

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

PRELIMINARY DETERMINATION OF EPICENTERS  
MONTHLY LISTING

OCTOBER - DECEMBER 1994

NATIONAL EARTHQUAKE INFORMATION CENTER

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1994



# PRELIMINARY DETERMINATION OF EPICENTERS

## MONTHLY LISTING

### U.S. DEPARTMENT OF THE INTERIOR / GEOLOGICAL SURVEY National Earthquake Information Center

DECEMBER 1994

| K<br>E<br>Y | DAY | ORIGIN<br>TIME<br>UTC | GEOGRAPHIC<br>COORDINATES | DEPTH | MAGNITUDES   | SD  | NO.<br>STA<br>USED | REGION, CONTRIBUTED MAGNITUDES AND COMMENTS   |
|-------------|-----|-----------------------|---------------------------|-------|--------------|-----|--------------------|---|
| Y           |     | HR MN SEC             | LAT LONG                  |       | GS<br>MB Msz |     |                    |   |
|             | 01  | 02 33 27.5            | 33.003 S 72.128 W         | 5 G   | 4.2          | 1.1 | 18                 | OFF COAST OF CENTRAL CHILE. MD 4.7 (SAN).   |
|             | 01  | 03 28 58.4            | 34.956 N 116.925 W        | 2     |              |     | 6                  | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).   |
|             | 01  | 03 46 14.5            | 45.62 N 26.74 E           | 130 G |              | 0.1 | 5                  | ROMANIA   |
|             | 01  | 03 47 59.4            | 33.070 S 71.803 W         | 10 G  |              | 0.9 | 12                 | NEAR COAST OF CENTRAL CHILE. MD 4.0 (SAN).  |
|             | 01  | 03 50 20.0            | 63.283 N 151.105 W        | 10    |              |     | 46                 | CENTRAL ALASKA. <AEIC>. ML 3.1 (AEIC), 3.4 (PMR).   |
|             | 01  | 03 55 07.4            | 8.467 S 115.649 E         | 134   | 5.0          | 0.6 | 19                 | BALI REGION, INDONESIA. Felt (III) at Denpasar, Bali and Mataram, Lombok.                                     |
|             | 01  | 04 10 01.4            | 32.95 S 72.04 W           | 10 G  |              | 0.7 | 10                 | OFF COAST OF CENTRAL CHILE. MD 3.7 (SAN).   |
|             | 01  | 04 36 41.1            | 38.29 N 19.71 E           | 10 G  |              | 0.5 | 12                 | IONIAN SEA. ML 3.9 (TTG), 3.6 (TIR). MD 3.6 (ATH).  |
| a           | 01  | 06 11 01.4            | 7.639 S 128.173 E         | 84    | 5.6          | 0.9 | 105                | BANDA SEA. Mw 5.4 (HRV).  |
|             | 01  | 06 49 47.5            | 46.730 N 10.121 E         | 10 G  |              | 0.9 | 9                  | NORTHERN ITALY. ML 2.3 (VIE).   |
|             | 01  | 06 53 41.4            | 32.959 S 72.018 W         | 10 G  |              | 0.4 | 11                 | OFF COAST OF CENTRAL CHILE. MD 3.9 (SAN).   |
|             | 01  | 07 17 36.0            | 38.694 N 20.519 E         | 30    | 4.6 4.4      | 1.5 | 103                | GREECE. ML 4.8 (ATH), 4.4 (TIR). Many houses damaged and landslides blocked roads on Levkas.                  |
|             | 01  | 07 31 25.7            | 33.075 S 71.787 W         | 10 G  |              | 0.9 | 11                 | NEAR COAST OF CENTRAL CHILE. MD 4.0 (SAN).  |
|             | 01  | 07 32 56.9            | 38.557 N 20.200 E         | 33 N  | 4.3          | 1.2 | 22                 | GREECE. ML 4.1 (ATH), 4.1 (TTG).  |
|             | 01  | 07 41 28.3            | 10.051 N 122.315 E        | 60 *  | 4.6 4.2      | 1.1 | 15                 | PANAY, PHILIPPINE ISLANDS   |
|             | 01  | 08 41 30.1            | 61.707 N 149.749 W        | 41    |              |     | 40                 | SOUTHERN ALASKA. <AEIC>. ML 2.6 (AEIC).   |
|             | 01  | 10 04 41.2            | 9.09 S 149.54 E           | 33 N  | 4.0          | 1.3 | 6                  | EASTERN NEW GUINEA REG., P.N.G.   |
|             | 01  | 11 12 38.6            | 39.49 N 27.77 E           | 10 G  |              | 1.0 | 4                  | TURKEY. ML 2.7 (ISK).   |
|             | 01  | 11 18 19.5            | 7.468 S 128.546 E         | 135   | 5.4          | 0.9 | 74                 | BANDA SEA   |
|             | 01  | 12 00 17.8            | 39.73 N 29.35 E           | 10 G  |              | 0.8 | 4                  | TURKEY. ML 2.7 (ISK).   |
|             | 01  | 12 06 43.7            | 39.35 N 27.27 E           | 5 G   |              | 0.2 | 4                  | TURKEY. ML 2.8 (ISK).   |
|             | 01  | 12 10 38.2            | 39.64 N 29.36 E           | 10 G  |              | 1.0 | 4                  | TURKEY. ML 2.8 (ISK).   |
|             | 01  | 13 38 21.2            | 40.34 N 28.77 E           | 10 G  |              | 0.3 | 4                  | TURKEY. ML 2.8 (ISK).   |
|             | 01  | 14 05 19.4            | 39.73 N 29.47 E           | 10 G  |              | 0.5 | 5                  | TURKEY. ML 2.8 (ISK).   |
|             | 01  | 14 46 41.3            | 4.003 S 141.765 E         | 33 N  | 3.7          | 1.3 | 10                 | NEW GUINEA, PAPUA NEW GUINEA  |
|             | 01  | 14 53 50.0            | 34.40 S 70.18 W           | 10 G  |              | 1.2 | 7                  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
|             | 01  | 15 47 05.8            | 38.634 N 20.258 E         | 22    | 4.1          | 1.1 | 37                 | GREECE. ML 4.1 (TTG), 3.7 (TIR). MD 3.8 (ATH).  |
|             | 01  | 16 07 06.5            | 37.487 N 118.868 W        | 6     |              |     | 14                 | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM).   |
|             | 01  | 17 56 42.1            | 33.159 S 70.278 W         | 5 G   |              | 0.4 | 9                  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
|             | 01  | 19 20 46.7            | 47.126 N 11.235 E         | 10 G  |              | 0.6 | 8                  | AUSTRIA. ML 2.0 (FUR), 1.6 (VIE).   |
|             | 01  | 19 24 36.7            | 34.24 S 70.31 W           | 10 G  |              | 1.4 | 8                  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
|             | 01  | 19 44 06.5            | 28.80 N 34.75 E           | 10 G  |              | 0.4 | 4                  | EGYPT. MD 2.0 (RYD).  |
|             | 01  | 20 23 26.2            | 44.445 N 7.085 E          | 10 G  |              | 0.2 | 11                 | NORTHERN ITALY. ML 2.3 (GEN).   |
|             | 01  | 20 41 14.3            | 44.744 N 6.761 E          | 10 G  |              | 0.5 | 13                 | FRANCE. ML 2.5 (GEN).   |
|             | 01  | 20 57 27.6            | 33.49 S 70.34 W           | 100 G |              | 0.3 | 7                  | CHILE-ARGENTINA BORDER REGION. MD 3.2 (SAN).  |
|             | 01  | 21 16 31.1            | 43.827 N 148.903 E        | 33 N  | 4.7          | 0.8 | 28                 | EAST OF KURIL ISLANDS   |
|             | 01  | 21 39 19.2            | 34.46 S 70.03 W           | 5 G   |              | 0.1 | 5                  | CHILE-ARGENTINA BORDER REGION   |
|             | 01  | 22 09 00.5            | 34.607 N 26.784 E         | 10 G  | 2.9          | 1.1 | 13                 | CRETE   |
|             | 02  | 00 10 23.6            | 38.698 N 20.507 E         | 5 G   |              | 1.4 | 14                 | GREECE. MD 3.1 (ATH).   |
|             | 02  | 00 36 56.4            | 34.267 N 118.557 W        | 15    |              |     | 27                 | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.7 (PAS), 2.8 (GS).   |
|             | 02  | 00 40 53.0            | 43.180 N 147.484 E        | 54 D  | 4.6          | 0.9 | 48                 | KURIL ISLANDS   |
|             | 02  | 01 19 06.3            | 58.943 N 152.814 W        | 72    |              |     | 34                 | KODIAK ISLAND REGION. <AEIC>.   |
|             | 02  | 02 11 28.7            | 33.656 S 69.921 W         | 5 G   |              | 1.1 | 10                 | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |
|             | 02  | 06 29 57.9            | 34.51 S 72.14 W           | 33 N  |              | 0.4 | 12                 | NEAR COAST OF CENTRAL CHILE. MD 4.3 (SAN).  |
|             | 02  | 06 47 09.0            | 38.594 N 20.216 E         | 5 G   |              | 1.1 | 5                  | GREECE. MD 3.0 (ATH).   |
|             | 02  | 07 29 30.1            | 38.697 N 20.525 E         | 5 G   |              | 1.3 | 12                 | GREECE. MD 3.2 (ATH).   |
|             | 02  | 07 38 11.3            | 38.898 N 26.909 E         | 10 G  |              | 0.9 | 8                  | AEGEAN SEA. ML 3.5 (ISK).   |
|             | 02  | 08 15 39.4            | 19.202 N 121.158 E        | 41 D  | 4.9 4.3      | 1.2 | 63                 | PHILIPPINE ISLANDS REGION. Felt (II RF) in the Pasuquin area.   |
|             | 02  | 09 25 09.3            | 43.32 N 147.96 E          | 33 N  | 4.1          | 1.3 | 7                  | KURIL ISLANDS   |
|             | 02  | 09 29 30.3            | 18.581 N 66.721 W         | 32    |              | 0.2 | 11                 | PUERTO RICO REGION. MD 3.0 (MPR).   |
|             | 02  | 10 05 51.7            | 44.985 N 7.173 E          | 10 G  |              | 0.5 | 12                 | NORTHERN ITALY. ML 2.4 (GEN).   |
|             | 02  | 10 09 58.6            | 44.992 N 7.179 E          | 10 G  |              | 0.7 | 7                  | NORTHERN ITALY. ML 2.0 (GEN).   |
|             | 02  | 10 50 20.6            | 36.174 N 120.730 W        | 10    |              |     | 10                 | CENTRAL CALIFORNIA. <GM-P>. MD 3.1 (GM). ML 3.3 (PAS). First and larger of two events about 45 seconds apart. |
|             | 02  | 11 05 52.0            | 42.864 N 143.236 E        | 149 * | 3.9          | 0.4 | 6                  | HOKKAIDO, JAPAN REGION  |

|      |    |    |       |        |   |         |   |     |   |         |     |   |  |
|------|----|----|-------|--------|---|---------|---|-----|---|---------|-----|---|--|
| 02   | 11 | 47 | 13.97 | 63.24  | N | 27.27   | E | 5   | G | 0.4     | 4   | FINLAND. ML 2.1 (NAO).  |  |
| 02   | 12 | 10 | 24.0  | 1.955  | N | 120.837 | E | 36  | * | 5.2 4.4 | 0.8 | 36  | MINAHASSA PENINSULA, SULAWESI  |
| 02   | 12 | 18 | 24.0* | 68.947 | N | 29.891  | E | 5   | G | 1.5     | 5   | FINLAND-RUSSIA BORDER REGION. MD 2.6 (BER).                       |  |
| 02   | 12 | 33 | 11.17 | 32.62  | S | 71.77   | W | 10  | G | 0.5     | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.6 (SAN).                        |  |
| 02   | 12 | 39 | 15.0  | 41.679 | N | 22.367  | E | 10  | G | 0.6     | 9   | NORTHWESTERN BALKAN REGION. ML 2.0 (SKO).                         |  |
| 02   | 12 | 54 | 47.9* | 18.157 | S | 178.875 | W | 499 | * | 4.8     | 1.2 | 41  | FIJI ISLANDS REGION  |
| 02   | 13 | 26 | 16.9* | 3.946  | S | 140.101 | E | 33  | N | 4.3     | 0.7 | 6   | IRIAN JAYA, INDONESIA  |
| 02   | 13 | 34 | 02.9* | 33.934 | S | 70.762  | W | 80  | G | 1.0     | 8   | CHILE-ARGENTINA BORDER REGION                                     |  |
| 02   | 13 | 49 | 35.0  | 44.129 | N | 6.425   | E | 10  | G | 0.5     | 24  | FRANCE. ML 2.7 (GEN), 2.3 (STR), 2.2 (LDG).                       |  |
| 02   | 13 | 54 | 01.47 | 43.77  | N | 148.38  | E | 33  | N | 4.2     | 1.4 | 7   | EAST OF KURIL ISLANDS  |
| 02   | 13 | 56 | 17.17 | 9.97   | N | 125.61  | E | 102 | ? | 4.2     | 1.2 | 6   | MINDANAO, PHILIPPINE ISLANDS   |
| 02   | 15 | 06 | 47.2* | 44.822 | N | 6.688   | E | 10  | G | 0.2     | 7   | FRANCE. ML 2.1 (GEN).   |  |
| 02   | 15 | 10 | 02.6* | 63.278 | N | 151.855 | W | 8   |   |         | 46  | CENTRAL ALASKA. <AEIC>. ML 3.0 (AEIC), 3.4 (PMR).                 |  |
| 02   | 17 | 11 | 08.77 | 39.30  | N | 29.43   | E | 5   | G | 1.2     | 4   | TURKEY. ML 3.0 (ISK).   |  |
| a 02 | 18 | 11 | 52.4  | 43.916 | N | 148.020 | E | 43  | D | 4.9 4.3 | 0.7 | 94  | EAST OF KURIL ISLANDS. Mw 5.1 (HRV).   |
| 02   | 18 | 18 | 01.3  | 40.788 | N | 20.825  | E | 5   | G | 0.6     | 9   | GREECE-ALBANIA BORDER REGION. ML 2.9 (TIR).                       |  |
| 02   | 18 | 22 | 54.97 | 43.47  | N | 147.96  | E | 10  | G | 4.4     | 1.3 | 6   | KURIL ISLANDS  |
| 02   | 19 | 04 | 37.5* | 44.499 | N | 7.311   | E | 10  | G | 0.1     | 5   | NORTHERN ITALY. ML 1.8 (GEN).                                     |  |
| 02   | 19 | 11 | 39.3* | 11.537 | N | 143.365 | E | 33  | N | 4.8     | 0.6 | 8   | SOUTH OF MARIANA ISLANDS   |
| 02   | 19 | 42 | 30.9* | 23.758 | S | 129.972 | E | 10  | G | 1.4     | 9   | NORTHERN TERRITORY, AUSTRALIA                                     |  |
| 02   | 22 | 53 | 45.9  | 32.430 | S | 69.609  | W | 10  | G | 0.9     | 12  | MENDOZA PROVINCE, ARGENTINA. MD 3.9 (SAN).                        |  |
| 02   | 23 | 50 | 56.27 | 40.26  | N | 24.23   | E | 5   | G | 0.2     | 5   | AEGEAN SEA  |  |
| 03   | 00 | 14 | 41.77 | 12.87  | N | 89.26   | W | 33  | N |         | 0.2 | 10  | OFF COAST OF CENTRAL AMERICA. MD 3.6 (SSS). Felt (II) at San Salvador, El Salvador.            |
| 03   | 01 | 35 | 51.6  | 37.643 | N | 49.349  | E | 33  | N | 4.8     | 1.2 | 25  | CASPIAN SEA. Felt in the Rasht area, Iran.   |
| 03   | 01 | 52 | 58.6* | 63.914 | N | 149.017 | W | 0   |   |         | 33  | CENTRAL ALASKA. <AEIC>. ML 2.6 (AEIC), 3.4 (PMR).                 |  |
| 03   | 02 | 33 | 41.7* | 60.813 | N | 151.689 | W | 72  |   |         | 48  | KENAI PENINSULA, ALASKA. <AEIC>.                                  |  |
| 03   | 03 | 15 | 48.0* | 34.135 | S | 70.434  | W | 10  | G | 0.5     | 6   | CHILE-ARGENTINA BORDER REGION                                     |  |
| 03   | 04 | 07 | 18.17 | 37.01  | N | 4.05    | W | 10  | G | 0.5     | 4   | SPAIN. mbLg 1.9 (MDD).  |  |
| a 03 | 04 | 53 | 11.6  | 14.487 | N | 92.404  | W | 79  |   | 4.9     | 1.0 | 141   | NEAR COAST OF CHIAPAS, MEXICO. Mw 5.3 (HRV). MD 4.9 (GCG).                                     |
| 03   | 05 | 18 | 10.47 | 34.44  | S | 71.04   | W | 70  | G |         | 1.2 | 9   | NEAR COAST OF CENTRAL CHILE  |
| 03   | 06 | 02 | 51.0  | 32.624 | N | 47.307  | E | 81  | * | 4.6     | 1.0 | 20  | IRAN-IRAQ BORDER REGION. Damage to buildings in the Musian area, Iran. Felt at Dehloran, Iran. |
| 03   | 06 | 27 | 58.6* | 34.359 | N | 118.701 | W | 15  |   |         | 29  | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.7 (PAS), 2.8 (GS).             |  |
| 03   | 08 | 04 | 43.2* | 28.553 | N | 34.833  | E | 10  | G | 0.4     | 6   | EGYPT. MD 2.4 (RYD).  |  |
| 03   | 08 | 15 | 46.7* | 36.962 | N | 3.737   | W | 10  | G | 1.2     | 8   | STRAIT OF GIBALTAR. mbLg 2.8 (MDD).                               |  |
| 03   | 08 | 49 | 50.5* | 28.677 | N | 34.732  | E | 10  | G | 0.6     | 7   | EGYPT. MD 2.6 (RYD).  |  |
| 03   | 09 | 27 | 48.47 | 38.71  | N | 20.63   | E | 10  | G | 0.4     | 4   | GREECE  |  |
| 03   | 09 | 33 | 02.67 | 36.71  | N | 2.87    | W | 10  | G | 0.5     | 4   | STRAIT OF GIBALTAR. mbLg 2.5 (MDD).                               |  |
| 03   | 09 | 49 | 10.5* | 28.537 | N | 34.743  | E | 10  | G | 0.6     | 6   | EGYPT. MD 2.4 (SAN).  |  |
| 03   | 10 | 19 | 47.6* | 32.979 | S | 70.389  | W | 110 | G | 0.3     | 11  | CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).                      |  |
| 03   | 11 | 33 | 17.67 | 19.57  | N | 66.19   | W | 25  |   | 0.2     | 12  | PUERTO RICO REGION. MD 3.9 (MPR).                                 |  |
| 03   | 11 | 37 | 54.9  | 26.339 | S | 27.476  | E | 5   | G | 1.1     | 10  | REPUBLIC OF SOUTH AFRICA. ML 3.6 (PRE).                           |  |
| 03   | 11 | 46 | 19.8  | 41.762 | N | 25.255  | E | 10  | G | 1.0     | 8   | GREECE-BULGARIA BORDER REGION                                     |  |
| 03   | 12 | 28 | 48.8  | 47.716 | N | 16.166  | E | 12  |   | 1.3     | 69  | AUSTRIA. ML 4.6 (GRF), 4.2 (CLL), 4.0 (FUR). Felt (VI) at Pitten. |  |
| 03   | 14 | 47 | 27.77 | 34.36  | N | 31.87   | E | 33  | N | 3.7     | 0.6 | 4   | CYPRUS REGION. ML 4.0 (CSS). Felt (III) at Paphos.   |
| 03   | 15 | 02 | 49.97 | 41.32  | N | 29.19   | E | 10  | G | 0.3     | 4   | TURKEY. ML 2.9 (ISK).   |  |
| 03   | 15 | 56 | 24.4* | 38.534 | N | 20.209  | E | 5   | G | 1.2     | 5   | GREECE. MD 3.1 (ATH).   |  |
| 03   | 17 | 21 | 47.8* | 37.264 | N | 3.006   | W | 10  | G | 0.2     | 7   | SPAIN. mbLg 2.4 (MDD).  |  |
| 03   | 17 | 35 | 40.5* | 37.271 | N | 2.976   | W | 10  | G | 0.7     | 8   | SPAIN. mbLg 2.3 (MDD).  |  |
| 03   | 17 | 40 | 18.2* | 37.269 | N | 3.002   | W | 10  | G | 0.3     | 8   | SPAIN. mbLg 2.7 (MDD).  |  |
| 03   | 18 | 42 | 43.5  | 37.317 | N | 2.978   | W | 17  |   | 0.8     | 20  | SPAIN. mbLg 3.5 (MDD). Felt (II) in the Guadix area.              |  |
| 03   | 19 | 11 | 17.7* | 58.546 | N | 150.926 | W | 81  |   |         | 28  | GULF OF ALASKA. <AEIC>.   |  |
| 03   | 19 | 18 | 06.27 | 59.77  | N | 6.22    | E | 5   | G | 0.3     | 4   | SOUTHERN NORWAY. MD 1.0 (BER).                                    |  |
| 03   | 19 | 22 | 45.1  | 41.401 | N | 20.994  | E | 10  | G | 0.7     | 6   | ALBANIA. ML 2.4 (SKO).  |  |
| 03   | 19 | 50 | 20.87 | 13.32  | N | 90.47   | W | 69  | ? | 3.9     | 1.0 | 10  | NEAR COAST OF GUATEMALA. MD 4.4 (GCG).   |
| 03   | 20 | 32 | 55.7  | 33.632 | N | 22.295  | W | 10  | G | 3.2     | 0.7 | 15  | NORTH ATLANTIC OCEAN   |
| 03   | 21 | 01 | 04.0* | 40.165 | N | 125.901 | W | 22  |   |         | 4   | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.2 (GM).            |  |
| 03   | 21 | 15 | 24.8  | 44.532 | N | 6.939   | E | 10  | G | 0.5     | 35  | FRANCE. ML 3.1 (GEN), 3.0 (LDG).                                  |  |
| 03   | 21 | 49 | 14.2  | 38.610 | N | 20.357  | E | 5   | G | 1.3     | 20  | GREECE. MD 3.3 (ATH).   |  |
| 03   | 22 | 36 | 39.0  | 38.648 | N | 20.629  | E | 5   | G | 0.7     | 6   | GREECE. MD 2.9 (ATH).   |  |
| 03   | 23 | 24 | 30.8  | 34.027 | S | 70.151  | W | 5   | G | 0.4     | 12  | CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).                      |  |
| 03   | 23 | 43 | 21.17 | 51.66  | N | 167.99  | W | 33  | N | 3.9     | 0.7 | 6   | FOX ISLANDS, ALEUTIAN ISLANDS  |
| 03   | 23 | 49 | 38.5* | 40.630 | N | 124.279 | W | 18  |   |         | 20  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.0 (GM).                |  |
| 04   | 00 | 02 | 13.5  | 44.036 | N | 7.251   | E | 5   | G | 0.2     | 14  | NORTHERN ITALY. ML 2.2 (LDG), 1.8 (GEN).                          |  |
| 04   | 00 | 38 | 28.7* | 40.208 | N | 123.120 | W | 36  |   | 3.3     | 46  | NORTHERN CALIFORNIA. <GM-P>. MD 3.9 (GM). ML 3.9 (BRK), 3.4 (GS). |  |
| 04   | 01 | 14 | 56.9* | 40.336 | N | 29.161  | E | 5   | G | 0.4     | 6   | TURKEY. ML 2.8 (ISK).   |  |
| 04   | 04 | 16 | 22.2* | 34.043 | S | 70.064  | W | 5   | G | 0.5     | 8   | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).                      |  |
| 04   | 04 | 27 | 25.3  | 40.032 | N | 20.665  | E | 5   | G | 0.6     | 17  | GREECE-ALBANIA BORDER REGION. ML 3.5 (TIR).                       |  |
| 04   | 05 | 07 | 57.3* | 39.490 | N | 28.195  | E | 5   | G | 1.0     | 7   | TURKEY. ML 3.0 (ISK).   |  |
| 04   | 05 | 21 | 07.7* | 33.653 | S | 70.582  | W | 10  | G | 0.8     | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.1 (SAN).                      |  |
| a 04 | 05 | 23 | 16.5  | 2.719  | N | 126.761 | E | 55  | * | 5.2 4.4 | 1.1 | 44  | NORTHERN MOLUCCA SEA. Mw 5.1 (HRV).  |
| 04   | 06 | 17 | 13.0* | 43.743 | N | 147.539 | E | 42  | D | 4.5     | 1.1 | 18  | KURIL ISLANDS  |
| 04   | 06 | 32 | 02.3  | 30.891 | S | 71.931  | W | 33  | N |         | 0.5 | 13  | NEAR COAST OF CENTRAL CHILE. MD 4.3 (SAN).   |
| 04   | 06 | 38 | 57.3* | 43.461 | N | 7.352   | W | 29  | * |         | 0.9 | 7   | SPAIN. mbLg 3.2 (MDD).   |
| 04   | 08 | 24 | 50.5* | 41.781 | N | 24.594  | E | 10  | G | 0.5     | 7   | GREECE-BULGARIA BORDER REGION                                     |  |
| 04   | 08 | 30 | 55.17 | 49.73  | S | 114.21  | E | 10  | G | 4.7 4.8 | 0.9 | 10  | SOUTH OF AUSTRALIA   |
| 04   | 08 | 42 | 38.9* | 67.596 | N | 161.566 | W | 33  | N | 3.5     | 1.3 | 9   | NORTHERN ALASKA. ML 4.2 (PMR).   |
| 04   | 08 | 43 | 47.3* | 44.353 | N | 7.348   | E | 10  | G | 0.2     | 6   | NORTHERN ITALY. ML 1.6 (GEN).                                     |  |
| 04   | 09 | 45 | 54.2* | 43.925 | N | 9.088   | E | 10  | G | 0.7     | 13  | CORSICA. ML 2.6 (GEN).  |  |
| 04   | 10 | 03 | 02.2* | 62.794 | N | 148.994 | W | 66  |   |         | 51  | CENTRAL ALASKA. <AEIC>. ML 3.0 (AEIC), 3.0 (PMR).                 |  |
| 04   | 10 | 16 | 32.57 | 14.08  | N | 91.50   | W | 33  | N |         | 0.1 | 6   | GUATEMALA. MD 4.1 (GCG).   |
| 04   | 10 | 17 | 27.5* | 32.255 | S | 71.401  | W | 33  | N |         | 0.6 | 11  | NEAR COAST OF CENTRAL CHILE. MD 3.9 (SAN).   |
| 04   | 10 | 35 | 14.3* | 37.343 | N | 121.705 | W | 9   |   |         | 81  | CENTRAL CALIFORNIA. <GM-P>. MD 3.6 (GM). ML 3.5 (GS), 3.1 (BRK).  |  |
| 04   | 11 | 37 | 23.97 | 36.75  | N | 28.92   | E | 10  | G |         | 0.9 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).  |
| 04   | 11 | 46 | 56.5* | 6.978  | S | 155.707 | E | 212 | ? | 4.6     | 0.4 | 6   | SOLOMON ISLANDS  |
| 04   | 11 | 47 | 20.77 | 38.51  | N | 20.17   | E | 5   | G |         | 0.3 | 4   | GREECE. MD 2.9 (ATH).  |
| 04   | 12 | 06 | 37.0  | 44.077 | N | 110.739 | W | 5   | G |         | 0.5 | 22  | YELLOWSTONE REGION, WYOMING. ML 2.2 (GS).  |
| 04   | 12 | 30 | 01.8  | 44.088 | N | 110.747 | W | 5   | G |         | 0.4 | 26  | YELLOWSTONE REGION, WYOMING. ML 3.1 (GS).  |

|      |    |    |       |        |   |         |   |     |   |         |      |     |  |
|------|----|----|-------|--------|---|---------|---|-----|---|---------|------|-----|--|
| 04   | 12 | 44 | 53.27 | 43.75  | N | 148.39  | E | 33  | N | 3.7     | 1.1  | 7   | EAST OF KURIL ISLANDS  |
| 04   | 12 | 48 | 27.07 | 44.79  | N | 6.78    | E | 5   | G |         | 0.2  | 4   | FRANCE. ML 1.5 (GEN).  |
| 04   | 14 | 18 | 23.4  | 50.242 | N | 12.440  | E | 10  | G |         | 0.3  | 10  | GERMANY. ML 2.4 (GRF), 2.2 (FUR).  |
| 04   | 14 | 24 | 14.6  | 50.253 | N | 12.415  | E | 14  |   |         | 0.3  | 10  | GERMANY. ML 2.4 (GRF), 2.2 (FUR), 2.0 (PRU).   |
| 04   | 14 | 26 | 07.9  | 50.242 | N | 12.436  | E | 10  | G |         | 0.2  | 10  | GERMANY. ML 2.3 (GRF), 2.2 (FUR), 1.7 (PRU).   |
| 04   | 14 | 33 | 02.3* | 50.270 | N | 12.418  | E | 10  | G |         | 0.3  | 5   | GERMANY  |
| 04   | 14 | 51 | 18.6  | 41.922 | N | 20.224  | E | 10  | G | 3.9     | 1.2  | 69  | ALBANIA. ML 4.2 (SKO), 3.7 (TIR). MD 4.1 (TTG).  |
| 04   | 15 | 09 | 51.9% | 36.957 | N | 28.911  | E | 10  | G |         | 0.4  | 5   | DODECANESE ISLANDS. ML 3.4 (ISK).  |
| 04   | 15 | 21 | 14.8% | 43.049 | N | 0.893   | W | 5   | G |         | 0.3  | 6   | PYRENEES. ML 1.0 (STR).  |
| 04   | 16 | 59 | 55.4% | 40.275 | N | 23.064  | E | 5   | G |         | 0.5  | 7   | GREECE   |
| 04   | 17 | 21 | 26.3  | 41.924 | N | 144.948 | E | 35  | D | 4.6 4.2 | 1.0  | 23  | HOKKAIDO, JAPAN REGION   |
| 04   | 17 | 28 | 10.0  | 36.382 | N | 6.019   | W | 10  | G |         | 1.2  | 13  | STRAIT OF GIBRALTAR. MD 2.9 (SFS). mbLg 2.6 (MDD).   |
| 04   | 17 | 32 | 12.47 | 59.82  | N | 6.58    | E | 5   | G |         | 0.3  | 4   | SOUTHERN NORWAY. ML 1.2 (NAO). MD 1.4 (BER).   |
| 04   | 17 | 42 | 30.0  | 36.386 | N | 6.000   | W | 10  | G |         | 1.2  | 10  | STRAIT OF GIBRALTAR. MD 2.3 (SFS). mbLg 2.0 (MDD).   |
| 04   | 17 | 45 | 11.3  | 50.247 | N | 12.440  | E | 10  | G |         | 0.4  | 9   | GERMANY. ML 2.3 (GRF), 2.2 (FUR).  |
| 04   | 17 | 47 | 14.6  | 50.233 | N | 12.425  | E | 10  | G |         | 0.6  | 8   | GERMANY. ML 1.9 (GRF), 1.3 (PRU).  |
| 04   | 18 | 12 | 34.6* | 2.621  | N | 95.845  | E | 27  | D | 4.9 4.3 | 1.2  | 20  | OFF W COAST OF NORTHERN SUMATERA   |
| 04   | 19 | 02 | 15.3* | 15.450 | S | 167.697 | E | 33  | N | 4.5 4.8 | 0.7  | 15  | VANUATU ISLANDS  |
| 04   | 19 | 28 | 46.7% | 32.412 | S | 71.178  | W | 70  | G |         | 0.5  | 9   | NEAR COAST OF CENTRAL CHILE. MD 3.4 (SAN).   |
| 04   | 19 | 29 | 05.8* | 50.282 | N | 12.404  | E | 10  | G |         | 0.4  | 5   | GERMANY. ML 1.7 (GRF).   |
| 04   | 19 | 54 | 38.8* | 24.145 | S | 66.968  | W | 183 | * | 4.5     | 1.2  | 20  | SALTA PROVINCE, ARGENTINA  |
| 04   | 21 | 58 | 57.4* | 39.337 | N | 71.790  | E | 33  | N | 4.6     | 1.4  | 18  | TAJIKISTAN   |
| a 04 | 22 | 05 | 57.3  | 35.587 | S | 178.431 | E | 160 | G | 5.4     | 1.2  | 86  | OFF E. COAST OF N. ISLAND, N.Z. Mw 5.4 (HRV).  |
| 04   | 22 | 50 | 09.8  | 36.377 | N | 5.992   | W | 10  | G |         | 0.8  | 13  | STRAIT OF GIBRALTAR. mbLg 2.8 (MDD). MD 2.8 (SFS).   |
| 04   | 23 | 11 | 56.07 | 10.50  | N | 60.90   | W | 33  | N |         | 0.3  | 4   | TRINIDAD. MD 3.1 (TRN).  |
| 04   | 23 | 13 | 01.5* | 45.613 | N | 15.656  | E | 10  | G |         | 1.0  | 14  | NORTHWESTERN BALKAN REGION. ML 3.3 (ZAG), 3.1 (VIE). MD 3.5 (LJU), 3.1 (TRI). Felt in the Samobor area.  |
| 04   | 23 | 39 | 34.7* | 35.400 | N | 25.509  | E | 33  | N | 3.6     | 1.3  | 10  | CRETE. MD 4.1 (ATH).   |
| 05   | 00 | 25 | 14.87 | 12.04  | S | 114.70  | E | 33  | N | 4.5     | 1.3  | 8   | NORTHWEST OF AUSTRALIA   |
| 05   | 00 | 25 | 54.5* | 31.987 | S | 70.194  | W | 100 | G |         | 0.6  | 12  | CHILE-ARGENTINA BORDER REGION. MD 4.0 (SAN).   |
| 05   | 00 | 27 | 18.27 | 17.76  | S | 178.37  | W | 592 | ? | 4.4     | 1.5  | 13  | FIJI ISLANDS REGION  |
| 05   | 00 | 37 | 53.9  | 50.250 | N | 12.429  | E | 10  | G |         | 0.3  | 9   | GERMANY. ML 2.5 (GRF), 2.4 (FUR), 2.2 (PRU).   |
| 05   | 00 | 43 | 25.7  | 50.256 | N | 12.419  | E | 10  | G |         | 0.2  | 8   | GERMANY. ML 1.8 (FUR), 1.7 (GRF), 1.6 (PRU), 1.3 (CLL).  |
| 05   | 00 | 45 | 28.7  | 50.283 | N | 12.333  | E | 26  |   |         | 0.6  | 8   | GERMANY. ML 2.1 (FUR), 2.0 (PRU), 1.8 (GRF).   |
| 05   | 00 | 46 | 15.3* | 15.452 | S | 167.795 | E | 33  | N | 4.9 4.7 | 1.0  | 43  | VANUATU ISLANDS  |
| 05   | 02 | 06 | 59.5* | 33.485 | S | 72.250  | W | 10  | G |         | 0.3  | 11  | OFF COAST OF CENTRAL CHILE. MD 3.9 (SAN).  |
| 05   | 03 | 09 | 05.9* | 44.247 | N | 146.975 | E | 33  | N | 4.2     | 1.0  | 15  | KURIL ISLANDS  |
| 05   | 03 | 29 | 03.97 | 11.68  | S | 114.30  | E | 33  | N | 4.2     | 0.8  | 6   | SOUTH OF BALI, INDONESIA   |
| 05   | 04 | 00 | 10.07 | 46.96  | N | 7.74    | E | 10  | G |         | 0.7  | 4   | SWITZERLAND. ML 2.3 (LDG).   |
| 05   | 04 | 13 | 01.27 | 13.15  | N | 92.13   | W | 30  | * | 4.1     | 0.6  | 8   | OFF COAST OF CHIAPAS, MEXICO. MD 4.1 (GCG).  |
| 05   | 05 | 15 | 22.9* | 50.236 | N | 156.503 | E | 33  | N | 5.0     | 0.9  | 21  | KURIL ISLANDS  |
| 05   | 06 | 43 | 14.6% | 34.018 | S | 71.209  | W | 60  | G |         | 0.2  | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.4 (SAN).   |
| 05   | 07 | 07 | 08.07 | 9.11   | S | 116.44  | E | 33  | N | 4.0     | 0.8  | 6   | SUMBAWA REGION, INDONESIA  |
| 05   | 07 | 09 | 07.1  | 48.041 | N | 146.861 | E | 456 |   | 4.7     | 0.7  | 148 | SEA OF OKHOTSK   |
| 05   | 08 | 41 | 16.0  | 38.670 | N | 20.684  | E | 10  | G |         | 0.8  | 8   | GREECE. MD 3.1 (ATH).  |
| 05   | 11 | 38 | 38.7% | 60.119 | N | 152.894 | W | 115 |   |         |      | 36  | SOUTHERN ALASKA. <AEIC>.   |
| 05   | 12 | 00 | 35.77 | 27.62  | N | 33.99   | E | 10  | G |         | 0.6  | 5   | EGYPT. MD 1.9 (RYD).   |
| 05   | 13 | 12 | 40.57 | 28.66  | N | 34.42   | E | 10  | G |         | 0.7  | 6   | EGYPT. MD 2.2 (RYD).   |
| 05   | 14 | 27 | 38.8  | 38.671 | N | 20.550  | E | 5   | G |         | 0.6  | 12  | GREECE   |
| 05   | 15 | 45 | 07.9% | 34.313 | S | 71.000  | W | 70  | G |         | 0.1  | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.5 (SAN).   |
| 05   | 15 | 50 | 16.4* | 15.314 | S | 167.698 | E | 33  | N | 4.6     | 1.0  | 20  | VANUATU ISLANDS  |
| 05   | 16 | 02 | 07.5* | 1.961  | S | 135.635 | E | 33  | N | 5.2 4.4 | 0.9  | 16  | IRIAN JAYA REGION, INDONESIA   |
| a 05 | 16 | 20 | 09.3  | 8.576  | S | 159.833 | E | 49  | G | 5.8 5.1 | 0.9  | 176 | SOLOMON ISLANDS. Mw 5.5 (HRV). Felt (III) at Honiara. Depth from broadband displacement seismograms.   |
| 05   | 16 | 22 | 17.8  | 43.232 | N | 146.984 | E | 34  | D | 5.0 4.7 | 1.0  | 67  | KURIL ISLANDS  |
| 05   | 17 | 25 | 40.3  | 41.685 | N | 3.969   | E | 10  | G |         | 0.9  | 7   | SPAIN. ML 2.5 (LDG). mbLg 2.6 (MDD).   |
| 05   | 18 | 24 | 55.9* | 42.930 | N | 146.422 | E | 69  | * | 4.9     | 1.2  | 34  | OFF COAST OF HOKKAIDO, JAPAN   |
| 05   | 19 | 15 | 35.9* | 37.479 | N | 29.626  | E | 10  | G |         | 0.2  | 5   | TURKEY. ML 2.9 (ISK).  |
| 05   | 19 | 19 | 55.97 | 2.79   | S | 139.68  | E | 94  | ? |         | 1.0  | 5   | NEAR NORTH COAST OF IRIAN JAYA   |
| 05   | 20 | 49 | 46.37 | 30.08  | S | 136.87  | E | 33  | N |         | 1.1  | 6   | SOUTH AUSTRALIA  |
| 05   | 21 | 02 | 31.57 | 30.47  | S | 137.99  | E | 10  | G |         | 1.4  | 4   | SOUTH AUSTRALIA  |
| 05   | 21 | 09 | 57.0* | 36.116 | N | 141.468 | E | 10  | G | 4.6 4.1 | 1.4  | 19  | NEAR EAST COAST OF HONSHU, JAPAN   |
| 05   | 21 | 14 | 10.5  | 46.478 | N | 12.719  | E | 10  | G |         | 0.9  | 19  | NORTHERN ITALY. ML 2.7 (LDG), 2.6 (VIE), 2.5 (LJU).  |
| 05   | 21 | 17 | 48.9% | 45.962 | N | 2.890   | E | 10  | G |         | 0.5  | 9   | FRANCE. ML 1.9 (LDG).  |
| 05   | 21 | 21 | 13.4% | 28.666 | N | 34.726  | E | 10  | G |         | 0.7  | 6   | EGYPT. MD 1.9 (RYD).   |
| 05   | 22 | 05 | 16.47 | 53.87  | N | 1.02    | W | 5   | G |         | 0.2  | 4   | UNITED KINGDOM. ML 2.2 (BGS). Felt (III) at Stillingfleet. Mining induced.   |
| 05   | 22 | 29 | 06.87 | 10.18  | N | 62.40   | W | 150 | G |         | 0.5  | 6   | NEAR COAST OF VENEZUELA. MD 3.6 (TRN).   |
| 05   | 22 | 44 | 22.5  | 51.542 | N | 16.177  | E | 5   | G |         | 0.6  | 18  | POLAND. ML 3.5 (GRF), 3.4 (VIE), 3.4 (MOX).  |
| 06   | 01 | 02 | 27.4% | 17.655 | N | 94.654  | W | 33  | N |         | 1.3  | 6   | CHIAPAS, MEXICO  |
| 06   | 01 | 40 | 47.8% | 40.632 | N | 27.750  | E | 10  | G |         | 0.5  | 7   | TURKEY. ML 3.1 (ISK).  |
| 06   | 02 | 01 | 30.3  | 33.337 | S | 71.146  | W | 33  | N |         | 0.6  | 13  | NEAR COAST OF CENTRAL CHILE. MD 4.1 (SAN).   |
| 06   | 03 | 21 | 26.8% | 40.674 | N | 23.460  | E | 5   | G |         | 0.4  | 8   | GREECE   |
| 06   | 03 | 36 | 24.3% | 34.294 | N | 118.390 | W | 8   |   |         |      | 66  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.7 (PAS), 3.7 (GS). Felt in the Los Angeles-San Fernando area.   |
| 06   | 03 | 48 | 18.2% | 34.299 | N | 118.388 | W | 9   |   |         |      | 25  | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.9 (PAS).  |
| 06   | 03 | 48 | 34.4% | 34.293 | N | 118.389 | W | 9   |   | 4.3 3.8 | 1.12 | 112 | SOUTHERN CALIFORNIA. <PAS-P>. ML 4.5 (PAS), 4.5 (GS). Felt (V) at Chatsworth and Redondo Beach; (IV) at Canoga Park, Corona, Culver City, Duarte, El Monte, Glendale, La Crescenta, Long Beach, Los Angeles, Montrose, Paramount, Sierra Madre, Simi Valley, Sun Valley, Thousand Oaks and Tujunga; (III) at Agoura Hills, Avalon, Compton, Lakewood, Lynwood, Monrovia, Palmdale, Pearblossom, Rosemead, Tustin and Whittier. |
| 06   | 04 | 42 | 53.1* | 40.724 | N | 27.386  | E | 5   | G |         | 0.6  | 5   | TURKEY. ML 2.8 (ISK).  |
| 06   | 05 | 15 | 20.7% | 44.275 | N | 6.406   | E | 10  | G |         | 0.1  | 7   | FRANCE. ML 2.2 (GEN).  |
| 06   | 06 | 04 | 53.2* | 30.343 | N | 130.889 | E | 117 | * | 4.5     | 1.2  | 17  | KYUSHU, JAPAN  |
| 06   | 06 | 52 | 07.9% | 67.700 | N | 160.761 | W | 0   |   | 4.4     |      | 37  | NORTHERN ALASKA. <AEIC>. ML 3.8 (AEIC), 4.3 (PMR).   |
| 06   | 07 | 18 | 01.7  | 36.346 | N | 6.036   | W | 10  | G |         | 1.0  | 9   | STRAIT OF GIBRALTAR. MD 2.6 (SFS). mbLg 2.3 (MDD).   |
| 06   | 07 | 48 | 34.47 | 37.04  | N | 28.95   | E | 10  | G |         | 0.2  | 4   | TURKEY. ML 3.1 (ISK).  |
| a 06 | 09 | 06 | 07.0  | 15.316 | S | 75.294  | W | 27  |   | 5.3 5.0 | 1.1  | 127 | NEAR COAST OF PERU. Mw 5.5 (HRV). Felt (IV) at Nazca and Palpa; (III) at Ica; (II) at Caraveli.  |
| 06   | 09 | 28 | 55.2% | 37.120 | N | 3.606   | W | 10  | G |         | 1.1  | 13  | SPAIN. mbLg 2.9 (MDD). Felt (III) in the Granada area.   |

|      |    |    |       |          |           |       |         |     |     |   |
|------|----|----|-------|----------|-----------|-------|---------|-----|-----|---|
| 06   | 10 | 12 | 53.6* | 42.937 N | 147.221 E | 33 N  | 4.6     | 1.5 | 20  | OFF COAST OF HOKKAIDO, JAPAN  |
| 06   | 10 | 19 | 53.0* | 43.105 N | 0.621 W   | 5 G   |         | 0.5 | 5   | PYRENEES. ML 1.0 (STR).   |
| 06   | 11 | 24 | 14.4* | 67.547 N | 161.881 W | 10 G  |         | 0.4 | 5   | NORTHERN ALASKA. ML 3.0 (PMR).  |
| 06   | 11 | 44 | 32.9* | 15.22 S  | 75.30 W   | 57 ?  | 4.1     | 1.3 | 7   | NEAR COAST OF PERU  |
| 06   | 12 | 18 | 30.2* | 72.488 N | 2.184 E   | 10 G  | 3.9 3.9 | 1.3 | 8   | NORWEGIAN SEA   |
| 06   | 14 | 25 | 57.8* | 57.752 N | 142.773 W | 10 G  |         | 0.6 | 15  | GULF OF ALASKA. ML 3.1 (AEIC).  |
| 06   | 15 | 19 | 40.2* | 46.638 N | 14.998 E  | 5 G   |         | 0.4 | 5   | NORTHWESTERN BALKAN REGION. ML 2.0 (VIE).   |
| 06   | 15 | 37 | 46.3* | 7.004 S  | 145.610 E | 102 * | 4.2     | 1.0 | 7   | NEAR S COAST OF NEW GUINEA, PNG.  |
| 06   | 16 | 52 | 02.0* | 63.211 N | 150.652 W | 131   |         |     | 29  | CENTRAL ALASKA. <AEIC>.   |
| 06   | 17 | 38 | 34.7* | 72.559 N | 3.342 E   | 10 G  | 4.5     | 1.2 | 36  | NORWEGIAN SEA   |
| 06   | 17 | 39 | 14.6* | 8.74 N   | 83.86 W   | 5 G   | 4.0     | 0.9 | 5   | COSTA RICA. MD 4.3 (UPA).   |
| 06   | 17 | 50 | 27.3* | 43.080 N | 147.225 E | 33 N  | 4.4     | 1.3 | 22  | KURIL ISLANDS   |
| 06   | 17 | 57 | 03.9* | 59.834 N | 5.110 E   | 5 G   |         | 0.3 | 7   | SOUTHERN NORWAY. MD 1.9 (BER).  |
| 06   | 19 | 59 | 06.9* | 38.815 N | 2.906 W   | 10 G  |         | 1.1 | 12  | SPAIN. mbLg 3.1 (MDD).  |
| 06   | 20 | 28 | 38.7* | 36.513 N | 2.834 W   | 5 G   |         | 0.7 | 14  | STRAIT OF GIBRALTAR. mbLg 3.4 (MDD). Felt (III) in the Adra area, Spain.  |
| 06   | 20 | 52 | 38.2* | 43.73 N  | 6.59 E    | 5 G   |         | 0.2 | 4   | NEAR SOUTH COAST OF FRANCE. ML 2.2 (LDG).   |
| 06   | 20 | 53 | 01.1  | 43.743 N | 128.032 W | 10 G  | 3.4     | 0.5 | 66  | OFF COAST OF OREGON   |
| 06   | 21 | 00 | 08.5* | 28.880 N | 34.821 E  | 10 G  |         | 0.8 | 5   | EGYPT. MD 2.4 (RYD).  |
| 06   | 21 | 22 | 21.5* | 45.00 N  | 7.18 E    | 10 G  |         | 0.3 | 4   | NORTHERN ITALY. ML 1.8 (GEN).   |
| 06   | 21 | 59 | 34.3* | 43.77 N  | 6.47 E    | 5 G   |         | 0.3 | 4   | NEAR SOUTH COAST OF FRANCE. ML 2.2 (LDG).   |
| 06   | 22 | 00 | 52.6  | 39.312 N | 20.847 E  | 25    | 4.0     | 1.1 | 56  | GREECE-ALBANIA BORDER REGION. MD 3.7 (ATH). ML 3.4 (TIR), 3.3 (TTG).  |
| 06   | 22 | 49 | 08.8* | 40.556 N | 125.066 W | 24    |         |     | 26  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.1 (GM). ML 3.1 (BRK).  |
| 06   | 23 | 13 | 31.0* | 43.068 N | 0.948 W   | 5 G   |         | 0.4 | 5   | PYRENEES. ML 1.0 (STR).   |
| 06   | 23 | 19 | 44.7* | 47.41 N  | 11.68 E   | 10 G  |         | 0.3 | 4   | AUSTRIA. ML 1.2 (VIE).  |
| 06   | 23 | 35 | 15.1  | 28.964 N | 94.654 E  | 10 G  | 4.9     | 1.0 | 89  | EASTERN XIZANG-INDIA BORDER REG.  |
| 07   | 02 | 34 | 27.5* | 35.93 N  | 139.94 E  | 109 ? |         | 0.3 | 7   | NEAR S. COAST OF HONSHU, JAPAN  |
| 07   | 03 | 21 | 40.7* | 37.347 N | 121.709 W | 9     |         |     | 89  | CENTRAL CALIFORNIA. <GM-P>. MD 3.7 (GM). ML 3.8 (BRK), 3.7 (GS). Felt (III) at San Jose and Santa Cruz; (II) at Mountain View. Felt throughout the southern San Francisco Bay area. |
| 07   | 03 | 27 | 22.3* | 37.348 N | 121.711 W | 8     |         |     | 53  | CENTRAL CALIFORNIA. <GM-P>. MD 3.1 (GM). ML 3.1 (BRK), 3.1 (GS). Felt in the epicentral area.   |
| a 07 | 03 | 37 | 54.8  | 23.422 S | 66.639 W  | 235 G | 5.6     | 1.3 | 351 | JUJUY PROVINCE, ARGENTINA. Mw 6.0 (GS), 5.9 (HRV). mb 5.8 (BRK). Mo=9.6*10*17 Nm (PPT). Depth from broadband displacement seismograms.  |
| 07   | 05 | 25 | 21.3  | 44.510 N | 6.772 E   | 14    |         | 0.4 | 16  | FRANCE. ML 2.3 (GEN), 2.0 (LDG).  |
| 07   | 06 | 18 | 59.9* | 32.929 S | 70.960 W  | 60 G  |         | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
| 07   | 06 | 36 | 45.5  | 38.734 N | 20.522 E  | 5 G   |         | 1.3 | 13  | GREECE. MD 3.5 (ATH).   |
| 07   | 06 | 50 | 30.6* | 44.32 N  | 7.33 E    | 10 G  |         | 0.1 | 4   | NORTHERN ITALY. ML 1.3 (GEN).   |
| 07   | 07 | 01 | 15.4  | 16.721 N | 62.201 W  | 10 G  |         | 0.5 | 8   | LEEWARD ISLANDS. ML 3.3 (FDF). MD 3.0 (TRN).  |
| 07   | 08 | 50 | 37.9* | 50.29 N  | 18.84 E   | 10 G  |         | 0.3 | 4   | POLAND. MG 3.0 (WAR).   |
| 07   | 09 | 04 | 52.2* | 33.920 S | 71.231 W  | 60 G  |         | 0.2 | 11  | NEAR COAST OF CENTRAL CHILE. MD 3.5 (SAN).  |
| 07   | 09 | 08 | 41.9* | 34.308 N | 118.460 W | 6     |         |     | 32  | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS), 2.7 (GS).   |
| 07   | 09 | 44 | 56.1* | 39.102 N | 27.711 E  | 10 G  |         | 0.4 | 5   | TURKEY. ML 2.8 (ISK).   |
| 07   | 10 | 00 | 14.4* | 60.037 N | 4.588 E   | 5 G   |         | 0.4 | 8   | SOUTHERN NORWAY. MD 1.9 (BER).  |
| 07   | 10 | 04 | 36.4* | 60.076 N | 4.587 E   | 5 G   |         | 0.6 | 8   | SOUTHERN NORWAY. MD 1.8 (BER).  |
| 07   | 10 | 09 | 54.1* | 39.14 N  | 27.79 E   | 10 G  |         | 0.2 | 4   | TURKEY. ML 2.8 (ISK).   |
| 07   | 10 | 10 | 50.1* | 60.089 N | 4.561 E   | 5 G   |         | 0.1 | 5   | SOUTHERN NORWAY. MD 1.6 (BER).  |
| 07   | 10 | 14 | 54.5* | 60.128 N | 4.605 E   | 5 G   |         | 0.2 | 7   | SOUTHERN NORWAY. MD 1.7 (BER).  |
| 07   | 10 | 40 | 03.9* | 32.767 S | 70.164 W  | 110 G |         | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
| 07   | 10 | 45 | 41.4* | 62.912 N | 151.297 W | 111   |         |     | 54  | CENTRAL ALASKA. <AEIC>.   |
| 07   | 14 | 58 | 48.6* | 31.48 S  | 71.92 W   | 100 G |         | 0.8 | 12  | NEAR COAST OF CENTRAL CHILE. MD 4.3 (SAN).  |
| 07   | 15 | 40 | 06.9* | 35.760 N | 118.062 W | 3     |         |     | 27  | CENTRAL CALIFORNIA. <PAS-P>. ML 2.8 (PAS), 2.8 (GS).  |
| 07   | 16 | 27 | 06.4  | 38.713 N | 20.482 E  | 5 G   |         | 0.4 | 10  | GREECE. MD 2.9 (ATH).   |
| 07   | 16 | 56 | 08.5* | 67.011 N | 154.068 W | 15    |         |     | 27  | NORTHERN ALASKA. <AEIC>. ML 3.6 (AEIC), 3.8 (PMR).  |
| 07   | 17 | 00 | 58.5* | 0.67 N   | 101.42 W  | 10 G  | 4.5     | 1.2 | 10  | EAST CENTRAL PACIFIC OCEAN  |
| 07   | 17 | 00 | 59.1* | 7.69 N   | 84.23 W   | 5 G   | 4.5     | 0.7 | 6   | OFF COAST OF COSTA RICA. MD 4.4 (UPA).  |
| 07   | 18 | 00 | 55.0* | 64.650 N | 149.717 W | 19    |         |     | 22  | CENTRAL ALASKA. <AEIC>. ML 3.0 (AEIC), 3.4 (PMR).   |
| 07   | 20 | 03 | 04.9* | 58.887 N | 137.056 W | 0     |         |     | 7   | SOUTHEASTERN ALASKA. <AEIC>. ML 2.7 (AEIC).   |
| a 07 | 20 | 22 | 18.3  | 3.459 S  | 130.940 E | 33 N  | 5.2 4.9 | 1.3 | 41  | SERAM, INDONESIA. Mw 5.5 (HRV).   |
| 07   | 21 | 01 | 40.5* | 16.373 N | 94.628 W  | 33 N  |         | 1.2 | 6   | OAXACA, MEXICO  |
| 07   | 21 | 04 | 27.8* | 33.534 S | 71.890 W  | 20 G  |         | 0.3 | 9   | NEAR COAST OF CENTRAL CHILE. MD 3.6 (SAN).  |
| 07   | 21 | 45 | 36.8  | 44.550 N | 7.224 E   | 10 G  |         | 0.5 | 23  | NORTHERN ITALY. ML 2.9 (GEN), 2.6 (LDG).  |
| 07   | 21 | 52 | 10.3  | 30.928 N | 51.145 E  | 28 D  | 4.9     | 1.2 | 112 | NORTHERN IRAN   |
| 07   | 22 | 07 | 16.4* | 40.452 N | 23.210 E  | 10 G  |         | 0.3 | 7   | GREECE  |
| a 07 | 23 | 08 | 37.5* | 2.949 S  | 119.830 E | 28 *  | 5.2 4.2 | 1.0 | 9   | SULAWESI, INDONESIA. Mw 5.3 (HRV).  |
| 08   | 00 | 54 | 44.0* | 40.631 N | 125.860 W | 22    |         |     | 76  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.6 (GM). ML 3.6 (BRK), 3.4 (GS).  |
| 08   | 00 | 55 | 47.3* | 43.56 N  | 147.67 E  | 33 N  | 4.3     | 1.0 | 9   | KURIL ISLANDS   |
| 08   | 03 | 29 | 11.9  | 52.988 N | 171.079 E | 33 N  | 5.0 4.9 | 0.9 | 124 | NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).   |
| 08   | 03 | 59 | 38.2  | 15.232 S | 75.198 W  | 47 *  | 4.4     | 0.6 | 13  | NEAR COAST OF PERU. Felt (II) in the Nana area.   |
| 08   | 04 | 32 | 52.7* | 43.32 N  | 146.79 E  | 33 N  | 4.6     | 1.2 | 9   | KURIL ISLANDS   |
| a 08 | 05 | 09 | 08.2  | 19.426 S | 168.954 E | 114   | 5.3     | 1.0 | 74  | VANUATU ISLANDS. Mw 5.4 (HRV).  |
| 08   | 05 | 55 | 44.9* | 43.75 N  | 5.38 E    | 10 G  |         | 0.3 | 7   | NEAR SOUTH COAST OF FRANCE  |
| 08   | 06 | 17 | 10.1* | 33.137 S | 70.290 W  | 100 G |         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |
| 08   | 06 | 19 | 06.8* | 42.013 N | 21.241 E  | 10 G  |         | 1.0 | 7   | NORTHWESTERN BALKAN REGION. ML 2.8 (SKO). Felt (V) in the Skopje area.  |
| 08   | 07 | 10 | 47.9* | 34.51 S  | 70.71 W   | 100 G |         | 0.2 | 7   | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |
| 08   | 07 | 55 | 48.5  | 38.706 N | 20.529 E  | 10 G  |         | 1.0 | 18  | GREECE. MD 3.4 (ATH).   |
| 08   | 08 | 12 | 58.0* | 58.351 N | 154.719 W | 86    |         |     | 36  | ALASKA PENINSULA. <AEIC>.   |
| a 08 | 08 | 30 | 26.8  | 1.967 N  | 120.844 E | 38    | 5.5 4.9 | 1.0 | 85  | MINAHASSA PENINSULA, SULAWESI. Mw 5.7 (HRV).  |
| 08   | 08 | 45 | 40.1* | 67.58 N  | 162.57 W  | 10 G  |         | 1.5 | 6   | NORTHERN ALASKA. ML 3.1 (PMR).  |
| 08   | 09 | 51 | 02.6  | 38.685 N | 20.489 E  | 10 G  |         | 0.9 | 16  | GREECE. MD 3.3 (ATH).   |
| 08   | 10 | 47 | 55.6  | 36.450 N | 70.927 E  | 200 * | 5.1     | 1.0 | 37  | HINDU KUSH REGION, AFGHANISTAN. Felt at Peshawar, Pakistan.   |
| 08   | 10 | 48 | 58.5  | 38.681 N | 20.536 E  | 5 G   |         | 1.1 | 19  | GREECE. ML 3.4 (TIR). MD 3.5 (ATH).   |
| 08   | 11 | 18 | 54.4* | 37.996 N | 20.159 E  | 10 G  |         | 1.3 | 12  | IONIAN SEA. MD 3.2 (ATH).   |
| 08   | 11 | 56 | 57.3* | 67.639 N | 161.509 W | 10 G  | 3.7     | 1.1 | 33  | NORTHERN ALASKA. ML 4.1 (PMR).  |
| 08   | 12 | 18 | 01.3* | 56.10 S  | 24.75 W   | 33 N  | 5.2     | 1.3 | 8   | SOUTH SANDWICH ISLANDS REGION   |
| 08   | 12 | 54 | 38.0  | 28.961 N | 52.580 E  | 33 N  | 5.0     | 0.6 | 42  | SOUTHERN IRAN   |

|      |    |    |       |        |   |         |   |     |   |     |     |     |     |   |
|------|----|----|-------|--------|---|---------|---|-----|---|-----|-----|-----|-----|---|
| 08   | 13 | 00 | 09.6* | 3.062  | N | 126.920 | E | 33  | N | 4.9 | 4.5 | 1.5 | 18  | TALAUD ISLANDS, INDONESIA   |
| 08   | 13 | 01 | 32.7* | 30.439 | N | 79.686  | E | 68  | ? | 4.9 |     | 0.7 | 8   | XIZANG-INDIA BORDER REGION  |
| 08   | 14 | 46 | 56.07 | 18.12  | S | 177.74  | W | 640 | ? | 4.4 |     | 0.4 | 7   | FIJI ISLANDS REGION   |
| 08   | 14 | 54 | 53.2* | 44.211 | N | 8.149   | E | 10  | G |     |     | 1.0 | 5   | NORTHERN ITALY  |
| 08   | 15 | 25 | 31.97 | 34.21  | S | 71.93   | W | 33  | N |     |     | 0.9 | 9   | NEAR COAST OF CENTRAL CHILE. MD 3.5 (SAN).  |
| 08   | 15 | 25 | 51.0* | 36.844 | N | 121.578 | W | 8   |   |     |     |     | 19  | CENTRAL CALIFORNIA. <GM-P>. MD 3.0 (GM).  |
| 08   | 15 | 27 | 22.6  | 41.149 | N | 20.760  | E | 10  | G |     |     | 0.9 | 7   | ALBANIA. ML 2.2 (TIR), 2.0 (SKO).   |
| 08   | 15 | 31 | 50.5* | 32.476 | S | 71.523  | W | 33  | N |     |     | 0.8 | 12  | NEAR COAST OF CENTRAL CHILE. MD 3.9 (SAN).  |
| 08   | 15 | 35 | 37.97 | 32.73  | S | 71.72   | W | 33  | N |     |     | 1.1 | 11  | NEAR COAST OF CENTRAL CHILE. MD 3.7 (SAN).  |
| 08   | 16 | 07 | 37.3* | 44.428 | N | 7.291   | E | 10  | G |     |     | 0.2 | 5   | NORTHERN ITALY. ML 1.6 (GEN).   |
| 08   | 16 | 08 | 24.7  | 36.824 | N | 71.404  | E | 33  | N | 4.5 |     | 0.7 | 19  | AFGHANISTAN-TAJIKISTAN BORD REG.  |
| 08   | 16 | 35 | 29.8* | 2.706  | N | 126.868 | E | 71  | ? | 5.1 |     | 1.1 | 11  | NORTHERN MOLUCCA SEA  |
| 08   | 16 | 44 | 27.3* | 34.169 | N | 139.258 | E | 33  | N | 4.1 |     | 0.6 | 8   | NEAR S. COAST OF HONSHU, JAPAN  |
| 08   | 17 | 25 | 03.3* | 37.496 | N | 1.599   | W | 13  |   |     |     | 0.7 | 14  | SPAIN. mbLg 3.1 (MDD).  |
| 08   | 17 | 54 | 53.3* | 40.562 | N | 30.366  | E | 10  | G |     |     | 0.6 | 5   | TURKEY. ML 3.0 (ISK).   |
| 08   | 18 | 47 | 05.4  | 43.802 | N | 147.447 | E | 46  |   | 4.8 |     | 1.1 | 77  | KURIL ISLANDS   |
| 08   | 19 | 24 | 50.1  | 50.481 | N | 12.146  | E | 10  | G |     |     | 0.5 | 8   | GERMANY. ML 2.2 (GRF), 1.8 (FUR).   |
| 08   | 19 | 34 | 34.5  | 39.724 | N | 78.043  | E | 47  | * | 4.8 |     | 1.0 | 30  | SOUTHERN XINJIANG, CHINA  |
| 08   | 19 | 39 | 31.4* | 66.088 | N | 150.219 | W | 80  |   |     |     |     | 17  | NORTHERN ALASKA. <AEIC>.  |
| 08   | 20 | 32 | 34.7  | 38.253 | N | 21.831  | E | 10  | G | 3.6 |     | 1.2 | 23  | GREECE. MD 3.4 (ATH).   |
| 08   | 20 | 43 | 34.4  | 13.297 | S | 166.871 | E | 33  | N | 4.5 |     | 0.9 | 51  | VANUATU ISLANDS   |
| 08   | 21 | 16 | 17.07 | 32.55  | S | 71.42   | W | 60  | G |     |     | 0.4 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.4 (SAN).  |
| 08   | 22 | 01 | 52.2* | 67.527 | N | 161.939 | W | 10  | G |     |     | 0.2 | 5   | NORTHERN ALASKA. ML 3.4 (PMR).  |
| 08   | 22 | 11 | 00.4* | 44.659 | N | 7.583   | E | 10  | G |     |     | 0.2 | 5   | NORTHERN ITALY. ML 2.0 (GEN).   |
| 08   | 22 | 28 | 53.6* | 60.293 | N | 153.264 | W | 181 |   |     |     |     | 33  | SOUTHERN ALASKA. <AEIC>.  |
| 08   | 23 | 20 | 48.2* | 4.382  | N | 127.191 | E | 10  | G | 4.9 |     | 0.5 | 5   | TALAUD ISLANDS, INDONESIA   |
| 08   | 23 | 34 | 04.7* | 12.536 | S | 114.096 | E | 10  | G | 4.3 |     | 0.6 | 7   | NORTHWEST OF AUSTRALIA  |
| 09   | 00 | 49 | 51.9* | 36.866 | N | 3.629   | W | 10  | G |     |     | 0.3 | 5   | STRAIT OF GIBRALTAR. mbLg 2.5 (MDD).  |
| 09   | 00 | 50 | 50.2  | 1.077  | S | 100.294 | E | 87  |   | 5.2 |     | 1.0 | 100 | SOUTHERN SUMATERA, INDONESIA  |
| 09   | 01 | 24 | 59.9  | 45.510 | N | 0.320   | W | 13  |   |     |     | 1.0 | 17  | FRANCE. ML 3.1 (LDG). MD 3.3 (BTH).   |
| 09   | 04 | 28 | 55.0* | 10.343 | S | 119.227 | E | 33  | N | 4.6 |     | 1.4 | 11  | SUMBA REGION, INDONESIA   |
| 09   | 06 | 19 | 00.2  | 40.850 | N | 20.773  | E | 10  | G | 4.4 |     | 1.3 | 56  | GREECE-ALBANIA BORDER REGION. ML 4.0 (TTG), 3.7 (TIR), 3.5 (SKO). MD 3.6 (ATH).                           |
| 09   | 07 | 23 | 49.8* | 41.85  | N | 125.78  | W | 10  | G |     |     | 1.2 | 13  | OFF COAST OF NORTHERN CALIFORNIA  |
| 09   | 07 | 51 | 21.2* | 38.256 | N | 30.091  | E | 10  | G |     |     | 0.6 | 7   | TURKEY. ML 3.4 (ISK).   |
| 09   | 07 | 54 | 40.1* | 34.333 | S | 70.212  | W | 10  | G |     |     | 0.3 | 11  | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).  |
| 09   | 08 | 07 | 59.7* | 44.357 | N | 7.342   | E | 10  | G |     |     | 0.4 | 8   | NORTHERN ITALY. ML 1.9 (GEN).   |
| 09   | 08 | 44 | 11.77 | 35.42  | S | 71.36   | W | 120 | G |     |     | 0.3 | 11  | CENTRAL CHILE. MD 4.3 (SAN).  |
| 09   | 09 | 46 | 56.7* | 41.562 | N | 23.501  | E | 5   | G |     |     | 0.3 | 8   | GREECE-BULGARIA BORDER REGION   |
| 09   | 10 | 45 | 16.2  | 33.951 | S | 70.168  | W | 10  | G | 4.8 |     | 1.0 | 21  | CHILE-ARGENTINA BORDER REGION. MD 4.9 (SAN).  |
| 09   | 10 | 57 | 41.6* | 34.15  | S | 69.88   | W | 10  | G |     |     | 0.4 | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
| 09   | 11 | 12 | 32.2* | 34.085 | S | 70.001  | W | 10  | G |     |     | 0.4 | 10  | CHILE-ARGENTINA BORDER REGION   |
| 09   | 11 | 33 | 24.0* | 34.018 | S | 70.063  | W | 10  | G |     |     | 0.1 | 6   | CHILE-ARGENTINA BORDER REGION   |
| 09   | 12 | 14 | 01.1* | 51.294 | N | 15.854  | E | 10  | G |     |     | 1.1 | 6   | POLAND  |
| 09   | 12 | 16 | 44.3  | 40.409 | N | 21.761  | E | 5   | G |     |     | 0.7 | 7   | GREECE  |
| 09   | 12 | 35 | 49.5* | 34.03  | S | 70.08   | W | 10  | G |     |     | 1.1 | 9   | CHILE-ARGENTINA BORDER REGION   |
| 09   | 12 | 40 | 53.2* | 34.052 | S | 70.025  | W | 5   | G |     |     | 0.4 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
| 09   | 13 | 07 | 18.3  | 33.967 | S | 70.168  | W | 5   | G |     |     | 0.5 | 12  | CHILE-ARGENTINA BORDER REGION. MD 4.0 (SAN).  |
| 09   | 13 | 44 | 46.8* | 34.048 | S | 70.134  | W | 10  | G |     |     | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).  |
| 09   | 13 | 47 | 08.5* | 40.020 | N | 24.196  | E | 10  | G |     |     | 0.7 | 7   | AEGEAN SEA  |
| 09   | 13 | 58 | 35.0* | 44.711 | N | 6.665   | E | 10  | G |     |     | 0.4 | 12  | FRANCE. ML 2.4 (GEN).   |
| 09   | 15 | 12 | 56.8* | 44.411 | N | 8.619   | E | 10  | G |     |     | 0.2 | 7   | NORTHERN ITALY. ML 2.0 (GEN).   |
| 09   | 16 | 35 | 50.6* | 33.87  | S | 68.40   | W | 10  | G |     |     | 0.7 | 11  | MENDOZA PROVINCE, ARGENTINA. MD 4.1 (SAN).  |
| 09   | 16 | 56 | 36.1  | 39.353 | N | 25.549  | E | 10  | G |     |     | 0.8 | 22  | AEGEAN SEA. ML 3.6 (ISK).   |
| 09   | 17 | 40 | 02.8* | 46.321 | N | 2.446   | E | 10  | G |     |     | 1.1 | 13  | FRANCE  |
| a 09 | 18 | 10 | 21.3* | 21.696 | S | 175.311 | W | 93  | * | 4.8 |     | 0.9 | 25  | TONGA ISLANDS. Mw 5.3 (HRV).  |
| 09   | 18 | 57 | 56.07 | 34.01  | S | 70.10   | W | 5   | G |     |     | 1.1 | 8   | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |
| 09   | 19 | 01 | 51.57 | 32.45  | S | 71.54   | W | 60  | G |     |     | 0.3 | 11  | NEAR COAST OF CENTRAL CHILE. MD 3.9 (SAN).  |
| 09   | 19 | 21 | 54.2* | 33.150 | S | 70.272  | W | 10  | G |     |     | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).  |
| 09   | 19 | 24 | 09.0  | 55.845 | S | 27.038  | W | 33  | N | 5.3 | 4.4 | 1.1 | 49  | SOUTH SANDWICH ISLANDS REGION   |
| 09   | 19 | 54 | 43.5* | 43.509 | N | 147.792 | E | 33  | N | 4.7 |     | 1.3 | 8   | KURIL ISLANDS   |
| 09   | 20 | 13 | 29.3* | 40.782 | N | 27.492  | E | 10  | G |     |     | 0.7 | 5   | TURKEY. ML 2.9 (ISK).   |
| 09   | 20 | 21 | 58.7* | 47.190 | N | 7.375   | E | 10  | G |     |     | 1.5 | 12  | SWITZERLAND. ML 2.3 (LDG), 2.0 (STR).   |
| 09   | 20 | 46 | 55.5* | 36.39  | N | 141.73  | E | 33  | N | 3.8 |     | 1.2 | 7   | NEAR EAST COAST OF HONSHU, JAPAN  |
| 09   | 20 | 59 | 54.5* | 44.07  | N | 7.86    | E | 10  | G |     |     | 0.0 | 4   | NORTHERN ITALY. ML 1.7 (GEN).   |
| 09   | 22 | 12 | 05.6* | 39.037 | N | 23.402  | E | 10  | G |     |     | 0.4 | 11  | AEGEAN SEA  |
| 09   | 22 | 26 | 17.67 | 51.88  | N | 16.25   | E | 10  | G |     |     | 0.7 | 5   | POLAND. ML 3.4 (VIE).   |
| 09   | 22 | 48 | 19.0  | 41.859 | N | 142.267 | E | 67  |   | 4.7 |     | 0.9 | 59  | HOKKAIDO, JAPAN REGION  |
| 09   | 23 | 04 | 58.2  | 6.530  | S | 147.149 | E | 54  | * | 5.0 | 4.5 | 1.1 | 42  | EASTERN NEW GUINEA REG., P.N.G.   |
| 09   | 23 | 44 | 01.3* | 34.009 | S | 70.124  | W | 10  | G |     |     | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |
| 10   | 00 | 09 | 36.5* | 35.090 | N | 118.294 | W | 7   |   |     |     |     | 24  | CENTRAL CALIFORNIA. <PAS-P>. ML 2.8 (PAS), 2.8 (GS).  |
| 10   | 00 | 19 | 33.4* | 40.720 | N | 29.789  | E | 10  | G |     |     | 0.6 | 7   | TURKEY. ML 3.3 (ISK).   |
| 10   | 00 | 22 | 43.7* | 39.050 | N | 23.324  | E | 10  | G |     |     | 0.4 | 7   | AEGEAN SEA  |
| 10   | 00 | 43 | 06.37 | 6.87   | S | 146.72  | E | 32  | ? |     |     | 0.5 | 5   | EASTERN NEW GUINEA REG., P.N.G. ML 3.8 (PMG).   |
| 10   | 00 | 43 | 59.7* | 40.682 | N | 23.641  | E | 5   | G |     |     | 0.7 | 9   | GREECE  |
| 10   | 01 | 13 | 10.1* | 35.561 | N | 3.760   | W | 5   | G |     |     | 0.9 | 17  | STRAIT OF GIBRALTAR. mbLg 3.4 (MDD).  |
| 10   | 01 | 26 | 57.0  | 41.062 | N | 22.510  | E | 10  | G |     |     | 0.4 | 7   | NORTHWESTERN BALKAN REGION. ML 2.0 (SKO).   |
| a 10 | 01 | 54 | 16.4  | 56.196 | S | 27.167  | W | 110 | G | 5.4 |     | 1.0 | 94  | SOUTH SANDWICH ISLANDS REGION. Mw 5.2 (HRV).  |
| 10   | 02 | 12 | 20.6* | 6.172  | S | 103.653 | E | 80  | G | 5.2 |     | 0.8 | 15  | SOUTHWEST OF SUMATERA, INDONESIA  |
| 10   | 02 | 34 | 22.7* | 34.444 | N | 119.343 | W | 14  |   |     |     |     | 65  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.6 (PAS), 3.6 (GS). Felt.   |
| 10   | 02 | 51 | 05.9  | 42.973 | N | 147.225 | E | 33  | N | 4.3 |     | 1.0 | 15  | OFF COAST OF HOKKAIDO, JAPAN  |
| a 10 | 03 | 39 | 31.7  | 23.534 | S | 70.591  | W | 37  | D | 5.8 | 5.6 | 1.3 | 261 | NEAR COAST OF NORTHERN CHILE. Mw 6.0 (HRV). Ms 5.3 (BRK). Mo-2.4*10**18 Nm (PPT). Felt (V) at Mejillones. |
| 10   | 03 | 56 | 09.1  | 43.681 | N | 147.553 | E | 47  | * | 4.7 |     | 1.1 | 47  | KURIL ISLANDS   |
| 10   | 03 | 57 | 31.5* | 44.067 | N | 7.077   | E | 10  | G |     |     | 0.3 | 6   | NORTHERN ITALY. ML 1.9 (GEN).   |
| 10   | 04 | 23 | 35.3* | 63.262 | N | 151.034 | W | 7   |   |     |     |     | 59  | CENTRAL ALASKA. <AEIC>. ML 3.0 (AEIC), 3.4 (PMR).   |
| 10   | 04 | 32 | 49.6* | 44.580 | N | 7.472   | E | 10  | G |     |     | 0.7 | 11  | NORTHERN ITALY. ML 2.3 (GEN).   |
| 10   | 05 | 32 | 26.0* | 45.820 | N | 7.137   | E | 10  | G |     |     | 0.3 | 10  | NORTHERN ITALY. ML 2.1 (GEN).   |
| 10   | 05 | 44 | 43.57 | 36.53  | N | 2.80    | W | 10  | G |     |     | 0.5 | 4   | STRAIT OF GIBRALTAR. mbLg 2.6 (MDD).  |
| 10   | 05 | 53 | 16.0* | 40.040 | N | 28.865  | E | 10  | G |     |     | 0.4 | 5   | TURKEY. ML 2.9 (ISK).   |
| 10   | 07 | 06 | 45.8* | 35.456 | N | 3.817   | W | 10  | G |     |     | 1.2 | 8   | STRAIT OF GIBRALTAR. mbLg 3.4 (MDD).  |
| 10   | 07 | 53 | 33.8* | 40.700 | N | 23.647  | E | 5   | G |     |     | 0.8 | 9   | GREECE  |

|      |             |          |           |              |     |   |  |
|------|-------------|----------|-----------|--------------|-----|---|--|
| 10   | 08 43 21.4% | 40.708 N | 23.674 E  | 5 G          | 0.5 | 7   | GREECE   |
| 10   | 08 52 42.3% | 40.712 N | 23.678 E  | 5 G          | 0.6 | 8   | GREECE   |
| a 10 | 09 26 42.5  | 38.306 N | 142.102 E | 52 D 5.4     | 0.8 | 196   | NEAR EAST COAST OF HONSHU, JAPAN. Mw 5.2 (HRV). Felt (III JMA) at Ishinomaki, Ofunato and Sendai; (II JMA) at Fukushima, Miyako, Morioka and Shinjo. Also felt in Akita and Ibaraki Prefectures. |
| 10   | 09 39 22.7% | 15.51 N  | 61.30 W   | 159 * 3.8    | 0.5 | 9   | LEEWARD ISLANDS. MD 3.7 (TRN).   |
| 10   | 09 49 10.2* | 35.738 N | 140.968 E | 60 * 4.5 3.9 | 1.0 | 17  | NEAR EAST COAST OF HONSHU, JAPAN   |
| 10   | 10 14 54.8  | 40.480 N | 21.607 E  | 10 G         | 0.3 | 8   | GREECE   |
| 10   | 10 24 31.9* | 6.901 N  | 72.969 W  | 167 * 4.0    | 0.7 | 9   | NORTHERN COLOMBIA  |
| 10   | 11 19 19.2  | 5.767 N  | 126.331 E | 106 5.1      | 0.9 | 52  | MINDANAO, PHILIPPINE ISLANDS   |
| 10   | 11 30 21.6% | 40.717 N | 23.684 E  | 5 G          | 0.8 | 6   | GREECE   |
| 10   | 12 01 21.2% | 34.065 S | 70.022 W  | 5 G          | 0.4 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).   |
| a 10 | 12 16 01.1  | 27.914 N | 64.985 E  | 57 D 5.2     | 1.3 | 157   | SOUTHWESTERN PAKISTAN. Mw 5.2 (HRV).   |
| 10   | 13 34 12.3  | 51.668 N | 16.287 E  | 10 G         | 0.8 | 19  | POLAND. ML 3.9 (VIE), 3.9 (GRF), 3.4 (CLL), 3.3 (BRA).   |
| 10   | 13 45 58.5  | 48.236 N | 155.109 E | 33 N 4.5     | 1.0 | 31  | KURIL ISLANDS  |
| 10   | 14 08 45.7* | 40.916 N | 144.611 E | 33 N 3.8     | 1.5 | 9   | OFF EAST COAST OF HONSHU, JAPAN  |
| 10   | 14 55 17.6% | 41.118 N | 28.422 E  | 10 G         | 0.7 | 6   | TURKEY. ML 2.8 (ISK).  |
| 10   | 15 13 52.3% | 65.119 N | 150.266 W | 9            | 24  | NORTHERN ALASKA. <AEIC>. ML 2.9 (AEIC).   |  |
| 10   | 15 14 20.4% | 65.099 N | 150.258 W | 6            | 19  | NORTHERN ALASKA. <AEIC>. ML 2.8 (AEIC).   |  |
| 10   | 15 14 44.4% | 65.116 N | 150.275 W | 10           | 13  | NORTHERN ALASKA. <AEIC>. ML 3.4 (AEIC).   |  |
| a 10 | 15 24 18.8  | 6.815 N  | 72.993 W  | 158 D 5.0    | 1.0 | 256   | NORTHERN COLOMBIA. Mw 5.2 (HRV). MD 5.4 (UPA). Felt at Bucaramanga, Sogamoso and Tunja.  |
| a 10 | 16 17 38.5  | 18.136 N | 101.384 W | 48 G 6.6 6.2 | 1.1 | 554   | GUERRERO, MEXICO. Mw 6.5 (GS), 6.4 (HRV). Ms 5.7 (BRK). Mo=1.2*10**19 Nm (PPT). Some damage at Mexico City and Zihuatanejo. Depth from broadband displacement seismograms.                       |
| 10   | 16 54 14.5* | 34.102 S | 70.116 W  | 10 G         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).   |
| 10   | 17 22 56.1% | 18.101 N | 101.296 W | 33 N         | 0.8 | 7   | GUERRERO, MEXICO   |
| 10   | 17 35 00.2% | 37.019 N | 28.928 E  | 10 G         | 0.6 | 5   | TURKEY. ML 3.3 (ISK).  |
| 10   | 17 54 24.7% | 34.981 N | 116.952 W | 0            | 50  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS), 3.4 (GS). Felt in the Barstow area.                                     |  |
| 10   | 18 37 45.2% | 60.193 N | 153.919 W | 219 4.6      | 121 | SOUTHERN ALASKA. <AEIC>. Felt (III) at Anchor Point.  |  |
| 10   | 18 43 29.4  | 44.472 N | 7.294 E   | 10 G         | 0.8 | 33  | NORTHERN ITALY. ML 3.1 (GEN), 2.8 (LDG).   |
| 10   | 19 04 16.9% | 10.36 S  | 120.21 E  | 33 N 3.9     | 1.0 | 6   | SUMBA REGION, INDONESIA  |
| 10   | 20 02 20.7  | 40.905 N | 20.884 E  | 10 G         | 1.2 | 14  | GREECE-ALBANIA BORDER REGION. ML 2.1 (SKO).  |
| 10   | 20 55 57.4% | 24.45 N  | 127.29 E  | 46 D 4.4     | 1.1 | 6   | SOUTHEAST OF RYUKYU ISLANDS  |
| 10   | 22 22 03.2  | 46.022 N | 14.051 E  | 10 G         | 0.5 | 6   | NORTHWESTERN BALKAN REGION. MD 2.3 (LJU). Felt (III) in the epicentral area.   |
| 10   | 23 50 23.5% | 18.39 N  | 101.21 W  | 10 G         | 1.4 | 5   | GUERRERO, MEXICO   |
| 11   | 00 08 28.8% | 34.012 N | 116.320 W | 6            | 7   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).   |  |
| 11   | 01 11 37.9% | 60.588 N | 152.902 W | 144 3.5      | 88  | SOUTHERN ALASKA. <AEIC>.  |  |
| 11   | 02 04 05.4% | 70.157 N | 11.668 E  | 5 G          | 1.2 | 7   | NORWEGIAN SEA  |
| a 11 | 02 25 46.3  | 5.829 S  | 104.661 E | 51 D 5.7     | 1.0 | 107   | SOUTHERN SUMATRA, INDONESIA. Mw 5.2 (HRV).   |
| 11   | 02 43 48.8% | 44.770 N | 6.629 E   | 10 G         | 0.7 | 6   | FRANCE. ML 2.0 (GEN).  |
| 11   | 03 17 49.5* | 18.074 N | 101.187 W | 95 * 3.8     | 1.7 | 18  | GUERRERO, MEXICO   |
| 11   | 03 43 33.9  | 42.522 N | 139.345 E | 30 4.8       | 1.0 | 72  | HOKKAIDO, JAPAN REGION   |
| 11   | 03 55 25.0% | 10.88 N  | 62.17 W   | 70 G         | 0.7 | 6   | NEAR COAST OF VENEZUELA. MD 3.3 (TRN).   |
| 11   | 04 28 34.7% | 27.32 N  | 34.65 E   | 10 G         | 0.3 | 7   | RED SEA. MD 2.9 (RYD).   |
| 11   | 05 20 48.3% | 58.827 N | 152.957 W | 5            | 36  | KODIAK ISLAND REGION. <AEIC>. ML 2.7 (AEIC).  |  |
| 11   | 06 12 18.2% | 31.84 S  | 72.04 W   | 10 G         | 0.6 | 11  | OFF COAST OF CENTRAL CHILE. MD 4.3 (SAN).  |
| 11   | 06 42 28.4* | 31.975 S | 70.318 W  | 120 G        | 0.4 | 11  | CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).   |
| 11   | 07 04 15.9* | 5.870 S  | 148.975 E | 130 * 4.8    | 0.9 | 10  | NEW BRITAIN REGION, P.N.G.   |
| 11   | 07 44 22.0* | 36.076 N | 27.561 E  | 10 G 3.8     | 1.6 | 18  | DODECANESE ISLANDS. MD 4.1 (ATH). ML 3.7 (ISK).  |
| a 11 | 09 29 01.4  | 24.855 S | 179.112 W | 391 D 5.5    | 1.1 | 180   | SOUTH OF FIJI ISLANDS. Mw 5.7 (HRV).   |
| 11   | 10 04 43.9* | 36.171 N | 27.504 E  | 10 G 4.1     | 1.3 | 11  | DODECANESE ISLANDS. MD 4.1 (ATH). ML 3.7 (ISK).  |
| 11   | 10 10 37.6* | 36.231 N | 27.364 E  | 10 G         | 0.9 | 7   | DODECANESE ISLANDS. MD 3.8 (ATH).  |
| 11   | 10 48 26.1% | 33.989 N | 118.435 W | 14           | 55  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.5 (PAS), 3.4 (GS). Felt (III) at Culver City and Torrance; (II) at Santa Monica. |  |
| 11   | 12 19 09.0% | 59.659 N | 151.821 W | 62           | 37  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.5 (AEIC).   |  |
| 11   | 12 27 55.4* | 36.202 N | 27.526 E  | 10 G         | 1.6 | 9   | DODECANESE ISLANDS. ML 3.4 (ISK).  |
| 11   | 13 30 41.8% | 4.67 S   | 152.00 E  | 177 * 4.5    | 1.2 | 10  | NEW BRITAIN REGION, P.N.G.   |
| a 11 | 14 03 46.2* | 3.440 S  | 149.500 E | 33 N 4.8 4.9 | 1.5 | 20  | BISMARCK SEA. Mw 5.4 (HRV).  |
| 11   | 15 04 48.2* | 42.081 N | 1.338 E   | 10 G         | 1.2 | 5   | PYRENEES. mbLg 2.8 (MDD). ML 2.3 (STR), 2.3 (LDG).   |
| 11   | 15 33 46.5% | 43.12 N  | 147.25 E  | 33 N 4.1     | 1.5 | 7   | KURIL ISLANDS  |
| 11   | 16 03 19.5% | 34.140 S | 69.939 W  | 5 G          | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.9 (SAN).   |
| 11   | 16 12 46.5% | 64.114 N | 148.684 W | 14           | 40  | CENTRAL ALASKA. <AEIC>. ML 2.7 (AEIC), 3.0 (PMR).   |  |
| 11   | 16 20 02.8% | 34.11 S  | 69.94 W   | 5 G          | 0.1 | 7   | CHILE-ARGENTINA BORDER REGION  |
| 11   | 17 04 38.4% | 44.237 N | 8.240 E   | 10 G         | 0.3 | 7   | NORTHERN ITALY. ML 1.9 (GEN).  |
| 11   | 17 04 39.8  | 36.803 N | 20.704 E  | 33 N         | 1.5 | 65  | CENTRAL MEDITERRANEAN SEA. ML 4.1 (TTG), 4.0 (THE). MD 3.9 (ATH).  |
| 11   | 17 31 20.8% | 33.37 S  | 71.89 W   | 33 N         | 0.5 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.6 (SAN).   |
| 11   | 18 23 31.3* | 36.175 N | 27.470 E  | 10 G         | 1.4 | 8   | DODECANESE ISLANDS. MD 3.9 (ATH). ML 3.5 (ISK).  |
| 11   | 19 01 02.5% | 51.26 N  | 15.84 E   | 10 G         | 0.5 | 6   | POLAND   |
| 11   | 19 03 17.1% | 39.173 N | 28.324 E  | 10 G         | 0.3 | 6   | TURKEY. ML 2.9 (ISK).  |
| 11   | 19 11 01.9% | 44.239 N | 8.239 E   | 10 G         | 0.2 | 8   | NORTHERN ITALY. ML 2.0 (GEN).  |
| 11   | 19 15 26.6* | 45.844 N | 149.451 E | 33 N 4.6     | 0.6 | 41  | KURIL ISLANDS  |
| 11   | 20 48 20.5  | 44.466 N | 6.921 E   | 5 G          | 0.4 | 17  | FRANCE. ML 2.1 (GEN), 2.1 (LDG).   |
| 11   | 20 53 58.1% | 37.638 N | 118.888 W | 2            | 30  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM).   |  |
| 11   | 21 06 32.2% | 47.410 N | 5.980 E   | 10 G         | 0.9 | 7   | FRANCE. ML 2.0 (LDG).  |
| 11   | 22 37 34.8* | 36.503 N | 71.467 E  | 33 N 4.3     | 0.8 | 20  | AFGHANISTAN-TAJIKISTAN BORD REG.   |
| 11   | 23 09 34.2* | 54.544 N | 163.265 W | 70 G 4.4     | 1.1 | 29  | UNIMAK ISLAND REGION. ML 4.5 (PMR). Felt (III) at King Cove and (II) at Cold Bay.  |
| 11   | 23 36 06.2% | 32.964 S | 72.103 W  | 5 G          | 0.5 | 11  | OFF COAST OF CENTRAL CHILE. MD 3.8 (SAN).  |
| 12   | 00 21 56.4  | 17.451 N | 120.973 E | 33 N 4.7     | 1.2 | 23  | LUZON, PHILIPPINE ISLANDS  |
| 12   | 00 57 22.8  | 43.622 N | 7.827 E   | 10 G         | 0.7 | 22  | NEAR SOUTH COAST OF FRANCE. ML 2.3 (GEN), 1.8 (LDG), 1.5 (STR).  |
| 12   | 01 03 04.1% | 40.384 N | 124.431 W | 17           | 4   | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 2.8 (GM).  |  |
| 12   | 01 44 22.2  | 39.190 N | 20.594 E  | 10 G         | 1.1 | 26  | GREECE-ALBANIA BORDER REGION. ML 3.4 (THE), 3.3 (TIR). MD 3.4 (ATH).   |
| 12   | 02 08 56.4% | 32.911 S | 70.831 W  | 73 ?         | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).   |
| 12   | 02 19 34.8% | 40.501 N | 27.935 E  | 10 G         | 0.5 | 5   | TURKEY. ML 2.8 (ISK).  |

