51 P      10 42.50   0.3
ABL     86.61  52 P      10 44.80   0.0
WDC     86.66  46 eP     10 45.00   0.3
CMB     87.07  49 eP     10 46.70  -0.1
FRI     87.12  50 eP     10 47.50   0.5
                  e      10 58.20

MWC     87.23  53 eP     10 48.00   0.2
LBFM    87.44  45 P      10 49.30   0.6
ISA     87.49  51 eP     10 49.00   0.1
SBB     87.59  53 eP     10 49.00  -0.4
PLM     87.81  54 eP     10 51.00   0.4
CLC     88.21  52 eP     10 53.00   0.7
AIA     88.52 161 eP     10 53.00  -0.3
GSC     88.60  52 eP     10 54.00  -0.3
TPC     88.73  54 eP     10 55.00   0.2
FBA     88.90  17 P      10 52.70  -2.2
         0.9s     17.71nm          5.4mb
GLA     89.28  55 eP     10 58.00   0.5
TNP     89.37  50 P      10 57.20  -0.8
         0.8s      3.55nm          4.7mb
GMW     89.62  39 P      10 58.00  -0.7
RMW     90.18  40 P      11 01.30  -0.1
PNT     92.29  39 eP     11 11.00   0.0
         1.0s     12.00nm          5.3mb
GBA     94.39 283 P      11 22.80   1.5
HYB     94.47 287 eP     11 28.00   6.4X
IMW     95.88  46 P      11 26.70  -1.3
ALO     96.47  56 eP     11 29.00  -1.7
         1.4s      4.65nm          4.8mb
       Z  22s      1.43um          5.4Msz
MAIO   114.80 302 ePKP   16 50.00   7.5X
KEV    122.61 345 ePKP   16 54.00  -2.1
                  e      17 05.00
SOD    124.38 343 ePKP   16 59.00  -0.6
PPD    125.05 134 (PKP)  16 54.00  -8.3X
BUL    125.16 229 iPKPd  16 55.40  -7.3X
         1.0s      9.50nm
SUF    127.69 339 iPKP   17 06.30   0.2
         0.4s      4.60nm
NUR    129.70 337 ePKP   17 10.00   0.0
                  e      17 21.00
NAO    133.79 345 PKP    17 18.60   0.8
         0.8s      4.50nm
BBTK   135.37 309 ePKP   17 18.00  -3.6X
MBH    135.52 295 ePKP   17 20.00  -2.0
MLR    137.85 320 ePKP   17 29.00   2.8X
HLW    138.57 295 ePKP   17 28.00   0.2
KRA    138.63 329 ePKP   17 26.40  -0.9
                  e      17 37.40
SPC    139.02 328 e(PKP) 17 28.90   0.6
KSP    139.81 332 ePKP   17 29.20  -0.2
BRG    140.81 334 ePKP   17 28.50  -2.7X
         1.6s     28.00nm
                  e      21 10.20
CLL    140.87 335 ePKP   17 18.00 -13.3X
       Z  20s      1.00um          5.6Msz
SRO    140.89 327 ePKP   17 30.90  -0.5
SOB1   141.08 131 ePKP   17 25.80  -7.0X
PRU    141.21 332 ePKP   17 28.00  -3.9X
       Z  20s      1.10um          5.6Msz
       N  20s      0.90um
       E  18s      0.50um
                  e      17 42.00
ZST    141.25 328 ePKP   17 31.60  -0.5
MOX    141.94 335 e(PKP) 17 31.00  -2.2
KHC    142.26 332 ePKP   17 30.50  -3.4X
       N  20s      0.90um
       E  19s      0.60um
                  e      17 36.50
SKO    142.42 317 ePKP   17 24.00 -10.3X
                  i      20 44.00
NEO    142.45 313 ePKP   17 32.00  -2.5
WTS    142.54 341 e(PKP) 17 35.00   0.9
         0.9s     12.00nm
                  e      17 46.00
WET    142.56 333 ePKP   17 33.50  -0.9
GRF    142.84 335 ePKP   17 32.60  -2.2
       Z  21s      1.00um          5.6Msz
VAM    143.19 306 ePKP   17 33.50  -2.3
OHR    143.27 317 ePKP   17 33.00  -2.9X
         1.2s     60.00nm
PTJ    143.36 327 ePKP   17 32.00  -3.9X
ZAG    143.40 326 ePKP   17 33.00  -2.8X
TNS    143.48 338 ePKPd  17 34.40  -1.5
BHG    143.61 331 iPKPd  17 34.70  -1.5
VLI    143.69 309 ePKP   17 24.00 -12.6X
ENN    143.88 340 ePKP   17 35.00  -1.5
         1.0s     39.00nm
MEM    143.99 340 PKP    17 35.30  -1.4
VBY    143.99 327 ePKPd  17 36.00  -0.9
                  i      17 42.70
LJU    144.00 328 ePKP   17 35.30  -1.6
ITM    144.25 310 ePKP   17 35.50  -2.1

CEY    144.27 328 ePKP   17 36.50  -0.9
VOY    144.33 328 ePKP   17 35.90  -1.7
UCC    144.33 342 PKP    17 35.00  -2.2
STU    144.38 336 ePKPc  17 36.00  -1.4
         0.9s     50.42nm
FVI    144.48 330 PKP    17 36.10  -1.5
WATA   144.49 332 iPKPd  17 36.90  -1.0
         0.7s     16.50nm
                  i      17 47.30
SNF    144.61 342 PKP    17 37.60  -0.1
KEK    144.62 315 ePKP   17 37.10  -1.0
ETA    144.66 354 iPKPd  17 37.60  -0.1
SOTA   144.74 332 iPKPd  17 36.60  -1.7
         0.7s     44.40nm
GWF    144.81 337 PKP    17 37.94  -0.3
DOU    144.88 341 PKP+   17 38.00  -0.2
                  e      18 50.00
ECB    145.04 354 iPKPd  17 38.20  -0.2
         1.0s    128.00nm
VVI    145.09 330 PKP    17 38.80   0.0
OGA    145.09 332 iPKPc  17 39.50   0.5
ECP    145.18 354 iPKPd  17 38.70   0.1
         0.7s    159.00nm
WLS    145.38 337 PKP    17 39.81   0.6
CDF    145.41 337 PKP    17 39.74   0.4
CTI    145.41 330 PKPc   17 39.70   0.3
LCI    145.52 317 PKP    17 39.00  -0.6
FEL    145.57 336 PKP    17 40.21   0.5
CAI    145.61 132 iPKPc  17 39.70  -0.9
ECH    145.62 337 PKP    17 39.94   0.3
VAL    145.69 358 iPKP   17 40.60   1.1
MOF    145.93 337 PKP    17 41.10   0.9
VITF   146.05 338 PKP    17 41.52   1.3
BSF    146.07 337 PKP    17 41.52   1.0
HAU    146.09 338 iPKPc  17 41.70   1.3
         0.8s     29.55nm
       Z  20s      0.38um          5.2Msz
SAL    146.27 331 PKP    17 42.00   1.3
LOMF   146.46 336 PKP    17 43.00   1.9
MDI    146.51 332 PKP    17 42.10   1.1
ARV    146.57 326 PKPc   17 44.20   2.9X
ORI    146.63 318 PKP    17 43.60   2.1
SFI    146.85 327 PKP    17 44.80   3.2X
VAI    146.86 333 PKP    17 42.80   1.2
PGD    146.94 328 PKP    17 45.20   3.1X
ASS    147.01 326 PKP    17 44.20   2.1
AQU    147.08 324 PKP    17 45.70   3.5X
MGR    147.16 319 PKP    17 43.50   1.2
BCAO   147.22 250 iPKPc  17 44.00   0.8
         0.5s     14.00nm
MME    147.23 329 PKP    17 45.80   3.2X
BSS    147.24 320 PKP    17 43.00   0.6
SDI    147.26 323 PKP    17 44.50   2.0
AZI    147.29 323 PKPc   17 44.80   2.4
ORX    147.39 333 PKP    17 44.69   2.0
ORO    147.39 333 PKPc   17 44.90   2.2
BOB    147.40 331 PKP    17 45.80   3.1X
MNS    147.46 325 PKP    17 45.10   2.3
FLN    147.49 346 ePKP   17 45.50   3.0X
         0.8s     36.25nm
       Z  20s      1.10um          5.6Msz
LDF    147.56 345 ePKP   17 45.70   3.0X
         0.6s     14.45nm
LOR    147.59 339 iPKPc  17 46.00   3.2X
         1.0s     62.00nm
       Z  20s      0.90um          5.6Msz
LBF    147.80 339 iPKPc  17 46.60   3.4X
         0.8s     44.35nm
RMP    147.82 324 PKP    17 43.60   0.3
GRC    147.83 340 PKP    17 46.98   3.8X
LSD    147.87 334 PKP    17 47.45   3.8X
SSF    147.89 340 iPKPc  17 47.00   3.7X
GRR    147.92 346 ePKP   17 46.90   3.6X
         0.8s     26.85nm
SOI    147.97 315 PKP    17 45.20   1.6
PCP    147.99 332 PKP    17 46.43   2.8X
LPL    148.00 335 iPKPc  17 47.90   4.1X
         0.8s     26.85nm
LPG    148.01 335 iPKPc  17 48.00   4.1X
         0.8s     36.95nm
RSP    148.08 334 PKP    17 46.12   2.3
SMF    148.14 339 iPKPc  17 47.40   3.7X
         0.8s     38.95nm
AVF    148.18 340 iPKPc  17 47.30   3.6X
         0.8s     32.25nm
LPF    148.30 346 ePKP   17 47.90   4.0X
         0.8s     45.65nm
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ATN	148.32	316	PKP	17	46.00	1.7
FIN	148.40	331	PKP	17	47.04	2.8X
BNI	148.40	334	PKPc	17	48.70	4.4X
RRL	148.46	334	PKP	17	48.68	4.1X
ROB	148.49	332	PKP	17	47.66	3.3X
BGF	148.55	340	iPKPc	17	48.80	4.4X
	0.8s		37.60nm			
DOI	148.60	333	PKP	17	47.30	2.7X
PZZ	148.66	333	PKP	17	48.79	4.0X
ENR	148.74	332	PKP	17	46.84	2.0
STV	148.77	332	PKP	17	48.89	4.0X
IMI	148.78	331	PKP	17	48.38	3.5X
PLDF	148.80	339	PKP	17	49.49	4.6X
AGO	148.90	339	PKP	17	49.62	4.7X
MAF	148.94	340	iPKPc	17	49.80	4.8X
	1.0s		24.00nm			
MNO	148.95	316	PKP	17	44.00	-1.5
TCF	149.00	340	iPKPc	17	49.80	4.7X
	1.1s		48.85nm			
SBF	149.02	332	ePKP	17	49.50	4.2X
	1.0s		66.00nm			
PYM	149.21	339	PKP	17	50.39	4.9X
LSF	149.24	341	iPKPc	17	50.20	4.7X
	1.0s		48.00nm			
PGF	149.28	329	ePKP	17	50.50	4.7X
	1.0s		96.00nm			
MFF	149.40	344	ePKP	17	50.70	5.0X
	0.8s		40.30nm			
LBL	149.57	338	PKP	17	51.59	5.7X
FRF	149.61	332	ePKP	17	51.10	5.0X
	1.0s		48.00nm			
LRG	149.82	333	ePKP	17	51.90	5.5X
	1.0s		48.00nm			
LMR	149.85	332	ePKP	17	51.80	5.4X
	1.0s		48.00nm			
CDR	149.90	334	ePKPc	17	51.80	5.3X
TOL	156.70	344	ePKP	17	59.00	2.8X
			ePKKP	18	29.00	
			ePP	22	06.00	
			eSS	42	08.00	

S.D. = 1.3 on 146 of 221 obs.

? SEP 24, 1990 02h 39m 27.74± 4.52s
46.916 N ±16.2km 1.835 E ±31.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.8 (LDG).

TCF	0.68	158	Pg	39	41.00	-0.2
			Sg	39	51.20	
BGF	0.78	117	Pg	39	43.40	0.4
			Sg	39	55.20	
MAF	0.86	144	Pg	39	44.40	0.1
			Sg	39	57.60	
AVF	1.05	96	Pg	39	47.20	-0.3
			Sg	40	02.50	
SSF	1.15	82	Pg	39	49.00	-0.3
			Sg	40	05.20	
LOR	1.43	75	Pg	39	54.00	0.3
			Sg	40	13.20	

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

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* SEP 24, 1990 02h 53m 54.57± 1.10s
33.368 N ±10.9km 138.525 E ± 9.5km
DEPTH = 10.0km (geophysicist)
4.3mb (1 obs.)
SOUTH OF HONSHU, JAPAN (211)

IIDJ	2.17	347	iPd	54	30.80	-0.4
			S	54	58.80	
CHJJ	2.70	8	P	54	39.60	0.8
			eS	55	17.30	
TSRJ	3.01	317	iPd	54	43.00	-0.2
KAKJ	3.14	25	P	54	43.70	-1.2
MAT	3.18	355	iPd	54	46.00	0.5
			eS	55	26.00	
MTMJ	3.26	350	P	54	46.90	0.0
NIIJ	3.88	6	P	54	56.20	0.6
YAMJ	4.95	14	P	55	14.00	3.3X
SHNJ	6.22	279	eP	55	28.10	-0.6
OFUJ	6.24	23	eP	55	28.80	-0.1
KUMJ	6.52	265	P	55	33.20	0.3
KAGJ	6.82	253	eP	55	33.90	-3.2X
NAO	76.91	337	P	05	46.70	-1.7
	1.0s		2.80nm			4.3mb
LRM	78.43	42	eP	05	57.40	0.1
PRU	83.33	327	eP	06	24.00	1.2
KHC	84.38	327	eP	06	29.00	0.8
ZOBO	150.55	61	PKP	13	48.00	4.2X
LPB	150.74	62	(PKP)	13	52.00	8.2X
CNCB	151.00	62	PKP	13	50.00	5.6X

S.D. = 0.9 on 14 of 19 obs.

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* SEP 24, 1990 03h 03m 39.51± 0.98s
17.916 S ±19.1km 167.661 E ±13.6km
DEPTH = 33.0km (normol)
4.6mb (3 obs.)
VANUATU ISLANDS (186)

PVC	0.64	74	iP	03	51.80	-0.3
			iS	04	03.00	
DZM	4.29	195	iPd	04	42.00	-2.2
			iS	05	35.00	
RMQ	19.46	241	iPc	08	06.20	-0.3
CTA	20.36	260	iPc	08	16.20	0.2
	1.4s		88.37nm			4.9mb
QLP	23.31	244	iPd	08	46.40	0.9
CNB	23.76	220	eP	08	52.00	2.1
BWA	23.78	223	eP	08	50.30	0.2
CMS	23.94	232	eP	08	52.00	0.4
CAN	23.99	220	eP	08	54.50	2.4
STK	27.34	234	iPd	09	23.40	-0.1
	1.0s		5.00nm			4.1mb
WRA	31.55	261	eP	09	59.40	-1.9
ASPA	32.03	254	eP	10	03.30	-2.1
	0.8s		8.00nm			4.7mb
CHG	76.74	295	eP	15	34.20	4.4X
CDF	145.64	337	ePKP	23	17.10	0.9
	1.2s		17.85nm			
BCAO	146.96	250	iPKPc	23	23.30	4.0X
	1.0s		11.00nm			
LOR	147.84	339	ePKP	23	27.10	7.4X
	0.8s		5.35nm			
LBF	148.04	339	ePKP	23	27.80	7.7X
	1.0s		7.00nm			
SSF	148.14	339	ePKP	23	27.10	7.0X
	1.0s		10.00nm			

S.D. = 1.6 on 13 of 18 obs.

& SEP 24, 1990 03h 04m 17.78s
61.383 N 147.368 W
DEPTH = 12.1km
SOUTHERN ALASKA (2)
<AGS-P>. ML 2.6 (PMR).

SCM	0.45	2	iP	04	26.94	-0.2
			eS	04	33.80	
VZW	0.51	129	iP	04	27.90	-0.3
			eS	04	36.05	
VLZ	0.56	116	iP	04	28.29	-0.7
			iS	04	36.85	
SML	0.63	313	iP	04	29.48	-0.7
			eS	04	38.07	
KLU	0.70	80	iP	04	30.63	-0.9
			eS	04	40.07	
GHO	0.84	298	iP	04	32.78	-1.1
			iS	04	44.84	
PLRM	0.87	285	iP	04	33.33	-1.0
			eS	04	44.56	
PMR	0.87	285	iPc	04	33.30	-1.0
			iS	04	45.00	
TOA	0.92	38	iPd	04	34.60	-0.6
PMS	1.07	263	iP	04	36.81	-0.9
PWA	1.23	284	eP	04	38.98	-1.5
SUA	1.62	274	eP	04	45.49	-0.9
SEW	1.64	219	eP	04	45.55	-0.9
SLKM	1.65	239	eP	04	45.94	-0.7
GLB	1.71	86	eP	04	46.29	-1.3
CUT	1.71	308	iP	04	46.71	-0.8
			eS	05	07.33	
SKT	2.07	289	eP	04	51.66	-1.1
CGLM	2.24	270	eP	04	54.24	-1.0
SPU	2.27	267	eP	04	54.40	-1.3
TGL	2.29	104	eP	04	54.90	-1.2
NCG	2.30	273	eP	04	55.14	-1.1
CRP	2.31	269	eP	04	55.41	-1.0
CKL	2.41	268	eP	04	56.24	-1.4
BGL	2.43	269	eP	04	56.81	-1.1
BALM	2.46	96	eP	04	57.25	-1.1
RDT	2.59	254	iP	04	58.75	-1.4
CNPM	2.67	228	eP	05	00.03	-1.4
RSO	2.79	253	eP	05	01.63	-1.5
HDA	3.04	3	eP	05	07.50	1.0
FBA	3.54	357	eP	05	13.40	-0.2
SVW	4.00	270	eP	05	17.30	-2.8
IMA	5.47	332	eP	05	38.50	-2.7

32 obs. associated

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* SEP 24, 1990 03h 46m 23.43± 0.61s
17.650 S ±11.8km 167.870 E ± 9.6km
DEPTH = 33.0km (normol)
4.6mb (4 obs.) 4.5Msz (1 obs.)
VANUATU ISLANDS (186)

PVC	0.43	102	iPd	46	32.50	-0.5
			iS	46	40.50	
DZM	4.60	197	iPd	47	29.00	-3.5X
			iS	48	17.60	
HNR	11.22	316	eP	49	04.00	-0.7
COO	19.42	226	eP	50	50.00	0.0
RMQ	19.76	240	iPd	50	52.40	-1.3
CTA	20.60	260	iPd	51	03.60	1.1
	1.0s		27.00nm			4.6mb
QLP	23.60	244	eP	51	33.00	0.7
CNB	24.09	219	eP	51	38.00	0.9
BWA	24.10	222	eP	51	36.90	-0.3
CMS	24.26	231	eP	51	37.00	-1.7
CAN	24.32	220	eP	51	40.90	1.6
STK	27.66	234	eP	52	09.30	-1.0
	0.9s		8.00nm			4.4mb
WRA	31.79	260	e(P)	52	41.00	-6.3X
ASPA	32.29	254	eP	52	46.50	-5.2X
	0.5s		7.00nm			4.8mb
Z	19s		0.92um			4.5Msz
			LR	05	19.80	
SPA	72.46	180	iPd	57	48.20	-0.3
	0.7s		5.08nm			4.6mb
CHG	76.81	295	eP	58	24.90	10.8X
FVI	144.55	330	PKP	05	55.50	-2.6
SOTA	144.81	332	iPKPd	05	58.40	-0.4
	0.8s		13.90nm			
			i	06	08.10	
DOU	144.95	341	PKP	05	59.20	0.5
CDF	145.48	337	ePKP	06	00.80	1.0
	1.0s		18.00nm			
BSF	146.14	337	ePKP	06	02.40	1.4
	0.8s		5.35nm			
HAU	146.16	338	ePKP	06	02.60	1.7
	0.8s		8.05nm			
SFI	146.91	327	PKP	06	06.00	3.9X
VAI	146.93	333	PKP	06	04.40	2.3X
BCAO	147.23	250	iPKPd	06	12.30	8.7X
	0.5s		6.00nm			
BOB	147.47	331	PKP	06	11.50	8.3X
LOR	147.66	339	ePKP	06	06.90	3.6X
	0.8s		6.05nm			
LBF	147.87	339	ePKP	06	07.70	4.0X
	1.0s		12.00nm			
SSF	147.96	340	ePKP	06	07.80	4.0X
	0.8s		8.05nm			
SOI	148.04	315	PKP	06	08.40	4.3X
LPL	148.07	335	ePKP	06	08.80	4.5X
	0.8s		4.05nm			
LPG	148.08	335	ePKP	06	08.70	4.3X
	0.8s		6.05nm			
SMF	148.21	339	ePKP	06	08.30	4.1X
	0.8s		4.05nm			
LPF	148.37	346	ePKP	06	08.80	4.4X
	0.8s		8.05nm			
BNI	148.47	334	PKP	06	10.20	5.4X
BGF	148.62	340	ePKP	06	09.40	4.5X
	0.6s		6.30nm			
TCF	149.06	340	ePKP	06	10.70	5.1X
	1.0s		8.00nm			
MFF	149.47	344	ePKP	06	11.60	5.4X
	0.8s		10.75nm			

S.D. = 1.3 on 18 of 38 obs.

? SEP 24, 1990 03h 48m 46.78± 4.56s
10.530 N ±28.4km 62.130 W ±25.7km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF VENEZUELA (97)
MD 3.6 (TRN).

TCE	0.41	66	eP	48	55.35	0.3
			eS	49	03.71	
TRN	0.72	81	eP	49	00.01	-1.0
			eS	49	14.78	
TBH	1.05	92	eP	49	06.99	0.5
TPR	1.48	64	eP	49	13.85	0.4
			eS	49	39.72	

24d 03h

BOT	1.53	65 eP	49	15.42	1.3X
		eS	49	40.08	
SVB	2.86	17 eP	49	32.82	-0.5
		eS	50	15.12	
SVV	2.91	18 eP	49	34.37	0.3
		eS	50	18.45	

S.D. = 0.8 on 6 of 7 obs.

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* SEP 24, 1990 04h 14m 28.08s
61.633 N 151.417 W
DEPTH = 67.7km
SOUTHERN ALASKA (2)
<AGS-P>.

SKT	0.35	351 iP	14	38.89	-0.7
SUA	0.36	117 iP	14	39.90	0.1
		eS	14	49.60	
NCG	0.42	237 iP	14	39.73	-0.6
		eS	14	49.22	
CGLM	0.43	221 iP	14	39.79	-0.6
CRP	0.51	224 iP	14	40.67	-0.5
		eS	14	50.91	
SPU	0.55	214 iP	14	40.72	-0.7
		eS	14	51.24	
BGL	0.60	232 iP	14	41.42	-0.6
CKL	0.62	226 iP	14	41.59	-0.7
PWA	0.73	88 iP	14	43.06	-0.3
		eS	14	56.46	
NKA	0.90	174 iP	14	46.79	1.4
CUT	0.94	34 iP	14	45.31	-0.7
		eS	14	58.66	
PMS	0.97	113 iP	14	45.89	-0.5
		eS	14	59.94	
PLRM	1.09	91 iP	14	46.69	-1.2
RDT	1.17	205 iP	14	48.18	-0.8
		eS	15	04.11	
GHO	1.20	82 eP	14	48.38	-1.0
SLKM	1.27	152 eP	14	49.27	-1.0
RSO	1.34	210 eP	14	50.55	-0.9
SML	1.48	82 eP	14	51.57	-1.6
HUR	1.59	31 eP	14	53.31	-1.3
NNL	1.60	178 eP	14	55.22	0.5
SEW	1.81	147 eP	14	57.61	0.0
SCM	1.96	82 eP	14	57.84	-1.9
SVW	2.09	257 eP	14	59.96	-1.6
CNPM	2.12	178 eP	15	00.96	-0.9
PDB	2.30	218 eP	15	02.72	-1.7
VZW	2.41	102 eP	15	03.37	-2.7
TOA	2.53	77 eP	15	06.11	-1.6
KLU	2.63	91 eP	15	06.35	-2.8

28 obs. associated

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* SEP 24, 1990 04h 16m 12.82± 0.55s
18.088 S ±14.7km 167.619 E ±13.4km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
VANUATU ISLANDS (186)

PVC	0.75	62 iPc	16	25.00	-1.9
		iS	16	36.50	
DZM	4.11	195 iPd	17	14.20	-0.8
		iS	18	03.80	
HNR	11.38	318 eP	18	51.00	-5.2X
BRS	16.52	233 iP	19	57.50	-6.2X
		e	20	34.00	
RMQ	19.34	241 iPc	20	38.00	-0.5
CTA	20.29	261 iPc	20	48.10	-0.5
	1.1s	27.85nm		4.5mb	
OLP	23.19	244 eP	21	18.00	0.2
BWA	23.62	223 eP	21	22.30	0.4
CMS	23.80	232 eP	21	25.00	1.4
CAN	23.83	220 eP	21	26.20	2.3X
STK	27.21	235 eP	21	55.30	-0.3
	1.1s	9.00nm		4.3mb	
WRA	31.49	261 eP	22	31.20	-2.8X
ASPA	31.94	254 eP	22	35.10	-2.9
	0.6s	16.00nm		5.1mb	
Z	22s	1.46um		4.6MszX	
		LR	34	12.50	
SPA	72.03	180 eP	27	30.90	-4.4X
	1.1s	11.90nm		4.8mb	
BJI	75.08	322 eP	27	52.00	-1.2
KMI	76.36	302 eP	28	15.00	13.8X
	1.5s	50.00nm			
CHG	76.78	295 eP	28	03.50	0.2
SOB1	140.91	132 ePKP	35	34.20	-8.0X
KHC	142.60	332 ePKP	35	42.00	-2.2
FVI	144.80	329 PKP	35	51.20	-16.7X
SOTA	145.08	332 iPKPc	35	48.30	-0.3
	0.8s	19.80nm			
CAI	145.43	133 iPKPd	35	39.30	-10.7X
CDF	145.79	337 ePKP	35	49.30	-0.5
	1.2s	47.60nm			
BSF	146.45	336 ePKP	35	51.00	0.1
	1.0s	10.00nm			
HAU	146.47	337 ePKP	35	51.20	0.4
	1.2s	20.85nm			
BCAO	146.86	250 iPKPc	35	53.70	1.3
	0.9s	29.00nm			
VAI	147.21	332 PKP	35	53.30	1.4
LDF	147.98	345 ePKP	35	54.40	1.3
	1.0s	16.00nm			
LOR	147.99	339 ePKP	35	54.60	1.4
	1.2s	17.85nm			
SOI	148.17	315 PKP	35	57.20	3.5X
LBF	148.19	339 ePKP	35	55.20	1.6
	1.0s	14.00nm			
SSF	148.28	339 ePKP	35	55.10	1.4
	1.0s	9.00nm			
LPL	148.36	334 ePKP	35	57.60	3.4X
	1.0s	8.00nm			
LPG	148.37	334 ePKP	35	57.00	2.7X
	1.2s	17.85nm			
SMF	148.53	338 ePKP	35	57.40	3.3X
	1.2s	20.85nm			
AVF	148.57	339 ePKP	35	58.00	3.9X
	1.3s	23.45nm			
MAF	149.33	339 ePKP	35	59.30	3.9X
	1.2s	17.85nm			
TCF	149.39	340 ePKP	35	57.40	1.9X
	1.2s	13.40nm			

S.D. = 1.3 on 22 of 38 obs.

SEP 24, 1990 05h 03m 56.27± 0.41s
3.578 S ± 8.9km 127.191 E ± 9.5km
DEPTH = 33.0km (normal)
5.3mb (4 obs.)
CERAM (272)

AAI	1.01	96 ePd	04	14.10	0.0
		eS	04	32.90	
WRA	17.70	157 eP	08	01.70	-0.3
OIS	20.76	145 iPd	08	37.30	0.3
ASPA	21.00	163 eP	08	39.80	0.3
	1.0s	128.00nm		5.3mb	
		eS	12	35.40	
FORR	27.14	178 eP	09	38.00	-0.4
CHG	35.61	310 eP	10	53.50	0.3
LZH	45.10	333 eP	12	12.00	0.5
GUN	50.61	311 P	12	54.60	-0.2
	0.7s	41.00nm		5.5mb	
PKI	50.79	310 P	12	55.60	-0.6
KKN	51.00	310 P	12	57.00	-0.6
	0.8s	21.00nm		5.2mb	
DMN	51.04	310 P	12	57.60	-0.4
GKN	51.60	310 P	13	01.60	-0.5
	0.8s	28.00nm		5.3mb	
GBA	52.23	290 Pc	13	08.20	1.4
	0.6s	1.50nm		4.1mb X	

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

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* SEP 24, 1990 06h 35m 13.93± 0.64s
38.253 N ±10.3km 47.951 E ± 9.2km
DEPTH = 10.0km (geophysicist)
4.6mb (7 obs.)
NORTHWESTERN IRAN (345)
Felt at Rudbar and Ardabil.

TAB	1.29	262 iPc	35	38.20	0.2
TEH	3.72	131 eP	36	13.00	0.2
KER	3.95	190 eP	36	17.00	1.0
TLB	16.21	299 eP	39	07.00	3.8X
VRI	17.47	303 ePc	39	19.50	0.4
MLR	17.88	301 eP	39	20.00	-4.4X
OHR	21.06	286 e(P)	40	02.20	1.7
KRA	23.16	310 eP	40	21.40	0.2
KSP	25.62	310 eP	40	38.70	-6.2X
NDI	26.12	103 iPd	40	50.00	0.2
NUR	26.67	334 eP	40	57.00	2.5
		e	41	11.00	
		e	41	26.00	
KHC	26.91	305 P	40	56.50	-0.4
CLL	27.74	309 iP	41	04.00	-0.4
	1.1s	13.00nm		4.6mb	
HFS	30.74	327 eP	41	29.60	-1.5
	0.6s	2.20nm		4.2mb	
Z	17s	0.11um		3.6MszX	
		LR	53	03.00	
NB2	32.25	327 P	41	42.80	-1.6
	0.7s	3.10nm		4.3mb	
EKA	37.96	314 Pc	42	35.70	2.5X
	0.6s	4.30nm		4.4mb	
BCAO	43.02	226 iPd	43	13.00	-2.4
	0.6s	15.00nm		4.9mb	
		ic	43	15.70	
CHG	48.16	99 eP	43	56.30	-0.1
BUL	60.86	201 iPd	45	21.50	-7.5X
	1.0s	5.50nm		4.6mb	
ASPA	101.25	111 ePdiff	49	02.10	-4.3X
	0.7s	8.00nm		5.4mb	

S.D. = 1.4 on 14 of 20 obs.

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* SEP 24, 1990 06h 36m 44.17± 3.30s
23.665 N ±12.2km 122.401 E ±28.4km
DEPTH = 10.0km (geophysicist)
TAIWAN REGION (243)

TWD	0.85	299 ePd	37	00.40	-0.1
TWF1	1.06	253 iPc	37	04.40	0.3
		eS	37	20.30	
TWC	1.07	332 iPd	37	03.30	-0.9
		eS	37	19.80	
TWG	1.48	236 ePd	37	10.50	-0.4
TWZ	1.61	332 eP	37	12.40	-0.3
ANP	1.71	332 eP	37	15.50	1.2

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

SEP 24, 1990 07h 04m 12.01± 1.07s
2.432 N ± 6.6km 128.576 E ±10.4km
DEPTH = 231.5 ± 10.8 km
4.9mb (11 obs.)
HALMAHERA (267)

MNI	3.86	255 iPd	05	13.40	-0.4
		eS	06	01.00	
DAV	5.51	327 eP	05	34.50	0.3
AAI	6.09	184 eP	05	46.30	4.7X
KKM	12.84	287 ePc	07	08.70	1.0
BAG	15.96	331 eP	07	46.00	-0.2
		eS	10	40.00	
KNA	18.07	179 iPc	08	08.60	-0.3
WRA	22.95	166 iPc	08	56.80	-0.6
MBL	24.96	200 eP	09	15.00	-1.2
OIS	25.28	155 iPc	09	19.00	-0.1
ASPA	26.45	169 iPc	09	29.40	-0.4
	0.5s	55.00nm		5.5mb	
Z	18s	0.34um		3.9Msz	
		eS	13	44.80	
		LR	20	14.60	
NANU	27.92	206 eP	09	42.40	-0.5
	0.3s	4.00nm		4.6mb	
WARB	28.51	184 eP	09	48.10	-0.1
PSI	29.62	271 ePd	09	58.80	0.7
NNT	30.28	291 eP	10	03.00	-0.9
FORR	33.10	181 eP	10	27.00	-1.1
CHG	33.27	301 ePd	10	30.50	0.7
	0.9s	42.65nm		5.1mb	
KMI	33.60	314 Pd	10	34.00	1.2
MAT	35.09	14 (P)	10	43.00	-2.0
	0.8s	11.94nm		4.5mb	
STK	36.29	161 iPd	10	54.90	-0.2
	0.6s	19.00nm		4.8mb	
		e	12	16.80	
BRS	37.72	143 iP	11	06.50	-0.7
		i	12	14.00	
ADE	38.40	167 iPc	11	14.00	1.2
	1.0s	74.00nm		5.2mb	
BJI	39.09	345 eP	11	17.50	-0.8
	1.0s	42.00nm		5.0mb	
LZH	40.56	329 Pd	11	32.50	1.9
		pP	11	46.00	51kmX
BWA	41.14	155 eP	11	37.80	2.6
BFD	41.49	163 eP	11	40.00	2.0
CAN	42.15	155 eP	11	47.20	3.7X
GUN	47.97	306 P	12	30.20	0.2
PKI	48.22	305 P	12	31.80	-0.1
	0.7s	29.00nm		4.8mb	
KKN	48.41	306 P	12	33.20	0.0
DMN	48.48	305 P	12	34.00	0.2
	0.8s	52.00nm		5.0mb	
GKN	49.02	306 P	12	37.60	-0.2

0.8s 43.00nm 4.9mb
HYB 51.29 290 ePd 12 54.00 -1.0
0.8s 35.70nm 4.9mb
GBA 51.73 285 P 12 57.30 -0.9
S.D. = 1.1 on 31 of 33 obs.

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* SEP 24, 1990 08h 19m 15.81± 1.19s
8.374 S ±12.6km 148.774 E ±13.4km
DEPTH = 63.1 ± 20.8 km
4.3mb (2 obs.)
EAST PAPUA NEW GUINEA REGION (207)

PMG 1.90 237 iPd 19 47.00 0.4
eS 20 12.00
LAT 2.45 314 eP 19 54.00 -0.3
eS 20 30.00
RAB 5.35 39 iPc 20 35.20 0.1
OIS 15.01 215 eP 22 45.00 -0.8
ASPA 20.84 221 eP 23 55.40 0.7
0.7s 25.00nm 4.7mb
CMS 23.16 186 eP 24 17.00 -0.6
STK 24.33 195 eP 24 28.70 -0.2
0.9s 4.00nm 3.9mb
BWA 25.93 181 eP 24 44.30 0.3
CAN 26.82 180 eP 24 52.30 0.2
S.D. = 0.6 on 9 of 9 obs.

SEP 24, 1990 08h 49m 37.49± 0.49s
0.013 N ± 5.4km 78.006 W ± 5.5km
DEPTH = 10.0km (geophysicist)
4.2mb (3 obs.)
COLOMBIA-ECUADOR BORDER REGION (106)

CAYA 0.07 18 iP 49 38.20 -2.1
iS 49 41.50
COTA 0.46 314 iP+ 49 46.90 -0.1
QTO 0.57 248 iPd 49 49.40 0.1
YANA 0.58 257 iPd 49 49.00 -0.6
ANGL 0.61 131 iP 49 47.80 -2.3
GGP 0.62 253 iPd 49 50.20 -0.2
VC1 0.76 211 iP+ 49 53.00 0.3
TUNG 1.49 197 P 50 05.00 0.4
BOG 6.04 41 eP 51 12.00 2.6
eS 52 49.00
ZOBO 18.89 149 P 54 02.00 0.9
Z 24s 0.13um
LR 00 16.00
CNCB 19.42 150 P 54 08.00 0.4
CCH 20.86 147 P 54 23.30 0.7
SIV 23.07 134 P 54 44.00 -0.4
ALO 43.74 326 eP 57 45.40 0.3
1.0s 4.50nm 4.2mb
ANMO 43.75 326 eP 57 45.40 0.3
1.0s 4.38nm 4.2mb
TNP 52.30 321 eP 58 51.80 0.0
1.0s 2.00nm 4.0mb
PNT 60.70 330 eP 59 51.00 -0.3
S.D. = 1.2 on 17 of 17 obs.

SEP 24, 1990 09h 23m 29.36± 0.71s
19.167 N ± 9.2km 108.117 W ± 8.4km
DEPTH = 10.0km (geophysicist)
3.9mb (3 obs.)
REVILLA GIGEDO ISLANDS REGION (53)

GLA 15.08 338 eP 27 04.00 -0.2
BAR 15.49 332 eP 27 10.00 0.5
ALO 15.78 5 eP 27 14.50 1.0
1.2s 10.94nm 3.9mb
ANMO 15.79 5 P 27 15.20 1.7
TPC 16.47 336 eP 27 23.00 0.8
RVR 16.91 333 eP 27 28.00 0.3
MWC 17.41 331 eP 27 34.00 -0.2
SBB 17.70 333 eP 27 39.00 1.4
GSC 17.82 336 eP 27 40.00 0.9
CLC 18.58 335 eP 27 48.00 -0.5
BCH 19.15 329 P 27 54.50 -1.1
SIO 19.53 30 eP 28 04.00 4.0X
e 28 13.60
TUL 19.91 31 eP 28 02.40 -1.6
1.1s 5.30nm 3.8mb
Z 20s 0.26um 4.6MszX
LR 34 00.00
PRI 20.20 329 eP 28 08.00 0.8
TNP 20.45 339 P 28 08.30 -1.6
1.2s 13.10nm 4.2mb
FRI 20.46 333 eP 28 08.50 -1.3
PRS 20.70 328 eP 28 12.70 0.4
DUG 21.34 350 P 28 18.70 -0.3
DAU 21.35 353 P 28 18.40 -0.9
GCC 21.56 328 eP 28 21.30 0.3
ARN 21.58 330 P 28 20.50 -0.8
CMB 21.63 333 eP 28 21.30 -0.5
MHC 21.63 330 eP 28 22.00 0.1
OLY 21.93 39 P 28 24.20 -0.6
ORV 23.37 333 eP 28 40.20 1.2
PWLA 23.74 44 P 28 42.70 0.2
ELC 24.47 39 P 28 49.60 0.0
WDC 24.67 333 eP 28 52.00 0.5
IMW 24.77 355 P 28 52.00 -0.8
RSSD 25.11 7 P 28 56.80 0.8
INK 51.65 348 eP 32 37.00 -1.0
ZOBO 52.79 129 P 32 49.00 1.0
SIV 57.98 124 P 33 25.60 0.7
PSI 145.67 306 ePKPd 43 09.50 -1.1
S.D. = 0.9 on 33 of 34 obs.

& SEP 24, 1990 09h 47m 03.20s
41.240 N 124.340 W
DEPTH = 5.0km (geophysicist)
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 3.5 (BRK). Felt (IV)
at Arcata and (III) at Boyside,
Eureka and Ferndale.

FHC 0.51 148 iPc 47 13.50 0.0
LBFM 1.85 86 eP 47 38.50 2.5
LTCM 1.97 121 eP 47 35.50 -2.1
ORV 2.74 127 eP 47 45.80 -2.9
ARN 4.45 150 eP 48 08.00 -5.0
5 obs. associated

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* SEP 24, 1990 10h 39m 52.52± 0.67s
17.963 S ±17.4km 167.871 E ±14.9km
DEPTH = 33.0km (normal)
4.4mb (4 obs.) 4.2Msz (1 obs.)
VANUATU ISLANDS (186)

PVC 0.48 62 iPd 40 02.40 -0.4
iS 40 11.50
DZM 4.30 198 iPc 40 56.60 -0.8
iS 41 46.60
RMQ 19.61 241 iPc 44 20.20 -1.0
BWA 23.88 223 eP 45 05.10 1.0
CMS 24.07 232 eP 45 07.00 1.1
STK 27.48 235 eP 45 38.50 0.7
1.1s 5.00nm 4.1mb
ASPA 32.20 254 eP 46 18.00 -2.0
0.7s 6.00nm 4.6mb
Z 20s 0.47um 4.2Msz
LR 58 25.50
SPA 72.15 180 iPd 51 16.70 0.9
0.8s 6.67nm 4.7mb
CHTO 76.94 295 eP 51 37.50 -6.4X
1.0s 2.75nm 4.2mb
CAI 145.34 132 ePKP 59 27.70 -1.9
CDF 145.77 337 ePKP 59 29.70 0.3
0.8s 8.05nm
BSF 146.43 337 ePKP 59 31.40 0.8
0.6s 3.60nm
HAU 146.45 337 ePKP 59 31.50 1.0
0.6s 4.50nm
BCAO 147.13 250 ePKPd 59 36.00 3.5X
0.5s 3.00nm
LOR 147.95 339 ePKP 59 35.80 2.9X
0.8s 7.40nm
LBF 148.16 339 ePKP 59 36.70 3.4X
0.8s 6.70nm
SSF 148.25 340 ePKP 59 36.90 3.6X
0.8s 10.75nm
LPL 148.35 334 ePKP 59 37.80 3.9X
1.0s 6.00nm
LPG 148.36 334 ePKP 59 37.60 3.6X
0.8s 4.05nm
SMF 148.50 339 ePKP 59 37.30 3.5X
0.8s 6.70nm
AVF 148.54 339 ePKP 59 37.00 3.2X
0.8s 4.05nm
LPF 148.67 346 ePKP 59 37.70 3.8X
0.6s 5.40nm
BGF 148.91 340 ePKP 59 38.40 4.0X
0.8s 8.05nm
TCF 149.36 340 ePKP 59 39.60 4.5X
0.6s 1.80nm
LSF 149.61 341 ePKP 59 39.90 4.4X
0.8s 5.35nm
MFF 149.77 343 ePKP 59 40.40 4.7X
0.6s 4.50nm
S.D. = 1.3 on 12 of 26 obs.

? SEP 24, 1990 14h 19m 41.83± 4.03s
13.076 N ±61.2km 144.000 E ±12.1km
DEPTH = 33.0km (normal)
4.1mb (1 obs.)
MARIANA ISLANDS (216)

GUMO 0.99 59 ePc 19 59.00 -0.3
PJG 0.99 59 iPc 19 58.90 -0.4
GUA 1.00 63 eP 19 59.70 0.1
eS 20 18.50
MAT 23.94 348 eP 24 55.00 1.1
BJI 36.33 323 eP 26 43.00 -1.5
YKA 83.70 27 eP 32 09.50 1.1
0.9s 1.40nm 4.1mb
ZOBO 148.78 100 ePKP 39 19.00 -6.2X
S.D. = 1.3 on 6 of 7 obs.

SEP 24, 1990 15h 33m 15.61± 0.26s
10.618 S ± 5.6km 73.444 W ± 5.8km
DEPTH = 135.3km (6 depth phases)
4.8mb (25 obs.)
PERU (116)

ARE 6.11 162 eP 34 45.00 -0.2
ZOBO 7.64 138 iPd 35 06.00 -0.1
LPB 7.85 139 P 35 08.00 -0.8
1.1s 215.19nm 5.7mb
CNCB 8.13 140 P 35 13.00 0.3
CCH 9.77 134 P 35 34.40 0.1
PSO 12.35 342 eP 36 10.00 1.6
SIV 13.17 115 iPd 36 18.80 0.1
BOG 15.15 358 eP 36 56.00 11.8X
eS 39 29.50
UPA 20.39 342 (P) 37 46.00 2.2
PPD 24.04 121 eP 38 19.40 -0.2
e 38 22.10
SVB 26.64 27 eP 38 42.08 -1.5
SVV 26.70 27 eP 38 42.34 -1.8
VAO 28.12 119 eP 38 55.60 -1.4
NEV 29.60 21 eP 39 11.49 1.4
SKI 29.72 21 eP 39 13.49 2.3X
BPA 29.78 23 eP 39 08.77 -3.0X
CPB 30.33 22 eP 39 13.78 -2.8X
JFO 30.90 115 eP 39 21.60 -0.1
SOB1 32.09 90 eP 39 33.00 0.9
JSC 45.26 351 P 41 21.10 -0.1
TKL 47.05 348 P 41 34.00 -1.3
GBTN 47.14 348 P 41 35.10 -1.0
RSCP 47.37 347 P 41 36.70 -1.2
1.1s 158.39nm 5.6mb
PWLA 47.42 344 P 41 36.30 -1.9
BLA 48.02 353 P 41 43.00 0.1
NAV 48.18 352 P 41 44.00 -0.1
NA2 48.65 355 P 41 48.10 0.5
OLY 48.93 340 P 41 47.90 -2.0
TUL 50.86 337 eP 42 04.50 0.0
1.3s 1166.00nm 6.5mb X
FVM 50.89 343 P 42 03.90 -0.9
SIO 50.92 336 eP 42 05.00 0.0
ALQ 55.05 327 ePc 42 35.00 -0.8
1.0s 7.00nm 4.5mb
epP 43 07.00 136km
ANMO 55.05 327 P 42 34.80 -1.0
1.3s 12.02nm 4.6mb
pP 43 07.20 138km
CBM 57.49 4 P 42 52.80 0.2
GLD 58.15 331 P 42 57.80 0.2
pP 43 30.10 136km
GOL 58.18 331 P 42 57.00 -0.9
pP 43 29.80 138km
TPC 60.12 320 eP 43 11.00 -0.1
PLM 60.16 318 eP 43 15.00 3.4X
RSSD 61.15 335 P 43 17.80 -0.4
GSC 61.36 320 eP 43 20.00 0.4
SBB 61.62 319 eP 43 21.00 -0.3
DAU 61.65 328 P 43 21.30 -0.4
CLC 62.18 320 eP 43 25.00 0.0
DUG 62.32 327 P 43 26.00 0.1
pP 43 58.30 134km
BW06 62.56 331 P 43 26.10 -1.4
1.3s 22.13nm 4.9mb

24d 15h

BCH	63.39	318	P	43 33.80	0.8
TNP	63.40	322	P	43 33.10	-0.1
	1.0s	10.83nm		4.7mb	
IMW	64.06	331	P	43 37.00	-0.5
PRI	64.34	319	ePc	43 39.60	0.4
LLA	64.81	319	iPc	43 42.50	0.4
PRS	64.91	319	ePc	43 43.30	0.6
CMB	65.31	321	iPc	43 45.60	0.3
ARN	65.62	319	P	43 47.70	0.4
MHC	65.69	319	iPc	43 48.70	0.9
GCC	65.73	319	ePc	43 48.50	0.6
LRM	66.21	331	eP	43 51.40	0.2
ORV	66.93	321	iPc	43 56.50	1.0
LBFM	68.25	323	P	44 04.20	0.2
FFC	69.40	343	eP	44 10.00	-0.5
	0.5s	6.00nm		4.7mb	
LIC	70.13	79	P	44 15.80	0.0
NEW	70.19	331	P	44 15.20	-0.3
	1.1s	13.89nm		4.7mb	
KIC	70.44	79	Pc	44 17.10	-0.6
	0.7s	22.00nm		5.1mb	
LON	71.57	327	P	44 23.40	-0.5
RMW	72.01	328	P	44 26.40	-0.1
EDM	72.11	336	eP	44 27.00	0.1
PNT	72.12	330	eP	44 28.00	1.0
BMW	72.16	326	P	44 27.80	0.4
GMW	72.59	327	P	44 30.00	0.2
MCW	73.32	328	P	44 34.40	0.4
ATEJ	80.37	50	eP	45 15.00	1.4
ALOJ	80.37	49	eP	45 15.40	1.8
AAPN	80.43	49	eP	45 15.50	1.6
ACHM	80.57	49	eP	45 16.50	1.9
APHE	80.62	50	eP	45 16.20	1.2
ASMO	80.73	49	eP	45 17.00	1.5
LPF	86.34	40	eP	45 42.40	-1.1
	0.6s	7.20nm		4.8mb	
MFF	86.43	41	eP	45 43.70	-0.3
	0.6s	3.60nm		4.5mb	
GRR	86.58	40	eP	45 44.30	-0.4
	0.6s	12.65nm		5.0mb	
FLN	86.94	39	eP	45 46.30	-0.1
	0.6s	10.80nm		5.0mb	
LDF	87.11	40	eP	45 46.50	-0.7
	0.6s	10.80nm		5.0mb	
MAF	88 09	42	eP	45 51.30	-0.7
	0.6s	3.60nm		4.6mb	
BGF	88.38	42	eP	45 52.90	-0.5
	0.6s	5.40nm		4.8mb	
AVF	88.78	42	eP	45 54.40	-0.8
	0.7s	3.30nm		4.5mb	
SMF	89.06	42	eP	45 55.90	-0.7
	0.7s	4.95nm		4.7mb	
INK	89.29	341	eP	45 58.00	0.8
	0.8s	23.00nm		5.3mb	
		pP		46 31.50 130km	
DOU	90.51	39	P	46 03.20	0.0
	0.6s	10.90nm		5.1mb	
LPL	90.70	44	eP	46 04.90	0.4
	0.6s	3.60nm		4.7mb	
LPG	90.71	44	eP	46 05.10	0.5
	0.6s	3.60nm		4.7mb	
BCAO	92.75	86	ePc	46 15.00	0.7
	0.5s	5.00nm		5.0mb	
FBA	93.01	336	P	46 14.90	0.5
	0.7s	7.27nm		5.0mb	
HFS	97.70	30	eP	46 35.70	-0.1
	0.6s	0.80nm		4.4mb	
MAT	141.49	317	(PKP)	52 19.00	-13.7X
NDI	147.18	53	iPKPc	52 47.00	4.5X
POO	147.43	72	iPKP	52 48.50	5.3X
BJI	149.48	345	PKP	52 51.50	5.7X
	1.5s	140.00nm			
GBA	151.38	81	PKPc	52 56.20	6.9X
	1.3s	44.40nm			
GKN	153.12	47	PKP	53 01.20	9.5X
KKN	153.70	47	PKP	53 02.40	9.8X
	0.8s	25.00nm			
PKI	153.93	47	PKP	53 02.60	9.5X

S.D. = 0.9 on 86 of 99 obs.

? SEP 24, 1990 17h 25m 23.79± 6.23s
32.486 S ±39.2km 71.738 W ±29.4km
DEPTH = 15.3 ± 10.0 km
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.78	129	iPd	25 38.60	-0.1
			iS	25 49.60	
JACH	0.99	102	iPd	25 42.10	0.0
			iS	25 55.50	
PEL	1.10	127	iPd	25 44.00	-0.1
			iS	25 58.70	
TACH	1.34	150	eP	25 47.70	-0.2
			iS	26 06.50	
FCH	1.48	125	iPd	25 50.10	0.0
			iS	26 09.70	
LNV	1.49	169	eP	25 49.70	-0.2
			iS	26 08.50	
PCH	1.53	138	ePd	25 50.50	-0.1
			i	26 10.60	
			iS	26 12.00	
CHCH	1.71	148	ePc	25 53.90	0.8
			iS	26 16.60	

S.D. = 0.4 on 8 of 8 obs.

SEP 24, 1990 18h 17m 28.13± 1.28s
32.830 S ± 8.8km 71.481 W ± 9.5km
DEPTH = 12.2 ± 6.3 km
NEAR COAST OF CENTRAL CHILE (135)

IHA	0.24	215	eP	17 33.00	-0.3
			iS	17 38.50	
ROCH	0.42	110	iPd	17 37.80	0.9
			iS	17 47.50	
LCCH	0.65	187	eP	17 41.50	0.7
			iS	17 50.50	
PEL	0.74	115	iPd	17 43.00	0.6
			iS	17 56.80	
JACH	0.76	79	iPd	17 42.00	-0.9
			iS	17 55.30	
SAN	0.93	132	eP	17 45.50	-0.1
			iS	18 02.10	
TACH	0.94	151	iPc	17 45.60	-0.2
			iS	18 01.00	
FCH	1.12	117	iPc	17 48.00	-1.1
			iS	18 07.20	
LNV	1.12	177	iP	17 45.00	-4.0X
			iS	18 04.00	
PCH	1.13	134	iP	17 48.70	-0.5
			iS	18 09.20	
CHCH	1.30	148	iP	17 52.20	0.2
			iS	18 11.40	
RTBS	2.08	56	eP	18 03.00	-0.1
RTCB	2.64	60	ePd	18 10.90	-0.4
			eS	18 49.50	
RTCV	2.67	70	e(P)	18 12.70	0.9
ZON	2.70	62	eP	18 14.40	2.3
RTLL	2.96	60	ePd	18 14.00	-1.8

S.D. = 1.1 on 15 of 16 obs.

SEP 24, 1990 18h 22m 11.62± 1.19s
32.844 S ± 6.6km 71.573 W ±10.0km
DEPTH = 17.7 ± 6.5 km
NEAR COAST OF CENTRAL CHILE (135)

IHA	0.19	197	eP	22 17.00	0.5
			iS	22 22.70	
ROCH	0.49	105	iPd	22 22.00	0.4
			iS	22 31.00	
LCCH	0.63	180	iPd	22 23.50	-0.3
			iS	22 34.30	
PEL	0.80	112	iPd	22 27.00	0.2
			i	22 34.40	
			i(S)	22 40.60	
JACH	0.84	79	iPd	22 26.00	-1.5
			iS	22 39.00	
TACH	0.97	147	iPd	22 30.00	0.4
			iS	22 45.00	
SAN	0.98	129	iPd	22 30.10	0.4
			iS	22 45.10	
LNV	1.12	173	iP	22 31.00	-1.1
			iS	22 48.00	
PCH	1.18	131	iPd	22 33.00	-0.2
			iS	22 52.00	
FCH	1.18	114	iPd	22 33.20	-0.3
			iS	22 51.00	
CHCH	1.33	145	iPc	22 35.80	0.4
			iS	22 55.20	
RTBS	2.15	57	eP	22 47.50	0.4
RTCB	2.71	61	ePc	22 55.00	-0.3
			S	23 34.20	
RTCV	2.75	70	e(P)	22 56.10	0.3
ZON	2.77	63	eP	22 59.40	3.3X
RTLL	3.04	61	eP	22 58.70	-1.1
			eS	23 40.00	

CFA	3.08	67	eP	23 02.00	1.6

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

SEP 24, 1990 18h 39m 22.65± 1.32s
32.846 S ± 7.2km 71.562 W ±10.7km
DEPTH = 16.5 ± 8.8 km
NEAR COAST OF CENTRAL CHILE (135)

IHA	0.19	200	eP	39 28.00	0.6
			iS	39 33.90	
ROCH	0.48	105	iPd	39 33.00	0.6
			iS	39 42.00	
LCCH	0.63	181	iPd	39 34.20	-0.6
			iS	39 45.20	
PEL	0.79	112	iPd	39 38.00	0.3
			i	39 45.50	
			i(S)	39 51.80	
JACH	0.83	79	iPd	39 36.60	-1.8
			iS	39 49.50	
TACH	0.96	147	iPd	39 40.90	0.4
			iS	39 56.00	
SAN	0.97	129	iPd	39 40.80	0.2
			iS	39 56.00	
LNV	1.11	174	iP	39 42.00	-1.0
			iS	39 59.00	
PCH	1.17	132	ePd	39 44.20	0.1
			iS	40 04.00	
FCH	1.17	115	iPd	39 43.80	-0.5
			iS	40 02.00	
CHCH	1.32	145	iPc	39 47.00	0.6
			iS	40 06.60	
RTBS	2.14	57	e(P)	39 58.00	-0.2
RTCB	2.71	61	ePd	40 06.10	-0.2
			e	40 07.80	
			S	40 18.90	
RTCV	2.74	70	e(P)	40 08.30	1.5
ZON	2.77	63	e(P)	40 09.00	1.9
RTLL	3.03	61	e(P)	40 08.90	-1.9
			e	40 10.70	

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

& SEP 24, 1990 19h 01m 45.85s
63.009 N 150.895 W
DEPTH = 127.4km
CENTRAL ALASKA (1)
<AGS-P>.

HUR	0.58	93	eP	02 04.88	-0.5
			eS	02 19.27	
CUT	0.67	154	iP	02 05.78	-0.2
SKT	1.07	196	iP	02 09.17	-0.4
			eS	02 26.52	
MCK	1.14	50	eP	02 09.89	-0.4
			eS	02 28.19	
PWA	1.44	160	eP	02 13.20	-0.2
GHO	1.54	143	eP	02 14.48	-0.2
			eS	02 36.51	
SUA	1.55	177	eP	02 14.76	-0.1
PLRM	1.64	149	eP	02 14.24	-1.5
SML	1.70	134	iP	02 15.94	-0.5
NCG	1.72	201	eP	02 15.80	-1.0
CGLM	1.79	197	eP	02 16.70	-0.9
CRP	1.85	199	eP	02 17.90	-0.5
PMS	1.88	160	eP	02 18.51	-0.2
BGL	1.89	203	eP	02 18.67	-0.2
SPU	1.91	197	eP	02 18.05	-1.1
WRH	1.93	39	eP	02 18.34	-0.9
CKL	1.94	201	eP	02 18.82	-0.7
SCM	2.04	124	eP	02 19.96	-0.7
CCB	2.14	38	eP	02 20.90	-0.9
TOA	2.37	110	eP	02 24.74	-0.1
GLM	2.52	36	eP	02 25.82	-0.9
SLKM	2.53	172	eP	02 26.13	-0.8
RDT	2.55	197	eP	02 26.54	-0.6
KLU	2.78	121	iP	02 28.92	-1.3
VLZ	2.86	129	eP	02 29.31	-1.8
SEW	3.00	166	eP	02 31.96	-1.0
DOT	3.15	75	eP	02 34.11	-0.9
CNPM	3.50	183	eP	02 38.78	-0.9
GLB	3.67	112	eP	02 40.66	-1.3

29 obs. associated

SEP 24, 1990 19h 51m 51.20± 0.37s
28.283 N ± 6.5km 56.918 E ± 4.3km
DEPTH = 33.0km (normal)
4.7mb (21 obs.)
SOUTHERN IRAN (353)

BRF	6.06	250	ePn	53 22.80	2.0
			eSn	54 31.80	
BJA	6.07	249	iPn	53 22.80	1.8
			eSn	54 33.20	
BBU	6.11	252	iPn	53 22.70	1.2
			eSn	54 32.70	
QUE	8.97	75	eP	54 03.20	1.6
			eS	55 38.70	
RYD	9.89	251	eP	54 13.70	-0.5
OASM	12.11	263	eP	54 43.70	-0.8
AFIF	13.02	254	eP	55 00.50	3.9X
KMSA	13.79	238	ePd	55 04.70	-2.0
SRAT	16.23	234	eP	55 38.30	-0.4
KMTA	16.36	235	eP	55 39.30	-1.0
GKN	24.43	84	P	57 08.60	0.4
DMN	24.89	85	P	57 12.80	0.0
KKN	25.02	84	P	57 13.20	-0.8
	0.6s	28.00nm		5.0mb	
PKI	25.16	85	P	57 14.80	-0.7
	0.4s	7.00nm		4.6mb	
KRA	35.46	318	iPd	58 46.70	0.4
NUR	38.87	335	eP	59 15.00	0.2
KHC	39.04	314	iPd	59 17.00	0.5
	1.1s	8.00nm		4.4mb	
WATA	39.90	311	eP	59 23.50	-0.3
CLL	40.03	317	eP	59 25.00	0.4
	1.0s	11.00nm		4.6mb	
SOTA	40.12	311	iPd	59 25.90	0.3
	0.7s	7.20nm		4.5mb	
LPG	42.91	308	eP	59 48.60	-0.1
	0.8s	5.35nm		4.3mb	
LPL	42.93	308	eP	59 48.50	-0.2
	0.8s	5.35nm		4.3mb	
HFS	43.14	330	eP	59 49.70	-0.2
NB2	44.64	330	P	00 00.30	-1.9
	0.9s	1.80nm		3.9mb	
LBF	44.97	309	eP	00 04.80	-0.2
	0.8s	6.70nm		4.6mb	
SMF	45.04	309	eP	00 05.30	-0.2
	0.8s	10.75nm		4.8mb	
LOR	45.08	310	eP	00 05.40	-0.5
	0.9s	8.20nm		4.6mb	
SSF	45.30	309	eP	00 07.50	-0.1
	0.8s	8.05nm		4.7mb	
AVF	45.38	309	eP	00 07.70	-0.5
	0.8s	4.05nm		4.4mb	
BGF	45.71	309	eP	00 10.70	-0.2
	1.0s	11.00nm		4.7mb	
MAF	45.88	308	eP	00 12.50	0.3
	0.9s	11.45nm		4.8mb	
TCF	46.14	308	eP	00 14.40	0.2
	0.8s	8.05nm		4.7mb	
CAF	46.18	306	eP	00 15.00	0.4
	0.8s	10.05nm		4.8mb	
RJF	46.58	307	eP	00 18.40	0.7
	0.8s	10.75nm		4.9mb	
LPO	46.80	306	eP	00 19.90	0.5
	0.8s	5.35nm		4.6mb	
LFF	47.12	306	eP	00 22.40	0.4
	0.8s	20.15nm		5.2mb	
LDF	47.85	311	eP	00 26.80	-0.9
	0.8s	8.05nm		4.8mb	
S.D. = 0.9 on 36 of 37 obs.					

? SEP 24, 1990 21h 37m 59.22± 1.09s
36.288 S ±21.7km 97.530 W ±16.9km
DEPTH = 10.0km (geophysicist)
4.8mb (1 obs.) 5.0Msz (1 obs.)
WEST CHILE RISE (686)

RTBS	23.70	87	e(P)	43 14.00	2.1
RTCB	24.28	87	e(P)	43 17.00	-0.7
RTLL	24.60	87	ePc	43 17.10	-3.7X
CCH	33.53	64	P	44 43.50	1.9
SIV	38.16	68	P	45 19.40	-1.2
PPD	42.40	83	eP	45 48.60	-7.0X
			e	45 53.90	
SPA	53.90	180	eP	47 25.00	0.3
	1.0s	9.50nm		4.8mb	
Z	19s	1.18um		5.0Msz	
SOB1	57.83	77	eP	47 51.90	-1.6
CAI	62.41	77	eP	48 23.70	-1.2
MEO	70.71	359	e(P)	49 17.00	-0.1
GLA	70.85	345	eP	49 19.00	0.9
SBB	73.10	343	eP	49 32.00	0.5
GSC	73.45	344	eP	49 35.00	1.5
CLC	74.13	343	eP	49 35.00	-2.4
SES	87.13	351	eP	51 00.00	13.9X
PNT	87.46	346	eP	51 01.00	13.3X
S.D. = 1.6 on 12 of 16 obs.					

• SEP 24, 1990 21h 39m 38.87± 0.55s
17.645 S ±14.8km 167.647 E ±11.9km
DEPTH = 10.0km (geophysicist)
4.7mb (2 obs.)
VANUATU ISLANDS (186)

PVC	0.64	99	iPd	39 51.20	-0.5
			iS	40 00.00	
DZM	4.55	194	iPc	40 48.70	-0.7
			iS	41 37.20	
RMO	19.58	240	eP	44 10.40	0.2
ASPA	32.09	253	eP	46 08.20	-0.3
	0.9s	9.00nm		4.7mb	
MAT	60.65	333	eP	49 50.00	-2.4
	0.9s	5.04nm		4.6mb	
GKN	92.18	299	P	53 00.00	9.4X
NB2	133.52	344	PKP	58 55.10	-1.7
	1.1s	2.40nm			
SOTA	144.71	332	iPKPd	59 15.30	-2.4X
	0.7s	8.60nm			
DOU	144.88	341	PKPc	59 15.80	-1.9
	0.7s	8.90nm			
CDF	145.39	337	ePKP	59 17.20	-1.6
	0.7s	19.85nm			
BSF	146.05	337	ePKP	59 18.90	-1.0
HAU	146.08	337	ePKP	59 19.00	-0.9
	0.6s	3.60nm			
FLN	147.49	345	ePKP	59 22.80	0.8
	0.7s	7.70nm			
LDF	147.56	345	iPKPc	59 23.10	0.9
LOR	147.58	339	iPKPc	59 23.50	1.2
	0.6s	4.50nm			
LBF	147.79	339	ePKP	59 24.20	1.5
	0.8s	9.40nm			
SSF	147.88	339	iPKPc	59 24.60	1.9
	0.7s	8.80nm			
GRR	147.93	346	ePKP	59 24.20	1.4
	0.7s	6.60nm			
LPL	147.98	334	iPKPc	59 25.40	2.1X
	0.7s	5.50nm			
LPG	147.98	334	iPKPc	59 25.50	2.1X
	0.7s	4.95nm			
SMF	148.13	339	iPKPc	59 24.90	1.7
	0.9s	8.20nm			
AVF	148.17	339	ePKP	59 24.60	1.4
	0.7s	4.40nm			
LPF	148.31	345	iPKPc	59 25.30	1.9X
	0.7s	12.15nm			
BGF	148.54	340	iPKPc	59 26.10	2.3X
	0.7s	8.25nm			
MAF	148.93	340	ePKP	59 27.10	2.6X
	0.8s	4.70nm			
TCF	148.99	340	ePKP	59 27.30	2.7X
	0.8s	4.05nm			
MFF	149.41	343	iPKPc	59 28.10	2.9X
	0.6s	7.20nm			
RJF	150.09	340	iPKPc	59 30.20	4.0X
	0.7s	5.50nm			
CAF	150.24	339	ePKP	59 30.60	4.1X
	0.7s	2.20nm			
LFF	150.66	341	ePKP	59 31.50	4.4X
	0.7s	8.80nm			
LPO	150.74	340	ePKP	59 31.60	4.4X
	0.7s	6.60nm			
EPF	152.49	340	iPKPc	59 36.00	6.1X
	0.8s	5.35nm			
S.D. = 1.5 on 18 of 32 obs.					

SEP 24, 1990 21h 45m 30.62± 0.39s
37.413 N ± 3.9km 30.600 E ± 4.1km
DEPTH = 38.1 ± 6.9 km
4.2mb (15 obs.) 4.0Msz (1 obs.)
TURKEY (366)
ML 4.3 (CSS). MD 4.3 (ATH). Felt in the Burdur-Isparta area.

CIN	2.01	276	ePn	46 02.00	-0.8
			iSg	46 27.00	
PPCY	2.89	150	eP	46 17.00	1.7
8BTK	2.96	34	ePn	46 17.00	0.6
			eSg	46 56.00	
SMG	3.00	277	ePn	46 16.60	-0.3
CSS	3.30	137	eP	46 20.50	-0.5
			eSn	47 02.00	
KAP	3.33	237	ePn	46 22.60	1.1
GBZT	3.49	345	eP	46 24.00	0.2
FAM	3.66	130	eP	46 28.50	2.3
PRK	3.86	300	ePn	46 29.20	0.1
ITU	3.89	342	ePn	46 29.00	-0.4
APE	4.06	267	ePn	46 32.00	0.0
NPS	4.56	243	ePn	46 38.20	-0.9
			eSn	47 31.00	
BHL	5.40	129	P	46 51.00	0.1
RDO	5.41	315	ePn	46 50.00	-1.0
ADI	5.75	137	eP	46 53.00	-2.7
KDZ	5.83	318	iPc	46 57.00	0.1
JMB	5.92	330	iP	46 58.00	-0.1
DIM	6.06	321	eP	46 59.00	-1.1
VLI	6.17	266	ePn	47 02.60	0.9
RZN	6.24	315	iP	47 03.00	0.2
SHMJ	6.31	136	P	47 04.50	0.9
PLG	6.31	300	ePn	47 04.50	0.7
ZNT	6.32	143	eP	47 01.00	-2.8
			eS	48 14.50	
PLD	6.52	318	eP	47 06.00	-0.6
PSN	6.53	344	iP	47 06.00	-0.6
BURJ	6.70	139	P	47 11.50	2.2X
MMB	6.75	310	ePd	47 11.00	1.1
ITM	6.92	271	ePn	47 12.70	0.5
PVL	7.05	327	iPd	47 13.00	-1.0
PGB	7.12	318	eP	47 14.00	-1.0
KKB	7.31	310	iP	47 19.00	1.4
KZN	7.47	295	ePn	47 20.00	0.0
HLW	7.56	175	eP	47 20.50	-0.7
			eS	48 43.00	
VTS	7.67	315	eP	47 26.00	3.1X
PRNI	7.94	151	eP	47 22.30	-4.2X
CFR	7.98	347	ePc	47 28.00	1.0
CSTJ	8.04	140	P	47 27.90	0.0
SHWJ	8.11	148	P	47 29.90	0.9
SKO	8.40	306	eP	47 29.00	-3.8X
OHR	8.45	299	eP	47 30.50	-3.1X
MLR	8.79	338	eP	47 40.00	1.7
CMP	8.89	334	ePc	48 25.00	45.4X
VRI	8.93	342	ePc	47 39.00	-1.1
BZS	10.60	323	eP	48 02.00	-1.0
SRO	13.76	323	eP	49 03.80	18.5X
ZST	14.61	322	eP	49 03.30	6.9X
KHC	17.01	319	eP	49 31.40	4.3X
LPG	19.56	302	eP	49 59.40	1.0
	0.8s	8.75nm		4.1mb	
LPL	19.58	302	eP	49 59.60	1.0
	0.8s	5.35nm		3.9mb	
CDF	20.23	310	eP	50 05.20	0.0
	0.6s	3.60nm		3.9mb	
BSF	20.30	308	eP	50 05.70	-0.2
	0.6s	5.40nm		4.1mb	
SMF	21.83	303	eP	50 21.20	-0.1
	0.9s	14.75nm		4.4mb	
L8F	21.83	304	eP	50 21.70	0.3
	1.0s	7.00nm		4.0mb	
LOR	21.99	305	eP	50 22.80	-0.1
	0.8s	5.35nm		4.0mb	
SSF	22.16	304	eP	50 25.10	0.5
	0.8s	7.40nm		4.2mb	
AVF	22.19	304	eP	50 24.70	-0.2
	0.9s	9.00nm		4.2mb	
NUR	23.42	353	eP	50 43.00	6.2X
MFF	24.49	302	eP	50 47.40	0.1
	1.0s	16.00nm		4.5mb	
HFS	25.17	340	ePKP	50 52.40	-1.3
	1.1s	13.00nm		4.4mb	
Z	18s	0.41um		4.0Msz	
		LR		44 02.00	
GRR	25.35	306	eP	50 54.40	-1.1
	0.8s	16.10nm		4.7mb	
LPF	25.38	305	eP	50 54.40	-1.4
	1.0s	8.00nm		4.3mb	
NB2	26.61	339	P	51 09.40	2.3
	0.9s	1.50nm		3.6mb	
HYB	46.44	102	ePc	53 56.00	0.3
GBA	47.86	107	Pc	54 06.80	0.0
	0.6s	5.30nm		4.7mb	
S.D. = 1.1 on 54 of 64 obs.					

% SEP 24, 1990 23h 50m 23.29± 1.18s
45.594 N ± 8.2km 2.803 E ±10.8km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.9 (LDG).

24d 23h

TCF	0.81	329	Pg	50	38.70	-0.3
			Sg	50	49.50	
CAF	0.85	218	Pg	50	39.70	0.0
			Sg	50	49.50	
BGF	0.96	2	Pg	50	42.00	0.4
			Sg	50	54.20	
LSF	1.10	307	Pg	50	44.10	0.1
			Sg	50	58.60	
SMF	1.28	34	Pg	50	46.80	-0.2
			Sg	51	03.50	

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

SEP 24, 1990 23h 55m 51.14± 1.35s
15.393 N ± 7.6km 119.605 E ± 8.6km
DEPTH = 47.9 ± 12.1 km
5.0mb (14 obs.) 3.9Msz (1 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BAG	1.38	43	iPd	56	14.30	-0.2
KMI	18.53	304	eP	00	08.50	2.1
CHG	20.04	283	eP	00	26.80	3.7X
BJI	24.74	354	eP	01	09.50	0.0
	1.1s		56.00nm			5.0mb
Z	18s		0.35um			3.9Msz
			eS	05	34.00	
GUN	33.61	297	P	02	29.10	-0.6
	0.7s		33.00nm			5.3mb
PKI	33.93	297	P	02	31.50	-1.0
	0.7s		12.00nm			4.9mb
KKN	34.10	297	P	02	32.80	-0.9
	0.8s		20.00nm			5.1mb
DMN	34.20	297	P	02	33.90	-0.8
GKN	34.70	297	P	02	37.50	-1.3
	0.8s		21.00nm			5.1mb
MBL	36.33	180	eP	02	52.70	0.4
WRA	37.99	157	eP	03	04.70	-1.7
GBA	40.82	273	P	03	31.00	1.0
ASPA	41.26	160	eP	03	33.20	-0.3
	0.8s		15.00nm			4.8mb
			iPcP	05	32.70	
			eS	09	17.00	
			iPcS	09	42.90	
WARB	41.89	171	eP	03	39.50	0.9
OUE	50.31	297	eP	04	45.80	0.3
SOD	77.07	337	iP	07	39.40	-1.2
SUF	78.03	332	iP	07	45.50	-0.5
	0.5s		5.00nm			4.8mb
NUR	79.16	330	eP	07	52.00	-0.2
VRI	81.09	315	ePd	08	03.50	0.7
KRA	84.42	320	eP	08	20.10	0.3
SLL	84.54	331	eP	08	19.20	-1.0
	0.5s		6.50nm			5.0mb
NB2	85.28	332	P	08	23.00	-1.0
	0.9s		7.50nm			4.9mb
KSP	86.38	322	iP	08	30.50	0.9
BRG	87.76	322	i(P)	08	37.20	1.0
WATA	90.56	320	eP	08	49.00	-0.7
	0.7s		6.20nm			5.1mb
SOTA	90.83	320	iPc	08	50.70	-0.2
	0.7s		10.30nm			5.3mb
CDF	92.72	322	eP	08	59.80	0.2
	0.8s		5.35nm			5.0mb
BSF	93.27	322	eP	09	02.20	0.0
LPG	94.36	319	eP	09	07.80	0.4
	0.7s		3.85nm			4.9mb
LPL	94.36	319	eP	09	07.80	0.4
	0.7s		5.50nm			5.1mb
PNT	97.10	35	eP	09	21.00	1.5
KIC	120.79	287	PKP	14	40.70	0.1
TIC	120.94	288	PKP	14	41.00	0.1
LIC	121.10	287	PKP	14	41.20	0.0
ZOBO	172.51	98	PKP	15	58.00	0.9

S.D. = 0.9 on 34 of 35 obs.

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* SEP 25, 1990 00h 32m 04.64± 0.86s
39.132 N ± 7.6km 20.659 E ± 9.2km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 3.0 (ATH).

KEK	0.88	311	ePb	32	21.00	-0.6
			eSb	32	33.00	
EVR	0.92	103	ePb	32	22.00	-0.3
VLS	0.95	183	ePg	32	23.10	0.3
			eSb	32	36.00	
KZN	1.45	36	ePb	32	30.60	-0.4
OHR	1.98	3	iPn	32	39.60	1.0
ITM	2.19	152	ePg	32	45.00	3.4X

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

? SEP 25, 1990 01h 07m 12.88± 2.94s
32.046 S ±49 8km 68.355 W ±22.7km
DEPTH = 100.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

RTCV	0.24	320	ePc	07	27.80	0.1
CFA	0.45	13	iPc	07	28.30	-0.3
			S	07	41.80	
ZON	0.57	331	iPc	07	30.10	0.6
			eS	07	43.10	
RTCB	0.67	326	iPc	07	30.10	-0.3
			eS	07	43.00	
RTLL	0.72	352	iPc	07	40.20	9.4X
RTBS	1.01	292	eP	07	33.50	-0.1

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

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* SEP 25, 1990 02h 36m 27.30± 1.75s
7.615 S ±11.4km 119.463 E ±16.7km
DEPTH = 284.0 ± 24.6 km
5.0mb (4 obs.)
FLORES SEA (279)

KNA	12.18	132	eP	39	12.20	-1.2
			eS	41	27.00	
MBL	13.47	179	eP	39	32.50	3.2X
			eS	42	02.00	
KKM	13.95	346	ePc	39	36.20	1.0
	0.8s		63.60nm			5.0mb
NANU	15.34	194	eP	39	51.60	-0.1
			eS	42	50.00	
WRA	18.93	132	iPc	40	28.60	-0.8
			eS	44	06.00	
WARB	19.69	161	iPd	40	37.90	0.9
			eS	44	31.00	
ASPA	21.13	141	iPd	40	52.40	1.3
	0.3s		26.00nm			5.1mb
			iS	44	28.70	
MRWA	21.74	188	eP	41	00.00	3.1X
			eS	45	16.00	
PSI	22.91	296	ePc	41	10.50	2.3X
OIS	23.35	126	eP	41	12.00	-0.4
			e	41	45.00	
FORR	24.49	162	eP	41	22.50	-0.2
STK	31.75	142	eP	42	28.10	0.9
	1.6s		66.00nm			4.9mb
			eS	43	35.50	
CHG	33.15	323	eP	42	39.80	0.3
PKI	48.05	318	Pc	44	39.10	-1.8
	0.5s		24.00nm			4.8mb

S.D. = 1.2 on 11 of 14 obs.

% SEP 25, 1990 04h 49m 13.49± 0.87s
40.792 N ±10.9km 15.238 E ±10.9km
DEPTH = 10.0km (geophysicist)
SOUTHERN ITALY (390)

BSS	0.33	270	P	49	20.20	-0.1
			eSg	49	25.00	
MGR	0.70	160	P	49	28.00	0.7
			eSg	49	38.80	
DUI	1.05	326	P	49	32.50	-0.8
			eSg	49	48.00	
ORI	1.18	128	P	49	35.00	-0.5
			eSg	49	53.00	
SDI	1.41	311	P	49	40.30	1.1
			eSg	49	56.30	
TDS	1.41	143	P	49	40.20	1.0
SOI	2.79	167	P	49	57.50	-1.5

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

? SEP 25, 1990 04h 51m 30.02± 1.92s
42.876 N ± 7.9km 13.048 E ±20.2km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ASS	0.34	305	P	51	37.00	-0.2
			eSg	51	41.00	
MNS	0.56	209	P	51	41.40	0.0
			eSg	51	50.10	
ARV	0.63	353	P	51	42.50	-0.2
			eSg	51	53.00	
SFI	1.36	321	P	51	55.30	0.3
			eSg	52	12.60	

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

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* SEP 25, 1990 05h 04m 42.85± 0.81s
0.460 N ±11.7km 100.653 E ±15.9km
DEPTH = 240.6 ± 11.0 km
NORTHERN SUMATERA (706)

PPI	0.95	196	eP	05	16.70	-0.1
			eS	05	39.80	
PSI	2.81	322	ePc	05	33.20	0.1
KGM	3.08	60	ePd	05	36.20	0.1
IPM	4.11	5	ePc	05	47.90	-0.1
	0.8s		72.90nm			
WRA	38.73	123	iPd	11	45.40	-0.3
FORR	40.61	142	iPd	12	01.20	0.3

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

SEP 25, 1990 05h 19m 01.75± 0.21s
46.162 N ± 2.0km 7.575 E ± 2.2km
DEPTH = 10.0km (geophysicist)
SWITZERLAND (544)
ML 3.3 (LDG), 3.0 (VIE).

DIX	0.14	234	iPc	19	05.40	0.1
MMK	0.29	112	iPd	19	06.80	-1.2
EMS	0.46	259	ePd	19	11.30	0.2
ORX	0.60	152	P	19	12.81	-1.2
			S	19	20.01	
LSD	0.76	203	P	19	15.91	-0.9
			S	19	26.11	
LPL	0.87	223	Pg	19	18.40	-0.3
LPG	0.88	221	Pg	19	18.40	-0.4
			Sg	19	30.00	
TMA	0.90	93	iPd	19	17.80	-1.4
RSP	1.03	193	P	19	20.65	-0.7
			S	19	33.46	
LLS	1.21	54	iPc	19	23.30	-1.1
LOMF	1.30	337	Pn	19	26.83	1.0
			Pg	19	27.84	
			Sg	19	45.08	
VDL	1.35	75	iPc	19	25.80	-1.0
RRL	1.36	204	P	19	26.89	-0.1
			S	19	44.25	
ZLA	1.43	23	iPc	19	28.40	0.6
SAX	1.63	48	iP	19	33.30	2.4
PZZ	1.69	192	P	19	30.77	-0.8
			S	19	50.82	
MOF	1.72	350	Pn	19	31.93	0.0
			Pg	19	34.51	
			Sg	19	56.98	
SLE	1.72	21	iPd	19	31.40	-0.6
BSF	1.75	343	Pn	19	31.94	-0.5
			Pg	19	35.01	
			Sg	19	57.82	
PCP	1.76	157	P	19	33.26	0.8
			S	19	55.04	
OSS	1.85	73	ePd	19	35.40	1.4
ROB	1.88	174	P	19	34.53	0.3
			S	19	57.08	
STV	1.93	185	P	19	33.91	-1.1
			S	19	55.98	
ENR	1.94	183	P	19	34.24	-0.9
			S	19	56.92	
FIN	2.00	167	P	19	36.59	0.6
			S	20	01.93	
HAU	2.03	336	Pn	19	36.30	0.0
			Pg	19	39.50	
			Sg	20	05.00	
ECH	2.07	352	Pn	19	36.56	-0.5
TOUF	2.16	186	Pn	19	37.62	-0.9
WLS	2.26	356	Pn	19	38.73	-1.0
CDF	2.26	355	Pn	19	39.08	-0.7
			Pg	19	44.19	
IMI	2.26	174	P	19	40.36	0.5
			S	20	07.71	
AURF	2.28	184	Pn	19	39.90	-0.2
MVIF	2.29	188	Pn	19	39.69	-0.6
			Sg	20	16.15	
SBF	2.30	183	Pn	19	40.50	0.1
			Sg	20	16.80	
REVF	2.43	184	Pn	19	44.21	2.1
CALN	2.46	192	Pn	19	44.23	1.6
OGA	2.49	72	ePn	19	48.70	5.6X
LBF	2.61	290	Pn	19	45.00	0.2
			Pg	19	52.10	
			Sn	20	14.00	
			Sg	20	24.40	
SMF	2.63	282	Pn	19	45.20	0.2

			Pg	19	52.80	
			Sn	20	15.00	
			Sg	20	24.40	
SQTA	2.72	66	iPnd	19	48.20	1.9
			iPg	19	54.90	
			iSg	20	29.70	
PLDF	2.76	267	Pn	19	46.97	0.1
LOR	2.79	295	Pn	19	47.70	0.5
			Sg	20	29.50	
CDR	2.80	208	ePn	19	49.20	1.8
			e	19	50.10	
			e	19	53.70	
			eSn	20	22.90	
LRG	2.84	198	Pn	19	48.80	0.8
LMR	2.93	195	Pn	19	51.00	1.8
SSF	2.95	289	Pn	19	49.80	0.4
AVF	2.98	284	Pn	19	50.40	0.4
			Sg	20	36.40	
WATA	2.99	65	e(Pn)	19	51.00	0.8
			i	19	52.20	
			iSg	20	34.50	
AGO	3.09	270	Pn	19	51.71	0.2
LBL	3.17	255	Pn	19	52.53	-0.1
PYM	3.21	264	Pn	19	52.91	-0.4
GRC	3.30	292	Pn	19	55.33	0.9
BGF	3.30	279	Pn	19	54.80	0.3
			Sn	20	32.00	
			Sg	20	47.00	
MAF	3.48	273	Pn	19	57.20	0.2
			Pg	20	09.00	
			Sn	20	36.40	
			Sg	20	51.60	
TCF	3.73	274	Pn	20	00.60	0.0
PGF	3.75	164	Pn	19	59.80	-1.3
			Sn	20	46.00	
CAF	4.06	254	Pn	20	05.40	0.1
LSF	4.20	273	Pn	20	07.20	0.0
GRF	4.30	33	ePn	20	15.40	6.7X
			ePg	20	22.90	
			eSg	21	16.00	
RJF	4.33	261	Pn	20	09.20	0.1
DOU	4.41	334	iPc	20	10.50	0.3
			iS	20	57.20	
MEM	4.57	347	P	20	12.40	-0.1
LPO	4.73	254	Pn	20	14.80	-0.1
LFF	4.95	258	Pn	20	18.00	0.1
KHC	5.03	52	ePg	21	09.50	50.5X
			eSg	21	40.20	
MFF	5.36	277	Pn	20	23.30	-0.4
LDF	5.77	298	Pn	20	28.50	-0.9
FLN	6.05	298	Pn	20	32.50	-0.9
GRR	6.16	294	Pn	20	33.60	-1.2
LPF	6.17	291	Pn	20	34.00	-1.1

S.D. = 0.9 on 67 of 70 obs.

