

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

EARTHQUAKE DATA REPORT
AUGUST 1989

by

U.S. Geological Survey
NATIONAL EARTHQUAKE INFORMATION CENTER¹

Open-File Report 89-608-A



This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards. Although this data file has been used by the U.S. Geological Survey, no warranty, expressed or implied, is made by the USGS as to the accuracy of this file, nor shall the fact of distribution constitute any such warranty, and no responsibility is assumed by the USGS in connection therewith.

1989

¹USGS, Denver, Colorado

The following description is for New Publications of the U.S. Geological Survey:

Earthquake Data Report for August, 1989

The Earthquake Data Report (EDR) is a bulletin produced by the National Earthquake Information Center (NEIC) containing all information used to calculate the locations and magnitudes of events published in the Preliminary Determination of Epicenters (PDE) Monthly Listing for the corresponding month. The EDR is a technical data file intended for users who are familiar with basic seismological practice. Potential users who are unfamiliar with such practice or who desire simply a bulletin of earthquake locations are advised to obtain the PDE Monthly Listing (available from the U.S. Government Printing Office) instead of the EDR. A machine-readable summary of the PDE Monthly Listing is available from the NEIC.

The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGE n .DAT, and a data file, OFEDR mmn .DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

U. S. DEPARTMENT OF THE INTERIOR
Geological Survey
EARTHQUAKE DATA REPORT

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

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

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

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

Two types of magnitude are computed: body-wave magnitude (m_b) and surface-wave magnitude (M_{SZ}). Each is a 25% trimmed mean of individual station values. Station magnitudes not used in the trimmed mean are marked with an X. This includes station magnitudes of either type which deviate significantly from the mean and surface-wave magnitudes determined from horizontal amplitudes. Body-wave magnitudes are computed according to the formula $\log(A/T) + Q$, derived by Gutenberg and Richter (1956), where A is the P-wave amplitude in micrometers, T is the period in seconds, and Q is the depth-distance factor. Surface-wave magnitudes are computed from the formula $\log(A/T) + 1.66 \log(\Delta) + 3.3$, where A is the maximum vertical surface-wave amplitude in micrometers, T is the period in seconds, and Δ is the epicentral distance in degrees. Surface-wave magnitudes are determined only for earthquakes whose focal depths (taking into account the computed standard deviations) are potentially less than 50 km, for stations having

$20^\circ \leq \Delta \leq 160^\circ$, and for reported periods of $18 \leq T \leq 22$ s. No correction for focal depth is used in the M_S calculation. Body-wave magnitudes are not determined from PKP arrivals or for stations having $\Delta \leq 5^\circ$. Amplitude values stated in this report are in nanometers (nm) for body-waves and micrometers (μm) for surface-waves.

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

Hypocenter Symbols

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

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

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

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

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

Note: On printers available to the NEIS for this publication, the symbol for degrees ($^\circ$) appears as "°".

References

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

 AUG 01, 1989 00h 18m 04.89± 0.14s
 4.511 S ± 3.3km 139.022 E ± 4.0km
 DEPTH = 14.3km (geophysicist)
 6.0mb (39 obs.) 5.8Msz (21 obs.)
 WEST IRIAN (201)
 Ms 5.7 (BRK). About 120 people
 killed and 125 injured by
 landslides which buried two
 villages in the Kurimo district.
 Landslides also blocked the
 Baliem River. Felt at Wamena.
 Depth from broodbond
 displacement seismograms.
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=142 Dip=77 Slip= 90
 NP2: 322 13 90
 Principal Axes:
 T P1g=58 Azm= 52
 P 32 232
 Comment: The focal mechanism is
 poorly controlled and
 corresponds to reverse
 faulting. The preferred fault
 plane is NP2.
 RADIATED ENERGY
 No. of sta: 11 Focal mech. F
 Energy 0.5±0.1*10**14 Nm
 MOMENT TENSOR SOLUTION
 Dep 3 No. of sta: 14
 Moment Tensor; Scale 10**18 Nm
 Mrr= 0.44 Mtt=-1.01
 Mff= -0.58 Mrt= 1.50
 Mrf=-2.65 Mtf= 0.74
 Principal axes:
 T Val= 3.22 P1g=46 Azm= 79
 N 0.06 19 328
 P -3.28 38 223
 Best Double Couple: Ma=3.3*10**18
 NP1: Strike=252 Dip=19 Slip= 13
 NP2: 149 86 109
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 32C
 Centroid Location:
 Origin Time 00:18:11.8 0.4
 Lat 4.67S 0.04 Lon 138.89E 0.04
 Dep 50.2 3.4 Half-duration 3.5
 Moment Tensor; Scale 10**18 Nm
 Mrr= 0.88 0.05 Mtt=-0.01 0.05
 Mff=-0.87 0.07 Mrt= 0.26 0.07
 Mrf=-0.17 0.06 Mtf= 1.66 0.06
 Principal Axes:
 T Val= 1.30 P1g=15 Azm=324
 N 0.88 74 123
 P -2.18 5 232
 Best Double Couple: Ma=1.7*10**18
 NP1: Strike= 7 Dip=76 Slip= 173
 NP2: 99 83 14
 JAY 2.60 40 iPc 18 48.70 1.5
 LAT 8.22 105 eP 20 09.00 2.5
 PMG 9.42 122 eP 20 22.00 -1.2
 KDB 9.46 122 P 20 21.50 -2.2
 LMG 10.06 116 eP 20 37.00 4.9X
 AAI 10.83 274 ePd 20 43.20 0.7
 0.5s 80.40nm 6.3mb
 MTN 11.37 223 eP 20 45.00 -5.0X
 e 20 47.00
 KNA 15.04 221 eP 21 35.00 -3.7X
 eS 24 20.00
 WB5 15.94 196 eP 21 45.20 -5.1X
 OIS 15.96 178 eP 21 45.00 -5.7X
 WRA 16.00 196 Pc 21 45.90 -5.3X
 0.6s 37.60nm 4.7mb X
 CTA 17.01 156 iPd- 22 04.10 0.1
 1.8s 986.36nm 5.6mb
 iS 25 14.00
 CTAO 17.01 156 eP 22 06.18 2.2
 1.8s 986.36nm 5.6mb
 eS 25 26.24
 DAV 17.69 311 ePc+ 22 12.00 -0.5
 eS 26 01.00
 GUA 18.86 18 eP 22 26.00 -1.0
 0.9s 369.75nm 5.6mb
 Z 18s 21.99um
 GUMO 18.89 18 eP 22 25.00 -2.4

1.8s 2901.41nm 6.2mb
 MKS 19.49 267 iPd 22 36.50 1.9
 1.2s 2666.20nm 6.4mb
 ASPA 19.68 194 iPd 22 34.30 -2.4
 0.9s 1392.00nm 6.3mb
 eS 26 02.60
 SVO 21.15 104 eP 22 51.00 -0.9
 TSM 22.66 292 ePc 23 13.10 6.1X
 1.0s 1922.80nm 6.5mb
 RMO 23.76 158 eP 23 18.20 0.5
 e 23 20.60
 e 30 57.00
 WARB 24.60 208 iPc 23 25.20 -0.7
 MBL 24.92 227 iPd 23 28.00 -1.0
 e 23 31.60
 eS 28 07.00
 KKM 25.07 295 ePd 23 31.20 0.6
 1.0s 415.50nm 6.1mb
 BRS 26.26 151 eP 23 41.00 -0.6
 iS 28 14.00
 TRT 26.42 262 iPd 23 43.00 -0.1
 0.7s 105.30nm 5.6mb
 eS 25 43.20
 STK 27.33 175 eP 23 48.50 -2.8
 e 24 11.00
 e 29 09.00
 e 32 40.00
 e 33 22.00
 CMS 27.59 167 eP 23 54.50 0.9
 e 23 58.30
 e 32 56.70
 BAG 27.65 319 ePc+ 23 52.00 -2.5
 1.9s 736.84nm 6.1mb
 eS 28 31.00
 FORR 28.15 200 eP 24 00.00 1.3
 0.5s 172.00nm 6.1mb
 COO 28.63 156 eP 24 03.70 0.6
 e 24 08.00
 e 31 40.00
 e 33 43.00
 NANU 28.96 230 iPd 24 04.20 -1.9
 eS 29 46.00
 MEKA 29.44 220 iPc 24 10.00 -0.4
 0.4s 14.00nm 5.1mb
 eS 30 13.00
 ADE 30.31 181 iPd 24 18.70 0.6
 COOL 31.17 211 eP 24 23.10 -2.6
 0.6s 162.00nm 6.1mb
 DZM 31.78 126 iPc 24 29.70 -1.6
 CAN 32.02 165 eP 24 36.10 3.0X
 eS 32 06.60
 CNB 32.11 164 eP 24 35.00 1.0
 BFD 32.67 175 eP 24 36.00 -2.7
 e 24 39.00
 e 35 00.00
 MRWA 32.86 219 eP 24 39.00 -1.5
 eS 31 17.00
 BAL 33.41 216 eP 24 44.50 -0.7
 TOO 33.43 171 eP 24 45.00 -0.4
 e 25 49.00
 KLB 33.53 214 eP 24 45.20 -1.1
 0.3s 15.00nm 5.4mb
 TATO 33.91 331 ePc 24 47.80 -1.7
 eS 24 54.42
 ANP 34.07 331 eP 24 46.00 -5.1X
 MUN 34.70 215 eP 24 55.00 -1.4
 NWA0 34.83 213 ePd 24 57.23 -0.3
 epP 25 01.37 14kmX
 eS 25 04.18
 QZH 35.38 327 Pd 25 03.00 0.8
 Z 28s 8.90um 5.4Msz X
 N 16s 1.50um
 E 16s 2.10um
 S 30 38.00
 RKG 35.83 212 eP 25 08.50 2.6
 HKC 36.07 319 iP 25 10.00 1.9
 KGM 36.26 280 ePc 25 12.40 2.6
 OIZ 37.05 310 P 25 15.60 -0.8
 N 19s 6.40um
 E 15s 3.00um
 PP 26 50.50
 S 31 01.50
 GZH 37.16 319 Pc 25 18.00 0.7
 Z 30s 6.20um 5.2Msz X
 N 18s 7.90um
 E 14s 2.60um
 S 31 02.50

IPM 39.02 283 ePd 25 33.10 0.1
 1.0s 293.60nm 5.9mb
 e 25 55.10
 SSE 39.29 335 Pd- 25 35.00 0.0
 1.3s 263.00nm 5.8mb
 Z 22s 9.20um 5.6Msz
 E 15s 5.80um
 PP 27 12.00
 S 31 34.00
 sS 32 40.00
 SS 34 38.00
 SHK 39.29 352 eP 25 33.10 -1.9
 SNG 40.05 287 eP 25 42.80 1.3
 1.2s 1287.50nm 6.5mb
 eS 31 45.00
 MAJO 40.84 359 ePc 25 45.43 -2.4
 epPd 25 49.40 13kmX
 MAT 40.84 359 eP 25 46.00 -1.8
 1.2s 107.81nm 5.4mb
 Z 20s 9.22um 5.6Msz
 eS 31 59.00
 NJ2 41.11 334 Pc 25 50.40 0.4
 5.5s 2.60nm 3.2mb X
 Z 22s 9.70um 5.6Msz
 N 18s 2.10um
 E 15s 4.10um
 PP 27 29.00
 iS 32 04.00
 WHN 42.09 328 P 25 58.50 0.5
 5.0s 2.86nm 3.3mb X
 N 20s 7.55um
 pP 26 08.00 32kmX
 S 32 20.00
 SS 35 23.00
 NNT 42.58 294 eP 26 01.50 -0.8
 LOE 42.77 302 eP 26 02.20 -1.7
 GYA 43.92 316 P 26 14.00 0.8
 Z 15s 2.37um 5.2Msz X
 N 15s 2.78um
 S 32 44.00
 BDT 45.04 300 eP 26 18.80 -3.4X
 0.8s 223.20nm 6.1mb
 TIA 45.40 335 eP 26 23.80 -1.0
 Z 22s 7.60um 5.6Msz
 N 17s 4.40um
 E 18s 4.70um
 S 33 00.00
 CHG 45.77 302 eP 26 26.60 -1.4
 0.8s 158.58nm 6.0mb
 eS 33 12.80
 CHTO 45.77 302 eP 26 26.38 -1.7
 ePP 28 18.77
 KMI 45.93 312 ePc 26 29.73 0.3
 5.0s 1.20nm 3.1mb X
 N 15s 3.00um
 epPd 26 36.35
 ePP 28 22.73
 iS 33 14.10
 eS 36 28.10
 SS 36 30.00
 DL2 46.10 341 P 26 31.00 0.7
 Z 20s 3.60um 5.3Msz
 N 18s 4.50um
 E 18s 7.10um
 S 33 15.00
 KRP 47.04 140 P 26 39.10 1.3
 MSZ 47.35 152 P 26 42.00 1.9
 SAP 47.39 2 eP 26 40.00 -0.4
 XAN 47.72 326 P 26 41.50 -1.8
 3.0s 1.50nm 3.5mb X
 N 16s 2.00um
 E 15s 1.60um
 SNY 48.22 345 iPc 26 44.00 -2.9
 8.0s 2.30nm 3.3mb X
 Z 20s 7.40um 5.7Msz
 N 17s 2.60um
 E 15s 1.80um
 PP 28 37.00
 iS 33 45.00
 TCW 48.28 144 P 26 46.00 -1.5
 MHZ 48.29 151 P 26 47.50 -0.1
 KIW 48.43 144 eP 26 49.20 0.5
 MRW 48.54 144 eP 26 48.50 -1.0
 SNZO 48.59 144 eP 26 49.39 -0.5
 epPd 26 56.18
 WEL 48.61 144 P 26 50.00 0.0
 (S) 33 46.00

01d 01h

31.404 S ±16.8km 68.552 W ±20.4km
 DEPTH = 88.9 ± 41.4 km
 SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.10 44 iPd 24 19.80 0.0
 S 24 30.50
 RTCB 0.23 249 iPd 24 20.20 0.0
 S 24 31.20
 CFA 0.34 127 iPd 24 20.50 0.1
 S 24 31.30
 RTCV 0.46 178 iPc 24 21.20 -0.1
 S 24 32.50
 RTBS 0.81 251 ePd 24 24.50 0.0
 S 24 38.40
 RTRS 1.46 327 iPc 24 32.20 0.0
 S 24 53.00

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

? AUG 01, 1989 01h 42m 04.66± 5.96s
 5.732 S ±58.8km 138.483 E ±16.5km
 DEPTH = 33.0km (normal)
 4.4mb (1 obs.)
 NEAR S. COAST OF WEST IRIAN (205)

MTN 10.13 225 eP 44 31.00 0.1
 eS 46 34.00
 KNA 13.78 223 eP 45 20.40 0.3
 WB5 14.62 196 eP 45 30.50 -0.6
 i 45 37.30
 eS 48 23.00
 OIS 14.78 176 eP 45 30.00 -3.2X
 eS 48 21.00
 CTA 16.15 153 eP 45 51.00 0.1
 ASPA 18.37 193 iPd 46 19.20 0.5
 1.0s 26.00nm 4.4mb
 WARB 23.27 208 eP 47 10.00 -0.4
 S.D. = 0.5 on 6 of 7 obs.

? AUG 01, 1989 01h 54m 50.00± 6.80s
 5.365 S ±65.0km 138.723 E ±21.4km
 DEPTH = 33.0km (normal)
 4.1mb (1 obs.)
 NEAR S. COAST OF WEST IRIAN (205)

MTN 10.56 225 eP 57 23.00 0.9
 eS 59 27.00
 WB5 15.04 196 eP 58 22.50 0.6
 e 58 29.80
 eS 01 10.00
 OIS 15.13 177 eP 58 22.00 -1.0
 e 01 23.00
 CTA 16.37 154 e(P) 58 40.00 1.0
 ASPA 18.78 194 eP 59 08.60 -0.5
 0.9s 11.00nm 4.1mb
 WARB 23.71 208 eP 59 59.00 -0.9
 S.D. = 1.2 on 6 of 6 obs.

AUG 01, 1989 02h 23m 30.84± 0.37s
 39.221 N ± 3.3km 23.663 E ± 2.5km
 DEPTH = 21.3 ± 3.5 km
 4.4mb (20 obs.)
 AEGEAN SEA (365)
 ML 4.5 (ATH), 4.4 (TTG). Felt on Skapelos and at Volos, Greece.

NEO 0.35 284 ePb 23 37.20 -1.3
 PLG 1.16 352 ePb 23 52.40 0.5
 ATH 1.25 178 ePn 23 52.70 -0.4
 LIT 1.26 315 iPbc 23 53.70 0.4
 THE 1.51 339 iPbc 23 57.30 0.6
 iSb 24 16.50
 KZN 1.82 307 ePn 24 01.40 0.1
 SRS 1.89 358 iPnc 24 03.10 0.7
 KNT 2.03 343 iPnc 24 05.30 1.0
 PRK 2.03 88 ePn 24 04.80 0.5
 EZN 2.15 73 ePn 24 06.10 0.1
 VAY 2.26 339 iPnc 24 07.70 0.1
 RDO 2.40 36 ePn 24 09.00 -0.6
 LSK 2.54 292 iPnd 24 12.30 0.6
 APE 2.60 145 ePn 24 12.00 -0.6
 VLS 2.62 248 ePn 24 13.00 0.2
 SMG 2.91 120 ePn 24 17.10 0.2
 IZM 2.93 105 iPn 24 18.20 1.0
 TPE 3.01 292 iPnc 24 21.20 2.9X
 KEK 3.03 281 ePn 24 20.20 1.6
 SKO 3.23 329 iPnc 24 21.60 0.2

1.1s 560.00nm
 Z 10s 2.01um
 E 12s 3.87um

iPb 24 29.80
 iSn 25 09.00
 iSg 25 25.00
 LD 25 37.50
 LR 26 10.00
 iPn 24 23.90 -0.3
 iPnd 24 26.50 2.1
 iPnc 24 24.90 0.0
 ePn 24 27.50 0.9
 iPn 24 30.00 0.9
 ePn 24 29.00 -0.9
 iPn 24 30.80 0.3
 iPn 24 33.80 1.2
 iPn 24 32.60 -0.6
 iPn 24 33.10 -1.1
 iPnc 24 35.40 0.8
 iPn 24 34.20 -1.0
 iPnd 24 39.20 3.7X
 ePn 24 36.00 0.1
 ePn 24 38.70 1.6
 eSn 25 27.00
 ePn 24 38.50 0.7
 eSn 25 28.00
 ePn 24 39.60 -0.2
 Pc 24 37.90 -2.1
 ePn 24 40.60 -0.4
 ePn 24 42.10 0.8
 eSn 25 34.00
 iPnd 24 41.90 0.6
 eSn 25 33.80
 iPn 24 42.10 0.2
 ePn 24 43.40 1.0
 ePn 24 44.00 0.6
 eSn 25 37.00
 iP 24 47.50 0.7
 ePn 24 47.50 0.4
 eSn 25 45.00
 ePn 24 48.00 0.5
 eSn 25 45.00
 ePn 24 50.00 0.4
 eSn 25 48.00
 ePn 24 49.70 -0.1
 ePn 24 45.10 -6.3X
 eSn 25 51.00
 iPd 24 59.00 6.6X
 iPc 24 54.00 0.9
 eP 25 17.00 23.5X
 eP 24 56.40 2.4
 ePn 24 56.20 0.9
 eP 24 56.90 0.7
 iP 24 58.90 2.1
 Pc 24 59.40 -2.1
 ePn 25 04.00 2.3
 e(Sn) 26 47.50
 iPc 25 01.00 -1.4
 iPc 25 04.50 -0.2
 P 25 04.70 -0.5
 iPc 25 07.50 -0.1
 P 25 06.30 -1.4
 P 25 07.80 -0.8
 iPc 25 06.00 -2.6
 ePc 25 09.50 -0.7
 iPn 26 02.50 51.7X
 iSn 26 21.90
 iPd 25 10.50 -1.7
 iPc 25 11.50 -1.1
 iPd 25 00.00 -13.8X
 iPc 25 14.50 -0.4
 eP 25 17.00 1.3
 P 25 15.50 -1.4
 P 25 13.90 -3.7X
 P 25 23.00 2.2
 P 25 22.50 -1.3
 eP 25 20.00 -4.6X
 iPd 25 26.00 0.2
 P 25 27.20 -0.3
 P 25 28.50 -2.8X
 P 25 34.50 2.2
 eP 25 32.15 -2.5
 iPd 25 39.00 4.1X
 ePn 25 38.50 -1.8
 iSn 27 15.20
 P 25 41.00 -0.3
 e(P) 25 40.00 -1.4

ARV 9.12 301 P 25 41.80 -2.5
 ASS 9.15 298 P 25 43.00 -1.7
 SRO 9.42 337 iP 25 46.40 -1.9
 i 25 54.40
 i 25 51.40 1.0
 LJU 9.57 318 e(P) 25 51.40 1.0
 eS 27 36.00
 KVT 9.66 75 eP 25 54.00 2.2
 TRI 9.77 315 e(Pn) 25 50.70 -2.4
 i(Sn) 27 33.10
 CRE 9.83 300 P 25 52.00 -2.2
 VOY 9.90 317 eP 25 52.70 -2.4
 eS 27 43.10
 ZST 10.15 334 iP 25 58.20 -0.1
 i 26 04.30
 SPC 10.26 347 iP 25 58.70 -1.3
 RBL 10.34 318 P 26 02.00 1.0
 VKA 10.48 332 eP 26 03.00 0.1
 i 26 04.30
 i 26 11.40
 i 26 22.00
 i 26 49.90
 e(S) 28 02.50
 FVI 10.85 316 P 26 06.90 -1.1
 KBA 10.88 320 iPc 26 09.00 0.5
 i 26 27.70
 i(S) 28 03.20
 i 28 05.80
 SAL 11.61 308 P 26 16.80 -1.5
 DSI 12.23 125 eP 26 25.00 -1.6
 KHC 12.26 327 P 26 26.50 -0.5
 1.0s 10.50nm 5.0mb
 PRU 12.56 332 eP 26 29.00 -2.0
 KSP 12.73 338 eP 26 40.00 6.8X
 PRNI 12.84 130 iPd 26 32.00 -2.9X
 MBH 13.20 132 eP 26 37.00 -2.6
 BRG 13.51 333 eP 26 48.60 5.0X
 LPG 13.98 302 eP 26 50.90 0.8
 0.8s 28.20nm 5.1mb
 CLL 14.21 332 e(P) 26 52.00 -0.7
 HAU 15.28 311 eP 27 06.10 -0.8
 0.7s 6.60nm 4.0mb
 PLDF 16.20 301 P 27 21.23 2.4
 LBL 16.25 298 P 27 23.40 4.1X
 SMF 16.28 304 eP 27 23.20 3.5X
 0.9s 23.50nm 4.3mb
 LBF 16.31 305 eP 27 23.30 3.2X
 0.7s 9.90nm 4.1mb
 LOR 16.49 306 eP 27 23.80 1.4
 1.2s 26.70nm 4.2mb
 PYM 16.55 300 P 27 26.26 3.0X
 AGO 16.56 301 P 27 26.26 3.0X
 SSF 16.64 305 eP 27 26.80 2.6
 0.7s 14.30nm 4.2mb
 AVF 16.64 304 eP 27 26.90 2.6
 0.8s 30.80nm 4.5mb
 BGF 16.90 302 eP 27 29.50 2.0
 0.8s 32.20nm 4.5mb
 MAF 16.98 301 eP 27 31.20 2.6
 0.8s 18.80nm 4.3mb
 CAF 17.00 297 eP 27 31.80 3.0X
 1.0s 10.00nm 3.9mb
 TCF 17.24 301 eP 27 34.80 3.0X
 LSF 17.68 301 eP 27 39.80 2.5
 LPF 19.87 304 eP 28 00.60 -2.7
 0.8s 18.80nm 4.5mb
 NUR 21.32 1 eP 28 18.00 -0.2
 0.6s 20.90nm 4.7mb
 TOL 21.35 281 eP 28 20.00 1.2
 ASMO 21.56 274 eP 28 23.00 2.0
 ACHM 21.69 273 eP 28 25.50 3.2X
 HFS 21.86 347 eP 28 24.30 0.7
 0.6s 8.00nm 4.3mb
 AAPN 21.87 274 eP 28 23.50 -0.6
 ATEJ 21.88 273 eP 28 25.00 0.7
 ALOJ 21.90 273 eP 28 27.50 3.0X
 NAO 23.06 344 P 28 35.40 -0.1
 0.7s 6.40nm 4.3mb
 SUF 23.58 3 eP 28 39.00 -1.5
 0.4s 4.90nm 4.4mb
 IFR 23.82 265 iP 28 45.00 1.7
 i 28 46.00
 i 29 04.50
 EKA 24.09 321 Pc 28 45.30 -0.2
 0.8s 21.90nm 4.8mb
 SOD 28.25 2 iP 29 23.60 -0.5
 BNG 34.94 189 iPd 30 22.30 -1.0
 0.5s 11.00nm 5.0mb

LIC 41.82 226 P 30 33.20
 CHG 67.12 84 eP 34 29.80 4.6X
 CHTO 67.12 84 eP 34 25.40 0.2
 1.0s 5.25nm 4.6mb
 i 34 30.10
 FFC 75.50 331 eP 35 15.00 0.1
 0.7s 6.00nm 4.7mb
 S.D. = 1.3 on 121 of 145 obs.

AUG 01, 1989 02h 38m 07.69±0.67s
 39.212 N ± 6.1km 23.433 E ± 7.3km
 DEPTH = 10.0km (geophysicist)
 AEGEAN SEA (365)
 ML 3.2 (ATH).

NEO 0.19 300 iPgd 38 12.70 0.8
 LIT 1.15 321 iPbc 38 30.30 1.1
 iSb 38 48.50
 PLG 1.16 0 iPbc 38 28.00 -1.4
 ATH 1.26 170 ePn 38 30.50 -0.5
 THE 1.46 346 ePnc 38 33.50 -0.6
 iSn 38 53.50
 KZN 1.68 311 ePn 38 38.80 1.4
 SRS 1.91 4 ePn 38 39.00 -1.5
 KNT 1.99 348 ePn 38 41.00 -0.7
 PRK 2.20 88 ePb 38 45.70 0.8
 VAY 2.21 343 ePn 38 45.00 0.1
 EZN 2.32 74 ePn 38 48.00 1.5
 ITM 2.35 211 ePn 38 46.00 -1.0
 APE 2.70 142 ePn 38 48.00 -4.0X
 S.D. = 1.2 on 12 of 13 obs.

? AUG 01, 1989 02h 42m 06.42±1.42s
 27.793 N ±10.3km 139.749 E ±25.9km
 DEPTH = 503.6 ± 20.0 km
 4.2mb (6 obs.)

BONIN ISLANDS REGION (212)

MAT 8.82 352 iPd 44 12.60 0.0
 0.8s 29.85nm 4.6mb
 eS 45 50.00
 CHTO 38.38 266 iP 48 45.10 0.0
 0.6s 2.81nm 4.0mb
 WB5 47.68 187 iPd 49 58.20 0.0
 WRA 47.74 187 Pd 49 58.80 0.1
 0.5s 5.40nm 4.3mb
 ASPA 51.47 187 iPd 50 26.30 -0.1
 0.6s 10.00nm 4.4mb
 FORR 59.36 192 eP 51 21.30 0.0
 SUF 75.63 334 eP 53 00.00 0.0
 0.4s 2.10nm 4.0mb
 NAO 82.44 337 P 53 36.00 0.0
 0.8s 2.10nm 3.7mb
 S.D. = 0.1 on 8 of 8 obs.

AUG 01, 1989 03h 06m 23.66±0.65s
 38.364 N ± 5.4km 26.428 E ± 6.6km
 DEPTH = 10.0km (geophysicist)
 AEGEAN SEA (365)
 MD 3.4 (ATH).

IZM 0.66 87 iPg 06 37.50 0.7
 iSg 06 47.50
 PRK 0.89 352 ePn 06 41.00 0.3
 EZN 1.46 357 iPn 06 50.10 0.1
 APE 1.48 209 ePn 06 50.40 0.1
 YER 1.92 129 ePn 06 56.30 -0.4
 DST 2.12 53 ePn 06 59.60 0.0
 EDC 2.27 29 ePn 07 01.00 -0.8
 KHL 2.43 90 ePn 07 04.10 -0.1
 RDO 2.86 346 ePn 07 10.20 0.1
 S.D. = 0.5 on 9 of 9 obs.

? AUG 01, 1989 03h 07m 01.19±6.86s
 5.577 S ±67.9km 138.418 E ±18.6km
 DEPTH = 33.0km (normal)
 4.4mb (2 obs.)
 NEAR S. COAST OF WEST IRIAN (205)

MTN 10.19 224 iPd 09 28.90 0.6
 eS 11 33.00
 KNA 13.85 222 eP 10 18.00 0.4
 WB5 14.75 195 eP 10 28.20 -1.2
 i 10 36.10
 eS 13 14.00
 WRA 14.82 195 P 10 38.00 7.7X

0.6s 10.80nm 4.4mb
 QIS 14.94 176 eP 10 28.00 -3.8X
 eS 13 18.00
 CTA 16.31 153 iPc 10 50.00 0.5
 ASPA 18.50 193 iPd 11 17.50 0.6
 0.9s 25.00nm 4.4mb
 eS 14 45.20
 WARB 23.38 208 eP 12 07.00 -0.9
 S.D. = 1.1 on 6 of 8 obs.

AUG 01, 1989 03h 21m 37.36±0.38s
 38.290 N ± 4.0km 22.249 E ± 3.4km
 DEPTH = 10.0km (geophysicist)
 3.7mb (2 obs.)

GREECE (364)
ML 3.5 (ATH).

ITM 1.14 193 iPnc 21 57.50 -1.2
 ATH 1.20 105 ePb 22 01.10 1.4
 NEO 1.27 37 ePn 22 00.20 -0.7
 VLS 1.31 266 iPnc 22 00.00 -1.6
 LIT 1.82 6 iPnc 22 08.70 -0.2
 iSn 22 30.30
 PAIG 1.98 34 iPnc 22 10.90 -0.3
 iSn 22 31.10
 KZN 2.05 350 ePn 22 12.10 -0.2
 LSK 2.26 326 iPnd 22 18.40 3.0X
 PLG 2.28 24 ePn 22 14.60 -1.0
 KEK 2.38 307 ePb 22 18.20 1.2
 OUR 2.44 33 ePn 22 17.40 -0.5
 TPE 2.65 320 iPnc 22 23.00 2.1
 GRG 2.67 2 ePn 22 23.70 2.6
 eSn 22 53.70

APE 2.87 114 ePn 22 24.00 -0.1
 KNT 2.91 10 ePnc 22 24.40 -0.2
 eSn 22 58.60

SRS 3.01 20 ePnc 22 25.00 -0.9
 VAY 3.04 5 iPn 22 25.70 -0.6
 VLO 3.05 316 ePn 22 28.00 1.6
 VAM 3.28 151 ePn 22 28.70 -1.1
 PRK 3.29 72 ePn 22 30.00 0.1
 MMB 3.49 19 iPd 22 32.00 -0.7
 eS 23 15.00
 EZN 3.52 63 eP 22 34.00 0.8
 TIR 3.56 330 ePn 22 35.00 1.2
 KKB 3.63 10 eP 22 34.00 -0.8
 S 23 07.00
 PHP 3.67 338 iPnc 22 35.90 0.6
 SKO 3.73 351 ePn 22 36.50 0.3
 i 22 46.20

RDO 3.82 41 ePn 22 36.00 -1.4
 RZN 3.89 28 iPd 22 38.00 -0.6
 e 23 25.00
 LCI 3.91 303 Pc 22 37.30 -1.4
 IZM 3.94 87 iP 22 40.10 0.8
 NPS 4.05 137 ePn 22 40.50 -0.2
 KDZ 4.14 35 iP 22 40.00 -2.0
 PUK 4.16 335 ePn 22 44.30 2.1
 SDA 4.28 331 ePn 22 44.40 0.5
 VTS 4.36 9 iP 22 45.00 -0.3
 eSg 23 35.00

BCI 4.40 338 ePn 22 49.00 3.4X
 KAP 4.80 123 ePn 22 53.20 1.8
 TDS 4.81 288 P 22 52.60 1.1
 SOI 4.89 269 P 22 53.60 1.0
 PVL 5.45 24 eP 22 55.00 -5.5X
 MGR 5.52 292 Pc 23 01.20 -0.3
 KHL 5.72 87 ePn 23 05.60 1.1
 SCO 5.83 295 P 23 04.00 -1.9
 MEU 5.92 261 P 23 07.30 0.0
 HVAR 6.58 320 i(Pn) 23 15.10 -1.3
 SDI 7.32 300 Pd 23 26.60 -0.3
 HFS 22.53 349 eP 26 37.20 -1.2
 0.5s 1.70nm 3.8mb
 NAO 23.67 346 P 26 46.10 -3.4X
 0.6s 1.40nm 3.7mb
 SUF 24.57 4 eP 26 59.00 0.7
 S.D. = 1.2 on 45 of 49 obs.

? AUG 01, 1989 04h 11m 31.84±3.41s
 37.354 N ±12.2km 30.756 E ±30.3km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

BCK 0.17 309 iPg 11 36.00 0.2
 ELL 0.91 229 iPn 11 48.90 -0.4
 KHL 1.37 315 iPn 11 55.60 -1.5

ALT 1.77 344 ePn 12 03.50 0.7
 YER 1.99 264 iPn 12 06.90 1.0
 S.D. = 1.4 on 5 of 5 obs.

& AUG 01, 1989 04h 19m 04.17s
 60.835 N 151.175 W
 DEPTH = 54.1km
 KENAI PENINSULA, ALASKA (14)
 <AGS-P>.

NKA 0.10 199 iP 19 14.31 3.4
 SLKM 0.57 125 iP 19 16.25 -0.4
 CRP 0.64 313 iP 19 17.47 -0.2
 S 19 28.68
 RDT 0.66 247 iP 19 17.22 -0.6
 SUA 0.66 18 iP 19 17.46 -0.4
 S 19 28.70
 NNL 0.80 184 iP 19 19.95 0.5
 S 19 31.72
 PWA 1.03 37 eP 19 22.32 -0.2
 BRK 1.08 172 eP 19 22.80 -0.6
 S 19 38.37
 SKT 1.16 352 iP 19 23.88 -0.5
 ILIM 1.16 230 iP 19 23.70 -0.8
 S 19 40.11
 CNPM 1.31 181 iP 19 25.83 -0.7
 S 19 43.71
 XLV 1.41 191 eP 19 26.91 -1.0
 GHO 1.44 48 iP 19 27.26 -1.0
 S 19 45.99
 KNK 1.44 65 iP 19 27.30 -1.0
 S 19 45.97
 OPT 1.57 222 eP 19 29.87 -0.2
 S 19 50.89
 CUT 1.63 15 eP 19 30.62 -0.3
 S 19 52.92
 AUV 1.87 219 eP 19 33.96 -0.3
 SVW 2.19 279 eP 19 36.54 -2.2
 VZW 2.27 82 eP 19 37.62 -2.3
 HUR 2.27 18 eP 19 40.84 0.9
 S 20 09.55
 CDD 2.28 214 eP 19 39.37 -0.7
 SHU 2.29 196 eP 19 39.33 -0.9
 MCNL 2.29 225 eP 19 39.22 -1.0
 KLU 2.63 73 eP 19 42.76 -2.3
 S 20 13.48
 TOA 2.72 60 eP 19 45.13 -1.2
 KTH 2.73 2 eP 19 45.93 -0.6
 MCK 3.09 19 eP 19 52.46 0.8
 PAX 3.45 49 eP 19 55.25 -1.5
 28 obs. associated

AUG 01, 1989 05h 24m 51.75±0.13s
 11.618 S ± 3.4km 164.686 E ± 3.3km
 DEPTH = 33.0km (normal)
 5.6mb (26 obs.) 5.3Msz (15 obs.)

SANTA CRUZ ISLANDS REGION (183)
Ms 5.5 (BRK). Mo=1.3*10**18 Nm (PPT).

CENTROID, MOMENT TENSOR (HRV)
 Dato Used: GDSN
 L.P.B.: 17S, 36C
 Centroid Location:
 Origin Time 05:24:56.1 0.2
 Lot 11.865 0.03 Lon 164.56E 0.03
 Dep 17.2 1.6 Half-duration 3.3
 Moment Tensor: Scale 10**17 Nm
 Mrr=-7.40 0.16 Mtt=-1.24 0.25
 Mff= 8.64 0.20 Mrt=-1.85 0.44
 Mrf= 1.91 0.69 Mtf=-2.11 0.17
 Principal Axes:
 T Vol= 9.37 Plg= 8 Azm=257
 N -1.36 12 166
 P -8.01 75 19
 Best Double Couple: Mo=8.7*10**17
 NP1: Strike= 1 Dip=39 Slip=-70
 NP2: 157 54 -105

SVO 5.38 297 eP 26 12.00 0.1
 eS 27 08.00
 VSG 5.43 295 iP 26 13.50 1.0
 DZM 10.53 171 iPd 27 22.00 -1.6
 iS 29 18.20
 PMG 17.38 276 iPd- 28 56.00 2.5
 LAT 18.14 284 eP 29 07.00 4.1X
 BRS 19.27 214 iPc 29 18.20 1.6
 iS 33 01.00

RSSD 98.89 47 P 38 30.00 -0.3
 FFC 101.31 36 ePdiff 38 39.50 -1.2
 1.2s 23.00nm 5.6mb
 MEO 102.01 57 iPdiff 38 44.30 -0.1
 ALE 106.62 6 ePdiff 39 06.00 2.2
 ALE 106.62 6 ePKP 43 06.00 -8.3X
 GAC 118.97 44 ePKP 43 37.50 -1.2
 PRIN 120.67 50 e(PKP) 43 42.60 0.5
 CNCB 120.77 118 PKP 43 44.80 1.1
 LPB 120.78 117 PKP 43 45.00 1.4
 ZOBO 120.87 117 PKP 43 44.00 0.1
 0.9s 19.46nm
 Z 19s 0.32um 5.0Msz
 PcP 45 24.00
 LR 55 16.00
 TBR 120.88 49 e(PKP) 43 43.10 0.6
 HBVT 120.96 45 ePKP 43 43.20 0.6
 ePP 45 21.50
 SUF 121.06 339 ePKP 43 41.00 -1.2
 SCH 121.09 32 ePKP 43 42.00 -0.5
 CCH 122.11 119 PKP 43 46.90 1.0
 MSL 122.12 306 ePKP 43 45.00 0.0
 BNH 122.14 44 e(PKP) 43 46.20 1.4
 NUR 123.05 338 iPKP 43 47.10 1.1
 0.7s 17.40nm
 MIM 123.45 43 e(PKP) 43 48.20 0.9
 CBM 123.48 41 PKP 43 42.50 -4.8X
 CBM 123.48 41 e(PKP) 43 47.70 0.4
 EMM 124.65 43 e(PKP) 43 50.40 0.8
 AKU 125.97 1 ePKP 43 52.70 1.1
 1.0s 16.00nm
 BUL 126.48 234 iPKPd 43 55.10 0.9
 0.9s 19.75nm
 HFS 127.02 342 ePKP 43 53.60 -0.2
 0.5s 1.70nm
 NAO 127.26 344 PKP 43 53.70 -0.5
 1.1s 11.50nm
 REY 127.35 4 iPKP 43 57.00 2.8X
 HRI 128.70 303 ePKP 43 59.00 1.0
 PRNI 129.90 300 ePKP 43 59.00 -1.3
 MBH 130.11 299 ePKP 44 01.00 0.4
 CFR 130.12 320 iPKPc 44 00.50 0.4
 VRI 130.66 322 ePKP 44 20.00 18.8X
 CVO 131.02 322 ePKP 44 06.00 4.1X
 MLR 131.32 322 ePKP 44 02.50 -0.1
 SPC 132.37 329 e(PKP) 44 05.20 0.6
 e 46 32.20
 KSP 133.14 333 ePKP 44 07.00 1.3
 VAO 133.69 138 ePKP 44 07.30 -0.4
 RDO 133.70 317 ePKP 44 08.70 1.6
 PRK 134.04 314 ePKP 44 07.00 -0.8
 BRG 134.14 334 iPKP 44 09.80 2.2
 2.0s 44.00nm
 CLL 134.20 335 iPKPd 44 09.80 2.1
 1.4s 23.00nm
 SRO 134.24 329 ePKP 44 11.60 3.7X
 e 46 36.80
 ZST 134.60 330 i(PKP) 44 11.50 3.0X
 Z 18s 1.30um 5.7Msz
 e 46 41.60
 MOX 135.27 336 ePKP 44 11.00 1.2
 e 46 48.00
 KHC 135.59 333 ePKP 44 02.50 -8.0X
 i 44 11.50
 SKO 135.95 320 ePKP 44 12.50 1.2
 NPS 136.12 309 ePKP 44 06.50 -5.4X
 VAM 137.13 310 ePKP 44 05.00 -8.8X
 ABH 137.44 338 ePKP 44 12.70 -1.3
 BAO 137.82 129 ePKP 44 05.00 -10.8X
 ITM 138.02 314 ePKP 44 06.00 -9.4X
 KEK 138.21 318 ePKP 44 17.00 1.3
 DOU 138.28 341 PKP 44 05.70 -9.8X
 e 47 02.00
 OGA 138.42 333 ePKP 44 08.90 -7.2X
 BSF 139.42 337 ePKP 44 10.80 -6.9X
 1.2s 17.85nm
 HAU 139.44 338 ePKP 44 10.80 -6.9X
 1.0s 16.00nm
 VAI 140.19 334 PKP 44 11.50 -7.5X
 PGD 140.29 329 PKP 44 10.00 -9.5X
 ATB 140.42 110 e(PKP) 44 13.90 -6.5X
 TDS 140.45 320 PKP 44 15.00 -4.7X
 SDI 140.67 325 PKP 44 14.00 -6.1X
 BDI 140.71 330 PKP 44 14.00 -6.1X
 BOB 140.73 332 PKP 44 13.00 -7.2X
 MNS 140.84 327 PKP 44 14.50 -5.9X
 FLN 140.96 344 ePKP 44 15.00 -5.3X

LOR 140.96 339 ePKP 44 15.00 -5.4X
 0.8s 10.05nm
 SSF 141.27 339 ePKP 44 15.80 -5.1X
 0.7s 11.60nm
 LPG 141.34 335 ePKP 44 16.70 -4.8X
 0.7s 11.00nm
 SMF 141.51 339 ePKP 44 15.80 -5.6X
 0.9s 16.40nm
 SOI 141.55 319 PKP 44 16.60 -5.1X
 BNI 141.73 335 PKP 44 20.50 -1.5
 LPF 141.78 344 ePKP 44 18.60 -3.2X
 BGF 141.93 340 ePKP 44 17.50 -4.7X
 0.7s 11.00nm
 MAF 142.32 340 ePKP 44 19.20 -3.7X
 1.0s 14.00nm
 TCF 142.38 340 ePKP 44 19.50 -3.5X
 1.2s 35.70nm
 LSF 142.64 341 ePKP 44 19.90 -3.5X
 1.0s 28.00nm
 MFF 142.84 343 ePKP 44 20.10 -3.6X
 1.0s 28.00nm
 FRF 142.94 333 ePKP 44 20.40 -3.6X
 0.8s 18.80nm
 LMR 143.18 333 ePKP 44 20.60 -3.8X
 0.5s 7.30nm
 RJF 143.48 340 ePKP 44 21.80 -3.0X
 CAF 143.62 339 ePKP 44 22.30 -2.8X
 0.8s 29.55nm
 LFF 144.06 340 ePKP 44 23.50 -2.3
 LPO 144.13 340 ePKP 44 23.70 -2.3
 0.8s 75.20nm
 PTS 144.89 320 PKP 44 26.90 -0.6
 ETER 145.57 336 ePKP 44 29.80 1.3
 BNG 145.75 261 iPKPc 44 29.50 -0.2
 1.1s 534.00nm
 i 45 07.20
 i 46 03.80
 EPF 145.88 339 ePKP 44 29.60 0.5
 1.0s 44.00nm
 PDCR 146.32 135 ePKPd 44 29.60 -0.9
 ECRJ 147.17 342 ePKP 44 35.00 3.8X
 EMON 147.55 349 ePKP 44 34.20 2.5X
 ESEL 147.65 333 e(PKP) 44 37.50 5.6X
 EBR 147.75 337 ePKP 44 36.00 4.0X
 STS 148.30 351 ePKP 44 36.80 3.9X
 ERUA 148.52 348 e(PKP) 44 37.00 3.7X
 ETOR 148.66 340 ePKP 44 38.00 4.3X
 ITR 149.37 130 ePKP 44 35.40 0.0
 e 44 38.60
 i 44 43.60
 e 44 50.90
 GUD 149.46 343 ePKP 44 40.00 5.0X
 TOL 150.13 342 iPKPc 44 41.00 5.2X
 1.2s 156.25nm
 EVIA 150.77 339 ePKP 44 43.80 6.9X
 EALH 151.06 337 ePKP 44 43.80 6.6X
 EBAN 151.63 341 ePKP 44 45.20 7.1X
 ENIJ 152.14 337 ePKP 44 45.40 6.5X
 ASMO 152.34 340 ePKP 44 46.00 6.7X
 AFC 152.37 339 ePKP 44 46.50 7.1X
 EHOR 152.39 343 ePKP 44 47.00 7.8X
 AAPN 152.51 340 ePKP 44 44.70 5.2X
 ACHM 152.60 340 ePKP 44 47.00 7.4X
 ALOJ 152.69 340 ePKP 44 48.00 8.2X
 APHE 152.69 339 iPKP 44 47.00 7.2X
 ATEJ 152.83 340 ePKP 44 47.00 6.9X
 EVAL 153.03 345 e(PKP) 44 48.50 8.4X
 MAL 153.14 340 iPKPc 44 47.50 7.3X
 EPRU 153.18 342 e(PKP) 44 49.80 9.4X
 IFR 156.29 338 iPKP 44 46.50 1.6
 i 45 07.50
 KIC 168.33 244 PKP 44 58.50 1.6
 LIC 168.51 243 PKP 44 58.30 1.3
 TIC 168.70 245 PKP 44 58.80 1.7
 S.D. = 1.0 on 194 of 267 obs.

? AUG 01, 1989 05h 44m 06.89±6.88s
 39.642 N ±21.3km 21.053 E ±52.3km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)

KZN 0.86 39 eP 44 23.00 -0.6
 eS 44 44.00
 LIT 1.20 67 ePn 44 29.80 0.6
 eSn 44 53.00
 NEO 1.71 101 eP 44 37.00 0.0
 PLG 1.98 68 eP 44 40.00 -0.8

KNT 2.07 42 ePn 44 42.90 0.8
 S.D. = 1.0 on 5 of 5 obs.

AUG 01, 1989 07h 57m 14.74±0.56s
 39.243 N ± 4.9km 23.557 E ± 5.3km
 DEPTH = 10.0km (geophysicist)
 AEGEAN SEA (365)
 ML 3.0 (ATH).

NEO 0.27 284 ePb 57 20.50 0.1
 PAIG 0.69 8 ePb 57 29.80 1.4
 eSb 57 41.20
 PLG 1.13 356 ePb 57 36.20 0.2
 OUR 1.14 17 ePb 57 36.40 0.4
 LIT 1.19 316 ePnd 57 37.20 0.3
 eSn 57 56.40
 ATH 1.27 174 ePb 57 38.00 -0.4
 eSn 57 52.00
 KZN 1.74 308 ePn 57 45.10 -0.1
 GRG 1.93 333 ePn 57 48.10 0.2
 PRK 2.11 89 ePb 57 52.50 2.0
 VAY 2.21 340 ePn 57 52.00 0.1
 EZN 2.22 74 ePn 57 52.00 -0.1
 ITM 2.43 212 ePb 57 55.00 -0.1
 RDO 2.43 38 ePn 57 53.00 -2.1
 KKB 2.65 352 iPc 57 58.00 -0.2
 S 58 59.00
 APE 2.67 144 ePn 57 53.00 -5.6X
 KDZ 2.79 30 iPg 57 59.00 -1.3
 iSg 58 17.00
 VTS 3.36 356 iP 58 08.00 -0.4
 e 58 50.00
 PVL 4.19 18 eP 58 34.00 14.0X
 S.D. = 1.0 on 16 of 18 obs.

? AUG 01, 1989 07h 57m 51.37±1.73s
 39.193 N ±12.6km 22.249 E ±15.7km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 ML 3.2 (ATH).

NEO 0.77 81 ePg 58 05.80 -0.5
 KZN 1.17 342 ePg 58 13.00 -0.3
 PLG 1.50 38 ePb 58 19.00 0.7
 ATH 1.68 136 ePn 58 21.00 0.2
 SKO 2.84 348 eP 59 08.00 30.4X
 S.D. = 0.9 on 4 of 5 obs.

AUG 01, 1989 08h 31m 03.60±0.79s
 44.137 N ±12.7km 10.831 E ± 7.1km
 DEPTH = 10.0km (geophysicist)
 NORTHERN ITALY (545)

MME 0.11 301 Pd 31 06.00 -0.7
 eSg 31 08.40
 BDI 0.18 246 Pc 31 07.00 -0.8
 eSg 31 10.20
 FIR 0.47 139 ePg 31 14.50 1.3
 eSg 31 20.50
 PGD 0.69 112 P 31 16.60 -0.8
 SFI 0.77 106 P 31 18.10 -0.4
 CRE 0.96 122 P 31 22.00 0.1
 eSg 31 35.00
 BOB 1.17 303 P 31 26.90 1.3
 S.D. = 1.2 on 7 of 7 obs.

* AUG 01, 1989 08h 43m 29.76±0.65s
 36.783 N ± 9.1km 69.610 E ±13.3km
 DEPTH = 33.0km (normal)
 4.4mb (3 obs.)
 HINDU KUSH REGION (718)

QUE 6.94 199 eP 45 11.80 -0.2
 eS 46 23.70
 MAIO 8.16 270 ePn 45 34.00 5.1X
 eSn 47 00.00
 NDI 10.30 139 iPd 45 58.50 0.1
 0.4s 38.14nm 6.0mb X
 VRI 33.12 300 eP 50 05.00 0.3
 MLR 33.67 299 iPc 50 10.00 0.3
 HFS 42.15 322 eP 51 20.30 -0.1
 0.5s 3.80nm 4.4mb
 NAO 43.64 323 P 51 32.10 -0.4
 0.7s 4.40nm 4.3mb
 MBC 67.10 2 eP 54 21.50 0.0
 0.5s 2.00nm 4.5mb

01d 08h S.D. = 0.3 on 7 of 8 obs.

AUG 01, 1989 09h 16m 26.49± 0.59s 39.269 N ± 5.1km 23.514 E ± 5.7km DEPTH = 10.0km (geophysicist) AEGEAN SEA (365) ML 3.0 (ATH).

Table of seismic data for the Aegean Sea region, listing station codes (NEO, PAIG, PLG, OUR, LIT, ATH, THE, KZN, SRS, GRG, KNT, PRK, VAY, EZN, ITM, RDO, RZN, KKB, APE) and their respective seismic parameters.

S.D. = 1.1 on 17 of 19 obs.

AUG 01, 1989 09h 20m 45.28± 0.67s 14.249 S ± 25.2km 72.862 W ± 13.4km DEPTH = 96.8 ± 19.0 km PERU (116)

Table of seismic data for the Peru region, listing station codes (PT03, HUA, PT06, PT02, PT08, NNA, ZOBO, LPB, CNCB, CCH, YKA) and their respective seismic parameters.

S.D. = 1.2 on 10 of 11 obs.

AUG 01, 1989 09h 38m 06.21± 2.04s 36.505 N ± 16.5km 70.747 E ± 15.1km DEPTH = 189.6 ± 25.3 km 4.2mb (5 obs.)

HINDU KUSH REGION (718)

Table of seismic data for the Hindu Kush region, listing station codes (QUE, MAIO, NDI, GBA, SUF, HFS, NAO, MBC, YKA) and their respective seismic parameters.

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

AUG 01, 1989 09h 51m 50.91± 8.71s 38.784 N ± 63.6km 23.806 E ± 33.6km DEPTH = 10.0km (geophysicist) GREECE (364)

Table of seismic data for the Japan region, listing station codes (PAIG, OUR, LIT, THE, SRS, KNT) and their respective seismic parameters.

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

AUG 01, 1989 11h 25m 39.70± 0.62s 31.304 N ± 3.6km 138.286 E ± 5.6km DEPTH = 391.1 ± 6.1 km 4.9mb (36 obs.) SOUTH OF HONSHU, JAPAN (211)

Table of seismic data for the South of Honshu, Japan region, listing station codes (MAT, SHK, SNY, CN2, PJG, GUA, BJI, WHN, TIY, HHC, BTO, XAN, GTA, LOE, AAI, CHG, CHTO, BDT, WMO, MTN, KNA, WB5, WRA, QIS, NDI, ASPA, MBL, GBA, WARB, DZM, BRS, QUE, FORR, MBC, MAIO, COOL, ALE, BWA, NNAO, CAN, KEV, SOD, YKA, SUF, NUR, HFS, NAO, LRM, VRI) and their respective seismic parameters.

Table of seismic data for the San Juan Province, Argentina region, listing station codes (MLR, CMP, HRI, KSP, CLL, PRNI, PRU, MBH, KHC, VAY, FEL, HAU, ALO, ORX, LSD, LOR, LPG, RSP, LBF, SSF, SMF, LDF, RRL, AVF, LPF, MAF, TCF, LSF, MFF, RJF, TIC, KIC, LIC, ZOBO, LPB, PDCR) and their respective seismic parameters.

S.D. = 0.8 on 82 of 85 obs.

AUG 01, 1989 11h 59m 17.97± 5.43s 31.270 S ± 17.1km 68.485 W ± 25.8km DEPTH = 99.9 ± 50.8 km SAN JUAN PROVINCE, ARGENTINA (137)

Table of seismic data for the Kermadec Islands region, listing station codes (RTLL, RTCB, CFA, RTCV, RTBS, RTRS) and their respective seismic parameters.

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

AUG 01, 1989 12h 44m 02.88± 3.59s 31.464 S ± 16.4km 177.525 W ± 25.4km DEPTH = 103.7 ± 25.1 km 5.4mb (4 obs.) KERMADEC ISLANDS REGION (177)

Table of seismic data for the Kermadec Islands region, listing station codes (MNG, KIW, CAW) and their respective seismic parameters.

WDW 11.49 210 eP 46 43.80 -1.0
 TCW 11.76 212 eP 46 48.10 -0.3
 DZM 17.08 299 iPd 47 57.00 0.3
 BRS 26.15 271 iPc 49 30.50 1.4
 CAN 28.14 253 eP 49 47.70 0.6
 BWA 28.66 255 eP 49 51.70 -0.1
 CMS 31.16 260 iPd 50 15.30 1.3
 CTA 34.38 280 iPc 50 40.90 -1.1

1.7s 357.69nm 6.0mb
 STK 34.65 258 iPd 50 45.70 1.5
 0.4s 30.00nm 5.5mb
 ASPA 43.47 268 iPc 51 56.70 -0.8
 WRA 44.55 273 Pd 52 04.70 -1.5
 0.2s 2.70nm 4.7mb
 WB5 44.55 273 iPd 52 04.90 -1.3
 FORR 46.12 256 eP 52 18.30 -0.2
 0.4s 20.00nm 5.3mb

SPA 58.71 180 e(P) 54 04.00 12.3X
 0.5s 5.09nm
 i 54 06.90
 CHTO 94.32 289 e(P) 57 11.30 -0.7
 SUF 145.25 341 ePKP 03 30.00 1.0
 NUR 147.45 340 ePKP 03 37.00 4.3X
 BNG 149.16 213 iPKPc 03 46.20 9.3X
 0.6s 12.00nm
 i 03 58.10

NAO 150.12 352 PKP 03 45.30 8.5X
 1.2s 11.70nm
 HFS 150.36 349 ePKP 03 44.20 7.0X
 0.7s 2.00nm

S.D. = 1.1 on 18 of 23 obs.

% AUG 01, 1989 12h 56m 08.93±2.09s
 16.489 N ±14.8km 61.187 W ±12.4km
 DEPTH = 10.0km (geophysicist)

LEEWARD ISLANDS (92)
 ML 2.6 (FDF).

DEG 0.21 145 eP 56 13.72 0.1
 S 56 16.60
 MGG 0.58 192 eP 56 21.00 0.3
 S 56 29.00
 PAG 0.66 226 eP 56 22.60 0.5
 S 56 32.20
 BBL 1.00 196 eP 56 27.07 -0.8
 S 56 41.40
 MGH 1.01 283 eP 56 28.00 -0.1
 S 56 42.20

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

? AUG 01, 1989 14h 22m 47.90±11.05s
 37.192 S ±110.km 177.553 E ±28.9km
 DEPTH = 33.0km (normal)
 OFF E. COAST OF N. ISLAND, N.Z. (160)

HBZ 0.72 125 eP 23 01.60 0.0
 MNG 3.78 205 eP 23 45.80 0.5
 KIW 4.20 208 P 23 52.20 0.9
 CAW 4.36 206 P 23 53.90 0.3
 BLW 4.47 200 eP 23 55.50 0.4
 WDW 4.53 205 eP 23 55.20 -0.7
 MOW 4.59 202 P 23 55.90 -0.8
 MRW 4.60 208 P 23 57.20 0.3
 WEL 4.62 207 eP 23 56.80 -0.4
 TCW 4.75 211 eP 23 58.50 -0.5

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

? AUG 01, 1989 14h 33m 48.83±5.09s
 44.141 N ±36.8km 12.078 E ±8.8km
 DEPTH = 10.0km (geophysicist)
 NORTHERN ITALY (545)

SFI 0.27 217 Pc 33 54.90 0.3
 eSg 33 58.20
 PGD 0.37 224 Pc 33 56.30 -0.2
 eSg 34 01.20
 CRE 0.52 190 P 33 59.00 -0.4
 eSg 34 06.50
 ARV 0.90 135 P 34 05.70 -0.3
 eSg 34 19.90
 ASS 1.15 158 P 34 11.00 0.6

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

AUG 01, 1989 15h 03m 53.41±0.30s
 21.952 S ±5.5km 170.568 E ±6.2km
 DEPTH = 60.5km (2 depth phases)
 5.3mb (21 obs.)

LOYALTY ISLANDS REGION (189)

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 13S, 26C

Centroid Location:

Origin Time 15:04: 4.4 0.6

Lat 21.855 0.06 Lon 169.64E 0.04

Dep 65.9 3.8 Half-duration 1.7

Moment Tensor: Scale 10**16 Nm

Mrr=-1.49 0.33 Mtt= 1.33 0.84

Mff= 0.16 0.67 Mrt= 5.52 0.42

Mrf= 0.62 0.45 Mtf= 8.92 0.43

Principal Axes:

T Val= 11.30 P1g=20 Azm=320

N -1.59 57 85

P -9.72 25 221

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

NP1:Strike= 2 Dip=57 Slip=-176

NP2: 270 87 -33

DZM 3.83 267 iPc 04 51.60 0.3
 iS 05 32.00
 PVC 4.70 333 iPd 05 05.50 2.1
 VSG 16.38 319 eP 07 44.00 3.1X
 SVO 16.40 319 eP 07 44.00 2.9X
 KRP 16.49 166 P 07 47.10 5.0X
 BRS 17.05 248 iPd 07 50.00 0.7
 eS 11 12.00

COO 18.81 239 iPc 08 12.70 1.8
 0.8s 60.00nm 4.9mb
 MNG 19.07 168 P 08 14.10 0.3
 0.5s 24.00nm 4.7mb
 PGZ 19.23 167 P 08 13.50 -2.0
 0.7s 36.00nm 4.7mb
 WEL 19.60 171 eP 08 20.00 0.6
 RMO 20.39 253 iPd 08 30.00 2.2
 1.1s 512.00nm 5.8mb
 e 08 42.00 52km

CTA 22.77 270 iPd 08 54.00 2.4
 1.0s 24.00nm 4.6mb
 i 09 41.60
 iS 12 57.00

CNB 22.82 230 iPd 08 54.50 2.4
 1.0s 260.00nm 5.6mb
 BWA 23.08 233 iPd 08 54.10 -0.5
 CAN 23.08 230 iPd 08 56.10 1.5
 CMS 24.01 241 iPc 09 04.90 1.3
 0.9s 211.00nm 5.6mb
 PMG 25.71 295 eP 09 21.00 1.1
 1.2s 212.50nm 5.5mb

TOO 26.65 229 iPc 09 29.30 1.0
 LAT 27.37 300 eP 09 35.00 -0.1
 STK 27.59 243 eP 09 37.00 0.1
 0.8s 33.00nm 5.0mb
 BFD 28.57 232 eP 09 45.00 -0.7
 OIS 28.87 267 eP 09 47.00 -1.5
 ADE 30.72 238 iPd 10 04.70 -0.3
 ASPA 33.79 260 iPd 10 30.20 -1.6
 0.8s 13.00nm 4.9mb
 Z 23s 0.68um 4.3MsZx
 e 10 52.50 97kmX
 LR 22 36.30

WB5 33.83 267 eP 10 30.00 -2.2
 WRA 33.84 267 Pc 10 30.00 -2.3
 1.1s 16.60nm 4.9mb

JAY 34.86 300 ePc 10 44.70 3.6X
 0.7s 129.50nm 6.0mb
 MTN 38.61 277 eP 11 11.00 -1.6
 0.9s 364.00nm 6.3mb
 e 11 15.00 14kmX

KNA 39.94 271 eP 11 22.50 -1.2
 WARB 40.19 255 eP 11 25.20 -0.4
 GUA 43.33 322 e(P) 11 50.80 -0.5
 0.7s 65.75nm 5.5mb
 COOL 44.85 248 eP 12 02.00 -1.6
 MBL 47.01 261 iPc 12 20.20 -0.6
 0.4s 3.00nm 4.6mb
 KLB 47.73 247 eP 12 25.10 -1.2
 NWA0 48.14 245 eP 12 28.30 -1.1
 BAL 48.67 248 eP 12 32.00 -1.6
 MUN 49.03 246 eP 12 35.00 -1.3

SBA 55.98 181 iPc 13 28.30 0.9
 TRT 57.45 275 ePd 13 38.50 -0.3
 MAT 65.72 332 eP 14 32.00 -1.8
 1.0s 73.00nm 5.6mb
 SPA 68.18 180 iPc 14 50.00 0.7
 1.0s 30.00nm 5.2mb

SSE 70.89 316 iP 15 05.30 -0.8
 GZH 71.46 305 Pc 15 08.80 -0.9
 QIZ 72.00 300 iPd 15 13.90 0.9
 IPM 72.90 282 ePd 15 18.00 -0.5
 0.9s 36.50nm 5.3mb

NJ2 73.01 316 Pc 15 18.00 -0.7
 WHN 75.08 312 P 15 31.50 0.8
 MDJ 76.09 331 eP 15 36.00 -0.1
 MAW 76.40 202 eP 15 38.00 0.4
 TIA 76.79 318 eP 15 39.50 -0.7
 CN2 77.41 328 Pc 15 43.20 -0.3
 LOE 77.91 294 eP 15 47.00 0.2
 BJI 79.82 321 eP 15 56.00 -0.7

TIY 80.66 317 iPd 16 02.30 0.9
 KMI 80.75 302 Pc+ 16 03.50 1.2
 XAN 80.85 312 Pc 16 02.50 0.1
 CHG 80.90 294 ePc 16 03.40 0.5
 1.0s 52.50nm 5.4mb
 CHTO 80.90 294 eP 16 03.90 1.0
 1.1s 59.78nm 5.4mb
 pP 16 22.80 69km

CD2 82.86 307 eP 16 12.90 -0.1
 HHC 83.08 319 Pd 16 14.00 0.1
 LZH 85.46 312 eP 16 26.50 0.4
 1.8s 109.00nm 5.7mb
 GTA 89.88 313 iPd 16 48.00 0.8
 MBC 106.57 14 ePKP 22 10.50 -1.7
 0.6s 2.00nm

SUF 132.67 339 iPKP 23 02.50 0.1
 0.5s 3.80nm
 NUR 134.70 337 ePKP 23 07.00 0.7
 HFS 138.51 343 ePKP 23 02.80 -10.7X
 0.4s 1.60nm
 NAO 138.65 345 PKP 23 04.00 -9.8X
 0.7s 2.20nm

SPC 144.07 326 iPKP 23 23.70 -0.2
 KDZ 144.79 312 iPKPd 23 25.00 -0.1
 EZN 144.81 309 ePKP 23 23.00 -2.2
 KSP 144.85 331 iPKPc 23 24.00 -0.9
 1.0s 136.00nm
 id 23 24.70

EDU 145.12 354 iPKPd 23 23.90 -1.3
 RZN 145.26 312 iPKPc 23 25.00 -1.2
 ELO 145.27 354 iPKPd 23 24.60 -0.9
 BZS 145.38 320 ePKP 23 25.00 -1.0
 EAB 145.60 355 iPKPd 23 25.80 -0.2
 ESY 145.70 353 ePKP 23 25.60 -0.6
 BUD 145.76 325 iPKP 23 27.00 0.4
 1.2s 88.30nm

BRG 145.84 333 iPKPc 23 27.50 0.9
 1.1s 150.00nm
 i 23 47.50
 EAU 145.86 354 ePKP 23 26.30 -0.2
 VTS 145.88 315 iPKP 23 27.00 -0.2
 CLL 145.89 335 iPKPc 23 26.10 -0.6
 1.5s 170.00nm

SRO 145.93 326 ePKP 23 28.10 1.3
 PRU 146.24 332 ePKPc 23 28.00 0.7
 1.2s 34.70nm
 SRS 146.26 312 ePKPd 23 28.00 0.4
 KKB 146.29 314 iPKPc 23 27.00 -0.7
 ZST 146.30 327 iPKP 23 29.40 2.0
 EKA 146.34 354 PKPc 23 27.80 0.5
 0.6s 26.60nm

VKA 146.64 328 ePKP 23 29.50 1.5
 2.0s 149.00nm
 e 24 08.00
 KNT 146.72 313 ePKPc 23 29.00 0.6
 VAY 146.87 313 ePKP 23 29.70 1.1
 MOX 146.95 335 ePKP 23 29.00 0.6
 1.3s 39.00nm

KHC 147.30 332 iPKPc 23 32.40 3.3X
 1.4s 51.00nm
 SKO 147.33 315 iPKPc 23 31.70 2.4X
 0.8s 54.00nm
 LIT 147.44 311 ePKPc 23 31.00 1.4
 WTS 147.48 341 ePKP 23 32.00 2.8X
 0.7s 27.00nm

WET 147.60 332 iPKPd 23 32.60 3.1X
 BNG 147.78 241 iPKPd 23 30.50 -0.4
 0.8s 28.00nm
 i 23 40.10
 i 23 53.50
 i 24 10.50
 GRF 147.86 334 ePKP 23 33.40 3.5X
 e 23 36.60
 DMU 148.05 357 ePKP 23 32.30 2.3X

01d 15h

DCN	148.62	358	ePKP	23	33.80	2.9X
DLE	148.64	357	ePKP	23	34.00	3.0X
BHG	148.66	330	iPKPd	23	35.00	3.7X
ENN	148.83	341	ePKP	23	35.00	3.6X
KBA	148.91	329	iPKPc	23	34.60	2.7X
VBY	149.03	325	iPKPc	23	36.60	4.7X
FUR	149.03	333	iPKPc	23	41.10	9.3X
LJU	149.05	327	ePKPc	23	35.50	3.6X
RBL	149.25	328	PKP	23	36.00	3.7X
CEY	149.31	326	ePKP	23	36.50	4.2X
VOY	149.38	327	iPKPc	23	36.20	3.7X
FVI	149.53	329	PKPd	23	37.00	4.5X
SNF	149.53	343	iPKPc	23	36.44	4.0X
ECB	149.57	357	iPKPc	23	36.30	3.9X
TRI	149.67	327	PKP	23	37.50	4.7X
WLF	149.72	340	PKP	23	37.50	4.8X
ECP	149.73	356	iPKPc	23	36.90	4.2X
GWF	149.81	337	PKP	23	37.33	4.3X
DOU	149.81	342	PKP	23	34.90	2.0
OGA	150.13	331	ePKP	23	39.00	5.2X
WLS	150.38	337	PKP	23	38.60	4.7X
CDF	150.41	337	PKP	23	38.55	4.6X
SLE	150.49	335	ePKPc	23	38.80	4.8X
SAX	150.56	334	ePKPd	23	39.90	5.4X
FEL	150.58	336	PKP	23	38.97	4.7X
ECH	150.62	337	PKP	23	38.60	4.4X
OSS	150.66	332	ePKPd	23	38.80	4.3X
ZLA	150.76	335	ePKPc	23	40.10	5.6X
MOF	150.93	337	PKP	23	39.68	4.9X
LLS	151.01	333	ePKPc	23	40.60	5.5X
VITF	151.03	338	PKP	23	39.97	5.2X
BSF	151.07	337	PKP	23	40.05	5.0X
HAU	151.08	338	ePKP	23	40.80	5.9X
VDL	151.11	332	ePKPd	23	41.20	5.9X
LOMF	151.47	337	PKP	23	41.41	5.8X
MDI	151.55	331	PKP	23	41.00	5.4X
ARV	151.60	324	PKP	23	44.00	8.2X
TMA	151.67	333	ePKPd	23	41.60	5.5X
VAI	151.90	332	PKPd	23	42.00	5.9X
ASS	152.04	324	PKP	23	43.00	6.4X
MMK	152.09	334	ePKPc	23	44.20	7.4X
SDI	152.26	321	PKPd	23	43.50	6.6X
DIX	152.29	334	ePKPd	23	44.20	7.1X
FLN	152.31	347	ePKP	23	42.90	6.2X
ORX	152.42	333	PKP	23	43.53	6.4X
BDI	152.42	328	PKP	23	42.00	4.9X
ORO	152.43	333	PKP	23	44.50	7.4X
BOB	152.45	330	PKP	23	44.00	6.9X
LOR	152.56	340	ePKP	23	43.90	6.8X
SSF	152.85	340	ePKP	23	44.60	7.1X
LSD	152.90	334	PKP	23	45.58	7.6X
PCP	153.03	331	PKP	23	46.09	8.2X
LPG	153.03	334	ePKP	23	46.60	8.4X
LPF	153.12	347	ePKP	23	45.20	7.4X
BNI	153.43	334	PKP	23	46.50	8.0X
RRL	153.49	334	PKP	23	46.71	7.9X
ROB	153.53	331	PKP	23	45.79	7.2X
TCF	153.94	341	ePKP	23	46.80	7.7X
LSF	154.17	342	ePKP	23	47.00	7.6X
S.D. = 1.1 on 89 of 159 obs.						
AUG 01, 1989 15h 23m 32.22± 1.15s 66.883 N ± 7.1km 156.103 W ± 9.8km DEPTH = 5.0km (geophysicist)						
ALASKA (676) ML 3.3 (PMR).						
IMA	1.27	129	eP	23	57.10	0.7

NEA	3.71	125	eP	24	31.89	0.5
RDS	3.87	119	eP	24	33.84	0.2
FBA	3.95	116	eP	24	34.60	-0.1
TTA	3.97	179	eP	24	35.10	0.0
KTH	3.99	144	eP	24	35.53	0.1
GLM	4.04	114	eP	24	36.07	-0.1
CCB	4.09	119	eP	24	36.78	0.1
WRH	4.10	122	eP	24	36.48	-0.4
HDA	4.53	119	eP	24	41.80	-1.2
SVW	5.80	178	iPc	25	00.90	-0.1
PMR	6.12	147	eP	25	05.60	0.2
MBC	14.59	35	eP	27	01.00	0.2
S.D. = 0.5 on 13 of 13 obs.						
* AUG 01, 1989 16h 49m 38.10± 1.89s 39.795 N ± 12.9km 22.101 E ± 12.8km DEPTH = 10.0km (geophysicist)						
GREECE (364)						
LIT	0.43	44	eP	49	46.30	-0.5
KZN	0.57	334	eP	49	49.00	-0.7
NEO	1.00	119	eP	49	57.00	0.0
PLG	1.18	60	eP	50	00.00	-0.2
KNT	1.49	24	eP	50	07.20	2.2X
VAY	1.57	13	ePn	50	07.40	1.4
S.D. = 1.2 on 5 of 6 obs.						
% AUG 01, 1989 17h 20m 30.10± 0.66s 60.636 N ± 4.8km 6.253 E ± 7.6km DEPTH = 10.0km (geophysicist)						
SOUTHERN NORWAY (535) MD 2.2 (BER).						
HYA	0.53	357	iP	20	40.50	-0.4
ASK	0.54	254	iP	20	40.80	-0.3
ODD1	0.75	165	iP	20	44.20	-0.6
SUE	0.84	301	iP	20	46.40	0.1
BLS1	1.28	167	iP	20	53.90	-0.1
KMY	1.52	200	iP	20	58.10	0.9
MOL	2.04	17	eP	21	05.20	0.4
S.D. = 0.6 on 7 of 7 obs.						
? AUG 01, 1989 17h 34m 49.99± 6.73s 45.578 N ± 12.8km 2.410 E ± 48.4km DEPTH = 10.0km (geophysicist)						
FRANCE (538) MD 2.1 (STR).						
PYM	0.45	67	Pg	34	58.97	-0.3
LBL	0.68	120	Pg	35	03.44	-0.1
AGO	0.69	47	Pg	35	03.48	-0.2
PLDF	0.93	65	Pg	35	08.42	0.6
S.D. = 0.7 on 4 of 4 obs.						
AUG 01, 1989 18h 07m 01.00± 0.47s 12.120 N ± 8.7km 140.588 E ± 7.2km DEPTH = 33.0km (normal)						
4.7mb (5 obs.) 4.5msz (1 obs.)						
WEST CAROLINE ISLANDS (209)						
GUMO	4.42	70	eP	08	07.80	0.3
PJG	4.42	70	eP	08	07.80	0.3
GUA	4.45	71	eP	08	08.00	0.1
WB5	32.38	191	eP	13	28.70	-1.3
CTA	32.49	170	iPc	13	31.00	0.1
BJI	35.18	327	eP	13	53.50	-0.4
TIY	35.81	320	eP	14	00.80	1.3
ASPA	36.16	190	eP	14	02.80	0.3
CD2	38.79	305	eP	14	24.00	-0.6
WARB	40.42	200	eP	14	38.70	0.7

CHTO	40.61	285	eP	14	40.80	1.1
GTA	45.12	314	eP	15	16.80	0.5
WMO	55.18	315	eP	16	32.00	-1.0
MAIO	75.80	305	eP	18	47.00	1.1
MBC	80.70	14	eP	19	12.00	0.2
SOD	87.78	339	eP	19	40.00	-7.7X
SUF	90.07	335	eP	19	56.00	-2.7
ZOBO	151.87	102	PKP	26	55.80	6.8X
LPB	151.88	102	ePKP	26	55.00	6.2X
CNCB	151.96	103	PKP	26	56.80	7.7X
S.D. = 1.1 on 16 of 20 obs.						
* AUG 01, 1989 18h 20m 32.52± 1.96s 39.760 N ± 13.2km 22.145 E ± 13.6km DEPTH = 10.0km (geophysicist)						
GREECE (364) MD 3.2 (ATH).						
LIT	0.43	38	eP	20	40.20	-1.1
KZN	0.62	332	eP	20	44.00	-1.0
NEO	0.95	118	eP	20	50.50	-0.1
PLG	1.17	58	eP	20	54.20	-0.2
KNT	1.51	22	eP	21	01.10	1.4
VAY	1.59	12	ePn	21	01.80	1.0
S.D. = 1.3 on 6 of 6 obs.						
* AUG 01, 1989 18h 34m 28.41± 0.78s 12.447 N ± 11.7km 47.464 E ± 10.6km DEPTH = 10.0km (geophysicist)						
4.2mb (3 obs.)						
EASTERN GULF OF ADEN (415)						
ARO	4.61	259	iP+	35	38.00	-1.8
AAE	9.20	249	eP	36	47.20	2.8X
SHI	17.75	15	eP	38	36.00	-1.4
MBH	20.82	328	eP	39	13.50	0.9
BHD	20.92	353	iPd	39	13.00	-0.6
PRNI	21.23	329	eP	39	17.50	0.7
KER	21.81	359	eP	39	26.00	3.2X
SLY	23.12	356	ePc	39	36.50	0.9
MSL	24.15	351	ePc	39	47.00	1.5
QUE	25.25	43	eP	39	58.00	1.5
MAIO	26.11	22	iPd	40	08.50	4.2X
BNG	29.66	257	iPc	40	38.10	1.3
BCAO	29.68	257	e(P)	40	38.20	1.3
BUL	37.32	210	iPc	41	42.90	-0.1
ZST	43.69	331	eP	42	32.80	-2.3
KSP	45.93	333	eP	42	52.80	-0.3
WMO	46.56	40	eP	42	58.80	0.5
XAN	59.54	58	eP	44	34.00	-0.7
TIY	62.73	54	eP	44	55.30	-1.0
CN2	72.85	48	eP	45	59.20	-0.2
S.D. = 1.3 on 17 of 20 obs.						
* AUG 01, 1989 20h 10m 07.97± 2.10s 39.753 N ± 13.6km 22.067 E ± 14.1km DEPTH = 10.0km (geophysicist)						
GREECE (364) MD 3.0 (ATH).						
LIT	0.48	43	eP	10	17.50	-0.1
KZN	0.60	338	ePn	10	19.50	-0.6
NEO	1.00	116	ePb	10	27.00	0.1
PLG	1.23	59	ePn	10	30.00	-0.8
KNT	1.54	24	eP	10	37.00	1.5
VAY	1.61	14	ePn	10	39.00	2.5X
S.D. = 1.1 on 5 of 6 obs.						

01d 23h

Z	22s	15.16um	5.5MszX
DAV	27.25	293 eP	43 08.70 -3.9X
CMS	28.06	189 eP	33 35.00 -1.0
CAN	31.54	183 eP	34 16.20 -0.9
WARB	32.14	223 eP	34 21.10 -1.4
TDO	34.09	187 eP	34 39.00 -0.3
MBL	34.68	237 eP	34 42.00 -2.5
BAG	35.83	305 eP	34 52.00 -2.6
NANU	38.89	238 eP	35 18.40 -1.7
KRP	40.97	150 P	35 38.10 1.1
MAT	41.66	345 eP	35 39.00 -3.7X
QZH	42.19	314 eP	35 46.00 -1.2
TCW	42.97	154 eP	35 52.60 -0.8
KIW	42.98	153 eP	35 53.00 -0.4
MRW	43.18	153 eP	35 53.10 -1.9
CAW	43.24	153 P	35 54.90 -0.7
WEL	43.25	153 P	35 55.00 -0.6
WDW	43.34	153 eP	35 55.20 -1.1
PGZ	43.42	151 eP	35 55.90 -1.1
MTW	43.48	153 eP	35 56.20 -1.3
MSZ	43.57	162 eP	36 01.00 2.9X
MOW	43.58	153 eP	35 56.80 -1.5
BLW	43.64	153 eP	35 58.20 -0.6
HKC	44.04	308 (P)	36 04.00 1.7
SSE	44.56	323 eP	36 08.00 1.6
Z	20s	91.00nm	5.4mb
N	14s	4.20um	5.4Msz
GZH	45.10	308 Pd	36 13.00 2.1
QIZ	46.08	301 eP	36 18.60 -0.1
NJ2	46.65	322 eP	36 18.00 -4.9X
SAP	47.27	351 eP	36 29.00 1.4
WHN	48.59	317 P	36 40.00 1.8
TIA	50.57	325 eP	36 52.90 -0.4
SNG	51.12	282 eP	36 58.00 0.1
SNY	51.55	334 Pd	37 00.00 -0.7
MDJ	51.64	341 eP	37 00.00 -1.3
GYA	52.04	308 P	37 06.20 1.4
CN2	52.42	337 eP	37 07.00 -0.2
BJI	53.80	327 eP	37 16.50 -0.9
TIY	54.35	323 eP	37 20.70 -0.9

XAN	54.36	317 P	37 38.00 67kmX
N	18s	3.20um	37 19.50 -2.2
E	20s	2.80um	
KMI	54.61	304 P	37 38.00 72kmX
Z	25s	0.70nm	37 23.00 -1.0
Z	25s	5.40um	2.9mb X
CHG	55.60	296 eP	37 39.00 61kmX
CHTO	55.60	296 eP	37 39.00 61kmX
OPA	56.14	61 e(P)	37 39.00 61kmX
CD2	56.41	311 P	37 40.00 61kmX
MHC	56.91	325 eP	37 40.00 61kmX
BTO	57.64	324 eP	37 40.00 61kmX
LZH	58.96	316 eP	37 40.00 61kmX
SMY	59.56	16 P	37 40.00 61kmX
ADK	61.88	22 P	37 40.00 61kmX
GTA	63.40	318 eP	37 40.00 61kmX
WMO	73.49	318 P	37 40.00 61kmX
HYB	74.14	289 eP	37 40.00 61kmX
KOD	74.20	282 eP	37 40.00 61kmX
SBA	74.63	177 (P)	37 40.00 61kmX
GBA	74.65	285 P	37 40.00 61kmX
KDC	76.15	28 eP	37 40.00 61kmX
SVW	76.61	24 eP	37 40.00 61kmX
NDI	77.34	300 eP	37 40.00 61kmX
TTA	77.49	22 eP	37 40.00 61kmX
PMR	79.53	25 eP	37 40.00 61kmX
IMA	80.10	20 eP	37 40.00 61kmX
TOA	81.02	25 eP	37 40.00 61kmX
FBA	81.62	22 P	37 40.00 61kmX
SPA	86.36	180 e(P)	37 40.00 61kmX
QUE	86.42	300 eP	37 40.00 61kmX
INK	88.15	21 eP	37 40.00 61kmX
WDC	89.90	50 eP	37 40.00 61kmX
LBFM	90.45	49 e(P)	37 40.00 61kmX
ORV	90.61	51 eP	37 40.00 61kmX
CMB	91.38	52 eP	37 40.00 61kmX
KVN	93.22	51 P	37 40.00 61kmX
MBC	93.52	14 eP	37 40.00 61kmX
PEC	93.80	56 e(P)	37 40.00 61kmX
TNP	93.88	52 P	37 40.00 61kmX
PLM	94.03	57 P	37 40.00 61kmX
GLA	95.73	57 P	37 40.00 61kmX
ALE	99.95	4 eP	37 40.00 61kmX
ALO	102.62	55 e(Pdiff)	37 40.00 61kmX
GOL	103.05	50 Pdiff	37 40.00 61kmX
GLD	103.16	50 Pdiff	37 40.00 61kmX
MSL	106.27	307 ePKP	37 40.00 61kmX

SUF	108.48	336 ePdiff	42 11.00 -5.6X
SRO	120.02	325 ePKP	46 25.20 -19.8X
ZST	120.50	326 ePKP	46 47.80 1.9
BRG	120.64	330 e(PKP)	46 55.00 8.9X
PRU	120.86	329 ePKP	46 54.50 7.9X
KHC	121.88	328 PKP	46 51.00 2.4X
BNG	132.27	273 ePKPd	47 11.60 2.1
CNCB	136.72	119 PKP	47 09.00 -9.6X
LPB	136.73	119 ePKP	47 08.00 -10.4X
ZOBO	136.82	118 ePKP	47 16.00 -2.8X
TIO	145.83	325 iPKP	47 36.50 2.7X
VAO	148.39	148 ePKP	47 42.50 4.4X
KUK	151.06	276 ePKP	47 51.00 8.7X
BAO	153.36	136 ePKP	47 39.50 -6.2X
PDCR	161.19	149 ePKP	47 53.20 -1.8
ITR	164.67	144 e(PKP)	48 00.70 2.2X
S.D. = 1.4 on 85 of 117 obs.			
AUG 02, 1989 00h 14m 03.64 ± 0.82s			
42.247 N ± 5.2km 13.525 E ± 10.9km			
DEPTH = 10.0km (geophysicist)			
CENTRAL ITALY (381)			
MD 2.6 (SSO).			
AQU	0.14	320 P	14 06.20 -0.8
AZI	0.27	194 Pc	14 09.90 0.6
ALP	0.53	4 iPgC	14 13.97 -0.5
SDI	0.58	158 P	14 15.10 -0.4
MNS	0.64	283 P	14 15.20 -1.3
CIO	0.99	344 e(Pg)	14 22.55 0.1
ASS	1.04	323 P	14 24.80 1.5
ARV	1.32	341 P	14 27.90 -0.2
CRE	1.80	321 P	14 36.00 1.0
S.D. = 1.0 on 9 of 9 obs.			
AUG 02, 1989 01h 13m 26.60 ± 0.69s			
37.065 N ± 6.8km 27.765 E ± 6.6km			
DEPTH = 10.0km (geophysicist)			
TURKEY (366)			
MD 3.5 (ATH).			
YER	0.42	80 iPg	13 35.00 -0.2
IZM	1.39	343 iPn	13 52.50 0.5
KAP	1.58	198 ePn	13 53.20 -1.6
KSL	1.74	122 ePn	13 58.20 1.2
ELL	1.75	100 iPn	13 59.90 2.6X
APE	1.79	271 ePn	13 59.00 1.2
KHL	1.88	47 iPn	13 59.90 0.8
PRK	2.48	332 ePb	14 16.30 8.7X
NPS	2.50	225 ePb	14 12.30 4.3X
DST	2.63	15 ePn	14 08.80 -1.0
ALT	2.72	42 ePn	14 11.00 -0.2
EZN	2.98	338 ePn	14 19.00 4.3X
EDC	3.28	1 iPn	14 18.20 -0.8
RDO	4.43	338 ePn	14 35.40 0.1
S.D. = 1.1 on 10 of 14 obs.			
* AUG 02, 1989 02h 27m 41.38 ± 2.27s			
13.639 S ± 16.5km 76.638 W ± 25.3km			
DEPTH = 56.0 ± 19.0 km			
NEAR COAST OF PERU (115)			
PT06	0.35	122 iP	27 52.30 0.7
PT02	0.72	16 iP	27 55.10 -0.7
PT03	0.89	113 iP	27 57.20 -0.8
PT10	1.59	348 iP	28 08.00 0.4
NNA	1.65	353 eP	28 08.30 -0.2
PT08	1.67	3 iP	28 08.80 -0.3

HUA 2.04 39 iPc 28 15.30 0.9
 iS 28 40.50
 ZOBO 8.63 109 eP 29 46.00 -0.9
 LPB 8.73 110 eP 29 47.00 -1.1
 CNCB 8.93 112 P 29 52.90 1.9
 S.D. = 1.2 on 10 of 10 obs.

AUG 02, 1989 03h 17m 07.46 ± 0.41s
 13.831 N ± 6.9km 90.556 W ± 7.0km
 DEPTH = 89.7 ± 3.6 km
 4.5mb (2 obs.)
 NEAR COAST OF GUATEMALA (71)
 Felt (11) at San Salvador, El Salvador.

PSG2 0.28 296 iPd 17 20.40 -0.5
 TER 0.48 345 iPc 17 21.50 -0.8
 PCG 0.56 351 ePd 17 22.00 -1.2
 REC 0.60 3 iP 17 23.50 0.0
 FUG 0.67 336 eP 17 23.50 -0.6
 MMG 0.71 350 iPc 17 25.00 0.4
 S 17 41.00
 GCG 0.75 2 iPc 17 25.00 0.1
 HUG 0.77 284 iP 17 24.00 -0.8
 S 17 39.00
 ITG 0.81 340 eP 17 26.00 0.4
 BVA 0.83 355 iPc 17 26.00 0.1
 LHG 0.86 315 iP 17 25.60 -0.3
 SLP 0.94 16 iPc 17 27.50 0.5
 RDG 1.17 4 iPc 17 30.70 1.0
 SSS 1.33 96 eP 17 32.70 1.2
 eS 17 50.70
 OC2 1.74 295 ePd 17 37.00 0.3
 KKG 1.83 309 iPc 17 38.40 0.4
 SRA 7.04 121 iPc 18 51.10 1.2
 SJS 7.45 121 iPc 18 56.70 1.2
 LCR2 7.59 122 eP 18 57.80 0.2
 VCR 7.72 118 eP 18 37.00 -22.2X
 JCR 8.29 118 eP 18 45.50 -21.4X
 DVD 9.59 123 eP 19 23.00 -1.6
 UYO 20.55 351 iPc 21 40.70 -0.3
 MEO 22.09 342 iPd 21 55.00 -1.3
 GLA 29.23 315 eP 23 04.90 1.8
 GAC 34.23 19 eP 23 46.50 0.0
 pP 24 06.50 85kmX
 KVN 34.95 321 iP 23 54.90 1.9
 LRM 36.86 334 eP 24 10.60 1.5
 ZOBO 37.23 143 P 24 13.40 0.6
 LPB 37.45 143 P 24 15.00 0.5
 CNCB 37.74 143 P 24 17.00 0.0
 CCH 39.28 141 P 24 28.70 -0.9
 FFC 41.77 350 eP 24 48.50 -0.8
 0.7s 7.00nm 4.6mb
 SCH 44.91 19 eP 25 13.00 -1.8
 YKA 51.52 346 eP 26 06.70 0.9
 YKB0 51.62 346 eP 26 05.50 -1.1
 SOB1 54.34 112 eP 26 25.30 -2.1
 PDCR 57.31 115 eP 26 44.00 -4.6X
 MBC 64.25 353 eP 27 34.50 -0.3
 1.0s 5.00nm 4.4mb
 KMI 139.17 341 ePKP 36 39.00 12.4X
 GBA 150.26 24 PKPd 36 50.30 5.2X
 0.5s 1.80nm

S.D. = 1.1 on 36 of 41 obs.
 AUG 02, 1989 03h 37m 28.07 ± 0.18s
 2.686 S ± 3.6km 127.312 E ± 4.7km
 DEPTH = 29.4km (16 depth phases)
 5.6mb (30 obs.) 5.0Msz (12 obs.)
 CERAM SEA (270)

CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 30C
 Centroid Location:
 Origin Time 03:37:31.3 0.3
 Lot 2.49S 0.04 Lon 126.93E 0.04
 Dep 60.8 3.8 Half-duration 2.6
 Moment Tensor: Scale 10**17 Nm
 Mrr= 0.14 0.14 Mlt= 0.71 0.15
 Mff=-0.85 0.24 Mrt= 0.63 0.18
 Mrf= 0.88 0.17 Mlf= 4.10 0.17
 Principal Axes:
 T Val= 4.36 Plg=14 Azm=320
 N -0.10 76 155
 P -4.26 4 51
 Best Double Couple: Mo=4.3*10**17

NP1:Strike= 96 Dip=78 Slip= 7
 NP2: 5 83 167
 AAI 1.33 138 iPc 37 54.80 4.1X
 MNI 4.79 329 ePd 38 38.10 -2.0
 MKS 8.22 252 iPc 39 31.80 3.5X
 DAV 9.86 350 eP 39 46.00 -5.0X
 MTN 10.78 160 iPd 40 05.10 1.5
 eS 42 08.30
 TSM 11.51 307 ePc 40 12.20 -1.3
 KNA 13.06 174 eP 40 35.10 0.8
 e 40 45.00
 JAY 13.38 90 ePd 40 41.00 2.4X
 0.8s 124.70nm 5.9mb
 KKM 14.07 308 ePd 40 45.60 -2.2
 0.9s 91.10nm 5.5mb
 TRT 15.44 251 ePc 41 09.70 4.2X
 MNDI 16.66 102 eP 41 28.00 6.7X
 OCP 18.29 340 eP 41 35.50 -5.9X
 WB5 18.43 159 eP 41 40.90 -2.3
 eS 45 06.00
 WRA 18.48 159 Pc 41 42.50 -1.3
 0.7s 181.00nm 5.4mb
 MBL 19.75 201 eP 41 57.00 -1.7
 0.6s 45.00nm 5.0mb
 LAT 20.01 102 eP 42 03.00 1.5
 BAG 20.11 341 eP 42 00.00 -2.7X
 eS 45 35.00
 PMG 20.82 110 eP 42 10.00 0.1
 QIS 21.43 147 iPc 42 14.60 -1.5
 e 42 25.00 40kmX
 eS 46 10.00
 ASPA 21.81 164 iPc 42 19.40 -0.5
 1.4s 756.00nm 5.9mb
 Z 21s 11.13um 5.2Msz
 iS 46 16.60
 eScS 53 39.70
 LR 54 07.00
 NANU 22.83 209 eP 42 29.50 -0.4
 WARB 23.37 182 eP 42 36.10 0.9
 0.3s 28.00nm 5.3mb
 GUA 23.76 47 eP 42 38.70 -0.4
 1.2s 350.00nm 5.8mb
 GUMO 23.76 47 eP 42 37.20 -1.8
 1.2s 377.78nm 5.8mb
 PJG 23.76 47 eP 42 37.30 -1.8
 KGM 24.44 281 ePd 42 48.60 3.0X
 MEKA 25.24 199 iPc 42 52.20 -1.0
 CTA 25.32 134 iPd 42 55.10 1.1
 1.0s 107.00nm 5.4mb
 i 43 05.30 38km
 iS 47 24.00
 PPI 26.99 274 eP 43 11.00 1.4
 IPM 27.24 285 ePc 43 13.00 1.2
 1.1s 188.70nm 5.7mb
 e 43 22.20 32km
 QIZ 27.58 322 eP 43 14.00 -0.9
 N 18s 2.20um
 iS 47 53.00
 FORR 28.02 179 eP 43 17.20 -1.5
 0.5s 159.00nm 6.0mb
 SNG 28.39 290 eP 43 22.90 0.7
 eS 48 15.40
 MRWA 28.50 201 eP 43 22.50 -0.5
 QZH 28.74 343 eP 43 25.80 0.6
 Z 20s 1.87um 4.7Msz
 S 48 13.50
 sS 48 25.00
 GZH 29.01 333 eP 43 27.50 -0.2
 Z 36s 4.10um 4.8MszX
 N 11s 1.50um
 E 15s 1.50um
 S 48 14.00
 MUN 30.96 199 iPd 43 46.00 1.1
 NNT 31.31 300 eP 43 48.80 0.5
 RMO 31.36 141 iPc 43 48.70 0.1
 NWA0 31.53 196 eP 43 49.00 -1.0
 Z 20s 2.50um 4.9Msz
 STK 32.00 157 iPd 43 53.50 -0.6
 i 44 02.00 30km
 e 45 06.00
 LOE 32.18 309 eP 43 55.00 -0.8
 NST 32.49 305 eP 43 59.10 0.6
 CMS 33.55 151 eP 44 07.00 -0.6
 ADE 33.82 163 iPc 44 09.90 -0.1
 0.6s 97.33nm 5.9mb
 SSE 34.10 351 eP 44 09.00 -3.3X

Z 22s 1.60um 4.7Msz
 E 12s 1.30um
 S 49 32.00
 sS 49 44.00
 BRS 34.59 138 iPd 44 16.10 -0.6
 i 47 02.00
 i 50 41.40
 CHG 35.15 309 iPc 44 21.90 0.4
 1.2s 50.78nm 5.3mb
 eS 49 58.00
 CHTO 35.15 309 iPc 44 21.80 0.3
 1.3s 52.29nm 5.3mb
 pP 44 30.80 30km
 sP 44 42.00
 GYA 35.18 327 iPc 44 22.00 0.2
 Z 14s 1.41um 4.9MszX
 N 10s 0.82um
 E 10s 1.11um
 S 49 55.00
 WHN 35.28 340 eP 44 22.50 0.0
 Z 24s 1.37um 4.6MszX
 N 18s 2.78um
 pP 44 31.00 29km
 S 49 54.00
 SS 52 13.00
 COO 36.20 143 eP 44 31.00 0.7
 KMI 36.50 321 Pc+ 44 34.00 0.9
 Z 20s 2.20um 4.9Msz
 N 15s 1.20um
 pP 44 48.00 53kmX
 PP 46 02.00
 S 50 16.00
 BWA 37.20 151 iPc 44 40.30 1.6
 iPcP 47 09.10
 CAN 38.20 151 iPc 44 47.90 0.8
 iPcP 47 11.70
 CNB 38.38 150 iPc 44 50.90 2.3
 1.0s 80.00nm 5.5mb
 e 46 24.00 517kmX
 TOO 38.52 157 iPd 44 51.70 1.9
 e 45 00.00 28km
 e 46 19.00
 CD2 40.25 328 P 45 04.00 -0.2
 Z 28s 1.90um 4.8MszX
 pP 45 17.00 49kmX
 S 51 08.00
 sS 51 22.00
 MAT 40.33 14 iPd 45 03.00 -1.7
 1.6s 223.33nm 5.7mb
 Z 20s 4.26um 5.3Msz
 eS 50 54.00
 XAN 40.43 336 Pc 45 05.00 -0.6
 N 12s 0.90um
 E 10s 0.90um
 S 51 08.00
 TIY 42.50 342 eP 45 22.50 -0.1
 E 11s 0.60um
 S 51 38.00
 DZM 42.60 120 iPc 45 24.30 0.7
 PVC 42.90 113 iPc 45 27.80 1.8
 BJJ 43.73 348 eP 45 32.00 -0.4
 Z 20s 1.21um 4.8Msz
 N 11s 0.42um
 epP 46 02.00 132kmX
 ePP 47 15.00
 eS 51 52.00
 eSS 55 08.00
 SHL 44.34 311 iP 45 38.20 0.3
 iS 52 10.00
 LZH 44.36 333 eP 45 38.50 0.6
 Z 30s 2.30um 4.9MszX
 N 13s 0.80um
 E 15s 1.20um
 pP 45 48.00 32km
 S 52 08.00
 SS 55 30.00
 SNY 44.43 356 Pc 45 38.00 -0.1
 Z 20s 1.80um 5.0Msz
 N 30s 2.10um
 E 27s 4.50um
 S 52 08.00
 SS 55 25.00
 HHC 45.65 343 eP 45 47.00 -1.0
 Z 30s 5.50um 5.3MszX
 N 10s 4.40um
 sP 46 01.00
 S 52 28.00

02d 03h

BTO 45.89 342 eP 45 49.80 -0.1
 CN2 46.31 358 eP 45 53.00 0.1
 5.0s 0.40nm 2.6mb X
 Z 22s 1.50um 4.9Msz
 N 16s 1.00um

PcP 47 29.00
 PP 47 46.00
 S 52 30.00
 iSS 55 48.00

MDJ 47.14 2 eP 45 57.50 -2.0
 S 52 42.00

LSA 47.25 316 iPc 46 03.00 1.7
 3.0s 1.08nm 3.3mb X
 pP 46 13.00 33km
 S 52 51.00

SAP 47.26 14 eP 46 01.00 0.5
 eS 52 05.20

GTA 48.93 332 iPc 46 13.70 0.0
 Z 22s 1.50um 4.9Msz
 S 53 13.50
 ScS 56 04.40

KOD 51.26 285 iPc 46 33.00 0.9
 1.2s 46.88nm 5.3mb
 GBA 52.05 289 P 46 37.20 -0.5
 HYB 52.06 294 ePc 46 37.50 -0.3
 0.8s 71.40nm 5.7mb
 i 46 46.50 30km
 i 46 53.80
 eS 54 02.00

MSZ 54.99 145 P 46 59.00 0.0
 KRP 56.31 135 P 47 09.30 0.7
 pP 47 18.00 28km

POO 56.66 294 iPd 47 12.40 0.9
 TCW 56.98 139 P 47 12.50 -0.9
 CCW 57.21 139 P 47 14.90 -0.1
 KIW 57.23 138 eP 47 14.20 -1.0
 NDI 57.26 307 iPc 47 14.00 -1.6
 0.6s 56.67nm 5.8mb

MRW 57.28 139 P 47 13.80 -1.6
 WEL 57.34 139 P 47 15.00 -0.9
 pP 47 23.00 26km

CAW 57.46 138 P 47 15.50 -1.3
 WDW 57.48 139 P 47 15.60 -1.3
 MNG 57.50 138 P 47 16.30 -0.8
 MOW 57.73 139 P 47 17.20 -1.5
 MTW 57.77 138 P 47 17.80 -1.1
 BLW 57.85 139 P 47 18.40 -1.1
 PGZ 58.03 137 P 47 20.00 -0.8
 WMO 58.34 327 iPc 47 22.50 -0.5
 Z 24s 1.70um 5.1MszX
 N 20s 2.00um

PcP 48 14.20
 S 55 24.00
 ScS 57 03.10

KSH 63.02 317 eP 47 57.00 2.1
 Z 16s 1.80um 5.3MszX
 pP 48 06.00 29km
 S 56 24.00

QUE 66.14 305 iPc 48 15.10 -0.4
 eS 57 04.00

MAIO 73.90 309 iPc 49 03.00 0.4
 1.0s 40.00nm 5.4mb
 i 49 12.00 29km
 eS 58 44.00

SBA 77.94 172 Pd 49 26.00 1.5
 SHI 78.15 301 eP 49 26.00 -0.8
 SDN 82.16 33 eP 49 49.00 1.6
 TBI 82.73 113 eP 49 57.00 6.0X
 1.4s 170.00nm 5.9mb

PPN 82.77 107 eP 49 57.00 5.7X
 1.2s 50.00nm 5.5mb

TVO 82.94 107 eP 49 58.00 5.7X
 1.2s 115.00nm 5.9mb

PMO 84.28 105 iP 50 03.40 4.4X
 1.2s 100.00nm 5.9mb

TAB 84.55 308 eP 50 11.00 10.8X
 TPT 84.55 105 iP 50 04.80 4.4X
 1.2s 75.00nm 5.8mb

RUV 84.77 105 iP 50 07.20 5.7X
 1.2s 70.00nm 5.7mb

BHD 85.55 304 ePd 50 05.50 0.4
 eP 50 14.00 27km
 iSKS 00 30.00
 eS 01 11.00

SVW 86.11 28 eP 50 08.00 0.7
 MSL 86.88 306 ePd 50 12.00 0.4
 eP 50 20.50 27km

KDC 87.02 32 eP 50 13.50 1.7
 SPA 87.33 180 e(P) 50 14.20 0.8
 0.9s 36.36nm 5.6mb

PMS 89.02 29 eP 50 21.90 24km
 PMR 89.27 28 P 50 22.10 0.7
 FBA 90.24 25 P 50 13.70 -8.8X
 0.9s 7.08nm 5.0mb

TOA 90.72 28 eP 50 30.30 1.0
 KVT 92.70 311 eP 50 48.00 9.1X
 INK 95.88 22 eP 50 53.50 0.7
 SLR 96.97 244 eP 51 08.00 9.2X
 0.9s 10.92nm 5.4mb

SUF 97.49 333 eP 51 01.00 0.8
 MBC 98.04 13 ePd 51 03.80 1.3
 0.9s 8.00nm 5.2mb

BLF 98.40 240 eP 51 16.00 10.7X
 VRI 99.30 316 iPc 51 18.00 9.3X
 MLR 99.88 316 eP 51 10.00 -1.6
 NAO 105.00 333 Pd diff 51 32.80 -1.1
 0.9s 5.00nm 5.4mb

KSP 105.26 322 ePKP 56 00.00 10.6X
 ZST 105.40 319 ePKP 56 02.50 12.7X
 PRU 106.57 322 ePKP 56 03.90 12.0X

Z 18s 0.50um 5.1Msz
 BRG 106.68 323 ePKP 55 53.80 1.7
 WDC 106.99 48 e(PKP) 55 49.50 -3.5X
 e 56 10.60

CLL 107.12 323 ePKP 56 05.00 12.1X
 KHC 107.41 321 iPKPc 56 05.60 12.0X
 e 56 19.50

BNG 108.90 274 ePKPc 56 05.50 8.0X
 0.7s 12.00nm

CMB 109.14 51 e(PKP) 56 06.40 9.1X
 e 56 24.70

KVN 110.66 49 PKP 56 10.50 10.2X
 TNP 111.57 50 PKP 56 05.50 3.4X
 LRM 112.65 41 ePKP 56 13.70 9.8X
 LPG 112.97 319 ePKP 56 13.50 8.9X
 LBF 114.19 321 ePKP 56 15.30 8.7X
 SSF 114.45 321 ePKP 56 15.80 8.7X
 FFC 114.57 29 iPKPc 56 16.20 9.2X
 1.1s 20.00nm

AVF 114.66 321 ePKP 56 16.00 8.6X
 BGF 115.07 321 ePKP 56 17.40 9.1X
 TCF 115.59 321 ePKP 56 18.40 9.1X
 BW06 115.69 43 PKP 56 09.00 -0.9
 CAF 116.25 320 ePKP 56 20.10 9.5X
 MFF 116.91 322 ePKP 56 20.40 8.7X
 LPO 116.92 320 ePKP 56 21.40 9.6X
 LFF 117.10 320 ePKP 56 20.80 8.7X
 RSSD 118.79 40 PKP 56 16.10 0.4
 GOL 119.79 45 PKP 56 10.20 -7.6X
 ALO 120.77 50 ePKP 56 22.10 2.4X

Z 19s 0.56um 5.2Msz
 e 56 30.00
 ePP 57 48.40
 eSKKKS 07 36.00

TOL 122.52 317 ePKP 56 27.00 4.3X
 IFR 126.07 310 iPKPc 56 41.50 11.5X
 MEO 126.77 48 e(PKP) 56 32.00 0.9
 SCH 126.78 10 ePKP 56 32.00 1.5
 UYO 130.07 46 iPKPd 56 30.60 1.3
 FVM 130.75 40 PKP 56 35.20 -3.3X
 KIC 132.08 276 PKP 56 44.52 2.8X
 GAC 132.73 22 ePKP 56 45.00 3.0X
 GBTN 136.09 38 PKP 56 41.20 -7.5X
 BLA 137.22 33 PKP 56 41.20 -9.7X
 CYA 146.58 159 e(PKP) 57 10.00 2.4X
 SRA 147.62 75 ePKPc 57 15.50 5.8X
 SJS 148.03 76 ePKP 57 14.00 3.6X
 LCR2 148.11 76 ePKP 57 16.00 5.4X
 BUS 148.38 76 ePKP 57 18.00 6.7X
 DVD 149.85 78 ePKPd 57 20.20 7.2X
 SLA 150.05 156 iPKPc 57 21.00 7.7X
 NNA 151.91 122 iPKP 57 25.00 8.8X
 UPA 152.58 76 e(PKP) 57 34.00 17.0X
 ARE 153.41 136 ePKP 57 14.00 -4.5X
 BMA 153.43 198 ePKP 57 17.90 -0.2
 e 57 29.60

PSO 155.33 93 ePKP 57 33.00 11.7X
 CNCB 155.44 143 PKP 57 26.00 4.4X
 LPB 155.58 142 PKP 57 26.90 5.3X
 eLR 41 22.00

ZOBO 155.76 141 PKP 57 25.50 3.4X

1.1s 26.10nm
 i 58 00.00
 LR 52 00.00
 CCH 156.05 147 PKP 57 24.20 2.1
 PDCR 159.75 221 ePKP 57 12.90 -13.2X
 e 57 35.70

BAO 161.21 194 e(PKP) 57 27.00 -0.7
 ITR 161.79 231 ePKP 57 36.10 7.8X
 e 57 52.70

SOB1 163.33 225 ePKP 57 40.80 11.0X
 S.D. = 1.1 on 111 of 182 obs.

7 AUG 02, 1989 03h 52m 03.23 ± 2.20s
 32.076 S ± 29.4km 71.272 W ± 22.8km
 DEPTH = 117.3 ± 48.3 km
 NEAR COAST OF CENTRAL CHILE (135)

PEL 1.17 155 iPd 52 26.80 -0.4
 iS 52 47.60
 RTBS 1.60 76 iPd 52 40.50 8.5X
 S 53 07.20

RTCB 2.19 75 iPc 52 32.20 -7.3X
 S 52 53.00

RTCV 2.33 85 iPd 52 42.50 1.1
 S 53 12.00

RTRS 2.45 40 iPd 52 49.00 6.1X
 RTLL 2.50 73 iPc 52 44.00 0.4
 S 53 14.50

CFA 2.62 81 ePd 52 16.30 -28.9X
 e 52 26.20

MRA 4.73 96 eP 53 13.50 0.0
 CYA 5.96 54 e(P) 53 28.70 -1.8
 CNCB 15.49 12 P 55 44.00 7.0X
 LPB 15.74 11 eP 55 47.00 7.0X
 ZOBO 15.99 11 eP 55 44.00 0.6
 S.D. = 1.6 on 6 of 12 obs.

AUG 02, 1989 05h 01m 56.45 ± 0.45s
 44.025 N ± 3.2km 7.206 E ± 3.7km
 DEPTH = 10.0km (geophysicist)
 NORTHERN ITALY (545)
 ML 2.4 (GEN). MD 1.3 (STR).

TOUF 0.03 110 Pg 01 58.22 -0.4
 MVIF 0.13 197 Pg 01 59.26 -0.5
 AURF 0.16 147 Pg 02 00.32 0.1
 AUTN 0.16 100 Pg 01 59.93 -0.4
 STV 0.24 21 P 02 01.68 0.1
 S 02 05.30

ENR 0.25 37 P 02 02.15 0.3
 S 02 05.94

SAOF 0.26 99 Pg 02 02.12 0.2
 Sg 02 06.32

CALN 0.36 220 Pg 02 04.50 0.7
 PZZ 0.49 351 P 02 06.07 -0.3
 S 02 12.68

IMI 0.51 103 P 02 06.86 0.1
 S 02 14.03

ROB 0.55 60 P 02 07.89 0.3
 S 02 15.40

FIN 0.75 75 P 02 11.09 0.0
 S 02 21.39

RRL 0.94 342 P 02 14.40 -0.2
 S 02 26.86

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

AUG 02, 1989 07h 41m 10.80 ± 0.75s
 36.056 N ± 9.1km 27.521 E ± 9.2km
 DEPTH = 10.0km (geophysicist)
 DODECANESE ISLANDS (369)
 MD 3.6 (ATH).

KAP 0.58 209 ePn 41 22.50 0.0
 eSn 41 33.00

YER 1.24 29 iPn 41 32.60 -1.3
 KSL 1.67 87 ePn 41 40.20 0.0
 NPS 1.74 244 ePn 41 41.00 -0.3
 ELL 2.05 70 iPn 41 46.00 0.6
 IZM 2.35 355 ePn 41 51.00 1.0
 KHL 2.77 35 ePn 42 01.80 5.7X
 S.D. = 1.0 on 6 of 7 obs.

AUG 02, 1989 08h 29m 10.78 ± 0.84s
 40.873 N ± 6.4km 23.033 E ± 6.7km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 ML 1.4 (SKO).

THE 0.25 192 ePg 29 16.00 0.0
 eSg 29 19.80
 KNT 0.31 341 ePg 29 17.10 -0.1
 eSg 29 21.20
 GRG 0.49 280 ePg 29 20.60 -0.1
 eSg 29 27.50
 SRS 0.49 60 ePgc 29 20.70 0.0
 eSg 29 27.60
 VAY 0.57 322 iPg 29 22.40 0.1
 iSg 29 29.70

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

% AUG 02, 1989 09h 38m 47.59±0.76s
 38.093 N ± 7.9km 23.213 E ± 7.4km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 ML 2.8 (ATH).

ATH 0.42 107 ePg 38 55.80 -0.3
 eSg 39 03.50
 NEO 1.21 0 ePb 39 08.50 -1.7
 ITM 1.37 229 ePb 39 12.00 -0.7
 VLS 2.07 273 ePb 39 23.00 0.2
 APE 2.11 118 ePn 39 24.00 0.6
 PLG 2.29 4 ePn 39 26.50 0.5
 KZN 2.48 334 ePb 39 30.00 1.3

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

* AUG 02, 1989 09h 47m 43.16±1.67s
 40.332 N ± 10.8km 21.780 E ± 14.6km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 MD 3.8 (ATH).

KZN 0.03 195 ePg 47 45.00 -0.2
 LIT 0.59 113 eP 47 53.50 -1.6
 VAY 1.16 31 ePn 48 04.40 -0.3
 PLG 1.27 88 ePn 48 08.00 1.2
 NEO 1.51 132 ePb 48 11.00 0.7
 SKO 1.66 351 ePn 48 20.00 7.6X

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

AUG 02, 1989 10h 24m 21.29±0.19s
 2.774 N ± 3.9km 96.143 E ± 3.7km
 DEPTH = 28.5km (7 depth phases)
 5.1mb (38 obs.) 4.9MsZ (8 obs.)

NORTHERN SUMATERA (706)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 18C
 Centroid Location:
 Origin Time 10:24:29.0 0.8
 Lat 2.66N 0.07 Lon 95.92E 0.08
 Dep 50.8 4.1 Half-duration 1.8
 Moment Tensor: Scale 10**16 Nm
 Mrr= 6.67 0.45 Mtt=-1.72 0.61
 Mff=-4.95 0.88 Mrt= 6.34 0.82
 Mrf=-4.35 0.84 Mtf= 6.95 0.50
 Principal Axes:
 T Val= 10.10 Plg=63 Azm= 7
 N 3.12 16 132
 P -13.23 21 229
 Best Double Couple: Mo=1.2*10**17
 NP1: Strike=345 Dip=28 Slip= 126
 NP2: 125 67 72

TSI 2.52 73 eP 25 05.50 4.2X
 eS 25 55.00
 BSI 2.83 343 iPc 25 06.50 0.9
 i(S) 25 45.00
 IPM 5.19 70 ePc 25 40.90 1.8
 1.0s 609.40nm 6.1mb
 e 26 00.00
 e 26 45.40
 PPI 5.33 127 ePd 25 21.60 -19.4X
 e(S) 26 42.00
 KLM 5.50 86 eP 25 53.00 9.5X
 SNG 6.24 45 eP 25 55.30 1.3
 2.3s 5563.64nm 6.9mb X
 KGM 7.21 96 ePc 26 09.60 2.1
 NNT 10.38 20 eP 26 56.20 4.8X
 e 35 59.00
 NST 13.41 17 eP 27 39.60 7.4X
 BDT 14.65 11 eP 27 47.30 -1.3
 LOE 15.54 20 eP 28 01.00 0.8
 CHG 16.17 10 iPc 28 08.20 -0.1
 1.3s 76.92nm 4.7mb

eS 31 34.00
 CHTO 16.17 10 iPc 28 08.10 -0.2
 1.2s 59.03nm 4.6mb
 TRT 19.47 122 ePc 28 49.40 0.4
 KOD 19.97 293 eP 28 54.00 -0.7
 eS 32 22.60
 KKM 20.27 80 ePd 28 58.20 0.6
 1.0s 96.90nm 5.1mb
 QIZ 20.99 39 eP 29 05.00 0.0
 Z 15s 5.50um 5.1MsZ X
 N 14s 3.50um
 GBA 21.39 301 Pc 29 09.60 0.6
 0.8s 6.30nm 4.1mb X
 TSM 21.94 86 eP 29 13.00 -1.5
 HYB 22.58 311 eP 29 21.00 0.1
 SHL 23.03 350 iP 29 22.60 -2.8
 iS 33 30.90
 KMI 23.11 15 Pc 29 26.50 0.2
 4.0s 1.00nm 2.7mb X
 Z 16s 12.60um 5.5MsZ X
 N 15s 5.90um
 E 12s 2.50um
 S 33 45.00
 MKS 24.62 109 iPc 29 42.50 1.8
 GYA 25.62 22 P 29 49.80 -0.5
 Z 15s 3.51um 5.0MsZ X
 N 16s 6.20um
 E 14s 5.90um
 HKC 26.14 41 (P) 30 00.00 5.1X
 GZH 26.18 38 eP 29 55.00 -0.3
 Z 20s 3.10um 4.8MsZ
 N 12s 2.60um
 E 12s 1.60um
 LSA 27.19 350 Pc 30 06.20 1.1
 S 34 43.00
 BAG 27.59 59 eP 30 08.40 -0.1
 CD2 28.90 14 eP 30 18.50 -1.5
 Z 12s 4.80um 5.3MsZ X
 N 12s 6.40um
 NDI 31.45 327 iPd 30 42.00 -0.6
 eS 35 48.00
 WHN 32.55 30 eP 30 51.50 -0.7
 Z 14s 3.55um 5.2MsZ X
 N 16s 2.48um
 E 15s 2.48um
 MBL 33.23 137 eP 30 57.00 -1.2
 0.4s 4.00nm 4.7mb
 XAN 33.31 20 eP 30 55.50 -3.4X
 N 14s 2.90um
 E 14s 2.10um
 LZH 33.90 11 eP 31 03.00 -1.2
 3.0s 401.00nm 5.8mb
 Z 25s 2.40um 4.8MsZ X
 E 20s 3.50um
 eS 36 35.00
 NJ2 36.12 34 Pd 31 21.60 -1.3
 Z 12s 3.00um 5.3MsZ X
 N 10s 0.60um
 E 12s 1.90um
 GTA 36.62 5 iPc 31 26.40 -0.8
 Z 14s 2.10um 5.1MsZ X
 N 12s 1.30um
 S 37 10.00
 SSE 36.77 37 eP 31 29.20 0.8
 Z 20s 2.70um 5.0MsZ
 N 14s 3.00um
 E 13s 1.90um
 PP 33 06.00
 eS 37 24.00
 sS 37 50.00
 TIY 37.85 21 eP 31 36.60 -0.9
 N 15s 6.00um
 PP 33 07.00
 MTN 38.05 115 eP 31 35.00 -4.3X
 0.6s 25.00nm 5.2mb
 TIA 38.51 28 Pd 31 43.10 0.1
 Z 15s 3.30um 5.3MsZ X
 N 12s 1.50um
 E 12s 1.70um
 QUE 38.83 318 eP 31 45.40 -0.5
 MUN 39.47 153 eP 31 51.30 0.3
 BTO 39.69 17 iPc 31 53.00 0.1
 N 13s 4.50um
 E 13s 1.90um
 eP 32 02.50 32km
 PP 33 29.00
 eS 37 57.00

sS 38 10.00
 HHC 40.38 18 iPc 32 00.00 1.4
 Z 14s 3.60um 5.4MsZ X
 N 15s 4.20um
 E 14s 6.80um
 PP 33 40.00
 S 38 08.00
 sS 38 24.00
 KSH 40.86 336 P 32 03.50 1.0
 E 12s 1.10um
 S 38 16.00
 COOL 41.09 146 eP 32 04.30 -0.1
 WARB 41.22 136 eP 32 04.00 -1.5
 BJI 41.30 23 eP 32 07.00 1.1
 4.0s 0.82nm 2.8mb X
 Z 14s 1.18um 4.9MsZ X
 E 14s 1.39um
 eSP 32 16.00
 eS 38 16.00
 WMQ 41.55 351 iPd 32 08.00 -0.1
 Z 22s 1.80um 4.9MsZ
 N 16s 1.70um
 pP 32 17.00 30km
 eS 38 22.00
 sS 38 33.20
 DL2 42.81 30 eP 32 18.30 0.0
 Z 19s 1.20um 4.8MsZ
 WB5 43.76 123 eP 32 24.80 -1.6
 WRA 43.77 123 Pd 32 25.70 -0.7
 1.1s 39.40nm 5.1mb
 ASPA 45.18 128 iPc 32 36.50 -1.3
 1.3s 25.00nm 5.0mb
 Z 23s 1.29um 4.8MsZ X
 LR 52 03.40
 FORR 45.23 140 eP 32 36.00 -2.0
 SNY 46.01 29 Pc 32 43.00 -1.0
 Z 21s 2.30um 5.1MsZ
 N 20s 3.30um
 E 19s 2.00um
 MAIO 47.49 319 eP 32 55.00 -1.0
 eS 39 48.00
 CN2 48.41 28 Pc 33 01.50 -1.3
 4.0s 0.60nm 3.0mb X
 Z 20s 1.80um 5.1MsZ
 N 13s 0.60um
 iPcP 34 29.00
 PP 34 54.00
 eS 40 00.00
 DIS 48.50 121 eP 33 03.00 -1.0
 SHI 49.22 308 eP 33 09.00 -0.6
 MDJ 51.03 30 eP 33 21.00 -1.9
 E 20s 3.20um
 MAT 51.27 44 (P) 33 28.00 3.1X
 1.5s 36.11nm 5.1mb
 eS 40 57.00
 PMG 52.24 104 eP 33 32.00 -0.6
 CTA 54.15 117 iPd 33 45.80 -0.8
 1.0s 63.00nm 5.6mb
 BHD 57.03 308 ePd 34 05.00 -2.2
 RMD 58.52 123 ePd 34 18.40 0.6
 TOO 60.80 136 eP 34 33.00 -0.3
 BWA 61.44 132 eP 34 38.40 0.7
 BRS 62.19 123 iPd 34 43.20 0.2
 CAN 62.25 133 eP 34 41.90 -1.3
 COO 62.58 127 iPc 34 46.00 0.5
 e 34 55.00 29km
 BBTK 67.96 312 eP 35 34.00 13.9X
 ELL 69.39 308 eP 35 26.90 -2.2
 DZM 72.88 114 iPc 35 50.30 0.1
 DEV 76.37 317 ePc 36 09.50 -0.3
 BNG 77.43 274 ePd 36 17.00 0.7
 0.8s 21.00nm 5.2mb
 i 36 22.10 16kmX
 SUF 78.45 334 iP 36 20.90 0.0
 NUR 78.54 331 eP 36 21.00 -0.4
 0.6s 14.30nm 5.2mb
 eS 46 12.00
 SPC 78.70 320 eP 36 22.60 -0.2
 PSZ 78.74 318 eP 36 22.50 -0.4
 KRA 79.03 320 eP 36 23.70 -0.6
 e 36 30.40 21km
 SOD 79.65 338 iP 36 22.30 -5.1X
 SRO 79.78 318 eP 36 28.20 -0.2
 KEV 80.28 341 eP 36 31.00 0.3
 eS 46 28.00
 ZST 80.63 318 eP 36 31.70 -1.3
 VBY 81.64 315 eP 36 38.80 0.5

ePKKP 17 08.00
 e 17 44.00
 e 18 34.00
 eSSS 38 04.00
 CNCB 158.99 227 ePKP 07 48.00 -17.6X
 LPB 159.26 228 (PKP) 07 49.00 -16.7X
 Z 18s 0.69um 5.5msz
 e 08 15.00
 LR 45 42.00
 ZOBO 159.44 228 PKP 08 06.00 -0.2
 Z 20s 0.53um 5.4msz
 LR 45 28.00
 S.D. = 0.9 an 98 of 106 obs.

? AUG 02, 1989 11h 11m 47.77±3.08s
 33.634 S ±15.1km 179.442 W ±20.8km
 DEPTH = 79.2 ± 22.9 km
 4.8mb (4 obs.)

SOUTH OF KERMADEC ISLANDS (179)

HBZ 4.36 204 eP 12 55.10 2.1
 KRP 5.91 222 P 13 28.80 14.2X
 MNG 8.06 209 eP 13 42.60 -1.7
 eS 15 20.20
 MSZ 14.73 218 eP 15 12.00 -1.1
 DZM 16.96 309 iPc 15 40.80 -0.7
 BRS 24.69 277 iPc 17 07.60 4.8X
 CAN 26.02 257 eP 17 31.80 16.7X
 BWA 26.59 259 eP 17 23.90 3.5X
 CTA 33.28 285 iPd 18 21.00 1.2
 0.6s 14.67nm 5.0mb
 ASPA 41.83 271 iPc 19 32.40 0.9
 0.8s 14.00nm 4.8mb
 WRA 43.11 276 Pc 19 41.70 -0.2
 0.5s 6.80nm 4.7mb
 WB5 43.12 276 eP 19 42.00 0.0
 i 19 55.10
 FORR 44.07 259 eP 19 50.40 0.9
 MTN 49.38 283 eP 20 30.30 -1.1
 SPA 56.54 180 e(P) 21 24.00 -0.1
 1.0s 5.00nm 4.5mb
 BNG 146.46 214 ePKPd 31 20.20 -0.3
 0.3s 8.00nm
 i 31 34.00
 SUF 146.72 339 iPKP 31 15.30 -4.0X
 0.5s 12.10nm
 NUR 148.86 337 ePKP 31 22.00 -0.8
 0.6s 13.00nm
 NB2 151.72 349 PKP 31 28.00 0.8
 0.7s 5.00nm
 HFS 152.12 346 ePKP 31 27.80 0.1
 0.5s 1.90nm
 S.D. = 1.2 an 15 of 20 obs.

? AUG 02, 1989 11h 48m 27.89±3.76s
 38.101 N ±32.5km 6.440 W ±21.3km
 DEPTH = 10.0km (geophysicist)
 SPAIN (377)
 mbLg 2.7 (MDD).

EVAL 0.57 205 iP 48 39.20 -0.2
 eS 48 46.00
 EHOR 0.98 106 eP 48 45.70 -0.9
 eS 48 58.50
 EPRU 1.49 139 eP 48 55.50 0.8
 eS 49 13.00
 EBAN 2.09 87 eP 49 03.80 0.3
 S.D. = 1.3 on 4 of 4 obs.

& AUG 02, 1989 12h 21m 11.00s
 64.209 N 139.039 W
 DEPTH = 18.0km (geophysicist)
 4.0mb (1 obs.)
 SOUTHERN YUKON TERRITORY, CANADA (18)
 <PGC-P>. ML 4.2 (PGC).

DWY 0.23 228 Pd 21 15.80 -0.7
 DOT 2.29 258 eP 21 51.06 2.5
 eS 22 20.56
 DMW 2.94 270 eP 21 59.68 2.0
 PAX 3.13 250 eP 21 59.72 -0.8
 HDA 3.45 277 eP 22 02.64 -2.4
 HYT 3.47 167 P 22 04.60 -0.8
 BALM 3.53 207 eP 22 06.67 0.4
 GLB 3.54 220 eP 22 06.19 0.0
 GLM 3.68 286 eP 22 06.15 -2.2
 CCB 3.83 281 eP 22 07.72 -2.6

FBA 3.84 284 eP 22 08.30 -2.2
 TGL 3.89 209 eP 22 11.49 0.3
 WHC 3.94 151 Pn 22 10.00 -1.9
 Sg 23 13.30
 WRH 3.95 278 eP 22 08.52 -3.4
 RDS 3.98 283 eP 22 08.55 -4.0
 KLU 4.17 232 eP 22 14.09 -1.1
 INK 4.68 26 eP 22 17.00 -5.4
 PMR 5.31 245 eP 22 31.00 -0.2
 IMA 6.45 293 e(P) 22 44.00 -3.5
 MBC 13.67 20 eP 24 17.50 -8.4
 0.5s 1.00nm 4.0mb
 20 obs. associated

? AUG 02, 1989 12h 24m 42.94±4.50s
 33.553 S ±15.5km 179.117 W ±23.0km
 DEPTH = 62.1 ± 34.4 km
 4.8mb (3 obs.)

SOUTH OF KERMADEC ISLANDS (179)

KRP 6.16 223 P 26 29.10 15.8X
 MSZ 14.96 218 eP 28 12.00 -0.1
 DZM 17.12 308 iPd 28 39.40 -0.2
 BRS 24.95 277 iPc 30 09.00 7.0X
 RMO 28.62 276 eP 30 38.00 2.5
 ASPA 42.10 271 iPc 32 30.60 0.0
 1.1s 23.00nm 4.9mb
 WRA 43.37 276 Pd 32 40.40 -0.6
 0.5s 7.30nm 4.7mb
 WB5 43.38 276 iPc 32 40.00 -1.0
 FORR 44.35 258 eP 32 49.00 0.3
 WARB 47.16 264 eP 33 10.00 -1.1
 SPA 56.63 180 e(P) 34 22.00 0.3
 1.0s 8.50nm 4.8mb
 BAO 112.45 128 e(PKP) 43 02.00 -12.2X
 BNG 146.68 213 ePKPd 44 17.50 -0.6
 0.7s 15.00nm
 i 44 19.40
 i 44 47.90
 SUF 146.74 339 iPKP 44 13.00 -3.7X
 0.6s 14.10nm
 NUR 148.89 337 iPKP 44 19.00 -1.2
 0.7s 25.40nm
 i 44 30.40
 NB2 151.69 349 PKP 44 25.40 0.9
 1.0s 5.70nm
 HFS 152.11 346 ePKP 44 25.80 0.8
 0.4s 1.20nm
 S.D. = 1.2 an 13 of 17 obs.

% AUG 02, 1989 12h 27m 18.00±0.79s
 37.735 N ± 7.5km 14.980 E ± 6.3km
 DEPTH = 10.0km (geophysicist)

SICILY (398)

MNO 0.30 311 Pc 27 24.60 0.3
 eSg 27 27.30
 ATN 0.57 42 P 27 29.30 -0.3
 eSg 27 37.50
 MEU 0.63 184 P 27 30.80 0.0
 eSg 27 41.20
 GIB 0.80 289 P 27 33.30 -0.2
 eSg 27 44.90
 SOI 0.91 68 P 27 35.70 0.2
 eSg 27 50.40
 S.D. = 0.4 an 5 of 5 obs.

& AUG 02, 1989 13h 25m 36.00s
 37.163 N 121.555 W
 DEPTH = 0.0km
 CENTRAL CALIFORNIA (39)
 <BRK>. ML 2.5 (BRK).

ARN 0.19 5 iPd 25 39.90 0.2
 MHC 0.19 339 iPd 25 39.98 0.2
 iS 25 43.40
 GCC 0.38 250 ePc 25 43.30 -0.2
 SAO 0.41 167 iPd 25 44.50 0.4
 eS 25 51.10
 LLA 0.73 138 eP 25 50.20 -0.4
 PCC 0.74 297 eP 25 49.70 -1.1
 PRS 0.84 170 eP 25 52.00 -0.8
 BKS 0.89 323 ePc 25 53.18 -0.7
 eS 26 06.85
 BRK 0.90 322 eP 25 53.40 -0.6
 CMB 1.27 47 eP 25 59.20 -1.4
 eS 26 17.30

KVN 3.31 54 eP 26 37.50 7.1
 11 obs. associated

% AUG 02, 1989 14h 21m 54.03±0.68s
 60.649 N ± 4.9km 6.277 E ± 8.4km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN NORWAY (535)
 MD 2.1 (BER).

HYA 0.52 355 iP 22 04.30 -0.3
 eS 22 12.00
 ASK 0.56 253 iP 22 04.90 -0.5
 eSg 22 12.50
 ODD1 0.76 167 iP 22 08.50 -0.4
 eS 22 17.30
 SUE 0.85 300 iP 22 10.40 0.1
 iS 22 22.20
 BLS1 1.29 167 iP 22 17.70 -0.3
 iS 22 34.30
 KMY 1.53 200 iP 22 22.50 1.1
 iS 22 41.60
 MOL 2.02 17 eP 22 28.80 0.3
 eS 22 55.50
 S.D. = 0.7 on 7 of 7 obs.

? AUG 02, 1989 15h 06m 32.66±1.02s
 44.407 N ±10.4km 7.290 E ± 9.8km
 DEPTH = 10.0km (geophysicist)
 NORTHERN ITALY (545)
 ML 1.7 (GEN).

STV 0.16 171 P 06 36.51 0.0
 S 06 38.85
 PZZ 0.17 306 P 06 36.56 0.0
 S 06 39.05
 ENR 0.20 153 P 06 37.13 0.0
 S 06 39.97
 ROB 0.43 105 P 06 41.48 0.0
 S.D. = 0.0 on 4 of 4 obs.

? AUG 02, 1989 15h 11m 05.61±2.23s
 32.001 S ±18.3km 179.466 E ±21.7km
 DEPTH = 359.5 ± 19.0 km
 3.9mb (1 obs.)

SOUTH OF KERMADEC ISLANDS (179)

HBZ 5.67 189 eP 12 35.80 2.3
 KRP 6.73 208 P 12 54.20 8.5X
 WHH 7.28 199 eP 12 53.70 1.5
 TTH 7.82 195 eP 13 03.10 4.6X
 PGZ 8.98 196 eP 13 12.90 0.7
 MNG 9.18 199 eP 13 13.20 -1.4
 eS 15 02.10
 KIW 9.57 201 eP 13 20.00 0.7
 CAW 9.75 200 P 13 20.30 -1.1
 BLW 9.88 198 eP 13 24.00 1.0
 WDW 9.92 200 eP 13 22.10 -1.3
 MRW 9.97 201 eP 13 23.10 -0.9
 eS 15 19.00
 MOW 9.99 199 eP 13 23.80 -0.5
 WEL 10.00 201 eP 13 22.80 -1.6
 WEL 10.00 201 P 13 27.00 2.6X
 S 15 19.00
 TCW 10.09 203 eP 13 24.70 -0.8
 DZM 15.23 307 iPc 14 24.10 -0.7
 BWA 26.04 256 eP 16 10.80 1.6
 WB5 42.04 275 eP 18 24.80 -0.1
 FORR 43.51 257 eP 18 37.20 0.8
 SPA 58.17 180 e(P) 20 25.80 0.8
 1.0s 5.00nm 3.9mb
 SUF 144.87 339 iPKP 29 55.80 -4.9X
 0.6s 27.00nm
 NUR 147.01 337 iPKP 30 02.80 -1.5
 0.7s 16.00nm
 BNG 147.26 217 iPKPd 30 06.50 0.3
 0.5s 8.00nm
 NB2 149.95 349 PKP 30 09.20 0.3
 0.6s 3.40nm
 HFS 150.31 346 ePKP 30 09.40 0.0
 1.1s 15.60nm
 S.D. = 1.2 on 21 of 25 obs.

? AUG 02, 1989 15h 49m 59.88±1.54s
 66.521 N ±12.0km 6.890 E ±14.4km
 DEPTH = 10.0km (geophysicist)
 NORWEGIAN SEA (642)
 MD 3.4 (BER).

02d 15h

NSS 2.91 131 iP 50 47.30 0.3
eS 51 14.50
MOL 3.98 176 iP 51 02.60 0.4
eS 51 41.30
HYA 5.39 184 iP 51 22.90 0.8
eS 52 17.90
TRO 5.48 50 eP 51 23.40 -0.1
eS 52 20.40
SUE 5.57 191 iP 51 26.00 1.3
eS 52 21.70
ASK 6.11 188 iP 51 32.10 -0.2
eS 52 32.50
ODD1 6.64 181 eP 51 40.10 0.3
eS 52 46.70
HFS 7.10 151 eP 51 45.80 -0.5
0.3s 7.20nm 5.3mb X
BLS1 7.16 180 iP 51 46.30 -0.9
eS 52 58.00
KMY 7.38 187 iP 51 48.50 -1.6
eS 53 01.90
SOD 7.79 75 eP 52 06.00 10.2X
SUF 9.09 106 eP 52 14.00 0.1
NUR 9.93 119 eP 52 37.00 11.4X
S.D. = 0.9 on 11 of 13 obs.

* AUG 02, 1989 16h 17m 45.22 ± 2.56s
46.952 N ± 12.1km 1.487 E ± 18.1km
DEPTH = 10.0km (geophysicist)

FRANCE (538)
ML 2.3 (LDG).

LSF 0.70 178 Pg 17 59.10 0.0
Sg 18 08.70
TCF 0.83 143 Pg 18 01.30 0.0
Sg 18 13.70
BGF 1.01 112 Pg 18 04.00 -0.4
Sg 18 19.10
MAF 1.04 134 Pg 18 05.10 0.2
Sg 18 20.70
AVF 1.29 97 Pg 18 09.50 0.4
Sg 18 27.10
SSF 1.39 85 Pg 18 09.90 -0.7
Sg 18 28.90
LOR 1.65 78 Pg 18 14.70 0.3
Sg 18 36.60
LBF 1.71 88 Pg 18 15.40 0.2
Sg 18 38.60
S.D. = 0.4 on 8 of 8 obs.

AUG 02, 1989 16h 29m 05.79 ± 0.78s
39.151 N ± 6.3km 23.516 E ± 7.4km
DEPTH = 10.0km (geophysicist)

AEGEAN SEA (365)
ML 3.0 (ATH).

NEO 0.28 305 ePg 29 12.30 0.7
eSg 29 17.00
PAIG 0.79 9 ePg 29 21.40 0.3
eSg 29 33.10
ATH 1.19 172 ePb 29 28.20 0.3
PLG 1.22 357 ePb 29 30.00 1.4
LIT 1.24 320 ePnd 29 29.10 0.3
iSn 29 48.70
OUR 1.24 17 ePb 29 28.00 -0.7
THE 1.54 344 ePn 29 33.50 0.2
KZN 1.77 311 ePb 29 35.00 -1.8
SRS 1.97 2 ePn 29 36.50 -1.0
eSn 30 01.70
KNT 2.06 347 ePn 29 41.10 0.2
EZN 2.28 72 ePn 29 44.00 0.0
VAY 2.29 342 ePn 29 38.40 -5.7X
RDO 2.52 37 ePb 29 58.00 10.5X
APE 2.62 142 ePb 29 55.80 6.9X
S.D. = 1.0 on 11 of 14 obs.

* AUG 02, 1989 16h 42m 23.02 ± 0.78s
36.082 N ± 10.3km 27.665 E ± 8.1km
DEPTH = 10.0km (geophysicist)

DODECANESE ISLANDS (369)
MD 3.6 (ATH).

KAP 0.66 217 ePg 42 35.50 -0.7
eSg 42 45.00
YER 1.16 25 iPn 42 43.40 -1.4
KSL 1.55 88 ePb 42 51.10 0.4
NPS 1.86 245 ePb 42 55.20 0.0
ELL 1.93 69 ePn 42 57.00 0.7

APE 1.98 300 ePg 42 58.00 1.0
IZM 2.33 352 eP 43 08.00 5.9X
S.D. = 1.2 on 6 of 7 obs.

& AUG 02, 1989 16h 58m 38.72s
51.075 N 166.543 W
DEPTH = 18.2km
ALEUTIAN ISLANDS REGION (16)
<PAL>

SNKA 4.10 32 eP 59 39.34 -2.5
DRRA 4.63 32 eP 59 47.12 -2.4
BALA 4.70 27 eP 59 49.46 -1.0
DLG 4.96 33 eP 59 51.78 -2.3
PS4 5.12 31 eP 59 55.03 -1.4
eS 00 49.58
PVV 5.17 32 eP 59 55.79 -1.2
SOF 5.49 39 eP 00 00.03 -1.6
NGI 5.57 42 eP 00 00.72 -1.9
eS 01 00.78
SASA 5.61 38 eP 00 01.63 -1.5
eS 01 01.50
CNBA 5.63 46 eP 00 02.05 -1.5
SGB 5.78 37 eP 00 03.34 -2.2
eS 01 05.67
BKJ 5.86 43 eP 00 04.87 -1.9
ADK 6.39 281 eP 00 08.10 -6.1
IVF 6.39 38 eP 00 12.13 -2.1
KDC 10.56 45 eP 01 09.20 -2.8
RDT 12.37 34 eP 01 34.18 -2.5
SLKM 13.14 38 eP 01 43.82 -3.0
TTA 13.17 22 eP 01 48.40 1.1
SUA 13.57 34 eP 01 48.90 -3.7
KNIM 14.04 41 eP 01 54.76 -3.9
GHO 14.43 35 eP 01 59.02 -4.8
GLI 14.60 40 eP 02 02.15 -3.8
FID 14.78 41 eP 02 04.43 -3.9
KLU 15.41 39 eP 02 12.93 -3.7
IMA 16.40 19 eP 02 31.60 2.2
25 obs. associated

* AUG 02, 1989 18h 45m 55.62 ± 0.71s
59.945 N ± 6.4km 6.400 E ± 8.6km
DEPTH = 10.0km (geophysicist)

SOUTHERN NORWAY (535)
MD 1.7 (BER).

ODD1 0.12 106 iPg 45 39.10 0.4
Sg 45 41.10
BLS1 0.60 159 iP 45 47.60 -0.2
S 45 55.20
ASK 0.81 312 eP 45 52.30 1.0
eS 46 04.70
KMY 0.94 219 iP 45 53.30 -0.2
eS 46 05.20
HYA 1.23 355 iP 45 57.90 -0.6
eS 46 12.40
SUE 1.38 325 eP 46 00.30 -0.5
iS 46 18.60
S.D. = 0.8 on 6 of 6 obs.

? AUG 02, 1989 18h 48m 43.48 ± 1.07s
40.751 N ± 7.2km 122.293 W ± 9.1km
DEPTH = 5.0km (geophysicist)

NORTHERN CALIFORNIA (36)
ML 2.5 (BRK).

WDC 0.25 228 iPc 48 48.40 -0.2
eS 48 50.30
LTCM 0.56 167 e(P) 48 55.20 0.6
MIN 0.66 128 eP 48 56.30 -0.5
eS 49 05.60
LBFM 0.67 27 eP 48 57.00 0.1
S.D. = 0.8 on 4 of 4 obs.

* AUG 02, 1989 19h 20m 10.14 ± 0.86s
38.026 N ± 11.9km 118.538 W ± 9.5km
DEPTH = 5.0km (geophysicist)

CALIFORNIA-NEVADA BORDER REGION (40)
ML 2.7 (BRK).

TNP 1.04 87 iPd 20 30.20 -0.3
KVN 1.08 18 iPd 20 31.40 0.4
FRI 1.39 222 ePd 20 34.40 -1.8
iS 20 54.10
CMB 1.46 271 eP 20 35.90 -1.3
iS 20 54.70

LLA 2.38 234 eP 20 51.30 0.8
ARN 2.47 255 eP 20 52.50 0.7
PRI 2.54 223 eP 20 54.10 1.3
S.D. = 1.4 on 7 of 7 obs.

? AUG 02, 1989 19h 33m 42.50 ± 2.79s
4.486 S ± 46.8km 154.409 E ± 29.8km
DEPTH = 289.7 ± 26.4 km

SOLOMON ISLANDS (193)

RAB 2.25 277 iPc 34 31.00 0.2
0.5s 1014.08nm
iS 35 05.00
LAT 7.68 253 eP 35 32.00 -0.8
PMG 8.70 235 eP 35 46.00 0.5
BWA 30.30 190 eP 39 28.70 -0.8
CAN 31.09 189 eP 39 36.60 0.3
WARB 34.23 228 eP 40 03.80 0.5
S.D. = 1.0 on 6 of 6 obs.

* AUG 02, 1989 20h 14m 07.78 ± 1.38s
31.365 S ± 15.0km 67.914 W ± 6.9km
DEPTH = 10.0km (geophysicist)

SAN JUAN PROVINCE, ARGENTINA (137)

CFA 0.37 229 iPd 14 15.50 0.1
e 14 21.10
RTLL 0.48 274 iPc 14 17.00 -0.5
RTCV 0.73 227 iPd 14 21.80 -0.3
S 14 30.50
RTCB 0.77 261 iPc 14 23.00 0.2
S 14 34.00
RTBS 1.35 257 e(P) 14 33.00 0.5
S 14 52.00
MRA 2.15 120 ePd 14 44.00 -0.1
S.D. = 0.4 on 6 of 6 obs.

* AUG 02, 1989 20h 50m 41.44 ± 1.34s
66.307 N ± 13.9km 150.066 W ± 10.5km
DEPTH = 33.0km (normal)

ALASKA (676)
ML 4.0 (PMR).

IMA 1.49 262 ePc 51 06.90 0.7
FBA 1.70 145 eP 51 07.70 -1.5
TTA 4.25 220 eP 51 44.50 -1.0
TOA 4.55 156 eP 51 50.50 0.7
PWA 4.68 179 eP 51 53.80 2.3
SVW 5.77 208 eP 52 05.80 -1.2
INK 6.70 65 eP 52 20.00 0.0
HYT 7.84 129 P 52 34.00 -2.1X
S.D. = 1.7 on 7 of 8 obs.

? AUG 02, 1989 21h 20m 11.55 ± 2.85s
34.282 S ± 25.9km 178.232 E ± 27.7km
DEPTH = 278.9 ± 18.4 km
4.1mb (1 obs.)

SOUTH OF KERMADEC ISLANDS (179)

HBZ 3.31 179 eP 21 09.30 -0.2
WHH 4.80 196 eP 21 29.40 2.9X
MOH 4.92 190 P 21 28.70 0.9
PGZ 6.51 193 eP 21 46.90 -0.3
0.4s 143.00nm 5.3mb X
MNG 6.69 198 P 21 48.60 -0.8
eS 23 11.40
KIW 7.08 201 eP 21 53.90 -0.3
MTW 7.20 197 eP 21 56.50 0.9
CAW 7.26 199 P 21 55.50 -0.9
WDW 7.43 199 P 21 57.40 -1.1
MRW 7.48 201 eP 21 58.60 -0.5
WEL 7.51 200 eP 22 00.00 0.5
S 23 33.00

TCW 7.59 203 P 22 00.30 -0.3
CCW 8.10 202 P 22 08.90 2.0
WB5 41.29 279 eP 27 31.70 0.0
SPA 55.90 180 e(P) 29 22.70 -0.1
0.8s 5.42nm 4.1mb
S.D. = 1.0 on 14 of 15 obs.

* AUG 02, 1989 21h 26m 17.78 ± 0.83s
23.302 N ± 9.9km 123.463 E ± 11.3km
DEPTH = 31.2km (2 depth phases)
4.4mb (6 obs.) 4.9msz (1 obs.)

SOUTHWESTERN RYUKYU ISLANDS (246)

TWC 1.97 312 ePd 26 49.40 -0.2
 eS 27 04.00
 TWF1 1.99 272 ePc 26 47.60 -2.4
 TWZ 2.48 316 ePd 26 58.80 1.9
 ANP 2.58 317 e(P) 27 28.00 29.6X
 SSE 8.02 346 P 28 14.50 -0.6
 0.8s 16.00nm 5.2mb
 Z 12s 1.40um
 N 12s 1.30um
 eS 30 24.00

NJ2 9.62 336 Pc 28 35.00 -2.2
 Z 14s 1.00um
 GYA 15.57 285 P 30 03.20 6.4X
 N 10s 0.50um
 E 10s 0.10um

XAN 16.63 313 Pd 30 14.00 3.8X
 TIY 17.20 329 eP 30 19.00 1.6
 N 12s 0.70um
 MAT 18.34 41 iPd 30 32.60 1.2
 0.8s 16.42nm 4.2mb

CD2 19.09 298 eP 30 40.80 0.1
 BTO 20.63 330 eP 30 56.00 -1.3
 N 10s 0.50um
 E 10s 0.50um

LOE 21.19 258 eP 31 04.00 0.9
 LZH 21.23 311 eP 31 04.50 1.0
 2.0s 82.00nm 4.8mb
 Z 15s 0.70um 4.2mszX
 eS 37 06.00

CHTO 23.30 264 eP 31 26.80 2.8
 pP 31 35.10 30km
 WMO 35.77 314 eP 33 14.20 -1.8
 WB5 44.22 165 eP 34 25.00 -1.0
 ASPA 47.78 167 iPc 34 53.90 -0.3
 eP 35 03.70 33km

SUF 72.83 331 iP 37 45.40 0.3
 0.6s 2.00nm 4.3mb
 HFS 79.35 331 eP 38 21.20 -0.6
 0.5s 1.50nm 4.3mb
 Z 19s 0.57um 4.9msz
 LR 15 02.00

NB2 79.97 333 P 38 25.00 -0.2
 0.9s 4.30nm 4.5mb
 KSP 82.41 322 eP 38 39.00 0.8
 YKA 82.96 23 eP 38 48.90 8.1X
 CLL 84.00 324 eP 38 56.00 9.7X
 KHC 84.77 322 eP 38 56.60 6.3X

S.D. = 1.5 on 19 of 25 obs.

& AUG 02, 1989 21h 35m 53.40s
 32.470 N 115.240 W
 DEPTH = 6.0km (geophysicist)
 CALIFORNIA-MEXICO BORDER REGION (45)
 <PAS-P>. ML 3.3 (PAS).

GLA 0.68 31 iPd 36 05.40 -1.6
 IKP 0.75 284 eP 36 07.40 -1.1
 eS 36 17.70

BAR 1.23 280 eP 36 14.60 -2.0
 PLM 1.62 303 eP 36 19.80 -3.0
 PEC 2.15 312 eP 36 29.00 -1.3
 5 obs. associated

% AUG 02, 1989 22h 58m 24.45±0.65s
 31.999 N ± 4.9km 35.759 E ± 8.9km
 DEPTH = 10.0km (geophysicist)

DEAD SEA REGION (373)
 SALJ 0.06 279 Pd 58 27.00 0.2
 KFNJ 0.15 207 P 58 28.00 0.0
 BURJ 0.24 9 Pd 58 29.40 -0.3
 MASJ 0.27 187 Pc 58 30.00 -0.2
 JARJ 0.29 34 Pc 58 30.70 0.2
 OUTJ 0.73 163 P 58 39.00 0.1

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

AUG 02, 1989 23h 19m 27.41±0.26s
 40.809 N ± 2.8km 20.106 E ± 2.0km
 DEPTH = 26.6 ± 3.0 km
 3.9mb (4 obs.)
 GREECE-ALBANIA BORDER REGION (392)
 ML 4.3 (ATH), 4.1 (ROM). MD 3.8
 (TTG). Felt (V) at Dobronj,
 Gjerbes, Zaloshnje and Greve;
 (IV) in the Gromsh and Korce
 areas, Albionio.

BERA 0.16 228 iPgc 19 32.00 -0.8
 TPE 0.52 188 iPgc 19 36.00 -2.0
 TIR 0.57 341 iPgc 19 40.10 1.4
 VLO 0.58 234 iPgd 19 37.60 -1.3
 OHR 0.61 60 iPgc 19 38.00 -1.4
 iSg 19 47.00

LSK 0.76 150 iPgc 19 39.20 -2.8
 PHP 0.91 16 iPgc 19 43.30 -1.1
 SRN 0.93 185 iPg 19 46.80 2.2
 KEK 1.12 192 ePn 19 47.50 0.1
 PUK 1.24 353 iPnc 19 52.40 3.3X
 KKS 1.29 10 ePn 19 51.40 1.7
 SDA 1.29 339 iPn 19 54.00 4.3X
 ULC 1.32 331 iPgc 19 53.50 3.3X
 eSg 20 14.00

KZN 1.36 111 iPnc 19 49.70 -1.2
 SKO 1.54 40 iPd 19 54.70 1.4
 i 19 56.30
 iSg 20 16.50
 LQ 20 19.30
 LR 20 28.00

BCI 1.56 359 iPn 19 57.50 3.9X
 LCI 1.71 255 Pc 19 56.20 0.4
 eSn 20 21.10
 TTG 1.74 339 iPnc 19 59.80 3.6X
 iSn 20 23.00

GRG 1.75 84 ePn 19 57.00 0.6
 eSn 20 27.10
 BDV 1.76 327 iPnc 19 59.20 2.7
 eSn 20 24.30
 PVY 1.79 357 ePn 20 00.20 3.1X
 eSn 20 24.50

VAY 1.93 74 iPnd 19 58.80 -0.3
 iSn 20 25.40
 LIT 1.95 110 ePnc 20 00.40 1.0
 eSn 20 29.40
 HCY 2.03 324 ePn 20 04.20 3.7X
 eSn 20 31.00

IVA 2.07 356 ePn 20 03.50 2.4
 eSn 20 31.00
 KNT 2.14 80 ePnc 20 02.30 0.2
 eSn 20 36.10
 NKY 2.17 338 ePn 20 05.00 2.5
 eSn 20 34.00

THE 2.18 94 ePnc 20 02.50 -0.1
 BRY 2.39 331 ePn 20 07.50 1.7
 eSn 20 40.00
 KKB 2.48 64 iPd 20 08.00 1.1
 Sg 20 31.00

PLG 2.58 99 ePn 20 09.00 0.6
 VLS 2.65 172 ePn 20 10.00 0.6
 SRS 2.66 82 ePnd 20 09.10 -0.3
 NEO 2.82 121 ePn 20 11.80 0.0
 MMB 2.84 73 iPd 20 12.00 0.0
 iS 20 50.00

PAIG 2.87 107 ePn 20 12.10 -0.2
 VTS 2.93 52 iP 20 14.00 0.7
 iS 20 52.00
 iSg 21 07.00

OUR 2.99 98 ePn 20 15.20 1.1
 TDS 3.10 250 P 20 15.60 -0.2
 GRI 3.47 236 P 20 22.31 1.4
 RZN 3.59 74 iPd 20 23.00 0.2
 S 21 07.00

HVAR 3.61 312 iPnc 20 23.30 0.4
 iSn 21 08.80
 SGO 3.66 268 P 20 24.90 1.3
 PLD 3.69 68 iPd 20 27.00 3.0X
 iS 21 08.00

ATH 3.98 134 ePn 20 29.60 1.4
 BEO 4.02 4 ePn 20 29.00 0.3
 KDZ 4.09 76 iP 20 28.00 -1.8
 RDO 4.13 84 ePn 20 29.20 -1.0
 SOI 4.16 230 Pd 20 30.50 -0.2
 GMB 4.21 233 P 20 31.65 0.1
 SSR 4.23 16 eP 20 40.00 8.3X
 DIM 4.26 71 eP 20 33.00 0.8
 DUI 4.34 283 Pc 20 35.90 2.5
 ATN 4.46 235 P 20 35.00 0.0
 BLY 4.49 332 eP 20 37.00 1.6
 eS 21 47.00

PVL 4.58 57 eP 20 35.00 -1.7
 RFI 4.65 278 P 20 39.59 1.9
 SDI 4.83 283 P 20 42.10 1.9
 EZN 4.85 100 eP 20 40.00 -0.5
 BZS 4.93 12 iPc 20 41.00 -0.6
 PRK 4.98 106 ePn 20 44.60 2.2

JMB 5.13 69 iPc 20 46.00 1.5
 AZI 5.15 285 P 20 46.60 1.8
 AQU 5.26 289 P 20 47.80 1.4
 ALP 5.26 294 iPnd 20 47.00 0.5
 i(Sn) 21 49.66

DEV 5.47 21 ePc 20 53.00 3.8X
 MEU 5.47 229 Pc 20 47.30 -2.1
 AOI 5.55 302 iPnd 20 50.74 0.3
 i(Sn) 21 54.26
 SSO 5.56 299 e(Sn) 20 50.86 0.3
 e(Sn) 21 52.97

BUC1 5.62 49 iPc 21 16.00 24.6X
 APE 5.64 130 ePn 20 52.00 0.3
 RDP 5.65 282 P 20 53.00 1.2
 RMP 5.66 283 P 20 54.40 2.4
 CIO 5.71 297 iPnd 20 52.29 -0.4
 e(Sn) 21 55.55

CMP 5.74 37 iPd 21 30.00 36.9X
 MNS 5.79 288 Pd 20 55.30 1.5
 ZAG 5.84 330 iPn 20 54.70 0.3
 iSg 22 00.00
 VBY 5.88 325 ePn 20 55.80 0.8
 iSn 22 02.50

PTJ 5.92 331 iPnc 20 55.40 -0.2
 eS 21 51.80
 ARV 5.96 299 P 20 56.10 -0.2
 ASS 5.99 295 P 20 57.20 0.5
 IZM 6.03 111 eP 20 58.50 1.3
 SMG 6.07 118 ePn 20 58.50 0.8
 RIY 6.17 319 iPnd 20 59.40 0.3
 iSn 22 09.60

MLR 6.33 40 iPc 21 01.00 -0.6
 ISR 6.40 45 eP 21 02.50 0.0
 CEY 6.44 322 ePnc 21 03.00 0.1
 eSn 22 17.50
 RSM 6.47 301 P 21 03.70 0.4
 LJU 6.62 324 ePnc 21 05.00 -0.4
 eSn 22 21.00

DST 6.63 98 eP 21 04.90 -0.8
 PSN 6.65 62 eP 21 56.00 50.2X
 CRE 6.68 298 P 21 07.50 1.1
 TRI 6.74 319 iPnd 21 06.20 -0.9
 iSn 22 18.00

SFI 6.86 300 P 21 09.00 0.2
 VOY 6.91 321 iPnc 21 08.70 -0.8
 eSn 22 26.30
 VRI 6.99 41 iPc 21 10.50 -0.1
 PSZ 7.11 359 eP 21 12.90 0.5
 SRO 7.12 350 eP 21 16.60 4.2X
 FIR 7.20 297 ePn 21 15.00 1.4
 iSn 22 36.00

CFR 7.34 51 eP 21 15.00 -0.5
 RBL 7.36 322 P 21 16.00 0.1
 VVI 7.62 315 P 21 18.50 -0.9
 KAP 7.65 131 ePn 21 21.00 1.1
 KHL 7.69 106 ePn 21 22.10 1.6
 ZST 7.69 345 eP 21 21.40 1.0
 e 21 28.70

MME 7.73 299 P 21 22.10 0.9
 BDI 7.75 298 P 21 20.70 -0.6
 FVI 7.85 320 P 21 21.60 -1.0
 VKA 7.93 341 ePn 21 24.50 0.7
 e 21 43.00
 eSn 22 50.00

KBA 7.94 324 iPnc 21 23.00 -1.1
 1.0s 22.50nm 5.3mb
 i 21 23.70
 i 21 35.80
 i 22 50.70
 iSn 22 54.20
 i 23 16.10

SPC 8.38 1 eP 21 33.90 3.7X
 SAL 8.48 308 P 21 31.00 -0.4
 CVF 8.59 285 Pn 21 33.80 0.8
 BHG 8.64 326 iPc 21 33.40 -0.2
 0.6s 23.00nm 5.6mb X

BOB 8.78 300 P 21 35.60 0.0
 OGA 8.93 316 eP 21 37.00 -0.8
 MDI 9.06 307 P 21 37.10 -2.3
 KHC 9.52 333 P 21 46.00 0.3
 e 22 14.40

VAI 9.68 305 P 21 46.60 -1.4
 SBF 9.87 292 Pn 21 50.30 -0.4
 PRU 9.97 339 eP 21 51.50 -0.5
 e 22 15.80
 ORO 10.07 303 P 21 51.90 -1.6
 LPG 10.82 300 Pn 22 02.60 -1.3

02d 23h

LPL 10.84 300 Pn 23 59.40 -2.1
BSF 11.83 311 Pn 22 15.90 -1.6
CDF 11.88 314 Pn 22 16.20 -1.9
HAU 12.18 311 Pn 22 20.00 -2.0
SMF 13.12 302 Pn 22 33.20 -1.4
LBF 13.16 303 Pn 22 33.80 -1.3
LOR 13.34 304 Pn 22 36.50 -1.0
AVF 13.49 302 Pn 22 38.30 -1.1
BGF 13.74 300 Pn 22 41.20 -1.5
TCF 14.08 299 Pn 22 46.70 -0.5
HFS 19.76 350 eP 23 55.60 -2.4
NB2 20.98 348 P 24 09.20 -1.5
SUF 22.24 7 eP 24 24.00 0.7
S.D. = 1.2 on 121 of 136 obs.
AUG 02, 1989 23h 44m 25.95 ± 0.99s
34.639 N ± 8.4km 24.099 E ± 5.4km
DEPTH = 37.9 ± 10.9 km
4.1mb (14 obs.)
CRETE (370)
ML 3.9 (ATH).
NPS 1.39 63 eP 44 52.00 2.8
KAP 2.68 69 eP 45 10.20 2.5
APE 2.69 25 eP 45 07.80 0.0
ATH 3.34 355 eP 45 17.60 0.6
YER 4.21 53 iP 45 32.10 2.6
VLS 4.53 322 eP 45 35.00 1.2
IZM 4.53 33 eP 45 34.70 0.7
NEO 4.71 352 eP 45 36.00 -0.5
KSL 4.72 70 eP 45 37.00 0.4
PRK 4.92 20 eP 45 38.00 -1.3
ELL 5.18 64 iP 45 44.00 0.9
EZN 5.47 18 eP 45 52.00 4.9X
KHL 5.71 48 iP 45 50.60 0.0
PLG 5.75 355 eP 45 50.00 -1.1
KZN 5.95 343 eP 45 53.00 -1.1
KEK 6.12 327 eP 45 55.50 -0.8
DST 6.14 35 eP 45 55.00 -1.6
RDO 6.60 10 eP 46 03.00 0.0
VAY 6.78 350 ePn 46 04.50 -1.0
SOI 7.34 300 P 46 13.50 0.1
LCI 7.49 321 P 46 11.60 -3.9X
SKO 7.61 345 ePn 46 15.50 -1.7
ATN 7.80 299 P 46 20.00 0.1
MEU 7.84 291 P 46 20.20 -0.3
TDS 7.97 311 P 46 20.50 -1.7
SGO 9.14 313 P 46 36.70 -1.6
BURJ 10.07 100 P 46 49.80 -1.5
PRNI 10.15 112 eP 46 51.00 -1.3
MASJ 10.16 103 P 46 52.20 -0.3
JARJ 10.19 100 P 46 51.00 -1.8
MBH 10.34 115 eP 46 54.50 -0.3
SBF 15.83 311 eP 48 11.10 3.4X
0.6s 5.40nm 3.9mb
KHC 16.44 335 eP 48 15.00 -0.3
i 48 19.90
PRU 16.87 338 eP 48 22.50 1.9
KSP 17.16 343 eP 48 25.50 1.1
GRF 17.77 332 e(P) 48 33.00 1.0
CLL 18.50 338 eP 48 41.00 0.2
e 49 08.00
LOR 19.75 316 eP 48 55.40 0.0
0.6s 2.10nm 3.6mb
BGF 19.98 313 eP 48 58.20 0.3
0.6s 5.40nm 4.1mb
WLF 19.98 324 P 49 00.40 2.6
MAF 19.99 312 eP 48 58.50 0.5
0.6s 3.90nm 3.9mb
LPD 20.23 307 eP 49 00.70 0.2
0.6s 5.40nm 4.1mb
TCF 20.24 312 eP 49 01.40 0.8
0.6s 2.70nm 3.8mb
LFF 20.62 307 eP 49 05.00 0.5
0.8s 8.00nm 4.1mb
LSF 20.65 311 eP 49 05.40 0.6
0.8s 10.70nm 4.3mb

DOU 21.03 323 iPc 49 08.60 0.0
MFF 21.85 310 eP 49 18.00 1.2
0.5s 8.70nm 4.4mb
LPF 23.01 313 eP 49 29.60 1.3
0.6s 12.60nm 4.6mb
FLN 23.02 315 eP 49 29.30 0.9
0.6s 9.70nm 4.5mb
NUR 25.89 1 eP 49 54.00 -1.7
HFS 26.40 348 eP 49 59.00 -1.4
0.4s 6.20nm 4.6mb
NB2 27.69 346 P 50 09.70 -2.6
0.6s 2.90nm 4.1mb
SUF 28.13 2 iP 50 13.80 -2.4
BNG 30.49 191 ePc 50 44.50 6.8X
0.6s 2.00nm 4.1mb
YKA 77.67 342 eP 56 21.10 1.3
S.D. = 1.4 on 51 of 55 obs.
AUG 03, 1989 00h 05m 07.77 ± 10.63s
7.565 S ± 90.5km 128.809 E ± 34.3km
DEPTH = 33.0km (normal)
4.1mb (1 obs.)
BANDA SEA (280)
MTN 5.72 157 iPd 06 33.40 0.7
e 06 43.80
eS 07 26.00
KNA 8.13 180 eP 07 06.30 -0.2
0.3s 13.00nm 5.6mb X
eS 08 22.00
WB5 13.38 157 eP 08 14.20 -3.7X
eS 10 23.00
QIS 16.61 142 eP 09 00.00 0.1
eS 11 41.00
ASPA 16.74 164 eP 09 00.40 -1.1
0.4s 7.00nm 4.1mb
e 09 07.80
eS 11 44.20
WARB 18.63 186 eP 09 25.50 0.5
S.D. = 1.0 on 5 of 6 obs.
AUG 03, 1989 00h 11m 18.70 ± 1.34s
14.156 N ± 7.7km 61.132 W ± 30.1km
DEPTH = 33.0km (normal)
WINDWARD ISLANDS (95)
ML 2.2 (FDF).
SLB 0.34 165 eP 11 27.03 0.0
eS 11 32.65
BIM 0.36 9 eP 11 27.25 -0.1
S 11 32.60
MVM 0.46 30 iPc 11 28.71 0.0
S 11 35.30
FDF 0.57 358 iPc 11 30.45 0.0
S 11 38.30
CRM 0.63 19 iPc 11 31.22 0.1
S 11 39.00
S.D. = 0.1 on 5 of 5 obs.
AUG 03, 1989 02h 24m 20.48 ± 0.63s
1.009 N ± 3.5km 126.100 E ± 4.8km
DEPTH = 65.6 ± 6.0 km
5.3mb (25 obs.)
MOLUCCA PASSAGE (266)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 30C
Centroid Location:
Origin Time 02:24:22.3 0.5
Lat 1.01N 0.05 Lon 126.01E 0.04
Dep 42.4 3.2 Half-duration 2.0
Moment Tensor: Scale 10**17 Nm
Mrr= 1.70 0.08 Mtt= 0.08 0.08
Mff=-1.77 0.13 Mrt= 0.65 0.14
Mrf= 0.42 0.12 Mtf=-0.31 0.08
Principal Axes:
T Vol= 1.95 Plg=71 Azm=346
N -0.05 17 194
P -1.90 9 102
Best Double Couple: Ma= 1.9*10**17
NP1: Strike=173 Dip=39 Slip= 63
NP2: 26 56 110
MNI 1.33 289 iPd 24 42.50 -0.9
eS 25 00.50
AAI 5.11 156 eP 25 35.40 -1.0
DAV 6.06 355 eP 25 50.00 0.4

TSM 8.63 292 ePc 26 27.00 1.8
1.3s 1376.10nm 6.6mb X
MKS 9.06 227 iPc 26 30.30 -0.8
KKM 11.06 297 eP 26 59.90 1.5
QCP 14.42 340 eP 27 37.00 -5.7X
MTN 14.64 160 eP 27 42.00 -3.6X
TRT 15.98 237 ePd 28 07.30 4.7X
BAG 16.24 341 eP 28 06.90 0.7
KNA 16.86 171 eP 28 12.50 -1.2
LAT 22.20 110 eP 29 15.00 2.2
WB5 22.29 159 iPd 29 12.20 -1.4
iS 33 14.10
GUMO 22.39 55 eP 29 09.60 -5.0X
0.6s 112.23nm 5.5mb
PJG 22.39 55 eP 29 09.60 -5.0X
GUA 22.40 55 eP 29 10.00 -4.7X
0.7s 87.67nm 5.3mb
KGM 22.79 273 ePc 29 21.30 2.7
MBL 22.87 195 eP 29 18.00 -1.3
PMG 23.38 117 eP 29 24.50 0.2
0.9s 67.23nm 5.1mb
QIZ 23.97 319 eP 29 28.00 -2.0
N 16s 1.20um
KLM 24.53 275 eP 29 37.50 2.1
QZH 24.87 344 Pc 29 38.00 -0.6
QIS 25.19 149 iPd 29 40.70 -0.9
0.9s 212.00nm 5.6mb
GZH 25.20 331 P 29 40.20 -1.5
IPM 25.29 279 ePc 29 42.10 -0.5
0.8s 52.10nm 5.1mb
NANU 25.59 203 eP 29 46.00 0.7
ASPA 25.67 163 iPd 29 45.50 -0.6
0.9s 116.00nm 5.4mb
Z 21s 1.02um 4.3msz
eS 34 10.10
LR 44 54.10
SNG 26.13 284 eP 29 51.40 1.0
0.8s 62.69nm 5.2mb
eS 34 36.20
WARB 27.04 179 eP 29 58.70 0.1
0.3s 7.00nm 4.7mb
PSI 27.21 274 ePd 30 00.50 0.2
NNT 28.55 295 eP 30 12.00 -0.4
CTA 28.81 138 iPc 30 14.20 -0.5
1.2s 57.03nm 5.1mb
NST 29.47 301 eP 30 23.00 2.4
BDT 31.16 303 eP 30 34.50 -1.0
WHN 31.42 340 eP 30 37.00 -0.6
GYA 31.46 325 P 30 37.40 -0.8
KUMJ 31.67 8 eP 30 39.10 -0.8
FORR 31.74 177 iPd 30 39.10 -1.3
0.5s 49.00nm 5.6mb
CHG 31.97 305 ePc 30 41.90 -0.8
0.9s 58.40nm 5.4mb
e 33 35.30
CHTO 31.97 305 iPc 30 42.00 -0.7
1.0s 9.75nm 4.6mb
COOL 32.06 188 eP 30 42.00 -1.3
0.5s 6.00nm 4.7mb
BAL 32.69 195 eP 30 48.00 -0.7
KMI 32.92 319 Pd 30 52.00 0.9
Z 20s 2.80um 5.0msz
E 18s 1.70um
SHNJ 33.28 8 eP 30 53.40 -0.4
KLB 33.37 193 eP 30 54.00 -0.7
TKSJ 33.64 12 eP 30 56.60 -0.3
SHK 33.91 10 iPc 30 59.20 -0.1
1.1s 177.22nm 5.9mb
WKYJ 34.21 14 P 31 02.00 0.0
YONJ 34.69 11 P 31 06.30 0.3
RMO 35.00 143 eP 31 09.00 0.3
TSRJ 35.56 14 P 31 13.20 -0.2
STK 35.86 157 eP 31 15.00 -0.9
e 31 17.00
e 33 45.00
IIDJ 36.01 17 P 31 16.10 -1.2
CD2 36.51 327 P 31 20.50 -1.0
XAN 36.58 336 iPd 31 21.00 -1.1
CHJJ 36.86 18 P 31 23.20 -1.1
MTMJ 37.02 16 P 31 25.10 -0.7
MAT 37.09 16 iPc 31 25.50 -0.8
1.9s 715.79nm 6.3mb
eS 39 52.00
KAKJ 37.37 19 P 31 26.60 -2.0

ADE 37.69 163 eP 31 31.50 0.2 0.8s 44.78nm 5.4mb	KSP 101.61 322 ePdiff38 10.50 3.5X	TOK 3.79 31 iPd 11 42.90 10 56.70 -3.2X
NIIJ 37.97 17 P 31 32.40 -1.2	YKA 102.22 24 ePdiff38 13.60 4.2X	iS 11 50.90
BRS 38.15 140 iPc 31 35.80 0.5	PRU 102.93 322 ePdiff38 16.00 3.1X	CHJJ 3.84 20 iP+ 10 57.80 -2.5 11 53.50
TIY 38.63 343 eP 31 37.00 -2.3	BRG 103.02 323 ePdiff38 17.20 4.0X	S 11 58.60
Z 26s 1.99um 4.8MszX	i 38 21.40	MTMJ 4.14 5 iPd 11 01.30 -1.9
N 17s 1.00um	e 38 36.50	MAT 4.14 10 iPd 11 00.90 -2.2 11 58.60
YAMJ 39.14 18 P 31 43.90 0.5	e 42 30.00	iS 11 58.60
COO 39.87 144 eP 31 50.00 0.4	CLL 103.45 324 ePdiff38 18.00 2.9X	YONJ 4.23 31 iPd 11 04.10 0.2 12 05.60
BJI 39.88 348 eP 31 48.00 -1.5	e 42 34.00	S 11 59.50
Z 28s 1.06um 4.5MszX	KHC 103.79 321 ePdiff38 22.10 5.3X	KAKJ 4.41 31 iPd 11 01.00 -4.6X 11 59.50
ePcP 33 56.00	BNG 107.42 275 ePKPc 42 43.20 0.8	S 11 05.60 -0.1
eS 37 44.00	0.6s 5.00nm	SHK 4.42 299 iPd 11 05.60 -0.1 0.8s 2850.75nm
OFUJ 40.48 19 P 31 55.30 0.9	ALQ 119.30 48 ePKP 43 08.00 3.3X	UTS 4.58 26 eP 11 03.00 -4.3X 12 02.00
LZH 40.55 332 eP 31 55.50 0.2	ePP 44 28.00	iS 12 02.00
1.5s 132.00nm 5.6mb	ePKS 46 31.00	NIIJ 4.96 15 Pd 11 07.90 -3.2X 12 11.80
Z 23s 1.80um 4.9MszX	GAC 129.72 20 ePKP 43 27.00 3.0X	SHNJ 5.48 289 iPd 11 17.20 0.7 11 17.90 1.1
SNY 40.70 357 Pc 31 56.00 -0.1	KIC 130.39 279 PKP 43 26.86 0.6	KAGJ 5.64 259 iP+ 11 19.60 1.4 11 20.00 -3.2X
Z 25s 1.30um 4.7MszX	1.0s 10.50nm	YAMJ 6.11 20 P 11 20.00 -3.2X 12 33.00
N 25s 1.10um	TIC 130.63 280 PKP 43 27.66 0.9	OFUJ 7.48 27 iP+ 11 34.70 -3.6X 12 59.20
E 21s 1.10um	LIC 130.69 279 PKP 43 27.48 0.7 1.1s 19.00nm	S 11 47.40 -1.8 13 21.60
S 38 02.00	PEL 144.35 155 iPKPc 43 53.50 2.1X	AOMJ 8.45 16 P 11 47.40 -1.8 13 21.60
BWA 41.00 151 eP 32 00.00 1.2	MRA 146.84 162 e(PKP) 43 56.00 0.5	MRRJ 10.38 15 iP+ 12 08.80 -2.6 14 00.10
SHL 41.04 309 iP 31 59.00 -0.4	VAO 157.13 197 e(PKP) 44 08.00 -2.8X	eS 14 11.40
iS 34 00.00	PPD 158.95 187 ePKP 44 15.70 2.9X	HOJ 10.97 24 iP+ 12 16.00 -2.1 14 11.40
AOMJ 41.45 16 eP 32 04.90 2.6	CNCB 159.05 139 PKP 44 17.00 3.3X	S 12 28.70 -2.1 12 30.90 -2.6
CAN 42.00 152 eP 32 07.90 0.9	LPB 159.18 139 PKP 44 18.00 4.3X	MDJ 13.56 336 Pd 12 45.00 -1.5 12 47.20 -2.0
BTO 42.02 342 eP 32 11.00 3.8X	ZOBO 159.35 138 PKP 44 16.00 1.9	SSE 13.82 269 Pc 12 47.20 -2.0 1.1s 0.12nm 2.3mb X
TOO 42.37 157 eP 32 11.70 1.7	e 44 50.90	DL2 14.30 301 iPd 12 53.00 -1.3
CN2 42.61 359 Pc 32 11.00 -0.8	CN2 159.05 139 PKP 44 17.00 3.3X	SNY 14.41 314 iPd 12 54.70 -0.8 3.0s 2.80nm 3.2mb X
Z 22s 0.90um 4.6MszX	BAO 164.34 202 e(PKP) 44 01.00 -17.5X	S 15 28.00
eP 32 18.00	SOB1 164.71 237 ePKP 44 16.40 -2.4X	CN2 14.68 324 iPd 12 57.50 -0.8 4.0s 1.00nm 2.6mb X
PP 33 53.00	e 44 23.20	isP 14 34.00
PcP 34 06.20	e 45 16.80	iS 15 33.00
eS 38 32.00	S.D. = 1.2 on 108 of 135 obs.	iScP 20 35.00
MRRJ 43.37 16 eP 32 18.90 0.9	% AUG 03, 1989 03h 32m 42.06±0.98s	iScS 24 09.00
MDJ 43.53 4 Pc 32 19.00 -0.3	31.653 S ±11.1km 67.926 W ±7.5km	NJ2 15.65 273 iPd 13 07.50 -1.0 15 50.00
LSA 43.81 314 P 32 23.00 0.7	DEPTH = 10.0km (geophysicist)	S 15 50.00
HOJ 43.99 18 eP 32 24.40 1.4	SAN JUAN PROVINCE, ARGENTINA (137)	ScP 20 39.00
KUSJ 45.09 19 eP 32 32.40 0.6	CFA 0.27 280 iPd 32 48.80 1.0	TIA 17.11 288 Pd 13 23.20 -0.1
GTA 45.12 331 Pd 32 32.10 -0.3	RTCV 0.56 248 iPc 32 53.50 0.0	QZH 18.06 250 Pd 13 33.00 0.3
1.0s 0.05nm 2.3mb X	RLL 0.57 305 iPd 32 52.80 -0.8	BJI 18.65 300 iPd- 13 38.00 -0.5 4.0s 1.20nm 2.7mb X
ScS 42 26.80	S 32 59.80	isP 15 24.00
ASAJ 45.37 17 P 32 34.70 0.6	RTCB 0.76 282 iPd 32 57.00 -0.1	eS 16 50.00
DZM 45.55 123 iPc 32 35.70 -0.2	S 33 07.50	eScP 20 44.00
KOD 49.19 283 iPd 33 04.70 -0.1	RTBS 1.30 269 e(P) 33 06.00 -0.1	ScS 24 24.00
1.0s 45.00nm 5.5mb	S 33 24.00	ScP 20 47.00
HYB 49.49 292 iPc 33 07.20 0.5	MRA 2.03 112 ePd 33 17.00 0.3	GUM0 20.00 158 eP 13 50.80 -1.1 1.0s 432.00nm 5.9mb
0.8s 64.30nm 5.7mb	RFA 3.14 188 ePc 33 32.00 -0.6	PJG 20.00 158 eP 13 50.80 -1.0
GBA 49.75 287 P 33 07.60 -1.0	S.D. = 0.7 on 7 of 7 obs.	GUA 20.06 158 eP 13 51.00 -1.4 0.7s 367.12nm 6.0mb
POO 54.10 292 eP 33 40.00 -1.3	AUG 03, 1989 04h 09m 48.06±0.13s	TIY 21.02 291 iPd 14 01.50 -0.1 1.0s 0.30nm 2.7mb X
WMO 54.60 327 Pc 33 44.40 -0.3	32.456 N ±3.0km 137.346 E ±2.7km	S 17 31.50
Z 20s 1.20um 5.0Msz	DEPTH = 418.0km (5 depth phases)	iPd 14 13.60 0.5
MSZ 58.71 146 eP 34 13.00 -0.6	5.2mb (64 obs.)	iS 17 51.00
KSH 59.51 316 eP 34 20.50 1.0	SOUTH OF HONSHU, JAPAN (211)	BTO 23.35 298 iP 14 23.00 -0.1 18 02.00
QUE 63.08 304 eP 34 42.50 -1.4	Felt (II JMA) at Utsunomiya; (I JMA) at Toteyomo ond Tokyo.	XAN 23.80 282 iPd 14 27.00 -0.2
MAIO 70.67 308 eP 35 31.00 -0.6	CENTROID, MOMENT TENSOR (HRV)	GYA 27.32 265 iPd 14 57.60 -1.3 16 14.00
0.7s 11.12nm 4.9mb	Data Used: GDSN	S 19 07.00
eS 44 48.00	Centroid Location:	ScS 25 00.20
SHI 75.24 300 eP 35 56.00 -2.7	Origin Time 04:09:46.0 0.8	QIZ 28.05 248 eP 15 06.00 0.8
TAB 81.32 308 eP 36 32.00 0.3	Lat 32.43N 0.08 Lon 137.69E 0.09	CD2 28.56 276 iPd 15 08.80 -0.9 19 26.00
BHD 82.51 303 ePd 36 37.50 -0.2	Dep 403.7 5.0 Half-duration 1.9	GTA 31.01 294 iPd 15 30.80 -0.2 1.0s 0.07nm 2.0mb X
MSL 83.72 306 ePd 36 43.00 -0.9	Moment Tensor; Scale 10**17 Nm	PP 16 52.00
NPA 87.21 255 iP 37 02.50 1.0	Mrr=0.47 0.06 Mtt=-0.12 0.10	S 20 04.00
NAI 89.32 269 eP 37 15.00 3.0X	Mff=-0.35 0.09 Mrt=0.18 0.11	ScP 21 19.00
KVT 89.38 311 eP 37 11.00 -0.5	Mrf=-0.54 0.11 Mtf=-1.18 0.09	ScS 25 15.70
BHL 89.81 304 P 37 11.00 -2.7	Principal Axes:	SMY 33.29 42 eP 15 49.80 -0.2
SPA 91.00 180 e(P) 37 19.80 1.2	T Vol= 1.27 Plg=33 Azm= 46	
1.0s 5.50nm 4.9mb	N 0.20 56 208	
KEV 92.21 340 iP 37 26.20 2.3	P -1.47 9 310	
0.6s 13.00nm 5.5mb	Best Double Couple:Mo=1.4*10**17	
SOD 92.72 338 iP 37 28.60 2.3	NP1:Strike= 83 Dip=61 Slip= 162	
INK 92.91 21 eP 37 27.00 -0.1	NP2: 182 74 30	
SUF 93.67 333 eP 37 32.00 1.3	WKYJ 2.29 321 iP+ 10 47.50 -0.5	
MBC 94.73 13 eP 37 38.00 2.6	S 11 34.00	
0.9s 11.00nm 5.3mb	IIDJ 3.05 9 iPd 10 52.10 -1.5	
NUR 94.76 331 eP 37 38.00 2.2	TKSJ 3.16 300 iPd 10 54.60 0.2	
VRI 95.81 316 eP 37 23.50 -17.5X	S 11 47.30	
MLR 96.41 316 eP 37 42.50 -1.3	TSRJ 3.27 340 iPd 10 54.90 -0.4	
BUL 97.38 250 eP 37 52.00 3.3X	S 11 47.50	
KRA 99.55 321 eP 38 05.20 7.4X	TAT 3.28 39 eP 10 53.00 -2.4	
HFS 100.11 332 ePdiff38 02.60 2.5X		
0.4s 1.50nm 4.9mb		
Z 19s 0.24um 4.7Msz		
LR 21 33.00		
NB2 100.92 333 Pdiff 38 02.00 -1.7		

ALE	49.37 351 eP	51 31.00	0.5		% AUG 03, 1989 08h 29m 56.93±0.70s	S.D. = 0.9 on 5 of 5 obs.
	0.6s 5.00nm		4.7mb		37.776 N ± 7.5km 14.987 E ± 5.2km	
KMI	49.82 92 Pc	51 34.00	-0.9		DEPTH = 10.0km (geophysicist)	? AUG 03, 1989 08h 45m 37.84±1.00s
TIY	50.01 72 Pd	51 35.80	-0.2		SICILY (398)	38.348 N ± 9.0km 26.628 E ± 9.3km
CHTO	51.02 101 iP	51 43.00	-0.8			DEPTH = 10.0km (geophysicist)
	0.7s 10.17nm		4.9mb			AEGEAN SEA (365)
BJI	51.45 68 eP	51 47.00	0.2		MNO 0.28 304 Pc	30 03.50 0.6
Z	20s 1.30um		5.0Msz		eSg 30 08.50	
GYA	51.89 88 P	51 49.40	-1.1		ATN 0.54 44 Pc	30 08.20 0.4
BDT	52.10 103 eP	51 51.40	-0.6		eSg 30 16.70	
NST	53.96 103 eP	52 06.00	0.3		MSI 0.62 46 Pd	30 09.80 0.4
WHN	55.11 79 eP	52 13.50	-0.6		eSg 30 19.20	
CN2	55.67 60 eP	52 18.00	0.0		MEU 0.67 184 Pc	30 09.70 -0.7
Z	18s 2.00um		5.2Msz		eSg 30 18.80	
N	12s 1.00um				GIB 0.79 286 P	30 11.80 -0.5
TIC	57.34 245 P	52 27.90	-2.3		eSg 30 25.30	
	1.1s 34.50nm		5.3mb		SOI 0.90 70 Pc	30 14.20 0.1
KIC	57.37 245 Pc	52 28.34	-2.1		eSg 30 26.00	
	1.0s 38.00nm		5.4mb		MCT 1.08 263 P	30 19.00 1.6
NJ2	57.46 75 Pc	52 30.00	-0.9		USI 1.70 304 P	30 25.00 -1.8
LIC	57.66 245 Pc	52 30.36	-2.1		CVT 1.74 267 P	30 28.70 1.3
	0.9s 46.00nm		5.5mb		LVI 2.11 277 P	30 31.70 -0.9
OIZ	58.74 93 eP	52 39.60	-0.5		SGO 2.79 5 P	30 41.90 -0.5
SSE	59.64 75 P	52 46.00	-0.1			S.D. = 1.1 on 11 of 11 obs.
	1.0s 28.00nm		5.3mb			
Z	20s 0.90um		4.9Msz		AUG 03, 1989 08h 34m 07.31±0.73s	
MBC	60.11 356 ePc	52 49.60	0.8		33.814 N ± 10.6km 134.921 E ± 5.9km	
	0.7s 18.00nm		5.3mb		DEPTH = 33.0km (normal)	
PSI	62.38 115 ePd	53 02.40	-2.4		SHIKOKU, JAPAN (236)	
BUL	65.19 197 eP	53 20.50	-2.7		MG 3.8 (JMA). Felt (1 JMA) at	
	1.0s 5.00nm		4.6mb		Sumoto, Awoji-shimo.	
INK	68.49 360 eP	53 43.00	-0.4		SUM 0.52 359 P	34 00.00 -18.2X
IMA	69.76 8 eP	53 52.00	0.6		WKYJ 0.69 54 iPd	34 20.30 -0.3
	1.0s 25.00nm		5.3mb		S 34 29.00	
FBA	71.43 6 ePc	54 02.30	0.9		TKSJ 0.74 283 iP+	34 22.30 0.9
TTA	72.53 10 eP	54 08.80	0.7		S 34 32.60	
	0.8s 7.76nm		4.8mb		YONJ 1.82 319 P	34 36.80 -0.1
YKB0	73.01 350 iPd	54 11.50	0.7		S 34 58.20	
YKA	73.12 350 eP	54 12.40	1.0		TSRJ 1.93 27 iPd	34 38.00 -0.4
TOA	74.32 6 eP	54 19.60	1.1		S 35 00.90	
SVW	74.34 10 eP	54 18.80	0.2		SHK 1.99 292 iPc	34 38.80 -0.5
PMR	74.58 7 eP	54 20.00	0.1		0.6s 66.67nm	
	0.9s 14.60nm		5.0mb		IIDJ 2.97 55 P	34 54.20 0.9
GAC	76.81 322 eP	54 35.00	2.2		S 35 33.80	
KDC	78.00 10 eP	54 40.30	1.2		SHNJ 3.18 277 P	34 56.10 -0.1
	0.5s 24.79nm		5.5mb		eS 35 32.70	
	e 55 20.70 164kmX				KUMJ 3.66 251 P	35 03.70 0.7
FFC	78.25 341 iPc	54 40.70	0.1		eS 35 44.00	
	0.6s 8.00nm		4.9mb		MAT 3.83 44 iPd	35 04.60 -0.8
PNT	86.61 350 ePc	55 25.00	0.9		iS 35 47.40	
	0.7s 5.00nm		4.8mb		CHJJ 4.02 55 P	35 08.70 0.6
RSSD	88.56 338 P	55 34.90	1.1		KAGJ 4.30 234 eP	35 11.10 -0.9
LRM	88.88 345 eP	55 35.80	0.4		S 35 57.00	
LON	89.40 351 eP	55 38.10	0.5			S.D. = 0.8 on 11 of 12 obs.
FVM	89.51 327 P	55 47.50	9.3X		% AUG 03, 1989 08h 35m 00.98±0.81s	
OLY	92.07 326 e(P)	55 50.00	0.0		37.735 N ± 7.7km 14.981 E ± 6.5km	
GOL	93.04 338 P	55 54.50	-0.3		DEPTH = 10.0km (geophysicist)	
	0.6s 3.09nm		4.9mb		SICILY (398)	
TNP	97.25 346 P	56 15.00	1.0		MNO 0.30 311 Pc	35 07.30 0.0
	0.9s 3.91nm		5.0mb		eSg 35 12.00	
ALQ	97.79 337 e(P)	56 17.30	0.8		ATN 0.57 42 P	35 12.00 -0.6
	0.9s 2.10nm		4.7mb		eSg 35 21.10	
Z	19s 0.78um		5.2Msz		MEU 0.63 184 P	35 13.60 -0.2
BWA	121.47 109 ePKP	01 34.90	0.4		eSg 35 23.70	
SPA	133.33 180 e(PKP)	01 55.40	-0.9		GIB 0.80 289 P	35 16.70 0.2
	1.0s 5.00nm				eSg 35 29.50	
	S.D. = 1.2 on 190 of 231 obs.				SOI 0.91 68 Pd	35 19.00 0.6
					iSg 35 33.00	
& AUG 03, 1989 07h 43m 25.49s						S.D. = 0.6 on 5 of 5 obs.
	11.517 N	86.078 W			% AUG 03, 1989 08h 35m 44.32±0.85s	
	DEPTH = 169.3km				37.733 N ± 8.0km 14.953 E ± 6.9km	
NEAR COAST OF NICARAGUA (74)					DEPTH = 10.0km (geophysicist)	
<HDC>					SICILY (398)	
RIN3	1.00 136 eP+	43 52.70	0.2		MNO 0.28 314 Pc	35 50.60 0.2
	S 44 13.60				eSg 35 56.60	
JUD	1.44 159 iP+	43 56.70	0.3		ATN 0.59 43 P	35 55.30 -0.9
	S 44 21.10				eSg 36 04.50	
JTS	1.65 138 eP	43 58.20	-0.2		MEU 0.63 182 P	35 56.90 -0.2
	S 44 24.40				eSg 36 05.90	
CAO	2.04 152 eP+	44 02.60	-0.1		GIB 0.78 290 P	35 59.50 0.0
	S 44 31.80				eSg 36 12.50	
EPA	2.10 136 eP	44 04.10	0.7		SOI 0.94 68 Pd	36 03.00 0.9
	S 44 33.40				eSg 36 17.00	
	5 obs. associated					
						? AUG 03, 1989 09h 50m 17.82±0.91s
						37.768 N ± 9.2km 14.984 E ± 7.5km
						DEPTH = 10.0km (geophysicist)

03d 09h			
SICILY (398)			
MNO	0.28 306 P	50 24.00	0.2
	eSg	50 30.50	
MEU	0.67 184 P	50 31.20	0.1
	eSg	50 39.80	
GIB	0.79 287 P	50 33.00	-0.2
	eSg	50 46.00	
SOI	0.90 70 P	50 35.00	0.0
	eSg	50 49.80	
S.D. = 0.3 on 4 of 4 obs.			
AUG 03, 1989 09h 53m 00.41 ± 1.33s			
15.032 N ± 4.5km 60.127 W ± 14.7km			
DEPTH = 28.7 ± 4.7 km			
LEEWARD ISLANDS (92)			
ML 3.6 (FDF). Felt (11) on Martinique.			
CRM	0.81 250 iPd	53 15.32	-0.4
MVM	0.88 238 iPd	53 16.70	-0.1
DFD	1.03 253 iPd	53 18.12	-0.9
	S	53 28.10	
BIM	1.05 241 iPd	53 18.77	-0.4
DPMT	1.24 281 eP	53 20.81	-1.0
	eS	53 32.19	
BBL	1.39 291 iPd	53 23.60	-0.5
	S	53 34.50	
MGG	1.45 308 iPd	53 25.00	0.2
	S	53 36.60	
SLB	1.49 217 eP	53 25.37	-0.2
	eS	53 48.40	
DEG	1.56 325 eP	53 30.00	3.5X
PAG	1.80 304 iPd	53 29.92	-0.1
	S	53 47.70	
SEG	1.90 316 eP	53 32.30	0.8
	S	53 53.40	
SOA	1.92 211 eP	53 32.97	1.2
	eS	53 54.20	
SVV	2.00 212 eP	53 33.62	0.6
SVB	2.06 212 eP	53 34.47	0.7
	eS	53 55.28	
BPA	2.60 321 eP	53 42.04	0.5
	eS	54 09.61	
MGH	2.62 310 eP	53 42.40	0.7
	S	54 10.50	
ANG	2.67 322 eP	53 43.14	0.7
NEV	3.15 312 eP	53 49.90	0.7
	eS	54 26.04	
SKI	3.40 313 eP	53 53.37	0.6
	eS	54 30.09	
TRN	4.53 196 eP	54 09.84	1.0
	eS	54 59.12	
TCE	4.59 200 eP	54 10.55	0.8
	eS	54 59.85	
TPP	4.86 196 eP	54 09.08	-4.4X
ZOBO	32.09 195 P	59 26.00	-2.0
YKA	60.73 334 eP	03 09.60	-1.9
S.D. = 1.0 on 22 of 24 obs.			
% AUG 03, 1989 10h 05m 55.98 ± 0.68s			
37.751 N ± 7.4km 14.997 E ± 5.2km			
DEPTH = 10.0km (geophysicist)			
SICILY (398)			
MNO	0.30 307 Pc	06 02.70	0.4
	eSg	06 07.40	
ATN	0.55 42 Pd	06 08.00	0.8
	iSg	06 17.00	
MSI	0.63 44 P	06 09.20	0.6
MEU	0.65 185 P	06 09.00	0.0
	eSg	06 17.00	
GIB	0.80 288 P	06 11.50	-0.1
	eSg	06 25.00	
SOI	0.90 69 Pc	06 13.60	0.5
	eSg	06 28.90	
MCT	1.09 264 P	06 18.50	1.9
LVI	2.12 277 P	06 31.20	-0.7
TDS	2.17 28 P	06 31.90	-0.8
S.D. = 1.0 on 9 of 9 obs.			
? AUG 03, 1989 10h 11m 22.10 ± 3.49s			
9.339 S ± 42.9km 161.112 E ± 29.9km			
DEPTH = 69.7 ± 16.7 km			
4.3mb (1 obs.)			
SOLOMON ISLANDS (193)			
SVO	1.29 278 iPc	11 45.50	0.8
	iS	12 05.50	
VSG	1.38 273 iP	11 45.00	-0.9
	iS	12 05.00	
DZM	13.66 159 iPc	14 34.20	0.0
CTA	17.89 232 iPc	15 28.10	0.2
	0.9s 16.8nm	4.3mb	
WB5	27.88 245 eP	17 07.70	0.2
WARB	36.69 238 eP	18 24.00	-0.3
S.D. = 0.9 on 6 of 6 obs.			
% AUG 03, 1989 10h 18m 31.91 ± 0.91s			
37.777 N ± 9.8km 14.914 E ± 7.7km			
DEPTH = 10.0km (geophysicist)			
SICILY (398)			
ATN	0.58 48 Pc	18 43.70	0.1
	eSg	18 51.60	
MEU	0.67 179 P	18 45.20	-0.2
	eSg	18 55.30	
GIB	0.73 287 P	18 47.70	1.3
	eSg	19 01.70	
SOI	0.95 72 P	18 50.20	0.2
USI	1.65 305 P	18 59.60	-1.4
S.D. = 1.4 on 5 of 5 obs.			
? AUG 03, 1989 10h 21m 08.37 ± 8.32s			
30.486 S ± 64.2km 69.217 W ± 29.6km			
DEPTH = 33.0km (normal)			
CHILE-ARGENTINA BORDER REGION (127)			
RTLL	1.06 143 i(P)	21 27.00	0.0
	S	21 43.00	
RTCB	1.06 160 iPd	21 27.00	0.0
	S	21 43.00	
RTBS	1.19 190 e(P)	21 29.00	0.3
	S	21 47.00	
CFA	1.40 143 ePd	21 32.30	0.5
	e	21 52.60	
RTCV	1.49 157 i(P)	21 33.50	0.4
MRA	3.56 124 e(P)	22 02.80	0.2
S.D. = 0.3 on 6 of 6 obs.			
AUG 03, 1989 11h 07m 17.97 ± 0.20s			
59.994 S ± 5.3km 26.680 W ± 6.4km			
DEPTH = 33.3km (8 depth phases)			
5.7mb (14 obs.) 5.7MsZ (5 obs.)			
SOUTH SANDWICH ISLANDS REGION (153)			
FAULT PLANE SOLUTION: P-Waves			
NP1: Strike=306 Dip=70 Slip= 22			
NP2: 208 69 159			
Principal Axes:			
T Vol= 1.17 Plg=36 Azm=177			
P 0 77			
Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a moderate reverse component. The preferred fault plane is not determined.			
MOMENT TENSOR SOLUTION			
Dep 6 No. of sto: 5			
Moment Tensor; Scale 10**18 Nm			
Mrr= 0.22 Mtt= 0.63			
Mff=-0.84 Mrt=-0.71			
Mrf= 0.22 Mtf= 0.27			
Principal axes:			
T Vol= 1.17 Plg=36 Azm=177			
N -0.15 47 320			
P -1.02 19 72			
Best Double Couple: Mo=1.1*10**18			
NP1: Strike=208 Dip=49 Slip= 166			
NP2: 308 79 42			
CENTROID, MOMENT TENSOR (HRV)			
Data Used: GDSN			
L.P.B.: 11S, 21C			
Centroid Location:			
Origin Time 11:07:23.2 0.7			
Lot 60.53S 0.08 Lon 26.04W 0.22			
Dep 15.0 FIX Half-duration 2.9			
Moment Tensor; Scale 10**17 Nm			
Mrr= 0.74 0.20 Mtt= 1.13 0.34			
Mff=-1.87 0.33 Mrt=-5.14 0.69			
Mrf= 1.91 0.63 Mtf= 2.71 0.21			
Principal Axes:			
T Vol= 6.13 Plg=42 Azm=173			
N	0.38	29	292
P	-6.51	35	44
Best Double Couple: Mo=6.3*10**17			
NP1: Strike=193 Dip=29 Slip= 171			
NP2: 290 86 61			
SNA	14.41 146 iPd	10 34.50	-6.7X
	1.0s 933.00nm	6.3mb	
SPA	30.17 180 iPc	13 27.00	0.0
	1.0s 115.00nm	5.6mb	
Z	19s 35.87um	6.0MsZ	
MAW	36.87 140 iPc	14 23.40	-0.9
	1.2s 140.00nm	5.7mb	
RFA	36.94 294 ePd	14 25.20	-0.2
MRA	37.68 299 ePd	14 31.50	0.0
BMA	39.25 334 eP	14 47.10	2.2
	e	14 50.20	
	ePP	14 55.20	27km
PEL	39.31 293 iPd	14 46.00	0.7
CER	40.05 69 eP	14 57.50	6.2X
PPD	41.73 324 eP	15 05.00	-0.2
	ePP	15 15.80	38km
	e	15 20.20	
SBA	42.15 184 Pc	15 09.40	1.3
SLA	44.29 305 ePc	15 26.00	-0.2
HVD	45.28 73 iPc	15 48.50	14.4X
	1.0s 24.00nm		
BLF	46.85 73 iPc	15 45.50	-1.0
	1.0s 80.00nm	5.7mb	
	i	15 55.00	32km
BAO	46.95 331 eP	15 47.80	0.5
ANT	47.28 300 e(P)	15 43.00	-6.7X
SWZ	48.05 71 iPd	15 47.50	-8.5X
	1.0s 155.00nm	6.0mb	
SEK	48.20 74 iPd	15 57.30	0.2
	1.1s 164.56nm	6.0mb	
PDCR	48.27 344 eP	15 56.90	-0.6
PRY	49.29 73 iPc	16 05.50	0.0
	i	16 15.20	32km
KSR	49.91 71 iPc	16 09.00	-1.3
	i	16 19.50	36km
CCH	51.15 309 P	16 19.00	-1.0
SOB1	51.80 342 eP	16 23.60	-0.9
ITR	51.88 345 eP	16 23.60	-1.5
	e	16 27.10	12kmX
	e	16 39.60	
CNCB	52.40 307 Pc	16 30.20	0.5
	S	23 57.00	
LPB	52.70 307 P	16 30.00	-1.8
Z	19s 6.94um	5.7MsZ	
	PcP	17 27.00	
	S	24 03.00	
	e	33 52.00	
	LR	36 18.00	
ZOBO	52.95 307 P	16 33.00	-0.8
	1.0s 82.50nm	5.6mb	
	PcP	17 18.00	
	S	24 03.80	
	LR	36 04.00	
DRV	53.27 173 eP	16 34.20	-0.6
ARE	54.15 303 e(P)	16 42.00	-0.3
BUL	55.61 69 iPc	16 52.00	-0.7
	1.0s 84.00nm	5.7mb	
Z	18s 26.12um	6.4MsZ	
N	18s 16.49um		
ATB	59.87 330 e(P)	17 22.50	0.0
NNA	60.43 300 eP	17 26.30	-0.2
CLK	62.48 73 iPd	17 43.20	2.9X
NPA	65.06 77 iP	17 51.40	-5.7X
	i(pP)	18 01.50	32km
LIC	68.20 23 P	18 17.40	0.4
Z	19s 2.50um	5.5MsZ	
	S	27 30.00	
KIC	68.39 24 P	18 18.30	0.2
KUK	69.18 28 eP	18 24.00	1.0
LWI	71.45 60 iPc	18 39.80	2.7
PSO	72.49 306 eP	18 44.50	1.0
BCAO	73.34 48 eP	18 48.68	0.7
	1.2s 22.10nm	5.0mb	
BNG	73.35 48 iPd	18 48.40	0.4
	0.9s 88.00nm	5.8mb	
	i	18 58.00	31km
	i	20 09.90	
BOG	74.34 310 e(PK)	19 05.00	10.8X
	ePP	28 26.00	
MSZ	75.01 191 P	18 56.00	-1.2
NAI	75.91 67 iP	19 12.00	9.0X

TWC 1.63 355 ePc 37 17.10 -0.1
 TWZ 2.14 350 eP 37 25.30 0.6
 GBA 43.19 266 P 44 55.00 3.6X
 0.7s 3.30nm 4.2mb
 WARB 49.08 174 eP 45 37.00 -0.9
 MAIO 55.08 299 eP 46 32.00 8.9X
 KEV 70.37 338 iP 48 11.00 6.9X
 0.6s 11.70nm 5.2mb
 SOD 71.06 336 iP 48 16.00 7.7X
 SUF 72.47 331 eP 48 24.00 7.2X
 0.6s 6.90nm 4.9mb
 NUR 73.80 329 eP 48 32.00 7.4X
 MBC 74.27 13 eP 48 28.00 0.9
 0.6s 5.00nm 4.7mb
 HFS 78.98 331 eP 49 00.70 7.0X
 0.5s 3.30nm 4.6mb
 MSZ 79.31 149 (P) 49 10.70 15.1X
 NB2 79.64 332 P 48 57.40 0.1
 0.9s 10.10nm 4.8mb
 FFC 93.93 24 eP 50 22.00 14.5X
 0.8s 16.00nm

S.D. = 0.8 on 9 of 18 obs.