|    |    |    |       |        |        |         |         |     |     |     |     |  |  |
|----|----|----|-------|--------|--------|---------|---------|-----|-----|-----|-----|--|--|
| 12 | 03 | 14 | 05.87 | 34.62  | S      | 71.01   | W       | 100 | G   | 0.2 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.5 (SAN).   |  |
| 12 | 03 | 39 | 47.74 | 45.518 | N      | 6.655   | E       | 10  | G   | 0.3 | 8   | FRANCE   |  |
| 12 | 04 | 50 | 00.57 | 15.96  | N      | 99.37   | W       | 33  | N   | 0.8 | 8   | OFF COAST OF GUERRERO, MEXICO  |  |
| 12 | 05 | 01 | 36.77 | 34.06  | S      | 69.96   | W       | 5   | G   | 0.3 | 7   | CHILE-ARGENTINA BORDER REGION  |  |
| 12 | 05 | 04 | 30.96 | 32.022 | N      | 116.347 | W       | 13  |     |     | 7   | CALIF.-BAJA CALIF. BORDER REGION. <ECX-P>. MD 3.0 (ECX). ML 3.0 (PAS).                   |  |
| 12 | 05 | 16 | 40.87 | 15.37  | S      | 70.76   | W       | 148 | ?   | 4.8 | 1.7 | 13 SOUTHERN PERU   |  |
| 12 | 05 | 50 | 00.06 | 35.927 | N      | 120.474 | W       | 10  |     |     | 56  | CENTRAL CALIFORNIA. <GM-P>. MD 3.0 (GM). ML 3.0 (GS), 2.9 (PAS).                         |  |
| 12 | 06 | 25 | 06.2  | 3.757  | S      | 141.224 | E       | 33  | N   | 4.6 | 0.8 | 17 NEW GUINEA, PAPUA NEW GUINEA  |  |
| 12 | 06 | 35 | 18.3  | 31.547 | S      | 68.791  | W       | 118 | *   |     | 1.0 | 19 SAN JUAN PROVINCE, ARGENTINA. MD 4.3 (SAN).   |  |
| 12 | 07 | 27 | 51.7  | 39.223 | S      | 71.820  | W       | 106 |     | 4.4 | 0.8 | 21 S. CHILE-ARGENTINA BORDER REGION  |  |
| a  | 12 | 07 | 41    | 55.4   | 17.477 | S       | 69.598  | W   | 148 | G   | 5.9 | 1.3  | 449 PERU-BOLIVIA BORDER REGION. Mw 6.3 (GS), 6.2 (HRV). mb 6.1 (BRK). Mo=5.0*10**18 Nm (PPT). Felt (V) at Arica; (IV) at Putre; (II) at Camina, Huara, Iquique and Pica, Chile. Felt (IV) at Arequipa and Moquegua; (III) at Tacna, Peru. Depth from broadband displacement seismograms. |
| 12 | 08 | 58 | 47.8  | 73.894 | N      | 8.863   | E       | 10  | G   | 4.9 | 1.3 | 75 GREENLAND SEA   |  |
| 12 | 09 | 57 | 01.0* | 21.512 | S      | 169.566 | E       | 33  | N   | 4.2 | 1.6 | 12 LOYALTY ISLANDS REGION  |  |
| 12 | 10 | 07 | 12.97 | 33.99  | S      | 70.13   | W       | 5   | G   |     | 1.4 | 7 CHILE-ARGENTINA BORDER REGION  |  |
| 12 | 10 | 41 | 36.77 | 29.51  | N      | 80.71   | E       | 33  | N   | 4.5 | 1.1 | 8 NEPAL-INDIA BORDER REGION  |  |
| 12 | 12 | 10 | 19.67 | 51.35  | N      | 15.82   | E       | 10  | G   |     | 1.7 | 7 POLAND   |  |
| 12 | 12 | 52 | 54.0  | 36.397 | N      | 70.811  | E       | 166 | *   | 5.2 | 1.1 | 37 HINDU KUSH REGION, AFGHANISTAN  |  |
| 12 | 13 | 00 | 04.96 | 32.054 | N      | 115.405 | W       | 1   |     |     |     | 11 CALIF.-BAJA CALIF. BORDER REGION. <ECX-P>. MD 3.6 (ECX). ML 3.2 (GS).                 |  |
| 12 | 13 | 05 | 31.06 | 33.194 | N      | 115.577 | W       | 5   |     |     |     | 39 SOUTHERN CALIFORNIA. <PAS-P>. ML 3.8 (PAS), 3.6 (GS). Felt (IV) at Niland.            |  |
| 12 | 13 | 13 | 06.07 | 40.22  | N      | 29.32   | E       | 10  | G   |     | 0.2 | 4 TURKEY. ML 2.7 (ISK).  |  |
| 12 | 13 | 14 | 06.8  | 42.501 | N      | 43.402  | E       | 33  | N   | 4.4 | 1.3 | 35 NORTHWESTERN CAUCASUS   |  |
| 12 | 13 | 15 | 29.86 | 33.193 | N      | 115.574 | W       | 4   |     |     |     | 7 SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).  |  |
| a  | 12 | 14 | 52    | 53.3*  | 9.975  | S       | 119.199 | E   | 26  | D   | 5.9 | 1.3  | 103 SUMBA REGION, INDONESIA. Mw 5.6 (HRV).   |
| 12 | 15 | 03 | 33.44 | 39.282 | N      | 29.225  | E       | 10  | G   |     | 0.6 | 6 TURKEY. ML 3.2 (ISK).  |  |
| 12 | 15 | 12 | 03.9  | 38.175 | N      | 73.021  | E       | 121 | D   | 5.0 | 0.9 | 100 TAJIKISTAN-XINJIANG BORDER REG.  |  |
| 12 | 15 | 14 | 52.3* | 51.586 | N      | 7.066   | E       | 10  | G   |     | 1.6 | 6 GERMANY. ML 2.7 (UCC), 2.2 (DBN).  |  |
| 12 | 15 | 27 | 01.5* | 35.505 | N      | 24.744  | E       | 33  | N   |     | 1.1 | 13 CRETE. MD 3.6 (ATH).  |  |
| 12 | 15 | 43 | 56.64 | 46.167 | N      | 0.174   | E       | 10  | G   |     | 1.5 | 7 FRANCE. ML 2.4 (LDG).  |  |
| 12 | 15 | 58 | 31.8* | 64.530 | N      | 9.737   | E       | 10  | G   |     | 1.3 | 6 NORWEGIAN SEA. MD 2.8 (BER). ML 2.5 (NAO).   |  |
| 12 | 16 | 26 | 59.7* | 59.983 | N      | 10.850  | E       | 5   | G   |     | 1.3 | 9 SOUTHERN NORWAY. MD 2.6 (BER).   |  |
| 12 | 16 | 44 | 34.36 | 60.021 | N      | 152.980 | W       | 120 |     | 3.7 |     | 89 SOUTHERN ALASKA. <AEIC>.  |  |
| 12 | 17 | 23 | 23.17 | 34.08  | S      | 69.94   | W       | 5   | G   |     | 0.5 | 6 CHILE-ARGENTINA BORDER REGION  |  |
| 12 | 17 | 30 | 34.6* | 10.152 | N      | 126.371 | E       | 33  | N   | 4.7 | 1.0 | 14 PHILIPPINE ISLANDS REGION   |  |
| 12 | 17 | 47 | 12.5  | 43.893 | N      | 7.740   | E       | 10  | G   |     | 0.7 | 20 NEAR SOUTH COAST OF FRANCE. ML 2.4 (LDG), 2.4 (GEN).                                  |  |
| 12 | 17 | 49 | 39.16 | 34.141 | N      | 116.430 | W       | 3   |     |     |     | 7 SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS). Felt.                                      |  |
| 12 | 17 | 54 | 27.74 | 46.190 | N      | 0.198   | E       | 10  | G   |     | 1.1 | 7 FRANCE. ML 2.3 (LDG).  |  |
| 12 | 19 | 09 | 02.2  | 38.513 | N      | 22.004  | E       | 10  | G   | 3.8 | 1.2 | 31 GREECE. ML 3.8 (THE). MD 3.7 (ATH).   |  |
| 12 | 19 | 48 | 30.86 | 35.699 | N      | 117.659 | W       | 12  |     |     |     | 62 CENTRAL CALIFORNIA. <PAS-P>. ML 3.7 (PAS), 3.5 (GS). Felt.                            |  |
| 12 | 20 | 16 | 48.24 | 33.628 | S      | 71.151  | W       | 57  | ?   |     | 0.4 | 9 NEAR COAST OF CENTRAL CHILE  |  |
| 12 | 20 | 53 | 10.57 | 33.85  | S      | 72.35   | W       | 5   | G   |     | 1.3 | 13 OFF COAST OF CENTRAL CHILE. MD 4.4 (SAN).   |  |
| a  | 12 | 21 | 49    | 15.7*  | 38.977 | S       | 46.586  | E   | 10  | G   | 5.1 | 1.2  | 48 SOUTHWEST INDIAN RIDGE. Mw 5.4 (HRV).   |
| 12 | 22 | 36 | 25.4  | 43.052 | N      | 0.358   | W       | 5   | G   |     | 0.7 | 6 PYRENEES. MD 2.1 (BTH).  |  |
| 13 | 00 | 29 | 36.7  | 38.624 | N      | 20.483  | E       | 10  | G   |     | 1.0 | 15 GREECE. MD 3.3 (ATH). ML 2.9 (THE).   |  |
| a  | 13 | 00 | 49    | 45.77  | 21.46  | S       | 178.33  | W   | 500 | G   | 4.4 | 1.2  | 13 FIJI ISLANDS REGION   |
| a  | 13 | 00 | 50    | 52.2*  | 24.059 | N       | 122.639 | E   | 33  | N   | 5.0 | 1.0  | 70 TAIWAN REGION. Mw 5.3 (HRV).  |
| 13 | 01 | 43 | 30.1* | 40.392 | N      | 21.521  | E       | 5   | G   |     | 0.4 | 5 GREECE. ML 1.9 (THE).  |  |
| 13 | 02 | 41 | 14.24 | 33.521 | S      | 71.574  | W       | 33  | N   |     | 0.4 | 10 NEAR COAST OF CENTRAL CHILE. MD 3.4 (SAN).  |  |
| 13 | 05 | 06 | 03.37 | 5.47   | N      | 81.81   | W       | 33  | N   | 3.8 | 0.6 | 7 SOUTH OF PANAMA. MD 4.0 (UPA).   |  |
| 13 | 05 | 41 | 19.97 | 44.36  | N      | 7.29    | E       | 5   | G   |     | 0.3 | 4 NORTHERN ITALY. ML 1.5 (GEN).  |  |
| 13 | 05 | 57 | 16.6* | 43.474 | N      | 13.177  | E       | 10  | G   |     | 1.2 | 28 CENTRAL ITALY. ML 3.5 (LDG).  |  |
| 13 | 07 | 03 | 36.2  | 38.091 | N      | 28.343  | E       | 10  | G   | 3.5 | 0.9 | 11 TURKEY. ML 3.6 (ISK).   |  |
| 13 | 07 | 16 | 57.48 | 38.776 | N      | 0.744   | W       | 10  | G   |     | 0.9 | 6 SPAIN. mbLg 3.0 (MDD).   |  |
| 13 | 07 | 18 | 22.17 | 7.97   | N      | 127.51  | E       | 33  | N   | 4.7 | 1.3 | 17 PHILIPPINE ISLANDS REGION   |  |
| 13 | 08 | 17 | 39.77 | 36.11  | N      | 27.53   | E       | 10  | G   |     | 1.2 | 5 DODECANESE ISLANDS. MD 3.9 (ATH).  |  |
| a  | 13 | 08 | 23    | 48.2   | 16.314 | N       | 98.443  | W   | 16  | D   | 5.3 | 1.1  | 184 NEAR COAST OF GUERRERO, MEXICO. Mw 5.5 (HRV). Ms 4.7 (BRK).  |
| 13 | 08 | 32 | 22.3* | 16.186 | N      | 98.472  | W       | 10  |     | 4.8 | 1.1 | 29 NEAR COAST OF GUERRERO, MEXICO  |  |
| 13 | 08 | 37 | 24.2  | 16.550 | N      | 98.599  | W       | 21  |     | 4.6 | 1.0 | 25 NEAR COAST OF GUERRERO, MEXICO  |  |
| 13 | 08 | 54 | 50.77 | 15.57  | N      | 98.71   | W       | 17  | D   | 4.4 | 1.5 | 10 OFF COAST OF GUERRERO, MEXICO   |  |
| 13 | 09 | 48 | 29.17 | 39.49  | N      | 12.12   | W       | 10  | G   | 3.8 | 1.3 | 59 NORTH ATLANTIC OCEAN. mbLg 4.1 (MDD). MD 3.4 (SFS).                                   |  |
| 13 | 09 | 49 | 15.9  | 39.279 | N      | 25.340  | E       | 10  | G   |     | 1.0 | 14 AEGEAN SEA. ML 3.6 (ISK). MD 3.4 (ATH).   |  |
| 13 | 09 | 53 | 37.97 | 15.71  | N      | 98.74   | W       | 33  | N   | 4.1 | 1.3 | 6 OFF COAST OF GUERRERO, MEXICO  |  |
| 13 | 09 | 56 | 16.67 | 16.25  | N      | 98.56   | W       | 19  | D   | 4.5 | 1.4 | 20 NEAR COAST OF GUERRERO, MEXICO  |  |
| 13 | 10 | 02 | 53.0  | 16.203 | N      | 98.460  | W       | 20  | D   | 5.1 | 1.1 | 100 NEAR COAST OF GUERRERO, MEXICO   |  |
| 13 | 10 | 07 | 14.0  | 15.631 | N      | 147.899 | E       | 33  | D   | 5.2 | 0.9 | 102 MARIANA ISLANDS REGION   |  |
| 13 | 10 | 12 | 44.0* | 38.855 | N      | 0.660   | W       | 10  | G   |     | 0.9 | 11 SPAIN. mbLg 3.1 (MDD).  |  |
| 13 | 10 | 42 | 44.64 | 43.942 | N      | 7.186   | E       | 5   | G   |     | 0.4 | 7 NEAR SOUTH COAST OF FRANCE. ML 1.0 (STR).  |  |
| 13 | 12 | 57 | 55.47 | 46.28  | N      | 2.43    | E       | 5   | G   |     | 0.2 | 4 FRANCE. ML 1.7 (LDG).  |  |
| a  | 13 | 13 | 11    | 14.4   | 53.985 | N       | 141.904 | E   | 13  | D   | 5.1 | 0.9  | 147 SAKHALIN ISLAND. Mw 5.2 (HRV). Felt (IV) at Okha.  |
| 13 | 13 | 56 | 51.1* | 33.279 | S      | 70.491  | W       | 90  | G   |     | 0.4 | 10 CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |  |
| a  | 13 | 14 | 26    | 37.7   | 24.126 | S       | 67.847  | W   | 104 | *   | 4.9 | 1.0  | 59 CHILE-ARGENTINA BORDER REGION. Mw 5.1 (HRV).  |
| 13 | 14 | 53 | 44.1* | 35.451 | N      | 3.795   | W       | 5   | G   |     | 1.2 | 24 STRAIT OF GIBRALTAR. mbLg 3.4 (MDD). MD 3.3 (RBA).                                    |  |
| 13 | 15 | 21 | 15.06 | 38.825 | N      | 122.818 | W       | 0   |     |     |     | 9 NORTHERN CALIFORNIA. <GM-P>. MD 2.8 (GM).  |  |
| 13 | 16 | 26 | 25.0  | 43.966 | N      | 7.584   | E       | 10  | G   |     | 0.1 | 11 NEAR SOUTH COAST OF FRANCE. ML 2.0 (GEN).   |  |
| 13 | 16 | 41 | 41.3* | 45.996 | N      | 10.652  | E       | 10  | G   |     | 0.8 | 8 NORTHERN ITALY. ML 2.1 (VIE).  |  |
| 13 | 16 | 56 | 41.9  | 44.593 | N      | 10.497  | E       | 10  | G   |     | 1.3 | 19 NORTHERN ITALY. ML 2.8 (LDG), 2.4 (VIE).  |  |
| 13 | 17 | 05 | 08.9  | 12.999 | N      | 121.374 | E       | 33  | N   | 5.0 | 0.9 | 24 MINDORO, PHILIPPINE ISLANDS   |  |
| 13 | 17 | 33 | 23.4  | 27.288 | N      | 54.883  | E       | 33  | N   | 4.9 | 1.3 | 102 SOUTHERN IRAN  |  |
| 13 | 17 | 51 | 44.46 | 34.126 | N      | 116.883 | W       | 11  |     |     |     | 28 SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS), 3.1 (GS). Felt in the Big Bear Lake area. |  |
| 13 | 17 | 54 | 33.4  | 25.228 | N      | 122.757 | E       | 169 | D   | 4.6 | 0.8 | 63 TAIWAN REGION   |  |
| 13 | 18 | 22 | 48.97 | 16.78  | N      | 98.11   | W       | 73  | *   | 4.2 | 1.6 | 9 NEAR COAST OF GUERRERO, MEXICO   |  |
| 13 | 18 | 42 | 59.76 | 30.593 | N      | 113.878 | W       | 32  |     |     |     | 12 GULF OF CALIFORNIA. <ECX-P>. MD 4.0 (ECX). ML 4.1 (GS).                               |  |



|      |    |    |       |        |   |         |   |     |     |     |                          |   |  |  |
|------|----|----|-------|--------|---|---------|---|-----|-----|-----|--------------------------|---|--|--|
| 13   | 19 | 59 | 19.47 | 15.75  | N | 98.48   | W | 33  | N   | 1.3 | 5                        | OFF COAST OF GUERRERO, MEXICO   |  |  |
| 13   | 20 | 05 | 28.77 | 34.37  | S | 70.12   | W | 5   | G   | 0.5 | 9                        | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).  |  |  |
| 13   | 20 | 11 | 08.34 | 60.252 | N | 153.628 | W | 181 | 3.0 | 85  | SOUTHERN ALASKA. <AEIC>. |   |  |  |
| a 13 | 20 | 27 | 47.6  | 3.166  | S | 130.534 | E | 25  | D   | 5.3 | 4.6                      | 1.4   | 46   | SERAM, INDONESIA. Mw 5.5 (HRV).  |
| 13   | 20 | 33 | 29.74 | 40.352 | N | 124.459 | W | 18  |     |     |                          | 29  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.1 (GM). ML 3.1 (GS), 3.0 (BRK). |  |
| 13   | 20 | 55 | 09.17 | 16.69  | N | 100.20  | W | 33  | N   | 1.6 | 6                        | NEAR COAST OF GUERRERO, MEXICO  |  |  |
| 13   | 23 | 04 | 03.37 | 38.78  | N | 0.78    | W | 10  | G   | 0.9 | 4                        | SPAIN. mbLg 2.9 (MDD).  |  |  |
| 13   | 23 | 26 | 26.0* | 48.249 | N | 7.636   | E | 10  | G   | 0.3 | 7                        | FRANCE. ML 2.1 (LDG).   |  |  |
| 13   | 23 | 27 | 59.27 | 38.82  | N | 0.73    | W | 10  | G   | 0.2 | 4                        | SPAIN. mbLg 2.4 (MDD).  |  |  |
| 14   | 00 | 23 | 25.8* | 44.347 | N | 7.659   | E | 10  | G   | 0.3 | 9                        | NORTHERN ITALY. ML 2.5 (LDG).   |  |  |
| 14   | 01 | 51 | 00.4  | 5.580  | N | 126.341 | E | 103 | 5.0 | 0.9 | 26                       | MINDANAO, PHILIPPINE ISLANDS  |  |  |
| 14   | 02 | 06 | 12.1* | 40.772 | N | 22.417  | E | 10  |     | 0.7 | 16                       | GREECE. ML 2.5 (THE), 2.2 (SKO).  |  |  |
| 14   | 02 | 34 | 29.77 | 61.70  | N | 2.52    | E | 10  | G   | 0.9 | 7                        | NORWEGIAN SEA. MD 2.5 (BER).  |  |  |
| 14   | 03 | 14 | 57.64 | 38.792 | N | 0.732   | W | 10  | G   | 0.6 | 6                        | SPAIN. mbLg 3.0 (MDD).  |  |  |
| 14   | 03 | 38 | 17.5  | 46.264 | N | 13.376  | E | 10  | G   | 1.3 | 19                       | AUSTRIA. MD 3.3 (LJU), 3.0 (TRI). ML 2.9 (VIE), 2.8 (LDG). Felt (V) at Livek, Slovenia. |  |  |
| 14   | 04 | 23 | 51.4  | 37.001 | N | 29.043  | E | 10  | G   | 1.2 | 8                        | TURKEY. MD 3.8 (ATH). ML 3.4 (ISK).   |  |  |
| 14   | 04 | 24 | 56.34 | 63.273 | N | 151.065 | W | 7   |     |     | 59                       | CENTRAL ALASKA. <AEIC>. ML 2.6 (AEIC), 3.0 (PMR).                                       |  |  |
| 14   | 04 | 44 | 17.5  | 43.496 | N | 17.051  | E | 10  | G   | 1.2 | 24                       | NORTHWESTERN BALKAN REGION. ML 3.3 (ZAG), 2.6 (LJU). MD 3.3 (TRI), 3.2 (TTG).           |  |  |
| a 14 | 06 | 36 | 14.1  | 43.374 | N | 147.207 | E | 26  | D   | 5.1 | 4.9                      | 1.0   | 166  | KURIL ISLANDS. Mw 5.2 (HRV).   |
| 14   | 07 | 19 | 32.37 | 43.62  | N | 148.70  | E | 33  | N   | 4.0 |                          | 1.3   | 8  | EAST OF KURIL ISLANDS  |
| a 14 | 07 | 28 | 53.2  | 9.519  | S | 159.411 | E | 16  | G   | 5.8 | 5.9                      | 1.0   | 236  | SOLOMON ISLANDS. Mw 6.1 (GS), 6.1 (HRV). Ms 5.7 (BRK). Mo=1.9*10**18 Nm (PPT). Two events about 2.7 seconds apart. Depth from broadband displacement seismograms, based on first event.  |
| 14   | 08 | 11 | 43.44 | 40.692 | N | 22.736  | E | 5   | G   |     |                          | 0.2   | 6  | GREECE. ML 2.0 (THE).  |
| 14   | 08 | 55 | 58.4  | 46.012 | N | 6.353   | E | 10  | G   | 4.5 |                          | 1.1   | 137  | SWITZERLAND. ML 5.1 (LDG), 4.8 (GRF), 4.7 (DBN), 4.5 (STR), 4.5 (VIE), 4.5 (FUR), 4.4 (BNS). MD 4.6 (TRI). Felt at Geneva.   |
| 14   | 08 | 59 | 01.44 | 38.760 | N | 0.745   | W | 10  | G   |     |                          | 0.8   | 5  | SPAIN. mbLg 2.7 (MDD).   |
| 14   | 09 | 29 | 06.47 | 17.64  | S | 173.65  | W | 33  | N   | 4.2 |                          | 1.3   | 9  | TONGA ISLANDS  |
| 14   | 09 | 43 | 14.2  | 45.986 | N | 6.402   | E | 5   | G   |     |                          | 0.5   | 21   | FRANCE. ML 2.8 (LDG), 2.2 (STR).   |
| 14   | 10 | 06 | 26.4  | 49.450 | N | 155.929 | E | 33  | N   | 4.7 |                          | 0.7   | 35   | KURIL ISLANDS  |
| 14   | 10 | 12 | 43.7* | 26.371 | N | 44.640  | W | 10  | G   | 4.6 |                          | 0.6   | 19   | NORTHERN MID-ATLANTIC RIDGE  |
| 14   | 10 | 26 | 18.67 | 43.41  | N | 147.17  | E | 33  | N   | 4.2 |                          | 1.2   | 7  | KURIL ISLANDS  |
| 14   | 10 | 33 | 30.7  | 37.860 | N | 20.943  | E | 10  |     |     |                          | 1.1   | 22   | IONIAN SEA. ML 3.8 (THE). MD 3.8 (ATH).  |
| 14   | 11 | 02 | 44.57 | 40.68  | N | 22.95   | E | 5   | G   |     |                          | 0.0   | 4  | GREECE. ML 1.6 (THE).  |
| 14   | 11 | 07 | 37.04 | 35.784 | N | 3.258   | W | 10  | G   |     |                          | 0.8   | 8  | STRAIT OF GIBRALTAR. mbLg 2.8 (MDD).   |
| 14   | 11 | 29 | 43.3  | 45.986 | N | 10.692  | E | 10  | G   |     |                          | 1.2   | 44   | NORTHERN ITALY. ML 3.4 (LJU), 3.3 (GRF), 2.9 (VIE), 2.9 (LDG).   |
| 14   | 11 | 56 | 00.9* | 36.166 | N | 6.171   | W | 10  | G   |     |                          | 1.2   | 12   | STRAIT OF GIBRALTAR. mbLg 3.0 (MDD). MD 2.6 (SFS).   |
| 14   | 11 | 56 | 49.94 | 38.245 | N | 28.259  | E | 10  | G   |     |                          | 0.1   | 6  | TURKEY. ML 3.5 (ISK).  |
| 14   | 12 | 37 | 32.9* | 51.161 | N | 15.821  | E | 10  | G   |     |                          | 0.3   | 7  | POLAND. ML 2.4 (CLL).  |
| 14   | 14 | 58 | 17.9  | 44.351 | N | 7.316   | E | 10  | G   |     |                          | 0.5   | 18   | NORTHERN ITALY. ML 2.6 (LDG), 2.4 (GEN).   |
| 14   | 15 | 35 | 12.17 | 34.79  | S | 70.91   | W | 110 | G   |     |                          | 0.1   | 11   | CHILE-ARGENTINA BORDER REGION. MD 3.9 (SAN).   |
| 14   | 16 | 14 | 03.8  | 43.700 | N | 147.648 | E | 33  | N   | 4.9 |                          | 0.8   | 40   | KURIL ISLANDS  |
| 14   | 17 | 33 | 30.1* | 8.468  | S | 128.713 | E | 187 | 7   | 4.8 |                          | 0.9   | 14   | TIMOR SEA  |
| 14   | 18 | 30 | 30.3* | 33.148 | S | 70.287  | W | 5   | G   |     |                          | 0.4   | 8  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).   |
| a 14 | 19 | 44 | 31.0  | 2.729  | N | 128.158 | E | 56  | D   | 5.4 | 5.4                      | 1.3   | 79   | HALMAHERA, INDONESIA. Mw 5.7 (HRV).  |
| 14   | 20 | 11 | 35.04 | 44.432 | N | 7.287   | E | 10  | G   |     |                          | 0.1   | 5  | NORTHERN ITALY. ML 1.7 (GEN).  |
| a 14 | 20 | 43 | 53.7  | 35.104 | N | 58.633  | E | 33  | N   | 5.3 |                          | 1.0   | 172  | NORTHERN IRAN. Mw 5.3 (HRV). ML 4.9 (TEH).   |
| 14   | 21 | 02 | 52.47 | 45.26  | N | 16.75   | E | 10  | G   |     |                          | 1.3   | 11   | NORTHWESTERN BALKAN REGION. ML 3.4 (ZAG). MD 3.1 (TRI).  |
| 14   | 21 | 25 | 59.0* | 51.057 | N | 30.008  | W | 10  | G   | 5.0 | 4.4                      | 1.0   | 118  | NORTHERN MID-ATLANTIC RIDGE  |
| 14   | 21 | 58 | 49.17 | 45.86  | N | 3.36    | E | 10  | G   |     |                          | 0.8   | 5  | FRANCE. ML 1.7 (LDG).  |
| 14   | 22 | 01 | 55.2  | 45.492 | N | 3.564   | E | 10  | G   |     |                          | 0.7   | 13   | FRANCE. ML 1.7 (LDG), 1.4 (STR).   |
| 14   | 22 | 11 | 13.47 | 11.55  | S | 117.21  | E | 33  | N   | 4.2 |                          | 1.0   | 12   | SOUTH OF SUMBAWA, INDONESIA  |
| 14   | 22 | 19 | 39.57 | 33.84  | S | 72.06   | W | 10  | G   |     |                          | 0.5   | 10   | OFF COAST OF CENTRAL CHILE. MD 3.3 (SAN).  |
| a 14 | 22 | 20 | 02.4* | 8.485  | S | 80.185  | W | 33  | N   | 5.2 | 4.9                      | 1.2   | 76   | OFF COAST OF NORTHERN PERU. Mw 5.6 (HRV). Felt (III) at Trujillo.  |
| 15   | 00 | 04 | 31.2* | 43.982 | N | 7.624   | E | 10  | G   |     |                          | 0.3   | 5  | NEAR SOUTH COAST OF FRANCE. ML 1.9 (GEN).  |
| 15   | 00 | 11 | 35.1* | 0.246  | S | 91.310  | W | 33  | N   | 4.8 |                          | 1.0   | 41   | GALAPAGOS ISLANDS  |
| 15   | 01 | 17 | 22.17 | 38.95  | N | 40.30   | E | 10  | G   |     |                          | 1.1   | 4  | TURKEY. ML 3.9 (ISK).  |
| 15   | 04 | 38 | 08.67 | 42.10  | N | 7.90    | W | 10  | G   |     |                          | 0.3   | 4  | SPAIN. mbLg 2.9 (MDD).   |
| a 15 | 04 | 42 | 12.24 | 58.688 | N | 150.280 | W | 39  |     | 5.0 | 4.4                      |   | 269  | GULF OF ALASKA. <AEIC>. Mw 5.2 (HRV). ML 5.0 (AEIC), 5.4 (PMR). Felt (IV) at Birchwood, Homer and Seward; (III) at Anchorage, Cooper Landing, Kasilof, Kodiak and Ninilchik.   |
| 15   | 05 | 15 | 44.77 | 37.13  | N | 28.92   | E | 10  | G   |     |                          | 1.3   | 4  | TURKEY. ML 3.2 (ISK).  |
| 15   | 05 | 25 | 06.37 | 33.68  | S | 71.62   | W | 10  | G   |     |                          | 0.4   | 10   | NEAR COAST OF CENTRAL CHILE. MD 3.8 (SAN).   |
| 15   | 05 | 44 | 47.64 | 36.911 | N | 4.948   | W | 10  | G   |     |                          | 1.0   | 9  | STRAIT OF GIBRALTAR. mbLg 2.3 (MDD).   |
| 15   | 05 | 51 | 46.77 | 34.40  | S | 70.60   | W | 100 | G   |     |                          | 0.2   | 8  | CHILE-ARGENTINA BORDER REGION  |
| 15   | 05 | 59 | 09.94 | 44.139 | N | 7.863   | E | 10  | G   |     |                          | 0.4   | 8  | NORTHERN ITALY. ML 2.0 (GEN).  |
| 15   | 06 | 09 | 37.9  | 36.734 | N | 89.336  | W | 5   | G   |     |                          | 0.5   | 7  | NEW MADRID, MISSOURI REGION. mbLg 2.5 (GS).  |
| 15   | 06 | 51 | 33.44 | 44.130 | N | 7.864   | E | 10  | G   |     |                          | 0.4   | 5  | NORTHERN ITALY. ML 1.8 (GEN).  |
| 15   | 07 | 16 | 47.57 | 15.30  | N | 98.74   | W | 33  | N   | 4.3 |                          | 1.4   | 8  | OFF COAST OF GUERRERO, MEXICO  |
| 15   | 08 | 42 | 53.5  | 45.564 | N | 3.682   | E | 10  | G   |     |                          | 0.9   | 16   | FRANCE. ML 2.8 (LDG), 2.3 (STR).   |
| 15   | 08 | 56 | 35.04 | 55.000 | N | 162.000 | W | 33  | N   |     |                          |   | 8  | ALASKA PENINSULA. <MACRO>. ML 3.5 (PMR). Felt (IV) at King Cove.   |
| 15   | 09 | 10 | 20.44 | 28.720 | N | 34.702  | E | 10  | G   |     |                          | 0.7   | 6  | EGYPT. MD 3.0 (RYD).   |
| 15   | 09 | 21 | 05.14 | 59.111 | N | 153.686 | W | 106 |     |     |                          |   | 33   | SOUTHERN ALASKA. <AEIC>.   |
| a 15 | 11 | 20 | 22.1  | 37.282 | S | 177.523 | E | 33  | N   | 5.9 | 6.4                      | 1.3   | 94   | OFF E. COAST OF N. ISLAND, N.Z. Mw 6.5 (GS), 6.3 (HRV). ML 6.2 (WEL). Ms 6.4 (BRK). Mo=9.3*10**18 Nm (PPT). Minor damage occurred at Opotiki. Felt strongly in the Bay of Plenty region. Felt in the northern and central parts of North Island. |
| 15   | 12 | 33 | 06.24 | 59.939 | N | 149.490 | W | 41  |     |     |                          |   | 83   | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.2 (AEIC), 3.2 (PMR).   |
| 15   | 13 | 22 | 38.8  | 33.765 | N | 136.899 | E | 358 | 4.8 |     |                          | 0.9   | 94   | NEAR S. COAST OF WESTERN HONSHU  |
| 15   | 14 | 50 | 07.64 | 33.140 | S | 70.270  | W | 5   | G   |     |                          | 0.5   | 7  | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).   |
| 15   | 15 | 08 | 10.7  | 1.864  | N | 120.717 | E | 29  | D   | 5.0 |                          | 0.8   | 30   | MINAHASSA PENINSULA, SULAWESI  |
| 15   | 15 | 26 | 18.7  | 41.208 | N | 21.961  | E | 5   | G   |     |                          | 0.4   | 7  | NORTHWESTERN BALKAN REGION. ML 2.0 (SKO).  |

|    |    |    |       |          |           |           |         |         |   |               |
|----|----|----|-------|----------|-----------|-----------|---------|---------|---|---------------|
| 15 | 16 | 06 | 32.9* | 32.370 S | 71.680 W  | 10 G      | 1.2     | 13      | NEAR COAST OF CENTRAL CHILE   |               |
| 15 | 16 | 58 | 04.5* | 37.544 S | 177.547 E | 18 D      | 4.9 4.3 | 21      | OFF E. COAST OF N. ISLAND, N.Z.   |               |
| 15 | 18 | 31 | 10.07 | 37.42 S  | 177.61 E  | 33 N      | 4.5 4.5 | 1.7     | 8   |               |
| 15 | 22 | 07 | 09.4* | 44.560 N | 7.139 E   | 10 G      | 0.1     | 8       | NORTHERN ITALY. ML 2.0 (GEN).   |               |
| 15 | 23 | 02 | 36.0  | 43.559 N | 127.289 W | 10 G      | 0.7     | 75      | OFF COAST OF OREGON   |               |
| 15 | 23 | 24 | 48.6* | 28.956 N | 52.641 E  | 33 N      | 4.7     | 0.9     | 111   |               |
| a  | 15 | 23 | 56    | 11.4     | 3.262 S   | 139.842 E | 114 D   | 5.7     | 0.9   | SOUTHERN IRAN |
| 16 | 00 | 44 | 33.57 | 28.68 N  | 34.80 E   | 10 G      | 0.7     | 142     | IRIAN JAYA, INDONESIA. Mw 5.8 (HRV).  |               |
| 16 | 01 | 02 | 47.4  | 42.640 N | 111.079 W | 5 G       | 1.0     | 6       | EGYPT. MD 3.2 (RYD).  |               |
| 16 | 01 | 46 | 20.3  | 11.829 N | 86.273 W  | 130 D     | 4.6     | 1.3     | 14  |               |
| 16 | 02 | 10 | 19.97 | 47.26 N  | 11.00 E   | 10 G      | 0.2     | 70      | EASTERN IDAHO. ML 3.2 (GS).   |               |
| 16 | 03 | 03 | 38.4* | 40.688 N | 125.202 W | 8         | 4.1     | 4       | NEAR COAST OF NICARAGUA. MD 4.5 (UPA).  |               |
|    |    |    |       |          |           |           |         | 140     | AUSTRIA. ML 1.1 (VIE).  |               |
|    |    |    |       |          |           |           |         |         | OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 4.4 (BRK), 4.3 (GS). MD 4.2 (GM). Mo-1.3*10**16 Nm (BRK). Felt (III) at Eureka and McKinleyville; (II) at Loleta. |               |
| 16 | 04 | 13 | 31.0* | 64.893 N | 149.021 W | 0         |         | 15      | CENTRAL ALASKA. <AEIC>. ML 2.6 (AEIC).  |               |
| 16 | 04 | 13 | 35.5* | 64.887 N | 148.965 W | 0         |         | 16      | CENTRAL ALASKA. <AEIC>. ML 3.0 (AEIC), 3.1 (PMR).   |               |
| 16 | 04 | 31 | 38.5  | 3.533 N  | 78.824 W  | 30 D      | 4.8     | 56      | SOUTH OF PANAMA. MD 4.4 (UPA).  |               |
| 16 | 05 | 45 | 09.9  | 44.106 N | 21.348 E  | 10 G      | 4.3     | 1.1     | 88  |               |
|    |    |    |       |          |           |           |         |         | NORTHWESTERN BALKAN REGION. MD 4.4 (TRI). ML 4.2 (TTG), 4.1 (TIR).  |               |
| 16 | 05 | 46 | 18.9* | 31.667 S | 69.538 W  | 150 G     | 0.6     | 13      | SAN JUAN PROVINCE, ARGENTINA. MD 3.9 (SAN).   |               |
| 16 | 05 | 52 | 00.7  | 35.341 N | 26.520 E  | 47        | 4.2     | 58      | CRETE   |               |
| 16 | 06 | 20 | 53.8* | 43.729 N | 147.230 E | 33 N      | 4.7     | 1.1     | 22  |               |
| 16 | 06 | 55 | 16.37 | 38.90 N  | 71.60 E   | 33 N      | 4.4     | 1.2     | 17  |               |
| 16 | 06 | 56 | 50.2* | 38.291 N | 28.256 E  | 10 G      | 0.6     | 5       | KURIL ISLANDS   |               |
| 16 | 08 | 36 | 43.5* | 11.036 N | 61.820 W  | 33 N      | 0.6     | 6       | AFGHANISTAN-TAJIKISTAN BORD REG.  |               |
| 16 | 09 | 02 | 05.07 | 11.13 N  | 62.13 W   | 109 ?     | 0.4     | 13      | TURKEY. ML 3.1 (ISK).   |               |
| 16 | 10 | 50 | 08.2* | 32.079 N | 114.914 W | 2         |         | 2       | WINDWARD ISLANDS. MD 2.9 (TRN).   |               |
| 16 | 11 | 19 | 57.27 | 16.69 N  | 95.97 W   | 33 N      | 4.2     | 1.6     | 8   |               |
| 16 | 11 | 51 | 14.17 | 20.49 S  | 177.98 W  | 500 G     | 4.2     | 1.6     | 12  |               |
| 16 | 12 | 43 | 20.7  | 41.650 N | 22.374 E  | 10 G      | 0.7     | 9       | W. ARIZONA-SONORA BORDER REGION. <ECX-P>. MD 2.9 (ECX).   |               |
| 16 | 12 | 45 | 24.3  | 39.018 N | 75.659 E  | 20 D      | 4.8     | 1.0     | 25  |               |
| 16 | 13 | 29 | 01.8* | 42.641 N | 23.930 E  | 10 G      | 1.5     | 8       | OAXACA, MEXICO  |               |
| 16 | 15 | 58 | 36.5* | 33.191 S | 70.338 W  | 5 G       | 0.3     | 9       | FIJI ISLANDS REGION   |               |
| 16 | 17 | 29 | 46.07 | 43.09 N  | 0.49 W    | 5 G       | 0.1     | 4       | NORTHWESTERN BALKAN REGION. ML 1.7 (SKO).   |               |
| 16 | 19 | 18 | 40.3* | 36.670 N | 121.290 W | 6         |         | 37      | SOUTHERN XINJIANG, CHINA  |               |
| 16 | 20 | 40 | 42.67 | 34.58 N  | 25.99 E   | 33 N      | 3.9     | 1.3     | 8   |               |
| 16 | 20 | 50 | 56.67 | 40.59 N  | 30.29 E   | 10 G      | 0.4     | 4       | BULGARIA. ML 2.9 (THE).   |               |
| 16 | 20 | 59 | 43.0  | 43.083 N | 0.428 W   | 5 G       | 0.1     | 6       | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |               |
| 16 | 21 | 25 | 04.3* | 36.724 N | 70.472 E  | 152 ?     | 4.2     | 0.6     | 9   |               |
| 16 | 21 | 32 | 01.47 | 36.39 N  | 6.03 W    | 10 G      | 1.7     | 4       | PYRENEES. ML 1.0 (STR).   |               |
| 16 | 21 | 52 | 08.57 | 58.87 S  | 27.24 W   | 33 N      | 4.8     | 1.3     | 37  |               |
| 16 | 23 | 59 | 13.0  | 43.554 N | 7.703 E   | 10 G      | 0.6     | 20      | CENTRAL CALIFORNIA. <GM-P>. MD 3.0 (GM). ML 2.8 (GS).   |               |
|    |    |    |       |          |           |           |         | 8       | CRETE   |               |
| 17 | 00 | 20 | 09.5* | 39.092 N | 28.637 E  | 10 G      | 0.6     | 5       | TURKEY. ML 2.8 (ISK).   |               |
| 17 | 00 | 25 | 16.7  | 40.963 N | 22.831 E  | 5 G       | 0.2     | 9       | TURKEY. ML 2.1 (BTH).   |               |
| 17 | 00 | 41 | 51.57 | 0.23 S   | 124.33 E  | 70 ?      | 4.5     | 1.6     | 19  |               |
| 17 | 00 | 58 | 58.97 | 56.06 S  | 25.90 W   | 31 D      | 4.8 4.1 | 1.2     | 16  |               |
| 17 | 01 | 00 | 11.4* | 33.867 S | 70.602 W  | 90 G      | 0.3     | 10      | HINDU KUSH REGION, AFGHANISTAN  |               |
| 17 | 02 | 07 | 35.4* | 65.116 N | 150.436 W | 12        |         | 69      | STRAIT OF GIBRALTAR. MD 2.4 (SFS).  |               |
|    |    |    |       |          |           |           |         | 9       | SOUTH SANDWICH ISLANDS REGION   |               |
|    |    |    |       |          |           |           |         | 20      | NEAR SOUTH COAST OF FRANCE. ML 2.3 (GEN), 2.0 (LDG), 1.5 (STR).   |               |
| 17 | 03 | 12 | 51.4* | 61.436 N | 150.967 W | 66        |         | 57      | TURKEY. ML 3.0 (ISK).   |               |
| 17 | 03 | 20 | 42.87 | 37.01 N  | 3.75 W    | 10 G      | 0.5     | 4       | GREECE. ML 2.3 (THE), 1.9 (SKO).  |               |
| 17 | 04 | 09 | 23.6* | 40.911 N | 23.743 E  | 5 G       | 0.4     | 6       | SOUTHERN MOLUCCA SEA  |               |
| 17 | 05 | 07 | 39.9* | 62.075 N | 150.812 W | 61        |         | 49      | SOUTH SANDWICH ISLANDS REGION   |               |
| 17 | 05 | 34 | 40.5  | 51.140 N | 5.782 E   | 10 G      | 1.4     | 23      | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |               |
|    |    |    |       |          |           |           |         | 69      | NORTHERN ALASKA. <AEIC>. ML 4.1 (AEIC), 4.2 (PMR). Felt (IV) at Manley Hot Springs; (III) at Fairbanks and Healy.   |               |
| 17 | 05 | 40 | 11.4  | 34.345 N | 26.111 E  | 33 N      | 4.1     | 0.8     | 57  |               |
| 17 | 06 | 54 | 16.0* | 17.364 S | 167.877 E | 33 N      | 4.4     | 1.4     | 7   |               |
| 17 | 07 | 23 | 21.8  | 42.853 N | 147.960 E | 37 D      | 4.9     | 1.1     | 58  |               |
| 17 | 09 | 09 | 24.8* | 59.513 N | 151.534 W | 47        |         | 39      | OFF COAST OF HOKKAIDO, JAPAN  |               |
| 17 | 09 | 51 | 13.0* | 32.777 S | 71.693 W  | 10 G      | 0.6     | 11      | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.5 (AEIC).   |               |
| 17 | 09 | 51 | 33.47 | 32.38 S  | 70.21 W   | 120 G     | 0.4     | 11      | NEAR COAST OF CENTRAL CHILE   |               |
| 17 | 11 | 37 | 38.37 | 39.16 N  | 30.86 E   | 10 G      | 0.2     | 4       | CHILE-ARGENTINA BORDER REGION   |               |
| 17 | 11 | 41 | 13.5* | 51.428 N | 15.636 E  | 10 G      | 0.4     | 6       | TURKEY. ML 3.1 (ISK).   |               |
| 17 | 12 | 17 | 11.0* | 65.090 N | 150.462 W | 13        |         | 23      | POLAND  |               |
| 17 | 12 | 37 | 11.2* | 39.686 N | 29.513 E  | 10 G      | 0.4     | 5       | NORTHERN ALASKA. <AEIC>. ML 3.0 (AEIC).   |               |
| 17 | 13 | 10 | 42.9* | 6.853 N  | 82.376 W  | 10 G      | 4.6     | 1.0     | 15  |               |
| 17 | 13 | 11 | 38.8* | 3.307 S  | 135.804 E | 33 N      | 4.6     | 1.5     | 6   |               |
| 17 | 13 | 11 | 59.2  | 34.498 N | 26.243 E  | 45        | 4.7     | 1.1     | 165   |               |
| 17 | 13 | 47 | 12.2* | 41.125 N | 28.462 E  | 10 G      | 0.8     | 5       | CRETE. MD 4.4 (ATH).  |               |
| 17 | 13 | 55 | 50.1* | 4.745 S  | 103.227 E | 33 N      | 5.4     | 1.1     | 29  |               |
| 17 | 14 | 03 | 09.6* | 35.510 N | 3.731 W   | 10 G      | 0.7     | 9       | TURKEY. ML 2.8 (ISK).   |               |
| 17 | 15 | 06 | 16.67 | 38.73 N  | 23.30 E   | 10 G      | 0.8     | 11      | SOUTHERN SUMATERA, INDONESIA  |               |
| 17 | 15 | 18 | 14.4* | 36.859 N | 28.929 E  | 10 G      | 0.7     | 5       | STRAIT OF GIBRALTAR. mbLg 3.4 (MDD).  |               |
| 17 | 16 | 04 | 03.8  | 22.216 S | 179.547 W | 590 *     | 4.7     | 0.9     | 9   |               |
| 17 | 16 | 08 | 45.97 | 36.35 N  | 28.98 E   | 10 G      | 0.7     | 4       | GREECE. ML 2.9 (THE).   |               |
| 17 | 17 | 27 | 14.3* | 33.326 S | 71.428 W  | 50 G      | 0.4     | 10      | DODECANESE ISLANDS. ML 3.4 (ISK).   |               |
| 17 | 18 | 09 | 33.4  | 36.270 N | 9.116 W   | 25        |         | 51      | SOUTH OF FIJI ISLANDS   |               |
| 17 | 18 | 25 | 23.1* | 36.275 N | 9.225 W   | 19        |         | 4       | DODECANESE ISLANDS. ML 3.4 (ISK).   |               |
| 17 | 18 | 30 | 50.97 | 36.57 N  | 8.81 W    | 10 G      | 0.7     | 9       | NEAR COAST OF CENTRAL CHILE. MD 3.5 (SAN).  |               |
| 17 | 18 | 49 | 53.0* | 67.660 N | 161.973 W | 10 G      | 3.4     | 1.4     | 30  |               |
| 17 | 19 | 47 | 24.9* | 4.254 S  | 134.252 E | 33 N      | 4.5     | 1.2     | 31  |               |
| 17 | 20 | 11 | 07.4* | 18.128 N | 101.516 W | 29 *      | 4.3     | 1.0     | 9   |               |
| 17 | 20 | 35 | 45.8* | 7.089 S  | 128.290 E | 33 N      |         | 1.1     | 12  |               |
| 17 | 21 | 06 | 02.0* | 3.626 N  | 82.748 W  | 33 N      | 4.6     | 1.0     | 20  |               |
| a  | 17 | 21 | 07    | 57.9*    | 27.320 S  | 176.715 W | 35 D    | 5.2 5.4 | 1.4   | BANDA SEA     |
| 17 | 23 | 02 | 23.17 | 31.94 S  | 69.69 W   | 130 G     | 1.3     | 1.3     | 13  |               |
| 17 | 23 | 14 | 43.37 | 32.85 S  | 71.51 W   | 33 N      |         | 1.5     | 11  |               |
| 17 | 23 | 42 | 00.77 | 36.51 N  | 3.12 W    | 10 G      | 0.0     | 4       | SOUTH OF PANAMA. MD 4.6 (UPA).  |               |
| 17 | 23 | 55 | 55.67 | 34.94 N  | 23.76 E   | 33 N      |         | 1.2     | 69  |               |
| 18 | 02 | 56 | 00.1  | 46.372 N | 1.499 E   | 5 G       |         | 1.1     | 12  |               |
| 18 | 03 | 26 | 12.1* | 39.166 N | 28.383 E  | 10 G      | 0.3     | 7       | KERMADEC ISLANDS REGION. Mw 5.8 (HRV). Ms 5.2 (BRK).  |               |
|    |    |    |       |          |           |           |         |         | SAN JUAN PROVINCE, ARGENTINA. MD 3.7 (SAN).   |               |
|    |    |    |       |          |           |           |         |         | NEAR COAST OF CENTRAL CHILE. MD 3.8 (SAN).  |               |
|    |    |    |       |          |           |           |         |         | STRAIT OF GIBRALTAR. mbLg 2.2 (MDD).  |               |
|    |    |    |       |          |           |           |         |         | CRETE. MD 3.5 (ATH).  |               |
|    |    |    |       |          |           |           |         |         | FRANCE. ML 3.0 (LDG), 2.4 (STR).  |               |
|    |    |    |       |          |           |           |         |         | TURKEY. ML 3.0 (ISK).   |               |

|    |    |    |       |        |        |         |         |     |     |     |     |   |  |
|----|----|----|-------|--------|--------|---------|---------|-----|-----|-----|-----|---|--|
| 18 | 03 | 45 | 03.0% | 44.600 | N      | 6.970   | E       | 10  | G   | 0.3 | 5   | FRANCE. ML 2.0 (GEN).   |  |
| 18 | 04 | 13 | 12.3% | 37.44  | S      | 177.53  | E       | 33  | N   | 4.8 | 4.8 | OFF E. COAST OF N. ISLAND, N.Z.   |  |
| 18 | 04 | 57 | 48.3  | 43.067 | N      | 147.559 | E       | 33  | N   | 4.5 | 1.2 | 30 KURIL ISLANDS  |  |
| 18 | 05 | 14 | 25.6% | 32.909 | S      | 70.345  | W       | 100 | G   | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).                                    |  |
| 18 | 06 | 27 | 26.9% | 37.217 | N      | 3.668   | W       | 10  | G   | 0.7 | 5   | SPAIN. mbLg 2.2 (MDD).  |  |
| 18 | 06 | 32 | 32.8% | 41.672 | N      | 7.417   | W       | 5   | G   | 0.4 | 6   | PORTUGAL. mbLg 3.2 (MDD).   |  |
| 18 | 06 | 43 | 12.5% | 10.98  | N      | 62.38   | W       | 90  | G   | 0.5 | 8   | NEAR COAST OF VENEZUELA. MD 3.6 (TRN).  |  |
| 18 | 07 | 55 | 30.6  | 56.127 | N      | 153.144 | W       | 10  | G   | 3.6 | 1.0 | 57 KODIAK ISLAND REGION. ML 3.8 (AEIC).   |  |
| 18 | 08 | 37 | 23.5% | 60.466 | N      | 151.455 | W       | 60  |     |     | 43  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.5 (AEIC).                                 |  |
| 18 | 09 | 30 | 08.6% | 10.903 | S      | 123.827 | E       | 88  | *   | 4.3 | 1.2 | 16 TIMOR REGION, INDONESIA  |  |
| 18 | 09 | 52 | 38.4% | 58.956 | N      | 153.335 | W       | 80  |     |     | 32  | KODIAK ISLAND REGION. <AEIC>.   |  |
| a  | 18 | 11 | 07    | 33.5   | 37.373 | N       | 139.799 | E   | 15  | D   | 5.3 | 5.1   | 1.0 128 EASTERN HONSHU, JAPAN. Mw 5.3 (HRV). Felt (IV JMA) at Aizu-Wakamatsu; (III JMA) at Nikko and Shirakawa.  |
| 18 | 11 | 22 | 48.6  | 56.278 | N      | 152.941 | W       | 10  | G   | 3.7 | 0.7 | 38 KODIAK ISLAND REGION. ML 3.8 (AEIC).   |  |
| a  | 18 | 11 | 40    | 40.5   | 44.029 | N       | 148.088 | E   | 33  | N   | 5.2 | 0.7   | 129 KURIL ISLANDS. Mw 5.1 (HRV).   |
| 18 | 12 | 51 | 59.6  | 37.293 | N      | 139.844 | E       | 33  | N   | 4.8 | 1.0 | 71 EASTERN HONSHU, JAPAN  |  |
| 18 | 13 | 34 | 02.5% | 33.244 | S      | 70.528  | W       | 90  | G   |     | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.2 (SAN).   |
| 18 | 13 | 34 | 59.6  | 41.218 | N      | 21.973  | E       | 10  | G   |     | 0.6 | 8   | NORTHWESTERN BALKAN REGION. ML 1.8 (SKO).  |
| 18 | 13 | 36 | 30.5% | 10.583 | N      | 61.456  | W       | 10  | G   |     | 1.6 | 5   | TRINIDAD. MD 2.9 (TRN).  |
| 18 | 13 | 37 | 48.8% | 7.01   | S      | 150.84  | E       | 74  | ?   | 4.3 | 0.7 | 9 NEW BRITAIN REGION, P.N.G.  |  |
| 18 | 13 | 45 | 44.2% | 43.58  | N      | 147.82  | E       | 33  | N   | 4.2 | 1.7 | 6 KURIL ISLANDS   |  |
| 18 | 13 | 54 | 03.8% | 43.88  | N      | 148.38  | E       | 33  | N   | 4.1 | 1.6 | 7 EAST OF KURIL ISLANDS   |  |
| 18 | 14 | 44 | 26.3% | 38.25  | N      | 28.20   | E       | 10  | G   |     | 0.9 | 4   | TURKEY. ML 2.9 (ISK).  |
| 18 | 15 | 06 | 50.1  | 40.832 | N      | 20.845  | E       | 5   | G   |     | 1.3 | 21  | GREECE-ALBANIA BORDER REGION. ML 3.2 (TTG), 2.8 (THE).   |
| 18 | 15 | 48 | 50.2% | 30.543 | N      | 114.077 | W       | 37  |     |     | 3   |   | GULF OF CALIFORNIA. <ECX-P>. MD 3.6 (ECX).   |
| 18 | 16 | 11 | 30.3  | 48.428 | N      | 7.753   | E       | 10  | G   |     | 0.4 | 8   | FRANCE. ML 2.5 (LDG).  |
| 18 | 16 | 27 | 12.3% | 40.557 | N      | 27.467  | E       | 10  | G   |     | 0.4 | 5   | TURKEY. ML 3.0 (ISK).  |
| 18 | 16 | 38 | 15.3  | 35.277 | N      | 39.745  | E       | 10  | G   | 4.6 | 0.9 | 55 JORDAN - SYRIA REGION. ML 5.0 (BHL). MD 4.8 (RYD).                           |  |
| 18 | 17 | 35 | 29.3% | 57.352 | N      | 153.846 | W       | 42  |     |     | 31  |   | KODIAK ISLAND REGION. <AEIC>. ML 3.5 (AEIC).   |
| 18 | 18 | 09 | 50.7% | 63.747 | N      | 149.281 | W       | 117 |     |     | 47  |   | CENTRAL ALASKA. <AEIC>.  |
| 18 | 18 | 53 | 05.6% | 38.741 | N      | 119.708 | W       | 0   |     |     | 32  |   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.1 (GM).  |
| a  | 18 | 20 | 38    | 32.0   | 17.838 | S       | 178.703 | W   | 545 | G   | 5.6 | 0.9   | 482 FIJI ISLANDS REGION. Mw 5.7 (GS), 5.7 (HRV). Depth from broadband displacement seismograms.  |
| 18 | 20 | 43 | 02.1% | 37.808 | N      | 27.231  | E       | 10  | G   |     | 0.7 | 6   | TURKEY. ML 3.5 (ISK).  |
| 18 | 23 | 15 | 35.3% | 23.457 | S      | 70.810  | W       | 33  | D   | 4.8 | 1.7 | 18 NEAR COAST OF NORTHERN CHILE   |  |
| 18 | 23 | 44 | 51.3% | 47.002 | N      | 0.528   | E       | 5   | G   |     | 0.9 | 13  | FRANCE. ML 2.8 (LDG).  |
| 18 | 23 | 47 | 49.4  | 43.894 | N      | 7.421   | E       | 5   | G   |     | 0.3 | 6   | NEAR SOUTH COAST OF FRANCE. ML 1.4 (LDG), 1.0 (STR).   |
| 19 | 01 | 11 | 16.9% | 44.00  | N      | 7.20    | E       | 5   | G   |     | 0.1 | 4   | NORTHERN ITALY. ML 1.7 (GEN).  |
| 19 | 01 | 59 | 43.0  | 40.805 | N      | 22.916  | E       | 5   | G   |     | 0.5 | 8   | GREECE. ML 2.2 (THE), 1.7 (SKO).   |
| 19 | 02 | 24 | 15.7  | 39.574 | N      | 79.516  | E       | 28  | D   | 4.9 | 0.9 | 63 SOUTHERN XINJIANG, CHINA   |  |
| 19 | 02 | 27 | 02.2% | 51.577 | N      | 7.692   | E       | 10  | G   |     | 1.3 | 12  | GERMANY. ML 3.2 (UCC), 2.7 (DBN).  |
| 19 | 02 | 36 | 34.4% | 22.05  | S      | 179.58  | W       | 557 | ?   | 4.8 | 1.1 | 21 SOUTH OF FIJI ISLANDS  |  |
| 19 | 03 | 22 | 17.8% | 34.032 | N      | 72.060  | E       | 33  | N   | 4.1 | 0.9 | 16 PAKISTAN   |  |
| 19 | 03 | 58 | 14.5% | 48.01  | N      | 3.06    | W       | 5   | G   |     | 1.0 | 14  | FRANCE. ML 3.0 (LDG).  |
| 19 | 05 | 00 | 26.1% | 60.711 | N      | 150.399 | W       | 45  |     |     | 32  |   | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.8 (AEIC).  |
| 19 | 05 | 09 | 23.6% | 39.651 | N      | 23.834  | E       | 10  | G   |     | 0.6 | 9   | AEGEAN SEA. ML 2.6 (THE).  |
| 19 | 05 | 16 | 37.0% | 37.60  | N      | 139.20  | E       | 33  | N   |     | 1.4 | 6   | EASTERN HONSHU, JAPAN  |
| 19 | 05 | 19 | 57.5  | 37.649 | N      | 21.221  | E       | 10  | G   | 3.6 | 1.4 | 28 SOUTHERN GREECE. ML 3.7 (THE). MD 3.6 (ATH).                                 |  |
| 19 | 05 | 39 | 43.8% | 51.13  | N      | 15.65   | E       | 10  | G   |     | 1.3 | 6   | POLAND   |
| 19 | 05 | 45 | 10.5  | 41.085 | N      | 20.037  | E       | 5   | G   |     | 0.9 | 30  | ALBANIA. ML 3.6 (TIR), 3.6 (TTG), 3.4 (THE), 2.9 (SKO). MD 3.6 (ATH).  |
| 19 | 06 | 00 | 59.0% | 37.70  | N      | 27.04   | E       | 10  | G   |     | 1.1 | 4   | TURKEY. ML 3.1 (ISK).  |
| 19 | 06 | 21 | 04.6% | 9.415  | S      | 124.331 | E       | 97  | *   | 4.5 | 1.1 | 20 TIMOR REGION, INDONESIA  |  |
| 19 | 06 | 54 | 05.2  | 35.693 | N      | 139.261 | E       | 10  | G   | 4.8 | 1.1 | 40 NEAR S. COAST OF HONSHU, JAPAN   |  |
| 19 | 06 | 57 | 48.6% | 47.01  | S      | 33.47   | E       | 10  | G   | 4.6 | 1.3 | 7 PRINCE EDWARD ISLANDS REGION  |  |
| 19 | 07 | 06 | 05.8% | 21.654 | N      | 143.717 | E       | 216 | ?   | 4.4 | 1.0 | 24 MARIANA ISLANDS REGION   |  |
| a  | 19 | 08 | 41    | 30.1   | 15.614 | N       | 94.480  | W   | 30  | D   | 5.1 | 1.2   | 100 NEAR COAST OF OAXACA, MEXICO. Mw 5.2 (HRV).  |
| a  | 19 | 09 | 22    | 04.5%  | 54.103 | S       | 143.412 | E   | 10  | G   | 5.4 | 5.5   | 1.3 33 WEST OF MACQUARIE ISLAND. Mw 5.7 (HRV).   |
| 19 | 10 | 04 | 59.9% | 43.579 | N      | 148.155 | E       | 33  | N   |     | 1.0 | 7   | EAST OF KURIL ISLANDS  |
| 19 | 10 | 09 | 57.6% | 28.722 | N      | 34.837  | E       | 10  | G   |     | 0.6 | 6   | EGYPT. MD 3.1 (RYD).   |
| 19 | 11 | 19 | 30.9% | 40.44  | N      | 23.67   | E       | 5   | G   |     | 0.2 | 4   | GREECE. ML 2.2 (THE).  |
| 19 | 11 | 27 | 25.4% | 59.001 | N      | 152.209 | W       | 21  |     |     | 47  |   | SOUTHERN ALASKA. <AEIC>. ML 3.2 (AEIC).  |
| 19 | 12 | 00 | 21.7% | 34.659 | S      | 109.348 | W       | 10  | G   | 5.0 | 1.0 | 21 SOUTHERN EAST PACIFIC RISE   |  |
| 19 | 12 | 15 | 43.8% | 40.47  | N      | 21.84   | E       | 5   | G   |     | 0.5 | 4   | GREECE   |
| a  | 19 | 13 | 08    | 43.5%  | 34.458 | S       | 108.234 | W   | 10  | G   | 5.4 | 4.8   | 1.3 28 SOUTHERN EAST PACIFIC RISE. Mw 5.2 (HRV).   |
| 19 | 14 | 59 | 58.5% | 40.934 | N      | 47.816  | E       | 33  | N   | 4.6 | 1.5 | 18 EASTERN CAUCASUS. Felt (VI) at Ismailly and (IV) at Stepanakert, Azerbaijan. |  |
| 19 | 17 | 19 | 27.1% | 4.675  | S      | 153.091 | E       | 73  | ?   | 4.2 | 0.8 | 8 NEW IRELAND REGION, P.N.G.  |  |
| a  | 19 | 17 | 41    | 15.4   | 17.820 | S       | 178.631 | W   | 578 | D   | 5.2 | 0.9   | 142 FIJI ISLANDS REGION. Mw 5.5 (HRV).   |
| 19 | 19 | 46 | 54.2% | 43.666 | N      | 147.760 | E       | 33  | N   | 4.7 | 1.0 | 40 KURIL ISLANDS  |  |
| 19 | 20 | 13 | 51.1% | 46.753 | N      | 112.342 | W       | 6   |     |     | 10  |   | MONTANA. <BUT>. ML 2.9 (BUT).  |
| 19 | 21 | 49 | 36.6% | 60.157 | N      | 152.903 | W       | 114 |     |     | 47  |   | SOUTHERN ALASKA. <AEIC>.   |
| 19 | 22 | 22 | 32.0% | 48.21  | N      | 1.60    | W       | 10  | G   |     | 0.5 | 5   | FRANCE. ML 2.5 (LDG).  |
| 19 | 22 | 54 | 48.5% | 31.84  | S      | 71.47   | W       | 10  | G   |     | 0.5 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.7 (SAN).   |
| 20 | 01 | 35 | 59.1% | 39.426 | N      | 27.775  | E       | 10  | G   |     | 0.7 | 5   | TURKEY. ML 3.0 (ISK).  |
| 20 | 02 | 50 | 48.2% | 60.560 | N      | 146.759 | W       | 14  |     | 3.5 | 69  |   | SOUTHERN ALASKA. <AEIC>. ML 3.3 (AEIC).  |
| 20 | 04 | 59 | 16.5% | 40.176 | N      | 29.506  | E       | 10  | G   |     | 0.7 | 6   | TURKEY. ML 2.9 (ISK).  |
| 20 | 05 | 16 | 54.3  | 43.816 | N      | 147.800 | E       | 33  | N   | 5.2 | 0.9 | 151 KURIL ISLANDS   |  |
| 20 | 05 | 20 | 43.1% | 33.86  | S      | 70.86   | W       | 5   | G   |     | 1.7 | 4   | CHILE-ARGENTINA BORDER REGION  |
| 20 | 06 | 16 | 42.2% | 43.30  | N      | 147.58  | E       | 33  | N   | 4.3 | 1.6 | 10 KURIL ISLANDS  |  |
| a  | 20 | 08 | 13    | 30.4%  | 12.865 | N       | 121.332 | E   | 33  | N   | 5.2 | 4.7   | 1.0 56 MINDORO, PHILIPPINE ISLANDS. Mw 5.3 (HRV).  |
| 20 | 10 | 24 | 22.5% | 40.441 | N      | 23.286  | E       | 5   | G   |     | 0.4 | 6   | GREECE. ML 1.9 (THE).  |
| 20 | 10 | 27 | 47.1% | 35.917 | N      | 120.465 | W       | 9   |     | 4.5 | 155 |   | CENTRAL CALIFORNIA. <GM-P>. MD 5.0 (GM). ML 5.0 (BRK), 4.9 (PAS). Felt (IV) at Atascadero, Bradley, Coalinga, Creston, Lockwood, Paso Robles, San Ardo, San Luis Obispo and Shandon; (III) at Arroyo Grande, Cayucos, Huron, San Miguel, Santa Cruz and Soledad. Felt in Kings, Monterey and San Luis Obispo Counties. |
| 20 | 10 | 32 | 15.4% | 61.772 | N      | 151.807 | W       | 107 |     |     | 61  |   | SOUTHERN ALASKA. <AEIC>.   |
| 20 | 10 | 39 | 42.6% | 38.893 | N      | 26.867  | E       | 10  | G   |     | 0.4 | 7   | AEGEAN SEA. ML 3.5 (ISK).  |
| 20 | 10 | 45 | 49.5% | 15.82  | S      | 171.69  | E       | 33  | N   |     | 1.1 | 16  | VANUATU ISLANDS REGION   |
| 20 | 11 | 08 | 50.6  | 6.134  | S      | 103.933 | E       | 37  | D   | 5.5 | 1.0 | 85 SOUTHWEST OF SUMATERA, INDONESIA   |  |
| 20 | 11 | 19 | 27.0% | 7.214  | N      | 127.097 | E       | 18  | D   | 5.0 | 1.6 | 24 PHILIPPINE ISLANDS REGION  |  |

|    |    |    |       |        |        |         |         |     |    |     |     |   |   |   |
|----|----|----|-------|--------|--------|---------|---------|-----|----|-----|-----|---|---|---|
| 20 | 11 | 38 | 46.67 | 36.73  | N      | 21.33   | E       | 10  | G  | 1.3 | 5   | SOUTHERN GREECE. MD 3.4 (ATH).  |   |   |
| 20 | 11 | 42 | 05.98 | 39.871 | N      | 30.028  | E       | 10  | G  | 0.8 | 6   | TURKEY. ML 2.8 (ISK).   |   |   |
| 20 | 12 | 39 | 51.7* | 11.864 | N      | 87.245  | W       | 95  | D  | 1.1 | 34  | NEAR COAST OF NICARAGUA   |   |   |
| 20 | 12 | 55 | 06.38 | 35.914 | N      | 120.464 | W       | 7   |    |     | 45  | CENTRAL CALIFORNIA. <GM-P>. MD 3.0 (GM). ML 3.3 (BRK), 3.3 (PAS), 3.2 (GS). |   |   |
| 20 | 13 | 05 | 14.38 | 34.323 | S      | 70.447  | W       | 110 | G  | 0.1 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).                                |   |   |
| 20 | 13 | 31 | 36.8* | 39.346 | S      | 74.042  | W       | 33  | N  | 4.5 | 0.6 | 13  | OFF COAST OF CENTRAL CHILE. MD 4.5 (SAN). Felt at Valdivia.   |   |
| 20 | 13 | 46 | 36.4* | 29.973 | N      | 141.897 | E       | 33  | N  | 4.6 | 1.2 | 19  | SOUTH OF HONSHU, JAPAN  |   |
| 20 | 14 | 24 | 07.97 | 47.15  | N      | 11.23   | E       | 10  | G  |     | 0.1 | 4   | AUSTRIA. ML 1.1 (VIE).  |   |
| 20 | 15 | 00 | 05.0  | 39.590 | N      | 141.048 | E       | 91  | D  | 4.9 | 0.9 | 115   | EASTERN HONSHU, JAPAN   |   |
| 20 | 15 | 05 | 18.18 | 34.305 | S      | 70.774  | W       | 90  | G  |     | 0.1 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).  |   |
| 20 | 15 | 53 | 31.8* | 18.253 | N      | 145.241 | E       | 509 |    | 4.7 | 0.7 | 17  | MARIANA ISLANDS   |   |
| 20 | 16 | 00 | 55.57 | 37.19  | N      | 3.71    | W       | 10  | G  |     | 0.3 | 4   | SPAIN. mbLg 2.3 (MDD).  |   |
| 20 | 19 | 15 | 25.98 | 60.226 | N      | 152.899 | W       | 113 |    |     |     | 64  | SOUTHERN ALASKA. <AEIC>.  |   |
| 20 | 19 | 56 | 10.28 | 46.823 | N      | 117.634 | W       | 14  |    |     |     | 11  | WASHINGTON. <SEA-P>. MD 2.6 (SEA).  |   |
| 20 | 22 | 14 | 10.98 | 38.731 | N      | 119.719 | W       | 3   |    |     |     | 51  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.7 (GM). ML 4.0 (BRK), 3.7 (GS). Felt at Gardnerville and Yerington, Nevada. |   |
| 20 | 23 | 50 | 57.7* | 68.554 | N      | 17.751  | W       | 10  | G  | 4.3 | 3.7 | 1.4   | 23  | ICELAND REGION  |
| 21 | 00 | 00 | 44.17 | 6.95   | S      | 147.50  | E       | 83  | *  | 4.4 |     | 0.1   | 6   | EASTERN NEW GUINEA REG., P.N.G.   |
| 21 | 01 | 08 | 00.28 | 38.731 | N      | 119.706 | W       | 0   |    |     |     |   | 9   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM).   |
| 21 | 01 | 28 | 24.98 | 61.068 | N      | 151.327 | W       | 58  |    |     |     |   | 44  | SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).   |
| 21 | 01 | 50 | 46.97 | 6.77   | S      | 130.45  | E       | 196 | ?  |     |     | 0.5   | 5   | BANDA SEA   |
| 21 | 02 | 50 | 56.1  | 31.740 | S      | 69.570  | W       | 138 | ?  |     |     | 0.8   | 18  | SAN JUAN PROVINCE, ARGENTINA. MD 3.9 (SAN).   |
| 21 | 03 | 05 | 54.37 | 43.84  | N      | 147.20  | E       | 10  | G  | 3.9 |     | 0.7   | 5   | KURIL ISLANDS   |
| 21 | 05 | 21 | 56.67 | 43.82  | N      | 147.60  | E       | 10  | G  | 4.1 |     | 1.1   | 5   | KURIL ISLANDS   |
| 21 | 05 | 50 | 11.98 | 38.732 | N      | 119.721 | W       | 4   |    |     |     |   | 87  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 4.0 (GM). ML 4.3 (BRK), 4.0 (GS). Felt (III) at Gardnerville, Nevada. Also felt at Yerington, Nevada. |
| 21 | 05 | 59 | 31.38 | 37.074 | N      | 4.421   | W       | 5   | G  |     |     | 0.9   | 7   | SPAIN. mbLg 2.2 (MDD).  |
| 21 | 06 | 11 | 53.87 | 44.28  | N      | 6.75    | E       | 5   | G  |     |     | 0.5   | 5   | FRANCE. ML 2.1 (GEN).   |
| 21 | 06 | 41 | 20.57 | 43.91  | N      | 147.27  | E       | 10  | G  | 3.9 |     | 0.7   | 5   | KURIL ISLANDS   |
| 21 | 07 | 01 | 37.18 | 38.723 | N      | 119.744 | W       | 0   | G  |     |     |   | 38  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM). ML 3.0 (BRK).   |
| 21 | 07 | 09 | 54.27 | 34.54  | S      | 71.04   | W       | 80  | G  |     |     | 0.6   | 7   | NEAR COAST OF CENTRAL CHILE   |
| 21 | 07 | 35 | 54.98 | 32.922 | S      | 70.280  | W       | 100 | G  |     |     | 0.7   | 11  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
| 21 | 07 | 41 | 57.2  | 44.540 | N      | 129.778 | W       | 10  | G  | 3.6 |     | 0.7   | 87  | OFF COAST OF OREGON   |
| 21 | 09 | 45 | 51.57 | 28.75  | N      | 35.63   | E       | 10  | G  |     |     | 1.1   | 4   | WESTERN ARABIAN PENINSULA   |
| 21 | 10 | 22 | 13.5  | 37.252 | N      | 21.138  | E       | 10  | G  |     |     | 0.8   | 30  | SOUTHERN GREECE. ML 4.0 (ATH), 3.7 (THE).   |
| 21 | 10 | 49 | 11.1* | 39.549 | N      | 19.708  | E       | 5   | G  |     |     | 0.8   | 11  | GREECE-ALBANIA BORDER REGION. ML 3.4 (THE).   |
| a  | 21 | 11 | 22    | 11.5   | 22.408 | N       | 118.646 | E   | 16 | D   | 5.2 | 0.8   | 96  | TAIWAN REGION. Mw 5.1 (HRV).  |
| 21 | 11 | 35 | 44.77 | 39.68  | N      | 29.58   | E       | 10  | G  |     |     | 0.9   | 4   | TURKEY. ML 2.8 (ISK).   |
| 21 | 12 | 07 | 46.78 | 43.860 | N      | 7.033   | E       | 5   | G  |     |     | 0.5   | 7   | NEAR SOUTH COAST OF FRANCE. ML 2.1 (GEN).   |
| 21 | 12 | 25 | 15.3  | 51.515 | N      | 16.128  | E       | 28  |    | 4.2 |     | 0.5   | 30  | POLAND. ML 4.4 (GRF), 4.1 (VIE), 3.8 (MOX).   |
| 21 | 13 | 01 | 09.9* | 51.070 | N      | 15.846  | E       | 10  | G  |     |     | 1.2   | 6   | POLAND. ML 2.7 (MOX).   |
| 21 | 14 | 08 | 40.78 | 60.239 | N      | 153.120 | W       | 120 |    |     |     |   | 35  | SOUTHERN ALASKA. <AEIC>.  |
| 21 | 14 | 08 | 45.1  | 44.567 | N      | 115.814 | W       | 10  | G  |     |     | 0.3   | 10  | WESTERN IDAHO. ML 2.9 (BUT).  |
| 21 | 15 | 01 | 32.78 | 37.350 | N      | 21.579  | E       | 5   | G  |     |     | 0.7   | 6   | SOUTHERN GREECE. ML 3.2 (ATH).  |
| 21 | 15 | 55 | 13.8  | 43.422 | N      | 5.453   | E       | 5   | G  |     |     | 0.6   | 15  | NEAR SOUTH COAST OF FRANCE. ML 2.7 (STR).   |
| 21 | 16 | 01 | 42.88 | 38.733 | N      | 119.759 | W       | 1   |    |     |     |   | 5   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM).   |
| 21 | 16 | 51 | 56.4* | 17.185 | N      | 95.747  | W       | 134 | *  | 3.4 |     | 1.1   | 10  | OAXACA, MEXICO  |
| 21 | 16 | 54 | 44.4* | 17.108 | N      | 94.868  | W       | 184 | ?  | 3.4 |     | 1.2   | 9   | CHIAPAS, MEXICO   |
| a  | 21 | 17 | 43    | 30.3   | 0.816  | N       | 126.230 | E   | 36 | *   | 5.3 | 1.0   | 50  | NORTHERN MOLUCCA SEA. Mw 5.1 (HRV).   |
| 21 | 18 | 46 | 33.3* | 44.493 | N      | 129.799 | W       | 10  | G  | 3.3 |     | 0.6   | 63  | OFF COAST OF OREGON   |
| 21 | 18 | 50 | 31.3* | 44.534 | N      | 129.641 | W       | 10  | G  | 3.2 |     | 0.7   | 62  | OFF COAST OF OREGON   |
| 21 | 19 | 27 | 40.0* | 16.448 | N      | 98.958  | W       | 55  | ?  | 3.7 |     | 1.3   | 6   | NEAR COAST OF GUERRERO, MEXICO  |
| 21 | 19 | 28 | 24.48 | 33.134 | S      | 70.266  | W       | 10  | G  |     |     | 0.2   | 7   | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |
| 21 | 19 | 35 | 09.58 | 44.483 | N      | 7.388   | E       | 5   | G  |     |     | 0.2   | 5   | NORTHERN ITALY. ML 1.8 (GEN).   |
| 21 | 19 | 47 | 41.67 | 27.44  | N      | 140.24  | E       | 459 | ?  | 4.3 |     | 0.5   | 18  | BONIN ISLANDS REGION  |
| 21 | 20 | 05 | 07.48 | 38.752 | N      | 119.640 | W       | 0   | G  |     |     |   | 5   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM).   |
| 21 | 20 | 05 | 38.08 | 40.297 | N      | 23.900  | E       | 5   | G  |     |     | 0.4   | 7   | GREECE. ML 2.5 (THE).   |
| 21 | 20 | 18 | 07.6  | 49.517 | N      | 28.545  | W       | 10  | G  | 4.7 | 4.6 | 0.9   | 103   | NORTHERN MID-ATLANTIC RIDGE   |
| 21 | 20 | 34 | 12.7  | 19.862 | S      | 176.070 | W       | 211 | *  | 5.1 |     | 0.9   | 34  | FIJI ISLANDS REGION   |
| 21 | 21 | 35 | 31.7  | 33.939 | S      | 70.246  | W       | 10  | G  |     |     | 0.6   | 15  | CHILE-ARGENTINA BORDER REGION. MD 4.3 (SAN).  |
| 21 | 21 | 52 | 56.48 | 34.014 | S      | 70.098  | W       | 10  | G  |     |     | 0.3   | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).  |
| 21 | 22 | 45 | 00.77 | 42.97  | N      | 22.21   | E       | 5   | G  |     |     | 1.3   | 7   | BULGARIA  |
| 21 | 22 | 48 | 14.68 | 34.029 | S      | 70.072  | W       | 10  | G  |     |     | 0.1   | 7   | CHILE-ARGENTINA BORDER REGION   |
| 21 | 23 | 12 | 13.4  | 34.062 | S      | 70.093  | W       | 5   | G  |     |     | 0.4   | 11  | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).  |
| 21 | 23 | 35 | 34.3  | 13.142 | N      | 121.159 | E       | 33  | N  | 5.1 |     | 0.6   | 24  | MINDORO, PHILIPPINE ISLANDS   |
| 21 | 23 | 56 | 22.2* | 22.034 | S      | 68.430  | W       | 128 | ?  | 4.9 |     | 1.3   | 8   | NORTHERN CHILE  |
| 22 | 00 | 05 | 55.4* | 22.957 | S      | 69.231  | W       | 33  | N  | 4.6 |     | 0.6   | 6   | NORTHERN CHILE  |
| 22 | 00 | 59 | 10.1  | 41.938 | N      | 138.831 | E       | 30  | D  | 4.9 |     | 0.8   | 80  | EASTERN SEA OF JAPAN  |
| 22 | 01 | 19 | 33.18 | 31.809 | N      | 116.224 | W       | 21  |    |     |     |   | 22  | BAJA CALIFORNIA, MEXICO. <ECX-P>. MD 3.0 (ECX). ML 3.0 (GS).  |
| 22 | 01 | 46 | 08.68 | 37.124 | N      | 4.389   | W       | 10  | G  |     |     | 0.8   | 7   | SPAIN. mbLg 2.3 (MDD).  |
| 22 | 02 | 07 | 00.28 | 38.594 | N      | 6.243   | W       | 10  | G  |     |     | 0.8   | 9   | SPAIN. mbLg 3.3 (MDD).  |
| 22 | 02 | 27 | 58.68 | 61.941 | N      | 150.939 | W       | 68  |    | 2.8 |     |   | 76  | SOUTHERN ALASKA. <AEIC>. ML 3.0 (AEIC), 3.2 (PMR).  |
| 22 | 02 | 30 | 35.48 | 38.731 | N      | 119.708 | W       | 0   | G  |     |     |   | 8   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM).   |
| 22 | 02 | 49 | 22.27 | 12.09  | N      | 88.30   | W       | 33  | N  | 4.4 |     | 0.7   | 18  | OFF COAST OF CENTRAL AMERICA  |
| 22 | 04 | 11 | 05.0  | 22.492 | N      | 118.655 | E       | 33  | N  | 4.8 |     | 1.1   | 36  | TAIWAN REGION   |
| 22 | 04 | 36 | 02.5* | 34.183 | S      | 70.321  | W       | 10  | G  |     |     | 0.8   | 13  | CHILE-ARGENTINA BORDER REGION. MD 4.0 (SAN).  |
| 22 | 04 | 37 | 34.77 | 4.24   | S      | 144.27  | E       | 142 | ?  | 3.6 |     | 0.2   | 5   | NEAR N COAST OF NEW GUINEA, PNG.  |
| 22 | 04 | 40 | 31.18 | 59.629 | N      | 152.835 | W       | 97  |    | 2.6 |     |   | 82  | SOUTHERN ALASKA. <AEIC>.  |
| 22 | 04 | 45 | 15.08 | 38.727 | N      | 119.749 | W       | 0   | G  |     |     |   | 38  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM).   |
| 22 | 05 | 56 | 59.3  | 34.905 | N      | 135.597 | E       | 370 |    | 4.9 |     | 0.7   | 146   | NEAR S. COAST OF WESTERN HONSHU   |
| 22 | 06 | 58 | 31.4  | 39.956 | N      | 21.833  | E       | 10  | G  | 4.1 |     | 0.9   | 53  | GREECE. ML 3.9 (TTG), 3.8 (ATH), 3.7 (THE).   |
| 22 | 07 | 01 | 47.68 | 40.001 | N      | 21.740  | E       | 5   | G  |     |     | 0.6   | 5   | GREECE  |
| 22 | 07 | 03 | 10.17 | 26.69  | N      | 34.66   | E       | 10  | G  |     |     | 0.2   | 7   | RED SEA. MD 3.5 (RYD).  |
| 22 | 08 | 22 | 29.1* | 51.299 | N      | 15.841  | E       | 10  | G  |     |     | 0.4   | 6   | POLAND  |
| 22 | 10 | 02 | 03.27 | 40.71  | N      | 22.94   | E       | 5   | G  |     |     | 1.3   | 4   | GREECE. ML 1.5 (THE).   |
| 22 | 10 | 04 | 16.18 | 33.923 | S      | 70.054  | W       | 130 | G  |     |     | 0.2   | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
| 22 | 12 | 19 | 42.68 | 36.721 | N      | 121.361 | W       | 4   |    |     |     |   | 32  | CENTRAL CALIFORNIA. <GM-P>. MD 2.9 (GM). ML 2.8 (GS).   |