SEP 25, 1990 05h 51m 10.34± 0.19s
27.593 S ± 4.8km 178.888 W ± 5.1km
DEPTH = 371.4km (4 depth phases)
4.9mb (26 obs.)
KERMADEC ISLANDS REGION (177)

RAO	1.86	153	P	52	04.50	1.5
VUN	9.85	345	ePc	53	23.00	-4.4X
HBZ	10.25	193	eP	53	29.60	-2.6X
SGE	10.38	343	ePc	53	30.50	-3.4X
PUZ	10.72	192	eP	53	33.50	-4.3X
			S	55	35.60	
MBU	10.80	348	eP	53	34.50	-4.3X
WLZ	11.22	203	P	53	45.60	1.8
			eS	55	58.10	
TAZ	11.29	199	eP	53	46.00	1.4
NOZ	11.29	192	eP	53	41.20	-3.4X
			S	55	44.10	
WHH	11.90	198	eP	53	50.20	-1.8
HITZ	11.95	201	P	53	53.50	1.0
MOH	11.97	195	eP	53	53.10	0.4
RATZ	12.10	200	eP	53	53.20	-1.0
NGZ	12.43	200	eP	53	55.90	-2.4X
CNZ	12.47	200	eP	53	58.00	-0.7
PGZ	13.59	196	eP	54	07.10	-4.0X
MNG	13.80	198	eP	54	08.30	-5.1X
			eS	56	37.40	
KIW	14.19	200	eP	54	14.70	-2.9X
MTW	14.30	197	eP	54	14.40	-4.4X
CAW	14.37	199	eP	54	16.60	-2.9X
DZM	14.40	289	iPc	54	19.50	-0.6
			iS	56	59.90	

BLW	14.50	197	P	54	19.70	-1.2
WDW	14.54	199	eP	54	19.60	-1.7
MRW	14.59	200	eP	54	16.50	-5.3X
MOW	14.61	198	P	54	20.10	-2.0
WEL	14.62	199	P	54	21.80	-0.4
			S	56	56.00	
TCW	14.70	201	P	54	20.50	-2.6
THZ	15.65	203	eP	54	31.50	-1.7
KHZ	16.03	201	eP	54	34.80	-2.2
LTZ	16.77	203	eP	54	43.80	-1.0
MQZ	17.47	201	eP	54	54.30	2.5X
			eS	57	52.60	
BRS	25.12	264	iPc	56	05.50	0.7
			e	57	11.00	
COO	25.68	256	eP	56	12.00	2.1
			i	57	24.00	
CAN	28.37	246	eP	56	36.50	2.8X
PAE	28.74	76	eP	56	34.00	-3.0X
	0.9s	50.00nm			4.8mb	
BWA	28.75	248	eP	56	36.90	-0.2
			i	57	14.80	185kmX
RMO	28.80	265	iP	56	37.30	-0.3
			i	57	46.20	375km
			i	57	51.90	
TVO	28.97	77	eP	56	38.00	-1.2
	0.9s	55.00nm			4.9mb	
CMS	30.86	254	eP	56	56.00	0.5
			i	58	08.00	387kmX
PMO	31.38	73	iP	56	58.20	-1.8
	0.9s	35.00nm			4.7mb	
TOO	31.46	242	eP	57	02.00	1.4
VAH	31.49	73	iP	56	59.20	-1.8
	0.9s	45.00nm			4.8mb	
TPT	31.62	73	iP	57	00.40	-1.7
	0.9s	35.00nm			4.7mb	
RUV	31.73	74	iP	57	01.30	-1.7
	0.9s	35.00nm			4.7mb	
CTA	32.67	276	iPd	57	10.70	-0.4
	0.7s	79.45nm			5.2mb	
			i	58	25.30	399kmX
			iS	01	59.00	
STK	34.45	253	eP	57	27.30	1.3
	0.9s	6.00nm			3.9mb	
			e	58	37.40	365km
OIS	38.40	271	iPd	57	58.40	-0.6
			e	59	15.00	398kmX
			e	03	19.00	
ASPA	42.55	264	iPd	58	32.10	-0.7
	0.4s	55.00nm			5.2mb	
Z	23s	0.22um			4.0MszX	
			iPcP	59	45.90	
			iScP	03	34.80	
			iS	04	24.00	
			iScS	07	51.60	
			LR	09	49.30	
WRA	43.27	270	iPd	58	29.60	-8.9X
			e	58	37.80	27kmX
			i	59	56.10	
			e	03	38.60	
			eS	04	36.50	
FORR	46.03	253	iPc	58	59.40	-0.6
WARB	48.27	258	eP	59	16.10	-1.2
	0.4s	10.00nm			4.5mb	
SBA	50.77	184	iPc	59	39.70	4.3X
GUA	53.89	315	eP	59	56.00	-2.9X
	0.8s	286.57nm			5.7mb	
GUMO	53.95	315	eP	59	55.50	-3.9X
	0.7s	175.35nm			5.5mb	
PJG	53.95	315	eP	59	55.20	-4.2X
MBL	55.71	262	iPd	00	10.10	-1.8
	0.5s	24.00nm			4.8mb	
SPA	62.57	180	iPc	01	00.30	2.4
	0.9s	69.09nm			5.2mb	
			e	02	19.80	365km
MAW	74.65	200	iP	02	13.00	2.0
AIA	74.80	157	eP	02	13.90	2.1
MAT	75.50	326	iPd	02	14.40	-1.7
	1.0s	50.00nm			5.2mb	
KGM	80.13	277	ePc	02	42.70	1.1
PPI	81.56	274	eP	02	48.30	-0.7
SSE	81.68	311	P	02	48.50	-0.7
	1.0s	19.00nm			4.8mb	
BLP	82.95	45	P	02	55.40	-0.2
PRS	83.51	43	iPc	02	58.90	0.5
BCH	83.55	45	P	02	58.90	0.1
GCC	83.59	42	iPc	02	59.00	0.3
PCC	83.67	42	iPc	02	59.30	0.2

PRI	83.81	44	iPc	03	00.60	0.5
ABL	83.88	46	P	03	00.30	-0.3
MHC	84.01	42	iPc	03	01.50	0.5
BKS	84.01	42	iPd	03	01.70	0.8
	0.8s	63.00nm			5.5mb	
NWRM	84.01	41	P	03	00.90	0.1
ARN	84.08	42	P	03	01.40	0.1
MWC	84.23	47	eP	03	02.00	-0.3
PSI	84.32	276	ePc	03	02.90	0.0
PLM	84.47	48	eP	03	04.00	0.5
RVR	84.53	47	eP	03	03.00	-0.6
PEC	84.61	47	P	03	03.70	-0.3
	0.9s	9.92nm			4.6mb	
SBB	84.67	46	eP	03	04.00	-0.3
ISA	84.87	45	eP	03	05.00	-0.3
FRI	84.95	44	iPc	03	05.60	0.1
CMB	85.21	43	iPc	03	06.90	0.0
TPC	85.47	48	eP	03	09.00	0.8
CLC	85.52	46	eP	03	08.00	-0.5
ORV	85.55	41	iPc	03	08.30	-0.1
WDC	85.64	39	iPc	03	09.10	0.3
GLA	85.64	49	eP	03	10.00	0.9
GSC	85.71	46	eP	03	10.00	0.6
MIN	86.01	40	ePc	03	10.40	-0.5
LBFM	86.52	39	P	03	13.30	0.0
TNP	87.17	44	P	03	16.00	-0.5
	0.8s	21.57nm			5.1mb	
LNV	88.02	128	ePd	03	22.40	1.9
TACH	88.51	127	eP	03	25.00	2.1
CHCH	88.56	128	eP	03	24.60	1.4
PCH	88.83	128	ePd	03	26.50	2.0
LOE	88.90	290	eP	03	27.50	2.7
PEL	88.96	127	iPc	03	26.60	1.5
FCH	89.14	127	iPd	03	28.80	2.5X
BMW	89.25	35	P	03	26.30	0.4
LON	90.16	35	P	03	29.90	-0.2
GMW	90.20	34	P	03	30.20	0.0
BJI	90.38	316	eP	03	31.50	0.4
	0.8s	20.00nm			5.1mb	
MSU	90.60	46	P	03	33.20	0.7
DUG	91.17	44	P	03	34.40	-0.6
CHG	91.90	290	iPd	03	40.00	1.4
	0.9s	12.18nm			4.9mb	
DAU	92.27	45	P	03	40.50	0.2
ALO	92.44	52	ePc	03	40.90	-0.1
	1.0s	10.00nm			4.8mb	
			e	05	10.00	381km
ANMO	92.44	52	P	03	40.80	-0.2
	0.9s	7.88nm			4.7mb	
PNT	92.96	34	eP	03	42.00	-0.8
	0.6s	4.00nm			4.6mb	
PTI	93.00	42	P	03	43.30	-0.1
IMW	94.44	42	P	03	49.80	-0.4
BW06	94.65	44	P	03	49.80	-1.3
	0.9s	7.20nm			4.8mb	
GOL	95.67	48	P	03	54.90	-0.9
	0.8s	4.09nm			4.6mb	
RSSD	98.78	45	P	04	09.20	-0.5
ZOBO	100.02	114	Pdiff	04	18.00	1.6
CCH	101.00	116	Pdiff	04	23.00	2.6X
SOB1	125.30	126	ePKP	09	29.50	-0.1
SUF	141.21	342	ePKP	09	52.00	-6.0X
NUR	143.42	341	ePKP	09	59.00	-2.8X
	0.7s	13.30nm				
			i	10	07.80	
NB2	145.87	351	PKP	10	05.60	-0.5
	0.8s	9.60nm				
HFS	146.35	349	ePKP	10	06.10	-0.7
	0.6s	19.20nm				
MKT	150.18	285	ePKP	10	17.00	3.2X
PRNI	150.29	283	ePKP	10	17.00	3.1X
BCAO	151.60	219	iPKPc	10	23.30	7.0X
	0.5s	17.00nm				
			ic	10	34.20	
KSP	154.07	338	ePKP	10	29.50	10.9X
	0.8s	25.00nm				
			ic	10	42.40	
			e	11	58.00	
LIC	157.96	164	PKPc	10	25.44	0.7
	0.8s	7.00nm				
KIC	158.16	164	PKPd	10	25.80	0.9
	0.7s	4.50nm				
TIC	158.37	163	PKP	10	26.22	1.0

S.D. = 1.1 on 100 of 129 obs.

& SEP 25, 1990 06h 41m 41.73s
62.317 N 150.710 W

25d 06h

DEPTH = 65.3km
CENTRAL ALASKA (1)
<AGS-P>.

CUT	0.22	67	iP	41 51.57	-0.5
SKT	0.51	229	iP	41 53.88	-0.6
PWA	0.78	149	eP	41 56.74	-0.6
			eS	42 08.31	
HUR	0.83	36	eP	41 57.19	-0.9
			eS	42 09.13	
SUA	0.86	181	iP	41 58.08	-0.5
			eS	42 11.21	
GHO	1.00	122	iP	41 59.58	-0.8
			eS	42 14.59	
PLRM	1.04	134	iP	41 59.97	-0.8
PMR	1.04	134	iPc	42 00.00	-0.8
NCG	1.14	217	eP	42 01.73	-0.5
CGLM	1.19	212	eP	42 02.64	-0.2
PMS	1.21	153	eP	42 02.41	-0.6
			eS	42 18.51	
SML	1.23	113	eP	42 02.61	-0.7
CRP	1.26	214	eP	42 03.01	-0.8
			eS	42 19.56	
SPU	1.31	210	eP	42 04.27	-0.1
BGL	1.32	218	eP	42 04.76	0.1
CKL	1.37	215	eP	42 04.98	-0.3
NKA	1.60	189	eP	42 08.43	0.1
SCM	1.66	105	eP	42 08.18	-1.1
SLKM	1.83	172	eP	42 11.58	0.0
RDT	1.93	206	eP	42 13.16	0.2
TOA	2.14	94	eP	42 15.20	-0.6
SEW	2.30	164	eP	42 18.74	0.7
VZW	2.35	121	eP	42 16.76	-2.0
VLZ	2.40	118	eP	42 16.98	-2.4
KLU	2.41	108	eP	42 17.55	-2.2
WRH	2.46	27	eP	42 18.56	-1.8
TTA	2.53	286	eP	42 19.90	-1.4
SVW	2.63	245	eP	42 21.30	-1.5
CNPM	2.81	185	eP	42 25.65	0.4
FBA	2.90	25	ePc	42 24.70	-1.8
GLB	3.38	102	eP	42 30.85	-2.5
IMA	3.98	342	eP	42 40.90	-0.9

32 obs. ossocioted

? SEP 25, 1990 07h 17m 26.30±12.08s
7.779 S ±102.km 128.962 E ±18.4km
DEPTH = 140.3 ± 53.5 km
4.3mb (1 obs.)
BANDA SEA (280)

MTN	5.47	157	eP	18 47.00	0.2
			eS	19 48.00	
KNA	7.92	181	eP	19 19.70	-0.3
			eS	20 44.00	
WRA	13.17	157	eP	20 26.20	-2.9X
			eS	22 48.00	
MBL	15.96	213	eP	21 04.40	0.1
			eS	23 52.00	
OIS	16.35	142	eP	21 09.00	-0.2
			eS	24 00.00	
ASPA	16.49	164	eP	21 11.20	0.2
	0.4s		7.00nm		4.3mb
			eS	24 06.40	
WARB	18.44	187	eP	21 41.00	7.2X
			eS	24 57.00	

S.D. = 0.5 on 5 of 7 obs.

SEP 25, 1990 07h 24m 35.29± 1.18s
33.298 N ±10.5km 138.539 E ± 7.2km
DEPTH = 6.7 ± 5.0 km
4.5mb (6 obs.)
SOUTH OF HONSHU, JAPAN (211)

IIDJ	2.24	347	P	25 12.80	-0.6
			eS	25 40.60	
WKYJ	2.62	291	eP	25 18.20	-0.6
			S	25 49.50	
TSRJ	3.07	317	P	25 24.60	-0.6
			S	26 02.30	
KAKJ	3.20	24	P	25 25.50	-1.4
MAT	3.25	355	iPd	25 27.90	0.2
			eS	26 12.00	
MTMJ	3.33	350	P	25 29.40	0.4
NIIJ	3.95	5	P	25 38.00	0.3
YAMJ	5.01	14	eP	25 54.80	2.0
SHNJ	6.25	280	P	26 09.30	-0.8
OFUJ	6.30	23	eP	26 10.30	-0.6
KUMJ	6.53	265	P	26 14.60	0.4
KAGJ	6.81	254	P	26 19.30	1.1
BJI	19.13	297	eP	29 03.50	2.0
	1.0s		12.00nm		4.1mb
	Z 14s		0.59um		4.6MszX
	N 12s		0.38um		
			eS	32 36.00	
LZH	28.57	285	eP	30 39.50	5.3X
CHG	38.14	258	eP	31 56.00	-1.1
KKN	45.79	278	P	33 00.00	0.2
FBA	53.51	31	eP	33 58.00	-0.3
	0.8s		3.79nm		4.4mb
INK	58.77	26	eP	34 33.00	-3.0X
KEV	66.09	339	eP	35 15.00	-9.8X
SUF	70.25	333	iP	35 49.20	-1.5
	0.5s		4.30nm		4.8mb
PNT	72.50	42	eP	36 06.00	1.4
NB2	76.69	337	P	36 27.00	-1.5
	0.9s		5.60nm		4.7mb
FFC	78.11	31	eP	36 37.00	0.6
	0.7s		5.00nm		4.7mb
LRM	78.47	42	eP	36 37.90	-1.0
TNP	80.04	51	eP	36 47.00	-0.4
	1.0s		2.25nm		4.1mb
KHC	84.45	327	P	37 09.50	-0.4
ZOBO	150.57	61	PKP	44 30.00	4.9X
LPB	150.76	62	ePKP	44 29.00	3.8X
CNCB	151.02	62	PKP	44 27.00	1.2

S.D. = 1.1 on 24 of 29 obs.

% SEP 25, 1990 07h 44m 59.10± 2.43s
61.407 N ±10.5km 4.488 E ±21.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.2 (BER).

SUE	0.38	159	eP	45 07.68	0.9
			eS	45 12.74	
HYA	0.86	106	iPd	45 15.99	0.4
			iS	45 27.60	
ASK	0.99	159	eP	45 18.35	0.5
			iS	45 31.54	
BER	1.11	158	eP	45 20.10	0.2
			iS	45 33.88	
ODD1	1.83	144	eP	45 31.07	0.2
			eS	45 52.72	
MOL	1.86	50	eP	45 32.13	0.9
			eS	45 56.16	
BLS3	2.23	152	eP	45 36.29	-0.4
			iS	46 01.64	
KMY	2.23	170	eP	45 35.66	-1.0
NRA0	3.49	98	Pn	45 52.80	-1.7
			Sg	46 49.00	

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

? SEP 25, 1990 07h 49m 10.07± 5.96s
62.656 N ±54.4km 7.510 E ±13.2km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.0 (BER).

MOL	0.09	168	ePg	49 12.23	-0.4
			eSg	49 19.01	
HYA	1.62	203	eP	49 39.10	0.4
			eSg	50 07.00	
SUE	2.07	220	eP	49 44.90	-0.3
			eSg	50 19.20	
NRA0	2.72	133	Pg	49 54.90	0.3
			Lg	50 33.50	

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

? SEP 25, 1990 08h 39m 15.49± 6.34s
62.707 N ±58.4km 7.599 E ±14.4km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.0 (BER).

MOL	0.14	190	ePg	39 18.68	-0.1
			eSg	39 21.25	
HYA	1.68	204	eP	39 45.20	0.1
			eS	40 07.40	
SUE	2.13	220	eP	39 51.50	-0.1
NRA0	2.73	135	Pn	40 00.10	0.0
			Lg	40 43.80	

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

? SEP 25, 1990 08h 42m 24.55± 6.14s
62.704 N ±56.3km 7.585 E ±14.2km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.9 (BER).

MOL	0.14	187	ePg	42 27.73	0.0
			eSg	42 30.91	
HYA	1.68	204	eP	42 54.10	0.0
			eSg	43 16.00	
SUE	2.13	220	eP	43 00.50	0.0
NRA0	2.73	135	Pn	43 09.20	0.0
			Pg	43 13.70	
			Sg	43 44.70	
			Lg	43 52.10	

S.D. = 0.1 on 4 of 4 obs.

• SEP 25, 1990 09h 17m 19.93± 2.12s
37.760 N ±13.8km 20.518 E ±21.7km
DEPTH = 10.0km (geophysicist)
IONIAN SEA (399)
ML 3.8 (ATH).

ITM	1.26	117	ePb	17 41.50	-1.9
EVR	1.54	41	ePg	17 55.40	7.9X
KEK	2.03	344	ePn	17 54.50	0.0
VLI	2.19	118	ePb	18 00.00	3.1X
ATH	2.54	84	ePn	18 03.10	1.3
KZN	2.72	21	ePn	18 03.00	-1.6
OHR	3.35	4	ePn	18 09.50	-4.0X
PLG	3.46	40	ePn	18 15.50	0.5
VAM	3.78	127	ePn	18 20.60	1.1
SKO	4.27	9	ePn	18 27.00	0.6
NPS	4.80	120	ePn	18 34.00	0.0

S.D. = 1.4 on 8 of 11 obs.

• SEP 25, 1990 09h 54m 51.55± 0.98s
23.155 S ±11.4km 67.006 W ±15.3km
DEPTH = 260.3 ± 23.8 km
CHILE-ARGENTINA BORDER REGION (127)

ANT	3.18	259	iPc	55 47.00	0.0
			iS	56 27.50	
CCH	5.80	8	P	56 17.70	-0.7
			eS	57 06.00	
CNCB	6.38	352	Pd	56 26.90	1.1
			S	57 38.00	
LPB	6.67	351	Pc	56 29.00	-0.3
	0.9s		50.42nm		4.5mb X
			S	57 42.00	
ZOBO	6.93	351	P	56 32.90	0.2
			S	57 49.00	
ARE	7.88	327	eP	56 44.00	-0.4
			iS	58 11.00	
SIV	9.06	39	P	57 54.60	55.5X
PPD	14.54	89	eP	58 07.20	0.0
			e	58 10.20	
SOB1	28.58	65	(P)	00 26.00	0.0
ALQ	68.84	326	eP	05 35.00	4.9X

S.D. = 0.7 on 8 of 10 obs.

• SEP 25, 1990 09h 57m 17.28± 0.72s
0.527 S ±12.8km 125.640 E ±20.9km
DEPTH = 33.0km (normal)
4.8mb (5 obs.)
MOLUCCA SEA (269)