* AUG 03, 1989 11h 40m 18.25±2.34s
 23.083 N ±19.0km 121.957 E ±17.9km
 DEPTH = 10.0km (geophysicist)
 4.6mb (4 obs.)

TAIWAN (244)

TWF1 0.66 294 iPd 40 30.90 -0.6
 eS 40 40.90
 TWG 0.86 252 ePd 40 34.60 -0.2
 eS 40 48.10
 TWK 1.36 278 ePc 40 44.20 0.9
 TWC 1.52 356 iPd 40 45.70 0.2
 SUF 72.36 331 eP 51 51.00 5.1X
 0.4s 4.00nm 4.9mb
 MBC 74.17 13 eP 52 04.00 7.7X
 0.6s 4.00nm 4.6mb
 SLL 78.88 331 eP 52 28.60 5.6X
 0.5s 3.60nm 4.7mb
 NB2 79.52 332 P 52 26.20 -0.3
 1.0s 5.70nm 4.5mb

S.D. = 0.8 on 5 of 8 obs.

* AUG 03, 1989 11h 45m 07.53±3.46s
 23.099 N ±18.4km 121.998 E ±24.5km
 DEPTH = 10.0km (geophysicist)
 4.5mb (3 obs.)

TAIWAN (244)

TWF1 0.69 291 iPd 45 20.80 -0.4
 eS 45 31.90
 TWG 0.90 252 ePc 45 24.80 0.1
 TWD 1.04 339 eP 45 27.20 0.0
 TWK 1.40 277 eP 45 33.10 0.0
 TWC 1.51 355 ePd 45 34.30 -0.3
 TWQ 1.58 318 ePc 45 36.40 0.7
 eS 45 59.50
 SOD 70.95 336 eP 56 34.00 7.2X
 SUF 72.36 331 iP 56 41.60 6.4X
 0.5s 3.50nm 4.7mb
 HFS 78.87 331 eP 57 18.30 6.1X
 0.5s 1.50nm 4.3mb
 NB2 79.53 332 P 57 21.60 5.8X
 0.9s 4.90nm 4.5mb

S.D. = 0.5 on 6 of 10 obs.

% AUG 03, 1989 11h 45m 20.28±0.78s
 37.743 N ±7.5km 14.975 E ±6.3km
 DEPTH = 10.0km (geophysicist)

SICILY (398)

MNO 0.29 310 Pc 45 26.70 0.3
 eSg 45 32.50
 ATN 0.57 43 Pc 45 31.50 -0.3
 eSg 45 39.00
 MEU 0.64 183 P 45 33.20 0.0
 eSg 45 42.00
 GIB 0.79 288 P 45 35.50 -0.2
 eSg 45 48.00
 SOI 0.92 69 P 45 38.00 0.2
 eSg 45 53.40

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

? AUG 03, 1989 11h 55m 09.49±3.38s
 23.088 N ±19.5km 121.875 E ±24.6km

DEPTH = 10.0km (geophysicist)
 4.2mb (1 obs.)

TAIWAN (244)

TWF1 0.59 296 ePd 55 21.50 0.0
 eS 55 31.00
 TWG 0.79 250 ePc 55 24.60 -0.2
 eS 55 37.00
 TWD 1.02 345 ePc 55 28.30 -0.5
 eS 55 43.50
 TWC 1.51 359 ePc 55 36.70 0.1
 NB2 79.49 332 P 07 23.20 5.6X
 0.9s 2.40nm 4.2mb
 PRU 83.07 322 eP 07 47.70 11.2X
 KHC 84.02 321 eP 07 52.50 11.0X

S.D. = 0.4 on 4 of 7 obs.

% AUG 03, 1989 13h 07m 42.43±0.75s
 37.769 N ±8.3km 14.992 E ±5.4km
 DEPTH = 12.0 ± 6.7 km

SICILY (398)

MNO 0.29 305 Pc 07 49.00 0.4
 eSg 07 55.20
 ATN 0.54 43 Pc 07 53.60 0.2
 eSg 08 02.20
 MSI 0.62 46 Pc 07 55.10 0.4
 eSg 08 04.90
 MEU 0.67 184 Pc 07 55.20 -0.4
 eSg 08 05.20
 GIB 0.79 286 P 07 57.30 -0.5
 eSg 08 11.10
 SOI 0.89 70 Pc 07 59.60 0.3
 eSg 08 14.50
 MCT 1.09 263 P 08 04.60 1.8
 USI 1.71 304 P 08 10.40 -1.7
 ERC 1.92 279 P 08 16.60 1.3
 LVI 2.11 277 P 08 17.50 -0.5
 TDS 2.16 29 P 08 18.50 -0.2

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

? AUG 03, 1989 13h 22m 41.68±4.41s
 44.088 N ±37.8km 7.509 E ±12.3km
 DEPTH = 10.0km (geophysicist)

NORTHERN ITALY (545)

ML 1.6 (GEN).
 ENR 0.15 335 P 22 45.16 -0.1
 S 22 46.65
 STV 0.20 320 P 22 46.32 0.1
 S 22 48.81
 ROB 0.33 51 P 22 48.68 0.1
 S 22 52.70
 FIN 0.52 76 P 22 52.13 -0.1
 S 22 59.13

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

AUG 03, 1989 14h 19m 53.20±0.57s
 43.638 N ±7.1km 4.809 E ±4.0km
 DEPTH = 10.0km (geophysicist)

NEAR SOUTH COAST OF FRANCE (379)

ML 2.9 (LDG). MD 2.4 (STR).
 PRAF 0.31 57 Pg 19 59.50 -0.2
 TREF 0.42 92 Pg 20 01.70 0.0
 GELF 0.52 119 Pg 20 03.72 0.0
 Sg 20 12.62
 PUYF 0.66 99 Pg 20 06.59 0.3
 Sg 20 17.12
 VILF 0.69 72 Pg 20 06.74 -0.2
 BERF 0.72 117 Pg 20 07.70 0.3
 Sg 20 18.41
 GANF 0.87 65 Pg 20 10.77 0.8
 TAVF 0.91 91 Pg 20 10.80 0.2
 Sg 20 23.54
 LRG 1.14 99 Pg 20 14.50 -0.1
 Sg 20 28.90
 LMR 1.27 103 Pg 20 16.70 -0.1
 Sg 20 32.40
 FRF 1.34 93 Pn 20 17.10 -0.7
 Pg 20 18.80
 Sg 20 35.40
 SBF 1.92 82 Pn 20 25.90 -0.4
 Pg 20 29.40
 Sg 20 53.50
 CAF 2.35 304 Pn 20 32.50 -0.1
 Sg 21 10.20

LPO 2.81 293 Pn 20 39.00 0.0
 Sg 21 24.60
 RJF 2.89 306 Pg 20 48.50 8.4X
 Sg 21 26.90

S.D. = 0.4 on 14 of 15 obs.

% AUG 03, 1989 14h 35m 29.62±0.68s
 60.653 N ±4.9km 6.287 E ±8.5km
 DEPTH = 10.0km (geophysicist)

SOUTHERN NORWAY (535)
 MD 2.0 (BER).

HYA 0.52 355 iP 35 40.20 0.1
 eS 35 48.90
 ASK 0.57 253 iPg 35 40.60 -0.5
 iSg 35 48.20
 ODD1 0.76 167 iP 35 43.90 -0.6
 eS 35 53.70
 SUE 0.85 299 eP 35 45.90 -0.1
 iS 35 57.70
 BLS1 1.29 168 iP 35 53.60 -0.1
 iS 36 10.30
 KMY 1.54 200 iP 35 58.20 1.1
 iS 36 17.30
 MOL 2.02 17 iP 36 04.00 0.0
 eS 36 29.90

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

* AUG 03, 1989 14h 38m 05.47±1.47s
 28.366 S ±10.7km 178.334 W ±21.4km
 DEPTH = 33.0km (normal)
 4.8mb (3 obs.)

KERMADEC ISLANDS REGION (177)

HBZ 9.63 196 eP 40 38.80 14.0X
 PGZ 13.00 199 eP 41 15.70 5.3X
 MNG 13.24 201 P 41 14.70 1.1
 eS 43 23.90
 KIW 13.64 202 eP 41 20.50 1.6
 MTW 13.73 200 eP 41 22.90 2.9X
 CAW 13.81 201 eP 41 21.30 0.1
 WDW 13.98 201 eP 41 22.50 -0.8
 MRW 14.04 202 eP 41 23.60 -0.5
 WEL 14.07 202 eP 41 24.30 -0.2
 WEL 14.07 202 eP 41 28.00 3.5X
 S 43 45.00
 TCW 14.17 203 eP 41 25.70 -0.1
 DZM 15.13 291 iPd 41 59.00 20.5X
 MSZ 19.62 210 eP 42 33.00 -1.0
 BRS 25.53 265 iPd 43 39.60 6.7X
 CAN 28.52 248 eP 44 02.00 2.0
 BWA 28.93 250 eP 44 03.30 -0.5
 CTA 33.23 276 eP 44 47.00 5.2X
 STK 34.70 254 eP 44 56.00 1.6
 ASPA 42.96 265 eP 46 03.90 0.6
 0.8s 16.00nm 4.8mb

WB5 43.76 270 eP 46 10.90 1.1

WRA 43.76 270 Pd 46 10.80 1.0

0.7s 4.60nm 4.4mb

FORR 46.27 253 eP 46 28.20 -1.5

WARB 48.60 259 eP 46 46.50 -1.5

SBA 50.04 184 iPc 46 59.40 1.0

MBL 56.09 263 eP 47 42.00 -2.0

NANU 59.35 259 iPc 48 05.30 -1.6

SPA 61.79 180 iPd 48 21.70 -1.6

1.0s 30.50nm 5.4mb

CHTO 92.62 290 e(P) 51 26.90 11.5X

SOD 138.16 346 ePKP 57 15.00 -13.1X

SUF 142.09 342 iPKP 57 32.50 -2.8X

0.4s 2.50nm

NUR 144.31 341 iPKP 57 40.40 1.3

0.8s 55.70nm

NB2 146.70 352 PKP 57 47.20 4.0X

0.6s 6.80nm

HFS 147.20 349 ePKP 57 47.90 4.0X

0.6s 10.90nm

BNG 151.29 217 iPKPd 57 55.20 3.5X

0.4s 18.00nm

i 58 02.20

S.D. = 1.3 on 21 of 34 obs.

* AUG 03, 1989 14h 49m 31.77±3.00s
 23.063 N ±18.2km 121.918 E ±19.9km
 DEPTH = 10.0km (geophysicist)

4.2mb (1 obs.)

TAIWAN (244)

03d 14h
TWF1 0.64 297 iPd 49 44.50 -0.1
TWG 0.82 253 ePd 49 47.40 -0.2
TWD 1.06 344 ePc 49 51.40 -0.2
TWK 1.33 279 ePc 49 56.70 0.3
TWC 1.54 358 iPc 49 59.10 -0.2
ANP 2.14 350 eP 50 08.50 0.4
LZH 20.34 314 eP 54 17.00 5.8X
CHG 21.86 263 eP 54 37.20 10.6X
CHTO 21.86 263 eP 54 36.70 10.1X
1.0s 11.75nm
NB2 0.8s 2.10nm 4.2mb
S.D. = 0.4 on 6 of 10 obs.

AUG 03, 1989 14h 56m 27.28 ± 0.37s
25.087 S ± 7.0km 87.755 E ± 7.2km
DEPTH = 10.0km (geophysicist)
5.1mb (11 obs.)
SOUTH INDIAN OCEAN (425)

WARB 34.99 100 eP 03 21.00 -1.0
GBA 39.75 344 P 04 02.00 0.1
ASPA 41.90 98 iPc 04 19.40 -0.3
1.0s 40.00nm 5.1mb
MTN 42.61 82 eP 04 25.30 -0.2
0.8s 39.00nm 5.2mb
WRA 43.18 93 P 04 29.80 -0.4
0.9s 21.70nm 4.9mb
WB5 43.22 93 iPc 04 30.10 -0.4
ADE 44.79 115 iPc 04 44.80 1.7
CHG 44.97 15 eP 04 45.50 0.9
CHTO 44.97 15 eP 04 45.30 0.7
1.0s 12.50nm 4.8mb
STK 47.40 111 eP 05 04.00 0.2
QIS 47.77 96 iPc 05 06.20 -0.6
0.6s 25.00nm 5.5mb
TOO 50.16 119 iPd 05 26.00 0.9
CMS 51.04 111 eP 05 32.00 0.2
KMI 51.98 17 P 05 41.00 1.9
BWA 52.81 115 eP 05 47.30 2.1
CAN 53.17 116 eP 05 48.00 0.2
CTA 53.89 97 iPc 05 52.40 -0.9
0.9s 21.01nm 5.2mb
BLF 54.42 251 eP 05 45.00 -12.2X
BUL 54.46 262 iPd 05 56.90 -0.7
1.0s 10.00nm 4.8mb
LSA 54.57 4 P 06 04.00 5.5X
CD2 57.75 16 eP 06 19.00 -1.8
BR5 57.76 108 iP 06 21.00 -0.1
QUE 58.47 339 eP 06 26.30 0.2
WHN 60.90 26 P 06 42.00 -0.5
XAN 62.14 20 P 06 50.10 -0.9
LZH 62.71 15 eP 06 55.00 0.1
2.0s 82.00nm 5.6mb
NJ2 64.11 29 Pd 07 04.00 0.1
SPA 65.06 180 ePc 07 09.00 -1.0
0.9s 23.18nm 5.4mb
GTA 65.14 10 iPc 07 10.70 0.0
TIY 66.63 21 Pd 07 19.00 -1.2
BTO 68.55 18 eP 07 32.70 0.5
WMO 68.57 360 P 07 32.50 0.3
HHC 69.23 19 eP 07 36.00 -0.4
BJI 70.00 23 eP 07 41.00 0.1
BNG 73.23 283 iPc 08 01.00 0.1
0.5s 6.00nm 4.9mb
CN2 76.78 27 eP 08 20.00 -0.6
MAT 77.59 39 iPc 08 24.90 -0.3
1.4s 34.88nm 5.3mb
VRI 89.70 322 iPd 09 28.00 1.2
MLR 89.91 322 iPc 09 28.50 0.6
CNCB 132.11 212 ePKP 15 42.00 -2.4X
LPB 132.41 212 (PKP) 15 42.00 -2.7X
ZOBO 132.65 212 ePKP 15 45.00 -0.4
PNT 147.76 34 ePKP 16 14.00 3.3X
0.8s 11.00nm
SES 150.85 25 ePKP 16 20.00 4.5X
ALO 164.27 48 ePKP 16 32.00 -0.4
S.D. = 0.9 on 39 of 45 obs.
AUG 03, 1989 15h 08m 34.69 ± 0.77s
38.562 N ± 8.1km 21.851 E ± 9.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.0 (ATH).

VLS 1.06 249 ePb 08 54.50 -0.2
NEO 1.30 55 ePb 08 58.60 -0.2
ITM 1.38 178 ePb 09 00.20 0.2
LIT 1.61 18 eP 09 03.20 -0.1
KZN 1.74 358 ePn 09 05.60 0.4
VAY 2.81 11 ePn 09 06.50 -14.0X
S.D. = 0.4 on 5 of 6 obs.
AUG 03, 1989 16h 35m 16.46s
61.823 N 150.551 W
DEPTH = 45.3km
SOUTHERN ALASKA (2)
>AGS-P>.

PWA 0.36 118 eP 35 25.70 -0.1
SUA 0.37 194 P 35 26.37 0.3
eS 35 34.36
SKT 0.49 289 iP 35 26.85 -0.5
eS 35 35.58
CUT 0.60 13 iP 35 27.94 -0.8
eS 35 37.11
PLRM 0.72 108 iP 35 29.24 -1.1
eS 35 41.12
PME 0.75 104 iP 35 29.96 -0.8
eS 35 42.13
GHO 0.77 93 iP 35 30.50 -0.7
eS 35 42.53
SPU 0.97 229 iP 35 33.27 -0.6
eS 35 47.01
KNK 1.08 111 iP 35 34.88 -0.6
eS 35 50.26
HUR 1.23 20 eP 35 36.78 -0.8
eS 35 52.91
SLKM 1.33 173 eP 35 37.87 -1.1
RDT 1.54 216 iP 35 41.42 -0.6
eS 36 02.01
KTH 1.75 355 eP 35 43.99 -0.9
eS 36 06.42
SEW 1.81 162 eP 35 46.26 0.6
NNL 1.82 192 eP 35 46.24 0.3
GLI 1.92 118 iP 35 45.22 -2.0
KNIM 2.01 136 eP 35 45.64 -3.0
MCK 2.06 20 eP 35 48.32 -0.9
VZW 2.07 110 eP 35 47.75 -1.7
TOA 2.09 80 eP 35 49.48 -0.2
ILIM 2.11 215 eP 35 49.61 -0.4
eS 36 15.99
KLU 2.23 96 eP 35 50.01 -1.8
eS 36 16.51
FID 2.24 117 eP 35 49.19 -2.6
CNPm 2.33 189 eP 35 53.30 0.2
SVW 2.54 256 eP 35 54.28 -1.9
OPT 2.54 212 eP 35 56.27 0.1
PAX 2.63 62 eP 35 56.40 -1.1
WRH 2.88 22 eP 35 59.40 -1.6
GLB 3.24 94 eP 36 04.21 -1.9

29 obs. associated
AUG 03, 1989 16h 38m 28.07 ± 1.12s
2.225 N ± 4.6km 126.779 E ± 6.3km
DEPTH = 87.9 ± 11.1 km
5.0mb (17 obs.)
MOLUCCA PASSAGE (266)

MNI 2.09 248 iPd 39 01.40 -0.5
eS 39 31.20
AAI 6.04 166 eP 39 58.00 1.4
TSM 8.92 283 ePd 40 37.70 1.6
0.8s 344.50nm 6.2mb X
MKS 10.39 225 ePd 40 52.00 -4.1X
KKM 11.20 290 ePc 41 07.20 0.2
TRT 17.22 235 ePd 42 26.30 1.8
KNA 17.97 174 eP 42 31.70 -2.0
GUMO 21.15 57 eP 43 09.00 1.1
GUA 21.16 57 eP 43 08.50 0.5
0.7s 54.70nm 5.0mb
WRA 23.25 162 P 43 26.70 -1.8
0.8s 31.50nm 4.8mb
OIZ 23.53 316 eP 43 30.80 -0.5
MBL 24.22 196 eP 43 37.00 -0.9
GZH 24.49 329 P 43 40.30 -0.2
IPM 25.81 276 ePc 43 54.40 1.4
OIS 25.90 152 iPc 43 52.90 -0.8
0.2s 28.00nm 5.4mb
ASPA 26.65 165 eP 43 59.50 -1.1
0.8s 50.00nm 5.1mb
eS 48 41.40

NANU 26.97 203 eP 44 03.60 0.2
WARB 28.24 180 iPc 44 16.00 -1.1
LOE 28.86 303 iPc 44 19.30 -1.3
CTA 29.27 140 iPc 44 23.40 -0.9
1.1s 31.65nm 4.9mb
BDT 31.10 300 eP 44 39.70 -0.7
0.7s 30.10nm 5.1mb
CHG 31.86 303 ePd 44 46.10 -1.0
0.8s 33.96nm 5.2mb
CHTO 31.86 303 iPd 44 46.20 -0.9
0.8s 44.47nm 5.3mb
FORR 32.91 178 eP 44 54.00 -2.0
COOL 33.36 189 eP 44 59.00 -1.0
0.4s 4.00nm 4.6mb
KLB 34.71 194 eP 45 12.00 0.5
0.3s 7.00nm 5.1mb
MUN 35.46 196 eP 45 18.00 0.1
RMO 35.57 145 iPd 45 18.90 -0.1
MAT 35.74 16 iPc 45 18.10 -2.2
1.0s 43.00nm 5.3mb
CD2 35.89 325 eP 45 21.40 -0.2
NWA0 36.11 194 eP 45 24.00 0.6
0.5s 8.00nm 4.9mb
STK 36.72 159 eP 45 28.00 -0.5
RKG 37.25 193 eP 45 38.00 5.0X
TIY 37.70 341 eP 45 34.00 -2.7
Z 32s 1.20um 4.5mszX
eS 51 26.00
CMS 38.10 153 eP 45 40.00 -0.1
BRS 38.65 141 iPd 45 44.60 -0.3
BJI 38.85 347 eP 45 46.00 -0.3
SNY 39.53 356 P 45 51.60 -0.3
LZH 39.82 330 eP 45 55.50 0.9
COO 40.46 146 iPd 46 00.20 0.4
0.8s 42.00nm 5.3mb
HHC 40.83 342 eP 46 02.80 0.0
CN2 41.42 359 eP 46 06.80 -0.5
BWA 41.75 153 iPc 46 12.10 1.9
MDJ 42.29 3 P 46 14.50 0.1
CAN 42.75 153 iPc 46 19.20 0.7
GTA 44.41 330 eP 46 31.10 -0.8
DZM 45.64 124 iPd 46 41.80 -0.1
HYB 49.68 291 ePd 47 13.00 -0.4
GBA 50.06 286 P 47 16.00 -0.2
WMO 53.98 326 P 47 47.50 2.2
sP 48 03.50
NDI 53.99 304 eP 47 45.00 -0.5
OUE 62.99 303 eP 48 48.40 0.1
TTA 82.21 27 P 50 42.50 1.9
0.7s 7.27nm 4.7mb
MAW 82.37 200 eP 50 43.00 1.8
KDC 83.17 32 P 50 46.20 0.7
BRW 83.58 18 P 50 42.20 -5.2X
IMA 83.73 24 P 50 50.00 1.5
1.0s 15.00nm 4.9mb
PMR 85.23 29 P 50 56.00 0.2
0.8s 13.79nm 5.0mb
KEV 91.31 340 eP 51 36.00 11.3X
SOD 91.87 338 eP 51 32.00 4.7X
SUF 92.91 333 eP 51 36.00 3.9X
MBC 93.40 13 eP 51 35.00 0.8
1.0s 5.00nm 4.9mb
MRA 147.76 160 ePKPc 58 06.70 5.0X
CNCB 159.49 136 ePKP 58 22.00 3.0X
i 59 36.00
LPB 159.59 135 (PKP) 58 20.00 1.1
e 59 40.00
ZOBO 159.75 134 PKP 58 22.00 2.7X
Z 24s 0.10um 4.6mszX
e 59 47.00
LR 54 28.00

S.D. = 1.1 on 57 of 66 obs.
AUG 03, 1989 16h 43m 15.45 ± 0.94s
44.999 N ± 6.4km 6.740 E ± 9.3km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.2 (GEN).

BNI 0.07 319 P 43 18.00 0.0
eSg 43 19.50
RRL 0.09 158 P 43 18.76 0.6
S 43 20.50
RSP 0.40 67 P 43 23.89 0.3
S 43 29.84
LSD 0.54 33 P 43 26.25 -0.3
S 43 33.12

PZZ 0.56 152 P 43 26.25 -0.6
S 43 33.12
S.D. = 0.6 on 5 of 5 obs.

AUG 03, 1989 16h 57m 08.79 ± 0.77s
44.999 N ± 5.1km 6.766 E ± 7.9km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.3 (GEN).

RRL 0.08 171 P 57 11.71 0.2
S 57 13.66

BNI 0.08 310 Pd 57 11.50 0.1
iSg 57 13.00

RSP 0.38 66 P 57 16.94 0.3
S 57 22.27

LSO 0.53 31 P 57 19.40 -0.3
S 57 26.38

PZZ 0.55 154 P 57 19.81 -0.1
S 57 26.89

ENR 0.90 149 P 57 25.97 -0.2
S.D. = 0.3 on 6 of 6 obs.

* AUG 03, 1989 17h 05m 45.43 ± 1.62s
35.192 N ± 16.3km 27.088 E ± 8.6km
DEPTH = 10.0km (geophysicist)
DODECANESE ISLANDS (369)
MD 3.7 (ATH).

KAP 0.37 11 iPgd 05 52.40 -0.5

NPS 1.21 274 ePb 06 08.20 0.2

YER 2.17 26 iPn 06 23.90 1.8

KSL 2.23 65 ePn 06 22.30 -0.7

APE 2.26 327 ePn 06 22.70 -0.7

VAM 2.37 276 ePb 06 29.00 4.0X

ELL 2.77 55 eP 06 30.50 -0.2
S.D. = 1.2 on 6 of 7 obs.

AUG 03, 1989 17h 53m 16.58 ± 0.57s
16.994 N ± 5.7km 62.271 W ± 4.9km
DEPTH = 10.0km (geophysicist)
LEeward ISLANDS (92)
ML 2.9 (FDF).

MGH 0.28 169 ePc 53 22.80 0.4

NEV 0.32 296 eP 53 23.38 0.2
eS 53 28.16

BPA 0.40 83 eP 53 24.95 0.2

ANG 0.45 69 eP 53 26.34 0.6

SKI 0.56 307 eP 53 27.65 -0.3
eS 53 34.87

SEG 0.94 129 ePc 53 34.20 -0.3
S 53 46.50

PAG 1.11 149 ePc 53 37.45 -0.1
S 53 51.30

DEG 1.34 120 eP 53 40.00 -1.4
S 53 57.90

MGG 1.41 139 eP 53 42.05 -0.2

BBL 1.65 152 eP 53 46.65 0.9
S 54 08.00

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

* AUG 03, 1989 17h 57m 24.20 ± 0.77s
37.762 N ± 7.2km 14.983 E ± 6.0km
DEPTH = 10.0km (geophysicist)
SICILY (398)

MNO 0.28 307 Pc 57 31.00 0.8
eSg 57 35.30

ATN 0.55 43 Pc 57 35.80 0.5
eSg 57 43.90

MSI 0.63 46 P 57 37.30 0.4

MEU 0.66 184 Pc 57 37.20 -0.2
eSg 57 47.30

GIB 0.79 287 P 57 39.70 0.1
eSg 57 53.30

SOI 0.90 70 P 57 41.90 0.4
eSg 57 57.30

TDS 2.17 29 P 58 00.70 -0.2

MGR 2.41 10 P 58 02.50 -1.8
S.D. = 1.0 on 8 of 8 obs.

AUG 03, 1989 19h 21m 41.57 ± 1.12s
33.578 N ± 5.7km 141.213 E ± 8.8km
DEPTH = 48.5 ± 9.0 km
5.0mb (9 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)

KAKJ 2.76 342 P 22 24.80 0.6

CHJJ 3.07 324 P 22 28.30 -0.4
S 23 03.80

IIDJ 3.32 306 P 22 33.00 0.6
S 23 12.10

MAT 3.85 321 iPd 22 40.20 0.4
eS 23 22.00

NIJ 4.08 334 P 22 42.60 -0.3

MTMJ 4.10 318 P 22 44.10 0.7

YAMJ 4.68 349 iPd 22 51.00 -0.5
S 23 42.40

WKYJ 4.72 279 iPd 22 51.60 -0.4

TSRJ 4.74 296 P 22 53.00 0.8

OFUJ 5.50 4 P 23 01.30 -1.8
S 23 59.00

TKSJ 5.98 276 eP 23 10.10 0.3

YONJ 6.61 286 eP 23 18.20 -0.3

KUMJ 8.78 266 eP 23 49.30 0.6

KAGJ 9.05 258 eP 23 57.40 5.0X

CHTO 40.39 259 eP 29 15.00 -1.6

KNA 50.47 196 eP 30 36.60 0.0

WB5 53.56 188 iPc 30 59.40 -0.3

WRA 53.62 188 Pd 31 00.10 -0.1
0.5s 18.80nm 5.4mb

ASPA 57.35 188 eP 31 26.60 -0.6
0.6s 31.00nm 5.5mb

MBL 58.12 204 eP 31 32.00 -0.6

MBC 59.88 16 eP 31 45.00 0.8
0.6s 6.00nm 4.9mb

GBA 60.83 267 P 31 51.00 -0.5
0.3s 0.90nm 4.4mb

WARB 61.02 195 eP 31 53.10 0.6

ALE 63.56 3 eP 32 09.50 0.7

FORR 65.27 192 iPd 32 20.30 0.0
0.4s 41.00nm 5.8mb

SOD 68.09 338 eP 32 38.00 0.1

DAG 69.21 355 eP 32 43.00 -1.6

NWAO 69.90 201 eP 32 50.00 0.6
0.4s 8.00nm 5.0mb

SUF 71.00 334 iP 32 55.20 -0.6
0.5s 4.40nm 4.7mb

NUR 72.92 332 iP 33 06.60 -0.6

LRM 76.74 44 eP 33 32.00 2.3

HFS 77.17 336 eP 33 31.10 -0.3
0.7s 6.90nm 4.8mb

NB2 77.31 338 P 33 32.10 -0.2
0.7s 8.90nm 4.9mb

VRI 81.25 320 eP 33 54.00 0.2

MLR 81.92 320 eP 33 54.00 -3.4X

PRU 84.34 329 Pd 34 10.40 0.9

KHC 85.40 329 eP 34 15.50 0.6

ZOBO 148.46 64 PKP 41 27.20 5.3X

LPB 148.64 64 PKPd 41 29.30 7.3X
0.8s 19.40nm

CNCB 148.90 65 PKP 41 25.00 2.4X
i 41 29.50

S.D. = 0.8 on 35 of 40 obs.

* AUG 03, 1989 19h 29m 05.61 ± 2.77s
36.367 N ± 19.2km 141.014 E ± 23.0km
DEPTH = 33.0km (normal)
NEAR EAST COAST OF HONSHU, JAPAN (228)
MG 3.6 (JMA). Felt (I JMA) at Mito.

MIT 0.44 272 iPd 29 15.40 0.1
iS 29 22.60

KAKJ 0.70 257 iPd 29 17.90 -1.1
S 29 26.70

CHJJ 1.66 260 iPd 29 31.60 -1.3
S 29 50.40

NIJ 1.84 299 iPd 29 35.10 -0.2

YAMJ 1.96 337 P 29 37.00 -0.2
eS 30 00.90

MAT 2.27 275 iPc 29 41.10 -0.4
eS 30 07.00

MTMJ 2.60 276 P 29 46.30 0.0

IIDJ 2.67 252 P 29 48.00 0.7

OFUJ 2.76 11 P 29 47.50 -0.9
S 30 22.50

TSRJ 4.16 260 P 30 10.30 1.9

AOMJ 4.22 353 eP 30 10.50 1.4
S.D. = 1.1 on 11 of 11 obs.

? AUG 03, 1989 20h 10m 26.81 ± 19.09s

16.280 N ± 46.6km 60.593 W ± 151.km
DEPTH = 33.0km (normal)

LEeward ISLANDS (92)

ML 2.7 (FDF).

DEG 0.45 274 ePd 10 36.20 -0.5

MGG 0.78 243 iPd 10 41.30 -0.1
S 10 51.00

SEG 0.88 278 ePd 10 43.10 0.2

PAG 1.07 257 eP 10 45.90 0.3
S 10 59.50

BBL 1.14 229 eP 10 46.30 -0.2
S.D. = 0.5 on 5 of 5 obs.

? AUG 03, 1989 20h 49m 23.92 ± 3.45s

34.895 N ± 26.3km 139.175 E ± 12.3km
DEPTH = 5.0km (geophysicist)

NEAR S. COAST OF HONSHU, JAPAN (230)
MG 2.9 (JMA). Felt (I JMA) at Ajiro.

AJI 0.16 337 iP+ 49 27.50 0.2
iS 49 28.50

CHJJ 1.16 353 P 49 45.30 -0.8
S 49 59.80

IIDJ 1.19 300 P 49 45.90 -0.7
S 50 00.60

KAKJ 1.54 32 P 49 52.00 0.0
S 50 13.90

MAT 1.82 335 iPd 49 56.10 -0.1
iS 50 18.50

MTMJ 2.02 327 P 50 00.40 1.3
S 50 25.80

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

? AUG 03, 1989 21h 06m 52.93 ± 3.26s

35.005 N ± 24.8km 139.099 E ± 12.4km
DEPTH = 5.0km (geophysicist)

NEAR S. COAST OF HONSHU, JAPAN (230)
MG 3.0 (JMA). Felt (II JMA) at Ajiro.

AJI 0.04 357 iPd 06 54.90 0.6
iS 06 56.00

CHJJ 1.04 355 P 07 12.70 -0.4
S 07 27.00

IIDJ 1.08 296 P 07 13.60 -0.2
S 07 28.30

KAKJ 1.48 36 P 07 20.20 0.0
S 07 40.50

MAT 1.70 335 iPd 07 23.80 0.5
iS 07 45.90

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

? AUG 03, 1989 21h 28m 25.44 ± 6.79s

20.183 S ± 111.km 176.752 W ± 57.8km
DEPTH = 380.8 ± 54.7 km
4.4mb (3 obs.)

FIJI ISLANDS REGION (181)

DZM 15.79 260 iPc 31 48.70 -0.8

CTA 34.69 264 iPd 34 43.20 0.7
0.7s 24.66nm 4.6mb

ASPA 45.73 256 iPc 36 12.90 0.6
0.8s 10.00nm 4.2mb

WB5 45.79 262 eP 36 12.80 0.1

PRS 76.78 43 eP 39 37.70 0.2

BCH 76.93 45 eP 39 38.50 0.0

PRI 77.12 44 eP 39 40.00 0.4

FRI 78.25 43 e(P) 39 45.20 -0.3

CMB 78.44 42 eP 39 46.40 -0.2

ORV 78.67 40 eP 39 47.50 -0.2

WDC 78.69 39 eP 39 47.90 0.1

KVN 80.48 42 eP 39 57.00 -0.5

TNP 80.49 44 iP 39 57.50 -0.1

PNT 85.74 33 eP 40 24.00 0.5

ALO 86.29 51 eP 40 27.20 0.5
1.0s 5.25nm 4.4mb

EKA 144.57 6 PKP 47 19.00 0.8
1.0s 5.80nm

BRG 148.23 347 iPKP 47 30.10 5.8X
1.4s 19.00nm

PRU 148.93 346 PKP 47 32.40 7.0X

KHC 149.95 346 iPKPc 47 25.10 -2.0

S.D. = 0.7 on 17 of 19 obs.

& AUG 03, 1989 22h 05m 50.40s

41.711 N 112.379 W

DEPTH = 8.7km

03d 22h

UTAH (478)
 <SLC-P>. ML 2.3 (SLC).

PTI 1.16 0 eP 06 12.00 -0.3
 DUG 1.55 192 eP 06 18.00 -0.4
 DAU 1.55 146 eP 06 19.00 0.4
 BW06 2.35 62 eP 06 31.00 0.9
 IMW 2.43 25 eP 06 32.50 1.3
 5 obs. associated

? AUG 03, 1989 22h 21m 42.92± 1.16s
 34.176 N ±15.1km 135.150 E ± 7.1km
 DEPTH = 10.0km (geophysicist)
 NEAR S. COAST OF SOUTHERN HONSHU(233)
 MG 2.9 (JMA). Felt (1 JMA) at
 Wakayama.

WKY 0.05 15 iP+ 21 44.80 -0.3
 S 21 45.70
 WKYJ 0.37 83 iPd 21 50.60 0.1
 S 21 56.00
 TKSJ 0.93 258 P 22 00.60 -0.1
 S 22 13.20
 YONJ 1.72 306 P 22 13.30 0.3
 S 22 35.40
 S.D. = 0.4 on 4 of 4 obs.

AUG 03, 1989 22h 25m 55.46± 0.11s
 22.531 S ± 3.4km 179.129 E ± 3.3km
 DEPTH = 592.1km (7 depth phases)
 5.5mb (38 obs.)
 SOUTH OF FIJI ISLANDS (171)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 29C
 Centroid Location:
 Origin Time 22:26: 2.6 0.2
 Lat 22.29S 0.03 Lon 178.93E 0.03
 Dep 620.9 1.5 Half-duration 3.3
 Moment Tensor; Scale 10**17 Nm
 Mrr=-6.33 0.16 Mtt= 5.33 0.27
 Mff= 1.00 0.24 Mrl= 2.53 0.22
 Mrf= 0.18 0.23 Mtf=-8.43 0.23
 Principal Axes:
 T Val= 12.06 Plg= 6 Azm= 37
 N -4.27 37 303
 P -7.79 53 135
 Best Double Couple:Ma=9.9*10**17
 NP1:Strike=160 Dip=50 Slip=-40
 NP2: 278 61 -133

RAO 7.20 159 iP 27 50.10 2.6
 iS 29 18.70
 DZM 11.75 270 iPd 28 32.60 0.7
 iS 30 43.60
 AFI 12.17 47 iPc 28 31.90 -4.0X
 S 30 18.40
 HBZ 15.04 183 P 29 02.90 -0.9
 TAZ 15.81 188 eP 29 12.90 1.6
 TUTZ 16.35 189 eP 29 17.60 1.0
 HITZ 16.38 189 P 29 19.10 2.2
 WHH 16.46 187 eP 29 16.80 -0.9
 HATZ 16.51 188 P 29 17.70 -0.5
 RATZ 16.54 189 eP 29 19.80 1.4
 KETZ 16.78 189 eP 29 21.60 0.7
 TTH 17.07 186 eP 29 23.70 0.2
 PGZ 18.19 187 P 29 31.10 -3.0
 MNG 18.30 189 eP 29 32.70 -2.4
 0.2s 146.00nm 6.2mb
 eS 32 25.00
 CAW 18.84 190 P 29 38.30 -1.8
 MRW 19.02 190 eP 29 39.80 -1.9
 eS 32 38.00
 WEL 19.06 190 P 29 41.50 -0.6
 S 32 40.00
 TCW 19.07 191 P 29 40.80 -1.4
 SVO 22.81 303 P 30 20.00 3.5X
 S 33 50.00
 MSZ 23.93 200 P 30 26.00 -0.2
 S 34 01.00
 BRS 24.36 253 iPd 30 31.30 1.1
 i 31 20.00
 iS 34 12.00
 iScP 36 35.00
 COO 25.60 246 iPc 30 42.40 1.2
 0.8s 146.00nm 5.7mb
 e 31 29.00 243kmX

RMO 27.88 256 iPc 31 02.60 1.6
 e 31 14.00 44kmX
 e 31 49.00
 e 33 58.00
 CNB 28.88 237 iPd 31 10.90 1.2
 1.0s 840.00nm 6.3mb
 i 35 24.30
 e 36 47.60
 TBI 28.91 98 iP 31 07.00 -2.9
 0.8s 75.00nm 5.4mb
 BWA 29.37 239 iPc 31 12.20 -1.6
 ePcP 32 49.30
 e 35 26.30
 eScP 36 47.00
 AFR 29.60 86 iP 31 14.60 -1.2
 0.8s 65.00nm 5.3mb
 PAE 29.75 86 iP 31 14.80 -2.3
 0.8s 30.00nm 5.0mb
 PPT 29.78 86 iP 31 16.10 -1.3
 0.8s 70.00nm 5.3mb
 Z 18s 1.0um 4.5msz
 PPN 29.92 86 iP 31 17.20 -1.3
 0.8s 40.00nm 5.1mb
 TVO 30.02 87 iP 31 18.50 -1.0
 CTA 30.69 268 iPc 31 24.90 -0.2
 0.8s 228.36nm 5.9mb
 iHcP 34 04.70
 iS 35 46.00
 iScP 36 53.00
 iSS 38 46.00
 iScS 40 53.30
 CMS 30.88 246 eP 31 27.60 1.0
 0.9s 367.00nm 6.0mb
 e 35 52.00
 PMO 32.05 82 iP 31 35.80 -0.7
 1.2s 140.00nm 5.5mb
 VAH 32.22 83 iP 31 37.00 -0.9
 1.2s 115.00nm 5.4mb
 TPT 32.31 82 iP 31 38.00 -0.7
 1.2s 175.00nm 5.6mb
 RUV 32.47 83 iP 31 39.20 -0.8
 1.2s 195.00nm 5.6mb
 TOO 32.55 235 eP 31 42.00 1.4
 e 36 17.00
 PMG 33.30 288 iPd 31 41.50 -5.6X
 0.5s 309.86nm 6.2mb
 STK 34.52 246 iPc 31 57.80 0.8
 e 32 03.00 18kmX
 e 34 15.00
 BFD 34.69 237 iPd 31 59.10 0.7
 0.9s 132.00nm 5.6mb
 e 34 15.00
 QIS 36.74 265 iPc 32 14.40 -1.0
 0.4s 20.00nm 5.1mb
 i 35 24.80
 e 37 14.00
 ADE 37.30 241 iPc 32 20.20 0.3
 1.2s 375.00nm 5.9mb
 ASPA 41.49 259 iPc 32 52.00 -1.7
 1.0s 376.00nm 5.9mb
 Z 17s 1.7um 5.0mszX
 iPcP 34 47.70
 iScP 37 33.40
 eS 38 24.00
 eScS 41 50.00
 e 42 14.10
 LR 49 24.70
 WB5 41.70 265 iPc 32 53.70 -1.7
 ePcP 34 53.80
 eScP 37 33.50
 eS 38 28.50
 WRA 41.71 265 P 32 53.70 -1.8
 0.3s 15.00nm 5.0mb
 FORR 46.01 248 iPd 33 27.50 -1.2
 MTN 46.56 274 eP 33 30.40 -2.6
 ePcP 34 54.20
 eS 39 37.00
 WARB 47.69 255 eP 33 40.00 -1.6
 e 39 52.00
 KNA 47.88 269 eP 33 41.20 -1.8
 0.3s 105.00nm 5.8mb
 GUA 49.08 314 eP 33 50.20 -1.7
 0.6s 426.67nm 6.2mb
 GUMO 49.15 314 eP 33 50.60 -1.8
 0.5s 236.73nm 6.0mb

PJG 49.15 314 eP 33 50.60 -1.8
 DRV 50.57 199 eP 34 01.20 -1.0
 COOL 51.98 248 eP 34 11.00 -2.0
 0.4s 71.00nm 5.4mb
 MBL 54.73 259 iPc 34 30.30 -2.2
 KLB 54.78 246 eP 34 36.00 3.2X
 0.4s 67.00nm 5.3mb
 MEKA 54.82 253 eP 34 31.90 -1.2
 NWA0 55.08 245 eP 34 33.00 -1.8
 0.5s 37.00nm 5.0mb
 Z 20s 0.60um 4.7msz
 SBA 55.69 183 iPc 34 40.10 1.7
 BAL 55.80 248 eP 34 38.00 -1.8
 0.3s 50.00nm 5.3mb
 MUN 56.05 246 iPd 34 40.30 -1.2
 1.0s 120.00nm 5.2mb
 MNI 58.00 287 e(P) 34 53.00 -2.0
 NANU 58.31 257 iPd 34 55.60 -1.4
 0.4s 48.00nm 5.1mb
 TRT 65.40 272 iPd 35 41.60 -1.2
 0.6s 233.00nm 5.8mb
 SPA 67.61 180 iPc 35 56.10 0.4
 1.0s 180.00nm 5.6mb
 i 36 24.60 114kmX
 KKM 67.74 287 ePd 35 55.70 -1.5
 KAKJ 69.05 327 P 36 03.30 -1.2
 CHJJ 69.53 326 P 36 05.80 -1.6
 IIDJ 69.67 325 P 36 06.50 -1.7
 MAT 70.32 326 iPd 36 09.90 -2.1
 0.8s 64.18nm 5.2mb
 NIJJ 70.45 327 P 36 12.10 -0.6
 OFUJ 70.61 330 P 36 12.20 -1.4
 YAMJ 70.66 328 eP 36 13.80 -0.1
 TSRJ 70.75 324 iPd 36 13.40 -1.0
 HOOJ 72.58 333 eP 36 25.10 0.3
 KUSJ 72.58 334 eP 36 23.80 -1.1
 MRRJ 73.56 332 eP 36 29.00 -1.4
 ASAJ 74.27 334 eP 36 35.00 0.6
 QZH 75.34 305 eP 36 39.00 -1.7
 SSE 76.99 312 eP 36 48.50 -1.0
 KGM 77.69 277 ePc 36 54.00 0.3
 MAW 78.75 201 iPc 36 58.30 0.0
 1.0s 80.00nm 5.1mb
 QIZ 79.29 296 eP 37 01.70 -0.2
 MDJ 80.68 327 eP 37 07.70 -0.9
 IPM 80.81 279 ePd 37 09.20 -0.7
 0.5s 122.90nm 5.7mb
 SYP 81.00 47 eP 37 12.00 1.3
 PRI 81.48 45 eP 37 13.30 0.3
 WHN 81.53 308 eP 37 13.00 -0.2
 SNY 82.08 322 iPc 37 15.20 -0.5
 S 46 44.00
 SNG 82.22 281 eP 37 16.80 -0.2
 BAR 82.26 50 eP 37 18.00 1.1
 CN2 82.31 324 iPd 37 16.00 -0.8
 3.5s 1.00nm 2.8mbX
 pP 39 19.00 573kmX
 S 46 45.00
 RVR 82.48 49 eP 37 19.00 1.1
 e 39 21.00 567kmX
 PLM 82.49 49 eP 37 18.00 -0.2
 e 39 30.00 627kmX
 SBB 82.56 48 eP 37 18.00 -0.4
 e 39 29.00 621kmX
 FRI 82.60 45 eP 37 18.10 -0.3
 e 40 38.50
 ISA 82.66 47 eP 37 19.00 0.1
 e 39 28.00 608kmX
 CMB 82.77 44 eP 37 19.00 -0.3
 e 39 30.80 625kmX
 e 40 37.70
 WDC 82.94 41 eP 37 20.20 0.1
 e 39 31.30 620kmX
 e 40 41.80
 DRV 82.96 42 eP 37 20.00 -0.2
 e 40 41.40
 CLC 83.34 47 eP 37 22.00 -0.3
 e 39 30.00 600km
 TPC 83.47 49 eP 37 24.00 1.1
 e 39 31.00 594km
 GSC 83.59 48 eP 37 24.00 0.4
 GLA 83.77 51 eP 37 25.00 0.6
 e 39 34.00 605kmX
 NNT 85.20 286 iPc 37 33.00 1.4
 GYA 85.36 301 P 37 32.00 -0.4
 LOE 85.45 291 eP 37 33.40 0.6
 BJI 85.49 317 Pd- 37 32.00 -0.5

Data Used: GDSN				2.5s 394.00nm 5.7mb				EZN 85.78 310 eP 41 21.00 -0.3			
L.P.B.: 11S, 16C				Z 18s 4.60um 5.1Msz				KRA 87.71 321 eP 41 30.60 0.1			
Centroid Location:				N 12s 2.50um				e 41 42.60			
Origin Time 04:28:41.3 0.6				E 12s 2.50um				SPC 87.76 320 eP 41 34.60 3.6X			
Lat 11.97N 0.06 Lon 121.02E 0.11				eS 39 25.00				HFS 87.94 331 eP 41 30.00 -1.3			
Dep 27.2 6.2 Half-duration 1.7				MAT 28.92 30 (P) 34 40.00 -2.0				0.4s 1.70nm 4.7mb			
Moment Tensor: Scale 10**16 Nm				SNY 29.71 4 Pd 34 47.40 -1.6				Z 16s 0.64um 5.1MszX			
Mrr=-2.10 0.71 Mtt= 8.84 0.61				Z 18s 3.80um 5.1Msz				LR 20 37.00			
Mff=-6.73 1.07 Mrt= 5.01 2.16				N 19s 3.00um				VAY 88.23 312 eP 41 32.30 -0.8			
Mrf=-1.86 1.36 Mtf= 0.30 0.67				E 16s 1.60um				NB2 88.74 333 P 41 34.10 -1.2			
Principal Axes:				eS 39 40.00				0.8s 2.40nm 4.6mb			
T Val= 10.79 Plg=21 Azm= 1				HHC 29.78 346 eP 34 50.00 0.2				KSP 89.70 322 eP 41 40.40 0.5			
N -3.12 56 126				Z 18s 7.10um 5.3Msz				PRU 91.04 322 eP 41 45.00 -1.1			
P -7.68 25 261				N 13s 2.00um				Z 16s 0.70um 5.2MszX			
Best Double Couple:Ma=9.2*10**16				E 11s 0.80um				N 18s 0.40um			
NP1:Strike= 42 Dip=56 Slip=-177				BTO 29.94 343 eP 34 50.20 -1.1				E 16s 0.80um			
NP2: 310 87 -34				N 13s 2.40um				BRG 91.09 323 iP 41 47.50 1.2			
				E 11s 3.90um				1.4s 21.00nm 5.3mb			
QCP 2.53 5 eP 29 25.50 2.1				esP 34 58.00				CLL 91.49 323 eP 41 50.00 1.8			
BAG 4.29 357 eP 29 47.00 -1.6				eS 39 44.00				1.6s 21.00nm 5.3mb			
DAV 6.82 136 eP 30 23.00 -1.2				CN2 31.83 6 eP 35 09.40 1.7				KHC 91.93 321 P 41 51.80 1.5			
KKM 7.56 218 ePc 30 48.00 13.4X				Z 18s 3.20um 5.0Msz				VBY 92.11 317 e(P) 41 51.90 0.8			
0.6s 85.30nm				N 13s 1.80um				CNCB 170.25 120 ePKP 48 43.00 -7.7X			
TSM 8.30 200 ePd 30 49.00 4.2X				eS 40 14.00				LPB 170.28 118 PKPc 48 43.30 -7.2X			
MNI 11.31 159 ePc 31 28.50 2.3				LSA 32.66 307 eP 35 16.20 0.5				ZOBO 170.37 117 PKP 48 52.00 1.2			
QIZ 12.64 304 eP 31 41.20 -2.9				S 40 35.00				Z 22s 0.18um			
N 11s 5.80um				GTA 32.97 329 Pc 35 17.50 -0.3				S.D. = 1.3 on 78 of 88 abs.			
E 14s 6.70um				Z 16s 3.80um 5.2MszX							
eS 33 58.00				E 11s 3.00um				% AUG 04, 1989 04h 44m 35.79± 0.95s			
GZH 13.05 328 eP 31 47.20 -2.3				S 40 38.00				31.679 S ± 9.7km 67.952 W ± 7.8km			
Z 16s 5.00um				MDJ 33.26 11 eP 35 21.00 0.9				DEPTH = 10.0km (geophysicist)			
N 13s 4.80um				Z 20s 1.30um 4.6Msz				SAN JUAN PROVINCE, ARGENTINA (137)			
E 12s 4.20um				WB5 34.46 157 eP 35 28.10 -2.6				CFA 0.26 286 iPd 44 41.80 0.6			
S 34 14.50				WRA 34.50 157 Pd 35 28.10 -3.1				RTCV 0.53 250 iPc 44 46.00 -0.5			
LOE 19.22 288 eP 33 08.00 -0.1				0.8s 23.80nm 5.2mb				RTLL 0.56 308 iPd 44 46.20 -1.0			
WHN 19.31 343 eP 33 08.00 -1.1				OIS 37.33 150 ePc 35 54.00 -1.1				S 44 53.00			
Z 16s 2.38um				ASPA 37.77 160 eP 35 56.80 -2.0				RTCB 0.75 285 iPd 44 05.00 -45.5X			
N 10s 2.64um				1.5s 52.00nm 5.2mb				S 45 00.20			
E 10s 5.53um				eS 41 49.30				RTBS 1.28 270 e(P) 44 59.00 -0.5			
GYA 19.55 319 P 33 13.00 1.1				WARB 38.47 172 eP 36 04.00 -0.6				S 45 16.00			
N 11s 6.11um				0.7s 26.00nm 5.2mb				RTRS 1.99 319 iPd 45 11.00 1.3			
E 11s 5.08um				CTA 40.60 142 iPd 36 23.30 1.0				S 45 37.00			
NJ2 19.94 355 Pd 33 16.00 0.2				1.1s 29.75nm 4.9mb				MRA 2.04 112 ePc 45 09.90 -0.6			
Z 20s 4.50um				iS 42 40.00				RFA 3.11 188 ePd 45 26.80 0.9			
KGM 20.06 241 eP 33 18.00 0.8				HYB 41.18 283 eP 36 19.00 -8.1X				S.D. = 1.1 on 7 of 8 obs.			
NST 20.42 282 eP 33 21.40 0.5				e 36 27.00				AUG 04, 1989 05h 10m 12.05± 1.04s			
SNG 20.53 258 eP 33 21.50 -0.6				GBA 42.31 277 P 36 37.50 1.1				31.106 N ± 9.7km 131.478 E ± 6.1km			
eS 37 14.30				WMQ 42.57 324 P 36 39.00 0.7				DEPTH = 48.4 ± 9.0 km			
NNT 20.63 274 eP 33 24.50 1.3				Z 14s 3.10um 5.3MszX				4.7mb (10 obs.) 4.3Msz (1 obs.)			
IPM 20.97 251 ePc 33 26.90 0.2				N 14s 3.70um				KYUSHU, JAPAN (235)			
1.6s 151.00nm 5.1mb				eS 43 02.00				Felt (II JMA) at Kagoshima.			
KMI 21.46 310 Pd 33 33.00 1.1				COOL 42.74 180 eP 36 39.00 -0.7				KAGJ 0.51 279 iPd 10 22.40 -1.0			
Z 15s 6.40um 5.1MszX				1.0s 19.00nm 4.8mb				S 10 30.70			
N 14s 5.10um				NWA0 44.91 184 eP 36 57.00 -0.2				KAG 0.92 301 iP+ 10 29.40 0.6			
sP 33 49.00				1.0s 20.00nm 5.0mb				S 10 42.20			
eS 36 31.00				Z 20s 0.60um 4.5Msz				eS 10 58.60			
CHG 22.13 290 ePc 33 39.30 1.0				KSH 48.05 313 eP 37 24.00 1.8				SHNJ 3.03 354 P 10 58.40 -0.2			
0.8s 12.87nm 4.4mb				Z 16s 1.30um 5.0MszX				SHK 3.56 16 eP 11 08.00 1.7			
eS 37 25.00				N 12s 1.30um				TKSJ 3.60 36 P 11 06.40 -0.3			
CHTO 22.13 290 eP 33 36.80 -1.5				BRS 50.00 142 iPc 37 38.50 1.3				YONJ 4.40 22 P 11 17.00 -1.0			
1.7s 51.83nm 4.7mb				QUE 52.90 299 eP 37 58.00 -1.4				WKYJ 4.66 47 P 11 20.00 -1.7			
GUMO 23.46 84 e(P) 33 52.10 0.7				BWA 53.17 151 eP 38 02.70 1.7				TSRJ 5.81 39 P 11 38.20 0.4			
PJG 23.46 84 e(P) 33 33.50 -17.9X				CAN 54.18 152 eP 38 09.00 0.7				IIDJ 6.93 49 eP 11 53.70 0.1			
GUA 23.51 84 e(P) 33 33.80 -18.0X				CNB 54.34 151 eP 38 10.00 0.4				MAT 7.79 44 (P) 12 04.00 -1.6			
PPI 23.83 240 eP 33 54.50 -0.4				TOO 54.56 156 eP 38 11.00 -0.1				(S) 13 48.00			
TIA 24.24 353 eP 34 00.00 1.3				MAIO 59.90 305 eP 38 48.00 -1.1				SSE 8.82 273 P 12 20.50 0.7			
XAN 24.40 335 P 34 00.00 -0.4				0.6s 8.14nm 5.0mb				Lg 14 52.00			
N 12s 2.60um				eSn 47 04.00				NJ2 10.81 278 Pd 12 51.00 4.0X			
E 12s 2.90um				SHI 65.35 297 eP 39 25.00 -0.6				Z 18s 2.10um			
S 38 20.00				MSL 73.07 304 eP 40 09.00 -3.8X				TIA 12.99 297 eP 13 17.50 1.3			
CD2 24.49 322 eP 34 01.30 0.0				IMA 77.19 25 eP 40 36.70 0.8				BJI 15.30 310 eP 13 48.00 1.7			
Z 19s 2.90um 4.8Msz				1.0s 20.30nm 5.1mb				E 13s 1.28um			
E 12s 5.50um				PMR 79.47 29 eP 40 48.10 -0.1				TIY 17.03 298 Pd 14 11.00 2.7			
PP 34 35.50				1.0s 10.00nm 4.8mb				E 10s 0.70um			
eS 38 22.00				FBA 79.72 26 eP 40 49.50 -0.1				HHC 18.79 307 eP 14 30.00 0.0			
sS 38 34.00				SOD 80.55 337 eP 40 53.00 -0.9				Z 14s 2.50um			
TIY 26.59 345 eP 34 19.30 -1.7				TOA 80.80 28 eP 40 56.40 0.9				N 14s 1.30um			
Z 15s 2.84um 4.9MszX				SUF 81.49 332 iP 40 58.60 -0.3				E 13s 1.10um			
E 10s 2.39um				CFR 83.41 315 eP 41 11.50 2.3				XAN 19.23 285 Pd 14 34.00 -1.2			
S 38 44.00				ELL 83.61 306 eP 41 13.00 2.3				BTO 19.76 305 P 14 44.00 3.1X			
BJI 28.13 352 eP 34 34.00 -0.8				VRI 84.27 316 iPc 41 14.00 0.4				N 13s 1.20um			
Z 20s 2.40um 4.8Msz				ISR 84.54 315 eP 41 19.00 4.0X				E 14s 1.50um			
N 12s 0.67um				CVO 84.65 316 eP 41 15.00 -0.6							
E 12s 1.12um				MLR 84.88 315 iPd 41 17.00 0.2							
PP 35 37.50				MBC 85.07 12 eP 41 17.50 0.4							
eS 39 11.00				1.5s 16.00nm 5.0mb							
LZH 28.38 330 P 34 38.00 0.6				IZM 85.37 308 eP 41 20.00 0.7							

TCF 147.23 346 ePKP 40 41.10 -0.4
 S.D. = 0.8 on 18 of 18 obs.

% AUG 04, 1989 06h 46m 56.96±3.23s
 23.096 N ±18.5km 121.916 E ±21.9km
 DEPTH = 10.0km (geophysicist)
 TAIWAN (244)

TWF1 0.62 294 iPc 47 08.90 -0.6
 eS 47 17.50
 TWG 0.83 251 ePc 47 12.60 -0.3
 TWD 1.02 343 eP 47 16.20 -0.1
 TWK 1.32 278 ePc 47 21.50 0.0
 TWC 1.51 358 eP 47 23.60 -0.4
 S.D. = 0.4 on 5 of 5 obs.

% AUG 04, 1989 06h 55m 07.57±0.99s
 31.610 S ±13.9km 67.754 W ± 7.6km
 DEPTH = 10.0km (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA (137)

CFA 0.41 270 iPd 55 16.50 0.5
 RTL 0.67 294 iPd 55 20.00 -1.0
 S 55 28.00
 RTCV 0.71 249 iPc 55 22.00 0.4
 S 55 32.00
 RTCB 0.90 278 iPd 55 24.00 -0.9
 S 55 36.00
 RTBS 1.45 268 e(P) 55 34.00 0.2
 S 55 53.00
 MRA 1.91 115 ePc 55 40.30 -0.2
 RTRS 2.05 314 iPd 55 43.50 1.0
 S 56 09.00
 S.D. = 0.9 on 7 of 7 obs.

AUG 04, 1989 08h 19m 23.65±0.16s
 27.050 N ± 3.7km 140.063 E ± 3.8km
 DEPTH = 474.6km (2 depth phases)
 5.0mb (44 obs.)
 BONIN ISLANDS REGION (212)

MAT 9.59 351 eP 21 37.00 -0.9
 0.9s 95.80nm 5.2mb
 (S) 23 25.00
 SHK 9.79 321 iPd 21 41.20 1.2
 1.0s 448.00nm 5.8mb
 SSE 16.98 288 P 22 54.50 -0.4
 0.8s 48.00nm 5.1mb
 sS 25 52.00
 NJ2 19.10 290 Pd 23 16.50 1.0
 OZH 19.41 269 eP 23 20.30 1.7
 DL2 19.43 312 eP 23 20.10 1.5
 MDJ 19.45 337 iPd 23 20.40 1.7
 S 26 36.00
 SNY 20.00 322 iPd 23 25.00 0.9
 eS 26 42.00
 WHN 22.78 285 P 23 51.00 1.0
 BJI 23.67 309 Pd 23 57.50 -0.4
 TIY 25.55 302 eP 24 14.50 -0.6
 HHC 27.21 308 Pd 24 30.00 0.3
 XAN 27.64 292 iPd 24 33.80 0.4
 BTO 28.23 306 P 24 39.10 0.5
 QIZ 28.88 260 eP 24 46.40 2.1
 GYA 29.78 277 iPd 24 52.00 -0.3
 S 29 12.00

CD2 31.90 286 iPd 25 10.70 0.4
 LZH 32.00 295 iPd 25 12.00 0.8
 1.5s 154.00nm 5.3mb
 KMI 33.50 275 Pd 25 25.50 1.5
 GTA 35.57 301 Pd 25 41.60 0.5
 1.2s 0.10nm 2.2mb X
 pCp 27 57.80
 eS 30 42.30
 ScP 30 58.20
 ScS 35 02.00

CHG 38.61 267 iPd 26 07.40 1.2
 1.0s 35.00nm 4.8mb
 CHTO 38.61 267 iPd 26 07.60 1.5
 1.2s 45.14nm 4.8mb
 pP 27 31.80 449kmX
 SHL 43.01 279 iP 26 43.50 1.8
 eS 32 30.00
 KNA 43.93 196 eP 26 48.00 -0.7
 WMO 45.07 306 iPc 26 58.50 1.0
 WB5 46.98 187 iPc 27 12.00 -0.2
 iPP 28 47.30
 iScP 31 42.10

WRA 47.04 187 Pc 33 24.00
 0.4s 16.70nm 4.9mb
 CTA 47.24 172 iPc 27 13.90 -0.3
 0.7s 8.22nm 4.3mb
 i 28 46.30 482km
 i 31 45.00
 OIS 47.33 181 iPc 27 14.30 -0.6
 ASPA 50.77 187 iPc 27 39.80 -0.9
 0.4s 42.00nm 5.2mb
 eS 34 16.10
 MBL 51.77 204 iPc 27 47.60 -0.5
 0.3s 6.00nm 4.4mb
 KSH 53.98 301 P 28 05.50 1.5
 WARB 54.48 195 eP 28 07.00 -0.5
 0.4s 5.00nm 4.2mb

NANU 54.73 208 iPd 28 09.30 0.1
 0.5s 10.00nm 4.4mb
 NDI 55.00 287 iPd 28 11.70 0.5
 0.6s 56.67nm 5.1mb
 BRS 55.49 166 iPd 28 14.90 0.4
 HYB 57.27 274 eP 28 27.00 -0.1
 PMR 57.49 32 eP 28 26.90 -1.0
 0.4s 4.74nm 4.2mb
 ePcP 29 15.20
 FBA 58.28 29 P 28 33.40 0.1
 0.5s 3.10nm 4.0mb X
 FORR 58.70 192 iPd 28 35.10 -1.3
 0.5s 88.00nm 5.4mb
 GBA 59.71 270 P 28 44.00 0.4
 POO 61.04 277 eP 28 53.50 1.1
 BAL 61.53 203 eP 28 55.00 -0.3
 BWA 61.65 172 eP 28 56.50 0.5
 KLB 62.07 202 eP 28 58.00 -0.8
 CAN 62.61 172 eP 29 02.00 -0.2
 QUE 63.22 292 iPd 29 07.00 0.4
 NWA0 63.47 201 eP 29 07.60 -0.2
 0.6s 13.00nm 4.7mb
 INK 63.86 24 iPc 29 09.00 -0.8
 ALE 70.11 3 ePd 29 48.70 0.6
 0.9s 60.00nm 5.2mb

KBS 70.29 351 iP 29 49.70 0.5
 KEV 72.39 340 iP 30 02.00 0.4
 0.6s 44.30nm 5.2mb
 YKBO 73.02 28 iPd 30 04.90 -0.4
 YKA 73.07 28 eP 30 05.70 0.1
 SOD 73.75 338 iP 30 09.30 -0.1
 TRO 74.80 342 iPd 30 15.50 0.3
 GMW 75.08 44 eP 30 18.50 1.3
 SHI 75.17 296 iPc 30 18.00 -0.2
 DAG 75.60 355 iPd 30 19.00 -0.5
 0.7s 12.33nm 4.6mb
 RMW 75.72 44 e(P) 30 22.00 1.2
 LON 76.01 45 e(P) 30 23.20 0.8
 PNT 76.26 42 eP 30 24.00 0.3
 SUF 76.42 334 iPd 30 24.40 0.2
 0.5s 146.70nm 5.8mb
 TAB 76.59 306 eP 30 23.00 -2.9
 DPW 77.74 42 P 30 31.50 -0.3
 SLY 78.21 304 ePc 30 35.00 0.6
 NUR 78.25 333 iP 30 34.30 0.2
 LBFM 78.25 50 eP 30 36.20 1.4
 MIN 78.88 50 eP 30 38.20 0.1
 ORV 79.30 51 eP 30 40.40 0.3
 MSL 79.60 305 ePc 30 42.50 0.7
 BHD 80.03 302 ePc 30 43.00 -1.0
 SES 80.64 38 iPd 30 47.50 0.6
 CMB 80.75 52 ePc 30 48.50 0.7
 PRS 80.82 54 eP 30 49.00 0.9
 UPP 81.43 334 iP 30 48.80 -1.9
 FRI 81.71 53 e(P) 30 53.10 0.5
 KVN 81.87 50 eP 30 54.00 0.3
 pP 32 38.20 468km

LRM 82.19 42 ePc 30 56.50 1.3
 FFC 82.77 31 eP 30 57.50 -0.1
 1.0s 28.00nm 4.8mb
 NB2 82.94 338 P 30 57.40 -1.0
 TNP 82.94 51 eP 31 00.00 0.9
 0.7s 3.56nm 4.1mb
 pP 33 45.00
 NRA0 83.05 337 P 30 56.40 -2.5
 DUG 84.86 47 eP 31 09.70 1.2
 0.5s 2.12nm 4.1mb
 PLM 85.49 55 P 31 10.50 -1.3
 BW06 85.56 44 eP 31 13.00 1.0
 DAU 85.76 46 eP 31 14.50 1.4
 AKU 86.04 351 iP 31 14.10 0.6

MSU 0.8s 11.94nm 4.7mb
 KRA 86.16 48 eP 31 16.40 1.5
 86.71 326 ePd 31 16.90 -0.1
 0.9s 43.00nm 5.2mb

e 31 24.40 24kmX
 FRB 86.74 12 eP 31 17.00 0.1
 SPC 87.11 325 eP 31 19.70 0.5
 RSSD 88.10 40 P 31 24.00 0.0
 BRG 89.03 329 iPd 31 27.50 -0.4
 0.9s 21.00nm 5.0mb
 CLL 89.15 330 iPd 31 27.90 -0.5
 1.1s 40.00nm 5.2mb
 ZST 89.34 326 i(P) 31 29.60 0.2
 PRU 89.37 328 eP 31 29.50 0.0
 GOL 89.90 45 P 31 33.50 1.0
 GLD 89.97 44 P 31 34.00 1.3
 KHC 90.42 328 iPd 31 34.60 0.2
 0.9s 24.00nm 5.1mb
 VAY 90.72 318 eP 31 35.60 -0.3
 SKO 90.99 319 i(P) 31 37.50 0.4
 GRF 91.10 330 ePd 31 38.00 0.5
 0.9s 42.00nm 5.4mb
 ALQ 91.95 49 eP 31 43.00 1.1
 1.0s 8.75nm 4.7mb
 e 32 02.00
 epP 33 34.90 497kmX

KBA 91.96 327 iPd 31 40.80 -0.9
 0.6s 16.10nm 5.2mb
 i 31 50.20 29kmX
 VBY 92.09 325 eP 31 42.20 0.1
 EKA 92.12 340 Pd 31 41.60 -0.5
 0.7s 5.90nm 4.7mb
 TOD 92.24 331 ePd 31 42.59 -0.2
 RBL 92.30 326 P 31 42.10 -1.0
 CEY 92.35 325 eP 31 43.00 -0.4
 VOY 92.42 326 iP 31 42.70 -1.0
 ABH 92.58 331 ePd 31 44.16 -0.2
 ENN 92.58 333 eP 31 44.00 -0.2
 0.8s 12.00nm 5.0mb

FVI 92.58 327 P 31 42.10 -2.2
 TRI 92.71 326 P 31 44.00 -0.9
 RUP 92.92 332 ePd 31 45.76 -0.2
 GWF 93.23 331 P 31 47.06 -0.3
 OGA 93.23 328 eP 31 47.30 -0.3
 0.6s 16.00nm 5.2mb
 WLF 93.33 332 P 31 48.00 0.3
 SNF 93.44 334 Pd 31 47.40 -0.8
 DOU 93.64 333 P 31 49.30 0.2
 SAX 93.74 329 ePc 31 49.90 -0.1
 SLE 93.75 330 ePc 31 49.40 -0.3
 WLS 93.77 331 P 31 49.35 -0.5
 OSS 93.78 328 ePd 31 50.00 -0.1
 CDF 93.80 331 P 31 49.57 -0.5
 FEL 93.88 330 P 31 49.57 -0.9
 ECH 94.00 331 P 31 50.15 -0.8
 LLS 94.18 329 ePc 31 51.70 -0.3
 VDL 94.24 328 ePd 31 52.00 -0.3
 MOF 94.29 330 P 31 51.46 -0.9
 BSF 94.45 331 P 31 51.87 -1.2
 VITF 94.51 331 P 31 52.53 -0.6
 HAU 94.52 331 eP 31 52.50 -0.8
 0.9s 9.80nm 4.9mb

ARV 94.67 324 Pd 31 54.00 0.0
 TMA 94.80 328 ePd 31 54.00 -0.8
 VAI 95.03 328 P 31 54.30 -1.2
 CRE 95.09 325 P 31 56.00 0.0
 ASS 95.12 324 P 31 56.00 -0.1
 DUI 95.14 322 P 31 56.00 -0.2
 MMK 95.27 329 ePd 31 56.70 -0.3
 SGO 95.42 321 Pd 31 57.50 0.1
 TDS 95.43 320 Pd 31 58.00 0.5
 SDI 95.45 323 Pd 31 57.00 -0.6
 DIX 95.50 329 ePd 31 57.70 -0.3
 BOB 95.51 327 P 31 57.50 -0.4
 MGR 95.56 321 Pd 31 57.50 -0.6
 ORX 95.57 328 P 31 56.66 -1.5
 LSD 96.09 329 P 32 00.35 -0.3
 PCP 96.12 327 P 31 59.33 -1.2
 LOR 96.15 332 eP 32 00.00 -0.6
 1.0s 8.80nm 5.0mb
 LPG 96.24 329 eP 32 00.00 -1.4
 0.6s 19.80nm 5.5mb
 LBF 96.32 331 eP 32 01.10 -0.3
 SSF 96.46 332 eP 32 01.50 -0.5
 1.2s 11.90nm 5.0mb
 FIN 96.52 327 P 32 00.66 -1.7
 ROB 96.62 328 P 32 01.07 -1.8

04d 08h

Table with columns for station code, time, and coordinates. Includes stations like SMF, SOI, RRL, LDF, AVF, IMI, GRR, SBF, LPF, LSF, TIC, KIC, LIC, ZOBO, LPB, CNCB, SOB1, PPD.

% AUG 04, 1989 09h 14m 34.70 ± 1.20s 41.966 N ± 9.7km 19.894 E ± 7.8km DEPTH = 5.0km (geophysicist)

ALBANIA (391)

Table with columns for station code, time, and coordinates. Includes stations like PUK, SDA, KKS, BCI, PHP, TIR.

* AUG 04, 1989 09h 22m 57.71 ± 0.78s 43.574 N ± 15.4km 45.413 E ± 11.0km DEPTH = 33.0km (normal) 4.2mb (8 obs.)

EASTERN CAUCASUS (337) Felt (IV) at Groznyy.

Table with columns for station code, time, and coordinates. Includes stations like TAB, MAIO, ISR, MLR, ZST, NUR, VBY, QUE, SUF, BRG, RBL, KBA, CLL, FV1, ARV, ASS, CRE, BDI, HFS, SOD, NB2.

Table with columns for station code, time, and coordinates. Includes stations like EKA, CHTO, LIC, FBA, YKA.

AUG 04, 1989 09h 45m 18.88 ± 1.54s 45.722 N ± 15.7km 15.847 E ± 11.4km DEPTH = 10.0km (geophysicist) YUGOSLAVIA (383) MD 3.4 (LJU), 2.5 (TRI), ML 2.1 (ZAG). Felt (IV) at Samobar and (III) at Zagreb.

Table with columns for station code, time, and coordinates. Includes stations like ZAG, PTJ, VBY, LJU, CEY, RIY, VOY, TRI, RBL, FVI.

? AUG 04, 1989 09h 52m 58.43 ± 1.18s 31.397 S ± 11.1km 69.333 W ± 11.5km DEPTH = 33.0km (normal) SAN JUAN PROVINCE, ARGENTINA (137)

Table with columns for station code, time, and coordinates. Includes stations like RTBS, RTCB, RTLL, RTCV, CFA, RTRS.

? AUG 04, 1989 10h 23m 14.52 ± 1.36s 22.605 S ± 63.7km 179.548 W ± 30.7km DEPTH = 600.0km (geophysicist) 4.9mb (7 obs.) SOUTH OF FIJI ISLANDS (171)

Table with columns for station code, time, and coordinates. Includes stations like BRS, RMO, CTA, ASPA, WB5, FORR, WARB, KNA, MBL, NANU, PLM, KVN, TNP, CHTO.

AUG 04, 1989 11h 39m 10.82 ± 0.57s 42.125 N ± 7.1km 26.431 E ± 4.9km DEPTH = 10.0km (geophysicist) BULGARIA (359)

Table with columns for station code, time, and coordinates. Includes stations like JMB, DIM, KDZ, DMK, PLD, RZN, PVL, PGB, CTT, MMB, ISK, EZN, KKB, HRT, VAY, MLR.

AUG 04, 1989 12h 04m 28.64 ± 0.89s 30.028 N ± 5.0km 36.079 E ± 16.3km DEPTH = 10.0km (geophysicist) DEAD SEA REGION (373)

Table with columns for station code, time, and coordinates. Includes stations like AYN, HOL, QUTJ, SRFA, MKRJ, MASJ, SALJ, JARJ, BURJ, BHL.

AUG 04, 1989 12h 14m 24.34 ± 0.78s 29.576 S ± 7.1km 68.741 W ± 10.7km DEPTH = 59.5 ± 18.4 km 4.7mb (1 obs.) SAN JUAN PROVINCE, ARGENTINA (137)

Table with columns for station code, time, and coordinates. Includes stations like RTLL, RTCB, CFA, RTBS, RTCV, CYA, MRA, FCH, SAN, PCH, TACH, CHCH, LNV, SLA, ANT, ZOBO, PPD, SPA.

DEPTH = 3.2km
UTAH (478)
<SLC-P>. CL 3.0 (SLC).

BW06 3.21 16 eP 21 48.00 0.4
GOL 4.15 88 eP 22 01.50 0.5
ALO 5.85 143 e(P) 22 40.00 14.9
3 obs. associated

AUG 04, 1989 13h 21m 54.91±0.55s
39.442 N ± 5.4km 23.536 E ± 4.7km
DEPTH = 5.0km (geophysicist)
AEGEAN SEA (365)
ML 3.2 (ATH).

NEO 0.28 241 ePg 21 58.50 -2.0
eSg 22 03.00
PLG 0.93 356 ePb 22 14.00 0.8
LIT 1.04 310 ePbc 22 14.70 -0.3
THE 1.27 340 ePn 22 29.30 10.4X
eSn 22 38.50
ATH 1.47 174 ePb 22 16.00 -6.1X
eSb 22 31.00
KZN 1.61 303 ePb 22 24.00 -0.1
SRS 1.67 1 ePnc 22 24.60 -0.4
eSn 22 48.30
KNT 1.79 344 ePn 22 26.20 -0.4
VAY 2.02 339 ePn 22 30.30 0.4
PRK 2.13 94 ePb 22 31.20 -0.4
MMB 2.15 4 ePc 22 31.00 -0.9
eS 23 12.00
EZV 2.19 79 ePn 22 32.00 -0.4
RDO 2.29 41 ePn 22 35.40 1.5
LSK 2.37 288 ePn 22 36.60 1.4
RZN 2.42 21 iP 22 30.00 -5.9X
KKB 2.45 352 iPc 22 36.00 -0.2
VLS 2.63 242 ePb 22 39.00 0.3
SRN 2.76 280 ePn 22 41.60 0.9
APE 2.84 146 ePg 22 42.50 0.7
TPE 2.84 289 ePn 22 43.50 1.7
SKO 2.99 328 e(Pn) 22 56.00 12.2X
PGB 3.14 9 eP 22 45.00 -1.0
PHP 3.25 315 ePn 22 46.20 -1.4
TIR 3.39 305 ePn 23 02.00 12.5X
PVL 4.01 19 eP 22 54.00 -4.2X
S.D. = 1.1 on 19 of 25 obs.

AUG 04, 1989 14h 19m 54.62±0.70s
60.659 N ± 5.0km 6.330 E ± 8.7km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 2.0 (BER).

HYA 0.51 352 iP 20 05.40 0.4
eS 20 13.20
ASK 0.59 253 iP 20 05.90 -0.6
eS 20 13.40
ODD1 0.76 169 iP 20 09.20 -0.4
eS 20 18.20
SUE 0.87 298 eP 20 11.20 0.0
iS 20 23.10
BLS1 1.30 169 eP 20 18.50 -0.2
iS 20 35.50
KMY 1.55 201 iP 20 23.40 1.1
iS 20 42.50
MOL 2.00 16 iP 20 28.50 -0.3
eS 20 55.10
S.D. = 0.7 on 7 of 7 obs.

AUG 04, 1989 14h 34m 48.84±4.57s
39.355 N ± 11.1km 142.809 E ± 40.8km
DEPTH = 33.0km (normal)
NEAR EAST COAST OF HONSHU, JAPAN(228)
MG 3.4 (JMA). Felt (1 JMA) at
Miyako ond Ofunoto.

MIY 0.71 294 P 35 03.60 1.2
S 35 10.10
OFU 0.90 251 eP 35 05.00 0.0
OFUJ 0.93 253 iP+ 35 05.30 -0.2
S 35 13.60
AOMJ 2.23 304 eP 35 23.20 -0.9
YAMJ 2.47 242 P 35 27.10 -0.5
eS 35 52.60
KAKJ 3.77 214 eP 35 46.00 -0.1
eS 36 26.50
CHJJ 4.48 224 P 35 56.50 0.3

MAT 4.59 234 (P) 35 58.00 0.2
S.D. = 0.7 on 8 of 8 obs.

AUG 04, 1989 15h 32m 34.98±1.79s
23.053 N ± 14.0km 121.901 E ± 14.6km
DEPTH = 10.0km (geophysicist)
4.4mb (2 obs.)

TAIWAN (244)

TWF1 0.63 298 ePc 32 47.10 -0.5
eS 32 56.90
TWG 0.80 253 ePc 32 50.90 0.4
TWD 1.06 345 ePc 32 53.50 -1.4
TWK 1.32 280 ePc 32 59.80 0.4
eS 33 19.50
TWC 1.55 358 iPc 33 01.80 -0.8
TWZ 2.06 352 eP 33 09.70 -0.3
ANP 2.15 351 eP 33 08.00 -3.4X
QZH 3.56 303 Pnc 33 30.00 -1.4
HKC 7.18 266 iP 34 22.00 -0.5
MCO 7.76 265 eP 34 30.10 -0.7
SSE 8.04 356 eP 34 36.00 1.5
NJ2 9.36 344 Pc 34 56.00 3.1X
OIZ 11.95 253 eP 35 35.30 6.9X
E 12s 0.50um
GYA 14.25 287 eP 36 02.40 3.3X
N 10s 0.69um
E 10s 1.11um
XAN 15.79 317 eP 36 23.90 4.8X
N 10s 1.10um
E 10s 0.90um
TIY 16.72 333 eP 36 31.00 0.1
Z 16s 1.43um
N 10s 1.00um
BJI 17.62 345 eP 36 44.00 2.0
Z 14s 0.59um
CD2 17.95 300 eP 36 55.00 8.6X
Z 12s 1.10um
SNY 18.77 4 Pc 37 03.20 6.9X
N 16s 0.60um
E 16s 0.80um
HHC 19.77 336 eP 37 10.60 2.4
BTO 20.16 333 eP 37 17.50 5.1X
N 12s 1.30um
E 12s 0.60um
LZH 20.34 314 eP 37 19.50 5.2X
1.5s 44.00nm 4.6mb
CN2 20.90 7 Pd 37 17.80 -2.1
Z 14s 0.90um 4.3MszX
pP 37 25.40 28kmX
CHG 21.85 263 eP 37 35.30 5.6X
CHTO 21.85 263 eP 37 30.00 0.4
GTA 24.85 316 eP 38 01.50 2.4
Z 14s 0.60um 4.2MszX
E 10s 0.50um
SHL 27.44 281 eP 38 31.50 8.2X
MAIO 54.96 299 iPd 42 16.00 7.2X
SOD 70.96 336 eP 43 49.00 -5.2X
SUF 72.36 331 eP 44 01.00 -1.7
SLL 78.88 331 eP 44 39.70 0.0
0.5s 1.10nm 4.1mb
PRU 83.11 322 eP 45 09.20 6.9X
CLL 83.35 323 e(P) 45 10.00 6.6X
KHC 84.07 321 eP 45 14.70 7.5X
S.D. = 1.4 on 18 of 34 obs.

AUG 04, 1989 16h 11m 54.13±0.75s
35.591 N ± 6.0km 22.674 E ± 4.0km
DEPTH = 44.4 ± 9.4 km
4.3mb (12 obs.) 4.3Msz (1 obs.)
MEDITERRANEAN SEA (400)
MD 4.3 (ATH).

VAM 1.26 98 ePb 12 15.20 -0.4
eSb 12 33.00
ITM 1.70 339 ePg 12 29.10 7.3X
NPS 2.42 97 ePg 12 37.00 4.9X
ATH 2.52 19 ePn 12 37.00 3.5X
eSn 12 13.00
APE 2.74 57 ePn 12 36.00 -0.7
VLS 3.07 328 ePn 12 42.50 1.1
KAP 3.67 89 ePn 12 50.00 0.2
NEO 3.73 7 ePn 12 52.40 1.7
PAIG 4.40 10 ePn 13 00.70 0.5
LIT 4.50 358 ePn 13 02.70 1.1
eSn 13 58.50

I2M 4.62 51 eP 13 05.00 1.7
PRK 4.64 37 ePn 13 04.00 0.5
KEK 4.70 332 ePn 13 05.60 1.2
KZN 4.76 352 ePn 13 06.00 0.7
SRN 4.78 334 ePn 13 06.60 1.2
YER 4.78 70 eP 13 05.50 -0.1
PLG 4.81 7 ePn 13 10.50 4.5X
LSK 4.84 341 ePn 13 07.10 0.7
OUR 4.85 12 ePn 13 09.60 3.2X
EZN 5.12 33 eP 13 15.00 4.7X
TPE 5.15 337 iPnd 13 11.00 0.4
GRG 5.36 358 ePn 13 13.80 0.1
KNT 5.57 2 ePn 13 16.90 0.3
SRS 5.56 7 ePn 13 16.20 -0.4
KSL 5.64 83 ePn 13 14.30 -3.3X
VAY 5.72 359 ePn 13 18.70 -0.1
SOI 5.86 297 P 13 19.90 -0.8
ELL 5.97 77 iP 13 20.10 -2.2
RDO 5.99 21 ePn 13 22.10 -0.3
LCI 6.03 323 P 13 21.50 -1.5
MMB 6.05 8 iPd 13 23.00 -0.4
KHL 6.12 62 iP 13 24.50 0.0
TIR 6.15 340 ePn 13 25.50 0.7
KKB 6.27 3 eP 13 25.00 -1.5
ATN 6.32 296 P 13 26.60 -0.6
PHP 6.33 345 iPnd 13 26.70 -0.6
KDZ 6.42 19 iP 13 29.00 0.4
SKO 6.44 352 ePn 13 28.50 -0.4
i 13 42.00
i 13 50.00
i 14 38.50
TDS 6.46 311 Pd 13 29.00 -0.2
PLD 6.69 13 eP 13 38.00 5.6X
KKS 6.71 345 ePn 13 32.50 -0.1
PUK 6.80 342 ePn 13 31.10 -2.7
MNO 6.82 292 P 13 34.60 0.3
SDA 6.88 340 ePn 13 36.00 1.1
PGB 7.05 9 eP 13 39.00 1.6
BCI 7.06 344 iPnd 13 38.00 0.5
MGR 7.23 311 Pd 13 38.00 -1.1
SGO 7.64 313 P 13 45.90 0.4
PVL 7.89 14 eP 13 44.00 -5.0X
DUI 8.83 316 P 14 01.50 -0.7
BBTK 9.05 59 eP 13 32.00 -33.2X
e 14 04.00
MLR 10.20 13 iPc 14 24.50 3.5X
VRI 10.72 15 eP 14 32.00 4.1X
DOR 10.82 109 eP 14 22.00 -7.4X
ARV 10.89 319 P 14 30.00 -0.3
VBY 11.39 333 ePn 14 34.50 -2.5
eSn 16 39.20
PRNI 11.59 113 eP 14 32.00 -7.9X
MBH 11.80 116 eP 14 36.00 -6.6X
VOY 12.36 330 e(P) 14 48.80 -1.3
eS 16 59.20
KHC 15.09 336 iP 15 31.60 5.7X
PRU 15.56 340 eP 15 36.00 4.1X
e 15 44.50
eSg 39 28.00
LPG 15.61 314 eP 15 52.70 19.8X
1.0s 6.00nm
GRF 16.39 333 eP 15 46.20 3.7X
0.9s 16.00nm 4.1mb
CLL 17.18 339 i(P) 16 04.00 11.6X
eSg 40 04.00
LBF 18.03 315 eP 16 03.80 0.8
SSF 18.35 315 eP 16 07.30 0.5
1.0s 6.80nm 3.8mb
DOU 19.57 323 iP 16 21.60 0.6
0.6s 13.60nm 4.4mb
MFF 20.34 310 eP 16 33.30 4.1X
0.7s 5.20nm 4.0mb
LDF 21.23 315 eP 16 38.20 0.0
1.2s 32.10nm 4.6mb
LPF 21.51 313 eP 16 40.90 -0.1
1.1s 39.00nm 4.7mb
FLN 21.52 315 eP 16 41.40 0.2
1.0s 28.00nm 4.6mb
GRR 21.56 314 eP 16 41.70 0.1
1.2s 11.90nm 4.2mb
HFS 25.24 349 eP 17 15.70 -1.5
0.4s 2.80nm 4.2mb
Z 20s 0.86um 4.3Msz
LR 21 46.00
EKA 26.53 326 Pc 17 31.50 2.2
0.6s 5.40nm 4.3mb
SUF 27.24 4 iP 17 33.90 -1.7

PGB 1.40 57 eSb 40 03.50
 39 56.00 -0.1
 Sg 40 12.00
 RZN 1.60 93 iP 39 59.00 0.0
 Sg 40 22.00
 KDZ 2.12 93 iP 40 08.00 1.5
 PVL 2.48 54 eP 40 12.00 0.5
 S.D. = 0.8 on 11 of 11 obs.

% AUG 04, 1989 20h 47m 50.35±0.87s
 39.328 N ± 9.8km 28.986 E ± 9.7km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

DST 0.39 315 iPg 47 57.50 -0.9
 iSg 48 04.50
 ALT 0.92 107 iPg 48 08.40 0.5
 eSg 48 19.20
 KHL 1.09 157 iPg 48 10.00 -0.8
 iSg 48 24.50
 EDC 1.34 320 ePn 48 15.50 0.5
 IZM 1.63 236 ePn 48 20.00 0.7
 S.D. = 1.1 on 5 of 5 obs.

AUG 04, 1989 21h 03m 21.07±0.58s
 27.838 S ± 6.5km 66.793 W ± 12.0km
 DEPTH = 180.1 ± 10.0 km
 4.3mb (1 obs.)
 CATAMARCA PROVINCE, ARGENTINA (130)

CYA 1.07 125 iPc 03 49.70 0.1
 RTRS 3.29 225 iPc 04 15.00 1.2
 S 04 57.00
 SLA 3.31 21 ePc 04 14.50 0.3
 RTLL 3.77 202 iPc 04 20.00 0.1
 S 05 04.50
 CFA 3.96 198 iPc 04 22.20 -0.1
 S 05 08.10
 RTCB 4.03 205 iPc 04 23.50 0.2
 S 05 10.00
 RTCV 4.29 200 iP 04 26.80 0.3
 S 05 11.00
 RTBS 4.46 211 e(P) 04 29.00 0.4
 MRA 4.65 169 ePc 04 31.00 -0.2
 FCH 6.25 208 eP 04 53.30 0.9
 PEL 6.26 211 ePc 04 51.20 -1.2
 iS 06 03.90
 ROCH 6.28 214 iPd 04 51.50 -1.3
 PCH 6.59 208 iPd 04 57.10 0.4
 RFA 7.06 191 ePd 05 01.60 -1.3
 ZOBO 11.58 354 P 06 02.00 -0.6
 SPA 62.32 180 e(P) 13 27.10 0.9
 0.8s 3.75nm 4.3mb
 S.D. = 0.8 on 16 of 16 obs.

& AUG 04, 1989 22h 45m 06.90s
 12.445 N 87.172 W
 DEPTH = 50.5km
 NEAR COAST OF NICARAGUA (74)
 <HDC>. MD 4.4 (HDC).

RIN3 2.41 133 eP 45 45.50 0.8
 S 46 15.40
 JUD 2.77 145 iP+ 45 50.30 0.3
 S 46 24.90
 JTS 3.05 134 eP 45 54.50 0.6
 S 46 30.70
 CAO 3.40 143 iPd 45 58.60 -0.2
 S 46 39.20
 CDM 4.41 130 eP 46 12.60 -0.8
 5 obs. associated

AUG 04, 1989 23h 05m 45.30±1.08s
 28.788 S ± 7.7km 67.153 W ± 10.6km
 DEPTH = 153.8 ± 22.2 km
 LA RIOJA PROVINCE, ARGENTINA (138)

CYA 1.24 74 iPd 06 12.70 -0.2
 RTRS 2.44 235 iPc 06 26.50 0.3
 S 06 57.00
 RTLL 2.78 204 iPc 06 30.50 -0.1
 S 07 05.00
 CFA 2.96 198 iPc 06 33.00 0.1
 RTCB 3.04 208 iPc 06 34.00 0.0
 S 07 10.00
 ZON 3.05 205 iPc 06 33.50 -0.5
 eS 07 10.00

RTCV 3.29 201 iPd 06 37.00 -0.1
 S 07 16.00
 RTBS 3.49 214 iPd 06 40.00 0.4
 MRA 3.82 161 ePc 06 44.60 0.7
 SLA 4.31 21 ePd 06 50.60 0.1
 RFA 6.07 190 ePc 07 13.30 -0.6
 S.D. = 0.5 on 11 of 11 obs.

& AUG 05, 1989 00h 32m 57.80s
 37.965 N 122.357 W
 DEPTH = 3.0km
 CENTRAL CALIFORNIA (39)
 <BRK>. ML 2.2 (BRK).
 Mo=1.2*10**13 Nm (BRK).

ZSP 0.08 104 iPc 32 59.60 0.0
 BRK 0.12 140 iPd 33 00.10 -0.1
 e(S) 33 02.50
 BKS 0.13 132 iPd 33 00.37 -0.1
 iS 33 02.90
 PCC 0.46 182 iPd 33 06.80 -0.3
 MHC 0.84 137 iPc 33 14.32 -0.3
 eS 33 26.90
 ARN 0.90 133 eP 33 14.50 -1.2
 GCC 0.98 163 eP 33 15.40 -1.6
 SAO 1.40 148 iPc 33 21.25 -3.0
 CMB 1.56 87 e(P) 33 25.10 -1.4
 eS 33 45.30
 ORV 1.72 23 e(P) 33 23.40 -5.4
 eS 33 47.30
 KVN 3.51 71 eP 34 00.00 5.4
 11 obs. associated

& AUG 05, 1989 00h 36m 47.04s
 59.144 N 153.552 W
 DEPTH = 119.8km
 4.3mb (8 obs.)
 SOUTHERN ALASKA (2)
 <AGS-P>. Felt (11) at Homer.

CDD 0.22 192 iP 37 02.99 0.6
 AUH 0.23 14 iP 37 03.31 0.8
 MCNL 0.41 276 iP 37 03.91 -0.8
 OPT 0.54 18 iP 37 04.87 -0.6
 ILIM 0.99 18 iP 37 08.40 -0.9
 XLV 0.99 71 iP 37 08.43 -0.8
 eS 37 23.92
 CNPM 1.25 71 iP 37 11.21 -0.8
 eS 37 28.61
 NNL 1.46 51 iP 37 14.36 0.0
 eS 37 33.07
 BRLL 1.50 64 eP 37 13.86 -1.0
 eS 37 33.50
 KDC 1.51 158 iPc 37 13.50 -1.4
 RDT 1.55 21 iP 37 14.70 -0.8
 eS 37 34.84
 NKA 1.98 35 iP 37 21.77 1.1
 SLKM 2.17 49 eP 37 21.52 -1.6
 SPU 2.18 19 iP 37 22.68 -0.6
 eS 37 49.89
 SVV 2.23 333 iPd 37 23.60 -0.3
 SEW 2.30 63 eP 37 23.47 -1.2
 eS 37 50.32
 SUA 2.72 30 iP 37 29.82 -0.5
 eS 38 03.39
 PMS 2.90 42 iPd 37 32.00 -0.7
 SKT 3.02 18 iP 37 33.42 -0.8
 PWA 3.11 34 iPd 37 34.50 -0.9
 MTU 3.12 72 eP 37 34.81 -0.8
 eS 38 08.53
 KNIM 3.18 65 iP 37 34.79 -1.6
 eS 38 10.49
 PLRM 3.29 40 eP 37 36.29 -1.6
 eS 38 10.71
 PMR 3.29 40 iPd 37 36.40 -1.5
 PME 3.35 40 iP 37 37.29 -1.4
 eS 38 14.30
 KNK 3.41 46 iP 37 38.02 -1.5
 eS 38 15.91
 GHO 3.49 39 iP 37 39.14 -1.5
 eS 38 18.76
 CUT 3.65 25 eP 37 41.28 -1.3
 eS 38 24.12
 GLI 3.68 59 eP 37 40.84 -2.3
 MID 3.71 83 iPc 37 42.10 -1.4
 HIN 3.78 68 iP 37 43.26 -1.2
 eS 38 19.42

FID 3.91 63 eP 37 43.76 -2.4
 TTA 3.98 344 iPc 37 46.00 -1.3
 CVA 4.18 67 eP 37 48.26 -1.6
 eS 38 31.41
 HUR 4.29 25 eP 37 50.79 -0.6
 eS 38 40.90
 SGAM 4.43 69 eP 37 51.64 -1.6
 eS 38 37.68
 KTH 4.60 15 eP 37 53.68 -2.0
 RAGM 4.66 71 iP 37 55.06 -1.4
 eS 38 41.33
 TOA 4.69 48 iPd 37 55.90 -1.0
 KAIM 4.72 77 eP 37 56.21 -1.0
 eS 38 42.08
 SDN 5.36 228 eP 38 05.50 -0.4
 PAX 5.49 42 eP 38 06.25 -1.5
 eS 39 06.67
 FBA 6.38 23 eP 38 17.80 -2.1
 IMA 6.95 360 e(P) 38 27.80 0.0
 YKU 7.08 81 eP 38 28.70 -0.7
 HYT 8.22 71 P 38 43.90 -1.1
 SIT 9.87 94 eP 39 03.90 -3.1
 INK 12.70 35 eP 39 43.00 -1.1
 ADK 14.93 251 e(P) 40 15.90 3.1
 0.9s 62.50nm 4.9mb
 MBC 20.92 22 eP 41 23.00 2.0
 0.5s 8.00nm 4.3mb
 PNT 21.90 102 eP 41 35.00 4.0
 0.6s 8.00nm 4.3mb
 EDM 22.87 87 iP 41 42.00 1.7
 KVN 30.16 116 eP 42 49.40 1.8
 TNP 31.35 116 eP 42 59.80 1.7
 BW06 31.47 102 eP 43 00.50 1.3
 RSSD 33.33 95 eP 43 16.60 1.3
 MSU 33.40 110 eP 43 18.50 2.5
 FRB 38.05 46 eP 43 55.00 0.4
 SUF 58.46 0 eP 46 32.00 0.1
 HFS 60.64 7 eP 46 45.30 -1.5
 0.4s 1.00nm 4.2mb
 EKA 63.44 18 P 47 05.00 -0.5
 1.7s 20.40nm 4.8mb
 LOR 72.34 16 eP 48 01.00 0.1
 MFF 72.37 19 eP 48 01.40 0.3
 SSF 72.49 16 eP 48 02.00 0.2
 1.2s 5.90nm 4.3mb
 AVF 72.73 16 eP 48 03.20 0.0
 1.1s 7.30nm 4.4mb
 BGF 72.89 17 eP 48 04.00 -0.1
 1.0s 6.80nm 4.4mb
 LFF 74.13 19 eP 48 11.70 0.4
 LPO 74.46 18 eP 48 13.40 0.2
 SLR 146.59 357 iPkPd 56 16.00 2.2
 BFS 147.77 359 iPkPd 56 16.00 0.3
 SPA 148.97 180 e(PK)56 20.30 3.9
 0.7s 3.91nm
 HVD 151.46 2 e(PK)56 20.00 -1.3
 72 obs. associated

AUG 05, 1989 01h 14m 59.91±0.51s
 44.450 N ± 6.3km 7.256 E ± 5.9km
 DEPTH = 10.0km (geophysicist)
 NORTHERN ITALY (545)
 ML 2.3 (GEN).

DOI 0.05 352 Pc 15 03.00 0.8
 iSg 15 04.50
 PZZ 0.12 296 P 15 03.36 0.3
 S 15 05.30
 STV 0.21 167 P 15 05.00 0.4
 S 15 07.87
 ENR 0.25 152 P 15 05.51 0.2
 S 15 09.00
 FOUF 0.35 283 iPgc 15 07.02 -0.1
 eSg 15 11.31
 ROB 0.47 109 P 15 09.71 0.3
 S 15 15.76
 RRL 0.58 325 P 15 10.94 -0.8
 S 15 19.05
 IMI 0.71 140 P 15 13.20 -0.7
 S 15 22.94
 FIN 0.72 109 P 15 13.82 -0.4
 S 15 23.76
 S.D. = 0.6 on 9 of 9 obs.

* AUG 05, 1989 02h 09m 13.22±0.98s
 37.807 N ± 9.3km 26.389 E ± 11.0km
 DEPTH = 10.0km (geophysicist)

05d 02h

DODECANESE ISLANDS (369)
MD 3.1 (ATH)
IZM 0.91 49 iPg 09 29.10 -1.5
APE 1.00 223 eP 09 31.70 -0.6
PRK 1.44 356 eP 09 40.00 0.7
YER 1.65 113 ePn 09 43.40 1.0
EZN 2.02 359 ePn 09 48.00 0.4
DST 2.51 44 ePn 09 59.00 4.3X
S.D. = 1.5 on 5 of 6 obs.

? AUG 05, 1989 02h 24m 11.06± 2.18s
46.114 N ±20.6km 2.217 E ± 7.2km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 1.8 (LDG)
TCF 0.17 358 Pg 24 15.20 0.2
MAF 0.27 66 Pg 24 16.90 0.2
LSF 0.50 286 Pg 24 21.10 0.0
BGF 0.62 44 Pg 24 23.20 -0.4
S.D. = 0.5 on 4 of 4 obs.

% AUG 05, 1989 02h 47m 02.35± 0.96s
31.510 S ±14.4km 69.256 W ±15.2km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)
RTBS 0.23 228 iPd 47 17.00 0.0
RTCB 0.39 87 iPd 47 18.00 0.3
RTLL 0.70 75 iPc 47 20.00 0.0
RTCV 0.71 120 iPd 47 20.00 -0.1
CFA 0.87 97 iPc 47 21.70 -0.1
RTRS 1.35 352 iPd 47 27.00 -0.1
S.D. = 0.2 on 6 of 6 obs.

% AUG 05, 1989 03h 50m 55.93± 2.07s
38.802 N ±13.6km 14.183 E ±15.2km
DEPTH = 10.0km (geophysicist)
SICILY (398)
MNO 0.96 155 P 51 13.70 -0.6
ATN 1.19 122 P 51 19.40 1.3
MCT 1.25 201 P 51 19.40 0.2
SOI 1.64 116 P 51 23.70 -1.2
MEU 1.80 161 P 51 27.50 0.2
TDS 1.88 62 P 51 28.50 0.1
S.D. = 1.1 on 6 of 6 obs.

? AUG 05, 1989 04h 48m 52.71± 0.90s
35.042 S ±22.2km 16.148 W ±13.7km
DEPTH = 10.0km (geophysicist)
4.6mb (4 obs.) 4.7Msz (2 obs.)
SOUTH ATLANTIC RIDGE (410)
SOB1 34.25 313 eP 55 47.90 6.9X
BAO 34.45 296 e(P) 55 41.00 -1.8
SLR 39.16 89 eP 56 23.00 0.4
BUL 42.01 81 eP 56 44.30 -1.7
KIC 42.56 17 P 56 52.90 2.5
KMZ 43.48 71 eP 57 09.00 10.9X
LSZ 44.27 75 iP 57 04.60 0.1
MZZ 47.24 71 eP 57 19.00 -9.1X
PTZ 47.36 76 iPd 57 28.30 -0.7
CCH 47.67 278 P 57 26.70 -5.0X
LPB 49.70 278 eP 57 52.00 4.4X
Z 19s 0.69um 4.7Msz
LR 13 10.00
ZOBO 49.86 278 eP 57 49.00 0.0
Z 20s 0.70um 4.7Msz
LR 13 16.00
IKZ 50.77 73 eP 57 54.00 -1.4
BNG 51.04 47 iPd 57 58.20 0.9

1.0s 20.00nm 5.0mb
SPA 55.14 180 e(P) 58 32.30 1.6
SKO 84.03 27 eP 01 27.50 3.1X
EKA 90.70 7 P 02 02.00 5.7X
0.9s 4.20nm 4.7mb
S.D. = 1.6 on 10 of 17 obs.

* AUG 05, 1989 05h 22m 26.51± 1.18s
32.045 S ±10.0km 64.824 W ±10.3km
DEPTH = 33.0km (normal)
CORDOBA PROVINCE, ARGENTINA (141)
MRA 0.83 244 ePc 22 40.50 -1.3
CFA 2.94 278 ePd 23 11.30 -0.7
RTCV 3.16 272 iPd 23 15.80 0.7
RTLL 3.19 282 iPd 23 15.80 0.3
ZON 3.32 278 eP 23 18.00 0.6
RTCB 3.43 278 iPd 23 19.50 0.4
CYA 3.69 347 ePd 23 23.30 0.7
RTBS 3.96 274 e(P) 23 28.00 1.6
RFA 4.08 227 eP 23 28.10 -0.2
RTRS 4.39 294 iPc 23 33.50 0.9
FCH 4.78 253 eP 23 46.50 8.1X
PEL 5.07 256 eP 23 43.00 0.8
CHCH 5.25 247 eP 23 48.00 3.2X
TACH 5.39 251 iP 23 45.10 -1.6
SLA 7.31 355 ePc 24 15.00 1.1
CCH 14.65 355 P 25 52.70 -0.8
PPD 15.62 54 eP 26 07.30 1.5
LPB 15.73 348 eP 26 06.00 -1.7
ZOBO 15.99 348 eP 26 09.00 -2.2
VAO 18.20 65 e(P) 26 51.00 12.6X
BAO 22.40 47 e(P) 27 16.00 -7.7X
S.D. = 1.3 on 17 of 21 obs.

* AUG 05, 1989 05h 32m 49.50± 3.12s
23.114 N ±17.8km 121.904 E ±21.5km
DEPTH = 10.0km (geophysicist)
TAIWAN (244)
TWF1 0.61 293 iPd 33 01.60 -0.1
TWG 0.82 249 ePc 33 05.20 -0.2
TWD 1.00 344 ePc 33 08.30 -0.2
TWK 1.31 277 ePc 33 14.10 0.3
TWC 1.49 358 ePd 33 16.40 0.1
ANP 2.09 350 eP 33 36.00 10.9X
S.D. = 0.3 on 5 of 6 obs.

AUG 05, 1989 05h 41m 52.60± 0.73s
30.269 N ± 4.6km 138.457 E ± 3.9km
DEPTH = 435.9 ± 7.7 km
4.7mb (24 obs.)
SOUTH OF HONSHU, JAPAN (211)
MAT 6.26 358 iPc 43 29.10 -0.9
SHK 6.48 313 iP 43 34.00 1.7
SSE 14.89 278 eP 45 02.50 -1.8
MDJ 15.94 336 eP 45 14.70 -0.4
SNY 16.64 318 iPd 45 22.70 0.6
NJ2 16.88 281 iPc 45 24.40 -0.1
CN2 17.01 326 eP 45 25.50 0.7
GUMO 17.62 159 eP 45 19.60 -12.5X
QZH 18.38 258 eP 45 39.50 0.1
TIA 18.79 294 Pd 45 43.10 -0.3
BJI 20.62 304 P 46 05.00 4.0X
WHN 20.79 277 iPd 46 03.50 0.8
TIY 22.77 296 iPd 46 20.50 -0.7
XAN 25.25 286 iPd 46 43.10 -0.5
BTO 25.26 302 P 46 43.80 0.0
GYA 28.18 270 iPd 47 09.00 -0.8
OIZ 28.23 253 P 47 11.50 1.4
CD2 29.81 280 iPd 47 25.60 -0.2

KMI 31.95 270 Pd 47 43.00 0.4
GTA 32.80 297 iPd 47 49.30 -0.1
LOE 35.79 258 eP 48 15.00 0.4
CHG 37.53 262 iPd 48 29.90 0.9
CHTO 37.53 262 iPd 48 29.70 0.7
NST 37.96 256 eP 48 34.00 1.5
NNT 39.86 252 iPd 48 48.80 0.7
WMO 42.09 303 iPc 49 06.00 0.1
SNG 42.25 245 eP 49 08.70 1.3
PSI 46.37 241 ePd 49 39.50 -0.2
WB5 50.01 185 eP 50 06.70 -0.5
TTA 52.42 32 P 50 23.70 -0.8
NDI 52.76 285 iPd 50 27.00 -0.3
ASPA 53.80 185 iPd 50 33.80 -1.0
KDC 53.90 38 P 50 33.90 -1.2
MBL 54.18 202 eP 50 36.70 -0.8
PMR 55.56 34 P 50 45.20 -1.6
HYB 55.71 271 eP 50 48.00 -0.5
FBA 56.16 30 P 50 50.30 -0.6
WARB 57.26 193 iPd 50 59.00 0.0
GBA 58.35 268 Pc 51 06.20 -0.4
KOD 59.90 264 eP 51 16.80 -0.7
QUE 60.76 290 iPd 51 22.00 -0.8
INK 61.53 25 ePc 51 25.90 -1.2
FORR 61.57 190 eP 51 27.10 -0.6
COOL 63.00 197 eP 51 36.00 -1.1
MBC 63.69 15 ePc 51 40.50 -0.5
NWA0 65.99 199 iPc 51 55.60 -0.4
ALE 66.99 3 eP 52 02.00 0.4
KEV 68.90 340 eP 52 13.00 -0.4
SOD 70.25 338 iP 52 21.30 -0.2
YKA 70.90 28 eP 52 25.40 0.0
SUF 72.92 334 iP 52 36.60 -0.5
GMW 73.76 44 P 52 42.00 -0.3
BMW 73.98 45 P 52 44.20 0.6
RMW 74.39 44 P 52 46.70 0.8
LON 74.72 45 P 52 47.80 0.1
NUR 74.75 332 eP 52 47.00 -0.5
PNT 74.80 42 ePc 52 48.00 -0.1
EDM 76.21 36 eP 52 55.00 -0.8
DPW 76.33 42 P 52 57.20 0.6
WDC 77.18 50 eP 53 01.50 0.2
LBFM 77.24 50 P 53 02.50 0.6
MIN 77.92 50 eP 53 05.00 -0.5
ORV 78.38 51 eP 53 07.70 -0.1
BRK 78.69 53 eP 53 09.80 0.3
HFS 79.20 335 eP 53 11.00 -0.7
GCC 79.29 53 eP 53 12.80 0.2
MHC 79.38 53 eP 53 13.40 0.1
ARN 79.45 53 P 53 14.00 0.4
CMB 79.89 52 eP 53 16.30 0.4
PRS 80.07 54 eP 53 17.40 0.6
LLA 80.22 53 eP 53 17.90 0.3
PRI 80.66 54 eP 53 20.70 0.7
FFC 80.74 31 iPc 53 19.80 0.0
LRM 80.76 42 eP 53 21.00 0.5
FRI 80.89 53 eP 53 21.10 0.1
KVN 80.91 50 P 53 21.80 0.5
TNP 82.00 51 P 53 27.80 0.8
VRI 82.24 319 ePc 53 29.00 1.2
FRB 83.89 12 eP 53 35.00 -0.7
BW06 84.21 43 P 53 38.40 0.4
PEC 84.28 54 P 53 38.40 0.1
DAU 84.56 46 P 53 40.70 0.8
PLM 84.78 54 P 53 41.00 0.0
GLA 86.37 54 P 53 49.40 0.9
RSSD 86.55 40 P 53 49.30 0.0

GOL 88.59 44 P 53 59.70 0.6
 1.2s 14.34nm 4.7mb
 ALQ 90.88 48 iPd 54 10.50 0.8
 1.0s 9.50nm 4.7mb
 ZOBO 151.97 66 PKP 01 00.00 7.5X
 LPB 152.14 67 PKP 01 01.50 9.0X
 S.D. = 0.7 an 85 of 89 abs.

? AUG 05, 1989 06h 08m 30.25±7.63s
 17.021 N ±53.8km 66.616 W ±23.7km
 DEPTH = 10.0km (geophysicist)
 PUERTO RICO REGION (90)

PNP 1.03 356 P 08 50.00 0.2
 SJG 1.17 22 iP 08 52.30 0.1
 S 09 02.00
 CSB 1.34 19 P 08 54.60 -0.3
 APR 1.43 356 P 08 56.00 -0.2
 LPR 1.47 29 P 08 56.90 0.1
 S.D. = 0.3 on 5 of 5 obs.

& AUG 05, 1989 06h 19m 34.18s
 62.595 N 151.443 W
 DEPTH = 98.9km
 CENTRAL ALASKA (1)
 <AGS-P>. Felt (11) at Trapper
 Creek.

CUT 0.58 109 iP 19 50.52 -0.1
 SKT 0.62 184 iP 19 51.07 0.0
 eS 20 03.18
 HUR 0.92 64 iP 19 53.55 -0.3
 iS 20 07.59
 KTH 0.99 14 iP 19 54.48 -0.3
 eS 20 08.73
 SUA 1.18 163 iP 19 56.92 -0.1
 eS 20 15.00
 PWA 1.20 141 iPd 19 57.00 -0.1
 RND 1.44 54 iP 19 59.59 -0.4
 eS 20 17.54
 GH0 1.44 124 iP 20 00.28 0.2
 eS 20 21.34
 SPU 1.45 192 iP 20 00.03 -0.1
 eS 20 20.03
 PLRM 1.48 132 eP 20 00.03 -0.5
 eS 20 19.78
 PMR 1.48 132 iPc 20 00.20 -0.3
 PME 1.49 129 iP 20 00.46 -0.2
 MCK 1.61 44 eP 20 01.82 -0.4
 PMS 1.62 146 iPc 20 02.10 -0.2
 NKA 1.86 177 iP 20 07.74 2.4
 TTA 2.13 281 iPc 20 08.70 -0.3
 SLKM 2.17 164 eP 20 09.01 -0.6
 NEA 2.25 27 eP 20 09.61 -1.0
 RED 2.28 197 eP 20 11.41 0.5
 WRH 2.41 37 eP 20 11.70 -1.0
 eS 20 37.85
 SVW 2.48 235 iPd 20 13.70 0.0
 TOA 2.51 99 iPc 20 13.90 -0.2
 CCB 2.62 37 iP 20 14.62 -0.9
 GLI 2.69 128 iP 20 15.16 -1.3
 PAX 2.77 80 eP 20 17.50 -0.2
 eS 20 50.52
 VZW 2.78 121 eP 20 16.14 -1.7
 FBA 2.83 33 iPc 20 17.90 -0.4
 GLM 3.00 35 iP 20 19.97 -0.8
 CNPM 3.08 178 eP 20 21.94 0.1
 eS 21 03.09
 HIN 3.24 131 iP 20 22.37 -1.6
 eS 21 01.34
 CVA 3.41 125 eP 20 24.56 -1.7
 DOT 3.52 69 eP 20 26.92 -0.8
 IMA 3.62 345 e(P) 20 28.50 -0.8
 SGAM 3.65 122 eP 20 27.67 -1.9
 RAGM 3.93 121 eP 20 31.76 -1.7
 MID 4.03 140 eP 20 34.20 -0.6
 KAIM 4.32 125 eP 20 36.27 -2.5
 KDC 4.89 187 eP 20 44.50 -2.1
 DWY 5.61 70 P 20 55.20 -1.4
 INK 9.38 45 eP 21 47.00 -1.0
 SIT 9.82 117 e(P) 21 50.80 -3.1
 41 obs. associated

AUG 05, 1989 06h 55m 50.99±0.14s
 76.118 N ±3.0km 134.578 E ±2.2km
 DEPTH = 10.0km (geophysicist)
 5.3mb (64 obs.) 5.0MsZ (8 obs.)

LAPTEV SEA (655)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 18S, 35C
 Centroid Location:
 Origin Time 06:55:56.7 0.3
 Lat 75.72N 0.05 Lon 133.90E 0.20
 Dep 15.0 Flx Half-duration 1.9
 Mament Tensor: Scale 10**17 Nm
 Mrr=-1.32 0.05 Mtt= 0.10 0.06
 Mff= 1.22 0.06 Mrt= 0.01 0.20
 Mrf= 0.23 0.26 Mtf=-0.20 0.06
 Principal Axes:
 T Val= 1.28 Plg= 5 Azm=260
 N 0.06 2 350
 P -1.34 85 104
 Best Double Couple:Mo=1.3*10**17
 NP1:Strike=348 Dip=40 Slip=-93
 NP2: 172 50 -87

BRW 18.76 69 P 00 13.00 1.4
 ALE 21.30 6 eP 00 39.00 -0.3
 1.0s 85.00nm 5.1mb
 KBS 22.05 334 iPc 00 47.70 0.9
 MBC 22.15 38 ePc 00 48.60 0.8
 1.0s 118.00nm 5.3mb
 IMA 23.53 76 P 01 05.00 3.4X
 1.3s 82.55nm 5.1mb
 TTA 25.61 82 eP 01 25.50 4.0X
 FBA 25.87 73 eP 01 25.50 1.6
 INK 26.12 58 eP 01 27.00 0.9
 0.9s 34.00nm 5.0mb
 DAG 26.54 347 iPc 01 29.10 -0.8
 0.8s 39.55nm 5.2mb
 e 06 13.00
 SVW 27.28 84 eP 01 37.10 0.2
 KEV 27.83 315 iP 01 41.30 -0.4
 0.8s 19.10nm 4.9mb
 eS 06 40.00
 PMR 28.40 78 eP 01 46.60 -0.3
 0.8s 17.10nm 4.9mb
 SOD 30.00 313 iP 02 01.00 -0.3
 ADK 30.66 114 eP 02 11.90 4.7X
 1.2s 101.60nm 5.6mb
 KDC 31.01 84 e(P) 02 11.00 0.9
 MDJ 31.68 187 Pc 02 15.50 -0.7
 N 12s 2.50um
 S 07 24.00
 CN2 32.66 192 Pd 02 24.50 -0.2
 5.0s 0.70nm 2.8mb X
 Z 14s 4.10um 5.3MsZ X
 N 12s 2.30um
 E 12s 1.00um
 pP 02 32.00 26kmX
 S 07 39.00
 SS 09 42.00
 SUF 34.30 309 eP 02 38.00 -0.8
 0.9s 15.00nm 4.9mb
 SNY 34.73 194 eP 02 41.70 -0.9
 Z 14s 10.40um 5.7MsZ X
 N 12s 5.20um
 E 11s 1.10um
 eS 08 04.00
 YKB0 34.85 49 eP 02 42.50 -1.0
 YKA 34.95 49 eP 02 44.70 0.3
 NUR 36.62 309 iP 02 57.70 -0.8
 Z 18s 1.60um 4.8MsZ
 eS 08 40.00
 LR 21 50.00
 HHC 36.79 210 P 03 01.80 1.5
 Z 14s 7.30um 5.6MsZ X
 N 12s 4.60um
 E 12s 1.30um
 BJI 37.09 204 eP 03 03.00 0.4
 Z 12s 6.90um 5.7MsZ X
 N 12s 3.36um
 E 12s 2.98um
 PP 04 30.00
 eS 08 40.00
 AKU 37.39 342 iP 03 05.40 0.5
 1.0s 24.00nm 4.9mb
 UPP 38.51 314 iP 03 12.70 -1.6
 NRA0 38.69 319 P 03 14.90 -1.0
 HFS 38.91 317 eP 03 16.80 -1.0
 0.9s 21.60nm 4.8mb
 Z 17s 0.80um 4.6MsZ X
 LR 18 12.00

FRB 39.61 16 eP 03 22.00 -1.5
 MAT 39.71 175 iP 03 24.60 0.0
 1.5s 88.89nm 5.2mb
 Z 18s 2.06um 5.0MsZ
 eS 09 24.00
 LZH 42.51 218 eP 03 49.50 1.7
 Z 14s 4.00um 5.5MsZ X
 E 13s 3.40um
 eS 09 55.00
 SS 13 00.00
 EDM 43.88 54 iP 03 58.50 -0.1
 1.0s 141.00nm 5.7mb
 FFC 44.50 44 eP 04 03.50 -0.1
 1.1s 58.00nm 5.4mb
 SSE 45.56 196 P 04 12.20 0.0
 1.2s 37.00nm 5.2mb
 Z 16s 4.00um 5.5MsZ X
 N 14s 7.10um
 S 10 50.00
 EKA 46.03 328 Pc 04 16.30 0.6
 0.9s 18.90nm 5.1mb
 PGC 46.12 64 eP 04 18.00 1.5
 PNT 46.31 61 ePc 04 18.00 -0.1
 WHN 46.67 204 eP 04 21.50 0.5
 Z 16s 4.16um 5.5MsZ X
 N 13s 5.70um
 E 18s 7.70um
 SES 47.01 53 eP 04 23.00 -0.6
 1.0s 98.00nm 5.9mb
 GMW 47.31 64 P 04 27.40 1.4
 KSP 47.32 311 iP 04 26.30 0.3
 1.0s 39.00nm 5.5mb
 e 06 15.00
 KRA 47.39 307 eP 04 27.00 0.5
 0.9s 70.00nm 5.8mb
 Z 18s 2.30um 5.2MsZ
 N 14s 2.40um
 e 04 52.20
 CLL 47.46 313 iPc 04 26.80 -0.3
 1.0s 38.00nm 5.4mb
 e 06 18.00
 CD2 47.60 217 eP 04 28.70 0.2
 Z 13s 1.50um 5.1MsZ X
 N 11s 1.60um
 S 11 27.00
 RMW 47.61 63 P 04 29.40 1.0
 BRG 47.71 313 iPc 04 29.50 0.4
 2.0s 60.00nm 5.3mb
 e 06 23.00
 e 11 28.00
 e 15 12.00
 WTS 47.84 319 eP 04 31.00 1.0
 1.0s 27.00nm 5.3mb
 DMU 47.90 330 eP 04 30.00 -0.5
 DBN 47.99 320 eP 04 36.00 4.8X
 e 06 28.00
 SPC 48.16 307 iP 04 33.90 1.1
 BMW 48.23 65 P 04 34.40 1.1
 LON 48.28 64 P 04 33.80 0.2
 DLE 48.46 330 eP 04 35.00 0.2
 PRU 48.46 312 iPc 04 36.00 1.1
 Z 19s 1.50um 5.0MsZ
 N 16s 1.40um
 E 14s 1.50um
 e 06 33.50
 DCN 48.49 330 eP 04 35.30 0.3
 0.9s 108.00nm 5.9mb
 SCH 48.61 16 eP 04 34.00 -2.0
 HOF 48.62 314 iPc 04 37.00 0.9
 1.5s 37.00nm 5.2mb
 SHW 48.72 64 P 04 38.80 1.7
 ETA 49.00 329 eP 04 39.20 0.3
 1.0s 70.00nm 5.6mb
 ENN 49.17 319 eP 04 41.00 0.7
 1.0s 22.00nm 5.1mb
 GRF 49.33 314 eP 04 43.10 1.5
 1.0s 29.00nm 5.2mb
 Z 19s 0.70um 4.7MsZ
 UCC 49.38 320 P 04 42.00 0.1
 ECB 49.39 330 eP 04 42.40 0.4
 1.0s 116.00nm 5.8mb
 PSZ 49.44 306 eP 04 43.80 1.2
 KHC 49.46 312 iPc 04 44.00 1.4
 1.0s 12.50nm 4.9mb
 e 06 38.50
 ECP 49.52 329 eP 04 43.30 0.3
 0.9s 58.00nm 5.6mb

05d 09h

STV 0.27 183 P 26 39.61 -0.2
ENR 0.29 170 P 26 40.23 0.0
ROB 0.44 120 P 26 43.61 0.6
RRL 0.57 315 P 26 45.15 -0.6
IMI 0.72 147 P 26 47.71 -0.6
S.D. = 0.7 on 7 of 7 obs.

% AUG 05, 1989 09h 45m 09.58 ± 4.15s
31.254 S ± 15.0km 68.825 W ± 15.7km
DEPTH = 89.4 ± 45.1 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.23 175 iPd 45 23.00 -0.2
RTLL 0.31 104 iPd 45 23.50 0.2
CFA 0.61 125 iPd 45 25.30 -0.2
RTCV 0.65 158 iPd 45 26.00 0.1
RTBS 0.67 233 e(P) 45 26.00 0.0
RTRS 1.21 333 iPc 45 32.00 0.0
S.D. = 0.3 on 6 of 6 obs.

? AUG 05, 1989 09h 48m 00.07 ± 12.09s
51.698 N ± 63.1km 16.507 E ± 77.9km
DEPTH = 10.0km (geophysicist)
POLAND (548)

ML 3.3 (VKA).

KSP 0.87 189 iPd 48 16.90 0.2
BRG 1.81 244 iPg 48 32.10 0.6
PRU 2.12 217 ePn 48 35.50 -0.5
CLL 2.22 261 iPn 48 37.40 -0.1
KHC 3.18 217 ePn 48 51.30 0.2
HOF 3.24 246 eP 48 51.70 -0.2
VKA 3.44 182 eP 49 02.00 7.2X
WET 3.45 224 iPnc 48 54.70 -0.2
S.D. = 0.4 on 7 of 8 obs.

* AUG 05, 1989 09h 54m 13.14 ± 1.94s
29.949 S ± 14.0km 177.680 W ± 10.7km
DEPTH = 49.1 ± 15.7 km
5.1mb (6 obs.)

KERMADEC ISLANDS (178)
Felt (IV) on Rooft Island.

RAO 0.72 343 iP 54 26.80 -0.5
MRW 12.84 207 eP 57 22.00 6.8X
DZM 16.27 295 iPc 58 08.00 8.0X
MSZ 18.59 214 eP 58 23.00 -5.4X
BRS 26.02 268 iPc 59 47.80 4.4X
COO 26.25 261 eP 59 50.00 4.4X
CAN 28.48 250 eP 00 09.00 3.2X
BWA 28.96 252 eP 00 11.20 1.1
RMQ 29.72 268 eP 00 21.00 4.1X
TOO 31.40 246 eP 00 33.80 2.1
CTA 34.00 278 iPc 00 57.00 2.5
STK 34.85 256 eP 01 04.00 2.3
ASPA 43.41 266 iPc 02 13.20 0.3
WB5 44.36 272 eP 02 20.00 -0.6

FORR 46.38 255 eP 02 35.70 -0.8
SBA 48.51 184 Pd 02 54.30 1.8
WARB 48.87 260 eP 02 55.00 -1.1
KNA 50.91 274 eP 03 11.90 0.2
COOL 52.16 253 eP 03 19.70 -1.4
KLB 54.75 251 iPd 03 38.30 -1.8
MBL 56.46 263 eP 03 51.00 -1.6
NANU 59.63 260 eP 04 13.00 -1.6
SPA 60.22 180 ePc 04 17.40 -1.0
MAW 72.83 200 eP 05 37.00 -1.1
PRS 84.50 42 eP 06 42.50 0.5
GCC 84.62 42 eP 06 43.20 0.7
PRI 84.79 43 eP 06 44.30 0.7
BAR 84.96 48 eP 06 42.00 -2.4
PLM 85.27 47 eP 06 43.00 -3.2X
SBB 85.54 46 eP 06 48.00 0.7
ISA 85.78 45 eP 06 49.00 0.5
FRI 85.93 43 eP 06 49.20 0.1
CMB 86.24 42 eP 06 50.50 -0.2
GLA 86.39 48 eP 06 52.00 0.5
CLC 86.42 45 eP 06 52.00 0.4
ORV 86.65 40 eP 06 52.60 0.0
WDC 86.79 39 eP 06 53.50 0.3
MIN 87.14 39 eP 06 54.60 -0.5
PNT 94.31 34 eP 07 20.00 -0.1
BUL 124.13 210 ePKP 13 05.90 -2.6X
SOD 139.83 346 ePKP 13 37.00 0.4
SUF 143.77 342 iPKP 13 40.50 -3.2X
BHD 144.19 286 ePKPc 13 44.00 -1.3
MSL 145.42 292 ePKPd 13 47.50 0.2
NUR 145.98 340 iPKP 13 47.60 0.1
UPP 148.35 345 iPKP 13 52.00 0.7
HFS 148.86 349 ePKP 13 54.90 2.8X
BNG 150.35 214 iPKPc 14 00.30 4.5X
KVT 150.56 301 ePKP 14 01.00 5.6X
HRI 151.41 285 ePKP 14 04.00 7.0X
BHL 151.51 287 PKPd 14 16.00 18.9X
PRNI 151.79 279 ePKP 14 04.00 6.4X
MBH 151.81 278 ePKP 14 03.50 6.0X
BBTK 153.26 300 iPKPd 14 08.00 8.5X
S.D. = 1.2 on 36 of 54 obs.

& AUG 05, 1989 10h 02m 41.07s
62.081 N 149.547 W
DEPTH = 44.9km
CENTRAL ALASKA (1)
<AGS-P>.

GHO 0.43 136 iP 02 50.70 -0.6
PWA 0.46 200 iP 02 51.50 0.0
CUT 0.47 314 eP 02 51.07 -0.6
PME 0.52 152 iP 02 51.64 -0.6
PLRM 0.53 158 iP 02 51.63 -0.8
SUA 0.84 223 eP 02 56.73 -0.1
KNK 0.85 142 iP 02 56.00 -0.8
HUR 0.90 357 eP 02 56.22 -1.3
SKT 0.94 265 eP 02 57.19 -0.9
RND 1.37 13 eP 03 02.35 -1.8
CGLM 1.41 238 eP 03 04.42 -0.3
CRP 1.49 238 iP 03 06.21 0.3
SPU 1.50 234 eP 03 06.04 0.1
TOA 1.59 88 iP 03 06.59 -0.7
KTH 1.61 337 eP 03 06.08 -1.4
SLKM 1.61 192 eP 03 07.39 -0.2

MCK 1.68 9 eP 03 07.85 -0.7
GLI 1.68 135 eP 03 07.80 -0.8
VZW 1.76 124 iP 03 08.67 -1.0
KLU 1.82 107 eP 03 09.00 -1.6
KNIM 1.95 152 eP 03 11.74 -0.5
FID 1.99 131 eP 03 11.79 -1.1
RDT 2.05 224 eP 03 13.28 -0.5
PAX 2.09 63 eP 03 13.06 -1.3
ILIM 2.60 221 iP 03 21.25 -0.4
HDA 2.61 26 eP 03 19.88 -1.9
CCB 2.69 16 eP 03 20.36 -2.5
CNPm 2.69 199 eP 03 23.11 0.2
FBA 2.94 15 eP 03 23.94 -2.4
DOT 2.97 56 eP 03 26.55 -0.3
GLM 3.07 17 eP 03 25.71 -2.7
31 obs. associated

* AUG 05, 1989 10h 19m 18.46 ± 1.42s
31.295 S ± 10.1km 68.852 W ± 11.1km
DEPTH = 110.7 ± 13.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.20 167 iPd 19 34.00 -0.5
ZON 0.29 149 iPd 19 34.20 -0.6
RTLL 0.33 96 iPd 19 35.00 0.3
CFA 0.61 121 iPc 19 36.80 0.4
RTCV 0.62 155 iPd 19 36.80 0.2
RTBS 0.63 234 iPd 19 37.00 0.5
RTRS 1.24 335 iPc 19 42.50 -0.1
MRA 2.90 113 iPc 20 03.80 0.0
RFA 3.48 175 ePd 20 11.60 -0.2
S.D. = 0.5 on 9 of 9 obs.

AUG 05, 1989 10h 26m 03.13 ± 0.63s
34.850 N ± 5.4km 5.525 W ± 10.2km
DEPTH = 10.0km (geophysicist)
MOROCCO (395)
MD 3.4 (RBA).

NKM 0.60 9 iPg 26 16.90 1.6
OJEN 1.25 360 eP 26 24.00 -0.3
IFR 1.37 166 iPg 26 30.50 2.1
RBA 1.37 233 iPg 26 29.00 0.7
SRQ 1.41 5 eP 26 29.00 0.2
EJIF 1.60 2 ePn 26 32.00 0.5
ALJ 1.82 358 eP 26 33.00 -1.8
GIBL 2.00 350 eP 26 39.00 1.6
LIJA 2.05 3 eP 26 44.00 5.9X
AVE 2.20 226 iPn 26 39.00 -1.3
TAF 2.56 90 e(Pn) 26 44.00 -1.4
EVAL 2.90 340 ePn 26 49.40 -0.8
EHQR 2.97 4 ePn 26 51.00 -0.2
EBAN 3.59 22 ePn 26 59.80 -0.2
TIO 4.18 201 iPn 27 07.70 -0.7
S.D. = 1.3 on 14 of 15 obs.

AUG 05, 1989 10h 36m 21.45 ± 0.79s
42.722 N ± 6.4km 13.213 E ± 7.3km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)

MD 2.6 (SSO).
 ALP 0.27 78 iPg 36 26.59 -0.7
 iSg 36 30.58
 AQU 0.39 159 P 36 28.70 -0.8
 eSg 36 34.50
 MNS 0.52 230 Pc 36 31.40 -0.6
 eSg 36 39.20
 ASS 0.53 311 P 36 32.30 0.0
 eSg 36 41.30
 ARV 0.80 346 P 36 37.40 0.4
 eSg 36 50.70
 SDI 1.11 156 P 36 44.00 1.7
 S.D. = 1.2 on 6 of 6 obs.

AUG 05, 1989 10h 49m 23.36 ± 0.35s
 76.166 N ± 7.1km 134.346 E ± 6.5km
 DEPTH = 13.2km (4 depth phases)
 4.6mb (12 obs.)

LAPTEV SEA (655)

ALE 21.26 6 eP 54 11.00 0.3
 0.8s 7.00nm 4.1mb
 MBC 22.14 38 eP 54 20.00 0.4
 0.9s 11.00nm 4.3mb
 TTA 25.66 82 P 54 54.70 0.8
 0.8s 12.93nm 4.7mb
 FBA 25.91 73 P 54 58.10 2.0
 1.0s 20.00nm 4.7mb
 INK 26.14 57 eP 54 58.00 -0.1
 DAG 26.48 346 iPc 55 00.00 -1.2
 0.9s 8.40nm 4.4mb
 PMR 28.45 77 P 55 17.70 -1.5
 MDJ 31.72 186 eP 55 48.00 -0.4
 CN2 32.69 192 Pd 55 55.00 -1.9
 sP 56 02.00
 BJI 37.11 203 eP 56 35.00 0.3
 HFS 38.84 317 eP 56 47.40 -1.6
 0.6s 1.50nm 3.9mb
 LZH 42.51 217 eP 57 21.50 1.8
 1.5s 40.00nm 4.9mb
 EDM 43.89 53 ePd 57 30.50 -0.1
 0.7s 24.00nm 5.1mb
 EKA 45.96 328 Pc 57 47.50 0.5
 0.5s 3.70nm 4.6mb
 SES 47.03 53 eP 57 56.00 0.4
 KSP 47.25 310 eP 57 57.80 0.6
 KRA 47.31 307 eP 57 58.00 0.2
 CD2 47.61 216 eP 58 01.00 0.6
 RMW 47.63 63 e(P) 58 01.40 0.9
 eP 58 05.50 14km
 LON 48.31 63 eP 58 06.30 0.6
 eP 58 10.40 14km
 KHC 49.38 312 P 58 15.20 1.3
 MLR 50.47 300 ePc 58 23.50 1.1
 DEV 50.72 303 iPc 58 41.00 16.9X
 LRM 51.13 56 eP 58 27.40 -0.2
 RSSD 54.37 49 P 58 50.50 -1.2
 BW06 54.63 54 P 58 46.00 -7.6X
 KVN 56.46 63 P 59 07.50 0.6
 GAC 56.90 25 eP 59 09.00 -0.7
 CMB 56.94 65 eP 59 11.10 0.9
 MSU 58.22 58 eP 59 19.90 0.6
 eP 59 24.20 14km

GOL 58.41 51 P 59 20.00 -0.7
 0.9s 12.31nm 5.0mb
 CHTO 60.20 219 eP 59 31.60 -1.4
 0.9s 3.62nm 4.5mb
 ALO 62.81 54 eP 59 50.00 -0.6
 1.0s 4.75nm 4.6mb
 e 59 53.50 11km
 UYO 65.72 43 iPc 00 08.00 -1.3
 PWLA 65.92 37 P 00 09.20 -1.3
 SPA 166.08 180 e(PKP)09 19.40 -7.4X
 0.9s 4.55nm
 S.D. = 1.1 on 33 of 36 obs.

? AUG 05, 1989 11h 12m 27.54 ± 4.24s
 18.796 S ± 38.3km 178.337 W ± 23.2km
 DEPTH = 595.2 ± 56.8 km
 4.9mb (5 obs.)

FIJI ISLANDS REGION (181)

BRS 27.86 247 iPd 17 32.70 -0.2
 COO 29.39 241 iPc 17 46.50 0.5
 CTA 33.38 262 iPd 18 19.80 0.2
 0.8s 34.70nm 5.0mb

WB5 44.53 260 iPd 19 49.00 -0.4
 ASPA 44.63 255 iPd 19 50.30 0.2
 0.8s 86.00nm 5.3mb
 FORR 49.66 245 iPc 20 27.60 -0.3
 0.4s 12.00nm 4.8mb
 KNA 50.45 265 iPd 20 33.80 -0.2
 WARB 51.06 251 iPd 20 38.00 -0.3
 0.4s 6.00nm 4.4mb
 MBL 57.83 256 iPd 21 25.40 -0.3
 NANU 61.54 254 iPd 21 50.90 0.8
 0.5s 29.00nm 4.9mb
 PLM 78.26 49 eP 23 28.20 -0.2
 KVN 80.49 43 iP 23 39.90 0.0
 FBA 86.66 13 eP 24 09.80 0.3
 1.0s 0.60nm 3.3mb X
 CHTO 89.37 290 e(P) 24 29.00 6.0X
 S.D. = 0.4 on 13 of 14 obs.

? AUG 05, 1989 12h 25m 15.31 ± 1.12s
 39.081 N ± 11.4km 24.215 E ± 10.3km
 DEPTH = 10.0km (geophysicist)

AEGEAN SEA (365)

ML 2.9 (ATH).

NEO 0.80 287 ePn 25 28.50 -2.4
 PAIG 0.94 334 ePg 25 37.50 4.3X
 eSg 25 48.50
 ATH 1.17 200 ePb 25 38.50 1.3
 OUR 1.26 352 ePb 25 44.10 5.3X
 PLG 1.42 336 ePb 25 43.70 2.5X
 eSn 26 00.00
 PRK 1.61 83 ePn 25 42.00 -1.8
 LIT 1.68 308 ePbd 25 44.90 0.0
 eSb 26 04.10
 THE 1.82 329 ePn 25 49.20 2.3X
 SRS 2.09 347 ePn 25 54.70 3.9X
 eSn 26 17.50
 KZN 2.25 304 ePn 25 53.10 -0.1
 RDO 2.30 26 ePb 25 55.00 1.2
 GRG 2.33 324 ePn 25 56.10 1.7
 S.D. = 1.9 on 7 of 12 obs.

? AUG 05, 1989 12h 29m 22.55 ± 1.72s
 30.037 N ± 9.7km 99.435 E ± 21.0km
 DEPTH = 33.0km (normal)

SICHUAN PROVINCE, CHINA (307)

ML 3.7 (BJI).

CD2 3.83 76 ePn 30 20.60 -0.1
 Pg 30 30.60
 Sg 31 16.80
 KMI 5.71 148 ePn 30 47.50 0.1
 Pg 31 04.50
 LZH 7.08 30 ePn 31 07.00 0.4
 Pg 31 33.50
 GYA 7.30 117 Pn 31 05.20 -4.6X
 N 10s 1.03um
 E 10s 0.74um
 XAN 8.99 61 eP 31 28.00 -5.1X
 GTA 9.36 2 eP 31 38.20 -0.1
 CN2 24.80 49 Pd 34 42.50 -0.3
 S.D. = 0.3 on 5 of 7 obs.

? AUG 05, 1989 12h 29m 37.57 ± 7.52s
 34.437 S ± 29.0km 72.279 W ± 56.7km
 DEPTH = 33.0km (normal)

NEAR COAST OF CENTRAL CHILE (135)

LCCH 1.13 32 iPd 29 56.80 -0.3
 iS 30 13.00
 TACH 1.36 55 iPc 30 00.30 -0.1
 iS 30 19.20
 CHCH 1.44 70 iP 30 01.00 -0.6
 iS 30 22.00
 SAN 1.66 54 iPd 30 05.00 0.1
 iS 30 26.50
 PCH 1.68 61 iPd 30 10.60 5.5X
 iS 30 37.50
 ROCH 1.80 36 iPd 30 07.30 0.2
 iS 30 20.00
 PEL 1.85 46 iPc 30 07.80 0.2
 i 30 10.00
 iS 30 33.10
 FCH 1.99 57 iPd 30 10.60 0.7
 iS 30 37.50
 RFA 3.16 97 ePd 30 26.40 0.1

ZON 4.18 47 e(P) 30 40.00 -0.7
 ZOBO 18.47 13 eP 33 44.00 -9.3X
 S.D. = 0.5 on 9 of 11 obs.

% AUG 05, 1989 12h 57m 16.55 ± 0.90s
 39.017 N ± 9.0km 28.017 E ± 9.1km
 DEPTH = 10.0km (geophysicist)

TURKEY (366)

DST 0.76 39 iPg 57 30.30 -1.1
 iSg 57 45.00
 IZM 0.85 224 iPg 57 32.70 -0.4
 iSg 57 46.00
 KHL 1.37 120 ePn 57 42.30 0.6
 EZN 1.54 302 ePn 57 43.60 -0.4
 MFT 1.86 342 ePn 57 50.00 1.3
 HRT 2.20 35 ePn 57 57.00 3.2X
 S.D. = 1.3 on 5 of 6 obs.

AUG 05, 1989 13h 33m 49.49 ± 0.21s
 30.087 N ± 4.8km 99.658 E ± 2.9km
 DEPTH = 33.0km (normal)
 4.9mb (33 obs.)

SICHUAN PROVINCE, CHINA (307)

CD2 3.63 76 iPnd 34 47.50 2.7
 Pg 34 58.50
 Sg 35 45.60
 KMI 5.65 150 Pnd 35 18.00 4.4X
 Z 10s 12.10um
 LZH 6.94 29 eP 35 32.50 0.9
 2.0s 110.00nm 5.4mb
 Lg 37 35.00
 e 37 49.00
 GYA 7.16 119 Pn 35 33.20 -1.4
 N 10s 9.97um
 E 10s 5.19um
 Sn 37 02.00
 LSA 7.40 269 ePn 35 38.00 -0.3
 XAN 8.79 61 Pc 35 55.50 -1.8
 N 10s 4.40um
 E 10s 1.70um
 CHG 11.24 183 eP 36 37.00 6.1X
 CHTO 11.24 183 ePn 36 33.80 2.9
 ePg 37 19.90
 WHN 12.70 84 P 36 49.00 -1.5
 LOE 12.76 171 eP 36 56.00 4.6X
 e 40 45.00
 BDT 12.80 183 ePg 37 01.90 10.1X
 NST 14.35 178 eP 37 20.60 8.3X
 HHC 14.45 39 P 37 12.80 -0.9
 Z 10s 3.10um
 E 10s 2.60um
 TIA 15.84 63 eP 37 30.80 -0.9
 NJ2 16.57 78 Pc 37 39.50 -1.3
 Z 12s 1.40um
 BJI 16.75 49 eP 37 43.00 -0.1
 eS 41 02.00
 Lg 43 44.00
 QZH 17.55 102 eP 37 52.00 -1.2
 SSE 18.56 81 Pc 38 07.80 2.1
 1.5s 61.00nm 4.6mb
 Z 10s 1.40um
 NDI 19.60 271 iPd 38 16.00 -2.0
 eS 41 43.00
 DL2 20.09 58 eP 38 23.00 0.0
 KSH 21.53 302 eP 38 39.50 1.6
 SNY 22.55 52 iPc 38 48.90 1.0
 N 14s 0.80um
 S 42 54.00
 HYB 23.02 242 eP 38 53.00 0.3
 CN2 24.62 49 Pd 39 09.00 1.0
 Z 12s 0.80um 4.4mszX
 pP 39 14.00 18kmX
 sP 39 17.00
 eS 43 34.00
 POO 26.12 250 eP 39 21.20 -1.1
 GBA 26.27 236 P 39 23.20 -0.5
 MDJ 27.68 50 eP 39 35.80 -0.5
 Z 12s 0.90um 4.6mszX
 eS 44 16.00
 QUE 28.24 279 eP 39 41.00 -0.8
 KOD 28.60 231 eP 39 45.00 -0.3
 MAIO 34.00 291 iPc 40 33.00 0.6
 eS 46 04.00
 MSL 47.12 293 ePc 42 20.00 -0.3
 PRNI 55.15 288 eP 43 21.00 -0.2

05d 13h

MBH 55.42 287 eP 43 22.00 -1.1
 SOD 56.09 334 iP 43 26.80 -0.6
 KEV 56.11 336 iP 43 27.20 -0.3
 0.8s 17.60nm 5.1mb
 SUF 56.22 328 iP 43 27.60 -0.8
 0.5s 5.80nm 4.9mb
 NUR 57.02 325 eP 43 33.00 -1.1
 VRI 57.69 308 ePd 43 39.00 0.0
 MLR 58.30 307 iPc 43 43.50 0.1
 JMB 58.52 304 iPd 43 45.00 0.2
 WB5 59.07 142 iPd 43 53.60 -0.9
 RZN 60.06 303 iPd 43 55.00 -0.7
 UPP 60.58 325 iP 43 56.80 -2.0
 RAB 60.67 115 e(P) 43 59.00 -1.0
 VTS 60.90 305 iPc 44 02.00 0.6
 KRA 61.25 314 eP 44 03.60 0.2
 SPC 61.26 313 eP 44 04.00 0.2
 SKO 62.34 304 eP 44 10.00 -0.9
 HFS 62.46 326 eP 44 10.10 -1.4
 0.7s 10.20nm 5.1mb
 Z 17s 0.05um 3.7MsZ
 LR 09 48.00
 KSP 63.31 315 ePc 44 17.30 0.1
 ZST 63.52 312 eP 44 18.70 0.0
 PRU 64.62 315 P 44 26.00 0.2
 BRG 64.73 316 iP 44 26.00 -0.5
 0.9s 12.00nm 5.0mb
 CLL 65.16 316 eP 44 29.00 -0.3
 KHC 65.48 314 iPc 44 32.30 0.9
 WET 65.91 314 iPc 44 44.90 10.7X
 HOF 66.15 316 iPc 44 36.00 0.3
 RBL 66.35 311 P 44 36.50 -0.6
 BHG 66.37 313 eP 44 37.60 0.5
 0.9s 20.00nm 5.2mb
 GRF 66.76 315 e(P) 44 40.20 0.6
 FVI 66.81 311 P 44 39.50 -0.4
 CTA 67.08 132 iPd 44 41.00 -1.0
 0.9s 32.77nm 5.4mb
 FUR 67.24 313 iPc 44 43.70 1.0
 ARV 67.77 308 P 44 46.00 -0.1
 SDI 67.81 306 P 44 45.50 -0.9
 OGA 67.85 312 iPc 44 46.50 -0.3
 0.9s 19.00nm 5.2mb
 ASS 68.12 308 P 44 33.00 -15.3X
 TOD 68.26 316 eP 44 48.64 -0.4
 MNS 68.36 307 P 44 49.00 -0.8
 OSS 68.48 312 ePd 44 50.50 -0.2
 WTS 68.57 318 eP 44 52.00 1.2
 0.8s 8.00nm 4.8mb
 ABH 68.92 316 eP 44 53.19 0.1
 VDL 68.99 312 ePc 44 53.90 0.1
 SLE 69.13 314 ePc 44 54.70 0.2
 LLS 69.15 313 ePc 44 54.80 0.0
 ZLA 69.30 314 ePc 44 55.50 0.0
 FEL 69.39 314 eP 44 55.46 -0.7
 TMA 69.51 312 ePd 44 56.30 -0.7
 ENN 69.55 317 eP 44 57.00 0.1
 0.7s 4.00nm 4.6mb
 CDF 69.64 315 eP 44 57.40 -0.2
 VAI 69.67 312 P 44 57.00 -0.7
 MMK 70.12 312 ePd 45 01.90 1.1
 BSF 70.16 314 eP 45 00.60 -0.3
 HAU 70.37 315 eP 45 01.70 -0.3
 0.8s 6.40nm 4.7mb
 DIX 70.46 312 ePc 45 03.70 0.8
 LPG 71.12 312 iPd 45 07.20 0.2
 0.6s 22.50nm 5.4mb
 MBC 71.15 9 eP 45 06.00 -0.2
 1.0s 2.00nm 4.1mb
 BNI 71.35 312 P 45 09.50 1.4
 LOR 72.21 315 eP 45 12.70 -0.4
 0.6s 3.60nm 4.5mb
 LRG 72.21 310 eP 45 13.20 0.1
 1.0s 20.00nm 5.1mb
 LBF 72.25 314 eP 45 13.00 -0.4
 0.8s 7.20nm 4.7mb
 SMF 72.48 314 iPd 45 14.70 0.0
 0.8s 13.40nm 5.0mb
 SSF 72.51 315 eP 45 14.70 -0.2
 0.8s 10.70nm 4.9mb
 EKA 72.57 324 Pc 45 15.00 0.0
 1.1s 16.80nm 5.0mb
 AVF 72.72 314 iPd 45 16.00 -0.1
 0.8s 14.70nm 5.0mb
 BGF 73.14 314 eP 45 18.40 -0.1
 1.0s 10.00nm 4.8mb
 RMO 73.30 135 iPc 45 21.60 1.9

MAF 73.46 314 eP 45 20.70 0.3
 1.4s 34.80nm 5.2mb
 TCF 73.65 314 eP 45 21.90 0.3
 0.8s 14.70nm 5.0mb
 LDF 74.02 317 eP 45 23.70 0.1
 1.0s 9.60nm 4.8mb
 INK 74.34 18 eP 45 24.50 -0.6
 CAF 74.35 313 eP 45 26.20 0.5
 1.0s 10.00nm 4.8mb
 RJF 74.53 314 eP 45 27.50 0.9
 1.0s 13.60nm 4.9mb
 GRR 74.55 317 eP 45 27.20 0.5
 1.0s 16.00nm 5.0mb
 MFF 74.96 315 eP 45 29.60 0.5
 1.4s 17.40nm 4.9mb
 LPO 75.02 313 eP 45 30.20 0.7
 1.0s 8.00nm 4.7mb
 DMU 75.18 324 eP 45 30.60 0.4
 LFF 75.18 313 eP 45 31.10 0.7
 1.0s 17.60nm 5.0mb
 DLE 75.30 323 eP 45 31.20 0.3
 DCN 75.65 324 eP 45 32.90 0.0
 BNG 80.11 269 ePc 45 57.50 -0.7
 1.0s 10.00nm 4.8mb
 TOL 80.76 311 iPd 46 02.50 1.3
 1.1s 63.29nm 5.5mb
 YKA 83.73 15 eP 46 18.30 2.2
 NKM 84.03 308 iP 46 16.50 -1.6
 BUL 84.62 243 iPc 46 20.30 -1.1
 IFR 84.87 306 iP 46 25.00 2.4
 AVE 86.59 307 iP 46 32.20 1.3
 PNT 93.55 25 eP 47 04.00 0.7
 BAO 147.04 289 e(PKP) 53 26.00 -3.1X
 PPD 152.77 280 ePKP 53 38.30 0.8
 ZOBO 162.26 318 PKPc 53 50.20 0.4
 1.5s 16.67nm
 LPB 162.46 318 ePKP 53 53.00 3.3X
 S.D. = 0.9 on 113 of 122 obs.
 ? AUG 05, 1989 13h 43m 42.95±2.45s
 38.871 N ±18.2km 28.251 E ±21.6km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)
 DST 0.79 22 ePg 43 58.00 -0.3
 IZM 0.91 239 ePg 44 00.50 0.2
 iSg 44 14.00
 EZN 1.77 303 ePn 44 13.00 -0.8
 MFT 2.05 339 ePn 44 19.00 1.0
 HRT 2.23 29 ePn 44 26.00 5.4X
 S.D. = 1.3 on 4 of 5 obs.
 ? AUG 05, 1989 14h 45m 54.53±0.87s
 38.998 N ± 9.0km 28.125 E ± 7.9km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)
 DST 0.72 33 ePg 46 08.90 0.1
 eSg 46 21.90
 IZM 0.90 229 ePg 46 12.00 0.2
 eSg 46 23.00
 KHL 1.29 121 ePn 46 18.30 -0.1
 EZN 1.62 301 ePn 46 23.00 -0.2
 S.D. = 0.3 on 4 of 4 obs.
 % AUG 05, 1989 15h 11m 33.70±1.07s
 38.828 N ± 7.4km 20.373 E ±12.3km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 MD 3.1 (ATH).
 VLS 0.67 165 ePn 11 46.60 -0.5
 eSn 11 57.00
 KEK 0.99 333 ePb 11 52.80 0.3
 KZN 1.83 36 ePn 12 05.10 -0.4
 ITM 2.05 143 ePn 12 09.00 0.3
 NEO 2.27 77 ePn 12 13.20 1.3
 PLG 2.83 56 ePn 12 18.70 -1.1
 S.D. = 1.1 on 6 of 6 obs.
 ? AUG 05, 1989 15h 25m 29.97±2.01s
 11.794 N ±17.6km 87.669 W ±21.0km
 DEPTH = 111.7 ± 29.9 km
 4.2mb (4 obs.)
 NEAR COAST OF NICARAGUA (74)
 MD 4.5 (HDC)

RIN3 2.46 114 eP+ 26 09.30 -0.3
 S 26 40.70
 JUD 2.64 128 eP+ 26 10.20 -1.8
 S 26 42.50
 AR6 3.02 116 iPc 26 17.30 0.1
 S 26 54.60
 JTS 3.06 119 eP 26 17.20 -0.3
 CAO 3.27 129 iPd 26 18.80 -1.6
 S 26 57.10
 EPA 3.51 120 eP+ 26 24.10 0.4
 S 27 05.00
 SRA 3.59 118 iPc 26 25.50 0.6
 POA2 3.72 115 eP 26 28.10 1.3
 LCR2 4.14 119 iPc 26 33.20 0.8
 QPS 4.21 124 eP+ 26 32.70 -0.5
 S 27 21.20
 VCR 4.31 112 ePc 26 09.40 -25.2X
 S 26 40.90
 CDM 4.44 120 eP+ 26 37.30 0.6
 S 27 24.60
 BUS 4.44 120 iPd 26 37.70 0.9
 JCR 4.87 113 ePd 26 18.20 -24.1X
 S 26 55.00
 LIO 4.89 111 ePc 26 45.00 2.6
 UP4 8.48 108 eP 27 29.00 -2.5
 GCM 9.60 38 eP 27 46.80 0.1
 UYO 23.12 346 e(P) 30 26.00 -0.9
 MEO 24.95 338 iPc 30 42.40 -2.0
 ALO 28.68 327 e(P) 31 19.00 0.4
 1.1s 3.16nm 3.9mb
 e 34 29.50
 BW06 36.26 332 eP 32 24.80 0.5
 1.0s 1.75nm 3.9mb
 KVN 38.30 320 eP 32 40.20 -1.2
 LRM 39.93 333 eP 32 57.10 2.2
 SES 43.00 338 eP 33 20.00 0.2
 FFC 44.29 348 eP 33 30.50 0.4
 0.7s 8.00nm 4.6mb
 PNT 45.79 331 eP 33 44.00 2.0
 0.6s 6.00nm 4.6mb
 SCH 45.97 17 eP 33 43.00 -0.3
 FRB 53.61 10 eP 34 40.00 -1.4
 CHG 148.90 348 ePKP 45 10.00 7.2X
 GBA 150.76 31 PKPc 45 14.20 8.6X
 0.8s 5.30nm
 S.D. = 1.4 on 26 of 30 obs.
 * AUG 05, 1989 16h 24m 53.84±3.21s
 51.443 N ±23.0km 6.271 E ±11.0km
 DEPTH = 10.0km (geophysicist)
 GERMANY (543)
 MD 2.1 (UCC). ML 2.0 (GSH).
 JCK 0.42 166 iPgc 25 02.50 0.1
 iSg 25 07.00
 PLH 0.56 142 iPgc 25 05.10 0.0
 iSg 25 11.10
 GSH 0.71 175 iPgd 25 07.70 -0.1
 iSg 25 15.60
 ENN 0.71 198 iPgc 25 07.90 0.1
 iSg 25 16.20
 MEM 0.85 191 iPc 25 10.16 -0.1
 iS 25 20.38
 SNF 1.56 234 iP 25 21.70 0.0
 i 25 23.00
 DOU 1.72 219 P 25 27.40 3.5X
 S 25 45.90
 S.D. = 0.1 on 6 of 7 obs.
 % AUG 05, 1989 16h 38m 16.50±3.46s
 23.054 N ±19.8km 121.934 E ±22.8km
 DEPTH = 10.0km (geophysicist)
 TAIWAN (244)
 TWF1 0.66 297 iPd 38 29.60 0.0
 eS 38 39.20
 TWG 0.83 254 ePc 38 32.30 -0.2
 eS 38 44.50
 TWD 1.07 343 ePc 38 36.20 -0.4
 TWK 1.35 279 ePc 38 41.70 0.4
 TWC 1.55 357 iPc 38 44.40 0.3
 S.D. = 0.4 on 5 of 5 obs.
 % AUG 05, 1989 18h 15m 47.03±3.49s
 23.086 N ±19.0km 121.950 E ±24.7km
 DEPTH = 10.0km (geophysicist)
 TAIWAN (244)

05d 23h

BZS 4.54 346 ePc 55 27.00 -1.3
 DEV 4.67 358 eP 55 38.00 7.9X
 MLR 4.73 24 ePc 55 31.50 0.4
 MDB 5.00 10 eP 56 00.00 25.2X
 CVO 5.10 24 eP 55 36.50 0.3
 VRI 5.32 28 ePd 55 40.00 0.6
 CFR 5.39 41 eP 55 47.00 6.7X

S.D. = 1.2 on 34 of 48 obs.

* AUG 05, 1989 23h 56m 41.70± 0.95s
 40.092 N ± 9.3km 19.964 E ± 8.4km
 DEPTH = 10.0km (geophysicist)

ALBANIA (391)
MD 3.2 (ATH).

KEK 0.40 199 ePg 56 50.00 0.1
 eSg 56 57.50
 LSK 0.49 83 ePg 56 50.20 -1.5
 TIR 1.26 357 ePn 57 05.20 0.2
 KZN 1.40 81 ePb 57 09.00 1.7
 eSb 57 34.00
 LCI 1.56 280 P 57 09.00 -0.5
 eSg 57 27.50
 VLS 1.97 166 ePb 57 19.00 3.5X

S.D. = 1.6 on 5 of 6 obs.

% AUG 06, 1989 00h 00m 48.90± 1.32s
 40.629 N ± 6.3km 22.381 E ± 12.1km
 DEPTH = 10.0km (geophysicist)

GREECE (364)

GRG 0.33 3 ePg 00 55.70 0.0
 eSg 01 00.60
 THE 0.44 89 ePgc 00 57.60 -0.3
 eSg 01 03.60
 LIT 0.53 171 ePg 00 59.70 0.0
 eSg 01 08.60
 KNT 0.66 36 ePgc 01 01.60 -0.5
 eSg 01 11.40
 SRS 1.04 62 ePb 01 09.20 0.7
 eSb 01 24.00

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

AUG 06, 1989 00h 57m 28.22± 0.74s
 38.882 N ± 7.3km 25.827 E ± 7.6km
 DEPTH = 10.0km (geophysicist)

AEGEAN SEA (365)

PRK 0.50 43 eP 57 39.50 1.1
 eS 57 51.70
 EZN 1.02 22 ePn 57 47.30 -0.1
 IZM 1.22 113 ePn 57 51.00 0.0
 SMG 1.42 146 eP 57 54.60 0.6
 APE 1.83 187 eP 57 58.00 -1.9
 ATH 1.89 242 eP 58 02.00 1.2
 NEO 2.07 283 eP 58 04.50 1.0
 RDO 2.27 354 eP 58 04.20 -2.1
 DST 2.29 71 ePn 58 07.00 0.3

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

AUG 06, 1989 01h 23m 22.95± 0.19s
 21.669 N ± 4.3km 143.012 E ± 4.7km
 DEPTH = 279.2km (2 depth phases)
 4.7mb (25 obs.)

MARIANA ISLANDS REGION (215)

PJG 8.23 167 eP 25 22.50 2.5
 GUMO 8.23 167 eP 25 22.50 2.5
 1.1s 1865.72nm 6.0mb X
 GUA 8.29 167 eP 25 22.30 1.6
 1.0s 712.00nm 5.7mb
 MAT 15.40 345 (P) 26 47.00 -1.2
 1.1s 65.82nm 4.9mb
 eS 29 30.00
 SHK 15.71 327 iPc 26 53.90 2.2
 0.7s 178.08nm 5.6mb
 SSE 21.66 300 Pc 27 53.50 1.5
 1.1s 0.03nm 1.6mb X
 QIZ 31.18 271 eP 29 19.80 1.4
 GYA 33.46 285 P 29 38.00 -0.2
 CD2 36.22 293 eP 30 01.70 0.4
 GTA 40.76 306 eP 30 39.00 0.2
 CHG 41.34 274 eP 30 44.80 1.1
 1.0s 17.25nm 4.3mb
 CHTO 41.34 274 eP 30 44.40 0.7
 1.0s 16.25nm 4.3mb
 pP 31 40.10 269km

CTA 41.62 175 iPd 30 45.30 -0.5
 1.0s 19.00nm 4.4mb
 BDT 41.63 272 eP 30 46.70 0.8
 QIS 42.10 185 iPc 30 48.70 -0.9
 WB5 42.15 192 iPc 30 49.40 -0.7
 WRA 42.22 192 Pc 30 49.40 -1.2
 0.3s 7.50nm 4.5mb
 SNG 43.35 257 eP 31 01.50 1.6
 ASPA 45.93 192 iPc 31 18.50 -1.6
 0.6s 16.00nm 4.5mb

PSI 46.80 252 iPc 31 27.50 0.5
 0.7s 28.00nm 4.7mb
 WARB 50.15 199 eP 31 51.30 -1.1
 FORR 54.14 196 eP 32 20.50 -1.3
 BWA 56.02 175 eP 32 34.10 -1.1
 CAN 56.96 174 eP 32 40.50 -1.2
 IMA 59.63 25 P 33 02.40 2.4
 0.8s 6.90nm 4.3mb
 PMR 60.66 31 P 33 05.80 -0.9
 0.8s 13.79nm 4.6mb
 FBA 61.77 27 P 33 13.70 -0.4
 0.8s 8.62nm 4.4mb
 GBA 62.63 275 Pc 33 19.20 -1.3
 0.7s 15.10nm 4.8mb

GBA 62.63 275 P 33 20.00 -0.5
 KOD 63.65 271 eP 33 26.30 -1.3
 INK 67.66 24 ePc 33 50.50 -1.2
 MBC 70.92 15 eP 34 11.00 -0.3
 0.9s 7.00nm 4.4mb
 MAIO 72.47 303 iPc 34 22.00 0.7
 YKB0 76.52 28 eP 34 43.10 -0.4
 YKA 76.56 28 eP 34 44.00 0.2
 GMW 77.06 44 P 34 47.80 0.9
 RMW 77.72 44 P 34 51.20 0.6
 SHW 77.85 45 P 34 48.00 -3.4X
 LON 77.95 44 P 34 52.00 0.2
 KEV 78.34 341 iP 34 53.40 0.0
 0.9s 22.00nm 4.9mb

PNT 78.49 41 ePc 34 55.00 0.3
 1.0s 26.00nm 4.9mb
 WDC 79.46 51 iPc 35 00.30 0.3
 SOD 79.72 339 iP 35 01.00 0.2
 ORV 80.56 51 ePc 35 05.60 -0.2
 BRK 80.58 53 eP 35 06.10 0.2
 BKS 80.59 53 eP 35 06.60 0.6
 0.8s 56.00nm 5.4mb
 PCC 80.61 53 eP 35 05.90 -0.2
 GCC 81.06 54 eP 35 08.50 0.1
 MHC 81.22 53 eP 35 09.00 0.3
 ARN 81.30 53 P 35 10.00 0.2
 PRS 81.78 54 eP 35 12.50 0.3
 CMB 81.91 52 iPc 35 13.10 0.2
 LLA 82.00 54 eP 35 13.60 0.2
 PRI 82.38 54 eP 35 16.10 0.6
 SUF 82.41 335 eP 35 14.00 -0.9
 0.6s 7.00nm 4.7mb

FRI 82.79 53 ePc 35 17.50 0.2
 BCH 83.17 55 P 35 20.00 0.5
 SES 83.20 38 ePc 35 19.00 -0.2
 1.0s 92.00nm 5.5mb
 KVN 83.20 51 P 35 20.00 0.3
 ISA 84.21 54 eP 35 24.00 -0.6
 TNP 84.21 51 P 35 24.90 0.2
 1.0s 18.33nm 4.9mb

NUR 84.24 334 eP 35 23.00 -1.1
 LRM 84.31 43 eP 35 25.30 0.1
 CLC 84.81 54 eP 35 27.00 -0.6
 SBB 85.07 55 eP 35 29.00 0.1
 GSC 85.60 54 eP 35 32.00 0.4
 RVR 85.69 55 eP 35 31.00 -0.9
 PEC 85.89 55 P 35 32.80 -0.1
 FFC 85.94 32 iPc 35 32.70 0.1
 0.8s 25.00nm 5.1mb
 PLM 86.33 56 P 35 35.20 -0.1
 TPC 86.65 55 eP 35 37.00 0.4
 BAR 86.75 56 eP 35 26.00 -11.1X
 DAU 87.45 47 P 35 40.80 0.1
 GLA 88.01 55 eP 35 43.00 -0.2
 HFS 88.69 337 ePKP 35 43.30 -2.5
 0.5s 3.30nm 4.5mb

RSSD 90.38 42 P 35 53.80 -0.4
 GOL 91.77 46 P 36 01.00 0.3
 1.0s 17.50nm 5.0mb
 GLD 91.84 46 P 36 01.80 0.9
 1.0s 27.50nm 5.2mb
 ALQ 93.37 50 eP 36 08.00 -0.1

1.0s 3.75nm 4.4mb
 e 37 17.50 289km
 LSZ 118.23 264 iPKP 41 39.00 -0.3
 BUL 119.12 258 iPKPc 41 39.70 -1.3
 BNG 119.78 289 ePKPd 41 41.30 -1.0
 0.4s 4.00nm
 ARE 147.03 87 ePKP 42 35.00 2.1X
 ZOBO 150.10 85 PKP 42 36.00 -2.0
 0.9s 54.07nm

i 42 43.80
 LPB 150.19 86 PKP 42 38.00 0.1
 1.0s 80.00nm
 i 42 44.30
 CNCB 150.37 86 iPKP 42 39.00 0.6
 i 42 44.30

S.D. = 1.0 on 83 of 86 obs.

* AUG 06, 1989 01h 51m 05.45± 0.69s
 2.836 S ± 9.9km 138.849 E ± 10.1km
 DEPTH = 10.0km (geophysicist)

WEST IRIAN (201)
4.5mb (3 obs.) 4.0Msz (1 obs.)

JAY 1.88 80 ePc 51 36.50 -1.5
 MNDI 5.82 125 eP 52 52.00 17.9X
 PMG 10.52 129 eP 53 41.00 1.5
 KNA 16.23 217 eP 54 55.50 0.3
 WRA 17.56 194 P 55 12.00 -0.1
 0.4s 3.50nm 3.8mb
 QIS 17.63 178 ePd 55 11.90 -1.0
 e 58 24.00
 CTA 18.61 158 iPd 55 29.00 4.0X
 1.2s 37.50nm 4.5mb
 ASPA 21.25 193 iPKP 55 53.60 -0.6
 Z 19s 0.56um 4.0Msz
 i 55 57.00
 iS 59 54.40
 LR 04 29.30

WARB 26.01 206 eP 56 40.10 -0.3
 BJI 47.46 336 eP 59 42.00 -0.3
 SPA 87.18 180 e(P) 03 52.80 -0.2
 0.7s 8.20nm 5.1mb
 CNCB 147.09 127 PKP 10 51.00 1.2
 i 11 07.30
 LPB 147.15 127 ePKP 10 51.00 1.3
 ZOBO 147.27 126 PKP 10 50.00 -0.1
 S.D. = 1.0 on 12 of 14 obs.

* AUG 06, 1989 02h 48m 28.05± 2.66s
 17.465 N ± 24.9km 61.918 W ± 13.1km
 DEPTH = 33.0km (normal)

LEEWARD ISLANDS (92)
ML 2.7 (FDF).

ANG 0.32 165 eP 48 36.03 0.0
 BPA 0.42 172 eP 48 37.32 -0.2
 eS 48 42.91
 NEV 0.70 242 eP 48 41.64 0.1
 MGH 0.79 201 eP 48 42.50 -0.3
 S 48 54.60
 SKI 0.79 261 eP 48 42.82 0.0
 eS 48 53.35
 DEG 1.41 144 eP 48 51.50 -0.2
 PAG 1.45 171 eP 48 52.80 0.6
 S 49 10.80

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

AUG 06, 1989 02h 55m 57.81± 0.25s
 57.769 N ± 3.8km 154.021 W ± 3.5km
 DEPTH = 103.2 ± 8.4 km
 4.1mb (5 obs.)

KODIAK ISLAND REGION (13)

KDC 0.82 91 iPd 56 16.60 -0.2
 MCNL 1.43 353 eP 56 22.82 -0.9
 AUE 1.63 12 iP 56 26.65 0.4
 AUL 1.65 11 eP 56 26.45 0.0
 OPT 1.93 12 iP 56 30.59 0.4
 CNPM 2.29 38 eP 56 35.31 0.5
 >NNL 2.68 31 iP 56 41.29 1.2
 RED 2.73 13 iP 56 41.45 0.6
 RDT 2.93 16 eP 56 43.57 0.0
 NKA 3.31 24 eP 56 50.44 1.9
 SEW 3.33 43 eP 56 48.49 -0.4
 SLKM 3.37 34 eP 56 49.09 -0.4
 SVW 3.45 347 eP 56 50.16 -0.4
 IVF 3.56 241 ePc 56 52.25 0.2

T Val= 6.02 Plg=84 Azm= 44
 N 0.11 2 290
 P -6.13 5 200
 Best Double Couple: Ma=6.1*10**17
 NP1: Strike=288 Dip=40 Slip= 87
 NP2: 112 50 93

MNI 3.44 263 ePc 37 22.50 0.6
 eS 37 37.80
 AAI 5.53 181 iPc 37 52.50 2.0
 eS 38 34.00
 DAV 5.82 333 eP- 37 55.00 0.5
 iS 39 08.00
 TSM 10.43 283 ePd 39 01.00 4.1X
 1.5s 2660.00nm 6.8mb X
 MKS 11.26 231 ePd 39 09.50 1.6
 KKM 12.70 289 ePc 39 28.70 1.8
 1.0s 69.30nm 5.2mb
 BAG 16.29 333 eP 40 11.00 -1.9
 eS 43 06.00
 KNA 17.53 178 eP 40 27.30 -0.6
 0.6s 288.00nm 5.7mb
 TRT 18.26 238 iPd 40 38.00 1.4
 0.8s 214.50nm 5.5mb
 GUMO 20.13 54 eP 40 55.80 -0.7
 0.6s 354.66nm 5.9mb
 PJG 20.13 54 eP 40 55.90 -0.6
 GUA 20.14 54 eP 40 55.50 -1.1
 0.7s 536.99nm 6.0mb
 LAT 20.55 115 eP 41 02.00 1.3
 PMG 21.92 121 iPc+ 41 15.10 0.7
 1.0s 60.00nm 4.9mb
 WB5 22.45 165 iPc 41 20.00 0.5
 eS 45 15.80
 WRA 22.50 165 Pc 41 19.00 -1.0
 0.9s 248.20nm 5.6mb
 ANP 24.06 345 iP+ 41 37.00 1.8
 iS 45 55.00
 MBL 24.34 199 iPd 41 37.30 -0.5
 0.6s 91.00nm 5.4mb
 HKC 24.48 327 iP 41 40.50 1.4
 S 45 53.00
 RAB 24.65 104 eP 41 40.00 -0.8
 eS 46 00.00
 OZH 24.75 339 iPc 41 43.00 1.4
 4.0s 0.77nm 2.5mb X
 S 45 56.00
 sS 46 38.00
 OIZ 24.81 315 Pc 41 43.00 0.8
 5.0s 2.40nm 2.9mb X
 pP 42 10.00 130kmX
 S 45 58.00
 sS 46 46.50
 KGM 24.92 271 eP 41 45.00 1.7
 OIS 24.92 154 iPc 41 44.00 0.7
 GZH 25.56 327 iPc 41 47.70 -1.5
 pP 42 15.50 133kmX
 S 46 05.00
 ASPA 25.98 168 iPc 41 52.80 -0.3
 ipP 42 21.20 136kmX
 iPcP 45 18.90
 eS 46 14.00
 iScP 48 46.90
 iScS 52 33.80
 NANU 27.28 206 iPd 42 03.90 -1.0
 0.6s 175.00nm 5.8mb
 IPM 27.31 276 ePd 42 05.60 0.3
 0.6s 15.80nm 4.8mb
 WARB 27.94 183 eP 42 10.30 -0.6
 PPI 27.95 265 eP 42 11.70 0.7
 SNG 28.04 282 eP 42 12.80 1.0
 1.3s 161.54nm 5.5mb
 eS 46 48.40
 CTA 28.08 142 iPc 42 12.50 0.3
 1.0s 89.00nm 5.4mb
 i 42 47.10 168kmX
 iPcP 45 24.20
 iS 46 50.00
 iScP 48 54.90
 iPcS 49 08.00
 i 49 15.00
 KAGJ 29.25 5 eP 42 21.70 -0.8
 PSI 29.31 272 iPc 42 23.00 -0.3
 1.1s 191.70nm 5.7mb
 SSE 29.81 348 P+ 42 27.00 -0.5
 5.0s 0.90nm 2.7mb X
 N 12s 1.00um

E 11s 1.60um
 pP 42 50.00 103kmX
 sP 43 00.00
 PcP 45 27.00
 S 47 13.00
 sS 47 48.00
 MEKA 29.84 198 iPd 42 26.50 -1.3
 0.4s 39.00nm 5.5mb
 NNT 30.18 292 eP 42 32.00 1.1
 LOE 30.28 302 iPc 42 31.60 -0.2
 KUMJ 30.59 4 P 42 33.50 -0.8
 NST 30.92 298 eP 42 38.00 0.6
 NJ2 31.29 345 Pc 42 40.80 0.4
 5.0s 0.70nm 2.7mb X
 S 47 37.00
 sS 48 22.00
 WHN 31.40 337 iPc 42 43.00 1.6
 Z 18s 1.82um 4.8msz
 pP 43 08.00 113km
 PcP 45 32.20
 S 47 36.00
 iS 47 43.00
 sS 48 26.00
 GYA 32.05 322 iPc 42 48.60 1.3
 3.0s 1.60nm 3.3mb X
 Z 16s 1.20um 4.7mszX
 N 10s 2.40um
 E 10s 1.80um
 pP 43 17.00 131kmX
 PcP 45 34.20
 S 47 54.00
 SHNJ 32.19 4 eP 42 47.20 -1.0
 TKSJ 32.39 9 P 42 49.70 -0.3
 BDT 32.55 300 eP 42 51.10 -0.5
 1.0s 55.20nm 5.3mb
 FORR 32.55 180 iPd 42 50.00 -1.4
 0.3s 21.00nm 5.4mb
 SHK 32.74 7 eP 42 52.50 -0.6
 WKYJ 32.89 11 P 42 54.00 -0.5
 MRWA 33.08 200 eP 42 55.00 -1.1
 CHG 33.28 302 iPc 42 58.30 0.3
 0.9s 74.37nm 5.5mb
 e 45 38.10
 eS 48 12.00
 CHTO 33.28 302 iPc 42 58.60 0.6
 PcP 45 38.20
 COOL 33.28 191 eP 42 55.60 -2.2
 SVO 33.31 110 eP 43 00.00 1.8
 YONJ 33.49 8 P 42 59.40 -0.2
 KMI 33.75 315 iPc+ 43 04.00 1.8
 3.0s 1.90nm 3.4mb X
 Z 18s 2.50um 5.0msz
 E 13s 1.10um
 pP 43 33.00 132kmX
 sP 43 45.00
 PP 44 23.00
 iS 48 20.00
 sS 49 09.00
 BAL 34.13 198 eP 43 03.30 -1.8
 TSRJ 34.25 11 P 43 05.50 -0.5
 RMO 34.46 146 iPc 43 08.60 0.6
 0.6s 46.00nm 5.5mb
 i 45 44.10
 IIDJ 34.61 14 P 43 08.10 -1.2
 KLB 34.75 196 eP 43 08.70 -1.7
 0.3s 24.00nm 5.5mb
 CHJJ 35.42 15 P 43 13.80 -2.3
 MUN 35.56 198 iPd 43 16.10 -1.2
 MTMJ 35.64 13 P 43 16.80 -1.2
 TIA 35.68 344 Pc 43 17.80 -0.4
 Z 20s 1.20um 4.7msz
 N 12s 1.30um
 PcP 45 44.10
 S 48 43.00
 sS 49 29.00
 MAT 35.69 14 iPc 43 16.50 -1.9
 0.9s 73.11nm 5.6mb
 Z 20s 2.84um 5.0msz
 eS 48 39.00
 STK 35.89 160 iPc 43 20.40 0.4
 0.8s 302.00nm 6.2mb
 i 45 45.20
 NWAO 36.15 196 iPc 43 21.20 -1.0
 0.6s 37.00nm 5.4mb
 Z 20s 1.50um 4.8msz
 XAN 36.74 333 iPc 43 27.70 0.5
 N 12s 2.40um

E 11s 1.50um
 S 48 58.00
 CD2 37.02 324 iPc 43 30.40 0.8
 Z 10s 2.20um 5.2mszX
 pP 43 56.80 115km
 S 49 06.00
 sS 50 00.00
 CMS 37.15 155 iPc 43 31.00 0.4
 0.6s 40.00nm 5.5mb
 RKG 37.29 195 eP 43 35.20 3.4X
 DL2 37.34 351 Pc 43 32.00 -0.1
 Z 28s 1.80um 4.7mszX
 N 14s 2.30um
 E 12s 1.30um
 PcP 45 49.00
 S 49 10.00
 BRS 37.48 143 iPd- 43 33.40 -0.1
 iPcP 45 06.00
 iS 49 15.00
 iScP 49 29.00
 YAMJ 37.70 15 eP 43 35.20 0.0
 ADE 37.95 166 iPc 43 38.20 0.9
 0.8s 223.88nm 6.1mb
 TIY 38.51 340 iPc 43 41.80 -0.3
 1.3s 0.30nm 3.0mb X
 Z 14s 2.62um 5.2mszX
 N 10s 1.70um
 pP 44 08.00 115km
 PcP 45 50.50
 iS 49 28.00
 sS 52 18.00
 OFUJ 39.00 17 eP 43 46.20 0.2
 COO 39.37 147 iPc 43 50.00 0.8
 0.8s 171.00nm 5.9mb
 e 45 26.00 536kmX
 BJI 39.53 345 Pc 43 51.00 0.6
 4.0s 1.22nm 3.1mb X
 Z 16s 1.17um 4.8mszX
 E 14s 0.90um
 esP 44 26.00
 PcP 45 57.00
 eS 49 43.00
 esS 50 24.00
 eSS 52 32.00
 eScS 53 48.00
 SNY 39.99 355 iPc 43 54.00 -0.1
 4.0s 1.10nm 3.0mb X
 Z 16s 2.20um 5.1mszX
 N 14s 1.20um
 E 15s 1.40um
 S 49 48.00
 sS 50 33.00
 BWA 40.78 154 iPc 44 03.30 2.5
 LZH 40.85 329 iPc 44 03.50 2.0
 3.0s 3451.00nm 6.6mb
 Z 36s 5.00um 5.1mszX
 pP 44 29.50 113km
 S 50 06.00
 BFD 41.07 163 iPc 44 03.70 0.7
 1.3s 396.00nm 6.0mb
 HHC 41.62 341 eP 44 09.00 1.3
 Z 20s 1.90um 5.0msz
 N 12s 1.00um
 E 10s 0.20um
 S 50 10.00
 CAN 41.79 154 iPc 44 10.50 1.4
 CN2 41.81 357 eP 44 09.00 0.0
 pP 44 38.00 128kmX
 iPcP 46 03.00
 ScP 49 42.50
 S 50 15.00
 sS 51 04.50
 iSS 53 19.00
 BTO 41.93 339 iPc 44 10.50 0.3
 N 12s 1.00um
 E 12s 0.70um
 pP 44 36.00 110km
 CNB 41.95 154 eP 44 12.80 2.4
 SHL 42.19 307 iP 44 13.60 0.9
 iS 50 24.00
 TOO 42.38 160 iPc 44 15.80 1.9
 1.0s 176.00nm 5.8mb
 HOOJ 42.52 17 eP 44 17.20 2.4
 MDJ 42.57 1 Pc 44 15.70 0.5
 N 14s 1.10um
 ePcP 50 28.00
 sS 51 13.00

ZOBO 158.45 133 PKP 56 17.00 1.3
 1.4s 46.96nm
 Z 24s 0.25um 5.0mszX
 LR 52 20.00
 VAO 158.50 192 ePKP 56 15.00 0.0
 e 56 51.00
 CCH 159.09 138 PKP 56 16.90 0.9
 PPD 159.97 181 ePKP 56 17.60 1.1
 PDCR 163.62 229 ePKP 56 20.40 0.1
 e 56 31.80
 ITR 165.08 242 ePKP 56 21.60 -0.1
 e 57 19.50
 BAO 165.84 195 ePKP 56 21.80 -0.6
 SOB1 166.98 236 ePKP 56 23.00 -0.2
 e 57 28.20
 S.D. = 1.1 on 252 of 274 obs.