|    |    |    |       |        |        |         |         |     |     |         |         |     |   |  |
|----|----|----|-------|--------|--------|---------|---------|-----|-----|---------|---------|-----|---|--|
| 22 | 12 | 53 | 36.47 | 5.43   | S      | 152.40  | E       | 71  | ?   | 4.5     | 0.6     | 8   | NEW BRITAIN REGION, P.N.G.  |  |
| 22 | 13 | 19 | 07.14 | 33.287 | N      | 115.703 | W       | 4   |     |         |         | 7   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.9 (PAS).   |  |
| 22 | 13 | 39 | 24.97 | 27.72  | N      | 131.38  | E       | 33  | N   | 4.8     | 0.8     | 16  | SOUTHEAST OF RYUKYU ISLANDS   |  |
| 22 | 14 | 02 | 58.17 | 44.53  | N      | 7.25    | E       | 10  | G   |         | 0.1     | 4   | NORTHERN ITALY. ML 1.2 (GEN).   |  |
| 22 | 14 | 43 | 21.14 | 61.969 | N      | 150.889 | W       | 58  |     |         |         | 61  | SOUTHERN ALASKA. <AEIC>. ML 3.1 (AEIC), 3.1 (PMR).  |  |
| 22 | 15 | 45 | 30.87 | 45.90  | N      | 6.90    | E       | 5   | G   |         | 0.3     | 6   | FRANCE. ML 2.4 (GEN).   |  |
| 22 | 15 | 48 | 34.84 | 33.286 | N      | 115.701 | W       | 4   |     |         |         | 7   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.6 (PAS).   |  |
| 22 | 16 | 03 | 16.47 | 38.50  | N      | 28.53   | W       | 5   | G   |         | 0.1     | 4   | AZORES ISLANDS. MD 3.2 (PDA).   |  |
| 22 | 16 | 03 | 26.94 | 33.286 | N      | 115.703 | W       | 4   |     |         |         | 6   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.5 (PAS).   |  |
| 22 | 16 | 24 | 44.64 | 38.628 | N      | 119.825 | W       | 0   |     |         |         | 8   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM). ML 2.8 (GS).                              |  |
| 22 | 17 | 09 | 44.7  | 32.907 | S      | 70.544  | W       | 90  | G   |         | 0.2     | 11  | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).  |  |
| 22 | 17 | 17 | 50.57 | 37.46  | N      | 3.65    | W       | 10  | G   |         | 0.6     | 4   | SPAIN   |  |
| 22 | 17 | 59 | 51.0  | 15.794 | N      | 146.902 | E       | 33  | N   | 4.9     | 0.9     | 40  | MARIANA ISLANDS   |  |
| 22 | 19 | 26 | 49.4  | 12.907 | N      | 89.487  | W       | 57  |     | 4.7     | 0.9     | 28  | OFF COAST OF CENTRAL AMERICA. MD 4.5 (GCG), 4.1 (SSS). Felt (III) at San Salvador, El Salvador. |  |
| 22 | 20 | 42 | 13.3  | 39.981 | N      | 21.713  | E       | 5   | G   |         | 0.5     | 8   | GREECE. ML 2.6 (THE).   |  |
| 22 | 21 | 29 | 27.6* | 34.294 | N      | 137.336 | E       | 33  | N   | 4.8     | 0.7     | 6   | NEAR S. COAST OF HONSHU, JAPAN  |  |
| 22 | 22 | 16 | 41.17 | 34.07  | S      | 70.04   | W       | 10  | G   |         | 0.3     | 5   | CHILE-ARGENTINA BORDER REGION   |  |
| 22 | 22 | 42 | 23.1  | 43.146 | N      | 1.122   | W       | 10  | G   |         | 0.6     | 9   | PYRENEES. mbLg 2.9 (MDD). ML 2.4 (LDG). MD 2.3 (BTH).   |  |
| 22 | 22 | 50 | 16.6* | 10.594 | N      | 93.116  | E       | 121 | ?   | 4.3     | 0.4     | 7   | ANDAMAN ISLANDS, INDIA  |  |
| a  | 23 | 00 | 28    | 28.6   | 4.995  | S       | 133.503 | E   | 33  | N       | 5.1 4.8 | 1.2 | 38  | IRIAN JAYA REGION, INDONESIA. Mw 5.4 (HRV).  |
| 23 | 00 | 39 | 20.17 | 37.40  | N      | 2.39    | W       | 10  | G   |         | 1.0     | 4   | SPAIN. mbLg 2.4 (MDD).  |  |
| 23 | 00 | 40 | 32.84 | 39.176 | N      | 28.650  | E       | 10  | G   |         | 0.5     | 8   | TURKEY. ML 3.2 (ISK).   |  |
| 23 | 00 | 57 | 22.97 | 38.61  | N      | 28.09   | E       | 10  | G   |         | 1.7     | 4   | TURKEY. ML 2.9 (ISK).   |  |
| 23 | 00 | 58 | 40.74 | 39.169 | N      | 28.615  | E       | 10  | G   |         | 0.7     | 8   | TURKEY. ML 3.1 (ISK).   |  |
| 23 | 01 | 12 | 31.34 | 39.194 | N      | 28.666  | E       | 10  | G   |         | 0.2     | 7   | TURKEY. ML 3.2 (ISK).   |  |
| 23 | 01 | 41 | 02.24 | 39.173 | N      | 28.608  | E       | 10  | G   |         | 0.5     | 8   | TURKEY. ML 3.1 (ISK).   |  |
| 23 | 01 | 47 | 57.54 | 39.175 | N      | 28.620  | E       | 5   | G   |         | 0.7     | 8   | TURKEY. ML 3.1 (ISK).   |  |
| 23 | 01 | 52 | 03.04 | 39.222 | N      | 28.661  | E       | 10  | G   |         | 0.6     | 5   | TURKEY. ML 2.9 (ISK).   |  |
| 23 | 01 | 59 | 41.67 | 35.31  | S      | 71.16   | W       | 90  | G   |         | 0.5     | 10  | CENTRAL CHILE. MD 3.6 (SAN).  |  |
| 23 | 02 | 09 | 09.14 | 44.727 | N      | 6.525   | E       | 5   | G   |         | 0.5     | 10  | FRANCE. ML 2.2 (GEN).   |  |
| 23 | 02 | 10 | 29.64 | 39.182 | N      | 28.678  | E       | 10  | G   |         | 0.6     | 8   | TURKEY. ML 3.0 (ISK).   |  |
| 23 | 02 | 14 | 09.14 | 39.191 | N      | 28.624  | E       | 10  | G   |         | 0.3     | 8   | TURKEY. ML 3.3 (ISK).   |  |
| 23 | 02 | 36 | 11.94 | 37.575 | N      | 118.851 | W       | 7   |     |         |         | 34  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM). ML 3.0 (GS).                              |  |
| 23 | 02 | 47 | 34.27 | 43.85  | N      | 146.61  | E       | 33  | N   | 4.3     | 1.2     | 6   | KURIL ISLANDS   |  |
| 23 | 03 | 12 | 46.34 | 46.384 | N      | 1.918   | W       | 10  | G   |         | 0.9     | 16  | FRANCE. ML 3.2 (LDG).   |  |
| 23 | 03 | 31 | 09.74 | 59.776 | N      | 151.906 | W       | 57  |     |         |         | 40  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.6 (AEIC).   |  |
| 23 | 03 | 55 | 04.27 | 36.80  | N      | 2.98    | W       | 10  | G   |         | 0.1     | 4   | STRAIT OF GIBRALTAR. mbLg 2.6 (MDD).  |  |
| 23 | 05 | 38 | 28.84 | 61.807 | N      | 150.882 | W       | 61  |     |         |         | 48  | SOUTHERN ALASKA. <AEIC>. ML 2.6 (AEIC).   |  |
| 23 | 05 | 47 | 27.14 | 59.899 | N      | 151.827 | W       | 61  |     |         |         | 48  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.7 (AEIC).   |  |
| 23 | 08 | 16 | 06.6  | 11.454 | N      | 141.633 | E       | 33  | N   | 4.6 4.3 | 1.2     | 24  | WESTERN CAROLINE ISLANDS  |  |
| 23 | 08 | 34 | 40.0  | 11.471 | N      | 141.580 | E       | 33  | N   | 4.9 4.6 | 1.0     | 35  | WESTERN CAROLINE ISLANDS  |  |
| 23 | 09 | 24 | 46.67 | 37.19  | N      | 3.67    | W       | 10  | G   |         | 0.9     | 4   | SPAIN. mbLg 2.6 (MDD).  |  |
| 23 | 13 | 06 | 53.8  | 43.446 | N      | 5.449   | E       | 5   | G   |         | 0.3     | 15  | NEAR SOUTH COAST OF FRANCE. ML 3.0 (STR).   |  |
| 23 | 13 | 57 | 57.7  | 46.744 | N      | 10.472  | E       | 10  | G   |         | 0.2     | 7   | NORTHERN ITALY. ML 1.7 (VIE).   |  |
| 23 | 14 | 34 | 32.74 | 44.220 | N      | 7.635   | E       | 10  | G   |         | 0.2     | 6   | NORTHERN ITALY. ML 2.1 (LDG).   |  |
| 23 | 15 | 04 | 48.04 | 36.803 | N      | 3.790   | W       | 5   | G   |         | 0.4     | 11  | STRAIT OF GIBRALTAR. mbLg 3.0 (MDD).  |  |
| a  | 23 | 15 | 40    | 04.6*  | 11.891 | S       | 165.855 | E   | 33  | N       | 5.0     | 1.2 | 23  | SANTA CRUZ ISLANDS. Mw 5.3 (HRV).  |
| 23 | 15 | 43 | 25.17 | 34.10  | S      | 69.93   | W       | 5   | G   |         | 0.1     | 7   | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |  |
| 23 | 16 | 07 | 04.4  | 43.290 | N      | 147.100 | E       | 33  | N   | 4.9     | 1.0     | 47  | KURIL ISLANDS   |  |
| 23 | 16 | 42 | 11.34 | 43.875 | N      | 7.866   | E       | 10  | G   |         | 0.2     | 7   | NEAR SOUTH COAST OF FRANCE. ML 2.1 (GEN).   |  |
| 23 | 19 | 46 | 53.84 | 39.816 | N      | 29.614  | E       | 10  | G   |         | 0.6     | 8   | TURKEY. ML 3.1 (ISK).   |  |
| 23 | 20 | 57 | 15.64 | 34.792 | N      | 116.295 | W       | 4   |     |         |         | 10  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).   |  |
| 23 | 21 | 12 | 43.04 | 34.790 | N      | 116.295 | W       | 5   |     |         |         | 8   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).   |  |
| 23 | 21 | 47 | 27.2* | 43.366 | N      | 147.984 | E       | 33  | N   | 4.4     | 0.9     | 16  | KURIL ISLANDS   |  |
| 23 | 23 | 13 | 38.2* | 57.114 | N      | 143.266 | W       | 10  | G   |         | 0.7     | 31  | GULF OF ALASKA. ML 3.0 (AEIC).  |  |
| 24 | 00 | 31 | 04.17 | 27.85  | N      | 34.49   | E       | 10  | G   |         | 0.3     | 5   | RED SEA. MD 2.4 (RYD).  |  |
| 24 | 01 | 51 | 16.74 | 58.871 | N      | 153.041 | W       | 15  |     |         |         | 42  | KODIAK ISLAND REGION. <AEIC>. ML 2.7 (AEIC).  |  |
| 24 | 03 | 02 | 27.7  | 41.151 | N      | 21.233  | E       | 5   | G   |         | 0.5     | 7   | NORTHWESTERN BALKAN REGION. ML 2.3 (SKO).   |  |
| 24 | 03 | 46 | 15.54 | 40.421 | N      | 125.052 | W       | 18  |     |         |         | 25  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.0 (GM).  |  |
| 24 | 04 | 57 | 03.57 | 8.89   | S      | 120.14  | E       | 205 | ?   | 4.3     | 0.2     | 6   | FLORES REGION, INDONESIA  |  |
| 24 | 05 | 39 | 12.5  | 41.336 | N      | 23.410  | E       | 5   | G   |         | 0.6     | 13  | GREECE-BULGARIA BORDER REGION. ML 2.1 (THE).  |  |
| 24 | 05 | 40 | 39.6  | 36.371 | N      | 28.243  | E       | 87  | ?   |         | 0.8     | 10  | DODECANESE ISLANDS  |  |
| 24 | 08 | 07 | 23.44 | 28.800 | N      | 34.864  | E       | 10  | G   |         | 0.6     | 5   | EGYPT. MD 2.3 (RYD).  |  |
| 24 | 08 | 43 | 34.84 | 60.132 | N      | 152.974 | W       | 120 |     |         |         | 66  | SOUTHERN ALASKA. <AEIC>.  |  |
| 24 | 08 | 59 | 54.37 | 37.32  | S      | 177.72  | E       | 33  | N   | 4.7     | 1.3     | 9   | OFF E. COAST OF N. ISLAND, N.Z.   |  |
| a  | 24 | 09 | 14    | 29.9   | 6.177  | S       | 146.698 | E   | 125 |         | 5.5     | 0.9 | 72  | EASTERN NEW GUINEA REG., P.N.G. Mw 5.4 (HRV).  |
| 24 | 09 | 33 | 18.94 | 33.490 | N      | 116.765 | W       | 15  |     |         |         | 25  | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.5 (PAS), 2.7 (GS).   |  |
| 24 | 09 | 46 | 18.54 | 34.164 | N      | 116.414 | W       | 1   |     |         |         | 5   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.4 (PAS).   |  |
| 24 | 10 | 47 | 44.44 | 40.151 | N      | 23.933  | E       | 5   | G   |         | 0.1     | 5   | GREECE  |  |
| 24 | 11 | 17 | 57.07 | 28.81  | N      | 34.32   | E       | 10  | G   |         | 1.1     | 6   | EGYPT. MD 2.4 (RYD).  |  |
| 24 | 11 | 50 | 55.94 | 61.810 | N      | 149.999 | W       | 39  |     |         |         | 45  | SOUTHERN ALASKA. <AEIC>. ML 3.1 (AEIC), 3.3 (PMR).  |  |
| 24 | 11 | 57 | 42.64 | 60.902 | N      | 150.431 | W       | 15  |     |         |         | 27  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.7 (AEIC).   |  |
| 24 | 12 | 28 | 45.24 | 28.809 | N      | 34.841  | E       | 10  | G   |         | 0.4     | 5   | EGYPT. MD 2.4 (RYD).  |  |
| 24 | 12 | 51 | 09.67 | 34.08  | S      | 70.01   | W       | 10  | G   |         | 0.4     | 8   | CHILE-ARGENTINA BORDER REGION   |  |
| 24 | 13 | 27 | 00.74 | 28.804 | N      | 34.855  | E       | 10  | G   |         | 0.4     | 5   | EGYPT. MD 1.9 (RYD).  |  |
| 24 | 14 | 24 | 39.34 | 28.838 | N      | 34.848  | E       | 10  | G   |         | 0.5     | 5   | EGYPT. MD 2.5 (RYD).  |  |
| 24 | 14 | 52 | 16.97 | 34.39  | S      | 70.39   | W       | 10  | G   |         | 0.3     | 7   | CHILE-ARGENTINA BORDER REGION   |  |
| 24 | 15 | 39 | 03.5  | 42.856 | N      | 126.648 | W       | 10  | G   |         | 0.7     | 70  | OFF COAST OF OREGON   |  |
| 24 | 16 | 01 | 40.84 | 60.153 | N      | 141.370 | W       | 15  |     |         |         | 15  | SOUTHEASTERN ALASKA. <AEIC>. ML 2.6 (AEIC).   |  |
| 24 | 17 | 05 | 46.37 | 28.81  | N      | 34.84   | E       | 10  | G   |         | 0.3     | 4   | EGYPT. MD 2.2 (RYD).  |  |
| 24 | 17 | 26 | 25.17 | 45.75  | N      | 14.12   | E       | 10  | G   |         | 0.1     | 4   | NORTHWESTERN BALKAN REGION. ML 1.6 (LJU).   |  |
| 24 | 17 | 46 | 55.9  | 5.520  | N      | 127.254 | E       | 113 | *   | 4.7     | 0.4     | 21  | PHILIPPINE ISLANDS REGION   |  |
| 24 | 18 | 00 | 57.57 | 45.75  | N      | 14.11   | E       | 10  | G   |         | 0.2     | 4   | NORTHWESTERN BALKAN REGION. ML 1.6 (LJU).   |  |
| 24 | 18 | 08 | 46.24 | 44.534 | N      | 6.850   | E       | 5   | G   |         | 0.5     | 6   | FRANCE. ML 1.9 (GEN).   |  |
| 24 | 18 | 08 | 57.54 | 44.535 | N      | 6.871   | E       | 10  | G   |         | 0.5     | 5   | FRANCE. ML 2.1 (GEN).   |  |
| 24 | 18 | 25 | 43.24 | 44.537 | N      | 6.862   | E       | 5   | G   |         | 0.4     | 9   | FRANCE. ML 2.2 (GEN).   |  |
| a  | 24 | 20 | 46    | 25.4   | 53.500 | N       | 160.359 | E   | 57  | D       | 5.5     | 0.9 | 285   | NEAR EAST COAST OF KAMCHATKA. Mw 5.2 (HRV). Felt (III) at Petropavlovsk-Kamchatskiy. |
| 24 | 21 | 11 | 05.54 | 44.214 | N      | 9.470   | E       | 10  | G   |         | 0.8     | 8   | NORTHERN ITALY. ML 2.4 (LDG).   |  |
| 24 | 21 | 43 | 04.1* | 3.207  | S      | 139.568 | E       | 102 | ?   | 4.9     | 0.3     | 6   | IRIAN JAYA, INDONESIA   |  |

|      |             |          |           |              |         |     |  |
|------|-------------|----------|-----------|--------------|---------|-----|--|
| 24   | 21 48 04.5% | 33.137 S | 70.273 W  | 10 G         | 0.2     | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).   |
| 24   | 23 51 47.9% | 38.588 N | 73.897 E  | 33 N 5.3     | 1.1     | 16  | TAJIKISTAN-XINJIANG BORDER REG.  |
| 24   | 23 57 21.5% | 59.205 N | 153.586 W | 94           |         | 45  | SOUTHERN ALASKA. <AEIC>.   |
| 25   | 00 06 51.8% | 61.947 N | 151.191 W | 70           |         | 60  | SOUTHERN ALASKA. <AEIC>.   |
| 25   | 01 09 17.0% | 39.052 N | 29.499 E  | 10 G         | 0.8     | 5   | TURKEY. ML 3.1 (ISK).  |
| 25   | 01 12 24.9% | 37.498 N | 118.874 W | 8            |         | 21  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM). ML 3.0 (BRK).  |
| 25   | 01 14 47.5  | 44.157 N | 6.326 E   | 5 G          | 0.7     | 18  | FRANCE. ML 2.4 (GEN), 2.2 (LDG), 1.8 (STR).  |
| 25   | 01 42 00.9  | 43.030 N | 146.913 E | 46           | 4.9     | 0.8 | 104 KURIL ISLANDS  |
| 25   | 01 43 44.4% | 35.16 S  | 71.21 W   | 90 G         | 0.2     | 10  | CENTRAL CHILE. MD 3.6 (SAN).   |
| 25   | 02 39 27.9  | 11.169 N | 86.756 W  | 33 N 4.8     | 1.1     | 47  | NEAR COAST OF NICARAGUA. MD 5.0 (UPA).   |
| 25   | 04 37 59.9% | 32.661 S | 71.555 W  | 33 N         | 0.9     | 12  | NEAR COAST OF CENTRAL CHILE. MD 4.2 (SAN).   |
| 25   | 04 46 25.1  | 34.386 N | 137.338 E | 302          | 4.8     | 0.7 | 140 NEAR S. COAST OF HONSHU, JAPAN   |
| 25   | 05 01 58.2% | 36.378 N | 27.068 E  | 100 G        | 0.8     | 6   | DODECANESE ISLANDS   |
| 25   | 05 59 34.3% | 35.20 S  | 71.59 W   | 80 G         | 0.4     | 10  | CENTRAL CHILE. MD 3.9 (SAN).   |
| 25   | 07 18 41.1% | 1.63 S   | 127.27 E  | 33 N 4.8     | 1.0     | 5   | HALMAHERA, INDONESIA   |
| 25   | 07 50 25.0  | 38.694 N | 20.422 E  | 5 G          | 1.0     | 16  | GREECE. MD 3.5 (ATH). ML 3.2 (THE).  |
| 25   | 07 59 38.7% | 36.114 N | 117.840 W | 3            |         | 83  | CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.5 (PAS), 3.7 (GS), 3.9 (BRK).   |
| 25   | 08 19 36.7% | 37.919 N | 29.098 E  | 5 G          | 0.5     | 5   | TURKEY. ML 3.2 (ISK).  |
| 25   | 08 20 10.1% | 61.960 N | 151.089 W | 82           |         | 76  | SOUTHERN ALASKA. <AEIC>.   |
| 25   | 10 31 20.5% | 37.498 N | 118.873 W | 7            |         | 5   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.4 (GM).  |
| 25   | 11 32 09.2% | 37.497 N | 118.873 W | 7            |         | 26  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM).  |
| 25   | 11 37 19.7% | 34.009 S | 70.117 W  | 10 G         | 0.2     | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).   |
| a 25 | 11 43 48.8% | 30.085 S | 178.351 W | 66 *         | 5.1     | 1.3 | 33 KERMADEC ISLANDS, NEW ZEALAND. Mw 5.5 (HRV). Felt (IV) on Raoul Island.   |
| 25   | 11 59 02.5% | 36.116 N | 117.842 W | 3            |         | 14  | CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 2.7 (PAS).  |
| 25   | 12 04 27.8  | 36.091 N | 3.082 W   | 5 G          | 1.0     | 17  | STRAIT OF GIBRALTAR. mbLg 3.3 (MDD). MD 3.3 (SFS).   |
| 25   | 13 13 23.8% | 40.000 N | 23.862 E  | 5 G          | 0.5     | 5   | GREECE. ML 1.3 (THE).  |
| 25   | 13 32 43.3% | 33.85 S  | 72.15 W   | 10 G         | 0.4     | 11  | OFF COAST OF CENTRAL CHILE. MD 4.2 (SAN).  |
| 25   | 13 44 11.1% | 37.496 N | 118.874 W | 8            |         | 41  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.3 (GM). ML 3.3 (GS).   |
| 25   | 15 19 18.1  | 34.078 S | 70.096 W  | 5 G          | 1.1     | 14  | CHILE-ARGENTINA BORDER REGION. MD 3.9 (SAN).   |
| 25   | 16 07 46.3  | 36.823 N | 5.306 W   | 5 G          | 1.2     | 9   | STRAIT OF GIBRALTAR. mbLg 2.2 (MDD).   |
| 25   | 16 28 04.6% | 43.21 N  | 0.13 W    | 5 G          | 0.5     | 4   | PYRENEES. ML 2.3 (LDG).  |
| 25   | 16 42 15.5% | 28.80 N  | 34.83 E   | 10 G         | 0.7     | 4   | EGYPT. MD 2.5 (RYD).   |
| 25   | 18 15 17.0% | 16.635 N | 98.445 W  | 33 N         | 1.3     | 6   | NEAR COAST OF GUERRERO, MEXICO   |
| 25   | 18 20 08.9% | 47.14 N  | 27.01 E   | 179 ?        | 0.3     | 7   | ROMANIA  |
| 25   | 18 43 11.1% | 37.42 N  | 8.34 W    | 10 G         | 1.2     | 14  | PORTUGAL. mbLg 3.3 (MDD). MD 3.0 (SFS).  |
| 25   | 18 54 24.8% | 37.850 N | 29.153 E  | 5 G          | 0.5     | 6   | TURKEY. ML 3.2 (ISK).  |
| 25   | 19 06 07.5  | 39.290 N | 104.811 W | 10 G         | 0.7     | 27  | COLORADO. mbLg 4.0 (GS). Felt (V) at Larkspur and Palmer Lake; (III) at Divide and Lake George. Felt from Colorado Springs to Denver.  |
| 25   | 19 40 18.3% | 48.13 N  | 10.31 E   | 10 G         | 0.7     | 5   | GERMANY. ML 1.9 (VIE).   |
| a 25 | 20 17 13.8  | 2.352 S  | 138.867 E | 33 N 5.5     | 0.8     | 50  | IRIAN JAYA, INDONESIA. Mw 5.3 (HRV).   |
| 25   | 21 29 49.4% | 44.154 N | 146.695 E | 33 N 4.7     | 0.7     | 27  | KURIL ISLANDS  |
| 25   | 23 00 58.5% | 40.716 N | 30.124 E  | 5 G          | 0.4     | 7   | TURKEY. ML 3.3 (ISK).  |
| 25   | 23 21 07.7% | 25.60 S  | 179.75 W  | 492 *        | 4.9     | 1.1 | 19 SOUTH OF FIJI ISLANDS   |
| 26   | 00 20 09.9% | 36.220 N | 22.385 E  | 5 G          | 1.5     | 6   | SOUTHERN GREECE. MD 3.6 (ATH).   |
| a 26 | 03 08 17.6  | 53.650 N | 164.508 W | 33 N 5.3 5.0 | 1.1     | 313 | UNIMAK ISLAND REGION. Mw 5.3 (HRV). Felt (III) at Akutan and False Pass. Also felt at Dutch Harbor.  |
| 26   | 05 26 51.2% | 28.51 N  | 34.63 E   | 10 G         | 0.1     | 4   | EGYPT. MD 1.9 (RYD).   |
| 26   | 05 45 21.6% | 34.40 S  | 70.12 W   | 10 G         | 0.1     | 6   | CHILE-ARGENTINA BORDER REGION  |
| 26   | 05 45 37.8% | 6.538 S  | 146.323 E | 129 *        | 4.5     | 10  | EASTERN NEW GUINEA REG., P.N.G.  |
| 26   | 06 53 11.2% | 44.02 N  | 145.89 E  | 33 N 4.1     | 0.5     | 4   | HOKKAIDO, JAPAN REGION   |
| 26   | 06 58 06.3% | 81.198 N | 4.860 W   | 10 G         | 1.3     | 15  | NORTH OF SVALBARD  |
| 26   | 08 38 50.6  | 41.752 N | 27.291 E  | 5 G          | 0.9     | 21  | TURKEY. ML 3.3 (ISK). MD 3.2 (ATH). Felt in the Kirklareli area.   |
| 26   | 08 56 29.0  | 32.698 S | 69.981 W  | 110 ?        | 0.5     | 17  | MENDOZA PROVINCE, ARGENTINA. MD 3.6 (SAN).   |
| 26   | 11 27 26.8% | 46.911 S | 165.764 E | 60 ? 4.3     | 0.9     | 8   | OFF W. COAST OF S. ISLAND, N.Z.  |
| 26   | 13 18 05.2% | 67.523 N | 161.685 W | 10 G         | 0.5     | 6   | NORTHERN ALASKA. ML 3.0 (PMR).   |
| 26   | 13 28 25.4% | 1.21 N   | 117.98 E  | 33 N 4.9     | 0.6     | 13  | BORNEO   |
| 26   | 13 49 13.0  | 45.284 N | 145.930 E | 33 N 4.9 4.9 | 0.6     | 42  | HOKKAIDO, JAPAN REGION   |
| a 26 | 14 10 29.1% | 40.741 N | 124.310 W | 23           | 5.1 5.0 | 170 | NEAR COAST OF NORTHERN CALIF. <GM-P>. Mw 5.5 (HRV). MD 5.3 (GM). ML 5.3 (BRK). Mo=1.5*10**17 Nm (BRK). Some damage (VII) at Eureka and Samoa. Slight damage (VI) at Arcata, Blue Lake, Fields Landing, Fortuna and McKinleyville. Total damage in Humboldt County estimated at 2.1 million U.S. dollars. Felt (V) at Bridgeville, Kneeland, Rio Dell and Weott; (IV) at Carlotta, Garberville, Klamath, Korbel, Miranda, Orleans, Petrolia, Phillipsville, Piercy, Redcrest, Salyer and Trinidad. Felt in much of northern California and as far as Brookings and Grants Pass, Oregon. |
| 26   | 14 30 50.1% | 20.735 N | 147.239 E | 33 N 5.3     | 0.6     | 20  | MARIANA ISLANDS REGION   |
| a 26 | 14 48 01.4% | 36.469 N | 71.244 E  | 226 D 5.1    | 0.9     | 303 | AFGHANISTAN-TAJIKISTAN BORD REG. Mw 5.4 (HRV).   |
| 26   | 14 54 05.3% | 59.612 N | 149.017 W | 16           |         | 59  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.9 (AEIC).  |
| 26   | 14 57 09.8% | 40.750 N | 124.310 W | 25           |         | 33  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.0 (GM). ML 3.2 (BRK), 3.1 (GS).   |
| 26   | 16 12 57.7% | 40.755 N | 124.426 W | 24           |         | 34  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.3 (GM). ML 3.5 (BRK), 3.5 (GS).   |
| 26   | 16 58 46.1  | 41.594 N | 88.833 E  | 10 G 4.6     | 0.9     | 25  | SOUTHERN XINJIANG, CHINA   |
| 26   | 17 46 49.4% | 40.738 N | 124.311 W | 22           |         | 30  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.0 (GM).   |
| 26   | 17 48 15.6  | 36.408 N | 7.960 W   | 10 G         | 1.1     | 56  | STRAIT OF GIBRALTAR. mbLg 3.6 (MDD).   |
| 26   | 19 35 09.7  | 31.347 S | 69.057 W  | 128 *        | 0.9     | 18  | SAN JUAN PROVINCE, ARGENTINA   |
| a 26 | 19 57 00.7  | 15.573 S | 71.757 W  | 10 G 5.0     | 1.0     | 44  | SOUTHERN PERU. Mw 5.4 (HRV).   |
| 26   | 20 34 25.6  | 36.535 N | 70.969 E  | 195 *        | 4.5     | 1.0 | 29 HINDU KUSH REGION, AFGHANISTAN  |
| 26   | 21 31 37.2% | 11.312 N | 86.813 W  | 33 N 4.7     | 1.0     | 32  | NEAR COAST OF NICARAGUA  |
| 26   | 21 38 20.5  | 11.406 N | 86.795 W  | 33 N 5.1     | 1.1     | 62  | NEAR COAST OF NICARAGUA  |
| 26   | 23 50 15.7% | 37.237 N | 121.616 W | 8            |         | 72  | CENTRAL CALIFORNIA. <GM-P>. MD 3.4 (GM). ML 3.6 (BRK), 3.4 (GS). Felt in the southeastern part of San Jose.  |
| 27   | 00 42 12.7% | 47.27 N  | 11.29 E   | 10 G         | 0.1     | 4   | AUSTRIA. ML 0.2 (VIE).   |

|      |    |    |       |          |           |       |         |     |     |   |
|------|----|----|-------|----------|-----------|-------|---------|-----|-----|---|
| 27   | 00 | 43 | 23.5  | 45.871 S | 92.786 W  | 10 G  | 5.1     | 0.9 | 64  | SOUTHERN PACIFIC OCEAN  |
| 27   | 00 | 45 | 39.8  | 36.128 N | 117.837 W | 3     |         |     | 15  | CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 2.7 (PAS), 3.2 (GS).   |
| 27   | 01 | 04 | 47.7  | 9.474 S  | 117.968 E | 33 N  |         | 0.9 | 6   | SUMBAWA REGION, INDONESIA   |
| 27   | 01 | 30 | 53.67 | 37.01 N  | 3.81 W    | 10 G  |         | 0.4 | 4   | SPAIN. mbLg 1.5 (MDD).  |
| 27   | 01 | 38 | 05.8  | 43.720 N | 147.350 E | 51    | 4.9     | 0.9 | 52  | KURIL ISLANDS   |
| 27   | 02 | 10 | 01.17 | 36.85 N  | 9.18 W    | 10 G  |         | 0.8 | 18  | WEST OF GIBRALTAR. mbLg 3.7 (MDD).  |
| 27   | 02 | 32 | 13.3  | 60.648 N | 147.063 W | 0     |         |     | 46  | SOUTHERN ALASKA. <AEIC>. ML 3.0 (AEIC).   |
| 27   | 03 | 11 | 34.1* | 36.684 N | 7.513 W   | 10 G  |         | 0.9 | 9   | STRAIT OF GIBRALTAR. mbLg 2.6 (MDD).  |
| 27   | 03 | 12 | 56.9  | 44.826 N | 9.752 E   | 10 G  |         | 1.1 | 45  | NORTHERN ITALY. ML 3.1 (LDG), 3.0 (GEN), 2.6 (VIE).   |
| 27   | 03 | 13 | 41.2  | 44.898 N | 9.978 E   | 10 G  |         | 0.7 | 23  | NORTHERN ITALY. ML 3.1 (LDG), 2.9 (GEN).  |
| 27   | 03 | 46 | 11.7? | 6.15 S   | 147.66 E  | 119 ? | 4.1     | 1.3 | 5   | EASTERN NEW GUINEA REG., P.N.G.   |
| 27   | 03 | 46 | 59.07 | 35.13 S  | 71.61 W   | 60 G  |         | 0.5 | 10  | CENTRAL CHILE. MD 3.6 (SAN).  |
| 27   | 05 | 01 | 10.8  | 40.769 N | 124.235 W | 23    |         |     | 21  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.0 (GM). ML 3.0 (GS).   |
| 27   | 05 | 10 | 53.5* | 51.316 N | 15.593 E  | 10 G  |         | 0.8 | 13  | POLAND. ML 3.6 (GRF), 3.6 (VIE).  |
| 27   | 05 | 59 | 39.9  | 14.048 N | 92.270 W  | 10 G  |         | 0.4 | 11  | NEAR COAST OF CHIAPAS, MEXICO. MD 4.2 (GCG).  |
| 27   | 06 | 33 | 27.6  | 38.060 N | 21.290 E  | 5 G   | 3.5     | 1.0 | 15  | GREECE. ML 3.4 (ATH).   |
| 27   | 06 | 50 | 14.5* | 6.679 S  | 143.459 E | 10 G  |         | 1.3 | 5   | NEW GUINEA, PAPUA NEW GUINEA  |
| 27   | 07 | 11 | 26.4  | 47.125 N | 27.373 W  | 10 G  | 4.8 4.7 | 0.8 | 84  | NORTHERN MID-ATLANTIC RIDGE   |
| 27   | 07 | 18 | 06.6? | 21.15 S  | 179.77 W  | 661 ? | 4.4     | 0.9 | 20  | FIJI ISLANDS REGION   |
| 27   | 07 | 22 | 53.3  | 38.040 N | 21.247 E  | 10 G  |         | 1.4 | 7   | GREECE. ML 3.6 (ATH).   |
| 27   | 09 | 17 | 43.1  | 39.781 N | 28.677 E  | 10 G  |         | 0.7 | 8   | TURKEY. ML 3.1 (ISK).   |
| 27   | 10 | 19 | 50.9* | 30.731 N | 141.290 E | 33 N  | 5.2     | 0.4 | 11  | SOUTH OF HONSHU, JAPAN  |
| 27   | 12 | 34 | 10.0  | 38.838 N | 122.821 W | 4     |         |     | 9   | NORTHERN CALIFORNIA. <GM-P>. MD 2.8 (GM).   |
| 27   | 12 | 44 | 05.9  | 37.646 N | 118.948 W | 6     |         |     | 33  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM).   |
| 27   | 13 | 25 | 04.3  | 37.492 N | 118.878 W | 7     |         |     | 27  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM).   |
| 27   | 13 | 55 | 22.7  | 15.437 N | 60.647 W  | 33 N  |         | 0.5 | 12  | LEEWARD ISLANDS. MD 3.5 (TRN). ML 3.2 (PDF).  |
| 27   | 15 | 00 | 17.9* | 46.644 N | 10.704 E  | 10 G  |         | 0.5 | 7   | NORTHERN ITALY. ML 2.0 (VIE).   |
| 27   | 15 | 16 | 20.0? | 32.70 S  | 71.81 W   | 10 G  |         | 0.6 | 8   | NEAR COAST OF CENTRAL CHILE   |
| 27   | 16 | 43 | 03.2? | 0.77 N   | 127.23 E  | 176 ? | 4.5     | 0.7 | 5   | HALMAHERA, INDONESIA  |
| 27   | 17 | 05 | 45.7  | 11.136 N | 61.907 W  | 10 G  |         | 0.6 | 6   | WINDWARD ISLANDS. MD 3.7 (TRN).   |
| 27   | 17 | 14 | 20.8  | 52.765 N | 174.501 W | 200 G | 4.7     | 0.9 | 76  | ANDREANOF ISLANDS, ALEUTIAN IS.   |
| a 27 | 17 | 32 | 50.8  | 31.965 S | 179.860 E | 212 G | 6.0     | 1.0 | 487 | KERMADEC ISLANDS REGION. Mw 6.4 (GS), 6.4 (HRV). mb 6.1 (BRK). Mo=5.9*10**18 Nm (PPT). Felt (IV) on Raoul Island. Depth from broadband displacement seismograms.  |
| 27   | 17 | 33 | 23.6  | 20.517 N | 145.724 E | 33 N  | 5.5     | 0.8 | 123 | MARIANA ISLANDS   |
| 27   | 18 | 53 | 56.8  | 25.715 N | 111.122 W | 10 G  | 4.8     | 1.2 | 88  | BAJA CALIFORNIA, MEXICO   |
| 27   | 20 | 01 | 26.1? | 47.20 N  | 11.20 E   | 10 G  |         | 0.9 | 4   | AUSTRIA. ML 0.8 (VIE).  |
| 27   | 20 | 43 | 04.3  | 44.917 N | 149.584 E | 74 D  | 5.6     | 0.8 | 340 | KURIL ISLANDS   |
| 27   | 20 | 53 | 48.8  | 37.285 N | 20.441 E  | 5 G   |         | 1.3 | 9   | IONIAN SEA  |
| 27   | 21 | 55 | 27.1  | 60.320 N | 152.483 W | 102   |         |     | 45  | SOUTHERN ALASKA. <AEIC>.  |
| 27   | 21 | 59 | 50.5  | 4.295 N  | 125.924 E | 182 ? | 4.9     | 0.8 | 33  | TALAUD ISLANDS, INDONESIA   |
| 27   | 22 | 38 | 36.4? | 33.97 S  | 70.69 W   | 90 G  |         | 0.2 | 6   | CHILE-ARGENTINA BORDER REGION   |
| 28   | 00 | 39 | 12.6* | 4.631 N  | 94.856 E  | 33 N  | 4.8     | 0.5 | 34  | OFF W COAST OF NORTHERN SUMATRA   |
| 28   | 01 | 15 | 02.1* | 42.951 N | 17.669 E  | 10 G  |         | 1.0 | 8   | ADRIATIC SEA  |
| 28   | 03 | 15 | 16.9? | 3.74 N   | 128.21 E  | 33 N  | 4.9     | 1.1 | 9   | NORTH OF HALMAHERA, INDONESIA   |
| 28   | 03 | 15 | 35.7* | 5.417 S  | 152.211 E | 61 *  | 4.9     | 0.7 | 7   | NEW BRITAIN REGION, P.N.G.  |
| a 28 | 03 | 56 | 17.1  | 35.833 N | 90.737 E  | 33 N  | 5.1 4.7 | 0.9 | 62  | QINGHAI, CHINA. Mw 5.2 (HRV).   |
| 28   | 06 | 27 | 01.9* | 11.202 N | 60.761 W  | 50 G  |         | 0.7 | 7   | WINDWARD ISLANDS. MD 3.1 (TRN).   |
| 28   | 11 | 19 | 37.8? | 40.54 N  | 57.45 E   | 33 N  | 4.3     | 0.8 | 13  | TURKMENISTAN  |
| 28   | 11 | 49 | 58.5? | 39.27 N  | 27.70 E   | 10 G  |         | 1.1 | 4   | TURKEY. ML 2.7 (ISK).   |
| a 28 | 12 | 19 | 23.0  | 40.525 N | 143.419 E | 27 G  | 6.4 7.5 | 1.1 | 470 | OFF EAST COAST OF HONSHU, JAPAN. Mw 7.7 (GS), 7.8 (HRV). Ms 7.2 (BRK). Mo=2.7*10**20 Nm (OBN), 3.4*10**20 Nm (PPT). Three people killed, more than 200 injured and damage (VI JMA) in the Hachinohe area. Felt (V JMA) at Aomori, Morioka and Mutsu; (IV JMA) at Miyako and Ofunato; (III JMA) at Sendai. Felt (VI) at Misawa. Also felt (IV JMA) at Hakodate, Obihiro, Tomakomai and Urakawa; (III JMA) at Sapporo, Hokkaido. Felt as far away as Tokyo. Local tsunami generated with maximum wave heights (peak-to-trough) recorded at the following selected tide stations: 110 cm. at Miyako, 88 cm. at Hachinohe, 54 cm. at Ofunato, 10 cm. at Choshi, Honshu; 48 cm. at Urakawa, 36 cm. at Hakodate and Kushiro, Hokkaido. Two events about 20 seconds apart. Depth from broadband displacement seismograms, based on second event. |
| 28   | 12 | 29 | 21.2  | 40.466 N | 143.612 E | 33 N  | 5.6     | 0.7 | 29  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 12 | 41 | 26.6* | 40.159 N | 143.558 E | 32 *  | 4.7     | 0.1 | 6   | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 12 | 45 | 25.8  | 36.654 N | 11.454 W  | 10 G  |         | 0.9 | 21  | NORTH ATLANTIC OCEAN. mbLg 3.9 (MDD).   |
| 28   | 12 | 47 | 10.7  | 40.573 N | 142.783 E | 33 N  | 5.3     | 1.1 | 40  | NEAR EAST COAST OF HONSHU, JAPAN  |
| 28   | 12 | 47 | 46.6* | 39.458 N | 143.486 E | 33 N  | 5.7     | 0.5 | 26  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 12 | 49 | 05.1  | 36.283 N | 120.463 W | 10    |         |     | 63  | CENTRAL CALIFORNIA. <GM-P>. MD 3.3 (GM). ML 3.3 (BRK), 3.3 (PAS), 3.1 (GS).   |
| 28   | 12 | 59 | 53.7  | 40.313 N | 143.626 E | 33 N  | 5.7     | 0.8 | 98  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 13 | 05 | 09.9  | 18.038 N | 101.622 W | 33 N  |         | 0.5 | 9   | GUERRERO, MEXICO  |
| 28   | 13 | 06 | 06.4? | 69.02 N  | 30.04 E   | 5 G   |         | 0.4 | 4   | NORWAY-RUSSIA BORDER REGION. MD 2.7 (BER).  |
| 28   | 13 | 21 | 42.1  | 40.118 N | 143.512 E | 33 N  | 4.0     | 0.9 | 22  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 13 | 25 | 50.2? | 40.10 N  | 143.61 E  | 26 *  | 4.3     | 0.3 | 6   | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 13 | 28 | 35.1  | 40.098 N | 143.379 E | 33 N  | 5.2     | 1.0 | 53  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 13 | 40 | 23.8  | 40.154 N | 143.163 E | 33 N  | 5.2     | 1.1 | 65  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 13 | 57 | 28.3* | 40.092 N | 143.468 E | 33 N  | 3.8     | 0.8 | 10  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 13 | 59 | 18.5  | 40.239 N | 143.546 E | 33 N  | 5.7     | 0.8 | 167 | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 15 | 01 | 47.9  | 10.585 S | 121.723 E | 71 *  | 5.1     | 1.0 | 25  | SAVO SEA  |
| 28   | 15 | 10 | 59.2  | 60.296 N | 151.138 W | 40    |         |     | 74  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.2 (AEIC).   |
| 28   | 15 | 27 | 04.4  | 40.071 N | 143.326 E | 33 N  | 4.7     | 0.9 | 29  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 15 | 46 | 52.0  | 40.160 N | 143.391 E | 19 D  | 5.2     | 0.9 | 87  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 15 | 47 | 14.1? | 37.61 N  | 140.79 E  | 33 N  |         | 0.4 | 5   | EASTERN HONSHU, JAPAN   |
| 28   | 15 | 49 | 38.2  | 40.297 N | 143.023 E | 33 D  | 4.9     | 1.0 | 66  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 16 | 15 | 09.3? | 40.51 N  | 143.82 E  | 33 N  |         | 0.3 | 5   | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 16 | 33 | 58.9  | 60.197 N | 152.190 W | 66    |         |     | 40  | SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).   |
| 28   | 16 | 41 | 10.9  | 40.229 N | 143.902 E | 33 N  | 5.0     | 0.8 | 28  | OFF EAST COAST OF HONSHU, JAPAN   |

|      |             |          |           |       |         |     |     |  |
|------|-------------|----------|-----------|-------|---------|-----|-----|--|
| 28   | 16 42 08.77 | 40.45 N  | 143.32 E  | 33 N  | 4.8     | 0.5 | 13  | OFF EAST COAST OF HONSHU, JAPAN  |
| 28   | 17 17 15.11 | 33.154 S | 70.311 W  | 10 G  |         | 0.2 | 5   | CHILE-ARGENTINA BORDER REGION  |
| 28   | 17 17 51.27 | 39.07 N  | 143.76 E  | 33 N  | 4.7     | 0.8 | 10  | OFF EAST COAST OF HONSHU, JAPAN  |
| 28   | 17 29 14.5  | 13.791 N | 120.698 E | 156   | 5.4     | 1.0 | 146 | MINDORO, PHILIPPINE ISLANDS. Felt (II RF) at Manila, Luzon.  |
| 28   | 18 08 37.8  | 30.547 S | 72.179 W  | 14    | 4.7     | 0.8 | 21  | OFF COAST OF CENTRAL CHILE   |
| 28   | 18 16 08.1  | 40.015 N | 143.215 E | 33 N  | 5.7     | 0.8 | 235 | OFF EAST COAST OF HONSHU, JAPAN  |
| 28   | 18 25 33.9  | 39.823 N | 143.639 E | 33 N  | 5.3     | 0.8 | 48  | OFF EAST COAST OF HONSHU, JAPAN  |
| 28   | 18 32 22.7  | 63.916 N | 148.981 W | 0     |         |     | 35  | CENTRAL ALASKA. <AEIC>. ML 2.7 (AEIC), 3.1 (PMR). Healy mine blast.  |
| 28   | 19 09 49.67 | 40.39 N  | 142.94 E  | 33 N  | 4.7     | 0.9 | 13  | NEAR EAST COAST OF HONSHU, JAPAN   |
| 28   | 19 28 58.57 | 40.92 N  | 22.74 E   | 5 G   |         | 0.1 | 4   | GREECE. ML 2.0 (THE).  |
| 28   | 19 47 50.4  | 60.392 N | 152.979 W | 144   |         |     | 70  | SOUTHERN ALASKA. <AEIC>.   |
| 28   | 19 57 13.17 | 39.74 N  | 143.54 E  | 33 N  | 4.5     | 1.3 | 13  | OFF EAST COAST OF HONSHU, JAPAN  |
| 28   | 20 23 14.3  | 40.044 N | 143.789 E | 27 D  | 5.4     | 0.9 | 74  | OFF EAST COAST OF HONSHU, JAPAN  |
| 28   | 20 44 33.5* | 40.546 N | 142.616 E | 33 N  | 4.8     | 0.7 | 26  | NEAR EAST COAST OF HONSHU, JAPAN   |
| 28   | 20 49 19.2  | 46.757 N | 10.466 E  | 10 G  |         | 0.3 | 9   | NORTHERN ITALY. ML 1.8 (VIE).  |
| a 28 | 20 52 25.8  | 40.094 N | 142.687 E | 22 G  | 5.9 5.9 | 0.9 | 437 | NEAR EAST COAST OF HONSHU, JAPAN. Mw 6.2 (GS), 6.2 (HRV). Ms 5.4 (BRK). Depth from broadband displacement seismograms. |
| 28   | 21 04 59.9  | 44.539 N | 6.628 E   | 5 G   |         | 0.2 | 5   | FRANCE. ML 1.6 (GEN).  |
| 28   | 21 22 35.7  | 9.576 N  | 84.407 W  | 33 N  | 5.1     | 1.0 | 120 | COSTA RICA   |
| 28   | 21 29 50.8  | 40.115 N | 142.788 E | 40 D  | 5.4     | 0.9 | 142 | NEAR EAST COAST OF HONSHU, JAPAN   |
| 28   | 22 04 58.47 | 9.17 N   | 84.32 W   | 35 ?  |         | 1.2 | 9   | COSTA RICA. MD 4.6 (UPA).  |
| 28   | 22 15 27.9* | 40.305 N | 142.884 E | 33 N  | 4.9     | 0.9 | 18  | NEAR EAST COAST OF HONSHU, JAPAN   |
| 28   | 22 18 47.2  | 46.886 N | 8.761 E   | 5 G   |         | 1.2 | 14  | SWITZERLAND. ML 2.4 (LDG), 2.4 (VIE).  |
| a 28 | 22 23 55.8* | 32.961 S | 179.862 E | 54 ?  | 5.6 6.0 | 1.5 | 40  | SOUTH OF KERMADEC ISLANDS. Mw 5.7 (HRV).   |
| 28   | 22 30 28.6  | 40.340 N | 143.691 E | 33 N  | 5.1     | 0.8 | 33  | OFF EAST COAST OF HONSHU, JAPAN  |
| 28   | 22 36 07.7  | 40.293 N | 142.361 E | 44 D  | 5.3     | 0.9 | 112 | NEAR EAST COAST OF HONSHU, JAPAN   |
| a 28 | 22 37 46.3  | 40.375 N | 143.636 E | 11 G  | 5.9 6.0 | 0.8 | 340 | OFF EAST COAST OF HONSHU, JAPAN. Mw 6.4 (GS), 6.2 (HRV). Ms 5.7 (BRK). Depth from broadband displacement seismograms.  |
| 28   | 22 39 23.7* | 5.211 N  | 126.316 E | 73 *  | 5.0     | 1.2 | 19  | MINDANAO, PHILIPPINE ISLANDS   |
| 28   | 22 48 38.6* | 39.914 N | 144.270 E | 33 N  | 4.8     | 0.3 | 14  | OFF EAST COAST OF HONSHU, JAPAN  |
| 28   | 22 54 47.5  | 40.187 N | 143.583 E | 30 D  | 5.8     | 0.9 | 207 | OFF EAST COAST OF HONSHU, JAPAN  |
| 28   | 23 38 48.5  | 33.882 S | 69.911 W  | 5 G   |         | 0.4 | 10  | CHILE-ARGENTINA BORDER REGION  |
| 29   | 00 21 28.2  | 42.887 N | 122.120 W | 2     |         |     | 3   | OREGON. <SEA-P>. MD 2.3 (SEA).   |
| 29   | 00 22 16.7  | 42.907 N | 122.093 W | 1     |         |     | 23  | OREGON. <SEA-P>. MD 2.6 (SEA). Felt (IV) at Crater Lake.   |
| 29   | 00 40 45.0  | 42.893 N | 122.115 W | 5     |         |     | 2   | OREGON. <SEA-P>. MD 2.4 (SEA). Felt (IV) at Crater Lake.   |
| 29   | 00 41 12.5  | 16.129 N | 61.098 W  | 10 G  |         | 0.6 | 11  | LEEWARD ISLANDS. MD 3.2 (TRN). ML 2.7 (FDF).   |
| 29   | 00 49 08.6  | 62.141 N | 148.028 W | 35    |         |     | 83  | CENTRAL ALASKA. <AEIC>. ML 3.0 (AEIC), 3.0 (PMR).  |
| 29   | 01 23 23.1  | 40.076 N | 19.800 E  | 5 G   |         | 1.3 | 10  | ALBANIA  |
| 29   | 02 03 27.8* | 13.004 N | 93.473 E  | 33 N  | 5.1     | 0.9 | 15  | ANDAMAN ISLANDS, INDIA   |
| 29   | 02 14 30.9  | 44.662 N | 7.052 E   | 10 G  |         | 0.5 | 23  | NORTHERN ITALY. ML 2.6 (GEN), 2.3 (LDG).   |
| 29   | 02 21 00.4  | 44.637 N | 6.979 E   | 10 G  |         | 0.3 | 10  | FRANCE. ML 2.1 (GEN).  |
| 29   | 03 50 58.0  | 36.658 N | 121.261 W | 0     |         |     | 17  | CENTRAL CALIFORNIA. <GM-P>. MD 3.0 (GM).   |
| 29   | 03 56 19.9  | 36.656 N | 121.268 W | 4     |         |     | 8   | CENTRAL CALIFORNIA. <GM-P>. MD 2.7 (GM).   |
| 29   | 04 33 53.0  | 5.112 S  | 102.689 E | 61 *  | 5.4     | 0.9 | 60  | SOUTHERN SUMATRA, INDONESIA  |
| 29   | 05 14 25.9* | 6.650 S  | 71.610 E  | 10 G  | 4.9     | 0.7 | 19  | CHAGOS ARCHIPELAGO REGION. Felt on Diego Garcia.   |
| 29   | 06 00 12.5  | 40.207 N | 143.558 E | 33 N  | 4.7 4.6 | 1.0 | 34  | OFF EAST COAST OF HONSHU, JAPAN  |
| 29   | 06 15 10.2* | 8.608 S  | 119.387 E | 142 * | 4.2     | 1.4 | 7   | FLORES REGION, INDONESIA   |
| 29   | 06 25 55.3  | 62.928 N | 149.815 W | 85    |         |     | 88  | CENTRAL ALASKA. <AEIC>.  |
| 29   | 06 40 36.6* | 15.508 N | 61.528 W  | 141 ? |         | 0.6 | 15  | LEEWARD ISLANDS. MD 3.4 (TRN).   |
| 29   | 07 36 45.0  | 63.164 N | 150.529 W | 122   |         |     | 49  | CENTRAL ALASKA. <AEIC>.  |
| 29   | 08 16 23.87 | 17.00 N  | 60.65 W   | 33 N  |         | 0.3 | 8   | LEEWARD ISLANDS. MD 3.1 (TRN). ML 2.8 (FDF).   |
| 29   | 08 53 10.47 | 26.29 N  | 128.65 E  | 39 ?  | 4.3     | 1.1 | 13  | RYUKYU ISLANDS   |
| 29   | 09 18 03.4  | 36.994 N | 3.856 W   | 60 G  |         | 1.1 | 15  | STRAIT OF GIBRALTAR  |
| 29   | 10 55 39.2  | 63.152 N | 150.534 W | 124   |         |     | 66  | CENTRAL ALASKA. <AEIC>   |
| 29   | 11 45 04.9* | 19.305 S | 169.321 E | 230 * | 4.7     | 1.1 | 14  | VANUATU ISLANDS  |
| 29   | 14 09 52.1  | 45.497 N | 112.278 W | 6     |         |     | 10  | MONTANA. <BUT>. ML 2.7 (BUT). Felt at Twin Bridges.  |
| 29   | 15 07 43.27 | 40.36 N  | 143.36 E  | 33 N  | 3.9     | 1.3 | 8   | OFF EAST COAST OF HONSHU, JAPAN  |
| a 29 | 15 29 29.0  | 40.773 N | 142.109 E | 56 D  | 5.7     | 0.8 | 415 | NEAR EAST COAST OF HONSHU, JAPAN. Mw 5.5 (HRV).  |
| 29   | 16 01 18.2  | 35.655 N | 80.663 E  | 33 N  | 5.5     | 1.0 | 25  | KASHMIR-XIZANG BORDER REGION   |
| 29   | 16 35 54.07 | 47.32 N  | 11.58 E   | 10 G  |         | 0.2 | 4   | AUSTRIA. ML 1.0 (VIE).   |
| 29   | 16 41 04.57 | 39.86 N  | 144.54 E  | 33 N  | 4.9     | 0.6 | 12  | OFF EAST COAST OF HONSHU, JAPAN  |
| 29   | 17 45 28.7  | 60.211 N | 152.566 W | 94    |         |     | 48  | SOUTHERN ALASKA. <AEIC>.   |
| 29   | 18 02 27.0  | 33.348 S | 72.187 W  | 10 G  |         | 0.4 | 9   | OFF COAST OF CENTRAL CHILE   |
| 29   | 18 08 34.8  | 43.631 N | 147.484 E | 33 N  | 4.9     | 1.0 | 41  | KURIL ISLANDS  |
| 29   | 18 10 35.4  | 33.316 S | 72.017 W  | 10 G  |         | 0.9 | 10  | OFF COAST OF CENTRAL CHILE. MD 3.6 (SAN).  |
| a 29 | 18 58 30.4  | 29.079 N | 103.790 E | 33 N  | 5.3 4.7 | 0.9 | 149 | SICHUAN, CHINA. Mw 5.1 (HRV). Some buildings damaged in the epicentral area. Felt at Chengdu and Leshan.               |
| 29   | 18 59 54.6  | 38.769 N | 119.672 W | 2     |         |     | 16  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.1 (GM). ML 3.4 (BRK), 3.0 (GS).  |
| 29   | 19 39 35.1* | 12.281 N | 92.287 E  | 33 N  | 4.6     | 0.2 | 7   | ANDAMAN ISLANDS, INDIA   |
| 29   | 20 23 02.0  | 60.714 N | 151.332 W | 56    |         |     | 30  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.0 (AEIC).  |
| 29   | 20 42 07.1  | 38.865 N | 27.842 E  | 10 G  |         | 0.4 | 6   | TURKEY. ML 2.8 (ISK).  |
| 29   | 21 10 36.5  | 40.012 N | 19.901 E  | 5 G   |         | 0.9 | 15  | ALBANIA. MD 3.2 (ATH). ML 2.8 (THE).   |
| 29   | 22 27 30.1  | 58.989 N | 150.745 W | 69    |         |     | 45  | GULF OF ALASKA. <AEIC>. ML 2.6 (AEIC).   |
| a 29 | 22 33 24.5  | 40.400 N | 142.921 E | 33 N  | 5.3 4.7 | 0.7 | 82  | NEAR EAST COAST OF HONSHU, JAPAN. Mw 5.1 (HRV).  |
| 29   | 22 37 17.47 | 44.39 N  | 7.38 E    | 10 G  |         | 0.0 | 4   | NORTHERN ITALY. ML 1.6 (GEN).  |
| 29   | 22 58 51.2  | 44.410 N | 7.399 E   | 10 G  |         | 0.2 | 5   | NORTHERN ITALY. ML 1.7 (GEN).  |
| 30   | 00 20 45.1  | 61.889 N | 150.408 W | 49    |         |     | 45  | SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).  |
| 30   | 00 33 26.87 | 43.26 N  | 147.56 E  | 33 N  | 4.4     | 0.9 | 12  | KURIL ISLANDS  |
| 30   | 02 05 56.1* | 39.605 N | 144.234 E | 33 N  |         | 0.3 | 7   | OFF EAST COAST OF HONSHU, JAPAN  |
| 30   | 03 45 15.37 | 47.24 N  | 11.54 E   | 10 G  |         | 0.2 | 4   | AUSTRIA. ML 0.6 (VIE).   |
| 30   | 03 46 35.3* | 9.697 S  | 124.116 E | 79 ?  | 4.8     | 1.3 | 8   | TIMOR REGION, INDONESIA  |
| 30   | 03 49 45.7  | 64.479 N | 149.010 W | 16    |         |     | 33  | CENTRAL ALASKA. <AEIC>. ML 2.7 (AEIC), 3.1 (PMR).  |
| 30   | 04 40 03.1  | 39.592 N | 27.819 E  | 10 G  |         | 0.7 | 8   | TURKEY. ML 3.0 (ISK).  |
| 30   | 04 48 03.6* | 36.105 N | 139.820 E | 138   | 4.6     | 0.3 | 14  | EASTERN HONSHU, JAPAN  |
| 30   | 04 55 31.4  | 63.271 N | 151.092 W | 6     |         |     | 34  | CENTRAL ALASKA. <AEIC>. ML 3.2 (AEIC), 3.7 (PMR).  |
| 30   | 05 03 18.8  | 43.539 N | 7.721 E   | 27    |         | 0.4 | 20  | NEAR SOUTH COAST OF FRANCE. ML 2.6 (GEN), 2.6 (LDG).   |



|      |    |    |      |        |   |         |   |     |   |         |     |     |   |
|------|----|----|------|--------|---|---------|---|-----|---|---------|-----|-----|---|
| 30   | 06 | 56 | 16.8 | 38.179 | N | 39.670  | E | 10  | G | 4.7     | 1.5 | 36  | TURKEY. Two people injured and some buildings slightly damaged in the Diyarbakir area.  |
| 30   | 07 | 30 | 19.5 | 46.291 | N | 1.901   | E | 10  | G |         | 0.5 | 5   | FRANCE. ML 1.4 (LDG).   |
| 30   | 08 | 05 | 54.2 | 34.23  | S | 71.57   | W | 50  | G |         | 0.5 | 8   | NEAR COAST OF CENTRAL CHILE   |
| 30   | 09 | 04 | 10.4 | 39.18  | N | 27.32   | E | 5   | G |         | 0.0 | 4   | TURKEY. ML 2.7 (ISK).   |
| 30   | 10 | 03 | 24.5 | 34.318 | N | 118.405 | W | 5   |   |         |     | 20  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS), 3.4 (GS). Felt.   |
| 30   | 10 | 28 | 26.2 | 30.348 | N | 88.260  | E | 33  | N | 4.3     | 1.4 | 18  | XIZANG  |
| 30   | 11 | 17 | 32.5 | 40.905 | N | 142.117 | E | 33  | N | 5.0     | 0.7 | 35  | NEAR EAST COAST OF HONSHU, JAPAN  |
| 30   | 11 | 28 | 42.5 | 38.760 | N | 119.720 | W | 1   |   |         |     | 4   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM).   |
| 30   | 11 | 35 | 59.8 | 33.569 | S | 69.923  | W | 10  | G |         | 0.1 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
| 30   | 11 | 47 | 22.6 | 43.27  | N | 148.23  | E | 33  | N | 5.1     | 0.8 | 12  | EAST OF KURIL ISLANDS   |
| 30   | 11 | 48 | 31.9 | 44.724 | N | 6.783   | E | 10  | G |         | 0.2 | 7   | FRANCE. ML 2.0 (GEN).   |
| 30   | 12 | 02 | 43.6 | 40.447 | N | 28.609  | E | 10  | G |         | 0.9 | 6   | TURKEY. ML 2.8 (ISK).   |
| 30   | 12 | 03 | 17.7 | 60.143 | N | 150.548 | W | 20  |   |         |     | 40  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.0 (AEIC).   |
| 30   | 12 | 15 | 27.9 | 39.32  | N | 27.39   | E | 10  | G |         | 0.4 | 4   | TURKEY. ML 2.8 (ISK).   |
| 30   | 12 | 18 | 53.1 | 35.42  | S | 106.43  | W | 10  | G | 4.8     | 1.4 | 14  | SOUTHERN EAST PACIFIC RISE  |
| 30   | 12 | 22 | 03.4 | 40.679 | N | 23.125  | E | 5   | G |         | 0.6 | 7   | GREECE. ML 2.0 (THE).   |
| 30   | 13 | 03 | 13.9 | 39.35  | N | 29.51   | E | 10  | G |         | 0.6 | 4   | TURKEY. ML 2.9 (ISK).   |
| 30   | 13 | 07 | 31.8 | 47.366 | S | 100.219 | E | 10  | G | 5.1 5.4 | 1.1 | 15  | SOUTHEAST INDIAN RIDGE  |
| 30   | 14 | 03 | 38.9 | 22.040 | N | 143.025 | E | 256 | * | 5.1     | 0.8 | 113 | VOLCANO ISLANDS REGION  |
| 30   | 14 | 37 | 11.4 | 39.836 | N | 143.961 | E | 33  | N | 4.4     | 0.8 | 8   | OFF EAST COAST OF HONSHU, JAPAN   |
| a 30 | 15 | 12 | 25.2 | 18.552 | N | 145.363 | E | 219 | G | 5.6     | 1.0 | 319 | MARIANA ISLANDS. Mw 6.3 (GS), 6.3 (HRV). mb 5.8 (BRK). Mo=1.4*10**18 Nm (PPT). Depth from broadband displacement seismograms.   |
| 30   | 16 | 31 | 34.8 | 44.528 | N | 7.254   | E | 10  | G |         | 0.7 | 12  | NORTHERN ITALY. ML 2.2 (GEN).   |
| 30   | 17 | 27 | 13.1 | 37.17  | N | 9.55    | W | 10  | G |         | 0.7 | 10  | PORTUGAL. mbLg 3.8 (MDD).   |
| 30   | 17 | 34 | 21.5 | 40.380 | N | 143.558 | E | 33  | N | 5.3     | 0.9 | 35  | OFF EAST COAST OF HONSHU, JAPAN   |
| 30   | 18 | 39 | 58.9 | 40.355 | N | 143.193 | E | 33  | N | 5.0     | 0.8 | 36  | OFF EAST COAST OF HONSHU, JAPAN   |
| 30   | 19 | 09 | 43.7 | 61.443 | N | 150.742 | W | 53  |   |         |     | 62  | SOUTHERN ALASKA. <AEIC>. ML 2.8 (AEIC).   |
| 30   | 20 | 07 | 29.4 | 43.52  | N | 148.29  | E | 33  | N |         | 0.8 | 8   | EAST OF KURIL ISLANDS   |
| 30   | 21 | 28 | 48.4 | 5.092  | S | 103.514 | E | 99  | ? | 5.1     | 1.0 | 32  | SOUTHERN SUMATRA, INDONESIA   |
| 30   | 21 | 33 | 55.3 | 37.12  | N | 3.54    | W | 10  | G |         | 1.9 | 4   | SPAIN. mbLg 2.2 (MDD).  |
| 30   | 22 | 10 | 36.9 | 52.204 | N | 106.391 | E | 10  | G | 4.2     | 1.0 | 7   | LAKE BAYKAL REGION, RUSSIA. Felt (V) at Kabansk; (III) at Irkutsk and Tyrgana.  |
| a 30 | 22 | 55 | 24.9 | 4.265  | S | 152.749 | E | 33  | N | 5.6 5.0 | 1.0 | 107 | NEW BRITAIN REGION, P.N.G. Mw 5.5 (HRV).  |
| 30   | 23 | 02 | 54.3 | 41.140 | N | 24.279  | E | 5   | G |         | 0.8 | 8   | GREECE-BULGARIA BORDER REGION. ML 3.0 (THE).  |
| 30   | 23 | 38 | 14.6 | 34.58  | S | 70.54   | W | 120 | G |         | 0.1 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |
| 31   | 00 | 07 | 24.2 | 32.460 | N | 115.333 | W | 9   |   |         |     | 11  | CALIF.-BAJA CALIF. BORDER REGION. <ECX-P>. MD 3.6 (ECX). ML 3.7 (PAS), 3.4 (GS). Felt in the Mexicali Valley.   |
| 31   | 00 | 43 | 01.4 | 45.58  | N | 26.50   | E | 10  | G |         | 0.6 | 4   | ROMANIA   |
| a 31 | 02 | 57 | 20.8 | 20.524 | N | 109.330 | E | 33  | N | 5.7 5.3 | 0.9 | 181 | SOUTHEASTERN CHINA. Mw 5.3 (HRV). At least 360 people injured in Guangdong and Guangxi Provinces and more than 1,100 houses damaged in Guangxi Province. Felt at Beihai, Guangzhou, Haikou, Nanning, Sanya and Zhanjiang. Also felt at Hong Kong. |
| 31   | 03 | 04 | 31.6 | 19.84  | S | 176.02  | W | 166 | ? | 5.0     | 1.2 | 12  | FIJI ISLANDS REGION   |
| 31   | 03 | 43 | 09.5 | 30.760 | S | 72.120  | W | 33  | N |         | 0.9 | 16  | OFF COAST OF CENTRAL CHILE  |
| 31   | 03 | 59 | 45.1 | 41.99  | N | 23.02   | E | 5   | G |         | 0.2 | 7   | GREECE-BULGARIA BORDER REGION. ML 2.6 (THE).  |
| 31   | 04 | 05 | 04.5 | 42.712 | N | 2.026   | E | 10  | G |         | 0.6 | 12  | PYRENEES. ML 2.9 (LDG), 2.9 (STR).  |
| 31   | 04 | 55 | 23.4 | 42.01  | N | 23.01   | E | 5   | G |         | 0.3 | 6   | BULGARIA. ML 2.5 (THE).   |
| 31   | 05 | 24 | 00.4 | 13.566 | N | 60.065  | W | 64  | * |         | 1.0 | 32  | WINDWARD ISLANDS. MD 3.7 (TRN).   |
| 31   | 05 | 54 | 34.8 | 32.594 | S | 71.617  | W | 33  | N |         | 0.8 | 11  | NEAR COAST OF CENTRAL CHILE. MD 4.0 (SAN).  |
| 31   | 07 | 23 | 24.9 | 41.455 | N | 23.257  | E | 5   | G |         | 0.4 | 6   | GREECE-BULGARIA BORDER REGION. ML 2.1 (THE).  |
| 31   | 08 | 08 | 43.8 | 55.66  | S | 147.47  | E | 10  | G | 4.8     | 1.0 | 7   | WEST OF MACQUARIE ISLAND  |
| 31   | 08 | 16 | 08.7 | 51.154 | N | 15.653  | E | 10  | G |         | 0.7 | 9   | POLAND. ML 3.6 (GRF), 3.5 (VIE), 3.3 (MOX).   |
| 31   | 08 | 39 | 41.1 | 40.342 | N | 125.479 | W | 11  |   |         |     | 6   | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 2.9 (GM).  |
| 31   | 09 | 00 | 58.8 | 58.590 | N | 154.537 | W | 107 |   |         |     | 42  | ALASKA PENINSULA. <AEIC>.   |
| 31   | 09 | 02 | 48.5 | 18.11  | S | 178.19  | W | 634 | ? | 4.9     | 1.0 | 25  | FIJI ISLANDS REGION   |
| 31   | 11 | 05 | 59.8 | 2.475  | N | 126.188 | E | 87  | * | 5.2     | 0.7 | 23  | NORTHERN MOLUCCA SEA  |
| 31   | 13 | 24 | 25.8 | 18.19  | N | 102.63  | W | 75  | ? |         | 1.0 | 10  | MICHOACAN, MEXICO   |
| 31   | 13 | 47 | 22.6 | 61.044 | N | 151.552 | W | 71  |   |         |     | 50  | SOUTHERN ALASKA. <AEIC>.  |
| a 31 | 13 | 50 | 23.7 | 40.217 | N | 142.546 | E | 43  |   | 5.7 5.6 | 1.0 | 297 | NEAR EAST COAST OF HONSHU, JAPAN. Mw 6.0 (HRV). Mo=1.4*10**18 Nm (PPT).   |
| 31   | 15 | 21 | 43.4 | 34.466 | N | 119.361 | W | 15  |   |         |     | 11  | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.7 (PAS), 2.8 (GS).   |
| 31   | 16 | 25 | 06.5 | 44.475 | N | 7.290   | E | 10  | G |         | 0.2 | 5   | NORTHERN ITALY. ML 1.9 (GEN).   |
| 31   | 17 | 17 | 26.8 | 40.183 | N | 142.786 | E | 33  | N | 5.0     | 1.0 | 49  | NEAR EAST COAST OF HONSHU, JAPAN  |
| 31   | 17 | 49 | 06.8 | 17.448 | N | 62.267  | W | 121 | ? |         | 0.3 | 17  | LEEWARD ISLANDS. MD 3.9 (TRN).  |
| 31   | 18 | 10 | 54.1 | 39.303 | N | 27.577  | E | 5   | G |         | 0.6 | 6   | TURKEY. ML 3.1 (ISK).   |
| 31   | 18 | 40 | 20.0 | 33.563 | S | 69.923  | W | 10  | G |         | 0.2 | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
| 31   | 18 | 56 | 08.2 | 44.348 | N | 6.782   | E | 5   | G |         | 0.3 | 8   | FRANCE. ML 2.3 (GEN).   |
| 31   | 19 | 01 | 17.4 | 36.312 | N | 2.525   | E | 10  | G |         | 0.7 | 18  | NORTHERN ALGERIA. mbLg 3.7 (MDD).   |
| 31   | 20 | 01 | 32.7 | 43.60  | N | 0.05    | E | 10  | G |         | 0.1 | 4   | FRANCE. ML 2.2 (LDG).   |
| 31   | 20 | 10 | 26.0 | 20.783 | N | 146.652 | E | 33  | N | 5.3     | 0.9 | 28  | MARIANA ISLANDS REGION  |
| 31   | 20 | 25 | 27.9 | 60.330 | N | 139.590 | W | 10  |   |         |     | 13  | SOUTHEASTERN ALASKA. <AEIC>. ML 2.6 (AEIC).   |
| 31   | 20 | 28 | 53.1 | 32.32  | S | 71.67   | W | 10  | G |         | 0.7 | 9   | NEAR COAST OF CENTRAL CHILE. MD 3.7 (SAN).  |
| a 31 | 20 | 52 | 27.7 | 35.820 | N | 139.993 | E | 76  |   | 5.2     | 0.9 | 96  | NEAR S. COAST OF HONSHU, JAPAN. Mw 5.1 (HRV).   |
| 31   | 21 | 49 | 17.2 | 58.541 | N | 143.393 | W | 10  | G |         | 0.6 | 15  | GULF OF ALASKA. ML 2.6 (AEIC).  |
| 31   | 22 | 09 | 56.4 | 30.335 | S | 20.988  | E | 5   | G |         | 1.3 | 11  | REPUBLIC OF SOUTH AFRICA. ML 4.5 (PRE). mbLg 4.4 (BUL).   |

## ADDITIONAL SOURCE PARAMETERS

|   |   |  |
|---|---|--|
| 01 06 11 01.49 7.639S 128.173E 84km<br>5.6mb ( 35 obs.)<br>BANDA SEA<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 38S, 56C<br>Centroid Location:<br>Origin Time 06:11: 7.0 0.5<br>Lat 7.82S 0.05 Lon 128.25E 0.04<br>Dep 113.5 2.3 Half-duration 1.1<br>Principal Axes:<br>Scale 10**16 Nm<br>T Val= 14.00 Plg=47 Azm=335<br>N -2.85 35 114<br>P -11.14 21 220<br>Best Double Couple:Mo=1.3*10**17<br>NP1:Strike=353 Dip=39 Slip= 155<br>NP2: 103 75 54                        | P -1.65 32 123<br>Best Double Couple:Mo=1.5*10**17<br>NP1:Strike=194 Dip=14 Slip= 68<br>NP2: 37 77 95   | Origin Time 03:38: 2.8 0.1<br>Lat 23.19S 0.01 Lon 66.58W 0.02<br>Dep 246.3 0.8 Half-duration 2.3<br>Principal Axes:<br>Scale 10**17 Nm<br>T Val= 9.76 Plg=26 Azm=113<br>N -1.39 24 11<br>P -8.37 54 245<br>Best Double Couple:Mo=9.1*10**17<br>NP1:Strike=244 Dip=29 Slip= -33<br>NP2: 4 75 -114   |
| 02 18 11 52.41 43.916N 148.020E 43km<br>4.9mb ( 55 obs.) 4.3Msz ( 9 obs.)<br>EAST OF KURIL ISLANDS<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 9S, 10C<br>Centroid Location:<br>Origin Time 18:11:57.1 2.2<br>Lat 43.95N FIX;Lon 147.99E FIX<br>Dep 31.0 FIX Half-duration 1.0<br>Principal Axes:<br>Scale 10**16 Nm<br>T Val= 4.78 Plg=56 Azm=322<br>N 0.49 3 56<br>P -5.27 34 149<br>Best Double Couple:Mo=5.0*10**16<br>NP1:Strike=252 Dip=11 Slip= 106<br>NP2: 56 79 87   | 05 16 20 09.36 8.576S 159.833E 49km<br>5.8mb ( 50 obs.) 5.1Msz ( 31 obs.)<br>SOLOMON ISLANDS<br>FAULT PLANE SOLUTION: P-Waves<br>NP1:Strike= 95 Dip=68 Slip= -90<br>NP2: 275 22 -90<br>Principal Axes:<br>T Plg=23 Azm=185<br>P 67 5<br>Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is not determined.<br>RADIATED ENERGY<br>No. of sta: 10 Focal mech. F<br>Energy 1.4±0.3*10**12 Nm<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 55S, 92C<br>Centroid Location:<br>Origin Time 16:20:12.6 0.3<br>Lat 8.49S 0.02 Lon 160.10E 0.03<br>Dep 50.9 2.2 Half-duration 1.4<br>Principal Axes:<br>Scale 10**17 Nm<br>T Val= 1.78 Plg=27 Azm=179<br>N -0.02 1 269<br>P -1.76 63 1<br>Best Double Couple:Mo=1.8*10**16<br>NP1:Strike=267 Dip=18 Slip= -93<br>NP2: 90 72 -89 | 07 20 22 18.36 3.459S 130.940E 33km<br>5.2mb ( 22 obs.) 4.9Msz ( 8 obs.)<br>SERAM, INDONESIA<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 39S, 60C<br>Centroid Location:<br>Origin Time 20:22:21.5 0.4<br>Lat 3.21S 0.04 Lon 130.88E 0.04<br>Dep 36.3 4.1 Half-duration 1.3<br>Principal Axes:<br>Scale 10**17 Nm<br>T Val= 1.62 Plg=22 Azm=315<br>N 0.15 62 175<br>P -1.76 17 52<br>Best Double Couple:Mo=1.7*10**17<br>NP1:Strike= 95 Dip=62 Slip= 4<br>NP2: 3 86 152   |
| 03 04 53 11.62 14.487N 92.404W 79km<br>4.9mb ( 58 obs.)<br>NEAR COAST OF CHIAPAS, MEXICO<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 30S, 46C<br>Centroid Location:<br>Origin Time 04:53:10.0 0.5<br>Lat 14.31N 0.05 Lon 92.85W 0.05<br>Dep 33.0 FIX Half-duration 1.0<br>Principal Axes:<br>Scale 10**16 Nm<br>T Val= 9.38 Plg=67 Azm= 56<br>N -1.73 6 312<br>P -7.65 22 220<br>Best Double Couple:Mo=8.5*10**16<br>NP1:Strike=298 Dip=23 Slip= 75<br>NP2: 135 68 96         | 06 09 06 07.07 15.316S 75.294W 27km<br>5.3mb ( 42 obs.) 5.0Msz ( 30 obs.)<br>NEAR COAST OF PERU<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 42S, 71C<br>Centroid Location:<br>Origin Time 09:06:11.8 0.2<br>Lat 15.41S 0.03 Lon 75.42W 0.03<br>Dep 33.2 2.1 Half-duration 1.4<br>Principal Axes:<br>Scale 10**17 Nm<br>T Val= 2.13 Plg=59 Azm=112<br>N -0.21 20 345<br>P -1.92 23 246<br>Best Double Couple:Mo=2.0*10**17<br>NP1:Strike=302 Dip=28 Slip= 44<br>NP2: 172 71 111  | 07 23 08 37.59 2.949S 119.830E 28km<br>5.2mb ( 5 obs.) 4.2Msz ( 1 obs.)<br>SULAWESI, INDONESIA<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 9S, 14C<br>Centroid Location:<br>Origin Time 23:08:33.0 1.2<br>Lat 2.97S FIX;Lon 119.81E FIX<br>Dep 33.0 FIX Half-duration 1.0<br>Principal Axes:<br>Scale 10**17 Nm<br>T Val= 0.96 Plg=17 Azm=174<br>N 0.34 68 315<br>P -1.30 13 80<br>Best Double Couple:Mo=1.1*10**17<br>NP1:Strike=216 Dip=68 Slip= 177<br>NP2: 308 87 22 |
| 04 05 23 16.56 2.719N 126.761E 55km<br>5.2mb ( 19 obs.) 4.4Msz ( 1 obs.)<br>NORTHERN MOLUCCA SEA<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 20S, 28C<br>Centroid Location:<br>Origin Time 05:23:25.5 1.0<br>Lat 3.55N 0.08 Lon 126.73E 0.09<br>Dep 53.5 6.3 Half-duration 1.0<br>Principal Axes:<br>Scale 10**16 Nm<br>T Val= 4.49 Plg=69 Azm= 26<br>N -0.13 20 217<br>P -4.36 3 125<br>Best Double Couple:Mo=4.4*10**16<br>NP1:Strike=195 Dip=45 Slip= 61<br>NP2: 54 52 116 | 07 03 37 54.83 23.422S 66.639W 235km<br>5.6mb (100 obs.)<br>JUJUY PROVINCE, ARGENTINA<br>FAULT PLANE SOLUTION: P-Waves<br>NP1:Strike= 8 Dip=75 Slip=-110<br>NP2: 243 25 -38<br>Principal Axes:<br>T Plg=27 Azm=114<br>P 56 253<br>Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with a moderate right-lateral strike-slip component. The preferred fault plane is NP1.<br>RADIATED ENERGY<br>No. of sta: 19 Focal mech. F<br>Energy 5.9±1.0*10**12 Nm<br>MOMENT TENSOR SOLUTION<br>Dep 244 No. of sta: 29<br>Principal Axes:<br>Scale 10**18 Nm<br>T Val= 1.02 Plg=28 Azm=106<br>N 0.00 6 200<br>P -1.02 61 301<br>Best Double Couple:Mo=1.0*10**18<br>NP1:Strike=180 Dip=18 Slip=-110<br>NP2: 22 73 -84<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 68S,143C<br>Centroid Location:            | 08 05 09 08.29 19.426S 168.954E 114km<br>5.3mb ( 19 obs.)<br>VANUATU ISLANDS<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 7S, 10C<br>Centroid Location:<br>Origin Time 05:09: 9.9 1.2<br>Lat 19.65S FIX;Lon 169.13E FIX<br>Dep 33.0 FIX Half-duration 1.1<br>Principal Axes:<br>Scale 10**17 Nm<br>T Val= 1.24 Plg=40 Azm= 83<br>N 0.15 17 338<br>P -1.38 46 231<br>Best Double Couple:Mo=1.3*10**17<br>NP1:Strike=238 Dip=17 Slip= -10<br>NP2: 337 87 -107               |
| 04 22 05 57.32 35.587S 178.431E 160km<br>5.4mb ( 20 obs.)<br>OFF E. COAST OF N. ISLAND, N.Z.<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 44S, 76C<br>Centroid Location:<br>Origin Time 22:06: 2.7 0.3<br>Lat 35.38S 0.03 Lon 178.91E 0.04<br>Dep 163.9 1.1 Half-duration 1.2<br>Principal Axes:<br>Scale 10**17 Nm<br>T Val= 1.39 Plg=58 Azm=314<br>N 0.26 5 216  | 08 08 30 26.80 1.967N 120.844E 38km<br>5.5mb ( 34 obs.) 4.9Msz ( 6 obs.)<br>MINAHASSA PENINSULA, SULAWESI<br>CENTROID, MOMENT TENSOR (HRV)<br>Data Used: GSN<br>L.P.B.: 53S, 92C<br>Centroid Location:<br>Origin Time 08:30:30.8 0.2<br>Lat 2.08N 0.02 Lon 120.91E 0.02<br>Dep 53.9 1.7 Half-duration 1.7<br>Principal Axes:<br>Scale 10**17 Nm<br>T Val= 3.72 Plg=10 Azm=263<br>N -0.20 72 138<br>P -3.52 14 356<br>Best Double Couple:Mo=3.6*10**17<br>NP1:Strike= 39 Dip=73 Slip= -3<br>NP2: 130 88 -163   | 09 18 10 21.30 21.696S 175.311W 93km<br>4.8mb ( 11 obs.)   |

TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 33S, 55C  
Centroid Location:  
Origin Time 18:10:20.0 0.6  
Lat 22.15S 0.06 Lon 174.60W 0.05  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.94 Plg=69 Azm=277  
N 1.44 4 18  
P -9.38 21 110  
Best Double Couple:Mo=8.7\*10\*\*16  
NP1:Strike=207 Dip=25 Slip= 100  
NP2: 16 66 85

10 01 54 16.44 56.196S 27.167W 110km  
5.4mb ( 16 obs.)  
SOUTH SANDWICH ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 21S, 28C  
Centroid Location:  
Origin Time 01:54:22.4 0.6  
Lat 56.05S 0.09 Lon 27.09W 0.13  
Dep 95.7 5.8 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.35 Plg=35 Azm=282  
N 2.29 39 158  
P -8.64 32 38  
Best Double Couple:Mo=7.5\*10\*\*16  
NP1:Strike= 72 Dip=39 Slip= 3  
NP2: 339 88 129

10 03 39 31.75 23.534S 70.591W 37km  
5.8mb ( 74 obs.) 5.6msz ( 45 obs.)  
NEAR COAST OF NORTHERN CHILE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 66S,159C  
Centroid Location:  
Origin Time 03:39:37.9 0.1  
Lat 23.50S 0.02 Lon 71.14W 0.01  
Dep 36.0 BDY Half-duration 2.5  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.24 Plg=70 Azm= 60  
N 0.09 8 172  
P -1.33 18 265  
Best Double Couple:Mo=1.3\*10\*\*18  
NP1:Strike= 7 Dip=28 Slip= 107  
NP2: 168 64 81

10 09 26 42.56 38.306N 142.102E 52km  
5.4mb ( 84 obs.)  
NEAR EAST COAST OF HONSHU, JAPAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 25S, 34C  
Centroid Location:  
Origin Time 09:26:46.0 0.5  
Lat 38.34N 0.06 Lon 142.42E 0.08  
Dep 52.0 BDY Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.47 Plg=26 Azm=114  
N -1.02 10 19  
P -6.45 62 270  
Best Double Couple:Mo=7.0\*10\*\*16  
NP1:Strike=226 Dip=21 Slip= -62  
NP2: 16 71 -100

10 12 16 01.12 27.914N 64.985E 57km  
5.2mb ( 61 obs.)  
SOUTHWESTERN PAKISTAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 34S, 43C  
Centroid Location:  
Origin Time 12:16: 7.5 0.5  
Lat 28.05N 0.06 Lon 65.19E 0.06  
Dep 38.9 4.0 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.97 Plg=14 Azm=142  
N -0.85 23 239  
P -6.12 63 23  
Best Double Couple:Mo=6.6\*10\*\*16  
NP1:Strike=204 Dip=37 Slip=-130  
NP2: 71 63 -64

10 15 24 18.81 6.815N 72.993W 158km  
5.0mb ( 95 obs.)  
NORTHERN COLOMBIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 18S, 20C  
Centroid Location:  
Origin Time 15:24:20.6 0.8  
Lat 6.89N 0.12 Lon 72.85W 0.10  
Dep 164.4 2.2 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.61 Plg=68 Azm= 41  
N 2.00 20 201  
P -8.60 7 293  
Best Double Couple:Mo=7.6\*10\*\*16  
NP1:Strike= 45 Dip=42 Slip= 121  
NP2: 186 55 65

10 16 17 38.51 18.136N 101.384W 48km  
6.6mb (146 obs.) 6.2msz ( 43 obs.)  
GUERRERO, MEXICO  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=117 Dip=76 Slip= -90  
NP2: 297 14 -90  
Principal Axes:  
T Plg=31 Azm=207  
P 59 27  
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is not determined.  
RADIATED ENERGY  
No. of sta: 6 Focal mech. C  
Energy 2.8±1.0\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 55 No. of sta: 29  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 5.28 Plg=24 Azm=208  
N 0.91 14 304  
P -6.19 62 62  
Best Double Couple:Mo=5.7\*10\*\*18  
NP1:Strike=271 Dip=24 Slip=-126  
NP2: 130 71 -75  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 62S,169C M.W.: 38S, 59C  
Centroid Location:  
Origin Time 16:17:45.5 0.1  
Lat 18.18N 0.01 Lon 101.39W 0.01  
Dep 54.0 BDY Half-duration 3.9  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 4.92 Plg=36 Azm=203  
N 0.57 12 302  
P -5.49 52 48  
Best Double Couple:Mo=5.2\*10\*\*18  
NP1:Strike=247 Dip=15 Slip=-146  
NP2: 124 82 -78

11 02 25 46.34 5.829S 104.661E 51km  
5.7mb ( 32 obs.)  
SOUTHERN SUMATERA, INDONESIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 26S, 34C  
Centroid Location:  
Origin Time 02:25:54.4 0.5  
Lat 6.32S 0.05 Lon 104.50E 0.07  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.80 Plg=64 Azm= 47  
N -0.41 14 287  
P -7.39 22 191  
Best Double Couple:Mo=7.6\*10\*\*16  
NP1:Strike=257 Dip=26 Slip= 58  
NP2: 113 68 105

11 09 29 01.47 24.855S 179.112W 391km  
5.5mb ( 52 obs.)  
SOUTH OF FIJI ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 38S, 61C  
Centroid Location:  
Origin Time 09:29: 7.1 0.2  
Lat 24.55S 0.03 Lon 179.07W 0.02  
Dep 394.9 1.1 Half-duration 1.6  
Principal Axes:  
Scale 10\*\*17 Nm

T Val= 3.45 Plg=51 Azm= 95  
N 0.18 0 185  
P -3.64 39 276  
Best Double Couple:Mo=3.5\*10\*\*17  
NP1:Strike= 9 Dip= 6 Slip= 94  
NP2: 185 84 90

11 14 03 46.22 3.440S 149.500E 33km  
4.8mb ( 5 obs.) 4.9msz ( 4 obs.)  
BISMARCK SEA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 34S, 48C  
Centroid Location:  
Origin Time 14:03:47.5 0.4  
Lat 3.59S 0.04 Lon 149.70E 0.05  
Dep 15.0 FIX Half-duration 1.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.28 Plg= 2 Azm=334  
N 0.06 88 154  
P -1.33 0 64  
Best Double Couple:Mo=1.3\*10\*\*17  
NP1:Strike=109 Dip=89 Slip= 1  
NP2: 19 89 179

12 07 41 55.41 17.477S 69.598W 148km  
5.9mb (109 obs.)  
PERU-BOLIVIA BORDER REGION  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=345 Dip=85 Slip=-125  
NP2: 248 35 -9  
Principal Axes:  
T Plg=31 Azm=103  
P 40 223  
Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting with a large strike-slip component. The preferred fault plane is not determined.  
RADIATED ENERGY  
No. of sta: 11 Focal mech. F  
Energy 1.4±0.3\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 147 No. of sta: 21  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 2.86 Plg=30 Azm=102  
N -0.16 28 354  
P -2.70 46 229  
Best Double Couple:Mo=2.8\*10\*\*18  
NP1:Strike=243 Dip=30 Slip= -18  
NP2: 349 81 -119  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 57S,141C  
Centroid Location:  
Origin Time 07:42: 2.2 0.1  
Lat 17.44S 0.02 Lon 69.66W 0.02  
Dep 161.4 0.6 Half-duration 3.3  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 2.71 Plg=25 Azm= 93  
N -0.26 25 350  
P -2.46 53 222  
Best Double Couple:Mo=2.6\*10\*\*18  
NP1:Strike=224 Dip=30 Slip= -33  
NP2: 343 75 -116

12 14 52 53.31 9.975S 119.199E 26km  
5.9mb ( 47 obs.) 5.1msz ( 13 obs.)  
SUMBA REGION, INDONESIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 42S, 73C  
Centroid Location:  
Origin Time 14:53: 3.3 0.3  
Lat 10.21S 0.02 Lon 119.46E 0.03  
Dep 41.4 2.2 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.26 Plg=73 Azm=297  
N 0.68 13 77  
P -2.94 10 169  
Best Double Couple:Mo=2.6\*10\*\*17  
NP1:Strike=275 Dip=36 Slip= 112  
NP2: 68 57 74

12 21 49 15.75 38.977S 46.586E 10km  
5.1mb ( 24 obs.) 4.9msz ( 5 obs.)  
SOUTHWEST INDIAN RIDGE

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 29S, 46C  
Centroid Location:  
Origin Time 21:49:21.1 0.4  
Lat 38.77S 0.05 Lon 46.89E 0.06  
Dep 15.0 FIX Half-duration 1.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.35 Plg= 6 Azm=348  
N -0.01 2 258  
P -1.35 84 151  
Best Double Couple:Mo=1.4\*10\*\*17  
NP1:Strike= 80 Dip=39 Slip= -87  
NP2: 257 51 -92