WRA	21.09	157	eP	01 59.30	-2.2
			eS	05 52.90	
MBL	21.28	195	iPc	02 03.90	0.6
	0.6s		30.00nm		4.9mb
ASPA	24.36	161	iPd	02 34.40	0.8
	0.8s		29.00nm		4.9mb
			eS	06 50.50	
WARB	25.53	178	iPc	02 45.80	1.1
CHG	32.51	308	ePc	03 47.90	0.4
	1.0s		13.50nm		4.8mb
STK	34.64	156	iPc	04 05.50	-0.2
	1.4s		11.00nm		4.6mb
BWA	39.89	150	eP	04 59.20	9.3X
CAN	40.89	150	eP	05 07.90	9.8X
BJI	41.29	349	eP	05 01.00	-0.2
GUN	47.47	310	P	05 52.60	1.0
PKI	47.66	309	P	05 53.00	-0.1
KKN	47.87	309	P	05 54.30	-0.3
DMN	47.92	309	P	05 55.80	0.8
GKN	48.47	309	P	05 59.00	-0.2
GBA	49.77	288	Pc	06 06.80	-2.3

```
        0.7s      2.00nm            4.3mb
ALQ   120.66  49 ePKP   16 09.00    0.8
CNCB  158.16 143 ePKP   17 19.00    5.3X
LPB   158.30 142 (PKP)  17 20.00    6.3X
ZOBO  158.48 141 ePKP   17 26.00   11.9X
     S.D. = 1.2  on  14 of  19 obs.
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%  SEP  25, 1990  10h 51m 07.99± 2.10s
   35.854 N ±16.3km   21.940 E ±15.2km
   DEPTH =  10.0km  (geophysicist)
 MEDITERRANEAN SEA                (400)

VLI     1.18  43 eP     51 30.00    0.0
ITM     1.32 360 eP     51 32.00   -0.4
VAM     1.89 103 eP     51 40.60   -0.1
VLS     2.56 335 eP     51 50.00   -0.2
EVR     3.06 358 eP     51 58.00    0.7
     S.D. = 0.6  on   5 of   5 obs.
-------------------------------------
   SEP  25, 1990  11h 54m 42.71± 0.94s
   51.679 N ± 7.4km   16.049 E ± 5.9km
   DEPTH =   6.1 ±  4.2 km
 POLAND                           (548)
      ML 4.3 (GRF), 4.0 (VKA).

KSP     0.85 170 iPd    54 58.00   -1.5
       0.6s   155.00nm
              iS       55 06.00
BRG     1.55 239 iPn    55 10.80    0.0
              iPg       55 12.10
              iSg       55 31.60
CLL     1.94 260 iPn    55 17.00    0.5
              iPg       55 20.50
              iSg       55 46.80
KRA     2.95 122 ePn    55 30.50   -0.5
              i         55 39.50
              iS        56 17.00
HOF     2.97 244 iPnc   55 31.50    0.3
MOX     2.98 251 ePn    55 31.50    0.2
              iPg       55 40.00
              iSg       56 19.00
KHC     3.00 213 Pn     55 31.50   -0.2
              Pg        55 37.70
              Sn        56 07.40
              Sg        56 17.70
WET     3.25 220 iPnc   55 35.30    0.1
VKA     3.42 177 iPgd   55 45.70    8.0X
              iSg       56 29.30
ZST     3.55 169 e(Pn)  55 39.00   -0.5
              e         55 46.20
              i(Sn)     56 24.50
              i         56 34.20
GRF     3.66 239 iPnc   55 41.40    0.4
              ePg       55 53.40
              eSg       56 39.50
SPC     3.66 131 eP     55 43.50    2.3
              e         55 50.80
              i         55 55.40
              i(Sn)     56 42.30
              e         03 44.30
KMR     3.83 200 iPg+   55 43.40   -0.1
              i(Sg)     56 35.90
SOP     4.01 175 eP     55 46.10    0.1
BHG     4.46 209 iPnc   55 54.30    1.9
BUD     4.62 154 e(P)   56 25.00   30.3X
TNS     5.02 256 ePnc   55 59.90   -0.5
              eSb       57 23.00
WATA    5.23 216 iPnc   56 02.90   -0.6
       0.7s    37.10nm          5.1mb X
              i         57 22.70
              iSn       57 30.60
              i         57 35.00
SOTA    5.47 217 e(Pn)  56 04.40   -2.3
       0.5s    20.80nm          5.1mb X
              i         56 06.70
              iSn       57 30.70
              i         57 39.50
OGA     5.83 216 iPc    56 11.60   -0.3
MEM     6.41 264 P      56 20.20    0.3
DOU     7.42 262 P      56 35.00    1.0
       0.3s     7.50nm          5.4mb X
HFS     8.58 352 eP     56 58.00    7.8X
       0.6s     3.80nm          4.9mb X
NRA0    9.42 346 Pn     57 00.70   -1.1
              Sn        58 47.10
              Lg        59 49.50
     S.D. = 1.1  on  21 of  24 obs.

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   SEP  25, 1990  12h 12m 15.30± 0.50s
   36.790 N ± 7.9km   49.855 E ± 6.5km
   DEPTH =  10.0km  (geophysicist)
   4.8mb ( 34 obs.)  4.0Msz (  3 obs.)
 WESTERN IRAN                     (347)
      Felt at Rudbar.

TEH     1.62 130 iPc    12 44.50    0.3
TAB     3.08 295 eP     13 08.00    2.9
KER     3.31 223 eP     13 09.00    0.7
BHL    11.95 260 P      15 10.00    1.3
              S         18 54.00
RYD    12.35 194 eP     15 07.40   -6.7X
BBTK   13.77 288 eP     15 35.00    2.1
AFIF   13.89 206 eP     15 32.50   -2.1
PRNI   13.95 247 eP     15 32.00   -3.3X
MBH    14.34 245 eP     15 33.00   -7.3X
QUE    15.70 110 eP     16 03.70    5.4X
              eS        19 15.00
              e         20 46.50
HLW    16.93 251 eP     16 16.00    2.2
PRK    18.73 285 eP     16 37.20    1.1
CLI    19.42 307 eP     16 46.50    2.0
DIM    19.48 293 iP     16 47.00    1.8
KDZ    19.52 292 eP     16 48.00    2.3
VRI    19.54 305 ePd    16 46.00    0.1
NPS    19.66 273 eP     16 47.00   -0.3
PVL    19.81 296 eP     16 52.00    3.2X
MLR    19.94 303 iPd    16 52.50    2.2
RZN    20.05 292 iPd    16 54.00    2.5
PLD    20.10 293 eP     16 53.00    1.1
PGB    20.56 294 eP     16 58.00    1.4
VAM    20.76 274 eP     16 59.00    0.2
MMB    20.78 291 ePd    17 01.00    2.1
TNR    21.11 303 ePc    17 00.00   -2.3
VTS    21.26 294 eP     17 07.00    3.0X
KKB    21.28 292 eP     17 05.00    1.0
VLI    21.55 278 eP     17 07.00    0.2
KZN    22.20 288 eP     17 15.00    1.6
ITM    22.29 279 eP     17 19.00    4.8X
SKO    22.51 292 eP     17 17.50    1.2
BZS    22.91 301 eP     17 20.00   -0.2
OHR    22.95 290 eP     17 22.50    1.7
       1.3s    75.00nm          5.1mb
VLS    23.23 282 eP     17 24.00    0.6
KEK    23.73 286 eP     17 32.00    3.7X
NDI    24.34 101 eP     17 36.00    1.8
PSZ    24.62 306 eP     17 39.20    2.3
BUD    25.08 305 e(P)   17 41.00   -0.2
KRA    25.26 311 ePc    17 43.50    0.6
              i         17 46.10
              i         17 49.10
KSP    27.72 311 eP     18 05.50   -0.1
NUR    28.65 334 eP     18 12.00   -1.8
KHC    28.99 307 Pd     18 17.30    0.2
BRG    29.16 310 e(P)   18 37.50   19.0X
SUF    29.78 338 iP     18 24.20    0.2
       0.6s     7.20nm          4.7mb
CLL    29.84 311 iPc    18 24.80    0.1
       1.2s    25.00nm          4.9mb
              i         18 38.30
WATA   30.03 303 iPc    18 25.30   -1.3
       0.7s    11.30nm          4.8mb
SOTA   30.27 302 iPc    18 27.60   -1.0
       0.7s    33.50nm          5.3mb
PGF    31.74 293 eP     18 40.30   -1.3
       1.2s    68.45nm          5.4mb
HFS    32.79 327 eP     18 49.80   -0.7
       0.7s    21.70nm          5.2mb
     Z  17s     0.18um          3.8MszX
              LR        31 54.00
SBF    32.82 296 eP     18 50.50   -0.4
       0.8s    37.60nm          5.4mb
CDF    33.02 304 eP     18 51.50   -1.2
       0.9s     6.55nm          4.6mb
LPG    33.27 299 eP     18 54.10   -1.0
       0.7s    12.15nm          4.9mb
LPL    33.28 299 eP     18 54.20   -1.0
       0.7s    11.00nm          4.9mb
BSF    33.30 303 eP     18 54.10   -1.1
       0.8s     6.70nm          4.6mb
SOD    33.35 344 iP     18 55.50    0.3
FRF    33.40 295 eP     18 54.90   -1.1
       1.2s    41.65nm          5.2mb
LMR    33.52 295 eP     18 55.80   -1.1
HAU    33.61 303 eP     18 56.20   -1.5

        0.7s     6.60nm          4.7mb
     Z  21s     0.25um          3.9Msz
LRG    33.62 295 eP     18 56.90   -0.9
GBA    33.78 126 P      19 04.00    4.6X
NB2    34.30 327 P      19 03.00   -0.6
       0.9s    10.30nm          4.7mb
LBF    35.19 301 eP     19 09.70   -1.7
       0.9s     8.20nm          4.6mb
KEV    35.26 346 eP     19 08.00   -3.7X
LOR    35.27 302 eP     19 10.40   -1.6
       0.9s     9.00nm          4.6mb
     Z  19s     0.25um          4.0Msz
SMF    35.28 301 eP     19 10.90   -1.3
       1.1s    17.10nm          4.8mb
SSF    35.51 302 eP     19 13.00   -1.1
       1.1s    15.85nm          4.8mb
AVF    35.62 301 eP     19 13.70   -1.3
       0.9s    18.00nm          4.9mb
MAF    36.18 300 eP     19 19.20   -0.5
       0.9s    18.00nm          4.9mb
TCF    36.42 300 eP     19 21.10   -0.7
       0.8s     8.05nm          4.6mb
CAF    36.60 298 eP     19 22.70   -0.6
       1.4s    39.20nm          5.0mb
LSF    36.89 300 eP     19 24.70   -1.0
RJF    36.96 299 eP     19 26.10   -0.2
       1.0s    16.00nm          4.7mb
     Z  21s     0.40um          4.2Msz
LFF    37.54 298 eP     19 30.60   -0.5
       1.1s    36.65nm          5.1mb
LDF    37.94 304 eP     19 33.20   -1.3
       0.6s    10.80nm          4.8mb
MFF    38.03 301 eP     19 34.20   -1.1
       1.0s    22.00nm          4.9mb
FLN    38.18 304 eP     19 35.40   -1.0
       0.9s    13.10nm          4.7mb
GRR    38.43 304 eP     19 37.90   -0.7
       0.9s    32.75nm          5.1mb
LPF    38.57 303 eP     19 38.60   -1.1
       0.8s    13.45nm          4.7mb
EKA    40.06 315 P      19 56.00    3.9X
       0.7s     5.60nm          4.3mb
ASMO   42.28 288 eP     20 09.50   -1.1
APHE   42.35 287 eP     20 10.70   -0.6
ATEJ   42.61 287 eP     20 12.50   -0.9
ALOJ   42.62 287 eP     20 16.00    2.5X
LZH    42.95  74 eP     20 17.80    1.6
       1.5s    28.00nm          4.8mb
CHG    46.44  99 eP     20 46.60    2.4
DAG    49.64 344 iPc    21 09.30    0.9
       1.0s    13.00nm          4.9mb
KIC    58.14 253 P      22 09.40   -2.3
LIC    58.44 253 P      22 11.30   -2.5
INK    75.19   1 eP     24 00.50    1.4
FFC    85.69 344 iPc    24 55.10   -0.2
       0.8s     9.00nm          5.0mb
     S.D. = 1.4  on  77 of  90 obs.
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   SEP  25, 1990  12h 16m 26.28± 1.11s
   17.963 S ± 7.7km  167.747 E ± 6.5km
   DEPTH =  26.4 ±  8.1 km
   4.9mb (  5 obs.)  4.4Msz (  1 obs.)
 VANUATU ISLANDS                  (186)

PVC     0.58  68 iPd    16 38.00    0.2
              iS        16 48.50
DZM     4.27 196 iPc    17 30.00   -1.2
              iS        18 15.50
HNR    11.37 317 eP     19 10.00   -0.1
COO    19.12 226 eP     20 50.00   -0.1
RMQ    19.50 241 eP     20 54.30   -0.3
CTA    20.43 261 iPc    21 04.00   -0.4
       1.2s    92.19nm          5.0mb
CNB    23.78 220 e(P)   21 41.00    3.3X
              e         22 19.00
BWA    23.80 223 eP     21 38.80    0.9
CMS    23.97 232 eP     21 41.00    1.4
              e         21 51.00
CAN    24.00 220 eP     21 43.10    3.2X
STK    27.38 235 iPc    22 12.30    0.8
       1.1s     8.00nm          4.3mb
              e         25 09.90
WRA    31.63 261 eP     22 50.90    1.3
ASPA   32.09 254 eP     22 52.40   -1.2
       0.7s     8.00nm          4.8mb
     Z  20s     0.90um          4.4Msz
              LR        34 57.50
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25d 12h

MAT	60.97	333	eP	26 39.00	-0.6
	1.3s	23.08nm		5.1mb	
SPA	72.15	180	iPc	27 51.10	0.6
	1.1s	17.26nm		5.0mb	
BJI	75.66	322	eP	28 11.00	3.5X
CHG	76.84	295	eP	28 22.90	4.9X
LZH	80.83	313	P	28 46.00	6.4X
PRS	85.93	50	eP	29 05.80	0.3
MHC	86.17	49	eP	29 07.00	0.2
WDC	86.98	46	ePc	29 10.60	0.1
ORV	87.24	47	eP	29 11.60	-0.2
CMB	87.37	49	ePc	29 12.60	0.1
FRI	87.42	50	ePc	29 12.70	0.0
ISA	87.79	51	eP	29 15.00	0.4
SBB	87.88	53	eP	29 15.00	0.0
PLM	88.10	54	eP	29 16.00	-0.2
CLC	88.50	52	eP	29 18.00	0.0
GSC	88.90	52	eP	29 20.00	0.1
GLA	89.56	55	eP	29 24.00	1.0
GWF	145.12	337	PKP	36 02.29	-0.7
DOU	145.21	341	PKP	36 03.00	0.0
STR	145.39	336	PKP	36 02.64	-0.7
CAI	145.42	133	iPKPd	36 02.60	-1.9
WLS	145.69	337	PKP	36 02.80	-1.2
CDF	145.72	337	ePKP	36 04.90	0.8
	1.0s	18.00nm			
FEL	145.87	335	PKP	36 01.44	-3.0X
ECH	145.93	337	PKP	36 02.39	-2.0
BSF	146.38	337	ePKP	36 06.60	1.4
	1.0s	10.00nm			
HAU	146.40	337	ePKP	36 06.60	1.4
	0.9s	8.20nm			
LOMF	146.77	336	PKP	36 03.07	-2.8X
LOR	147.91	339	ePKP	36 11.10	3.5X
	0.9s	9.85nm			
LBF	148.12	339	ePKP	36 11.80	3.8X
	0.9s	10.65nm			
SSF	148.21	339	ePKP	36 12.10	4.1X
	0.9s	11.45nm			
LPL	148.30	334	ePKP	36 12.80	4.3X
	1.0s	10.00nm			
LPG	148.31	334	ePKP	36 12.90	4.3X
	0.8s	6.70nm			
SMF	148.46	339	ePKP	36 12.30	3.8X
	1.0s	12.00nm			
AVF	148.50	339	ePKP	36 12.30	3.8X
	1.0s	13.00nm			
LPF	148.64	345	ePKP	36 13.00	4.3X
	1.0s	16.00nm			
BGF	148.87	340	ePKP	36 13.70	4.6X
	0.7s	5.50nm			
MAF	149.26	340	ePKP	36 15.00	5.2X
	1.0s	6.00nm			
TCF	149.32	340	ePKP	36 14.70	4.8X
	1.2s	19.35nm			
LSF	149.57	341	ePKP	36 15.00	4.8X
	1.1s	19.55nm			
MFF	149.74	343	ePKP	36 15.70	5.3X
	1.1s	22.00nm			
FRF	149.90	332	ePKP	36 16.00	5.2X
	0.9s	9.85nm			
LMR	150.14	332	ePKP	36 16.70	5.6X
	1.0s	16.00nm			
RJF	150.41	340	ePKP	36 17.60	6.1X
	0.9s	8.20nm			
LPO	151.07	340	ePKP	36 19.00	6.5X
	1.0s	12.00nm			
S.D. = 0.9		on	34 of	58 obs.	

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* SEP 25, 1990 13h 17m 37.81± 2.09s
33.318 S ± 6.6km 71.727 W ±18.5km
DEPTH = 35.0 ± 20.2 km
NEAR COAST OF CENTRAL CHILE (135)
Felt (III) at Valparaiso.

LCCH	0.20	140	iPd	17 44.60	0.0
			iS	17 49.00	
IHA	0.30	14	iPd	17 45.80	0.1
			iS	17 50.60	
LNV	0.69	158	iPd	17 51.00	0.0
			iS	18 00.50	
ROCH	0.69	60	iPd	17 50.60	-0.7
PEL	0.89	79	iPd	17 54.10	0.1
			iS	18 05.50	
SAN	0.90	99	eP	17 54.20	0.1
			iS	18 05.00	
PCH	1.06	107	eP	17 56.70	0.3
			iS	18 10.10	
CHCH	1.09	125	iPc	17 56.60	-0.2
			iS	18 11.40	
JACH	1.14	57	iP	17 58.00	0.3
			iS	18 13.00	
FCH	1.20	91	iPd	17 58.80	0.0
			iS	18 14.00	
S.D. = 0.4		on	10 of	10 obs.	

% SEP 25, 1990 14h 53m 08.83± 0.90s
45.342 N ±10.3km 25.110 E ± 6.6km
DEPTH = 5.0km (geophysicist)
ROMANIA (358)

MTUR	0.12	196	iPc	53 11.00	-0.4
MLR	0.61	75	iP	53 21.00	0.0
TNR	0.67	298	ePc	53 21.00	-1.1
VRI	1.25	64	ePd	53 32.50	0.0
BZS	2.47	278	ePc	53 52.00	1.6
S.D. = 1.4		on	5 of	5 obs.	

? SEP 25, 1990 15h 00m 39.53± 0.92s
37.422 N ± 9.6km 21.893 E ±13.7km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
MD 2.7 (ATH).

ITM	0.24	174	ePb	00 45.20	0.5
			eSb	00 50.00	
VLI	1.09	130	ePn	00 59.50	-0.5
VLS	1.28	307	ePn	01 02.80	-0.5
EVR	1.49	357	ePb	01 07.00	0.5
S.D. = 1.0		on	4 of	4 obs.	

% SEP 25, 1990 16h 20m 18.20± 2.88s
24.297 N ± 7.4km 122.130 E ±23.6km
DEPTH = 10.0km (geophysicist)
TAIWAN REGION (243)

TWC	0.40	321	iPd	20 27.00	0.6
			eS	20 32.20	
TWD	0.53	246	iPc	20 29.10	0.1
TWZ	0.94	328	iPc	20 35.70	-0.4
			eS	20 47.40	
TWQ	1.18	269	ePd	20 39.90	-0.4
			eS	20 54.10	
TWK	1.82	236	ePc	20 49.90	0.0
TWM1	2.14	227	eP	20 54.60	0.1
S.D. = 0.5		on	6 of	6 obs.	

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* SEP 25, 1990 16h 23m 04.01± 1.16s
3.727 N ±16.2km 128.773 E ±27.0km
DEPTH = 33.0km (normal)
4.5mb (3 obs.)
NORTH OF HALMAHERA (264)

WRA	24.15	167	eP	28 18.80	0.5
MBL	26.24	199	eP	28 38.00	0.0
ASPA	27.68	170	eP	28 51.20	0.0
	0.8s	8.00nm		4.4mb	
WARB	29.81	184	eP	29 10.80	0.5
CHG	32.78	300	eP	29 37.00	0.4
FORR	34.39	181	eP	29 49.50	-0.7
STK	37.45	162	iPd	30 16.00	-0.2
	0.5s	6.00nm		4.7mb	
GUN	47.39	305	P	31 38.00	0.3
PKI	47.64	304	P	31 39.40	-0.3
KKN	47.83	305	P	31 41.00	0.0
GKN	48.44	305	P	31 45.50	-0.2
GBA	51.59	284	Pd	32 09.50	-0.2
	0.5s	2.30nm		4.4mb	
S.D. = 0.4		on	12 of	12 obs.	

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* SEP 25, 1990 16h 49m 17.41± 1.83s
48.157 N ±19.8km 18.066 E ±13.0km
DEPTH = 10.0km (geophysicist)
CZECHOSLOVAKIA (547)
mbLg 1.6 (SRO).

SRO	0.38	154	iPg	49 25.60	0.4
			iSg	49 30.10	
			Lg	49 32.00	
ZST	0.65	274	iPg	49 31.60	1.3
			i	49 32.80	
			iSg	49 41.20	
BUD	0.93	136	eP	49 35.00	-0.2
SOP	1.12	246	ePn	49 37.60	-0.8
KHC	3.13	290	ePn	50 07.10	-0.6
			ePg	50 14.20	
S.D. = 1.2		on	5 of	5 obs.	

% SEP 25, 1990 19h 11m 09.24± 2.98s
48.084 N ± 9.9km 1.581 W ±23.8km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.8 (LDG).

LPF	0.37	98	Pg	11 16.60	-0.2
			Sg	11 25.00	
GRR	0.57	58	Pg	11 20.80	0.0
			Sg	11 32.80	
FLN	1.00	47	Pg	11 27.80	-0.4
			Sg	11 45.50	
LDF	1.10	62	Pg	11 30.40	0.5
			Sg	11 48.80	
MFF	1.78	146	Pg	11 40.20	0.0
			Sg	12 04.00	
S.D. = 0.5		on	5 of	5 obs.	

? SEP 25, 1990 20h 14m 18.84± 4.18s
44.740 N ±27.5km 2.736 E ±21.8km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.9 (LDG).

CAF	0.51	291	Pg	14 29.20	0.0
			Sg	14 37.60	
RJF	1.03	304	Pg	14 38.40	0.1
			Sg	14 53.00	
LPO	1.11	268	Pg	14 39.60	0.0
			Sg	14 56.50	
MAF	1.49	355	Pg	14 45.60	0.0
			Sg	15 05.60	
S.D. = 0.1		on	4 of	4 obs.	

? SEP 25, 1990 20h 35m 17.20± 4.37s
43.169 N ±29.7km 138.156 E ±39.9km
DEPTH = 266.8 ± 44.6 km
EASTERN SEA OF JAPAN (223)

MRRJ	2.27	108	eP	36 03.50	-0.3
ASAJ	3.39	72	eP	36 15.50	0.2
HOOJ	3.86	100	eP	36 21.20	0.7
			eS	37 07.30	
KUSJ	4.80	89	eP	36 31.00	-0.6
			eS	37 25.50	
OFUJ	4.87	146	eP	36 32.40	-0.1
			S	37 26.60	
MAT	6.62	180	eP	36 54.00	0.0
S.D. = 0.7		on	6 of	6 obs.	

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* SEP 25, 1990 20h 56m 34.61± 0.61s
13.709 S ±11.3km 165.749 E ±13.8km
DEPTH = 33.0km (normal)
4.9mb (3 obs.)
VANUATU ISLANDS (186)

HNR	7.10	306	eP	58 19.00	0.1
SVO	7.37	307	eP	58 22.00	-0.7
DZM	8.34	176	iPc	58 36.00	-0.3
			iS	00 12.30	
SVW	80.63	18	eP	08 45.30	0.0
TTA	81.96	17	ePc	08 52.40	0.1
	0.9s	8.50nm		4.8mb	
PMR	83.04	20	e(P)	08 57.10	-0.6
TOA	84.40	21	ePc	09 05.40	0.6
IMA	85.06	15	eP	09 08.50	0.4
	1.0s	4.90nm		4.7mb	
FBA	85.84	18	ePc	09 11.10	-0.7
	0.9s	33.30nm		5.6mb	
SOB1	145.10	129	ePKP	16 10.00	-1.4
BCAO	146.38	257	iPKPc	16 15.90	2.4
	0.5s	12.00nm			
			id	16 24.20	
S.D. = 1.1		on	11 of	11 obs.	

& SEP 25, 1990 21h 18m 30.84s
59.957 N 153.411 W
DEPTH = 127.5km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT	0.32	163	iP	18 48.32	0.9
			iS	19 01.57	

PDB	0.43	247	iP	18 48.77	-0.7
			eS	19 02.32	
AUH	0.60	182	eP	18 49.90	-0.7
AUE	0.60	178	iP	18 49.63	-0.8
AUI	0.62	181	eP	18 49.75	-0.9
RDT	0.80	39	iP	18 51.17	-0.9
MCNL	0.91	212	iP	18 52.23	-0.7
			eS	19 08.28	
HOM	0.94	108	eP	18 52.37	-0.9
			eS	19 08.75	
XLV	0.99	120	eP	18 52.25	-1.5
			eS	19 09.24	
CDD	1.04	187	iP	18 53.24	-1.0
			eS	19 10.91	
NNL	1.07	84	eP	18 54.05	-0.4
CNPM	1.18	111	iP	18 54.23	-1.4
			eS	19 11.85	
BRLK	1.29	98	eP	18 55.36	-1.4
NKA	1.34	53	eP	18 58.00	0.7
CKL	1.35	23	iP	18 57.25	-0.3
SPU	1.40	28	iP	18 57.40	-0.6
			eS	19 17.85	
BGL	1.40	21	eP	18 58.02	-0.1
CRP	1.45	25	eP	18 58.48	-0.3
CGLM	1.52	26	eP	18 58.80	-0.7
NCG	1.58	22	eP	19 00.17	0.0
SLKM	1.68	69	eP	18 59.57	-1.7
SEW	1.99	84	eP	19 03.12	-1.9
SUA	2.00	40	eP	19 04.92	-0.3
PMS	2.30	54	eP	19 07.13	-1.8
PWA	2.43	44	eP	19 10.62	0.1
GHO	2.85	48	eP	19 13.86	-2.3
SML	3.10	51	eP	19 16.91	-2.5
VLZ	3.69	68	eP	19 24.83	-2.3

28 obs. associated

? SEP 25, 1990 23h 19m 48.32± 0.99s
37.551 N ± 9.2km 21.776 E ±11.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.1 (ATH).

ITM	0.39	162	iPgd	19 56.00	-0.3
			eSg	20 04.50	
VLS	1.13	304	ePb	20 10.00	0.5
			eSb	20 30.00	
EVR	1.36	1	ePb	20 12.50	-0.9
ATH	1.59	74	iPbd	20 17.30	0.7
			eSb	20 38.00	
KZN	2.75	360	ePb	20 36.00	2.6X

S.D. = 1.3 on 4 of 5 obs.

SEP 26, 1990 00h 12m 04.39± 0.91s
45.497 N ± 7.2km 7.213 E ± 5.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.4 (GEN), 2.4 (LDG).

LSD	0.06	226	P	12 06.60	-0.3
LPG	0.32	270	Pg	12 11.30	0.1
			Sg	12 15.00	
LPL	0.34	273	Pg	12 11.50	0.0
			Sg	12 15.10	
RSP	0.35	175	P	12 12.70	1.1
			S	12 17.90	
ORX	0.56	76	P	12 15.90	0.1
			S	12 24.40	
RRL	0.65	208	P	12 17.60	0.0
			S	12 25.52	
PZZ	1.00	185	P	12 24.29	0.9
			S	12 35.88	
STV	1.26	176	P	12 26.44	-1.3
ENR	1.28	173	P	12 27.47	-0.7
SBF	1.64	174	Pg	12 39.50	6.0X
			Sg	13 03.20	
FRF	1.98	192	Pg	12 42.20	3.9X
			Sg	13 08.30	

S.D. = 0.9 on 9 of 11 obs.

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* SEP 26, 1990 01h 17m 49.53± 1.36s
10.486 S ±12.6km 161.858 E ±16.3km
DEPTH = 105.9 ± 11.3 km
4.4mb (2 obs.)
SOLOMON ISLANDS (193)

HNR	2.15	299	eP	18 25.00	0.2
			eS	18 53.00	
SVO	2.41	303	eP	18 28.00	-0.3
			e(S)	19 04.00	
DZM	12.33	160	iPd	20 42.70	0.0
			iS	22 48.10	
CTA	17.81	236	iPd	21 52.90	0.7
	1.1s		51.90nm	4.7mb	
BRS	18.87	206	eP	22 04.00	-0.3
			i	22 11.50	
RMO	20.16	216	eP	22 17.60	-0.2
COO	22.04	203	eP	22 37.00	0.5
WB5	28.09	247	eP	23 32.80	-0.6
ASPA	29.69	240	eP	23 47.30	-0.4
	1.1s		6.00nm	4.2mb	
	Z 19s		0.48um	4.1Msz	
			LR	34 26.80	
CHG	68.52	295	eP	28 43.50	0.5
SOB1	150.08	130	ePKP	37 32.60	7.6X
			e	37 53.40	

S.D. = 0.5 on 10 of 11 obs.

? SEP 26, 1990 02h 09m 43.05± 4.87s
46.683 N ±10.1km 4.482 E ±36.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.6 (LDG).

LBF	0.46	311	Pg	09 52.40	0.0
LOR	0.72	324	Pg	09 57.20	-0.1
			Sg	10 09.30	
SSF	0.77	300	Pg	09 58.30	0.2
			Sg	10 09.30	
BGF	1.13	264	Pg	10 04.10	-0.2
			Sg	10 18.10	
MAF	1.40	251	Pg	10 08.80	0.1
			Sg	10 25.50	
TCF	1.62	257	Pg	10 11.70	0.0

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

& SEP 26, 1990 02h 53m 55.80s
37.380 N 122.182 W
DEPTH = 8.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 3.6 (BRK).
Mo=3.9•10••14 Nm (BRK). Felt (IV) at Loma Mar, Moss Beach, Mountoin View and Redwood City, (III) at Half Moon Bay and (II) at San Gregoria. Also felt at Palo Alta.

GCC	0.38	157	iPd	54 02.90	-0.6
MHC	0.43	95	iP	54 04.50	-0.1
BRK	0.50	353	iPd	54 05.50	-0.3
BKS	0.50	355	iPd	54 05.50	-0.3
ARN	0.52	93	iPc	54 05.90	-0.4
SAO	0.85	136	iP	54 11.30	-1.1
NWRM	1.21	333	eP	54 16.00	-2.5
LLA	1.25	127	eP	54 17.80	-1.4
CMB	1.57	65	ePd	54 22.90	-1.1
PRI	1.74	135	eP	54 26.20	-0.3
FRI	2.01	100	eP	54 28.70	-1.7
PHAM	2.11	137	eP	54 29.50	-2.3
ORV	2.24	14	eP	54 31.20	-2.5
BCH	2.77	142	eP	54 38.20	-3.2
ABL	3.48	136	eP	54 48.20	-3.4
LBFM	3.97	3	eP	54 58.50	0.1
TNP	4.00	78	e(P)	54 59.50	0.6

17 obs. associated

& SEP 26, 1990 03h 52m 05.72s
58.882 N 152.042 W
DEPTH = 59.3km
KODIAK ISLAND REGION (13)
<AGS-P>.

XLV	0.60	16	eP	52 17.95	-0.9
CNPM	0.77	32	iP	52 20.13	-0.8
			eS	52 30.79	
HOM	0.81	15	eP	52 20.76	-0.6
			eS	52 32.16	
CDD	0.83	274	eP	52 20.88	-0.8
			eS	52 32.61	
AUE	0.84	305	eP	52 21.08	-0.6
AUI	0.85	303	eP	52 21.08	-0.8
AUH	0.87	304	eP	52 21.67	-0.6
OPT	0.98	322	eP	52 22.46	-1.2
MCNL	1.22	285	eP	52 26.55	-0.4
NNL	1.22	18	eP	52 26.99	0.1
PDB	1.43	310	eP	52 28.87	-0.9
RDT	1.71	354	eP	52 32.71	-1.0
SEW	1.80	46	eP	52 35.51	0.6
SLKM	1.87	29	eP	52 35.02	-0.9
SPU	2.31	360	eP	52 40.70	-1.4
CKL	2.33	356	eP	52 41.86	-0.5
BGL	2.40	356	eP	52 42.75	-0.6
VZW	3.52	49	eP	52 56.61	-2.6

18 obs. associated

& SEP 26, 1990 04h 14m 07.10s
40.450 N 125.797 W
DEPTH = 5.0km
4.5mb (11 obs.) 4.1Msz (1 obs.)
OFF COAST OF NORTHERN CALIFORNIA(34)
<BRK>. ML 4.4 (BRK). Felt (III) at Ferndale.

FHC	1.42	75	iP	14 31.60	-2.1
WDC	2.49	86	iPc	14 46.40	-2.5
			iS	15 15.90	
LTCM	2.82	94	eP	14 51.00	-2.7
NWRM	3.01	131	e(P)	14 53.00	-3.2
LBFM	3.09	72	eP	14 55.80	-1.9
MIN	3.20	91	iPc	14 56.20	-3.0
ORV	3.42	104	ePd	14 58.30	-3.9
ZSP	3.72	131	eP	15 03.50	-2.9
BRK	3.77	132	eP	15 04.00	-3.1
BKS	3.78	132	ePd	15 04.10	-3.2
MPOR	4.38	22	P	15 16.37	0.5
MHC	4.49	132	eP	15 13.30	-4.1
GCC	4.53	138	eP	15 13.60	-4.2
ARN	4.54	132	eP	15 13.40	-4.8
TCO	4.80	39	P	15 22.70	0.7
CMB	4.84	118	eP	15 20.10	-2.4
GT2	5.37	28	P	15 30.34	0.5
KMOR	5.45	17	P	15 32.42	1.4
VBEM	5.55	33	P	15 32.95	0.4
VIPM	5.58	42	P	15 32.24	-0.7
PGO	5.58	25	P	15 34.30	1.5
TDH	5.66	30	Pc	15 34.55	0.5
CROR	5.75	36	P	15 35.23	0.0
VLMM	5.78	27	P	15 36.53	0.8
VFP	5.81	32	P	15 36.41	0.2
VLL	5.85	30	P	15 37.54	0.9
NLO	5.89	16	P	15 38.89	1.7
APM	6.08	28	P	15 40.97	1.1
KVN	6.09	101	eP	15 36.80	-3.4
VTHM	6.10	37	P	15 39.44	-0.6
RVW	6.12	20	P	15 41.20	0.9
LVP	6.14	23	P	15 40.97	0.3
			S	16 47.12	
MTMW	6.16	24	P	15 40.95	0.0
			S	16 47.74	
VGB	6.26	34	eP	15 42.90	0.5
FL2	6.27	22	P	15 42.83	0.2
GULW	6.27	28	P	15 43.74	1.1
CDFW	6.29	25	Pd	15 43.09	0.3
HSR	6.30	24	P	15 44.13	1.1
SHW	6.30	23	P	15 43.38	0.3
BMW	6.31	16	P	15 43.80	0.7
REMW	6.32	23	P	15 43.96	0.5
ESD	6.33	24	P	15 43.94	0.4
STD	6.34	23	P	15 43.80	0.1
SOSW	6.37	24	P	15 44.61	0.6
ERK	6.37	22	P	15 44.43	0.4
CZM	6.44	21	P	15 45.56	0.6
TDL	6.45	23	P	15 45.74	0.6
ASR	6.47	27	P	15 45.66	0.2
ONR	6.59	12	P	15 48.51	1.5
GL2	6.60	32	P	15 47.66	0.5
APW	6.61	19	P	15 48.49	1.2
JBO	6.65	39	P	15 47.99	0.1
LMW	6.72	21	P	15 49.64	0.8
CPW	6.80	16	P	15 50.81	0.8
GLK	6.83	25	P	15 50.77	0.3
LON	6.93	23	P	15 51.97	0.2
WPW	6.97	25	P	15 52.41	0.0
REMR	6.98	23	P	15 53.24	0.6
PATW	6.99	37	P	15 52.88	0.2
RVC	7.06	22	P	15 54.45	0.8
TNP	7.06	107	eP	15 50.50	-3.4
GHW	7.07	20	P	15 54.69	1.1
FMW	7.13	23	P	15 55.29	0.5
YAKW	7.17	31	P	15 56.03	0.8
NAC	7.24	28	P	15 56.19	0.0

26d 04h

PRW 7.28 36 P 15 56.70 0.0
MXC 7.31 31 P 15 57.52 0.4
GSM 7.34 22 P 15 58.78 1.1
BRVW 7.36 33 P 15 58.09 0.2
OOW 7.38 8 P 16 02.76 4.7
GMW 7.42 16 P 15 59.26 0.6
RSW 7.46 35 P 15 59.24 0.0
HDW 7.46 14 P 15 59.97 0.7
EBG 7.49 29 P 15 59.87 0.3
ISA 7.50 127 eP 15 58.00 -1.8
SYP 7.51 140 eP 15 59.00 -1.0
OSD 7.52 11 P 16 04.23 4.0
WG3 7.53 40 P 15 59.97 -0.2
MDW 7.56 33 P 16 00.47 -0.1
TWW 7.58 26 P 16 02.80 1.9
WIW 7.63 36 P 16 01.20 -0.3
SEA 7.63 18 P 16 03.22 1.7
BVW 7.67 32 P 16 02.15 0.0
GBL 7.68 35 P 16 02.13 -0.1
MJ2 7.69 35 P 16 02.27 -0.1
TBM 7.70 27 P 16 03.20 0.6
OTR 7.70 7 P 16 07.24 4.6
LNOR 7.71 43 P 16 02.25 -0.5
VTG 7.75 31 P 16 03.42 0.3
WAH2 7.76 34 P 16 03.24 -0.1
LOCW 7.78 34 P 16 03.77 0.1
BLN 7.82 14 P 16 06.29 2.0
OT2 7.87 35 P 16 04.48 -0.4
CRF 7.89 34 P 16 04.44 -0.7
HTW 7.90 20 P 16 05.89 0.5
CLC 7.95 123 eP 16 05.00 -1.1
RC1 7.96 33 P 16 05.79 -0.4
WRD 8.10 34 P 16 07.30 -0.9
ETW 8.16 27 P 16 09.67 0.5
JCW 8.22 18 P 16 10.36 0.5
EPH 8.22 31 P 16 09.91 0.0
PGC 8.37 11 eP 16 15.00 3.2
WTV 8.38 28 P 16 12.36 0.3
CMW 8.39 17 P 16 13.59 1.2
MCW 8.50 13 P 16 14.64 0.9
S 17 43.68
SBB 8.55 130 eP 16 12.00 -2.5
RPW 8.56 20 P 16 14.78 0.1
SAW 8.58 30 P 16 15.00 0.1
OD2 8.62 34 P 16 16.34 1.0
DHW2 8.68 28 P 16 16.94 0.6
PAS 8.74 134 eP 16 17.00 -0.1
MWC 8.75 133 eP 16 16.00 -1.4
GSC 8.77 123 eP 16 15.00 -2.6
MBW 8.78 17 P 16 18.50 0.7
PEC 9.50 131 eP 16 25.50 -2.1
PNT 9.89 24 eP 16 33.00 0.1
0.5s 16.00nm 5.8mb X
DUG 9.92 87 eP 16 31.00 -2.6
NEW 9.98 36 eP 16 32.00 -2.1
TPC 10.02 126 eP 16 32.00 -2.8
DAU 11.09 85 eP 16 48.50 -1.2
LRM 11.13 57 eP 16 48.00 -2.2
GLA 11.48 127 eP 16 52.00 -2.8
IMW 11.55 68 eP 16 54.70 -1.3
BW06 12.38 74 eP 17 04.00 -3.1
SES 14.34 41 eP 17 30.00 -2.7
1.0s 75.00nm 5.3mb
pP 17 41.00
EDM 15.32 29 eP 17 44.00 -1.6
GOL 15.66 86 eP 17 48.00 -2.3
0.8s 9.52nm 4.1mb
GLD 15.76 86 eP 17 49.80 -1.8
1.0s 44.00nm 4.6mb
ANMO 16.25 104 eP 17 55.50 -2.4
0.8s 6.53nm 3.8mb
ALQ 16.26 104 eP 17 56.00 -1.9
1.0s 6.75nm 3.7mb
RSSD 16.51 70 eP 17 56.00 -5.1
FFC 21.35 40 iPd 18 56.10 -1.0
1.0s 104.00nm 5.2mb
YKA 23.08 13 eP 19 16.80 2.5
1.1s 7.80nm 4.2mb
SIO 23.62 92 eP 19 19.60 -0.2
TUL 23.96 91 eP 19 23.70 0.7
0.9s 12.90nm 4.5mb
Z 19s 0.60um 4.1Msz
LR 27 22.00
PMR 25.49 334 eP 19 43.00 5.5
0.8s 12.41nm 4.7mb
UYO 25.62 94 iPd 19 39.90 0.9
OLY 27.40 89 eP 19 54.00 -1.3

FVM 27.41 84 eP 19 54.00 -1.4
0.7s 13.00nm 4.8mb
FBA 27.58 340 eP 20 03.00 6.2
0.9s 8.33nm 4.5mb
INK 28.23 354 eP 20 09.00 6.5
JSC 35.64 85 eP 21 06.00 -1.8
LHS 35.90 85 eP 21 09.50 -0.6
ZOBO 77.76 124 P 26 08.00 0.4
Z 24s 0.07um 3.9MszX
LR 53 32.00
LPB 77.97 124 P 25 57.00 -11.6
CNCB 78.25 124 P 26 12.00 1.7
CCH 79.85 123 P 26 21.00 2.3
SIV 82.16 119 P 26 31.40 0.9
BRG 82.47 24 e(P) 26 34.40 2.7
BUL 150.22 55 iPKPd 34 06.20 10.4
0.6s 3.67nm
150 obs. associated

& SEP 26, 1990 04h 33m 49.30s
40.417 N 125.402 W
DEPTH = 5.0km
OFF COAST OF NORTHERN CALIFORNIA(34)
<BRK>. ML 3.3 (BRK).

FHC 1.15 70 iPc 34 09.70 -1.5
iS 34 24.00
WDC 2.19 85 iPc 34 24.70 -2.2
eS 34 51.00
LTCM 2.51 94 eP 34 29.00 -2.5
LBFM 2.82 70 eP 34 33.50 -2.6
MIN 2.90 90 ePc 34 34.50 -2.7
ORV 3.12 105 eP 34 36.80 -3.3
ARN 4.30 134 eP 34 53.50 -3.4
7 obs. associated

• SEP 26, 1990 04h 37m 02.07± 1.19s
6.414 N ±10 1km 93.978 E ±10.9km
DEPTH = 80.3 ± 13.5 km
4.8mb (4 obs.)
NICOBAR ISLANDS REGION (704)

BSI 1.60 125 ePd 37 30.00 0.9
eS 37 50.50
TSI 5.41 122 eP 38 25.00 3.1X
PSI 6.16 127 ePd 38 32.70 0.3
eS 38 43.50
SNG 6.64 83 eP 38 37.00 -1.9
IPM 7.25 104 ePc 38 47.90 0.5
e 40 02.00
NNT 8.36 42 eP 38 59.00 -3.7X
PPI 9.36 137 ePc 39 15.20 -1.2
BDT 11.83 24 eP 39 45.00 -4.6X
CHTO 13.24 21 iP 40 09.50 1.3
1.0s 7.50nm 4.3mb
GBA 17.78 295 P 41 05.50 -0.3
S 44 16.50
HYB 18.62 307 eP 41 12.00 -4.1X
KKN 22.81 340 P 41 58.60 -0.5
BJI 38.96 27 eP 44 22.00 0.0
1.1s 16.00nm 4.8mb
WB5 47.56 124 iPc 45 32.20 0.5
ASPA 49.12 129 iPc 45 44.40 0.7
0.4s 8.00nm 5.1mb
MAT 50.26 47 eP 45 52.00 -0.3
0.8s 6.72nm 4.7mb
HFS 79.63 330 eP 49 22.60 20.7X
1.5s 27.30nm
S.D. = 1.1 on 12 of 17 obs.

SEP 26, 1990 06h 47m 24.67± 0.30s
43.505 N ± 2.5km 0.560 W ± 4.8km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 3.2 (LDG). mbLg 3.0 (MDD).
Felt (IV) at Pordies, France.
Felt also in the Lacq oilfield
area, France.

OGE 0.34 169 Pg 47 31.66 -0.1
MADF 0.41 208 Pg 47 33.08 0.1
Sg 47 38.96
ESCF 0.43 181 Pg 47 32.94 -0.4
ATE 0.43 194 Pg 47 33.46 0.0
Sg 47 39.40
ELYF 0.46 223 Pg 47 34.28 0.2
Sg 47 40.48

JAU 0.49 163 Pg 47 34.15 -0.5
ISSF 0.51 200 Pg 47 34.89 -0.1
Sg 47 42.21
BOH 0.52 220 Pg 47 35.51 0.3
Sg 47 42.43
LHE 0.59 184 Pg 47 35.89 -0.9
EPF 0.81 126 Pg 47 40.90 0.5
Sg 47 52.20
ECRI 1.69 239 eP 47 57.00 2.6X
eS 48 19.00
LFF 1.71 33 Pg 47 59.80 5.1X
Sg 48 21.90
LPO 1.72 46 Pg 47 59.90 5.0X
Sg 49 22.50
RJF 2.33 39 Pn 48 04.50 0.8
Pg 48 11.00
Sg 48 40.70
CAF 2.36 52 Pn 48 04.80 0.7
Pg 48 11.60
Sg 48 41.90
EROQ 2.78 165 eP 48 17.00 7.0X
eS 48 50.00
ETOR 2.91 203 eP 48 13.00 1.1
eS 48 47.60
MFF 3.11 5 Pn 48 15.50 0.9
Pg 48 25.60
Sg 49 05.20
TCF 3.41 34 Pn 48 18.80 -0.1
Pg 48 31.00
Sg 49 14.40
MAF 3.51 38 Pn 48 20.20 -0.2
Pg 48 31.60
Sg 49 28.40
BGF 3.89 37 Pn 48 25.10 -0.7
Pg 48 39.80
Sg 49 28.40
LPF 4.54 356 Pn 48 34.50 -0.4
Sn 49 24.50
GRR 4.89 358 Pn 48 39.40 -0.5
Sn 49 33.30
LDF 5.10 3 Pn 48 42.20 -0.7
Sn 49 37.00
S.D. = 0.6 on 20 of 24 obs.

SEP 26, 1990 07h 44m 31.43± 0.42s
6.278 S ± 6.2km 124.294 E ± 8.2km
DEPTH = 33.0km (normal)
5.2mb (8 obs.)
BANDA SEA (280)

AAI 4.66 57 eP 45 42.00 0.7
MTN 9.38 135 iPd 46 57.50 10.1X
KNA 10.38 155 iPd 46 59.90 -1.3
eS 48 54.00
MBL 15.41 196 eP 48 08.40 0.2
WB5 16.69 145 iPc 48 21.00 -3.5X
eS 51 20.00
ASPA 19.60 153 iPc 49 00.40 0.3
0.6s 77.00nm 5.2mb
eS 52 33.30
WARB 19.92 174 eP 49 02.20 -1.2
QIS 20.54 135 eP 49 10.00 0.1
MRWA 24.13 198 eP 49 47.00 1.6
FORR 24.70 172 eP 49 51.00 0.1
0.4s 11.00nm 4.8mb
PSI 26.85 289 ePd 50 12.30 1.1
STK 30.17 150 iPd 50 41.50 0.6
0.9s 6.00nm 4.4mb
e 51 20.80
CHG 35.30 315 eP 51 26.00 0.3
GUN 50.30 314 P 53 27.10 -0.5
0.8s 24.00nm 5.3mb
PKI 50.44 314 P 53 28.00 -0.6
0.6s 18.00nm 5.2mb
KKN 50.66 314 P 53 29.60 -0.5
0.8s 30.00nm 5.3mb
DMN 50.68 314 P 53 30.00 -0.3
0.7s 23.00nm 5.3mb
GKN 51.25 314 P 53 34.00 -0.5
0.8s 36.00nm 5.4mb
ALQ 125.35 51 ePKP 03 54.80 23.4X
S.D. = 0.9 on 16 of 19 obs.

• SEP 26, 1990 07h 55m 47.40± 0.47s
1.935 S ± 6.4km 77.240 W ±13.3km
DEPTH = 174.7 ± 8.0 km
4.2mb (2 obs.)

ECUADOR (107)

ANGL	1.56	349	eP	56	32.80	12.5X
VC1	1.73	318	iPd	56	21.50	-0.7
CAYA	2.13	340	iP	56	26.80	0.3
QTO	2.15	323	Pd	56	26.30	-0.3
GGP	2.21	322	Pd	56	27.10	-0.4
YANA	2.25	324	iPd	56	27.10	-0.7
COTA	2.51	334	iPd	56	30.90	0.0
PSO	3.11	358	eP	56	38.00	0.0
BOG	7.25	26	eP	57	34.00	2.0
PT08	9.98	176	iPd	58	09.70	1.5
			iS	59	47.60	
NNA	10.00	178	iPc	58	07.70	-0.3
			iS	59	44.00	
PT10	10.08	178	i(P)	58	04.00	-5.0X
			iS	59	48.00	
ARE	15.51	159	eP	59	19.00	0.5
ZOBO	16.84	148	P	59	23.00	-12.1X
			i	59	35.00	
LPB	17.07	149	P	59	38.00	0.3
CCH	18.83	145	P	59	56.50	-0.3
SIV	21.19	132	P	00	19.00	-1.3
FVM	41.55	344	iP	03	18.00	-1.3
	0.8s		9.09nm			4.4mb
ANMO	45.78	326	iP	03	55.10	1.7
	1.0s		5.25nm			4.0mb
LKO	72.25	79	P	06	52.32	-3.7X
LIC	72.55	83	P	06	56.40	-1.3
KIC	72.84	83	P	06	58.60	-0.8
INK	79.91	342	ePd	07	38.90	1.1

S.D. = 1.1 on 19 of 23 obs.

& SEP 26, 1990 10h 08m 01.30s
60.302 N 147.766 W
DEPTH = 5.9km
SOUTHERN ALASKA (2)
<AGS-P>.

SEW	0.86	257	eP	08	17.43	-0.8
			iS	08	29.45	
VZW	0.97	38	eP	08	18.73	-1.4
			eS	08	31.82	
VLZ	1.09	40	eP	08	20.79	-1.4
			eS	08	34.70	
MID	1.13	140	eP	08	21.78	-1.1
SLKM	1.24	281	eP	08	23.18	-1.5
PMS	1.29	318	eP	08	23.67	-2.0
			eS	08	39.70	
PLRM	1.46	333	eP	08	25.79	-2.3
KLU	1.50	36	eP	08	27.61	-1.2
			eS	08	47.08	
SML	1.54	350	eP	08	27.67	-1.7
SCM	1.55	8	eP	08	28.41	-1.2
GHO	1.58	340	eP	08	28.01	-2.0
PWA	1.70	324	eP	08	29.83	-1.8
NKA	1.77	286	eP	08	32.89	0.2
NNL	1.78	263	eP	08	33.19	0.3
SUA	1.87	310	eP	08	32.06	-2.1
CNPM	1.91	247	eP	08	32.96	-1.8
GLB	2.25	58	eP	08	38.19	-1.5
SPU	2.28	295	eP	08	37.66	-2.5
RDT	2.32	279	eP	08	38.30	-2.4
CRP	2.36	296	eP	08	38.94	-2.4
NCG	2.42	299	eP	08	39.49	-2.6
CUT	2.43	331	eP	08	39.87	-2.3
TGL	2.48	77	eP	08	40.87	-2.2

23 obs. associated

& SEP 26, 1990 10h 29m 50.42s
60.292 N 153.531 W
DEPTH = 165.5km
SOUTHERN ALASKA (2)
<AGS-P>.

PDB	0.61	214	iP	30	13.21	-1.1
RDT	0.63	63	iP	30	13.39	-1.1
OPT	0.66	167	eP	30	13.83	-0.8
AUH	0.93	177	eP	30	15.39	-1.1
AUE	0.94	175	eP	30	15.50	-1.0
AUI	0.96	177	eP	30	15.47	-1.2
CKL	1.08	32	iP	30	17.11	-0.7
			eS	30	37.81	
BGL	1.12	29	iP	30	17.73	-0.4
HOM	1.14	123	eP	30	17.24	-0.9
			eS	30	37.71	
NNL	1.15	102	eP	30	17.60	-0.6
SPU	1.15	38	eP	30	17 26	-1.0
			eS	30	38.41	
MCNL	1.18	201	eP	30	17.24	-1.3
CRP	1.19	34	eP	30	18.35	-0.4
NKA	1.22	67	eP	30	18.16	-0.6
XLV	1.24	132	eP	30	17.01	-2.0
CGLM	1.26	36	eP	30	18.47	-0.9
NCG	1.30	31	eP	30	18.94	-0.8
			eS	30	38.92	
CDD	1.37	182	eP	30	18.98	-1.3
CNPM	1.39	123	iP	30	19.21	-1.2
			eS	30	41.16	
SLKM	1.66	81	eP	30	21.07	-2.1
SUA	1.80	48	eP	30	22.93	-1.9
SKT	1.95	29	eP	30	25.50	-0.9
SEW	2.05	94	eP	30	25.50	-1.9
PMS	2.17	62	eP	30	26.54	-2.3
PWA	2.24	51	eP	30	27.96	-1.7
CUT	2.64	35	eP	30	33.08	-1.3
SML	2.95	57	eP	30	35.34	-3.0
VZW	3.52	74	eP	30	42.66	-2.9
VLZ	3.64	73	eP	30	44.23	-2.7
KLU	3.91	69	eP	30	47.00	-3.6

30 obs. associated

? SEP 26, 1990 12h 27m 56.02± 4.87s
46.120 N ±33.7km 2.926 E ±17.4km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.1 (LDG).

MAF	0.27	292	Pg	28	02.00	0.3
			Sg	28	05.30	
BGF	0.44	353	Pg	28	05.00	0.0
			Sg	28	10.60	
TCF	0.52	289	Pg	28	06.40	-0.3
			Sg	28	12.40	
AVF	0.73	24	Pg	28	10.40	0.0
			Sg	28	19.80	

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

? SEP 26, 1990 12h 47m 14.66± 4.26s
5.456 S ±37.6km 102.271 E ±42.7km
DEPTH = 46.3 ± 30.4 km
5.3mb (3 obs.)
SOUTHERN SUMATERA (274)

PPI	5.31	339	eP	48	32.50	-1.0
IPM	10.05	353	eP	49	40.80	1.4
CHG	24.34	352	eP	52	28.00	-1.5
WB5	34.35	118	eP	53	58.80	-0.6
ASPA	35.42	124	eP	54	09.20	0.6
	0.4s		19.00nm			5.4mb
PKI	36.65	334	P	54	19.30	0.1
	0.6s		10.00nm			4.9mb
GUN	36.75	335	P	54	20.20	0.1
DMN	36.82	334	P	54	20.70	0.2
KKN	36.90	334	P	54	21.40	0.3
GKN	37.36	334	P	54	25.40	0.4
	0.8s		44.00nm			5.4mb

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

& SEP 26, 1990 13h 18m 51.33s
37.165 N 89.577 W
DEPTH = 12.4km
4.7mb (8 obs.)
CAPE GIRARDEAU, MISSOURI REGION(487)
<SLM>. mbLg 5.0 (TUL), 4.8 (BLA). MD 4.7 (SLM). Slight domage (VI) at Benton, Choffee, Kelso, Kewonee, Morble Hill, Scott City, Sikeston and Vonduser. Also slight domage (VI) at Alto Poss, Anno, Cove in Rock, Jonesboro, Murphysboro, Olive Bronch and Pulaski, Illinois and at Piggott, Arkonsos and Foncy Form, Kentucky. Felt (V) in many oreas of southeastern Missouri, southern Illinois and western Kentucky including Cape Girardeau, Missouri and Poducah, Kentucky. Also felt in parts of Arkonsas, Indiano, Tennessee and at Cincinnati, Ohio.

DON	0.28	272	iPd	18	56.98	-0.5
ELC	0.30	67	iP	18	57.70	-0.1
DWM	0.37	169	iPc	18	58.86	-0.1
NMMO	0.58	178	iP	19	02.28	-0.5
NRMS	0.68	181	iPc	19	03.98	-0.5
LDMO	0.75	179	iPc	19	05.30	-0.5
CSIL	0.78	53	iPd	19	05.58	-0.7
GOIL	0.81	81	iPd	19	06.00	-0.7
ACTN	0.84	165	iPc	19	07.01	-0.4
CBD	0.85	184	iPc	19	07.05	-0.4
UTMA	1.00	151	iPc	19	10.04	0.1
MFTN	1.01	172	iPc	19	10.07	-0.2
OHTN	1.01	177	iPc	19	10.00	-0.3
FVM	1.06	321	iP	19	10.10	-1.0
ECD	1.14	195	eP	19	11.96	-0.5
BPIL	1.30	37	ePd	19	14.85	-0.3
NHIL	1.35	55	ePd	19	15.59	-0.3
MOTN	1.39	113	P	19	16.20	-0.2
WGAR	1.40	201	iP	19	16.15	-0.4
MILT	1.48	152	iPc	19	17.84	0.2
LRDO	1.49	217	iPd	19	17.20	-0.7
SLM	1.56	341	eP	19	18.98	0.2
TYS	1.57	330	iP	19	19.04	0.1
JHP	1.73	206	eP	19	21.18	-0.1
WDIN	1.74	57	iPd	19	22.21	0.7
SFTN	1.84	191	iPd	19	22.26	-0.6
AFAR	1.88	237	iPd	19	23.08	-0.4
EBZ	2.03	175	iPc	19	24.62	-1.0
WLA	2.18	205	iPd	19	27.24	-0.6
OLY	2.26	223	iP	19	28.30	-0.6
HAKY	2.39	91	P	19	31.00	0.2
PWLA	2.50	150	iPc	19	30.78	-1.6
LGAR	2.66	200	iP	19	33.82	-0.8
THI	2.84	37	P	20	20.00	42.8
			S	20	42.00	
			LR	20	50.00	
			Lg	20	59.00	
HOGG	2.90	229	iPd	19	37.02	-1.0
ABTN	3.07	114	P	19	40.10	-0.4
BLO	3.13	49	P	19	41.00	-0.3
LAL	3.27	146	P	19	41.90	-1.5
MSAL	3.30	134	P	19	42.40	-1.4
PDTN	3.56	121	P	19	46.70	-0.7
GBTN	4.58	107	iP	20	01.50	-0.4
UYO	4.97	234	iPd	20	05.60	-1.9
TUL	5.16	258	ePn	20	06.70	-3.4
	0.7s		26.90nm			5.0mb X
SIO	5.61	257	ePn	20	13.50	-3.0
FKO	6.59	256	(Pn)	20	27.50	-2.9
PRM	6.63	115	eP	20	27.90	-3.0
RRO	7.29	259	ePn	20	37.20	-3.0
BLA	7.31	87	eP	20	38.30	-2.2
JSC	7.35	111	eP	20	38.40	-2.6
LHS	7.61	108	eP	20	41.30	-3.3
ACO	7.68	269	iPn	20	42.90	-2.7
	0.5s		116.50nm			6.3mb X
MEO	7.68	255	eP	20	40.20	-5.4
DLA	8.37	45	P	20	52.25	-2.9
LDN	8.70	45	P	20	55.25	-4.6
ELF	8.73	44	P	20	56.00	-4.2
CBN	9.73	80	eP	21	44.00	30.0
GMTN	12.53	68	Pn	21	52.20	0.1
GLD	12.53	287	eP	21	46.50	-5.9
PNJ	12.56	68	eP	21	52.40	-0.1
			i(PP)	22	39.70	
			eLR	24	00.00	
			eLg	25	06.90	
TXNY	12.59	67	iP	21	53.20	0.2
GOL	12.64	286	eP	21	47.30	-6.6
RSSD	12.98	307	eP	21	52.70	-5.7
ANMO	13.84	266	eP	22	06.00	-3.7
ALQ	13.84	266	eP	22	06.00	-3.7
BW06	16.30	296	eP	22	37.00	-4.7
DAU	17.20	288	eP	22	49.50	-3.7
LRM	19.14	304	eP	23	12.70	-4.4
FFC	19.51	338	iPc	23	17.00	-4.1
	0.5s		9.00nm			4.3mb
EDM	23.04	322	eP	23	51.50	-5.6
SCH	23.54	34	P	24	00.00	-1.9
PNT	24.85	309	eP	24	14.00	-0.7
FBA	43.65	328	eP	26	54.50	-2.5
	0.5s		6.20nm			4.7mb
PMR	43.79	323	eP	26	57.00	-1.1
	0.6s		3.08nm			4.3mb
IMA	46.25	329	eP	27	15.00	-2.9
TTA	47.08	325	eP	27	21.80	-2.6
	0.6s		4.68nm			4.7mb

26d 13h

ZOBO 56.86 155 P 28 35.00 -3.9
1.0s 17.50nm 5.0mb
LPB 57.12 155 P 28 35.00 -5.5
CNCB 57.41 155 P 28 38.70 -4.0
EKA 58.52 42 Pd 28 45.10 -4.4
0.5s 4.10nm 4.8mb
SIV 59.30 148 P 28 50.60 -4.7
NB2 63.08 32 P 29 16.60 -3.9
0.9s 3.90nm 4.6mb
KEV 63.93 20 eP 29 22.00 -3.8
HFS 64.60 33 eP 29 26.00 -4.3
0.5s 3.30nm 4.8mb
SOD 65.28 22 iP 29 31.20 -3.4
SUF 68.03 27 eP 29 49.00 -3.2
NUR 68.87 29 iP 30 12.80 15.5
1.0s 108.00nm
ZST 72.92 42 iP 30 15.00 -7.0
i 30 26.50
87 obs. associated

SEP 26, 1990 13h 24m 18.92± 0.18s
3.989 S ± 4.3km 102.385 E ± 5.0km
DEPTH = 58.6km (4 depth phases)
5.6mb (26 obs.)
SOUTHERN SUMATERA (274)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 24C
Centroid Location:
Origin Time 13:24:27.0 0.8
Lat 4.23S 0.08 Lon 102.56E 0.09
Dep 54.2 7.8 Half-durotion 1.5
Moment Tensor; Scale 10**16 Nm
Mrr= 3.14 0.29 Mtt=-2.49 0.36
Mff=-0.65 0.52 Mrt= 2.94 0.57
Mrf=-0.86 0.40 Mtf= 0.57 0.35
Principal Axes:
T Val= 4.46 Plg=67 Azm= 16
N -0.49 0 286
P -3.97 23 196
Best Double Couple:Mo=4.2*10**16
NP1:Strike=285 Dip=22 Slip= 89
NP2: 106 68 90

KGM 6.04 9 ePd 25 51.70 4.0X
0.8s 1025.90nm 6.3mb
e 25 57.00
e 27 06.00
KLM 7.08 354 eP 26 04.50 2.2
0.9s 972.70nm 6.5mb
PSI 7.49 332 ePc 26 08.30 0.4
TSI 8.36 333 eP 26 21.00 1.0
IPM 8.62 351 ePc 26 25.80 2.2
0.8s 318.30nm 6.3mb
e 27 07.50
SNG 11.23 351 eP 27 00.00 0.8
KKM 17.03 54 ePd 28 19.00 4.2X
1.0s 96.90nm 4.9mb
NST 19.66 354 eP 28 45.00 -1.0
LOE 21.27 358 iPc 29 03.00 0.5
BDT 21.36 351 eP 28 58.00 -5.4X
0.8s 119.40nm 5.3mb
NANU 22.43 147 eP 29 15.40 1.4
eS 33 22.00
CHTO 22.91 352 iP 29 18.10 -0.6
1.0s 110.00nm 5.2mb
MNI 23.08 77 ePd 29 22.00 1.6
MBL 24.06 137 eP 29 31.00 1.1
eS 33 55.00
AAI 25.75 90 eP 29 52.10 6.1X
KMI 28.94 1 Pc 30 16.00 0.9
1.0s 0.80nm 3.3mb X
sP 30 35.00
MTN 29.74 109 iPc 30 19.90 -2.2
GBA 30.31 306 P 30 27.00 -0.1
e 33 27.00
MUN 30.72 157 eP 30 32.00 1.4
KLB 31.03 154 eP 30 33.00 -0.4
HYB 31.71 313 eP 30 39.00 -0.6
WARB 32.05 136 eP 30 41.50 -0.9
i 30 50.40 31kmX
COOL 32.07 149 eP 30 41.50 -1.0
WB5 34.94 120 iPc 31 06.20 -1.3
eS 36 30.50
PKI 35.39 333 Pc 31 11.20 -0.4
GUN 35.48 334 Pc 31 12.20 -0.2
DMN 35.56 333 Pc 31 12.60 -0.3

KKN 35.64 333 Pc 31 13.20 -0.3
GKN 36.11 333 Pc 31 17.40 0.0
ASPA 36.16 126 iPc 31 17.50 -0.3
0.3s 106.00nm 6.2mb
Z 18s 0.39um 4.2Msz
iPcP 33 42.40
iS 36 50.90
eScS 41 57.70
LR 44 58.10
SSE 39.23 26 iPc 31 45.00 1.7
1.0s 25.00nm 5.0mb
Z 20s 0.50um 4.3Msz
PcP 33 51.20
eS 38 12.00
DIS 39.78 118 iPc 31 47.70 -0.4
i 33 53.50
LZH 39.89 2 iPc 31 49.50 0.6
1.0s 125.00nm 5.7mb
pP 32 04.50 59km
sP 32 10.80
S 41 49.50
sS 42 13.00
NDI 40.51 325 iPc 31 54.00 0.1
0.5s 373.24nm 6.5mb
CTA 45.61 114 iPc 32 35.20 -0.3
1.0s 141.00nm 5.8mb
ADE 45.61 137 iPd 32 35.70 0.4
0.7s 49.32nm 5.5mb
BJI 45.61 15 eP 32 36.00 0.9
0.9s 110.00nm 5.7mb
Z 18s 0.59um 4.6Msz
ePcP 34 12.50
ePcS 38 04.00
eS 39 14.00
OLP 45.88 124 eP 32 38.00 0.5
STK 46.06 132 iPc 32 39.30 0.5
0.6s 54.00nm 5.7mb
OUE 47.99 318 eP 32 53.30 -1.0
0.9s 28.57nm 5.3mb
iS 34 02.00
e(S) 35 13.00
CMS 49.10 129 eP 33 02.00 -0.6
BFD 49.42 137 eP 33 07.00 2.0
RMO 49.64 122 eP 33 05.80 -1.1
e 34 27.30 405kmX
TOO 51.63 136 ePd 33 23.50 1.6
MTMJ 52.17 36 P 33 25.10 -0.9
BWA 52.31 131 eP . 33 29.60 2.5
MAT 52.38 37 iPc 33 25.90 -1.6
0.8s 22.39nm 5.2mb
(S) 41 20.00
CHJJ 52.52 38 P 33 26.80 -1.7
CAN 53.12 132 eP 33 34.10 1.1
BRS 53.33 121 iPd 33 35.00 0.3
i 33 40.00 16kmX
COO 53.58 125 eP 33 37.00 0.5
YAMJ 54.55 36 P 33 42.60 -0.8
OFUJ 56.11 36 P 33 53.40 -1.2
MRRJ 57.99 33 eP 34 07.10 -0.7
HOOJ 59.19 34 eP 34 16.40 0.2
ASAJ 59.97 33 P 34 21.00 -0.6
KUSJ 60.45 35 P 34 24.30 -0.5
RYD 61.21 301 eP 34 29.50 -1.0
KMSA 61.73 296 iP+ 34 32.50 -1.5
SRAT 62.33 293 eP+ 34 38.70 0.4
KMTA 62.63 293 eP+ 34 40.70 0.4
ABHA 62.76 293 eP+ 34 42.70 1.6
AFIF 63.98 299 iP+ 34 49.70 0.8
DZM 64.49 112 iPd 34 51.90 -0.4
TAB 66.60 314 eP 35 03.00 -2.6
WAJH 70.32 299 eP+ 35 28.90 0.2
BADA 72.26 301 iP+ 35 40.30 0.0
HOL 72.41 302 eP+ 35 40.80 -0.4
LTZ 72.58 134 P 35 41.50 -0.5
PRNI 72.73 303 eP 35 43.50 0.4
DSI 72.74 305 eP 35 43.50 0.4
THZ 72.86 132 P 35 43.20 -0.5
e 35 59.80 60km
HRI 72.93 306 eP 35 35.00 -9.3X
BUL 73.40 250 iPd 35 45.80 -1.5
0.8s 16.42nm 5.0mb
ipP 36 02.00 58km
KHZ 73.44 133 P 35 46.50 -0.4
0.6s 18.00nm 5.2mb
CNZ 74.45 129 P 35 53.60 0.5
NGZ 74.49 129 P 35 53.70 0.4
MNG 74.60 131 P 35 53.50 -0.2

PGZ 75.19 131 P 35 57.10 0.0
0.5s 86.00nm 5.9mb
HBZ 76.42 128 eP 36 03.80 -0.3
0.4s 30.00nm 5.6mb
PUZ 76.43 128 P 36 03.40 -0.8
KAS 76.81 314 ePg 36 05.50 -0.8
iSg 36 23.00
SBA 80.85 169 eP 36 29.30 1.8
VRI 82.92 317 ePc 36 39.00 0.2
BCAO 84.19 275 iPc 36 46.00 0.1
0.8s 14.00nm 5.1mb
id 37 02.20 57km
OHR 86.27 311 eP 36 54.30 -1.5
SUF 87.25 333 iP 37 00.20 0.2
0.4s 33.70nm 5.9mb
NUR 87.43 331 eP 37 01.00 0.1
SPC 87.86 319 iP 37 04.50 1.0
e 37 14.40 31kmX
KRA 88.18 320 eP 37 05.30 0.6
SOD 88.21 338 iP 37 04.20 -0.3
KEV 88.69 340 iP 37 06.80 0.0
0.8s 39.60nm 5.7mb
ZST 89.80 318 eP 37 12.30 -0.1
PTJ 90.35 316 iPc 37 15.60 0.5
KSP 90.59 321 iPc 37 17.00 0.9
UPP 90.78 330 iP 37 16.40 -0.3
VBY 90.80 315 iPc 37 11.90 -5.2X
LJU 91.35 316 eP 37 20.00 0.4
PRU 91.64 320 Pc 37 21.00 0.1
BRG 92.08 321 iPc 37 23.10 0.2
1.0s 20.00nm 5.5mb
i 37 34.80 38kmX
i 37 49.80
KHC 92.20 319 P 37 24.50 0.9
CLL 92.70 321 eP 37 26.00 0.3
HFS 92.77 330 eP 37 25.00 -0.9
0.7s 31.30nm 5.9mb
Z 20s 0.07um 4.1Msz
LR 18 22.00
MOX 93.54 320 e(P) 37 30.00 0.3
NB2 94.03 331 P 37 31.10 -0.6
0.8s 11.70nm 5.4mb
INK 105.79 19 ePKP 42 34.00 -2.9X
PNT 122.51 31 ePKP 43 09.00 -0.3
0.8s 19.00nm
LRM 128.46 31 ePKP 43 20.80 -0.5
SCH 128.57 352 ePKP 43 21.00 0.1
SBB 131.83 46 ePKP 43 29.00 1.2
e 46 48.00
GSC 132.24 44 ePKP 43 29.00 0.4
e 46 49.00
TPC 133.39 45 ePKP 43 30.00 -0.8
GLA 134.81 46 ePKP 43 35.00 1.5
SOB1 141.12 250 ePKP 43 38.60 -7.0X
e 43 40.40
e 43 45.40
e 43 54.30
PPD 143.52 224 ePKP 43 46.50 -3.1X
MEO 143.71 30 iPKPd 43 45.70 -3.8X
SIO 143.99 26 iPKP 43 47.50 -2.5
TUL 144.08 26 iPKPc 43 47.80 -2.3
0.7s 57.80nm
SIV 154.27 219 PKP 44 06.20 -0.2
S.D. = 1.0 on 109 of 119 obs.

% SEP 26, 1990 13h 35m 47.14± 1.78s
37.854 N ±10.9km 26.755 E ±18.0km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.4 (ATH).

KAP 2.32 172 ePn 36 25.60 -0.4
NPS 2.75 200 ePn 36 32.50 0.5
VAM 3.19 221 ePn 36 38.60 0.3
VLI 3.25 251 ePb 36 42.70 3.5X
PLG 3.60 315 ePn 36 44.50 0.3
ITM 3.90 262 ePn 36 48.00 -0.4
EVR 4.03 287 ePn 36 50.00 -0.3
S.D. = 0.5 on 6 of 7 obs.

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* SEP 26, 1990 13h 42m 19.19± 0.84s
33.655 S ± 9.6km 70.601 W ±15.8km
DEPTH = 83.5 ± 9.0 km
4.7mb (1 obs.)
CHILE-ARGENTINA BORDER REGION (127)

CHCH 0.28 189 iPc 42 32.40 0.4

			iS	42	42.00		PPCY	24.84	291	eP	38	02.00	1.1	PTJ	38.81	308	eP	40	06.40	2.6X
TACH	0.28	270	iPd	42	31.50	-0.5	KAS	25.18	306	eP	38	06.00	1.7	VKA	39.03	312	ePc	40	05.50	0.0
			iS	42	41.00		BBTK	25.44	302	eP	38	12.00	5.3X		3.0s	313.00nm				5.6mb
PEL	0.52	352	eP	42	33.40	-0.2	HLW	25.71	279	eP	38	11.00	1.8	Z	16s	3.00um				5.2MszX
			iS	42	44.00					eS	42	40.00				e(S)	46	14.00		
LNV	0.74	246	iPd	42	35.50	-0.2	GBZT	28.13	303	eP	38	31.00	-0.2			LR	00	40.00		
			iS	42	47.00		AAE	28.85	230	eP	38	40.00	1.7	BSS	39.11	300	P	40	07.00	0.8
ROCH	0.76	333	iPd	42	36.50	0.2	KAP	29.11	291	eP	38	41.00	0.9	VBY	39.24	307	eP	40	04.30	-2.9X
			iS	42	48.60		SMG	29.56	296	eP	38	43.60	-0.5	DUI	39.42	301	P	40	11.50	2.6X
LCCH	0.83	282	iP	42	37.00	0.3	PRK	30.21	299	eP	38	49.20	-0.7	NUR	39.64	333	iP	40	11.00	0.8
			iS	42	49.50		CFR	30.36	311	eP	38	51.00	-0.1		0.9s	43.90nm				5.2mb
JACH	0.97	0	iPd	42	38.50	0.0	NPS	30.37	291	eP	38	49.00	-2.4			i	40	15.40		
			iS	42	52.50		RDO	31.09	302	iPd	38	57.10	-0.5			e	41	44.00		
SPA	56.52	180	eP	51	54.90	0.0	KDZ	31.28	303	eP	38	59.00	-0.4			e	46	16.00		
	0.9s	6.82nm				4.7mb	BUC	31.50	308	ePc	39	03.00	1.9	KSP	39.69	316	iPc	40	12.00	1.1
			i	52	11.10		VAM	31.53	291	eP	39	01.00	-0.6		1.3s	103.00nm				5.4mb
S.D. = 0.4		on	8 of	8	obs.		VRI	31.54	311	ePc	39	02.00	0.4			i	40	22.20		
----------							PVL	31.70	306	eP	39	05.00	2.0			e	41	50.00		
SEP 26, 1990 15h 32m 40.26± 0.21s							PLD	31.90	304	eP	39	05.00	0.3	RFI	39.76	301	P	40	13.90	2.4
29.147 N ± 5.0km 60.906 E ± 3.3km							MLR	31.93	310	iPc	39	07.50	2.4	LJU	39.82	308	e(P)	40	13.00	1.0
DEPTH = 33.0km (normal)							ATH	32.04	296	eP	39	06.20	0.2	CEY	39.85	308	e(P)	40	12.50	0.2
5.4mb (63 obs.) 5.4Msz (22 obs.)							PGB	32.38	304	iPd	39	10.00	1.0	SDI	39.90	301	P	40	13.00	0.2
SOUTHERN IRAN (353)							CMP	32.47	310	ePc	39	10.00	0.3	FAI	40.00	294	P	40	18.50	4.9X
Felt in the Zahedan orea. Also							MMB	32.51	303	ePd	39	10.00	-0.2	AOU	40.25	302	P	40	17.70	2.1
felt in southwestern Pakistan.							PLG	32.53	300	eP	39	10.00	-0.3	VOY	40.26	308	e(P)	40	13.60	-2.1
CENTROID, MOMENT TENSOR (HRV)							VLI	32.59	293	eP	39	08.00	-2.8	KMR	40.42	311	iP+	40	17.00	0.0
Data Used: GDSN							COZ	32.95	309	ePc	39	15.50	1.4			i(PP)	42	01.70		
L.P.B.: 15S, 31C							KKB	33.04	303	iPd	39	14.00	-0.7	SUF	40.43	336	iP	40	17.60	0.8
Centroid Location:							VTS	33.08	304	iP	39	15.00	-0.2		0.8s	38.30nm				5.2mb
Origin Time 15:32:39.6 0.4							ITM	33.42	294	iPd	39	15.40	-2.6	PRU	40.56	314	eP	40	17.00	-1.0
Lat 29.06N 0.03 Lon 60.51E 0.04							EVR	33.62	297	eP	39	18.80	-1.0	Z	20s	4.60um				5.3Msz
Dep 15.0 FIX Half-duration 2.6							KZN	33.79	300	eP	39	20.00	-1.3	N	18s	1.80um				
Moment Tensor; Scale 10**17 Nm							SKO	34.27	303	iP	39	24.00	-1.3	E	14s	3.20um				
Mrr=-0.25 0.08 Mtt= 0.99 0.12								1.5s	4100.00nm				7.1mb X			e	40	44.00		
Mff=-0.75 0.11 Mrt= 0.00 0.00							Z	17s	4.88um				5.3MszX			S	46	30.00		
Mrf= 0.00 0.00 Mtf= 2.80 0.09							N	18s	4.49um					ARV	40.66	304	P	40	18.00	-1.0
Principal Axes:							E	18s	4.23um					MNS	40.78	302	P	40	20.00	0.0
T Val= 3.06 Plg= 0 Azm=144									i	39	45.20			KHC	40.99	313	P	40	22.10	0.5
N -0.25 90 180									iPP	40	38.00				1.5s	66.50nm				5.1mb
P -2.81 0 54									iS	44	40.00			N	16s	2.20um				
Best Double Couple:Mo=2.9*10**17									iSS	46	50.00			E	18s	2.30um				
NP1:Strike=189 Dip=90 Slip=-180									LR	55	40.00					S	46	40.00		
NP2: 279 90 0							OHR	34.62	301	iPc	39	27.30	-1.1	FVI	41.10	309	Pd	40	23.20	0.7
								1.2s	200.00nm				5.9mb	BRG	41.14	315	iP	40	23.50	0.8
MAIO	7.23	351	iPc	34	27.00	0.6	TIM	35.18	309	ePc	39	32.00	-1.0			i	40	41.60		
	0.8s	34.77nm				5.4mb	KEK	35.24	298	eP	39	32.70	-0.9			iPcP	42	13.80		
		eS	36	34.00			CHG	36.11	98	eP	39	40.90	-0.3			eS	46	40.00		
BRF	9.65	254	eP	34	58.80	-1.1		1.0s	25.00nm				5.1mb			e	48	08.00		
	0.7s	395.00nm				6.8mb X	LZH	36.59	68	P	39	48.20	2.8X			e	50	04.00		
BBU	9.71	255	eP	35	00.20	-0.5		2.0s	153.00nm				5.5mb	BHG	41.20	310	iPc	40	23.50	0.2
	0.8s	640.00nm				6.9mb X	N	13s	3.00um						1.5s	305.00nm				5.8mb
DHR	9.95	256	eP	35	00.00	-4.0X	E	12s	4.80um					VVI	41.27	308	P	40	24.50	0.6
TEH	10.38	312	ePd	35	11.50	1.4			pP	39	56.00	26kmX		CRE	41.39	304	P	40	25.70	0.7
RYD	13.49	254	ePd	35	45.50	-6.3X			sP	40	03.00			WET	41.44	312	eP	40	25.50	0.2
NDI	14.30	88	iPc	35	58.50	-3.8X			PP	41	13.80			Z	17s	2.00um				5.1MszX
	0.5s	52.82nm				5.4mb			S	45	28.00					eS	46	45.00		
TAB	15.04	310	iP+	36	14.00	1.8			sS	45	42.00			SFI	41.48	305	P	40	28.30	2.7X
OASM	15.70	263	eP+	36	15.30	-5.4X	PSZ	36.63	312	iP	39	46.20	0.8	CTI	41.81	308	P	40	26.50	-2.0
POO	15.86	129	iPc	36	23.20	0.5	SPC	36.77	314	eP	39	46.90	0.2	CLL	41.81	316	iPc	40	29.40	1.1
		iS	39	38.50			BDT	36.81	100	eP	39	43.20	-3.9X		1.9s	230.00nm				5.6mb
AFIF	16.62	257	eP	36	34.60	2.1	BUD	37.08	311	eP	39	49.50	0.4			eS	46	47.00		
RUWJ	19.25	285	Pd	37	12.40	7.6X	KRA	37.23	316	eP	39	49.20	-1.1	BRN	41.96	317	eP	40	30.00	0.6
SRAT	19.64	240	eP+	37	06.00	-3.5X		1.4s	168.00nm				5.7mb	WATA	42.02	310	ePc	40	29.00	-1.2
KMTA	19.79	240	eP+	37	08.10	-2.9X	Z	20s	2.30um				5.0Msz		1.3s	222.00nm				5.7mb
HYB	19.95	122	ePd	37	11.50	-0.9	E	20s	3.10um					SOTA	42.25	309	iPd	40	31.70	-0.4
	1.2s	196.00nm				5.3mb			e	39	51.40				1.3s	97.60nm				5.4mb
GKN	20.87	87	P	37	21.40	-0.7			e	40	05.00					i	40	34.60		
CSTJ	21.04	281	Pd	37	24.20	0.4			eS	45	42.00					i	40	41.40		
DMN	21.34	88	P	37	27.00	-0.1	KMI	37.31	86	Pd	39	51.50	0.0	UPP	42.29	329	iP	40	32.00	0.0
HLBJ	21.36	284	Pc	37	29.00	2.0		2.0s	300.00nm				5.8mb	MME	42.32	305	P	40	33.70	0.8
KKN	21.46	88	P	37	27.80	-0.4	Z	20s	4.60um				5.3Msz	BDI	42.39	305	Pd	40	32.80	-0.4
PKI	21.61	88	P	37	29.60	-0.3	N	13s	1.40um					MOX	42.53	314	eP+	40	34.00	-0.2
WAJH	21.76	268	eP	37	31.10	0.2			e	39	52.00				1.9s	99.00nm				5.2mb
GBA	21.78	132	P	37	31.00	-0.1			S	45	40.00			Z	11s	2.40um				5.3MszX
		S	42	42.00					iS	45	41.00			N	13s	2.60um				
SHMJ	21.84	286	Pc	37	31.00	-0.7	SRO	37.63	312	eP	39	54.90	1.3	E	16s	1.40um				
HRI	21.90	287	eP	37	34.00	1.6	ORI	37.83	299	P	39	59.00	3.5X			eS	46	58.00		
GUN	21.97	87	P	37	33.50	0.1	TDS	37.90	298	P	39	56.30	0.2	GRF	42.61	313	ePc	40	35.60	0.7
BHL	22.02	289	Pc	37	34.00	0.4	NAI	38.04	221	iP	40	04.00	6.3X		2.2s	196.00nm				5.4mb
		S	41	40.00				0.9s	16.81nm				4.9mb	Z	18s	2.50um				5.1Msz
DSI	22.15	283	ePd	37	36.00	1.3	HVAR	38.08	304	iP	39	59.60	2.0			e	40	39.20		
JRSJ	22.32	279	Pc	37	37.90	1.4	SOI	38.09	296	Pd	39	57.60	-0.1	OSS	42.91	308	ePd	40	37.80	0.2
HOL	22.56	277	eP	37	39.30	0.5	ZST	38.51	312	eP	40	00.60	-0.5	MDI	43.13	307	P	40	38.90	-0.2
RMN	22.83	280	eP	37	42.50	1.0	MGR	38.52	299	P	40	01.10	-0.2	808	43.25	306	P	40	41.00	0.7
CSS	24.04	291	eP	37	56.00	2.8X	SGO	38.72	300	P	40	03.70	0.8	SNG	43.29	112	eP	40	37.20	-3.5X
ARO	24.31	228	iPd	37	57.60	1.5	SOP	38.75	311	eP	40	04.80	1.7			eS	47	15.30		
		S	42	29.00			ZAG	38.78	308	eP	40	07.00	3.6X	COP	43.30	322	iP	40	42.00	1.7

26d 15h

			eS	47	08.00	
CGL	43.35	298	P	40	42.30	1.2
VDL	43.36	308	ePd	40	41.40	0.1
SOD	43.40	342	iP	40	42.20	1.1
SAX	43.51	309	ePd	40	42.30	-0.3
LLS	43.72	309	ePd	40	43.30	-0.8
VAI	43.80	307	Pd	40	44.00	-0.5
LWI	43.81	230	iPc	40	45.90	0.7
SLE	44.14	310	ePd	40	46.80	-0.5
HFS	44.20	328	eP	40	47.70	0.1
	1.2s	74.70nm				5.4mb
	Z 18s	3.37um				5.3Msz
		LR		58	54.00	
ORO	44.33	307	P	40	54.80	5.7X
MMK	44.37	307	ePd	40	48.80	-0.7
TNS	44.46	313	ePc	40	50.50	0.6
FEL	44.47	310	P	40	48.63	-1.5
SBF	44.67	304	eP	40	50.10	-1.6
	1.2s	98.20nm				5.5mb
PSI	44.68	119	eP	40	52.50	0.5
DIX	44.75	307	ePd	40	52.00	-0.7
DOI	44.81	305	Pd	40	51.60	-1.3
GWF	44.84	311	P	40	51.98	-1.0
WLS	44.96	311	P	40	52.82	-1.2
KEV	45.01	344	iP	40	54.20	0.2
	0.9s	45.60nm				5.4mb
	Z 20s	12.80um				5.9Msz
		e		42	52.00	
		e		47	36.00	
		e		50	56.00	
		LR		01	30.00	
CDF	45.01	311	P	40	53.13	-1.3
MOF	45.06	310	P	40	53.96	-0.9
ECH	45.07	310	P	40	53.85	-1.0
LPG	45.19	307	eP	40	55.20	-1.0
	1.6s	77.75nm				5.4mb
LPL	45.21	307	eP	40	55.30	-0.9
	1.3s	45.15nm				5.2mb
LOMF	45.23	309	P	40	55.35	-0.8
BNI	45.23	306	Pd	40	55.50	-0.8
BSF	45.29	310	eP	40	55.30	-1.4
	1.2s	23.80nm				5.0mb
HAU	45.60	310	eP	40	57.90	-1.1
	1.6s	55.95nm				5.2mb
	Z 20s	2.50um				5.2Msz
NB2	45.68	329	P	40	59.10	-0.3
	1.0s	28.60nm				5.1mb
WTS	45.73	316	eP	41	01.50	1.6
	0.9s	34.00nm				5.3mb
VITF	45.86	310	P	40	59.86	-1.1
WIT	45.94	317	e(P)	41	04.00	2.5
BJI	46.12	61	eP	41	02.00	-1.2
	1.5s	26.00nm				4.9mb
	Z 18s	3.29um				5.3Msz
	N 14s	2.13um				
		ePP		42	50.00	
		eS		47	48.00	
ENN	46.13	314	eP	41	04.00	0.9
	0.8s	21.00nm				5.1mb
DOU	46.91	313	Pd	41	10.50	1.2
		S		48	00.00	
		PS		48	07.00	
		e		48	19.00	
		e		51	41.00	
BCAO	47.03	247	ePc	40	52.20	-18.5X
	1.0s	30.00nm				
		ic		41	09.90	
		id		41	25.10	
TRO	47.03	341	eP	41	11.60	1.6
UCC	47.12	314	P	41	13.00	2.1
		S		48	06.00	
SNF	47.14	313	P	41	11.90	0.8
LBF	47.16	309	eP	41	10.30	-1.1
	1.6s	111.95nm				5.6mb
LOR	47.24	309	eP	41	10.80	-1.2
	1.4s	65.35nm				5.4mb
	Z 20s	2.50um				5.2Msz
SSF	47.48	309	eP	41	12.90	-1.0
	1.6s	124.40nm				5.7mb
AVF	47.58	308	eP	41	13.60	-1.0
	1.6s	74.65nm				5.5mb
BGF	47.93	308	eP	41	16.30	-1.1
	1.6s	68.40nm				5.4mb
MAF	48.12	307	eP	41	18.20	-0.7
	1.6s	80.85nm				5.5mb
TCF	48.37	308	eP	41	19.90	-0.9
	1.4s	30.50nm				5.1mb

CAF	48.50	306	eP	41	20.90	-1.0
	1.6s	99.50nm				5.6mb
KGM	48.52	116	eP	41	24.00	1.7
RJF	48.88	306	eP	41	23.90	-0.8
	1.6s	99.50nm				5.6mb
	Z 20s	3.25um				5.3Msz
LPO	49.14	305	eP	41	26.10	-0.6
	1.6s	74.65nm				5.5mb
LFF	49.44	306	eP	41	28.00	-1.1
	1.4s	87.15nm				5.6mb
LDF	49.93	311	eP	41	32.00	-0.8
	1.2s	47.60nm				5.4mb
MFF	49.99	308	eP	41	32.10	-1.1
	1.4s	78.40nm				5.5mb
FLN	50.17	311	eP	41	33.40	-1.2
	1.2s	56.55nm				5.5mb
	Z 20s	4.25um				5.5Msz
GRR	50.43	310	eP	41	35.80	-0.7
	1.2s	65.45nm				5.5mb
LPF	50.56	310	eP	41	36.30	-1.2
	1.4s	61.00nm				5.4mb
ACU	50.96	298	eP	41	42.90	2.1
ECHE	51.23	299	eP	41	42.90	0.1
SSE	51.61	72	eP	41	45.00	-0.7
	1.5s	34.00nm				5.1mb
	Z 18s	2.20um				5.2Msz
	N 15s	3.10um				
	E 14s	1.10um				
		eS		49	11.00	
		sS		49	36.00	
		SS		52	52.00	
ETOR	51.88	301	eP	41	46.10	-1.7
EKA	51.96	319	Pc	41	47.20	-0.8
	1.2s	14.30nm				4.8mb
EVIA	52.56	298	eP	41	51.90	-1.0
ENIJ	52.64	296	eP	41	55.20	1.8
GUD	53.48	301	eP	41	59.60	-0.1
TOL	53.53	300	eP	41	59.00	-0.9
		iS		49	35.00	
AFC	53.62	297	e(P)	41	59.50	-1.3
EBAN	53.63	298	eP	42	00.00	-0.7
ECOG	53.63	297	eP	41	59.50	-1.3
ETA	53.74	316	eP	42	04.40	3.2X
ASMO	53.76	297	eP	42	00.50	-1.2
APHE	53.79	296	eP	42	01.50	-0.5
ECP	53.85	315	eP	42	04.30	2.3
	1.0s	51.00nm				5.5mb
ECP	53.85	315	eP	42	03.60	1.6
	0.7s	42.00nm				5.6mb
ATEJ	54.06	296	eP	42	02.50	-1.5
AAPN	54.06	297	eP	42	01.70	-2.3
ALOJ	54.09	297	eP	42	01 00	-3.2X
ECB	54.10	316	eP	42	03.60	-0.2
	0.7s	42.00nm				5.6mb
ECB	54.10	316	eP	42	04.30	0.5
	1.0s	51.00nm				5.5mb
MAL	54.41	296	iPd	42	05.00	-1.4
		eS		49	42.00	
EHOR	54.83	298	eP	42	08.10	-1.4
EPRU	55.00	297	eP	42	11.90	1.1
EPLA	55.03	300	eP	42	10.40	-0.6
ERUA	55.41	303	eP	42	12.50	-1.1
BAG	55.95	89	eP	42	18.50	0.4
STS	56.35	304	eP	42	22.50	2.2
KKM	56.92	103	ePc	42	26.00	1.0
OCP	57.12	91	eP	42	26.00	-0.3
BUL	58.07	216	iPd	42	30.30	-2.6
	0.9s	8.40nm				4.8mb
SLR	62.92	213	iPc	43	05.00	-0.9
	1.5s	41.67nm				5.3mb
	Z 18s	4.12um				5.6Msz
MAT	63.76	61	(P)	43	12.00	0.8
	1.0s	10.00nm				4.9mb
	Z 20s	1.42um				5.1Msz
		eS		51	42.00	
LKO	64.92	267	P	43	15.88	-3.3X
SEK	65.42	212	iPc	43	20.60	-1.5
	0.5s	17.61nm				5.4mb
KIC	65.68	264	P	43	24.86	0.9
TIC	65.78	264	P	43	25.44	0.8
LIC	65.99	264	P	43	26.68	0.7
	Z 20s	3.00um				5.5Msz
MBL	75.67	124	eP	44	25.00	0.8
GUMO	78.31	81	eP	44	25.00	-14.1X
	Z 20s	0.73um				5.0Msz
IMA	81.45	14	P	44	54.50	-0.7
	1.0s	13.13nm				4.9mb

INK	82.25	5	ePd	45	00.20	1.1
FBA	83.63	12	P	45	06.40	0.1
	0.9s	13.96nm				5.1mb
TTA	83.63	16	P	45	05.80	-0.7
	1.2s	26.52nm				5.3mb
WB5	85.95	115	eP	45	19.00	0.3
PMR	86.37	14	P	45	19.90	-0.2
	1.0s	32.50nm				5.5mb
	Z 20s	5.00um				5.9Msz
ASPA	87.64	119	iPd	45	27.70	0.8
	1.1s	52.00nm				5.7mb
	Z 23s	1.39um				5.3MszX
		iS		55	53.30	
		LR		28	47.20	
OIS	90.49	113	eP	45	42.00	1.7
FFC	95.18	350	eP	46	01.00	-0.5
	0.8s	10.00nm				5.3mb
GLD	110.25	349	PKP	51	15.00	4.3X
	Z 19s	2.38um				5.8Msz
GOL	110.32	349	PKP	51	15.00	4.1X
	Z 20s	2.10um				5.7Msz
ANMO	115.14	349	PKP	51	27.00	6.8X
	Z 20s	2.13um				5.7Msz
ALQ	115.15	349	ePKP	51	27.00	6.7X
	Z 20s	1.47um				5.6Msz
HON	117.35	41	PKP	51	30.00	5.5X
	Z 20s	1.33um				5.6Msz
SIV	125.33	271	Pdiff	48	22.60	5.8X
	S.D. = 1.1	on 210 of 242 obs.				

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* SEP 26, 1990 15h 40m 42.43± 0.82s
36.190 S ±17.2km 100.795 W ±11.3km
DEPTH = 10.0km (geophysicist)
5.2mb (5 obs.) 4.9Msz (3 obs.)
SOUTHERN PACIFIC OCEAN (692)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 38C
Centroid Location:
Origin Time 15:40:46.7 0.2
Lat 36.38S 0.03 Lon 100.41W 0.03
Dep 15.0 FIX Half-duration 2.6
Moment Tensor; Scale 10**17 Nm
Mrr=-0.33 0.07 Mtt=-0.55 0.08
Mff= 0.88 0.09 Mrt=-0.06 0.21
Mrf=-0.42 0.26 Mtf=-3.17 0.07
Principal Axes:
T Val= 3.44 Plg= 4 Azm= 52
N -0.32 82 176
P -3.12 6 321
Best Double Couple:Mo=3.3*10**17
NP1:Strike= 96 Dip=82 Slip=-179
NP2: 6 89 -8

LNV	24.11	93	eP	46	01.00	1.9
CHCH	24.73	94	eP	46	05.40	0.2
SAN	24.84	93	eP	46	07.00	0.7
PEL	24.90	92	eP	46	05.50	-1.4
		i		46	08.00	
MDZ	26.46	92	eP	46	22.10	0.7
NNA	32.36	48	iP	47	13.00	-1.3
	1.2s	31.25nm				5 1mb
	Z 20s	1.42um				4.7Msz
		i		48	22.50	
ARE	32.60	61	eP	47	15.00	-1.7
CNCB	34.90	65	P	47	37.30	0.4
LPB	34.99	65	P	47	39.00	1.5
		LR		57	20.00	
ZOBO	35.14	64	PKPc	47	38.90	-0.1
	1.2s	51.35nm				5.3mb
		SKS		55	36.00	
CCH	35.90	68	P	47	46.90	1.7
PPD	45.02	86	eP	48	59.30	-0.8
BAO	51.05	81	eP	49	46.90	-0.3
SPA	53.99	180	eP	50	09.40	0.8
	1.3s	26.67nm				5.1mb
	Z 20s	1.13um				4.9Msz
SOB1	60.40	79	eP	50	52.80	-1.7
CAI	64.97	79	eP	51	24.10	-0.8
ALQ	70.96	355	eP	52	02.00	-0.1
	1.0s	5.00nm				4.6mb
PRI	74.30	343	ePc	52	23.20	1.5
PRS	74.65	343	eP	52	24.80	1.3
FRI	74.90	344	eP	52	22.50	-2.4
GCC	75.46	343	eP	52	29.30	1.1
MHC	75.67	343	ePc	52	31.20	1.6
CMB	76.05	344	ePd	52	32.60	1.0

BKS 76.32 343 eP 52 31.10 -2.0
0.9s 55.00nm 5.6mb
Z 20s 1.30um 5.2Msz
N 20s 1.30um
E 20s 0.40um
eS 06 30.00
eSS 13 16.00
eLR 36 36.00
WDC 78.97 343 iPd 52 48.20 0.6
PNT 86.76 348 eP 53 31.00 3.5X
SSE 144.88 274 PKP 00 19.00 -2.4
1.2s 28.00nm
BJI 150.80 289 ePKP 00 35.50 5.0X
LOE 152.65 233 ePKP 00 41.00 7.1X
S.D. = 1.4 on 26 of 29 obs.

• SEP 26, 1990 16h 01m 55.12± 0.85s
47.741 N ± 6.9km 6.995 E ±10.5km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
MD 1.0 (STR).

MOF 0.14 40 Pg 01 58.77 0.2
Sg 02 01.57
LOMF 0.41 196 Pg 02 03.42 0.0
Sg 02 09.54
CDF 0.70 16 Pg 02 08.62 -0.4
Sg 02 18.71
WLS 0.71 20 Pg 02 09.37 0.1
VITF 0.83 305 Pg 02 11.22 0.1
S.D. = 0.3 on 5 of 5 obs.

• SEP 26, 1990 17h 01m 06.69± 2.83s
17.480 N ±16.7km 61.149 W ±19.7km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 3.3 (FDF).

CPB 0.67 284 eP 01 20.16 0.3
eS 01 32.16
BPA 0.80 238 eP 01 22.50 0.2
SEG 1.12 198 eP 01 27.85 0.1
S 01 45.60
NEV 1.40 256 eP 01 32.01 -0.3
eS 01 51.54
DOG 1.51 197 eP 01 33.50 -0.3
SKI 1.52 265 eP 01 33.82 -0.2
eS 01 54.63
PAG 1.53 200 eP 01 34.00 -0.1
S 01 56.00
MGG 1.56 186 eP 01 35.10 0.6
BBL 1.97 189 eP 01 40.20 -0.3
S.D. = 0.4 on 9 of 9 obs.

? SEP 26, 1990 17h 28m 15.38± 9.39s
48.819 N ±28.8km 9.128 E ±62.2km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
MD 1.0 (STR).

GWF 1.01 280 Pg 28 34.29 -0.2
Sg 28 46.18
FEL 1.20 219 Pg 28 37.69 -0.2
WLS 1.25 252 Pg 28 38.42 -0.1
Sg 28 53.49
CDF 1.29 252 Pg 28 39.76 0.3
Sg 28 55.74
ECH 1.44 246 Pg 28 41.84 0.3
LOMF 2.13 227 Pg 28 55.53 4.0X
S.D. = 0.4 on 5 of 6 obs.

? SEP 26, 1990 17h 58m 59.55± 1.65s
31.294 S ±38.0km 68.369 W ±21.8km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.09 247 iPc 59 15.00 -0.3
eS 59 23.00
CFA 0.33 160 eP 59 16.00 0.3
ZON 0.36 226 eP 59 16.10 0.2
eS 59 27.10
RTCB 0.42 242 ePd 59 11.00 -5.2X
S 59 26.50
RTCV 0.58 194 ePc 59 17.00 -0.3
S 59 28.80
RTBS 1.00 248 e(P) 59 21.00 0.1
S.D. = 0.4 on 5 of 6 obs.

? SEP 26, 1990 18h 28m 03.10± 8.39s
15.747 N ±19.8km 60.726 W ±56.3km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.9 (FDF).

MGG 0.59 287 iPc 28 16.27 1.2
S 28 22.60
SFG 0.68 318 ePc 28 17.40 0.9
S 28 24.50
BBL 0.76 253 iPc 28 18.77 0.8
S 28 27.90
DOG 0.90 288 iPc 28 21.06 0.6
S 28 31.50
PAG 0.96 287 ePc 28 21.86 0.5
S 28 32.60
SEG 0.99 311 ePd 28 22.50 0.6
S 28 33.90
S.D. = 0.3 on 6 of 6 obs.

• SEP 26, 1990 18h 54m 51.26± 1.83s
10.497 S ± 8.3km 124.407 E ±10.2km
DEPTH = 52.3 ± 22.3 km
4.8mb (6 obs.)
TIMOR (289)

KNA 6.73 141 iPd 56 30.30 0.4
eS 57 42.50
MTN 6.99 110 iPc 56 33.80 0.3
eS 57 51.00
MBL 11.48 202 eP 57 33.50 -1.7
WB5 13.39 135 eP 57 57.20 -3.4X
eS 00 19.20
NANU 14.70 214 eP 58 18.00 0.3
eS 00 52.00
WARB 15.75 173 eP 58 31.20 0.0
eS 01 22.00
ASPA 15.92 147 iPc 58 32.50 -1.0
0.8s 11.00nm 4.0mb
iS 01 20.10
QIS 17.72 126 eP 58 55.00 -1.0
e 59 00.00
eS 02 02.00
KKM 18.35 333 ePc 59 05 00 1.2
MRWA 20.22 202 eP 59 26.00 1.4
eS 03 00.00
FORR 20.54 171 eP 59 30.00 2.1
0.4s 11.00nm 4.5mb
CHG 38.46 319 eP 02 10.90 0.8
GBA 52.39 296 Pd 03 59.90 -1.0
0.6s 3.30nm 4.5mb
GUN 53.37 317 P 04 08.30 0.0
0.6s 23.00nm 5.4mb
PKI 53.47 316 P 04 08.60 -0.5
0.4s 6.00nm 5.0mb
KKN 53.70 316 P 04 09.90 -0.7
DMN 53.71 316 P 04 10.40 -0.3
GKN 54.28 316 P 04 14.30 -0.5
0.4s 7.00nm 5.0mb
S.D. = 1.1 on 17 of 18 obs.

• SEP 26, 1990 19h 54m 37.66± 0.39s
16.166 S ±15.7km 172.887 W ±13.8km
DEPTH = 33.0km (normal)
5.0mb (11 obs.) 4.8Msz (1 obs.)
SAMOA ISLANDS REGION (169)

BKM 18.12 263 iPc 59 02.00 13.5X
DZM 20.38 250 iPc 59 15.20 0.6
LTZ 29.41 203 eP 00 40.90 0.6
CAN 38.96 233 eP 02 11.00 8.4X
BWA 39.13 235 eP 02 09.70 5.7X
WB5 50.13 257 eP 03 28.80 -3.4X
ASPA 50.35 252 iPd 03 31.30 -2.5
1.0s 17.00nm 5.0mb
Z 18s 0.91um 4.8Msz
LR 23 23.70
WARB 56.84 249 eP 04 19.60 -2.1
BCH 71.51 43 P 05 57.30 -0.2
PRI 71.70 42 eP 06 05.30 6.7X
MHC 71.80 41 eP 06 07.00 7.8X
ABL 71.89 44 P 06 00.00 0.1
FRI 72.82 42 eP 06 05.20 0.1
CMB 73.01 41 iPc 06 06.60 0.3
ORV 73.25 39 eP 06 07.20 -0.4
WDC 73.28 38 iPc 06 08.20 0.5
MIN 73.68 38 eP 06 08.00 -2.2
GLA 73.93 48 P 06 12.00 0.3
SPA 73.94 180 iPd 06 11.80 0.5
1.0s 20.00nm 5.1mb
i 06 23.20
LBFM 74.14 37 P 06 13.00 0.1
TNP 75.06 42 P 06 17.80 -0.6
0.9s 9.77nm 4.8mb
BMW 76.71 33 P 06 27.00 -0.3
LON 77.63 33 P 06 32.00 -0.4
GMW 77.64 32 P 06 32.20 -0.1
RMW 78.09 33 P 06 35.00 0.1
PNT 80.39 32 eP 06 47.00 -0.3
0.8s 14.00nm 5.0mb
ALQ 80.91 50 eP 06 50.70 0.1
1.0s 7.50nm 4.6mb
LRM 82.31 38 eP 06 58.10 0.4
BW06 82.51 42 P 06 58.10 -0.7
0.9s 14.41nm 5.0mb
FBA 83.05 11 P 07 00.50 -0.3
0.8s 20.69nm 5.3mb
IMA 83.25 8 P 07 02.20 0.3
1.0s 3.75nm 4.5mb
GOL 83.83 46 P 07 05.70 0.1
0.9s 9.47nm 4.9mb
GLD 83.96 46 P 07 06.80 0.6
1.2s 35.35nm 5.4mb
SES 85.55 34 ePd 07 13.80 0.1
BJI 86.35 313 eP 07 20.00 2.2
1.2s 16.00nm 5.1mb
RSSD 86.69 42 P 07 18.30 -1.4
CHG 93.42 288 eP 07 53.10 1.7
CLL 144.63 354 ePKP 14 11.00 -1.4
KSP 144.63 350 ePKPc 14 11.90 -0.5
KRA 144.64 346 ePKP 14 11.30 -1.2
SPC 145.37 345 ePKP 14 14.50 0.5
MOX 145.42 355 ePKP 14 14.00 0.2
1.3s 22.00nm
PRU 145.73 351 iPKPc 14 15.30 1.0
1.5s 35.70nm
e 14 21.00
NAI 145.94 242 iPKP 14 19.00 2.9X
KAS 145.95 323 ePKP 14 18.00 2.9X
VRI 146.14 335 ePKPc 14 12.00 -3.2X
GRF 146.40 355 ePKPc 14 18.00 2.5X
1.4s 44.00nm
KHC 146.70 352 PKP 14 18.60 2.6X
e 14 30.00
MLR 146.77 336 ePKP 14 20.00 3.6X
e 30 19.00
FLN 146.90 9 ePKP 14 17.90 1.6
0.8s 6.70nm
ZST 147.02 348 ePKP 14 19.40 2.9X
SRO 147.12 346 ePKP 14 19.60 3.0X
LDF 147.12 9 ePKP 14 18.30 1.7
0.8s 5.35nm
GRR 147.21 10 ePKP 14 19.00 2.2
0.8s 10.75nm
CMP 147.31 336 ePKPc 14 24.00 6.9X
BBTK 147.52 322 ePKP 14 22.00 4.3X
LPF 147.52 10 ePKP 14 19.70 2.4X
0.8s 13.45nm
CDF 147.84 360 ePKP 14 21.00 3.1X
1.0s 8.00nm
BHG 148.18 353 iPKPc 14 22.60 4.2X
BZS 148.22 341 ePKP 14 15.00 -3.5X
e 30 20.00
HAU 148.24 1 ePKP 14 21.90 3.4X
0.8s 8.05nm
BSF 148.42 0 ePKP 14 22.10 3.2X
1.0s 6.00nm
LOR 148.87 4 ePKP 14 23.50 4.0X
1.0s 10.00nm
SSF 149.05 5 ePKP 14 24.30 4.5X
1.2s 20.85nm
LBF 149.16 4 ePKP 14 24.30 4.3X
1.0s 12.00nm
AVF 149.31 5 ePKP 14 24.40 4.2X
0.8s 4.05nm
SMF 149.49 4 ePKP 14 25.10 4.6X
1.0s 8.00nm
BGF 149.49 6 ePKP 14 25.30 4.8X
1.2s 20.85nm
RJF 150.57 8 ePKP 14 27.60 5.5X
1.2s 17.85nm
LPL 150.74 1 ePKP 14 29.40 6.7X
1.0s 7.00nm

26d 20h

LPG	150.76	1	ePKP	14	29.40	6.6X
	1.2s	17.85nm				
LFF	150.82	9	ePKP	14	28.40	5.9X
	1.2s	23.80nm				
SKO	151.48	337	ePKP	14	26.00	2.4X
			i	14	30.00	
OHR	152.47	337	ePKP	14	24.00	-1.1
	S.D. = 1.1		on 41 of 74 obs.			

? SEP 26, 1990 20h 10m 41.93± 0.56s
14.736 S ±28.8km 173.372 W ±17.4km
DEPTH = 33.0km (normal)
5.0mb (9 obs.) 4.7Msz (4 obs.)
SAMOA ISLANDS REGION (169)

DZM	20.48	246	iPc	15	19.30	-0.6
WB5	50.00	256	eP	19	30.20	-5.3X
ASPA	50.35	251	eP	19	32.50	-5.6X
	1.3s	45.00nm			5.3mb	
	Z 20s	0.73um			4.7Msz	
			LR	38	21.10	
BCH	70.81	44	P	21	58.00	0.5
ABL	71.20	45	P	22	12.00	11.9X
TNP	74.34	43	P	22	17.80	-0.6
	1.0s	6.67nm			4.6mb	
ALO	80.35	50	eP	22	52.00	0.1
	1.5s	15.28nm			4.8mb	
			e	23	12.00	
LRM	81.48	38	eP	23	01.30	3.6X
FBA	81.74	11	P	22	57.60	-0.7
	1.0s	16.25nm			5.0mb	
BW06	81.76	42	P	22	58.00	-1.2
	1.2s	8.22nm			4.6mb	
IMA	81.90	8	P	23	02.60	3.3X
GOL	83.18	46	P	23	07.00	0.4
	1.2s	10.25nm			4.8mb	
GLD	83.30	46	P	23	08.80	1.7
	1.2s	32.83nm			5.3mb	
BJI	85.03	313	eP	23	16.50	1.0
	2.0s	166.00nm			5.9mb	
			eS	33	50.00	
RSSD	85.95	42	P	23	20.00	-0.4
MEO	86.25	53	e(P)	23	21.50	-0.3
INK	87.62	14	eP	23	27.00	-0.7
LZH	92.85	306	eP	23	53.50	0.5
	2.0s	43.00nm			5.5mb	
			sP	24	01.50	
KEV	123.55	352	ePKP	29	31.00	-5.9X
HFS	134.38	355	ePKP	29	57.20	-0.7
	1.3s	16.50nm				
KSP	143.15	350	ePKP	30	13.70	-0.5
CLL	143.16	353	ePKP	30	13.00	-1.2
BRG	143.47	352	e(PKP)	30	13.80	-1.0
	1.2s	11.00nm				
			e	30	19.40	
SPC	143.87	345	ePKP	30	13.90	-1.9
MOX	143.96	355	ePKP	30	15.00	-0.6
PRU	144.26	351	PKP	30	14.80	-1.3
KAS	144.53	324	iPKPd	30	16.90	-0.1
DOU	144.70	2	PKPc	30	17.20	0.3
GRF	144.94	355	ePKPd	30	16.60	-0.7
			e	30	18.40	
			e	30	25.50	
PSZ	145.13	344	ePKP	30	17.00	-0.8
KHC	145.23	352	PKP	30	18.20	0.3
	1.2s	17.00nm				
ZST	145.53	348	ePKP	30	18.50	0.1
FLN	145.57	8	ePKP	30	17.20	-1.2
	1.2s	47.60nm				
	Z 20s	0.15um			4.8Msz	
SRO	145.62	346	iPKP	30	19.00	0.5
BUD	145.76	345	e(PKP)	30	18.00	-0.8
LDF	145.78	8	ePKP	30	18.10	-0.7
	1.2s	41.65nm				
CMP	145.82	337	ePKPc	30	22.00	3.0X
GWF	145.85	359	PKP	30	19.39	0.5
GRR	145.88	9	ePKP	30	18.80	-0.1
	1.3s	50.55nm				
BBTK	146.11	323	ePKP	30	20.00	0.2
SOP	146.13	348	ePKP	30	22.00	2.6X
LPF	146.20	9	ePKP	30	19.60	0.1
	1.2s	53.55nm				
WLS	146.42	359	PKP	30	21.04	1.1
CDF	146.42	359	PKP	30	21.16	1.2
VITF	146.61	1	PKP	30	21.25	1.2
ECH	146.62	359	PKP	30	21.28	1.1
HAU	146.83	0	ePKP	30	21.90	1.4
	1.0s	16.00nm				
	Z 20s	0.10um			4.6Msz	
FEL	146.94	358	PKP	30	22.61	1.8X
MOF	146.98	359	PKP	30	22.85	2.0X
BSF	147.00	360	ePKP	30	22.20	1.3
	0.8s	8.05nm				
WATA	147.24	354	ePKP	30	21.00	-0.4
	1.5s	35.00nm				
SOTA	147.39	354	iPKPd	30	23.70	2.1X
	1.5s	37.50nm				
LOMF	147.48	360	PKP	30	22.95	1.3
LOR	147.48	4	ePKP	30	23.40	1.8X
	1.2s	35.70nm				
	Z 20s	0.28um			5.0Msz	
SSF	147.67	4	ePKP	30	24.10	2.2X
	1.2s	52.05nm				
MFF	147.73	9	ePKP	30	24.00	2.0X
	1.0s	16.00nm				
LBF	147.77	3	ePKP	30	24.30	2.2X
	1.2s	38.70nm				
HRI	147.80	310	ePKP	30	23.00	0.3
AVF	147.93	4	ePKP	30	24.10	1.8X
	0.8s	12.10nm				
SMF	148.10	4	ePKP	30	24.60	2.0X
	0.9s	13.10nm				
BGF	148.12	5	ePKP	30	25.00	2.4X
	1.0s	24.00nm				
LSF	148.29	7	ePKP	30	25.10	2.2X
	1.2s	38.70nm				
TCF	148.33	6	ePKP	30	25.30	2.3X
	1.2s	20.85nm				
MAF	148.43	5	ePKP	30	25.90	2.8X
	1.2s	29.75nm				
DSI	148.84	307	ePKP	30	28.00	3.8X
LPL	149.32	360	ePKP	30	29.30	4.5X
	1.0s	21.00nm				
LPG	149.34	360	ePKP	30	29.60	4.6X
	1.2s	28.25nm				
LFF	149.48	8	ePKP	30	28.70	3.9X
	1.0s	24.00nm				
LPO	149.80	8	ePKP	30	29.70	4.4X
	1.0s	16.00nm				
MBH	149.98	305	ePKP	30	30.50	4.5X
SKO	149.99	338	iPKP	30	30.50	4.9X
SURF	150.35	360	PKP	30	28.85	2.5X
OHR	150.97	338	ePKP	30	28.50	1.3
	S.D. = 0.9		on 44 of 73 obs.			

* SEP 26, 1990 20h 16m 24.23± 0.79s
26.804 N ±10.7km 57.453 E ± 9.2km
DEPTH = 33.0km (normal)
4.6mb (8 obs.)
SOUTHERN IRAN (353)

BRF	6.20	265	ePn	17	55.60	-0.3
			eSn	19	06.60	
BBU	6.30	266	iPn	17	58.90	1.7
			(Sn)	19	06.80	
QUE	9.01	66	eP	18	28.40	-6.8X
RYD	9.99	260	eP	18	45.50	-3.1X
QASM	12.49	270	eP+	19	15.30	-7.3X
AFIF	13.17	261	eP	19	31.50	-0.2
KMSA	13.49	244	eP	19	33.30	-2.5
SRAT	15.82	239	eP+	20	08.10	1.6
KMTA	15.98	240	eP	20	08.30	-0.1
HY8	21.64	111	eP	21	14.00	0.2
KHC	40.41	315	eP	24	00.00	-0.9
SLL	44.98	331	eP	24	26.20	-11.7X
	0.4s	2.60nm				
LBF	46.28	310	eP	24	48.60	0.2
	0.6s	2.70nm			4.4mb	
SMF	46.34	310	eP	24	48.90	0.1
	1.0s	12.00nm			4.8mb	
LOR	46.39	311	eP	24	49.00	-0.3
	0.8s	4.05nm			4.4mb	
SSF	46.61	310	eP	24	50.90	-0.1
	0.8s	5.35nm			4.6mb	
AVF	46.69	310	eP	24	51.40	-0.2
	1.0s	8.00nm			4.6mb	
BGF	47.01	310	eP	24	54.20	0.0
	0.8s	5.35nm			4.6mb	
MAF	47.18	309	eP	24	55.90	0.4
	0.8s	6.05nm			4.7mb	
TCF	47.43	309	eP	24	57.80	0.3
	0.8s	4.05nm			4.5mb	
	S.D. = 1.0		on 16 of 20 obs.			

? SEP 26, 1990 20h 21m 48.91± 5.38s
32.948 S ±17.8km 72.217 W ±37.8km
DEPTH = 10.8 ± 6.0 km
OFF COAST OF CENTRAL CHILE (134)

LCCH	0.76	134	iPd	22	03.70	0.1
			iS	22	13.10	
ROCH	1.01	92	iPd	22	08.00	-0.2
			i	22	20.20	
			iS	22	21.40	
LNV	1.21	146	iPc	22	11.00	-0.3
			iS	22	26.00	
TACH	1.28	124	iPd	22	12.10	-0.5
			iS	22	28.30	
PEL	1.30	99	iPd	22	13.20	0.2
			iS	22	29.20	
JACH	1.39	79	iPd	22	14.00	-0.4
			iS	22	33.50	
SAN	1.40	112	iPd	22	15.00	0.6
			iS	22	33.00	
CHCH	1.64	127	iPc	22	18.00	0.2
			iS	22	38.50	
	S.D. = 0.5		on 8 of 8 obs.			

SEP 26, 1990 20h 23m 07.39± 0.45s
41.063 N ± 5.2km 20.091 E ± 4.5km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 3.3 (TTG). Felt at Kroljev Vrh, Bistro, Zagreb and Vorozdin, Yugoslavia.

OHR	0.54	85	iPgd	23	16.00	-2.3
			iSg	23	23.90	
ULC	1.10	325	ePg	23	27.00	-1.0
			eSg	23	46.50	
SKO	1.36	48	iPg	23	30.60	-1.8
			i	30	35.40	
			iSg	30	48.50	
			iSb	30	51.50	
KEK	1.37	189	iPd	23	34.10	1.6
			eSg	23	56.50	
KZN	1.48	120	eP	23	33.70	-0.5
			eS	23	55.50	
TTG	1.50	336	ePg	23	34.00	-0.3
			eSg	23	57.30	
PVY	1.53	357	ePg	23	34.40	-0.5
			eSg	23	58.50	
BDV	1.54	323	ePg	23	35.20	0.2
			eSg	23	59.00	
LCI	1.78	247	P	23	36.70	-1.7
			eSn	23	57.30	
IVA	1.81	356	ePn	23	41.40	2.4
			eSn	24	08.30	
HCY	1.83	320	ePn	23	40.00	0.9
			eSn	24	07.00	
NKY	1.93	335	ePn	23	42.00	1.3
			eSn	24	11.00	
EVR	2.52	148	eP	23	51.30	2.2
VTS	2.79	56	eP	23	53.00	0.0
MMB	2.79	78	ePc	23	54.00	1.1
VLS	2.91	172	eP	23	53.60	-1.0
ORI	2.95	251	P	23	56.30	1.2
PGB	3.39	63	eP	24	02.00	0.5
MGR	3.57	256	P	24	03.30	-0.7
SGO	3.66	264	P	24	04.80	-0.5
KDZ	4.05	80	eP	24	11.00	0.2
ITM	4.13	159	eP	24	19.00	7.1X
SOI	4.32	228	P	24	14.20	-0.4
PVL	4.45	59	eP	24	21.00	4.6X
SDI	4.76	280	P	24	19.90	-1.1
ZAG	5.61	329	iPgd	25	11.20	38.3X
			iSg	25	13.40	
PTJ	5.69	330	iPgd	25	09.70	35.6X
	S.D. = 1.3		on 23 of 27 obs.			

& SEP 26, 1990 20h 39m 36.18s
63.564 N 149.878 W
DEPTH = 125.9km
CENTRAL ALASKA (1)
<AGS-P>.

MCK	0.45	68	iP	39	54.69	-0.1
			eS	40	07.68	
HUR	0.60	169	iP	39	55.18	-0.5
			eS	40	09.19	
NEA	1.08	19	eP	39	59.02	-0.7

CUT	1.18	189	iP	40 00.28	-0.5
			eS	40 19.36	
WRH	1.20	40	eP	40 00.60	-0.5
CCB	1.42	39	iP	40 02.81	-0.6
			eS	40 22.93	
HDA	1.54	55	eP	40 04.26	-0.6
FBA	1.62	33	eP	40 05.39	-0.4
SKT	1.76	206	iP	40 06.44	-1.0
GLM	1.79	36	iP	40 07.47	-0.4
GHO	1.85	166	iP	40 08.17	-0.5
			eS	40 33.13	
SML	1.90	157	iP	40 08.39	-0.8
PWA	1.92	180	eP	40 09.17	-0.2
PLRM	2.01	170	iP	40 09.71	-0.7
SCM	2.10	145	eP	40 10.99	-0.7
SUA	2.15	191	eP	40 12.69	0.4
TOA	2.24	129	eP	40 13.06	-0.5
PMS	2.33	176	eP	40 14.01	-0.6
BGL	2.59	208	eP	40 18.11	0.1
SPU	2.60	204	eP	40 17.76	-0.3
DOT	2.60	86	eP	40 17.22	-0.9
CKL	2.64	207	eP	40 18.63	0.0
KLU	2.77	137	eP	40 18.91	-1.5
VLZ	2.95	144	eP	40 20.51	-2.0
SLKM	3.07	183	eP	40 21.87	-2.4
SEW	3.48	176	eP	40 27.36	-2.3
GLB	3.53	124	eP	40 29.42	-1.0
CNPM	4.10	190	eP	40 36.76	-1.3

28 obs. associated

& SEP 26, 1990 20h 41m 47.72s
64.024 N 148.135 W
DEPTH = 104.4km
CENTRAL ALASKA (1)
<AGS-P>.

WRH	0.45	2	iP	42 03.79	-0.1
MCK	0.46	231	iP	42 03.83	-0.1
			eS	42 15.74	
CCB	0.64	13	iP	42 04.97	-0.3
			eS	42 18.18	
HDA	0.64	53	iP	42 05.18	-0.1
			iS	42 18.43	
NEA	0.69	324	eP	42 05.30	-0.4
			eS	42 18.44	
FBA	0.89	9	iPc	42 07.20	-0.4
GLM	1.02	18	iP	42 08.49	-0.5
			eS	42 24.79	
DDM	1.03	102	eP	42 08.91	-0.3
			eS	42 24.56	
HUR	1.25	213	iP	42 11.04	-0.5
			iS	42 28.84	
DOT	1.84	100	iP	42 17.81	-1.2
			eS	42 40.82	
CUT	1.89	212	iP	42 18.59	-0.9
TOA	2.12	154	eP	42 22.33	-0.3
SML	2.23	182	eP	42 23.31	-0.7
SCM	2.23	170	eP	42 23.48	-0.6
			eS	42 52.95	
GHO	2.29	189	eP	42 24.15	-0.7
TMW	2.40	105	eP	42 24.67	-1.5
PLRM	2.48	191	eP	42 27.07	-0.3
PMR	2.48	191	eP	42 26.30	-1.0
PWA	2.51	199	eP	42 27.22	-0.5
			eS	42 58.25	
SKT	2.57	219	iP	42 27.01	-1.5
KLU	2.74	157	eP	42 29.49	-1.4
FYU	2.83	24	iP	42 31.04	-0.9
SUA	2.84	206	eP	42 32.06	-0.2
PMS	2.87	194	eP	42 31.90	-0.7
VLZ	3.02	163	eP	42 33.42	-1.1
VZW	3.07	165	eP	42 33.88	-1.4
IMA	3.12	314	eP	42 34.00	-2.1
GLB	3.27	141	eP	42 37.08	-0.9
CRP	3.33	216	eP	42 39.27	0.3
SPU	3.38	214	eP	42 39.03	-0.5
BGL	3.40	217	eP	42 40.04	0.2
CKL	3.44	216	eP	42 40.11	-0.3
NKA	3.60	205	eP	42 44.33	1.9
TTA	3.70	256	P	42 41.40	-2.5
DWY	3.83	86	P	42 44.10	-1.5
SEW	3.98	190	eP	42 45.74	-1.9
RDT	4.00	212	eP	42 47.20	-0.8
BALM	4.02	136	eP	42 47.24	-1.1
TGL	4.10	141	eP	42 47.21	-2.3
NNL	4.26	202	eP	42 51.72	0.2
CNPM	4.75	199	eP	42 56.78	-1.5

INK	7.30	48	eP	43 31.00	-2.3

42 obs. associated

% SEP 26, 1990 22h 34m 36.24± 0.60s
47.191 N ± 6.5km 0.049 W ± 8.7km
DEPTH = 10.0km (geophysicist)
FRANCE (538)

MFF	0.59	186	Pg	34 48.20	0.0
			Sg	34 57.00	
LPF	1.08	322	Pg	34 56.60	0.1
			Sg	35 11.30	
GRR	1.32	336	Pg	35 00.20	-0.4
			Sg	35 17.80	
LDF	1.40	358	Pg	35 01.30	-0.6
			Sg	35 18.20	
LSF	1.44	130	Pg	35 01.60	-0.7
			Sg	35 19.20	
FLN	1.60	350	Pg	35 05.40	0.8
			Sg	35 24.20	
TCF	1.80	119	Pg	35 08.00	0.5
			Sg	35 28.40	
MAF	2.04	117	Pg	35 12.00	0.9
			Sg	35 36.00	
BGF	2.08	107	Pg	35 11.00	-0.7
			Sg	35 36.40	
CAF	2.70	146	Pg	35 24.50	4.0X
			Sg	35 58.50	

S.D. = 0.7 on 9 of 10 obs.

SEP 26, 1990 23h 08m 23.96± 0.25s
28.014 S ± 5.0km 26.727 E ± 5.9km
DEPTH = 5.0km (geophysicist)
5.4mb (58 obs.) 4.2Msz (9 obs.)
REPUBLIC OF SOUTH AFRICA (584)
Two people killed and five injured in a mine in the Welkom area. Slight damage in the Welkom area.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 20C
Centroid Location:
Origin Time 23:08:29.4 1.0
Lat 27.92S 0.18 Lon 26.88E 0.11
Dep 28.3 8.8 Half-duration 1.5
Moment Tensor; Scale 10**16 Nm
Mrr=-2.80 0.26 Mtt=-1.15 0.34
Mff= 3.95 0.34 Mrt=-0.70 0.78
Mrf= 0.37 1.13 Mtf=-0.82 0.38
Principal Axes:
T Val= 4.11 Plg= 4 Azm=261
N -1.05 20 169
P -3.06 70 1
Best Double Couple:Mo=3.6**16
NP1:Strike= 11 Dip=45 Slip= -61
NP2: 153 52 -115

PRY	1.27	32	iPd	09 26.00	37.9X
SLR	2.66	32	iPd	09 07.60	-0.8
			(S)	09 40.50	
BUL	8.02	13	iPn	10 19.50	-4.6X
			iSn	11 45.50	
			iSg	12 27.00	
WIN	10.26	300	iPd	10 53.00	-2.1
LWI	25.71	5	iPd	13 57.00	-0.1
NAI	28.28	22	iP	14 22.30	1.6
	1.0s		15.00nm		4.8mb
BCAO	33.21	345	iPd	15 01.70	-2.4
	0.5s		52.00nm		5.7mb
			ic	16 03.00	
AAE	38.62	19	eP	15 52.00	1.6
KIC	45.72	314	P	16 46.58	-1.5
	1.1s		68.00nm		5.6mb
LIC	45.81	313	P	16 47.90	-0.8
	1.0s		35.00nm		5.3mb
Z	20s		0.49um		4.4Msz
TIC	46.12	314	P	16 50.24	-1.0
LKO	48.70	315	P	17 07.92	-3.6X
MBH	57.98	8	eP	18 20.50	0.7
DSI	59.82	9	eP	18 32.50	-0.1
HRI	61.55	9	eP	18 46.00	1.5
SPA	62.15	180	iPd	18 46.60	-1.8
	1.4s		89.22nm		5.8mb
NPS	62.94	359	eP	18 53.00	-0.6
JFO	63.10	259	eP	18 54.40	-0.7
VAM	63.12	358	eP	18 55.00	0.2

GBA	64.20	57	Pd	18 59.90	-2.4
	1.3s		71.50nm		5.7mb
VLI	64.49	357	eP	19 03.60	-0.1
ITM	65.01	356	eP	19 07.80	0.7
AIA	65.33	208	eP	19 09.30	0.4
SOB1	66.01	272	eP	19 12.90	-1.2
FAI	66.09	349	P	19 15.50	1.5
VLS	66.09	355	eP	19 14.00	-0.1
SOI	66.50	351	P	19 17.80	1.2
EVR	66.74	356	eP	19 20.00	1.7
HYB	67.50	54	eP	19 22.50	-1.0
KZN	68.13	356	eP	19 26.00	-1.0
MGR	68.59	351	P	19 30.00	0.2
RDO	68.82	359	eP	19 32.00	0.9
OHR	68.99	355	eP	19 32.80	0.5
	1.2s		182.00nm		6.2mb
SGO	69.04	351	P	19 32.60	0.1
BSS	69.34	350	P	19 34.00	-0.4
BAO	69.53	263	Pd	19 36.00	-0.3
SKO	69.81	356	iP	19 38.00	0.8
	1.4s		99.00nm		5.8mb
PPD	69.86	255	(P)	19 37.00	-1.1
APHE	70.66	335	eP	19 43.40	0.6
ATEJ	70.75	334	eP	19 42.70	-0.6
ACHM	70.85	335	eP	19 45.50	1.7
AFC	70.87	335	eP	19 44.50	0.4
ECOG	70.90	335	eP	19 44.50	0.3
EJIF	70.92	333	eP	19 44.50	0.3
ALOJ	70.96	334	eP	19 45.20	0.6
ASMO	71.04	335	eP	19 45.00	0.0
AAPN	71.14	334	eP	19 44.50	-1.1
EPRU	71.27	333	eP	19 46.80	0.5
SBA	71.75	172	eP	19 49.20	0.5
ECHE	72.04	338	e(P)	19 51.00	0.1
PGF	72.09	346	eP	19 50.40	-0.8
	1.2s		47.60nm		5.5mb
CMP	72.95	359	ePc	19 59.00	3.0X
MLR	73.16	359	eP	19 58.00	0.6
TOL	73.37	336	iPc	19 59.00	0.3
LMR	73.39	345	eP	19 58.30	-0.3
	1.2s		23.80nm		5.1mb
ETOR	73.51	338	eP	20 00.00	0.5
VRI	73.53	360	iPd	20 01.50	2.1
LRG	73.54	345	eP	19 59.50	0.0
	1.2s		35.70nm		5.3mb
FRF	73.57	345	eP	19 59.10	-0.6
	1.0s		20.00nm		5.1mb
SBF	73.68	346	eP	19 59.80	-0.6
	0.9s		22.95nm		5.2mb
PTJ	74.21	352	eP	20 04.00	0.5
NDI	74.27	45	iPc	20 04.00	-0.1
SURF	74.41	345	P	20 05.23	0.4
EPF	74.75	340	eP	20 06.20	-0.4
	1.2s		53.55nm		5.4mb
LPG	75.39	346	eP	20 10.40	-0.2
	1.0s		17.00nm		5.1mb
LPL	75.41	346	eP	20 10.30	-0.3
	1.2s		19.35nm		5.0mb
TMA	75.53	347	ePc	20 10.30	-0.9
PSI	75.63	79	ePd	20 12.80	0.6
MMK	75.66	347	ePc	20 11.50	-0.5
KBA	75.71	351	iPc	20 13.70	1.5
	1.2s		64.30nm		5.6mb
VDL	75.78	348	ePc	20 12.40	-0.3
DIX	75.80	346	ePc	20 12.40	-0.5
OSS	75.85	348	ePc	20 12.90	-0.1
SRO	75.85	354	iP	20 13.00	0.3
OGA	75.87	349	eP	20 14.50	1.3
	1.5s		30.00nm		5.2mb
LBL	75.97	343	P	20 13.33	-0.1
CAF	76.00	342	eP	20 13.60	-0.1
	1.1s		51.30nm		5.5mb
LPO	76.02	342	eP	20 13.60	-0.2
	1.2s		29.75nm		5.3mb
SOTA	76.18	349	ePd	20 09.70	-5.1X
	1.1s		45.60nm		5.5mb
			i	20 14.20	
			i	20 15.80	
WATA	76.23	349	i(P)	20 15.60	0.5
	1.2s		42.90nm		5.4mb
LLS	76.24	348	ePc	20 14.70	-0.5
ZST	76.35	353	eP	20 16.20	0.7
			e	29 08.00	
LFF	76.38	341	eP	20 15.50	-0.3
	1.2s		83.30nm		5.7mb
BHG	76.41	350	iPc	20 15.90	0.0
	1.3s		92.00nm		5.7mb

26d 23h

RJF	76.50	342	eP	20	16.20	-0.3
	1.2s		50.60nm			5.5mb
Z	20s		0.10um			4.1Msz
VKA	76.50	353	ePd	20	15.00	-1.4
	1.8s		134.00nm			5.8mb
PYM	76.51	343	P	20	16.58	-0.1
PLDF	76.56	344	P	20	16.49	-0.4
AGO	76.76	343	P	20	17.87	-0.1
ZLA	76.94	347	ePc	20	19.20	0.2
MAF	77.07	343	eP	20	19.80	0.2
	1.4s		111.10nm			5.8mb
SPC	77.07	356	eP	20	14.00	-5.8X
			i	20	20.80	
FUR	77.09	349	iPc	20	21.00	1.3
	1.2s		97.00nm			5.8mb
LOMF	77.13	346	P	20	19.33	-0.7
SMF	77.14	344	eP	20	19.80	-0.2
	1.2s		56.55nm			5.6mb
SLE	77.19	347	ePc	20	20.50	0.2
TCF	77.22	343	eP	20	20.40	-0.1
	1.2s		44.65nm			5.5mb
BGF	77.31	343	eP	20	20.90	0.0
	1.2s		32.75nm			5.3mb
LSF	77.36	342	eP	20	21.00	-0.3
	1.2s		38.70nm			5.4mb
FEL	77.39	347	P	20	20.16	-1.4
AVF	77.40	344	eP	20	21.10	-0.3
	1.3s		79.40nm			5.7mb
LBF	77.43	344	eP	20	20.80	-0.9
	1.2s		23.80nm			5.2mb
MOF	77.55	347	P	20	21.28	-1.1
BSF	77.60	346	eP	20	22.10	-0.5
	1.2s		35.70nm			5.4mb
SSF	77.61	344	eP	20	22.00	-0.6
	1.2s		26.80nm			5.2mb
KHC	77.69	351	P	20	23.60	0.6
LOR	77.72	344	eP	20	22.50	-0.7
	1.2s		29.75nm			5.3mb
Z	20s		0.13um			4.2Msz
WET	77.80	351	eP	20	24.70	1.1
	1.5s		54.00nm			5.4mb
HAU	77.86	346	eP	20	23.60	-0.4
	1.4s		34.85nm			5.3mb
Z	20s		0.10um			4.1Msz
GRC	77.94	344	P	20	23.94	-0.4
KRA	77.95	356	iPd	20	25.40	1.1
	1.3s		67.00nm			5.6mb
WLS	78.04	347	P	20	23.75	-1.2
CDF	78.05	347	P	20	24.09	-1.0
VITF	78.13	346	P	20	24.94	-0.4
MFF	78.15	341	eP	20	25.50	-0.1
	1.2s		95.20nm			5.8mb
PRU	78.41	352	Pc	20	27.80	0.9
	1.6s		30.00nm			5.1mb
GWF	78.52	347	P	20	27.15	-0.5
GRF	78.58	350	ePc	20	28.80	0.9
	1.3s		83.00nm			5.6mb
Z	19s		0.10um			4.2Msz
GKN	78.63	50	P	20	27.20	-1.6
	1.1s		81.00nm			5.7mb
DMN	78.70	50	P	20	28.00	-1.3
PKI	78.88	51	P	20	28.80	-1.6
	1.4s		135.00nm			5.8mb
KKN	78.93	50	P	20	29.10	-1.5
	1.4s		144.00nm			5.8mb
KSP	79.05	353	eP	20	30.70	0.3
BRG	79.35	352	iPc	20	20.32	-11.7X
	2.0s		52.00nm			
GUN	79.42	51	P	20	32.60	-0.8
MOX	79.45	350	eP	20	34.00	1.4
	1.5s		45.00nm			5.2mb
MDZ	79.62	238	eP	20	36.40	2.2
LPF	79.70	341	eP	20	33.70	-0.3
	1.0s		32.00nm			5.2mb
CLL	79.90	351	iPc	20	36.10	1.1
	1.7s		39.00nm			5.1mb
			e	21	24.00	
LDF	79.96	342	eP	20	34.80	-0.6
	1.0s		16.00nm			4.9mb
GRR	79.98	342	eP	20	34.90	-0.6
	1.1s		24.40nm			5.1mb
DOU	80.21	346	P	20	38.20	1.5
FLN	80.21	342	eP	20	36.10	-0.6
	1.0s		12.00nm			4.8mb
Z	20s		0.10um			4.2Msz
CHCH	80.49	237	eP	20	39.50	0.7
SNF	80.67	346	P	20	39.60	0.5

SIV	80.76	257	P	20	39 60	-0.8
PEL	80.88	237	eP	20	41.00	0.2
WTS	81.56	348	eP	20	45.00	1.3
	1.2s		32.00nm			5.3mb
CHTO	83.91	65	eP	20	55.10	-1.5
	1.5s		47.86nm			5.5mb
CNCB	86.29	253	P	21	09.80	0.6
LPB	86.51	253	P	21	11.00	0.8
	1.0s		80.00nm			5.9mb
Z	20s		0.92um			5.2Msz
			LR	49	18.00	
ZOBO	86.66	253	Pd	21	10.90	-0.2
	1.3s		55.21nm			5.6mb
Z	22s		0.40um			4.8Msz
			LR	49	20.00	
EKA	86.87	343	Pd	21	10.70	0.2
	1.4s		31.50nm			5.3mb
NB2	89.63	353	P	21	25.20	1.6
	1.3s		29.80nm			5.4mb
KMI	90.20	62	Pc	21	27.00	-0.3
GBTN	121.90	296	PKP	27	20.80	-0.3
ELC	126.19	297	PKP	27	29.40	0.1
FVM	127.24	298	PKP	27	31.80	0.5
OLY	127.66	295	PKP	27	31.30	-0.9
TUL	131.20	295	ePKP	27	38.50	-0.4
	1.4s		98.30nm			
Z	18s		0.00um			3.3Msz
SIO	131.59	294	e(PKP)	27	40.00	0.3
INK	138.00	349	ePKP	27	43.00	-7.8X
ALQ	139.77	292	ePKP	27	49.00	-6.3X
	1.3s		6.73nm			
BW06	141.87	304	PKP	27	53.00	-5.9X
IMA	141.93	0	PKP	28	00.50	2.3
LRM	143.31	310	ePKP	27	58.50	-2.8X
DAU	143.44	301	PKP	27	57.90	-3.9X
MSU	144.33	298	PKP	28	02.70	-0.6
DUG	144.65	301	PKP	28	02.20	-1.4
TTA	145.04	2	PKP	28	01.70	-1.8
NEW	145.55	316	PKP	28	02.40	-2.4X
PMR	146.31	356	PKP	28	05.70	0.2
DPW	146.37	316	PKP	28	06.30	0.1
PNT	146.60	319	ePKP	28	08.00	1.6
GLA	146.63	288	ePKP	28	09.00	2.0
TPC	147.67	290	ePKP	28	10.00	1.4
BAR	148.18	288	ePKP	28	14.00	4.5X
GSC	148.25	292	ePKP	28	14.00	4.4X
TNP	148.33	298	PKP	28	12.80	3.0X
PLM	148.35	289	ePKP	28	17.00	7.1X
PEC	148.59	290	PKP	28	10.80	0.7
RVR	148.77	290	ePKP	28	15.00	4.7X
MCW	148.77	320	PKP	28	11.30	1.4
CLC	148.86	294	ePKP	28	16.00	5.5X
LON	149.07	316	PKP	28	10.30	-0.2
SBB	149.12	291	ePKP	28	16.00	5.1X
GMW	149.30	318	PKP	28	11.70	1.0
ABL	150.26	292	PKP	28	19.70	6.9X
FRI	150.43	296	iPKPc	28	19.00	6.3X
CMB	150.80	298	iPKPc	28	20.10	6.8X
SYP	150.90	291	ePKP	28	21.00	7.3X
BCH	150.94	293	PKP	28	21.70	8.0X
LBFM	151.14	306	PKP	28	19.30	5.3X
MIN	151.21	304	iPKPc	28	20.10	6.1X
PRI	151.31	295	iPKPc	28	22.00	7.8X
ORV	151.34	302	iPKPc	28	20.80	6.8X
LLA	151.47	296	iPKPc	28	22.00	7.7X
ARN	151.82	297	PKP	28	23.30	8.4X
WDC	151.83	304	iPKPc	28	20.80	6.1X
MHC	151.91	297	iPKPc	28	23.00	7.9X
	S.D. = 0.9		on 157 of 190 obs.			

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* SEP 26, 1990 23h 41m 08.40± 1.74s
23.139 S ±17.8km 68.088 W ±16.9km
DEPTH = 120.0km (geophysicist)
NORTHERN CHILE (123)

ANT	2.21	255	iPc	41	45.00	0.0
			iS	42	11.00	
CCH	6.01	18	eP	42	41.00	4.4X
CNCB	6.30	1	P	42	41.30	0.5
			e	43	21.00	
LPB	6.57	360	P	42	44.00	-0.4
ZOBO	6.83	360	P	42	46.00	-0.1
ARE	7.37	334	eP	42	59.00	3.8X
			eS	44	32.00	
SIV	9.71	44	P	43	26.40	0.0
PPD	15.54	89	eP	44	53.10	11.0X
	S.D. = 0.5		on 5 of 8 obs.			

SEP 27, 1990 00h 53m 44.06± 0.65s
31.870 N ± 5.6km 115.797 W ± 6.1km
DEPTH = 10.0km (geophysicist)
BAJA CALIFORNIA (48)

ENX	0.74	271	iPc	53	58.14	-0.4
			S	54	07.90	
PBX	0.80	261	iPc	53	59.45	-0.2
			S	54	09.70	
CBX	0.86	301	eP	54	00.45	-0.2
			S	54	11.97	
SPX	0.87	161	iPd	54	01.29	0.3
			S	54	13.05	
GLA	1.44	35	iPd	54	09.50	-0.7
PLM	1.73	329	iPd	54	14.90	0.4
PEC	2.32	331	eP	54	22.50	-0.4
ABL	4.13	317	eP	54	49.50	0.8
BCH	4.87	314	eP	54	59.30	0.1
TNP	6.31	350	eP	55	20.00	0.4
ALQ	8.39	66	e(P)	55	35.00	-13.7X
	S.D. = 0.5		on 10 of 11 obs.			

& SEP 27, 1990 00h 54m 26.07s
58.457 N 142.699 W
DEPTH = 10.0km (geophysicist)
4.5mb (2 obs.)
GULF OF ALASKA (15)
<AGS-P>. ML 4.3 (PMR).

WRG	1.62	12	eP	54	50.08	-4.7
			eS	55	09.77	
KAIM	1.72	330	iP	54	51.67	-4.5
YKU	1.89	53	ePd	54	54.60	-4.0
YAH	1.97	14	iP	54	55.21	-4.9
WAX	2.00	358	iP	54	55.08	-5.3
HMT	2.05	338	eP	54	56.27	-4.7
PNL	2.09	53	iP	54	56.33	-5.3
MID	2.12	299	eP	54	56.58	-5.4
			eS	55	19.28	
BCPM	2.18	45	iP	54	57.51	-5.3
RAGM	2.18	333	iP	54	57.86	-5.1
HON	2.22	62	iP	54	57.97	-5.5
TGL	2.31	358	iP	54	59.43	-5.4
BALM	2.59	4	iP	55	03.56	-5.3
			eS	55	34.26	
CVA	2.61	325	iP	55	03.09	-5.9
HIN	2.75	317	iP	55	05.77	-5.3
GLB	3.05	350	iP	55	09.53	-5.7
VLZ	3.25	327	eP	55	11.86	-6.2
VZW	3.26	325	eP	55	11.92	-6.3
PLBC	3.43	70	P	55	14.90	-5.7
KLU	3.45	333	iP	55	15.16	-5.8
SEW	3.84	298	eP	55	20.02	-6.4
			eS	56	02.90	
TOA	4.05	336	iPc	55	24.30	-5.1
SCM	4.10	328	eP	55	24.19	-6.0
SIT	4.19	106	ePc	55	24.80	-6.6
SLKM	4.35	301	eP	55	27.36	-6.4
SML	4.39	322	eP	55	27.90	-6.3
PMS	4.45	312	eP	55	29.17	-5.9
WHC	4.49	56	P	55	30.00	-5.7
PLRM	4.50	317	eP	55	29.81	-6.0
PMR	4.50	317	iPd	55	30.00	-5.8
	0.5s		169.42nm			
CNPM	4.54	287	iP	55	31.16	-5.3
GHO	4.56	320	eP	55	30.45	-6.2
PWA	4.82	315	eP	55	34.02	-6.3
SUA	5.04	310	eP	55	37.25	-6.4
KDC	5.24	266	eP	55	42.50	-3.8
DOT	5.25	353	eP	55	40.52	-6.0
RDT	5.38	297	eP	55	41.21	-7.1
CUT	5.45	320	eP	55	44.96	-4.3
SPU	5.45	304	eP	55	43.28	-6.1
CGLM	5.49	305	eP	55	44.56	-5.4
CRP	5.54	305	eP	55	45.40	-5.2
DDM	5.56	345	eP	55	46.87	-4.1
OPT	5.57	287	eP	55	46.39	-4.6
CKL	5.58	304	eP	55	45.74	-5.5
NCG	5.60	306	eP	55	46.19	-5.3
BGL	5.64	304	eP	55	46.58	-5.4
SKT	5.64	312	eP	55	45.28	-6.7
DWY	5.83	14	P	55	49.50	-5.1
WRH	6.56	339	eP	55	59.67	-5.3
CCB	6.67	341	eP	55	59.75	-6.7
LIB	6.81	124	P	56	00.00	-8.4
NEA	6.85	336	eP	56	01.46	-7.6

FBA	6.90	342	eP	56 02.20	-7.5
SVW	7.04	298	eP	56 06.00	-5.7
TTA	7.92	310	eP	56 16.40	-7.6
IMA	9.18	331	eP	56 33.30	-8.2
INK	10.69	19	P	56 59.00	-3.1
YKA	14.36	62	eP	57 53.90	2.7
	0.8s		9.20nm		4.5mb
PNT	16.32	114	eP	58 18.00	1.4
SES	19.95	100	eP	58 56.00	-4.8
LRM	22.23	111	eP	59 24.10	-0.3
FFC	22.48	82	iPc	59 23.30	-3.1
	1.1s		20.00nm		4.5mb
	62 obs. associated				

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* SEP 27, 1990 01h 12m 46.49± 1.08s
37.092 N ±14.2km 21.448 E ± 8.4km
DEPTH = 5.0km (geophysicist)
3.8mb (1 obs.)
SOUTHERN GREECE (368)
ML 3.4 (ATH).

ITM	0.39	77	iPgd	12 52.80	-1.6
VLI	1.25	107	ePb	13 10.00	-0.2
			eSb	13 26.50	
VLS	1.28	328	ePb	13 10.60	-0.1
			eSb	13 31.00	
EVR	1.84	9	ePb	13 22.30	3.2X
ATH	2.01	63	ePn	13 23.20	1.8
			eSn	13 52.50	
VAM	2.79	126	ePn	13 33.00	0.4
KEK	2.92	334	ePg	13 43.00	8.6X
KZN	3.22	4	ePn	13 41.20	2.5X
PLG	3.63	25	ePn	13 34.80	-9.7X
OHR	4.05	353	eP	14 15.50	25.1X
SOI	4.39	284	P	13 55.00	-0.4
			eSn	14 11.50	
			e	18 16.00	
HFS	23.59	350	eP	17 55.00	-3.7X
	0.4s		1.10nm		3.8mb
	S.D. = 1.4		on	6 of 12 obs.	

& SEP 27, 1990 01h 16m 38.97s
58.250 N 142.696 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>.

YAH	2.18	13	eP	17 10.13	-5.8
			eS	17 36.65	
PNL	2.22	49	iP	17 11.09	-5.4
HQN	2.32	57	iP	17 12.72	-5.1
			eS	17 37.11	
BCPM	2.33	41	eP	17 12.87	-5.0
			eS	17 38.01	
BALM	2.80	4	eP	17 17.20	-7.5
			eS	17 48.00	
PLBC	3.50	67	P	17 29.50	-5.1
KLU	3.64	335	eP	17 29.00	-7.6
	7 obs. associated				

SEP 27, 1990 01h 22m 01.92± 0.89s
51.656 N ± 5.4km 16.201 E ±10.7km
DEPTH = 10.0km (geophysicist)
POLAND (548)
ML 3.4 (GRF).

KSP	0.82	176	iPc	22 17.60	-0.1
	0.7s		67.00nm		
			iS	22 26.90	
BRG	1.62	242	iPg	22 31.50	0.9
			iSg	22 51.40	
PRU	1.97	213	Pn	22 35.60	-0.1
			Pg	22 37.30	
			Sn	22 54.20	
CLL	2.03	261	iPg	22 39.80	3.3X
			iSg	23 04.80	
KHC	3.03	215	Pn	22 51.00	0.1
			Pg	22 57.20	
			Sn	23 26.40	
			Sg	23 37.00	
HOF	3.05	245	ePn	22 51.30	0.3
MOX	3.06	252	ePn	22 50.00	-1.2
			ePg	22 58.00	
			iSg	23 38.00	
WET	3.29	221	ePn	22 54.60	0.0
ZST	3.51	170	eP	23 47.40	49.8X
SPC	3.58	132	eP	23 07.80	9.1X
GRF	3.73	240	ePn	23 00.80	0.0
			ePg	23 14.00	
			eSn	23 44.10	
			eSg	23 57.40	
APO	8.99	353	eP	24 14.90	0.2
	1.2s		12.30nm		5.1mb X
NRA0	9.46	346	Pn	24 21.00	-0.1
			Sn	26 03.30	
	S.D. = 0.6		on	10 of 13 obs	

& SEP 27, 1990 01h 47m 53.10s
37.170 N 89.620 W
DEPTH = 7.0km
CAPE GIRARDEAU, MISSOURI REGION(487)
<SLM>. mbLg 3.0 (NEIS), 3.2 (TUL). MD 3.3 (SLM). Felt (V) at Chaffee and Morley; (IV) at Benton and Scott City; (III) at Allenville, Dutchtown and Oran; (II) at Cape Girardeau. Felt (III) at Thebes, Illinois. Also felt at Paducah, Kentucky.

DON	0.25	271	iPd	47 58.85	0.6
			S	48 00.99	
ELC	0.33	70	iPd	47 59.64	-0.2
			S	48 03.48	
DWM	0.38	164	iPc	48 00.72	0.0
			S	48 06.22	
NMMO	0.58	175	iPd	48 04.12	-0.7
			S	48 12.13	
NRMS	0.68	178	iPc	48 05.85	-0.9
LDMO	0.76	177	iP	48 07.29	-0.9
CBD	0.85	182	iPc	48 08.95	-0.8
			S	48 20.07	
ACTN	0.86	163	eP	48 08.92	-1.0
			S	48 20.55	
GRT	0.92	170	iP	48 09.99	-0.9
OHTN	1.02	175	eP	48 11.81	-0.9
			S	48 26.50	
MFTN	1.02	170	iPc	48 11.91	-0.8
			S	48 25.75	
FVM	1.03	322	ePc	48 11.97	-0.9
ECD	1.14	193	eP	48 13.96	-0.7
			S	48 30.10	
PGA	1.37	216	eP	48 17.63	-0.9
			S	48 35.71	
SLM	1.54	342	eP	48 20.89	-0.1
			S	48 41.16	
OLY	2.24	222	eP	48 30.57	-0.5
GBTN	4.61	107	P	49 03.20	-1.7
BLA	7.34	87	P	49 48.00	4.6
MEO	7.65	255	e(P)	49 45.00	-2.6
	19 obs. associated				

SEP 27, 1990 02h 27m 13.02± 0.72s
38.117 N ± 8.9km 20.744 E ± 6.2km
DEPTH = 10.0km (geophysicist)
3.8mb (1 obs.)
GREECE (364)
ML 3.6 (ATH).

VLS	0.14	296	iPgc	27 15.80	-0.5
EVR	1.16	46	iPbc	27 32.70	-2.0
ITM	1.33	135	ePb	27 37.60	0.1
KEK	1.76	335	iPgc	27 48.50	4.8X
VLI	2.24	128	ePg	27 55.50	4.9X
KZN	2.33	20	ePn	27 54.30	2.3
ATH	2.35	93	ePn	27 53.30	1.0
			eSn	28 25.00	
OHR	2.99	1	ePn	28 02.00	0.6
PLG	3.08	42	ePn	28 02.50	-0.1
SOI	3.70	271	P	28 13.20	1.8
ORI	3.87	302	P	28 20.20	6.4X
VAM	3.87	133	ePn	28 13.00	-0.9
SKO	3.89	8	ePn	28 18.00	3.9X
MGR	4.51	298	P	28 23.60	0.7
SGO	4.87	302	P	28 28.30	0.3
BSS	5.31	302	P	28 32.50	-1.8
SDI	6.42	306	P	28 48.50	-1.5
HFS	22.49	351	eP	32 10.50	-3.1X
	0.6s		2.00nm		3.8mb
	S.D. = 1.4		on	13 of 18 obs.	

% SEP 27, 1990 04h 51m 42.68± 0.69s
44.774 N ± 5.1km 7.196 E ± 8.3km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.2 (GEN).

PZZ	0.28	194	P	51 48.75	0.2
			S	51 52.55	
RRL	0.33	297	P	51 49.47	-0.1
			S	51 53.68	
RSP	0.38	7	P	51 50.60	0.1
			S	51 55.83	
STV	0.54	170	P	51 53.68	0.1
			S	52 00.24	
ENR	0.57	164	P	51 53.98	-0.3
			S	52 00.85	
RO8	0.68	135	P	51 56.24	0.0
			S	52 04.96	
	S.D. = 0.2		on	6 of 6 obs.	

SEP 27, 1990 05h 10m 31.61± 5.67s
45.973 N ±20.0km 16.022 E ±48.9km
DEPTH = 5.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.7 (VIE). Felt at Kraljev Vrh.

PTJ	0.09	211	iPgd	10 33.50	-0.1
ZAG	0.16	190	iPgd	10 35.00	0.1
			iSg	10 36.80	
VOY	1.48	273	e(Pn)	10 59.30	0.2
			eSn	11 21.20	
SOTA	3.55	292	iPn	11 28.40	-0.2
	S.D. = 0.3		on	4 of 4 obs.	

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* SEP 27, 1990 05h 30m 44.13± 2.66s
32.783 S ±13.5km 68.452 W ±24.8km
DEPTH = 10.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

MDZ	0.35	253	iPd	30 50.60	-0.8
			iS	31 03.10	
ZON	1.25	351	eP	31 07.10	-0.3
FCH	1.64	250	iPd	31 12.10	-1.3
			i	31 34.10	
JACH	1.81	273	iPd	31 16.00	0.4
			iS	31 41.20	
PEL	1.91	259	iPd	31 17.00	-0.1
			iS	31 42.50	
PCH	1.92	244	ePd	31 17.20	-0.1
			iS	31 44.50	
SAN	1.97	250	eP	31 18.00	0.1
ROCH	2.16	264	eP	31 22.20	1.3
			eS	31 51.00	
CHCH	2.17	237	iPd	31 20.50	-0.4
			iS	31 51.00	
TACH	2.26	247	iP	31 22.50	0.4
			i	31 52.70	
LCCH	2.71	254	iPc	31 30.70	2.2X
			i	32 06.80	
			e	39 25.10	
LNV	2.74	244	eP	31 29.60	0.7
			e	32 07.30	
	S.D. = 0.8		on	11 of 12 obs.	

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* SEP 27, 1990 06h 08m 03.53± 2.18s
32.807 S ±11.8km 68.514 W ±20.3km
DEPTH = 10.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

MDZ	0.29	255	iPd	08 09.70	0.0
			iS	08 19.30	
ZON	1.27	354	eP	08 27.10	0.0
JACH	1.76	274	iPc	08 33.90	-0.4
			iS	08 59.80	
PEL	1.86	259	iPd	08 35.50	-0.2
			iS	09 00.90	
PCH	1.86	244	ePd	08 35.70	-0.1
			iS	09 02.50	
SAN	1.91	250	eP	08 36.20	-0.3
			eS	09 03.00	
ROCH	2.11	265	eP	08 40.00	0.5
			iS	09 09.40	
CHCH	2.11	237	iP	08 39.00	-0.4
			iS	09 08.30	
TACH	2.20	247	iPd	08 41.00	0.3
			iS	09 11.10	
LNV	2.68	244	eP	08 48.00	0.5
			iS	09 25.10	
	S.D. = 0.4		on	10 of 10 obs.	

? SEP 27, 1990 06h 22m 59.42± 0.53s
15.457 N ±45.5km 146.451 E ±56.7km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
MARIANA ISLANDS (216)

GUMO	2.41	220	iPd	23	37.60	0.2
PJG	2.41	220	iPd	23	37.50	0.1
GUA	2.42	218	iPd	23	37.40	-0.2
			eS	24	03.60	
PMR	64.42	29	P	33	36.00	1.6
	0.7s		6.54nm		4.8mb	
INK	72.06	23	eP	34	21.50	-0.4
GMW	79.27	44	P	35	04.20	1.0
RMW	79.94	44	P	35	07.50	0.6
LON	80.09	44	P	35	07.80	0.2
YKA	80.50	28	eP	35	07.90	-1.5
	0.6s		2.60nm		4.4mb	
NEW	82.83	42	P	35	21.10	-0.8
	0.8s		6.77nm		4.8mb	
TNP	85.48	52	P	35	35.00	-0.8
	0.8s		2.94nm		4.5mb	
DAU	89.18	48	P	36	17.70	23.9X

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

? SEP 27, 1990 06h 26m 26.44± 0.78s
42.611 S ±17.7km 83.842 E ±15.6km
DEPTH = 10.0km (geophysicist)
5.1mb (8 obs.)
MID-INDIAN RISE (429)

ASPA	45.27	82	iPc	34	44.90	-1.1
	1.1s		12.30nm		4.8mb	
	Z 24s		0.28um		4.1MszX	
			LR	50	51.00	
STK	46.40	96	iPd	34	54.50	-0.2
	1.0s		7.00nm		4.6mb	
SPA	47.58	180	eP	35	04.80	0.9
	1.0s		16.50nm		5.1mb	
WB5	47.96	78	iPc	35	06.10	-1.1
BUL	51.21	278	iPd	35	30.00	-2.3
	0.8s		13.06nm		4.9mb	
BRS	57.00	98	iP	36	14.60	-0.1
PKI	69.85	1	P	37	39.40	-0.1
DMN	69.88	1	P	37	40.20	0.6
	1.2s		48.00nm		5.5mb	
KKN	70.06	1	P	37	41.00	0.4
	0.9s		31.00nm		5.4mb	
GKN	70.27	1	P	37	42.20	0.4
	1.0s		40.00nm		5.5mb	
BCAO	75.19	290	ePd	38	04.00	-7.0X
	0.3s		3.00nm		4.8mb	
INK	147.60	25	ePKP	46	11.00	2.5

S.D. = 1.4 on 11 of 12 obs.

% SEP 27, 1990 08h 04m 06.02± 2.37s
59.020 N ±20.5km 5.827 E ± 6.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.4 (BER).

KMY	0.36	303	iPc	04	13.30	0.0
BLS2	0.63	64	iPc	04	19.11	0.3
			iS	04	27.75	
ODD1	0.98	24	iP	04	24.68	0.0
			eS	04	37.79	
BER	1.39	350	eP	04	32.10	0.7
			eS	04	49.27	
ASK	1.50	348	iP	04	33.19	0.2
			iS	04	52.05	
SUE	2.11	346	iP	04	41.27	-0.5
			eS	05	06.86	
HYA	2.16	5	iPc	04	42.61	0.1
			eSg	05	11.25	
NRA0	3.36	57	Pn	04	59.20	-0.3
			Sg	05	48.10	
MOL	3.66	13	iP	05	03.40	-0.4

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

% SEP 27, 1990 09h 00m 48.13± 1.24s
46.625 N ±12.4km 23.220 E ±16.2km
DEPTH = 10.0km (geophysicist)
ROMANIA (358)

CEI	1.18	334	eP	01	10.00	-0.1
TNR	1.22	143	ePd	01	10.00	-0.8
COZ	1.52	149	iPc	01	16.50	0.9
MTUR	1.90	137	ePd	01	24.00	3.0X
CVO	2.20	110	eP	01	29.00	3.7X
MLR	2.21	120	ePc	01	28.50	3.0X
VRI	2.55	106	ePc	01	29.50	-0.7
CLI	2.80	90	ePc	01	34.50	0.7

S.D. = 1.1 on 5 of 8 obs.

& SEP 27, 1990 09h 29m 57.97s
63.464 N 149.166 W
DEPTH = 98.1km
CENTRAL ALASKA (1)
<AGS-P>.

MCK	0.29	21	iP	30	12.53	0.0
			eS	30	22.82	
HUR	0.53	204	iP	30	13.63	-0.4
			eS	30	24.92	
WRH	1.12	25	iP	30	19.46	-0.4
			eS	30	34.71	
NEA	1.12	2	iP	30	19.41	-0.5
			eS	30	33.98	
CUT	1.18	206	iP	30	20.08	-0.5
CCB	1.33	26	iP	30	21.87	-0.5
HDA	1.36	45	iP	30	22.42	-0.4
			eS	30	41.86	
DDM	1.51	76	eP	30	24.86	0.2
FBA	1.56	22	iPd	30	24.90	-0.4
GHO	1.70	176	eP	30	26.94	-0.2
			eS	30	49.77	
SML	1.71	167	eP	30	26.92	-0.3
GLM	1.72	26	iP	30	26.81	-0.5
SCM	1.84	152	eP	30	29.32	0.3
			eS	30	51.83	
SKT	1.84	217	iP	30	27.94	-1.0
			eS	30	50.84	
PWA	1.85	191	eP	30	28.87	-0.1
PLRM	1.88	179	eP	30	29.41	0.1
PMR	1.88	179	ePc	30	29.90	0.6
TOA	1.94	133	eP	30	30.80	0.6
SUA	2.14	201	eP	30	33.11	0.2
			eS	31	00.02	
PMS	2.24	185	eP	30	34.22	0.1
DOT	2.29	83	eP	30	34.51	-0.4
KLU	2.49	141	eP	30	36.39	-1.2
NCG	2.49	215	eP	30	36.81	-0.9
CGLM	2.54	213	eP	30	38.00	-0.2
SPU	2.66	212	eP	30	39.33	-0.5
BGL	2.67	216	eP	30	40.40	0.3
VLZ	2.69	149	eP	30	38.82	-1.4
VZW	2.71	152	eP	30	39.28	-1.2
			eS	31	12.91	
CKL	2.71	214	eP	30	41.00	0.3
TMW	2.78	90	eP	30	40.75	-0.7
SLKM	3.01	190	eP	30	44.44	-0.2
TTA	3.15	263	eP	30	46.60	0.1
GLB	3.21	127	eP	30	46.67	-0.7
IMA	3.25	326	eP	30	47.00	-1.0
SEW	3.38	182	eP	30	49.11	-0.4
SVW	3.83	235	eP	30	55.20	-0.7
BALM	4.01	124	eP	30	57.76	-0.7
INK	8.02	46	ePd	31	52.40	-1.0

38 obs. associated

? SEP 27, 1990 12h 07m 09.39± 9.07s
43.811 N ±27.8km 13.206 E ±62.0km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

ARV	0.37	212	P	07	16.60	-0.3
			eSg	07	21.60	
RSM	0.56	282	P	07	20.30	-0.4
ASS	0.84	208	P	07	25.90	0.3
			eSg	07	38.40	
CRE	0.93	259	P	07	27.40	0.2
SFI	0.99	277	P	07	28.30	0.2
			eSg	07	41.30	

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

SEP 27, 1990 12h 34m 52.97± 0.42s
28.975 N ±10.2km 60.760 E ± 5.0km
DEPTH = 33.0km (normal)
4.8mb (17 obs.)
SOUTHERN IRAN (353)

QUE	5.53	76	eP	36	14.50	-0.8
	0.7s	1232.88nm			6.6mb X	
			e(S)	37	38.50	
TEH	10.40	313	e(P)	37	13.00	-10.1X
RYD	13.32	255	eP+	37	57.50	-4.8X
NDI	14.43	87	eP	38	12.00	-4.8X
TAB	15.06	311	eP	38	28.00	2.9X
POO	15.85	128	eP	38	41.00	5.7X
AFIF	16.46	257	ePd	38	44.30	1.2
KMSA	17.07	244	eP	38	48.00	-2.8
SRAT	19.44	240	eP	39	20.30	0.3
HYB	19.97	121	eP	39	20.50	-4.9X
CSTJ	20.95	282	Pc	39	36.80	1.2
GKN	21.00	87	P	39	36.80	0.6
DMN	21.48	88	P	39	42.00	0.9
KKN	21.60	87	P	39	42.20	-0.1
PKI	21.75	88	P	39	44.80	0.9
GBA	21.76	131	P	39	43.90	0.2
BHL	21.96	289	P	39	47.00	1.3
			S	48	28.00	
SHWJ	21.98	280	Pc	39	48.20	2.1
DSI	22.86	283	eP	39	49.00	2.4
GUN	22.11	87	P	39	49.00	1.5
PRNI	22.42	280	eP	39	53.00	2.8X
SKO	34.25	303	iP	41	36.00	-1.9
OHR	34.60	301	eP	41	40.70	-0.3
CHG	36.21	98	ePd	41	53.50	-1.3
	1.0s		12.50nm		4.8mb	
LZH	36.78	68	eP	41	56.00	-3.6X
KRA	37.26	316	eP	42	03.90	0.6
	1.4s		67.00nm		5.3mb	
			e	42	25.90	
KMI	37.45	86	Pc	42	05.00	-0.4
	1.2s		40.00nm		5.2mb	
TDS	37.87	298	P	42	10.00	1.5
MGR	38.49	299	P	42	14.20	0.5
SGO	38.70	300	Pc	42	16.20	0.8
DUI	39.40	301	P	42	22.00	0.6
KSP	39.72	316	ePc	42	24.80	0.9
NUR	39.73	333	eP	42	23.00	-0.7
SUF	40.53	336	iP	42	30.90	0.6
	0.7s		9.60nm		4.7mb	
KHC	41.01	313	eP	42	35.00	0.5
BRG	41.17	315	eP	42	37.80	2.1
	1.6s		22.00nm		4.6mb	
CLL	41.85	316	ePc	42	42.00	0.7
	1.7s		50.00nm		5.0mb	
			eSg	46	00.00	
SOD	43.53	342	iP	42	55.20	0.4
HFS	44.28	328	eP	43	00.20	-0.7
	0.7s		10.60nm		4.8mb	
KEV	45.14	344	eP	43	08.00	0.3
	0.7s		13.30nm		5.0mb	
NB2	45.76	329	P	43	11.70	-1.1
	1.0s		15.40nm		4.9mb	