AUG 06, 1989 07h 43m 39.15± 0.20s
 1.093 N ± 3.2km 126.307 E ± 4.4km
 DEPTH = 50.0km (geophysicist)
 5.3mb (26 obs.) 5.0msz (2 obs.)
 MOLUCCA PASSAGE (266)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 25C
 Centroid Location:
 Origin Time 07:43:39.4 0.6
 Lat 0.96N 0.09 Lon 126.00E 0.10
 Dep 36.0 6.0 Half-duration 1.5
 Moment Tensor: Scale 10**16 Nm
 Mrr= 7.21 1.02 Mtt=-2.44 0.74
 Mff=-4.77 1.38 Mrt= 1.71 1.68
 Mrf= 3.21 1.60 Mtf=-4.09 0.99
 Principal Axes:
 T Vol= 8.07 Plg=77 Azm=288
 N 0.60 4 35
 P -8.67 13 126
 Best Double Couple: Mo=8.4*10**16
 NP1: Strike=222 Dip=32 Slip= 97
 NP2: 33 58 85

MNI 1.51 283 iPd 44 05.60 1.4
 eS 44 27.50
 AAI 5.11 158 ePd 44 57.50 2.3
 eS 46 03.40
 DAV 6.00 353 eP 45 14.90 7.3X
 TSM 8.79 291 ePc 45 49.30 2.8
 0.9s 637.10nm 6.6mb X
 MKS 9.27 227 ePc 45 55.50 2.4
 KKM 11.21 296 ePc 46 24.70 5.1X
 1.0s 98.30nm 5.9mb
 TRT 16.20 237 ePc 47 26.50 1.5
 1.2s 241.00nm 5.2mb
 BAG 16.23 340 eP 47 27.30 1.7
 KNA 16.91 172 eP 47 33.10 -0.9
 WB5 22.29 160 iPd 48 32.80 -1.0
 iS 52 34.80
 WRA 22.34 160 Pd 48 33.20 -1.0
 0.4s 52.90nm 5.3mb
 KGM 23.00 273 eP 48 40.50 -0.2
 MBL 23.00 196 eP 48 40.10 -0.6
 PMG 23.24 117 eP 48 44.00 1.0
 QIZ 24.05 319 eP 48 51.10 0.3
 QZH 24.85 343 eP 48 59.00 0.5
 QIS 25.15 150 eP 49 00.00 -1.4
 1.2s 311.00nm 5.7mb
 GZH 25.23 331 eP 49 00.80 -1.3
 IPM 25.48 278 ePd 49 04.20 -0.4
 0.6s 43.40nm 5.2mb
 ASPA 25.70 164 iPd 49 05.60 -0.9
 0.8s 129.00nm 5.5mb
 eS 53 32.20
 NANU 25.75 203 eP 49 06.80 -0.2
 PPI 25.95 267 eP 49 09.50 0.5
 SNG 26.31 284 eP 49 12.30 0.0
 WARB 27.12 179 eP 49 19.50 0.0
 0.3s 17.00nm 5.2mb
 PSI 27.41 274 iPc 49 21.00 -1.3
 1.0s 69.00nm 5.2mb
 MEKA 28.55 195 iPc 49 32.00 -0.5
 0.4s 17.00nm 5.0mb
 NNT 28.71 295 eP 49 33.70 -0.3
 CTA 28.73 138 iPd 49 33.80 -0.4
 1.2s 78.13nm 5.2mb
 LOE 29.10 305 iPd 49 36.80 -0.7
 NST 29.61 301 eP 49 41.70 -0.4
 SSE 30.23 351 eP 50 07.50 20.1X

BDT 31.29 302 eP 49 55.00 -1.9
 0.9s 63.60nm 5.4mb
 WHN 31.41 340 eP 49 57.50 -0.3
 GYA 31.51 325 P 49 59.00 0.1
 NJ2 31.59 348 Pd 49 59.30 0.0
 FORR 31.81 177 iPd 50 00.10 -1.2
 0.4s 82.00nm 5.9mb
 CHG 32.09 305 ePc 50 03.20 -0.8
 1.1s 40.19nm 5.2mb
 CHTO 32.09 305 iPc 50 03.30 -0.7
 1.2s 47.22nm 5.2mb
 COOL 32.18 188 eP 50 03.00 -1.6
 BAL 32.82 195 eP 50 09.30 -0.8
 KMI 32.99 318 Pd 50 13.00 1.0
 KLB 33.50 193 eP 50 15.40 -0.7
 0.4s 15.00nm 5.2mb
 SHK 33.79 9 eP 50 19.00 0.5
 MUN 34.25 195 iPc 50 22.30 -0.2
 0.6s 38.00nm 5.5mb
 SVO 34.90 108 eP 50 27.00 -1.3
 NWA0 34.90 193 iPc 50 28.10 0.0
 0.6s 31.00nm 5.4mb
 RMO 34.94 143 eP 50 29.00 0.5
 e 51 49.00
 HNR 35.10 108 eP 50 20.00 -10.0X
 TSRJ 35.43 14 P 50 33.40 0.9
 STK 35.85 157 iPd 50 35.60 -0.5
 0.7s 32.00nm 5.4mb
 IIDJ 35.88 16 P 50 36.40 0.0
 TIA 35.96 347 eP 50 36.40 -0.7
 RKG 36.05 193 eP 50 43.20 5.4X
 CD2 36.55 326 eP 50 41.40 -0.7
 XAN 36.59 335 Pc 50 41.50 -0.9
 CHJJ 36.72 17 eP 50 42.60 -0.8
 MTMJ 36.88 16 P 50 45.00 0.1
 MAT 36.95 16 iPc 50 44.90 -0.5
 1.5s 75.00nm 5.4mb
 CMS 37.32 152 eP 50 48.00 -0.5
 ADE 37.70 163 iPd 50 51.80 0.0
 0.9s 63.87nm 5.6mb
 NIJ 37.83 17 eP 50 54.80 2.1
 DL2 37.87 354 Pc 50 54.00 1.0
 BRS 38.08 140 iPc 50 54.70 -0.3
 i 52 23.50
 TIY 38.62 342 eP 50 58.50 -0.9
 Z 26s 1.14um 4.6mszX
 N 18s 1.00um
 COO 39.81 144 eP 51 10.00 0.6
 LZH 40.58 332 eP 51 16.00 0.2
 2.0s 55.00nm 5.0mb
 Z 20s 5.00um 5.4msz
 SNY 40.62 357 iPc 51 16.80 1.0
 BFD 40.95 160 eP 51 19.00 0.5
 BWA 40.97 152 eP 51 20.60 1.7
 e 52 54.00
 CAN 41.98 152 eP 51 27.80 0.7
 TOO 42.37 157 eP 51 31.70 1.4
 CN2 42.53 359 eP 51 27.50 -3.9X
 PcP 53 21.50
 MDJ 43.44 3 eP 51 39.80 1.0
 LSA 43.90 314 P 51 44.60 1.2
 GTA 45.15 331 eP 51 52.00 -0.9
 DZM 45.42 123 iPc 51 55.10 -0.1
 i 53 36.40
 KOD 49.38 282 eP 52 26.00 -0.6
 HYB 49.65 292 eP 52 27.00 -1.3
 1.0s 100.00nm 5.8mb
 GBA 49.92 287 P 52 27.90 -2.4
 NDI 54.24 305 iPd 53 02.00 -0.5
 POO 54.27 292 iPc 53 02.80 -0.1
 WMO 54.65 326 P 53 04.50 -0.9
 KSH 59.59 316 eP 53 40.20 -0.3
 QUE 63.21 303 eP 54 04.70 -0.4
 MAIO 70.78 308 eP 54 52.00 -0.7
 1.0s 17.50nm 4.9mb
 MAW 81.15 200 eP 55 51.60 1.1
 BHD 82.64 303 ePd 55 59.00 0.1
 MSL 83.84 306 ePd 56 05.50 0.5
 KVT 89.49 311 eP 56 33.00 0.5
 NAI 89.53 269 iPd 56 35.50 2.0
 MML 90.18 302 eP 56 35.00 -0.9
 PRNI 90.59 300 eP 56 39.00 1.1
 MBH 90.70 300 eP 56 41.00 2.7X
 SPA 91.09 180 e(P) 56 41.00 1.5
 1.0s 5.00nm 4.9mb
 KEV 92.21 340 eP 56 43.00 -1.4
 SOD 92.73 338 eP 56 46.00 -0.9

INK 92.75 21 eP 56 47.00 0.0
 SUF 93.69 333 eP 56 52.00 0.6
 NUR 94.79 331 eP 57 01.00 4.6X
 Z 18s 0.20um 4.6msz
 LR 43 10.00
 HFS 100.14 332 ePd iff57 20.10 -0.6
 0.4s 0.60nm 4.5mb
 YKA 102.06 25 ePd iff57 33.60 4.4X
 BRG 103.08 323 ePd iff57 40.00 5.9X
 1.1s 12.00nm 5.5mb
 ALO 119.09 48 e(PKP)02 26.20 1.3
 PPD 159.06 186 e(PKP)03 35.00 1.4
 S.D. = 1.0 on 94 of 104 obs.

AUG 06, 1989 08h 19m 56.12± 0.23s
 23.157 S ± 4.8km 68.321 W ± 5.6km
 DEPTH = 114.6km (32 depth phases)
 5.3mb (17 obs.)
 NORTHERN CHILE (123)

ANT 2.00 254 iPc+ 20 27.80 -2.0
 iS 20 50.00
 CYA 5.74 157 ePd 21 20.00 -0.3
 CCH 6.10 20 iPc 21 28.40 2.8
 i 22 02.40
 S 22 36.90
 CNCB 6.32 3 iPc 21 30.20 1.3
 LPB 6.59 2 iPc 21 34.20 1.8
 0.9s 302.52nm 5.7mb
 ZOBO 6.85 2 iPc 21 35.90 -0.2
 iS 22 56.00
 ARE 7.30 335 iPd 21 38.30 -3.6X
 i(S) 22 55.60
 ZON 8.36 182 eP 21 51.00 -5.1X
 MRA 9.50 166 e(P) 22 08.60 -2.8
 ROCH 10.06 193 eP 22 12.00 -7.1X
 PEL 10.17 191 ePc 22 23.50 3.2X
 FCH 10.28 189 eP 22 16.50 -5.6X
 LCCH 10.67 195 eP 22 29.50 2.5
 TACH 10.71 192 eP 22 22.00 -5.5X
 ITB1 12.83 99 eP 23 04.20 8.8X
 ITB 13.00 100 e(P) 23 05.50 7.8X
 ITB7 13.06 101 eP 23 06.10 7.6X
 NNA 13.75 322 iPc 23 12.70 5.2X
 0.8s 45.52nm 4.9mb
 PPD 15.75 89 ePc 23 33.40 0.6
 e 23 36.40
 i 23 52.00
 VAO 19.65 94 iPd 24 17.40 -1.0
 iPp 24 43.80
 i 24 58.30
 BMA 22.26 94 iPd 24 46.10 1.6
 epP 25 08.30 106km
 ATB 25.16 41 Pc 25 11.70 -0.6
 PSO 25.74 339 eP 25 19.00 0.8
 BOG 28.17 348 e(P) 25 43.00 2.8
 PDCR 29.68 74 eP 25 52.40 -0.9
 i 25 54.10 6kmX
 SOB1 29.69 67 eP 25 52.20 -1.3
 e 26 44.70 268kmX
 ITR 32.02 68 eP 26 11.40 -2.4
 e 26 13.90 9kmX
 e 26 20.30
 BUS 35.85 333 eP 26 48.50 1.3
 LCR2 36.12 333 iPd 26 50.20 1.0
 SJS 36.32 333 iPd 26 52.90 2.2
 BIM 38.11 11 eP 27 04.63 -1.0
 MVM 38.18 12 eP 27 04.74 -1.4
 FDF 38.30 11 eP 27 05.50 -1.8
 GCM 44.07 342 P 27 53.70 -0.7
 JSC 58.43 347 P 29 41.00 -0.9
 LHS 58.53 348 P 29 41.70 -1.0
 TKL 60.30 346 P 29 52.80 -2.0
 GBTN 60.41 345 P 29 53.00 -2.5
 RSCP 60.68 344 P 29 55.30 -2.1
 0.9s 195.17nm 6.1mb
 PWLA 60.78 341 P 29 55.40 -2.7
 BLA 61.12 349 P 30 01.20 0.8
 UYO 62.19 336 iPc 30 06.00 -1.6
 OLY 62.33 339 P 30 06.00 -2.4
 FVM 64.27 341 P 30 18.20 -2.9
 pP 30 47.60 120km
 MEO 64.39 333 e(P) 30 26.00 4.0X
 SPA 66.98 180 iPd 30 38.20 -0.3
 1.0s 106.50nm 5.7mb
 e 31 06.90 116km

06d 08h					CENTRAL ALASKA (1) <AGS-P>.		
ALQ	68.17 327 iPd	30 45.50	-0.8	1.0s	69.00nm	5.4mb	
	1.0s 56.75nm	30 52.90	5.4mb		pP	32 35.00 113km	
	e	31 10.00		MAW	82.59 163 iPd	32 07.70 0.4	
	ePcP	31 15.00 119km			0.9s 67.00nm	5.5mb	TOA 0.58 89 iP 07 50.50 -0.7
	epP	31 27.40		FFC	82.77 341 ePc	32 07.00 -1.2	GHO 0.79 246 iP 07 52.88 -1.0
LIC	68.34 73 Pd	30 47.44	0.0		i	32 30.50 120km	08 04.90 eS
TIC	68.54 72 P	30 48.96	0.3	BFS	84.10 117 iPd	32 13.00 -2.9	KNK 0.85 216 iP 07 54.11 -0.5
	1.0s 2.50nm	30 49.68	0.3		0.9s 84.03nm	5.6mb	iS 08 06.05 eS
KIC	68.65 73 Pd	30 49.68	0.3	SEK	84.23 118 iPd	32 18.50 1.9	PME 0.91 239 iP 07 54.37 -0.9
	1.0s 55.00nm	30 50.50	0.7		0.8s 18.66nm	5.0mb	KLU 0.93 130 iP 07 54.80 -0.9
GAC	68.84 355 eP	30 50.50	0.7	PNT	85.36 329 ePd	32 21.00 -0.4	eS 08 07.30 eS
GLA	71.35 320 P	31 06.00	0.5	EDM	85.49 335 iPd	32 24.70 2.7	PLRM 0.97 239 iP 07 55.08 -0.9
	pP	31 34.80	114km		pP	32 50.50 97kmX	eS 08 09.08 eS
GLD	71.43 331 P	31 05.80	-0.2	SLR	85.79 116 iPd	32 25.00 0.7	SDG 0.97 63 iP 07 55.27 -0.9
	1.1s 72.32nm	31 35.20	117km	FRB	86.61 360 eP	32 27.00 -0.1	eS 08 08.34 eS
GOL	71.46 331 P	31 05.70	-0.6	PGC	86.77 327 eP	32 29.00 0.8	VZW 1.12 158 iP 07 57.07 -1.2
	1.0s 65.00nm	31 34.80	116km	BUL	88.31 111 iPc	32 37.40 0.8	eS 08 13.51 eS
BAR	72.20 319 eP	31 10.00	-0.5	BNG	88.85 85 ePd	32 40.20 1.1	GLI 1.24 173 iP 07 59.25 -0.5
	e	31 39.00	115km		0.6s 4.00nm	4.7mb	eS 08 17.49 eS
KUK	72.44 75 eP	31 13.00	0.7	YKA	92.92 340 eP	33 10.30 115km	PAX 1.25 45 iP 07 59.25 -0.8
PLM	72.78 319 eP	31 14.00	-0.1	YKB0	93.01 340 eP	32 57.40 0.6	eS 08 15.49 eS
TPC	72.81 320 eP	31 14.00	-0.1	INK	102.68 340 ePdiff	33 41.00 0.2	PWA 1.26 250 iP 07 59.93 -0.1
PEC	73.33 319 P	31 17.20	0.1		pP	34 11.00	HUR 1.36 311 eP 08 00.79 -0.7
	pP	31 46.20	114km	CTA	125.37 221 iPd	35 22.70 -0.1	eS 08 18.59 eS
RVR	73.53 319 eP	31 18.00	-0.2		0.6s 14.00nm		CUT 1.37 284 iP 08 01.39 -0.3
MSU	73.85 326 P	31 20.60	0.4	CTA	125.37 221 iPKPc	38 45.40 -0.3	FID 1.43 161 iP 08 02.16 -0.3
GSC	74.09 320 eP	31 22.00	0.4		1.0s 12.50nm		eS 08 20.55 eS
	e	31 51.00	114km	ASPA	128.69 206 iPKPd	38 51.10 -0.9	RND 1.47 334 iP 08 02.56 -0.5
MWC	74.10 319 eP	31 22.00	0.3		0.8s 26.00nm		eS 08 21.74 eS
	e	31 51.00	114km	WRA	131.79 209 PKPd	38 57.10 -0.9	SUA 1.71 249 iP 08 06.71 0.2
PAS	74.12 319 eP	31 22.00	0.4		0.8s 9.30nm		eS 08 29.26 eS
SBB	74.28 319 eP	31 22.00	-0.6	WBS	131.84 209 ePKP	38 57.80 -0.2	CVA 1.75 152 eP 08 08.90 2.0
	e	31 51.00	114km		e	39 29.00	eS 08 27.89 eS
SBA	74.30 190 ePd	31 23.00	0.9	POO	144.42 90 ePKP	39 21.00 -0.1	HIN 1.77 165 eP 08 07.40 0.2
RSSD	74.52 334 P	31 24.20	0.2	KSH	145.71 53 ePKP	39 24.00 1.1	eS 08 32.31 eS
DAU	74.81 327 P	31 25.80	-0.1	GBA	146.22 100 PKP	39 25.10 1.0	KNIM 1.77 185 iP 08 07.30 0.1
CLC	74.92 320 eP	31 26.00	-0.2		e	39 56.80	MCK 1.78 338 eP 08 07.52 0.2
	e	31 55.00	114km	KUSJ	146.24 314 ePKP	39 22.90 -0.5	eS 08 29.36 eS
ISA	75.33 320 eP	31 29.00	0.4	ASAJ	147.11 317 ePKP	39 25.60 0.8	DDM 1.83 22 eP 08 07.06 -1.1
	e	31 58.00	114km	GUA	147.11 259 ePKP	39 27.20 1.6	SGAM 1.93 146 eP 08 08.90 -0.5
SYP	75.47 318 eP	31 30.00	0.4		0.8s 185.07nm		SKT 1.95 268 iP 08 09.78 0.1
BLP	75.76 318 P	31 31.00	0.1	GUMO	147.17 259 ePKP	39 27.40 1.7	eS 08 34.52 eS
	pP	32 00.30	115km		1.0s 288.00nm		SLKM 2.10 222 eP 08 12.02 0.2
BW06	75.82 330 P	31 30.40	-1.0	PJG	147.17 259 ePKP	39 27.50 1.8	DMW 2.10 20 eP 08 13.13 1.3
BCH	75.98 318 P	31 32.80	0.5	HYB	148.45 94 ePKP	39 32.00 4.3X	RAGM 2.17 141 eP 08 12.11 -0.7
	pP	32 02.00	115km		1.0s 40.00nm		eS 08 40.99 eS
TNP	76.27 322 P	31 34.20	0.1		e	39 46.50	KTH 2.17 314 eP 08 12.67 -0.3
	1.0s 29.17nm	32 03.50	115km	NDI	148.59 73 iPKPc	39 29.00 1.4	DOT 2.18 43 eP 08 12.63 -0.4
	pP	31 38.20	0.4	MRRJ	148.93 315 ePKP	39 31.60 3.9X	SEW 2.24 207 eP 08 14.33 0.6
PRI	76.97 319 eP	32 07.20	113km	TRT	149.32 182 ePKPd	39 34.50 5.4X	eS 08 43.69 eS
	epP	31 40.00	0.2	MAT	153.50 306 iPKPc	39 42.40 7.7X	NKA 2.29 235 eP 08 16.10 1.6
IMW	77.32 330 P	31 40.60	0.3		0.8s 21.60nm		HDA 2.32 5 iP 08 15.11 0.2
LLA	77.45 319 eP	31 40.60	0.3	CN2	156.49 334 ePKP	39 38.00 -0.4	eS 08 43.53 eS
	epP	32 09.80	114km		ePP	43 44.00	CGLM 2.33 252 iP 08 15.65 0.5
PRS	77.52 319 eP	31 41.00	0.3	BJI	162.74 348 ePKP	39 47.00 1.7	eS 08 40.98 eS
	epP	32 10.00	113km	LZH	165.43 26 ePKP	39 49.50 1.3	HMT 2.34 138 eP 08 07.37 -7.8
SCH	77.66 1 eP	31 41.00	-0.1	TIY	165.48 358 ePKP	39 45.70 -2.3	TMW 2.37 57 eP 08 15.15 -0.5
SAO	77.85 319 eP	31 42.50	0.0	XAN	168.89 12 PKP	39 51.50 1.0	WRH 2.40 353 iP 08 15.68 -0.3
CMB	78.06 320 eP	31 43.60	-0.1		S.D. = 1.2 on 117 of 133 obs.		eS 08 44.90 eS
ARN	78.29 319 P	31 45.80	0.8		? AUG 06, 1989 08h 20m 52.89± 5.15s		SPU 2.40 249 eP 08 16.30 0.1
	pP	32 15.20	115km		31.456 S ± 22.1km 69.177 W ± 16.1km		CRP 2.41 252 eP 08 16.61 0.2
MHC	78.35 319 eP	31 45.90	0.5		DEPTH = 93.8 ± 51.1 km		CCB 2.56 356 eP 08 17.68 -0.6
GCC	78.36 319 eP	31 45.50	0.2		SAN JUAN PROVINCE, ARGENTINA (137)		eS 08 46.93 eS
	epP	32 14.60	114km	RTBS	0.31 229 iPd	21 06.80 -0.2	TGL 2.58 120 eP 08 17.97 -0.7
PCC	78.89 319 eP	31 47.90	-0.3		S	21 19.00	eS 08 51.22 eS
BKS	79.05 319 eP	31 49.60	0.5	RTCB	0.32 95 iPd	21 07.50 0.3	NEA 2.60 344 eP 08 17.64 -1.2
	0.9s 47.00nm	31 49.70	0.6		S	21 19.00	KAIM 2.62 145 eP 08 18.64 -0.6
BRK	79.06 319 e(P)	31 49.70	0.6	RTLL	0.62 78 iPd	21 09.00 -0.3	eS 08 45.47 eS
LRM	79.49 330 ePd	31 51.90	0.3		S	21 23.00	RDS 2.75 353 eP 08 20.59 -0.5
	e	32 21.40	115km	RTCV	0.68 127 iPd	21 10.00 0.2	eS 08 51.95 eS
ORV	79.72 321 eP	31 52.80	0.2		S	21 24.50	FBA 2.81 357 iP 08 21.37 -0.6
	epP	32 22.30	115km	CFA	0.82 101 iPc	21 11.10 -0.1	RDT 2.86 240 eP 08 22.18 -0.5
MIN	80.30 322 eP	31 54.70	-1.2	RTRS	1.30 349 iPd	21 16.80 0.1	GLM 2.90 0 eP 08 22.36 -0.8
WDC	81.00 321 eP	31 58.00	-1.3		S	21 35.50	RED 3.09 239 eP 08 25.46 -0.6
	epP	32 27.20	113km		S.D. = 0.3 on 6 of 6 obs.		CTGM 3.12 109 eP 08 25.99 -0.5
LBFM	81.13 322 P	32 00.20	-0.1		& AUG 06, 1989 09h 07m 38.48s		eS 09 04.79 eS
	pP	32 30.00	116km		62.103 N 147.405 W		CNPM 3.19 218 eP 08 26.77 -0.6
HVD	81.65 120 iPc	32 18.20	14.9X		DEPTH = 55.8km		OPY 3.76 232 eP 08 35.01 -0.3
	0.9s 21.85nm	33 48.00	394kmX		? AUG 06, 1989 10h 41m 22.05± 8.83s		DWY 4.12 58 P 08 39.30 -1.0
FHC	81.98 321 eP	32 05.20	0.7				IMA 4.84 328 iP 08 49.52 -1.1
SES	82.40 334 iPd	32 05.90	-0.6				INK 8.51 37 eP 09 39.00 -2.6

19.369 N \pm 64.0km DEPTH = 10.0km PUERTO RICO REGION	66.620 W \pm 16.0km (geophysicist) (90)	ATN 6.17 282 P 54 37.60 -1.3 HRT 6.26 52 eP 54 38.00 -2.3 NKY 6.48 332 ePn 54 44.00 0.7 eSn 55 52.50	Z 15s 0.06um 3.2MszX LR 07 25.00 EKA 25.46 324 P 58 33.00 -1.0 0.8s 12.10nm 4.5mb
CSB 1.16 158 P 41 43.80 0.1 S 41 53.10		MEU 6.56 272 Pc 54 43.10 -1.3 MNO 6.75 279 P 54 46.60 -0.6 SGO 6.98 301 P 54 50.00 -0.3	SHI 25.59 98 eP 58 36.00 0.4 SUF 25.65 3 iP 58 34.40 -1.3 DLE 26.14 318 eP 58 39.30 -1.0
LPR 1.27 146 P 41 45.40 -0.3 PNP 1.30 183 P 41 46.00 -0.2 SJJ 1.33 160 iP 41 47.00 0.4 MGP 1.43 198 P 41 48.00 0.0 S.D. = 0.4 on 5 of 5 obs.		BUC1 7.51 16 eP 55 42.00 44.5X BUC 7.58 16 iPc 55 40.00 41.4X BBTK 8.01 68 eP 55 13.00 8.2X DUI 8.08 306 P 55 07.00 1.3 CMP 8.23 9 ePd 55 07.00 -0.6	DCN 26.56 317 eP 58 43.90 -0.3 DMU 26.61 319 eP 58 42.50 -2.1 BNG 32.84 188 iPc 59 40.90 0.4 0.6s 19.00nm 5.2mb X TIC 39.75 227 P 00 38.30 -0.8 KIC 39.82 227 P 00 39.00 -0.6
AUG 06, 1989 11h 53m 07.69 \pm 0.34s 37.161 N \pm 3.8km 23.135 E \pm 2.9km DEPTH = 33.0km (normol) 4.1mb (18 obs.) SOUTHERN GREECE (368) ML 4.1 (ATH).		ISR 8.37 17 eP 55 14.50 4.8X SDI 8.52 305 P 55 14.40 2.6 BZS 8.52 353 eP 55 10.50 -1.2 CSS 8.54 102 eP 55 13.00 0.9 MLR 8.59 13 iPc 55 11.50 -1.2 CFR 8.86 24 P 55 17.00 0.6 AZI 8.90 306 P 55 22.00 5.0X CVO 8.95 14 eP 55 19.00 1.4 MDB 9.02 6 eP 55 11.00 -7.6X VRI 9.11 16 ePc 55 18.50 -1.3 MNS 9.59 306 P 55 34.00 7.5X ASS 9.95 310 P 55 35.50 3.9X ARV 10.03 312 P 55 32.00 -0.5 VBY 10.22 327 ePn 55 37.30 2.2 eSn 57 28.40	GBA 53.57 101 Pc 02 26.70 -1.1 0.8s 4.50nm 4.5mb SCH 60.58 318 eP 03 16.00 -1.1 CHG 67.77 83 eP 04 03.10 -1.4 CHTO 67.77 83 eP 04 03.10 -1.4 1.2s 7.64nm 4.7mb INK 73.40 351 eP 04 37.00 -0.7 YKA 75.04 341 eP 04 48.00 0.7 S.D. = 1.3 on 100 of 131 obs.
ATH 0.93 30 ePb 53 25.50 1.1 ITM 0.97 271 iPc 53 22.80 -2.1 APE 1.92 92 ePn 53 39.00 0.3 VAM 1.95 154 ePn 53 39.20 0.1 NEO 2.14 2 ePn 53 42.00 0.2 VLS 2.26 297 ePb 53 46.00 2.5 NPS 2.76 133 ePn 53 52.00 1.5 PAIG 2.79 9 ePn 53 51.30 0.3 eSn 54 23.80		PTJ 10.25 331 eP 55 37.40 1.8 CEY 10.77 325 eP 55 47.00 4.4X eS 57 38.00	% AUG 06, 1989 12h 13m 35.04 \pm 2.01s 32.349 S \pm 12.2km 69.278 W \pm 18.1km DEPTH = 85.0 \pm 33.9 km MENDOZA PROVINCE, ARGENTINA (139)
LIT 2.98 350 ePnc 53 53.90 0.2 iSn 54 29.50		LJU 10.96 327 eP 55 46.00 0.8 e(S) 57 40.50	RTBS 0.70 348 iPd 13 52.00 0.7 S 14 05.50
PLG 3.22 4 ePn 53 56.80 -0.3 PRK 3.23 49 ePn 53 57.50 0.3 OUR 3.24 12 ePn 53 57.50 0.2 eSn 54 36.70		VOY 11.24 325 eP 55 43.00 -6.0X eS 57 47.10	RTCV 0.80 52 iPc 13 50.50 -1.9 S 14 10.20
KZN 3.32 342 ePn 53 58.50 -0.1 THE 3.47 358 ePnc 54 00.60 0.0 IZM 3.50 68 eP 54 02.20 1.1 KAP 3.64 115 iPnc 54 05.20 2.2 EZN 3.65 42 eP 54 03.00 -0.2 KEK 3.65 315 ePn 54 03.00 -0.3 SRN 3.66 319 iPn 54 04.40 1.1 GRG 3.83 352 ePn 54 06.10 0.3 eSn 54 50.60		RBL 11.69 325 P 55 55.00 -0.2 ZST 11.88 340 eP 56 05.60 7.9X FVI 12.17 324 P 56 08.50 7.0X SPC 12.20 351 eP 56 16.00 13.8X KRA 13.09 351 eP 56 20.40 6.6X KHC 13.83 333 P 56 31.50 7.9X 1.2s 10.00nm 4.5mb WET 14.11 331 eP 56 34.20 7.0X PRU 14.24 337 eP 56 26.00 -2.9X e 56 40.10	RTCB 0.95 25 iPd 13 55.00 0.8 S 14 11.50
SRS 3.97 5 ePnc 54 07.90 0.2 KNT 4.00 357 ePnd 54 08.80 0.6 YER 4.11 89 iP 54 17.90 8.0X VAY 4.18 354 iPn 54 11.00 0.3 ALN 4.36 30 ePn 54 16.00 2.6 eSn 55 04.90		KSP 14.53 342 eP 56 39.00 6.4X GRF 15.20 329 e(P) 56 46.00 4.6X BRG 15.20 337 eP 56 46.00 4.6X 1.0s 14.00nm 4.2mb e 56 51.00	RTLL 1.23 34 i(P) 13 58.50 1.0 S 14 18.00
RDO 4.40 24 ePn 54 12.50 -1.3 MMB 4.45 6 iPd 54 14.00 -0.6 eS 54 54.00		FEL 15.43 319 eP 56 43.90 -0.6 CLL 15.88 336 iP 56 54.10 4.0X 1.3s 19.00nm 4.1mb i 56 59.10	RTRS 2.18 356 iPc 14 09.00 -1.0 S 14 36.00
KKB 4.70 360 iPc 54 18.00 -0.1 KDZ 4.82 21 iPd 54 18.00 -1.8 MFT 4.85 40 eP 54 15.00 -5.3X EDC 4.88 48 eP 54 20.50 -0.1 TIR 4.89 330 ePn 54 22.50 1.7 DST 4.96 59 eP 54 22.00 0.1 PHP 4.98 336 ePn 54 21.50 -0.5 SKO 4.98 345 iPn 54 22.50 0.4 E 10s 2.00um		TOD 16.19 325 eP 56 55.70 1.5 HAU 16.40 317 eP 56 59.50 2.6 0.6s 5.40nm 3.9mb SMF 17.17 310 eP 57 07.90 1.4 0.6s 3.60nm 3.7mb LBF 17.24 311 eP 57 07.90 0.4 0.6s 1.80nm 3.4mb LOR 17.45 311 eP 57 10.00 0.0 0.6s 2.70nm 3.6mb	RFA 2.51 165 ePc 14 14.60 0.0 MRA 3.02 92 ePc 14 22.00 0.4 S.D. = 1.5 on 7 of 7 obs.
PLD 5.08 13 eP 54 23.00 -0.5 LCI 5.14 310 P 54 22.70 -1.7 KHL 5.19 75 iP 54 25.50 0.3 DIM 5.22 20 eP 54 26.00 0.5 KSL 5.29 99 ePn 54 28.80 2.4 KKS 5.34 338 ePn 54 31.50 4.4X VTS 5.42 1 iPc 54 29.00 0.5 e 13 23.80		ENN 18.34 323 eP 57 24.00 3.1X e 57 32.50	ANDREANOF ISLANDS, ALEUTIAN IS. (7) KDC 15.84 55 e(P) 55 58.00 -0.5 TTA 16.50 36 e(P) 56 08.50 1.5 PMR 18.67 45 e(P) 56 29.50 -4.3X FBA 20.63 37 eP 56 54.50 -0.9 HYT 23.95 50 P 57 28.20 -0.3 INK 27.19 34 eP 58 03.00 4.4X YKA 34.76 46 eP 59 11.00 5.5X RMW 35.63 74 eP 59 12.00 -1.2 LON 35.95 75 eP 59 15.50 -0.4 PNT 36.13 70 eP 59 16.00 -1.3 0.4s 2.00nm 4.4mb
ELL 5.44 92 iP 54 32.60 3.9X PGB 5.44 8 iPd 54 18.00 -10.6X PUK 5.48 334 ePn 54 28.10 -1.0 SDA 5.60 331 ePn 54 31.30 0.5 SOI 5.69 281 P 54 32.50 0.4 BCI 5.71 337 ePn 54 33.00 0.7 DMK 5.87 36 eP 54 33.00 -1.6 TDS 5.89 297 P 54 36.50 1.5 JMB 5.93 26 eP 54 27.00 -8.4X ITU 6.03 47 eP 54 35.00 -1.9 ISK 6.03 48 eP 54 40.00 3.0X TTG 6.05 332 ePn 54 36.30 -0.8 eSn 55 41.00		DOU 18.57 320 P 57 25.80 2.0 0.9s 22.50nm 4.4mb e 04 02.00	EDM 38.12 61 eP 59 36.50 2.5X LBFM 38.67 82 eP 59 39.30 0.3 KVN 42.36 83 eP 00 09.70 0.3 TNP 43.50 83 eP 00 19.00 0.3 0.9s 10.74nm 4.6mb BW06 45.46 73 eP 00 34.50 0.1 MSU 46.38 79 eP 00 42.50 0.8 GOL 49.83 74 eP 01 09.50 0.9 ALO 52.19 79 eP 01 27.00 0.5 WB5 82.39 225 eP 04 36.70 0.1 WRA 82.46 225 Pd 04 36.70 -0.2 0.6s 1.30nm 4.2mb S.D. = 0.8 on 16 of 20 obs.
		WTS 18.78 327 eP 57 33.00 6.7X SNF 18.98 321 P 57 31.40 2.6 MFF 19.67 306 eP 57 35.10 -1.7 0.8s 4.50nm 3.8mb LDF 20.43 311 eP 57 42.00 -2.7 0.6s 3.60nm 3.9mb FLN 20.72 311 eP 57 45.90 -1.7 0.6s 6.10nm 4.2mb GRR 20.79 310 eP 57 46.60 -1.8 0.6s 5.40nm 4.1mb TOL 21.41 286 eP 57 57.00 2.2 IFR 23.30 269 iP 58 18.00 4.3X i 58 19.50 NUR 23.39 2 eP 58 13.00 -1.0 HFS 23.77 348 eP 58 16.70 -1.1 0.6s 12.60nm 4.6mb	& AUG 06, 1989 13h 17m 43.37s 59.939 N 140.475 W DEPTH = 10.0km (geophysicist) 5.3mb (48 obs.) 5.2Msz (6 obs.) SOUTHEASTERN ALASKA (19) <AGS-P> CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 17S, 29C Centroid Location: Origin Time 13:17:53.4 0.5 Lot 60.18N 0.07 Lon 140.82W 0.13 Dep 15.0 BDY Half-duration 1.8

06d 15h

1.1s 9.70nm 4.8mb
SPA 149.76 180 e(PKP)34 28.20 -5.1
1.0s 4.00nm
70 obs. associated

* AUG 06, 1989 16h 45m 05.02±0.32s
16.670 S ±11.5km 174.144 W ±10.6km
DEPTH = 132.4km (8 depth phases)
4.9mb (14 obs.)

TONGA ISLANDS (173)

Table listing seismic data for Tonga Islands (173 stations). Columns include station name, time, depth, and magnitude. Stations include AFI, PVC, DZM, TAZ, PGZ, SVO, COO, RMQ, CTA, PMG, TOO, STK, WB5, WRA, ASPA, FORR, WARB, COOL, SBA, MBL, BAL, MUN, NANU, SPA, KVN, TNP, RMW, MSU, PMR, TTA, PNT, ALO, BW06, FBA, IMA, GOL, BJI, SES, EDM, INK, CHTO, PTZ, LSZ, KMZ, MZZ, NAI, WTS, KRA.

Table listing seismic data for various stations. Columns include station name, time, depth, and magnitude. Stations include KSP, CLL, BRG, SPC, UCC, CFR, ENN, PRU, VRI, HOF, SNF, CVO, DOU, MLR, ISR, GRF, ABH, KHC, RUP, TOD, WLF, BBTk, ZST, SRO, FLN, GWF, LDF, GRR, KMR, LPF, BZS, WLS, CDF, HRI, ECH, VITF, HAU, FEL, MOF, BSF, LOMF, LOR, FVI, RBL, SSF, LBF, MFF, PGB, LJU, AVF, KDZ, VOY, SMF, BGF, PRNI, CEY, VBY, VTS, RZN, LSF, TCF, MBH, MAF, LWI, VAI, KKB, EZN, RJF, LPG, LSD, SKO, LFF, RSP, LPO, RRL.

Table listing seismic data for stations PZZ, ROB, IMI, BNG. Columns include station name, time, depth, and magnitude.

S.D. = 1.3 on 66 of 127 obs.

% AUG 06, 1989 18h 53m 42.87±2.30s
15.652 N ± 8.9km 60.483 W ±23.3km
DEPTH = 33.0km (normal)

LEEWARD ISLANDS (92)
ML 2.9 (FDF).

Table listing seismic data for Leeward Islands (92 stations). Columns include station name, time, depth, and magnitude. Stations include MGG, DEG, BBL, CRM, FDF, MVM, PAG, BIM.

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

& AUG 06, 1989 19h 01m 53.75s
53.046 N 164.040 W
DEPTH = 3.0km

UNIMAK ISLAND REGION (10)
<PAL>

Table listing seismic data for Unimak Island Region (10 stations). Columns include station name, time, depth, and magnitude. Stations include SNKA, DRRR, BALA, DLG, PS4, PVV.

6 obs. associated

AUG 06, 1989 19h 36m 51.38±0.73s
39.321 N ± 6.4km 28.926 E ± 8.6km
DEPTH = 10.0km (geophysicist)

TURKEY (366)

Table listing seismic data for Turkey (366 stations). Columns include station name, time, depth, and magnitude. Stations include DST, KHL, EDC, GPA, IZM, HRT, ISK, ITU, CTT, EZN, YER, DMK, ELL, BBTk.

S.D. = 1.4 on 10 of 14 obs.

AUG 06, 1989 19h 43m 18.20±0.53s
31.684 S ± 5.7km 70.891 W ± 7.4km
DEPTH = 100.5 ± 6.3 km
5.0mb (4 obs.)

CHILE-ARGENTINA BORDER REGION (127)

Table listing seismic data for Chile-Argentina Border Region (127 stations). Columns include station name, time, depth, and magnitude. Stations include RTBS, ROCH, PEL, FCH, SAN, RTCB, LCCH, ZON, RTRS, PCH.

07d 00h

Table with columns for station code, time, depth, and coordinates. Includes stations like CVO, RIY, VRI, CFR, CRE, CEY, SFI, LJU, TRI, VOY, SRO, RBL, FVI, KBA.

Table with columns for station code, time, depth, and coordinates. Includes stations like LBG, CLL, HAU, LBF, LOR, HFS.

Table with columns for station code, time, depth, and coordinates. Includes stations like NUR, EKA, SUF, BNG.

AUG 07, 1989 00h 42m 32.69 ± 0.65s
38.967 N ± 6.9km 21.030 E ± 6.3km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.6 (ATH).

Table with columns for station code, time, depth, and coordinates. Includes stations like VLS, KEK, KZN, LIT, NEO, ITM, THE, GRG, PAIG, PLG, KNT, VAY, LCI, SRS, SKO, MGR, SGO.

AUG 07, 1989 00h 44m 46.74 ± 0.64s
38.885 N ± 7.0km 21.085 E ± 4.4km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.6 (ATH).

Table with columns for station code, time, depth, and coordinates. Includes stations like VLS, KEK, SRN, KZN, LIT, NEO, ITM.

Table with columns for station code, time, depth, and coordinates. Includes stations like VLO, ATH, PAIG, THE, PLG, OUR, KNT, VAY, LCI, SKO.

Table with columns for station code, time, depth, and coordinates. Includes stations like SDA, TDS, SOI, VTS, RDO, PLD, PGB, MGR, SGO, SDI, ARV, VBY, CEY, VOY.

S.D. = 1.1 on 21 of 31 obs.

? AUG 07, 1989 01h 00m 46.34 ± 1.37s
39.006 N ± 13.3km 20.916 E ± 20.1km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)

Table with columns for station code, time, depth, and coordinates. Includes stations like VLS, KZN, NEO, PLG.

AUG 07, 1989 01h 00m 52.20 ± 0.39s
38.995 N ± 4.3km 20.969 E ± 3.0km
DEPTH = 10.0km (geophysicist)
4.2mb (3 obs.)
GREECE (364)
ML 3.5 (ATH), 3.5 (TTG). Felt in Prevezon and Levkodos Provinces.

Table with columns for station code, time, depth, and coordinates. Includes stations like VLS, KEK, SRN, LSK, KZN, TPE, NEO, VLO, ITM, THE, GRG, ATH, VAY, OUR, LCI, PHP, SRS, SKO.

AUG 07, 1989 00h 44m 46.74 ± 0.64s
38.885 N ± 7.0km 21.085 E ± 4.4km
DEPTH = 10.0km (geophysicist)
GREECE (364)
ML 3.6 (ATH).

Table with columns for station code, time, depth, and coordinates. Includes stations like KKS, PUK, SDA, ULC, KKB.

Table with columns for station code, time, depth, and coordinates. Includes stations like TDS, BDV, TTG, HCY, RZN, SOI, VTS, NKY, RDO, PRK, PLD, EZN, PGB, BRY, KZD, MGR, ALN, ATN, VAM, DIM, SGO, IZM, MEU, PVL, HVAR, EDC, JMB, DUL, BEO, DMK, DST, SDI, AZI, CMP, MNS, MLR, ASS, ARV, VBY, PTJ, CVO, RIY, VRI, CRE, CEY.

Table with columns for station code, time, depth, and coordinates. Includes stations like SFI, LJU, TRI, VOY, RBL, MME, FVI, KBA, BOB, LPG, CLL, HAU, PRNI, MBH, LBF, BGF, MFF, NUR, EKA.

Table with columns for station code, time, depth, and coordinates. Includes stations like SFI, LJU, TRI, VOY, RBL, MME, FVI, KBA, BOB, LPG, CLL, HAU, PRNI, MBH, LBF, BGF, MFF, NUR, EKA.

Table with columns for station code, time, depth, and coordinates. Includes stations like BOB, LPG, CLL, HAU, PRNI, MBH, LBF, BGF, MFF, NUR, EKA, SFI, SUF, BNG, KBA.

S.D. = 1.4 on 76 of 89 obs.

Table with 5 columns: station ID, magnitude, depth, location (lat/lon), and distance. Includes stations like RSW, WAH2, PRW, SAW, EPH, PATW, MDW, JBO, BVW, BRVW, VTG, WTV, PNT, VGB, LON, EDM, GOL, KVN, TNP, WDC, ORV, CMB, FFC, ALO, YKA, YKB0, UYO, FVM, RSCP, GAC, INK, FBA, ALE, and a section for NEW BRITAIN REGION (192) and SOUTHERN GREECE (368).

Table with 5 columns: station ID, magnitude, depth, location (lat/lon), and distance. Includes stations like LIT, SOI, ATN, VAY, SKO, BRD, CFR, PPE, BIR, VRI, CLI, ISR, MLR, HYA, ASK, ODD1, SUE, BLS1, KMY, MOL, and a section for CENTROID, MOMENT TENSOR (HRV) with detailed parameters like Mrr, Mff, Mrf, etc.

Table with 5 columns: station ID, magnitude, depth, location (lat/lon), and distance. Includes stations like GUMO, RMO, DZM, BRS, MTN, WB5, WRA, COO, ASPA, Z, CMS, MNI, STK, BWA, DAV, CAN, WARB, FORR, MBL, OCP, BAG, COOL, NANU, SNZO, KLB, MSZ, ANP, MUN, SSE, QIZ, NJ2, WHN, TIA, SNY, MDJ, GYA, and GUA.

07d 14h

CN2 E 19s 1.50um 54.55 337 eP 58 53.00 -2.2
Z 4.0s 0.30nm 2.7mb X
Z 18s 1.20um 5.0Msz
N 16s 0.70um
eP 59 05.00 42kmX
iPP 00 56.00
eS 06 36.00
LOE 54.59 296 eP 58 56.00 0.1
BJI 55.98 327 eP 59 05.00 -0.6
Z 20s 1.30um 5.0Msz
N 20s 1.20um
eS 07 06.00
XAN 56.54 317 P 59 08.70 -1.1
TIY 56.54 323 eP 59 08.20 -1.6
N 20s 1.80um
Pc 07 22.00
sS 09 11.50 0.2
KMI 56.69 305 P 59 11.50 0.2
Z 20s 1.40um 5.1Msz
S 59 46.00
eS 06 57.00
CHG 57.56 296 iPc 59 17.00 -0.2
1.2s 22.66nm 5.1mb
CHTO 57.56 296 eP 59 16.90 -0.3
1.3s 21.24nm 5.0mb
CD2 58.55 311 P 59 23.40 -0.7
HHC 59.10 325 P 59 27.50 -0.3
Z 24s 2.10um 5.2Msz X
N 20s 1.50um
E 24s 2.50um
BTO 59.83 324 P 59 33.00 0.2
N 17s 0.60um
E 17s 0.70um
LZH 61.13 316 eP 59 42.00 0.2
1.6s 0.02nm 2.0mb X
Z 20s 1.00um 5.0Msz
S 08 00.00
GTA 65.58 318 eP 00 10.90 -0.2
Z 20s 0.90um 5.0Msz
E 20s 1.07um
eS 08 44.00
LSA 67.95 305 P 00 27.60 0.9
WMO 75.67 318 P 01 11.50 -0.5
KOD 75.85 282 eP 01 16.00 2.2
HYB 75.96 289 eP 01 13.00 -1.0
GBA 76.39 285 P 01 16.90 0.5
KDC 77.10 27 eP 01 19.20 -0.3
SVW 77.68 23 ePc 01 23.40 0.6
TTA 78.62 22 ePc 01 28.20 0.2
PMR 80.56 25 ePc 01 37.80 -0.5
1.3s 94.30nm 5.6mb
IMA 81.29 20 ePc 01 42.40 0.1
1.5s 41.70nm 5.2mb
TOA 82.04 25 ePc 01 46.70 0.6
KSH 82.73 311 eP 01 51.90 1.6
Z 20s 2.50um 5.6Msz
FBA 82.74 22 ePc 01 48.30 -1.3
SPA 84.62 180 e(P) 01 59.70 0.3
1.0s 10.50nm 5.0mb
MAW 84.71 203 eP 02 00.00 0.5
SIT 85.20 32 eP 02 03.00 0.9
INK 89.30 21 eP 02 21.00 -0.9
CMB 91.40 52 eP 02 32.80 0.5
PNT 93.00 41 eP 02 40.00 0.7
SBB 93.17 56 eP 02 41.00 0.5
KVN 93.28 51 P 02 41.40 0.3
CLC 93.44 55 eP 02 42.00 0.3
RVR 93.49 56 eP 02 43.00 1.1
TNP 93.90 52 P 02 44.00 0.0
TPC 94.60 56 eP 02 44.00 -3.1X
MBC 94.89 14 eP 02 48.00 0.5
0.9s 6.00nm 5.0mb
GLA 95.56 57 eP 02 53.00 1.5
YKB0 96.33 28 eP 02 54.50 0.2
YKA 96.33 28 eP 02 55.40 1.1
EDM 97.08 37 ePc 02 58.20 0.2
SES 98.57 40 eP 03 04.00 -0.7
ALQ 102.52 56 e(Pdif) 03 39.50 16.4X
Z 20s 0.34um 4.9Msz
eLR 38 20.00
BUL 118.88 244 ePKP 08 15.00 -0.8
BRG 122.81 330 e(PKP) 08 22.10 0.0
1.4s 12.00nm
KHC 124.06 328 ePKP 08 25.30 0.6
BNG 133.65 271 ePKPc 08 43.10 -1.0
0.8s 14.00nm
ic 08 45.00

CNCB 134.71 120 PKP 08 50.00 3.4X
LPB 134.73 120 ePKP 08 49.00 2.5X
TOL 139.48 331 ePKP 09 14.00 19.8X
ePP 11 56.00
PPD 144.41 141 e(PKP) 09 02.00 -1.4
IFR 144.89 326 iPKP 09 04.00 -0.1
i 09 10.00
VAO 146.20 147 e(PKP) 09 14.60 8.1X
e 09 26.20
AVE 146.30 328 iPKP 09 07.50 1.3
TIO 148.02 325 iPKP 09 13.00 3.8X
BAO 151.18 137 e(PKP) 09 06.00 -8.4X
KUK 152.52 273 ePKP 09 24.00 7.7X
KIC 156.87 273 PKP 09 35.00 12.8X
LIC 157.15 273 PKP 09 35.20 12.7X
PDCR 159.01 148 e(PKP) 09 41.00 16.4X
S.D. = 0.9 on 86 of 109 obs.
AUG 07, 1989 14h 53m 44.01 ± 0.49s
5.432 S ± 11.0km 152.177 E ± 12.3km
DEPTH = 33.0km (normal)
4.8mb (5 obs.)
NEW BRITAIN REGION (192)
RAB 1.23 360 iP+ 54 36.00 31.0X
LMG 5.28 229 eP 55 02.00 -0.8
PMG 6.36 231 eP 55 19.00 1.1
DZM 21.54 142 iPc 58 32.80 0.0
SNG 52.95 283 eP 03 10.30 10.4X
CHTO 57.70 296 eP 03 34.00 -0.2
1.8s 17.61nm 4.8mb
KDC 77.04 27 eP 05 35.10 -0.1
SVW 77.63 23 eP 05 39.40 0.8
PMR 80.51 24 ePc 05 53.70 -0.4
1.0s 22.50nm 5.1mb
IMA 81.26 20 ePc 05 58.40 0.3
1.0s 8.80nm 4.7mb
TOA 81.99 25 eP 06 02.70 0.8
FBA 82.70 22 eP 06 04.50 -1.0
SPA 84.60 180 e(P) 06 15.00 -0.3
1.0s 6.00nm 4.7mb
INK 89.26 21 eP 06 36.00 -1.7
MBC 94.87 14 eP 06 55.00 -8.5X
1.0s 4.00nm 4.8mb
YKA 96.27 28 eP 07 11.60 1.5
S.D. = 1.0 on 13 of 16 obs.
AUG 07, 1989 14h 55m 33.35 ± 0.38s
5.493 S ± 7.8km 152.042 E ± 8.7km
DEPTH = 33.0km (normal)
4.9mb (7 obs.)
NEW BRITAIN REGION (192)
LMG 5.14 228 e(P) 56 50.00 -0.2
SVO 8.52 116 eP 57 29.00 -8.5X
GUA 20.19 340 eP 00 12.80 4.6X
0.9s 154.62nm 5.3mb
DZM 21.58 141 iPc 00 22.00 -0.5
BRS 21.79 178 iPc 00 24.20 -0.3
GYA 54.22 308 P 04 59.20 0.7
XAN 56.61 317 Pd 05 14.80 -0.9
KMI 56.75 305 Pd 05 18.00 0.9
CHTO 57.61 296 iPc 05 23.00 0.1
1.3s 15.52nm 4.9mb
CD2 58.62 311 eP 05 28.80 -1.1
HHC 59.17 325 P 05 32.50 -1.1
BTO 59.90 324 iPc 05 38.00 -0.7
GBA 76.43 285 P 07 23.00 1.0
0.8s 4.30nm 4.5mb
KDC 77.15 27 eP 07 24.80 -0.4
SVW 77.74 23 eP 07 29.50 1.0
TTA 78.69 22 eP 07 33.50 -0.2
PMR 80.62 25 eP 07 43.00 -1.0
0.9s 33.30nm 5.3mb
IMA 81.36 20 eP 07 48.10 0.1
1.0s 13.80nm 4.9mb
TOA 82.10 25 eP 07 52.80 1.0
FBA 82.80 22 eP 07 54.20 -1.1
SPA 84.54 180 e(P) 08 08.00 3.6X
1.0s 5.00nm 4.7mb
INK 89.37 21 eP 08 27.00 -0.6
pP 09 25.00 238kmX
PNT 93.04 41 eP 08 45.00 0.1
MBC 94.96 14 eP 08 53.00 -0.2
1.0s 5.00nm 4.9mb
YKA 96.39 28 eP 09 01.40 1.4
KHC 124.13 328 ePKP 14 30.50 0.2

AVE 146.37 328 iPKP 15 13.50 1.7
TIO 148.09 325 iPKP 15 18.60 3.8X
i 16 16.40
S.D. = 0.9 on 24 of 28 obs.
AUG 07, 1989 14h 56m 30.72 ± 1.02s
5.594 S ± 27.8km 151.993 E ± 23.8km
DEPTH = 33.0km (normal)
5.2mb (4 obs.)
NEW BRITAIN REGION (192)
PMG 6.11 231 e(P) 58 01.00 -0.2
CHTO 57.61 296 iP 06 20.30 0.0
1.5s 24.21nm 5.0mb
GBA 76.40 285 P 08 19.60 0.4
1.1s 12.80nm 4.8mb
PMR 80.74 25 eP 08 41.50 -0.4
1.0s 35.00nm 5.3mb
FBA 82.92 22 iP 08 52.30 -1.0
0.8s 27.59nm 5.4mb
INK 89.48 21 P 09 25.00 -0.4
PNT 93.15 41 eP 09 43.00 0.2
YKA 96.50 28 eP 09 59.30 1.5
TIO 148.14 325 iPKP 16 16.40 4.2X
S.D. = 0.9 on 8 of 9 obs.
AUG 07, 1989 15h 14m 32.41 ± 0.40s
5.434 S ± 7.6km 152.160 E ± 8.9km
DEPTH = 33.0km (normal)
4.8mb (6 obs.)
NEW BRITAIN REGION (192)
PMG 6.34 231 eP 16 07.00 0.9
CTA 15.66 201 iPc 18 17.20 4.8X
1.0s 32.00nm 4.5mb
RMO 21.19 188 eP 19 18.00 0.5
e 19 22.00
DZM 21.55 141 iPc 19 20.80 -0.5
BRS 21.84 179 iPc 19 23.10 -1.0
MTN 22.02 249 eP 19 26.80 1.0
WB5 22.49 229 eP 19 31.60 1.1
WRA 22.55 229 Pd 19 30.70 -0.4
0.6s 5.70nm 4.2mb
KNA 25.14 244 eP 19 55.00 -1.3
ASPA 25.26 222 iPc 19 59.20 1.9
0.9s 61.00nm 5.2mb
iS 24 31.00
FORR 33.92 219 eP 21 13.20 -1.4
MBL 35.02 240 eP 21 23.30 -0.9
KMI 56.81 305 P 24 16.50 -0.1
CHG 57.69 296 eP 24 22.00 -0.6
CHTO 57.69 296 eP 24 21.50 -1.0
1.4s 9.13nm 4.6mb
KDC 77.05 27 eP 26 23.30 -0.4
SVW 77.64 23 ePc 26 27.70 0.7
TTA 78.59 22 ePc 26 32.50 0.3
PMR 80.52 24 iPc 26 42.00 -0.5
1.1s 25.00nm 5.1mb
IMA 81.26 20 ePc 26 46.80 0.2
1.1s 17.20nm 5.0mb
TOA 82.00 25 ePc 26 51.00 0.7
FBA 82.71 22 eP 26 53.00 -0.9
INK 89.27 21 eP 27 26.00 -0.2
YKA 96.28 28 eP 28 00.40 1.9
AVE 146.39 328 ePKP 34 13.00 2.2X
TIO 148.11 325 ePKP 34 17.00 3.1X
BAO 151.08 137 e(PKP) 34 04.00 -14.7X
LIC 157.29 273 PKP 34 38.80 11.6X
S.D. = 1.0 on 23 of 28 obs.
AUG 07, 1989 15h 44m 34.95 ± 1.44s
5.627 S ± 13.4km 152.314 E ± 24.1km
DEPTH = 33.0km (normal)
4.6mb (3 obs.)
NEW BRITAIN REGION (192)
RAB 1.43 354 iPc 44 58.70 -0.2
LMG 5.26 231 eP 45 52.00 -1.5
PMG 6.35 233 eP 46 09.00 0.3
MTN 22.09 250 eP 49 29.40 0.3
WB5 22.48 229 eP 49 34.70 1.7
WRA 22.54 229 P 49 42.00 8.4X
0.9s 8.50nm 4.2mb
ASPA 25.22 223 eP 49 59.20 -0.3
0.9s 23.00nm 4.8mb
SPA 84.41 180 e(P) 57 05.00 -0.3
1.0s 5.00nm 4.6mb

S.D. = 1.2 on 7 of 8 obs.				iSb 40 54.30				AUH 0.87 214 iP 58 40.79 -0.9			
* AUG 07, 1989 16h 17m 45.94 ± 1.08s				SRN 1.15 295 iPg 40 36.40 0.4	AUA 0.87 215 iP 58 40.75 -0.8						
4.816 S ± 18.4km 153.631 E ± 7.2km				KEK 1.25 285 ePg 40 38.00 0.3	eS 58 54.43						
DEPTH = 95.1 ± 11.5 km				TPE 1.37 311 ePn 40 38.00 -1.6	BRLK 0.88 111 iP 58 40.99 -0.7						
4.8mb (2 obs.)				VLS 1.37 206 ePb 40 38.70 -0.9	eS 58 55.56						
NEW IRELAND REGION (190)				NEO 1.45 93 ePn 40 42.50 1.7	AUI 0.89 212 iP 58 40.71 -1.1						
RAB 1.58 293 iPd 18 13.50 0.1				GRG 1.74 27 ePn 40 44.70 -0.3	NKA 0.91 43 iP 58 43.21 1.3						
LMG 6.79 233 eP 19 24.00 -0.9				PAIG 1.86 73 ePn 40 46.90 0.2	SPU 1.12 11 iP 58 43.93 -0.5						
VSG 7.47 126 eP 19 34.00 -0.1				eSn 41 10.40	eS 59 00.24						
SVO 7.50 125 eP 19 35.00 0.6				KNT 2.11 33 ePn 40 49.50 -0.8	CRP 1.20 8 iP 58 45.06 -0.4						
HNR 7.77 127 eP 19 38.00 -0.1				VAY 2.12 25 iPn 40 50.00 -0.5	SLKM 1.21 69 iP 58 44.23 -1.3						
PMG 7.88 234 eP 19 40.00 0.3				OUR 2.22 64 ePn 40 52.40 0.5	CGLM 1.25 11 iP 58 45.55 -0.5						
DZM 21.17 145 iPc 22 24.30 -1.1				TIR 2.25 330 ePn 40 54.50 2.2	eS 59 02.84						
RMO 22.05 192 iPd 22 36.20 2.2				ATH 2.33 127 ePg 40 58.20 4.7X	CDD 1.30 207 iP 58 44.98 -1.6						
BRS 22.46 182 iP 22 38.10 0.0				PHP 2.38 343 ePn 40 55.20 1.0	MCNL 1.30 227 iP 58 45.10 -1.5						
MTN 23.60 249 eP 22 50.20 1.0				SRS 2.42 44 ePn 40 54.50 -0.2	eS 59 02.52						
0.3s 18.00nm 4.9mb				SKO 2.56 1 iPn 40 57.40 0.6	SHU 1.47 177 iP 58 47.27 -1.3						
WB5 24.00 230 eP 22 53.30 0.2				i 40 59.70	eS 59 06.72						
WRA 24.06 230 Pd 22 53.40 -0.2				i 41 27.50	SEW 1.53 88 iP 58 47.59 -1.8						
0.6s 14.30nm 4.6mb				LCI 2.78 291 P 41 00.70 0.8	eS 59 07.74						
ASPA 26.70 224 eP 23 17.70 -0.6				PUK 2.86 338 ePn 41 02.70 1.7	SUA 1.63 31 iP 58 50.32 -0.5						
FORR 33.43 228 eP 24 17.50 -0.4				SDA 2.97 332 ePn 41 04.00 1.6	SVW 1.85 305 iPc 58 52.00 -1.7						
SPA 85.22 180 e(P) 30 38.40 25.5X				RDO 3.64 60 ePn 41 11.00 -1.0	PMS 1.86 50 iPc 58 52.80 -0.9						
0.8s 2.92nm				TDS 3.89 275 P 41 18.40 2.7X	SKT 1.96 14 iP 58 53.83 -1.2						
S.D. = 0.9 on 15 of 16 obs.				MGR 4.53 281 P 41 24.20 -0.5	PWA 2.03 38 iPd 58 54.80 -1.1						
* AUG 07, 1989 16h 47m 05.97 ± 0.66s				SGO 4.79 286 P 41 28.40 0.0	PLRM 2.24 46 iP 58 56.66 -2.1						
35.336 N ± 10.5km 136.855 E ± 5.5km				MLR 6.96 28 eP 42 02.50 3.4X	PMR 2.24 46 iPd 58 56.80 -1.9						
DEPTH = 10.0km (geophysicist)				VRI 7.57 30 eP 42 10.00 2.5X	PME 2.30 46 iP 58 57.64 -1.9						
SOUTHERN HONSHU, JAPAN (232)				VOY 8.60 323 ePn 42 18.40 -3.6X	KDC 2.35 180 iPd 58 57.10 -3.1						
MG 3.5 (JMA). Felt (1 JMA) at Gifu.				eSn 43 53.50	KNK 2.39 54 iP 58 58.67 -2.2						
GIF 0.10 310 iPd 47 08.80 0.2				NB2 22.56 347 P 45 14.30 -1.6	eS 59 26.73						
TSRJ 0.74 286 iPd 47 20.10 -0.4				0.8s 2.50nm 3.8mb	KNIM 2.39 82 iP 58 57.91 -3.0						
IIDJ 0.88 80 iPd 47 22.00 -0.8				S.D. = 1.2 on 24 of 29 obs.	GHO 2.43 44 iP 58 59.49 -2.0						
WKYJ 1.52 223 P 47 33.40 0.1				? AUG 07, 1989 17h 47m 09.70 ± 3.38s	eS 59 27.49						
CHJJ 1.88 67 P 47 39.30 0.8				23.119 N ± 19.1km 121.910 E ± 24.9km	MTU 2.44 90 iP 58 59.88 -1.6						
TKSJ 2.68 241 P 47 50.10 0.2				DEPTH = 10.0km (geophysicist)	GLI 2.79 71 iP 59 02.74 -3.6						
YONJ 2.78 268 eP 47 51.20 -0.1				TAIWAN (244)	HIN 3.01 81 eP 59 06.01 -3.3						
S.D. = 0.6 on 7 of 7 obs.				TWF1 0.61 292 iPd 47 22.00 0.0	eS 59 39.89						
? AUG 07, 1989 17h 30m 55.64 ± 13.41s				TWG 0.83 249 ePc 47 25.70 0.0	FID 3.06 75 iP 59 05.96 -4.0						
8.402 S ± 120. km 128.707 E ± 21.5km				TWD 1.00 343 eP 47 28.60 0.0	VZW 3.09 69 iP 59 07.16 -3.3						
DEPTH = 152.3 ± 38.6 km				TWC 1.48 358 iPd 47 36.40 0.0	MID 3.19 99 eP 59 09.50 -2.2						
4.0mb (2 obs.)				ANP 2.09 350 eP 47 52.00 6.8X	HUR 3.21 24 iP 59 11.26 -0.8						
TIMOR SEA (290)				S.D. = 0.5 on 4 of 5 obs.	TTA 3.31 331 ePd 59 11.40 -2.1						
MTN 5.02 152 iPd 32 11.20 1.0				* AUG 07, 1989 17h 49m 46.71 ± 0.90s	CVA 3.39 79 eP 59 10.98 -3.5						
KNA 7.30 180 eP 32 41.50 0.6				39.445 N ± 9.2km 21.344 E ± 8.7km	eS 59 47.71						
0.3s 57.00nm 5.6mb X				DEPTH = 10.0km (geophysicist)	KLU 3.52 64 iP 59 13.45 -2.9						
WB5 12.66 155 eP 34 11.00 0.7				GREECE (364)	KTH 3.56 11 eP 59 14.92 -2.0						
WRA 12.70 155 Pc 33 50.20 -1.9				MD 3.0 (ATH).	SGAM 3.65 80 eP 59 14.23 -3.9						
MBL 15.30 213 eP 34 24.00 -0.9				KZN 0.92 21 ePg 50 04.20 -0.2	eS 59 57.49						
0.3s 2.00nm 3.9mb				LIT 1.10 53 eP 50 06.50 -0.9	TOA 3.68 54 eP 59 16.40 -2.1						
ASPA 15.97 162 eP 34 33.70 0.4				KEK 1.22 283 ePg 50 10.00 0.5	RND 3.75 26 iP 59 17.87 -1.7						
WARB 17.79 186 eP 34 55.70 0.5				VLS 1.40 205 ePb 50 11.30 -0.9	RAGM 3.91 82 eP 59 19.01 -2.7						
FORR 22.34 181 eP 35 42.50 1.0				NEO 1.46 95 ePb 50 14.80 1.6	eS 00 03.52						
S.D. = 1.4 on 8 of 8 obs.				PLG 1.86 59 ePb 50 22.70 3.7X	MCK 4.03 23 eP 59 21.85 -1.5						
AUG 07, 1989 17h 40m 14.52 ± 0.70s				VAY 2.09 26 e(Pn) 50 21.00 -1.2	KAIM 4.06 89 eP 59 21.26 -2.5						
39.407 N ± 7.5km 21.360 E ± 4.4km				SKO 2.53 2 ePn 50 29.50 1.1	eS 00 04.70						
DEPTH = 10.0km (geophysicist)				S.D. = 1.4 on 7 of 8 obs.	PAX 4.44 46 iP 59 26.64 -2.4						
3.8mb (1 obs.)				& AUG 07, 1989 17h 58m 22.73s	NEA 4.78 18 eP 59 30.98 -2.7						
GREECE (364)				60.088 N 152.501 W	TGL 4.84 78 iP 59 32.05 -2.6						
ML 3.6 (ATH).				DEPTH = 94.2km	WRH 4.86 23 eP 59 31.84 -2.9						
LSK 0.95 322 iPgd 40 30.30 -2.3				SOUTHERN ALASKA (2)	HDA 5.05 28 iP 59 34.81 -2.6						
KZN 0.95 19 ePg 40 31.00 -1.7				<AGS-P>.	CCB 5.07 24 eP 59 34.60 -3.1						
LIT 1.11 51 ePbc 40 35.90 0.5				ILIM 0.23 268 iP 58 36.10 1.1	RDS 5.17 21 iP 59 36.41 -2.7						
				RED 0.36 338 iP 58 36.81 -0.5	FBA 5.30 22 eP 59 38.00 -2.9						
				RDT 0.49 5 iP 58 37.62 -0.5	DOT 5.36 45 eP 59 39.06 -2.7						
				eS 58 49.51	GLM 5.46 23 eP 59 40.16 -3.0						
				OPT 0.57 220 iP 58 38.04 -0.7	IMA 6.03 355 eP 59 48.45 -2.6						
				eS 58 50.51	HYT 7.45 78 P 00 08.00 -2.7						
				NNL 0.61 94 iP 58 39.28 0.3	63 obs. associated						
				XLV 0.75 148 iP 58 39.50 -0.8	? AUG 07, 1989 18h 44m 45.72 ± 3.45s						
				AUL 0.85 214 iP 58 40.54 -0.8	5.555 S ± 24.6km 152.285 E ± 59.8km						
				eS 58 55.30	DEPTH = 33.0km (normal)						
				CNPM 0.85 131 iP 58 40.85 -0.6	4.2mb (2 obs.)						
				eS 58 55.06	NEW BRITAIN REGION (192)						
				AUE 0.85 211 iP 58 40.35 -1.0	RAB 1.36 355 iP 45 08.50 -0.1						
					LMG 5.28 231 eP 46 03.50 -1.1						
					PMG 6.37 233 eP 46 20.50 0.8						
					WB5 22.50 229 eP 49 44.90 0.9						
					WRA 22.56 229 P 49 47.00 2.4X						
					0.8s 3.40nm 3.9mb						
					ASPA 25.25 223 eP 50 10.10 -0.5						
					1.3s 19.00nm 4.5mb						
					S.D. = 1.2 on 5 of 6 obs.						

07d 19h

* AUG 07, 1989 19h 12m 25.88±0.79s
3.890 S ±15.1km 12.363 W ±14.3km
DEPTH = 10.0km (geophysicist)
4.7mb (11 obs.)

NORTH OF ASCENSION ISLAND (407)

Table with columns for station name, depth, and coordinates. Includes stations like LIC, KIC, TIC, KUK, ITR, BNG, SEK, STV, ENR, PZZ, LSF, RRL, TCF, MAF, LPG, LSD, SSF, LBF, LOR, HAU, SKO, WET, KHC, ZST, SRO, MOX, PRU, BRG, CLL, MLR, SPC, VRI, KRA, HFS, NB2, NUR, SUF, SOD, MAIO, SPA.

% AUG 07, 1989 19h 25m 44.18±0.84s
43.072 N ±9.0km 0.634 W ±7.1km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

Table with columns for station name, depth, and coordinates. Includes stations like ESCF, ATE, ISSF, MADF, LHE.

? AUG 07, 1989 20h 09m 48.53±4.54s
17.321 N ±25.0km 101.354 W ±35.0km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (58)

Table with columns for station name, depth, and coordinates. Includes stations like ACX, III, MRX.

Table with columns for station name, depth, and coordinates. Includes stations like CRX, UNM, IIC, IIT, IISM, OXX.

% AUG 07, 1989 21h 17m 05.88±0.82s
37.683 N ±7.2km 15.071 E ±6.8km
DEPTH = 10.0km (geophysicist)
SICILY (398)

Table with columns for station name, depth, and coordinates. Includes stations like MNO, ATN, MEU, SOI, GIB, MGR.

? AUG 07, 1989 21h 22m 40.54±2.69s
5.078 S ±25.1km 103.585 E ±22.0km
DEPTH = 97.9 ±30.8 km
4.5mb (3 obs.)
SOUTHERN SUMATERA (274)

Table with columns for station name, depth, and coordinates. Includes stations like PPI, KGM, TRT, IPM, NANU, MBL, WARB, GBA, WB5, WRA, FORR.

& AUG 07, 1989 22h 27m 43.78s
61.612 N 146.374 W
DEPTH = 0.0km
SOUTHERN ALASKA (2)
<AGS-P>

Table with columns for station name, depth, and coordinates. Includes stations like CVA, HIN, SGAM, RAGM, KAIM.

AUG 07, 1989 22h 42m 56.83±0.69s
10.714 N ±6.4km 62.207 W ±7.1km
DEPTH = 90.4 ±8.9 km
3.8mb (1 obs.)
NEAR COAST OF VENEZUELA (97)
MD 3.8 (TRN).

Table with columns for station name, depth, and coordinates. Includes stations like TCE, TRN, TPP, TBH, BOT, CUM.

Table with columns for station name, depth, and coordinates. Includes stations like SVB, SVV, SLB, BIM, MVM, FDF, CRM, MGG, PAG, DEG, MGH, NB2.

? AUG 07, 1989 23h 07m 39.10±6.21s
29.427 S ±27.6km 178.565 W ±50.6km
DEPTH = 204.6 ±47.9 km
4.9mb (1 obs.)
KERMADEC ISLANDS (178)

Table with columns for station name, depth, and coordinates. Includes stations like PGZ, MNG, KIW, MTW, WDW, MRW, DZM, WB5, SBA, SPA, MAW, NUR, NB2, HFS, BNG.

? AUG 07, 1989 23h 32m 14.81±3.97s
26.561 N ±22.9km 54.790 E ±37.8km
DEPTH = 10.0km (geophysicist)
3.9mb (1 obs.)
SOUTHERN IRAN (353)
ML 3.4 (BMU).

Table with columns for station name, depth, and coordinates. Includes stations like SHI, BBU, RYD, QASM, KMSA, NB2.

* AUG 07, 1989 23h 34m 54.55±0.62s
4.440 S ±10.9km 104.876 W ±12.2km
DEPTH = 10.0km (geophysicist)
5.0mb (6 obs.) 5.4MsZ (4 obs.)
NORTHERN EASTER I. CORDILLERA (694)
Ms 5.7 (BRK).

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 35C
Centroid Location:
Origin Time 23:34:59.4 0.4
Lot 4.83S 0.03 Lon 105.03W 0.03
Dep 15.0 FIX Half-duration 2.7
Moment Tensor: Scale 10**17 Nm
Mrr=-0.84 0.76 Mtt= 1.75 0.34
Mff=-0.82 0.32 Mrt= 0.76 0.28
Mrf= 1.36 0.33 Mtf= 3.97 0.08
Principal Axes:

T Val= 4.98 Plg=14 Azm=323				Z 24s 2.10um 5.8MszX	iS 07 33.00
N	-1.03	71	188	E 18s 2.00um	07 16.60 -0.1
P	-3.86	13	56	MA10 145.18 22 ePKP 54 34.00 -0.7	iS 07 32.90
Best Double Couple: Mo=4.4*10**17				KM1 146.44 311 ePKP 54 37.00 -0.3	TACH 2.07 126 iPd 07 35.00 17.7X
NP1: Strike=100 Dip=71 Slip= 0				SHI 147.05 38 ePKP 54 39.00 1.0	SAN 2.16 118 iPd 07 18.70 0.0
NP2: 10 90 161				OUE 153.25 16 ePKP 54 55.00 7.6X	iS 07 36.30
				S.D. = 1.2 on 48 of 55 obs.	PCH 2.35 121 iPd 07 21.70 0.2
PSO	28.09	79	eP 40 51.00 1.8	-----	
BOG	32.07	74	eP 41 26.00 1.5	* AUG 08, 1989 00h 07m 41.89± 1.01s	
			eS 46 46.00	33.085 N ±15.2km 137.823 E ± 9.7km	
ZOBO	37.94	111	P 42 15.00 0.1	DEPTH = 360.2 ± 4.4 km	
Z 24s	3.05um		5.0MszX	4.2mb (4 obs.)	
		S	48 16.00	NEAR S. COAST OF HONSHU, JAPAN (230)	
		SS	50 52.00	Felt (1 JMA) at Utsunomiya.	
		LR	53 40.00	WKYJ 2.18 302 iP+ 08 36.10 0.3	AUG 08, 1989 03h 18m 37.49± 0.19s
LPPB	38.03	111	P 42 15.00 -0.5	eS 09 17.60	44.700 N ± 1.5km 6.614 E ± 2.2km
Z 22s	4.44um		5.2Msz	S 08 37.60 0.2	DEPTH = 10.0km (geophysicist)
		S	48 14.00	S 09 22.00	FRANCE (538)
		SS	51 00.00	TSRJ 2.88 329 iP+ 08 42.10 0.8	ML 3.0 (GEN), 2.8 (LDG).
		LR	53 46.00	S 09 29.50	FOUF 0.21 145 iPg 18 42.03 0.0
CNCB	38.20	112	eP 42 18.00 0.8	S 09 32.00	eSg 18 44.69
GLA	38.46	347	eP 42 20.00 1.5	CHJJ 3.11 18 iPd 08 43.60 0.2	e 18 44.78
BAR	38.58	344	eP 42 21.00 1.5	TKSJ 3.28 287 iP+ 08 45.20 0.3	S 18 43.52 0.6
ALO	39.20	358	eP 42 25.00 0.2	S 09 34.70	P 18 48.43
	1.0s	7.25nm	4.3mb	MTMJ 3.49 360 iPd 08 47.50 0.4	BNI 0.36 7 Pc 18 44.60 -0.3
		e	42 31.50	KAKJ 3.67 31 iPd 08 46.40 -2.2	eSg 18 49.80
		eS	48 31.00	S 09 37.60	PZZ 0.40 119 P 18 45.91 0.2
		eLg	51 38.00	UTS 3.84 25 P 09 40.20 49.9X	S 18 52.59
UYO	39.64	14	iPd 42 28.30 0.0	YONJ 4.18 301 P 08 54.40 0.6	DOI 0.49 113 Pd 18 47.50 0.0
TPC	39.76	345	eP 42 28.00 -1.4	NIIJ 4.26 13 iP+ 08 53.90 -0.6	eSg 18 54.90
RVR	40.01	344	eP 42 26.00 -5.3X	S 09 51.20	P 18 50.81 0.4
CCH	40.05	112	P 42 34.30 2.0	SHK 4.52 290 iPd 08 57.40 0.1	S 19 00.46
MWC	40.42	343	eP 42 36.00 1.1	0.8s 86.57nm	STV 0.68 132 P 18 50.44 -0.6
SBB	40.79	344	eP 42 38.00 0.2	SHNJ 5.70 282 P 09 10.60 0.4	S 18 59.86
GSC	41.09	345	eP 42 42.00 1.7	S 10 22.40	ENR 0.75 129 P 18 51.52 -0.7
CLC	41.78	344	eP 42 46.00 0.1	KUMJ 5.91 267 eP 09 13.20 0.5	S 19 02.01
ISA	41.88	343	eP 42 46.00 -0.8	S 10 26.00	LPG 0.80 7 Pg 18 52.90 -0.4
BCH	41.93	341	P 42 48.30 1.1	KAGJ 6.18 254 P 09 16.00 0.3	Sg 19 05.10
PRI	42.99	341	eP 42 55.90 0.0	OFUJ 6.74 26 P 09 21.20 -0.9	Pg 18 53.10 -0.4
PRS	43.40	341	eP 43 00.30 1.2	S 10 38.60	LPL 0.82 6 Pg 19 05.60
FRI	43.48	343	eP 43 00.20 0.5	CN2 14.42 321 eP 10 52.00 -0.2	Sg 18 52.84 -0.7
RSCP	43.75	23	P 43 00.70 -1.3	BJI 18.70 298 eP 11 36.00 -0.3	P 18 53.91 -0.1
PRM	43.82	27	P 43 01.70 -0.8	Z 28s 1.77um	S 19 05.34
TNP	43.83	346	P 43 03.50 0.7	WHN 20.10 269 P 11 50.00 -0.1	MVIF 0.89 154 Pg 18 54.23 -0.5
GOL	43.92	359	P 43 03.60 0.0	TIY 21.18 290 Pc 12 01.00 0.4	AUTN 0.91 140 Pg 18 55.05 -0.1
GLD	43.97	360	P 43 05.30 1.4	XAN 24.07 280 P 12 27.00 -0.6	AURF 0.96 148 Pg 18 55.77 -0.1
FVM	44.29	16	P 43 06.10 -0.2	CD2 28.90 275 P 13 09.30 -1.5	CALN 0.97 168 Pg 18 55.73 -0.3
	0.6s	17.56nm	5.1mb	GTA 31.13 293 eP 13 29.00 -1.3	SAOF 0.98 136 Pg 18 56.09 -0.1
GBTN	44.36	24	P 43 06.30 -0.6	CHG 37.51 258 eP 14 23.50 -0.6	Sg 19 09.21
CMB	44.65	343	eP 43 10.00 0.8	GBA 57.97 266 P 17 00.00 -0.2	P 18 56.54 0.3
KVN	44.97	345	P 43 11.90 -0.1	0.6s 1.80nm 3.7mb	S 19 10.19
BKS	45.09	341	e(P) 43 13.60 0.9	INK 59.23 26 eP 17 09.00 1.0	SBF 1.02 145 Pg 18 57.10 0.2
	Z 20s	8.00um	5.6Msz	MBC 61.12 15 eP 17 21.50 0.9	Sg 19 11.90
	N 20s	9.00um		0.9s 13.00nm 4.5mb	REVF 1.10 150 Pg 18 58.63 0.4
	E 20s	0.90um		YKA 68.68 28 eP 18 10.30 1.6	FRF 1.14 179 Pg 18 59.50 0.7
		e	43 27.60	HFS 76.43 335 eP 18 53.80 0.2	Sg 19 16.50
		eS	49 57.20	0.5s 3.60nm 4.4mb	IMI 1.21 130 P 19 00.36 0.3
		e	53 32.80	0.7s 1.70nm 3.9mb	S 19 16.13
		eP	43 22.40 -0.5	S.D. = 0.9 on 28 of 29 obs.	LRG 1.26 188 Pg 19 01.10 0.2
ORV	46.38	342	eP 43 22.40 -0.5	-----	
BW06	47.19	355	P 43 27.50 -2.0	? AUG 08, 1989 00h 25m 03.46± 1.19s	
RSSD	48.34	1	P 43 38.00 -0.5	32.239 N ±10.9km 35.919 E ± 8.4km	
PPD	54.68	114	eP 44 27.50 1.0	DEPTH = 10.0km (geophysicist)	
SES	54.88	355	eP 44 25.00 -2.4	DEAD SEA REGION (373)	
PNT	55.05	348	eP 44 20.00 -8.7X	JARJ 0.02 93 P 25 05.60 0.1	LMR 1.37 183 Pg 19 02.70 0.1
	1.0s	24.00nm	5.2mb	BURJ 0.10 272 P 25 06.10 -0.1	Sg 19 20.90
EDM	57.89	354	eP 44 46.50 -2.4	SALJ 0.30 221 P 25 10.20 0.4	PCP 1.39 96 P 19 03.59 0.7
PDCR	65.39	102	eP 45 37.30 -2.8	MASJ 0.54 199 Pc 25 14.60 0.3	S 19 20.66
ITR	66.09	98	eP 45 42.30 -2.2	MKRJ 0.72 199 P 25 17.10 -0.6	CVF 2.69 142 Pn 19 21.40 -0.2
		e	45 46.50	S.D. = 0.6 on 5 of 5 obs.	SMF 2.75 316 Pn 19 23.00 0.5
		e	45 52.80	-----	
YKA	67.16	355	eP 45 58.10 7.6X	? AUG 08, 1989 02h 06m 42.14±17.55s	
YKB0	67.27	355	eP 45 48.00 -3.2X	32.447 S ±69.9km 72.938 W ±122.km	
FRB	73.24	16	eP 46 27.00 -0.4	DEPTH = 10.0km (geophysicist)	
PMR	74.10	340	ePc 46 32.30 -0.2	OFF COAST OF CENTRAL CHILE (134)	
Z 18s	1.00um		5.1Msz	LCCH 1.54 132 iPd 07 09.70 0.0	SSF 3.21 319 Pg 19 37.60 8.7X
INK	75.29	349	eP 46 38.50 -0.7	iS 07 19.00	Sg 20 02.80
FBA	76.00	343	P 46 37.70 -5.7X	ROCH 1.71 108 iP 07 12.50 0.2	Pg 19 35.80 8.5X
	0.5s	4.34nm	4.8mb	iS 07 24.80	Sg 20 15.50
MBC	81.00	357	eP 47 11.00 0.6	LNV 1.98 140 iPd 07 16.00 0.1	Pn 19 28.80 -0.1
	1.4s	34.00nm	5.2mb	iS 07 31.00	Sg 20 18.30
SPA	85.59	180	e(P) 47 34.50 0.2	JACH 1.99 97 iPc 07 16.30 -0.1	Pg 19 38.30
	1.0s	9.00nm	4.9mb	-----	
WMO	139.24	346	ePKP 54 16.50 -7.5X		
Z 20s	1.81um		5.8Msz		
		PP	57 18.80		
CD2	142.32	318	ePKP 54 29.20 -0.7		
KSH	145.14	359	ePKP 54 34.00 -0.5		

08d 03h

HAU 3.31 357 Sg 20 20.70
 Pn 19 30.10 -0.3
 Sn 20 08.30
 TCF 3.48 299 Pn 19 33.00 0.2
 Sg 20 28.80
 S.D. = 0.4 on 35 of 37 obs.

? AUG 08, 1989 04h 24m 54.47±4.22s
 31.326 S ±16.0km 68.774 W ±16.1km
 DEPTH = 90.7 ± 43.8 km
 SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.16 188 iPd 25 08.00 0.0
 S 25 19.20
 RTLL 0.26 91 iPd 25 08.00 0.0
 CFA 0.54 122 iPd 25 10.00 0.2
 e 25 22.30
 e 25 25.30
 RTCV 0.57 159 iPc 25 10.00 -0.1
 S 25 22.50
 RTBS 0.67 240 eP 25 11.00 0.1
 S 25 24.50
 RTRS 1.29 333 iPc 25 18.00 0.0
 S 25 32.00
 S.D. = 0.2 on 6 of 6 obs.

? AUG 08, 1989 04h 25m 22.49±4.74s
 31.403 S ±19.2km 68.945 W ±17.5km
 DEPTH = 84.7 ± 49.3 km
 SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.15 124 e(P) 25 35.00 -0.2
 S 25 47.00
 RTLL 0.41 80 iPd 25 36.50 0.2
 (S) 25 48.00
 RTBS 0.50 239 iPd 25 37.00 0.1
 S 25 49.50
 RTCV 0.57 143 i(P) 25 37.50 -0.1
 S 25 51.00
 RTRS 1.31 340 i(P) 25 45.80 -0.1
 S 26 05.00
 S.D. = 0.4 on 5 of 5 obs.

AUG 08, 1989 04h 29m 50.52±0.80s
 39.392 N ±8.5km 21.642 E ±7.6km
 DEPTH = 10.0km (geophysicist)
 GREECE (364)
 ML 3.1 (ATH).

KZN 0.92 6 ePb 30 07.50 -0.6
 LIT 0.96 42 eP 30 08.80 -0.1
 eS 30 25.70
 NEO 1.23 93 ePn 30 14.00 0.6
 KEK 1.46 283 ePg 30 18.20 1.3
 VLS 1.47 214 ePb 30 16.00 -1.0
 PLG 1.70 54 ePn 30 20.70 0.3
 VAY 2.05 20 e(Pn) 30 25.00 -0.5
 S.D. = 1.0 on 7 of 7 obs.

? AUG 08, 1989 05h 36m 22.80±12.05s
 32.096 S ±80.4km 71.911 W ±56.2km
 DEPTH = 33.0km (normal)
 NEAR COAST OF CENTRAL CHILE (135)

ROCH 1.16 139 iPd 36 42.10 -0.9
 iS 36 57.70
 JACH 1.26 118 iPd 36 44.50 0.2
 iS 37 01.00
 LCCH 1.41 168 iPc 36 45.50 -0.8
 iS 37 02.10
 PEL 1.47 136 iPc 36 47.00 -0.3
 iS 37 05.10
 SAN 1.71 142 eP 36 51.00 0.2
 iS 37 12.50
 TACH 1.76 152 iPd 36 51.10 -0.3
 iS 37 13.50
 FCH 1.84 132 iP 36 52.80 -0.1
 iS 37 16.00
 LNV 1.90 167 iPd 36 54.10 0.6
 iS 37 18.50
 PCH 1.92 143 iPd 36 54.30 0.4
 iS 37 19.20
 CHCH 2.12 150 eP 36 57.50 0.9
 S.D. = 0.7 on 10 of 10 obs.

* AUG 08, 1989 06h 54m 21.36±0.90s
 27.771 S ±10.0km 141.314 E ±9.5km

DEPTH = 10.0km (geophysicist)
 QUEENSLAND, AUSTRALIA (594)
 ML 3.6 (CMS), 3.0 (STK).

STK 4.10 177 e(P) 55 33.00 7.5X
 ePg 55 51.00
 eSn 56 13.00
 eSg 56 43.00
 CMS 5.40 134 eP 55 44.30 0.4
 eS 56 43.00
 OIS 7.35 347 eP 56 13.00 1.7
 eS 57 33.00
 ASPA 7.83 300 eP 56 22.30 4.2X
 0.9s 29.00nm 5.5mb X
 eS 57 43.30
 CTA 8.88 32 (P) 56 31.50 -1.2
 i 56 40.00
 e(S) 58 06.00
 e 58 22.00
 eLR 59 20.00
 WB5 10.10 320 eP 56 49.00 -0.5
 eS 58 38.10
 FORR 11.93 252 eP 57 14.30 -0.2
 WARB 13.18 274 eP 57 31.00 -0.2
 eS 59 50.00
 S.D. = 1.3 on 6 of 8 obs.

AUG 08, 1989 07h 59m 06.19±0.16s
 40.121 S ±3.7km 174.330 E ±3.3km
 DEPTH = 121.6km (10 depth phases)
 5.5mb (33 obs.)

COOK STRAIT, NEW ZEALAND (163)
 Minor damage on North and South Islands. Felt at Auckland, Gisborne, Napier, New Plymouth, Wanganui and Wellington, North Island and as for south as Christchurch, South Island.
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 25C
 Centroid Location:
 Origin Time 07:59: 6.7 0.4
 Lat 40.54S 0.04 Lon 174.09E 0.03
 Dep 114.3 1.0 Half-duration 2.3
 Moment Tensor: Scale 10**17 Nm
 Mrr=-2.87 0.09 Mll=-1.57 0.22
 Mff=-1.30 0.19 Mrt= 0.69 0.11
 Mrf= 0.17 0.09 Mtr=-0.80 0.16
 Principal Axes:
 T Vol= 2.98 Plg=81 Azm=356
 N -0.66 5 232
 P -2.32 7 141
 Best Double Couple: Mo=2.6*10**17
 NP1: Strike=226 Dip=38 Slip= 82
 NP2: 55 52 96

KIW 0.86 149 Pc 59 27.60 0.2
 NEZ 0.87 348 P 59 27.80 0.3
 MNG 1.01 120 Pd 59 28.90 0.1
 eS 59 44.60
 TCW 1.09 182 Pc 59 30.20 0.7
 CAW 1.14 151 Pc 59 30.40 0.4
 MRW 1.15 166 Pc 59 30.70 0.6
 WEL 1.21 164 P 59 31.20 0.4
 WDW 1.25 156 Pd 59 31.50 0.3
 MTW 1.37 140 Pd 59 32.50 -0.1
 KETZ 1.44 45 P 59 32.70 -0.9
 MOW 1.48 152 Pd 59 33.90 0.1
 BLW 1.52 145 Pd 59 34.40 0.1
 PGZ 1.57 109 Pc 59 34.20 -0.6
 CCW 1.63 183 Pc 59 36.70 1.1
 RATZ 1.68 42 P 59 35.60 -0.6
 HITZ 1.80 39 Pd 59 37.30 -0.4
 HATZ 1.83 49 P 59 36.80 -1.3
 HUTZ 2.02 43 P 59 39.60 -0.8
 UTU 2.42 37 P 59 45.10 -0.5
 TAZ 2.53 43 P 59 46.30 -0.7
 TMP 5.23 215 P 00 21.70 -1.6
 S 01 09.00
 MHZ 6.19 215 eP 00 32.40 -4.1X
 MSZ 6.57 224 P 00 38.20 -3.5X
 OBZ 8.14 212 P 01 03.00 0.0
 S 02 26.00
 DZM 19.20 337 iPc 03 23.90 0.7
 CNB 20.30 276 iPc 03 37.40 3.0X
 e 04 03.00 144kmX

CAN 20.58 275 eP 03 39.90 2.8
 e 04 03.00 121km
 eTT 20 30.00
 COO 20.59 291 iPc 03 40.90 3.7X
 e 03 42.00 4kmX
 BWA 21.35 277 eP 03 43.60 -1.3
 e 04 11.70 147kmX
 eTT 21 30.00
 BRS 21.90 299 iPd 03 53.60 3.3X
 i 04 17.00 114km
 iS 07 53.00
 PVC 22.90 345 iPc 04 02.00 1.9
 CMS 24.59 282 iPc 04 17.80 1.6
 e 04 46.00 137kmX
 BFD 24.93 267 iPd 04 21.60 2.2
 e 04 45.00 109kmX
 RMO 25.22 295 ePc 04 24.80 2.6
 e 04 42.00 75kmX
 STK 27.61 277 eP 04 45.80 1.9
 1.0s 54.00nm 5.1mb
 i 05 13.20 129km
 ADE 28.58 269 ePd 04 53.60 0.9
 0.8s 89.55nm 5.5mb
 CTA 31.23 301 iPc+ 05 17.60 1.4
 1.0s 175.00nm 5.8mb
 iS 10 19.00
 DRV 32.75 205 eP 05 29.80 0.9
 HNR 33.14 333 eP 05 38.00 5.3X
 VSG 33.38 333 eP 05 36.00 1.1
 SVO 33.44 333 eP 05 37.00 1.6
 OIS 35.45 293 iPc 05 52.90 0.4
 0.9s 88.00nm 5.6mb
 ASPA 37.68 283 iPc 06 11.60 0.3
 1.2s 264.00nm 6.0mb
 Z 18s 1.32um 4.8msz
 eS 11 51.60
 LR 21 10.20
 SBA 37.97 183 iPd 06 16.80 3.8X
 AFR 38.28 65 iP 06 17.40 1.1
 0.8s 70.00nm 5.5mb
 PAE 38.34 65 iP 06 17.80 1.1
 0.8s 65.00nm 5.5mb
 FORR 38.40 269 eP 06 17.50 0.4
 0.4s 39.00nm 5.6mb
 PPT 38.40 65 iP 06 18.40 1.1
 0.8s 150.00nm 5.9mb
 Z 18s 0.40um 4.3msz
 TVO 38.48 65 iP 06 19.40 1.4
 0.8s 75.00nm 5.6mb
 PPN 38.53 65 iP 06 19.60 1.3
 PMG 38.98 314 iPc 06 24.00 1.9
 0.9s 268.91nm 6.0mb
 WRA 39.62 289 Pc 06 27.60 0.3
 0.5s 54.60nm 5.6mb
 WB5 39.64 289 iPc 06 28.00 0.5
 i 06 55.80 123km
 RAB 40.98 325 iPc+ 06 39.90 1.4
 0.6s 933.33nm 6.7mb X
 iS 12 44.00
 PMO 41.34 64 eP 06 42.00 0.6
 1.2s 75.00nm 5.3mb
 VAH 41.35 64 eP 06 42.00 0.4
 0.8s 15.00nm 4.8mb
 TPT 41.54 64 eP 06 44.00 0.9
 1.0s 40.00nm 5.1mb
 RUV 41.56 64 eP 06 44.00 0.7
 1.0s 30.00nm 5.0mb
 WARB 41.80 274 eP 06 44.70 -0.5
 0.5s 13.00nm 4.9mb
 COOL 43.71 265 eP 07 00.20 -0.5
 0.4s 17.00nm 5.1mb
 RKG 45.44 259 eP 07 12.50 -1.9
 NWA0 45.77 260 eP 07 16.00 -1.0
 0.7s 23.00nm 5.0mb
 KLB 45.96 262 eP 07 17.80 -0.8
 0.3s 11.00nm 5.1mb
 KNA 46.36 288 iPc 07 22.10 0.3
 0.3s 40.00nm 5.6mb
 MTN 46.61 293 iPc 07 24.20 0.4
 MUN 46.97 261 eP 07 25.80 -0.7
 BAL 47.22 263 eP 07 27.90 -0.6
 MEKA 47.79 269 iPc 07 31.90 -1.1
 MRWA 48.42 264 eP 07 37.50 -0.3
 MBL 49.76 275 iPc 07 47.10 -1.0
 0.4s 30.00nm 5.5mb
 SPA 50.07 180 iPc 07 52.10 1.9
 0.7s 105.47nm 5.8mb

08d 19h

KMI 75.85 340 Pc 47 19.50 2.6X
 BUL 78.58 253 iPc 47 33.20 1.0
 0.9s 8.40nm 4.8mb
 WHN 79.29 352 eP 47 36.80 1.3
 LSZ 82.44 256 iP 47 56.00 3.2X
 XAN 83.40 347 P 47 53.50 -3.6X
 TIA 84.69 354 eP 48 04.70 1.2
 MZZ 85.07 259 eP 48 10.00 3.8X
 KMZ 85.31 255 eP 48 05.00 -2.3
 LZH 86.23 344 eP 48 14.00 2.6X
 2.0s 71.00nm 5.5mb
 BJI 88.57 354 eP 48 23.00 0.7
 GTA 90.25 342 eP 48 31.80 1.3
 CN2 92.06 1 eP 48 39.80 1.3
 CLL 137.01 301 ePKP 54 52.00 -0.6
 EDM 144.42 60 ePKPc 54 58.10 -7.8X
 SES 144.93 66 ePKPc 55 03.00 -3.8X
 YKA 145.43 44 ePKP 55 06.20 -1.0
 YKB0 145.43 44 ePKP 55 04.60 -2.6X
 MEO 145.81 98 iPKPd 55 05.50 -3.3X
 ALE 145.94 1 ePKP 55 10.00 2.3X
 EKA 147.45 302 PKP 55 14.00 3.3X
 1.1s 14.80nm
 S.D. = 1.6 on 16 of 27 obs.

* AUG 08, 1989 20h 08m 45.97±0.54s
 11.598 S ±10.0km 14.175 W ±9.1km
 DEPTH = 10.0km (geophysicist)
 4.9mb (15 obs.) 5.2msz (2 obs.)
 ASCENSION ISLAND REGION (408)

LIC 19.91 28 P 13 19.50 -1.3
 1.2s 57.00nm 4.8mb
 S 17 30.00
 KIC 20.16 28 P 13 22.00 -1.4
 TIC 20.28 27 P 13 23.60 -1.2
 KUK 22.38 39 eP 13 44.00 -2.0
 ITR 24.03 274 eP 14 01.30 -0.9
 e 14 04.80
 e 14 14.50
 SOB1 26.38 273 eP 14 22.50 -2.1
 e 14 26.80
 BNG 36.24 66 iPc 15 57.00 5.5X
 1.6s 39.00nm 5.0mb
 ic 17 15.40
 KMZ 39.07 97 eP 16 15.00 -0.4
 LSZ 41.32 100 eP 16 34.00 0.1
 BUL 41.93 107 eP 16 36.80 -2.1
 MZZ 42.18 94 eP 16 47.00 6.0X
 SLR 42.41 115 eP 16 50.00 7.2X
 Z 19s 3.96um 5.3msz
 SEK 42.42 119 e(P) 16 30.70 -12.1X
 TIO 42.80 9 iP 16 48.00 2.2
 PTZ 44.39 99 eP 17 01.20 2.3
 TOL 52.07 10 eP 18 05.00 6.8X
 ZOBO 52.45 258 eP 18 03.00 0.9
 EPF 55.96 13 eP 18 23.50 -3.3X
 CAF 58.15 14 eP 18 41.80 -0.4
 LSF 59.29 13 eP 18 50.50 0.4
 1.3s 21.60nm 5.1mb
 TCF 59.47 13 eP 18 52.00 0.6
 1.5s 15.60nm 4.9mb
 LPG 59.89 17 eP 18 55.50 0.9
 1.8s 43.10nm 5.3mb
 SMF 60.19 14 eP 18 56.70 0.4
 1.8s 34.50nm 5.2mb
 AVF 60.21 14 eP 18 56.90 0.5
 SSF 60.50 14 eP 18 58.60 0.2
 1.6s 18.60nm 5.0mb
 LPF 60.50 10 eP 18 58.90 0.5
 LBF 60.54 14 eP 18 58.80 0.1
 1.6s 12.40nm 4.8mb
 LOR 60.77 14 eP 19 00.40 0.1
 1.5s 10.40nm 4.7mb
 SKO 62.55 29 iP 19 12.50 0.1
 KBA 63.38 21 e(P) 19 20.00 2.0
 1.2s 8.30nm 4.8mb
 i 19 44.50
 GRF 64.98 18 eP 19 34.00 5.8X
 1.2s 15.00nm 5.1mb
 KHC 65.23 20 eP 19 29.90 0.1
 e 21 50.50
 BZS 65.45 27 eP 19 31.00 -0.2
 e 28 43.00
 ZST 65.68 22 eP 19 37.80 5.2X
 SRO 65.82 23 eP 19 43.70 10.1X
 MOX 65.94 18 eP 19 40.00 5.7X

PRU 66.29 20 eP 19 31.00 -5.5X
 BRG 66.86 19 eP 19 45.90 5.7X
 1.2s 11.00nm 4.9mb
 e 22 13.00
 EKA 67.32 7 P 19 49.00 6.0X
 1.4s 14.70nm 5.0mb
 MLR 67.35 29 iPc 19 48.00 4.4X
 KSP 67.61 20 eP 19 49.50 4.6X
 SPC 67.69 24 eP 19 46.40 0.7
 VRI 68.00 30 eP 19 46.00 -1.5
 KRA 68.27 23 eP 19 54.50 5.4X
 Z 18s 0.90um 5.0msz
 N 18s 1.20um
 e 20 03.70
 NB2 75.15 12 P 20 30.40 0.4
 1.2s 6.20nm 4.5mb
 NUR 78.22 18 eP 20 55.00 7.9X
 SPA 78.48 180 e(P) 20 49.00 0.3
 1.0s 5.50nm 4.6mb
 SUF 80.39 18 eP 21 04.00 5.2X
 MAIO 83.98 51 eP 21 18.00 -0.1
 SOD 84.10 15 eP 21 19.00 1.1
 S.D. = 1.2 on 32 of 50 obs.

AUG 08, 1989 20h 17m 57.54±0.39s
 11.592 S ±7.3km 14.214 W ±7.0km
 DEPTH = 10.0km (geophysicist)
 5.0mb (19 obs.) 5.0msz (3 obs.)
 ASCENSION ISLAND REGION (408)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 24C
 Centroid Location:
 Origin Time 20:18: 4.8 1.0
 Lat 11.15S 0.10 Lon 14.22W 0.09
 Dip 15.0 FIX Half-duration 1.7
 Moment Tensor: Scale 10**16 Nm
 Mrr=-0.31 0.46 Mtt=-4.24 0.54
 Mff= 4.54 0.64 Mrt= 1.07 1.61
 Mrf=-7.24 1.45 Mtf= 5.87 0.46
 Principal Axes:
 T Vol= 10.97 Plg=30 Azm=109
 N -1.35 46 344
 P -9.62 30 218
 Best Double Couple: Mo=1.0*10**17
 NP1: Strike=254 Dip=46 Slip= 0
 NP2: 344 90 -136

LIC 19.92 28 P 22 30.88 -1.6
 S 26 30.00
 KIC 20.17 28 P 22 33.60 -1.5
 TIC 20.29 27 P 22 35.00 -1.4
 KUK 22.40 39 eP 22 55.00 -2.8
 ITR 23.99 274 iPc 23 12.80 -0.6
 i 23 19.10
 i 23 24.10
 i 23 24.10
 PDCR 24.38 265 eP 23 16.80 -0.3
 i 23 23.70
 SOB1 26.35 273 eP 23 35.50 -0.3
 VAO 33.19 246 e(P) 24 25.00 -11.8X
 e 24 37.70
 BNG 36.27 66 iPc 25 06.90 3.6X
 1.5s 38.00nm 5.0mb
 id 25 14.50
 ic 26 35.90
 KMZ 39.11 97 eP 25 26.00 -1.3
 LSZ 41.36 100 iP 25 45.90 0.1
 BUL 41.96 107 eP 25 50.10 -0.6
 MZZ 42.22 94 eP 25 52.60 -0.3
 SLR 42.45 115 eP 26 06.30 11.6X
 SEK 42.45 119 eP 26 04.00 9.3X
 TIO 42.80 9 iP 26 00.50 3.1X
 PTZ 44.43 99 eP 26 10.00 -0.8
 NAI 51.63 82 iPc 27 10.00 2.8
 TOL 52.07 10 eP 27 10.00 0.2
 CNCB 52.26 258 eP 27 05.00 -7.2X
 LPB 52.38 258 eP 27 04.00 -9.0X
 Z 16s 0.67um 4.8mszX
 eLR 43 12.00
 ZOBO 52.41 258 P 27 13.00 -0.4
 Z 22s 0.50um 4.5msz
 i 27 19.00
 LR 43 44.00
 EBR 53.89 14 (P) 27 35.00 11.8X
 PEL 55.76 238 iPc 27 37.00 -0.2
 EPF 55.96 13 eP 27 38.90 0.5
 1.4s 14.80nm 4.8mb

LPO 57.72 13 eP 27 50.80 0.0
 LFF 57.87 12 eP 27 52.00 0.2
 1.8s 41.40nm 5.2mb
 CAF 58.15 14 eP 27 53.50 -0.3
 1.4s 14.80nm 4.8mb
 RJF 58.39 13 eP 27 55.40 -0.1
 STV 58.92 18 P 28 00.05 0.8
 ENR 58.93 18 P 27 58.92 -0.5
 PZZ 59.09 18 P 28 00.36 -0.2
 MFF 59.29 11 eP 28 01.90 0.2
 LSF 59.29 13 eP 28 01.80 0.1
 1.2s 27.90nm 5.3mb
 RRL 59.37 17 P 28 04.97 2.3
 TCF 59.47 13 eP 28 03.40 0.4
 1.3s 23.10nm 5.1mb
 MAF 59.49 13 eP 28 03.50 0.4
 1.8s 25.80nm 5.1mb
 FIR 59.79 21 eP 28 13.00 7.8X
 BGF 59.87 14 eP 28 05.80 0.1
 1.4s 13.00nm 4.9mb
 LPG 59.89 17 eP 28 06.70 0.4
 1.2s 22.00nm 5.2mb
 LSD 59.97 17 P 28 06.00 -0.8
 SMF 60.19 14 eP 28 07.90 0.0
 1.2s 14.80nm 5.0mb
 AVF 60.21 14 eP 28 08.20 0.2
 SSF 60.50 14 eP 28 10.10 0.1
 1.1s 12.20nm 4.9mb
 LBF 60.54 14 eP 28 10.40 0.1
 1.3s 14.40nm 4.9mb
 LOR 60.78 14 eP 28 11.80 -0.1
 GRR 60.88 10 eP 28 12.80 0.3
 1.4s 20.90nm 5.1mb
 HAU 62.08 15 eP 28 20.40 -0.4
 1.2s 17.80nm 5.1mb
 FEL 62.42 17 eP 28 22.00 -1.1
 SKO 62.57 29 iP 28 24.00 0.0
 Z 16s 0.75um 5.0mszX
 N 16s 0.62um
 E 16s 0.68um
 i 28 29.50
 i 28 34.00
 iPPP 32 18.00
 iS 37 12.00
 LR 58 30.00
 VAY 62.63 31 eP 28 19.50 -4.9X
 CEY 62.63 22 e(P) 28 27.50 3.1X
 MBH 62.66 48 eP 28 23.00 -1.8
 VOY 62.68 22 e(P) 28 26.00 1.1
 VBY 62.74 23 e(P) 28 26.10 1.0
 LJU 62.93 22 e(P) 28 25.50 -0.8
 PRNI 63.06 47 eP 28 27.00 -0.6
 KBA 63.39 21 e(P) 28 30.00 0.4
 1.1s 8.80nm 4.9mb
 i 28 43.40
 MMB 63.41 31 eP 28 30.00 0.4
 WLF 63.57 15 P 28 31.70 1.3
 DOU 63.60 13 P 28 31.20 0.5
 Z 19s 1.20um 5.1msz
 RUP 63.83 15 eP 28 31.13 -1.2
 VTS 63.89 30 eP 28 33.00 0.0
 RZN 63.98 32 eP 28 34.00 0.4
 ABH 64.12 15 eP 28 31.59 -2.6
 PGB 64.34 31 eP 28 36.00 0.3
 MML 64.52 46 eP 28 39.00 1.9
 GRF 64.98 18 eP 28 40.60 0.8
 KHC 65.24 20 P 28 41.60 0.1
 1.0s 5.50nm 4.7mb
 e 31 04.40
 JMB 65.51 32 eP 28 43.00 -0.2
 ZST 65.69 22 eP 28 44.60 0.3
 SRO 65.83 23 eP 28 44.50 -0.7
 i 29 37.80
 MOX 65.95 18 eP 28 46.00 0.1
 e 28 55.00
 PRU 66.30 20 P 28 47.50 -0.7
 Z 17s 0.80um 5.0mszX
 N 17s 0.40um
 E 17s 0.80um
 BRG 66.87 19 eP 28 41.20 -10.6X
 1.4s 10.00nm
 Z 18s 1.00um 5.1msz
 N 18s 0.50um
 E 18s 1.00um
 e 31 29.40
 CLL 66.95 18 eP 28 52.00 -0.3
 BBTK 67.21 38 eP 28 48.00 -6.3X

08d 22h		FORR 24.33 183 eP 38 08.00 -0.3 S.D. = 1.0 on 8 of 8 obs.		LTCM 0.95 40 eP 15 23.30 -0.9		i 45 57.00			
AUG 08, 1989 22h 41m 38.60±1.91s 41.629 N ±15.1km 12.620 E ± 8.0km DEPTH = 10.0km (geophysicist)		ORV 1.11 86 iPc 15 24.90 -1.9		CYA 6.19 158 ePc 45 34.00 -0.9		iS 47 17.00			
SOUTHERN ITALY (390) MD 3.0 (SSO).		WDC 1.14 15 iPd 15 26.50 -0.8		ZOBO 6.43 3 iPd 45 39.30 0.5		iP 45 38.00 -6.2X			
RMP 0.19 19 Pc 41 42.40 -0.5		MIN 1.33 49 e(P) 15 29.10 -1.6		ARE 6.85 335 eP 46 54.00		iS 46 54.00			
AZI 0.71 59 P 41 51.60 -0.9		FHC 1.55 329 ePc 15 31.60 -2.0		RTRS 7.47 187 iPd 45 49.50 -2.9		iPc 46 03.20 -4.3X			
MNS 0.76 3 P 41 52.50 -0.9		ZSP 1.62 161 eP 15 33.00 -1.7		RTLL 8.57 180 iPc 46 05.00 -4.7X		iPd 46 05.00 -5.5X			
SDI 0.90 85 P 41 55.80 -0.1		BKS 1.69 161 eP 15 34.10 -1.6		ZON 8.79 181 eP 46 05.00 -9.0X		iP 46 10.20 -4.5X			
AQU 0.93 39 Pc 41 58.10 1.7		LBFM 2.02 23 eP 15 40.00 -0.7		RTBS 8.94 185 iP 46 22.80 -3.3X		ePd 46 22.00 -6.1X			
MAO 1.35 306 P 42 03.50 0.1		PCC 2.02 168 eP 15 38.10 -2.4		MRA 9.96 166 eP 46 32.50 -0.5		iS 46 32.50 -1.8			
ALP 1.35 31 e(Pg) 42 03.37 -0.2		MHC 2.36 154 ePc 15 44.00 -1.5		JACH 10.10 190 eP 46 35.70		i(S) 46 45.50			
ASS 1.44 1 P 42 04.50 -0.3		ARN 2.39 152 eP 15 44.10 -1.8		ROCH 10.45 192 eP 46 37.60 1.4		iPd 46 46.50 5.7X			
CIO 1.61 14 e(Pg) 42 06.50 -0.7		GCC 2.56 163 eP 15 45.70 -2.4		FCH 10.68 188 eP 46 34.50 -7.0X		iP 46 49.50 3.1X			
ARV 1.88 7 P 42 12.10 1.0		SAO 2.95 156 ePd 15 51.58 -2.2		LNV 11.48 192 eP 46 47.00 -6.4X		ePc 47 04.60 4.6X			
AOI 2.05 20 e(Pn) 42 14.46 0.9		FRI 3.55 133 eP 16 02.00 -0.2		RFA 12.00 180 ePc 48 02.40		iS 50 04.80			
S.D. = 1.0 on 11 of 11 obs.		KVN 3.77 95 eP 16 04.20 -2.1		HUA 12.47 327 i(P)d 47 10.50 -0.3		i 49 46.50 4.5mb			
% AUG 08, 1989 22h 58m 49.86±0.95s 39.105 N ± 8.9km 28.023 E ± 9.8km DEPTH = 10.0km (geophysicist)		BCH 4.85 151 eP 16 18.70 -2.1		NNA 13.32 322 iP 48 28.00 -1.6		iPc 48 53.10 148kmX			
TURKEY (366)		ISA 5.20 136 eP 16 25.00 -0.7		VAO 19.82 95 iPc 48 54.80 -0.9		e 48 55.80 4kmX			
DST 0.69 43 ePg 59 03.30 -0.2		CLC 5.59 129 eP 16 30.00 7.7		BMA 22.44 95 eP 49 01.70		i 49 08.00 3.6X			
IZM 0.92 220 iPg 59 06.50 -1.0		GSC 6.42 129 eP 16 50.00 7.1		TUNG 23.29 334 eP 49 12.50 0.6		eP 49 18.10 2.3			
EDC 1.25 354 ePn 59 12.00 -1.0		MWC 6.54 142 eP 16 56.00 11.2		REC 24.05 335 eP 49 18.10 1.9		eP 49 17.70 1.6			
KHL 1.41 123 ePn 59 16.30 0.7		RVR 7.06 139 eP 16 31.00 -20.9		CAYA 24.48 335 eP 49 45.00 -0.6		eS 53 53.00			
EZN 1.50 299 ePn 59 18.30 1.5		LRM 9.98 47 eP 17 35.00 0.3		BOG 27.72 348 eP 50 00.80 -1.9		eP 50 11.10 37kmX			
S.D. = 1.6 on 5 of 5 obs.		PNT 10.11 12 eP 17 41.00 6.8		SOB1 29.66 68 eP 50 26.50		e 50 45.30			
* AUG 08, 1989 23h 01m 06.01±0.79s 31.533 S ± 6.7km 68.488 W ± 7.2km DEPTH = 10.0km (geophysicist)		SES 13.76 34 eP 18 31.00 7.6		PDCR 29.70 75 eP 50 32.80		e 50 38.70 -2.3			
SAN JUAN PROVINCE, ARGENTINA (137) Felt (III) in San Juan Province.		ALO 13.88 104 e(P) 18 28.00 2.8		BMG 29.95 351 eP 50 08.00 2.7		eP 50 20.40 -2.8			
ZON 0.16 266 eP 01 20.00 10.2X		EDM 15.23 22 eP 18 40.50 -2.1		ITR 32.00 69 eP 50 24.00 13kmX		i 50 35.80 1.2			
RTLL 0.20 5 iPd 01 10.80 0.3		MEO 19.95 96 iPc 19 44.40 3.5		UPA 33.32 340 iPd 50 58.50 5.5X		eP 51 00.44 -1.4			
CFA 0.22 109 ePd 01 11.50 0.6		28 obs. associated		BUS 35.40 333 iPc 51 09.94 -1.9		eP 51 10.50 -2.0			
RTCB 0.27 280 iPc 01 12.00 0.3		& AUG 08, 1989 23h 28m 32.90s 39.500 N 122.900 W DEPTH = 13.0km NORTHERN CALIFORNIA (36) <BRK>. ML 2.6 (BRK).		SVV 36.52 12 eP 51 11.42 -2.1		eP 51 12.20 -1.8			
RTCV 0.33 187 iP 01 12.50 -0.3		LTCM 0.93 40 eP 28 50.80 0.5		BIM 37.71 12 eP 51 11.42 -2.1		eP 51 12.20 -1.8			
RTBS 0.83 261 e(P) 01 30.50 8.4X		ORV 1.08 87 eP 28 51.70 -1.3		MVM 37.78 12 eP 51 11.42 -2.1		eP 51 12.20 -1.8			
RTRS 1.60 328 iPd 01 39.00 4.7X		WDC 1.11 14 eP 29 05.60		FDF 37.91 12 eP 51 11.42 -2.1		eP 51 12.20 -1.8			
JACH 2.12 237 iPc 01 52.30 10.2X		MIN 1.31 49 eP 29 02.90 -0.6		CRM 37.97 12 eP 51 11.42 -2.1		eP 51 12.20 -1.8			
FCH 2.35 220 iPd 01 57.00 11.4X		KVN 3.75 95 eP 29 00.60		GCM 43.62 342 P 52 00.00 -0.3		eP 52 38.30 1.0			
PEL 2.46 229 iPc 01 55.60 8.8X		5 obs. associated		ACX 49.91 319 iP 52 50.40 0.6		eP 53 12.80 0.6			
MRA 2.52 111 e(P) 01 54.10 6.5X		AUG 08, 1989 23h 44m 04.45±0.16s 22.723 S ± 3.5km 68.478 W ± 4.3km DEPTH = 102.0km (23 depth phases) 5.3mb (48 obs.) NORTHERN CHILE (123) Felt (VI) at Colama and Chuquicomata; (IV) at Peine; (III) at Antofagosta, Iquique, Morio Elena, Pedro de Valdivia and San Pedro de Atacama; (II) at Mejillones. CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 29C Centroid Location: Origin Time 23:44:13.5 0.4 Lat 22.40S 0.06 Lon 68.89W 0.06 Dep 125.4 2.8 Half-duration 1.9 Moment Tensor: Scale 10 ¹⁷ Nm Mrr=-0.89 0.07 Mtt=-0.52 0.11 Mff= 1.41 0.10 Mrt=-0.42 0.07 Mrf=-0.83 0.06 Mtf= 0.42 0.11 Principal Axes: T Val= 1.80 Plg=19 Azm=104 N -0.53 18 200 P -1.27 64 330 Best Double Couple: Mo=1.5*10 ¹⁷ NP1: Strike=167 Dip=31 Slip=-126 NP2: 28 66 -71		ROCH 2.57 235 iP 02 31.20		MRX 52.90 320 iPc 53 12.80 0.6		eP 53 47.60 -1.2	
SAN 2.65 223 iPd 01 58.80 9.2X		JSC 57.97 348 P 54 24.00 155kmX		JSC 57.97 348 P 54 24.00 155kmX		eP 54 26.00 161kmX			
PCH 2.69 219 iP 02 03.50 13.2X		PRM 58.02 346 P 53 47.60 -1.2		LHS 58.08 348 P 53 48.40 -0.8		eP 54 00.60 -1.5			
TACH 2.96 224 iPc 02 01.60 7.7X		LHS 58.08 348 P 53 48.40 -0.8		TKL 59.84 346 P 53 58.50 -2.9		eP 54 01.00 -3.1X			
CHCH 3.01 217 iPd 02 03.50 8.9X		TKL 59.84 346 P 53 58.50 -2.9		RSC 60.23 344 P 54 02.60 -2.1		eP 54 06.30 -0.7			
RFA 3.23 180 ePc 02 06.00 8.2X		RSC 60.23 344 P 54 01.00 -3.1X		PWL 60.32 342 P 54 02.60 -2.1		eP 54 06.30 -0.7			
LNV 3.45 225 iPd 02 06.60 5.8X		PWL 60.32 342 P 54 02.60 -2.1		BLA 60.67 349 P 54 06.30 -0.7		e 54 37.00 111km			
CYA 3.87 38 ePc 02 06.00 -0.8		BLA 60.67 349 P 54 06.30 -0.7		CBN 61.18 352 iPc 54 09.80 -0.6		e 54 49.00			
S.D. = 0.8 on 5 of 19 obs.		CBN 61.18 352 iPc 54 09.80 -0.6		UYO 61.74 336 iPc 54 13.00 -1.3		e 54 14.70 -0.4			
& AUG 08, 1989 23h 15m 06.10s 39.482 N 122.928 W DEPTH = 11.0km 4.3mb (1 obs.) NORTHERN CALIFORNIA (36) <BRK>. ML 4.1 (BRK). Felt (IV) at Willits. Also felt at Ukiah.		ANT 2.03 241 iPc 44 36.00 -2.0		OLY 61.87 339 P 54 14.70 -0.4		eP 54 24.20 1.5			
		YJA 2.81 79 iPc 44 53.60 4.8X		TBR 63.03 355 P 54 26.00 -1.5		eP 54 26.00 -1.9			
		CNCP 5.90 5 iPd 45 33.80 2.3		FVM 63.81 341 P 54 26.00 -1.9		eP 54 52.00 104km			
		LPB 6.17 3 iPd 45 37.10 2.1							
		1.0s 440.00nm 5.7mb							

09d 00h

Mrf=-0.98 1.98 Mtf=-2.85 0.45
 Principal Axes:
 T Vol= 7.84 Plg=70 Azm=181
 N 1.01 19 20
 P -8.85 6 288
 Best Double Couple: Ma=8.3*10**16
 NP1: Strike=358 Dip=42 Slip= 61
 NP2: 214 54 113

DAU 83.95 43 P 53 05.30 1.2
 ALQ 84.33 50 eP 53 07.00 1.0
 Z 2.0s 147.06nm 5.8mb
 0.53um 4.9Msz
 epP 53 18.50 37km
 esP 53 25.00
 DPW 84.33 34 P 53 06.00 0.5
 PNT 84.53 32 eP 53 07.00 0.5
 DL2 84.70 315 Pc 53 08.00 0.6
 CN2 84.97 321 Pc 53 09.00 0.3
 Z 3.0s 0.40nm 3.1mb X
 20s 0.50um 4.9Msz
 pP 53 18.00 28km
 sP 53 22.00
 PP 56 20.00
 eS 03 37.00
 SNY 85.01 318 iPc 53 09.00 0.1
 Z 22s 0.50um 4.9Msz
 E 22s 0.60um
 pP 53 21.00 39km
 sS 03 40.00
 WHN 85.87 305 eP 53 14.50 1.0
 IMW 86.07 40 P 52 57.20 -17.4X
 LRM 86.25 38 eP 53 14.90 -0.5
 BW06 86.30 42 P 53 14.20 -1.5
 1.6s 26.32nm 5.2mb
 TIA 86.44 311 P 53 16.40 0.2
 GOL 87.43 46 P 53 22.30 1.0
 0.8s 11.90nm 5.2mb
 Z 20s 0.50um 4.9Msz
 pP 53 34.00 38km
 GLD 87.56 46 P 53 23.10 1.3
 1.5s 54.69nm 5.6mb
 FBA 87.56 11 P 53 22.00 1.0
 0.7s 17.44nm 5.4mb
 SNG 88.56 278 eP 53 28.00 1.1
 BJI 88.92 314 eP 53 28.00 0.0
 Z 20s 0.30um 4.7Msz
 eS 04 10.00
 SES 89.61 35 eP 53 30.00 -1.1
 MEO 90.00 53 iPc 53 33.80 0.5
 EDM 90.04 31 eP 53 27.50 -5.6X
 GYA 90.31 298 P 53 36.60 1.6
 RSSD 90.45 42 P 53 35.50 0.1
 pP 53 46.50 35km
 TIY 90.46 310 eP 53 35.90 0.5
 Z 20s 0.50um 4.9Msz
 E 12s 0.30um
 pP 53 49.50 45km
 XAN 91.51 306 P 53 42.00 1.7
 HHC 92.42 313 eP 53 45.80 1.4
 KMI 93.09 296 Pd 53 50.00 2.0
 Z 20s 1.00um 5.3Msz
 E 20s 1.40um
 pP 54 02.50 41km
 eS 04 28.00
 INK 93.38 14 eP 53 48.00 0.0
 BTO 93.39 312 eP 53 49.50 0.7
 CHG 94.17 288 eP 53 54.60 1.8
 MA10 131.36 301 ePKP 59 48.00 1.4
 e 02 03.00
 BHD 144.06 299 ePKPd 00 07.50 -2.3
 MSL 144.34 304 ePKPd 00 08.50 -1.7
 WIT 147.89 360 ePKP 00 20.00 4.5X
 e 00 34.00
 DBN 148.59 1 ePKP 00 12.00 -4.6X
 e 00 36.00
 e 00 52.00
 e 04 04.00
 WTS 148.71 359 ePKP 00 20.00 3.2X
 2.0s 112.00nm
 e 00 36.00
 KRA 148.74 343 ePKP 00 17.00 0.0
 e 00 21.50
 KSP 148.87 348 ePKP 00 18.00 0.8
 e 00 21.30
 ed 00 35.80
 KAS 148.95 318 ePKP 00 24.00 6.3X
 CLL 148.96 352 iPKP 00 22.00 4.7X
 2.6s 215.00nm
 i 00 35.90
 BRG 149.25 351 ePKP 00 22.80 5.1X
 i 00 36.50
 i 01 01.80
 SPC 149.44 342 ePKP 00 20.20 1.9
 MOX 149.78 353 ePKP 00 22.00 3.5X
 2.0s 113.00nm

AFI 6.92 15 eP 42 08.40 -9.5X
 eS 43 20.00
 eLR 44 22.00
 RAR 12.95 95 P 43 31.00 -9.3X
 s 45 38.00
 PVC 17.31 277 iPc 44 29.80 -6.9X
 DZM 18.63 262 iPc 44 53.10 0.1
 TBI 22.55 101 iP 45 33.80 -0.5
 1.6s 530.00nm 5.7mb
 AFR 22.73 86 eP 45 34.00 -2.1
 1.4s 125.00nm 5.2mb
 SNZO 22.86 203 eP 45 40.00 2.8
 eS 49 52.00
 PPT 22.92 86 eP 45 36.00 -2.0
 1.2s 125.00nm 5.3mb
 Z 18s 5.00um 5.0Msz
 TVO 23.18 87 eP 45 51.00 10.4X
 1.4s 125.00nm
 BRS 31.36 251 iPc 46 55.10 -0.6
 RMO 34.89 253 eP 47 27.00 0.7
 CAN 35.88 238 eP 47 35.10 0.4
 BWA 36.14 240 eP 47 34.90 -2.0
 CTA 37.56 264 iPd 47 47.90 -1.0
 0.9s 36.13nm 5.3mb
 iS 54 05.00
 CMS 37.81 245 eP 47 50.00 -0.9
 ASPA 48.48 256 iPc 49 16.00 -1.4
 WBS 48.63 261 eP 49 16.80 -1.8
 i 50 44.70
 WRA 48.64 261 Pd 49 16.90 -1.8
 1.1s 13.80nm 4.9mb
 FORR 52.97 246 eP 49 49.80 -1.6
 WARB 54.70 252 eP 50 02.00 -2.2
 SBA 58.04 185 (P) 50 32.20 4.9X
 COOL 58.92 246 eP 50 33.00 -1.2
 MBL 61.73 256 eP 50 51.50 -2.0
 0.5s 11.00nm 5.2mb
 NWA0 61.97 243 eP 50 55.00 0.0
 MUN 62.96 244 eP 51 01.00 -0.5
 NANU 65.31 254 iPc 51 16.70 -0.3
 0.6s 15.00nm 5.2mb
 SPA 69.48 180 e(P) 51 46.20 3.5
 2.0s 110.00nm 5.5mb
 Z 19s 0.76um 5.0Msz
 MAT 72.83 321 (P) 52 02.00 -1.0
 1.2s 18.75nm 4.9mb
 eS 01 34.00
 BAG 74.33 295 eP 52 11.80 -0.5
 PRS 75.15 41 eP 52 16.00 -0.5
 BCH 75.23 43 P 52 17.80 0.7
 ARN 75.70 40 P 52 20.30 0.6
 MWC 75.95 45 eP 52 21.00 -0.4
 BAR 75.97 47 eP 52 19.00 -2.2
 PLM 76.23 46 eP 52 22.00 -0.9
 RVR 76.27 45 eP 52 21.00 -1.9
 PEC 76.35 46 P 52 23.70 0.3
 SBB 76.39 45 eP 52 23.00 -0.6
 ISA 76.56 43 eP 52 24.00 -0.6
 FRI 76.60 42 eP 52 24.20 -0.4
 ORV 77.15 39 eP 52 27.10 -0.6
 CLC 77.22 44 eP 52 27.00 -1.2
 TPC 77.22 46 eP 52 28.00 -0.3
 WDC 77.23 37 eP 52 27.80 -0.3
 GSC 77.43 45 eP 52 29.00 -0.4
 GLA 77.45 47 eP 52 30.00 0.5
 TNP 78.83 42 P 52 36.80 -0.4
 0.9s 34.51nm 5.3mb
 pP 52 48.20 37km
 KVN 78.87 41 P 52 36.40 -1.0
 pP 52 48.30 40km
 SSE 80.97 308 eP 52 46.00 -2.5
 Z 20s 0.50um 4.9Msz
 sP 53 01.00
 eS 03 01.00
 MSU 82.31 44 P 52 56.80 1.1
 DUG 82.84 42 P 52 59.20 0.9
 MDJ 83.05 323 eP 53 00.00 1.0
 Z 20s 0.90um 5.1Msz

VRI 149.80 331 ePKP 00 22.00 3.3X
 ENN 149.94 1 ePKP 00 24.00 5.3X
 2.0s 159.00nm
 PRU 150.01 349 ePKP 00 20.00 1.1
 Z 20s 0.60um 5.4Msz
 e 00 25.40
 BBTk 150.42 316 ePKP 00 21.00 1.0
 ISR 150.44 330 ePKP 00 26.00 6.2X
 MLR 150.45 331 iPKPd 00 25.00 5.1X
 DOU 150.58 2 PKP 00 26.00 6.3X
 GRF 150.76 354 ePKP 00 26.60 6.5X
 e(pPKP01 00.00
 e(sPKP01 26.00
 ABH 150.81 358 ePKP 00 20.75 0.6
 KHC 151.00 350 PKP 00 23.80 3.3X
 i 00 27.50
 RUP 151.00 359 ePKP 00 21.44 1.0
 WLF 151.04 0 PKP 00 23.40 3.0X
 i 00 28.70
 HRI 151.07 302 ePKP 00 28.00 6.8X
 ZST 151.18 345 ePKP 00 22.00 1.3
 SRO 151.23 343 ePKP 00 21.00 0.2
 i 00 27.70
 e 01 07.20
 VKA 151.30 346 e(PKP)00 14.00 -6.9X
 2.8s 167.00nm
 e 00 57.50
 FLN 151.41 10 ePKP 00 27.10 6.1X
 1.5s 62.70nm
 LDF 151.63 9 ePKP 00 27.50 6.1X
 1.8s 69.05nm
 GRR 151.71 10 ePKP 00 28.10 6.6X
 1.2s 26.80nm
 KMR 151.94 349 ePKP 00 20.00 -1.9
 i 00 30.00
 LPF 152.03 11 ePKP 00 28.70 6.7X
 1.2s 26.80nm
 BZS 152.12 337 ePKP 00 23.00 0.8
 CDF 152.29 359 ePKP 00 23.60 1.1
 1.6s 80.85nm
 PRN1 152.49 296 ePKP 00 31.00 7.7X
 HAU 152.70 0 ePKP 00 24.20 1.2
 1.4s 26.15nm
 MBH 152.72 295 ePKP 00 31.00 7.5X
 FEL 152.80 358 ePKP 00 20.71 -2.5
 KBA 153.03 349 iPKPc 00 31.90 8.2X
 i 00 42.00
 i 00 54.50
 LOR 153.36 4 ePKP 00 29.70 5.8X
 1.4s 17.45nm
 ZAG 153.68 345 ePKP 00 26.00 1.6
 SMF 153.98 4 ePKP 00 31.80 7.0X
 1.6s 37.30nm
 EZN 154.37 323 ePKP 00 35.00 9.5X
 SKO 155.22 332 ePKP 00 27.00 0.4
 Z 20s 1.22um 5.7Msz
 N 20s 0.44um
 E 19s 0.42um
 OHR 156.20 332 e(PKP)00 30.00 2.0
 BNG 160.01 218 iPKPc 00 35.10 1.9
 1.6s 39.00nm
 id 01 14.50
 MAL 161.41 28 ePKP 00 32.30 -1.6
 i 01 20.00

S.D. = 1.3 on 96 of 130 abs.

 & AUG 09, 1989 00h 55m 05.70s
 39.500 N 122.900 W
 DEPTH = 11.0km
 NORTHERN CALIFORNIA (36)
 <BRK>. ML 2.5 (BRK).

 LTCM 0.93 40 eP 55 23.60 0.3
 ORV 1.08 87 eP 55 24.70 -1.3
 eS 55 38.40
 WDC 1.11 14 eP 55 25.80 -0.7
 MIN 1.31 49 eP 55 29.00 -0.9
 KVN 3.75 95 eP 56 04.50 -0.5
 5 abs. associated

 AUG 09, 1989 01h 10m 52.08±0.63s
 39.498 N ± 6.1km 29.029 E ± 6.7km
 DEPTH = 5.0km (geophysicist)
 TURKEY (366)

09d 03h			DEPTH = 10.0km (geophysicist)			0.9s 17.86nm 4.8mb		
			AEGEAN SEA (365)			CHTO 30.44 309 eP 10 39.50 0.0		
			ML 3.7 (ATH)			0.8s 12.63nm 4.7mb		
			IZM 0.60 83 iPg 49 31.60 -1.6			BWA 41.60 149 eP 12 15.10 1.7		
			PRK 0.94 349 eP 49 40.00 1.1			CAN 42.60 149 eP 12 22.00 0.5		
			APE 1.48 212 eP 49 46.60 -1.2			BUL 94.83 250 iPc 17 42.90 -1.6		
			EZN 1.50 355 ePn 49 47.80 -0.3			S.D. = 1.5 on 9 of 10 obs.		
			YER 1.84 130 ePn 49 55.10 2.0			? AUG 09, 1989 05h 25m 06.37± 3.78s		
			DST 2.09 52 iPn 49 54.80 -1.8			23.067 S ± 36.1km 178.297 W ± 29.7km		
			ATH 2.23 262 eP 50 02.40 3.8X			DEPTH = 578.5 ± 40.7 km		
			EDC 2.27 27 ePn 50 00.00 0.7			4.4mb (4 obs.)		
			KHL 2.37 89 ePn 50 01.80 1.1			SOUTH OF FIJI ISLANDS (171)		
			RDO 2.91 345 eP 50 08.30 0.0			DZM 14.13 271 iPc 28 07.00 0.6		
			S.D. = 1.5 on 9 of 10 obs.			BR5 26.49 255 iPc 30 00.20 -0.3		
			* AUG 09, 1989 04h 20m 55.91± 0.48s			CAN 30.91 239 eP 30 39.00 0.5		
			15.486 N ± 8.9km 147.065 E ± 8.9km			BWA 31.17 241 eP 30 39.20 -1.4		
			DEPTH = 33.0km (normal)			CTA 33.05 268 iPd 30 56.00 -0.5		
			4.5mb (5 obs.)			0.6s 33.33nm 5.1mb		
			MARIANA ISLANDS REGION (215)			ASPA 43.72 259 iPd 32 22.00 -1.0		
			GUMO 2.85 229 eP 21 40.30 0.3			FORR 48.03 249 eP 32 56.00 0.3		
			GUA 2.85 227 eP 21 40.10 0.1			0.4s 14.00nm 4.8mb		
			MAT 22.41 341 eP 25 52.00 -1.0			WARB 49.84 255 eP 33 09.30 0.1		
			0.8s 7.46nm 4.2mb			MBL 56.97 259 eP 34 00.40 0.6		
			eS 30 00.00			NANU 60.49 256 iPd 34 25.10 1.8		
			eS 30 00.00			ALO 89.21 51 e(P) 37 02.50 0.0		
			eS 30 00.00			1.0s 2.00nm 4.0mb		
			eS 30 00.00			eP 37 22.00		
			eS 30 00.00			eP 38 00.50 238kmX		
			eS 34 01.00			CHTO 90.86 290 eP 37 09.20 -0.8		
			BJI 36.37 318 eP 27 59.00 0.1			1.0s 1.75nm 4.0mb		
			Z 24s 0.32um 4.0mszX			S.D. = 1.0 on 12 of 12 obs.		
			WB5 37.30 200 eP 28 04.80 -2.1			AUG 09, 1989 05h 25m 10.14± 1.07s		
			GYA 39.12 293 P 28 23.00 0.6			44.516 N ± 5.2km 140.857 E ± 6.2km		
			HHC 39.80 317 eP 28 28.10 0.3			DEPTH = 247.9 ± 10.1 km		
			BTO 40.72 315 eP 28 36.00 0.7			4.5mb (26 obs.)		
			LZH 43.55 306 eP 28 59.50 0.8			EASTERN SEA OF JAPAN (223)		
			1.5s 0.02nm 1.7mb X			MDJ 8.05 275 iPc 27 06.00 1.3		
			NST 45.13 277 eP 29 12.50 1.1			S 28 33.00		
			CHG 46.00 281 eP 29 19.00 0.8			MAT 8.22 195 iPc 27 05.90 -1.0		
			CHTO 46.00 281 eP 29 19.00 0.8			0.8s 120.90nm 5.0mb		
			0.8s 7.32nm 4.7mb			eS 28 37.00		
			GTA 47.56 310 eP 29 29.70 -0.8			CN2 11.10 272 Pc 27 43.00 -0.4		
			WMO 57.41 312 iPd 30 44.00 0.2			pP 27 48.00		
			INK 71.81 23 eP 32 16.00 -0.9			eS 29 41.00		
			MBC 75.92 14 eP 32 40.50 -0.1			SNY 12.90 264 iPc 28 06.20 0.4		
			1.0s 6.00nm 4.5mb			DL2 15.40 255 Pc 28 36.00 -0.4		
			MAIO 79.08 305 eP 33 10.00 11.0X			TIA 19.85 253 P 29 22.20 -1.5		
			YKB0 80.18 28 eP 33 03.80 -0.4			SSE 20.45 236 P 29 32.00 2.3		
			YKA 80.20 28 P 33 04.70 0.4			1.0s 0.01nm 1.4mb X		
			ALE 81.21 4 eP 33 10.00 0.6			NJ2 21.21 242 Pc 29 35.80 -1.3		
			0.6s 4.00nm 4.6mb			HHC 21.79 271 eP 29 42.40 -0.4		
			KEV 85.37 342 eP 33 31.00 0.2			TIY 22.40 262 eP 29 47.50 -1.2		
			LRM 86.16 44 eP 33 35.10 -0.4			S 33 38.00		
			SOD 86.81 340 eP 33 34.00 -3.9X			BTO 22.98 271 eP 29 55.00 0.7		
			SUF 89.59 337 eP 33 51.00 -0.3			eS 33 42.00		
			ALO 94.21 52 e(P) 34 16.00 2.6			WHN 25.09 245 P 30 13.50 -0.3		
			NB2 96.02 340 P 34 19.70 -1.4			GTA 32.70 275 eP 31 04.00 0.1		
			0.9s 1.10nm 4.3mb			GYA 32.85 248 P 31 22.00 -0.6		
			KIC 144.63 306 PKP 40 30.00 -1.8			OIZ 36.25 236 eP 31 53.40 2.2		
			TIC 144.67 306 PKP 40 30.10 -1.8			KMI 36.37 251 Pd 31 53.00 0.5		
			LIC 144.93 306 PKP 40 31.00 -1.3			WMO 37.58 288 P 32 03.00 0.7		
			ZOBO 146.17 96 PKP 40 36.00 1.0			IMA 40.61 35 ePc 32 26.30 -0.7		
			LPB 146.21 97 PKP 40 37.00 2.1			KDC 42.12 47 eP 32 39.30 0.2		
			CNCB 146.34 97 ePKP 40 36.00 0.7			PMR 43.07 41 eP 32 46.70 -0.1		
			S.D. = 1.1 on 32 of 35 obs.			0.6s 8.50nm 4.3mb		
			? AUG 09, 1989 05h 04m 42.55± 1.39s			CHG 43.26 247 eP 32 49.00 0.1		
			0.289 N ± 29.5km 123.648 E ± 26.5km			CHTO 43.26 247 iPd 32 49.00 0.1		
			DEPTH = 190.7 ± 23.3 km			0.5s 7.27nm 4.3mb		
			4.6mb (3 obs.)			TOA 44.35 40 eP 32 59.00 1.9		
			MINAHASSA PENINSULA (265)			INK 48.02 30 iPc 33 25.10 -0.5		
			MNI 1.65 46 iPd 05 16.80 -0.4			0.4s 18.00nm 4.8mb		
			TSM 6.81 305 eP 06 21.50 0.5			1.0s 4.00nm 3.8mb		
			WB5 22.63 153 eP 09 26.20 -2.0			KEV 56.34 338 eP 34 20.00 -7.0X		
			e 13 19.70			YKA 57.63 32 eP 34 36.80 0.7		
			WRA 22.67 153 Pc 09 24.90 -3.7X			MTN 57.77 191 iPd 34 36.80 -0.7		
			0.4s 1.60nm 3.9mb			SOD 57.95 335 eP 34 37.00 -1.3		
			ASPA 25.81 158 eP 09 58.90 0.9			KNA 60.98 193 eP 34 58.70 -0.7		
			CHG 30.44 309 ePc 10 39.80 0.3			SUF 61.16 331 iP 34 58.80 -1.4		
						0.4s 3.10nm 4.3mb		
						GBA 61.67 261 P 35 02.90 -1.2		
						NUR 63.20 330 eP 35 12.00 -1.6		

PNT 63.20 46 eP 35 14.00 0.1
0.6s 6.00nm 4.5mb
HFS 67.13 334 eP 35 37.40 -1.3
0.6s 7.40nm 4.6mb
NB2 67.16 336 P 35 37.70 -1.2
0.7s 6.50nm 4.5mb
MBL 68.13 201 eP 35 44.30 -0.9
ASPA 68.15 187 iPd 35 45.40 0.1
0.6s 38.00nm 5.3mb
LRM 69.16 46 eP 35 52.30 0.6
FRB 69.60 13 eP 35 53.00 -0.7
WARB 71.55 193 iPd 36 06.40 0.6
0.3s 12.00nm 5.1mb
PRU 74.92 327 P 36 25.60 0.5
FORR 75.90 191 iPc 36 31.00 0.4
0.4s 37.00nm 5.5mb X
KHC 75.98 327 eP 36 31.90 0.8
COOL 77.16 197 eP 36 37.20 -0.5
BAL 77.94 201 eP 36 42.00 0.1
BWA 78.87 174 eP 36 48.70 1.8
HAU 79.58 331 eP 36 51.30 0.6
NWAO 80.02 200 eP 36 52.50 -0.5
LOR 81.07 332 eP 36 58.50 0.0
0.6s 5.40nm 4.5mb
LBF 81.27 332 eP 36 59.60 0.0
0.6s 4.50nm 4.4mb
SSF 81.36 332 eP 37 00.20 0.2
0.8s 2.70nm 4.0mb
GRR 81.58 335 eP 37 01.40 0.4
0.8s 5.35nm 4.3mb
LPG 81.58 329 eP 37 02.60 1.1
0.8s 6.70nm 4.4mb
SMF 81.61 332 iPd 37 01.60 0.3
0.6s 5.40nm 4.5mb
AVF 81.65 332 iPd 37 01.90 0.4
0.6s 6.30nm 4.5mb
LPF 81.95 335 eP 37 03.60 0.6
0.9s 9.85nm 4.5mb
MAF 82.41 332 iPd 37 06.20 0.7
0.7s 12.15nm 4.7mb
TCF 82.47 332 eP 37 06.40 0.6
0.8s 2.70nm 4.0mb
LSF 82.73 333 eP 37 07.50 0.4
0.6s 7.20nm 4.6mb
MFF 82.95 334 eP 37 09.00 0.8
0.8s 8.05nm 4.5mb
CAF 83.72 332 eP 37 13.30 1.2
0.6s 3.60nm 4.3mb
LPO 84.23 332 eP 37 15.60 1.0
0.5s 3.65nm 4.5mb
EPF 85.98 332 eP 37 24.00 0.6
0.8s 6.70nm 4.5mb
MNG 90.28 154 P 37 44.80 1.4
SPA 134.32 180 e(PKP) 43 59.90 1.1
1.0s 6.00nm 4.5mb
ZOBO 142.71 50 ePKP 44 14.00 -2.2
LPB 142.94 50 ePKP 44 16.00 -0.4
CNCB 143.23 51 PKP 44 16.00 -1.0
ITR 144.38 359 ePKP 44 16.10 -2.3
SOB1 144.79 3 ePKP 44 18.70 -0.4
PDCR 148.13 360 ePKP 44 23.90 -0.6
i 44 27.50
S.D. = 1.0 on 71 of 72 obs.

AUG 09, 1989 05h 51m 02.24 ± 0.27s
9.777 S ± 4.4km 118.093 E ± 6.9km
DEPTH = 33.0km (normal)
4.9mb (8 obs.)

SUMBAWA ISLAND REGION (285)

KUPT 5.44 94 eP 52 32.50 9.3X
TRT 5.77 290 iPd 52 28.20 0.3
iS 53 30.50
MBL 11.44 172 eP 53 42.00 -4.4X
0.3s 35.00nm 6.0mb
eS 55 35.00
KNA 11.98 121 eP 53 52.20 -1.6
eS 55 48.00
NANU 12.95 191 eP 54 02.20 -4.4X
0.3s 51.00nm 6.1mb X
eS 56 05.00
MTN 13.14 105 eP 54 08.60 -0.7
eS 56 23.60
TSM 13.91 360 eP 54 25.00 5.7X
KKM 15.83 353 iPc 54 51.50 7.0X
MEKA 16.75 179 eP 54 54.00 -2.1
eS 57 46.00

WARB 18.22 155 eP 55 14.30 -0.1
0.4s 30.00nm 4.8mb
iS 08 22.30
MRWA 19.44 186 iPc 55 29.30 0.3
eS 58 46.00
ASPA 20.46 134 iPd 55 40.90 1.0
0.8s 44.00nm 4.9mb
Z 22s 0.58um 3.9mszX
eS 59 18.60
LR 03 05.40
BAL 20.76 183 eP 55 42.60 -0.3
0.3s 14.00nm 4.8mb
e 55 49.00
eS 59 13.00
COOL 21.19 173 eP 55 47.00 -0.3
iS 59 25.00
KLB 21.71 181 eP 55 52.60 0.1
0.3s 13.00nm 4.9mb
e 56 00.00
eS 59 38.00
MUN 22.16 184 eP 55 57.00 0.0
e 56 06.00
eS 59 49.00
IPM 22.19 309 ePd 55 58.20 0.7
PSI 22.76 302 ePc 56 03.30 0.3
FORR 22.94 157 eP 56 05.50 0.8
eS 00 16.00
NWAO 23.05 182 eP 56 06.80 1.1
0.5s 39.00nm 5.2mb
e 56 17.00
eS 00 06.00
OIS 23.33 120 eP 56 11.00 2.4
e 00 47.00
TSI 23.51 303 eP 56 05.00 -5.3X
SNG 24.22 313 eP 56 17.20 0.0
OIZ 29.76 344 eP 57 07.80 -0.3
BDT 32.82 325 eP 57 33.80 -1.2
CHTO 34.12 326 eP 57 46.00 -0.3
1.0s 5.00nm 4.4mb
GYA 37.69 343 P 58 17.80 1.2
PcP 00 35.20
KMI 37.78 337 Pd 58 20.00 2.5
WHN 40.25 355 P 58 39.00 1.3
SSE 40.75 4 P 58 43.50 1.7
NJ2 41.60 1 Pc 58 50.30 1.6
CD2 42.73 342 eP 58 58.00 -0.2
XAN 44.44 349 P 59 12.00 0.0
TIA 45.75 359 eP 59 21.80 -0.5
GBA 46.56 299 P 59 27.00 -2.0
TIY 47.54 354 Pd 59 35.30 -1.2
Z 15s 0.70um 4.8mszX
DL2 48.54 4 P 59 44.00 -0.2
BJI 49.59 358 eP 59 52.00 -0.3
MAT 49.81 21 eP 59 53.00 -1.0
1.6s 70.00nm 5.4mb
BTO 50.67 352 eP 00 00.40 -0.3
HHC 50.73 354 eP 00 00.60 -0.5
SNY 51.60 5 eP 00 06.60 -0.9
GTA 51.80 342 Pc 00 09.00 -0.3
CN2 53.74 7 eP 00 22.50 -0.9
MDJ 55.13 10 eP 00 33.00 -0.6
WMO 60.07 335 iPd 01 08.00 -0.6
SPA 80.29 180 e(P) 03 27.50 16.2X
1.0s 9.00nm
BUL 86.21 250 iPd 03 43.30 0.9
SUF 99.50 332 iP 04 42.40 -0.5
SOD 99.52 337 eP 04 42.00 -0.9
YKA 115.26 24 ePKP 09 43.00 1.3
ALO 132.32 51 ePKP 10 17.70 2.2X
ePKS 13 54.50
CBN 148.47 24 ePKP 10 49.00 5.2X
ITR 150.24 233 ePKP 10 53.50 6.3X
e 11 08.20
SOB1 151.84 229 ePKP 10 57.90 8.3X
CCH 152.69 171 PKP 11 00.90 9.8X
CNCB 152.91 167 PKP 11 02.00 10.3X
LPB 153.15 167 ePKP 11 03.00 11.1X
ZOBO 153.40 167 PKP 11 03.00 10.6X
S.D. = 1.1 on 44 of 59 obs.

AUG 09, 1989 07h 12m 03.38 ± 1.16s
44.688 N ± 7.4km 6.793 E ± 14.6km
DEPTH = 10.0km (geophysicist)

FRANCE (538)
ML 2.2 (GEN).

FOUF 0.16 183 iPgc 12 07.24 0.2

eSg 12 09.39
RRL 0.23 358 P 12 08.52 0.0
S 12 12.11
PZZ 0.29 130 P 12 10.26 0.8
S 12 15.08
STV 0.58 139 P 12 14.57 -0.7
ENR 0.64 136 P 12 16.01 -0.3
S.D. = 0.8 on 5 of 5 obs.

? AUG 09, 1989 08h 24m 08.67 ± 1.55s
24.734 S ± 13.5km 70.705 W ± 23.4km
DEPTH = 33.0km (normal)
4.3mb (1 obs.)

NEAR COAST OF NORTHERN CHILE (122)

ANT 1.06 15 iPc 24 29.30 2.1
iS 24 41.00
YJA 5.42 63 ePd 25 36.90 7.2X
CYA 5.74 131 e(P) 25 33.50 -0.4
ARE 8.26 355 iP 26 07.50 -2.0
CNCB 8.29 18 P 26 12.00 2.0
PEL 8.38 180 eP 26 18.00 7.2X
CCH 8.46 31 P 26 22.30 10.0X
LPB 8.52 17 P 26 12.00 -1.1
ZOBO 8.76 16 P 26 15.00 -1.6
Z 20s 0.23um
LR 29 30.00
MRA 8.82 151 e(P) 26 12.80 -4.0X
ALO 68.34 329 eP 35 09.80 0.7
0.7s 1.88nm 4.3mb
KVN 77.39 324 eP 36 02.70 0.4
GBA 148.02 104 PKPd 43 52.40 2.6X
0.6s 2.10nm
S.D. = 1.8 on 8 of 13 obs.

& AUG 09, 1989 08h 59m 19.18s
59.612 N 152.096 W
DEPTH = 64.4km

SOUTHERN ALASKA (2)
<AGS-P>.

CNPM 0.45 101 iP 59 30.63 -0.5
eS 59 39.32
OPT 0.58 275 iP 59 32.11 -0.4
eS 59 42.83
BRK 0.63 76 eP 59 32.50 -0.7
eS 59 43.48
ILIM 0.64 318 eP 59 32.50 -0.8
AUL 0.72 252 eP 59 33.91 -0.2
RDT 0.98 351 iP 59 36.65 -0.8
eS 59 50.37
CDD 1.05 230 eP 59 37.53 -0.8
eS 59 52.47
NKA 1.21 20 eP 59 41.53 1.1
SEW 1.42 69 eP 59 42.34 -1.0
eS 00 01.14
SPU 1.58 1 eP 59 44.91 -0.6
eS 00 05.30
SUA 1.97 19 eP 59 51.48 0.4
PLRM 2.47 35 eP 59 56.33 -1.5
GHO 2.67 34 eP 59 59.40 -1.4
13 obs. associated

? AUG 09, 1989 09h 24m 41.83 ± 4.18s
1.367 S ± 24.6km 78.060 W ± 25.2km
DEPTH = 10.0km (geophysicist)

ECUADOR (107)

TUNG 0.39 262 iP+ 24 50.00 0.1
eS 24 56.00
RECU 0.88 325 iP+ 24 57.70 -1.5
eS 25 10.40
OUR 1.28 338 eP 25 06.70 0.9
S 25 26.00
GGP 1.30 336 eP 25 06.70 0.4
S 25 26.00
CAYA 1.44 3 eP 25 07.30 -1.1
COTA 1.71 351 eP 25 13.50 1.1
S.D. = 1.4 on 6 of 6 obs.

AUG 09, 1989 09h 28m 15.94 ± 0.80s
38.235 N ± 6.5km 26.569 E ± 9.7km
DEPTH = 10.0km (geophysicist)

AEGEAN SEA (365)
MD 3.1 (ATH).

SMG 0.57 158 eP 28 27.00 -0.4

SOD 0.9s 8.40nm 4.9mb
 61.26 338 iP 48 35.60 -1.1
 HYB 62.60 269 eP 48 46.00 -0.4
 WB5 63.46 193 eP 48 51.30 -0.5
 SUF 64.68 334 iP 48 58.30 -1.1
 0.4s 4.70nm 4.9mb
 GBA 65.87 266 P 49 08.00 0.4
 FFC 66.54 36 eP 49 11.00 -0.4
 0.8s 14.00nm 5.1mb
 NUR 66.79 333 iP 49 11.80 -1.1
 LRM 67.08 48 eP 49 15.60 0.2
 KVN 67.95 57 eP 49 20.00 -0.9
 TNP 69.09 57 eP 49 28.30 0.3
 UPP 69.54 335 iP 49 28.70 -1.3
 NB2 70.41 339 P 49 34.60 -0.8
 0.5s 9.80nm 5.2mb
 HFS 70.48 337 eP 49 34.60 -1.2
 0.4s 18.50nm 5.5mb
 KRA 76.56 328 eP 50 11.80 0.5
 e 50 22.00 33km
 VRI 76.94 322 ePc 50 15.00 1.4
 KSP 77.29 330 eP 50 15.50 0.1
 CLL 78.06 332 iPd 50 19.70 0.1
 1.1s 16.00nm 5.0mb
 i 50 30.30 34km
 BRG 78.10 332 eP 50 20.10 0.2
 e 50 46.80 103kmX
 PRU 78.63 331 Pc 50 23.00 0.2
 KHC 79.69 331 iPc 50 29.50 0.9
 1.0s 6.00nm 4.6mb
 VAY 82.37 321 e(P) 50 44.00 1.2
 SSF 84.82 336 eP 50 55.50 0.3
 SMF 85.09 335 eP 50 57.40 0.9
 AVF 85.11 336 eP 50 57.20 0.6
 LPG 85.18 333 eP 51 00.30 2.9
 MAF 85.86 336 eP 51 01.70 1.3
 1.6s 37.30nm 5.4mb
 CAF 87.18 336 eP 51 08.40 1.5
 1.6s 18.30nm 5.1mb

SOB1 145.82 14 ePKP 58 00.10 -0.1
 PDCR 149.36 12 ePKP 58 11.00 5.2X
 BAO 150.03 30 e(PKP) 57 58.00 -8.9X
 S.D. = 1.1 on 50 of 55 obs.

? AUG 09, 1989 14h 40m 10.25 ± 1.01s
 52.948 N ± 23.4km 171.622 E ± 12.1km
 DEPTH = 33.0km (normal)
 4.7mb (2 obs.)
 NEAR ISLANDS, ALEUTIAN ISLANDS (5)
 SMY 1.52 97 eP 40 36.70 1.3
 MAT 28.51 248 eP 46 04.00 -0.5
 EDM 43.10 58 eP 48 06.00 -2.6
 KVN 48.81 77 eP 48 54.20 0.0
 TNP 49.97 77 eP 49 03.00 -0.1
 SUF 61.52 343 iP 50 26.60 0.9
 0.6s 4.70nm 4.8mb
 NUR 63.84 343 iP 50 41.70 0.6
 NB2 65.29 350 P 50 50.90 0.4
 0.7s 4.50nm 4.7mb
 S.D. = 1.4 an 8 of 8 abs.

& AUG 09, 1989 15h 26m 07.83s
 38.176 N 112.590 W
 DEPTH = 0.4km
 UTAH (478)
 <SLC-P>. CL 2.8 (SLC).
 MSU 0.47 44 iPd 26 17.40 0.2
 DUG 2.02 355 eP 26 42.20 -1.5
 DAU 2.46 24 eP 26 53.80 3.6
 ALO 5.90 121 eP 27 35.00 -3.8
 4 abs. associated

& AUG 09, 1989 15h 28m 33.39s
 38.188 N 112.589 W
 DEPTH = 2.5km
 UTAH (478)
 <SLC>. CL 3.3 (SLC). Felt at Beaver.
 DWU 0.33 256 P 28 40.00 -0.1
 MSU 0.46 45 iPd 28 42.70 0.1
 IMU 0.63 315 P 28 45.90 -0.1
 DUG 2.01 355 eP 29 07.80 -1.0
 DAU 2.45 25 eP 29 15.00 -0.3
 TNP 3.65 270 eP 29 32.00 -0.3

KVN 4.40 283 eP 29 42.00 -0.9
 BW06 5.13 26 P 30 07.00 13.7
 ALO 5.90 121 eP 30 02.00 -2.1
 9 obs. associated

AUG 09, 1989 16h 01m 25.43 ± 0.73s
 24.559 N ± 4.4km 94.707 E ± 5.1km
 DEPTH = 85.7 ± 7.4 km
 5.2mb (12 obs.)

BURMA-INDIA BORDER REGION (294)
 SHL 2.75 292 iP 02 07.40 -1.1
 iS 02 39.20
 LSA 6.02 329 P 02 54.60 0.4
 S 04 01.00
 CHG 6.94 145 iPn 03 06.90 0.4
 iSg 04 50.60
 CHTO 6.94 145 iPn 03 06.60 0.2
 KMI 7.32 84 Pc 03 17.50 5.7X
 sP 03 50.00
 S 04 42.00
 BDT 8.31 150 ePn 03 24.80 -0.4
 NST 10.20 149 ePn 03 53.50 2.6
 e 06 29.00
 GYA 10.96 78 P 04 05.40 4.1X
 LZH 13.93 32 eP 04 40.50 0.2
 QIZ 15.09 108 P 05 01.60 6.3X
 GTA 15.42 15 eP 04 57.20 -2.3
 eS 07 53.00
 XAN 15.57 49 eP 05 00.30 -1.0
 NDI 16.17 289 eP 05 10.00 1.2
 eS 07 51.00
 HYB 16.67 248 eP 05 15.00 -0.1
 eS 08 02.00
 WHN 18.40 67 eP 05 36.00 -0.3
 GBA 19.60 239 Pc 05 47.60 -1.9
 0.5s 1.80nm 3.6mb X
 GBA 19.60 239 P 05 51.00 1.5
 S 09 12.00
 TIY 20.01 45 eP 05 51.80 -1.9
 WMO 20.06 345 iPd 05 54.60 0.4
 BTO 20.50 35 eP 06 00.50 1.8
 IPM 20.77 162 ePd 06 01.50 -0.1
 HHC 21.50 37 eP 06 10.80 1.9
 KSH 21.68 318 P 06 12.50 1.9
 PSI 22.11 169 eP 06 10.00 -5.0X
 BJI 23.73 44 eP 06 44.00 13.5X
 QUE 25.25 289 eP 07 03.00 17.7X
 MAIO 32.37 300 iPc 08 07.80 18.9X
 TRT 36.52 149 ePc 08 26.20 1.8
 NANU 51.02 155 iPd 10 21.10 0.3
 0.5s 31.00nm 5.6mb
 MBL 51.60 150 eP 10 24.70 -0.5
 0.3s 7.00nm 5.2mb
 KNA 52.05 137 eP 10 27.50 -1.2
 ELL 56.11 299 iP 10 57.30 -1.1
 VRI 57.71 310 ePd 11 09.50 0.1
 MLR 58.28 310 ePd 11 13.00 -0.5
 SUF 58.65 330 eP 11 15.00 -0.7
 0.6s 8.40nm 5.0mb
 WB5 58.67 135 iPc 11 15.70 -0.6
 WRA 58.70 135 Pc 11 15.90 -0.6
 0.3s 3.80nm 5.0mb
 BAL 58.77 158 eP 11 16.00 -0.8
 WARB 59.14 146 iPc 11 19.30 -0.2
 0.4s 8.00nm 5.2mb
 NUR 59.15 327 eP 11 19.00 -0.1
 SOD 59.16 335 iP 11 19.00 -0.1
 KEV 59.49 338 eP 11 22.00 0.6
 MUN 59.86 159 iPc 11 23.30 -1.0
 KLB 60.03 157 eP 11 24.20 -1.3
 0.3s 6.00nm 5.3mb
 NWA0 61.07 158 iPc 11 31.10 -1.4
 0.5s 13.00nm 5.3mb

ASPA 61.18 139 eP 11 32.70 -0.8
 RKG 62.04 159 eP 11 41.00 2.0
 UPP 62.64 326 iPc 11 42.20 -0.5
 F0RR 63.71 148 eP 11 49.10 -0.9
 KSP 64.18 316 eP 11 52.50 -0.5
 HFS 64.59 327 eP 11 55.10 -0.4
 0.5s 19.50nm 5.3mb
 PRU 65.41 316 eP 12 00.50 -0.5
 NB2 65.71 328 P 12 01.90 -0.9
 0.6s 4.80nm 4.6mb
 EKA 74.46 324 Pd 12 56.30 0.4
 0.9s 6.30nm 4.5mb
 BNG 75.59 268 iPd 13 02.40 -0.7

0.2s 16.00nm 5.6mb
 id 13 23.00
 BUL 78.16 241 iPc 13 17.00 -0.4
 0.7s 4.11nm 4.4mb
 INK 80.90 16 eP 13 32.00 0.9
 SLR 81.37 237 iPc 13 34.60 0.1
 YKA 90.15 13 eP 14 19.20 2.2
 SOB1 135.08 282 ePKP 20 38.80 1.5
 ZOBO 161.93 294 PKP 21 19.70 0.9
 LPB 162.04 293 ePKP 21 19.00 0.3
 CNCB 162.07 292 PKP 21 20.00 1.1
 S.D. = 1.1 an 56 of 63 abs.

* AUG 09, 1989 19h 06m 33.27 ± 0.92s
 16.746 N ± 8.9km 62.292 W ± 10.7km
 DEPTH = 33.0km (normal)
 LEEWARD ISLANDS (92)
 ML 2.6 (FDF).
 NEV 0.47 325 eP 06 44.50 1.0
 BPA 0.51 54 eP 06 44.71 0.6
 eS 06 55.17
 ANG 0.60 47 eP 06 44.52 -0.8
 eS 06 54.41
 SKI 0.72 324 eP 06 46.09 -1.0
 eS 06 56.22
 PAG 0.92 140 eP 06 50.50 0.6
 S 07 08.50
 MGG 1.25 131 eP 06 50.00 -4.5X
 BBL 1.45 147 eP 06 56.90 -0.5
 S.D. = 1.1 on 6 of 7 obs.

& AUG 09, 1989 19h 14m 59.33s
 60.120 N 152.239 W
 DEPTH = 67.9km
 SOUTHERN ALASKA (2)
 <AGS-P>.
 ILIM 0.36 264 iP 15 10.48 -0.5
 eS 15 20.10
 RED 0.40 319 iP 15 10.92 -0.4
 RDT 0.46 350 iP 15 11.29 -0.6
 eS 15 21.49
 OPT 0.69 227 eP 15 13.61 -0.6
 eS 15 25.30
 BRLK 0.77 117 eP 15 14.86 -0.3
 eS 15 27.47
 CNPM 0.78 139 iP 15 14.79 -0.5
 eS 15 27.61
 NKA 0.80 38 eP 15 16.63 1.2
 AUW 0.98 220 eP 15 16.84 -0.8
 CGLM 1.20 5 eP 15 20.01 -0.6
 eS 15 35.84
 CDD 1.39 212 eP 15 21.82 -1.4
 SEW 1.40 89 eP 15 21.60 -1.6
 SHU 1.50 182 eP 15 23.85 -0.7
 SUA 1.54 28 eP 15 24.70 -0.5
 eS 15 44.77
 PMS 1.74 48 eP 15 27.10 -0.8
 SKT 1.90 10 eP 15 28.77 -1.4
 PWA 1.92 36 eP 15 29.60 -0.8
 SVW 1.94 302 iPc 15 28.30 -2.4
 PLRM 2.12 44 iP 15 31.29 -1.9
 PMR 2.12 44 eP 15 31.40 -1.8
 PME 2.18 45 iP 15 32.26 -1.7
 KNIM 2.26 82 iP 15 31.90 -3.2
 GHO 2.32 43 iP 15 34.01 -2.0
 KDC 2.38 183 eP 15 34.40 -2.4
 GLI 2.66 71 iP 15 36.92 -3.8
 eS 16 06.42
 FID 2.92 75 iP 15 40.12 -4.3
 TOA 3.55 53 eP 15 51.20 -2.1
 26 abs. associated

* AUG 09, 1989 20h 08m 52.14 ± 1.01s
 38.238 N ± 9.1km 26.526 E ± 9.4km
 DEPTH = 10.0km (geophysicist)
 AEGEAN SEA (365)
 MD 3.3 (ATH).
 IZM 0.60 74 iPg 09 03.10 -1.2
 eSg 09 10.00
 PRK 1.03 349 ePn 09 11.20 -0.3
 eSn 09 25.50
 APE 1.41 214 ePn 09 18.20 0.3
 EZN 1.59 354 ePn 09 19.00 -1.4
 YER 1.78 128 ePn 09 28.30 5.1X

09d 20h

DST 2.13 50 ePn 09 30.00 1.7
 EDC 2.35 26 ePn 09 33.00 1.7
 KHL 2.36 87 ePn 09 31.00 -0.6
 RDO 3.00 346 ePn 09 40.50 -0.1
 S.D. = 1.4 on 8 of 9 obs.

* AUG 09, 1989 21h 11m 52.61±0.98s
 5.546 S ±10.3km 152.010 E ±17.5km
 DEPTH = 33.0km (normal)
 4.8mb (1 obs.)

NEW BRITAIN REGION (192)

RAB 1.36 7 iPd 12 15.30 -0.1
 LMG 5.08 229 eP 13 09.00 0.3
 S 14 06.00
 LAT 5.10 257 eP 13 14.00 5.2X
 QIS 19.18 218 eP 16 15.00 -1.4
 RMO 21.06 188 eP 16 37.00 0.7
 e 16 40.60
 BRS 21.74 178 iPd 16 43.30 0.1
 MTN 21.84 249 eP 16 45.20 1.0
 WBS 22.30 229 eP 16 50.60 1.7
 KNA 24.96 244 eP 17 14.00 -0.7
 ASPA 25.07 222 eP 17 15.00 -0.8
 0.7s 20.00nm 4.8mb

WARB 31.76 227 eP 17 23.10 29kmX
 18 15.50 -0.6
 S.D. = 1.1 on 10 of 11 obs.

AUG 09, 1989 22h 07m 25.63±1.42s
 14.312 N ±3.6km 60.749 W ±18.6km
 DEPTH = 20.3 ± 9.8 km

WINDWARD ISLANDS (95) ML 3.1 (FDF).

MVM 0.28 329 iPc 07 32.11 0.1
 BIM 0.37 303 iPd 07 33.60 0.1
 S 07 38.20
 CRM 0.47 340 iPc 07 35.10 0.0
 S 07 41.50
 SLB 0.56 210 eP 07 36.45 -0.3
 eS 07 48.44
 FDF 0.57 317 iPc 07 36.59 -0.3
 S 07 43.90
 SOA 1.01 203 eP 07 43.76 -0.5
 eS 07 57.97
 SVV 1.09 205 eP 07 46.07 0.4
 eS 08 00.50
 SVB 1.14 205 eP 07 46.84 0.3
 eS 08 02.60
 BBL 1.40 330 eP 07 50.00 0.0
 S 08 07.50
 PAG 1.93 332 eP 07 58.60 0.8
 S 08 24.00
 SEG 2.20 341 eP 08 01.80 0.1
 S.D. = 0.4 on 11 of 11 obs.

* AUG 09, 1989 23h 00m 42.59±1.22s
 10.621 S ±14.3km 162.133 E ±15.9km
 DEPTH = 33.0km (normal)
 4.5mb (2 obs.)

SOLOMON ISLANDS (193)

HNR 2.46 299 eP 01 20.00 -1.2
 eS 01 51.00
 SVO 2.71 302 eP 01 26.00 1.2
 eS 01 55.00
 DZM 12.11 161 iPd 03 36.00 0.1
 CTA 17.96 237 iPc 04 52.00 0.4
 1.0s 39.00nm 4.5mb
 RMO 20.22 217 eP 05 17.00 -0.7
 SPA 79.45 180 e(P) 12 47.80 0.7
 1.0s 5.50nm 4.5mb
 PDCR 148.78 137 ePKP 20 24.80 -0.5
 e 20 28.10
 SOB1 149.78 130 ePKP 20 31.10 4.2X
 S.D. = 1.0 on 7 of 8 obs.

& AUG 09, 1989 23h 47m 54.42s
 61.245 N 146.837 W
 DEPTH = 1.0km

SOUTHERN ALASKA (2) <AGS-P>

GLI 0.39 199 iP 48 03.01 0.9
 eS 48 08.76
 FID 0.53 160 iP 48 05.00 0.1

KNIM 1.00 207 eS 48 13.17
 eP 48 12.18 -2.1
 eS 48 26.85
 PME 1.12 291 iP 48 15.07 -1.2
 GHO 1.13 299 iP 48 15.03 -1.5
 eS 48 31.06
 PLRM 1.16 289 iP 48 15.25 -1.6
 eS 48 31.40
 MTU 1.32 198 eP 48 18.06 -1.7
 SDG 1.43 25 eP 48 19.63 -1.8
 eS 48 38.52
 SEW 1.72 229 eP 48 24.22 -1.4
 eS 48 45.00
 SLKM 1.81 247 iP 48 25.19 -1.9
 eS 48 49.19
 PAX 1.85 20 iP 48 25.87 -1.7
 eS 48 49.59
 SUA 1.89 278 iP 48 26.89 -1.4
 eS 48 51.48
 HUR 2.18 324 eP 48 31.10 -1.3
 eS 48 59.42
 SKT 2.36 290 eP 48 32.74 -2.2
 RND 2.36 337 iP 48 33.79 -1.3
 CGLM 2.50 274 eP 48 35.94 -1.0
 SPU 2.53 271 eP 48 35.02 -2.3
 NCG 2.57 276 eP 48 36.30 -1.7
 CKL 2.66 271 eP 48 36.96 -2.4
 CTGM 2.69 94 eP 48 38.06 -1.7
 RDT 2.80 259 iP 48 38.44 -2.9
 RED 3.02 257 eP 48 41.69 -2.7

22 obs. associated

* AUG 09, 1989 23h 53m 23.53±0.65s
 22.419 S ±16.7km 12.799 W ± 9.1km
 DEPTH = 10.0km (geophysicist)
 4.7mb (6 obs.) 4.8msz (1 obs.)

SOUTH ATLANTIC RIDGE (410)

PDCR 26.92 287 eP 59 08.40 1.4
 e 59 10.40
 ITR 28.10 295 eP 59 15.90 -1.8
 e 59 33.30
 SOB1 29.98 291 eP 59 33.60 -1.1
 e 59 42.10
 BAO 33.89 275 eP 00 04.00 -5.0X
 KMZ 37.73 83 eP 00 40.00 -1.6
 LSZ 39.34 87 eP 00 55.00 -0.1
 BNG 40.64 53 ePc 01 04.70 -1.0
 0.9s 14.00nm 4.7mb
 MZZ 41.32 81 eP 01 10.90
 PTZ 42.55 87 iP 01 14.00 2.6
 IKZ 45.12 82 eP 01 22.00 0.5
 CCH 50.20 266 eP 01 41.00 -1.4
 CNCB 52.05 266 P 02 23.00 0.8
 i 02 37.20 0.6
 i 03 51.50
 LPB 52.23 266 eP 02 36.00 -1.8
 Z 20s 0.85um 4.8msz
 LR 20 40.00
 ZOBO 52.32 266 eP 02 21.00 -17.7X
 Z 24s 0.08um 3.7mszX
 e 02 39.00
 LR 18 30.00
 ARE 55.38 265 eP 03 11.00 10.1X
 SPA 67.72 180 e(P) 04 24.20 1.0
 0.9s 6.36nm 4.8mb
 LSF 69.57 11 eP 04 34.60 0.1
 LPG 69.89 15 eP 04 37.00 0.1
 1.0s 4.00nm 4.5mb
 SSF 70.70 12 eP 04 42.70 1.3
 LBF 70.72 12 eP 04 41.20 -0.4
 LPF 70.91 8 eP 04 44.70 2.0
 1.4s 21.80nm 5.1mb
 SKO 71.47 26 eP 04 41.50 -4.7X
 i 04 45.50
 KKB 72.07 27 iPc 04 50.00 0.2
 KDZ 72.91 29 iP 04 53.00 -1.8
 BZS 74.59 24 eP 05 05.00 0.6
 ZST 75.23 20 eP 05 07.60 -0.5
 SRO 75.29 21 eP 05 16.60 8.2X
 PRU 76.06 18 eP 05 15.00 2.3
 MLR 76.22 27 eP 05 14.00 0.1
 VRI 76.85 27 eP 05 16.00 -1.3
 EKA 77.87 6 P 05 24.00 1.4
 1.0s 7.90nm 4.8mb
 NB2 85.40 11 P 06 00.60 -1.4
 0.9s 2.10nm 4.3mb

MAIO 89.78 50 eP 06 21.00 -2.8
 SUF 90.28 17 iP 06 27.10 1.7
 S.D. = 1.5 on 29 of 34 obs.

* AUG 10, 1989 00h 01m 20.28±1.34s
 50.385 N ±24.3km 18.812 E ± 9.7km
 DEPTH = 10.0km (geophysicist)

POLAND (548) ML 3.0 (KRA).

KRA 0.80 114 iPgd 01 35.50 -0.2
 iSg 01 45.10
 SPC 1.52 142 iPn 01 47.90 0.3
 i(Sg) 02 09.50
 e 05 18.70
 KSP 1.67 287 ePn 01 50.00 0.3
 ePg 01 51.70
 iS 02 14.40
 PRU 2.77 263 eP 02 05.00 -0.5
 Pg 02 14.50
 Sg 02 58.00
 KHC 3.62 252 ePn 02 17.70 0.1
 Sg 03 12.00
 S.D. = 0.5 on 5 of 5 obs.

? AUG 10, 1989 00h 35m 49.30±11.00s
 16.591 N ±54.3km 59.634 W ±74.5km
 DEPTH = 33.0km (normal)

LEEWARD ISLANDS (92) ML 3.3 (FDF).

MGG 1.75 248 eP 36 17.80 0.0
 SEG 1.80 264 eP 36 18.45 -0.1
 PAG 2.04 254 eP 36 22.50 0.4
 S 36 47.00
 BBL 2.07 239 eP 36 22.00 -0.4
 CRM 2.20 214 eP 36 24.32 0.0
 FDF 2.35 219 iPc 36 26.65 0.1
 S 36 53.90
 MVM 2.36 211 eP 36 26.45 -0.2
 BIM 2.48 214 iPc 36 28.71 0.4
 S 36 56.20
 SLB 3.07 206 eP 36 36.52 -0.1
 eS 37 09.74
 S.D. = 0.3 on 9 of 9 obs.

? AUG 10, 1989 00h 36m 50.76±9.20s
 17.926 N ±40.8km 65.761 W ±47.8km
 DEPTH = 10.0km (geophysicist)

PUERTO RICO REGION (90)

LPR 0.39 345 P 36 58.80 -0.1
 SJJ 0.41 297 iP 36 59.10 -0.1
 S 37 07.00
 PNP 0.89 279 P 37 07.70 -0.1
 APR 1.06 300 P 37 11.00 0.3
 S.D. = 0.3 on 4 of 4 obs.

AUG 10, 1989 01h 11m 33.69±0.52s
 42.128 N ± 7.5km 142.494 E ± 8.3km
 DEPTH = 41.0 ± 8.6 km
 3.9mb (3 obs.)

HOKKAIDO, JAPAN REGION (224) Felt (1 JMA) at Urakawa.

URA 0.21 82 iPd 11 40.10 -1.1
 iS 11 46.70
 HOOJ 0.64 66 iPd 11 46.20 -0.2
 eS 11 56.70
 MRRJ 1.10 286 iP+ 11 52.40 -0.4
 S 12 06.20
 KUSJ 1.90 59 P 12 05.20 1.0
 S 12 32.10
 ASAJ 1.99 3 P 12 06.40 0.9
 AOMJ 2.24 226 P 12 09.80 0.7
 iS 12 37.10
 OFUJ 3.11 192 P 12 21.60 0.1
 S 13 00.00
 MAT 6.49 212 (P) 13 09.00 -0.2
 CHTO 43.54 251 e(P) 19 35.70 0.6
 0.9s 0.64nm 3.4mb
 HFS 69.80 335 eP 22 40.40 -1.0
 0.5s 1.60nm 4.3mb
 NB2 69.82 337 P 22 41.10 -0.5
 0.6s 0.90nm 3.9mb
 PDCR 150.48 3 e(PKP) 31 22.00 4.9X
 S.D. = 0.9 on 11 of 12 obs.

AUG 10, 1989 01h 55m 57.21± 0.69s			LAT 25.75 119 eP 01 26.00 1.5	iS 07 56.00
5.898 N ± 3.5km 124.424 E ± 4.3km			TSI 25.88 266 ePc 01 26.00 0.3	BJI 34.79 349 eP 02 44.50 0.0
DEPTH = 55.8 ± 6.3 km			WHN 26.28 340 eP 01 30.50 1.2	Z 4.0s 0.57nm 2.9mb X
5.4mb (38 obs.) 5.7Msz (24 obs.)			N 16s 11.90um	Z 22s 12.80um 5.6Msz
MINDANAO, PHILIPPINE ISLANDS (259)			E 16s 13.50um	N 17s 5.20um
CENTROID, MOMENT TENSOR (HRV)			pP 01 40.00 34kmX	esP 02 57.00
Data Used: GDSN			S 06 04.00	eS 08 12.00
L.P.B.: 16S, 35C			NJ2 26.54 349 Pc 01 32.00 0.4	LZH 35.49 331 eP 02 51.50 0.8
Centroid Location:			N 18s 10.90um	Z 4.0s 806.00nm 6.0mb X
Origin Time 01:55:58.9 0.3			E 16s 8.70um	N 15s 9.10um 5.6Msz
Lot 5.92N 0.02 Lon 124.22E 0.04			S 06 03.00	E 15s 6.20um
Dep 41.0 2.8 Half-duration 4.4			GYA 26.55 322 P 01 32.60 0.6	pP 03 10.00 76kmX
Mament Tensor; Scale 10**17 Nm			N 17s 21.10um	sP 03 17.00
Mrr= 9.97 0.49 Mtt=-2.34 0.42			E 17s 18.00um	eS 08 27.00
Mff=-7.63 0.80 Mrt=-6.68 0.76			PMG 27.28 124 eP 01 38.50 -0.1	SNY 35.78 359 iPc 02 52.00 -0.9
Mrf=-9.77 0.73 Mtf= 3.38 0.44			1.1s 88.61nm 5.3mb	Z 20s 13.20um 5.7Msz
Principal Axes:			BDT 27.29 297 eP 01 37.80 -0.9	N 18s 10.70um
T Vol= 15.65 Plg=64 Azm= 51			0.9s 90.80nm 5.4mb	E 16s 6.30um
N -0.80 4 149			WB5 27.42 159 iPc 01 37.90 -1.9	sP 03 05.00
P -14.85 25 241			eS 05 39.20	PP 04 15.00
Best Double Couple:Mo=1.5*10**18			WRA 27.47 159 Pc 01 38.10 -2.1	S 08 28.00
NP1:Strike=339 Dip=20 Slip= 101			0.7s 37.80nm 5.1mb	MRWA 35.84 193 eP 02 53.00 -0.5
NP2: 148 71 86			CHG 27.95 300 eP 01 45.30 0.6	OFUJ 36.53 23 eP 02 59.60 0.4
			1.0s 15.75nm 4.6mb	HHC 36.66 344 Pc 03 01.00 0.6
			eS 06 26.00	Z 21s 15.30um 5.8Msz
DAV 1.64 44 iPd 56 26.00 1.8			CHTO 27.95 300 eP 01 44.50 -0.1	N 15s 6.80um
MNI 4.45 175 e(P) 57 00.50 -3.2			1.2s 18.40nm 4.6mb	E 11s 1.30um
eS 57 52.50			KMI 28.23 315 Pc 01 49.50 2.1	pP 03 15.00 53kmX
TSM 6.54 256 ePd 57 28.90 -4.2X			Z 17s 35.00um 6.0Msz X	PP 04 32.50
0.3s 119.00nm 5.9mb			E 16s 9.30um	SS 11 14.00
KKM 8.17 271 ePc 57 50.80 -5.0X			PP 02 44.00	FORR 36.71 175 eP 02 59.00 -1.7
0.3s 51.30nm 5.8mb			S 06 33.00	0.5s 36.00nm 5.6mb
QCP 9.29 340 eP 58 16.00 4.9X			sS 07 00.00	SHL 36.75 306 iP 03 04.00 2.5
BAG 11.11 340 eP 58 36.00 -0.1			SHNJ 28.76 12 eP 01 59.80 8.1X	eS 08 42.00
MKS 12.10 204 ePd 59 04.50 15.2X			BSI 28.99 271 eP 02 05.50 11.5X	AOMJ 37.36 20 eP 03 10.40 4.3X
KUG 15.98 183 eP 59 49.00 9.1X			TKSJ 29.34 16 P 01 57.40 0.5	CN2 37.76 1 eP 03 08.00 -1.5
0.1s 362.00nm 6.5mb X			RAB 29.46 109 iP 02 00.00 1.7	5.0s 0.60nm 2.8mb X
TRT 17.91 221 iPc 00 04.50 0.4			iS 07 02.00	Z 22s 13.70um 5.7Msz
1.1s 147.80nm 5.1mb			SHK 29.50 14 eP 01 58.00 -0.4	E 15s 4.70um
HKC 19.08 330 P 00 21.00 2.8X			NANU 29.59 197 eP 01 57.00 -2.3	pP 03 15.00 24kmX
0.3s 51.00			0.5s 16.00nm 5.0mb	ScP 09 13.00
QIZ 19.29 314 iPd 00 20.00 -0.5			WKYJ 30.02 19 eP 02 04.00 0.9	ScS 13 13.00
N 15s 11.00um			QIS 30.23 151 iPd 02 04.50 -0.5	SVO 38.31 113 eP 03 23.00 8.5X
E 15s 14.50um			YONJ 30.32 15 P 02 05.40 -0.2	HNR 38.54 113 eP 03 21.00 4.6X
iS 03 57.00			ASPA 30.81 163 eP 02 08.40 -1.7	MDJ 38.83 6 eP 03 18.00 -0.4
sS 04 10.00			0.9s 80.00nm 5.4mb	Z 20s 14.20um 5.8Msz
ANP 19.38 352 eP+ 00 19.00 -2.5			Z 22s 7.91um 5.3Msz X	N 19s 8.30um
iS 04 04.00			LR 17 56.10	epP 03 33.00 59kmX
QZH 19.75 344 eP 00 23.00 -2.3			TIA 30.90 348 Pd 02 10.40 -0.4	S 09 07.00
6.0s 2.40nm 2.7mb X			Z 23s 12.60um 5.5Msz X	NWAO 39.21 190 eP 03 21.50 -0.2
Z 17s 18.90um 5.0Msz X			N 14s 5.40um	Z 19s 3.70um 5.2Msz
N 17s 19.50um			E 14s 3.60um	N 19s 5.50um
pP 00 33.00 43kmX			esP 02 23.50	E 19s 6.40um
S 04 03.00			S 07 11.00	iS 09 28.00
MTN 19.78 160 eP 00 23.70 -2.0			XAN 31.47 335 P 02 15.50 -0.4	MRRJ 39.26 20 P 03 23.70 1.7
GZH 20.15 329 eP 00 28.00 -1.6			N 16s 12.50um	LSA 39.29 311 iPc 03 25.00 1.9
Z 18s 18.00um 5.5Msz			E 16s 8.70um	Z 17s 2.35um 5.1Msz X
N 15s 24.70um			S 07 19.00	N 18s 5.52um
E 17s 14.80um			CD2 31.55 325 P 02 16.40 -0.2	pP 03 34.50 32kmX
KGM 21.40 260 ePc 00 42.40 0.0			Z 22s 14.00um 5.6Msz	S 09 21.00
GUMO 21.53 68 eP 00 44.00 0.3			N 18s 16.90um	RMQ 39.91 145 eP 03 28.00 0.4
1.2s 355.56nm 5.6mb			PP 03 24.20	HOOJ 40.00 22 eP 03 33.00 4.8X
PJJ 21.53 68 eP 00 45.00 1.3			S 07 22.00	GTA 40.07 330 Pc 03 30.00 1.0
GUA 21.56 68 eP 00 44.00 0.0			IIDJ 31.95 21 P 02 24.60 4.6X	1.0s 0.05nm 2.3mb X
0.8s 95.52nm 5.2mb			WARB 31.96 176 eP 02 19.00 -1.2	Z 20s 10.50um 5.7Msz
KNA 21.93 169 eP 00 46.50 -1.2			0.5s 21.00nm 5.2mb	N 21s 16.90um
0.7s 171.00nm 5.6mb			CHJJ 32.86 22 P 02 25.70 -2.1	E 18s 13.70um
MNDI 22.63 122 eP 00 59.00 4.2X			DL2 32.96 356 eP 02 29.00 0.4	pP 03 40.50 36kmX
IPM 23.34 268 ePd 01 03.00 1.5			Z 20s 6.90um 5.4Msz	iS 09 35.00
0.8s 68.30nm 5.2mb			N 17s 6.10um	ScS 13 30.30
SNG 23.69 274 eP 01 05.30 0.5			E 20s 29.00um	RKG 40.36 190 eP 03 36.00 4.8X
1.1s 134.18nm 5.3mb			S 07 45.00	STK 40.98 157 iPc 03 37.20 0.9
eS 05 22.00			MAT 33.01 21 iPc 02 28.00 -1.2	i 06 32.90
PPI 24.80 256 eP 01 16.80 1.2			1.3s 32.69nm 5.0mb	KUSJ 41.15 23 eP 03 41.60 4.0X
0.5s 66.00nm 5.4mb			Z 20s 16.67um 5.7Msz	ASAJ 41.29 20 eP 03 40.20 1.5
LOE 24.96 299 eP 01 16.00 -1.1			eS 07 46.00	CMS 42.42 152 eP 03 49.00 0.8
NNT 25.24 287 eP 01 20.60 0.8			KAKJ 33.45 23 P 02 36.40 3.5X	ADE 42.82 163 eP 03 52.00 0.6
SSE 25.25 353 Pc 01 18.00 -1.7			33.50 343 iPc 02 32.00 -1.5	1.0s 240.00nm 5.9mb
6.0s 1.20nm 2.6mb X			Z 18s 12.70um 5.7Msz	BRS 42.97 142 iPc 03 52.90 0.1
Z 20s 12.50um 5.4Msz			N 17s 12.70um	i 04 19.50
N 15s 9.70um			pP 02 42.50 37kmX	iPcP 05 39.20
E 14s 4.20um			iS 07 53.50	iS 10 20.00
pP 01 28.50 39kmX			sS 08 09.00	BWA 46.07 152 eP 04 19.30 1.8
S 05 42.00			PcS 08 58.00	BFD 46.07 160 iPd 04 18.40 1.0
sS 05 57.00			CTA 33.58 141 iPc+ 02 34.30 0.0	eP 06 05.00
PSI 25.62 264 ePc 01 25.50 2.2			1.5s 138.89nm 5.6mb	HYB 46.24 288 eP 04 20.00 0.9
0.8s 53.90nm 5.1mb			i 02 50.00	

Table with columns for station ID, time (10d 02h), and various data points including values, units, and error margins. The data is organized into multiple columns for different stations and includes detailed annotations such as 'S.D. = 1.3 on 173 of 224 obs.' and '* AUG 10, 1989 02h 12m 27.10±0.50s'.