13 00 50 52.21 24.059N 122.639E 33km  
5.0mb ( 35 obs.) 4.7MsZ ( 6 obs.)  
TAIWAN REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 9S, 12C  
Centroid Location:  
Origin Time 00:50:53.8 0.7  
Lat 24.05N FIX;Lon 122.61E FIX  
Dep 25.0 5.4 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.51 Plg=51 Azm=303  
N -2.47 3 37  
P -9.04 39 129  
Best Double Couple:Mo=1.0\*10\*\*17  
NP1:Strike=240 Dip= 7 Slip= 113  
NP2: 36 84 87

13 08 23 48.21 16.314N 98.443W 16km  
5.3mb ( 65 obs.) 4.9MsZ ( 24 obs.)  
NEAR COAST OF GUERRERO, MEXICO  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 31S, 52C  
Centroid Location:  
Origin Time 08:23:52.9 0.3  
Lat 16.25N 0.05 Lon 98.12W 0.06  
Dep 15.0 BDY Half-duration 1.4  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.33 Plg=58 Azm= 31  
N -0.14 5 292  
P -2.19 32 199  
Best Double Couple:Mo=2.3\*10\*\*17  
NP1:Strike=270 Dip=14 Slip= 67  
NP2: 113 77 96

13 13 11 14.43 53.985N 141.904E 13km  
5.1mb ( 62 obs.) 4.4MsZ ( 5 obs.)  
SAKHALIN ISLAND  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 12S, 15C  
Centroid Location:  
Origin Time 13:11:17.3 1.0  
Lat 53.94N FIX;Lon 141.84E FIX  
Dep 35.311.6 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 8.90 Plg=49 Azm=157  
N -1.81 12 261  
P -7.08 38 0  
Best Double Couple:Mo=8.0\*10\*\*16  
NP1:Strike=144 Dip=13 Slip= 154  
NP2: 259 84 78

13 14 26 37.79 24.126S 67.847W 104km  
4.9mb ( 11 obs.)  
CHILE-ARGENTINA BORDER REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 9S, 9C  
Centroid Location:  
Origin Time 14:26:46.5 1.0  
Lat 24.14S FIX;Lon 67.82W FIX  
Dep 131.4 5.7 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 3.98 Plg=19 Azm=351  
N 1.87 21 89  
P -5.85 61 222  
Best Double Couple:Mo=4.9\*10\*\*16  
NP1:Strike= 50 Dip=32 Slip= -133  
NP2: 278 67 -67

13 20 27 47.63 3.166S 130.534E 25km  
5.3mb ( 22 obs.) 4.6MsZ ( 5 obs.)  
SERAM, INDONESIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 32S, 45C  
Centroid Location:  
Origin Time 20:27:51.4 0.7  
Lat 3.18S 0.07 Lon 130.71E 0.06  
Dep 15.0 FIX Half-duration 1.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.74 Plg=60 Azm=206  
N -0.04 7 308  
P -1.70 29 42  
Best Double Couple:Mo=1.7\*10\*\*17  
NP1:Strike=151 Dip=17 Slip= 114  
NP2: 306 75 83

14 06 36 14.14 43.374N 147.207E 26km  
5.1mb ( 73 obs.) 4.9MsZ ( 3 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 14S, 24C  
Centroid Location:  
Origin Time 06:36:21.0 1.3  
Lat 43.33N FIX;Lon 147.26E FIX  
Dep 26.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 8.36 Plg=48 Azm= 51  
N -2.45 42 240  
P -5.91 4 146  
Best Double Couple:Mo=7.1\*10\*\*16  
NP1:Strike=201 Dip=55 Slip= 35  
NP2: 89 62 139

14 07 28 53.25 9.519S 159.411E 16km  
5.8mb ( 55 obs.) 5.9MsZ ( 44 obs.)  
SOLOMON ISLANDS  
RADIATED ENERGY  
No. of sta: 14 Focal mech. M  
Energy 2.0±0.5\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 12 No. of sta: 25  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.37 Plg=42 Azm= 95  
N -0.01 42 312  
P -1.35 20 203  
Best Double Couple:Mo=1.4\*10\*\*18  
NP1:Strike=248 Dip=45 Slip= 19  
NP2: 144 77 133

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 61S,139C  
Centroid Location:  
Origin Time 07:28:59.9 0.1  
Lat 9.63S 0.02 Lon 159.80E 0.01  
Dep 15.0 BDY Half-duration 2.8  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.70 Plg=60 Azm= 62  
N 0.08 5 324  
P -1.78 29 231  
Best Double Couple:Mo=1.7\*10\*\*18  
NP1:Strike=307 Dip=16 Slip= 73  
NP2: 145 75 95

14 19 44 31.01 2.729N 128.158E 56km  
5.4mb ( 32 obs.) 5.4MsZ ( 28 obs.)  
HALMAHERA, INDONESIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 49S, 85C  
Centroid Location:  
Origin Time 19:44:34.3 0.3  
Lat 3.01N 0.03 Lon 128.33E 0.02  
Dep 35.9 2.1 Half-duration 1.7  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.87 Plg=10 Azm= 52  
N -0.02 46 311  
P -3.85 42 151  
Best Double Couple:Mo=3.9\*10\*\*17  
NP1:Strike=182 Dip=54 Slip= -26  
NP2: 288 69 -141

14 20 43 53.72 35.104N 58.633E 33km  
5.3mb ( 68 obs.)  
NORTHERN IRAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN

L.P.B.: 13S, 16C  
Centroid Location:  
Origin Time 20:43:56.9 1.0  
Lat 35.56N 0.09 Lon 58.66E 0.10  
Dep 33.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.62 Plg=55 Azm=316  
N 1.71 26 89  
P -9.32 22 190  
Best Double Couple:Mo=8.5\*10\*\*16  
NP1:Strike=319 Dip=32 Slip= 144  
NP2: 80 72 63

14 22 20 02.43 8.485S 80.185W 33km  
5.2mb ( 19 obs.) 4.9MsZ ( 27 obs.)  
OFF COAST OF NORTHERN PERU  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 45S, 77C  
Centroid Location:  
Origin Time 22:20: 6.9 0.2  
Lat 8.33S 0.03 Lon 80.30W 0.02  
Dep 24.0 BDY Half-duration 1.5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.45 Plg=65 Azm= 83  
N 0.18 3 347  
P -2.63 25 255  
Best Double Couple:Mo=2.5\*10\*\*17  
NP1:Strike=338 Dip=20 Slip= 81  
NP2: 168 70 93

15 04 42 12.26 58.688N 150.280W 39km  
5.0mb ( 68 obs.) 4.4MsZ ( 6 obs.)  
GULF OF ALASKA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 28S, 47C  
Centroid Location:  
Origin Time 04:42:15.7 0.5  
Lat 58.49N 0.07 Lon 149.96W 0.09  
Dep 32.2 5.4 Half-duration 1.1  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 10.19 Plg=31 Azm= 96  
N -4.11 20 199  
P -6.08 52 316  
Best Double Couple:Mo=8.1\*10\*\*16  
NP1:Strike=141 Dip=23 Slip= -150  
NP2: 23 79 -70

15 11 20 22.15 37.282S 177.523E 33km  
5.9mb ( 23 obs.) 6.4MsZ ( 37 obs.)  
OFF E. COAST OF N. ISLAND, N.Z.  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=190 Dip=80 Slip= 176  
NP2: 281 86 10  
Principal Axes:  
T Plg=10 Azm=146  
P 4 55  
Comment: The focal mechanism is well controlled and corresponds to strike-slip faulting with a small reverse component. The preferred fault plane is not determined.  
MOMENT TENSOR SOLUTION  
Dep 38 No. of sta: 6  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 6.24 Plg=12 Azm=321  
N -0.01 74 186  
P -6.23 11 53  
Best Double Couple:Mo=6.2\*10\*\*18  
NP1:Strike= 97 Dip=74 Slip= 0  
NP2: 7 90 164

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 61S,156C M.W.: 44S, 73C  
Centroid Location:  
Origin Time 11:20:26.6 0.1  
Lat 37.09S 0.01 Lon 177.45E 0.01  
Dep 15.0 BDY Half-duration 3.6  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 3.38 Plg= 4 Azm=327  
N -0.18 67 227  
P -3.20 22 58  
Best Double Couple:Mo=3.3\*10\*\*18  
NP1:Strike=100 Dip=72 Slip= -13  
NP2: 194 77 -161

15 23 56 11.47 3.262S 139.842E 114km  
5.7mb ( 43 obs.)  
IRIAN JAYA, INDONESIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 63S,135C  
Centroid Location:  
Origin Time 23:56:17.8 0.1  
Lat 3.07S 0.01 Lon 139.85E 0.02  
Dep 106.4 1.0 Half-duration 1.9  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 5.56 Plg=56 Azm=227  
N 1.59 26 89  
P -7.15 20 349  
Best Double Couple:Mo=6.3\*10\*\*17  
NP1:Strike= 43 Dip=34 Slip= 38  
NP2: 280 70 118

17 21 07 57.91 27.320S 176.715W 35km  
5.2mb ( 18 obs.) 5.4msz ( 40 obs.)  
KERMADEC ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 58S,112C  
Centroid Location:  
Origin Time 21:08:3.5 0.2  
Lat 27.37S 0.02 Lon 176.44W 0.02  
Dep 20.7 1.1 Half-duration 1.8  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 4.59 Plg=66 Azm=299  
N 0.72 8 192  
P -5.31 23 98  
Best Double Couple:Mo=4.9\*10\*\*17  
NP1:Strike=173 Dip=23 Slip= 70  
NP2: 15 68 98

18 11 07 33.52 37.373N 139.799E 15km  
5.3mb ( 57 obs.) 5.1msz ( 6 obs.)  
EASTERN HONSHU, JAPAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 29S, 48C  
Centroid Location:  
Origin Time 11:07:36.4 0.4  
Lat 37.12N 0.05 Lon 139.90E 0.05  
Dep 22.4 4.2 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 0.92 Plg= 2 Azm=351  
N 0.25 80 249  
P -1.17 9 81  
Best Double Couple:Mo=1.0\*10\*\*17  
NP1:Strike=125 Dip=82 Slip= -5  
NP2: 216 85 -172

18 11 40 40.50 44.029N 148.088E 33km  
5.2mb ( 69 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 9S, 11C  
Centroid Location:  
Origin Time 11:40:47.5 1.2  
Lat 44.07N FIX;Lon 148.07E FIX  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 4.37 Plg=59 Azm=234  
N 0.30 25 16  
P -4.67 16 114  
Best Double Couple:Mo=4.5\*10\*\*16  
NP1:Strike=236 Dip=36 Slip= 136  
NP2: 4 66 62

18 20 38 32.08 17.838S 178.703W 545km  
5.6mb ( 70 obs.)  
FIJI ISLANDS REGION  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=165 Dip=43 Slip= 90  
NP2: 345 47 90  
Principal Axes:  
T Plg=88 Azm=255  
P 2 75  
Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting. The preferred fault plane is NP1.  
RADIATED ENERGY  
No. of sta: 15 Focal mech. M  
Energy 2.6±0.5\*10\*\*12 Nm

MOMENT TENSOR SOLUTION  
Dep 580 No. of sta: 6  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.08 Plg=75 Azm=353  
N 0.75 15 173  
P -3.83 0 83  
Best Double Couple:Mo=3.4\*10\*\*17  
NP1:Strike=158 Dip=47 Slip= 69  
NP2: 8 47 111  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 63S,104C  
Centroid Location:  
Origin Time 20:38:39.6 0.1  
Lat 17.55S 0.02 Lon 178.60W 0.01  
Dep 573.8 1.0 Half-duration 1.7  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.48 Plg=77 Azm= 1  
N 0.24 12 161  
P -3.71 4 252  
Best Double Couple:Mo=3.6\*10\*\*17  
NP1:Strike=355 Dip=42 Slip= 108  
NP2: 151 51 74

19 08 41 30.16 15.614N 94.480W 30km  
5.1mb ( 45 obs.)  
NEAR COAST OF OAXACA, MEXICO  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 22S, 32C  
Centroid Location:  
Origin Time 08:41:35.3 0.6  
Lat 15.63N 0.05 Lon 94.48W 0.07  
Dep 30.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.95 Plg=71 Azm= 29  
N -0.93 1 122  
P -7.02 19 213  
Best Double Couple:Mo=7.5\*10\*\*16  
NP1:Strike=304 Dip=26 Slip= 92  
NP2: 122 64 89

19 09 22 04.52 54.103S 143.412E 10km  
5.4mb ( 13 obs.) 5.5msz ( 4 obs.)  
WEST OF MACQUARIE ISLAND  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 54S,113C  
Centroid Location:  
Origin Time 09:22:12.4 0.2  
Lat 54.26S 0.02 Lon 143.80E 0.03  
Dep 15.0 FIX Half-duration 1.8  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 4.63 Plg= 1 Azm=219  
N -0.36 78 314  
P -4.27 12 129  
Best Double Couple:Mo=4.4\*10\*\*17  
NP1:Strike=265 Dip=81 Slip= -172  
NP2: 174 82 -9

19 13 08 43.54 34.458S 108.234W 10km  
5.4mb ( 14 obs.) 4.8msz ( 10 obs.)  
SOUTHERN EAST PACIFIC RISE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 34S, 52C  
Centroid Location:  
Origin Time 13:08:46.5 0.4  
Lat 35.29S 0.06 Lon 108.80W 0.07  
Dep 15.0 FIX Half-duration 1.1  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.75 Plg= 7 Azm= 62  
N 0.21 82 203  
P -7.96 5 331  
Best Double Couple:Mo=7.8\*10\*\*16  
NP1:Strike=107 Dip=82 Slip= 179  
NP2: 197 89 8

19 17 41 15.41 17.820S 178.631W 578km  
5.2mb ( 47 obs.)  
FIJI ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 23S, 29C  
Centroid Location:  
Origin Time 17:41:20.6 0.6  
Lat 17.91S 0.07 Lon 178.51W 0.06  
Dep 604.4 4.2 Half-duration 1.2

Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.84 Plg=20 Azm= 31  
N 0.40 48 144  
P -2.24 35 286  
Best Double Couple:Mo=2.0\*10\*\*17  
NP1:Strike= 74 Dip=50 Slip=-167  
NP2: 335 80 -41

20 08 13 30.43 12.865N 121.332E 33km  
5.2mb ( 31 obs.) 4.7msz ( 6 obs.)  
MINDORO, PHILIPPINE ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 10S, 13C  
Centroid Location:  
Origin Time 08:13:29.8 0.7  
Lat 12.89N FIX;Lon 121.47E FIX  
Dep 33.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.29 Plg=31 Azm=123  
N 3.08 12 25  
P -10.37 56 276  
Best Double Couple:Mo=8.8\*10\*\*16  
NP1:Strike=247 Dip=18 Slip= -47  
NP2: 22 77 -103

21 11 22 11.56 22.408N 118.646E 16km  
5.2mb ( 60 obs.)  
TAIWAN REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 22S, 25C  
Centroid Location:  
Origin Time 11:22:12.3 0.6  
Lat 22.59N 0.09 Lon 118.62E 0.12  
Dep 16.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 4.44 Plg=16 Azm=182  
N 0.14 20 279  
P -4.58 64 56  
Best Double Couple:Mo=4.5\*10\*\*16  
NP1:Strike=245 Dip=34 Slip=-128  
NP2: 109 64 -68

21 17 43 30.35 0.816N 126.230E 36km  
5.3mb ( 22 obs.)  
NORTHERN MOLUCCA SEA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 20S, 30C  
Centroid Location:  
Origin Time 17:43:35.2 0.8  
Lat 1.16N 0.06 Lon 126.62E 0.09  
Dep 41.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.37 Plg=56 Azm=230  
N 0.96 28 87  
P -6.33 17 347  
Best Double Couple:Mo=5.8\*10\*\*16  
NP1:Strike= 42 Dip=37 Slip= 39  
NP2: 279 68 120

23 00 28 28.66 4.995S 133.503E 33km  
5.1mb ( 16 obs.) 4.8msz ( 8 obs.)  
IRIAN JAYA REGION, INDONESIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 6S, 8C  
Centroid Location:  
Origin Time 00:28:27.8 1.2  
Lat 5.04S FIX;Lon 133.63E FIX  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.26 Plg=42 Azm=109  
N 4.24 33 342  
P -15.50 30 230  
Best Double Couple:Mo=1.3\*10\*\*17  
NP1:Strike=268 Dip=34 Slip= 13  
NP2: 167 83 124

23 15 40 04.62 11.891S 165.855E 33km  
5.0mb ( 10 obs.)  
SANTA CRUZ ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 4S, 5C  
Centroid Location:  
Origin Time 15:40:0.7 1.8

Lat 12.21S FIX:Lon 166.80E FIX  
Dep 15.310.0 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 10.23 Plg=68 Azm= 70  
N -0.95 6 326  
P -9.28 21 234  
Best Double Couple:Mo=9.8\*10\*\*16  
NP1:Strike=314 Dip=25 Slip= 76  
NP2: 148 66 96

24 09 14 29.94 6.177S 146.698E 125km  
5.5mb ( 34 obs.)  
EASTERN NEW GUINEA REG., P.N.G.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 21S, 27C  
Centroid Location:  
Origin Time 09:14:34.1 0.6  
Lat 6.27S 0.05 Lon 146.80E 0.08  
Dep 111.0 4.0 Half-duration 1.1  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.40 Plg= 0 Azm=208  
N -0.21 69 118  
P -1.19 21 298  
Best Double Couple:Mo=1.3\*10\*\*17  
NP1:Strike=341 Dip=75 Slip= -16  
NP2: 75 75 -164

24 20 46 25.42 53.500N 160.359E 57km  
5.5mb (106 obs.)  
NEAR EAST COAST OF KAMCHATKA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 38S, 56C  
Centroid Location:  
Origin Time 20:46:28.1 0.4  
Lat 53.24N 0.05 Lon 160.98E 0.06  
Dep 55.9 3.5 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.95 Plg=74 Azm=215  
N -0.80 10 344  
P -7.15 13 76  
Best Double Couple:Mo=7.6\*10\*\*16  
NP1:Strike=180 Dip=34 Slip= 109  
NP2: 338 58 78

25 11 43 48.83 30.085S 178.351W 66km  
5.1mb ( 7 obs.)  
KERMADEC ISLANDS, NEW ZEALAND  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 46S, 73C  
Centroid Location:  
Origin Time 11:43:51.4 0.2  
Lat 30.39S 0.02 Lon 177.76W 0.02  
Dep 36.8 1.7 Half-duration 1.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.05 Plg=66 Azm=285  
N 0.38 0 16  
P -2.43 24 106  
Best Double Couple:Mo=2.2\*10\*\*17  
NP1:Strike=196 Dip=21 Slip= 90  
NP2: 16 69 90

25 20 17 13.87 2.352S 138.867E 33km  
5.5mb ( 33 obs.)  
IRIAN JAYA, INDONESIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 12S, 15C  
Centroid Location:  
Origin Time 20:17:15.5 1.0  
Lat 2.12S 0.09 Lon 138.49E 0.16  
Dep 27.0 8.1 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.32 Plg=57 Azm= 48  
N -0.41 7 149  
P -8.91 32 243  
Best Double Couple:Mo=9.1\*10\*\*16  
NP1:Strike=358 Dip=15 Slip= 120  
NP2: 147 77 83

26 03 08 17.68 53.650N 164.508W 33km  
5.3mb ( 90 obs.) 5.0Msz ( 36 obs.)  
UNIMAK ISLAND REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 40S, 60C

Centroid Location:  
Origin Time 03:08:17.6 0.3  
Lat 53.61N 0.06 Lon 164.29W 0.05  
Dep 42.8 3.6 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.87 Plg=23 Azm=325  
N 2.74 28 68  
P -10.61 52 201  
Best Double Couple:Mo=9.2\*10\*\*16  
NP1:Strike= 14 Dip=33 Slip=-149  
NP2: 257 74 -61

26 14 10 29.12 40.741N 124.310W 23km  
5.1mb ( 13 obs.) 5.0Msz ( 2 obs.)  
NEAR COAST OF NORTHERN CALIF.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 43S, 73C  
Centroid Location:  
Origin Time 14:10:35.0 0.2  
Lat 40.94N 0.02 Lon 124.62W 0.03  
Dep 15.0 FIX Half-duration 1.4  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.18 Plg=13 Azm=112  
N -0.21 77 310  
P -1.97 4 203  
Best Double Couple:Mo=2.1\*10\*\*17  
NP1:Strike=248 Dip=78 Slip= 6  
NP2: 157 84 168

26 14 48 01.47 36.469N 71.244E 226km  
5.1mb (114 obs.)  
AFGHANISTAN-TAJIKISTAN BORD REG.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 26S, 43C  
Centroid Location:  
Origin Time 14:48: 1.0 0.7  
Lat 36.16N 0.07 Lon 70.89E 0.06  
Dep 224.0 3.1 Half-duration 1.2  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 13.64 Plg=63 Azm=274  
N -0.48 14 34  
P -13.16 22 129  
Best Double Couple:Mo=1.3\*10\*\*17  
NP1:Strike=244 Dip=26 Slip= 123  
NP2: 28 69 75

26 19 57 00.76 15.573S 71.757W 10km  
5.0mb ( 12 obs.)  
SOUTHERN PERU  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 30S, 46C  
Centroid Location:  
Origin Time 19:57: 5.5 0.4  
Lat 16.11S 0.03 Lon 71.88W 0.05  
Dep 43.7 2.9 Half-duration 1.1  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.17 Plg=10 Azm= 13  
N 0.11 7 282  
P -1.28 78 160  
Best Double Couple:Mo=1.2\*10\*\*17  
NP1:Strike=111 Dip=35 Slip= -79  
NP2: 277 56 -98

27 17 32 50.81 31.965S 179.860E 212km  
6.0mb ( 57 obs.)  
KERMADEC ISLANDS REGION  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 0 Dip=47 Slip= -90  
NP2: 180 43 -90  
Principal Axes:  
T Plg= 2 Azm= 90  
P 88 270  
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP2.  
RADIATED ENERGY  
No. of sta: 16 Focal mech. F  
Energy 2.4±0.5\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 230 No. of sta: 36  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 3.99 Plg=12 Azm=116  
N 0.00 16 209

P -3.98 70 351  
Best Double Couple:Mo=4.0\*10\*\*18  
NP1:Strike=185 Dip=36 Slip=-118  
NP2: 39 59 -71  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 75S, 186C M.W.: 56S, 86C  
Centroid Location:  
Origin Time 17:32:57.9 0.1  
Lat 31.84S 0.01 Lon 179.82E 0.01  
Dep 225.8 0.4 Half-duration 3.6  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 3.78 Plg= 6 Azm= 90  
N 0.38 23 183  
P -4.15 66 345  
Best Double Couple:Mo=4.0\*10\*\*18  
NP1:Strike=156 Dip=44 Slip=-125  
NP2: 20 56 -61

28 03 56 17.10 35.833N 90.737E 33km  
5.1mb ( 33 obs.) 4.7Msz ( 3 obs.)  
QINGHAI, CHINA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 14S, 19C  
Centroid Location:  
Origin Time 03:56:22.5 0.5  
Lat 35.75N FIX:Lon 90.57E FIX  
Dep 33.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.33 Plg=22 Azm=321  
N -1.44 11 56  
P -5.88 65 170  
Best Double Couple:Mo=6.6\*10\*\*16  
NP1:Strike= 31 Dip=25 Slip=-116  
NP2: 240 68 -78

28 12 19 23.03 40.525N 143.419E 27km  
6.4mb (120 obs.) 7.5Msz ( 32 obs.)  
OFF EAST COAST OF HONSHU, JAPAN  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 19 Dip=86 Slip= 90  
NP2: 199 4 90  
Principal Axes:  
T Plg=49 Azm=289  
P 41 109  
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.  
RADIATED ENERGY  
No. of sta: 37 Focal mech. F  
Energy 4.5±0.7\*10\*\*15 Nm  
MOMENT TENSOR SOLUTION  
Dep 7 No. of sta: 41  
Principal Axes:  
Scale 10\*\*20 Nm  
T Val= 4.27 Plg=54 Azm=297  
N 0.10 1 205  
P -4.37 36 115  
Best Double Couple:Mo=4.3\*10\*\*20  
NP1:Strike=200 Dip= 9 Slip= 85  
NP2: 26 81 91  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
M.W.: 65S, 175C

Centroid Location:  
Origin Time 12:19:59.1 0.1  
Lat 40.56N 0.01 Lon 142.99E 0.01  
Dep 27.7 0.3 Half-duration 14.8  
Principal Axes:  
Scale 10\*\*20 Nm  
T Val= 4.82 Plg=56 Azm=298  
N 0.14 5 202  
P -4.96 34 108  
Best Double Couple:Mo=4.9\*10\*\*20  
NP1:Strike=179 Dip=12 Slip= 67  
NP2: 22 79 95

28 20 52 25.83 40.094N 142.687E 22km  
5.9mb (132 obs.) 5.9Msz ( 31 obs.)  
NEAR EAST COAST OF HONSHU, JAPAN  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 25 Dip=80 Slip= 90  
NP2: 205 10 90  
Principal Axes:  
T Plg=55 Azm=295  
P 35 115  
Comment: The focal mechanism is poorly controlled and

corresponds to reverse faulting. The preferred fault plane is NP2.

RADIATED ENERGY  
No. of sta: 14 Focal mech. F  
Energy  $9.8 \pm 1.3 \times 10^{12}$  Nm  
MOMENT TENSOR SOLUTION  
Dep 26 No. of sta: 20

Principal Axes:  
Scale  $10^{18}$  Nm  
T Val= 1.97 Plg=63 Azm=286  
N -0.11 3 21  
P -1.86 27 113  
Best Double Couple: Mo=  $1.9 \times 10^{18}$   
NP1: Strike=209 Dip=18 Slip= 98  
NP2: 21 72 87  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 61S, 138C  
Centroid Location:  
Origin Time 20:52:31.1 0.2  
Lat 40.10N 0.02 Lon 143.09E 0.02  
Dep 31.0 BDY Half-duration 3.0

Principal Axes:  
Scale  $10^{18}$  Nm  
T Val= 1.98 Plg=61 Azm=317  
N 0.15 12 205  
P -2.13 26 109  
Best Double Couple: Mo=  $2.1 \times 10^{18}$   
NP1: Strike=174 Dip=22 Slip= 57  
NP2: 29 72 102

28 22 23 55.89 32.961S 179.862E 54km  
5.6mb ( 17 obs.) 6.0Msz ( 27 obs.)  
SOUTH OF KERMADEC ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 13S, 20C  
Centroid Location:  
Origin Time 22:23:53.1 0.9  
Lat 32.93S 0.14 Lon 179.96E 0.13  
Dep 31.313.1 Half-duration 2.2

Principal Axes:  
Scale  $10^{17}$  Nm  
T Val= 4.63 Plg=10 Azm=308  
N -0.80 73 73  
P -3.83 14 216  
Best Double Couple: Mo=  $4.2 \times 10^{17}$   
NP1: Strike=352 Dip=73 Slip= 177  
NP2: 262 87 -17

28 22 37 46.34 40.375N 143.636E 11km  
5.9mb ( 97 obs.) 6.0Msz ( 15 obs.)  
OFF EAST COAST OF HONSHU, JAPAN  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike= 25 Dip=81 Slip= 90  
NP2: 205 9 90

Principal Axes:  
T Plg=54 Azm=295  
P 36 115  
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.

RADIATED ENERGY  
No. of sta: 15 Focal mech. F  
Energy  $2.8 \pm 0.5 \times 10^{13}$  Nm  
MOMENT TENSOR SOLUTION  
Dep 7 No. of sta: 24

Principal Axes:  
Scale  $10^{18}$  Nm  
T Val= 4.57 Plg=52 Azm=275  
N -0.03 10 18  
P -4.55 37 115  
Best Double Couple: Mo=  $4.6 \times 10^{18}$   
NP1: Strike=249 Dip=12 Slip= 142  
NP2: 16 83 80  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 61S, 130C  
Centroid Location:  
Origin Time 22:37:52.2 0.1  
Lat 40.32N 0.02 Lon 143.74E 0.03  
Dep 15.0 FIX Half-duration 3.4

Principal Axes:  
Scale  $10^{18}$  Nm  
T Val= 2.56 Plg=54 Azm=294  
N 0.10 1 202  
P -2.67 36 111  
Best Double Couple: Mo=  $2.6 \times 10^{18}$   
NP1: Strike=194 Dip= 9 Slip= 81  
NP2: 23 81 91

29 15 29 29.00 40.773N 142.109E 56km  
5.7mb (119 obs.)  
NEAR EAST COAST OF HONSHU, JAPAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 46S, 82C  
Centroid Location:  
Origin Time 15:29:30.5 0.2  
Lat 40.66N 0.02 Lon 142.42E 0.02  
Dep 60.7 1.8 Half-duration 1.3

Principal Axes:  
Scale  $10^{17}$  Nm  
T Val= 1.90 Plg=66 Azm=320  
N 0.12 11 205  
P -2.02 21 110  
Best Double Couple: Mo=  $2.0 \times 10^{17}$   
NP1: Strike=181 Dip=25 Slip= 64  
NP2: 29 67 102

29 18 58 30.46 29.079N 103.790E 33km  
5.3mb ( 70 obs.) 4.7Msz ( 6 obs.)  
SICHUAN, CHINA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 12S, 20C  
Centroid Location:  
Origin Time 18:58:34.1 0.6  
Lat 28.80N 0.16 Lon 103.59E 0.10  
Dep 33.0 FIX Half-duration 1.0

Principal Axes:  
Scale  $10^{16}$  Nm  
T Val= 5.32 Plg=46 Azm= 7  
N 1.18 43 177  
P -6.50 5 272  
Best Double Couple: Mo=  $5.9 \times 10^{16}$   
NP1: Strike= 38 Dip=55 Slip= 147  
NP2: 149 63 40

29 22 33 24.53 40.400N 142.921E 33km  
5.3mb ( 61 obs.) 4.7Msz ( 2 obs.)  
NEAR EAST COAST OF HONSHU, JAPAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 10S, 13C  
Centroid Location:  
Origin Time 22:33:25.8 1.5  
Lat 40.08N FIX; Lon 143.52E 1.5  
Dep 30.9 9.4 Half-duration 1.0

Principal Axes:  
Scale  $10^{16}$  Nm  
T Val= 6.13 Plg=50 Azm=327  
N -0.53 12 223  
P -5.60 37 124  
Best Double Couple: Mo=  $5.9 \times 10^{16}$   
NP1: Strike=162 Dip=14 Slip= 29  
NP2: 44 84 102

30 15 12 25.28 18.552N 145.363E 219km  
5.6mb ( 88 obs.)  
MARIANA ISLANDS  
RADIATED ENERGY  
No. of sta: 7 Focal mech. M  
Energy  $1.6 \pm 0.6 \times 10^{13}$  Nm  
MOMENT TENSOR SOLUTION  
Dep 227 No. of sta: 21

Principal Axes:  
Scale  $10^{18}$  Nm  
T Val= 3.24 Plg=46 Azm=170  
N 0.21 41 324  
P -3.46 13 66  
Best Double Couple: Mo=  $3.4 \times 10^{18}$   
NP1: Strike=196 Dip=48 Slip= 152  
NP2: 306 70 46  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 72S, 180C  
Centroid Location:  
Origin Time 15:12:33.2 0.1

Lat 18.66N 0.01 Lon 145.59E 0.01  
Dep 228.2 0.5 Half-duration 3.5

Principal Axes:  
Scale  $10^{18}$  Nm  
T Val= 3.22 Plg=54 Azm=175  
N -0.15 31 320  
P -3.07 17 60  
Best Double Couple: Mo=  $3.1 \times 10^{18}$   
NP1: Strike=187 Dip=39 Slip= 144  
NP2: 306 68 57

30 22 55 24.93 4.265S 152.749E 33km  
5.6mb ( 35 obs.) 5.0Msz ( 8 obs.)  
NEW BRITAIN REGION, P.N.G.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 38S, 63C  
Centroid Location:  
Origin Time 22:55:31.8 0.3  
Lat 4.20S 0.05 Lon 152.88E 0.03  
Dep 53.1 3.6 Half-duration 1.3

Principal Axes:  
Scale  $10^{17}$  Nm  
T Val= 1.58 Plg=50 Azm=159  
N 0.18 25 35  
P -1.77 29 290  
Best Double Couple: Mo=  $1.7 \times 10^{17}$   
NP1: Strike=333 Dip=28 Slip= 26  
NP2: 220 78 116

31 02 57 20.85 20.524N 109.330E 33km  
5.7mb ( 77 obs.) 5.3Msz ( 12 obs.)  
SOUTHEASTERN CHINA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 27S, 45C  
Centroid Location:  
Origin Time 02:57:19.8 0.3  
Lat 20.56N 0.04 Lon 109.43E 0.05  
Dep 32.1 3.1 Half-duration 1.1

Principal Axes:  
Scale  $10^{17}$  Nm  
T Val= 0.93 Plg=27 Azm=229  
N 0.40 62 59  
P -1.33 4 321  
Best Double Couple: Mo=  $1.1 \times 10^{17}$   
NP1: Strike= 8 Dip=68 Slip= 17  
NP2: 272 74 157

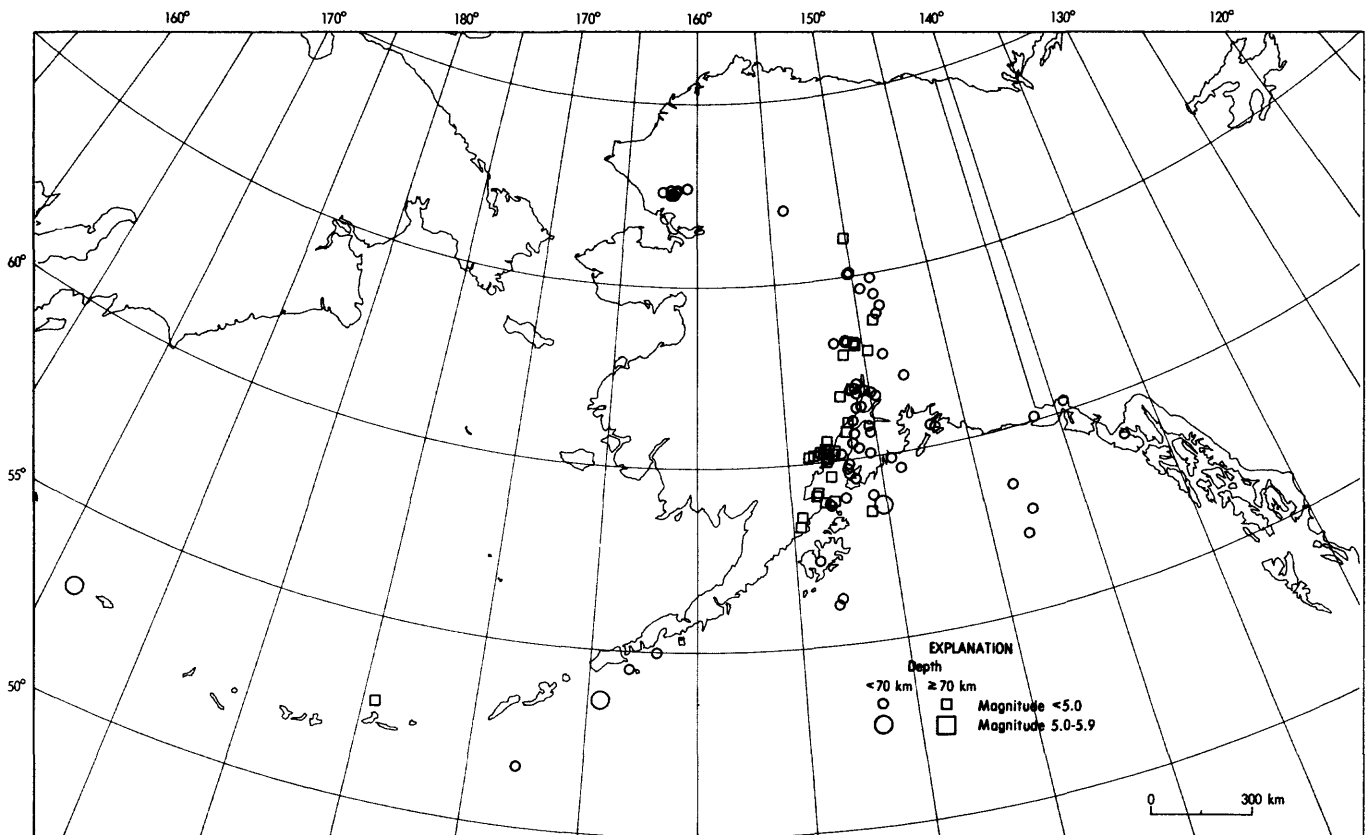
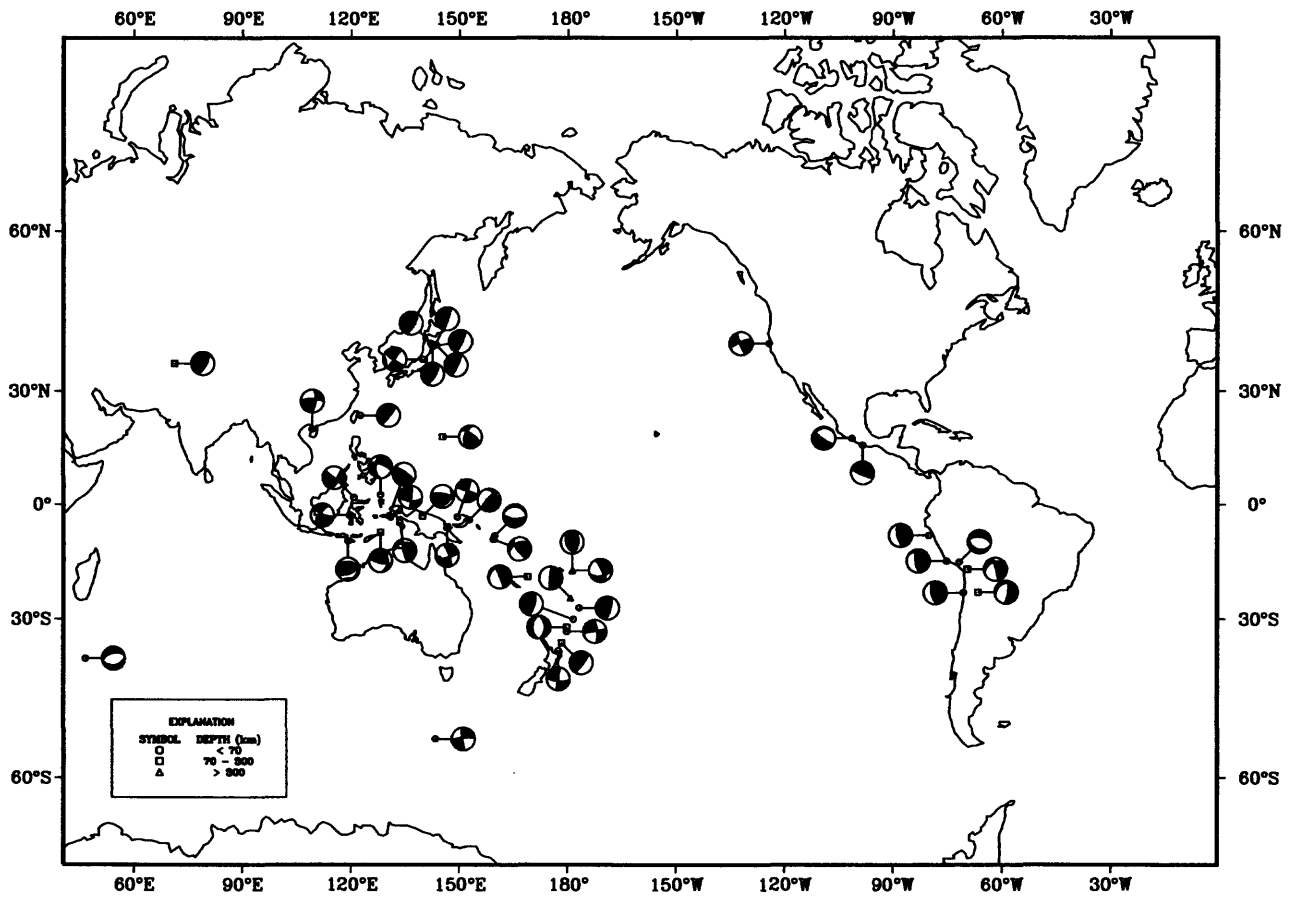
31 13 50 23.70 40.217N 142.546E 43km  
5.7mb (109 obs.) 5.6Msz ( 48 obs.)  
NEAR EAST COAST OF HONSHU, JAPAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 66S, 155C  
Centroid Location:  
Origin Time 13:50:27.1 0.1  
Lat 40.22N 0.01 Lon 142.85E 0.01  
Dep 34.0 BDY Half-duration 2.3

Principal Axes:  
Scale  $10^{17}$  Nm  
T Val= 9.72 Plg=64 Azm=319  
N 0.80 11 206  
P -10.52 23 111  
Best Double Couple: Mo=  $1.0 \times 10^{18}$   
NP1: Strike=180 Dip=24 Slip= 62  
NP2: 30 69 102

31 20 52 27.75 35.820N 139.993E 76km  
5.2mb ( 52 obs.)  
NEAR S. COAST OF HONSHU, JAPAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GSN  
L.P.B.: 17S, 23C  
Centroid Location:  
Origin Time 20:52:28.0 1.3  
Lat 35.69N 0.12 Lon 140.72E 0.09  
Dep 56.4 5.6 Half-duration 1.0

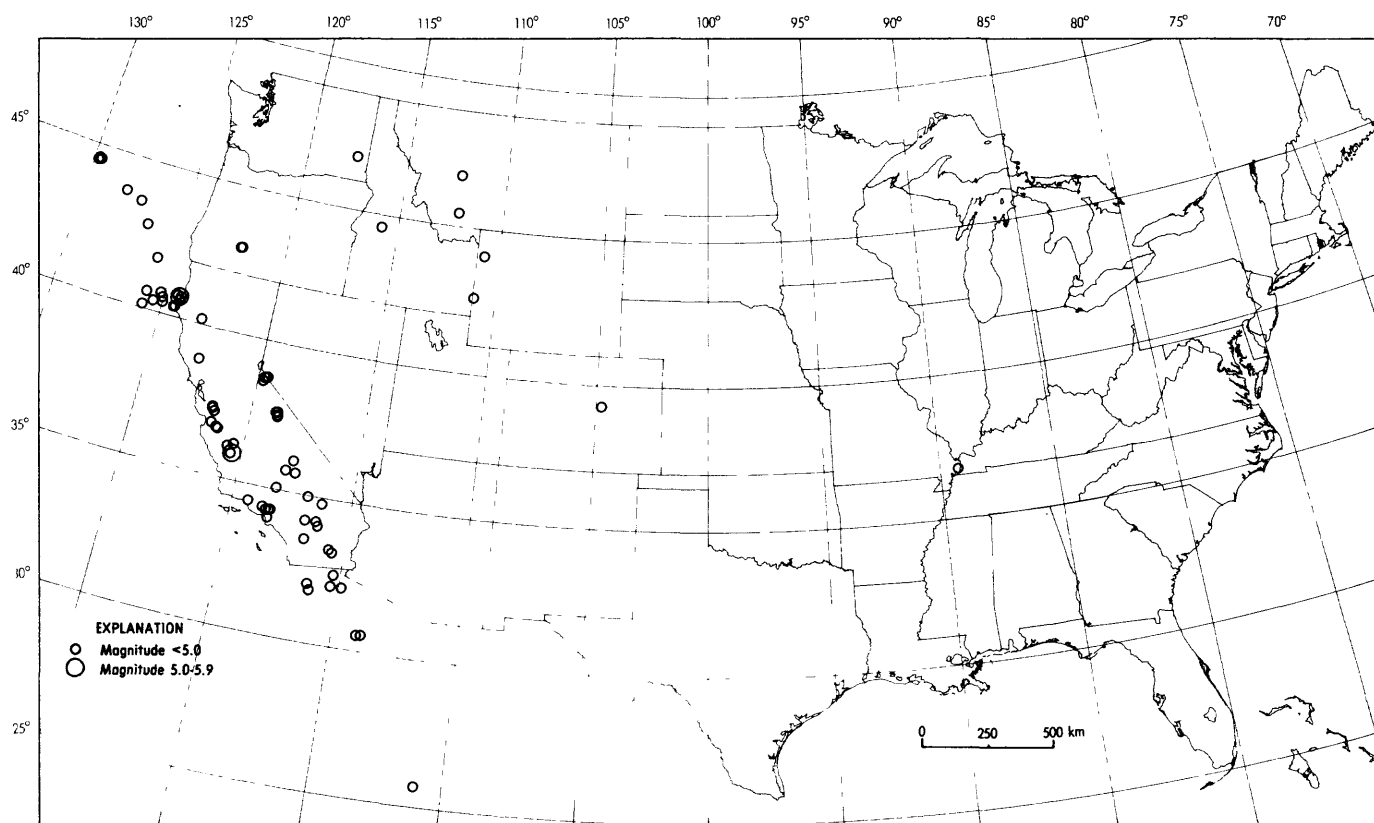
Principal Axes:  
Scale  $10^{16}$  Nm  
T Val= 5.86 Plg=63 Azm=339  
N -2.01 11 225  
P -3.86 24 130  
Best Double Couple: Mo=  $4.9 \times 10^{16}$   
NP1: Strike=197 Dip=24 Slip= 60  
NP2: 49 70 102

# Earthquake Focal Mechanisms for December 1994

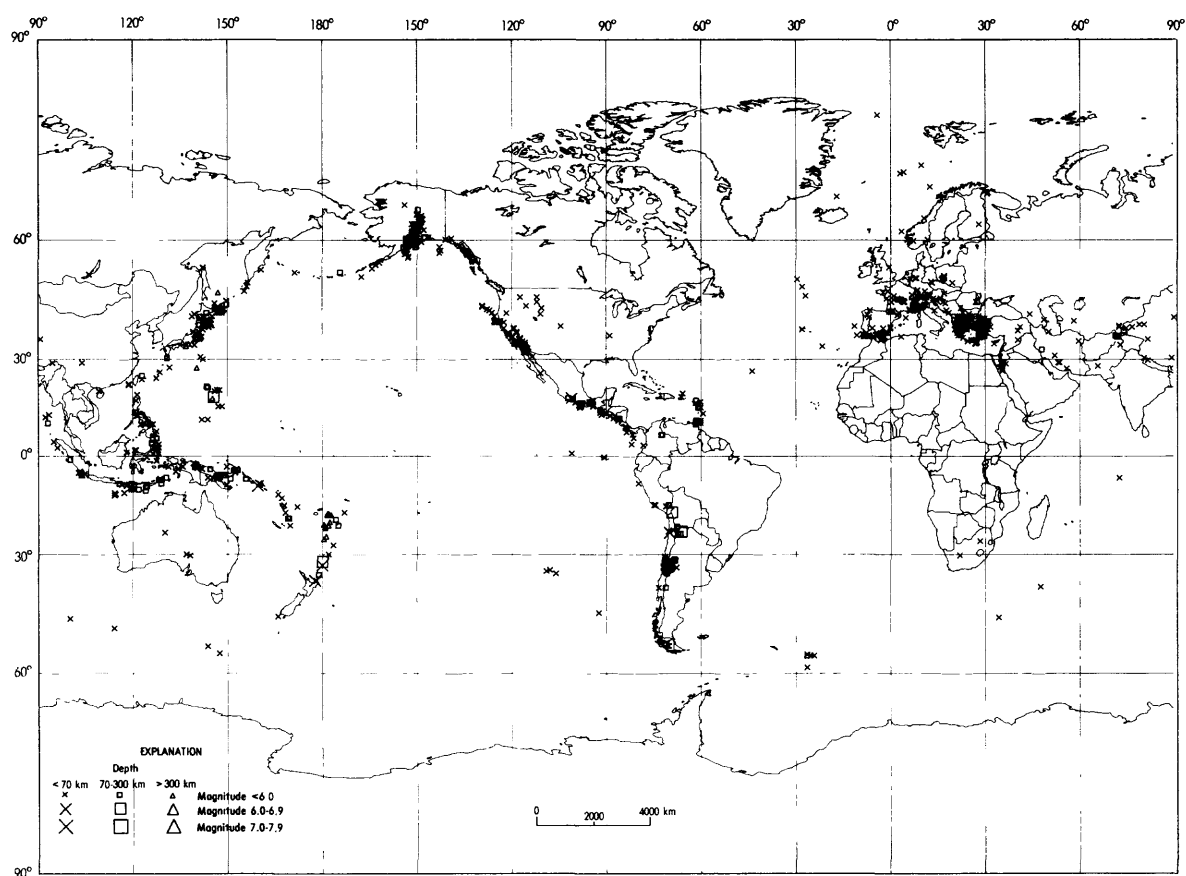


Earthquake epicenters in Alaska and adjacent regions for December, 1994





Earthquake epicenters in the conterminous United States and adjacent regions for December, 1994



Earthquakes located in December, 1994



# PRELIMINARY DETERMINATION OF EPICENTERS

## MONTHLY LISTING

### U.S. DEPARTMENT OF THE INTERIOR / GEOLOGICAL SURVEY National Earthquake Information Center

NOVEMBER 1994

| KEY | DAY | ORIGIN TIME |      |          | GEOGRAPHIC COORDINATES |           | DEPTH | MAGNITUDES |         |    | SD  | NO. STA USED | REGION, CONTRIBUTED MAGNITUDES AND COMMENTS   |
|-----|-----|-------------|------|----------|------------------------|-----------|-------|------------|---------|----|-----|--------------|---|
|     |     | UTC         | HR   | MN       | SEC                    | LAT       |       | LONG       | GS      | MB |     |              |   |
|     | 01  | 00          | 04   | 30.6*    | 43.937 N               | 147.262 E | 24    | *          | 4.7     |    | 0.7 | 24           | KURIL ISLANDS   |
|     | 01  | 00          | 20   | 43.8*    | 33.390 S               | 70.484 W  | 80    | G          |         |    | 0.2 | 10           | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
|     | 01  | 00          | 28   | 03.4*    | 43.549 N               | 146.709 E | 54    | ?          | 4.2     |    | 1.0 | 13           | KURIL ISLANDS   |
|     | 01  | 01          | 03   | 35.9?    | 38.87 N                | 29.89 W   | 10    | G          |         |    | 0.6 | 12           | AZORES ISLANDS. Felt (II) on Faial Island.  |
|     | 01  | 01          | 41   | 54.1*    | 43.328 N               | 128.111 W | 10    | G          |         |    | 0.4 | 26           | OFF COAST OF OREGON   |
|     | 01  | 03          | 02   | 12.0*    | 61.729 N               | 151.711 W | 88    |            |         |    |     | 68           | SOUTHERN ALASKA. <AEIC>.  |
|     | 01  | 03          | 02   | 24.0*    | 42.246 N               | 121.964 W | 7     |            |         |    |     | 23           | OREGON. <SEA-P>. MD 3.0 (SEA). ML 3.3 (BRK), 3.2 (GS). Felt in the Klamath Falls area.  |
|     | 01  | 03          | 19   | 11.1     | 40.786 N               | 20.884 E  | 5     | G          |         |    | 1.1 | 11           | GREECE-ALBANIA BORDER REGION. ML 2.5 (TIR), 2.1 (SKO).  |
|     | 01  | 03          | 50   | 14.3?    | 34.14 S                | 68.22 W   | 5     | G          |         |    | 0.9 | 11           | MENDOZA PROVINCE, ARGENTINA. MD 3.7 (SAN).  |
|     | 01  | 03          | 56   | 22.2     | 40.784 N               | 20.847 E  | 10    | G          |         |    | 1.1 | 24           | GREECE-ALBANIA BORDER REGION. MD 3.3 (ATH). ML 3.3 (TTG), 3.0 (TIR).  |
|     | 01  | 04          | 41   | 07.8*    | 58.984 N               | 153.332 W | 81    |            |         |    |     | 92           | KODIAK ISLAND REGION. <AEIC>.   |
|     | 01  | 04          | 50   | 33.0     | 42.951 N               | 0.277 W   | 5     | G          |         |    | 1.1 | 11           | PYRENEES. ML 2.7 (LDG). mbLg 2.7 (MDD).   |
|     | 01  | 05          | 06   | 35.7*    | 39.278 N               | 29.220 E  | 5     | G          |         |    | 0.5 | 10           | TURKEY. ML 3.1 (ISK).   |
|     | 01  | 05          | 11   | 39.7     | 38.909 N               | 22.769 E  | 33    | N          |         |    | 1.0 | 8            | GREECE. MD 3.3 (ATH).   |
|     | 01  | 05          | 20   | 29.2*    | 42.135 N               | 142.159 E | 33    | N          | 4.7     |    | 0.9 | 18           | HOKKAIDO, JAPAN REGION  |
|     | 01  | 06          | 06   | 53.0*    | 37.431 N               | 118.562 W | 12    |            |         |    |     | 32           | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM).   |
|     | 01  | 07          | 51   | 40.2*    | 36.751 N               | 3.077 W   | 5     | G          |         |    | 0.4 | 5            | STRAIT OF GIBRALTAR. mbLg 2.4 (MDD).  |
|     | 01  | 07          | 59   | 53.2?    | 44.62 N                | 147.34 E  | 33    | N          | 4.4     |    | 1.1 | 10           | KURIL ISLANDS   |
|     | 01  | 08          | 02   | 53.7     | 40.912 N               | 20.835 E  | 10    | G          |         |    | 0.6 | 7            | GREECE-ALBANIA BORDER REGION. MD 3.5 (ATH).   |
| a   | 01  | 08          | 08   | 02.1*    | 1.432 S                | 67.947 E  | 10    | G          | 5.0 5.2 |    | 1.2 | 41           | CARLSBERG RIDGE. Mw 5.7 (HRV).  |
|     | 01  | 08          | 31   | 41.9?    | 45.42 N                | 26.39 E   | 130   | G          |         |    | 0.9 | 6            | ROMANIA   |
|     | 01  | 08          | 36   | 27.3*    | 44.070 N               | 146.521 E | 33    | N          | 4.6     |    | 0.8 | 7            | KURIL ISLANDS   |
|     | 01  | 08          | 51   | 33.3?    | 39.75 N                | 29.70 E   | 10    | G          |         |    | 1.0 | 4            | TURKEY. ML 2.6 (ISK).   |
|     | 01  | 09          | 30   | 46.7     | 46.348 N               | 7.514 E   | 5     | G          |         |    | 0.7 | 28           | SWITZERLAND. ML 2.5 (LDG).  |
|     | 01  | 10          | 06   | 29.7     | 39.357 N               | 20.160 E  | 33    | N          | 4.2     |    | 1.1 | 46           | GREECE-ALBANIA BORDER REGION. MD 3.9 (ATH). ML 3.9 (TIR), 3.8 (TTG).  |
|     | 01  | 10          | 18   | 27.7*    | 39.669 N               | 29.571 E  | 10    | G          |         |    | 0.7 | 7            | TURKEY. ML 2.7 (ISK).   |
|     | 01  | 10          | 20   | 59.6*    | 58.471 N               | 154.264 W | 84    |            |         |    |     | 41           | ALASKA PENINSULA. <AEIC>.   |
|     | 01  | 10          | 25   | 27.8*    | 40.758 N               | 30.001 E  | 10    | G          |         |    | 0.1 | 5            | TURKEY. ML 2.6 (ISK).   |
|     | 01  | 10          | 55   | 42.0*    | 39.305 N               | 29.139 E  | 5     | G          |         |    | 0.6 | 8            | TURKEY. ML 2.9 (ISK).   |
|     | 01  | 11          | 08   | 42.3*    | 66.762 N               | 14.343 E  | 10    | G          |         |    | 0.9 | 5            | NORTHERN NORWAY. MD 2.1 (BER).  |
|     | 01  | 11          | 41   | 16.7     | 8.760 S                | 117.951 E | 137   | *          | 4.6     |    | 0.8 | 22           | SUMBAWA REGION, INDONESIA   |
|     | 01  | 13          | 12   | 43.5     | 27.951 S               | 26.671 E  | 5     | G          |         |    | 1.1 | 17           | REPUBLIC OF SOUTH AFRICA. ML 4.2 (PRE).   |
|     | 01  | 14          | 04   | 23.7?    | 10.99 N                | 61.82 W   | 33    | N          |         |    | 0.3 | 5            | TRINIDAD  |
|     | 01  | 14          | 13   | 49.1*    | 38.767 N               | 119.703 W | 0     |            |         |    |     | 27           | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM).   |
|     | 01  | 14          | 15   | 22.8*    | 59.888 N               | 152.831 W | 96    |            |         |    |     | 44           | SOUTHERN ALASKA. <AEIC>.  |
|     | 01  | 15          | 16   | 45.5*    | 39.668 N               | 29.306 E  | 10    | G          |         |    | 0.4 | 5            | TURKEY. ML 2.7 (ISK).   |
|     | 01  | 15          | 27   | 49.2*    | 62.680 N               | 150.720 W | 90    |            | 4.5     |    |     | 123          | CENTRAL ALASKA. <AEIC>. Felt (III) at Skwentna, Talkeetna, Wasilla and Willow. Also felt at Palmer.                                   |
|     | 01  | 16          | 48   | 36.8     | 8.216 N                | 125.909 E | 42    |            | 4.6 4.3 |    | 1.2 | 15           | MINDANAO, PHILIPPINE ISLANDS  |
|     | 01  | 17          | 21   | 44.0?    | 60.20 N                | 6.49 E    | 10    | G          |         |    | 1.5 | 4            | SOUTHERN NORWAY. MD 1.4 (BER).  |
|     | 01  | 18          | 01   | 54.3*    | 8.214 N                | 125.978 E | 55    | *          | 3.9     |    | 1.5 | 8            | MINDANAO, PHILIPPINE ISLANDS  |
|     | 01  | 18          | 31   | 00.0?    | 45.57 N                | 26.58 E   | 130   | G          |         |    | 0.6 | 5            | ROMANIA   |
|     | 01  | 19          | 06   | 53.7*    | 44.092 N               | 8.540 E   | 10    | G          |         |    | 0.2 | 8            | NORTHERN ITALY. ML 2.2 (GEN).   |
|     | 01  | 19          | 33   | 26.2*    | 60.032 N               | 140.665 W | 8     |            |         |    |     | 12           | SOUTHEASTERN ALASKA. <AEIC>. ML 2.5 (AEIC).   |
|     | 01  | 20          | 31   | 34.3     | 43.160 N               | 19.052 E  | 10    | G          |         |    | 0.8 | 8            | NORTHWESTERN BALKAN REGION. ML 2.0 (TTG).   |
|     | 01  | 21          | 38   | 45.5*    | 33.138 S               | 70.237 W  | 10    | G          |         |    | 0.2 | 7            | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).  |
|     | 01  | 21          | 42   | 30.2     | 42.045 N               | 32.375 E  | 10    | G          |         |    | 0.3 | 11           | BLACK SEA. ML 3.5 (ISK).  |
|     | 01  | 22          | 18   | 04.3*    | 38.629 N               | 2.267 W   | 10    | G          |         |    | 1.0 | 12           | SPAIN. mbLg 3.4 (MDD). Felt (III) in the Bogarra area.  |
|     | 01  | 22          | 21   | 43.8*    | 7.136 S                | 145.791 E | 33    | N          | 4.4     |    | 1.5 | 5            | NEAR S COAST OF NEW GUINEA, PNG. ML 4.0 (PMG).  |
|     | 01  | 22          | 27   | 04.6?    | 43.38 N                | 147.71 E  | 33    | N          | 4.3     |    | 1.3 | 11           | KURIL ISLANDS   |
|     | 01  | 22          | 36   | 53.0*    | 65.674 N               | 149.828 W | 37    |            |         |    |     | 17           | NORTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).   |
|     | 01  | 23          | 43   | 43.2     | 43.136 N               | 0.619 W   | 10    | G          |         |    | 0.6 | 10           | PYRENEES. ML 1.0 (STR).   |
| 02  | 00  | 16          | 41.6 | 45.074 N | 14.712 E               | 5         | G     |            |         |    | 1.3 | 57           | NORTHWESTERN BALKAN REGION. ML 3.9 (ZAG), 3.7 (GRF), 3.7 (TTG), 3.5 (LDG). MD 3.9 (LJU), 3.6 (TRI). Felt at Novi Vinodolski and Senj. |

|      |             |          |           |       |         |     |     |   |
|------|-------------|----------|-----------|-------|---------|-----|-----|---|
| 02   | 00 54 19.6  | 44.092 N | 147.034 E | 33 N  | 4.7 4.6 | 0.7 | 49  | KURIL ISLANDS   |
| a 02 | 01 43 55.5  | 5.099 N  | 118.643 E | 55    | 5.7     | 1.1 | 236 | BORNEO. Mw 5.7 (HRV). Felt strongly at Kota Kinabalu, Sandakan and Tawau, Malaysia.                             |
| 02   | 02 02 18.8% | 76.157 N | 10.317 E  | 5 G   |         | 0.8 | 5   | SVALBARD REGION   |
| 02   | 02 05 44.4  | 38.901 N | 107.493 W | 1 G   |         | 0.5 | 12  | COLORADO. ML 2.8 (GS). Coal bump.   |
| 02   | 02 40 51.4% | 58.844 N | 152.414 W | 55    |         |     | 44  | KODIAK ISLAND REGION. <AEIC>. ML 2.8 (AEIC).  |
| 02   | 02 48 16.4% | 38.748 N | 119.722 W | 2     |         |     | 46  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM). ML 3.0 (BRK), 2.7 (GS).                                   |
| 02   | 03 34 49.7  | 41.087 N | 21.032 E  | 5 G   |         | 1.1 | 30  | NORTHWESTERN BALKAN REGION. ML 2.8 (TTG), 2.8 (THE). MD 3.3 (ATH). Felt (IV) in the Resen-Lake Prespa area.     |
| 02   | 04 34 20.3  | 18.606 N | 120.914 E | 54    | 4.4 4.1 | 1.0 | 18  | LUZON, PHILIPPINE ISLANDS. Felt (II RF) in the Pasuquin area.   |
| 02   | 04 46 24.8  | 43.668 N | 127.614 W | 10 G  |         | 0.4 | 59  | OFF COAST OF OREGON   |
| 02   | 04 55 15.2  | 5.312 N  | 76.554 W  | 84 D  | 4.5     | 1.1 | 57  | COLOMBIA  |
| 02   | 05 08 10.8% | 43.13 N  | 147.67 E  | 74 ?  | 4.5     | 1.1 | 12  | KURIL ISLANDS   |
| 02   | 06 32 24.0% | 37.430 N | 118.561 W | 12    |         |     | 34  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM). ML 3.0 (GS).  |
| 02   | 07 06 45.2  | 33.031 S | 69.196 W  | 10 G  |         | 0.7 | 13  | CHILE-ARGENTINA BORDER REGION. MD 4.1 (SAN).  |
| 02   | 07 31 02.0% | 44.740 N | 6.697 E   | 10 G  |         | 0.3 | 5   | FRANCE. ML 2.1 (GEN).   |
| 02   | 07 34 20.8% | 60.879 N | 167.507 E | 10 G  | 4.3     | 1.0 | 20  | EASTERN SIBERIA, RUSSIA   |
| 02   | 08 46 16.2% | 64.933 N | 147.585 W | 13    |         |     | 39  | CENTRAL ALASKA. <AEIC>. ML 3.3 (AEIC), 3.5 (PMR). Felt (III-V) throughout the Fairbanks area.                   |
| 02   | 09 50 46.1  | 40.594 N | 26.066 E  | 10 G  |         | 0.8 | 26  | TURKEY. ML 3.6 (ISK).   |
| 02   | 09 51 18.6  | 24.846 N | 95.311 E  | 144   | 4.8     | 0.8 | 93  | MYANMAR   |
| 02   | 10 03 51.5% | 14.84 N  | 119.84 E  | 97 ?  | 4.3     | 0.9 | 6   | LUZON, PHILIPPINE ISLANDS   |
| 02   | 10 07 56.8  | 40.589 N | 26.079 E  | 10 G  |         | 0.5 | 15  | TURKEY. ML 3.5 (ISK). MD 3.4 (ATH).   |
| 02   | 10 14 22.9% | 39.65 N  | 29.29 E   | 10 G  |         | 0.6 | 4   | TURKEY. ML 2.6 (ISK).   |
| 02   | 11 01 54.7% | 39.70 N  | 29.44 E   | 10 G  |         | 0.6 | 6   | TURKEY. ML 2.8 (ISK).   |
| 02   | 11 08 27.4% | 43.42 N  | 146.36 E  | 33 N  | 4.2     | 0.5 | 5   | KURIL ISLANDS   |
| 02   | 11 59 43.7% | 28.464 N | 142.751 E | 33 N  | 3.4     | 1.0 | 10  | BONIN ISLANDS REGION  |
| 02   | 12 31 01.0  | 38.152 N | 48.315 E  | 10 G  | 5.0     | 1.4 | 54  | ARMENIA-AZERBAIJAN-IRAN BORD REG. Felt at Astara and Ardabil, Iran.   |
| 02   | 12 49 00.8% | 40.608 N | 30.053 E  | 5 G   |         | 0.4 | 5   | TURKEY. ML 2.5 (ISK).   |
| 02   | 13 10 43.3  | 40.590 N | 26.093 E  | 10 G  |         | 0.7 | 14  | TURKEY. ML 3.4 (ISK). MD 3.4 (ATH).   |
| 02   | 13 15 56.2  | 40.596 N | 26.094 E  | 10 G  |         | 0.9 | 17  | TURKEY. ML 3.6 (ISK). MD 3.6 (ATH).   |
| 02   | 13 24 15.6% | 60.439 N | 151.451 W | 58    |         |     | 53  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.8 (AEIC).   |
| 02   | 13 31 40.9% | 39.57 N  | 29.38 E   | 10 G  |         | 0.5 | 7   | TURKEY. ML 2.7 (ISK).   |
| 02   | 13 45 56.9% | 43.284 N | 19.006 E  | 10 G  |         | 0.4 | 5   | NORTHWESTERN BALKAN REGION. ML 1.7 (TTG).   |
| 02   | 13 52 19.9% | 50.515 N | 130.286 W | 10 G  | 3.8     |     | 99  | VANCOUVER ISLAND REGION. <PGC-P>. ML 4.1 (PGC).   |
| 02   | 14 16 36.5% | 44.453 N | 7.474 E   | 10 G  |         | 0.4 | 10  | NORTHERN ITALY. ML 2.1 (GEN).   |
| 02   | 14 57 32.3% | 56.754 N | 7.442 E   | 10 G  |         | 1.0 | 12  | NORTH SEA   |
| 02   | 15 55 49.1% | 39.23 N  | 26.69 E   | 5 G   |         | 0.6 | 5   | TURKEY. ML 3.0 (ISK).   |
| 02   | 18 13 32.8% | 43.572 N | 148.065 E | 33 N  | 4.4     | 1.0 | 14  | EAST OF KURIL ISLANDS   |
| 02   | 18 35 28.8% | 32.906 N | 119.124 W | 6 G   |         |     | 7   | OFF COAST OF CALIFORNIA. <PAS-P>. ML 2.9 (PAS).   |
| 02   | 20 11 46.2% | 45.34 N  | 26.35 E   | 130 G |         | 1.4 | 6   | ROMANIA   |
| 02   | 20 48 28.0  | 43.793 N | 128.056 W | 10 G  | 4.4     | 0.7 | 138 | OFF COAST OF OREGON. MD 4.5 (SEA).  |
| 02   | 21 16 28.1% | 44.26 N  | 7.26 E    | 10 G  |         | 0.4 | 4   | NORTHERN ITALY. ML 1.8 (GEN).   |
| 02   | 22 28 41.0  | 42.635 N | 18.676 E  | 10 G  |         | 0.5 | 9   | NORTHWESTERN BALKAN REGION. ML 1.7 (TTG).   |
| 02   | 22 45 42.5% | 42.389 N | 18.546 E  | 5 G   |         | 0.2 | 8   | NORTHWESTERN BALKAN REGION. ML 1.6 (TTG).   |
| 02   | 22 47 46.1% | 34.44 S  | 70.31 W   | 10 G  |         | 0.3 | 7   | CHILE-ARGENTINA BORDER REGION   |
| 02   | 23 00 24.3  | 9.683 S  | 118.598 E | 32 *  | 4.8     | 1.2 | 27  | SUMBAWA REGION, INDONESIA   |
| 02   | 23 54 07.2  | 43.384 N | 147.338 E | 63 D  | 4.8     | 0.7 | 46  | KURIL ISLANDS   |
| 03   | 00 11 37.4% | 43.56 N  | 146.89 E  | 33 N  |         | 0.6 | 8   | KURIL ISLANDS   |
| 03   | 00 21 13.7% | 51.221 N | 15.849 E  | 10 G  |         | 0.7 | 5   | POLAND  |
| 03   | 01 03 18.3% | 45.912 N | 125.840 W | 10 G  |         | 0.5 | 32  | OFF COAST OF OREGON   |
| 03   | 01 21 07.9% | 43.64 N  | 147.04 E  | 33 N  | 4.7     | 0.8 | 29  | KURIL ISLANDS   |
| a 03 | 03 07 21.5  | 10.931 S | 166.247 E | 156 D | 5.4     | 0.7 | 201 | SANTA CRUZ ISLANDS. Mw 5.8 (HRV). mb 5.6 (BRK). Mo=5.4*10**17 Nm (PPT).   |
| 03   | 04 35 06.4  | 15.414 N | 60.749 W  | 10 G  |         | 0.5 | 12  | LEEWARD ISLANDS. ML 2.7 (FDF). MD 3.3 (TRN).  |
| 03   | 04 35 52.6  | 40.850 N | 20.856 E  | 5 G   |         | 1.2 | 27  | GREECE-ALBANIA BORDER REGION. ML 2.9 (TTG), 2.7 (THE), 2.5 (TIR). MD 3.1 (ATH).                                 |
| 03   | 06 05 57.2% | 46.410 N | 1.870 E   | 10 G  |         | 0.6 | 9   | FRANCE. ML 1.9 (LDG).   |
| 03   | 06 33 31.1% | 34.434 S | 70.359 W  | 5 G   |         | 0.7 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
| 03   | 08 04 52.1% | 5.14 S   | 133.63 E  | 33 N  | 4.3     | 1.3 | 6   | ARU ISLANDS REGION, INDONESIA   |
| 03   | 08 24 40.2% | 4.61 S   | 130.76 E  | 33 N  | 4.6     | 1.0 | 6   | BANDA SEA   |
| 03   | 09 20 09.9% | 37.142 N | 4.124 W   | 10 G  |         | 1.5 | 5   | SPAIN. mbLg 2.4 (MDD).  |
| 03   | 09 52 41.4% | 43.201 N | 17.706 E  | 5 G   |         | 1.2 | 9   | NORTHWESTERN BALKAN REGION. ML 2.5 (TTG).   |
| 03   | 10 12 16.4  | 35.317 N | 27.580 E  | 33 N  |         | 0.7 | 10  | DODECANESE ISLANDS. MD 3.8 (ATH).   |
| 03   | 11 18 46.2  | 43.274 N | 147.446 E | 49 D  | 5.1     | 0.8 | 153 | KURIL ISLANDS   |
| 03   | 11 40 10.1  | 40.040 N | 108.269 W | 5 G   |         | 0.7 | 14  | COLORADO. ML 3.4 (GS).  |
| 03   | 11 43 33.4  | 28.260 N | 52.203 E  | 33 N  | 4.9 4.4 | 0.9 | 93  | SOUTHERN IRAN   |
| 03   | 11 51 32.3% | 60.060 N | 153.226 W | 163   |         |     | 43  | SOUTHERN ALASKA. <AEIC>.  |
| 03   | 11 59 13.5% | 39.60 N  | 29.54 E   | 10 G  |         | 0.6 | 7   | TURKEY. ML 2.8 (ISK).   |
| 03   | 12 03 31.6% | 19.328 S | 166.467 E | 33 N  | 3.9     | 1.2 | 8   | VANUATU ISLANDS REGION  |
| 03   | 12 52 39.1% | 20.818 S | 179.355 W | 633 ? | 4.4     | 0.7 | 35  | FIJI ISLANDS REGION   |
| 03   | 13 22 21.0% | 34.93 S  | 71.23 W   | 80 G  |         | 0.3 | 6   | NEAR COAST OF CENTRAL CHILE   |
| 03   | 13 31 37.8% | 40.455 N | 125.755 W | 22    |         |     | 32  | OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.5 (BRK), 3.3 (GS). MD 3.3 (GM).                                   |
| 03   | 14 41 50.9% | 60.307 N | 152.049 W | 79    |         |     | 42  | SOUTHERN ALASKA. <AEIC>.  |
| 03   | 16 36 16.1% | 59.139 N | 152.064 W | 62    |         |     | 36  | SOUTHERN ALASKA. <AEIC>. ML 2.6 (AEIC).   |
| 03   | 18 39 13.4% | 43.704 N | 147.434 E | 35 D  | 4.6     | 0.6 | 27  | KURIL ISLANDS   |
| 03   | 20 31 28.7% | 14.58 N  | 94.23 W   | 57 *  | 4.5     | 1.0 | 9   | OFF COAST OF CHIAPAS, MEXICO  |
| 03   | 20 33 30.6% | 34.573 N | 116.578 W | 5     |         |     | 26  | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS), 2.8 (GS).   |
| 03   | 20 42 13.1% | 12.990 N | 89.664 W  | 33 N  |         | 0.2 | 13  | OFF COAST OF CENTRAL AMERICA. MD 3.9 (SSS). Felt (III) at San Salvador, El Salvador.                            |
| 03   | 21 41 41.2  | 42.421 N | 18.522 E  | 10 G  |         | 0.7 | 9   | NORTHWESTERN BALKAN REGION. ML 2.1 (TTG).   |
| 03   | 22 11 20.8% | 34.66 S  | 70.85 W   | 100 G |         | 0.3 | 7   | CHILE-ARGENTINA BORDER REGION   |
| 03   | 22 29 14.5% | 42.392 N | 18.470 E  | 10 G  |         | 0.5 | 6   | NORTHWESTERN BALKAN REGION. ML 1.4 (TTG).   |
| 03   | 23 59 23.9% | 38.718 N | 21.294 E  | 5 G   |         | 1.0 | 7   | GREECE. MD 3.1 (ATH).   |
| a 04 | 01 13 20.1  | 9.379 S  | 71.334 W  | 591 G | 5.8     | 1.0 | 538 | PERU-BRAZIL BORDER REGION. Mw 6.1 (GS), 6.1 (HRV). mb 5.9 (BRK). Depth from broadband displacement seismograms. |
| 04   | 01 35 32.6% | 17.052 S | 172.429 W | 36 D  | 5.2 5.0 | 1.2 | 20  | TONGA ISLANDS REGION  |

|      |    |    |       |        |   |         |   |     |   |         |     |     |  |
|------|----|----|-------|--------|---|---------|---|-----|---|---------|-----|-----|--|
| 04   | 01 | 43 | 40.2? | 16.38  | S | 173.07  | W | 33  | N | 4.6     | 1.2 | 15  | TONGA ISLANDS  |
| 04   | 02 | 17 | 23.2  | 45.768 | N | 15.255  | E | 10  | G |         | 0.5 | 6   | NORTHWESTERN BALKAN REGION. ML 2.5 (ZAG). MD 2.7 (LJU), 2.4 (TRI). Felt (IV) in the Stopce area, Slovenia.               |
| 04   | 02 | 18 | 42.9% | 32.798 | S | 71.673  | W | 10  | G |         | 0.8 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.6 (SAN).   |
| 04   | 03 | 08 | 35.7% | 32.788 | S | 71.756  | W | 10  | G |         | 0.5 | 11  | NEAR COAST OF CENTRAL CHILE. MD 3.7 (SAN).   |
| 04   | 03 | 20 | 01.0* | 32.492 | S | 72.131  | W | 10  | G |         | 0.5 | 12  | OFF COAST OF CENTRAL CHILE. MD 4.1 (SAN).  |
| 04   | 03 | 53 | 38.2  | 0.690  | N | 127.027 | E | 10  | G | 4.9     | 1.0 | 25  | HALMAHERA, INDONESIA. Felt (III) at Ternate.   |
| 04   | 03 | 54 | 24.9  | 19.631 | N | 108.837 | W | 10  | G | 4.6     | 1.1 | 56  | REVILLA GIGEDO ISLANDS REGION  |
| a 04 | 05 | 24 | 18.2* | 17.709 | S | 172.197 | W | 33  | N | 5.1 4.6 | 1.2 | 19  | TONGA ISLANDS REGION. Mw 5.3 (HRV). Mo=1.4*10**17 Nm (PPT).  |
| 04   | 05 | 40 | 47.9* | 36.154 | N | 21.811  | E | 5   | G |         | 1.1 | 10  | SOUTHERN GREECE. MD 3.6 (ATH).   |
| 04   | 05 | 59 | 51.8  | 59.300 | N | 5.846   | E | 10  | G |         | 0.8 | 8   | SOUTHERN NORWAY. MD 2.0 (BER).   |
| 04   | 06 | 00 | 48.5? | 27.39  | N | 34.44   | E | 10  | G |         | 0.5 | 6   | RED SEA. MD 3.2 (RYD).   |
| 04   | 06 | 21 | 26.5% | 40.390 | N | 125.524 | W | 23  |   |         |     | 28  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.3 (GM). ML 3.4 (BRK), 3.0 (GS).   |
| 04   | 06 | 59 | 40.1  | 58.076 | N | 151.292 | W | 33  | N | 4.9     | 0.9 | 161 | KODIAK ISLAND REGION. ML 4.9 (AEIC), 5.1 (PMR). Felt (III) at Kodiak.  |
| 04   | 07 | 17 | 37.3* | 33.427 | N | 132.161 | E | 33  | N | 4.5     | 1.1 | 9   | SHIKOKU, JAPAN   |
| a 04 | 08 | 27 | 30.6  | 21.473 | S | 179.341 | W | 616 | D | 5.3     | 0.9 | 145 | FIJI ISLANDS REGION. Mw 5.4 (HRV). mb 5.1 (BRK).   |
| 04   | 09 | 40 | 27.8* | 51.092 | N | 15.807  | E | 10  | G |         | 1.5 | 6   | POLAND   |
| 04   | 09 | 46 | 42.0% | 39.585 | N | 29.510  | E | 5   | G |         | 0.8 | 5   | TURKEY. ML 2.8 (ISK).  |
| 04   | 10 | 06 | 25.4* | 36.102 | N | 139.944 | E | 60  |   | 4.9     | 1.0 | 11  | EASTERN HONSHU, JAPAN. Felt (III JMA) at Mito; (II JMA) at Kumagaya, Nikko, Tokyo and Utsunomiya.                        |
| a 04 | 10 | 12 | 41.9  | 17.417 | S | 172.027 | W | 33  | N | 5.5 5.1 | 1.1 | 59  | TONGA ISLANDS REGION. Mw 5.5 (HRV). Ms 5.0 (BRK). Mo=6.6*10**17 Nm (PPT).  |
| 04   | 10 | 54 | 04.0  | 28.564 | N | 35.008  | E | 10  | G |         | 1.4 | 7   | WESTERN ARABIAN PENINSULA  |
| 04   | 11 | 06 | 03.9? | 10.54  | S | 109.05  | E | 33  | N | 4.4     | 1.5 | 6   | SOUTH OF JAWA, INDONESIA   |
| 04   | 11 | 27 | 14.1  | 43.147 | N | 0.511   | W | 5   | G |         | 1.1 | 11  | PYRENEES. ML 3.0 (LDG). mbLg 2.7 (MDD).  |
| 04   | 11 | 53 | 27.8  | 13.048 | S | 166.747 | E | 135 | * | 5.1     | 1.0 | 56  | VANUATU ISLANDS  |
| 04   | 12 | 44 | 03.1* | 40.920 | N | 20.885  | E | 10  | G |         | 0.8 | 5   | GREECE-ALBANIA BORDER REGION. MD 3.3 (ATH).  |
| 04   | 12 | 45 | 28.8* | 68.889 | N | 29.808  | E | 10  | G |         | 1.3 | 5   | FINLAND-RUSSIA BORDER REGION. ML 2.2 (NAO).  |
| 04   | 13 | 14 | 31.8? | 31.06  | S | 69.86   | W | 130 | G |         | 0.8 | 11  | SAN JUAN PROVINCE, ARGENTINA. MD 3.5 (SAN).  |
| 04   | 13 | 39 | 40.6% | 44.278 | N | 7.410   | E | 10  | G |         | 0.3 | 8   | NORTHERN ITALY. ML 1.9 (GEN).  |
| 04   | 14 | 00 | 36.3? | 8.69   | S | 118.51  | E | 107 | ? | 4.2     | 1.2 | 8   | SUMBAWA REGION, INDONESIA  |
| 04   | 14 | 17 | 56.9? | 42.40  | N | 18.56   | E | 5   | G |         | 0.0 | 4   | NORTHWESTERN BALKAN REGION. ML 1.7 (TTG).  |
| 04   | 14 | 18 | 27.6% | 42.394 | N | 18.544  | E | 5   | G |         | 0.1 | 5   | NORTHWESTERN BALKAN REGION. ML 1.9 (TTG).  |
| 04   | 14 | 27 | 08.9* | 5.342  | S | 146.014 | E | 33  | N | 3.7     | 0.9 | 7   | EASTERN NEW GUINEA REG., P.N.G.  |
| 04   | 14 | 45 | 09.9  | 35.527 | N | 0.291   | W | 8   |   | 3.2     | 1.0 | 21  | NORTHERN ALGERIA. mbLg 3.7 (MDD).  |
| 04   | 15 | 01 | 18.0% | 39.641 | N | 29.511  | E | 10  | G |         | 0.7 | 6   | TURKEY. ML 2.8 (ISK).  |
| 04   | 15 | 06 | 56.1% | 59.779 | N | 151.005 | W | 37  |   |         |     | 32  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.5 (AEIC).  |
| 04   | 16 | 09 | 44.7* | 48.013 | N | 146.235 | E | 99  | * | 4.5     | 0.9 | 37  | SEA OF OKHOTSK   |
| 04   | 16 | 16 | 56.3% | 39.327 | N | 29.231  | E | 10  | G |         | 0.7 | 7   | TURKEY. ML 3.0 (ISK).  |
| 04   | 17 | 49 | 27.9? | 32.49  | N | 140.15  | E | 99  | * | 4.9     | 1.1 | 12  | SOUTH OF HONSHU, JAPAN   |
| 04   | 17 | 54 | 46.6  | 43.431 | N | 5.454   | E | 5   | G |         | 0.6 | 15  | NEAR SOUTH COAST OF FRANCE. ML 2.8 (STR). Mining induced.  |
| 04   | 19 | 09 | 03.2? | 38.82  | N | 30.08   | E | 10  | G |         | 0.9 | 5   | TURKEY. ML 3.0 (ISK).  |
| 04   | 19 | 29 | 01.6? | 17.83  | S | 178.00  | W | 542 | * | 4.7     | 0.7 | 13  | FIJI ISLANDS REGION  |
| 04   | 19 | 48 | 38.6% | 37.311 | N | 121.678 | W | 8   |   |         |     | 11  | CENTRAL CALIFORNIA. <GM-P>. MD 2.8 (GM). ML 3.0 (GS).  |
| 04   | 21 | 00 | 58.5% | 38.221 | N | 28.918  | E | 5   | G |         | 0.4 | 8   | TURKEY. ML 3.2 (ISK).  |
| 04   | 21 | 18 | 26.2  | 36.561 | N | 29.995  | E | 10  | G | 4.3     | 0.9 | 60  | TURKEY. ML 4.0 (ISK).  |
| 04   | 21 | 36 | 17.5? | 36.67  | N | 29.92   | E | 10  | G |         | 1.2 | 5   | TURKEY. ML 3.2 (ISK).  |
| 04   | 22 | 41 | 51.8% | 39.253 | N | 29.222  | E | 10  | G |         | 0.5 | 6   | TURKEY. ML 3.0 (ISK).  |
| 04   | 22 | 43 | 07.3% | 60.439 | N | 147.741 | W | 14  |   |         |     | 60  | SOUTHERN ALASKA. <AEIC>. ML 3.1 (AEIC), 3.4 (PMR).   |
| 04   | 23 | 00 | 57.9% | 38.794 | N | 119.670 | W | 1   |   |         |     | 30  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM).  |
| 04   | 23 | 01 | 17.2? | 34.60  | S | 71.07   | W | 70  | G |         | 0.6 | 10  | NEAR COAST OF CENTRAL CHILE  |
| 04   | 23 | 01 | 46.1* | 42.863 | N | 17.648  | E | 10  | G |         | 1.5 | 8   | ADRIATIC SEA. ML 2.7 (TTG).  |
| 04   | 23 | 29 | 36.9% | 60.083 | N | 152.981 | W | 105 |   |         |     | 22  | SOUTHERN ALASKA. <AEIC>.   |
| 04   | 23 | 48 | 25.6% | 33.942 | N | 116.328 | W | 4   |   |         |     | 28  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS), 2.8 (GS).  |
| 04   | 23 | 48 | 30.7% | 42.271 | N | 19.578  | E | 10  | G |         | 0.4 | 7   | NORTHWESTERN BALKAN REGION. ML 1.7 (TTG).  |
| 05   | 00 | 02 | 19.2% | 17.333 | N | 94.301  | W | 33  | N |         | 1.0 | 8   | CHIAPAS, MEXICO  |
| 05   | 00 | 23 | 18.6% | 62.273 | N | 151.395 | W | 91  |   |         |     | 46  | CENTRAL ALASKA. <AEIC>.  |
| 05   | 00 | 30 | 47.2% | 38.053 | N | 28.754  | E | 10  | G |         | 0.7 | 10  | TURKEY. ML 3.3 (ISK).  |
| 05   | 01 | 08 | 48.7% | 38.011 | N | 28.795  | E | 10  | G |         | 1.1 | 7   | TURKEY. ML 3.1 (ISK).  |
| 05   | 01 | 27 | 33.3% | 42.373 | N | 18.453  | E | 10  | G |         | 0.5 | 8   | NORTHWESTERN BALKAN REGION. ML 1.7 (TTG).  |
| a 05 | 02 | 16 | 03.3  | 57.193 | S | 157.858 | E | 25  | G | 6.1 6.1 | 1.2 | 202 | MACQUARIE ISLANDS REGION. Mw 6.5 (GS), 6.3 (HRV). Mo=4.9*10**18 Nm (PPT). Depth from broadband displacement seismograms. |
| 05   | 02 | 27 | 29.2% | 38.081 | N | 28.858  | E | 5   | G |         | 0.5 | 5   | TURKEY. ML 3.1 (ISK).  |
| 05   | 02 | 55 | 57.2? | 43.58  | N | 20.03   | E | 10  | G |         | 0.4 | 8   | NORTHWESTERN BALKAN REGION. ML 2.4 (TTG).  |
| 05   | 03 | 12 | 04.1* | 7.942  | N | 125.553 | E | 52  | * | 4.8     | 1.4 | 16  | MINDANAO, PHILIPPINE ISLANDS   |
| 05   | 03 | 15 | 18.0  | 39.688 | N | 20.374  | E | 10  | G |         | 1.2 | 16  | GREECE-ALBANIA BORDER REGION. ML 2.9 (THE).  |
| 05   | 03 | 16 | 46.9? | 40.79  | N | 30.57   | E | 10  | G |         | 0.3 | 5   | TURKEY. ML 2.6 (ISK).  |
| 05   | 03 | 56 | 09.9  | 43.160 | N | 17.831  | E | 10  | G |         | 1.2 | 20  | NORTHWESTERN BALKAN REGION. MD 4.1 (TRI).  |
| 05   | 04 | 12 | 44.5? | 42.86  | N | 128.68  | W | 10  | G |         | 0.4 | 41  | OFF COAST OF OREGON  |
| 05   | 04 | 22 | 16.0  | 31.660 | N | 116.223 | W | 5   | G |         | 0.5 | 34  | BAJA CALIFORNIA, MEXICO. ML 3.2 (GS).  |
| 05   | 04 | 57 | 30.5  | 7.448  | S | 75.691  | W | 134 | D | 4.6     | 0.9 | 49  | NORTHERN PERU  |
| 05   | 05 | 55 | 51.1? | 61.86  | N | 2.05    | E | 10  | G |         | 1.1 | 9   | NORWEGIAN SEA. MD 2.8 (BER).   |
| 05   | 07 | 05 | 33.3% | 63.703 | N | 150.680 | W | 3   |   |         |     | 29  | CENTRAL ALASKA. <AEIC>. ML 2.5 (AEIC).   |
| 05   | 08 | 50 | 43.4% | 45.016 | N | 6.989   | E | 10  | G |         | 0.3 | 5   | FRANCE. ML 2.0 (GEN).  |
| 05   | 09 | 12 | 29.5* | 62.453 | N | 124.259 | W | 10  | G |         | 0.5 | 5   | NORTHWEST TERRITORIES, CANADA  |
| 05   | 09 | 28 | 20.1% | 44.732 | N | 112.413 | W | 4   |   |         |     | 18  | EASTERN IDAHO. <BUT>. ML 3.4 (BUT), 3.0 (GS).  |
| 05   | 09 | 53 | 33.2* | 43.080 | N | 147.468 | E | 75  | ? | 4.5     | 1.1 | 19  | KURIL ISLANDS  |
| a 05 | 10 | 52 | 15.1  | 10.721 | N | 141.311 | E | 31  | D | 5.5 5.1 | 1.1 | 144 | WESTERN CAROLINE ISLANDS. Mw 5.6 (HRV). Ms 5.1 (BRK).  |
| a 05 | 11 | 12 | 47.3  | 40.746 | N | 27.484  | E | 10  | G |         | 0.7 | 18  | TURKEY. ML 3.6 (ISK). MD 3.5 (ATH).  |
| 05   | 12 | 05 | 28.5  | 9.386  | S | 71.335  | W | 597 | D | 5.7     | 0.9 | 413 | PERU-BRAZIL BORDER REGION. Mw 5.6 (HRV). mb 5.8 (BRK).   |
| 05   | 12 | 06 | 38.5% | 32.892 | S | 70.432  | W | 10  | G |         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).   |
| 05   | 12 | 34 | 52.3% | 32.755 | S | 70.865  | W | 70  | G |         | 0.1 | 8   | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).   |
| 05   | 12 | 35 | 40.0? | 39.65  | N | 29.39   | E | 10  | G |         | 1.0 | 4   | TURKEY   |
| 05   | 14 | 25 | 08.9* | 57.020 | S | 157.513 | E | 10  | G | 4.3     | 0.3 | 6   | MACQUARIE ISLANDS REGION   |
| 05   | 14 | 40 | 19.2% | 63.258 | N | 150.633 | W | 12  |   |         |     | 56  | CENTRAL ALASKA. <AEIC>. ML 3.2 (AEIC), 3.5 (PMR).  |
| 05   | 14 | 57 | 13.2* | 6.670  | S | 131.667 | E | 33  | N | 4.0     | 1.2 | 10  | TANIMBAR ISLANDS REG., INDONESIA   |
| 05   | 15 | 01 | 06.5* | 28.880 | N | 140.690 | E | 105 | ? | 4.7     | 0.9 | 25  | BONIN ISLANDS REGION   |
| 05   | 17 | 05 | 48.0  | 38.054 | N | 113.391 | W | 5   | G |         | 0.8 | 10  | UTAH. ML 3.2 (GS).   |