LBF	47.16	309	eP	43	21.20	-2.9X
	1.3s		16.25nm		4.9mb	
SMF	47.25	308	eP	43	23.40	-1.4
	1.0s		14.00nm		4.9mb	
LOR	47.25	309	eP	43	21.50	-3.3X
	1.2s		10.40nm		4.7mb	
SSF	47.49	309	eP	43	23.90	-2.7X
	1.2s		11.90nm		4.8mb	
AVF	47.59	308	eP	43	25.70	-1.7
	1.4s		13.05nm		4.8mb	
MAF	48.13	308	eP	43	30.80	-0.9
	1.0s		8.00nm		4.7mb	
GRR	50.44	310	eP	43	47.80	-1.5
	1.2s		23.80nm		5.1mb	
ASMO	53.72	297	eP	44	13.00	-1.2
APHE	53.76	296	eP	44	14.00	-0.5
ATEJ	54.02	296	eP	44	15.50	-0.9
ALOJ	54.05	297	eP	44	15.50	-1.1
MAL	54.37	296	eP	44	17.00	-1.8
YKA	88.78	358	eP	47	43.50	-0.9
	0.8s		3.10nm		4.7mb	

S.D. = 1.2 on 43 of 54 obs.

SEP 27, 1990 12h 41m 51.30± 0.70s
25.919 S ± 8.4km 137.556 E ± 7.8km
DEPTH = 10.0km (geophysicist)
NORTHERN TERRITORY, AUSTRALIA (591)
ML 3.2 (QIS).

ASPA	4.01	303	iPc	42	56.00	1.9
	0.2s		23.40nm			
			iPg	43	05.80	
			eS	43	34.60	
QIS	5.66	20	iPc	43	17.70	0.2

		eSn	44 21 00			
		eSg	44 51.00			
QLP	6.03	98 eP	43 24.80	2.1		
WB5	6.69	333 eP	43 31.00	-1.1		
STK	6.91	150 iPc	43 36.10	1.0		
	1.8s	87.00nm		5.6mb X		
		iS	44 49.20			
CMS	9.14	129 eP	44 05.00	-1.2		
		eS	45 42.00			
FORR	9.67	237 eP	44 12.00	-1.4		
	0.4s	19.00nm		5.9mb X		
		eS	45 55.50			
WARB	9.82	266 eP	44 16.00	0.4		
		eS	46 00.00			
CTA	9.89	56 eP	44 15.00	-1.6		
BFD	12.00	160 eP	44 45.00	-0.3		
		eS	46 55.00			
MTN	14.34	334 eP	45 13.00	-3.5X		
		eS	47 40.00			
MRWA	19.39	255 eP	46 17.50	-2.8X		
		eS	49 40.00			
LAT	21.17	27 eP	46 46.00	6.8X		
	S.D. = 1.5	on 10 of 13 obs.				

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* SEP 27, 1990 12h 51m 39.47± 0.94s
21.258 S ±10.8km 68.034 W ±20.6km
DEPTH = 212.9 ± 28.7 km
CHILE-BOLIVIA BORDER REGION (124)

ANT	3.28	222 iP	52 33.70	0.2		
		iS	53 12.20			
CCH	4.25	25 P	51 45.00	-60.7X		
CNCB	4.43	1 iPc	52 49.70	1.6		
		S	53 41.00			
LPB	4.70	359 eP	52 50.00	-1.5		
	1.0s	180.00nm				
		i	52 54.00			
		eS	53 45.00			
ZOBO	4.96	359 iPc	52 55.20	0.3		
	1.1s	137.76nm				
		S	53 50.00			
ARE	5.79	325 iPc	53 04.70	-0.5		
		iS	54 10.20			
PPD	15.57	96 eP	55 08.90	-0.5		
SOB1	28.74	69 eP	57 19.80	0.4		
	S.D. = 1.3	on 7 of 8 obs.				

? SEP 27, 1990 12h 59m 28.69± 4.80s
6.103 S ±37.8km 127.933 E ±41.1km
DEPTH = 101.0 ± 49.1 km
4.4mb (2 obs.)
BANDA SEA (280)

AAI	2.41	6 ePd	59 40.00	-27.3X		
		eS	00 53.50			
MTN	7.41	155 iPd	01 16.50	0.7		
KNA	9.62	175 eP	01 46.00	0.0		
WB5	15.06	156 eP	02 55.00	-2.4		
		eS	05 43.20			
OIS	18.30	143 eP	03 38.00	0.5		
ASPA	18.38	162 iPc	03 39.70	1.1		
	0.6s	8.80nm		4.2mb		
		eS	07 08.30			
CHTO	37.81	312 iP	06 38.20	1.1		
	0.8s	6.95nm		4.6mb		
PKI	52.99	311 P	08 37.60	-0.1		
KKN	53.20	311 P	08 39.20	0.0		
DMN	53.24	311 P	08 39.80	0.4		
GKN	53.80	311 P	08 41.80	-1.6		
ZOBO	152.68	145 ePKP	19 12.00	2.7X		
	Z 24s	0.11um		4.6MszX		
		LR	27 44.00			
	S.D. = 1.4	on 10 of 12 obs.				

% SEP 27, 1990 13h 01m 55.29± 3.87s
59.039 N ±26.9km 5.254 E ±17.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.5 (BER).

KMY	0.17	359 iPg	01 59.04	-0.2		
BLS2	0.90	73 iP	02 12.80	0.2		
		iSg	02 25.29			
ODD1	1.12	38 eP	02 16.52	0.2		
		eSg	02 31.46			
BER	1.35	2 iP	02 20.69	0.6		
		eS	02 37.82			
ASK	1.45	359 iP	02 21.34	-0.2		
		iS	02 39.69			
SUE	2.04	353 eP	02 29.83	-0.2		
		eSg	02 58.22			
HYA	2.18	12 eP	02 32.05	-0.1		
		eSg	03 03.68			
NRA0	3.60	59 Pn	02 52.00	-0.2		
		Lg	03 46.60			
MOL	3.72	17 iP	02 53.21	-0.7		
	S.D. = 0.4	on 9 of 9 obs.				

% SEP 27, 1990 13h 08m 45.51± 0.72s
38.729 N ± 4.6km 15.211 E ± 9.9km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MSI	0.59	153 P	08 57.40	0.0		
		eSg	09 04.70			
ATN	0.60	161 P	08 57.40	-0.2		
		eSg	09 05.80			
MNO	0.89	207 P	09 03.10	0.3		
SOI	0.93	134 P	09 03.20	-0.1		
		eSg	09 16.60			
TDS	1.28	43 Pc	09 09.60	0.4		
		eSg	09 27.00			
MGR	1.43	11 Pc	09 11.70	0.2		
		eSg	09 30.90			
SGO	1.83	2 P	09 16.60	-0.6		
	S.D. = 0.4	on 7 of 7 obs.				

? SEP 27, 1990 13h 34m 08.17± 0.90s
31.453 S ±33.1km 68.632 W ±18.0km
DEPTH = 110.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB	0.15	257 ePd	34 24.00	0.0		
		eS	34 35.00			
RTLL	0.19	48 iPc	34 24.10	0.0		
		eS	34 34.80			
CFA	0.37	115 e(P)	34 24.50	0.0		
RTCV	0.41	169 ePc	34 24.80	0.0		
		S	34 36.00			
RTBS	0.73	253 e(P)	34 27.00	0.0		
	S.D. = 0.0	on 5 of 5 obs.				

% SEP 27, 1990 14h 37m 36.67± 0.78s
59.365 N ± 8.4km 6.068 E ± 5.0km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.4 (BER).

BLS3	0.24	75 iP	37 41.99	0.2		
		eS	37 45.15			
BLS1	0.39	86 eP	37 44.71	0.0		
		eS	37 49.92			
BLS2	0.45	99 eP	37 45.78	0.0		
		eS	37 52.20			
KMY	0.45	250 eP	37 45.70	-0.1		
		iS	37 51.66			
ODD1	0.62	27 eP	37 48.72	-0.4		
		eS	37 57.60			
ASK	1.20	339 eP	37 59.40	0.3		
		eS	38 15.10			
	S.D. = 0.3	on 6 of 6 obs.				

& SEP 27, 1990 15h 05m 55.47s
., 39.500 N 111.031 W
DEPTH = 15.1km
UTAH (478)
<SLC-P>. CL 3.2 (SLC).

DAU	0.93	349 eP	06 13.00	0.1		
MSU	1.33	222 eP	06 19.50	-0.1		
DUG	1.54	297 eP	06 22.50	0.0		
BW06	3.46	18 eP	06 52.30	2.3		
GOL	4.38	86 e(P)	07 06.50	3.4		
	5 obs. ossocioted					

SEP 27, 1990 15h 38m 56.07± 1.75s
7.335 N ± 4.9km 126.869 E ±10.2km
DEPTH = 54.6 ± 17.1 km
4.8mb (6 obs.) 4.4Msz (1 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)

MNI	6.19	199 eP	40 27.30	0.1		
OCP	9.22	322 eP	41 10.00	0.9		
GUMO	18.75	69 eP	43 27.00	13.7X		
NNT	27.22	283 eP	44 38.20	1.2		
WB5	28.03	165 eP	44 47.80	3.5X		
KMI	29.05	310 Pc	44 53.50	-0.3		
		sP	45 04.50			
TSRJ	29.29	15 P	44 55.40	0.0		
CHG	29.44	296 eP	44 56.20	-0.9		
OIS	30.41	156 iPd	45 04.10	-1.5		
		i	45 16.40			
CHJJ	30.66	20 P	45 06.20	-1.4		
MTMJ	30.78	17 P	45 08.30	-0.5		
MAT	30.86	18 eP	45 08.00	-1.4		
	0.8s	12.69nm		4.7mb		
ASPA	31.57	168 eP	45 15.70	-0.1		
	0.4s	10.90nm		5.0mb		
NANU	31.72	200 iPc	45 17.50	0.5		
	0.5s	4.00nm		4.5mb		
NIIJ	31.75	19 eP	45 17.20	0.1		
YAMJ	32.93	19 P	45 27.80	0.3		
WARB	33.32	180 eP	45 30.20	-0.7		
BJI	33.95	345 eP	45 34.50	-1.7		
OFUJ	34.30	21 P	45 40.50	1.2		
LZH	35.53	327 eP	45 51.50	1.5		
	Z 20s	0.60um		4.4Msz		
		sP	46 06.50			
MRWA	37.82	196 eP	46 09.00	-0.1		
FORR	37.98	178 eP	46 09.00	-1.4		
	0.4s	65.00nm		5.9mb X		
BAL	38.96	194 eP	46 18.00	-0.7		
KLB	39.67	192 iPd	46 33.30	8.7X		
NWAO	41.07	192 iPd	46 36.00	-0.1		
STK	41.45	161 eP	46 38.50	-0.7		
	0.9s	10.00nm		4.6mb		
RKG	42.22	192 eP	46 50.20	4.7X		
ADE	43.53	166 eP	46 56.00	-0.2		
BWA	46.27	155 eP	47 20.00	2.0		
CAN	47.28	155 eP	47 28.50	2.4		
GBA	48.94	282 P	47 38.20	-0.9		
FBA	81.43	25 iP	51 08.80	0.5		
	1.0s	12.50nm		4.8mb		
INK	86.78	22 eP	51 36.00	0.7		
YKA	96.18	24 eP	52 19.30	0.1		
	0.8s	3.70nm		5.0mb		
ZOBO	162.86	123 PKP	58 56.00	1.4		
	S.D. = 1.1	on 31 of 35 obs.				

& SEP 27, 1990 16h 32m 07.65s
64.288 N 146.986 W
DEPTH = 7.2km
CENTRAL ALASKA (1)
<AGS-P>.

HDA	0.12	7 iP	32 10.41	0.0		
		iS	32 12.42			
CCB	0.51	316 iP	32 17.23	-0.6		
WRH	0.51	291 iP	32 17.56	-0.4		
		iS	32 24.79			
DDM	0.71	135 eP	32 21.33	-0.4		
FBA	0.71	331 eP	32 21.05	-0.7		
		eS	32 31.18			
GLM	0.72	346 eP	32 21.34	-0.8		
		eS	32 31.29			
NEA	0.95	289 eP	32 25.59	-0.5		
		eS	32 39.23			
MCK	1.02	238 eP	32 27.41	0.1		
		eS	32 41.88			
DOT	1.44	115 eP	32 33.67	-0.5		
		eS	32 53.49			
TOA	2.22	170 eP	32 45.05	-0.4		
CUT	2.40	220 eP	32 47.14	-0.8		
FYU	2.40	17 eP	32 49.25	1.3		
SML	2.56	194 eP	32 49.93	-0.4		
KLU	2.85	170 eP	32 55.35	0.9		
	14 obs. ossocioted					

% SEP 27, 1990 16h 34m 43.53± 0.94s
44.558 N ± 8.6km 7.243 E ± 8.9km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (GEN).

PZZ	0.11	243 P	34 46.47	-0.1		
		S	34 48.62			
STV	0.32	169 P	34 50.37	0.2		
		S	34 54.88			
ENR	0.35	159 P	34 50.78	-0.1		
		S	34 55.90			
RRL	0.49	318 P	34 53.54	0.0		

27d 16h

		S	34 59.39			
ROB	0.52 120	P	34 54.06	0.0		
		S	35 01.23			
S.D. = 0.2 on 5 of 5 obs.						

SEP 27, 1990 16h 50m 05.95± 0.98s
6.214 S ± 7.9km 154.088 E ± 8.7km
DEPTH = 63.1 ± 10.5 km
5.2mb (10 obs.)
SOLOMON ISLANDS (193)

RAB	2.77 316	iPc	50 48.00	-0.9		
	0.7s 219.18nm					
		iS	51 33.50			
SVO	6.38 118	eP	51 40.00	0.4		
HNR	6.63 119	eP	51 44.00	1.0		
		eS	53 06.00			
LAT	7.06 266	eP	51 25.00	-24.0X		
CTA	15.75 208	iPc	53 50.60	5.2X		
	0.8s 9.33nm			4.0mb X		
DZM	19.78 144	iPc	54 32.00	-1.9		
RMO	20.79 194	eP	54 43.70	-0.6		
WB5	23.49 233	eP	55 12.20	1.2		
		i	58 56.90			
ASPA	26.04 226	iPd	55 34.90	-0.3		
	9.0s 9.00nm			4.3mb		
Z	22s 0.21um			3.6Msz		
		LR	05 23.00			
CMS	26.31 196	eP	55 39.00	1.4		
STK	28.08 203	eP	55 52.50	-1.2		
	1.6s 76.00nm			5.1mb		
		e	55 58.50			
BAG	40.05 305	eP	57 37.10	0.0		
KMI	58.84 304	Pc	00 02.00	1.1		
CHG	59.75 296	eP	00 07.50	0.4		
LZH	63.13 316	Pc	00 29.50	-0.2		
	1.5s 28.00nm			5.1mb		
		pP	00 35.50	19kmX		
GUN	73.95 301	P	01 37.40	0.3		
	0.8s 39.00nm			5.4mb		
PKI	74.25 301	P	01 39.00	0.1		
	1.2s 43.00nm			5.3mb		
KKN	74.42 301	P	01 39.80	0.0		
	0.9s 44.00nm			5.4mb		
DMN	74.52 301	P	01 40.80	0.4		
	1.0s 82.00nm			5.6mb		
GKN	75.03 301	P	01 43.20	0.0		
	1.0s 72.00nm			5.6mb		
GBA	78.58 285	Pd	02 02.50	-0.4		
	0.6s 1.60nm			4.1mb		
SPA	83.83 180	iPd	02 30.10	0.3		
	1.0s 9.50nm			4.8mb		
QUE	90.62 300	eP	03 03.10	-0.3		
ZOBO	132.63 119	PKP	09 16.00	-0.9		
S.D. = 0.9 on 22 of 24 obs.						

? SEP 27, 1990 17h 50m 17.68± 1.33s
24.349 S ±15.7km 67.189 W ±25.8km
DEPTH = 186.1 ± 47.4 km
CHILE-ARGENTINA BORDER REGION (127)

ANT	3.02 282	iPc	51 07.30	0.0		
		iS	51 42.70			
CNCB	7.54 354	P	52 07.10	0.7		
		S	53 28.00			
LPB	7.82 354	eP	52 10.00	0.0		
ZOBO	8.09 354	P	52 13.00	-0.6		
		S	53 44.00			
PPD	14.78 84	(P)	53 39.00	0.0		
BAO	20.00 68	Pd	54 37.90	0.0		
S.D. = 0.7 on 6 of 6 obs.						

SEP 27, 1990 18h 18m 33.62± 1.00s
33.036 S ± 6.6km 71.048 W ±10.6km
DEPTH = 53.5 ± 13.4 km
NEAR COAST OF CENTRAL CHILE (135)

ROCH	0.07 26	iPc	18 42.40	0.1		
		iS	18 50.20			
JACH	0.52 47	iPc	18 45.00	-0.5		
		iS	18 54.50			
SAN	0.53 142	iPc	18 45.60	0.1		
		iS	18 55.60			
LCCH	0.62 225	iPd	18 47.00	0.4		
		iS	18 58.30			
TACH	0.62 172	iPc	18 47.00	0.3		
		iS	18 58.20			
PCH	0.73 143	iPc	18 48 20	0.0		
		iS	19 01.00			
CHCH	0.95 160	iPc	18 50.80	-0.2		
		iS	19 05.90			
LNV	0.97 198	iP	18 50.50	-0.6		
		iS	19 05.40			
RTBS	1.92 45	ePd	19 05.00	0.5		
RTCV	2.42 62	e(P)	19 12.70	1.1		
RTCB	2.45 52	ePc	19 12.10	0.0		
RTLL	2.77 53	ePc	19 15.30	-1.3		
S.D. = 0.7 on 12 of 12 obs.						

SEP 27, 1990 20h 07m 11.22± 0.74s
51.567 N ± 5.3km 6.748 E ± 9.0km
DEPTH = 10.0km (geophysicist)
GERMANY (543)
ML 1.7 (BNS).

WTS	0.43 5	ePg	07 20.00	0.0		
BNS	0.66 156	iPc	07 24.30	-0.1		
	0.4s 36.00nm					
		iS	07 33.50			
ENN	0.95 213	ePg	07 30.00	0.6		
	0.3s 23.00nm					
		iSg	07 44.40			
KLL	0.96 197	iPc	07 29.40	-0.1		
		iS	07 44.10			
MEM	1.07 206	iP	07 30.97	-0.3		
		iS	07 46.57			
KOE	1.30 151	iPc	07 35.40	0.1		
		iS	07 53.50			
DOU	2.01 224	iP	07 45.30	-0.2		
		S	08 09.60			
S.D. = 0.4 on 7 of 7 obs.						

* SEP 27, 1990 20h 30m 39.90± 0.86s
27.613 S ± 6.1km 70.690 W ±19.8km
DEPTH = 110.3 ± 14.0 km
4.6mb (2 obs.)
NEAR COAST OF NORTHERN CHILE (122)

ANT	3.90 4	eP	31 40.00	1.2		
RTBS	4.18 165	e(P)	31 44.60	2.0		
RTLL	4.18 153	iPc	31 42.30	-0.4		
		eS	32 25.00			
RTCB	4.20 157	eP	31 43.90	0.9		
ZON	4.29 156	eP	31 45.10	0.8		
CFA	4.52 152	ePc	31 46.50	-0.8		
		S	32 34.00			
RTCV	4.63 157	e(P)	31 44.00	-4.9X		
JACH	5.05 179	iP	31 55.50	0.8		
ROCH	5.35 183	eP	31 58.50	-0.4		
		i	32 58.50			
MDZ	5.49 164	eP	32 04.20	3.5X		
		i	32 28.90			
		i(S)	33 05.80			
LCCH	5.89 187	iP	31 55.50	-10.7X		
PCH	5.99 179	eP	32 08.00	0.4		
TACH	6.02 182	iP	32 07.30	-0.7		
CHCH	6.30 180	eP	32 11.00	-0.8		
LNV	6.35 185	eP	32 10.70	-1.8		
CNCB	11.04 14	P	33 16.00	-0.4		
ARE	11.12 356	e(P)	33 30.00	12.8X		
LPB	11.28 13	(P)	33 07.00	-12.5X		
ZOBO	11.54 12	P	33 22.00	-0.9		
PPD	18.44 77	eP	34 47.40	-2.3		
LIC	71.70 73	P	41 53.60	1.5		
KIC	72.02 73	P	41 55.60	1.7		
	0.5s 4.50nm			4.5mb		
LKO	72.99 69	Pd	41 58.98	-0.7		
	0.7s 8.00nm			4.7mb		
S.D. = 1.3 on 18 of 23 obs.						

& SEP 27, 1990 20h 50m 07.58s
47.732 N 123.711 W
DEPTH = 0.0km
WASHINGTON (29)
<SEA>. CL 2.8 (SEA).

OSD	0.09 4	Pd	50 09.28	-0.1		
OOW	0.32 271	Pc	50 13.88	-0.1		
OBC	0.39 321	Pd	50 14.75	-0.6		
OBH	0.42 195	Pd	50 15.77	-0.2		
		S	50 22.02			
STW	0.42 4	Pd	50 15.45	-0.5		
HDW	0.45 100	Pc	50 16.24	-0.4		
		S	50 22.30			
OFK	0.49 297	Pd	50 17.04	-0.3		
OTR	0.55 310	Pd	50 18.29	-0.3		
BLN	0.57 61	Pc	50 18.49	-0.4		
GMW	0.65 106	Pc	50 19.82	-0.8		
		S	50 29.33			
PGW	0.76 83	P	50 22.12	-0.5		
OSP	0.81 313	P	50 23.00	-0.7		
		S	50 36.67			
CPW	0.85 153	Pd	50 23.70	-0.9		
ONR	0.86 183	P	50 24.07	-0.6		
SPW	1.01 100	P	50 27.17	-0.4		
MCW	1.12 31	P	50 27.37	-2.1		
CMW	1.27 56	P	50 30.63	-1.6		
JCW	1.28 68	Pc	50 30.77	-1.5		
BMW	1.30 165	Pd	50 31.11	-1.5		
APW	1.30 146	P	50 30.95	-1.7		
HTW	1.31 86	P	50 30.97	-1.9		
RMW	1.32 101	P	50 31.56	-1.4		
GSM	1.40 111	P	50 32.99	-1.4		
LMW	1.44 137	P	50 33.30	-1.7		
CZM	1.54 147	P	50 35.03	-1.3		
FMW	1.60 119	P	50 35.67	-1.8		
MBW	1.60 48	P	50 36.44	-1.0		
LON	1.63 126	P	50 36.30	-1.3		
RPW	1.64 63	Pc	50 36.90	-0.9		
RVW	1.72 157	P	50 37.89	-1.0		
TDL	1.72 143	P	50 37.78	-1.3		
FL2	1.80 148	P	50 39.06	-1.1		
WPW	1.80 124	P	50 39.38	-0.9		
STD	1.81 145	P	50 39.33	-1.0		
SHW	1.84 146	P	50 40.08	-0.8		
GLK	1.85 128	P	50 40.96	0.0		
LVP	1.89 151	P	50 40.76	-0.7		
CDFW	1.98 144	P	50 42.24	-0.5		
MTMW	1.99 148	P	50 42.47	-0.5		
TWW	2.02 106	P	50 44.01	0.6		
TBM	2.19 104	P	50 46.33	0.5		
NAC	2.20 116	P	50 46.95	0.9		
ETW	2.29 92	P	50 47.56	0.2		
EBG	2.29 110	P	50 47.95	0.7		
GULW	2.32 140	P	50 48.18	0.4		
VLMM	2.48 152	P	50 51.40	1.4		
BVW	2.77 108	P	50 56.29	2.2		
47 obs. assocloted						

SEP 27, 1990 21h 07m 38.42± 0.22s
51.689 N ± 5.3km 176.307 E ± 3.0km
DEPTH = 34.4km (5 depth phases)
5.1mb (62 obs.) 4.7Msz (3 obs.)
RAT ISLANDS, ALEUTIAN ISLANDS (6)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.8.: 15S, 30C
Centroid Location:
Origin Time 21:07:40.2 1.0
Lot 52.19N 0.12 Lon 176.1BE 0.17
Dep 15.0 FIX Holf-durotion 1.5
Moment Tensor; Scole 10**16 Nm
Mrr= 3.06 0.37 Mtt=-2.00 0.46
Mff=-1.06 0.40 Mrt= 7.29 1.17
Mrf= 6.79 1.17 Mtf=-1.18 0.46
Principol Axes:

	Vol= 10.54	Plg=53	Azm=315
T			
N	-0.31	2	48
P	-10.23	37	139

Best Double Couple:Mo=1.0**10**17
NP1:Strike=242 Dip= 8 Slip= 104
NP2: 47 82 88

SMY	1.71 308	iPd	08 06.70	0.3		
ADK	4.36 85	ePc	08 45.60	1.7		
ANM	16.04 29	eP	11 27.80	5.1X		
SVW	18.03 48	eP	11 49.90	2.2		
TTA	18.54 42	eP	11 55.70	1.8		
KDC	18.90 59	eP	11 56.80	-1.4		
IMA	20.86 35	ePc	12 19.80	0.2		
PMR	21.17 49	eP	12 20.40	-2.2		
FBA	22.64 41	eP	12 37.20	0.0		
	0.6s 33.90nm			5.0mb		
TOA	22.65 48	eP	12 38.50	1.1		
KUSJ	22.90 260	eP	12 39.10	-0.8		
ASAJ	23.64 265	eP	12 49.00	1.9		
HOOJ	24.17 260	eP	12 52.70	0.5		
INK	28.98 36	eP	13 35.50	-0.9		
KAKJ	29.90 253	P	13 45.20	0.2		
NIIJ	29.92 256	P	13 45.20	0.1		
MAT	30.86 256	iPc	13 53.50	0.1		

		0 9s	35.29nm		5.2mb		ETA	75.97	2 eP	19 25.60	2.6				iSg	20 47.50							
			(S)	19 05.00			ECB	76.29	2 eP	19 25.60	0.8		ZLA	80.67	352 ePd	19 48.90	0.0						
	MTMJ	31.07	256 P	13 55.80	0.4		ECB	76.29	2 eP	19 25.20	0.4		SAX	80.81	351 ePd	19 50.00	0.0						
	RMW	39.29	71 P	15 15.00	9.5X		WTS	76.31	353 eP	19 25.00	0.0		OGA	81.01	350 iPc	19 51.40	0.4						
	LON	39.65	72 eP	15 10.00	1.6			0.7s	18.00nm		5.2mb			0.7s	13.00nm		5.0mb						
	PNT	39.66	67 eP	15 11.00	2.6				e	19 36.00	36km		FVI	81.08	349 P	19 51.00	0.0						
	EDM	41.30	59 eP	15 19.00	-2.9		CLL	76.41	349 iP	19 24.60	-1.0		LOR	81.21	355 eP	19 51.60	-0.1						
	NEW	41.61	67 eP	15 22.50	-2.0			1.9s	32.00nm		5.0mb			1.1s	17.10nm		5.0mb						
		0.8s	9.38nm		4.6mb				i	20 46.90	362kmX		LLS	81.22	351 ePc	19 52.40	0.4						
	BJI	42.31	279 eP	15 30.50	0.3				e	20 56.00			HYB	81.22	287 eP	19 52.00	-0.2						
		1.7s	125.00nm		5.4mb		KSP	76.45	347 iPc	19 25.40	-0.4			1.0s	110.00nm		5.8mb						
	LBFM	42.56	79 eP	15 33.00	0.4				i	19 32.00	21kmX		GRC	81.22	355 P	19 52.01	0.3						
	WDC	42.62	80 eP	15 34.20	1.4				e	20 32.80			OSS	81.28	350 ePc	19 52.80	0.5						
	ORV	43.87	81 eP	15 43.80	0.8				i	20 43.40			PTJ	81.33	346 iPc	19 52.70	0.2						
	SES	43.93	62 eP	15 45.00	1.6				e	34 32.00			SSF	81.44	355 eP	19 53.00	0.1						
	BRK	44.44	83 eP	15 46.00	-1.5		ECP	76.48	2 eP	19 25.20	-0.7			0.8s	12.10nm		5.0mb						
	SSE	44.96	265 Pc	15 52.80	1.0		ECP	76.48	2 eP	19 25.60	-0.3		LBF	81.49	355 eP	19 52.80	-0.4						
		1.0s	35.00nm		5.2mb		KRA	76.66	345 iPd	19 27.30	0.3			0.9s	9.85nm		4.8mb						
	GCC	45.13	84 eP	15 53.50	0.4			0.7s	34.00nm		5.5mb		VDL	81.55	351 ePc	19 54.50	0.7						
	MHC	45.15	83 eP	15 54.00	0.5		Z	20s	0.80um		5.0Msz		BEO	81.63	343 iP	19 53.50	-0.4						
	ARN	45.22	83 eP	15 54.20	0.3		E	20s	1.00um				AVF	81.71	355 eP	19 54.20	-0.1						
	CMB	45.49	82 eP	15 56.50	0.4				e	19 29.20	6kmX			1.0s	14.00nm		4.9mb						
		1.4s	29.35nm		5.0mb				e	19 37.00			CTI	81.75	349 Pc	19 54.40	-0.3						
	PRS	45.96	84 eP	16 00.60	0.9		BRG	76.72	349 iPc	19 26.40	-1.0		TRI	81.82	348 eP	19 53.40	-1.5						
	LLA	46.04	84 eP	16 01.20	0.8			1.0s	20.00nm		5.1mb		SMF	81.83	355 eP	19 55.00	0.0						
	FFC	46.41	52 eP	16 04.00	1.0				i	19 37.70	37km			1.0s	28.00nm		5.2mb						
		0.7s	6.00nm		4.7mb				i	20 46.00			BGF	81.97	355 eP	19 55.80	0.1						
	TNP	47.41	79 eP	16 10.50	-0.9				i	20 59.00				1.1s	17.10nm		5.0mb						
		0.8s	16.18nm		5.1mb				i	22 39.00			TMA	81.99	351 ePc	19 56.20	0.2						
	BCH	47.50	84 eP	16 12.20	0.2				i	36 12.00			MFF	82.04	358 eP	19 56.20	0.2						
	ISA	48.19	83 eP	16 16.00	-1.3		MOX	77.22	350 eP	19 30.00	-0.1			0.8s	9.40nm		4.9mb						
	ABL	48.25	84 eP	16 18.00	0.0		SPC	77.45	344 iP	19 32.60	1.0		RIY	82.10	347 eP	20 01.20	4.9X						
	CLC	48.63	82 eP	16 21.00	0.3		PRU	77.52	348 P	19 31.50	-0.3		MMK	82.12	352 ePc	19 57.80	1.0						
	BW06	49.09	70 eP	16 22.50	-1.9				e	19 42.10	34km		DIX	82.14	352 ePc	19 57.90	1.0						
	SBB	49.22	83 eP	16 25.00	-0.3				PP	22 37.00			VAI	82.23	351 Pc	19 57.50	0.5						
	PAS	49.37	84 eP	16 24.00	-2.3		ENN	77.60	354 ePc	19 32.00	-0.1		TCF	82.27	356 eP	19 57.40	0.1						
	MWC	49.39	84 eP	16 27.00	0.3			0.8s	35.00nm		5.4mb			0.8s	6.05nm		4.7mb						
	GSC	49.45	82 eP	16 27.00	-0.1		GRF	78.20	350 ePc	19 36.00	0.5		MAF	82.32	356 eP	19 58.00	0.5						
	RVR	49.96	84 eP	16 31.00	0.1			0.8s	23.00nm		5.3mb			1.2s	17.85nm		5.0mb						
	TPC	50.71	83 eP	16 36.00	-0.6		Z	22s	0.20um		4.4Msz		LSF	82.34	356 eP	19 57.60	0.0						
	PLM	50.71	84 eP	16 37.00	0.2				e	19 40.70	15kmX			1.0s	14.00nm		5.0mb						
	BAR	51.28	84 eP	16 41.00	0.0				e	19 46.70			AGO	82.46	355 P	19 58.95	0.7						
	GLA	52.17	83 eP	16 48.00	0.3		DOU	78.35	355 Pc	19 36.00	-0.3		PLDF	82.52	355 P	19 59.27	0.6						
	GOL	53.48	70 eP	16 58.00	0.4			0.9s	32.50nm		5.3mb		ORX	82.54	352 P	19 58.59	-0.2						
		0.8s	6.70nm		4.7mb		KHC	78.48	349 iPc	19 37.50	0.4		LPL	82.76	353 eP	20 01.20	1.1						
	FRB	54.32	30 ePc	17 01.40	-1.6			1.0s	9.00nm		4.7mb			1.0s	20.00nm		5.1mb						
	ALQ	56.00	75 eP	17 13.00	-3.0				e	21 03.50	379kmX		PYM	82.77	355 P	20 00.33	0.4						
		0.9s	3.15nm		4.3mb		WET	78.55	349 eP	19 37.70	0.2		LPG	82.78	353 eP	20 01.40	1.1						
	KEV	56.81	348 iP	17 19.10	-2.0		CLI	78.58	339 ePc	19 58.00	20.3X			1.0s	28.00nm		5.3mb						
		0.6s	20.90nm		5.3mb		ZST	78.91	346 iPc	19 40.20	0.8		LSD	82.78	352 P	20 01.36	1.1						
	TRO	57.87	351 eP	17 27.00	-1.5				i	19 50.50	33km		RSP	83.08	352 P	20 01.67	0.1						
	SOD	59.09	347 iP	17 34.80	-2.3		SRO	79.10	345 iP	19 41.50	1.1		BNI	83.22	353 P	20 03.80	1.4						
	KMI	60.65	274 Pc	17 47.00	-1.6		BUD	79.30	345 iP	19 42.30	0.7		BOB	83.26	351 P	20 03.60	1.1						
			pP	18 00.00	46kmX		VRI	79.35	339 ePc	19 42.00	0.1		LBL	83.27	355 P	20 03.10	0.7						
			sP	18 11.00			KMR	79.47	348 iP+	19 42.80	0.3		RRL	83.35	353 P	20 04.44	1.3						
	SCH	61.63	36 eP	17 54.00	-0.6		SOP	79.50	346 eP	19 45.00	2.4		BBTK	83.46	333 eP	19 50.00	-13.6X						
	AKU	62.43	7 iP	18 00.00	0.3		CFR	79.67	338 eP	19 43.00	-0.5				e	20 04.00	48kmX						
		1.0s	76.00nm		5.8mb		CDF	79.84	353 eP	19 44.30	-0.3		PCP	83.57	351 P	20 03.72	-0.3						
			i	21 54.10				0.6s	10.80nm		5.0mb		CAF	83.64	356 eP	20 04.90	0.5						
	SUF	63.53	345 iP	18 05.80	-1.2		MLR	79.88	339 ePd	19 41.50	-3.4X			0.8s	6.05nm		4.8mb						
		0.6s	38.80nm		5.7mb		FLN	79.89	358 eP	19 44.20	-0.5		LFF	83.68	357 eP	20 05.00	0.5						
	UYO	63.62	68 e(P)	18 09.10	1.1			1.0s	26.00nm		5.2mb			0.8s	13.45nm		5.1mb						
	NUR	65.86	345 iP	18 20.80	-1.3		LDF	80.05	358 eP	19 45.20	-0.3		MME	83.69	350 P	20 06.10	1.2						
		0.8s	26.40nm		5.4mb			0.8s	18.80nm		5.1mb		DOI	83.72	352 P	20 04.50	-0.4						
	NB2	66.99	352 P	18 28.20	-1.2		ISR	80.08	339 ePd	19 42.00	-3.9X		PZZ	83.73	352 P	20 04.33	-0.7						
		0.8s	58.10nm		5.7mb		TNR	80.09	340 ePc	19 46.00	0.2		ASPA	83.74	218 iPc	20 05.20	0.2						
	LOE	67.00	269 eP	18 30.00	0.0		WB5	80.14	220 eP	19 46.00	-0.3			0.5s	8.70nm		5.1mb						
	HBVT	67.17	47 eP	18 28.50	-2.2		TLB	80.26	338 eP	19 42.50	-4.2X		SURF	83.78	352 P	20 06.19	0.9						
	CBM	67.31	42 eP	18 29.80	-1.7		GRR	80.27	358 eP	19 46.60	-0.1		SFI	83.82	349 P	20 07.00	1.8						
	UPP	67.48	349 iPc	18 31.30	-1.1			0.7s	19.85nm		5.2mb		BDI	83.83	350 P	20 05.60	0.2						
	HFS	67.65	351 eP	18 31.20	-2.3		CMP	80.29	340 ePc	19 51.00	4.0X		ROB	83.87	352 P	20 05.36	-0.3						
		0.6s	37.90nm		5.7mb		HAU	80.31	353 eP	19 46.80	-0.2		PGD	83.88	349 P	20 07.40	1.6						
	Z	21s	0.47um		4.7Msz			0.6s	9.90nm		5.0mb		HVAR	83.91	345 iP	20 05.60	-0.1						
			LR	45 42.00			SLE	80.38	352 ePc	19 47.10	-0.3		LPO	83.92	357 eP	20 06.00	0.3						
	CHG	67.67	272 iPc	18 33.60	-0.7		BSF	80.45	353 eP	19 47.20	-0.7			0.8s	16.10nm		5.2mb						
		1.0s	22.25nm		5.2mb			0.8s	13.45nm		5.0mb		STV	83.97	352 P	20 04.95	-1.2						
	CHTO	67.67	272 iP	18 33.10	-1.1		WATA	80.49	350 iPc	19 48.40	0.3		ENR	83.98	352 P	20 04.85	-1.4						
		1.0s	22.50nm		5.2mb			0.6s	16.80nm		5.2mb		CRE	84.10	349 P	20 08.00	1.2						
	CHTO	67.67	272 iP	18 50.00	15.8X				iPgc	20 38.60			ARV	84.10	348 Pc	20 07.60	0.9						
		1.0s	25.00nm						iSg	20 40.70			RDO	84.10	338 iPc	20 07.20	0.5						
	BDT	68.82	271 eP	18 36.50	-4.8X		K8A	80.53	348 iPc	19 49.30	0.9		SKO	84.19	341 iP	20 07.80	0.6						
	JSC	70.87	59 eP	18 52.30	-1.3			0.7s	72.20nm		5.8mb		IMI	84.25	352 P	20 07.20	-0.3						
	NNT	71.90	267 eP	18 58.50	-1.6		LPF	80.63	358 eP	19 48.60	0.0		SBF	84.34	352 eP	20 08.10	0.1						
	EKA	73.35	360 Pc	19 07.50	-0.4			0.6s	7.20nm		4.8mb			0.6s	14.45nm		5.3mb						
		0.7s	10.50nm		4.9mb		SQTA	80.64	350 iPc	19 49.20	0.3		ASS	84.56	348 P	20 10.20	1.1						
	WIT	75.51	354 eP	19 22.00	1.6			0.8s	26.30nm		5.3mb		FRF	84.71	352 eP	20 10.20	0.5						
			e	19 32.00	32km				iPgd	20 42.50				0.8s	16.10nm		5.3mb						

27d 21h

LRG	84.84	353	eP	20	11.10	0.8
	0.8s	14.80nm			5.2mb	
LMR	84.94	353	eP	20	11.40	0.5
	0.8s	13.45nm			5.2mb	
OHR	85.15	342	eP	20	11.70	-0.4
AQU	85.17	347	P	20	13.30	1.2
MNS	85.23	348	Pc	20	12.50	0.1
PLG	85.31	340	eP	20	13.00	0.1
PGF	85.50	351	eP	20	14.30	0.5
	0.6s	43.30nm			5.8mb	
AZI	85.52	347	P	20	15.00	1.2
EPF	85.60	357	eP	20	13.90	-0.3
	0.8s	6.70nm			4.9mb	
DUI	85.70	346	P	20	15.50	0.7
KZN	85.73	341	eP	20	14.00	-1.0
PRK	85.74	337	eP	20	15.00	0.1
SDI	85.75	347	P	20	15.10	0.1
SGO	86.65	346	P	20	17.50	-1.9
KEK	86.69	342	eP	20	19.00	-0.7
ORI	86.95	345	Pc	20	22.00	1.1
MGR	87.02	345	P	20	20.70	-0.5
EVR	87.06	340	eP	20	22.00	0.4
TDS	87.36	345	P	20	23.50	0.6
VLS	88.02	341	eP	20	25.00	-1.1
STK	88.63	209	eP	20	28.70	0.0
ITM	88.70	340	eP	20	28.00	-1.4
VLI	88.93	339	eP	20	28.20	-2.2
WARB	88.94	223	eP	20	31.50	1.1
	0.5s	5.00nm			5.1mb	
SOI	88.96	345	P	20	29.40	-1.1
KAP	89.01	335	eP	20	29.00	-1.9
NPS	89.68	336	eP	20	31.80	-2.3
VAM	89.89	338	eP	20	34.60	-0.4
ZOBO	118.42	80	ePKP	26	29.00	4.3X
LPB	118.64	80	ePKP	26	18.00	-6.9X
CNCB	118.92	80	PKP	26	26.00	0.4
PPD	132.94	69	(PKP)	26	52.00	0.4
SPA	141.50	180	ePKP	27	08.80	2.5X
	0.4s	7.89nm				
SLR	144.51	305	iPKPc	27	10.00	-2.8X
	1.0s	40.00nm				
MAW	144.86	218	iPKP	27	10.90	-0.9
SWZ	147.20	307	iPKPc	27	23.00	5.8X
	0.9s	100.84nm				
BLF	148.33	304	iPKPc	27	22.50	3.6X
S.D. = 1.0 on 206 of 223 obs.						

SEP 27, 1990 21h 10m 07.60± 0.44s
38.007 N ± 5.7km 23.512 E ± 5.3km
DEPTH = 171.6 ± 6.9 km
3.9mb (2 obs.)
GREECE (364)

ATH	0.17	102	iPd	10	31.00	0.5
			eS	10	46.00	
VLI	1.37	200	iPc	10	37.50	-0.4
ITM	1.51	237	iPd	10	40.00	0.7
EVR	1.62	305	iPc	10	40.80	0.3
APE	1.86	120	iPc	10	43.20	0.2
VLS	2.31	275	iPd	10	48.60	0.6
			eS	11	18.00	
PLG	2.36	359	eP	10	48.10	-0.6
VAM	2.65	168	iPc	10	51.20	-0.9
			eS	11	24.00	
KZN	2.67	330	iPd	10	52.20	-0.1
NPS	3.22	148	iPc	10	58.00	-1.1
			eS	11	35.50	
KEK	3.36	302	iPd	11	01.10	0.2
OHR	3.74	327	iPn	11	05.80	0.0
KAP	3.83	129	eP	11	08.00	1.2
			eS	11	50.00	
SKO	4.27	339	iPn	11	12.50	0.0
LCI	4.90	300	P	11	19.00	-1.8
			eSn	12	08.50	
BRT	5.66	302	P	11	30.70	-0.1
			eSn	12	29.80	
TDS	5.84	289	P	11	34.30	1.1
ORI	5.87	293	P	11	33.40	-0.2
			eSn	12	34.60	
SOI	5.89	273	P	11	33.70	-0.1
			eSn	12	33.40	
BAI	6.00	303	P	11	34.00	-1.3
MGR	6.55	291	P	11	42.50	-0.1
SGO	6.85	294	P	11	47.30	0.7
SDI	8.32	299	P	12	06.80	0.6
HFS	23.01	347	eP	14	58.00	0.0
	0.4s	2.40nm			4.1mb	

NB2	24.31	345	P	15	10 90	0.5
	0.5s	1.50nm			3.8mb	
S.D. = 0.8 on 25 of 25 obs.						

SEP 27, 1990 21h 12m 32.57± 0.20s
47.903 N ± 4.0km 84.961 E ± 4.5km
DEPTH = 33.4km (6 depth phases)
5.0mb (36 obs.) 4.5Msz (3 obs.)
KAZAKH-XINJIANG BORDER REGION (331)
Some damage (VI) to buildings in the Zayson area, USSR which had been weakened by previous earthquakes. Felt (IV) at Ust-Kamenogorsk and (II) at Semipalatinsk, USSR.

LZH	18.29	123	Pc	16	45.00	-0.4
	1.5s	167.00nm			5.0mb	
Z	18s	2.20um			4.1MszX	
E	10s	4.50um				
			pP	16	54.00	
			sP	17	00.00	
			PP	17	01.00	
			eS	19	53.50	
			SS	20	13.00	
GKN	19.87	181	P	17	04.20	0.3
GUN	19.97	178	P	17	05.00	-0.2
KKN	20.08	179	P	17	06.20	0.0
NDI	20.11	200	iPc	17	05.50	-0.7
	0.6s	30.00nm			4.8mb	
DMN	20.26	180	P	17	08.40	0.3
PKI	20.30	179	P	17	08.80	0.2
MAIO	22.06	248	eP	17	27.00	0.9
	0.8s	24.52nm			4.7mb	
			eS	23	36.00	
OUE	22.46	224	eP	17	30.20	0.0
			ePP	17	39.10	
			e	18	27.90	
			e	19	34.00	
			eS	21	58.10	
BJI	23.68	98	eP	17	43.50	1.7
	2.0s	388.00nm			5.6mb	
Z	18s	2.94um			4.8Msz	
			eS	22	04.00	
TAB	29.65	265	eP	18	48.00	10.8X
POO	30.67	201	ePd	18	46.00	-0.2
			iS	20	02.50	
HYB	30.85	192	eP	18	47.00	-0.8
SSE	32.24	108	Pd	19	00.00	0.2
	1.0s	19.00nm			4.9mb	
Z	20s	0.50um			4.2Msz	
			pP	19	11.00	41km
GBA	34.76	193	P	19	21.50	-0.3
SOD	35.03	325	iP	19	23.80	0.2
KEV	35.14	329	iP	19	24.80	0.3
	0.7s	17.40nm			5.1mb	
			i	19	34.60	33km
SUF	35.20	317	iP	19	25.00	-0.1
	0.5s	10.50nm			5.0mb	
NUR	36.12	313	eP	19	33.00	0.1
	0.7s	17.40nm			5.1mb	
			i	19	43.00	34km
GLH	39.85	266	eP	20	06.50	2.1
MAT	40.29	86	eP	20	06.00	-2.1
KRA	41.52	298	eP	20	29.00	11.1X
HFS	41.53	314	eP	20	17.00	-0.9
	0.7s	33.30nm			5.2mb	
Z	18s	0.61um			4.5Msz	
			LR	37	02.00	
MBH	42.20	263	eP	20	26.00	2.3
NB2	42.45	316	P	20	25.00	-0.5
	1.1s	70.30nm			5.3mb	
PRK	42.47	281	eP	20	27.00	1.2
BSD	42.49	307	iP	20	34.60	8.8X
	0.6s	13.00nm			4.8mb	
			i	22	08.00	504kmX
IPM	45.31	157	ePc	20	50.00	1.0
WATA	47.69	298	iPd	21	18.90	11.2X
	0.6s	10.20nm				
			iPgc	22	27.90	
			iSg	22	30.00	
SOTA	47.96	298	iPd	21	21.10	11.3X
	0.6s	17.80nm				
			iPgd	22	31.70	
			iSg	22	36.80	
ORI	48.44	287	P	21	24.60	11.2X
TDS	48.73	287	P	21	27.00	11.3X

ARV	48.81	293	P	21	28.40	12.1X
SGO	48.90	289	P	21	30.00	13.1X
MGR	48.97	288	P	21	28.50	11.0X
SFI	49.26	294	P	21	32.20	12.6X
AZI	49.31	291	P	21	31.00	11.0X
PGD	49.36	294	P	21	33.00	12.3X
MNS	49.57	292	P	21	33.50	11.4X
SOI	49.80	285	P	21	33.00	9.1X
BDI	49.95	295	P	21	37.50	12.4X
LPG	51.50	298	eP	21	37.70	0.6
	0.4s	13.20nm			5.3mb	
LPL	51.50	298	eP	21	37.70	0.7
	0.4s	18.90nm			5.4mb	
EKA	51.71	313	Pc	21	38.10	-0.1
	0.5s	7.50nm			4.9mb	
DOI	51.74	297	P	21	46.00	7.3X
PGF	51.76	294	eP	21	40.00	1.1
	0.6s	7.20nm			4.8mb	
BNI	51.78	298	P	21	50.20	11.1X
SSF	52.54	302	eP	21	44.00	-0.6
	1.0s	6.00nm			4.5mb	
LMR	52.83	296	eP	21	47.00	0.2
MAF	53.54	301	eP	21	52.00	0.0
	0.8s	5.35nm			4.6mb	
TCF	53.71	301	eP	21	53.00	-0.2
	1.0s	8.00nm			4.7mb	
LDF	53.74	305	eP	21	52.90	-0.4
	0.5s	5.85nm			4.9mb	
FLN	53.84	305	eP	21	53.70	-0.4
	0.4s	10.30nm			5.2mb	
LSF	54.12	302	eP	21	55.40	-0.8
	1.0s	7.00nm			4.6mb	
GRR	54.26	305	eP	21	56.70	-0.5
	0.6s	5.40nm			4.8mb	
LPF	54.56	305	eP	21	58.80	-0.6
	0.6s	4.50nm			4.7mb	
MFF	54.87	303	eP	22	01.40	-0.4
	0.6s	3.60nm			4.6mb	
ECP	55.02	311	eP	22	12.00	9.3X
ECB	55.12	312	eP	22	13.00	9.5X
LPO	55.22	300	eP	22	04.50	0.2
	0.8s	10.75nm			4.9mb	
EPF	56.69	299	eP	22	14.00	-0.9
	0.8s	9.40nm			4.9mb	
IMA	57.82	24	eP	22	22.00	-0.7
	1.0s	15.70nm			5.0mb	
INK	60.60	15	eP	22	41.00	-0.7
TOL	61.22	299	eP	22	45.50	-0.9
ASMO	62.67	296	eP	22	55.70	-0.5
ACHM	62.89	296	eP	22	57.20	-0.4
APHE	62.90	296	eP	22	57.50	-0.3
AAPN	62.93	296	eP	22	57.50	-0.4
ALOJ	63.05	296	eP	22	58.00	-0.8
ATEJ	63.12	296	eP	22	58.00	-1.3
BCAO	71.03	255	iPd	23	58.00	8.8X
	0.7s	27.00nm			5.4mb	
			i	24	11.30	46kmX
			i	27	56.50	
KNA	74.45	136	iPc	24	08.40	-0.7
	0.5s	41.00nm			5.7mb	
NANU	75.32	151	eP	24	14.50	0.5
MBL	75.53	147	eP	24	15.00	-0.3
	0.6s	15.00nm			5.2mb	
FFC	77.58	4	eP	24	26.00	-0.3
	0.7s	10.00nm			5.0mb	
WB5	80.68	134	iPc	24	43.30	-0.2
PNT	80.86	16	eP	24	55.00	10.8X
SES	81.12	10	eP	24	45.00	-0.6
	0.9s	32.00nm			5.3mb	
GMW	81.91	19	P	24	51.60	1.9
			pP	25	01.50	31km
NEW	82.32	15	P	24	52.00	0.1
	0.9s	12.06nm			4.9mb	
CBM	82.67	342	P	24	54.00	0.3
WARB	82.71	143	eP	24	54.50	0.5
BMW	82.83	19	P	24	56.00	1.4
LON	82.88	18	P	24	56.00	1.2
LKO	83.37	277	P	24	55.64	-2.1
ASPA	83.69	136	iPd	24	58.60	-0.5
	0.9s	40.40nm			5.6mb	
QIS	83.88	130	iPc	24	59.20	-0.9
KIC	85.13	274	P	25	07.50	0.9
HBVT	86.11	344	P	25	12.00	0.9
LBFM	88.00	20	P	25	22.00	1.4
RSSD	88.02	6	P	25	21.20	0.6
			pP	25	31.00	31km
STK	94.24	135	iPc	25	48.70	-0.4

	0.8s	9.00nm			5.3mb	
ALQ	96.90	9 e(P)	26	03.00	1.2	
	1.0s	4.00nm			4.9mb	
		e	26	13.00	31km	
ZOBO	141.46	316 PKP	31	56.00	-6.7X	
	Z 24s	0.16um			4.7MszX	
		LR	06	00.00		
LPB	141.68	316 ePKP	32	03.00	0.1	
CNCB	141.86	315 PKP	32	04.00	0.6	
ARE	143.15	320 ePKP	32	03.00	-2.3	
	S.D. = 0.9	on 74 of 97 obs.				

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* SEP 27, 1990 23h 43m 48.14± 2.74s
10.883 N ± 9.5km 62.024 W ±22.0km
DEPTH = 10.0km (geophysicist)
NEAR COAST OF VENEZUELA (97)
MD 3.5 (TRN).

TCE	0.32	125 eP	43	54.04	-0.8	
		eS	44	05.58		
TRN	0.65	111 eP	44	00.54	-0.6	
		eS	44	15.87		
TPP	0.80	135 eP	44	04.51	0.9	
		eS	44	24.91		
TPR	1.26	76 eP	44	12.04	0.5	
		eS	44	37.80		
BOT	1.31	77 eP	44	12.68	0.3	
		eS	44	38.64		
GRW	1.32	16 eP	44	12.27	-0.3	
		eS	44	38.42		
	S.D. = 0.9	on 6 of 6 obs.				

SEP 28, 1990 02h 07m 58.51± 0.42s
35.932 N ± 4.6km 4.478 W ± 3.7km
DEPTH = 110.8 ± 4.0 km
4.0mb (2 obs.)
STRAIT OF GIBRALTAR (385)

MAL	0.80	4 iPnc	08	17.00	-1.0	
		iSg	08	29.00		
OJEN	0.87	281 iPc	08	19.50	0.6	
EJIF	0.95	303 iPgd	08	20.20	0.6	
		eSg	08	33.40		
MOMI	1.08	291 iPc	08	21.00	0.1	
ALJ	1.17	309 iPc	08	21.00	-1.0	
EPRU	1.20	330 iPgc	08	23.00	0.8	
		eSg	08	39.10		
CNIL	1.35	289 iPc	08	24.50	0.6	
EMEL	1.39	117 iPnc	08	23.90	-0.5	
		eSn	08	41.80		
GIBL	1.49	307 iPc	08	26.00	0.4	
SFS	1.49	291 iPc	08	25.50	-0.1	
ECOG	1.53	28 iPnd	08	27.50	1.3	
		eSn	08	47.80		
ALM	1.87	60 iP	08	30.00	-0.3	
		eS	08	53.00		
EHOR	1.98	342 iPnc	08	31.60	-0.2	
		eSn	08	54.80		
ENIJ	2.10	60 iPnc	08	33.20	-0.1	
		eSn	08	57.60		
EBAN	2.30	14 iPnc	08	36.00	0.1	
		eSn	09	01.90		
EVAL	2.46	313 iPnd	08	37.50	-0.5	
		eSn	09	04.40		
EVIA	3.13	30 ePn	08	47.10	0.1	
		eSn	09	21.80		
TOL	3.96	5 ePb	08	56.50	-1.8	
		iPg	09	04.00		
		iSn	09	39.00		
		eSb	09	49.00		
		iSg	09	56.50		
ACU	4.14	58 ePn	09	01.20	0.4	
EPLA	4.32	343 iPnc	09	02.90	-0.3	
		eSn	09	48.90		
ECHE	4.59	36 ePn	09	07.50	0.6	
		eSn	09	57.60		
GUD	4.71	3 iPnc	09	08.10	-0.6	
		eSn	09	58.10		
ETOR	5.24	21 ePn	09	15.50	-0.4	
		eSn	10	10.40		
EROO	6.21	37 ePn	09	29.50	0.4	
		eSn	10	35.90		
ERUA	6.78	343 iPnd	09	36.60	-0.3	
		eSn	10	48.70		
ECRI	6.84	12 ePn	09	38.50	0.7	
		eSn	10	49.70		
STS	7.63	337 ePn	09	49.00	0.6	
		eSn	11	09.60		
EPF	8.01	26 Pn	09	54.00	0.3	
		Sn	11	16.00		
LPO	9.75	25 Pn	10	17.00	-0.2	
		Sn	11	56.00		
LFF	9.83	22 Pn	10	19.20	0.9	
		Sn	11	58.00		
CAF	10.27	27 Pn	10	24.10	-0.1	
		Sn	12	09.00		
RJF	10.41	24 Pn	10	25.00	-1.0	
		Sn	12	12.00		
MFF	11.14	16 Pn	10	35.40	-0.3	
LSF	11.26	22 Pn	10	36.40	-0.8	
MAF	11.57	25 Pn	10	40.20	-1.1	
		Sn	12	39.00		
BGF	11.95	25 Pn	10	45.80	-0.5	
		Sn	12	47.50		
SSF	12.62	26 Pn	10	55.60	0.6	
VOY	17.11	48 e(P)	11	53.70	1.5	
CLL	19.83	34 iP	12	23.30	0.7	
	0.8s	12.00nm			4.3mb	
ZST	20.09	46 eP	12	25.50	0.2	
SRO	20.63	48 eP	12	30.80	0.1	
MLR	24.83	58 ePd	13	11.00	-0.9	
HFS	26.91	20 eP	13	30.50	-0.1	
	0.3s	0.80nm			3.7mb	
KIC	29.43	181 P	13	53.10	-0.6	
SOD	36.14	20 iP	14	52.00	0.8	
OASM	41.94	90 ePd	15	51.90	12.0X	
KMSA	45.41	96 eP+	16	12.50	4.6X	
	S.D. = 0.7	on 45 of 47 obs.				

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* SEP 28, 1990 02h 13m 32.86± 1.16s
27.508 N ±16.8km 54.528 E ±11.4km
DEPTH = 33.0km (normal)
3.9mb (2 obs.)
SOUTHERN IRAN (353)

BRF	3.80	249 (Pn)	14	31.00	0.5	
BBU	3.86	251 iPn	14	31.40	0.1	
		(Sn)	15	15.60		
RYD	7.64	250 eP	15	22.50	-2.2	
AFIF	10.77	254 eP	16	08.70	0.7	
OUE	11.21	73 eP	16	14.70	0.6	
PRNI	17.33	284 iPc	17	35.00	1.1	
RMN	17.66	284 ePc	17	39.00	1.0	
BBTK	21.83	310 eP	18	25.00	0.7	
NUR	38.71	337 eP	20	55.00	-0.2	
HFS	42.77	331 eP	21	27.90	-0.7	
	0.4s	1.00nm			3.9mb	
NB2	44.28	331 P	21	38.20	-2.8	
	0.8s	1.60nm			3.9mb	
KEV	45.18	347 eP	21	49.00	1.0	
KIC	59.89	261 P	23	47.10	8.9X	
	S.D. = 1.4	on 12 of 13 obs.				

SEP 28, 1990 03h 51m 00.05± 0.42s
2.559 S ± 8.7km 118.992 E ± 9.7km
DEPTH = 33.0km (normal)
4.8mb (4 obs.) 3.7Msz (1 obs.)
SULAWESI (268)

KKM	8.98	342 eP	53	11.50	0.8	
PPI	18.70	276 eP	55	19.00	0.8	
IPM	19.30	292 ePd	55	24.70	-0.7	
PSI	20.73	284 ePc	55	40.70	0.2	
	1.0s	34.20nm			4.7mb	
SNG	20.73	298 eP	55	35.50	-5.0X	
WB5	22.85	140 iPc	56	00.70	-1.0	
		i	56	06.50		
NNT	24.34	309 eP	56	03.00	-13.2X	
WARB	24.61	163 eP	56	19.70	0.9	
ASPA	25.47	147 iPc	56	26.30	-0.6	
	1.8s	13.50nm			4.2mb	
	Z 20s	0.26um			3.7Msz	
		LR	06	39.00		
STK	36.10	146 iPc	58	00.50	-0.4	
	0.7s	11.00nm			4.9mb	
		iPcP	58	07.40		
BJI	42.47	357 eP	58	54.00	0.4	
CAN	42.86	143 eP	58	58.50	1.4	
GUN	43.96	316 P	59	06.30	-0.1	
PKI	44.08	315 P	59	06.80	-0.6	
GBA	44.23	292 P	59	09.00	0.6	
KKN	44.30	315 P	59	08.80	-0.3	
DMN	44.31	315 P	59	09.00	-0.2	
HYB	44.54	298 eP	59	10.00	-0.9	
GKN	44.88	315 P	59	13.20	-0.5	
	0.7s	14.00nm			5.0mb	
	S.D. = 0.8	on 17 of 19 obs.				

% SEP 28, 1990 03h 51m 41.57± 0.58s
37.137 N ± 6.1km 4.227 W ± 5.2km
DEPTH = 10.0km (geophysicist)
SPAIN (377)
mbLg 2.7 (MDD).

MAL	0.43	200 iPnd	51	49.00	-1.4	
		iSg	51	58.00		
ECOG	0.55	75 ePg	51	51.90	-0.7	
		eSg	52	00.40		
EPRU	0.82	258 ePg	51	58.00	0.5	
		eSg	52	10.00		
EHOR	1.06	310 iPgc	52	01.60	0.1	
		eSg	52	17.00		
EBAN	1.08	19 iPgd	52	01.60	-0.4	
		eSg	52	15.60		
ALJ	1.20	248 eP	52	08.00	4.0X	
EJIF	1.21	236 ePn	52	05.00	0.9	
		eSn	52	21.60		
GIBL	1.42	258 eP	52	13.50	6.1X	
ENIJ	1.62	95 ePn	52	12.00	1.8	
		eSn	52	33.40		
EVIA	2.02	42 eP	52	16.60	0.4	
		eS	52	43.60		
EVAL	2.06	283 ePn	52	16.00	-0.6	
		eSn	52	42.40		
EPLA	3.27	334 ePn	52	34.30	0.5	
ETOR	4.05	24 ePn	52	44.00	-1.0	
	S.D. = 1.0	on 11 of 13 obs.				

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* SEP 28, 1990 04h 46m 44.57± 0.78s
40.232 N ± 7.6km 25.460 E ±12.0km
DEPTH = 10.0km (geophysicist)
3.6mb (1 obs.)
AEGEAN SEA (365)
MD 3.1 (ATH).

RDO	0.92	4 ePn	47	01.50	-0.5	
PRK	1.17	147 ePn	47	05.00	-1.3	
		eSn	47	20.00		
KDZ	1.42	359 iPgd	47	11.00	0.6	
		iSg	47	28.00		
PLG	1.55	276 ePn	47	11.00	-1.2	
KK8	2.43	313 iP	47	26.00	1.1	
PGB	2.51	338 eP	47	56.00	29.9X	
SMG	2.74	156 ePb	47	31.00	1.7	
MLR	5.27	4 eP	48	04.50	-0.8	
HFS	21.24	344 eP	51	33.30	0.6	
	0.5s	1.30nm			3.6mb	
	S.D. = 1.3	on 8 of 9 obs.				

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* SEP 28, 1990 05h 32m 07.04± 1.23s
5.664 S ±11.0km 146.093 E ± 9.6km
DEPTH = 73.3 ± 13.0 km
4.1mb (2 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT	1.33	137 iPc	32	30.20	-0.1	
		eS	32	54.00		
MNDI	2.47	259 eP	32	46.00	-0.1	
		eS	33	23.00		
OIS	16.09	202 eP	35	50.50	0.3	
MTN	16.39	243 eP	35	54.00	0.0	
WB5	18.16	218 eP	36	16.10	0.2	
GUMO	19.17	356 eP	36	28.00	0.3	
RMO	20.86	173 eP	36	46.90	1.7	
ASPA	21.41	212 eP	36	48.50	-2.2	
	1.1s	7.50nm			4.0mb	
	Z 18s	0.48um			3.9Msz	
		LR	45	46.00		
DZM	25.56	132 iPd	37	29.90	-1.1	
STK	26.42	189 iPd	37	39.20	0.5	
	0.9s	7.00nm			4.2mb	
WARB	27.60	220 eP	37	50.00	0.5	
LZH	57.37	320 eP	41	55.50	5.1X	
PPD	147.62	149 ePKP	51	47.20	4.6X	
KIC	150.99	273 PKP	51	54.10	6.1X	
	S.D. = 1.2	on 11 of 14 obs.				

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* SEP 28, 1990 05h 56m 58.45± 0.42s
28.920 S ± 9.5km 176.291 W ± 8.8km
DEPTH = 15.9km (3 depth phases)
4.9mb (7 obs.) 4.6Msz (1 obs.)

28d 05h

KERMADEC ISLANDS REGION (177)

PUZ	10.20	205	eP	59	27.00	-0.2
			eS	01	29.80	
THZ	15.54	212	P	00	43.60	5.2X
KHZ	15.78	209	eP	00	39.90	-1.6
LTZ	16.63	211	eP	00	52.90	0.6
DZM	17.00	290	iPc	00	58.90	1.7
PVC	17.97	305	iPd	01	07.70	-1.5
CAN	29.98	249	eP	03	12.10	3.7X
BWA	30.43	251	eP	03	14.80	2.4
STK	36.28	255	iPd	04	04.70	1.6
	0.9s	6.00nm			4.5mb	
ASPA	44.70	265	eP	05	11.90	-0.8
	1.1s	13.60nm			4.8mb	
	Z 20s	0.71um			4.6Msz	
			LR	22	29.00	
WB5	45.56	270	eP	05	18.00	-1.5
WARB	50.25	259	eP	05	55.20	-0.9
NANU	61.00	259	eP	07	13.00	-0.6
MAT	77.90	324	iPc	08	53.40	-3.6X
	0.9s	16.81nm			5.1mb	
PLM	83.69	46	P	09	30.00	2.0
RVR	83.78	46	eP	09	33.00	4.8X
SBB	83.96	45	eP	09	35.00	5.8X
ISA	84.20	44	eP	09	27.00	-3.4X
TPC	84.69	46	eP	09	33.00	0.1
CLC	84.84	44	eP	09	39.00	5.4X
GSC	84.99	45	eP	09	35.00	0.6
TNP	86.56	43	P	09	41.80	-0.4
	1.1s	12.01nm			5.0mb	
			pP	09	46.90	16km
PSI	86.73	275	eP	09	43.00	-0.3
ALO	91.49	50	eP	10	05.30	-0.3
	1.0s	3.25nm			4.6mb	
ANMO	91.49	50	P	10	05.70	0.1
	1.0s	4.50nm			4.8mb	
			pP	10	10.80	16km
PV09	91.79	46	P	10	06.50	-0.5
BJI	92.93	315	eP	10	11.00	-0.8
	1.0s	12.00nm			5.3mb	
BW06	94.05	43	P	10	16.00	-1.2
CHG	94.50	289	eP	10	20.10	0.6
RSSD	98.12	44	P	10	34.90	-0.8
			pP	10	40.00	16km
KEV	136.99	348	ePKP	16	08.00	-13.4X
NUR	145.41	342	iPKP	16	34.90	-1.6
NB2	147.49	353	PKP	16	41.10	1.1
	0.9s	23.70nm				
UPP	147.65	347	iPKP	16	40.60	0.4
HFS	148.06	351	ePKP	16	42.10	1.2
	0.8s	25.10nm				
BCAO	151.87	213	ePKPd	16	49.00	0.9
	0.8s	20.00nm				
KSP	156.14	340	ePKP	17	03.00	10.1X
CLL	156.57	345	e(PKP)	17	04.00	10.6X
			e	17	19.00	
BRG	156.75	343	ePKP	17	04.40	10.7X
	1.0s	12.00nm				
			e	17	20.20	

S.D. = 1.2 on 28 of 39 obs.

? SEP 28, 1990 07h 46m 13.69± 3.32s
25.267 S ±24.8km 179.518 E ±29.2km
DEPTH = 532.1 ± 34.1 km
5.3mb (1 obs.)
SOUTH OF FIJI ISLANDS (171)

HBZ	12.34	185	eP	48	57.00	0.7
DZM	12.40	282	iPc	48	57.20	0.1
PUZ	12.81	184	eP	48	59.70	-1.5
WLZ	12.97	194	eP	49	04.40	1.6
NOZ	13.37	185	P	49	05.50	-1.3
PGZ	15.55	189	eP	49	27.30	-1.2
THZ	17.34	197	eP	49	48.20	2.1
KHZ	17.80	195	eP	49	50.40	-0.1
LTZ	18.46	197	eP	49	57.00	0.0
ASPA	41.40	262	iPd	53	14.80	-0.1
	0.4s	39.40nm			5.3mb	
			iS	58	48.90	
WARB	47.36	257	eP	54	00.30	-0.9
NAO	143.62	351	PKP	04	49.00	0.4
	0.8s	4.00nm				
HFS	143.79	348	ePKP	04	48.80	0.0
	0.4s	2.80nm				
MLR	150.70	320	ePKPc	04	46.00	-14.5X

S.D. = 1.2 on 13 of 14 obs.

% SEP 28, 1990 08h 05m 17.38± 0.48s
43.088 N ± 6.5km 0.629 W ± 3.5km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.1 (STR).

ESCF	0.04	104	Pg	05	19.49	0.0
			Sg	05	21.13	
ATE	0.05	268	Pg	05	19.59	0.0
			Sg	05	21.11	
ISSF	0.14	244	Pg	05	20.94	0.2
			Sg	05	23.63	
OGE	0.14	55	Pg	05	20.68	0.0
MADF	0.15	292	Pg	05	21.03	0.1
			Sg	05	24.21	
LHE	0.18	178	Pg	05	21.33	-0.1
			Sg	05	24.23	
JAU	0.20	105	Pg	05	21.81	0.0
			Sg	05	24.69	
ELYF	0.28	287	Pg	05	23.17	-0.1
			Sg	05	27.40	
BOH	0.28	273	Pg	05	23.15	-0.2
			Sg	05	27.35	

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

? SEP 28, 1990 11h 57m 50.31± 4.18s
20.511 S ±71.8km 178.077 W ±60.8km
DEPTH = 617.7 ± 26.2 km
4.6mb (3 obs.)
FIJI ISLANDS REGION (181)

SVA	4.05	305	eP	59	16.90	-0.8
VUN	4.11	307	eP	59	18.10	-0.1
SGE	4.77	307	iPc	59	23.40	0.3
DZM	14.51	261	iPd	00	55.90	2.5
STK	37.72	244	iPd	04	17.80	1.0
	0.7s	6.00nm			4.3mb	
ASPA	44.45	257	iPd	05	09.40	-0.8
	0.7s	28.90nm			4.9mb	
			iS	10	58.00	
W85	44.51	262	iPd	05	08.90	-1.8
WARB	50.76	252	iPd	05	56.20	-1.2
NANU	61.32	255	eP	07	09.20	-0.6
	0.5s	17.00nm			4.6mb	
CHG	90.18	290	eP	09	48.60	1.0
HFS	139.54	351	ePKP	16	02.30	-7.5X
	0.4s	1.20nm				
EKA	145.02	5	PKP	16	20.00	0.5
	2.1s	70.80nm				
KSP	147.68	343	iPKPd	16	27.70	3.8X
JVI	148.05	298	ePKP	16	29.50	4.4X
CLL	148.06	347	iPKPd	16	28.40	3.9X
	0.9s	19.00nm				
			i	16	32.70	
BRG	148.25	345	iPKP	16	29.50	4.7X
	1.0s	10.00nm				
PRNI	148.66	295	ePKP	16	31.00	4.9X
PRU	148.92	344	PKP	16	30.80	5.0X
RMN	148.95	295	ePKP	16	31.50	4.9X
MOX	148.97	348	e(PKP)	16	31.00	5.1X
KHC	149.96	345	ePKP	16	34.00	6.5X

S.D. = 1.5 on 11 of 21 obs.

• SEP 28, 1990 12h 33m 34.93± 1.12s
16.692 S ±12.0km 178.160 E ±11.2km
DEPTH = 33.0km (normal)
5.3mb (2 obs.)
FIJI ISLANDS (182)

MBU	0.61	117	iPc	33	47.80	0.7
			eS	33	59.70	
SGE	0.92	194	iPc	33	50.10	-1.5
			eS	34	04.10	
NDE	1.12	85	iPc	33	52.30	-2.1
			eS	34	09.10	
NDF	1.26	213	eP	33	55.00	-1.3
			eS	34	17.00	
KRO	1.33	118	ePc	33	57.40	0.0
			eS	34	18.00	
VUN	1.34	168	iPc	33	59.00	1.5
			eS	34	18.40	
SVA	1.44	169	ePc	33	59.70	0.7
			eS	34	20.00	
MAT	65.01	325	(P)	44	14.00	-0.1
PNT	85.62	35	eP	46	15.00	3.7X
LZH	87.57	309	P	46	26.00	4.7X
	1.5s	25.00nm			5.3mb	
			sP	46	38.00	
TUL	96.49	55	e(P)	47	07.50	5.0X
	1.0s	13.30nm			5.4mb	
ZST	144.95	338	ePKP	53	12.30	2.0
KHC	145.30	342	ePKP	53	15.40	4.4X
GRF	145.42	345	ePKPc	53	15.10	4.0X
	Z 27s	0.04um			4.1MszX	
CDF	147.50	349	ePKP	53	20.40	5.8X
	0.8s	5.35nm				
LOR	149.15	352	ePKP	53	24.60	7.4X
	0.8s	4.05nm				
SSF	149.40	353	ePKP	53	25.70	8.1X
	0.8s	7.40nm				
LBF	149.41	352	ePKP	53	25.40	7.7X
	1.0s	6.00nm				
AVF	149.68	353	ePKP	53	25.90	7.9X
	0.6s	2.70nm				
TCF	150.30	354	ePKP	53	27.70	8.7X
	0.6s	2.70nm				
MAF	150.33	354	ePKP	53	28.10	9.1X
	1.0s	7.00nm				

S.D. = 1.6 on 9 of 21 obs.

& SEP 28, 1990 14h 09m 46.65s
64.916 N 151.341 W
DEPTH = 20.8km
CENTRAL ALASKA (1)
<AGS-P>. ML 3.0 (PMR).

NEA	1.03	108	eP	10	05.11	-0.5
			eS	10	19.09	
WRH	1.47	106	eP	10	11.54	-0.5
			eS	10	30.40	
FBA	1.51	89	ePd	10	12.10	-0.6
IMA	1.51	321	eP	10	12.90	0.1
CCB	1.54	99	eP	10	12.15	-0.9
MCK	1.58	138	eP	10	12.93	-0.8
GLM	1.68	86	eP	10	14.47	-0.8
HDA	1.96	103	eP	10	20.75	1.6
			eS	10	46.58	
CUT	2.57	169	eP	10	26.96	-0.9
TTA	2.87	228	eP	10	35.20	3.0
SKT	2.95	182	eP	10	34.75	1.5
FYU	3.02	54	eP	10	34.71	0.5
PWA	3.34	168	eP	10	36.22	-2.6
PMR	3.48	162	ePc	10	39.00	-1.8
NCG	3.55	186	eP	10	39.30	-2.6
TOA	3.65	138	eP	10	45.20	1.9
PMS	3.77	167	eP	10	41.89	-3.1

17 obs. associated

SEP 28, 1990 14h 17m 10.23± 0.52s
26.348 S ± 5.1km 66.602 W ±10.4km
DEPTH = 225.3 ± 11.4 km
4.8mb (2 obs.)
CATAMARCA PROVINCE, ARGENTINA (130)

ANT	4.35	306	iPd	18	18.70	1.0
			iS	19	07.00	
RTCB	5.47	200	iPc	18	32.00	0.1
			eS	19	24.80	
ZON	5.49	199	eP	18	33.10	1.0
			eS	19	35.10	
RTCV	5.75	197	ePc	18	35.00	-0.4
RTBS	5.85	205	eP	18	37.20	0.6
MDZ	6.80	196	eP	18	49.10	0.3
JACH	7.21	208	eP	18	55.40	1.3
			iS	20	16.00	
ROCH	7.63	209	eP	18	58.50	-1.2
PEL	7.64	207	eP	19	00.00	0.3
			iS	20	24.60	
PCH	8.00	204	eP	19	05.00	0.6
TACH	8.19	206	eP	19	05.50	-1.3
LCCH	8.31	210	iPd	19	08.30	0.0
CHCH	8.33	204	iPd	19	08.60	-0.1
			i	20	37.70	
LNV	8.65	208	eP	19	10.50	-2.2
			iS	20	44.40	
CCH	8.93	3	eP	19	16.00	-0.7
LPB	9.87	352	P	19	29.00	0.2
ZOBO	10.13	352	P	19	32.00	-0.3
			S	21	22.00	
PPD	14.60	76	eP	20	28.00	0.2
			e	20	29.50	
			e	20	30.90	
			e	20	40.20	

		e	20 47.20		
VAO	18.15	84 eP	21 07.20	-1.3	
BAO	20.36	62 eP	21 30.50	-0.4	
BMA	20.74	85 eP	21 35.80	1.2	
JFO	21.74	83 eP	21 45.70	1.3	
SOB1	29.73	60 eP	22 56.60	-1.1	
LIC	67.85	71 P	27 46.80	0.4	
TIC	68.07	70 P	27 48.80	0.9	
KIC	68.16	71 Pc	27 48.60	0.2	-
	0.4s	8.50nm		4.8mb	
LKO	69.13	67 P	27 52.00	-2.4	
BUL	85.73	110 iPd	29 26.20	0.6	
	0.8s	15.30nm		4.9mb	
GBA	144.03	104 PKPc	36 22.00	1.0	
	0.9s	2.60nm			
HYB	146.55	98 ePKP	36 30.70	5.5X	
NDI	147.90	77 iPKPc	36 34.50	7.4X	
	0.8s	11.19nm			
	S.D. = 1.1	on 29 of	31 obs.		

• SEP 28, 1990 15h 05m 43.37± 0.94s
36.110 N ± 7.5km 27.122 E ±10.2km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.7 (ATH).

KAP	0.56	176 ePg	05 55.00	0.3	
		eSg	06 04.50		
NPS	1.49	236 ePb	06 10.30	0.1	
APE	1.80	307 ePb	06 12.50	0.7	
SMG	1.61	352 ePb	06 12.80	0.9	
CIN	1.68	27 eP	06 12.00	-0.8	
VAM	2.48	254 ePg	06 31.00	6.6X	
VLI	3.43	281 ePn	06 36.30	-1.6	
ITM	4.31	286 ePn	06 51.00	0.5	
	S.D. = 1.1	on 7 of	8 obs.		

• SEP 28, 1990 16h 22m 31.22± 0.94s
40.141 N ± 8.7km 20.549 E ±10.0km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 3.0 (ATH).

KEK	0.72	234 ePb	22 45.00	-0.4	
KZN	0.95	80 ePb	22 48.50	-0.9	
OHR	0.99	11 ePg	22 49.30	-0.7	
		eSg	23 02.20		
EVR	1.56	141 ePb	22 59.80	0.6	
SKO	1.95	20 iPn	23 06.00	1.3	
	S.D. = 1.3	on 5 of	5 obs.		

SEP 28, 1990 16h 38m 06.75± 0.64s
46.992 N ±10.6km 113.895 W ± 8.1km
DEPTH = 5.0km (geophysicist)
MONTANA (456)
ML 3.2 (NEIS), 2.9 (BUT).

BUT	1.34	136 ePg	38 34.10	2.0X	
		eSg	38 53.40		
HRY	1.44	100 ePn	38 33.20	-0.5	
HBMT	1.49	143 iPnd	38 34.70	0.2	
LRM	1.54	139 iPnd	38 35.20	0.1	
SXM	2.04	113 ePn	38 42.70	0.4	
BGMT	2.18	143 ePnd	38 44.30	-0.1	
MCMT	2.28	161 iPnc	38 45.80	-0.2	
NEW	2.53	301 eP	38 49.80	0.7	
LTMT	2.77	153 ePn	38 53.00	0.2	
DPW	3.05	288 eP	38 56.00	-0.6	
	S.D. = 0.5	on 9 of	10 obs.		

• SEP 28, 1990 16h 50m 59.29± 0.50s
41.243 S ±10.7km 85.491 E ± 8.6km
DEPTH = 10.0km (geophysicist)
5.3mb (11 obs.) 4.9Msz (2 obs.)
SOUTHEAST INDIAN RISE (435)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 27C
Centroid Locotion:
Origin Time 16:51: 2.3 0.8
Lat 41.29S 0.07 Lon 84.82E 0.08
Dep 15.0 FIX Holf-durotion 1.5
Moment Tensor; Scole 10••16 Nm
Mrr=-0.78 0.29 Mtt= 6.94 0.39
Mff=-6.16 0.33 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf= 0.55 0.39
Principol Axes:

	T	Vol= 6 96	Plg= 0	Azm=178	
	N	-0.78	90	180	
	P	-6.18	0	88	
	Best Double Couple:Mo=6.6••10••16				
	NP1:Strike=223	Dip=90	Slip=-180		
	NP2:	313	90	0	
NANU	31.35	63 eP	57 22.00	-0.2	
	0.5s	7.00nm		4.8mb	
ASPA	43.85	82 iPc	59 06.90	-0.5	
	1.1s	16.00nm		4.7mb	
Z	20s	1.78um		5.0Msz	
		iPP	00 53.90		
		LR	14 39.00		
STK	45.33	97 iPd	59 19.80	0.6	
	0.9s	14.00nm		4.9mb	
PSI	45.41	19 ePc	59 22.80	2.9	
WB5	46.47	78 eP	59 28.10	-0.2	
MTN	48.75	68 iPd	59 56.20	10.0X	
SPA	48.95	180 iPc	59 47.50	0.1	
	0.9s	86.36nm		5.8mb	
BLF	49.10	265 iPc	59 51.00	2.0	
BWA	49.21	104 eP	59 55.30	5.7X	
CAN	49.23	105 eP	59 57.80	8.1X	
SLR	49.31	270 iPd	59 50.00	-0.6	
QIS	49.95	83 eP	59 55.60	0.2	
SNG	50.14	20 eP	59 57.10	0.3	
SWZ	50.76	266 iPd	00 06.00	4.3X	
BUL	52.27	276 iPc	00 11.60	-1.6	
	1.0s	20.00nm		5.0mb	
RMO	53.46	95 eP	00 21.00	-0.8	
GBA	55.07	350 P	00 33.30	-0.3	
NNT	55.15	17 eP	00 32.00	-2.2	
HYB	58.71	352 eP	00 59.50	0.0	
POO	60.44	347 iPc	01 10.80	-0.6	
KMI	67.94	17 Pc	02 01.50	1.0	
	1.5s	48.00nm		5.5mb	
PKI	68.46	360 P	02 03.40	-0.5	
DMN	68.50	360 P	02 04.00	0.0	
	1.0s	54.00nm		5.7mb	
KKN	68.68	360 P	02 04.90	-0.2	
	0.8s	35.00nm		5.6mb	
GUN	68.80	0 P	02 06.10	0.1	
GKN	68.90	359 P	02 06.00	-0.3	
	1.1s	63.00nm		5.7mb	
QUE	73.11	343 eP	02 23.30	-8.4X	
LZH	78.78	15 Pc	03 04.00	0.4	
	2.0s	43.00nm		5.1mb	
Z	20s	0.50um		4.8Msz	
		pP	03 12.00	25kmX	
		sP	03 17.00		
BJI	85.58	23 eP	03 28.00	-10.6X	
	1.5s	26.00nm			
Z	23s	0.56um		4.9MszX	
MAT	91.23	40 (P)	04 05.00	-0.7	
	1.1s	12.66nm		5.2mb	
INK	145.84	25 ePKP	10 39.50	1.0	
	0.9s	36.00nm			
	S.D. = 1.1	on 25 of	31 obs.		

? SEP 28, 1990 17h 20m 33.92±16.69s
24.587 N ±25.5km 123.417 E ±135.km
DEPTH = 33.0km (normol)
SOUTHWESTERN RYUKYU ISLANDS (246)

TWC	1.43	271 ePd	20 58.30	0.6	
		eS	21 11.70		
TWD	1.74	253 iPc	21 02.20	0.0	
TWZ	1.75	287 iPd	21 02.20	-0.2	
TWF1	2.30	238 iPc	21 10.50	0.3	
TWD	2.37	263 ePc	21 11.00	-0.4	
TWK	2.99	244 eP	21 19.80	-0.3	
	S.D. = 0.5	on 6 of	6 obs.		

• SEP 28, 1990 17h 29m 20.48± 1.37s
66.974 N ±10.5km 20.954 E ±16.8km
DEPTH = 10.0km (geophysicist)
SWEDEN (536)
MD 3.2 (BER).

KTK1	2.22	22 iP	29 57.98	0.1	
		iS	30 27.20		
TRO	2.78	345 iP	30 05.91	0.2	
LOF	3.07	296 iP	30 09.14	-0.7	
NSS	4.44	241 eP	30 31.10	1.7	
MOL	7.23	239 iP	31 07.94	-0.6	
HFS	7.59	209 eP	31 13.00	-0.6	
	0.4s	0.80nm		4.3mb	
	S.D. = 1.2	on 6 of	6 obs.		

% SEP 28, 1990 18h 35m 41.83± 0.74s
43.226 N ± 5.7km 11.313 E ± 6.8km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

CRE	0.62	49 P	35 54.30	0.0	
		eSg	36 02.50		
PGD	0.71	24 P	35 56.00	0.0	
		eSg	36 05.60		
PII	0.76	311 Pc	35 56.40	-0.2	
		eSg	36 07.10		
SFI	0.80	29 P	35 57.20	-0.1	
MAO	0.82	188 P	35 57.70	0.0	
		eSg	36 09.40		
BDI	0.98	328 P	36 00.50	-0.1	
		eSg	36 14.30		
MME	1.06	336 P	36 02.40	0.4	
	S.D. = 0.2	on 7 of	7 obs.		

SEP 28, 1990 19h 19m 30.62± 0.49s
45.035 N ± 4.2km 14.524 E ± 4.5km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.9 (VIE), 2.8 (ZAG). Felt
(V) at Punot ond on Krk.

RIY	0.32	342 iPgc	19 35.80	-1.5	
		iSg	19 40.90		
VBY	0.70	48 ePgd	19 43.50	-0.9	
		iSg	19 53.40		
CEY	0.71	354 ePg	19 43.80	-0.8	
		eSg	19 54.50		
TRI	0.86	322 ePgd	19 46.70	-0.5	
		iSg	19 59.20		
LJU	1.01	0 ePn	19 50.00	0.3	
		iPg	19 50.30		
		eSn	20 04.50		
		iSg	20 05.50		
VOY	1.09	336 iPnc	19 50.80	-0.4	
		ePg	19 52.10		
		eSn	20 07.30		
		eSg	20 10.50		
ZAG	1.29	52 iPgd	19 55.20	0.7	
		iSg	20 14.40		
PTJ	1.33	49 iPn	19 55.50	0.3	
		iSn	20 15.40		
FVI	1.98	323 Pd	20 04.90	0.4	
SFI	2.21	241 P	20 07.80	-0.1	
CTI	2.26	298 P	20 08.00	-0.7	
		eSg	20 34.00		
HVAR	2.32	143 iPn	20 09.40	0.0	
		iSg	20 45.60		
PGD	2.32	241 P	20 09.60	0.0	
		eSg	20 38.50		
ASS	2.38	215 Pc	20 09.80	-0.5	
BHG	2.92	338 eP	20 19.30	1.4	
OGA	3.05	308 ePn	20 29.10	9.1X	
WATA	3.08	319 iP	20 21.30	1.0	
		iPg	20 22.70		
		iSg	21 00.40		
SOTA	3.18	315 i(Pn)	20 22.90	1.2	
		iPg	20 31.60		
		iSg	21 12.80		
KHC	4.15	351 eP	20 35.40	0.0	
		e	21 48.40		
PRU	4.96	0 eP	21 41.50	54.7X	
		eSg	22 14.00		
	S.D. = 0.8	on 18 of	20 obs.		

SEP 28, 1990 19h 44m 47.12± 0.10s
13.559 S ± 3.0km 167.079 E ± 3.0km
DEPTH = 176.0km (geophysicist)
6.0mb (45 obs.)
VANUATU ISLANDS (186)
mb 6.0 (PAS). Mo=1.6••10••19 Nm
(PPT). Depth from broodbond
displocement seismograms.
FAULT PLANE SOLUTION: P-Woves
NP1:Strike= 5 Dip=41 Slip= 100
NP2: 172 50 81
Principol Axes:
T Plg=82 Azm= 32
P 4 268
Comment: The focol mechonism is

28d 19h

poorly controlled and
corresponds to reverse
faulting with a small strike-
slip component. The preferred
fault plane is not determined.
RADIATED ENERGY
No. of sta: 12 Focal mech. M
Energy 3.0±0.8*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 182 No. of sta: 18
Moment Tensor; Scale 10**19 Nm
Mrr= 1.31 Mtt=-0.04
Mff=-1.27 Mrt=-0.12
Mrf=-0.11 Mtf=-0.14
Principal axes:
T Val= 1.32 Plg=85 Azm=155
N -0.03 4 7
P -1.29 3 277
Best Double Couple:Mo=1.3*10**19
NP1:Strike= 2 Dip=42 Slip= 83
NP2: 191 48 96
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 44C M.W.: 13S, 28C
Centroid Location:
Origin Time 19:44:55.3 0.1
Lat 13.47S 0.01 Lon 166.84E 0.01
Dep 185.3 0.4 Half-duration 8.0
Moment Tensor; Scale 10**19 Nm
Mrr= 1.17 0.01 Mtt=-0.06 0.01
Mff=-1.12 0.01 Mrt= 0.14 0.01
Mrf=-0.32 0.01 Mtf= 0.02 0.01
Principal Axes:
T Val= 1.23 Plg=80 Azm= 52
N -0.07 6 177
P -1.17 8 268
Best Double Couple:Mo=1.2*10**19
NP1:Strike= 5 Dip=37 Slip= 100
NP2: 173 53 83

HNR 8.10 300 eP 46 44.00 1.2
eS 48 18.00
SVO 8.36 301 eP 46 48.00 1.8
eS 47 07.00
DZM 8.49 184 iPd 46 50.00 2.1
SGE 11.19 112 ePd 47 27.00 3.7X
e 47 36.50
e 48 52.50
MBU 11.74 108 eP 47 34.90 4.5X
SVA 11.85 114 eP 47 36.10 4.3X
NDE 12.20 106 eP 47 40.30 3.9X
KRO 12.44 109 eP 47 41.80 2.3
RAB 17.41 301 iP- 48 40.00 -1.0
iS 51 48.00
BRS 19.18 222 iPc 49 01.70 2.0
i 49 06.50 18kmX
i 49 13.00
i 49 46.00
iS 52 33.00
e(PcP)56 36.00
iScP 57 59.00
LAT 20.91 287 iPc 49 21.80 4.7X
CTA 20.95 249 iPd- 49 19.00 1.4
0.9s 432.77nm 5.9mb
iS 52 55.00
CTAO 20.95 249 ePd 49 19.71 2.1
RMQ 21.45 230 iP 49 23.80 1.3
i 56 40.00
i 58 05.00
COO 21.98 217 iP 49 30.70 3.1X
e 52 05.00
e 53 21.00
e 56 43.00
e 58 08.00
RIV 24.83 213 iPd 49 57.40 2.7X
eS 53 56.00
e 55 16.00
OLP 25.01 235 iPc 49 58.00 1.5
e 50 41.00 223kmX
i 56 52.00
HBZ 25.95 159 P 50 05.30 0.4
0.3s 33.00nm 5.5mb
PUZ 26.36 160 eP 50 07.00 -1.7
e 50 48.30 209kmX
CMS 26.44 224 eP 50 10.00 0.5
0.9s 406.00nm 6.1mb
e 50 45.00 172kmX

e 51 09.00
e 56 55.00
WHH 26.57 163 eP 50 10.70 0.1
NGZ 26.61 165 eP 50 12.00 0.9
CNZ 26.61 165 eP 50 12.10 1.0
BWA 26.78 216 iPc 50 12.80 0.2
iScP 56 55.80
NOZ 26.78 161 P 50 10.70 -1.8
eS 54 30.70
CNB 26.92 213 eP 50 14.00 0.2
0.6s 231.00nm 6.0mb
i 50 56.50 214kmX
iS 56 56.00
CAN 27.12 214 iPc 50 17.10 1.5
i 51 06.80 257kmX
iScP 56 56.80
OIS 27.14 251 iP 50 16.80 0.8
i 50 56.00 194kmX
i 56 03.60
i 57 11.00
TTH 27.27 163 eP 50 16.00 -0.9
KIW 28.05 167 eP 50 23.50 -0.4
PGZ 28.14 165 P 50 22.80 -1.8
TCW 28.26 168 eP 50 24.70 -1.1
MRW 28.36 168 P 50 25.30 -1.4
WEL 28.43 168 P+ 50 26.00 -1.3
(PP) 52 19.00
S 55 02.00
SNZO 28.44 168 iPc 50 26.19 -1.1
epPd 51 05.09 191kmX
esPd 51 23.13
WDW 28.46 167 P 50 26.10 -1.4
MTW 28.46 167 eP 50 25.80 -1.8
e 51 08.80 214kmX
THZ 28.55 171 P 50 28.00 -0.5
BLW 28.66 167 eP 50 26.20 -3.2X
MOW 28.66 167 P 50 27.70 -1.7
KHZ 29.29 170 eP 50 31.60 -3.3X
e 51 15.10 216kmX
LTZ 29.46 172 P 50 36.20 -0.3
e 51 15.80 194kmX
STK 29.63 228 iPc 50 38.80 0.8
0.7s 251.00nm 6.1mb
iPP 51 14.10
iPcP 53 39.30
iS 55 21.80
iScP 57 04.40
iScS 00 58.10
MOZ 30.42 172 eP 50 44.10 -0.7
TOO 30.69 215 ePc 50 48.00 0.7
0.9s 368.00nm 6.1mb
e 51 39.00 257kmX
eS 57 07.00
e 01 10.00
MMCZ 31.39 177 P 50 53.20 -0.2
MHZ 31.45 177 P 50 53.50 -0.5
TLC 31.57 177 P 50 55.40 0.3
WB5 31.91 254 iPc 50 57.20 -1.0
BFD 32.14 219 eP 51 02.00 2.1
0.6s 118.00nm 5.8mb
e 57 10.00
RAR 32.49 108 P 51 00.00 -3.1X
S 55 48.00
ASPA 32.94 247 iPc 51 06.20 -0.9
0.7s 456.80nm 6.3mb
Z 22s 54.55um 6.2Msz
iPP 51 44.40
iPcP 53 46.70
iS 56 08.20
iScP 57 15.70
iScS 01 13.00
LR 03 03.00
TAU 33.85 206 iPc 51 14.62 0.0
epPd 51 53.35 184kmX
esPd 52 11.56
ePcP 53 49.55
GUA 34.74 320 eP+ 51 22.20 -0.3
0.9s 470.59nm 6.2mb
pP 51 27.20 17kmX
GUMO 34.81 320 iPc 51 20.90 -2.1
isPd 52 18.01
PJG 34.81 320 eP 51 22.70 -0.3
MTN 34.99 267 iPd 51 25.70 1.1
0.6s 538.00nm 6.4mb
KNA 37.10 262 iPc 51 43.40 1.1
0.8s 392.00nm 6.1mb
FORR 39.73 238 eP 52 04.00 0.0

WARB 39.88 245 iPc 52 06.10 0.7
e 57 56.00
AFR 41.69 101 eP 52 21.00 0.8
1.2s 350.00nm 5.8mb
PPT 41.88 101 eP 52 23.00 1.2
1.2s 270.00nm 5.7mb
TVO 42.19 102 eP 52 25.00 0.6
1.2s 250.00nm 5.7mb
PMO 43.60 98 iP 52 37.30 1.5
1.2s 630.00nm 6.1mb
VAH 43.84 98 iP 52 38.70 1.0
1.2s 450.00nm 5.9mb
TPT 43.87 98 iP 52 39.30 1.4
1.2s 450.00nm 5.9mb
RUV 44.08 98 iP 52 40.90 1.3
1.2s 540.00nm 6.0mb
COOL 45.54 240 iPc 52 50.70 -0.3
MBL 45.59 254 iPc 52 51.50 0.0
DAV 46.03 294 eP 52 55.60 0.5
MEKA 47.14 246 eP 53 03.20 -0.5
KLB 48.52 240 eP 53 13.70 -0.5
HON 48.75 45 P 53 20.00 4.0X
Z 21s 8.60um 5.7Msz
KIP 48.81 45 ePc 53 17.08 0.5
eS 00 09.77
e 01 23.16
eSS 04 58.60
OPA 49.00 45 P 53 17.00 -0.9
NWAO 49.20 238 ePc 53 18.72 -0.7
epPd 53 57.45 173kmX
esPd 54 16.65
BAL 49.25 241 eP 53 19.20 -0.7
RKG 49.60 237 eP 53 23.00 0.5
0.9s 606.00nm 6.2mb
NANU 49.62 252 iPc 53 23.10 0.4
MRWA 49.67 243 iPc 53 23.00 -0.1
PFH 49.77 49 P 53 25.00 1.2
MUN 49.88 240 iPc 53 24.00 -0.7
0.9s 323.00nm 5.9mb
Z 20s 47.10um 6.5Msz
N 20s 36.80um
E 20s 23.50um
OCP 53.46 300 eP 54 06.00 14.5X
KKM 54.12 288 ePc 53 56.00 -0.5
1.2s 1122.40nm 6.5mb
BAG 54.75 302 ePc+ 54 00.00 -1.1
e 54 42.00 185kmX
eS 01 27.00
DRV 56.04 193 iPd 54 09.40 -0.1
MAJO 56.79 332 iPc 54 14.11 -1.0
epPd 54 53.67 172kmX
esPd 55 14.86
iS 01 53.14
e 03 08.07
iSS 05 36.36
MAT 56.79 332 iPc 54 13.60 -1.5
1.0s 402.00nm 6.2mb
eS 01 46.00
ANP 58.78 311 iPc 54 30.00 0.7
iS 00 16.00
SAP 61.08 339 eP 54 45.00 0.5
SSE 62.55 316 iPd+ 54 53.50 -1.0
1.5s 916.00nm 6.4mb
Z 20s 7.70um 5.9Msz
N 15s 4.00um
E 13s 2.50um
pP 55 32.00 163kmX
sP 55 50.00
PP 57 13.00
ePcS 59 33.00
iS 03 06.00
sS 04 12.00
ScS 04 18.00
SS 07 08.00
HKC 62.92 304 iP 54 58.00 0.9
iS 03 16.00
MCO 63.33 303 eP 55 00.70 0.9
YSS 64.13 342 P 55 05.00 0.5
SBA 64.30 180 iPc+ 55 06.00 0.8
S 03 18.20
KGM 65.07 279 ePc 55 12.20 1.0
1.2s 1252.00nm 6.7mb
e 55 55.60 184kmX
SMY 66.29 5 eP 55 18.80 0.6
Z 20s 15.00um 6.2Msz
ADK 66.68 11 ePc 55 20.10 -0.6
0.9s 190.10nm 5.9mb

	Z	18s	10.00um		6.1Msz				epP	57	43	40	182kmX			1.2s	84.00nm		5.6mb
KLM		66.97	279	eP	55	23.00	-0.3	SAO	83.73	50	eP	56	58.60	1.0	NEW	90.80	40	P	57	31.40	0.0
PPI		67.25	275	eP	55	24.60	-0.5				epP	57	43.60	182kmX		1.1s	117.28nm		5.9mb
IPM		67.98	281	ePc	55	30.00	0.4	MHC	83.80	49	eP	56	59.40	1.3		Z 20s	8.00um		6.2Msz
				e	56	15.00	190kmX				epP	57	44.00	180kmX	DUG	91.25	49	P	57	34.00	0.2
SNG		69.12	283	eP	55	36.90	0.4	TOA	83.81	20	ePc	56	58.70	1.1	MSU	91.25	51	P	57	35.20	1.2
		0.8s	310.45nm			6.1mb		ARN	83.88	49	P	56	59.80	1.4	WMQ	91.78	315	iPc	57	36.32	0.2
				e	23	44.30					pP	57	44.50	181kmX				epPd	58	20.02	174kmX
PSI		69.48	278	ePc	55	38.40	-0.4	SYP	84.03	53	eP	57	02.00	2.7X				esPd	58	41.21	
		0.8s	292.10nm			6.1mb					e	57	45.00	173kmX				iHPP	01	14.39	
TSI		70.04	279	ePc	55	43.10	0.9	LLA	84.05	50	eP	57	00.20	1.0				ePP	01	15.05	
BJI		71.24	321	iPc	55	49.06	0.1	PRI	84.08	51	eP	57	01.00	1.4				iS	08	19.32	
		1.5s	780.00nm			6.3mb		PAF	84.25	221	eP	57	01.00	1.0				i	09	12.13	
	Z	20s	12.60um			6.2Msz					eS	07	10.00					i	10	47.15	
	N	18s	9.60um					WDC	84.39	46	eP	57	01.80	1.0	INK	91.85	19	eP	57	34.00	-1.7
				ipPd	56	29.62	168kmX				epP	57	45.40	176kmX	HYB	92.60	287	iPc	57	40.50	0.2
				esPd	56	49.48		IMA	84.57	15	ePc	57	01.30	-0.1		1.4s	500.00nm			6.5mb	
				iS	04	52.76		ABL	84.72	52	P	57	03.10	0.2	GBA	92.78	283	P	57	41.00	-0.1
				eSKS	05	31.67		ORV	84.73	47	eP	57	03.40	0.8	LRM	93.09	44	ePd	57	42.80	0.5
LOE		71.46	294	iPc	55	50.80	0.2				epP	57	48.20	181kmX				e	58	27.30	177kmX
NNT		71.62	288	iPd	55	51.60	-0.1	CMB	84.98	49	iPc	57	03.13	-0.8	ALQ	94.79	55	ePc+	57	49.30	-1.0
NST		72.28	291	iPc	55	56.00	0.5				eSKS	07	09.20			1.3s	38.46nm			5.5mb	
KMI		73.54	302	iPc	56	04.17	1.2				ePS	09	26.92			Z 18s	7.85um			6.2Msz	
		1.0s	1350.00nm			6.6mb		FRI	85.11	50	eP	57	05.00	0.5				epP	58	36.60	189kmX
				epPd	56	45.39	170kmX				epP	57	49.50	179kmX	ANMO	94.79	55	ePc	57	49.46	-0.8
				iS	05	21.44		PAS	85.30	53	iPc	57	05.42	-0.1				iPP	01	39.62	
				eSKS	05	46.69					epPd	57	49.45	177kmX				iHPP	01	40.45	
BSI		73.71	280	iPd	56	05.00	1.1				epPP	01	25.00					eS	08	48.49	
BDT		73.84	293	eP	56	01.00	-3.5X				eSKS	07	11.53					e	10	04.97	
		1.0s	241.50nm			5.9mb					esS	08	14.43					ePS	11	26.75	
SDN		73.87	19	eP	56	02.80	-1.2				ePS	09	12.37		SES	95.23	40	eP	57	51.00	-0.7
	Z	20s	9.50um			6.1Msz					eSS	13	00.00		NDI	96.27	298	eP	57	55.20	-1.7
CHG		74.43	294	iPc	56	08.40	0.4				eLg	19	42.00		YKA	96.60	27	eP	57	57.20	-0.4
				eS	05	24.00		COL	85.30	18	iPc	57	03.75	-1.1		0.8s	9.10nm			5.2mb	
CHTO		74.43	294	iPc	56	08.03	0.1				epPd	57	49.44	185kmX	GOL	96.67	51	P	57	58.90	0.1
				epPd	56	50.24	174kmX				eSKS	07	15.51			1.0s	16.25nm			5.4mb	
				esPd	57	08.28					e	08	09.48			Z 20s	7.50um			6.2Msz	
HIA		75.18	330	iPc	56	11.68	0.0	FBA	85.30	18	ePc	57	03.20	-1.7	GLD	96.79	51	P	57	59.80	0.5
				epPd	56	53.56	172kmX		1.0s	270.00nm			6.0mb			1.0s	35.00nm			5.7mb	
				esPd	57	13.59		MWC	85.41	53	eP	57	06.00	-0.3	POO	97.21	287	iPd	58	01.30	0.0
				iS	05	35.63					e	57	50.00	177kmX		1.5s	155.56nm			6.2mb	
				eSKS	06	10.88		COR	85.47	42	iPc	57	06.45	0.4	MEO	101.12	57	e(Pdif	58	18.30	-0.4
SPA		76.53	180	iPc	56	19.20	0.0				iPP	00	25.82		TUL	103.53	56	Pdiff	58	28.00	-1.4
		1.4s	609.80nm			6.1mb					eHPP	00	26.81			Z 18s	1.57um			5.6Msz	
	Z	18s	4.82um			5.9Msz					eSKS	07	12.88					LR	27	00.00	
				i	57	05.80	193kmX				eS	07	21.49		QUE	105.34	298	ePdiff	58	38.20	0.4
LZH		77.40	312	iPc	56	25.82	1.3				esS	08	13.47					e	02	54.30	
		1.5s	1498.00nm			6.5mb					ePS	09	25.97					eSKS	09	04.70	
				epPd	57	09.19	178kmX	ISA	85.58	52	eP	57	07.00	0.0				ePPS	10	27.00	
				esPd	57	26.24					e	57	50.00	173kmX	CCM	107.36	54	ePdiff	58	46.76	0.4X
				iS	06	03.44		SBB	85.75	53	eP	57	08.00	0.2				ePP	03	11.10	
				eSKS	06	18.89					e	57	52.00	177kmX				eHPP	03	12.75	
				SS	07	12.00		RVR	85.87	54	eP	57	09.00	0.7	NNA	111.73	109	iPdiff	59	08.00	1.7
				SSS	11	07.00					e	57	53.00	177kmX		1.0s	40.00nm				
KDC		78.44	21	eP	56	29.70	0.2	BAR	86.00	55	eP	57	10.00	0.9		Z 20s	1.77um			5.6Msz	
SVW		80.09	17	ePc	56	39.20	0.8				e	57	55.00	181kmX	MAIO	112.00	304	ePKP	03	03.00	-0.4
TTA		81.45	16	ePc	56	45.10	-0.4	PEC	86.00	54	P	57	09.00	-0.1				eS	13	16.00	
PMR		82.46	20	ePc	56	49.80	-0.8		2.0s	333.33nm			5.8mb		UPA	114.68	86	(Pdiff	59	20.00	0.7
		0.8s	118.70nm			5.7mb		PLM	86.07	55	eP	57	09.00	-0.6	ARE	114.90	115	e(PKP)	02	55.00	-14.8X
	Z	19s	18.60um			6.5Msz					e	57	54.00	181kmX	PSO	115.14	95	ePKP	03	11.50	1.0
MAW		82.89	202	iPc+	56	53.30	0.5	BMW	86.28	41	P	57	10.80	0.6	FRB	116.93	24	ePKP	03	11.00	-0.8
		1.0s	254.00nm			5.9mb					pP	57	55.00	178kmX	LPB	117.83	117	PKP	03	17.00	1.5
PCC		83.31	49	eP	56	56.40	0.9	CLC	86.30	52	eP	57	09.00	-1.5				LR	21	25.00	
GCC		83.42	50	eP	56	57.00	1.0				e	57	54.00	181kmX	ZOBO	117.92	117	Pdiff	59	42.00	7.6X
				epP	57	42.00	182kmX	GSC	86.74	53	iPc	57	12.59	-0.1	ZOBO	117.92	117	ePKPc	03	15.11	-0.8
FHC		83.47	45	eP	56	55.80	-0.5				epPd	57	57.62	181kmX				iPP	04	29.18	
BRK		83.54	49	eP	56	57.20	0.6				eSKS	07	22.22					iHPP	04	29.68	
				epP	57	41.80	181kmX				eS	07	35.13		CBN	118.29	54	e(PKP)	03	14.00	-1.2
				ePP	00	08.00					esS	08	41.34		KEV	118.55	345	iPKP	03	14.60	-0.2
				eS	07	06.00					ePS	09	30.67			1.0s	104.00nm				
				ePPS	07	50.00		TPC	86.95	54	eP	57	13.00	-0.6				e	04	32.00	
				eLQ	17	18.00					e	57	59.00	185kmX				e	14	06.00	
				eLR	21	30.00		GMW	86.99	40	P	57	14.00	0.5				e	15	20.00	
BKS		83.56	49	ePc	56	57.40	0.6				pP	57	59.00	181kmX	GDH	118.73	15	ePdiff	59	35.00	-1.0
		0.9s	171.00nm			5.8mb		PGC	87.03	38	eP	57	15.00	1.4				e	03	15.00	
	Z	20s	22.00um			6.5Msz		LON	87.29	41	P	57	17.40	2.4				i	04	35.00	
	N	20s	9.00um					TNP	87.34	50	P	57	16.50	0.9				i	14	25.00	
	E	20s	14.00um								pP	57	59.90	174kmX	BOG	119.11	92	ePdiff	59	40.00	0.5
				epP	57	42.00	181kmX	MCW	87.42	39	P	57	16.40	0.9				ePP	04	36.00	
				ePP	00	06.00		RMW	87.57	40	P	57	18.00	1.7	CCH	119.13	119	PKP	03	17.60	-0.2
				eScS	07	04.00		GLA	87.59	55	eP	57	16.00	-0.7	RSNY	119.57	46	PKP	03	16.80	-0.7
				eSKKS	09	00.00					e	58	03.00	189kmX	KTK1	120.01	346	iPKP	03	16.37	-1.2
				eLQ	18	28.00		GUN	88.67	299	P	57	22.50	0.1	SOD	120.33	343	iPKP	03	17.30	-0.9
				eLR	22	20.00		PKI	88.98	299	P	57	23.40	-0.4	TRO	120.49	348	iPKP	03	17.53	-0.9
ZSP		83.57	49	eP	56	57.60	0.8	KKN	89.15	299	P	57	24.20	-0.3	HBVT	120.64	46	PKP	03	18.00	-1.5
				epP	57	43.10	185kmX	DMN	89.25	299	P	57	24.80	-0.2	SCH	121.46	33	ePKP	03	20.00	-0.8
PRS		83.62	50	eP	56	58.40	1.3	PNT	89.62	39	eP	57	26.00	0.1	HRV	122.08	48	ePdiff	59	53.07	1.5X

28d 19h

			ePP	04	53.32						e	03	48	20						ePPKP	04	40.00		
			eHPP	04	56.14						e	04	10	50		SOP	138.05	330	ePKP	03	45.00	-7.7X
KER	122.20	302	ePKP	03	24.00	1.0					e	04	34	20		KHC	138.36	334	ePKP	03	44.30	-8.9X
TAB	122.38	307	ePKP+	03	24.00	0.8					e	07	03	00			Z 20s		1.00um			5.6Msz	
			e	05	05.00		KRA	134.80	330	ePKP	03	35	60	-10.8X		N 21s		3.30um				
LOF	122.83	349	iPKP	03	22.69	-0.2		1.0s		99.00nm						E 21s		3.60um				
BLF	123.20	221	iPKPc	03	25.00	-0.1					i	03	47	00					e	03	55.00		
CBM	123.37	42	PKP	03	23.00	-1.7					i	03	52	50		PLG	138.47	317	ePKP	03	43.00	-10.7X
SUF	123.69	340	iPKP	03	24.20	-0.6					e	06	21	00		WTS	138.51	342	ePKP	03	54.00	0.7
	0.9s		214.80nm				BDF	134.84	129	ePKPc	03	46	24	-1.4		0.9s		232.00nm				
SLR	124.01	226	iPKPc+	03	25.00	-1.8					iHPP	06	15	54					e	06	46.00		
	1.0s		85.00nm								iPP	06	16	65					e	07	14.00		
CER	124.13	213	iPKPd	03	25.40	-1.2					eSKP	06	59	69					e	08	39.00		
	0.8s		81.25nm				CMP	134.94	322	ePKPc	03	49	00	2.1		GRF	138.89	336	e(Pdif	01	10.00	3.9X
SWZ	125.06	222	iPKPd	03	32.70	3.9X	MTUR	134.95	322	ePKP	03	42	00	-5.0X					ed	01	55.00		
	1.0s		255.00nm				TNR	135.19	323	ePKPc	03	34	00	-13.4X		GRFO	138.89	336	iPKPc	03	52.09	-2.0
ARO	125.62	275	ePKP+	03	31.00	0.9	SPC	135.23	329	ePKP	03	34	10	-13.4X		DBN	138.90	343	ePKP	03	47.00	-7.0X
NUR	125.72	338	iPKPd	03	27.80	-1.0					i	03	47	90			Z 20s		2.00um			5.9Msz	
	0.9s		351 40nm								i	04	33	60					e	04	40.00		
			e	05	24.00						e	06	24	60					ePP	06	41.00		
			e	06	40.00		COZ	135.33	323	ePKP	03	30	00	-17.8X					iPKS	07	32.00		
			e	17	44.00		JMB	135.39	318	ePKP	03	40	00	-7.8X					eSPP	18	50.00		
			e	22	16.00		DRA	135.73	322	ePKP	03	49	00	0.6					eSS	24	52.00		
NSS	126.26	347	iPKP	03	29.34	-0.4	LWI	135.75	252	iPKPd	03	50	70	1.1					eSSS	30	04.00		
BUL	127.17	231	iPKP	03	15.00	-18.0X	DEV	135.85	324	ePKPd	03	50	00	1.4		KMR	138.92	332	ePKP	03	44.00	-10.2X
	1.0s		150 50nm				KSP	135.91	334	ePKP	03	38	00	-10.5X					i	03	54.30		
OLLA	127 22	88	ePKP	03	18.00	-15.2X		1.2s		197.00nm									ipPKP	04	38.30		
AKU	127.81	3	ePKP	03	33 40	0.8					id	03	49	60					i	06	39.70		
	1 0s		108 00nm								e	04	24	00					i	06	50.20		
RGS	127.92	347	iPKP	03	35.00	2.1					e	06	21	50		SKO	138.93	320	iPKPc	03	40.00	-14.4X
PPD	128.34	133	ePKP	03	34.40	-0 6					i	07	05	00		NPS	139.15	309	ePKP	03	47.70	-7.4X
			i	03	37.40						i	08	28	50		BNS	139.29	341	iPKPc	03	46.30	-8.5X
			e	03	40.50		BRN	135.97	337	ePKP	03	51	00	2.5			Z 20s		4.00um			6.2Msz	
			e	04	26.30		HLW	136.09	299	ePKP	03	48	50	-1.0					i	04	30.00		
NAI	128.56	257	iPKPd	03	38.70	2.7X					ePP	04	30	00					i	06	50.00		
UPP	128.59	341	iPKP	03	33.40	-0.9					eS	06	34	00		ATH	139.42	314	ePKP	03	50.00	-5.4X
MOL	128.93	348	ePKP	03	34.39	-0.5					eSS	07	28	00		TNS	139.49	339	ePKPd	03	46.20	-9.1X
REY	129.10	5	iPKP	03	37.10	2.0	PSZ	136.23	328	iPKP	03	48	90	-0.4		PTJ	139.59	329	iPKP	03	49.00	-6.6X
AAE	129.19	271	ePKP	03	38.00	0.8	KDZ	136.54	317	iPKP	03	38	00	-12.0X		KZN	139.60	318	ePKP	03	48.20	-7.6X
NB2	129.45	345	PKP	03	34.80	-1.2	RDO	136.70	317	ePKP	03	49	00	-1.3		ZAG	139.63	329	ePKP	03	49.00	-6.5X
	1.2s		135.30nm				BZS	136.73	325	ePKP	03	40	00	-10.2X		OHR	139.80	319	iPKP	03	45.00	-11.1X
HFS	129.56	343	ePKP	03	20.20	-15.9X	PLD	136.79	318	ePKP	03	50	00	-0.5			1.5s		598.00nm				
	0.6s		1.50nm				BRG	136.88	335	e(PKP)	03	39	00	-11.4X					i	03	53.10		
VAO	130.69	137	ePKP	03	32.50	-7.1X		Z 20s		2.00um				5.8Msz		ENN	139.85	341	ePKP	03	56.50	0.7
			e	03	40.30			N 20s		4.00um							1.0s		162.00nm				
KAS	130.96	314	ePKP	03	40.00	0.5		E 20s		3.00um									e	06	55.00		
KONO	131.06	345	ePKPc	03	38.69	-0.3					i	03	50	20					e	07	21.00		
			iPP	05	57.01						i	04	37	40					e	08	43.00		
			iHPP	05	58.11						iSKP	07	08	00		TTG	139.99	322	ePKP	03	49.30	-7.0X
			eSKP	06	46.12						i	08	31	10		FUR	140.08	335	ePKP	03	49.40	-6.9X
			e	07	05.16						i	16	40	00		VAM	140.16	310	ePKP	03	48.80	-8.0X
CSTJ	131.33	300	PKPd	03	41.10	0.6					e	24	40	00		LJU	140.20	330	ePKP	03	49.00	-7.6X
BHL	131 64	303	PKP	03	42.00	0.9	PG8	136.90	319	iPKPc	03	38	00	-12.8X					i	03	55.50		
			S	07	08.00		CLL	136.91	336	iPKP	03	51	20	0.8		VBY	140.22	329	ePKPc	03	53.10	-3.5X
HRI	131.71	303	ePKP	03	40.00	-1.2		1.4s		190.00nm									i	03	58.00		
SHMJ	131.80	302	PKPd	03	29.20	-12.1X		Z 18s		3.00um				6.1Msz		EVR	140.29	316	ePKP	03	51.00	-6.1X
ANTO	132 17	312	iPKPc	03	41.53	-0.4					pPKP	04	36	00		UCC	140.29	343	PKP	03	50.00	-6.6X
			epP'df	04	25.40						eSKP	07	07	00					e	03	54.30		
			eHPP	06	07.19		BUD	136.96	328	e(PKP)	03	42	00	-8.6X					e	04	44.00		
BBTK	132.20	312	ePdiff	00	36.00	-0.8	PRK	137.06	314	ePKP	03	50	70	-0.3					PP	06	51.00		
			e	03	19.00		SRO	137.10	329	e(PKP)	03	39	70	-11.2X		HCY	140.43	323	ePKP	03	50.00	-7.1X
ZNT	132.50	301	ePKP	03	32.00	-10.7X					i	03	50	90		CEY	140.46	330	ePKP	03	49.40	-7.7X
TRN	132.57	88	ePKP	03	43.00	-0.2					e	04	37	50					i	03	57.50		
BMA	132.73	139	(PKP)	03	44.00	0.6					i	06	36	60		VOY	140.51	330	ePKP	03	49.50	-7.8X
CLI	132.94	323	ePKPd	03	39.00	-4.0X	PRU	137.30	334	ePKP	03	40	00	-11 2X		VLI	140.53	312	ePKP	03	50.70	-6.8X
SVB	133.05	84	ePKP	03	43.12	-1.0		Z 17s		2.10um				5 9MszX		SNF	140.57	343	iPKP	03	50.94	-6.1X
MBH	133.08	298	ePKP	03	33.50	-10.3X		N 20s		4 60um									ic	03	56.62		
SVV	133.09	84	ePKP	03	39.95	-4.2X		E 22s		2.80um						ETA	140.59	354	ePKP	03	51.00	-6.0X
CFR	133.09	320	ePKPc	03	39.00	-4.3X					e	03	51	00			1.0s		69.00nm				
CSS	133.25	305	ePKP	03	44.50	0.5					i	03	53	50		WATA	140.59	334	iPKPc	03	51.10	-6.4X
TLB	133.45	320	ePKPc	03	40.00	-4.0X	ZST	137.43	330	ePKP	03	42	60	-8.9X			1.2s		233.00nm				
COP	133.61	340	iPKPc+	03	44.00	0.1					i	03	51	90					i	03	57.10		
	0.8s		208.96nm								e	04	38	60					ipP	04	35.40		
			i	04	35.00						i	06	38	50					i	04	49.20		
			i	06	18.00		VTS	137.49	320	ePKP	03	41	00	-11.0X					iPP	06	55.30		
			i	07	18.00		EKA	137.63	352	PKP	03	39	00	-12.6X		FVI	140.62	332	PKPd	03	50.20	-7.1X
VRI	133.62	322	ePKPd	03	25.00	-19.3X		0.7s		7.60nm						RIY	140.77	329	ePKP	03	53.40	-4.2X
PSN	133.78	319	iPKP	03	46.00	1.3	VKA	137.76	331	(PKP)	03	53	00	0.9		TRI	140.81	330	PKP	03	55.45	-2.2
JFO	133 96	139	ePKP	03	45.30	-0.5		3.5s		1933.00nm						GWF	140.83	339	PKP	03	49.89	-7.8X
PPCY	134 05	306	ePKP	03	32.50	-13.0X					i	03	55	20		SOTA	140.84	334	iPKPd	03	51.40	-6.5X
ISR	134.10	321	ePKPd	03	41.50	-3.9X					ipPKP	04	50	00			1.0s		140.00nm				
GBZT	134 20	314	ePKP	03	46.60	1.0					ePP	06	38	00					id	03	52.10		
MLR	134.28	322	ePKP	03	30.00	-15.8X					epPS	18	00	00					ic	03	57.90		
ITU	134.37	315	iPKPc	03	44.00	-1.9	WIT	137 84	342	ePKP	03	54	00	1.9					(pPKP)	04	40.00		
BMR	134 47	326	ePKPd	03	47.00	1.1					e	07	16	00					i	06	47.80		
BUC	134.75	321	ePKPc	03	47.00	0.5	BEO	137 87	324	i(PKP)	03	52	80	0.4					e(PP)	07	00.00		
BAO	134.79	129	ePKP	03	38.80	-8.8X	MOX	137.98	337	Pdiff	01	00	00	-2.0		DOU	140.85	342	PKP	03	50.90	-6.7X

Z 19s 2.50um 6.0Msz
PP 06 54.00
i 07 00.90
e 07 19.30
PS 17 19.00
SS 25 03.00
ECB 140.98 354 ePKP 03 52.00 -5.7X
1.1s 290.00nm
ITM 141.04 313 ePKP 03 51.50 -6.9X
STR 141.10 338 PKP 03 51.23 -6.9X
ECP 141.12 354 ePKP 03 51.90 -6.1X
1.3s 205.00nm
HVAR 141.15 325 iPKP 03 51.60 -6.8X
OGA 141.20 334 ePKP 03 53.00 -5.6X
KEK 141.20 318 ePKP 03 54.00 -4.6X
WLS 141.40 338 PKP 03 51.79 -7.0X
CDF 141.43 338 PKP 03 52.81 -6.0X
VLS 141.48 316 ePKP 03 54.50 -4.7X
SLE 141.51 337 ePKPd 03 53.70 -5.2X
CTI 141.55 332 PKPd 03 53.00 -6.2X
SAX 141.60 335 ePKPd 03 53.90 -5.5X
ECH 141.63 338 PKP 03 53.37 -5.8X
VAL 141.66 357 ePKP 03 53.90 -5.1X
PP 07 04.00
PPP 08 56.00
S 13 59.00
SS 18 39.00
OSS 141.71 334 ePKPd 03 53.70 -5.8X
ZLA 141.79 337 ePKPd 03 54.60 -4.9X
MOF 141.95 338 PKP 03 54.50 -5.3X
LCI 142.02 320 PKP 03 56.80 -3.2X
LLS 142.04 335 ePKPd 03 54.60 -5.5X
VITF 142.05 339 PKP 03 54.00 -5.8X
BSF 142.09 338 PKP 03 53.94 -6.1X
MAU 142.10 339 ePKP 03 54.80 -5.2X
Z 20s 3.00um 6.0Msz
VDL 142.16 335 ePKPd 03 55.00 -5.3X
SAL 142.39 333 PKP 03 56.30 -4.2X
LOMF 142.48 338 PKP 03 56.71 -4.0X
MDI 142.62 334 PKPd 03 56.00 -4.8X
TMA 142.71 335 ePKPd 03 56.50 -4.8X
RSM 142.74 329 PKP 03 58.10 -3.0X
FG2 142.76 324 PKP 03 59.08 -2.1
ARV 142.80 328 PKPd 03 57.80 -3.5X
VAI 142.94 335 PKP 03 57.30 -4.1X
SFI 143.04 330 PKP 03 58.80 -2.8X
ORI 143.11 321 PKPd 03 59.30 -2.6X
MMK 143.12 336 ePKPd 03 59.00 -3.1X
PGD 143.14 330 PKP 03 58.90 -3.2X
CRE 143.21 329 PKP 03 58.70 -3.4X
ASS 143.25 328 PKP 03 56.90 -5.2X
DUI 143.26 325 PKP 03 56.90 -5.3X
DIX 143.32 336 ePKPd 03 59.80 -2.6X
AOU 143.37 327 PKP 03 59.80 -2.5X
MME 143.39 331 PKP 03 59.70 -2.9X
TDS 143.42 321 PKPd 03 59.80 -2.6X
FLN 143.42 346 ePKP 03 58.50 -3.6X
0.9s 255.95nm
Z 20s 5.50um 6.3Msz
ORX 143.46 335 PKP 03 58.53 -3.9X
ORO 143.47 335 PKPd 03 58.60 -3.9X
SGO 143.48 323 PKP 03 59.20 -3.3X
LDF 143.49 346 ePKP 03 58.80 -3.5X
EMS 143.52 337 ePKPd 04 00.20 -2.5
BOB 143.52 333 PKPd 03 59.50 -3.1X
BDI 143.54 331 PKP 03 58.40 -4.2X
LOR 143.58 341 ePKP 03 59.70 -2.8X
1.0s 156.25nm
Z 20s 4.50um 6.2Msz
SDI 143.58 325 PKP 03 59.10 -3.6X
AZI 143.60 326 PKPd 04 00.50 -2.1
MGR 143.60 322 PKPd 03 59.20 -3.5X
BSS 143.63 323 PKP 03 59.80 -2.9X
MNS 143.73 327 PKP 03 59.50 -3.4X
RFI 143.76 325 PKP 04 01.29 -1.6
LBF 143.79 340 ePKP 04 00.20 -2.7X
GRC 143.80 341 PKP 04 06.96 4.2X
PII 143.83 331 PKP 03 59.20 -3.8X
GRR 143.86 346 ePKP 03 59.80 -3.1X
GRI 143.87 320 PKP 04 01.36 -1.9
SSF 143.87 341 ePKP 04 00.40 -2.6X
LPL 144.05 336 ePKP 04 01.50 -2.1
LPG 144.06 336 ePKP 04 01.60 -2.1
1.0s 281.25nm
PCP 144.10 333 PKP 04 00.79 -2.7X
RMP 144.12 327 PKP 04 00.80 -2.8X
SMF 144.13 340 ePKP 04 01.00 -2.4
RSP 144.15 335 PKP 04 01.71 -1.9
RDP 144.15 326 PKP 04 01.60 -2.1
AVF 144.16 341 ePKP 04 01.00 -2.4
SOB1 144.18 128 iPKPd 04 02.20 -2.3
i 07 25.80
i 08 51.00
LPF 144.24 346 ePKP 04 01.30 -2.2
CKI 144.31 334 PKP 04 01.20 -2.6X
BNI 144.46 336 PKP 04 03.10 -1.1
MAO 144.49 329 PKP 04 02.20 -2.0
FIN 144.51 333 PKP 04 01.82 -2.4
RRL 144.53 336 PKP 04 03.15 -1.3
BGF 144.53 341 ePKP 04 02.90 -1.2
SOI 144.54 319 PKP 04 03.20 -1.1
BST 144.59 350 PKP 04 03.23 -0.9
ROB 144.59 334 PKP 04 02.33 -2.0
GMB 144.61 319 PKP 04 03.66 -1.0
DOI 144.68 335 PKP 04 01.30 -3.2X
PZZ 144.74 335 PKP 04 02.53 -2.2
MSI 144.78 319 PKP 04 02.80 -2.0
PLDF 144.80 340 PKP 04 04.25 -0.4
ENR 144.83 334 PKP 04 02.02 -2.8X
STV 144.86 334 PKP 04 01.92 -2.9X
ATN 144.86 319 PKP 04 03.30 -1.6
IMI 144.89 333 PKP 04 03.46 -1.4
AGO 144.89 340 PKP 04 04.25 -0.5
MAF 144.92 341 ePKP 04 03.80 -1.0
TCF 144.97 342 ePKP 04 03.80 -1.1
LPI 145.00 320 PKP 04 04.03 -1.2
AUTN 145.02 334 PKP 04 04.75 -0.6
TOUF 145.08 334 PKP 04 04.84 -0.5
SBF 145.12 334 ePKP 04 04.50 -0.8
AURF 145.15 334 PKP 04 04.88 -0.5
PYM 145.20 340 PKP 04 05.42 0.1
LSF 145.21 342 ePKP 04 04.20 -1.1
MVIF 145.21 334 PKP 04 05.23 -0.3
REVF 145.25 334 PKP 04 05.14 -0.3
MFF 145.35 344 ePKP 04 05.54 0.1
CALN 145.44 334 PKP 04 05.92 0.0
PGF 145.45 331 PKP 04 05.94 0.0
MNO 145.49 320 PKP 04 06.50 0.2
LBL 145.57 340 PKP 04 06.96 1.1
FRF 145.70 334 ePKP 04 05.70 -0.5
MEU 145.83 318 PKP 04 07.60 0.9
GIB 145.87 320 PKP 04 05.80 -1.0
LRG 145.91 335 ePKP 04 06.30 -0.2
1.0s 1000.00nm
LMR 145.94 334 ePKP 04 06.20 -0.4
CDR 145.97 335 ePKPc 04 06.70 0.1
e 04 07.30
e 04 07.80
i 04 54.80
RJF 146.07 342 ePKP 04 06.80 0.1
Z 20s 5.75um 6.4Msz
CAF 146.23 341 ePKP 04 07.30 0.2
MCT 146.33 320 PKP 04 09.70 2.1
FAI 146.53 320 PKP 04 09.80 2.1
LFF 146.63 342 ePKP 04 08.00 0.4
ERC 146.72 322 PKPd 04 08.60 0.5
LPO 146.73 342 ePKP 04 08.10 0.3
CVT 146.82 321 PKP 04 09.00 0.9
LVI 146.90 322 PKP 04 08.40 0.2
BCAO 147.67 257 iPKPc 04 09.40 -0.9
0.8s 570.00nm
i 05 02.50
i 05 36.30
CGL 147.68 327 PKP 04 06.46 -3.2X
PTS 147.87 321 PKP 04 12.90 3.0X
ETER 148.26 337 iPKPd 04 11.20 0.9
EPF 148.48 341 ePKP 04 11.30 0.6
BTH 148.57 342 PKPc 04 12.00 1.2
OGE 148.60 342 PKP 04 14.65 3.8X
JAU 148.69 342 PKP 04 15.89 4.7X
ESCF 148.72 342 PKP 04 15.00 3.9X
MADF 148.73 343 PKP 04 14.87 3.8X
ATE 148.75 343 PKP 04 13.09 2.0
ELYF 148.75 343 PKP 04 14.83 3.7X
BOM 148.82 343 PKP 04 13.29 1.9
ISSF 148.83 343 PKP 04 16.84 5.5X
LHE 148.88 342 PKP 04 16.15 4.7X
ECRI 149.68 345 iPKPd 04 14.20 1.6
ESEL 150.41 335 ePKP 04 14.70 1.0
EROO 150.44 339 iPKPd 04 14.70 1.0
STS 150.53 353 ePKP 04 13.60 -0.2
ERUA 150.84 351 iPKPd 04 15.20 0.9
ETOR 151.23 343 ePKP 04 15.80 0.8
GUD 151.95 346 ePKP 04 16.90 0.7
ECHE 152.01 340 ePKP 04 16.30 0.1
TOL 152.64 345 iPKP+ 04 17.00 0.0
ipPKP 04 26.50
iPKKP 04 49.00
iPP 08 05.00
eSKS 11 06.00
ePPS 19 55.00
iSS 27 40.00
ACU 152.78 338 ePKP 04 17.90 0.6
EPLA 152.92 348 ePKP 04 17.40 0.0
EVIA 153.37 342 ePKP 04 18.50 0.3
EBAN 154.18 343 iPKPd 04 20.40 1.2
ENIJ 154.80 340 ePKP 04 20.40 0.4
EMOR 154.89 346 ePKP 04 21.50 1.5
ASMO 154.92 343 iPKPc 04 20.50 0.2
ECOG 154.95 342 ePKP 04 20.40 0.1
AFC 154.96 342 ePKP 04 20.40 0.0
CRT 155.04 342 iPKPc 04 21.60 1.2
AAPN 155.08 343 iPKPc 04 21.00 0.5
ACHM 155.18 342 iPKPc 04 20.70 0.1
ALOJ 155.26 343 iPKPc 04 21.50 0.7
APHE 155.28 342 iPKPc 04 21.50 0.7
ATEJ 155.41 343 iPKPc 04 21.50 0.5
EVAL 155.45 348 ePKP 04 20.10 -0.7
EPRU 155.70 345 ePKP 04 22.50 1.2
MAL 155.70 343 iPKPd 04 22.00 0.8
iPP 08 20.00
EJIF 156.24 345 ePKP 04 23.10 1.1
TBT 164.25 16 iPKP 04 33.40 2.6X
CTFE 164.83 11 iPKP 04 33.60 2.3
CHIE 165.14 18 iPKP 04 34.80 3.3X
CFTV 165.18 4 iPKP 04 33.20 1.6
iPP 09 16.30
GGC 165.29 9 iPKP 04 33.30 1.6
iPP 09 17.80
KIC 169.23 229 PKP 04 34.38 -0.5
0.9s 112.50nm
LIC 169.35 228 PKP 04 34.48 -0.4
1.4s 270.00nm
Z 20s 7.00um
TIC 169.62 229 PKP 04 34.64 -0.5
1.2s 167.00nm
LKO 171.78 242 PKP 04 33.30 -2.8X
1.1s 303.00nm
S.D. = 1.1 on 349 of 513 obs.

SEP 28, 1990 20h 43m 40.87± 0.26s
51.284 N ± 7.7km 176.760 W ± 3.5km
DEPTH = 33.0km (normal)
5.0mb (15 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
ML 4.5 (PMR). Felt (IV) on Adak.

ADK 0.60 4 iPd 43 54.70 1.8
SMY 5.83 288 eP 45 12.00 4.8X
SDN 10.54 61 eP 46 13.40 0.8
SVW 15.26 42 eP 47 18.80 3.5X
KDC 15.45 56 eP 47 16.90 -0.8
TTA 16.12 36 eP 47 31.30 4.9X
PMR 18.28 45 eP 47 59.50 6.3X
IMA 18.88 30 ePd 48 01.30 0.6
0.9s 30.60nm 4.5mb
TOA 19.78 45 eP 48 11.70 0.9
FBA 20.25 37 eP 48 15.60 0.0
0.6s 202.71nm 5.6mb
INK 26.81 34 eP 49 18.00 -1.4
KAKJ 34.03 261 P 50 23.70 0.0
NIIJ 34.11 263 P 50 24.40 0.1
GMW 34.65 75 eP 50 30.00 1.1
CHJJ 34.86 262 P 50 31.30 0.5
BMW 34.87 76 eP 50 32.00 1.1
MAT 35.04 263 iPc 50 32.70 0.3
1.0s 19.00nm 5.0mb
MTMJ 35.26 263 P 50 34.50 0.1
RMW 35.28 74 eP 50 35.50 1.1
LON 35.61 75 eP 50 38.00 0.9
PNT 35.77 70 eP 50 39.00 0.6
0.6s 22.00nm 5.3mb
TSRJ 37.07 264 P 50 49.70 0.3
NEW 37.72 70 P 50 55.40 0.6
0.8s 52.08nm 5.4mb
pP 51 02.00 22kmX
SES 40.25 65 eP 51 16.00 0.1
SHNJ 41.03 266 eP 51 22.60 0.2
LRM 41.70 71 eP 51 28.70 0.6
e 51 34.60
TNP 43.18 84 eP 51 41.30 1.0

28d 20h

	0 8s	9.80nm		4 6mb		
		e	51 50.30			
PTI	43.36	75 eP	51 43.00	1.4		
DUG	44.64	78 eP	51 52.00	0.0		
BW06	45.11	73 eP	51 56.20	0.4		
		e	53 03.00			
DAU	45.47	77 eP	51 59.10	0.4		
PLM	46.41	89 eP	52 06.00	-0.1		
BJI	46.64	283 eP	52 08.00	0.4		
	1.0s	15.00nm		4.9mb		
RSSD	47.61	69 eP	52 15.40	-0.1		
SSE	49.28	271 P	52 29.00	0.8		
	0.8s	10.00nm		4.9mb		
		pP	52 39.50	36kmX		
GOL	49.48	74 eP	52 30.00	-0.1		
	0.7s	32.77nm		5.5mb		
		e	52 37.50			
ANMO	51.86	80 P	52 47.00	-1.1		
	0.8s	4.66nm		4.5mb		
ALO	51.86	80 eP	52 48.00	-0.2		
	0.9s	5.67nm		4.5mb		
LZH	56.64	288 iPc	53 23.50	0.4		
	1 2s	125.00nm		5.8mb		
Z	26s	0.90um		4.7MszX		
E	15s	0.70um				
		pP	53 30.00	21kmX		
		sP	53 35.00			
FVM	59.43	66 eP	53 40.60	-1.8		
		e	53 53.90			
UYO	59.68	72 iPd	53 42.50	-1.7		
SOD	60.36	350 eP	53 46.00	-2.4		
ELC	60.60	66 eP	53 49.00	-1.4		
		e	54 02.00			
HBVT	64.18	51 eP	54 12.80	-1.4		
		e	54 24.50			
CBM	64.59	46 P	54 15.00	-1.8		
BLA	65.59	61 eP	54 23.50	0.1		
	0.8s	23.40nm		5.3mb		
		e	54 36.30			
NUR	67.24	349 eP	54 25.00	-8.5X		
JSC	67.27	63 eP	54 33.80	-0.3		
LHS	67.37	63 eP	54 34.60	-0.1		
		epP	54 47.00	42kmX		
NB2	67.85	356 P	54 36.60	-0.8		
	0 7s	1.70nm		4.3mb		
HFS	68.62	354 eP	54 39.40	-2.7X		
	0.5s	5.60nm		4.9mb		
CHG	72.03	278 eP	55 03.00	-0.4		
GUN	73.07	293 P	55 10.40	0.5		
KKN	73.51	294 P	55 12.60	0.3		
PKI	73.60	294 P	55 13.10	0.2		
GKN	73.72	294 P	55 13.60	0.2		
DMN	73.75	294 P	55 14.20	0.5		
VRI	81.13	344 ePc	55 55.00	1.1		
QUE	81.46	308 iPc	55 55.68	-0.5		
WB5	82.78	226 eP	56 02.00	-0.8		
HYB	85.44	292 eP	56 16.50	0.1		
POO	87.25	296 iPc	56 25.00	-0.3		
GBA	89.11	291 P	56 34.00	-0.2		
JVI	92.45	333 eP	56 49.00	-0.4		
PRNI	94.04	333 eP	56 56.00	-0.9		
LKO	118.94	10 PKP	02 24.48	-3.2X		
KIC	122.18	9 PKP	02 33.50	-0.3		
LIC	122.28	10 PKP	02 33.60	-0.4		
BUL	143.09	318 iPKPc	03 06.90	-6.2X		
	1.0s	9.00nm				
MAW	147.19	218 iPKP	03 21.20	2.9X		
SLR	148.13	314 ePKP	03 24.00	2.7X		
	0.6s	16.67nm				
		i	03 39.00			
SWZ	150.69	317 iPKPc	03 34.50	9.3X		
	0.6s	50.00nm				
BLF	151.97	313 iPKPd	03 34.50	7.4X		
	S.D. = 0.9	on 61 of 73 obs.				

? SEP 28, 1990 22h 09m 48.82± 8.90s
0.005 S ±14.9km 79.124 W ±61.0km
DEPTH = 10.0km (geophysicist)
ECUADOR (107)

GGP	0.55	108 iPd	10 00.40	-0.1		
YANA	0.56	101 Pd	10 00.50	-0.1		
		iS	10 06.00			
OTO	0.63	108 Pd	10 01.50	-0.2		
		S	10 09.50			
COTA	0.86	67 P	10 05.70	0.0		
		S	10 17.20			
VC1	0 96	131 iPd	10 07 50	0.1		
CAYA	1.14	86 P	10 10.60	0.0		
	S.D. = 0.1	on 6 of 6 obs.				

SEP 28, 1990 22h 57m 13 92± 0.42s
34.942 N ± 4.7km 134.256 E ± 3.4km
DEPTH = 25.7 ± 3.4 km
4.9mb (15 obs.)
NEAR S. COAST OF SOUTHERN HONSHU(233)

YONJ	0.69	291 iPd	57 25.80	-1.6		
		S	57 35.50			
TKSJ	0.97	190 iP+	57 31.60	-0.2		
		S	57 45.50			
WKYJ	1.32	123 eP	57 36.40	-0.4		
		S	57 54.70			
TSRJ	1.53	67 iPd	57 39.80	-0.1		
		S	57 59.40			
SHNJ	2.72	253 P	57 58.40	1.5		
		eS	58 35.00			
IIDJ	3.04	79 P	58 00.90	-0.6		
MTMJ	3.32	59 eP	58 06.10	0.6		
MAT	3.59	62 iPd	58 08.90	-0.4		
		eS	58 51.00			
KUMJ	3.73	231 P	58 13.10	1.9		
CHJJ	4.02	73 P	58 15.50	0.1		
NIIJ	4.48	58 P	58 21.90	0.1		
KAGJ	4.69	218 eP	58 27.00	2.1		
KAKJ	4.99	74 P	58 28.00	-1.0		
OFUJ	7.23	53 P	59 01.60	1.1		
SSE	11.62	254 P	00 01.00	-0.1		
	1.2s	28.00nm		5.4mb		
Z	12s	1.40um		5.7MszX		
		esP	00 10.00			
BJI	15.22	295 iPd	00 50.00	1.3		
	1.5s	299.00nm		5.4mb		
Z	10s	1.41um		4.4Msz		
E	13s	1.64um				
		eS	03 51 00			
BAG	22.15	217 eP	02 09.20	-0.4		
GUMO	23.32	153 eP	02 21.60	0.7		
	1.2s	333.33nm		5 7mb		
PJG	23.32	153 eP	02 21.70	0.8		
GUA	23.39	153 eP	02 21.80	0.2		
LZH	24.74	282 eP	02 34.00	-0.7		
	1.5s	42.00nm		4.8mb		
Z	16s	1.50um		4.6MszX		
N	13s	1.10um				
E	13s	0.90um				
		sP	02 45 00			
		PP	03 14.00			
		eS	06 56.00			
KMI	28.88	259 Pd	03 12.50	-0.5		
Z	14s	0.90um		4.5MszX		
		pP	03 16.50	14kmX		
		S	08 16.00			
CHG	35.14	252 eP	04 08.30	0.7		
GUN	41.55	274 P	05 01.00	-0.4		
PKI	42.06	274 P	05 04.80	-0.8		
KKN	42.08	274 P	05 05.00	-0.7		
DMN	42.30	274 P	05 06.80	-0.7		
GKN	42.53	275 P	05 08.60	-0.7		
	0.9s	49.00nm		5.2mb		
NDI	48.32	279 iPd	05 54.00	-1.2		
HYB	52.30	265 eP	06 25.00	-0.7		
WB5	54.52	180 eP	06 40.50	-1.4		
GBA	55.22	262 P	06 46.70	-0.5		
QUE	55.97	285 eP	06 51.70	-1.0		
ASPA	58.29	180 iPc	07 07.10	-1.7		
	1.2s	9.50nm		4.7mb		
INK	58.84	26 eP	07 28.00	15.8X		
SOD	64.57	336 eP	07 52.00	1.3		
STK	66.83	173 eP	08 04.30	-1.2		
	1.8s	23.00nm		5.0mb		
HFS	73.47	333 eP	08 44.40	-1.2		
	0.7s	3.70nm		4.5mb		
NB2	73.74	335 P	08 46.40	-0.8		
	0.9s	5.00nm		4.5mb		
VRI	76.41	317 ePd	09 03.50	0.7		
KRA	77.42	323 eP	09 07.90	-0.3		
		e	09 10.70			
KSP	78.66	325 ePc	09 15.50	0.5		
LRM	79.61	41 eP	09 22.90	2.2		
BRG	79.72	326 e(P)	09 25.40	4.6X		
CLL	79.84	327 iP	09 21.60	0.2		
	1.3s	15.00nm		4.9mb		
NOH	79.91	300 ePd	09 22.00	-0.3		
PRU	80.06	325 eP	09 23.00	0.4		
		e	09 38.70			
MBH	80.49	300 eP	09 25.00	-0.3		
KHC	81.11	325 P	09 29.20	0.9		
TNP	81.71	49 eP	09 32.50	0.7		
	1.0s	3.75nm		4.4mb		
CDF	84.50	328 eP	09 46.40	0.6		
	1.0s	8.00nm		4.9mb		
LPL	86.93	326 eP	09 58.60	0.5		
	0.8s	4.05nm		4.7mb		
LPG	86.93	326 eP	09 58.90	0.7		
	0.8s	4.70nm		4.8mb		
LFF	90.02	329 eP	10 13.60	1.1		
	1.0s	12.00nm		5.1mb		
ZOBO	152.67	53 ePKP	17 07.00	3.4X		
		e	17 15.00			
	S.D. = 1.0	on 52 of 55 obs.				

SEP 29, 1990 00h 22m 44.79± 0.87s
46.152 N ± 8.1km 14.241 E ± 5.0km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 2.3 (TRI), 2.2 (LJU). Felt at Skofjo Loko.

LJU	0.23	118 iPgd	22 50.00	0.3		
		iSg	22 53.00			
		i	22 54.00			
VOY	0.27	244 iPgd	22 51.00	0.5		
		eSg	22 56.20			
CEY	0.43	163 ePg	22 53.90	0.3		
		eSg	23 00.00			
TRI	0.55	217 iPgc	22 55.50	-0.5		
		iSg	23 03.80			
RIY	0.81	173 ePg	23 00.30	-0.2		
		iSg	23 11.20			
FVI	1.10	294 P	23 05.40	-0.1		
		eSg	23 20.00			
PTJ	1.22	101 ePg	23 07.40	-0.2		
		iSg	23 23.30			
	S.D. = 0.4	on 7 of 7 obs.				

* SEP 29, 1990 00h 55m 54.73± 0.88s
33.012 S ±10.9km 68.146 W ±12.0km
DEPTH = 171.9 ± 9.0 km
4.4mb (1 obs.)
MENDOZA PROVINCE, ARGENTINA (139)

MDZ	0.61	282 iPc	56 20.30	0.9		
		iS	56 35.90			
RTCV	1.20	344 iPd	56 23.20	-0.4		
CFA	1.40	357 iPc	56 25.00	-0.5		
		S	56 47.00			
ZON	1.53	343 iPc	56 27.20	0.5		
RTLL	1.70	351 iPd	56 28.20	-0.2		
PCH	2.07	252 iPd	56 33.00	0.5		
		iS	57 03.00			
JACH	2.09	278 iPc	56 33.00	0.3		
		iS	57 02.30			
PEL	2.14	266 iPd	56 33.50	0.3		
		iS	57 02.30			
SAN	2.15	258 iPc	56 32.50	-0.9		
		iS	57 02.60			
ROCH	2.41	270 iPd	56 36.20	-0.4		
		iS	57 06.90			
TACH	2.42	254 iPd	56 36.00	-0.5		
		iS	57 07.70			
CCH	15.67	7 P	59 25.60	-2.3		
		i	00 17.50			
CNCB	16.13	1 P	59 36.00	2.1		
LPB	16.41	0 P	59 36.00	-1.1		
ZOBO	16.67	0 Pc	59 42.00	1.6		
	1.0s	17.50nm		4.4mb		
		i	00 32.00			
ARE	16.75	349 e(P)	59 41.60	0.4		
SIV	18.12	22 P	59 55.60	-0.8		
		e	00 41.00			
PPD	18.48	58 iPd	59 59.60	-0.6		
		e	00 08.60			
		i	00 15.70			
VAO	21.16	67 eP	00 28.40	1.0		
		e	00 33.40			
	S.D. = 1.1	on 19 of 19 obs.				

SEP 29, 1990 01h 23m 44.66± 0.56s
5.092 N ± 7.8km 31.973 E ± 8.9km
DEPTH = 10.0km (geophysicist)

4.5mb (15 obs.)
SUDAN (557)

AAE	7.79	59	eP	25	39.50	-1.7
LWI	7.94	204	iPd	25	43.20	0.0
NAI	7.95	143	iPc	25	44.00	0.7
	0.9s	25.21nm			5.4mb	
BCAO	13.41	268	iPc	26	55.30	-2.3
	0.7s	26.00nm			5.4mb	
			iS	29	21.30	
			Lg	30	45.00	
BUL	25.29	187	iPd	29	22.30	9.1X
	1.0s	7.50nm			4.3mb	
			i	37	00.00	
KIC	36.55	274	P	30	54.40	1.6
LKO	37.50	279	P	30	59.94	-0.9
ZST	44.79	346	eP	32	10.60	10.3X
			e	36	26.00	
SPC	45.05	349	eP	32	03.30	0.6
LPG	45.85	335	eP	32	09.10	-0.1
	1.0s	6.00nm			4.5mb	
LPL	45.88	335	eP	32	09.20	-0.1
	0.8s	2.70nm			4.3mb	
KHC	46.58	343	P	32	14.80	0.3
			e	32	26.00	
CAF	47.51	331	eP	32	22.10	0.1
	1.0s	4.00nm			4.5mb	
SMF	48.00	334	eP	32	25.80	0.0
	1.0s	8.00nm			4.8mb	
LBF	48.21	334	eP	32	27.40	0.0
	0.8s	2.70nm			4.4mb	
MAF	48.25	333	eP	32	28.60	0.9
	1.0s	7.00nm			4.7mb	
AVF	48.33	334	eP	32	28.20	0.0
	0.8s	2.70nm			4.4mb	
TCF	48.46	333	eP	32	30.40	1.1
	0.9s	4.90nm			4.6mb	
LSF	48.74	332	eP	32	32.20	0.7
	0.8s	2.70nm			4.3mb	
LDF	51.23	333	eP	32	50.24	-0.2
	1.0s	10.00nm			4.7mb	
GKN	54.87	59	P	33	00.00	-18.1X
HFS	56.65	349	eP	33	31.40	1.2
	0.4s	0.80nm			4.1mb	
NB2	57.97	348	P	33	37.40	-2.1
	1.1s	4.60nm			4.4mb	

S.D. = 1.1 on 20 of 23 obs.

& SEP 29, 1990 02h 17m 01.29s
60.346 N 147.652 W
DEPTH = 9.3km
SOUTHERN ALASKA (2)
<AGS-P>.

MTU	0.36	180	eP	17	09.21	0.5
GLI	0.60	27	iP	17	12.50	-0.9
			eS	17	22.30	
VZW	0.90	37	eP	17	17.39	-1.2
			eS	17	29.75	
SEW	0.93	256	iP	17	17.93	-1.1
			eS	17	30.05	
VLZ	1.02	39	eP	17	19.36	-1.3
SLKM	1.28	278	iP	17	23.38	-1.8
			eS	17	40.16	
PMS	1.30	315	iP	17	23.50	-1.9
			eS	17	40.15	
KLU	1.43	36	eP	17	26.03	-1.4
			eS	17	45.55	
PLRM	1.44	331	eP	17	25.68	-1.8
SCM	1.50	6	eP	17	27.27	-1.2
SML	1.50	348	eP	17	27.17	-1.3
GHO	1.56	337	eP	17	27.74	-1.5
PWA	1.70	321	eP	17	29.73	-1.5
BRLK	1.72	252	eP	17	29.84	-1.8
NKA	1.82	284	eP	17	32.43	-0.4
NNL	1.85	262	eP	17	32.04	-1.3
SUA	1.88	308	eP	17	31.84	-2.1
TOA	1.90	21	eP	17	33.58	-0.7
CNPM	1.98	247	eP	17	33.33	-2.0
HOM	2.12	253	eP	17	35.23	-2.1
GLB	2.18	58	eP	17	36.80	-1.4
SPU	2.32	293	eP	17	37.59	-2.6
			eS	18	05.09	
CGLM	2.34	296	eP	17	38.14	-2.5
			eS	18	05.86	
RDT	2.37	278	eP	17	37.97	-3.0
CUT	2.42	330	eP	17	39.44	-2.1
NCG	2.45	298	eP	17	39.56	-2.5
CKL	2.45	292	eP	17	39.54	-2.6
SKT	2.49	313	eP	17	40.30	-2.4
BGL	2.50	294	eP	17	41.09	-1.7
RSO	2.53	275	eP	17	40.54	-2.9
BALM	2.70	73	eP	17	44.05	-1.7

31 obs. associated

& SEP 29, 1990 02h 55m 14.72s
59.687 N 151.101 W
DEPTH = 15.4km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

BRLK	0.13	55	iP	55	18.56	0.0
CNPM	0.18	203	iP	55	18.95	-0.3
			eS	55	22.16	
HOM	0.28	264	iP	55	21.08	0.2
			eS	55	26.05	
NNL	0.37	345	iP	55	23.09	0.6
XLV	0.39	234	iP	55	21.82	-1.0
			eS	55	27.41	
SEW	0.93	63	iP	55	30.96	-1.0
SLKM	0.93	28	eP	55	30.62	-1.5
			eS	55	44.03	
OPT	1.08	269	eP	55	33.60	-1.0
RDT	1.10	324	eP	55	33.79	-1.2
RSO	1.14	314	eP	55	34.42	-1.2
AUH	1.24	256	eP	55	36.15	-1.1
PDB	1.57	275	eP	55	40.89	-1.1
			eS	56	00.44	
SPU	1.57	343	eP	55	41.52	-0.6
			eS	56	00.70	
CGLM	1.69	345	eP	55	43.33	-0.5
BGL	1.71	339	eP	55	43.63	-0.5
PMS	1.74	25	eP	55	44.47	-0.1
NCG	1.80	344	eP	55	44.93	-0.5
PWA	2.06	16	eP	55	49.70	0.6
PLRM	2.14	26	eP	55	50.57	0.3
SML	2.53	31	eP	55	55.96	0.1
KLU	3.13	52	eP	56	02.70	-1.8

21 obs. associated

• SEP 29, 1990 03h 33m 15.74± 0.74s
28.894 N ±15.5km 60.970 E ± 8.8km
DEPTH = 33.0km (normal)
4.7mb (6 obs.)
SOUTHERN IRAN (353)

QUE	5.37	75	eP	34	36.50	0.7
	0.7s	1119.86nm			6.5mb	X
			e	36	00.40	
NDI	14.25	87	iPd	36	36.50	-0.7
HYB	19.77	121	eP	37	46.00	0.0
GKN	20.83	87	P	37	56.40	-0.8
DMN	21.30	88	P	38	02.20	0.1
	0.8s	36.00nm			4.8mb	
KKN	21.42	87	P	38	02.80	-0.5
PKI	21.57	88	P	38	04.40	-0.5
GBA	21.57	131	P	38	05.40	0.9
GUN	21.93	87	P	38	09.00	0.5
PRNI	22.61	280	eP	38	29.00	14.1X
MLR	32.14	311	ePc	39	40.00	-2.4
KRA	37.45	316	eP	40	27.80	0.2
			e	40	30.70	
NUR	39.89	333	iP	40	48.10	0.3
	0.8s	16.10nm			4.8mb	
SUF	40.68	336	iP	40	55.00	0.7
	0.8s	10.00nm			4.6mb	
KHC	41.20	313	P	41	01.60	2.7X
CLL	42.04	316	iP	41	07.00	1.4
	1.6s	29.00nm			4.8mb	
SOD	43.66	342	iP	41	19.40	0.8
HFS	44.44	328	eP	41	24.50	-0.6
	0.9s	10.30nm			4.7mb	
	Z 16s	0.06um			3.6MszX	
		LR		58	24.00	
KEV	45.27	344	eP	41	20.00	-11.5X
NB2	45.92	329	P	41	36.70	-0.2
	0.8s	5.50nm			4.5mb	

S.D. = 0.9 on 17 of 20 obs.

? SEP 29, 1990 04h 46m 01.81±14.25s
32.900 S ±40.9km 72.700 W ±109.km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

ROCH	1.42	93	iPd	46	24.80	-1.0
			iS	46	38.00	
LNV	1.51	135	iPc	46	26.60	-0.2
			iS	46	41.00	
TACH	1.66	117	iPc	46	28.50	-0.5
			iS	46	45.00	
PEL	1.71	99	iPd	46	30.00	0.2
			iS	46	47.00	
JACH	1.79	84	iPc	46	31.10	0.1
			iS	46	49.50	
SAN	1.80	108	eP	46	31.00	0.0
			iS	46	49.50	
			i	46	51.20	
PCH	1.97	112	iPd	46	33.80	0.2
			iS	46	55.00	

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

• SEP 29, 1990 05h 01m 23.77± 1.01s
23.170 S ±13.2km 66.925 W ±18.5km
DEPTH = 255.5 ± 31.0 km
JUJUY PROVINCE, ARGENTINA (128)

ANT	3.25	260	iP	02	20.00	0.3
			iS	03	00.50	
CCH	5.81	7	P	02	51.00	0.5
CNCB	6.41	351	P	02	59.00	0.7
			S	04	13.00	
LPB	6.70	350	P	02	03.50	-58.3X
			eS	04	16.00	
ZOBO	6.96	350	P	03	05.20	0.0
			S	04	23.00	
ARE	7.94	326	eP	03	16.00	-1.3
			eS	04	04.00	
SIV	9.02	39	P	03	27.50	-3.4X
PPD	14.47	89	eP	04	37.50	-1.2
			e	04	40.00	
VAO	18.36	93	eP	05	21.80	-0.3
			e	05	24.70	
JFO	21.86	91	(P)	05	58.00	1.3

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

SEP 29, 1990 05h 06m 08.71± 0.73s
45.255 N ± 7.2km 26.985 E ± 6.3km
DEPTH = 10.0km (geophysicist)
ROMANIA (358)

ISR	0.33	250	iPd	06	15.50	-0.1
VRI	0.64	344	iPc	06	27.00	5.4X
MLR	0.77	288	iPd	06	23.50	-0.4
CVO	0.80	315	ePc	06	25.00	0.7
CFR	0.83	94	iPc	06	27.00	2.3
TLB	1.00	131	iPc	06	25.00	-2.6
CLI	1.31	9	iPc	06	32.00	-1.0
MTUR	1.36	269	ePc	06	32.50	-1.2
CMP	1.38	271	ePd	06	39.00	5.1X
PSN	1.79	151	eP	06	45.00	5.1X
COZ	1.87	273	ePc	06	42.00	0.9
TNR	1.95	283	ePd	06	50.00	7.8X
PVL	2.36	211	eP	06	49.00	0.9
PLD	3.56	209	eP	07	16.00	10.9X
KDZ	3.78	198	iP	07	09.00	0.7
BZS	3.80	277	ePc	07	15.00	6.5X
VTS	3.81	227	iP	07	09.00	0.1
MMB	4.37	214	eP	07	09.00	-7.6X
KKB	4.42	221	iPd	07	17.00	-0.3

S.D. = 1.4 on 12 of 19 obs.

? SEP 29, 1990 07h 49m 45.19± 4.04s
3.857 N ±36.5km 77.714 W ±38.1km
DEPTH = 33.0km (normal)
NEAR WEST COAST OF COLOMBIA (102)

PSO	2.68	172	eP	50	27.50	0.2
COTA	3.55	190	P	50	39.40	-0.5
			iS	51	17.60	
BOG	3.72	78	eP	50	42.00	0.0
			eS	51	20.00	
CAYA	3.76	184	P	50	42.10	-0.7
			eS	51	30.50	
YANA	4.04	192	eP	50	46.80	0.1
			eS	51	35.00	
GGP	4.10	192	Pd	50	48.00	0.3
			S	51	32.50	
VC1	4.52	189	P	50	54.20	0.6
			eS	51	49.40	

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

29d 08h

& SEP 29, 1990 08h 03m 17.18s
46 158 N 122.864 W
DEPTH = 22.7km
WASHINGTON (29)
<SEA>. CL 2.9 (SEA).

RVW	0.08	96	Pc	03	20.92	-0.5
LVP	0.33	106	P	03	24.05	-0.6
FL2	0.36	84	Pc	03	24.50	-0.6
CZM	0.37	42	Pd	03	24.56	-0.7
ERK	0.39	68	Pd	03	24.75	-0.9
			S	03	30.18	
BMW	0.41	322	Pc	03	25.20	-0.6
			S	03	31.49	
NLO	0.41	261	Pc	03	25.74	-0.2
SHW	0.44	85	Pc	03	25.88	-0.5
STD	0.45	80	Pc	03	25.85	-0.7
MTMW	0.47	106	Pc	03	26.31	-0.6
YEL	0.47	83	P	03	26.38	-0.6
HSR	0.47	88	Pc	03	26.54	-0.4
REMW	0.47	85	P	03	26.61	-0.4
TDL	0.49	67	Pd	03	26.41	-0.8
			S	03	32.78	
ESD	0.50	85	P	03	26.73	-0.6
SOSW	0.51	81	Pd	03	26.81	-0.7
APW	0.52	17	Pd	03	26.90	-0.7
KOSW	0.56	57	Pd	03	27.50	-0.8
CDFW	0.57	94	Pc	03	27.91	-0.6
LMW	0.65	38	Pd	03	28.98	-0.8
KMOR	0.68	220	Pd	03	29.29	-1.1
PGO	0.75	157	P	03	31.01	-0.4
CPW	0.84	347	Pd	03	32.01	-1.0
			S	03	43.93	
VLMM	0.85	137	Pc	03	32.32	-0.9
ASR	0.88	90	Pc	03	32.79	-1.0
GULW	0.91	104	Pc	03	33.38	-1.0
APM	0.93	117	Pc	03	33.88	-0.6
LON	0.94	51	Pd	03	33.59	-1.1
GLK	0.96	65	Pd	03	34.25	-0.9
REMR	0.97	47	Pd	03	34.23	-1.2
GHW	0.97	25	P	03	33.87	-1.4
RVC	1.00	38	Pd	03	34 65	-1.1
WPW	1.06	59	Pd	03	35.72	-1.0
VLL	1.08	130	P	03	36.31	-0.7
GT2	1.09	157	P	03	36.07	-1.0
FMW	1.13	46	Pd	03	36.93	-0.9
TDH	1.15	139	P	03	37.01	-1.0
GSM	1.28	35	Pd	03	39.21	-0.6
VFP	1.29	130	P	03	39.53	-0.5
OBH	1.36	330	P	03	40.67	-0.1
GMW	1.39	2	Pd	03	40.50	-0.8
VBEM	1.42	140	Pc	03	41.83	0.0
GL2	1.44	97	P	03	42.27	0.3
SPW	1.46	17	P	03	42.37	0.1
RMW	1.49	29	P	03	42.59	-0.2
HDW	1.50	355	Pd	03	42.40	-0.5
NAC	1.52	67	P	03	43.96	0.7
VGB	1.59	113	P	03	44.44	0.1
PGW	1.67	6	P	03	45.56	0.2
EBG	1.75	64	P	03	47.92	1.3
OSD	1.76	341	P	03	47.67	0.8
CROR	1.77	131	P	03	47.54	0.7
HTW	1.81	24	P	03	47.69	0.3
OOW	1.82	331	P	03	47.86	0.3
MXC	1.83	76	P	03	48.82	1.1
TBM	1.86	56	P	03	50.01	1.8
BRVW	2.02	80	P	03	52.20	1.7
JCW	2.13	17	Pd	03	52.82	0.7
CMW	2.32	12	P	03	56.09	1.3
RPW	2.47	21	P	03	58.42	1.5
MCW	2.52	0	P	03	58.73	1.1
M8W	2.71	14	P	04	01.90	1.5

62 obs. ossocioted

& SEP 29, 1990 08h 19m 19.29s
46.164 N 122.865 W
DEPTH = 21.8km
WASHINGTON (29)
<SEA>. CL 2.6 (SEA).

RVW	0.09	100	Pc	19	22.97	-0.5
LVP	0.33	107	Pc	19	26.09	-0.6
FL2	0.36	85	Pc	19	26.55	-0.6
CZM	0.37	42	Pd	19	26.61	-0.6
ERK	0.39	69	Pd	19	26.83	-0.8
BMW	0.40	321	Pc	19	27.28	-0.5
NLO	0.41	260	Pc	19	27.78	-0.2
SHW	0.44	86	P	19	27.93	-0.5
STD	0 45	80	Pc	19	27.89	-0.8
YEL	0.47	84	P	19	28.51	-0.5
HSR	0.47	89	P	19	28.56	-0.5
REMW	0.47	86	P	19	28.65	-0.5
MTMW	0.48	107	Pc	19	28.39	-0.6
TDL	0.49	67	Pd	19	28.50	-0.8
			S	19	35.52	
ESD	0.50	86	Pc	19	28.79	-0.7
APW	0.51	17	Pd	19	28.94	-0.6
SOSW	0.51	82	Pd	19	28.85	-0.8
KOSW	0.55	57	Pd	19	29.56	-0.7
CDFW	0.57	95	Pc	19	29.95	-0.6
LMW	0.64	38	Pd	19	31.02	-0.8
KMOR	0.69	220	Pd	19	31.34	-1.2
PGO	0.75	157	P	19	33.22	-0.4
CPW	0.83	347	Pd	19	34.06	-0.9
VLMM	0.85	137	P	19	34.38	-1.0
ASR	0.88	90	Pc	19	34.86	-1.1
GULW	0.92	105	Pc	19	35.45	-1.0
APM	0.93	117	ePc	19	35.94	-0.7
LON	0.94	51	Pd	19	35.64	-1.1
GLK	0.96	65	Pd	19	36.30	-0.9
REMR	0.96	47	Pd	19	36.30	-1.1
GHW	0.97	25	P	19	35.94	-1.3
RVC	0.99	38	Pd	19	36.74	-1.0
WPW	1.06	59	Pd	19	37.71	-1.1
VLL	1.09	130	P	19	38.37	-0.9
GT2	1.09	157	P	19	38.24	-1.1
FMW	1.13	47	Pd	19	38.99	-1.0
GSM	1.27	35	Pd	19	41.29	-0.7
O8H	1.35	330	P	19	42.65	-0.3
GMW	1.39	2	P	19	42.50	-0.9
VBEM	1.42	140	P	19	43.89	-0.2
GL2	1.44	97	P	19	44.24	0.0
RMW	1.49	29	P	19	44.66	-0.3
HDW	1.49	355	ePd	19	44.42	-0.6
EBG	1.75	64	P	19	50.26	1.5
HTW	1.80	24	P	19	49.66	0.1
MXC	1.83	76	P	19	50.83	1.0
JCW	2.13	17	P	19	54.91	0.7
CMW	2.32	12	P	19	58.21	1.3
RPW	2.46	21	P	20	00.44	1.4

49 obs. ossocioted

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* SEP 29, 1990 10h 22m 26.84± 0.68s
6.911 S ± 8.0km 143.703 E ± 9.5km
DEPTH = 33.0km (normol)
4.8mb (2 obs.)
PAPUA NEW GUINEA (202)

MNDI	0.75	357	eP	22	39.50	-1.7
LAT	3.28	86	eP	23	18.00	0.8
PMG	4.22	126	eP	23	29.00	-1.5
	1.0s		80.00nm			
			eS	24	18.00	
MTN	13.72	244	iPc	25	40.10	-1.3
OIS	14.14	196	eP	25	46.80	-0.1
WB5	15.76	214	eP	26	07.90	-0.2
			eS	29	07.90	
ASPA	19.14	208	iPc	26	51.50	1.3
	0.8s		64.00nm		4.9mb	
	Z 14s		0.21um		4.8Msz	
			eS	30	35.40	
			LR	34	08.00	
RMO	20.06	167	eP	27	00.60	0.4
SSE	43.50	331	eP	30	31.70	2.7X
	1.5s		25.00nm		4.8mb	
MAT	43.53	354	(P)	30	30.00	0.9
BJI	53.18	334	eP	31	45.50	1.5
CNCB	140.79	127	PKP	42	00.00	3.2X
	S.D. = 1.3		on 10 of 12 obs.			

SEP 29, 1990 11h 16m 10.92± 0.40s
8.701 S ± 6.5km 122.385 E ± 8.9km
DEPTH = 33.0km (normol)
5.0mb (13 obs.)
FLORES ISLAND REGION (286)

KNA	9.38	139	iPc	18	26.60	-0.3
			eS	20	03.00	
MTN	9.53	116	iPd	18	30.50	1.6
TRT	9.70	275	ePc	18	39.70	8.4X
M8L	12.63	191	eP	19	11.00	-0.1
			eS	21	21.00	
NANU	15.27	205	eP	19	47.00	1.1
			iS	22	26.00	
WB5	16.06	135	eP	19	53.50	-2.5
WARB	17.85	167	iPc	20	19.80	1.3
			eS	23	30.00	
MEKA	18.19	191	eP	20	23.00	0.3
	0.3s		19.00nm		4.7mb	
			eS	23	33.00	
ASPA	18.52	145	iPd	20	26.80	0.0
	0.3s		119.20nm		5.6mb	
			eS	23	39.80	
			iScS	31	56.00	
OIS	20.38	127	iP	20	47.20	-0.6
			e	24	28.00	
MRWA	21.27	196	iPd	20	56.80	0.0
			eS	24	42.00	
FORR	22.67	167	eP	21	09.00	-1.7
	0.4s		37.00nm		5.2mb	
NWAO	24.57	190	iPc	21	29.00	-0.2
RKG	25.73	190	iPc	21	45.00	4.9X
	0.2s		10.00nm		5.1mb	
STK	29.16	145	iPc	22	10.10	-1.3
	0.4s		4.00nm		4.5mb	
			iS	27	47.10	
CMS	31.46	139	eP	22	31.00	-0.8
BRS	34.20	127	iPc	22	55.90	0.1
CHTO	35.80	320	eP	23	11.00	1.6
	1.0s		2.50nm		4.1mb	
SSE	39.58	358	eP	23	42.20	1.3
	1.0s		10.00nm		4.5mb	
MAT	47.40	17	eP	24	44.00	-0.1
	1.2s		28.13nm		5.2mb	
BJI	48.83	354	eP	24	54.50	-0.6
GBA	49.82	296	P	25	01.00	-2.1
GUN	50.71	317	P	25	09.60	-0.5
	0.6s		20.00nm		5.3mb	
PKI	50.81	316	P	25	09.80	-1.1
	0.6s		13.00nm		5.1mb	
KKN	51.03	317	P	25	11.60	-0.9
	0.6s		10.00nm		5.0mb	
DMN	51.04	316	P	25	12.20	-0.3
	0.6s		11.00nm		5.0mb	
GKN	51.61	316	P	25	15.80	-0.9
	0.6s		19.00nm		5.2mb	
INK	103.24	22	Pdiff	30	18.00	9.9X
PPD	148.84	191	(PKP)	35	55.00	1.4
CNCB	152.66	158	PKP	36	02.00	1.9
LPB	152.87	158	ePKP	36	02.00	1.8
ZOBO	153.10	157	ePKP	36	02.00	1.3
	S.D. = 1.2		on 29 of 32 obs.			

? SEP 29, 1990 11h 43m 59.27± 6.05s
4.713 S ±68.3km 143.970 E ±16.0km
DEPTH = 142.8 ± 16.2 km
4.3mb (1 obs.)
PAPUA NEW GUINEA (202)

MNDI	1.47	192	eP	44	28.50	0.0
			eS	44	54.00	
LAT	3.58	123	eP	44	54.50	0.0
PMG	5.63	146	eP	45	22.00	0.0
WB5	17.74	211	eP	47	58.90	0.0
ASPA	21.20	206	eP	48	34.90	0.0
	0.5s		6.70nm		4.3mb	
	S.D. = 0.0		on 5 of 5 obs.			

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* SEP 29, 1990 12h 01m 55.43± 0.43s
33.394 S ± 9.9km 77.580 E ± 9.1km
DEPTH = 10.0km (geophysicist)
5.1mb (13 obs.) 4.8Msz (1 obs.)
MID-INDIAN RISE (429)
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 18S, 31C
Centroid Locotion:
Origin Time 12:02: 6.7 0.4
Lot 33.36S 0.06 Lon 77.85E 0.04
Dep 15.0 FIX Holf-durotion 1.6
Moment Tensor; Scale 10**16 Nm
Mrr=-0.08 0.36 Mtt=-8.35 0.45
Mff= 8.43 0.31 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf=-0.30 0.37
Principol Axes:

T	Vol= 8.43	Plg= 0	Azm=269
N	-0.08	90	180
P	-8.36	0	179

Best Double Couple:Mo=8.4*10**16
NP1:Strike=314 Dip=90 Slip=-180
NP2: 44 90 0