PRNI 86.54 300 eP 25 09.50 0.8
 MBH 86.69 299 eP 25 10.00 0.7
 SOD 87.54 337 eP 25 12.00 -0.7
 SUF 88.54 333 eP 25 17.00 -0.5
 0.5s 3.00nm 4.9mb
 NUR 89.65 331 eP 25 23.00 0.2
 Z 23s 3.40um 5.7mszx
 LR 50 30.00
 HFS 94.99 332 eP 25 46.50 -0.9
 0.4s 0.60nm 4.4mb
 NB2 95.78 333 P 25 49.80 -1.4
 0.8s 2.70nm 4.8mb
 S.D. = 1.0 on 16 of 17 obs.

* AUG 10, 1989 02h 29m 30.43±1.87s
 36.656 N ±10.4km 26.931 E ± 8.3km
 DEPTH = 148.1 ± 30.3 km

DODECANESE ISLANDS (369)

KAP 1.12 170 eP 29 56.50 0.1
 eS 30 11.00
 YER 1.18 66 iPn 29 57.40 0.4
 NPS 1.75 218 eP 30 02.70 -0.3
 IZM 1.76 9 iPn 30 02.70 -0.4
 KSL 2.21 103 eP 30 08.00 -0.3
 ELL 2.39 87 iPn 30 10.90 0.2
 ITM 4.04 279 eP 30 32.20 0.3
 S.D. = 0.4 on 7 of 7 obs.

& AUG 10, 1989 02h 43m 34.49s
 63.209 N 150.463 W
 DEPTH = 116.1km

CENTRAL ALASKA (1)
 <AGS-P>

KTH 0.40 329 iP 43 51.79 0.0
 eS 44 03.88
 HUR 0.44 121 iP 43 51.52 -0.4
 eS 44 04.10
 RND 0.75 74 eP 43 53.93 -0.3
 eS 44 08.30
 SKT 1.33 202 iP 43 59.36 -0.7
 eS 44 17.80
 NEA 1.50 23 eP 44 01.36 -0.7
 eS 44 20.77
 PWA 1.59 170 eP 44 03.10 0.0
 GH0 1.61 153 eP 44 03.22 -0.2
 eS 44 25.96
 PME 1.72 157 eP 44 04.34 -0.4
 PMR 1.74 158 eP 44 06.10 1.2
 SUA 1.76 184 eP 44 05.54 0.2
 eS 44 28.78
 CCB 1.86 38 eP 44 05.84 -0.6
 RDS 1.92 31 eP 44 06.53 -0.7
 PMS 2.02 167 eP 44 08.40 -0.1
 FBA 2.06 33 iPd 44 08.60 -0.4
 SPU 2.17 201 eP 44 10.31 -0.1
 eS 44 37.10
 TOA 2.27 117 eP 44 11.60 -0.2
 PAX 2.28 94 eP 44 11.54 -0.4
 eS 44 39.76
 SDG 2.36 105 eP 44 12.29 -0.6
 TTA 2.54 266 eP 44 14.40 -0.9
 KLU 2.73 127 eP 44 16.45 -1.4
 RDT 2.80 200 eP 44 18.95 0.2
 eS 44 52.78
 VZW 2.83 138 eP 44 17.53 -1.6
 SEW 3.15 171 eP 44 22.34 -1.0
 eS 44 56.80
 SVW 3.21 231 eP 44 23.70 -0.5
 ILIM 3.36 202 eP 44 27.20 1.0
 CNPM 3.72 186 eP 44 30.05 -1.0
 eS 45 13.52

26 obs. associated

* AUG 10, 1989 02h 59m 33.16±1.00s
 10.015 N ±16.0km 56.882 E ±14.7km
 DEPTH = 10.0km (geophysicist)
 4.7mb (8 obs.)

CARLSBERG RIDGE (421)

SHI 19.95 349 eP 04 10.00 1.5
 GBA 20.43 78 P 04 13.00 -0.4
 0.7s 1.80nm 3.5mb x
 QUE 22.16 24 eP 04 33.50 2.3
 BNG 38.41 265 iPc 06 58.40 1.5
 0.5s 7.00nm 4.6mb

BUL 40.89 223 eP 07 16.90 -0.6
 iP 07 23.00 21kmx
 MLR 44.19 329 eP 07 31.50 -12.6X
 KHC 53.05 326 eP 08 52.70 0.0
 LPG 55.47 319 eP 09 10.30 -0.5
 SUF 57.08 344 iP 09 21.00 -0.7
 LBF 57.81 320 eP 09 26.80 -0.4
 LOR 58.00 320 eP 09 28.70 0.3
 0.8s 5.35nm 4.6mb
 SSF 58.14 320 eP 09 29.50 0.1
 0.8s 5.35nm 4.6mb
 BGF 58.39 319 eP 09 31.30 0.2
 0.7s 5.50nm 4.7mb
 DOU 58.65 323 P 09 43.40 10.5X
 HFS 59.40 337 eP 09 35.40 -2.6
 0.4s 1.60nm 4.5mb
 LDF 60.97 320 eP 09 46.00 -2.9
 0.6s 6.10nm 4.9mb
 KIC 61.03 272 P 09 51.00 1.1
 TIC 61.27 272 P 09 52.20 0.7
 0.6s 4.50nm 4.8mb
 LIC 61.33 272 P 09 52.50 0.6
 0.6s 7.00nm 5.0mb
 S.D. = 1.4 on 17 of 19 obs.

* AUG 10, 1989 03h 19m 03.33±0.83s
 5.785 N ±11.1km 124.174 E ±19.5km
 DEPTH = 33.0km (normal)
 4.5mb (3 obs.)

MINDANAO, PHILIPPINE ISLANDS (259)

DAV 1.90 47 iPd 19 35.30 1.3
 WB5 27.40 159 eP 24 48.20 0.2
 PMG 27.43 123 eP 24 46.00 -2.3
 WRA 27.45 159 Pc 24 48.50 0.0
 0.8s 4.70nm 4.2mb
 ASPA 30.77 162 eP 25 18.60 0.4
 0.7s 6.00nm 4.5mb
 BJI 34.86 349 eP 25 53.50 0.0
 LZH 35.47 331 eP 26 09.00 1.0
 BWA 46.08 152 eP 27 29.30 3.1X
 CAN 47.09 152 eP 27 36.30 2.2
 SUF 88.58 333 eP 31 53.00 -0.9
 0.5s 1.50nm 4.6mb
 INK 89.19 21 eP 31 55.00 -1.8
 S.D. = 1.5 on 10 of 11 obs.

AUG 10, 1989 03h 58m 41.10±0.41s
 5.816 N ± 6.5km 124.286 E ±10.6km
 DEPTH = 38.9km (2 depth phases)
 4.9mb (7 obs.) 4.0msz (1 obs.)

MINDANAO, PHILIPPINE ISLANDS (259)

DAV 1.80 45 ePd- 59 11.90 1.7
 MNI 4.38 173 eP 59 45.80 -1.1
 eS 00 32.50
 TSM 6.39 256 eP 00 16.50 1.2
 MTN 19.75 160 eP 03 10.20 -0.6
 0.4s 22.00nm 4.8mb
 KNA 21.88 168 eP 03 33.00 0.4
 SSE 25.32 354 eP 04 06.50 0.7
 Z 20s 0.50um 4.0msz
 N 12s 0.30um
 eS 08 38.00
 WB5 27.39 159 iPc 04 23.90 -1.2
 i 05 35.30 402kmx
 CHTO 27.87 300 eP 04 30.30 0.8
 1.0s 3.25nm 4.0mb
 OIS 30.22 151 eP 04 49.60 -1.0
 ASPA 30.77 163 eP 04 54.40 -1.0
 0.7s 25.00nm 5.1mb
 e 05 05.20 40km
 XAN 31.49 335 P 05 01.50 -0.1
 CD2 31.54 325 eP 05 02.20 0.1
 WARB 31.89 176 iPd 05 05.50 0.4
 0.5s 6.00nm 4.7mb
 TIY 33.54 343 eP 05 17.20 -2.2
 N 14s 0.40um
 BJI 34.85 349 eP 05 30.00 -0.6
 LZH 35.49 331 eP 05 37.50 1.1
 2.5s 47.00nm 5.0mb
 GTA 40.08 330 eP 06 16.00 1.3
 STK 40.96 157 iPd 06 22.60 0.8
 e 06 33.50 38km
 ADE 42.78 162 eP 06 37.30 0.5
 0.8s 29.85nm 5.1mb
 BWA 46.06 152 eP 07 05.30 2.2

CAN 47.07 152 eP 07 12.40 1.3
 PRNI 86.49 300 eP 11 22.00 0.3
 MBH 86.64 299 eP 11 23.00 0.7
 SOD 87.62 337 eP 11 24.00 -2.3
 SUF 88.60 333 iP 11 29.50 -1.6
 NB2 95.84 333 P 12 02.80 -1.9
 0.9s 3.10nm 4.8mb
 S.D. = 1.3 on 26 of 26 obs.

? AUG 10, 1989 05h 51m 20.26±1.06s
 19.535 S ±12.0km 69.204 W ±26.1km
 DEPTH = 33.0km (normal)

NORTHERN CHILE (123)

CNCB 2.95 23 P 52 06.40 0.0
 LPB 3.17 20 P 52 10.10 0.8
 1.1s 75.95nm
 ZOBO 3.41 18 P 52 12.20 -0.7
 0.9s 12.98nm
 CCH 3.61 54 P 52 15.50 0.0
 ANT 4.30 195 e(P) 52 25.00 0.0
 S.D. = 0.8 on 5 of 5 obs.

* AUG 10, 1989 07h 53m 00.90±0.56s
 59.716 S ±13.3km 26.160 W ±10.5km
 DEPTH = 33.0km (normal)
 4.9mb (4 obs.)

SOUTH SANDWICH ISLANDS REGION (153)

SPA 30.45 180 e(P) 59 11.80 -0.6
 1.0s 5.50nm 4.3mb
 i 59 22.80
 PCH 38.97 292 eP 00 26.00 0.5
 LNV 39.12 291 ePd 00 26.20 -0.3
 TACH 39.14 291 ePd 00 26.50 -0.3
 PEL 39.44 292 iPd 00 29.50 0.1
 1.0s 65.00nm 5.3mb
 JACH 39.78 293 eP 00 32.50 0.3
 BAO 46.83 331 eP 01 25.60 -3.7X
 PDCR 48.08 343 eP 01 38.80 -0.2
 CCH 51.19 308 eP 02 03.00 -0.2
 SOB1 51.61 341 eP 02 05.50 -0.6
 ITR 51.68 344 eP 02 05.00 -1.6
 CNCB 52.44 306 Pc 02 13.80 0.8
 LPB 52.74 306 eP 02 07.00 -8.1X
 i 02 16.00
 ZOBO 52.99 306 Pc 02 16.60 -0.5
 LR 21 56.00
 ARE 54.22 303 iPd 02 26.00 0.2
 BUL 55.26 69 iPd 02 32.20 -1.0
 0.9s 4.20nm 4.5mb
 KIC 68.03 23 P 04 00.10 1.2
 BNG 72.97 47 ePd 04 30.00 1.2
 0.2s 15.00nm 5.6mb
 ic 04 44.30
 FRB 127.27 338 ePKP 12 01.00 -0.9
 SUF 128.48 28 iPKP 12 03.50 -0.8
 0.6s 1.70nm
 YKA 139.21 315 ePKP 12 24.60 0.1
 YKB0 139.28 315 ePKP 12 23.00 -1.6
 ALE 143.21 353 ePKP 12 28.00 -3.2X
 0.5s 4.00nm
 MBC 147.54 334 ePKP 12 40.50 2.0
 0.7s 4.00nm
 INK 148.92 317 ePKP 12 43.00 2.2
 S.D. = 1.1 on 22 of 25 obs.

? AUG 10, 1989 08h 16m 22.89±1.23s
 23.387 N ±35.9km 142.322 E ±15.7km
 DEPTH = 33.0km (normal)
 4.6mb (7 obs.)

VOLCANO ISLANDS REGION (213)

SSE 20.28 297 Pd 21 00.00 1.5
 CHTO 40.61 272 iP 24 02.00 0.4
 1.0s 6.50nm 4.3mb
 YKA 75.34 28 eP 28 05.40 1.0
 SOD 77.89 339 eP 28 19.00 0.4
 SUF 80.59 335 iP 28 32.60 -0.6
 0.7s 4.20nm 4.5mb
 LRM 83.49 43 eP 28 49.00 0.0
 TNP 83.64 51 eP 28 50.90 1.0
 0.8s 1.03nm 4.0mb
 FFC 84.82 32 eP 28 56.00 0.8
 1.4s 25.00nm 5.2mb
 HFS 86.87 337 eP 29 03.00 -2.3
 0.5s 2.00nm 4.6mb

10d 08h

NB2 87.09 338 P 29 04.40 -2.0
0.8s 4.60nm 4.8mb
ALQ 92.76 50 e(P) 29 34.20 0.5
1.2s 5.08nm 4.8mb
ZOBO 150.54 82 PKP 36 13.70 5.0X
LPB 150.65 82 ePKP 36 07.00 -1.6
CNCB 150.84 83 ePKP 36 10.00 0.9
S.D. = 1.4 on 13 of 14 obs.

? AUG 10, 1989 08h 19m 01.79±1.07s
6.852 S ±22.4km 151.915 E ±16.3km
DEPTH = 33.0km (normal)
4.7mb (1 obs.)
NEW BRITAIN REGION (192)

LMG 4.25 241 eP 20 04.00 -2.0
eS 20 47.00
LAT 4.89 272 eP 20 16.00 1.1
eS 21 11.00
PMG 5.35 241 iPd 20 21.50 0.0
1.2s 187.50nm 5.5mb X
eS 21 18.00
SVO 8.15 107 eP 21 18.00 17.2X
OIS 18.11 220 iPc 23 14.40 1.8
RMO 19.76 188 eP 23 41.00 8.9X
BRS 20.44 178 iPd 23 48.10 8.8X
WB5 21.40 231 eP 23 47.80 -1.2
eS 27 40.50
ASPA 24.06 224 eP 24 16.50 1.3
0.8s 20.00nm 4.7mb
WARB 30.81 228 eP 25 16.30 -0.7
CHTO 58.10 297 e(P) 29 04.00 9.2X
KVN 94.25 51 eP 32 19.40 0.0
TNP 94.86 52 eP 32 22.00 -0.2
S.D. = 1.4 on 9 of 13 obs.

AUG 10, 1989 08h 23m 45.03±0.37s
5.875 N ±6.3km 124.431 E ±10.5km
DEPTH = 42.9km (3 depth phases)
5.0mb (7 obs.) 4.7msz (8 obs.)

MINDANAO, PHILIPPINE ISLANDS (259)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 16C
Centroid Location:
Origin Time 08:23:47.6 0.6
Lat 5.91N 0.05 Lon 123.89E 0.11
Dep 52.6 5.9 Holf-duration 1.6
Moment Tensor: Scale 10**16 Nm
Mrr= 9.79 0.86 Mtt=-1.59 0.89
Mff=-8.20 1.59 Mrt= 5.34 1.56
Mrf=-2.46 0.99 Mlf= 6.88 0.90
Principal Axes:
T Vol= 11.91 Plg=68 Azm=358
N 1.69 18 141
P -13.60 12 235
Best Double Couple: Mo=1.3*10**17
NP1: Strike=348 Dip=36 Slip= 121
NP2: 130 60 69

DAV 1.66 43 iPd- 24 15.00 2.9
MNI 4.42 175 ePd 24 49.80 -1.6
eS 25 35.20
TSM 6.54 256 eP 26 19.00 57.7X
QCP 9.31 340 eP 25 50.90 -8.8X
AAI 10.21 158 eP 26 10.00 -2.1
BAG 11.13 340 eP 26 35.90 11.1X
TRT 17.90 221 ePd 27 55.00 2.4
QIZ 19.31 314 eP 28 12.40 2.8X
N 15s 1.32um
E 15s 1.85um
S 31 48.00
sS 32 00.00
ANP 19.40 352 eP 28 20.00 9.3X
QZH 19.77 344 eP 28 12.50 -2.0
Z 17s 7.40um
N 15s 2.10um
GZH 20.18 329 eP 28 20.00 1.2
N 14s 3.00um
eS 32 00.00
KNA 21.91 169 eP 28 36.20 -0.2
SNG 23.69 274 eP 28 55.30 1.3
eS 33 12.00
SSE 25.27 353 P 29 08.00 -1.0
6.0s 0.60nm 2.3mb X
Z 20s 1.40um 4.5msz
N 14s 1.00um

pP 29 20.00 48km
sP 29 35.00
S 33 40.00
sS 34 02.00
SS 34 57.00
LAT 25.73 119 eP 29 15.00 1.5
WHN 26.31 340 eP 29 22.00 3.4X
N 18s 2.08um
E 15s 1.65um
eS 33 50.00

GYA 26.58 322 P 29 27.60 6.3X
Z 18s 1.20um 4.5msz
N 16s 2.10um
E 16s 1.40um
S 33 54.00

WB5 27.40 159 iPc 29 27.00 -1.7
eS 34 06.00
CHG 27.97 300 eP 29 40.20 6.3X
CHTO 27.97 300 eP 29 33.00 -0.9
1.7s 20.58nm 4.5mb
KMI 28.25 315 P 29 39.00 2.3
Z 17s 2.30um 4.8msz X
E 16s 1.50um
S 34 23.00

OIS 30.20 151 eP 29 53.00 -0.9
ASPA 30.78 163 eP 29 57.10 -1.9
0.7s 24.00nm 5.1mb
Z 22s 0.82um 4.3msz
e 30 07.50 38km
LR 44 22.00
XAN 31.50 335 P 30 04.50 -0.7
N 16s 1.50um
E 15s 1.00um
S 35 13.00

CD2 31.57 325 P 30 05.40 -0.5
Z 17s 1.40um 4.7msz X
E 15s 2.00um
S 35 11.00

WARB 31.94 176 iPd 30 09.00 -0.1
0.4s 5.00nm 4.7mb
TIY 33.52 343 eP 30 22.30 -0.6
Z 22s 18.30um 5.8msz X
E 16s 1.40um
S 35 43.50

CTA 33.56 141 iPc 30 34.60 11.3X
1.0s 27.00nm
BJI 34.82 349 eP 30 32.50 -1.3
Z 28s 1.06um 4.4msz X
N 15s 0.64um
eS 35 56.00

LZH 35.51 331 eP 30 42.00 1.9
Z 2.5s 158.00nm 5.5mb
Z 18s 1.90um 4.9msz
N 16s 1.20um
E 15s 1.23um
eS 36 15.00

SNY 35.81 359 eP 30 40.60 -1.6
Z 19s 1.40um 4.7msz
N 19s 1.40um
E 19s 1.40um
S 36 16.00

HHC 36.68 344 P 30 50.50 0.7
Z 22s 1.60um 4.8msz
N 14s 1.10um
PP 32 20.00
S 36 32.00
FORR 36.68 175 eP 30 48.70 -1.0
BTO 36.91 342 eP 30 52.00 0.3
Z 17s 1.10um 4.7msz X
N 14s 0.70um
E 14s 0.70um

ePP 32 13.40
eS 36 30.50
CN2 37.78 1 eP 31 03.50 4.7X
Z 18s 1.20um 4.7msz
N 11s 0.50um
eP 31 07.50 14kmX
GTA 40.10 330 eP 31 18.80 0.4
Z 15s 5.80um 5.5msz X
E 15s 0.95um
S 37 22.50

STK 40.96 157 eP 31 26.00 0.7
e 31 38.00 44km
ADE 42.79 163 iPc 31 41.90 1.5
1.1s 108.86nm 5.5mb
BRS 42.95 142 iPd 31 41.70 -0.1
BWA 46.04 152 eP 32 08.80 2.3

GBA 46.88 283 P 32 35.00 21.7X
CAN 47.05 152 eP 32 15.90 1.5
TOO 47.47 157 eP 32 19.50 1.7
DZM 49.64 125 iPc 32 35.60 0.8
WMO 49.67 325 eP 32 35.00 0.3
Z 20s 1.77um 5.0msz
N 15s 0.88um
E 16s 1.03um
eS 39 43.00
ScS 42 16.00

KSH 54.89 315 eP 33 16.00 2.1
E 14s 1.00um
MAIO 66.40 307 eP 34 31.00 -1.2
KVT 84.97 311 eP 36 18.00 0.7
MML 86.06 302 eP 36 23.50 0.5
PRNI 86.58 300 eP 36 25.00 -0.6
MBH 86.73 299 eP 36 26.50 0.3
SUF 88.61 333 iP 36 32.70 -1.9
MBC 90.37 12 eP 36 42.00 -0.7
1.0s 5.00nm 4.8mb
DAG 94.85 352 ePd 37 00.90 -2.4
NB2 95.86 333 P 37 05.80 -2.4
1.0s 5.50nm 5.0mb
S.D. = 1.5 on 44 of 55 obs.

AUG 10, 1989 08h 27m 25.47±1.19s
37.323 N ±7.9km 143.490 E ±9.6km
DEPTH = 27.5 ± 5.4 km
4.6mb (4 obs.)
OFF EAST COAST OF HONSHU, JAPAN (229)
Felt (1 JMA) at Ofunato.

OFUJ 2.27 321 iPd 28 02.00 0.2
S 28 25.30
YAMJ 2.87 288 P 28 10.40 0.1
S 28 41.50
KAKJ 2.89 248 iPd 28 10.50 -0.1
S 28 40.20
NIIJ 3.58 270 iPd 28 20.70 0.2
eS 29 00.20
CHJJ 3.83 252 iPd 28 23.70 -0.3
S 29 02.90

MAT 4.30 261 iPd 28 31.50 0.8
eS 29 19.00
MTMJ 4.61 263 iPd 28 36.10 0.8
IIDJ 4.86 249 iPd 28 39.40 0.7
S 29 32.80
HOOJ 5.06 358 P 28 41.60 0.2
eS 29 34.50

MRRJ 5.42 341 P 28 46.80 0.3
eS 29 41.40
KUSJ 5.84 9 P 28 51.70 -0.8
S 29 53.40
TSRJ 6.31 256 P 28 59.80 0.7
ASAJ 6.82 355 P 29 05.80 -0.4
S 30 17.40

WKYJ 7.13 247 eP 29 09.60 -1.0
TKSJ 8.38 249 eP 29 26.70 -1.3
YONJ 8.38 258 eP 29 27.20 -0.8
WB5 57.54 190 eP 37 32.80 17.9X
SOD 65.34 338 eP 38 07.00 0.1
SUF 68.46 334 iP 38 26.30 -0.4
0.6s 2.20nm 4.4mb

FFC 72.56 34 eP 38 52.00 0.4
1.0s 12.00nm 4.9mb
HFS 74.50 336 eP 39 02.90 0.1
0.4s 1.40nm 4.3mb
NB2 74.55 338 P 39 03.00 -0.2
0.9s 7.40nm 4.7mb

LPB 145.29 62 ePKP 47 04.00 0.8
S.D. = 0.7 on 22 of 23 obs.

& AUG 10, 1989 08h 27m 26.08s
59.742 N 152.775 W
DEPTH = 94.2km
SOUTHERN ALASKA (2)
<AGS-P>.

OPT 0.25 249 iP 27 39.53 1.1
eS 27 49.29
ILIM 0.35 345 eP 27 39.87 -0.7
eS 27 51.31
AUW 0.51 224 eP 27 41.11 -0.5
RED 0.68 0 iP 27 42.49 -0.6
eS 27 55.22

CNPM 0.81 105 iP 27 43.61 -0.7
eS 27 57.07

AUG 10, 1989 12h 36m 12.10 ± 0.80s
 39.101 N ± 7.9km 27.952 E ± 7.7km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

DST 0.73 46 iPg 36 25.20 -1.2
 IZM 0.89 218 iPg 36 28.50 -0.6
 iSg 36 41.00
 EDC 1.25 357 iPn 36 35.30 0.1
 EZN 1.45 300 ePn 36 39.00 0.6
 KHL 1.45 122 iPn 36 38.40 -0.1
 ALT 1.68 91 ePn 36 43.00 1.2
 S.D. = 1.1 on 6 of 6 abs.

AUG 10, 1989 12h 36m 22.65 ± 0.51s
 37.981 N ± 5.2km 20.152 E ± 3.1km
 DEPTH = 10.0km (geophysicist)
 4.1mb (3 abs.)
 IONIAN SEA (399)
 ML 4.0 (ATH), 4.0 (TTG).

VLS 0.40 60 iPg 36 30.30 -0.5
 ITM 1.02 119 ePb 36 51.70 0.3
 KEK 1.75 351 ePb 36 54.50 1.3
 LSK 2.19 9 ePn 37 00.80 1.1
 KZN 2.64 28 ePn 37 07.50 1.4
 NEO 2.75 60 ePn 37 08.00 0.4
 LIT 2.79 40 ePn 37 10.70 2.5
 eSn 38 10.00
 ATH 2.82 89 ePb 37 12.20 3.7X
 LCI 2.91 325 P 37 10.50 0.8
 OHR 3.17 9 iPn 37 15.30 1.8
 SOI 3.24 273 Pd 37 15.20 0.7
 PAIG 3.37 54 ePn 37 17.00 0.7
 TDS 3.42 301 P 37 18.10 1.0
 THE 3.43 39 ePn 37 18.50 1.3
 GRG 3.44 30 ePn 37 18.40 1.0
 PLG 3.50 46 ePn 37 19.00 0.7
 ATN 3.71 274 P 37 22.00 0.8
 OUR 3.79 51 ePn 37 22.60 0.2
 KNT 3.82 33 ePn 37 23.20 0.4
 VAY 3.82 28 ePn 37 23.60 0.8
 ULC 4.04 350 ePn 37 25.40 -0.4
 eSn 38 10.50
 SKO 4.11 14 iPn 37 26.80 0.0
 i 37 35.20
 LR 39 10.00
 SRS 4.11 39 ePn 37 27.70 0.9
 VAM 4.14 127 ePn 37 27.00 -0.3
 MEU 4.24 260 Pd 37 28.20 -0.7
 eSn 38 18.60
 MNO 4.31 271 P 37 30.60 0.6
 APE 4.37 100 ePn 37 33.70 3.1X
 BDV 4.42 347 ePn 37 30.00 -1.2
 eSn 38 19.00
 KKB 4.49 29 eP 37 27.00 -5.2X
 TTG 4.50 352 ePn 37 31.00 -1.3
 eSn 38 22.50
 MMB 4.54 36 eP 37 33.00 0.1
 SGO 4.56 306 P 37 34.90 1.7
 PVY 4.61 358 ePn 37 35.00 0.9
 eSn 38 27.00
 HCY 4.64 345 ePn 37 32.70 -1.7
 eSn 38 24.30
 BRY 5.07 346 ePn 37 39.40 -1.1
 eSn 38 36.00
 VTS 5.16 26 eP 37 42.00 0.1
 RDO 5.23 51 ePn 37 41.00 -1.7
 KDZ 5.46 46 iP 37 45.00 -1.1
 PGB 5.50 33 iP 37 46.00 -0.6
 IZM 5.62 84 eP 37 55.00 6.7X
 DIM 5.79 44 eP 37 57.00 6.3X
 HVAR 5.91 333 iPn 37 50.60 -1.6
 iSn 38 56.10
 SDI 6.13 309 P 37 55.70 0.2
 PVL 6.55 35 eP 38 00.00 -1.3
 JMB 6.65 46 eP 38 12.00 9.2X
 ALP 6.94 316 iPnc 38 07.15 0.2
 CIO 7.45 317 ePn 38 13.97 -0.1
 AOI 7.46 320 e(Pn) 38 13.41 -0.7
 ASS 7.64 314 Pd 38 18.10 1.4
 BZS 7.71 8 ePc 38 21.50 4.0X
 ARV 7.77 317 P 38 18.00 -0.4
 VBY 8.36 336 ePn 38 25.20 -1.5
 eSn 39 53.60
 PTJ 8.51 340 ePn 38 22.60 -6.2X

RIY 8.53 331 eSn 38 42.90
 e(Pn) 38 27.70 -1.3
 iSn 40 01.30
 MLR 8.66 28 eP 38 30.00 -1.0
 PGD 8.68 315 P 38 32.70 1.4
 CEY 8.85 333 ePn 38 32.70 -0.8
 eSn 40 08.00
 TRI 9.07 330 ePn 38 30.70 -5.8X
 iSn 40 10.00
 LJU 9.07 334 e(Pn) 38 35.00 -1.6
 e 38 38.00
 e 38 40.00
 eSn 40 12.00
 VOY 9.29 332 ePn 38 38.30 -1.4
 eSn 40 18.50
 RBL 9.76 332 P 38 47.30 1.2
 BHG 11.10 334 iPd 39 19.30 15.0X
 KHC 12.12 339 P 39 16.00 -2.2
 e 41 40.20
 MOX 14.05 337 e(P) 39 49.00 5.3X
 PRNI 14.45 117 eP 39 47.00 -2.1
 MBH 14.71 119 eP 39 48.00 -4.5X
 HFS 22.55 352 eP 41 23.50 -0.4
 0.5s 3.90nm 4.1mb
 NUR 22.73 6 eP 41 30.00 4.4X
 EKA 23.42 325 P 41 33.00 0.6
 1.0s 6.90nm 4.2mb
 NB2 23.76 349 P 41 35.40 -0.3
 0.7s 2.90nm 4.0mb
 SUF 25.04 7 iP 41 48.80 0.8
 S.D. = 1.1 on 58 of 71 obs.

? AUG 10, 1989 12h 53m 48.28 ± 7.57s
 51.278 N ± 36.7km 15.919 E ± 52.0km
 DEPTH = 10.0km (geophysicist)
 POLAND (548)

BRG 1.31 253 iPg 54 12.50 0.0
 iSg 54 32.50
 PRU 1.56 215 eP 54 17.00 0.9
 Pg 54 22.00
 Sg 54 45.50
 CLL 1.83 272 ePg 54 20.00 0.0
 eSg 54 46.00
 KHC 2.62 216 ePn 54 30.50 -0.9
 Pg 54 37.00
 Sg 55 16.00
 MOX 2.79 259 ePg 54 39.00 5.2X
 iSg 55 20.00
 S.D. = 1.3 on 4 of 5 obs.

AUG 10, 1989 13h 17m 33.59 ± 0.56s
 39.955 N ± 4.8km 23.754 E ± 5.2km
 DEPTH = 10.0km (geophysicist)
 AEGEAN SEA (365)
 MD 3.1 (ATH)

PAIG 0.06 245 ePg 17 36.40 0.5
 OUR 0.42 25 ePg 17 43.00 0.9
 eSg 17 49.70
 PLG 0.48 331 iPbc 17 42.50 -0.9
 NEO 0.77 213 ePn 17 48.00 -0.6
 THE 0.91 319 ePb 17 52.20 1.3
 eSb 18 04.60
 SRS 1.17 354 ePb 17 55.80 0.4
 eSb 18 12.30
 GRG 1.44 315 ePn 17 58.40 -1.3
 eSn 18 21.10
 KZN 1.56 284 ePb 18 00.80 -0.7
 MMB 1.63 359 iPg 18 02.00 -0.5
 Sg 18 26.00
 VAY 1.64 327 ePn 18 03.50 1.0
 RDO 1.81 48 ePn 18 05.70 -1.3
 KKB 1.98 345 iP 18 07.00 -0.5
 iSg 18 37.00
 EZN 1.98 93 ePn 18 09.00 1.5
 ALN 1.99 61 ePn 18 06.90 -0.7
 PRK 2.07 109 ePb 18 13.60 4.8X
 PLD 2.27 18 ePg 18 10.00 6.4X
 OHR 2.53 298 ePn 18 16.80 1.3
 PGB 2.61 7 iPd 18 22.00 5.4X
 VTS 2.67 351 eP 18 17.00 -0.5
 SKO 2.67 320 ePn 18 13.00 -4.4X
 ITM 3.12 208 ePn 18 23.50 -0.2
 JMB 3.29 39 eP 18 35.00 8.8X
 PVL 3.47 19 eP 18 25.00 -3.6X
 S.D. = 1.0 on 17 of 23 obs.

AUG 10, 1989 13h 42m 43.97 ± 0.44s
 34.155 N ± 6.6km 135.674 E ± 4.2km
 DEPTH = 71.5 ± 4.7 km
 4.1mb (1 obs.)
 NEAR S. COAST OF SOUTHERN HONSHU(233)
 Felt (11 JMA) at Kyoto and (1 JMA) at Kobe, Nara, Owase and Tsu.

WKYJ 0.09 314 iPd 42 54.30 -0.4
 S 43 00.50
 OWA 0.44 101 iPd 42 56.80 0.3
 iS 43 05.30
 NAR 0.54 14 P 42 00.00 -57.5X
 KOB 0.67 323 P 42 58.60 -0.2
 iS 43 08.40
 KYO 0.86 3 iP+ 43 00.80 -0.2
 iS 43 12.40
 TSU 0.89 52 iP+ 43 02.00 0.7
 iS 43 14.50
 TKSJ 1.36 263 iPd 43 07.80 0.3
 S 43 24.50
 TSRJ 1.40 10 iP+ 43 07.70 -0.3
 S 43 24.90
 YONJ 2.09 300 iPd 43 17.10 -0.4
 S 43 41.80
 IIDJ 2.27 54 P 43 19.20 -0.8
 S 43 43.70
 SHK 2.51 279 iPd 43 22.80 -0.5
 0.5s 1183.10nm
 MTMJ 2.99 35 P 43 29.70 -0.3
 MAT 3.16 40 iPc 43 32.00 -0.3
 (S) 44 12.00
 CHJJ 3.31 54 P 43 34.20 -0.3
 S 44 23.60
 SHNJ 3.79 271 P 43 41.00 -0.1
 S 44 23.50
 NIJ 4.10 40 P 43 45.20 -0.3
 KAKJ 4.21 60 P 43 46.60 -0.6
 KUMJ 4.37 250 P 43 49.90 0.6
 eS 44 37.80
 KAGJ 5.00 235 P 43 58.50 0.3
 S 44 54.30
 YAMJ 5.34 40 eP 44 03.30 0.3
 OFUJ 6.88 43 P 44 24.60 0.3
 AOMJ 7.41 29 eP 44 34.10 2.6
 MRRJ 9.28 26 eP 44 59.20 1.9
 HOOJ 10.16 34 eP 45 07.50 -1.7
 BJI 16.62 296 eP 46 34.50 0.9
 TIY 19.14 287 Pc 47 04.20 -0.1
 HHC 20.23 296 eP 47 15.50 -0.2
 XAN 22.14 277 P 47 36.00 1.1
 CD2 27.04 272 P 48 20.80 -0.7
 GTA 29.07 291 Pd 48 38.60 -1.1
 WB5 53.75 182 iPc 52 01.10 0.1
 NB2 74.94 335 P 54 18.10 -0.6
 0.8s 1.90nm 4.1mb
 MEO 94.67 42 e(P) 56 10.00 11.5X
 S.D. = 0.9 on 31 of 33 obs.

AUG 10, 1989 13h 47m 33.06 ± 0.59s
 39.246 N ± 4.9km 23.680 E ± 6.5km
 DEPTH = 10.0km (geophysicist)
 AEGEAN SEA (365)
 ML 3.1 (ATH)

NEO 0.36 280 iPg 47 39.20 -1.3
 PAIG 0.68 360 ePg 47 48.20 1.7
 eSg 47 59.50
 OUR 1.11 12 ePb 47 55.10 1.2
 eSb 48 08.60
 PLG 1.14 351 iPbc 47 54.60 0.2
 LIT 1.25 313 ePbc 47 55.90 -0.5
 eSb 48 14.60
 ATH 1.27 179 ePb 47 56.50 -0.2
 eSb 48 12.50
 THE 1.49 339 ePnd 48 00.10 0.3
 eSn 48 19.60
 KZN 1.81 306 ePn 48 03.70 -0.9
 GRG 1.97 331 ePn 48 06.70 -0.2
 eSn 48 30.70
 KNT 2.01 343 ePn 48 07.60 0.3
 eSn 48 34.20
 PRK 2.01 89 ePg 48 12.60 5.2X
 EZN 2.13 73 eP 48 14.00 4.9X
 VAY 2.24 338 ePn 48 10.50 -0.2

MMB 2.34 1 iPc 48 12.00 -0.2
RDO 2.37 36 ePn 48 12.20 -0.4
ALN 2.45 47 ePn 48 14.50 0.8
eSn 48 45.30
ITM 2.48 214 ePb 48 15.70 1.5
APE 2.62 146 ePn 48 15.50 -0.7
KKB 2.66 350 iPg 48 16.00 -0.7
OHR 2.89 311 ePn 48 22.00 2.0
VTS 3.36 354 eP 48 27.00 0.2
PVL 4.16 17 eP 48 35.00 -2.9
S.D. = 1.2 on 20 of 22 obs.

AUG 10, 1989 14h 37m 32.94±0.37s
36.127 N ± 8.1km 71.186 E ± 7.0km
DEPTH = 121.2km (2 depth phases)
4.8mb (22 obs.)

AFGHANISTAN-USSR BORDER REGION (717)
Felt (111) at Ishkoshim and (11)
at Dushonbe and Khorog, USSR.

QUE 6.90 212 eP 39 12.20 -1.0
eS 40 28.20
NDI 9.00 144 eP 39 38.50 -2.9
0.6s 46.67nm 5.4mb
iS 41 14.00
MAIO 9.45 274 iPd 39 43.40 -4.1X
0.7s 14.29nm 4.9mb
eS 41 21.00
WMO 14.79 54 P 40 53.00 -4.2X
S 43 35.20
POO 17.68 172 eP 41 49.00 15.9X
iS 45 05.00
LSA 17.93 105 P 41 36.40 -0.1
HYB 19.75 159 eP 41 56.00 0.4
1.0s 50.00nm 4.8mb
GTA 22.83 73 Pc 42 27.00 1.6
GBA 23.12 164 P 42 31.30 2.3
S 45 41.30
LZH 26.32 80 eP 43 03.00 3.8X
Z 18s 0.50um 4.1MsZ
CHG 29.91 118 eP 43 33.60 2.2
CHTO 29.91 118 eP 43 33.20 1.8
1.0s 2.75nm 3.9mb
BTO 30.60 70 P 43 38.00 0.6
XAN 30.83 83 eP 43 39.50 0.1
VRI 34.55 300 eP 44 12.00 0.6
MLR 35.10 300 eP 44 17.00 0.7
BJI 35.34 70 eP 44 18.50 0.3
Z 20s 0.30um 4.0MsZ
NUR 38.22 325 iP 44 41.30 -0.8
SUF 38.32 328 iP 44 42.30 -0.6
0.5s 7.20nm 4.8mb
SPC 38.95 306 eP 44 48.40 -0.2
KRA 39.16 307 eP 44 51.20 1.2
1.0s 37.00nm 5.1mb
SOD 40.14 335 iP 44 57.30 -0.6
UPP 41.46 322 iP 45 07.80 -1.0
PRU 42.64 307 eP 45 20.40 1.8
BRG 42.97 309 iPd 45 23.00 1.7
1.3s 22.00nm 4.7mb
KHC 43.32 306 P 45 25.80 1.6
e 45 57.30 140kmX
HFS 43.45 322 eP 45 23.90 -1.1
0.9s 21.60nm 4.9mb
CLL 43.54 309 iPd 45 26.70 0.8
1.5s 15.00nm 4.5mb
e 46 52.00 445kmX
e 47 11.00
MOX 44.46 308 eP 45 34.00 0.7
NB2 44.77 323 P 45 33.50 -2.2
0.7s 16.70nm 4.9mb
GRF 44.80 307 eP 45 38.40 2.3
1.4s 28.00nm 4.8mb
BSF 47.97 305 eP 46 01.30 0.2
0.8s 5.35nm 4.4mb
LPG 48.47 302 eP 46 03.20 -2.0
0.6s 3.15nm 4.3mb
DOU 48.99 308 P 46 10.30 1.6
SMF 50.19 304 eP 46 18.70 0.7
0.8s 4.70nm 4.4mb
AVF 50.48 304 eP 46 20.60 0.5
0.8s 4.05nm 4.4mb
EKA 52.66 316 P 46 40.00 3.6X
1.2s 20.70nm 4.9mb
MAT 52.95 68 (P) 46 37.00 -1.8
DAG 55.16 344 iPd 46 53.00 -1.4
0.8s 11.94nm 4.9mb

BNG 57.66 250 iPd 47 11.30 -1.7
0.6s 8.00nm 4.9mb
ic 47 40.00 119km
ic 47 51.40
BCAO 57.67 250 eP 47 11.70 -1.3
1.2s 1.50nm 3.9mb
MBC 67.70 3 eP 48 17.50 -1.0
1.0s 31.00nm 5.1mb
pP 48 48.00 124km
BUL 68.95 223 iPc 48 26.90 -0.1
1.0s 9.00nm 4.6mb
INK 74.25 9 eP 48 55.00 -2.7
YKA 81.61 3 eP 49 38.10 0.1
WB5 81.64 122 eP 49 37.80 -1.1
FFC 89.32 356 eP 50 16.00 -0.4
1.1s 16.00nm 5.0mb
EDM 90.93 3 iPd 50 24.00 0.0
S.D. = 1.4 on 43 of 48 obs.

AUG 10, 1989 14h 56m 19.40±0.44s
5.787 N ± 5.9km 124.172 E ± 11.8km
DEPTH = 33.0km (normal)
4.6mb (5 obs.) 4.2MsZ (2 obs.)

MINDANAO, PHILIPPINE ISLANDS (259)

DAV 1.90 47 ePd- 56 51.00 0.9
MNI 4.37 171 eP 57 24.00 -1.2
TSM 6.27 256 eP 58 02.50 10.4X
AAI 10.23 157 ePc 58 46.00 -1.1
OIZ 19.19 315 eP 00 49.00 5.7X
E 14s 0.50um
eS 04 22.50
MTN 19.76 160 eP 00 49.60 -0.1
0.4s 17.00nm 4.7mb
GUMO 21.81 68 eP 01 11.20 0.5
GUA 21.83 68 eP 01 11.00 0.0
KNA 21.88 168 eP 01 12.20 0.8
SSE 25.33 354 P 01 44.00 -0.9
Z 20s 0.50um 4.0MsZ
N 12s 0.30um
S 06 30.00
WB5 27.41 159 iPc 02 03.00 -1.1
i 02 13.70
CHTO 27.79 300 e(P) 02 12.00 4.4X
1.3s 3.27nm 3.9mb
ASPA 30.78 162 iPc 02 33.50 -0.8
0.8s 16.00nm 4.9mb
XAN 31.47 335 P 02 40.50 0.2
CD2 31.50 325 P 02 41.60 1.0
WARB 31.87 176 eP 02 44.60 0.7
TIY 33.53 343 eP 02 58.00 -0.3
Z 28s 0.90um 4.3MsZ
N 18s 0.80um
BJI 34.85 349 eP 03 09.00 -0.6
LZH 35.46 331 eP 03 17.00 2.0
FORR 36.62 174 eP 03 24.20 -0.4
MDJ 38.97 6 eP 03 41.50 -2.7
GTA 40.05 330 eP 03 55.00 1.6
Z 20s 0.60um 4.4MsZ
E 14s 0.32um
STK 40.98 157 eP 04 02.00 1.1
e 04 13.00
ADE 42.79 162 ePd 04 17.50 1.7
BWA 46.09 152 eP 04 44.80 2.5X
CAN 47.09 152 eP 04 51.80 1.6
SUF 88.57 333 iP 09 09.30 -0.7
0.5s 1.80nm 4.6mb
NB2 95.82 333 P 09 41.40 -2.2
0.9s 2.00nm 4.6mb
S.D. = 1.3 on 24 of 28 obs.

? AUG 10, 1989 15h 14m 53.94±1.00s
23.107 S ± 20.3km 170.145 E ± 15.9km
DEPTH = 33.0km (normal)
4.7mb (1 obs.)

LOYALTY ISLANDS REGION (189)

DZM 3.57 286 iPc 15 48.00 -0.5
iS 16 30.20
HNR 16.74 323 eP 18 49.00 1.4
BWA 22.08 234 eP 19 49.30 1.4
i 20 00.10
ASPA 33.22 262 iPd 21 29.30 -0.9
0.8s 9.00nm 4.7mb
WB5 33.39 269 eP 21 29.60 -2.1
SPA 67.03 180 e(P) 25 57.10 11.3X
1.0s 5.50nm

KVN 91.17 48 eP 27 54.80 -2.3
BNG 146.87 240 iPKPd 34 34.00 0.5
BCAO 146.88 240 iPKP 34 34.00 0.5
1.0s 2.90nm
EKA 147.43 353 PKPd 34 34.00 1.0
0.5s 3.70nm
SKO 147.85 313 ePKP 34 35.20 1.0
KHC 148.12 330 ePKP 34 50.50 16.1X
S.D. = 1.6 on 10 of 12 obs.

% AUG 10, 1989 15h 41m 07.57±1.04s
39.566 N ± 12.4km 28.483 E ± 8.2km
DEPTH = 10.0km (geophysicist)

TURKEY (366)

DST 0.12 71 iPg 41 10.10 -0.5
EDC 0.91 329 ePg 41 25.00 0.0
eSg 41 36.80
ALT 1.36 111 ePn 41 33.00 0.3
CTT 1.58 359 ePn 41 36.00 0.3
EZN 1.68 280 ePn 41 37.00 -0.2
S.D. = 0.5 on 5 of 5 obs.

% AUG 10, 1989 15h 45m 26.62±0.96s
29.997 S ± 13.7km 124.625 E ± 8.5km
DEPTH = 10.0km (geophysicist)

WESTERN AUSTRALIA (590)

FORR 3.12 107 eP 46 16.30 -0.4
iS 46 51.10
COOL 3.13 253 eP 46 18.80 1.8
eS 46 56.50
WARB 4.20 26 eP 46 32.70 0.6
KLB 6.12 253 eP 46 58.80 -0.4
eS 48 07.00
MRWA 7.55 274 iPc 47 18.10 -1.3
iS 48 39.30
RKG 7.63 236 eP 47 25.30 4.8X
eS 48 51.00
MBL 9.80 333 eP 47 47.60 -3.0X
eS 49 32.00
NANU 11.02 310 eP 48 07.00 -0.2
0.3s 2.00nm 5.0mb X
eS 50 01.00
S.D. = 1.4 on 6 of 8 obs.

* AUG 10, 1989 16h 49m 52.26±0.62s
27.679 N ± 12.0km 97.188 E ± 9.5km
DEPTH = 33.0km (normal)
4.2mb (4 obs.)

BURMA-INDIA BORDER REGION (294)

KMI 5.59 116 eP 51 15.00 -0.5
LSA 5.67 292 P 51 17.40 0.5
GYA 8.53 96 P 51 57.40 0.8
CHTO 8.97 169 e(P) 52 02.60 0.1
1.0s 1.50nm 4.1mb
SUF 57.12 329 eP 59 38.00 0.4
0.4s 1.00nm 4.2mb
HFS 63.23 326 eP 00 18.80 -0.6
0.4s 0.90nm 4.2mb
NB2 64.28 327 P 00 25.80 -0.6
0.8s 2.30nm 4.3mb
S.D. = 0.7 on 7 of 7 obs.

AUG 10, 1989 16h 50m 41.98±0.69s
38.280 N ± 6.3km 26.600 E ± 7.0km
DEPTH = 10.0km (geophysicist)

AEGEAN SEA (365)
ML 3.8 (ATH).

IZM 0.53 77 iPg 50 52.50 -0.2
PRK 1.00 345 ePb 51 00.50 -0.4
APE 1.48 216 ePb 51 07.50 -1.2
eSb 51 32.50
EZN 1.56 352 ePn 51 08.70 -1.0
YER 1.75 130 ePn 51 11.80 -0.9
DST 2.06 49 iPn 51 16.00 -1.1
EDC 2.28 25 ePn 51 21.30 1.0
KHL 2.30 88 ePn 51 16.30 -4.3X
ATH 2.30 263 ePn 51 25.80 5.3X
ALT 2.85 73 ePn 51 27.00 -1.4
RDO 2.98 344 ePn 51 29.20 -0.9
ELL 3.04 119 ePn 51 36.00 4.9X
NPS 3.12 195 ePn 51 34.00 1.9
CTT 3.19 26 ePn 51 34.30 1.2
PLG 3.22 311 ePg 51 46.20 12.6X

11d 01h

LPO 1.1s 19.55nm 151.95 340 ePKP 32 11.00 5.8X 1.4s 35.50nm S.D. = 1.5 on 56 of 90 obs.

? AUG 11, 1989 01h 56m 42.95 ± 2.41s 46.150 N ± 44.5km 152.624 E ± 35.5km DEPTH = 33.0km (normal) 4.3mb (4 obs.)

KURIL ISLANDS (221)

KUSJ 6.42 244 P 58 13.80 -3.8X S 59 21.60 ASAJ 7.35 258 eP 58 31.70 1.1 HOOJ 7.69 244 eP 58 34.80 -0.5 FBA 36.84 38 e(P) 03 50.00 0.6 0.9s 0.30nm 3.2mb X

CHTO 51.65 257 eP 05 47.90 -0.7 1.0s 3.00nm 4.2mb NB2 68.69 341 P 07 43.90 -0.9 0.6s 1.30nm 4.2mb

HFS 68.90 339 ePKP 07 44.00 -2.0 0.4s 2.00nm 4.5mb KHC 78.63 334 eP 08 44.20 1.5 KBA 80.52 333 iPd 08 54.10 0.9 0.9s 4.70nm 4.5mb

i 08 56.10 i 08 58.30 S.D. = 1.4 on 8 of 9 obs.

* AUG 11, 1989 02h 30m 39.92 ± 1.23s 31.581 S ± 14.7km 69.291 W ± 11.9km DEPTH = 124.9 ± 19.9 km

SAN JUAN PROVINCE, ARGENTINA (137)

ZON 0.52 86 iPd 30 59.00 0.1 eS 31 11.00 JACH 1.56 225 iP 31 08.90 0.1 iS 31 30.50

FCH 1.94 206 iPc 31 14.00 0.4 iS 31 39.00 PEL 1.95 217 iPd 31 12.90 -0.7 iS 31 37.70

ROCH 2.01 226 iPd 31 13.80 -0.7 iS 31 39.10 PCH 2.28 207 iPd 31 18.00 0.3 iS 31 46.30

TACH 2.49 213 iPd 31 19.50 -0.8 iS 31 48.60 CHCH 2.61 206 iPc 31 21.20 -0.8 iS 31 52.30

LCCH 2.70 225 eP 31 25.00 2.0 iS 31 53.50 LNV 2.97 216 iP 31 26.50 0.0 iS 31 56.90

MRA 3.15 106 iPc 31 29.30 0.3 CYA 4.36 45 ePd 31 45.00 -0.3 S.D. = 0.9 on 12 of 12 obs.

% AUG 11, 1989 02h 47m 14.08 ± 0.78s 59.879 N ± 6.7km 6.502 E ± 10.3km DEPTH = 20.0km (geophysicist)

SOUTHERN NORWAY (535)

MD 1.6 (BER).

ODD1 0.07 62 iP 47 19.00 1.1 eSg 47 21.60 BLS1 0.52 161 eP 47 24.00 -0.5 iS 47 30.30

ASK 0.89 313 eP 47 31.40 0.7 eS 47 43.80 KMY 0.93 224 iP 47 31.50 0.2 eS 47 42.70

HYA 1.30 353 iP 47 38.00 0.9 eS 47 55.20 SUE 1.46 325 eP 47 38.20 -1.2 eS 47 55.50

MOL 2.75 10 eP 47 56.70 -1.2 eS 48 27.40 S.D. = 1.2 on 7 of 7 obs.

AUG 11, 1989 03h 27m 00.60 ± 0.28s 19.043 S ± 8.2km 176.743 E ± 8.2km DEPTH = 20.0km (7 depth phases) 5.1mb (12 obs.) 4.3Msz (1 obs.)

SOUTH OF FIJI ISLANDS (171)

DZM 10.11 251 iPd 29 28.30 0.4 KRP 18.84 183 eP 31 23.00 1.4 PGZ 21.51 181 eP 31 49.20 -1.1 1.0s 80.00nm 5.1mb

BRS 23.51 245 iPc 32 11.50 1.2 RMO 26.81 249 eP 32 43.00 1.5 CTA 28.73 263 eP 33 03.00 4.0X

WB5 39.89 262 eP 34 34.00 -1.1 ASPA 40.06 256 iPd 34 35.20 -1.3 1.3s 59.00nm 5.1mb

Z 22s 0.48um 4.3Msz LF 49 49.50 SBA 59.05 182 Pc 37 01.00 -0.2

MAT 66.19 327 (P) 37 48.00 -1.1 1.3s 26.92nm 5.2mb SPA 71.08 180 ePd 38 18.00 -1.3 1.0s 56.00nm 5.6mb

e 38 40.50 CN2 78.19 325 P 39 01.00 0.8 MAW 81.21 201 eP 39 15.00 -1.1

WDC 81.82 42 e(P) 39 24.80 5.1X CMB 81.86 45 eP 39 20.00 0.0

ORV 81.93 43 eP 39 22.40 2.1 TIY 82.66 314 eP 39 24.20 -0.1

XAN 83.35 309 P 39 28.20 0.4 KVN 83.92 45 eP 39 30.50 -0.3 ePP 39 36.30 18km

TNP 84.03 46 eP 39 31.50 0.1 1.0s 6.50nm 4.8mb pP 39 37.70 20km

PMS 84.45 16 eP 39 32.00 -0.8 PMR 84.86 16 eP 39 34.00 -0.7 1.4s 23.30nm 5.2mb

CHG 85.10 292 eP 39 37.00 0.1 CHTO 85.10 292 eP 39 35.80 -1.1 1.0s 4.50nm 4.7mb

pP 39 43.50 24km CD2 85.86 305 eP 39 41.10 0.6

FBA 87.98 14 eP 39 48.00 -2.0 LZH 87.99 309 eP 39 51.50 0.6 2.0s 88.00nm 5.7mb

PNT 88.30 36 eP 39 52.00 0.1 PV10 89.90 49 (P) 40 00.00 0.0

ALQ 90.43 53 eP 40 02.80 0.3 1.0s 5.25nm 4.8mb pP 40 09.50 21km

BW06 91.37 45 eP 40 07.00 0.3 1.0s 2.00nm 4.4mb pP 40 12.70 18km

GTA 92.25 311 eP 40 10.70 0.0 GOL 93.05 49 eP 40 15.00 0.5 1.0s 15.00nm 5.4mb

pP 40 21.00 19km GLD 93.17 49 eP 40 16.00 1.0 1.0s 38.00nm 5.8mb

pP 40 22.70 21km RSSD 95.60 45 P 40 25.50 -0.6

MEO 96.42 56 e(P) 40 29.80 0.0 SOB1 133.47 124 ePKP 46 07.30 -10.9X e 46 16.70

PRNI 143.63 296 ePKP 46 33.00 -3.3X MBH 143.81 295 ePKP 46 33.50 -3.1X

KRA 143.94 334 ePKP 46 35.00 -1.1 ISR 144.10 323 ePKP 46 40.00 3.3X

MLR 144.23 324 ePKPc 46 34.50 -2.5X SPC 144.48 333 ePKP 46 35.40 -2.0

KSP 144.68 338 ePKPc 46 35.60 -1.8 CMP 144.87 324 ePKPd 46 38.00 0.0

CTT 145.13 316 ePKP 46 34.00 -4.5X CLL 145.33 342 iPKPd 46 37.50 -1.0 1.8s 70.00nm 5.2mb

BRG 145.43 341 iPKPc 46 38.00 -0.7 1.5s 58.00nm PRU 146.00 339 ePKPd 46 38.70 -1.0 e 46 41.50

MOX 146.32 343 ePKP 46 43.00 2.8X 2.0s 74.00nm SRO 146.36 333 iPKP 46 43.30 3.0X

BZS 146.44 328 ePKP 46 39.00 -1.5 ZST 146.55 335 ePKP 46 39.70 -0.9 KHC 147.06 340 iPKPc 46 43.50 2.0 1.5s 17.50nm

GRF 147.29 343 ePKP 46 46.00 4.2X 1.6s 44.00nm VTS 147.57 322 ePKP 46 43.00 0.4

UCC 147.74 351 PKP+ 46 45.00 2.6X MMB 147.87 320 ePKP 46 44.00 1.0

SNF 148.03 351 PKPc 46 48.70 5.8X ABH 148.04 347 ePKPc 46 44.70 1.7

KKB 148.09 321 ePKP 46 45.00 1.7 RUP 148.31 347 ePKPc 46 45.59 2.1

DOU 148.39 350 PKPc 46 46.00 2.5X 0.9s 12.50nm e 46 57.10

WLF 148.53 348 PKPc 46 46.70 3.0X VAY 148.72 321 ePKP 46 44.50 0.2

KBA 148.90 338 ePKP 46 45.00 0.3 1.2s 10.40nm i 46 53.00

i 47 06.50 SKO 148.98 323 ePKP 46 45.50 0.8 1.8s 55.00nm i 46 50.00

VBV 149.47 334 e(PKP) 46 49.00 3.7X CDF 149.48 346 ePKP 46 47.30 1.9

FEL 149.81 345 ePKPc 46 48.40 2.5X OHR 149.90 322 ePKP 46 49.20 3.0X

HAU 150.07 347 ePKP 46 50.10 3.9X BSF 150.14 346 ePKP 46 50.00 3.6X

SMF 151.86 350 ePKP 47 03.10 14.2X 1.4s 28.30nm LPG 152.34 345 ePKP 46 56.30 6.3X

BNG 154.24 238 ePKPd 46 52.30 -0.9 0.3s 3.00nm S.D. = 1.1 on 54 of 76 obs.

? AUG 11, 1989 04h 05m 50.87 ± 3.02s 16.085 S ± 34.7km 167.839 E ± 27.4km DEPTH = 183.2 ± 19.2 km 4.5mb (2 obs.)

VANUATU ISLANDS (186)

PVC 1.71 165 iP 06 25.00 -0.4 iS 06 52.00

DZM 6.10 192 iPc 07 21.10 1.0 iS 08 32.00

BRS 17.94 229 iPc 09 48.30 -1.5 CTA 20.90 256 iP 10 24.20 4.0X

0.9s 18.49nm 4.6mb WB5 32.03 258 eP 12 01.90 -0.4

ASPA 32.73 251 iPc 12 08.80 0.4 0.6s 72.00nm 5.5mb X

MBL 45.64 256 eP 13 56.00 1.1 SPA 74.02 180 e(P) 17 07.80 -0.2

1.0s 7.00nm 4.3mb BNG 147.70 252 iPKPc 25 16.20 3.1X 0.5s 11.00nm

id 25 19.70 S.D. = 1.3 on 7 of 9 obs.

AUG 11, 1989 04h 21m 23.47 ± 1.33s 45.833 N ± 6.4km 150.690 E ± 3.2km DEPTH = 84.6 ± 12.5 km 5.2mb (64 obs.)

KURIL ISLANDS (221)

MAT 13.20 230 iPd 24 27.70 -0.9 0.8s 50.75nm 5.2mb (S) 26 46.00

CN2 18.00 273 eP 25 29.80 0.4 SNY 19.92 268 Pc 25 51.00 0.3

BJI 25.79 269 eP 26 50.00 2.1 eS 31 44.00

HHC 28.68 274 P 27 15.00 0.7 XAN 33.76 265 P 27 57.00 -1.9

SVW 34.30 44 eP 28 04.30 1.0 BRW 35.53 26 eP 28 14.20 0.7

IMA 35.53 35 iPc 28 14.10 0.3 0.9s 30.20nm 5.2mb

KDC 36.03 50 eP 28 17.10 -0.8 PMR 37.42 43 eP 28 29.80 0.3 0.9s 18.70nm 5.0mb

GTA 37.45 279 iPc 28 31.00 0.8 FBA 37.92 38 iPc 28 34.70 1.0

11d 06h

FIJI ISLANDS REGION (181)

Table with columns for station code, time, and various data points (e.g., KRP 18.98 183 P 00 23.40 7.8X). Includes sub-section for MINDORO, PHILIPPINE ISLANDS (250) starting with BAG 3.39 346 ePc+ 40 42.00 1.8.

AUG 11, 1989 07h 39m 47.71 ± 0.27s
13.105 N ± 4.1km 121.445 E ± 5.6km
DEPTH = 27.8km (5 depth phases)
5.0mb (9 obs.) 5.0MsZ (7 obs.)

Continuation of station data table for the FIJI ISLANDS REGION, listing stations from WHN to IPM.

Table with columns for station code, time, and various data points (e.g., BDT 22.04 284 eP 44 43.50 1.5). Includes sub-section for MINDORO, PHILIPPINE ISLANDS (250) starting with TIY 25.79 343 Pd 45 17.00 -1.2.

Table with columns for station code, time, and various data points (e.g., GTA 32.43 328 Pd 46 17.00 -0.7). Includes sub-section for MINDORO, PHILIPPINE ISLANDS (250) starting with STK 48.72 157 eP 48 31.00 -0.9.

11d 13h

PV10 0.7s 5.46nm 4.2mb
27.72 332 P 17 54.00 -0.5
PLM 28.73 315 P 18 04.40 0.8
TNP 31.86 322 P 18 31.40 0.1
0.7s 1.30nm 3.9mb
KVN 33.02 322 P 18 41.70 0.4
LRM 35.28 336 eP 19 01.20 0.4
PNT 41.02 333 eP 19 49.00 0.7
0.7s 5.00nm 4.4mb
YKA 50.31 347 eP 21 03.10 1.4
PDCR 59.61 114 eP 22 08.80 -1.0
e 22 22.90
MBC 63.27 353 eP 22 32.50 -1.1
0.6s 4.00nm 4.6mb
BDT 146.32 339 ePKP 31 45.00 0.6
GBA 150.42 19 PKP 31 56.00 5.2X
S.D. = 1.1 on 31 of 37 obs.

? AUG 11, 1989 14h 09m 12.39±6.33s
31.659 S ±32.8km 69.377 W ±23.9km
DEPTH = 92.0 ± 52.7 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.07 268 iP 09 25.50 -0.2
RTCB 0.52 71 iPd 09 28.20 0.4
S 09 44.00
RTCV 0.74 106 e(P) 09 30.00 0.2
RTLL 0.84 67 iPd 09 30.50 -0.3
S 09 48.00
CFA 0.97 87 iPd 09 32.10 -0.1
RTRS 1.49 357 iPc 09 38.50 0.1
S 10 01.00
S.D. = 0.4 on 6 of 6 obs.

? AUG 11, 1989 14h 10m 54.19±1.60s
27.123 N ±13.8km 141.149 E ±54.7km
DEPTH = 487.4 ± 15.2 km
3.7mb (3 obs.)
BONIN ISLANDS REGION (212)

CHJJ 9.09 349 P 13 02.50 -0.5
S 14 45.30
KAKJ 9.09 355 P 13 03.50 0.4
S 14 44.60
TSRJ 9.48 334 P 13 07.30 0.1
MAT 9.72 346 eP 13 10.00 0.2
NIIJ 10.25 350 P 13 15.10 -0.2
WB5 47.18 189 eP 18 43.40 0.0
SUF 76.77 335 iP 21 55.80 0.3
0.4s 1.60nm 3.9mb
HFS 83.03 336 eP 22 27.80 -0.4
0.4s 0.80nm 3.7mb
NB2 83.24 338 P 22 29.40 0.1
0.5s 0.60nm 3.4mb
S.D. = 0.4 on 9 of 9 obs.

AUG 11, 1989 14h 50m 55.77±1.80s
13.156 N ± 6.5km 121.665 E ± 9.1km
DEPTH = 53.5 ± 17.1 km
4.9mb (8 obs.) 4.4Msz (4 obs.)
MINDORO, PHILIPPINE ISLANDS (250)

OCP 1.58 339 eP 51 22.00 0.2
DAV 7.15 147 eP 52 04.00 -36.3X
QZH 12.08 347 Pc 53 46.50 -1.1
Z 22s 4.00um
N 22s 3.70um
QIZ 12.77 299 P 53 56.80 -0.1
E 13s 0.90um
eS 56 23.00
SSE 17.86 359 P 55 05.00 3.0X
Z 20s 1.50um
N 15s 0.40um
E 15s 0.80um
eP 55 18.00
eS 58 27.00
sS 58 46.00
eSS 58 56.00
WHN 18.58 340 eP 55 14.00 3.2X
Z 18s 1.22um
N 12s 0.52um
E 12s 0.49um
sS 58 46.00
NJ2 18.98 353 Pc 55 20.00 4.2X
Z 16s 0.90um
N 12s 0.30um
E 13s 0.50um

SS 58 55.00
GYA 19.32 315 P 55 19.00 -0.7
Z 18s 0.70um
N 14s 1.10um
E 14s 0.60um
sS 59 04.00
LOE 19.69 285 eP 55 22.00 -1.5
NST 21.00 279 eP 55 39.00 1.9
NNT 21.39 271 eP 55 40.00 -1.0
KMI 21.45 306 eP 55 42.00 0.2
Z 18s 1.20um
S 59 35.00
SNG 21.54 256 eP 55 43.20 0.6
eS 59 49.20
IPM 22.08 249 ePd 55 48.40 0.4
BDT 22.24 283 eP 55 48.80 -0.6
1.0s 41.40nm 4.8mb
CHG 22.54 287 ePd 55 55.60 3.1X
0.9s 25.21nm 4.6mb
GUMO 22.58 86 eP 56 11.00 18.2X
TRT 22.58 204 ePd 55 52.50 -0.3
GUA 22.62 86 eP 56 10.20 16.9X
KUG 23.25 175 eP 56 01.50 2.2
0.5s 103.20nm 5.5mb
TIA 23.32 351 Pd 56 02.50 2.6
sS 00 17.00

XAN 23.80 333 eP 56 03.00 -1.6
N 15s 1.20um
CD2 24.18 320 P 56 09.90 1.5
PSI 24.78 247 eP 56 13.50 -0.6
1.5s 60.60nm 4.9mb
PPI 25.05 239 eP 56 18.50 1.7
TIY 25.81 343 eP 56 24.00 0.3
Z 22s 1.30um 4.4Msz
E 18s 1.50um

BJI 27.21 351 eP 56 36.00 -0.4
Z 16s 0.59um 4.2MszX
MTN 27.49 160 eP 56 43.70 4.6X
MAT 27.62 30 (P) 56 40.00 -0.2
1.8s 27.27nm 4.6mb
LZH 27.90 328 eP 56 42.50 -0.4
1.5s 110.00nm 5.3mb
Z 22s 1.30um 4.5Msz
N 14s 1.10um
E 14s 0.70um

BTO 29.18 342 eP 56 57.00 2.6
N 20s 0.90um
E 20s 1.60um
eS 01 38.50
MDJ 32.08 11 eP 57 24.50 4.8X
GTA 32.50 328 eP 57 22.80 -0.8
Z 20s 1.50um 4.7Msz
N 15s 0.80um
S 02 44.00
LSA 32.69 305 P 57 25.20 -0.6
WB5 35.13 159 eP 57 44.00 -2.4
i 57 47.20
ASPA 38.50 162 iPc 58 13.80 -1.0
0.8s 19.00nm 5.0mb
iS 04 08.90
WARB 39.40 173 eP 58 21.30 -0.9
WMO 42.20 323 eP 58 46.00 0.9
Z 16s 0.90um 4.7MszX
N 13s 0.90um

GBA 42.99 276 P 58 52.50 0.7
ADE 50.52 162 e(P) 59 51.00 0.2
BWA 53.72 153 eP 00 13.90 -0.8
CAN 54.73 153 eP 00 22.50 0.3
TOO 55.20 157 ePd 00 26.20 0.7
MAIO 59.96 304 eP 00 57.00 -2.2
MSZ 71.21 147 P 02 12.10 1.1
PMR 78.17 29 e(P) 02 59.80 9.1X
SOD 79.90 337 eP 02 59.00 -1.0
SUF 80.93 332 eP 03 04.00 -1.6
INK 83.26 21 eP 03 19.00 1.4
VRI 84.08 316 eP 03 26.00 3.8X
MLR 84.70 315 eP 03 28.00 2.5
HFS 87.40 332 eP 03 36.10 -2.2
1.1s 9.10nm 4.9mb
Z 17s 0.20um 4.6MszX
LR 39 02.00
S.D. = 1.4 on 41 of 52 obs.

* AUG 11, 1989 15h 09m 11.87±1.54s
32.097 S ±15.0km 69.444 W ±13.9km
DEPTH = 80.1 ± 38.8 km
MENDOZA PROVINCE, ARGENTINA (139)

ZON 0.85 50 iPd 09 29.00 -0.5
eS 09 44.00
JACH 1.13 239 iPc 09 23.40 -9.6X
iS 09 52.90
FCH 1.42 210 iPc 09 39.10 2.2
iS 10 02.50
PEL 1.48 225 iPc 09 37.40 0.0
iS 10 00.20
ROCH 1.59 236 iPd 09 38.00 -1.0
iS 10 01.50
PCH 1.77 210 iPd 09 42.30 1.1
iS 10 08.80
TACH 2.00 219 iPd 09 44.00 -0.3
iS 10 11.50
CHCH 2.09 209 iPd 09 45.80 0.1
iS 10 16.10
LNV 2.48 221 iPc 09 48.60 -2.3
iS 10 19.70
RFA 2.79 163 iPc 09 56.00 0.8
MRA 3.18 97 iPc 09 58.80 -1.8
CYA 4.82 42 eP 10 25.10 1.6
S.D. = 1.6 on 11 of 12 obs.

? AUG 11, 1989 16h 45m 04.20±4.96s
29.357 S ±40.8km 67.237 W ±19.1km
DEPTH = 33.0km (normal)
LA RIOJA PROVINCE, ARGENTINA (138)

RTRS 2.10 247 iPc 45 38.00 0.4
S 46 07.50
RTLL 2.24 208 iPc 45 04.50 -35.2X
S 46 12.20
CFA 2.40 201 ePc 45 42.80 0.7
S 46 15.80
RTCB 2.52 212 iPc 45 44.00 0.2
RTCV 2.74 204 e(P) 45 47.00 0.2
RTBS 2.99 219 e(P) 45 49.00 -1.3
MRA 3.32 157 eP 45 54.80 -0.2
S.D. = 0.9 on 6 of 7 obs.

? AUG 11, 1989 17h 59m 43.84±2.52s
32.345 S ±29.6km 179.421 E ±32.7km
DEPTH = 509.4 ± 27.1 km
SOUTH OF KERMADOC ISLANDS (179)

HBZ 5.32 190 eP 01 13.90 -1.1
TAZ 6.34 201 eP 01 25.90 1.2
KRP 6.41 209 P 01 28.90 3.5X
PGZ 8.64 196 eP 01 49.20 1.1
KIW 9.24 202 eP 01 54.40 0.0
MTW 9.34 199 eP 01 55.90 0.4
CAW 9.42 201 eP 01 55.60 -0.7
BLW 9.54 198 eP 01 58.40 0.8
WDW 9.59 200 eP 01 57.80 -0.2
MRW 9.64 202 eP 01 58.20 -0.4
TCW 9.76 204 eP 01 58.80 -1.1
WB5 42.03 276 eP 06 51.50 0.0
SUF 145.18 339 iPc 18 23.40 0.1
0.3s 5.30nm
NUR 147.31 337 iPc 18 30.00 3.2X
NB2 150.27 348 PKP 18 37.20 5.7X
0.7s 1.60nm
HFS 150.64 345 ePKP 18 36.60 4.6X
0.3s 0.50nm
S.D. = 0.9 on 12 of 16 obs.

AUG 11, 1989 18h 48m 42.72±0.92s
41.957 N ± 7.6km 19.175 E ± 6.1km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 2.2 (TTG).

ULC 0.06 83 iPgc 48 44.00 -1.0
iSg 48 45.50
SDA 0.25 76 iPgc 48 47.40 -0.6
BDV 0.42 322 iPgd 48 51.50 0.3
iSg 49 00.00
TTG 0.48 8 ePg 48 52.20 -0.2
iSg 49 01.00
PUK 0.54 81 ePg 48 54.00 0.3
HCY 0.70 314 ePg 48 56.50 -0.1
eSg 49 09.50
BCI 0.78 58 ePg 48 59.00 1.1
TIR 0.80 139 ePg 48 58.50 0.2
NKY 0.87 351 ePg 48 59.20 -0.2
eSg 49 14.00
S.D. = 0.7 on 9 of 9 obs.

? AUG 11, 1989 19h 58m 46.56± 5.06s
31.341 S ± 19.0km 69.199 W ± 16.4km
DEPTH = 93.8 ± 52.9 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.37 113 iPc 59 01.20 0.1
S 59 13.50
RTBS 0.39 214 iPc 59 01.00 -0.1
S 59 13.00
RTLL 0.62 89 iP 59 03.00 0.0
S 59 17.00
RTCV 0.77 133 iP 59 04.50 0.1
S 59 19.50
CFA 0.86 108 ePd 59 05.20 -0.1
S 59 21.10
RTRS 1.19 349 iPd 59 09.00 0.0
S 59 27.80
S.D. = 0.2 on 6 of 6 obs.

AUG 11, 1989 20h 58m 42.44± 0.38s
7.237 S ± 4.4km 122.689 E ± 6.4km
DEPTH = 632.2 ± 8.3 km
5.4mb (11 obs.)
FLORES SEA (279)

KUG 3.04 163 ePd 00 09.00 4.2X
eS 01 05.00
MKS 3.78 302 iPd 00 11.00 1.9
AAI 6.52 58 eP 00 28.50 -1.5
KHKI 7.11 260 eP 00 33.70 -1.4
i 00 35.20
eS 02 13.70
e 05 06.00
MNI 8.89 14 ePc 00 50.70 -0.7
0.8s 1168.00nm 6.0mb
TRT 9.98 267 ePd 01 01.00 -0.7
0.5s 56.90nm 4.9mb
MTN 10.01 125 iPc 01 02.00 0.0
eS 02 44.00
TSM 12.28 338 ePd 01 26.00 2.2
0.7s 376.10nm 5.6mb
MBL 14.11 191 iPc 01 42.60 1.1
KKM 14.69 334 ePc 01 47.20 0.0
0.5s 104.90nm 5.3mb
NANU 16.72 204 iPc 02 07.10 0.7
0.3s 28.00nm 5.1mb
WB5 16.92 139 iPc 02 08.00 -0.2
eS 04 53.10
WARB 19.21 169 iPc 02 30.00 0.6
ASPA 19.56 148 iPc 02 32.60 0.0
0.3s 81.00nm 5.7mb
eS 05 33.40
eScS 12 39.40
MEKA 19.67 191 iPc 02 33.40 -0.2
0.4s 127.00nm 5.7mb
OIS 21.06 131 iPc 02 45.80 -0.4
eS 05 56.00
COOL 23.57 183 eP 03 07.00 -1.6
BAL 23.92 193 iPc 03 11.10 -0.5
FORR 24.03 169 eP 03 11.20 -1.4
0.4s 56.00nm 5.5mb
PMG 24.30 97 eP 03 14.00 -1.1
KLB 24.66 190 eP 03 18.00 -0.2
MUN 25.35 193 iPd 03 23.90 -0.2
NWA0 26.06 190 iPc 03 30.10 -0.2
CTA 26.17 122 iPc 03 31.50 0.0
RKG 27.21 190 eP 03 45.00 4.6X
STK 30.20 147 iPc 04 06.50 0.6
0.5s 49.00nm 5.4mb
ADE 31.29 154 iPd 04 16.00 1.0
0.6s 33.33nm 5.1mb
OZH 32.23 353 Pd 04 22.50 -0.5
BFD 34.85 152 eP 04 44.00 -0.6
e 06 24.00
BRS 34.86 129 iPd 04 45.90 1.0
i 04 50.00
CHG 34.90 318 eP 04 45.80 0.5
BWA 35.98 142 eP 04 55.00 1.0
e 06 39.20
SVO 36.79 96 eP 05 08.00 7.2X
HNR 36.92 96 (P) 05 01.00 -0.9
GYA 36.93 336 Pc 05 02.00 0.1
CAN 36.94 143 eP 05 03.90 2.1
WHN 38.41 348 P 05 16.00 2.3
NJ2 39.24 355 Pc 05 20.80 0.4
CD2 42.04 335 eP 05 42.20 -0.5

XAN 43.07 343 iPc 05 49.80 -1.0
DZM 44.64 114 iPc 06 03.80 0.7
MAT 45.92 17 eP 06 12.00 -0.5
0.6s 4.00nm 4.1mb X
LZH 46.59 339 eP 06 18.00 0.2
1.0s 38.00nm 4.8mb
GBA 49.47 295 P 06 38.00 -1.3
GTA 51.02 337 eP 06 49.80 -0.7
MDJ 51.99 6 eP 06 56.50 -0.6
WMO 59.87 331 P 07 51.60 0.4
S.D. = 1.0 on 44 of 47 obs.

% AUG 11, 1989 21h 26m 18.36± 2.43s
30.696 S ± 17.3km 68.332 W ± 17.0km
DEPTH = 101.3 ± 37.9 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.64 191 iPd 26 36.50 0.8
(S) 26 46.50
RTCB 0.88 207 iPd 26 38.20 0.2
S 26 49.00
CFA 0.91 175 iPd 26 37.80 -0.5
S 26 48.90
RTRS 1.11 298 iPc 26 40.00 -0.3
S 27 08.20
RTCV 1.17 189 iPc 26 40.00 -1.2
RTBS 1.36 225 e(P) 26 44.00 0.7
S 26 59.80
MRA 2.82 128 iPc 27 02.70 0.3
S.D. = 1.0 on 7 of 7 obs.

& AUG 11, 1989 22h 44m 50.35s
57.798 N 156.280 W
DEPTH = 148.9km
ALASKA PENINSULA (12)
<AGS-P>.

AUL 2.18 42 eP 45 26.49 -1.4
AUE 2.18 43 iP 45 26.72 -1.2
CNPM 3.15 55 eP 45 38.49 -1.7
RED 3.19 33 eP 45 38.64 -2.1
RDT 3.42 34 eP 45 41.71 -2.0
eS 46 20.82
CRP 4.06 29 eP 45 50.84 -1.4
NCG 4.18 28 eP 45 52.37 -1.4
SEW 4.23 54 eP 45 51.73 -2.5
SUA 4.63 35 iP 45 57.45 -2.2
SKT 4.83 28 eP 46 00.20 -2.1
KNIM 5.10 56 eP 46 03.18 -2.6
GLI 5.62 53 eP 46 09.38 -3.5
eS 47 06.17
FID 5.83 55 eP 46 12.19 -3.5
VZW 5.94 53 eP 46 14.40 -2.8
KTH 6.34 22 eP 46 19.83 -2.8
TOA 6.66 45 iP 46 23.86 -3.1
RND 6.71 30 eP 46 23.41 -4.2
CCB 7.99 27 eP 46 39.26 -5.4
FBA 8.20 26 eP 46 43.92 -3.6
HYT 10.06 65 P 47 12.00 -0.2
20 obs. associated

AUG 11, 1989 23h 43m 58.15± 0.40s
39.224 N ± 3.6km 23.717 E ± 3.9km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
ML 3.4 (ATH).

NEO 0.39 282 ePg 44 04.90 -1.3
PAIG 0.70 358 ePgc 44 13.40 1.4
eSg 44 25.10
OUR 1.13 10 ePb 44 20.20 1.0
PLG 1.17 350 ePg 44 20.00 0.0
ATH 1.25 180 ePb 44 20.90 -0.4
LIT 1.29 313 iPb 44 21.00 -1.1
eSb 44 39.90
THE 1.52 338 iPb 44 24.90 -0.5
KZN 1.85 306 ePb 44 29.20 -1.0
SRS 1.89 357 ePn 44 30.50 -0.3
PRK 1.98 89 ePg 44 37.20 5.1X
GRG 2.00 330 ePn 44 31.90 -0.5
eSn 44 59.20
KNT 2.03 342 iPn 44 32.90 0.0
eSn 44 58.90
EZN 2.10 73 eP 44 34.10 0.3
VAY 2.27 338 iPn 44 36.00 -0.3
RDO 2.37 35 ePn 44 37.20 -0.5
ALN 2.45 46 ePn 44 39.80 1.1

ITM 2.48 215 ePn 44 39.20 0.0
RZN 2.58 17 iPc 44 41.00 0.2
APE 2.58 146 ePn 44 41.20 0.5
VLS 2.66 248 ePb 44 43.50 1.7
KKB 2.68 350 iPc 44 42.00 -0.2
KDZ 2.75 28 iPc 44 42.00 -1.1
IZM 2.89 105 eP 44 43.50 -1.6
OHR 2.92 311 ePn 44 45.30 -0.3
PLD 2.97 14 eP 44 47.00 0.8
KEK 3.07 280 ePb 44 50.00 2.4
SKO 3.25 328 ePn 44 49.70 -0.4
EDC 3.39 69 eP 45 01.00 8.9X
VTS 3.39 354 iPc 44 52.00 -0.2
JMB 3.90 33 eP 45 13.00 13.6X
PVL 4.17 16 eP 45 02.00 -1.2
MLR 6.48 14 ePc 45 36.00 0.0
CVO 6.84 15 eP 45 41.50 0.6
VRI 7.00 18 ePc 45 44.00 0.8
S.D. = 0.9 on 31 of 34 obs.

AUG 12, 1989 00h 40m 10.71± 0.15s
0.800 N ± 3.1km 126.817 E ± 3.9km
DEPTH = 51.0km (4 depth phases)
5.7mb (33 obs.)
MOLUCCA PASSAGE (266)

Felt (IV) on Ternate.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 18S, 40C
Centroid Location:
Origin Time 00:40:11.5 0.3
Lot 1.00N 0.02 Lon 126.54E 0.04
Dep 39.4 2.7 Half-duration 4.2
Moment Tensor; Scale 10**18 Nm
Mrr=-0.29 0.04 Mtt= 1.23 0.04
Mff=-0.94 0.06 Mrt=-0.54 0.06
Mrf= 0.02 0.05 Mtf=-0.77 0.03
Principal Axes:
T Vol= 1.62 Plg=15 Azm=197
N -0.40 72 51
P -1.21 10 290
Best Double Couple:Mo=1.4*10**18
NP1:Strike=334 Dip=72 Slip= 4
NP2: 243 86 162

AAI 4.67 163 iPc 41 20.90 0.5
eS 41 33.00
DAV 6.37 349 eP 41 43.80 -0.5
PCI 7.18 256 eP 41 57.00 1.3
e(S) 42 27.00
TSM 9.37 291 ePc 42 27.50 1.5
0.6s 1455.00nm 7.2mb X
MKS 9.47 231 iPc 42 28.00 0.7
iS 44 11.70
BKB2 10.13 258 ePc 42 37.70 1.3
1.3s 662.90nm 6.6mb
KKM 11.79 296 ePc 43 00.90 1.9
0.8s 199.00nm 6.2mb
MTN 14.22 163 iPc 43 27.50 -3.5X
JAY 14.27 103 ePc 43 31.50 -0.2
OCP 14.87 338 eP 43 38.00 -1.5
KNA 16.56 173 iPc 43 59.00 -2.0
BAG 16.69 339 eP 44 20.00 17.2X
eS 47 06.00
MNDI 18.18 113 e(P) 44 28.00 6.6X
LAT 21.46 110 eP 45 00.00 3.1X
WB5 21.84 161 iPc 44 59.30 -1.5
eS 48 57.80
WRA 21.90 161 Pd 45 00.90 -0.4
1.2s 529.90nm 5.8mb
GUMO 21.93 54 eP 45 00.50 -1.1
0.7s 152.48nm 5.5mb
GUA 21.93 54 eP 45 00.20 -1.5
0.8s 143.28nm 5.4mb
KLI 22.65 255 eP 45 12.60 3.9X
i 45 16.50
MBL 22.87 197 iPc 45 09.60 -1.2
KGM 23.52 273 ePc 45 17.90 0.7
OIZ 24.60 318 iPd 45 27.00 -0.7
N 15s 4.40um
E 16s 4.80um
sP 45 45.00
iS 49 49.00
OIS 24.64 150 iPc 45 27.50 -0.6
e 49 46.00
HKC 24.66 331 P 45 28.00 -0.2
S 49 45.00

12d 01h

Table with columns for station code, latitude, longitude, depth, and time. Includes stations like CNCB, BOG, LPB, BMG, ZOBO, CCH, PDCR, ITR, BAO.

* AUG 12, 1989 01h 12m 06.92 ± 1.72s
31.237 S ± 15.0km 179.144 E ± 17.1km
DEPTH = 495.0 ± 21.6 km
4.4mb (5 obs.)

KERMADEC ISLANDS REGION (177)

Table with columns for station code, latitude, longitude, depth, and time. Includes stations like KRP, TAZ, KIW, MTW, CAW, WDW, MRW, MOW, TCW, DZM, MSZ, ASPA, WRA, WB5, SPA, MAT, PLM, TNP, KVN, SUF, NUR, NB2, HFS.

& AUG 12, 1989 01h 41m 48.00s
40.985 N 126.638 W
DEPTH = 5.0km
4.0mb (2 obs.)
OFF COAST OF NORTHERN CALIFORNIA (34)
<BRK>. ML 3.7 (BRK).

Table with columns for station code, latitude, longitude, depth, and time. Includes stations like FHC, WDC, LTRM, LBFM, MIN, ORV, PCC, ARN, CMB, LON, KVN, PNT, LRM, ALQ.

Table with columns for station code, latitude, longitude, depth, and time. Includes stations like FFC, YKA, YKB0, MEO, UYO, MBC, IKZ, LSZ.

* AUG 12, 1989 01h 56m 09.71 ± 0.71s
62.016 N ± 12.1km 26.478 W ± 9.6km
DEPTH = 10.0km (geophysicist)
4.4mb (20 obs.)

ICELAND REGION (637)

Table with columns for station code, latitude, longitude, depth, and time. Includes stations like NB2, HFS, SNF, WTS, DOU, ENN, KEV, LOR, SSF, SOD, TCF, BGF, AVF, LBF, MAF, SMF, HAU, BSF, CAF, CLL, NUR, BRG, EPF, LPG, PRU, BW06, KVN, BNG, SPA.

S.D. = 1.1 on 22 of 29 obs.
AUG 12, 1989 02h 24m 41.78 ± 4.26s
15.072 N ± 14.6km 61.286 W ± 44.2km
DEPTH = 153.6 ± 41.3 km

LEEWARD ISLANDS (92)

Table with columns for station code, latitude, longitude, depth, and time. Includes stations like FDF, CRM, BBL, BIM, MVM, MGG, PAG.

Table with columns for station code, latitude, longitude, depth, and time. Includes stations like SLB, SEG.

S.D. = 0.4 on 9 of 9 obs.
& AUG 12, 1989 03h 36m 19.00s
38.228 N 122.147 W
DEPTH = 10.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 2.5 (BRK).

Table with columns for station code, latitude, longitude, depth, and time. Includes stations like ZSP, BKS, BRK, NWRM, PCC, MHC, ARN, CMB.

* AUG 12, 1989 03h 55m 43.47 ± 0.42s
1.413 S ± 10.0km 77.824 W ± 16.8km
DEPTH = 169.7 ± 4.9 km
4.5mb (4 obs.)

ECUADOR (107)

Table with columns for station code, latitude, longitude, depth, and time. Includes stations like TUNG, RECU, QUR, GGP, CAYA, ARE, ZOBO, LPB, CNCB, CCH, ITR, ALQ, SES, PNT, INK, MBC, SPA, WARB, LZH.

S.D. = 0.8 on 18 of 19 obs.
AUG 12, 1989 04h 12m 52.39 ± 0.69s
35.260 N ± 6.7km 3.789 W ± 6.9km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
MD 3.6 (RBA). mlLg 3.3 (MDD).

Table with columns for station code, latitude, longitude, depth, and time. Includes stations like EMEL, TAF, OJEN, EJIF, MOMI, AFC, IFR, CNIL, EHOR, EBAN, EVAL.

Table with columns: Station Name, Time, Depth, Latitude, Longitude, and other parameters. Includes stations like EVIA, AVE, TOL, TIO, GUD, ETOR.

? AUG 12, 1989 04h 15m 08.36± 6.30s
31.557 S ±29.2km 69.106 W ±18.0km
DEPTH = 95.7 ± 59.2 km

Table with columns: Station Name, Time, Depth, Latitude, Longitude, and other parameters. Includes stations like RTCB, RTBS, RTCV, RTLL, CFA, RTRS.

& AUG 12, 1989 04h 30m 28.20s
41.623 N 128.090 W
DEPTH = 5.0km
4.0mb (1 obs.)

Table with columns: Station Name, Time, Depth, Latitude, Longitude, and other parameters. Includes stations like FHC, WDC, LTCM, MIN, ORV, BRK, PCC, MHC, ARN, CMB, KVN, PNT, LRM, EDM, ALO, MEO, UYO.

AUG 12, 1989 04h 32m 13.85± 0.74s
43.551 N ± 5.1km 8.046 E ± 5.5km
DEPTH = 10.0km (geophysicist)
CORSIKA (380)
ML 3.0 (GEN), 2.8 (MDD).

Table with columns: Station Name, Time, Depth, Latitude, Longitude, and other parameters. Includes stations like IMI, REVF, SBF, AURF, AUTN, MVIF, TOUF, ROB.

Table with columns: Station Name, Time, Depth, Latitude, Longitude, and other parameters. Includes stations like ENR, CALN, STV, FRF, PCP, LMR, CVF, PZZ, LRG, FOUF, RRL, RSP, LPG, LPL.

* AUG 12, 1989 05h 02m 27.08± 0.40s
23.735 S ±16.3km 179.869 E ± 9.8km
DEPTH = 550.0km (geophysicist)
4.3mb (6 obs.)

Table with columns: Station Name, Time, Depth, Latitude, Longitude, and other parameters. Includes stations like CTA, ASPA, WRA, SPA, PLM, FRI, CMB, ORV, WDC, MIN, GLA, KVN, TNP, PNT, ALO, HFS.

* AUG 12, 1989 05h 43m 18.34± 0.62s
8.172 S ± 8.4km 120.299 E ±12.2km
DEPTH = 33.0km (normal)
4.5mb (3 obs.)

Table with columns: Station Name, Time, Depth, Latitude, Longitude, and other parameters. Includes stations like MKS, KNA, MTN, MBL, NANU, WB5, WRA, WARB, ASPA, OIS, BWA, XAN, BJI, GTA, SPA.

Table with columns: Station Name, Time, Depth, Latitude, Longitude, and other parameters. Includes stations like BUL, PDCR, CNCB, LPB, ZOBO.

* AUG 12, 1989 05h 55m 28.87± 1.46s
32.859 S ± 7.3km 71.519 W ±13.8km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

Table with columns: Station Name, Time, Depth, Latitude, Longitude, and other parameters. Includes stations like ROCH, LCCH, PEL, JACH, TACH, SAN, LNV, FCH, PCH, CHCH, RTBS, RTCB, RTCV, RTLL, CFA, RTRS, MRA.

AUG 12, 1989 06h 02m 21.52± 0.36s
31.917 S ± 5.3km 69.097 W ± 6.5km
DEPTH = 115.6 ± 5.0 km

Table with columns: Station Name, Time, Depth, Latitude, Longitude, and other parameters. Includes stations like SAN, PCH, TACH, CHCH, LCCH, LNV, RFA, MRA, CYA, CCH, CNCB, LPB, ZOBO, LIC.

12d 06h

TIC 72.01 70 P 13 34.30 -0.6
 KIC 72.07 70 P 13 34.20 -1.0
 S.D. = 1.0 on 26 of 27 obs.

? AUG 12, 1989 06h 29m 55.66 ± 0.77s
 15.917 S ± 27.4km 173.515 W ± 24.1km
 DEPTH = 33.0km (normal)
 4.7mb (2 obs.)

TONGA ISLANDS (173)

AFI 2.61 40 eP 30 35.00 -1.5
 e(S) 30 58.00
 DZM 19.91 249 iPc 34 33.70 6.1X
 ASPA 49.85 252 iPd 38 47.80 -0.2
 1.0s 13.00nm 4.9mb
 FORR 55.05 243 eP 39 25.50 -1.3
 WARB 56.36 249 eP 39 35.70 -0.6
 MBL 63.02 254 eP 40 22.00 -0.1
 NANU 66.79 252 eP 40 47.30 0.8
 SPA 74.18 180 e(P) 41 30.50 -0.3
 1.0s 6.50nm 4.6mb
 PNT 80.51 32 eP 42 07.00 1.1
 SES 85.69 35 eP 42 33.00 0.6
 VRI 145.66 335 ePKP 49 31.50 -0.9
 GRF 146.09 354 ePKP 49 36.90 3.9X
 MLR 146.29 335 ePKPc 49 36.00 2.4
 S.D. = 1.3 on 11 of 13 obs.

* AUG 12, 1989 06h 56m 46.85 ± 1.31s
 3.021 S ± 18.6km 123.047 E ± 14.4km
 DEPTH = 33.0km (normal)
 4.0mb (3 obs.)

SULAWESI (268)

PCI 3.84 303 P 57 45.00 0.0
 eS 58 26.50
 MKS 4.18 238 iPc 57 50.00 0.1
 iS 58 37.00
 WB5 20.07 147 eP 01 20.00 -0.5
 WRA 20.11 148 P 01 22.00 1.1
 0.6s 1.90nm 3.6mb
 ASPA 23.05 154 eP 01 49.80 -0.7
 0.8s 10.00nm 4.4mb
 CHTO 32.15 313 (P) 03 20.50 6.6X
 0.7s 1.59nm 4.0mb
 S.D. = 1.0 on 5 of 6 obs.

* AUG 12, 1989 07h 13m 30.53 ± 1.52s
 2.762 S ± 6.9km 138.569 E ± 11.6km
 DEPTH = 57.9 ± 15.7 km
 4.6mb (4 obs.) 4.3Msz (1 obs.)

WEST IRIAN (201)

MNDI 6.09 124 eP 15 02.00 1.7
 PMG 10.79 128 eP 16 06.00 1.1
 MTN 12.43 216 iPc 16 26.30 -0.6
 eS 18 47.20
 KNA 16.12 216 eP 17 16.30 1.4
 GUA 17.37 21 eP 17 29.20 -1.5
 GUMO 17.40 21 eP 17 30.00 -1.0
 PJJ 17.40 21 eP 17 29.50 -1.5
 WB5 17.50 193 eP 17 29.80 -2.4
 i 17 35.00
 eS 20 39.00
 WRA 17.57 193 P 17 32.00 -1.1
 0.7s 6.90nm 3.9mb
 OIS 17.72 177 eP 17 31.00 -3.9X
 e 20 47.00
 CTA 18.78 157 iPd 17 48.90 0.9
 1.1s 25.32nm 4.3mb
 ASPA 21.27 192 iPd 18 13.20 -1.0
 1.0s 64.00nm 4.9mb
 Z 21s 1.24um 4.3Msz
 eS 22 10.30
 LR 26 43.40
 MBL 25.83 223 eP 19 02.00 3.7X
 WARB 25.95 205 eP 19 00.00 0.6
 BWA 32.81 165 eP 20 00.00 -0.6
 SSE 37.52 335 Pd 20 44.40 3.7X
 1.0s 0.01nm 1.8mb X
 XAN 46.04 325 Pd 21 52.00 1.6
 CD2 47.13 318 eP 22 01.20 2.2
 BJI 47.29 337 eP 22 01.00 0.9
 CN2 47.83 347 Pc 22 04.40 0.1
 GTA 55.03 324 eP 23 00.00 1.3
 WMQ 64.96 322 eP 24 07.40 0.8
 SPA 87.26 180 e(P) 26 13.00 1.1

1.0s 10.00nm 5.0mb
 ALQ 111.95 53 e(PKP) 32 01.00 -0.6
 KIC 143.26 277 PKP 32 59.20 -1.8
 TIC 143.52 277 PKP 32 59.60 -1.9
 LIC 143.55 277 PKP 33 00.10 -1.4
 CNCB 147.36 127 PKP 33 11.00 2.5
 LPB 147.42 127 PKP 33 07.00 -1.4
 ZOBO 147.54 126 PKP 33 09.50 0.7
 S.D. = 1.5 on 27 of 30 obs.

AUG 12, 1989 09h 18m 05.42 ± 0.81s
 12.797 N ± 5.5km 143.616 E ± 12.9km
 DEPTH = 123.2 ± 8.2 km
 4.4mb (4 obs.)

SOUTH OF MARIANA ISLANDS (210)

GUMO 1.45 57 iPc 18 32.80 0.0
 PJJ 1.45 57 iPc 18 32.90 0.1
 GUA 1.46 60 iPc 18 32.90 -0.1
 eS 18 51.80
 IIDJ 23.16 348 eP 23 02.00 0.2
 KAKJ 23.51 353 P 23 05.20 0.1
 CHJJ 23.52 351 P 23 05.20 0.0
 MAT 24.14 349 (P) 23 09.00 -2.2
 MTMJ 24.26 349 P 23 13.70 1.3
 NIIJ 24.69 351 P 23 17.40 1.1
 WB5 33.72 196 eP 24 36.20 -0.9
 WRA 33.79 196 Pd 24 37.20 -0.5
 0.4s 1.50nm 4.1mb
 ASPA 37.46 195 iPc 25 09.30 0.6
 0.5s 7.00nm 4.0mb
 MBL 41.04 215 eP 25 30.10 -0.2
 0.4s 3.00nm 4.4mb
 DZM 41.26 147 iPd 25 40.40 0.3
 WARB 42.12 203 iPc 25 48.00 0.9
 FORR 45.89 199 eP 26 17.00 -0.2
 INK 75.56 22 ePc 29 36.60 -1.1
 MBC 79.33 14 ePc 29 58.00 -0.4
 0.6s 4.00nm 4.4mb
 YKA 84.12 27 eP 30 24.40 0.9
 PNT 84.77 41 eP 30 27.00 0.0
 SES 89.78 38 eP 30 51.00 -0.2
 LRM 90.40 43 eP 30 54.80 0.3
 ZOBO 149.10 100 ePKP 37 42.00 4.1X
 S.D. = 0.8 on 22 of 23 obs.

& AUG 12, 1989 09h 35m 12.10s
 38.812 N 122.795 W
 DEPTH = 4.0km
 NORTHERN CALIFORNIA (36)
 <BRK>. ML 3.0 (BRK).

ZSP 0.96 154 eP 35 30.00 -1.0
 BRK 1.03 156 eP 35 31.40 -0.7
 eS 35 47.10
 BKS 1.03 155 ePc 35 31.43 -0.7
 iS 35 47.30
 ORV 1.25 53 e(P) 35 33.70 -2.2
 PCC 1.35 166 eP 35 35.70 -1.9
 MHC 1.73 148 eP 35 41.65 -1.6
 ARN 1.77 145 eP 35 42.00 -1.7
 WDC 1.78 6 e(P) 35 43.30 -0.5
 MIN 1.79 31 eP 35 42.70 -1.4
 CMB 2.05 112 eP 35 46.40 -1.4
 FHC 2.19 336 e(P) 35 58.20 8.4
 LBFM 2.63 15 eP 36 19.50 23.3
 KVN 3.67 85 eP 36 09.50 -1.5
 13 obs. associated

? AUG 12, 1989 10h 28m 49.72 ± 0.96s
 31.013 S ± 9.9km 69.133 W ± 12.5km
 DEPTH = 33.0km (normal)

SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.55 149 e(P) 29 01.80 0.6
 RTLL 0.65 119 e(P) 29 03.00 0.5
 S 29 17.00
 RTBS 0.70 203 iPc 29 03.00 -0.1
 S 29 15.50
 RTRS 0.89 341 iPd 29 05.80 0.0
 S 29 22.00
 CFA 0.97 128 ePc 29 06.00 -1.0
 e 29 22.90
 S.D. = 0.9 on 5 of 5 obs.

? AUG 12, 1989 10h 39m 19.45 ± 3.70s
 10.598 N ± 27.1km 62.453 W ± 12.3km

DEPTH = 128.4 ± 49.8 km
 NEAR COAST OF VENEZUELA (97)

TCE 0.69 82 eP 39 38.68 -1.2
 eS 39 51.46
 TPP 1.02 106 eP 39 43.20 0.5
 eS 39 58.05
 TRN 1.03 87 eP 39 42.38 -0.4
 eS 39 57.08
 TBH 1.37 95 eP 39 46.84 0.5
 eS 40 08.58
 CUM 1.69 266 iPc 39 50.20 0.2
 iS 40 12.50
 BOT 1.80 71 eP 39 51.04 -0.2
 eS 40 15.19
 SVB 2.91 24 eP 40 06.24 0.8
 eS 40 44.04
 SVV 2.96 24 eP 40 07.83 1.7
 eS 40 45.31
 SOA 3.04 25 eP 40 09.48 2.3
 eS 40 47.87
 SLB 3.49 23 eP 40 12.06 -1.2
 eS 40 55.17
 BIM 4.12 19 eP 40 20.89 -0.8
 S 41 08.40
 MVM 4.22 21 iPd 40 22.19 -0.8
 FDF 4.30 17 iPd 40 23.18 -1.0
 CRM 4.39 20 eP 40 24.83 -0.5
 S.D. = 1.2 on 14 of 14 obs.

? AUG 12, 1989 11h 23m 45.77 ± 0.86s
 57.996 S ± 17.1km 25.056 W ± 17.7km
 DEPTH = 33.0km (normal)
 4.7mb (5 obs.)

SOUTH SANDWICH ISLANDS REGION (153)

SPA 32.18 180 e(P) 30 13.00 0.6
 1.0s 7.00nm 4.5mb
 VAO 38.36 326 eP 31 06.90 1.6
 PDCR 46.61 341 eP 32 12.20 -0.2
 CNCB 51.92 304 eP 32 52.00 -2.0
 LPB 52.22 304 eP 32 30.00 -26.0X
 ZOBO 52.46 304 P 32 57.00 -1.0
 BUL 54.11 69 eP 33 07.20 -2.5
 LIC 66.03 22 P 34 31.80 0.7
 0.8s 5.00nm 4.7mb
 KIC 66.22 22 P 34 33.00 0.7
 0.8s 6.50nm 4.8mb
 TIC 66.44 22 P 34 34.30 0.6
 0.7s 4.50nm 4.7mb
 BNG 71.37 47 ePd 35 04.50 0.3
 1.0s 10.00nm 4.8mb
 ic 35 12.30
 YKA 138.39 316 ePKP 43 10.90 2.9X
 MBC 146.24 335 ePKP 43 22.50 1.2
 0.9s 9.00nm
 INK 148.04 318 ePKPc 43 27.10 2.8X
 S.D. = 1.4 on 11 of 14 obs.

& AUG 12, 1989 13h 50m 18.36s
 59.721 N 153.048 W
 DEPTH = 106.8km
 SOUTHERN ALASKA (2)
 <AGS-P>.

OPT 0.11 233 iP 50 32.62 0.8
 eS 50 42.91
 ILIM 0.36 7 iP 50 33.66 -0.7
 eS 50 45.99
 AUL 0.39 210 iP 50 33.64 -0.8
 iS 50 45.76
 RED 0.71 11 iP 50 36.31 -0.6
 eS 50 50.27
 CDD 0.85 201 iP 50 36.78 -1.3
 eS 50 50.83
 MCNL 0.85 231 eP 50 45.95 7.9
 RDT 0.91 20 iP 50 38.18 -0.6
 eS 50 53.25
 CNPM 0.94 101 iP 50 38.26 -0.7
 eS 50 53.73
 SHU 1.15 162 eP 50 40.09 -1.1
 NKA 1.37 41 eP 50 45.25 1.5
 eS 51 03.53
 SPU 1.55 18 eP 50 45.58 -0.4
 eS 51 06.71
 SLKM 1.62 60 eP 50 45.91 -1.0
 SEW 1.85 76 eP 50 48.78 -1.0

PDCR 68.26 112 ePd 42 53.40 -1.5
e 42 54.70
i 42 59.20
e 43 12.70
DAG 70.54 14 iPc 42 56.60 -1.7
0.5s 44.37nm 5.6mb
KBS 76.44 11 iP 43 33.50 0.8
DMU 77.79 37 eP 43 41.00 0.5
DLE 78.15 38 eP 43 42.40 0.0
STS 79.52 48 eP 43 50.70 0.5
EMON 80.23 48 eP 43 54.20 0.2
ERUA 80.65 49 eP 43 58.00 1.8
EPLA 82.08 51 eP 44 04.50 0.7
EVAL 82.31 53 eP 44 06.00 1.0
TRO 82.74 18 eP 44 06.30 -0.3
GRR 83.03 41 iPc 44 09.80 1.3
0.8s 18.80nm 5.1mb
LPF 83.04 42 iPc 44 09.50 1.0
0.8s 20.15nm 5.1mb
RGS 83.14 25 eP 44 07.40 -1.3
FLN 83.14 41 iPc 44 10.20 1.2
0.8s 34.40nm 5.4mb
GUD 83.31 50 eP 44 11.00 0.8
EHOR 83.38 52 eP 44 11.20 0.8
LDF 83.43 41 iPc 44 11.70 1.2
0.7s 15.45nm 5.1mb
EJIF 83.63 54 eP 44 13.00 1.2
ECRI 83.85 47 eP 44 13.80 1.0
MFF 84.10 43 eP 44 15.10 1.2
1.0s 28.00nm 5.2mb
AAPN 84.39 53 eP 44 16.50 0.8
NBZ 84.39 27 P 44 16.50 1.4
0.7s 17.70nm 5.2mb
ALOJ 84.46 53 eP 44 18.00 1.9
ATEJ 84.59 53 eP 44 18.40 1.6
ASMO 84.65 53 eP 44 18.10 1.1
ACHM 84.67 53 eP 44 18.50 1.4
ETOR 84.76 49 eP 44 18.20 0.7
APHE 84.83 53 eP 44 19.00 1.1
AFC 84.84 53 eP 44 19.50 1.5
KEV 84.90 16 iP 44 18.00 0.5
0.7s 40.00nm 5.6mb
EVIA 85.16 51 eP 44 20.60 1.1
LFF 85.26 44 eP 44 20.50 0.7
0.8s 29.55nm 5.4mb
LSF 85.31 43 iPc 44 20.80 0.8
0.7s 19.30nm 5.3mb
UCC 85.32 38 iPd 44 21.80 1.9
SNF 85.39 38 iPc 44 21.63 1.4
RJF 85.64 44 iPc 44 22.40 0.7
0.8s 32.25nm 5.4mb
LPO 85.65 44 iPc 44 22.60 0.9
0.8s 21.50nm 5.3mb
EPF 85.68 46 iPc 44 22.80 0.8
0.8s 26.20nm 5.4mb
TCF 85.73 43 iPc 44 22.60 0.5
0.7s 26.45nm 5.4mb
DOU 85.74 38 P 44 23.10 1.1
1.0s 27.80nm 5.3mb
HFS 85.90 27 eP 44 22.70 0.1
0.7s 14.10nm 5.2mb
Z 18s 0.08um 4.1MsZ
LR 17 47.00
MAF 85.98 43 iPc 44 23.70 0.3
0.9s 31.10nm 5.4mb
BGF 86.04 42 iPc 44 23.80 0.2
0.8s 24.85nm 5.3mb
CAF 86.14 44 eP 44 25.00 0.8
0.8s 12.10nm 5.0mb
WTS 86.23 36 iPc 44 25.20 0.8
0.8s 20.00nm 5.3mb
i 44 27.20
i 44 47.00
ENN 86.24 38 iPc 44 24.90 0.4
0.6s 45.00nm 5.7mb
i 44 26.90
SSF 86.26 42 iPc 44 25.00 0.3
0.6s 26.15nm 5.5mb
AVF 86.27 42 eP 44 24.90 0.2
0.6s 15.35nm 5.3mb
SOD 86.37 18 iP 44 25.00 0.1
LOR 86.40 41 iPc 44 26.00 0.6
0.6s 42.25nm 5.7mb
EROO 86.51 48 eP 44 26.50 0.4
EBR 86.57 48 eP 44 27.00 0.7
LBF 86.59 42 iPc 44 26.80 0.4

SMF 86.64 42 eP 44 26.70 0.2
0.6s 14.45nm 5.3mb
WLF 86.83 38 P 44 28.20 0.9
RUP 87.35 38 eP 44 30.28 0.3
ABH 87.56 38 eP 44 31.48 0.5
HAU 87.64 40 eP 44 31.60 0.2
0.6s 14.25nm 5.3mb
FEL 88.71 40 eP 44 35.81 -0.8
LPG 88.95 42 iPc 44 38.80 0.7
0.8s 7.40nm 5.0mb
SUF 89.28 22 iP 44 38.50 -0.4
0.5s 32.30nm 5.8mb
CLL 89.97 35 eP 44 42.00 -0.3
NUR 90.16 24 iP 44 42.80 -0.2
BRG 90.71 35 eP 44 46.00 0.3
0.9s 14.00nm 5.3mb
KHC 91.38 37 iP 44 51.00 2.1
PRU 91.49 36 P 44 50.20 0.9
LIC 93.68 82 P 44 59.40 -0.6
ZST 93.86 36 eP 45 01.40 1.1
KIC 93.91 82 P 45 00.60 -0.5
KRA 94.37 34 eP 45 03.10 0.5
SRO 94.75 36 eP 45 06.60 2.2
SPC 95.03 34 eP 45 08.00 2.1
BNG 116.28 75 ePKPc 50 26.30 -1.2
0.4s 5.00nm
WMO 117.69 353 PKP 50 28.50 -0.9
GTA 119.40 342 ePKP 50 31.80 -1.0
XAN 120.68 331 PKPc 50 34.40 -0.9
WHN 120.74 325 ePKP 50 34.50 -0.9
MAIO 122.65 19 ePKP 50 39.00 0.0
CD2 125.61 334 ePKP 50 44.10 -0.8
WB5 127.88 259 ePKP 50 48.80 -0.7
i 51 05.10
WRA 127.91 259 PKPd 50 48.40 -1.2
0.7s 7.80nm
GYA 128.05 328 PKP 50 48.80 -1.0
ASPA 128.73 254 iPKPd 50 49.90 -1.2
0.9s 15.00nm
iPcP 51 06.50
QUE 130.42 14 ePKP 50 54.00 -0.3
KMI 131.06 331 PKPc 50 55.50 -0.2
pP 51 11.50
SHL 134.65 344 iPKP 51 02.00 -0.5
CHG 138.26 331 ePKP 51 08.20 -1.0
MEKA 142.68 250 ePKP 51 11.00 -5.9X
HYB 144.52 1 iPKPd 51 17.70 -2.6
1.0s 80.00nm
e 51 33.50
GBA 148.27 3 PKP 51 28.90 2.5
IPM 148.59 314 ePKPd 51 27.60 0.5
1.0s 48.50nm
e 51 49.60
KGM 148.71 308 ePKP 51 31.50 4.3X
PSI 151.38 315 ePKPc 51 37.00 5.8X
0.6s 26.70nm
KLI 151.45 295 ePKP 51 47.50 16.2X
KOD 151.62 3 ePKP 51 38.80 6.8X
S.D. = 1.2 on 198 of 215 obs.
AUG 12, 1989 16h 46m 43.33± 0.12s
8.682 N ± 2.5km 125.718 E ± 3.1km
DEPTH = 55.2km (geophysicist)
5.9mb (59 obs.)
MINDANAO, PHILIPPINE ISLANDS (259)
Ms 5.5 (BRK). Felt at Bislig.
Depth from broadband
displacement seismograms.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=250 Dip=60 Slip=-70
NP2: 34 36 -121
Principal Axes:
T P1g=13 Azm=326
P 68 201
Comment: The focal mechanism is
poorly controlled and
corresponds to normal faulting
with a moderate strike-slip
component. The preferred fault
plane is not determined.
RADIATED ENERGY
No. of sta: 6 Focal mech. C
Energy 0.2±0.1*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 65 No. of sta: 6
Moment Tensor; Scale 10**17 Nm

Mrr=-2.39 Mtt= 0.46
Mff= 1.94 Mrt= 3.71
Mrf= 0.63 Mtf= 4.23
Principal axes:
T Val=-6.48 P1g=19 Azm=315
N -0.93 40 62
P -5.55 44 205
Best Double Couple:Mo=6.0*10**17
NP1:Strike= 1 Dip=44 Slip=-158
NP2: 255 75 -49
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 39C
Centroid Location:
Origin Time 16:46:45.9 0.2
Lat 8.74N 0.01 Lon 125.68E 0.03
Dep 64.7 1.8 Half-duration 3.3
Moment Tensor; Scale 10**17 Nm
Mrr=-6.12 0.28 Mtt= 7.73 0.29
Mff=-1.62 0.52 Mrt=-0.81 0.28
Mrf= 1.91 0.22 Mtf= 1.29 0.27
Principal Axes:
T Val= 7.93 P1g= 2 Azm=173
N -1.01 21 264
P -6.92 69 77
Best Double Couple:Mo=7.4*10**17
NP1:Strike=242 Dip=47 Slip=-120
NP2: 102 51 -62
DAV 1.59 185 iPc+ 47 12.00 2.5
OCP 7.46 323 eP 48 48.70 16.6X
TSM 8.79 240 ePd 48 54.80 4.3X
1.0s 480.60nm 6.4mb
BAG 9.17 327 iPc+ 48 56.20 0.3
2.0s 2729.41nm 6.9mb X
eS 50 40.00
KKM 9.78 255 ePc 49 06.30 2.1
1.1s 175.40nm 6.1mb
AAI 12.53 169 ePc 49 39.00 -2.2
eS 50 04.00
MKS 15.15 205 iPd 50 19.00 3.5X
1.5s 1126.30nm 5.9mb
ANP 16.89 347 iP+ 50 38.00 0.4
eS 53 58.00
HKC 17.51 322 iP 50 47.50 2.3
S 54 00.00
QZH 17.54 338 eP 50 45.40 -0.2
6.0s 3.30nm 2.7mb X
Z 28s 15.20um 4.2MsZ
N 20s 10.30um
sP 51 08.50
S 54 01.00
MCO 17.76 320 eP 50 50.70 2.4
QIZ 18.51 305 P 50 59.00 1.4
pP 51 11.50
sP 51 21.50
iS 54 28.00
SS 54 52.00
GZH 18.60 322 iPc 50 59.00 0.4
8.0s 9.00nm 3.0mb X
N 12s 2.70um
E 13s 2.60um
pP 51 13.00
S 54 26.00
GUMO 19.41 74 eP 51 09.20 1.2
1.3s 849.67nm 5.9mb
PJG 19.41 74 eP 51 09.40 1.4
GUA 19.44 74 eP 51 08.90 0.6
1.2s 1112.50nm 6.0mb
MTN 22.05 166 eP 51 34.80 -0.2
SSE 22.70 350 P+ 51 41.00 -0.3
4.0s 1.00nm 2.6mb X
Z 20s 4.70um 4.9MsZ
E 10s 2.00um
pP 51 52.00 43kmX
sP 52 00.00
PPP 52 21.00
S 55 44.00
sS 56 03.00
KAGJ 22.90 11 P 51 43.40 0.1
MNDI 23.18 129 eP 51 49.00 2.7
KGM 23.25 255 ePd 51 49.40 2.6
NJ2 24.11 346 Pc 51 54.00 -1.0
3.0s 1.10nm 2.8mb X
Z 22s 4.10um 4.9MsZ
pP 52 06.00 48kmX
S 56 12.00

VITF 102.50 323 Pd diff 00 51.33 16.3X
 PRS 102.85 50 ePd diff00 37.50 0.6
 CMB 102.96 48 ePd diff00 37.90 0.5
 LPG 103.31 321 ePd diff00 39.40 0.3
 0.8s 4.05nm 5.2mb
 SES 103.39 33 ePd diff00 39.00 0.0
 FRI 103.85 49 ePd diff00 41.50 0.2
 KVN 104.22 46 Pd diff 00 43.00 -0.2
 LOR 104.22 323 ePd diff00 43.20 0.5
 LBF 104.29 323 ePd diff00 43.40 0.3
 SSF 104.53 323 ePd diff00 45.30 1.2
 1.2s 7.45nm 5.5mb
 AVF 104.76 323 ePd diff00 45.30 0.2
 LRM 104.92 38 ePd diff00 47.10 0.9
 TNP 105.24 47 Pd diff 00 48.00 0.2
 ISA 105.28 49 ePKP 05 02.00 0.1
 FFC 105.30 26 ePd diff00 46.00 -1.3
 1.4s 28.00nm 6.0mb
 CLC 105.87 49 ePKP 05 01.00 -2.0
 SBB 106.14 50 ePKP 05 15.00 11.4X
 TOL 113.01 320 ePKP 05 16.00 -0.3
 ePP 06 20.00
 ALO 114.37 45 e(PKP)05 19.00 -0.4
 Z 22s 0.74um 5.2Msz
 ePP 06 42.50
 ePKKP 16 06.00
 eLR 39 38.00
 SCH 115.87 8 ePKP 05 21.00 -0.4
 IFR 117.24 315 iPKPd 05 26.00 1.1
 i 05 44.00
 MED 119.82 42 iPKPd 05 28.70 -0.8
 TIO 120.17 313 iPKP 05 30.90 0.4
 i 05 48.40
 FVM 122.62 34 PKP 05 35.00 0.3
 GAC 122.62 18 ePKP 05 34.00 -0.4
 UYO 122.86 40 iPKPc 05 35.20 -0.1
 RSCP 126.98 32 PKP 05 41.00 -2.3
 TKL 127.86 31 PKP 05 44.00 -1.0
 BLA 128.19 27 PKP 05 46.00 0.4
 KIC 128.40 285 PKPc 05 46.32 -0.3
 TIC 128.59 286 PKPc 05 46.50 -0.4
 CBN 128.62 23 ePKP 05 46.00 -0.3
 LIC 128.71 285 PKPc 05 46.82 -0.3
 SJS 145.06 59 iPKPd 06 17.90 0.5
 LCR2 145.21 59 iPKPd 06 18.00 0.3
 BUS 145.51 59 iPKPd 06 19.90 1.4
 UPA 149.33 56 ePKPd 06 28.40 4.4X
 1.2s 496.88nm
 LCCH 150.62 150 ePKP 06 32.00 6.5X
 PCH 151.02 151 ePKPd 06 32.80 6.6X
 SAN 151.08 151 ePKPd 06 32.00 5.8X
 ROCH 151.30 150 ePKPd 06 33.50 6.7X
 PEL 151.32 150 iPKPd 06 33.40 6.8X
 JACH 151.74 150 ePKP 06 34.50 7.2X
 NNA 157.57 100 ePKP 06 36.20 0.6
 SLA 160.79 147 ePKPd 06 40.10 1.1
 BMA 163.01 214 ePKP 06 37.50 -3.6X
 VAO 164.13 205 ePKP 06 43.80 1.6
 e 07 00.80
 ITR 164.32 269 iPKPd 06 41.90 -0.7
 e 06 59.30
 e 07 35.00
 CNCB 164.40 123 PKP 06 45.70 2.5
 PKS 10 40.00
 LPB 164.43 121 PKPd 06 46.00 2.9X
 1.4s 130.23nm
 LR 48 14.00
 ZOBO 164.53 121 iPKPd 06 45.00 1.6
 Z 25s 0.77um
 i 07 41.50
 LR 44 12.00
 PDCR 164.62 254 iPKPd 06 43.00 0.2
 i 07 00.20
 e 07 47.90
 PPD 166.42 192 ePKP 06 57.00 12.9X
 e 07 14.00
 e 07 59.60
 BDF 170.67 221 ePKP 06 46.69 -0.4
 epPKP 07 04.07
 BAO 170.75 221 ePKP 06 47.50 0.4
 S.D. = 1.1 an 276 of 323 obs.

CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 30C
 Centroid Location:
 Origin Time 17:18:47.2 0.5
 Lat 6.81S 0.05 Lon 12.37W 0.06
 Dep 15.0 FIX Half-duration 2.6
 Moment Tensor; Scale 10**17 Nm
 Mrr=-0.54 0.10 Mtt=-1.77 0.14
 Mff= 2.31 0.17 Mrt=-0.79 0.39
 Mrf=-0.22 0.36 Mtf= 2.14 0.09
 Principal Axes:
 T Val= 3.30 Plg= 8 Azm=114
 N -0.44 73 230
 P -2.87 16 22
 Best Double Couple: Ma=3.1*10**17
 NP1:Strike=159 Dip=73 Slip=-174
 NP2: 67 85 -17
 LIC 15.43 30 P 22 11.10 -5.3X
 S 25 10.00
 KIC 15.69 31 Pc 22 14.50 -5.3X
 TIC 15.79 29 P 22 15.70 -5.5X
 ITR 25.51 265 iPd 24 06.80 -0.6
 e 24 14.80
 e 24 22.70
 e 24 46.20
 PDCR 26.54 257 eP 24 15.80 -1.1
 i 24 17.80
 i 24 26.70
 e 24 51.80
 BNG 33.28 70 ePc 25 14.80 -2.2
 0.8s 13.00nm 4.9mb
 ic 26 47.30
 TIO 38.32 8 iP 26 00.40 0.5
 KMZ 38.37 102 iP 26 01.00 0.5
 iPP 27 24.00
 LSZ 40.82 105 iPd 26 22.00 1.2
 IFR 41.18 10 iP 26 19.00 -4.6X
 i 26 32.50
 KSR 41.99 121 iPd 26 35.70 5.3X
 0.9s 7.69nm 4.4mb
 BUL 42.00 112 iPc 26 30.20 -0.3
 1.0s 16.00nm 4.7mb
 SLR 43.14 120 iPd 26 40.50 0.8
 0.9s 25.21nm 5.0mb
 IKZ 44.89 97 iPc 26 53.00 -1.1
 TOL 47.58 9 eP 27 19.00 4.2X
 EPF 51.44 12 eP 27 45.60 1.2
 0.8s 10.75nm 4.8mb
 LPD 53.20 12 eP 27 58.40 0.9
 0.8s 12.10nm 4.9mb
 SLA 53.29 245 ePd 28 01.00 2.2
 LFF 53.35 12 eP 27 59.40 0.8
 0.8s 16.10nm 5.0mb
 CAF 53.62 13 eP 28 01.20 0.6
 0.8s 8.05nm 4.8mb
 RJF 53.86 12 eP 28 02.80 0.5
 0.8s 8.05nm 4.8mb
 MNS 54.56 23 P 28 12.10 4.5X
 CNCB 54.74 255 eP 28 09.00 -1.0
 LSF 54.76 12 eP 28 09.50 0.5
 1.0s 38.00nm 5.4mb
 LPB 54.84 255 eP 28 10.00 -0.6
 Z 22s 0.74um 4.7Msz
 LR 04 36.00
 ZOBO 54.85 255 P 28 11.00 0.2
 Z 22s 0.61um 4.6Msz
 LR 04 04.00
 TCF 54.94 13 eP 28 11.00 0.6
 0.9s 18.00nm 5.1mb
 FIR 55.24 21 eP 28 20.00 7.5X
 LPG 55.34 17 eP 28 13.70 0.1
 1.0s 28.00nm 5.2mb
 BGF 55.34 13 eP 28 14.00 0.8
 1.2s 17.85nm 5.0mb
 SMF 55.65 14 eP 28 15.80 0.3
 0.8s 5.35nm 4.6mb
 AVF 55.67 13 eP 28 16.00 0.4
 0.8s 6.70nm 4.7mb
 SSF 55.96 13 eP 28 18.40 0.7
 0.7s 11.00nm 5.0mb
 LBF 56.00 14 eP 28 18.40 0.4
 0.7s 11.00nm 5.0mb
 LPF 56.00 9 eP 28 18.10 0.2
 1.0s 16.00nm 5.0mb
 LOR 56.24 14 eP 28 20.60 0.9

GRR 56.38 9 eP 28 21.40 0.8
 1.0s 14.00nm 4.9mb
 OHR 57.12 30 eP 28 06.50 -19.6X
 BSF 57.49 15 eP 28 28.20 -0.5
 HAU 57.54 15 eP 28 28.60 -0.3
 0.8s 6.70nm 4.7mb
 TRI 57.81 22 eP 28 37.50 6.7X
 FEL 57.86 16 eP 28 31.40 0.1
 SKO 58.08 30 eP 28 29.50 -3.3X
 ARE 58.09 255 eP 28 35.40 1.8
 VOY 58.13 22 eP 28 33.90 0.7
 CDF 58.15 16 eP 28 32.70 -0.6
 VAY 58.16 31 eP 28 50.30 17.0X
 VBY 58.19 23 eP 28 33.00 -0.5
 FVI 58.22 20 P 28 31.50 -2.1
 RBL 58.36 21 P 28 32.60 -2.2
 LJU 58.37 22 eP 28 32.00 -2.8
 MBH 58.68 49 eP 28 39.00 1.9
 PTJ 58.80 23 eP 28 37.10 -0.7
 KBA 58.83 21 iPd 28 43.30 5.1X
 0.9s 5.90nm 4.7mb
 i 28 46.20
 i 29 02.70
 PRNI 59.06 48 eP 28 36.50 -3.4X
 TOD 59.66 16 eP 28 36.58 -7.1X
 ENN 60.00 14 eP 28 47.50 1.6
 1.0s 12.00nm 5.0mb
 i 28 50.20
 KHC 60.68 19 P 28 56.20 5.5X
 e 30 42.50
 SRO 61.29 23 eP 29 01.60 6.8X
 WTS 61.34 14 eP 28 56.50 1.4
 e 29 01.00
 MOX 61.39 17 eP 28 56.00 0.5
 PRU 61.74 20 eP 29 02.00 4.2X
 BRG 62.31 19 eP 29 10.00 8.4X
 1.2s 62.00nm 5.7mb
 e 31 26.00
 CLL 62.39 18 eP 29 06.00 3.8X
 MLR 62.88 30 ePc 29 02.00 -3.6X
 BBTk 62.89 38 eP 29 07.00 1.2
 KSP 63.06 20 eP 29 11.00 4.4X
 SPC 63.16 24 eP 29 06.00 -1.5
 CVO 63.23 29 eP 29 08.50 0.7
 KRA 63.73 23 eP 28 54.50 -16.5X
 HFS 70.36 14 eP 29 48.00 -4.7X
 1.0s 18.10nm 5.2mb
 NB2 70.62 12 P 29 51.40 -3.0
 0.9s 5.70nm 4.7mb
 NUR 73.67 18 eP 30 13.00 0.6
 Z 24s 2.40um 5.4Msz
 LR 40 40.00
 SUF 75.84 17 eP 30 24.00 -0.8
 SCH 76.44 331 eP 30 28.00 -0.4
 GAC 76.79 320 eP 30 30.00 -0.5
 SOD 79.56 14 eP 30 41.00 -4.3X
 MAIO 80.15 51 eP 30 48.00 -1.2
 KEV 81.49 13 eP 30 55.00 -0.5
 SPA 82.79 180 e(P) 31 08.00 5.4X
 1.5s 40.91nm 5.4mb
 UYO 87.26 305 e(P) 31 25.00 -0.3
 MEO 90.73 305 iPc 31 41.00 -0.7
 BJI 123.95 46 ePKP 37 45.00 7.7X
 S.D. = 1.2 an 56 of 83 obs.

 AUG 12, 1989 18h 01m 21.29± 0.78s
 36.473 N ± 7.0km 70.258 E ± 5.6km
 DEPTH = 222.2 ± 9.4 km
 4.5mb (15 obs.)
 HINDU KUSH REGION (718)

KSH 5.41 55 P 02 42.00 -0.2
 S 03 43.00
 QUE 6.85 205 iPd 03 01.40 0.8
 eS 04 18.00
 MAIO 8.68 272 iPd 03 23.70 -0.7
 eS 05 02.00
 NDI 9.73 141 iPd 03 36.50 -1.2
 0.5s 17.61nm 4.5mb
 eS 05 18.00
 WMO 15.20 56 iPd 04 44.70 -1.6
 LSA 18.75 105 iPc 05 28.50 2.3
 HYB 20.35 157 eP 05 44.00 2.0
 SHL 21.44 114 iP 05 52.60 -0.2
 eS 09 47.50
 GTA 23.45 74 eP 06 13.40 1.4

AUG 12, 1989 17h 18m 36.94± 0.40s
 7.259 S ± 8.1km 12.700 W ± 7.1km
 DEPTH = 10.0km (geophysicist)
 4.9mb (27 obs.) 4.7Msz (2 obs.)
 ASCENSION ISLAND REGION (408)

Table with columns: Station ID, Time, Azimuth, Elevation, Distance, Azimuth Error, Elevation Error, Distance Error. Includes stations like PPD, VAO, BAO, PDCR, ITR, SPA, FVM, ALO, LIC, TIC, KIC, GAC, RSSD, TNP, KVN, BUL, PNT, BNG, GBA, HYB.

AUG 12, 1989 23h 23m 40.75 ± 0.55s
46.337 N ± 5.6km 13.239 E ± 5.0km
DEPTH = 10.0km (geophysicist)

AUSTRIA (546)
MD 3.2 (LJU), 2.5 (TRI), ML 2.5 (KBA).

Table with columns: Station ID, Time, Azimuth, Elevation, Distance, Azimuth Error, Elevation Error, Distance Error. Includes stations like RBL, FVI, VOY, VVI, TRI, KBA, LJU, CEY, CTI, SCE, RIY, BHG, VBY, KHC, PRU.

S.D. = 1.1 on 11 of 15 obs.

? AUG 12, 1989 23h 30m 45.02 ± 5.68s
9.472 S ± 55.3km 123.920 E ± 18.5km
DEPTH = 33.0km (normal)
4.6mb (4 obs.)

TIMOR (289)

Table with columns: Station ID, Time, Azimuth, Elevation, Distance, Azimuth Error, Elevation Error, Distance Error. Includes stations like KNA, MTN, MBL, WB5, WRA.

Table with columns: Station ID, Time, Azimuth, Elevation, Distance, Azimuth Error, Elevation Error, Distance Error. Includes stations like NANU, WARB, ASPA, QIS.

S.D. = 1.4 on 8 of 9 obs.

? AUG 13, 1989 00h 09m 33.86 ± 3.35s
15.977 N ± 31.2km 97.860 W ± 11.8km
DEPTH = 33.0km (normal)

NEAR COAST OF OAXACA, MEXICO (66)

Table with columns: Station ID, Time, Azimuth, Elevation, Distance, Azimuth Error, Elevation Error, Distance Error. Includes stations like OXX, ACX, III, IISM, IIT, UNM, LVVM, IIC, MRX.

S.D. = 0.6 on 5 of 9 obs.

? AUG 13, 1989 00h 15m 51.54 ± 0.86s
51.755 S ± 14.3km 161.203 E ± 24.8km
DEPTH = 10.0km (geophysicist)
5.1mb (6 obs.) 4.6msz (1 obs.)

NORTH OF MACQUARIE ISLAND (165)

Table with columns: Station ID, Time, Azimuth, Elevation, Distance, Azimuth Error, Elevation Error, Distance Error. Includes stations like CBZ, TOO, CAN, BWA, BRS, DZM, CTA, ASPA, Z, WRA, WB5, SPA, BDT, CHG, SSE, ALE, CFR, VAY, MLR, OHR, SKO.

S.D. = 1.3 on 15 of 20 obs.

AUG 13, 1989 01h 31m 21.42 ± 0.92s
22.866 N ± 7.4km 120.488 E ± 6.3km
DEPTH = 24.2 ± 7.0 km
4.6mb (4 obs.)

TAIWAN (244)

Table with columns: Station ID, Time, Azimuth, Elevation, Distance, Azimuth Error, Elevation Error, Distance Error. Includes station TWG.

Table with columns: Station ID, Time, Azimuth, Elevation, Distance, Azimuth Error, Elevation Error, Distance Error. Includes stations like TWF1, TWO, TWD, TWZ, ANP, QZH, HKC, MCO, GZH.

SSE 8.22 4 eP 33 21.50 -0.6
Z 20s 5.00um eS 34 43.80 Lg 35 29.00

Table with columns: Station ID, Time, Azimuth, Elevation, Distance, Azimuth Error, Elevation Error, Distance Error. Includes stations like NJ2, WHN, GYA, XAN, TIY, KMI, CD2, BJI, SNY, HHC, BTO, CHG, CN2, GTA, WB5, ASPA, WARB, MA10, MBC, INK, NB2, KHC, PNT.

S.D. = 1.3 on 26 of 34 obs.

* AUG 13, 1989 04h 03m 28.42 ± 0.76s
23.127 S ± 8.7km 66.579 W ± 10.1km
DEPTH = 230.6 ± 10.7 km

JUJUY PROVINCE, ARGENTINA (128)

Table with columns: Station ID, Time, Azimuth, Elevation, Distance, Azimuth Error, Elevation Error, Distance Error. Includes stations like YJA, SLA, ANT, CCH, CNCB, LPB, ZOBO, PPD, VAO, BAO.

S.D. = 0.7 on 9 of 10 obs.

? AUG 13, 1989 04h 48m 02.25 ± 4.58s
5.079 S ± 40.3km 146.344 E ± 20.5km

DOU 80.42 340 Pc 46 22.10 0.3
 WLF 80.44 339 Pc 46 23.60 1.8
 GWF 80.70 338 P 46 23.16 -0.1
 KBA 80.77 333 iPd 46 24.80 0.9
 1.0s 28.20nm 5.2mb
 PTJ 80.96 331 e(P) 46 24.70 -0.1
 WLS 81.29 338 P 46 26.31 -0.1
 CDF 81.31 338 eP 46 26.60 0.0
 1.4s 34.85nm 5.2mb
 ECH 81.52 338 P 46 27.28 -0.3
 SLE 81.57 337 ePd 46 28.10 0.2
 FEL 81.60 337 P 46 27.91 -0.3
 OGA 81.66 335 eP 46 29.50 0.9
 0.8s 23.00nm 5.2mb

VITF 81.82 338 P 46 28.98 -0.1
 ZLA 81.86 337 ePd 46 29.80 0.4
 MOF 81.86 338 P 46 28.95 -0.5
 HAU 81.92 338 eP 46 30.50 0.8
 1.2s 17.85nm 5.0mb
 KHL 81.94 319 iP 46 29.50 -0.5
 BSF 81.97 338 eP 46 30.70 0.6
 1.2s 17.85nm 5.0mb
 OSS 82.08 335 ePd 46 31.70 0.9
 LLS 82.25 336 ePd 46 32.00 0.3
 SKO 82.36 326 eP 46 32.20 0.1
 VDL 82.46 336 ePd 46 33.60 0.8
 VAY 82.46 325 eP 46 33.00 0.4
 KNT 82.47 324 eP 46 33.00 0.4
 TMA 82.98 336 ePd 46 35.90 0.5
 LOR 83.24 339 eP 46 36.90 0.4
 1.1s 28.10nm 5.3mb
 GRR 83.24 343 eP 46 36.00 -0.5
 1.8s 69.05nm 5.5mb

MMK 83.29 336 ePd 46 38.20 1.1
 OHR 83.35 326 eP 46 37.00 -0.2
 DIX 83.41 337 ePd 46 38.90 1.1
 LBF 83.47 339 eP 46 37.80 0.0
 0.9s 7.35nm 4.8mb
 SSF 83.51 340 eP 46 38.30 0.4
 1.1s 13.10nm 5.0mb
 LPF 83.62 343 eP 46 37.80 -0.6
 1.5s 31.35nm 5.2mb
 MML 83.71 311 eP 46 22.50 -16.7X
 AVF 83.81 340 eP 46 39.80 0.4
 1.5s 41.80nm 5.3mb
 SMF 83.82 339 eP 46 39.90 0.4
 1.3s 46.95nm 5.5mb

LPG 84.13 337 eP 46 42.30 0.8
 1.3s 18.05nm 5.1mb
 BGF 84.15 340 eP 46 41.40 0.3
 1.5s 23.50nm 5.1mb
 FIR 84.38 333 e(P) 46 44.00 1.7
 MAF 84.53 340 eP 46 44.00 0.9
 1.4s 52.30nm 5.5mb
 TCF 84.55 340 eP 46 43.90 0.7
 1.2s 14.90nm 5.0mb
 SBF 85.44 336 eP 46 51.10 3.3X
 1.0s 14.00nm 5.1mb
 PRNI 85.57 310 eP 46 49.00 0.4
 CAF 85.87 340 eP 46 51.00 1.2
 1.2s 14.90nm 5.1mb
 MBH 86.08 310 eP 46 50.00 -1.0
 LFF 86.17 341 eP 46 52.80 1.6
 0.8s 14.40nm 5.3mb
 SFF 87.20 185 eP 46 38.30 -17.6X
 1.1s 13.45nm 5.1mb

PDCR 145.04 21 ePKP 53 47.90 -0.2
 e 53 59.40
 PPD 148.91 48 ePKP 54 11.20 17.0X
 S.D. = 0.8 on 127 of 138 obs.
 AUG 13, 1989 09h 34m 08.17 ± 0.83s
 18.471 S ± 9.0km 70.306 W ± 8.0km
 DEPTH = 96.5 ± 9.5 km
 4.4mb (1 obs.)
 NEAR COAST OF NORTHERN CHILE (122)

ARE 2.30 330 iPd 34 46.10 0.7
 iS 35 09.90
 CNCB 2.76 54 iPc 34 52.50 0.5
 LPB 2.86 48 iPc 34 53.20 0.1
 S 35 26.00
 ZOBO 3.02 44 iPc 34 54.20 -1.3
 S 35 32.00
 CCH 4.11 75 iPc 35 11.10 0.9
 S 35 29.00
 ANT 5.21 181 e(P) 35 25.00 -0.1

NNA 9.02 315 iP 36 16.50 -1.0
 e 38 10.00
 BAO 21.52 86 eP 38 50.40 -0.6
 LIC 68.86 76 P 45 05.00 0.2
 KIC 69.17 76 P 45 06.00 -0.7
 SPA 71.64 180 e(P) 45 29.90 8.8X
 1.0s 5.50nm 4.4mb
 YKA 87.91 341 eP 46 49.00 1.3
 S.D. = 1.0 on 11 of 12 obs.

? AUG 13, 1989 10h 25m 28.35 ± 7.28s
 31.733 S ± 40.7km 69.668 W ± 39.1km
 DEPTH = 80.9 ± 48.1 km
 SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.20 69 iPc 25 40.50 -0.1
 S 25 53.00
 RTCB 0.78 72 iPc 25 45.50 0.2
 S 26 02.00
 RTCV 0.97 98 iPd 25 47.50 0.1
 S 26 05.20
 RTLL 1.10 69 iPc 25 48.80 -0.2
 S 26 08.00
 CFA 1.22 84 iPc 25 50.50 -0.1
 e 26 10.20
 RTRS 1.57 7 iPd 25 55.00 0.0
 S.D. = 0.2 on 6 of 6 obs.

? AUG 13, 1989 11h 51m 27.73 ± 2.03s
 13.895 N ± 46.2km 145.483 E ± 86.2km
 DEPTH = 101.9 ± 28.6 km
 4.8mb (1 obs.)
 MARIANA ISLANDS (216)

GUA 0.66 237 iPc 51 45.20 0.0
 eS 51 58.70
 GUMO 0.67 243 iPc 51 45.30 0.0
 PJG 0.67 243 iPc 51 45.30 0.0
 YKA 82.32 27 eP 03 39.30 0.3
 PNT 82.75 41 eP 03 41.00 -0.6
 KVN 86.26 51 iP 04 00.00 0.3
 TNP 87.18 52 iP 04 04.30 0.1
 0.8s 7.35nm 4.8mb
 ZOBO 147.49 99 PKP 10 59.80 -0.5
 LPB 147.51 99 ePKP 11 00.00 -0.1
 CNCB 147.62 100 PKP 11 01.00 0.5
 S.D. = 0.4 on 10 of 10 obs.

* AUG 13, 1989 12h 45m 04.23 ± 3.34s
 45.118 N ± 23.8km 14.480 E ± 8.3km
 DEPTH = 5.0km (geophysicist)
 YUGOSLAVIA (383)
 MD 2.9 (LJU), 2.3 (TRI).

RIY 0.24 344 iPgc 45 09.30 0.3
 iSg 45 12.70
 CEY 0.62 357 e(Pg) 45 16.40 -0.3
 eSg 45 25.50
 VBY 0.67 55 ePg 45 17.30 -0.3
 iSg 45 25.70
 TRI 0.78 320 e(Pg) 45 20.00 0.2
 iSg 45 31.70
 LJU 0.93 2 eP 45 23.00 0.6
 eSg 45 35.00
 VOY 1.00 336 ePg 45 23.00 -0.8
 eSg 45 38.70
 PTJ 1.30 53 ePn 45 29.10 0.3
 eSg 45 48.30
 S.D. = 0.6 on 7 of 7 obs.

? AUG 13, 1989 13h 08m 55.78 ± 3.26s
 20.780 S ± 45.3km 178.986 W ± 31.9km
 DEPTH = 620.5 ± 33.2 km
 4.3mb (4 obs.)
 FIJI ISLANDS REGION (181)

DZM 13.63 262 iPc 11 50.40 0.1
 ASPA 43.56 257 iPd 16 08.60 0.0
 0.7s 11.00nm 4.5mb
 WB5 43.63 263 eP 16 08.80 -0.4
 WRA 43.65 263 Pc 16 09.40 0.1
 0.2s 1.10nm 4.0mb
 MTN 48.25 271 iPc 16 44.10 -0.2
 FORR 48.30 247 eP 16 44.00 -0.5
 0.4s 9.00nm 4.6mb
 KNA 49.70 267 eP 16 56.00 1.0
 WARB 49.87 253 eP 16 56.00 -0.2

MBL 56.80 258 eP 17 44.90 -0.2
 0.5s 6.00nm 4.1mb
 NANU 60.43 255 eP 18 09.90 0.6
 KVN 82.34 43 eP 20 15.80 0.4
 FBA 88.71 13 eP 20 44.50 -0.6
 HFS 139.66 350 ePKP 27 07.90 -7.4X
 0.4s 1.00nm
 S.D. = 0.6 on 12 of 13 obs.

AUG 13, 1989 17h 41m 01.36 ± 0.75s
 21.350 N ± 10.5km 106.590 W ± 9.4km
 DEPTH = 10.0km (geophysicist)
 4.7mb (8 obs.)
 OFF COAST OF CENTRAL MEXICO (51)

MZX 1.85 5 iPd 41 28.90 -4.4X
 iS 41 54.00
 AGX 4.03 82 iPd 42 16.00 11.6X
 MRX 5.32 107 iPd 42 23.00 0.3
 IIC 7.05 102 iP 42 52.00 4.5X
 III 7.33 113 iPd 42 55.00 3.8X
 ACX 7.77 124 iP 42 59.70 2.5
 (S) 45 01.50
 IIT 8.12 105 iPc 43 04.50 2.1
 IISM 8.97 104 iPd 43 15.50 1.6
 OXX 10.24 113 iPd 43 32.00 0.3
 (S) 46 24.00
 ALO 13.54 0 e(P) 44 17.00 0.8
 1.0s 3.50nm 4.3mb

e 44 30.40
 e 47 28.00
 eLR 48 14.00
 GLA 13.76 330 P 44 15.00 -3.9X
 PLM 15.03 325 eP 44 37.00 1.3
 MEO 15.12 26 iPc 44 40.80 4.1X
 TPC 15.21 329 eP 44 41.00 3.2X
 RVR 15.79 325 eP 44 49.00 3.6X
 MWC 16.34 324 eP 44 57.00 4.4X
 GSC 16.54 329 eP 44 57.00 2.0
 SBB 16.56 326 eP 44 57.00 1.7
 UYO 16.66 37 iPd 44 58.00 1.5
 PV10 17.10 353 P 45 01.00 -1.3
 CLC 17.33 329 eP 45 06.00 1.0
 ISA 17.65 326 eP 45 10.00 1.0
 GOL 18.32 3 P 45 17.80 0.3
 GLD 18.38 3 P 45 19.00 0.9
 TNP 19.03 333 P 45 26.00 -0.2
 0.7s 3.89nm 3.7mb

FRI 19.31 327 ePd 45 28.80 -0.6
 PRS 19.72 322 ePd 45 33.50 -0.6
 KVN 20.22 333 P 45 39.00 -0.5
 CMB 20.45 327 eP 45 41.00 -0.8
 BW06 21.51 354 P 45 50.80 -2.0
 FVM 21.67 37 P 45 54.90 0.7
 0.5s 14.00nm 4.6mb
 ORV 22.18 328 ePd 46 00.40 1.2
 RSSD 22.81 5 P 46 05.00 -0.7
 MIN 22.84 329 ePd 46 07.50 1.5
 RSCP 23.22 48 P 46 08.60 -1.0
 WDC 23.48 328 e(P) 46 10.50 -1.4
 GBTN 24.22 49 P 46 17.10 -2.1
 LRM 24.88 350 eP 46 26.30 0.5
 SES 29.20 354 eP 47 05.00 -0.1
 FFC 33.51 5 eP 47 29.00 -13.9X
 GAC 35.16 39 eP 47 55.00 -2.3
 FBA 51.21 339 P 50 01.00 -5.7X
 1.0s 6.00nm 4.5mb

LPB 53.31 132 eP 50 22.00 -1.6
 CNCB 53.58 132 eP 50 23.00 -2.7
 MBC 55.32 356 eP 50 36.00 -1.0
 0.8s 12.00nm 5.0mb
 NB2 84.00 26 P 53 32.60 -0.5
 0.8s 2.70nm 4.5mb
 SSF 87.41 40 eP 53 48.80 -1.4
 1.4s 13.05nm 5.0mb
 LBF 87.73 40 eP 53 50.20 -1.6
 1.4s 13.05nm 5.0mb
 GBA 145.04 353 PKP 00 42.40 1.0
 1.2s 4.10nm
 S.D. = 1.4 on 38 of 49 obs.

* AUG 13, 1989 18h 01m 55.15 ± 2.21s
 52.965 N ± 17.9km 4.748 W ± 13.1km
 DEPTH = 10.0km (geophysicist)
 UNITED KINGDOM (533)
 YRH 0.15 151 eP 01 58.70 0.0

& AUG 13, 1989 22h 13m 34.61s
59.986 N 153.390 W
DEPTH = 125.7km
SOUTHERN ALASKA (2)
<AGS-P>

Table with columns for station name, depth, time, and other parameters. Includes stations like ILIM, OPT, PDB, RED, AUL, RDT, CDD, CNPM, NKA, SPU, SHU, SLKM, SUA, SKT, PME, KNIM, FID, KTH.

18 obs. associated

? AUG 13, 1989 23h 36m 15.07±1.20s
12.133 N ±26.1km 86.996 W ±27.9km
DEPTH = 33.0km (normal)
4.0mb (1 obs.)

NICARAGUA (75)

MD 4.0 (SJR).

Table with columns for station name, depth, time, and other parameters. Includes stations like RIN3, JUD, JTS, CAO, EPA, POA2, HDC2, SJS, IRZ2, LCR2, QPS, CDM, BUS, JCR, IDC, PBC, ALO.

S.D. = 1.1 on 16 of 17 obs.

& AUG 14, 1989 00h 10m 02.51s
61.132 N 149.503 W
DEPTH = 40.3km
SOUTHERN ALASKA (2)
<AGS-P>. ML 3.3 (PMR).

Table with columns for station name, depth, time, and other parameters. Includes stations like PMS, PLRM, PMR, PME, PWA, KNK, GH0, SLKM.

Table with columns for station name, depth, time, and other parameters. Includes stations like NKA, SEW, KNIM, GLI, CGLM, SKT, CRP, NCG, VZW, MTU, FID, RDT, BRK, HIN, RED, KLU, CNPM, HUR, TOA, CVA, ILIM, SGAM, MID, OPT, RAGM, KTH, AUH, PAX, AUV, PDB, HMT, KAIM, SVW, CDD, WAX, NEA, TTA, CCB, KDC, RDS, FBA.

49 obs. associated

* AUG 14, 1989 00h 50m 36.95±0.83s
16.922 S ±12.3km 71.427 W ±9.3km
DEPTH = 122.2 ± 10.2 km
4.3mb (1 obs.)

SOUTHERN PERU (117)
Felt (11) at Arequipo.

Table with columns for station name, depth, time, and other parameters. Includes stations like ARE, LPB, ZOBO, CNCB, CCH, ANT, NNA, ITB1, PPD, VAO, KIC, LLA, SPA, MAT.

S.D. = 1.1 on 10 of 14 obs.

AUG 14, 1989 02h 13m 22.27±0.52s
16.774 N ± 5.4km 61.978 W ± 5.4km
DEPTH = 10.0km (geophysicist)
LEEWARD ISLANDS (92)
ML 2.9 (FDF).

Table with columns for station name, depth, time, and other parameters. Includes stations like MBET, BPA.

Table with columns for station name, depth, time, and other parameters. Includes stations like SEG, NEV, PAG, SFG, SKI, MGG, BBL.

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

AUG 14, 1989 02h 51m 02.16±0.32s
46.233 N ± 7.1km 153.296 E ± 4.0km
DEPTH = 33.0km (normal)
5.0mb (42 obs.) 4.4Msz (4 obs.)

KURIL ISLANDS (221)

Table with columns for station name, depth, time, and other parameters. Includes stations like KUSJ, ASAJ, HOOJ, MRRJ, CHJJ, MAT, MTMJ, IIDJ, MDJ, CN2, SNY, DL2, BJI, TIA, SSE, HHC, TIY, TTA, SVW, XAN, PMR, FBA, LZH, GTA, CD2, GYA, INK, WMO, KMI, ALE, YKB0, YKA, CHG, KSH.

S.D. = 0.6 on 45 of 46 obs.

AUG 14, 1989 03h 26m 45.88±0.23s
44.438 N ± 2.0km 6.313 E ± 2.1km
DEPTH = 10.0km (geophysicist)

FRANCE (538)
ML 2.8 (GEN), 2.6 (LDG). MD 2.6 (STR).

Table with columns for station name, magnitude, depth, time, and other parameters. Includes stations like FOUF, GANF, PZZ, RRL, BNI, DOI, VILF, STV, TOUF, CALN, MVIF, ENR, TAVF, FRF, AURF, AUTN, RSP, LRG, SBF, SAOF, PUYF, REVF, PRAF, TREF, LPG, LMR, LPL, ROB, LSD, GELF, IMI, FIN, PCP, ORX, CVF, SMF, LBF, CAF, AVF, MAF, BGF, SSF, HAU.

S.D. = 0.7 on 40 of 43 obs.

? AUG 14, 1989 04h 01m 18.19±8.18s

38.806 N ±60.7km 23.693 E ±27.8km

DEPTH = 10.0km (geophysicist)

GREECE (364)

Table with columns for station name, magnitude, depth, time, and other parameters. Includes stations like PAIG, OUR, LIT, THE, SRS, GRG, KNT.

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

AUG 14, 1989 04h 05m 58.40±0.42s

46.005 N ± 4.1km 13.626 E ± 4.6km

DEPTH = 10.0km (geophysicist)

AUSTRIA (546)

MD 3.1 (LJU). ML 2.9 (KBA).

Table with columns for station name, magnitude, depth, time, and other parameters. Includes stations like VOY, TRI, RBL, CEY, FVI, VVI, RIY, KBA, VBY, PTJ, SCE, BHG, OGA, ARV, KHC, WET, HVAR.

S.D. = 0.8 on 15 of 17 obs.

& AUG 14, 1989 04h 09m 04.10s

11.552 N 86.145 W

DEPTH = 124.4km

NEAR COAST OF NICARAGUA (74)

<HDC>.

Table with columns for station name, magnitude, depth, time, and other parameters. Includes stations like RIN3, JUD, JTS, CAO, EPA, HDC2, IRZ2.

AUG 14, 1989 04h 11m 56.11±0.84s

46.023 N ± 7.2km 13.636 E ± 9.8km

DEPTH = 10.0km (geophysicist)

AUSTRIA (546)

ML 2.3 (KBA). MD 2.2 (TRI).

Table with columns for station name, magnitude, depth, time, and other parameters. Includes stations like VOY, TRI.

Table with columns for station name, magnitude, depth, time, and other parameters. Includes stations like RBL, FVI, RIY, KBA, VBY.

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

AUG 14, 1989 04h 13m 00.92±0.81s

46.028 N ± 6.9km 13.623 E ± 9.4km

DEPTH = 10.0km (geophysicist)

AUSTRIA (546)

ML 2.2 (KBA), 1.6 (LJU). MD 2.2 (TRI).

Table with columns for station name, magnitude, depth, time, and other parameters. Includes stations like VOY, TRI, RBL, FVI, RIY, KBA, VBY.

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

AUG 14, 1989 04h 16m 24.24±0.58s

46.016 N ± 5.6km 13.647 E ± 6.6km

DEPTH = 10.0km (geophysicist)

AUSTRIA (546)

ML 3.2 (KBA), 3.0 (VKA). MD 3.2 (LJU). 2.7 (TRI).

Table with columns for station name, magnitude, depth, time, and other parameters. Includes stations like VOY, TRI, RBL, CEY, LJU, FVI, RIY, KBA, VBY, PTJ, SCE, BHG, OGA, VKA, KHC, WET, ZST, HVAR, GRF.

S.D. = 1.0 on 16 of 20 obs.

AUG 14, 1989 04h 26m 25.88±0.56s

46.024 N ± 5.4km 13.622 E ± 5.6km

DEPTH = 10.0km (geophysicist)

AUSTRIA (546)

14d 04h

MD 3.1 (LJU), 2.5 (TRI), ML 2.9 (KBA).

Table with columns for station code (e.g., VOY, TRI, RBL), values, and units (e.g., iPg, eSg). Includes a summary row for AUG 14, 1989 05h 13m 03.11 ± 1.15s.

AUG 14, 1989 05h 13m 03.11 ± 1.15s
1.092 S ± 7.2km 78.396 W ± 24.3km
DEPTH = 10.0km (geophysicist)

Table with columns for station code (e.g., TUNG, RECU, QUR), values, and units. Includes a summary row for AUG 14, 1989 06h 34m 06.18 ± 0.53s.

AUG 14, 1989 06h 34m 06.18 ± 0.53s
46.000 N ± 5.3km 13.694 E ± 6.2km
DEPTH = 10.0km (geophysicist)

Table with columns for station code (e.g., VOY, TRI, RBL, CEY, LJU, RIY, FVI, KBA, VBY, PTJ, SCE, BHG, OGA, PRO, ARV, VKA, KHC), values, and units. Includes a summary row for AUG 14, 1989 07h 01m 26.40 ± 0.87s.

Table with columns for station code (WET, ZST, HVAR), values, and units. Includes a summary row for AUG 14, 1989 06h 47m 40.86 ± 0.48s.

AUG 14, 1989 06h 47m 40.86 ± 0.48s
46.020 N ± 5.5km 13.694 E ± 5.1km
DEPTH = 10.0km (geophysicist)

Table with columns for station code (AUSTRIA, VOY, TRI, RBL, CEY, LJU, RIY, FVI, KBA, VBY, PTJ, ZAG, SCE, BHG, OGA, PRO, SAL, OSS, ARV, VDL, KHC, WET, SAX, LLS, TMA, HVAR, MMK, RBL, FVI, RIY, VBY, SHU, CNPM), values, and units. Includes a summary row for AUG 14, 1989 08h 28m 23.81s.

AUG 14, 1989 08h 28m 23.81s
58.361 N 155.410 W
DEPTH = 129.7km
ALASKA PENINSULA (12)
<ACS-P>

Table with columns for station code (RDT, SLK, SEW, SUA, MTU, PLRM, FID, VZW, KLU), values, and units. Includes a summary row for AUG 14, 1989 09h 29m 50.11 ± 1.02s.

AUG 14, 1989 09h 29m 50.11 ± 1.02s
46.028 N ± 9.3km 13.684 E ± 11.5km
DEPTH = 10.0km (geophysicist)

Table with columns for station code (AUSTRIA, VOY, TRI, RBL, FVI, VBY), values, and units. Includes a summary row for AUG 14, 1989 09h 52m 16.14 ± 0.84s.

AUG 14, 1989 09h 52m 16.14 ± 0.84s
38.270 N ± 8.5km 20.788 E ± 8.9km
DEPTH = 10.0km (geophysicist)

Table with columns for station code (GREECE, MD 3.4 (ATH), VLS, ITM, KEK, NEO, KZN, OHR, PLG, VAY, SKO), values, and units. Includes a summary row for AUG 14, 1989 10h 50m 54.40 ± 0.95s.

AUG 14, 1989 10h 50m 54.40 ± 0.95s
46.040 N ± 8.8km 13.680 E ± 10.9km
DEPTH = 10.0km (geophysicist)

Table with columns for station code (AUSTRIA, MD 1.9 (TRI), ML 1.7 (LJU), VOY, TRI, RBL, FVI, VBY), values, and units. Includes a summary row for AUG 14, 1989 10h 51m 18.24 ± 0.57s.

AUG 14, 1989 10h 51m 18.24 ± 0.57s
46.025 N ± 6.0km 13.671 E ± 5.6km
DEPTH = 10.0km (geophysicist)

Table with columns for station code (AUSTRIA, ML 3.0 (KBA), MD 2.9 (LJU), (TRI), VOY, TRI, RBL, CEY, LJU, FVI), values, and units.

14d 17h

ASPA 46.47 256 iPd 31 10.40 0.7
 0.8s 33.00nm 5.3mb
 WB5 46.50 261 iPd 31 09.50 -0.5
 WARB 52.79 252 iPd 31 58.30 0.0
 0.3s 5.00nm 5.0mb
 NANU 63.35 254 eP 33 12.00 -0.3
 MAT 70.78 322 iPc 33 59.00 0.0
 CHTO 91.75 289 iP 35 49.80 0.0
 0.7s 3.18nm 4.8mb
 S.D. = 0.5 on 6 of 6 obs.

AUG 14, 1989 17h 51m 08.76±0.10s
 19.016 S ± 3.4km 176.652 E ± 2.8km
 DEPTH = 33.0km (normal)
 5.8mb (36 obs.) 5.9Msz (17 obs.)
 SOUTH OF FIJI ISLANDS (171)

Ms 6.0 (BRK), 5.7 (PAS).
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=148 Dip=82 Slip=-180
 NP2: 238 90 -352
 Principal Axes:
 T Plg= 6 Azm=103
 P 6 13

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

RADIATED ENERGY
 No. of sta: 8 Focal mech. F
 Energy 0.2±0.1*10**16 Nm
 MOMENT TENSOR SOLUTION
 Dep 19 No. of sta: 16
 Moment Tensor; Scale 10**18 Nm
 Mrr=-0.18 Mtt=-2.24
 Mff= 2.42 Mrt= 0.08
 Mrf= 0.42 Mtf= 1.19
 Principal axes:
 T Vol= 2.77 Plg= 8 Azm=283
 N -0.24 82 107
 P -2.53 1 14

Best Double Couple: Mo=2.6*10**18
 NP1: Strike= 59 Dip=84 Slip= 5
 NP2: 328 85 174
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 35C M.W.: 12S, 29C
 Centroid Location:
 Origin Time 17:51:13.2 0.2
 Lat 19.24S 0.02 Lon 176.83E 0.02
 Dep 15.0 FIX Half-duration 5.3
 Moment Tensor; Scale 10**18 Nm
 Mrr=-1.74 0.04 Mtt=-1.74 0.04
 Mff= 3.48 0.04 Mrt= 0.18 0.12
 Mrf= 0.54 0.16 Mtf= 1.19 0.03
 Principal Axes:
 T Vol= 3.79 Plg= 6 Azm=282
 N -1.78 74 33
 P -2.02 15 191
 Best Double Couple: Mo=2.9*10**18
 NP1: Strike=327 Dip=75 Slip=-174
 NP2: 236 84 -15

PVC 8.02 278 iPc 53 08.50 2.6
 DZM 10.03 251 iPc 53 34.60 0.7
 AFI 12.20 67 P 54 02.00 -1.3
 e 54 24.30
 HNR 18.77 298 eP 55 30.00 2.3
 KRP 18.87 183 P 55 30.20 1.5
 e 59 24.00
 SVO 19.03 299 eP 55 33.00 2.2
 VSG 19.06 298 eP 55 32.00 0.8
 HUTZ 19.55 181 P 55 38.30 1.5
 RATZ 19.80 182 P 55 41.70 2.3
 HATZ 19.81 181 P 55 41.10 1.6
 KETZ 20.03 182 P 55 43.70 1.8
 PGZ 21.53 181 P 55 56.10 -1.0
 1.1s 744.00nm 6.0mb
 CAW 22.06 183 P 56 02.00 -0.4
 MTW 22.09 182 P 56 01.60 -1.1
 WDW 22.23 183 P 56 03.10 -0.9
 RAR 22.24 100 P 56 05.00 0.7
 S 59 48.00
 WEL 22.26 184 iPc- 56 06.40 2.1
 S 00 02.00
 BLW 22.30 182 P 56 04.10 -0.7

MOW 22.36 183 P 56 05.70 0.2
 CCW 22.76 185 P 56 12.70 3.4X
 BRS 23.45 245 iPc 56 18.00 1.8
 iS 00 04.00
 iS 00 34.00
 COO 25.19 238 eP 56 36.00 3.0
 e 56 38.00
 e 56 46.40 0.6
 MSZ 26.60 194 Pd 57 42.00
 i 18 19.00
 e 56 49.00 1.6
 e 56 55.00
 RIV 27.08 232 e(P) 56 56.00 5.6X
 eS 01 32.00
 CTA 28.65 263 iPc+ 57 05.10 0.4
 1.1s 126.58nm 5.5mb
 i 57 14.00
 iS 01 55.20
 CAN 29.34 231 eP 57 11.90 1.0
 BWA 29.39 233 eP 57 10.20 -1.1
 PMG 30.10 284 eP 57 19.00 1.2
 1.4s 418.60nm 6.0mb
 CMS 30.41 240 eP 57 21.00 0.6
 e 57 25.00
 TBI 31.85 104 eP 57 43.00 10.0X
 1.4s 225.00nm 5.9mb
 AFR 31.89 93 eP 57 33.00 -0.4
 1.2s 130.00nm 5.7mb
 PAE 32.06 93 eP 57 35.00 0.1
 1.2s 115.00nm 5.6mb
 PPT 32.07 93 eP 57 35.00 -0.1
 1.2s 205.00nm 5.9mb
 Z 22s 33.00um 6.0Msz
 PPN 32.21 93 eP 57 36.00 -0.3
 1.2s 45.00nm 5.2mb
 STK 34.00 241 eP 57 53.00 1.3
 e 58 03.00
 PMO 34.10 89 iP 57 52.00 -0.7
 1.2s 140.00nm 5.8mb
 VAH 34.30 89 iP 57 53.40 -1.0
 1.2s 90.00nm 5.6mb
 TPT 34.36 89 iP 57 54.20 -0.8
 1.2s 125.00nm 5.7mb
 RUV 34.55 89 iP 57 55.60 -0.9
 1.2s 120.00nm 5.7mb
 OIS 34.85 261 iPc 57 58.00 -0.3
 e 58 05.00
 BFD 34.86 232 eP 57 59.80 0.8
 ADE 37.10 237 eP 58 19.50 1.4
 0.9s 63.87nm 5.5mb
 WB5 39.81 262 eP 58 39.00 -1.8
 i 58 50.50
 eS 04 46.20
 ASPA 39.98 256 iPc 58 41.40 -0.8
 0.8s 288.00nm 6.1mb
 Z 23s 50.57um 6.3MszX
 eS 04 37.60
 LR 12 27.30
 GUA 44.99 314 eP 59 22.30 -0.8
 1.5s 288.00nm 6.0mb
 FORR 45.26 245 eP 59 24.00 -1.1
 0.5s 53.00nm 5.7mb
 KNA 45.71 266 eP 59 28.00 -0.8
 0.8s 126.00nm 5.9mb
 WARB 46.49 252 eP 59 34.00 -0.9
 1.0s 223.00nm 6.1mb
 HON 47.14 33 P 59 46.00 6.0X
 AAI 49.70 282 eP 00 02.00 2.0
 COOL 51.24 245 eP 00 10.50 -1.1
 KUG 51.94 272 eP 00 22.50 5.5X
 0.8s 229.50nm 6.2mb
 MBL 53.16 257 eP 00 24.70 -1.4
 DRV 53.17 197 eP 00 24.80 -0.7
 KLB 54.13 244 eP 00 32.60 -0.5
 NWA0 54.55 243 iPc 00 35.90 -0.3
 1.0s 103.00nm 5.8mb
 eS 08 24.00
 RKG 54.72 241 eP 00 35.50 -2.0
 MNI 54.79 286 ePc 00 37.50 -0.6
 BAL 55.07 246 iPc 00 39.10 -0.9
 MUN 55.44 244 eP 00 42.00 -0.7
 Z 20s 17.60um 6.1Msz
 eS 08 32.00
 MRWA 55.77 247 eP 00 44.00 -1.1
 DAV 56.62 292 eP 00 51.00 -0.3
 NANU 56.91 255 iPc 00 53.70 0.4
 0.8s 132.00nm 6.0mb

MKS 57.32 276 iPc 00 56.50 0.2
 SBA 59.07 182 iPd 01 07.20 -0.5
 KHKI 60.00 271 eP 01 14.00 -1.0
 e 04 31.00
 QCP 64.13 297 eP 01 41.50 -1.0
 KKM 64.51 287 ePc 01 45.00 -0.2
 1.3s 133.50nm 5.9mb
 KAKJ 64.86 328 eP 01 46.10 -0.7
 CHJJ 65.34 327 P 01 49.20 -0.8
 BAG 65.42 299 eP- 01 50.00 -1.1
 1.1s 83.54nm 5.7mb
 eS 10 38.00
 IIDJ 65.47 326 P 01 50.00 -0.9
 MAJO 66.12 327 ePd 01 53.68 -1.3
 MAT 66.12 327 iPc 01 53.50 -1.5
 1.3s 273.08nm 6.2mb
 eS 10 49.00
 NIIJ 66.25 328 eP 01 55.90 0.1
 MTMJ 66.37 327 P 01 55.60 -1.1
 KAGJ 66.50 318 eP 01 56.00 -1.5
 TSRJ 66.55 325 eP 01 57.50 -0.2
 KUMJ 67.44 319 eP 02 03.30 -0.2
 SHK 67.71 322 ePd 02 04.80 -0.3
 SHNJ 68.36 320 eP 02 08.80 -0.3
 TATO 69.24 307 ePd 02 14.20 -0.6
 ANP 69.33 307 eP 02 16.00 0.5
 ADK 70.83 4 eP 02 23.40 -0.5
 1.3s 358.50nm 6.3mb
 SPA 71.10 180 e(P) 02 24.80 -0.9
 0.8s 268.75nm 6.4mb
 Z 20s 6.31um 5.9Msz
 QZH 71.42 306 Pd 02 27.50 -0.6
 8.0s 2.70nm 3.3mb X
 Z 42s 13.50um 5.9MszX
 N 22s 7.50um
 S 11 38.00
 SMY 71.48 358 P 02 29.80 2.1
 SSE 72.92 312 Pd 02 37.00 0.2
 5.0s 1.70nm 3.3mb X
 Z 20s 5.10um 5.8Msz
 N 18s 2.40um
 E 20s 3.40um
 sP 02 59.00
 S 12 05.00
 sS 12 33.00
 SS 16 56.00
 HKC 73.58 301 eP 02 41.00 0.1
 GZH 74.63 301 Pd 02 47.00 0.1
 5.0s 3.00nm 3.5mb X
 Z 32s 4.10um 5.5MszX
 N 12s 1.50um
 E 11s 2.20um
 KGM 74.94 277 ePc 02 49.50 0.6
 NJ2 75.10 312 Pc 02 50.50 1.0
 4.0s 1.80nm 3.4mb X
 Z 22s 6.30um 5.9Msz
 N 21s 2.70um
 E 18s 5.00um
 OIZ 75.67 296 Pd 02 53.00 0.0
 N 23s 4.10um
 E 24s 4.50um
 ePP 05 45.00
 eS 12 27.00
 SS 17 17.00
 MDJ 76.49 327 ePd 02 58.22 1.2
 N 20s 3.80um
 E 25s 2.90um
 SDN 76.57 13 eP 02 56.40 -0.8
 DL2 77.26 319 iP 03 02.00 0.6
 E 20s 2.40um
 WHN 77.55 309 Pd 03 03.00 -0.2
 5.0s 3.21nm 3.6mb X
 Z 26s 11.50um 6.1MszX
 N 20s 4.70um
 E 23s 10.80um
 SNY 77.90 322 iPd 03 05.00 0.1
 5.0s 2.30nm 3.5mb X
 Z 24s 6.40um 5.9MszX
 N 24s 4.10um
 E 24s 4.80um
 pP 03 28.00 87kmX
 IPM 77.97 279 ePd 03 05.00 -0.9
 1.0s 132.30nm 5.9mb
 CN2 78.12 325 iPd 03 06.00 -0.1
 5.0s 2.90nm 3.6mb X
 Z 22s 5.00um 5.8Msz
 N 15s 1.20um

14d 18h

Table with 5 columns (Station, Time, Depth, Magnitude, Direction) listing seismic stations and their data. Includes stations like WHN, PRI, MAW, etc.

Table with 5 columns (Station, Time, Depth, Magnitude, Direction) listing seismic stations and their data. Includes stations like MTMJ, SPA, WHN, etc.

Table with 5 columns (Station, Time, Depth, Magnitude, Direction) listing seismic stations and their data. Includes stations like MA10, AYN, BADA, etc.

* AUG 14, 1989 19h 02m 33.44±0.50s
19.032 S ±11.2km 176.862 E ±10.6km
DEPTH = 33.0km (normol)
5.3mb (5 obs.)

SOUTH OF FIJI ISLANDS (171)

Table with 5 columns (Station, Time, Depth, Magnitude, Direction) listing seismic stations and their data. Includes stations like PVC, DZM, BRS, etc.

* AUG 14, 1989 19h 57m 29.79±1.54s
31.364 N ±10.9km 49.400 E ±16.8km
DEPTH = 50.6 ± 17.7 km
4.2mb (3 obs.)

WESTERN IRAN (347)
Felt in the Haft Gel area.

Table with 5 columns (Station, Time, Depth, Magnitude, Direction) listing seismic stations and their data. Includes stations like KER, BHD, TEH, etc.

& AUG 14, 1989 20h 07m 20.18s
56.917 N 142.698 W
DEPTH = 10.0km (geophysicist)
GULF OF ALASKA (15)
<AGS-P>. ML 3.8 (PMR).

Table with 5 columns (Station, Time, Depth, Magnitude, Direction) listing seismic stations and their data. Includes stations like YKU, MID, HQN, etc.

53 obs. associated				ASPA 34.11 260 iPc 56 12.10 -0.7 0.8s 42.00nm 5.3mb				TRI 0.27 172 iPgc 02 31.10 -0.7 iSg 02 35.70			
AUG 14, 1989 20h 29m 11.84±0.95s 46.008 N ± 7.8km 13.642 E ± 9.9km DEPTH = 10.0km (geophysicist)				WB5 34.18 267 eP 56 12.00 -1.4 FORR 39.13 248 eP 56 54.00 -0.9 WARB 40.49 255 eP 57 06.00 -0.2 MBL 47.34 261 eP 58 00.80 -0.5 CHTO 81.31 294 eP 01 43.50 1.2 1.0s 4.50nm 4.2mb				RIY 0.79 143 e(Pg) 02 42.00 0.6 i 02 42.80 iSg 02 53.50 VVI 0.90 271 P 02 43.50 0.3 eSg 02 54.10 KBA 1.13 347 ePg 02 45.00 -2.3 iSg 03 59.90 PTJ 1.57 92 ePn 02 55.70 1.6 eSn 03 17.20 SCE 1.74 308 ePn 02 56.90 0.3 BHG 1.83 342 eP 02 59.00 1.2 OGA 2.06 297 iPc 03 03.00 1.7 ARV 2.54 193 P 03 06.90 -1.1 KHC 3.15 358 ePg 03 15.50 -1.2 Sg 04 05.20 HVAR 3.42 144 iPn 03 19.80 -0.6 iSn 04 02.40			
AUSTRIA (546) ML 1.8 (KBA).				KSP 145.18 332 ePKP 09 00.50 -1.9 BRG 146.16 334 iPKP 09 03.50 -0.5 1.0s 10.00nm CLL 146.21 335 iPKPd 09 03.50 -0.5 1.1s 10.00nm				S.D. = 1.4 on 11 of 11 obs.			
VOY 0.18 82 iPgc 29 15.60 -0.3 eSg 29 19.00				PRU 146.58 332 PKP 09 04.50 -0.2 KHC 147.63 332 iPKPd 09 08.00 1.5 SKO 147.72 315 ePKP 09 09.00 2.2X BNG 148.00 241 iPKPc 09 09.40 1.3 0.3s 10.00nm id 09 13.20				? AUG 15, 1989 00h 46m 22.45±0.74s 21.883 S ±19.7km 175.145 W ±15.5km DEPTH = 38.9km (4 depth phases) 5.0mb (7 obs.) 5.1msz (2 obs.)			
TRI 0.31 164 P 29 17.50 -0.8 eSg 29 23.30				KBA 149.25 329 iPKPd 09 11.20 1.9X 0.7s 5.10nm				TONGA ISLANDS (173)			
RBL 0.44 353 Pd 29 19.50 -1.3 eSg 29 25.70				VOY 149.73 327 ePKP 09 12.50 2.6X				S.D. = 1.4 on 16 of 21 obs.			
FVI 0.84 315 P 29 28.70 0.7 eSg 29 38.50				? AUG 14, 1989 23h 15m 24.48±14.22s 11.151 N ±86.3km 85.866 W ±69.6km DEPTH = 133.2 ± 55.5 km				Z 18s 1.49um 5.0msz ePp 55 10.20 87kmX LR 14 12.10			
KBA 1.09 349 ePg 29 33.00 0.5 iSg 29 48.60				NICARAGUA (75) MD 4.4 (SJR).				DZM 17.08 266 iPd 50 26.70 6.6X BWA 34.29 241 eP 53 04.70 -2.6 CTA 36.02 266 iPd 53 21.90 -0.3 0.9s 20.17nm 5.0mb eS 59 29.00			
VBV 1.24 113 ePg 29 35.90 1.1 eSg 29 51.70 eSn 29 54.70				JUD 1.03 162 iPd 15 48.30 -0.1 S 16 08.90 AR6 1.18 127 iPd 15 00.00 0.2 S 16 16.90				Z 18s 1.49um 5.0msz ePp 55 10.20 87kmX LR 14 12.10			
S.D. = 1.2 on 6 of 6 obs.				JTS 1.24 134 iP+ 15 49.80 -0.5 S 16 23.20				WB5 47.05 263 eP 54 49.10 -1.5 WRA 47.06 263 Pc 54 50.40 -2.1 0.7s 6.00nm 4.7mb FORR 51.17 247 eP 55 22.70 -1.3 0.4s 9.00nm 5.1mb GUMO 52.74 308 eP 55 36.20 0.2 NANU 63.61 255 iPd 56 51.20 -0.9 SPA 68.25 180 ePd 57 23.70 2.4 1.0s 13.50nm 5.0mb MAT 72.91 322 (P) 57 48.00 -1.7 PRS 77.02 42 eP 58 10.70 -2.4 e 58 22.90 41km CMB 78.71 41 ePc 58 21.00 -1.5 e 58 32.00 36km WDC 79.07 38 eP 58 23.30 -1.1 e 58 33.80 34km TNP 80.70 43 P 58 43.00 9.6X 0.8s 4.12nm 4.5mb MDJ 83.19 324 eP 58 47.50 1.6 CN2 85.03 321 Pc 58 56.00 0.9 3.0s 0.30nm 2.9mb X Z 13s 0.60um 5.2msz X N 12s 0.30um sP 59 10.50			
% AUG 14, 1989 21h 26m 34.24±2.29s 31.220 S ±17.0km 68.686 W ±16.3km DEPTH = 104.6 ± 28.3 km				EPA 1.70 133 iPd 15 55.70 0.2 S 16 21.90 SRA 1.75 127 iPd 15 54.40 -1.8 POA2 1.86 121 eP 15 57.90 0.2 S 16 25.50 HDC2 2.04 123 eP 16 00.00 0.3 S 16 29.40 SJS 2.15 124 iPc 16 01.20 0.1 S 16 38.50				PV10 86.18 46 P 59 05.00 3.6X ALQ 86.21 50 e(P) 59 02.00 0.5 1.0s 9.00nm 5.0mb e 59 15.50 46km e 59 26.00 e 59 30.50			
SAN JUAN PROVINCE, ARGENTINA (137)				IRZ2 2.26 121 eP 16 02.20 -0.5 S 16 34.80 LCR2 2.31 127 iPd 16 03.30 0.2 ICR 2.32 120 eP 16 04.70 1.3 S 16 41.90 QPS 2.44 135 eP 16 04.70 0.2 S 16 38.80 CDM 2.61 127 iP+ 16 07.60 0.5 S 16 43.20 JCR 3.00 115 iPc 15 54.00 -17.9X IDC 3.12 141 iPd 16 13.50 0.1 TIG 3.29 129 iP+ 16 16.10 0.4 ACR 3.64 133 iPc 16 19.80 -0.5 S 17 11.80 CTCR 3.79 126 iP+ 16 22.20 -0.3 PBC 3.89 134 eP 16 23.20 -0.5				PNT 86.34 33 eP 59 01.00 -0.6 SNG 87.33 279 eP 59 08.10 1.0 BJI 88.75 314 eP 59 14.00 0.7 Z 12s 0.60um 5.2msz X FBA 89.04 11 P 59 13.40 -0.8 GOL 89.31 46 P 59 20.00 3.6X GYA 89.65 299 P 59 20.60 2.5 TIY 90.19 311 eP 59 21.20 0.9 Z 20s 0.80um 5.1msz E 16s 0.50um			
YUGOSLAVIA (383) ML 2.3 (TTG).				* AUG 14, 1989 23h 30m 06.69±1.10s 21.022 S ± 7.1km 70.440 W ±18.0km DEPTH = 33.0km (normal)				XAN 91.09 306 Pd 59 26.10 1.6 RSSD 92.32 43 P 59 40.00 9.9X KMI 92.35 296 Pd 59 33.50 2.8X BDT 92.58 287 eP 59 34.00 2.5 CHG 93.21 289 eP 59 36.80 2.3 INK 94.92 14 eP 59 41.00 -0.3			
BRY 0.33 218 ePg 27 05.40 -1.1 iSg 27 11.50				NEAR COAST OF NORTHERN CHILE (122)				S.D. = 0.7 on 19 of 20 obs.			
NKY 0.37 160 ePg 27 07.00 -0.3 eSg 27 14.80				ANT 2.67 180 ePd 30 48.80 0.5 ARE 4.64 347 eP 31 16.00 -0.7 iS 32 07.30				? AUG 14, 1989 22h 49m 36.88±4.51s 22.136 S ±29.3km 170.954 E ±30.7km DEPTH = 113.3 ± 31.5 km 4.6mb (3 obs.)			
PLE 0.45 68 iPgd 27 07.00 -1.8 iSg 27 14.00				CNCB 4.79 29 eP 31 19.00 0.0 i 31 20.10 LPB 4.99 27 P 31 23.00 1.4 1.3s 500.00nm				LOYALTY ISLANDS REGION (189)			
TTG 0.80 156 ePg 27 13.90 -1.2 eSg 27 27.00				ZOBO 5.21 25 P 31 24.40 -0.6 SLA 5.86 130 ePc 31 33.10 -0.7 PPD 17.83 97 e(P) 34 21.00 7.0X				DZM 4.18 270 iPc 50 39.70 -0.1 iS 51 28.20			
IVA 0.84 110 ePg 27 16.30 0.4 eSg 27 29.30				S.D. = 1.1 on 6 of 7 obs.				BRS 17.31 249 iPd 53 37.10 4.1X RMQ 20.68 253 eP 54 13.00 3.3X i 54 15.50			
BDV 0.88 180 ePg 27 16.60 0.1 eSg 27 31.00				AUG 15, 1989 00h 02m 26.01±0.66s 45.979 N ± 6.5km 13.710 E ± 8.5km DEPTH = 10.0km (geophysicist)				CTA 23.13 270 eP 54 36.00 2.2 0.8s 19.40nm 4.5mb			
BCI 1.21 131 ePg 27 23.10 0.9 SDA 1.25 156 ePn 27 30.80 8.0X				NORTHERN ITALY (545) ML 2.8 (KBA). MD 2.8 (TRI).				CAN 23.24 231 eP 54 36.80 1.9 BWA 23.26 233 eP 54 33.90 -1.2			

LWI	146.50	227	iPKPc	06 02.90	2.0	* AUG 15, 1989 02h 56m 13.57± 1.32s	PLG	5.83	206	ePn	16 30.20	-0.9
KRA	149.47	341	ePKP	06 08.90	4.7X	0.063 S ± 9.0km	KKS	5.85	234	ePn	16 32.20	1.0
KSP	149.74	346	ePKP	06 09.50	4.9X	DEPTH = 10.0km	EZN	5.85	184	ePn	16 31.10	-0.1
CFR	149.92	326	ePKPd	06 10.00	5.0X	(geophysicist)	BCI	5.87	238	ePn	16 35.00	3.6X
CLL	149.95	350	iPKP	06 09.30	4.4X	ECUADOR	PHP	6.09	231	ePn	16 32.90	-1.6
							PUK	6.17	236	ePn	16 39.50	3.9X
SPC	150.13	340	e(PKP)	06 10.70	5.2X	CAYA	0.22	311	iP+	56 18.33	-0.2	
VRI	150.15	328	ePKPd	06 10.50	5.1X				S	56 23.70		
BRG	150.20	348	iPKP	06 10.50	5.2X	COTA	0.65	307	iP+	56 27.00	0.1	
	1.5s	26.00nm				OUR	0.72	261	iPd	56 28.50	0.5	
			i	06 22.00					eS	56 38.50		
			i	06 33.00		GGP	0.79	262	iPd	56 29.60	0.3	
BBTK	150.28	313	iPKPc	06 11.50	5.6X	RECU	0.94	233	iP+	56 30.50	-1.4	
BHL	150.38	301	PKPc	06 12.50	6.3X				eS	56 41.40		
HRI	150.47	299	ePKP	06 13.00	6.6X	TUNG	1.48	205	P	56 41.60	1.0	
MLR	150.80	329	ePKPc	06 12.50	5.9X	ZOBO	18.73	150	eP	00 35.00	-0.2	
MASJ	150.85	296	PKP	06 13.20	6.2X	S.D. = 0.9 on 7 of 7 obs.						
KFNJ	150.85	296	PKP	06 13.10	6.3X	AUG 15, 1989 04h 15m 05.58± 0.29s	LIT	6.40	211	ePn	16 39.30	0.5
PRU	150.93	347	PKP	06 12.50	6.1X	45.668 N ± 2.7km	SDA	6.41	238	ePn	16 41.50	2.5
			e	06 34.00		DEPTH = 115.2 ± 3.8 km	PRK	6.43	184	ePn	16 40.00	0.8
HOF	151.09	351	ePKP	06 12.90	6.2X	4.4mb (19 obs.)	KZN	6.50	216	ePn	16 40.00	-0.3
PRNI	151.72	294	ePKP	06 16.00	7.7X	ROMANIA	NEO	6.88	204	ePn	16 43.50	-1.9
GRF	151.79	351	ePKP	06 15.50	7.8X		ZST	7.10	294	eP	16 40.20	-8.1X
			e	06 23.90		Felt (III) of Bucharest.	IZM	7.27	177	P	16 48.00	-2.8
			e	06 23.90			BBTK	7.29	141	eP	16 56.00	5.0X
DOU	151.84	0	PKP	06 27.20	19.4X				iS	18 15.00		
MBH	151.92	292	ePKP	06 16.20	7.7X	VRI	0.21	346	iPc	15 21.50	0.3	
KHC	151.94	348	iPKP	06 14.60	6.6X	BRD	0.23	130	iPd	15 23.00	1.7	
ZST	151.97	342	e(PKP)	06 14.50	6.5X	FOC	0.27	84	iPc	15 21.00	-0.4	
			e	06 24.70		CVO	0.46	290	iPc	15 22.00	-1.0	
WLF	152.26	358	PKP	06 26.00	17.7X	ISR	0.56	198	iPd	15 24.00	0.3	
BZS	152.64	334	ePKP	06 15.50	6.5X	MLR	0.62	254	ePc	15 23.20	-1.1	
OHR	156.57	329	ePKP	06 07.00	-7.6X	PPE	0.79	46	iPd	15 27.00	1.5	
BNG	158.16	219	ePKPc	06 17.60	0.3	BIR	0.83	44	iPd	15 27.00	1.1	
	0.7s	9.00nm				BAC	0.90	5	iPc	15 25.00	-1.5	
			id	06 51.00		CLI	0.95	21	iPc	15 27.00	0.0	
						CFR	1.07	116	iPd	15 29.00	0.8	
S.D. = 1.6 on 31 of 62 obs.						CMP	1.30	253	iPc	15 32.00	1.2	
						PTT	1.30	348	iPc	15 30.00	-0.7	
* AUG 15, 1989 01h 46m 15.56± 0.92s						BUC	1.35	202	iPd	15 32.00	0.7	
34.870 N ± 9.2km 139.243 E ± 9.0km						BUC1	1.43	203	iPc	15 32.50	0.3	
DEPTH = 10.0km (geophysicist)						IAS	1.62	19	iPc	15 34.00	-0.4	
NEAR S. COAST OF HONSHU, JAPAN (230)						MDB	1.75	287	iPc	15 35.00	-1.1	
MG 3.2 (JMA). Felt (I JMA) on						DRA	2.05	242	iPc	15 40.00	0.1	
Oshimo.						PSN	2.22	153	iPd	15 45.00	2.9	
						PVL	2.66	204	iP	15 49.00	1.1	
OSH	0.16	134	eP	46 19.00	-0.2				iS	16 17.00		
			S	46 22.40		GZR	2.84	266	iPc	16 25.50	35.2X	
CHJJ	1.19	350	iPd	46 36.70	-1.1	BMR	3.03	313	iPc	15 52.00	-0.8	
			S	46 52.40		CEI	3.60	306	eP	16 45.00	44.5X	
IIDJ	1.25	300	iPd	46 37.50	-1.3	BZS	3.63	271	iPc	15 59.00	-1.9	
			S	46 54.10		PGB	3.65	212	iPd	16 01.00	-0.2	
KAKJ	1.53	29	P	46 42.60	-0.3	DIM	3.73	195	eP	16 02.00	-0.3	
			eS	47 01.80					eSg	16 56.00		
MAT	1.87	334	iPd	46 47.70	-0.2	PLD	3.87	204	eP	16 04.00	-0.1	
			iS	47 12.20					iS	16 32.00		
MTMJ	2.07	326	iPd	46 51.70	0.8	TIM	3.91	273	eP	16 35.00	30.4X	
			S	47 20.00		VTS	4.02	221	iPd	16 52.00	45.7X	
NIIJ	2.37	355	P	46 56.60	1.5				iS	17 33.00		
TSRJ	2.75	285	P	47 01.30	0.8	KDZ	4.14	194	iPc	16 00.00	0.2	
			eS	47 33.30					iSg	16 52.00		
S.D. = 1.1 on 8 of 8 obs.						RZN	4.25	201	iPc	16 09.00	-0.6	
						BEO	4.56	262	ePn	16 12.50	-1.0	
* AUG 15, 1989 02h 10m 45.49± 0.76s						RDO	4.61	192	ePn	16 13.70	-0.6	
36.676 N ± 9.5km 71.388 E ± 13.4km						MMB	4.65	210	iPb	16 15.00	0.2	
DEPTH = 33.0km (normol)									eS	16 55.00		
4.6mb (4 obs.)						KKB	4.65	217	iPd	16 15.00	0.1	
AFGHANISTAN-USSR BORDER REGION (717)									S	16 51.00		
QUE	7.46	211	eP	12 34.50	-0.4	CTT	4.67	165	ePn	16 14.50	-0.6	
			eS	13 52.60		ALN	4.80	187	ePnc	16 17.60	0.8	
NDI	9.36	147	eP	13 00.00	-1.1	ITU	4.84	160	ePn	16 20.00	2.7	
MAIO	9.59	271	eP	13 04.00	-0.3				iSg	17 11.00		
			eS	14 42.00		ISK	4.89	159	ePn	16 16.50	-1.5	
HYB	20.20	160	eP	15 15.50	-4.9X	SRS	5.11	208	iPnd	16 21.60	0.5	
GBA	23.61	165	P	15 56.00	1.7	GBZT	5.25	157	ePn	16 23.00	0.1	
			S	19 32.00					iSg	17 22.00		
NUR	37.87	324	iP	18 01.20	0.6	PSZ	5.25	298	eP	16 19.00	-4.0X	
SUF	37.94	328	eP	18 01.00	-0.2	VAY	5.32	217	iPn	16 23.40	-0.5	
	0.6s	2.50nm				KNT	5.32	214	ePnc	16 24.10	0.1	
KRA	38.96	307	eP	18 10.80	0.9				eSn	17 21.50		
BRG	42.76	308	i(P)	18 42.00	0.8	SKO	5.35	228	ePn	16 21.00	-3.4X	
	0.8s	10.00nm							i	17 14.50		
HFS	43.12	322	eP	18 43.20	-0.8	EDC	5.38	171	iPn	16 24.50	-0.2	
	0.5s	8.20nm				YLV	5.44	159	iPn	16 19.00	-6.6X	
NB2	44.43	323	P	18 53.60	-1.1	SPC	5.67	311	iP	16 27.60	-1.3	
	0.5s	5.70nm				GRG	5.70	216	ePn	16 30.10	1.0	
S.D. = 1.1 on 10 of 11 obs.						OUR	5.72	202	ePn	16 29.40	0.0	
									eSn	17 30.30		
						THE	5.76	210	ePn	16 30.60	0.6	

Z	17s	0.03um	5.3mszX
BGF	16.62	282 eP	18 52.60 -0.2
MAF	16.85	281 eP	18 55.80 0.2
TCF	17.09	281 eP	18 58.90 0.3
SUF	17.09	359 iP	18 53.50 -4.9X
MBH	17.09	155 eP	18 58.50 -0.2
CAF	17.40	276 eP	19 03.30 0.9
LSF	17.56	281 eP	19 03.70 -0.6
RJF	17.71	278 eP	19 06.40 0.2
NB2	17.91	335 P	19 03.60 -4.9X
LFF	18.32	277 eP	19 12.50 -0.8
LDF	18.51	289 eP	19 12.40 -3.0X
MFF	18.67	283 eP	19 13.40 -3.7X
FLN	18.75	289 eP	19 14.80 -3.2X
GRR	19.01	288 eP	19 17.00 -3.7X
EPF	19.07	272 eP	19 20.30 -1.2
LPF	19.15	287 eP	19 19.00 -3.1X
RGS	19.72	338 eP	19 19.00 -9.0X
MOL	20.20	334 iP	19 31.80 -1.1
NSS	20.62	342 iP	19 35.20 -1.9
SOD	21.76	360 iP	19 49.20 0.8
LOF	23.55	348 iP	20 11.90 6.1X
TRO	24.35	353 iP	20 14.70 1.2
BNG	41.70	192 iPc	22 44.50 0.1
ALE	44.92	349 eP	23 11.00 1.3
KIC	47.74	225 Pc	23 32.10 -0.5
LIC	48.00	225 Pc	23 34.10 -0.5
INK	65.40	352 eP	25 37.00 -0.1
S.D. = 1.2 on 100 of 145 obs.			