|      |             |          |           |              |     |     |  |
|------|-------------|----------|-----------|--------------|-----|-----|--|
| 05   | 17 29 03.6  | 41.084 N | 23.395 E  | 5 G          | 0.8 | 14  | GREECE-BULGARIA BORDER REGION. ML 3.2 (SKO). MD 3.8 (ATH).   |
| 05   | 17 43 15.27 | 7.06 S   | 129.06 E  | 140 ? 4.0    | 0.3 | 5   | BANDA SEA  |
| 05   | 18 51 15.8  | 41.075 N | 23.290 E  | 5 G          | 0.9 | 15  | GREECE-BULGARIA BORDER REGION. ML 3.0 (THE).   |
| 05   | 19 50 31.5  | 38.205 N | 28.803 E  | 10 G 4.1     | 1.2 | 46  | TURKEY. ML 3.9 (ISK). MD 4.0 (ATH). Felt in the Alasehir-Sarigol area.   |
| 05   | 19 54 11.4  | 38.170 N | 28.729 E  | 5 G 3.1      | 0.4 | 13  | TURKEY. ML 3.4 (ISK).  |
| 05   | 22 14 03.17 | 52.27 N  | 1.19 E    | 5 G          | 0.4 | 13  | UNITED KINGDOM. ML 3.0 (LDG).  |
| 05   | 23 15 04.9* | 7.115 S  | 131.827 E | 62 ? 4.5     | 1.5 | 10  | TANIMBAR ISLANDS REG., INDONESIA   |
| 06   | 00 18 44.17 | 8.47 S   | 123.95 E  | 147 ? 3.6    | 0.7 | 8   | FLORES REGION, INDONESIA   |
| 06   | 00 36 30.5* | 44.679 N | 18.802 E  | 10 G         | 1.4 | 11  | NORTHWESTERN BALKAN REGION. ML 2.8 (TTG).  |
| 06   | 01 05 05.4  | 39.399 N | 27.802 E  | 10 G         | 0.7 | 8   | TURKEY. ML 3.0 (ISK).  |
| 06   | 01 09 05.4  | 6.753 N  | 73.022 W  | 174 4.8      | 0.9 | 51  | NORTHERN COLOMBIA  |
| 06   | 01 46 09.97 | 27.98 N  | 34.24 E   | 10 G         | 0.6 | 5   | RED SEA. MD 3.5 (RYD).   |
| 06   | 01 54 56.2* | 38.260 N | 28.814 E  | 5 G          | 0.2 | 8   | TURKEY. ML 3.2 (ISK).  |
| 06   | 02 12 38.7* | 39.075 N | 23.524 E  | 10 G         | 1.4 | 8   | AEGEAN SEA. ML 3.5 (ATH).  |
| 06   | 02 13 39.07 | 13.92 N  | 144.54 E  | 194 4.5      | 0.1 | 7   | MARIANA ISLANDS  |
| 06   | 03 48 51.1  | 31.790 N | 116.302 W | 5 G          | 0.5 | 23  | BAJA CALIFORNIA, MEXICO. ML 2.8 (GS).  |
| 06   | 04 04 34.9  | 43.676 N | 127.583 W | 10 G 4.2     | 0.8 | 110 | OFF COAST OF OREGON  |
| 06   | 04 13 29.47 | 47.27 N  | 11.57 E   | 10 G         | 0.1 | 4   | AUSTRIA. ML 0.8 (VIE).   |
| 06   | 04 31 34.8* | 59.530 N | 153.041 W | 100          |     | 63  | SOUTHERN ALASKA. <AEIC>.   |
| 06   | 04 41 12.9* | 47.103 N | 7.919 E   | 10 G         | 1.5 | 10  | SWITZERLAND. ML 2.3 (LDG).   |
| 06   | 09 22 35.5* | 8.354 S  | 115.733 E | 33 N 3.7     | 0.9 | 6   | BALI REGION, INDONESIA. Felt (II) at Karangasem.   |
| a 06 | 11 52 54.5  | 7.273 N  | 126.980 E | 42 D 5.3 5.0 | 1.2 | 99  | MINDANAO, PHILIPPINE ISLANDS. Mw 5.5 (HRV).  |
| 06   | 12 50 38.9  | 35.985 N | 89.085 W  | 10 G         | 0.6 | 11  | TENNESSEE. mbLg 2.7 (GS). MD 3.1 (TVA).  |
| 06   | 14 08 47.9  | 43.411 N | 14.513 E  | 10 G         | 1.0 | 30  | ADRIATIC SEA. MD 3.5 (TRI).  |
| 06   | 14 47 55.9* | 59.611 N | 151.553 W | 53           |     | 41  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.7 (AEIC).  |
| 06   | 14 54 34.27 | 36.51 N  | 3.01 W    | 10 G         | 0.1 | 4   | STRAIT OF GIBRALTAR. mbLg 2.6 (MDD).   |
| 06   | 15 09 14.57 | 7.68 S   | 129.16 E  | 114 ? 4.3    | 1.2 | 7   | BANDA SEA  |
| 06   | 15 39 49.9* | 38.782 N | 119.703 W | 0 G          |     | 7   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM). ML 2.4 (GS).   |
| a 06 | 15 57 34.7* | 21.088 S | 169.906 E | 102 ? 5.3    | 1.0 | 21  | LOYALTY ISLANDS REGION. Mw 5.2 (HRV).  |
| 06   | 18 38 35.8* | 58.723 N | 157.340 W | 6 3.9        |     | 65  | ALASKA PENINSULA. <AEIC>. ML 4.4 (AEIC), 4.4 (PMR). Felt (III) at Dillingham. Also felt at King Salmon and Naknek.   |
| 06   | 20 11 03.97 | 41.32 S  | 90.27 W   | 10 G 4.9 5.1 | 1.3 | 22  | SOUTHERN PACIFIC OCEAN. Ms 5.0 (BRK).  |
| 06   | 20 26 43.4  | 40.772 N | 27.512 E  | 10 G         | 0.6 | 9   | TURKEY. ML 3.1 (ISK). MD 3.1 (ATH).  |
| 06   | 21 33 07.6* | 44.496 N | 7.298 E   | 10 G         | 0.4 | 5   | NORTHERN ITALY. ML 2.4 (GEN).  |
| 07   | 03 02 52.27 | 5.37 S   | 149.57 E  | 153 * 5.0    | 0.5 | 9   | NEW BRITAIN REGION, P.N.G.   |
| 07   | 05 17 39.5  | 6.985 S  | 80.629 W  | 24 D 5.0     | 0.9 | 62  | NEAR COAST OF NORTHERN PERU. Felt (II) at Chiclayo. Also felt at Ferrenafe and Lambayeque.   |
| 07   | 06 41 18.57 | 9.37 S   | 113.16 E  | 10 G 4.1     | 1.4 | 6   | SOUTH OF JAWA, INDONESIA   |
| 07   | 06 49 32.9* | 58.985 N | 151.967 W | 64           |     | 36  | KODIAK ISLAND REGION. <AEIC>. ML 2.8 (AEIC).   |
| 07   | 07 02 11.4  | 38.669 N | 26.354 E  | 5 G          | 0.7 | 13  | AEGEAN SEA. ML 3.8 (ATH), 3.6 (ISK).   |
| 07   | 07 37 02.5* | 18.878 N | 67.595 W  | 5 G          | 0.9 | 11  | MONA PASSAGE. MD 3.8 (MPR).  |
| 07   | 07 45 18.16 | 60.141 N | 153.236 W | 135          |     | 41  | SOUTHERN ALASKA. <AEIC>.   |
| 07   | 07 51 51.0* | 18.224 N | 66.967 W  | 10 G         | 0.7 | 11  | PUERTO RICO REGION. MD 3.1 (MPR).  |
| 07   | 08 32 38.0* | 39.133 N | 27.680 E  | 10 G         | 0.3 | 6   | TURKEY. ML 2.8 (ISK).  |
| 07   | 08 34 25.3* | 39.663 N | 29.493 E  | 10 G         | 0.5 | 6   | TURKEY. ML 2.8 (ISK).  |
| 07   | 09 25 18.4* | 38.186 N | 28.884 E  | 10 G         | 0.5 | 5   | TURKEY   |
| 07   | 09 39 58.2* | 63.514 N | 151.080 W | 12 4.6       |     | 89  | CENTRAL ALASKA. <AEIC>. ML 4.4 (AEIC), 4.4 (PMR).  |
| 07   | 10 25 13.27 | 54.99 N  | 156.93 W  | 33 N 3.8     | 1.8 | 8   | SOUTH OF ALASKA  |
| 07   | 10 40 32.8  | 39.960 N | 24.492 E  | 10           | 1.3 | 19  | AEGEAN SEA. ML 3.5 (ATH).  |
| 07   | 10 53 41.0* | 20.173 S | 67.703 W  | 192 * 4.6    | 0.7 | 17  | SOUTHERN BOLIVIA   |
| 07   | 10 54 08.3* | 34.597 N | 116.632 W | 4            |     | 6   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.7 (PAS).  |
| a 07 | 10 59 22.4  | 10.215 N | 93.774 E  | 33 N 5.0 4.4 | 1.0 | 32  | ANDAMAN ISLANDS, INDIA. Mw 5.1 (HRV).  |
| 07   | 11 45 23.2* | 57.790 N | 152.359 W | 53           |     | 36  | KODIAK ISLAND REGION. <AEIC>. ML 2.8 (AEIC).   |
| 07   | 12 22 26.4* | 36.188 N | 28.450 E  | 33 N         | 0.9 | 8   | DODECANESE ISLANDS. MD 3.8 (ATH).  |
| 07   | 12 59 47.37 | 29.31 N  | 34.94 E   | 10 G         | 0.8 | 6   | EGYPT  |
| a 07 | 13 03 42.1  | 43.770 N | 147.278 E | 56 D 5.1     | 0.8 | 140 | KURIL ISLANDS. Mw 5.1 (HRV).   |
| 07   | 13 07 51.3* | 63.499 N | 151.102 W | 10           |     | 32  | CENTRAL ALASKA. <AEIC>. ML 2.7 (AEIC).   |
| 07   | 13 43 35.57 | 10.10 S  | 124.82 E  | 33 N 4.6     | 1.4 | 5   | TIMOR REGION, INDONESIA  |
| 07   | 13 45 30.27 | 44.79 N  | 10.79 E   | 10 G         | 0.5 | 5   | NORTHERN ITALY. ML 2.7 (LDG).  |
| 07   | 13 50 58.17 | 21.13 S  | 177.88 W  | 500 G 4.2    | 0.7 | 7   | FIJI ISLANDS REGION  |
| 07   | 14 30 17.17 | 41.88 N  | 20.07 E   | 10 G         | 0.8 | 8   | ALBANIA. ML 2.1 (TTG).   |
| 07   | 14 57 31.9  | 47.591 N | 147.059 E | 421 4.6      | 0.9 | 65  | NORTHWEST OF KURIL ISLANDS   |
| 07   | 15 02 41.8  | 43.543 N | 127.458 W | 10 G         | 0.6 | 87  | OFF COAST OF OREGON  |
| 07   | 15 13 07.9* | 43.267 N | 128.112 W | 10 G         | 0.4 | 52  | OFF COAST OF OREGON  |
| 07   | 16 21 41.0* | 4.446 S  | 151.979 E | 172 * 4.7    | 1.4 | 18  | NEW BRITAIN REGION, P.N.G.   |
| 07   | 16 27 16.27 | 44.50 N  | 3.18 E    | 10 G         | 1.2 | 9   | FRANCE. ML 2.8 (LDG), 2.2 (STR).   |
| 07   | 18 00 25.6* | 63.266 N | 151.365 W | 9            |     | 34  | CENTRAL ALASKA. <AEIC>. ML 2.5 (AEIC).   |
| 07   | 18 04 42.6* | 34.339 N | 116.823 W | 7            |     | 31  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS), 2.9 (GS).  |
| 07   | 18 05 14.37 | 35.37 S  | 71.50 W   | 100 G        | 0.4 | 10  | CENTRAL CHILE. MD 3.8 (SAN).   |
| 07   | 18 32 20.6* | 33.701 N | 116.764 W | 15           |     | 37  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.8 (PAS), 3.7 (GS). Felt (IV) at Nuevo; (III) at Hemet, Indio and Rancho Mirage. Also felt at Desert Hot Springs and Palm Springs. |
| 07   | 19 11 20.5  | 52.576 N | 172.170 E | 33 N 4.6 4.2 | 0.8 | 65  | NEAR ISLANDS, ALEUTIAN ISLANDS   |
| 07   | 19 49 25.27 | 48.71 S  | 107.10 E  | 10 G 4.7     | 1.2 | 8   | SOUTHEAST INDIAN RIDGE   |
| 07   | 20 01 00.47 | 48.83 S  | 107.49 E  | 10 G 4.9 5.1 | 1.1 | 8   | SOUTHEAST INDIAN RIDGE   |
| 07   | 20 47 56.1  | 34.883 N | 26.399 E  | 79 * 4.2     | 1.3 | 33  | CRETE. MD 4.0 (ATH).   |
| 07   | 21 10 22.8  | 52.140 N | 169.148 W | 33 N 4.9 4.2 | 0.9 | 82  | FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.7 (PMR).   |
| 07   | 21 15 32.7* | 33.148 S | 70.295 W  | 5 G          | 0.5 | 8   | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).   |
| 07   | 22 09 38.3* | 61.928 N | 149.226 W | 38 4.2       |     | 103 | SOUTHERN ALASKA. <AEIC>. ML 4.0 (AEIC), 4.2 (PMR). Felt (III) at Fort Richardson and (II) at Palmer.   |
| 07   | 22 28 07.7* | 59.871 N | 152.588 W | 86           |     | 49  | SOUTHERN ALASKA. <AEIC>.   |
| 07   | 22 40 53.4* | 23.715 N | 100.343 E | 33 N 4.0     | 0.7 | 7   | YUNNAN, CHINA  |
| 07   | 23 05 53.0* | 18.215 N | 66.930 W  | 33 N         | 1.2 | 10  | PUERTO RICO REGION. MD 2.8 (MPR).  |
| 07   | 23 38 10.1  | 46.605 N | 8.358 E   | 5 G          | 0.9 | 11  | SWITZERLAND. ML 2.1 (LDG).   |
| 08   | 00 17 33.8  | 37.000 N | 2.332 W   | 10 G         | 0.8 | 30  | SPAIN. mbLg 4.0 (MDD). MD 3.5 (SFS). Felt (IV) in the Almeria area.  |
| 08   | 00 42 43.8* | 60.086 N | 152.710 W | 102          |     | 40  | SOUTHERN ALASKA. <AEIC>.   |
| 08   | 00 55 17.1* | 36.852 N | 2.372 W   | 10 G         | 0.5 | 5   | STRAIT OF GIBRALTAR. mbLg 2.5 (MDD).   |

|    |    |    |       |        |        |         |         |     |    |         |         |     |   |   |
|----|----|----|-------|--------|--------|---------|---------|-----|----|---------|---------|-----|---|---|
| 08 | 01 | 43 | 19.2  | 7.306  | N      | 127.322 | E       | 43  | *  | 4.7     | 0.9     | 21  | PHILIPPINE ISLANDS REGION   |   |
| 08 | 03 | 28 | 48.3  | 50.374 | N      | 4.317   | E       | 10  | G  |         | 0.5     | 13  | BELGIUM. ML 2.8 (LDG).  |   |
| 08 | 03 | 29 | 22.36 | 59.857 | N      | 153.216 | W       | 114 |    |         |         | 46  | SOUTHERN ALASKA. <AEIC>.  |   |
| 08 | 03 | 45 | 41.87 | 38.11  | N      | 28.90   | E       | 5   | G  |         | 0.3     | 4   | TURKEY. ML 3.0 (ISK).   |   |
| 08 | 03 | 55 | 25.8* | 40.682 | N      | 22.727  | E       | 5   | G  |         | 1.0     | 5   | GREECE. MD 3.0 (ATH).   |   |
| 08 | 04 | 30 | 10.1* | 37.707 | N      | 19.698  | E       | 5   | G  | 3.9     | 1.0     | 16  | IONIAN SEA. ML 3.9 (ATH).   |   |
| 08 | 05 | 04 | 45.36 | 58.642 | N      | 137.682 | W       | 10  | G  |         |         | 5   | SOUTHEASTERN ALASKA. <PGC-P>. ML 2.8 (PGC).   |   |
| 08 | 05 | 31 | 22.4  | 43.271 | N      | 86.960  | E       | 33  | N  | 5.0     | 1.0     | 76  | NORTHERN XINJIANG, CHINA  |   |
| 08 | 07 | 04 | 27.36 | 61.665 | N      | 150.830 | W       | 3   |    |         |         | 46  | SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).   |   |
| 08 | 07 | 06 | 33.2* | 44.334 | N      | 146.726 | E       | 33  | N  | 4.4     | 0.6     | 12  | KURIL ISLANDS   |   |
| 08 | 07 | 10 | 48.6  | 22.703 | S      | 68.321  | W       | 115 | D  | 4.8     | 1.0     | 30  | NORTHERN CHILE  |   |
| 08 | 07 | 13 | 09.76 | 34.379 | N      | 116.457 | W       | 5   |    |         |         | 27  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS), 2.9 (GS).   |   |
| 08 | 07 | 13 | 36.86 | 34.381 | N      | 116.455 | W       | 4   |    |         |         | 4   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.7 (PAS), 2.8 (GS).   |   |
| 08 | 07 | 32 | 24.37 | 40.73  | N      | 30.41   | E       | 10  | G  |         | 0.9     | 6   | TURKEY. ML 2.8 (ISK).   |   |
| 08 | 08 | 11 | 46.8  | 40.873 | N      | 20.835  | E       | 10  | G  |         | 1.3     | 38  | GREECE-ALBANIA BORDER REGION. ML 4.1 (TTG), 3.9 (TIR), 3.6 (SKO). MD 3.9 (ATH). Felt (IV) in the Resen-Lake Prespa area, former Yugoslav Republic of Macedonia. |   |
| 08 | 08 | 18 | 16.67 | 39.12  | N      | 27.67   | E       | 5   | G  |         | 0.2     | 4   | TURKEY. ML 2.7 (ISK).   |   |
| 08 | 08 | 42 | 20.1  | 40.611 | N      | 26.210  | E       | 10  | G  |         | 1.2     | 6   | TURKEY. ML 3.0 (ISK).   |   |
| 08 | 08 | 45 | 19.1* | 40.868 | N      | 20.933  | E       | 10  | G  |         | 0.6     | 5   | GREECE-ALBANIA BORDER REGION. MD 3.1 (ATH).   |   |
| 08 | 09 | 02 | 49.56 | 58.663 | N      | 137.627 | W       | 10  | G  |         |         | 5   | SOUTHEASTERN ALASKA. <PGC-P>. ML 3.1 (PGC).   |   |
| 08 | 09 | 22 | 06.5  | 33.707 | N      | 139.269 | E       | 39  | D  | 4.7     | 1.0     | 40  | SOUTH OF HONSHU, JAPAN  |   |
| 08 | 09 | 23 | 36.9* | 38.119 | N      | 25.409  | E       | 10  | G  |         | 1.0     | 10  | AEGEAN SEA. MD 3.5 (ATH). ML 3.6 (ISK).   |   |
| 08 | 09 | 39 | 11.5  | 41.107 | N      | 21.292  | E       | 5   | G  |         | 1.0     | 14  | NORTHWESTERN BALKAN REGION. ML 3.0 (SKO), 3.0 (TIR). Felt (V) at Bitola and (IV) in the Krusevo area.   |   |
| 08 | 10 | 11 | 08.76 | 56.879 | N      | 154.986 | W       | 52  |    | 3.7     |         | 75  | KODIAK ISLAND REGION. <AEIC>. ML 4.0 (AEIC), 4.2 (PMR).   |   |
| 08 | 10 | 14 | 01.57 | 39.60  | N      | 29.50   | E       | 10  | G  |         | 1.2     | 5   | TURKEY. ML 2.8 (ISK).   |   |
| 08 | 10 | 49 | 26.3* | 43.288 | N      | 147.709 | E       | 33  | N  | 3.5     | 1.2     | 8   | KURIL ISLANDS   |   |
| 08 | 11 | 07 | 45.7* | 32.558 | S      | 71.459  | W       | 10  | G  |         | 0.7     | 11  | NEAR COAST OF CENTRAL CHILE. MD 3.9 (SAN).  |   |
| 08 | 11 | 20 | 32.17 | 43.12  | N      | 146.14  | E       | 10  | G  | 3.4     | 1.4     | 6   | KURIL ISLANDS   |   |
| 08 | 12 | 16 | 53.67 | 39.14  | N      | 27.61   | E       | 10  | G  |         | 0.2     | 4   | TURKEY. ML 2.8 (ISK).   |   |
| 08 | 12 | 37 | 22.2  | 46.663 | N      | 12.032  | E       | 10  | G  |         | 0.4     | 5   | NORTHERN ITALY. ML 1.7 (VIE).   |   |
| 08 | 12 | 42 | 43.26 | 38.803 | N      | 119.675 | W       | 8   |    |         |         | 60  | CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.2 (BRK), 3.3 (GS). MD 3.4 (GM).  |   |
| 08 | 13 | 00 | 44.76 | 39.713 | N      | 29.417  | E       | 10  | G  |         | 0.7     | 8   | TURKEY. ML 2.8 (ISK).   |   |
| 08 | 13 | 12 | 33.46 | 39.231 | N      | 27.719  | E       | 10  | G  |         | 0.9     | 5   | TURKEY. ML 2.8 (ISK).   |   |
| 08 | 13 | 27 | 19.96 | 62.480 | N      | 148.093 | W       | 47  |    |         |         | 86  | CENTRAL ALASKA. <AEIC>. ML 3.3 (AEIC), 3.5 (PMR).   |   |
| 08 | 13 | 34 | 49.66 | 60.099 | N      | 152.475 | W       | 100 |    |         |         | 37  | SOUTHERN ALASKA. <AEIC>.  |   |
| 08 | 14 | 06 | 57.1  | 41.780 | N      | 15.503  | E       | 10  | G  |         | 0.7     | 15  | SOUTHERN ITALY. ML 3.2 (TTG).   |   |
| 08 | 14 | 48 | 07.47 | 34.31  | N      | 135.74  | E       | 80  | *  | 4.2     | 0.3     | 7   | NEAR S. COAST OF WESTERN HONSHU   |   |
| 08 | 15 | 00 | 52.87 | 39.78  | N      | 29.47   | E       | 10  | G  |         | 0.3     | 4   | TURKEY. ML 2.6 (ISK).   |   |
| 08 | 15 | 20 | 55.77 | 41.18  | N      | 21.99   | E       | 10  | G  |         | 0.4     | 4   | NORTHWESTERN BALKAN REGION. ML 1.4 (SKO).   |   |
| 08 | 16 | 30 | 16.2  | 40.799 | N      | 20.896  | E       | 5   | G  |         | 1.2     | 25  | GREECE-ALBANIA BORDER REGION. MD 3.1 (ATH). ML 3.2 (TTG), 3.1 (THE), 2.9 (TIR).   |   |
| 08 | 16 | 58 | 08.6  | 34.895 | N      | 26.501  | E       | 10  | G  |         | 1.4     | 18  | CRETE. MD 3.9 (ATH).  |   |
| 08 | 17 | 37 | 24.56 | 34.150 | S      | 70.436  | W       | 10  | G  |         | 0.5     | 5   | CHILE-ARGENTINA BORDER REGION   |   |
| 08 | 17 | 42 | 58.9  | 43.905 | N      | 147.708 | E       | 51  |    | 4.9 4.1 | 0.9     | 75  | KURIL ISLANDS   |   |
| a  | 08 | 17 | 48    | 45.0   | 11.940 | N       | 144.239 | E   | 35 | *       | 5.0 4.5 | 1.0 | 43  | SOUTH OF MARIANA ISLANDS. Mw 5.3 (HRV). Felt (III) at Tumon, Guam.                                      |
| 08 | 18 | 03 | 34.3* | 14.433 | N      | 60.067  | W       | 33  | N  |         | 0.3     | 9   | WINDWARD ISLANDS. MD 3.2 (TRN). ML 2.6 (PDF).   |   |
| 08 | 18 | 47 | 34.8* | 34.576 | N      | 139.191 | E       | 10  | G  | 4.1     | 1.5     | 12  | NEAR S. COAST OF HONSHU, JAPAN  |   |
| 08 | 18 | 50 | 12.16 | 38.766 | N      | 122.731 | W       | 0   |    |         |         | 30  | NORTHERN CALIFORNIA. <GM-P>. MD 2.9 (GM).   |   |
| 08 | 18 | 55 | 26.86 | 33.131 | S      | 70.247  | W       | 10  | G  |         | 0.3     | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).  |   |
| 08 | 19 | 11 | 14.96 | 45.622 | N      | 3.615   | E       | 10  | G  |         | 1.3     | 10  | FRANCE. ML 2.3 (LDG).   |   |
| 08 | 20 | 07 | 02.56 | 44.242 | N      | 7.386   | E       | 10  | G  |         | 0.4     | 8   | NORTHERN ITALY. ML 2.0 (GEN).   |   |
| 08 | 20 | 22 | 16.87 | 15.42  | S      | 177.79  | W       | 500 | ?  | 4.0     | 1.0     | 11  | FIJI ISLANDS REGION   |   |
| 08 | 20 | 29 | 51.67 | 44.74  | N      | 151.02  | E       | 33  | N  | 4.1     | 0.9     | 7   | EAST OF KURIL ISLANDS   |   |
| 08 | 20 | 59 | 00.67 | 40.83  | N      | 30.34   | E       | 10  | G  |         | 0.9     | 5   | TURKEY. ML 2.7 (ISK).   |   |
| 08 | 22 | 04 | 18.86 | 38.801 | N      | 119.667 | W       | 4   |    |         |         | 30  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM). ML 2.8 (GS).  |   |
| 08 | 22 | 13 | 57.5* | 31.057 | S      | 68.136  | W       | 240 | G  |         | 0.7     | 12  | SAN JUAN PROVINCE, ARGENTINA. MD 3.9 (SAN).   |   |
| 08 | 22 | 46 | 56.46 | 37.042 | N      | 29.467  | E       | 10  | G  |         | 0.9     | 5   | TURKEY. ML 3.0 (ISK).   |   |
| 08 | 23 | 10 | 53.1  | 40.561 | N      | 26.038  | E       | 10  | G  |         | 0.5     | 11  | TURKEY. ML 3.0 (ISK). MD 3.1 (ATH).   |   |
| 08 | 23 | 13 | 50.97 | 40.44  | N      | 26.25   | E       | 10  | G  |         | 1.0     | 5   | TURKEY. ML 2.8 (ISK).   |   |
| 08 | 23 | 18 | 48.47 | 39.34  | N      | 29.13   | E       | 5   | G  |         | 0.1     | 4   | TURKEY. ML 2.7 (ISK).   |   |
| 08 | 23 | 29 | 35.3  | 39.691 | N      | 26.327  | E       | 10  | G  |         | 0.9     | 9   | TURKEY. ML 3.1 (ISK). MD 3.0 (ATH).   |   |
| 08 | 23 | 45 | 10.5  | 45.019 | N      | 9.081   | E       | 19  |    |         | 0.9     | 24  | NORTHERN ITALY. ML 2.8 (GEN), 2.6 (LDG).  |   |
| 09 | 02 | 29 | 04.36 | 33.680 | N      | 116.797 | W       | 17  |    |         |         | 44  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.7 (PAS), 3.4 (GS). Felt (III) at Hemet and White Water; (II) at Sun City. Also felt at Idyllwild.                            |   |
| 09 | 02 | 30 | 27.46 | 17.081 | N      | 99.878  | W       | 33  | N  |         | 1.1     | 7   | GUERRERO, MEXICO  |   |
| 09 | 03 | 21 | 11.1  | 43.388 | N      | 147.024 | E       | 50  | D  | 4.5     | 1.1     | 23  | KURIL ISLANDS   |   |
| 09 | 03 | 21 | 31.26 | 12.126 | N      | 60.090  | W       | 33  | N  |         | 0.9     | 9   | WINDWARD ISLANDS. MD 3.8 (TRN).   |   |
| 09 | 03 | 48 | 36.87 | 11.04  | N      | 61.86   | W       | 33  | N  |         | 0.7     | 5   | WINDWARD ISLANDS. MD 3.1 (TRN).   |   |
| a  | 09 | 03 | 56    | 57.1   | 7.428  | N       | 71.927  | W   | 9  | D       | 5.2 4.9 | 1.1 | 210   | VENEZUELA. Mw 5.4 (HRV). Felt at Merida and Santo Domingo. Also felt in parts of northeastern Colombia. |
| 09 | 05 | 02 | 45.3* | 7.871  | S      | 77.925  | W       | 33  | N  | 4.5     | 1.3     | 13  | NORTHERN PERU. Felt (IV) at Chiclayo and (III) at Trujillo. Also felt at Chimbote.  |   |
| 09 | 05 | 09 | 15.1  | 36.931 | N      | 28.999  | E       | 21  |    | 4.3     | 1.1     | 70  | DODECANESE ISLANDS. ML 4.2 (ISK). MD 4.4 (ATH).   |   |
| 09 | 05 | 13 | 12.4  | 36.941 | N      | 28.852  | E       | 5   | G  |         | 0.7     | 10  | DODECANESE ISLANDS. ML 3.6 (ISK). MD 3.9 (ATH).   |   |
| 09 | 05 | 27 | 29.37 | 17.90  | N      | 66.79   | W       | 5   | G  |         | 0.3     | 5   | PUERTO RICO REGION. MD 2.2 (MPR).   |   |
| 09 | 07 | 35 | 08.76 | 62.477 | N      | 151.243 | W       | 92  |    |         |         | 74  | CENTRAL ALASKA. <AEIC>.   |   |
| 09 | 07 | 36 | 04.9* | 16.754 | S      | 167.501 | E       | 33  | N  | 3.9     | 0.7     | 8   | VANUATU ISLANDS   |   |
| 09 | 07 | 51 | 38.47 | 38.67  | N      | 27.48   | E       | 10  | G  |         | 1.2     | 4   | TURKEY. ML 2.9 (ISK).   |   |
| 09 | 08 | 07 | 42.77 | 40.93  | N      | 22.98   | E       | 10  | G  |         | 0.9     | 5   | GREECE. ML 2.4 (SKO).   |   |
| 09 | 08 | 23 | 58.56 | 33.701 | N      | 116.762 | W       | 14  |    |         |         | 6   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).   |   |
| 09 | 08 | 36 | 30.97 | 17.07  | N      | 101.30  | W       | 33  | N  |         | 1.5     | 5   | NEAR COAST OF GUERRERO, MEXICO  |   |
| 09 | 09 | 19 | 34.76 | 61.779 | N      | 151.587 | W       | 81  |    |         |         | 39  | SOUTHERN ALASKA. <AEIC>.  |   |
| 09 | 09 | 30 | 27.7* | 43.750 | N      | 7.389   | E       | 10  | G  |         | 0.6     | 6   | NEAR SOUTH COAST OF FRANCE. ML 1.0 (STR).   |   |
| 09 | 09 | 58 | 10.66 | 36.842 | N      | 28.797  | E       | 10  | G  |         | 0.4     | 5   | DODECANESE ISLANDS. ML 3.2 (ISK).   |   |
| 09 | 10 | 16 | 04.57 | 39.69  | N      | 29.49   | E       | 10  | G  |         | 0.7     | 4   | TURKEY. ML 2.7 (ISK).   |   |
| 09 | 11 | 05 | 57.7* | 43.323 | N      | 17.519  | E       | 10  | G  |         | 1.3     | 10  | NORTHWESTERN BALKAN REGION. ML 2.3 (TTG).   |   |
| 09 | 11 | 26 | 52.77 | 34.98  | N      | 135.10  | E       | 10  | G  |         | 0.3     | 6   | NEAR S. COAST OF WESTERN HONSHU   |   |

|      |    |    |       |          |           |     |   |         |      |  |   |
|------|----|----|-------|----------|-----------|-----|---|---------|------|--|---|
| 09   | 11 | 45 | 55.1  | 40.423 N | 20.691 E  | 10  | G | 0.7     | 16   | GREECE-ALBANIA BORDER REGION. ML 3.0 (TTG). MD 3.1 (ATH).  |   |
| 09   | 12 | 33 | 36.18 | 39.662 N | 29.449 E  | 10  | G | 1.3     | 6    | TURKEY. ML 2.8 (ISK).  |   |
| 09   | 12 | 54 | 26.27 | 46.35 N  | 14.06 E   | 5   | G | 0.2     | 4    | NORTHWESTERN BALKAN REGION. MD 2.2 (LJU).  |   |
| 09   | 13 | 14 | 40.7  | 36.654 N | 115.777 W | 5   | G | 0.8     | 9    | CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (GS).  |   |
| 09   | 14 | 37 | 01.1  | 41.125 N | 21.249 E  | 10  | G | 0.8     | 13   | NORTHWESTERN BALKAN REGION. MD 3.3 (ATH). ML 3.1 (SKO). Felt (VI) at Bitola and (IV) in the Krusevo-Ohrid-Prilep area. |   |
| 09   | 14 | 40 | 50.1* | 18.116 S | 178.529 W | 621 | * | 4.5     | 1.1  | 35   | FIJI ISLANDS REGION   |
| 09   | 14 | 41 | 23.0* | 23.199 S | 178.787 E | 685 | * | 5.1     | 1.3  | 75   | SOUTH OF FIJI ISLANDS   |
| 09   | 14 | 41 | 41.9  | 18.051 S | 178.422 W | 590 |   | 4.9     | 1.0  | 143  | FIJI ISLANDS REGION   |
| 09   | 15 | 19 | 39.88 | 45.000 N | 7.091 E   | 10  | G | 0.4     | 5    |  | NORTHERN ITALY. ML 1.9 (GEN).   |
| 09   | 15 | 29 | 24.38 | 60.688 N | 5.568 E   | 5   | G | 0.6     | 8    |  | SOUTHERN NORWAY. MD 1.4 (BER).  |
| 09   | 16 | 44 | 28.08 | 60.305 N | 151.749 W | 53  |   |         | 90   |  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.6 (AEIC), 3.8 (PMR).  |
| 09   | 17 | 22 | 40.47 | 44.81 N  | 7.18 E    | 10  | G | 0.6     | 4    |  | NORTHERN ITALY. ML 1.8 (GEN).   |
| 09   | 17 | 30 | 35.4* | 13.180 N | 91.978 W  | 33  | N | 4.3     | 1.0  | 18   | NEAR COAST OF GUATEMALA. MD 4.6 (GCG).  |
| 09   | 17 | 44 | 28.08 | 44.797 N | 7.222 E   | 10  | G | 0.4     | 7    |  | NORTHERN ITALY. ML 2.2 (GEN).   |
| 09   | 17 | 47 | 07.17 | 44.80 N  | 7.20 E    | 10  | G | 0.2     | 4    |  | NORTHERN ITALY. ML 1.9 (GEN).   |
| 09   | 17 | 47 | 12.7* | 39.354 N | 26.128 E  | 10  | G | 0.7     | 8    |  | TURKEY. ML 3.1 (ISK). MD 3.3 (ATH).   |
| 09   | 17 | 51 | 02.97 | 44.79 N  | 7.20 E    | 10  | G | 0.2     | 4    |  | NORTHERN ITALY. ML 1.8 (GEN).   |
| 09   | 18 | 20 | 11.67 | 20.28 S  | 177.57 W  | 648 | ? | 4.8     | 0.7  | 11   | FIJI ISLANDS REGION   |
| a 09 | 18 | 21 | 02.6  | 43.556 N | 147.144 E | 54  | G | 6.2 5.2 | 0.8  | 609  | KURIL ISLANDS. Mw 5.8 (GS), 5.8 (HRV). Mo=7.9*10**17 Nm (PPT). Depth from broadband displacement seismograms. |
| 09   | 18 | 21 | 08.8* | 36.330 N | 45.361 E  | 38  | * | 4.2     | 0.7  | 17   | IRAN-IRAQ BORDER REGION   |
| 09   | 20 | 22 | 18.0  | 2.595 N  | 128.494 E | 223 | * | 5.0     | 0.7  | 33   | HALMAHERA, INDONESIA  |
| 09   | 20 | 30 | 11.0  | 38.811 N | 23.539 E  | 33  | N |         | 0.6  | 9  | GREECE. MD 3.2 (ATH).   |
| 09   | 21 | 03 | 23.47 | 20.46 S  | 174.22 W  | 135 | ? | 4.6     | 0.8  | 10   | TONGA ISLANDS   |
| 09   | 21 | 06 | 50.28 | 17.951 N | 100.920 W | 33  | N |         | 1.1  | 6  | GUERRERO, MEXICO  |
| 09   | 21 | 42 | 16.3* | 71.934 N | 1.933 W   | 10  | G | 4.3     | 1.1  | 20   | JAN MAYEN ISLAND REGION   |
| 09   | 21 | 42 | 29.78 | 36.077 N | 117.857 W | 2   |   |         |      | 5  | CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 2.7 (PAS).   |
| 09   | 21 | 49 | 47.97 | 9.47 S   | 113.17 E  | 33  | N | 4.8     | 1.4  | 7  | SOUTH OF JAWA, INDONESIA  |
| 09   | 23 | 01 | 28.97 | 51.08 N  | 15.75 E   | 10  | G |         | 0.7  | 5  | POLAND  |
| 09   | 23 | 19 | 08.9* | 52.774 N | 116.215 W | 10  | G |         | 1.0  | 5  | ALBERTA, CANADA. ML 2.9 (PGC).  |
| 09   | 23 | 31 | 40.9  | 52.671 N | 116.194 W | 10  | G |         | 1.3  | 11   | ALBERTA, CANADA. ML 3.5 (PGC).  |
| 10   | 00 | 25 | 24.8* | 43.123 N | 146.827 E | 68  | * | 4.7     | 1.1  | 25   | KURIL ISLANDS   |
| 10   | 00 | 49 | 19.7  | 37.109 N | 28.928 E  | 10  | G |         | 0.7  | 14   | TURKEY. ML 3.7 (ISK). MD 4.1 (ATH).   |
| 10   | 01 | 03 | 01.0* | 48.180 N | 16.277 E  | 10  | G |         | 0.8  | 6  | AUSTRIA. ML 3.1 (GRF).  |
| 10   | 01 | 28 | 03.7* | 44.070 N | 148.042 E | 54  | * | 4.6     | 1.1  | 33   | KURIL ISLANDS   |
| 10   | 01 | 49 | 12.48 | 39.722 N | 124.017 W | 5   |   |         |      | 26   | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.1 (GM).  |
| 10   | 02 | 46 | 57.97 | 37.00 N  | 28.87 E   | 10  | G |         | 0.4  | 4  | TURKEY. ML 3.0 (ISK).   |
| a 10 | 03 | 03 | 23.1  | 5.719 S  | 154.186 E | 33  | D | 5.4     | 0.8  | 66   | SOLOMON ISLANDS. Mw 5.5 (HRV).  |
| 10   | 03 | 30 | 08.9  | 2.981 N  | 128.073 E | 89  | D | 5.0     | 0.9  | 68   | HALMAHERA, INDONESIA  |
| 10   | 03 | 52 | 33.8  | 40.835 N | 20.705 E  | 5   | G |         | 1.5  | 15   | GREECE-ALBANIA BORDER REGION. MD 3.3 (ATH). ML 3.1 (TIR), 3.0 (THE), 2.7 (SKO).                               |
| 10   | 04 | 28 | 12.7* | 19.011 N | 145.577 E | 252 | * | 4.7     | 0.3  | 11   | MARIANA ISLANDS   |
| 10   | 05 | 26 | 53.77 | 7.05 S   | 129.38 E  | 131 | ? | 3.6     | 0.2  | 5  | BANDA SEA   |
| a 10 | 06 | 02 | 13.0  | 7.236 S  | 129.272 E | 96  | D | 5.2     | 1.2  | 49   | BANDA SEA. Mw 5.2 (HRV).  |
| 10   | 06 | 44 | 18.37 | 10.98 N  | 62.07 W   | 60  | G |         | 0.1  | 4  | NEAR COAST OF VENEZUELA. MD 2.9 (TRN).  |
| a 10 | 07 | 07 | 44.3  | 22.356 N | 118.800 E | 33  | N | 5.0 4.5 | 1.0  | 55   | TAIWAN REGION. Mw 5.1 (HRV).  |
| 10   | 08 | 45 | 57.07 | 81.07 N  | 4.94 W    | 10  | G |         | 0.9  | 15   | NORTH OF SVALBARD   |
| 10   | 09 | 54 | 28.88 | 28.391 N | 34.466 E  | 10  | G |         | 1.4  | 5  | EGYPT. MD 3.1 (RYD).  |
| a 10 | 10 | 48 | 23.5  | 7.761 S  | 158.354 E | 33  | D | 5.2 4.8 | 0.8  | 108  | SOLOMON ISLANDS. Mw 5.3 (HRV).  |
| 10   | 10 | 56 | 02.5* | 1.219 S  | 67.461 E  | 10  | G | 5.1 4.8 | 0.9  | 17   | CARLSBERG RIDGE   |
| 10   | 11 | 05 | 28.2* | 44.411 N | 146.729 E | 33  | N | 4.2 3.9 | 1.3  | 18   | KURIL ISLANDS   |
| 10   | 11 | 41 | 11.17 | 32.22 S  | 71.70 W   | 33  | N |         | 0.4  | 10   | NEAR COAST OF CENTRAL CHILE. MD 3.9 (SAN).  |
| 10   | 11 | 45 | 13.58 | 32.790 S | 70.799 W  | 70  | G |         | 0.3  | 11   | CHILE-ARGENTINA BORDER REGION. MD 3.9 (SAN).  |
| 10   | 11 | 59 | 45.9* | 51.193 N | 178.834 E | 33  | N | 4.3     | 1.3  | 15   | RAT ISLANDS, ALEUTIAN ISLANDS   |
| 10   | 12 | 09 | 14.6  | 36.747 N | 3.812 W   | 10  | G |         | 0.2  | 5  | STRAIT OF GIBRALTAR. mbLg 2.6 (MDD).  |
| 10   | 13 | 35 | 37.6* | 4.283 S  | 143.281 E | 92  | ? | 4.0     | 1.2  | 6  | NEW GUINEA, PAPUA NEW GUINEA  |
| 10   | 14 | 11 | 09.08 | 39.093 N | 27.508 E  | 10  | G |         | 1.0  | 5  | TURKEY. ML 2.7 (ISK).   |
| 10   | 14 | 52 | 36.58 | 40.200 N | 29.209 E  | 10  | G |         | 0.2  | 5  | TURKEY. ML 2.6 (ISK).   |
| 10   | 15 | 10 | 53.38 | 39.151 N | 27.602 E  | 10  | G |         | 0.2  | 5  | TURKEY. ML 2.8 (ISK).   |
| 10   | 15 | 47 | 35.5  | 2.730 N  | 126.729 E | 33  | N | 5.1 4.2 | 1.2  | 35   | NORTHERN MOLUCCA SEA  |
| 10   | 16 | 35 | 56.8  | 35.721 N | 142.256 E | 25  |   | 4.9 4.8 | 1.0  | 84   | OFF EAST COAST OF HONSHU, JAPAN   |
| 10   | 18 | 12 | 05.27 | 36.58 N  | 2.82 W    | 10  | G |         | 0.9  | 5  | STRAIT OF GIBRALTAR. mbLg 2.9 (MDD).  |
| 10   | 21 | 03 | 15.6* | 19.309 N | 95.268 W  | 33  | N |         | 0.9  | 5  | VERACRUZ, MEXICO  |
| 10   | 21 | 30 | 03.7* | 42.927 N | 148.036 E | 33  | N | 4.6     | 0.5  | 17   | OFF COAST OF HOKKAIDO, JAPAN  |
| 10   | 22 | 31 | 05.38 | 60.060 N | 152.891 W | 98  |   | 3.9     | 1.25 |  | SOUTHERN ALASKA. <AEIC>. Felt (V) at Anchor Point and (III) at Homer. Also felt at Pedro Bay.                 |
| 10   | 22 | 31 | 55.6  | 40.272 N | 29.508 E  | 10  | G |         | 0.7  | 8  | TURKEY. ML 2.8 (ISK).   |
| 10   | 22 | 45 | 14.9* | 31.632 S | 69.356 W  | 140 | G |         | 0.5  | 12   | SAN JUAN PROVINCE, ARGENTINA. MD 4.0 (SAN).   |
| 10   | 23 | 18 | 24.28 | 59.819 N | 152.314 W | 91  |   |         |      | 60   | SOUTHERN ALASKA. <AEIC>.  |
| 10   | 23 | 19 | 42.8  | 44.321 N | 6.467 E   | 10  | G |         | 0.4  | 16   | FRANCE. ML 2.4 (GEN), 2.1 (LDG).  |
| 11   | 01 | 46 | 15.8* | 36.289 N | 71.938 E  | 141 | ? | 4.8     | 0.8  | 16   | AFGHANISTAN-TAJIKISTAN BORD REG.  |
| 11   | 02 | 18 | 25.08 | 40.248 N | 28.866 E  | 10  | G |         | 0.6  | 7  | TURKEY. ML 2.7 (ISK).   |
| 11   | 02 | 27 | 58.87 | 21.25 S  | 178.42 W  | 550 | G | 4.5     | 0.6  | 6  | FIJI ISLANDS REGION   |
| 11   | 02 | 51 | 38.0* | 13.205 N | 88.004 W  | 33  | N | 4.7     | 1.2  | 58   | EL SALVADOR. MD 4.2 (SSS). Felt (IV) at San Salvador.   |
| 11   | 03 | 22 | 24.6* | 52.174 N | 175.953 W | 146 | * | 4.5     | 1.2  | 19   | ANDREANOF ISLANDS, ALEUTIAN IS.   |
| 11   | 04 | 19 | 03.48 | 26.376 S | 27.600 E  | 5   | G |         | 0.6  | 5  | REPUBLIC OF SOUTH AFRICA. ML 2.5 (PRE).   |
| 11   | 05 | 11 | 14.2* | 43.405 N | 147.563 E | 33  | N | 4.6     | 1.1  | 19   | KURIL ISLANDS   |
| 11   | 06 | 06 | 30.2* | 41.036 N | 25.217 E  | 10  | G |         | 1.6  | 13   | GREECE-BULGARIA BORDER REGION   |
| 11   | 06 | 20 | 51.18 | 36.915 N | 28.849 E  | 10  | G |         | 0.3  | 6  | DODECANESE ISLANDS. ML 3.4 (ISK).   |
| 11   | 06 | 37 | 27.38 | 40.398 N | 125.250 W | 15  |   |         |      | 26   | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.2 (GM).  |
| 11   | 07 | 23 | 08.3  | 43.899 N | 146.628 E | 33  | N | 4.7     | 0.9  | 41   | KURIL ISLANDS   |
| a 11 | 08 | 48 | 29.9  | 15.626 S | 72.535 W  | 121 | D | 5.6     | 1.1  | 282  | SOUTHERN PERU. Mw 5.8 (GS), 5.8 (HRV). Felt (IV) at Arequipa, (III) at Ilo and (II) at Ica.                   |
| 11   | 10 | 44 | 00.08 | 40.382 N | 28.305 E  | 10  | G |         | 0.3  | 11   | TURKEY. ML 3.0 (ISK).   |
| 11   | 10 | 54 | 32.98 | 44.315 N | 7.670 E   | 5   | G |         | 0.4  | 6  | NORTHERN ITALY. ML 1.9 (LDG).   |
| 11   | 11 | 43 | 39.3* | 43.226 N | 147.625 E | 33  | N | 4.7     | 1.1  | 27   | KURIL ISLANDS   |
| 11   | 12 | 05 | 56.67 | 37.48 N  | 29.95 E   | 10  | G |         | 0.3  | 4  | TURKEY. ML 3.0 (ISK).   |
| 11   | 12 | 09 | 03.27 | 36.61 N  | 2.79 W    | 5   | G |         | 0.5  | 6  | STRAIT OF GIBRALTAR. mbLg 3.1 (MDD).  |
| 11   | 12 | 15 | 21.08 | 37.356 N | 2.140 W   | 10  | G |         | 0.6  | 5  | SPAIN. mbLg 2.9 (MDD).  |

|      |    |    |       |        |   |         |   |     |   |     |     |  |   |   |
|------|----|----|-------|--------|---|---------|---|-----|---|-----|-----|--|---|---|
| 11   | 12 | 19 | 54.1% | 40.547 | N | 27.500  | E | 10  | G | 0.7 | 9   | TURKEY. ML 3.1 (ISK).  |   |   |
| 11   | 12 | 22 | 33.6* | 43.470 | N | 147.871 | E | 33  | N | 4.2 | 18  | KURIL ISLANDS  |   |   |
| 11   | 12 | 36 | 21.3% | 26.829 | S | 26.790  | E | 5   | G | 1.4 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.9 (PRE).  |   |   |
| 11   | 12 | 43 | 48.5% | 28.022 | S | 26.822  | E | 5   | G | 1.0 | 7   | REPUBLIC OF SOUTH AFRICA. ML 2.3 (PRE).  |   |   |
| 11   | 13 | 30 | 10.2% | 26.402 | S | 27.488  | E | 5   | G | 1.4 | 10  | REPUBLIC OF SOUTH AFRICA. ML 2.9 (PRE).  |   |   |
| 11   | 13 | 46 | 26.57 | 43.60  | N | 6.50    | E | 5   | G | 0.8 | 4   | NEAR SOUTH COAST OF FRANCE. ML 2.1 (LDG).  |   |   |
| 11   | 14 | 32 | 50.7  | 44.441 | N | 7.267   | E | 10  | G | 0.4 | 23  | NORTHERN ITALY. ML 2.7 (GEN), 2.5 (LDG), 2.1 (STR).  |   |   |
| 11   | 14 | 43 | 15.6  | 6.053  | N | 125.973 | E | 163 |   | 0.8 | 48  | MINDANAO, PHILIPPINE ISLANDS   |   |   |
| 11   | 14 | 49 | 00.2* | 48.166 | N | 7.618   | E | 10  | G | 0.4 | 8   | FRANCE. ML 1.9 (LDG), 1.7 (STR).   |   |   |
| 11   | 14 | 55 | 23.6  | 38.149 | N | 112.714 | W | 5   | G | 0.5 | 10  | UTAH. ML 3.0 (GS).   |   |   |
| 11   | 15 | 27 | 33.9% | 44.386 | N | 7.372   | E | 10  | G | 0.5 | 9   | NORTHERN ITALY. ML 2.1 (GEN).  |   |   |
| 11   | 16 | 05 | 48.2% | 28.016 | S | 26.920  | E | 5   | G | 1.0 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.7 (PRE).  |   |   |
| 11   | 16 | 08 | 25.8% | 26.333 | S | 27.497  | E | 5   | G | 0.9 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.7 (PRE).  |   |   |
| 11   | 16 | 13 | 18.87 | 36.98  | N | 29.37   | E | 10  | G | 1.1 | 4   | TURKEY. ML 3.1 (ISK).  |   |   |
| 11   | 16 | 21 | 18.6% | 63.137 | N | 151.503 | W | 0   |   |     | 59  | CENTRAL ALASKA. <AEIC>. ML 2.8 (AEIC), 3.2 (PMR).  |   |   |
| 11   | 17 | 16 | 03.6* | 27.888 | S | 26.706  | E | 5   | G | 1.2 | 14  | REPUBLIC OF SOUTH AFRICA. mbLg 3.7 (BUL). ML 3.5 (PRE).  |   |   |
| 11   | 17 | 27 | 06.6% | 37.581 | N | 118.858 | W | 6   |   |     | 7   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM). ML 2.7 (GS).                                   |   |   |
| 11   | 18 | 40 | 51.87 | 26.04  | N | 110.62  | W | 10  | G | 1.3 | 11  | GULF OF CALIFORNIA   |   |   |
| 11   | 20 | 30 | 18.67 | 18.25  | S | 167.74  | E | 33  | N | 4.1 | 1.6 | 6  | VANUATU ISLANDS   |   |
| 11   | 21 | 00 | 29.97 | 47.35  | N | 11.09   | E | 10  | G | 0.2 | 4   | AUSTRIA. ML 1.2 (VIE).   |   |   |
| 11   | 21 | 30 | 01.9% | 35.122 | N | 118.948 | W | 10  |   |     | 57  | CENTRAL CALIFORNIA. <PAS-P>. ML 3.0 (PAS), 3.0 (GS).   |   |   |
| 11   | 21 | 39 | 21.3% | 48.183 | N | 114.493 | W | 9   |   |     | 10  | MONTANA. <BUT>. ML 3.2 (BUT). Felt in the Smith Lake area west of Kalispell. Also felt at Kalispell. |   |   |
| 11   | 22 | 54 | 41.57 | 34.35  | S | 69.90   | W | 150 | G | 0.7 | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).   |   |   |
| 11   | 23 | 32 | 37.4% | 28.020 | S | 26.768  | E | 5   | G | 0.8 | 9   | REPUBLIC OF SOUTH AFRICA. ML 3.1 (PRE).  |   |   |
| 11   | 23 | 36 | 05.7  | 12.898 | N | 60.975  | W | 104 | * | 0.5 | 17  | WINDWARD ISLANDS. MD 3.7 (TRN). Felt on St. Vincent.   |   |   |
| 12   | 01 | 06 | 16.4* | 38.469 | N | 22.078  | E | 52  | * | 4.0 | 1.3 | 51   | GREECE. MD 3.8 (ATH).   |   |
| 12   | 01 | 56 | 15.37 | 45.51  | N | 6.74    | E | 5   | G | 0.3 | 4   | FRANCE. ML 2.3 (LDG).  |   |   |
| 12   | 01 | 56 | 17.0* | 18.606 | S | 69.769  | W | 182 | * | 0.8 | 8   | NORTHERN CHILE   |   |   |
| 12   | 02 | 13 | 02.0% | 59.955 | N | 140.555 | W | 8   |   |     | 16  | SOUTHEASTERN ALASKA. <AEIC>. ML 2.8 (AEIC), 2.8 (PGC).   |   |   |
| 12   | 03 | 20 | 56.27 | 8.40   | S | 121.73  | E | 33  | N | 3.7 | 0.6 | 5  | FLORES REGION, INDONESIA  |   |
| 12   | 04 | 17 | 20.1  | 51.633 | N | 179.889 | W | 115 | * | 4.3 | 0.9 | 25   | ANDREANOF ISLANDS, ALEUTIAN IS.   |   |
| 12   | 04 | 34 | 11.07 | 22.09  | S | 67.81   | W | 33  | N |     | 1.1 | 4  | CHILE-BOLIVIA BORDER REGION   |   |
| 12   | 05 | 08 | 14.47 | 41.78  | N | 23.82   | E | 5   | G |     | 0.1 | 4  | GREECE-BULGARIA BORDER REGION   |   |
| 12   | 05 | 23 | 10.7% | 42.092 | N | 19.592  | E | 10  | G |     | 0.5 | 9  | NORTHWESTERN BALKAN REGION. ML 1.9 (TTG).                                       |   |
| 12   | 05 | 29 | 56.2% | 33.759 | S | 70.320  | W | 110 | G | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).   |   |   |
| 12   | 06 | 11 | 28.9% | 59.526 | N | 147.091 | W | 15  |   |     | 49  | GULF OF ALASKA. <AEIC>. ML 3.5 (AEIC), 3.9 (PMR).  |   |   |
| 12   | 06 | 47 | 24.27 | 43.16  | N | 147.99  | E | 33  | N | 1.3 | 10  | KURIL ISLANDS  |   |   |
| 12   | 07 | 46 | 33.07 | 39.10  | N | 27.65   | E | 10  | G | 0.4 | 4   | TURKEY. ML 2.8 (ISK).  |   |   |
| 12   | 07 | 56 | 44.5% | 40.822 | N | 28.148  | E | 10  | G | 0.8 | 9   | TURKEY. ML 2.9 (ISK).  |   |   |
| 12   | 08 | 21 | 43.27 | 44.33  | N | 7.27    | E | 5   | G | 0.0 | 4   | NORTHERN ITALY. ML 1.5 (GEN).  |   |   |
| 12   | 09 | 28 | 33.4* | 28.382 | S | 67.425  | W | 163 | ? | 1.1 | 11  | LA RIOJA PROVINCE, ARGENTINA   |   |   |
| 12   | 10 | 51 | 11.2  | 43.286 | N | 147.361 | E | 33  | N | 5.1 | 0.8 | 88   | KURIL ISLANDS   |   |
| 12   | 10 | 52 | 04.87 | 39.73  | N | 29.48   | E | 10  | G | 1.1 | 4   | TURKEY. ML 2.6 (ISK).  |   |   |
| 12   | 11 | 23 | 56.5% | 57.834 | N | 153.734 | W | 42  |   |     | 72  | KODIAK ISLAND REGION. <AEIC>. ML 3.5 (AEIC).   |   |   |
| 12   | 11 | 24 | 47.37 | 37.92  | N | 29.24   | E | 10  | G | 1.6 | 4   | TURKEY. ML 3.2 (ISK).  |   |   |
| 12   | 11 | 34 | 33.0% | 59.140 | N | 150.857 | W | 15  |   |     | 51  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.2 (AEIC).  |   |   |
| 12   | 11 | 40 | 59.2% | 60.018 | N | 153.511 | W | 137 |   |     | 61  | SOUTHERN ALASKA. <AEIC>.   |   |   |
| 12   | 11 | 48 | 55.1* | 31.633 | S | 66.593  | W | 114 | ? | 1.1 | 14  | LA RIOJA PROVINCE, ARGENTINA   |   |   |
| 12   | 11 | 50 | 28.5% | 34.361 | N | 116.459 | W | 2   |   |     | 50  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS), 3.5 (GS).  |   |   |
| 12   | 12 | 18 | 00.0  | 6.947  | S | 29.916  | E | 22  | D | 4.9 | 0.9 | 36   | LAKE TANGANYIKA REGION. mbLg 4.4 (BUL).   |   |
| 12   | 12 | 42 | 42.3% | 39.692 | N | 26.369  | E | 10  | G | 0.5 | 7   | TURKEY. ML 3.1 (ISK).  |   |   |
| 12   | 12 | 48 | 50.8* | 30.703 | S | 68.796  | W | 100 | G | 0.7 | 6   | SAN JUAN PROVINCE, ARGENTINA   |   |   |
| 12   | 13 | 55 | 24.9* | 42.896 | N | 147.809 | E | 33  | N | 4.9 | 1.7 | 14   | OFF COAST OF HOKKAIDO, JAPAN  |   |
| 12   | 14 | 00 | 52.17 | 37.38  | N | 29.93   | E | 10  | G | 0.2 | 4   | TURKEY. ML 3.0 (ISK).  |   |   |
| 12   | 14 | 04 | 55.8% | 39.701 | N | 29.423  | E | 10  | G | 0.4 | 5   | TURKEY. ML 2.7 (ISK).  |   |   |
| 12   | 14 | 34 | 56.1% | 16.566 | N | 61.129  | W | 10  | G | 0.3 | 5   | LEEWARD ISLANDS. ML 2.9 (PDF).   |   |   |
| 12   | 14 | 45 | 53.2* | 31.863 | S | 69.441  | W | 120 | G | 0.4 | 8   | SAN JUAN PROVINCE, ARGENTINA   |   |   |
| 12   | 14 | 50 | 32.37 | 43.60  | N | 6.11    | E | 5   | G | 0.3 | 4   | NEAR SOUTH COAST OF FRANCE. ML 2.2 (LDG).  |   |   |
| 12   | 15 | 01 | 06.97 | 9.24   | S | 115.92  | E | 33  | N | 1.3 | 4   | SOUTH OF BALI, INDONESIA   |   |   |
| 12   | 15 | 57 | 05.2% | 39.236 | N | 28.131  | E | 10  | G | 0.8 | 6   | TURKEY. ML 2.7 (ISK).  |   |   |
| 12   | 16 | 55 | 31.5* | 9.189  | S | 123.772 | E | 33  | N | 4.8 | 0.9 | 12   | TIMOR REGION, INDONESIA   |   |
| 12   | 18 | 10 | 50.87 | 19.13  | N | 65.10   | W | 33  | N | 0.9 | 9   | PUERTO RICO REGION. MD 3.7 (MPR). ML 3.7 (PDF).  |   |   |
| 12   | 18 | 50 | 35.2* | 45.940 | N | 21.299  | E | 10  | G | 1.6 | 12  | ROMANIA  |   |   |
| 12   | 19 | 09 | 50.2% | 44.517 | N | 6.885   | E | 5   | G | 0.4 | 5   | FRANCE. ML 1.6 (GEN).  |   |   |
| 12   | 19 | 34 | 39.2  | 45.541 | N | 21.008  | E | 10  | G | 1.1 | 50  | ROMANIA. ML 4.1 (TTG).   |   |   |
| 12   | 20 | 24 | 51.07 | 34.15  | N | 139.28  | E | 10  | G | 4.0 | 1.0 | 8  | NEAR S. COAST OF HONSHU, JAPAN  |   |
| 12   | 20 | 53 | 52.0% | 60.994 | N | 147.324 | W | 20  |   |     | 63  | SOUTHERN ALASKA. <AEIC>. ML 3.1 (AEIC), 3.2 (PMR).   |   |   |
| 12   | 21 | 35 | 32.8  | 40.551 | N | 15.794  | E | 10  | G | 1.0 | 27  | SOUTHERN ITALY. ML 3.8 (TTG).  |   |   |
| 12   | 21 | 45 | 58.7% | 39.243 | N | 28.178  | E | 10  | G | 0.6 | 5   | TURKEY. ML 2.7 (ISK).  |   |   |
| 13   | 00 | 18 | 46.77 | 5.49   | S | 146.68  | E | 149 | * | 0.8 | 8   | EASTERN NEW GUINEA REG., P.N.G.  |   |   |
| 13   | 00 | 20 | 58.0* | 43.254 | N | 148.013 | E | 33  | N | 4.7 | 1.4 | 17   | EAST OF KURIL ISLANDS   |   |
| 13   | 00 | 36 | 05.3  | 44.328 | N | 6.516   | E | 5   | G | 0.5 | 25  | FRANCE. ML 2.3 (LDG), 1.6 (STR).   |   |   |
| 13   | 01 | 32 | 52.07 | 32.55  | S | 71.54   | W | 33  | N | 0.5 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.6 (SAN).   |   |   |
| 13   | 01 | 54 | 34.2% | 44.542 | N | 6.862   | E | 5   | G | 0.1 | 5   | FRANCE. ML 1.6 (GEN).  |   |   |
| 13   | 03 | 46 | 03.4% | 39.204 | N | 0.332   | W | 10  | G | 1.0 | 5   | SPAIN. mbLg 2.8 (MDD).   |   |   |
| 13   | 04 | 18 | 56.7  | 38.231 | N | 112.741 | W | 5   | G | 0.6 | 14  | UTAH. ML 3.3 (GS).   |   |   |
| 13   | 04 | 35 | 05.9  | 44.616 | N | 150.087 | E | 33  | N | 4.9 | 0.8 | 42   | EAST OF KURIL ISLANDS   |   |
| 13   | 04 | 37 | 29.67 | 44.60  | N | 150.02  | E | 33  | N | 4.5 | 1.4 | 11   | EAST OF KURIL ISLANDS   |   |
| 13   | 04 | 56 | 55.0% | 44.331 | N | 7.289   | E | 5   | G | 0.4 | 10  | NORTHERN ITALY. ML 2.4 (GEN).  |   |   |
| 13   | 05 | 05 | 21.6* | 3.419  | N | 79.208  | W | 33  | N | 4.7 | 1.3 | 48   | SOUTH OF PANAMA. MD 4.5 (UPA).  |   |
| 13   | 06 | 27 | 19.6% | 45.089 | N | 6.723   | E | 5   | G | 0.3 | 5   | FRANCE. ML 1.8 (GEN).  |   |   |
| 13   | 06 | 47 | 37.5% | 45.078 | N | 6.713   | E | 5   | G | 0.6 | 5   | FRANCE. ML 2.1 (GEN).  |   |   |
| a 13 | 06 | 56 | 00.5  | 36.910 | N | 29.060  | E | 10  | G | 4.9 | 5.0 | 1.2  | 248   | TURKEY. Mw 5.4 (HRV). ML 4.5 (ISK). Felt in the Mugla area. |
| 13   | 07 | 02 | 21.47 | 36.92  | N | 28.82   | E | 10  | G | 0.3 | 4   | DODECANESE ISLANDS. ML 3.5 (ISK).  |   |   |
| 13   | 07 | 03 | 00.5% | 36.880 | N | 28.827  | E | 10  | G | 0.7 | 6   | DODECANESE ISLANDS. ML 3.4 (ISK).  |   |   |
| 13   | 07 | 13 | 46.5  | 36.944 | N | 28.982  | E | 10  | G | 4.3 | 1.2 | 101  | DODECANESE ISLANDS. MD 4.6 (ATH). ML 4.1 (ISK). Felt in the Mugla area, Turkey. |   |
| 13   | 07 | 14 | 08.2% | 44.504 | N | 7.438   | E | 10  | G | 0.2 | 5   | NORTHERN ITALY. ML 1.7 (GEN).  |   |   |
| 13   | 07 | 33 | 08.77 | 55.61  | N | 4.80    | E | 10  | G | 0.7 | 5   | NORTH SEA  |   |   |
| 13   | 07 | 50 | 00.3% | 36.881 | N | 28.810  | E | 10  | G | 0.5 | 6   | DODECANESE ISLANDS. ML 3.4 (ISK).  |   |   |



|    |             |          |           |       |         |     |     |  |   |   |
|----|-------------|----------|-----------|-------|---------|-----|-----|--|---|---|
| 13 | 07 53 51.1& | 40.393 N | 125.339 W | 16    |         |     |     |  | 48  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.6 (GM). ML 3.4 (GS). |
| 13 | 07 58 15.1  | 37.033 N | 28.909 E  | 10 G  | 4.8 4.4 | 1.3 | 196 |  | TURKEY. ML 4.3 (ISK). MD 4.3 (RYD). Felt in the Mugla area.           |   |
| 13 | 08 06 06.6  | 36.830 N | 28.904 E  | 12    | 3.6     | 1.2 | 27  |  | DODECANESE ISLANDS. ML 3.6 (ISK).                                     |   |
| 13 | 08 14 15.4& | 37.085 N | 29.011 E  | 10 G  |         | 0.6 | 6   |  | TURKEY. ML 3.2 (ISK).   |   |
| 13 | 08 15 21.4  | 36.952 N | 29.046 E  | 10 G  | 4.7 4.0 | 1.2 | 150 |  | TURKEY. ML 4.1 (ISK). Felt in the Mugla area.                         |   |
| 13 | 08 29 18.0  | 36.816 N | 28.757 E  | 10 G  |         | 0.4 | 16  |  | DODECANESE ISLANDS. ML 3.6 (ISK).                                     |   |
| 13 | 08 32 56.5* | 36.897 N | 28.976 E  | 33 N  | 3.6     | 1.3 | 27  |  | DODECANESE ISLANDS. ML 3.5 (ISK).                                     |   |
| a  | 09 07 12.1  | 0.221 S  | 124.424 E | 35 D  | 5.3     | 1.1 | 96  |  | SOUTHERN MOLUCCA SEA. Mw 5.2 (HRV).                                   |   |
| 13 | 09 07 25.27 | 36.97 N  | 28.81 E   | 10 G  |         | 0.6 | 4   |  | DODECANESE ISLANDS. ML 3.3 (ISK).                                     |   |
| 13 | 09 19 53.2& | 60.657 N | 151.296 W | 59    |         |     | 68  |  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.3 (AEIC), 3.1 (PMR).            |   |
| 13 | 09 27 14.3& | 38.734 N | 119.636 W | 0     |         |     | 6   |  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.6 (GM). ML 2.5 (GS).    |   |
| 13 | 10 03 24.87 | 36.85 N  | 28.81 E   | 10 G  |         | 0.1 | 4   |  | DODECANESE ISLANDS. ML 3.0 (ISK).                                     |   |
| 13 | 10 35 07.97 | 13.66 N  | 93.05 W   | 33 N  | 4.2     | 1.0 | 16  |  | OFF COAST OF CHIAPAS, MEXICO  |   |
| 13 | 10 46 22.7  | 48.207 N | 152.892 E | 121 * | 4.5     | 0.7 | 46  |  | KURIL ISLANDS   |   |
| 13 | 10 59 55.67 | 35.80 N  | 140.14 E  | 33 N  |         | 0.1 | 6   |  | NEAR EAST COAST OF HONSHU, JAPAN                                      |   |
| 13 | 11 03 06.9* | 36.815 N | 28.887 E  | 10 G  | 3.1     | 0.5 | 7   |  | DODECANESE ISLANDS. ML 3.5 (ISK).                                     |   |
| 13 | 11 05 23.57 | 39.28 N  | 28.01 E   | 10 G  |         | 0.4 | 4   |  | TURKEY. ML 2.8 (ISK).   |   |
| 13 | 11 15 06.2& | 44.452 N | 7.387 E   | 10 G  |         | 0.3 | 7   |  | NORTHERN ITALY. ML 1.9 (GEN).   |   |
| 13 | 11 38 53.5  | 36.921 N | 28.946 E  | 11    | 3.7     | 1.2 | 25  |  | DODECANESE ISLANDS. MD 4.1 (ATH). ML 3.7 (ISK).                       |   |
| 13 | 12 31 09.97 | 36.78 N  | 28.81 E   | 10 G  |         | 0.1 | 4   |  | DODECANESE ISLANDS. ML 3.0 (ISK).                                     |   |
| 13 | 12 53 09.5& | 62.033 N | 149.374 W | 47    |         |     | 62  |  | CENTRAL ALASKA. <AEIC>. ML 3.0 (AEIC), 3.0 (PMR).                     |   |
| 13 | 13 02 26.5& | 62.029 N | 149.382 W | 38    |         |     | 42  |  | CENTRAL ALASKA. <AEIC>. ML 2.5 (AEIC).                                |   |
| 13 | 13 28 28.9* | 43.155 N | 147.426 E | 33 N  | 4.5     | 0.7 | 12  |  | KURIL ISLANDS   |   |
| 13 | 13 54 14.17 | 36.96 N  | 28.77 E   | 10 G  |         | 0.1 | 4   |  | DODECANESE ISLANDS. ML 3.0 (ISK).                                     |   |
| 13 | 14 00 31.4& | 36.933 N | 28.825 E  | 10 G  |         | 0.3 | 5   |  | DODECANESE ISLANDS. ML 3.2 (ISK).                                     |   |
| 13 | 14 48 58.9& | 37.140 N | 28.831 E  | 10 G  |         | 1.0 | 5   |  | TURKEY. ML 3.2 (ISK).   |   |
| 13 | 15 03 20.67 | 35.04 S  | 67.36 W   | 27    |         | 0.5 | 24  |  | MENDOZA PROVINCE, ARGENTINA. Felt (V) at Malvinas and (I) at Mendoza. |   |
| 13 | 15 37 14.5& | 44.253 N | 8.215 E   | 10 G  |         | 0.7 | 6   |  | NORTHERN ITALY. ML 1.4 (GEN).   |   |
| 13 | 16 50 11.4* | 22.447 N | 119.140 E | 10 G  | 4.8     | 1.0 | 16  |  | TAIWAN REGION   |   |
| 13 | 16 50 47.2& | 46.587 N | 119.590 W | 27    |         |     | 73  |  | WASHINGTON. <SEA-P>. MD 3.3 (SEA). ML 3.1 (GS).                       |   |
| 13 | 17 11 19.77 | 37.40 N  | 28.96 E   | 10 G  |         | 0.3 | 4   |  | TURKEY. ML 3.0 (ISK).   |   |
| 13 | 17 12 49.17 | 37.05 N  | 28.88 E   | 10 G  |         | 0.2 | 4   |  | TURKEY. ML 3.1 (ISK).   |   |
| 13 | 17 23 36.2& | 44.253 N | 8.213 E   | 10 G  |         | 0.6 | 6   |  | NORTHERN ITALY. ML 1.4 (GEN).   |   |
| 13 | 17 23 53.0  | 40.729 N | 22.743 E  | 5 G   |         | 0.3 | 6   |  | GREECE  |   |
| 13 | 17 26 25.3& | 44.252 N | 8.193 E   | 10 G  |         | 0.6 | 8   |  | NORTHERN ITALY. ML 1.5 (GEN).   |   |
| 13 | 17 29 12.57 | 44.25 N  | 8.22 E    | 10 G  |         | 0.4 | 4   |  | NORTHERN ITALY. ML 1.3 (GEN).   |   |
| 13 | 17 32 00.3& | 44.233 N | 8.262 E   | 10 G  |         | 0.5 | 5   |  | NORTHERN ITALY. ML 1.5 (GEN).   |   |
| 13 | 17 32 04.57 | 36.66 N  | 28.66 E   | 10 G  |         | 0.4 | 4   |  | DODECANESE ISLANDS. ML 3.2 (ISK).                                     |   |
| 13 | 17 32 07.6& | 44.242 N | 8.232 E   | 10 G  |         | 0.3 | 6   |  | NORTHERN ITALY. ML 1.6 (GEN).   |   |
| 13 | 17 33 27.1& | 44.253 N | 8.211 E   | 10 G  |         | 0.3 | 5   |  | NORTHERN ITALY. ML 1.5 (GEN).   |   |
| 13 | 17 33 45.9& | 44.204 N | 8.284 E   | 10 G  |         | 0.3 | 6   |  | NORTHERN ITALY. ML 1.5 (GEN).   |   |
| 13 | 17 34 48.4& | 44.247 N | 8.242 E   | 10 G  |         | 0.3 | 12  |  | NORTHERN ITALY. ML 2.4 (GEN).   |   |
| 13 | 17 35 32.1& | 44.245 N | 8.225 E   | 10 G  |         | 0.5 | 5   |  | NORTHERN ITALY. ML 1.5 (GEN).   |   |
| 13 | 17 36 21.0& | 44.237 N | 8.236 E   | 10 G  |         | 0.4 | 11  |  | NORTHERN ITALY. ML 2.4 (GEN).   |   |
| 13 | 17 37 05.7& | 44.239 N | 8.250 E   | 10 G  |         | 0.4 | 8   |  | NORTHERN ITALY. ML 2.0 (GEN).   |   |
| 13 | 17 37 08.37 | 36.85 N  | 28.84 E   | 10 G  |         | 0.1 | 4   |  | DODECANESE ISLANDS. ML 3.1 (ISK).                                     |   |
| 13 | 17 37 27.3& | 44.233 N | 8.243 E   | 10 G  |         | 0.3 | 8   |  | NORTHERN ITALY. ML 2.0 (GEN).   |   |
| 13 | 17 38 06.8& | 44.235 N | 8.244 E   | 10 G  |         | 0.3 | 5   |  | NORTHERN ITALY. ML 1.5 (GEN).   |   |
| 13 | 17 39 45.6& | 44.238 N | 8.240 E   | 10 G  |         | 0.4 | 5   |  | NORTHERN ITALY. ML 1.5 (GEN).   |   |
| 13 | 17 40 39.9& | 44.238 N | 8.238 E   | 10 G  |         | 0.2 | 11  |  | NORTHERN ITALY. ML 2.4 (GEN).   |   |
| 13 | 17 41 01.5& | 44.248 N | 8.233 E   | 10 G  |         | 0.4 | 8   |  | NORTHERN ITALY. ML 1.9 (GEN).   |   |
| 13 | 17 43 07.9& | 44.261 N | 8.202 E   | 10 G  |         | 0.3 | 5   |  | NORTHERN ITALY. ML 1.5 (GEN).   |   |
| 13 | 17 46 55.0& | 44.255 N | 8.210 E   | 10 G  |         | 0.4 | 5   |  | NORTHERN ITALY. ML 1.4 (GEN).   |   |
| 13 | 17 53 41.9& | 44.238 N | 8.242 E   | 10 G  |         | 0.3 | 5   |  | NORTHERN ITALY. ML 1.4 (GEN).   |   |
| 13 | 17 55 17.0& | 44.244 N | 8.224 E   | 10 G  |         | 0.3 | 5   |  | NORTHERN ITALY. ML 1.3 (GEN).   |   |
| 13 | 17 56 09.97 | 44.24 N  | 8.23 E    | 10 G  |         | 0.3 | 4   |  | NORTHERN ITALY. ML 1.3 (GEN).   |   |
| 13 | 17 56 22.0& | 44.239 N | 8.225 E   | 10 G  |         | 0.4 | 8   |  | NORTHERN ITALY. ML 2.0 (GEN).   |   |
| 13 | 17 58 10.77 | 44.24 N  | 8.23 E    | 10 G  |         | 0.2 | 4   |  | NORTHERN ITALY. ML 1.4 (GEN).   |   |
| 13 | 17 58 12.4& | 44.247 N | 8.201 E   | 10 G  |         | 0.3 | 6   |  | NORTHERN ITALY. ML 1.6 (GEN).   |   |
| 13 | 18 01 57.1& | 44.247 N | 8.224 E   | 10 G  |         | 0.4 | 5   |  | NORTHERN ITALY. ML 1.4 (GEN).   |   |
| 13 | 18 02 09.27 | 44.22 N  | 8.24 E    | 10 G  |         | 0.0 | 4   |  | NORTHERN ITALY. ML 1.3 (GEN).   |   |
| 13 | 18 02 50.7& | 44.233 N | 8.247 E   | 10 G  |         | 0.2 | 8   |  | NORTHERN ITALY. ML 2.0 (GEN).   |   |
| 13 | 18 03 35.57 | 44.23 N  | 8.25 E    | 10 G  |         | 0.3 | 4   |  | NORTHERN ITALY. ML 1.3 (GEN).   |   |
| 13 | 18 05 04.0& | 44.234 N | 8.240 E   | 10 G  |         | 0.2 | 8   |  | NORTHERN ITALY. ML 1.9 (GEN).   |   |
| 13 | 18 07 07.3& | 44.268 N | 8.199 E   | 10 G  |         | 0.2 | 5   |  | NORTHERN ITALY. ML 1.4 (GEN).   |   |
| 13 | 18 08 49.0& | 44.225 N | 8.242 E   | 10 G  |         | 0.4 | 8   |  | NORTHERN ITALY. ML 2.1 (GEN).   |   |
| 13 | 18 09 05.0& | 44.243 N | 8.230 E   | 10 G  |         | 0.3 | 5   |  | NORTHERN ITALY. ML 1.6 (GEN).   |   |
| 13 | 18 09 40.8& | 44.236 N | 8.237 E   | 10 G  |         | 0.4 | 8   |  | NORTHERN ITALY. ML 2.0 (GEN).   |   |
| 13 | 18 10 35.9& | 44.237 N | 8.237 E   | 10 G  |         | 0.5 | 5   |  | NORTHERN ITALY. ML 1.6 (GEN).   |   |
| 13 | 18 10 49.27 | 44.24 N  | 8.24 E    | 10 G  |         | 0.1 | 4   |  | NORTHERN ITALY. ML 1.4 (GEN).   |   |
| 13 | 18 10 52.57 | 44.24 N  | 8.23 E    | 10 G  |         | 0.3 | 4   |  | NORTHERN ITALY. ML 1.6 (GEN).   |   |
| 13 | 18 11 43.97 | 44.23 N  | 8.25 E    | 10 G  |         | 0.4 | 4   |  | NORTHERN ITALY. ML 1.2 (GEN).   |   |
| 13 | 18 12 04.67 | 44.23 N  | 8.25 E    | 10 G  |         | 0.3 | 4   |  | NORTHERN ITALY. ML 1.3 (GEN).   |   |
| 13 | 18 12 31.37 | 44.25 N  | 8.22 E    | 10 G  |         | 0.0 | 4   |  | NORTHERN ITALY. ML 1.2 (GEN).   |   |
| 13 | 18 14 14.6& | 44.236 N | 8.246 E   | 10 G  |         | 0.2 | 6   |  | NORTHERN ITALY. ML 1.6 (GEN).   |   |
| 13 | 18 14 23.2& | 44.242 N | 8.228 E   | 10 G  |         | 0.5 | 7   |  | NORTHERN ITALY. ML 2.0 (GEN).   |   |
| 13 | 18 15 37.6& | 44.237 N | 8.244 E   | 10 G  |         | 0.2 | 8   |  | NORTHERN ITALY. ML 2.1 (GEN).   |   |
| 13 | 18 15 57.37 | 44.13 N  | 9.95 E    | 10 G  |         | 0.6 | 5   |  | NORTHERN ITALY  |   |
| 13 | 18 16 08.07 | 44.25 N  | 8.23 E    | 10 G  |         | 0.0 | 4   |  | NORTHERN ITALY. ML 1.4 (GEN).   |   |
| 13 | 18 16 47.2& | 44.262 N | 8.224 E   | 10 G  |         | 0.3 | 5   |  | NORTHERN ITALY. ML 1.8 (GEN).   |   |
| 13 | 18 17 03.4& | 44.257 N | 8.234 E   | 10 G  |         | 0.2 | 5   |  | NORTHERN ITALY. ML 1.6 (GEN).   |   |
| 13 | 18 17 44.57 | 44.24 N  | 8.24 E    | 10 G  |         | 0.1 | 4   |  | NORTHERN ITALY. ML 1.3 (GEN).   |   |
| 13 | 18 17 48.2& | 44.243 N | 8.209 E   | 10 G  |         | 0.4 | 8   |  | NORTHERN ITALY. ML 2.0 (GEN).   |   |
| 13 | 18 19 51.1& | 44.226 N | 8.230 E   | 10 G  |         | 0.5 | 8   |  | NORTHERN ITALY. ML 2.1 (GEN).   |   |
| 13 | 18 20 03.4& | 44.237 N | 8.231 E   | 10 G  |         | 0.3 | 9   |  | NORTHERN ITALY. ML 2.2 (GEN).   |   |
| 13 | 18 20 39.7& | 44.237 N | 8.231 E   | 10 G  |         | 0.2 | 8   |  | NORTHERN ITALY. ML 1.9 (GEN).   |   |
| 13 | 18 20 55.5& | 44.241 N | 8.255 E   | 10 G  |         | 0.1 | 5   |  | NORTHERN ITALY. ML 1.5 (GEN).   |   |
| 13 | 18 21 14.7& | 44.234 N | 8.241 E   | 10 G  |         | 0.3 | 8   |  | NORTHERN ITALY. ML 2.0 (GEN).   |   |

|   |    |    |    |       |          |           |       |         |     |     |   |
|---|----|----|----|-------|----------|-----------|-------|---------|-----|-----|---|
|   | 13 | 18 | 22 | 32.8% | 44.239 N | 8.223 E   | 10 G  |         | 0.4 | 8   | NORTHERN ITALY. ML 2.0 (GEN).   |
|   | 13 | 18 | 23 | 04.4% | 44.238 N | 8.227 E   | 10 G  |         | 0.2 | 6   | NORTHERN ITALY. ML 1.5 (GEN).   |
|   | 13 | 18 | 23 | 42.2% | 44.251 N | 8.211 E   | 10 G  |         | 0.4 | 5   | NORTHERN ITALY. ML 1.5 (GEN).   |
|   | 13 | 18 | 23 | 54.9% | 44.237 N | 8.232 E   | 10 G  |         | 0.4 | 7   | NORTHERN ITALY. ML 1.7 (GEN).   |
|   | 13 | 18 | 29 | 36.1% | 44.227 N | 8.256 E   | 10 G  |         | 0.2 | 8   | NORTHERN ITALY. ML 1.9 (GEN).   |
|   | 13 | 18 | 30 | 29.9% | 44.234 N | 8.250 E   | 10 G  |         | 0.2 | 6   | NORTHERN ITALY. ML 1.6 (GEN).   |
|   | 13 | 18 | 38 | 03.6% | 44.233 N | 8.246 E   | 10 G  |         | 0.3 | 5   | NORTHERN ITALY. ML 1.5 (GEN).   |
|   | 13 | 18 | 53 | 29.0? | 51.10 N  | 176.34 E  | 33 N  | 3.8     | 0.6 | 6   | RAT ISLANDS, ALEUTIAN ISLANDS   |
|   | 13 | 19 | 37 | 06.0% | 44.251 N | 8.226 E   | 10 G  |         | 0.1 | 5   | NORTHERN ITALY. ML 1.4 (GEN).   |
|   | 13 | 19 | 39 | 43.1? | 44.24 N  | 8.23 E    | 10 G  |         | 0.0 | 4   | NORTHERN ITALY. ML 1.2 (GEN).   |
|   | 13 | 19 | 40 | 09.6% | 44.231 N | 8.238 E   | 10 G  |         | 0.6 | 6   | NORTHERN ITALY. ML 1.5 (GEN).   |
|   | 13 | 19 | 46 | 28.4% | 44.234 N | 8.237 E   | 10 G  |         | 0.3 | 6   | NORTHERN ITALY. ML 1.5 (GEN).   |
|   | 13 | 19 | 48 | 19.6% | 44.238 N | 8.247 E   | 10 G  |         | 0.3 | 8   | NORTHERN ITALY. ML 2.0 (GEN).   |
| a | 13 | 19 | 55 | 45.0  | 51.130 N | 159.966 E | 32 D  | 5.1 4.5 | 1.3 | 166 | OFF EAST COAST OF KAMCHATKA. Mw 5.1 (HRV).  |
|   | 13 | 20 | 06 | 30.0% | 36.779 N | 28.635 E  | 10 G  |         | 0.3 | 5   | DODECANESE ISLANDS. ML 3.3 (ISK).   |
|   | 13 | 20 | 13 | 53.5  | 51.572 N | 16.060 E  | 10 G  |         | 0.6 | 26  | POLAND. ML 3.8 (GRF), 3.8 (FUR), 3.7 (VIE), 3.2 (CLL).  |
|   | 13 | 20 | 21 | 17.0% | 44.239 N | 8.233 E   | 10 G  |         | 0.3 | 9   | NORTHERN ITALY. ML 2.0 (GEN).   |
|   | 13 | 20 | 21 | 51.7% | 44.230 N | 8.252 E   | 10 G  |         | 0.2 | 6   | NORTHERN ITALY. ML 1.7 (GEN).   |
|   | 13 | 20 | 25 | 06.5% | 44.249 N | 8.223 E   | 10 G  |         | 0.4 | 6   | NORTHERN ITALY. ML 1.6 (GEN).   |
|   | 13 | 20 | 25 | 31.1% | 44.236 N | 8.240 E   | 10 G  |         | 0.4 | 7   | NORTHERN ITALY. ML 1.8 (GEN).   |
|   | 13 | 20 | 34 | 43.3  | 32.924 S | 70.992 W  | 60 G  |         | 0.6 | 11  | CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).  |
|   | 13 | 20 | 40 | 37.0? | 43.62 N  | 146.42 E  | 77 ?  | 4.9     | 1.6 | 26  | KURIL ISLANDS   |
|   | 13 | 20 | 47 | 18.7* | 31.284 S | 68.639 W  | 100 G |         | 0.6 | 6   | SAN JUAN PROVINCE, ARGENTINA  |
|   | 13 | 20 | 55 | 27.5* | 43.641 N | 148.394 E | 33 N  | 4.9     | 1.3 | 22  | EAST OF KURIL ISLANDS   |
|   | 13 | 21 | 10 | 46.0* | 39.503 N | 74.074 E  | 33 N  | 4.3     | 1.1 | 12  | SOUTHERN XINJIANG, CHINA  |
|   | 13 | 21 | 13 | 29.6  | 40.311 N | 126.883 W | 10 G  |         | 0.6 | 64  | OFF COAST OF NORTHERN CALIFORNIA. ML 3.7 (GS).  |
|   | 13 | 22 | 15 | 15.6% | 36.932 N | 28.913 E  | 10 G  |         | 0.6 | 6   | DODECANESE ISLANDS. ML 3.5 (ISK).   |
|   | 13 | 22 | 36 | 58.9? | 36.98 N  | 28.81 E   | 10 G  |         | 0.0 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).   |
|   | 13 | 22 | 49 | 35.3% | 44.242 N | 8.225 E   | 10 G  |         | 0.4 | 6   | NORTHERN ITALY. ML 1.6 (GEN).   |
|   | 13 | 23 | 42 | 05.9% | 44.257 N | 8.207 E   | 10 G  |         | 0.5 | 5   | NORTHERN ITALY. ML 1.5 (GEN).   |
|   | 13 | 23 | 42 | 29.5? | 44.24 N  | 8.24 E    | 10 G  |         | 0.4 | 4   | NORTHERN ITALY. ML 1.2 (GEN).   |
|   | 13 | 23 | 46 | 22.6? | 36.86 N  | 28.86 E   | 10 G  |         | 0.3 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).   |
|   | 14 | 00 | 44 | 32.9? | 36.81 N  | 28.83 E   | 10 G  |         | 0.5 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).   |
|   | 14 | 00 | 59 | 55.9? | 37.02 N  | 28.88 E   | 10 G  |         | 0.6 | 4   | TURKEY. ML 3.1 (ISK).   |
|   | 14 | 01 | 28 | 23.9% | 40.351 N | 124.478 W | 18    | 4.2     |     | 91  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 4.3 (GM). ML 4.3 (BRK), 4.3 (GS). Mo=8.7*10**15 Nm (BRK). Items knocked from store shelves at Scotia. Felt (V) at Honeydew and Petrolia; (IV) at Carlotta, Loleta, Rio Dell and Samoa; (III) at Alderpoint, Bayside, Fortuna, Hydesville, Miranda, Phillipsville, Weott and Whitethorn; (II) at Redcrest. Also felt at Eureka, Ferndale, Garberville, Mayers Flat and Piercy.  |
|   | 14 | 01 | 28 | 50.3* | 4.211 N  | 126.386 E | 95 ?  | 4.8     | 1.1 | 13  | TALAUD ISLANDS, INDONESIA   |
|   | 14 | 01 | 57 | 16.4% | 36.714 N | 28.559 E  | 10 G  |         | 0.8 | 6   | DODECANESE ISLANDS. ML 3.5 (ISK).   |
|   | 14 | 02 | 16 | 58.9% | 36.867 N | 28.804 E  | 10 G  |         | 0.4 | 5   | DODECANESE ISLANDS. ML 3.3 (ISK).   |
|   | 14 | 03 | 35 | 56.0? | 34.13 S  | 70.78 W   | 80 G  |         | 0.2 | 6   | CHILE-ARGENTINA BORDER REGION   |
|   | 14 | 03 | 52 | 58.9% | 60.564 N | 151.691 W | 70    |         |     | 50  | KENAI PENINSULA, ALASKA. <AEIC>.  |
|   | 14 | 04 | 09 | 14.7? | 36.86 N  | 28.82 E   | 10 G  |         | 0.6 | 4   | DODECANESE ISLANDS. ML 3.2 (ISK).   |
|   | 14 | 04 | 23 | 06.1% | 40.354 N | 124.241 W | 29    |         |     | 43  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.2 (GM). ML 3.0 (BRK).  |
|   | 14 | 04 | 29 | 50.9* | 40.788 N | 20.809 E  | 5 G   |         | 1.5 | 20  | GREECE-ALBANIA BORDER REGION. ML 3.1 (TIR), 3.1 (TTG), 2.7 (SKO).   |
|   | 14 | 04 | 49 | 26.7% | 37.040 N | 3.945 W   | 10 G  |         | 0.2 | 5   | SPAIN. mbLg 1.9 (MDD).  |
|   | 14 | 05 | 00 | 28.3  | 56.299 N | 152.253 W | 10 G  |         | 0.8 | 47  | KODIAK ISLAND REGION. ML 3.8 (AEIC).  |
|   | 14 | 05 | 11 | 53.1? | 34.15 S  | 70.39 W   | 10 G  |         | 0.5 | 5   | CHILE-ARGENTINA BORDER REGION   |
|   | 14 | 05 | 40 | 39.6* | 31.464 S | 68.580 W  | 100 G |         | 0.7 | 7   | SAN JUAN PROVINCE, ARGENTINA  |
|   | 14 | 06 | 10 | 07.7% | 63.438 N | 151.117 W | 9     |         |     | 39  | CENTRAL ALASKA. <AEIC>. ML 2.5 (AEIC).  |
|   | 14 | 07 | 54 | 14.8? | 40.16 N  | 40.40 E   | 10 G  |         | 1.3 | 4   | TURKEY. ML 3.9 (ISK).   |
|   | 14 | 08 | 49 | 04.1? | 36.94 N  | 28.81 E   | 10 G  |         | 0.3 | 4   | DODECANESE ISLANDS. ML 3.3 (ISK).   |
|   | 14 | 09 | 08 | 46.7% | 30.626 S | 117.038 E | 10 G  |         | 0.9 | 5   | WESTERN AUSTRALIA   |
|   | 14 | 10 | 06 | 32.0* | 40.779 N | 20.936 E  | 10 G  |         | 1.7 | 6   | GREECE-ALBANIA BORDER REGION. ML 2.7 (TIR), 2.5 (SKO).  |
|   | 14 | 10 | 41 | 00.0? | 0.96 N   | 127.24 E  | 33 N  | 4.2     | 0.2 | 6   | HALMAHERA, INDONESIA  |
| a | 14 | 11 | 27 | 56.1  | 0.028 S  | 16.935 W  | 10 G  | 5.2 4.9 | 0.9 | 136 | NORTH OF ASCENSION ISLAND. Mw 5.3 (HRV).  |
|   | 14 | 11 | 33 | 13.1? | 10.41 N  | 61.73 W   | 60 G  |         | 0.8 | 4   | TRINIDAD. MD 2.4 (TRN).   |
|   | 14 | 12 | 58 | 32.8% | 40.426 N | 125.838 W | 7     |         |     | 3   | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 2.8 (GM).  |
|   | 14 | 13 | 26 | 51.9? | 30.65 S  | 118.49 E  | 10 G  |         | 0.3 | 5   | WESTERN AUSTRALIA   |
|   | 14 | 13 | 53 | 58.1% | 61.931 N | 124.121 W | 10 G  |         | 1.3 | 8   | NORTHWEST TERRITORIES, CANADA. mbLg 3.5 (PGC).  |
|   | 14 | 13 | 54 | 19.4% | 40.350 N | 124.465 W | 18    |         |     | 26  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.0 (GM). ML 3.0 (BRK), 2.9 (GS).  |
|   | 14 | 14 | 00 | 15.2% | 38.817 N | 119.676 W | 3     |         |     | 59  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.2 (GM). ML 3.2 (BRK), 3.2 (GS).   |
|   | 14 | 14 | 31 | 06.5% | 37.197 N | 4.045 W   | 10 G  |         | 0.5 | 7   | SPAIN. mbLg 2.9 (MDD).  |
|   | 14 | 14 | 33 | 32.2% | 10.511 N | 65.931 W  | 33 N  |         | 1.2 | 6   | NEAR COAST OF VENEZUELA   |
| a | 14 | 15 | 24 | 38.9* | 21.231 S | 174.639 W | 54 ?  | 5.2     | 1.1 | 72  | TONGA ISLANDS. Mw 5.3 (HRV).  |
|   | 14 | 15 | 35 | 25.3  | 36.771 N | 28.720 E  | 10 G  |         | 0.6 | 21  | DODECANESE ISLANDS. ML 3.7 (ISK).   |
|   | 14 | 15 | 49 | 04.2% | 26.383 S | 27.411 E  | 5 G   |         | 0.7 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.6 (PRE).   |
|   | 14 | 16 | 19 | 43.7% | 37.000 N | 28.899 E  | 10 G  |         | 0.5 | 5   | TURKEY. ML 3.4 (ISK).   |
|   | 14 | 16 | 27 | 31.6% | 38.889 N | 27.750 E  | 10 G  |         | 0.4 | 9   | TURKEY. ML 3.2 (ISK).   |
|   | 14 | 16 | 31 | 26.8* | 42.940 N | 147.856 E | 33 N  | 4.5     | 1.0 | 22  | OFF COAST OF HOKKAIDO, JAPAN  |
|   | 14 | 16 | 39 | 11.6% | 26.365 S | 27.352 E  | 5 G   |         | 0.5 | 5   | REPUBLIC OF SOUTH AFRICA. ML 1.9 (PRE).   |
|   | 14 | 17 | 14 | 59.8% | 36.925 N | 28.829 E  | 10 G  |         | 0.8 | 5   | DODECANESE ISLANDS  |
|   | 14 | 17 | 49 | 07.9  | 38.170 N | 112.727 W | 5 G   |         | 0.6 | 12  | UTAH. ML 3.0 (GS).  |
|   | 14 | 18 | 23 | 24.3* | 28.714 N | 34.739 E  | 10 G  |         | 1.3 | 12  | EGYPT. MD 3.8 (RYD).  |
|   | 14 | 18 | 29 | 35.7? | 3.88 S   | 79.22 W   | 33 N  | 4.7     | 1.4 | 7   | NEAR COAST OF ECUADOR   |
| a | 14 | 19 | 15 | 30.6  | 13.525 N | 121.067 E | 32 G  | 6.1 7.1 | 1.1 | 411 | MINDORO, PHILIPPINE ISLANDS. Mw 7.0 (GS), 7.1 (HRV). Ms 7.1 (BRK). Mo=2.0*10**20 Nm (PPT). At least seventy-eight people killed and 225 injured on Luzon and Mindoro. A local tsunami contributed to extensive damage (VII RF) in the Calapan and Puerto Galera areas. More than 797 houses destroyed and 3,288 damaged on Mindoro. Seven houses destroyed at Batangas, Luzon. Liquefaction, sand boils and surface faulting occurred in the epicentral area. Felt (IV RF) at Batangas, |

Guinayangan, Manila and Tagaytay; (III RF) at Quezon City, Luzon. Also felt (II RF) on Masbate. Depth from broadband displacement seismograms.