```
MAW     35 31 190 iPc    08 52.50    0 3
SEK     42.85 263 iPd    09 56.40    0.7
        1.0s     15.00nm             4.7mb
SLR     43.23 267 iPc    09 57.00   -1.7
        1.0s     35.00nm             5.1mb
BLF     43.78 261 eP     10 04.50    1.3
SWZ     45.16 263 iPc    10 18.60    4.2X
        0.7s     34.25nm             5.4mb
BUL     45.29 274 iPd    10 13.80   -1.6
        1.2s     75.00nm             5.5mb
GBA     46.73 360 P      10 27.00    0.5
ADE     49.89 110 iPc    10 51.50    0.4
ASPA    49.91  94 eP     10 49.20   -2.2
        1.8s     20.50nm             4.8mb
      Z  28s      1.04um             4.7MszX
                 LR     27 40.00
POO     51.76 355 eP     11 08.30    3.0X
WB5     51.94  90 eP     11 06.00   -0.9
                 eS     15 38.20
STK     53.14 107 iPd    11 15.30   -0.4
        1.0s     6.00nm              4.5mb
BDT     54.35  25 eP     11 20.00   -4.5X
CHG     55.78  25 eP     11 35.10    0.2
SPA     56.78 180 eP     11 41.80   -0.2
        0.9s     18.18nm             5.1mb
PKI     61.08   8 P      12 12.20    0.0
DMN     61.09   8 P      12 12.40    0.2
        1.0s     34.00nm             5.4mb
KKN     61.28   8 P      12 13.60    0.1
        1.0s     32.00nm             5.4mb
GKN     61 43   7 P      12 14.40    0.0
        0.8s     16.00nm             5.2mb
GUN     61.47   8 P      12 14.40   -0.5
BRS     63.85 107 iPc    12 31.00    0.5
QUE     64.03 350 eP     12 29.80   -1.9
BCAO    67.23 292 iPd    12 50.50   -1.9
        0.8s     10.00nm             5.1mb
                 i      15 25.00
LZH     73.35  22 Pc     13 29.50    0.2
        2.0s     54.00nm             5.3mb
      Z  20s      0.50um             4.8Msz
                 pP     13 37.50   26kmX
MBH     74.69 322 eP     13 40.00    3.0X
DSI     75.90 324 eP     13 46.00    2.2
SSE     76.22  38 P      13 46.00    0.3
        1.0s     10.00nm             4.9mb
GLH     76.69 325 eP     13 51.00    2.7X
BJI     81.32  29 eP     14 10.00   -3.2X
KIC     87.09 279 P      14 46.00    3.1X
VRI     91.31 327 eP     15 05.50    3.4X
MLR     91.38 327 eP     15 15.00   12.4X
CLI     91.58 328 ePd    15 03.50    0.1
INK    140.79  18 ePKP   21 28.00    1.8
SCH    147.17 322 ePKP   21 43.00    5.5X
YKA    149.87  11 ePKP   21 49.00    7.5X
        0.9s     12.20nm
TUL    173.99 297 ePKP   22 09.70    3.9X
        1.0s     13.30nm
SIO    174.44 297 ePKP   22 16.70   10.7X
ALQ    176.31  64 ePKP   22 09.00    2.3
        1.0s      3.75nm
                  e      22 17.00
     S.D. = 1.2  on  26 of  39 obs.
-------------------------------------
?  SEP  29, 1990  12h 16m 16.32± 3.26s
   44.026 N ±26.7km    11.984 E ± 9.4km
   DEPTH =  10.0km  (geophysicist)
 NORTHERN ITALY                    (545)