* AUG 15, 1989 04h 32m 45.76±0.54s
 20.006 N ±11.2km 70.951 W ±9.8km
 DEPTH = 33.0km (normol)
 4.2mb (2 obs.)

DOMINICAN REPUBLIC REGION (88)

MGP	4.16	118 P	33 53.20 4.7X
APR	4.28	110 P	33 52.00 1.8
PNP	4.48	115 P	33 52.20 -0.9
LPR	5.09	109 P	34 01.00 -0.9
RSCP	20.18	323 eP	37 26.50 6.1X
FVM	24.63	321 (P)	38 21.00 16.5X
UYO	25.16	309 iPc	38 10.00 0.4
GAC	25.90	353 eP	38 16.50 0.1
ALQ	34.63	303 e(P)	39 34.50 0.1
GOL	35.43	311 eP	39 41.00 -0.2
ZOBO	36.15	175 P	39 49.00 1.2
LPB	36.42	175 P	39 50.00 0.2
CNCB	36.70	175 P	39 51.00 -1.4
EDM	46.42	326 eP	41 10.50 -0.5
S.D. = 1.0 on 11 of 14 obs.			

? AUG 15, 1989 05h 13m 23.41±1.00s
 72.237 N ±21.5km 0.142 W ±26.5km
 DEPTH = 10.0km (geophysicist)

JAN MAYEN ISLAND REGION (639)

MD	3.2	(BER)
LOF	6.20	125 eP 14 57.00 -0.1
DAG	6.72	321 eP 15 04.40 0.0
NSS	8.91	144 iP 15 35.30 0.3
MDL	10.14	159 eP 15 51.70 -0.2
S.D. = 0.4 on 4 of 4 obs.		
? AUG 15, 1989 06h 37m 27.69±5.48s		
35.316 N ±49.0km 22.172 E ±37.6km		
DEPTH = 10.0km (geophysicist)		
MEDITERRANEAN SEA (400)		
VAM	1.66	86 eP 37 57.00 0.1

ITM	1.87	354 eP 38 01.50 1.5
VLS	3.13	336 eP 38 17.50 -0.4
KZN	4.99	356 eP 38 44.50 0.0
VAY	6.00	3 eP 38 57.50 -1.1
S.D. = 1.4 on 5 of 5 obs.		

& AUG 15, 1989 07h 02m 58.63s		
11.602 N 86.856 W		
DEPTH = 146.3km		
NEAR COAST OF NICARAGUA (74)		
<HDC>		
JUD	1.92	138 iPd 03 33.60 0.5
JTS	2.28	125 eP 03 37.40 0.1
CAO	2.56	137 iPd 03 40.70 -0.1
EPA	2.74	126 eP 03 42.90 -0.2
HDC2	3.10	120 eP 03 48.30 0.4
IRZ2	3.33	119 eP 03 51.40 0.3
QPS	3.46	129 eP 03 52.80 0.5
CDM	3.66	124 eP 03 56.10 0.7
8 obs. associated		

* AUG 15, 1989 07h 53m 57.90±0.41s
 21.974 S ±14.2km 175.042 W ±9.5km
 DEPTH = 33.0km (normol)
 5.1mb (13 obs.) 4.9msz (4 obs.)

TONGA ISLANDS (173)

RAR	14.22	90 P 57 09.00 -10.1X
DZM	17.17	266 iPc 58 03.00 6.0X
MSZ	26.64	208 eP 59 42.40 7.1X
BRS	29.68	253 iPd 00 04.80 1.7
RMO	33.25	255 eP 00 36.00 1.6
CTA	36.11	266 iPd 00 59.40 0.4
OIS	42.17	263 iPd 01 49.10 -0.2
ASPA	46.89	258 iPc 02 26.20 -1.0
Z	19s	1.61um 5.0msz
WB5	47.13	263 eP 02 28.00 -1.1
WRA	47.14	263 Pd 02 28.00 -1.2
FDRR	51.22	247 iPd 02 59.70 -0.8
MTN	51.94	271 eP 03 04.00 -2.2
WARB	53.03	253 eP 03 13.00 -1.2
KNA	53.30	266 eP 03 15.00 -1.2
COOL	57.17	247 eP 03 43.00 -1.2
KLB	59.94	245 eP 04 02.50 -0.9
MBL	60.14	258 eP 04 03.30 -1.6
BAL	60.99	246 eP 04 10.00 -0.6
MUN	61.19	245 eP 04 11.40 -0.5
NANU	63.68	255 iPd 04 28.50 -0.1
SPA	68.16	180 e(P) 04 58.80 1.9
MAT	73.04	322 (P) 05 25.00 -1.6
ADK	73.55	359 P 05 27.00 -2.1
BCH	77.10	43 P 05 50.00 0.1
PRI	77.34	42 e(P) 05 51.00 -0.2
MHC	77.50	41 e(P) 05 52.20 0.1
PLM	78.11	47 eP 06 03.00 7.4X
SBB	78.26	45 eP 06 03.00 6.7X
ISA	78.43	44 eP 05 56.00 -1.2
FRI	78.47	42 e(P) 05 56.90 -0.4
CMB	78.71	41 ePc 05 58.80 0.1
ORV	79.02	39 e(P) 05 59.90 -0.3
WDC	79.09	38 eP 06 00.60 0.0
CLC	79.09	44 eP 06 01.00 0.2
MIN	79.47	39 eP 06 02.50 -0.4
TNP	80.70	43 P 06 09.70 0.1

MAW	81.10	199 eP 06 12.00 1.1
MDJ	83.32	324 eP 06 24.50 1.8
CN2	85.16	321 Pd 06 32.00 0.1
Z	20s	0.20nm 3.0mbX
Z	18s	0.30um 4.7msz
PMR	85.84	12 P 06 34.70 -0.3
DPW	86.17	34 P 06 37.20 0.2
ALQ	86.20	50 eP 06 37.90 0.3
Z	20s	0.35um 4.8msz
TIA	86.31	311 eP 06 40.00 2.1
PNT	86.36	33 eP 06 38.00 0.1
BJI	88.88	314 eP 06 51.50 1.4
FBA	89.11	11 P 06 50.30 -0.4
GOL	89.31	46 P 06 50.00 -2.6
GLD	89.43	46 P 06 53.00 0.0
TIY	90.32	311 eP 06 58.50 1.5
Z	24s	0.80um 5.1mszX
XAN	91.22	306 P 07 03.00 1.8
MEO	91.85	53 e(P) 07 03.70 -0.4
EDM	91.87	32 eP 07 04.00 0.3
RSSD	92.32	43 P 07 06.40 0.1
HHC	92.36	313 eP 07 08.00 1.6
KMI	92.47	296 Pd 07 10.00 2.6
CHG	93.33	289 eP 07 14.00 2.8
INK	94.99	14 eP 07 17.00 -0.7
MSL	143.94	302 ePKPd 13 29.50 -2.4
LWI	146.51	227 ePKPc 13 40.30 3.2X
KAS	148.99	315 iPKPc 13 45.60 5.5X
KRA	149.59	341 ePKP 13 46.20 5.6X
KSP	149.85	346 iPKPc 13 46.50 5.5X
CLL	150.05	350 iPKPc 13 47.10 5.9X
SPC	150.25	340 e(PK) 13 42.60 0.7
VRI	150.28	328 ePKPd 13 47.70 5.9X
BRG	150.31	348 ePKP 13 42.50 0.9
BBTK	150.41	313 ePKP 13 48.50 6.2X
HR1	150.60	299 ePKP 13 49.50 6.7X
MLR	150.93	329 ePKPd 13 48.50 5.5X
PRU	151.04	347 PKP 13 49.50 6.7X
HOF	151.20	351 iPKPd 13 50.20 7.2X
DSI	151.29	296 ePKP 13 52.00 8.3X
SNF	151.51	1 PKP 13 50.30 6.9X
CMP	151.53	329 ePKPc 13 53.00 9.3X
DOU	151.93	0 PKP 13 51.20 7.1X
MBH	152.04	292 ePKP 13 53.20 8.3X
KHC	152.05	348 iPKPc 13 52.20 7.8X
SRO	152.07	341 ePKP 13 51.20 6.8X
ZST	152.08	343 e(PK) 13 51.70 7.3X
WLF	152.35	358 PKPc 13 52.60 7.9X
BZS	152.76	334 ePKP 13 53.00 7.6X
SKO	155.73	329 ePKP 13 50.00 0.4
OHR	156.70	329 ePKP 13 36.80 -14.2X
BNG	158.15	219 ePKPd 13 54.30 0.8
F	0.6s	14.00nm 14 04.30
F	1.0s	14 28.20
F	1.1s	14 45.70
S.D. = 1.2 on 57 of 84 obs.		

AUG 15, 1989 09h 31m 44.62±0.93s		
48.320 N ±5.7km 7.670 E ±7.1km		
DEPTH = 10.0km (geophysicist)		
FRANCE (538)		
ML 2.4 (LDG). MD 1.7 (STR).		
WLS	0.23	294 Pg 31 49.97 0.4
CDF	0.28	290 Pg 31 50.81 0.3
ECH	0.36	253 Pg 31 51.59 -0.4
FEL	0.50	153 Pg 31 54.47 -0.3

15d 09h

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations MOF, GWF, BSF, HAU, LOMF, VITF.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations PDCR, SBA, SNA, ITR, MRX, UYO, MEO, MAW, GLA, BAR, ALO.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations MAT, BHD, MSL, SNG, MDJ, SLY, TAB, CN2.

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

AUG 15, 1989 10h 04m 22.31 ± 0.25s
38.307 S ± 6.7km 93.822 W ± 4.9km
DEPTH = 10.0km (geophysicist)
5.4mb (19 obs.) 5.3msz (7 obs.)

WEST CHILE RISE (686)

Ms 5.3 (BRK).

CENTROID, MOMENT TENSOR (HRV)

Date Used: GDSN

L.P.B.: 18S, 34C

Centroid Location:

Origin Time 10:04:23.5 0.2

Lat 38.04S 0.04 Lon 93.33W 0.04

Dep 15.0 FIX Half-duration 2.3

Moment Tensor: Scale 10**17 Nm

Mrr=-1.95 0.06 Mtt=-0.78 0.08

Mff= 2.72 0.07 Mrt=-0.50 0.17

Mrf=-0.90 0.27 Mtf=-0.33 0.06

Principol Axes:

T Vol= 2.90 Plg=10 Azm= 86

N -0.60 20 180

P -2.31 67 331

Best Double Couple: Mo=2.6*10**17

NP1: Strike=153 Dip=39 Slip=-123

NP2: 13 58 -66

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations RSCP, GBTN, PLM, TPC, RVR, MWC, SBB, FVM, BLA, GSC, SYP, CLC, ISA, BCH, PRI, GOL.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations GLD, PRS, FRI, LLA, TNP, MHC, CMB, BKS.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations Z 20s, N 20s, E 20s.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations BRK, ORV, BW06, MIN, RSSD, WDC.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations GAC, LRM, CAN, DPW, PNT, EDM, FFC.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations ALE, VOY, KHC, CLL, BRG.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations OHR, SKO.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations Z 19s, N 19s, E 19s.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations BZS, MLR.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations SHI, KOD, SNY, LOE, BJI.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations CHG, MAIO, XAN, QUE, CD2, LZH.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations Z 25s, PP, GTA.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations KSH.

S.D. = 1.1 on 94 of 105 obs.

? AUG 15, 1989 10h 12m 28.75 ± 4.92s

22.693 S ± 97.1km 179.183 E ± 55.8km

DEPTH = 680.7 ± 51.1 km

3.9mb (3 obs.)

SOUTH OF FIJI ISLANDS (171)

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations DZM, BRS, RMO, CTA.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations WB5, WRA.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations FORR, PLM, KVN, TNP.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations NB2, HFS.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations KSP.

S.D. = 1.8 on 12 of 13 obs.

% AUG 15, 1989 10h 18m 12.32 ± 1.65s

31.502 S ± 15.2km 68.455 W ± 11.7km

DEPTH = 97.9 ± 17.5 km

SAN JUAN PROVINCE, ARGENTINA (137)

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations RTLL, CFA.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations RTCB, RTCV.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations RTBS, RTRS.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations MRA.

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

AUG 15, 1989 11h 17m 30.62 ± 0.56s

40.666 N ± 5.4km 23.324 E ± 5.2km

DEPTH = 10.0km (geophysicist)

GREECE (364)

MD 2.8 (ATH). ML 2.5 (SKO).

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations LNV, SAN, RFA, MRA, CYA, SLA, NNA, CNCB, LPB.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations Z 22s, Z 24s.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations CCH, PPD, PSO, VAO.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations BAO, BOG, UPA, SPA.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations TVO, RUV, VAH.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations PPN, PAE, TPT.

Table with columns for station code, time, magnitude, depth, and other parameters. Includes stations PPT, AFR, PMO.

Table with columns for station code, time, depth, and values. Includes stations like THE, PLG, SRS, KNT, OUR, GRG, PAIG, LIT, VAY, KZN, NEO, RDO, SKO, OHR, ALN.

S.D. = 1.3 on 14 of 15 obs.

Summary for AUG 15, 1989 12h 12m. Includes depth and location: LUZON, PHILIPPINE ISLANDS (249). Lists stations like QCP, BAG, LOE, CHG, LZH, WB5.

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

Summary for AUG 15, 1989 14h 30m. Includes depth and location: BANDA SEA (280). Lists stations like AAI, MTN, KNA.

Main data table for BANDA SEA (280) listing stations like AAI, MTN, KNA, WB5, WRA, OIS, ASPA, PMG, WARB, NANU, CTA, MEKA, FORR, COOL, MRWA, BAL, KLB, RMQ, MUN, STK.

Main data table for EASTERN CAUCASUS (337) listing stations like NWAQ, RKG, IPM, BRS, BWA, CAN, BDT, CHG, GYA, MAT, CD2, TIY, BJL, LZH, LSA, MNG, GTA, GBA, WMO, MAW, SPA, ITB7, ITB, PPD, CNCB, ZOBO.

S.D. = 1.2 on 42 of 46 obs.

Summary for AUG 15, 1989 14h 35m. Includes depth and location: EASTERN CAUCASUS (337).

Main data table for EASTERN CAUCASUS (337) listing stations like TAB, MSL, MAIO, BZS, NUR, SUF, HFS, NB2, BNG, BUL.

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

Summary for AUG 15, 1989 16h 08m. Includes depth and location: TURKEY (366).

Main data table for TURKEY (366) listing stations like PRK, EZN, IZM, SMG, EDC, MFT, DST, RDO, PAIG, APE, ATH, NEO, PLG, YER, CTT, KDZ, KHL.

Main data table for Eastern Mediterranean listing stations like YLV, RZN, ISK, ITU, GBZT, ALT, DIM, THE, LIT, MMB, PLD, GPA, KNT, VAY, KAP, KZN, ELL, PGB, NPS, KSL, ITM, PVL, VAM, KBN, LSK, VLS, SKO.

Summary for Eastern Mediterranean including depth and location information.

Main data table for Eastern Mediterranean listing stations like Z, N, E, OHR, PSN, TPE, BBTK, KEK, BERA, PHP, BUC, KKS, TIR, PUK, BCI, SDA, ISR, ULC, KAS, CFR, CMP, TTG, MLR, BRD, BDV, NKY, CVO, VRI, HCY, BRY, BEO, BIR, DEV, BZS, BAC, CLI, PTT.

EARTHQUAKE DATA REPORT

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

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

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

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

Two types of magnitude are computed: body-wave magnitude (m_b) and surface-wave magnitude (M_{sz}). Each is a 25% trimmed mean of individual station values. Station magnitudes not used in the trimmed mean are marked with an X. This includes station magnitudes of either type which deviate significantly from the mean and surface-wave magnitudes determined from horizontal amplitudes. Body-wave magnitudes are computed according to the formula $\log(A/T) + Q$, derived by Gutenberg and Richter (1956), where A is the P-wave amplitude in micrometers, T is the period in seconds, and Q is the depth-distance factor. Surface-wave magnitudes are computed from the formula $\log(A/T) + 1.66 \log(\Delta) + 3.3$, where A is the maximum vertical surface-wave amplitude in micrometers, T is the period in seconds, and Δ is the epicentral distance in degrees. Surface-wave magnitudes are determined only for earthquakes whose focal depths (taking into account the computed standard deviations) are potentially less than 50 km, for stations having

$20^\circ \leq \Delta \leq 160^\circ$, and for reported periods of $18 \leq T \leq 22$ s. No correction for focal depth is used in the M_S calculation. Body-wave magnitudes are not determined from PKP arrivals or for stations having $\Delta \leq 5^\circ$. Amplitude values stated in this report are in nanometers (nm) for body-waves and micrometers (μm) for surface-waves.

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

Hypocenter Symbols

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

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

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

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

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

Note: On printers available to the NEIS for this publication, the symbol for degrees ($^\circ$) appears as "°".

References

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

BRG 107.04 322 iPKP 03 50.50 -7.0X
1.8s 32.00nm
i 03 57.00
CLL 107.51 323 iPKPc 03 49.90 -8.5X
1.9s 38.00nm
i 03 56.00
KIC 130.39 274 PKP 04 43.40 0.1
TIC 130.67 275 PKP 04 43.80 0.0
LIC 130.68 274 PKP 04 43.70 -0.1
ZOBO 155.30 147 PKP 05 27.00 1.1
S.D. = 1.0 on 32 of 35 obs.

* AUG 16, 1989 14h 12m 26.98± 2.15s
32.585 S ± 19.0km 69.767 W ± 12.6km
DEPTH = 133.3 ± 27.4 km
MENDOZA PROVINCE, ARGENTINA (139)

JACH 0.70 262 iPc 12 48.20 0.1
iS 13 03.00
FCH 0.86 211 iP 12 49.50 -0.1
iS 13 05.20
PEL 0.95 234 iPc 12 49.80 -0.3
iS 13 05.50
ROCH 1.12 249 iPc 12 51.70 -0.1
iS 13 08.80
PCH 1.21 211 iPd 12 53.00 0.4
iS 13 11.00
TACH 1.45 222 iPd 12 55.00 -0.1
iS 13 14.80
CHCH 1.54 209 iPc 12 56.40 0.3
iS 13 18.20
LCCH 1.76 239 iPc 12 59.30 0.7
iS 13 21.70
LNV 1.94 225 iPc 13 00.00 -0.8
iS 13 23.60
MRA 3.43 88 ePd 13 20.00 0.0
S.D. = 0.5 on 10 of 10 obs.

? AUG 16, 1989 14h 47m 47.83± 0.99s
31.670 S ± 8.7km 68.692 W ± 7.6km
DEPTH = 10.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.20 333 iPd 47 51.00 -1.4
S 48 07.00
RTCV 0.23 145 iP 47 52.00 -0.8
S 48 09.50
RTLL 0.39 29 iPd 47 56.00 0.2
S 48 07.50
CFA 0.39 81 iPd 47 56.50 0.6
S 48 09.00
RTBS 0.65 271 e(P) 48 02.00 1.2
S 48 13.00
S.D. = 1.5 on 5 of 5 obs.

AUG 16, 1989 15h 48m 39.92± 0.80s
38.849 N ± 6.6km 26.333 E ± 8.4km
DEPTH = 10.0km (geophysicist)
AEGEAN SEA (365)
MD 3.4 (ATH).

PRK 0.40 353 iPgc 48 48.40 0.3
IZM 0.86 121 iPg 48 57.00 0.6
iSg 49 08.80
EZN 0.98 360 iPn 48 58.90 0.5
APE 1.89 200 ePb 49 11.90 -0.6
EDC 1.91 38 iPn 49 11.60 -1.2
DST 1.94 66 iPn 49 14.70 1.5
YER 2.30 137 ePn 49 22.60 4.0X
RDO 2.37 345 ePn 49 19.50 0.0
KHL 2.55 101 ePn 49 28.40 6.3X
CTT 2.80 34 ePn 49 24.00 -1.6
VAY 3.80 312 ePn 49 40.30 0.6
S.D. = 1.1 on 9 of 11 obs.

? AUG 16, 1989 17h 02m 00.24± 3.10s
18.655 S ± 38.6km 177.253 W ± 29.3km
DEPTH = 656.0 ± 38.3 km
4.7mb (6 obs.)
FIJI ISLANDS REGION (181)

DZM 15.66 255 iPc 05 13.80 0.0
BRS 28.86 247 iPd 07 11.70 0.3
RMO 32.27 250 iPd 07 41.50 1.5
CAN 34.14 234 eP 07 56.10 0.6
BWA 34.30 236 eP 07 55.30 -1.5
CTA 34.41 262 iPd 07 57.70 -0.2

0.7s 30.14nm 5.0mb
OLP 36.31 250 iPd 08 13.70 0.4
WB5 45.56 260 iPd 09 25.80 -0.6
WRA 45.58 260 Pd 09 25.70 -0.8
0.3s 6.40nm 4.5mb
ASPA 45.65 255 iPd 09 26.90 -0.2
0.7s 30.00nm 4.8mb
FORR 50.65 245 eP 10 03.50 -0.5
0.4s 19.00nm 4.8mb
MBL 58.87 256 iPc 11 01.00 0.0
0.4s 7.00nm 4.2mb
NANU 62.57 254 iPc 11 26.20 1.2
0.5s 14.00nm 4.5mb
KVN 79.69 43 eP 13 03.50 0.0
S.D. = 0.9 on 14 of 14 obs.

% AUG 16, 1989 17h 22m 09.81± 2.12s
33.026 S ± 14.9km 71.393 W ± 16.9km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

ROCH 0.33 81 iPd 22 19.00 0.9
iS 22 28.50
LCCH 0.47 198 iPd 22 21.50 1.5
iS 22 28.20
PEL 0.61 101 iPd 22 22.00 0.0
iS 22 34.30
TACH 0.73 149 iPd 22 24.00 0.3
iS 22 37.50
JACH 0.76 63 iPd 22 23.20 -0.9
iS 22 36.00
LNV 0.93 181 eP 22 24.50 -1.9
iS 22 38.00
PCH 0.95 129 iPd 22 27.00 0.2
eS 22 42.00
FCH 0.97 108 iPd 22 28.00 0.5
iS 22 43.50
CHCH 1.10 146 iPd 22 28.50 -0.4
iS 22 45.00
S.D. = 1.2 on 9 of 9 obs.

% AUG 16, 1989 18h 09m 12.28± 0.85s
38.587 N ± 8.2km 27.435 E ± 9.4km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

IZM 0.23 216 iPg 09 16.80 -0.5
DST 1.38 42 iPn 09 36.50 -1.1
EZN 1.51 325 ePn 09 40.00 0.7
YER 1.60 155 iPn 09 40.90 0.2
KHL 1.66 98 ePn 09 42.30 0.7
S.D. = 1.1 on 5 of 5 obs.

AUG 16, 1989 19h 09m 00.22± 0.76s
44.463 N ± 3.7km 6.422 E ± 6.4km
DEPTH = 10.0km (geophysicist)
FRANCE (538)
ML 2.2 (LDG).

FOUF 0.27 75 ePgc 09 06.37 0.5
eSg 09 09.88
PZZ 0.49 85 P 09 10.12 0.0
S 09 16.87
RRL 0.53 29 P 09 10.84 -0.1
S 09 18.79
STV 0.68 108 P 09 12.99 -0.8
S 09 21.97
FRF 0.92 170 Pg 09 18.00 0.3
Sg 09 29.40
SBF 0.94 129 Pg 09 19.40 1.1
LRG 1.01 183 Pg 09 19.00 -0.3
Sg 09 33.00
ROB 1.05 99 P 09 20.07 0.0
LPG 1.06 13 Pn 09 20.40 0.0
Sg 09 36.00
LPL 1.08 12 Pn 09 20.60 0.0
Sg 09 37.00
IMI 1.19 117 P 09 22.01 -0.5
FIN 1.31 101 P 09 23.86 -0.6
PCP 1.52 86 P 09 27.96 0.4
S.D. = 0.6 on 13 of 13 obs.

& AUG 16, 1989 19h 27m 23.80s
39.502 N 123.375 W
DEPTH = 1.0km
NEAR COAST OF NORTHERN CALIF. (35)
<BRK>. ML 3.0 (BRK). Felt (V) at

Willits.
NWRM 1.11 160 eP 27 46.10 0.7
LTCM 1.19 53 eP 27 45.60 -1.3
WDC 1.25 31 iPd 27 46.40 -1.5
i 27 53.20
iS 28 03.90
i 28 24.20
FHC 1.38 340 ePc 27 51.10 1.0
ORV 1.45 87 iPd 27 49.60 -1.6
iS 28 07.90
MIN 1.60 58 ePc 27 51.30 -2.2
LBFM 2.16 31 e(P) 28 00.30 -1.4
CMB 2.76 121 e(P) 28 08.20 -1.9
e 28 47.10
FRI 3.82 130 ePc 28 23.80 -1.3
KVN 4.12 95 eP 28 29.00 -0.5
10 obs. associated

* AUG 16, 1989 20h 31m 27.21± 1.22s
40.835 N ± 10.4km 27.743 E ± 9.7km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

EDC 0.50 169 iPg 31 37.10 -0.2
eSg 31 42.60
CTT 0.61 59 ePg 31 39.50 0.1
eSg 31 49.00
ISK 1.02 77 ePg 31 46.50 0.0
eSg 32 00.50
YLV 1.27 102 iPn 31 51.50 0.7
GBZT 1.29 91 ePg 32 10.00 18.8X
HRT 1.46 90 ePn 31 53.00 -0.7
EZN 1.48 228 ePn 31 54.00 0.1
S.D. = 0.6 on 6 of 7 obs.

* AUG 16, 1989 20h 45m 48.14± 1.24s
0 808 N ± 15.6km 127.888 E ± 21.2km
DEPTH = 33.0km (normal)
4.7mb (3 obs.)
HALMAHERA (267)

MNI 3.11 282 ePc 46 35.00 -1.1
eS 47 13.60
AAI 4.48 176 eP 46 56.00 0.5
WB5 21.52 163 eP 50 35.30 -1.3
WRA 21.57 163 Pd 50 34.60 -2.5X
0.8s 20.90nm 4.6mb
ASPA 25.02 167 eP 51 11.20 0.4
0.9s 39.00nm 5.0mb
BJI 40.48 346 eP 53 25.00 -0.4
LZH 41.59 330 eP 53 38.50 3.6X
1.8s 25.00nm 4.6mb
HYB 51.23 292 eP 54 53.00 1.9
MAIO 72.20 308 eP 57 18.00 5.8X
S.D. = 1.5 on 6 of 9 obs.

* AUG 16, 1989 21h 07m 53.21± 1.86s
14.481 N ± 5.1km 60.932 W ± 27.5km
DEPTH = 140.1 ± 16.0 km
WINDWARD ISLANDS (95)

MVM 0.08 26 iPc 08 13.43 0.1
S 08 27.80
BIM 0.14 285 eP 08 13.49 0.0
CRM 0.27 3 iPc 08 13.65 -0.1
FDf 0.33 320 iPc 08 13.65 -0.3
S 08 28.20
SLB 0.66 189 eP 08 15.01 0.3
eS 08 32.66
DTMT 0.85 332 eP 08 16.41 0.3
eS 08 36.60
DPMT 0.89 331 eP 08 15.47 -0.9
SOA 1.12 191 eP 08 18.23 -0.2
eS 08 40.97
BBL 1.16 333 eP 08 19.29 0.4
S 08 39.70
SVV 1.19 193 eP 08 19.14 0.0
eS 08 36.51
SVB 1.24 195 eP 08 19.65 0.0
eS 08 38.00
MGG 1.48 345 eP 08 22.46 0.4
S 08 44.80
PAG 1.70 335 ePc 08 25.16 0.5
S 08 50.00
DEG 1.83 356 eP 08 26.10 0.0
S 08 53.50

16d 21h

BPA 2.70 341 eP 08 36.45 -0.5
 TRN 3.84 187 eP 09 33.00 41.2X
 TCE 3.85 192 eP 09 34.46 42.5X
 S.D. = 0.4 on 15 of 17 obs.

AUG 16, 1989 23h 28m 09.80 ± 0.82s
 42.271 N ± 7.4km 1.319 E ± 8.4km
 DEPTH = 10.0km (geophysicist)

PYRENEES (378)

EPF 1.05 317 Pn 28 28.90 -0.7
 Pg 28 32.20
 Sg 28 48.60
 ETER 1.14 88 eP 28 30.80 -0.3
 eS 28 46.50
 EROO 1.60 206 eP 28 38.40 0.2
 eS 29 00.00
 LPO 2.41 358 Pn 28 50.00 0.1
 Sg 29 28.40
 LFF 2.70 351 Pn 28 54.70 0.7
 Sg 29 38.60
 CAF 2.71 11 Pn 28 54.30 0.1
 Sg 29 36.20
 S.D. = 0.6 on 6 of 6 obs.

? AUG 17, 1989 00h 04m 33.89 ± 7.90s
 47.002 N ± 43.9km 6.193 E ± 50.0km
 DEPTH = 10.0km (geophysicist)

FRANCE (538)

BSF 0.93 26 Pg 04 51.67 0.0
 Sg 05 03.36
 MOF 1.06 37 Pg 04 53.95 0.0
 Sg 05 06.40
 VITF 1.22 353 Pg 05 48.73 52.1X
 ECH 1.38 28 Pg 04 59.15 0.0
 FEL 1.51 54 Pg 05 01.17 0.0
 CDF 1.59 27 Pg 05 02.21 0.0
 S.D. = 0.0 on 5 of 6 obs.

* AUG 17, 1989 00h 13m 46.26 ± 2.81s
 31.562 S ± 12.4km 68.804 W ± 11.0km
 DEPTH = 223.3 ± 47.7 km

SAN JUAN PROVINCE, ARGENTINA (137)

ZON 0.11 81 iPd 13 07.00 -68.8X
 eS 13 21.00
 JACH 1.88 233 iPc 14 25.30 -0.6
 iS 14 53.20
 FCH 2.16 215 iPd 14 29.50 0.6
 PEL 2.24 225 eP 14 29.40 0.0
 iS 14 57.00
 ROCH 2.34 232 iPd 14 30.50 -0.1
 iS 14 59.20
 TACH 2.75 220 iP 14 35.30 0.5
 iS 15 09.00
 MRA 2.76 109 iPc 14 34.90 0.0
 CHCH 2.83 213 iPc 14 32.00 -3.7X
 RFA 3.21 175 iPc 14 39.80 -0.3
 LNV 3.24 222 eP 14 40.10 -0.2
 CYA 4.06 41 e(P) 14 50.20 0.0
 S.D. = 0.5 on 9 of 11 obs.

AUG 17, 1989 00h 24m 58.14 ± 0.64s
 40.858 N ± 7.3km 21.519 E ± 5.0km
 DEPTH = 10.0km (geophysicist)

GREECE (364)

ML 2.6 (SKO).

KBN 0.58 247 ePg 25 09.30 -0.6
 OHR 0.60 295 iPg 25 08.70 -1.6
 iSg 25 18.20
 GRG 0.68 81 ePg 25 11.00 -0.6
 eSg 25 22.30
 VAY 0.92 59 iPg 25 15.40 -0.3
 iSg 25 28.70
 LSK 1.00 225 ePg 25 18.90 1.8
 LIT 1.06 135 ePb 25 17.60 -0.5
 eSb 25 34.80
 KNT 1.09 73 ePb 25 18.60 0.0
 eSb 25 33.90
 SKO 1.12 357 iPg 25 21.00 2.0
 i 25 34.00
 iSg 25 37.00
 THE 1.12 101 ePb 25 19.40 0.3
 iSb 25 36.90
 PHP 1.16 316 ePg 25 19.40 -0.4

BERA 1.20 263 ePg 25 25.90 5.4X
 TIR 1.34 292 ePn 25 34.50 11.7X
 PUK 1.70 315 ePn 25 31.50 3.5X
 BCI 1.86 325 e(Pn) 25 36.20 5.9X
 SDA 1.91 308 ePn 25 52.00 21.0X
 S.D. = 1.3 on 10 of 15 obs.

? AUG 17, 1989 00h 32m 19.73 ± 3.79s
 39.401 N ± 28.3km 20.576 E ± 17.1km
 DEPTH = 5.0km (geophysicist)

GREECE-ALBANIA BORDER REGION (392)

LSK 0.75 1 ePg 32 32.80 -1.9
 TPE 0.99 334 ePh 32 39.00 0.0
 KBN 1.23 8 ePn 32 44.80 1.7
 BERA 1.39 340 ePn 32 45.10 -0.6
 LIT 1.63 64 eP 32 48.00 -1.2
 eS 33 15.20
 OHR 1.72 6 ePn 32 49.80 -0.7
 PHP 2.29 357 ePh 32 59.40 0.7
 VAY 2.45 38 ePn 33 02.00 1.0
 SKO 2.65 14 ePn 33 05.00 1.1
 S.D. = 1.4 on 9 of 9 obs.

* AUG 17, 1989 00h 54m 03.18 ± 0.92s
 17.134 N ± 9.2km 99.867 W ± 9.0km
 DEPTH = 55.9 ± 8.2 km
 4.9mb (5 obs.)

GUERRERO, MEXICO (59)

ACX 0.26 178 iP 54 10.13 -2.6
 iS 54 13.82
 III 1.29 17 iP 54 26.57 1.1
 UNM 2.28 16 iP 54 41.00 1.7
 eS 55 18.00
 IIT 2.39 38 eP 54 45.00 4.1X
 iS 55 19.39
 IIC 2.68 12 iP 54 44.64 -0.4
 (S) 55 35.45
 SMMM 2.80 22 (P) 54 45.33 -1.2
 iS 55 27.82
 MRX 2.85 334 eP 54 48.00 0.8
 (S) 55 13.63
 IISM 3.00 52 iP 54 50.55 1.2
 iS 55 33.61
 OXX 3.01 91 iP 54 52.20 2.6
 (S) 55 37.67
 LVVM 4.15 51 (P) 55 14.51 9.0X
 (S) 56 09.32
 AGX 5.25 334 (P) 54 33.00 -48.0X
 MEO 17.61 3 e(P) 58 05.00 -1.3
 OLY 19.76 21 P 58 28.60 -2.8
 GLA 20.81 322 P 58 42.00 -0.3
 PLM 22.24 320 eP 59 16.00 19.2X
 TPC 22.28 322 eP 58 58.00 1.0
 RSCP 22.36 32 P 58 56.30 -1.4
 0.6s 60.39nm 5.2mb
 pP 59 07.70 45kmX
 FVM 22.37 20 P 58 56.00 -1.8
 0.4s 22.40nm 4.9mb
 GOL 22.99 349 P 59 03.40 -0.8
 RVR 22.99 320 eP 59 06.00 2.1
 GLD 23.01 349 P 59 04.00 -0.3
 GBTN 23.12 34 P 59 04.70 -0.5
 SBB 23.73 321 eP 59 10.00 -1.2
 CLC 24.38 323 eP 59 05.00 -12.5X
 ISA 24.79 322 eP 59 24.00 2.7
 TNP 25.83 327 P 59 31.50 0.2
 0.5s 1.54nm 3.8mb X
 BLA 26.34 37 P 59 36.00 0.2
 0.6s 11.36nm 4.6mb
 BW06 26.86 344 P 59 36.90 -3.8X
 KVN 27.02 328 P 59 42.10 0.0
 RSSD 27.13 353 P 59 43.80 0.7
 LON 34.67 333 P 00 49.80 0.4
 PNT 35.87 338 eP 01 00.00 0.4
 EDM 37.53 347 ePd 01 13.00 -0.4
 FFC 37.55 358 iPc 01 13.10 -0.4
 1.1s 22.00nm 5.0mb
 SCH 45.37 26 eP 02 17.00 -0.7
 ZOBO 45.61 135 eP 02 22.00 1.4
 YKA 46.47 351 eP 02 26.20 0.0
 INK 55.41 346 eP 03 33.00 -0.7
 MBC 60.00 355 eP 04 06.00 0.1
 0.8s 5.00nm 4.7mb
 S.D. = 1.4 on 33 of 39 obs.

% AUG 17, 1989 01h 54m 57.55 ± 0.98s
 39.932 N ± 7.3km 15.362 E ± 10.6km
 DEPTH = 10.0km (geophysicist)

SOUTHERN ITALY (390)

MGR 0.25 36 Pc 55 02.70 -0.2
 eSg 55 06.30
 SGO 0.63 356 P 55 09.90 -0.2
 eSg 55 19.40
 TDS 0.80 110 P 55 13.50 0.4
 SOI 1.93 164 P 55 30.40 -0.4
 SDI 2.13 327 P 55 34.00 0.4
 S.D. = 0.5 on 5 of 5 obs.

? AUG 17, 1989 02h 37m 00.48 ± 3.15s
 76.510 N ± 60.9km 134.340 E ± 17.9km
 DEPTH = 10.0km (geophysicist)

LAPTEV SEA (655)

MBC 21.87 38 eP 41 55.50 1.0
 0.8s 3.00nm 3.8mb
 FBA 25.81 73 eP 42 35.30 2.5
 INK 25.96 58 eP 42 34.50 0.4
 NB2 38.12 319 P 44 21.90 1.2
 0.9s 3.90nm 4.2mb
 HFS 38.59 316 eP 44 24.70 0.2
 0.5s 1.10nm 3.8mb
 EDM 43.69 54 eP 45 06.50 -0.1
 LON 48.15 64 eP 45 41.50 -0.7
 KVN 56.31 63 eP 46 43.30 -0.1
 GOL 58.19 52 (P) 46 56.30 -0.5
 OLY 64.63 40 eP 47 37.80 -2.1
 RSCP 65.38 35 eP 47 43.00 -1.8
 0.7s 12.46nm 5.2mb X
 S.D. = 1.5 on 11 of 11 obs.

& AUG 17, 1989 02h 53m 37.49s
 59.938 N 153.141 W

SOUTHERN ALASKA (2)

<AGS-P>.

ILIM 0.17 33 eP 53 53.65 0.9
 OPT 0.29 189 iP 53 54.17 1.0
 eS 54 06.93
 RED 0.52 21 iP 53 55.35 -0.6
 eS 54 09.78
 PDB 0.55 255 iP 53 55.22 -0.8
 AUE 0.59 192 iP 53 55.49 -0.8
 eS 54 09.71
 AUI 0.62 194 eP 53 55.69 -0.9
 eS 54 10.20
 RDT 0.74 30 iP 53 56.88 -0.6
 eS 54 11.30
 XLV 0.87 123 eP 53 57.43 -1.2
 eS 54 13.48
 CDD 1.04 194 iP 53 59.08 -1.2
 eS 54 15.16
 CNPM 1.05 112 iP 53 59.46 -0.9
 BRK 1.15 98 eP 54 00.62 -0.8
 eS 54 18.49
 NKA 1.24 49 iP 54 03.43 1.1
 SPU 1.36 23 iP 54 03.03 -0.7
 SHU 1.38 162 eP 54 01.80 -2.0
 eS 54 22.03
 CRP 1.42 20 iP 54 04.17 -0.4
 SVW 1.70 315 eP 54 06.52 -1.2
 eS 54 29.11
 SEW 1.86 83 eP 54 08.41 -1.2
 SUA 1.93 37 eP 54 09.80 -0.9
 SKT 2.20 20 eP 54 12.77 -1.2
 PWA 2.35 42 eP 54 14.41 -1.4
 PME 2.63 48 eP 54 16.94 -2.7
 KNIM 2.73 79 eP 54 18.29 -2.7
 eS 54 48.49
 MTU 2.76 87 eP 54 20.01 -1.3
 GLI 3.15 70 eP 54 24.04 -2.4
 FID 3.41 73 eP 54 26.38 -3.6
 VZW 3.45 68 eP 54 27.80 -2.7
 eS 55 06.07
 KTH 3.78 15 eP 54 32.43 -2.6
 KLU 3.88 63 iP 54 33.56 -2.7
 eS 55 16.62
 TOA 4.03 54 iP 54 36.56 -1.8
 PAX 4.77 47 eP 54 46.23 -2.3
 DDM 5.17 39 eP 54 53.54 -0.4

17d 06h

FOUF 1 48 40 P 54 35.00 19.8X
 AUTN 1.56 67 Pn 54 17.27 0.7
 Sg 54 39.46
 SAOF 1.64 69 Pn 54 17.43 -0.1
 CVF 2.65 107 Pn 54 31.20 -0.9
 S.D. = 0.6 on 14 of 15 obs.

* AUG 17, 1989 07h 05m 45.07 ± 1.60s
 4.222 S ± 10.2km 102.254 E ± 12.6km
 DEPTH = 84.8 ± 12.8 km
 4.6mb (2 obs.)

SOUTHERN SUMATERA (274)

PPI 4.18 334 eP 06 46.50 -1.2
 eS 07 40.00
 KGM 6.29 10 ePc 07 18.20 1.1
 IPM 8.83 352 ePd 07 53.10 1.1
 LOE 21.50 359 eP 10 28.00 -0.6
 CHG 23.12 352 eP 10 44.80 0.2
 OIZ 24.28 18 eP 10 57.00 1.2
 KMI 29.17 1 Pd 11 54.00 13.2X
 SHL 31.27 342 iP 11 57.90 -1.5
 WB5 34.94 119 eP 12 30.20 -0.8
 WRA 34.94 119 Pc 12 29.80 -1.2
 0.7s 2.80nm 4.3mb
 CD2 34.96 2 eP 12 30.20 -0.9
 LSA 35.37 343 eP 12 34.80 -0.2
 ASPA 36.13 125 eP 12 40.80 -0.3
 e 12 47.30
 XAN 38.57 9 P 13 00.90 -0.5
 LZH 40.12 2 eP 13 12.50 -1.8
 NDI 40.62 325 iPc 13 18.50 0.2
 CTA 45.63 114 iPd 13 59.80 0.7
 1.0s 15.00nm 4.8mb
 i 14 10.00
 i 15 50.20

HHC 45.66 10 P 14 00.00 1.0
 BJI 45.87 15 eP 14 01.00 0.4
 Z 16s 0.59um 4.6mszX

WMO 49.59 346 Pc 14 29.50 -0.2
 KSH 49.75 333 eP 14 31.40 0.4
 CN2 52.17 21 Pd 14 48.40 -0.7
 CAN 53.06 132 eP 14 56.80 0.9
 VRI 83.00 317 eP 18 03.00 0.7
 MLR 83.45 317 ePc 18 05.00 0.2
 SUF 87.39 333 iP 18 24.60 0.9
 ALO 139.49 37 e(PKP)24 58.00 -7.2X
 ePKKS 29 03.50
 ZOBO 157.53 205 ePKP 25 35.00 0.8
 S.D. = 0.9 on 26 of 28 obs.

? AUG 17, 1989 09h 10m 51.47 ± 7.60s
 48.158 N ± 15.4km 8.845 E ± 52.8km
 DEPTH = 10.0km (geophysicist)

GERMANY (543)

MD 1.0 (STR).

FEL 0.63 244 Pg 11 04.05 -0.1
 WLS 1.03 285 Pg 11 10.33 -0.6
 CDF 1.08 284 Pg 11 11.87 0.1
 Sg 11 26.93
 ECH 1.13 274 Pg 11 13.20 0.5
 GWF 1.15 316 Pg 11 13.16 0.1
 Sg 11 28.76
 S.D. = 0.6 on 5 of 5 obs.

* AUG 17, 1989 09h 34m 37.74 ± 1.57s
 32.914 S ± 12.5km 70.172 W ± 10.3km
 DEPTH = 114.1 ± 18.2 km

CHILE-ARGENTINA BORDER REGION (127)

JACH 0.42 303 iPc 34 55.00 0.1
 iS 35 07.50
 FCH 0.42 194 iPd 34 55.20 0.0
 iS 35 08.00
 PEL 0.49 242 iPd 34 55.10 -0.2
 iS 35 07.00
 SAN 0.68 217 iPd 34 56.50 -0.1
 iS 35 10.10
 ROCH 0.71 265 iPc 34 57.00 -0.1
 iS 35 11.00
 PCH 0.76 202 iPd 34 57.50 0.1
 iS 35 11.70
 TACH 0 98 221 iPd 34 59.40 0.0
 iS 35 14.50
 CHCH 1.09 201 iP 35 01.00 0.4
 iS 35 17.00

LCCH 1.30 244 iPd 35 03.40 0.6
 iS 35 20.50
 LNV 1.47 225 ePc 35 04.00 -0.7
 iS 35 23.30
 MRA 3.80 84 ePc 35 35.30 0.0
 S.D. = 0.4 on 11 of 11 obs.

AUG 17, 1989 10h 26m 32.48 ± 0.54s
 45.810 N ± 5.6km 14.853 E ± 4.5km
 DEPTH = 10.0km (geophysicist)

YUGOSLAVIA (383)

MD 3.1 (LJU), 2.8 (TRI), ML 3.0
 (KBA). Felt (IV) in the
 Ljubljana area.

CEY 0.31 257 iPgc 26 39.20 0.3
 eSg 26 43.90
 LJU 0.32 316 iPd 26 38.90 -0.3
 iSg 26 42.80
 VBY 0.42 137 iPd 26 41.20 0.2
 iSg 26 49.60
 RIY 0.57 215 ePg 26 44.10 0.1
 iSg 26 53.10
 VOY 0.71 289 iPd 26 45.80 -0.7
 eSg 26 56.20
 TRI 0.77 263 ePgc 26 46.90 -0.6
 iSg 26 58.40
 PTJ 0.78 83 iPc 26 47.30 -0.4
 eSg 27 00.70
 RBL 1.09 306 P 26 53.30 0.2
 eSg 27 09.00
 FVI 1.64 299 P 27 01.60 0.2
 KBA 1.64 321 iPnc 27 02.50 0.8
 iPg 27 04.70
 iSg 27 25.50
 KHC 3.43 346 eP 27 58.90 31.8X
 S.D. = 0.5 on 10 of 11 obs.

AUG 17, 1989 11h 03m 10.64 ± 0.18s
 17.701 S ± 4.8km 167.187 E ± 4.2km
 DEPTH = 10.0km (geophysicist)
 5.2mb (11 obs.) 4.8msz (8 obs.)

VANUATU ISLANDS (186)

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 12S, 26C

Centroid Location:

Origin Time 11:03:19.8 0.6

Lat 17.72S 0.04 Lon 166.58E 0.05

Dep 15.0 FLX Half-duration 2.4

Moment Tensor: Scale 10¹⁷ Nm

Mrr=-1.89 0.06 Mtt=-0.67 0.10

Mff= 2.56 0.09 Mrt=-1.54 0.21

Mrf=-0.50 0.28 Mtr= 1.52 0.07

Principal Axes:

T Vol= 3.38 Plg=12 Azm=115

N -0.41 34 213

P -2.97 53 9

Best Double Couple: Mo=3.2*10¹⁷

NP1: Strike=159 Dip=45 Slip=-143

NP2: 52 65 -51

PVC 1.07 92 iPc 03 29.70 -1.1
 iS 03 44.00
 DZM 4.40 189 iPc 04 16.40 -2.7
 iS 05 07.00
 HNR 10.82 319 eP 05 50.00 1.3
 eS 07 52.00
 VSG 11.10 318 eP 05 52.00 -0.6
 SVO 11.12 319 eP 05 52.00 -0.8
 eS 07 51.00
 COO 18.92 225 eP 07 38.00 4.0X
 RMO 19.17 240 eP 07 38.00 0.9
 RAB 19.91 311 eP 07 46.00 0.5
 eS 11 24.00
 CTA 19.95 260 iPd+ 07 47.30 1.5
 1.1s 124.05nm 5.1mb
 i 07 57.40
 iS 11 33.00
 PMG 21.13 290 eP 07 58.00 -0.1
 OLP 22.99 243 eP 08 17.00 0.3
 e 08 28.00
 BWA 23.63 222 eP 08 22.30 -0.6
 CNB 23.64 219 eP 08 24.60 1.6
 e 08 29.00
 CMS 23.72 231 eP 08 25.00 1.3
 e 08 29.00

CAN 23.86 219 eP 08 27.30 2.2
 MNG 23.93 164 eP 08 24.50 -1.2
 OIS 26.20 259 eP 08 48.00 0.6
 MSZ 26.89 179 P 08 57.20 3.7X
 STK 27.10 234 eP 08 55.50 -0.1
 e 09 06.00
 TOO 27.47 220 eP 08 59.00 0.0
 e 09 03.00
 e 09 27.50 0.2
 ADE 30.62 230 eP 09 30.80 -1.0
 0.7s 26.03nm 5.2mb
 WB5 31.12 261 eP 09 30.80 -1.0
 WRA 31.14 261 Pd 09 34.20 2.2
 1.0s 6.10nm 4.5mb
 ASPA 31.65 254 iPd 09 34.30 -2.2
 0.8s 27.00nm 5.2mb
 Z 20s 3.58um 5.0msz
 e 09 47.30
 eS 14 46.30
 LR 21 00.20
 KNA 36.81 267 eP 10 19.20 -1.6
 FORR 37.77 242 eP 10 29.00 0.3
 GUMO 38.10 323 eP 10 35.00 3.4X
 PJG 38.10 323 eP 10 36.00 4.4X
 WARB 38.42 250 eP 10 33.70 -0.6
 MBL 44.67 258 eP 11 24.00 -1.6
 MEKA 45.70 250 eP 11 32.50 -1.3
 0.5s 12.00nm 5.1mb
 NWA0 47.21 241 iPd 11 49.00 3.3X
 Z 20s 1.70um 5.0msz
 N 20s 4.30um
 E 20s 1.70um
 DAV 47.91 297 eP 11 50.00 -1.4
 NANU 48.55 255 iPd 11 55.70 -0.6
 0.7s 39.00nm 5.6mb
 KKM 55.57 291 eP 13 00.00 10.9X
 1.2s 99.30nm
 BAG 57.07 304 eP 12 58.00 -1.9
 SBA 60.18 180 P 13 20.90 0.4
 MAT 60.50 333 eP 13 22.00 -1.2
 1.2s 34.38nm 5.4mb
 OZH 63.54 310 eP 13 42.00 -1.7
 Z 20s 0.30um 4.5msz
 N 12s 0.30um
 S 22 18.00
 SSE 65.62 317 eP 13 53.00 -4.2X
 Z 20s 0.60um 4.8msz
 eS 22 40.00
 eS 23 04.00
 GZH 66.42 306 eP 14 02.00 -0.4
 OIZ 67.13 300 eP 14 07.70 0.6
 NJ2 67.76 317 Pd 14 10.00 -0.8
 Z 22s 0.40um 4.6msz
 IPM 68.89 282 ePd 14 17.10 -1.1
 WHN 69.88 313 eP 14 24.00 0.1
 SNG 70.21 285 eP 14 26.40 0.2
 DL2 70.63 324 eP 14 28.00 -0.3
 Z 24s 0.60um 4.8mszX
 eS 23 37.00
 MDJ 70.86 333 eP 14 28.50 -1.1
 eS 23 45.00
 SNY 71.63 327 eP 14 31.40 -2.9
 Z 20s 0.70um 4.9msz
 N 20s 1.00um
 eS 23 43.00
 SS 28 16.00
 CN2 72.15 330 Pd 14 37.00 -0.3
 5.0s 0.40nm 2.8mb X
 SPA 72.41 180 ePd 14 38.00 -0.9
 1.0s 14.50nm 5.0mb
 Z 20s 0.68um 4.9msz
 NST 73.93 293 eP 14 50.60 2.3
 BJI 74.53 322 eP 14 50.50 -0.8
 Z 40s 1.43um 5.0mszX
 eS 24 28.00
 TIY 75.39 318 eP 14 54.80 -1.7
 N 17s 1.00um
 S 24 38.00
 BDT 75.55 294 eP 14 58.30 0.7
 XAN 75.64 313 P 14 56.90 -1.1
 KMI 75.81 302 Pd 15 00.00 0.7
 S 24 27.00
 CHG 76.24 295 eP 15 02.30 0.7
 1.1s 26.27nm 5.2mb
 CD2 77.76 308 eP 15 10.00 0.1
 HHC 77.80 320 P 15 10.00 0.1
 Z 24s 1.10um 5.1mszX

17d 13h

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like TIO, EBAN, EPLA, EVIA, GUD, and ETOR.

S.D. = 0.9 on 12 of 16 obs.

AUG 17, 1989 13h 41m 50.02 ± 0.47s
36.600 N ± 7.2km 26.789 E ± 4.6km

DEPTH = 170.9 ± 9.4 km
DODECANESE ISLANDS (369)
MD 4.4 (HLW), 2.9 (ATH).

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like KAP, APE, YER, NPS, IZM, KSL, VAM, ELL, KHL, ITM, OHR, KOT, ATZ, SOI, DSI, TDS, MGR, MEU, MBH, MNO.

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

AUG 17, 1989 13h 57m 17.03 ± 0.59s
37.752 N ± 6.4km 14.987 E ± 5.4km
DEPTH = 10.0km (geophysicist)
SICILY (398)

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like ATN, MSI, MEU, GIB, SOI, FAI, USI, TDS, MGR.

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

AUG 17, 1989 15h 01m 22.28 ± 0.69s
4.371 S ± 4.9km 153.002 E ± 5.5km
DEPTH = 108.4 ± 6.9 km
5.3mb (11 obs.)
NEW IRELAND REGION (190)

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like RAB, LAT, PMG, VSG, SVO, HNR, CTA, GUA, GUMO, PJC, OIS.

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like DZM, RMO, MTN, OLP, WB5, WRA, KNA, ASPA, WARB, FORR, MBL, MEKA, NANU, TCW, MNG, MRW, CAW, WDW, PGZ, MTW, MSZ, MAT, QZH, NJ2, WHN, CN2, XAN, CD2, BTO, GTA, SPA, NB2, ZOBO, BNG, PPD, BAO.

? AUG 17, 1989 16h 36m 30.07 ± 7.22s
7.218 S ± 68.0km 128.329 E ± 22.6km
DEPTH = 33.0km (normal)

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like BANDA SEA, MTN, KNA, WB5, MBL, ASPA, WARB, FORR.

? AUG 17, 1989 17h 08m 56.82 ± 15.44s
7.425 S ± 144. km 128.728 E ± 21.5km
DEPTH = 227.6 ± 38.9 km
BANDA SEA (280)

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like MTN, KNA, WB5, MBL, ASPA, WARB.

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

* AUG 17, 1989 17h 10m 51.73 ± 0.97s
38.239 N ± 8.2km 21.902 E ± 11.5km
DEPTH = 10.0km (geophysicist)

GREECE (364)
MD 3.2 (ATH).

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like VLS, ITM, NEO, LIT, KZN, LSK, TPE, OHR, VAY, PHP, SKO, SDA.

S.D. = 1.5 on 8 of 12 obs.

? AUG 17, 1989 18h 11m 02.38 ± 6.14s
34.384 S ± 34.5km 71.969 W ± 32.1km
DEPTH = 10.0km (geophysicist)

NEAR COAST OF CENTRAL CHILE (135)

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like LNV, LCCH, TACH, CHCH, PCH, ROCH, PEL, FCH, JACH.

S.D. = 0.3 on 8 of 9 obs.

? AUG 17, 1989 18h 33m 37.82 ± 0.94s
40.737 N ± 15.6km 123.458 W ± 6.5km
DEPTH = 5.0km (geophysicist)

NORTHERN CALIFORNIA (36)
ML 2.7 (BRK).

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like FHC, WDC, LBFM, ORV.

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

? AUG 17, 1989 18h 46m 28.53 ± 0.92s
37.865 N ± 20.5km 141.038 E ± 17.6km
DEPTH = 33.0km (normal)
4.4mb (3 obs.)

NEAR EAST COAST OF HONSHU, JAPAN(228)
Felt (11 JMA) at Fukushima, Onahama, Sendai and Utsunomiya.

Table with columns: Station ID, coordinates, observation type, and values. Includes stations like MAT, KMI, SOD, SUF, NUR, HFS, NB2, LCCM, ZOBO, LPB, CNCB.

* AUG 17, 1989 22h 08m 20.42 ± 0.83s

12.508 N ±12.3km 95.757 E ±10.1km
DEPTH = 27.3km (2 depth phases)
4.8mb (4 obs.)

ANDAMAN ISLANDS REGION (703)

NNT 3.88 .88 iP 09 21.40 1.6
ePg 09 38.30
eSg 10 09.50
KBR 3.97 67 e(P) 10 16.80 55.8X
NST 5.28 53 eP 09 42.50 2.9X
NST 5.28 53 iP 09 21.40 -18.2X
ePg 09 38.30
eSg 10 09.50
BDT 5.66 33 eP 09 44.30 -0.6
0.7s 37.40nm 5.1mb
CHG 6.98 26 eP 10 03.00 -0.6
LOE 7.55 49 eP 10 13.50 2.0
e 13 07.00
OIZ 15.02 63 eP 12 01.60 8.9X
GYA 17.26 35 eP 12 24.60 3.3X
LSA 17.63 347 P 12 22.10 -4.2X
GBA 17.88 276 P 12 29.00 0.0
CD2 19.75 21 Pd 12 49.40 -1.9
XAN 24.56 27 eP 13 38.00 -1.3
LZH 24.58 16 eP 13 40.00 0.3
1.2s 40.00nm 4.9mb
pP 13 47.50 27km
WHN 24.86 41 eP 13 43.50 1.4
GTA 27.03 7 P 14 00.00 -2.5
WMO 31.97 349 eP 14 47.50 1.1
CN2 40.30 34 eP 15 55.70 -1.3
pP 16 04.00 28km
WB5 49.80 130 eP 17 12.00 -1.2
WRA 49.82 130 Pc 17 12.40 -0.9
1.0s 5.20nm 4.5mb
SUF 69.65 333 eP 19 32.00 2.8X
SOD 70.54 337 eP 19 37.00 2.4
PRU 74.89 319 eP 20 02.00 1.4
KHC 75.55 318 eP 20 05.50 1.1
BNG 76.58 272 ePd 20 09.80 -1.1
0.5s 4.00nm 4.7mb
S.D. = 1.5 on 18 of 25 obs.

? AUG 17, 1989 22h 15m 39.78± 8.03s
44.271 N ±32.0km 114.894 W ±60.4km
DEPTH = 5.0km (geophysicist)

WESTERN IDAHO (33)
ML 3.0 (BUT).

BGMT 2.25 64 ePn 16 18.40 0.0
LRM 2.32 47 ePn 16 20.10 0.5
BUT 2.40 43 ePg 16 26.10 5.6X
eSn 16 51.42
eSg 16 55.00
LCCM 2.65 53 ePn 16 24.00 -0.1
IMW 2.87 96 e(P) 16 27.50 0.1
DMMT 3.01 30 ePn 16 28.90 -0.3
MEMT 3.09 63 ePn 16 29.90 -0.4
HRV 3.25 40 ePn 16 32.80 0.2
S.D. = 0.4 on 7 of 8 obs.

? AUG 17, 1989 22h 32m 20.75± 1.75s
16.571 S ±33.7km 175.969 W ±23.1km
DEPTH = 301.8 ± 24.4 km
4.3mb (4 obs.)

TONGA ISLANDS (173)

AFI 4.83 57 iPd 33 36.60 -0.4
e(S) 34 20.00
DZM 17.47 249 iPc 36 09.50 2.6
WB5 47.16 258 eP 40 25.30 -0.2
WRA 47.18 258 Pc 40 26.10 0.4
0.7s 12.90nm 4.4mb
ASPA 47.41 253 iPd 40 27.30 -0.2
0.8s 115.00nm 5.3mb
FORR 52.65 244 eP 41 05.00 -1.7
WARB 53.93 249 iPc 41 15.10 -1.1
MBL 60.57 255 eP 42 01.00 -1.4
SPA 73.53 180 e(P) 43 23.30 0.8
1.0s 4.50nm 4.2mb
FBA 84.02 12 iP 44 19.50 1.3
CHTO 90.75 289 (P) 44 56.00 4.7X
0.7s 1.27nm 4.0mb
S.D. = 1.6 on 10 of 11 obs.

? AUG 17, 1989 23h 37m 13.65± 2.41s
31.829 S ±33.6km 69.555 W ±25.0km

DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.19 27 e(P) 37 28.00 -0.2
RTCB 0.73 62 iPd 37 31.50 -0.2
S 37 46.00
RTCV 0.87 92 e(P) 37 34.00 1.0
S 37 50.00
RTLL 1.05 62 ePc 37 35.00 0.0
S 37 52.10
MRA 3.32 101 ePc 38 03.80 -0.6
S.D. = 0.9 on 5 of 5 obs.

AUG 18, 1989 00h 14m 32.54± 1.15s
0.709 N ± 5.4km 126.221 E ± 9.2km
DEPTH = 58.9 ± 11.1 km
5.0mb (9 obs.)

MOLUCCA PASSAGE (266)

MNI 1.56 298 ePc 14 59.70 1.3
AAI 4.79 156 eP 15 44.10 0.2
eS 15 49.50
MTN 14.32 160 eP 17 52.00 -1.7
TRT 15.92 238 ePd 18 18.60 4.3X
KNA 16.55 171 eP 18 22.30 0.1
WB5 21.96 159 iPc 19 22.00 -1.1
eScP 23 20.00
WRA 22.01 159 Pc 19 22.40 -1.1
0.5s 54.00nm 5.2mb
MBL 22.61 196 eP 19 29.00 -0.4
PMG 23.14 116 eP 19 35.00 0.4
OIZ 24.28 320 eP 19 47.80 2.2
OZH 25.20 344 eP 19 53.00 -1.3
ASPA 25.35 163 iPd 19 55.50 -0.3
0.4s 145.00nm 5.8mb
eS 24 24.70
NANU 25.37 204 eP 19 56.00 0.1
0.7s 22.00nm 4.8mb
IPM 25.46 279 ePd 19 57.10 0.2
0.9s 41.90nm 4.9mb
GZH 25.52 332 eP 19 56.00 -1.3
WARB 26.74 179 eP 20 08.90 0.3
0.3s 10.00nm 4.9mb
MRWA 31.32 197 eP 20 50.00 0.5
FORR 31.44 177 iPd 20 50.40 0.0
0.4s 48.00nm 5.6mb
GYA 31.78 325 P 20 53.00 -0.7
CHG 32.24 306 eP 20 56.90 -0.9
STK 35.53 157 iPd 21 25.60 -0.3
0.5s 20.00nm 5.3mb
CD2 36.82 327 eP 21 35.40 -1.4
XAN 36.91 336 P 21 36.40 -1.1
ADE 37.36 163 eP 21 40.30 -1.0
TIY 38.95 343 eP 21 55.80 1.1
BJI 40.20 348 eP 22 05.00 0.2
BFD 40.62 160 iPc 22 09.10 0.8
BWA 40.68 151 eP 22 10.80 1.9
SNY 41.00 357 iPd 22 11.80 0.5
CAN 41.68 152 eP 22 17.90 0.8
CN2 42.91 359 eP 22 28.20 1.2
MDJ 43.82 3 eP 22 34.80 0.5
GTA 45.44 331 P 22 47.00 -0.6
HYB 49.72 292 eP 23 22.00 0.8
WMO 54.92 327 P 23 59.20 -0.5
MAIO 70.95 308 eP 25 46.00 -0.1
SPA 90.70 180 e(P) 27 31.20 1.1
0.7s 1.95nm 4.6mb
SOD 93.05 338 eP 27 40.00 -0.6
INK 93.14 21 eP 27 41.00 0.0
SUF 93.99 333 eP 27 44.00 -1.1
NB2 101.24 333 Pd diff 28 16.60 -1.4
1.0s 2.10nm 4.7mb
JCK 107.71 325 ePKPd 32 45.30 -9.3X
ALO 119.41 49 ePKP 33 19.20 1.4
Z080 159.05 138 PKP 34 28.00 1.4
S.D. = 1.0 on 42 of 44 obs.

* AUG 18, 1989 02h 37m 33.76± 0.74s
17.785 N ±10.5km 95.130 W ± 9.4km
DEPTH = 122.1 ± 10.2 km
3.5mb (1 obs.)

OAXACA, MEXICO (60)

OXX 1.67 246 iPd 38 03.37 -0.6
eS 38 25.56
LVVM 2.31 327 iP 38 10.33 -1.4
eS 38 37.40

IISM 2.45 300 iP 38 13.85 0.4
eS 38 37.70
SCX 2.60 113 eP 38 16.60 1.1
eS 38 46.60
IIT 3.26 293 eP 38 25.99 1.5
(S) 38 49.62
TPX 3.97 136 (P) 39 00.71 26.8X
(S) 39 41.79
UNM 4.14 292 (P) 39 16.50 40.1X
III 4.17 279 eP 38 36.31 -0.4
IIC 4.38 297 eP 38 39.38 -0.3
UYO 16.33 2 iPc 41 16.80 -0.3
MEO 17.21 350 iPd 41 28.50 0.5
ALO 19.85 332 e(P) 41 57.70 0.1
0.9s 2.31nm 3.5mb
e 42 24.60
LRM 31.45 336 eP 43 46.10 0.2
GAC 32.29 26 eP 43 51.00 -1.8
ZOBO 43.04 140 P 45 23.00 -0.8
YKA 46.69 348 eP 45 53.80 2.2
INK 55.98 344 eP 47 01.00 -0.3
S.D. = 1.2 on 15 of 17 obs.

& AUG 18, 1989 03h 29m 45.83s
59.767 N 152.341 W
DEPTH = 90.8km
SOUTHERN ALASKA (2)
<AGS-P>

ILIM 0.44 316 iP 29 59.65 -0.9
eS 30 10.84
XLV 0.44 135 eP 29 59.63 -0.8
OPT 0.46 256 iP 30 00.15 -0.5
eS 30 10.83
CNPM 0.61 113 iP 30 01.11 -0.7
eS 30 13.08
AUL 0.68 236 iP 30 02.02 -0.4
RED 0.69 342 iP 30 01.99 -0.7
eS 30 14.99
BRLK 0.74 90 iP 30 02.26 -0.8
eS 30 14.90
RDT 0.81 358 iP 30 03.14 -0.7
PDB 0.94 272 iP 30 04.17 -1.0
CDD 1.07 219 iP 30 05.61 -1.1
eS 30 20.75
NKA 1.12 29 iP 30 08.99 1.7
SLKM 1.30 54 eP 30 08.18 -1.3
eS 30 25.48
SPU 1.43 6 iP 30 10.68 -0.5
SEW 1.49 76 eP 30 10.50 -1.4
SUA 1.88 24 eP 30 16.68 -0.4
eS 30 39.05
KDC 2.03 182 eP 30 16.65 -2.3
SVW 2.11 311 iP 30 18.68 -1.5
PWA 2.24 32 eP 30 22.10 0.2
SKT 2.26 10 iP 30 21.21 -0.9
MTU 2.37 83 eP 30 22.77 -0.9
KNIM 2.38 74 iP 30 21.73 -2.0
PLRM 2.42 39 eP 30 22.66 -1.5
eS 30 50.22
KNK 2.53 48 eP 30 25.19 -0.6
GHO 2.62 38 eP 30 25.87 -1.2
eS 30 56.18
GLI 2.84 65 eP 30 27.90 -2.1
eS 30 59.04
FID 3.08 69 eP 30 30.54 -2.8
eS 31 04.66
VZW 3.15 63 eP 30 32.47 -1.8
KLU 3.61 59 iP 30 38.74 -1.9
eS 31 18.12
TOA 3.82 49 eP 30 42.01 -1.5
KTH 3.86 9 iP 30 43.85 -0.3
RND 4.01 23 eP 30 44.87 -1.4
31 obs. associated

AUG 18, 1989 03h 46m 26.02± 0.33s
55.053 S ± 8.4km 27.846 W ± 7.8km
DEPTH = 33.0km (normol)
5.6mb (11 obs.) 5.5msz (7 obs.)
SOUTH SANDWICH ISLANDS REGION (153)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 28C
Centroid Location:
Origin Time 03:46:30.4 0.4
Lot 55.38S 0.05 Lon 27.70W 0.13
Dep 15.0 FIX Half-duration 2.1

18d 03h

Moment Tensor; Scale 10**17 Nm
Mrr= 0.53 0.06 Mtt=-0.14 0.08
Mff=-0.38 0.07 Mrt=-1.98 0.19
Mrf= 0.82 0.14 Mtf= 1.21 0.08
Principal Axes:
T Vol= 2.21 Plg=48 Azm=174
N 0.51 24 293
P -2.72 32 39
Best Double Couple: Mo=2.5*10**17
NP1: Strike=180 Dip=25 Slip= 160
NP2: 289 82 66

Table with columns for station name, coordinates, and seismic data. Includes stations like BMA, VAO, SPA, PEL, PPD, MAW, PDCR, ITR, SBA, CCH, CNCB, KSR, LPB, ZOBO, SLR, ARE, BUL, DRV, LSZ, KMZ, PTZ, MZZ, LIC, KIC, TIC, IKZ, KUK, LWI, BNG, BOG, MSZ, ADE, IFR, APHE, AAPN, TOL, FVM, BZS, KHC, GLD, GOL, BW06, HFS.

Table with columns for station name, coordinates, and seismic data. Includes stations like NB2, LRM, SUF, DPW, LON, SOD, EDM, PNT, YKA, WMO, ALE, GTA, XAN, INK, NJ2, SSE, TIY, BTO, PMR, TIA, FBA, HHC, BJI, CN2, VLS, ITM, ATH, LIT, LSK, TPE, KBN, BERA, OHR, VAY, TIR, PHP, SDA.

Table with columns for station name, coordinates, and seismic data. Includes stations like ARE, ANT, CNCB, LPB, ZOBO, CCH, AAI, MTN.

Table with columns for station name, coordinates, and seismic data. Includes stations like KUG, KNA, WB5, WRA, DIS, ASPA, PMG, KKM, NANU, CTA, FORR, OLP, CHG, GYA, KMI, GTA, SPA, CNCB, PPD, LPB, ZOBO, QUE, NDI, MAIO, WMO, POO, HYB, GTA, BTO, TIY, NUR, SUF, SOD, KEV, HFS, NB2, MBC, INK, WRA, EDM, & AUG 18, 1989 08h 21m 24.96s, ALASKA PENINSULA, CDD, MCNL, AUE, OPT, PDB, SHU, ILIM, XLV.

Table with columns for station ID, depth, time, and other parameters. Includes stations like KOC, CNPM, RED, RDT, BRLK, SVW, SPU, SLKM, SEW, SUA, PMS, SKT, PWA, PLRM, PMR, KNK, GHO, MID, TTA, FID, VZW, HUR, KLU, KTH, TOA, WRH, CCB, FBA, IMA, HYT, DWY, INK, PNT, EDM, ALO.

Table with columns for station ID, depth, time, and other parameters. Includes stations like ROCH, RTBS, FCH, TACH, PCH, RTCB, CHCH, ZON, RTCV, RTLL, MRA, KNT, SRS, VAY, THE, MMB, GRG, KKB, PLC, OUR, LIT, RZN, PAIG, KZN, VTS, PLD, SKO, PGB, KDZ, OHR, RDO, NEO, DIM, PHP, LSK, ALN, BERA, TIR, PVL, EZN, SDA, JMB, DRA, CMP.

Table with columns for station ID, depth, time, and other parameters. Includes stations like PNT, EDM, WDC, MIN, ORV, WB5, WRA, FFC, LRM, CMB, PRS, NB2, PRNI, MBH, HYA, ASK, SUE, ODD1, BLS1, MOL, KMY, SRO, OJEN, TAF, AVE, TIO, IZM, DST, CIN, KHL, EDC, EZN, YER, ITM.

Summary table for ALBANIA (391) on AUG 18, 1989 at 08h. Includes location (41.947 N, 20.125 E), depth (10.0km), and station list with parameters.

Summary table for GREECE-BULGARIA BORDER REGION (363) on AUG 18, 1989 at 09h. Includes location (41.180 N, 23.149 E), depth (10.0km), and station list with parameters.

Summary table for SOUTHERN NORWAY (535) on AUG 18, 1989 at 10h. Includes location (60.893 N, 6.728 E), depth (10.0km), and station list with parameters.

Summary table for NEAR COAST OF CENTRAL CHILE (135) on AUG 18, 1989 at 09h. Includes location (31.628 S, 71.537 W), depth (100.1km), and station list with parameters.

18d 11h

VLS 1.56 340 ePb 51 10.20 -1.0
 eSb 51 29.00
 NEO 3.02 30 ePn 51 32.80 0.7
 OHR 4.41 355 eP 51 53.00 1.1
 S.D. = 1.8 on 4 of 4 obs.

? AUG 18, 1989 14h 23m 00.60 ± 1.05s
 31.511 S ± 16.6km 69.205 W ± 17.2km
 DEPTH = 100.0km (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.26 235 iPd 23 15.00 -0.4
 RTCB 0.35 86 iPd 23 16.00 0.3
 S 23 28.00
 RTLL 0.65 74 iPc 23 18.20 0.3
 S 23 32.50

RTCV 0.67 122 iPc 23 19.00 1.0
 S 23 32.00
 CFA 0.83 97 iPd 23 18.30 -1.3
 RTRS 1.35 351 iPc 23 25.50 0.1
 S 23 45.50

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

AUG 18, 1989 15h 41m 37.39 ± 0.70s
 19.486 S ± 5.2km 69.317 W ± 8.6km
 DEPTH = 132.3 ± 7.7 km
 NORTHERN CHILE (123)

CNCB 2.95 26 iPd 42 24.80 0.2
 LPB 3.16 22 Pd 42 27.40 0.2
 1 0s 900.00nm
 S 43 06.00

ZOBO 3.39 20 iPc 42 29.40 -1.1
 S 43 04.00
 ARE 3.65 325 iPc 42 29.00 -4.6X
 S 43 07.10

CCH 3.67 56 P 42 34.70 0.8
 ANT 4.32 193 iPc 42 41.20 -1.1
 YJA 4.46 127 ePd 42 45.20 0.6
 SLA 6.31 146 ePd 43 09.00 -0.4
 ROCH 13.52 186 eP 44 45.00 -0.1
 PEL 13.66 185 iPc 44 46.90 0.1
 FCH 13.81 183 eP 44 50.50 1.5
 LCCH 14.08 188 eP 44 52.00 -0.1
 TACH 14.18 186 eP 44 52.50 -1.0
 LNV 14.53 187 eP 44 51.00 -6.8X
 ITB1 14.76 113 e(P) 45 01.00 0.3
 ITB 14.96 113 e(P) 45 06.10 2.8
 PPD 17.03 102 eP 45 27.10 -1.9
 e 45 28.70
 e 45 31.40

VAO 21.12 103 eP 46 12.80 -0.3
 e 46 27.30
 BMA 23.69 102 eP 46 38.80 0.7
 PDCR 29.80 81 eP 47 32.90 -1.1
 i 47 33.70

GAC 65.12 355 eP 52 06.00 0.2
 LIC 68.21 75 P 52 25.08 -0.9
 TIC 68.39 74 P 52 26.20 -0.9
 KIC 68.53 75 Pc 52 27.28 -0.7
 EDM 81.78 335 iPc 53 42.60 0.1
 YKA 89.17 341 eP 54 20.90 2.2

S.D. = 1.2 on 24 of 26 obs.

% AUG 18, 1989 15h 56m 11.41 ± 1.39s
 31.533 S ± 22.6km 66.913 W ± 12.5km
 DEPTH = 33.0km (normal)
 LA RIOJA PROVINCE, ARGENTINA (138)

CFA 1.13 266 ePc 56 30.60 -0.5
 S 56 49.00
 RTLL 1.35 278 ePd 56 33.00 -1.1
 MRA 1.35 131 eP 56 34.00 0.0
 RTCV 1.42 256 iPd 56 35.50 0.3
 RTCB 1.61 271 iPc 56 39.00 1.0
 S 57 02.50

RTRS 2.58 301 e(P) 56 52.00 0.3
 S.D. = 0.9 on 6 of 6 obs.

& AUG 18, 1989 16h 15m 53.77s
 60.120 N 152.676 W
 DEPTH = 98.4km
 SOUTHERN ALASKA (2)
 <AGS-P>

ILIM 0.15 254 eP 16 07.31 1.0
 eS 16 18.51

RED 0.30 351 eP 16 07.90 -0.6
 eS 16 20.62
 RDT 0.47 16 eP 16 08.92 -0.6
 eS 16 20.82

OPT 0.55 211 iP 16 09.30 -0.7
 eS 16 20.97
 XLV 0.82 144 eP 16 11.46 -1.0
 PDB 0.83 247 iP 16 11.71 -0.9
 eS 16 25.66

AUW 0.85 208 eP 16 11.98 -0.8
 CNPM 0.94 129 eP 16 13.01 -0.7
 eS 16 27.83

NKA 0.95 48 eP 16 14.94 1.2
 eS 16 29.31
 SPU 1.11 16 iP 16 15.07 -0.6
 eS 16 31.83

BGL 1.16 7 eP 16 15.99 -0.3
 SLKM 1.28 71 eP 16 16.42 -1.3
 CDD 1.29 203 eP 16 16.24 -1.5

SHU 1.51 173 eP 16 19.01 -1.3
 eS 16 39.21
 SEW 1.62 89 eP 16 20.12 -1.6
 SUA 1.65 34 eP 16 22.07 -0.3
 eS 16 43.72

SKT 1.95 16 eP 16 25.15 -1.0
 PLRM 2.28 48 eP 16 28.83 -1.6
 KNK 2.44 56 eP 16 30.70 -2.0
 GHQ 2.47 46 eP 16 31.36 -1.8

20 obs. associated

? AUG 18, 1989 17h 01m 47.87 ± 8.04s
 16.339 N ± 14.0km 60.799 W ± 70.8km
 DEPTH = 33.0km (normal)

LEEWARD ISLANDS (92)

ML 2.4 (FDF)

DEG 0.25 264 ePd 01 55.10 0.0
 S 01 58.90
 SFG 0.39 257 ePd 01 56.85 0.0
 S 02 02.70

MGG 0.65 230 ePd 02 00.58 0.0
 S 02 08.40
 PAG 0.90 250 eP 02 04.20 0.0
 S 02 15.80

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

* AUG 18, 1989 17h 43m 21.56 ± 0.68s
 48.101 N ± 15.0km 154.618 E ± 14.5km
 DEPTH = 33.0km (normal)
 4.6mb (4 obs.)

KURIL ISLANDS (221)

KUSJ 8.56 238 P 45 25.40 -0.6
 S 46 55.50
 ASAJ 9.22 249 P 45 39.40 4.2X
 HOOJ 9.82 239 eP 45 43.60 0.2
 eS 47 27.90

MRRJ 11.10 244 eP 46 01.90 1.0
 NIJ 15.77 232 P 47 00.40 -2.3
 KAKJ 15.97 227 P 47 10.20 5.0X
 CHJJ 16.68 229 P 47 18.40 4.1X

MTMJ 16.90 233 P 47 16.90 -0.2
 IIDJ 17.68 231 P 47 28.70 1.9
 TSRJ 18.66 235 P 47 39.00 0.2

CHG 53.42 257 eP 52 40.30 -0.1
 LRM 59.57 54 eP 53 25.80 1.4
 KVN 60.64 63 eP 53 32.00 0.3
 e 53 45.50

BW06 63.12 55 (P) 54 01.50 13.2X
 RSSD 65.18 51 eP 53 59.80 -1.9
 e 54 14.80

CLL 75.65 336 e(P) 55 04.00 -0.7
 KHC 77.46 335 P 55 14.80 -0.1
 LOR 81.66 340 eP 55 37.30 -0.2
 0.6s 2.70nm 4.4mb

SSF 81.93 341 eP 55 38.50 -0.4
 SMF 82.25 340 eP 55 40.70 0.1
 LPG 82.63 338 eP 55 43.40 0.5
 1.2s 8.90nm 4.7mb

MAF 82.94 341 eP 55 44.60 0.5
 1.0s 8.80nm 4.8mb
 TCF 82.95 341 eP 55 44.50 0.3
 0.8s 2.60nm 4.4mb

S.D. = 1.0 on 19 of 23 obs.

? AUG 18, 1989 18h 20m 06.12 ± 1.23s

47.045 N ± 15.3km 14.157 E ± 13.1km
 DEPTH = 10.0km (geophysicist)
 AUSTRIA (546)
 ML 2.4 (KBA). Felt near Murou.

KBA 0.56 274 iPgc 20 16.60 -0.9
 iSg 20 25.60

BHG 1.10 308 eP 20 28.40 1.6
 PTJ 1.69 132 eP 20 36.20 0.3
 KHC 2.12 350 Pg 20 41.20 -0.9
 Sg 21 06.60

ZST 2.30 59 eP 21 14.30 29.6X
 S.D. = 2.1 on 4 of 5 obs.

& AUG 18, 1989 18h 43m 40.68s
 57.701 N 139.021 W
 DEPTH = 10.0km (geophysicist)
 OFF COAST OF SOUTHEASTERN ALASKA (20)
 <AGS-P>

PNL 1.98 354 eP 44 07.98 -6.7
 eS 44 36.03

BCPM 2.28 352 eP 44 13.25 -5.7
 eS 44 45.29

PCA 2.49 346 eP 44 17.34 -4.6
 eS 44 52.98
 HYT 3.23 13 P 44 21.00 -11.5
 4 obs. associated

* AUG 18, 1989 18h 49m 59.58 ± 1.05s
 12.727 N ± 9.2km 144.491 E ± 10.6km
 DEPTH = .66.4 ± 9.4 km
 4.5mb (1 obs.)

SOUTH OF MARIANA ISLANDS (210)

GUA 0.90 27 iPc 50 17.00 0.1
 eS 50 26.50
 GUMO 0.93 23 iPc 50 17.20 0.0
 PJG 0.93 23 iPc 50 17.20 -0.1

CHJJ 23.74 349 P 55 06.10 -0.5
 MTMJ 24.50 347 P 55 13.20 -0.9
 NIJJ 24.90 350 P 55 16.70 -1.0
 WHN 33.00 307 ePd 56 30.50 0.0
 OIZ 33.87 285 Pd 56 39.10 1.0
 BJI 36.89 323 eP 57 03.00 -0.5

Z 24s 0.32um 4.0MszX
 ASPA 37.62 196 iPc 57 09.30 -0.6
 TIY 37.89 317 Pd 57 10.70 -1.4

Z 16s 0.80um 4.6MszX
 GYA 38.01 297 P 57 15.20 1.9
 PcP 59 29.20

XAN 38.64 309 eP 57 18.20 -0.2
 KMI 41.21 294 eP 57 41.50 1.6
 CD2 41.64 302 eP 57 42.70 -0.4
 WARB 42.40 204 eP 57 49.00 -0.3

PSI 46.17 261 iPd 58 20.50 0.8
 GTA 47.47 312 eP 58 30.00 0.1
 WMO 57.47 314 eP 59 44.00 -0.2
 MSZ 60.96 161 P 00 08.00 0.0
 HYB 63.58 283 eP 00 26.00 -0.1

QUE 73.03 298 eP 01 24.70 -0.2
 INK 75.30 22 eP 01 37.00 0.1
 MAIO 78.59 305 eP 01 57.00 1.0
 ALE 84.11 3 eP 02 25.50 1.5
 0.6s 3.00nm 4.5mb

CMB 86.24 52 eP 02 37.80 2.3
 EDM 87.06 36 ePc 02 40.50 1.4
 KIC 144.02 300 PKP 09 28.22 -2.0
 TIC 144.10 301 PKP 09 28.68 -1.7

LIC 144.33 300 PKP 09 29.28 -1.5
 LPB 148.26 101 ePKP 09 46.00 8.4X
 CNCB 148.36 101 PKP 09 44.00 6.0X
 S.D. = 1.1 on 30 of 32 obs.

AUG 18, 1989 20h 00m 51.10 ± 0.50s
 51.380 N ± 10.8km 175.649 E ± 4.9km
 DEPTH = 33.0km (normal)
 4.9mb (31 obs.) 4.2Msz (1 obs.)
 RAT ISLANDS, ALEUTIAN ISLANDS (6)

SMY 1.66 325 ePd 01 17.10 -1.1
 ADK 4.80 81 eP 02 01.40 -1.5
 TTA 19.04 42 eP 05 13.90 1.1

IMA 21.35 35 eP 05 36.40 -1.0
 0.9s 11.50nm 4.3mb

PMS 21.41 49 eP 05 36.70 -1.2
 FBA 23.14 40 eP 05 53.50 -1.4

MTN 28.82 107 iPc 01 49.90 -0.3
 GBA 31.52 307 Pc 02 13.20 -0.9
 0.6s 1.90nm 4.1mb
 WRA 33.84 118 Pc 02 33.80 -0.6
 0.8s 8.70nm 4.7mb
 ASPA 34.97 125 iPc 02 43.60 -0.5
 02 53.40
 CD2 36.02 1 eP 02 52.00 -0.8
 QIS 38.70 116 eP 03 15.00 -0.5
 e 03 27.00
 XAN 39.54 8 Pc 03 21.50 -0.8
 NDI 41.89 325 iPc 03 41.50 -0.1
 TIY 43.71 11 eP 03 54.50 -1.9
 N 20s 2.10um
 PMG 44.03 98 eP 03 59.00 -0.3
 CTA 44.59 113 iPc 04 03.80 0.1
 1.0s 15.00nm 4.7mb
 GTA 44.59 357 P 04 04.00 0.4
 Z 16s 0.70um 4.7MsZ
 STK 44.79 131 iPd 04 05.70 0.6
 i 04 17.00
 HMC 46.61 9 P 04 21.00 1.5
 BJI 46.75 14 eP 04 21.00 0.6
 Z 24s 0.32um 4.2MsZ
 WMO 50.80 346 iPc 04 52.50 0.7
 CN2 52.94 20 eP 05 06.60 -1.3
 MAT 53.12 36 eP 05 07.00 -2.3
 MLR 84.70 317 ePd 08 25.30 0.9
 e 37 21.00
 SPA 84.73 180 e(P) 08 36.00 11.8X
 2.0s 22.50nm
 SUF 88.66 333 eP 08 43.50 0.4
 0.5s 3.00nm 4.8mb
 NUR 88.84 331 eP 08 59.30 15.3X
 Z 20s 0.20um 4.5MsZ
 LR 59 50.00
 KRA 89.54 320 eP 08 48.80 1.3
 SOD 89 63 338 iP 08 48.30 0.7
 SRO 90.28 318 eP 08 52.70 1.7
 ALO 139.93 39 e(PKP) 15 20.50 0.9
 Z 18s 0.40um 5.2MsZ
 CNCB 156.25 202 ePKP 15 58.00 11.9X
 LPB 156.55 202 ePKP 16 03.00 16.7X
 eLR 27 10.00
 ZOBO 156.80 202 ePKP 15 59.00 12.1X
 Z 20s 0.18um 4.9MsZ
 S.D. = 1.2 on 35 of 44 obs.

? AUG 19, 1989 07h 59m 40.25 ± 3.70s
 34.014 N ± 39.1km 23.209 E ± 12.7km
 DEPTH = 10.0km (geophysicist)
 4.1mb (1 obs.)

CRETE (370)
 MD 3.9 (ATH).

NPS 2.34 57 ePn 00 19.20 -0.2
 ITM 3.33 342 ePn 00 33.10 -0.3
 APE 3.59 31 ePn 00 37.60 0.5
 KAP 3.61 64 ePb 00 46.50 9.2X
 OHR 7.34 346 ePn 01 25.80 -4.3X
 KHC 16.71 338 P 03 38.50 2.6X
 DOU 21.10 325 Pc 04 27.70 0.6
 HFS 26.87 349 eP 05 22.00 -0.6
 0.4s 1.70nm 4.1mb
 S.D. = 0.8 on 5 of 8 obs.

AUG 19, 1989 08h 14m 59.18 ± 0.39s
 2.170 S ± 4.9km 138.182 E ± 7.4km
 DEPTH = 33.0km (normal)
 4.4mb (4 obs.) 4.5MsZ (1 obs.)

WEST IRIAN (201)

JAY 2.54 98 ePd 15 33.00 -6.1X
 iS 15 39.50
 MNDI 6.74 126 eP 16 44.00 5.3X
 LAT 9.85 117 eP 17 22.20 0.5
 PMG 11.46 129 eP 17 44.50 0.9
 MTN 12.70 213 iPd 17 59.70 -0.6
 eS 20 17.00
 KNA 16.38 214 eP 18 48.00 -0.3
 eS 21 43.00
 GUA 16.97 23 eP 18 55.50 -0.4
 GUMO 17.00 23 eP 18 54.50 -1.7
 WRA 18.06 192 Pd 19 08.70 -0.7
 0.3s 3.10nm 3.9mb
 OIS 18.33 176 e(P) 19 11.00 -1.7
 CTA 19.48 157 iPc 19 27.10 0.6

0.7s 10.96nm 4.2mb
 ASPA 21.77 191 iPd 19 48.70 -1.4
 Z 17s 2.71um 4.7MsZ
 eS 23 45.40
 MBL 26.00 222 eP 20 32.00 1.0
 LR 28 41.30
 RMQ 26.23 158 iPd 20 34.70 1.6
 WARB 26.33 204 eP 20 34.00 0.0
 0.3s 5.00nm 4.6mb
 GYA 41.67 315 P 22 48.00 1.4
 KMI 43.77 311 Pd 23 05.00 1.1
 CHG 43.86 300 eP 23 05.20 0.7
 XAN 45.33 325 P 23 15.50 -0.6
 CD2 46.43 318 eP 23 25.20 0.4
 BJI 46.59 337 eP 23 25.00 -0.9
 Z 24s 0.52um 4.4MsZ
 CN2 47.17 347 eP 23 26.50 -3.9X
 Z 22s 0.60um 4.5MsZ
 LZH 49.74 323 eP 23 51.50 0.8
 1.5s 45.00nm 5.3mb
 GTA 54.32 324 Pc 24 24.80 -0.2
 WMO 64.26 322 P 25 33.00 -0.6
 SPA 87.84 180 e(P) 27 52.70 6.3X
 CNCB 148.02 127 PKP 34 46.00 4.6X
 LPB 148.08 127 ePKP 34 45.00 3.7X
 ZOBO 148.20 126 PKP 34 45.00 3.3X
 1.0s 11.25nm
 i 35 15.00
 CCH 149.13 130 ePKP 34 54.00 11.2X
 S.D. = 1.0 on 22 of 30 obs.

% AUG 19, 1989 10h 16m 14.97 ± 1.73s
 37.741 S ± 15.4km 176.057 E ± 10.4km
 DEPTH = 33.0km (normal)
 NORTH ISLAND, NEW ZEALAND (159)
 Felt in the Bay of Plenty region.

UTU 0.45 166 Pd 16 24.10 -0.7
 TAZ 0.61 144 Pd 16 27.40 0.3
 eS 16 37.00
 HUTZ 0.89 178 eP 16 30.80 -0.3
 HITZ 0.99 193 Pc 16 32.10 -0.5
 RATZ 1.15 191 eP 16 34.30 -0.5
 HATZ 1.15 179 eP 16 34.40 -0.4
 KETZ 1.39 193 eP 16 38.00 -0.4
 HBZ 1.79 86 eP 16 44.00 0.0
 MNG 2.91 189 eP 17 00.90 0.9
 KIW 3.24 196 eP 17 05.40 0.7
 i 17 12.30
 CAW 3.45 193 eP 17 07.90 0.2
 i 17 16.10
 MRW 3.64 196 eP 17 11.20 0.9
 TCW 3.73 201 P 17 12.30 0.7
 MSZ 9.25 219 eP 18 28.00 -0.9
 S.D. = 0.7 on 14 of 14 obs.

AUG 19, 1989 10h 29m 00.46 ± 1.91s
 44.787 N ± 6.3km 6.713 E ± 25.7km
 DEPTH = 10.0km (geophysicist)
 FRANCE (538)
 ML 2.4 (GEN).

RRL 0.14 21 P 29 04.09 0.1
 S 29 06.35
 FOUF 0.26 169 ePgd 29 05.98 0.0
 eSg 29 09.04
 PZZ 0.40 135 P 29 08.61 0.0
 S 29 14.45
 LSD 0.74 25 P 29 15.07 -0.1
 S 29 24.19
 S.D. = 0.1 on 4 of 4 obs.

AUG 19, 1989 10h 34m 19.31 ± 0.54s
 37.441 N ± 4.8km 22.698 E ± 5.5km
 DEPTH = 77.0 ± 11.7 km
 3.8mb (1 obs.)

SOUTHERN GREECE (368)

ITM 0.67 247 iPnd 34 33.50 -1.1
 ATH 0.97 56 ePb 34 38.60 0.6
 eSn 34 51.60
 VLS 1.82 294 ePn 34 50.90 1.6
 APE 2.29 98 ePn 34 56.00 0.3
 VAM 2.36 149 ePn 34 56.00 -0.7
 PAIG 2.60 17 ePn 34 59.90 0.0
 eSn 35 31.80

LIT 2.66 357 ePn 35 00.60 -0.2
 eSn 35 31.70
 KZN 2.95 346 ePn 35 04.60 -0.3
 PLG 2.99 11 ePn 35 04.50 -0.8
 OUR 3.06 19 ePn 35 06.70 0.4
 eSn 35 43.80
 THE 3.19 4 ePn 35 07.60 -0.6
 NPS 3.20 132 ePn 35 08.20 -0.2
 KEK 3.21 316 ePn 35 08.20 -0.2
 KBN 3.50 336 ePn 35 21.30 8.9X
 GRG 3.52 356 ePn 35 12.80 0.0
 TPE 3.54 324 ePn 35 12.00 -1.0
 KNT 3.72 2 ePn 35 16.00 0.5
 eSn 35 58.70
 SRS 3.74 10 ePn 35 15.80 0.0
 eSn 35 58.60
 VAY 3.88 359 ePn 35 17.70 0.0
 OHR 3.95 339 iPn 35 21.10 2.3
 KAP 4.07 116 ePn 35 21.60 1.1
 MMB 4.22 11 eP 35 22.00 -0.6
 eS 36 09.00
 TIR 4.47 332 ePn 35 40.50 14.4X
 RZN 4.52 20 iPc 35 27.00 0.1
 eS 36 18.00
 PHP 4.59 338 iPnc 36 02.30 34.7X
 SKO 4.63 348 ePn 35 21.10 -7.2X
 KDZ 4.70 26 iPd 35 28.00 -1.3
 VTS 5.16 4 iPd 35 36.00 0.2
 SDA 5.19 333 ePn 35 50.20 14.1X
 HFS 23.43 349 eP 39 21.70 -0.3
 0.4s 1.80nm 3.8mb
 S.D. = 0.9 on 25 of 30 obs.

* AUG 19, 1989 11h 33m 35.75 ± 0.88s
 33.138 S ± 9.0km 179.579 W ± 18.7km
 DEPTH = 33.0km (normal)
 4.6mb (2 obs.)

SOUTH OF KERMADEC ISLANDS (179)

HBZ 4.78 201 eP 34 52.50 5.3X
 PGZ 8.17 203 eP 35 36.30 1.4
 KIW 8.88 208 eP 35 45.00 0.3
 MTW 8.92 205 eP 35 45.50 0.3
 CAW 9.03 207 eP 35 45.80 -1.0
 WDW 9.20 206 eP 35 48.50 -0.6
 eS 37 34.30
 MRW 9.27 208 eP 35 49.90 -0.2
 eS 37 35.70
 TCW 9.43 210 P 35 51.90 -0.4
 eS 37 40.20
 ASPA 41.71 271 iPd 41 24.10 0.8
 WRA 42.94 276 Pc 41 33.10 -0.3
 0.7s 10.50nm 4.7mb
 SPA 57.04 180 e(P) 43 21.50 0.8
 1.0s 5.00nm 4.5mb
 SUF 146.22 339 ePKP 53 07.60 -4.8X
 0.8s 16.60nm
 BNG 146.81 215 ePKPc 53 13.20 -1.7
 0.4s 6.00nm
 NB2 151.21 349 PKP 53 20.70 0.4
 0.7s 2.70nm
 HFS 151.61 346 ePKP 53 21.10 0.2
 1.0s 7.10nm
 LIC 152.75 168 PKP 53 31.70 7.8X
 S.D. = 0.9 on 13 of 16 obs.

? AUG 19, 1989 12h 15m 39.38 ± 4.72s
 39.852 N ± 32.8km 20.146 E ± 26.3km
 DEPTH = 10.0km (geophysicist)
 GREECE-ALBANIA BORDER REGION (392)

TPE 0.46 347 ePg 15 46.50 -2.1
 LSK 0.46 49 iPgd 15 36.00 -12.7X
 KBN 0.93 33 ePn 15 57.00 0.0
 OHR 1.35 21 iPn 16 05.20 0.9
 TIR 1.51 352 ePn 16 08.00 1.6
 LIT 1.82 81 eP 16 10.00 -1.0
 eS 16 38.10
 PHP 1.85 7 iPnc 16 11.70 0.4
 SKO 2.33 24 ePn 16 18.70 0.3
 VAY 2.36 51 ePn 16 21.70 3.0X
 S.D. = 1.5 on 7 of 9 obs.

* AUG 19, 1989 12h 27m 55.64 ± 0.78s
 62.692 S ± 17.2km 158.732 W ± 15.4km
 DEPTH = 10.0km (geophysicist)
 5.1mb (3 obs.)

19d 12h

SOUTH PACIFIC CORDILLERA (691)

SBA 18.62 202 P 32 14.70 0.1
 SPA 27.47 180 ePc 33 43.00 -0.5
 0.8s 58.33nm 5.4mb
 ASPA 58.88 279 eP 38 00.90 4.2X
 Z 22s 1.34um 5.0MszX
 LR 58 44.30
 WRA 61.91 281 Pd 38 16.60 -0.9
 0.8s 1.50nm 4.2mb
 ARE 74.27 95 i(P) 39 34.40 -0.5
 CNCB 75.57 99 P 39 42.80 0.1
 LPB 75.76 98 P 39 43.00 -0.6
 CCH 75.90 100 (P) 39 45.00 0.7
 ZOBO 75.98 98 iPd 39 44.00 -1.0
 1.4s 34.53nm 5.3mb
 S 49 36.00
 LR 03 28.00
 PPD 78.30 115 e(P) 40 02.00 4.8X
 MBH 145.90 201 ePKP 47 36.00 0.5
 IFR 146.39 138 ePKP 47 38.50 2.0
 i 47 41.00
 OHR 158.38 179 ePKP 48 16.30 23.1X
 S.D. = 1.0 on 10 of 13 obs.

AUG 19, 1989 13h 19m 20.26±0.14s
 6.507 S ± 2.6km 130.028 E ± 3.4km
 DEPTH = 164.5km (geophysicist)
 5.7mb (25 obs.)

BANDA SEA (280)

Depth from broadband displacement seismograms.
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=75 Dip=52 Slip=45
 NP2: 313 56 132
 Principal Axes:
 T P1g=56 Azm=282
 P 2 15

Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting with a large strike-slip component. The preferred fault plane is not determined.

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN
 L.P.B.: 12S, 24C
 Centroid Location:
 Origin Time 13:19:24.6 0.5
 Lat 6.38S 0.05 Lon 130.02E 0.06
 Dep 172.8 2.1 Half-duration 2.0
 Moment Tensor: Scale 10**17 Nm
 Mrr=1.12 0.09 Mtt=-0.66 0.10
 Mff=-0.46 0.12 Mrt=0.34 0.10
 Mrf=1.00 0.10 Mtf=-0.92 0.12
 Principal Axes:
 T Vol=1.61 P1g=63 Azm=264
 N 0.18 19 37
 P -1.79 18 134
 Best Double Couple: Mo=1.7*10**17
 NP1: Strike=251 Dip=32 Slip=129
 NP2: 28 66 69

AAI 3.34 327 ePd 20 17.30 4.2X
 eS 20 45.00
 MTN 6.39 170 iPd 20 52.60 -0.6
 KNA 9.27 188 iP 21 30.00 -1.4
 eS 23 06.00
 MNI 9.44 327 ePc 21 36.00 2.2
 0.8s 1543.50nm 6.6mb X
 MKS 10.58 276 iPc 21 55.50 6.8X
 JAY 11.36 70 ePd 21 57.20 -1.7
 PCI 11.59 298 eP 22 08.00 6.2X
 eS 22 24.50
 MNDI 13.55 89 eP 22 29.00 1.7
 WRA 14.00 163 Pd 22 28.80 -3.9X
 0.6s 198.30nm 5.6mb
 DAV 14.22 342 eP 22 36.00 0.5
 LAT 16.86 91 eP 23 09.00 0.8
 PMG 17.20 101 iPc 23 13.20 0.9
 ASPA 17.46 168 iPd 23 13.80 -1.6
 0.9s 1062.00nm 6.2mb
 Z 17s 2.90um 5.0MszX
 eS 26 22.00
 LR 30 37.20
 MBL 17.60 213 iPc 23 16.30 -0.6
 eS 26 22.00

KKM 18.59 312 eP 23 28.00 0.4
 0.7s 158.70nm 5.5mb
 WARB 19.83 189 iPd 23 41.10 0.7
 CTA 20.74 132 iPd 23 50.10 0.5
 1.0s 530.00nm 6.0mb
 iS 27 34.00
 NANU 21.22 220 iPc 23 55.00 0.8
 0.4s 106.00nm 5.7mb
 eS 27 52.00
 RAB 22.16 85 iPd 24 04.00 0.5
 0.6s 448.00nm 6.1mb
 TPI 22.61 278 ePd 24 11.30 3.5X
 e 28 00.00
 MEKA 22.80 207 iPd 24 10.40 0.8
 0.4s 116.00nm 5.7mb
 eS 28 26.00
 OCP 22.81 337 eP 24 08.50 -1.2
 QLP 24.12 147 iPd 24 22.70 0.4
 e 24 38.00 65kmX
 e 29 15.00
 FORR 24.28 184 iPd 24 23.70 -0.1
 0.4s 170.00nm 6.0mb
 eS 29 00.00
 BAG 24.62 338 eP 24 26.00 -1.2
 1.0s 96.00nm 5.3mb
 eS 28 32.00
 GUA 24.80 37 eP 24 28.80 0.1
 GUMO 24.81 36 eP 24 28.50 -0.3
 KLI 25.10 272 eP 24 31.00 -0.5
 eS 26 45.00
 COOL 25.64 198 iPd 24 36.10 -0.3
 eS 29 32.00
 MRWA 26.19 209 iPc 24 41.10 -0.3
 0.3s 35.00nm 5.6mb
 e 25 15.00 166kmX
 eS 29 42.00
 RMO 26.71 140 iPd 24 45.90 -0.2
 e 25 25.00 195kmX
 e 31 35.00
 BAL 27.04 206 eP 24 49.00 -0.1
 eS 30 08.00
 STK 27.46 158 iPd 24 52.60 -0.2
 0.3s 44.00nm 5.6mb
 e 25 23.00 145kmX
 e 30 08.00
 KLB 27.47 203 eP 24 53.00 0.1
 KGM 27.98 287 eP 24 59.00 1.3
 MUN 28.44 205 iPc 25 01.30 -0.4
 eS 30 35.00
 NWA0 28.86 203 eP 25 05.00 -0.4
 CMS 28.92 151 eP 25 05.00 -0.9
 e 25 41.00 174kmX
 e 30 25.00
 ADE 29.43 165 iPd 25 11.20 0.7
 0.6s 253.33nm 6.1mb
 SVO 29.62 97 eP 25 12.00 -0.3
 HNR 29.77 98 eP 25 12.00 -1.6
 BRS 29.97 137 iPc 25 13.80 -1.5
 i 25 53.00 191kmX
 PPI 30.17 280 eP 25 16.50 -0.6
 0.6s 143.60nm 5.9mb
 IPM 30.98 290 ePc 25 23.10 -1.2
 0.5s 39.30nm 5.4mb
 COO 31.54 142 iPc 25 28.80 0.8
 e 26 16.00 227kmX
 OIZ 32.24 322 iPc 25 35.60 0.4
 N 12s 0.40um
 S 30 32.00
 SNG 32.34 294 eP 25 35.50 -0.6
 0.8s 62.69nm 5.4mb
 eS 29 35.60
 PSI 32.37 285 ePc 25 29.60 -6.8X
 1.0s 182.90nm 5.8mb
 BFD 32.59 161 iPc 25 39.10 1.0
 e 26 14.00 165kmX
 e 26 47.00
 OZH 33.18 341 Pd 25 42.60 -0.7
 S 30 46.00
 sS 31 46.00
 GZH 33.63 331 eP 25 44.70 -2.5
 S 30 53.00
 CNB 33.74 151 eP 25 50.00 1.9
 e 32 55.00
 TOO 33.97 158 iPc 25 52.40 2.4
 e 32 54.00
 NNT 35.59 302 iPc 26 04.00 0.1
 BSI 36.66 288 ePd 26 10.50 -2.4

LOE 36.69 311 iPc 26 13.00 -0.1
 NST 36.91 307 eP 26 16.30 1.4
 SSE 38.33 348 P 26 26.80 0.1
 1.0s 0.06nm 2.2mb X
 Z 20s 0.50um 4.3Msz
 E 16s 0.60um
 S 32 02.00
 sS 32 14.00
 SS 34 18.00
 DZM 38.39 118 iPc 26 27.30 -0.2
 BDT 38.69 308 iPc 26 30.50 0.7
 0.7s 221.30nm 6.0mb
 CHG 39.65 310 iPc 26 38.60 0.8
 1.0s 186.50nm 5.7mb
 WHN 39.79 339 Pc 26 40.00 1.3
 1.0s 0.12nm 2.5mb X
 pP 27 18.00 175kmX
 S 32 29.00
 sS 33 36.00
 NJ2 39.80 345 Pc 26 39.80 1.1
 ScP 32 14.00
 S 32 29.00
 sS 33 35.00
 GYA 39.84 326 iPc 26 40.00 0.7
 1.0s 0.10nm 2.4mb X
 pP 27 19.00 181kmX
 PcP 28 42.60
 ScP 32 16.50
 S 32 28.00
 sS 33 35.00
 ScS 36 27.00
 KMI 41.15 321 ePc 26 51.69 1.4
 pP 27 28.00 166kmX
 esPd 27 45.49
 eS 32 48.50
 eSS 36 09.13
 TSRJ 42.19 7 P 26 58.90 0.6
 IIDJ 42.42 10 P 27 00.00 -0.2
 CHJJ 43.16 11 P 27 05.20 -1.0
 MTMJ 43.48 9 P 27 08.50 -0.4
 MAT 43.50 10 eP 27 08.00 -1.0
 0.8s 28.36nm 4.9mb
 Z 20s 0.71um 4.6Msz
 eS 33 24.00
 KAKJ 43.54 12 P 27 08.90 -0.3
 TIA 44.19 345 eP 27 13.90 -0.6
 S 33 31.00
 NIIJ 44.32 10 P 27 15.10 -0.4
 CD2 44.90 327 iPc 27 20.10 -0.2
 0.8s 0.10nm 2.4mb X
 S 33 36.00
 XAN 45.01 335 iPc 27 20.70 -0.3
 S 33 41.00
 TIY 46.95 341 iPc 27 36.80 0.4
 1.0s 0.10nm 2.3mb X
 N 16s 0.50um
 sP 28 24.00
 S 34 12.50
 BJI 48.05 346 ePc 27 44.63 0.0
 epPd 28 21.87 166kmX
 eS 34 26.00
 SNY 48.46 354 iPc 27 47.80 0.0
 Z 19s 0.50um 4.5Msz
 E 19s 0.70um
 pP 28 25.00 165kmX
 sP 28 46.40
 PcP 29 10.00
 sS 35 37.00
 SHL 48.89 312 iP 27 51.00 -0.7
 eS 34 38.00
 LZH 48.99 332 ePc 27 52.78 0.6
 Z 18s 0.50um 4.5Msz
 pP 28 30.00 165kmX
 esPd 28 47.57
 S 34 41.00
 esS 35 41.77
 HHC 50.09 342 iPc 28 01.00 0.5
 S 34 58.00
 CN2 50.24 356 Pc 28 00.80 -0.6
 4.0s 0.20nm 2.1mb X
 pP 28 39.00 169kmX
 sP 28 58.50
 PcP 29 17.00
 eS 34 58.00
 sS 36 02.00
 ScS 37 33.00
 SS 38 36.00

MSZ 50.33 145 P 28 02.80 0.7
e 28 46.20 195kmX
BTO 50.36 340 eP 28 02.00 -0.5
pP 28 40.00 168kmX
sP 29 05.50
eS 34 55.00
MDJ 50.89 360 eP 28 06.50 0.2
LSA 51.86 316 iPd 28 14.40 -0.1
S 35 21.00
TCW 52.35 138 eP 28 16.30 -1.0
e 28 59.50 192kmX
CCW 52.57 139 P 28 18.30 -0.7
KIW 52.60 138 P 28 19.30 0.1
MRW 52.64 138 P 28 18.40 -1.1
WEL 52.71 138 P 28 19.50 -0.5
CAW 52.82 138 P 28 19.50 -1.3
WDW 52.85 138 eP 28 19.60 -1.4
MTW 53.14 138 eP 28 22.00 -1.1
BLW 53.21 138 P 28 22.80 -0.9
PGZ 53.41 137 P 28 24.00 -1.1
0.4s 26.00nm 5.4mb
GTA 53.56 331 iPc 28 26.80 0.4
0.8s 0.10nm 2.6mb X
Z 16s 0.50um 4.7MszX
pP 29 05.60 170kmX
S 35 43.00
sS 36 48.50
ScS 37 56.40
HBZ 53.58 133 P 28 26.40 0.0
KOD 54.92 287 eP 28 36.20 -0.7
GBA 55.90 291 P 28 42.80 -0.8
HYB 56.12 296 iPc 28 44.00 -1.2
0.7s 96.20nm 5.8mb
DRV 60.46 175 eP 29 18.00 3.6X
NDI 61.71 307 iPc 29 22.50 -0.9
eS 37 26.00
WMO 63.00 327 ePc 29 32.53 0.7
pP 30 11.20 163kmX
eS 37 46.56
SBA 73.82 172 P 30 39.50 1.6
MAW 75.42 201 eP 30 47.70 0.6
0.9s 65.00nm 5.4mb
SPA 83.54 180 e(P) 31 31.00 0.2
1.0s 40.00nm 5.2mb
e 32 23.00 214kmX
PRNI 97.58 300 eP 32 33.00 -4.3X
MBH 97.65 299 iPc 32 38.00 0.4
SUF 102.11 333 iPdiff 32 55.80 -1.1
0.6s 7.30nm 5.6mb
NUR 103.19 331 ePdiff 33 08.40 6.6X
Z 22s 0.50um 5.0Msz
LR 04 50.00
HFS 108.55 332 ePdiff 33 24.10 -1.5
0.6s 3.10nm 5.7mb
NB2 109.36 333 Pdiff 33 27.90 -1.3
0.7s 1.80nm
BNG 111.80 272 ePKPd 37 38.10 -0.1
1.0s 20.00nm
ic 38 20.50
id 38 32.40
KHC 112.06 321 PKP 37 37.80 0.2
BSF 116.75 321 ePKP 37 46.50 -0.3
CVF 117.11 315 ePKP 37 47.20 -0.3
LPG 117.61 318 ePKP 37 48.70 0.0
SBF 117.70 317 ePKP 37 48.40 -0.3
LOR 118.80 321 ePKP 37 50.80 0.2
LBF 118.84 321 ePKP 37 50.80 0.1
SSF 119.11 321 ePKP 37 51.20 0.1
AVF 119.31 321 ePKP 37 51.40 -0.1
BCF 119.73 321 ePKP 37 52.50 0.2
MAF 120.04 320 ePKP 37 53.00 0.0
TCF 120.24 321 ePKP 37 53.70 0.3
LSF 120.68 321 ePKP 37 54.80 0.6
FLN 120.76 324 ePKP 37 54.30 0.1
CAF 120.89 319 ePKP 37 54.80 0.1
ALO 120.99 53 ePKP 37 56.10 0.7
e 38 45.50
LPF 121.44 324 ePKP 37 56.20 0.7
LPO 121.56 319 ePKP 37 56.00 0.1
MFF 121.57 322 ePKP 37 56.00 0.2
LFF 121.74 320 ePKP 37 57.00 0.8
EPF 122.81 318 ePKP 37 58.60 0.2
TIC 135.36 273 PKP 38 13.86 -9.3X
ANT 143.94 147 iPKP 38 39.30 0.9
SLA 145.47 155 ePKPc 38 42.10 0.9
NNA 147.57 124 iPKP 38 49.00 4.3X
0.9s 25.21nm

YJA 147.69 152 ePKPd 38 46.90 1.7
e 38 49.10
ARE 148.79 137 ePKP 38 53.00 6.1X
BMA 150.42 191 ePKP 38 50.60 1.7
e 38 56.50
e 39 20.00
epPKP 39 41.00
BMA 150.42 191 ePKP 38 55.00 6.1X
VAO 150.53 186 ePKP 38 55.50 6.4X
epPKP 39 45.50
UPA 150.61 83 ePKPc 38 55.00 5.7X
0.5s 56.34nm
e 39 42.80
CNCB 150.78 143 PKP 38 52.00 1.8
i 38 58.00
LPB 150.92 142 PKP 38 58.00 7.8X
0.9s 75.63nm
ZOBO 151.11 142 PKP 38 53.00 2.3
1.1s 63.81nm
i 39 54.00
CCH 151.39 146 PKP 39 00.00 9.2X
PPD 151.61 177 ePKP 38 50.80 0.2
e 38 56.10
i 38 57.70
PDCR 158.23 210 ePKP 38 52.40 -7.2X
e 39 35.20
S.D. = 0.9 on 133 of 151 obs.
AUG 19, 1989 14h 13m 36.97 ± 0.52s
40.746 N ± 5.8km 27.632 E ± 5.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
EDC 0.44 156 iPg 13 45.90 0.0
eSg 13 52.90
BNT 0.45 151 iPg 13 46.70 0.6
CTT 0.73 56 ePn 13 59.00 7.8X
KCT 0.74 132 iPg 13 51.20 -0.4
iSg 14 01.20
ISK 1.13 73 ePn 13 57.30 -0.8
ALN 1.21 278 eP 14 13.50 14.0X
YLV 1.34 97 iPn 14 00.20 -1.5
EZN 1.36 228 iPn 14 00.20 -1.7
DST 1.37 146 iPn 14 02.70 0.5
GBZT 1.38 88 ePn 14 01.80 -0.4
eSg 14 20.60
JMB 1.89 336 eP 14 11.00 1.4
eS 14 36.00
KDZ 1.90 299 iPd 14 10.00 0.3
DIM 2.05 310 eP 14 11.00 -0.8
ePg 14 15.00
IZM 2.36 187 ePn 14 19.00 2.6
RZN 2.39 294 eP 14 16.00 -1.0
eS 14 49.00
OUR 2.81 263 eP 14 27.00 4.2X
KHL 2.83 148 iPn 14 32.00 8.9X
MMB 3.07 287 eP 14 25.00 -1.4
eS 15 10.00
SRS 3.08 278 eP 14 32.20 5.6X
PGB 3.16 306 eP 14 33.00 5.2X
eS 15 13.00
KKB 3.60 290 eP 14 38.00 4.0X
eS 15 28.00
KNT 3.61 278 eP 14 29.00 -4.3X
VTS 3.79 301 eP 14 46.00 9.1X
VAY 3.87 280 ePn 14 46.60 8.8X
MLR 4.90 346 eP 14 53.00 0.5
VRI 5.16 353 eP 14 58.00 1.9
S.D. = 1.3 on 16 of 26 obs.
? AUG 19, 1989 15h 06m 10.49 ± 5.14s
7.804 S ± 36.0km 130.132 E ± 20.9km
DEPTH = 124.3 ± 35.0 km
4.6mb (3 obs.)
TANIMBAR ISLANDS REGION (281)
MTN 5.11 169 iPc 07 27.00 1.0
KNA 8.01 189 eP 08 05.00 -0.6
eS 09 39.00
WRA 12.74 162 Pc 09 06.70 -1.6
ASPA 16.18 168 eP 09 53.10 1.0
0.5s 38.00nm 4.9mb
eS 12 50.60
MBL 16.59 216 eP 09 57.00 -0.1
WARB 18.58 190 eP 10 21.30 0.6
0.3s 3.00nm 4.1mb
eS 13 46.00

FORR 23.01 184 eP 11 05.00 -0.2
0.3s 10.00nm 4.7mb
CNCB 149.68 144 ePKP 25 44.00 0.3
ZOBO 150.02 143 ePKP 25 44.00 -0.3
S.D. = 1.0 on 9 of 9 obs.
AUG 19, 1989 16h 25m 39.03 ± 0.63s
40.731 N ± 6.9km 27.625 E ± 5.6km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MFT 0.27 282 ePg 25 42.40 -2.3
EDC 0.42 155 iPg 25 47.90 0.2
iSg 25 54.90
BNT 0.44 149 iPg 25 47.70 -0.2
KCT 0.74 131 iPg 25 54.70 1.2
iSg 26 05.70
CTT 0.74 55 ePg 25 52.70 -0.8
eSg 26 06.20
ISK 1.14 72 ePn 25 59.00 -1.3
YLV 1.34 96 iPn 26 03.20 -0.6
EZN 1.34 228 ePn 26 02.20 -1.6
DST 1.36 145 iPn 26 05.70 1.6
GBZT 1.38 87 ePn 26 04.00 -0.3
JMB 1.90 336 eP 26 13.00 1.2
eS 26 38.00
DIM 2.05 311 eP 26 15.00 1.0
IZM 2.35 187 ePn 26 23.00 4.7X
RZN 2.39 294 eP 26 21.00 1.9
eS 26 51.00
KHL 2.82 148 iPn 26 34.00 9.0X
KKB 3.60 290 eP 26 42.00 5.9X
eS 27 30.00
S.D. = 1.4 on 13 of 16 obs.
% AUG 19, 1989 17h 04m 13.04 ± 0.81s
40.806 N ± 7.6km 27.521 E ± 5.3km
DEPTH = 10.0km (geophysicist)
TURKEY (366)
MFT 0.18 264 ePg 04 17.20 0.0
EDC 0.53 150 iPg 04 22.90 -0.8
eSg 04 29.90
BNT 0.54 146 iPg 04 24.70 0.7
CTT 0.77 63 ePg 04 28.70 0.7
eSg 04 38.70
KCT 0.85 131 iPg 04 30.20 0.8
ISK 1.19 77 ePn 04 35.00 -0.3
EZN 1.34 223 ePn 04 37.70 0.0
YLV 1.43 99 ePn 04 38.00 -1.1
S.D. = 0.8 on 8 of 8 obs.
AUG 19, 1989 17h 29m 55.91 ± 0.44s
27.641 S ± 4.6km 67.486 W ± 8.4km
4.8mb (2 obs.)
CATAMARCA PROVINCE, ARGENTINA (130)
CYA 1.70 119 iPc 30 28.60 -0.2
SLA 3.41 32 iPc 30 50.80 1.2
CFA 4.01 189 ePc 30 43.50 -13.7X
S 30 57.30
ZON 4.03 195 iPc 30 58.30 0.8
eS 31 43.00
RTCV 4.30 192 i(P) 31 02.00 0.9
RTBS 4.36 203 iPd 31 03.50 1.8
ANT 4.73 325 iPd 31 08.30 1.6
MRA 5.00 162 iPd 31 09.80 -0.4
JACH 5.70 207 iPc 31 20.60 1.0
iS 32 24.50
YJA 5.74 19 ePc 31 20.50 0.0
ROCH 6.12 209 iPd 31 19.03 -6.4X
iS 04 03.50
PEL 6.14 206 iPd 31 25.00 -0.5
iS 32 34.50
FCH 6.16 202 iPd 31 27.50 1.4
iS 32 37.50
PCH 6.51 203 iPd 31 31.10 0.6
iS 32 44.80
TACH 6.69 206 iPd 31 31.50 -1.3
iS 32 45.50
LCCH 6.80 210 iPd 31 32.60 -1.7
iS 32 47.50
CHCH 6.84 203 iPd 31 34.40 -0.5
LNV 7.14 207 iP 31 36.10 -2.8
iS 32 54.50
RFA 7.16 186 ePd 31 38.00 -1.2

PRNI 88.61 38 eP 35 38.00 2.6
 PNT 135.36 299 ePKP 42 03.00 0.9
 INK 146.32 326 ePKP 42 22.00 1.0
 0.8s 28.00nm
 S.D. = 1.4 on 13 of 15 obs.

* AUG 19, 1989 23h 38m 06.17± 0.71s
 23.152 S ± 9.4km 66.570 W ± 9.2km
 DEPTH = 225.1 ± 8.6 km
 4.0mb (1 obs.)

JUJUY PROVINCE, ARGENTINA (128)

YJA 1.39 45 iPd 38 41.20 -0.9
 SLA 1.85 148 iPd 38 47.00 1.3
 S 39 17.80
 ANT 3.57 260 iPc 39 03.20 -1.1
 iS 39 43.50
 CCH 5.75 4 P 39 32.20 0.5
 CNCB 6.45 348 iPc 39 41.40 0.6
 LPB 6.74 347 Pc 39 45.00 0.6
 ZOBO 7.00 348 iP 39 47.20 -0.7

Z 24s 0.13um

LR 50 38.00
 ARE 8.11 324 eP 39 58.00 -4.0X
 eS 41 24.00
 PPD 14.14 88 eP 41 17.70 -0.4
 e 41 20.60
 VAO 18.04 93 eP 42 03.70 0.4
 BAO 19.04 70 eP 42 14.00 0.3
 ITR 30.53 67 eP 43 59.20 -1.5
 ALO 69.06 326 eP 48 50.60 0.8
 1.0s 3.50nm 4.0mb

S.D. = 1.0 on 12 of 13 obs.

AUG 20, 1989 00h 03m 17.85± 0.57s
 34.736 N ± 6.8km 87.645 W ± 4.2km
 DEPTH = 10.0km (geophysicist)
 3.4mb (1 obs.)

ALABAMA (507)

mbLg 3.9 (NEIS). Minor damage
 (VI) reported south of Florence.
 Felt (V) at Donville, Florence,
 Rogersville and Tuscumbia; (IV)
 at Courtland, Killen, Sheffield
 and Town Creek; (III) at
 Cherokee and Waterloo. Also felt
 (III) at Iron City,
 Lawrenceburg, Saint Joseph and
 Westpoint, Tennessee.

LAL 0.39 140 P 03 26.60 0.7
 PWLA 0.42 305 iPc 03 26.50 0.1
 MSAL 0.81 82 P 03 32.40 -1.1
 TCT 1.27 3 P 03 40.70 -0.7
 ABTN 1.70 47 P 03 47.90 0.2
 LKGA 1.79 93 P 03 49.70 0.6
 MOTN 1.90 352 P 03 51.00 0.4
 LST 2.46 317 eP 04 00.50 1.9
 GBTN 2.96 71 eP 04 07.50 1.7
 OLY 3.23 285 eP 04 09.40 -0.1
 TKL 3.30 73 eP 04 11.30 0.7
 FVM 3.94 326 eP 04 19.00 -0.7
 PRM 4.41 97 eP 04 25.70 -0.7
 LHS 5.64 91 eP 04 43.20 -0.6
 UYO 5.66 266 iPn 04 43.00 -1.0
 iLg 05 48.00

NAV 6.12 63 eP 04 50.50 0.0
 BLA 6.36 65 eP 04 52.80 -1.1
 ALO 15.45 276 eP 07 05.00 7.3X
 0.9s 2.10nm 3.4mb

S.D. = 1.0 on 17 of 18 obs.

* AUG 20, 1989 00h 07m 39.61± 0.55s
 38.402 N ± 8.7km 72.580 E ± 9.5km
 DEPTH = 33.0km (normal)
 4.4mb (8 obs.)

TAJIK SSR (715)

Felt (III) at Vonch.

KSH 2.85 67 ePg 08 29.60 5.7X
 NDI 10.43 157 iPc 10 09.00 -1.0
 MAIO 10.63 263 iPc 10 06.80 -5.9X
 0.6s 9.82nm 5.2mb
 eS 12 02.00
 WMO 12.61 60 eP 10 39.50 0.0
 GTA 21.19 79 eP 12 25.40 0.8
 GBA 25.07 169 Pc 13 02.90 0.4

0.8s 4.30nm 4.1mb
 SUP 37.01 326 eP 14 48.40 0.9
 0.8s 5.20nm 4.4mb
 NUR 37.65 322 eP 14 47.90 0.0
 HFS 42.37 321 eP 15 31.30 -0.7
 0.4s 3.30nm 4.4mb

NB2 43.64 322 P 15 41.30 -1.1
 0.9s 3.60nm 4.1mb

BNG 59.50 249 ePc 17 45.40 3.3X
 0.5s 3.00nm 4.7mb

BCAO 59.50 249 eP 17 43.30 1.2
 0.5s 1.28nm 4.3mb
 e 17 47.30

MBC 65.38 3 eP 18 20.00 -0.4
 0.7s 3.00nm 4.5mb

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

? AUG 20, 1989 00h 30m 08.48± 4.99s

31.135 S ± 21.9km 68.496 W ± 36.8km

DEPTH = 92.1 ± 50.5 km

SAN JUAN PROVINCE, ARGENTINA (137)

RTL 0.20 173 iPd 30 22.00 -0.2
 S 30 32.00

RTCB 0.44 216 iPd 30 23.50 0.2
 S 30 35.80

CFA 0.52 155 iPd 30 24.10 0.2
 e 30 36.00

RTCV 0.72 183 iPc 30 25.50 -0.2
 S 30 37.00

RTRS 1.27 319 iPc 30 31.80 0.0
 S 30 49.00

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

AUG 20, 1989 01h 01m 50.07± 0.22s

17.878 N ± 4.1km 64.560 W ± 3.2km

DEPTH = 156.9 ± 2.9 km

4.5mb (21 obs.)

VIRGIN ISLANDS (91)

LPR 1.32 289 P 02 18.30 -0.4
 SJC 1.53 279 P 02 21.20 0.4
 S 02 44.20

SKI 1.82 107 eP 02 23.89 -0.1
 eS 02 49.89

PNP 2.03 275 P 02 26.30 0.0
 NEV 2.04 111 ePd 02 26.60 0.2
 S 02 47.30

APR 2.14 286 P 02 27.50 -0.1
 S 02 57.50

MGP 2.41 273 P 02 30.70 -0.2
 S 03 01.70

MBET 2.55 116 eP 02 31.89 -0.8
 BPA 2.71 107 ePc 02 33.37 -1.2
 S 03 04.30

SEG 3.27 116 eP 02 41.37 -0.3
 PAC 3.31 123 eP 02 43.30 1.0
 S 03 26.00

SFG 3.60 116 eP 02 44.10 -1.8
 MGC 3.67 122 eP 02 46.95 0.2
 S 03 30.40

BBL 3.77 128 ePc 02 48.46 0.3
 DPMT 4.01 130 eP 02 51.56 0.3
 FDF 4.53 133 iPc 02 58.44 0.3

CRM 4.68 131 iPc 03 00.41 0.3
 BIM 4.73 134 iPc 03 01.42 0.5
 MVM 4.83 133 iPc 03 02.83 0.7

SLB 5.26 139 eP 03 08.58 0.6
 eS 04 14.14

SVB 5.58 145 eP 03 12.94 0.8
 eS 04 19.46

TCE 7.64 159 eP 03 51.80 12.0X
 TRN 7.81 157 eP 03 46.10 4.0X
 BLA 23.78 327 P 06 51.00 1.5
 1.0s 57.00nm 5.1mb

GBTN 24.85 319 P 07 00.00 0.5
 FVM 30.22 317 P 07 47.80 -0.1
 0.6s 33.16nm 5.2mb

ZOBO 34.11 186 P 08 22.00 -0.5
 LPB 34.37 186 P 08 25.00 0.5
 CNCB 34.63 186 eP 08 25.00 -1.9
 e 08 27.00

CCH 35.07 183 P 08 30.00 -0.3
 SCH 36.91 358 eP 08 45.00 0.0
 BAO 37.09 153 eP 08 47.50 0.4
 ALO 40.86 303 eP 09 19.30 1.0
 1.0s 7.50nm 4.3mb

GLD 41.30 310 P 09 21.00 -0.8
 GOL 41.39 310 P 09 23.00 0.3
 0.9s 12.50nm 4.5mb

PPD 41.73 161 eP 09 24.20 -1.0
 FFC 46.58 331 eP 10 03.00 -0.7
 0.6s 8.00nm 4.5mb

LRM 48.34 316 eP 10 18.30 0.4
 TNP 49.97 305 P 10 31.20 0.9
 0.9s 5.66nm 4.3mb

KVN 50.79 306 P 10 37.00 0.4
 LON 54.85 315 P 11 05.50 -0.7
 LIC 59.14 93 Pc 11 38.50 1.7

MFF 59.70 46 eP 11 40.40 0.2
 0.6s 5.40nm 4.6mb

FLN 59.72 44 eP 11 40.40 0.1
 0.6s 3.60nm 4.5mb

EPF 59.76 50 eP 11 41.20 0.5
 0.6s 3.60nm 4.5mb

LDF 59.93 44 eP 11 41.80 0.0
 0.6s 3.60nm 4.5mb

LSF 60.82 47 eP 11 47.80 -0.1
 0.8s 3.20nm 4.3mb

TCF 61.29 47 eP 11 50.80 -0.3
 0.6s 2.70nm 4.3mb

AVF 62.11 46 eP 11 56.20 -0.2
 0.6s 1.80nm 4.2mb

LOR 62.49 46 eP 11 58.20 -0.7
 0.4s 3.40nm 4.6mb

LBF 62.55 46 eP 11 59.20 -0.2
 0.8s 2.60nm 4.2mb

LPG 64.44 48 eP 12 12.60 0.5
 0.6s 3.60nm 4.5mb

M8C 64.68 348 ePd 12 12.80 0.0
 0.7s 16.00nm 5.0mb

ALE 64.69 0 ePd 12 11.80 -1.0
 0.5s 16.00nm 5.2mb

INK 65.77 338 eP 12 19.00 -0.8
 NB2 67.64 31 P 12 32.00 0.2
 0.7s 4.10nm 4.4mb

HFS 68.83 32 eP 12 38.20 -0.8
 0.9s 4.70nm 4.3mb

KHC 68.98 44 eP 12 34.80 -5.5X
 FBA 71.11 333 P 12 52.50 -0.3
 0.8s 8.28nm 4.6mb

KEV 73.92 21 eP 13 10.00 0.8
 SOD 74.12 24 iP 13 10.40 0.0

SUF 74.61 29 eP 13 13.00 -0.3
 MBL 174.73 231 ePKP 22 00.00 17.8X

S.D. = 0.7 on 59 of 63 obs.

* AUG 20, 1989 01h 31m 54.64± 0.29s
 15.147 S ± 11.5km 173.611 W ± 10.8km
 DEPTH = 44.7km (5 depth phases)
 4.9mb (12 obs.) 4.7MsZ (1 obs.)

TONGA ISLANDS (173)

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 16S, 27C

Centroid Location:

Origin Time 01:32: 6.5 0.6

Lat 15.41S 0.07 Lon 173.77W 0.06

Dep 71.8 6.3 Half-duration 1.8

Moment Tensor; Scale 10¹⁶ Nm

Mrr= 2.71 0.47 Mtt= 2.63 1.13

Mff=-5.34 0.88 Mrt=-7.22 0.46

Mrf= 4.56 0.44 Mtf= 1.29 0.50

Principal Axes:

T Vol= 10.27 P1g=47 Azm=194

N -1.01 26 314

P -9.25 32 62

Best Double Couple: Mo=9.8*10¹⁶

NP1: Strike=204 Dip=27 Slip= 162

NP2: 310 82 64

AFI 2.16 56 iPc 32 24.00 -4.9X
 DZM 20.11 247 iPc 36 35.60 7.9X
 KRK 24.64 201 P 37 14.00 1.7
 PMO 24.83 93 eP 37 18.00 3.7X
 1.4s 85.00nm 5.1mb
 TPT 25.09 93 eP 37 17.00 0.1
 1.4s 95.00nm 5.2mb
 MSZ 33.34 204 eP 38 29.50 -0.9
 e 38 52.60 102kmX
 CTA 38.50 257 eP 39 18.00 3.4X
 WRA 49.70 257 Pd 40 42.90 -1.7
 1.1s 5.60nm 4.5mb
 ASPA 50.00 252 iPc 40 44.90 -2.0

20d 01h

WARB	56.55	248 eP	41 33.50	-1.9	KHC	145.60	352 iPKP	51 30.00	0.3	ARV	151.19	350 PKP	51 45.10	6.5X
MAT	68.61	320 (P)	43 09.00	13.7X	1.2s	20.00nm				CRE	151.22	352 PKP	51 43.00	4.2X
BCH	71.26	44 P	43 11.50	-0.1						AUTN	151.23	358 PKP	51 47.30	8.3X
PLM	72.48	47 P	43 17.50	-1.5	MZZ	145.67	222 iPKP	51 31.00	0.0	OHR	151.26	337 ePKP	51 43.80	4.9X
SBB	72.52	46 eP	43 17.00	-2.1										
CMB	72.71	41 eP	43 19.30	-0.8	KMZ	145.68	215 ePKP	51 31.00	0.1	IMI	151.30	358 PKP	51 44.23	5.4X
WDC	72.91	38 eP	43 19.80	-1.3	ZST	145.88	347 ePKP	51 30.00	-0.1	ASS	151.66	350 PKP	51 40.00	0.6
ORV	72.91	40 eP	43 19.60	-1.6						LWI	151.89	234 iPKPc	51 48.70	7.9X
CLC	73.29	45 eP	43 23.00	-0.6	SRO	145.96	346 ePKP	51 31.60	1.3	AZI	152.57	349 PKP	51 44.00	3.4X
TPC	73.45	47 eP	43 37.00	12.5X	FLN	146.01	8 ePKP	51 30.60	0.3	DUI	152.67	347 PKP	51 42.00	1.1
KVN	74.76	42 P	43 32.00	-0.2	LDF	146.22	8 ePKP	51 30.90	0.2	SDI	152.77	348 PKP	51 45.00	4.0X
TNP	74.79	43 P	43 31.90	-0.5	GWG	146.25	359 PKP	51 46.72	15.9X	MGR	153.85	344 PKP	51 42.00	-0.5
	1.0s	7.75nm			BBTK	146.29	322 ePKP	51 32.50	1.2	BNG	163.99	230 ePKPc	51 56.30	1.4
					GRR	146.32	9 ePKP	51 31.70	0.9					
						0.8s	6.40nm						id	52 13.30
													ic	52 22.00
													S.D. = 1.1 on 57 of 130 obs.	
SPA	74.95	180 e(P)	43 33.00	0.2	STR	146.64	358 PKP	51 47.30	16.0X	% AUG 20, 1989 01h 42m 17.00± 0.83s				
	1.0s	15.50nm			LPF	146.64	9 ePKP	51 32.80	1.4	40.147 N ± 9.3km 27.608 E ± 6.9km				
LON	77.17	34 P	43 48.90	57kmX	1.0s	8.00nm				DEPTH = 10.0km (geophysicist)				
PMR	78.91	12 P	43 55.10	0.5	WLS	146.82	359 PKP	51 47.92	16.2X	TURKEY (366)				
PNT	79.91	33 eP	44 06.00	5.7X	CDF	146.82	359 ePKP	51 32.00	0.2					
CN2	80.76	320 eP	44 05.60	0.7	HAU	147.24	0 ePKP	51 32.90	0.5					
ALO	80.79	50 eP	44 05.90	0.4	CDF	146.82	359 PKP	51 48.24	16.4X	EDC	0.28	44 iPq	42 22.90	0.0
	1.1s	6.33nm			ECH	147.02	359 PKP	51 48.66	16.6X					
Z	20s	0.35um			MOF	147.38	359 PKP	51 48.74	16.0X	BNT	0.32	49 iPq	42 23.40	-0.2
					BSF	147.41	359 PKP	51 50.26	17.5X					
					KBA	147.64	351 ePKP	51 35.00	1.7	KCT	0.58	80 iPq	42 29.40	0.6
										DST	0.95	124 ePn	42 35.00	-0.2
										EZV	1.04	252 ePn	42 36.60	0.0
										YLV	1.41	72 iPn	42 42.40	-0.4
										S.D. = 0.4 on 6 of 6 obs.				
LRM	81.94	38 eP	44 16.50	5.1X	LOR	147.90	3 ePKP	51 36.10	2.6X	& AUG 20, 1989 02h 47m 24.99s				
FBA	82.19	11 P	44 13.00	1.1	SSF	148.09	4 ePKP	51 36.80	3.1X	61.587 N 151.402 W				
	0.9s	15.83nm			LBF	148.19	3 ePKP	51 37.50	3.5X	DEPTH = 74.6km				
GOL	83.63	46 P	44 21.40	1.2	FVI	148.20	352 PKP	51 35.00	1.1	SOUTHERN ALASKA (2)				
	0.9s	9.85nm			RBL	148.23	351 PKP	51 37.90	3.8X	<AGS-P>				
GLD	83.75	46 P	44 21.90	1.2	PTJ	148.30	347 e(PKP)	51 39.50	5.3X	SUA	0.34	111 iP	47 37.16	-0.1
	1.1s	40.50nm			AVF	148.35	4 ePKP	51 37.40	3.3X					
SES	85.11	35 eP	44 27.00	-0.1	LJU	148.45	349 ePKP	51 37.20	2.8X	SKT	0.40	351 iP	47 36.98	-0.6
BJI	85.15	314 eP	44 29.00	1.6	SMF	148.52	3 ePKP	51 38.20	3.7X					
					BGF	148.54	5 ePKP	51 38.10	3.6X	CGLM	0.40	226 iP	47 37.18	-0.5
					VOY	148.57	350 ePKP	51 37.20	2.5X	CRP	0.48	229 iP	47 37.99	-0.5
EDM	85.38	32 ePc	44 41.00	12.6X	LSF	148.73	7 ePKP	51 39.80	5.0X	SPU	0.51	218 iP	47 38.00	-0.6
MEO	86.68	53 iPd	44 35.40	0.2	TCF	148.76	6 ePKP	51 39.80	4.9X	BGL	0.58	236 iP	47 38.76	-0.5
TIJ	86.93	310 eP	44 38.00	1.6	CEY	148.76	349 ePKP	51 39.00	4.1X	CKL	0.60	229 iP	47 38.86	-0.6
	24s	0.50um			VBY	148.83	348 ePKP	51 39.70	4.7X	PLRM	1.09	89 iP	47 43.90	-1.1
INK	88.07	14 eP	44 55.00	13.9X	MAF	148.86	5 ePKP	51 39.00	4.0X	RDT	1.13	206 iP	47 45.17	-0.5
NB2	134.04	357 PKP	51 13.50	5.0X	CTI	148.88	353 PKP	51 39.00	3.8X	PME	1.13	87 eP	47 44.62	-1.0
HFS	134.76	355 (PKP)	51 26.80	17.0X	KDZ	148.88	332 ePKP	51 35.00	-0.2	GHO	1.20	80 eP	47 45.55	-1.0
LSZ	142.88	216 ePKP	51 27.00	0.9	TRI	148.91	350 PKP	51 39.00	3.9X	SLKM	1.23	152 iP	47 45.92	-1.0
WTS	143.24	360 ePKP	51 47.00	21.5X	RZN	148.91	350 ePKPc	51 39.00	4.0X	SEW	1.77	146 eP	47 53.94	-0.2
	1.0s	9.00nm			VAI	149.31	357 PKP	51 41.70	6.0X					
KSP	143.51	349 ePKP	51 20.50	-5.5X	PRNI	149.70	305 ePKP	51 41.00	4.2X	BRLK	1.85	172 eP	47 54.29	-1.0
					LPG	149.74	359 ePKP	51 42.20	5.4X	CNPM	2.07	178 eP	47 57.19	-1.1
CLL	143.54	353 e(PKP)	51 41.00	14.9X	LSA	149.78	359 PKP	51 43.92	7.2X	OPT	2.14	206 eP	47 59.06	-0.2
IKZ	143.81	228 iPKP	51 23.00	-4.8X	EZN	149.86	328 ePKP	51 41.00	4.3X	RND	2.18	32 eP	47 58.51	-1.3
					MBH	150.02	304 ePKP	51 43.00	5.8X	VZW	2.40	101 eP	48 00.26	-2.6
BRG	143.85	352 ePKP	51 47.00	20.4X	BN1	150.19	360 PKP	51 45.10	7.9X	AUW	2.45	206 iP	48 03.36	-0.1
	1.1s	10.00nm			SKO	150.28	337 iPKP	51 42.00	4.7X	TTA	2.54	304 eP	48 03.34	-1.5
										SHU	3.01	189 eP	48 09.91	-1.3
SPC	144.20	344 e(PKP)	51 43.00	15.5X						PAX	3.10	61 eP	48 10.96	-1.7
MDX	144.34	354 ePKP	51 26.00	-1.5						22 obs. associated				
										? AUG 20, 1989 02h 50m 17.72± 7.60s				
ENN	144.47	1 ePKP	51 27.00	-0.6						57.319 N ± 64.4km 7.176 E ± 20.2km				
	1.0s	12.00nm								DEPTH = 10.0km (geophysicist)				
PRU	144.62	351 ePKP	51 26.00	-2.0	RRL	150.32	359 PKP	51 43.61	6.0X	NORTH SEA (534)				
					BOB	150.36	356 PKP	51 36.00	-1.4	MD 2.7 (BER).				
SNF	144.69	2 PKP	51 31.70	3.7X	VAY	150.39	335 ePKP	51 42.70	5.3X	BLS1	2.09	355 eP	50 53.10	-0.2
VRI	144.93	335 ePKPd	51 27.50	-1.1	PCP	150.64	357 PKP	51 48.22	10.4X					
DOU	145.11	2 PKP	51 28.30	-0.5	PZZ	150.73	359 PKP	51 44.23	6.2X					
CVO	145.19	336 ePKP	51 30.00	0.9	MME	150.82	354 PKP	51 57.60	19.3X					
GRF	145.32	354 iPKP	51 29.90	0.7	ROB	150.92	358 PKP	51 43.51	5.3X	KMY	2.15	333 iP	50 54.30	0.2
					SFI	150.95	352 PKP	51 42.00	-6.2X					
					STV	150.99	359 PKP	51 48.84	10.5X	ODD1	2.62	354 eP	51 02.00	1.2
MLR	145.55	335 ePKP	51 30.30	0.4	FIN	150.99	357 PKP	51 42.99	4.7X					
WLF	145.57	0 ePKP	51 45.80	16.3X	PGD	151.01	352 PKP	51 36.00	-2.5	ASK	3.34	343 eP	51 10.30	-0.6
ISR	145.60	334 ePKPd	51 46.50	16.6X	FIR	151.16	353 ePKP	51 45.00	6.5X					

HYA 3.89 353 eP 51 18.30 -0.5
 eS 52 03.90
 HFS 4.42 48 eP 51 26.30 0.0
 0.3s 0.70nm
 MOL 5.27 2 eP 51 38.00 -0.4
 eS 52 34.70
 S.D. = 0.8 on 7 of 7 obs.

AUG 20, 1989 03h 22m 15.25 ± 0.47s
 49.125 N ± 3.4km 129.304 W ± 5.4km
 DEPTH = 10.0km (geophysicist)
 4.5mb (7 obs.)

VANCOUVER ISLAND REGION (25)

EDB 1.61 61 iPnc 22 44.03 0.3
 ETB 1.83 81 iPnc 22 47.38 0.4
 PHC 1.99 37 Pn 22 49.60 0.3
 Sn 23 18.50
 BTB 2.50 81 iPnc 22 56.84 0.1
 Sn 23 30.09
 CBB 2.72 69 iPnc 23 00.54 0.8
 ALB 2.94 85 Pn 23 02.57 -0.2
 Sn 23 39.89
 MGB 3.04 91 Pn 23 03.19 -1.1
 Sn 23 40.89
 BB8 3.16 13 Pn 23 05.00 -0.9
 eSn 23 43.00
 MCW 4.29 94 eP 23 21.70 -0.4
 GMW 4.62 107 eP 23 26.30 -0.5
 BMW 4.88 121 eP 23 30.70 0.3
 RMW 5.27 106 eP 23 36.00 -0.1
 LON 5.57 112 eP 23 40.70 0.5
 PNT 6.35 85 iPd 23 50.90 -0.3
 0.5s 21.00nm 5.3mb

DPW 7.48 95 eP 24 05.50 -1.6
 WDC 9.80 148 iPd 24 39.60 0.5
 LTCM 10.27 148 eP 24 46.10 0.5
 MIN 10.34 145 ePd 24 46.80 0.1
 EDM 10.82 62 eP 24 52.80 -0.4
 ORV 11.07 147 ePd 24 56.40 -0.2
 LRM 11.87 100 eP 25 09.20 1.5
 SES 11.88 77 ePd 25 07.50 -0.1
 CM8 12.82 147 eP 25 19.00 -1.2
 KVN 12.88 137 eP 25 21.80 0.6
 MHC 13.02 152 eP 25 21.60 -1.4
 ARN 13.05 152 eP 25 22.00 -1.3
 IMW 13.68 106 eP 25 40.50 8.7X
 FRI 13.99 146 ePd 25 35.00 -0.6
 TNP 14.07 137 eP 25 37.40 0.5
 1.0s 7.50nm 4.4mb

PRI 14.43 151 eP 25 40.60 -1.0
 DAU 15.47 117 eP 26 01.50 6.2X
 BCH 15.50 151 eP 25 54.00 -1.5
 ISA 15.63 145 eP 25 57.00 -0.1
 YKB8 15.77 26 eP 25 59.50 0.8
 CLC 15.83 143 eP 26 01.00 1.3
 SYP 16.14 151 eP 26 07.00 3.3X
 GSC 16.60 142 eP 26 13.00 3.5X
 PMR 16.73 326 eP 26 13.50 2.6
 SBB 16.74 145 eP 26 13.00 1.7
 PAS 17.09 147 eP 26 18.00 2.3
 RVR 17.52 145 eP 26 22.00 0.9
 FFC 17.70 61 eP 26 23.00 -0.1
 0.9s 19.00nm 4.2mb X
 FFC 17.70 61 eP 26 27.50 4.4X
 0.7s 39.00nm 4.6mb

TPC 17.94 142 eP 26 26.00 -0.3
 PLM 18.28 145 eP 26 30.50 -0.2
 FBA 18.62 335 eP 26 33.70 -0.7
 1.3s 21.70nm 4.2mb
 INK 19.36 355 eP 26 43.00 -0.4
 GOL 19.45 110 eP 26 44.50 -0.5
 0.9s 8.33nm 4.0mb
 GLD 19.51 110 eP 26 46.00 0.3
 1.1s 42.43nm 4.6mb
 TTA 20.13 323 eP 26 50.00 -1.9
 ALO 21.99 122 eP 27 11.50 0.2
 1.0s 13.75nm 4.3mb
 e 27 16.50
 e 27 19.20
 S.D. = 1.0 on 46 of 51 obs.

AUG 20, 1989 04h 36m 59.05 ± 0.74s
 20.263 N ± 7.8km 99.163 E ± 14.5km
 DEPTH = 33.0km (normal)
 4.3mb (3 obs.)

BURMA (296)

Felt in Chiang Mai and Chiang Rai Provinces, Thailand.

CHG 1.46 188 iPn 37 24.00 0.7
 iSg 37 44.00
 LOE 3.74 139 ePn 38 09.40 13.5X
 ePg 38 14.20
 eSg 38 56.20

NST 4.66 168 ePn 38 08.60 -0.3
 ePg 39 15.50
 eSg 39 30.00

KMI 5.86 34 Pc 38 48.50 22.4X
 S 39 51.00

NNT 7.65 176 eP 38 50.00 -1.0
 e 45 45.60
 e 46 18.00
 e 46 33.20

LZH 16.29 14 eP 40 47.00 -0.1
 2.0s 80.00nm 4.5mb
 Z 12s 1.10um 4.4msz

NDI 21.64 297 eP 41 47.00 -1.6
 eS 47 22.00

GBA 21.80 256 P 41 51.30 1.0
 WRA 52.76 137 Pc 46 13.80 0.5
 0.9s 2.90nm 4.2mb

SUF 64.41 331 iP 47 34.80 0.9
 NB2 71.51 329 P 48 12.20 -6.2X
 0.8s 2.50nm 4.3mb

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

AUG 20, 1989 04h 42m 35.84 ± 0.51s
 20.273 N ± 8.5km 99.322 E ± 10.2km
 DEPTH = 33.0km (normal)
 4.6mb (5 obs.)

BURMA (296)

Felt in Chiang Mai and Chiang Rai Provinces, Thailand.

CHG 1.49 194 iPn 43 00.20 -0.5
 iSg 43 20.30

LOE 3.65 141 ePn 43 37.60 6.2X
 ePg 43 47.50
 e 44 39.20

KMI 5.77 33 Pc 44 27.50 25.9X
 S 45 29.00

HYB 19.86 265 eP 47 07.10 -0.1
 GBA 21.95 256 P 47 30.00 1.5
 1.0s 12.90nm 4.3mb

MAT 37.56 56 (P) 49 50.00 1.0
 WRA 52.66 137 Pc 51 50.00 0.6
 0.6s 1.80nm 4.2mb

ASPA 55.16 141 eP 52 07.00 -0.8
 SUF 64.47 331 eP 53 10.60 -0.5
 0.6s 4.80nm 4.8mb

SOD 64.81 336 eP 53 13.00 -0.3
 NUR 65.03 328 eP 53 15.50 0.7
 UPP 68.54 328 iP 53 37.00 0.0

KSP 70.21 318 eP 53 43.00 -4.4X
 e 53 46.50

HFS 70.49 328 (P) 53 48.00 -0.9
 1.1s 13.90nm 4.9mb
 NB2 71.58 329 P 53 54.80 -0.8
 0.7s 4.40nm 4.6mb

S.D. = 0.9 on 12 of 15 obs.

AUG 20, 1989 05h 06m 03.45 ± 4.53s
 31.521 S ± 24.9km 68.717 W ± 28.1km
 DEPTH = 84.9 ± 42.5 km

SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.08 296 ePd 06 16.00 0.0
 RTLL 0.28 48 iPd 06 16.50 0.1
 RTCV 0.37 156 iPc 06 17.00 0.0

CFA 0.42 102 iPd 06 17.20 -0.1
 RTRS 1.49 334 iPc 06 29.20 0.0
 S.D. = 0.1 on 5 of 5 obs.

AUG 20, 1989 05h 43m 33.08 ± 1.87s
 40.802 N ± 15.0km 27.570 E ± 9.4km
 DEPTH = 10.0km (geophysicist)

TURKEY (366)

EDC 0.51 154 iPg 43 42.90 -0.5
 eSg 43 49.90
 BNT 0.52 149 iPg 43 44.00 0.4

iSg 43 51.00
 KCT 0.82 132 iPg 43 49.00 0.1
 EZN 1.36 225 ePn 43 58.10 0.0
 YLV 1.39 99 iPn 43 58.50 -0.1
 S.D. = 0.4 on 5 of 5 obs.

AUG 20, 1989 06h 21m 45.83 ± 1.62s
 23.372 S ± 8.2km 70.967 W ± 16.7km
 DEPTH = 59.9 ± 12.1 km
 4.7mb (2 obs.)

NEAR COAST OF NORTHERN CHILE (122)

Felt (111) in the Antofagasto area.

ANT 0.61 123 iPd 21 59.20 0.2
 iS 22 09.20

SLA 5.18 106 e(P) 23 07.50 4.7X
 YJA 5.18 78 ePd 23 04.80 1.7
 CYA 6.87 138 e(P) 23 25.10 -1.2

ARE 6.89 356 iPc 23 21.90 -4.9X
 iS 24 34.60
 CNCB 7.11 24 P 23 31.00 0.9
 S 24 52.00

LPB 7.32 22 eP 23 31.00 -1.9
 1.0s 120.00nm 5.6mb X
 Z 16s 1.01um

i 23 36.00
 LR 25 40.00

CCH 7.48 38 P 23 36.00 0.9
 ZOBO 7.56 21 iPd 23 36.00 -0.3
 0.9s 103.81nm 5.6mb X

i 25 02.00
 MRA 10.13 154 ePc 24 06.00 -5.1X
 PPD 18.19 90 eP 25 52.90 -2.8X
 e 25 56.20

VAO 22.06 94 eP 26 37.60 0.4
 BAO 22.96 75 eP 26 45.00 -1.1
 ITR 34.37 70 eP 28 28.40 -0.9

SPA 66.77 180 e(P) 32 33.80 0.9
 0.9s 10.00nm 4.8mb

ALO 67.06 329 e(P) 32 35.50 0.4
 KIC 71.05 74 P 33 00.40 0.5
 0.7s 6.00nm 4.6mb

S.D. = 1.2 on 13 of 17 obs.

AUG 20, 1989 07h 27m 45.66 ± 0.95s
 43.997 N ± 7.5km 7.963 E ± 6.8km
 DEPTH = 10.0km (geophysicist)

NEAR SOUTH COAST OF FRANCE (379)

ML 2.5 (GEN).

IMI 0.10 212 P 27 48.50 0.0
 S 27 50.24

FIN 0.28 40 P 27 50.96 -0.5
 S 27 54.76

ROB 0.31 347 P 27 52.19 0.1
 S 27 56.70

STV 0.52 298 P 27 56.19 -0.1
 S 28 03.78

PCP 0.69 37 P 27 59.78 0.5
 S 28 08.60

PZZ 0.80 310 P 28 01.22 -0.1
 S 28 12.39

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

AUG 20, 1989 08h 07m 00.75 ± 0.92s
 1.360 N ± 10.3km 121.547 E ± 8.5km
 DEPTH = 67.7 ± 12.9 km
 4.9mb (4 obs.)

MINAHASSA PENINSULA (265)

PCI 2.83 217 iPd 07 44.50 0.0
 (S) 08 16.00

MNI 3.29 89 iPc 07 50.80 -0.2
 eS 08 31.00
 KKM 7.07 311 iPd 08 44.00 0.1
 0.6s 49.50nm 5.4mb

KNA 18.44 158 eP 11 13.80 0.4
 0.4s 23.00nm 4.7mb
 MBL 22.44 184 eP 11 55.10 -0.1
 WRA 24.61 150 Pd 12 15.90 -0.3
 0.5s 26.10nm 4.9mb

ASPA 27.63 155 iPd 12 44.20 0.1
 0.5s 18.00nm 4.9mb
 WARB 27.82 170 eP 12 45.70 -0.1
 MEKA 27.96 186 eP 12 46.90 -0.1
 FORR 32.63 170 eP 13 27.00 -1.3

20d 08h

STK 38.13 152 iPc 14 16.50 1.4
S.D. = 0.8 on 11 of 11 obs.
AUG 20, 1989 09h 10m 15.94 ± 0.99s
9.255 N ± 3.7km 123.697 E ± 5.6km
DEPTH = 53.6 ± 9.8 km
5.3mb (13 obs.) 4.1Msz (3 obs.)
NEGROS, PHILIPPINE ISLANDS (257)

DAV 2.85 139 eP 11 01.00 1.1
OCP 5.93 335 eP 11 10.90 -32.5X
BAG 7.73 337 eP 12 09.00 0.3
MNI 7.84 172 eP 12 16.00 5.9X
KKM 8.07 247 ePc 12 13.00 -0.3
OZH 16.34 343 eP 14 02.00 -1.3
OIZ 16.57 307 eP 14 07.10 0.9
TPI 19.95 234 ePc 14 47.10 0.7
JAY 20.59 124 ePc 14 51.00 -2.1
GUMO 21.19 76 eP 15 00.90 1.7
GUA 21.22 76 eP 15 00.30 0.8
KGM 21.50 252 eP 15 13.00 10.7X
SSE 21.86 354 Pd 15 05.20 -0.5

LOE 22.84 293 eP 15 15.00 -0.6
WHN 22.91 339 P 15 17.50 1.4
IPM 22.97 260 ePc 15 20.10 3.2X
NJ2 23.12 349 Pd 15 19.00 0.8
MTN 23.17 161 eP 15 19.00 0.3
NST 23.86 288 eP 15 27.10 1.6
BDT 25.29 291 eP 15 40.00 0.8
KNA 25.35 169 eP 15 39.70 0.1
KMI 25.43 311 eP 15 41.00 0.3
XAN 28.16 333 P 16 03.80 -1.5

CD2 28.45 322 eP 16 06.30 -1.7
TIY 30.10 342 eP 16 22.40 -0.4
MBL 30.46 187 eP 16 24.70 -1.2
WRA 30.85 160 Pd 16 27.80 -1.6
BJI 31.38 349 eP 16 31.50 -2.3
LZH 32.24 329 eP 16 41.50 -0.2
SNY 32.44 360 eP 16 42.10 -1.0
HHC 33.25 343 eP 16 51.00 0.6
ASPA 34.21 163 iPc 16 57.80 -0.9

CN2 34.45 2 eP 16 59.00 -1.5
WARB 35.34 175 eP 17 08.10 -0.2
MEKA 36.00 188 iPd 17 13.10 -0.8
CTA 36.65 143 eP 17 20.00 0.6
GTA 36.84 328 eP 17 20.60 -0.4
MRWA 38.96 191 eP 17 38.40 -0.3
COOL 39.98 183 iPd 17 46.60 -0.5
FORR 40.10 174 eP 17 48.00 0.0
BAL 40.20 189 iPc 17 49.00 0.1
KLB 41.01 188 iPc 17 55.70 0.2
MUN 41.62 190 iPc 18 00.80 0.3
NWA0 42.40 188 iPd 18 07.30 0.4

STK 44.34 158 eP 18 23.00 0.3
HYB 44.58 285 eP 18 25.60 0.7
KOD 45.54 275 eP 18 41.10 8.2X
BRS 46.05 143 eP 18 43.00 6.6X
ADE 46.22 163 iPd 18 38.30 0.7
WMQ 46.50 324 eP 18 40.50 0.6

NDI' 47.66 300 eP 25 24.00
BFD 49.45 160 eP 18 48.00 -1.1
DZM 52.21 127 iPd 19 02.70 0.0
QUE 56.73 300 eP 19 02.10 8.0X
MAIO 63.82 306 eP 19 48.10 -9.0X
MSZ 66.87 147 eP 20 46.00 0.7
PMR 80.58 29 eP 21 04.00 -0.5

SOD 84.24 337 iP 22 31.20
SUF 85.29 333 eP 22 43.10 0.4
INK 86.15 21 eP 22 50.20 2.2
NUR 86.44 331 iP 22 53.00 0.8
MBC 87.24 12 eP 23 00.40 6.6X
VR1 88.25 316 eP 04 10.00
MLR 88.86 316 eP 22 58.00 0.5
UPP 90.00 331 iP 23 06.50 3.7X
SLL 91.80 332 (P) 23 14.00 8.1X

PRU 94.99 322 eP 23 16.60 5.9X
KSP 93.65 323 eP 23 18.00 -1.1
BRG 95.03 323 eP 23 23.00 0.5
KHC 95.89 322 P 23 32.50 4.7X
CNCB 166.37 125 ePKP 23 36.00
LPB 166.42 123 ePKP 23 42.00 8.0X
ZOBO 166.53 122 PKP 23 44.00 9.8X

AUG 20, 1989 09h 15m 39.66 ± 0.49s
9.239 N ± 6.3km 123.676 E ± 11.8km
DEPTH = 38.2km (2 dep(h phoses)
4.3mb (1 obs.)
NEGROS, PHILIPPINE ISLANDS (257)

KKM 8.05 247 eP 17 38.30 1.1
OZH 16.35 343 eP 19 28.00 -0.1
SSE 21.87 354 P 20 30.70 -0.3
LOE 22.83 293 eP 20 42.50 4.8km
WHN 22.91 339 P 20 42.00 -0.6
XAN 28.16 333 P 20 40.00 0.7
TIY 30.11 342 eP 20 50.00 29km
BJI 31.39 349 eP 21 29.40 -1.2
SNY 32.46 360 P 21 54.00 5.9X
ASPA 34.20 163 iPc 21 47.00 -12.2X
CN2 34.47 2 eP 22 10.00 1.5
WARB 35.33 175 eP 22 23.40 -0.5
MDJ 35.62 7 Pd 22 27.20 1.3
MEKA 35.99 188 eP 22 34.00 0.5
GTA 36.84 328 eP 22 35.00 -0.7
FORR 40.08 174 eP 22 38.70 -0.4
HYB 44.56 285 eP 22 46.20 -0.1
MAIO 63.81 306 eP 23 13.10 -0.1
INK 86.17 21 ePd 23 58.00 7.9X
MBC 87.26 12 eP 26 19.00 8.3X

SLL 91.81 332 eP 28 19.00 1.1
S.D. = 1.0 on 17 of 21 obs.
AUG 20, 1989 10h 36m 50.95 ± 2.68s
38.318 N ± 13.9km 72.947 E ± 13.4km
DEPTH = 69.0 ± 27.2 km
4.6mb (10 obs.)
TAJIK SSR (715)
Felt (III) at Chuyangaron, Dushanbe and sfara.

NDI 10.25 158 iPc 39 16.20 -1.3
MAIO 10.90 263 eP 41 00.00 0.5
HYB 21.39 165 eP 41 20.00 2.4

GBA 24.93 170 Pc 42 06.20 -3.0X
SUF 37.24 326 iP 43 58.20 1.1
SOD 38.78 333 eP 44 11.00 1.1
UPP 40.63 320 iP 44 24.40 -0.9
HFS 42.62 321 eP 44 41.30 -0.3
BRG 42.75 307 iP 44 43.50 0.7
CLL 43.29 308 iP 44 47.70 0.6
NB2 43.89 322 P 44 51.40 -0.6
SMF 50.15 303 eP 45 41.20 0.1
SSF 50.25 304 eP 45 41.50 -0.4
AVF 50.43 303 eP 45 43.40 0.2
MAF 51.12 303 eP 45 48.50 0.0
GRR 52.66 306 eP 45 59.50 -0.6
LFF 52.74 302 eP 46 00.60 -0.1
BNG 59.74 250 ePc 46 49.30 -1.7
MBC 65.45 3 ePd 47 28.00 0.0
INK 71.86 10 eP 48 07.00 -0.7

S.D. = 1.1 on 19 of 20 obs.
AUG 20, 1989 10h 58m 25.27 ± 0.84s
6.987 S ± 9.8km 155.325 E ± 6.6km
DEPTH = 93.5 ± 8.7 km
4.6mb (4 obs.)
SOLOMON ISLANDS (193)

RAB 4.19 311 e(P) 59 29.50 1.3
VSG 4.89 118 eP 59 27.00 -0.9
SVO 4.94 116 eP 59 39.00 0.5
HNR 5.18 118 eP 59 42.00 0.2
PMG 8.44 253 eP 00 24.50 -2.2
CTA 15.72 213 eP 02 17.00 14.3X
WRA 24.09 236 Pc 03 34.20 0.8

MTN 24.52 254 eP 03 39.00 1.5
ASPA 26.43 229 iPc 03 54.80 -0.4
WARB 33.33 232 eP 04 57.00 0.6
FORR 34.83 224 eP 05 08.50 -0.7
TCW 38.03 157 P 05 36.90 0.8
MTW 38.48 155 P 05 39.50 -0.4
BLW 38.65 155 P 05 41.60 0.4
LOE 58.23 295 eP 08 12.00 -0.5
CHG 61.19 296 ePc 08 32.30 -0.5

GBA 79.96 285 P 10 27.20 1.1
SPA 83.06 180 e(P) 10 42.80 1.2
INK 89.60 21 eP 10 54.00 5.1mb
KIR 112.19 343 iPc 11 13.00 -0.2
HFS 119.61 339 ePKP+ 17 09.44 18.4X
NB2 119.80 341 PKP 17 05.20 -0.6
BNG 136.93 269 ePKP 17 30.20 -9.8X

PPD 141.10 139 e(P) 17 47.00 -0.3
BAO 147.77 134 ePKP 18 02.10 3.3X
IFR 147.99 328 iPc 18 03.00 4.2X
S.D. = 1.0 on 21 of 26 obs.

AUG 20, 1989 11h 16m 56.51 ± 0.13s
11.766 N ± 2.4km 41.942 E ± 2.3km
DEPTH = 11.6km (geophysicist)
5.8mb (81 obs.) 6.3Msz (20 obs.)
ETHIOPIA (558)
Ms 6.1 (BRK), 5.5 (PAS), ML 5.8 (ARO). Two people killed, 2 injured and damage and rockslides caused in the Galafi-Yobaki area, Djibouti. Ground cracks were observed at Galafi and 4 springs were destroyed in

the area. Felt strongly throughout Djibouti. Damage and landslides occurred in northeastern Ethiopia, particularly along the Aseb-Adis Abeba highway. Felt at Aseb. Depth from broadband displacement seismograms.

FAULT PLANE SOLUTION: P-Waves
NP1: Strike=130 Dip=68 Slip=-115
NP2: 1 33 -44
Principal Axes:

T Val= 1.11 Plg=19 Azm=238
N 0.12 1 286
P -1.23 78 22

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

RADIATED ENERGY

No. of sta: 12 Focal mech. M
Energy 1.0±0.3*10**13 Nm

MOMENT TENSOR SOLUTION

Dep 15 No. of sta: 18
Moment Tensor: Scale 10**18 Nm
Mrr=-1.13 Mtt= 0.95
Mff= 0.18 Mrt=-0.45
Mrf= 0.16 Mtf=-0.23

Principal axes:
T Val= 1.11 Plg=12 Azm=196
N 0.12 1 286
P -1.23 78 22

Best Double Couple: Ma=1.2*10**18
NP1: Strike=284 Dip=33 Slip=-92
NP2: 107 57 -88

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN
L.P.B.: 17S, 47C M.W.: 14S, 28C

Centroid Location:

Origin Time 11:17: 7.6 0.2
Lat 11.99N 0.02 Lon 42.04E 0.02

Dep 15.0 0.8 Half-duration 7.0
Moment Tensor: Scale 10**18 Nm

Mrr=-5.86 0.08 Mtt= 4.63 0.08
Mff= 1.23 0.07 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf=-3.09 0.06

Principal Axes:
T Val= 6.46 Plg= 0 Azm=211
N -0.59 0 121
P -5.86 90 180

Best Double Couple: Ma=6.2*10**18
NP1: Strike=301 Dip=45 Slip=-90
NP2: 121 45 -90

KSU 0.55 117 iP+ 17 07.04 -0.6
DAF 0.60 105 iP+ 17 07.84 -0.6
SGH 0.75 116 eP+ 17 13.22 2.1
GBR 0.80 140 iP+ 17 10.70 -1.2
ARO 0.92 105 iP+ 17 13.22 -0.7
TDD 0.94 88 iP+ 17 13.70 -0.7
ATA 1.28 104 P 17 18.70 -1.4
ABHA 6.49 7 eP 18 34.50 -0.1
TAIF 9.59 351 eP 19 21.30 3.6X
RYD 13.62 18 eP 20 14.00 1.9
NAI 13.92 202 iPc 20 17.00 0.7
AKSR 14.54 325 iPd 20 30.00 6.0X
AGMR 14.73 324 iPc 20 33.00 6.4X
AMAN 14.82 326 iPd 20 32.00 4.2X
ASW 14.96 326 iPc 20 34.00 4.4X
BJA 16.34 29 eP 20 48.50 1.1
DHR 16.40 27 eP 20 50.30 2.2
BRF 16.40 29 eP 20 49.90 1.7
AYN 17.90 343 eP 21 09.30 2.3
HOL 18.56 341 eP 21 17.30 2.1
LWI 19.08 224 ePd 21 20.90 -1.0
MKT 20.10 343 eP 21 35.00 2.0
SHI 20.33 27 iPd 21 34.00 -1.7
KOT 20.37 334 ePd 21 37.00 1.2
HLW 20.52 333 iPd 21 38.00 0.6
DSI 20.62 344 ePd 21 39.70 1.3
MML 21.43 345 ePd 21 48.60 1.9

BHD 21.53 6 iPc 21 47.00 -0.6
HRI 22.15 346 P 21 56.10 2.1
KER 22.97 11 ePd 22 03.50 1.3
IKZ 23.67 203 iP 22 10.00 0.9
SLY 23.95 7 iPc 22 12.00 0.6
BNG 24.26 254 iPd 22 15.10 0.3
BCAO 24.28 254 ePd 22 14.80 -0.1
MSL 24.53 2 ePc 22 19.00 1.8
TEH 25.35 18 eP- 22 28.00 2.8
MZZ 26.20 210 iP 22 34.50 1.3
TAB 26.48 8 iP- 22 38.00 2.3
KSL 26.69 337 eP 22 38.00 0.6
NPA 26.81 186 iPd 22 42.70 4.0X
ELL 27.13 338 iP 22 42.90 1.3
KAP 27.20 333 eP 22 43.10 1.0
NPS 27.69 330 eP 22 45.90 -0.6
PTZ 27.90 202 iP 22 49.00 0.3
CLK 28.13 194 iPc 22 52.60 1.9
VAM 28.51 329 eP 22 54.00 0.1
KHL 28.68 339 iP 22 55.20 -0.3
MAIO 29.11 30 eP 23 00.00 0.5
BBTK 29.12 345 eP 23 01.00 1.4
ALT 29.14 341 iP 22 59.40 -0.3
APE 29.20 332 eP 23 02.10 1.9
OUE 29.57 48 eP 23 06.00 2.2
IZM 29.58 336 iP 23 04.80 1.2
KMZ 29.72 213 eP 23 00.00 -5.1X
BKR 29.88 2 iPd 23 07.00 0.6
LSZ 30.12 207 iP 23 09.00 0.3
DST 30.14 339 iP 23 08.90 0.3
GPA 30.21 342 eP 23 08.80 -0.4
KAS 30.35 348 iPc 23 11.20 0.7
BOM 30.57 73 eP 23 19.00 6.4X
PRK 30.71 336 eP 23 15.00 1.5
YLV 30.75 341 iP 23 14.20 0.2
ATH 30.77 331 ePd 23 16.00 1.9
KCT 30.80 339 eP 23 14.00 -0.4
BNT 31.05 339 iP 23 17.70 1.1
EDC 31.06 339 iP 23 16.90 0.2
EZN 31.18 336 eP 23 18.50 0.8
ISK 31.31 341 eP 23 20.00 1.2
ITU 31.36 341 iPd 23 20.00 0.8
POO 31.49 74 iPd 23 25.50 4.8X
MFT 31.66 339 eP 23 23.00 1.0
NEO 32.07 332 eP 23 25.40 -0.2
ALN 32.21 337 ePd 23 28.20 1.5
PAIG 32.37 333 eP 23 28.80 0.7
OUR 32.57 334 ePd 23 30.80 1.0
PLG 32.84 333 eP 23 32.00 -0.2
LIT 33.04 332 ePd 23 33.90 -0.1
KDZ 33.10 337 iPd 23 34.00 -0.5
THE 33.26 333 eP 23 43.60 7.8X
JMB 33.39 339 iP 23 29.00 -7.9X
SRS 33.39 334 ePd 23 36.90 -0.1
DIM 33.40 338 iPc 23 38.00 0.9
RZN 33.41 336 iPd 23 28.00 -9.3X

KZN 33.54 331 eP 23 37.60 -0.8
KNT 33.72 334 ePd 23 39.70 -0.2
SIM 33.74 350 ePd 23 40.00 0.0
GRG 33.77 333 eP 23 40.40 0.0
VAY 33.99 333 iPd 23 41.80 -0.4
KEK 34.05 329 eP 23 42.90 0.2
SRN 34.07 329 eP 23 43.40 0.5
KKB 34.22 335 iPd 23 44.00 -0.2
KBN 34.24 331 iPd 23 45.10 0.8
BUL 34.31 203 iPd 23 44.50 -0.9
Z 18s 68.73um 6.4MsZ
N 19s 37.50um
E 20s 68.09um
PGB 34.35 336 iPd 23 46.00 0.6
PVL 34.49 338 iPd 23 46.00 -0.4
OHR 34.63 331 iPd 23 47.80 0.0
GBA 34.66 83 P 23 48.30 0.1
VTS 34.77 335 iPd 23 50.00 0.9
KOD 34.89 89 eP 23 51.00 0.4
SOI 34.94 323 Pd 23 51.00 0.6
PZI 34.96 321 P 23 51.60 0.9
MEU 34.99 321 P 23 52.40 1.4
SKO 35.02 333 iPd 23 50.70 -0.3
GMB 35.12 323 P 23 55.30 3.2X
BUC1 35.23 340 iPd 23 52.00 -0.8
PHP 35.25 332 iPd 23 51.80 -1.1
TIR 35.26 331 eP 23 53.80 0.8
BUC 35.27 340 iPd 23 53.00 -0.1
CFR 35.33 343 ePd 23 53.00 -0.6
ATN 35.35 323 P 23 54.90 1.0
LCI 35.46 328 P 23 54.90 0.1
MNO 35.66 322 P 23 56.50 -0.3
ISR 35.77 341 ePd 23 58.50 1.0
HYB 35.83 77 ePc 23 57.70 -0.6
TDS 35.85 325 Pd 23 59.30 1.1
FAI 35.89 320 P 24 00.50 2.0
SDA 35.95 331 eP 23 58.20 -0.7
ULC 36.02 331 eP 24 00.20 0.6
GIB 36.11 321 P 24 00.00 -0.5
MCT 36.13 320 P 23 59.40 -1.3
PVT 36.17 332 eP 24 01.20 0.2
MLR 36.28 341 iPd 24 03.00 1.1
VRI 36.37 342 iPc 24 03.00 0.5
TTG 36.38 331 eP 24 02.70 0.2
CMP 36.38 340 ePd 24 11.00 8.4X
IVA 36.43 332 eP 24 03.00 0.0
BIR 36.47 343 eP 24 05.00 1.7
BDV 36.47 331 eP 24 04.00 0.7
CVO 36.50 341 ePc 24 06.00 2.4
MGR 36.62 325 Pd 24 04.80 0.2
CVT 36.69 320 P 24 06.20 1.0
HCY 36.75 331 eP 24 06.00 0.3
NKY 36.80 331 eP 24 06.50 0.3
CLI 36.83 343 ePc 24 11.00 4.7X
NDI 36.95 58 iPd 24 02.00 -5.5X
BAC 36.95 343 eP 24 08.00 0.7
ERC 37.03 320 P 24 09.00 0.8
SGO 37.05 325 P 24 07.00 -1.1
USI 37.08 321 P 24 08.90 0.5
LVI 37.16 320 P 24 07.00 -2.1
IAS 37.34 344 eP 24 13.00 2.5
MDB 37.37 340 eP 24 10.00 -0.8
PTT 37.44 342 eP 24 11.50 0.1

20d 11h									11.919 N ± 7.1km 41.963 E ± 7.6km		
MAW 1.2s 170.00nm 5.9mb			TNP 126.71 340 PKP 36 02.00 -0.3						DEPTH = 10.1km (geophysicist)		
80.60 172 eP 29 11.00 1.0			CMB' 127.77 342 ePKP 36 04.10 0.0						5.6mb (5 obs.)		
1.7s 650.00nm 6.4mb									ETHIOPIA (558)		
DAV 82.38 84 eP- 29 22.00 1.5									Depth from broadband displacement seismograms.		
ITR 82.45 259 eP 29 20.30 -0.6			BKS 128.44 344 ePKP 36 06.50 1.2						SLY 23.79 7 iP 23 09.00 0.1		
e 29 30.80			1.2s 56.00nm						BCAO 24.34 254 eP 23 15.55 1.1		
BAL 83.15 123 eP 29 25.00 0.8			iPP 38 12.00						NPA 26.97 186 eP 23 44.40 5.3X		
MBL 83.16 113 eP 29 21.50 -2.9			i 39 06.00						PTZ 28.05 202 iP 23 48.00 -1.0		
MUN 83.17 125 eP 29 24.00 -0.2			i(PS) 51 04.00						KVT 29.51 351 iP 24 05.00 3.1X		
SHK 84.03 56 eP 29 28.50 -0.2			e 55 02.00						BUL 34.46 203 iP 24 43.80 -1.8		
NWA0 84.29 125 ePd 29 30.54 0.6			e 55 00.00						TLB 34.68 342 eP 24 52.00 4.9X		
Z 20s 51.00um 6.9MsZ									SKO 34.89 333 iP 24 48.00 -0.9		
N 20s 2.30um									SLR 39.73 199 eP 25 30.46 0.5		
E 20s 5.10um									1.0s 40.00nm 5.0mb		
epP 29 34.35 12kmX			FRI 128.52 341 ePKP 36 05.70 0.2						RIY 40.77 330 iP 25 38.90 0.8		
esP 29 36.17			eSKSP' 05 37.00						SRO 40.90 336 iP 25 41.20 2.1		
KLB 84.31 124 eP 29 30.00 0.0			ARN 128.74 343 PKP 36 06.80 0.8						SPC 41.29 338 iP 25 43.00 0.4		
TSRJ 86.51 55 eP 29 41.30 0.4			MHC 128.78 343 ePKP 36 06.50 0.3						TRI 41.34 330 ePc 25 44.30 1.6		
COOL 86.89 122 eP 29 44.00 1.1			iPP 38 10.00						ZST 41.70 335 iP 25 46.30 0.6		
AAI 87.08 94 eP 29 48.50 4.4X			ePKS 39 33.00						VKA 42.08 334 iP 25 50.70 1.9		
MTMJ 87.72 53 eP 29 49.50 2.6			e 40 30.00						KRA 42.12 339 iP 25 50.20 1.1		
MAJO 88.05 53 ePd 29 47.94 -0.5			e 41 21.00						KBA 42.52 331 iP 25 53.40 0.7		
MAT 88.05 53 (P) 29 48.00 -0.4			eSKS 43 02.00						KHC 43.92 333 eP 26 03.60 -0.3		
Z 20s 10.64um 6.3MsZ			e 45 35.00						KSP 44.11 337 iP 26 06.00 0.6		
eS 40 33.00									PRU 44.15 335 eP 26 06.00 0.3		
NIIJ 88.51 52 eP 29 53.10 2.6			eSKKKS 46 17.00						FOUF 44.31 324 eP 26 07.69 0.7		
YSS 88.71 42 iPd 29 50.00 -1.3			ePKKP 46 37.00						BRG 45.07 335 iP 26 13.00 -0.1		
eS 40 20.00									CLL 45.79 335 iP 26 18.10 -0.7		
CHJJ 88.78 54 eP 29 51.60 -0.3			eSPPc 50 04.00						MOX 45.90 333 iP 26 19.00 -0.6		
WARB 90.44 117 eP 30 00.00 0.2			e 07 10.00						TAF 46.20 307 iP 26 22.00 -0.3		
SCH 90.96 327 eP 30 02.00 0.3			eLO 10 19.00						IFR 47.97 305 iP 26 38.00 1.5		
MBC 91.45 356 ePc 30 05.00 1.5			eLR 16 08.00						ENN 48.62 330 iP 26 40.20 -0.7		
1.4s 100.00nm 6.0mb			CLC 128.88 339 ePKP 36 07.00 0.7						DOU 48.86 329 P 26 42.10 -0.7		
FORR 92.69 121 eP 30 11.00 1.0			e 38 16.00						WTS 49.00 332 eP 26 43.00 -0.9		
BDF 92.97 255 ePd 30 13.62 1.9			GSC 129.05 338 ePKP 36 08.00 1.3						TOL 49.15 313 ePd 26 44.47 -0.8		
epPc 30 17.60 12kmX			GCC 129.17 343 ePKP 36 07.60 0.9						ePP 28 38.90		
esP 30 19.25			ISA 129.32 339 ePKP 36 07.00 -0.2						eS 33 57.70		
ePP 33 53.11									SNF 49.27 329 iP 26 46.00 0.0		
BAO 93.05 255 eP 30 11.00 -1.1			PRI 129.60 342 ePKP 36 09.00 1.3						UCC 49.41 329 iP 26 46.00 -1.0		
VAO 93.53 247 eP 30 17.30 3.2X			PRS 129.64 342 ePKP 36 08.00 0.3						WIT 49.61 333 eP 26 49.00 0.4		
PET 96.00 33 eP 30 24.00 -0.8			TPC 129.81 336 ePKP 36 09.00 0.9						DBN 49.83 331 eP 26 52.00 1.7		
WRA 96.16 109 Pc 30 27.00 0.8			SBB 129.97 338 ePKP 36 09.00 0.6						NUR 50.16 349 eP 26 52.00 -0.7		
1.2s 19.10nm 5.5mb			GLA 130.22 334 ePKP 36 10.00 1.1						WMO 50.50 42 ePd 26 56.27 0.6		
ASPA 96.41 113 iPd 30 27.40 0.1			BCH 130.30 341 PKP 36 10.40 1.3						NRA0 53.60 342 eP 27 17.00 -1.6		
1.6s 47.00nm 5.8mb			RVR 130.42 337 ePKP 36 10.00 0.8						NB2 53.94 342 P 27 20.30 -0.8		
PPD 97.30 249 e(P) 30 38.00 6.7X			PEC 130.43 337 PKP 36 10.00 0.7						1.5s 261.30nm 6.0mb		
GUM0 99.54 74 eP 30 38.00 -3.5X			PAS 130.58 338 ePKP 36 10.00 0.5						55.18 75 ePd 27 30.15 -0.7		
GAC 99.88 321 eP 30 48.00 5.4X			ePP 39 18.00						1.8s 83.63nm 5.5mb		
INK 100.07 358 ePd iff 30 43.00 0.1			eS 46 26.00						ePPc 27 32.87 9kmX		
SPA 101.69 180 e(Pd iff 30 54.00 3.7X			eSS 51 28.00						ESY 55.80 331 eP 27 32.90 -1.8		
1.5s 27.27nm 5.6mb			eLg 56 16.00						EDI 56.07 331 eP 27 34.90 -1.7		
PMR 106.36 5 PKP 35 25.00 2.7			eLR 00 38.00						EAU 56.16 331 eP 27 35.50 -1.8		
Z 20s 13.00um 6.5MsZ			PLM 130.79 336 ePKP 36 11.00 0.8						EDU 56.34 332 eP 27 36.30 -2.3		
FFC 107.10 339 ePKP 35 32.00 8.0X			SYP 130.87 340 ePKP 36 12.00 1.8						DLE 56.40 327 eP 27 38.60 -0.4		
1.3s 21.00nm			BAR 131.31 336 ePKP 36 12.00 1.0						1.6s 450.00nm 6.2mb		
SES 113.75 341 ePKP 35 36.00 -0.9			HON 141.72 31 PKP 36 30.00 -0.6						DMU 56.88 328 eP 27 45.80 3.3X		
PNT 117.05 347 ePKP 35 44.00 0.9			Z 22s 8.33um 6.4MsZ						KEV 58.57 354 ePd 27 53.59 -0.5		
LRM 118.21 340 ePKP 35 46.10 0.3			AFI 147.07 97 ePKP 36 43.72 3.8X						ePP 30 25.15		
UYO 118.34 319 iPKPc 35 46.50 0.5			AFR 167.29 118 ePKP 37 05.00 0.8						eS 36 01.40		
RMW 119.28 347 PKP 35 47.00 -0.5			1.2s 55.00nm						KMI 58.68 68 ePd 27 55.63 -0.3		
IMW 119.35 338 PKP 35 48.00 -0.1			PAE 167.41 119 ePKP 37 05.00 0.7						ePPc 27 59.51 13kmX		
GMW 119.40 348 PKP 35 47.00 -0.7			1.2s 85.00nm						eS 36 08.03		
LON 119.96 347 PKP 35 46.50 -2.3			PPT 167.45 119 ePKP 37 07.00 2.7						LZH 60.40 55 ePd 28 06.92 -0.6		
GLD 120.35 331 PKP 35 49.00 -1.0			1.2s 130.00nm						KGM 61.57 94 eP 28 17.60 2.0		
GOL 120.46 331 PKP 36 00.00 9.7X			Z 20s 13.00um						BJI 70.37 52 P 29 10.00 -1.5		
Z 20s 8.50um 6.4MsZ			PPN 167.59 119 ePKP 37 07.00 2.6						HIA 73.10 42 ePd 29 27.70 0.0		
ME0 120.47 323 iPKPc 35 50.50 0.4			1.2s 45.00nm						ePPc 29 30.92 10kmX		
DAU 122.45 336 PKP 35 54.00 -0.1			TVO 167.64 120 ePKP 37 08.00 3.5X						TATO 75.66 67 eP 29 44.13 1.3		
DUG 123.25 337 PKP 35 55.40 0.0			1.2s 135.00nm						MDJ 80.06 46 ePd 30 06.52 -0.3		
1.3s 26.43nm			PMO 169.90 110 ePKP 37 09.00 3.1X						ALE 80.12 353 eP 30 08.00 1.6		
MSU 124.44 335 PKP 35 58.40 0.5			1.2s 80.00nm						1.0s 33.00nm 5.3mb		
ALO 124.73 328 e(PKP) 35 58.50 0.0			VAH 170.07 111 ePKP 37 08.00 2.0						MAJO 87.94 53 ePd 30 46.87 0.0		
Z 22s 6.83um 6.3MsZ			1.2s 70.00nm						MAT 87.94 53 eP 30 46.00 -0.9		
ePP 37 43.50			TPT 170.16 110 ePKP 37 09.00 3.0X						BDF 93.03 255 ePd 31 12.55 1.6		
e 38 42.50			1.2s 90.00nm						CCH 110.57 256 Pd iff 32 32.00 2.6X		
ePPP 40 28.00			RUV 170.31 112 ePKP 37 08.00 1.9						i 33 13.00		
e 46 43.00			S.D. = 1.0 on 449 of 486 obs.						CNCB 112.25 257 iPd iff 32 24.50 -13.5X		
eSS 54 56.00									ZOBO 112.33 257 Pd iff 32 32.00 -6.3X		
eLR 12 25.00									i 33 16.00		
LBFM 125.09 345 PKP 35 59.50 0.5											
MIN 125.96 344 ePKP 36 00.20 -0.5											
eSKSP' 05 31.50											
WDC 125.97 345 ePKP 36 00.00 -0.5											
eSKKP 49 27.20											
eSKSP' 05 31.60											
ORV 126.67 344 ePKP 36 01.80 -0.1											
eSKSP' 05 33.00											

AUG 20, 1989 11h 17m 55.24 ± 0.38s

SKS 42 36.00
 LR 10 04.00
 LPB 112.34 257 Pd^{diff} 32 21.00 -17.2X
 1.1s 544.30nm
 Z 18s 11.68um 6.5mszX
 i 32 29.80
 PKS 36 24.00
 e 02 40.00
 eLR 10 44.00
 BOG 114.31 281 ePKP 36 36.00 -2.4
 eS 46 20.00
 ARE 115.57 257 iP^{diff} 32 46.50 -5.9X
 UPA 118.25 287 e(PKP) 37 04.00 18.6X
 Z 20s 4.22um 6.1mszX
 GSC 128.91 338 ePKP 37 06.00 0.6
 TPC 129.68 336 ePKP 37 08.00 1.1
 SBB 129.84 338 ePKP 37 08.00 0.8
 RVR 130.29 337 ePKP 37 09.00 1.1
 BAR 131.18 336 ePKP 37 11.00 1.3
 AFI 147.07 97 ePKP 37 42.49 3.6X
 S.D. = 1.2 on 59 of 70 obs.