14 20 13 57.5 40.311 N 124.434 W 8 24 NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 2.9 (GM).

14 20 19 18.4 43.912 N 147.383 E 33 N 4.4 0.8 18 KURIL ISLANDS

14 20 27 13.0 13.167 N 121.259 E 33 N 4.5 0.8 20 MINDORO, PHILIPPINE ISLANDS

14 20 56 54.1 43.686 N 147.444 E 33 N 4.4 1.1 11 KURIL ISLANDS

14 21 50 00.5 58.858 N 149.105 W 15 39 GULF OF ALASKA. <AEIC>. ML 2.5 (AEIC).

14 21 54 31.2 44.445 N 7.275 E 10 G 0.4 8 NORTHERN ITALY. ML 1.9 (GEN).

14 22 25 23.9 24.130 N 122.366 E 21 D 4.8 0.8 33 TAIWAN REGION

14 22 37 50.2 47.184 N 155.051 E 33 N 4.7 1.3 30 EAST OF KURIL ISLANDS

14 23 16 27.8 13.10 N 121.41 E 30 D 4.9 0.9 19 MINDORO, PHILIPPINE ISLANDS

14 23 53 06.2 11.934 N 93.766 E 141 D 4.6 0.7 82 ANDAMAN ISLANDS, INDIA

15 00 33 08.2 0.840 N 125.701 E 33 N 0.8 10 NORTHERN MOLUCCA SEA

15 00 33 25.8 13.643 N 120.924 E 33 N 4.8 0.5 14 MINDORO, PHILIPPINE ISLANDS

15 00 50 02.1 36.914 N 28.895 E 10 G 0.5 5 DODECANESE ISLANDS. ML 3.5 (ISK).

15 02 09 09.8 35.36 N 21.66 E 50 G 1.5 10 CENTRAL MEDITERRANEAN SEA

15 03 22 51.5 57.686 N 154.259 W 9 53 KODIAK ISLAND REGION. <AEIC>. ML 3.3 (AEIC).

15 03 54 11.5 43.873 N 6.694 E 5 G 0.6 34 NEAR SOUTH COAST OF FRANCE. ML 2.4 (LDG), 1.9 (STR).

15 05 34 31.0 44.377 N 7.348 E 10 G 0.5 7 NORTHERN ITALY. ML 1.8 (GEN).

15 05 37 17.4 44.383 N 7.350 E 10 G 0.4 7 NORTHERN ITALY. ML 1.8 (GEN).

15 06 06 19.6 40.315 N 124.425 W 8 3 NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 2.7 (GM).

15 06 13 09.4 37.002 N 28.952 E 10 G 0.5 5 TURKEY. ML 3.3 (ISK).

15 06 19 56.8 26.364 S 27.347 E 5 G 0.6 5 REPUBLIC OF SOUTH AFRICA. ML 2.1 (PRE).

a 15 06 25 09.2 13.136 N 121.184 E 21 D 5.3 5.0 1.2 71 MINDORO, PHILIPPINE ISLANDS. Mw 5.5 (HRV). Felt in the epicentral area.

15 06 44 39.5 12.936 N 120.913 E 33 N 4.9 0.9 25 MINDORO, PHILIPPINE ISLANDS

15 06 57 01.8 12.944 N 121.058 E 33 N 4.9 0.6 21 MINDORO, PHILIPPINE ISLANDS

15 07 20 57.8 45.415 N 145.181 E 33 N 4.8 0.7 51 HOKKAIDO, JAPAN REGION

15 07 29 34.2 38.731 N 27.325 E 10 G 0.4 10 TURKEY. ML 3.4 (ISK).

15 07 54 10.3 26.908 S 26.722 E 5 G 1.0 7 REPUBLIC OF SOUTH AFRICA. ML 2.5 (PRE).

15 08 16 06.6 56.124 N 154.633 W 33 N 28 KODIAK ISLAND REGION. <AEIC>. ML 3.5 (AEIC).

15 08 47 18.2 47.26 N 10.75 E 10 G 0.5 5 AUSTRIA. ML 2.2 (VIE).

15 08 48 24.9 41.073 N 20.062 E 10 G 1.0 10 ALBANIA. ML 2.4 (TTG), 1.8 (SKO).

15 09 05 28.6 26.344 S 27.489 E 5 G 1.0 11 REPUBLIC OF SOUTH AFRICA. mbLg 3.0 (BUL). ML 2.9 (PRE).

15 09 22 11.8 38.943 N 24.705 E 10 G 1.2 16 AEGEAN SEA. MD 3.3 (ATH).

15 10 16 07.2 13.456 N 121.000 E 33 N 4.6 1.0 12 MINDORO, PHILIPPINE ISLANDS

15 10 40 48.7 13.474 N 121.235 E 33 N 4.8 4.5 1.0 25 MINDORO, PHILIPPINE ISLANDS

15 11 06 38.7 13.853 S 171.158 E 634 \* 4.8 0.9 97 VANUATU ISLANDS REGION

15 11 36 13.5 44.348 N 7.307 E 5 G 0.5 23 NORTHERN ITALY. ML 2.9 (STR), 2.8 (GEN), 2.5 (LDG).

15 11 41 03.0 12.830 N 120.910 E 33 N 4.7 4.0 1.1 17 MINDORO, PHILIPPINE ISLANDS

15 11 48 36.6 36.864 N 28.848 E 10 G 0.5 5 DODECANESE ISLANDS. ML 3.3 (ISK).

15 11 53 50.9 40.928 N 23.779 E 10 G 0.4 6 GREECE

15 14 04 01.1 44.468 N 146.934 E 33 N 4.7 0.8 19 KURIL ISLANDS

15 14 27 08.6 41.00 N 21.90 E 10 G 1.4 4 NORTHWESTERN BALKAN REGION. ML 1.8 (SKO).

15 14 29 13.9 40.200 N 124.162 W 3 28 NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.2 (GM). ML 3.3 (BRK), 2.9 (GS).

15 14 37 05.3 20.979 S 178.834 W 593 \* 5.0 0.9 39 FIJI ISLANDS REGION

15 14 56 06.6 33.22 S 72.27 W 10 G 0.4 10 OFF COAST OF CENTRAL CHILE. MD 3.9 (SAN).

15 14 57 31.3 26.358 S 27.396 E 5 G 1.5 10 REPUBLIC OF SOUTH AFRICA. ML 3.2 (PRE). mbLg 2.8 (BUL).

15 15 14 11.7 57.229 N 33.364 W 10 G 4.7 0.9 31 NORTH ATLANTIC OCEAN

15 15 41 16.8 44.526 N 7.387 E 10 G 0.3 5 NORTHERN ITALY. ML 1.8 (GEN).

15 15 56 24.3 26.404 S 27.400 E 5 G 0.5 8 REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).

15 17 48 02.7 26.37 S 27.35 E 5 G 0.7 4 REPUBLIC OF SOUTH AFRICA

15 18 10 52.7 26.376 S 27.350 E 5 G 0.4 5 REPUBLIC OF SOUTH AFRICA. ML 2.1 (PRE).

15 18 13 05.8 44.344 N 7.339 E 5 G 0.2 5 NORTHERN ITALY. ML 1.9 (GEN).

15 18 37 08.8 36.871 N 28.847 E 10 G 3.7 1.2 28 DODECANESE ISLANDS. ML 3.7 (ISK).

15 18 44 06.2 43.238 N 17.726 E 10 G 0.7 17 NORTHWESTERN BALKAN REGION. ML 3.3 (TTG).

15 18 52 34.4 52.650 N 175.221 W 33 N 4.8 0.9 39 ANDREANOF ISLANDS, ALEUTIAN IS. First and larger of two events about 66 seconds apart.

15 19 50 12.8 37.86 N 28.93 E 10 G 0.1 4 TURKEY. ML 2.9 (ISK).

15 20 16 17.6 34.370 S 70.514 W 110 G 0.2 11 CHILE-ARGENTINA BORDER REGION. MD 4.0 (SAN).

a 15 20 18 11.3 5.589 S 110.186 E 561 G 6.2 0.9 672 JAVA SEA. Mw 6.5 (GS), 6.5 (HRV). Depth from broadband displacement seismograms.

a 15 20 39 37.2 47.451 N 154.927 E 12 G 5.8 6.0 1.2 237 KURIL ISLANDS. Mw 6.0 (HRV). Ms 5.6 (BRK). Two events about 1.8 seconds apart. Depth from broadband displacement seismograms, based on second event.

15 21 09 47.0 38.696 N 26.378 E 10 G 3.7 0.6 26 AEGEAN SEA. MD 3.8 (ATH). ML 3.7 (ISK).

15 23 07 40.4 36.89 N 28.87 E 10 G 0.9 4 DODECANESE ISLANDS. ML 3.1 (ISK).

15 23 07 44.4 44.579 N 7.312 E 5 G 0.4 7 NORTHERN ITALY. ML 2.2 (GEN).

15 23 10 53.8 48.100 N 126.128 W 10 G 0.4 28 VANCOUVER ISLAND REGION. ML 3.0 (PGC).

15 23 34 11.8 36.55 N 3.01 W 10 G 0.5 4 STRAIT OF GIBRALTAR. mbLg 2.5 (MDD).

15 23 41 38.2 13.630 N 121.040 E 33 N 4.5 0.4 17 MINDORO, PHILIPPINE ISLANDS

15 23 59 54.5 22.393 N 118.772 E 13 D 5.2 4.9 1.1 87 TAIWAN REGION

16 00 04 21.1 40.342 N 124.630 W 21 30 NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.6 (GM). ML 3.4 (GS), 3.3 (BRK).

16 00 23 13.4 47.648 N 153.922 E 33 N 4.8 0.7 52 KURIL ISLANDS

16 01 08 08.4 9.39 S 33.51 E 10 G 4.4 1.6 14 TANZANIA. mbLg 4.5 (BUL).

16 01 12 06.4 40.868 N 22.878 E 10 G 0.5 5 GREECE

16 01 36 15.4 58.345 N 153.052 W 47 45 KODIAK ISLAND REGION. <AEIC>. ML 2.5 (AEIC).

16 02 11 56.7 13.074 N 121.024 E 28 \* 4.6 4.0 0.7 21 MINDORO, PHILIPPINE ISLANDS

16 02 12 53.4 31.457 S 68.444 W 100 G 0.3 6 SAN JUAN PROVINCE, ARGENTINA

16 02 21 04.3 17.757 N 66.769 W 5 G 0.6 11 PUERTO RICO REGION. MD 2.7 (MPR).

16 02 22 35.7 35.774 N 140.924 E 33 N 4.8 1.1 18 NEAR EAST COAST OF HONSHU, JAPAN

16 02 26 56.6 34.33 S 70.31 W 5 G 0.5 6 CHILE-ARGENTINA BORDER REGION

16 02 31 28.9 34.084 S 69.951 W 5 G 0.2 9 CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).

16 02 34 47.4 62.095 N 147.717 W 39 111 CENTRAL ALASKA. <AEIC>. ML 4.3 (AEIC), 4.2 (PMR). Felt (II) at Anchorage, Eagle River, Palmer and Sutton.

16 02 45 44.9 40.72 N 22.75 E 5 G 0.2 4 GREECE

16 02 50 59.1 34.064 S 70.014 W 5 G 0.3 9 CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).

16 02 52 04.9 34.082 S 70.046 W 8 5.1 1.1 79 CHILE-ARGENTINA BORDER REGION. MD 4.8 (SAN).

16 02 52 42.3 34.072 N 117.187 W 11 41 SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS), 3.3 (GS). Felt (IV) at March Air Force Base. Also felt at

|      |    |    |       |        |   |         |   |     |   |         |     |     |   |
|------|----|----|-------|--------|---|---------|---|-----|---|---------|-----|-----|---|
| 16   | 02 | 54 | 14.2* | 18.562 | N | 146.246 | E | 81  | * | 4.8     | 0.7 | 21  | Riverside.  |
| 16   | 02 | 58 | 55.77 | 34.09  | S | 69.93   | W | 5   | G |         | 0.2 | 6   | MARIANA ISLANDS   |
| 16   | 03 | 01 | 26.3* | 34.047 | S | 70.055  | W | 5   | G |         | 0.3 | 9   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 03 | 05 | 58.6* | 33.998 | S | 70.163  | W | 5   | G |         | 0.4 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
| 16   | 03 | 15 | 50.5* | 34.089 | S | 69.991  | W | 5   | G |         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).  |
| 16   | 03 | 17 | 50.6  | 33.966 | S | 70.202  | W | 5   | G |         | 0.5 | 12  | CHILE-ARGENTINA BORDER REGION. MD 4.1 (SAN).  |
| 16   | 03 | 23 | 39.8* | 34.059 | S | 70.070  | W | 5   | G |         | 0.6 | 8   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 03 | 26 | 44.3  | 43.168 | N | 18.795  | E | 10  | G |         | 0.6 | 10  | NORTHWESTERN BALKAN REGION. ML 2.0 (TTG).   |
| 16   | 03 | 36 | 36.8* | 34.10  | S | 69.95   | W | 5   | G |         | 0.1 | 7   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 03 | 51 | 43.2* | 34.081 | S | 70.024  | W | 5   | G |         | 0.4 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
| 16   | 04 | 06 | 38.9* | 34.02  | S | 70.07   | W | 5   | G |         | 0.5 | 7   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 04 | 26 | 35.8* | 39.011 | N | 26.626  | E | 10  | G |         | 0.4 | 5   | TURKEY. ML 3.0 (ISK).   |
| 16   | 05 | 07 | 29.8* | 34.079 | S | 70.013  | W | 5   | G |         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION   |
| 16   | 05 | 12 | 23.17 | 34.04  | S | 70.11   | W | 5   | G |         | 0.7 | 8   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 05 | 28 | 33.6* | 37.059 | N | 28.834  | E | 10  | G |         | 0.4 | 5   | TURKEY. ML 3.2 (ISK).   |
| 16   | 05 | 53 | 07.7* | 34.066 | S | 70.012  | W | 5   | G |         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).  |
| 16   | 06 | 49 | 44.8* | 34.09  | S | 69.95   | W | 5   | G |         | 0.2 | 7   | CHILE-ARGENTINA BORDER REGION   |
| a 16 | 06 | 54 | 03.1* | 56.173 | S | 142.612 | W | 10  | G | 5.4 5.6 | 1.2 | 49  | PACIFIC-ANTARCTIC RIDGE. Mw 5.8 (HRV). Mo=3.6*10**18 Nm (PPT).                          |
| 16   | 07 | 18 | 43.77 | 34.08  | S | 69.99   | W | 5   | G |         | 0.1 | 6   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 07 | 28 | 27.3* | 40.334 | N | 124.657 | W | 20  |   |         |     | 4   | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 2.8 (GM).                                      |
| 16   | 07 | 30 | 20.47 | 34.11  | S | 69.95   | W | 5   | G |         | 0.1 | 5   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 08 | 18 | 34.5* | 37.16  | N | 28.87   | E | 10  | G |         | 1.3 | 4   | TURKEY. ML 3.1 (ISK).   |
| 16   | 08 | 19 | 15.9  | 34.143 | S | 70.001  | W | 5   | G |         | 1.1 | 17  | CHILE-ARGENTINA BORDER REGION. MD 4.0 (SAN).  |
| 16   | 09 | 01 | 22.7* | 63.456 | N | 151.150 | W | 15  |   |         |     | 64  | CENTRAL ALASKA. <AEIC>. ML 2.9 (AEIC), 3.3 (PMR).                                       |
| 16   | 09 | 25 | 42.2* | 34.064 | S | 70.003  | W | 5   | G |         | 0.3 | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
| 16   | 10 | 16 | 08.6* | 39.965 | N | 28.872  | E | 10  | G |         | 0.5 | 7   | TURKEY. ML 2.9 (ISK).   |
| 16   | 10 | 59 | 27.4* | 36.275 | N | 70.996  | E | 33  | N | 4.7     | 1.1 | 17  | HINDU KUSH REGION, AFGHANISTAN  |
| 16   | 11 | 09 | 33.47 | 40.65  | N | 22.59   | E | 10  | G |         | 1.1 | 4   | GREECE  |
| 16   | 11 | 17 | 42.8* | 60.421 | N | 140.258 | W | 6   |   |         |     | 11  | SOUTHEASTERN ALASKA. <AEIC>. ML 2.5 (AEIC).   |
| 16   | 11 | 18 | 53.4* | 26.354 | S | 27.436  | E | 5   | G |         | 0.9 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.5 (PRE).   |
| 16   | 11 | 38 | 50.8* | 38.549 | N | 29.940  | E | 10  | G |         | 0.6 | 6   | TURKEY. ML 3.1 (ISK).   |
| 16   | 11 | 43 | 15.6* | 38.835 | N | 122.877 | W | 3   |   |         |     | 9   | NORTHERN CALIFORNIA. <GM-P>. MD 2.8 (GM). ML 2.8 (GS).                                  |
| 16   | 11 | 54 | 25.7* | 39.426 | N | 123.141 | W | 0   |   |         |     | 28  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.0 (GM). ML 3.0 (GS). Felt in the Ukiah area. |
| 16   | 12 | 01 | 18.9  | 40.467 | N | 24.027  | E | 10  | G |         | 0.6 | 10  | AEGEAN SEA  |
| 16   | 12 | 03 | 39.0* | 34.057 | S | 70.078  | W | 5   | G |         | 0.4 | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).  |
| 16   | 12 | 23 | 40.5* | 34.092 | S | 70.001  | W | 5   | G |         | 0.4 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
| 16   | 12 | 57 | 48.2* | 36.129 | N | 120.215 | W | 2   |   |         |     | 12  | CENTRAL CALIFORNIA. <GM-P>. MD 2.7 (GM). ML 2.7 (GS), 2.6 (PAS).                        |
| 16   | 13 | 04 | 47.77 | 34.10  | S | 69.94   | W | 5   | G |         | 0.2 | 6   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 13 | 13 | 19.4* | 39.230 | N | 27.711  | E | 10  | G |         | 0.1 | 5   | TURKEY. ML 2.8 (ISK).   |
| 16   | 13 | 49 | 17.1  | 34.223 | S | 70.036  | W | 5   | G |         | 1.4 | 18  | CHILE-ARGENTINA BORDER REGION. MD 4.0 (SAN).  |
| 16   | 13 | 56 | 46.3* | 34.09  | S | 69.95   | W | 5   | G |         | 0.2 | 7   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 13 | 58 | 32.3* | 33.20  | S | 70.32   | W | 5   | G |         | 0.4 | 4   | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
| 16   | 14 | 01 | 37.27 | 11.47  | S | 12.28   | W | 10  | G | 4.8 4.3 | 1.2 | 29  | ASCENSION ISLAND REGION   |
| 16   | 14 | 31 | 22.97 | 34.09  | S | 69.96   | W | 5   | G |         | 0.2 | 6   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 14 | 42 | 55.27 | 34.12  | S | 69.93   | W | 5   | G |         | 0.1 | 7   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 14 | 51 | 12.2* | 60.469 | N | 146.972 | W | 19  |   |         |     | 84  | SOUTHERN ALASKA. <AEIC>. ML 3.4 (AEIC), 3.5 (PMR).                                      |
| 16   | 14 | 54 | 29.5* | 37.747 | N | 27.508  | E | 10  | G |         | 0.7 | 8   | TURKEY. ML 3.3 (ISK).   |
| 16   | 16 | 20 | 56.8* | 34.07  | S | 69.99   | W | 5   | G |         | 0.4 | 7   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 17 | 11 | 23.2* | 33.995 | S | 70.218  | W | 5   | G |         | 0.8 | 8   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 17 | 16 | 43.9* | 34.09  | S | 69.96   | W | 5   | G |         | 0.1 | 6   | CHILE-ARGENTINA BORDER REGION   |
| 16   | 17 | 32 | 40.8* | 43.655 | N | 146.444 | E | 33  | N | 4.6     | 1.0 | 39  | KURIL ISLANDS   |
| 16   | 18 | 14 | 18.0* | 34.083 | S | 70.080  | W | 5   | G |         | 0.9 | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
| 16   | 18 | 55 | 45.47 | 38.37  | N | 27.67   | E | 10  | G |         | 1.2 | 4   | TURKEY. ML 2.9 (ISK).   |
| 16   | 18 | 58 | 25.8* | 13.937 | N | 92.571  | W | 33  | N | 4.5 3.8 | 1.2 | 34  | OFF COAST OF CHIAPAS, MEXICO  |
| 16   | 20 | 52 | 36.5* | 33.690 | S | 70.675  | W | 31  | * |         | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
| 16   | 21 | 20 | 42.77 | 34.02  | S | 70.03   | W | 5   | G |         | 1.1 | 8   | CHILE-ARGENTINA BORDER REGION   |
| a 16 | 21 | 32 | 47.6* | 10.263 | S | 13.166  | W | 10  | G | 4.7     | 1.5 | 21  | ASCENSION ISLAND REGION   |
| 16   | 21 | 34 | 52.0* | 10.182 | S | 13.258  | W | 10  | G | 5.1 4.9 | 0.9 | 46  | ASCENSION ISLAND REGION. Mw 5.3 (HRV).  |
| 16   | 22 | 13 | 41.4  | 39.052 | N | 26.046  | E | 10  | G |         | 1.1 | 11  | TURKEY. ML 3.4 (ISK). MD 3.4 (ATH).   |
| 16   | 22 | 14 | 56.5* | 33.16  | S | 72.25   | W | 10  | G |         | 0.4 | 10  | OFF COAST OF CENTRAL CHILE. MD 4.1 (SAN).   |
| 16   | 22 | 33 | 48.0* | 37.080 | N | 28.917  | E | 10  | G |         | 0.9 | 5   | TURKEY. ML 3.1 (ISK).   |
| 16   | 22 | 43 | 33.9* | 39.81  | N | 2.69    | W | 10  | G |         | 1.1 | 4   | SPAIN   |
| 16   | 23 | 46 | 30.8  | 43.109 | N | 147.116 | E | 33  | N | 4.9     | 0.9 | 67  | KURIL ISLANDS   |
| 16   | 23 | 49 | 03.27 | 43.92  | N | 146.51  | E | 33  | N |         | 1.0 | 6   | KURIL ISLANDS   |
| 16   | 23 | 50 | 36.1  | 13.005 | N | 121.026 | E | 23  | D | 4.8 4.2 | 1.0 | 30  | MINDORO, PHILIPPINE ISLANDS   |
| 17   | 00 | 13 | 10.7  | 21.812 | S | 174.663 | W | 33  | N | 5.1 4.8 | 0.8 | 43  | TONGA ISLANDS   |
| 17   | 00 | 17 | 53.0* | 37.433 | N | 118.558 | W | 11  |   |         |     | 8   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.7 (GM). ML 2.6 (GS).                      |
| 17   | 01 | 00 | 53.8* | 62.928 | N | 150.869 | W | 111 |   |         |     | 63  | CENTRAL ALASKA. <AEIC>.   |
| 17   | 01 | 32 | 21.7  | 32.461 | S | 71.820  | W | 12  |   | 0.6     |     | 16  | NEAR COAST OF CENTRAL CHILE. MD 4.0 (SAN).  |
| 17   | 01 | 40 | 46.5* | 37.431 | N | 118.560 | W | 12  |   |         |     | 26  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM). ML 3.0 (GS).                      |
| 17   | 02 | 07 | 51.27 | 34.09  | S | 69.94   | W | 5   | G |         | 0.2 | 7   | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
| 17   | 02 | 12 | 24.17 | 34.06  | S | 70.04   | W | 5   | G |         | 0.1 | 5   | CHILE-ARGENTINA BORDER REGION   |
| 17   | 02 | 19 | 48.07 | 31.82  | S | 72.30   | W | 33  | N |         | 1.0 | 16  | OFF COAST OF CENTRAL CHILE. MD 4.2 (SAN).   |
| 17   | 02 | 40 | 40.0* | 63.504 | N | 151.137 | W | 11  |   | 4.2     |     | 100 | CENTRAL ALASKA. <AEIC>. ML 4.3 (AEIC), 4.5 (PMR).                                       |
| 17   | 03 | 04 | 42.0  | 0.037  | N | 126.612 | E | 75  | ? | 4.6     | 1.3 | 19  | NORTHERN MOLUCCA SEA  |
| 17   | 03 | 12 | 46.1* | 34.079 | S | 70.030  | W | 5   | G |         | 0.6 | 8   | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |
| 17   | 03 | 31 | 13.4* | 32.064 | S | 71.837  | W | 10  | G |         | 1.1 | 15  | NEAR COAST OF CENTRAL CHILE. MD 3.9 (SAN).  |
| 17   | 03 | 42 | 32.47 | 34.10  | S | 69.98   | W | 5   | G |         | 0.4 | 7   | CHILE-ARGENTINA BORDER REGION   |
| 17   | 03 | 44 | 31.3* | 37.182 | N | 4.064   | W | 10  | G |         | 0.5 | 6   | SPAIN. mbLg 2.6 (MDD).  |
| 17   | 03 | 50 | 37.5  | 17.916 | N | 68.691  | W | 33  | N | 4.5     | 1.1 | 13  | MONA PASSAGE. MD 4.3 (MPR). Felt lightly at Higuey, Dominican Republic.                 |
| 17   | 04 | 14 | 55.9* | 34.064 | S | 70.016  | W | 5   | G |         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
| 17   | 04 | 18 | 41.47 | 34.10  | S | 69.94   | W | 5   | G |         | 0.2 | 6   | CHILE-ARGENTINA BORDER REGION. MD 4.5 (SAN).  |
| 17   | 05 | 34 | 57.4* | 63.448 | N | 151.123 | W | 13  |   |         |     | 46  | CENTRAL ALASKA. <AEIC>. ML 2.6 (AEIC), 2.8 (PMR).                                       |
| 17   | 05 | 35 | 32.8  | 22.440 | S | 66.020  | W | 274 | D | 5.1     | 1.1 | 138 | JUJUY PROVINCE, ARGENTINA   |
| 17   | 06 | 07 | 58.0  | 33.549 | N | 139.311 | E | 10  | G | 4.7     | 0.9 | 16  | SOUTH OF HONSHU, JAPAN  |
| 17   | 07 | 10 | 16.17 | 9.32   | S | 128.30  | E | 141 | ? | 4.2     | 1.3 | 6   | TIMOR SEA   |

|    |    |    |       |          |           |           |      |     |     |   |   |
|----|----|----|-------|----------|-----------|-----------|------|-----|-----|---|---|
| 17 | 07 | 26 | 04.7* | 36.093 S | 72.259 W  | 56 D      | 4.3  | 1.1 | 26  | NEAR COAST OF CENTRAL CHILE. MD 4.5 (SAN).  |   |
| 17 | 07 | 58 | 57.9? | 34.11 S  | 69.93 W   | 5 G       |      | 0.2 | 6   | CHILE-ARGENTINA BORDER REGION   |   |
| 17 | 08 | 59 | 57.3% | 34.049 S | 70.047 W  | 5 G       |      | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |   |
| 17 | 09 | 19 | 57.1? | 32.11 S  | 71.26 W   | 70 G      |      | 0.3 | 8   | NEAR COAST OF CENTRAL CHILE   |   |
| 17 | 09 | 21 | 15.1% | 63.511 N | 151.125 W | 11        |      |     | 40  | CENTRAL ALASKA. <AEIC>. ML 2.7 (AEIC), 2.9 (PMR).   |   |
| 17 | 09 | 30 | 58.7* | 20.782 S | 178.014 W | 469 *     | 4.2  | 0.9 | 18  | FIJI ISLANDS REGION   |   |
| 17 | 09 | 56 | 43.3% | 39.198 N | 27.391 E  | 10 G      |      | 0.3 | 5   | TURKEY. ML 2.7 (ISK).   |   |
| 17 | 10 | 19 | 55.9  | 36.038 N | 21.979 E  | 33 N      | 4.0  | 1.2 | 31  | SOUTHERN GREECE. MD 4.0 (ATH).  |   |
| 17 | 10 | 20 | 24.6% | 33.761 S | 71.014 W  | 70 G      |      | 0.4 | 10  | NEAR COAST OF CENTRAL CHILE   |   |
| 17 | 10 | 27 | 31.0  | 0.518 S  | 99.159 E  | 65 *      | 5.1  | 0.8 | 28  | SOUTHERN SUMATERA, INDONESIA  |   |
| 17 | 10 | 57 | 32.9? | 36.93 N  | 28.89 E   | 10 G      |      | 0.7 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).   |   |
| 17 | 10 | 57 | 41.3? | 34.14 S  | 69.89 W   | 5 G       |      | 0.2 | 6   | CHILE-ARGENTINA BORDER REGION   |   |
| 17 | 11 | 03 | 10.1% | 44.156 N | 7.763 E   | 10 G      |      | 0.4 | 5   | NORTHERN ITALY. ML 2.3 (GEN).   |   |
| 17 | 11 | 04 | 05.7? | 33.86 S  | 71.85 W   | 33 N      |      | 0.7 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.4 (SAN).  |   |
| 17 | 11 | 11 | 01.2  | 38.216 N | 112.728 W | 5 G       |      | 0.6 | 16  | UTAH. ML 3.3 (GS). MD 3.6 (SLC). Felt at Beaver.  |   |
| 17 | 11 | 26 | 01.4  | 1.357 N  | 126.995 E | 143 *     | 5.1  | 0.9 | 35  | NORTHERN MOLUCCA SEA  |   |
| 17 | 11 | 48 | 22.8% | 36.943 N | 28.842 E  | 10 G      |      | 0.8 | 6   | DODECANESE ISLANDS. ML 3.4 (ISK).   |   |
| 17 | 11 | 58 | 24.3% | 62.681 N | 148.953 W | 58        |      |     | 63  | CENTRAL ALASKA. <AEIC>. ML 3.0 (AEIC), 3.2 (PMR).   |   |
| 17 | 12 | 16 | 39.3% | 26.913 S | 26.712 E  | 5 G       |      | 1.0 | 9   | REPUBLIC OF SOUTH AFRICA. ML 2.9 (PRE).   |   |
| 17 | 12 | 36 | 03.1? | 34.06 S  | 70.08 W   | 5 G       |      | 0.3 | 5   | CHILE-ARGENTINA BORDER REGION   |   |
| 17 | 12 | 50 | 40.7% | 39.796 N | 29.289 E  | 10 G      |      | 0.8 | 6   | TURKEY. ML 2.8 (ISK).   |   |
| 17 | 13 | 46 | 29.2  | 37.731 N | 6.252 W   | 10 G      |      | 1.0 | 18  | SPAIN. mbLg 3.2 (MDD). MD 3.0 (SFS).  |   |
| 17 | 14 | 04 | 49.3  | 1.952 S  | 99.816 E  | 47 D      | 5.2  | 0.9 | 39  | SOUTHERN SUMATERA, INDONESIA  |   |
| 17 | 14 | 15 | 14.7* | 27.913 S | 26.674 E  | 5 G       |      | 1.2 | 10  | REPUBLIC OF SOUTH AFRICA. ML 3.5 (PRE).   |   |
| 17 | 14 | 15 | 54.6* | 42.065 N | 24.820 E  | 10 G      |      | 1.5 | 11  | BULGARIA  |   |
| 17 | 14 | 27 | 28.8? | 43.76 N  | 148.17 E  | 33 N      |      | 1.6 | 11  | EAST OF KURIL ISLANDS   |   |
| 17 | 14 | 34 | 24.3? | 39.59 N  | 29.54 E   | 10 G      |      | 1.1 | 4   | TURKEY. ML 2.7 (ISK).   |   |
| 17 | 14 | 59 | 20.6  | 18.622 N | 68.344 W  | 81 D      | 4.7  | 1.4 | 79  | MONA PASSAGE. MD 4.6 (MPR). Felt (IV) at Santo Domingo, Dominican Republic. Felt in the eastern part of the Dominican Republic and at Mayaguez, Puerto Rico.                    |   |
| 17 | 15 | 28 | 37.6% | 26.396 S | 27.392 E  | 5 G       |      | 0.8 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.2 (PRE).   |   |
| 17 | 16 | 24 | 04.0? | 46.75 N  | 151.64 E  | 180 *     |      | 0.7 | 13  | KURIL ISLANDS   |   |
| 17 | 16 | 44 | 12.9? | 26.34 S  | 27.59 E   | 5 G       |      | 0.9 | 4   | REPUBLIC OF SOUTH AFRICA  |   |
| 17 | 17 | 10 | 19.3% | 36.872 N | 28.818 E  | 10 G      |      | 0.5 | 7   | DODECANESE ISLANDS. ML 3.3 (ISK).   |   |
| 17 | 17 | 12 | 54.2% | 26.387 S | 27.401 E  | 5 G       |      | 0.7 | 7   | REPUBLIC OF SOUTH AFRICA. ML 2.5 (PRE).   |   |
| 17 | 17 | 30 | 47.3* | 51.406 N | 16.097 E  | 10 G      |      | 0.6 | 8   | POLAND. ML 2.6 (CLL).   |   |
| 17 | 17 | 33 | 28.7? | 34.08 S  | 69.98 W   | 5 G       |      | 0.2 | 5   | CHILE-ARGENTINA BORDER REGION   |   |
| 17 | 17 | 35 | 34.1% | 34.106 S | 70.028 W  | 5 G       |      | 0.6 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |   |
| 17 | 17 | 53 | 41.5* | 15.072 S | 167.502 E | 130 D     | 4.9  | 1.2 | 51  | VANUATU ISLANDS   |   |
| 17 | 18 | 19 | 03.0  | 38.967 N | 21.352 E  | 5 G       |      | 1.2 | 13  | GREECE. MD 3.0 (ATH).   |   |
| 17 | 18 | 34 | 42.5% | 36.877 N | 28.805 E  | 10 G      |      | 0.5 | 5   | DODECANESE ISLANDS. ML 3.3 (ISK).   |   |
| 17 | 19 | 19 | 22.0% | 40.748 N | 28.005 E  | 10 G      |      | 0.7 | 8   | TURKEY. ML 2.7 (ISK).   |   |
| 17 | 19 | 29 | 46.6% | 28.043 S | 26.873 E  | 5 G       |      | 1.1 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.7 (PRE).   |   |
| 17 | 19 | 54 | 23.4? | 34.10 S  | 69.93 W   | 5 G       |      | 0.1 | 7   | CHILE-ARGENTINA BORDER REGION   |   |
| 17 | 19 | 57 | 17.1* | 36.304 N | 70.777 E  | 33 N      | 4.5  | 1.4 | 15  | HINDU KUSH REGION, AFGHANISTAN  |   |
| 17 | 20 | 13 | 04.8  | 36.961 N | 28.906 E  | 10 G      |      | 1.1 | 28  | DODECANESE ISLANDS. ML 3.6 (ISK).   |   |
| 17 | 20 | 29 | 49.5% | 42.380 N | 122.044 W | 7         | 3.8  |     | 86  | OREGON. <SEA-P>. MD 3.9 (SEA). ML 4.4 (GS), 4.4 (BRK). Felt (IV) at Klamath River and Medford; (III) at Fort Klamath, Keno and Midland. Also felt at Ashland and Klamath Falls. |   |
| 17 | 20 | 57 | 54.0? | 32.00 S  | 116.72 E  | 10 G      |      | 0.0 | 4   | WESTERN AUSTRALIA   |   |
| 17 | 21 | 40 | 29.7% | 45.701 N | 120.178 W | 0         |      |     | 32  | WASHINGTON-OREGON BORDER REGION. <SEA-P>. MD 2.7 (SEA).   |   |
| 17 | 21 | 40 | 57.9% | 61.606 N | 150.982 W | 66        |      |     | 35  | SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).   |   |
| 17 | 21 | 55 | 38.2% | 39.026 N | 26.869 E  | 10 G      |      | 0.4 | 5   | TURKEY. ML 2.8 (ISK).   |   |
| 17 | 21 | 56 | 23.5% | 38.421 N | 27.863 E  | 10 G      |      | 0.3 | 6   | TURKEY. ML 3.1 (ISK).   |   |
| 17 | 22 | 42 | 13.0? | 9.39 N   | 82.98 W   | 5 G       |      | 0.2 | 4   | PANAMA-COSTA RICA BORDER REGION. MD 3.9 (UPA).  |   |
| 17 | 23 | 06 | 52.7? | 42.61 N  | 23.62 E   | 10 G      |      | 0.9 | 8   | BULGARIA  |   |
| 17 | 23 | 29 | 57.1% | 38.767 N | 119.702 W | 0         |      |     | 40  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM). ML 3.1 (BRK).   |   |
| 17 | 23 | 34 | 28.5* | 37.380 N | 21.364 E  | 33 N      |      | 0.9 | 7   | SOUTHERN GREECE. MD 3.6 (ATH).  |   |
| 17 | 23 | 45 | 53.9  | 42.456 N | 23.772 E  | 10 G      |      | 1.1 | 22  | BULGARIA. MD 3.1 (ATH).   |   |
| a  | 18 | 01 | 13    | 00.2     | 13.057 N  | 121.090 E | 20 D | 5.4 | 5.2 | 112   | MINDORO, PHILIPPINE ISLANDS. Mw 5.4 (HRV). Felt in the epicentral area. |
| 18 | 02 | 55 | 37.4* | 51.362 N | 175.971 W | 33 N      | 4.6  | 0.9 | 21  | ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.2 (PMR).   |   |
| 18 | 04 | 09 | 37.2% | 40.197 N | 23.599 E  | 10 G      |      | 0.7 | 7   | GREECE  |   |
| 18 | 05 | 14 | 03.4  | 13.017 N | 120.954 E | 33 N      | 4.9  | 0.7 | 14  | MINDORO, PHILIPPINE ISLANDS   |   |
| a  | 18 | 05 | 32    | 47.8*    | 41.938 S  | 83.784 W  | 10 G | 5.4 | 1.2 | 43  | WEST CHILE RISE. Mw 5.3 (HRV).  |
| 18 | 05 | 44 | 58.3% | 33.496 S | 70.895 W  | 71 ?      |      | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.2 (SAN).  |   |
| 18 | 05 | 48 | 26.5? | 34.10 S  | 69.97 W   | 5 G       |      | 0.2 | 7   | CHILE-ARGENTINA BORDER REGION   |   |
| 18 | 05 | 54 | 48.6% | 26.334 S | 27.503 E  | 5 G       |      | 1.0 | 7   | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).   |   |
| 18 | 06 | 58 | 19.0* | 19.070 N | 64.259 W  | 60 G      |      | 0.7 | 14  | VIRGIN ISLANDS. MD 3.6 (MPR).   |   |
| 18 | 07 | 54 | 17.7% | 44.714 N | 6.465 E   | 10 G      |      | 0.5 | 9   | FRANCE. ML 2.4 (GEN).   |   |
| 18 | 07 | 54 | 19.2? | 34.08 S  | 69.96 W   | 5 G       |      | 0.1 | 6   | CHILE-ARGENTINA BORDER REGION   |   |
| 18 | 08 | 17 | 22.9? | 44.04 N  | 146.27 E  | 33 N      | 4.8  | 0.4 | 14  | KURIL ISLANDS   |   |
| 18 | 09 | 04 | 30.7* | 51.561 N | 174.235 W | 33 N      | 4.4  | 1.1 | 10  | ANDREANOF ISLANDS, ALEUTIAN IS.   |   |
| 18 | 09 | 50 | 58.3% | 38.399 N | 122.630 W | 5         |      |     | 28  | NORTHERN CALIFORNIA. <GM-P>. MD 3.0 (GM). ML 3.0 (GS). Felt at Santa Rosa.  |   |
| 18 | 09 | 55 | 18.0% | 37.431 N | 118.560 W | 12        |      |     | 29  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM). ML 3.0 (GS).  |   |
| 18 | 10 | 25 | 53.2% | 39.645 N | 29.522 E  | 10 G      |      | 1.1 | 6   | TURKEY. ML 2.7 (ISK).   |   |
| 18 | 11 | 03 | 03.1  | 44.137 N | 12.163 E  | 10 G      |      | 1.3 | 59  | NORTHERN ITALY. MD 3.6 (TRI), 3.5 (FIR). ML 3.6 (LDG), 3.6 (VIE).   |   |
| 18 | 11 | 22 | 10.0% | 43.781 N | 70.918 W  | 5 G       |      |     | 4   | MAINE. <WES-P>. MD 2.6 (WES). mbLg 2.0 (GS). Felt (IV) at Kezar Falls; (III) at Cornish and West Baldwin. Also felt at Porter.  |   |
| 18 | 11 | 23 | 06.7% | 61.550 N | 144.820 W | 47        |      |     | 42  | SOUTHERN ALASKA. <AEIC>. ML 2.6 (AEIC).   |   |
| 18 | 13 | 00 | 39.9% | 26.334 S | 27.519 E  | 5 G       |      | 0.3 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.6 (PRE).   |   |
| 18 | 13 | 20 | 47.9  | 42.682 N | 23.873 E  | 10 G      |      | 0.7 | 9   | BULGARIA  |   |
| 18 | 13 | 21 | 05.0% | 39.908 N | 27.293 E  | 10 G      |      | 0.8 | 8   | TURKEY. ML 2.9 (ISK).   |   |
| 18 | 13 | 25 | 36.2% | 38.748 N | 26.407 E  | 10 G      |      | 0.7 | 10  | AEGEAN SEA. ML 3.4 (ISK).   |   |
| 18 | 13 | 34 | 56.4% | 39.690 N | 29.594 E  | 10 G      |      | 0.7 | 6   | TURKEY. ML 2.7 (ISK).   |   |
| 18 | 13 | 42 | 51.4* | 51.312 N | 16.076 E  | 10 G      |      | 0.5 | 6   | POLAND. ML 2.3 (CLL).   |   |
| 18 | 13 | 45 | 41.6% | 60.547 N | 150.621 W | 36        |      |     | 69  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.0 (AEIC).   |   |

|      |    |    |       |        |   |         |   |     |   |         |     |  |   |
|------|----|----|-------|--------|---|---------|---|-----|---|---------|-----|--|---|
| 18   | 13 | 56 | 20.6* | 43.316 | N | 148.033 | E | 33  | N | 4.7     | 0.8 | 18   | EAST OF KURIL ISLANDS   |
| 18   | 14 | 02 | 44.8% | 59.348 | N | 6.074   | E | 10  | G |         | 0.8 | 5  | SOUTHERN NORWAY. MD 1.4 (BER).                                    |
| 18   | 14 | 10 | 35.1% | 26.363 | S | 27.394  | E | 5   | G |         | 1.1 | 7  | REPUBLIC OF SOUTH AFRICA. ML 2.6 (PRE).                           |
| 18   | 14 | 15 | 54.1* | 51.481 | N | 16.169  | E | 10  | G |         | 0.7 | 6  | POLAND. MG 2.7 (WAR).   |
| 18   | 14 | 29 | 18.8* | 43.239 | N | 148.055 | E | 33  | N | 4.7     | 1.1 | 25   | EAST OF KURIL ISLANDS   |
| 18   | 15 | 13 | 00.9* | 9.905  | N | 83.130  | W | 33  | N | 4.1     | 1.3 | 6  | COSTA RICA. MD 4.4 (UPA).   |
| 18   | 15 | 26 | 36.3  | 37.000 | N | 28.873  | E | 10  | G |         | 1.0 | 8  | TURKEY. ML 3.4 (ISK).   |
| 18   | 15 | 47 | 25.2  | 43.571 | N | 147.483 | E | 33  | N | 5.5     | 0.8 | 232  | KURIL ISLANDS   |
| 18   | 15 | 48 | 58.2  | 44.291 | N | 7.393   | E | 5   | G |         | 0.4 | 17   | NORTHERN ITALY. ML 2.3 (GEN).                                     |
| 18   | 16 | 27 | 12.3* | 2.086  | N | 128.568 | E | 171 | * | 4.8     | 0.9 | 19   | HALMAHERA, INDONESIA  |
| 18   | 16 | 35 | 29.2* | 34.378 | S | 70.219  | W | 5   | G |         | 1.1 | 17   | CHILE-ARGENTINA BORDER REGION. MD 4.3 (SAN).                      |
| 18   | 16 | 49 | 07.8* | 34.75  | S | 70.89   | W | 80  | G |         | 0.4 | 9  | CHILE-ARGENTINA BORDER REGION                                     |
| 18   | 17 | 08 | 49.5* | 39.06  | N | 25.91   | E | 10  | G |         | 0.3 | 7  | AEGEAN SEA. ML 3.2 (ISK).   |
| 18   | 17 | 16 | 56.1* | 6.66   | S | 130.13  | E | 186 | * | 4.8     | 0.5 | 16   | BANDA SEA   |
| 18   | 17 | 18 | 44.6* | 31.446 | S | 68.555  | W | 100 | G |         | 0.5 | 7  | SAN JUAN PROVINCE, ARGENTINA                                      |
| 18   | 18 | 25 | 06.8% | 39.582 | N | 123.441 | W | 7   |   |         | 25  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 2.9 (GM).   |   |
| 18   | 18 | 35 | 50.8% | 17.386 | N | 95.007  | W | 33  | N |         | 1.4 | 5  | OAXACA, MEXICO  |
| 18   | 19 | 15 | 51.0% | 34.074 | S | 70.018  | W | 5   | G |         | 0.3 | 10   | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).                      |
| 18   | 19 | 33 | 09.3* | 43.288 | N | 13.095  | E | 10  | G |         | 1.1 | 31   | CENTRAL ITALY. ML 3.6 (LDG).                                      |
| 18   | 19 | 37 | 35.7* | 17.91  | S | 175.14  | W | 257 | * | 4.8     | 1.5 | 21   | TONGA ISLANDS   |
| 18   | 20 | 27 | 54.2* | 36.81  | N | 28.85   | E | 10  | G |         | 0.6 | 4  | DODECANESE ISLANDS. ML 3.3 (ISK).                                 |
| 18   | 20 | 33 | 34.6* | 2.618  | S | 138.534 | E | 33  | N | 4.9     | 0.9 | 20   | IRIAN JAYA, INDONESIA   |
| 18   | 20 | 46 | 54.1* | 36.39  | N | 3.04    | W | 10  | G |         | 1.0 | 8  | STRAIT OF GIBRALTAR. mbLg 2.6 (MDD).                              |
| 18   | 20 | 50 | 59.1% | 39.168 | N | 119.733 | W | 6   |   |         | 105 | NEVADA. <GM-P>. MD 4.1 (GM), 4.2 (REN). ML 4.4 (BRK), 4.0 (GS). Felt (V) at Carson City, (IV) at Virginia City and (III) at Gardnerville. Felt (III) at Loyalton, Pollock Pines and Tahoe City, California. Felt at Incline Village, Minden, Reno and Washoe City, Nevada. Also felt at Alta and in the South Lake Tahoe area, California. |   |
| 18   | 21 | 12 | 43.2% | 39.171 | N | 119.711 | W | 6   |   |         | 51  | NEVADA. <GM-P>. MD 3.4 (GM). ML 3.4 (GS), 3.4 (BRK).   |   |
| 18   | 21 | 29 | 43.6% | 60.298 | N | 150.987 | W | 39  |   |         | 78  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.3 (AEIC), 3.4 (PMR).   |   |
| 18   | 22 | 05 | 36.5* | 22.630 | N | 121.295 | E | 33  | N | 4.6     | 1.1 | 20   | TAIWAN REGION   |
| 18   | 22 | 15 | 36.9% | 38.750 | N | 119.675 | W | 0   |   |         | 5   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.7 (GM).  |   |
| 18   | 23 | 02 | 41.1* | 30.66  | S | 178.79  | W | 150 | G | 5.0     | 1.3 | 92   | KERMADEC ISLANDS, NEW ZEALAND                                     |
| 18   | 23 | 54 | 00.8* | 64.45  | N | 19.16   | W | 10  | G | 4.2 3.9 | 1.1 | 20   | ICELAND   |
| 19   | 00 | 31 | 22.2% | 39.934 | N | 24.231  | E | 10  | G |         | 0.9 | 7  | AEGEAN SEA  |
| 19   | 00 | 31 | 30.8% | 37.414 | N | 118.440 | W | 12  |   |         | 7   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.7 (GM).  |   |
| 19   | 01 | 22 | 05.9% | 42.405 | N | 19.263  | E | 19  | * |         | 0.2 | 9  | NORTHWESTERN BALKAN REGION. ML 1.4 (TTG).                         |
| 19   | 01 | 59 | 51.9* | 50.353 | N | 18.881  | E | 10  | G |         | 1.0 | 5  | POLAND. MG 2.8 (WAR).   |
| 19   | 02 | 11 | 47.8  | 38.169 | N | 112.681 | W | 5   | G |         | 0.6 | 18   | UTAH. ML 3.3 (GS).  |
| 19   | 02 | 18 | 01.3* | 27.82  | N | 56.89   | E | 33  | N | 4.6     | 0.9 | 17   | SOUTHERN IRAN   |
| 19   | 03 | 30 | 18.1% | 38.743 | N | 119.658 | W | 1   |   |         | 60  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.3 (GM). ML 3.3 (BRK), 3.2 (GS).  |   |
| 19   | 05 | 47 | 33.8% | 28.023 | S | 26.833  | E | 5   | G |         | 1.0 | 9  | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).                           |
| 19   | 05 | 48 | 04.2% | 37.923 | N | 27.921  | E | 10  | G |         | 0.4 | 7  | TURKEY. ML 3.0 (ISK).   |
| 19   | 05 | 53 | 21.0* | 39.233 | N | 26.425  | E | 10  | G |         | 1.3 | 18   | TURKEY. MD 3.4 (ATH). ML 3.3 (ISK).                               |
| 19   | 06 | 01 | 10.7* | 11.64  | S | 123.96  | E | 33  | N |         | 1.6 | 5  | SOUTH OF TIMOR, INDONESIA   |
| 19   | 06 | 13 | 09.6* | 52.85  | N | 153.08  | E | 400 | G | 4.0     | 1.1 | 12   | NORTHWEST OF KURIL ISLANDS  |
| 19   | 06 | 40 | 12.6% | 33.920 | S | 70.831  | W | 80  | G |         | 0.2 | 7  | CHILE-ARGENTINA BORDER REGION                                     |
| 19   | 07 | 31 | 21.6% | 11.270 | N | 61.800  | W | 10  | G |         | 0.7 | 5  | WINDWARD ISLANDS. MD 3.2 (TRN).                                   |
| 19   | 08 | 29 | 01.3  | 37.018 | N | 141.723 | E | 33  | N | 5.0     | 0.9 | 33   | NEAR EAST COAST OF HONSHU, JAPAN                                  |
| 19   | 08 | 30 | 14.8% | 52.188 | N | 115.199 | W | 5   | G |         | 1.1 | 24   | ALBERTA, CANADA. <PGC-P>. ML 4.0 (PGC), 3.9 (GS).                 |
| 19   | 08 | 52 | 35.5* | 35.85  | S | 72.21   | W | 33  | N | 4.4     | 0.6 | 27   | NEAR COAST OF CENTRAL CHILE. MD 4.7 (SAN).                        |
| 19   | 09 | 07 | 27.7  | 60.143 | N | 11.169  | E | 10  | G |         | 0.6 | 16   | SOUTHERN NORWAY. ML 3.5 (UPP). MD 3.3 (BER). Felt.                |
| 19   | 09 | 15 | 53.0* | 60.183 | N | 11.077  | E | 10  | G |         | 0.6 | 10   | SOUTHERN NORWAY. ML 2.7 (UPP), 2.6 (NAO). Felt.                   |
| 19   | 09 | 48 | 34.3* | 27.802 | S | 69.206  | W | 120 | G | 4.5     | 1.2 | 10   | NORTHERN CHILE  |
| 19   | 10 | 09 | 55.5* | 34.07  | S | 69.99   | W | 5   | G |         | 0.3 | 5  | CHILE-ARGENTINA BORDER REGION                                     |
| 19   | 10 | 39 | 49.0% | 60.158 | N | 152.736 | W | 106 |   |         | 81  | SOUTHERN ALASKA. <AEIC>.   |   |
| 19   | 10 | 53 | 57.9% | 33.999 | S | 70.180  | W | 5   | G |         | 0.5 | 12   | CHILE-ARGENTINA BORDER REGION. MD 3.9 (SAN).                      |
| 19   | 10 | 57 | 39.4% | 39.361 | N | 28.008  | E | 10  | G |         | 0.2 | 5  | TURKEY. ML 2.8 (ISK).   |
| 19   | 11 | 11 | 58.9  | 51.234 | N | 178.730 | E | 33  | N | 4.8 4.5 | 1.0 | 85   | RAT ISLANDS, ALEUTIAN ISLANDS                                     |
| 19   | 11 | 42 | 21.0% | 44.372 | N | 6.560   | E | 10  | G |         | 0.5 | 6  | FRANCE. ML 2.1 (GEN).   |
| 19   | 12 | 39 | 27.1* | 16.543 | N | 145.583 | E | 102 | * | 4.5     | 0.6 | 17   | MARIANA ISLANDS   |
| 19   | 12 | 54 | 35.5  | 44.351 | N | 8.678   | E | 5   | G |         | 1.1 | 48   | NORTHERN ITALY. ML 3.3 (GEN), 3.3 (LDG).                          |
| 19   | 14 | 11 | 40.7* | 20.781 | S | 177.711 | W | 500 | G | 4.9     | 0.7 | 22   | FIJI ISLANDS REGION   |
| 19   | 15 | 10 | 50.0% | 45.922 | N | 3.729   | E | 10  | G |         | 0.2 | 8  | FRANCE. ML 1.7 (LDG).   |
| 19   | 16 | 19 | 13.9* | 28.712 | S | 67.395  | W | 150 | G |         | 0.8 | 8  | LA RIOJA PROVINCE, ARGENTINA                                      |
| 19   | 16 | 34 | 11.1* | 34.09  | S | 69.94   | W | 5   | G |         | 0.1 | 6  | CHILE-ARGENTINA BORDER REGION                                     |
| 19   | 17 | 30 | 42.5% | 34.010 | S | 70.157  | W | 5   | G |         | 0.5 | 11   | CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).                      |
| 19   | 17 | 51 | 31.3% | 34.095 | S | 69.987  | W | 5   | G |         | 0.3 | 11   | CHILE-ARGENTINA BORDER REGION. MD 4.1 (SAN).                      |
| 19   | 18 | 01 | 44.5  | 37.786 | N | 112.954 | W | 5   | G |         | 0.6 | 15   | UTAH. ML 3.1 (GS). Felt (IV) at Cedar City. Also felt at Parowan. |
| 19   | 18 | 52 | 21.0* | 39.11  | N | 26.07   | E | 10  | G |         | 1.2 | 5  | TURKEY. ML 3.1 (ISK).   |
| 19   | 19 | 56 | 00.6* | 34.09  | S | 69.96   | W | 5   | G |         | 0.1 | 7  | CHILE-ARGENTINA BORDER REGION                                     |
| 19   | 20 | 32 | 46.9% | 34.332 | S | 70.152  | W | 5   | G |         | 0.5 | 9  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).                      |
| a 19 | 21 | 46 | 50.4  | 43.107 | N | 146.956 | E | 47  | D | 5.4     | 0.8 | 267  | KURIL ISLANDS. Mw 5.2 (HRV).                                      |
| 19   | 22 | 04 | 56.3% | 60.249 | N | 152.560 | W | 105 |   |         | 46  | SOUTHERN ALASKA. <AEIC>.   |   |
| 19   | 22 | 30 | 06.0* | 38.24  | N | 28.79   | E | 10  | G |         | 0.3 | 4  | TURKEY. ML 3.0 (ISK).   |
| 19   | 22 | 59 | 02.1  | 27.976 | S | 26.728  | E | 5   | G |         | 1.4 | 13   | REPUBLIC OF SOUTH AFRICA. mbLg 4.1 (BUL). ML 3.5 (PRE).           |
| 19   | 23 | 34 | 12.7  | 38.389 | N | 25.223  | E | 10  | G |         | 1.5 | 26   | AEGEAN SEA. MD 3.5 (ATH). ML 3.4 (ISK).                           |
| 20   | 00 | 54 | 14.3  | 51.253 | N | 179.082 | W | 33  | N | 5.0 4.2 | 0.8 | 127  | ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.6 (PMR).                     |
| 20   | 01 | 13 | 24.7* | 36.93  | N | 28.86   | E | 10  | G |         | 0.3 | 4  | DODECANESE ISLANDS. ML 3.2 (ISK).                                 |
| 20   | 01 | 22 | 13.5% | 49.180 | N | 125.535 | W | 38  |   |         | 66  | VANCOUVER ISLAND REGION. <PGC-P>. ML 3.8 (PGC), 3.9 (GS). Felt (III) at Port Albion, Tofino and Ucluelet.  |   |
| 20   | 01 | 32 | 45.5* | 31.512 | S | 68.768  | W | 100 | G |         | 1.1 | 10   | SAN JUAN PROVINCE, ARGENTINA                                      |
| 20   | 01 | 55 | 58.3* | 42.260 | N | 25.278  | E | 5   | G |         | 1.6 | 16   | BULGARIA  |
| 20   | 02 | 24 | 20.4* | 5.95   | S | 128.92  | E | 327 | * | 4.7     | 0.4 | 15   | BANDA SEA   |
| 20   | 02 | 31 | 17.0% | 44.408 | N | 8.581   | E | 5   | G |         | 0.4 | 6  | NORTHERN ITALY. ML 2.0 (GEN).                                     |
| 20   | 02 | 36 | 16.2% | 46.237 | N | 2.757   | E | 20  | * |         | 0.3 | 9  | FRANCE. ML 1.6 (LDG).   |
| 20   | 02 | 57 | 01.5  | 14.769 | N | 55.609  | E | 10  | G | 5.0     | 0.8 | 30   | ARABIAN SEA   |
| a 20 | 02 | 57 | 15.6  | 9.794  | S | 159.712 | E | 24  | D | 5.8 5.5 | 1.0 | 192  | SOLOMON ISLANDS. Mw 5.6 (HRV). Ms 5.3 (BRK). Felt (V)             |

|      |             |          |           |       |         |     |     |   |
|------|-------------|----------|-----------|-------|---------|-----|-----|---|
| 20   | 03 10 55.2* | 40.22 N  | 28.25 E   | 10 G  |         | 0.4 | 5   | TURKEY. ML 3.0 (ISK).   |
| 20   | 04 02 05.3* | 2.870 N  | 125.950 E | 137 ? | 4.6     | 0.7 | 12  | TALAUD ISLANDS, INDONESIA   |
| 20   | 04 31 43.4* | 34.012 N | 116.319 W | 6     |         |     | 69  | SOUTHERN CALIFORNIA. <PAS-P>. ML 4.2 (PAS), 4.2 (BRK), 4.3 (GS). Felt (IV) at La Quinta and Rancho Mirage. Felt (III) at White Water. Also felt at Yucca Valley.  |
| 20   | 05 30 01.9* | 13.570 N | 121.198 E | 33 N  | 4.8     | 1.2 | 18  | MINDORO, PHILIPPINE ISLANDS   |
| 20   | 05 34 25.3  | 13.558 N | 124.919 E | 33 N  | 4.8     | 1.0 | 24  | LUZON, PHILIPPINE ISLANDS   |
| 20   | 05 46 06.2* | 45.914 N | 10.865 E  | 10 G  |         | 0.4 | 6   | NORTHERN ITALY. ML 2.4 (VIE).   |
| 20   | 06 08 54.7* | 31.528 S | 68.807 W  | 100 G |         | 1.1 | 10  | SAN JUAN PROVINCE, ARGENTINA  |
| a 20 | 06 39 21.8  | 20.766 S | 172.748 E | 24 D  | 5.5 5.6 | 1.1 | 108 | VANUATU ISLANDS REGION. Mw 5.9 (HRV). Ms 5.5 (BRK). Mo=1.2*10**18 Nm (PPT).   |
| 20   | 07 30 58.6* | 61.840 N | 149.749 W | 48    |         |     | 58  | SOUTHERN ALASKA. <AEIC>. ML 2.7 (AEIC).   |
| 20   | 08 08 46.9* | 39.82 N  | 23.50 E   | 10 G  |         | 0.4 | 6   | AEIGIAN SEA   |
| 20   | 08 13 44.8* | 8.859 S  | 109.552 E | 33 N  | 4.0     | 1.2 | 13  | JAWA, INDONESIA   |
| 20   | 08 22 10.4* | 35.455 N | 136.865 E | 10 G  |         | 0.4 | 7   | WESTERN HONSHU, JAPAN. Felt (III JMA) at Gifu. Also felt in Aichi, Fukui, Kyoto, Mie, Nagano, Nara, Shiga and Yamanashi Prefectures.  |
| a 20 | 08 30 12.3  | 43.103 N | 146.946 E | 52 D  | 5.1     | 0.8 | 172 | KURIL ISLANDS. Mw 5.4 (HRV).  |
| 20   | 08 46 10.2* | 48.092 N | 145.599 E | 461 * | 4.2     | 0.7 | 30  | SEA OF OKHOTSK  |
| 20   | 09 28 37.0* | 44.106 N | 147.408 E | 38 D  | 4.9     | 1.0 | 54  | KURIL ISLANDS   |
| 20   | 09 50 30.3* | 34.679 N | 29.206 E  | 28 *  | 4.3     | 1.3 | 65  | EASTERN MEDITERRANEAN SEA   |
| 20   | 10 20 03.0  | 43.012 N | 19.107 E  | 10 G  |         | 1.5 | 20  | NORTHWESTERN BALKAN REGION. ML 3.4 (TIR). MD 3.2 (TTG).   |
| 20   | 14 29 05.3  | 0.854 N  | 127.195 E | 121 D | 5.0     | 1.1 | 54  | HALMAHERA, INDONESIA  |
| a 20 | 14 31 02.2* | 35.335 N | 39.557 E  | 29 D  | 5.1 4.9 | 1.2 | 189 | JORDAN - SYRIA REGION. Mw 5.4 (HRV).  |
| 20   | 14 42 22.1* | 36.864 N | 28.862 E  | 10 G  |         | 0.5 | 5   | DODECANESE ISLANDS. ML 3.3 (ISK).   |
| 20   | 15 14 25.8* | 33.472 S | 71.332 W  | 53 ?  |         | 0.3 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.3 (SAN).  |
| 20   | 15 38 56.4* | 18.070 S | 71.445 W  | 79 *  | 4.4     | 0.6 | 10  | OFF COAST OF NORTHERN CHILE   |
| 20   | 15 56 11.7  | 3.930 S  | 129.870 E | 33 N  | 4.9     | 1.0 | 25  | SERAM, INDONESIA  |
| 20   | 16 03 41.1* | 36.881 N | 118.198 W | 12    |         |     | 32  | CENTRAL CALIFORNIA. <GM-P>. MD 2.8 (GM). ML 2.9 (GS).   |
| 20   | 16 12 36.9* | 9.873 S  | 113.692 E | 33 N  | 4.9     | 1.1 | 14  | SOUTH OF JAWA, INDONESIA  |
| 20   | 16 19 06.1* | 10.25 S  | 161.38 E  | 89 ?  | 4.1     | 0.5 | 7   | SOLOMON ISLANDS   |
| 20   | 16 34 41.7  | 43.455 N | 147.351 E | 53 D  | 5.2     | 0.9 | 195 | KURIL ISLANDS   |
| a 20 | 16 59 05.6  | 2.001 S  | 135.932 E | 16 G  | 5.8 6.3 | 1.1 | 193 | IRIAN JAYA REGION, INDONESIA. Mw 6.3 (GS), 6.3 (HRV). Ms 6.2 (BRK). Mo=9.5*10**18 Nm (PPT). Twenty-eight people injured and many buildings damaged at Serui, Yapan. Felt strongly on Yapan. Also felt on Biak. Depth from broadband displacement seismograms. |
| 20   | 17 22 03.1* | 36.893 N | 28.858 E  | 10 G  |         | 0.4 | 6   | DODECANESE ISLANDS. ML 3.4 (ISK).   |
| 20   | 17 33 09.2* | 43.995 N | 147.240 E | 33 N  | 4.7     | 0.7 | 26  | KURIL ISLANDS   |
| 20   | 17 35 53.1* | 18.76 N  | 62.83 W   | 10 G  |         | 0.3 | 8   | LEEWARD ISLANDS. ML 3.6 (FDF).  |
| 20   | 17 48 12.5* | 42.950 N | 0.523 W   | 5 G   |         | 1.1 | 9   | PYRENEES. ML 2.3 (LDG).   |
| a 20 | 18 34 34.4* | 4.330 N  | 97.591 E  | 153 G | 5.7     | 1.3 | 422 | NORTHERN SUMATERA, INDONESIA. Mw 6.1 (GS), 6.0 (HRV). Felt at Banda Aceh. Two events about 2.1 seconds apart. Depth from broadband displacement seismograms, based on second event.   |
| 20   | 18 41 28.5* | 23.386 N | 142.995 E | 28 D  | 5.1 5.0 | 1.0 | 49  | VOLCANO ISLANDS REGION  |
| 20   | 19 04 31.9* | 34.791 N | 116.296 W | 4     |         |     | 6   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).   |
| 20   | 19 33 34.0* | 44.233 N | 70.600 W  | 5 G   |         |     | 8   | MAINE. <WES-P>. MD 3.0 (WES). mbLg 2.9 (GS). Felt (IV) at Locke Mills and Norway; (III) at Bryant Pond, Buckfield, Hanover, Peru, Turner, West Bethel and West Sumner. Also felt at Harrison, Oxford, South Paris and Sweden.                                 |
| 20   | 19 49 46.8* | 17.219 S | 173.705 W | 33 N  | 4.7     | 1.0 | 22  | TONGA ISLANDS   |
| 20   | 20 02 31.0  | 27.272 S | 179.212 W | 411   | 5.1     | 1.1 | 77  | KERMADEC ISLANDS REGION   |
| 20   | 20 34 37.3* | 63.322 N | 151.354 W | 7     |         |     | 30  | CENTRAL ALASKA. <AEIC>. ML 2.5 (AE  |

|    |    |    |       |        |        |         |         |     |     |     |     |     |     |  |  |
|----|----|----|-------|--------|--------|---------|---------|-----|-----|-----|-----|-----|-----|--|--|
| 21 | 10 | 27 | 01.6? | 2.26   | S      | 136.11  | E       | 33  | N   | 4.0 | 4.4 | 1.2 | 11  | IRIAN JAYA REGION, INDONESIA   |  |
| 21 | 11 | 55 | 30.4  | 42.887 | N      | 145.646 | E       | 51  |     | 5.1 |     | 0.8 | 139 | HOKKAIDO, JAPAN REGION. Felt (III JMA) at Kushiro; (II JMA) at Nemuro and (I JMA) at Abashiri.   |  |
| 21 | 12 | 29 | 19.7% | 37.107 | N      | 4.130   | W       | 10  | G   |     |     | 1.0 | 8   | SPAIN. mbLg 2.0 (MDD).   |  |
| 21 | 13 | 23 | 07.3% | 44.565 | N      | 6.936   | E       | 10  | G   |     |     | 0.5 | 5   | FRANCE. ML 1.9 (GEN).  |  |
| 21 | 13 | 57 | 58.5* | 43.360 | N      | 147.929 | E       | 33  | N   | 4.5 |     | 1.3 | 13  | KURIL ISLANDS  |  |
| 21 | 14 | 07 | 36.4? | 44.38  | N      | 7.27    | E       | 10  | G   |     |     | 0.1 | 4   | NORTHERN ITALY. ML 1.7 (GEN).  |  |
| 21 | 14 | 23 | 28.7% | 28.020 | S      | 26.853  | E       | 5   | G   |     |     | 1.0 | 9   | REPUBLIC OF SOUTH AFRICA. ML 2.6 (PRE).  |  |
| 21 | 14 | 36 | 36.8  | 46.087 | N      | 10.659  | E       | 10  | G   |     |     | 0.8 | 11  | NORTHERN ITALY. ML 2.5 (VIE).  |  |
| 21 | 14 | 38 | 08.3* | 31.562 | S      | 68.084  | W       | 33  | N   |     |     | 1.3 | 6   | SAN JUAN PROVINCE, ARGENTINA   |  |
| 21 | 15 | 17 | 13.6% | 35.470 | N      | 3.629   | W       | 10  | G   |     |     | 0.7 | 6   | STRAIT OF GIBRALTAR. mbLg 3.1 (MDD).   |  |
| 21 | 15 | 56 | 31.9% | 39.140 | N      | 30.341  | E       | 5   | G   |     |     | 0.5 | 5   | TURKEY. ML 3.0 (ISK).  |  |
| 21 | 16 | 10 | 30.0% | 44.419 | N      | 6.641   | E       | 5   | G   |     |     | 0.4 | 6   | FRANCE. ML 2.0 (GEN).  |  |
| 21 | 16 | 15 | 13.2% | 44.023 | N      | 7.117   | E       | 10  | G   |     |     | 0.2 | 9   | NORTHERN ITALY. ML 2.4 (GEN).  |  |
| 21 | 16 | 27 | 13.2? | 36.98  | N      | 28.81   | E       | 10  | G   |     |     | 0.5 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).  |  |
| 21 | 16 | 29 | 21.8? | 36.57  | N      | 3.04    | W       | 5   | G   |     |     | 0.8 | 5   | STRAIT OF GIBRALTAR. mbLg 2.5 (MDD).   |  |
| 21 | 16 | 59 | 34.8% | 44.035 | N      | 7.143   | E       | 10  | G   |     |     | 0.3 | 9   | NORTHERN ITALY. ML 2.4 (GEN).  |  |
| 21 | 18 | 48 | 12.5% | 36.243 | N      | 120.804 | W       | 9   |     |     |     |     | 33  | CENTRAL CALIFORNIA. <GM-P>. MD 2.9 (GM). ML 2.7 (GS), 2.7 (PAS).   |  |
| 21 | 18 | 52 | 30.9* | 5.437  | S      | 147.229 | E       | 176 |     | 5.3 |     | 1.1 | 18  | EASTERN NEW GUINEA REG., P.N.G.  |  |
| 21 | 18 | 55 | 16.4  | 35.902 | N      | 51.884  | E       | 33  | N   | 4.5 |     | 1.0 | 47  | NORTHERN IRAN. Felt in the Tehran area.  |  |
| 21 | 20 | 12 | 18.1? | 18.21  | N      | 67.25   | W       | 33  | N   |     |     | 0.5 | 5   | MONA PASSAGE   |  |
| 21 | 20 | 32 | 37.8% | 33.147 | S      | 70.297  | W       | 10  | G   |     |     | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).   |  |
| 21 | 20 | 52 | 14.0  | 43.155 | N      | 0.710   | W       | 5   | G   |     |     | 0.1 | 7   | PYRENEES. ML 2.2 (LDG).  |  |
| 21 | 21 | 05 | 36.6  | 60.194 | N      | 11.122  | E       | 10  | G   |     |     | 0.5 | 8   | SOUTHERN NORWAY. MD 2.7 (BER). Felt.   |  |
| 21 | 21 | 32 | 34.9% | 37.643 | N      | 118.954 | W       | 8   |     |     |     |     | 13  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM). ML 2.8 (GS).   |  |
| 21 | 21 | 35 | 20.4* | 42.914 | N      | 147.804 | E       | 33  | N   | 3.7 |     | 1.4 | 13  | OFF COAST OF HOKKAIDO, JAPAN   |  |
| 21 | 22 | 13 | 37.6* | 50.218 | N      | 18.878  | E       | 10  | G   |     |     | 1.3 | 6   | POLAND. ML 2.8 (WAR).  |  |
| 21 | 23 | 09 | 27.5  | 44.063 | N      | 7.142   | E       | 5   | G   |     |     | 0.4 | 15  | NORTHERN ITALY. ML 2.2 (GEN).  |  |
| 21 | 23 | 45 | 02.3% | 43.365 | N      | 7.060   | W       | 10  | G   |     |     | 0.8 | 7   | SPAIN. mbLg 3.1 (MDD). Felt (III) at Taramundi.  |  |
| 22 | 00 | 16 | 38.0* | 24.995 | N      | 96.192  | E       | 97  | ?   | 4.2 |     | 0.9 | 13  | MYANMAR  |  |
| 22 | 01 | 02 | 17.7* | 31.176 | S      | 67.999  | W       | 94  | ?   |     |     | 0.7 | 9   | SAN JUAN PROVINCE, ARGENTINA   |  |
| 22 | 01 | 09 | 13.3? | 47.79  | N      | 1.81    | W       | 10  | G   |     |     | 0.4 | 5   | FRANCE. ML 1.8 (LDG).  |  |
| 22 | 01 | 24 | 52.1? | 42.85  | N      | 147.47  | E       | 33  | N   | 4.8 |     | 1.1 | 14  | OFF COAST OF HOKKAIDO, JAPAN   |  |
| 22 | 02 | 44 | 38.4% | 40.310 | N      | 124.690 | W       | 18  |     |     |     |     | 26  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.0 (GM).   |  |
| 22 | 02 | 51 | 53.4  | 47.115 | N      | 11.321  | E       | 10  | G   |     |     | 0.9 | 22  | AUSTRIA. ML 2.4 (FUR), 2.2 (VIE).  |  |
| 22 | 03 | 04 | 02.7? | 39.25  | N      | 27.95   | E       | 10  | G   |     |     | 0.7 | 4   | TURKEY. ML 2.8 (ISK).  |  |
| 22 | 03 | 11 | 31.2* | 37.107 | S      | 72.484  | W       | 10  | G   |     |     | 0.8 | 20  | CENTRAL CHILE. MD 4.6 (SAN).   |  |
| 22 | 03 | 15 | 45.2* | 30.264 | S      | 69.364  | W       | 33  | N   |     |     | 0.4 | 6   | CHILE-ARGENTINA BORDER REGION  |  |
| 22 | 03 | 20 | 22.8  | 47.743 | N      | 13.711  | E       | 10  | G   |     |     | 0.9 | 17  | AUSTRIA. ML 2.9 (VIE), 2.7 (GRF), 2.7 (FUR).   |  |
| 22 | 03 | 58 | 43.2% | 62.126 | N      | 149.784 | W       | 51  |     |     |     |     | 84  | CENTRAL ALASKA. <AEIC>. ML 3.3 (AEIC), 3.5 (PMR).  |  |
| 22 | 04 | 16 | 40.3? | 31.45  | S      | 70.44   | W       | 146 | ?   |     |     | 0.5 | 12  | CHILE-ARGENTINA BORDER REGION. MD 4.1 (SAN).   |  |
| 22 | 04 | 56 | 50.0* | 1.949  | S      | 102.579 | E       | 236 | ?   | 5.1 |     | 0.6 | 20  | SOUTHERN SUMATRA, INDONESIA  |  |
| a  | 22 | 05 | 04    | 22.0   | 20.790 | S       | 178.390 | W   | 555 | D   | 5.3 |     | 0.9 | 325  | FIJI ISLANDS REGION. Mw 5.4 (HRV).   |
| 22 | 05 | 10 | 06.6% | 19.342 | N      | 155.113 | W       | 5   |     |     |     |     | 45  | HAWAII. <HVO-P>. MD 4.1 (HVO). Felt (V) at Keaau; (IV) at Kurtistown, Ninole, Papaaloa and Papaikou; (III) at Laupahoehoe and Pahala. Also felt at Hakalau, Hilo and Paauiilo. |  |
| 22 | 05 | 19 | 45.0  | 51.607 | N      | 16.097  | E       | 10  | G   |     |     | 1.2 | 20  | POLAND. ML 3.6 (GRF), 3.4 (VIE).   |  |
| 22 | 05 | 32 | 38.0  | 43.497 | N      | 6.457   | E       | 5   | G   |     |     | 0.9 | 13  | NEAR SOUTH COAST OF FRANCE. ML 2.0 (LDG), 1.6 (STR).   |  |
| 22 | 06 | 18 | 12.3? | 38.06  | N      | 71.83   | E       | 33  | N   |     |     | 0.7 | 12  | AFGHANISTAN-TAJIKISTAN BORD REG.   |  |
| 22 | 06 | 31 | 42.7? | 29.03  | S      | 69.45   | W       | 130 | G   |     |     | 0.2 | 7   | CHILE-ARGENTINA BORDER REGION  |  |
| 22 | 06 | 38 | 55.0? | 43.03  | N      | 147.97  | E       | 33  | N   | 4.8 |     | 1.4 | 7   | KURIL ISLANDS  |  |
| 22 | 07 | 16 | 33.0* | 31.158 | S      | 72.101  | W       | 24  |     |     |     | 0.8 | 20  | OFF COAST OF CENTRAL CHILE. MD 4.3 (SAN).  |  |
| 22 | 07 | 55 | 15.4  | 41.458 | N      | 20.166  | E       | 10  | G   |     |     | 0.8 | 21  | ALBANIA. ML 3.2 (TTG), 2.9 (THE).  |  |
| 22 | 08 | 07 | 10.1? | 36.73  | N      | 28.76   | E       | 10  | G   |     |     | 0.9 | 4   | DODECANESE ISLANDS. ML 3.2 (ISK).  |  |
| 22 | 08 | 39 | 21.0* | 19.886 | S      | 169.650 | E       | 10  | G   | 5.1 |     | 1.2 | 12  | VANUATU ISLANDS  |  |
| 22 | 09 | 12 | 17.4% | 41.648 | N      | 23.037  | E       | 10  | G   |     |     | 0.7 | 7   | GREECE-BULGARIA BORDER REGION. ML 2.6 (THE).   |  |
| 22 | 09 | 26 | 29.9% | 34.092 | S      | 70.018  | W       | 5   | G   |     |     | 0.5 | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).   |  |
| 22 | 09 | 53 | 03.9% | 40.652 | N      | 23.018  | E       | 5   | G   |     |     | 0.5 | 5   | GREECE. ML 1.5 (THE).  |  |
| 22 | 09 | 55 | 55.8% | 39.672 | N      | 29.581  | E       | 10  | G   |     |     | 0.8 | 5   | TURKEY. ML 2.8 (ISK).  |  |
| 22 | 10 | 03 | 15.3? | 34.78  | S      | 70.89   | W       | 100 | G   |     |     | 0.2 | 8   | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).   |  |
| 22 | 10 | 21 | 24.3* | 43.768 | N      | 8.262   | E       | 5   | G   |     |     | 0.6 | 11  | CORSICA. ML 2.2 (GEN).   |  |
| a  | 22 | 11 | 11    | 57.7   | 43.961 | N       | 147.293 | E   | 49  | D   | 5.6 | 5.1 | 0.8 | 417  | KURIL ISLANDS. Mw 5.6 (GS), 5.6 (HRV).   |
| 22 | 11 | 31 | 00.6  | 43.308 | N      | 0.648   | W       | 10  | G   |     |     | 1.1 | 11  | PYRENEES. ML 2.7 (LDG). Mining induced.  |  |
| 22 | 11 | 43 | 59.5? | 47.15  | N      | 11.35   | E       | 10  | G   |     |     | 0.1 | 4   | AUSTRIA. ML 0.6 (VIE).   |  |
| 22 | 12 | 01 | 15.9% | 28.007 | S      | 26.864  | E       | 5   | G   |     |     | 1.2 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.5 (PRE).  |  |
| 22 | 12 | 09 | 56.8* | 14.161 | N      | 96.045  | E       | 33  | N   | 4.6 |     | 1.3 | 17  | ANDAMAN ISLANDS, INDIA   |  |
| a  | 22 | 12 | 19    | 49.3   | 23.260 | S       | 69.409  | W   | 67  | D   | 4.9 |     | 0.9 | 58   | NORTHERN CHILE. Mw 5.1 (HRV). Felt (IV) at Antofagasta, Calama and Chuquicamata; (III) at Tocopilla. |
| 22 | 12 | 29 | 10.1  | 51.525 | N      | 16.107  | E       | 9   |     |     |     | 0.9 | 17  | POLAND. ML 3.8 (GRF), 3.6 (VIE).   |  |
| 22 | 12 | 34 | 26.9% | 26.368 | S      | 27.523  | E       | 5   | G   |     |     | 0.5 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).  |  |
| 22 | 12 | 54 | 45.2? | 39.25  | N      | 26.95   | E       | 10  | G   |     |     | 0.4 | 4   | TURKEY. ML 2.7 (ISK).  |  |
| 22 | 13 | 00 | 26.4* | 7.778  | S      | 158.057 | E       | 33  | N   | 4.9 |     | 0.6 | 17  | SOLOMON ISLANDS  |  |
| 22 | 13 | 14 | 19.6% | 39.686 | N      | 29.420  | E       | 10  | G   |     |     | 0.4 | 5   | TURKEY. ML 2.8 (ISK).  |  |
| 22 | 13 | 19 | 14.7% | 39.664 | N      | 29.399  | E       | 10  | G   |     |     | 0.3 | 5   | TURKEY. ML 2.8 (ISK).  |  |
| 22 | 14 | 13 | 58.4? | 58.43  | N      | 6.28    | E       | 5   | G   |     |     | 0.4 | 4   | SOUTHERN NORWAY. MD 2.0 (BER).   |  |
| 22 | 14 | 20 | 26.2? | 40.19  | N      | 29.18   | E       | 5   | G   |     |     | 0.6 | 4   | TURKEY. ML 2.8 (ISK).  |  |
| 22 | 14 | 35 | 29.0* | 21.614 | S      | 169.677 | E       | 33  | N   | 4.8 |     | 1.3 | 20  | LOYALTY ISLANDS REGION   |  |
| 22 | 14 | 56 | 07.1% | 39.667 | N      | 29.435  | E       | 10  | G   |     |     | 1.2 | 5   | TURKEY. ML 2.7 (ISK).  |  |
| a  | 22 | 15 | 05    | 02.6   | 3.235  | N       | 127.922 | E   | 138 | *   | 5.1 |     | 0.9 | 67   | TALAUD ISLANDS, INDONESIA. Mw 5.2 (HRV).   |
| a  | 22 | 15 | 38    | 35.0   | 13.661 | N       | 95.689  | E   | 33  | N   | 4.9 | 4.9 | 1.0 | 59   | ANDAMAN ISLANDS, INDIA. Mw 5.3 (HRV).  |
| 22 | 15 | 48 | 10.8  | 50.004 | N      | 19.131  | E       | 10  | G   |     |     | 0.7 | 6   | POLAND. ML 3.3 (WAR).  |  |
| 22 | 17 | 10 | 24.2* | 0.230  | S      | 16.211  | W       | 10  | G   | 5.0 |     | 0.5 | 14  | NORTH OF ASCENSION ISLAND  |  |
| 22 | 17 | 19 | 25.6  | 41.241 | N      | 21.919  | E       | 5   | G   |     |     | 0.7 | 10  | NORTHWESTERN BALKAN REGION. ML 2.1 (THE), 1.9 (SKO).   |  |
| 22 | 17 | 57 | 43.0? | 29.82  | S      | 72.33   | W       | 33  | N   |     |     | 1.2 | 12  | OFF COAST OF CENTRAL CHILE   |  |
| a  | 22 | 18 | 10    | 47.7   | 1.874  | S       | 136.115 | E   | 33  | N   | 5.2 | 4.8 | 1.0 | 46   | IRIAN JAYA REGION, INDONESIA. Mw 5.1 (HRV).  |
| 22 | 18 | 23 | 51.2? | 36.64  | N      | 28.78   | E       | 33  | N   |     |     | 0.7 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).  |  |
| a  | 22 | 19 | 08    | 12.6   | 7.764  | S       | 158.296 | E   | 33  | N   | 5.4 | 5.2 | 0.8 | 147  | SOLOMON ISLANDS. Mw 5.4 (HRV). Felt (IV) at Tabarato Village, Choiseul.                              |
| 22 | 19 | 13 | 34.2  | 27.992 | S      | 66.434  | W       | 189 |     | 4.6 |     | 1.2 | 48  | CATAMARCA PROVINCE, ARGENTINA. MD 4.7 (SAN).   |  |
| 22 | 19 | 25 | 23.1? | 39.42  | N      | 30.83   | E       | 5   | G   |     |     | 0.3 | 5   | TURKEY. ML 3.0 (ISK).  |  |