SFI      0.14 222 P       16 19.00   -0.6
                 eSg      16 22.80
PGD      0.24 232 P       16 22.10    0.5
                 eSg      16 26.50
CRE      0.40 183 P       16 24.50    0.0
                 eSg      16 29.00
ARV      0.87 127 P       16 33.20    0.1
                 eSg      16 44.00
     S.D  = 0.8  on   4 of   4 obs.
-------------------------------------
   SEP  29, 1990  12h 32m 33.38± 0.24s
    5.579 S ± 4.5km   141.876 E ± 5.3km
   DEPTH =  21.9km  (  5 depth phases)
   5.0mb ( 16 obs.)  4.5Msz (  5 obs.)
 PAPUA NEW GUINEA                  (202)

MNDI     1 86 108 eP     33 05.70    1.1
JAY      3.26 339 iPd    33 26.20    1.8
LAT      5.21 102 eP     33 52.00    0.0
PMG      6.47 126 iPc    34 07.90   -1.9
                 eS     35 26.00
RAB     10.35  83 iPd    35 03.50   -0.2
        1.0s    320.00nm          6 6mb X
MTN     12.83 235 iPc    35 36.00   -1.3
CTA     15.04 164 iPc    36 09.60    3.2X
        1.0s     50.00nm             4.8mb
                 iS     39 14.00
KNA     16.36 231 eP     36 22.00   -1.4
SVO     18.14 102 eP     36 46.00    0.3
HNR     18.32 103 eP     36 42.00   -5.9X
                 eS     40 26.00
                 eLR    45 02.00
GUA     19.23   9 eP     36 57.60   -1.5
        0.8s     59.70nm             4.9mb
GUMO    19.27   9 eP     36 57.30   -2.3
        1.0s    120.00nm             5.1mb
PJG     19.27   9 eP     36 57.30   -2.3
ASPA    19.55 202 iPd    37 02.40   -0.5
        1.0s    132.80nm             5.2mb
      Z  14s      3.86um             4.2Msz
                 eS     40 30.60
                 LR     44 42.00
QLP     21.01 174 iPc    37 18.30    0.3
                 e      41 25.00
                 e      43 53.00
RMO     21.81 163 iP     37 24.80   -1.2
                 e      44 14.00
                 i      45 54.40
BRS     24.05 156 iPc    37 48.10    0.1
                 e(S)   45 09.00
WARB    25.13 214 iPd    37 58.90    0.4
                 i      38 06.80   28km
CMS     26.04 172 eP     38 06.80   -0.1
                 e      43 32.00
STK     26.17 181 iPd    38 06.90   -1.2
        1.1s     8.00nm              4.3mb
MBL     26.39 232 eP     38 21.00   10.7X
COO     26.59 160 iPc    38 12.80    0.7
                 e      46 43.00
BWA     29.34 169 eP     38 38.60    1.7
                 e      38 42.50   14km
ADE     29.39 185 e(P)   38 50.00   12.6X
CAN     30.32 168 eP     38 46.30    0.7
                 e      38 52.80   22km
MEKA    30.55 224 eP     38 46.00   -1.8
BFD     31.45 179 eP     38 55.00   -0.5
                 e      39 36.00  199kmX
                 eS     45 53.00
                 i      48 36.00
TOO     32.01 175 e(P)   38 52.00   -8.5X
                 e      45 46.00
MRWA    33.93 223 eP     39 23.00    5.7X
KLB     34.35 218 eP     39 29.00    8.1X
MUN     35.58 219 eP     39 38.00    6.7X
NWAO    35.60 217 eP     40 00.00   28.5X
      Z  20s      2.90um             5.0Msz
      N  20s      0.50um
      E  20s      2.60um
SSE     41.48 333 eP     40 19.50   -1.0
        1.2s     17.00nm             4.7mb
      Z  20s      0.50um             4.4Msz
                 pP     40 27.20   26km
                 eS     46 32.00
IPM     42.02 283 ePd    40 32.60    7.3X
MAT     42.04 356 eP     40 25.00    0.0
        1.4s     32.56nm             4.9mb
LOE     45.76 301 eP     41 02.00    6.6X
CHG     48.75 301 eP     41 19.00    0.1
KMI     48.77 310 Pc     41 26.00    6.8X
        2.0s    120.00nm             5.6mb
BJI     51.20 335 eP     41 36.50   -0.7
        1.5s     21.00nm             4.8mb
      Z  20s      0.30um             4.3Msz
LZH     54.66 322 P      42 04.00    0.7
        1.5s     37.00nm             5.2mb
      Z  22s      0.40um             4.4Msz
                 pP     42 10.00   20km
GUN     63.41 305 P      43 05.20    0.8
        0.8s     78.00nm             5.9mb
PKI     63.66 304 P      43 06.40    0.4
        1.2s     51.00nm             5.5mb
KKN     63.85 305 P      43 07.80    0.7
DMN     63.93 304 P      43 08.40    0.7
GKN     64.46 305 P      43 11.60    0.6
GBA     66.73 287 Pc     43 24.40   -1.2
        1.1s      7.70nm             4.8mb
ADK     67.25  26 eP     43 32.90    4.7X
NDI     70.84 303 eP     43 50.20   -0.7
POO     71.16 292 eP     43 56.80    3.8X
SDN     76.99  30 eP     44 31.40    5.5X
        0.7s    100.60nm             6.0mb
QUE     79.87 302 e(P)   44 43.90    1.3
MAW     80.68 202 iP     44 46.50    0.6
SVW     82.02  26 eP     44 53.20    0.1
KDC     82.03  30 eP     44 59.00    6.0X
SPA     84.46 180 eP     45 19.90   14.3X
        1.1s     19.05nm
IMA     85.01  22 ePd    45 08.50    0.2
        1.4s     14.70nm             5.0mb
PMR     85.08  27 eP     45 07.90   -0.6
TOA     86.57  27 eP     45 17.80    1.8
FBA     86.82  24 ePd    45 15.90   -1.2
        0.9s     13.10nm             5.2mb
BRG    117.54 326 i(PKP) 51 19.40    0.2
KHC    118.55 324 ePKP   51 22.20    0.9
BSF    123.11 325 ePKP   51 29.70   -0.4
        1.0s      8.00nm
HAU    123.27 326 ePKP   51 29.70   -0.6
        0.8s      5.35nm
LPG    124.38 323 ePKP   51 32.90    0.0
        0.8s      2.70nm
LPL    124.39 323 ePKP   51 32.60   -0.3
        0.8s      2.70nm
LOR    125.07 326 ePKP   51 33.30   -0.5
        1.0s      4.00nm
LBF    125.17 326 ePKP   51 33.70   -0.4
        1.0s      6.00nm
SSF    125.39 326 ePKP   51 34.20   -0.2
        1.0s      8.00nm
TCF    126.56 326 ePKP   51 36.80    0.0
        1.0s     10.00nm
GRR    126.87 330 ePKP   51 37.00   -0.2
        1.0s     12.00nm
LSF    126.96 326 ePKP   51 37.10   -0.4
        1.0s      8.00nm
LPF    127.20 329 ePKP   51 37.70   -0.2
        1.0s     16.00nm
CNCB   143.04 128 PKP    52 06.00   -3.0X
LPB    143.10 127 ePKP   52 07.00   -1.9
                  e      52 24.00
ZOBO   143.23 127 PKP    52 04.00   -5.3X
        1.5s     17.20nm
      Z  20s      0.15um             4.7Msz
                 LR     01 12.00
KIC    146.79 273 PKP    52 16.88    2.2
TIC    147.07 274 PKP    52 17.46    2.3
LIC    147.08 273 PKP    52 17.50    2.4
TOV    148.35  80 ePKP   52 18.50    1.3
FISA   148.63  78 ePKP   52 20.00    2.3
SIV    148.77 134 PKP    52 19.00    1.2
PPD    149.67 155 ePKP   52 23.70    4.7X
                  e      52 29.10
VAO    150.31 163 ePKP   52 26.10    6.1X
OLLA   151.25  79 ePKP   52 21.00   -0.7
     S.D. = 1.1  on  63 of  84 obs.
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   SEP  29, 1990  12h 58m 54.01± 1.80s
   37.768 N ± 9.2km   72.488 E ± 7.1km
   DEPTH =  91.8 ± 20.6 km
   4.8mb ( 20 obs.)
 TAJIK SSR                         (715)