? AUG 20, 1989 11h 28m 00.55±3.18s
 61.186 N ±10.7km 4.177 E ±25.7km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN NORWAY (535)
 MD 1.7 (BER).

SUE 0.31 114 iP_g 28 07.60 0.6
 eS_g 28 11.60
 ASK 0.86 144 iP 28 16.40 -0.7
 eS 28 26.70
 HYA 0.97 90 iP 28 18.40 -0.6
 iS 28 31.40
 ODD1 1.76 135 eP 28 32.00 0.7
 eS 28 53.00
 MOL 2.12 48 eP 28 36.50 0.1
 eS 29 03.40
 S.D. = 0.9 on 5 of 5 obs.

AUG 20, 1989 11h 46m 28.07±0.18s
 11.884 N ± 3.4km 41.812 E ± 2.7km
 DEPTH = 10.0km (geophysicist)
 6.1mb (65 obs.) 5.6msz (5 obs.)

ETHIOPIA (558)
 Ms 6.1 (BRK).
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=122 Dip=68 Slip=-90
 NP2: 302 22 -90
 Principal Axes:
 T P_{lg}=23 Azm=212
 P 67 32
 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 22C
 Centroid Location:
 Origin Time 11:46:33.7 0.7
 Lat 11.86N FIX; Lon 41.90E FIX
 Dep 15.0 FIX Half-duration 4.2
 Moment Tensor: Scale 10**18 Nm
 Mrr=-1.63 0.07 Mtt=1.16 0.09
 Mff=0.47 0.10 Mrt=-0.20 0.33
 Mrf=0.58 0.26 Mtf=-0.50 0.08
 Principal Axes:
 T Vol=1.49 P_{lg}=9 Azm=211
 N 0.29 11 302
 P -1.78 76 84
 Best Double Couple: Mo=1.6*10**18
 NP1: Strike=288 Dip=38 Slip=-109
 NP2: 130 55 -76

ARO 1.07 109 P 46 48.70 0.4
 S 47 05.80
 BEE 16.28 29 eP 50 18.10 -0.4
 BJA 16.30 29 iP 50 19.00 0.9
 BRF 16.36 29 eP 50 21.10 1.7
 0.5s 521.00nm 5.9mb
 LWI 19.08 223 iP 50 54.80 1.1
 MKT 19.95 343 ePd 51 05.00 1.7
 DSI 20.47 344 ePd 51 10.10 1.4
 MML 21.28 345 ePd 51 19.30 2.2
 BHD 21.42 6 iP 51 19.00 0.6

iS 55 49.00
 HRP 22.00 346 ePd 51 27.00 2.6
 KER 22.88 11 iPd 51 34.40 1.3
 BNG 24.17 254 iPc 51 45.90 0.2
 1.2s 270.00nm 5.7mb
 ic 53 14.90
 MSL 24.42 3 ePc 51 40.50 -7.4X
 eS 56 18.50
 TAB 26.38 8 eP 52 08.00 1.4
 NPA 26.92 185 iPc 52 15.30 3.8X
 1.0s 510.00nm 6.2mb
 e 52 18.00
 ELL 26.98 339 iP 52 13.40 1.4
 YER 27.93 336 iP 52 21.90 1.3
 CLK 28.21 194 iPc 52 23.50 0.2
 i 01 20.10
 i 11 10.90
 KHL 28.52 339 iP 52 25.70 -0.3
 ALT 28.99 341 iP 52 29.90 -0.3
 MAIO 29.08 30 eP 52 32.00 1.0
 IZM 29.42 336 iP 52 35.20 1.2
 KVT 29.52 351 iP 52 36.00 1.1
 QUE 29.59 48 eP 52 37.20 1.4
 BKR 29.77 3 iPd 52 40.00 2.7
 iS 57 50.00
 DST 29.98 339 iP 52 39.90 0.9
 KAS 30.21 348 iPd 52 42.10 1.0
 YLV 30.60 341 iP 52 45.20 0.7
 KCT 30.65 340 iP 52 45.70 0.8
 GBZT 30.78 341 eP 52 47.30 1.3
 BNT 30.90 339 iP 52 48.50 1.5
 EDC 30.91 339 iP 52 47.90 0.8
 EZN 31.02 336 eP 52 49.00 0.9
 MFT 31.50 339 eP 52 53.00 0.6
 POO 31.58 74 iPd 53 11.30 18.0X
 KDZ 32.94 337 iPd 53 05.00 0.1
 JMB 33.23 339 iPd 53 09.00 1.6
 DIM 33.24 338 iPc 53 09.00 1.5
 RZN 33.25 336 iPd 53 09.00 1.2
 SRN 33.90 329 iP 53 13.40 0.2
 KKB 34.06 335 iPd 53 15.00 0.4
 KBN 34.08 331 iPd 53 17.80 3.1X
 PGB 34.19 337 iPd 53 16.00 0.2
 PVL 34.33 338 iPd 53 16.00 -0.9
 BUL 34.37 202 eP 53 16.50 -1.2
 1.0s 135.00nm 5.8mb
 OHR 34.47 331 iPd 53 18.00 -0.2
 1.9s 0.95nm 3.4mb X
 VTS 34.61 335 iPd 53 20.00 0.5
 TLB 34.67 343 ePc 53 20.50 0.7
 GBA 34.77 83 P 53 21.50 0.5
 SOI 34.77 323 Pd 53 21.20 0.5
 PZI 34.79 321 P 53 21.70 0.7
 MEU 34.82 321 Pd 53 22.30 0.9
 SKO 34.86 333 iPd 53 21.40 -0.1
 1.5s 819.00nm 6.4mb
 i 53 37.00
 GMB 34.95 323 P 53 24.00 1.5
 KOD 35.02 89 eP 53 24.00 0.5
 GRI 35.06 324 P 53 23.90 0.6
 PMP 35.08 332 iPd 53 22.80 -0.6
 TIR 35.09 331 iPc 53 24.20 0.7
 ATN 35.18 323 P 53 25.40 1.1
 CFR 35.18 343 ePd 53 24.00 -0.2
 LCI 35.29 328 P 53 25.00 -0.2
 MNO 35.49 322 P 53 29.10 1.9
 ISR 35.62 341 ePc 53 29.00 1.0
 TDS 35.69 325 P 53 29.40 0.8
 FAI 35.71 320 P 53 31.00 2.2
 SDA 35.78 331 iPd 53 29.60 0.3
 ULC 35.86 331 eP 53 30.50 0.5
 HYB 35.93 77 ePc 53 31.20 0.3
 GIB 35.94 321 P 53 32.00 1.2
 MCT 35.96 320 P 53 33.30 2.2
 PVY 36.01 332 eP 53 33.60 0.2
 MLR 36.13 341 iPd 53 34.50 2.1
 TTG 36.21 331 eP 53 34.20 1.3
 VRI 36.22 342 iPd 53 34.00 1.0
 CMP 36.23 340 ePd 53 40.00 6.9X
 IVA 36.26 332 eP 53 33.60 0.1
 BDV 36.31 331 eP 53 34.20 0.4
 BIR 36.32 343 eP 53 35.50 1.7
 CVO 36.35 341 ePc 53 35.50 1.4
 MGR 36.45 325 Pd 53 35.00 0.0
 CVT 36.52 320 P 53 36.70 1.1
 0.1s 22.40nm 5.9mb
 PTS 36.52 318 P 53 36.20 0.6

HCY 36.59 331 eP 53 37.00 0.9
 NKY 36.63 331 eP 53 36.50 -0.1
 CLI 36.68 343 ePc 53 39.00 2.1
 ERC 36.86 320 P 53 39.40 0.8
 1.9s 660.00nm 6.1mb
 SGO 36.88 325 P 53 39.00 0.5
 USI 36.91 321 P 53 39.30 0.5
 BRY 36.91 331 eP 53 39.00 0.0
 LVI 36.99 320 P 53 40.50 1.0
 NDI 36.99 58 iPd 53 40.00 0.3
 eS 59 27.00
 IAS 37.19 344 eP 53 33.00 -8.1X
 MDB 37.21 340 ePc 53 40.00 -1.3
 PTT 37.29 342 eP 53 42.50 0.6
 DEV 37.51 338 ePc 53 44.00 0.2
 BEO 37.58 335 iP 53 44.00 -0.4
 TIM 38.02 336 iPd 53 47.00 -1.1
 DUI 38.10 326 P 53 49.20 0.3
 RFI 38.12 325 P 53 50.00 1.1
 HVAR 38.14 330 iP 53 49.40 0.3
 SDI 38.48 326 Pd 53 52.10 0.0
 AZI 38.88 326 Pd 53 55.70 0.3
 AOU 39.15 326 Pd 53 57.90 0.2
 RMP 39.17 325 P 53 58.90 1.0
 ALP 39.34 327 ePd 54 02.85 3.4X
 MNS 39.57 326 P 54 00.80 -0.3
 SLR 39.64 199 ePc 54 01.54 -0.5
 ePP 55 33.91
 CGL 39.72 319 P 54 03.20 0.6
 AOI 39.86 328 ePd 54 03.73 0.2
 CIO 39.86 327 ePd 54 02.72 -0.9
 ASS 40.03 326 P 54 04.60 -0.4
 ARV 40.17 327 Pd 54 05.80 -0.3
 ZAG 40.32 332 iPd 54 08.50 1.2
 PTJ 40.40 332 eP 54 08.40 0.4
 VBY 40.43 331 iPd 54 08.90 0.8
 MAO 40.45 324 P 54 08.50 0.2
 PRO 40.47 327 eP 54 28.00 19.5X
 RSM 40.72 327 P 54 10.90 0.4
 RIY 40.73 330 iPd 54 11.40 0.8
 CRE 40.79 326 P 54 10.00 -1.3
 KSH 40.84 42 eP 54 12.40 0.6
 Z 10s 78.00um 6.9mszX
 N 11s 61.30um
 SRO 40.87 336 iPd 54 13.30 1.6
 CEY 41.00 331 ePd 54 13.20 0.3
 SFI 41.04 327 P 54 13.00 -0.1
 PGD 41.08 327 P 54 13.00 -0.7
 LJU 41.17 331 iPd 54 14.60 0.4
 SPC 41.27 339 iPd 54 16.00 0.8
 2.0s 1640.00nm 6.4mb
 FIR 41.27 326 eP 54 15.00 0.0
 TRI 41.30 330 ePd 54 15.50 0.3
 VOY 41.47 330 eP 54 16.20 -0.6
 ZST 41.67 335 iPd 54 18.60 0.3
 BDI 41.81 326 P 54 17.70 -1.9
 MME 41.84 326 P 54 21.70 1.6
 CVF 41.86 323 iPd 54 19.90 -0.1
 1.6s 360.60nm 5.9mb
 RBL 41.92 331 P 54 21.00 0.6
 FRU 41.94 37 iPd 54 23.00 2.3
 KUK 42.00 266 eP 54 22.00 0.5
 VKA 42.05 335 iPd 54 22.20 0.8
 6.0s 6403.00nm 6.5mb X
 Z 12s 3.60um 5.5mszX
 LR 05 31.00
 KRA 42.10 339 iPd 54 22.10 0.3
 1.0s 217.00nm 5.8mb
 Z 18s 7.60um 5.6msz
 N 18s 10.70um
 VVI 42.15 329 P 54 23.20 0.9
 FVI 42.41 330 Pd 54 25.00 0.7
 KBA 42.48 331 iPd 54 25.20 0.0
 1.6s 309.00nm 5.8mb
 i 54 50.60
 i 56 09.00
 CTI 42.59 329 Pd 54 26.20 0.2
 SAL 42.87 328 P 54 26.80 -1.3
 BOB 42.90 326 P 54 27.40 -1.1
 BHG 43.17 331 eP 54 30.10 -0.5
 1.7s 700.00nm 6.1mb
 FIN 43.24 324 P 54 30.37 -0.9
 IMI 43.24 324 P 54 30.78 -0.6
 PCP 43.26 325 P 54 30.37 -1.1
 OBN 43.31 356 iPd 54 31.80 0.2
 1.8s 1200.00nm 6.4mb
 Z 17s 19.00um 6.1mszX

20d 12h

LPF	50.89	324 eP	05 19.20	-1.8
FLN	50.95	325 eP	05 19.60	-1.9
GRR	50.97	324 eP	05 19.00	-2.6
UPP	51.31	345 iP	05 24.50	0.5
SUF	52.12	351 eP	05 28.60	-1.6
HFS	52.62	343 eP	05 32.60	-1.4
Z	16s	2.59um		5.4MszX
PTO	52.95	313 eP	05 40.00	3.3X
NB2	54.09	342 P	05 41.90	-2.9
CHTO	55.22	75 (P)	05 53.00	-0.7
BDT	55.33	77 eP	05 53.20	-1.3
EKA	55.87	331 P	05 58.00	0.2
SOD	56.48	353 iP	06 03.30	1.3
DLE	56.53	327 eP	06 01.50	-1.1
DMU	57.01	328 eP	06 08.60	2.6
GTA	57.87	51 eP	06 11.80	-0.7
KEV	58.72	354 eP	06 19.00	1.2
KMI	58.74	68 Pd	06 18.00	-0.9
CD2	59.91	61 eP	06 27.00	0.3
LZH	60.49	55 eP	06 31.00	0.3
GYA	62.29	66 P	06 42.00	-1.0
XAN	64.46	58 P	06 56.00	-1.1
QIZ	65.51	74 eP	07 05.60	1.6
BTO	65.80	51 eP	07 05.00	-0.7
TIY	67.48	54 eP	07 14.50	-1.9
WHN	69.02	62 eP	07 26.20	0.2
BJI	70.47	52 eP	07 35.00	0.3
TIA	71.22	56 eP	07 38.40	-1.0
NJ2	72.81	60 Pc	07 48.60	-0.3
SSE	74.86	61 P	08 02.50	1.7
CN2	77.28	48 Pd	08 14.00	-0.2
ALE	80.27	353 eP	08 31.00	1.1
MAW	80.59	172 eP	08 33.00	1.4
MAT	88.03	53 (P)	09 08.00	-1.9
MBC	91.45	356 eP	09 28.00	2.8X
BAO	93.07	255 eP	09 38.00	4.2X
WRA	96.14	109 P	09 51.00	3.3X
ASPA	96.38	113 eP	09 51.10	2.3
ALQ	124.74	328 e(PKP)	15 18.50	-1.7
WDC	125.98	345 ePKP	15 26.40	4.2X
CMB	127.78	342 ePKP	15 24.30	-1.4
BKS	128.45	344 ePKP	15 40.00	13.1X
Z	20s	1.70um		5.7MszX
N	20s	1.30um		
E	20s	3.70um		
CLC	128.89	339 ePKP	15 30.00	2.1
GSC	129.06	338 ePKP	15 33.00	4.7X
ISA	129.33	339 ePKP	15 29.00	0.2
TPC	129.82	336 ePKP	15 32.00	2.2
SBB	129.98	338 ePKP	15 31.00	0.9
PLM	130.80	336 ePKP	15 35.00	3.2X
BAR	131.32	336 ePKP	15 38.00	5.4X
S.D. = 1.3 on 153 of 181 obs.				
% AUG 20, 1989 12h 01m 49.02±1.00s				
39.143 N ± 8.7km 27.629 E ± 10.1km				
DEPTH = 10.0km (geophysicist)				
TURKEY (366)				
IZM	0.80	201 ePg	02 04.90	0.4
DST	0.90	59 iPg	02 05.20	-1.1
EDC	1.22	8 ePn	02 11.90	0.3
EZN	1.22	304 ePn	02 11.00	-0.7
KCT	1.24	27 iPn	02 13.20	1.1
S.D. = 1.3 on 5 of 5 obs.				
? AUG 20, 1989 12h 13m 36.74±2.02s				
11.469 N ± 39.8km 41.706 E ± 19.6km				
DEPTH = 10.0km (geophysicist)				

4.8mb (16 obs.)				
ETHIOPIA (558)				
VRI	36.58	342 iPc	20 45.50	0.8
SPC	41.61	339 iP	21 28.00	1.3
ZST	42.00	335 iP	21 30.10	0.4
FVI	42.71	331 P	21 36.80	1.3
OGA	43.77	330 iPc	21 45.90	1.5
KHC	44.21	334 iP	21 47.50	-0.2
KSP	44.43	337 eP	21 49.00	-0.4
PRU	44.45	335 eP	21 49.80	0.2
LPG	45.13	325 eP	21 55.50	0.0
BRG	45.38	336 iP	21 56.50	-0.5
GRF	45.66	333 iPd	21 55.30	-4.0X
CLL	46.09	335 iPc	22 02.50	-0.2
MOX	46.18	334 eP	22 03.00	-0.4
BSF	46.56	328 eP	22 06.40	-0.1
CDF	46.68	329 eP	22 07.50	0.0
LBF	47.56	325 eP	22 14.20	-0.2
LOR	47.79	326 eP	22 16.00	-0.2
AVF	47.80	325 eP	22 16.00	-0.2
SSF	47.87	325 eP	22 16.50	-0.3
BGF	47.95	324 eP	22 17.70	0.2
LFF	48.33	321 eP	22 21.30	0.9
DOU	49.11	329 Pc	22 26.40	0.1
SNF	49.52	329 P	22 29.70	0.2
LPF	50.98	324 eP	22 40.10	-0.5
FLN	51.04	325 eP	22 40.50	-0.6
GRR	51.06	325 eP	22 40.80	-0.4
HFS	52.83	343 eP	22 52.90	-1.5
NB2	54.29	342 P	23 03.50	-1.7
CHTO	55.54	75 (P)	23 15.30	0.4
S.D. = 0.8 on 28 of 29 obs.				
AUG 20, 1989 13h 25m 26.01±0.26s				
11.898 N ± 4.4km 41.884 E ± 4.3km				
DEPTH = 10.0km (geophysicist)				
5.2mb (39 obs.)				
ETHIOPIA (558)				
ML 5.1 (ARO)				
GBR	0.93	143 P	25 41.00	-2.9
ARO	1.01	111 P	25 42.00	-3.2
ATA	1.37	109 P	25 48.40	-2.7
ABHA	6.37	7 eP	27 02.00	-0.5
RYD	13.52	19 eP	28 47.00	6.6X
AKSR	14.40	325 iPd	29 04.00	12.1X
BJA	16.26	29 (P)	29 20.30	4.2X
DHR	16.31	27 eP	29 21.50	4.8X
BRF	16.31	29 (P)	29 19.90	3.1X
LWI	19.14	224 ePd	29 53.90	1.6
SHI	20.24	28 eP	30 04.00	-0.5
DSI	20.48	344 eP	30 08.00	1.3
BHD	21.40	6 iPc	30 16.00	-0.1
ATZ	21.69	345 e(P)	30 25.00	5.9X
HRI	22.00	346 ePc	30 25.00	2.7X
KER	22.85	11 eP	30 33.00	2.2
IKZ	23.77	203 eP	30 41.00	1.2
SLY	23.82	7 iPc	30 41.00	1.0
BNG	24.25	254 iPc	30 43.90	-0.4

ic	32	11.30
id	33	54.00
id	38	28.40
ic	39	54.20
ePc	30	47.00
eS	35	17.00
e	39	06.50
eLO	39	45.50
eLR	41	43.50
eP	30	58.00
eP	31	06.00
e	39	05.00
eP	31	11.00
iP	31	13.70
e	32	08.00
i	40	55.50
eP	31	10.90
iP	31	20.00
i	32	12.50
i	39	20.00
e	41	05.00
eP	31	24.00
eP	31	25.90
eP	31	33.00
eP	31	30.00
iP	31	33.00
eP	31	37.70
iPc	31	37.50
iS	36	38.00
eP	31	38.00
e	41	18.00
eP	31	37.80
eP	31	42.00
eP	31	43.00
e	41	02.00
e	42	08.00
iP	31	42.20
iP	31	44.20
eP	31	47.00
eP	32	03.50
eP	32	09.00
eP	32	06.00
iPd	32	07.00
eP	32	09.50
ePd	32	08.00
eS	37	26.00
iP	32	10.00
ePn	32	11.40
iPd	32	12.00
ePn	32	12.50
iPd	32	14.00
iPc	32	17.00
iP	32	16.80
0.05nm		2.4mb X
iPd	32	18.00
P	32	21.30
P	32	18.00
iP	32	19.00
i	32	25.00
i	32	29.00
i	33	12.00
iS	37	54.50
i	38	57.00
iSSS	41	10.00
iPc	32	21.20
ePn	32	20.60
ePn	32	21.60
eP	32	23.00
iPc	32	22.00
P	32	23.20
P	32	18.00
P	32	20.00
eP	32	27.00
P	32	27.00
ePn	32	27.70
eP	32	30.50
P	32	30.00
P	32	31.70
ePc	32	32.00
iPc	32	33.00
ePc	32	38.00
P	32	32.00
P	32	36.00
eP	32	40.80
eS	33	32.00
eP	32	41.50
eP	32	46.00

1.2s 13.00nm 4.7mb
CLL 45.54 335 iP 24 04.10 -0.5
MOX 45.64 334 eP 24 05.00 -0.4
BSF 46.03 328 eP 24 08.20 -0.5
CDF 1.0s 12.00nm 4.8mb
LOR 47.28 325 eP 24 17.90 -0.6
SSF 47.35 325 eP 24 18.40 -0.7
BGF 47.44 324 eP 24 19.40 -0.4
LFF 47.84 321 eP 24 23.10 0.2
SUF 51.80 351 eP 24 51.80 -1.1
APO 52.53 343 eP 24 57.00 -1.5
WRA 96.54 109 P 29 16.00 1.3
S.D. = 1.1 on 24 of 26 obs.

* AUG 20, 1989 14h 36m 36.79 ± 1.08s
24.234 N ± 12.6km 109.295 W ± 14.7km
DEPTH = 10.0km (geophysicist)
5.0mb (5 obs.)
GULF OF CALIFORNIA (49)

BAR 10.62 324 eP 39 12.00 -0.1
ALO 10.95 12 iPc 39 15.00 -1.8
PLM 11.25 326 eP 39 21.00 0.2
TPC 11.47 331 eP 39 23.00 -0.6
SBB 12.79 326 eP 39 43.00 1.5
GSC 12.81 331 eP 39 41.00 -0.7
CLC 13.59 330 eP 39 52.00 -0.1
MEO 14.04 39 e(P) 40 02.80 4.8X
MSU 14.44 351 P 40 05.80 2.3
TNP 15.37 336 P 40 16.00 0.5
FRI 15.54 327 eP 40 21.40 3.9X
GOL 15.77 11 P 40 22.00 1.2
GLD 15.85 12 P 40 22.00 0.3
PRS 15.92 322 e(P) 40 26.60 4.1X
DUG 16.19 350 P 40 28.00 2.0
DAU 16.22 355 P 40 25.80 -0.8
UYO 16.28 49 iPc 40 22.40 -4.7X
KVN 16.55 335 P 40 31.90 1.2
CMB 16.69 328 e(P) 40 30.80 -1.6
LRM 21.69 354 ePc 41 29.00 -1.0
INK 46.49 348 eP 45 04.00 -1.6
MBC 52.31 357 eP 45 48.00 -2.3
ZOBO 56.88 131 eP 46 30.00 4.9X
LPB 57.08 131 eP 46 27.00 0.7
CNCB 57.35 131 eP 46 29.00 0.6
KEV 81.21 14 eP 49 05.00 11.2X
SUF 86.42 19 eP 49 25.00 4.6X
S.D. = 1.4 on 20 of 27 obs.

? AUG 20, 1989 15h 01m 00.49 ± 11.28s
0.336 S ± 39.7km 80.058 W ± 86.8km
DEPTH = 33.0km (normal)
NEAR COAST OF ECUADOR (105)

GGP 1.47 84 ePn 01 24.00 -1.5
RECU 1.52 101 iPd 01 27.00 0.8
OUR 1.54 84 eP 01 25.30 -1.0
COTA 1.84 69 P 01 30.60 -0.3
CAYA 2.12 79 P 01 35.80 1.1
PURC 4.54 54 eP 02 10.60 1.4
SALC 4.70 46 eP 02 12.10 1.0
ANCC 4.98 40 (P) 02 14.54 -0.5
DIAC 5.28 47 eP 02 15.29 -4.0X
CLMC 5.45 40 eP 02 20.77 -1.0
S.D. = 1.2 on 9 of 10 obs.

* AUG 20, 1989 15h 39m 43.09s
62.049 N 148.104 W

DEPTH = 39.4km
CENTRAL ALASKA (1)
<AGS-P>

GHO 0.48 235 iP 39 52.87 -0.7
PME 0.61 227 eP 39 54.52 -0.8
KNK 0.66 195 eP 39 55.63 -0.4
PLRM 0.67 227 iP 39 55.11 -1.0
TOA 0.91 86 iP 39 58.83 -0.8
PWA 0.93 245 iP 39 59.71 -0.1
HUR 1.17 323 eP 40 01.58 -1.7
KLU 1.18 117 iP 40 02.11 -1.3
VZW 1.24 143 eP 40 02.82 -1.5
GLI 1.27 157 eP 40 03.98 -0.7
SDG 1.29 67 eP 40 03.60 -1.4
SUA 1.39 246 eP 40 06.35 -0.1
RND 1.41 346 eP 40 05.65 -1.7
FID 1.52 148 eP 40 07.55 -0.7
PAX 1.53 52 eP 40 28.43 eS
SKT 1.62 269 eP 40 07.07 -1.4
KNIM 1.72 174 eP 40 26.10 eS
SLKM 1.85 214 eP 40 09.08 -0.5
KTH 1.99 321 eP 40 10.56 -0.4
NCG 2.04 253 eP 40 13.08 0.0
SEW 2.06 199 iP 40 13.56 -1.5
GLB 2.13 105 eP 40 15.71 0.0
HDA 2.42 12 eP 40 40.56 0.6
WRH 2.43 0 eP 40 16.47 -1.0
RDT 2.55 236 eP 40 43.42 eS
CCB 2.61 3 eP 40 20.31 -0.8
CNPM 2.96 213 eP 40 20.32 -0.9
27 obs. associated

? AUG 20, 1989 15h 55m 26.83 ± 1.70s
11.638 N ± 14.6km 42.285 E ± 32.6km
DEPTH = 10.0km (geophysicist)
4.4mb (1 obs.)
ETHIOPIA (558)

ABHA 6.59 4 eP 57 05.00 -1.4
RYD 13.64 17 eP 58 47.00 4.1X
HOL 18.80 340 eP 59 48.50 -0.1
PRNI 19.81 341 eP 00 02.50 2.0
JVI 21.18 343 eP 00 16.00 1.3
BHD 21.62 5 ePc 00 19.00 -0.2
HRI 22.35 345 e(P) 00 22.00 1.4
SLY 24.03 6 ePd 00 28.00 -7.8X
BNG 24.55 255 iPd 00 48.10 -0.1
MSL 24.65 2 ePc 00 50.00 4.4mb
MAIO 29.06 29 eP 01 40.00 10.4X
BUL 34.33 203 eP 02 16.40 0.3
SRO 41.28 335 eP 03 16.60 2.7
SPC 41.66 338 eP 03 17.00 -0.2
ZST 42.09 335 eP 03 20.60 0.1
KRA 42.50 339 eP 03 22.90 -0.9
OCA 43.91 329 iPc 03 28.30 eS
KHC 44.31 333 P 03 35.50 -0.1
BRG 45.46 335 eP 03 36.80 -1.9
CLL 46.18 335 eP 03 47.50 -0.3
MOX 46.29 333 eP 03 52.00 -1.4
S.D. = 1.4 on 18 of 21 obs.

AUG 20, 1989 16h 15m 56.02 ± 0.62s
45.395 N ± 5.7km 14.425 E ± 4.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
MD 3.0 (LJU), 2.5 (TRI), ML 2.6
(ZAG), 2.5 (KBA). Fell in the
Rijeko oreo.

RIY 0.06 209 iPgc 15 58.30 0.1
CEY 0.34 0 iPg 15 59.70 iSg
TRI 0.56 304 iPgd 16 02.90 -0.2
VBY 0.60 79 iPg 16 08.90 eSg
LJU 0.65 7 iPg 16 07.30 -0.1
VOY 0.74 330 iPgd 16 07.00 -1.1
ZAG 1.17 68 iPg 16 14.40 iSg
PTJ 1.19 64 ePg 16 14.40 iSg
RBL 1.21 331 P 16 09.30 0.2
FVI 1.66 317 P 16 19.00 eSg
KBA 1.84 336 iPgd 16 10.20 -0.4
CTI 2.05 290 P 16 22.80 eSg
KHC 3.78 352 eP 16 19.00 1.1
S.D. = 0.6 on 11 of 13 obs.

AUG 20, 1989 17h 29m 39.37 ± 0.30s
44.556 N ± 2.3km 7.280 E ± 3.0km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.6 (GEN), 2.5 (LDG), MD 2.0
(STR).

PZZ 0.14 248 P 29 42.97 0.2
STV 0.31 174 P 29 44.92 S
FOUF 0.36 266 iPgc 29 45.94 0.0
ROB 0.50 122 P 29 50.15 S
RRL 0.51 316 P 29 56.81 S
TOUF 0.54 182 Pg 29 49.64 0.2
AUTN 0.57 169 Pg 29 56.81 S
SAOF 0.60 161 Pg 29 50.44 0.0
BNI 0.66 319 Pc 29 50.39 -0.7
MVIF 0.67 188 Pg 29 58.26 Sg
AURF 0.67 177 Pg 29 52.73 1.1
SBF 0.70 171 Pg 29 52.20 -0.4
FIN 0.75 117 P 30 00.10 eSg
IMI 0.78 146 P 29 51.95 -0.8
CALN 0.85 199 Pg 30 00.30 Sg
LSD 0.91 354 P 29 52.13 -0.6
PCP 0.90 90 P 29 53.10 -0.2
LPG 1.01 338 Pg 30 02.30 Sg
LPL 1.04 338 Pg 30 02.30 Sg
FRF 1.10 205 Pg 30 53.84 -0.3
LRG 1.29 211 Pg 30 04.10 S
LMR 1.34 205 Pg 29 54.15 -0.5
S.D. = 0.5 on 22 of 22 obs.

* AUG 20, 1989 17h 30m 04.77 ± 1.09s
20.056 S ± 10.4km 69.390 W ± 17.2km
DEPTH = 33.0km (normal)
NORTHERN CHILE (123)

CNCB 3.49 23 iPc 30 59.50 0.8
LPB 3.71 20 iPd 31 03.20 1.6
ANT 3.75 195 e(P) 31 02.00 0.3
ZOBO 3.95 18 P 31 05.00 -0.2
CCH 4.07 50 Pd 31 05.00 -1.6
ARE 4.09 330 eP 31 06.00 -0.9

20d 17h

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

AUG 20, 1989 18h 25m 13.39± 0.33s
11.807 N ± 6.2km 41.813 E ± 4.1km
DEPTH = 10.0km (geophysicist)

ETHIOPIA (558)
ML 4.3 (ARO).

Table with columns for station code, magnitude, depth, and other parameters. Includes stations like DAF, GBR, ARO, TDD, ATA, OBO, ABHA, BNG, BCAA, ZST, KHC, PRU, LPG, BRG, MOX, BSF, CDF, MAU, LBF, LOR, AVF, SSF, LFF, LPF, FLN, GRR, NB2.

S.D. = 0.5 on 26 of 27 obs.

AUG 20, 1989 18h 27m 33.66± 0.59s
11.825 N ± 8.0km 41.583 E ± 8.7km
DEPTH = 10.0km (geophysicist)

ETHIOPIA (558)

Table with columns for station code, magnitude, depth, and other parameters. Includes stations like RYD, NAI, DHR, HQL, LWI, MBH, NOH, MLW, SHI, JVI, BHD, HRI, KER, SLY, BCAA, MSL, TAB, NPA, BBTk, MAIO, QUE, BUL, GBA.

Table with columns for station code, magnitude, depth, and other parameters. Includes stations like CFR, HYB, BRN, SMF, CAF, LBF, EPF, LOR, AVF, SSF, MAF, LPO, BGF, APHE, RJF, IFR, ACHM, TCF, ASMO, ATEJ, LFF, ALOJ, AAPN, LSF, ENN, DOU, WTS, TOL, WIT, NUR, LDF, LPF, FLN, GRR, UPP, SUF, HFS, NB2, BJI, ALE, LCCM.

S.D. = 1.4 on 55 of 64 obs.

* AUG 20, 1989 18h 27m 58.34± 1.17s
43.622 N ± 10.8km 12.800 E ± 13.0km
DEPTH = 10.0km (geophysicist)

CENTRAL ITALY (381)

Table with columns for station code, magnitude, depth, and other parameters. Includes stations like ARV, PRO, RSM, CIO, ASS.

SFI 0.75 294 P 28 13.00 0.0
PGD 0.82 288 P 28 14.00 -0.4
MNS 1.24 184 P 28 21.70 0.3

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

AUG 20, 1989 18h 32m 29.91± 0.19s
37.278 N ± 2.6km 21.203 E ± 1.8km
DEPTH = 10.5km (4 depth phases)

5.4mb (63 obs.) 5.6Msz (12 obs.)

SOUTHERN GREECE (368)
ML 5.4 (ATH), MD 5.4 (TTG). Felt throughout most of Peloponnisos.

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 34C
Centroid Location:
Origin Time 18:32:36.3 0.5
Lat 36.95N 0.05 Lon 21.15E 0.08
Dep 15.0 FIX Half-duration 3.0
Moment Tensor; Scale 10**17 Nm
Mrr=-3.64 0.22 Mtt= 7.29 0.35
Mff=-3.65 0.25 Mrt=-2.96 0.93
Mrf= 0.08 0.52 Mtf= 1.02 0.20
Principal Axes:
T Vol= 8.12 Plg=14 Azm=175
N -3.60 23 271
P -4.52 63 56
Best Double Couple: Mo=6.3*10**17
NP1: Strike=237 Dip=37 Slip=-130
NP2: 104 63 -64

Table with columns for station code, magnitude, depth, and other parameters. Includes stations like VLS, ATH, NEO, KEK, SRN, LIT, VAM, KZN, TPE, PAIG, KBN, APE, PLG, BERA, THE, OUR, GRG, OHR, LCI, GRI, NPS, KNT, SOI, VAY, TIR, SRS, GMB, PHP, PRK, TDS, MSI, ATN, SKO, MMB, KKB, KKS, SDA, ULC, IZM, MEU, PZI, LPI.

20d 18h

LPO	1.3s	122.70nm	4.9mb		eS	41 54 00			i	47 23.00			
	16.80	302 eP	36 27.00	0.3	HFS	23.37 351 eP	37 37 70	-1.4	KSR	63.03 174 eP	42 58.70 -0.7		
	1.3s	129.90nm	4.9mb			0.8s	71.40nm	5.3mb		0.9s	15.38nm	5.2mb	
EPF	16.94	296 eP	36 30.40	2.0	Z	16s	28.59um	5.8mszX		i	47 28.70		
	0.9s	27.80nm	4.4mb										
LSF	17.16	308 eP	36 32.50	1.3	AVE	23.65 269 i	37 41 00	-1.1	CBM	63.53 310 P	43 02.40 -0.1		
UFF	17.19	303 eP	36 33.20	1.7			37 54.50	56kmX	MBC	64.02 350 eP	43 05.50 0.3		
	1.0s	112.00nm	4.9mb							0.8s	21.00nm	5.4mb	
ENN	17.35	326 ePc	36 35.50	2.1	YRH	23.79 319 eP	37 44.90	1.7	LZH	64.12 63 P	43 05.00 -1.7		
	1.0s	160.00nm	5.1mb		LIS	23.91 283 iPd	37 45.40	0.9		2.0s	112.00nm	5.7mb	
DOU	17.51	322 P	36 37.80	2.4	TEH	24.26 84 ePc	37 49.00	0.8	Z	18s	3.90um	5.6msz	
	0.7s	102.20nm	5.1mb		NRA0	24.27 348 P	37 46.00	-1.8	N	12s	1.60um		
		S	39 54.00		TIO	24.35 263 iP	37 52.00	2.9X	E	11s	1.90um		
ECHE	17.52	284 eP	36 37.00	1.2			38 40.00			eS	51 43.00		
MSL	17.59	86 ePc	36 36.00	-0.6	ECP	24.41 316 eP	37 55.00	5.8X	PRY	64.14 174 iPd	43 06.80 0.1		
		eS	40 17.50			1.2s	286.00nm	5.8mb		0.6s	19.64nm	5.5mb	
BKR	17.77	69 iPd	36 39.00	0.0	EKA	24.47 325 Pc	37 47 50	-2.3	BTO	66.20 56 P	43 19.00 -1.0		
		iS	40 08.00			1.8s	525.10nm	5.9mb	N	13s	1.50um		
WTS	17.88	330 ePc	36 34.50	-5.5X	ESK	24.49 325 ePc	37 51.40	1.5	E	13s	2.50um		
	1.0s	102.00nm	4.9mb			1.0s	200.00nm	5.7mb		S	52 00.00		
UCC	18.09	324 P+	36 45.00	2.4	ETA	24.56 318 eP	37 52.40	1.7	CD2	66.60 68 eP	43 21.00 -1.6		
		iS	40 10.00		NB2	24.61 348 P	37 48.60	-2.5		S	52 11.50		
MFF	18.37	307 eP	36 44.60	-1.5		1.0s	106.90nm	5.4mb	FRS	66.79 176 iPd	43 24.50 1.1		
	0.9s	78.60nm	4.9mb		ECB	24.72 317 eP	37 53.80	1.6		i	48 05.50		
ETOR	18.40	288 eP	36 48.80	2.2		1.1s	191.00nm	5.7mb	HHC	67.10 55 Pc	43 24.30 -1.4		
WIT	18.56	331 eP	36 51.00	2.6X	DLE	25.02 319 eP	37 56.80	1.7	Z	18s	2.50um	5.5msz	
DBN	18.63	328 iP+	36 52.00	2.8X		1.3s	340.00nm	5.9mb	N	11s	2.40um		
Z	13s	19.70um			BER	25.24 341 eP	37 59.30	2.2	E	11s	2.00um		
		iS	40 25.00		DMU	25.51 320 eP	38 00.20	0.5		S	52 17.00		
ENIJ	18.67	276 eP	36 51.30	1.3	SUF	25.65 5 eP	37 59.90	-1.1	GAC	68.58 312 eP	43 35.00 0.3		
EVIA	18.74	281 eP	36 51.50	0.6		0.8s	137.30nm	5.7mb	XAN	68.75 63 P	43 34.20 -1.9		
LDF	19.21	313 eP	36 55.90	-0.5	VAL	26.50 314 eP	38 10 00	1.1		S	52 37.00		
	1.0s	92.00nm	5.0mb							SKS	53 35.00		
TAF	19.25	270 iP	37 00.00	2.9X	RGS	26.60 349 eP	38 13 00	3.2X	KMI	68.83 74 Pd	43 34.50 -2.4		
		i	37 05.00	19km	SOD	30.30 4 iP	38 38 00	-5.0X	N	18s	1.70um		
BHD	19.33	95 iPc	36 56.00	-2.1	MAIO	30.55 80 eP	38 44 00	-1.7		sP	43 59.00		
COP	19.35	345 iPd	36 58.10	0.1		1.1s	20.02nm	4.9mb	TIY	69.28 58 Pd	43 37.00 -2.3		
	1.9s	1263.16nm	5.9mb		KEV	32.69 4 eP	39 03 00	-0.9	Z	16s	4.77um	5.8mszX	
FLN	19.50	313 eP	36 57.90	-2.0			44 12 00		N	14s	3.20um		
	0.9s	102.30nm	5.1mb		BCAO	32.78 185 eP	39 05 00	-0.3	E	15s	3.40um		
LPF	19.50	310 eP	36 59.00	-0.9	AKU	36.44 334 iP	39 37 00	0.9		PP	46 10.50		
	1.0s	88.00nm	5.0mb			1.5s	133.33nm	5.5mb	CHG	69.28 82 ePd	43 37.10 -2.4		
GRR	19.55	312 eP	36 58.60	-1.9	REY	37.12 330 iP	39 44.30	2.5		1.1s	98.10nm	5.9mb	
	0.7s	37.40nm	4.8mb		QUE	38.40 87 eP	39 52.20	-1.1		eS	52 42.00		
SLY	19.61	88 ePc	36 58.00	-3.2X			45 41 00		BDT	70.20 83 eP	43 43.00 -2.0		
		iPP	37 20.00		TIC	38.73 225 P	39 56.68	0.8		1.0s	66.20nm	5.7mb	
		iPPP	37 37.00		KIC	38.80 224 P	39 57.34	0.8	BJI	70.53 54 eP	43 45.00 -1.7		
		iS	40 31.00		LIC	39.08 224 P	39 59.74	0.9		4.0s	0.41nm	2.9mb X	
		iPcP	40 58.00				46 00 00		Z	20s	3.94um	5.7msz	
		iSSS	41 32.00		LWI	39.94 168 iPc	40 00 00	1.8	N	13s	3.45um		
		iLR	43 37.00		FRU	40.69 65 iP	40 11 00	-1.0		eS	52 59.00		
CRT	19.74	277 eP	37 05.00	2.3	KSH	42.45 70 P	40 25.40	-1.1	GYA	71.10 71 P	43 48.40 -2.2		
EBAN	19.78	280 eP	37 02.00	-1.0		E	12s	10.60um		N	20s	1.60um	
TAB	19.89	80 eP	37 03.00	-1.4				46 48 00		E	20s	2.50um	
TOL	19.90	285 iPd	37 05.50	1.3	DAG	43.31 348 eP	40 33 00	0.1		S	53 03.00		
		iS	40 47.00		NDI	47.18 83 eP	41 03 00	-1.4	NST	71.97 84 eP	43 55.10 -0.7		
GUD	19.98	288 eP	37 05.00	-0.3			47 53 00		ITR	72.10 244 eP	43 57.70 1.2		
OBN	20.69	26 iPd	37 09.00	-3.3X	MZZ	48.70 170 iP	41 16 00	-0.5		e	44 07.70	32kmX	
	1.2s	700.00nm	5.9mb		POD	49.48 97 eP	41 21 00	-1.4		e	44 26.10		
Z	14s	35.00um	5.9mszX		WMO	49.73 60 P	41 22 00	-2.1	LOE	72.26 81 eP	43 56.00 -1.5		
		iS	40 50.00			Z	20s	6.00um	5.6msz	INK	73.04 350 eP	44 01.00 -0.2	
EMOR	20.96	280 eP	37 14.20	-1.1		E	11s	7.40um		TIA	73.25 57 eP	44 01.30 -1.8	
EPRU	21.06	277 eP	37 17.70	1.3	KMZ	50.65 174 eP	41 32 00	0.6	NNT	73.41 87 eP	44 02.70 -1.6		
KER	21.19	90 eP	37 16.00	-1.8	PTZ	52.13 168 eP	41 43 00	0.4	CBN	73.88 306 eP	44 10.00 3.4X		
LIJA	21.22	277 eP	37 20.00	2.0	ALE	52.44 351 eP	41 43 00	-1.1	CN2	74.11 47 Pd	44 06.00 -1.9		
SRO	21.30	275 eP	37 22.00	3.3X		0.7s	36.00nm	5.4mb		4.5s	0.50nm	2.8mb X	
EJIF	21.34	276 eP	37 20.00	0.8	LSZ	52.68 172 iPc	41 47.20	0.4	Z	24s	2.60um	5.4mszX	
ALJ	21.41	277 eP	37 20.00	0.0	HY8	53.82 95 ePd	41 53.40	-1.8	N	13s	1.50um		
EPLA	21.45	286 eP	37 19.50	-0.8		1.4s	125.00nm	5.7mb	E	13s	1.20um		
OJEN	21.46	275 eP	37 24.00	3.6X	CLK	54.25 164 iPd	42 01 00	2.8X		pP	44 17.50	38kmX	
MOMI	21.56	276 eP	37 27.00	5.6X	NPA	54.79 159 iP	42 07.40	5.3X		sP	44 22.00		
GIBL	21.66	277 eP	37 22.00	-0.4	GBA	55.11 100 P	42 03 00	-1.6		S	53 36.00		
IFR	21.76	268 iPd	37 27.80	4.1X	KOD	57.15 103 eP	42 18 00	-0.8		sS	53 55.00		
		i	37 29.80	7km	BUL	57.54 172 iPc	42 21 90	0.0	SNY	74.16 49 Pd	44 05.00 -3.2X		
ERUA	22.30	292 eP	37 28.50	-0.3		1.1s	37.07nm	5.3mb	Z	20s	3.30um	5.6msz	
UPP	22.71	355 iP	37 31.00	-1.6	LSA	57.64 75 iPd	42 21.50	-1.6	N	16s	3.80um		
	1.2s	400.00nm	5.8mb			E	11s	0.50um		E	16s	3.70um	
		i	37 33.20	8km				50 18 00			S	53 31.00	
PUL	23.26	12 iPd	37 37.00	-1.0	SCH	59.47 318 eP	42 35 00	0.0	YKBo	74.33 340 eP	44 09.00 0.2		
		eS	41 44.00		WIN	59.65 184 iPd	42 39 00	2.3	WHN	74.50 63 iPd	44 08.00 -2.4		
NUR	23.35	4 iP	37 37.70	-1.2	GTA	59.78 62 Pd	42 34 00	-2.7	Z	16s	1.19um	5.3mszX	
	0.7s	56.10nm	5.2mb			1.2s	0.10nm	2.8mb X	E	12s	2.10um		
Z	11s	80.10um	6.4mszX			Z	15s	2.30um	5.4mszX		S	53 40.00	
		eS	41 48.00			E	11s	1.90um					
PTO	23.36	289 eP	37 39.30	0.2	SLR	63.03 173 iPc	42 59 00	-0.4	DL2	74.66 53 eP	44 09.00 -2.1		
		LR	48 10.00			Z	19s	36.46um	6.6msz	N	12s	2.00um	5.6msz

PDCR	75.19	241	eS	53	42.00		
			eP	44	16.60	2.1	
			epP	44	19.20	8km	
			e	44	22.60		
			e	44	28.90		
MDJ	75.97	44	eP	44	10.00	-8.6X	
Z	14s		2.70um			5.7mszX	
E	14s		4.80um				
			S	53	55.00		
FFC	76.23	330	eP	44	19.00	-0.8	
	0.8s		23.00nm			5.3mb	
BLA	76.42	306	e(P)	44	24.20	2.9X	
	1.0s		12.00nm			4.9mb	
NJ2	76.80	60	Pc	44	22.00	-1.4	
N	15s		1.20um				
E	15s		3.10um				
IMA	76.91	358	eP	44	24.20	0.6	
	1.3s		28.30nm			5.2mb	
SNG	77.28	91	eP	44	25.60	-0.7	
	1.2s		131.25nm			5.9mb	
OIZ	77.68	75	eP	44	28.60	0.1	
			S	54	22.00		
FBA	77.79	355	P	44	28.00	-0.3	
GZH	78.01	70	eP	44	23.00	-7.2X	
E	16s		2.00um				
			S	54	24.50		
JSC	78.72	304	P	44	36.00	2.0	
SSE	78.97	59	Pc	44	34.00	-1.4	
	1.2s		0.08nm			2.6mb X	
Z	20s		2.00um			5.4msz	
N	12s		1.00um				
E	12s		0.80um				
			pP	44	44.00	32kmX	
			S	54	28.00		
IPM	79.14	93	ePc	44	36.50	-0.1	
	1.2s		42.30nm			5.3mb	
TKL	79.51	307	P	44	38.00	-0.2	
TTA	80.11	359	eP	44	42.30	1.3	
OZH	80.80	66	eP	44	44.00	-1.3	
Z	20s		1.80um			5.4msz	
E	13s		1.20um				
			eS	54	48.00		
PMR	81.16	355	eP	44	47.30	0.8	
	1.3s		42.50nm			5.3mb	
Z	20s		3.00um			5.6msz	
EDM	81.64	334	iPd	44	50.30	1.0	
SVW	81.93	358	eP	44	52.40	1.8	
FVM	82.11	312	eP	44	53.00	1.1	
	0.9s		29.66nm			5.4mb	
KGM	82.51	93	eP	44	54.30	0.0	
ANP	82.77	64	e(P)	45	08.00	12.3X	
SES	83.10	331	ePd	44	57.60	0.7	
BAO	83.60	245	eP	45	03.50	3.5X	
TSRJ	85.62	48	P	45	09.90	0.1	
MTMJ	85.96	46	P	45	11.90	0.3	
NIIJ	86.19	45	P	45	12.00	-0.6	
MAT	86.23	46	eP	45	12.00	-0.8	
	1.4s		88.37nm			5.8mb	
Z	20s		3.19um			5.7msz	
			eS	55	33.00		
IIDJ	86.80	47	eP	45	15.20	-0.5	
CHJJ	87.02	46	P	45	16.70	0.0	
PNT	87.05	336	eP	45	18.00	1.3	
	1.4s		54.00nm			5.6mb	
UYO	87.09	312	iPd	45	19.30	2.2	
BAG	87.44	71	eP	45	19.00	-0.2	
			eS	55	44.00		
DPW	87.82	334	P	45	21.00	0.6	
IMW	88.29	328	P	45	24.00	0.9	
TPI	88.82	94	ePd	45	26.50	0.9	
			e	47	00.00	404kmX	
OCP	88.91	73	e(P)	45	22.50	-3.5X	
GLD	88.91	322	eP	45	26.50	0.5	
	1.0s		36.00nm			5.6mb	
GOL	89.03	322	eP	45	27.00	0.4	
	1.0s		10.50nm			5.1mb	
MEO	89.07	314	iPd	45	28.20	1.6	
RMW	89.39	336	P	45	27.00	-1.0	
LON	90.01	336	P	45	31.00	0.1	
PPD	90.15	242	e(P)	45	37.00	5.4X	
ALO	93.24	319	e(P)	45	46.20	0.1	
	1.0s		4.75nm			4.9mb	
Z	20s		2.82um			5.7msz	
			eS	56	56.00		
			eSS	03	34.00		
			eSSS	07	18.00		
			eSKKS	10	28.00		

KVN	95.31	329	P	45	55.00	-0.6	
WDC	95.69	333	eP	45	56.30	-0.7	
TNP	95.76	328	P	45	56.50	-1.2	
ORV	96.20	332	eP	45	54.70	-4.7X	
CMB	97.09	330	e(P)	46	05.30	1.8	
ZOBO	99.14	257	eP	46	17.00	3.5X	
			LR	20	08.00		
LPB	99.28	256	(P)	46	04.00	-9.9X	
			eLR	20	18.00		
CNCB	99.35	256	(P)	46	04.00	-10.4X	
GUMO	106.81	58	ePKP	51	09.00	11.5X	
WRA	119.96	93	PKP	51	25.00	2.5X	
	0.7s		1.00nm				
ASPA	121.53	97	iPKPc	51	24.70	-0.7	
	0.9s		11.00nm				
			e	53	18.90		
SPA	127.09	180	e(PKP)	51	37.00	2.0	
	1.0s		10.00nm				
			e	52	39.00		
CTA	129.53	86	ePKP	51	48.00	7.1X	
DZM	146.43	73	iPKPc	52	14.40	2.7X	
MSZ	153.94	117	PKP	52	39.20	17.0X	

S.D. = 1.4 on 326 of 413 obs.

AUG 20, 1989 18h 39m 48.89±0.33s
 11.985 N ± 5.6km 41.870 E ± 5.5km
 DEPTH = 10.0km (geophysicist)
 5.4mb (46 obs.)

ETHIOPIA (558)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 20C
 Centroid Location:
 Origin Time 18:39:44.6 1.7
 Lat 11.32N 0.12 Lon 41.42E 0.11
 Dep 15.0 Flx Half-duration 2.3
 Moment Tensor: Scale 10**17 Nm
 Mrr=-3.88 0.26 Mlt= 3.28 0.38
 Mff= 0.60 0.31 Mrt= 0.00 0.00
 Mrf= 0.00 0.00 Mlf=-1.47 0.28
 Principal Axes:
 T Vol= 3.93 Plg= 0 Azm=204
 N -0.05 0 114
 P -3.88 90 180
 Best Double Couple: Mo=3.9*10**17
 NP1: Strike=294 Dip=45 Slip=-90
 NP2: 114 45 -90

MBH	18.85	341	ePc	44	15.00	3.7X	
LWI	19.19	223	iPc	44	16.30	0.5	
			iS	48	07.50		
DSI	20.39	344	ePc	44	31.50	2.9X	
ZNT	21.12	344	ePc	44	39.70	3.5X	
ADI	21.86	345	eP	44	48.00	4.3X	
BCAO	24.27	254	(P)	45	05.50	-1.9	
	1.2s		46.88nm			5.0mb	
TAB	26.28	8	eP	45	32.00	5.6X	
NPA	27.02	186	eP	45	35.00	1.8	
MAIO	28.96	30	eP	46	05.00	14.3X	
IZM	29.35	336	eP	45	55.00	0.8	
KAS	30.12	348	eP	46	02.00	0.9	
VAY	33.77	333	eP	46	33.40	0.5	
OHR	34.40	331	eP	46	38.80	0.3	
BUL	34.49	202	eP	46	38.00	-1.5	
	1.0s		37.50nm			5.2mb	
			eS	57	54.00		
GBA	34.70	83	P	46	41.80	0.6	
MEU	34.78	321	P	46	43.60	1.8	
SKO	34.79	333	iP	46	42.80	1.1	
	1.3s		131.00nm			5.7mb	
ATN	35.13	322	P	46	45.00	0.3	
LCI	35.24	328	P	46	46.00	0.5	
TDS	35.63	325	P	46	50.00	1.0	
HYB	35.85	77	eP	46	44.00	-7.1X	
GIB	35.90	321	P	46	53.40	2.1	
SGO	36.83	325	P	46	58.50	-0.4	
DUI	38.05	326	P	47	12.00	2.7X	
RFI	38.07	325	P	47	11.30	2.0	
SDI	38.43	325	P	47	13.10	0.6	
AZI	38.83	326	P	47	16.80	1.0	
RMP	39.12	325	P	47	19.50	1.2	
MNS	39.51	325	P	47	21.50	0.0	
ASS	39.98	326	P	47	27.10	1.7	
ARV	40.12	327	P	47	27.00	0.5	
PTJ	40.33	332	e(P)	47	29.30	1.0	
R1Y	40.67	330	eP	47	32.00	1.1	

SRO	40.80	336	iP	47	33.90	1.9	
SPC	41.19	338	iPc	47	37.00	1.6	
FIR	41.22	326	eP	47	40.00	4.6X	
TRI	41.24	330	ePc	47	36.80	1.2	
ZST	41.60	335	iP	47	39.40	0.9	
RBL	41.86	331	P	47	41.40	0.6	
VKA	41.98	334	iPc	47	42.90	1.2	
KRA	42.03	339	eP	47	42.00	0.0	
	0.6s		67.00nm			5.5mb	
FVI	42.35	330	P	47	45.70	1.1	
KBA	42.42	331	iPc	47	46.10	0.6	
	1.1s		28.90nm			4.9mb	
			i	49	27.50		
CTI	42.53	329	P	47	47.00	0.7	
BOB	42.85	326	P	47	48.00	-0.9	
BHG	43.11	331	eP	47	50.60	-0.3	
			i	47	52.50		
FIN	43.19	324	P	47	52.84	1.1	
IMI	43.20	324	P	47	52.02	0.2	
PCP	43.21	325	P	47	52.22	0.4	
OGA	43.41	329	iPc	47	54.90	1.3	
	1.4s		183.00nm			5.7mb	
ROB	43.44	324	P	47	53.86	0.1	
STV	43.72	324	P	47	56.43	0.4	
OSS	43.73	328	ePc	47	57.10	0.9	
KHC	43.82	333	P	47	57.00	0.3	
	1.2s		55.00nm			5.2mb	
VAI	43.92	327	P	47	56.10	-1.3	
TMA	44.01	327	ePc	47	58.50	0.0	
KSP	44.02	337	eP	47	58.50	0.2	
	1.1s		58.00nm			5.3mb	
PRU	44.05	335	eP	47	58.00	-0.5	
	1.5s		67.00nm			5.3mb	
ORO	44.19	326	P	48	00.00	0.1	
FOUF	44.20	324	ePd	48	00.56	0.8	
RRL	44.43	324	P	48	02.27	0.3	
LLS	44.44	328	ePc	48	01.80	-0.2	
MMK	44.47	326	P	48	01.50	-0.8	
SAX	44.51	329	eP	48	02.40	-0.3	
LSD	44.55	325	P	48	02.07	-0.9	
BNI	44.57	324	P	48	02.00	-1.0	
DIX	44.79	326	ePd	48	04.20	-0.7	
LPG	44.80	325	P	48	03.10	-1.9	
	1.2s		56.50nm			5.4mb	
BRG	44.98	335	iP	48	05.50	-0.5	
	1.4s		85.00nm			5.5mb	
ZLA	45.16	328	eP	48	06.60	-1.0	

20d 18h

LPO	1.2s	20.80nm	5.1mb	47.63	321 eP	48 26.70	-0.4
BGF	1.2s	59.50nm	5.6mb	47.63	324 eP	48 25.80	-1.3
AFC	1.2s	95.20nm	5.8mb	47.74	310 e(P)	48 28.50	0.2
RJF	1.2s	41.60nm	5.4mb	47.75	322 eP	48 27.40	-0.6
APHE	1.2s	30.40nm	5.2mb	47.75	309 eP	48 30.50	2.2
CRT	1.4s	30.40nm	5.2mb	47.76	310 eP	48 31.00	2.7
JAU	1.4s	30.40nm	5.2mb	47.82	318 P	48 29.01	0.2
TCF	1.4s	30.40nm	5.2mb	47.85	323 eP	48 28.00	-0.9
IFR	1.2s	103.50nm	5.8mb	47.86	305 iPd	48 31.00	1.7
ACHM	1.2s	59.50nm	5.6mb	47.91	310 eP	48 31.00	1.5
ASMO	1.2s	59.50nm	5.6mb	47.93	310 eP	48 31.00	1.3
LHE	1.2s	59.50nm	5.6mb	47.93	318 P	48 29.54	0.0
OGE	1.2s	59.50nm	5.6mb	47.95	318 P	48 29.46	-0.2
ESCF	1.2s	59.50nm	5.6mb	47.97	318 P	48 30.03	0.2
ATEJ	1.2s	59.50nm	5.6mb	47.99	309 eP	48 32.50	2.3
ETOR	1.2s	59.50nm	5.6mb	47.99	315 e(P)	48 30.00	-0.1
LF	1.2s	59.50nm	5.6mb	48.03	321 eP	48 29.60	-0.6
ATE	1.2s	59.50nm	5.6mb	48.06	318 P	48 30.68	0.2
ISSF	1.2s	59.50nm	5.6mb	48.09	318 P	48 30.73	-0.2
ALOF	1.2s	59.50nm	5.6mb	48.12	309 eP	48 31.70	0.5
MADF	1.2s	59.50nm	5.6mb	48.16	318 P	48 30.80	-0.5
AAPN	1.2s	59.50nm	5.6mb	48.20	310 eP	48 31.00	-0.8
LSF	1.2s	59.50nm	5.6mb	48.23	323 eP	48 31.00	-0.8
BOH	1.2s	59.50nm	5.6mb	48.27	318 P	48 32.37	0.1
ENN	1.2s	59.50nm	5.6mb	48.52	330 eP	48 34.00	0.2
DOU	1.2s	59.50nm	5.6mb	1.3s	131.00nm	48 35.10	-0.6
WTS	1.2s	59.50nm	5.6mb	48.90	332 eP	48 37.50	0.8
EJIF	1.2s	59.50nm	5.6mb	48.95	308 e(P)	48 38.00	0.5
TOL	1.2s	59.50nm	5.6mb	49.04	313 iPc	48 38.00	-0.1
SNF	1.2s	59.50nm	5.6mb	49.17	329 Pc	48 38.60	-0.2
UCC	1.2s	59.50nm	5.6mb	49.31	329 P	48 40.20	0.3
GUD	1.2s	59.50nm	5.6mb	49.39	314 e(P)	48 41.00	0.0
MFF	1.2s	59.50nm	5.6mb	49.41	323 eP	48 39.60	-1.2
WIT	1.2s	59.50nm	5.6mb	49.51	333 eP	48 43.00	1.5
NUR	1.2s	59.50nm	5.6mb	50.08	349 iP	48 45.10	-0.6
LDF	1.2s	59.50nm	5.6mb	50.42	325 eP	48 46.70	-1.8
EPLA	1.2s	59.50nm	5.6mb	50.56	312 e(P)	48 49.70	-0.1
LPF	1.2s	59.50nm	5.6mb	50.66	324 eP	48 48.50	-1.8
FLN	1.2s	59.50nm	5.6mb	50.71	325 eP	48 49.00	-1.7
GRR	1.2s	59.50nm	5.6mb	50.73	324 eP	48 49.10	-1.8
UPP	1.2s	59.50nm	5.6mb	51.07	345 iP	48 53.80	0.6
SUF	1.2s	59.50nm	5.6mb	51.89	351 eP	48 59.00	-0.5
ERUA	1.2s	59.50nm	5.6mb	52.12	315 e(P)	49 01.50	-0.1
HFS	1.2s	59.50nm	5.6mb	52.39	343 eP	49 00.70	-2.6
EMON	1.2s	59.50nm	5.6mb	52.62	316 e(P)	49 05.50	0.2
NB2	1.2s	59.50nm	5.6mb	53.85	342 P	49 12.80	-1.3
CHTO	1.2s	59.50nm	5.6mb	55.25	75 ePc	49 24.30	-0.7
EKA	1.2s	59.50nm	5.6mb	55.63	331 P	49 26.00	-1.2
SOD	1.2s	59.50nm	5.6mb	56.25	353 iP	49 31.20	-0.2
KEV	1.2s	59.50nm	5.6mb	58.49	354 iP	49 47.00	-0.2
KMI	1.2s	59.50nm	5.6mb	58.74	68 Pd	49 49.00	-1.0
GVA	1.2s	59.50nm	5.6mb	62.29	66 P	50 12.00	-2.1
BTO	1.2s	59.50nm	5.6mb	65.73	51 eP	50 37.00	0.7
TIY	1.2s	59.50nm	5.6mb	67.43	54 eP	50 47.50	0.4
WHN	1.2s	59.50nm	5.6mb	69.00	62 eP	50 56.50	-0.4
CN2	1.2s	59.50nm	5.6mb	77.20	48 Pd	51 44.80	0.0
PCI	1.2s	59.50nm	5.6mb	78.42	93 ePc	51 54.00	1.9
ALE	1.2s	59.50nm	5.6mb	80.04	353 eP	52 01.00	1.3
PDCR	1.2s	59.50nm	5.6mb	83.97	256 eP	52 26.60	5.4x
MBC	1.2s	59.50nm	5.6mb	91.23	356 eP	52 56.00	0.8
KVN	1.2s	59.50nm	5.6mb	125.90	341 PKP	58 51.80	-1.6
TNP	1.2s	59.50nm	5.6mb	126.48	339 PKP	58 53.50	-1.1

CMB	1.2s	10.08nm	5.1mb	127.54	342 PKP	58 55.00	-1.3
ARN	1.2s	10.08nm	5.1mb	128.51	343 PKP	58 59.40	1.2
CLC	1.2s	10.08nm	5.1mb	128.65	339 ePKP	59 01.00	2.5
TPC	1.2s	10.08nm	5.1mb	129.58	336 ePKP	59 01.00	0.7
SBB	1.2s	10.08nm	5.1mb	129.74	338 ePKP	59 01.00	0.4
PEC	1.2s	10.08nm	5.1mb	130.20	337 PKP	59 01.00	-0.5
BAR	1.2s	10.08nm	5.1mb	131.08	336 ePKP	59 05.00	1.8
S.D. = 1.0 on 158 of 168 obs.							
* AUG 20, 1989 18h 48m 23.68± 1.23s							
37.333 N ± 14.7km 21.128 E ± 6.7km							
DEPTH = 33.0km (normal)							
3.6mb (2 obs.)							
SOUTHERN GREECE (368)							
ML 3.3 (ATH)							
ATH	2.15	72 ePn	48 57.90	0.0			
NEO	2.57	39 ePn	49 04.50	0.6			
KEK	2.59	337 ePn	49 10.10	5.9x			
KZN	3.01	9 ePn	49 10.60	0.4			
LCI	3.89	321 P	49 21.70	-0.8			
SOI	4.09	282 P	49 26.10	0.6			
MEU	4.95	269 P	49 36.90	-0.9			
MNO	5.14	279 P	49 41.20	0.6			
MGR	5.18	304 P	49 42.00	1.1			
SGO	5.56	307 P	49 46.20	-0.1			
HFS	23.31	351 eP	53 27.70	-1.6			
0.4s 0.80nm 3.6mb							
NB2	24.54	348 P	53 41.40	0.1			
0.8s 1.50nm 3.6mb							
SUF	25.60	5 eP	53 47.00	-4.2x			
S.D. = 0.9 on 11 of 13 obs.							
AUG 20, 1989 18h 54m 05.31± 0.50s							
11.896 N ± 7.7km 41.764 E ± 5.7km							
DEPTH = 10.0km (geophysicist)							
5.2mb (47 obs.)							
ETHIOPIA (558)							
MBH	18.90	341 eP	58 33.40	5.0x			
LWI	19.06	223 iPc	58 34.00	3.4			
NOH	19.73	342 ePc	58 40.30	2.0			
JVI	20.80	344 ePc	58 51.70	2.4			
HRI	21.98	346 ePc	59 04.10	2.7			
BNG	24.13	254 iPc	59 23.30	0.8			
1.0s 53.00nm 5.1mb							
TAB	26.38	8 eP	59 49.00	5.2x			
MAIO	29.09	30 eP	00 11.00	2.7			
QUE	29.61	48 eP	00 16.00	2.7			
KAS	30.19	348 eP	00 19.00	0.9			
KDZ	32.91	337 iPc	00 42.00	0.1			
VAY	33.80	334 eP	00 50.00	0.4			
OHR	34.43	331 eP	00 52.80	-2.3			
GBA	34.82	83 Pc	00 56.90	-1.7			
0.9s 6.60nm 4.5mb							
SKO	34.82	333 iP	00 59.50	1.1			
ATN	35.14	323 P	01 03.00	1.8			
CFR	35.16	343 iPc	01 02.00	0.8			
GIB	35.90	321 P	01 09.00	1.2			
MLR	36.10	341 iPd	01 11.00	1.6			
VR1	36.20	342 ePd	01 11.50	1.4			
CMP	36.20	340 ePc	01 19.00	8.9x			
MGR	36.42	325 P	01 12.00	0.1			
DUI	38.06	326 P	01 26.00	0.1			
SDI	38.45	326 P	01 29.00	-0.1			
AZI	38.85	326 P	01 33.60	1.3			
ARV	40.14	327 P	01 43.20	0.1			
PTJ	40.36	332 e(P)	01 45.60	0.6			
VBY	40.40	331 ePc	01 46.70	1.6			
SRO	40.84	336 iP	01 50.50	1.8			
0.3s 42.40nm 4.8mb							
CEY	40.96	331 eP	01 51.00	1.2			
LJU	41.14	331 eP	01 50.00	-1.2			
FIR	41.23	326 eP	01 55.00	3.0x			
TRI	41.26	330 iPc	01 53.40	1.2			
VOY	41.43	331 eP	01 53.90	0.2			
ZST	41.64	335 iP	01 56.30	1.0			
CVF	41.82	323 eP	01 56.60	-0.3			
1.2s 26.10nm 4.8mb							
RBL	41.88	331 P	01 58.00	0.6			
VKA	42.02	335 iPc	02 00.20	1.8			
KRA	42.07	339 eP	01 59.40	0.6			
0.8s 89.00nm 5.5mb							
FVI	42.37	330 P	02 02.40	1.1			
KBA	42.45	331 iPd	02 02.70	0.5			
1.6s 53.20nm 5.0mb							

CTI	42.55	329 P	02 03.00	0.1			
SAL	42.83	328 P	02 05.00	-0.1			
BHG	43.13	332 iPc	02 08.10	0.5			
1.1s 53.00nm 5.2mb							
FIN	43.21	325 P	02 07.73	-0.5			
IMI	43.21	324 P	02 07.32	-1.0			
PCP	43.22	325 P	02 06.70	-1.7			
OGA	43.43	329 eP	02 11.40	1.2			
1.0s 73.00nm 5.4mb							
SBF	43.44	324 eP	02 09.40	-0.8			
1.2s 17.80nm 4.7mb							
ROB	43.45	324 P	02 09.78	-0.5			
FRF	43.72	323 eP	02 11.90	-0.5			
1.2s 17.80nm 4.7mb							
STV	43.73	324 P	02 12.65	0.1			
OSS	43.75	329 ePc	02 13.40	0.6			
KHC	43.85	333 iP	02 13.30	-0.1			
1.0s 25.00nm 5.0mb							
VAI	43.93	327 P	02 13.50	-0.5			
TMA	44.03	327 ePc	02 14.70	-0.4			
KSP	44.06	337 iPc	02 15.50	0.5			
1.0s 25.00nm 5.0mb							
PRU	44.09	335 e	03 57.00				
1.2s 29.70nm 5.0mb							
ORO	44.21	326 P	02 18.00	1.6			
FOUF	44.21	324 iPc	02 04.50	-11.8x			
RRL	44.45	324 P	02 18.00	-0.4			
LLS	44.46	328 ePc	02 18.30	-0.3			
MMK	44.49	326 ePc	02 18.30	-0.5			
SAX	44.54	329 eP	02 18.70	-0.6			
LSD	44.56	325 P	02 18.90	-0.6			
DIX	44.80	326 ePc	02 20.80	-0.7			
LPG	44.81	325 eP	02 20.10	-1.4			
0.8s 13.40nm 4.9mb							
BRG	45.01	335 iP	02 22.50	-0.2			
1.2s 40.00nm 5.2mb							
SLE	45.31	329 eP	02 23.80	-1.4			
GRF	45.32	332 iPd	02 20.60	-4.6x			
1.0s 21.60nm 5.0mb							
HOF	45.47	333 iPc	02 27.00	0.6			
BBS	45.62	328 P	02 27.20	-0.4			
FEL	45.63	328 P	02 26.80	-1.0			
CLL	45.73	335 iPc	02 28.00	-0.4			
1.5s 53.00nm 5.3mb							
MOX	45.83	334 iP	02 29.00	-0.2			
1.							

Table with columns for station code (e.g., CRT, RJF, JAU), magnitude (e.g., 47.74), depth (310 eP), time (02 46.00), and distance (1.4). Includes station codes like ACHM, ASMO, LHE, OGE, ATEJ, ESCF, ETOR, LFF, ATE, ISSF, ALOJ, MADF, AAPN, LSF, BOM, ENN, DOU, WTS, TIO, TOL, SNF, GUD, MFF, WIT, NUR, LDF, EPLA, LPF, FLN, GRR, UPP, SUF, HFS, NB2, EKA, SOD, GTA, KEV, KMI, GYA, XAN, TIY, WHN, CN2, ALE.

S.D. = 1.1 on 143 of 149 obs.

AUG 20, 1989 19h 25m 56.51±0.13s
11.904 N ± 2.5km 41.824 E ± 2.2km
DEPTH = 11.7km (geophysicist)
6.2mb (64 obs.) 5.7msz (13 obs.)
ETHIOPIA (558)
Ms 5.8 (BRK). Depth from
broadband displacement
seismograms.
RADIATED ENERGY
No. of sta: 10 Focal mech. C
Energy 0.9±0.3*10**13 Nm
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 35C M.W.: 14S, 25C
Centroid Location:
Origin Time 19:26: 6.8 0.2
Lot 12.40N 0.02 Lon 41.91E 0.02

Table with columns for station code (e.g., DAF, SGH, GBR, TDD, ARO, MKL, ATA, OBO, ABHA, TAIF, RYD, OASM, AKSR, AMAN, ASW, BJA, DHR, AYN, MBH, LWI, OUTJ, KOT, SHI, MKRJ, DSI, MASJ, KFNJ, SALJ, JARJ, BURJ, BHD, HRI, KER, IKZ, SLY, FAM, BNG, BCAO, CSS, MSL, PPCY, TEM, MZZ, TAB, KSL, NPA, ELL, KAP, NPS, YER), magnitude (e.g., 0.75), depth (113 eP+), time (26 10.89), and distance (-0.2).

Table with columns for station code (e.g., PTZ, VAM, KHL, BBTK, ALT, APE, MAIO, BAK, IZM, KVT, QUE, KMZ, DST, GPA, KAS, LSZ, PRK, YLV, ATH, KCT, BOM, GBZT, BNT, EDC, ISK, CTT, MFT, POO, NEO, ALN, PAIG, VLS, OUR, PLG, LIT, KDZ, THE, SRS, RZN, KNT, SIM, GRG, PSN, VAY, SRN, KBN, PVL, OHR, VTS, TLB, GBA, SOI, MEU, SKO, GRI, BUC1, TIR, BUC, CFR, ATN, LCI, KKS, MNO, ISR, TDS, FAI, SDA, BRD, ULC, HYB), magnitude (e.g., 27.99), depth (202 iP), time (31 50.00), and distance (0.5).

Dep 15.0 BDY Half-duration 4.4
Moment Tensor; Scale 10**18 Nm
Mrr=-1.39 0.02 Mtt= 1.43 0.02
Mff=-0.03 0.02 Mrt=-0.54 0.09
Mrf= 0.19 0.07 Mtf=-0.47 0.02
Principal Axes:
T Val= 1.67 Plg=11 Azm=197
N -0.17 1 287
P -1.50 79 23
Best Double Couple: Mo=1.6*10**18
NP1: Strike=285 Dip=34 Slip= -92
NP2: 108 56 -89

20d 19h				
INK	99.93	358	eP	39 42.50 0.1
PMR	106.23	5	PKP	44 14.00 -8.1X
FFC	106.93	339	ePKP	44 35.00 11.4X
	2.2s	269.00nm		
EDM	111.74	344	ePKP	44 22.00 -10.8X
SES	113.58	341	ePKP	44 33.00 -3.5X
PNT	116.89	346	ePKP	44 44.00 1.2
LRM	118.04	340	ePKP	44 50.00 4.6X
LON	119.80	347	PKP	44 48.00 -0.5
MSU	124.27	335	PKP	44 58.00 0.4
ALO	124.55	328	e(PKP)	44 58.90 0.7
Z	22s	2.96um		5.9msz
		ePP	46 44.00	
WDC	125.81	345	ePKPc	45 00.30 0.1
KVN	125.96	341	PKP	45 00.00 -0.8
ORV	126.50	344	ePKPc	45 01.80 0.2
TNP	126.54	339	PKP	45 02.00 0.0
CMB	127.60	342	ePKPc	45 04.60 0.8
		ePP	48 05.60	
FRI	128.35	341	ePKPc	45 05.90 0.8
MHC	128.61	343	ePKPc	45 07.00 1.2
CLC	128.71	339	ePKP	45 07.00 1.0
GSC	128.88	337	ePKP	45 08.00 1.7
LLA	129.00	342	ePKPc	45 08.00 1.4
PRI	129.44	342	ePKPc	45 09.40 2.0
TPC	129.64	336	ePKP	45 09.00 1.2
SBB	129.80	338	ePKP	45 08.00 -0.1
GLA	130.05	334	ePKP	45 10.00 1.4
RVR	130.25	337	ePKP	45 10.00 1.1
PEC	130.26	337	PKP	45 10.00 1.1
MWC	130.30	338	ePKP	45 14.00 4.8X
PLM	130.62	336	ePKP	45 11.00 1.2
BAR	131.14	336	ePKP	45 12.00 1.4
	S.D.	= 1.0	on 426 of 456 obs.	
* AUG 20, 1989 19h 39m 26.53±1.36s				
37.451 N ±12.5km 21.065 E ±10.8km				
DEPTH = 10.0km (geophysicist)				
SOUTHERN GREECE (368)				
VLS	0.82	333	ePb	39 41.80 -0.6
		eSn	40 00.50	
ATH	2.17	75	ePn	40 05.20 2.1
NEO	2.51	42	ePn	40 07.60 -0.5
LIT	2.87	22	eP	40 16.00 2.8X
		eS	41 05.00	
VAM	3.25	128	ePn	40 17.60 -0.9
PLG	3.46	32	ePn	40 19.70 -1.8
OHR	3.66	357	ePn	40 24.80 0.3
VAY	4.04	16	ePn	40 30.40 0.7
SKO	4.52	4	ePn	40 33.00 -3.6X
MGR	5.07	304	P	40 45.00 0.6
	S.D.	= 1.4	on 8 of 10 obs.	
? AUG 20, 1989 20h 03m 09.01±3.72s				
37.664 N ±30.7km 21.033 E ±16.7km				
DEPTH = 10.0km (geophysicist)				
SOUTHERN GREECE (368)				
ML 3.3 (ATH)				
VLS	0.62	326	ePg	03 21.50 0.0
ATH	2.15	81	ePn	03 45.70 0.4
NEO	2.38	46	ePn	03 47.70 -0.9
LIT	2.69	25	eP	03 54.00 0.9
PLG	3.29	34	ePn	04 00.60 -1.1
OHR	3.45	357	ePn	04 03.00 -0.9
VAY	3.84	18	ePn	04 11.00 1.6
SKO	4.31	4	ePn	04 20.00 3.9X
	S.D.	= 1.3	on 7 of 8 obs.	
? AUG 20, 1989 20h 03m 38.66±4.86s				
23.516 S ±22.5km 179.712 W ±25.2km				
DEPTH = 571.5 ± 49.4 km				
4.6mb (6 obs.)				
SOUTH OF FIJI ISLANDS (171)				
MSZ	23.40	203	P	08 05.00 -0.6
BRS	25.12	255	iP	08 21.00 0.0
CTA	31.74	270	iPd	09 19.20 1.0
	0.7s	52.05nm		5.3mb
ASPA	42.36	260	iPd	10 45.50 0.5
	0.9s	29.00nm		4.8mb
		iScP	15 32.30	
		eS	16 26.30	
WRA	42.70	266	Pd	10 47.70 0.0
	0.5s	10.30nm		4.6mb
FORR	46.65	249	eP	11 17.70 -0.3
WARB	0.5s	121.00nm		5.7mb X
	48.47	255	iPd	11 31.60 -0.3
	0.3s	4.00nm		4.4mb
KNA	48.93	269	iPd	11 35.90 0.5
COOL	52.60	248	eP	12 01.00 -1.0
KLB	55.38	247	iPd	12 21.30 -0.2
BAL	56.42	248	eP	12 28.20 -0.5
	0.4s	9.00nm		4.4mb
MUN	56.63	246	iPd	12 30.10 0.0
MRWA	57.27	249	iPc	12 34.40 -0.1
SPA	66.62	180	e(P)	13 34.70 0.1
	0.9s	12.27nm		4.4mb
Z	20s	9.86um		6.0mszX
MAW	78.20	200	eP	14 42.00 1.7
NB2	141.74	351	PKP	22 06.30 -0.2
	0.8s	2.10nm		
HFS	142.22	349	ePKP	22 06.80 -0.5
	0.5s	6.60nm		
KSP	150.02	340	iPKPd	22 30.80 10.6X
CLL	150.56	344	iPKP	22 31.00 10.0X
	1.0s	15.00nm		
		e	22 41.00	
BRG	150.70	342	iPKP	22 32.20 11.0X
	0.8s	8.00nm		
	S.D.	= 0.7	on 17 of 20 obs.	
* AUG 20, 1989 20h 25m 59.21±1.21s				
45.376 N ±11.1km 14.514 E ± 6.6km				
DEPTH = 10.0km (geophysicist)				
YUGOSLAVIA (383)				
MD 2.7 (LJU), 2.1 (TRI), ML 2.2				
(KBA). Felt in the Rijeko area.				
RIY	0.10	250	iPgc	26 01.00 -0.8
		iSg	26 02.50	
CEY	0.37	350	ePg	26 06.50 -0.3
		eSg	26 12.00	
VBY	0.54	76	ePg	26 09.60 -0.5
		iSg	26 17.40	
TRI	0.62	303	ePg	26 10.10 -1.6
		iSg	26 19.50	
LJU	0.67	1	ePg	26 12.50 0.0
VOY	0.79	327	iPgc	26 12.90 -1.7
		eSg	26 25.30	
PTJ	1.14	62	ePg	26 21.10 0.5
		eSg	26 37.30	
RBL	1.25	329	P	26 23.30 0.7
		eSg	26 39.00	
FVI	1.72	316	P	26 31.10 1.9
		eSg	26 55.40	
KBA	1.89	335	ePg	26 34.50 2.6X
		eSg	26 58.50	
CTI	2.12	290	P	26 37.00 1.8
	S.D.	= 1.4	on 10 of 11 obs.	
* AUG 20, 1989 20h 34m 40.75±1.43s				
34.068 N ±16.7km 135.070 E ± 7.7km				
DEPTH = 5.0km (geophysicist)				
NEAR S. COAST OF SOUTHERN HONSHU(233)				
MG 3.3 (JMA). Felt (1 JMA) at				
Wakoyama.				
WKY	0.18	27	iP	34 44.50 0.1
WKYJ	0.46	71	iPd	34 48.90 -1.1
		S	34 54.90	
TKSJ	0.85	265	iP+	34 57.60 0.0
		S	35 10.80	
TSRJ	1.65	27	P	35 10.00 -0.4
		S	35 30.50	
YONJ	1.73	311	iPd	35 11.50 -0.2
		S	35 33.60	
IIDJ	2.73	58	eP	35 27.70 1.6
		S	36 00.50	
MTMJ	3.36	41	eP	35 43.10 8.0X
MAT	3.56	45	(P)	35 40.00 10.2X
		(S)	36 35.00	
	S.D.	= 1.1	on 6 of 8 obs.	
* AUG 20, 1989 20h 45m 12.25±1.55s				
12.164 N ±16.0km 41.611 E ±21.9km				
DEPTH = 10.0km (geophysicist)				
4.7mb (24 obs.)				
ETHIOPIA (558)				
LWI	19.15	222	ePc	49 39.00 0.3
SHI	20.14	29	eP	49 48.00 -1.6
BHD	21.17	6	eP	50 02.00 2.0
SLY	23.60	8	eP	50 25.00 1.0
BNG	24.06	253	iPc	50 30.00 1.2
	1.1s	21.00nm		4.6mb
TAB	26.14	8	e(P)	50 53.00 4.5X
MLR	35.80	341	ePc	52 16.00 2.2
VRI	35.90	342	eP	52 05.50 -9.0X
SRO	40.54	336	iP	52 55.50 2.3
		e	59 33.90	
		e	01 37.60	
SPC	40.94	339	i(P)	52 58.50 1.8
ZST	41.33	335	eP	53 00.80 1.1
		e	59 39.80	
OGA	43.12	329	iPc	53 16.40 1.7
KHC	43.55	333	iPc	53 18.00 0.1
KSP	43.75	337	eP	53 20.50 1.0
PRU	43.79	335	P	53 20.20 0.5
LPG	44.51	325	eP	53 25.10 -0.9
	0.9s	4.90nm		4.4mb
BRG	44.71	335	iP	53 27.00 -0.2
	1.2s	15.00nm		4.8mb
GRF	45.01	332	eP	53 30.10 0.4
	0.9s	7.00nm		4.6mb
CLL	45.43	335	iP	53 32.80 -0.1
	1.5s	19.00nm		4.8mb
MOX	45.52	334	eP	53 33.00 -0.7
BSF	45.93	328	eP	53 36.30 -0.7
	0.6s	5.40nm		4.7mb
CDF	46.04	329	eP	53 37.50 -0.5
	0.6s	2.50nm		4.4mb
MAU	46.27	328	eP	53 38.90 -0.7
	0.6s	3.60nm		4.6mb
SMF	46.82	325	eP	53 43.10 -0.9
	0.6s	2.70nm		4.5mb
LBF	46.94	325	eP	53 44.40 -0.6
	0.8s	10.70nm		5.0mb
LOR	47.17	325	eP	53 46.00 -0.8
	0.9s	8.10nm		4.8mb
AVF	47.18	325	eP	53 45.80 -1.0
	0.6s	2.10nm		4.4mb
SSF	47.25	325	eP	53 46.80 -0.6
	0.8s	2.60nm		4.4mb
MAF	47.32	323	eP	53 47.70 -0.3
LPO	47.33	321	eP	53 48.50 0.4
	0.8s	3.70nm		4.5mb
BGF	47.34	324	eP	53 47.90 -0.2
	0.9s	11.40nm		5.0mb
LFF	47.74	321	eP	53 51.60 0.3
	0.8s	5.30nm		4.7mb
LSF	47.94	323	eP	53 52.70 -0.2
	0.9s	6.50nm		4.7mb
DOU	48.47	329	Pc	53 56.80 -0.1
	0.8s	8.30nm		4.8mb
SNF	48.88	329	P	54 02.40 2.4
LDF	50.13	325	eP	54 08.20 -1.5
	0.9s	6.50nm		4.6mb
LPF	50.36	324	eP	54 10.10 -1.3
	0.9s	13.10nm		4.9mb
FLN	50.42	325	eP	54 10.60 -1.3
	0.9s	16.30nm		5.0mb
GRR	50.44	324	eP	54 10.90 -1.1
	0.7s	6.60nm		4.7mb
HFS	52.14	343	eP	54 22.80 -2.0
	0.9s	9.00nm		4.7mb
NB2	53.60	342	P	54 34.20 -1.5
	1.1s	9.50nm		4.7mb
	S.D.	= 1.2	on 39 of 41 obs.	
AUG 20, 1989 20h 57m 20.85±0.27s				
39.949 N ± 3.2km 23.956 E ± 2.4km				
DEPTH = 10.0km (geophysicist)				
4.0mb (7 obs.)				
AEGEAN SEA (365)				
ML 4.0 (ATH)				
PAIG	0.21	264	ePg	57 26.50 1.0
PLG	0.58	317	iPbd	57 31.50 -1.1
NEO	0.86	222	iPbc	57 37.10 -0.3
THE	1.02	312	ePg	57 40.90 0.8
		eSg	57 55.50	
LIT	1.14	278	ePb	57 42.90 0.8
		eSb	57 59.00	
SRS	1.20	347	ePb	57 44.50 1.3
		eSb	58 00.10	
KNT	1.45	327	ePb	57 48.40 1.2
GRG	1.56	311	ePb	57 49.80 1.2
		eSb	58 11.00	
KZN	1.71	283	ePb	57 50.60 -0.4

VAY	1.73	323	iPn	57	51.40	0.3
RZN	1.83	18	iPc	57	54.00	1.2
			Sg	58	23.00	
ALN	1.86	59	ePb	57	53.60	0.7
PRK	1.92	111	ePn	57	54.00	0.1
ATH	1.98	185	ePn	57	53.80	-1.0
KDZ	2.03	33	iPc	57	55.00	-0.5
			iS	58	23.00	
DIM	2.41	29	eP	58	02.00	1.0
			Sg	58	45.00	
KBN	2.50	287	iPn	58	04.00	1.9
PGB	2.60	3	iPc	58	04.00	0.3
			S	58	38.00	
OHR	2.67	297	iPn	58	05.30	0.6
VTS	2.70	348	iPc	58	06.00	0.8
			iSg	58	50.00	
SKO	2.78	317	iPn	58	06.50	0.3
			i	58	11.50	
			i	58	15.00	
			i	58	30.00	
			i	58	41.00	
			i	58	50.50	
			i	58	53.00	
IZM	3.00	120	ePn	58	10.30	0.9
EDC	3.02	81	ePn	58	10.00	0.4
BNT	3.07	81	iPn	58	11.30	1.1
APE	3.13	156	ePn	58	10.20	-1.0
VLS	3.16	237	ePn	58	11.70	0.1
JMB	3.20	37	iP	58	12.00	-0.2
			Sg	59	07.00	
KEK	3.21	267	ePb	58	17.20	4.9X
KCT	3.39	84	iPn	58	15.80	0.9
PVL	3.42	17	iPc	58	14.00	-1.3
CTT	3.61	69	ePn	58	16.90	-1.1
DST	3.62	94	iPn	58	18.50	0.4
CIN	3.99	125	ePn	58	24.00	0.7
ITU	4.02	72	ePn	58	35.00	11.2X
			iSg	59	32.00	
ISK	4.05	72	ePn	58	25.00	0.9
YLV	4.19	80	ePn	58	26.00	-0.3
YER	4.40	128	iPn	58	29.60	0.3
VAM	4.54	177	ePn	58	31.50	0.4
LCI	4.62	277	P	58	30.40	-1.9
KHL	4.62	109	iPn	58	33.60	1.1
DRA	4.73	3	eP	58	34.00	0.1
BUC	4.74	19	eP	58	52.00	18.1X
NPS	4.86	164	ePn	58	37.20	1.4
GPA	4.88	84	ePn	58	33.80	-2.3
PSN	4.89	39	iPc	58	36.00	-0.1
CMP	5.38	8	iPc	58	35.00	-8.0X
CMP	5.38	8	iPc	58	51.00	8.0X
ISR	5.53	19	iPd	58	45.30	0.1
TLB	5.54	32	iPc	58	45.00	-0.2
ELL	5.67	122	eP	58	35.00	-12.3X
MLR	5.73	14	iPd	58	49.00	0.9
TDS	5.87	270	P	58	52.00	2.0
GRI	5.95	261	P	58	51.50	0.4
DEV	5.98	353	ePc	58	51.00	-0.5
BRD	6.01	21	ePc	59	00.00	8.1X
CFR	6.08	29	eP	58	25.00	-27.8X
CVO	6.09	15	iPc	58	54.00	0.9
TIM	6.12	342	eP	59	18.00	24.5X
VR1	6.26	18	iPd	58	55.50	0.1
SOI	6.43	256	P	58	57.20	-0.7
MGR	6.45	274	P	58	57.90	-0.3
SGO	6.64	278	P	59	00.10	-0.8
BBTK	6.77	88	eP	59	04.00	1.2
			iS	01	03.00	
PTT	7.20	13	eP	59	08.50	-0.2
DUI	7.41	286	P	59	11.00	-0.7
MEU	7.62	251	P	59	12.00	-2.7
			eSn	00	33.30	
PZI	7.67	251	P	59	10.70	-4.6X
RFI	7.70	283	P	59	16.90	1.2
BMR	7.73	358	ePc	59	30.00	14.0X
SDI	7.89	286	P	59	18.50	0.1
GIB	7.98	259	P	59	53.00	33.3X
PTJ	8.35	318	eP	59	23.30	-1.6
VBY	8.47	314	eP	59	28.00	1.5
MNS	8.85	290	P	59	33.60	1.9
ARV	8.97	297	P	59	31.00	-2.3
ASS	9.03	294	P	59	34.90	0.6
LJU	9.20	315	e(P)	59	34.00	-2.6
TRI	9.44	311	eP	59	40.60	0.8
VOY	9.55	313	eP	59	39.70	-1.8
CRE	9.69	296	P	59	45.00	1.6
PGD	9.93	297	P	59	47.00	0.3

KBA	10.49	316	eP	59	52.50	-1.9
	1.2s		10.40nm			5.1mb X
			e	00	15.50	
FVI	10.51	313	P	59	53.00	-1.4
CTI	10.87	308	P	59	59.00	-0.6
HRI	11.57	121	e(P)	00	07.00	-2.2
PRU	12.04	330	eP	00	26.50	11.2X
BRG	12.98	331	e(P)	00	40.80	13.0X
MBH	13.54	135	eP	00	32.00	-3.3X
CLL	13.68	330	eP	00	46.00	8.8X
MOX	13.76	325	e(P)	00	48.00	9.9X
	2.2s		69.00nm			5.2mb X
LPG	13.80	299	eP	00	41.10	2.0
	0.7s		2.60nm			4.2mb
HAU	14.99	308	eP	00	52.00	-2.4
SMF	16.08	301	eP	01	10.70	2.2
LBF	16.10	302	eP	01	10.90	2.2
	0.7s		2.20nm			3.4mb
LOR	16.26	303	eP	01	10.30	-0.5
	0.7s		2.20nm			3.4mb
AVF	16.44	301	eP	01	14.90	1.8
	0.8s		5.90nm			3.8mb
CAF	16.89	294	eP	01	19.00	0.2
NUR	20.59	1	eP	02	00.10	-2.2
HFS	21.20	346	eP	02	06.80	-1.8
	0.7s		4.90nm			4.0mb
NRA0	22.19	344	P	02	16.40	-2.1
NB2	22.54	344	P	02	21.20	-0.8
	0.9s		11.30nm			4.4mb
SUF	22.84	3	eP	02	23.50	-1.4
BNG	35.69	189	ePc	04	20.70	-0.7
	1.0s		10.00nm			4.6mb
						S.D. = 1.3 on 86 of 103 abs.
AUG 20, 1989 21h 09m 42.46± 1.17s						
39.847 N ±10.1km 24.057 E ± 4.9km						
DEPTH = 10.0km (geophysicist)						
AEGEAN SEA (365)						
PAIG	0.30	286	ePg	09	48.80	0.1
			eSg	09	51.50	
OUR	0.49	353	ePg	09	53.10	0.7
			iSg	09	59.50	
THE	1.15	314	ePg	10	03.90	0.0
			eSg	10	17.80	
LIT	1.23	282	ePg	10	05.80	0.4
			eSg	10	21.90	
SRS	1.32	345	ePb	10	06.70	-0.1
			eSb	10	24.30	
KNT	1.58	326	ePb	10	10.50	-0.1
			eSb	10	32.50	
GRG	1.68	312	ePb	10	12.70	0.6
ALN	1.85	55	ePn	10	19.80	5.4X
			eSn	10	46.70	
VAY	1.86	323	iPn	10	14.40	-0.2
KDZ	2.08	29	iPc	10	17.00	-0.8
KKB	2.15	340	iPd	10	18.00	-0.8
DIM	2.47	26	eP	10	25.00	1.7
			Sg	11	05.00	
PGB	2.70	2	eP	10	26.00	-0.8
			Sg	11	09.00	
OHR	2.79	298	ePn	10	27.50	-0.5
VTS	2.82	347	iP	10	28.00	-0.5
			iSg	11	12.00	
SKO	2.91	318	ePn	10	25.00	-4.6X
JMB	3.24	35	eP	10	44.00	9.7X
PVL	3.50	15	eP	10	55.00	17.0X
CTT	3.58	67	eP	10	39.00	-0.1
CMP	5.47	7	ePc	11	22.00	16.1X
MLR	5.81	13	iPd	11	11.00	0.2
						S.D. = 0.7 on 16 of 21 abs.
AUG 20, 1989 21h 23m 15.61s						
41.714 N 112.395 W						
DEPTH = 6.9km						
UTAH (478)						
<SLC-P>. ML 3.0 (SLC). Felt						
(iii) at Hawaii, Plymouth and						
Riverside. Also felt at Garland						
and at the Morton Thiokol Plant.						
PTI	1.16	1	eP	23	37.30	-0.3
DUG	1.55	192	eP	23	43.30	-0.5
DAU	1.56	146	eP	23	44.30	0.2
IMW	2.43	26	eP	23	56.50	-0.2
KVN	5.10	240	eP	24	33.50	-1.0
TNP	5.19	227	eP	24	35.00	-0.7

GOL	5.70	108	eP	24	45.00	1.9
ALQ	8.21	143	e(P)	25	48.00	29.8
						8 obs. associated
AUG 20, 1989 21h 35m 42.74± 0.72s						
20.805 N ±27.4km 122.375 E ±78.2km						
DEPTH = 33.0km (normal)						
4.4mb (5 abs.)						
PHILIPPINE ISLANDS REGION (248)						
ANP	4.43	350	eP	37	07.40	18.0X
BJI	19.89	346	eP	40	14.50	0.3
WRA	42.16	163	Pd	43	33.70	-0.3
	0.9s		3.90nm			4.1mb
ASPA	45.61	165	eP	44	02.20	0.4
	0.5s		7.00nm			4.8mb
SOD	73.18	336	eP	47	12.00	0.2
SUF	74.54	332	eP	47	19.50	-0.2
	0.5s		2.00nm			4.4mb
NUR	75.84	330	eP	47	38.70	11.6X
UPP	79.36	330	iP	47	46.40	-0.2
HFS	81.04	331	eP	47	55.00	-0.6
	0.8s		5.00nm			4.6mb
NB2	81.72	333	P	47	58.80	-0.3
	0.8s		2.30nm			4.2mb
KSP	83.76	322	iPd	48	10.50	0.7
						S.D. = 0.5 on 9 of 11 obs.
AUG 20, 1989 22h 05m 45.89± 1.06s						
4.836 N ±9.3km 82.858 W ±15.8km						
DEPTH = 10.0km (geophysicist)						
SOUTH OF PANAMA (83)						
MD 4.8 (HDC).						
PBC	3.56	357	ePd	06	42.50	0.1
			S	07	23.60	
IDC	3.98	345	iPd	06	48.00	-0.3
			S	07	34.00	
CTCR	4.03	1	eP+	06	49.00	-0.2
			S	07	34.50	
TIG	4.20	354	ePd	06	51.80	0.4
			S	07	38.80	
OPS	4.71	344	P	06	58.80	0.1
			S	07	51.90	
CDM	4.77	349	P	07	00.00	0.0
			S	07	53.90	
UPA	5.28	39	ePc	07	06.70	0.0
	0.8s		89.55nm			5.4mb X
LPB	25.76	146	eP	11	25.00	5.9X
CNCB	26.05	146	eP	11	22.00	0.0
						S.D. = 0.2 on 8 of 9 abs.
AUG 20, 1989 22h 17m 15.88± 1.74s						
37.492 N ±16.7km 21.052 E ± 8.4km						
DEPTH = 10.0km (geophysicist)						
SOUTHERN GREECE (368)						
ML 3.3 (ATH).						
VLS	0.78	332	ePg	17	31.10	0.1
ATH	2.17	76	ePb	17	52.00	-0.5
KEK	2.43	337	ePg	18	05.20	9.0X
NEO	2.49	43	ePb	17	57.50	0.4
LIT	2.84	23	eP	18	08.00	5.9X
			eS	19	02.50	
KZN	2.87	11	ePn	18	04.00	1.5
PLG	3.43	32	ePn	18	11.10	0.6
OHR	3.62					

20d 22h

PAIG	3.18	28	eP	37	28.70	1.0
PLG	3.51	22	ePb	37	31.00	-1.3
THE	3.63	15	eP	37	32.90	-1.2
OUR	3.65	28	eP	37	33.70	-0.7
PRK	4.15	58	ePg	37	55.00	13.6X
IZM	4.55	72	eP	37	53.00	5.8X
CMP	8.51	16	ePd	38	47.00	4.2X
LJU	10.42	331	e(P)	39	07.50	-1.6
VOY	10.66	329	e(P)	39	07.70	-4.8X
KHC	13.39	336	P	40	03.90	14.7X
CLL	15.49	339	eP	40	26.00	9.4X
	1.5s			14.00nm		4.0mb
NB2	24.85	348	P	42	04.50	4.2X
	0.7s			1.00nm		3.6mb
BNG	32.66	186	ePc	43	12.20	1.1
	0.6s			4.00nm		4.5mb
BCAO	32.67	186	eP	43	09.80	-1.3
	0.8s			2.38nm		4.2mb

S.D. = 1.3 on 12 of 20 obs.

• AUG 21, 1989 00h 06m 47.64±1.47s
37.435 N ±15.7km 20.859 E ± 9.4km
DEPTH = 10.0km (geophysicist)

IONIAN SEA (399)
ML 3.2 (ATH).

VLS	0.77	344	ePg	07	04.00	1.3
ATH	2.33	76	ePb	07	28.10	1.5
KEK	2.42	340	ePg	07	41.00	13.1X
NEO	2.64	44	ePn	07	29.00	-2.0
LIT	2.95	25	eP	07	43.50	8.1X
KZN	2.95	14	ePb	07	40.50	5.0X
OHR	3.67	359	ePn	07	45.00	-0.7
SOI	3.86	281	Pd	07	48.90	0.6
KNT	4.04	22	eP	07	51.00	0.1
SKO	4.55	5	e(P)	08	02.00	3.9X
MEU	4.74	268	P	08	00.10	-0.9
				eSn	08 56.40	

S.D. = 1.5 on 7 of 11 obs.

? AUG 21, 1989 00h 55m 55.08±2.14s
37.908 N ±24.0km 21.151 E ± 9.8km
DEPTH = 10.0km (geophysicist)

SOUTHERN GREECE (368)
ML 3.2 (ATH).

VLS	0.52	301	ePg	56	05.50	-0.1
ATH	2.03	87	ePb	56	29.80	0.1
NEO	2.14	49	ePn	56	31.10	-0.3
KZN	2.44	11	ePg	56	45.50	9.8X
OHR	3.21	355	e(Pn)	56	46.80	0.2

S.D. = 0.4 on 4 of 5 obs.

% AUG 21, 1989 01h 03m 38.07±1.72s
31.482 N ± 8.3km 36.217 E ±12.2km
DEPTH = 10.0km (geophysicist)

DEAD SEA REGION (373)

OUTJ	0.25	224	P	03	43.70	0.2
MASJ	0.49	300	Pd	03	49.00	0.9
MKRJ	0.50	278	Pd	03	47.10	-1.1
KFNJ	0.60	310	Pd	03	50.70	0.6
HLBJ	0.60	7	Pc	03	50.30	0.1
SALJ	0.69	319	Pd	03	52.00	0.2
JARJ	0.79	343	Pd	03	53.70	0.3
BURJ	0.84	335	Pd	03	53.10	-1.2

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

AUG 21, 1989 01h 09m 06.63±0.12s
11.874 N ± 2.3km 41.870 E ± 2.2km
DEPTH = 15.8km (geophysicist)
6.3mb (66 obs.) 6.2Msz (18 obs.)

ETHIOPIA (558)

Ms 6.2 (BRK), 5.9 (PAS). ML 6.0
(ARD). Felt in northeastern
Ethiopia and throughout
Djibouti. Depth from broadband
displacement seismograms.

FAULT PLANE SOLUTION: P-Waves

NP1:Strike=110 Dip=68 Slip=-130

NP2: 356 45 -32

Principal Axes:

T P1g=14 Azm=228

P 50 335

Comment: The focal mechanism is

poorly controlled and

corresponds to normal faulting

with a large strike-slip
component. The preferred fault
plane is not determined.

RADIATED ENERGY

No. of sta: 7 Focal mech. M

Energy $0.6 \pm 0.2 \times 10^{14}$ Nm

MOMENT TENSOR SOLUTION

Dep 11 No. of sta: 18

Moment Tensor: Scale 10^{18} Nm

Mrr=-1.89 Mtt= 1.40

Mff= 0.49 Mrt=-0.78

Mrf= 0.21 Mtf=-0.05

Principal axes:

T Val= 1.58 P1g=13 Azm=185

N 0.49 3 276

P -2.07 7 19

Best Double Couple:Ma=1.8×10¹⁸

NP1:Strike=271 Dip=32 Slip=-96

NP2: 98 58 -86

CENTROID, MOMENT TENSOR (HRV)

Data Used: GD5N

L.P.B.: 16S, 42C M.W.: 15S, 25C

Centroid Location:

Origin Time 01:09:16.0 0.1

Lat 12.19N 0.01 Lon 41.88E 0.01

Dep 15.0 FIX Half-duration 6.3

Moment Tensor: Scale 10^{18} Nm

Mrr=-4.98 0.05 Mtt= 4.83 0.06

Mff= 0.15 0.06 Mrt= 0.06 0.24

Mrf= 0.63 0.20 Mtf=-1.78 0.05

Principal Axes:

T Val= 5.44 P1g= 1 Azm=199

N -0.37 8 289

P -5.06 82 103

Best Double Couple:Ma=5.3×10¹⁸

NP1:Strike=281 Dip=45 Slip=-101

NP2: 116 46 -79

BCAO	24.24	254	ePd	14	23.63	-0.3
CSS	24.26	343	eP	14	25.50	1.5
MSL	24.43	2	ePc	14	27.00	1.4
				eS	19 01.00	
				e	22 01.50	
				eLR	24 32.00	
PPCY	24.49	341	eP	14	27.50	1.3
TEH	25.27	18	eP	14	37.80	3.9X
GAZ	25.54	351	iP	14	40.30	4.1X
MZZ	26.26	210	iP	14	45.00	1.8
TAB	26.39	8	iP+	14	47.00	2.7
KSL	26.57	337	eP	14	45.60	-0.1
NPA	26.91	186	iPd	14	53.70	4.6X
	1.0s			610.00nm		6.2mb
				e	15 00.00	
				e(S)	23 41.40	
ELL	27.01	338	iP	14	51.00	1.1
KAP	27.07	333	eP	14	50.90	0.5
NPS	27.56	330	eP	14	55.50	0.6
YER	27.96	336	iP	14	59.80	1.3
PTZ	27.97	202	iP	14	59.00	0.1
CLK	28.21	194	iPc	15	01.00	0.0
VAM	28.38	329	eP	15	02.00	-0.2
KHL	28.55	339	iP	15	03.60	-0.3
SONG	28.74	198	eP	15	07.00	1.2
				e	24 01.50	
BBTK	29.00	345	iPd	15	09.00	1.1
ALT	29.02	341	iP	15	07.80	-0.3
APE	29.07	332	eP	15	08.50	0.0
IZM	29.45	336	iP	15	13.30	1.3
KVT	29.54	351	iP	15	13.00	0.3
QUE	29.55	48	eP	15	15.10	2.0
				eS	21 19.80	
KMZ	29.77	213	iP	15	15.00	-0.1
BKR	29.78	2	iP	15	16.00	1.0
				iS	20 25.00	
DST	30.01	339	iP	15	17.30	0.4
LSZ	30.19	207	iP	15	15.00	-3.8X
KAS	30.23	348	iPd	15	19.60	0.7
PRK	30.58	336	iPd	15	22.90	1.1
YLV	30.63	341	iP	15	22.50	0.1
ATH	30.64	331	iPd	15	23.60	1.2
KCT	30.68	339	iP	15	23.50	0.7
GBZT	30.81	341	eP	15	25.20	1.3
BNT	30.93	339	iP	15	25.50	0.6
EDC	30.94	339	iP	15	26.00	1.0
ISK	31.18	341	eP	15	26.00	-1.1
ITU	31.23	341	iPd	15	28.00	0.4
CTT	31.46	340	eP	15	30.00	0.4
POO	31.53	74	iPc	15	34.20	3.7X
NEO	31.94	332	iPd	15	33.20	-0.7
ALN	32.09	337	eP	15	36.80	1.7
PAIG	32.24	333	eP	15	37.40	1.0
VLS	32.36	328	eP	15	37.00	-0.5
OUR	32.44	334	eP	15	33.40	-4.8X
PLG	32.71	333	eP	15	39.50	-1.1
LIT	32.92	332	iPd	15	42.30	-0.1
KDZ	32.97	337	iPd	15	43.00	0.2
THE	33.13	333	eP	15	44.50	0.3
SRS	33.26	334	iPd	15	45.60	0.3
JMB	33.26	339	iP	15	46.00	0.7
DIM	33.27	338	iPd	15	46.00	0.6
RZN	33.28	336	iPd	15	47.00	1.3
KZN	33.41	331	eP	15	45.50	-1.3
KNT	33.59	334	iPd	15	48.40	0.2
SIM	33.62	350	iPd	15	49.00	0.6
				iS	21 16.00	
PLD	33.64	337	iPd	15	49.00	0.4
GRG	33.64	333	eP	15	48.90	0.2
PSN	33.83	342	iPc	15	51.00	0.8
LSK	33.85	330	iPd	15	50.90	0.3
VAY	33.87	333	iPd	15	50.30	-0.3
	1.3s			1.00nm		3.6mb X
				i	15 53.30	
KEK	33.92	329	eP	15	50.60	-0.5
SRN	33.94	329	iP	15	51.30	0.1
KKB	34.09	335	iPd	15	52.00	-0.6
KBN	34.11	331	iPc	15	53.30	0.6
PGB	34.23	336	iPd	15	54.00	0.2
TPE	34.25	330	iPc	15	53.50	-0.4
PVL	34.36	338	iPd	15	53.00	-1.8
BUL	34.39	202	iPc+	15	55.20	-0.2
	1.0s			113.50nm		5.7mb
				iS	27 14.00	
OHR	34.50	331	iPd	15	56.20	0.1

	1.5s	1.39nm		3.6mb X		Z	20s	37.23um		6.2Msz	SAOF	43.52	324	P	17	10.79	-0.4			
		i	16	00.40		CGL	39.77	319	P	16	41.24		0.7	ROB	43.53	324	P	17	10.85	-0.4
		i	16	06.10			1.7s	554.20nm		6.0mb	AURF	43.60	324	P	17	11.70	-0.2			
BERA	34.59	330	iPc	15	57.80	1.0	AOI	39.90	328	ePd	16	41.46	0.0	AUTN	43.60	324	P	17	11.76	-0.3
VTS	34.64	335	iPd	15	57.00	-0.5	CIO	39.90	327	ePd	16	41.64	0.1	MVIF	43.70	323	P	17	12.74	-0.1
GBA	34.72	83	P	15	58.30	0.1	ANS	39.97	327	P	16	42.30	0.2	TOUF	43.72	324	P	17	12.74	-0.2
SOI	34.81	323	Pd	15	59.00	0.3	ASS	40.07	326	Pd	16	42.20	-0.8	LMR	43.76	322	eP	17	12.20	-0.8
PZI	34.83	321	P	15	59.30	0.3	UZH	40.11	340	iPd	16	42.00	-1.1	CALN	43.77	323	P	17	12.93	-0.4
MEU	34.87	321	Pd	16	00.30	0.9			iS	22	34.00		FRF	43.80	323	eP	17	13.00	-0.4	
SKO	34.89	333	iPd	15	59.90	0.5	ARV	40.21	327	Pd	16	43.70	-0.4	STV	43.81	324	P	17	13.92	0.3
	1.5s	1896.00nm		6.8mb			KSR	40.24	201	iPd	16	44.90	0.2	OSS	43.82	328	ePd	17	14.00	0.2
N	15s	23.05um						1.1s	94.59nm		5.4mb	LRG	43.91	322	eP	17	13.60	-0.7		
		i	16	04.50			ZAG	40.36	332	iPd	16	46.00	0.8		1.4s	408.40nm		6.1mb		
		i	16	15.50			PTJ	40.43	332	iPd	16	46.50	0.6	KHC	43.92	333	iPd	17	13.60	-0.7
		i	16	31.00			VBY	40.46	331	iPd	16	47.00	0.9		1.4s	844.00nm		6.4mb		
		iPP	17	20.00			MAO	40.49	324	P	16	46.50	0.2					19	07.30	
		iS	21	46.00			PRO	40.51	327	eP	16	46.60	0.2					24	00.00	
		i	22	31.00			RSM	40.76	327	P	16	48.70	0.2	VAI	44.01	327	Pd	17	14.40	-0.6
		iSS	24	37.00			RIY	40.77	330	iPd	16	48.90	0.4	VDL	44.04	328	ePc	17	15.80	0.3
KOD	34.96	89	eP	16	01.20	0.5	KSH	40.81	42	P	16	49.50	0.3	TMA	44.11	327	ePd	17	15.60	-0.5
		eS	21	36.00				Z	18s	45.90um		6.4Msz	KSP	44.12	337	iPd	17	16.00	0.1	
GRI	35.10	324	P	16	01.74	0.5		E	11s	40.30um				1.5s	1106.00nm		6.5mb			
	1.3s	597.90nm		6.3mb			CRE	40.83	326	P	16	48.00	-1.2					17	20.00	
PHP	35.12	332	iPc	16	00.50	-0.8	SRO	40.90	336	iPd	16	50.90	1.3					19	00.00	
TIR	35.13	331	iPc	16	01.80	0.4			i	16	55.80		PRU	44.15	335	Pd	17	15.50	-0.7	
BUC	35.15	340	ePd	16	02.00	0.5	CEY	41.03	331	eP	16	51.30	0.5		Z	18s	14.70um		5.9Msz	
CFR	35.21	343	P	16	01.00	-1.0	SFI	41.08	327	P	16	51.00	-0.1		N	18s	14.70um			
ATN	35.22	323	P	16	03.00	0.7	PGD	41.12	326	P	16	54.00	2.3		E	18s	6.30um			
LCL	35.33	328	Pd	16	02.60	-0.5	LJU	41.20	331	ePd	16	52.60	0.4					17	19.70	
LACI	35.42	331	iPd	16	04.00	0.1	SPC	41.30	339	iPd	16	54.00	0.9					PP	19	10.50
ISR	35.65	341	ePd	16	07.30	1.4		2.0s	2880.00nm		6.7mb							eS	24	08.00
PUK	35.65	331	iPd	16	06.60	0.8	FIR	41.31	326	iPd	16	52.00	-1.0	TAVF	44.19	322	P	17	15.91	-0.7
TDS	35.73	325	Pd	16	07.40	0.9	TRI	41.33	330	P	16	53.70	0.5	ESEL	44.21	316	eP	17	17.00	0.2
LPI	35.75	323	P	16	06.70	-0.1	VOY	41.50	330	iPc	16	54.70	0.0	WET	44.24	333	iPd	17	16.00	-0.9
FAI	35.76	320	P	16	08.00	1.2	ZST	41.70	335	iPd	16	56.80	0.6		1.5s	353.00nm		6.0mb		
SDA	35.82	331	iPd	16	07.50	0.3			iPP	18	39.70		FUR	44.28	331	iPd	17	16.50	-0.7	
BCI	35.82	332	iP	16	07.80	0.5	BDI	41.85	326	P	16	55.20	-2.4		Z	16s	B.80um		5.8MszX	
BRD	35.83	342	ePc	16	10.50	3.1X	MME	41.88	326	P	16	56.50	-1.6					17	20.60	
HYB	35.88	77	iPc	16	08.20	0.1	CVF	41.90	323	P	16	57.50	-0.4	ORO	44.28	326	P	17	15.80	-1.6
	1.4s	350.00nm		6.1mb			FRU	41.92	37	iP	17	00.00	1.9	FOUF	44.29	324	ePd	17	17.92	0.6
ULC	35.90	331	iPd	16	08.20	0.2			eS	23	10.00							19	07.23	
GIB	35.98	321	Pd	16	09.50	0.7	RBL	41.95	331	Pd	16	58.50	0.1	FRS	44.35	201	iPd	17	18.00	0.1
MCT	36.00	320	P	16	11.15	2.0	WIN	41.96	215	eP	16	58.00	-0.9	PUYF	44.35	322	P	17	17.48	-0.4
	1.6s	1636.50nm		6.7mb				0.9s	92.44nm		5.5mb		GELF	44.44	322	P	17	17.93	-0.7	
DRA	36.01	338	ePd	16	10.00	1.1		Z	18s	27.15um		6.2Msz	GANF	44.49	323	P	17	18.91	-0.2	
PVY	36.05	332	iPd	16	09.50	0.1	KUK	42.06	266	eP	16	58.00	-1.6	RRL	44.52	324	P	17	18.95	-0.6
MLR	36.15	341	iPd	16	11.00	0.7			e	31	42.00		VILF	44.53	323	P	17	19.06	-0.3	
TTG	36.25	331	iPd	16	11.10	0.2	VKA	42.08	335	iPd	16	59.50	0.2	LLS	44.54	328	ePd	17	18.70	-0.9
		eS	21	52.00				1.8s	2579.00nm		6.7mb		MMK	44.56	326	ePc	17	18.70	-1.1	
VRI	36.25	342	iPd	16	12.00	1.1		Z	13s	8.70um		5.8MszX	TREF	44.60	322	P	17	19.66	-0.2	
CMP	36.25	340	iPd	16	20.00	9.0X			i	17	04.00		SAX	44.61	329	ePd	17	19.50	-0.7	
IYA	36.30	332	iPd	16	11.50	0.1			i	17	10.10		LSD	44.64	325	P	17	19.87	-0.6	
PPE	36.30	343	ePd	16	12.00	0.7			i	18	38.20		BNI	44.67	324	P	17	19.90	-0.7	
BVD	36.34	331	iPd	16	12.20	0.5			e	22	50.00		PRAF	44.83	322	P	17	21.32	-0.5	
BIR	36.35	343	eP	16	13.00	1.3			e	23	36.00		DIX	44.88	326	ePd	17	21.60	-0.8	
CVO	36.38	341	ePd	16	02.50	-9.5X			LR	43	02.00		LPG	44.89	325	eP	17	20.70	-1.9	
MGR	36.49	325	P	16	12.60	-0.4	KRA	42.13	339	iPd	16	59.70	0.0		1.1s	358.60nm		6.2mb		
CVT	36.56	320	P	16	14.50	0.9		1.4s	1587.00nm		6.6mb	BRG	45.08	335	iPd	17	23.00	-0.6		
PTS	36.57	318	P	16	13.40	-0.2		Z	24s	12.40um		5.7MszX		1.5s	1000.00nm		6.5mb			
HCY	36.63	331	iPd	16	14.50	0.4		N	24s	20.80um							i	17	27.20	
NKY	36.67	331	iPd	16	14.90	0.3			e	18	53.00						e	18	53.00	
ERC	36.90	320	P	16	17.20	0.6			iS	23	29.00						eS	24	04.00	
SGO	36.92	325	P	16	16.60	0.1	VVI	42.19	329	Pd	17	00.80	0.5	ZLA	45.25	328	ePd	17	24.10	-1.0
BRY	36.95	331	iPd	16	17.40	0.4	FVI	42.44	330	Pd	17	02.90	0.7	SLE	45.38	329	ePd	17	25.10	-1.0
NDI	36.95	58	iPc	16	17.00	0.0	KBA	42.52	331	iPd	17	03.10	-0.1	GRF	45.38	332	eP	17	24.70	-1.4
		eS	22	08.00				1.2s	406.00nm		6.0mb			Z	16s	8.00um		5.7MszX		
USI	36.95	321	P	16	16.90	0.1			i	17	07.50						id	17	25.10	
LVI	37.03	320	P	16	18.40	0.9			i	18	48.70						e	17	29.70	
MDB	37.24	340	iPd	16	20.00	0.8	CTI	42.62	329	Pd	17	04.20	0.3	ETER	45.47	319	eP	17	26.80	0.0
PTT	37.31	342	eP	16	20.00	0.2	KMR	42.87	333	iP-	17	06.90	1.1	HOF	45.54	333	eP	17	27.00	-0.3
DEV	37.54	338	iPd	16	22.50	0.8			iPP	18	53.30						i	17	31.20	
BEQ	37.61	335	iP	16	20.70	-1.6			iS	23	40.40		BBS	45.70	328	P	17	27.85	-0.8	
		i	16	25.00			SAL	42.91	328	Pd	17	06.10	0.0	FEL	45.70	328	P	17	27.85	-0.9
TIM	38.05	336	iPd	16	26.20	0.2	BOB	42.94	326	Pd	17	05.40	-1.1	STU	45.70	330	iPd	17	27.50	-1.1
DUI	38.14	326	P	16	27.30	0.4	BHG	43.20	331	iPd	17	07.90	-0.6		1.2s	218.75nm		6.0mb		
RFI	38.16	325	P	16	27.65	0.7		1.2s	230.00nm		5.8mb		CLL	45.80	335	iPd	17	28.30	-1.0	
HVAR	38.18	329	iP	16	26.60	-0.5	FIN	43.28	324	P	17	08.49	-0.8		1.6s	1200.00nm		6.6mb		
SDI	38.52	326	P	16	30.00	-0.1	IMI	43.28	324	P	17	08.49	-0.8		Z	17s	8.50um			

21d 01h

LOMF	45.98	327	P	17	30.37	-0.6		4.0s	2.00nm		3.5mb X		ePP	20	56.29								
MOF	46.14	328	P	17	31.57	-0.6			sP	18	05.00		BER	55.38	339	eP	18	41.50	-0.5				
TAF	46.15	307	iPd	17	33.00	0.6		49.00	332	iPd	17	54.40	0.1	BDT	55.40	77	iPd	18	41.00	-1.8			
			i	17	37.00			1.2s	1205.00nm			6.8mb			1.2s	221.10nm			6.1mb				
			i	19	26.00				i	17	58.50		EKA	55.73	331	Pd	18	43.10	-1.6				
STR	46.29	329	P	17	32.87	-0.3		49.00	309	eP	17	54.00	-0.6		1.2s	194.80nm			6.0mb				
KIC	46.30	267	Pd	17	33.06	-0.8		49.02	308	eP	17	54.20	-0.6	ESK	55.74	331	ePd	18	43.50	-1.2			
BSF	46.30	328	P	17	32.76	-0.7		TIO	49.08	301	iPd	17	55.40	-0.1		1.2s	400.00nm			6.3mb			
EBR	46.32	316	eP	17	34.00	0.4				i	18	20.50		RCS	55.75	343	iP	18	44.00	-0.6			
			ePP	19	28.00			TOL	49.11	313	ePd	17	54.69	-0.8	ECP	55.77	326	eP	18	42.60	-2.3		
ECH	46.36	328	P	17	33.24	-0.6			1.3s	730.77nm			6.5mb		1.5s	884.00nm			6.6mb				
WLS	46.38	329	P	17	33.43	-0.6				ePc	17	58.17	12kmX	ESY	55.80	332	iPd	18	43.90	-1.2			
CDF	46.42	329	P	17	33.61	-0.8				esPc	18	00.82			0.8s	701.00nm			6.7mb				
TIC	46.52	268	Pd	17	34.84	-0.8				iPP	19	56.00		APA	55.91	356	iPd	18	45.30	-0.4			
BRN	46.56	336	iPd	17	35.00	-0.2				iPPP	20	45.00				iS	26	38.00					
BRL	46.56	336	iPd	17	16.00	-19.3X				eS	25	03.46		EBL	55.92	331	ePd	18	44.60	-1.4			
LIC	46.61	267	Pd	17	35.56	-0.7				iSS	28	10.00		GCC	55.92	296	iPc	18	47.00	0.5			
	1.2s	153.50nm				5.9mb		LIJA	49.11	309	eP	17	57.00	1.4		i	19	07.20					
Z	20s	25.20um				6.2msz		ALJ	49.19	308	eP	17	55.50	-0.7	ETA	55.93	327	eP	18	44.50	-1.6		
		S	24	30.00				SNF	49.26	329	Pd	17	55.60	-0.8		1.6s	1059.00nm			6.6mb			
GWF	46.61	329	P	17	35.32	-0.5		EHOR	49.28	310	iPd	17	55.00	-1.7	EDI	56.07	331	iPd	18	45.80	-1.2		
HAU	46.65	328	eP	17	34.80	-1.3		COP	49.36	338	iPc	17	47.20	-9.8X		0.8s	500.00nm			6.6mb			
	1.4s	885.00nm				6.6mb			1.2s	637.50nm			6.5mb	ECB	56.08	326	eP	18	46.10	-1.1			
								UCC	49.40	329	iP-	17	58.00	0.6		1.2s	918.00nm			6.7mb			
ENIJ	46.72	310	eP	17	37.00	0.1				i	18	31.00		EAU	56.15	331	iPd	18	46.70	-1.0			
LBL	46.76	323	P	17	37.33	0.4				S	19	57.00			0.8s	500.00nm			6.6mb				
ECH	46.81	314	iPd	17	38.50	1.0				e	25	11.00		EDU	56.33	332	iPd	18	47.30	-1.7			
PLDF	46.95	324	P	17	37.82	-0.7				S	17	59.00	1.0		0.8s	343.00nm			6.4mb				
VITF	46.97	328	P	17	37.80	-0.7		CNIL	49.45	308	eP	17	59.00	1.0	SOD	56.36	353	iP	18	48.00	-1.0		
PYM	47.18	323	P	17	40.16	-0.3		GUD	49.47	314	iPd	17	58.00	-0.4	DLE	56.39	327	eP	18	48.00	-1.4		
SMF	47.20	325	eP	17	39.00	-1.5		MFF	49.49	323	eP	17	56.90	-1.4		1.5s	1550.00nm			6.8mb			
AGO	47.28	324	P	17	40.54	-0.6		GIBL	49.51	309	eP	17	58.00	-0.5	NNT	56.45	83	iPc	18	49.80	-0.7		
CAF	47.30	322	eP	17	41.00	-0.4		WIT	49.61	333	iPd	17	59.90	0.9	NST	56.57	79	eP	18	51.50	0.2		
LBF	47.32	325	eP	17	40.10	-1.4				i	18	03.40		ELO	56.61	332	iPd	18	49.10	-1.9			
EPF	47.44	319	eP	17	41.60	-0.9		AVE	49.72	304	eP	17	55.00	-5.2X	TSI	56.71	94	ePd	18	55.50	3.2X		
	1.3s	282.00nm				6.2mb				i	18	23.00		EAB	56.76	331	ePd	18	50.50	-1.5			
EVIA	47.54	312	iPd	17	43.00	-0.4		DBN	49.83	331	iP-	18	01.00	0.3	DMU	56.87	328	eP	18	52.00	-0.9		
LOR	47.55	325	eP	17	41.80	-1.4		Z	17s	7.00um			5.7mszX	VAL	57.81	325	eP	18	59.00	-0.5			
	1.4s	1293.50nm				6.8mb				ePP	20	00.00			S	27	17.00						
AVF	47.56	325	eP	17	41.70	-1.6				eS	25	08.00		GTA	57.88	51	eP	18	59.30	-1.1			
SSF	47.63	325	eP	17	42.40	-1.4				eSS	29	20.00		Z	19s	13.60um			6.1msz				
MAF	47.70	324	eP	17	43.30	-1.1		NUR	50.19	349	iP	18	02.50	-0.8	N	13s	6.80um						
LPO	47.72	321	eP	17	44.20	-0.4				i	18	06.20				sP	19	14.00					
BGF	47.72	324	eP	17	43.40	-1.2				ePP	20	08.00		CVVD	57.93	295	iP	18	57.80	-3.0X			
WLF	47.79	329	iPd	17	44.39	-0.6				eS	25	00.00				i	19	24.50					
		e	22	28.70						eSS	29	00.00		TBT	57.96	296	iP	19	03.00	2.0			
AFC	47.82	310	iPd	17	45.80	0.1		EVAL	50.34	309	iPd	18	04.00	-0.9	LOE	57.99	77	e(P)	19	01.00	-0.3		
APHE	47.82	309	iPd	17	46.50	0.8		LDF	50.51	325	eP	18	04.10	-1.9	SNG	58.04	89	eP	19	04.70	3.0X		
RJF	47.83	322	eP	17	44.60	-0.9		WMO	50.59	42	ePd	18	06.39	-0.5			eS	27	06.00				
CRT	47.83	310	iP	17	47.00	1.3		Z	44s	50.40um			6.2mszX	KEV	58.60	354	ePd	19	04.32	-0.4			
JAU	47.90	318	P	17	46.73	0.5		N	15s	13.00um					1.0s	142.00nm			6.0mb				
IFR	47.92	305	iPd	17	47.80	1.2		E	19s	46.30um					eS	19	11.61						
		i	19	46.00						ePP	18	11.69	18kmX		esP	19	11.61						
TCF	47.94	323	eP	17	45.40	-1.0				eSP	18	13.18		KMI	58.78	68	ePd	19	06.08	-1.0			
ACHM	47.98	310	iPc	17	47.00	0.1				PP	20	06.00			eP	19	10.88	16kmX					
ASMO	48.00	310	iPd	17	46.50	-0.6		EPLA	50.64	313	iPd	18	06.80	-0.4		eSP	19	13.37					
LHE	48.01	318	P	17	47.34	0.3		LPF	50.75	324	eP	18	05.90	-1.9		ePP	21	24.79					
OGE	48.03	318	P	17	47.17	0.1		FLN	50.81	325	eP	18	06.40	-1.8		ePPP	22	43.59					
ATEJ	48.06	309	iPc	17	47.60	0.0			1.4s	1797.30nm			6.8mb		eS	27	14.96						
ESCF	48.06	318	P	17	47.81	0.5		GRR	50.82	324	eP	18	06.70	-1.7	TRO	59.53	351	iP	19	13.70	2.5		
ETOR	48.07	315	iPd	17	47.80	0.3		UPP	51.18	345	iPd	18	09.50	-1.3	CD2	59.94	61	P	19	13.00	-1.8		
LFF	48.12	321	eP	17	47.20	-0.5			1.5s	1900.00nm			6.8mb	E	17s	7.60um							
ATE	48.14	318	P	17	48.22	0.3				i	18	13.80				PP	21	28.00					
ISSF	48.18	318	P	17	48.62	0.3		SUF	52.00	351	iP	18	16.40	-0.7	LZH	60.50	55	eP	19	18.00	-0.6		
ALOJ	48.19	310	iPc	17	48.50	-0.1		ERUA	52.20	315	iPd	18	18.60	-0.3		3.0s	1124.00nm			6.5mb			
MADF	48.25	318	P	17	48.82	0.1		LIS	52.48	310	iPd	18	21.00	-0.1	Z	32s	14.80um			5.9mszX			
AAPN	48.27	310	iPd	17	48.00	-1.1		HFS	52.49	343	eP	18	19.30	-1.6	N	16s	8.30um						
EBAN	48.31	311	eP	17	48.00	-1.3			1.5s	951.90nm			6.5mb	E	17s	8.10um							
LSF	48.32	323	eP	17	48.20	-1.1		Z	18s	6.91um			5.7msz			pp	19	31.00	46kmX				
PLH	48.34	331	ePd	17	49.10	-0.1		EMON	52.70	316	iPd	18	22.00	-0.7			PP	21	34.50				
BOH	48.35	318	P	17	49.94	0.3		PTO	52.80	313	iP	18	23.00	-0.5	KGM	61.66	94	ePc	19	26.80	0.2		
ELYF	48.37	318	P	17	49.61	-0.1				e(\$)	25	52.00		GYA	62.34	66	iPd	19	29.80	-1.3			
MEM	48.47	330	iPd	17	50.05	-0.2		STS	53.34	315	eP	18	27.00	-0.4		1.2s	0.10nm			2.9mb X			
JCK	48.54	331	eP	17	50.60	-0.2		NRA0	53.62	342	P	18	27.70	-1.4	Z	22s	6.30um			5.7msz			
PUL	48.57	352	iPd	17	51.00	0.1		NB2	53.95	342	P	18	29.90	-1.8	N	20s	5.30um						
		eS	24	56.00			YRH	55.16	328	eP	18	39.50	-1.1	E	20s	6.90um							
ENN	48.61	330	iPd	17	51.40	0.0			1.3s	349.00nm			6.2mb			S	27	58.00					
	1.3s	1381.00nm				6.8mb		CHG	55.28	75	iPd	18	40.70	-1.3	XAN	64.48	58	P	19	43.50	-1.6		
									1.5s														

21d 01h				
CLC	128.75	339	ePKP	28 16.00 0.5
			e	30 16.00
GSC	128.92	338	ePKP	28 18.00 2.2
			e	30 08.00
LLA	129.12	342	ePKPc	28 17.30 1.2
			epPKP	28 21.90
SAO	129.13	343	ePKP	28 16.80 0.7
Z	20s	4.30um		6.1MsZ
N	20s	4.40um		
E	20s	1.80um		
ISA	129.20	339	ePKP	28 16.00 -0.3
PRI	129.48	342	ePKPc	28 18.60 1.7
			epPKP	28 22.90
			esPKP	28 26.30
PRS	129.52	342	ePKPc	28 17.90 1.1
WEL	129.53	134	ePKP	28 20.00 3.4X
TPC	129.68	336	ePKP	28 18.00 0.7
			e	30 27.00
SBB	129.84	338	ePKP	28 18.00 0.4
RVR	130.30	337	ePKP	28 19.00 0.6
			e	30 35.00
PEC	130.31	337	PKP	28 19.40 1.0
MWC	130.35	338	ePKP	28 20.00 1.3
			e	30 17.00
PAS	130.45	338	ePKP	28 18.00 -0.7
			e	31 18.00
			ePP	33 32.00
			eSKKS	39 49.00
			ePKKP	42 28.00
			ePS	42 46.00
			eSS	48 52.00
			e	52 43.00
			eSSS	53 11.00
			eLg	59 28.00
			eLR	03 58.00
PLM	130.67	336	ePKP	28 20.00 0.7
SYP	130.74	340	ePKP	28 20.00 0.6
BAR	131.18	336	ePKP	28 22.00 1.9
			e	30 25.00
KRP	131.27	130	PKP	28 25.00 5.0X
AFI	147.15	97	ePKP	28 53.26 3.9X
AFR	167.41	118	PKP	29 20.00 6.3X
			1.6s	125.00nm
PAE	167.52	119	PKP	29 20.00 6.3X
			1.6s	230.00nm
PPT	167.57	118	PKP	29 20.00 6.2X
			1.6s	265.00nm
Z	21s	11.00um		
PPN	167.71	119	PKP	29 20.00 6.1X
			1.6s	150.00nm
TVO	167.75	120	PKP	29 21.00 7.0X
			1.6s	205.00nm
PMO	170.00	109	PKP	29 18.40 3.1X
			1.6s	230.00nm
VAH	170.18	111	PKP	29 18.40 3.0X
			1.6s	290.00nm
TPT	170.26	110	PKP	29 18.60 3.2X
			1.6s	365.00nm
RUV	170.42	111	PKP	29 18.50 3.0X
			1.6s	215.00nm
S.D. = 1.0 on 484 of 538 obs.				
* AUG 21, 1989 01h 34m 07.34± 1.12s				
11.992 N ±21.7km 41.891 E ±11.6km				
DEPTH = 10.0km (geophysicist)				
4.9mb (33 obs.)				
ETHIOPIA (558)				
TAB	26.27	8	eP	39 51.00 6.2X
VAY	33.77	333	eP	40 51.60 0.2
OHR	34.41	331	eP	40 57.00 0.0
SKO	34.80	333	iP	41 01.10 0.9
TDS	35.64	325	P	41 08.00 0.5
GIB	35.90	321	P	41 11.00 1.2
MLR	36.05	341	ePc	41 13.00 2.0
VRI	36.14	342	iPc	41 14.00 2.3
SGO	36.83	325	P	41 18.00 0.6
DUI	38.05	326	P	41 29.00 1.2
SDI	38.44	325	P	41 31.40 0.4
AZI	38.84	325	P	41 35.30 1.0
RMP	39.13	325	P	41 37.90 1.1
MNS	39.52	325	P	41 40.10 0.1
PTJ	40.34	332	eP	41 48.00 1.2
VBY	40.37	331	e(P)	41 48.70 1.7
SRO	40.80	336	eP	41 52.40 1.9
SPC	41.19	338	iP	41 56.00 2.1
TRI	41.24	330	ePd	41 54.90 0.8
VOY	41.41	330	e(P)	41 46.00 -9.6X
			e	41 56.90
ZST	41.60	335	e(P)	41 47.40 -9.6X
			i	41 56.80
CVF	41.82	323	eP	41 59.00 0.0
			0.8s	8.00nm
VKA	41.98	334	iPc	42 01.70 1.5
KRA	42.03	339	eP	42 01.20 0.7
FVI	42.35	330	P	41 57.30 -5.8X
KBA	42.43	331	e(P)	41 56.00 -8.0X
			1.0s	9.90nm
			i	42 08.90
			i	43 45.50
BHG	43.11	331	iPc	42 10.00 0.6
SBF	43.44	323	eP	42 12.20 0.0
			1.0s	8.00nm
KHC	43.82	333	iP	42 15.50 0.3
			1.0s	10.50nm
KSP	44.02	337	eP	42 17.00 0.3
PRU	44.06	335	eP	42 17.00 0.0
			1.5s	33.50nm
BNI	44.58	324	P	42 22.00 0.5
LPG	44.80	325	eP	42 22.50 -1.0
			1.0s	16.00nm
BRG	44.98	335	iP	42 23.80 -0.7
			1.2s	25.00nm
GRF	45.29	332	iPd	42 26.50 -0.5
BBS	45.61	328	P	42 27.01 -2.6
FEL	45.61	328	P	42 28.40 -1.3
CLL	45.70	335	iP	42 29.90 -0.2
			1.6s	31.00nm
MOX	45.80	333	eP	42 30.00 -1.0
			1.2s	28.00nm
LOMF	45.90	327	P	42 30.46 -1.4
MOF	46.05	328	P	42 31.10 -2.0
STR	46.20	329	P	42 33.37 -0.7
BSF	46.22	328	P	42 33.12 -1.3
WLS	46.29	328	P	42 32.85 -2.1
CDF	46.33	328	P	42 33.48 -1.8
HAU	46.56	327	eP	42 37.30 0.3
			0.8s	8.00nm
VITF	46.88	327	P	42 37.25 -2.2
SMF	47.12	325	eP	42 40.80 -0.7
			0.8s	4.00nm
CAF	47.23	322	eP	42 42.80 0.4
			1.0s	10.80nm
LBF	47.24	325	eP	42 42.00 -0.4
			0.8s	15.30nm
LOR	47.47	325	eP	42 43.70 -0.5
			1.0s	18.80nm
AVF	47.48	324	eP	42 43.70 -0.6
			0.8s	5.30nm
SSF	47.55	325	eP	42 44.20 -0.6
			0.8s	6.70nm
MAF	47.62	323	eP	42 45.30 -0.1
			0.8s	2.60nm
LPO	47.64	321	eP	42 45.90 0.3
			0.8s	1.00nm
BGF	47.64	324	eP	42 45.30 -0.3
			0.8s	14.70nm
WLF	47.70	329	P	42 45.40 -0.6
APHE	47.76	309	eP	42 48.00 1.1
ACHM	47.92	310	eP	42 48.50 0.5
ESCF	47.98	318	P	42 48.72 0.3
ATEJ	48.00	309	eP	42 39.50 -9.3X
LFF	48.04	321	eP	42 49.10 0.4
			0.8s	13.40nm
ATE	48.07	318	P	42 48.91 -0.1
ALOJ	48.13	309	eP	42 50.00 0.2
MADF	48.17	318	P	42 48.56 -1.3
AAPN	48.21	310	eP	42 50.00 -0.3
LSF	48.24	323	eP	42 50.10 -0.2
			0.8s	8.00nm
ENN	48.52	330	eP	42 52.50 0.2
			1.0s	17.00nm
DOU	48.76	329	Pc	42 53.10 -1.1
WTS	48.90	332	eP	42 56.00 0.8
			1.2s	32.00nm
SNF	49.17	329	Pc	42 57.80 0.5
WIT	49.52	333	eP	43 01.50 1.6
NUR	50.07	349	iP	43 04.40 0.3
			1.0s	20.00nm
LDF	50.43	325	eP	43 05.80 -1.2
			1.0s	12.00nm
LPF	50.66	324	eP	43 07.80 -1.0
			1.0s	17.00nm
FLN	50.72	325	eP	43 08.20 -1.0
GRR	50.74	324	eP	43 08.50 -0.9
			0.8s	14.50nm
UPP	51.07	345	iP	43 10.80 -0.9
SUF	51.89	351	eP	43 18.00 0.1
			0.7s	6.00nm
HFS	52.39	343	eP	43 10.40 -11.3X
			1.2s	4.90nm
NB2	53.85	342	P	43 21.10 -11.5X
			1.1s	14.90nm
EKA	55.64	331	P	43 49.00 3.4X
			1.2s	14.70nm
SOD	56.25	353	eP	43 33.00 -16.8X
GTA	57.79	51	P	43 59.40 -2.0
KEV	58.49	354	iP	44 06.00 0.4
			0.5s	16.80nm
GVA	62.27	66	P	44 31.40 -1.0
BJI	70.38	52	eP	45 22.00 -1.7
CN2	77.18	48	Pc	46 03.60 0.4
			pP	46 08.00 14kmX
ALE	80.04	353	eP	46 19.00 0.9
			0.7s	3.00nm
WRA	96.28	109	P	47 41.00 3.2
			1.1s	3.80nm
S.D. = 1.1 on 80 of 90 obs.				
? AUG 21, 1989 04h 48m 43.50± 3.19s				
27.523 N ±23.5km 54.404 E ±32.2km				
DEPTH = 33.0km (normol)				
3.7mb (2 obs.)				
SOUTHERN IRAN (353)				
Felt in the Lor area.				
SHI	2.68	322	eP	49 26.00 0.6
DHR	4.00	253	eP	50 01.00 17.0X
RYD	7.54	250	eP	50 35.00 1.0
OASM	9.82	264	eP	51 04.50 -1.0
KHC	38.00	316	eP	55 59.00 -1.1
HFS	42.70	331	eP	56 38.70 0.0
			0.5s	1.10nm
NB2	44.22	331	P	56 51.60 0.5
			0.6s	0.60nm
S.D. = 1.1 on 6 of 7 obs.				
? AUG 21, 1989 04h 48m 55.05± 4.12s				
15.721 N ±23.4km 60.725 W ±37.5km				
DEPTH = 33.0km (normol)				
LEEWARD ISLANDS (92)				
ML 2.7 (FDF).				
MGG	0.60	289	eP	49 08.10 1.0
			S	49 16.50
BBL	0.75	255	eP	49 09.00 -0.2
			S	49 19.30
PAG	0.97	289	eP	49 11.50 -0.9
			S	49 27.50
CRM	0.98	191	eP	49 12.07 -0.4
			S	49 24.30
FDF	1.06	203	eP	49 13.97 0.2
			S	49 27.60
MVM	1.17	188	eP	49 14.99 -0.2
			S	49 29.80
BIM	1.24	196	eP	49 16.72 0.5
			S	49 32.50
S.D. = 0.8 on 7 of 7 obs.				
AUG 21, 1989 05h 03m 05.60± 0.17s				
11.942 N ± 2.9km 41.769 E ± 2.9km				
DEPTH = 9.7km (geophysicist)				
5.8mb (59 obs.) 5.7MsZ (18 obs.)				
ETHIOPIA (558)				
Ms 5.8 (BRK). Felt strongly in northeastern Ethiopia. Depth from broadband displacement seismograms.				
FAULT PLANE SOLUTION: P-Waves				
NP1: Strike=115 Dip=68 Slip= -90				
NP2: 295 22 -90				
Principal Axes:				
T P1g=23 Azm=205				
P 67 25				
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP1.				
RADIATED ENERGY				

No. of sta: 6 Focal mech. M
 Energy 0.7±0.2*10**13 Nm
 MOMENT TENSOR SOLUTION
 Dep 6 No. of sta: 14
 Moment Tensor: Scale 10**18 Nm
 Mrr=-1.38 Mtt= 1.34
 Mff= 0.04 Mrt=-0.53
 Mrf= 0.43 Mtf=-0.35

Principal axes:
 T Vol= 1.56 Plg=12 Azm=196
 N 0.01 10 289
 P -1.57 74 57
 Best Double Couple:Mo=1.6*10**18
 NP1:Strike=274 Dip=34 Slip=-108
 NP2: 115 58 -78

CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 36C
 Centroid Location:
 Origin Time 05:03:12.7 0.3
 Lat 12.17N 0.03 Lon 41.56E 0.03
 Dep 15.0 BDY Half-duration 4.0
 Moment Tensor: Scale 10**18 Nm
 Mrr=-1.43 0.03 Mtt= 1.53 0.04
 Mff=-0.10 0.04 Mrt=-0.30 0.13
 Mrf=-0.15 0.11 Mtf=-0.32 0.03

Principal Axes:
 T Vol= 1.62 Plg= 5 Azm=190
 N -0.13 9 99
 P -1.49 80 310
 Best Double Couple:Mo=1.6*10**18
 NP1:Strike=290 Dip=41 Slip=-77
 NP2: 92 51 -101

DAF	0.82	114	P	03	19.50	-1.9
GBR	1.04	139	P	03	23.70	-1.6
ARO	1.13	111	P	03	43.75	16.9X
ABHA	6.34	8	iPc	04	39.00	-2.8X
TAIF	9.40	352	eP	05	26.00	1.7
RYD	13.51	19	eP	06	23.00	3.0X
NAI	14.03	201	iPc	06	27.60	0.7
OASM	14.17	6	eP	06	33.50	4.8X
AGAL	14.24	325	eP	06	36.00	6.5X
AKSR	14.30	326	eP	06	38.00	7.8X
AMAN	14.58	326	iPc	06	41.00	7.1X
ASW	14.72	326	iPc	06	40.00	4.2X
BEE	16.25	29	eP	06	56.80	1.2
BJA	16.27	30	eP	06	57.00	1.1
DHR	16.32	28	eP	06	59.00	2.5
AYN	17.68	343	eP	07	16.00	2.4
MBH	18.06	341	iPd	07	29.00	0.8
LWI	19.09	223	iPc	07	33.00	1.6
KOT	20.14	334	eP	07	43.00	0.2
SHI	20.26	28	eP	07	42.00	-2.2
HLW	20.29	333	iPd	07	45.00	0.6
MKRJ	20.32	345	Pc	07	46.20	1.4
DSI	20.40	344	ePd	07	46.00	0.5
MASJ	20.47	345	Pc	07	48.00	1.7
KFNJ	20.60	345	Pc	07	50.00	2.4
SALJ	20.74	345	Pd	07	51.00	1.8
BHD	21.37	6	iPc	07	55.00	-0.4
HRI	21.93	346	ePd	08	03.00	1.7
KER	22.83	11	eP	08	12.00	1.8
IKZ	23.77	203	iPd	08	20.00	0.6
SLY	23.79	8	iPc	08	20.00	0.7
BNG	24.15	254	iPd	08	23.40	0.4
BCAO	24.16	254	ePd	08	23.13	0.0

CSS	24.16	343	eP	08	26.00	3.0X
MSL	24.36	3	ePc	08	26.50	1.6
PPCY	24.39	341	eP	08	27.00	1.8
TEH	25.24	19	eP-	08	35.00	1.5
GAZ	25.45	352	iP	08	31.00	-4.3X
MZZ	26.27	210	eP	08	45.00	1.8
TAB	26.33	8	iP-	08	46.00	2.3
KSL	26.47	337	eP	08	45.70	1.0
ELL	26.91	339	iP	08	49.50	0.6
KAP	26.96	333	eP	08	51.30	2.0
NPA	26.97	185	iP	08	53.70	4.2X
NPS	27.45	330	eP	08	51.70	-2.1
YER	27.86	336	eP	08	58.40	0.9
PTZ	28.00	202	eP	08	59.00	0.0
CLK	28.26	194	iPc	09	00.00	-1.3
VAM	28.27	329	eP	08	59.00	-1.4
KHL	28.45	340	iP	09	03.00	0.1
BBTK	28.91	346	iPd	09	08.00	1.0
MAIO	29.05	30	eP	09	09.00	0.7
IZM	29.35	336	eP	09	11.30	0.3
QUE	29.58	48	iP-	09	13.30	0.0
BKR	29.72	3	iPd	09	15.00	0.7
KMZ	29.77	213	eP	09	15.00	0.0
DST	29.91	339	iP	09	17.20	1.2
LSZ	30.20	207	eP	09	20.00	1.2
PRK	30.48	336	eP	09	22.40	1.5
YLV	30.53	341	iP	09	21.70	0.2
ATH	30.53	331	iPd	09	22.00	0.6
KCT	30.58	340	iP	09	22.70	0.9
BOM	30.68	73	iP	09	25.00	2.1
BNT	30.83	339	iP	09	25.20	1.2
EDC	30.84	339	iP	09	26.00	1.9
ISK	31.08	341	eP	09	26.00	-0.2
ITU	31.14	341	iPd	09	25.00	-1.7
CTT	31.36	340	eP	09	27.00	-1.7
NEO	31.84	332	eP	09	32.60	-0.3
PLG	32.60	334	eP	09	39.70	0.1
LIT	32.81	332	eP	09	41.70	0.3
JMB	33.16	339	iPd	09	45.00	0.6
KZN	33.31	332	eP	09	45.40	-0.4
KNT	33.49	334	eP	09	47.60	0.4
MMB	33.49	335	eP	09	46.00	-1.3
SIM	33.54	350	iPd	09	48.00	0.4
VAY	33.76	334	iP	09	49.20	-0.4
SRN	33.83	329	eP	09	51.30	1.1
KKB	33.99	335	iPd	09	51.00	-0.6
PGB	34.12	337	iPd	09	52.00	-0.8
TPE	34.14	330	eP	09	52.50	-0.4
PVL	34.26	338	iPd	09	53.00	-0.9
BUL	34.41	202	iPc+	09	54.90	-0.7
VTS	34.54	336	iPd	09	56.00	-0.5
SOI	34.70	323	P	09	58.40	0.7
SKO	34.78	333	iPd	09	58.00	-0.4
GBA	34.81	83	P	09	59.10	0.2
GRI	34.99	324	P	10	00.64	0.4
BUC1	35.01	340	iPd	10	00.00	-0.3
PHP	35.01	332	eP	09	58.60	-1.7
TIR	35.02	331	eP	10	01.50	1.1

BUC	35.05	340	iP	10	01.00	0.4
KOD	35.06	89	eP	10	04.00	2.5
ATN	35.11	323	P	10	09.00	7.7X
CFR	35.11	343	iPc	10	01.50	0.3
LCI	35.22	328	P	09	58.00	-4.1X
LACI	35.32	331	eP	10	03.50	0.6
PUK	35.55	331	iPd	10	05.50	0.6
ISR	35.55	341	ePc	10	05.50	0.5
TDS	35.61	325	P	10	05.00	-0.5
FAI	35.64	320	P	10	07.70	1.9
SDA	35.71	331	iPc	10	07.50	1.2
BCI	35.72	332	eP	10	06.20	-0.1
ULC	35.79	331	eP	10	07.20	0.2
DRA	35.91	339	eP	10	10.00	2.0
PVY	35.94	332	eP	10	08.50	0.1
HYB	35.96	77	ePc	10	11.10	2.4
MLR	36.06	341	ePd	10	10.00	0.6
TTG	36.14	331	eP	10	10.50	0.6
VRI	36.15	342	Pd	10	10.50	0.5
CMP	36.16	340	ePd	10	18.00	7.9X
IVA	36.19	332	eP	10	11.00	0.5
CVO	36.28	341	ePd	10	11.30	0.2
MGR	36.38	325	P	10	11.00	-1.0
PTS	36.45	318	P	10	14.52	1.9
NKY	36.56	331	eP	10	15.00	1.4
SGO	36.80	325	P	10	16.50	1.0
BRY	36.84	331	eP	10	17.00	1.0
NDI	37.00	58	iPc	10	19.00	1.7
DEV	37.44	338	ePc	10	20.00	-0.8
BEO	37.51	335	eP	10	20.50	-0.9
DUI	38.03	326	P	10	14.00	-11.9X
RFI	38.04	325	P	10	26.81	0.9
HVAR	38.07	330	iP	10	25.80	-0.3
SDI	38.41	326	P	10	29.20	0.1
AZI	38.81	326	Pd	10	32.80	0.5
RMP	39.10	325	P	10	35.70	0.9
MNS	39.49	326	P	10	37.80	-0.3
CGL	39.65	319	P	10	40.74	1.2
SLR	39.69	199	eP	10	40.00	0.0
ASS	39.96	326	P	10	42.00	0.0
UZH	40.01	340	iPd	10	43.00	0.8
ZAG	40.25	332	iPd	10	45.00	0.8
KSR	40.27	201	eP	10	44.20	-0.7
PTJ	40.32	302	eP	10	45.50	0.5
VBY	40.36	331	ePd	10	45.30	0.2
RSM	40.65	327	P	10	48.50	1.0
RIY	40.66	330	ePd	10	47.90	0.3
SRO	40.80	336	iPd	10	49.50	0.8
CEY	40.93	331	ePd	10	50.50	0.7
LJU	41.10	331	ePd	10	51.50	0.3
FIR	41.20	326	iPd	10	52.00	0.0
SPC	41.20	339	iPd	10	52.90	0.7
TRI	41.22	330	ePd	10	52.40	0.2
VOY	41.39	330	eP	10	53.70	-0.1
ZST	41.60	335	iPd	10	55.70	0.4
BDI	41.74	326	P	10	55.00	-1.6
CVF	41.79	323	P	10	56.27	-0.7
RBL	41.85	331	P	10	58.10	0.7
FRU	41.92	37	iPd	11	00.00	1.9
KUK	41.97	266	eP	10	58.00	-0.8
VKA	41.98	335	iPd	10	58.80	0.4
KRA	42.03	339	eP	10	59.10	0.3
VVI	42.08	329	P	10	57.56	-1.7

KMI	58.85	68 Pd	13 05.00	-2.5		eS	24 12.00		eSS	40 55.00					
	7.0s	1.90nm		3.3mb X		SS	28 51.00		eLR	59 44.00					
Z	30s	6.00um		5.5MszX	DL2	74.75	53 Pd	14 47.50	-0.3	MIN	125.74	344 ePKP	22 10.20	0.5	
N	19s	3.20um				Z	40s	3.40um				e	23 58.90		
		PcP	13 52.00			E	14s	3.60um		WDC	125.76	345 ePKP	22 09.80	0.3	
		S	21 17.00					S	24 29.00		KVN	125.91	341 PKP	22 12.00	1.8
CD2	59.99	61 eP	13 15.40	0.3		SSE	74.94	61 P+	14 48.00	-1.1	ORV	126.45	344 ePKP	22 11.40	0.5
N	12s	3.20um					8.0s	2.10nm		3.2mb X	TNP	126.49	339 PKP	22 13.50	2.2
LZH	60.54	55 eP	13 18.00	-0.9		Z	20s	2.80um		5.6Msz	CM8	127.55	342 ePKPc	22 14.30	1.2
	8.0s	2.36nm		3.4mb X		N	12s	1.10um			BKS	128.22	344 ePKP	22 16.00	1.7
Z	16s	7.50um		5.9MszX		E	12s	2.00um			Z	20s	2.50um		5.9Msz
N	12s	3.60um						PP	17 36.00		N	20s	2.10um		
E	11s	3.80um						S	24 27.50		E	20s	1.10um		
		PP	15 47.00					sS	24 35.00			ePP	24 16.00		
		ePP	17 03.50					ScS	25 00.00			e	25 44.00		
		eS	21 46.00			ANP	75.83	67 eP	14 56.00	1.6		e	27 08.00		
		SS	25 35.00			SNY	76.07	50 iPd	14 53.50	-1.8		ePPS	35 52.00		
GYA	62.40	66 iPd	13 29.80	-1.7		Z	18s	8.90um		6.1Msz		e	36 04.00		
	4.0s	1.10nm		3.4mb X		N	17s	5.40um				eSS	42 00.00		
Z	20s	1.90um		5.3Msz		E	16s	2.10um				eSSS	46 24.00		
N	20s	4.80um						S	24 42.00			eLO	59 00.00		
		S	22 00.00			BAG	76.11	76 eP	14 55.00	-1.2		eLR	04 00.00		
IRK	63.93	37 iPd	13 40.00	-1.1				eS	24 47.00		FRI	128.30	341 ePKP	22 15.70	1.2
		eS	22 20.00			OCP	76.86	78 eP	14 55.00	-5.1X	ARN	128.52	343 PKP	22 18.50	3.5X
XAN	64.53	58 P	13 43.20	-2.2		CN2	77.30	48 iPd	15 01.00	-1.1	MHC	128.56	343 ePKP	22 16.90	1.7
N	14s	5.60um					7.0s	2.60nm		3.4mb X	Z	20s	1.60um		5.7Msz
E	16s	2.90um				Z	19s	8.80um		6.1Msz	N	20s	2.00um		
OIZ	65.65	74 Pd	13 52.00	-0.7		N	15s	4.20um			E	20s	0.30um		
	8.0s	21.00nm		4.4mb X				sP	15 14.00		CLC	128.65	338 ePKP	22 18.00	2.7X
E	20s	3.90um						S	24 56.00		GSC	128.82	337 ePKP	22 20.00	4.3X
		SS	26 57.00			TIK	77.84	19 iPd	15 04.00	-0.6	SAO	129.04	343 e(PKP)	22 18.00	2.1
8TO	65.83	51 iPd	13 53.00	-0.7				eS	25 02.00		Z	20s	1.70um		5.7Msz
	7.0s	2.20nm		3.5mb X		PCI	78.52	93 ePc	15 13.00	3.6X	N	20s	1.80um		
N	15s	5.20um				NANU	79.95	116 eP	15 18.00	1.1	E	20s	0.60um		
E	18s	5.30um					1.0s	81.00nm		5.7mb		ePP	24 16.00		
		PP	16 18.00			ALE	80.07	353 eP	15 17.50	0.9		iSKP	25 47.00		
		S	22 34.00				1.2s	31.00nm		5.2mb		ePPP	26 56.00		
		SS	26 50.00			MDJ	80.19	46 ePd	15 17.41	-0.4		eSKS	29 42.00		
HMC	67.02	51 eP	14 01.20	-0.1				epPc	15 20.72	11kmX		eSKSP	34 33.00		
	8.0s	2.30nm		3.4mb X		ITR	82.32	259 eP	15 32.20	2.6		ePPS	36 25.00		
Z	35s	7.20um		5.6MszX		DAV	82.53	84 eP	15 30.00	-0.7		iSPP	36 31.00		
N	17s	2.70um				MBL	83.39	113 eP	15 35.00	0.1		i	37 05.00		
E	13s	2.40um				SHK	84.08	56 eP	15 38.50	0.2		e	37 48.00		
TIY	67.53	54 eP	14 03.70	-0.9		NWAO	84.53	125 ePd	15 41.05	0.5		e	39 00.00		
	8.0s	1.90nm		3.3mb X				epPc	15 44.19	10kmX		eSS	41 49.00		
Z	17s	7.80um		6.0MszX		MAJO	88.08	53 ePd	15 56.93	-1.0		eRScS	44 32.00		
E	15s	5.60um						epPc	16 00.41	11kmX		eSSS	46 12.00		
		PP	16 38.50			MAT	88.08	53 iP-	15 57.20	-0.8		e	49 16.00		
		S	23 04.50			Z	20s	2.48um		5.6Msz		e	52 44.00		
		SS	27 12.00					eS	26 40.00			eLR	02 19.00		
GZH	68.59	70 P	14 10.00	-1.3		YSS	88.70	42 iPd	16 00.00	-0.6	PRI	129.38	342 e(PKP)	22 19.00	2.3X
	8.0s	2.40nm		3.4mb X				eS	26 40.00		TPC	129.58	336 ePKP	22 20.00	2.9X
Z	52s	8.80um		5.6MszX		SCH	90.72	327 eP	16 10.00	0.0		e	24 31.00		
N	15s	1.50um				MBC	91.26	356 eP	16 14.50	2.4	S88	129.74	338 ePKP	22 20.00	2.6X
E	13s	1.00um					1.5s	88.00nm		5.9mb	GLA	129.99	334 ePKP	22 20.00	2.1
		PP	16 45.00			BDF	92.85	255 ePd	16 22.46	1.8	PEC	130.20	337 PKP	22 20.90	2.6X
		S	23 18.00					epPc	16 24.95	8kmX	PAS	130.35	338 ePKP	22 20.00	1.5
WHN	69.10	62 eP	14 14.00	-0.3		BAO	92.93	255 eP	16 23.50	2.5X		e	25 53.00		
	8.0s	2.43nm		3.4mb X		WRA	96.37	109 P	16 38.00	1.4		ePP	27 06.00		
Z	20s	2.51um		5.5Msz			1.0s	8.50nm		5.2mb		eS	36 10.00		
N	20s	6.23um				ASPA	96.63	113 eP	16 38.10	0.4		ePPS	36 44.00		
E	16s	1.90um					1.2s	18.00nm		5.5mb		eSS	42 42.00		
		S	23 20.00			GUMO	99.65	74 eP	16 36.70	-14.8X		eSSS	48 08.00		
HKC	69.42	71 P	14 16.00	-0.3			99.89	358 eP	16 53.00	1.4	PLM	130.56	336 ePKP	22 21.00	1.8
BJI	70.51	52 eP	14 23.00	0.3		SVW	105.89	9 ePKP	21 46.40	15.4X	BAR	131.08	336 ePKP	22 12.00	-8.0X
	8.0s	1.86nm		3.3mb X		PMR	106.20	5 ePKP	21 43.90	12.5X		S.D. = 1.1 on 339 of 382 obs.			
Z	32s	6.20um		5.7MszX			1.8s	59.50nm							
N	19s	5.15um				Z	22s	3.00um		5.8Msz					
		ePP	17 00.00			FFC	106.88	339 ePKP	21 44.00	11.0X					
		eS	23 42.00				1.7s	55.00nm							
		eSS	28 20.00			EDM	111.69	344 ePKP	21 24.00	-18.2X					
TIA	71.28	56 P	14 26.70	-0.8		ZOBO	112.15	257 (PKP)	21 27.00	-17.8X					
Z	22s	4.70um		5.7Msz				LR	58 28.00						
N	13s	2.30um				RSSD	116.13	333 PKP	21 54.20	2.9X					
E	13s	3.30um				PNT	116.84	346 ePKP	21 53.00	0.8					
DAG	71.88	348 iPd-	14 28.20	-2.2		LRM	117.99	340 ePKP	21 58.20	3.4X					
	1.4s	137.21nm		5.9mb		BW06	119.54	336 PKP	21 59.00	1.2					
Z	21s	2.72um		5.5Msz		LON	119.75	347 PKP	21 59.40	1.6					
NJ2	72.88	60 iPd	14 36.00	-1.1		GLD	120.12	331 PKP	22 01.10	2.2					
	6.5s	1.30nm		3.2mb X		GOL	120.23	331 PKP	22 02.50	3.3X					
N	12s	1.80um				MSU	124.21	335 PKP	22 07.80	0.9					
E	13s	1.60um				ALO	124.49	328 ePKP	22 10.60	3.1X					
		PP	17 18.00			Z	22s	3.15um		5.9Msz					
QZH	73.22	67 eP	14 38.00	-1.1				ePP	23 51.00						
Z	23s	2.90um		5.5MszX											
E	13s	1.90um													

* AUG 21, 1989 05h 05m 45.39±0.81s
11.821 N ±15.1km 41.732 E ±10.6km
DEPTH = 10.0km (geophysicist)
5.3mb (10 obs.)

ETHIOPIA (558)
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 11C
Centroid Location:
Origin Time 05:05:53.5 0.7
Lat 11.92N FIX; Lon 41.71E FIX
Dep 15.0 FIX Holf-duration 2.3
Moment Tensor: Scale 10¹⁷ Nm
Mrr=-4.22 1.24 Mtt= 5.31 1.72
Mff=-1.09 0.89 Mrt= 0.00 0.00
Mrf= 0.00 0.00 Mtf=-4.15 0.95
Principal Axes:

21d 05h

T Val= 7.35 Plg= 0 Azm=206
 N -3.13 0 116 NKY
 P -4.22 90 180
 Best Double Couple: Mo=5.8*10**17
 NP1: Strike=296 Dip=45 Slip=-90
 NP2: 116 45 -90

ARO 1.13 105 P 06 06.55 -0.1
 S 06 24.05
 TRI 41.31 330 iPd 13 34.40 1.7
 ZST 41.69 335 i(P) 13 36.30 0.5
 VKA 42.07 335 i(P) 13 39.80 0.9
 BRG 45.07 335 iP 14 02.30 -0.9
 1.6s 60.00nm 5.3mb
 KIC 46.17 267 P 14 12.52 0.1
 TIC 46.39 268 P 14 14.12 -0.1
 LIC 46.47 267 P 14 14.90 0.1
 0.9s 29.00nm 5.3mb
 DOU 48.82 329 P 14 20.90 -11.8X
 WTS 48.98 332 eP 14 34.50 0.6
 1.0s 49.00nm 5.5mb
 WIT 49.59 333 eP 14 40.00 1.4
 NUR 50.21 349 eP 14 43.00 -0.2
 0.5s 21.10nm 5.4mb
 SUF 52.03 351 iP 14 56.10 -0.9
 0.7s 12.50nm 5.0mb
 HFS 52.50 343 eP 14 58.20 -2.4
 1.0s 35.90nm 5.3mb
 NB2 53.96 342 P 15 10.30 -1.1
 1.1s 50.60nm 5.5mb
 EKA 55.71 331 Pd 15 22.88 -1.4
 0.9s 18.40nm 5.1mb
 DLE 56.36 327 eP 15 28.30 -0.6
 SOD 56.39 353 iP 15 28.80 -0.2
 DMU 56.84 328 eP 15 31.60 -0.8
 KEV 58.64 354 iP 15 47.20 2.5
 0.6s 23.50nm 5.5mb
 ALE 80.18 353 eP 17 58.00 1.1
 WRA 96.37 109 P 19 20.00 3.7X
 0.8s 2.40nm 4.8mb
 S.D. = 1.2 on 20 of 22 obs.

* AUG 21, 1989 05h 06m 00.20 ± 0.75s
 31.587 S ± 9.3km 68.643 W ± 10.6km
 DEPTH = 110.3 ± 15.6 km

SAN JUAN PROVINCE, ARGENTINA (137)

ZON 0.05 323 iPd 06 16.00 0.1
 eS 06 28.00
 FCH 2.23 218 iPc 06 37.80 0.8
 iS 31 24.00
 PEL 2.32 228 iPc 06 38.90 0.9
 iS 07 05.50
 PCH 2.57 217 iPd 06 41.00 -0.3
 iS 07 13.00
 MRA 2.63 109 iPc 06 43.00 1.1
 TACH 2.83 223 iPd 06 43.40 -1.2
 iS 07 17.00
 CHCH 2.89 215 eP 06 45.40 -0.1
 iS 07 19.40
 RFA 3.18 177 iPc 06 48.60 -0.8
 CYA 3.99 39 ePd 06 59.00 -1.4
 ZOBO 15.26 2 P 09 32.20 0.8
 S.D. = 1.1 on 10 of 10 obs.

? AUG 21, 1989 06h 11m 53.17 ± 1.75s
 40.015 N ± 11.6km 23.808 E ± 18.5km
 DEPTH = 10.0km (geophysicist)

GREECE (364)

PAIG 0.13 228 ePgd 11 56.30 0.0
 eSg 11 59.40
 OUR 0.35 23 ePgc 12 00.50 0.2
 eSg 12 06.70
 SRS 1.11 352 ePb 12 13.50 -0.6
 eSb 12 30.80
 KNT 1.34 329 ePb 12 18.20 0.4
 eSb 12 37.90
 S.D. = 0.7 on 4 of 4 obs.

AUG 21, 1989 06h 19m 53.28 ± 0.26s
 43.185 N ± 3.7km 18.100 E ± 2.7km
 DEPTH = 5.0km (geophysicist)

YUGOSLAVIA (383)
 MD 3.4 (TTG). ML 2.9 (LJU).

BRY 0.43 131 iPgc 20 02.00 0.0

20 08.50
 20 07.50 -1.0
 20 20.50
 20 08.50 -0.6
 20 21.70
 20 12.00 -1.5
 20 29.70
 20 14.40 -0.7
 20 33.70
 20 15.70 -0.4
 20 33.10
 20 18.00 0.0
 20 39.50
 20 21.00 0.3
 20 43.80
 20 21.00 0.0
 20 44.30
 20 23.50 1.8
 20 24.80 1.6
 20 28.00 0.6
 20 31.60 3.1X
 20 32.00 0.2
 20 33.20 0.9
 20 38.00 4.7X
 21 11.00
 20 39.80 1.0
 20 44.50
 21 16.00
 21 23.00
 21 28.70
 20 38.50 -1.6
 20 41.00 0.2
 20 44.40 0.8
 20 53.90
 21 22.00
 21 30.40
 21 35.60
 20 45.00 1.2
 20 43.80 -0.3
 21 21.10
 20 50.40 4.9X
 20 46.10 0.0
 20 46.88 0.2
 21 23.72
 20 48.48 1.1
 20 46.30 -1.0
 20 51.10 2.6X
 21 47.50
 20 49.20 -0.3
 20 47.50 -2.0
 20 50.40 0.0
 20 49.60 -1.2
 20 52.40 0.9
 20 53.50 1.6
 21 00.50
 21 39.00
 20 53.40 0.1
 20 54.00 0.5
 20 54.00 0.1
 21 38.00
 20 53.50 -0.3
 20 58.50 4.3X
 21 43.00
 20 56.00 -0.4
 20 56.90 0.4
 21 44.90
 20 56.90 -0.7
 20 58.80 0.2
 21 49.00
 21 04.00 0.8
 21 04.00 0.2
 21 03.00 -1.9
 21 14.00 3.1X
 22 07.00
 21 31.20 18.2X
 22 17.40
 22 00.00 45.2X
 21 16.00 -0.9
 22 14.00
 21 54.00 27.9X
 21 31.00 -0.2
 21 35.00 -0.1
 23 02.90
 S.D. = 0.9 on 44 of 53 obs.

? AUG 21, 1989 06h 46m 40.27 ± 10.57s
 11.533 N ± 98.6km 42.481 E ± 152.6km

DEPTH = 10.0km (geophysicist)
 4.4mb (3 obs.)

ETHIOPIA (558)

ABHA 6.68 2 iPc 48 32.00 10.0X
 8NG 24.71 255 ePc 52 03.60 0.5
 0.5s 4.00nm 4.3mb
 8CAO 24.73 255 eP 52 02.80 -0.5
 ZST 42.26 335 iP 54 35.50 0.2
 KHC 44.49 333 iP 54 53.40 -0.2
 e 58 08.10
 HFS 53.00 342 eP 55 54.00 -5.2X
 0.7s 5.10nm 4.6mb
 NB2 54.46 342 P 56 10.00 0.0
 1.0s 4.40nm 4.4mb
 S.D. = 0.5 on 5 of 7 obs.

* AUG 21, 1989 06h 49m 39.01 ± 1.31s
 51.681 N ± 17.4km 179.729 W ± 9.3km
 DEPTH = 110.5 ± 10.8 km
 4.4mb (4 obs.)

ANDREANOF ISLANDS, ALEUTIAN IS. (7)

ADK 1.90 83 iPc 50 11.50 0.3
 SMY 3.94 288 eP 50 38.50 0.1
 SDN 12.01 65 eP 52 25.90 -1.6
 KDC 16.79 58 eP 53 27.20 -1.2
 TTA 16.94 39 eP 53 31.60 1.3
 PMS 19.05 48 eP 53 54.10 -0.7
 IMA 19.50 32 eP 54 02.00 2.4
 MBC 33.54 22 eP 56 09.50 0.1
 0.7s 17.00nm 5.0mb
 ALE 42.43 10 eP 57 23.00 -0.5
 0.6s 8.00nm 4.7mb
 KVN 43.83 82 eP 57 36.20 0.6
 MSU 47.80 78 eP 58 07.00 0.0
 PLM 48.25 87 eP 58 11.40 0.9
 GLA 49.72 86 eP 58 22.00 0.4
 GOL 51.14 73 eP 58 31.80 -0.8
 ALO 53.60 78 e(P) 58 51.00 8.2
 1.0s 2.50nm 4.2mb
 NB2 67.29 354 P 00 21.70 -1.5
 0.7s 1.90nm 4.1mb
 S.D. = 1.2 on 16 of 16 obs.

AUG 21, 1989 06h 52m 58.52 ± 0.42s
 48.074 N ± 3.3km 5.380 W ± 4.0km
 DEPTH = 33.0km (normal)

NORTH ATLANTIC OCEAN (402)

MD 4.5 (STR). mbLg 4.2 (MDD).
 Felt (IV) on Sein Island and in
 the western part of Bretagne,
 France.

BST 0.91 75 iPgc 53 15.80 0.8
 LPF 2.91 89 Pn 53 45.30 1.8
 Pg 53 54.50
 Sg 54 31.80
 GRR 3.04 82 Pn 53 47.20 1.8
 Pg 53 56.60
 Sg 54 34.40
 FLN 3.33 76 Pn 53 51.20 1.6
 Pg 54 02.00
 Sn 54 28.00
 Sg 54 45.00
 LDF 3.55 80 Pn 53 54.00 1.4
 Pg 54 05.60
 Sn 54 33.00
 Sg 54 51.80
 MFF 3.85 111 Pn 53 58.40 1.5
 Sg 55 02.80
 ECP 4.16 352 eP 54 02.30 1.1
 eS 54 46.20
 ECB 4.39 349 eP 54 05.30 0.8
 eS 54 52.70
 ETA 4.66 354 eP 54 08.80 0.5
 eS 55 00.20
 YRH 4.79 5 eP 54 11.70 1.5
 eS 55 04.00
 EMON 4.04 197 iP 54 10.60 -0.3
 eS 55 01.30
 VAL 4.98 323 iP 54 57.00 44.1X
 LSF 5.05 109 Pn 54 14.60 0.6
 Sn 55 11.10
 Sg 55 38.40
 LFF 5.26 124 Pn 54 18.00 1.2
 Sg 55 49.10

21d 07h

NUR 50.23 349 eP 16 37.00 0.6
Z 22s 0.80um 4.7msz
LR 38 50.00
LDF 50.49 325 eP 16 37.30 -1.3
1.2s 20.20nm 4.9mb
LPF 50.72 324 eP 16 39.20 -1.2
1.2s 29.70nm 5.1mb
WMO 50.75 42 eP 16 40.50 -0.3
Z 24s 1.10um 4.8mszX
FLN 50.78 325 eP 16 39.60 -1.2
0.8s 13.40nm 4.9mb
GRR 50.80 324 eP 16 39.90 -1.1
1.2s 29.70nm 5.1mb
SUF 52.05 351 iP 16 49.50 -0.8
0.8s 15.70nm 5.0mb
HFS 52.52 343 eP 16 51.80 -2.0
0.8s 9.10nm 4.8mb
Z 16s 0.22um 4.3mszX
LR 38 45.00
NB2 53.98 342 P 17 02.80 -1.8
1.1s 21.90nm 5.1mb
EKA 55.72 331 Pc 17 16.60 -0.8
1.0s 10.30nm 4.8mb
GTA 58.04 51 eP 17 32.00 -2.3
XAN 64.64 58 P 18 18.00 -0.9
ALE 80.20 353 eP 19 51.00 0.9
S.D. = 1.1 an 84 of 89 obs.

AUG 21, 1989 07h 12m 59.58 ± 0.96s
37.151 N ± 9.2km 21.135 E ± 5.1km
DEPTH = 10.0km (geophysicist)
SOUTHERN GREECE (368)
ML 3.3 (ATH).

ITM 0.63 87 ePg 13 11.60 -0.7
VLS 1.11 337 ePg 13 19.60 -0.8
ATH 2.21 67 ePn 13 37.00 0.2
NEO 2.71 37 ePb 13 45.30 1.3
KEK 2.76 338 ePg 13 56.10 11.4X
SRN 2.87 342 ePn 13 55.20 -9.1X
LSK 3.02 352 ePn 13 40.10 -8.3X
VAM 3.03 124 ePn 13 53.50 5.1X
KZN 3.19 9 ePn 13 51.50 0.7
TPE 3.26 345 ePn 14 00.50 8.8X
BERA 3.66 346 ePn 14 05.70 8.2X
PLG 3.69 29 ePn 13 57.80 -0.1
OHR 3.96 356 ePn 14 02.30 0.6
SOI 4.14 284 P 14 04.00 -0.1
eSn 14 48.00
VAY 4.31 15 ePn 14 05.80 -0.8
TDS 4.52 305 P 14 13.00 3.3X
PHP 4.56 353 ePn 14 05.70 -4.5X
LACI 4.61 347 ePn 14 10.50 -0.4
SKO 4.82 3 e(Pn) 14 04.50 -9.4X
MMB 4.87 24 eP 14 14.00 -0.6
KKB 4.94 17 eP 14 16.00 0.4
GIB 5.71 281 P 14 27.00 0.4
S.D. = 0.7 an 13 of 22 obs.

* AUG 21, 1989 08h 52m 38.69s
60.626 N 151.456 W
DEPTH = 57.8km
KENAI PENINSULA, ALASKA (14)
<AGS-P>.

NKA 0.16 42 iP 52 49.42 1.7
RDT 0.47 264 iP 52 49.99 -0.4
eS 52 59.55
SLKM 0.62 100 iP 52 51.48 -0.5
SPU 0.63 333 iP 52 51.81 -0.3
eS 53 02.53
RED 0.68 253 iP 52 52.26 -0.5
CKL 0.72 323 iP 52 53.01 -0.2
SUA 0.91 22 iP 52 55.47 -0.2
eS 53 09.57
BRK 0.91 162 eP 52 55.00 -0.6
eS 53 08.46
ILIM 0.93 234 iP 52 55.15 -0.7
eS 53 08.82
CNPM 1.11 174 iP 52 57.54 -0.8
PMS 1.11 55 iPd 52 57.80 -0.6
SEW 1.13 117 eP 52 57.70 -0.8
eS 53 14.16
XLV 1.18 187 eP 52 58.24 -1.0
eS 53 13.36
OPT 1.32 223 iP 53 00.85 -0.4
eS 53 18.69

PMR 1.49 48 iPd 53 02.30 -1.2
PDB 1.60 240 iP 53 03.66 -1.4
AUW 1.62 220 eP 53 04.71 -0.6
KNK 1.66 60 iP 53 04.77 -1.2
GHO 1.68 46 iP 53 05.02 -1.2
eS 53 26.31
KNIM 1.86 97 iP 53 06.03 -2.7
eS 53 28.12
CDD 2.03 214 iP 53 10.38 -0.7
SVW 2.09 285 ePc 53 09.80 -2.2
GLI 2.16 81 eP 53 09.85 -3.0
VZW 2.44 78 eP 53 14.10 -2.8
eS 53 43.56
FID 2.45 85 eP 53 13.50 -3.5
eS 53 41.25
HUR 2.51 19 eP 53 15.91 -2.0
eS 53 46.32
KLU 2.83 70 iP 53 19.95 -2.5
eS 53 51.66
KDC 2.94 191 eP 53 21.10 -2.8
TOA 2.95 57 ePc 53 22.80 -1.3
TTA 3.17 319 iPc 53 25.50 -1.7
FBA 4.61 20 iPc 53 45.90 -1.5
31 obs. associated

% AUG 21, 1989 08h 57m 50.71 ± 1.01s
37.813 N ± 11.2km 15.024 E ± 6.1km
DEPTH = 10.0km (geophysicist)

SICILY (398)
MNO 0.29 295 P 57 57.50 0.7
ATN 0.49 45 P 58 02.00 1.3
GIB 0.81 283 P 58 06.00 -0.4
SOI 0.86 72 P 58 07.00 -0.2
eSg 58 28.50
FAI 1.20 244 P 58 13.00 0.0
TDS 2.11 29 P 58 26.00 -0.5
LVI 2.13 275 P 58 27.00 0.2
MGR 2.36 10 P 58 28.50 -1.6
DUI 3.87 354 P 58 52.00 0.4
S.D. = 0.9 an 9 of 9 obs.

? AUG 21, 1989 09h 04m 11.15 ± 2.69s
12.300 N ± 33.7km 41.250 E ± 56.5km
DEPTH = 10.0km (geophysicist)
4.2mb (2 abs.)

ETHIOPIA (558)
ABHA 6.09 14 eP 05 42.50 -1.2
LWI 19.02 221 iPc 08 35.60 -0.3
BNG 23.76 253 iPc 09 24.90 0.1
0.4s 4.00nm 4.3mb
TAB 26.06 9 eP 09 48.00 1.4
NB2 53.37 342 P 13 32.90 0.1
0.9s 2.10nm 4.1mb
S.D. = 1.3 an 5 of 5 obs.

* AUG 21, 1989 09h 24m 53.64 ± 0.94s
44.663 N ± 7.8km 12.049 E ± 9.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
MD 2.8 (TRI).

SFI 0.76 191 P 25 08.50 0.1
BDI 1.20 241 P 25 16.00 -0.1
eSg 25 31.00
ARV 1.33 151 P 25 18.00 -0.2
TRI 1.60 49 e(Pg) 25 26.90 4.9X
i(Sg) 25 51.10
ASS 1.65 164 P 25 23.00 0.1
eSg 25 44.00
VOY 1.89 43 ePn 25 31.10 4.8X
eSn 26 07.00
RBL 2.07 30 P 25 29.00 0.0
S.D. = 0.2 an 5 of 7 obs.

AUG 21, 1989 09h 33m 41.17 ± 0.85s
17.055 N ± 8.2km 99.405 W ± 7.8km
DEPTH = 46.7 ± 7.9 km
3.9mb (5 abs.)
GUERRERO, MEXICO (59)

ACX 0.47 247 iP 33 50.68 -1.3
iS 33 56.93
IIT 2.22 28 iP 34 16.27 -0.2
(S) 34 50.00
UNM 2.27 5 iP 34 17.00 -0.3

(S) 34 58.00
TAC 2.35 5 (P) 34 21.00 2.7X
(S) 34 54.00
CRX 2.35 354 (P) 34 18.00 -0.4
OXX 2.56 89 iP 34 22.60 1.2
iS 35 03.28
IIC 2.70 3 iP 34 23.64 0.1
IISM 2.72 45 iP 34 23.67 0.2
iS 35 06.06
SMMM 2.74 13 (P) 34 18.51 -5.3X
MRX 3.13 328 (P) 34 33.27 4.0X
(S) 35 14.09
EVV 4.11 70 (P) 34 17.00 -26.1X
(S) 35 14.00
AGX 5.52 331 (P) 35 05.00 2.0
SCX 6.49 92 (P) 35 23.00 6.4X
TPX 7.19 106 (P) 35 11.50 -15.0X
MEO 17.67 2 iPd 37 45.70 0.1
ALO 18.90 342 eP 38 00.20 -0.6
0.9s 2.73nm 3.5mb
e 38 10.50
e 38 17.50
e 40 11.80
e 44 08.00
e 53 56.00
e 55 28.00

OLY 19.69 20 eP 38 07.50 -1.9
FVM 22.29 19 eP 38 35.00 -0.9
1.0s 8.00nm 4.1mb
PLM 22.59 319 eP 38 41.20 2.1
GOL 23.15 348 eP 38 44.10 -0.5
0.9s 4.55nm 3.9mb
BW06 27.06 343 eP 39 22.00 0.5
1.0s 2.50nm 3.8mb
LRM 30.68 342 eP 39 54.00 0.1
SES 34.55 347 eP 40 28.00 0.7
PNT 36.11 337 eP 40 52.00 11.5X
FFC 37.65 358 eP 40 53.00 -0.3
0.7s 8.00nm 4.7mb
EDM 37.71 346 eP 40 53.00 -0.9
ZOBO 45.25 135 P 41 57.00 0.3
S.D. = 1.1 an 20 of 27 obs.

AUG 21, 1989 10h 18m 20.93 ± 0.88s
43.398 N ± 5.5km 5.425 E ± 6.9km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.5 (STR).

GELF 0.01 172 Pg 18 22.43 -0.4
BERF 0.21 114 Pg 18 25.81 0.2
TREF 0.23 353 Pg 18 25.33 -0.5
PUYF 0.24 56 Pg 18 25.12 -1.0
PRAF 0.45 336 Pg 18 30.34 0.3
VILF 0.50 25 Pg 18 30.26 -0.8
TAVF 0.51 64 Pg 18 30.78 -0.5
GANF 0.69 30 Pg 18 34.87 0.2
TOUF 1.46 64 Pn 18 47.86 0.4
Sg 19 09.01
AURF 1.47 70 Pn 18 47.28 -0.2
Sg 19 09.36
FOUF 1.50 40 ePg 18 49.72 1.9
eSg 19 08.57
AUTN 1.57 67 Pn 18 49.42 0.3
SAOF 1.65 60 Pn 18 50.40 0.3
S.D. = 0.8 an 13 of 13 obs.

% AUG 21, 1989 10h 52m 16.90 ± 1.05s
37.777 N ± 11.5km 14.937 E ± 6.6km
DEPTH = 10.0km (geophysicist)

SICILY (398)
MNO 0.25 309 P 52 23.00 0.8
eSg 52 29.00
GIB 0.75 287 P 52 31.00 -0.7
SOI 0.93 71 P 52 35.00 0.3
FAI 1.12 244 P 52 38.00 0.1
TDS 2.17 30 P 52 53.00 -0.6
MGR 2.41 11 P 52 57.00 0.1
S.D. = 0.7 an 6 of 6 obs.

% AUG 21, 1989 10h 54m 12.68 ± 1.00s
37.844 N ± 14.1km 14.951 E ± 7.8km
DEPTH = 10.0km (geophysicist)

SICILY (398)
ATN 0.51 52 P 54 23.50 0.4

GIB 0.75 282 P 54 28.00 0.7
 SOI 0.90 75 P 54 30.00 0.1
 FAI 1.16 241 P 54 34.00 -0.4
 MGR 2.34 11 P 54 51.00 -0.8
 S.D. = 0.8 on 5 of 5 obs.

% AUG 21, 1989 10h 58m 45.78 ± 0.86s
 62.547 N ± 10.1km 7.688 E ± 7.5km
 DEPTH = 10.0km (geophysicist)

SOUTHERN NORWAY (535)
 MD 2.1 (BER).

MOL 0.07 290 iPg 58 48.10 0.0
 eSg 58 50.70

RGS 1.35 68 eP 59 10.60 0.0
 eS 59 30.00

HYA 1.56 208 iP 59 14.10 0.6
 eS 59 32.50

ASK 2.39 211 iP 59 25.00 -0.6
 NRA0 2.59 133 iPg 59 33.00 4.6X
 eS 59 59.30

NRA0 2.59 133 iPc 59 28.30 -0.1
 S.D. = 0.6 on 5 of 6 obs.

% AUG 21, 1989 12h 24m 37.77 ± 2.57s
 60.113 N ± 6.8km 4.498 E ± 22.4km
 DEPTH = 10.0km (geophysicist)

SOUTHERN NORWAY (535)
 MD 2.0 (BER).

BER 0.50 57 eP 24 47.90 0.0
 iS 24 55.20

ASK 0.51 43 iP 24 47.80 -0.3
 eS 24 54.90

KMY 0.98 157 iP 24 56.30 -0.1
 eS 25 10.50

ODD1 1.09 100 iP 24 58.30 0.0
 eS 25 12.80

HYA 1.35 37 iP 25 02.70 0.2
 eS 25 21.40

BLS1 1.38 121 iP 25 03.20 0.0
 eS 25 23.00

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

& AUG 21, 1989 12h 38m 00.40s
 61.672 N 149.818 W

DEPTH = 36.0km
 SOUTHERN ALASKA (2)
 <AGS-P>.

PWA 0.04 234 iP 38 06.46 0.1
 PLRM 0.34 103 iP 38 07.98 -0.8
 eS 38 14.79

PME 0.38 96 iP 38 08.57 -0.8
 eS 38 15.75

GHO 0.44 76 eP 38 09.24 -1.0
 eS 38 17.33

SUA 0.49 245 eP 38 10.23 -0.8
 eS 38 18.66

KNK 0.70 111 iP 38 12.92 -1.0
 eS 38 24.86

SKT 0.87 292 iP 38 15.10 -1.2
 eS 38 27.25

CGLM 1.11 252 eP 38 19.26 -0.5
 SLKM 1.18 190 eP 38 20.03 -0.7
 eS 38 35.75

HUR 1.31 4 eP 38 22.09 -0.5
 eS 38 38.86

GLI 1.54 120 iP 38 24.55 -1.4
 eS 38 44.86

KNIM 1.67 142 iP 38 25.43 -2.4
 RDT 1.67 230 eP 38 26.84 -1.1
 eS 38 48.47

VZV 1.69 110 eP 38 27.27 -0.9
 TOA 1.78 74 eP 38 29.46 0.0
 RND 1.80 14 eP 38 28.89 -0.8
 FID 1.86 118 eP 38 28.52 -2.0
 eS 38 52.86

KLU 1.87 94 iP 38 29.43 -1.3
 KTH 1.96 345 eP 38 31.27 -0.7
 CNPM 2.26 199 eP 38 36.34 0.1

20 obs. associated

? AUG 21, 1989 13h 06m 00.62 ± 4.34s
 51.284 N ± 30.8km 16.053 E ± 27.1km
 DEPTH = 10.0km (geophysicist)

POLAND (548)

KSP 0.47 161 iP 06 10.00 -0.1
 1.4s 160.00nm

iS 06 18.50
 06 24.50

BRG 1.39 254 iPg 06 25.20 -0.8
 iSg 06 45.10

PRU 1.62 217 Pn 06 29.90 0.7
 ePg 06 31.00
 Sn 06 47.70
 Sg 06 52.00

CLL 1.91 272 ePg 06 34.00 0.4
 eSg 06 59.00

KHC 2.68 217 ePn 06 44.40 -0.2
 Pg 06 50.00
 Sn 07 12.90
 Sg 07 32.50

MOX 2.88 259 ePg 06 53.00 5.7X
 iPg 07 33.00

ZST 3.17 167 eP 07 46.20 54.8X
 S.D. = 0.8 on 5 of 7 obs.