|      |    |    |       |        |   |         |   |     |   |     |     |     |  |
|------|----|----|-------|--------|---|---------|---|-----|---|-----|-----|-----|--|
| 22   | 21 | 10 | 52.87 | 19.36  | S | 168.75  | E | 127 | ? | 5.1 | 1.1 | 12  | VANUATU ISLANDS  |
| 22   | 21 | 23 | 30.8  | 43.550 | N | 127.187 | W | 10  | G | 4.6 | 0.8 | 107 | OFF COAST OF OREGON  |
| 22   | 21 | 46 | 43.28 | 37.145 | N | 4.223   | W | 10  | G |     | 0.2 | 7   | SPAIN. mbLg 2.2 (MDD).   |
| 22   | 22 | 04 | 01.17 | 44.18  | N | 147.12  | E | 33  | N | 4.5 | 0.8 | 7   | KURIL ISLANDS  |
| 22   | 22 | 54 | 32.17 | 44.52  | N | 7.24    | E | 10  | G |     | 0.1 | 4   | NORTHERN ITALY. ML 1.6 (GEN).  |
| 22   | 23 | 24 | 35.16 | 63.501 | N | 151.061 | W | 10  |   |     |     | 41  | CENTRAL ALASKA. <AEIC>. ML 2.6 (AEIC), 3.0 (PMR).  |
| 23   | 00 | 32 | 14.28 | 43.594 | N | 5.663   | E | 10  | G |     | 0.4 | 8   | NEAR SOUTH COAST OF FRANCE. ML 1.0 (STR).  |
| 23   | 01 | 15 | 42.1* | 39.571 | N | 19.737  | E | 10  | G |     | 1.3 | 14  | GREECE-ALBANIA BORDER REGION. MD 3.2 (ATH). ML 3.1 (THE).  |
| 23   | 01 | 40 | 09.87 | 40.38  | N | 26.21   | E | 5   | G |     | 0.8 | 4   | TURKEY. ML 3.1 (ISK).  |
| 23   | 01 | 40 | 37.68 | 16.561 | N | 61.866  | W | 33  | N |     | 0.5 | 6   | LEEWARD ISLANDS. ML 2.0 (FDF).   |
| 23   | 01 | 43 | 03.77 | 16.51  | N | 61.91   | W | 33  | N |     | 0.9 | 4   | LEEWARD ISLANDS  |
| 23   | 02 | 11 | 34.7  | 43.166 | N | 147.587 | E | 33  | N | 5.0 | 0.9 | 87  | KURIL ISLANDS  |
| 23   | 02 | 43 | 04.7  | 38.395 | N | 21.679  | E | 5   | G |     | 0.8 | 19  | GREECE. ML 3.4 (THE), 3.3 (ATH).   |
| 23   | 03 | 11 | 13.77 | 39.26  | N | 29.03   | E | 5   | G |     | 0.2 | 4   | TURKEY. ML 2.7 (ISK).  |
| 23   | 03 | 12 | 32.38 | 44.234 | N | 6.545   | E | 5   | G |     | 0.4 | 10  | FRANCE. ML 2.1 (GEN).  |
| 23   | 04 | 04 | 49.7  | 43.755 | N | 147.443 | E | 50  |   | 5.1 | 0.8 | 138 | KURIL ISLANDS  |
| 23   | 04 | 15 | 49.3* | 39.410 | N | 19.660  | E | 5   | G |     | 1.4 | 13  | GREECE-ALBANIA BORDER REGION. MD 3.1 (ATH). ML 2.9 (THE).  |
| 23   | 04 | 24 | 29.27 | 8.14   | S | 122.10  | E | 191 | ? | 5.0 | 0.6 | 11  | FLORES REGION, INDONESIA   |
| 23   | 04 | 25 | 33.8  | 47.825 | N | 7.199   | E | 10  | G |     | 0.2 | 6   | SWITZERLAND. ML 2.1 (LDG).   |
| a 23 | 05 | 09 | 44.1* | 37.663 | S | 175.941 | E | 181 | ? | 5.2 | 0.9 | 20  | NORTH ISLAND, NEW ZEALAND  |
| a 23 | 05 | 25 | 25.1  | 10.254 | N | 122.357 | E | 27  | D | 4.9 | 0.9 | 48  | PANAY, PHILIPPINE ISLANDS. Mw 5.1 (HRV).   |
| 23   | 05 | 26 | 17.57 | 43.70  | N | 147.78  | E | 33  | N | 4.0 | 1.3 | 9   | KURIL ISLANDS  |
| 23   | 05 | 45 | 55.5  | 39.306 | N | 20.615  | E | 10  | G |     | 0.9 | 12  | GREECE-ALBANIA BORDER REGION. MD 3.1 (ATH). ML 3.0 (THE).  |
| a 23 | 05 | 56 | 51.2* | 53.070 | S | 159.456 | E | 10  | G | 5.1 | 1.2 | 13  | MACQUARIE ISLANDS REGION. Mw 5.5 (HRV).  |
| 23   | 06 | 01 | 04.07 | 34.88  | S | 71.03   | W | 100 | G |     | 0.1 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.6 (SAN).   |
| 23   | 09 | 13 | 24.68 | 36.274 | N | 4.363   | W | 10  | G |     | 1.1 | 6   | STRAIT OF GIBRALTAR  |
| 23   | 09 | 21 | 09.2  | 12.251 | N | 143.883 | E | 33  | N | 5.0 | 0.3 | 14  | SOUTH OF MARIANA ISLANDS   |
| 23   | 09 | 28 | 51.97 | 17.70  | S | 178.72  | W | 568 | * | 4.2 | 1.2 | 13  | FIJI ISLANDS REGION  |
| 23   | 10 | 47 | 44.5* | 59.576 | N | 26.771  | E | 5   | G |     | 0.8 | 5   | BALTICS-BELARUS-NW RUSSIA REG. ML 2.5 (NAO).   |
| 23   | 11 | 14 | 47.07 | 39.63  | N | 29.43   | E | 5   | G |     | 0.3 | 4   | TURKEY. ML 2.8 (ISK).  |
| 23   | 12 | 08 | 35.0* | 68.869 | N | 29.727  | E | 10  | G |     | 1.2 | 5   | FINLAND-RUSSIA BORDER REGION. ML 2.5 (NAO).  |
| 23   | 13 | 19 | 51.27 | 39.65  | N | 29.42   | E | 10  | G |     | 1.5 | 4   | TURKEY. ML 2.8 (ISK).  |
| 23   | 13 | 39 | 58.07 | 41.36  | N | 22.48   | E | 10  | G |     | 0.7 | 6   | NORTHWESTERN BALKAN REGION. ML 1.6 (THE), 1.3 (SKO).   |
| 23   | 13 | 57 | 59.4  | 22.492 | S | 67.468  | W | 174 |   | 4.9 | 1.3 | 43  | CHILE-BOLIVIA BORDER REGION  |
| 23   | 14 | 37 | 38.3  | 41.180 | N | 21.981  | E | 5   | G |     | 0.6 | 10  | NORTHWESTERN BALKAN REGION. ML 2.4 (THE), 1.9 (SKO).   |
| 23   | 14 | 41 | 43.28 | 61.673 | N | 149.497 | W | 31  |   |     |     | 74  | SOUTHERN ALASKA. <AEIC>. ML 3.2 (AEIC), 3.4 (PMR). Felt (III) at Palmer; (II) at Chugiak and Eagle River.                            |
| 23   | 15 | 22 | 30.2* | 0.867  | N | 125.991 | E | 73  | ? | 5.1 | 0.9 | 25  | NORTHERN MOLUCCA SEA   |
| 23   | 16 | 12 | 03.38 | 36.819 | N | 28.908  | E | 10  | G |     | 0.3 | 6   | DODECANESE ISLANDS. ML 3.6 (ISK).  |
| 23   | 16 | 29 | 11.57 | 36.65  | N | 28.68   | E | 33  | N |     | 0.5 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).  |
| 23   | 16 | 30 | 48.9  | 39.500 | N | 111.520 | W | 5   | G |     | 0.9 | 14  | UTAH. ML 3.3 (GS). Felt (III) at Chester, Spring City and Wales. Also felt at Ephraim.   |
| 23   | 16 | 50 | 14.47 | 36.95  | N | 28.92   | E | 5   | G |     | 0.6 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).  |
| 23   | 18 | 06 | 07.58 | 16.859 | N | 61.620  | W | 10  | G |     | 0.5 | 7   | LEEWARD ISLANDS. ML 2.6 (FDF).   |
| 23   | 18 | 09 | 21.8  | 46.587 | N | 6.812   | E | 7   |   |     | 0.8 | 23  | SWITZERLAND. ML 2.5 (LDG).   |
| 23   | 18 | 26 | 40.77 | 36.68  | N | 28.72   | E | 33  | N |     | 0.2 | 4   | DODECANESE ISLANDS. ML 3.3 (ISK).  |
| 23   | 18 | 37 | 53.9  | 36.184 | N | 99.022  | E | 33  | N | 4.7 | 1.3 | 28  | QINGHAI, CHINA   |
| 23   | 19 | 09 | 52.57 | 35.88  | N | 141.20  | E | 33  | N |     | 1.1 | 7   | NEAR EAST COAST OF HONSHU, JAPAN   |
| a 23 | 19 | 10 | 26.6  | 7.016  | S | 156.676 | E | 23  | D | 5.4 | 1.0 | 77  | SOLOMON ISLANDS. Mw 5.3 (HRV). Felt (V) at Tabarato Village, Choiseul.   |
| 23   | 19 | 11 | 57.37 | 40.86  | N | 28.73   | E | 5   | G |     | 0.1 | 4   | TURKEY. ML 2.6 (ISK).  |
| 23   | 19 | 18 | 29.58 | 28.361 | S | 67.423  | W | 140 | G |     | 0.2 | 6   | LA RIOJA PROVINCE, ARGENTINA   |
| 23   | 19 | 36 | 04.68 | 33.151 | S | 70.296  | W | 5   | G |     | 0.4 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).   |
| 23   | 19 | 39 | 37.97 | 42.99  | N | 146.63  | E | 33  | N | 4.8 | 1.1 | 5   | OFF COAST OF HOKKAIDO, JAPAN   |
| 23   | 19 | 48 | 40.58 | 61.145 | N | 149.973 | W | 48  |   |     |     | 76  | SOUTHERN ALASKA. <AEIC>. ML 3.4 (AEIC), 3.5 (PMR). Felt (IV) at Eagle River; (III) at Anchorage and Fort Richardson; (II) at Palmer. |
| 23   | 20 | 42 | 20.8  | 9.220  | S | 106.785 | E | 33  | N | 5.4 | 0.7 | 28  | SOUTH OF JAWA, INDONESIA   |
| a 23 | 20 | 53 | 29.08 | 31.978 | S | 116.735 | E | 10  | G |     | 0.2 | 6   | WESTERN AUSTRALIA  |
| a 23 | 21 | 47 | 04.2  | 54.615 | N | 161.518 | E | 33  | D | 5.2 | 0.8 | 170 | NEAR EAST COAST OF KAMCHATKA. Mw 5.0 (HRV).  |
| 23   | 22 | 05 | 03.47 | 31.99  | S | 116.73  | E | 10  | G |     | 0.4 | 4   | WESTERN AUSTRALIA  |
| 23   | 22 | 28 | 25.88 | 44.265 | N | 8.226   | E | 10  | G |     | 0.3 | 5   | NORTHERN ITALY. ML 1.7 (GEN).  |
| 23   | 22 | 30 | 47.87 | 43.69  | N | 6.43    | E | 10  | G |     | 0.5 | 4   | NEAR SOUTH COAST OF FRANCE. ML 2.4 (LDG).  |
| 23   | 22 | 46 | 00.87 | 31.98  | S | 116.71  | E | 10  | G |     | 0.2 | 4   | WESTERN AUSTRALIA  |
| 23   | 23 | 30 | 48.67 | 31.99  | S | 116.72  | E | 10  | G |     | 0.1 | 4   | WESTERN AUSTRALIA  |
| 23   | 23 | 43 | 30.06 | 34.051 | N | 116.735 | W | 12  |   |     |     | 6   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).  |
| 23   | 23 | 47 | 06.8* | 10.445 | N | 122.551 | E | 33  | N | 4.8 | 1.3 | 13  | PANAY, PHILIPPINE ISLANDS  |
| 24   | 00 | 17 | 36.77 | 47.21  | N | 11.27   | E | 5   | G |     | 0.2 | 4   | AUSTRIA. ML 0.8 (VIE).   |
| 24   | 00 | 56 | 24.27 | 42.52  | N | 144.90  | E | 54  | ? | 4.7 | 0.6 | 9   | HOKKAIDO, JAPAN REGION   |
| 24   | 01 | 34 | 36.77 | 39.17  | N | 27.81   | E | 10  | G |     | 0.4 | 4   | TURKEY. ML 2.8 (ISK).  |
| 24   | 02 | 47 | 06.38 | 34.041 | S | 70.200  | W | 10  | G |     | 0.9 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).   |
| 24   | 03 | 02 | 40.47 | 39.66  | N | 27.68   | E | 10  | G |     | 0.5 | 4   | TURKEY. ML 2.6 (ISK).  |
| 24   | 03 | 05 | 24.0* | 21.871 | N | 120.877 | E | 33  | N | 4.5 | 1.4 | 7   | TAIWAN REGION  |
| 24   | 03 | 19 | 46.9* | 44.237 | N | 17.571  | E | 5   | G |     | 1.0 | 11  | NORTHWESTERN BALKAN REGION. ML 2.7 (TTG).  |
| 24   | 03 | 46 | 36.87 | 37.48  | N | 72.28   | E | 33  | N | 5.2 | 0.7 | 7   | TAJIKISTAN   |
| 24   | 05 | 08 | 02.4* | 31.496 | S | 69.225  | W | 119 | ? |     | 0.6 | 9   | SAN JUAN PROVINCE, ARGENTINA   |
| 24   | 05 | 19 | 53.38 | 26.892 | S | 26.687  | E | 5   | G |     | 0.9 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.4 (PRE).  |
| 24   | 06 | 00 | 38.3* | 7.313  | S | 156.376 | E | 33  | N | 5.4 | 0.8 | 21  | SOLOMON ISLANDS  |
| 24   | 06 | 43 | 32.18 | 35.390 | N | 119.372 | W | 6   | G |     |     | 69  | CENTRAL CALIFORNIA. <PAS-P>. ML 3.5 (PAS), 3.6 (BRK), 3.6 (GS). Felt (IV) at Buttonwillow, (III) at Fellows and (II) at Bakersfield. |
| 24   | 06 | 55 | 13.67 | 39.47  | N | 25.80   | E | 10  | G |     | 0.2 | 5   | AEGEAN SEA. ML 3.4 (ISK).  |
| 24   | 06 | 58 | 54.6* | 38.228 | N | 21.538  | E | 10  | G |     | 1.6 | 5   | GREECE. MD 3.0 (ATH).  |
| 24   | 07 | 14 | 57.9  | 38.365 | N | 21.745  | E | 5   | G |     | 1.3 | 10  | GREECE. MD 3.4 (ATH).  |
| 24   | 07 | 21 | 18.98 | 21.747 | S | 67.114  | W | 200 | G |     | 0.3 | 5   | CHILE-BOLIVIA BORDER REGION  |
| 24   | 08 | 03 | 23.5  | 9.903  | N | 122.419 | E | 115 | * | 4.9 | 0.8 | 19  | NEGROS, PHILIPPINE ISLANDS   |
| 24   | 08 | 49 | 21.37 | 31.20  | S | 68.52   | W | 72  | ? |     | 0.7 | 5   | SAN JUAN PROVINCE, ARGENTINA   |
| 24   | 09 | 09 | 00.87 | 39.23  | N | 27.20   | E | 10  | G |     | 0.7 | 4   | TURKEY. ML 2.8 (ISK).  |
| 24   | 09 | 18 | 01.9  | 16.026 | N | 61.410  | W | 10  | G |     | 0.1 | 4   | LEEWARD ISLANDS. ML 1.7 (FDF).   |
| 24   | 09 | 27 | 38.4  | 46.265 | N | 2.742   | E | 10  | G |     | 0.3 | 14  | FRANCE. ML 2.2 (LDG).  |

|      |             |        |   |         |   |     |   |         |     |     |  |
|------|-------------|--------|---|---------|---|-----|---|---------|-----|-----|--|
| 24   | 09 42 44.2? | 3.86   | S | 101.02  | E | 33  | N |         | 0.5 | 5   | SOUTHERN SUMATERA, INDONESIA   |
| 24   | 09 55 48.5  | 43.850 | N | 147.422 | E | 40  |   | 4.8 4.0 | 0.9 | 95  | KURIL ISLANDS. Felt (IV) on Shikotan and (III) at Kurilsk.             |
| 24   | 09 59 34.0  | 43.136 | N | 0.450   | W | 5   | G |         | 0.4 | 5   | PYRENEES. ML 1.0 (STR).  |
| 24   | 10 09 44.9  | 10.490 | S | 122.640 | E | 33  | N | 5.0     | 1.0 | 12  | SAVU SEA   |
| 24   | 10 15 54.2? | 39.96  | N | 28.84   | E | 5   | G |         | 0.1 | 4   | TURKEY. ML 2.6 (ISK).  |
| 24   | 10 24 39.4* | 45.150 | N | 28.408  | E | 10  | G |         | 0.8 | 7   | UKRAINE-MOLDOVA-SW RUSSIA REGION                                       |
| a 24 | 10 38 49.2  | 12.950 | N | 121.373 | E | 62  | * | 5.3     | 0.9 | 57  | MINDORO, PHILIPPINE ISLANDS. Mw 5.1 (HRV).                             |
| 24   | 10 51 39.3  | 39.677 | N | 29.449  | E | 10  | G |         | 0.2 | 5   | TURKEY. ML 2.8 (ISK).  |
| 24   | 11 03 40.9  | 60.328 | N | 151.164 | W | 41  |   |         |     | 50  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.6 (AEIC).                        |
| 24   | 11 06 00.6  | 40.383 | N | 28.295  | E | 5   | G |         | 0.1 | 8   | TURKEY. ML 2.8 (ISK).  |
| 24   | 11 22 06.8? | 47.21  | N | 11.27   | E | 5   | G |         | 0.2 | 4   | AUSTRIA. ML 1.0 (VIE).   |
| 24   | 12 22 30.1  | 38.812 | N | 122.801 | W | 2   |   |         |     | 10  | NORTHERN CALIFORNIA. <GM-P>. MD 2.8 (GM).                              |
| 24   | 12 31 46.9? | 39.71  | N | 29.44   | E | 10  | G |         | 0.6 | 6   | TURKEY. ML 2.9 (ISK).  |
| 24   | 13 18 18.0  | 58.453 | N | 154.214 | W | 87  |   |         |     | 43  | ALASKA PENINSULA. <AEIC>.  |
| a 24 | 13 21 15.5  | 5.294  | S | 150.461 | E | 142 | D | 5.5     | 0.8 | 173 | NEW BRITAIN REGION, P.N.G. Mw 5.4 (HRV).                               |
| 24   | 13 48 27.6  | 38.777 | N | 119.727 | W | 9   |   |         |     | 19  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM). ML 3.0 (BRK).    |
| 24   | 14 04 52.9  | 15.741 | N | 99.101  | W | 33  | N |         | 0.6 | 6   | OFF COAST OF GUERRERO, MEXICO  |
| 24   | 14 05 56.7? | 39.32  | N | 29.50   | E | 10  | G |         | 0.1 | 4   | TURKEY. ML 2.7 (ISK).  |
| 24   | 14 16 43.1? | 31.65  | S | 69.78   | W | 152 | ? |         | 0.2 | 7   | SAN JUAN PROVINCE, ARGENTINA   |
| 24   | 14 41 25.2? | 31.98  | S | 116.72  | E | 10  | G |         | 0.3 | 4   | WESTERN AUSTRALIA  |
| 24   | 15 12 38.1? | 16.18  | N | 61.68   | W | 120 | G |         | 0.6 | 7   | LEEWARD ISLANDS  |
| 24   | 16 15 14.3  | 38.337 | N | 21.817  | E | 5   | G |         | 1.3 | 23  | GREECE. ML 3.5 (ATH).  |
| 24   | 16 21 49.4  | 38.359 | N | 21.769  | E | 5   | G |         | 1.2 | 10  | GREECE. ML 3.1 (ATH).  |
| 24   | 16 34 35.4? | 4.97   | S | 125.30  | E | 461 | ? |         | 0.4 | 6   | BANDA SEA  |
| 24   | 17 17 53.7  | 27.993 | S | 26.792  | E | 5   | G |         | 1.0 | 8   | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).                                |
| 24   | 17 35 09.5? | 47.71  | S | 102.79  | E | 10  | G | 4.9 4.7 | 0.9 | 14  | SOUTHEAST INDIAN RIDGE   |
| 24   | 18 01 02.2? | 47.55  | N | 14.86   | E | 10  | G |         | 0.1 | 4   | AUSTRIA. ML 3.0 (VIE).   |
| 24   | 18 44 53.7? | 50.46  | N | 18.76   | E | 10  | G |         | 0.0 | 4   | POLAND. MG 2.8 (WAR).  |
| 24   | 18 53 39.6? | 47.29  | N | 11.31   | E | 5   | G |         | 0.0 | 4   | AUSTRIA. ML 0.8 (VIE).   |
| a 24 | 18 54 07.8? | 18.67  | N | 66.46   | W | 67  | ? |         | 0.2 | 9   | PUERTO RICO REGION. MD 3.0 (MPR).                                      |
| 24   | 19 42 44.6  | 13.099 | S | 167.100 | E | 218 | D | 5.6     | 0.9 | 212 | VANUATU ISLANDS. Mw 5.4 (HRV).   |
| 24   | 20 01 11.7  | 40.267 | N | 22.756  | E | 10  | G |         | 0.3 | 8   | GREECE. ML 1.6 (THE).  |
| 24   | 20 03 21.2  | 31.970 | S | 116.723 | E | 10  | G |         | 0.7 | 6   | WESTERN AUSTRALIA  |
| 24   | 21 15 42.0? | 44.46  | N | 8.46    | E | 5   | G |         | 0.4 | 4   | NORTHERN ITALY. ML 1.9 (GEN).  |
| 24   | 21 17 33.8  | 43.865 | N | 6.398   | E | 5   | G |         | 0.7 | 61  | NEAR SOUTH COAST OF FRANCE. ML 3.6 (GEN), 3.5 (LDG), 3.1 (STR).        |
| 24   | 21 35 50.1? | 42.92  | N | 147.98  | E | 33  | N | 4.4     | 0.6 | 12  | OFF COAST OF HOKKAIDO, JAPAN   |
| 24   | 22 00 28.3? | 3.62   | S | 142.37  | E | 25  | * | 4.6     | 1.0 | 8   | NEAR N COAST OF NEW GUINEA, PNG.                                       |
| 24   | 22 17 24.8? | 44.14  | N | 146.69  | E | 33  | N | 5.1     | 0.7 | 9   | KURIL ISLANDS  |
| 24   | 22 24 02.8  | 42.253 | N | 71.064  | E | 33  | N | 4.6     | 0.9 | 23  | KYRGYZSTAN   |
| 24   | 22 34 32.6* | 33.537 | S | 70.830  | W | 102 | * |         | 0.5 | 12  | CHILE-ARGENTINA BORDER REGION. MD 3.9 (SAN).                           |
| 24   | 23 00 01.1  | 47.876 | N | 7.568   | E | 10  | G |         | 0.8 | 14  | SWITZERLAND. ML 2.3 (LDG), 1.8 (STR).                                  |
| 24   | 23 37 41.1  | 44.524 | N | 7.461   | E | 12  |   |         | 0.6 | 26  | NORTHERN ITALY. ML 2.8 (GEN), 2.6 (LDG).                               |
| 24   | 23 46 39.7* | 46.639 | N | 13.680  | E | 5   | G |         | 1.4 | 6   | AUSTRIA. MD 2.4 (LJU), ML 2.1 (VIE).                                   |
| 25   | 00 21 58.2  | 34.789 | N | 116.301 | W | 4   |   |         |     | 23  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).                            |
| 25   | 00 35 07.8  | 40.641 | N | 19.856  | E | 5   | G |         | 0.8 | 24  | ALBANIA. ML 3.4 (TTG), 3.3 (THE), 3.0 (SKO). MD 3.4 (ATH).             |
| 25   | 00 45 49.9? | 37.06  | N | 28.82   | E | 10  | G |         | 1.0 | 4   | TURKEY. ML 3.1 (ISK).  |
| 25   | 02 05 44.1  | 50.273 | N | 18.869  | E | 10  | G |         | 0.6 | 7   | POLAND. MG 2.9 (WAR).  |
| 25   | 02 11 43.6* | 43.202 | N | 0.458   | W | 10  | G |         | 0.2 | 6   | PYRENEES. ML 2.1 (LDG).  |
| 25   | 02 17 38.0  | 40.584 | N | 21.236  | E | 5   | G |         | 0.9 | 14  | GREECE. ML 2.9 (THE).  |
| 25   | 02 30 17.0* | 43.202 | N | 0.449   | W | 10  | G |         | 0.2 | 6   | PYRENEES. ML 2.6 (LDG).  |
| 25   | 03 05 22.4  | 33.976 | S | 70.123  | W | 10  | G |         | 0.4 | 9   | CHILE-ARGENTINA BORDER REGION  |
| 25   | 03 18 46.4  | 40.746 | N | 21.344  | E | 10  | G |         | 1.0 | 11  | GREECE. ML 2.7 (THE), 2.2 (SKO).                                       |
| 25   | 05 33 17.3  | 34.651 | N | 4.575   | W | 78  |   | 4.4     | 1.1 | 155 | MOROCCO. MD 4.2 (MDD), 4.1 (SFS).                                      |
| 25   | 06 06 54.9? | 34.11  | S | 69.91   | W | 5   | G |         | 0.1 | 6   | CHILE-ARGENTINA BORDER REGION  |
| 25   | 06 27 01.6? | 11.00  | N | 62.11   | W | 80  | G |         | 0.2 | 5   | WINDWARD ISLANDS. MD 3.5 (TRN).  |
| 25   | 07 07 55.3  | 44.436 | N | 114.193 | W | 5   | G |         | 0.4 | 9   | WESTERN IDAHO. ML 2.7 (BUT). Felt at Challis.                          |
| 25   | 07 22 52.2  | 28.059 | S | 26.866  | E | 5   | G |         | 0.9 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.2 (PRE).                                |
| 25   | 07 25 32.2  | 59.737 | N | 152.600 | W | 91  |   | 3.1     |     | 59  | SOUTHERN ALASKA. <AEIC>.   |
| 25   | 07 30 06.0* | 51.380 | N | 16.278  | E | 10  | G |         | 1.0 | 7   | POLAND   |
| 25   | 07 36 33.8* | 45.565 | N | 20.950  | E | 10  | G |         | 1.4 | 5   | NORTHWESTERN BALKAN REGION   |
| 25   | 08 08 44.8  | 26.393 | S | 27.346  | E | 5   | G |         | 1.2 | 8   | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).                                |
| 25   | 08 15 13.3  | 40.212 | N | 28.040  | E | 5   | G |         | 0.4 | 5   | TURKEY. ML 2.8 (ISK).  |
| 25   | 08 17 26.3  | 31.497 | N | 114.421 | W | 16  |   |         |     | 5   | GULF OF CALIFORNIA. <ECX-P>. MD 3.5 (ECX).                             |
| a 25 | 08 49 50.0  | 43.809 | N | 149.012 | E | 61  | D | 5.4     | 0.9 | 212 | EAST OF KURIL ISLANDS. Mw 5.2 (HRV).                                   |
| 25   | 10 34 15.9  | 39.954 | N | 28.918  | E | 10  | G |         | 0.4 | 8   | TURKEY. ML 2.8 (ISK).  |
| 25   | 10 49 59.3  | 46.112 | N | 0.207   | W | 5   | G |         | 1.0 | 14  | FRANCE. ML 2.8 (LDG), 2.7 (STR).                                       |
| 25   | 10 52 22.7  | 26.239 | S | 27.722  | E | 5   | G |         | 1.1 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).                                |
| 25   | 11 36 50.1? | 34.03  | S | 70.65   | W | 100 | G |         | 0.2 | 6   | CHILE-ARGENTINA BORDER REGION  |
| 25   | 11 36 58.6? | 39.64  | N | 29.48   | E | 5   | G |         | 0.3 | 4   | TURKEY. ML 2.7 (ISK).  |
| 25   | 11 47 04.8  | 62.783 | N | 149.645 | W | 74  |   |         |     | 85  | CENTRAL ALASKA. <AEIC>.  |
| 25   | 11 47 46.6* | 63.278 | N | 27.067  | E | 5   | G |         | 0.5 | 5   | FINLAND. ML 2.3 (NAO).   |
| 25   | 12 42 04.3* | 15.197 | N | 123.906 | E | 33  | N | 4.6     | 1.2 | 10  | PHILIPPINE ISLANDS REGION  |
| 25   | 12 51 40.5  | 34.377 | S | 70.405  | W | 10  | G |         | 0.5 | 11  | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).                           |
| 25   | 12 55 47.4? | 39.18  | N | 27.35   | E | 10  | G |         | 0.1 | 4   | TURKEY. ML 2.8 (ISK).  |
| 25   | 13 18 40.7  | 15.033 | N | 123.785 | E | 22  | D | 5.1     | 0.8 | 59  | PHILIPPINE ISLANDS REGION  |
| 25   | 13 30 58.4? | 36.67  | N | 28.92   | E | 5   | G |         | 0.5 | 4   | DODECANESE ISLANDS. ML 3.0 (ISK).                                      |
| 25   | 13 43 15.1? | 39.65  | N | 29.48   | E | 10  | G |         | 0.3 | 4   | TURKEY. ML 2.8 (ISK).  |
| 25   | 14 22 12.3* | 17.660 | S | 73.246  | W | 10  | G | 4.8     | 1.3 | 8   | OFF COAST OF PERU  |
| 25   | 14 32 13.1  | 33.196 | S | 70.346  | W | 5   | G |         | 0.1 | 7   | CHILE-ARGENTINA BORDER REGION  |
| 25   | 16 01 31.4  | 40.902 | N | 28.517  | E | 10  | G |         | 0.7 | 5   | TURKEY. ML 2.7 (ISK).  |
| 25   | 16 14 09.4* | 31.403 | S | 69.236  | W | 85  | ? |         | 0.4 | 7   | SAN JUAN PROVINCE, ARGENTINA   |
| 25   | 16 25 27.5  | 63.061 | N | 150.951 | W | 118 |   |         |     | 42  | CENTRAL ALASKA. <AEIC>.  |
| 25   | 16 57 33.6* | 31.306 | S | 68.967  | W | 85  | ? |         | 0.1 | 7   | SAN JUAN PROVINCE, ARGENTINA   |
| 25   | 17 10 29.1  | 53.114 | N | 1.185   | W | 5   | G |         | 0.5 | 7   | UNITED KINGDOM. ML 2.1 (BGS). Felt (III) at Mansfield. Mining induced. |
| 25   | 17 28 13.1  | 37.583 | N | 2.357   | W | 10  | G |         | 1.1 | 5   | SPAIN. mbLg 2.6 (MDD).   |
| 25   | 17 30 09.4  | 38.633 | N | 24.103  | E | 5   | G |         | 1.0 | 14  | AEGEAN SEA. ML 3.2 (ATH), 2.9 (THE).                                   |
| 25   | 17 31 38.9  | 26.433 | S | 27.358  | E | 5   | G |         | 1.1 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.1 (PRE).                                |
| 25   | 18 36 01.1  | 64.558 | N | 150.137 | W | 18  |   |         |     | 42  | CENTRAL ALASKA. <AEIC>. ML 2.7 (AEIC), 3.1 (PMR).                      |

|      |             |          |           |       |         |     |   |  |
|------|-------------|----------|-----------|-------|---------|-----|---|--|
| 25   | 18 39 30.3  | 31.346 S | 68.794 W  | 124 * | 1.0     | 20  | SAN JUAN PROVINCE, ARGENTINA. MD 4.1 (SAN).           |  |
| 25   | 18 52 57.7* | 19.622 N | 97.330 W  | 20 *  | 1.1     | 9   | VERACRUZ, MEXICO                                      |  |
| 25   | 18 59 28.5  | 46.173 N | 7.212 E   | 5 G   | 0.6     | 11  | SWITZERLAND. ML 2.5 (LDG).                            |  |
| 25   | 19 12 57.5? | 34.80 N  | 142.53 E  | 33 N  | 4.9     | 9   | OFF EAST COAST OF HONSHU, JAPAN                       |  |
| 25   | 19 16 48.7  | 41.808 N | 20.182 E  | 5 G   | 0.5     | 12  | ALBANIA. ML 3.2 (TTG), 2.6 (SKO).                     |  |
| 25   | 19 50 57.5* | 63.674 N | 149.397 W | 117   |         | 48  | CENTRAL ALASKA. <AEIC>.                               |  |
| 25   | 21 02 08.2  | 21.509 N | 93.270 E  | 33 N  | 4.7     | 36  | MYANMAR   |  |
| 25   | 21 07 18.6* | 59.600 N | 5.558 E   | 0 G   | 0.3     | 6   | SOUTHERN NORWAY. MD 1.5 (BER).                        |  |
| 25   | 21 19 24.8* | 16.705 N | 62.153 W  | 10 G  | 0.3     | 7   | LEEWARD ISLANDS                                       |  |
| 25   | 21 23 51.6* | 33.834 S | 70.919 W  | 70 G  | 0.2     | 10  | CHILE-ARGENTINA BORDER REGION                         |  |
| 25   | 22 12 04.8? | 37.53 N  | 29.97 E   | 10 G  | 0.7     | 4   | TURKEY. ML 3.0 (ISK).                                 |  |
| 25   | 22 32 08.0* | 34.125 N | 116.425 W | 7     |         | 25  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS), 3.0 (GS). |  |
| 25   | 23 14 34.6? | 36.55 N  | 2.49 W    | 10 G  | 0.4     | 5   | STRAIT OF GIBRALTAR. mbLg 2.8 (MDD).                  |  |
| 25   | 23 38 10.0* | 38.086 N | 27.156 E  | 10 G  | 0.8     | 5   | TURKEY. ML 3.1 (ISK).                                 |  |
| 25   | 23 45 40.0* | 37.769 N | 25.490 W  | 10 G  | 1.2     | 6   | AZORES ISLANDS  |  |
| 26   | 02 12 42.0  | 4.651 S  | 80.837 W  | 37 D  | 5.0     | 0.8 | 116   | PERU-ECUADOR BORDER REGION. Felt (IV) at Piura, Sullana and Talara, Peru.  |
| 26   | 03 08 15.2* | 40.585 N | 124.089 W | 26    |         | 5   | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 2.9 (GM).    |  |
| 26   | 03 38 56.2  | 12.248 N | 141.528 E | 33 N  | 4.3 4.2 | 1.0 | 15  | SOUTH OF MARIANA ISLANDS   |
| 26   | 04 11 23.8* | 27.659 S | 177.356 W | 33 N  | 4.7     | 0.8 | 9   | KERMADEC ISLANDS REGION  |
| a 26 | 04 48 03.2  | 2.889 N  | 79.494 W  | 10 G  | 5.1 4.5 | 0.9 | 164   | SOUTH OF PANAMA. Mw 5.3 (HRV).   |
| 26   | 05 37 09.7  | 34.013 S | 70.127 W  | 10 G  |         | 0.3 | 12  | CHILE-ARGENTINA BORDER REGION. MD 4.3 (SAN).   |
| a 26 | 06 11 10.2  | 20.126 S | 169.126 E | 36 D  | 5.8 5.4 | 1.1 | 259   | VANUATU ISLANDS. Mw 5.7 (HRV). Ms 5.4 (BRK).   |
| 26   | 06 27 02.9* | 44.486 N | 7.271 E   | 10 G  |         | 0.2 | 7   | NORTHERN ITALY. ML 1.8 (GEN).  |
| 26   | 07 39 38.7? | 36.29 N  | 27.00 E   | 130 G |         | 0.8 | 4   | DODECANESE ISLANDS   |
| 26   | 07 50 44.6  | 18.628 N | 106.297 W | 33 N  | 4.4 4.7 | 1.0 | 38  | OFF COAST OF JALISCO, MEXICO   |
| 26   | 07 57 14.6* | 60.358 N | 142.986 W | 0     |         |     | 13  | SOUTHERN ALASKA. <AEIC>. ML 2.6 (AEIC).  |
| 26   | 08 13 31.3* | 2.908 N  | 128.386 E | 66 ?  | 5.0 4.2 | 1.3 | 24  | HALMAHERA, INDONESIA   |
| 26   | 08 19 39.3* | 31.482 S | 68.085 W  | 35 ?  |         | 0.9 | 7   | SAN JUAN PROVINCE, ARGENTINA   |
| 26   | 08 28 47.7* | 38.125 N | 2.435 W   | 10 G  |         | 1.2 | 9   | SPAIN. mbLg 2.9 (MDD).   |
| 26   | 08 53 31.3* | 61.241 N | 149.460 W | 43    |         |     | 36  | SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).  |
| 26   | 09 19 05.9* | 58.822 N | 154.645 W | 116   |         |     | 57  | ALASKA PENINSULA. <AEIC>.  |
| 26   | 09 51 02.1* | 37.666 N | 4.662 W   | 10 G  |         | 1.0 | 6   | SPAIN. mbLg 2.5 (MDD).   |
| 26   | 10 03 10.7? | 29.81 S  | 117.00 E  | 10 G  |         | 0.3 | 4   | WESTERN AUSTRALIA  |
| 26   | 10 06 59.6? | 61.88 N  | 3.62 E    | 5 G   |         | 0.8 | 6   | NORWEGIAN SEA. MD 2.4 (BER).   |
| 26   | 10 26 35.0? | 39.66 N  | 29.26 E   | 10 G  |         | 0.9 | 4   | TURKEY. ML 2.7 (ISK).  |
| 26   | 10 49 41.6? | 36.70 N  | 3.60 W    | 10 G  |         | 0.5 | 5   | STRAIT OF GIBRALTAR. mbLg 2.2 (MDD).   |
| 26   | 11 13 11.1* | 60.582 N | 149.812 W | 34    |         |     | 51  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.5 (AEIC).  |
| 26   | 11 17 34.1  | 24.329 N | 122.376 E | 33 N  | 5.3 4.8 | 1.2 | 59  | TAIWAN REGION. Felt in northern Taiwan.  |
| a 26 | 11 21 00.8  | 0.147 N  | 123.681 E | 199   | 5.2     | 1.1 | 90  | MINAHASSA PENINSULA, SULAWESI. Mw 5.4 (HRV).   |
| 26   | 12 07 44.2* | 60.382 N | 148.308 W | 17    |         |     | 77  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.7 (AEIC), 3.5 (PMR).   |
| 26   | 12 16 13.1* | 44.071 N | 146.436 E | 33 N  | 4.8     | 0.9 | 12  | KURIL ISLANDS  |
| 26   | 12 31 48.4  | 57.340 N | 150.680 W | 10 G  |         | 0.6 | 39  | GULF OF ALASKA. ML 3.1 (AEIC).   |
| 26   | 13 55 57.4? | 6.26 S   | 130.11 E  | 161 ? | 4.4     | 1.2 | 6   | BANDA SEA  |
| 26   | 14 16 04.4* | 31.834 S | 116.923 E | 10 G  |         | 0.8 | 6   | WESTERN AUSTRALIA  |
| 26   | 14 33 24.9  | 41.204 N | 21.987 E  | 5 G   |         | 0.4 | 11  | NORTHWESTERN BALKAN REGION. ML 2.0 (THE), 2.0 (SKO).   |
| 26   | 14 39 09.3  | 39.626 N | 23.428 E  | 10 G  |         | 0.7 | 12  | AEGEAN SEA. ML 2.6 (THE).  |
| 26   | 14 50 50.9* | 28.536 N | 34.898 E  | 10 G  |         | 0.5 | 7   | EGYPT. MD 2.7 (RYD).   |
| 26   | 15 10 47.6* | 71.946 N | 4.846 W   | 10 G  | 4.6     | 0.9 | 51  | JAN MAYEN ISLAND REGION  |
| 26   | 16 21 34.9* | 47.688 N | 4.121 E   | 10 G  |         | 1.2 | 9   | FRANCE. ML 2.3 (LDG).  |
| 26   | 17 30 55.8? | 36.70 N  | 28.46 E   | 33 N  |         | 0.7 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).  |
| 26   | 17 50 18.4* | 45.091 N | 127.808 W | 10 G  |         | 0.4 | 31  | OFF COAST OF OREGON  |
| 26   | 18 04 34.1* | 31.615 S | 69.310 W  | 110 ? |         | 0.8 | 9   | SAN JUAN PROVINCE, ARGENTINA   |
| 26   | 18 28 17.7? | 36.89 N  | 28.84 E   | 5 G   |         | 0.5 | 4   | DODECANESE ISLANDS. ML 3.2 (ISK).  |
| 26   | 19 22 14.8  | 41.754 N | 25.269 E  | 10 G  |         | 1.1 | 33  | GREECE-BULGARIA BORDER REGION. ML 3.6 (ISK), 3.4 (THE). MD 3.5 (ATH). Felt (IV) in the Kurdzhali area, Bulgaria. |
| 26   | 19 27 34.6? | 18.30 N  | 66.52 W   | 10 G  |         | 0.3 | 4   | PUERTO RICO REGION. MD 2.3 (MPR).  |
| 26   | 19 59 36.9* | 62.080 N | 152.980 W | 10    |         |     | 60  | CENTRAL ALASKA. <AEIC>. ML 3.0 (AEIC), 3.4 (PMR).  |
| 26   | 20 57 32.4? | 17.95 S  | 167.21 E  | 33 N  | 4.1     | 0.3 | 4   | VANUATU ISLANDS  |
| 26   | 21 18 16.4? | 6.90 S   | 147.42 E  | 73 *  | 4.5     | 0.4 | 7   | EASTERN NEW GUINEA REG., P.N.G.  |
| 26   | 21 44 08.2* | 39.493 N | 28.298 E  | 10 G  |         | 0.8 | 5   | TURKEY. ML 2.7 (ISK).  |
| 26   | 22 11 48.0  | 39.284 N | 28.056 E  | 10 G  |         | 0.7 | 10  | TURKEY. MD 3.4 (ATH). ML 3.3 (ISK).  |
| 26   | 22 12 14.2? | 19.39 N  | 66.25 W   | 33 N  |         | 0.1 | 12  | PUERTO RICO REGION. MD 3.8 (MPR).  |
| 26   | 22 14 22.4  | 31.434 S | 68.681 W  | 17    |         | 0.3 | 9   | SAN JUAN PROVINCE, ARGENTINA. Felt (III) at San Juan.  |
| 26   | 22 31 44.2? | 36.91 N  | 28.83 E   | 10 G  |         | 0.6 | 4   | DODECANESE ISLANDS. ML 3.1 (ISK).  |
| 27   | 01 22 50.0? | 35.06 S  | 71.15 W   | 100 G |         | 0.4 | 8   | CENTRAL CHILE. MD 3.5 (SAN).   |
| 27   | 01 30 46.5? | 38.86 N  | 72.10 E   | 33 N  | 4.2     | 1.3 | 11  | TAJIKISTAN   |
| 27   | 01 31 05.9? | 37.01 N  | 28.94 E   | 5 G   |         | 0.9 | 4   | TURKEY. ML 3.0 (ISK).  |
| 27   | 02 38 28.6  | 36.986 N | 28.978 E  | 5 G   |         | 0.9 | 10  | DODECANESE ISLANDS. MD 3.8 (ATH). ML 3.6 (ISK).  |
| 27   | 02 46 06.2? | 40.74 N  | 27.60 E   | 5 G   |         | 1.1 | 4   | TURKEY. ML 2.7 (ISK).  |
| 27   | 05 08 24.7* | 11.106 S | 114.093 E | 33 N  | 3.9     | 1.2 | 6   | SOUTH OF BALI, INDONESIA   |
| 27   | 05 24 53.6  | 21.495 S | 66.606 W  | 233   | 4.6     | 1.4 | 36  | SOUTHERN BOLIVIA   |
| 27   | 05 30 04.6* | 17.934 N | 66.252 W  | 33 N  |         | 0.5 | 10  | PUERTO RICO REGION. MD 2.6 (MPR).  |
| 27   | 05 56 05.5  | 43.665 N | 147.674 E | 33 N  | 4.5     | 0.7 | 26  | KURIL ISLANDS  |
| 27   | 06 30 00.5  | 36.304 N | 113.557 W | 5 G   |         | 0.6 | 16  | WESTERN ARIZONA. ML 3.4 (GS).  |
| 27   | 06 32 58.9? | 39.36 N  | 28.50 E   | 5 G   |         | 0.1 | 4   | TURKEY. ML 2.9 (ISK).  |
| 27   | 06 48 03.0? | 46.08 N  | 7.16 E    | 10 G  |         | 0.9 | 5   | SWITZERLAND. ML 1.9 (LDG).   |
| 27   | 07 15 33.7* | 33.886 S | 70.762 W  | 80 G  |         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).   |
| 27   | 07 26 25.0? | 38.33 N  | 14.69 E   | 10 G  |         | 1.3 | 13  | SICILY   |
| 27   | 07 53 43.0* | 39.270 N | 23.912 E  | 10 G  |         | 0.2 | 7   | AEGEAN SEA. ML 2.7 (THE).  |
| 27   | 07 58 50.0* | 15.371 N | 61.109 W  | 145 ? |         | 0.3 | 11  | LEEWARD ISLANDS  |
| 27   | 08 22 40.9? | 17.97 N  | 65.43 W   | 5 G   |         | 0.5 | 8   | PUERTO RICO REGION. MD 3.1 (MPR).  |
| 27   | 08 40 38.8  | 2.970 N  | 79.434 W  | 33 N  | 4.6     | 0.7 | 29  | SOUTH OF PANAMA  |
| 27   | 10 10 21.9* | 22.464 S | 65.920 W  | 260 * | 4.2     | 0.9 | 9   | JUJUY PROVINCE, ARGENTINA  |
| 27   | 10 20 38.0* | 61.283 N | 145.205 W | 22    |         |     | 44  | SOUTHERN ALASKA. <AEIC>. ML 2.7 (AEIC).  |
| 27   | 10 51 00.5? | 28.67 S  | 178.04 E  | 178 ? | 3.9     | 0.7 | 6   | KERMADEC ISLANDS REGION  |
| 27   | 11 10 53.4  | 36.332 N | 113.597 W | 5 G   |         | 0.8 | 13  | WESTERN ARIZONA. ML 3.5 (GS).  |
| 27   | 11 28 37.4* | 26.943 S | 26.715 E  | 5 G   |         | 1.3 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.5 (PRE).  |
| 27   | 11 31 56.7* | 16.708 N | 62.158 W  | 10 G  |         | 0.4 | 7   | LEEWARD ISLANDS. ML 2.8 (FDF).   |
| 27   | 11 39 31.7* | 20.234 S | 178.510 W | 344 ? | 4.6     | 1.0 | 59  | FIJI ISLANDS REGION  |
| 27   | 11 56 52.8? | 39.20 N  | 27.25 E   | 5 G   |         | 0.5 | 4   | TURKEY. ML 2.8 (ISK).  |

|   |    |    |    |       |        |   |         |   |     |     |     |     |  |                                  |
|---|----|----|----|-------|--------|---|---------|---|-----|-----|-----|-----|--|----------------------------------|
|   | 27 | 12 | 01 | 07.1% | 40.049 | N | 21.634  | E | 10  | G   | 0.6 | 7   | GREECE. ML 2.1 (THE).  |                                  |
|   | 27 | 12 | 31 | 54.1% | 16.689 | N | 62.128  | W | 5   | G   | 0.7 | 7   | LEEWARD ISLANDS. ML 2.7 (FDF).   |                                  |
|   | 27 | 12 | 36 | 14.2* | 36.324 | N | 113.377 | W | 5   | G   | 0.5 | 9   | WESTERN ARIZONA. ML 3.0 (GS).  |                                  |
|   | 27 | 12 | 55 | 40.2% | 16.699 | N | 62.129  | W | 5   | G   | 0.6 | 7   | LEEWARD ISLANDS. ML 2.8 (FDF).   |                                  |
|   | 27 | 13 | 19 | 19.2% | 16.77  | N | 62.11   | W | 5   | G   | 0.2 | 4   | LEEWARD ISLANDS. ML 2.8 (FDF).   |                                  |
|   | 27 | 14 | 00 | 49.2% | 45.78  | N | 0.19    | W | 10  | G   | 0.3 | 4   | FRANCE. ML 2.1 (LDG).  |                                  |
|   | 27 | 14 | 08 | 23.2% | 33.472 | S | 70.769  | W | 73  | ?   | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION  |                                  |
|   | 27 | 15 | 18 | 16.3% | 34.074 | S | 70.020  | W | 5   | G   | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION  |                                  |
|   | 27 | 15 | 37 | 30.4% | 16.94  | N | 62.11   | W | 5   | G   | 0.1 | 4   | LEEWARD ISLANDS. ML 2.5 (FDF).   |                                  |
|   | 27 | 15 | 54 | 14.0  | 5.478  | S | 101.772 | E | 33  | N   | 4.6 | 0.6 | 12   | SOUTHWEST OF SUMATERA, INDONESIA |
|   | 27 | 16 | 16 | 14.2  | 40.586 | N | 26.087  | E | 10  | G   | 0.7 | 17  | TURKEY. ML 3.4 (ISK).  |                                  |
|   | 27 | 17 | 17 | 34.8* | 15.744 | S | 168.008 | E | 33  | N   | 4.3 | 1.0 | 18   | VANUATU ISLANDS                  |
|   | 27 | 17 | 23 | 41.6% | 8.06   | N | 82.86   | W | 10  | G   | 0.2 | 4   | PANAMA-COSTA RICA BORDER REGION. MD 3.8 (UPA).   |                                  |
|   | 27 | 17 | 51 | 11.7% | 2.45   | N | 84.48   | W | 33  | N   | 4.3 | 1.1 | 11   | OFF COAST OF CENTRAL AMERICA     |
|   | 27 | 17 | 59 | 30.9* | 16.835 | S | 167.664 | E | 10  | G   | 1.0 | 9   | VANUATU ISLANDS  |                                  |
|   | 27 | 18 | 00 | 34.5% | 18.08  | N | 101.09  | W | 33  | N   | 0.7 | 6   | GUERRERO, MEXICO   |                                  |
|   | 27 | 18 | 02 | 24.0% | 46.08  | N | 12.61   | E | 10  | G   | 0.5 | 6   | NORTHERN ITALY   |                                  |
| a | 27 | 18 | 27 | 08.0  | 5.768  | N | 119.324 | E | 27  | D   | 5.4 | 4.9 | 70   | SULU ARCHIPELAGO. Mw 5.5 (HRV).  |
|   | 27 | 18 | 28 | 56.3  | 43.707 | N | 147.452 | E | 33  | N   | 5.0 | 0.9 | 55   | KURIL ISLANDS                    |
|   | 27 | 18 | 45 | 22.8% | 36.22  | N | 28.62   | E | 33  | N   | 0.3 | 4   | DODECANESE ISLANDS. ML 3.0 (ISK).  |                                  |
|   | 27 | 19 | 04 | 53.3% | 39.413 | N | 28.282  | E | 10  | G   | 0.5 | 6   | TURKEY. ML 2.9 (ISK).  |                                  |
|   | 27 | 19 | 21 | 41.8  | 40.586 | N | 25.972  | E | 10  | G   | 1.1 | 11  | AEGEAN SEA. ML 3.2 (ISK).  |                                  |
|   | 27 | 19 | 31 | 39.4% | 41.75  | N | 23.35   | E | 5   | G   | 0.1 | 4   | GREECE-BULGARIA BORDER REGION. ML 2.0 (THE).   |                                  |
|   | 27 | 21 | 18 | 41.5  | 37.747 | N | 67.788  | E | 33  | N   | 4.6 | 1.2 | 30   | AFGHANISTAN-TAJIKISTAN BORD REG. |
|   | 27 | 21 | 50 | 04.6% | 36.60  | N | 28.76   | E | 33  | N   | 0.6 | 4   | DODECANESE ISLANDS. ML 3.2 (ISK).  |                                  |
|   | 27 | 22 | 08 | 24.5% | 40.63  | N | 28.93   | E | 5   | G   | 0.2 | 4   | TURKEY. ML 2.5 (ISK).  |                                  |
|   | 27 | 22 | 12 | 54.5% | 44.45  | N | 6.38    | E | 10  | G   | 0.3 | 5   | FRANCE. ML 2.1 (GEN).  |                                  |
|   | 27 | 22 | 58 | 11.0% | 39.15  | N | 29.01   | E | 5   | G   | 0.0 | 4   | TURKEY. ML 2.8 (ISK).  |                                  |
|   | 27 | 23 | 49 | 00.7% | 41.255 | N | 23.313  | E | 10  | G   | 0.3 | 6   | GREECE-BULGARIA BORDER REGION  |                                  |
|   | 28 | 01 | 12 | 42.8* | 28.100 | S | 67.415  | W | 135 | ?   | 0.6 | 10  | LA RIOJA PROVINCE, ARGENTINA   |                                  |
|   | 28 | 01 | 15 | 51.2% | 39.151 | N | 29.022  | E | 10  | G   | 0.3 | 6   | TURKEY. ML 2.8 (ISK).  |                                  |
|   | 28 | 01 | 55 | 22.2  | 33.445 | S | 70.972  | W | 71  | ?   | 0.2 | 11  | CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).   |                                  |
|   | 28 | 02 | 37 | 46.8* | 19.588 | S | 169.175 | E | 142 | *   | 4.9 | 1.0 | 25   | VANUATU ISLANDS                  |
|   | 28 | 02 | 45 | 14.9% | 59.923 | N | 152.523 | W | 83  | ?   | 0.3 | 69  | SOUTHERN ALASKA. <AEIC>.   |                                  |
|   | 28 | 02 | 47 | 33.7% | 19.14  | S | 173.08  | W | 68  | ?   | 4.5 | 0.3 | 7  | TONGA ISLANDS                    |
|   | 28 | 03 | 31 | 00.2* | 40.063 | N | 23.867  | E | 10  | G   | 0.8 | 9   | GREECE. ML 2.0 (THE).  |                                  |
|   | 28 | 03 | 59 | 53.1  | 37.445 | N | 88.915  | E | 33  | N   | 4.9 | 0.9 | 66   | SOUTHERN XINJIANG, CHINA         |
|   | 28 | 05 | 12 | 32.9% | 43.36  | N | 147.86  | E | 33  | N   | 4.2 | 1.5 | 7  | KURIL ISLANDS                    |
|   | 28 | 05 | 29 | 09.8  | 26.470 | S | 27.415  | E | 5   | G   | 0.8 | 9   | REPUBLIC OF SOUTH AFRICA. mbLg 3.1 (BUL). ML 2.8 (PRE).  |                                  |
|   | 28 | 06 | 00 | 30.7% | 60.123 | N | 152.826 | W | 98  | ?   | 0.3 | 44  | SOUTHERN ALASKA. <AEIC>.   |                                  |
|   | 28 | 06 | 42 | 54.2% | 17.958 | N | 67.026  | W | 33  | N   | 0.3 | 6   | MONA PASSAGE. MD 2.5 (MPR).  |                                  |
|   | 28 | 06 | 49 | 52.0% | 35.01  | S | 70.99   | W | 100 | G   | 0.2 | 7   | CHILE-ARGENTINA BORDER REGION  |                                  |
|   | 28 | 07 | 30 | 18.4  | 38.539 | N | 1.218   | W | 10  | G   | 1.2 | 31  | SPAIN. mbLg 3.4 (MDD). Felt (III) at Jumilla.  |                                  |
|   | 28 | 07 | 48 | 16.1% | 32.33  | S | 71.68   | W | 10  | G   | 0.4 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.9 (SAN).   |                                  |
|   | 28 | 07 | 59 | 44.8% | 18.27  | N | 66.32   | W | 10  | G   | 0.6 | 4   | PUERTO RICO REGION. MD 2.2 (MPR).  |                                  |
|   | 28 | 08 | 15 | 40.8% | 39.33  | N | 27.40   | E | 10  | G   | 0.8 | 4   | TURKEY. ML 2.8 (ISK).  |                                  |
|   | 28 | 08 | 28 | 12.4% | 39.15  | N | 27.56   | E | 10  | G   | 0.7 | 4   | TURKEY. ML 2.8 (ISK).  |                                  |
|   | 28 | 08 | 28 | 14.1  | 44.329 | N | 6.652   | E | 10  | G   | 0.5 | 25  | FRANCE. ML 2.8 (GEN), 2.8 (LDG).   |                                  |
|   | 28 | 09 | 50 | 55.9  | 49.755 | N | 8.415   | E | 10  | G   | 1.4 | 14  | GERMANY. ML 2.8 (LDG), 2.4 (BNS).  |                                  |
|   | 28 | 10 | 13 | 35.7% | 44.620 | N | 6.902   | E | 10  | G   | 0.3 | 11  | FRANCE. ML 2.7 (GEN).  |                                  |
|   | 28 | 10 | 39 | 45.0% | 40.423 | N | 125.681 | W | 24  | ?   | 0.3 | 42  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.4 (GM).   |                                  |
|   | 28 | 11 | 15 | 47.6  | 55.552 | N | 164.691 | E | 33  | N   | 5.2 | 0.6 | 23   | KOMANDORSKY ISLANDS REGION       |
|   | 28 | 12 | 02 | 14.0% | 36.723 | N | 28.983  | E | 10  | G   | 0.4 | 5   | DODECANESE ISLANDS. ML 3.2 (ISK).  |                                  |
|   | 28 | 12 | 43 | 37.7% | 39.353 | N | 27.290  | E | 10  | G   | 0.6 | 5   | TURKEY. ML 2.8 (ISK).  |                                  |
|   | 28 | 13 | 45 | 59.3  | 2.526  | S | 138.688 | E | 33  | N   | 5.5 | 1.1 | 27   | IRIAN JAYA, INDONESIA            |
|   | 28 | 13 | 51 | 43.7% | 39.648 | N | 29.389  | E | 5   | G   | 0.6 | 5   | TURKEY. ML 2.7 (ISK).  |                                  |
|   | 28 | 14 | 03 | 29.4  | 26.865 | S | 26.733  | E | 5   | G   | 1.2 | 12  | REPUBLIC OF SOUTH AFRICA. mbLg 3.7 (BUL). ML 3.6 (PRE).  |                                  |
|   | 28 | 14 | 28 | 52.9% | 26.878 | S | 26.745  | E | 5   | G   | 1.1 | 8   | REPUBLIC OF SOUTH AFRICA. ML 3.0 (PRE).  |                                  |
|   | 28 | 15 | 13 | 56.3% | 33.141 | S | 70.277  | W | 10  | G   | 0.3 | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).   |                                  |
|   | 28 | 15 | 19 | 28.5  | 33.735 | S | 70.308  | W | 117 | *   | 0.7 | 18  | CHILE-ARGENTINA BORDER REGION. MD 4.1 (SAN).   |                                  |
|   | 28 | 15 | 40 | 02.9% | 45.52  | N | 6.69    | E | 5   | G   | 0.6 | 5   | FRANCE   |                                  |
|   | 28 | 15 | 50 | 32.8% | 26.377 | S | 27.385  | E | 5   | G   | 0.8 | 5   | REPUBLIC OF SOUTH AFRICA. ML 1.9 (PRE).  |                                  |
|   | 28 | 16 | 15 | 21.6% | 44.387 | N | 8.778   | E | 5   | G   | 0.6 | 10  | NORTHERN ITALY. ML 2.3 (GEN).  |                                  |
|   | 28 | 16 | 28 | 11.2% | 31.93  | S | 69.40   | W | 123 | ?   | 0.6 | 8   | SAN JUAN PROVINCE, ARGENTINA   |                                  |
|   | 28 | 16 | 29 | 38.8% | 40.574 | N | 29.259  | E | 10  | G   | 0.3 | 7   | TURKEY. ML 2.7 (ISK).  |                                  |
|   | 28 | 16 | 41 | 01.6* | 31.535 | S | 68.118  | W | 101 | ?   | 0.4 | 8   | SAN JUAN PROVINCE, ARGENTINA   |                                  |
|   | 28 | 17 | 06 | 23.3% | 40.500 | N | 23.153  | E | 10  | G   | 0.3 | 6   | GREECE. ML 1.7 (THE).  |                                  |
| a | 28 | 18 | 32 | 44.0  | 13.615 | N | 143.915 | E | 208 | 5.3 | 0.9 | 142 | SOUTH OF MARIANA ISLANDS. Mw 5.3 (HRV). Felt (III) in the central part of Guam.                            |                                  |
|   | 28 | 19 | 27 | 55.6% | 37.00  | N | 28.91   | E | 10  | G   | 0.4 | 4   | TURKEY. ML 3.2 (ISK).  |                                  |
|   | 28 | 19 | 28 | 06.7% | 40.431 | N | 125.306 | W | 22  | ?   | 0.6 | 21  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.0 (GM).   |                                  |
|   | 28 | 19 | 52 | 28.3% | 39.973 | N | 23.929  | E | 5   | G   | 0.6 | 6   | AEGEAN SEA. ML 2.4 (THE).  |                                  |
|   | 28 | 19 | 55 | 21.0% | 59.670 | N | 152.341 | W | 70  | ?   | 0.6 | 46  | SOUTHERN ALASKA. <AEIC>.   |                                  |
|   | 28 | 20 | 09 | 10.8% | 38.703 | N | 119.704 | W | 1   | ?   | 0.6 | 1   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM).  |                                  |
|   | 28 | 20 | 58 | 37.6% | 59.354 | N | 152.392 | W | 79  | ?   | 0.6 | 35  | SOUTHERN ALASKA. <AEIC>.   |                                  |
|   | 28 | 21 | 56 | 10.0% | 42.917 | N | 0.529   | W | 5   | G   | 0.0 | 5   | PYRENEES. ML 1.0 (STR).  |                                  |
|   | 28 | 21 | 58 | 13.5% | 59.877 | N | 141.297 | W | 7   | ?   | 0.6 | 14  | SOUTHEASTERN ALASKA. <AEIC>. ML 3.0 (AEIC).  |                                  |
|   | 28 | 22 | 08 | 12.0% | 63.143 | N | 150.560 | W | 121 | ?   | 0.6 | 50  | CENTRAL ALASKA. <AEIC>.  |                                  |
|   | 28 | 23 | 32 | 49.8  | 48.782 | N | 7.786   | E | 10  | G   | 0.6 | 13  | FRANCE. ML 2.7 (LDG).  |                                  |
|   | 28 | 23 | 35 | 50.1% | 40.663 | N | 23.016  | E | 5   | G   | 0.2 | 5   | GREECE. ML 1.7 (THE).  |                                  |
|   | 28 | 23 | 43 | 21.5* | 40.943 | N | 8.397   | W | 10  | G   | 1.3 | 6   | PORTUGAL   |                                  |
|   | 29 | 01 | 24 | 14.2* | 37.926 | N | 21.242  | E | 5   | G   | 1.1 | 6   | SOUTHERN GREECE. ML 3.1 (ATH).   |                                  |
|   | 29 | 01 | 43 | 25.1  | 43.323 | N | 111.287 | W | 5   | G   | 0.8 | 57  | EASTERN IDAHO. ML 3.5 (GS), 3.7 (BUT). Felt (V) at Irwin and (III) at Swan Valley. Also felt at Palisades. |                                  |
|   | 29 | 01 | 58 | 50.1% | 61.445 | N | 151.602 | W | 78  | ?   | 0.8 | 72  | SOUTHERN ALASKA. <AEIC>.   |                                  |
|   | 29 | 02 | 56 | 34.3* | 35.800 | N | 70.563  | E | 33  | N   | 4.5 | 13  | HINDU KUSH REGION, AFGHANISTAN   |                                  |
|   | 29 | 03 | 10 | 59.8% | 31.46  | S | 70.84   | W | 110 | *   | 1.1 | 13  | CHILE-ARGENTINA BORDER REGION  |                                  |
|   | 29 | 03 | 29 | 50.8% | 39.984 | N | 28.825  | E | 10  | G   | 0.6 | 6   | TURKEY. ML 2.8 (ISK).  |                                  |
|   | 29 | 04 | 05 | 31.5% | 18.136 | N | 67.094  | W | 33  | N   | 0.3 | 11  | MONA PASSAGE. MD 3.3 (MPR).  |                                  |
|   | 29 | 04 | 19 | 44.9% | 63.248 | N | 144.115 | W | 0   | G   | 0.9 | 25  | CENTRAL ALASKA. <AEIC>. ML 2.6 (AEIC).   |                                  |
|   | 29 | 07 | 13 | 18.9  | 35.230 | N | 27.392  | E | 35  | *   | 0.9 | 29  | DODECANESE ISLANDS. ML 3.8 (ISK).  |                                  |
|   | 29 | 08 | 11 | 01.2% | 39.16  | N | 27.50   | E | 10  | G   | 0.5 | 4   | TURKEY. ML 2.8 (ISK).  |                                  |

|   |    |    |    |       |        |   |         |   |     |   |         |     |  |
|---|----|----|----|-------|--------|---|---------|---|-----|---|---------|-----|--|
| a | 29 | 08 | 18 | 16.0? | 39.19  | N | 27.89   | E | 10  | G | 1.4     | 4   | TURKEY. ML 2.8 (ISK).  |
|   | 29 | 08 | 21 | 54.7  | 22.126 | S | 175.894 | W | 88  | D | 5.2     | 0.9 | 93 TONGA ISLANDS REGION. Mw 5.3 (HRV).   |
|   | 29 | 10 | 18 | 42.3  | 42.160 | N | 25.225  | E | 5   | G | 1.2     | 29  | BULGARIA. MD 3.6 (ATH). Felt (IV) at Khaskovo, Plovdiv and Pervomay.                               |
|   | 29 | 10 | 41 | 50.7? | 6.02   | S | 150.39  | E | 73  | ? | 4.3     | 0.3 | 5 NEW BRITAIN REGION, P.N.G.   |
|   | 29 | 10 | 49 | 35.6* | 26.905 | S | 26.744  | E | 5   | G |         | 0.9 | 8 REPUBLIC OF SOUTH AFRICA. ML 2.9 (PRE).  |
|   | 29 | 10 | 56 | 45.1? | 37.46  | N | 71.57   | E | 33  | N | 4.7     | 0.8 | 13 AFGHANISTAN-TAJIKISTAN BORD REG.  |
|   | 29 | 11 | 37 | 44.4* | 46.831 | N | 0.204   | W | 10  | G |         | 1.1 | 8 FRANCE. ML 2.6 (LDG).  |
|   | 29 | 11 | 38 | 50.8? | 46.23  | N | 12.27   | E | 10  | G |         | 0.1 | 5 NORTHERN ITALY. ML 2.0 (VIE).  |
|   | 29 | 11 | 49 | 44.5* | 46.207 | N | 12.305  | E | 10  | G |         | 0.7 | 7 NORTHERN ITALY. ML 2.2 (VIE).  |
|   | 29 | 11 | 56 | 47.5* | 47.434 | N | 121.829 | W | 18  |   |         | 64  | WASHINGTON. <SEA-P>. MD 2.9 (SEA). ML 2.8 (GS). Felt.  |
|   | 29 | 12 | 16 | 55.6* | 26.250 | S | 27.645  | E | 5   | G |         | 0.7 | 5 REPUBLIC OF SOUTH AFRICA. ML 2.2 (PRE).  |
|   | 29 | 13 | 44 | 17.7* | 31.679 | S | 69.545  | W | 119 | ? |         | 0.6 | 9 SAN JUAN PROVINCE, ARGENTINA   |
|   | 29 | 13 | 46 | 43.0* | 40.167 | N | 29.224  | E | 5   | G |         | 0.7 | 6 TURKEY. ML 2.6 (ISK).  |
|   | 29 | 14 | 02 | 12.1* | 38.115 | N | 21.772  | E | 5   | G |         | 1.3 | 9 GREECE. MD 3.1 (ATH). ML 2.9 (THE).  |
|   | 29 | 14 | 03 | 43.2* | 2.189  | N | 127.162 | E | 104 | * | 4.9     | 0.4 | 18 NORTHERN MOLUCCA SEA  |
|   | 29 | 14 | 27 | 52.9? | 6.07   | S | 150.54  | E | 78  | ? | 4.6     | 0.8 | 6 NEW BRITAIN REGION, P.N.G.   |
| a | 29 | 14 | 30 | 28.4  | 38.707 | N | 20.484  | E | 21  |   | 4.9 4.8 | 1.3 | 158 GREECE. Mw 5.1 (HRV). ML 5.0 (TTG), 4.9 (ATH), 4.7 (TIR). Felt at Levkas and Preveza.          |
|   | 29 | 14 | 31 | 34.1* | 32.045 | S | 116.636 | E | 33  | N |         | 1.2 | 5 WESTERN AUSTRALIA  |
|   | 29 | 14 | 39 | 17.6* | 38.401 | N | 20.420  | E | 5   | G |         | 0.7 | 14 GREECE. ML 3.5 (THE). MD 3.5 (ATH).   |
|   | 29 | 14 | 47 | 49.0? | 38.59  | N | 20.42   | E | 10  | G |         | 1.0 | 5 GREECE   |
|   | 29 | 14 | 48 | 25.9  | 38.661 | N | 20.378  | E | 10  | G |         | 1.1 | 22 GREECE. ML 3.7 (TTG), 3.5 (TIR). MD 3.5 (ATH).  |
|   | 29 | 15 | 24 | 50.2* | 28.296 | S | 66.502  | W | 160 | G |         | 0.9 | 9 CATAMARCA PROVINCE, ARGENTINA  |
|   | 29 | 15 | 26 | 49.6  | 38.658 | N | 20.655  | E | 5   | G |         | 1.4 | 17 GREECE. MD 3.5 (ATH).   |
|   | 29 | 15 | 30 | 19.3  | 50.472 | N | 176.382 | W | 33  | N | 4.6     | 1.0 | 50 ANDREANOF ISLANDS, ALEUTIAN IS. ML 3.9 (PMR).   |
|   | 29 | 15 | 35 | 46.0? | 38.41  | N | 20.14   | E | 5   | G |         | 1.3 | 11 GREECE. ML 3.2 (THE).   |
|   | 29 | 16 | 07 | 01.4  | 38.697 | N | 20.497  | E | 5   | G |         | 1.1 | 18 GREECE. MD 3.4 (ATH). ML 3.0 (THE).   |
|   | 29 | 16 | 26 | 29.2* | 29.058 | S | 67.939  | W | 33  | N |         | 1.3 | 7 LA RIOJA PROVINCE, ARGENTINA   |
|   | 29 | 16 | 42 | 32.2  | 6.646  | N | 123.137 | E | 38  | * | 5.3     | 1.0 | 22 MINDANAO, PHILIPPINE ISLANDS  |
|   | 29 | 17 | 27 | 08.6  | 38.676 | N | 20.552  | E | 5   | G |         | 0.9 | 18 GREECE. MD 3.4 (ATH). ML 3.2 (THE).   |
|   | 29 | 17 | 28 | 51.6* | 38.669 | N | 20.501  | E | 5   | G |         | 1.2 | 8 GREECE. ML 3.7 (ATH).  |
|   | 29 | 18 | 04 | 47.9? | 38.63  | N | 20.53   | E | 5   | G |         | 0.9 | 4 GREECE. MD 3.1 (ATH).  |
|   | 29 | 18 | 26 | 45.7* | 24.122 | S | 66.607  | W | 211 |   | 4.5     | 1.1 | 18 SALTA PROVINCE, ARGENTINA   |
|   | 29 | 18 | 42 | 02.2  | 38.675 | N | 20.544  | E | 5   | G |         | 0.8 | 13 GREECE. MD 3.3 (ATH). ML 3.0 (THE).   |
|   | 29 | 18 | 54 | 05.5* | 40.033 | N | 23.822  | E | 5   | G |         | 0.6 | 8 GREECE. ML 1.8 (THE).  |
|   | 29 | 19 | 41 | 48.6* | 61.475 | N | 147.855 | W | 28  |   |         | 76  | SOUTHERN ALASKA. <AEIC>. ML 2.9 (AEIC).  |
|   | 29 | 19 | 42 | 11.9? | 39.83  | N | 28.77   | E | 10  | G |         | 0.8 | 4 TURKEY. ML 2.6 (ISK).  |
|   | 29 | 19 | 46 | 51.0* | 38.458 | N | 20.679  | E | 5   | G |         | 0.9 | 10 GREECE. MD 3.4 (ATH). ML 3.2 (THE).   |
|   | 29 | 19 | 48 | 58.1  | 36.495 | S | 1.555   | W | 10  | G | 5.3     | 0.8 | 122 SOUTH ATLANTIC OCEAN   |
|   | 29 | 20 | 20 | 22.3  | 40.542 | N | 26.003  | E | 10  | G |         | 1.0 | 16 TURKEY. ML 3.2 (ISK). MD 3.1 (ATH).   |
|   | 29 | 20 | 24 | 26.8  | 38.666 | N | 20.468  | E | 5   | G |         | 0.7 | 10 GREECE. MD 3.3 (ATH).   |
| a | 29 | 20 | 32 | 44.9  | 20.150 | S | 168.925 | E | 33  | N | 5.2     | 1.1 | 126 LOYALTY ISLANDS. Mw 5.2 (HRV).   |
|   | 29 | 20 | 34 | 02.9? | 51.49  | N | 16.02   | E | 10  | G |         | 1.1 | 4 POLAND   |
|   | 29 | 20 | 47 | 40.6  | 38.689 | N | 20.598  | E | 5   | G |         | 1.1 | 10 GREECE. MD 3.2 (ATH). ML 3.0 (THE).   |
|   | 29 | 20 | 55 | 24.2* | 34.397 | N | 118.335 | W | 4   |   |         | 31  | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.9 (PAS), 2.8 (GS).  |
|   | 29 | 21 | 12 | 22.8* | 40.660 | N | 27.839  | E | 10  | G |         | 0.3 | 5 TURKEY. ML 2.7 (ISK).  |
|   | 29 | 22 | 43 | 09.7? | 42.22  | N | 7.85    | W | 10  | G |         | 0.1 | 4 SPAIN. mbLg 3.2 (MDD).   |
|   | 30 | 00 | 08 | 00.7? | 61.18  | N | 17.47   | E | 5   | G |         | 0.7 | 4 SWEDEN. ML 2.3 (NAO). Felt.  |
|   | 30 | 00 | 23 | 41.9* | 42.630 | N | 18.739  | E | 10  | G |         | 0.2 | 8 NORTHWESTERN BALKAN REGION. ML 1.4 (TTG).  |
|   | 30 | 00 | 29 | 04.8* | 42.633 | N | 18.741  | E | 10  | G |         | 0.2 | 9 NORTHWESTERN BALKAN REGION. ML 2.0 (TTG).  |
|   | 30 | 00 | 48 | 14.7? | 36.95  | N | 28.80   | E | 10  | G |         | 0.3 | 4 DODECANESE ISLANDS. ML 3.2 (ISK).  |
|   | 30 | 01 | 06 | 40.2  | 42.864 | N | 143.094 | E | 112 |   | 4.9     | 0.8 | 137 HOKKAIDO, JAPAN REGION   |
|   | 30 | 01 | 16 | 20.3* | 40.343 | N | 124.414 | W | 18  |   |         | 22  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 2.8 (GM).   |
|   | 30 | 01 | 37 | 53.0* | 60.101 | N | 153.449 | W | 155 |   |         | 45  | SOUTHERN ALASKA. <AEIC>.   |
|   | 30 | 01 | 40 | 17.1  | 38.931 | N | 142.279 | E | 57  |   | 4.6     | 1.2 | 39 NEAR EAST COAST OF HONSHU, JAPAN  |
|   | 30 | 02 | 18 | 23.2* | 60.162 | N | 153.290 | W | 145 |   |         | 56  | SOUTHERN ALASKA. <AEIC>.   |
|   | 30 | 02 | 24 | 54.3* | 38.663 | N | 20.371  | E | 5   | G |         | 1.2 | 8 GREECE. MD 3.3 (ATH).  |
| a | 30 | 02 | 28 | 15.5  | 10.774 | N | 41.033  | W | 10  | G | 4.9 4.6 | 1.1 | 112 NORTHERN MID-ATLANTIC RIDGE. Mw 5.1 (HRV).   |
|   | 30 | 02 | 52 | 24.7? | 40.83  | N | 27.77   | E | 5   | G |         | 0.8 | 5 TURKEY. ML 2.7 (ISK).  |
|   | 30 | 02 | 54 | 37.7  | 19.532 | N | 64.597  | W | 19  |   | 4.5     | 1.0 | 59 VIRGIN ISLANDS  |
|   | 30 | 03 | 04 | 53.0? | 32.00  | S | 69.32   | W | 151 | ? |         | 0.5 | 7 SAN JUAN PROVINCE, ARGENTINA   |
|   | 30 | 03 | 54 | 54.0* | 16.685 | N | 62.126  | W | 5   | G |         | 0.4 | 7 LEEWARD ISLANDS. ML 3.3 (FDF).   |
|   | 30 | 05 | 03 | 11.7  | 15.926 | N | 92.434  | W | 175 | D | 4.5     | 0.9 | 84 MEXICO-GUATEMALA BORDER REGION  |
|   | 30 | 05 | 51 | 51.5  | 38.505 | N | 20.723  | E | 33  | N |         | 0.8 | 15 GREECE. MD 3.2 (ATH). ML 3.2 (THE).   |
|   | 30 | 06 | 37 | 14.8* | 18.001 | S | 178.374 | W | 565 | ? | 5.2     | 0.9 | 39 FIJI ISLANDS REGION   |
|   | 30 | 06 | 58 | 26.8  | 42.550 | N | 0.690   | E | 10  | G |         | 1.6 | 11 PYRENEES. ML 2.7 (LDG), 2.7 (STR). mbLg 2.6 (MDD). Felt (III) in the Valle de Aran area, Spain. |
|   | 30 | 07 | 16 | 33.4? | 36.95  | N | 28.87   | E | 10  | G |         | 0.0 | 4 DODECANESE ISLANDS. ML 3.1 (ISK).  |
|   | 30 | 07 | 24 | 30.0  | 39.071 | N | 22.536  | E | 10  | G |         | 0.8 | 24 GREECE. ML 3.1 (THE).   |
|   | 30 | 08 | 02 | 30.3  | 37.051 | N | 28.913  | E | 10  | G |         | 0.7 | 11 TURKEY. MD 3.6 (ATH). ML 3.6 (ISK).   |
|   | 30 | 08 | 19 | 59.8? | 39.17  | N | 27.32   | E | 5   | G |         | 0.9 | 4 TURKEY. ML 2.8 (ISK).  |
|   | 30 | 08 | 24 | 17.0? | 43.14  | N | 0.72    | W | 5   | G |         | 0.1 | 4 PYRENEES. ML 1.0 (STR).  |
|   | 30 | 08 | 43 | 02.1* | 7.491  | S | 129.623 | E | 33  | N | 5.4     | 1.2 | 15 BANDA SEA   |
|   | 30 | 08 | 56 | 23.2* | 37.096 | N | 28.869  | E | 10  | G |         | 0.4 | 5 TURKEY. ML 3.3 (ISK).  |
|   | 30 | 09 | 10 | 23.4* | 2.917  | N | 126.435 | E | 33  | N | 5.0     | 1.1 | 16 NORTHERN MOLUCCA SEA  |
|   | 30 | 09 | 14 | 14.5? | 43.22  | N | 148.40  | E | 33  | N | 4.0     | 1.4 | 7 EAST OF KURIL ISLANDS  |
|   | 30 | 09 | 33 | 01.7* | 16.695 | N | 62.126  | W | 5   | G |         | 0.8 | 6 LEEWARD ISLANDS. ML 2.0 (FDF).   |
|   | 30 | 10 | 10 | 50.2? | 3.03   | N | 126.38  | E | 33  | N | 4.7     | 1.1 | 9 TALAUD ISLANDS, INDONESIA  |
|   | 30 | 10 | 48 | 41.4* | 40.820 | N | 27.804  | E | 5   | G |         | 0.4 | 8 TURKEY. ML 3.0 (ISK).  |
|   | 30 | 11 | 02 | 59.1* | 40.374 | N | 29.141  | E | 10  | G |         | 1.2 | 5 TURKEY. ML 3.0 (ISK).  |
|   | 30 | 11 | 53 | 45.9? | 63.23  | N | 27.18   | E | 5   | G |         | 0.6 | 4 FINLAND. ML 2.1 (NAO).   |
|   | 30 | 11 | 58 | 47.6? | 38.70  | N | 26.29   | E | 5   | G |         | 0.4 | 4 AEGEAN SEA. ML 3.4 (ISK).  |
|   | 30 | 12 | 17 | 56.7* | 36.970 | N | 28.903  | E | 10  | G |         | 0.4 | 6 DODECANESE ISLANDS. ML 3.3 (ISK).  |
|   | 30 | 12 | 22 | 36.4  | 60.785 | N | 4.231   | E | 10  | G |         | 1.1 | 10 SOUTHERN NORWAY. MD 2.5 (BER).  |
|   | 30 | 12 | 25 | 16.8* | 29.256 | S | 177.904 | W | 71  |   | 4.8     | 0.8 | 23 KERMADEC ISLANDS, NEW ZEALAND. Felt (II) on Raoul Island.                                       |
|   | 30 | 12 | 26 | 50.8* | 68.966 | N | 29.929  | E | 10  | G |         | 1.5 | 5 FINLAND-RUSSIA BORDER REGION. MD 2.3 (BER).  |
|   | 30 | 12 | 29 | 34.5* | 68.883 | N | 29.857  | E | 10  | G |         | 1.5 | 5 FINLAND-RUSSIA BORDER REGION. ML 2.0 (NAO).  |
|   | 30 | 12 | 29 | 52.0? | 37.00  | N | 28.97   | E | 5   | G |         | 0.3 | 4 DODECANESE ISLANDS. ML 3.0 (ISK).  |
|   | 30 | 12 | 59 | 26.2  | 38.654 | N | 20.552  | E | 10  | G |         | 1.1 | 16 GREECE. ML 3.7 (TIR). MD 3.6 (ATH).   |
|   | 30 | 13 | 08 | 07.3* | 16.706 | N | 62.134  | W | 5   | G |         | 0.7 | 6 LEEWARD ISLANDS. ML 2.9 (FDF).   |
|   | 30 | 13 | 10 | 02.7? | 37.20  | N | 30.11   | E | 10  | G |         | 1.0 | 4 TURKEY. ML 3.1 (ISK).  |

|   |    |    |    |       |        |   |         |   |    |   |     |     |    |   |
|---|----|----|----|-------|--------|---|---------|---|----|---|-----|-----|----|---|
| a | 30 | 21 | 50 | 54.1  | 2.871  | N | 84.306  | W | 33 | N | 5.3 | 1.0 | 71 | OFF COAST OF CENTRAL AMERICA. Mw 5.2 (HRV). |
|   | 30 | 22 | 34 | 34.1* | 43.769 | N | 147.602 | E | 33 | N | 4.7 | 0.8 | 13 | KURIL ISLANDS                               |
|   | 30 | 23 | 01 | 54.6* | 65.915 | N | 155.271 | W | 21 |   |     |     | 20 | NORTHERN ALASKA. <AEIC>. ML 3.0 (AEIC).     |

### ADDITIONAL SOURCE PARAMETERS

|  |   |  |
|--|---|--|
| <p>01 08 02.17 1.432S 67.947E 10km<br/>           5.0mb ( 26 obs.) 5.2Msz ( 27 obs.)<br/>           CARLSBERG RIDGE<br/>           CENTROID, MOMENT TENSOR (HRV)<br/>           Data Used: GDSN<br/>           L.P.B.: 56S,109C<br/>           Centroid Location:<br/>           Origin Time 08:08: 6.8 0.2<br/>           Lat 1.09S 0.02 Lon 67.62E 0.02<br/>           Dep 15.0 FIX Half-duration 1.8<br/>           Principal Axes:<br/>           Scale 10**17 Nm<br/>           T Val= 4.54 Plg= 9 Azm=261<br/>           N -0.96 76 31<br/>           P -3.58 11 169<br/>           Best Double Couple:Mo=4.1*10**17<br/>           NP1:Strike=305 Dip=76 Slip=-179<br/>           NP2: 215 89 -14</p> | <p>NP1:Strike=308 Dip=44 Slip= 55<br/>           NP2: 173 56 119</p>  | <p>Centroid Location:<br/>           Origin Time 05:24:21.9 2.7<br/>           Lat 18.02S 0.16 Lon 171.90W 0.20<br/>           Dep 15.0 FIX Half-duration 1.0<br/>           Principal Axes:<br/>           Scale 10**16 Nm<br/>           T Val= 9.63 Plg=29 Azm=295<br/>           N -1.16 24 39<br/>           P -8.47 51 163<br/>           Best Double Couple:Mo=9.1*10**16<br/>           NP1:Strike=339 Dip=28 Slip=-153<br/>           NP2: 225 78 -65</p>   |
| <p>02 01 43 55.54 5.099N 118.643E 55km<br/>           5.7mb ( 74 obs.)<br/>           BORNEO<br/>           CENTROID, MOMENT TENSOR (HRV)<br/>           Data Used: GDSN<br/>           L.P.B.: 55S,104C<br/>           Centroid Location:<br/>           Origin Time 01:43:57.6 0.1<br/>           Lat 5.33N 0.02 Lon 118.79E 0.02<br/>           Dep 34.4 1.4 Half-duration 1.8<br/>           Principal Axes:<br/>           Scale 10**17 Nm<br/>           T Val= 4.58 Plg=60 Azm=178<br/>           N 0.18 22 43<br/>           P -4.77 19 305<br/>           Best Double Couple:Mo=4.7*10**17<br/>           NP1:Strike= 3 Dip=32 Slip= 45<br/>           NP2: 233 68 114</p>                          | <p>04 01 13 20.15 9.379S 71.334W 591km<br/>           5.8mb (134 obs.)<br/>           PERU-BRAZIL BORDER REGION<br/>           FAULT PLANE SOLUTION: P-waves<br/>           NP1:Strike=345 Dip=40 Slip= -80<br/>           NP2: 152 51 -98<br/>           Principal Axes:<br/>           T Plg= 5 Azm=248<br/>           P 82 18<br/>           Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting with a small strike-slip component. The preferred fault plane is not determined.</p>  | <p>04 08 27 30.69 21.473S 179.341W 616km<br/>           5.3mb ( 58 obs.)<br/>           FIJI ISLANDS REGION<br/>           CENTROID, MOMENT TENSOR (HRV)<br/>           Data Used: GDSN<br/>           L.P.B.: 22S, 27C<br/>           Centroid Location:<br/>           Origin Time 08:27:34.8 0.7<br/>           Lat 21.55S 0.07 Lon 179.22W 0.05<br/>           Dep 627.6 4.3 Half-duration 1.1<br/>           Principal Axes:<br/>           Scale 10**17 Nm<br/>           T Val= 1.52 Plg=35 Azm= 63<br/>           N -0.04 21 169<br/>           P -1.48 47 283<br/>           Best Double Couple:Mo=1.5*10**17<br/>           NP1:Strike= 97 Dip=22 Slip=-163<br/>           NP2: 351 84 -69</p>               |
| <p>03 03 07 21.53 10.931S 166.247E 156km<br/>           5.4mb ( 54 obs.)<br/>           SANTA CRUZ ISLANDS<br/>           CENTROID, MOMENT TENSOR (HRV)<br/>           Data Used: GDSN<br/>           L.P.B.: 65S,117C<br/>           Centroid Location:<br/>           Origin Time 03:07:27.3 0.2<br/>           Lat 10.91S 0.02 Lon 166.27E 0.01<br/>           Dep 164.7 0.5 Half-duration 1.9<br/>           Principal Axes:<br/>           Scale 10**17 Nm<br/>           T Val= 5.45 Plg=66 Azm=138<br/>           N -1.02 24 335<br/>           P -4.43 6 242<br/>           Best Double Couple:Mo=4.9*10**17</p>   | <p>RADIATED ENERGY<br/>           No. of sta: 23 Focal mech. F<br/>           Energy 7.112*10**12 Nm<br/>           MOMENT TENSOR SOLUTION<br/>           Dep 587 No. of sta: 28<br/>           Principal Axes:<br/>           Scale 10**18 Nm<br/>           T Val= 1.53 Plg= 2 Azm=245<br/>           N -0.19 4 155<br/>           P -1.33 85 4<br/>           Best Double Couple:Mo=1.4*10**18<br/>           NP1:Strike=340 Dip=43 Slip= -84<br/>           NP2: 151 48 -96<br/>           CENTROID, MOMENT TENSOR (HRV)<br/>           Data Used: GDSN<br/>           L.P.B.: 64S,135C<br/>           Centroid Location:<br/>           Origin Time 01:13:25.5 0.1<br/>           Lat 9.40S 0.01 Lon 71.07W 0.01<br/>           Dep 619.2 1.0 Half-duration 2.5<br/>           Principal Axes:<br/>           Scale 10**18 Nm<br/>           T Val= 1.46 Plg= 8 Azm=260<br/>           N 0.08 1 170<br/>           P -1.55 82 71<br/>           Best Double Couple:Mo=1.5*10**18<br/>           NP1:Strike=352 Dip=37 Slip= -88<br/>           NP2: 169 53 -92</p> | <p>04 10 12 41.94 17.417S 172.027W 33km<br/>           5.5mb ( 20 obs.) 5.1Msz ( 13 obs.)<br/>           TONGA ISLANDS REGION<br/>           CENTROID, MOMENT TENSOR (HRV)<br/>           Data Used: GDSN<br/>           L.P.B.: 40S, 70C<br/>           Centroid Location:<br/>           Origin Time 10:12:44.1 0.3<br/>           Lat 17.40S 0.04 Lon 171.64W 0.03<br/>           Dep 15.0 FIX Half-duration 1.2<br/>           Principal Axes:<br/>           Scale 10**17 Nm<br/>           T Val= 1.78 Plg=25 Azm=287<br/>           N 0.20 5 194<br/>           P -1.98 64 95<br/>           Best Double Couple:Mo=1.9*10**17<br/>           NP1:Strike= 28 Dip=20 Slip= -76<br/>           NP2: 193 71 -95</p> |
| <p>04 05 24 18.23 17.709S 172.197W 33km<br/>           5.1mb ( 10 obs.) 4.6Msz ( 4 obs.)<br/>           TONGA ISLANDS REGION<br/>           CENTROID, MOMENT TENSOR (HRV)<br/>           Data Used: GDSN<br/>           L.P.B.: 13S, 17C</p>   | <p>05 02 16 03.32 57.193S 157.858E 25km<br/>           6.1mb ( 38 obs.) 6.1msz ( 50 obs.)<br/>           MACQUARIE ISLANDS REGION</p>   |  |

FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike= 45 Dip=90 Slip= 165  
 NP2: 135 75 360  
 Principal Axes:  
 T Plg=11 Azm=359  
 P 11 91  
 Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a small vertical component. The preferred fault plane is not determined.