QUE      8.85 213 iPd    01 01.20    0.0
        1.0s     40.00nm             5.2mb
                  eS     02 33.30
NDI      9.89 155 iPd    01 17.20    2.2
        0.5s     35.21nm             5.6mb
GKN     14.09 130 P      02 10.20   -0.6
KKN     14.64 129 P      02 16.80   -1.1
DMN     14.66 130 P      02 17.80   -0.5
PKI     14.88 129 P      02 20.80   -0.2
GUN     14.93 127 P      02 21.00   -0.7
POO     19.20 176 eP     03 18.80    5.4X
POO     19.20 176 iPd    03 13.30   -0.1
HYB     20.96 164 eP     03 32.00    0.5
GBA     24.47 168 P      04 06.00    0.3
                  S      08 26.00
VRI     34.65 298 ePc    05 32.50   -3.8X
MLR     35.22 298 ePc    05 38.00   -3.3X
SUF     37.50 327 iP     06 00.70    0.7
        0.6s      9.70nm             4.9mb
NUR     37.51 323 iP     06 00.80    0.6
```

29d 13h

	0.7s	20.00nm			5.2mb	
KRA	39.02	306	iPd	06	13.00	0.1
SOD	39.11	334	iP	06	14.30	0.9
KSP	41.31	307	eP	06	32.20	0.5
PRU	42.50	306	eP	06	42.00	0.5
BRG	42.79	307	iP	06	44.50	0.7
	1.1s	21.00nm			4.9mb	
		e		08	36.00	
HFS	42.82	321	eP	06	43.70	-0.2
	0.6s	24.20nm			5.2mb	
KHC	43.23	305	P	06	49.00	1.6
TDS	43.24	291	P	06	48.00	0.3
CLL	43.33	308	iPc	06	48.40	0.2
	1.4s	18.00nm			4.7mb	
MGR	43.69	292	P	06	51.50	0.2
SGO	43.76	292	P	06	53.00	1.2
NB2	44.10	322	P	06	53.90	-0.5
	0.7s	11.40nm			4.8mb	
ASS	45.02	296	P	07	00.00	-2.0
PGF	47.75	297	eP	07	22.60	-1.0
	0.8s	8.05nm			4.6mb	
BSF	47.90	304	eP	07	23.90	-0.8
	0.8s	6.70nm			4.6mb	
HAU	48.15	304	eP	07	25.60	-0.9
SBF	48.48	299	eP	07	29.00	-0.1
	0.9s	18.00nm			5.0mb	
LPG	48.50	301	eP	07	29.80	0.3
	0.8s	2.70nm			4.2mb	
LPL	48.51	301	eP	07	29.80	0.3
	0.8s	5.35nm			4.5mb	
FRF	49.11	299	eP	07	33.30	-0.6
	0.8s	8.05nm			4.7mb	
SMF	50.15	303	eP	07	40.70	-1.1
	0.7s	5.50nm			4.7mb	
AVF	50.43	304	eP	07	42.80	-1.1
	0.8s	8.75nm			4.8mb	
MAF	51.11	303	eP	07	48.50	-0.6
	0.8s	7.40nm			4.8mb	
TCF	51.33	303	eP	07	50.20	-0.6
	1.0s	6.00nm			4.6mb	
EKA	52.21	316	Pc	07	56.40	-0.8
	0.8s	2.90nm			4.4mb	
INK	72.46	10	eP	10	13.00	1.2
YKA	79.92	3	eP	10	54.60	1.0
	0.6s	4.80nm			4.5mb	
S.D. = 0.9		on	39	of	42	obs.

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* SEP 29, 1990 13h 08m 25.25± 0.52s
47.360 N ±10.4km 153.201 E ±10.3km
DEPTH = 33.0km (normal)
4.6mb (15 obs.) 4.3Msz (1 obs.)
KURIL ISLANDS (221)

MAT	15.50	231	eP	12	00.00	-3.0X
INK	41.11	33	eP	16	08.50	1.5
CHG	52.32	256	eP	17	36.50	0.5
CHTO	52.32	256	iP	17	36.10	0.1
	1.0s	10.25nm			4.7mb	
kKN	55.49	275	P	18	00.60	1.1
PKI	55.55	275	P	18	00.20	0.2
DMN	55.73	275	P	18	02.40	1.2
GKN	55.79	276	P	18	01.40	-0.2
FFC	60.23	40	iPc	18	32.20	0.0
	0.6s	7.00nm			5.0mb	
LRM	60.78	53	eP	18	36.70	0.4
		e		18	52.20	
NUR	64.68	335	eP	18	52.00	-9.6X
NB2	67.67	341	P	19	19.80	-0.9
	0.6s	2.00nm			4.4mb	
HFS	67.91	339	eP	19	20.50	-1.7
	0.6s	6.20nm			4.9mb	
Z	19s	0.16um			4.3Msz	
		LR		37	38.00	
WB5	69.04	199	eP	19	28.80	-0.8
GBA	70.49	269	Pd	19	37.50	-1.1
	0.8s	2.80nm			4.4mb	
ASPA	72.81	198	eP	19	52.10	-0.2
	0.8s	5.70nm			4.6mb	
CLL	75 93	336	eP	20	09.00	-1.0
KHC	77.72	334	eP	20	21.00	1.0
CDF	80.12	338	eP	20	32.60	-0.5
	1.0s	8.00nm			4.7mb	
LOR	82.03	339	eP	20	42.70	-0.4
	0.8s	5.35nm			4.6mb	
LBF	82.26	339	eP	20	44.00	-0.4
	0.8s	2.70nm			4.3mb	
SSF	82.31	340	eP	20	43.60	-0.9
	0.8s	2 70nm			4.3mb	
AVF	82.60	340	eP	20	46.00	0.0
	1.0s	6.00nm			4.6mb	
SMF	82.62	339	eP	20	46.00	-0.2
	1.2s	8.95nm			4.7mb	
LPL	82.93	337	eP	20	48.50	0.4
	0.8s	4.05nm			4.6mb	
LPG	82.95	337	eP	20	48.80	0.5
	0.9s	3.30nm			4.4mb	
MAF	83.32	340	eP	20	50.10	0.3
	0.8s	5.35nm			4.7mb	
DSI	83.61	311	iPc	20	52.00	0.5
MKT	84.23	310	ePc	20	55.00	0.3
MBH	85.31	310	eP	21	00.00	0.0
LPB	134.21	62	Pdiff	24	37.00	-4.3X
S.D. = 0.8		on	28	of	31	obs.

SEP 29, 1990 13h 43m 50.36± 1.01s
48.354 N ± 5.0km 7.520 E ± 8.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.4 (LDG).

WLS	0.13	298	Pg	43	53.67	0.2
			Sg	43	55.18	
CDF	0.17	290	Pg	43	54.47	0.1
			Sg	43	56.80	
ECH	0.28	240	Pg	43	56.18	-0.1
			Sg	43	59.68	
MOF	0.57	207	Pg	44	01.59	-0.3
GWF	0.63	6	Pg	44	02.88	-0.1
BSF	0.72	223	Pg	44	04.30	-0.2
			Sg	44	13.80	
HAU	0.86	246	Pg	44	06.90	0.0
VITF	1.04	263	Pg	44	09.70	-0.2
LOMF	1.11	205	Pg	44	11.76	0.6
			Sg	44	26.56	
SMF	3.02	237	Pg	44	47.20	8.1X
AVF	3.23	243	Pg	44	51.20	9.2X
S.D. = 0.3		on	9	of	11	obs.

? SEP 29, 1990 14h 22m 34.40± 4.14s
3.447 S ±61.3km 149.060 E ±21.4km
DEPTH = 33.0km (normal)
4.4mb (1 obs.)
BISMARCK SEA (203)

RAB	3.19	104	iPd	23	23.40	0.0
			iS	34	07.00	
LAT	3.79	213	eP	23	32.00	0.1
PMG	6.22	198	eP	24	11.00	4.7X
QIS	19.34	208	iP	26	59.80	-0.3
WB5	21.73	220	eP	27	24.50	-0.5
BRS	24.07	172	eP	27	58.00	10.1X
ASPA	24.87	215	iPd	27	56.40	0.7
	1.0s	12.10nm			4.4mb	
Z	30s	0.23um			3.5MszX	
		eS		32	28.00	
		LR		36	02.00	
S.D. = 0.7		on	5	of	7	obs.

? SEP 29, 1990 14h 59m 49.75± 0.85s
18.059 S ±30.7km 167.717 E ±28.1km
DEPTH = 10.0km (geophysicist)
4.4mb (2 obs.) 3.9Msz (1 obs.)
VANUATU ISLANDS (186)

BKM	0.63	52	iP	00	01.50	-1.0
BWA	23.71	223	eP	05	01.80	-0.9
CMS	23.89	232	eP	05	04.00	-0.5
CAN	23.91	220	eP	05	05.90	1.2
STK	27.30	235	iPc	05	34.90	-1.7
	1.3s	7.00nm			4.2mb	
WB5	31.56	261	eP	06	09.50	-5.3X
ASPA	32.04	254	iPd	06	14.50	-4.5X
	1.4s	8.50nm			4.5mb	
Z	22s	0.30um			3.9Msz	
		LR		18	08.00	
BJI	75.12	322	eP	11	33.50	-0.3
JFO	130.13	141	ePdiff	15	35.00	-16.4X
DOU	145.29	341	PKPc	19	32.30	3.0X
CDF	145.80	337	ePKP	19	28.00	-2.3X
	1.2s	23.80nm				
BCAO	146.96	250	iPKPc	19	34.30	1.2
	0.9s	9.00nm				
LOR	147.99	339	ePKP	19	37.60	3.8X
	1.2s	11.90nm				
LBF	148.20	339	ePKP	19	38.50	4.3X
	0.8s	6.70nm				
SMF	148.54	338	ePKP	19	38.70	4.0X
	1.0s	4.00nm				
AVF	148.58	339	ePKP	19	38.90	4.2X
	1.0s	8.00nm				
TCF	149.40	340	ePKP	19	38.10	2.0
	1.2s	5.95nm				
S.D. = 1.5		on	8	of	17	obs.

& SEP 29, 1990 15h 54m 53.43s
61.085 N 150.149 W
DEPTH = 31.1km
SOUTHERN ALASKA (2)
<AGS-P>.

PMS	0.33	60	iP	55	01.57	0.1
SUA	0.48	323	iP	55	03.34	-0.3
			eS	55	11.57	
SLKM	0.58	184	eP	55	04.23	-1.0
PWA	0.58	13	iP	55	04.39	-0.8
NKA	0.63	238	iP	55	06.88	0.9
PLRM	0.71	44	iP	55	05.74	-1.4
GHO	0.91	40	iP	55	08.90	-1.1
			eS	55	21.73	
CGLM	0.93	285	iP	55	09.41	-0.9
SPU	0.93	277	eP	55	09.21	-1.1
			iS	55	22.17	
CRP	0.99	282	iP	55	10.53	-0.8
NCG	1.02	289	iP	55	11.00	-0.7
SEW	1.04	160	eP	55	10.56	-1.3
CKL	1.07	277	iP	55	11.46	-0.9
BGL	1.10	280	iP	55	12.11	-0.7
SKT	1.12	324	iP	55	12.33	-0.6
SML	1.13	49	iP	55	12.10	-1.2
NNL	1.19	209	eP	55	14.31	0.3
RDT	1.22	246	eP	55	13.49	-1.0
CUT	1.33	358	eP	55	15.31	-0.6
BRLK	1.37	196	eP	55	15.83	-0.8
RSO	1.42	245	eP	55	16.72	-0.8
GLI	1.50	97	iP	55	16.53	-2.0
SCM	1.55	60	eP	55	18.39	-0.9
HOM	1.61	208	eP	55	19.84	-0.2
CNPM	1.66	200	eP	55	19.68	-1.1
VLZ	1.85	87	iP	55	21.98	-1.6
KLU	2.08	77	iP	55	25.15	-1.8
OPT	2.10	228	eP	55	26.66	-0.5
TOA	2.16	60	eP	55	27.20	-0.8
AUE	2.36	224	eP	55	30.21	-0.6
AUH	2.38	225	eP	55	30.76	-0.5
PDB	2.39	239	eP	55	29.96	-1.3
SVW	2.66	273	eP	55	33.62	-1.5
GLB	3.08	81	eP	55	38.83	-2.3
BALM	3.79	87	eP	55	47.80	-3.4
35 obs. associated						

SEP 29, 1990 16h 11m 30.47± 0.73s
51.426 N ± 4.6km 178.266 W ± 2.4km
DEPTH = 57.0 ± 6.2 km
5.1mb (59 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS. (7)
Felt (IV) on Adak.

ADK	1.09	64	iPc	11	49.20	-0.5
SMY	4.89	288	eP	12	42.40	-0.7
SDN	11.31	63	eP	14	09.70	-1.9
ANM	14.79	22	eP	15	02.50	5.0X
SVW	15.79	43	eP	15	12.30	1.9
KDC	16.16	57	eP	15	14.20	-0.7
TTA	16.57	37	ePd	15	22.30	2.1
PMR	18.86	46	P	15	49.00	0.8
IMA	19.24	31	P	15	53.10	0.4
TOA	20.35	46	ePc	16	03.20	-1.1
FBA	20.70	38	eP	16	07.10	-0.7
INK	27.23	35	eP	17	09.50	-0.9
OFUJ	30.40	262	P	17	38.80	-0.3
YAMJ	31.97	262	P	17	52.60	-0.3
NIIJ	33.19	262	P	18	02.60	-0.9
CHJJ	33.95	260	P	18	10.20	0.0
MAT	34.12	261	iPc	18	11.60	0.0
	0.9s	55.46nm			5.5mb	
MTMJ	34.35	262	P	18	13.60	0.0
YKA	34.96	47	eP	18	16.70	-1.7
	0.9s	8.00nm			4.6mb	
MCW	34.98	72	eP	18	20.00	1.1
GMW	35.52	74	eP	18	24.30	0.9
BMW	35.76	76	eP	18	26.00	0.5

RMW	36.15	74	eP	18	29.50	0.7	CHG	71.07	277	eP	22	44.00	-0.5	LPL	83.34	356	eP	23	53.70	1.3
								0.8s		5.35nm			4.6mb							
LON	36.48	75	eP	18	32.00	0.4	GUN	72.15	292	P	22	51.40	0.2	LPG	83.36	356	eP	23	53.90	1.3
PNT	36.60	70	iPc	18	33.00	0.5	BDT	72.22	275	eP	22	46.20	-5.1X							
	0.8s		65.00nm			5.6mb	KKN	72.59	293	P	22	53.80	0.2		1.0s		10.00nm			4.8mb
NEW	38.56	70	eP	18	48.90	-0.1	PKI	72.68	292	P	22	54.80	0.5	RJF	83.65	0	eP	23	54.30	0.6
	0.9s		64.56nm			5.5mb	GKN	72.80	293	P	22	54.70	-0.1		1.0s		28.00nm			5.2mb
LBFM	39.27	82	eP	18	56.20	1.0	DMN	72.82	293	P	22	55.60	0.5	Z	20s		0.15um			4.4Msz
WDC	39.30	84	eP	18	56.70	1.5	EKA	73.53	3	Pc	22	58.90	0.5	RSP	83.69	356	P	23	54.02	0.0
MIN	40.02	83	eP	19	02.20	0.9		1.0s		8.10nm			4.6mb	LBL	83.71	359	P	23	54.60	0.6
SHNJ	40.10	265	P	19	03.10	1.3	NDI	76.44	299	eP	23	15.50	0.0	BNI	83.81	356	Pc	23	56.00	1.3
ORV	40.55	84	eP	19	06.00	0.5	CLL	77.20	353	e(P)	23	19.00	-0.3	RRL	83.94	356	P	23	56.48	1.0
BRK	41.09	87	eP	19	10.50	0.6	KSP	77.36	351	eP	23	19.50	-0.7	BOB	83.96	354	P	23	57.00	1.6
KUMJ	41.34	263	P	19	13.20	1.2	BRG	77.55	352	iP	23	20.80	-0.5	LFF	84.01	1	eP	23	56.20	0.7
CMB	42.16	85	eP	19	19.60	0.8		1.0s		20.00nm			5.1mb		1.0s		72.00nm			5.7mb
KAGJ	42.22	261	P	19	20.40	1.2	MTN	77.57	231	iPc	23	21.30	-0.4	CAF	84.03	360	eP	23	56.20	0.5
LRM	42.54	71	ePc	19	21.90	-0.2		0.8s		68.00nm			5.7mb		1.0s		28.00nm			5.2mb
LLA	42.69	87	eP	19	24.30	1.2	KRA	77.71	348	ePd	23	22.20	0.0	PCP	84.23	355	P	23	56.28	-0.4
FRI	43.23	86	eP	19	28.10	0.7	MOX	77.96	354	eP	23	23.50	0.0	LPO	84.27	0	eP	23	57.10	0.3
TNP	44.10	83	eP	19	35.00	0.2	PRU	78.38	352	eP	23	25.00	-0.8		1.0s		24.90nm			5.2mb
	0.9s		11.07nm			4.6mb	SNF	78.42	358	P	23	27.00	1.0	DOI	84.33	356	P	23	56.50	-0.8
PTI	44.23	74	eP	19	36.50	0.8	SPC	78.53	348	eP	23	27.40	0.5	PZZ	84.34	356	P	23	57.10	-0.3
ISA	44.84	86	eP	19	40.00	-0.5	DOU	78.83	358	iPd	23	28.30	0.0	MME	84.45	354	P	23	59.20	1.2
CLC	45.29	86	eP	19	44.00	-0.1	GRF	78.94	354	eP	23	29.20	0.3	HYB	84.51	291	iPc	23	58.20	-0.3
DUG	45.53	78	eP	19	46.40	0.3		0.8s		18.00nm			5.1mb		1.0s		150.00nm			6.0mb
	0.8s		18.75nm			5.0mb	Z	21s		0.10um			4.1Msz	ROB	84.51	356	P	23	57.30	-0.8
BJI	45.69	282	P	19	47.50	0.4	KHC	79.31	352	P	23	31.70	0.7	FIN	84.58	355	P	23	56.58	-1.9
	1.0s		48.00nm			5.4mb	ZST	79.89	350	iP	23	34.60	0.6	BDI	84.58	354	P	23	58.60	0.1
Z	24s		0.32um			4.2MszX	SRO	80.12	349	iP	23	35.80	0.5	STV	84.59	356	P	23	57.20	-1.3
SBB	45.87	87	eP	19	49.00	0.3	FLN	80.17	1	eP	23	35.30	-0.2	ENR	84.60	356	P	23	57.51	-1.1
BW06	45.97	73	eP	19	49.60	0.0		1.0s		28.00nm			5.1mb	SFI	84.63	353	Pc	23	59.90	1.3
	1.2s		77.63nm			5.5mb	LDF	80.35	1	eP	23	36.10	-0.4	PGD	84.69	353	P	24	00.00	0.9
MWC	46.03	88	eP	19	50.00	-0.1		0.7s		15.45nm			5.0mb	IMI	84.90	356	P	23	59.35	-0.7
GSC	46.11	86	eP	19	51.00	0.4	CDF	80.43	356	eP	23	36.80	-0.2	CRE	84.91	353	P	24	00.20	0.0
DAU	46.35	76	eP	19	53.30	0.6		0.6s		5.40nm			4.7mb	HVAR	84.91	349	iP	24	00.10	0.0
PLM	47.35	88	eP	20	02.00	1.4	GRR	80.54	2	eP	23	37.20	-0.3	PII	84.93	354	P	23	59.30	-0.8
TPC	47.36	86	eP	20	02.00	1.5		0.8s		16.10nm			5.0mb	ARV	84.96	352	P	23	59.70	-0.6
SSE	48.33	269	Pc	20	08.50	0.6	QUE	80.63	307	eP	23	38.60	0.1	SBF	84.96	356	eP	24	00.50	0.1
	1.2s		72.00nm			5.6mb	VRI	80.72	343	ePc	23	39.00	0.5		0.8s		45.65nm			5.6mb
RSSD	48.43	68	eP	20	08.00	-0.9	HAU	80.87	357	eP	23	39.10	-0.2	FRF	85.30	356	eP	24	02.10	0.1
GLA	48.82	86	eP	20	11.00	-0.8		0.6s		7.20nm			4.8mb		0.9s		22.95nm			5.3mb
GOL	50.34	73	eP	20	23.70	0.1	LPF	80.89	2	eP	23	39.10	-0.2	ASS	85.41	352	Pc	24	03.30	0.7
	0.7s		18.20nm			5.2mb		0.8s		22.85nm			5.2mb	SKO	85.41	345	iPc	24	03.00	0.4
GLD	50.40	73	eP	20	24.00	0.0	BSF	81.03	357	eP	23	39.80	-0.4		1.1s		54.00nm			5.6mb
	1.3s		51.72nm			5.4mb		0.6s		5.40nm			4.7mb	LRG	85.42	357	eP	24	02.50	0.0
ANMO	52.76	79	eP	20	41.00	-0.8	MLR	81.22	343	iPd	23	38.00	-3.3X		0.8s		13.45nm			5.1mb
	1.0s		8.75nm			4.7mb	WATA	81.26	353	iP	23	35.60	-5.9X	LMR	85.53	357	eP	24	03.60	0.5
ALQ	52.76	79	ePc	20	41.00	-0.9		0.7s		4.90nm			4.6mb		0.8s		16.10nm			5.2mb
	1.0s		8.00nm			4.7mb				i	23	38.90		ASPA	85.75	223	eP	24	02.20	-2.2
			e	21	03.00					i	23	41.60			0.9s		15.70nm			5.2mb
LZH	55.69	287	iPc	21	03.50	0.3	SQTA	81.40	353	e(P)	23	42.00	-0.2	MNS	86.09	352	Pc	24	05.60	-0.4
	1.2s		21.00nm			5.0mb		0.6s		12.50nm			5.0mb	PGF	86.19	355	eP	24	06.80	0.2
Z	20s		0.60um			4.7Msz				id	23	43.00			0.8s		40.30nm			5.7mb
MEO	57.65	73	iPc	21	16.30	-0.7	CMP	81.60	344	ePc	23	46.00	2.8X	POO	86.33	295	iPc	24	07.10	-0.5
KEV	57.73	350	eP	21	14.00	-3.0X	GRC	81.65	359	P	23	44.63	1.3		1.0s		184.00nm			6.2mb X
SIO	58.35	71	iP	21	20.90	-0.9	LOR	81.67	359	eP	23	43.40	0.0	AZI	86.41	351	P	24	09.00	1.5
TUL	58.54	71	ePc	21	22.20	-1.0		1.0s		16.00nm			5.0mb	DUI	86.63	350	P	24	09.50	0.8
	1.3s		218.30nm			6.1mb	Z	20s		0.15um			4.3Msz	SDI	86.65	351	P	24	08.50	-0.3
Z	20s		0.03um			3.4Msz	SSF	81.88	359	eP	23	44.80	0.3	SGO	87.63	350	P	24	13.20	-0.2
			LR	40	00.00			0.8s		14.80nm			5.0mb	ORI	87.99	349	P	24	16.00	0.8
SOD	60.05	349	iP	21	32.00	-1.2	FVI	81.90	352	P	23	47.50	2.9	MGR	88.02	349	P	24	15.00	-0.3
			i	22	17.70		LBF	81.95	358	eP	23	44.80	-0.2	GBA	88.17	289	P	24	16.00	-0.4
FVM	60.23	65	eP	21	33.00	-1.8		0.8s		10.75nm			4.9mb	TDS	88.40	349	Pc	24	16.40	-0.8
UYO	60.54	71	iPd	21	34.40	-2.5	AVF	82.15	359	eP	23	46.10	0.2	STK	90.15	213	iPc	24	26.10	0.9
OLY	61.36	68	eP	21	40.30	-2.2		0.8s		13.45nm			5.0mb		0.8s		10.00nm			5.2mb
ELC	61.40	65	eP	21	41.30	-1.4	WBS	82.21	224	iPc	23	45.80	-0.7	BBU	91.63	318	eP	24	32.40	0.0
KMI	64.05	278	Pc	22	00.00	-0.7	SMF	82.29	359	eP	23	46.70	0.0		0.7s		78.00nm			6.2mb X
SUF	64.57	348	eP	22	08.00	4.7X		1.0s		38.00nm			5.4mb	BRF	91.70	317	(P)	24	32.70	0.0
GBTN	65.38	63	eP	22	08.00	-0.9	MFF	82.34	1	eP	23	46.40	-0.5		0.7s		53.00nm			6.1mb
TKL	65.63	63	eP	22	09.80	-0.7		0.8s		21.50nm			5.2mb	BJA	91.76	317	iP	24	32.50	-0.5
BLA	66.34	60	eP	22	14.50	-0.5	BGF	82.39	359	eP	23	47.30	0.1		0.6s		22.00nm			5.8mb
	0.9s		24.79nm			5.2mb		0.8s		10.75nm			4.9mb	TIC	121.87		8 PKP	30	19.18	-0.6
NUR	66.90	348	iP	22	17.00	-1.2	CTI	82.53	353	P	23	47.20	-0.9	KIC	122.18		8 PKPc	30	19.82	-0.5
	0.7s		17.40nm			5.2mb	VVI	82.54	353	P	23	48.00	0.0		0.7s		12.50nm			
			i	22	45.20		TCF	82.67	360	eP	23	48.60	-0.1	LIC	122.29		8 PKPc	30	19.96	-0.6
PRM	67.57	63	eP	22	22.40	-0.4		0.8s		8.05nm			4.8mb		0.7s		13.00nm			
NB2	67.63	355	P	22	21.60	-1.2	TRI	82.69	352	P	23	49.00	0.3	BCAO	122.53	340	iPKPd	30	20.70	-0.3
	0.9s		6.20nm			4.6mb	LSF	82.71	0	eP	23	48.80	0.0		0.4s		12.00nm			
JSC	68.04	62	iPc	22	25.60	-0.1		0.6s		24.35nm			5.4mb	PPD	129.79	75	(PKP)	30	35.00	0.2
			e	22	35.00		MAF	82.73	359	eP	23	49.50	0.5	MAW	146.72	218	ePKP	31	04.00	-0.1
LHS	68.14	62	iP	22	26.20	-0.2		1.0s		24.00nm			5.2mb		1.0s		35.00nm			
			e	22	36.00		BEO	82.77	347	iP	23	50.00	0.8	SLR	147.34	312	iPKPc	31	05.00	-1.6X
UPP	68.33	351	iP	22	25.40	-1.7	AGO	82.90	359	P	23	50.18	0.3	SWZ	149.93	315	iPKPc	31	19.50	8.9X
HFS	68.38	354	eP	22	25.20	-2.2	VAI	82.90	355	P	23	50.00	0.2		1.0s		220.00nm			
	0.5s		7.00nm			4.9mb	MDI	82.93	354	P	23	49.50	-0.5	BLF	151.18	311	iPKPc	31	18.50	6.1X
Z	19s		0.17um			4.3Msz	PLDF	82.97	359	P	23	50.83	0.5		0.9s		92.31nm			
			LR	46	44.00		ORX	83.17	356	P	23	51.25	-0.2		S.D. = 0.8		on 189 of 199 obs.			
SGS	69.27	63	eP	22	33.40	0.1	PYM	83.20	359	P	23	51.82	0.3							

29d 16h

SEP 29, 1990 16h 28m 51.08± 0.46s
36.449 N ± 7.1km 28.279 E ± 5.0km
DEPTH = 33.0km (normal)
DODECANESE ISLANDS (369)
ML 4.1 (ATH).

KAP	1.27	225	iPnc	29	13.70	1.1
SMG	1.71	318	ePn	29	18.50	-0.4
APE	2.29	286	ePn	29	26.50	-0.9
NPS	2.47	242	ePn	29	29.50	-0.4
			eSn	29	57.00	
PRK	3.21	331	ePn	29	39.50	-0.8
VAM	3.47	254	ePn	29	45.00	0.9
PPCY	3.66	114	ePn	29	48.50	1.8
			eSn	30	31.00	
ATH	3.95	294	ePn	29	50.50	-0.3
VLI	4.31	275	ePn	29	55.60	-0.3
CSS	4.37	108	eP	29	58.00	1.1
			eSn	30	49.00	
RDO	5.16	336	ePn	30	09.20	1.3
EVR	5.69	298	ePn	30	16.00	0.4
ADI	6.63	118	eP	30	28.00	-0.8
			eS	31	37.00	
ZNT	6.99	125	eP	30	33.00	-0.7
			eS	31	45.00	
DSI	7.64	127	eP	30	42.00	-0.9
MBH	8.66	138	eP	30	56.00	-1.0

S.D = 1.0 on 16 of 16 obs.

SEP 29, 1990 17h 53m 09.40± 0.37s
28.896 N ± 9.0km 60.849 E ± 4.3km
DEPTH = 33.0km (normal)
4.8mb (6 obs.) 3.9Msz (2 obs.)
SOUTHERN IRAN (353)

OUE	5.47	75	eP	54	32.20	1.3
	0.7s	708.90nm				6.3mb X
			e(S)	55	56.00	
BRF	9.54	255	(Pn)	55	27.40	-0.1
			(Sn)	57	35.90	
BJA	9.55	255	ePn	55	27.60	0.0
			(Sn)	57	32.20	
BBU	9.60	256	iPn	55	28.20	-0.1
			(Sn)	57	36.20	
TEH	10.51	313	e(P)	55	30.00	-11.0X
RYD	13.38	255	eP	56	15.00	-4.5X
NDI	14.36	87	eP	56	29.20	-3.1X
TAB	15.17	311	e(P)	56	45.00	2.1
POO	15.74	128	eP	56	58.50	8.2X
AFIF	16.52	257	eP	57	01.30	1.0
DHJN	19.45	239	eP	57	35.30	-1.3
HYB	19.86	121	eP	57	41.00	0.3
GKN	20.93	87	P	57	51.20	-0.7
DMN	21.40	88	P	57	56.60	-0.2
KKN	21.53	87	P	57	57.20	-0.8
GBA	21.65	131	P	58	02.00	3.0X
PKI	21.67	88	P	57	59.10	-0.5
GUN	22.03	87	P	58	03.60	0.4
MML	22.15	286	eP	58	06.50	2.6
MKT	22.35	282	eP	58	10.00	4.0X
RMN	22.82	280	eP	58	13.00	2.4
MLR	32.06	311	eP	59	31.00	-4.4X
OHR	34.71	301	eP	59	57.00	-1.3
CHG	36.12	98	eP	00	11.00	0.5
LZH	36.74	67	eP	00	15.00	-0.7
Z	18s	0.30um				4.1Msz
KMI	37.37	86	eP	00	21.50	0.3
MGR	38.60	299	P	00	28.50	-2.6
SGO	38.80	300	P	00	33.00	0.2
BSS	39.20	300	P	00	35.00	-1.1
DUI	39.51	301	P	00	37.00	-1.7
KSP	39.83	316	eP	00	41.70	0.5
NUR	39.84	333	eP	00	41.00	0.0
SDI	39.99	302	P	00	38.00	-4.7X
SUF	40.64	336	iP	00	47.80	0.2
	0.6s	5.90nm				4.5mb
ARV	40.76	304	P	00	49.00	0.1
PGD	41.67	305	P	00	57.20	0.6
CLL	41.96	316	iP	00	59.00	0.4
	2.0s	44.00nm				4.8mb
SOD	43.63	342	iP	01	12.40	0.4
HFS	44.39	328	eP	01	16.50	-1.7
	0.9s	12.80nm				4.8mb
Z	18s	0.07um				3.6Msz
			LR	20	54.00	
KEV	45.24	344	eP	01	45.00	20.1X
NB2	45.86	329	P	01	29.20	-0.9
	1.1s	12.60nm				4.8mb
BCAO	46.89	247	iPc	01	37.50	-1.2
	0.5s	10.00nm				5.1mb
WB5	85.89	115	eP	05	48.20	0.7
ASPA	87.57	119	eP	05	56.70	1.1
	1.7s	12.90nm				4.9mb

S.D. = 1.2 on 35 of 44 obs.

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* SEP 29, 1990 18h 39m 33.11± 1.21s
12.180 N ±27.2km 142.465 E ±27.5km
DEPTH = 33.0km (normal)
5.0mb (3 obs.) 4.7Msz (1 obs.)
SOUTH OF MARIANA ISLANDS (210)

GUMO	2.73	59	eP	40	15.80	0.3
PJG	2.73	59	eP	40	15.70	0.2
GUA	2.74	60	eP	40	15.80	0.1
			eS	40	42.50	
WB5	32.84	194	eP	46	06.20	0.1
ASPA	36.60	193	iPd	46	38.20	0.0
	0.3s	29.00nm				5.6mb
WARB	41.12	202	iPd	47	17.40	1.5
NANU	43.46	217	eP	47	34.90	-0.1
	0.4s	12.00nm				5.0mb
STK	43.82	181	eP	47	36.70	-1.0
	0.4s	3.00nm				4.4mb
ZOBO	150.09	101	PKP	59	18.00	-0.4
Z	20s	0.12um				4.7Msz
			LR	04	40.00	
LPB	150.09	102	ePKP	59	13.00	-5.3X
CNCB	150.19	103	PKP	59	18.00	-0.6

S.D. = 0.8 on 10 of 11 obs.

& SEP 29, 1990 19h 21m 45.20s
37.777 N 118.895 W
DEPTH = 5.0km (geophysicist)
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 2.5 (BRK).

FRI	1.02	220	eP	22	03.20	-1.7
			iS	22	17.60	
CMB	1.21	283	eP	22	07.30	-0.9
			iS	22	23.00	
PRI	2.16	222	eP	22	21.70	-0.8
SAO	2.27	244	eP	22	25.70	1.7

4 obs. associated

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* SEP 29, 1990 19h 56m 27.12± 1.95s
44.162 N ± 9.1km 8.548 E ±13.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.3 (LDG), 2.1 (GEN).

FIN	0.25	281	P	56	32.41	0.0
			S	56	36.30	
PCP	0.38	360	P	56	34.77	-0.2
			S	56	40.81	
ROB	0.51	285	P	56	36.82	-0.6
			S	56	43.79	
IMI	0.54	242	P	56	37.33	-0.7
			S	56	44.61	
ENR	0.81	275	P	56	43.61	0.6
			S	56	53.45	
SBF	0.86	250	Pg	56	43.80	0.1
			Sg	56	57.60	
STV	0.88	276	P	56	44.40	0.2
			S	56	54.68	
PZZ	1.09	289	P	56	47.92	0.2
			S	57	00.53	
FRF	1.50	247	Pg	56	54.40	0.3
			Sg	57	13.80	

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

& SEP 29, 1990 20h 58m 20.70s
33.810 N 118.110 W
DEPTH = 13.0km
SOUTHERN CALIFORNIA (43)
<PAS-P>. ML 2.3 (PAS). Felt at Long Beach.

MWC	0.42	6	iPd	58	28.80	-0.6
CIS	0.47	211	eP	58	29.90	-0.4
RVR	0.64	73	iPd	58	32.30	-0.9
PEC	0.79	84	eP	58	34.80	-1.1
PLM	1.14	113	eP	58	41.40	-0.4

5 obs. associated

% SEP 29, 1990 21h 39m 10.74± 0.92s
38.420 N ± 6.2km 16.129 E ±11.7km
DEPTH = 18.3 ± 8.2 km
SOUTHERN ITALY (390)

SOI	0.35	190	Pc	39	17.60	-0.6
			eSg	39	22.80	
MSI	0.50	245	P	39	20.50	-0.2
ATN	0.58	244	P	39	22.00	-0.2
			eSg	39	30.20	
MNO	1.23	247	P	39	33.70	0.5
TDS	1.25	7	P	39	33.10	-0.2
MEU	1.62	216	P	39	39.30	0.6
			eSn	39	59.60	
ORI	1.66	9	P	39	39.90	0.8
MGR	1.77	346	P	39	40.50	-0.2
SGO	2.23	344	P	39	46.60	-0.7

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

SEP 29, 1990 21h 39m 43.71± 0.78s
13.100 N ± 4.3km 145.232 E ± 5.4km
DEPTH = 52.7 ± 6.7 km
5.3mb (29 obs.) 4.9Msz (8 obs.)
MARIANA ISLANDS (216)
Felt in central Guam.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 31C
Centroid Location:
Origin Time 21:39:43.4 0.5
Lat 13.02N 0.04 Lon 145.78E 0.06
Dep 15.0 BDY Half-duration 1.9
Moment Tensor; Scale 10**17 Nm
Mrr= 1.02 0.04 Mtt=-0.29 0.05
Mff=-0.73 0.05 Mrt= 0.34 0.14
Mrf= 0.93 0.16 Mtf=-0.68 0.04
Principal Axes:

	Val=	Plg=	Azm=
T	1.42	67	274
N	0.16	10	29
P	-1.58	20	123

Best Double Couple:Mo=1.5*10**17
NP1:Strike=230 Dip=26 Slip= 114
NP2: 24 66 79

GUA	0.54	324	ePd	39	56.20	0.6
GUMO	0.60	324	ePd	39	57.00	0.6
PJG	0.60	324	eP	39	56.80	0.4
JAY	16.15	196	ePc	43	30.20	1.3
RAB	18.51	158	eP	43	56.00	-2.1
			eS	47	40.00	
DAV	20.25	255	eP	44	20.20	2.8X
KAGJ	22.33	326	eP	44	41.50	3.2X
PMG	22.44	175	eP	44	37.50	-2.0
KUMJ	23.41	328	eP	44	50.20	1.4
KAKJ	23.45	350	P	44	48.90	-0.2
QCP	23.50	277	eP	44	51.70	1.9
CHJJ	23.53	347	P	44	48.20	-1.7
TSRJ	23.85	341	P	44	54.50	1.5
BAG	24.06	281	eP	44	56.70	1.2
	1.1s	111.39nm				5.3mb
			eS	49	30.00	
MAT	24.18	346	iPd	44	54.00	-2.3
	1.0s	74.00nm				5.2mb
			eS	49	15.00	
MTMJ	24.32	345	P	44	55.90	-1.8
SHNJ	24.55	331	eP	45	03.80	4.0X
NIIJ	24.68	348	P	44	58.70	-2.3
ANP	25.37	302	eP	45	06.00	-1.9
SSE	28.48	313	eP	45	36.00	0.0
Z	20s	1.60um				4.6Msz
E	16s	1.50um				
			pP	45	48.20	47kmX
			PPP	46	16.00	
			eS	49	28.00	
MTN	29.33	209	iPd	45	44.00	0.2
QIS	33.90	189	eP	46	21.70	-2.1
WB5	34.47	198	eP	46	27.00	-1.8
BJI	37.04	322	eP	46	50.00	-0.3
	1.4s	44.00nm				5.2mb
Z	20s	1.50um				4.8Msz
N	14s	0.85um				
			ePP	48	16.00	
			eS	52	48.00	
ASPA	38.18	197	iPd	46	59.30	-0.8
	0.8s	31.70nm				5.3mb
Z	22s	0.99um				4.6Msz
			iS	52	49.80	

			LR	01	27.00		
TRT	38.41	239	ePc	47	04 00	1.9	
	1.1s	155.90nm				5.8mb	
KMI	41.73	293	P+	47	30.00	0.3	
Z	20s	1.80um				4.9Msz	
			e	47	32.50		
			sP	47	53.50		
			iS	54	06.00		
LOE	42.12	281	eP	47	34.00	1.3	
MBL	42.21	217	eP	47	34.00	0.7	
KGM	42.91	259	ePd	47	42.20	3.0X	
WARB	43.03	205	eP	47	40.50	0.5	
LZH	43.60	309	Pd	47	45.00	0.2	
	1.8s	41.00nm				4.9mb	
Z	20s	1.70um				5.0Msz	
N	15s	0.60um					
E	15s	0.90um					
			pP	47	51.50	22kmX	
			sP	47	57.00		
			ePP	49	30.00		
			SP	54	07.00		
			eS	54	17.00		
			sS	54	28.00		
			SS	57	28.00		
NST	43.70	279	eP	47	47.70	2.1	
SNG	44.26	267	eP	47	53.60	3.4X	
CMS	44.33	179	eP	47	50.00	-0.4	
IPM	44.43	263	ePd	47	54.00	2.4X	
BDT	44.73	281	eP	47	51.00	-2.9X	
CHG	44.77	284	eP	47	55.40	1.1	
STK	44.86	184	iPd	47	53.90	-0.8	
	1.1s	9.00nm				4.5mb	
SMY	45.76	24	eP	48	01.60	0.0	
NANU	45.86	220	eP	48	04.00	1.3	
MEKA	47.24	213	eP	48	13.30	-0.3	
BWA	47.36	176	eP	48	18.10	3.7X	
ADE	48.20	187	iPd	48	21.30	0.3	
CAN	48.29	176	eP	48	25.70	4.0X	
ADK	49.30	30	eP	48	28.20	-1.0	
TOO	50.40	180	eP	48	38.00	0.2	
MRWA	50.67	214	eP	48	39.00	-1.0	
GUN	57.02	295	P	49	27.00	-0.3	
PKI	57.42	294	P	49	29.20	-0.9	
KKN	57.54	295	P	49	30.00	-0.8	
DMN	57.69	294	P	49	31.40	-0.5	
GKN	58.12	295	P	49	34.20	-0.5	
SVW	63.93	28	eP	50	12.20	-1.1	
HYB	64.20	283	eP	50	15.00	-0.8	
	1.0s	90.00nm				5.7mb	
KDC	64.33	32	eP	50	16.10	0.2	
TTA	64.44	26	eP	50	15.40	-1.3	
	1.7s	74.90nm				5.4mb	
NDI	64.66	296	eP	50	18.50	-0.1	
GBA	65.76	279	P	50	25.00	-0.8	
IMA	66.56	23	eP	50	28.00	-2.3	
	1.6s	36.80nm				5.2mb	
PMR	67.05	28	eP	50	29.90	-3.3X	
	0.7s	19.10nm				5.2mb	
POO	68.51	285	iPd	50	41.80	-1.5	
	0.9s	43.70nm				5.4mb	
FBA	68.52	25	eP	50	40.70	-1.7	
	1.7s	76.00nm				5.4mb	
TOA	68.53	28	ePc	50	43.80	1.1	
OUE	73.50	298	eP	51	14.00	0.7	
INK	74.68	22	eP	51	17.50	-1.6	
	1.1s	67.00nm				5.5mb	
BMW	81.68	44	P	51	58.70	0.7	
GMW	81.79	43	P	51	59.80	1.4	
YKA	83.13	27	eP	52	04.50	-0.5	
	0.7s	14.80nm				5.1mb	
WDC	83.28	50	eP	52	07.30	1.0	
			epP	52	10.70	11kmX	
PNT	83.51	41	eP	52	09.00	1.7	
	0.9s	25.00nm				5.2mb	
LBFM	83.61	49	P	52	08.00	-0.2	
BRK	84.03	53	eP	52	10.80	0.7	
BKS	84.05	53	eP	52	10.70	0.4	
	1.2s	63.00nm				5.5mb	
ORV	84.27	51	eP	52	10.80	-0.5	
			epP	52	14.80	13kmX	
MHC	84.63	53	eP	52	14.40	1.1	
DPW	84.75	42	P	52	14.80	1.2	
SAO	84.90	54	eP	52	15.70	1.2	
PRS	85.05	54	eP	52	16.30	1.0	
			epP	52	20.50	13kmX	
LLA	85.33	54	eP	52	17.80	1.1	
			epP	52	21.20	11kmX	

NEW	85.36	42	P	52	16 40	-0.2	
	1.0s	39	38nm			5.5mb	
CMB	85.45	52	eP	52	17.70	0.4	
			epP	52	21.50	12kmX	
PRI	85.65	54	eP	52	19.80	1.3	
			epP	52	33.40	46kmX	
PHAM	85.93	54	P	52	20.00	0.3	
FRI	86.21	53	eP	52	21.00	0.0	
			epP	52	25.00	13kmX	
KEV	87.09	342	eP	52	24.00	-0.7	
	0.7s	12.00nm				5.2mb	
			i	52	29.00		
ISA	87.49	54	eP	52	31.00	3.6X	
TNP	87.86	52	P	52	28.70	-0.6	
	1.0s	19.17nm				5.3mb	
PAS	88.11	56	eP	52	31.00	0.7	
CLC	88.15	54	eP	52	34.00	3.5X	
MWC	88.18	55	eP	52	35.00	4.1X	
SBB	88.25	55	eP	52	31.00	0.0	
SOD	88.44	340	iP	52	31.80	0.6	
SES	88.56	38	eP	52	33.00	0.8	
RVR	88.79	55	eP	52	38.00	4.5X	
TAB	88.90	309	eP	52	35.00	0.8	
GSC	88.90	54	eP	52	33.00	-1.2	
PEC	88.99	56	P	52	33.50	-1.0	
LRM	89.10	43	eP	52	35.00	-0.1	
PLM	89.37	56	eP	52	41.00	4.5X	
BAR	89.70	57	eP	52	42.00	4.1X	
TPC	89.82	55	eP	52	42.00	3.5X	
DUG	90.56	49	P	52	41.70	-0.2	
SUF	91.05	336	iP	52	43.00	-0.5	
	0.8s	23.60nm				5.7mb	
GLA	91.09	56	eP	52	45.00	0.7	
DAU	91.63	48	P	52	48.00	1.0	
FFC	92.03	32	eP	52	47.00	-1.1	
	1.2s	25.00nm				5.5mb	
BW06	92.05	45	P	52	51.00	2.2	
	1.0s	4.67nm				4.9mb	
NUR	92.84	335	eP	52	52.00	0.3	
RSSD	95.29	43	P	53	04.00	0.3	
GOL	96.11	47	P	53	11.00	3.4X	
	1.0s	3.75nm				4.9mb	
KAS	96.98	315	eP	53	11.50	0.7	
ANMO	97.07	52	P	53	15.00	3.1X	
	1.0s	2.50nm				4.7mb	
ALQ	97.07	52	eP	53	14.00	2.1	
	1.0s	3.25nm				4.8mb	
Z	20s	0.62um				5.1Msz	
HFS	97.38	338	eP	53	10.00	-2.5	
	1.4s	28.90nm				5.6mb	
Z	18s	0.73um				5.2Msz	
			LR	32	12.00		
NB2	97.63	339	P	53	12.10	-1.6	
	1.1s	13.80nm				5.4mb	
VRI	99.43	322	ePd	53	22.50	0.4	
KSP	102.36	330	ePdiff	53	30.00	-5.0X	
BRG	103.48	331	e(Pdif	53	41.00	1.0	
CLL	103.63	331	e(Pdif	53	41.00	0.4	
	1.7s	18.00nm				5.6mb	
SKO	104.72	320	iPdiff	53	42.00	-3.7X	
Z	20s	0.50um				5.0Msz	
N	20s	0.49um					
E	19s	0.49um					
			iSKS	04	20.00		
			ePS	07	20.00		
			e	08	05.00		
			eSS	13	20.30		
			LR	49	28.00		
BUL	119.16	254	iPKPd	58	27.20	-2.3	
	1.0s	5.00nm					
BCAO	124.28	285	iPKPc	58	40.80	1.5	
	0.4s	7.00nm					
MDZ	143.20	128	ePKP	59	15.50	1.2	
KIC	144.45	301	PKP	59	15.80	-1.0	
	1.1s	204.00nm					
TIC	144.53	302	PKP	59	16.00	-1.0	
LIC	144.77	301	PKP	59	16.62	-0.7	
MBO	147.48	327	ePKP	59	27.70	6.0X	
ZOBO	147.60	100	PKP	59	24.00	1.4	
	1.0s	44.50nm					
			LR	48	12.00		
LPB	147.62	100	PKP	59	24.00	1.5	
CNCB	147.72	101	PKP	59	24.00	1.2	
SIV	154.38	100	PKP	59	32.60	0.6	
PPD	161.91	122	ePKP	59	46.40	5.8X	
SOB1	172.85	58	ePKP	00	02.80	14.2X	
			e	01	18.00		

S.D. = 1.2 on 110 of 134 abs.

& SEP 29, 1990 22h 13m 02.02s
60.081 N 152.514 W
DEPTH = 91.5km
SOUTHERN ALASKA (2)
<AGS-P>.

RSO	0.40	343	eP	13	16.13	-0.6
			eS	13	27.08	
RDT	0.50	6	iP	13	16.48	-0.7
OPT	0.56	220	iP	13	16.94	-0.7
			eS	13	29.02	
HOM	0.61	134	eP	13	17.93	-0.1
			eS	13	30.53	
NNL	0.61	93	iP	13	18.29	0.2
XLV	0.75	147	eP	13	18.49	-0.9
AUE	0.84	211	eP	13	19.34	-1.0
CNPM	0.85	130	eP	13	19.86	-0.6
AUH	0.86	214	eP	13	19.71	-0.9
AUI	0.88	212	eP	13	19.88	-0.9
BRLK	0.88	110	eP	13	19.93	-0.9
PDB	0.89	252	iP	13	19.98	-0.9
			iS	13	33.90	
NKA	0.92	43	eP	13	22.19	1.0
CKL	1.12	4	iP	13	22.88	-0.8
			eS	13	39.39	
SPU	1.13	11	iP	13	22.86	-0.8
			eS	13	39.54	
BGL	1.19	3	eP	13	23.78	-0.7
CRP	1.20	8	eP	13	24.09	-0.6
			eS	13	40.91	
SLKM	1.22	68	eP	13	23.56	-1.2
CGLM	1.26	11	iP	13	24.62	-0.6
CDD	1.29	207	eP	13	24.14	-1.5
MCNL	1.29	227	iP	13	24.21	-1.4
			eS	13	41.28	
NCG	1.34	7	eP	13	25.54	-0.8
SEW	1.54	88	eP	13	26.98	-1.7
SUA	1.64	31	eP	13	29.50	-0.6
PMS	1.86	50	eP	13	32.44	-0.6
SKT	1.97	14	eP	13	33.03	-1.3
PWA	2.04	38	eP	13	35.07	-0.2
PLRM	2.25	46	eP	13	35.85	-2.2
GHO	2.44	44	eP	13	39.22	-1.6
CUT	2.57	24	eP	13	41.08	-1.4
SML	2.68	48	eP	13	41.85	-2.2
GLI	2.80	71	eP	13	43.05	-2.6
32 abs. associated						

• SEP 29, 1990 23h 10m 33.96± 0.92s
20.788 S ± 8.5km 68.287 W ±10.5km
DEPTH = 102.4 ± 11.9 km
5.0mb (3 abs.)
CHILE-BOLIVIA BORDER REGION (124)

ANT	3.51	214	eP	11	27.00	-0.5
CNCB	3.97	4	iPc	11	34.90	0.6
LPB	4.24	2	P	11	38.00	0.1
ZOBO	4.50	2	P	11	40.40	-1.2
ARE	5.27	324	eP	11	42.00	-10.0X
			iS	12	37.40	
SIV	8.35	56	iPc	12	34.40	0.4
NNA	11.99	316	eP	13	23.60	0.7
	1.0s	18.00nm				4.7mb
Z	18s	0.52um				3.9Msz
			iS	15	22.50	
PPD	15.86	98	eP	14	17.60	5.0X
			i	14	20.60	
			e	14	26.50	
			e	14	32.70	
VAO	19.90	100	eP	15	01.30	1.4
			e	15	06.80	
			e	15	28.50	
BMA	22.49	99	eP	15	29.20	3.5X
JFO	23.28	97	eP	15	37.50	4.1X
SOB1	28.80	71	eP	16	23.80	-0.7
LIC	67.63	74	Pc	21	21.58	-0.7
TIC	67.82	73	Pc	21	22.78	-0.7
	1.0s	22.50nm				5.0mb
KIC	67.95	74	Pc	21	23.78	-0.5
	0.8s	25.00nm				5.2mb
GBA	146.54	97	PKPd	30	05.00	1.0
	0.7s	2.10nm				
S.D. = 1.0 on 12 of 16 abs.						

• SEP 30, 1990 00h 06m 24.01± 1.46s

30d 00h

41.815 N ±10 8km 101.505 W ±14 5km
DEPTH = 5.0km (geophysicist)
NEBRASKA (463)
mbLg 3.0 (NEIS).

RSSD	2.96	322	ePn	07	13.00	0.3
			eSn	07	50.00	
			eLg	08	00.00	
GLD	3.50	235	eP	07	21.00	0.7
GOL	3.62	236	ePn	07	21.80	-0.3
			eLg	08	20.00	
BW06	6.05	282	eP	07	56.00	-0.5
MEO	7.39	161	e(P)	08	15.00	-0.1
OLY	10.06	126	e(P)	09	00.50	8.3X
ELC	10.50	111	e(P)	09	02.50	4.2X

S.D. = 0.7 on 5 of 7 obs.

SEP 30, 1990 01h 08m 12.60± 0.15s
44.388 N ± 2.4km 114.250 W ± 1.5km
DEPTH = 5.0km (geophysicist)
3.7mb (1 obs.)
WESTERN IDAHO (33)
ML 3.9 (NEIS). Felt (III) at Challis, Clayton and Ellis.

HPI	1.07	129	iPc	08	32.80	-0.6
MCMT	1.09	66	iPd	08	33.80	0.0
JGI	1.17	104	iPc	08	34.80	-0.2
CBTI	1.39	135	iPd	08	38.10	-0.7
LTMT	1.54	84	iPnd	08	41.70	0.7
BGMT	1.79	61	iPnd	08	44.60	0.1
HBMT	1.82	39	iPnd	08	45.60	0.5
LRM	1.92	41	iPnd	08	46.50	0.0
TMI	2.00	122	iPd	08	47.80	0.1
BUT	2.02	36	iPnd	08	47.90	0.1
			iPg	08	51.50	
			eSn	09	14.90	
			eSg	09	18.60	
PTI	2.04	137	iPd	08	48.10	-0.1
IMW	2.43	100	P	08	54.80	0.8
MEMT	2.63	61	ePn	08	56.80	0.2
SXM	2.78	50	iPnd	08	58.30	-0.5
HRY	2.88	35	ePn	08	59.30	-0.8
WG3	3.65	298	P	09	12.27	1.4
BW06	3.77	114	eP	09	14.00	1.1
ET3	3.96	305	P	09	15.38	0.1
WIW	4.09	302	P	09	17.46	0.3
JBO	4.11	287	P	09	17.53	0.1
PATW	4.18	293	P	09	18.23	-0.1
MJ2	4.20	303	P	09	19.73	1.0
OT2	4.21	305	P	09	19.55	0.7
PRW	4.25	297	P	09	19.05	-0.4
RSW	4.26	300	P	09	19.08	-0.6
GBL	4.28	303	P	09	20.49	0.6
WRD	4.29	309	P	09	19.97	-0.1
LOCW	4.32	304	P	09	21.20	0.7
DUG	4.32	165	eP	09	20.00	-0.6
OD2	4.33	316	P	09	20.16	-0.4
CRF	4.35	306	P	09	21.08	0.2
NEW	4.36	334	eP	09	20.70	-0.3
WAH2	4.42	304	P	09	22.71	0.9
DPW	4.44	323	P	09	21.62	-0.5
RC1	4.44	307	P	09	21.82	-0.4
MDW	4.47	302	P	09	22.73	0.2
DAU	4.55	150	eP	09	25.90	1.9
BRVW	4.55	299	P	09	22.92	-0.9
VIPM	4.56	274	P	09	23.73	-0.3
VTHM	4.56	282	P	09	24.67	0.8
EPH	4.77	310	P	09	27.30	0.4
VTG	4.77	305	P	09	26.97	0.1
MXC	4.78	299	P	09	27.36	0.3
CROR	4.84	279	P	09	27.78	-0.2
SAW	4.88	315	P	09	27.67	-0.8
GL2	4.91	291	P	09	28.01	-0.8
YAKW	4.91	298	P	09	29.26	0.5
EBG	5.10	302	P	09	31.75	0.2
WTV	5.17	312	P	09	32.37	-0.2
NAC	5.18	299	P	09	33.33	0.6
VFP	5.21	283	P	09	32.91	-0.4
TBM	5.24	304	P	09	34.32	0.7
DHW2	5.26	315	P	09	33.14	-0.7
VBEM	5.27	280	P	09	34.09	0.0
CBSW	5.28	312	P	09	33.72	-0.5
TCO	5.29	270	P	09	34.35	0.0
ETW	5.32	309	P	09	33.61	-1.2
VLL	5.38	284	P	09	36.45	0.8
GULW	5.42	289	P	09	35.48	-0.6
TDH	5.44	282	P	09	36.71	0.3
ASR	5.47	291	P	09	36.33	-0.6
NLW	5.61	313	P	09	38.21	-0.6
GLK	5.61	295	P	09	38.76	-0.1
WPW	5.62	297	P	09	39.27	0.3
CDFW	5.77	290	P	09	41.26	0.3
FMW	5.79	299	P	09	41.64	0.2
LON	5.81	297	P	09	41.83	0.3
REMR	5.85	297	P	09	43.98	1.7
MTMW	5.86	289	P	09	41.22	-1.1
GSM	5.98	301	P	09	43.70	-0.3
RVC	5.98	298	P	09	44.64	0.6
KVN	6.06	210	P	09	50.00	4.8X
RMW	6.10	303	P	09	45.43	-0.2
PNT	6.15	325	P	09	49.00	2.7X
LBFM	6.38	244	eP	09	49.00	-0.8
TNP	6.68	201	e(P)	09	54.00	-0.1
GMW	6.74	301	P	09	53.80	-0.8
WDC	7.21	241	eP	10	04.30	3.1X
ORV	7.24	231	eP	10	08.70	7.0X
RSSD	7.34	89	eP	10	02.70	-0.5
CMB	7.85	218	eP	10	13.40	3.2X
GOL	8.10	122	eP	10	13.80	-0.1
FRI	8.47	211	eP	10	24.00	5.2X
EDM	8.86	4	eP	10	21.00	-3.2X
ALQ	11.18	145	e(P)	10	55.00	-1.2
FFC	13.04	33	eP	11	13.00	-8.0X
MEO	15.40	123	e(P)	11	52.50	0.3
YKA	18.14	359	eP	12	26.20	-0.4
	0.8s		5.00nm		3.7mb	

S.D. = 0.6 on 80 of 88 obs.

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* SEP 30, 1990 01h 32m 10.95± 0.71s
36.770 N ±11.0km 71.727 E ± 9.5km
DEPTH = 33.0km (normal)
3.9mb (2 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

OUE	7.68	213	eP	34	03.50	0.0
			eS	35	21.10	
KKN	14.53	124	P	35	36.20	-0.1
DMN	14.54	125	P	35	36.60	0.2
PKI	14.76	125	P	35	39.40	0.0
HFS	43.22	322	eP	40	10.50	0.3
	0.4s		1.10nm		4.0mb	
NB2	44.52	323	P	40	20.60	-0.3
	0.5s		0.70nm		3.8mb	

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

SEP 30, 1990 02h 40m 29.76± 0.39s
48.324 N ± 3.9km 7.378 E ± 4.0km
DEPTH = 17.0 ± 5.0 km
FRANCE (538)
ML 3.2 (LDG), 3.2 (VIE), 2.7 (GRF).

WLS	0.09	350	Pg	40	32.51	-0.9
CDF	0.11	322	Pg	40	33.31	-0.3
ECH	0.18	234	Pg	40	35.00	0.5
			Sg	40	38.64	
STR	0.37	45	Pg	40	36.41	-1.0
MOF	0.50	199	Pg	40	40.51	0.7
			Sg	40	47.94	
FEL	0.62	136	Pg	40	41.11	-0.7
BSF	0.63	219	Pg	40	43.14	1.1
			Sg	40	52.37	
GWF	0.67	14	Pg	40	42.24	-0.5
			Sg	40	50.79	
HAU	0.76	246	Pg	40	45.80	1.6
			Sg	40	57.20	
SLE	0.93	126	iPd	40	46.80	-0.3
VITF	0.94	264	Pg	40	48.86	1.7
LOMF	1.04	201	Pg	40	49.75	0.7
ZLA	1.08	141	iPc	40	50.30	0.6
WLF	1.57	329	iP	40	59.70	2.9X
SAX	1.71	128	ePd	41	02.10	2.9X
TNS	2.03	20	ePnc	41	04.10	0.5
			eSn	41	31.90	
DIX	2.24	179	iPd	41	07.60	0.6
MMK	2.31	170	ePd	41	10.50	2.6X
TMA	2.44	155	ePc	41	11.20	1.5
MEM	2.46	339	iP	41	09.85	0.2
			i	41	15.55	
DOU	2.55	315	iP	41	12.70	1.7
			i	41	17.70	
			i	41	20.30	
			iS	41	48.70	
LOR	2.60	247	Pn	41	11.00	-0.8
			Pg	41	20.00	
			Sg	41	53.20	
LBF	2.66	241	Pn	41	11.20	-1.5
			Pg	41	21.00	
			Sg	41	56.00	
SOTA	2.81	112	iPnd	41	15.40	0.6
			iPg	41	21.50	
			iSg	41	57.00	
LPL	2.84	189	Pn	41	15.20	-0.2
			Pg	41	25.60	
			Sg	42	03.00	
LPG	2.86	189	Pn	41	15.80	0.1
GRF	2.88	60	ePg	41	23.10	7.4X
			eSg	41	58.10	
SSF	2.90	246	Pn	41	15.20	-0.8
			Pg	41	26.00	
			Sg	42	03.60	
SMF	2.93	236	Pn	41	15.10	-1.3
			Pg	41	26.10	
			Sg	42	05.00	
SNF	2.98	318	iP	41	19.00	1.9
AVF	3.13	242	Pn	41	18.00	-1.2
			Pg	41	29.80	
			Sg	42	11.30	
BGF	3.55	242	Pn	41	23.90	-1.3
			Pg	41	38.00	
			Sg	42	23.30	
MAF	3.89	239	Pg	41	44.10	14.0X
			Sg	42	35.00	
TCF	4.06	242	Pn	41	30.00	-2.5
			Pg	41	46.40	
			Sg	42	39.50	
KHC	4.18	77	eP	41	34.10	-0.2
			e	41	47.20	
			Sg	42	42.30	
LSF	4.49	245	Pg	41	55.20	16.7X
			Sg	42	52.00	
PRU	4.99	68	eP	42	01.00	15.4X
			Sg	43	03.50	

S.D. = 1.2 on 30 of 37 obs.

SEP 30, 1990 03h 15m 03.05± 0.77s
13.038 N ± 3.6km 145.390 E ± 4.7km
DEPTH = 49.4 ± 6.8 km
5.1mb (28 obs.) 5.3Msz (13 obs.)
MARIANA ISLANDS (216)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 18S, 35C
Centroid Location:
Origin Time 03:15: 5.1 0.4
Lat 13.14N 0.03 Lon 145.75E 0.03
Dep 15.0 FIX Half-duration 2.3
Moment Tensor; Scale 10**17 Nm
Mrr= 1.84 0.04 Mtt=-0.19 0.06
Mff=-1.65 0.06 Mrt= 0.25 0.16
Mrf= 2.01 0.20 Mtf=-1.03 0.05
Principal Axes:

	Val=	Plg=	Azm=
T	2.77	64	260
N	0.19	12	17
P	-2.96	22	112

Best Double Couple:Mo=2.9**17
NP1:Strike=225 Dip=25 Slip= 120
NP2: 12 68 77

GUA	0.68	317	iPd	15	17.20	0.6
			eS	15	31.20	
GUMO	0.75	317	eP	15	16.80	-0.7
PJG	0.75	317	eP	15	16.70	-0.8
JAY	16.14	197	ePc	18	50.30	2.1
RAB	18.39	158	iP-	19	14.00	-2.3
			eS	22	28.00	
DAV	20.38	255	eP	19	34.00	-4.4X
PMG	22.37	175	eP	19	58.00	-0.4
KAGJ	22.47	326	P	20	01.40	2.1
MNI	23.39	242	eP	20	10.50	2.1
KAKJ	23.54	349	P	20	09.70	0.0
KUMJ	23.55	328	eP	20	10.50	0.7
CHJJ	23.62	347	P	20	11.80	1.3
AAI	23.83	227	eP	20	14.50	1.9
BAG	24.22	281	ePc+	20	17.00	0.3
			eS	24	47.00	
MAT	24.28	346	eP	20	15.00	-1.9
	1.2s		56.25nm		5.0mb	
Z	20s		4.96um		5.0Msz	
			eS	24	24.00	

MTMJ 24.42 345 P 20 17.30 -1.0
YONJ 24.55 336 eP 20 20.10 0.6
SHNJ 24.68 331 eP 20 21.20 0.5
NIIJ 24.77 348 P 20 20.10 -1.5
YAMJ 25.48 350 P 20 30.10 1.8
ANP 25.54 302 eP 20 32.00 3.0X
OFUJ 26.15 353 P 20 38.50 4.1X
HNR 26.60 146 eP 20 22.00 -16.7X
e(S) 25 08.00
SSE 28.63 313 eP 20 58.00 0.9
1.2s 22.00nm 4.7mb
Z 20s 2.90um 4.9Msz
N 16s 1.00um
E 16s 2.30um
pP 21 06.50 30kmX
PP 21 40.00
S 25 38.00
HKC 31.08 292 eP 21 20.00 1.0
CTA 32.93 179 iPd 21 38.80 3.7X
1.0s 20.00nm 4.9mb
iS 26 52.00
OIS 33.87 190 eP 21 42.50 -0.7
WB5 34.46 199 eP 21 46.80 -1.6
BJI 37.19 322 eP 22 11.00 -0.2
1.0s 13.00nm 4.8mb
Z 18s 2.64um 5.1Msz
N 14s 1.36um
PP 23 39.00
eS 27 57.00
SS 30 37.00
ASPA 38.17 197 eP 22 18.80 -0.9
0.7s 31.90nm 5.3mb
Z 22s 2.20um 4.9Msz
eS 28 02.50
LR 36 37.00
TRT 38.52 239 iPd 22 24.40 1.7
0.8s 72.90nm 5.6mb
RMO 39.42 175 eP 22 28.50 -1.6
DZM 40.54 149 iPc 22 39.00 -0.5
KMI 41.89 293 P+ 22 52.00 1.3
Z 20s 3.30um 5.2Msz
PP 25 17.00
S 29 27.00
WARB 43.04 205 eP 23 00.40 0.6
LZH 43.76 309 eP 23 05.50 -0.3
2.0s 36.00nm 4.8mb
Z 18s 3.20um 5.3Msz
N 15s 1.30um
E 15s 1.20um
sP 23 18.50
ePP 24 47.00
eS 29 31.00
sS 29 50.00
SS 32 39.00
NST 43.86 279 eP 23 09.00 2.4
SNG 44.41 267 eP 23 13.00 1.9
NNT 44.48 275 eP 23 11.80 0.2
STK 44.81 185 iPd 23 13.50 -0.5
1.1s 6.00nm 4.3mb
Z 19s 72.00um 6.6MszX
iS 29 51.70
CHTO 44.93 284 eP 23 14.00 -1.2
1.5s 6.76nm 4.2mb
MEKA 47.27 213 eP 23 34.00 0.4
ADE 48.16 187 eP 23 41.00 0.6
ADK 49.28 30 eP 23 48.00 -0.8
0.9s 23.30nm 5.2mb
BFD 50.02 183 eP 23 56.00 1.4
TOO 50.34 180 eP 23 57.00 0.0
MRWA 50.70 214 iPc 24 00.80 0.9
BAL 51.42 212 eP 24 05.00 -0.4
KLB 51.69 210 eP 24 06.00 -1.4
MUN 52.77 211 eP 24 15.00 -0.5
GUN 57.18 295 P 24 48.00 -0.1
PKI 57.59 294 P 24 49.50 -1.5
KKN 57.71 295 P 24 50.60 -1.1
DMN 57.86 294 P 24 52.00 -0.8
GKN 58.28 295 P 24 54.60 -1.0
SVW 63.91 28 eP 25 31.90 -1.1
HYB 64.36 283 eP 25 36.00 -0.6
1.0s 60.00nm 5.6mb
TTA 64.43 26 eP 25 35.40 -1.0
1.1s 18.30nm 5.0mb
NDI 64.82 296 iPd 25 39.00 -0.4
GBA 65.92 279 P 25 44.00 -2.5
IMA 66.56 23 ePc 25 49.10 -0.9
1.4s 21.50nm 5.0mb

PMR 67.03 28 ePc 25 51.30 -1.6
0.7s 16.40nm 5.2mb
Z 20s 1.80um 5.3Msz
FBA 68.51 25 eP 26 01.40 -0.7
1.2s 43.20nm 5.3mb
TOA 68.51 28 eP 26 03.00 0.7
POO 68.68 285 iPc 26 02.30 -1.7
INK 74.68 22 eP 26 38.00 -0.9
1.1s 39.00nm 5.3mb
pP 26 53.00 53kmX
GMW 81.73 43 P 27 18.80 0.9
RMW 82.40 43 P 27 21.60 0.2
YKA 83.11 27 eP 27 24.20 -0.5
1.0s 14.20nm 5.0mb
WDC 83.20 50 eP 27 26.50 0.9
PNT 83.45 41 eP 27 27.00 0.2
0.8s 14.00nm 5.0mb
MIN 83.94 50 eP 27 30.70 1.1
ORV 84.19 51 eP 27 32.10 1.5
GCC 84.33 53 eP 27 33.20 1.8
MHC 84.54 53 eP 27 33.50 0.9
ARN 84.62 53 P 27 32.80 -0.1
DPW 84.69 42 P 27 33.50 0.4
PRS 84.97 54 eP 27 35.70 1.1
LLA 85.24 54 eP 27 37.70 1.7
NEW 85.30 42 P 27 36.80 0.7
1.0s 32.50nm 5.4mb
CMB 85.36 52 eP 27 37.00 0.4
FRI 86.12 53 eP 27 40.90 0.6
BCH 86.24 55 P 27 41.00 -0.1
EDM 86.29 36 eP 27 41.00 0.1
SYP 86.47 56 eP 27 43.00 0.7
KEV 87.20 342 eP 27 44.00 -0.9
ISA 87.41 54 eP 27 47.00 0.3
TNP 87.78 52 P 27 47.80 -0.8
1.0s 14.58nm 5.2mb
PAS 88.02 56 eP 27 49.00 -0.6
CLC 88.06 54 eP 27 51.00 1.2
MWC 88.09 55 eP 27 50.00 -0.2
SBB 88.16 55 eP 27 50.00 -0.3
SES 88.52 38 eP 27 52.00 0.3
SOD 88.55 340 iP 27 51.20 -0.3
RVR 88.70 56 eP 27 53.00 0.2
GSC 88.81 54 eP 27 54.00 0.5
PEC 88.89 56 P 27 54.00 0.2
PLM 89.27 56 eP 27 56.00 0.2
BAR 89.60 57 eP 27 56.00 -1.2
TPC 89.73 55 eP 27 58.00 0.2
DUG 90.49 49 P 28 01.80 0.5
GLA 91.00 56 eP 28 04.00 0.4
SUF 91.17 336 iP 28 03.40 -0.4
0.7s 13.60nm 5.5mb
DAU 91.55 48 P 28 07.50 1.1
BW06 91.99 45 P 28 11.00 2.7X
1.0s 1.83nm 4.5mb
FFC 92.00 32 eP 28 06.00 -1.8
1.0s 12.00nm 5.3mb
NUR 92.96 335 eP 28 11.00 -1.0
RSSD 95.23 43 P 28 23.60 0.5
GLD 96.12 47 P 28 28.00 0.7
1.0s 36.00nm 5.9mb
Z 20s 2.00um 5.6Msz
ANMO 96.99 52 P 28 31.80 0.6
0.7s 2.14nm 4.8mb
Z 20s 1.28um 5.4Msz
ALQ 96.99 52 eP 28 32.00 0.7
0.9s 2.10nm 4.7mb
Z 19s 1.15um 5.4Msz
HFS 97.49 338 eP 28 30.10 -2.7X
1.3s 20.10nm 5.5mb
Z 18s 1.29um 5.5Msz
LR 07 33.00
NB2 97.74 339 P 28 33.00 -1.0
1.0s 4.90nm 5.0mb
VRI 99.57 322 ePc 28 39.00 -3.5X
CLL 103.76 331 ePdiff29 11.00 10.0X
Z 18s 1.50um 5.6Msz
SKO 104.86 320 iPdiff29 06.50 0.4
Z 10s 0.79um 5.6MszX
N 19s 0.78um
E 19s 0.73um
iPP 33 25.00
iSKS 39 45.00
i 40 52.00
iPS 42 44.00
i 43 18.00
iSS 48 40.30

LR 24 48.00
GRC1 106.03 330 ePdiff29 10.00 -1.2
Z 18s 1.30um 5.5Msz
e(PP) 33 18.00
e 42 53.00
SLR 119.82 248 iPKPc 33 49.50 -0.9
BCAO 124.44 285 iPKPc 33 58.90 -0.5
0.5s 5.00nm
KIC 144.62 301 PKPc 34 36.08 -0.8
1.0s 104.50nm
TIC 144.69 302 PKPc 34 36.28 -0.7
0.9s 74.00nm
LIC 144.93 301 PKPc 34 37.06 -0.3
1.0s 146.50nm
ZOBO 147.44 100 PKP 34 42.00 -0.1
Z 24s 0.58um 5.3MszX
LR 23 24.00
LPB 147.46 100 PKP 34 47.00 5.0X
Z 24s 1.55um 5.7MszX
LR 23 42.00
SIV 154.22 100 PKP 35 00.00 8.5X
VAO 164.64 132 (PKP) 35 06.00 2.9X
S.D. = 1.1 on 114 of 126 obs.

% SEP 30, 1990 03h 42m 15.34± 0.95s
18.015 N ±11.3km 67.039 W ± 6.3km
DEPTH = 10.0km (geophysicist)
MONA PASSAGE (89)

MGP 0.05 261 P 42 17.40 -0.1
MEP 0.14 23 P 42 19.10 0.5
LRS 0.33 34 P 42 22.00 -0.2
PORP 0.38 84 P 42 24.20 1.0
SJG 0.85 83 iP 42 31.50 -0.3
CSB 0.88 72 P 42 31.90 -0.4
LPR 1.15 75 P 42 36.40 -0.5
S.D. = 0.7 on 7 of 7 obs.

? SEP 30, 1990 03h 59m 35.63± 5.67s
45.997 N ±20.7km 26.743 E ±19.8km
DEPTH = 109.6 ± 53.9 km
ROMANIA (358)

VRI 0.13 186 iPc 59 50.50 0.2
CVO 0.43 246 ePd 59 52.00 -0.3
CLI 0.67 34 iPd 59 54.00 0.0
MLR 0.75 228 iPd 59 55.00 0.2
ISR 0.87 189 iPd 59 06.50 -49.3X
CFR 1.28 129 ePd 00 00.00 -0.1
TLB 1.68 147 iPc 00 05.00 0.1
S.D. = 0.3 on 6 of 7 obs.

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* SEP 30, 1990 04h 34m 31.48± 0.97s
5.957 S ±10.2km 149.427 E ± 9.1km
DEPTH = 73.7 ± 10.3 km
4.3mb (3 obs.)
NEW BRITAIN REGION (192)

LAT 2.51 254 eP 35 11.00 0.2
eS 35 51.00
RAB 3.25 57 iPd 35 21.20 0.1
0.6s 1333.33nm
PMG 4.10 213 iPd 35 32.90 -0.2
eS 36 19.00
MTN 19.30 248 iPd 38 52.90 -0.5
WB5 20.15 225 iPc 39 01.80 -0.5
RMQ 20.43 182 eP 39 04.00 -1.2
DZM 22.96 136 iPc 39 30.40 -0.1
ASPA 23.09 219 iPc 39 32.50 0.8
1.0s 13.90nm 4.3mb
iS 43 39.80
STK 26.81 195 iPd 40 08.90 2.2
0.8s 2.00nm 3.7mb
iPcP 43 23.10
KLB 39.09 225 eP 41 53.00 -0.2
MAT 43.56 347 eP 42 30.00 0.2
1.2s 15.63nm 4.7mb
PPD 145.55 144 ePKP 54 04.10 0.4
VAO 147.06 151 ePKP 54 05.20 -1.0
BAO 152.47 141 PKPc 54 23.40 8.7X
S.D. = 1.0 on 13 of 14 obs.

SEP 30, 1990 06h 13m 17.57± 0.59s
13.088 N ± 4.3km 145.277 E ± 4.9km
DEPTH = 56.4 ± 5.0 km
5.1mb (24 obs.)
MARIANA ISLANDS (216)

30d 06h

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 33C
Centroid Location:
Origin Time 06:13:17.4 0.5
Lat 13.12N 0.05 Lon 145.79E 0.05
Dep 15.0 FIX Half-duration 2.2
Moment Tensor; Scale 10**17 Nm
Mrr= 1.16 0.04 Mtt=-0.30 0.06
Mff=-0.86 0.06 Mrt= 0.36 0.16
Mrf= 1.56 0.18 Mtf=-0.71 0.04
Principal Axes:
T Val= 2.01 Plg=61 Azm=269
N 0.06 12 21
P -2.07 26 117
Best Double Couple:Mo=2.0*10**17
NP1:Strike=233 Dip=22 Slip= 123
NP2: 17 72 77

GUA		0.57	322	eP	13 30.00	-0.2
				eS	13 42.00	
GUMO		0.64	321	eP	13 30.80	-0.1
PJG		0.64	321	eP	13 30.80	-0.1
JAY		16.15	197	eP	17 15.00	12.5X
RAB		18.48	158	iP-	17 30.00	-1.4
				iS	21 16.00	
DAV		20.29	255	eP	17 52.20	0.9
PMG		22.43	175	eP	18 10.00	-2.9X
WKYJ		22.80	339	P	18 18.70	2.2
TKSJ		23.17	336	P	18 22.10	2.1
MNI		23.31	242	ePc	18 23.20	1.7
KUMJ		23.45	328	eP	18 23.90	1.3
QCP		23.54	277	eP	18 24.00	0.3
CHJJ		23.55	347	P	18 22.00	-1.7
AAI		23.78	227	eP	18 30.60	4.6X
BAG		24.11	281	ePc+	18 22.96	-6.4X
				eS	23 02.00	
MAT		24.20	346	eP	18 28.00	-2.0
		1.6s	106.67nm		5.1mb	
				eS	22 36.00	
MTMJ		24.34	345	eP	18 30.60	-0.8
YONJ		24.46	336	P	18 35.70	3.2X
SHNJ		24.58	331	eP	18 40.70	7.1X
NIIJ		24.70	348	eP	18 33.40	-1.3
ANP		25.42	302	eP	18 48.00	6.2X
				eS	23 32.00	
HNR		26.70	146	e(P)	18 44.00	-9.5X
SSE		28.52	313	eP	19 08.00	-1.9
	Z	20s	2.40um		4.8Msz	
	N	16s	1.60um			
	E	16s	1.80um			
				sP	19 20.00	
				ePP	19 50.00	
				S	24 16.00	
MTN		29.34	209	eP	19 16.50	-0.9
HKC		30.96	292	eP	19 36.00	4.3X
CTA		32.98	178	iPd	19 53.30	4.0X
		1.2s	53.13nm		5.2mb	
				iS	25 05.00	
WB5		34.48	198	eP	20 01.00	-1.3
BJI		37.08	322	eP	20 23.50	-0.6
		8.0s	0.43nm		2.4mb X	
	Z	18s	1.76um		4.9Msz	
	N	14s	1.28um			
				PP	21 50.00	
				eScP	26 32.00	
				eS	27 07.00	
				SS	28 32.00	
ASPA		38.19	197	iPc	20 32.70	-0.9
		1.0s	12.00nm		4.8mb	
	Z	22s	1.13um		4.6Msz	
				iS	26 21.50	
				LR	36 15.00	
TRT		38.45	239	ePd	20 36.80	0.9
DZM		40.64	149	iPc	20 55.20	1.2
KMI		41.77	293	Pc	21 04.00	0.5
	Z	20s	2.80um		5.1Msz	
				S	27 40.00	
WARB		43.04	205	eP	21 14.40	0.8
LZH		43.64	309	Pc	21 19.00	0.4
		2.0s	43.00nm		4.9mb	
	Z	18s	2.00um		5 1Msz	
	N	15s	1.10um			
	E	16s	1.00um			
				pP	21 34.50	61kmX
				sP	21 40.00	
				PP	23 05.00	
				S	27 48.00	
				sS	28 10.00	
				SS	31 00.00	
NST		43.75	279	eP	21 21.00	1.6
COO		43.88	172	eP	21 24.00	3.7X
SNG		44.31	267	eP	21 15.90	-8.1X
CHG		44.82	284	eP	21 29.70	1.6
STK		44.85	184	iPd	21 26.00	-2.1
		1.2s	14.00nm		4.7mb	
	Z	17s	63.00um		6.6MszX	
				iS	27 57.90	
SMY		45.75	24	eP	21 36.20	1.2
NANU		45.88	220	eP	21 37.50	1.2
ADE		48.19	187	eP	21 54.50	0.1
ADK		49.29	30	eP	22 02.90	0.3
BFD		50.06	183	eP	22 10.00	1.4
TOO		50.39	180	eP	22 11.00	-0.2
MRWA		50.68	214	iPd	22 13.20	-0.3
BAL		51.41	212	eP	22 19.00	0.0
KLB		51.68	210	eP	22 20.00	-1.0
GUN		57.06	295	P	23 00.80	-0.2
PKI		57.47	294	P	23 03.20	-0.6
KKN		57.59	295	P	23 04.00	-0.5
DMN		57.74	294	P	23 05.40	-0.2
GKN		58.16	295	P	23 08.20	-0.3
SVW		63.92	28	eP	23 47.00	0.3
HYB		64.24	283	eP	23 49.00	-0.5
TTA		64.43	26	eP	23 49.00	-1.1
		1.7s	52.30nm		5.3mb	
GBA		65.80	279	P	23 59.30	-0.2
IMA		66.55	23	ePc	24 02.30	-1.4
		1.4s	23.60nm		5.0mb	
PMR		67.04	28	eP	24 05.90	-0.7
		0.4s	7.70nm		5.1mb	
	Z	20s	1.50um		5.2Msz	
FBA		68.51	25	eP	24 14.60	-1.2
		1.3s	28.50nm		5.1mb	
TOA		68.52	28	eP	24 16.90	0.9
POO		68.56	285	iPd	24 15.70	-1.3
		1.0s	30.00nm		5.2mb	
INK		74.68	22	eP	24 51.50	-1.0
		1.1s	52.00nm		5.4mb	
				pP	25 07.00	55kmX
BMW		81.66	44	P	25 31.40	0.1
GMW		81.77	43	P	25 32.30	0.6
YKA		83.12	27	eP	25 38.00	-0.4
		1.1s	13.30nm		4.9mb	
WDC		83.25	50	eP	25 37.70	-1.8
PNT		83.49	41	eP	25 42.00	1.4
		1.0s	24.00nm		5.2mb	
LBFM		83.58	49	P	25 41.80	0.3
MIN		84.00	50	eP	25 44.00	0.5
BKS		84.02	53	eP	25 48.90	5.4X
		1.2s	69.00nm		5.6mb	
	Z	20s	1.10um		5.2Msz	
	E	20s	1.10um			
ORV		84.24	51	eP	25 45.20	0.6
MHC		84.60	53	eP	25 47.80	1.2
ARN		84.68	53	P	25 47.00	0.1
PRS		85.03	54	eP	25 49.70	1.1
NEW		85.34	42	P	25 50.70	0.8
		1.0s	38.75nm		5.5mb	
CMB		85.42	52	eP	25 51.40	0.8
TEH		85.58	306	e(P)	25 52.00	0.5
PHAM		85.90	54	P	25 53.40	0.4
FRI		86.18	53	eP	25 55.30	1.0
BCH		86.30	55	P	25 55.80	0.7
EDM		86.32	36	eP	25 55.50	0.8
ABL		87.07	55	P	25 59.00	0.0
KEV		87.12	342	eP	25 59.00	0.8
ISA		87.46	54	eP	26 00.00	-0.6
TNP		87.83	52	P	26 02.50	-0.1
		1.0s	15.42nm		5.2mb	
PAS		88.08	56	eP	26 05.00	1.5
CLC		88.12	54	eP	26 04.00	0.2
MWC		88.15	55	eP	26 05.00	0.9
SBB		88.22	55	eP	26 04.00	-0.3
SOD		88.47	340	iP	26 03.20	-1.6
SES		88.55	38	eP	26 06.00	0.5
RVR		88.76	56	eP	26 04.00	-2.8
GSC		88.87	54	eP	26 08.00	0.6
PEC		88.96	56	P	26 07.50	-0.3
		0.9s	13.39nm		5.2mb	
PLM		89.34	56	eP	26 11.00	1.2
BAR		89.67	57	eP	26 09.00	-2.1
TPC		89.79	55	eP	26 12.00	0.3
DUG		90.54	49	P	26 15.80	0.6
GLA		91.06	56	eP	26 18.00	0.4
SUF		91.08	336	iP	26 16.70	-0.3
		0.5s	5.50nm		5.2mb	
DAU		91.60	48	P	26 21.00	0.7
FFC		92.02	32	eP	26 10.00	-11.5X
		1.5s	35.00nm			
BW06		92.03	45	P	26 22.30	0.2
		1.1s	6.35nm		5.0mb	
NUR		92.87	335	eP	26 29.00	3.7X
RSSD		95.27	43	P	26 36.00	-1.0
GOL		96.08	47	P	26 50.50	9.7X
		1.0s	2.25nm		4.7mb	
	Z	20s	0.75um		5.2Msz	
GLD		96.17	47	P	26 53.00	11.9X
	Z	20s	1.00um		5.3Msz	
ALQ		97.04	52	eP	26 45.50	0.3
		1.0s	3.25nm		4.8mb	
	Z	18s	0.86um		5.3Msz	
ANMO		97.04	52	P	26 48.50	3.4X
		1.2s	2.86nm		4.7mb	
	Z	20s	1.06um		5.3Msz	
HFS		97.40	338	eP	26 44.10	-1.9
		1.2s	17.10nm		5.5mb	
	Z	18s	0.94um		5.3Msz	
				LR	03 18.00	
NB2		97.66	339	P	26 46.10	-1.2
		1.1s	8.10nm		5.2mb	
VRI		99.46	322	ePd	26 56.00	0.3
				ec	30 24.00	
BHG		106.12	329	ePKP	31 47.30	10.2X
FVI		106.92	328	PKP	31 47.20	8.7X
SFI		109.18	326	PKP	31 52.00	9.1X
PGD		109.28	326	PKP	31 51.50	8.1X
SGO		109.34	322	PKP	31 27.00	-16.3X
MGR		109.44	321	PKP	31 25.20	-18.4X
BSS		109.50	322	PKP	31 31.00	-12.6X
MNS		109.72	325	PKP	31 44.70	0.6
BDI		109.75	327	PKP	31 56.00	11.9X
BCAO		124.32	285	iPKPc	32 14.00	1.2
		0.4s	4.00nm			
MDZ		143.15	128	ePKP	32 45.30	-2.3
ARE		144.32	100	ePKP	32 49.00	-1.3
KIC		144.50	301	PKPc	32 49.76	-0.5
		0.9s	69.00nm			
TIC		144.57	302	PKPc	32 49.80	-0.6
		1.0s	67.50nm			
LIC		144.81	301	PKPc	32 50.74	-0.1
		0.9s	94.00nm			
ZOBO		147.56	100	PKP	32 59.20	3.3X
		1.1s	23.20nm			
LPB		147.57	100	PKP	33 00.00	4.2X
SIV		154.34	100	PKP	33 09.80	4.5X
PPD		161.87	122	ePKP	33 15.10	1.1
SOB1		172.82	58	ePKP	33 23.70	1.8
				e	34 51.90	

S.D. = 1.1 on 104 of 133 obs.

SEP 30, 1990 06h 24m 03.94± 0.28s
29.028 N ± 7.0km 60.855 E ± 3.8km
DEPTH = 33.0km (normal)
4.9mb (24 obs.)
SOUTHERN IRAN (353)

QUE		5.43	76	eP	25 25.30	0.4
		0.1s	*******	nm		8.7mb X
				e(S)	26 40.00	
TAB		15.08	310	eP	27 37.00	0.6
OASM		15.64	263	eP	27 39.70	-3.9X
POO		15.82	128	eP	27 50.00	4.1X
AFIF		16.55	257	eP	27 54.30	-1.0
KMTA		19.69	241	eP+	28 32.30	-1.3
ABHA		19.73	241	eP	28 35.70	1.6
HYB		19.92	122	eP	28 36.00	0.1
GKN		20.92	87	P	28 45.60	-0.7
DMN		21.39	88	P	28 51.20	0.0
KKN		21.51	87	P	28 51.60	-0.8
PKI		21.66	88	P	28 53.40	-0.6
GBA		21.73	131	P	28 55.00	0.6
GUN		22.02	87	P	28 58.00	0.4
DSI		22.13	283	eP	28 55.00	-3.2X
ADI		22.31	287	eP	28 50.00	-10.0X
MBH		22.63	278	eP	29 05.00	1.8
BBTK		25.46	302	eP	29 36.00	5.4X
SKO		34.29	303	iP	30 48.00	-1.2
		1.5s	49.00nm		5.2mb	
				iS	37 52.00	
				eScS	40 40.00	

eSS 41 30.30
OHR 34.64 301 eP 30 52.00 -0.3
1.5s 80.00nm 5.4mb
CHG 36.13 98 eP 31 05.70 0.6
LZH 36.68 68 Pd 31 09.40 -0.4
2.0s 25.00nm 4.8mb
Z 17s 2.10um 5.0MszX
pP 31 18.00 29kmX
sP 31 25.00
KRA 37.28 316 ePc 31 14.60 0.2
1.6s 104.00nm 5.4mb
e 31 22.20
KMI 37.36 86 Pc 31 16.00 0.4
SRO 37.67 312 eP 31 17.60 -0.1
SOI 38.10 296 P 31 22.00 0.6
ZST 38.55 312 e(P) 31 25.70 0.6
NUR 39.72 333 iP 31 35.00 0.4
0.7s 13.30nm 4.8mb
KSP 39.74 316 eP 31 34.80 -0.2
SUF 40.52 336 iP 31 41.70 0.5
0.8s 16.00nm 4.8mb
PRU 40.61 314 eP 31 42.00 -0.1
KHC 41.04 313 eP 31 46.70 1.0
BRG 41.19 315 eP 31 48.20 1.4
1.4s 24.00nm 4.7mb
CLL 41.87 316 iPc 31 53.00 0.6
1.8s 60.00nm 5.0mb
MOX 42.58 315 eP 32 00.00 1.7
SOD 43.50 342 iP 32 05.80 0.3
KEV 45.11 344 eP 32 19.00 0.5
LPG 45.23 307 eP 32 18.90 -1.2
1.0s 8.00nm 4.6mb
LPL 45.24 307 eP 32 19.00 -1.2
0.8s 4.05nm 4.4mb
BNI 45.27 306 P 32 20.00 -0.2
NB2 45.75 329 P 32 21.30 -2.4
1.0s 19.30nm 5.0mb
WTS 45.79 316 eP 32 26.00 2.0
0.8s 8.00nm 4.7mb
ENN 46.18 314 eP 32 28.00 0.9
1.0s 14.00nm 4.9mb
LBF 47.20 309 eP 32 34.60 -0.8
1.2s 16.35nm 4.9mb
SMF 47.28 308 eP 32 35.10 -0.9
1.0s 16.00nm 5.0mb
LOR 47.28 309 eP 32 35.10 -0.9
1.0s 8.00nm 4.7mb
SSF 47.52 309 eP 32 37.20 -0.7
1.2s 20.85nm 5.0mb
AVF 47.62 308 eP 32 37.60 -1.0
1.0s 7.00nm 4.6mb
BGF 47.97 308 eP 32 41.50 0.1
0.8s 5.35nm 4.6mb
MAF 48.16 308 eP 32 42.50 -0.4
1.0s 6.00nm 4.6mb
LSF 48.88 308 eP 32 48.80 0.4
1.0s 16.00nm 5.0mb
EKA 52.02 319 P 33 12.00 -0.2
1.3s 12.10nm 4.7mb
MAL 54.42 296 iPd 33 29.50 -0.6
INK 82.37 5 eP 36 23.20 -0.2
WB5 85.94 115 eP 36 42.20 -0.1
ASPA 87.62 119 iPc 36 50.90 0.5
0.8s 15.50nm 5.3mb
YKA 88.73 358 eP 36 55.00 -0.1
0.8s 6.00nm 5.0mb
S.D. = 0.9 on 52 of 57 obs.

SEP 30, 1990 06h 49m 22.79± 0.51s
52.705 N ±10.7km 160.570 E ± 8.5km
DEPTH = 33.0km (normal)
4.9mb (29 obs.) 5.5Msz (1 obs.)
OFF EAST COAST OF KAMCHATKA (219)

MAT 22.54 233 eP 54 22.00 1.0
0.6s 12.67nm 4.6mb
TTA 24.79 49 P 54 43.10 0.4
0.9s 13.54nm 4.5mb
IMA 26.14 42 P 54 54.50 -0.8
FBA 28.50 45 P 55 16.00 -0.6
INK 34.00 37 eP 56 09.00 4.0X
KEV 53.28 342 eP 58 39.00 -0.9
SOD 55.37 340 eP 58 52.00 -3.2X
TNP 56.46 70 P 59 03.50 -0.3
0.9s 3.26nm 4.4mb
BW06 57.46 61 P 59 10.50 -0.3
1.0s 7.00nm 4.7mb
CHG 58.11 259 ePc 59 15 80 0.5
1.0s 13.25nm 5.0mb
GUN 59.22 277 P 59 22.20 -1.3
SUF 59.47 338 iP 59 23.90 -0.3
0.6s 46.50nm 5.8mb
KKN 59.67 277 P 59 25.40 -1.0
0.6s 28.00nm 5.6mb
PKI 59.76 277 P 59 26.00 -1.1
0.6s 15.00nm 5.3mb
GKN 59.91 278 P 59 27.00 -0.9
0.6s 17.00nm 5.4mb
DMN 59.91 277 P 59 27.40 -0.7
0.6s 20.00nm 5.4mb
NUR 61.75 337 iP 59 39.00 -0.8
0.7s 17.40nm 5.3mb
NB2 64.00 344 P 59 53.60 -1.1
1.0s 13.50nm 5.0mb
HFS 64.41 342 eP 59 55.60 -1.7
0.6s 7.00nm 4.9mb
ALQ 64.75 65 eP 59 59.00 -1.2
HYB 71.53 275 eP 00 41.50 -0.9
KRA 72.33 335 eP 00 46.70 0.1
KSP 72.51 337 eP 00 47.80 0.1
WIT 72.61 344 eP 00 59.00 10.8X
CLL 72.82 339 eP 00 49.00 -0.5
1.3s 24.00nm 5.0mb
BRG 73.02 339 iP 00 51.60 0.9
1.2s 19.00nm 5.0mb
WTS 73.37 343 eP 00 54.00 1.4
0.8s 6.00nm 4.6mb
PRU 73.72 338 eP 00 55.50 0.8
Z 17s 0.90um 5.1MszX
N 17s 0.30um
E 18s 0.50um
MOX 73.74 340 eP 00 56.00 1.1
ENN 74.70 344 eP 01 00.00 -0.4
1.0s 19.00nm 5.0mb
GRF 74.72 340 eP 01 01.40 0.8
KHC 74.74 338 P 01 02.00 1.3
1.1s 7.00nm 4.6mb
GBA 75.16 273 P 01 03.20 -0.3
WB5 75.78 205 eP 01 07.30 0.4
CDF 76.73 342 eP 01 12.50 0.4
1.0s 12.00nm 4.9mb
WATA 76.88 339 e(P) 01 13.00 0.0
1.2s 12.10nm 4.8mb
SQTA 77.07 339 i(P) 01 15.20 1.2
1.2s 12.90nm 4.8mb
FVI 77.31 338 P 01 16.80 1.7
GRR 78.05 347 eP 01 17.70 -1.5
1.0s 16.00nm 5.0mb
CTI 78.09 338 P 01 20.00 0.4
MDI 78.76 340 P 01 22.00 -1.1
VAI 78.87 340 P 01 22.20 -1.5
AVF 78.99 344 eP 01 23.90 -0.5
1.0s 8.00nm 4.7mb
SMF 79.05 344 eP 01 24.30 -0.4
1 2s 7.45nm 4.6mb
LPL 79.61 342 eP 01 29.60 1.5
0.9s 14.75nm 5.0mb
LPG 79.63 342 eP 01 29.80 1.5
1.0s 22.00nm 5.1mb
TCF 79.66 345 eP 01 27.70 -0.4
1.0s 10.00nm 4.8mb
MAF 79.67 345 eP 01 28.10 0.0
1.0s 6.00nm 4.5mb
LSF 79.80 345 eP 01 27.70 -1.1
0.8s 6.70nm 4.7mb
BNI 80.07 342 P 01 32.00 1.6
PGD 80.13 338 P 01 33.00 2.2
BDI 80.20 339 P 01 32.30 1.2
MNS 81.31 337 P 01 37.00 0.1
ZOBO 127.35 65 (PKP) 08 25.00 -1.3
Z 24s 0.45um 5.1MszX
LR 21 32.00
LPB 127.58 65 PKP 08 29.00 2.4
Z 20s 1.06um 5.5Msz
LR 22 18.00
S.D. = 1.1 on 52 of 55 obs.

? SEP 30, 1990 07h 14m 44.83± 1.19s
28.451 N ±15.9km 131.720 E ±21.3km
DEPTH = 33.0km (normal)
4.8mb (5 obs.)
RYUKYU ISLANDS REGION (239)

KAGJ 2.82 345 P 15 26.60 -1.9
SSE 9.53 289 eP 17 07.50 4.8X
LAT 37.88 155 eP 21 59.50 -1.2
GUN 40.22 281 P 22 20.80 0.3
0.4s 26.00nm 5.3mb
PKI 40.70 280 P 22 24.00 -0.4
0.4s 6.00nm 4.7mb
KKN 40.76 281 P 22 24.40 -0.4
0.4s 10.00nm 4.9mb
DMN 40.95 280 P 22 26.60 0.2
GKN 41.28 281 P 22 28.60 -0.4
0.4s 7.00nm 4.7mb
HFS 78.27 333 eP 26 44.50 1.8
0.4s 0.70nm 4.0mb
NB2 78.67 335 P 26 47.00 2.1
0.6s 0.40nm 3.6mb X
S.D. = 1.5 on 9 of 10 obs.

SEP 30, 1990 07h 48m 57.91± 0.33s
52.780 N ± 9.1km 160.647 E ± 6.2km
DEPTH = 33.0km (normal)
4.7mb (16 obs.)
OFF EAST COAST OF KAMCHATKA (219)

MAT 22.62 233 eP 53 58.00 1.1
0.8s 231.34nm 5.7mb
TTA 24.71 49 P 54 18.50 1.5
0.8s 11.21nm 4.5mb
IMA 26.05 42 P 54 29.60 -0.1
0.8s 4.31nm 4.1mb
FBA 28.41 45 P 54 49.80 -1.2
0.7s 5.09nm 4.3mb
INK 33.91 37 eP 55 40.00 0.7
PNT 47.82 60 eP 57 34.00 0.1
NEW 49.77 60 P 57 48.50 -0.5
ARN 54.41 73 P 58 23.50 -0.3
TNP 56.39 70 P 58 38.00 -0.4
0.8s 5.39nm 4.6mb
BW06 57.38 61 P 58 45.10 -0.3
0.7s 6.43nm 4.8mb
DUG 57.40 65 P 58 45.50 0.0
DAU 58.11 64 P 58 50.50 -0.1
CHTO 58.17 259 eP 58 51.00 0.1
0.9s 1.92nm 4.2mb
RSSD 59.30 57 P 58 58.30 -0.5
SUF 59.42 338 iP 58 59.60 0.6
0.8s 26.00nm 5.4mb
KKN 59.71 277 P 59 01.00 -0.8
0.6s 13.00nm 5.2mb
PKI 59.79 277 P 59 01.40 -1.1
GKN 59.94 278 P 59 02.20 -1.1
DMN 59.95 277 P 59 02.80 -0.6
NUR 61.70 337 eP 59 14.00 -0.6
NB2 63.94 344 P 59 29.10 -0.3
0.8s 3.20nm 4.5mb
HFS 64.35 342 eP 59 30.50 -1.6
0.7s 4.00nm 4.6mb
ALQ 64.68 65 eP 59 34.40 -0.4
0.9s 2.52nm 4.3mb
SIO 69.49 58 e(P) 00 03.80 -1.0
TUL 69.62 57 eP 00 05.30 -0.4
1.1s 17.50nm 5.0mb
KSP 72.46 337 eP 00 23.00 0.5
CLL 72.77 339 eP 00 25.00 0.7
1.0s 9.00nm 4.7mb
e 00 30.00
BRG 72.97 339 e(P) 00 26.30 0.8
PRU 73.67 338 eP 00 30.00 0.5
e 00 39.50
KHC 74.69 338 eP 00 38.30 2.7
GBA 75.20 273 P 00 38.00 -0.9
WB5 75.87 205 eP 00 42.00 -0.5
ASPA 79.61 205 eP 01 03.20 0.1
0.8s 10.40nm 4.9mb
STK 85.93 196 eP 01 36.30 0.9
1.6s 23.00nm 5.2mb
ZOBO 127.28 65 (PKP) 08 02.00 0.7
LPB 127.51 65 PKP 08 03.00 1.4
S.D. = 0.9 on 36 of 36 obs.

? SEP 30, 1990 08h 26m 56.42± 0.67s
15.863 N ±21.9km 119.318 E ±51.9km
DEPTH = 33.0km (normal)
4.4mb (5 obs.)
LUZON, PHILIPPINE ISLANDS (249)

BJI 24.24 354 eP 32 11.50 0.1
1.5s 18.00nm 4.4mb

30d 08h

LZH	24.41	328	eP	32	13.70	0.4	OOW	6.26	17	P	14	50.53	-0.1	CBN	37.70	79	eP	20	34.00	0.9
	2.0s	36.00nm			4.6mb		JBO	6.31	52	P	14	50.87	-0.5	KEV	67.14	10	eP	24	09.00	-2.4
		pP	32	21.30	27kmX		FMW	6.37	34	P	14	52.63	0.3	SOD	69.33	11	iP	24	23.90	-1.2
		sP	32	26.00			GMW	6.47	26	P	14	53.12	-0.4	NB2	72.01	20	P	24	40.80	-0.7
WB5	38.48	157	eP	34	17.20	-0.1	HDW	6.48	24	P	14	54.33	0.6		1.1s	7.30nm			4.7mb	
ASPA	41.79	160	eP	34	45.00	0.3	GSM	6.54	32	P	14	55.11	0.5	HFS	73.42	19	eP	24	48.70	-1.0
	0.7s	4.00nm			4.3mb		OTR	6.56	15	P	14	55.48	0.7		0.9s	13.00nm			5.0mb	
SLL	84.00	331	eP	39	24.00	-0.6	PATW	6.59	49	P	14	55.00	-0.3		Z 20s	0.06um			3.9Msz	
	0.4s	1.30nm			4.4mb		NAC	6.60	39	P	14	55.28	-0.2			LR		54	34.00	
NB2	84.74	332	P	39	28.20	-0.1	RMW	6.74	31	P	14	57.87	0.4	SUF	73.63	13	eP	24	50.00	-0.8
	0.7s	1.00nm			4.1mb		MXC	6.75	43	P	14	57.05	-0.5		0.5s	4.30nm			4.8mb	
	S.D. = 0.5	on	6 of	6	obs.		STW	6.77	19	P	14	58.03	0.3	NUR	75.44	14	eP	25	01.00	-0.3
							PRW	6.84	47	P	14	58.00	-0.7	GRR	78.38	33	eP	25	17.60	-0.3
SEP 30, 1990 09h 13m 15.95± 0.33s							BRVW	6.84	44	P	14	58.37	-0.5		0.8s	6.70nm			4.8mb	
41.781 N ± 2.2km 126.907 W ± 3.7km							EBG	6.85	39	P	14	58.95	0.0	ZOBO	79.19	123	P	25	23.00	-0.5
DEPTH = 10.0km (geophysicist)							TWW	6.88	37	P	15	00.33	1.0	LPB	79.41	123	P	25	10.00	-14.4X
4.7mb (26 obs.) 4.3Msz (4 obs.)							RSW	7.00	46	P	15	00.11	-0.9	CLL	80.93	24	ePc	25	32.00	0.4
OFF COAST OF NORTHERN CALIFORNIA(34)							TBM	7.03	38	P	15	01.72	0.3	LOR	81.17	31	eP	25	32.60	-0.4
CENTROID, MOMENT TENSOR (HRV)							HTW	7.04	29	P	15	01.43	-0.2		1.0s	5.00nm			4.5mb	
Data Used: GDSN							MDW	7.05	44	P	15	01.09	-0.6		Z 18s	0.28um			4.7Msz	
L.P.B.: 10S, 20C							BVW	7.12	43	P	15	02.15	-0.5	SSF	81.20	32	eP	25	33.90	0.8
Centroid Location:							VTG	7.17	41	P	15	03.04	-0.2	BGF	81.35	32	eP	25	34.40	0.5
Origin Time 09:13:17.3 1.2							WIW	7.19	47	P	15	02.81	-0.8	AVF	81.36	32	eP	25	34.20	0.3
Lat 41.85N 0.16 Lon 127.62W 0.15							GBL	7.20	46	P	15	02.98	-0.8		0.7s	3.85nm			4.6mb	
Dep 15.0 FIX Half-duration 1.5							WG3	7.20	51	P	15	02.68	-1.1	LBF	81.45	32	eP	25	34.60	0.2
Moment Tensor; Scale 10**16 Nm							MJ2	7.22	46	P	15	03.91	-0.2		1.0s	5.00nm			4.5mb	
Mrr=-3.39 0.30 Mtt= 0.42 0.40							WAH2	7.25	44	P	15	03.87	-0.5	CDF	81.51	29	eP	25	35.50	0.7
Mff= 2.97 0.40 Mrt= 0.25 1.03							PGC	7.29	18	eP	15	05.00	0.1		1.0s	8.00nm			4.7mb	
Mrf=-1.19 1.37 Mtf= 0.33 0.32							LOCW	7.29	45	P	15	04.49	-0.5	MAF	81.51	33	eP	25	35.50	0.8
Principal Axes:							JCW	7.32	27	P	15	05.79	0.4		1.3s	14.45nm			4.9mb	
T Val= 3.22 Plg=10 Azm= 96							CRF	7.38	44	P	15	05.43	-0.9	BRG	81.60	24	iP	25	35.70	0.6
N 0.41 5 5							OT2	7.40	46	P	15	05.68	-0.8	SMF	81.68	32	eP	25	35.90	0.3
P -3.63 79 247							RC1	7.44	44	P	15	06.72	-0.4	LFF	81.79	35	eP	25	36.00	-0.1
Best Double Couple:Mo=3.4*10**16							LNOR	7.45	54	P	15	05.93	-1.5		1.0s	12.00nm			4.9mb	
NP1:Strike=192 Dip=35 Slip= -81							CMW	7.45	25	P	15	07.89	0.5	BSF	81.82	29	eP	25	37.00	0.6
NP2: 1 55 -96							ET3	7.47	47	P	15	06.66	-0.9		1.0s	8.00nm			4.8mb	
							ETW	7.47	37	P	15	07.86	0.2	RJF	81.82	34	eP	25	36.90	0.5
FHC	2.41	113	eP	13	54.50	-1.6	MCW	7.47	21	P	15	08.82	1.2		0.9s	6.55nm			4.7mb	
LBFM	3.79	95	eP	14	16.00	0.1	RPW	7.68	28	P	15	10.30	-0.2		Z 20s	0.40um			4.8Msz	
LTCM	3.95	112	eP	14	18.00	0.2	WTV	7.71	38	P	15	10.82	-0.2	KSP	82.32	23	eP	25	40.00	1.1
GROR	4.28	32	P	14	23.02	0.4	MBW	7.84	25	P	15	15.37	2.5	KHC	83.02	25	P	25	43.80	1.2
KMOR	4.58	32	P	14	26.92	0.0	TNP	8.31	113	eP	15	18.00	-1.5	KRA	84.04	21	eP	25	47.30	-0.4
ORV	4.67	117	eP	14	25.70	-2.5	BCH	8.48	139	P	15	22.00	0.2	SPC	84.91	21	eP	25	53.30	1.0
GT2	4.77	43	P	14	29.60	0.0	ISA	8.98	130	eP	15	28.00	-0.7	ZST	84.93	23	eP	25	52.90	0.7
PGO	4.90	40	P	14	32.05	0.7	PNT	9.10	32	ePd	15	29.00	-1.3	FRF	85.34	32	eP	25	55.00	0.7
NLO	4.98	29	P	14	32.86	0.4		0.7s	19.00nm			5.6mb			1.1s	14.65nm			5.1mb	
VBEM	5.07	48	P	14	33.54	-0.5	CLC	9.39	126	eP	15	36.00	1.7	LMR	85.48	32	eP	25	55.80	0.8
TDH	5.11	45	P	14	34.34	-0.2	NEW	9.48	44	eP	15	34.70	-0.9		0.9s	9.85nm			5.0mb	
VLMM	5.15	42	P	14	35.44	0.4	SBB	10.05	132	eP	15	43.00	-0.5	LZH	89.66	321	P	26	15.60	0.0
VLL	5.29	44	P	14	37.01	0.0	GSC	10.22	126	eP	15	46.00	0.3		2.0s	29.00nm			5.2mb	
RVW	5.30	33	P	14	37.77	0.7	DUG	10.77	94	eP	15	53.80	0.4			pP		26	18.60	9kmX
VFP	5.30	46	P	14	36.93	-0.4	RVR	10.82	133	eP	15	53.00	-0.9	SLR	154.02	60	iPKPc	33	14.50	5.4X
VIPM	5.35	57	P	14	36.98	-0.9	PEC	11.01	133	P	15	57.50	0.9		S.D. = 0.9	on 150 of 155		obs.		
CROR	5.37	51	P	14	37.26	-0.9	DAU	11.89	91	eP	16	09.00	0.2							
LVP	5.38	36	P	14	38.31	0.1	BW06	12.89	80	P	16	21.60	-0.5							
BMW	5.39	28	P	14	38.00	-0.3		1.2s	22.37nm			5.2mb								
MTMW	5.43	37	P	14	38.94	-0.1	GLA	12.95	128	eP	16	23.00	0.2							
		S	15	38.36			SES	13.96	47	eP	16	36.00	0.1							
APM	5.47	42	P	14	39.94	0.4	GOL	16.45	90	eP	17	08.00	-0.6							
FL2	5.50	35	P	14	40.20	0.2	GLD	16.55	90	eP	17	10.00	0.2							
SHW	5.55	36	P	14	41.33	0.6	RSSD	16.90	74	P	17	11.20	-3.0X							
HSR	5.56	36	P	14	41.50	0.6	ANMO	17.41	106	eP	17	21.00	0.4							
CDFW	5.58	37	P	14	40.88	-0.1	ALQ	17.41	106	eP	17	22.00	1.4							
ESD	5.59	36	P	14	41.83	0.5		0.9s	8.19nm			3.9mb								
STD	5.59	36	P	14	41.47	0.2	FFC	20.91	43	eP	18	00.50	-0.3							
ERK	5.59	34	P	14	41.57	0.3		0.9s	25.00nm			4.6mb								
SOSW	5.63	36	P	14	41.97	0.2	YKA	22.00	15	eP	18	11.60	-0.1							
CZM	5.63	33	P	14	42.33	0.6		0.9s	6.10nm			4.0mb								
GULW	5.65	41	P	14	41.92	-0.1	MEO	23.24	98	iPd	18	27.00	2.9							
TDL	5.68	35	P	14	42.59	0.0	DWY	23.47	346	P	18	07.50	-18.6X							
VTHM	5.73	52	P	14	42.78	-0.4	PMR	23.93	334	eP	18	25.00	-5.5X							
APW	5.75	31	P	14	43.52	0.1		1.3s	42.45nm			4.9mb								
KOSW	5.78	34	P	14	44.33	0.5	SIO	24.53	94	eP	18	39.30	2.6							
VGB	5.81	48	eP	14	43.70	-0.5	TUL	24.85	93	eP	18	40.90	1.2							
ASR	5.81	39	P	14	44.38	0.0		1.3s	74.80nm			5.2mb								
CPW	5.85	26	P	14	44.31	-0.5		Z 19s	0.19um			3.6Msz								
LMW	5.90	33	P	14	46.34	0.7			LR		26	00.00								
OBH	5.95	20	P	14	45.19	-1.0	FBA	26.05	340	eP	18	50.00	-0.7							
GL2	6.06	44	P	14	47.34	-0.5		1.0s	8.75nm			4.4mb								
ARN	6.07	135	eP	14	45.70	-2.2	UYO	26.57	96	eP	18	58.00	2.2							
GLK	6.11	37	P	14	48.82	0.2	TTA	27.23	331	eP	18	59.00	-2.6							
LON	6.17	35	P	14	49.72	0.4		1.0s	12.50nm			4.6mb								
REMR	6.21	34	P	14	50.57	0.6	FVM	28.11	86	P	19	10.00	0.1							
GHW	6.22	31	P	14	51.41	1.5		1.0s	8.00nm			4.5mb								
WPW	6.24	36	P	14	50.49	0.1	OLY	28.24	91	P	19	13.00	2.0							
CMB	6.25	125	eP	14	50.00	-0.6	IMA	28.55	337	eP	19	11.00	-2.6							
RVC	6.26	33	P	14	51.46	0.9		1.1s	5.47nm			4.3mb								

& SEP 30, 1990 10h 09m 41.90s
36.623 N 117.267 W
DEPTH = 5.0km (geophysicist)
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.1 (BRK).

TNP	1.46	2	iPd	10	08.70	-0.4
FRI	1.99	281	iPc	10	18.00	1.4
ABL	2.38	223	e(P)	10	31.50	9.1
PHAM	2.65	254	e(P)	10	31.00	4.9
BCH	2.70	239	e(P)	10	32.00	5.1
PEC	2.73	178	eP	10	35.70	8.5
PRI	2.78	261	eP	10	31.00	2.9
CMB	2.86	300	eP	10	29.50	0.4
			eS	11	03.80	
PLM	3.28	174	eP	10	43.00	7.9
ARN	3.49	283	eP	10	42.50	4.5
	10 obs. associated					

? SEP 30, 1990 10h 23m 36.31± 3.06s
33.300 N ±30.7km 140.200 E ±18.1km
DEPTH = 204.4 ± 17.8 km
4.3mb (4 obs.)
SOUTH OF HONSHU, JAPAN (211)

MAT	3.62	334	eP	24	34.00	-0.1
			(S)	25	33.00	
YAMJ	4.86	358	eP	24	50.50	0.8
			eS	26	00.70	
OFUJ	5.89	11	eP	25	02.10	-0.7
			S	26	22.10	
INK	58.17	26	ePc	33	11.30	0.8
KEV	66.58	340	eP	34	06.00	0.0

SOD	68.02	338	iP	34 15.70	0.7	
SUF	70 87	334	iP	34 32.40	0.1	
	0.5s		4.00nm		4.4mb	
PNT	71.56	43	eP	34 36.00	-0.7	
	0.6s		3.00nm		4.2mb	
NUR	72.77	332	eP	34 43.00	-0.5	
HFS	77.07	336	eP	35 07.20	-0.7	
	0.3s		3.40nm		4.6mb	
NB2	77.24	337	P	35 08.80	-0.1	
	0.6s		1.90nm		4.0mb	
ZOBO	149.34	63	PKP	42 58.00	-0.8	
LPB	149.52	64	PKP	43 00.00	1.2	
	S.D. = 0.8	on	13 of	13 obs.		

? SEP 30, 1990 10h 43m 38.96± 7.41s
34.834 N ±65.4km 26.700 E ±22.1km
DEPTH = 10.0km (geophysicist)
CRETE (370)
MD 3.9 (ATH).

KAP	0.81	28	ePg	43 54.70	0.0	
NPS	0.99	296	ePg	43 57.50	-0.2	
VAM	2.13	286	ePg	44 19.20	4.2X	
APE	2.42	337	ePb	44 19.30	0.0	
CIN	2.98	22	eP	44 27.00	-0.1	
VLI	3.59	303	ePn	44 36.00	0.2	
ITM	4.52	303	ePb	44 53.50	4.5X	
	S.D. = 0.2	on	5 of	7 obs.		

• SEP 30, 1990 10h 50m 03.02± 2.58s
41.718 N ±10.6km 126.916 W ±21.8km
DEPTH = 10.0km (geophysicist)
3.9mb (2 obs.)
OFF COAST OF NORTHERN CALIFORNIA(34)

FHC	2.39	112	eP	50 42.50	-0.4	
LBFM	3.79	94	eP	51 04.00	1.0	
VBEM	5.12	48	P	51 22.09	0.3	
VLMM	5.21	41	P	51 23.15	0.3	
VLL	5.34	44	P	51 24.77	0.0	
RVW	5.36	33	P	51 25.77	0.8	
VIPM	5.39	57	P	51 25.20	-0.4	
LVP	5.43	35	P	51 26.37	0.3	
MTMW	5.49	37	P	51 26.22	-0.6	
FL2	5.56	35	P	51 27.94	0.0	
CDFW	5.63	37	P	51 29.12	0.3	
ESD	5.65	36	P	51 29.25	0.1	
STD	5.65	35	P	51 29.45	0.3	
ERK	5.65	34	P	51 29.03	-0.1	
SOSW	5.68	36	P	51 30.52	0.9	
CZM	5.69	32	P	51 29.71	0.1	
TDL	5.74	35	P	51 30 73	0.3	
KOSW	5.84	34	P	51 31.61	-0.1	
ASR	5.87	39	P	51 31.76	-0.4	
CPW	5.91	26	P	51 32.43	-0.3	
LMW	5.96	32	P	51 34.07	0.6	
GL2	6.11	44	P	51 35.21	-0.4	
GLK	6.17	36	P	51 36.27	-0.2	
LON	6.23	34	P	51 37.51	0.3	
WPW	6.30	36	P	51 37.71	-0.6	
JBO	6.36	52	P	51 39.21	0.1	
FMW	6.43	34	P	51 40.42	0.2	
GSM	6.59	32	P	51 42.89	0.4	
NAC	6.65	39	P	51 43.21	0.0	
RMW	6.80	31	P	51 46.44	1.1	
MXC	6.80	42	P	51 44.46	-0.8	
RSW	7.05	46	P	51 47.68	-1.1	
HTW	7.10	29	P	51 49.15	-0 3	
ETW	7.53	36	P	51 55.25	-0.3	
PNT	9.16	31	eP	52 17.00	-1.1	
	0.6s		4.00nm		5.0mb X	
ALQ	17.40	106	eP	54 11.00	3.4X	
FFC	20.96	43	eP	54 48.00	-0.4	
	0.7s		6.00nm		4.1mb	
YKA	22.06	15	eP	55 07.50	8.1X	
	0.9s		3.20nm		3.8mb	
UYO	26.57	96	e(P)	55 48.30	5.4X	
	S.D. = 0.6	on	36 of	39 obs.		

• SEP 30, 1990 11h 21m 38.03± 0.95s
23.572 S ± 9.4km 179.367 W ±17.4km
DEPTH = 578.0 ± 11.7 km
5.0mb (3 obs.)
SOUTH OF FIJI ISLANDS (171)

SVA	5.80	339	eP	23 16.80	0.0	
THZ	19.26	198	P	25 27.40	0.3	
KHZ	19.70	196	eP	25 31 40	0.3	
LTZ	20.38	198	P	25 36 70	-0.7	
STK	35.39	248	eP	27 48.10	0.6	
	1.8s		54.00nm		4.9mb	
ASPA	42.66	260	iPd	28 46.50	0.1	
	0.4s		16.70nm		4.9mb	
			eS	34 24.90		
WB5	43.00	266	iPd	28 49.00	-0.1	
FORR	46.93	249	iPc	29 19.10	0.0	
	0.4s		37.00nm		5.3mb	
WARB	48.76	255	eP	29 32.50	-0.5	
MEKA	55.84	253	eP	30 23.00	-0.7	
MBL	55.91	260	iPd	30 24.10	-0.1	
MRWA	57.54	249	iPc	30 35.30	0.0	
NANU	59.42	257	iPd	30 48.60	0.7	
HFS	142.33	349	ePKP	40 06.30	0.1	
	0.4s		1.10nm			
	S.D. = 0.5	on	14 of	14 obs.		

? SEP 30, 1990 12h 20m 38.24± 2.13s
16.185 S ±82.2km 178.411 W ±59.7km
DEPTH = 340.7 ± 18.8 km
4.4mb (3 obs.)
FIJI ISLANDS REGION (181)

SVA	3.56	237	eP	21 43.00	0.4	
DZM	15.46	245	iPc	23 54.10	-6.8X	
STK	39.48	239	eP	27 37.40	-0.9	
	1.4s		19.00nm		4.2mb	
WB5	44.94	258	eP	28 22.80	0.5	
ASPA	45.28	253	eP	28 23.80	-1.2	
	0.7s		19.80nm		4.5mb	
	Z 16s		0.16um		4.0MszX	
			LR	45 36.00		
NANU	62.22	253	eP	30 27.00	0.0	
PNT	83.32	34	eP	32 26.00	-2.5	
FBA	84.14	13	eP	32 32.40	0.2	
	1.0s		7.10nm		4.5mb	
KRA	143.10	340	ePKP	39 38.30	5.0X	
KSP	143.46	344	iPKPc	39 35.50	1.6	
SPC	143.74	339	ePKP	39 37.00	2.3X	
CLL	143.79	348	ePKP	39 35.00	0.6	
	1.2s		12.00nm			
BRG	144.00	347	ePKP	39 36.10	1.3	
PRU	144.69	346	ePKP	39 38.50	2.5X	
KHC	145.72	346	ePKP	39 43.50	5.7X	
	S.D. = 1.5	on	10 of	15 obs.		

• SEP 30, 1990 12h 45m 24.87± 1.80s
12.964 N ± 8.8km 145.380 E ±24.8km
DEPTH = 55.7 ± 13 0 km
4.6mb (5 obs.)
SOUTH OF MARIANA ISLANDS (210)

GUA	0.73	321	eP	45 39.50	0.1	
			e(S)	45 54.30		
GUMO	0.80	321	eP	45 40.50	0.3	
PJG	0.80	321	eP	45 40.20	0.0	
MAT	24.34	346	eP	50 37.00	-1.8	
WB5	34.39	199	eP	52 09.00	0.1	
ASPA	38.10	197	iPc	52 40.90	0.7	
	0.8s		7.60nm		4.7mb	
			eS	58 40.10		
STK	44.74	185	eP	53 32.70	-1.8	
	1.4s		10.00nm		4.4mb	
GUN	57.20	295	P	55 00.00	-9.4X	
HYB	64.37	283	eP	55 58.00	0.3	
INK	74.75	22	eP	57 01.00	0.7	
YKA	83.18	27	eP	57 46.70	0.6	
	0.7s		2.00nm		4.2mb	
KEV	87.27	342	eP	58 06.00	-0.3	
SOD	88.62	340	eP	58 17.00	4.1X	
SUF	91.23	336	eP	58 25.00	-0.1	
NUR	93.02	335	eP	58 45.00	11.6X	
APO	97.20	338	eP	58 51.60	-0.9	
	0.9s		7.40nm		5.2mb	
NB2	97.81	339	P	58 55.40	0.1	
	1.0s		2.00nm		4.6mb	
KIC	144.65	301	PKP	04 58.50	0.6	
	0.6s		6.50nm			
TIC	144.72	302	PKPd	04 58.58	0.5	
	0.6s		7.50nm			
LIC	144.96	301	PKPd	04 59.44	1.0	
	0.5s		11.00nm			
ZOBO	147.44	100	ePKP	05 06.00	2.8X	
			LR	07 48.00		
LPB	147.45	100	PKP	05 07.00	4.0X	

	S.D. = 0.9	on	17 of	22 obs.		

SEP 30, 1990 13h 08m 39.18± 0.77s
30.762 S ± 6.7km 71.501 W ± 7.2km
DEPTH = 69.6 ± 9.2 km
4.9mb (12 obs.)
NEAR COAST OF CENTRAL CHILE (135)

JACH	2.06	158	iPd	09 13.00	0.6	
			i	09 37.00		
ROCH	2.24	169	ePd	09 14.60	-0.4	
IHA	2.26	183	iPc	09 13.90	-1.1	
			i(S)	09 45.20		
PEL	2.47	164	iPd	09 18.50	0.5	
ZON	2.54	109	iPc	09 22.00	3.0X	
RTLL	2.66	103	iPd	09 22.40	1.7	
LCCH	2.71	181	iPd	09 20.10	-1.1	
			i	09 50.00		
RTCV	2.76	114	eP	09 24.30	2.2	
SAN	2.78	165	iP	09 22.50	0.3	
			i	09 41.10		
			iS	09 56.30		
CFA	2.92	108	iPd	09 26.20	1.9	
TACH	2.92	171	eP	09 24.20	-0.1	
			i	09 44.80		
PCH	2.97	164	iPd	09 25.20	0.2	
			i	09 44.00		
			i	09 58.00		
MDZ	3.09	134	iPc	09 30.30	3.6X	
LNV	3.18	179	iPd	09 26.00	-1.9	
			i	09 48.50		
ANT	7.10	8	e(P)	10 20.00	-2.5	
ARE	14.24	0	eP	11 59.00	0.0	
LPB	14.50	13	P	12 04.90	2.3X	
ZOBO	14.75	13	eP	12 02.00	-4.0X	
	0.8s		67.72nm		5.0mb	
			i	12 06.50		
			LR	16 14.00		
SIV	17.53	35	P	12 37.00	-3.4X	
NNA	19.33	344	iP	13 03.50	1.7	
	0.5s		10.56nm		4.4mb	
PPD	20.04	69	eP	13 07.80	-1.4	
			e	13 12.50		
			e	13 19.80		
VAO	23.18	76	eP	13 38.30	-2.2	
			e	14 01.80		
BMA	25.67	78	eP	14 03.50	-0.8	
BAO	26.26	60	Pd	14 09.70	-0.1	
			e	14 26.50		
			e	14 43.70		
JFO	26.77	77	eP	14 12.80	-1.6	
SOB1	35.67	60	eP	15 29.10	-3.6X	
			e	15 31.50		
SPA	59.41	180	iPd	18 31.00	-5.6X	
	1.3s		20.00nm		5.1mb	
			i	18 51.70		
BLA	68.13	352	P	19 33.30	-0.4	
OLY	68.54	343	P	19 35.10	-1.1	
TUL	70.14	339	iPc	19 45.60	-0.4	
	1.1s		122.00nm		5.7mb	
SIO	70.15	339	iP	19 45.50	-0.6	
FVM	70.64	344	P	19 48.40	-0.6	
	1.0s		35.00nm		5.2mb	
ALQ	73.18	331	eP	20 04.00	-0.4	
	1.3s		13.94nm		4.7mb	
ANMO	73.18	331	P	20 03.80	-0.6	
	1.2s		13.67nm		4.8mb	
LIC	73.33	72	P	20 05.22	-0.3	
TIC	73.58	72	P	20 06.52	-0.4	
KIC	73.64	72	Pc	20 07.12	-0.2	
LKO	74.77	69	P	20 10.72	-3.2X	
GLD	76.83	334	P	20 27.00	1.8	
	1.0s		36.00nm		5.3mb	
GOL	76.84	334	P	20 25.20	-0.2	
	1.1s		8.01nm		4.6mb	
CBM	77.39	2	P	20 29.00	1.2	
PEC	77.41	322	P	20 29.80	1.5	
DAU	79.82	330	P	20 42.20	0.5	
BCH	79.95	321	P	20 43.00	0.8	
RSSD	80.24	337	P	20 44.20	0.5	
BW06	81.10	333	P	20 48.80	0.5	
	1.0s		3.67nm		4.3mb	
CM8	82.26	323	P	20 55.50	1.3	
	1.0s		4.50nm		4.4mb	
ORV	83.97	323	P	21 04.10	1.2	
SLR	84.96	117	e(P)	21 05.00	-3.4X	
PNT	90.50	331	eP	21 34.00	-0.2	

30d 13h

BCAO	92 27	86	iPc	21 43.60	0.4	
	0.6s	5.00nm			5.1mb	
			i	22 08.00		
WB5	123.84	210	ePKP	27 47.90	16.7X	
GBA	146.71	114	PKPc	28 31.00	17.6X	
	0.7s	3.50nm				
HYB	149.71	109	ePKP	28 22.00	3.8X	
	S.D. = 1.2	on	42 of	54 obs.		

& SEP 30, 1990 14h 12m 15.50s
36.652 N 121.320 W
DEPTH = 4.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.7 (BRK).

SAO	0.15	318	iP	12 18.50	-0.1
LLA	0.31	97	iPc	12 21.50	-0.1
PRS	0.32	187	iP	12 22.00	0.0
GCC	0.66	305	iPd	12 28.00	-0.7
PRI	0.73	134	eP	12 29.50	-0.7
MHC	0.73	340	ePc	12 30.20	0.0
PCC	1.20	315	ePc	12 36.80	-1.6
FRI	1.34	75	ePd	12 39.00	-1.7
			iS	12 56.60	
BKS	1.42	329	ePd	12 40.50	-1.7
BRK	1.43	329	eP	12 40.50	-1.8
CMB	1.57	28	eP	12 42.80	-1.4
			iS	13 02.20	

11 obs. associated

* SEP 30, 1990 14h 21m 38.35± 1.36s
6.680 S ±10.8km 147.547 E ±11.8km
DEPTH = 61.5 ± 7.5 km
5.0mb (3 obs.)
EAST PAPUA NEW GUINEA REGION (207)

LAT	0.54	273	iP	21 51.00	0.0
PMG	2.74	188	iPd	22 21.00	0.2
			eS	23 02.00	
MNDI	3.90	277	eP	22 41.50	4.2X
WB5	18.33	223	eP	25 49.50	-0.5
QLP	20.04	189	iPd	26 09.00	-0.1
BRS	21.19	167	iPc	26 20.50	-0.3
ASPA	21.38	216	iPd	26 21.40	-1.4
	0.2s	45.80nm		5.5mb	
Z	46s	0.06um		2.6MszX	
		eS	30 19.20		
		LR	33 51.00		
COO	24.12	171	eP	26 50.00	0.4
STK	25.68	192	iPc	27 04.30	0.0
	0.6s	5.00nm		4.2mb	
WARB	27.81	223	eP	27 24.00	0.1
MBL	30.43	239	iPc	27 47.20	-0.2
MEKA	33.99	231	eP	28 18.40	0.0
COOL	34.52	222	eP	28 24.00	1.1
NANU	34.65	240	eP	28 24.00	-0.1
	0.5s	14.00nm		5.1mb	
MRWA	37.24	229	iPc	28 46.50	0.6
KLB	37.26	224	iPc	28 46.10	0.1
NWAO	38.40	223	eP	28 56.00	0.4
MUN	38.57	225	eP	28 57.00	0.0
APO	116.05	337	ePKP	40 15.40	-0.3
	0.6s	0.90nm			
BCAO	129.22	270	ePKPc	40 48.00	5.6X
	0.4s	3.00nm			
	S.D. = 0.6	on	18 of	20 obs.	

& SEP 30, 1990 16h 11m 50.70s
37.092 N 121.963 W
DEPTH = 17.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.1 (BRK). Felt in the Santa Cruz area.

GCC	0.07	204	iPd	11 53.40	-0.6
			eS	11 55.80	
MHC	0.36	46	iPd	11 58.10	-0.2
			eS	12 02.10	
ARN	0.43	53	iPc	11 59.20	-0.3
PCC	0.53	321	iPd	12 00.30	-0.8
SAO	0.53	128	iPc	12 00.60	-0.5
BKS	0.81	345	iPc	12 05.60	-0.4
BRK	0.81	343	eP	12 05.40	-0.6
			eS	12 16.00	

7 obs. associated

% SEP 30, 1990 16h 26m 25.46± 0.63s
38.138 N ± 6.3km 15.832 E ± 5.8km
DEPTH = 19.1 ± 6.6 km
SICILY (398)

SOI	0.19	111	P	26	30.40	0.0
			eSg	26	33.70	
MSI	0.23	287	P	26	30.80	-0.1
			eSg	26	33.30	
ATN	0.29	275	P	26	31.60	-0.4
			eSg	26	34.20	
MNO	0.92	257	P	26	43.20	0.4
			eSn	26	55.20	
MEU	1.26	215	P	26	47.80	-0.3
			eSn	27	05.50	
GIB	1.43	265	P	26	51.00	0.4
			eSn	27	09.20	
TDS	1.57	14	P	26	52.80	0.4
MGR	2.01	354	P	26	58.60	-0.2
SGO	2.45	351	P	27	05.00	-0.1
			eSn	27	33.00	
	S.D. = 0.4	on	9 of	9	obs.	

SEP 30, 1990 18h 08m 34.02± 0.55s
43.334 N ± 4.5km 0.602 W ± 5.3km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
ML 2.5 (LDG). MD 2.4 (STR).

OGE	0.19	150	Pg	08	38.33	0.1
			Sg	08	43.72	
MADF	0.25	220	Pg	08	39.28	0.0
			Sg	08	44.97	
ESCF	0.26	176	Pg	08	39.93	0.5
			Sg	08	45.73	
ATE	0.26	197	Pg	08	39.90	0.4
			Sg	08	45.88	
ELYF	0.33	240	Pg	08	40.51	-0.3
ISSF	0.34	205	Pg	08	41.18	0.1
			Sg	08	48.77	
JAU	0.34	150	Pg	08	40.23	-0.9
BOH	0.38	233	Pg	08	41.53	-0.3
			Sg	08	48.44	
LHE	0.42	182	Pg	08	43.07	0.4
EPF	0.75	113	Pg	08	48.20	-0.6
			Sg	08	59.80	
LPO	1.87	43	Pg	09	05.40	-0.9
			Sg	09	29.20	
LFF	1.87	31	Pg	09	05.00	-1.4
			Sg	09	28.00	
RJF	2.49	37	Pg	09	16.20	1.0
			Sg	09	47.00	
CAF	2.49	49	Pg	09	17.20	1.9
			Sg	09	47.80	
BGF	4.05	36	Pg	09	45.80	8.5X
			Sg	10	35.80	
	S.D. = 0.9	on	14 of	15	obs.	

? SEP 30, 1990 18h 32m 29.68± 2.13s
7.921 S ±20.5km 128.048 E ±13.2km
DEPTH = 159.3 ± 26.9 km
BANDA SEA (280)

KUPT	4.92	243	eP	33	43.00	0.1
			eS	34	48.00	
MTN	5.76	148	iPc	33	59.90	5.8X
KNA	7.81	175	iPc	34	30.40	8.7X
			eS	36	12.00	
WB5	13.37	153	eP	35	34.90	0.5
			eS	38	11.10	
ASPA	16.63	161	iPc	36	14.00	-1.1
	0.4s	44.90nm			5.2mb X	
			iS	39	21.50	
QIS	16.82	140	iP	36	11.00	-6.3X
WARB	18.21	184	eP	36	34.30	0.9
LAT	18.84	87	eP	36	40.00	0.0
NANU	18.89	218	eP	36	40.00	-0.5
CAN	33.35	148	eP	38	47.30	-7.3X
	S.D. = 1.1	on	6 of	10	obs.	

SEP 30, 1990 18h 54m 25.07± 0.31s
45.641 N ± 3.2km 26.430 E ± 3.3km
DEPTH = 77.2 ± 4.0 km
4.4mb (30 obs.)
ROMANIA (358)
Felt (V) in the Vrancea region.

CVO	0.26	315	iPc	54	36.50	-0.5
			e	17	04.00	
VRI	0.31	42	iPd	54	37.50	0.2
MLR	0.37	247	iPd	54	36.50	-1.4
BRD	0.45	106	iPd	54	39.50	1.2
BAC	0.98	19	iPc	54	46.00	2.0
CMP	1.05	250	iPc	54	44.00	-0.9
MTUR	1.05	247	iPc	54	46.50	1.6
CLI	1.09	33	iPc	54	46.00	0.7
			e	17	00.00	
BUC	1.25	191	eP	54	50.00	2.6
PTT	1.29	359	iPd	54	48.00	0.0
CFR	1.30	110	iPd	54	47.00	-0.9
BUC1	1.32	193	ePd	54	48.50	0.2
TNR	1.51	271	ePc	54	50.00	-0.9
TLB	1.55	132	iPd	54	51.50	0.2
IAS	1.74	26	ePc	54	54.50	0.6
DRA	1.81	239	iPc	54	56.00	1.1
PSN	2.32	147	iPd	55	02.00	0.1
DEV	2.48	277	iPd	55	05.00	0.9
PVL	2.55	198	iPd	55	07.00	2.0
BMR	2.87	316	iPd	55	10.00	0.6
JMB	3.18	178	iPd	55	13.00	-0.7
BZS	3.38	271	iPc	55	15.50	-1.0
			e	17	19.50	
CEI	3.41	308	eP	55	22.00	5.0X
PGB	3.49	209	iPd	55	19.00	0.8
DIM	3.65	191	eP	55	20.00	-0.3
TIM	3.65	273	ePc	55	41.50	21.2X
PLD	3.75	200	iPd	55	10.00	-11.7X
			iSg	55	36.00	
VTS	3.83	218	iPc	55	22.00	-1.0
KDZ	4.06	191	iPd	55	26.00	-0.1
			iS	55	57.00	
KKB	4.48	214	eP	55	31.00	-1.0
RDO	4.54	189	eP	55	32.20	-0.6
ITU	4.91	157	ePn	55	32.00	-5.9X
			iSg	56	31.00	
PSZ	5.03	299	iPn	55	38.40	-1.4
SKO	5.15	226	iPn	55	39.80	-1.5
	1.1s	146.00nm			5.1mb	
			iSn	56	34.80	
			Lg	57	46.00	
GBZT	5.33	155	iPgd	55	46.00	2.2
GBZT	5.33	155	ePg	56	42.00	58.2X
BUD	5.43	292	iPd	55	43.60	-1.6
	0.8s	1.23nm			3.2mb X	
PVY	5.56	239	ePn	55	47.00	-0.1
			eSn	56	46.50	
PLG	5.70	204	eP	55	48.20	-0.8
SRO	5.99	294	iP	55	51.40	-1.6
			i	55	51.90	
			i	56	07.50	
			i	17	25.70	
TTG	6.08	241	ePn	55	54.30	0.0
			eSn	57	00.20	
OHR	6.11	224	iPn	55	53.80	-0.9
KRA	6.21	318	ePc	55	55.20	-0.8
			i	55	57.70	
			e	56	03.60	
KZN	6.33	214	eP	55	57.70	-0.1
PRK	6.39	181	eP	55	57.20	-1.4
BDV	6.43	241	ePn	56	01.10	2.0
			eSn	57	09.50	
HCY	6.55	244	ePn	56	01.20	0.5
			eSn	57	10.00	
KAS	6.83	126	eP	56	02.00	-2.7
ZST	6.88	295	iP	56	03.60	-1.7
			i	56	11.00	
SOP	7.09	290	iPc	56	07.20	-1.0
VKA	7.40	294	ePd	56	11.00	-1.5
			iPP	56	19.30	
			iS	58	08.10	
BBTK	7.43	139	eP	56	11.00	-2.0
EVR	7.54	209	eP	56	13.50	-1.0
ATH	7.93	196	eP	56	20.50	0.8
SMG	7.93	178	eP	56	18.50	-1.3
CIN	8.13	171	eP	56	21.00	-1.5
LJU	8.32	277	e(P)	56	25.50	0.4
			e(S)	57	52.50	
CEY	8.41	275	e(P)	56	27.30	1.0
KSP	8.53	311	eP	56	26.00	-2.0
	0.8s	50.00nm			5.3mb	
			ic	56	35.20	
VOY	8.76	277	eP	56	30.80	-0.5
KMR	8.77	290	e(P)	56	31.00	-0.3
			i	56	53.50	
TRI	8.87	275	ePc	56	33.30	0.7

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ITM     9.10 203 eP     56 38.70   2.9
PRU     9.10 303 P      56 34.80  -1.0
                e       56 42.50
VLI     9.29 198 eP     56 37.70  -0.7
KHC     9.39 296 iP     56 38.90  -0.9
                e       56 46.20
BRG     9.83 307 eP     56 46.00   0.3
      1.0s    20.00nm          5.1mb
                i       56 54.50      -
                i       57 03.40
WET     9.83 296 eP     56 44.80  -1.0
WATA   10.39 285 e(P)   56 53.00  -0.4
      1.0s    44.60nm          5.4mb X
                i       56 56.50
CLL    10.56 307 eP     56 54.00  -1.6
                i       57 03.20
SOTA   10.63 284 iPc    56 57.20   0.5
      1.3s    44.40nm          5.3mb
                i       57 05.50
                i       57 12.80
OGA    10.74 282 eP     57 00.90   2.6
HOF    10.81 301 iPd    56 58.50  -0.5
      0.8s    16.00nm          5.0mb
GRF    11.03 297 ePc    57 01.70  -0.2
                e       57 09.60
MOX    11.09 302 eP     57 03.00   0.3
BSF    13.65 286 eP     57 37.40   0.9
      1.1s    14.65nm          4.4mb
HAU    13.95 207 eP     57 40.30  -0.1
    Z  22s     0.08um
FRF    14.25 269 eP     57 49.60   5.4X
      1.0s    20.00nm          4.4mb
WTS    14.38 303 eP     57 52.50   6.6X
      1.0s    15.00nm          4.2mb
LMR    14.41 268 eP     57 50.70   4.4X
      1.3s    89.70nm          4.9mb
LRG    14.48 268 eP     57 52.60   5.4X
      0.9s    16.40nm          4.3mb
ENN    14.59 298 eP     57 55.50   6.9X
      1.0s    19.00nm          4.3mb
NUR    14.93 357 iPKP   57 47.00  -5.9X
      0.7s    37.40nm          4.7mb
                i       57 56.30
UPP    15.18 343 iP     57 52.60  -3.5X
                i       00 30.50
DOU    15.30 295 P      58 02.30   4.6X
LBF    15.57 283 eP     58 03.80   2.6
LOR    15.63 284 eP     58 04.30   2.3
      1.3s    19.85nm          4.1mb
    Z  19s     0.08um          5.0Msz
SMF    15.68 282 eP     58 03.90   1.3
      0.9s    13.90nm          4.1mb
SSF    15.89 283 eP     58 07.20   2.0
      0.9s     9.85nm          4.0mb
AVF    16.01 282 eP     58 08.80   2.1
      1.3s    19.45nm          4.1mb
BGF    16.38 282 eP     58 13.20   1.9
      1.0s    18.00nm          4.2mb
HFS    16.38 337 eP     58 05.00  -6.2X
      0.6s     9.90nm          4.2mb
    Z  18s     0.08um          6.0Msz
                LR      01 27.00
SUF    17.11 360 ePKP   58 14.00  -6.4X
CAF    17.15 276 eP     58 23.80   2.8
RJF    17.46 278 eP     58 25.80   1.0
      0.8s     8.05nm          4.0mb
    Z  22s     0.05um          6.3Msz
LPO    17.81 276 eP     58 29.40   0.3
NB2    17.82 335 P      58 24.60  -4.6X
      0.7s    11.40nm          4.2mb
LFF    18.07 277 eP     58 33.20   1.0
      1.1s    34.20nm          4.5mb
LDF    18.28 289 eP     58 33.40  -1.4
      1.1s    31.75nm          4.5mb
MFF    18.42 283 eP     58 35.40  -1.1
      1.1s    43.95nm          4.6mb
FLN    18.51 289 eP     58 35.80  -1.8
      1.0s    20.00nm          4.3mb
    Z  22s     0.08um          4.1Msz
GRR    18.77 288 eP     58 37.70  -2.9
LPF    18.91 287 eP     58 40.40  -1.7
EKA    21.03 308 Pd     59 03.60  -0.5
      0.8s     9.30nm          4.2mb
SOD    21.79   0 iPKP   59 11.70   0.2
TOL    23.02 266 eP     59 24.00   0.1
ASMO   23.96 261 eP     59 35.20   2.1
APHE   24.12 260 eP     59 34.50  -0.3

ACHM   24.14 260 eP     59 33 50  -1.4
KEV    24.18   0 ePKP   59 35.00   0.2
      0.6s    22.20nm          4.8mb
AAPN   24.24 261 eP     59 35.00  -0.9
ALOJ   24.33 260 eP     59 39.70   2.9
ATEJ   24.37 260 eP     59 36.20  -0.9
BCAO   41.62 192 ePd    02 06.90  -0.2
      0.4s     3.00nm          4.5mb
LKO    45.24 227 P      02 32.76  -3.7X
      0.4s     4.50nm          4.7mb
TIC    47.43 225 P      02 53.70   0.0
KIC    47.54 224 P      02 53.60  -0.9
LIC    47.80 224 P      02 55.50  -1.0
GKN    48.73  90 P      03 04.60   0.8
DMN    49.30  90 P      03 09.20   0.9
KKN    49.31  90 P      03 08.80   0.4
PKI    49.53  90 P      03 10.60   0.4
GUN    49.65  90 P      03 11.80   0.6
GBA    53.43 110 Pd     03 37.70  -1.5
      0.7s     2.40nm          4.3mb
YKA    67.80 342 eP     05 15.60  -0.6
      0.8s     1.40nm          3.9mb
TWZ    75.91  69 ePc    05 56.70  -8.2X
TWK    76.45  71 ePc    06 10.00   1.9
TWD    76.62  69 ePc    05 52.40 -16.5X
     S.D. = 1.3  on 109 of 128 obs.
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   SEP  30, 1990  19h 05m 02.46± 0.12s
   24.248 N ± 2.5km  125.215 E ± 2.6km
   DEPTH =  35.0km  (geophysicist)
   5.9mb ( 71 obs.)  6.2Msz ( 26 obs.)
 SOUTHWESTERN RYUKYU ISLANDS      (246)
      Ms 5.8 (BRK). Depth from
      broadband displacement
      seismograms.
      FAULT PLANE SOLUTION: P-Waves
       NP1:Strike= 36 Dip=85 Slip=  80
       NP2:        280      11      153
       Principal Axes:
        T                 Plg=49  Azm=295
        P                    39       135
      Comment: The focal mechanism is
        poorly controlled and
        corresponds to reverse
        faulting with a small right-
        lateral strike-slip component.
        The preferred fault plane is
        NP2.
      RADIATED ENERGY
       No. of sta:   6  Focal mech.  F
       Energy        8.9±3.4*10**12 Nm
      MOMENT TENSOR SOLUTION
      Dep  12              No. of sta: 11
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 0.30        Mtt=-0.09
        Mff=-0.21        Mrt= 0.87
        Mrf= 1.25        Mtf=-0.22
       Principal axes:
        T  Val=  1.52  Plg=51  Azm=304
        N        0.08      1       35
        P       -1.60     39      126
      Best Double Couple:Mo=1.6*10**18
       NP1:Strike=222 Dip= 6 Slip=  97
       NP2:       35     84       89
      CENTROID, MOMENT TENSOR     (HRV)
      Data Used: GDSN
      L.P.B.: 14S, 33C
      Centroid Location:
      Origin Time        19:05: 4.9 0.2
      Lat 24.15N 0.03 Lon 125.02E 0.04
      Dep  20.7 2.0 Half-duration  4.9
      Moment Tensor;   Scale 10**18 Nm
        Mrr= 0.90 0.03   Mtt=-0.41 0.04
        Mff=-0.48 0.04   Mrt= 0.83 0.10
        Mrf= 1.21 0.14   Mtf=-0.81 0.03
       Principal Axes:
        T  Val=  1.66  Plg=62  Azm=294
        N        0.33      7       37
        P       -1.99     27      131
      Best Double Couple:Mo=1.8*10**18
       NP1:Strike=238 Dip=19 Slip= 112
       NP2:       35     72       83

ANP     3.49 286 iPc    05 58.00   2.3
                iS      06 50.00
SSE     7.70 333 iPd+   06 54.50  -0.5
      0.8s   120.00nm          6.0mb
      N  13s    139.20um
      E  14s    143.50um
                Lg      09 02.00
KAGJ    8.55   35 eP     07 04.40  -2.4X
BAG     8.93  210 eP     07 10.00  -2.2X
KUMJ    9.62   30 P      07 17.50  -4.1X
QCP    10.32  203 eP     07 33.00   1.7
HKC    10.33  261 iP     07 30.20  -1.2
MCO    10.93  261 eP     07 37.80  -1.8
SHNJ   11.10   26 eP     07 44.00   2.1
WKYJ   13.44   40 P      08 14.90   1.7
MTMJ   16.38   38 eP     08 54.20   2.7X
MAJO   16.59   39 ePc    08 56.31   2.3
                iS      12 09.07
                e       12 14.20
MAT    16.59   39 iPd    08 55.70   1.7
      1.3s   596.15nm          5.6mb
                eS      12 07.00
CHJJ   16.72   42 P      08 58.50   2.8X
                S       12 15.60
DAV    17.07  179 eP     09 01.00   0.9
BJI    17.49  336 iPc    09 06.33   1.1
    Z  12s     35.10um
    N  13s     79.70um
                e       09 16.09
                eS      12 22.61
                esS     12 35.36
NIIJ   17.53   39 eP     09 05.70   0.0
KAKJ   17.56   44 P      09 06.20   0.1
                S       12 23.90
YAMJ   18.76   39 eP     09 18.60  -2.4X
KKM    20.06  207 ePc    09 36.50   0.7
      1.3s   162.90nm          5.2mb
OFUJ   20.32   39 eP     09 35.50  -2.7X
KMI    20.44  277 ePc    09 40.98   1.1
    Z  20s     73.60um          6.0Msz
    N  14s     16.00um
    E  11s      5.70um
                e       09 50.58  37kmX
                eS      13 29.93
                e       13 38.53
GUMO   21.37  116 ePd    09 48.22  -1.0
PJG    21.37  116 eP     09 50.00   0.8
                TT      31 03.00
GUA    21.44  116 ePd-   09 50.20   0.4
      1.5s  4111.11nm          6.6mb
    Z  22s     44.33um          5.8Msz
                eS      13 48.50
LZH    21.87  308 ePc    09 54.03  -0.2
      1.0s   427.00nm          5.8mb
    Z  22s     79.80um          6.1Msz
    N  16s     46.00um
    E  13s     72.20um
                e       10 00.48  23kmX
                PP      10 00.60
                sP      10 05.00
                PP      10 20.00
                S       13 47.00
                sS      13 58.00
                SS      14 22.00
MNI    22.67  181 eP     10 01.00  -1.1
LOE    22.96  257 eP     10 06.50   1.6
SAP    22.99   31 eP     10 05.00   0.0
                eS      14 12.00
HOOJ   23.48   35 eP     10 10.60   0.9
                S       14 24.60
PCT    24.34  251 eP     10 20.50   2.2
ASAJ   24.42   31 eP     10 17.50  -1.3
                eS      14 39.50
KUSJ   24.73   36 eP     10 22.30   0.5
CHG    25.01  263 ePc    10 24.30  -0.5
      0.8s    97.39nm          5.4mb
                eS      14 40.00
CHTO   25.01  263 iPc    10 25.35   0.6
                e       10 35.95  40kmX
NST    25.04  255 eP     10 27.00   2.0
HIA    25.34  352 ePc    10 25.46  -2.2
                id      10 36.05  40kmX
                eS      14 48.30
BDT    25.46  259 eP     10 25.10  -3.8X
      0.9s   163.50nm          5.6mb
YSS    26.69   27 iPc    10 39.00  -1.0
                eS      15 10.00
NNT    26.76  249 eP     10 40.80  -0.2
AAI    27.92  174 eP     10 52.00   0.5
IPM    30.41  234 ePc    11 15.00   1.1
      0.7s    43.60nm          5.4mb
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30d 19h

KGM		30.60	227	eP	11	16.80	1.2	TOO		64.38	162	eP	15	37.50	0.3					S	27	20.00							
IRK		32.20	336	iPc	11	27.00	-2.3					i	15	45.40	25kmX					SP	28	24.00							
				eS	16	44.00		IMA		64.51	27	P	15	36.70	-1.2					SS	32	44.00							
TRT		34.05	203	ePc	11	45.20	-0.4	KDC		65.77	36	eP	15	44.80	-1.1					SSS	36	28.00							
KUPT		34.22	183	ePd	11	35.00	-12.1X	BRF		66.67	289	(P)	15	52.10	0.0	NB2		79.86	333	P	17	07.30	-1.5						
		0.9s		42.50nm				BJA		66.67	289	iP	15	51.70	-0.4			1.2s		160.90nm			5.9mb						
GUN		35.42	285	P	11	57.80	0.0			0.5s		65.00nm		6.0mb		BMR		79.88	318	ePc	17	10.00	0.9						
PKI		35.85	284	P	12	00.40	-1.0	BBU		66.73	289	iP	15	52.50	-0.1	CMP		79.91	315	ePc	17	07.00	-2.4						
KKN		35.95	284	P	12	01.20	-0.9			0.3s		49.00nm		6.1mb		JMB		80.02	312	iPc	17	11.00	1.0						
DMN		36.12	284	P	12	02.80	-0.8	SVA		66.84	124	eP	16	01.00	7.7X	TNR		80.24	316	ePc	17	11.00	-0.1						
WMO		36.31	312	ePc	12	04.16	-0.6	PMR		66.94	31	eP	15	52.00	-1.3	PVL		80.55	313	iPc	17	14.00	1.2						
				epPd	12	14.26	34kmX			2.1s		216.88nm		5.9mb		DIM		80.90	312	iP	17	16.00	1.4						
				ePP	13	20.88			Z	20s		3.50um		5.6Msz		KRA		80.95	321	iPc	17	15.10	0.3						
GKN		36.51	285	P	12	05.80	-0.9	DHR		66.98	290	iP+	15	53.50	-0.7			1.0s		112.00nm			5.8mb						
MTN		37.32	170	eP	12	12.00	-1.3	COL		67.06	28	iPc	15	53.57	-0.5		Z	22s		13.30um			6.2Msz						
PET		38.22	33	eP	12	20.00	-0.5					ipPd	16	06.48	45kmX		E	22s		15.60um									
				eS	18	10.00						eS	24	48.12						e	17	17.70	8kmX						
RAB		38.57	134	iP-	12	24.00	0.1					esS	25	00.86						i	17	26.50							
				iS	18	20.00						eSKS	25	47.38						eS	27	30.00							
PMG		39.72	145	eP	12	33.00	-0.5					esSKS	26	00.35		DEV		81.01	316	eP	17	16.00	0.9						
KNA		39.90	175	iPc	12	34.80	-0.1	FBA		67.06	28	eP	15	53.30	-0.7	KDZ		81.14	312	iPc	17	17.00	1.0						
NDI		42.97	287	iPc	13	00.50	0.4			2.1s		399.10nm		6.1mb		SPC		81.17	320	eP	17	15.70	-0.5						
		1.0s		350.00nm			6.0mb	TAB		67.07	303	iPc+	15	55.00	0.2	RDO		81.27	311	eP	17	16.80	0.2						
TLG		43.40	308	iP	13	06.00	2.5X	TOA		68.24	30	eP	16	02.40	0.8	KONO		81.29	332	iPc	17	16.53	0.2						
				iS	19	22.00		BKR		68.32	307	iPc	16	04.00	1.4					epPd	17	26.13	30kmX						
HYB		43.98	270	iPc	13	08.80	0.4					iS	25	09.00		PLD		81.44	312	eP	17	08.00	-9.4X						
		1.0s		110.00nm			5.6mb	APA		68.56	336	iPc	16	02.10	-1.3	HLW		81.45	299	eP+	17	18.00	0.3						
WB5		44.76	168	eP	13	13.20	-1.4					iS	25	01.50						e	20	28.00							
FRU		45.34	307	iPc	13	19.00	-0.1	OBN		69.70	322	iPc	16	08.40	-2.2					e	22	18.00							
				eS	20	00.00				1.1s		250.00nm		6.2mb						eS	26	30.00							
MBL		45.44	187	eP	13	18.00	-1.9		Z	20s		23.00um		6.4Msz		PRK		81.54	309	eP	17	18.50	0.5						
GBA		46.22	266	P	13	26.90	0.6					eS	25	14.00		SMG		81.76	308	eP	17	20.00	0.8						
SMY		46.43	39	eP	13	29.80	2.3	KEV		70.28	339	iP	16	13.00	-0.8	PSZ		81.95	319	iP	17	20.30	0.2						
OIS		46.69	161	iP	13	29.40	-0.4			0.9s		76.00nm		5.7mb		COP		82.16	328	iPc+	17	22.00	1.1						
SVO		47.36	130	eP	13	34.00	-1.2	RYD		70.50	289	iP+	16	15.10	-0.9		Z	15s		22.00um			6.6MszX						
TIK		47.46	2	iP	13	33.00	-2.3	KBS		70.68	349	eP	16	15.60	-0.6					i	17	37.70	55kmX						
				eS	20	22.00		SOD		71.11	336	iP	16	18.30	-0.6					eS	27	36.00							
NANU		47.47	192	eP	13	36.00	0.0	INK		71.77	23	eP	16	22.50	-0.4					i	37	34.00							
HNR		47.65	130	eP	13	36.00	-1.5			0.9s		134.00nm		5.9mb		VTS		82.23	313	iP	17	22.00	0.2						
POO		47.95	274	iPc	13	39.30	-0.7	PUL		71.77	328	eP	16	22.00	-1.0	KAP		82.40	305	eP	17	24.50	1.9						
		1.0s		138.00nm			5.9mb					eS	25	36.00		AMAN		82.44	293	iPc	17	25.00	2.0						
ASPA		48.37	169	iPd	13	42.20	-0.8	OASM		72.70	291	iP+	16	15.10	-14.1X	ASK		82.61	334	eP	17	24.00	0.9						
		1.6s		57.20nm			5.4mb	SUF		72.77	332	iP	16	27.60	-1.3	BER		82.61	334	eP	17	26.00	2.8X						
	Z	24s		6.49um			5.5MszX			0.8s		111.10nm		5.9mb		KKB		82.63	313	iPd	17	23.00	-0.7						
				iS	20	40.80		TRO		72.97	339	eP	16	29.00	-0.9	KSP		82.64	323	iPc	17	24.50	1.0						
				eScS	23	15.90		AFIF		73.65	289	eP+	16	35.30	0.5			1.0s		70.00nm			5.7mb						
CTA		48.60	153	iPd-	13	45.50	0.7	KMSA		73.77	285	eP+	16	43.10	7.6X					i	17	34.80	33kmX						
		1.6s		260.00nm			6.0mb	SIM		74.03	312	eP	16	37.00	0.4					e	20	28.70							
				iS	20	46.00						eS	18	26.00		AGRW		82.66	293	iPc	17	25.00	0.9						
WARB		50.15	178	eP	13	56.50	-0.1	NUR		74.21	330	eP	16	36.00	-1.2	BUD		82.68	319	eP	17	24.80	1.0						
MEKA		50.97	188	eP	14	02.00	-0.9			0.8s		88.00nm		5.8mb		BLS3		82.71	333	eP	17	25.00	1.1						
OUE		51.68	290	iPc	14	08.90	0.3	KAS		75.43	309	iPd	16	45.60	0.8	AGAL		82.73	292	iPc	17	26.00	1.5						
		1.0s		1140.00nm			6.8mb	SRAT		75.77	284	eP+	16	48.10	0.8	AKRL		82.74	293	iPc	17	25.00	0.5						
				eS	21	29.70		KMTA		75.99	284	iP+	16	49.20	0.7	PLG		83.03	311	eP	17	25.70	-0.2						
ADK		51.72	42	eP	14	07.00	-1.3	BHL		76.55	301	P	16	52.00	0.7	ZST		83.47	320	eP	17	28.80	0.9						
MRWA		53.89	190	eP	14	30.00	5.4X					S	26	38.00		BRN		83.49	325	eP	17	29.00	1.2						
FORR		54.85	177	eP	14	32.00	0.4	ANTO		76.64	308	iPc	16	51.70	0.0	NEO		83.65	310	eP	17	17.20	-11.8X						
		0.4s		15.00nm			5.4mb					ipPd	17	01.47	31kmX	NPS		83.68	306	eP	17	30.00	0.8						
COOL		54.96	184	eP	14	32.00	-0.4					eHPP	19	46.82		SKO		83.68	313	eP	17	28.60	-0.5						
ILT		55.20	22	iPc	14	33.00	-0.8					iPP	19	47.32			Z	19s		14.02um			6.4Msz						
RMQ		55.33	154	eP	14	33.00	-2.2					eHpPP	19	55.60			N	18s		6.71um									
KLB		55.98	188	eP	14	40.00	0.2					ipPP	19	56.76			E	19s		9.82um									
MAIO		57.05	299	iPd	14	47.50	-0.2	BBTK		76.67	308	eP	16	52.00	0.1					i	17	29.80	4kmX						
				eS	23	12.00		HRI		76.70	301	eP	16	58.00	5.8X					i	17	40.20							
NWAO		57.36	188	eP	14	50.00	0.4	SHMJ		76.87	300	Pd	16	56.80	3.8X					i	20	54.00							
BRS		57.82	151	iP	14	52.50	-0.4	BURJ		77.01	300	Pc	16	55.00	1.1					i	24	13.00							
STK		57.97	164	iPc	14	53.20	-0 7	ZNT		77.62	300	iPc	17	02.80	5.6X					i	27	18.00							
		0.8s		20.00nm		5	2mb	UPP		77.68	331	iP	16	55.20	-1.6					iS	27	48.50							
				i	15	01.30	27kmX					i	26	43.00						i	33	25.00							
				i	17	09.30		CSS		77.98	303	eP	16	59.00	-0.1					i	39	00.00							
CMS		58.82	159	eP	15	00.00	0.1	TL8		78.22	314	ePc	17	00.00	-0.1					LR	39	49.50							
ANM		59.54	28	eP	15	04.70	0.2	PSN		78.46	313	iPd	17	03.00	1.5	ATH		83.89	309	eP	17	30.00	-0.2						
COO		60.22	154	eP	15	10.00	0.5	ARO		78.47	278	iP+	17	03.00	0.9					eS	29	00.00							
ADE		60.26	167	iPc	15	10.00	0.2	WAJH		78.55	294	iP+	17	03.30	1.0	VKA		83.90	321	iPc	17	31.10	1.1						
		1.0s		74.00nm			5.8mb	VRI		78.58	315	iPd	17	02.00	-0.1			4.0s		1851.00nm			6.6mb X						
DZM		61.04	136	iPc	15	14.90	-0.4	MBH		78.63	298	iPc	17	08.00	5.3X		Z	18s		7.50um			6.1Msz						
BWA		62.37	158	eP	15	26.00	1.9	HOL		78.68	297	iP+	17	03.70	0.7					ipP	17	43.90	43kmX						
				i	15	33.70	25kmX	PPCY		78.76	303	eP	17	03.00	-0.3					LR	01	11.00							
BFD		63.24	165	eP	15	30.00	0.4	ITU		78.87	310	iPc	17	04.00	0.2	BRG		83.91	324	iPc	17	30.60	0.6						
				e	15	38.00	26kmX	BADA		78.99	296	iP+	17	05.50	0.8			2.4s		480.00nm			6.2mb						
CAN		63.38	158	eP	15	31.90	1.2	HFS		79.28	332	eP	17	04.00	-1.6					ipP	17	43.50	43kmX						
				i	15	39.80	25kmX			1.0s		146.80nm		5.9mb						i	20	27.60							
CNB		63.50	158	eP	15	31.00	-0.5		Z	16s		22.57um		6.6MszX						iSKS	27	48.00							
				i	15	40.00	29kmX					LR	49	20.00						i	28	52.00							
TTA		63.61	30	eP	15	30.70	-1.3	JNW		79.64	346	eP	17	09.50	2.1					e	38	20.00							
TEH		63.62	299	eP	15	20.00	-12.6X	SNZO		79.74	144	P	17	16.00	7.7X	PRU		84.04	323	iPc	17	31.50	0.8						
SVW		63.87	32	eP	15	33.60	-0.1					PP	20	20.00				2.7s		514.70nm			6.2mb						

	Z	18s	18.90um		6.5Msz				e	21	10.20		VITF	89.69	324	P	18	09.68	11.5X
	N	17s	8.10um			TNS	87.19	325	ePc	17	47.90	1.5	PII	89.72	319	P	17	59.60	1.1
	E	19s	14.40um			VVI	87.35	320	P	17	46.00	-1.2	MMK	89.89	322	ePc	18	00.10	0.5
			e	17	44.20 42kmX	SOTA	87.38	321	iPc	17	47.40	-0.1	WDC	89.92	45	ePd	17	59.90	0.4
			PP	20	54.00		1.2s	70.30nm			5.8mb		ORX	90.12	321	P	17	59.30	-1.2
			SKS	27	52.00				i	17	57.90	33kmX	DIX	90.18	322	ePc	18	01.30	0.3
SOP	84.05	320	ePc	17	31.80 1.0				i	20	50.30		PCP	90.43	320	P	18	01.46	-0.4
CLL	84.18	324	iPc	17	31.40 0.0				i(PP)	21	01.30		SES	90.62	32	eP	18	02.00	-0.6
	2.7s	670.00nm			6.3mb				i	21	10.30			1.1s	119.00nm				6.1mb
	Z	18s	28.50um		6.7Msz	OGA	87.68	321	iPc	17	49.50	0.5	MIN	90.65	45	eP	18	03.80	0.7
			i	17	44.10 42kmX	EDM	87.71	31	eP	17	49.50	0.7	RSP	90.82	321	P	18	02.69	-1.0
			eSKS	27	52.00	DBN	87.73	328	eP+	17	48.00	-0.8	FIN	90.82	320	P	18	03.20	-0.4
KZN	84.21	312	eP	17	30.50 -1.4		Z	14s	20.10um		6.7MszX		LPG	90.90	322	eP	18	03.50	-0.8
PLE	84.40	315	eP	17	33.20 0.4				ePP	21	14.00			0.9s	102.35nm				6.2mb
OHR	84.50	313	iP	17	31.20 -2.1				eSKS	28	19.00		LPL	90.90	322	eP	18	03.40	-0.8
	1.3s	219.00nm			6.2mb				eSP	29	44.00		ROB	90.97	320	P	18	03.61	-0.8
			i	17	44.10 43kmX				eSS	34	44.00		ORV	91.14	45	eP	18	05.30	0.1
			i	17	55.70				eSSS	38	10.00		IMI	91.18	320	P	18	04.94	-0.4
VAM	84.66	306	eP	17	35.00 0.9	CTI	87.77	320	P	17	49.00	-0.3	BNI	91.21	321	Pc	18	05.60	0.0
EVR	84.81	310	eP	17	34.50 -0.4	ORI	87.91	313	P	17	51.00	1.0	DOI	91.21	321	P	18	04.10	-1.4
NKY	84.90	315	eP	17	35.20 -0.1	ENN	88.17	326	eP	17	51.00	0.0	RRL	91.22	321	P	18	05.66	-0.1
TTG	84.91	314	eP	17	35.70 0.5		1.0s	71.00nm			5.9mb		ENR	91.27	320	P	18	03.92	-1.9
			e(S)	27	58.00				e	18	02.00	35kmX	PZZ	91.29	321	P	18	04.53	-1.4
VLI	85.00	308	eP	17	34.60 -1.2	TDS	88.19	313	P	17	52.52	1.2	PGF	91.31	318	eP	18	05.00	-1.0
KHC	85.02	322	iPc	17	36.50 0.8		2.4s	232.00nm			6.1mb			1.0s	46.00nm				5.8mb
	Z	19s	3.70um		5.8Msz	MEM	88.23	326	P	17	52.30	1.1	STV	91.31	321	P	18	04.12	-1.9
	N	21s	9.00um						e	18	02.70	32kmX	LOR	91.40	324	eP	18	05.00	-1.2
	E	21s	8.00um			OSS	88.29	321	ePc	17	52.30	0.4		1.0s	26.00nm				5.6mb
			e	17	48.10 38kmX	GWF	88.36	324	P	18	03.50	11.5X		Z	21s	15.50um			6.4Msz
			S	28	00.00	ARV	88.38	318	P	17	52.30	0.1	SBF	91.47	320	eP	18	05.30	-1.4
ULC	85.14	314	eP	17	36.40 0.0	DUI	88.39	315	P	17	51.40	-1.0		0.8s	64.50nm				6.1mb
BRY	85.15	315	eP	17	36.50 -0.1	SAX	88.42	322	ePc	17	52.70	0.0	LBF	91.51	324	eP	18	05.70	-1.1
BDV	85.26	314	eP	17	36.50 -0.5	DPW	88.46	37	P	17	52.80	0.2		0.9s	24.55nm				5.6mb
KMR	85.26	321	iP+	17	38.30 1.4	MGR	88.47	314	P	17	52.10	-0.5	FFC	91.56	25	iPd	18	07.00	0.2
			ipP	17	51.00 42kmX	STR	88.51	324	P	18	03.86	11.2X		0.7s	37.00nm				5.9mb
MOX	85.28	324	iPc+	17	37.50 0.6	GRI	88.56	312	P	17	54.15	1.0	BKS	91.57	47	eP	18	10.40	3.2X
	2.4s	465.00nm			6.3mb		0.1s	11.20nm			6.1mb			0.9s	44.00nm				5.9mb
	Z	17s	23.10um		6.6MszX	SLE	88.59	323	ePc	17	53.10	-0.1		Z	20s	3.60um			5.8Msz
	N	17s	13.10um			BSS	88.62	315	P	17	53.30	-0.1		N	20s	1.40um			
	E	17s	12.30um			SAL	88.67	320	Pc	17	53.60	0.1		E	20s	3.00um			
ZAG	85.32	319	iPc	17	38.00 0.8	ASS	88.78	317	P	17	53.70	-0.5				eS	29	08.00	
HOF	85.32	324	eP	17	37.50 0.3	SDI	88.78	316	Pc	17	53.80	-0.4				eSS	35	12.00	
	Z	16s	23.00um		6.7MszX	VDL	88.78	321	ePc	17	54.60	0.3				eLR	47	10.00	
HCY	85.40	315	eP	17	37.20 -0.5	SFI	88.81	318	P	17	55.70	1.5	PCC	91.67	47	eP	18	07.90	0.3
WET	85.40	322	eP	17	37.50 -0.1	ZLA	88.82	323	ePc	17	54.70	0.4	SSF	91.72	324	eP	18	07.00	-0.7
	Z	18s	19.00um		6.5Msz	NEW	88.82	36	P	17	54.00	-0.3		1.0s	14.00nm				5.3mb
			eS	28	01.00		0.9s	65.79nm			6.0mb		SMF	91.80	324	eP	18	07.00	-1.1
ITM	85.52	309	eP	17	37.30 -1.1	LLS	88.83	322	ePc	17	54.70	0.2		1.0s	46.00nm				5.9mb
KEK	85.83	312	eP	17	39.70 -0.2	AZI	88.87	316	P	17	55.00	0.5	AVF	91.97	324	eP	18	07.90	-0.9
VBY	85.92	318	ePd	17	42.60 2.4X	CDF	88.88	324	eP	17	53.40	-1.2		1.1s	32.95nm				5.7mb
			i	17	52.60 31kmX		1.1s	124.55nm			6.1mb		FRF	92.11	320	eP	18	08.30	-1.3
VLS	86.00	310	eP	17	40.50 -0.3	CRE	88.91	318	P	17	55.40	0.5		1.0s	68.00nm				6.0mb
GRF	86.02	324	eP	17	41.40 0.8	PGD	88.92	318	P	17	57.10	2.1	ARN	92.32	47	P	18	11.00	0.3
	1.8s	190.00nm			6.0mb	UCC	88.94	327	P+	17	55.00	0.3	LMR	92.33	320	eP	18	09.50	-1.0
	Z	18s	22.00um		6.6Msz				e	18	08.00	43kmX		0.9s	45.85nm				5.9mb
			e	17	43.80 8kmX				PP	21	23.00		LRG	92.34	320	eP	18	09.80	-0.8
			e	17	51.50				SKS	28	26.00			0.9s	80.25nm				6.2mb
GMW	86.06	39	P	17	40.80 -0.1				iS	28	40.00		BGF	92.39	324	eP	18	10.00	-0.8
AKU	86.06	346	eP	17	40.90 0.4	MDI	89.05	321	P	17	53.00	-2.3	ETA	92.50	333	eP	18	13.80	2.7X
	1.3s	123.08nm			6.0mb	NAI	89.07	268	eP	17	59.00	2.8X		1.0s	58.00nm				6.0mb
	Z	20s	13.48um		6.3Msz	MNS	89.14	317	P	17	53.70	-2.2	LDF	92.59	327	eP	18	10.70	-0.9
			i	17	53.60 42kmX	SNF	89.15	327	P	17	56.00	0.3		1.0s	22.00nm				5.5mb
LJU	86.07	319	ePd	17	41.00 0.0				e	18	07.00	35kmX	FLN	92.65	327	eP	18	11.80	-0.1
BHG	86.16	321	iPc	17	42.10 0.7	SOI	89.18	312	Pc	17	56.40	0.4		0.9s	14.75nm				5.4mb
CEY	86.29	319	eP	17	42.40 0.3	DOU	89.26	326	P	17	54.40	-1.8		Z	19s	20.50um			6.6Msz
BMW	86.37	40	P	17	42.80 0.3		Z	18s	27.70um		6.7Msz		CMB	92.71	46	ePc	18	13.44	1.0
VOY	86.46	319	ePd	17	42.80 -0.2				e+	17	58.00	11kmX	MAF	92.75	324	eP	18	12.20	-0.3
WIT	86.57	328	eP	17	45.00 1.8				e	18	08.20			0.9s	18.85nm				5.5mb
			e	17	56.00 35kmX				PP	21	29.00		TCF	92.90	324	eP	18	12.80	-0.4
TRI	86.71	319	eP	17	43.40 -0.6				e	25	18.00		ECP	92.94	333	eP	18	15.10	2.0
GDH	86.77	360	iPd	17	54.80 10.9X				SKS	28	25.00			1.1s	82.00nm				6.1mb
	1.0s	60.00nm							S	28	46.00		ECB	92.98	333	eP	18	15.40	2.1
			e	21	20.00	MOF	89.29	324	P	18	06.95	10.4X		1.2s	88.00nm				6.1mb
			i	28	22.00	TMA	89.34	321	ePc	17	56.60	-0.3	LSF	93.28	325	eP	18	14.60	-0.3
LCI	86.78	313	P	17	42.80 -1.7	EKA	89.35	333	P	17	57.00	0.4	LPF	93.42	327	eP	18	15.50	0.1
FVI	86.82	320	Pc	17	44.50 0.0		1.7s	69.10nm			5.7mb			0.9s	36.05nm				5.8mb
FUR	86.82	322	iPc	17	45.70 1.1	MME	89.36	319	P	17	58.20	1.1	PRI	93.56	48	eP	18	17.70	1.2
PNT	86.86	36	eP	17	46.00 1.2	RMP	89.43	316	P	17	56.50	-0.7	FRI	93.73	47	eP	18	17.60	0.5
WTS	86.99	327	eP	17	46.00 0.7	RDP	89.45	316	P	17	56.80	-0.6	CAF	93.85	323	eP	18	17.60	0.0
	1.0s	52.00nm			5.7mb	BSF	89.48	324	eP	17	55.80	-1.7		0.9s	22.95nm				5.6mb
			e	17	57.00 35kmX		0.9s	32.75nm			5.6mb		RJF	93.90	324	eP	18	17.80	0.0
			ePP	21	19.00	BDI	89.49	319	P	17	56.20	-1.4		0.9s	40.95nm				5.9mb
LON	87.05	39	ePc	17	44.61 -1.2	VAI	89.54	321	P	17	56.70	-0.9		Z	19s	17.25um			6.5Msz
WATA	87.11	321	iPd	17	45.20 -1.0	ATN	89.54	312	P	17	59.90	2.1	PHAM	93.91	48	P	18	19.50	1.5
	1.2s	64.30nm			5.7mb	HAU	89 62	324	eP	17	56.50	-1.5	LPO	94.49	324	eP	18	20.40	-0.1
			i	17	56.70 37kmX		1.0s	48.00nm			5.7mb		LFF	94.56	324	eP	18	21.00	0.2
			e	20	50.50		Z	21s	13.50um		6.3Msz		VAL	94.71	334	iPKP	18	31.80	10.5X

30d 19h

			PPP	22	12.00	
			SKS	26	09.00	
TNP	94.73	45	P	18	22.20	0.2
SYP	94.92	49	eP	18	23.00	0.2
ABL	95.26	48	P	18	25.30	0.8
ISA	95.30	47	eP	18	27.00	2.5X
CLC	95.80	47	eP	18	27.00	0.2
DUG	96.18	41	P	18	29.60	1.0
SBB	96.30	48	eP	18	29 00	-0.1
BW06	96.39	37	P	18	29.40	-0.2
GSC	96.62	47	eP	18	31.00	0.4
RVR	97.00	48	eP	18	32.00	-0.1
PLM	97.72	48	eP	18	48.00	12.4X
BAR	98.24	49	eP	18	40.00	2.2
RSSD	98.38	33	P	18	39.40	0.9
ETOR	98.84	322	eP	18	49 00	8.6X
GLA	99.27	47	eP	18	56.00	13.5X
GUD	100.12	323	ePdiff	18	49.00	2.8X
TOL	100.59	323	ePdiff	18	49.00	0.8
			iPP	22	52.00	
			iPPP	25	48.00	
			eSKS	29	26.00	
			eS	30	25.00	
			ePS	31	55.00	
			iSS	37	50.00	
GOL	100.80	37	Pdiff	18	58.00	8.6X
	Z 20s		3.60um			5.9Msz
GLD	100.84	37	Pdiff	18	58.00	8.5X
	Z 20s		3.70um			5.9Msz
BCAO	103.29	281	ePdiff	19	17.50	16.7X
	0.6s		3.00nm			
			e	22	19.00	
			Lg	23	05.90	
BCAO	103.29	281	ePdiff	18	58.66	-2.1X
ANMO	103.43	41	Pdiff	19	10.00	8.9X
	Z 20s		2.66um			5.8Msz
ALQ	103.43	41	ePdiff	19	10.00	8.8X
	Z 18s		3.14um			5.9Msz
SLR	106.01	249	ePdiff	19	16.80	4.0X
SIO	108.57	35	e(PKP)	23	43.00	13.5X
TUL	108.71	34	ePKP	23	46.80	17.1X
	1.0s		4.00nm			
LKO	121.40	299	PKP	23	51.40	-3.1X
KIC	122.53	295	PKP	23	56.44	-0.2
TIC	122.60	296	PKP	23	56.48	-0.3
LIC	122.84	295	PKP	23	56.72	-0.5
	Z 20s		4.00um			6.1Msz
UPA	139.08	39	(PKP)	24	24.00	-4.1X
	Z 22s		3.70um			6.1Msz
TOV	143.13	25	ePKP	24	32.00	-3.4X
CAR	143.48	20	iPKP	24	28.00	-8.1X
LLAV	143.55	20	ePKP	24	30.00	-6.2X
OLLA	143.98	20	ePKP	24	34.00	-2.9X
BMG	144.12	32	iPKPd	24	35.00	-2.2
CEOS	144.38	23	ePKP	24	35.00	-2.6X
BOG	145.71	36	ePKP	24	40.50	0.3
PSO	146.56	44	ePKP	24	44.50	2.8X
SOB1	160.01	316	ePKP	25	11.00	11.2X
			e	25	38.40	
ARE	162.54	67	ePKP	25	19.00	16.5X
ZOBO	165.19	60	ePKPc	25	07.91	2.5X
LPB	165.36	61	PKP	25	08.00	2.6X
	Z 24s		5.43um			
			LR	24	20.00	
CNCB	165.60	62	PKP	25	08.20	2.5X
			i	26	13.00	
JFO	169.15	281	ePKP	25	23.80	16.3X
	S.D. = 1.0		on 327 of 388 obs.			

? SEP 30, 1990 19h 29m 53.50± 6.97s
31.210 N ±55 6km 90.242 E ±110.km
DEPTH = 33.0km (normol)
4.0mb (2 obs.)
TIBET (306)

GUN	5.02	230	P	31	09.40	0.5
KKN	5.51	233	P	31	15.00	-0.5
PKI	5.56	231	P	31	16.40	0.0
DMN	5.74	233	P	31	18.60	-0.3
GKN	5.83	238	P	31	20.40	0.3
HFS	56.90	324	eP	39	37.00	-0.3
	0.8s		1.60nm			4.1mb
NB2	58.01	326	P	39	45.40	0.3
	0.7s		1.00nm			4.0mb
	S.D. = 0.5		on 7 of 7 obs.			

? SEP 30, 1990 20h 37m 54.97± 1.89s
39.877 N ±64.4km 62.691 E ±52.7km
DEPTH = 33.0km (normol)
4.4mb (5 obs.)
TURKMEN SSR (340)

GKN	21.66	116	P	42	44.60	-0.1
	0.6s		8.00nm			4.3mb
KKN	22.24	116	P	42	50.60	0.0
	0.6s		14.00nm			4.6mb
PKI	22.46	116	P	42	53.00	0.1
HFS	36.34	320	eP	44	57.20	-0.1
	0.8s		6.50nm			4.6mb
NB2	37.71	321	P	45	08.90	0.1
	0.8s		2.90nm			4.2mb
YKA	77.96	359	eP	49	50.80	0.0
	0.8s		1.10nm			3.9mb
	S.D. = 0.1		on 6 of 6 obs.			

• SEP 30, 1990 21h 03m 47.86± 0.71s
24.606 N ±10.3km 125.040 E ± 9.3km
DEPTH = 33.0km (normol)
3.9mb (3 obs.)
SOUTHWESTERN RYUKYU ISLANDS (246)

TWC	2.90	271	eP	04	31.90	-0.9
			eS	04	45.40	
TWZ	3.18	280	ePc	04	37.30	0.5
ANP	3.25	281	eP	04	38.50	0.7
TWO	3.85	266	ePc	04	46.40	0.2
SSE	7.31	333	P	05	35.20	0.2
			epP	05	39.50	
WB5	45.14	168	iPc	12	03.70	0.5
ASPA	48.75	169	eP	12	30.70	-0.8
	0.3s		5.40nm			5.1mb X
WARB	50.52	178	eP	12	45.50	0.5
HFS	78.89	332	eP	15	48.00	-1.1
	0.5s		0.50nm			3.8mb
NB2	79.47	333	P	15	50.90	-1.4
	0.8s		1.20nm			3.9mb
YKA	81.19	24	eP	16	03.00	1.6
	0.6s		0.90nm			4.0mb
	S.D. = 1.1		on 11 of 11 obs.			

SEP 30, 1990 21h 23m 00.89± 0.22s
38.795 N ± 5.2km 70.829 E ± 4.7km
DEPTH = 33.0km (normol)
5.0mb (50 obs.)
AFGHANISTAN-USSR BORDER REGION (717)

QUE	9.16	202	eP	25	15.60	1.6
	0.8s		33.58nm			5.6mb
			eS	26	58.20	
NDI	11.40	150	iPd	25	43.00	-1.4
	0.5s		49.30nm			5.9mb
GKN	15.75	129	P	26	38.50	-3.6X
KKN	16.30	128	P	26	43.20	-5.9X
DMN	16.32	129	P	26	45.60	-3.8X
PKI	16.54	128	P	26	47.20	-5.0X
GUN	16.59	126	P	26	49.40	-3.5X
TAB	19.20	276	eP	27	29.00	4.1X
POO	20.36	172	iPc	27	37.30	-0.1
	0.9s		101.68nm			5.2mb
HYB	22.34	160	eP	27	57.50	0.1
	1.0s		70.00nm			5.1mb
GBA	25.76	165	Pd	28	29.20	-1.1
	0.8s		20.80nm			4.8mb
LZH	26.28	86	iPc	28	35.50	0.3
	1.0s		43.00nm			5.0mb
			pP	28	42.50	25kmX
CHG	31.47	121	eP	29	21.50	-0.3
VRI	33.02	297	ePc	29	39.00	4.0X
MLR	33.60	296	ePc	29	46.00	5.8X
CMP	34.25	296	ePc	29	50.00	4.3X
LOE	34.34	120	eP	29	46.00	-0.7
BJI	34.77	73	eP	29	49.50	-0.6
	0.6s		14.00nm			5.1mb
NUR	35.91	323	eP	30	00.00	0.4
	0.8s		23.50nm			5.2mb
SUF	35.92	326	eP	30	00.00	0.3
	0.5s		3.00nm			4.5mb
NNT	36.58	128	iPc	30	05.50	-0.2
SPC	37.21	303	eP	30	15.50	4.6X
SKO	37.34	291	eP	30	13.00	1.1
KRA	37.36	304	eP	30	12.60	0.7
	0.7s		37.00nm			5.4mb
			e	30	16.10	
SOD	37.61	334	iP	30	13.60	-0.2
SRO	38.61	301	e(P)	30	27.20	4.8X
KEV	38.63	337	eP	30	13.00	-9.3X
UPP	39.20	320	iP	30	26.90	-0.3
ZST	39.37	302	eP	30	29.20	0.4
			e	37	57.70	
KSP	39.65	306	eP	30	32.00	0.9
			ic	30	35.50	
PRU	40.84	305	eP	30	42.50	1.6
			e	30	45.90	
BRG	41.13	306	eP	30	44.80	1.6
	0.9s		20.00nm			4.8mb
			i	30	48.20	
			e	32	29.00	
HFS	41.20	320	eP	30	43.00	-0.6
	0.7s		34.80nm			5.2mb
	Z 17s		0.27um			4.2MszX
			LR	45	41.00	
LJU	41.43	299	e(P)	30	51.00	5.2X
SSE	41.55	85	Pc	30	47.80	0.9
	0.8s		29.00nm			5.1mb
KHC	41.57	304	P	30	48.30	1.4
			i	30	52.00	
			eSg	48	47.40	
CLL	41.67	307	i(P)	30	51.00	3.3X
			e	31	31.00	
VOY	41.87	299	eP	30	50.40	0.9
			e	30	54.30	
BHG	42.25	302	iPc	30	57.20	4.8X
NB2	42.48	322	P	30	53.40	-0.9
	0.8s		18.70nm			4.9mb
MOX	42.62	306	eP	31	00.50	5.0X
GRF	43.01	305	eP	31	00.80	2.1
			i(pP)d	31	04.30	12kmX
WATA	43.19	301	iPc	31	04.00	3.7X
	0.9s		14.60nm			4.7mb
SQTA	43.45	301	iPc	31	05.10	2.7
	0.9s		14.50nm			4.7mb
IPM	43.72	133	ePd	31	07.20	2.5
	0.7s		28.00nm			5.2mb
OSS	44.28	301	ePd	31	09.10	-0.1
SAX	44.69	302	ePd	31	12.70	0.1
TMA	45.27	300	ePd	31	16.50	-0.6
CDF	45.80	304	eP	31	20.80	-0.4
	0.7s		4.40nm			4.5mb
PGF	46.13	295	eP	31	23.40	-0.5
	0.9s		4.75nm			4.4mb
BSF	46.24	303	eP	31	24.00	-0.7
	0.9s		14.75nm			4.9mb
DIX	46.26	301	ePd	31	25.10	0.0
HAU	46.50	303	eP	31	26.10	-0.5
	0.9s		9.85nm			4.8mb
SBF	46.84	298	eP	31	29.50	0.1
	0.7s		29.75nm			5.4mb
LPG	46.86	300	eP	31	29.80	0.0
	0.7s		9.90nm			4.9mb
LPL	46.86	300	eP	31	29.80	0.0
	0.7s		12.15nm			5.0mb
FRF	47.48	297	eP	31	33.80	-0.6
	0.9s		19.65nm			5.1mb
LBF	48.31	303	eP	31	39.90	-1.0
LOR	48.31	303	eP	31	39.50	-1.3
	1.0s		9.00nm			4.8mb
SMF	48.49	302	eP	31	41.60	-0.6
	0.9s		10.65nm			4.9mb
AVF	48.77	302	eP	31	43.50	-0.9
	1.0s		18.00nm			5.1mb
BGF	49.17	302	eP	31	46.60	-0.9
	1.1s		24.40nm			5.1mb
MAF	49.46	302	eP	31	48.60	-1.1
	1.1s		28.10nm			5.2mb
TCF	49.67	302	eP	31	50.20	-1.2
	1.0s		17.00nm			5.0mb
LSF	50.14	302	eP	31	53.80	-1.1
	1.1s		19.55nm			5.0mb
LDF	50.51	306	eP	31	56.70	-1.0
	1.0s		26.00nm			5.2mb
EKA	50.56	315	Pc	32	01.20	3.2X
	0.9s		9.50nm			4.8mb
FLN	50.69	306	eP	31	58.20	-0.8
	1.1s		24.40nm			5.1mb
GRR	51.04	306	eP	32	00.70	-1.0
	0.9s		18.00nm			5.0mb
MAT	52.27	70	iPc	32	09.40	-1.8
	0.8s		19.40nm			5.1mb
BCAO	58.37	248	iPc	32	55.50	0.0
	0.4s		3.00nm			4.7mb
IMA	69.98	18	iPc	34	09.70	-1.1