% AUG 21, 1989 13h 12m 21.27 ± 2.59s
 37.768 N ± 28.4km 15.063 E ± 8.0km
 DEPTH = 10.0km (geophysicist)

SICILY (398)

MNO 0.33 299 P 12 28.00 -0.3
 SOI 0.84 69 P 12 37.00 -0.5
 GIB 0.85 285 P 12 38.00 0.3
 TDS 2.13 27 P 12 59.00 1.6
 MGR 2.40 9 P 13 00.00 -1.2
 S.D. = 1.5 on 5 of 5 obs.

% AUG 21, 1989 13h 13m 57.68 ± 2.19s
 37.726 N ± 22.1km 15.124 E ± 6.6km
 DEPTH = 10.0km (geophysicist)

SICILY (398)

MNO 0.40 301 P 14 06.00 0.1
 ATN 0.51 32 P 14 08.00 0.0
 eSg 14 18.00

SOI 0.81 65 P 14 13.50 0.1
 eSg 14 27.00

GIB 0.91 287 P 14 15.00 -0.1
 TDS 2.15 26 P 14 34.00 -0.1
 S.D. = 0.1 on 5 of 5 obs.

% AUG 21, 1989 13h 16m 52.08 ± 1.36s
 40.561 N ± 17.1km 106.055 E ± 9.4km
 DEPTH = 33.0km (normal)

NORTHERN CHINA (323)
 ML 4.1 (BJI).

BTO 3.02 88 Pn 17 39.40 0.6
 Pg 17 46.00
 Sg 18 24.20

HHC 4.20 84 Pn 17 55.00 -0.5
 Pg 18 07.00
 Sg 19 01.40

LZH 4.79 202 Pn 18 05.50 1.5
 Pg 18 16.50
 Sg 19 14.50

GTA 4.93 259 Pn 18 05.40 -0.5
 Pg 18 21.60
 Sn 19 03.20
 Sg 19 24.00

TIY 5.72 118 ePn 18 17.50 0.6
 Pg 18 32.90
 Sn 19 21.40

XAN 6.90 160 Pn 18 31.80 -1.7
 Pg 18 54.70
 Sn 19 44.50

BJI 7.75 91 Pg 19 10.00 24.6X
 Sg 20 47.00

S.D. = 1.5 on 6 of 7 obs.

AUG 21, 1989 13h 23m 44.52 ± 0.62s
 4.853 S ± 7.9km 146.792 E ± 9.1km
 DEPTH = 33.0km (normal)

4.4mb (3 obs.) 4.0Msz (1 obs.)
 EAST PAPUA NEW GUINEA REGION (207)

LAT 1.80 173 iPd 24 13.20 -0.5
 MNDI 3.38 247 eP 24 43.00 6.6X
 PMG 4.54 175 eP 24 51.50 -1.2
 RAB 5.40 83 e(P) 25 03.00 -1.9
 JAY 6.50 291 ePc 25 20.30 -0.2

CTA 15.15 182 eP 27 20.00 2.1
 1.2s 46.88nm 4.6mb

MTN 17.38 242 eP 27 47.00 0.7
 GUMO 18.42 354 eP 28 05.30 6.1X
 WRA 19.29 218 Pc 28 07.10 -2.5
 0.5s 1.50nm 3.5mb

KNA 20.76 237 eP 28 24.50 -0.7
 RMO 21.60 175 eP 28 35.00 1.3
 ASPA 22.46 212 eP 28 43.30 1.0

Z 21s 0.68um 4.0Msz
 eS 32 50.00
 LR 37 22.70

MNI 22.81 285 eP 28 47.00 1.2
 BRS 23.13 166 eP 28 54.00 5.1X
 DZM 25.60 134 iPc 29 14.50 1.8
 WARB 28.66 220 eP 29 40.20 -0.4
 COOL 35.39 220 eP 30 38.00 -1.5
 KLB 38.06 222 eP 31 00.40 -1.5
 BAL 38.19 224 eP 31 02.30 -0.7
 LOE 49.68 298 eP 32 36.40 0.7
 KMI 52.14 307 Pc 32 55.50 1.0
 XAN 52.67 320 eP 32 56.80 -1.3
 CD2 54.33 314 P 33 10.20 -0.2
 LSA 63.39 307 P 34 15.00 1.1
 WMO 71.79 319 eP 35 05.50 -0.5
 QUE 83.68 301 eP 36 12.00 0.0
 SPA 85.18 180 e(P) 36 21.00 2.3
 0.9s 3.64nm 4.6mb

S.D. = 1.4 on 24 of 27 obs.

AUG 21, 1989 14h 13m 47.29 ± 0.80s
 39.801 N ± 5.7km 30.393 E ± 8.9km
 DEPTH = 10.0km (geophysicist)

TURKEY (366)
 Felt at Eskisehir.

GPA 0.49 353 iPg 13 59.00 1.7
 ALT 0.78 196 iPg 14 00.90 -1.6
 eSg 14 13.10

YLV 1.09 315 iPn 14 08.80 0.9
 HRT 1.16 332 ePn 14 09.40 0.4
 GBZT 1.22 324 ePn 14 09.40 -0.6
 iSg 14 28.10

DST 1.38 262 iPn 14 12.80 0.3
 ISK 1.62 322 ePn 14 15.40 -0.6
 KHL 1.62 205 iPn 14 16.90 0.8
 KCT 1.63 287 ePn 14 15.00 -1.1
 BBTK 1.82 88 iPc 14 18.00 -1.0
 iS 14 53.00

BNT 1.98 287 iPn 14 24.80 3.6X
 CTT 2.01 313 ePn 14 20.00 -1.7
 EDC 2.02 286 iPn 14 25.00 3.3X
 IZM 2.81 241 ePn 14 37.00 3.9X
 KAS 3.01 58 ePn 14 40.00 4.1X
 iSg 15 23.00

ELL 3.07 187 ePn 14 39.00 2.1
 EZN 3.13 272 ePn 14 38.00 0.4
 YER 3.14 213 ePn 14 44.70 7.0X
 S.D. = 1.3 on 13 of 18 obs.

* AUG 21, 1989 14h 30m 14.73 ± 1.13s
 41.354 N ± 10.4km 23.382 E ± 8.0km
 DEPTH = 10.0km (geophysicist)

GREECE-BULGARIA BORDER REGION (363)

MMB 0.35 48 iPgc 30 21.00 -1.0
 Sg 30 26.00

KNT 0.41 242 ePc 30 23.20 0.0
 eS 30 23.60

KKB 0.56 336 iPc 30 25.00 -1.1
 Sg 30 33.00

RZN 1.06 71 eP 30 35.00 0.2
 S 30 53.00

VTS 1.24 354 iPg 30 39.00 1.1
 iSg 30 57.00

PGB 1.33 26 eP 30 40.00 0.7
 S 30 57.00

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

AUG 21, 1989 14h 47m 19.55 ± 0.97s
 5.587 N ± 5.6km 124.566 E ± 9.4km
 DEPTH = 62.8 ± 11.4 km
 4.6mb (6 obs.)

MINDANAO, PHILIPPINE ISLANDS (259)

DAV 1.80 34 iPd- 47 50.00 1.2
 MNI 4.13 176 ePd 48 20.30 -1.3

21d 14h

PCI 7.99 216 eS 49 05.20
 ePd 49 14.00 -1.5
 eS 50 03.50
 AAI 9.90 158 eP 49 42.00 0.3
 MTN 19.44 160 eP 51 44.00 0.1
 OIZ 19.61 314 Pc 51 45.50 -0.2
 KNA 21.60 169 eP 52 07.50 1.4
 IPM 23.47 269 ePc 52 27.30 2.8X
 LOE 25.23 300 eP 52 41.80 0.4
 SSE 25.57 353 eP 52 44.80 0.4

Z 20s 0.50um 4.0msz
 eS 57 29.00
 NST 25.99 295 eP 52 50.00 1.6
 GYA 26.89 322 P 52 57.40 0.7
 WRA 27.13 159 Pc 53 02.20 3.4X
 0.8s 4.30nm 4.1mb

CHG 28.23 300 eP 53 09.00 0.2
 CHTO 28.23 300 eP 53 08.80 0.0
 1.0s 8.00nm 4.3mb

KMI 28.55 315 Pc 53 12.50 0.6
 ASPA 30.47 163 eP 53 30.40 1.6
 0.7s 8.00nm 4.6mb

XAN 31.81 335 Pc 53 43.20 -0.5
 CD2 31.89 325 P 53 41.60 0.4
 MAT 33.25 20 eP 53 51.00 -1.9
 0.9s 10.92nm 4.7mb

CTA 33.25 141 iPc 54 08.20 15.1X
 1.3s 38.46nm
 TIY 33.84 343 Pc 53 58.00 -0.1

Z 16s 1.00um 4.6mszX
 BJ1 35.12 349 eP 54 08.00 -0.9
 SNY 36.10 359 Pc 54 15.60 -1.5
 HHC 36.99 344 eP 54 25.00 0.1

BTO 37.22 342 P 54 27.00 0.2
 LSA 39.60 311 eP 54 48.00 0.7
 GTA 40.41 330 Pc 54 54.10 0.7
 BRS 42.64 142 eP 55 20.00 8.3X

DZM 49.36 125 iPd 56 20.80 15.7X
 WMO 49.98 325 P 56 09.60 0.1

Z 18s 0.50um 4.6msz
 eS 03 22.00
 QUE 59.34 302 eP 57 17.60 -0.4
 MAIO 66.68 307 eP 58 03.00 -3.3X

MSL 79.81 306 ePc 59 22.00 -0.9
 SUF 88.93 333 iP 00 07.00 -1.2
 0.4s 4.70nm 5.1mb

NUR 90.04 331 eP 00 15.00 1.5
 NB2 96.17 333 PKP 00 39.80 -2.0
 0.9s 3.20nm 4.9mb

ZOBO 163.64 131 ePKP 07 31.00 13.2X
 S.D. = 1.1 on 31 of 38 obs.

AUG 21, 1989 15h 23m 07.30 ± 0.62s
 40.414 N ± 5.3km 142.266 E ± 9.8km
 DEPTH = 59.0 ± 12.7 km
 4.3mb (2 obs.)

NEAR EAST COAST OF HONSHU, JAPAN(228)
 Felt (1 JMA) at Hachinohe and Moriako.

HAC 0.57 281 iPd 23 19.10 -1.0
 iS 23 27.50

MRK 1.11 230 eP 23 27.00 0.1
 S 23 39.80

OFUJ 1.41 199 P 23 30.90 -0.1
 S 23 48.30

AOMJ 1.45 276 P 23 31.70 0.1
 HOOJ 2.11 21 P 23 42.20 1.4
 S 24 08.40

MRRJ 2.20 336 P 23 41.80 -0.2
 S 24 08.50

YAMJ 2.83 218 eP 23 50.90 -0.1
 KUSJ 3.25 33 P 23 56.00 -0.9
 S 24 32.40

ASAJ 3.71 4 P 24 03.70 0.3
 NIJ 4.07 220 P 24 09.30 0.9
 KAKJ 4.51 202 P 24 12.90 -1.7
 MAT 5.01 221 iPc 24 22.10 0.4
 0.8s 14.18nm 4.2mb

eS 25 36.00
 CHJJ 5.06 212 P 24 22.50 0.0
 MTMJ 5.18 224 P 24 24.60 0.4
 IIDJ 6.01 216 P 24 36.60 0.9
 NB2 71.33 337 P 34 21.70 -0.6
 0.9s 3.40nm 4.3mb
 S.D. = 0.9 on 16 of 16 obs.

? AUG 21, 1989 16h 24m 54.46 ± 6.93s
 37.244 N ± 52.6km 21.002 E ± 32.1km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN GREECE (368)
 ML 3.4 (ATH).

VLS 0.99 341 ePg 25 13.00 -0.2
 ATH 2.27 71 ePn 25 32.70 0.1
 KEK 2.64 339 ePg 25 48.60 10.8X
 NEO 2.70 40 ePn 25 38.40 -0.3
 KZN 3.12 11 ePn 25 45.20 0.6
 OHR 3.87 358 ePn 25 52.00 -3.3X
 VAY 4.25 16 eP 26 00.50 -0.1
 SKO 4.73 4 ePn 25 54.50 -13.1X

S.D. = 0.5 on 5 of 8 obs.

* AUG 21, 1989 16h 43m 48.73 ± 1.30s
 31.708 S ± 9.4km 68.921 W ± 10.4km
 DEPTH = 104.4 ± 13.6 km
 SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.24 25 iPd 44 04.00 -0.2
 ZON 0.26 52 iPd 44 04.00 -0.2
 eS 44 16.00

RTCV 0.36 115 iPc 44 05.00 0.6
 RTBS 0.46 276 iP 44 05.00 0.2
 RTLL 0.54 46 iPd 44 05.00 -0.5
 CFA 0.59 80 iPd 44 06.00 0.1

RTRS 1.60 343 iPc 44 17.00 0.2
 MRA 2.02 105 iPc 44 33.00 0.2
 RFA 3.08 173 iPc 44 36.20 -0.3

S.D. = 0.4 on 9 of 9 obs.

* AUG 21, 1989 18h 10m 36.94 ± 0.96s
 12.072 N ± 11.6km 41.680 E ± 17.9km
 DEPTH = 10.0km (geophysicist)
 4.6mb (3 obs.)

ETHIOPIA (558)

ABHA 6.23 9 eP 12 12.60 -0.8
 SHI 20.19 28 eP 15 17.00 0.2
 BHD 21.25 6 ePc 15 28.00 0.5
 e 22 31.50

BNG 24.10 254 iPc 15 56.10 0.2
 0.8s 12.00nm 4.5mb
 MSL 24.24 3 ePc 16 01.50 4.5X

BUL 34.50 202 eP 17 29.60 0.0
 ZST 41.44 335 eP 18 28.20 0.9
 KHC 43.66 333 P 18 46.00 0.5

PRU 43.90 335 eP 18 27.50 -19.8X
 KIC 46.13 267 P 19 05.00 -0.7
 NUR 49.96 349 iP 19 34.80 0.0

SUF 51.78 351 eP 19 49.00 0.3
 0.8s 8.90nm 4.7mb
 NB2 53.71 342 P 20 02.00 -1.1
 1.0s 5.70nm 4.5mb

FRB 87.95 335 eP 23 45.00 15.0X
 S.D. = 0.7 on 11 of 14 obs.

AUG 21, 1989 18h 25m 41.05 ± 0.08s
 4.104 S ± 2.0km 154.459 E ± 2.3km
 DEPTH = 493.5km (geophysicist)
 5.8mb (48 obs.)

SOLOMON ISLANDS (193)

mb 5.8 (BRK). Two events about 3.5 seconds apart. Depth from broadband displacement seismograms, based on second event.

FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=105 Dip=85 Slip= 70
 NP2: 2 21 166

Principal Axes:
 T P1g=46 Azm=354
 P 37 213

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

RADIATED ENERGY
 No. of sta: 8 Focal mech. C
 Energy 0.2 ± 0.1 * 10¹⁵ Nm

MOMENT TENSOR SOLUTION

Dep 482 No. of sta: 15
 Moment Tensor: Scale 10¹⁸ Nm
 Mrr= 1.30 Mtt=-0.10
 Mff=-1.20 Mrt= 5.33
 Mrf=-1.72 Mtf= 1.92

Principal axes:
 T Vol= 5.98 P1g=49 Azm= 0
 N 0.14 18 112
 P -6.13 36 215

Best Double Couple: Mo=6.1 * 10¹⁸
 NP1: Strike=359 Dip=19 Slip= 159
 NP2: 109 83 72

CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 34C M.W.: 13S, 22C

Centroid Location:
 Origin Time 18:25:48.0 ± 0.2
 Lat 4.155 ± 0.01 Lon 154.31E ± 0.01
 Dep 489.2 ± 0.8 Half-duration 7.0

Moment Tensor: Scale 10¹⁸ Nm
 Mrr= 0.83 0.05 Mtt= 0.25 0.07
 Mff=-1.08 0.08 Mrt= 7.54 0.07
 Mrf=-1.96 0.07 Mtf= 0.19 0.07

Principal Axes:
 T Vol= 8.27 P1g=46 Azm= 12
 N -0.90 4 105
 P -7.37 43 199

Best Double Couple: Mo=7.8 * 10¹⁸
 NP1: Strike=354 Dip= 4 Slip= 159
 NP2: 105 89 86

RAB 2.29 268 iPc+ 26 48.00 0.3
 VSG 7.31 135 eP 27 30.00 -1.3
 SVO 7.31 134 eP 27 30.00 -1.3
 HNR 7.60 134 ePc 27 33.00 -1.3

eS 29 03.00
 LAT 7.85 251 iPd 27 37.50 0.6
 PMG 8.97 234 iPc+ 27 49.60 0.9

MNDI 10.95 259 eP 28 11.00 1.0
 JAY 13.82 276 ePc 28 37.20 -2.7
 0.7s 604.10nm 6.2mb

CTA 17.79 206 iPd- 29 20.80 1.3
 iS 32 14.00
 iScP 36 22.00
 iScS 40 05.00

CTAO 17.79 206 ePd 29 20.76 1.3
 ed 29 25.23
 PVC 19.18 136 iPd 29 33.00 0.0
 iS 32 51.00

GUA 19.93 332 eP 29 40.00 -0.2
 GUMO 19.99 332 eP 29 40.20 -0.6
 PJG 19.99 332 eP 29 40.40 -0.4

DZM 21.31 148 iPd 29 52.00 -1.1
 iS 33 16.20
 RMO 22.92 193 iPd 30 07.40 -0.3
 e 31 13.00

iScP 36 35.40
 e 40 02.00
 BRS 23.21 184 iPc+ 30 09.00 -0.6
 iS 32 57.00
 iScP 36 37.00

iScS 40 04.40
 OLP 24.40 203 iPd 30 20.80 -0.3
 iScP 36 39.50
 e 40 16.00

MTN 24.63 248 iPd 30 22.70 -0.6
 WRA 25.15 230 Pc 30 27.10 -0.8
 0.7s 246.20nm 5.8mb

AAI 26.21 270 ePd 30 37.40 0.1
 0.5s 133.20nm 5.7mb
 eS 34 43.00

COO 26.44 185 iP 30 39.70 0.4
 e 34 41.00
 iScP 36 46.20

KNA 27.78 244 iPd 30 50.10 -1.0
 0.4s 269.00nm 6.1mb
 ASPA 27.79 224 iPd 30 50.20 -0.9
 1.1s 1545.00nm 6.4mb

Z 21s 14.84um 5.5msz
 eS 34 56.90
 e 36 46.00
 e 40 41.00

LR 41 06.80
 CMS 28.42 196 iPd 30 56.10 -0.4
 e 32 16.00
 e 36 51.20

e 40 51.00

FBA 80.55 21 iP 46 54.50 -0.1 1.0s 50.00nm 5.0mb	ML 3.9 (PRE).	BNG 47.98 46 iPd 01 50.00 0.9 1.0s 29.00nm 5.3mb
SPA 85.88 180 ePd 47 05.70 -15.6X 1.0s 65.00nm	JOZ 2.41 34 iPd 58 33.00 0.6 S 59 03.00	LWI 50.20 62 iPd 02 08.20 1.7 ZOBO 51.28 275 P 02 13.80 -1.3 2 20s 0.38um 4.4msz LR 18 12.00
HFS 116.78 339 ePKP 53 20.80 -1.1 0.4s 1.30nm	UMT 2.63 216 iPd 58 34.50 -1.0 S 59 08.50	MAW 55.55 153 eP 02 46.00 0.6 SPA 57.78 180 e(P) 03 02.80 1.2 0.9s 5.00nm 4.5mb
SPC 120.87 327 e(PKP) 53 48.00 17.7X	SEK 2.83 293 iPc 58 46.50 8.0X S 59 25.00	CLL 86.70 17 eP 06 03.00 10.2X S.D. = 1.3 on 10 of 11 obs.
FRS 121.05 232 iPKPd 53 45.50 14.5X 0.4s 33.90nm	PRY 3.73 312 eP 58 53.50 2.2 S 59 45.50	? AUG 21, 1989 21h 21m 35.41± 3.16s 12.096 N ± 39.6km 41.648 E ± 43.6km DEPTH = 10.0km (geophysicist) 4.6mb (3 obs.)
KSR 121.38 236 ePKP 53 33.40 1.4 1.0s 30.00nm	BFT 3.80 353 iPc 58 41.00 -11.3X S 59 25.00	ETHIOPIA (558)
PRU 123.35 330 ePKP 53 35.50 0.7 1.0s 21.70nm	BLF 3.85 274 eP 58 56.50 3.5X BPI 3.99 325 eP 58 55.50 0.6 S 59 46.50	ABHA 6.21 10 eP 23 08.50 -1.1 RYD 13.41 20 eP 24 57.00 8.7X SHI 20.18 28 eP 26 13.00 -0.2 BNG 24.08 254 iPd 26 51.40 -0.7 0.6s 13.00nm 4.7mb
VAY 123.50 318 ePKP 53 40.00 -0.1 CER 123.78 225 e(PKP) 53 30.00 -6.2X SKO 123.94 319 iPKP 53 33.20 -3.0X i 53 35.60 i 56 37.60 i 01 40.00 i 04 32.00 i 06 28.00	BFS 4.22 307 eP 58 46.00 -12.2X SLR 4.24 331 eP 58 57.00 -1.5 (S) 59 45.00 HVD 4.55 254 iPc 59 20.00 17.1X S 00 18.00	MAIO 28.98 31 eP 27 42.00 4.6X ZST 41.41 335 eP 29 27.10 3.6X KHC 43.62 333 eP 29 41.90 8.2 NUR 49.93 349 iP 30 33.50 2.4 SUF 51.75 351 iP 30 48.00 3.1X 0.6s 4.70nm 4.6mb
KHC 124.38 330 PKP 53 30.70 -6.2X 1.0s 14.00nm	FRS 4.59 265 iPc 59 06.50 3.3X S 00 19.00	NB2 53.68 342 P 30 58.70 -0.7 1.0s 5.40nm 4.5mb S.D. = 1.7 on 6 of 10 obs.
KBA 125.83 328 iPKPc 53 26.60 -13.4X 1.6s 36.20nm	KSR 4.86 317 eP 58 08.60 -58.7X 0.4s 13.64nm e 59 06.90	AUG 21, 1989 21h 54m 31.46± 0.77s 35.731 N ± 7.9km 26.930 E ± 5.7km DEPTH = 10.0km (geophysicist)
EKA 125.95 345 PKP 53 24.00 -15.7X 1.5s 59.10nm	KIM 5.13 277 eP 59 15.50 4.5X SWZ 5.16 295 eP 59 09.00 -2.6 S 00 10.00	CRETE (370) ML 4.1 (ATH).
PPD 143.55 137 ePKP 54 11.20 -2.1 S.D. = 0.8 on 47 of 56 obs.	SUR 8.88 248 eP 00 04.50 0.8 S 01 50.00	KAP 0.27 132 ePg 54 36.70 -0.4 NPS 1.17 247 ePb 54 51.90 -1.5 APE 1.75 320 ePb 55 00.60 -1.5 YER 1.78 37 iPn 55 02.70 0.2 CIN 2.08 26 eP 55 06.00 -0.9 KSL 2.19 79 ePn 55 09.60 1.2 VAM 2.25 263 ePg 55 12.70 3.4X ELL 2.61 66 ePn 55 16.00 1.4 IZM 2.68 6 ePn 55 14.00 -1.4 KHL 3.32 38 iPn 55 24.80 0.3 ATH 3.41 312 ePn 55 27.70 1.9 DST 4.10 19 eP 55 35.00 -8.5 EZN 4.12 353 eP 55 34.00 -1.7 ALT 4.17 36 eP 55 35.00 -1.7 BBTK 6.18 47 eP 56 05.00 0.0 OHR 7.21 320 eP 56 20.00 0.5 e 56 27.50
AUG 21, 1989 19h 29m 31.84± 1.67s 17.648 S ± 21.8km 73.653 W ± 15.1km DEPTH = 33.0km (normol) OFF COAST OF PERU (114) Felt (II) of Arequipo.	POF 9.27 268 eP 00 11.00 2.1 BUL 9.46 349 iPnd 00 02.70 -9.0X iSn 01 46.00 iSg 02 44.80	DSI 8.17 118 eP 56 22.00 -10.9X PRNI 8.64 126 eP 56 27.00 -12.5X MBH 8.95 129 eP 56 33.00 -10.7X MGR 10.00 299 P 56 58.50 0.3 KHC 16.59 328 eP 58 27.50 1.9 CLL 18.51 332 eP 58 51.00 1.6 S.D. = 1.3 on 18 of 22 obs.
ARE 2.38 61 iPc 30 08.70 -1.0 iS 30 28.50	WIN 13.93 296 eP 01 11.50 -0.6 S 03 49.20	& AUG 21, 1989 21h 54m 44.70s 11.278 N 87.046 W DEPTH = 0.0km NEAR COAST OF NICARAGUA (74) <HDC>. MD 4.2 (HDC).
PT03 4.18 330 iP 30 35.50 0.5	BCAO 35.64 339 (P) 04 52.00 -0.4 KIC 49.21 311 P 06 38.00 -4.0X TIC 49.60 311 P 06 42.00 -3.9X S.D. = 1.7 on 10 of 21 obs.	RIN3 1.71 106 eP 55 16.80 0.8 S 55 42.30
PT06 4.59 325 iP 30 41.00 0.2 iS 31 27.30	AUG 21, 1989 20h 26m 27.92± 1.44s 37.176 N ± 13.4km 21.152 E ± 7.5km DEPTH = 10.0km (geophysicist) SOUTHERN GREECE (368) ML 3.4 (ATH).	JUD 1.84 127 eP 55 19.20 1.2 S 55 46.20
PT02 5.39 330 iP 30 52.60 0.4 iS 31 38.80	ITM 0.62 89 ePg 26 39.80 -0.6 VLS 1.09 336 ePg 26 46.90 -1.6 ATH 2.19 68 ePg 27 10.90 6.1X NEO 2.68 37 ePn 27 12.40 0.5 KEK 2.75 338 ePg 27 19.60 6.8X SRN 2.85 342 ePn 27 21.10 6.9X LSK 3.00 352 ePn 27 18.60 2.2 VAM 3.03 125 ePg 27 29.60 12.8X LIT 3.10 19 eP 27 22.20 4.4X KZN 3.16 9 ePb 27 22.40 3.7X KBN 3.45 356 ePn 27 22.00 -0.7 BERA 3.64 345 ePn 27 25.60 0.1 LCI 4.02 323 P 27 36.00 5.1X SOI 4.14 284 P 27 32.00 -0.6 eSn 30 54.00	JTS 2.28 115 eP 55 25.40 1.2 CAO 2.47 129 eP 55 28.10 1.1 S 56 02.30 EPA 2.73 118 eP 55 31.80 1.2 S 56 08.50
LPB 5.43 79 P 30 56.00 3.0X	POF 9.27 268 eP 00 11.00 2.1	POA2 2.96 111 eP 55 35.50 1.4 HDC2 3.13 113 eP 55 37.80 1.5 S 56 19.20
ZOBO 5.47 76 iPc 30 55.70 2.0	BUL 9.46 349 iPnd 00 02.70 -9.0X	IRZ2 3.36 113 eP 55 41.40 1.5 OPS 3.42 123 eP 55 41.80 1.4 CDM 3.65 118 eP 55 45.30 1.2 CTCR 4.84 119 eP 56 00.90 0.1
CNCB 5.48 82 iPc 30 57.30 3.4X	WIN 13.93 296 eP 01 11.50 -0.6	
HUA 5.81 344 eP 30 57.80 -0.6 eS 31 20.20	BCAO 35.64 339 (P) 04 52.00 -0.4 KIC 49.21 311 P 06 38.00 -4.0X TIC 49.60 311 P 06 42.00 -3.9X S.D. = 1.7 on 10 of 21 obs.	
PT08 6.31 333 iP 31 05.60 0.2 iS 32 09.80	AUG 21, 1989 20h 26m 27.92± 1.44s 37.176 N ± 13.4km 21.152 E ± 7.5km DEPTH = 10.0km (geophysicist) SOUTH ATLANTIC RIDGE (410)	
CCH 7.17 89 eP 31 22.00 4.6X	ITM 0.62 89 ePg 26 39.80 -0.6 VLS 1.09 336 ePg 26 46.90 -1.6 ATH 2.19 68 ePg 27 10.90 6.1X NEO 2.68 37 ePn 27 12.40 0.5 KEK 2.75 338 ePg 27 19.60 6.8X SRN 2.85 342 ePn 27 21.10 6.9X LSK 3.00 352 ePn 27 18.60 2.2 VAM 3.03 125 ePg 27 29.60 12.8X LIT 3.10 19 eP 27 22.20 4.4X KZN 3.16 9 ePb 27 22.40 3.7X KBN 3.45 356 ePn 27 22.00 -0.7 BERA 3.64 345 ePn 27 25.60 0.1 LCI 4.02 323 P 27 36.00 5.1X SOI 4.14 284 P 27 32.00 -0.6 eSn 30 54.00	
PPD 21.46 105 eP 34 21.60 2.0 e 34 26.90	TIR 4.21 18 eP 27 34.50 1.0 TIR 4.28 347 ePn 27 34.20 -0.4 VAY 4.28 14 ePn 27 28.00 -6.6X TDS 4.52 305 P 27 40.00 2.0 PHP 4.54 353 ePn 27 38.40 0.2 LACI 4.59 346 ePn 27 37.40 -1.5 SKO 4.80 3 ePn 27 39.00 -2.9X SDA 5.00 346 ePn 27 44.40 -0.3 SGO 5.67 308 P 27 54.00 -0.3 S.D. = 1.2 on 14 of 23 obs.	
PDCR 33.69 86 eP 36 10.60 -1.7 e 36 11.60	KNT 4.21 18 eP 27 34.50 1.0 TIR 4.28 347 ePn 27 34.20 -0.4 VAY 4.28 14 ePn 27 28.00 -6.6X TDS 4.52 305 P 27 40.00 2.0 PHP 4.54 353 ePn 27 38.40 0.2 LACI 4.59 346 ePn 27 37.40 -1.5 SKO 4.80 3 ePn 27 39.00 -2.9X SDA 5.00 346 ePn 27 44.40 -0.3 SGO 5.67 308 P 27 54.00 -0.3 S.D. = 1.2 on 14 of 23 obs.	
LIC 71.76 77 P 40 52.50 -0.9	AUG 21, 1989 19h 57m 52.26± 1.63s 29.472 S ± 12.5km 30.581 E ± 15.4km DEPTH = 10.0km (geophysicist) REPUBLIC OF SOUTH AFRICA (584)	
KIC 72.07 77 P 40 54.00 -1.3 0.7s 14.00nm 5.1mb X S.D. = 1.4 on 11 of 14 obs.		
AUG 21, 1989 19h 46m 43.52± 1.00s 41.820 N ± 6.9km 22.853 E ± 10.3km DEPTH = 10.0km (geophysicist) YUGOSLAVIA (383) ML 2.1 (SKO).		
VAY 0.54 203 iPg 46 54.50 0.0 iSg 47 02.00		
KNT 0.66 177 ePc 46 56.80 0.2		
MMB 0.69 109 eP 46 57.00 -0.3 Sg 47 07.00		
VTS 0.81 19 iP 46 59.00 -0.4 iSg 47 11.00		
PCB 1.22 53 Pg 47 07.00 0.8 Sg 47 22.00		
RZN 1.40 95 eP 47 09.00 -0.3 S 47 29.00 S.D. = 0.6 on 6 of 6 obs.		

21d 21h

11 obs. associated

AUG 21, 1989 23h 12m 41.44 ± 0.14s
 24.094 N ± 2.9km 122.478 E ± 2.8km
 DEPTH = 42.8km (7 depth phases)
 5.6mb (64 obs.) 6.3msz (17 obs.)
 TAIWAN REGION (243)
 Ms 5.8 (BRK). Felt throughout
 Taiwan. Also felt (11 JMA) on
 Yanoguni-jimo and (1 JMA) on
 Ishigaki-shimo, Ryukyu Islands.
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 25C M.W.: 9S, 19C
 Centroid Location:
 Origin Time 23:12:43.1 0.1
 Lat 23.85N 0.01 Lon 122.27E 0.03
 Dep 23.8 1.4 Half-duration 5.3
 Moment Tensor; Scale 10¹⁸ Nm
 Mrr= 1.43 0.05 Mtt=-1.54 0.04
 Mff= 0.12 0.05 Mrt= 2.32 0.25
 Mrf= 0.57 0.09 Mtf= 0.14 0.03
 Principal Axes:
 T Vol= 2.82 Plg=59 Azm=336
 N 0.01 9 82
 P -2.82 29 177
 Best Double Couple: Mo=2.8*10¹⁸
 NP1: Strike=291 Dip=18 Slip= 120
 NP2: 79 75 81

YOJ 0.62 53 eP 12 54.00 0.2
 TWC 0.77 312 iPd 12 55.70 -0.2
 TWD 0.81 269 ePc 12 54.90 -1.6
 TWZ 1.29 321 ePc 13 05.20 1.9
 TWF1 1.31 236 ePc 13 01.90 -1.7
 ANP 1.39 321 iPc 13 05.00 0.2
 ISI 1.56 81 iP+ 13 07.60 0.5
 OZH 3.64 284 Pc 13 34.80 -1.9
 Z 12s 100.00um 4.4msz
 SSE 7.07 351 Pc 14 23.20 -1.8
 0.5s 0.12nm
 N 14s 323.00um 3.0mb X
 HKC 7.85 259 P 14 33.00 -2.9
 BAG 7.85 193 ePc- 14 32.00 -4.1X
 MCO 8.44 258 eP 14 44.30 0.2
 NJ2 8.55 339 Pc 14 43.00 -2.5
 N 13s 184.00um
 WHN 9.67 313 Pc 15 00.00 -1.0
 0.7s 0.05nm 2.8mb X
 Z 20s 76.50um 6.0msz X
 E 10s 64.30um
 KAGJ 10.27 45 eP 15 07.70 -1.5
 KUMJ 11.17 39 eP 15 21.80 0.3
 SHNJ 12.52 35 eP 15 45.30 5.8X
 OIZ 12.79 249 Pd 15 43.50 0.3
 N 15s 50.70um
 E 14s 30.00um
 TIA 12.93 340 P 15 04.00
 7.0s 7.80nm 3.8mb X
 N 14s 337.00um
 E 12s 136.00um
 SHK 13.68 38 eP 15 55.00 0.1
 GYA 14.50 283 iPc 16 07.00 1.2
 5.0s 3.30nm 3.1mb X
 Z 14s 54.60um 4.7msz X
 E 12s 88.50um
 DL2 14.78 357 Pc 16 12.00 2.7
 6.0s 8.80nm 3.3mb X
 N 10s 62.80um
 E 10s 32.30um
 XAN 15.43 313 P 16 17.80 -0.1
 N 11s 70.10um

E 10s 40.00um
 TIY 16.06 330 iPc 16 29.00 3.1X
 6.5s 15.00nm 3.3mb X
 N 10s 66.20um
 TSRJ 16.33 43 P 16 30.10 0.8
 BJI 16.76 343 Pc+ 16 35.50 0.9
 7.0s 15.20nm 3.2mb X
 N 14s 82.50um
 DAV 17.17 170 eP- 19 48.00 -1.9
 e 20 00.00
 IIDJ 17.53 46 P 16 46.00 1.7
 SNY 17.71 3 IPc 16 46.00 -0.4
 7.0s 14.90nm 3.2mb X
 N 13s 124.00um
 E 16s 346.00um
 CD2 17.93 296 iPd 16 49.00 -0.3
 Z 16s 50.00um
 KMI 17.98 277 iPc+ 16 52.00 1.9
 9.0s 8.20nm 2.9mb X
 E 14s 113.90um
 MAT 18.36 44 eP 16 53.00 -1.6
 1.3s 59.62nm 4.6mb
 CHJJ 18.58 46 P 16 56.70 -0.5
 KKM 18.93 200 ePc 17 01.50 -0.2
 1.1s 143.70nm 5.1mb
 HHC 19.05 334 P 17 03.40 0.4
 Z 20s 161.00um
 N 14s 76.10um
 E 14s 55.50um
 NIJJ 19.29 43 P 17 06.70 1.1
 KAKJ 19.45 48 P 17 04.00 -3.4X
 BTO 19.50 331 iPc 17 08.00 0.0
 8.0s 8.90nm 3.1mb X
 N 13s 94.80um
 E 13s 76.30um
 CN2 19.81 6 Pc 17 09.30 -1.9
 7.0s 10.40nm 3.3mb X
 Z 17s 150.00um 4.7msz
 E 13s 118.00um
 LZH 20.03 311 eP 17 14.00 0.2
 6.0s 6984.00nm 6.2mb X
 Z 30s 68.00um 5.8msz X
 N 15s 61.00um
 E 14s 78.40um
 LOE 20.50 255 eP 17 18.40 -0.1
 YAMJ 20.51 43 eP 17 20.30 1.7
 MDJ 21.28 14 eP 17 24.00 -2.3
 N 16s 94.90um
 OFUJ 22.08 43 P 17 29.20 -5.1X
 AOMJ 22.25 38 eP 17 36.90 0.9
 CHG 22.51 261 ePc 17 39.30 0.5
 1.0s 92.00nm 5.2mb
 NST 22.60 252 eP 17 45.00 5.4X
 MNI 22.63 174 eP 17 28.50 -11.5X
 BDT 22.98 257 eP 17 45.20 1.9
 0.8s 57.10nm 5.1mb
 GUMO 23.59 112 eP 17 50.00 0.7
 1.5s 1936.94nm 6.4mb
 PJG 23.59 112 eP 17 50.00 0.7
 GUA 23.65 112 eP 17 50.40 0.5
 1.8s 2436.36nm 6.4mb
 Z 20s 40.14um 5.9msz
 MRRJ 23.91 36 P 17 50.20 -1.9

NNT 24.39 246 eP 17 59.40 2.3
 GTA 24.49 314 Pc 17 57.60 -0.4
 7.5s 6.10nm 3.2mb X
 Z 15s 67.10um 6.3msz X
 E 13s 62.50um
 pP 18 10.00 50km
 sP 18 16.50
 S 22 16.00
 sS 22 34.00
 PCI 24.98 186 ePc 18 05.00 2.3
 1.5s 3.00nm 3.6mb X
 HOOJ 25.10 38 P 18 00.60 -3.0
 S 22 27.30
 ASAJ 25.91 35 eP 18 08.80 -2.4
 KUSJ 26.36 39 eP 18 13.80 -1.5
 SNG 26.87 235 eP 18 22.60 2.3
 eS 22 52.00
 YSS 28.02 30 iPc 18 27.00 -3.4X
 eS 23 32.00
 AAI 28.17 168 eP 18 31.10 -0.9
 IPM 28.35 230 ePd 18 34.60 0.9
 1.0s 76.20nm 5.3mb
 LSA 28.44 288 iPc 18 35.50 0.6
 E 16s 24.80um
 KGM 28.73 223 eP 18 38.00 1.0
 MKS 29.28 186 iPd 18 40.00 -2.0
 TSI 30.85 232 ePd 19 08.50 12.6X
 IRK 31.37 338 iPc 18 58.00 -2.2
 eS 24 04.00
 WMO 34.57 313 P 19 27.50 -0.7
 7.0s 1.50nm 3.0mb X
 Z 14s 16.30um 5.9msz X
 SS 27 03.50
 MTN 37.68 166 eP 19 51.80 -2.7
 PET 39.72 34 eP 20 08.00 -3.2X
 eS 26 06.00
 KNA 40.07 171 eP 20 12.00 -2.5
 RAB 40.33 130 e(P) 20 18.00 1.3
 eS 26 38.00
 NDI 40.62 287 iPc 20 19.00 0.0
 PMG 41.11 141 eP 20 22.50 -0.5
 HYB 41.48 269 eP 20 28.00 1.8
 KSH 41.93 303 P 20 31.90 2.1
 6.0s 3.20nm 3.2mb X
 Z 16s 57.40um 6.5msz X
 E 16s 64.00um
 ePP 22 15.00
 eS 26 50.00
 SS 29 52.00
 FRU 43.44 308 ePc 20 42.50 0.5
 eS 27 12.00
 GBA 43.72 265 P 20 47.00 2.6
 KOD 44.96 260 eP 20 56.00 1.2
 eS 27 36.00
 MBL 45.05 183 eP 20 52.50 -2.5
 WRA 45.27 164 Pc 20 55.50 -1.3
 0.7s 59.50nm 5.6mb
 POO 45.46 273 iPc 21 00.30 1.8
 iS 27 39.50
 BOM 46.31 274 eP 20 56.50 -8.6X
 eS 27 53.50
 NANU 46.87 189 eP 21 10.00 0.7
 OIS 47.41 158 eP 21 13.00 -0.7
 TIK 47.71 3 eP 21 15.00 -0.4
 eS 26 37.00
 ASPA 48.75 166 iPc 21 23.20 -0.9
 0.5s 102.00nm 6.1mb
 Z 21s 8.86um 5.7msz
 eS 28 25.30
 LR 41 31.00
 SVO 49.20 128 eP 21 34.00 6.3X
 QUE 49.38 290 iP+ 21 29.10 -0.1
 eS 28 32.00
 HNR 49.49 128 eP 21 44.00 14.1X
 CTA 49.65 150 iPc 21 31.00 0.0
 1.6s 236.67nm 6.0mb
 Z 22s 30.22um 6.3msz
 i 21 46.00 57kmX
 iS 28 40.00
 WARB 50.14 175 eP 21 33.30 -1.4
 0.4s 27.00nm 5.6mb
 OLP 54.59 156 eP 22 07.00 -0.9
 e 22 19.00 42km
 FORR 54.90 174 eP 22 09.50 -0.5
 0.5s 30.00nm 5.6mb
 MAIO 54.93 298 iPc+ 22 11.00 0.5
 1.0s 63.50nm 5.6mb

22d 06h

& AUG 22, 1989 06h 07m 32.10s
40.555 N 123.748 W
DEPTH = 42.0km
NORTHERN CALIFORNIA (36)
<BRK>. ML 3.2 (BRK).

FHC 0.31 324 iPd 07 39.20 -1.4
iS 07 45.30
WDC 0.92 88 iPc 07 47.50 -1.2
iS 07 59.50
LTCM 1.29 105 eP 07 56.00 2.1
LBFM 1.61 60 eP 07 58.60 -0.2
MIN 1.65 97 ePc 07 57.50 -1.7
iS 08 18.00
ORV 1.99 119 eP 08 03.90 -0.1
eS 08 24.80
KVN 4.60 107 e(P) 08 39.30 -1.9
7 obs. associated

AUG 22, 1989 06h 27m 02.72±0.59s
5.030 S ± 3.4km 151.386 E ± 4.6km
DEPTH = 132.6 ± 5.3 km
5.2mb (18 obs.)

NEW BRITAIN REGION (192)

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 12S, 23C

Centroid Location:

Origin Time 06:27: 6.6 1.0

Lat 5.42S 0.09 Lon 150.94E 0.09

Dep 128.3 4.2 Holt-duration 1.5

Moment Tensor; Scale 10¹⁶ Nm

Mrr=-2.04 0.43 Mtt= 4.98 0.67

Mff=-2.94 0.67 Mrt=-0.87 0.45

Mrf=-5.05 0.47 Mtf= 0.49 0.56

Principal Axes:

T Val= 5.33 P1g=15 Azm=167

N 2.23 44 62

P -7.56 42 271

Best Double Couple: Mo=6.4*10¹⁶

NP1: Strike=300 Dip=49 Slip=-23

NP2: 45 73 -137

RAB 1.14 43 iPd- 27 26.00 -1.5
LAT 4.65 250 eP 28 13.00 0.9
PMG 6.05 224 iPd 28 31.00 -0.1
eS 29 42.00
SVO 9.31 117 eP 29 24.00 8.9X
JAY 10.95 283 ePc 29 35.70 -1.1
CTA 15.78 198 iPc 30 40.10 1.2
1.0s 45.00nm 4.7mb

QIS 19.22 216 iPd 31 34.00 -0.4
GUA 19.54 341 eP 31 23.80 1.4
0.8s 764.1Bnm 6.1mb

GUMO 19.60 341 eP 31 24.30 1.3
1.1s 650.18nm 5.9mb

PJC 19.60 341 eP 31 24.70 1.7
PVC 20.83 129 iPc 31 36.30 0.9

MTN 21.45 247 eP 31 41.00 -0.7
RMO 21.49 186 iPc 31 43.10 1.1
1.0s 142.00nm 5.3mb

WRA 22.25 227 Pc 31 50.20 0.7
0.6s 115.20nm 5.4mb

BRS 22.28 177 iPd 31 50.50 0.7
i 32 49.30
i 35 50.00

DZM 22.35 141 iPc 31 50.90 0.3
QLP 22.50 197 iPc 31 53.50 1.7

KNA 24.64 243 iPc 32 12.00 0.3
0.3s 58.00nm 5.6mb

ASPA 25.05 221 eP 32 16.30 0.0
eS 36 27.90
e 39 14.90
e 43 04.70

COO 25.42 179 iPc 32 20.80 1.1
WARB 31.66 226 iPd 33 15.20 -0.4
0.2s 17.00nm 5.5mb

FORR 33.76 218 eP 33 32.30 -1.3
0.3s 15.00nm 5.2mb

MBL 34.55 239 eP 33 39.40 -1.2
BAG 37.18 306 eP 34 03.50 0.5

MEKA 38.00 232 iPc 34 09.30 -0.3
0.3s 20.00nm 5.4mb

COOL 38.34 224 eP 34 11.30 -1.1
0.3s 12.00nm 5.2mb

NANU 38.78 240 iPd 34 15.70 -0.4

0.3s 5.00nm 4.8mb
KLB 41.12 226 eP 34 34.00 -1.3
0.3s 11.00nm 5.0mb
BAL 41.37 228 eP 34 36.60 -0.7
TCW 41.45 154 P 34 38.10 0.3
MNG 41.52 152 P 34 38.40 0.0
CAW 41.72 153 eP 34 39.70 -0.3
WDW 41.81 153 P 34 40.50 -0.3
MTW 41.96 153 P 34 41.60 -0.4
MOW 42.05 153 P 34 41.80 -1.0
MSZ 42.06 162 P 34 53.50 10.8X
e 35 32.00

BLW 42.11 153 P 34 42.70 -0.5
MUN 42.45 227 eP 34 45.20 -0.9
RKG 43.02 223 iPc 34 53.10 2.3
MAT 43.15 344 eP 34 47.00 -4.8X
1.2s 21.88nm 4.7mb

OZH 43.64 315 iPc 34 57.10 1.3
WHN 50.06 317 P 35 47.00 1.1
GYA 53.42 308 iPc 36 12.00 0.7
CN2 53.94 337 Pc 36 14.00 -0.8
PcP 37 16.00

BJI 55.31 327 eP 36 24.00 -0.7
XAN 55.82 317 P 36 28.10 -0.5
TIY 55.85 323 eP 36 28.50 -0.3
KMI 55.95 305 Pc 36 30.50 0.6
CHG 56.82 296 iPc 36 36.40 0.5
1.2s 35.55nm 5.2mb

CHTO 56.82 296 eP 36 36.00 0.1
1.2s 30.56nm 5.1mb

CD2 57.82 311 iPc 36 43.10 0.3
BTO 59.15 324 P 36 52.00 0.1
LZH 60.42 317 eP 37 00.00 -0.7
2.0s 0.05nm 2.1mb X

GTA 64.87 318 eP 37 30.00 0.0
WMO 74.96 318 P 38 30.60 -0.6
GBA 75.67 285 Pd 38 34.40 -1.2
1.0s 14.50nm 4.7mb

KSH 82.00 311 eP 39 08.50 -1.0
MAW 84.82 203 eP 39 23.00 -0.1
SPA 85.00 180 e(P) 39 20.60 -3.7X
1.0s 6.00nm 4.4mb

e 40 11.60
INK 89.17 21 eP 39 43.00 -1.1
MBC 94.67 14 eP 40 09.00 -0.4
0.6s 2.00nm 4.6mb

NB2 116.64 340 PKP 45 31.30 -1.1
1.1s 4.80nm
BUL 118.48 244 iPKPd 45 36.40 -0.9
BRG 122.16 330 iPKP 45 43.00 -0.2
0.7s 10.00nm

SKO 122.34 317 iPKP 45 43.00 -0.8
CLL 122.36 330 iPKP 45 43.00 -0.5
0.8s 9.00nm

KHC 123.40 328 PKP 45 45.70 0.0
EKA 125.83 342 PKP 45 51.00 0.8
0.6s 2.80nm

BSF 127.69 330 ePKP 45 53.70 -0.5
1.0s 12.00nm

HAU 127.79 331 ePKP 45 53.90 -0.3
1.0s 12.00nm

LPG 129.29 328 ePKP 45 57.80 0.3
0.6s 2.70nm

LOR 129.50 332 ePKP 45 57.90 0.4
0.8s 5.30nm

LBF 129.65 331 ePKP 45 58.00 0.2
0.8s 3.20nm

SSF 129.82 332 ePKP 45 58.70 0.6
0.8s 4.00nm

CVF 129.99 324 ePKP 45 58.50 -0.1
0.8s 9.10nm

FLN 130.29 336 ePKP 45 59.10 0.2
0.8s 10.70nm

FRF 130.63 326 ePKP 46 00.10 0.4
0.6s 3.60nm

GRR 130.74 336 ePKP 46 00.30 0.6
0.6s 4.30nm

LMR 130.85 326 ePKP 46 00.40 0.3
LRG 130.85 327 ePKP 46 00.50 0.4
0.8s 5.30nm

TCF 131.00 332 ePKP 46 00.60 0.2
0.8s 8.00nm

LPF 131.09 336 ePKP 46 00.90 0.5
0.8s 10.70nm

LSF 131.34 332 ePKP 46 01.10 0.1
1.0s 8.00nm

BNG 133.00 271 iPKPc 46 03.90 -1.2
0.6s 12.00nm
CNCB 135.45 120 ePKP 45 49.00 -21.3X
ZOBO 135.56 119 PKP 46 02.50 -8.1X
PPD 145.11 141 ePKP 46 25.50 -1.3
e 46 57.00
VAO 146.87 148 ePKP 46 31.90 2.1
KUK 151.87 274 ePKP 46 44.00 6.4X
S.D. = 0.9 on B2 of B9 obs.

AUG 22, 1989 07h 06m 36.60±0.68s
35.186 N ± 5.9km 3.829 W ± 7.1km
DEPTH = 10.0km (geophysicist)
STRAIT OF GIBRALTAR (385)
MD 3.8 (RBA). mbLg 3.4 (MDD).

TAF 1.22 107 iPg 06 59.00 -0.3
i 07 09.00
iSg 07 20.00
i 07 22.00

SRO 1.65 311 iP 07 05.00 -0.7
OJEN 1.66 304 iP 07 09.50 3.5X

EJIF 1.84 314 ePn 07 07.30 -1.1
MOMI 1.91 307 iP 07 11.00 1.5
IFR 1.98 213 iPn 07 11.50 0.8
iPg 07 15.00
iSn 07 38.00
iSg 07 41.00

ALJ 2.07 316 iP 07 13.00 1.1
AFC 2.08 6 eP 07 11.00 -0.3
eS 07 36.00

EPRU 2.11 328 iPb 07 14.00 1.6
eSb 07 38.50

LIJA 2.14 324 iP 07 13.00 0.1
GIBL 2.38 314 iP 07 15.00 -1.2

ENDR 2.87 337 ePn 07 23.20 0.1
eSn 07 55.50
EBAN 2.97 1 ePn 07 25.30 0.6
eSn 07 58.50

EVAL 3.36 316 ePn 07 29.00 -1.1
eSn 08 06.30

AVE 3.52 239 ePn 07 39.50 7.1X
i 07 45.20
iSn 08 10.50
i 08 17.50

EVIA 3.60 17 ePn 07 34.00 0.3
eSn 08 14.50

TOL 4.69 358 iPg 07 51.00 1.9
iSg 09 01.00

TIO 5.13 215 iPn 07 55.00 -0.5
iSn 08 54.00

EPLA 5.19 341 ePn 07 55.00 -1.2
eSn 08 51.00

GUD 5.45 357 ePn 07 58.50 -1.5
eSn 08 58.50

S.D. = 1.1 on 18 of 20 obs.

? AUG 22, 1989 07h 28m 53.60±10.23s
43.213 N ± 56.9km 18.274 E ± 40.2km
DEPTH = 10.0km (geophysicist)
YUGOSLAVIA (383)
ML 2.5 (TTG).

BRY 0.37 148 ePg 29 01.00 -0.2
eSg 29 08.10

NKY 0.66 127 ePg 29 06.60 -0.3
eSg 29 19.50

HCY 0.78 168 ePg 29 08.40 -0.4
eSg 29 21.00

BDV 1.01 156 ePg 29 13.50 0.7
eSg 29 29.50

TTG 1.07 187 ePg 29 14.00 0.3
eSg 29 30.50

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

& AUG 22, 1989 07h 29m 40.00s
60.035 N 152.686 W
DEPTH = 106.0km
SOUTHERN ALASKA (2)
<AGS-P>.

ILIM 0.14 288 iP 29 54.52 1.1
RED 0.39 354 eP 29 55.51 -0.6
eS 30 08.69

OPT 0.47 216 iP 29 55.79 -0.7
eS 30 08.17

RDT 0.56 14 iP 29 56.53 -0.6

CHILE-ARGENTINA BORDER REGION (127)

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like PEL, FCH, RTCB, etc. S.D. = 1.0 on 15 of 15 obs.

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like CMP, CLLI, BRG, PRU, ZST, etc. S.D. = 1.7 on 20 of 28 obs.

TAIWAN REGION (243)

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like TWD, TWC, TWF1, etc. S.D. = 1.7 on 6 of 8 obs.

AUG 22, 1989 11h 44m 01.67±1.54s
24.020 N ± 11.6km 122.507 E ± 17.6km
DEPTH = 33.0km (normol)
4.0mb (1 obs.)

YUGOSLAVIA (383)

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like CEY, TRI, VOY, etc. S.D. = 1.0 on 8 of 8 obs.

AUG 22, 1989 13h 20m 19.70±0.38s
44.811 N ± 3.6km 11.955 E ± 4.4km
DEPTH = 10.0km (geophysicist)

NORTHERN ITALY (545)

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like SFI, RSM, MME, etc.

AUG 22, 1989 10h 44m 57.33±1.40s
8.463 N ± 6.9km 125.704 E ± 11.1km
DEPTH = 52.4 ± 14.4 km
4.6mb (3 obs.)

MINDANAO, PHILIPPINE ISLANDS (259)

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like DAV, MNI, OCP, etc. S.D. = 1.1 on 16 of 19 obs.

AUG 22, 1989 10h 51m 52.14±0.86s
21.440 S ± 24.9km 173.534 E ± 15.3km
DEPTH = 33.0km (normol)
4.6mb (4 obs.)

VANUATU ISLANDS REGION (185)

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like DZM, BRS, RMO, etc.

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like CIO, VOY, FVI, etc.

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like PTJ, CVF, SBF, etc. S.D. = 1.0 on 26 of 35 obs.

AUG 22, 1989 14h 20m 35.14±0.85s
8.391 S ± 13.2km 158.511 E ± 9.5km
DEPTH = 33.0km (normol)
4.3mb (2 obs.)

SOLOMON ISLANDS (193)

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like SVO, HNR, etc. S.D. = 1.1 on 9 of 11 obs.

AUG 22, 1989 14h 28m 55.12±0.30s
42.217 N ± 3.4km 155.540 E ± 3.1km
DEPTH = 10.0km (geophysicist)

Table with columns: Station Name, Lat, Lon, Time, Depth, and Value. Includes stations like DUI, HVAR, SDI, etc.

22d 14h

MGR	2.08	180	P	29	28.70	-1.7
MNS	2.13	275	P	29	32.40	1.2
RMP	2.15	260	P	29	33.00	1.4
ASS	2.29	293	P	29	36.56	3.0X
ARV	2.30	305	P	29	34.30	0.6
PRO	2.57	312	ePn	29	40.30	2.9X
0.3s 1.10nm						
LCI	2.62	135	P	29	39.10	1.0
TDS	2.63	166	P	29	38.70	0.4
RSM	2.84	308	P	29	41.90	0.7
SDA	2.95	93	ePn	29	44.00	1.1
LACI	3.16	99	ePn	29	50.50	4.6X
SFI	3.19	303	P	29	48.00	1.7
PGD	3.25	302	P	29	49.02	1.7
MAO	3.26	275	P	29	47.50	0.2
VBY	3.29	357	ePn	29	49.30	1.6
VBY	3.29	357	i(Pn)	30	03.10	15.4X
TIR	3.35	104	ePn	29	50.20	1.6
BCI	3.36	86	ePn	29	51.30	2.6X
FIR	3.51	298	iPnd	29	52.50	1.8
CEY	3.61	348	e(Pn)	29	53.50	1.2
ZAG	3.61	5	iPn	29	53.20	1.0
KKS	3.62	91	ePn	30	01.00	8.6X
PHP	3.69	97	iPnc	29	53.20	-0.2
PTJ	3.69	5	ePn	29	54.00	0.5
TRI	3.72	340	eP	29	53.30	-0.5
TPE	3.88	118	ePn	29	56.00	-0.1
LJU	3.89	350	ePn	29	56.50	0.2
VOY	3.99	343	ePn	29	57.50	-0.2
MME	4.05	301	P	29	58.40	-0.3
OHR	4.09	104	iPn	29	59.30	0.2
SOI	4.16	174	P	29	59.60	-0.4
LSK	4.34	117	ePn	30	00.80	-1.9
SKO	4.40	91	ePn	30	04.00	0.6
RBL	4.45	342	P	30	05.63	1.4
CTI	4.74	325	P	30	08.20	-0.3
FVI	4.80	337	P	30	08.90	-0.2
CVF	4.95	276	Pn	30	11.10	-0.2
SAL	4.96	315	P	30	10.40	-0.9
KBA	5.11	343	e(P)	30	13.00	-0.6
BOB	5.11	302	P	30	14.20	0.6
VAY	5.33	97	ePn	30	16.00	-0.7
BZS	5.55	50	eP	30	31.00	11.3X
BHG	5.82	342	eP	30	22.00	-1.5
OSS	5.91	321	ePc	30	26.00	1.1
KMR	5.92	351	eP	30	24.00	-0.9
SRO	5.93	18	e(P)	30	35.00	10.0X
ZST	6.08	10	eP	30	34.80	7.7X
VAI	6.09	309	P	30	25.30	-2.0
VDL	6.09	317	ePd	30	27.40	-0.2
SBF	6.16	288	Pn	30	27.80	-0.6
TMA	6.17	311	ePc	30	27.00	-1.7
LLS	6.59	317	eP	30	35.50	0.9
FUR	6.67	335	iPc	31	10.10	34.6X
FRF	6.67	285	Pn	30	35.50	0.0
LMR	6.74	283	Pn	30	36.00	-0.5
LRG	6.86	283	Pn	30	37.10	-1.1
DIX	7.01	306	ePc	30	40.00	-0.5
KHC	7.05	349	ePn	30	39.90	-1.0
LPG	7.15	300	Pn	30	40.20	-2.3

LPL	7.17	300	Pn	31	58.70	-1.7
WET	7.17	346	eP	30	40.10	-2.5
PRU	7.80	355	ePn	30	50.00	-1.4
BSF	8.36	315	Pn	30	58.10	-1.2
CDF	8.50	320	Pn	31	00.40	-0.8
KSP	8.64	3	iPd	31	28.70	25.6X
BRG	8.73	353	iPg	31	46.40	42.2X
MOX	8.85	344	e(P)	31	16.00	10.0X
CLL	9.26	350	e(P)	31	22.00	10.4X
CLL	9.26	350	ePg	31	55.00	43.4X
LBF	9.52	304	Pn	31	13.70	-1.6
LOR	9.72	305	Pn	31	14.60	-3.4X
S.D. = 1.2 on 64 of 80 obs.						
AUG 22, 1989 14h 49m 54.86 ± 0.51s 37.370 N ± 6.8km 9.566 E ± 3.1km DEPTH = 10.0km (geophysicist)						
TUNISIA (397)						
LVI	2.28	74	Pd	50	33.40	0.3
ERC	2.49	74	P	50	35.80	-0.3
CVT	2.58	82	P	50	37.00	-0.4
USI	3.15	64	P	50	45.90	0.5
FAI	3.28	90	P	50	48.00	0.7
GIB	3.59	79	P	50	51.70	-0.1
SOI	5.19	80	P	51	14.00	-0.4
CVF	5.22	354	Pn	51	16.70	1.9
MGR	5.44	58	P	51	16.50	-1.4
ESEL	5.75	297	ePh	51	23.00	0.7
LMR	6.40	340	Pn	51	32.00	0.6
LRG	6.55	339	Pn	51	34.00	0.4
FRF	6.57	341	Pn	51	34.90	1.0
SBF	6.69	347	Pn	51	35.30	-0.2
EBR	7.85	299	eP	51	49.00	-0.8
EROD	7.91	299	ePn	51	52.00	-0.7
ACU	7.97	281	ePn	51	53.00	-0.5
LPG	8.39	346	Pn	51	57.50	-2.1
LPL	8.41	346	Pn	51	58.30	-1.6
ECHE	8.56	288	ePn	52	01.80	0.1
EALH	8.73	277	ePn	52	03.60	-0.5
EPF	9.04	312	Pn	52	08.70	0.3
CAF	9.43	326	Pn	52	14.40	0.7
EVIA	9.61	281	ePn	52	16.40	0.1
LPO	9.66	322	Pn	52	17.80	0.9
RJF	9.97	325	Pn	52	20.60	-0.5
LFF	10.07	321	Pn	52	23.40	0.9
MAF	10.27	332	Pn	52	24.50	-0.7
AFC	10.44	273	ePn	52	27.50	-0.4
TOL	10.94	287	eP	52	35.00	0.5
GBA	64.34	92	Pd	00	34.40	1.2
S.D. = 0.9 on 31 of 31 obs.						
? AUG 22, 1989 18h 00m 55.84 ± 2.74s 43.921 N ± 19.5km 7.527 E ± 16.6km DEPTH = 10.0km (geophysicist)						
NEAR SOUTH COAST OF FRANCE (379)						

SAOF	0.07	17	Pg	00	58.24	0.0
AUTN	0.10	316	Pg	00	57.63	-1.2
AURF	0.15	257	Pg	00	59.78	0.5
TOUF	0.22	295	Pg	01	02.70	-0.7
FOUF	0.81	319	ePc	01	12.97	1.5
S.D. = 1.5 on 5 of 5 obs.						
* AUG 22, 1989 18h 07m 28.52 ± 1.31s 2.355 S ± 10.0km 79.893 W ± 17.0km DEPTH = 33.0km (normal) 4.3mb (1 obs.)						
NEAR COAST OF ECUADOR (105)						
RECU	2.16	38	iPd	08	04.50	1.1
OUR	2.56	32	eP	08	09.10	0.1
CAYA	3.08	38	P	08	15.90	-0.6
COTA	3.09	30	eP	08	16.00	-0.6
ZOBO	18.04	141	eP	11	39.00	0.0
Z 20s 0.12um LR 19 12.00						
CNCB	18.53	142	eP	11	35.00	-10.1X
ALO	44.69	329	eP	15	40.60	0.1
S.D. = 0.8 on 6 of 7 obs.						
AUG 22, 1989 18h 12m 41.62 ± 0.90s 42.142 N ± 8.5km 15.561 E ± 8.8km DEPTH = 10.0km (geophysicist)						
ADRIATIC SEA (382)						
DUI	0.95	240	P	13	00.40	0.6
HVAR	1.22	32	iPg	13	04.60	0.2
SDI	1.37	252	P	13	06.50	-0.3
ALP	1.60	294	ePn	13	09.42	-0.7
MGR	2.00	180	P	13	15.60	-0.3
MNS	2.15	277	P	13	18.60	0.5
S.D. = 0.7 on 6 of 6 obs.						
? AUG 22, 1989 18h 51m 01.34 ± 2.61s 41.458 N ± 15.3km 138.242 E ± 27.7km DEPTH = 33.0km (normal)						
EASTERN SEA OF JAPAN (223)						
OFUJ	3.54	131	eP	51	55.70	0.4
HOOJ	3.88	75	P	51	59.40	-0.6
ASAJ	4.19	49	eP	52	04.90	0.4
MAT	4.91	180	iPc	52	14.60	-0.2
KUSJ	5.07	69	P	52	13.00	-4.0X
S.D. = 0.9 on 4 of 5 obs.						
& AUG 22, 1989 19h 19m 00.37s 60.050 N 153.372 W DEPTH = 147.9km						
SOUTHERN ALASKA (2) <AGS-P>						
ILIM	0.21	81	iP	19	19.95	0.8
OPT	0.40	170	eP	19	20.77	1.0
RED	0.48	39	iP	19	20.95	-0.8
PDB	0.49	238	eP	19	20.76	-0.9
AUL	0.67	183	iP	19	22.03	-0.7
RDT	0.71	42	iP	19	22.43	-0.6
MCNL	1.00	210	iP	19	23.95	-1.2
XLV	1.03	125	iP	19	24.43	-1.0
CDD	1.13	187	iP	19	25.11	-1.3
CNPM	1.20	115	iP	19	26.15	-0.9
NKA	1.27	56	eP	19	28.59	0.9
BRLK	1.29	102	iP	19	27.19	-0.7

22d 20h

PRU 82.81 322 eP 15 00.00 0.3
 KHC 83.77 321 P 15 05.90 1.1
 KBA 84.93 320 eP 15 10.00 -0.8
 1.0s 4.90nm 4.6mb
 CDF 87.69 323 eP 15 24.70 0.5
 EDM 89.16 30 iP 15 32.50 1.4
 LPG 89.63 321 eP 15 34.20 0.4
 0.8s 5.90nm 4.9mb
 LOR 90.23 323 eP 15 36.00 -0.2
 1.0s 4.00nm 4.7mb
 LBF 90.34 323 eP 15 36.70 0.0
 1.2s 11.90nm 5.1mb
 SSF 90.55 323 eP 15 37.70 0.1
 AVF 90.79 323 eP 15 38.90 0.2
 1.2s 8.90nm 5.0mb
 MAF 91.57 323 eP 15 42.80 0.4
 1.2s 11.90nm 5.2mb
 CAF 92.64 322 eP 15 48.50 1.1
 1.0s 10.00nm 5.2mb
 RJF 92.72 323 eP 15 48.60 1.0
 1.0s 8.00nm 5.1mb
 FFC 92.81 24 eP 15 47.00 -0.9
 1.2s 25.00nm 5.5mb
 LPO 93.28 322 eP 15 51.00 0.7
 1.0s 8.00nm 5.1mb
 ZOBO 167.35 55 PKP 22 45.00 2.6X
 LR 50 30.00
 S.D. = 1.0 on 45 of 49 obs.

? AUG 22, 1989 20h 41m 39.25 ± 3.95s
 24.063 S ± 32.4km 179.467 E ± 33.1km
 DEPTH = 635.3 ± 48.3 km
 4.3mb (3 obs.)
 SOUTH OF FIJI ISLANDS (171)

DZM 12.15 277 iPc 44 18.10 -1.4
 CTA 30.99 271 iPd 47 10.90 1.7
 0.5s 19.72nm 5.0mb
 WRA 41.91 266 Pd 48 39.20 0.8
 0.6s 3.40nm 4.0mb
 SPA 66.08 180 e(P) 51 26.90 -0.1
 0.8s 9.17nm 4.3mb
 KVN 85.70 44 eP 53 15.00 1.1
 TNP 85.70 45 eP 53 14.80 0.8
 NB2 142.16 351 PKP 00 00.20 -1.5
 0.7s 0.90nm
 HFS 142.61 348 ePKP 00 01.00 -1.4
 0.4s 4.30nm
 KSP 150.26 338 iPc 00 24.60 9.6X
 CLL 150.86 342 iPcPd 00 25.90 10.0X
 0.9s 9.00nm
 S.D. = 1.7 on 8 of 10 obs.

* AUG 22, 1989 21h 03m 58.05 ± 1.43s
 0.317 N ± 9.3km 98.603 E ± 9.9km
 DEPTH = 59.5 ± 12.0 km
 4.4mb (5 obs.)
 NORTHERN SUMATERA (706)

PPI 1.95 113 iPd 04 30.50 1.2
 eS 04 55.00
 PSI 2.38 8 iPd 04 35.70 0.3
 IPM 4.88 30 ePd 05 10.50 -0.1
 0.6s 119.40nm
 e 05 18.20
 KGM 5.01 70 ePd 05 13.10 0.6
 BSI 6.11 327 eP 05 25.00 -2.9
 eS 06 30.00
 SNG 7.10 16 eP 05 41.70 0.0
 e 07 19.80
 CHG 18.38 1 eP 08 10.80 0.3
 KKM 18.48 72 ePd 08 13.50 1.8
 3.7s 59.50nm 4.2mb X
 GBA 24.77 303 Pd 09 17.30 1.5
 0.9s 11.10nm 4.4mb
 GYA 27.13 16 eP 09 37.80 0.1
 WHN 33.58 25 eP 10 34.00 -0.6
 XAN 34.91 15 P 10 45.30 -0.8
 TIY 39.34 17 eP 11 24.20 0.9
 WRA 40.38 122 Pd 11 30.20 -1.9
 0.7s 2.00nm 4.1mb
 ASPA 41.74 127 eP 11 41.80 -1.5
 0.5s 7.00nm 4.7mb
 FORR 41.78 141 eP 11 44.20 0.9
 BJI 42.66 20 eP 11 52.00 1.6
 WMO 44.40 349 eP 12 06.00 1.4
 CN2 49.47 25 Pd 12 43.80 -0.5

CTA 50.86 116 eP 12 55.00 39kmX
 MTMJ 51.17 41 P 12 54.00 -1.3
 MAT 51.41 41 (P) 12 56.60 -0.9
 CHJJ 51.65 42 P 12 58.00 -1.2
 BUL 71.36 249 eP 12 59.60 -1.4
 BNG 80.06 274 ePd 15 14.60 0.3
 0.4s 4.00nm 4.7mb
 HFS 87.18 330 eP 16 41.00 2.2
 0.4s 0.70nm 4.2mb
 S.D. = 1.4 on 26 of 26 obs.

% AUG 22, 1989 21h 18m 42.71 ± 1.78s
 44.240 N ± 13.4km 11.892 E ± 9.3km
 DEPTH = 10.0km (geophysicist)
 NORTHERN ITALY (545)

SFI 0.32 185 P 18 49.50 0.2
 PGD 0.39 199 P 18 50.50 -0.2
 MME 0.86 267 P 18 59.30 -0.1
 BDI 0.95 260 P 19 01.00 0.2
 ARV 1.06 134 P 19 02.70 0.0
 S.D. = 0.2 on 5 of 5 obs.

AUG 22, 1989 21h 26m 16.98 ± 0.74s
 44.311 N ± 5.9km 12.004 E ± 7.6km
 DEPTH = 10.0km (geophysicist)
 NORTHERN ITALY (545)
 ML 2.7 (KBA).

SFI 0.41 196 P 26 24.60 -0.7
 eSg 26 30.90
 PGD 0.48 205 Pd 26 25.60 -1.2
 eSg 26 32.90
 RSM 0.50 140 Pd 26 27.70 0.6
 CRE 0.68 183 P 26 30.10 -0.5
 FIR 0.76 226 eP 26 37.00 5.2X
 e 26 42.00
 BDI 1.04 257 P 26 35.90 -0.8
 eSg 26 50.80
 ARV 1.06 140 P 26 37.80 0.9
 ASS 1.33 159 P 26 43.10 1.6
 CTI 1.75 352 P 26 49.80 2.1
 TRI 1.87 41 eP 26 47.70 -1.6
 i 27 17.60
 BOB 1.88 285 P 26 51.00 1.4
 VOY 2.18 37 e(Pn) 26 52.20 -1.7
 eSn 27 20.00
 eSg 27 27.80
 FVI 2.35 13 P 27 00.60 4.5X
 LJU 2.49 45 eP 27 24.20 26.0X
 e 27 28.00
 e(Sg) 27 37.50
 KBA 2.92 18 e(Pg) 27 12.00 7.5X
 iSg 27 53.20
 S.D. = 1.5 on 11 of 15 obs.

AUG 22, 1989 22h 22m 29.59 ± 0.89s
 6.452 S ± 8.8km 148.935 E ± 7.6km
 DEPTH = 57.3 ± 9.3 km
 4.7mb (5 obs.)
 NEW BRITAIN REGION (192)

LAT 1.93 264 eP 23 01.00 0.4
 PMG 3.43 211 iPd 23 22.00 0.2
 0.9s 773.11nm
 eS 24 03.00
 RAB 3.93 55 iP 23 28.50 -0.3
 MNDI 5.25 273 eP 23 59.00 11.3X
 CTA 13.80 191 eP 25 44.00 -0.1
 WRA 19.51 225 Pc 26 53.50 -1.7
 0.5s 13.30nm 4.5mb
 RMO 19.93 180 iPc 26 59.40 -0.1
 0.9s 79.00nm 5.0mb
 OLP 20.52 192 iPc 27 05.70 0.1
 BRS 21.14 170 iPd 27 11.10 -0.9
 ASPA 22.40 219 iPd 27 24.70 0.1
 0.7s 19.00nm 4.6mb
 eS 31 26.20
 DZM 22.96 134 iPc 27 30.80 0.7
 WARB 28.93 225 eP 28 26.50 0.8
 NANU 35.96 240 eP 29 27.00 0.1
 0.5s 4.00nm 4.6mb
 SPA 83.59 180 e(P) 34 53.70 0.8
 0.6s 6.91nm 4.8mb
 BNG 130.59 270 ePKPd 41 36.10 -0.7
 0.4s 3.00nm

ZOBO 136.94 122 ePKP 41 40.00 -9.4X
 PPD 145.43 146 ePKP 42 03.90 0.3
 BAO 152.38 143 ePKP 42 11.20 -3.5X
 S.D. = 0.8 on 15 of 18 obs.

AUG 22, 1989 23h 24m 25.68 ± 1.33s
 24.360 N ± 6.4km 123.126 E ± 10.3km
 DEPTH = 42.7 ± 11.5 km
 4.3mb (3 obs.) 3.9MsZ (1 obs.)
 SOUTHWESTERN RYUKYU ISLANDS (246)
 Felt (1 JMA) on Yanoguni-jimo.

YOJ 0.15 317 eP 24 42.00 8.5X
 TWC 1.19 282 iPd 24 45.70 -0.4
 eS 24 58.80
 TWD 1.43 259 iPd 24 49.20 -0.2
 eS 25 05.30
 TWZ 1.59 298 iPd 24 52.10 0.3
 ANP 1.68 300 iPc 24 53.70 0.6
 0.7s 767.12nm
 iS 25 12.00
 SSE 6.93 346 Pd 26 07.80 0.6
 0.8s 0.12nm 2.7mb X
 Z 20s 0.90um 4.4MsZ
 N 12s 0.80um

sP 26 13.20
 S 27 25.00
 Lg 28 15.00
 BAG 8.26 197 eP 26 24.90 -1.2
 NJ2 8.54 335 Pc 26 27.80 -1.8
 OCP 9.86 192 eP 27 44.00 56.1X
 WHN 9.93 310 eP 26 47.00 -1.8
 GYA 15.02 281 eP 27 58.20 1.3
 XAN 15.70 311 P 28 06.50 1.0
 TIY 16.14 328 eP 28 16.50 5.4X
 Z 23s 1.07um
 N 15s 0.70um

PP 28 32.00
 BJI 16.69 341 eP 28 24.00 6.0X
 Z 24s 0.65um
 eS 31 38.00
 SNY 17.42 1 Pc 28 29.00 1.9
 Z 20s 0.70um
 N 22s 0.60um
 PP 28 46.00
 CD2 18.35 295 eP 28 39.80 1.1
 KMI 18.53 277 eP 28 42.00 0.8
 HHC 19.08 332 eP 28 48.40 0.8
 CN2 19.49 5 eP 28 51.00 -1.0
 Z 14s 0.70um 4.4MsZ X
 N 11s 0.20um

BTO 19.57 329 P 28 53.20 0.2
 LZH 20.31 310 eP 29 00.00 -0.9
 Z 18s 0.50um 3.9MsZ
 pP 29 21.00 110kmX
 CHG 23.14 261 eP 29 29.90 0.7
 CHTO 23.14 261 iP 29 30.00 0.8
 0.8s 5.31nm 4.1mb
 GTA 24.74 313 eP 29 43.20 -1.5
 NDI 41.11 286 iPc 32 06.00 -1.3
 WRA 45.37 165 Pc 32 42.30 0.5
 0.9s 9.50nm 4.7mb
 WARB 50.36 176 eP 33 21.00 0.4
 MAIO 55.32 298 eP 33 57.00 -0.6
 NB2 78.89 333 P 36 24.30 -1.6
 1.0s 3.70nm 4.3mb
 FFC 92.25 24 iPc 37 33.50 1.2
 0.9s 22.00nm 5.6mb X
 S.D. = 1.2 on 26 of 30 obs.

% AUG 23, 1989 00h 15m 39.57 ± 0.79s
 39.521 N ± 7.8km 29.120 E ± 8.3km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

DST 0.39 283 ePg 15 47.30 -0.3
 ALT 0.90 121 ePg 15 57.30 0.4
 iSg 16 08.80
 KCT 0.93 321 iPn 15 58.20 0.8
 YLV 1.06 10 ePn 15 59.00 -0.6
 KHL 1.24 165 ePn 16 02.30 -0.3
 S.D. = 0.8 on 5 of 5 obs.

AUG 23, 1989 01h 17m 04.39 ± 0.72s
 42.711 N ± 5.5km 13.171 E ± 6.6km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)

MD 2.2 (SSO).				S.D. = 0.4 on 6 of 6 obs.				PEL	1.92	133	iPc	51	11.00	-0.5			
ALP	0.31	77	iPgc	17	10.69	-0.1	? AUG 23, 1989 03h 59m 41.64±13.48s	SAN	2.16	139	iP	51	14.50	-0.2			
CIO	0.48	358	e(Pg)	17	13.54	-0.7	8.299 S ±123.3km 128.758 E ±23.2km	LNV	2.26	160	iPd	51	16.60	0.4			
MNS	0.49	228	Pc	17	13.70	-0.6	DEPTH = 165.2 ± 40.4 km	PCH	2.36	140	iPd	51	18.00	0.2			
ASS	0.52	314	P	17	15.60	0.7	3.7mb (1 obs.)	CHCH	2.54	146	iPd	51	20.90	0.7			
ARV	0.80	348	P	17	20.30	0.3	TIMOR SEA (290)	RTCB	3.05	84	iPc	51	23.50	-4.0X			
SDI	1.11	154	P	17	25.80	0.5	MTN 5.09 153 iPd 00 57.50 0.3	ZON	3.15	86	iPc	51	29.50	0.7			
S.D. = 0.7 on 6 of 6 obs.				WRA 12.78 156 P 02 38.00 -0.6				RTLL	3.35	82	eP	51	33.00	1.2			
? AUG 23, 1989 01h 46m 02.03±16.10s				MBL 15.42 213 eP 03 11.50 -0.3				CFA	3.51	87	ePd	51	34.60	0.5			
43.087 N ±31.5km 1.158 W ±95.2km				ASP A 16.06 163 eP 03 23.20 -3.5X				RFA	4.38	133	ePc	51	46.20	-0.2			
DEPTH = 5.0km (geophysicist)				WAR 17.90 186 eP 03 42.00 0.5				MRA	5.67	98	eP	52	01.80	-2.6			
PYRENEES (378)				S.D. = 0.8 on 5 of 6 obs.				CYA	6.61	61	e(P)	52	18.00	0.2			
MD 1.0 (STR).				* AUG 23, 1989 04h 01m 49.27± 0.94s				SLA	9.30	42	eP	53	16.50	21.1X			
BOH	0.11	82	Pg	46	04.68	0.2	37.250 N ± 8.1km 28.230 E ±12.4km	CCH	15.45	23 (P)	eP	54	19.00	1.2			
ELYF	0.15	56	Pg	46	05.67	0.6	DEPTH = 5.0km (geophysicist)	CNCB	15.47	16	eP	54	22.00	3.6X			
MADF	0.25	77	Pg	46	07.62	0.4	TURKEY (366)	LPB	15.71	15	eP	54	21.00	-0.4			
ISSF	0.27	102	Pg	46	08.12	0.5	YER 0.12 160 iPg 01 51.70 -0.2	ZOBO	15.96	15	eP	54	24.00	-0.7			
S.D. = 0.3 on 4 of 4 obs.				CIN 0.37 342 iPgd 01 57.00 0.3				Z 20s	0.12um								
& AUG 23, 1989 02h 21m 15.02s				IZM 1.38 327 ePn 02 15.00 -0.2				LR	00	32.00							
41.708 N 112.399 W				ELL 1.43 110 iPn 02 16.60 0.5				PPD	21.11	68	eP	55	25.20	0.6			
DEPTH = 8.1km				KHL 1.48 43 iPn 02 16.20 -0.5				BAO	27.42	60	eP	56	24.00	-1.3			
UTAH (478)				S.D. = 0.6 on 5 of 5 obs.				S.D. = 1.1 on 16 of 19 obs.									
<SLC-P>. ML 2.4 (SLC).				AUG 23, 1989 05h 30m 57.20± 0.70s				? AUG 23, 1989 05h 59m 54.87± 7.49s									
PTI	1.16	1	eP	21	36.50	-0.5	34.521 N ± 5.9km 5.199 W ±10.0km	34.552 S ±50.7km 70.303 W ±22.9km									
DUG	1.54	192	eP	21	42.70	-0.3	DEPTH = 10.0km (geophysicist)	DEPTH = 5.0km (geophysicist)									
DAU	1.56	146	eP	21	43.60	0.3	MOROCCO (395)	CHILE-ARGENTINA BORDER REGION (127)									
BW06	2.37	62	eP	21	56.00	1.0	MD 3.7 (RBA). mblg 3.0 (MDD).	CHCH	0.68	335	iPc	00	08.80	0.3			
IMW	2.44	26	eP	21	57.80	1.8	NKM 0.94 349 iPgc 31 15.00 -0.1	PCH	0.94	349	iPd	00	13.40	0.0			
5 obs. associated				IFR 1.00 177 iPg 31 17.80 1.5				TACH	1.04	329	iPc	00	14.60	-0.4			
? AUG 23, 1989 02h 25m 03.54± 4.37s				RBA 1.45 250 iPg 31 22.50 -1.0				SAN	1.14	345	eP	00	16.50	-0.1			
8.460 S ±39.4km 113.627 E ±31.9km				OJEN 1.60 350 iP 31 27.00 1.4				FCH	1.22	1	iPc	00	18.10	-0.2			
DEPTH = 33.0km (normal)				SRQ 1.74 355 iP 31 29.00 1.4				PEL	1.44	347	iPc	00	22.10	0.4			
4.2mb (3 obs.)				MOMI 1.85 347 iP 31 35.00 5.8X				S.D. = 0.4 on 6 of 6 obs.									
JAVA (277)				EJIF 1.94 354 eP 31 31.50 1.0				AUG 23, 1989 06h 28m 09.40± 0.21s									
MBL	13.97	155	eP	28	20.20	-1.3	ENIL 1.97 340 iP 31 28.00 -3.0X	27.374 N ± 3.8km 129.763 E ± 4.5km									
0.3s 6.00nm 4.9mb X				CNIL 2.00 67 ePn 31 34.80 3.4X				DEPTH = 8.4km (7 depth phases)									
NANU	14.14	173	eP	28	24.00	0.4	ENEL 2.00 67 ePn 31 34.80 3.4X	5.4mb (45 obs.)									
0.3s 13.00nm 5.1mb X				ALJ 2.17 351 iP 31 35.50 1.5				RYUKYU ISLANDS (238)									
KNA	16.47	118	eP	28	56.00	2.1	AVE 2.21 237 iPn 31 35.50 1.1	Felt (I JMA) at Naze.									
MEKA	18.65	166	eP	29	21.00	0.1	TAF 2.31 82 ePn 31 37.00 1.0	NZJ	1.03	347	iP+	28	30.20	1.3			
MRWA	20.77	174	eP	29	45.00	0.7	LIJA 2.30 356 iP 31 36.00 -0.9	KAGJ	3.92	14	eP	29	09.20	-2.0			
WARB	21.53	147	iPc	29	52.10	0.0	GIBL 2.38 345 iP 31 35.50 -1.4	KUMJ	5.23	10	eP	29	28.40	-1.2			
0.3s 2.00nm 4.0mb				EPRU 2.44 359 ePn 31 37.90 0.2				SHNJ	6.83	9	P	29	51.30	-0.9			
BAL	22.22	173	eP	30	00.00	1.1	EHOR 3.29 359 ePn 31 48.50 -1.3	TKSJ	7.55	28	P	30	00.30	-2.0			
WRA	23.07	122	Pd	30	06.50	-0.8	EVAL 3.30 338 ePn 31 51.70 1.7	SHK	7.56	19	eP	30	00.80	-1.7			
0.5s 3.30nm 4.1mb				EBAN 3.01 17 ePn 31 56.20 -1.0				SSE	8.36	298	Pc	30	14.00	0.3			
COOL	23.39	164	eP	30	10.30	-0.1	TIO 3.98 206 iPn 31 57.50 -2.3	Z 1.2s	0.15nm								
MUN	23.52	174	eP	30	29.30	17.7X	EVI A 4.64 27 ePn 32 09.00 -0.1	Z 16s	4.00um								
ASPA	24.61	130	iPd	30	21.30	-1.0	ETOR 6.76 21 ePn 32 36.50 -2.5	N 10s	2.60um								
FORR	26.06	151	eP	30	34.50	-1.2	S.D. = 1.5 on 18 of 21 obs.				E 10s	1.80um					
S.D. = 1.2 on 11 of 12 obs.				AUG 23, 1989 03h 06m 37.61± 1.20s				YONJ 8.41 21 eP 30 11.80 -2.6X									
% AUG 23, 1989 03h 06m 37.61± 1.20s				39.525 N ± 8.0km 26.459 E ±11.7km				WKYJ 8.47 35 eP 30 12.00 -3.2X									
DEPTH = 10.0km (geophysicist)				TURKEY (366)				TSRJ 9.71 32 P 30 27.40 -5.0X									
EZN	0.32	341	iPg	06	44.20	0.0	NJ2 10.56 299 Pc 30 44.00 -0.1										
IZM	1.29	151	ePn	07	01.50	0.0	Z 14s							4.00um			
EDC	1.36	52	iPn	07	02.10	-0.4	N 11s							2.80um			
BNT	1.40	53	iPn	07	03.70	0.6	E 11s							2.40um			
KCT	1.63	63	iPn	07	06.20	-0.3	IIDJ 10.66 39 eP 30 42.00 -3.4X										
DST	1.68	87	ePn	07	07.30	0.1	MTMJ 11.44 35 eP 30 53.20 -2.9X										
OFF COAST OF CENTRAL CHILE (134)				AUG 23, 1989 05h 50m 40.38± 1.24s				MAT 11.61 36 (P) 30 56.00 -2.4X									
31.830 S ± 5.7km 72.353 W ±13.8km				DEPTH = 33.0km (normal)				CHJJ 11.68 40 eP 30 57.60 -1.7									
								DL2 13.36 331 eP 31 21.00 -0.7									
								Z 15s							2.90um		
								N 13s							2.30um		
								E 13s							2.70um		
								BAG 13.84 220 eP 31 28.00 -0.3									

0.8s 21.40nm 5.6mb
 TCF 92.66 327 eP 41 24.60 1.6
 1.0s 6.80nm 5.0mb
 LPF 92.92 329 eP 41 25.90 1.8
 0.9s 30.70nm 5.7mb
 RSSD 93.50 36 P 41 28.00 0.8
 MFF 93.56 328 eP 41 29.00 1.9
 0.8s 14.50nm 5.4mb
 ALQ 98.36 44 e(P) 41 53.00 3.5X
 ZOBO 160.08 60 PKP 48 11.50 0.0
 LPB 160.26 61 (PKP) 48 06.00 -5.5X
 e 48 37.00
 CNCB 160.51 61 ePKP 48 11.00 -0.9
 e 48 54.00
 CCH 162.26 59 (PKP) 48 19.00 5.7X
 S.D. = 1.2 on 152 of 173 obs.

? AUG 23, 1989 06h 28m 52.96 ± 1.13s
 34.509 N ± 7.7km 5.347 W ± 12.4km
 DEPTH = 10.0km (geophysicist)

MOROCCO (395)
 MD 3.8 (RBA).

NKM 0.95 357 iPg 29 11.00 0.0
 i 29 11.50
 iSg 29 22.00
 i 29 23.00
 IFR 1.00 169 iPg 29 12.00 0.0
 iSg 29 26.50
 RBA 1.33 249 iPg 29 17.50 0.0
 iSg 29 36.00
 AVE 2.10 236 ePn 29 28.50 0.0
 i 29 30.00
 iSn 29 57.90
 S.D. = 0.0 on 4 of 4 obs.

% AUG 23, 1989 06h 45m 50.77 ± 1.17s
 34.509 N ± 8.4km 5.435 W ± 13.5km
 DEPTH = 10.0km (geophysicist)

MOROCCO (395)
 MD 3.3 (RBA).

NKM 0.94 1 iPg 46 08.70 0.1
 i 46 09.00
 iSg 46 20.50
 i 46 24.00
 IFR 1.02 165 iPg 46 10.00 -0.2
 iSg 46 24.00
 RBA 1.27 247 iPg 46 15.00 0.7
 iSg 46 30.50
 AVE 2.04 234 iPn 46 24.00 -1.6
 i 46 27.50
 iSn 46 50.00
 i 46 56.00
 T10 3.89 204 iPn 46 53.00 1.0
 i 47 53.00
 S.D. = 1.4 on 5 of 5 obs.

* AUG 23, 1989 07h 07m 17.83 ± 0.69s
 27.394 N ± 10.3km 129.907 E ± 14.3km
 DEPTH = 33.0km (normol)
 4.9mb (8 obs.)

RYUKYU ISLANDS (238)

SSE 8.46 298 eP 09 22.00 0.9
 Z 20s 0.70um
 N 16s 0.90um
 E 16s 1.50um
 eLg 11 44.00
 CN2 16.76 349 eP 11 13.20 1.6
 Z 12s 8.70um
 N 11s 4.40um
 BJI 16.99 321 eP 11 13.50 -0.9
 TIY 17.94 309 eP 11 27.00 0.6
 GYA 20.74 273 P 12 00.60 2.2
 Z 14s 3.50um 4.9MszX
 N 13s 4.20um
 E 13s 4.80um
 CD2 23.09 285 eP 12 18.00 -2.9
 LZH 23.74 298 eP 12 18.50 -9.6X
 KMI 24.45 271 Pc 12 35.00 -0.2
 eS 17 11.00
 GTA 27.70 303 Pc 13 01.00 -3.4X
 WRA 47.25 174 Pd 15 49.30 -0.5
 0.7s 3.90nm 4.5mb
 CTA 49.79 160 iPc 16 10.20 0.7

0.9s 15.13nm 5.0mb
 GBA 50.68 265 Pc 16 16.10 -0.4
 0.5s 3.10nm 4.5mb
 ASPA 50.91 175 eP 16 18.00 0.0
 0.6s 9.00nm 4.9mb
 WARB 53.36 184 iPc 16 37.00 0.7
 SUF 72.02 332 iP 18 39.70 -0.3
 0.8s 7.90nm 4.8mb
 NUR 73.62 330 eP 18 50.00 0.6
 UPP 77.00 331 iP 19 09.70 1.1
 HFS 78.48 333 eP 19 15.40 -1.4
 0.9s 10.50nm 4.9mb
 N82 78.93 334 P 19 18.60 -0.7
 0.8s 11.50nm 4.9mb
 VRI 79.30 316 ePd 19 22.50 0.9
 BRG 83.83 325 i(P) 19 49.10 3.9X
 CLL 84.04 326 e(P) 19 44.00 -2.2
 VAY 84.18 314 eP 19 47.40 0.3
 MOX 85.15 326 e(P) 19 55.00 3.2X
 GRF 85.94 325 eP 19 59.60 3.8X
 1.1s 23.00nm 5.3mb
 S.D. = 1.3 on 20 of 25 obs.

AUG 23, 1989 07h 11m 46.25 ± 0.26s
 27.481 N ± 4.1km 129.824 E ± 4.8km
 DEPTH = 28.0km (4 depth phases)
 5.3mb (18 obs.) 4.7Msz (2 obs.)

RYUKYU ISLANDS (238)

KAGJ 3.81 14 P 12 44.00 -0.4
 eS 13 26.80
 TKSJ 7.43 28 eP 13 34.40 -1.1
 eS 14 53.10
 SHK 7.44 18 eP 13 33.60 -2.1
 YONJ 8.29 21 eP 13 46.70 -0.9
 eS 15 13.80
 WKYJ 8.35 35 eP 13 46.10 -2.3
 eS 15 11.90
 SSE 8.36 298 eP 13 48.50 0.0
 Z 16s 8.40um
 N 10s 5.20um
 E 10s 3.70um
 sS 15 39.00
 TSRJ 9.60 32 P 14 04.00 -1.6
 IIDJ 10.54 39 P 14 18.30 -0.3
 NJ2 10.56 298 eP 14 18.00 -0.8
 Z 14s 8.80um
 N 11s 6.10um
 E 12s 4.50um
 MAT 11.49 36 (P) 14 32.00 0.4
 eS 16 40.00
 CHJJ 11.56 40 P 14 34.20 1.7
 DL2 13.29 331 eP 14 52.00 -3.5X
 Z 14s 5.90um
 E 14s 7.40um
 eS 17 29.00
 BAC 13.95 220 eP 15 03.00 -1.5
 SNY 15.20 342 Pc 15 20.00 -0.5
 Z 13s 10.10um
 N 12s 5.70um
 E 10s 2.60um
 BJI 16.88 321 Pc+ 15 43.00 1.0
 5.0s 0.41nm 1.8mb X
 Z 12s 3.91um 5.7Msz
 N 12s 3.10um
 E 12s 1.57um
 eS 19 00.00
 MDJ 17.10 359 eP 15 42.50 -2.3
 Z 12s 1.70um
 N 13s 2.20um
 TIY 17.83 309 Pc 15 55.00 1.0
 Z 13s 16.80um
 N 12s 8.00um
 E 12s 9.60um
 sP 16 06.50
 XAN 19.10 295 P 16 07.30 -2.3
 E 12s 6.00um
 GUMO 19.71 132 eP 16 16.30 -0.2
 Z 17s 1.20um
 PJG 19.71 132 eP 16 16.80 0.3
 GUA 19.77 132 eP 16 16.00 -1.2
 HHC 20.10 316 eP 16 20.00 -0.6
 Z 20s 7.10um 5.0Msz
 N 14s 3.80um
 E 14s 3.10um
 PP 16 41.00
 S 20 04.60

DAV 20.68 192 eP 16 28.00 1.3
 BTO 20.93 314 eP 16 27.50 -1.7
 N 13s 3.50um
 E 13s 2.90um
 sP 16 42.00
 S 20 10.50
 CD2 22.99 285 P 16 48.30 -1.5
 Z 14s 5.70um 5.2MszX
 E 13s 8.20um
 pP 16 59.00 41kmX
 PP 17 20.80
 S 20 56.00
 LZH 23.64 298 eP 16 56.50 0.3
 Z 14s 8.80um 5.4MszX
 N 12s 1.60um
 E 13s 5.00um
 sP 17 09.50
 PP 17 36.00
 eS 21 10.00
 SS 22 03.00
 TSM 25.70 208 ePc 17 17.50 1.6
 GTA 27.59 303 iPc 17 31.10 -2.1
 Z 14s 5.90um 5.3MszX
 E 12s 4.80um
 CHG 29.61 260 eP 17 50.50 -1.0
 CHTO 29.61 260 eP 17 50.20 -1.3
 0.8s 10.61nm 4.7mb
 LSA 33.93 283 eP 18 29.00 -0.7
 WMO 37.47 307 eP 18 57.00 -2.2
 Z 14s 3.70um 5.3MszX
 E 12s 3.10um
 eS 24 38.00
 MTN 40.11 178 iPd 19 20.20 -1.0
 KNA 42.98 181 eP 19 44.20 -0.6
 0.7s 82.00nm 5.6mb
 KSH 45.87 299 eP 20 10.00 1.9
 Z 14s 2.40um 5.3MszX
 E 12s 2.30um
 NDI 46.11 284 iPd 20 09.30 -0.7
 1.1s 44.30nm 5.3mb
 WRA 47.35 174 Pc 20 19.20 -0.5
 0.8s 20.20nm 5.2mb
 MBL 49.31 192 eP 20 33.50 -1.4
 0.6s 18.00nm 5.3mb
 CTA 49.89 160 iPd 20 39.00 -0.4
 1.0s 56.00nm 5.5mb
 GBA 50.62 265 Pd 20 44.80 -0.3
 0.7s 5.10nm 4.6mb
 ASPA 51.00 175 ePd 20 46.00 -1.8
 0.7s 37.00nm 5.4mb
 Z 19s 0.30um 4.3Msz
 LR 42 38.80
 KOD 52.04 261 eP 20 57.00 0.7
 WARB 53.44 184 iPc 21 06.10 0.1
 0.6s 30.00nm 5.4mb
 FORR 58.03 182 eP 21 38.00 -0.9
 BRs 58.84 156 iPc 21 45.10 0.3
 INK 67.18 24 eP 22 40.00 0.5
 KEV 68.80 339 eP 22 49.00 -0.5
 SOD 69.83 336 iP 22 56.00 0.1
 ALE 70.06 2 eP 22 58.00 0.9
 0.7s 6.00nm 4.8mb
 SUF 71.90 332 iP 23 08.60 0.1
 0.5s 2.80nm 4.5mb
 NUR 73.51 330 eP 23 19.00 1.1
 Z 17s 1.60um 5.4MszX
 LR 01 30.00
 UPP 76.89 331 iP 23 37.60 0.4
 HFS 78.37 333 eP 23 45.10 -0.3
 1.1s 33.00nm 5.3mb
 Z 15s 0.51um 5.0MszX
 LR 00 17.00
 NB2 78.82 334 P 23 47.60 -0.3
 0.8s 16.70nm 5.1mb
 VRI 79.18 316 ePd 23 51.50 1.4
 MSZ 79.79 153 P 23 53.10 -0.1
 MLR 79.84 316 eP 23 41.00 -12.9X
 PRNI 80.44 299 e(P) 23 58.00 0.8
 MBH 80.78 299 e(P) 24 00.00 1.0
 KRA 81.02 322 eP 24 01.00 1.2
 Z 15s 1.60um 5.5MszX
 N 15s 1.60um
 e 24 07.80 22km
 SPC 81.31 321 eP 23 58.00 -3.6X
 PNT 81.78 38 eP 24 06.00 2.1
 KDZ 82.05 313 eP 24 04.00 -1.4
 IZM 82.41 309 eP 24 11.00 3.6X

23d 07h

RZN 82.49 313 eP	24 09.00	1.1	iSg	10 14.00	SPU 1.54 196 eP	51 13.56	0.1				
KSP 82.53 324 eP	24 08.50	0.8	i	10 14.50	eS	51 33.79					
EDM 82.78 33 eP	24 11.00	2.0	RBA 1.21 246 iP	10 02.50	0.7	KNK 1.78 133 eP	51 15.79	-0.7			
MMB 83.18 313 eP	24 12.00	0.7	i	10 04.00		eS	51 40.64				
KKB 83.45 314 eP	24 11.00	-1.6	iSg	10 21.50		RDS 2.55 30 eP	51 26.06	-0.6			
ZST 83.60 322 eP	24 17.00	3.8X	OJEN 1.59 359 iP	10 08.50	1.0	HDA 2.57 45 eP	51 25.70	-1.2			
Z 16s	2.20um	5.6mszX	SRO 1.75 3 iP	10 10.00	0.2	PAX 2.63 81 eP	51 27.48	-0.3			
			MOMI 1.82 355 iP	10 10.00	-0.8	KLU 2.73 113 eP	51 27.50	-1.6			
BRG 83.72 325 eP	24 14.80	1.0	CNIL 1.91 347 iP	10 14.00	1.9	KNIM 2.84 143 eP	51 28.01	-2.5			
1.6s	27.00nm	5.2mb	EJIF 1.94 1 eP	10 12.80	0.2	CNPM 3.15 181 eP	51 35.27	0.6			
			AVE 1.99 233 iPn	10 13.50	0.1	17 obs. associated					
			iSn	10 42.00		? AUG 23, 1989 10h 54m 15.54± 6.43s					
CLL 83.93 326 ePd	24 16.00	1.2	i	10 43.00		10.314 N ±41.7km 60.592 W ±41.1km					
1.7s	31.00nm	5.2mb	i	10 46.00		DEPTH = 33.0km (normal)					
			TAF 2.57 82 ePn	10 22.00	0.3	TRINIDAD (98)					
			e	10 24.00		MD 3.4 (TRN).					
KNT 83.93 313 eP	24 16.50	1.4	i	10 27.00		TBH 0.50 290 eP 54 25.98 -0.1					
PRU 83.93 324 eP	24 16.00	1.1	eSn	10 50.00		eS 54 35.41					
			i	11 02.00		TPP 0.85 270 eP 54 30.93 -0.1					
VAY 84.06 314 eP	24 16.70	1.0	i	11 04.00		eS 54 44.64					
SKO 84.44 315 iP	24 19.00	1.4		11 09.00		BOT 0.86 352 eP 54 31.12 0.0					
			EVAL 3.23 342 eP	10 29.00	-2.0	eS 54 45.05					
LIT 84.75 313 eP	24 20.00	0.8	eS	11 05.00		TRN 0.86 293 eP 54 31.06 -0.2					
KHC 84.95 324 P	24 22.10	2.0	EHOR 3.31 4 eP	10 31.50	-0.6	eS 54 44.77					
MOX 85.03 326 eP	24 23.00	2.6	TIO 3.87 203 iPn	10 39.50	-0.7	eS 54 31.51 0.1					
DHR 85.31 314 e(P)	24 20.50	-1.5	iSn	11 25.00		eS 54 45.31					
SES 85.65 34 eP	24 24.00	0.4	i	11 43.00		TCE 1.20 289 eP 54 36.58 0.4					
GRF 85.82 325 eP	24 28.90	4.5X	S.D. = 1.0 on 13 of 13 obs.			eS 54 52.14					
1.7s	71.00nm	5.6mb	* AUG 23, 1989 08h 22m 14.43± 0.93s								
			24.332 S ± 8.8km 66.066 W ±13.9km								
KBA 86.31 322 eP	24 27.00	-0.1	DEPTH = 33.0km (normal)								
0.6s	6.50nm	5.0mb	SALTA PROVINCE, ARGENTINA (129)								
			SLA 0.65 127 iPd	22 26.00	-0.6	* AUG 23, 1989 11h 03m 38.22± 1.72s					
RBL 86.57 322 P	24 34.00	5.8X	CYA 4.10 177 ePd	23 16.70	0.3	34.857 N ±17.6km 25.854 E ± 6.2km					
FFC 86.84 27 eP	24 30.00	0.7	CCH 6.92 359 eP	24 01.00	4.6X	DEPTH = 10.0km (geophysicist)					
1.2s	34.00nm	5.5mb	CNCB 7.70 346 eP	24 07.00	-0.6	CRETE (370)					
			e	24 18.00		MD 4.0 (ATH).					
FVI 86.91 322 P	24 32.00	2.3	LPB 7.99 346 eP	24 12.00	0.4	NPS 0.45 334 iPgc 03 47.00 -0.4					
CTI 87.87 322 P	24 38.00	3.5X	e	24 21.00		KAP 1.28 57 ePg 04 02.50 0.5					
ASS 89.13 319 P	24 44.00	3.4X	ZOBO 8.25 346 (P)	24 11.00	-4.3X	VAM 1.46 293 ePb 04 04.50 -0.1					
SDI 89.28 318 P	24 42.00	0.7	Z 24s	0.15um		APE 2.22 353 ePn 04 16.50 0.8					
AZI 89.34 318 P	24 45.00	3.5X	e	24 28.00		YER 3.01 40 iPn 04 20.20 1.4					
MNS 89.54 319 P	24 44.00	1.5	eLR	41 04.00		KSL 3.29 66 ePn 04 30.00 -0.9					
LSD 90.66 324 P	24 48.46	0.6	PPD 13.76 83 e(P)	25 30.00	0.4	ELL 3.80 59 ePn 04 39.20 1.0					
FIN 90.92 322 P	24 48.35	-0.5	S.D. = 0.7 on 5 of 7 obs.			ITM 3.94 307 ePn 04 41.00 1.0					
ROB 91.04 322 P	24 48.97	-0.5	* AUG 23, 1989 08h 21m 35.05± 1.70s								
RRL 91.21 323 P	24 50.71	0.3	0.127 S ± 9.1km 99.039 E ±25.1km								
IMI 91.29 322 P	24 50.71	0.1	DEPTH = 33.0km (normal)								
ZOBO 159.98 60 ePKP	31 39.00	-6.1X	4.3mb (2 obs.)								
LPB 160.16 60 (PKP)	31 48.00	2.9X	SOUTHERN SUMATERA (274)								
CNCB 160.41 61 ePKP	31 44.00	-1.5	KGM 4.78 64 ePd	22 46.60	0.0	& AUG 23, 1989 11h 41m 20.60s					
	32 28.00		IPM 5.08 23 ePd	22 51.40	0.5	60.423 N 148.414 W					
			0.6s	108.60nm	5.5mb X	DEPTH = 0.0km					
S.D. = 1.2 on 87 of 99 obs.			e	22 58.50		KENAI PENINSULA, ALASKA (14)					
& AUG 23, 1989 07h 21m 19.94s			SNG 7.42 12 eP	23 23.50	-0.4	<AGS-P>.					
41.711 N 112.396 W			0.8s	86.57nm	5.8mb X	HIN 0.95 91 iP 41 38.50 -1.0					
DEPTH = 8.0km			WRA 39.78 122 Pd	29 07.10	0.2	eS 41 51.06					
UTAH (478)			0.5s	1.40nm	4.0mb	CVA 1.33 83 eP 41 44.31 -1.7					
<SLC-P>. ML 3.2 (SLC). Felt			FORR 41.16 141 eP	29 18.50	0.4	eS 42 03.32					
(III) at Garland and Howell.			CTA 50.27 116 iPc	30 30.00	-0.7	SGAM 1.59 86 eP 41 47.97 -2.1					
			0.9s	7.50nm	4.7mb	eS 42 10.61					
PTI 1.16 1 eP	21 41.70	-0.2	S.D. = 0.6 on 6 of 6 obs.			RAGM 1.86 89 eP 41 52.45 -1.5					
DUG 1.55 192 eP	21 47.60	-0.4	& AUG 23, 1989 10h 50m 46.14s								
DAU 1.56 146 eP	21 48.90	0.6	62.660 N 151.154 W								
BW06 2.36 62 eP	22 01.00	1.1	DEPTH = 101.1km								
MSU 3.20 177 eP	22 12.00	0.3	CENTRAL ALASKA (1)								
BGMT 3.53 4 ePn	22 20.80	4.4	<AGS-P>.								
LRM 4.11 359 ePn	22 30.60	6.0	SKT 0.70 195 iP	51 03.86	-0.1	? AUG 23, 1989 11h 54m 32.89± 1.25s					
LCCM 4.14 5 ePn	22 31.10	6.1	HUR 0.77 65 iP	51 03.96	-0.6	40.929 N ±18.6km 0.600 W ± 7.4km					
KVN 5.10 240 eP	22 38.30	-0.4	eS	51 15.93		DEPTH = 10.0km (geophysicist)					
TNP 5.18 227 eP	22 40.00	0.1	KTH 0.90 7 iP	51 05.87	-0.1	SPAIN (377)					
GOL 5.70 108 eP	22 47.50	0.2	eS	51 18.63		EROD 0.77 98 eP 54 48.00 0.0					
RSSD 6.59 66 eP	22 57.50	-2.3	PWA 1.18 149 eP	51 08.73	-0.2	eS 55 02.00					
ALO 8.21 143 e(P)	23 56.50	34.1	eS	51 25.43		ETOR 1.11 265 eP 54 54.20 0.4					
	25 33.50		SUA 1.22 171 iP	51 09.68	0.2	eS 55 10.00					
13 obs. associated			eS	51 26.78		ECHE 1.37 192 eP 54 58.00 0.0					
AUG 23, 1989 08h 09m 39.28± 0.56s			GHO 1.37 129 eP	51 11.37	0.0	GUD 2.71 265 eP 55 17.00 -0.5					
34.510 N ± 4.7km 5.506 W ± 8.0km			eS	51 30.65		eS 55 48.00					
DEPTH = 10.0km (geophysicist)			PLRM 1.43 138 eP	51 11.44	-0.5	S.D. = 0.6 on 4 of 4 obs.					
MOROCCO (395)			PME 1.44 135 eP	51 11.63	-0.4	% AUG 23, 1989 13h 06m 16.16± 3.25s					
MD 3.5 (RBA).			MCK 1.47 42 eP	51 30.91	-0.7	42.900 N ±24.2km 19.886 E ±17.9km					
NKM 0.94 5 iPg	09 57.00	-0.2	DEPTH = 10.0km (geophysicist)								
i	09 59.00		YUGOSLAVIA (303)								
i	10 04.50		MD 2.0 (TTG).								
iSg	10 08.50										
IFR 1.04 162 iPg	09 59.00	0.0									

IVA 0.03 162 iPgc 06 18.00 -0.2
 iSg 06 20.50
 PVY 0.31 168 ePg 06 23.00 0.3
 eSg 06 27.80
 TTG 0.66 225 ePg 06 29.00 -0.3
 eSg 06 38.00
 NKY 0.66 263 ePg 06 29.50 0.1
 eSg 06 37.50
 BRY 0.99 270 ePg 06 35.00 0.0
 eSg 06 48.00
 S.D. = 0.3 on 5 of 5 obs.

? AUG 23, 1989 13h 15m 41.29±11.15s
 58.095 N ±83.4km 6.227 E ±23.8km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN NORWAY (535)
 MD 2.4 (BER).

KMY 1.23 336 eP 16 04.60 0.4
 eS 16 18.80
 BLS1 1.34 13 iP 16 05.60 -0.4
 eS 16 20.30
 ODD1 1.83 6 eP 16 13.90 0.8
 eS 16 33.20
 ASK 2.45 348 eP 16 22.30 0.4
 eS 16 50.70
 SUE 3.06 347 eP 16 29.20 -1.4
 eS 17 04.20
 HYA 3.08 360 eP 16 31.00 0.2
 eS 17 06.60
 S.D. = 1.0 on 6 of 6 obs.

? AUG 23, 1989 13h 49m 41.48±1.38s
 27.263 N ±39.4km 129.809 E ±79.1km
 DEPTH = 33.0km (normal)
 4.2mb (4 obs.)
 RYUKYU ISLANDS (238)

BJI 17.04 322 eP 53 39.00 0.3
 WRA 47.13 174 Pc 58 12.20 -0.3
 0.8s 2.60nm 4.3mb
 CTA 49.69 160 iPc 58 32.90 0.5
 1.0s 8.50nm 4.7mb
 HFS 78.56 333 P 01 39.10 -1.8
 0.4s 0.60nm 4.0mb
 NB2 79.01 334 P 01 44.80 1.4
 0.9s 2.20nm 4.2mb
 S.D. = 1.7 on 5 of 5 obs.

* AUG 23, 1989 13h 56m 30.27±1.70s
 36.473 N ±10.1km 70.186 E ± 9.1km
 DEPTH = 177.7 ± 19.6 km
 4.6mb (7 obs.)
 HINDU KUSH REGION (718)

QUE 6.83 204 iPc 58 10.40 1.3
 eS 59 25.00
 NDI 9.77 141 iPc 58 46.00 -1.7
 0.4s 84.75nm 5.6mb
 iS 00 27.00
 WMO 15.25 56 Pd 59 56.50 -1.2
 LSA 18.80 105 P 00 41.00 1.9
 NYB 20.38 156 eP 00 54.50 -0.2
 e 01 25.00
 eS 04 35.00
 GTA 23.50 74 Pd 01 26.20 1.0
 GBA 23.68 162 Pd 01 27.80 0.9
 0.6s 14.30nm 4.7mb
 XAN 31.58 83 P 02 37.80 -0.2
 GYA 32.51 97 P 02 46.00 -0.2
 SUF 37.60 328 iP 03 29.80 1.0
 0.5s 2.80nm 4.2mb
 HFS 42.68 322 eP 04 10.70 0.1
 0.5s 12.20nm 4.7mb
 NB2 44.01 323 P 04 21.10 -0.2
 0.5s 5.20nm 4.4mb
 BNG 57.03 249 iPd 05 58.90 -1.0
 0.5s 11.00nm 4.9mb
 BUL 68.66 222 iPc 07 15.10 -1.3
 0.8s 5.22nm 4.4mb
 S.D. = 1.2 on 14 of 14 obs.

? AUG 23, 1989 13h 56m 43.23±3.60s
 31.988 S ±54.1km 69.800 W ±32.5km
 DEPTH = 120.0km (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.44 42 iPc 59 01.00 0.0
 S 59 15.50
 RTCB 0.99 60 iPc 59 05.50 0.0
 RTCV 1.08 84 iPc 59 06.50 0.1
 S 59 25.50
 RTLL 1.31 60 iPc 59 09.00 0.1
 S 59 29.00
 CFA 1.38 74 iPc 59 09.60 -0.1
 S.D. = 0.1 on 5 of 5 obs.

* AUG 23, 1989 14h 51m 54.87±1.57s
 31.089 N ±16.9km 131.725 E ± 6.6km
 DEPTH = 33.0km (normal)
 KYUSHU, JAPAN (235)

KAGJ 0.72 278 iP+ 52 08.60 0.0
 S 52 18.20
 KUMJ 1.63 332 P 52 21.70 0.1
 S 52 41.60
 SHNJ 3.07 350 eP 52 42.10 -0.1
 TKSJ 3.49 34 P 52 48.30 0.1
 eS 53 26.40
 SHK 3.53 13 eP 53 00.00 11.3X
 YONJ 4.34 19 P 53 00.40 0.2
 eS 53 48.80
 WKYJ 4.52 45 P 53 02.30 -0.5
 S 53 49.50
 TSRJ 5.69 38 P 53 19.30 0.0
 S 54 20.70
 IIDJ 6.78 48 P 53 35.60 0.9
 MAT 7.66 43 (P) 53 46.00 -0.9
 CHJJ 7.83 49 P 53 49.50 0.2
 S.D. = 0.5 on 10 of 11 obs.

AUG 23, 1989 15h 20m 43.70±0.22s
 52.517 N ± 5.1km 168.095 W ± 3.1km
 DEPTH = 33.0km (normal)
 5.1mb (55 obs.) 5.0msz (14 obs.)
 FOX ISLANDS, ALEUTIAN ISLANDS (9)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 24C
 Centroid Location:
 Origin Time 15:20:48.0 0.3
 Lat 52.81N 0.05 Lon 168.12W 0.06
 Dep 15.0 FIX Half-duration 2.1
 Moment Tensor: Scale 10**17 Nm
 Mrr= 0.96 0.04 Mtt=-0.64 0.05
 Mff=-0.33 0.04 Mrt= 1.37 0.17
 Mrf= 1.42 0.15 Mtf=-0.77 0.06
 Principal Axes:
 T Vol= 2.12 Plg=59 Azm=309
 N 0.29 4 46
 P -2.41 30 138
 Best Double Couple:Mo=2.3*10**17
 NP1:Strike=241 Dip=15 Slip=106
 NP2: 44 75 86

SDN 5.31 55 eP 22 01.10 -1.5
 ADK 5.32 267 eP 22 02.60 -0.3
 KDC 10.35 53 eP 23 08.70 -4.0X
 SVW 10.97 33 eP 23 23.00 1.6
 TTA 12.25 27 eP 23 38.00 -0.6
 PMS 13.34 42 eP 23 49.30 -3.7X
 PMR 13.70 41 eP 23 54.20 -3.5X
 TOA 15.17 42 eP 24 14.40 -2.5
 IMA 15.39 22 eP 24 22.10 2.2
 9.0s 32.80nm 3.6mb X
 FBA 16.18 32 eP 24 28.00 -1.8
 SIT 19.32 63 eP 25 06.80 -1.8
 BRW 19.53 11 eP 25 09.00 -1.8
 INK 22.80 33 eP 25 41.50 -2.6
 0.7s 92.00nm 5.4mb
 YKA 29.56 49 eP 26 48.70 1.6
 LON 30.10 82 eP 26 52.00 -0.2
 MBC 30.12 21 ePc 26 51.00 -0.9
 0.6s 18.00nm 5.0mb
 PNT 30.27 76 eP 26 52.00 -1.6
 0.4s 4.00nm 4.6mb
 FHC 31.97 94 eP 27 09.90 1.3
 EDM 32.37 66 iP 27 11.50 -0.5
 LBFM 32.93 91 eP 27 17.00 -0.1
 WDC 32.98 93 eP 27 17.40 0.0
 MIN 33.69 92 ePc 27 24.20 0.4
 ORV 34.24 93 eP 27 27.60 -0.7
 MHC 35.55 96 ePc 27 39.90 0.3
 CMB 35.87 94 eP 27 42.50 0.3

0.8s 10.67nm 4.8mb
 PRS 36.37 98 eP 27 46.90 0.5
 LLA 36.44 97 ePd 27 47.50 0.4
 KVN 36.63 91 eP 27 48.00 -0.8
 PRI 36.92 97 eP 27 51.20 0.0
 FRI 36.95 95 eP 27 51.80 0.6
 TNP 37.77 92 eP 27 58.00 -0.4
 0.8s 7.84nm 4.6mb
 BCH 37.91 98 eP 28 00.00 0.5
 FFC 37.97 60 iPc 27 58.60 -1.1
 0.7s 9.00nm 4.7mb
 SYP 38.42 98 eP 28 16.00 12.2X
 ISA 38.57 96 eP 28 06.00 1.0
 CLC 39.00 95 eP 28 09.00 0.4
 KAKJ 39.50 267 P 28 12.70 0.1
 NIJ 39.55 269 P 28 12.60 -0.4
 BW06 39.60 80 eP 28 13.00 -0.7
 SBB 39.62 96 eP 28 13.00 -0.7
 MWC 39.79 97 eP 28 25.00 9.7X
 GSC 39.83 95 eP 28 16.00 0.5
 ALE 40.28 11 eP 28 18.00 -0.6
 0.5s 6.00nm 4.6mb
 CHJJ 40.32 267 P 28 19.60 0.2
 RVR 40.36 97 eP 28 21.00 1.2
 MAT 40.48 269 eP 28 20.00 -0.7
 0.6s 18.67nm 5.0mb
 Z 20s 2.48um 5.1msz
 eS 34 25.00
 TPC 41.09 95 eP 28 27.00 1.2
 PLM 41.11 97 eP 28 28.00 1.9
 IIDJ 41.36 268 P 28 28.00 0.0
 BAR 41.69 98 eP 28 33.00 2.3
 TSRJ 42.50 269 P 28 37.00 -0.3
 GLA 42.56 96 eP 28 39.00 1.2
 CN2 43.72 286 Pc 28 46.10 -1.0
 6.0s 0.40nm 2.4mb X
 Z 19s 2.70um 5.2msz
 N 18s 2.20um
 iP 28 59.30 49kmX
 eS 35 14.00
 iS 35 36.00
 eSS 38 22.00
 GOL 43.97 81 eP 28 48.50 -1.0
 0.8s 26.04nm 5.1mb
 RSON 44.24 61 eP 28 50.00 -1.2
 SNY 46.01 285 iPc 29 05.00 -0.4
 Z 23s 1.30um 4.8mszX
 N 24s 1.20um
 E 25s 1.00um
 pP 29 20.00 58kmX
 eS 35 51.00
 ALO 46.39 87 eP 29 08.20 -0.5
 1.1s 9.81nm 4.7mb
 Z 20s 1.24um 4.9msz
 ePcP 30 43.00
 eS 35 57.00
 eSS 39 40.00
 eLg 40 36.00
 eLR 42 28.00
 FRB 48.40 36 eP 29 23.00 -0.9
 DL2 49.00 283 eP 29 28.00 -0.8
 Z 18s 1.20um 4.9msz
 DAG 49.52 9 iPd 29 31.10 -1.2
 0.6s 21.33nm 5.4mb
 MEO 51.28 81 eP 29 44.30 -2.0
 BJI 51.48 288 eP 29 47.00 -0.7
 6.0s 0.41nm 2.6mb X
 Z 16s 3.22um 5.4mszX
 E 16s 1.26um
 eS 37 12.00
 TIA 53.47 284 eP 30 01.40 -1.2
 Z 20s 1.40um 5.0msz
 E 19s 1.50um
 HMC 53.59 292 Pc 30 03.20 -0.5
 Z 20s 3.20um 5.4msz
 N 16s 1.50um
 E 14s 1.10um
 e 30 05.00
 sP 30 17.00
 GUMO 53.86 242 eP 30 02.30 -3.4X
 0.7s 55.91nm 5.7mb
 Z 20s 0.51um 4.6msz
 PJG 53.86 242 eP 30 02.30 -3.4X
 GUA 53.88 242 eP 30 02.30 -3.5X
 0.6s 53.33nm 5.7mb
 FVM 53.97 73 eP 30 03.00 -3.3X
 SSE 54.56 276 P- 30 10.50 -0.2

23d 17h

Table with columns for station name, time, and depth. Includes stations ALT, DST, VAM, EZN, YLV, BBTk, KOT, DSI, PRNI, MBH.

S.D. = 1.3 on 14 of 19 obs.

% AUG 23, 1989 18h 05m 52.48 ± 0.79s
37.725 N ± 6.9km 14.968 E ± 6.9km
DEPTH = 5.0km (geophysicist)

SICILY (398)

Table with columns for station name, time, and depth. Includes stations MNO, ATN, MEU, SOI, FAI.

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

? AUG 23, 1989 18h 28m 55.75 ± 5.58s
6.724 S ± 25.9km 105.761 E ± 14.6km
DEPTH = 126.7 ± 52.2 km
4.3mb (5 obs.)

SUNDA STRAIT (276)

Table with columns for station name, time, and depth. Includes stations NANU, KNA, MTN, WRA, GBA, PMG, CTA, BRS, BUL, SIO, TUL.

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

* AUG 23, 1989 19h 43m 32.87 ± 1.43s
22.279 N ± 9.6km 121.967 E ± 9.5km
DEPTH = 19.9 ± 7.8 km
4.1mb (4 obs.)

TAIWAN REGION (243)

Table with columns for station name, time, and depth. Includes stations TWG, TWF1, TWC, TWZ, ANP, OZH, HKC, MCO, SSE, NJ2, WHN, OIZ, XAN, TIY, BJI, CD2, SNY, MAT.

Table with columns for station name, time, and depth. Includes stations HHC, BTO, LZH, CN2, CHG, CHTO, MDJ, WARB, SUF, SLL, VTS, KKB.

S.D. = 1.1 on 19 of 30 obs.

& AUG 23, 1989 19h 57m 27.23s
62.907 N 150.388 W
DEPTH = 92.0km
CENTRAL ALASKA (1)
<AGS-P>

Table with columns for station name, time, and depth. Includes stations HUR, KTH, RND, MCK, SKT, PWA, GHO, PLRM, SUA, KNK, NEA, WRH, SPU, CCB, TOA, HDA, PAX, FBA, KLU, GLI, TTA, SVW, GLB, IMA.

25 obs. associated

? AUG 23, 1989 20h 09m 54.07 ± 2.76s
51.531 N ± 43.1km 167.306 W ± 19.3km
DEPTH = 33.0km (normal)
4.6mb (3 obs.)

FOX ISLANDS, ALEUTIAN ISLANDS (9)

Table with columns for station name, time, and depth. Includes stations ADK, KDC, IMA, FBA, INK, SOD, SUF, NB2, NUR, HFS.

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

AUG 23, 1989 20h 25m 22.41 ± 0.23s
52.350 N ± 5.2km 168.025 W ± 3.0km
DEPTH = 33.0km (normal)
5.3mb (58 obs.) 4.7msz (5 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)

Table with columns for station name, time, and depth. Includes stations ADK, SDN, KDC, SVW, TTA, PMR, TOA, IMA, FBA, SIT, BRW, INK, YKA, LON, MBC, FHC, EDM, LBFM, WDC, ORV, SES, CMB, LRM, PRS, LLA, KVN, FRI, TNP, FFC, SBB, NIJ, BW06, GSC, RVR, CHJJ, ALE, MAT, MDJ, N, TPC, PLM, IIDJ, BAR, RSSD, GLA, TSRJ, CN2, Z, N, GOL, RSON, SNY, Z, N, ALO, SHNJ, KUMJ, KAGJ, DL2, Z, DAG, MEO, TIA, HHC, Z, N, FVM, SSE.

23d 20h

BBL 1.47 194 eP 27 42.20 0.1
S.D. = 0.1 on 4 of 4 obs.

& AUG 23, 1989 20h 31m 02.60s
37.863 N 122.235 W

DEPTH = 2.0km
CENTRAL CALIFORNIA (39)
<BRK>. ML 2.5 (BRK).
Mo=4.1*10**11 Nm (BRK). Felt in
the northern part of Oakland
near the Coldecott Tunnel.

BKS 0.01 360 eP 31 02.20 -1.0
eS 31 03.70
BKS 0.01 360 iPd 31 03.70 0.5
iS 31 04.60
BRK 0.02 298 iPc 31 02.80 -0.5
iS 31 04.30
ZSP 0.08 348 iPd 31 04.20 -0.1
iS 31 06.20
PCC 0.38 198 e(P) 31 07.00 -2.4
MHC 0.70 138 ePc 31 16.37 -0.3
e(S) 31 28.95
GCC 0.85 167 eP 31 18.30 -1.4
eS 31 30.30
SAO 1.26 150 e(P) 31 24.00 -2.8
CMB 1.47 83 e(P) 31 28.20 -2.0
eS 31 47.50
9 obs. associated

? AUG 23, 1989 21h 08m 44.44± 4.77s
32.277 S ±24.9km 71.215 W ±40.7km
DEPTH = 33.0km (normol)
NEAR COAST OF CENTRAL CHILE (135)

PEL 0.97 153 iPd 09 02.10 0.3
iS 09 19.50
FCH 1.31 144 eP 09 07.00 0.2
iS 09 30.00
TACH 1.39 170 eP 09 07.00 -0.8
iS 09 30.00
PCH 1.46 156 ePd 09 09.00 0.1
iS 09 33.00
CHCH 1.72 164 eP 09 13.00 0.5
iS 09 39.60
ZON 2.28 72 eP 09 21.00 0.5
MRA 4.66 93 ePc 09 53.60 -0.7
S.D. = 0.6 on 7 of 7 obs.

* AUG 23, 1989 21h 21m 21.19± 0.96s
52.445 N ±19.5km 168.077 W ±10.5km
DEPTH = 33.0km (normol)
4.9mb (15 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS (9)

ADK 5.33 267 eP 22 40.10 -0.3
KDC 10.38 53 eP 23 47.40 -3.3X
TTA 12.31 27 eP 24 21.50 4.6X
PMR 13.75 41 eP 24 34.00 -1.8
IMA 15.45 22 eP 25 01.00 2.8
FBA 16.23 32 eP 25 06.00 -2.0
SIT 19.34 63 eP 25 45.00 -1.3
INK 22.85 33 eP 26 21.00 -1.1
pP 26 37.00 70kmX
YKA 29.60 49 eP 27 28.10 3.2X
CN2 43.75 286 P 29 23.70 -1.1
pP 29 30.60 23kmX
GOL 43.97 81 eP 29 26.50 -0.5
BTO 54.67 292 P 30 49.40 0.3
KEY 57.62 354 iP 31 08.50 -1.1
0.6s 10.40nm 5.1mb
XAN 59.83 288 P 31 25.00 -0.6
SOD 60.00 353 iP 31 25.40 -0.8
GTA 61.15 298 P 31 33.40 -1.2
WMO 64.11 309 P 31 53.00 -1.1
SUF 64.63 353 iP 31 56.40 -0.7
0.5s 8.30nm 5.1mb
GYA 66.69 283 eP 32 11.00 0.1
NB2 66.86 0 P 32 10.10 -1.4
0.7s 5.20nm 4.7mb
NUR 66.94 353 iP 32 11.20 -0.7
0.7s 20.00nm 5.3mb
Z 23s 0.80um 4.9mszX
LR 28 30.00
HFS 67.77 359 eP 32 15.50 -1.6
0.5s 14.70nm 5.3mb
SSF 80.61 6 eP 33 31.90 0.4

MFF 0.8s 4.50nm 4.5mb
80.79 8 eP 33 33.40 1.0
0.8s 5.30nm 4.6mb
KBA 80.85 359 eP 33 33.00 0.0
0.8s 9.50nm 4.8mb
i 33 34.70
i 33 45.10
AVF 80.87 6 eP 33 33.40 0.6
0.8s 10.70nm 4.9mb
LSF 81.28 7 eP 33 35.70 0.7
0.8s 9.40nm 4.8mb
MAF 81.39 7 eP 33 36.30 0.7
0.8s 6.70nm 4.7mb
RJF 82.22 7 eP 33 41.00 1.1
LPG 82.34 4 eP 33 43.00 2.1
1.0s 6.80nm 4.7mb
LSD 82.39 3 P 33 43.58 2.4
LFF 82.52 8 eP 33 42.50 1.0
0.8s 16.10nm 5.1mb
CAF 82.64 7 eP 33 43.00 0.8
0.8s 8.00nm 4.8mb
RRL 82.91 4 P 33 46.14 2.3
PZZ 83.34 3 P 33 47.27 1.4
PCP 83.35 2 P 33 46.35 0.5
ROB 83.58 3 P 33 47.37 0.3
STV 83.61 3 P 33 46.76 -0.5
ENR 83.63 3 P 33 47.17 -0.2
FIN 83.67 3 P 33 47.48 0.0
IMI 83.96 3 P 33 47.27 -1.7
FIR 84.16 0 eP 33 51.00 1.2
EPF 84.38 9 eP 33 51.50 0.4
0.6s 7.20nm 5.0mb
BUL 145.24 332 ePKP 40 56.80 -0.3
SLR 150.60 329 ePKP 41 08.50 3.1X
0.7s 6.85nm
PRY 151.97 329 ePKP 41 10.70 3.2X
S.D. = 1.2 on 41 of 46 obs.

* AUG 23, 1989 21h 36m 05.93± 0.86s
1.510 N ±17.9km 90.353 W ±23.6km
DEPTH = 10.0km (geophysicist)
4.8mb (7 obs.)
GALAPAGOS ISLANDS REGION (696)

NNA 18.97 135 eP 40 12.00 -18.0X
ZOBO 28.18 130 P 42 01.00 -0.5
Z 24s 3.50um 4.9mszX
LR 51 36.00
LPB 28.36 130 eP 42 03.00 0.1
CNCD 28.61 130 P 42 06.00 0.6
OLY 33.84 358 P 42 50.50 -0.1
MEO 33.98 348 iPc 42 52.20 0.3
RSCP 34.21 7 P 42 53.50 -0.3
1.0s 31.45nm 5.2mb
GBTN 34.46 9 P 42 56.50 0.5
FVM 36.30 360 P 43 12.00 0.4
1.0s 13.00nm 4.7mb
ALO 36.49 337 eP 43 15.20 1.7
1.0s 6.25nm 4.4mb
eS 49 08.00
eSS 51 50.00
BLA 36.69 13 P 43 20.00 5.0X
1.0s 20.00nm 4.9mb
PLM 40.26 325 P 43 47.00 1.9
TNP 43.96 329 P 44 15.50 0.2
0.8s 2.79nm 4.1mb
KVN 45.15 329 P 44 24.50 -0.3
CMB 45.62 326 eP 44 26.50 -1.9
SES 51.78 343 eP 45 13.00 -3.0
DPW 52.09 337 P 45 18.90 0.6
PNT 53.81 337 eP 45 31.00 0.0
0.9s 16.00nm 5.0mb
INK 72.82 345 eP 47 36.00 -0.3
MBC 76.43 353 eP 47 57.00 0.0
1.0s 7.00nm 4.7mb
S.D. = 1.2 on 18 of 20 obs.

* AUG 23, 1989 22h 08m 00.66± 0.94s
19.777 S ±10.1km 133.751 E ± 9.6km
DEPTH = 5.0km (geophysicist)
3.3mb (1 obs.)
NORTHERN TERRITORY, AUSTRALIA (591)

WB5 0.59 100 iPd 08 12.00 -0.5
ASPA 3.87 178 iPd 09 03.70 1.5
0.3s 86.00nm
eS 09 47.60

KNA 6.21 309 eP 09 35.90 0.6
0.2s 13.00nm 5.4mb X
eS 10 46.00
MTN 7.34 340 eP 09 51.00 -0.1
eS 11 10.00
WARB 9.14 224 iPd 10 14.70 -1.5
0.2s 10.00nm 5.9mb X
eS 11 54.00
FORR 12.15 204 eP 10 53.00 -4.3X
0.3s 20.00nm 5.9mb X
MBL 13.12 262 eP 11 05.00 -5.4X
eS 13 25.00
NANU 17.22 258 eP 12 00.00 -3.6X
0.4s 1.00nm 3.3mb
eS 14 57.00
S.D. = 1.6 on 5 of 8 obs.

* AUG 23, 1989 22h 14m 41.54± 2.85s
36.926 N ±25.3km 20.954 E ±10.4km
DEPTH = 10.0km (geophysicist)
MEDITERRANEAN SEA (400)
ML 3.2 (ATH).

ITM 0.82 72 iPgd 14 56.70 -0.7
VLS 1.28 347 ePb 15 04.00 -1.3
ATH 2.43 64 ePb 15 25.50 3.5X
KEK 2.93 342 ePg 15 38.50 9.6X
NEO 2.98 36 ePn 15 29.90 0.2
KZN 3.44 10 ePn 15 37.20 1.0
PLG 3.96 29 ePn 15 44.20 0.6
OHR 4.18 358 ePn 15 49.00 2.2X
MGR 5.31 309 P 16 03.00 0.2
S.D. = 1.1 on 6 of 9 obs.

% AUG 24, 1989 00h 12m 02.67± 1.00s
39.233 N ± 7.6km 27.918 E ±10.8km
DEPTH = 10.0km (geophysicist)
TURKEY (366)

DST 0.66 56 iPg 12 14.30 -1.6
eSg 12 24.30
IZM 0.98 212 ePg 12 20.90 -0.4
eSg 12 34.90
KCT 1.07 18 iPn 12 24.20 1.4
EDC 1.11 358 ePn 12 23.20 -0.3
EZN 1.37 296 ePn 12 31.00 3.3X
KHL 1.55 125 iPn 12 31.20 0.8
ALT 1.71 95 ePn 12 33.00 0.2
S.D. = 1.4 on 6 of 7 obs.

AUG 24, 1989 -00h 31m 10.54± 0.37s
49.605 N ± 3.5km 129.917 W ± 4.7km
DEPTH = 10.0km (geophysicist)
4.6mb (17 obs.) 4.5msz (2 obs.)
VANCOUVER ISLAND REGION (25)

EDB 1.83 81 iPnc 31 41.69 -0.6
PHC 1.94 54 iPnc 31 44.00 0.2
Sn 32 10.00
ETB 2.21 95 Pn 31 48.26 0.4
BBB 2.82 23 Pn 31 56.00 -0.5
BTB 2.87 91 Pn 31 56.19 -1.1
CBB 2.98 80 iPnc 31 58.95 0.3
PGC 4.35 100 eP 32 18.00 -0.2
MCW 4.74 99 eP 32 23.50 -0.3
GMW 5.16 111 eP 32 31.00 1.3
BMW 5.47 122 eP 32 32.50 -1.6
RMW 5.80 109 eP 32 40.00 1.3
LON 6.13 115 eP 32 43.50 0.2
PNT 6.72 89 eP 32 52.10 0.4
DPW 7.94 98 eP 33 07.30 -1.4
SIT 8.13 339 eP 33 06.40 -5.0X
WDC 10.42 147 ePd 33 42.90 0.0
EDM 10.96 64 ePd 33 49.50 -0.9
MIN 10.96 144 ePd 33 50.20 -0.4
ORV 11.69 146 eP 33 59.90 -0.4
SES 12.17 79 iPd 34 06.60 -0.2
1.0s 144.00nm 6.2mb X
LRM 12.35 101 eP 34 08.50 -1.0
CMB 13.44 146 eP 34 22.40 -1.4
KVN 13.50 137 eP 34 25.00 0.3
FRI 14.62 146 eP 34 38.10 -1.0
TNP 14.69 137 eP 34 41.00 0.7
1.0s 15.00nm 4.5mb
YKA 15.43 27 eP 35 00.80 11.2X
BW06 15.64 108 eP 34 54.00 1.3
PMR 16.10 325 eP 34 55.50 -2.7

Table with columns for station name, time, coordinates, and magnitude. Includes stations like CLC, GSC, SBB, FFC, FBA, RVR, RSSD, TPC, INK, PLM, TTA, BAR, GLA, GOL, Z, GLD, IMA, ALO, RSON, MBC, MEO, SIO, TUL, Z, FVM, RSCP, GAC, BLA, ALE, LPF, BRG, LOR, SSF, CDF, AVF, LBF, RJF, CAF, ZOBO, Z, CCH, BUL, AUG 24, 1989 00h, WEST CAROLINE ISLANDS, GUMD, PJJ, GUA, DAV, OQP, BAC, PMG, KAGJ, ANP, KUMJ, SHNJ, OZH, Z.

Table with columns for station name, time, coordinates, and magnitude. Includes stations like MAT, SSE, WRA, CTA, DL2, SNY, Z, N, E, CN2, Z, N, GYA, ASPA, Z, BJI, Z, N, E, TIY, Z, N, E, XAN, KMI, Z, E, HHC, Z, CD2, BTO, N, E, WARB, BRS, CHG, LZH, Z, E, DZM, GTA, Z, WMO, Z, HYB, GBA, QUE, MAIO, INK, MBC, ALE, PNT, WDC, ORV, CMB, SUF, KVN, SES, LPB, ZOBO, CNCB, S.D., ? AUG 24, 1989 01h, AUG 24, 1989 01h 53m, AUG 24, 1989 01h 56m, AUG 24, 1989 02h, AUG 24, 1989 02h 13m.

Table with columns for station name, time, coordinates, and magnitude. Includes stations like ACX, III, MRX, CRX, UNM, IIC, IIT, OXX, IISM, AGX, LVVM, ALO, SIO, TUL, S.D., ? AUG 24, 1989 01h 53m, TURKEY, DST, EDC, IZM, KHL, S.D., & AUG 24, 1989 01h 56m, CENTRAL ALASKA, KTH, HUR, RND, MCK, SKT, GHQ, SUA, PLRM, WRH, KNK, CCB, RDS, HDA, CNPM, AUG 24, 1989 02h 13m, IONIAN SEA, CENTROID, MOMENT TENSOR, Data Used: GDSN, L.P.B.: 13S, 22C, Centroid Location: Origin Time 02:13:11.6 1.4, Lat 37.05N 0.09 Lon 19.72E 0.14, Dep 15.0 FIX Half-duration 1.7, Moment Tensor: Scale 10e+16 Nm, Mrr=6.32 0.50 Mtt=-0.98 0.71, Mff=-5.34 0.51 Mrt=4.99 1.66.

24d 02h

Mrf=-0.56 1.73 Mlf= 2.27 0.52			FAI 5.21 264 P 14 33 40 -0.1			i 16 08.00				
Principal Axes:			SMG 5.27 91 eSn 15 29 20			i 16 12.00				
T Val= 8.88 Plg=63 Azm=355			KDZ 5.44 46 ePd 14 36.00 -0.6			iS 17 36.50				
N -1.98 24 142			PCB 5.48 33 iPd 14 37.00 -0.2			i 17 39.60				
P -6.90 13 238			USI 5.55 280 P 14 36.50 -1.7			i 15 44.10 -2.1				
Best Double Couple:Mo=7.9*10**16			IZM 5.59 84 eP 14 39.40 0.6			i 15 57.50				
NP1:Strike=356 Dip=38 Slip= 131			DUI 5.73 312 P 14 39.90 -0.9			i 16 35.30				
NP2: 129 62 63			RFI 5.81 307 P 14 42 65 0.8			e 18 12.00				
VLS	0.37	60 iPgd	13 22.40	-1.0	HVAR	5.91 332 iPnc	14 41 60 -1.6	SAL	10.47 320 P	15 45.10 -1.5
ITM	1.61	120 iPnc	13 43.00	0.9	ERC	6.00 273 P	14 44 30 -0.2	BOB	10.52 313 P	15 45.60 -1.8
KEK	1.74	350 ePb	13 45.70	1.6	KAP	6.12 111 ePn	14 45 60 -0.6	VKA	10.64 346 eP	15 46.50 -2.5
SRN	1.89	356 iPn	13 48.20	2.0	SDI	6.14 309 P	14 46 40 -0.2	Z 10s	6.70um	
LSK	2.18	8 iPnc	13 52.70	2.3	LVI	6.20 272 P	14 46 20 -1.1	i	16 05.90	
TPE	2.30	357 iPnd	13 52.50	0.4	EDC	6.41 66 iP	14 50 20 -0.2	i	16 11.30	
KZN	2.62	28 iPnc	13 59.50	2.8X	BNT	6.46 66 iP	14 52 70 1.7	i	16 46.30	
KBN	2.67	10 iPnc	14 00.00	2.7X	YER	6.49 95 eP	14 52 00 0.5	i	17 07.60	
BERA	2.71	356 iPnd	13 59.20	1.3	PVL	6.52 35 iPd	14 52 00 0.2	i	17 45.00	
NEO	2.72	60 iPnc	13 59.50	1.4	AZI	6.54 310 P	14 52 80 0.7	i	18 32.90	
LIT	2.77	40 ePnc	14 00.90	2.2	JMB	6.63 46 eP	14 53 00 -0.3	LR	20 43.00	
ATH	2.79	89 ePn	14 00.00	0.9	PTS	6.63 262 P	14 52 00 -1.4	PCP	10.93 310 P	15 52.10 -0.8
LCI	2.91	324 P	14 00.48	-0.2	KCT	6.74 68 iP	14 55 70 0.7	FIN	10.96 308 P	15 54.15 0.8
GR1	3.07	287 P	14 03.59	0.5	DST	6.79 74 iP	14 56 20 0.5	SCE	10.98 328 eP	15 52.50 -1.3
OHR	3.15	9 iPnc	14 06.10	1.9	BEO	6.82 2 ePn	14 54 00 -2.1	KMR	10.98 338 iP+	15 51.70 -1.9
SOI	3.26	273 Pd	14 05.80	0.1	i	15 27 00		i	18 16.60	
PAIG	3.34	54 ePn	14 42.80	1.1	MNS	7.22 310 P	15 00 40 -1.4	KAS	11.00 68 eP	15 56.00 2.1
TIR	3.36	356 iPnc	14 08.50	1.4	KHL	7.37 85 eP	15 06 20 2.4	CSS	11.01 102 eP	15 51.00 -3.0X
THE	3.40	38 ePn	14 09.70	1.9	ITU	7.50 63 eP	15 16 00 10.5X	IMI	11.01 306 P	15 57.84 3.7X
GMB	3.41	274 P	14 08.50	0.4	ISK	7.51 63 iP	15 04 70 -1.1	BHG	11.09 334 eP	15 53.10 -2.0
GRG	3.42	29 ePn	14 09.50	1.5	YLV	7.58 67 iP	15 07 20 0.5	OGA	11.15 326 iPc	15 54.50 -1.5
TDS	3.43	300 P	14 09.20	1.0	BZS	7.69 8 ePc	15 04 50 -3.7X	SPC	11.19 0 iP	15 55.60 -1.0
PLG	3.47	46 ePn	14 09.50	0.7	GBZT	7.70 66 eP	15 07 50 -0.8	ROB	11.21 308 P	15 57.33 0.5
LACI	3.66	354 iPnc	14 12.10	0.8	KSL	7.75 101 ePn	15 08 50 -0.5	SAOF	11.26 306 P	15 57.63 0.2
MSI	3.66	275 P	14 11.50	0.1	ARV	7.77 317 P	15 08 90 -0.5	REVF	11.27 305 P	15 57.54 -0.1
PHP	3.69	3 iPnc	14 12.40	0.6	ELL	7.84 96 iP	15 14 20 3.7X	AUTN	11.35 306 P	15 58.19 -0.6
ATN	3.73	274 P	14 12.50	0.1	ALT	7.85 79 eP	15 11 40 0.7	AURF	11.36 305 P	15 58.15 -0.7
SOH	3.74	40 ePn	14 36.00	23.4X	PRO	8.07 319 ePn	15 14 00 0.5	OSS	11.42 323 ePc	15 59.20 -0.5
OUR	3.77	50 ePn	14 14.10	1.2	CMP	8.12 25 iPc	15 09 00 -5.3X	ENR	11.46 307 P	16 01.22 1.0
KNT	3.80	33 ePn	14 14.90	1.6	MAO	8.20 305 P	15 15 40 0.0	TOUF	11.47 306 P	16 01.25 0.8
VAY	3.80	28 iPnc	14 14.40	1.1	PSN	8.31 44 eP	15 17 00 0.2	MVIF	11.48 305 P	16 01.38 0.9
ULC	4.03	350 iPnc	14 16.00	-0.6	RSM	8.32 318 P	15 17 02 0.0	STV	11.53 307 P	16 02.15 1.0
PUK	4.05	357 iPnc	14 18.00	1.1	VBY	8.36 335 iPnc	15 16 40 -1.1	VAI	11.57 316 P	15 59.30 -2.3
SRS	4.08	39 ePn	14 18.50	1.1	CRE	8.40 315 P	15 16 70 -1.5	CALN	11.59 304 P	16 02.25 0.3
SKO	4.09	13 iPn	14 18.00	0.5	ZAG	8.42 340 iPnc	15 16 30 -2.0	VDL	11.61 320 ePc	16 01.60 -0.7
Z 10s	27.20um		4.7mszX		iSn	16 48 40		TMA	11.67 318 ePc	16 01.20 -1.9
N 12s	28.42um				iSg	17 37 50		PZZ	11.79 308 P	16 03.48 -1.3
i(Pb)	14 25.00				iPhc	15 16 90		ORO	11.87 314 P	16 04.40 -1.3
iPg	14 33.50				eSh	16 48 50		FOUF	12.01 307 ePc	16 09.44 2.0
iSn	15 08.00				iSh	16 50 60		KRA	12.06 359 eP	16 06.60 -1.5
iSb	15 22.00				PTJ	8.50 340 iPnc	-2.7X	Z 14s	9.40um	
i	15 34.00				RIY	8.53 331 iPnd	-1.6	N 14s	9.60um	
LR	16 04.00				ISR	8.58 32 eP	15 20 50 -0.1	e	16 12.60	
VAM	4.13	127 ePn	14 17.50	-0.7	MLR	8.64 28 ePd	15 21 50 0.0	e	16 16.60	
LPI	4.16	278 P	14 17.97	-0.6	SFI	8.64 316 P	15 19 40 -2.1	e	19 22.00	
MGR	4.19	302 Pd	14 19.60	0.7	PGD	8.69 315 P	15 23 50 1.2	FUR	12.06 330 iPc	16 07.20 -1.0
MEU	4.27	260 P	14 18.60	-1.5	TLB	8.85 39 ePd	15 24 00 -0.2	LLS	12.11 321 ePd	16 09.30 0.2
PZI	4.30	259 P	14 17.97	-2.5	CEY	8.85 333 ePnc	15 22 40 -1.9	KHC	12.11 339 eP	16 05.60 -3.3X
MNO	4.34	271 P	14 21.20	0.0	FIR	8.84 275 eSh	17 00 00	1.0s	53.00nm	5.7mb
APE	4.35	101 ePn	14 20.80	-0.4	CVO	9.00 28 ePd	15 27 00 0.5	MMK	12.13 315 ePd	16 08.80 -0.6
BCI	4.37	359 iPnc	14 23.00	1.6	TRI	9.07 330 ePnc	15 24 70 -2.6X	RRL	12.19 309 P	16 10.56 0.3
BDV	4.41	347 iPn	14 21.00	-1.0	LJU	9.07 334 iPnc	15 24 80 -1.6	SAX	12.21 323 ePc	16 10.00 -0.4
KKB	4.46	29 iPc	14 30.00	7.2X	VRI	9.25 30 ePd	15 30 00 0.1	LSD	12.25 312 P	16 08.20 -2.8X
TTG	4.49	351 iPnc	14 22.50	-0.6	VOY	9.29 332 iPc	15 28 30 -2.2	HLW	12.31 128 eP	16 07.00 -4.6X
MMB	4.51	36 iPc	14 24.00	0.5	BDI	9.44 313 P	15 33 09 0.5	eS	18 17.00	
SGO	4.57	306 P	14 25.70	1.4	RBL	9.76 332 P	15 34 50 -2.4	BNI	12.33 309 P	16 11.10 -0.9
PVY	4.60	358 iPnc	14 25.50	0.6	VVI	9.85 327 P	15 36 31 -1.8	WET	12.33 337 eP	16 08.60 -3.2X
HCY	4.63	344 iPnc	14 23.50	-1.7	PPE	9.89 32 eP	15 40 50 1.8	DIX	12.46 314 ePd	16 12.70 -1.1
GIB	4.86	272 P	14 27.90	-0.7	SRO	9.91 353 iPc	15 40 00 1.1	LPG	12.51 311 eP	16 14.60 0.0
IVA	4.88	358 iPnc	14 29.50	0.8	BMR	9.97 13 ePd	15 36 00 -3.8X	0.8s	37.60nm	5.6mb
NKY	4.90	350 ePn	14 28.30	-0.7	BBTK	9.97 75 eP	15 42 00 2.0	KOT	12.57 126 eP	16 08.50 -6.5X
PRK	4.93	73 ePn	14 31.00	1.6	CLI	10.03 29 ePd	15 42 00 1.4	eS	18 19.00	
BRY	5.06	346 iPnc	14 30.00	-1.3	SOP	10.04 346 eP	15 38 20 -2.5	KVT	12.63 71 eP	16 19.40 3.5X
RZN	5.08	42 iPc	14 32.00	0.3	FVI	10.19 330 P	15 40 90 -1.8	PRU	12.65 343 Pc	16 14.00 -2.1
EZN	5.13	67 iP	14 32.40	0.2	CTI	10.24 324 P	15 40 90 -2.7X	Z 12s	6.00um	
NPS	5.15	120 ePn	14 32.00	-0.5	PPCY	10.28 104 eP	15 45 50 1.5	N 12s	3.30um	
					KBA	10.38 333 iPd	15 43 60 -1.9	E 12s	4.50um	
						0.9s 243.00nm	6.5mb X	e	19 06.00	
								GRC1	12.66 333 ePn	16 12.80 -3.4X
								Z 16s	3.00um	
								e	18 27.60	
								KSP	13.14 349 ePc	16 21.80 -0.8
								e	19 26.00	
								BBS	13.26 320 P	16 23.19 -1.1
								FEL	13.29 322 P	16 23.56 -1.1
								STU	13.40 327 eP	16 24.50 -1.4

Table with columns for station name, time, and depth. Includes stations YLV, GBZT, DST, EZN, ALT, IZM, KHL, BBTk, VRI. Summary: S.D. = 1.0 on 11 of 14 obs.

Table with columns for station name, time, and depth. Includes stations NINJ, CHJJ, OFUJ, MAT, IIDJ, AOMJ, TSRJ. Summary: S.D. = 1.0 on 9 of 9 obs.

Table with columns for station name, time, and depth. Includes stations CD2, LSA, WHN, XAN, LZH, Z, N, E, NDI, TIY, N, PMG, CTA, STK, GTA, Z, N, BTO, N, E, HHC, Z, N, BJI, SNY, WMO, BRS, CN2, MAT, MAIO, SPA, VRI, BNG, MLR, SUF, HFS, KVN, TNP, RSSD, ALO, SIO, TUL, FVM, OLY, GBTN, CNCB, LPB. Summary: S.D. = 1.2 on 42 of 52 obs.

AUG 24, 1989 06h 56m 23.83 ± 0.76s
37.978 N ± 6.6km 20.130 E ± 5.0km
DEPTH = 10.0km (geophysicist)
3.9mb (2 obs.)
IONIAN SEA (399)
ML 3.9 (ATH).

AUG 24, 1989 10h 07m 23.63 ± 0.63s
41.447 N ± 6.3km 20.158 E ± 5.2km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 2.7 (SKO), 2.5 (TTG).

Table with columns for station name, time, and depth. Includes stations VLS, ITM, KEK, SRN, LSK, KZN, KBN, BERA, NEO, ATH, OHR, SOI, TIR, PLG, LACI, PHP, VAY, SDA, PUK, SKO, BCI, KKB, MMB, RZN, VTS, KDZ, VOY, HFS, NB2, SUF. Summary: S.D. = 0.8 on 26 of 30 obs.

Table with columns for station name, time, and depth. Includes stations TIR, PHP, LACI, OHR, PUK, ULC, BCI, KBN, SKO, PVY, TTG, BDV, HCY, VAY, BRY. Summary: S.D. = 1.2 on 14 of 15 obs.

Table with columns for station name, time, and depth. Includes stations BTO, N, E, HHC, Z, N, BJI, SNY, WMO, BRS, CN2, MAT, MAIO, SPA, VRI, BNG, MLR, SUF, HFS, KVN, TNP, RSSD, ALO, SIO, TUL, FVM, OLY, GBTN, CNCB, LPB. Summary: S.D. = 1.2 on 42 of 52 obs.

? AUG 24, 1989 07h 20m 54.14 ± 3.84s
32.586 S ± 16.9km 71.284 W ± 33.5km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

AUG 24, 1989 11h 25m 46.89 ± 0.50s
5.692 S ± 7.9km 102.680 E ± 9.4km
DEPTH = 33.0km (normal)
4.8mb (12 obs.) 4.9msz (2 obs.)
SOUTHERN SUMATRA (274)

AUG 24, 1989 11h 56m 18.98 ± 0.47s
44.369 N ± 4.4km 11.972 E ± 3.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
MD 3.2 (FIR), 3.1 (TRI).

Table with columns for station name, time, and depth. Includes stations PEL, SAN, TACH, FCH, PCH, CHCH, ZON, MRA. Summary: S.D. = 0.5 on 8 of 8 obs.

Table with columns for station name, time, and depth. Includes stations KGM, IPM, PCI, TSM, NNT, NANU, MBL, LOE, BDT, CHG, KNA, MTN, GBA, WRA, ASPA, Z. Summary: S.D. = 0.5 on 5 of 5 obs.

Table with columns for station name, time, and depth. Includes stations SFI, PGD, RSM, FIR, PRO, MME, BDI, ARV, ASS, AOI, CIO, CTI.

AUG 24, 1989 08h 40m 29.82 ± 3.02s
36.658 N ± 18.2km 141.531 E ± 26.6km
DEPTH = 5.0km (geophysicist)
NEAR EAST COAST OF HONSHU, JAPAN(228)
KAKJ 1.19 248 iPd 40 51.80 -0.6
YAMJ 1.92 322 P 41 03.40 -0.1

Table with columns for station name, time, and depth. Includes stations KGM, IPM, PCI, TSM, NNT, NANU, MBL, LOE, BDT, CHG, KNA, MTN, GBA, WRA, ASPA, Z.

Table with columns for station name, time, and depth. Includes stations SFI, PGD, RSM, FIR, PRO, MME, BDI, ARV, ASS, AOI, CIO, CTI.

24d 11h

TRI 1.85 43 ePg 56 50.10 -0.8 | BOB 1.85 283 P 56 51.80 0.8 | ALP 1.97 143 ePn 56 52.62 -0.3 | RIY 1.97 60 eP 56 51.70 -1.1 | MNS 2.05 165 P 56 53.50 -0.4 | VOY 2.15 39 ePn 56 55.30 -0.1 | CEY 2.21 51 eP 57 22.00 25.7X | FVI 2.30 14 P 57 01.90 4.5X | LJU 2.47 46 e(Pg) 57 07.00 7.1X | OGA 2.59 345 eP 57 09.10 7.3X | VBY 2.59 63 eP 57 18.20 16.5X | KBA 2.88 19 iP 57 51.90 46.1X | PTJ 3.21 60 e(Pn) 57 19.70 9.2X | KHC 4.89 12 eP 58 15.00 40.7X

CHJJ 11.30 227 eP 42 40.50 -0.8 | MAT 11.37 231 iPd 42 41.20 -0.8 | MDJ 14.04 278 eP 43 16.00 -1.4 | CN2 17.10 277 Pc 43 57.60 0.9 | SNY 18.88 272 Pc 44 17.80 -0.9 | DL2 21.27 265 eP 44 44.00 -0.1 | BJI 24.76 272 eP 45 18.00 -0.4 | TIA 25.66 263 Pd 45 27.10 0.2 | HHC 27.79 276 eP 45 46.30 -0.2 | TIY 28.36 270 eP 45 51.00 -0.6 | BT0 28.98 277 eP 45 56.00 -1.2 | WHN 30.64 255 eP 46 13.00 1.1 | LZH 35.25 273 P 46 52.50 0.4

LPF 84.48 340 eP 52 30.00 1.1 | SMF 84.49 337 eP 52 29.70 0.7 | AVF 84.49 337 eP 52 29.70 0.7 | LSD 84.57 334 P 52 31.09 1.3 | PRNI 84.59 308 eP 52 30.00 0.2 | LPG 84.66 335 eP 52 31.20 0.9 | FIR 84.70 331 eP 52 30.00 0.0 | BGF 84.84 337 eP 52 31.80 1.0 | PCP 84.95 333 P 52 30.48 -0.9 | MBH 85.09 307 iP 52 33.00 0.8 | RRL 85.17 334 P 52 33.04 0.3 | MAF 85.23 337 eP 52 33.50 0.8 | TCF 85.27 338 eP 52 34.00 1.1 | FIN 85.35 333 P 52 34.17 0.8 | ROB 85.39 333 P 52 32.73 -0.9 | PZZ 85.44 334 P 52 32.32 -1.7 | LSF 85.49 338 eP 52 35.00 1.0 | IMI 85.72 333 P 52 32.73 -2.6 | CAF 86.56 337 eP 52 40.90 1.5

S.D. = 0.8 on 17 of 26 obs. | * AUG 24, 1989 12h 29m 33.30±0.89s | 20.196 S ± 8.4km 68.974 W ± 14.0km | DEPTH = 132.7 ± 9.1 km | 4.2mb (4 obs.)

GTA 36.69 280 P 47 04.20 0.0 | CD2 37.94 265 P 47 14.90 0.2 | GYA 38.49 257 P 47 19.40 0.0 | FBA 39.83 36 P 47 30.80 0.8 | WMO 43.31 292 P 47 50.50 -0.4 | INK 45.24 31 eP 48 13.00 -0.9 | MBC 47.89 19 eP 48 34.00 -0.8

S.D. = 0.9 on 78 of 79 obs. | & AUG 24, 1989 12h 46m 28.70s | 37.878 N 122.218 W | DEPTH = 5.0km | CENTRAL CALIFORNIA (39) | <BRK>. ML 2.4 (BRK). | Ma=1.4+10**12 Nm (BRK). Felt at Orinda.

CNCB 3.50 16 iPc 30 28.10 0.3 | LPB 3.74 13 iPc 30 31.80 1.0 | ANT 3.74 201 eP 30 30.00 -0.4 | ZOBO 3.99 12 Pc 30 34.00 -0.3 | ARE 4.42 327 eP 30 35.00 -4.9X | PPD 16.58 99 eP 33 18.90 -0.5 | GBTN 57.40 345 P 39 03.00 -7.1X | OLY 59.36 339 P 39 21.80 -1.9 | FVM 61.29 341 P 39 35.50 -1.2 | ALO 65.38 327 eP 40 03.00 -0.8 | GLD 68.57 331 P 40 23.50 -0.3 | GOL 68.60 331 P 40 23.50 -0.6 | RSSD 71.60 334 P 40 42.50 0.3 | TNP 73.57 322 P 40 55.00 1.2 | KVN 74.74 322 P 41 01.50 1.0 | DPW 80.84 329 P 41 34.50 0.9 | EDM 82.56 335 iPd 41 42.00 -0.4 | WRA 134.04 211 PKP 48 39.00 1.8

CHG 48.85 255 ePc 48 43.80 0.9 | CHTO 48.85 255 eP 48 43.80 0.9 | EDM 60.04 43 ePc 50 03.80 -0.4 | FFC 64.43 38 eP 50 33.00 -0.4 | WRA 65.29 195 Pc 50 40.50 1.3 | KVN 65.80 59 eP 50 43.00 0.3 | TNP 66.94 59 eP 50 50.50 0.4 | BW06 68.45 51 eP 51 00.00 0.5 | NB2 69.69 340 P 51 03.40 -3.1X | KRA 76.24 329 iPd 51 44.70 -0.3 | SPC 76.83 328 iP 51 49.50 0.9 | VRI 76.86 323 ePd 51 48.00 -0.6 | KSP 76.88 332 iP 51 48.00 -0.6 | MLR 77.50 323 eP 51 51.50 -0.8 | CLL 77.57 334 iP 51 51.60 -0.8 | BRG 77.64 333 iP 51 52.20 -0.6 | EKA 78.09 344 P 51 55.00 -0.2 | PRU 78.20 332 Pc 51 55.80 -0.1 | MOX 78.59 334 eP 51 57.00 -1.0 | KHC 79.26 332 iPc 52 01.50 -0.3 | GRF 79.54 334 iPc 52 03.10 -0.2 | ENN 80.17 337 e(P) 52 06.00 -0.5 | RBL 81.58 331 P 52 13.20 -0.9 | CDF 81.89 335 eP 52 16.00 0.2 | SKO 82.27 324 iP 52 17.50 -0.2 | VAY 82.31 322 eP 52 18.00 0.1 | OHR 83.25 323 eP 52 22.00 -0.9 | VAI 83.70 333 P 52 24.20 -0.7 | LOR 83.91 337 eP 52 26.30 0.2 | GRR 84.11 340 eP 52 27.80 0.8 | LBF 84.14 337 eP 52 27.50 0.2

BKS 0.01 264 eP 46 28.60 -1.2 | BKS 0.01 264 iPd 46 29.68 -0.1 | BRK 0.03 262 iPc 46 29.80 -0.2 | ZSP 0.07 335 iPd 46 29.50 -1.0 | PCC 0.40 199 iPd 46 36.40 -0.3 | MHC 0.70 139 eP 46 42.40 -0.4 | ARN 0.76 134 eP 46 43.20 -0.7 | NWRM 0.78 318 eP 46 43.10 -1.3 | GCC 0.86 168 eP 46 44.60 -1.2 | SAO 1.27 151 e(P) 46 50.40 -2.3 | CMB 1.46 83 eP 46 54.40 -1.4

S.D. = 1.1 on 16 of 18 obs. | AUG 24, 1989 12h 39m 59.09±1.07s | 44.220 N ± 7.6km 149.221 E ± 6.2km | DEPTH = 37.9 ± 9.7 km | 5.0mb (29 obs.) 3.9Msz (2 obs.) | KURIL ISLANDS (221)

GRF 79.54 334 iPc 52 03.10 -0.2 | ENN 80.17 337 e(P) 52 06.00 -0.5 | RBL 81.58 331 P 52 13.20 -0.9 | CDF 81.89 335 eP 52 16.00 0.2 | SKO 82.27 324 iP 52 17.50 -0.2 | VAY 82.31 322 eP 52 18.00 0.1 | OHR 83.25 323 eP 52 22.00 -0.9 | VAI 83.70 333 P 52 24.20 -0.7 | LOR 83.91 337 eP 52 26.30 0.2 | GRR 84.11 340 eP 52 27.80 0.8 | LBF 84.14 337 eP 52 27.50 0.2

11 obs. associated | * AUG 24, 1989 13h 14m 30.72±0.50s | 14.752 N ± 9.6km 146.055 E ± 12.1km | DEPTH = 33.0km (normal) | 4.4mb (1 obs.) | MARIANA ISLANDS (216) | GUM0 1.63 225 iPd 14 57.50 0.0 | PJC 1.63 225 iPd 14 57.50 0.0 | GUA 1.64 223 iPd 14 57.70 0.1 | CHJJ 22.13 345 P 19 25.90 0.8 | MAT 22.80 344 eP 19 30.00 -1.8 | NIJ 23.26 346 P 19 37.50 1.3 | INK 72.86 23 eP 25 57.00 -0.9 | DPW 83.00 42 P 26 54.00 -0.1 | BCH 84.73 55 P 27 03.50 0.3 | KVN 85.29 51 P 27 06.00 -0.1 | TNP 86.22 52 P 27 10.50 -0.2 | PLM 87.79 56 P 27 19.50 1.1 | GLA 89.51 56 P 27 26.00 -0.4

KUSJ 3.46 253 iP+ 40 51.80 -0.1 | HDOJ 4.70 249 iP+ 41 11.60 2.1 | ASAJ 4.73 271 eP 41 11.90 1.9 | MRRJ 6.21 256 P 41 31.50 0.8 | AOMJ 7.50 244 eP 41 49.00 0.2 | OFUJ 7.64 230 P 41 49.40 -1.3 | YAMJ 9.18 232 eP 42 11.00 -1.1 | NIJ 10.42 232 eP 42 28.80 -0.3 | KAKJ 10.57 224 eP 42 30.60 -0.5

S.D. = 0.9 on 13 of 13 obs. | AUG 24, 1989 14h 04m 47.07±0.72s | 41.687 N ± 5.8km 20.002 E ± 6.6km | DEPTH = 10.0km (geophysicist) | ALBANIA (391) | LAC1 0.22 257 iPgc 04 51.80 -0.1 | PHP 0.33 90 iPgc 04 54.60 0.7 | TIR 0.35 197 ePg 04 55.00 0.6

PUK 0.36 347 iPgd 04 54.10 -0.5	SUF 76.45 334 iP 54 01.50 0.2	SNG 5.80 87 eP 26 57.80 -2.4
BCI 0.68 4 ePg 05 00.90 0.4	0.4s 8.20nm 4.7mb	eS 27 17.80
OHR 0.83 134 ePn 05 02.00 -1.2	NUR 78.28 333 iP 54 11.40 0.2	IPM 6.64 110 ePd 27 13.00 1.0
BERA 0.98 182 ePn 05 10.90 5.2X	KVN 81.92 50 eP 54 31.30 0.4	NNT 7.45 41 ePn 27 01.00 -22.3X
SKO 1.11 75 ePn 05 12.00 4.1X	HFS 82.74 336 eP 54 33.40 -1.0	eSg 27 26.50
S.D. = 0.9 on 6 of 8 obs.	0.4s 3.20nm 4.4mb	CHG 12.49 19 eP 28 32.80 0.3
% AUG 24, 1989 15h 40m 19.18±0.77s	NB2 82.98 338 P 54 35.60 0.0	CHTO 12.49 19 eP 28 32.80 0.4
60.564 N ± 4.3km 5.063 E ± 9.2km	0.6s 3.70nm 4.3mb	1.0s 3.75nm 4.5mb
DEPTH = 10.0km (geophysicist)	TNP 82.99 51 eP 54 36.00 -0.3	GBA 18.30 293 P 29 47.00 -0.2
SOUTHERN NORWAY (535)	ZOBO 151.79 74 PKP 02 03.00 6.4X	HYB 18.96 305 eP 29 53.00 -2.4
MD 1.8 (BER).	S.D. = 0.6 on 9 of 10 obs.	COOL 45.29 147 eP 34 08.50 17.8X
ASK 0.10 141 iPgc 40 22.00 0.1	* AUG 24, 1989 16h 58m 29.92±0.58s	0.7s 10.00nm
iSg 40 24.00	2.551 S ± 9.8km 22.704 E ± 13.9km	WRA 47.21 125 P 34 23.00 17.0X
iP 40 23.80 -0.2	DEPTH = 10.0km (geophysicist)	1.0s 3.20nm
eSg 40 27.70	4.5mb (11 obs.)	HFS 79.58 330 eP 37 40.60 1.4
eP 40 29.40 -0.2	ZAIRE REPUBLIC (567)	0.4s 2.90nm 4.6mb
eS 40 37.90	LWI 6.10 87 iP 00 03.00 0.5	NB2 80.86 331 P 37 48.00 1.9
eP 40 35.00 0.0	iS 01 18.30	1.0s 5.00nm 4.5mb
eS 40 46.70	BNG 8.09 329 ePd 00 20.20 -10.1X	S.D. = 1.9 on 8 of 11 obs.
iPg 40 38.60 0.1	0.4s 5.00nm	AUG 24, 1989 17h 38m 27.94±0.41s
eS 40 51.90	iS 00 47.30	40.811 N ± 4.1km 20.728 E ± 4.1km
iP 40 44.10 0.0	Lg 02 39.20	DEPTH = 10.0km (geophysicist)
eS 41 00.30	BCAO 8.09 329 eP 00 25.00 -5.4X	3.2mb (1 obs.)
iP 40 46.10 0.2	iS 00 47.00	GREECE-ALBANIA BORDER REGION (392)
eS 41 03.00	CLK 17.79 138 iPnd 02 34.90 -4.5X	MD 3.6 (ATH). ML 3.5 (SKO). 3.2
iP 40 58.70 0.5	iSn 05 49.90	(TTG).
eS 41 27.50	iSg 07 54.00	KBN 0.20 161 iPgd 38 32.20 -0.1
iPc 41 09.90 -0.5	iPnc 02 47.20 0.0	OHR 0.30 10 iPgd 38 34.10 -0.2
iPg 41 14.70	iSn 06 14.60	iSg 38 39.10
eS 41 46.20	iLO 08 19.90	BERA 0.60 260 iPgd 38 38.30 -1.8
S.D. = 0.3 on 9 of 9 obs.	iPc 03 42.70 0.0	LSK 0.67 188 ePg 38 40.30 -1.0
AUG 24, 1989 15h 56m 59.33±0.79s	0.7s 10.27nm 4.5mb	TIR 0.84 310 iPg 38 44.00 -0.2
41.614 N ± 7.2km 70.899 W ± 5.0km	24.67 170 eP 03 43.00 -9.4X	PHP 0.90 346 iPgc 38 42.70 -2.5
DEPTH = 5.0km (geophysicist)	EPF 49.65 339 eP 07 24.80 1.0	KZN 0.94 122 ePg 38 45.80 -0.1
SOUTHERN NEW ENGLAND (476)	0.8s 4.50nm 4.5mb	SRN 1.08 211 ePn 38 49.30 1.0
mbLg 3.0 (NEIS). CL 3.0 (WES).	LPG 49.90 345 eP 07 28.60 2.6X	LACI 1.13 317 ePn 38 49.00 0.0
Felt (V) at Fairhaven and South	0.6s 2.70nm 4.4mb	SKO 1.28 25 iPg 38 51.70 0.1
Dartmouth, Massachusetts. Felt	LPO 50.80 340 eP 07 33.00 0.5	i 38 53.40
(IV) at Dartmouth and New	0.6s 5.40nm 4.7mb	i 39 07.40
Bedford, Massachusetts. Also	LFF 51.18 340 eP 07 36.00 0.7	iSg 39 08.00
felt in ports of southeastern	0.8s 5.30nm 4.5mb	i 39 10.40
Rhode Island.	MAF 51.73 342 eP 07 40.60 1.1	KKS 1.29 349 ePg 38 44.00 -7.7X
FLR 0.20 302 P 57 04.66 1.3	0.6s 3.60nm 4.5mb	KEK 1.31 213 ePb 38 54.00 1.9
S 57 07.40	AVF 52.01 343 eP 07 42.00 0.4	PUK 1.38 333 iPnc 38 50.20 -3.0X
iPg 57 11.70 0.8	1.0s 8.00nm 4.6mb	VAY 1.48 69 ePn 38 55.20 0.6
iSg 57 19.90	LBF 52.01 344 eP 07 41.60 -0.1	SDA 1.52 323 ePn 38 57.40 2.3
NSC 0.73 260 P 57 13.40 -0.5	0.8s 4.00nm 4.4mb	ULC 1.60 316 iPnd 38 58.20 1.8
WES 0.83 338 iP 57 16.20 0.3	MFF 52.93 340 eP 07 48.80 0.2	eSn 39 20.50
MD2 1.15 266 P 57 20.96 -0.4	LPF 54.48 341 eP 08 00.00 0.1	BCI 1.63 343 ePb 38 58.40 1.7
S 57 36.78	0.8s 5.30nm 4.6mb	PVY 1.87 343 ePn 39 03.00 2.6X
iP 57 21.50 -0.4	GRR 54.73 341 eP 08 01.60 -0.1	eSn 39 30.00
eS 57 37.00	HFS 62.90 355 eP 08 56.10 -2.2	TTG 1.96 326 ePn 39 03.20 1.7
MD5 1.21 263 iP 57 21.90 -0.4	0.4s 1.50nm 4.5mb	eSn 39 30.00
eS 57 38.70	NB2 64.03 354 P 09 03.80 -2.1	BDV 2.05 317 iPnc 39 03.20 0.3
DNH 1.51 0 ePn 57 26.30 -0.7	0.7s 4.00nm 4.7mb	eSn 39 31.00
eSn 57 48.50	SUF 65.15 2 eP 09 13.00 0.0	PLG 2.11 101 ePb 39 04.50 0.7
LNx 1.91 293 eP 57 33.90 1.0	S.D. = 1.0 on 15 of 20 obs.	IVA 2.15 344 ePn 39 07.20 2.8X
eS 57 59.30	* AUG 24, 1989 17h 00m 52.42±0.70s	eSn 39 08.00
WNH 2.28 351 ePn 57 37.20 -1.0	8.541 N ± 13.2km 94.742 E ± 9.0km	LCI 2.17 258 P 39 02.70 -1.8
eSn 58 11.00	DEPTH = 33.0km (normal)	eSn 39 35.60
IVT 2.48 321 eP 57 42.10 1.0	4.1mb (4 obs.)	HCY 2.34 315 ePn 39 08.50 1.5
eS 58 11.70	NICOBAR ISLANDS REGION (704)	eSn 39 40.00
TBR 2.54 260 eP 57 42.00 0.1	SNG 5.98 103 eP 02 12.50 -8.4X	eSn 39 09.40 1.7:
TRM 2.69 10 ePn 57 43.30 -0.7	eS 02 32.50	eSn 39 41.00
eSn 58 26.40	NNT 6.35 50 iPd 02 26.00 -0.1	MMB 2.39 70 iPc 39 08.00 0.2
BNH 2.99 355 ePn 57 47.70 -0.5	IPM 7.38 122 eP 02 40.50 -0.1	iS 39 39.00
eS 58 34.50	CHTO 11.00 21 (P) 03 40.80 10.2X	NEO 2.43 127 ePn 39 08.00 -0.4
PRIN 3.15 248 eP 57 47.00 -3.5X	e 03 42.00	VTS 2.57 45 iP 39 11.00 0.5
PTN 4.21 316 e(P) 58 12.00 6.5X	GBA 17.71 288 P 04 58.00 -0.3	iSg 39 41.00
CBM 5.68 20 e(P) 58 30.00 3.6X	1.2s 5.40nm 3.6mb	VLS 2.63 182 ePg 39 30.50 19.3X
BLA 8.58 242 e(P) 59 09.00 1.8X	WRA 48.17 126 P 09 32.00 0.1	BRY 2.65 323 iPnc 39 12.50 0.9
S.D. = 0.8 on 14 of 18 obs.	0.5s 0.60nm 3.9mb	eSn 39 46.00
? AUG 24, 1989 16h 42m 57.61±1.93s	HFS 78.18 330 eP 12 50.20 0.3	PGB 3.11 55 eP 39 21.00 3.1X
27.003 N ± 13.6km 140.039 E ± 23.5km	0.5s 2.40nm 4.5mb	RZN 3.13 72 iPd 39 19.00 0.6
DEPTH = 442.8 ± 19.3 km	NB2 79.45 331 P 12 57.00 0.1	KDZ 3.63 75 iP 39 23.00 -2.4
4.3mb (4 obs.)	0.8s 2.70nm 4.3mb	ITM 3.74 165 ePn 39 30.50 3.5X
BONIN ISLANDS REGION (212)	S.D. = 0.3 on 6 of 8 obs.	HVAR 3.97 308 iPn 39 28.30 -1.9
MAT 9.64 351 iPd 45 12.40 0.0	* AUG 24, 1989 17h 25m 34.10±1.31s	MGR 4.00 262 P 39 30.30 -0.3
WRA 46.99 187 Pd 50 48.80 0.0	6.930 N ± 19.4km 94.775 E ± 11.8km	PVL 4.19 53 eP 39 38.00 4.7X
0.6s 1.10nm 3.4mb	DEPTH = 33.0km (normal)	SOI 4.54 234 P 39 39.50 1.3
SOD 73.78 338 eP 53 47.00 0.6	4.5mb (3 obs.)	eSn 40 29.70
	NICOBAR ISLANDS REGION (704)	BLY 4.72 328 eP 39 39.50 -1.3
		eS 40 29.50
		BZS 4.85 7 ePc 39 39.00 -3.6X
		SDI 5.29 282 P 39 48.20 -0.7

* AUG 24, 1989 20h 06m 41.18± 1.48s
36.785 N ±10.7km 70.769 E ± 8.4km
DEPTH = 72.5 ± 16.1 km
4.5mb (8 obs.)

Table with columns for station codes (KSH, MAIO, etc.), magnitudes, depths, and other parameters. Includes a section for HINDU KUSH REGION (718).

* AUG 24, 1989 23h 21m 57.86± 1.68s
51.195 N ±17.5km 15.845 E ± 7.9km
DEPTH = 10.0km (geophysicist)

Table for POLAND (548) with ML 3.6 (GRF), 3.5 (VKA). Lists stations like KSP, BRG, PRU, etc.

* AUG 25, 1989 00h 48m 10.71s
61.729 N 151.928 W
DEPTH = 111.1km
SOUTHERN ALASKA (2)
<AGS-P>

Table listing stations in SOUTHERN ALASKA such as SKT, NCG, CGLM, etc.

Table listing stations in SUIA, PWA, NKA, etc., with associated magnitudes and depths.

AUG 25, 1989 01h 17m 30.97± 0.65s
43.060 N ±11.5km 17.727 E ± 8.5km
DEPTH = 10.0km (geophysicist)

Table for YUGOSLAVIA (383) with ML 2.6 (TTG). Lists stations like BRY, HCY, HVAR, etc.

* AUG 25, 1989 01h 36m 15.91± 1.31s
37.149 N ±11.4km 21.098 E ± 7.1km
DEPTH = 10.0km (geophysicist)

Table for SOUTHERN GREECE (368) with ML 3.4 (ATH). Lists stations like ITM, VLS, ATH, etc.

PUK 4.98 350 ePn 37 29.30 -3.0X
BCI 5.27 352 ePn 37 36.90 0.3
S.D. = 0.7 on 11 of 15 obs.

* AUG 25, 1989 01h 39m 45.68± 1.40s
24.030 N ± 7.3km 122.524 E ±13.3km
DEPTH = 44.8 ± 11.9 km
4.2mb (4 obs.)

Table for TAIWAN REGION (243) with ML 4.1 (BJI). Lists stations like TWC, TWD, TWF1, etc.

? AUG 25, 1989 02h 26m 01.35±11.18s
19.217 N ±8.5km 67.392 W ±63.6km
DEPTH = 10.0km (geophysicist)

Table for MONA PASSAGE (89) listing stations like APR, MGP, SJG, LPR.

* AUG 25, 1989 02h 56m 17.32± 0.96s
37.110 N ± 8.3km 27.916 E ± 9.3km
DEPTH = 5.0km (geophysicist)

Table for TURKEY (366) listing stations like YER, IZM, ELL, etc.

* AUG 25, 1989 03h 22m 03.32± 0.83s
43.398 N ±13.2km 8.033 E ±15.0km
DEPTH = 10.0km (geophysicist)

Table for CORSICA (380) listing station VAY.

25d 03h

MD 1.7 (STR).

Table with columns for station ID, time, and three numerical values. Includes stations like REVF, SAOF, AURF, AUTN, TOUF, CALN, CVF.

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

? AUG 25, 1989 03h 47m 27.89 ± 1.33s
35.499 N ± 26.0km 136.607 E ± 8.9km
DEPTH = 33.0km (normal)
SOUTHERN HONSHU, JAPAN (232)
MG 3.4 (JMA). Felt (1 JMA) at Gifu.

Table with columns for station ID, time, and three numerical values. Includes stations like GIF, TSRJ, IIDJ, MTMJ, CHJJ.

S.D. = 1.3 on 4 of 5 obs.

? AUG 25, 1989 07h 03m 58.69 ± 0.85s
36.679 N ± 16.6km 70.836 E ± 31.9km
DEPTH = 33.0km (normal)
3.9mb (2 obs.)
HINDU KUSH REGION (718)

Table with columns for station ID, time, and three numerical values. Includes stations like NDI, GBA, NB2, INK, FBA.

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

* AUG 25, 1989 07h 42m 12.22 ± 1.62s
16.280 N ± 19.4km 97.578 W ± 8.5km
DEPTH = 33.0km (normal)
4.4mb (7 obs.)
OAXACA, MEXICO (60)

Large table with columns for station ID, time, and three numerical values. Includes stations like OXX, ACX, IISM, III, IIT, EVV, UNM, LVVM, CRX, IIC, SCX, MRX, TPX, UYO, SIO, TUL, OLY, ALO, RSCP, PRM, FVM.

Table with columns for station ID, time, and three numerical values. Includes stations like GBTN, GOL, GLD, PLM, BLA, TNP, KVN, LRM, INK.

S.D. = 1.4 on 23 of 30 obs.

* AUG 25, 1989 08h 24m 41.72 ± 1.30s
31.674 S ± 6.0km 72.234 W ± 14.3km
DEPTH = 33.0km (normal)
OFF COAST OF CENTRAL CHILE (134)

Table with columns for station ID, time, and three numerical values. Includes stations like PEL, TACH, FCH, LNV, PCH, CHCH, RTRS, RTCB, ZON, RTCV, RTLL, CFA, RFA, MRA, SLA, CNCB, LPB, ZOBO, Z, PPD.

S.D. = 1.3 on 17 of 19 obs.

? AUG 25, 1989 09h 02m 45.10 ± 1.02s
32.401 N ± 9.4km 104.669 E ± 15.1km
DEPTH = 33.0km (normal)
SICHUAN PROVINCE, CHINA (307)
ML 4.0 (BJI).

Table with columns for station ID, time, and three numerical values. Includes stations like CD2, LZH, XAN, GYA, TIY, BTO.

S.D. = 1.5 on 4 of 6 obs.

AUG 25, 1989 09h 06m 06.02 ± 0.60s
37.403 N ± 6.9km 141.288 E ± 8.1km
DEPTH = 47.5km (2 depth phases)
4.4mb (4 obs.)
NEAR EAST COAST OF HONSHU, JAPAN (228)
Felt (1 JMA) at Fukushima, Mito and Shirakawa.

Table with columns for station ID, time, and three numerical values. Includes stations like FKS, SHR, MIT, YAMJ.

Table with columns for station ID, time, and three numerical values. Includes stations like KAKJ, OFUJ, NIJJ, CHJJ, MTMJ, AOMJ, IIDJ, TSRJ, INK, MBC.

* AUG 25, 1989 09h 18m 22.50 ± 3.57s
16.845 N ± 17.1km 61.049 W ± 32.9km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 3.1 (FDF).

Table with columns for station ID, time, and three numerical values. Includes stations like WBS, WRA, LRM, NAO, ALO, ZOBO, LPB, CNCB.

S.D. = 1.1 on 17 of 22 obs.

* AUG 25, 1989 09h 18m 22.50 ± 3.57s
16.845 N ± 17.1km 61.049 W ± 32.9km
DEPTH = 33.0km (normal)
LEEWARD ISLANDS (92)
ML 3.1 (FDF).

Table with columns for station ID, time, and three numerical values. Includes stations like SFG, SEG, BPA, ANG, MGG, PAG, BBL, NEV, SKI.

S.D. = 0.4 on 9 of 9 obs.

? AUG 25, 1989 09h 19m 30.39 ± 7.55s
18.579 N ± 34.1km 67.320 W ± 44.8km
DEPTH = 10.0km (geophysicist)
MONA PASSAGE (89)

Table with columns for station ID, time, and three numerical values. Includes stations like APR, MGP, PORP, SJG, LPR.

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

* AUG 25, 1989 09h 30m 00.98 ± 0.62s
44.246 N ± 7.2km 7.438 E ± 4.7km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
ML 2.0 (GEN).

Table with columns for station ID, time, and three numerical values. Includes stations like ENR, STV, ROB, PZZ, IMI, FIN.

PCP 0.85 69 P 30 17.24 -0.1
S 30 28.47
S.D. = 0.6 on 7 of 7 obs.

? AUG 25, 1989 09h 47m 44.53±0.95s
39.174 N ± 8.2km 27.620 E ± 9.4km
DEPTH = 10.0km (geophysicist)

TURKEY (366)

IZM 0.82 200 ePg 48 00.40 -0.1
eSg 48 11.20
DST 0.89 61 iPn 48 01.90 0.2
EDC 1.19 9 ePn 48 06.30 -0.3
EZN 1.19 303 iPn 48 07.00 0.2
S.D. = 0.5 on 4 of 4 obs.

* AUG 25, 1989 10h 52m 10.63±1.72s
43.589 N ± 4.6km 127.263 W ± 17.0km
DEPTH = 10.0km (geophysicist)
4.2mb (1 obs.)
OFF COAST OF OREGON (30)

GROR 3.12 54 eP 53 00.66 -0.2
KMOR 3.38 51 eP 53 03.85 -0.8
eS 53 47.29
NLO 3.69 46 eP 53 09.45 0.5
GT2 3.91 65 eP 53 12.20 0.2
PGO 3.92 60 eP 53 13.00 0.9
BMW 4.06 43 eP 53 13.57 -0.6
RVW 4.11 50 eP 53 14.55 -0.2
ONR 4.11 36 eP 53 14.75 0.0
VLMM 4.21 61 eP 53 16.39 0.0
LVP 4.25 53 eP 53 16.93 0.0
TDH 4.27 65 eP 53 17.72 0.4
VBEM 4.33 68 eP 53 18.06 -0.1
MTMW 4.34 54 eP 53 18.04 -0.2
FL2 4.36 52 eP 53 18.61 0.1
VLL 4.41 63 eP 53 19.44 0.2
CZM 4.41 48 eP 53 19.13 -0.1
SHW 4.42 52 eP 53 20.17 0.8
ERK 4.43 50 eP 53 19.44 0.0
HSR 4.44 53 eP 53 20.09 0.4
JLK 4.44 53 eP 53 19.81 0.2
STD 4.45 52 eP 53 19.88 0.1
APW 4.48 45 eP 53 19.90 -0.2
LON 4.98 49 eP 53 27.50 0.2
CMB 7.61 134 ePc 54 04.50 0.2
PNT 7.79 40 iP 54 06.00 -0.7
0.5s 16.00nm 5.5mb X
FRI 8.76 136 e(P) 54 20.00 -0.2
LRM 10.78 73 eP 54 46.90 -1.4
FFC 19.82 47 iPc 56 44.50 0.4
0.8s 11.00nm 4.2mb
S.D. = 0.5 on 28 of 28 obs.

AUG 25, 1989 11h 02m 42.12±0.65s
40.035 N ± 6.0km 142.227 E ± 11.3km
DEPTH = 58.4 ± 15.8 km
NEAR EAST COAST OF HONSHU, JAPAN(228)
MG 3.8 (JMA). Feit (11 JMA) at
Miyako.

OFUJ 1.05 205 iPd 03 01.70 0.8
S 03 14.80
ADMJ 1.51 291 eP 03 06.70 -0.5
S 03 23.30
HOOJ 2.48 18 P 03 21.80 1.1
S 03 50.10
YAMJ 2.52 223 iPd 03 21.70 0.3
MRRJ 2.54 340 eP 03 21.70 0.1
S 03 49.10
KUSJ 3.58 31 eP 03 35.60 -0.8
S 04 14.60
NIJ 3.76 223 P 03 39.20 0.2
ASAJ 4.09 4 P 03 43.30 -0.3
eS 04 29.90
KAKJ 4.15 204 P 03 43.00 -1.4
eS 04 29.00
CHJJ 4.73 214 P 03 51.90 -0.6
eS 04 45.80
MTMJ 4.89 227 P 03 56.00 1.0
IIDJ 5.69 218 P 04 06.10 0.0
JNK 51.44 28 eP 11 43.00 0.2
pP 11 59.50 64kmX
S.D. = 0.8 on 13 of 13 obs.

? AUG 25, 1989 11h 29m 56.12±4.72s

43.983 N ± 28.6km 7.323 E ± 17.8km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
ML 1.8 (GEN).

ENR 0.25 16 P 30 01.45 -0.1
S 30 02.58
STV 0.26 0 P 30 01.86 0.2
S 30 03.71
ROB 0.50 52 P 30 06.48 0.2
S 30 11.50
PZZ 0.55 343 P 30 06.99 -0.2
S 30 10.99
FIN 0.68 70 P 30 09.76 0.2
S 30 17.86
PCP 1.04 57 P 30 15.40 -0.4
S 30 27.19
S.D. = 0.3 on 6 of 6 obs.

AUG 25, 1989 12h 50m 33.80±0.65s
43.830 N ± 11.1km 11.490 E ± 4.5km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)
MD 3.3 (FIR).

PGD 0.17 75 Pc 50 37.30 -0.5
eSg 50 39.20
FIR 0.18 253 iPgc 50 36.50 -1.3
iSg 50 48.00
SFI 0.28 71 Pd 50 38.30 -1.3
eSg 50 41.40
CRE 0.39 121 P 50 42.30 0.5
eSg 50 49.80
MME 0.68 303 P 50 47.90 0.5
eSg 50 57.30
BDI 0.69 290 P 50 48.10 0.7
eSg 50 58.80
RSM 0.70 82 P 50 48.00 0.4
eSg 50 57.30
ARV 1.10 107 P 50 54.30 -0.2
eSg 51 11.90
CIO 1.36 117 e(Pg) 51 02.71 3.9X
AOI 1.56 100 e(Pg) 51 03.00 1.4
e(Sg) 51 20.36
TRI 2.48 40 eP 51 36.90 22.1X
S.D. = 1.1 on 9 of 11 obs.

? AUG 25, 1989 14h 04m 58.05±1.66s
32.268 N ± 11.7km 132.059 E ± 16.2km
DEPTH = 10.0km (geophysicist)
SHIKOKU, JAPAN (236)

KUMJ 1.07 285 P 05 18.40 0.1
S 05 34.70
KAGJ 1.47 223 iPd 05 24.50 0.0
S 05 45.50
SHNJ 2.02 337 P 05 32.20 -0.3
eS 05 59.70
SHK 2.32 13 eP 05 37.00 0.2
S.D. = 0.3 on 4 of 4 obs.

AUG 25, 1989 14h 29m 08.66±0.94s
43.419 N ± 5.9km 5.421 E ± 7.0km
DEPTH = 10.0km (geophysicist)
NEAR SOUTH COAST OF FRANCE (379)
MD 2.6 (STR).

GELF 0.04 172 Pg 29 09.76 -1.0
TREF 0.21 353 Pg 29 12.78 -0.4
BERF 0.22 118 Pg 29 13.18 -0.4
PUYF 0.23 61 Pg 29 12.58 -1.1
PRAF 0.43 335 Pg 29 17.82 0.4
VILF 0.48 26 Pg 29 17.06 -1.4
TAVF 0.50 67 Pg 29 18.04 -0.9
GANF 0.68 31 Pg 29 21.37 -0.8
CALN 1.12 72 Pg 29 30.03 0.3
Sg 29 46.04
MVIF 1.34 69 Pn 29 33.69 0.2
Sg 29 52.63
REVF 1.45 77 Pn 29 36.35 1.4
Sg 29 55.16
TOUF 1.45 65 Pn 29 35.68 0.5
Sg 29 57.96
AURF 1.46 71 Pn 29 35.79 0.6
Sg 29 56.83
FOUF 1.48 41 ePg 29 37.12 1.8
eSg 29 55.95

AUTN 1.57 68 Pn 29 37.57 0.8
Pg 29 59.39
SAOF 1.65 69 Pn 29 37.57 -0.2
Sg 30 00.27
S.D. = 1.0 on 16 of 16 obs.

? AUG 25, 1989 14h 32m 55.81±5.44s
31.657 S ± 24.3km 72.210 W ± 42.4km
DEPTH = 33.0km (normol)
OFF COAST OF CENTRAL CHILE (134)

PEL 1.96 139 iPc 33 27.10 -0.4
iS 33 52.50
SAN 2.22 144 eP 33 32.00 1.0
iS 34 00.50
TACH 2.26 152 iP 33 32.50 0.9
iS 33 59.80
FCH 2.32 136 iPd 33 32.60 -0.3
iS 34 02.40
RTBS 2.35 91 iPd 33 33.80 0.9
LNV 2.39 164 iP 33 33.20 -0.2
iS 34 09.60
PCH 2.42 144 iPd 33 34.00 -0.1
iS 34 05.70
CHCH 2.62 150 iPd 33 36.10 -0.7
iS 34 07.30
RTCB 2.92 88 iPc 33 41.00 0.0
S 34 18.20
ZON 3.02 89 eP 33 42.00 -0.4
RTCV 3.13 95 iPc 34 09.00 24.9X
(S) 34 26.00
RTLL 3.21 85 e(P) 33 45.00 -0.2
CFA 3.39 90 eP 33 47.50 -0.2
e 34 33.80
RFA 4.41 136 ePc 34 02.00 -0.3
CYA 6.42 62 e(P) 34 26.30 -4.2X
SLA 9.09 42 e(P) 34 32.00 -35.9X
e 34 46.40
e 36 10.60

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

& AUG 25, 1989 14h 36m 06.21s
51.568 N 159.715 W
DEPTH = 6.2km
SOUTH OF ALASKA (17)
<PAL>.

SNKA 3.45 329 eP 36 58.90 -2.6
eS 37 37.87
BKJ 3.60 1 eP 37 01.27 -2.3
DRRA 3.70 336 eP 37 02.88 -2.2
DLG 3.80 341 eP 37 04.02 -2.5
PS4 4.01 342 eP 37 07.82 -1.6
PVV 4.01 343 eP 37 07.45 -2.0
SGB 4.01 354 eP 37 08.18 -1.3
eS 37 52.12
BALA 4.07 334 eP 37 09.38 -0.9
eS 37 53.38
IVF 4.34 1 eP 37 11.63 -2.5
eS 38 00.02
KDC 7.47 31 eP 37 56.00 -2.3
10 obs. associated

AUG 25, 1989 14h 43m 23.65±0.57s
43.102 N ± 6.6km 0.477 W ± 4.2km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

OGE 0.07 2 Pg 43 25.83 -0.2
Sg 43 27.56
ESCF 0.08 252 Pg 43 26.00 -0.1
Sg 43 27.67
JAU 0.10 129 Pg 43 26.28 -0.3
ATE 0.17 265 Pg 43 27.56 0.1
Sg 43 30.20
LHE 0.22 209 Pg 43 28.29 -0.1
ISSF 0.24 252 Pg 43 29.19 0.3
Sg 43 33.37
MADF 0.25 280 Pg 43 29.04 0.0
Sg 43 33.41
EPF 0.60 96 Pg 43 36.20 0.3
Sg 43 45.20

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

* AUG 25, 1989 14h 45m 54.67±0.85s
43.189 N ± 10.0km 0.358 W ± 8.6km

PRU 149.91 349 ePKP 54 42.00 5.7X
MLR 150.31 331 ePKP 54 44.00 6.8X
DOU 150.51 2 PKP 54 44.20 7.0X
KHC 150.91 350 iPKPd 54 45.60 7.7X
WLF 150.97 0 PKP 54 22.60 -15.2X
FLN 151.37 9 ePKP 54 45.40 6.9X
0.6s 3.60nm
LDF 151.58 9 ePKP 54 45.80 6.9X
0.6s 3.60nm
GRR 151.67 10 ePKP 54 46.20 7.2X
0.6s 3.60nm
LPF 151.99 10 ePKP 54 47.00 7.6X
0.8s 5.30nm
BZS 151.99 337 ePKP 54 46.50 7.0X
LOR 153.30 4 ePKP 54 50.00 8.6X
SSF 153.49 4 ePKP 54 50.80 9.2X
0.8s 2.60nm
LBF 153.59 3 ePKP 54 50.60 8.8X
S.D. = 1.2 on 20 of 43 obs.

& AUG 25, 1989 16h 49m 39.83s
61.315 N 150.382 W
DEPTH = 40.9km
SOUTHERN ALASKA (2)
<AGS->. ML 3.2 (PMR).

SUA 0.23 311 iP 49 47.87 0.2
eS 49 55.06
PMS 0.40 100 iP 49 49.33 -0.1
PWA 0.41 35 iPd 49 49.10 -0.4
PLRM 0.66 65 iP 49 51.87 -0.9
eS 50 01.99
PMR 0.66 65 iPd 49 52.00 -0.8
NKA 0.71 216 iP 49 54.57 1.1
PME 0.72 64 eP 49 52.86 -0.8
CGLM 0.78 270 iP 49 54.06 -0.6
SLKM 0.81 174 iP 49 54.02 -1.0
GHO 0.84 56 iP 49 54.43 -0.9
eS 50 06.67
CRP 0.86 268 iP 49 55.20 -0.5
SKT 0.86 321 iP 49 54.84 -0.8
KNK 0.93 83 iP 49 55.97 -0.7
eS 50 08.76
RDT 1.24 234 iP 50 00.16 -0.8
eS 50 16.40
SEW 1.30 159 eP 50 00.30 -1.5
eS 50 19.30
RED 1.48 233 iP 50 03.63 -0.8
eS 50 22.67
BRLK 1.58 189 eP 50 04.44 -1.3
eS 50 25.35
GLI 1.66 104 eP 50 04.72 -2.2
HUR 1.71 12 eP 50 07.34 -0.3
eS 50 29.14
ILIM 1.77 227 iP 50 07.81 -0.8
eS 50 31.10
CNPM 1.84 194 iP 50 08.32 -1.3
eS 50 32.85
VZW 1.87 96 eP 50 08.13 -1.9
FID 1.98 105 eP 50 08.79 -2.8
KLU 2.15 83 iP 50 12.09 -2.1
TOA 2.16 67 iPc 50 13.30 -0.9
RND 2.22 18 eP 50 14.85 -0.2
KTH 2.26 354 eP 50 15.30 -0.4
eS 50 43.57
MCK 2.52 15 eP 50 19.41 0.2
SVW 2.54 268 iPc 50 18.00 -1.6
TTA 3.10 304 e(P) 50 25.50 -2.1
KDC 3.74 198 eP 50 34.70 -1.8
FBA 3.79 17 eP 50 36.70 -0.5
32 obs. associated

& AUG 25, 1989 18h 51m 32.38±0.83s
43.097 N ± 7.3km 0.461 W ± 6.7km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.0 (STR).

OGE 0.07 353 Pg 51 34.72 -0.1
Sg 51 36.55
ESCF 0.09 257 Pg 51 34.99 0.0
Sg 51 36.49
JAU 0.09 131 Pg 51 35.16 0.0
Sg 51 37.19
ATE 0.18 266 Pg 51 36.29 -0.1
Sg 51 39.07
LHE 0.22 213 Pg 51 37.11 -0.1

MADF 0.27 281 Pg 51 38.15 0.1
S.D. = 0.1 on 6 of 6 obs.
* AUG 25, 1989 19h 07m 44.58±1.30s
18.915 S ± 14.6km 169.135 E ± 15.6km
DEPTH = 216.0 ± 10.0 km
4.7mb (5 obs.)

VANUATU ISLANDS (186)

PVC 1.41 326 iPd 08 19.20 0.0
iS 08 45.30
DZM 4.03 218 iPc 08 47.60 -0.3
iS 09 37.20
BRS 17.23 238 iPd 11 34.90 1.1
RMO 20.24 244 iPd 12 06.40 1.7
CTA 21.60 263 iPc 12 19.90 1.8
0.9s 23.53nm 4.7mb
MNG 22.31 167 P 12 24.80 0.0
WB5 32.77 262 eP 13 57.90 -1.6
WRA 32.80 262 Pc 13 58.20 -1.4
0.7s 3.60nm 4.1mb
ASPA 33.11 256 iPc 14 00.90 -1.5
0.5s 87.00nm 5.6mb
MTN 37.00 274 iPc 14 34.90 -0.3
0.4s 15.00nm 4.9mb
WARB 39.77 252 iPd 14 58.20 0.1
SPA 71.20 180 e(P) 18 41.00 -0.7
0.9s 5.91nm 4.3mb
SKO 144.23 317 i(PKP) 26 55.00 -1.3
GRF 144.56 335 iPKPc 26 55.40 -1.2
1.5s 24.00nm
WLF 146.42 340 PKP 27 01.60 2.0
DOU 146.53 342 PKP 27 01.50 1.7
BNG 147.88 247 iPKPd 27 06.20 3.1X
0.5s 6.00nm
FLN 149.06 347 ePKP 27 07.70 3.8X
LOR 149.26 340 ePKP 27 08.20 3.9X
0.8s 4.00nm
SSF 149.55 340 ePKP 27 09.10 4.4X
LPG 149.73 335 ePKP 27 10.10 4.7X
0.8s 2.60nm
LPF 149.88 347 ePKP 27 09.80 4.7X
0.8s 5.30nm
TCF 150.65 341 ePKP 27 11.60 5.2X
0.8s 2.60nm
LSF 150.88 342 ePKP 27 11.70 4.9X
0.8s 2.60nm
S.D. = 1.4 on 16 of 24 obs.

* AUG 25, 1989 19h 17m 32.74±0.98s
8.212 S ± 14.8km 119.985 E ± 14.8km
DEPTH = 182.1 ± 26.2 km
4.5mb (3 obs.)

FLORES ISLAND REGION (286)

MKS 3.02 350 iPc 18 22.00 -0.2
KNA 11.39 132 eP 20 11.00 -0.4
0.2s 18.00nm 5.2mb X
eS 22 15.00
MTN 11.88 114 iPd 20 18.80 1.1
eS 22 24.10
MBL 12.87 181 eP 20 29.00 -1.3
eS 22 44.00
NANU 14.90 196 eP 20 57.00 1.3
eS 23 31.00
WB5 18.13 131 iPc 21 33.00 -0.8
eS 24 50.30
WRA 18.14 131 Pd 21 33.70 -0.3
0.4s 3.40nm 4.1mb
WARB 18.96 161 iPd 21 42.60 0.0
0.3s 4.00nm 4.4mb
ASPA 20.35 141 eP 21 57.20 0.5
0.3s 17.00nm 5.0mb
MRWA 21.23 190 eP 22 23.00 17.6X
0.3s 2.00nm
eS 25 58.00
S.D. = 1.1 on 9 of 10 obs.

* AUG 25, 1989 19h 29m 53.88±1.38s
9.343 N ± 13.9km 92.841 E ± 9.9km
DEPTH = 66.4 ± 19.6 km
4.0mb (2 obs.)

NICOBAR ISLANDS REGION (704)

BSI 4.53 147 eP 31 01.50 -0.1
NNT 7.50 64 eP 31 43.00 0.1
GBA 15.68 287 Pc 33 32.60 0.4

0.7s 3.80nm 3.7mb
HYB 16.04 301 eP 33 36.50 -0.4
e 33 47.00
WB5 50.15 126 eP 38 44.00 -0.9
WRA 50.16 126 Pc 38 45.90 0.9
0.5s 1.60nm 4.3mb
S.D. = 1.0 on 6 of 6 obs.

AUG 25, 1989 19h 40m 49.48±0.71s
42.888 N ± 5.3km 12.955 E ± 6.3km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)
MD 2.4 (SSO).

ASS 0.28 310 P 40 55.50 0.1
eSg 40 59.70
CIO 0.34 24 iPg 40 56.55 0.1
ALP 0.47 103 ePg 40 58.97 -0.1
iSg 41 06.54
MNS 0.54 202 P 41 00.50 0.0
eSg 41 09.20
ARV 0.61 359 P 41 01.50 -0.3
eSg 41 10.60
AOI 0.81 35 e(Pg) 41 05.49 0.2
e(Sg) 41 19.65
S.D. = 0.2 on 6 of 6 obs.

& AUG 25, 1989 20h 06m 37.90s
45.910 N 111.290 W
DEPTH = 9.6km
MONTANA (456)
<BUT>. ML 3.6 (BUT). Felt (IV)
at Townsend ond (III) at
Manhattan. Also felt at
Belgrade.

SXM 0.25 13 iPd 06 42.70 -0.5
MEMT 0.38 144 iPc 06 45.00 -0.7
LCCM 0.42 260 iPc 06 46.10 -0.4
LRM 0.82 264 iPc 06 53.20 -0.7
BGMT 0.86 218 iPd 06 53.80 -0.8
HRY 0.88 335 iPd 06 54.50 -0.5
BUT 0.89 277 iPc 06 55.00 -0.2
iS 07 07.50
IMW 2.03 173 eP 07 13.00 0.1
PTI 3.14 195 eP 07 31.00 2.5
BW06 3.37 158 eP 07 32.50 0.6
SES 4.49 2 eP 07 45.00 -2.6
DPW 5.13 295 eP 07 54.70 -2.0
RSSD 5.45 107 eP 08 00.50 -0.8
LON 7.33 280 eP 08 27.50 -0.2
GOL 7.58 143 eP 08 28.00 -3.3
KVN 8.50 219 e(P) 08 45.50 1.4
FFC 10.64 31 eP 09 07.00 -6.3
17 obs. associated

AUG 25, 1989 20h 25m 22.65±1.25s
15.164 N ± 6.2km 120.354 E ± 8.0km
DEPTH = 34.6 ± 11.3 km
4.5mb (6 obs.)

LUZON, PHILIPPINE ISLANDS (249)

OCP 0.87 127 iP 26 01.00 22.5X
BAG 1.26 10 iPc 25 45.00 0.7
MCO 9.45 318 iP 27 36.10 -3.5X
DAV 9.52 147 eP 27 48.50 8.0X
OZH 9.87 351 Pc 27 44.00 -1.3
OIZ 10.76 292 eP 27 55.00 -2.5
WHN 16.27 341 eP 29 12.00 1.8
GYA 17.01 314 P 29 20.20 0.4
KMI 19.26 304 eP 29 49.00 1.5
NNT 20.18 265 eP 29 58.50 1.3
CHTO 20.79 283 eP 30 04.00 0.4
1.0s 3.75nm 3.7mb
TIA 21.16 353 eP 30 07.00 -0.2
XAN 21.44 333 Pd 30 09.80 -0.3
CD2 21.84 319 P 30 13.80 -0.3
TIY 23.53 344 eP 30 31.40 0.7
BJI 25.05 352 eP 30 45.00 -0.2
LZH 25.53 328 eP 30 50.50 0.5
1.5s 41.00nm 4.8mb
Z 15s 0.30um 3.9Mszx
GTA 30.13 327 Pd 31 30.80 -0.9
WB5 37.45 158 eP 32 34.50 -0.3
WRA 37.50 158 Pd 32 34.90 -0.3
0.6s 2.50nm 4.3mb
WMO 39.84 322 eP 32 55.00 0.3

25d 20h

HYB 40.13 279 eP 32 57.00 -0.3
 ASPA 40.80 161 iPd 33 02.90 0.3
 0.7s 9.00nm 4.6mb
 WARB 41.55 171 eP 33 09.00 0.3
 GBA 41.55 274 Pc 33 09.30 0.4
 0.6s 3.80nm 4.3mb
 MA10 57.79 303 iPd 35 13.00 -0.2
 SOD 77.56 337 eP 37 16.00 -0.4
 SUF 78.58 332 iP 37 21.30 -0.8
 NUR 79.72 330 iP 37 27.60 -0.7
 VRI 81.76 315 iPd 37 40.00 0.6
 MLR 82.38 315 eP 37 43.00 0.2
 NB2 85.81 333 P 37 58.80 -1.0
 0.7s 6.80nm 5.0mb
 VAY 85.84 312 eP 38 00.00 -0.2
 KSP 87.00 322 eP 38 06.20 0.5
 S.D. = 0.9 on 31 of 34 obs.

* AUG 25, 1989 20h 40m 06.48 ± 1.00s
 36.020 N ± 11.1km 140.040 E ± 10.0km
 DEPTH = 58.7 ± 11.7 km
 NEAR EAST COAST OF HONSHU, JAPAN(228)
 MG 3.6 (JMA). Felt (11 JMA) at
 Utsunomiya.

KAKJ 0.21 30 iP+ 40 16.10 0.2
 S 40 22.00
 UTS 0.54 345 iPd 40 18.50 -0.3
 S 40 26.00
 CHJJ 0.85 272 iPd 40 21.20 -1.4
 S 40 30.90
 NIIJ 1.48 326 iPd 40 30.50 -0.6
 IIDJ 1.81 253 P 40 36.80 0.9
 eS 40 58.40
 MTMJ 1.89 288 P 40 36.50 -0.5
 YAMJ 2.15 360 P 40 41.30 0.8
 eS 41 08.80
 OFUJ 3.32 22 P 40 57.10 0.0
 eS 41 33.90
 TSRJ 3.33 263 eP 40 58.60 1.3
 WB5 55.85 186 eP 49 39.60 -0.6
 S.D. = 1.0 on 10 of 10 obs.

* AUG 25, 1989 20h 47m 46.97 ± 3.40s
 31.546 N ± 11.2km 140.018 E ± 17.0km
 DEPTH = 123.2 ± 26.2 km
 4.6mb (8 obs.)
 SOUTH OF HONSHU, JAPAN (211)

MDJ 15.40 331 eP 51 18.20 -0.4
 SSE 16.10 273 eP 51 30.00 2.5X
 CN2 16.78 321 eP 51 36.20 0.4
 TIA 19.56 290 eP 52 09.10 1.8
 BJI 21.07 300 eP 52 22.00 -0.6
 XAN 26.21 284 P 53 11.40 -0.5
 GTA 33.45 295 eP 54 14.60 -1.6
 LOE 37.38 257 iPc 54 49.30 -0.1
 CHTO 39.05 261 iP 55 04.60 1.2
 0.8s 6.95nm 4.5mb
 WMO 42.53 302 eP 55 31.50 -0.3
 WB5 51.42 187 eP 56 41.00 -0.3
 WRA 51.48 187 P 56 49.00 7.2X
 0.3s 0.30nm 3.7mb
 GBA 59.74 268 Pd 57 40.80 -0.4
 0.9s 6.90nm 4.7mb
 KEV 68.17 340 eP 58 35.00 -0.3
 SOD 69.58 338 iP 58 44.30 0.3
 DAG 71.14 355 iPd 58 53.30 0.0
 0.8s 7.46nm 4.6mb
 SUF 72.37 334 iP 59 00.60 -0.2
 0.3s 7.10nm 4.9mb
 NUR 74.25 332 iP 59 11.40 -0.3
 UPP 77.37 334 iP 59 29.20 -0.1
 NB2 78.79 337 P 59 37.10 0.0
 0.6s 9.60nm 4.8mb
 CLL 85.26 330 eP 00 10.00 -0.7
 1.2s 13.00nm 4.7mb
 PRU 85.54 328 eP 00 13.00 0.8
 EKA 87.89 340 P 00 25.00 1.5
 0.5s 1.30nm 4.2mb
 S.D. = 0.8 on 21 of 23 obs.

* AUG 25, 1989 21h 31m 52.63 ± 0.85s
 43.107 N ± 10.6km 0.980 W ± 6.8km
 DEPTH = 10.0km (geophysicist)
 PYRENEES (378)
 MD 1.0 (STR).

BOH 0.02 260 Pg 31 54.76 0.1
 Sg 31 56.57
 ELYF 0.06 352 Pg 31 54.78 -0.2
 Sg 31 56.73
 MADF 0.12 72 Pg 31 56.13 0.4
 Sg 31 58.32
 ISSF 0.16 120 Pg 31 56.31 0.0
 Sg 31 59.98
 ATE 0.20 96 Pg 31 56.84 -0.3
 Sg 32 00.48
 S.D. = 0.4 on 5 of 5 obs.

? AUG 25, 1989 21h 56m 20.85 ± 0.74s
 31.563 S ± 29.4km 68.715 W ± 16.1km
 DEPTH = 100.0km (geophysicist)
 SAN JUAN PROVINCE, ARGENTINA (137)

RTCB 0.11 316 iPd 56 35.20 -0.2
 S 56 45.00
 RTLL 0.31 42 iPd 56 35.80 0.0
 RTCV 0.33 153 iPc 56 35.80 -0.1
 S 56 47.00
 CFA 0.41 96 iPd 56 36.40 0.1
 (S) 56 48.30
 RTBS 0.64 261 e(P) 56 38.00 0.1
 S.D. = 0.2 on 5 of 5 obs.

* AUG 25, 1989 22h 04m 56.68 ± 0.68s
 4.497 S ± 9.4km 134.650 E ± 11.2km
 DEPTH = 33.0km (normal)
 4.6mb (4 obs.) 3.6MsZ (1 obs.)
 WEST IRIAN REGION (196)

JAY 6.36 72 ePc 06 29.50 -1.1
 AAI 6.49 277 ePd 06 30.00 -2.4
 MTN 9.00 203 iPd 07 06.60 -0.8
 eS 08 47.00
 MNDI 9.12 101 eP 07 40.00 30.7X
 MNI 11.44 301 e(P) 07 35.50 -5.4X
 KNA 12.59 207 iPc 07 54.30 -2.0
 0.8s 446.00nm 6.6mb X
 eS 10 10.00
 WB5 15.29 181 eP 08 27.90 -4.0X
 i 08 37.10
 eS 11 10.00
 WRA 15.36 181 P 08 28.60 -4.2X
 0.7s 3.10nm 3.7mb
 QIS 16.68 164 iPc 08 53.70 4.1X
 eS 11 42.00

CTA 19.18 145 iPd 09 21.30 0.8
 1.2s 56.25nm 4.7mb
 GUMO 20.63 29 eP 09 35.40 -0.7
 Z 22s 0.32um 3.6MsZ
 PJG 20.63 29 eP 09 34.60 -1.5
 KKM 21.18 299 ePd 09 47.00 5.2X
 MBL 21.94 220 eP 09 50.60 1.3
 0.5s 13.00nm 4.6mb
 WARB 22.89 199 iPc 10 01.70 3.0X
 0.5s 12.00nm 4.6mb
 QLP 23.80 158 eP 10 11.70 4.2X
 e 10 15.70
 NANU 25.78 224 eP 10 28.00 1.5
 FORR 26.93 193 iPc 10 37.70 0.8
 BJI 47.46 341 eP 13 32.50 2.2
 CN2 48.79 351 Pd 13 41.60 1.1
 WMO 63.97 324 eP 15 30.00 0.8
 CNCB 149.20 134 PKP 24 48.00 7.3X
 ZOBO 149.45 133 ePKP 24 44.00 2.9X
 CCH 150.10 137 ePKP 24 54.00 12.3X
 S.D. = 1.6 on 13 of 24 obs.

? AUG 25, 1989 23h 01m 20.09 ± 6.90s
 34.125 S ± 20.2km 72.055 W ± 51.5km
 DEPTH = 10.0km (geophysicist)
 NEAR COAST OF CENTRAL CHILE (135)

LNV 0.56 73 iP 01 32.40 1.0
 iS 01 44.10
 TACH 1.04 63 iPd 01 39.60 -0.2
 iS 01 57.50
 CHCH 1.18 81 iPd 01 40.60 -1.5
 iS 02 00.10
 SAN 1.34 60 eP 01 45.00 0.2
 iS 02 07.00
 PCH 1.38 69 iPd 01 45.30 -0.1
 iS 02 06.80
 PEL 1.50 50 iPd 02 38.50 51.3X

FCH 1.67 62 iPd 01 49.90 0.1
 iS 02 16.50
 RFA 3.03 103 e(P) 02 09.70 0.6
 S.D. = 1.0 on 7 of 8 obs.

% AUG 25, 1989 23h 58m 14.90 ± 1.01s
 39.819 N ± 7.0km 15.559 E ± 11.4km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN ITALY (390)

MGR 0.32 359 Pc 58 21.30 -0.2
 eSg 58 25.80
 TDS 0.62 105 P 58 26.70 -0.7
 SOI 1.79 167 P 58 46.30 0.3
 LCI 1.91 74 P 58 48.50 0.8
 MEU 2.76 191 P 58 59.90 -0.2
 S.D. = 0.8 on 5 of 5 obs.

? AUG 26, 1989 00h 02m 48.46 ± 7.32s
 37.291 N ± 49.1km 20.662 E ± 48.5km
 DEPTH = 10.0km (geophysicist)
 IONIAN SEA (399)
 MD 3.2 (ATH).

VLS 0.89 356 ePg 03 05.30 -0.2
 ITM 1.02 96 ePg 03 07.50 -0.2
 KEK 2.51 345 ePg 03 37.00 7.0X
 NEO 2.85 44 ePb 03 35.60 0.8
 KZN 3.13 16 ePn 03 37.50 -1.3
 OHR 3.82 2 ePn 03 49.50 0.9
 S.D. = 1.3 on 5 of 6 obs.

AUG 26, 1989 00h 05m 11.02 ± 0.43s
 40.784 N ± 5.1km 27.751 E ± 4.2km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)
 MD 3.3 (ATH).

EDC 0.44 169 iPg 05 20.40 0.3
 eSg 05 27.40
 BNT 0.45 163 iPg 05 20.60 0.5
 KCT 0.71 139 iPg 05 25.10 0.1
 ITU 1.01 71 ePg 05 29.00 -1.1
 iSg 05 43.00
 ISK 1.03 74 iPg 05 30.10 -0.4
 iSg 05 43.10
 YLV 1.25 99 iPn 05 33.60 -0.8
 GBZT 1.29 89 ePn 05 34.80 -0.1
 iSg 05 55.40
 DST 1.36 150 iPn 05 36.30 0.3
 EZN 1.45 229 iPn 05 36.80 -0.5
 HRT 1.46 88 iPn 05 36.10 -1.3
 JMB 1.90 333 iPd 05 46.00 2.3
 (S) 06 11.00
 PRK 1.91 217 ePb 05 43.70 -0.2
 KDZ 1.96 297 eP 05 44.00 -0.7
 iS 06 13.00
 GPA 2.01 103 ePn 05 46.00 0.6
 DIM 2.09 308 eP 05 49.00 2.4
 eSg 06 12.00
 IZM 2.41 189 ePn 05 53.00 1.8
 RZN 2.46 293 iPd 05 51.00 -1.0
 (S) 06 27.00
 KHL 2.81 150 iPn 06 04.60 7.6X
 PSN 2.91 6 eP 06 07.00 8.8X
 PVL 3.03 324 eP 06 04.00 4.2X
 MMB 3.14 286 eP 06 03.00 1.5
 eS 06 50.00
 SMG 3.15 193 ePb 06 10.00 8.4X
 PGB 3.21 304 eP 06 00.00 -2.6
 PLG 3.30 264 ePn 06 03.00 -0.9
 KKB 3.68 289 eP 06 08.00 -1.2
 S 07 05.00
 VTS 3.85 299 eP 06 10.00 -1.8
 eSg 07 12.00
 BBTK 3.94 102 eP 06 30.00 17.0X
 eS 07 20.00
 VAY 3.95 279 ePn 06 12.60 -0.4
 MLR 4.89 345 ePd 06 27.00 0.6
 SKO 4.89 286 e(Pn) 06 33.00 6.6X
 VRI 5.14 352 ePd 06 32.00 2.2
 OHR 5.27 276 ePn 06 05.00 -26.8X
 S.D. = 1.4 on 25 of 32 obs.

AUG 26, 1989 00h 11m 43.21 ± 0.44s
 36.210 N ± 3.5km 140.919 E ± 3.6km
 DEPTH = 52.7 ± 3.2 km

26d 07h

VAM	4.19	127	ePn	57	14.00	-1.3
MEU	4.20	259	P	57	15.30	-0.3
MNO	4.27	271	P	57	17.60	1.0
BDV	4.38	348	ePn	57	17.30	-0.7
APE	4.42	101	ePn	58	05.50	1.9
TTG	4.46	352	ePn	57	18.70	-0.4
KKB	4.49	30	iP	57	19.00	-0.5
MMB	4.54	37	eP	57	20.00	-0.3
PVY	4.58	359	ePn	57	21.70	0.7
HCY	4.60	345	ePn	57	20.00	-1.1
GIB	4.80	272	P	57	24.60	0.6
IYA	4.86	358	ePn	57	25.50	0.6
NKY	4.87	350	ePn	57	24.30	-0.8
PRK	4.99	74	ePb	57	33.20	6.6X
BRY	5.03	347	ePn	57	26.40	-0.9
RZN	5.11	43	iP	57	29.00	0.5
FAI	5.15	264	P	57	30.00	1.1
VTS	5.16	26	iP	57	24.00	-5.2X
EZN	5.19	68	eP	57	31.00	1.6
NPS	5.21	120	ePn	57	29.00	-0.8
KDZ	5.48	47	eP	57	33.00	-0.5
USI	5.48	279	P	57	32.00	-0.7
PGB	5.50	33	iP	57	33.90	-0.9
PGB	5.50	33	eP	57	38.00	4.1X
IZM	5.66	84	eP	57	36.00	0.5
DUI	5.67	312	P	57	38.00	1.7
DIM	5.81	44	eP	57	41.00	2.9X
HVAR	5.86	333	iPn	57	37.10	-1.8
SDI	6.08	309	P	57	41.90	-0.2
KAP	6.19	111	ePn	57	42.00	-1.5
MFT	6.22	61	eP	57	46.60	2.6X
AZI	6.48	310	P	57	49.10	1.5
PVL	6.55	36	iPd	57	43.00	-5.7X
ALP	6.89	316	ePc	57	54.58	1.0
BLY	7.08	343	eP	58	00.00	3.9X
MNS	7.17	310	P	57	58.10	0.8
CIO	7.40	317	eP	58	00.85	0.2
AOI	7.41	320	eP	58	00.20	-0.5
ASS	7.59	314	P	58	03.10	-0.2
BZS	7.69	8	eP	58	04.00	-0.5
ARV	7.72	318	P	58	05.10	0.1
KSL	7.81	101	ePn	58	07.00	0.6
ELL	7.91	96	eP	58	01.00	-6.9X
CMP	8.14	25	ePc	58	02.00	-8.9X
RSM	8.27	318	P	58	13.20	0.5
VBY	8.32	336	ePn	58	12.50	-0.9
RIY	8.48	332	ePn	58	14.60	-1.0
MLR	8.66	28	eP	58	20.00	1.8
FIR	8.83	314	e(Pn)	58	27.00	6.5X
TRI	9.03	330	eP	58	21.90	-1.2
LJU	9.03	335	ePn	58	21.00	-2.2
VOY	9.25	332	ePn	58	24.80	-1.5
VRI	9.28	30	eP	58	27.00	0.4
SRO	9.89	353	e(Pn)	58	47.00	12.0X
FVI	10.14	330	P	58	38.20	-0.3
CTI	10.19	325	P	58	38.40	-1.0
KBA	10.34	333	eP	58	39.00	-2.4
ZST	10.42	349	e(Pn)	58	46.00	3.7X
BHG	11.05	334	eP	58	48.80	-2.2
OGA	11.10	326	eP	59	00.80	9.0X
VAI	11.52	317	P	58	55.70	-1.6
KHC	12.08	339	P	59	03.00	-1.9

KOTV	12.63	126	ePn	59	13.80	-6.8X
GRB4	13.00	335	e(Pn)	59	33.00	15.7X
BRG	13.59	343	e(P)	59	07.80	-17.2X
BSF	13.82	320	eP	59	27.10	-1.0
MOX	14.01	337	eP	59	29.00	-1.5
DSI	14.10	113	eP	59	25.00	-6.7X
HAU	14.16	319	eP	59	30.90	-1.6
CLL	14.22	342	eP	59	41.00	7.8X
PRNI	14.50	117	eP	59	30.00	-7.1X
MBH	14.76	119	iP	59	34.00	-6.4X
LBF	14.87	312	eP	59	40.10	-1.8
LOR	15.09	313	eP	59	43.70	-1.0
WLF	15.37	324	Pc	59	55.50	7.3X
MEM	16.10	326	P	00	03.80	6.1X
ENN	16.25	326	e(P)	00	06.50	6.8X
DOU	16.40	322	P	00	03.00	1.5
ECHE	16.50	282	e(P)	00	08.00	5.0X
ETOR	17.34	286	e(P)	00	16.00	2.4
TOL	18.87	283	eP	00	32.50	0.1
GUD	18.93	286	e(P)	00	34.00	0.7
UPP	21.93	357	iP	01	14.20	9.3X
NUR	22.71	6	eP	01	15.00	2.3
EKA	23.38	325	Pd	01	19.10	-0.2
NB2	23.72	349	P	01	21.90	-0.7
SUF	25.02	7	iP	01	33.70	-1.4
BNG	33.44	183	ePc	02	50.30	-0.8
BUL	58.39	171	iPc	06	12.40	4.4X
?	AUG 26, 1989	09h	33m	35.89	± 5.36s	
				13.642 S	± 33.6km	167.796 E ± 62.5km
				DEPTH = 33.0km	(normal)	
				4.4mb	(3 obs.)	
VANUATU ISLANDS (186)						
DZM	8.48	189	iPc	35	40.00	0.5
BRS	19.59	223	iP	38	03.70	-0.7
CTA	21.58	250	iP	38	27.00	2.1
RMQ	21.94	231	eP	38	28.00	-0.5
WB5	32.56	254	eP	40	05.90	-0.6
WRA	32.59	254	Pc	40	06.10	-0.7
ASPA	33.55	248	eP	40	13.80	-1.3
FORR	40.28	238	iPc	41	11.20	-0.5
WARB	40.48	246	iPc	41	14.00	0.5
MBL	46.23	254	iPc	42	01.10	1.0
MEKA	47.75	246	eP	42	12.00	0.0
NANU	50.26	252	eP	42	31.50	0.2
?	AUG 26, 1989	09h	51m	45.51	± 1.66s	
				45.309 N	± 24.9km	151.131 E ± 21.4km
				DEPTH = 33.0km	(normal)	
				4.0mb	(2 obs.)	
KURIL ISLANDS (221)						
KUSJ	5.12	247	P	52	59.50	-2.4
ASAJ	6.17	262	eP	53	18.30	1.7
HODJ	6.38	245	P	53	19.60	0.0
MRRJ	7.82	252	eP	53	40.30	0.5
WRA	66.71	197	P	02	36.00	0.7
NB2	69.13	340	P	02	48.80	-1.3
KHC	78.92	333	eP	03	47.70	0.8
?	AUG 26, 1989	10h	10m	00.24	± 1.48s	
				35.503 N	± 11.4km	141.050 E ± 12.9km
				DEPTH = 10.0km	(geophysicist)	

NEAR EAST COAST OF HONSHU, JAPAN(228)						
KAKJ	1.00	315	iPd	10	18.50	-0.6
CHJJ	1.76	289	P	10	29.80	-1.1
NIJ	2.40	317	iPd	10	39.20	-0.9
MAT	2.53	295	iPd	10	41.00	-1.0
IIDJ	2.56	270	iPd	10	43.80	1.3
YAMJ	2.79	343	P	10	46.20	0.5
MTMJ	2.84	293	P	10	46.20	-0.4
OFUJ	3.60	8	P	10	58.30	1.0
TSRJ	4.13	272	P	11	07.00	2.3
WB5	55.44	188	eP	19	36.20	-1.0
S.D. = 1.3 on 10 of 10 obs.						
? AUG 26, 1989 10h 59m 53.21 ± 26.95s						
48.105 N ± 99.1km 8.626 E ± 157.7km						
DEPTH = 10.0km (geophysicist)						
GERMANY (543)						
MD 1.0 (STR)						
WLS	0.90	290	Pg	00	10.61	0.0
CDJ	0.95	289	Pg	00	11.37	0.0
ECH	0.99	277	Pg	00	11.99	0.0
GWF	1.10	323	Pg	00	13.86	0.0
S.D. = 0.1 on 4 of 4 obs.						
% AUG 26, 1989 11h 11m 56.22 ± 0.93s						
39.555 N ± 8.3km 29.398 E ± 8.4km						
DEPTH = 10.0km (geophysicist)						
TURKEY (366)						
DST	0.60	275	ePg	12	07.80	-0.5
ALT	0.74	132	ePg	12	11.00	0.1
YLV	1.01	359	iPn	12	15.00	-0.4
KCT	1.06	311	iPn	12	17.00	0.8
KHL	1.23	175	iPn	12	22.90	3.7X
HRT	1.28	9	iPn	12	20.00	0.0
S.D. = 0.7 on 5 of 6 obs.						
AUG 26, 1989 11h 18m 52.38 ± 0.69s						
45.629 N ± 7.5km 14.826 E ± 5.0km						
DEPTH = 10.0km (geophysicist)						
YUGOSLAVIA (383)						
MD 2.7 (LJU), 2.4 (TRI), ML 2.5						
(ZAG). Slight domoge (V) in the Klinja Vas-Kocevje area.						
CEY	0.30	292	iPg	18	58.80	0.1
VBY	0.33	112	iPg	18	59.10	-0.1
RIY	0.42	228	ePg	19	00.90	-0.1
LJU	0.46	334	ePg	19	01.20	-0.6
TRI	0.75	277	ePg	19	06.40	-0.6
VOY	0.77	302	iPg	19	06.90	-0.5
PTJ	0.84	71	ePg	19	08.60	0.0
FVI	1.72	305	P	19	24.20	1.7
S.D. = 0.9 on 8 of 8 obs.						
AUG 26, 1989 11h 35m 54.55 ± 0.45s						
39.026 N ± 3.7km 23.417 E ± 6.9km						
DEPTH = 10.0km (geophysicist)						
AEGEAN SEA (365)						
ML 3.2 (ATH)						
NEO	0.32	332	iPg	36	01.20	0.0
PAIG	0.92	13	ePg	36	13.00	0.8
ATH	1.08	167	iPg	36	14.50	-0.3
LIT	1.29	327	ePg	36	18.10	-0.4
PLG	1.35	1	iPbc	36	18.80	-0.5
OUR	1.38	18	ePb	36	19.90	0.2

 * AUG 26, 1989 21h 23m 19.20s

53.792 N 163.746 W

DEPTH = 3.4km

UNIMAK ISLAND REGION (10)

<PAL>

 SNKA 0.89 39 eP 23 35.33 -1.5

DRRA 1.42 36 eP 23 43.49 -2.4

 DLG 1.75 39 eP 23 48.73 -1.9

PS4 1.91 34 eP 23 51.21 -1.7

SASA 2.45 49 eP 23 58.41 -2.2

 NGI 2.49 58 eP 23 59.03 -2.1

SGB 2.60 46 eP 24 00.85 -1.9

IVF 3.22 47 eP 24 10.41 -1.2

8 obs. associated

 * AUG 26, 1989 21h 25m 24.07s

60.045 N 152.821 W

DEPTH = 92.4km

SOUTHERN ALASKA (2)

<AGS-P>

 ILIM 0.08 297 iP 25 36.75 1.0

 RED 0.38 4 iP 25 38.09 -0.4

OPT 0.44 208 iP 25 38.35 -0.6

 RDT 0.57 21 iP 25 39.37 -0.6

 AUV 0.75 206 eP 25 40.80 -0.7

XLV 0.81 136 eP 25 41.21 -1.0

 CNPM 0.96 122 iP 25 42.90 -0.9

 NKA 1.05 48 iP 25 45.87 1.1

CDD 1.19 201 eP 25 45.12 -1.4

SPU 1.20 18 eP 25 45.94 -0.7

 SLKM 1.38 69 eP 25 47.80 -1.0

SHU 1.44 170 iP 25 48.16 -1.4

 PMS 2.01 52 eP 25 56.23 -0.8

 SKT 2.04 17 eP 25 56.45 -1.0

PLRM 2.38 48 eP 26 00.28 -1.7

KNIM 2.56 81 eP 26 01.37 -3.0

GHO 2.57 46 eP 26 02.47 -2.2

17 obs. associated

? AUG 26, 1989 21h 55m 58.12± 4.29s

40.344 N ±36.2km 24.041 E ±12.9km

DEPTH = 10.0km (geophysicist)

AEGEAN SEA (365)

 MMB 1.27 349 ePg 56 21.00 -0.7

 RZN 1.44 21 iP 56 25.00 0.6

 VAY 1.48 312 ePn 56 24.60 -0.2

KDZ 1.67 38 eP 56 27.00 -0.5

 KKB 1.68 335 iP 56 16.00 -11.7X

 DIM 2.04 33 eP 56 36.00 3.1X

PGB 2.21 2 eP 56 40.00 4.6X

 VTS 2.33 345 eP 56 38.00 0.8

 PVL 3.03 18 eP 56 43.00 -3.9X

S.D. = 0.9 on 5 of 9 obs.

* AUG 26, 1989 23h 04m 27.40± 1.68s

37.129 N ±17.3km 28.290 E ±13.0km

DEPTH = 10.0km (geophysicist)

TURKEY (366)

 YER 0.01 315 iPg 04 28.50 -0.8

 CIN 0.50 341 ePg 04 38.00 0.5

 ELL 1.35 106 iPn 04 52.90 0.5

IZM 1.51 328 iPn 04 54.50 0.0

KHL 1.54 39 iPn 04 54.20 -0.8

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

* AUG 26, 1989 23h 08m 00.81± 1.24s

2.523 N ±13.0km 99.473 E ±11.1km

DEPTH = 108.7 ± 11.8 km

4.1mb (3 obs.)

NORTHERN SUMATERA (706)

 TSI 1.33 317 iPd 08 26.50 0.7

 KLM 2.24 75 eP 08 38.00 0.6

 IPM 2.56 37 ePd 08 41.90 0.2

 SNG 4.76 14 eP 09 11.00 -0.5

 NNT 10.01 1 eP 10 21.80 -1.3

CHTO 16.20 358 eP 11 45.20 1.7

 GBA 24.41 298 P 13 09.50 -1.1

BJI 40.30 20 eP 15 33.00 4.2X

W85 40.85 125 eP 15 34.70 1.0

WRA 40.86 125 Pd 15 33.80 0.1

 NB2 86.96 331 P 20 34.60 -0.1

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

? AUG 27, 1989 00h 26m 09.45± 2.62s

31.280 S ±23.1km 68.702 W ±25.6km

DEPTH = 101.0 ± 25.5 km

SAN JUAN PROVINCE, ARGENTINA (137)

 RTLL 0.21 104 iPd 26 24.00 -0.3

 RTCB 0.22 202 iPd 26 24.50 0.1

 CFA 0.51 130 ePd 26 26.10 0.4

 RTCV 0.60 166 iPd 26 26.20 -0.2

 RTRS 1.28 329 iPc 26 33.50 0.0

 MRA 2.79 115 ePc 26 53.00 -0.1

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

% AUG 27, 1989 01h 05m 09.36± 0.76s

41.848 N ± 7.3km 12.774 E ± 6.7km

DEPTH = 10.0km (geophysicist)

SOUTHERN ITALY (390)

 RMP 0.06 235 Pc 05 11.50 -0.2

RDP 0.10 205 Pc 05 12.40 0.3

AZI 0.51 74 P 05 20.00 0.2

 MNS 0.54 353 P 05 20.30 0.0

SDI 0.79 100 P 05 24.50 -0.3

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

AUG 27, 1989 01h 21m 17.92± 0.20s

34.921 N ± 2.8km 26.240 E ± 2.0km

DEPTH = 61.0km (3 depth phases)

5.0mb (61 obs.)

CRETE (370)

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 13S, 25C

Centroid Location:

Origin Time 01:21:17.2 0.6

Lat 34.25N 0.06 Lon 26.28E 0.09

Dep 15.0 FIX Half-duration 1.8

Moment Tensor; Scale 10**17 Nm

Mrr= 0.89 0.09 Mtt=-1.45 0.11

Mff= 0.56 0.07 Mrt= 2.65 0.23

Mrf=-0.55 0.17 Mtf=-0.49 0.10

Principal Axes:

T Vol= 2.85 Plg=53 Azm= 30

N 0.33 16 278

P -3.10 33 178

Best Double Couple: Mo=3.0*10**17

NP1:Strike=223 Dip=19 Slip= 33				
NP2:		101	80	106
NPS	0.62	304	iPd	21 33.00 1.6
KAP	0.99	50	iPc	21 37.00 1.0
VAM	1.74	287	eP	21 48.30 2.0
APE	2.22	345	iPd	21 54.00 1.0
YER	2.76	36	iPn	22 00.80 0.1
SMG	2.82	10	eP	22 02.00 0.5
KSL	2.98	65	eP	22 02.50 -1.2
CIN	3.06	29	iPg	22 05.00 0.1
ELL	3.49	57	iPn	22 11.00 -0.1
IZM	3.57	13	ePn	22 12.50 0.5
ATH	3.66	327	eP	22 14.90 1.6
ITM	4.16	304	eP	22 20.10 -0.2
KHL	4.30	37	iPn	22 21.20 -1.2
PRK	4.32	0	eP	22 23.00 0.5
EZN	4.90	1	iPn	22 30.30 -0.4
NEO	5.00	332	eP	22 33.00 0.9
PPCY	5.02	89	eP	22 28.00 -4.4X
			eS	23 22.00
DST	5.05	21	iP	22 32.20 -0.7
AGG	5.15	324	ePn	22 35.50 1.2
ALT	5.16	36	eP	22 33.00 -1.5
EDC	5.57	13	iP	22 40.60 0.5
KCT	5.58	17	iP	22 40.40 0.1
BNT	5.59	13	iP	22 40.90 0.5
VLS	5.59	307	eP	22 39.00 -1.4
CSS	5.82	88	ePn	22 39.50 -4.2X
			eSn	23 43.80
PLG	5.88	339	eP	22 44.50 0.1
LIT	5.97	331	ePn	22 46.00 0.3
YLV	6.16	23	iP	22 49.90 1.5
GPA	6.26	30	eP	22 51.10 1.4
THE	6.26	337	ePn	22 51.30 1.5
FAM	6.37	87	eP	22 49.50 -1.8
			eS	23 58.00
GBZT	6.38	22	eP	23 01.40 10.0X
KZN	6.44	328	eP	22 54.00 1.7
ISK	6.53	19	iP	22 54.40 1.0
SRS	6.53	342	ePn	22 54.50 1.0
HLW	6.64	138	ePc	22 49.00 -6.0X
			eS	23 58.00
KNT	6.77	338	ePn	22 58.00 1.2
KOT	6.86	135	eP	22 51.00 -7.1X
RZN	6.86	350	iPc	22 59.00 0.7
LSK	6.88	321	ePn	22 59.10 0.7
MMB	6.94	344	iPc	23 00.00 0.7
			Pg	23 16.00
SRN	7.01	317	ePn	23 00.60 0.4
VAY	7.01	337	iPn	23 00.00 -0.2
KEK	7.01	315	eP	22 57.60 -2.7X
KBN	7.13	325	ePn	23 03.70 1.9
DIM	7.14	356	eP	23 03.00 1.0
BBTK	7.15	45	iPd	23 01.00 -1.2
KKB	7.36	341	iP	23 05.00 -0.1
OHR	7.52	327	iPnc	23 05.60 -1.8
ADI	7.68	101	eP	23 04.10 -5.5X
PGB	7.79	349	iPg	23 06.00 -5.0X
			iSg	23 24.00
ZNT	7.81	108	eP	23 05.20 -6.1X
			eS	24 28.90
SKO	7.98	333	ePn	23 11.70 -2.0
	9.0s	2741	00nm	6.0mb X
Z	25s	8.47um		5.2Msz
N	21s	8.72um		
E	21s	14.32um		
				23 17.30
				23 24.50
				23 28.00
				23 31.00
				23 42.70
				23 46.00
				25 08.00
				25 51.50
				26 06.00
				26 19.00
VTS	8.02	344	iPd	23 16.00 1.7
				23 26.00
MML	8.04	105	eP	23 08.20 -6.3X
TIR	8.14	324	ePn	23 16.00 0.1
PHP	8.15	328	ePn	23 13.20 -2.7X
PVL	8.31	355	iPc	23 13.00 -5.2X
DSI	8.35	111	eP	23 12.50 -6.2X
SALJ	8.41	108	Pd	23 13.60 -6.0X
BURJ	8.42	106	P	23 13.50 -6.2X
LACI	8.44	325	ePn	23 18.00 -1.9

<AGS-P>

Table with columns for station name, depth, time, and other parameters. Includes stations like ILIM, RED, RDT, XLV, CNPM, OPT, NKA, SLKM, AUL, SPU, SEW, CDD, SHU, MCNL, SUA, PMS, SKT, SVW, PLRM, KNIM, GHO, KLU.

22 obs. associated

AUG 27, 1989 05h 10m 40.04 ± 0.56s
37.103 N ± 5.2km 28.273 E ± 6.6km
DEPTH = 10.0km (geophysicist)

TURKEY (366)

MD 3.4 (ATH)

Table with columns for station name, depth, time, and other parameters. Includes stations like YER, CIN, ELL, KSL, IZM, KHL, KAP, ALT, PRK, NPS.

S.D. = 0.8 on 9 of 10 obs.

AUG 27, 1989 05h 24m 18.08 ± 0.39s
37.873 N ± 3.9km 26.457 E ± 4.0km
DEPTH = 10.0km (geophysicist)

3.5mb (1 obs.)

DODECANESE ISLANDS (369)

ML 3.5 (ATH)

Table with columns for station name, depth, time, and other parameters. Includes stations like IZM, APE, PRK, YER, EZN, ATH, KAP, DST, KHL, EDC, BNT, KCT, NEO, ELL, KSL, VAM, ALT, PLG, YLV, ITM, GPA, KDZ, RZN, DIM, MMB, KZN.

Table with columns for station name, depth, time, and other parameters. Includes stations like VAY, JMB, KKB, PGB, BBTK, VTS, PVL, OHR, NB2.

S.D. = 1.0 on 27 of 35 obs.

AUG 27, 1989 06h 47m 32.72 ± 0.69s

21.853 S ± 9.7km 179.369 W ± 7.5km

DEPTH = 615.5 ± 9.6 km

4.6mb (12 obs.)

FIJI ISLANDS REGION (181)

Table with columns for station name, depth, time, and other parameters. Includes stations like DZM, KRP, PGZ, MNG, MSZ, BRS, RMO, BWA, CTA.

Table with columns for station name, depth, time, and other parameters. Includes stations like TOO, PMG, ASPA.

Table with columns for station name, depth, time, and other parameters. Includes stations like WB5, WRA, FORR.

Table with columns for station name, depth, time, and other parameters. Includes stations like MTN, WARB, MBL.

Table with columns for station name, depth, time, and other parameters. Includes stations like NANU, SPA, PRS, PRI, PLM, FRI, CMB, WDC, ORV, MIN, GLA, KVN, TNP.

Table with columns for station name, depth, time, and other parameters. Includes stations like LON, PNT, ALO, GOL, RSSD, GBTN, BMA, LWI, EKA, KRA, KSP.

Table with columns for station name, depth, time, and other parameters. Includes stations like PRS, PRI, PLM, FRI, CMB, WDC, ORV, MIN, GLA, KVN, TNP.

Table with columns for station name, depth, time, and other parameters. Includes stations like LON, PNT, ALO, GOL, RSSD, GBTN, BMA, LWI, EKA, KRA, KSP.

Table with columns for station name, depth, time, and other parameters. Includes stations like LON, PNT, ALO, GOL, RSSD, GBTN, BMA, LWI, EKA, KRA, KSP.

Table with columns for station name, depth, time, and other parameters. Includes stations like LON, PNT, ALO, GOL, RSSD, GBTN, BMA, LWI, EKA, KRA, KSP.

Table with columns for station name, depth, time, and other parameters. Includes stations like LON, PNT, ALO, GOL, RSSD, GBTN, BMA, LWI, EKA, KRA, KSP.

Table with columns for station name, depth, time, and other parameters. Includes stations like LON, PNT, ALO, GOL, RSSD, GBTN, BMA, LWI, EKA, KRA, KSP.

Table with columns for station name, depth, time, and other parameters. Includes stations like LON, PNT, ALO, GOL, RSSD, GBTN, BMA, LWI, EKA, KRA, KSP.

Table with columns for station name, depth, time, and other parameters. Includes stations like LON, PNT, ALO, GOL, RSSD, GBTN, BMA, LWI, EKA, KRA, KSP.

Table with columns for station name, depth, time, and other parameters. Includes stations like SPC, CLL, BRG, WTS, PRU, MOX, ZST, ENN, KHC, GRF, MEM, DOU, WLF.

S.D. = 1.0 on 39 of 55 obs.

AUG 27, 1989 07h 01m 09.72 ± 0.83s

41.744 N ± 6.1km 20.142 E ± 7.2km

DEPTH = 10.0km (geophysicist)

ALBANIA (391)

ML 1.8 (SKO)

Table with columns for station name, depth, time, and other parameters. Includes stations like PHP, PUK, KKS, TIR, OHR, SKO.

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

AUG 27, 1989 07h 07m 44.40 ± 3.05s

17.987 S ± 35.3km 69.806 W ± 11.6km

DEPTH = 33.0km (normal)

PERU-BOLIVIA BORDER REGION (118)

Table with columns for station name, depth, time, and other parameters. Includes stations like CNCB, LPB, ARE, ZOBO, CCH.

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

AUG 27, 1989 07h 34m 30.56 ± 1.76s

18.162 N ± 16.0km 67.058 W ± 16.7km

DEPTH = 33.0km (normal)

MONA PASSAGE (89)

Table with columns for station name, depth, time, and other parameters. Includes stations like MGP, PORP, APR, SJG, LPR.

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

AUG 27, 1989 07h 44m 08.12 ± 0.69s

37.837 N ± 7.0km 15.064 E ± 5.4km

DEPTH = 10.0km (geophysicist)

SICILY (398)

Table with columns for station name, depth, time, and other parameters. Includes stations like MNO, ATN, MSI, MEU, SOI, GIB, TDS, MGR.

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

* AUG 27, 1989 08h 00m 33.51±1.09s
39.624 N ±11.6km 19.408 E ± 8.5km
DEPTH = 10.0km (geophysicist)
GREECE-ALBANIA BORDER REGION (392)
MD 2.9 (ATH).

KEK 0.31 73 ePg 00 39.50 -0.5
LCI 1.32 303 P 00 57.50 -0.4
eSn 01 15.70
VLS 1.71 147 ePb 01 04.00 0.4
OHR 1.83 35 ePn 01 06.50 1.3
KZN 1.94 69 ePg 01 09.80 2.9X
SKO 2.81 33 ePn 01 27.10 7.8X
MGR 3.01 281 P 01 33.20 11.1X
PLG 3.19 75 ePn 01 24.00 -0.7
S.D. = 1.2 on 5 of 8 obs.

% AUG 27, 1989 08h 08m 56.23±1.11s
32.924 S ± 6.9km 68.941 W ±26.6km
DEPTH = 10.0km (geophysicist)
MENDOZA PROVINCE, ARGENTINA (139)

RTCV 1.11 18 eP 09 17.20 0.0
S 09 34.00
RTCB 1.44 5 iPc 09 21.80 -0.6
S 09 41.00
CFA 1.44 25 iPd 09 22.80 0.4
RTLL 1.64 14 e(P) 09 25.00 -0.2
S 09 48.00
RFA 1.88 168 ePc 09 28.80 0.0
MRA 2.77 80 e(P) 09 50.20 8.7X
RTRS 2.78 351 e(P) 09 42.00 0.4
(S) 10 18.00
S.D. = 0.5 on 6 of 7 obs.

? AUG 27, 1989 08h 16m 44.87±4.95s
31.225 S ±21.5km 68.418 W ±36.5km
DEPTH = 90.2 ± 47.2 km
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.11 203 iPd 16 58.00 -0.1
S 17 09.20
CFA 0.41 158 iPd 16 59.40 0.2
S 17 11.30
RTCB 0.42 231 iPd 16 59.50 0.1
S 17 12.00
RTCV 0.64 189 iPd 17 01.00 -0.1
S 17 14.50
RTRS 1.38 319 iPd 17 09.50 0.0
S 17 28.00
S.D. = 0.3 on 5 of 5 obs.

AUG 27, 1989 09h 17m 06.98±0.76s
44.026 N ± 8.3km 11.645 E ± 4.4km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
MD 3.1 (FIR).

PGD 0.16 160 P 17 10.80 0.0
SFI 0.18 125 Pc 17 10.90 -0.1
eSg 17 14.20
FIR 0.37 229 ePg 17 15.00 0.3
iSg 17 22.50
CRE 0.46 151 P 17 15.90 -0.4
eSg 17 24.20
RSM 0.59 99 P 17 19.00 0.1
MME 0.70 284 P 17 20.90 -0.1
BDI 0.76 273 P 17 21.70 -0.1
eSg 17 33.30
ARV 1.08 119 P 17 27.60 0.3
eSg 17 44.70
S.D. = 0.3 on 8 of 8 obs.

AUG 27, 1989 09h 27m 54.11±0.88s
36.049 N ±10.1km 139.638 E ± 6.4km
DEPTH = 33.0km (normal)
HONSHU, JAPAN (227)
MG 3.6 (JMA). Felt (1 JMA) at
Utsunomiya.

KAKJ 0.46 70 iPd 28 04.20 0.1
S 28 11.60
CHJJ 0.52 270 iPd 28 04.50 -0.5
S 28 12.10
MAT 1.25 293 iPd 28 15.30 -0.1
eS 28 32.00

NIJ 1.29 337 P 28 16.20 0.2
S 28 33.50
IIDJ 1.51 248 P 28 19.40 0.2
S 28 39.00
MTMJ 1.57 290 P 28 20.00 -0.2
YAMJ 2.14 8 P 28 28.90 0.7
eS 28 55.20
TSRJ 3.01 261 P 28 41.10 0.5
OFUJ 3.43 27 eP 28 45.80 -0.7
S.D. = 0.5 on 9 of 9 obs.

AUG 27, 1989 09h 34m 18.89±1.04s
40.014 N ± 8.3km 23.790 E ± 7.7km
DEPTH = 10.0km (geophysicist)
GREECE (364)

PAIG 0.12 224 iPc 34 21.30 -0.6
eSg 34 23.70
OUR 0.35 25 iPc 34 24.80 -1.3
THE 0.88 315 ePb 34 35.70 -0.1
eSg 34 49.80
LIT 1.00 275 ePg 34 37.80 -0.1
eSg 34 52.70
SRS 1.11 352 ePb 34 39.00 -0.8
eSb 34 54.80
KNT 1.33 330 ePb 34 43.20 -0.3
eSb 35 02.10
VAY 1.60 325 ePh 34 48.70 1.4
ALN 1.93 62 ePh 34 52.80 0.7
PGB 2.55 6 eP 35 02.00 1.0
S.D. = 1.0 on 9 of 9 obs.

AUG 27, 1989 09h 53m 57.49±0.87s
26.320 S ± 8.5km 27.204 E ±10.4km
DEPTH = 5.0km (geophysicist)
REPUBLIC OF SOUTH AFRICA (584)
ML 3.1 (PRE).

PRY 0.65 158 iPc 54 10.40 -0.2
0.4s 17.05nm
S 54 16.30
BFS 0.69 213 iPd 54 09.00 -2.3
S 54 17.00
SLR 1.13 59 iPd 54 18.50 -0.7
S 54 27.90
BFT 2.63 77 eP 54 42.00 0.4
S 55 02.00
BLF 2.92 198 e(P) 54 46.50 0.9
S 54 53.50
KIM 3.24 221 iPc 54 51.00 0.9
S 55 29.50
FRS 3.80 206 iPc 54 59.00 1.0
S 55 41.00
BUL 6.28 12 iP 55 33.20 -0.1
iSn 56 41.60
iSg 56 56.00
i 57 13.00
S.D. = 1.3 on 8 of 8 obs.

AUG 27, 1989 10h 14m 46.23±0.43s
40.656 N ± 3.5km 22.413 E ± 3.8km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.2 (ATH). ML 2.8 (SKO).

GRG 0.30 358 iPc 14 52.40 -0.1
THE 0.42 93 ePg 14 54.70 -0.1
eSg 15 00.90
LIT 0.56 174 ePg 14 57.60 0.0
eSg 15 06.70
KZN 0.60 235 ePn 14 57.90 -0.5
KNT 0.63 36 ePg 14 58.40 -0.4
eSg 15 07.30
VAY 0.68 10 iPc 14 58.70 -0.9
iSg 15 08.00
PLG 0.84 109 ePn 15 02.40 0.0
SRS 1.01 62 ePg 15 05.00 -0.3
eSg 15 21.00
PAIG 1.21 126 ePb 15 09.10 0.3
eSb 15 26.60
OUR 1.24 104 ePb 15 10.00 0.8
eSb 15 27.80
OHR 1.31 291 iPn 15 10.80 0.4
KKB 1.31 22 iP(P)d 15 10.00 -0.5
iSg 15 28.00
MMB 1.36 46 iPd 15 11.00 -0.3
eS 15 31.00

NEO 1.48 155 ePn 15 12.20 -0.8
SKO 1.51 331 ePn 15 14.50 1.2
iSn 15 35.60
RZN 2.02 59 iPd 15 21.00 0.1
Sg 15 52.00
VTS 2.02 17 iP 15 21.00 0.1
iS 15 49.00
PGB 2.30 34 eP 15 29.00 4.1X
KDZ 2.48 65 eP 15 26.00 -1.3
iS 16 05.00
DIM 2.73 58 eP 15 33.00 2.1
Sg 16 19.00
ALN 2.77 84 ePn 15 31.70 0.3
PVL 3.36 39 eP 15 46.00 6.2X
S.D. = 0.8 on 20 of 22 obs.

? AUG 27, 1989 10h 22m 22.11±0.91s
31.074 S ±22.8km 68.760 W ±36.1km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTLL 0.36 136 iPd 22 38.00 0.7
S 22 49.00
RTCB 0.41 185 iPd 22 38.00 0.4
S 22 50.00
CFA 0.69 140 iPd 22 39.20 -0.6
S 22 51.30
RTCV 0.81 166 iPd 22 40.50 -0.3
RTRS 1.08 326 iPc 22 43.50 -0.2
S 23 07.00
S.D. = 0.8 on 5 of 5 obs.

* AUG 27, 1989 10h 30m 50.15±1.95s
41.626 N ±19.7km 19.464 E ±17.4km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 2.2 (TTG).

ULC 0.37 335 ePg 30 56.50 -1.3
eSg 31 01.00
TTG 0.82 349 ePg 31 05.50 -0.4
eSg 31 15.50
HCY 1.09 319 ePg 31 11.50 0.9
eSg 31 28.00
OHR 1.13 117 ePn 31 10.80 -0.5
NKY 1.24 344 ePg 31 14.00 0.8
eSg 31 32.00
SKO 1.52 76 ePn 31 18.00 0.6
iSn 31 41.00
S.D. = 1.2 on 6 of 6 obs.

AUG 27, 1989 10h 53m 20.94±0.51s
46.390 N ± 5.7km 12.966 E ± 4.8km
DEPTH = 10.0km (geophysicist)
NORTHERN ITALY (545)
MD 3.1 (LJU). ML 2.6 (KBA).

RBL 0.42 83 P 53 28.80 -0.7
eSn 53 35.40
KBA 0.74 21 iPc 53 34.80 -0.7
iSg 53 44.70
VOY 0.74 119 ePg 53 34.20 -1.3
eSg 53 45.80
TRI 0.88 140 P 53 38.00 0.2
eSg 53 51.70
CTI 0.98 250 P 53 39.30 -0.2
eSg 53 53.30
SCE 1.08 307 iPg 53 40.40 -1.0
LJU 1.14 107 ePg 53 43.00 0.7
eSg 53 59.10
CEY 1.21 122 ePg 53 46.40 2.9X
eSg 54 01.90
BHG 1.33 357 iPc 53 46.30 0.8
OGA 1.42 290 iPc 53 46.80 -0.2
RIY 1.44 136 iPnc 53 47.40 0.3
iSn 54 07.60
VBY 1.83 118 ePn 53 53.50 0.9
iSn 54 21.10
FUR 2.12 328 eP 53 58.10 1.3
PTJ 2.14 102 eP 54 05.00 7.8X
S.D. = 0.9 on 12 of 14 obs.

? AUG 27, 1989 11h 07m 10.34±0.73s
48.981 S ±18.7km 123.778 E ±37.4km
DEPTH = 10.0km (geophysicist)
4.6mb (3 obs.) 4.0Msz (1 obs.)
SOUTH OF AUSTRALIA (437)

Table with columns for station code, time, depth, and other parameters. Includes stations ASPA, SPA, GBA, KMI, BJI, KVN, TNP, ALO, GOL, GLD, EDM, SES, RSSD, SIQ, TUL.

S.D. = 1.5 on 13 of 15 obs.

Summary data for AUG 27, 1989, 11h 10m. Includes coordinates, depth (10.0km), and Turkey station list (DST, ALT, YLV, HRT, KHL).

S.D. = 0.2 on 4 of 5 obs.

Summary data for AUG 27, 1989, 11h 11m. Includes coordinates, depth (67.8km), Central Alaska station list (HUR, RND, MCK, GHO, PME, PWA, SKT, KNK, SUA, PAX, DDM, HDA, CCB, KLU, RDS, VLZ, GLI, SLKM).

18 obs. associated

Summary data for AUG 27, 1989, 11h 31m. Includes coordinates, depth (10.0km), Turkey station list (DST, YLV, ALT, HRT, KHL).

S.D. = 1.8 on 4 of 5 obs.

Summary data for AUG 27, 1989, 12h 41m. Includes coordinates, depth (118.8 ± 8.7 km).

Table for NEAR COAST OF PERU (115). Includes stations ARE, LPB, ZOBO, ANT, HUA, NNA, SLA, MRA, BAO, VAO, BMA, PRM, GBTN, RSCP, TUL, FVM, SIO, ALO, GOL, LIC, TIC, KIC, TNP, KVN, EDM, TQL, GBA.

S.D. = 1.5 on 23 of 27 obs.

Summary data for AUG 27, 1989, 13h 01m. Includes coordinates, depth (123.5 ± 22.1 km), San Juan Province, Argentina station list (RTBS, RTCB, RTCV, RTLL, CFA, RTRS, MRA, RFA).

S.D. = 0.7 on 7 of 8 obs.

Summary data for AUG 27, 1989, 14h 35m. Includes coordinates, depth (87.0 ± 43.1 km), San Juan Province, Argentina station list (RTLL, RTCB, CFA, RTCV, RTRS).

Table for BURMA (296). Includes stations CHG, CHTO, BDT, LOE, NST, KMI, E, KBR, NNT, SHL, GYA, CD2, LSA, LZH, XAN, GTA, TIY, Z, N, E, NDI, GBA, BTO, WMO, SUF, SOD, NUR, UPP, KSP.

S.D. = 0.9 on 26 of 29 obs.

Summary data for AUG 27, 1989, 16h 40m. Includes coordinates, depth (10.0km), Turkey station list (IZM, DST, EDC).

28d 08h

S.D. = 1.3 on 4 of 4 obs.

AUG 28, 1989 08h 11m 48.69s
59.903 N 153.273 W
DEPTH = 127.3km
4.2mb (1 obs.)
SOUTHERN ALASKA
<AGS-P>

Table with columns for station name, time, depth, and seismic data. Includes stations like ILIM, OPT, AUL, RED, RDT, MCNL, XLV, CDD, CNPM, BRK, NKA, SHU, SPU, SLKM, SVW, SEW, SUA, KDC, SKT, PMS, PMR, PME, KNIM, KNK, MTU, GHO, GLI, TTA, HIN, FID, VZW, HUR, MID, VLZ, CVA, KTH, KLU, SCAM, RND, TOA, RAGM, MCK, KAIM, PAX, GLB, WAX, DDM, TGL, BALM, FBA, DOT, SDN, IMA, HYT, INK, MBC.

0.5s 5.00nm
56 obs. associated

AUG 28, 1989 08h 14m 11.90± 0.84s
41.926 N ± 4.9km 20.347 E ± 7.2km
DEPTH = 10.0km (geophysicist)
ALBANIA (391)
ML 2.7 (TTG).

Table with columns for station name, time, depth, and seismic data. Includes stations like KKS, PHP, PUK, BCI, LACI, SDA, TIR, PVY, ULC, TTG, IVA, BDV, HCY, TPE, BRY, LSK.

S.D. = 1.1 on 14 of 16 obs.

AUG 28, 1989 08h 14m 30.09± 1.50s
17.854 S ± 11.8km 69.823 W ± 22.3km
DEPTH = 139.9 ± 15.9 km
4.2mb (1 obs.)
PERU-BOLIVIA BORDER REGION (118)

Table with columns for station name, time, depth, and seismic data. Includes stations like CNCB, LPB, ZOBO, CCH, ANT, SLA, SPA.

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

AUG 28, 1989 08h 43m 51.79± 0.37s
2.904 N ± 4.8km 128.551 E ± 8.5km
DEPTH = 33.0km (normal)
4.7mb (4 obs.)
HALMAHERA (267)

Table with columns for station name, time, depth, and seismic data. Includes stations like MNI, MTN, KNA, GUMO, WB5, WRA, MBL, QIS, ASPA, NANU, WARB, LOE, CHG, MAT, XAN, CD2, STK, TIY, BJI, LZH, MDJ, BWA, GTA, GBA, WMO.

ALO 116.22 49 e(PKP)02 49.50 15.2X
S.D. = 0.9 on 23 of 26 obs.

AUG 28, 1989 09h 44m 45.45± 1.09s
40.417 N ± 8.6km 21.681 E ± 9.1km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.4 (ATH).

Table with columns for station name, time, depth, and seismic data. Includes stations like KZN, LIT, OHR, VAY, KNT, PLG, SKO, NEO.

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

AUG 28, 1989 10h 30m 53.67± 8.04s
16.829 N ± 40.0km 100.091 W ± 67.2km
DEPTH = 33.0km (normal)
NEAR COAST OF GUERRERO, MEXICO (58)

Table with columns for station name, time, depth, and seismic data. Includes stations like ACX, ILL, CRX, IIT, IIC, MRX, OXX.

S.D. = 1.6 on 4 of 7 obs.

AUG 28, 1989 10h 32m 53.14± 1.99s
11.096 N ± 11.8km 62.048 W ± 12.8km
DEPTH = 104.0 ± 26.8 km
WINDWARD ISLANDS (95)
MD 3.8 (TRN). Felt on Trinidad.

Table with columns for station name, time, depth, and seismic data. Includes stations like TCE, TRN, TPP, TBH, PIG, TPR, BOT, SVB, SVV, SSV, SLB, BIM, MVM, FDF, CRM, DTMT.

S.D. = 0.2 on 16 of 16 obs.

AUG 28, 1989 10h 40m 33.44± 0.69s
40.405 N ± 6.1km 21.850 E ± 6.2km
DEPTH = 10.0km (geophysicist)
GREECE (364)
MD 3.6 (ATH).

Table with columns for station name, time, depth, and seismic data. Includes stations like KZN, LIT, OHR, VAY, KNT, PLG.

NEO 1.52 136 ePb 41 01.50 0.7
SKO 1.60 349 ePn 41 10.00 8.2X
S.D. = 0.6 on 7 of 8 obs.

% AUG 28, 1989 12h 55m 04.72 ± 2.23s
32.041 N ± 6.5km 35.274 E ± 16.4km
DEPTH = 10.0km (geophysicist)
DEAD SEA REGION (373)

SALJ 0.35 95 Pc 55 12.10 0.1
KFNJ 0.39 117 Pd 55 12.70 0.1
MASJ 0.49 129 Pd 55 14.80 0.1
MKRJ 0.58 147 Pd 55 16.40 -0.1
JARJ 0.60 71 Pc 55 16.70 -0.3
SHMJ 0.80 31 Pc 55 20.40 0.1
HLBJ 0.87 87 Pd 55 21.50 -0.1
S.D. = 0.2 on 7 of 7 obs.

% AUG 28, 1989 13h 30m 05.41 ± 3.47s
42.628 N ± 25.3km 0.312 W ± 7.7km
DEPTH = 10.0km (geophysicist)
PYRENEES (378)
MD 1.5 (STR).

LHE 0.36 321 Pg 30 13.15 0.2
Sg 30 17.93
JAU 0.41 354 Pg 30 13.75 -0.1
Sg 30 18.06
ESCF 0.49 337 Pg 30 15.23 -0.1
Sg 30 20.51
ISSF 0.53 319 Pg 30 15.76 -0.5
Sg 30 23.79
ATE 0.54 328 Pg 30 16.43 0.1
Sg 30 22.46
OGE 0.55 348 Pg 30 16.79 0.1
Sg 30 22.49
EPF 0.63 50 Pg 30 18.00 0.0
Sg 30 24.80
MADF 0.64 324 Pg 30 18.52 0.3
Sg 30 27.21
S.D. = 0.3 on 8 of 8 obs.

% AUG 28, 1989 13h 35m 59.80s
37.383 N 118.563 W
DEPTH = 12.0km
CALIFORNIA-NEVADA BORDER REGION (40)
<BRK>. ML 3.2 (BRK).

FRI 0.99 247 iPc 36 17.70 -0.8
i 36 20.30
iS 36 30.70
TNP 1.27 56 eP 36 22.70 -0.7
CMB 1.58 295 iPd 36 27.90 0.1
iS 36 48.50
KVN 1.70 12 eP 36 28.90 -0.8
PKEM 1.81 224 eP 36 31.80 0.8
LLA 2.05 249 ePc 36 34.60 0.0
PRI 2.09 234 ePc 36 35.30 0.1
iSb 37 05.10
PHAM 2.14 224 eP 36 36.10 0.3
ARN 2.37 270 eP 36 40.00 0.9
SAO 2.39 256 iPc 36 39.80 0.5
eSb 37 15.85
MHC 2.45 270 ePd 36 41.00 0.6
eSb 37 14.90
PRS 2.48 246 e(P) 36 40.80 0.1
BCH 2.51 210 eP 36 41.20 0.0
ABL 2.58 192 eP 36 41.80 -0.5
BKS 2.96 281 iPd 36 48.30 0.9
eS 37 29.40
BRK 2.98 281 eP 36 48.10 0.5
PCC 3.04 273 eP 36 49.00 0.4
ORV 3.17 314 e(P) 36 55.30 4.9
18 obs. associated

? AUG 28, 1989 14h 17m 20.94 ± 1.05s
63.347 N ± 8.6km 10.260 E ± 13.1km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.3 (BER).

RGS 0.34 166 iP 17 27.50 -0.4
eS 17 32.80
NSS 1.41 32 eP 17 46.50 -0.1
eS 18 03.30
MOL 1.46 239 eP 17 47.30 0.0
eS 18 05.20

NRAO 2.69 166 eP 18 05.50 0.5
eSg 18 47.10
S.D. = 0.6 on 4 of 4 obs.

% AUG 28, 1989 14h 20m 00.12 ± 0.60s
60.643 N ± 5.0km 6.247 E ± 6.5km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.6 (BER).

HYA 0.53 357 iP 20 10.20 -0.5
eS 20 17.90
ASK 0.54 253 eP 20 11.00 -0.1
iS 20 18.10
ODD1 0.76 165 eP 20 13.70 -1.3
eS 20 23.10
SUE 0.84 300 eP 20 16.20 -0.1
eS 20 28.20
BLS1 1.29 167 eP 20 24.10 0.0
eS 20 40.50
KMY 1.52 200 iP 20 28.50 1.2
iS 20 47.50
MOL 2.03 17 iP 20 35.10 0.4
eS 21 01.30
NRAO 2.61 86 eP 20 43.40 0.4
iPg 20 46.00
eS 21 14.20
iSg 21 19.80
S.D. = 0.8 on 8 of 8 obs.

* AUG 28, 1989 14h 57m 17.63 ± 1.98s
24.049 S ± 13.7km 179.697 W ± 11.9km
DEPTH = 561.2 ± 22.9 km
4.7mb (13 obs.)

SOUTH OF FIJI ISLANDS (171)

DZM 12.91 276 iPc 00 06.70 0.9
KRP 14.42 195 eP 00 23.00 2.4
PGZ 16.87 191 P 00 43.70 -0.7
MNG 17.01 193 eP 00 43.70 -2.2
eS 03 34.20
CAW 17.57 193 eP 00 50.40 -0.9
WDW 17.74 193 eP 00 51.60 -1.3
WEL 17.80 194 Pc 00 54.70 1.2
1.0s *****nm 7.5mb X
S 03 53.00
TCW 17.84 195 eP 00 53.50 -0.4
MHZ 22.80 200 P 01 38.50 -1.2
MSZ 22.92 203 P 01 40.90 0.3
BRS 25.00 256 iPc 02 00.60 1.1
COO 26.03 249 eP 02 09.70 1.2
CAN 29.31 240 iPc 02 38.10 1.1
BWA 29.57 242 iPc 02 38.30 -1.0
CMS 31.30 249 ePc 02 54.30 0.4
CTA 31.75 270 iPc 02 58.00 0.2
0.4s 40.25nm 5.4mb
STK 34.93 248 iPc 03 25.40 1.1
ASPA 42.29 261 iPc 04 24.10 0.1
0.7s 33.00nm 5.0mb
eS 10 05.30

WB5 42.66 266 iPc 04 26.20 -0.8
WRA 42.67 266 Pc 04 26.20 -0.9
0.6s 15.30nm 4.7mb
WARB 48.35 256 eP 05 10.10 -0.6
0.3s 9.00nm 4.8mb
KNA 48.94 270 iPc 05 14.60 -0.5
0.3s 21.00nm 5.1mb
COOL 52.42 249 eP 05 39.70 -0.7
0.5s 12.00nm 4.5mb
SBA 54.25 184 Pd 05 56.90 4.2X
KLB 55.18 247 eP 05 59.20 -0.7
0.3s 11.00nm 4.7mb
NWA0 55.43 246 eP 06 01.00 -0.6
MBL 55.53 260 eP 06 01.30 -1.1
0.3s 7.00nm 4.5mb
BAL 56.23 248 iPc 06 06.70 -0.5
0.3s 11.00nm 4.7mb
MUN 56.43 247 iPc 06 08.60 0.1
MRWA 57.09 250 eP 06 13.00 0.0
0.3s 6.00nm 4.5mb
NANU 59.02 257 iPc 06 26.40 0.3
0.3s 21.00nm 4.9mb
SPA 66.09 180 ePc 07 13.70 2.6
1.0s 10.00nm 4.3mb
MAW 77.71 200 eP 08 19.00 1.5
KVN 85.16 43 eP 08 56.00 -0.1
ALO 90.83 52 e(P) 09 22.30 -0.4

1.0s 2.50nm 4.2mb
S.D. = 1.1 on 34 of 35 obs.

? AUG 28, 1989 15h 14m 28.74 ± 1.08s
50.017 N ± 10.2km 5.779 E ± 10.1km
DEPTH = 10.0km (geophysicist)
BELGIUM (541)

WLF 0.43 145 iPd 14 37.60 0.1
MEM 0.61 14 iP 14 40.70 -0.3
DOU 0.77 276 iP 14 42.60 -1.1
SNF 1.08 298 iP 14 50.30 1.3
iS 15 06.40
S.D. = 1.7 on 4 of 4 obs.

? AUG 28, 1989 16h 06m 19.61 ± 5.58s
10.582 N ± 29.0km 62.542 W ± 42.8km
DEPTH = 33.0km (normol)
NEAR COAST OF VENEZUELA (97)
MD 3.5 (TRN).

TCE 0.78 82 eP 06 33.20 -1.0
TPP 1.10 104 eP 06 39.01 0.2
eS 06 49.29
TRN 1.12 87 eP 06 37.65 -1.4
eS 06 50.15
TBH 1.45 94 eP 06 45.30 1.5
eS 07 05.84
PIG 1.77 71 eP 06 48.04 -0.3
eS 07 07.12
BOT 1.88 72 eP 06 50.60 0.6
eS 07 08.30
SVB 2.96 25 eP 07 05.99 0.6
eS 07 39.34
SVV 3.01 25 eP 07 06.84 0.7
eS 07 39.55
SSV 3.03 26 eP 07 07.34 0.9
eS 07 40.72
SOA 3.09 26 eP 07 08.43 1.2
eS 07 42.42
SLB 3.54 24 eP 07 13.66 -0.1
eS 07 52.29
BIM 4.17 20 eP 07 21.70 -0.8
S 08 03.90
MVM 4.26 22 eP 07 22.87 -1.0
FDF 4.34 18 eP 07 24.08 -1.0
S 08 07.10
S.D. = 1.0 on 14 of 14 obs.

AUG 28, 1989 18h 52m 37.33 ± 0.44s
42.094 N ± 5.6km 20.661 E ± 3.5km
DEPTH = 5.0km (geophysicist)
YUGOSLAVIA (383)
ML 3.3 (SKO), 2.7 (TTG).

KKS 0.19 265 iPg 52 41.30 0.1
PHP 0.44 202 iPgc 52 43.40 -2.7
BCI 0.52 302 iPgc 52 47.50 -0.2
PUK 0.57 265 iPgc 52 48.00 -0.8
SKO 0.59 102 iPgc 52 47.40 -1.8
iSg 52 55.30
PVY 0.71 315 ePg 52 51.50 -0.1
eSg 53 04.00
SDA 0.87 265 ePg 52 54.20 -0.3
TIR 0.95 219 ePg 52 58.00 2.1
IVA 0.96 324 ePg 52 56.20 0.1
eSg 53 13.00
ULC 1.06 263 ePg 52 57.40 -0.4
eSg 53 15.00
TTG 1.09 288 ePg 52 57.20 -1.1
eSg 53 15.20
NKY 1.42 301 ePg 53 04.30 0.3
eSg 53 07.20
VAY 1.62 118 ePn 53 05.70 -1.0
HCY 1.64 283 ePn 53 08.00 1.0
eSn 53 34.00
BRY 1.76 298 ePn 53 11.30 2.5X
eSn 53 39.00
KKB 1.82 96 eP 53 10.00 0.4
TPE 1.86 195 ePn 53 11.50 1.4
KNT 1.92 118 eP 53 10.00 -1.0
LSK 1.94 181 ePn 53 13.00 1.6
VTS 1.95 74 eP 53 12.00 0.4
MMB 2.35 101 eP 53 19.00 1.8
SRS 2.41 113 eP 53 17.50 -0.5
LIT 2.42 145 eP 53 22.00 3.7X
PGB 2.64 79 eP 53 22.00 0.6

28d 18h

RZN 3.05 96 iPg 53 35.00 7.6X
S.D. = 1.2 on 22 of 25 obs.

% AUG 28, 1989 19h 08m 37.98± 0.61s
60.432 N ± 5.1km 5.349 E ± 7.3km
DEPTH = 10.0km (geophysicist)
SOUTHERN NORWAY (535)
MD 1.5 (BER).

BER 0.05 189 eP 08 39.80 -0.3
eSg 08 40.90
ASK 0.09 304 iPg 08 40.10 -0.5
iSg 08 41.70
SUE 0.69 336 iP 08 51.90 0.3
eS 09 01.20
ODDI 0.83 129 ePg 08 54.70 0.7
iS 09 08.30
HYA 0.84 29 eP 08 54.90 0.7
iS 09 08.10
KMY 1.23 182 iP 09 01.00 0.3
eS 09 16.20
MOL 2.39 25 eP 09 17.80 0.0
eS 09 49.40
NRA0 3.07 82 eP 09 26.00 -1.4
eSn 10 13.70
S.D. = 0.8 on 8 of 8 obs.

* AUG 28, 1989 19h 08m 55.99± 0.96s
29.160 N ± 13.4km 80.787 E ± 13.3km
DEPTH = 33.0km (normal)
3.9mb (4 obs.)
NEPAL-INDIA BORDER REGION (309)
Felt in western Nepal.

NDI 3.17 262 iPnd 09 43.70 -0.9
0.7s 51.37nm
HYB 11.87 190 eP 11 46.50 0.6
eS 13 57.00
POO 12.33 212 iPc 12 02.70 10.5X
GBA 15.79 192 Pc 12 36.60 -0.9
0.5s 2.50nm 3.6mb
KOD 19.08 190 eP 13 26.00 7.1X
eS 19 13.00
MAIO 19.26 297 eP 13 11.00 -9.6X
CHTO 19.50 118 eP 13 24.00 0.6
1.1s 3.83nm 3.6mb
MLR 45.67 306 eP 17 17.00 1.5
SUF 48.43 330 eP 17 35.00 -1.7
BNG 63.68 260 ePc 19 28.60 1.8
0.5s 3.00nm 4.7mb
WB5 71.04 127 eP 20 12.00 -1.0
WRA 71.07 127 P 20 18.00 4.9X
0.8s 1.50nm 4.1mb
S.D. = 1.6 on 8 of 12 obs.

% AUG 28, 1989 22h 37m 57.23± 1.23s
31.453 S ± 14.6km 69.466 W ± 17.5km
DEPTH = 100.0km (geophysicist)
SAN JUAN PROVINCE, ARGENTINA (137)

RTBS 0.21 177 e(P) 38 12.00 0.2
S 38 23.00
RTCB 0.57 94 iPc 38 13.80 -0.1
S 38 29.20
RTLL 0.86 82 iPc 38 16.80 0.3
S 38 34.00
RTCV 0.89 117 iPd 38 16.50 -0.3
S 38 34.00
CFA 1.06 99 iPc 38 18.70 0.1
S 38 38.00
RTRS 1.28 0 iPd 38 21.00 -0.1
S 38 41.50
S.D. = 0.3 on 6 of 6 obs.

AUG 28, 1989 23h 22m 48.97± 0.51s
41.739 N ± 5.1km 12.703 E ± 2.9km
DEPTH = 17.8 ± 3.2 km
SOUTHERN ITALY (390)
MD 4.1 (TRI).

RDP 0.02 29 Pd 22 52.50 0.2
RMP 0.07 360 Pc 22 51.70 -0.8
AZI 0.60 65 P 23 00.10 -0.5
eSg 23 08.30
MNS 0.64 358 P 23 02.00 0.6
eSg 23 11.00
AOU 0.81 40 P 23 03.30 -0.9

SDI 0.83 92 Pd 23 04.50 -0.2
ePq 23 16.50
ALP 1.23 32 iPn 23 11.03 -0.3
iSn 23 33.89
DUI 1.32 93 P 23 13.30 0.7
ASS 1.33 359 P 23 13.00 0.3
MAO 1.34 301 Pd 23 14.80 2.0
CIO 1.49 12 iPn 23 14.88 -0.1
iSn 23 40.89
ARV 1.77 6 P 23 19.50 0.5
AOI 1.93 20 i(Pn) 23 24.49 3.2X
CRE 1.97 344 P 23 22.10 0.2
ePq 23 46.00
PGD 2.25 342 P 23 26.40 0.3
SFI 2.27 344 P 23 26.00 0.7
FIR 2.30 333 e(Pn) 23 28.00 1.4
i(Sn) 24 15.00
MGR 2.69 126 P 23 32.00 -0.2
BDI 2.79 327 P 23 33.70 0.0
CVF 2.97 287 Pn 23 37.20 1.1
Sn 24 12.00
HVAR 3.12 61 iPn 23 43.70 5.4X
RIY 3.81 18 e(Pn) 23 47.80 -0.2
iSn 24 30.70
TRI 4.04 11 e(Pn) 23 50.30 -1.0
i(Sn) 24 36.00
FIN 4.12 308 P 23 53.55 1.1
PCP 4.14 314 P 23 52.83 0.1
IMI 4.15 303 P 23 56.42 3.4X
CEY 4.19 17 e(Pn) 23 57.50 4.0X
eSn 24 40.50
VBY 4.20 25 iPh 24 02.80 9.3X
iSh 24 52.00
ROB 4.37 307 P 23 55.91 -0.1
CTI 4.37 350 P 23 56.00 -0.1
VOY 4.38 11 ePh 24 04.40 8.2X
e(Sn) 24 45.50
SAOF 4.40 302 Pg 23 56.25 -0.2
SBF 4.42 300 Pn 23 56.20 -0.6
AUTN 4.49 302 Pg 23 57.74 -0.1
LJU 4.50 16 ePh 23 57.00 -0.9
eSh 24 48.00
ENR 4.60 304 P 23 59.70 0.2
TOUF 4.61 301 Pg 23 59.41 -0.2
STV 4.67 304 P 24 00.52 0.1
CALN 4.73 297 Pg 24 00.74 -0.6
RBL 4.74 7 P 24 00.00 -1.4
PTJ 4.78 28 e(P) 24 04.20 2.3
FRF 4.82 294 Pn 24 02.60 0.1
LMR 4.85 291 Pn 24 01.80 -1.0
PZZ 4.94 306 P 24 03.90 -0.4
LRG 4.99 292 Pn 24 03.80 -0.9
FOUF 5.15 305 ePnc 24 07.18 0.1
i 24 09.16
KBA 5.36 5 iPnd 24 09.30 -0.9
0.6s 19.40nm 4.9mb X
i 24 10.70
i 24 13.00
i 24 30.30
iSn 25 09.00
i 25 13.80
RRL 5.36 308 P 24 10.37 0.1
BNI 5.50 309 P 24 12.70 0.5
LPL 5.75 313 Pn 24 17.60 1.9
BHG 5.98 1 iPd 24 20.30 9.5X
SKO 6.53 85 ePn 24 34.00 7.5X
ZST 7.17 24 eP 24 59.00 23.6X
KHC 7.42 4 eP 24 39.20 0.2
e 25 58.50
GRB4 7.77 354 e(Pn) 24 43.80 -0.1
PRU 8.35 8 eP 24 47.50 -4.4X
CAF 8.38 296 Pn 24 51.00 -1.5
MOX 8.94 356 e(P) 25 04.00 3.9X
S.D. = 0.8 on 47 of 58 obs.

? AUG 29, 1989 00h 34m 39.12± 5.90s
7.814 S ± 42.4km 128.626 E ± 29.4km
DEPTH = 154.3 ± 38.4 km
4.6mb (1 abs.)
BANDA SEA (280)

MTN 5.57 154 iPc 36 01.60 0.5
eS 37 04.00
KNA 7.89 179 iPc 36 31.60 -0.6
0.3s 15.00nm 5.0mb X
eS 37 54.00
WB5 13.22 156 eP 37 39.10 -3.0X

OIS 16.53 141 eS 40 02.00
eP 38 23.00 -0.5
e 41 21.00
ASPA 16.56 163 eP 38 24.20 0.4
0.4s 12.00nm 4.6mb
eS 41 25.50
WARB 18.37 186 eP 38 45.00 0.2
CNCB 150.53 146 PKP 54 13.00 3.1X
LPB 150.69 146 (PKP) 54 10.00 0.0
ZOBO 150.89 145 ePKP 54 13.00 2.5X
S.O. = 0.7 on 6 of 9 obs.

* AUG 29, 1989 01h 19m 33.57± 1.89s
43.940 N ± 17.1km 11.826 E ± 9.7km
DEPTH = 10.0km (geophysicist)
CENTRAL ITALY (381)
MD 2.9 (FIR).

SFI 0.03 135 P 19 35.30 -0.2
PGD 0.10 229 Pd 19 36.20 -0.2
CRE 0.32 164 P 19 40.60 0.3
eSg 19 47.10
FIR 0.44 249 ePg 19 42.50 -0.1
iSg 19 50.00
BDI 0.90 278 P 19 51.00 0.2
S.D. = 0.3 on 5 of 5 obs.

* AUG 29, 1989 02h 13m 59.71± 1.79s
36.179 S ± 14.9km 72.374 W ± 13.4km
DEPTH = 33.0km (normal)
NEAR COAST OF CENTRAL CHILE (135)

LNv 2.36 20 iPd 14 37.70 0.8
iS 15 01.00
CHCH 2.65 33 iP 14 40.90 -0.2
iS 15 07.30
TACH 2.78 26 iPd 14 43.10 0.2
iS 15 11.50
PCH 2.98 31 iPd 14 46.00 0.2
iS 15 14.50
SAN 3.06 28 ePd 14 47.00 0.0
iS 15 17.50
FCH 3.32 32 iPc 14 51.50 0.6
iS 15 26.40
PEL 3.33 25 iPd 14 51.40 0.6
i(S) 15 09.00
RFA 3.49 67 iPd 14 54.90 1.9
RTBS 5.12 29 e(P) 15 17.00 0.9
RTCB 5.55 33 iPd 15 22.00 -0.2
(S) 15 27.00
ZON 5.55 35 eP 15 21.00 -1.2
eS 16 29.00
CFA 5.71 38 e(P) 15 23.00 -1.5
e 16 35.00
RTLL 5.83 35 iPd 15 25.00 -1.2
MRA 6.67 58 e(P) 15 37.10 -0.9
CYA 9.51 38 e(P) 16 11.30 -6.1X
ITB1 19.27 58 e(P) 18 21.70 -2.7X
CCH 19.52 18 P 18 34.20 6.5X
ARE 19.65 3 eP 18 29.00 -0.1
CNCB 19.68 13 P 18 30.00 0.3
LPB 19.93 12 P 18 33.00 0.8
ZOBO 20.19 12 P 18 34.20 -0.8
KIC 76.03 71 P 25 45.40 -0.4
ALO 77.56 332 e(P) 26 13.50 19.4X
1.0s 2.25nm
S.D. = 0.9 on 19 of 23 obs.

* AUG 29, 1989 02h 57m 10.02± 1.03s
13.587 S ± 9.6km 76.383 W ± 13.5km
DEPTH = 33.0km (normal)
NEAR COAST OF PERU (115)
Felt (IV) at Chincho, Ico and Nana.

PT06 0.25 168 iP 57 17.70 0.6
PT02 0.64 355 iP 57 22.50 -0.2
PT03 0.70 125 iP 57 21.60 -1.8
iS 57 36.60
PT10 1.61 339 iP 57 37.30 0.8
iS 57 58.70
PT08 1.63 354 iP 57 36.70 -0.4
NNA 1.65 344 iPc 57 36.70 -0.5
0.8s 52.24nm
i 57 40.70
iS 57 58.00
HUA 1.85 34 iPd 57 41.20 0.8

	iS	58 07.40	
ARE	5.52 122 eP	58 34.00 1.6	
ZOBO	8.42 109 P	59 12.00 -1.2	
	S	01 50.00	
LPB	8.52 111 P	59 16.00 1.4	
CNCB	8.72 113 eP	59 17.00 -0.4	
CCH	10.57 112 P	59 43.00 0.4	
S.D. = 1.1 on 12 of 12 abs.			

* AUG 29, 1989 04h 02m 44.40± 0.82s
 54.081 N ±11.8km 163.232 W ±10.3km
 DEPTH = 33.0km (normal)
 4.3mb (3 obs.)

UNIMAK ISLAND REGION (10)			
SDN	2.03 50 iPc	03 17.70 0.8	
KDC	7.06 54 eP	04 25.70 -2.3	
SVW	8.14 27 eP	04 43.10 -0.1	
ADK	8.41 260 eP	04 46.70 -0.2	
PMS	10.24 40 eP	05 11.00 -1.1	
IMA	12.91 18 eP	05 50.80 2.6	
INK	19.90 33 eP	07 13.00 -2.4	
YKB0	26.30 52 eP	08 20.50 2.2	
YKA	26.31 52 eP	08 21.70 3.4X	
LON	27.07 89 eP	08 26.60 1.1	
KVN	33.84 98 (P)	09 26.20 0.5	
TNP	35.00 98 eP	09 36.20 0.5	
0.7s 2.04nm 4.2mb			
DUG	36.20 92 eP	09 45.50 -0.3	
MSU	37.67 93 eP	09 58.70 0.4	
RSSD	38.94 80 eP	10 08.80 0.0	
GOL	40.90 86 eP	10 25.80 0.7	
0.7s 4.25nm 4.3mb			
ALO	43.46 92 eP	10 44.40 -1.6	
SUF	63.31 355 iP	13 11.60 0.0	
0.5s 3.50nm 4.7mb			
BUL	144.93 340 ePKP	22 18.90 -0.8	
1.0s 5.50nm			
iPP 22 26.10			
S.D. = 1.4 on 18 of 19 abs.			

AUG 29, 1989 04h 16m 23.02± 0.19s
 18.039 N ± 3.7km 105.667 W ± 3.2km
 DEPTH = 21.4km (geophysicist)
 5.7mb (51 abs.) 6.6msz (26 abs.)
 OFF COAST OF JALISCO, MEXICO (54)
 Ms 6.7 (BRK), 6.4 (PAS).
 Ma=1.3*10**19 Nm (PPT). Felt
 along the coast of Jalisco. Also
 felt at Guadalaajara and in the
 southern part of the Mexico City
 area. Depth from broadband
 displacement seismograms.
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=200 Dip=83 Slip= 8
 NP2: 109 82 173
 Principal Axes:
 T Plg=11 Azm= 65
 P 1 334

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:	4	Focal mech.	M
Energy	0.8±0.3*10**14 Nm		
MOMENT TENSOR SOLUTION			
Dep 75	No. of sta: 14		
Moment Tensor;	Scale 10**18 Nm		
Mrr= 0.17	Mtt=-2.04		
Mff= 1.88	Mrt= 0.88		
Mrf=-0.58	Mtf=-4.28		
Principal axes:			
T Val= 4.83	Plg=12	Azm= 57	
N 0.00	77	260	
P -4.83	5	148	
Best Double Couple:Ma=4.8*10**18			
NP1:Strike=193 Dip=78 Slip= 5			
NP2: 102 85 168			
CENTROID, MOMENT TENSOR (HRV)			
Data Used: GDSN			
L.P.B.: 15S, 38C	M.W.: 12S, 22C		
Centroid Location:			
Origin Time	04:16:25.7	0.2	
Lat 17.88N	Lon 105.65W	0.02	

Dep 15.0 FIX Half-duration 7.5
 Moment Tensor; Scale 10**18 Nm
 Mrr= 0.51 0.06 Mtt=-2.85 0.07
 Mff= 2.34 0.07 Mrt= 0.79 0.31
 Mrf=-1.85 0.30 Mtf=-6.02 0.06
 Principal Axes:
 T Val= 6.91 Plg=17 Azm= 57
 N -0.09 72 227
 P -6.82 3 326
 Best Double Couple:Ma=6.9*10**18
 NP1:Strike=100 Dip=76 Slip= 170
 NP2: 193 80 14

MRX	4.55 68 eP	17 32.70 0.3	
	iS	18 31.30	
AGX	4.96 39 iP	17 38.46 0.3	
	iS	18 36.30	
MZX	5.18 352 iP	17 38.80 -2.5	
	iS	18 34.50	
ACX	5.67 101 iP	17 49.10 0.9	
	iS	18 49.20	
CRX	5.83 76 iP	17 50.50 -0.3	
	(S)	19 04.30	
III	5.90 86 eP	17 50.30 -1.4	
	(S)	19 07.30	
UNM	6.28 77 eP	17 57.70 0.6	
	(S)	19 54.50	
IIC	6.31 73 iP	17 57.20 -0.3	
	(S)	19 25.50	
IIT	7.05 81 eP	18 06.80 -1.1	
	(S)	19 42.50	
IISM	7.92 82 (P)	17 33.45 -46.4X	
OXX	8.58 95 iP	18 30.50 1.2	
	(S)	20 16.50	
LVVM	8.89 78 (P)	18 32.10 -1.2	
	(S)	20 43.50	
TPX	13.23 102 (P)	19 33.50 1.2	
ALO	16.85 358 iPd	20 21.60 2.2	
	e	20 32.00	
	e	20 39.00	
	e	20 44.00	
	eS	23 44.00	
	eLR	24 48.00	
GLA	17.07 333 eP	20 23.00 1.0	
IKP	17.32 329 eP	20 29.40 4.2X	
BAR	17.63 328 iP	20 30.50 1.5	
CPE	18.00 327 eP	20 37.60 4.0X	
PLM	18.26 329 eP	20 37.00 0.0	
TPC	18.50 332 iP	20 41.50 1.7	
PEC	18.84 329 P	20 44.40 0.4	
SCI	18.85 325 eP	20 48.00 3.9X	
UYO	18.93 30 iPd	20 42.50 -2.5	
RVR	19.03 329 eP	20 47.00 0.8	
SIO	19.49 23 iPc	20 50.00 -1.7	
PAS	19.55 328 iPd	20 52.00 -0.4	
	ePp	21 37.00	
	ePcP	24 45.00	
	eLR	25 49.00	
	ePcS	28 33.00	
MWC	19.55 328 eP	20 52.00 -0.6	
SBB	19.81 329 eP	20 55.00 -0.2	
TUL	19.83 24 iPc+	20 53.50 -1.9	
2.0s 39.00nm 4.4mb X			
Z 20s	35.00um	4.6mszX	
	eS	24 40.00	
GSC	19.84 332 eP	20 55.00 -0.5	
CLC	20.62 332 eP	21 03.00 -0.7	
SYF	20.80 325 eP	21 06.00 0.4	
ISA	20.91 330 eP	21 06.00 -0.6	
BLP	21.06 324 P	21 08.40 0.3	
BCH	21.35 326 P	21 11.30 0.1	
OLY	21.48 33 P	21 11.10 -1.2	
GOL	21.59 1 P	21 13.30 -0.4	
GLD	21.64 1 eP	21 15.60 1.4	
Z 20s	400.00um	6.8msz	
TNP	22.38 335 P	21 23.00 1.4	
PR1	22.38 327 ePd	21 21.80 0.3	
SJS	22.45 108 eP	21 25.10 2.8X	
FR1	22.57 330 ePd	21 22.80 -0.3	
LCR2	22.57 109 eP	21 27.30 3.7X	
LLA	22.89 327 eP	21 26.30 -0.1	
PRS	22.90 326 ePd	21 26.70 0.2	
PWLA	23.02 39 P	21 27.40 -0.2	
GCM	23.04 83 eP	21 29.30 1.4	
KVN	23.57 335 P	21 35.20 2.1	
CMB	23.72 330 ePd	21 35.43 0.9	
MHC	23.81 327 eP	21 35.90 0.5	

	e	21 50.00	
	ePP	22 15.00	
	e	23 45.00	
	e	23 58.00	
	e	25 39.00	
	eS	26 01.00	
	eLQ	27 05.00	
	eLR	28 05.00	
BKS	24.52 327 iPd	21 43.60 1.4	
	1.6s 663.00nm	6.0mb	
Z 20s	149.00um	6.5msz	
N 20s	95.00um		
E 20s	284.00um		
	iPP	22 22.00	
	iS	25 56.00	
	eLR	28 02.00	
BRK	24.53 327 ePd	21 43.30 1.1	
ORV	25.46 331 ePd	21 51.20 0.1	
RSSD	26.04 3 P	21 55.60 -1.1	
MIN	26.14 332 ePd	21 57.00 -0.6	
PRM	26.24 48 P	21 58.30 -0.2	
WDC	26.76 331 ePd	22 00.40 -2.7	
UPA	26.93 106 eP-	22 06.00 1.1	
Z 20s	36.88um	5.9msz	
LHS	27.55 49 P	22 10.40 0.0	
NAV	29.08 44 P	22 23.80 -0.4	
LON	31.58 339 ePd	22 45.66 -0.7	
	ePP	23 43.01	
CBN	31.83 45 eP	22 47.00 -1.6	
	e	28 12.00	
PSO	32.48 118 eP	22 55.00 0.1	
SES	32.57 354 ePd	22 54.30 -0.6	
2.0s 1576.00nm 6.6mb			
SCP	32.93 41 ePc	22 55.95 -2.2	
	eP	23 02.91 24kmX	
PNT	33.18 343 eP	23 00.00 -0.2	
BMG	33.57 105 eP	23 13.00 9.0X	
FUO	33.59 108 iP	22 52.00 -12.5X	
MCW	33.59 339 P	23 04.80 1.0	
BOG	33.65 110 iPd	23 08.00 2.9X	
	iS	28 18.00	
PGC	33.78 339 eP	23 06.00 0.7	
DHN	33.95 37 P	23 06.40 -0.6	
PRIN	34.71 44 P	23 14.60 1.1	
PNJ	35.36 43 iP	23 21.50 2.5X	
TBR	35.43 43 P	23 18.90 -0.8	
EDM	35.62 352 ePd	23 20.00 -1.2	
1.9s 978.00nm 6.4mb			
FFC	36.73 4 ePc	23 28.10 -2.3	
1.2s 139.00nm 5.7mb			
GAC	37.26 36 eP	23 35.00 0.0	
HRV	37.84 43 ePc	23 42.36 2.5	
	eS	29 36.72	
NEV	41.02 84 eP	24 08.00 1.4	
NNA	41.23 134 iPd	24 08.80 0.5	
1.2s 70.31nm 5.3mb			
BPA	41.71 84 eP	24 16.00 3.7X	
PAG	42.03 86 eP	24 16.00 1.0	
HUA	42.31 133 eP	24 20.20 2.5	
	eS	25 13.70	
MGC	42.40 86 eP	24 23.00 5.1X	
FDf	42.76 88 eP	24 22.50 1.5	
	S	30 53.00	
SVB	42.95 90 eP	24 22.85 0.3	
TCE	43.08 94 eP	24 27.24 3.7X	
TRN	43.42 94 eP	24 27.43 1.1	
TPP	43.46 94 eP	24 27.57 0.9	
SIT	44.80 337 e(P)	24 38.00 1.1	
Z 20s	35.00um	6.3msz	
YKA	44.85 354 eP	24 39.80 2.6X	
YKB0	44.96 354 iPd	24 38.50 0.4	
ARE	48.04 134 eP	24 45.00 -18.4X	
HON	49.21 283 P	25 10.00 -2.0	
Z 20s	50.00um	6.5msz	
ZOBO	50.29 130 Pd	25 18.90 -2.1	
1.5s 169.35nm 5.8mb			
	S	32 28.00	
	LR	41 08.00	
LPB	50.48 131 P	25 21.70 -0.6	
1.2s 281.25nm 6.1mb			
	S	32 40.00	
	e	39 32.00	
	LR	43 06.00	
CNCB	50.75 131 P	25 23.20 -1.3	
FRB	52.19 20 eP	25 34.00 -0.1	
TOA	52.28 337 eP	25 35.70 0.8	
CCH	52.45 130 P	25 34.80 -2.3	

PWLA 23.06 39 P 22 52.70 0.5
 KVN 23.61 335 P 22 58.90 1.1
 CMB 23.77 330 eP 22 58.80 -0.4
 FVM 23.98 31 P 23 01.50 0.4
 BKS 24.56 327 eP 23 21.90 15.1X
 Z 20s 0.90um 4.3msz
 N 20s 0.80um
 E 20s 0.50um
 iS 27 43.00
 iLO 28 25.00
 eLR 29 40.00
 RSCP 25.00 41 P 23 09.30 -1.7
 1.0s 216.92nm 5.7mb
 TKL 26.20 43 P 23 22.20 0.0
 LRM 28.32 350 eP 23 41.60 -0.2
 BLA 29.30 44 P 23 51.40 1.0
 1.0s 40.00nm 5.1mb
 CVL 31.02 45 P 24 06.30 0.7
 NA2 31.58 45 P 24 10.90 0.5
 SES 32.62 354 eP 24 19.00 -0.5
 EDM 35.67 352 eP 24 44.50 -1.2
 FFC 36.78 4 eP 24 53.50 -1.5
 1.0s 14.00nm 4.8mb
 ZOBD 50.26 130 eP 26 40.00 -4.8X
 1.3s 11.83nm 4.7mb
 Z 25s 0.30um 4.2mszX
 iS 26 43.00
 LR 43 56.00
 LPB 50.45 131 P 26 46.00 -0.1
 CNCB 50.71 131 P 26 47.50 -0.8
 INK 53.29 347 eP 27 04.00 -2.3
 MBC 58.71 356 eP 27 44.00 -1.1
 1.1s 9.00nm 4.8mb
 S.D. = 1.2 on 45 of 49 obs.

% AUG 29, 1989 12h 29m 30.15 ± 1.20s
 61.167 N ± 13.6km 10.134 E ± 9.7km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN NORWAY (535)
 MD 2.0 (BER).
 NRA0 0.81 122 iPd 29 45.70 -0.2
 iPg 29 48.30
 iS 29 57.10
 iSg 30 01.10
 MOL 1.87 320 eP 30 03.00 0.6
 eS 30 26.80
 HYA 1.91 272 eP 30 02.10 -0.9
 eS 30 27.60
 ODD1 2.14 236 iP 30 06.20 -0.2
 eS 30 33.10
 BLS1 2.43 224 iP 30 10.90 0.3
 iS 30 41.10
 ASK 2.51 256 eP 30 13.70 2.0
 eS 30 43.80
 SUE 2.61 270 eP 30 11.40 -1.6
 eS 30 43.10
 S.D. = 1.4 on 7 of 7 obs.

? AUG 29, 1989 13h 03m 32.21 ± 15.04s
 40.277 N ± 25.1km 125.457 W ± 119.0km
 DEPTH = 10.0km (geophysicist)
 OFF COAST OF NORTHERN CALIFORNIA (34)
 ML 3.3 (BRK).
 FMC 1.24 64 iPc 03 55.40 0.1
 eS 04 08.40
 WDC 2.25 81 eP 04 09.80 -0.2
 eS 04 35.30
 LBFM 2.91 67 eP 04 19.70 0.1
 MIN 2.95 87 eP 04 19.70 -0.4
 KVN 5.81 100 eP 05 01.00 0.3
 S.D. = 0.4 on 5 of 5 obs.

% AUG 29, 1989 13h 49m 41.32 ± 0.58s
 60.638 N ± 4.9km 6.209 E ± 6.3km
 DEPTH = 10.0km (geophysicist)
 SOUTHERN NORWAY (535)
 MD 1.8 (BER).
 ASK 0.52 253 eP 49 51.70 -0.2
 iS 49 59.10
 HYA 0.53 359 iP 49 51.50 -0.5
 eS 49 59.50
 ODD1 0.76 164 eP 49 55.30 -0.9
 eS 50 04.50
 SUE 0.82 301 eP 49 57.30 0.1

iS 50 09.20
 BL'S1 1.29 166 iP 50 04.90 -0.4
 iS 50 21.60
 KMY 1.51 199 iP 50 09.60 1.2
 eS 50 28.20
 MOL 2.04 18 eP 50 16.40 0.3
 eS 50 42.90
 NRA0 2.63 86 iPd 50 24.90 0.4
 NRA0 2.63 86 iP 50 27.00 2.5X
 iSg 51 01.20
 S.D. = 0.8 on 8 of 9 obs.

? AUG 29, 1989 13h 56m 00.49 ± 8.98s
 15.069 N ± 79.0km 98.565 W ± 17.4km
 DEPTH = 33.0km (normol)
 OFF COAST OF GUERRERO, MEXICO (65)
 ACX 2.18 325 iP 56 35.50 0.3
 iS 56 53.70
 OXX 2.67 41 iPc 56 42.20 -0.1
 iS 57 14.20
 III 3.40 345 (P) 56 51.80 -0.9
 (S) 57 24.50
 IIT 3.94 4 (P) 57 01.10 0.7
 (S) 57 39.50
 LVVM 5.06 23 (P) 57 26.20 10.1X
 (S) 58 19.30
 S.D. = 1.2 on 4 of 5 obs.

* AUG 29, 1989 14h 18m 09.85 ± 0.88s
 40.318 N ± 11.4km 33.287 E ± 9.5km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)
 BBTK 0.62 221 iPgc 18 23.00 0.5
 iSg 18 32.00
 KAS 1.11 19 iPgc 18 30.60 -0.2
 iSg 18 47.00
 KVT 2.23 69 iPn 18 47.60 0.1
 GPA 2.28 270 ePn 18 48.00 -0.1
 ALT 2.76 244 ePn 18 53.80 -1.2
 YLV 3.00 276 iPn 18 59.20 0.9
 KHL 3.53 237 ePn 19 16.90 10.9X
 S.D. = 0.9 on 6 of 7 obs.

? AUG 29, 1989 14h 34m 57.54 ± 0.98s
 39.095 N ± 8.3km 27.689 E ± 9.8km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)
 IZM 0.77 206 ePg 35 12.60 0.0
 eSg 35 24.60
 DST 0.89 55 ePn 35 14.70 0.1
 EDC 1.26 6 ePn 35 20.80 -0.1
 EZN 1.28 305 iPn 35 21.40 0.1
 S.D. = 0.1 on 4 of 4 obs.

? AUG 29, 1989 14h 50m 38.31 ± 3.68s
 16.061 N ± 37.8km 98.615 W ± 12.9km
 DEPTH = 33.0km (normol)
 3.8mb (1 obs.)
 NEAR COAST OF GUERRERO, MEXICO (58)
 ACX 1.44 304 iP 51 01.50 -0.8
 iS 51 23.80
 OXX 2.08 61 iPd 51 12.00 0.3
 iS 51 40.50
 III 2.44 341 eP 51 17.50 0.6
 iS 51 52.50
 IIT 2.96 6 eP 51 27.00 2.7X
 iS 52 12.00
 UNM 3.30 351 (P) 51 37.50 8.4X
 (S) 52 21.00
 CRX 3.48 343 eP 51 32.00 0.2
 iS 52 24.00
 IIC 3.74 351 iP 51 42.50 7.1X
 iS 52 30.00
 EVV 3.93 52 (P) 51 14.50 -23.3X
 (S) 52 16.00
 LVVM 4.20 29 (P) 51 47.50 5.9X
 (S) 52 41.00
 MRX 4.38 326 (P) 51 53.50 9.3X
 (S) 52 36.50
 SCX 5.78 82 (P) 52 54.00 50.0X
 UYO 18.41 11 iPd 54 51.00 -1.7
 ALQ 20.07 341 eP 55 13.50 1.5
 1.0s 4.50nm 3.8mb

ePP 55 51.00
 ePPP 55 53.00
 S.D. = 1.4 on 6 of 13 obs.

AUG 29, 1989 15h 30m 38.65 ± 0.14s
 48.172 N ± 3.3km 147.578 E ± 3.4km
 DEPTH = 407.7km (3 depth phases)
 4.8mb (58 obs.)
 SEA OF OKHOTSK (663)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 9S, 17C
 Centroid Location:
 Origin Time 15:30:48.8 1.8
 Lat 48.00N 0.12 Lon 147.43E 0.20
 Dep 444.3 6.4 Half-duration 1.5
 Moment Tensor; Scale 10**16 Nm
 Mrr= 3.19 0.41 Mtt= 2.55 0.71
 Mff=-5.73 0.61 Mrt= 4.30 0.81
 Mrf=-3.28 1.00 Mlf=-0.26 0.65
 Principal Axes:
 T Vol= 7.69 Plg=48 Azm= 17
 N -0.73 34 157
 P -6.96 21 262
 Best Double Couple: Mo=7.3*10**16
 NP1: Strike= 34 Dip=39 Slip= 154
 NP2: 145 74 54

ASAJ 5.31 222 iP+ 32 07.00 2.2
 eS 33 14.10
 KUSJ 5.46 203 iP+ 32 04.00 -2.3
 S 33 10.40
 HOOJ 6.53 209 iP+ 32 16.10 -1.8
 S 33 30.90
 MRRJ 7.35 221 P 32 26.70 -0.3
 S 33 52.40
 AOMJ 9.19 217 P 32 46.30 -1.8
 S 34 25.10
 OFUJ 10.04 207 P 32 56.60 -1.4
 eS 34 46.30
 YAMJ 11.40 212 eP 33 14.10 0.4
 eS 35 15.60
 NIJJ 12.60 213 P 33 27.10 -0.2
 MDJ 12.91 261 Pd 33 30.00 -0.5
 KAKJ 13.15 207 P 33 32.30 -0.7
 eS 35 51.60
 MAT 13.52 214 iPc 33 37.10 0.1
 1.1s 144.30nm 5.3mb
 (S) 36 01.00
 MTMJ 13.63 215 P 33 38.60 0.3
 CHJJ 13.67 211 P 33 38.20 -0.5
 IIDJ 14.57 213 P 33 48.50 0.2
 S 36 22.00
 TSRJ 15.27 218 P 33 56.90 1.3
 S 36 38.40
 CNZ 15.97 262 iPd 34 02.00 -0.8
 2.0s 0.30nm 2.4mb X
 eS 36 47.00
 WKYJ 16.57 217 eP 34 09.80 0.8
 YONJ 16.68 224 eP 34 11.00 0.9
 TKSJ 17.42 220 eP 34 18.50 1.0
 SNY 18.08 258 eP 34 24.00 0.0
 S 37 26.00
 SHNJ 18.67 227 eP 34 30.60 0.8
 KUMJ 20.10 225 eP 34 45.50 1.8
 KAGJ 21.20 223 eP 34 56.30 2.0
 BJI 23.84 262 P 35 20.00 1.4
 epP 36 29.00
 eS 39 06.00
 eS 41 12.00
 SSE 26.34 239 P 35 41.50 0.3
 1.0s 0.02nm 1.5mb X
 eS 39 52.00
 HHC 26.52 267 Pc 35 44.30 1.4
 NJ2 27.02 244 Pd 35 47.50 0.2
 TIY 27.55 261 Pd 35 53.20 1.3
 S 40 05.50
 WHN 30.82 247 Pd 36 21.50 1.0
 XAN 32.00 258 P 36 31.20 0.6
 TTA 33.90 43 eP 36 47.50 1.1
 SVW 34.17 46 ePc 36 50.70 2.1
 IMA 34.92 38 iPc 36 55.90 0.9
 0.9s 57.30nm 4.9mb
 GTA 35.08 274 Pd 36 58.00 1.4
 KDC 36.20 52 ePc 37 05.90 0.3
 PMR 37.22 45 ePd 37 15.20 1.3
 1.0s 45.00nm 4.8mb

BLS1 0.76 37 iP 30 40.30 -0.7
 ODD1 1.18 17 iP 30 48.30 0.2
 ASK 1.73 348 eP 30 57.60 1.2
 eS 31 18.80
 S.D. = 1.6 on 4 of 4 obs.

* AUG 29, 1989 17h 06m 52.94 ± 0.88s
 39.122 N ± 7.2km 27.602 E ± 9.1km
 DEPTH = 10.0km (geophysicist)
 TURKEY (366)

IZM 0.77 200 iPg 07 08.10 0.1
 DST 0.93 58 iPn 07 10.50 -0.2
 EZN 1.21 306 iPn 07 15.30 -0.2
 EDC 1.24 9 ePn 07 15.80 -0.2
 BNT 1.26 11 iPn 07 16.80 0.5
 KHL 1.70 117 ePn 07 27.40 4.5X
 S.D. = 0.4 on 5 of 6 obs.

* AUG 29, 1989 18h 01m 45.29 ± 4.04s
 29.219 S ± 15.7km 177.374 W ± 13.1km
 DEPTH = 156.5 ± 35.9 km
 4.6mb (4 obs.)
 KERMADEC ISLANDS (178)

DZM 16.23 292 iPc 05 25.40 -0.4
 BRS 26.32 267 iP 07 09.10 0.9
 RMO 30.01 267 iPd 07 41.60 0.3
 CTA 34.17 277 eP 08 18.00 0.5
 WB5 44.61 271 eP 09 42.00 -1.8
 SPA 60.95 180 e(P) 11 44.20 0.4
 1.0s 19.50nm 5.0mb
 MAT 77.59 325 eP 13 27.00 1.6
 1.0s 7.00nm 4.3mb
 PLM 84.58 47 P 14 05.00 2.7X
 SBB 84.84 46 eP 14 03.00 -0.4
 ISA 85.08 44 eP 14 04.00 -0.6
 FRI 85.22 43 eP 14 05.10 0.0
 CMB 85.52 42 eP 14 06.60 -0.1
 CLC 85.72 45 eP 14 08.00 0.3
 ORV 85.92 40 eP 14 08.70 0.1
 WDC 86.06 39 eP 14 09.40 0.2
 TNP 87.42 43 eP 14 16.50 0.4
 1.0s 11.25nm 4.8mb
 KVN 87.53 42 eP 14 16.50 -0.1
 ALO 92.41 51 eP 14 40.00 0.5
 0.9s 3.15nm 4.5mb

RSSD 99.00 44 P 15 09.00 -0.3
 SUF 143.16 342 iPKP 20 58.30 -3.1X
 NUR 145.39 341 ePKP 21 05.00 -0.2
 0.6s 18.30nm
 i 21 19.00

NB2 147.66 352 PKP 21 07.90 -1.1
 0.9s 5.90nm
 UPP 147.71 346 iPKP 21 24.40 15.4X
 BNG 151.10 214 ePKP 21 23.10 7.4X
 0.7s 17.00nm
 i 21 27.70
 i 21 36.60

BHL 151.55 288 PKP 21 25.00 9.1X
 S.D. = 0.8 on 20 of 25 obs.

AUG 29, 1989 19h 57m 20.10 ± 0.93s
 61.714 N ± 8.4km 150.711 W ± 8.2km
 DEPTH = 77.8 ± 19.6 km
 SOUTHERN ALASKA (2)

PWA 0.40 99 iPc 57 33.00 0.0
 PMS 0.73 130 iPc 57 36.00 -0.1
 PMR 0.76 99 iPc 57 36.20 -0.3
 TOA 2.18 78 iPd 57 55.80 0.7
 SVW 2.44 258 iPd 57 59.00 0.4
 TTA 2.76 299 eP 58 03.40 0.4
 KDC 4.08 194 eP 58 20.90 -0.4
 IMA 4.56 345 eP 58 27.50 -0.8
 S.D. = 0.7 on 8 of 8 obs.

* AUG 29, 1989 21h 46m 19.62 ± 0.89s
 23.895 S ± 10.2km 66.604 W ± 14.4km
 DEPTH = 220.4 ± 7.7 km
 4.3mb (1 obs.)
 JUJUY PROVINCE, ARGENTINA (128)

SLA 1.31 130 iPd 46 54.20 0.1
 S 47 19.00

YJA 1.99 31 ePd 47 00.40 -0.1
 ANT 3.50 272 iPc 47 32.10 15.5X
 iS 47 51.40
 CNCB 7.17 349 P 48 04.00 0.6
 S 49 26.00
 LPB 7.46 349 P 48 03.00 -4.0X
 ZOBO 7.72 349 eP 48 10.00 -0.6
 S 49 36.00

VAO 18.04 91 eP 50 16.60 -0.5
 BAO 19.33 68 eP 50 31.00 0.5
 SPA 66.25 180 e(P) 56 46.00 0.1
 0.8s 5.00nm 4.3mb
 GBA 144.54 100 PKPc 05 31.80 -0.1
 0.6s 4.20nm
 S.D. = 0.6 on 8 of 10 obs.

* AUG 30, 1989 02h 24m 18.77 ± 0.39s
 9.721 N ± 3.5km 84.045 W ± 3.8km
 DEPTH = 9.7 ± 4.3 km
 COSTA RICA (78)

MD 2.9 (HDC). Felt (III) at
 Lucho and Cedrol and (II) at
 Tobosi.

IRZ2 0.29 31 iPc 24 24.80 -0.1
 HDC2 0.31 344 iPc 24 25.60 0.3
 S 24 30.40
 CDM 0.32 121 iPc 24 25.30 -0.3
 S 24 31.50
 OPS 0.33 195 iPd 24 26.10 0.6
 S 24 31.40
 POA2 0.50 336 iPc 24 29.20 0.3
 S 24 36.80
 EPA 0.60 296 iPc 24 30.40 -0.6
 S 24 39.90
 TIG 1.00 133 eP 24 37.60 -0.3
 S 24 52.30
 IDC 1.02 170 eP 24 37.80 -0.2
 CAO 1.04 269 iPc 24 38.30 -0.2
 S 24 53.80
 JTS 1.06 302 iPc 24 38.40 -0.4
 S 24 53.60
 CTRC 1.51 123 eP 24 46.40 0.3
 S 25 07.10
 JUD 1.54 287 ePd 24 46.50 0.0
 S 25 08.20
 RIN3 1.69 309 ePd 24 48.90 0.3
 S.D. = 0.4 on 13 of 13 obs.

AUG 30, 1989 03h 06m 55.14 ± 0.16s
 54.597 N ± 3.8km 162.793 E ± 2.8km
 DEPTH = 31.0km (7 depth phases)
 5.5mb (60 obs.) 5.2MsZ (10 obs.)

NEAR EAST COAST OF KAMCHATKA (218)
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 29C
 Centroid Location:
 Origin Time 03:07: 0.5 0.4
 Lat 54.20N 0.05 Lon 163.18E 0.06
 Dep 35.4 3.2 Half-duration 2.1
 Moment Tensor: Scale 10**17 Nm
 Mrr= 1.45 0.07 Mtt= 0.08 0.10
 Mff=-1.53 0.06 Mrt= 0.35 0.13
 Mrf= 0.17 0.20 Mtf=-1.22 0.08

Principal Axes:
 T Val= 1.54 Plg=74 Azm= 11
 N 0.67 16 210
 P -2.21 5 119
 Best Double Couple: Mo=1.9*10**17
 NP1: Strike=192 Dip=42 Slip= 66
 NP2: 43 52 110

SMY 6.98 101 P 08 36.00 -1.7
 ADK 12.58 94 P 09 51.00 -3.6X
 1.5s 118.92nm 5.8mb
 YSS 14.75 247 P 10 24.00 0.9
 KUSJ 16.50 233 eP 10 39.30 -6.3X
 ASAJ 16.74 239 eP 10 48.70 0.0
 HOOJ 17.71 234 eP 10 57.00 -3.8X
 SDN 20.94 73 eP 11 38.90 1.6
 OFUJ 21.08 231 eP 11 38.10 -0.8
 TTA 22.56 52 eP 11 53.20 -0.4
 YAMJ 22.56 233 eP 11 55.60 1.9
 SVW 22.74 57 eP 11 55.30 0.0
 MDJ 23.51 259 eP 12 01.00 -1.9
 Z 14s 6.70um 5.3MsZ

N 12s 7.00um
 NIJJ 23.80 233 P 12 06.20 0.5
 IMA 23.85 44 eP 12 20.00 13.8X
 1.3s 70.60nm
 KAKJ 24.12 230 P 12 10.30 1.5
 CHJJ 24.78 231 P 12 16.30 1.0
 MTMJ 24.89 234 P 12 18.30 1.9
 IIDJ 25.74 232 P 12 25.50 1.1
 PMR 25.82 55 eP 12 24.20 -0.6
 FBA 26.23 47 eP 12 27.70 -0.9
 CN2 26.38 261 Pc 12 30.30 0.2

Z 14s 13.80um 5.7MsZ
 N 15s 8.20um
 pP 12 35.00 17kmX
 TSRJ 26.60 235 P 12 32.70 0.5
 TOA 27.15 53 eP 12 37.00 -0.2
 SNY 28.68 260 Pc 12 49.00 -2.1
 Z 19s 8.80um 5.4MsZ
 N 15s 9.10um
 E 16s 8.50um

sP 13 04.00
 S 17 40.00

INK 31.70 39 eP 13 16.00 -1.5
 2.0s 310.00nm 5.8mb
 SIT 33.80 60 eP 13 36.60 0.7
 BJL 34.11 264 eP 13 32.00 -6.8X
 Z 15s 7.60um 5.5MsZ
 N 15s 7.95um
 E 15s 4.68um

PP 14 58.50
 eS 18 59.00
 MBC 35.02 24 eP 13 46.00 -0.2
 1.0s 14.00nm 4.8mb
 TIA 36.18 259 eP 13 54.40 -2.1

Z 16s 5.60um 5.4MsZ
 N 14s 2.90um
 E 13s 5.40um

HHC 36.26 269 eP 13 55.20 -2.1
 Z 12s 12.90um 5.9MsZ
 N 12s 1.43um
 E 12s 2.34um

S 19 40.00
 BTO 37.32 270 P 14 04.00 -2.2
 Z 12s 7.40um 5.7MsZ
 N 12s 8.20um
 E 12s 4.00um

eP 14 13.00 30km
 PP 15 35.00
 eS 19 53.00
 sS 20 10.00
 SSE 37.70 249 eP 14 07.00 -2.3
 Z 16s 3.10um 5.2MsZ
 E 16s 3.90um

eS 20 05.00
 TIY 37.83 265 eP 14 05.00 -5.5X
 Z 17s 5.76um 5.4MsZ
 N 14s 8.20um

S 20 03.50
 YKB0 40.92 44 eP 14 35.50 -0.1
 YKA 40.97 45 eP 14 38.40 2.3
 ALE 41.21 8 eP 14 38.00 0.1
 0.5s 2.00nm 4.1mb X

ANP 42.24 243 e(P) 14 50.80 3.8X
 XAN 42.44 264 eP 14 47.00 -1.5
 N 16s 10.50um
 E 16s 7.30um
 PJG 43.26 206 eP 15 07.20 11.9X
 GUMO 43.26 206 eP 15 07.00 11.7X
 OZH 43.96 246 eP 15 01.00 0.1

Z 22s 1.40um 4.8MsZ
 N 14s 2.50um
 GTA 44.02 277 P 15 00.00 -1.5
 Z 14s 18.80um 6.2MsZ
 N 13s 12.20um

RMW 45.82 66 P 15 17.00 1.3
 PNT 45.83 63 ePd 15 15.00 -0.6
 LON 46.26 67 P 15 19.00 -0.1
 EDM 46.59 55 eP 15 21.50 -0.1
 DPW 47.47 64 P 15 28.00 -0.6
 CD2 47.70 265 P 15 29.70 -0.9

Z 16s 3.60um 5.4MsZ
 N 13s 4.30um
 WMO 47.98 290 Pc 15 31.00 -1.7
 Z 18s 1.50um 5.0MsZ
 N 16s 7.80um

DAG 48.90 0 eP+ 15 39.00 -0.2
 E 19s 2.78um

Table of seismic data for stations BGF, WB5, WRA, MFF, TCF, MAF, LSD, LPG, LSF, SKO, Z, N, E, BOB, RSM, BNI, MME, RRL, PCP, PGD, BDI, ARV, KOD, FIR, KHL, ROB, RJF, FIN, ENR, STV, CAF, IMI, LFF, SBF, LPO, FRF, LRG, LMR, CVF, DHR, HRI, EPF, RMO, DSI, RYD, ETOR, MBH, AYN, ECHE, TOL, EPLA, EVIA, ZOBO, LPB, CNCB, SPA.

Table of seismic data for stations AIA, MINDANAO, PHILIPPINE ISLANDS (259), MNI, WB5, WRA, WARB, BJI, BWA, SUF, KENAI PENINSULA, ALASKA (14), NKA, RDT, CKL, IJLIM, CRP, CNPM, NCG, XLV, PMS, PWA, AUE, PLRM, PME, GHO, KNIM, CDD, GLI, FID, VLZ, KLU, KTH, GLB, ? AUG 30, 1989 04h 22m, KERMADEC ISLANDS (178), DZM, BRS, BWA, CTA, STK, WRA, WB5, FORR, SPA, SUF, NUR, BNG, HFS, YAMJ.

Table of seismic data for stations AUG 30, 1989 05h 37m, ANDREANOF ISLANDS, ALEUTIAN IS. (7), Felt (IV) on Adak, ADK, SDN, SVW, TTA, PMR, IMA, TOA, FBA, INK, MBC, LON, PNT, EDM, LBFM, WDC, ORV, BKS, CMB, FRI, TNP, BCH, ISA, CLC, BW06, SBB, MWC, GSC, HHC, PLM, TPC, BAR, RSSD, BITO, TIY, Z, E, GOL, GLD, ALO, XAN, LZH, Z, GTA, CD2, WMO, OLY, NB2, CHTO, WB5, WRA, ? AUG 30, 1989 05h 49m, NEAR EAST COAST OF HONSHU, JAPAN (228), KAKJ, YAMJ.

30d 05h

Table with columns for station name (e.g., NIJ, CHJJ, OFUJ, IDJ, AOMJ, TSRJ, TIA, GYA, GTA, WMO, WB5, WRA, GBA, SUF, LRM, NB2, KSP, CLL, KHC, ALO, ZOBO, LPB, CNCB, CCH), numerical values, units, and flags. Includes sub-section 'NEAR EAST COAST OF KAMCHATKA (218)'.

Table with columns for station name (e.g., MBC, XAN, OZH, LZH, Z, GTA, CD2, ALE, YKB0, YKA, GYA, WMO, PGC, KMI, OIZ, PNT, LON, EDM, DPW, WDC, MIN, ORV, FFC, FFC, LRM, SOD, CHG, CMB, KVN, BDT, NST, TNP, BCH, SYP, ISA, BW06, KBR, CLC, SUF, SBB, NNT, GSC, MWC, RVR, RSSD, RSON, TPC, PLM, NUR), numerical values, units, and flags.

Table with columns for station name (e.g., PSI, HYB, CTA, POO, EKA, KRA, FVM, GAC, GAC, KSP, DZM, CLL, GBA, BRG, WB5, WRA, WTS, RSNY, OLY, DMU, DMU, CBM, DLE, DLE, MLR, KHC, GRF, ENN, MEM, SNF, KOD, SHI, DOU, RSCP, KBA, CDF, PTJ, SLE, RMO, HAU, BLA, BSF, OSS, OLP, CBN, FLN, LDF, VDL, GRR, LOR, LPF, LBF, SSF, MMK, DIX, PRM, AVF), numerical values, units, and flags.

S.D. = 1.0 on 21 of 26 obs.
AUG 30, 1989 06h 05m 06.82 ± 0.16s
51.355 N ± 3.8km 157.960 E ± 3.2km
DEPTH = 51.7km (14 depth phases)
5.0mb (50 obs.)

NEAR EAST COAST OF KAMCHATKA (218)

Table with columns for station name (e.g., SMY, KUSJ, ASAJ, HOOJ, MRRJ, ADK, OFUJ, YAMJ, NIJ, KAKJ, MDJ, CHJJ, MTMJ, IDJ, TSRJ, CN2, WKYJ, YONJ, TKSJ, SHNJ, TTA, SVW, KUMJ, IMA, KAGJ, KDC, PMR, FBA, BJI, TOA, TIA, SSE, TIY, INK, WHN), numerical values, units, and flags.

Table with columns for station name (e.g., FFC, LRM, SOD, CHG, CMB, KVN, BDT, NST, TNP, BCH, SYP, ISA, BW06, KBR, CLC, SUF, SBB, NNT, GSC, MWC, RVR, RSSD, RSON, TPC, PLM, NUR, GOL, GLD, NB2, HFS, ALO), numerical values, units, and flags.

Table with columns for station name (e.g., DMU, DMU, CBM, DLE, DLE, MLR, KHC, GRF, ENN, MEM, SNF, KOD, SHI, DOU, RSCP, KBA, CDF, PTJ, SLE, RMO, HAU, BLA, BSF, OSS, OLP, CBN, FLN, LDF, VDL, GRR, LOR, LPF, LBF, SSF, MMK, DIX, PRM, AVF), numerical values, units, and flags.

30d 16h

TIC 130.77 284 PKP 44 33.50 0.7
 LIC 130.87 283 PKP 44 33.80 0.8
 UPA 149.67 62 e(PKP) 45 10.40 4.1X
 CNCB 161.45 128 PKP 45 25.00 2.9X
 LPB 161.51 127 PKP 45 27.50 5.6X
 ZOBO 161.64 126 PKP 45 24.00 1.7

S.D. = 1.1 on 119 of 129 obs.

* AUG 30, 1989 17h 04m 26.32±1.34s
 42.740 N ± 6.4km 13.906 E ± 12.4km
 DEPTH = 10.0km (geophysicist)
 CENTRAL ITALY (381)
 MD 2.8 (SSO).

ALP 0.25 280 iPg 04 31.15 -0.5
 CIO 0.72 309 ePg 04 40.37 -0.2
 AOI 0.84 345 ePg 04 42.79 0.2
 MNS 0.97 249 P 04 45.50 0.7
 ARV 1.04 317 P 04 45.90 0.0
 SDI 1.04 184 P 04 45.70 -0.2
 eSn 05 03.40

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

? AUG 30, 1989 18h 16m 49.76±18.17s
 43.387 N ± 96.7km 5.659 E ± 110.km
 DEPTH = 10.0km (geophysicist)
 NEAR SOUTH COAST OF FRANCE (379)

FOUF 1.40 35 ePg 17 15.83 0.6
 STV 1.48 54 P 17 16.20 -0.3
 ENR 1.53 56 P 17 16.91 -0.3
 PZZ 1.53 42 P 17 17.66 0.4
 IMI 1.70 71 P 17 20.04 0.3
 RRL 1.73 27 P 17 19.92 -0.4
 ROB 1.84 60 P 17 21.84 0.1
 FIN 2.02 65 P 17 24.19 -0.1
 PCP 2.38 60 P 17 29.22 -0.3

S.D. = 0.4 on 9 of 9 obs.

& AUG 30, 1989 18h 39m 08.00s
 33.930 N 116.600 W
 DEPTH = 13.0km
 SOUTHERN CALIFORNIA (43)
 <PAS-P>. ML 3.1 (PAS). Felt (IV)
 at Cobazon and (III) at North
 Palm Springs. Also felt at Palm
 Springs.

PEC 0.47 266 iPc 39 16.60 -1.0
 TPC 0.49 69 iPc 39 17.20 -0.8
 PLM 0.62 201 iPd 39 19.50 -0.7
 RVR 0.65 276 iPc 39 19.60 -1.0
 CPE 1.13 202 ePd 39 27.40 -1.4
 MWC 1.24 284 eP 39 30.00 -1.0
 BAR 1.25 183 ePd 39 29.80 -1.1
 SBB 1.27 307 ePc 39 30.40 -0.9
 GLA 1.72 120 eP 39 39.20 1.4
 ABL 2.35 294 eP 39 45.60 -1.5
 BCH 3.14 295 eP 39 56.00 -2.1
 TNP 4.17 353 eP 40 11.50 -1.4
 CMB 5.12 324 e(P) 40 30.00 3.8
 KVN 5.25 347 eP 40 26.40 -1.8

14 obs. associated

& AUG 30, 1989 19h 06m 44.29s
 59.810 N 152.958 W
 DEPTH = 105.1km
 SOUTHERN ALASKA (2)
 <AGS-P>.

OPT 0.21 221 iP 06 58.85 1.0
 ILIM 0.27 360 iP 06 58.91 0.9
 AUL 0.49 210 eP 07 00.18 -0.6
 AUW 0.51 211 eP 07 00.30 -0.6
 RED 0.62 9 iP 07 01.24 -0.6

XLV 0.72 119 eS 07 14.34
 eP 07 01.73 -0.9
 eS 07 15.63
 RDT 0.81 20 iP 07 02.89
 CNPM 0.92 107 iP 07 03.72 -0.8
 eS 07 18.59
 MCNL 0.94 229 iP 07 03.77 -1.0
 eS 07 18.52
 CDD 0.95 202 iP 07 03.67 -1.2
 BRKL 1.05 92 iP 07 05.15 -0.8
 eS 07 20.66
 SHU 1.23 165 eP 07 06.79 -1.1
 eS 07 24.91
 NKA 1.27 42 eP 07 09.57 1.2
 eS 07 26.04
 SLKM 1.54 62 eP 07 10.36 -1.3
 KDC 2.08 173 iP 07 16.36 -2.2
 eS 07 41.36
 PMS 2.21 48 eP 07 19.26 -1.1
 SKT 2.29 17 eP 07 20.29 -1.1
 PLRM 2.60 45 eP 07 23.32 -2.1
 KNIM 2.67 76 iP 07 24.20 -2.3
 MTU 2.68 84 eP 07 25.07 -1.5
 KNK 2.74 52 eP 07 25.54 -1.9
 GHO 2.79 43 eP 07 26.48 -1.7
 GLI 3.11 67 eP 07 29.56 -2.8
 FID 3.36 71 eP 07 32.51 -3.3
 VZW 3.41 66 eP 07 34.05 -2.5
 TTA 3.46 336 iP 07 35.28 -1.9
 GLB 4.79 66 eP 07 52.70 -2.8

27 obs. associated

? AUG 30, 1989 19h 12m 38.15±3.98s
 2.598 S ± 6.9km 79.953 W ± 62.5km
 DEPTH = 33.0km (normal)
 NEAR COAST OF ECUADOR (105)

GGP 2.76 29 Pd 13 21.50 -0.1
 S 13 54.30
 QUR 2.80 31 iPd 13 22.50 0.5
 (S) 13 53.15
 CAYA 3.31 37 eP 13 28.60 -0.8
 COTA 3.33 29 P 13 30.00 0.3
 NNA 9.82 162 eP 15 00.00 -0.3
 0.9s 12.60nm 5.2mb X
 ZOBO 17.89 140 P 16 48.70 -0.8
 LPB 18.10 141 (P) 16 59.00 9.7X
 CNCB 18.38 141 P 16 54.20 1.3

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

AUG 30, 1989 19h 19m 40.94±0.54s
 4.703 S ± 7.7km 133.884 E ± 8.6km
 DEPTH = 33.0km (normal)
 4.6mb (4 obs.)
 WEST IRIAN REGION (196)

AAI 5.76 280 ePc 21 06.50 0.0
 eS 22 11.40
 MTN 8.54 198 iPd 21 45.20 -0.1
 eS 23 20.00
 MNDI 9.84 99 eP 22 02.00 -1.4
 MNI 10.91 304 e(P) 22 18.00 0.1
 KNA 12.07 204 eP 22 32.00 -1.7
 0.8s 270.00nm 6.5mb X
 PMG 13.97 110 eP 22 55.00 -3.9X
 WB5 15.09 178 eP 23 08.90 -4.7X
 i 23 18.00
 eS 25 51.00
 WRA 15.16 178 Pd 23 10.20 -4.2X
 0.2s 3.10nm 4.2mb
 OIS 16.71 161 eP 23 30.00 -4.3X
 eS 26 23.60
 CTA 19.47 143 iPd 24 07.80 -0.3
 1.1s 88.61nm 5.0mb
 i 24 17.10
 GUMO 21.19 31 eP 24 27.00 0.9
 MBL 21.30 219 eP 24 29.00 1.8
 OLP 23.90 157 eP 24 54.00 1.3
 i 25 00.50
 RMO 25.91 148 iPc 25 15.30 3.4X
 0.9s 40.00nm 5.0mb
 HNR 26.28 102 eP 25 09.00 -6.4X
 BRS 28.87 143 eP 25 45.00 6.1X
 i 35 15.80
 LOE 38.61 305 eP 27 03.00 0.0

CHG 41.60 305 eP 27 26.50 -1.3
 CHTO 41.60 305 eP 27 26.00 -1.7
 1.0s 2.00nm 3.8mb
 TIY 46.68 337 eP 28 10.50 2.0
 BJI 47.41 342 eP 28 14.00 -0.1
 CN2 48.88 352 eP 28 24.00 -1.4
 WMO 63.69 324 eP 30 12.00 0.4
 MAIO 80.29 308 eP 32 05.00 14.5X
 CNCB 149.60 135 PKP 39 32.00 6.4X
 LPB 149.71 135 ePKP 39 27.00 1.4
 ZOBO 149.86 134 ePKP 39 31.00 5.0X
 CCH 150.46 138 PKP 39 37.90 11.4X

S.D. = 1.3 on 17 of 28 obs.

? AUG 30, 1989 19h 22m 33.42±1.01s
 30.280 N ± 26.6km 68.673 E ± 14.7km
 DEPTH = 33.0km (normal)
 4.2mb (4 obs.)
 PAKISTAN (710)

NDI 7.62 100 eP 24 24.00 -0.9
 0.5s 246.48nm 6.5mb X
 eS 25 51.00
 CHTO 29.72 106 iP 28 40.00 1.1
 0.8s 3.66nm 4.2mb
 SUF 42.35 332 iP 30 26.70 1.0
 0.4s 1.50nm 4.1mb
 NB2 48.34 327 P 31 12.40 -1.1
 0.8s 1.70nm 4.1mb
 BCAA 53.75 252 eP 31 54.80 -0.2
 0.8s 2.00nm 4.2mb

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

% AUG 30, 1989 19h 36m 39.43±0.77s
 47.222 N ± 8.6km 0.051 E ± 11.1km
 DEPTH = 10.0km (geophysicist)
 FRANCE (538)
 ML 2.5 (LDG).

MFF 0.63 192 Pg 36 51.80 -0.4
 Sg 37 00.40
 LPF 1.10 318 Pg 37 00.30 0.3
 Sg 37 15.20
 GRR 1.32 333 Pg 37 03.40 -0.4
 Sg 37 21.00
 LDF 1.38 355 Pg 37 04.00 -0.7
 Sg 37 22.00
 LSF 1.41 133 Pg 37 04.60 -0.5
 Sg 37 22.60
 FLN 1.58 347 Pg 37 08.40 0.8
 Sg 37 28.40
 TCF 1.75 121 Pg 37 11.20 1.1
 Sg 37 32.80
 MAF 2.00 119 Pg 37 15.60 2.0
 Sg 37 39.20
 BGF 2.03 108 Pn 37 11.70 -2.4
 Pg 37 16.20
 Sg 37 40.60
 CAF 2.69 148 Pg 37 29.60 6.0X
 Sg 38 03.80

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

? AUG 30, 1989 20h 03m 26.43±7.17s
 45.147 N ± 23.0km 0.245 W ± 51.5km
 DEPTH = 5.0km (geophysicist)
 FRANCE (538)
 ML 2.3 (LDG).

LFF 0.73 106 Pg 03 40.20 -0.8
 Sg 03 51.00
 LPO 1.12 114 Pg 03 47.80 -0.1
 Sg 04 01.60
 RJF 1.25 82 Pg 03 51.10 0.9
 Sg 04 08.80
 CAF 1.65 97 Pg 03 57.00 0.8
 Sg 04 19.00
 MAF 2.24 60 Pn 04 04.00 -0.8
 BGF 2.58 56 Pg 04 17.20 7.6X
 Sg 04 52.00

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

? AUG 30, 1989 20h 40m 26.97±2.81s
 30.890 N ± 41.0km 140.377 E ± 42.0km
 DEPTH = 120.0km (geophysicist)
 4.9mb (4 obs.)
 SOUTH OF HONSHU, JAPAN (211)

PJG 17.71 166 ePd 44 27.90 0.4
 GUMO 17.71 166 eP 44 27.80 0.3
 0.9s 177.32nm 5.3mb
 GUA 17.77 165 eP 44 28.30 0.1
 0.7s 109.59nm 5.2mb
 CHTO 39.26 262 iP 47 46.50 1.0
 0.7s 1.91nm 4.0mb
 epP 48 14.00 121kmX
 WBS 50.81 187 iPc 49 15.10 -2.0
 WRA 50.87 187 Pc 49 13.60 -4.0X
 0.4s 2.50nm 4.5mb
 BRS 59.15 167 iPc 50 17.10 -0.2
 GBA 60.02 268 P 50 23.00 -0.5
 BWA 65.41 173 eP 50 59.10 0.4
 CAN 66.36 172 eP 51 05.10 0.4
 ZOBO 150.21 67 ePKP 00 08.00 6.9X
 S.D. = 1.0 on 9 of 11 obs.

% AUG 30, 1989 21h 30m 11.09±0.78s
 37.716 N ± 7.3km 15.051 E ± 6.5km
 DEPTH = 10.0km (geophysicist)

SICILY (398)

MNO 0.35 307 P 30 18.30 -0.2
 eSg 30 24.50
 ATN 0.55 36 P 30 22.80 0.5
 MEU 0.62 189 Pd 30 22.80 -0.9
 eSg 30 32.80
 GIB 0.86 289 P 30 27.40 -0.2
 eSg 30 40.50
 SOI 0.87 66 P 30 28.30 0.5
 eSn 30 41.80
 FAI 1.18 249 Pc 30 34.40 1.3
 MGR 2.45 9 P 30 50.60 -1.1
 S.D. = 1.0 on 7 of 7 obs.

* AUG 30, 1989 21h 43m 22.46±2.54s
 2.255 N ± 16.5km 78 587 W ± 34.3km
 DEPTH = 10.0km (geophysicist)

NEAR WEST COAST OF COLOMBIA (102)

COTA 1.92 173 P 43 55.40 -0.6
 SALC 2.02 69 iPd 43 57.18 0.1
 ANCC 2.13 54 eP 43 58.91 0.4
 CAYA 2.24 164 iPd 44 00.70 0.0
 eS 44 25.80
 HOOC 2.29 58 iPd 44 01.37 0.2
 OUR 2.41 179 iPd 44 03.20 0.2
 S 44 28.80
 GGP 2.41 180 iPd 44 03.50 0.3
 S 44 30.30
 CLMC 2.59 51 iPc 44 05.06 -0.2
 HOBC 3.22 49 eP 44 13.75 -0.4
 S.D. = 0.4 on 9 of 9 obs.

? AUG 30, 1989 23h 31m 39.48±3.62s
 33.749 S ± 11.0km 71.520 W ± 27.9km
 DEPTH = 10.0km (geophysicist)

NEAR COAST OF CENTRAL CHILE (135)

LNV 0.23 156 iPd 31 44.40 0.1
 iS 31 58.00
 TACH 0.49 79 iPc 31 50.20 0.7
 iS 32 07.90
 CHCH 0.75 105 iPc 31 53.10 -1.0
 iS 32 16.90
 SAN 0.77 68 iPd 31 54.60 0.0
 iS 32 18.10
 PEL 0.92 49 iPc 31 56.30 -0.8
 iS 32 25.00
 FCH 1.11 68 iPc 32 00.00 -0.5
 iS 32 30.50
 RFA 2.73 113 e(P) 32 24.00 -0.2
 ZON 3.25 48 eP 32 37.00 5.4X
 MRA 5.06 76 e(P) 32 59.00 1.9
 S.D. = 1.1 on 8 of 9 obs.

? AUG 30, 1989 23h 53m 57.62±1.48s
 7.104 S ± 26.6km 154.857 E ± 14.8km
 DEPTH = 51.0 ± 29.2 km
 4.3mb (2 obs.)

SOLOMON ISLANDS (193)

RAB 3.94 317 e(P) 54 58 00 0.9
 iS 55 28 00
 HNR 5.54 115 P 55 19 00 -0.7
 eS 56 30 00

LAT 7.81 273 eP 55 50.00 -1.4
 PMG 7.96 253 eP 55 58.00 4.6X
 1.0s 104.00nm 5.6mb X
 DZM 18.61 144 iPc 58 14.70 1.2
 WB5 23.59 235 eP 59 05.40 0.6
 WRA 23.64 235 Pc 59 06.00 0.7
 0.7s 7.70nm 4.3mb
 SPA 82.94 180 e(P) 06 17.00 -1.4
 0.9s 2.27nm 4.2mb
 e 06 34.20
 S.D. = 1.6 on 7 of 8 obs.

AUG 31, 1989 00h 31m 56.90±0.97s
 37.932 N ± 9.6km 20.164 E ± 6.3km
 DEPTH = 10.0km (geophysicist)
 3.3mb (1 obs.)

IONIAN SEA (399)
 ML 3.5 (ATH).

VLS 0.42 54 iPgd 32 04.00 -1.4
 ITM 1.59 118 ePb 32 25.40 0.2
 SRN 1.95 356 ePn 32 34.90 4.6X
 LSK 2.24 9 ePn 32 37.50 2.8X
 TPE 2.36 357 ePn 32 39.60 3.3X
 KZN 2.68 27 ePn 32 42.00 1.1
 KBN 2.73 10 ePn 32 44.00 2.4
 NEO 2.76 59 ePn 32 43.10 1.1
 ATH 2.81 88 ePg 32 47.90 5.2X
 LCI 2.95 325 P 32 44.30 -0.3
 OHR 3.21 9 iPn 32 48.50 0.1
 TIR 3.42 356 ePn 32 51.50 0.2
 TDS 3.45 301 P 32 53.10 1.3
 PHP 3.76 3 iPnd 32 56.80 0.7
 VAY 3.86 28 ePn 33 02.00 4.4X
 PUK 4.11 357 ePn 32 59.30 -1.7
 SKO 4.15 13 ePn 32 59.80 -1.9
 MGR 4.21 303 P 33 03.00 0.4
 MEU 4.24 260 P 33 02.20 -0.9
 eSn 33 52.30
 SDI 6.17 310 P 33 30.20 -0.1
 HFS 22.60 352 (P) 36 57.40 -1.2
 0.4s 0.40nm 3.3mb
 S.D. = 1.3 on 16 of 21 obs.

& AUG 31, 1989 01h 00m 49.90s
 37.482 N 121.820 W
 DEPTH = 7.0km
 CENTRAL CALIFORNIA (39)
 <BRK>. ML 3.0 (BRK).
 Mo=1.1*10¹⁴ Nm (BRK).

MHC 0.20 135 iPc 00 54.00 -0.1
 iS 00 57.40
 PCC 0.45 272 iPc 00 58.50 -0.4
 GCC 0.47 197 iPd 00 59.10 -0.3
 BKS 0.51 320 iPc 00 59.95 -0.3
 e 01 08.00
 eS 01 08.45
 BRK 0.52 318 iPc 01 00.00 -0.4
 SAO 0.78 157 iPd 01 04.87 -0.4
 eS 01 16.05
 CMB 1.26 64 iPc 01 12.70 -1.0
 eS 01 27.40

7 obs. associated
 AUG 31, 1989 02h 10m 58.97±0.64s
 24.127 S ± 7.5km 66.981 W ± 9.9km
 DEPTH = 190.0 ± 7.7 km
 4.6mb (4 obs.)

SALTA PROVINCE, ARGENTINA (129)

SLA 1.48 114 iPd 11 33.90 1.8
 S 12 00.00
 YJA 2.38 35 iPd 11 42.10 0.4
 S 12 16.40
 ANT 3.17 277 iPc 11 50.60 0.0
 iS 12 27.80
 CYA 4.43 166 ePd 12 07.10 0.6
 CCH 6.76 7 Pc 12 35.70 -1.4
 CNCB 7.34 352 iPd 12 46.20 1.1
 iS 14 07.50
 LPB 7.63 352 P 12 49.80 1.0
 0.8s 74.63nm 5.0mb
 S 14 15.00
 ZOBO 7.89 352 P 12 52.20 -0.3
 1.1s 53.07nm 4.8mb
 S 14 19.00

MRA 8.33 173 ePc 12 55.00 -2.4
 ARE 8.72 330 eP 13 01.00 -1.9
 iS 14 33.30
 ITB1 11.49 95 eP 13 46.10 7.5X
 PPD 14.57 85 eP 14 17.30 -0.3
 e 14 20.60
 BAO 19.74 68 eP 15 14.90 -1.3
 PDCR 28.79 71 eP 16 39.30 -2.0
 KIC 67.78 72 P 21 39.00 0.5
 ALO 69.66 326 (P) 21 51.20 1.3
 1.0s 2.00nm 3.8mb
 BUL 86.82 111 iPc 23 25.20 1.6
 BNG 87.72 84 ePd 23 28.90 1.1
 0.5s 4.00nm 4.5mb
 WRA 131.52 207 PKPc 29 51.30 0.2
 0.4s 0.80nm
 GBA 144.83 101 PKPd 30 15.30 -0.1
 0.7s 3.80nm
 S.D. = 1.4 on 19 of 20 obs.

% AUG 31, 1989 02h 30m 16.92±1.68s
 45.030 N ± 10.0km 0.146 W ± 14.5km
 DEPTH = 10.0km (geophysicist)

FRANCE (538)
 ML 2.7 (LDG).

LFF 0.64 98 Pg 30 30.10 0.4
 Sg 30 40.50
 LPO 1.01 110 Pg 30 36.40 0.4
 Sg 30 50.60
 RJF 1.21 76 Pg 30 40.50 1.1
 Sg 30 58.10
 CAF 1.57 93 Pg 30 46.50 1.6
 Sg 31 08.00
 MFF 1.57 0 Pg 30 46.70 1.8
 Sg 31 06.80
 LSF 1.69 43 Pg 30 49.50 2.8X
 Sg 31 12.40
 EPF 2.03 170 Pg 30 50.80 -0.8
 Sn 31 10.40
 Sg 31 16.20
 TCF 2.08 52 Pn 30 51.00 -1.3
 Sg 31 26.60
 MAF 2.25 57 Pn 30 53.10 -1.6
 Sg 31 30.60
 BGF 2.59 53 Pn 30 58.00 -1.6
 Pg 31 06.20
 Sg 31 41.60
 S.D. = 1.6 on 9 of 10 obs.

AUG 31, 1989 03h 47m 28.91±1.22s
 18.337 N ± 7.3km 120.482 E ± 10.9km
 DEPTH = 70.6 ± 12.9 km
 4.6mb (6 obs.)

LUZON, PHILIPPINE ISLANDS (249)

BAG 1.92 177 iP- 48 01.00 0.8
 OCP 3.72 171 eP 48 26.00 0.8
 QZH 6.80 345 ePn 49 01.00 -7.2X
 Sn 50 12.00
 HKC 7.11 305 P 49 06.80 -5.7X
 MCO 7.51 301 eP 49 13.00 -5.1X
 GZH 8.18 306 Pd 49 20.00 -7.3X
 N 15s 1.80um
 E 16s 1.20um
 OIZ 10.11 276 Pd 49 48.30 -5.4X
 E 15s 1.20um
 GYA 15.11 305 P 50 58.00 -1.9
 N 14s 0.80um
 E 14s 0.90um
 KMI 17.80 295 Pd 51 34.00 0.2
 Z 18s 2.10um
 E 20s 0.50um
 S 55 06.00
 XAN 18.74 329 P 51 43.90 -0.9
 CD2 19.66 313 eP 51 54.10 -0.8
 CHG 20.42 275 ePd 52 03.60 0.8
 1.0s 17.25nm 4.3mb
 BDT 20.48 270 eP 52 04.00 0.6
 0.8s 29.60nm 4.7mb
 TIY 20.55 342 eP 52 05.00 0.9
 Z 17s 1.20um 4.3MsZ
 N 17s 1.00um
 NNT 20.79 257 iPd 52 09.40 2.8X
 BJI 21.95 351 eP 52 17.50 -0.5
 Z 17s 0.59um 4.1MsZ
 eS 56 16.00

SUE	3.01	347	eS	22	51.70		LWI	46.63	93	ePc	13	30.30	0.6	TRI	53.50	27	ePc	14	21.20	-0.2	
			iP	22	30.80	-0.5	LP0	47.74	18	eP	13	38.60	0.8	GWf	53.64	21	P	14	22.13	-0.4	
			eS	23	04.90			1.5s	66.80nm			5.5mb		VOY	53.80	27	ePc	14	23.10	-0.7	
HYA	3.03	360	iP	22	31.80	0.2	LFF	47.84	18	iPc	13	39.40	0.9	CEY	53.82	28	ePc	14	24.00	0.1	
			eS	23	06.20			1.3s	93.80nm			5.7mb		OHR	53.95	36	eP	14	19.50	-5.4X	
NRA0	3.77	44	iPc	22	42.00	-0.2	MEU	47.87	36	P	13	39.80	0.8	RBL	53.97	26	P	14	25.40	0.4	
			eS	23	24.90		CAF	48.24	19	iPc	13	42.10	0.4	VBY	54.04	28	ePc	14	25.70	0.3	
			iSg	23	37.00			1.2s	38.60nm			5.4mb		LJU	54.10	27	eP	14	25.50	-0.4	
S.D. = 0.5 on 7 of 7 obs.																					

% AUG 31, 1989 09h 45m 20.65±2.56s																					
31.932 S ±20.8km 68.969 W ±16.6km																					
DEPTH = 114.6 ± 20.3 km																					
SAN JUAN PROVINCE, ARGENTINA (137)																					
RTCV	0.37	79	iPc	45	38.00	0.4	CVF	48.84	26	P	13	46.22	-0.1	ENN	54.62	18	ePc	14	30.00	0.4	
			S	45	51.20		ATN	48.91	35	P	13	48.40	1.5		1.2s	64.00nm			14	38.00	5.5mb
RTCB	0.47	18	iPc	45	38.00	-0.2	CALN	48.98	24	P	13	47.80	0.3	BHG	54.66	25	eP	14	28.60	-1.4	
			S	45	51.20		REVF	49.16	24	P	13	49.32	0.5		1.7s	120.00nm				5.6mb	
RTBS	0.49	303	iP	45	38.00	-0.1	MVIF	49.21	24	P	13	49.95	0.7	PTJ	54.66	28 (P)		14	30.10	0.0	
			S	45	51.20		LSF	49.26	18	iPc	13	49.80	0.3	SKO	54.86	35	iPc	14	31.70	0.1	
CFA	0.70	63	iPd	45	39.70	-0.1	AURF	49.27	24	P	13	50.36	0.7		1.5s	150.00nm				5.8mb	
			e	45	54.50		SBF	49.29	24	iPc	13	50.30	0.5	Z	17s	1.45um				5.1MsZ	
RTLL	0.74	36	iPd	45	40.00	-0.1	TOUF	49.34	24	P	13	51.05	0.7	N	16s	1.03um					
RTRS	1.81	346	iPc	45	52.00	0.2	AUTN	49.40	24	P	13	51.53	0.7	E	15s	1.63um					
			S	46	11.00		SAOF	49.44	24	P	13	50.90	0.0				iS	22	11.00		
MRA	2.81	101	eP	46	04.80	-0.1	TCF	49.50	18	eP	13	52.20	0.8				iSS	26	02.00		
S.D. = 0.3 on 7 of 7 obs.																					

AUG 31, 1989 11h 04m 58.68±0.33s																					
0.174 S ± 6.6km 17.801 W ± 4.9km																					
DEPTH = 10.0km (geophysicist)																					
5.4mb (45 obs.) 4.7MsZ (6 obs.)																					
NORTH OF ASCENSION ISLAND (407)																					
CENTROID, MOMENT TENSOR (HRV)																					
Data Used: GDSN																					
L.P.B.: 12S, 26C																					
Centroid Location:																					
Origin Time 11:05:12.7 0.5																					
Lat 0.54N 0.05 Lon 16.92W 0.06																					
Dep 15.0 FIX Half-duration 2.0																					
Moment Tensor: Scale 10**17 Nm																					
Mrr=-0.13 0.05 Mtt= 0.85 0.09																					
Mff=-0.71 0.10 Mrt= 0.43 0.22																					
Mrf=-0.54 0.23 Mtf=-1.33 0.05																					
Principal Axes:																					
T Val= 1.82 Plg=18 Azm= 31																					
N -0.30 68 178																					
P -1.53 11 297																					
Best Double Couple:Mo=1.7*10**17																					
NP1:Strike= 73 Dip=69 Slip= 175																					
NP2: 165 85 21																					
LIC	14.25	63	P	08	20.74	-1.9	LBF	50.68	19	eP	14	00.60	0.2	BRG	57.56	23	iP	14	49.60	-1.2	
TIC	14.44	62	P	08	22.80	-2.4		1.4s	43.50nm			5.2mb			1.3s	34.00nm				5.2mb	
KIC	14.56	63	P	08	24.86	-1.9	DUI	50.83	31	P	14	02.50	0.9				e	15	00.20		
			S	10	55.32		FIR	50.87	27	eP	14	02.00	0.3				e	16	54.40		
			eTT	18	30.00		LOR	50.90	19	iPc	14	02.30	0.3	KSP	58.49	25	eP	14	56.50	-0.8	
KUK	18.51	70	eP	09	18.00	0.9		1.2s	19.00nm			4.9mb					e	15	26.00		
ITR	22.24	247	eP	09	56.90	-0.5	DIX	51.13	22	ePc	14	04.30	0.2	ALT	58.67	43	eP	14	58.10	-0.8	
			e	10	00.30		MMK	51.32	23	ePc	14	05.50	0.0	SPC	59.04	28	eP	15	02.00	0.6	
			e	10	06.30		ARV	51.44	28	P	14	05.50	-0.6	KRA	59.51	27	eP	15	03.80	-0.6	
PDCR	24.45	239	eP	10	18.50	-0.5	LOMF	51.98	21	P	14	09.81	-0.5		1.2s	58.00nm				5.6mb	
			e	10	31.90		CNCB	52.10	249	P	14	12.00	-0.3	MLR	59.60	34	iPc	15	04.50	-0.8	
TIO	32.51	17	iPc	11	32.50	0.5	ZOBO	52.12	249	P	14	11.80	-0.6				e	27	22.50		
			i	11	40.00			1.0s	9.50nm			4.7mb					e	36	02.50		
			i	12	16.00		Z	20s	1.05um			4.9MsZ									
			i	12	28.00					LR	30	54.00		ISR	59.73	35	ePd	15	05.00	-1.1	
BAO	33.53	241	eP	11	45.50	4.4X				S	31	50.00		VRI	60.27	34	ePc	15	08.00	-1.7	
BMA	34.04	227	e(P)	11	35.00	-10.3X	LPB	52.15	249	eP	14	08.00	-4.5X	BHL	60.42	50	Pc	15	12.00	0.9	
BNG	36.60	82	iPc	12	08.90	1.6				eLR	33	06.00		CLI	60.98	34	ePd	15	14.00	-0.5	
	0.6s		50.00nm			5.5mb	SLA	52.17	238	ePc	14	12.30	0.1	HFS	64.90	17	eP	15	38.60	-1.7	
			ic	13	39.10		VDL	52.27	24	ePc	14	11.80	-0.8		1.3s	51.60nm				5.6mb	
PPD	39.22	234	eP	12	25.00	-4.1X	BBS	52.33	21	P	14	12.88	0.0	Z	19s	0.36um				4.6MsZ	
TOL	41.80	16	iPc	12	51.00	0.9	HAU	52.37	20	eP	14	13.00	-0.2				LR	36	50.00		
	1.3s		230.77nm			5.7mb		1.4s	47.00nm			5.2mb		NB2	64.98	15	P	15	39.90	-0.9	
			ePP	14	32.00		BSF	52.38	21	P	14	12.29	-1.0		1.2s	24.80nm				5.3mb	
			ePPP	15	09.00		LLS	52.39	23	ePc	14	12.50	-1.1	BHD	67.09	54	ePd	15	55.50	0.7	
			iS	19	10.00		VITF	52.43	20	P	14	12.72	-0.8	GAC	68.13	320	eP	16	01.00	0.0	
			iSS	22	02.00		MOF	52.52	21	P	14	13.77	-0.6	BLA	68.57	310	P	16	04.00	-0.1	
ELYF	45.71	17	P	13	22.77	1.0	ZLA	52.67	22	ePc	14	14.90	-0.5		1.0s	20.00nm				5.3mb	
ATE	45.72	18	P	13	22.74	0.9	ECH	52.84	21	P	14	16.49	-0.1	SUF	70.79	20	iP	16	16.80	-0.3	
MADF	45.74	17	P	13	22.70	0.7	SAX	52.84	23	ePc	14	16.20	-0.8		0.5s	8.50nm				5.1mb	
ESCF	45.75	18	P	13	23.02	1.0	FEL	52.86	22	P	14	16.07	-0.9	SOD	74.12	16	eP	16	35.00	-1.7	
EPF	45.99	19	iPc	13	25.20	1.2	SLE	52.94	22	ePc	14	16.90	-0.5	KEV	75.87	15	eP	16	41.00	-5.7X	
	1.4s		65.30nm			5.4mb	COF	53.04	21	P	14	17.33	-0.9	FVM	76.46	309	P	16	49.60	-1.1	
LWI	46.63	93	ePd	13	29.30	-0.4	WLS	53.07	21	P	14	17.65	-0.8		1.0s	45.00nm				5.5mb	

31d 11h

OLY 76.84 306 P 16 52.00 -0.8
 UYO 79.07 305 iPd 17 05.00 -0.1
 MHI 79.87 53 iPc 17 10.00 0.4
 TUL 80.38 306 eP 17 10.80 -1.3
 1.2s 35.00nm 5.2mb
 Z 21s 0.61um 4.9msz
 LR 42 34.00
 SIO 80.77 306 e(P) 17 14.20 0.0
 RSON 81.25 322 P 17 15.10 -1.3
 FFC 86.77 325 eP 17 43.00 -1.3
 1.5s 23.00nm 5.2mb
 RSSD 87.41 314 P 17 48.20 0.3
 GLD 88.12 310 P 17 52.90 1.5
 1.2s 121.21nm 6.1mb
 GOL 88.24 310 P 17 52.80 0.8
 1.3s 104.17nm 6.0mb
 ALO 89.00 305 eP 17 56.50 0.8
 1.2s 9.77nm 5.0mb
 SPA 89.83 180 e(P) 18 01.80 2.9
 1.0s 5.00nm 4.7mb
 MBC 92.92 346 eP 18 16.50 3.7X
 1.0s 7.00nm 5.0mb
 EDM 93.47 323 eP 18 15.70 -0.1
 WRA 146.17 128 PKPc 24 45.20 4.4X
 0.9s 3.30nm
 WB5 146.23 128 ePKP 24 45.00 4.1X
 BRS 151.13 162 ePKP 25 06.00 17.6X
 S.D. = 0.9 on 134 of 144 obs.

& AUG 31, 1989 11h 54m 57.88s
 60.144 N 150.809 W
 DEPTH = 82.4km
 KENAI PENINSULA, ALASKA (14)
 <AGS-P>

PMS 1.26 29 eP 55 18.90 -1.8
 PWA 1.58 16 eP 55 23.70 -1.0
 PMR 1.67 29 iP 55 24.20 -1.7
 MIN 2.16 81 eP 55 31.22 -1.4
 eS 55 57.83
 CVA 2.55 79 iP 55 36.18 -1.7
 SGAM 2.81 80 iP 55 39.66 -1.8
 eS 56 12.25
 TOA 2.99 47 eP 55 43.50 -0.5
 FBA 4.97 15 eP 56 10.20 -1.4
 IMA 6.09 349 eP 56 27.50 0.3
 9 obs. associated

% AUG 31, 1989 13h 45m 56.36 ± 3.94s
 43.815 N ± 25.1km 7.232 E ± 13.6km
 DEPTH = 10.0km (geophysicist)
 NEAR SOUTH COAST OF FRANCE (379)
 ML 2.0 (GEN).

ENR 0.43 18 P 46 05.20 0.0
 S 46 12.31
 STV 0.43 9 P 46 05.36 0.1
 S 46 12.31
 S 46 12.36
 ROB 0.66 44 P 46 09.33 -0.3
 S 46 19.38
 PZZ 0.70 352 P 46 10.31 0.1
 S 46 20.71
 FIN 0.81 60 P 46 12.20 0.2
 S 46 24.50
 RRL 1.15 344 P 46 17.94 -0.1
 PCP 1.19 52 P 46 18.66 0.0
 S 46 35.61
 S.D. = 0.2 on 7 of 7 obs.

AUG 31, 1989 13h 48m 36.24 ± 1.13s
 7.495 S ± 6.3km 128.193 E ± 10.2km
 DEPTH = 144.2 ± 11.9 km
 4.5mb (12 obs.)
 BANDA SEA (280)

AAI 3.78 0 iPd 49 37.00 2.8
 MTN 6.05 152 iPd 50 04.10 -0.5
 KNA 8.22 176 iPd 50 32.90 -1.0
 0.4s 381.00nm 6.4mb X
 eS 51 58.00
 MNI 9.49 339 e(P) 50 56.20 5.5X
 WB5 13.69 155 eP 51 40.60 -5.0X
 eS 54 06.20
 WRA 13.74 155 Pd 51 41.80 -4.4X
 0.2s 13.10nm 4.9mb
 MBL 15.81 210 eP 52 11.50 -0.7
 0.4s 8.00nm 4.4mb

ASFA 16.99 162 iPc 54 59.00 -2.4
 0.6s 273.00nm 5.7mb X
 eS 55 27.60
 OIS 17.05 141 iPc 52 25.30 -2.2
 eS 55 24.70
 WARB 18.64 184 iPd 52 45.30 -0.4
 0.5s 26.00nm 4.8mb
 eS 56 06.00
 PMG 18.85 97 eP 52 49.00 1.2
 MEKA 21.12 205 eP 53 13.00 2.1
 0.3s 8.00nm 4.6mb
 eS 17 03.00
 CTA 21.52 127 eP 53 15.00 0.1
 FORR 23.24 180 eP 53 31.80 0.3
 0.3s 14.00nm 4.9mb
 COOL 24.19 195 eP 53 40.00 -0.7
 0.6s 6.00nm 4.3mb
 eS 58 16.00
 OLP 24.35 143 eP 53 42.10 -0.1
 MRWA 24.47 206 eP 53 44.00 0.6
 0.3s 4.00nm 4.4mb
 eS 58 21.00
 BAL 25.39 204 eP 53 54.00 2.2
 0.5s 5.00nm 4.3mb
 e 54 23.00
 eS 58 41.00
 MUN 26.80 203 eP 54 07.00 2.3
 e 54 39.00
 eS 59 16.00
 RMQ 27.19 136 eP 54 09.00 0.7
 NWA0 27.27 200 eP 54 08.00 -1.0
 e 54 48.00
 eS 59 25.00

STK 27.29 155 iPc 54 09.80 0.7
 BRS 30.57 133 eP 54 39.00 0.5
 CHG 38.93 313 ePd 55 50.70 0.9
 0.9s 8.61nm 4.5mb
 TIA 44.70 347 eP 56 34.90 -1.6
 MAT 44.80 11 (P) 56 32.00 -5.3X
 XAN 45.17 337 P 56 38.50 -1.8
 TIY 47.32 343 iPc 56 55.80 -1.5
 LZH 49.02 334 eP 57 10.00 -0.5
 2.0s 47.00nm 4.9mb
 GTA 53.56 333 iPc 57 43.70 -0.8
 0.6s 0.01nm 1.8mb X
 GBA 54.58 292 Pd 57 50.20 -1.9
 1.1s 6.50nm 4.4mb
 WMO 62.85 328 P 58 48.50 -0.4
 SPA 82.56 180 ePc 00 44.20 0.1
 0.8s 5.42nm 4.4mb
 KIC 133.28 272 PKP 07 37.80 0.1
 LIC 133.55 271 PKP 07 38.40 0.2
 TIC 133.58 272 PKP 07 38.20 -0.1
 PPD 150.65 181 ePKP 08 12.90 5.2X
 CNCB 151.03 147 ePKP 08 10.00 0.9
 LPB 151.19 146 ePKP 08 11.00 1.9
 ZOBO 151.39 146 ePKP 08 02.00 -7.6X
 CCH 151.51 150 PKP 08 17.00 7.6X
 S.D. = 1.4 on 34 of 41 obs.

% AUG 31, 1989 14h 42m 13.42 ± 0.76s
 60.438 N ± 6.5km 5.317 E ± 9.1km
 DEPTH = 5.0km (geophysicist)
 SOUTHERN NORWAY (535)
 MD 1.0 (BER).

BER 0.06 171 ePg 42 15.20 0.2
 iSp 42 16.20
 ASK 0.08 307 iPg+ 42 15.20 0.0
 eSp 42 16.60
 SUE 0.68 336 eP 42 26.90 -0.1
 eS 42 36.30
 ODD1 0.84 128 iP 42 29.90 -0.3
 eS 42 41.80
 HYA 0.85 30 iP 42 30.40 0.2
 eS 42 43.50
 S.D. = 0.3 on 5 of 5 obs.

* AUG 31, 1989 15h 47m 14.95 ± 2.56s
 41.939 N ± 11.7km 20.643 E ± 18.8km
 DEPTH = 5.0km (geophysicist)
 ALBANIA (391)
 ML 2.7 (SKO).

KKS 0.22 308 iPg+ 47 18.50 -0.9
 PHP 0.29 211 iPgc 47 20.30 -0.6

LACI 0.76 247 ePg 47 31.30 1.1
 TIR 0.83 225 ePg 47 30.00 -1.5
 OHR 0.84 172 ePg 47 32.20 0.6
 eSg 47 47.00
 SDA 0.86 276 ePg 47 33.10 1.2
 S.D. = 1.5 on 6 of 6 obs.

AUG 31, 1989 16h 02m 10.25 ± 0.40s
 3.879 N ± 5.7km 76.059 W ± 8.7km
 DEPTH = 130.7 ± 4.1 km
 4.6mb (2 obs.)

COLOMBIA (103)
 Felt in Valle del Couco
 Department.

HOBC 0.48 351 iPd 02 29.95 0.3
 CLMC 0.50 270 iPc 02 29.79 -0.1
 DIAC 0.60 193 iPd 02 30.88 0.4
 HOOC 0.70 235 iPc 02 30.64 -0.7
 ANCC 0.88 246 iPc 02 31.70 -0.8
 SALC 1.10 215 iPc 02 34.37 -0.3
 PURC 1.58 191 iPd 02 41.67 1.5
 BOG 2.12 70 eP 02 51.00 4.4X
 eS 03 18.00
 PSO 2.95 205 eP 02 56.50 -0.8
 COTA 4.19 213 eP 03 14.20 0.2
 RECU 5.14 209 eP 03 27.20 0.4
 PRM 30.62 350 eP 08 15.00 1.0
 FVM 36.40 341 eP 09 03.30 -0.4
 0.9s 16.95nm 4.9mb
 ITR 39.57 109 e(P) 09 30.00 -0.5
 ALO 41.81 321 eP 09 49.50 0.6
 0.9s 6.09nm 4.3mb
 RSSD 47.06 333 eP 10 30.80 0.1
 KVN 51.75 318 eP 11 06.20 -0.5
 LIC 70.75 85 P 13 14.40 -0.3
 KIC 71.03 85 P 13 16.20 -0.2
 WRA 146.34 239 PKPd 21 36.70 0.0
 0.5s 0.90nm
 WB5 146.35 239 ePKP 21 36.80 0.1
 S.D. = 0.6 on 20 of 21 obs.

& AUG 31, 1989 17h 30m 55.00s
 35.750 N 118.030 W
 DEPTH = 5.0km
 CENTRAL CALIFORNIA (39)
 <PAS-P>. ML 3.1 (PAS), 3.3
 (BRK).

CLC 0.36 79 iPc 31 02.00 -0.2
 ISA 0.37 257 iPc 31 02.10 -0.4
 SBB 1.07 171 ePd 31 14.60 -1.1
 GSC 1.10 114 ePc 31 15.50 -0.6
 FRI 1.84 313 eP 31 27.40 0.0
 iS 31 51.00
 LLA 2.51 291 eP 31 38.60 1.4
 PRS 2.77 283 eP 31 40.80 -0.1
 SAO 2.94 291 eP 31 44.20 0.9
 CMB 2.96 321 eP 31 46.00 2.4
 iS 32 23.80
 MHC 3.31 300 eP 31 49.00 0.3
 10 obs. associated

AUG 31, 1989 18h 43m 37.13 ± 0.69s
 37.591 N ± 6.4km 20.842 E ± 4.8km
 DEPTH = 10.0km (geophysicist)
 3.9mb (3 obs.)

IONIAN SEA (399)
 ML 3.7 (ATH).

VLS 0.62 341 iPgc 43 50.10 0.5
 ITM 0.96 115 ePg 43 53.40 -2.0
 ATH 2.31 80 ePb 44 17.50 1.7
 SRN 2.38 344 ePn 44 19.80 3.1X
 NEO 2.54 47 ePn 44 19.30 0.3
 LSK 2.56 356 ePn 44 20.90 1.5
 TPE 2.78 347 iPnd 44 24.00 1.6
 KZN 2.81 15 ePn 44 24.20 1.3
 LIT 2.82 27 iPnd 44 23.40 0.4
 eSn 44 57.90
 KBN 3.03 360 ePn 44 28.00 2.1
 PAIG 3.22 43 ePn 44 28.20 -0.5
 eSn 45 08.40
 PLG 3.44 35 ePn 44 31.40 -0.5
 THE 3.46 28 ePn 44 32.40 0.4
 eSn 45 13.30
 VAM 3.47 128 ePn 44 32.30 0.0

Table with columns for station ID, time, and various numerical data points. Includes stations like OHR, LCI, GRG, APE, SOI, TIR, KNT, VAY, PHP, SRS, LACI, SKO, PUK, ULC, SDA, MMB, PRK, KKB, MEU, EZN, MGR, TTG, RZN, IZM, VTS, KDZ, HVAR, MLR, VBY, VOY, KHC, GRA3, HFS, EKA, NB2, and SUF.

S.D. = 1.3 on 46 of 50 obs.

AUG 31, 1989 19h 39m 46.36 ± 0.89s
62.722 N ± 9.9km 151.377 W ± 8.8km
DEPTH = 33.0km (normal)
4.3mb (5 obs.)

CENTRAL ALASKA (1)

Table with columns for station ID, time, and various numerical data points. Includes stations like PWA, PMR, PMS, TTA, TOA, SVW, and FBA.

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

AUG 31, 1989 19h 54m 41.60 ± 0.51s
28.767 N ± 7.3km 99.721 E ± 7.1km
DEPTH = 33.0km (normal)
4.3mb (5 obs.)

YUNNAN PROVINCE, CHINA (318)
ML 4.1 (BJI)

Table with columns for station ID, time, and various numerical data points. Includes stations like CD2, KMI, GYA, LSA, LZH, XAN, CHG, and GTA.

Table with columns for station ID, time, and various numerical data points. Includes stations like WHN, BT0, Z, N, E, NNT, TIA, BJI, WMO, KSH, HYB, GBA, KEV, SUF, WB5, WRA, UPP, HFS, NB2, and S.D. = 1.3 on 17 of 24 obs.

AUG 31, 1989 21h 29m 31.10 ± 0.30s
38.087 N ± 3.4km 21.737 E ± 2.3km
DEPTH = 33.0km (normal)
4.4mb (24 obs.) 3.7MsZ (1 obs.)

GREECE (364)
MD 4.5 (ATH), ML 4.4 (TTG), 4.3 (ROM)

Table with columns for station ID, time, and various numerical data points. Includes stations like VLS, ITM, AGG, ATH, NEO, LIT, KZN, LSK, SRN, PAIG, TPE, KBN, PLG, and THE.

Table with columns for station ID, time, and various numerical data points. Includes stations like GRG, BERA, OHR, APE, KNT, VAY, VAM, SRS, TIR, LCI, PHP, PRK, MMB, LACI, and SKO.

Table with columns for station ID, time, and various numerical data points. Includes stations like N, E, KKB, EZN, KKS, PUK, NPS, GRI, and RZN.

Table with columns for station ID, time, and various numerical data points. Includes stations like SDA, ULC, ALN, IZM, SOI, TDS, KDZ, PLD, VTS, PVY, TTG, BDV, PGB, ATN, HCY, KAP, MFT, MGR, EDC, YER, BNT, BRY, MEU, PZI, MNO, DST, JMB, PVL, GIB, KHL, YLV, HVAR, DUI, ELL, HRT, USI, RFI, BEO, BUC1, SDI, BUC, AZI, BZS, AQU, ALP, RMP, ISR, MLR, TLB, MNS, AOI, CIO, CVO, BRD, CFR, ARV, VRI, ZAG, VBY, PTJ, RSM, CRE, CEY, CLI, PGD, LJU, TRI, FIR, CGL, and VOY.

FAM	FKK	FKS	FL2	FLR	FMT	FMW	FOC	FUG	FUO	GBL	GBR	GCG	GCM	GDH	GGC	GGN	GIF
GL2	GLB	GLH	GLK	GLR	GMB	GMR	GRA3	GRB1	GRB4	GRC1	GROR	GSH	GT2	GULW	GZR	HAC	HAK
HATZ	HBF	HBVT	HIA	HITZ	HJJ	HLBJ	HMT	HOB	HQJ	HOM	HOO	HOOC	HOR	HPI	HON	HRV	HRY
HSR	HTW	HUG	HUTZ	ICR	IDC	IKP	ILT	IMU	IRK	ISI	ISN	ITG	IVF	IVT	IXG	JAT	JBO
JCK	JCR	JLK	JOZ	JVI	KAG	KDB	KETZ	KIM	KIP	KIR	KKG	KLM	KLN	KMG	KMOR	KMSA	KOB
KOSW	KRNA	KSI	KSU	KUPT	KUS	KYO	LAL	LCCM	LHG	LIO	LIS	LKGA	LMN	LMW	LNOR	LNK	LOHW
LOP	LPI	LST	LVP	MAE	MAJO	MBET	MCW	MCY	MD2	MD3	MD5	MDI	MDW	MEMT	MGB	MHI	MHZ
MIM	MIT	MIY	MKL	MKT	MLAL	MMG	MNA	MOH	MOOW	MOTN	MRK	MRR	MSAL	MTE	MTMW	MUDI	MVO
MYT	MZM	MZX	NA2	NAR	NAV	NCG	NDF	NEM	NEZ	NGI	NLO	NNL	NOH	NSC	NWRM	NZJ	OBH
OBI	OBO	OBZ	OC2	OFU	ONA	ONR	OPA	OSH	OWA	PACW	PANV	PATW	PBC	PCA	PCG	PCO	PET
PGO	PHAM	PHC	PIG	PKEM	PKI	PLAT	PLE	PLH	PNJ	PNL	POA2	POF	PORP	PRIN	PRN	PRW	PS4
PSG2	PT10	PTI	PTS	PUL	PURC	PV10	PVV	PZI	QCS	OUTJ	RAMW	RAO	RAR	RATZ	RDG	REC	REDW
REG	RIN3	RIV	RMN	ROG	RSNY	RSW	RVC	RVW	SALC	SAP	SASA	SAW	SCI	SCP	SEN	SFF	SGB
SGH	SGS	SGU	SHG	SHMJ	SHR	SHZ	SIM	SLP	SMMM	SNKA	SNOW	SNZO	SOA	SOG	SOG2	SOH	SONG
SOP	SOSW	SPRG	SOF	SSO	SSP	SSR	SSS	SSV	STB	STD	STEW	SUM	SUR	SVE	SWZ	SXM	TAC
TAIF	TARW	TAT	TATO	TAU	TAZ	TBR	TBT	TCT	TDD	TDH	TDL	TER	THI	TIG	TIK	TLG	TMBR
TMP	TMR	TMW	TNE	TOK	TPAW	TP1	TPR	TPU	TRM	TSAL	TSU	TTH	TUTZ	TWM1	UMT	URA	UTS
UTU	VBEM	VCR	VFP	VILF	VLL	VLMW	VLZ	VSS	VTG	VTHM	WAM2	WAX	WES	WHC	WHH	WIN	WIW
WKY	WNH	WPW	WRD	WTV	YEL	YKU	YMT4	YOJ	YOK	YSS	YUP	ZNT	ZSP				