```
        0 5s      8.30nm            5.1mb
 BUL   70.72 222 iPc    34 13.20  -2.6
        1.0s      5.00nm            4.5mb
 INK   71.67   9 eP     34 20.50  -0.2
 TTA   71.92  21 iPc    34 22.20  -0.3
        0.4s      3.00nm            4.6mb
 FBA   72.31  16 iPc    34 24.20  -0.4
        0.6s     12.90nm            5.1mb
 LKO   73.51 269 P      34 30.20  -2.3
 NANU  74.01 137 eP     34 36.00   1.0
        0.5s      5.00nm            4.8mb
 KIC   74.80 266 P      34 40.30   0.4
        0.6s      6.50nm            4.8mb
 PMR   74.84  19 ePc    34 38.40  -1.0
        0.6s     11.20nm            5.0mb
 TIC   74.84 266 P      34 40.50   0.3
 TOA   75.10  17 iPc    34 41.30   0.3
 LIC   75.11 266 P      34 42.00   0.3
 KDC   77.18  22 eP     34 53.10   0.5
 YKA   78.96   3 eP     35 01.70  -0.6
        0.6s      5.20nm            4.7mb
 WB5   83.29 122 eP     35 26.00   0.3
 ASPA  85.67 125 iPc    35 37.80   0.1
        0.8s      9.90nm            5.1mb
 FFC   86.65 356 eP     35 43.00   1.0
        0.8s     15.00nm            5.3mb
 PNT   91.78   7 eP     36 07.00   0.6
        0.8s     14.00nm            5.4mb
 NEW   93.03   5 P      36 12.70   0.5
        0.8s     10.42nm            5.3mb
 GMW   93.18   9 P      36 14.50   1.6
 RMW   93.39   9 P      36 14.60   0.7
 LON   94.09   9 P      36 17.80   0.6
 DUG  101.32   3 Pdiff  36 46.30  -3.6X
 SIV  132.28 285 PKP    42 14.00   0.4
 ZOBO 137.71 290 PKP    42 26.00   1.4
 LPB  137.86 290 (PKP)  42 34.00   9.3X
 CNCB 137.95 290 PKP    42 26.00   1.0
      S.D. = 1.0  on  78 of  98 obs.
-------------------------------------
?  SEP  30, 1990  21h 48m 48.27± 9.70s
   51.695 N ±53.2km   16.415 E ±61.2km
   DEPTH =  10.0km  (geophysicist)
 POLAND                          (548)
      ML 3.6 (GRF), 3.4 (VKA).

 KSP    0.86 185 iPd    49 05.00   0.2
       0.5s   108.00nm
                iS     49 14.70
                i      49 22.00
 BRG    1.76 243 iPg    49 19.80   0.9
                iSg    49 39.50
 PRU    2.08 216 Pn     49 23.10  -0.5
                Pg     49 25.20
                Sn     49 41.70
                Sg     49 48.70
                i      49 55.50
 CLL    2.17 261 iPn    49 24.70  -0.2
                iPg    49 27.30
                iSg    49 53.80
 KRA    2.77 125 ePd    49 46.30  12.8X
                e      50 22.80
 KHC    3.14 216 Pn     49 38.50  -0.3
                Pg     49 45.00
                Sg     50 14.00
 MOX    3.20 253 ePn    49 39.00  -0.5
                iPg    49 48.00
                iSg    50 27.00
 WET    3.41 223 ePn    49 42.30  -0.3
 VKA    3.43 181 iPgc   49 52.30   9.4X
                iSg    50 36.40
 GRF    3.86 241 e(Pn)  49 49.50   0.5
                e(Pg)  50 01.90
                eSg    50 47.00
      S.D. = 0.6  on   8 of  10 obs.
-------------------------------------
&  SEP  30, 1990  21h 56m 59.42s
   62.092 N          149.101 W
   DEPTH =   5.2km
 CENTRAL ALASKA                  (  1)
      <AGS-P>.

 GHO    0.33 165 iP     57 06.74   0.6
                eS     57 11.64
 SML    0.46 128 iP     57 08.61  -0.1
                eS     57 15.25
 PLRM   0.50 182 iP     57 09.75   0.3
 PWA    0.58 220 iP     57 11.30   0.4
                eS     57 19.01
 CUT    0.63 300 iP     57 11.84  -0.2
 SCM    0.88 106 eP     57 15.17  -1.6
 PMS    0.88 195 eP     57 15.84  -0.9
                eS     57 27.96
 HUR    0.92 345 eP     57 16.78  -0.7
                iS     57 29.43
 SUA    1.00 232 eP     57 18.16  -0.8
                eS     57 31.26
 SKT    1.15 265 iP     57 20.50  -0.9
                iS     57 36.14
 RND    1.32   5 iP     57 22.93  -1.5
                eS     57 40.22
 TOA    1.38  88 eP     57 23.83  -1.5
 GLI    1.55 141 eP     57 27.24  -0.5
                iS     57 47.84
 CGLM   1.59 242 eP     57 27.43  -1.0
                iS     57 48.60
 VZW    1.60 129 eP     57 26.94  -1.5
                eS     57 48.92
 NCG    1.61 246 eP     57 28.58  -0.1
                eS     57 49.83
 KLU    1.63 110 eP     57 26.74  -2.1
 VLZ    1.64 125 eP     57 27.37  -1.5
 MCK    1.65   3 eP     57 28.02  -1.1
 CRP    1.68 242 eP     57 30.61   1.0
                iS     57 52.94
 SLKM   1.68 199 eP     57 29.11  -0.5
 SPU    1.68 238 eP     57 30.38   0.8
                iS     57 52.26
 BGL    1.78 244 eP     57 31.93   0.9
 CKL    1.79 241 eP     57 31.61   0.4
 RDT    2.20 228 eP     57 37.29   0.0
 DDM    2.26  40 eP     57 38.20   0.2
 GLB    2.60 102 eP     57 42.42  -0.4
       27 obs. associated
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•  SEP  30, 1990  22h 08m 44.06± 1.17s
   16.087 N ±10.7km  120.512 E ± 7.5km
   DEPTH =  36.6 ±  8.5 km
   4.9mb ( 14 obs.)  4.2Msz (  2 obs.)
 LUZON, PHILIPPINE ISLANDS       (249)

 BAG    0.33  11 iPd    08 52.30  -0.3
 OCP    1.54 159 eP     09 18.00   8.5X
 NNT   20.43 263 eP     13 21.40   0.4
 CHG   20.75 281 eP     13 26.00   1.6
 BJI   24.16 352 eP     13 59.00   1.1
       1.4s     49.00nm          4.9mb
    Z  18s      0.59um           4.1Msz
                eS     18 22.00
 LZH   24.84 326 Pd     14 06.00   1.3
       1.5s     40.00nm          4.8mb
    Z  20s      0.90um           4.3Msz
    N  14s      0.50um
                pP     14 10.00  14kmX
                sP     14 13.50
 GUN   34.08 296 P      15 26.40  -1.4
 PKI   34.42 295 P      15 29.80  -0.9
 KKN   34.57 296 P      15 31.00  -0.9
       1.0s     20.00nm          5.0mb
 DMN   34.69 295 P      15 32.20  -0.7
       1.0s     23.00nm          5.1mb
 GKN   35.17 296 P      15 36.00  -1.0
       1.0s     30.00nm          5.2mb
 HYB   40.14 278 eP     16 19.00   0.4
 ASPA  41.62 161 iPc    16 30.50   0.0
       0.8s      8.10nm          4.5mb
 GBA   41.66 273 P      16 32.00   1.0
 TTA   72.85  28 eP     20 11.30   0.3
 IMA   73.73  25 ePd    20 16.50   0.4
       0.6s      3.50nm          4.5mb
 PMR   76.17  30 ePc    20 29.60  -0.3
       0.7s      7.20nm          4.8mb
 KEV   76.25 339 eP     20 31.00   0.7
 FBA   76.29  26 eP     20 29.80  -0.8
       1.0s      5.00nm          4.5mb
 SOD   76.78 337 iP     20 33.20  -0.1
 TOA   77.47  29 eP     20 38.50   1.2
 SUF   77.84 332 iP     20 38.90  -0.2
       0.5s     10.00nm          5.1mb
 NUR   79.00 330 iP     20 45.40  -0.2
       0.8s     17.60nm          5.1mb
 INK   80.95  21 ePd    20 55.30  -0.6
 HFS   84.31 331 ePKP   21 12.20  -1.1
       0.6s      5.10nm          4.9mb
 KRA   84.44 320 ePd    21 14.20   0.0
 NB2   85.07 333 P      21 16.40  -0.8
       1.0s     13.80nm          5.1mb
 SKO   85.96 312 iP     21 22.00   0.0
 KSP   86.37 322 eP     21 24.70   0.9
 YKA   90.65  22 eP     21 44.00   0.1
       0.8s      1.20nm          4.3mb
      S.D. = 0.9  on  29 of  30 obs.
-------------------------------------
   SEP  30, 1990  22h 57m 18.77± 0.58s
   41.439 N ± 6.4km   22.743 E ± 5.2km
   DEPTH =  10.0km  (geophysicist)
 YUGOSLAVIA                      (383)
      MD 3.0 (ATH).

 KKB    0.50  31 ePg    57 28.00  -0.9
                Sg     57 34.00
 MMB    0.75  78 iPgd   57 33.00  -0.6
                iSg    57 44.00
 SKO    1.11 299 iPg    57 39.40  -0.2
 PLG    1.19 153 ePb    57 40.80  -0.2
 VTS    1.20  17 iPg    57 53.00  11.7X
 KZN    1.35 213 ePb    57 43.80   0.1
 OHR    1.50 258 iPn    57 45.80   0.0
 PGB    1.54  43 eP     57 48.00   1.7
 KDZ    2.02  83 eP     57 53.00  -0.2
 RDO    2.13  97 ePn    57 55.00   0.2
 DIM    2.18  73 eP     58 00.00   4.5X
 PVL    2.62  46 eP     58 05.00   3.2X
      S.D. = 0.8  on   9 of  12 obs.
-------------------------------------
•  SEP  30, 1990  23h 21m 17.38± 0.92s
   13.142 N ±10.8km  145.064 E ±19.6km
   DEPTH =  68.4 ±  6.3 km
   4.4mb (  4 obs.)
 MARIANA ISLANDS                 (216)

 GUA    0.42 339 ePd    21 29.40  -0.1
                eS     21 42.50
 GUMO   0.48 337 ePd    21 30.10   0.1
 PJG    0.48 337 ePd    21 30.20   0.2
 WB5   34.46 198 eP     28 00.70  -0.1
 ASPA  38.18 197 eP     28 31.70  -0.4
       0.9s      4.50nm          4.4mb
 PKI   57.26 294 P      31 00.00  -0.9
 INK   74.71  22 eP     32 50.50  -0.6
 YKA   83.17  27 eP     33 36.00  -1.0
       0.7s      1.90nm          4.2mb
 KEV   87.00 342 eP     33 56.00   0.0
 TNP   87.96  51 eP     34 02.00   0.4
       1.0s      2.50nm          4.3mb
 SUF   90.95 336 eP     34 16.00   1.2
 APO   96.92 338 eP     34 41.50  -0.7
       0.7s      1.60nm          4.7mb
 KIC  144.29 301 PKPc   40 48.70   0.5
       1.0s     30.00nm
 TIC  144.37 302 PKP    40 48.92   0.5
       0.9s     21.50nm
 LIC  144.60 301 PKPc   40 49.72   1.0
       0.8s     36.00nm
 ZOBO 147.77 100 PKP    41 02.00   7.4X
 LPB  147.79 100 ePKP   41 02.00   7.6X
 CNCB 147.89 101 PKP    41 01.00   6.2X
      S.D. = 0.7  on  15 of  18 obs.
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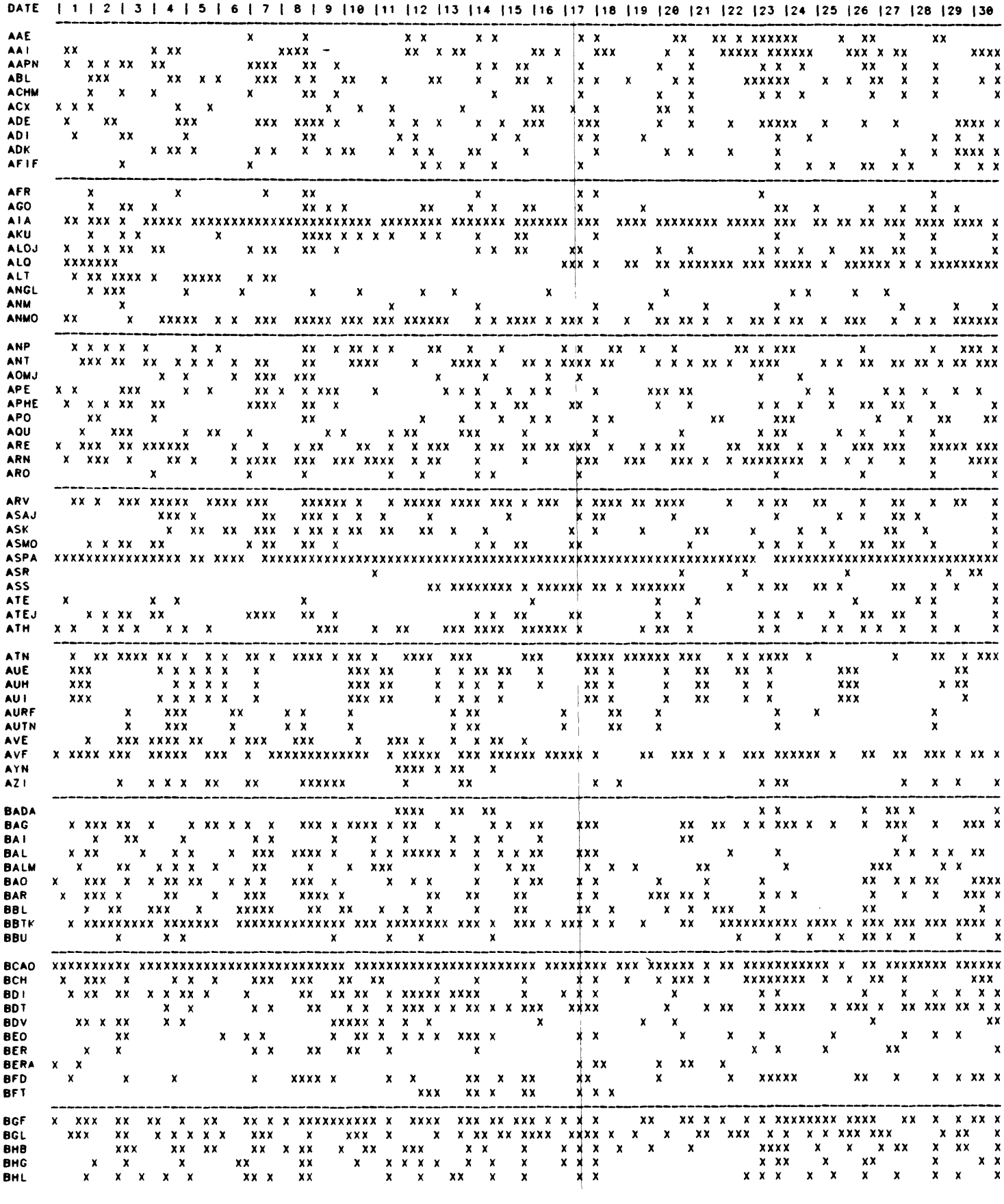
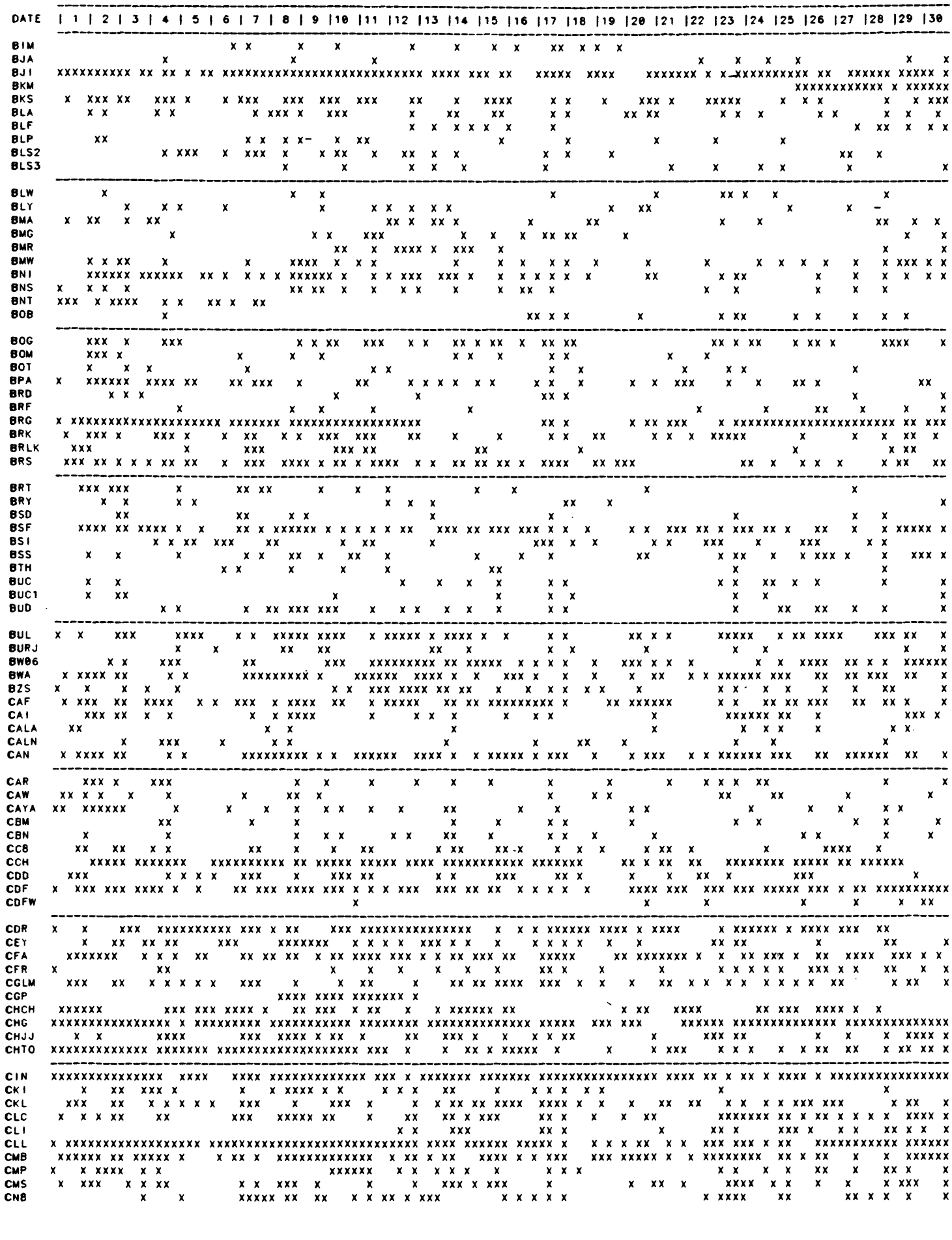
STATION DATA REPORT FOR SEPTEMBER, 1990

1297 stations reported 54567 reading arrival groups

X = data received for this 6-hour time period

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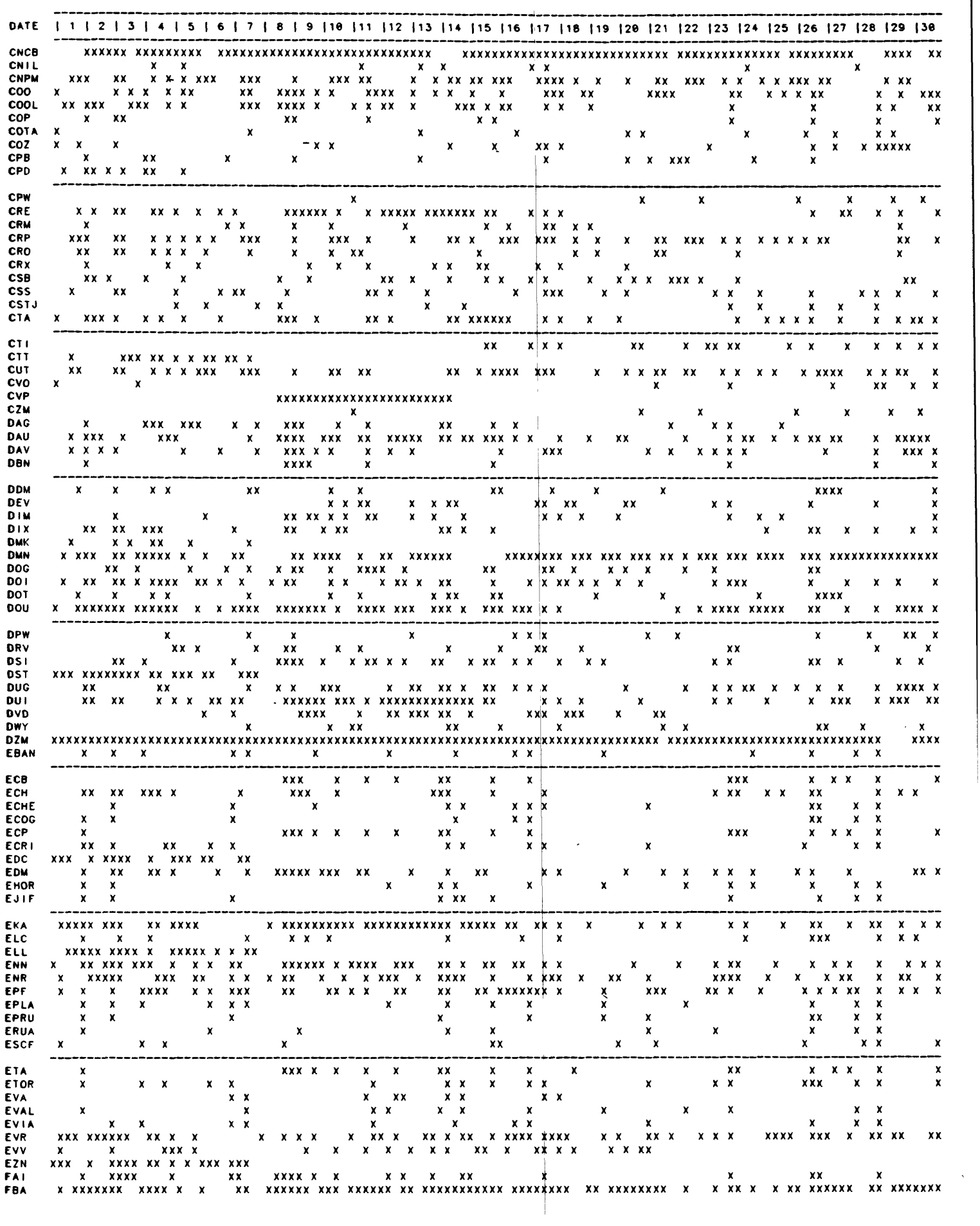
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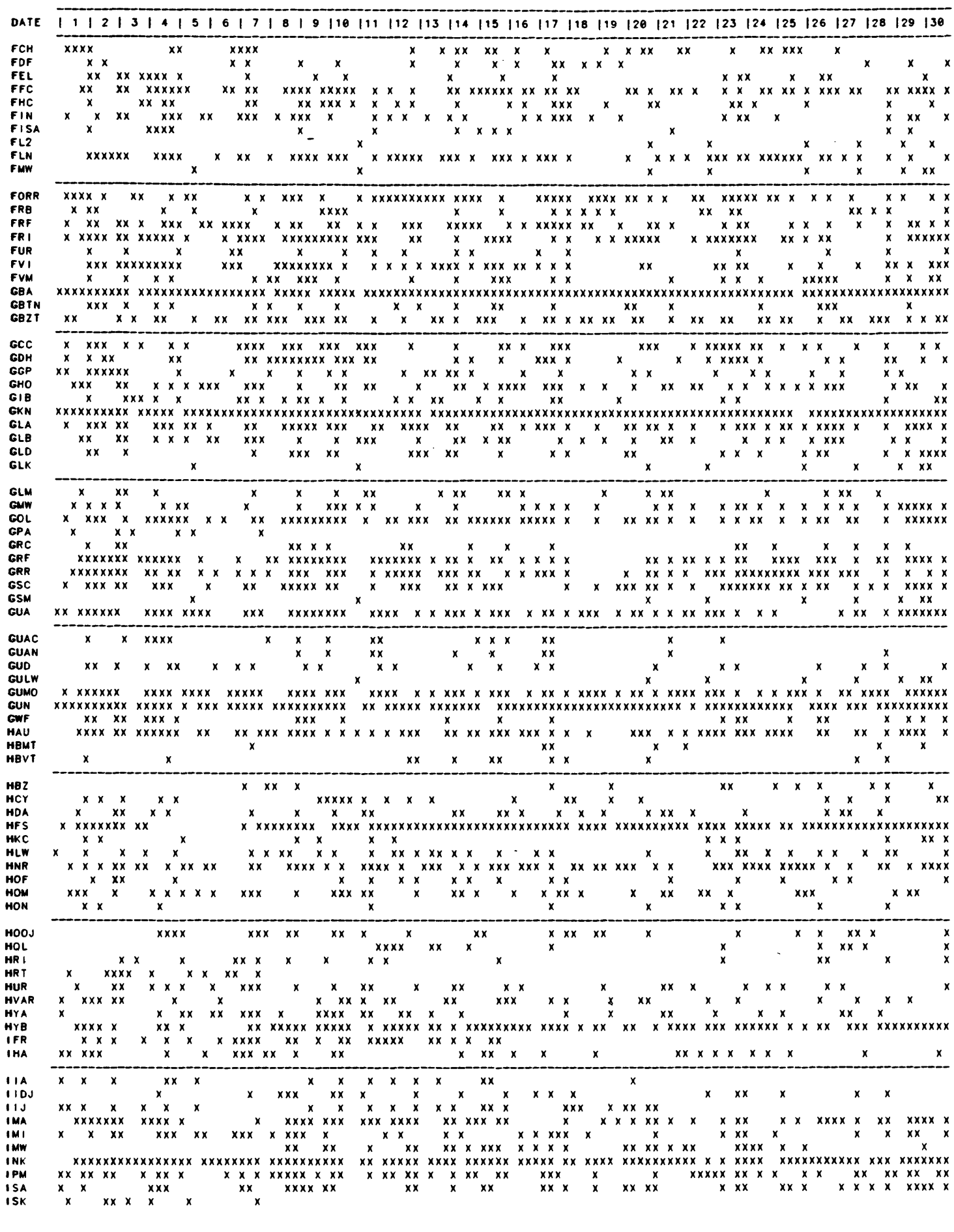
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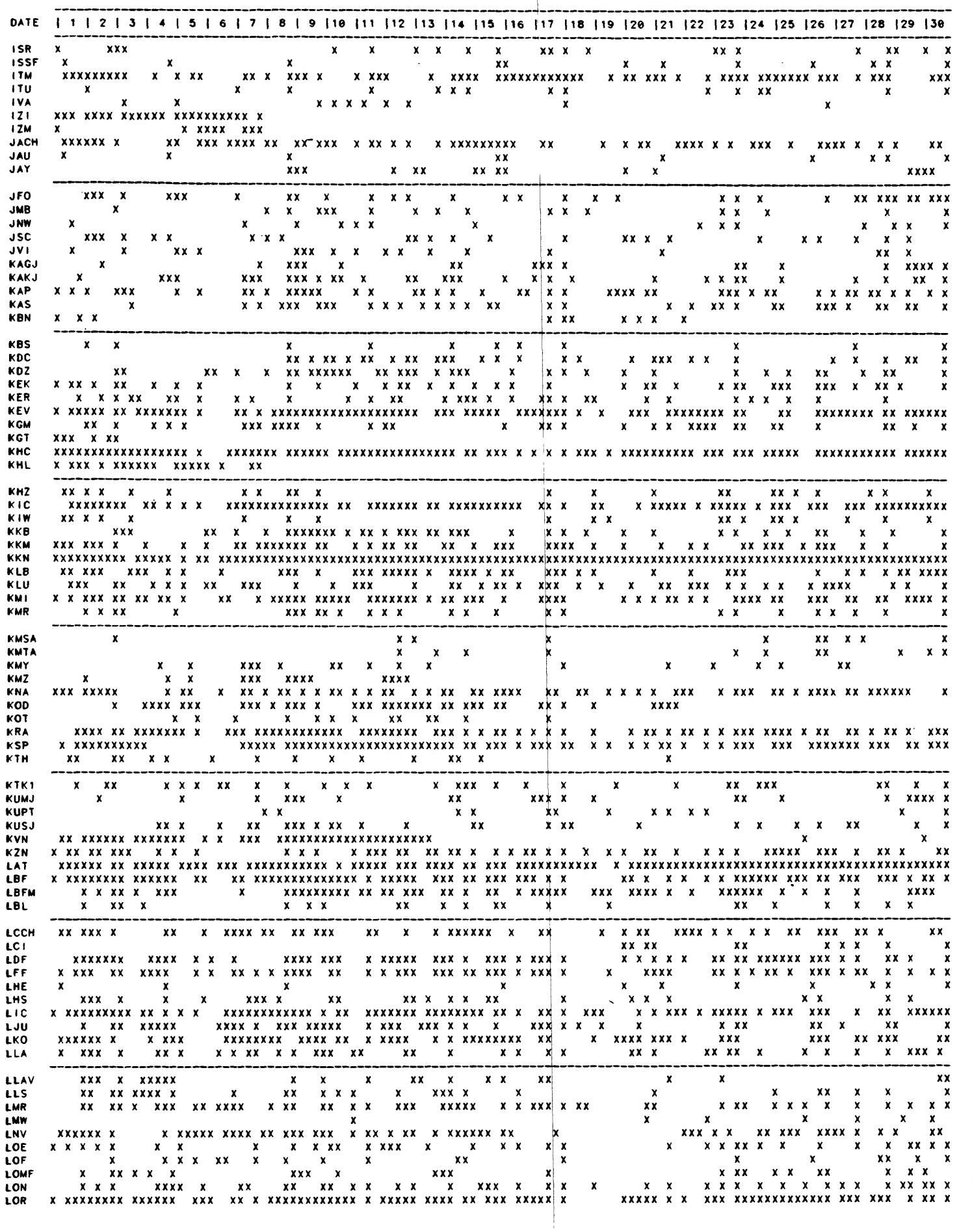
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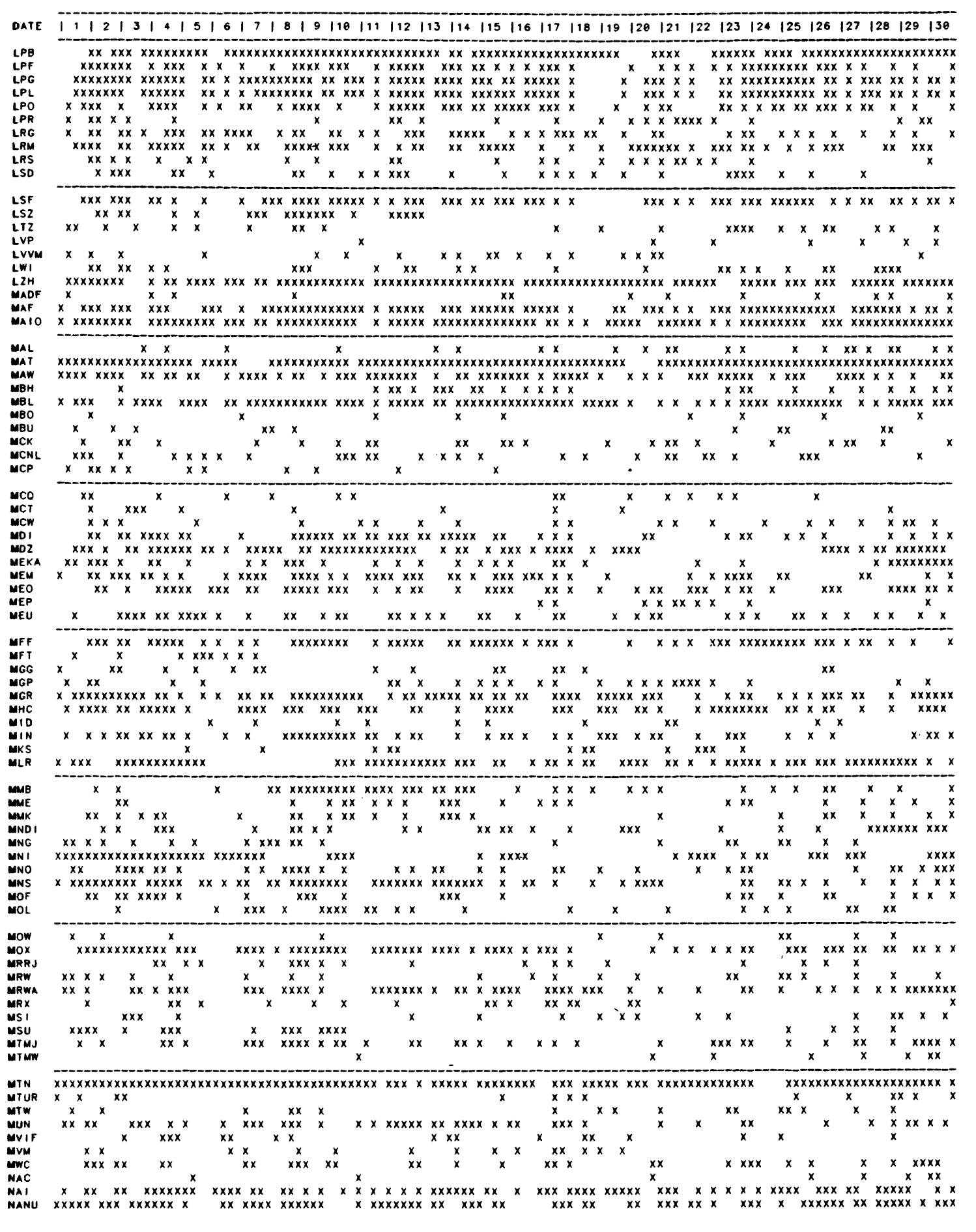
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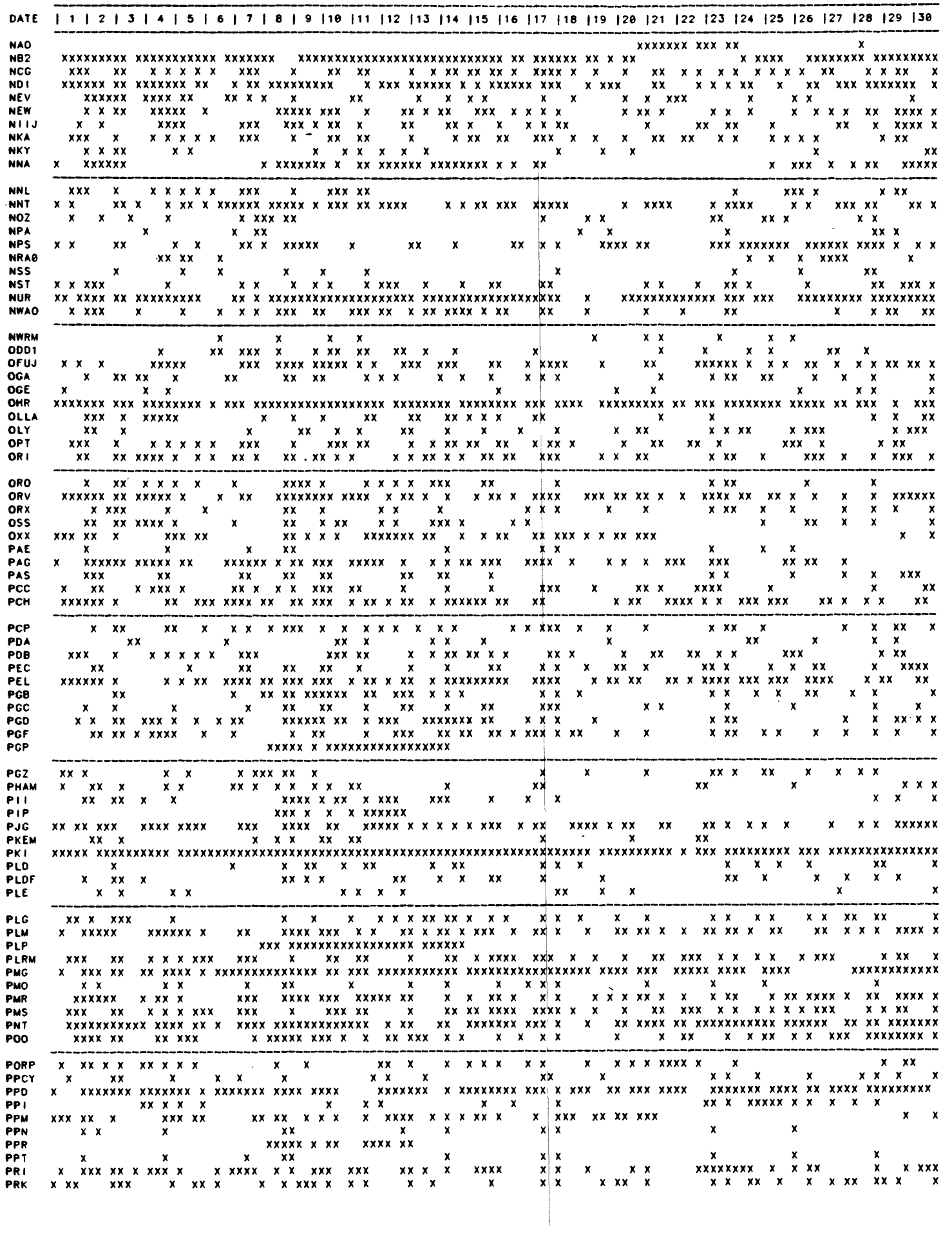
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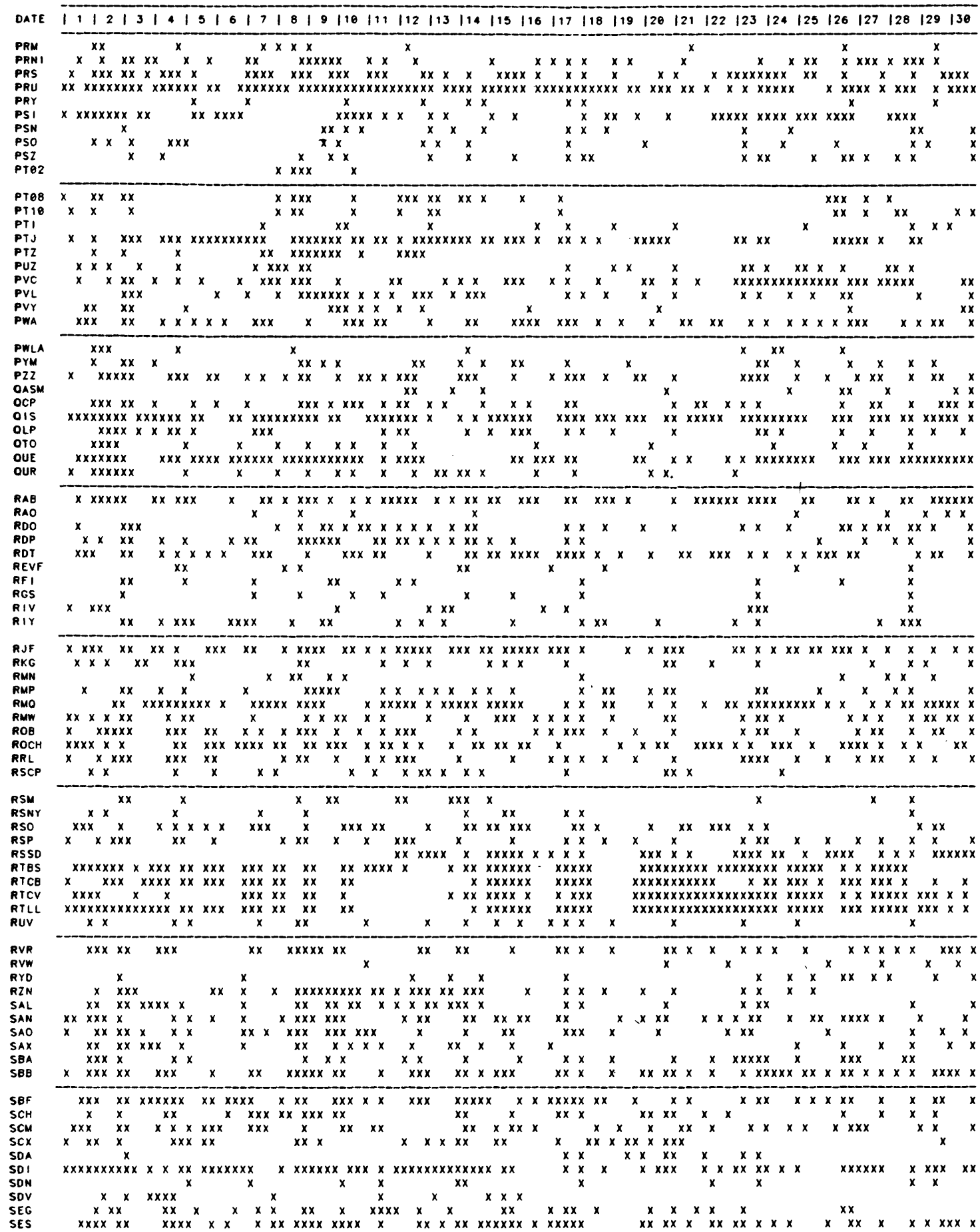
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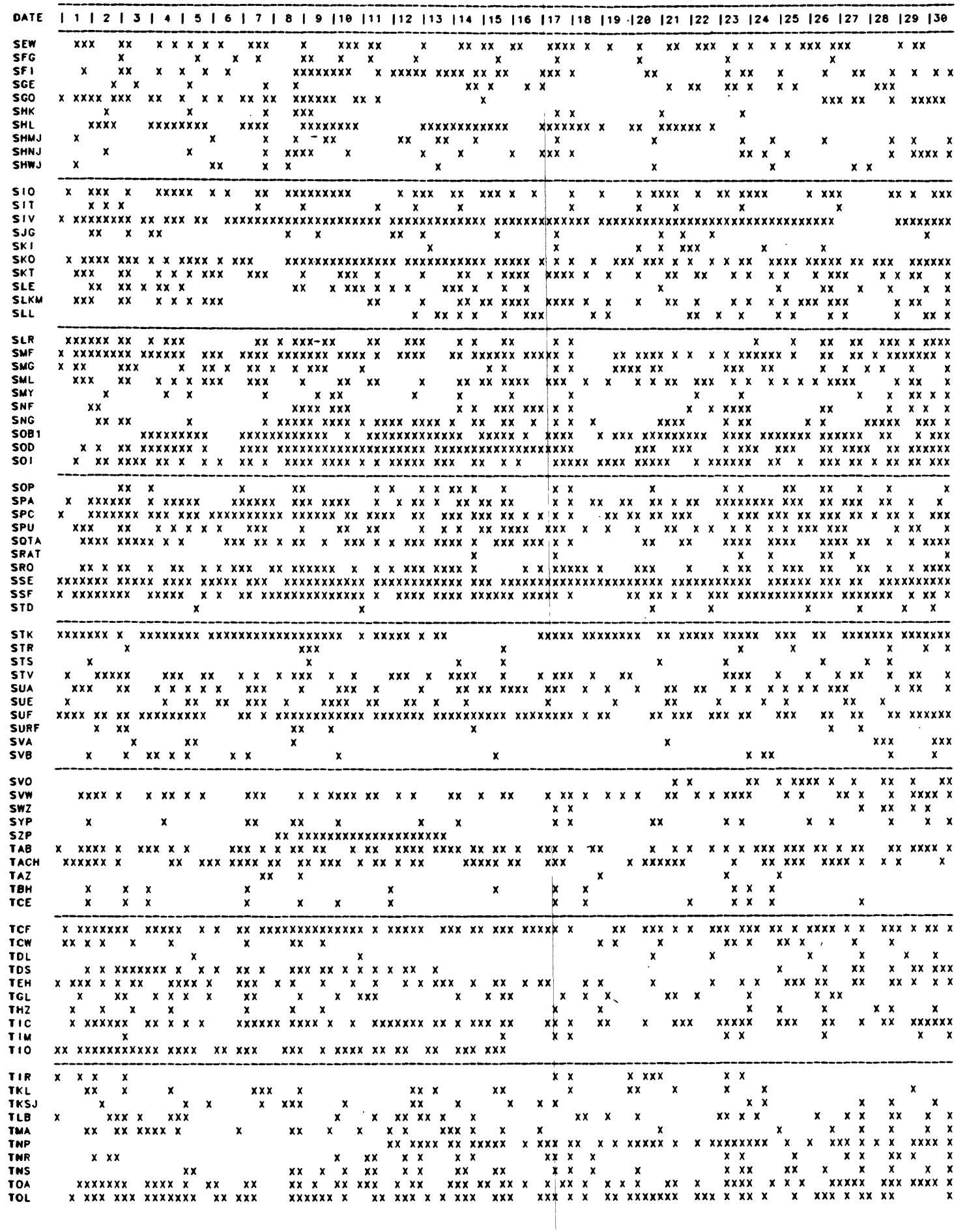
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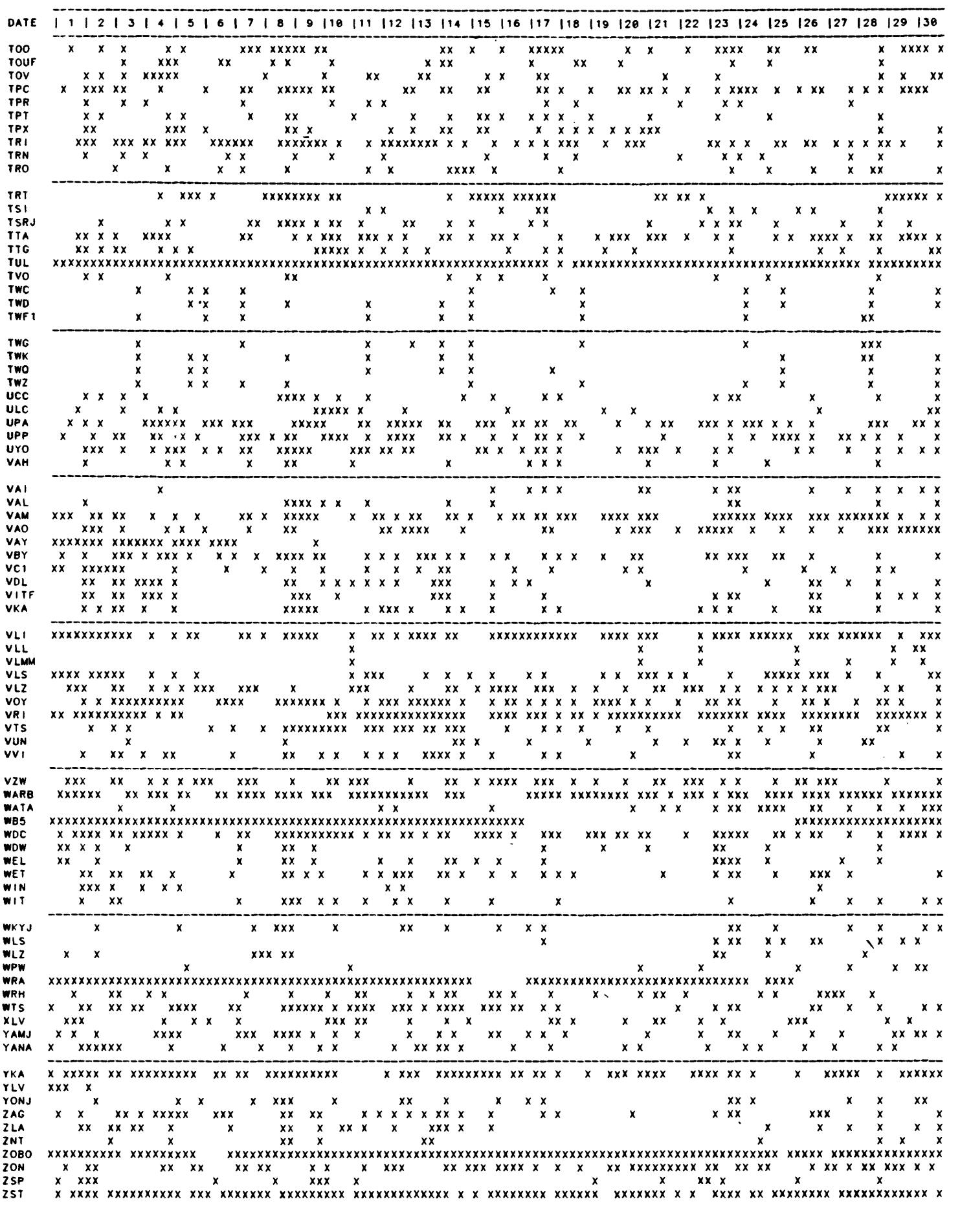
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The following stations each reported less than 10 readings:

ABHA	ABTN	ACO	ACTN	ACU	ADH	AFAR	AFC	AGAL	AGMR	AGRW	AGX	AKRL	AKSR	AKUR	ALB	ALJ	ALM
ALN	ALP	AMAN	ANCC	ANMR	ANTO	AOI	APA	APM	APW	ASW	ATA	ATZ	BAC	BBB	BBS	BCI	BCPM
BDF	BEE	BERF	BGG	BGMT	BIX	BKB2	BKR	BLN	BLO	BLS1	BNH	BOH	BPI	BPIL	BRN	BRVW	BRW
BST	BTB	BUGC	BUT	BVW	CBB⁻	CBD	CBSW	CBTI	CBX	CCM	CEI	CEOS	CER	CFTV	CGL	CHIE	CIO
CIS	CLMC	CMW	CNZ	COL	COR	CPE	CRF	CROR	CRT	CRZF	CSIL	CTAO	CTFE	CVA	CVT	CVVD	CYK
DAF	DBCT	DHJN	DHR	DHW2	DIAC	DLA	DON	DPMT	DRA	DSH	DWM	EAB	EALH	EAU	EBG	E8H	EBL
EBZ	ECD	EDB	EDI	EDR	EDU	ELF	ELO	ELYF	EMEL	EMM	EMON	EMS	ENIJ	ENX	EPH	ERC	ERK
EROO	ESD	ESEL	ESK	ESY	ET3	ETB	ETER	ETW	EZAM	FAM	FG2	FKO	FNA	FOO	FRU	FUO	FYU
GANF	GAZ	GBL	GBR	GCM	GDR	GELF	GGC	GHW	GIBL	GL2	GLH	GLI	GLO	GMB	GMOM	GMTN	GOIL
GRA2	GRA3	GRA4	GRC1	GRFO	GRG	GRI	GRN	GROR	GRT	GRW	GT2	HAKY	HBF	HDW	HIA	HIN	HITZ
HLBJ	HLD	HMT	HNB	HOBC	HOGG	HOJ	HOQC	HOR	HPI	HON	HRV	HRY	HSR	HTW	HVD	IAS	III
IIT	IKP	ILT	IRK	IVY	JARJ	JBO	JCW	JGI	JHP	JMI	JNE	JRDJ	JRSJ	KAIM	KBA	KCT	KDB
KFNJ	KIM	KIP	KKS	KLL	KLM	KMOR	KNT	KOE	KONO	KOSW	KRO	KSL	KSR	KSU	KVT	LACI	LAL
LDMO	LDN	LFU	LGAR	LIB	LISJ	LIT	LNOR	LOCW	LPA	LPI	LRDO	LSK	LTCM	LTMT	LVI	LVNJ	MAJO
MAN	MAO	MASJ	MBET	MBW	MCMT	MCO	MDN	MDSJ	MDW	MEMT	MEW	MEX	MFTN	MGB	MHA	MHI	MHZ
MILT	MIM	MJ2	MJMA	MKL	MKRJ	MKT	MMCZ	MML	MOH	MOMI	MORO	MOTN	MPOR	MQZ	MSAL	MSZ	MTU
MXC	MZX	NA2	NAB	NAV	NDE	NDF	NEA	NEO	NGZ	NHIL	NKM	NLO	NLW	NMMO	NOH	NRMS	OBC
OBH	OBN	OBO	OD2	OFK	OHTN	OJEN	ONR	OOW	OPA	OSD	OSG	OSP	OT2	OTR	OVA	OZB	PAF
PATW	PBX	PCA	PCF	PCJ	PCT	PDTN	PEM	PET	PFB	PFH	PGA	PGO	PGW	PHC	PICO	PIG	PLAT
PLAV	PLBC	PNJ	PNL	POW	PPE	PRAF	PRW	PSM	PTS	PTT	PUK	PUL	PURC	PUYF	PV01	PV03	PV04
PV06	PV09	PV10	PVPS	PZI	QTFJ	QTRJ	QZA	RAGM	RAR	RATZ	RBL	RC1	REMR	REMW	REY	RKT	RND
ROSA	RPW	RRO	RSW	RUWJ	RVC	RW1	RW2	RW3	RW4	RW5	RW6	SALC	SALJ	SAOF	SAP	SAW	SCI
SEA	SEK	SFS	SFTN	SGH	SGL	SGS	SHB	SHBJ	SHI	SHW	SILC	SIM	SJAS	SLB	SLM	SLW	SMMM
SNH	SNZO	SOH	SONG	SOSW	SPW	SPX	SRA	SRE	SRN	SRS	SSO	STH	STU	STW	SVV	SXM	TAF
TAU	TAVF	TBI	TBM	TBR	TBT	TCO	TDD	TDH	THE	THI	TIK	TLC	TLG	TME	TMI	TMW	TPE
TPP	TREF	TSM	TTH	TUNG	TVI	TWM1	TWW	TXNY	TYS	UAV	UDU	UNM	UOSK	UTMA	UZH	VBEM	VFP
VGB	VILF	VIPM	VLO	VPD	VSM	VSS	VTG	VTHM	WAH2	WAJH	WAX	WDIN	WG3	WGAR	WHC	WHH	WIW
WLA	WLF	WMO	WNY	WRD	WRG	WTV	WTZ	YAH	YAK	YAKW	YEL	YHJ	YKU	YPE	YSS		