RADIATED ENERGY  
 No. of sta: 5 Focal mech. F  
 Energy 2.5±0.5\*10\*\*14 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 18 No. of sta: 13  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 6.58 Plg= 1 Azm=183  
 N 0.63 87 300  
 P -7.21 3 93  
 Best Double Couple:Mo=6.9\*10\*\*18  
 NP1:Strike=228 Dip=87 Slip=-179  
 NP2: 138 89 -3  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 72S,184C M.W.: 56S, 98C  
 Centroid Location:  
 Origin Time 02:16:11.0 0.1  
 Lat 57.16S 0.01 Lon 157.17E 0.01  
 Dep 15.0 FIX Half-duration 3.8  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 3.60 Plg= 8 Azm=357  
 N 0.06 69 245  
 P -3.66 19 90  
 Best Double Couple:Mo=3.6\*10\*\*18  
 NP1:Strike=132 Dip=71 Slip=-8  
 NP2: 225 82 -160

05 10 52 15.16 10.721N 141.311E 31km  
 5.5mb ( 49 obs.) 5.1Msz ( 26 obs.)  
 WESTERN CAROLINE ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 57S,104C  
 Centroid Location:  
 Origin Time 10:52:18.3 0.2  
 Lat 10.48N 0.02 Lon 141.47E 0.03  
 Dep 15.5 1.4 Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 3.42 Plg=15 Azm= 1  
 N -0.14 13 267  
 P -3.28 70 136  
 Best Double Couple:Mo=3.3\*10\*\*17  
 NP1:Strike=109 Dip=33 Slip=-64  
 NP2: 260 61 -105

05 12 05 28.59 9.386S 71.335W 597km  
 5.7mb (121 obs.)  
 PERU-BRAZIL BORDER REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 54S, 89C  
 Centroid Location:  
 Origin Time 12:05:32.6 0.2  
 Lat 9.43S 0.02 Lon 71.14W 0.02  
 Dep 605.6 1.6 Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 3.39 Plg= 6 Azm=263  
 N -0.18 7 172  
 P -3.21 80 33  
 Best Double Couple:Mo=3.3\*10\*\*17  
 NP1:Strike= 1 Dip=39 Slip=-78  
 NP2: 167 52 -99

06 11 52 54.59 7.273N 126.980E 42km  
 5.3mb ( 44 obs.) 5.0Msz ( 23 obs.)  
 MINDANAO, PHILIPPINE ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 37S, 57C  
 Centroid Location:  
 Origin Time 11:52:58.6 0.3  
 Lat 7.20N 0.04 Lon 127.22E 0.04  
 Dep 15.0 FIX Half-duration 1.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.96 Plg=68 Azm=312

N 0.02 11 193  
 P -1.97 19 99  
 Best Double Couple:Mo=2.0\*10\*\*17  
 NP1:Strike=171 Dip=28 Slip= 65  
 NP2: 19 65 103

06 15 57 34.79 21.088S 169.906E 102km  
 5.3mb ( 5 obs.)  
 LOYALTY ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 11S, 15C  
 Centroid Location:  
 Origin Time 15:57:37.0 2.0  
 Lat 21.35S 0.15 Lon 169.71E 0.19  
 Dep 99.1 7.6 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 8.94 Plg=30 Azm=275  
 N -2.38 60 109  
 P -6.56 6 9  
 Best Double Couple:Mo=7.8\*10\*\*16  
 NP1:Strike= 56 Dip=65 Slip= 18  
 NP2: 318 74 154

07 10 59 22.44 10.215N 93.774E 33km  
 5.0mb ( 18 obs.) 4.4Msz ( 5 obs.)  
 ANDAMAN ISLANDS, INDIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 18S, 25C  
 Centroid Location:  
 Origin Time 10:59:25.8 0.6  
 Lat 10.46N 0.09 Lon 94.09E 0.09  
 Dep 15.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 3.02 Plg=11 Azm=246  
 N 2.54 2 337  
 P -5.56 78 77  
 Best Double Couple:Mo=4.3\*10\*\*16  
 NP1:Strike=334 Dip=34 Slip=-94  
 NP2: 158 56 -88

07 13 03 42.15 43.770N 147.278E 56km  
 5.1mb ( 79 obs.)  
 KURIL ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 7S, 8C  
 Centroid Location:  
 Origin Time 13:03:45.4 1.8  
 Lat 43.45N 0.24 Lon 147.19E 0.20  
 Dep 65.924.6 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 3.95 Plg=62 Azm= 72  
 N 1.65 4 170  
 P -5.60 27 262  
 Best Double Couple:Mo=4.8\*10\*\*16  
 NP1:Strike= 3 Dip=18 Slip= 103  
 NP2: 169 73 86

08 17 48 45.04 11.940N 144.239E 35km  
 5.0mb ( 14 obs.) 4.5Msz ( 3 obs.)  
 SOUTH OF MARIANA ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 13S, 15C  
 Centroid Location:  
 Origin Time 17:48:49.1 0.9  
 Lat 12.01N 0.07 Lon 144.43E 0.15  
 Dep 43.313.2 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 7.97 Plg=11 Azm=345  
 N 1.53 79 147  
 P -9.50 3 254  
 Best Double Couple:Mo=8.7\*10\*\*16  
 NP1:Strike= 29 Dip=80 Slip= 175  
 NP2: 120 85 10

09 03 56 57.17 7.428N 71.927W 9km  
 5.2mb ( 73 obs.) 4.9Msz ( 6 obs.)  
 VENEZUELA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 40S, 61C  
 Centroid Location:  
 Origin Time 03:57: 4.9 0.3  
 Lat 7.53N 0.04 Lon 71.73W 0.03  
 Dep 21.3 2.2 Half-duration 1.2  
 Principal Axes:

Scale 10\*\*17 Nm  
 T Val= 1.40 Plg=74 Azm=182  
 N 0.22 15 341  
 P -1.61 6 72  
 Best Double Couple:Mo=1.5\*10\*\*17  
 NP1:Strike=178 Dip=42 Slip= 113  
 NP2: 329 52 71

09 18 21 02.68 43.556N 147.144E 54km  
 6.2mb (154 obs.) 5.2Msz ( 41 obs.)  
 KURIL ISLANDS  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike= 50 Dip=82 Slip= 100  
 NP2: 178 13 39  
 Principal Axes:  
 T Plg=52 Azm=332  
 P 36 131  
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting with a small left-lateral strike-slip component. The preferred fault plane is NP2.

RADIATED ENERGY  
 No. of sta: 11 Focal mech. F  
 Energy 2.0±0.5\*10\*\*13 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 56 No. of sta: 21  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 5.01 Plg=57 Azm=336  
 N 0.08 22 208  
 P -5.09 23 108  
 Best Double Couple:Mo=5.1\*10\*\*17  
 NP1:Strike=162 Dip=29 Slip= 40  
 NP2: 36 72 113  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 60S,136C  
 Centroid Location:  
 Origin Time 18:21: 6.7 0.2  
 Lat 43.41N 0.02 Lon 147.24E 0.02  
 Dep 61.0 BDY Half-duration 2.1  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 5.14 Plg=56 Azm=344  
 N 0.86 18 225  
 P -6.00 28 125  
 Best Double Couple:Mo=5.6\*10\*\*17  
 NP1:Strike=177 Dip=24 Slip= 40  
 NP2: 50 75 109

10 03 03 23.17 5.719S 154.186E 33km  
 5.4mb ( 23 obs.)  
 SOLOMON ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 55S, 94C  
 Centroid Location:  
 Origin Time 03:03:29.0 0.2  
 Lat 5.87S 0.02 Lon 153.97E 0.02  
 Dep 45.6 1.6 Half-duration 1.4  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.29 Plg=80 Azm= 15  
 N -0.10 5 138  
 P -2.18 8 229  
 Best Double Couple:Mo=2.2\*10\*\*17  
 NP1:Strike=325 Dip=37 Slip= 99  
 NP2: 134 54 83

10 06 02 13.03 7.236S 129.272E 96km  
 5.2mb ( 25 obs.)  
 BANDA SEA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 12S, 13C  
 Centroid Location:  
 Origin Time 06:02:17.1 1.1  
 Lat 7.32S FIX;Lon 129.35E FIX  
 Dep 137.4 4.0 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 5.72 Plg=80 Azm=314  
 N 1.53 5 195  
 P -7.25 9 104  
 Best Double Couple:Mo=6.5\*10\*\*16  
 NP1:Strike=188 Dip=36 Slip= 82  
 NP2: 19 54 96

10 07 07 44.34 22.356N 118.800E 33km  
 5.0mb ( 34 obs.) 4.5Msz ( 2 obs.)

TAIWAN REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 14C  
Centroid Location:  
Origin Time 07:07:38.5 0.7  
Lat 22.63N 0.10 Lon 118.66E 0.17  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 4.93 Plg=15 Azm=173  
N -0.95 37 71  
P -3.98 49 281  
Best Double Couple:Mo=4.4\*10\*\*16  
NP1:Strike=303 Dip=44 Slip= -30  
NP2: 55 70 -130

10 10 48 23.59 7.761S 158.354E 33km  
5.2mb ( 25 obs.) 4.8Msz ( 8 obs.)  
SOLOMON ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 41S, 55C  
Centroid Location:  
Origin Time 10:48:25.9 0.3  
Lat 7.77S 0.04 Lon 158.50E 0.04  
Dep 33.6 3.1 Half-duration 1.1  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.42 Plg=67 Azm=276  
N -1.78 18 137  
P -9.64 14 42  
Best Double Couple:Mo=1.1\*10\*\*17  
NP1:Strike=109 Dip=35 Slip= 58  
NP2: 327 61 110

11 08 48 29.97 15.626S 72.535W 121km  
5.6mb ( 85 obs.)  
SOUTHERN PERU  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=210 Dip=88 Slip= 21  
NP2: 119 69 178  
Principal Axes:  
T Plg=16 Azm= 77  
P 13 343  
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 132 No. of sta: 4  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 5.89 Plg=22 Azm= 88  
N -0.16 67 249  
P -5.73 7 356  
Best Double Couple:Mo=5.8\*10\*\*17  
NP1:Strike=130 Dip=70 Slip= 169  
NP2: 224 80 21  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 67S, 131C  
Centroid Location:  
Origin Time 08:48:35.2 0.1  
Lat 15.64S 0.01 Lon 72.39W 0.02  
Dep 127.3 0.7 Half-duration 1.9  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 6.03 Plg=32 Azm= 76  
N -0.92 58 249  
P -5.11 3 344  
Best Double Couple:Mo=5.6\*10\*\*17  
NP1:Strike=115 Dip=66 Slip= 158  
NP2: 214 70 26

13 06 56 00.52 36.910N 29.060E 10km  
4.9mb ( 77 obs.) 5.0Msz ( 22 obs.)  
TURKEY  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 34S, 59C  
Centroid Location:  
Origin Time 06:56: 5.7 0.4  
Lat 37.12N 0.04 Lon 28.02E 0.06  
Dep 15.0 FIX Half-duration 1.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.18 Plg= 9 Azm= 44  
N 0.30 4 313  
P -1.48 80 200

Best Double Couple:Mo=1.3\*10\*\*17  
NP1:Strike=139 Dip=36 Slip= -83  
NP2: 310 54 -95

13 09 07 12.18 0.221S 124.424E 35km  
5.3mb ( 36 obs.)  
SOUTHERN MOLUCCA SEA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 38S, 54C  
Centroid Location:  
Origin Time 09:07:18.8 0.4  
Lat 0.01S 0.04 Lon 124.72E 0.04  
Dep 80.4 3.0 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.89 Plg=77 Azm=268  
N 1.60 8 36  
P -8.49 10 127  
Best Double Couple:Mo=7.7\*10\*\*16  
NP1:Strike=227 Dip=36 Slip= 104  
NP2: 30 56 80

13 19 55 45.04 51.130N 159.966E 32km  
5.1mb ( 52 obs.) 4.5Msz ( 4 obs.)  
OFF EAST COAST OF KAMCHATKA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 18S, 23C  
Centroid Location:  
Origin Time 19:55:51.7 1.0  
Lat 51.30N 0.09 Lon 159.88E 0.18  
Dep 17.2 5.5 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.57 Plg=63 Azm= 15  
N -1.22 24 225  
P -4.35 12 130  
Best Double Couple:Mo=5.0\*10\*\*16  
NP1:Strike=192 Dip=39 Slip= 50  
NP2: 59 61 118

14 11 27 56.19 0.028S 16.935W 10km  
5.2mb ( 50 obs.) 4.9Msz ( 12 obs.)  
NORTH OF ASCENSION ISLAND  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 36S, 58C  
Centroid Location:  
Origin Time 11:28: 0.6 0.2  
Lat 0.46N 0.04 Lon 17.14W 0.04  
Dep 15.0 FIX Half-duration 1.1  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.23 Plg= 3 Azm= 32  
N -2.02 2 123  
P -9.22 87 241  
Best Double Couple:Mo=1.0\*10\*\*17  
NP1:Strike=121 Dip=42 Slip= -92  
NP2: 304 48 -88

14 15 24 38.90 21.231S 174.639W 54km  
5.2mb ( 19 obs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 21C  
Centroid Location:  
Origin Time 15:24:42.5 0.7  
Lat 20.45S 0.13 Lon 174.44W 0.11  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 8.90 Plg=53 Azm= 78  
N -0.83 4 344  
P -8.07 37 251  
Best Double Couple:Mo=8.5\*10\*\*16  
NP1:Strike=320 Dip= 9 Slip= 67  
NP2: 164 82 94

14 19 15 30.66 13.525N 121.067E 32km  
6.1mb (115 obs.) 7.1Msz ( 52 obs.)  
MINDORO, PHILIPPINE ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=335 Dip=77 Slip= 178  
NP2: 65 88 13  
Principal Axes:  
T Plg=11 Azm=291  
P 8 200  
Comment: The focal mechanism is well controlled and corresponds to strike-slip faulting with a small reverse

component. The preferred fault plane is not determined.  
RADIATED ENERGY  
No. of sta: 6 Focal mech. F  
Energy 3.3±0.7\*10\*\*15 Nm  
MOMENT TENSOR SOLUTION  
Dep 14 No. of sta: 25  
Principal Axes:  
Scale 10\*\*19 Nm  
T Val= 2.88 Plg= 1 Azm=291  
N 0.57 80 193  
P -3.45 10 21  
Best Double Couple:Mo=3.2\*10\*\*19  
NP1:Strike= 65 Dip=82 Slip= -6  
NP2: 156 84 -172  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 66S, 168C M.W.: 63S, 157C  
Centroid Location:  
Origin Time 19:15:39.1 0.1  
Lat 13.44N 0.01 Lon 121.32E 0.01  
Dep 15.0 FIX Half-duration 9.3  
Principal Axes:  
Scale 10\*\*19 Nm  
T Val= 5.70 Plg=13 Azm=296  
N -1.17 70 64  
P -4.53 15 202  
Best Double Couple:Mo=5.1\*10\*\*19  
NP1:Strike=339 Dip=70 Slip= -178  
NP2: 249 88 -20

15 06 25 09.20 13.136N 121.184E 21km  
5.3mb ( 38 obs.) 5.0Msz ( 5 obs.)  
MINDORO, PHILIPPINE ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 46S, 84C  
Centroid Location:  
Origin Time 06:25:11.9 0.2  
Lat 13.34N 0.03 Lon 121.31E 0.03  
Dep 19.3 2.7 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.66 Plg=22 Azm=322  
N -0.66 67 125  
P -2.00 6 230  
Best Double Couple:Mo=2.3\*10\*\*17  
NP1:Strike= 4 Dip=70 Slip= 168  
NP2: 98 79 20

15 20 18 11.31 5.589S 110.186E 561km  
6.2mb (150 obs.)  
JAVA SEA  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=310 Dip=42 Slip= -65  
NP2: 98 53 -111  
Principal Axes:  
T Plg= 6 Azm=203  
P 73 311  
Comment: The focal mechanism is well controlled and corresponds to normal faulting with a moderate left-lateral strike-slip component. The preferred fault plane is NP1.  
RADIATED ENERGY  
No. of sta: 18 Focal mech. F  
Energy 2.1±0.5\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 585 No. of sta: 19  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 6.62 Plg= 6 Azm=201  
N -0.06 20 109  
P -6.57 69 305  
Best Double Couple:Mo=6.6\*10\*\*18  
NP1:Strike=312 Dip=43 Slip= -60  
NP2: 93 54 -115  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 66S, 173C M.W.: 46S, 79C  
Centroid Location:  
Origin Time 20:18:17.2 0.1  
Lat 5.61S 0.01 Lon 110.29E 0.01  
Dep 570.7 0.5 Half-duration 4.4  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 6.19 Plg= 1 Azm=202  
N 0.54 20 111  
P -6.72 70 296  
Best Double Couple:Mo=6.4\*10\*\*18



NP1:Strike=311 Dip=47 Slip= -62  
 NP2: 93 50 -117  
 15 20 39 37.25 47.451N 154.927E 12km  
 5.8mb ( 71 obs.) 6.0Msz ( 27 obs.)  
 KURIL ISLANDS  
 RADIATED ENERGY  
 No. of sta: 10 Focal mech. C  
 Energy 6.4±1.6\*10\*\*12 Nm  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 28S, 52C  
 Centroid Location:  
 Origin Time 20:39:44.3 0.3  
 Lat 47.50N 0.05 Lon 155.14E 0.07  
 Dep 15.0 BDY Half-duration 2.4  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 11.02 Plg=66 Azm=304  
 N 0.72 3 207  
 P -11.74 24 116  
 Best Double Couple:Mo=1.1\*10\*\*18  
 NP1:Strike=199 Dip=21 Slip= 81  
 NP2: 28 69 93  
 16 06 54 03.17 56.173S 142.612W 10km  
 5.4mb ( 9 obs.) 5.6Msz ( 26 obs.)  
 PACIFIC-ANTARCTIC RIDGE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 62S, 127C  
 Centroid Location:  
 Origin Time 06:54:10.8 0.1  
 Lat 56.49S 0.02 Lon 142.36W 0.04  
 Dep 15.0 FIX Half-duration 2.0  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 6.48 Plg=23 Azm=344  
 N -0.17 60 122  
 P -6.31 18 246  
 Best Double Couple:Mo=6.4\*10\*\*17  
 NP1:Strike= 24 Dip=60 Slip= 176  
 NP2: 116 87 30  
 16 21 34 52.01 10.182S 13.258W 10km  
 5.1mb ( 29 obs.) 4.9Msz ( 5 obs.)  
 ASCENSION ISLAND REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 27S, 43C  
 Centroid Location:  
 Origin Time 21:35: 0.9 0.3  
 Lat 10.02S 0.05 Lon 13.28W 0.04  
 Dep 15.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 9.63 Plg= 0 Azm=262  
 N 1.05 19 353  
 P -10.68 71 171  
 Best Double Couple:Mo=1.0\*10\*\*17  
 NP1:Strike=335 Dip=48 Slip=-115  
 NP2: 190 48 -65  
 18 01 13 00.25 13.057N 121.090E 20km  
 5.4mb ( 54 obs.) 5.2Msz ( 34 obs.)  
 MINDORO, PHILIPPINE ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 43S, 70C  
 Centroid Location:  
 Origin Time 01:13: 1.5 0.2  
 Lat 13.16N 0.02 Lon 121.20E 0.04  
 Dep 15.8 1.5 Half-duration 1.2  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.71 Plg=13 Azm=356  
 N -0.15 10 264  
 P -1.56 73 137  
 Best Double Couple:Mo=1.6\*10\*\*17  
 NP1:Strike= 99 Dip=33 Slip= -71  
 NP2: 257 59 -102  
 18 05 32 47.85 41.938S 83.784W 10km  
 5.4mb ( 14 obs.)  
 WEST CHILE RISE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 19C  
 Centroid Location:  
 Origin Time 05:32:51.1 0.5  
 Lat 41.59S 0.16 Lon 84.76W 0.15  
 Dep 15.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 8.52 Plg=32 Azm= 86  
 N 1.38 16 186  
 P -9.90 53 299  
 Best Double Couple:Mo=9.2\*10\*\*16  
 NP1:Strike=133 Dip=20 Slip=-145  
 NP2: 10 79 -73  
 19 21 46 50.46 43.107N 146.956E 47km  
 5.4mb ( 99 obs.)  
 KURIL ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 23S, 38C  
 Centroid Location:  
 Origin Time 21:46:54.7 0.5  
 Lat 43.14N 0.05 Lon 147.05E 0.09  
 Dep 50.6 4.3 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 6.38 Plg=70 Azm=303  
 N 2.60 4 44  
 P -8.98 19 135  
 Best Double Couple:Mo=7.7\*10\*\*16  
 NP1:Strike=232 Dip=26 Slip= 99  
 NP2: 42 65 86  
 20 02 57 15.62 9.794S 159.712E 24km  
 5.8mb ( 57 obs.) 5.5Msz ( 42 obs.)  
 SOLOMON ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 52S, 95C  
 Centroid Location:  
 Origin Time 02:57:21.1 0.2  
 Lat 9.85S 0.04 Lon 160.01E 0.03  
 Dep 24.0 BDY Half-duration 1.7  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.77 Plg=43 Azm=345  
 N 0.19 15 89  
 P -2.96 43 194  
 Best Double Couple:Mo=2.9\*10\*\*17  
 NP1:Strike=359 Dip=15 Slip= 179  
 NP2: 89 90 75  
 20 06 39 21.85 20.766S 172.748E 24km  
 5.5mb ( 40 obs.) 5.6Msz ( 38 obs.)  
 VANUATU ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 60S, 144C  
 Centroid Location:  
 Origin Time 06:39:25.0 0.1  
 Lat 20.91S 0.02 Lon 172.99E 0.01  
 Dep 15.0 FIX Half-duration 2.2  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 7.42 Plg= 2 Azm=128  
 N -0.92 84 238  
 P -6.50 6 37  
 Best Double Couple:Mo=7.0\*10\*\*17  
 NP1:Strike=173 Dip=85 Slip=-178  
 NP2: 82 88 -5  
 20 08 30 12.39 43.103N 146.946E 52km  
 5.1mb ( 83 obs.)  
 KURIL ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 13S, 16C  
 Centroid Location:  
 Origin Time 08:30:10.8 1.4  
 Lat 42.74N 0.13 Lon 147.60E 0.14  
 Dep 52.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 16.75 Plg=38 Azm= 34  
 N -3.81 50 190  
 P -12.94 12 295  
 Best Double Couple:Mo=1.5\*10\*\*17  
 NP1:Strike= 67 Dip=55 Slip= 159  
 NP2: 170 73 37  
 20 14 31 02.27 35.335N 39.557E 29km  
 5.1mb ( 59 obs.) 4.9Msz ( 6 obs.)  
 JORDAN - SYRIA REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 33S, 48C  
 Centroid Location:  
 Origin Time 14:31: 4.4 0.4  
 Lat 35.36N 0.05 Lon 39.07E 0.06  
 Dep 15.0 FIX Half-duration 1.2  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.40 Plg=25 Azm=102  
 N -0.32 57 238  
 P -1.08 20 2  
 Best Double Couple:Mo=1.2\*10\*\*17  
 NP1:Strike=141 Dip=57 Slip= 176  
 NP2: 233 87 33  
 20 16 59 05.63 2.001S 135.932E 16km  
 5.8mb ( 55 obs.) 6.3Msz ( 41 obs.)  
 IRIAN JAYA REGION, INDONESIA  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike=195 Dip=84 Slip= 175  
 NP2: 286 85 6  
 Principal Axes:  
 T Plg= 8 Azm=150  
 P 1 60  
 Comment: The focal mechanism is 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: 15 Focal mech. F  
 Energy 1.6±0.4\*10\*\*14 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 17 No. of sta: 19  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 3.64 Plg= 2 Azm=148  
 N -0.01 87 9  
 P -3.64 2 238  
 Best Double Couple:Mo=3.6\*10\*\*18  
 NP1:Strike=283 Dip=87 Slip= 0  
 NP2: 193 90 177  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 66S, 156C M.W.: 54S, 95C  
 Centroid Location:  
 Origin Time 16:59:15.5 0.1  
 Lat 1.81S 0.01 Lon 135.97E 0.01  
 Dep 20.7 0.7 Half-duration 4.5  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 3.56 Plg=11 Azm=146  
 N -0.06 76 9  
 P -3.50 10 238  
 Best Double Couple:Mo=3.5\*10\*\*18  
 NP1:Strike=282 Dip=76 Slip= 1  
 NP2: 192 89 166  
 20 18 34 34.49 4.330N 97.591E 153km  
 5.7mb ( 91 obs.)  
 NORTHERN SUMATERA, INDONESIA  
 RADIATED ENERGY  
 No. of sta: 4 Focal mech. M  
 Energy 3.1±1.4\*10\*\*12 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 157 No. of sta: 9  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 1.39 Plg=41 Azm= 56  
 N 0.00 41 276  
 P -1.39 22 166  
 Best Double Couple:Mo=1.4\*10\*\*18  
 NP1:Strike=209 Dip=44 Slip= 17  
 NP2: 107 78 133  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 49S, 90C  
 Centroid Location:  
 Origin Time 18:34:40.8 0.3  
 Lat 4.33N 0.03 Lon 97.30E 0.04  
 Dep 162.7 1.2 Half-duration 2.5  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 13.50 Plg=45 Azm= 52  
 N -2.54 28 289  
 P -10.96 32 180  
 Best Double Couple:Mo=1.2\*10\*\*18  
 NP1:Strike=217 Dip=29 Slip= 15  
 NP2: 113 83 119  
 21 02 21 30.75 14.976S 167.243E 126km  
 5.6mb ( 30 obs.)  
 VANUATU ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 40S, 53C

Centroid Location:  
 Origin Time 02:21:30.4 0.4  
 Lat 15.02S 0.04 Lon 167.22E 0.03  
 Dep 104.2 1.8 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 10.14 Plg=58 Azm=186  
 N -0.64 32 1  
 P -9.51 2 93  
 Best Double Couple:Mo=9.8\*10\*\*16  
 NP1:Strike=212 Dip=51 Slip= 133  
 NP2: 335 55 50

21 03 25 57.81 36.663S 78.547E 10km  
 4.6mb ( 7 obs.)  
 MID-INDIAN RIDGE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 42S, 74C  
 Centroid Location:  
 Origin Time 03:26: 4.3 0.3  
 Lat 36.65S 0.05 Lon 78.87E 0.04  
 Dep 15.0 FIX Half-duration 1.1  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 11.48 Plg=22 Azm=275  
 N -1.27 67 75  
 P -10.21 7 182  
 Best Double Couple:Mo=1.1\*10\*\*17  
 NP1:Strike=317 Dip=69 Slip= 169  
 NP2: 51 80 21

21 08 16 34.07 25.540N 96.657E 14km  
 5.6mb ( 93 obs.) 5.9Msz ( 52 obs.)  
 MYANMAR  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike=135 Dip=85 Slip= 12  
 NP2: 44 78 175  
 Principal Axes:  
 T Plg=12 Azm=360  
 P 5 269  
 Comment: The focal mechanism is 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: 5 Focal mech. F  
 Energy 7.1±2.7\*10\*\*13 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 15 No. of sta: 17  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 5.84 Plg=24 Azm=352  
 N -0.20 66 163  
 P -5.63 3 260  
 Best Double Couple:Mo=5.7\*10\*\*17  
 NP1:Strike= 33 Dip=71 Slip= 165  
 NP2: 128 76 19  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 50S, 119C  
 Centroid Location:  
 Origin Time 08:16:40.1 0.2  
 Lat 25.37N 0.02 Lon 96.83E 0.02  
 Dep 42.7 1.8 Half-duration 2.4  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 9.16 Plg=10 Azm=350  
 N 0.17 76 126  
 P -9.33 10 258  
 Best Double Couple:Mo=9.2\*10\*\*17  
 NP1:Strike= 34 Dip=76 Slip= 179  
 NP2: 124 89 14

22 05 04 22.09 20.790S 178.390W 555km  
 5.3mb ( 68 obs.)  
 FIJI ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 48S, 71C  
 Centroid Location:  
 Origin Time 05:04:26.6 0.3  
 Lat 20.55S 0.03 Lon 178.35W 0.03  
 Dep 562.0 1.7 Half-duration 1.2  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.37 Plg=18 Azm=175  
 N 0.49 7 83  
 P -1.87 71 332  
 Best Double Couple:Mo=1.6\*10\*\*17

NP1:Strike=276 Dip=28 Slip= -75  
 NP2: 79 63 -98

22 11 11 57.76 43.961N 147.293E 49km  
 5.6mb (135 obs.) 5.1Msz ( 25 obs.)  
 KURIL ISLANDS  
 RADIATED ENERGY  
 No. of sta: 11 Focal mech. M  
 Energy 2.5±0.4\*10\*\*12 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 34 No. of sta: 30  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.50 Plg=64 Azm=216  
 N 0.06 24 10  
 P -2.55 10 105  
 Best Double Couple:Mo=2.5\*10\*\*17  
 NP1:Strike=221 Dip=41 Slip= 128  
 NP2: 355 59 62  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 46S, 92C  
 Centroid Location:  
 Origin Time 11:12: 0.8 0.3  
 Lat 43.90N 0.02 Lon 147.51E 0.03  
 Dep 54.4 1.7 Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.96 Plg=48 Azm=207  
 N 0.50 42 33  
 P -3.46 3 300  
 Best Double Couple:Mo=3.2\*10\*\*17  
 NP1:Strike=355 Dip=56 Slip= 36  
 NP2: 244 61 140

22 12 19 49.31 23.260S 69.409W 67km  
 4.9mb ( 21 obs.)  
 NORTHERN CHILE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 20C  
 Centroid Location:  
 Origin Time 12:19:57.0 0.6  
 Lat 23.31S 0.05 Lon 69.60W 0.12  
 Dep 76.2 5.6 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 4.74 Plg= 9 Azm= 35  
 N 0.98 14 303  
 P -5.71 74 157  
 Best Double Couple:Mo=5.2\*10\*\*16  
 NP1:Strike=141 Dip=38 Slip= -68  
 NP2: 294 55 -107

22 15 05 02.65 3.235N 127.922E 138km  
 5.1mb ( 34 obs.)  
 TALAUD ISLANDS, INDONESIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 23C  
 Centroid Location:  
 Origin Time 15:04:58.0 1.5  
 Lat 3.17N 0.13 Lon 128.00E 0.15  
 Dep 131.9 3.3 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 6.21 Plg= 0 Azm=152  
 N -0.13 46 242  
 P -6.09 44 62  
 Best Double Couple:Mo=6.2\*10\*\*16  
 NP1:Strike=206 Dip=61 Slip= -146  
 NP2: 98 61 -34

22 15 38 35.00 13.661N 95.689E 33km  
 4.9mb ( 35 obs.) 4.9Msz ( 6 obs.)  
 ANDAMAN ISLANDS, INDIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 31S, 47C  
 Centroid Location:  
 Origin Time 15:38:35.4 0.3  
 Lat 13.64N 0.04 Lon 95.51E 0.05  
 Dep 22.7 4.2 Half-duration 1.1  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 9.78 Plg= 1 Azm=330  
 N -1.22 68 61  
 P -8.56 22 240  
 Best Double Couple:Mo=9.2\*10\*\*16  
 NP1:Strike= 17 Dip=74 Slip= -164  
 NP2: 283 75 -16

22 18 10 47.73 1.874S 136.115E 33km

5.2mb ( 17 obs.) 4.8Msz ( 6 obs.)  
 IRIAN JAYA REGION, INDONESIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 25C  
 Centroid Location:  
 Origin Time 18:10:49.5 0.9  
 Lat 1.46S 0.10 Lon 136.30E 0.12  
 Dep 35.2 9.2 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 4.65 Plg=11 Azm=139  
 N 2.39 54 34  
 P -7.04 34 237  
 Best Double Couple:Mo=5.8\*10\*\*16  
 NP1:Strike=273 Dip=58 Slip= -18  
 NP2: 12 75 -147

22 19 08 12.65 7.764S 158.296E 33km  
 5.4mb ( 27 obs.) 5.2Msz ( 37 obs.)  
 SOLOMON ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 51S, 87C  
 Centroid Location:  
 Origin Time 19:08:16.6 0.2  
 Lat 7.74S 0.02 Lon 158.57E 0.02  
 Dep 35.5 1.7 Half-duration 1.2  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.39 Plg=80 Azm=299  
 N -0.04 9 137  
 P -1.34 3 47  
 Best Double Couple:Mo=1.4\*10\*\*17  
 NP1:Strike=127 Dip=43 Slip= 76  
 NP2: 326 49 103

23 05 25 25.16 10.254N 122.357E 27km  
 4.9mb ( 25 obs.) 4.4Msz ( 3 obs.)  
 PANAY, PHILIPPINE ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 25C  
 Centroid Location:  
 Origin Time 05:25:25.3 0.7  
 Lat 10.03N 0.07 Lon 122.69E 0.12  
 Dep 24.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 5.41 Plg=54 Azm=237  
 N -0.04 32 88  
 P -5.37 14 348  
 Best Double Couple:Mo=5.4\*10\*\*16  
 NP1:Strike= 42 Dip=41 Slip= 37  
 NP2: 283 67 125

23 05 56 51.27 53.070S 159.456E 10km  
 5.1mb ( 4 obs.)  
 MACQUARIE ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 46S, 86C  
 Centroid Location:  
 Origin Time 05:56:57.7 0.2  
 Lat 52.89S 0.03 Lon 159.29E 0.04  
 Dep 15.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.26 Plg= 3 Azm=164  
 N -0.09 86 310  
 P -2.17 2 73  
 Best Double Couple:Mo=2.2\*10\*\*17  
 NP1:Strike=208 Dip=86 Slip= 179  
 NP2: 299 89 4

23 19 10 26.68 7.016S 156.676E 23km  
 5.4mb ( 42 obs.) 4.7Msz ( 2 obs.)  
 SOLOMON ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 42S, 63C  
 Centroid Location:  
 Origin Time 19:10:29.8 0.3  
 Lat 7.17S 0.04 Lon 156.99E 0.04  
 Dep 27.8 4.3 Half-duration 1.1  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 9.61 Plg= 3 Azm=151  
 N 1.69 81 45  
 P -11.30 9 242  
 Best Double Couple:Mo=1.0\*10\*\*17  
 NP1:Strike=286 Dip=82 Slip= -4  
 NP2: 17 86 -172

23 21 47 04.28 54.615N 161.518E 33km  
5.2mb ( 74 obs.)  
NEAR EAST COAST OF KAMCHATKA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 22S, 30C  
Centroid Location:  
Origin Time 21:47: 6.7 0.9  
Lat 54.25N 0.09 Lon 162.57E 0.13  
Dep 43.3 7.6 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 3.43 Plg=65 Azm= 12  
N -0.70 24 204  
P -2.73 5 112  
Best Double Couple:Mo=3.1\*10\*\*16  
NP1:Strike=178 Dip=45 Slip= 54  
NP2: 43 55 121

24 10 38 49.27 12.950N 121.373E 62km  
5.3mb ( 26 obs.)  
MINDORO, PHILIPPINE ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 23S, 28C  
Centroid Location:  
Origin Time 10:38:47.8 0.5  
Lat 12.81N 0.05 Lon 121.81E 0.08  
Dep 37.3 6.7 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 3.55 Plg= 6 Azm=319  
N 1.62 8 50  
P -5.17 80 196  
Best Double Couple:Mo=4.4\*10\*\*16  
NP1:Strike= 40 Dip=40 Slip=-103  
NP2: 237 51 -79

24 13 21 15.56 5.294S 150.461E 142km  
5.5mb ( 55 obs.)  
NEW BRITAIN REGION, P.N.G.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 42S, 59C  
Centroid Location:  
Origin Time 13:21:19.7 0.4  
Lat 5.53S 0.04 Lon 150.55E 0.04  
Dep 150.2 0.9 Half-duration 1.1  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.07 Plg= 2 Azm=309  
N 0.46 11 218  
P -1.53 78 49  
Best Double Couple:Mo=1.3\*10\*\*17  
NP1:Strike= 50 Dip=44 Slip= -74  
NP2: 208 48 -105

24 19 42 44.63 13.099S 167.100E 218km  
5.6mb ( 44 obs.)  
VANUATU ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 41S, 65C  
Centroid Location:  
Origin Time 19:42:48.6 0.3  
Lat 13.24S 0.03 Lon 167.07E 0.02  
Dep 218.0 1.3 Half-duration 1.1  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.11 Plg=87 Azm=229  
N 0.21 2 359  
P -1.32 3 89  
Best Double Couple:Mo=1.2\*10\*\*17  
NP1:Strike=181 Dip=43 Slip= 93  
NP2: 357 48 87

25 08 49 50.03 43.809N 149.012E 61km  
5.4mb ( 87 obs.)  
EAST OF KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 25C  
Centroid Location:  
Origin Time 08:49:53.0 1.1  
Lat 43.93N 0.10 Lon 149.25E 0.11  
Dep 34.2 5.8 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.51 Plg=76 Azm=314  
N 1.43 0 224  
P -6.94 14 134  
Best Double Couple:Mo=6.2\*10\*\*16  
NP1:Strike=224 Dip=31 Slip= 90

NP2: 44 59 90

26 04 48 03.23 2.889N 79.494W 10km  
5.1mb ( 60 obs.) 4.5Msz ( 8 obs.)  
SOUTH OF PANAMA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 31S, 43C  
Centroid Location:  
Origin Time 04:48: 7.5 0.5  
Lat 2.65N 0.06 Lon 79.32W 0.06  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.46 Plg=10 Azm=284  
N -0.06 14 16  
P -9.40 72 159  
Best Double Couple:Mo=9.4\*10\*\*16  
NP1:Strike=357 Dip=37 Slip=-114  
NP2: 206 57 -73

26 06 11 10.20 20.126S 169.126E 36km  
5.8mb ( 57 obs.) 5.4Msz ( 42 obs.)  
VANUATU ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 45S, 80C  
Centroid Location:  
Origin Time 06:11:16.9 0.2  
Lat 20.21S 0.02 Lon 168.84E 0.02  
Dep 36.0 BDY Half-duration 2.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 4.29 Plg=83 Azm= 19  
N 0.55 6 164  
P -4.83 4 254  
Best Double Couple:Mo=4.6\*10\*\*17  
NP1:Strike=351 Dip=41 Slip= 99  
NP2: 159 49 82

26 11 21 00.81 0.147N 123.681E 199km  
5.2mb ( 33 obs.)  
MINAHASSA PENINSULA, SULAWESI  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 19C  
Centroid Location:  
Origin Time 11:21: 1.0 0.8  
Lat 0.55N 0.10 Lon 124.15E 0.12  
Dep 185.2 3.8 Half-duration 2.2  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.98 Plg=41 Azm= 24  
N 4.20 37 254  
P -14.18 28 141  
Best Double Couple:Mo=1.2\*10\*\*17  
NP1:Strike=180 Dip=38 Slip= 12  
NP2: 80 82 127

27 18 27 08.01 5.768N 119.324E 27km  
5.4mb ( 33 obs.) 4.9Msz ( 15 obs.)  
SULU ARCHIPELAGO  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 33S, 58C  
Centroid Location:  
Origin Time 18:27:11.6 0.3  
Lat 5.90N 0.03 Lon 119.40E 0.04  
Dep 34.0 3.7 Half-duration 1.3  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.26 Plg=28 Azm= 13  
N -0.44 61 173  
P -1.82 8 278  
Best Double Couple:Mo=2.0\*10\*\*17  
NP1:Strike= 52 Dip=64 Slip= 165  
NP2: 148 77 26

28 18 32 44.01 13.615N 143.915E 208km  
5.3mb ( 55 obs.)  
SOUTH OF MARIANA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 18S, 26C  
Centroid Location:  
Origin Time 18:32:47.6 0.8  
Lat 13.22N 0.05 Lon 143.73E 0.12  
Dep 199.6 3.2 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.72 Plg=48 Azm= 53  
N -0.24 30 283  
P -9.47 26 176

Best Double Couple:Mo=9.6\*10\*\*16  
NP1:Strike=219 Dip=33 Slip= 22  
NP2: 110 78 121

29 08 21 54.73 22.126S 175.894W 88km  
5.2mb ( 39 obs.)  
TONGA ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 28S, 43C  
Centroid Location:  
Origin Time 08:22: 1.1 0.4  
Lat 21.87S 0.06 Lon 175.87W 0.04  
Dep 108.3 3.0 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 8.50 Plg=39 Azm= 86  
N 0.10 22 337  
P -8.60 43 224  
Best Double Couple:Mo=8.6\*10\*\*16  
NP1:Strike=240 Dip=23 Slip= -6  
NP2: 336 88 -113

29 14 30 28.40 38.707N 20.484E 21km  
4.9mb ( 44 obs.) 4.8Msz ( 6 obs.)  
GREECE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 14C  
Centroid Location:  
Origin Time 14:30:31.4 1.4  
Lat 38.61N 0.12 Lon 20.49E 0.10  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.08 Plg= 0 Azm=140  
N -0.47 90 180  
P -4.61 0 50  
Best Double Couple:Mo=4.8\*10\*\*16  
NP1:Strike=185 Dip=90 Slip=-180  
NP2: 275 90 0

29 20 32 44.96 20.150S 168.925E 33km  
5.2mb ( 25 obs.)  
LOYALTY ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 26S, 41C  
Centroid Location:  
Origin Time 20:32:51.5 0.6  
Lat 20.10S 0.05 Lon 168.62E 0.05  
Dep 46.2 3.7 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.62 Plg=59 Azm=180  
N 3.31 30 12  
P -9.92 5 279  
Best Double Couple:Mo=8.3\*10\*\*16  
NP1:Strike=341 Dip=48 Slip= 47  
NP2: 214 57 127

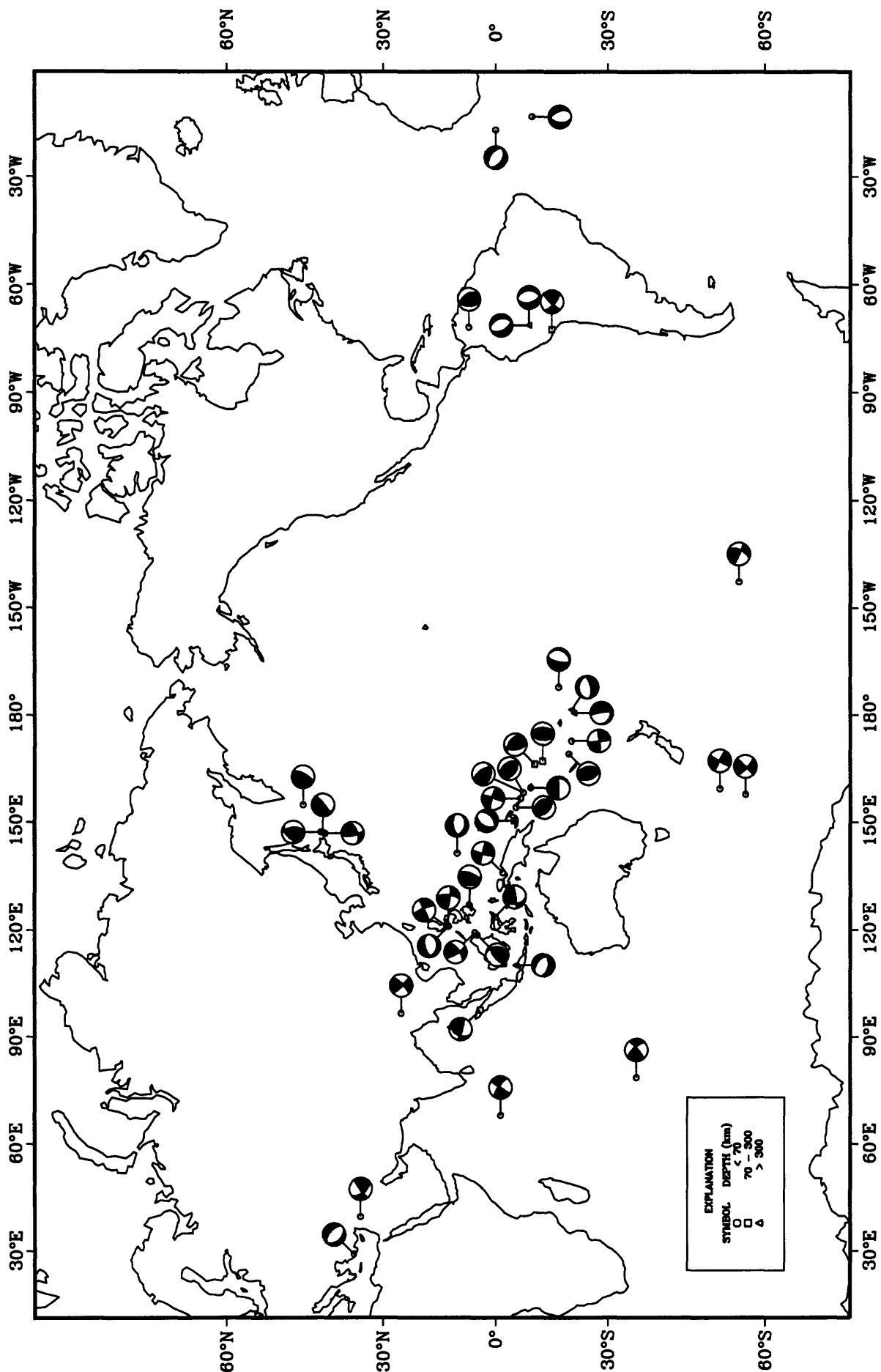
30 02 28 15.52 10.774N 41.033W 10km  
4.9mb ( 41 obs.) 4.6Msz ( 22 obs.)  
NORTHERN MID-ATLANTIC RIDGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 19S, 29C  
Centroid Location:  
Origin Time 02:28:21.1 0.7  
Lat 10.80N 0.09 Lon 41.04W 0.09  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.19 Plg= 7 Azm= 40  
N -0.87 75 284  
P -4.32 13 132  
Best Double Couple:Mo=4.8\*10\*\*16  
NP1:Strike=175 Dip=76 Slip= -5  
NP2: 266 86 -166

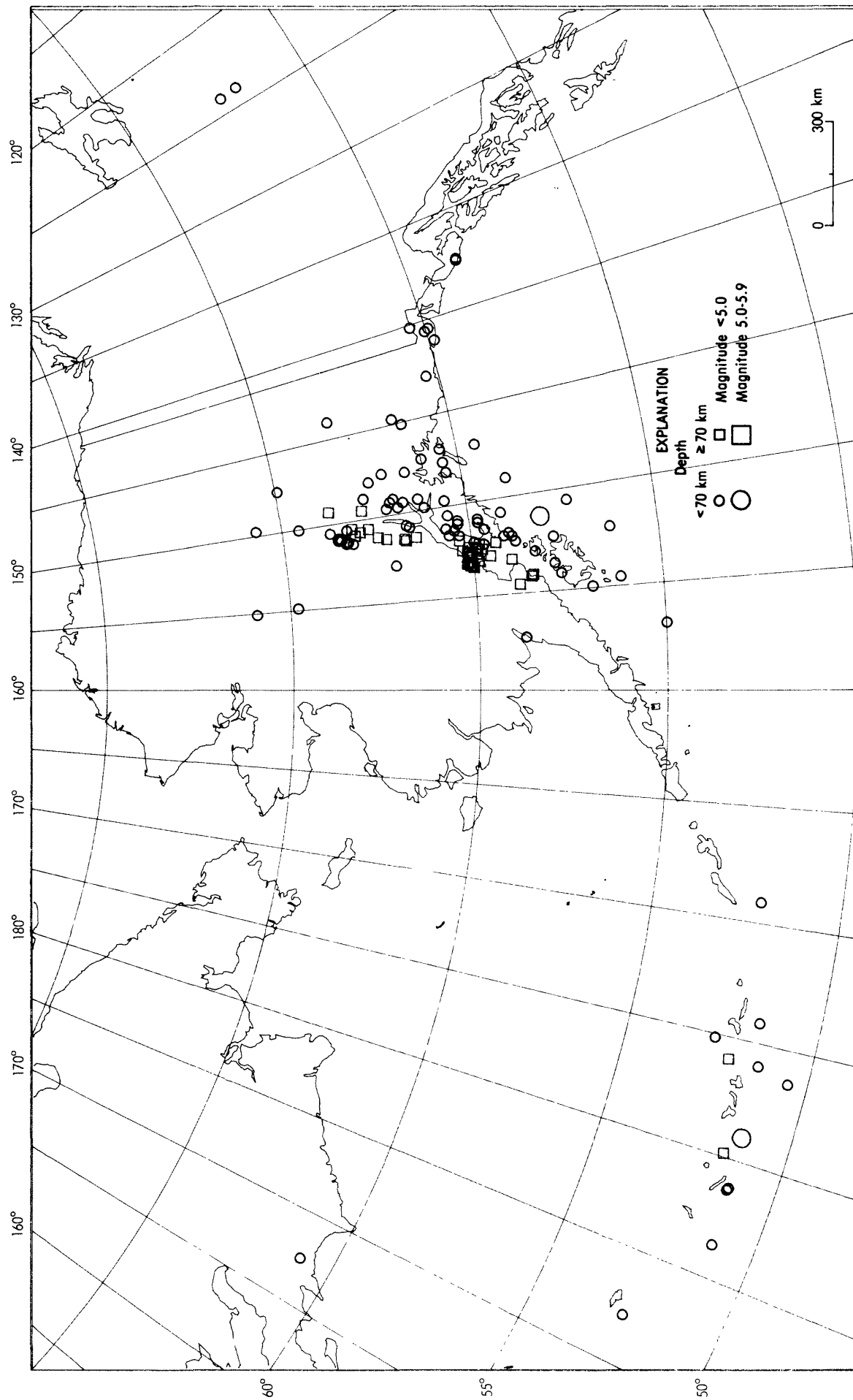
30 21 50 54.14 2.871N 84.306W 33km  
5.3mb ( 34 obs.)  
OFF COAST OF CENTRAL AMERICA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 29S, 35C  
Centroid Location:  
Origin Time 21:50:54.3 0.6  
Lat 2.63N 0.08 Lon 84.37W 0.08  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.01 Plg=25 Azm= 2

|                                  |       |    |     |  |
|----------------------------------|-------|----|-----|--|
| N                                | 1.27  | 6  | 95  |  |
| P                                | -8.28 | 64 | 199 |  |
| Best Double Couple:Mo-7.6*10**16 |       |    |     |  |
| NP1:Strike= 78 Dip=21 Slip=-108  |       |    |     |  |
| NP2:                             | 277   | 70 | -83 |  |

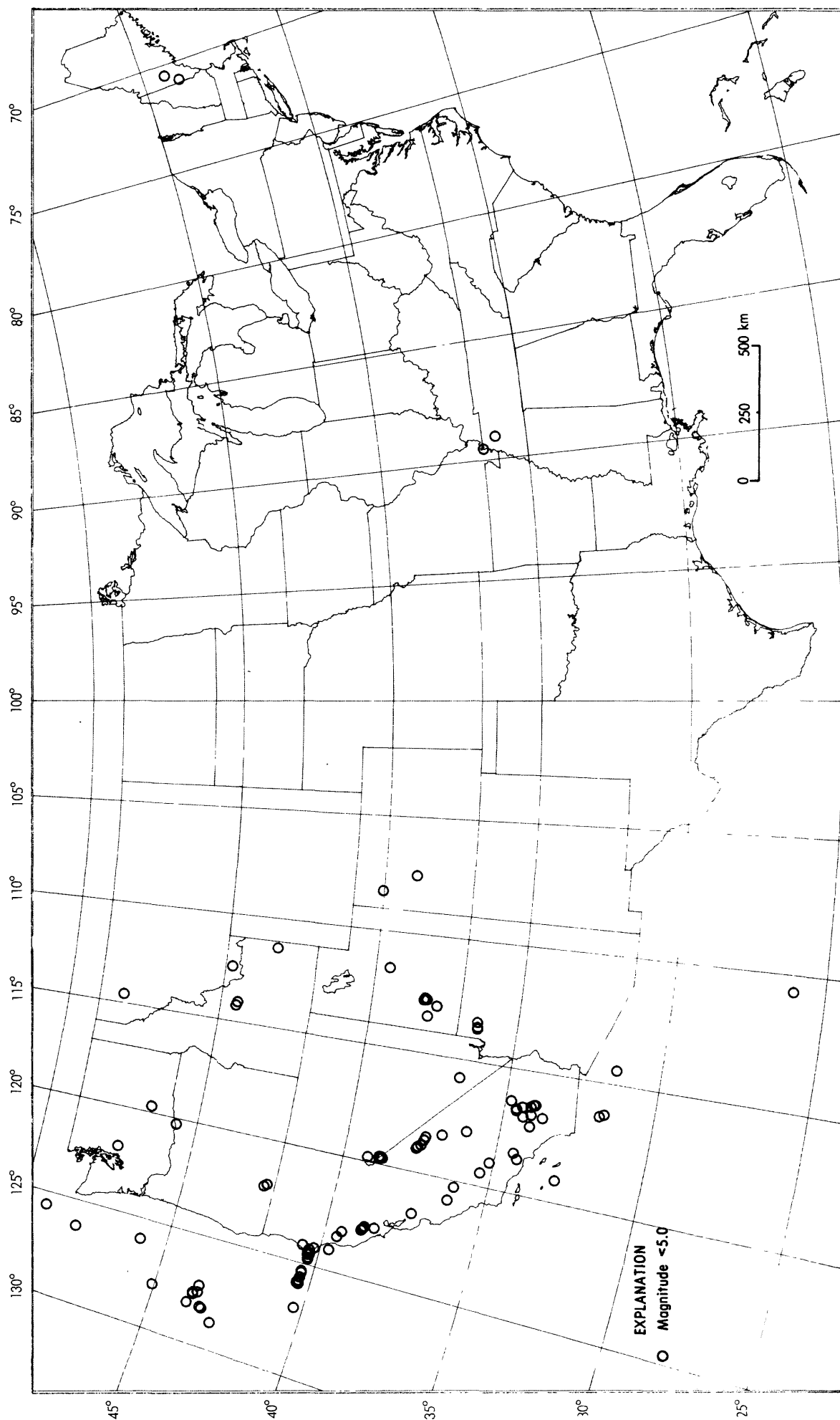
Compiled by Francis W. Baldwin, Pamela J. Benfield, Pingsheng Chang, George L. Choy, Willis S. Jacobs, Stuart K. Koyanagi, Christina K. LaVonne, John H. Minsch, Waverly J. Person, Bruce W. Presgrave, William H. Schmieder, Stuart A. Sipkin and Madeleine D. Zirbes.

# Earthquake Focal Mechanisms for November 1994

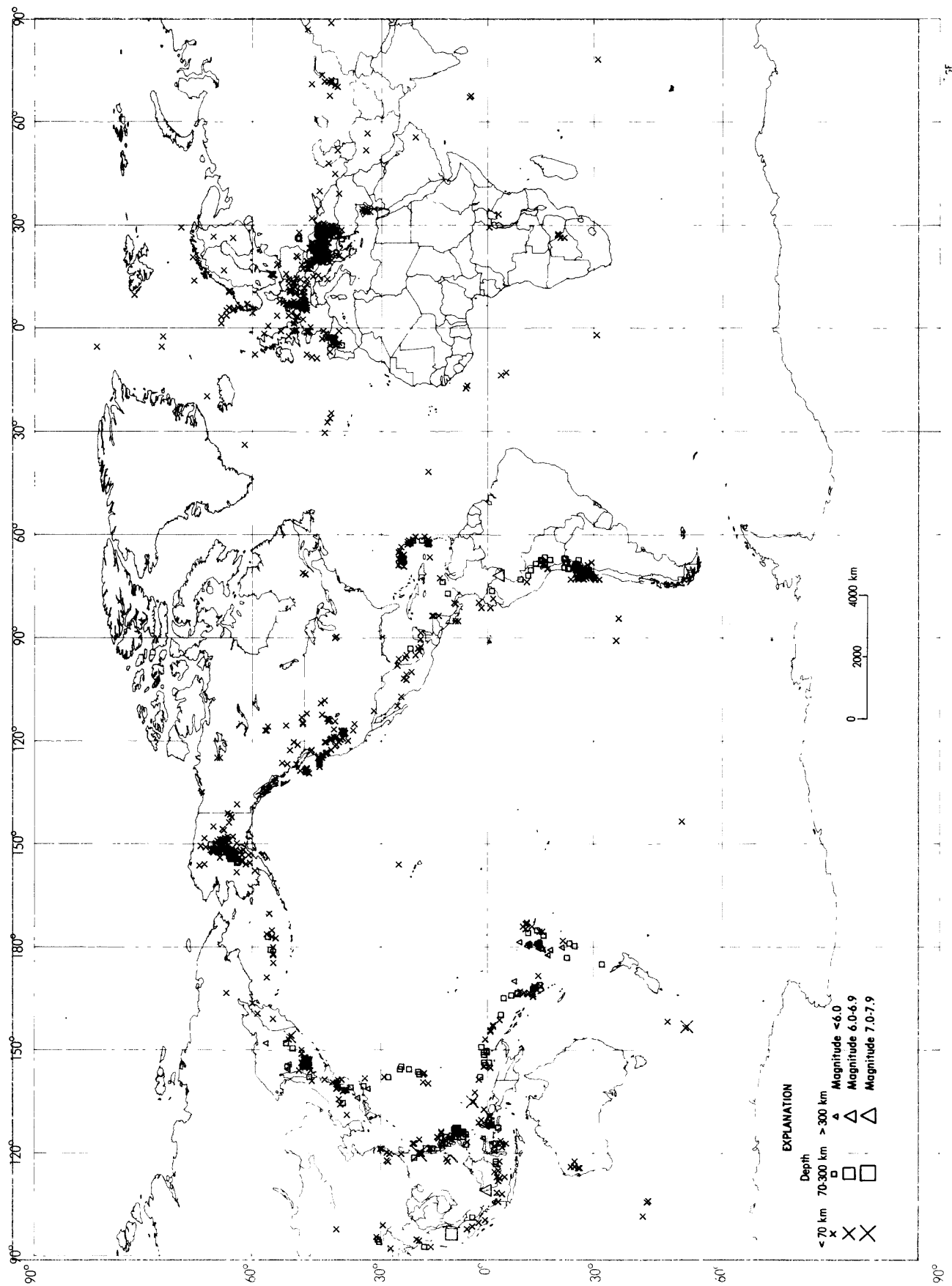




Earthquake epicenters in Alaska and adjacent regions for November, 1994



Earthquake epicenters in the conterminous United States and adjacent regions for November, 1994



Earthquakes located in November, 1994



### CHANGE OF ADDRESS FORM

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |  |  |  |  |          |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------|--|--|--|--|----------|--|--|--|--|--|--|--|--|--|
| NAME—FIRST, LAST                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |  |  |  |  |          |  |  |  |  |  |  |  |  |  |
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# PRELIMINARY DETERMINATION OF EPICENTERS

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### U.S. DEPARTMENT OF THE INTERIOR / GEOLOGICAL SURVEY National Earthquake Information Center

OCTOBER 1994

| K DAY<br>E Y | ORIGIN TIME<br>UTC<br>HR MN SEC | GEOGRAPHIC<br>COORDINATES<br>LAT LONG | DEPTH | MAGNITUDES<br>GS<br>MB Msz | SD  | NO.<br>STA<br>USED | REGION, CONTRIBUTED MAGNITUDES AND COMMENTS   |
|--------------|---------------------------------|---------------------------------------|-------|----------------------------|-----|--------------------|---|
| 01           | 00 07 41.1                      | 60.150 N 153.343 W                    | 148   |                            |     | 39                 | SOUTHERN ALASKA. <AEIC>.  |
| 01           | 00 08 51.2                      | 42.901 N 7.638 E                      | 10 G  |                            | 0.7 | 13                 | WESTERN MEDITERRANEAN SEA. ML 2.7 (LDG), 2.5 (GEN).   |
| 01           | 00 26 18.2                      | 38.843 N 119.773 W                    | 1     |                            |     | 53                 | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.1 (GM).<br>ML 3.2 (BRK).  |
| 01           | 00 58 33.7                      | 8.366 N 103.185 W                     | 33 N  | 4.8                        |     | 0.9                | 51 OFF COAST OF MEXICO  |
| 01           | 01 06 28.4                      | 11.220 N 87.917 W                     | 33 N  | 4.9 5.0                    |     | 1.2                | 87 NEAR COAST OF NICARAGUA  |
| 01           | 01 22 30.5                      | 44.492 N 9.706 E                      | 10 G  |                            |     | 0.9                | 48 NORTHERN ITALY. ML 3.2 (GEN), 3.1 (LDG).   |
| 01           | 02 35 41.7                      | 43.075 N 0.861 W                      | 10 G  |                            |     | 0.1                | 7 PYRENEES. ML 1.0 (STR).   |
| 01           | 03 29 05.1                      | 41.867 N 22.857 E                     | 10 G  |                            |     | 1.0                | 8 NORTHWESTERN BALKAN REGION  |
| 01           | 03 31 40.6                      | 41.788 N 22.921 E                     | 10 G  |                            |     | 0.4                | 6 NORTHWESTERN BALKAN REGION  |
| 01           | 03 46 08.9                      | 63.743 N 150.767 W                    | 19    |                            |     | 44                 | CENTRAL ALASKA. <AEIC>. ML 2.7 (AEIC).  |
| 01           | 04 35 09.0                      | 40.67 N 29.92 E                       | 10 G  |                            | 0.6 | 6                  | TURKEY. ML 2.8 (ISK).   |
| 01           | 05 52 31.2                      | 32.18 S 71.92 W                       | 10 G  |                            | 0.5 | 11                 | NEAR COAST OF CENTRAL CHILE. MD 4.2 (SAN).  |
| 01           | 07 04 56.0                      | 10.37 N 86.57 W                       | 33 N  | 4.7                        |     | 1.2                | 23 OFF COAST OF COSTA RICA  |
| 01           | 07 14 39.0                      | 35.912 N 27.923 E                     | 95    | 3.8                        |     | 0.7                | 48 DODECANESE ISLANDS. MD 4.0 (ATH).  |
| 01           | 07 33 51.0                      | 5.708 S 76.956 W                      | 33 N  | 4.8                        |     | 1.1                | 50 NORTHERN PERU  |
| 01           | 08 25 14.7                      | 27.149 N 57.548 E                     | 46 D  | 5.0                        |     | 0.9                | 114 SOUTHERN IRAN   |
| 01           | 08 40 13.0                      | 39.41 N 29.62 E                       | 10 G  |                            | 0.5 | 5                  | TURKEY. ML 2.7 (ISK).   |
| 01           | 08 47 13.8                      | 17.957 S 167.867 E                    | 33 N  | 4.4                        |     | 1.4                | 15 VANUATU ISLANDS  |
| 01           | 09 44 32.4                      | 21.753 N 121.436 E                    | 33 N  | 4.4                        |     | 1.3                | 5 TAIWAN REGION   |
| 01           | 10 18 36.9                      | 39.15 N 27.53 E                       | 10 G  |                            | 0.8 | 4                  | TURKEY. ML 2.7 (ISK).   |
| 01           | 11 23 56.2                      | 39.138 N 27.662 E                     | 10 G  |                            | 0.9 | 5                  | TURKEY. ML 2.8 (ISK).   |
| 01           | 12 21 39.9                      | 32.41 S 71.57 W                       | 10 G  |                            | 0.5 | 10                 | NEAR COAST OF CENTRAL CHILE. MD 3.6 (SAN).  |
| 01           | 12 44 36.0                      | 10.726 N 62.566 W                     | 109   | 4.2                        |     | 0.8                | 40 NEAR COAST OF VENEZUELA. MD 4.6 (TRN).   |
| 01           | 12 52 42.3                      | 39.684 N 29.429 E                     | 10 G  |                            | 0.6 | 6                  | TURKEY. ML 2.8 (ISK).   |
| 01           | 13 06 45.0                      | 17.70 S 178.92 W                      | 651 ? | 4.8                        |     | 0.9                | 12 FIJI ISLANDS REGION  |
| 01           | 14 04 20.0                      | 13.116 N 50.416 E                     | 10 G  | 4.9 4.4                    |     | 1.2                | 102 EASTERN GULF OF ADEN  |
| 01           | 14 13 51.1                      | 10.688 N 62.612 W                     | 100 G |                            | 0.8 | 11                 | NEAR COAST OF VENEZUELA. MD 3.8 (TRN).  |
| 01           | 14 30 35.9                      | 61.643 N 151.842 W                    | 93    | 4.4                        |     | 182                | SOUTHERN ALASKA. <AEIC>. Felt (III) at Anchorage and<br>(II) at Palmer.   |
| a 01         | 14 54 28.6                      | 18.278 S 178.475 W                    | 645 * | 5.5                        | 1.0 | 28                 | FIJI ISLANDS REGION   |
| 01           | 15 03 31.3                      | 17.849 S 167.805 E                    | 26 D  | 5.4 5.3                    | 1.1 | 154                | VANUATU ISLANDS. Mw 5.7 (HRV). Mo=5.3*10**17 Nm (PPT).  |
| 01           | 16 29 54.7                      | 39.71 N 29.47 E                       | 10 G  |                            | 0.8 | 7                  | TURKEY. ML 2.8 (ISK).   |
| 01           | 16 32 11.0                      | 8.470 N 103.405 W                     | 33 N  | 4.6                        | 1.1 | 27                 | OFF COAST OF MEXICO   |
| 01           | 16 34 30.2                      | 34.102 S 71.305 W                     | 60 G  |                            | 0.1 | 11                 | NEAR COAST OF CENTRAL CHILE. MD 3.8 (SAN).  |
| a 01         | 16 35 20.7                      | 17.745 S 167.682 E                    | 17 G  | 5.9 6.5                    | 1.1 | 378                | VANUATU ISLANDS. Mw 6.4 (GS), 6.5 (HRV). Ms 6.5 (BRK).<br>Mo=9.9*10**18 Nm (PPT). Depth from broadband<br>displacement seismograms. |
| 01           | 16 44 31.7                      | 42.517 N 24.376 E                     | 10 G  |                            | 1.4 | 6                  | BULGARIA  |
| 01           | 17 06 59.6                      | 18.107 S 167.303 E                    | 33 N  |                            | 0.9 | 26                 | VANUATU ISLANDS   |
| 01           | 17 29 32.3                      | 17.884 S 167.845 E                    | 33 N  | 4.7                        | 1.2 | 35                 | VANUATU ISLANDS   |
| 01           | 17 45 48.8                      | 18.50 S 166.65 E                      | 33 N  | 4.4                        | 1.4 | 5                  | VANUATU ISLANDS REGION  |
| a 01         | 17 46 37.5                      | 17.768 S 167.830 E                    | 33 N  | 5.8 6.3                    | 1.1 | 326                | VANUATU ISLANDS. Mw 6.2 (HRV). Ms 6.3 (BRK).<br>Mo=5.3*10**18 Nm (PPT).   |
| 01           | 17 54 16.7                      | 17.962 S 167.321 E                    | 33 N  | 5.1                        | 1.0 | 76                 | VANUATU ISLANDS   |
| 01           | 18 16 22.2                      | 18.040 S 167.365 E                    | 33 N  | 5.1 5.4                    | 1.1 | 67                 | VANUATU ISLANDS   |
| 01           | 18 20 11.1                      | 17.801 S 167.835 E                    | 33 N  | 4.7                        | 1.1 | 24                 | VANUATU ISLANDS   |
| 01           | 18 23 49.0                      | 17.885 S 176.314 W                    | 33 N  | 4.9                        | 1.1 | 41                 | FIJI ISLANDS REGION   |
| 01           | 18 40 13.5                      | 37.502 N 118.865 W                    | 9     |                            |     | 27                 | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM).   |
| 01           | 19 48 26.5                      | 5.576 N 127.497 E                     | 60 *  | 5.0 4.7                    | 0.9 | 26                 | PHILIPPINE ISLANDS REGION   |
| 01           | 20 12 19.0                      | 17.984 S 167.520 E                    | 33 N  | 4.9                        | 1.1 | 86                 | VANUATU ISLANDS   |
| 01           | 20 39 05.4                      | 18.128 S 167.388 E                    | 33 N  | 4.8                        | 1.2 | 60                 | VANUATU ISLANDS   |
| 01           | 20 49 31.6                      | 10.513 N 69.288 W                     | 33 N  |                            | 0.9 | 5                  | VENEZUELA   |
| 01           | 21 01 28.3                      | 17.806 S 167.790 E                    | 25 D  | 5.3 4.9                    | 1.1 | 68                 | VANUATU ISLANDS   |
| 01           | 21 43 22.1                      | 10.475 N 147.568 E                    | 33 N  | 4.8                        | 0.9 | 36                 | E. CAROLINE ISLANDS, MICRONESIA   |
| 01           | 21 57 35.7                      | 11.078 N 61.862 W                     | 33 N  |                            | 0.6 | 5                  | WINDWARD ISLANDS. MD 3.3 (TRN).   |
| 01           | 22 04 09.5                      | 18.041 S 167.572 E                    | 33 N  | 4.8                        | 1.2 | 83                 | VANUATU ISLANDS   |
| a 01         | 23 28 56.2                      | 17.638 S 167.787 E                    | 18 D  | 5.2                        | 1.2 | 103                | VANUATU ISLANDS. Mw 5.4 (HRV).  |

|      |             |          |           |       |         |     |     |   |
|------|-------------|----------|-----------|-------|---------|-----|-----|---|
| a 01 | 23 53 59.4  | 17.884 S | 167.436 E | 33 N  | 4.9 4.9 | 1.0 | 95  | VANUATU ISLANDS. Mw 5.4 (HRV).  |
| 02   | 00 44 19.8  | 7.021 S  | 13.113 W  | 10 G  | 4.8 5.3 | 0.9 | 71  | ASCENSION ISLAND REGION   |
| a 02 | 00 55 37.4  | 8.121 N  | 93.935 E  | 33 N  | 5.1 4.6 | 1.1 | 157 | NICOBAR ISLANDS, INDIA. Mw 5.2 (HRV).   |
| 02   | 01 32 52.6  | 8.029 N  | 93.965 E  | 33 N  | 4.6     | 1.0 | 25  | NICOBAR ISLANDS, INDIA  |
| 02   | 01 47 16.9* | 39.040 N | 26.985 E  | 10 G  |         | 0.5 | 5   | TURKEY. ML 3.0 (ISK).   |
| 02   | 02 01 14.3* | 59.286 N | 153.522 W | 98    |         |     | 39  | SOUTHERN ALASKA. <AEIC>.  |
| 02   | 02 03 36.9* | 38.234 N | 1.144 W   | 17    |         | 0.6 | 12  | SPAIN. mbLg 3.1 (MDD).  |
| 02   | 02 43 50.6  | 35.381 N | 0.109 W   | 15    |         | 0.7 | 26  | NORTHERN ALGERIA. mbLg 3.7 (MDD).   |
| 02   | 03 18 35.6* | 17.956 S | 167.949 E | 10 G  | 4.0     | 1.3 | 21  | VANUATU ISLANDS   |
| 02   | 03 22 56.1* | 44.528 N | 8.531 E   | 10 G  |         | 0.1 | 6   | NORTHERN ITALY. ML 2.0 (GEN).   |
| 02   | 03 26 54.6* | 17.847 S | 167.966 E | 33 N  | 4.9     | 1.2 | 50  | VANUATU ISLANDS   |
| 02   | 03 45 16.4* | 17.873 S | 167.899 E | 10 G  | 3.6     | 1.2 | 17  | VANUATU ISLANDS   |
| 02   | 04 11 39.0* | 59.434 N | 152.486 W | 73    |         |     | 40  | SOUTHERN ALASKA. <AEIC>.  |
| 02   | 04 52 08.6* | 33.74 S  | 72.91 W   | 10 G  |         | 0.7 | 12  | OFF COAST OF CENTRAL CHILE. MD 4.2 (SAN).   |
| 02   | 05 18 16.8  | 32.488 S | 71.703 W  | 10 G  |         | 0.7 | 14  | NEAR COAST OF CENTRAL CHILE. MD 4.4 (SAN).  |
| 02   | 05 20 38.1  | 17.811 S | 167.730 E | 33 N  | 4.2     | 0.9 | 27  | VANUATU ISLANDS   |
| 02   | 06 34 52.0* | 17.962 S | 167.828 E | 33 N  | 4.3     | 1.3 | 19  | VANUATU ISLANDS   |
| 02   | 08 45 59.8* | 39.110 N | 27.626 E  | 10 G  |         | 0.6 | 5   | TURKEY. ML 2.8 (ISK).   |
| 02   | 09 07 00.1* | 39.127 N | 27.619 E  | 10 G  |         | 0.5 | 5   | TURKEY. ML 2.8 (ISK).   |
| 02   | 09 45 35.1  | 42.569 N | 0.122 E   | 5 G   |         | 1.2 | 26  | PYRENEES. ML 3.2 (LDG). MD 2.7 (MDD).   |
| 02   | 09 57 35.4* | 11.150 N | 62.608 W  | 10 G  |         | 1.0 | 7   | WINDWARD ISLANDS. MD 3.5 (TRN).   |
| a 02 | 10 14 32.3  | 17.563 S | 168.053 E | 10 G  | 5.3 4.9 | 1.2 | 75  | VANUATU ISLANDS. Mw 5.4 (HRV). Ms 5.0 (BRK).  |
| 02   | 10 34 15.7* | 14.86 S  | 178.70 E  | 33 N  | 4.8 4.8 | 1.3 | 6   | FIJI ISLANDS REGION   |
| 02   | 10 34 31.9* | 17.838 S | 167.876 E | 33 N  | 4.3     | 0.9 | 15  | VANUATU ISLANDS   |
| 02   | 10 35 45.4* | 17.780 S | 167.645 E | 33 N  | 5.2 5.1 | 1.2 | 46  | VANUATU ISLANDS   |
| 02   | 10 46 09.7* | 17.80 S  | 168.54 E  | 59 *  | 4.5     | 0.6 | 7   | VANUATU ISLANDS   |
| 02   | 11 08 04.1  | 70.004 N | 15.153 W  | 10 G  | 4.6 4.7 | 1.4 | 33  | JAN MAYEN ISLAND REGION   |
| 02   | 11 27 22.5  | 42.347 N | 72.277 W  | 10 G  |         | 0.6 | 14  | SOUTHERN NEW ENGLAND. mbLg 3.7 (GS), 3.5 (OTT). Felt (IV) at Barre, Belchertown, Gilbertville, Granby, Hardwick, Leverett, Ludlow, Oakham, Shutesbury, South Hadley, Springfield, Thorndike, Ware, Warren, Wheelwright and Wilbraham, Massachusetts. Felt at Boston, Massachusetts and Nashua, New Hampshire. Also felt in parts of northern Connecticut. |
| 02   | 11 48 45.3* | 17.589 S | 167.673 E | 33 N  | 4.7     | 1.1 | 46  | VANUATU ISLANDS   |
| 02   | 12 58 49.3* | 34.17 N  | 74.60 E   | 33 N  | 4.5     | 0.5 | 22  | SOUTHWESTERN KASHMIR  |
| 02   | 13 56 52.7* | 39.694 N | 29.481 E  | 10 G  |         | 0.8 | 9   | TURKEY. ML 2.8 (ISK).   |
| 02   | 14 36 36.7  | 42.360 N | 72.218 W  | 10 G  |         | 0.5 | 7   | SOUTHERN NEW ENGLAND. mbLg 3.3 (GS), 3.1 (OTT).   |
| 02   | 14 46 01.5* | 38.736 N | 119.674 W | 8     |         |     | 15  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM).   |
| 02   | 15 19 41.4* | 34.203 N | 116.826 W | 6     |         |     | 7   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).   |
| 02   | 15 30 33.8  | 18.555 N | 145.518 E | 205 D | 4.8     | 1.1 | 109 | MARIANA ISLANDS   |
| 02   | 15 52 49.7* | 17.776 S | 167.784 E | 33 N  | 4.3     | 1.1 | 14  | VANUATU ISLANDS   |
| 02   | 16 13 09.2* | 39.666 N | 29.459 E  | 10 G  |         | 0.7 | 10  | TURKEY. ML 2.9 (ISK).   |
| 02   | 16 20 16.8  | 38.554 N | 73.888 E  | 125 D | 4.7     | 1.0 | 101 | TAJIKISTAN-XINJIANG BORDER REG.   |
| 02   | 16 55 19.7* | 6.571 S  | 146.641 E | 125   | 4.8     | 1.2 | 14  | EASTERN NEW GUINEA REG., P.N.G.   |
| 02   | 19 28 20.9* | 31.193 S | 68.564 W  | 94 ?  |         | 0.7 | 8   | SAN JUAN PROVINCE, ARGENTINA  |
| 02   | 19 48 48.8  | 7.066 S  | 128.975 E | 115 * | 4.8     | 1.2 | 35  | BANDA SEA   |
| 02   | 19 52 39.0* | 37.797 N | 21.065 E  | 10 G  |         | 1.4 | 5   | SOUTHERN GREECE. MD 3.5 (ATH).  |
| 02   | 20 06 13.4* | 2.26 S   | 138.23 E  | 33 N  | 4.7     | 1.0 | 7   | IRIAN JAYA, INDONESIA   |
| 02   | 20 31 19.7* | 17.768 S | 167.813 E | 33 N  | 4.8     | 1.2 | 45  | VANUATU ISLANDS   |
| 02   | 20 34 24.7* | 39.05 N  | 28.40 E   | 10 G  |         | 1.5 | 4   | TURKEY. ML 2.8 (ISK).   |
| 02   | 21 47 35.2* | 38.753 N | 119.724 W | 0     |         |     | 7   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM).   |
| a 02 | 22 10 39.6  | 25.327 S | 177.081 W | 65 D  | 5.4     | 0.9 | 93  | SOUTH OF FIJI ISLANDS. Mw 5.2 (HRV). mb 5.4 (BRK).  |
| 02   | 22 24 49.9  | 45.567 N | 15.940 E  | 10 G  |         | 0.7 | 7   | NORTHWESTERN BALKAN REGION. MD 3.0 (LJU).   |
| 02   | 22 39 30.3* | 26.418 S | 27.387 E  | 10 G  |         | 0.7 | 7   | REPUBLIC OF SOUTH AFRICA. ML 3.9 (PRE).   |
| 02   | 22 42 09.5* | 11.937 N | 60.742 W  | 33 N  |         | 0.4 | 10  | WINDWARD ISLANDS. MD 3.8 (TRN).   |
| 02   | 23 52 26.6* | 40.579 N | 124.293 W | 25    |         |     | 26  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.0 (GM). Felt (III) at Rio Dell.  |
| 02   | 23 54 33.3* | 52.06 N  | 168.71 W  | 33 N  | 4.2     | 1.9 | 8   | FOX ISLANDS, ALEUTIAN ISLANDS   |
| 03   | 00 12 23.9* | 17.47 S  | 169.50 E  | 33 N  | 4.6     | 1.5 | 6   | VANUATU ISLANDS   |
| 03   | 02 01 56.1* | 63.640 N | 2.380 E   | 10 G  |         | 0.7 | 9   | NORWEGIAN SEA. ML 3.2 (BGS). MD 3.1 (BER).  |
| 03   | 02 22 45.6* | 32.763 N | 48.880 E  | 67 ?  | 4.6     | 0.8 | 10  | WESTERN IRAN. Felt at Masjed Soleyman.  |
| 03   | 03 08 00.6  | 35.640 N | 5.736 E   | 10 G  | 4.2     | 1.0 | 52  | NORTHERN ALGERIA. mbLg 3.9 (MDD).   |
| 03   | 03 32 02.8* | 60.146 N | 151.456 W | 43    |         |     | 67  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.2 (AEIC).   |
| 03   | 06 00 32.3* | 51.345 N | 15.821 E  | 10 G  |         | 0.9 | 6   | POLAND  |
| 03   | 06 30 11.5* | 37.540 N | 118.848 W | 10    |         |     | 29  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM).   |
| 03   | 06 50 26.9* | 0.699 N  | 29.158 W  | 10 G  | 4.7     | 1.3 | 15  | CENTRAL MID-ATLANTIC RIDGE  |
| 03   | 07 40 51.0* | 31.131 S | 68.502 W  | 33 N  |         | 1.5 | 5   | SAN JUAN PROVINCE, ARGENTINA  |
| 03   | 07 53 49.9* | 39.13 N  | 27.58 E   | 10 G  |         | 0.7 | 4   | TURKEY. ML 2.7 (ISK).   |
| 03   | 08 28 49.7* | 34.569 N | 120.052 W | 13    |         |     | 63  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS), 3.1 (BRK), 3.1 (GS). Felt (IV) at Solvang, (III) at Santa Ynez and (II) at Santa Barbara.   |
| 03   | 08 39 26.4* | 39.146 N | 27.631 E  | 10 G  |         | 0.6 | 5   | TURKEY. ML 2.8 (ISK).   |
| 03   | 08 43 50.1* | 39.15 N  | 27.40 E   | 5 G   |         | 0.5 | 4   | TURKEY. ML 2.7 (ISK).   |
| 03   | 09 49 17.0* | 39.64 N  | 29.56 E   | 5 G   |         | 0.7 | 4   | TURKEY. ML 2.6 (ISK).   |
| 03   | 10 08 04.3* | 39.153 N | 27.586 E  | 10 G  |         | 0.2 | 5   | TURKEY. ML 2.8 (ISK).   |
| 03   | 11 12 14.1* | 1.30 S   | 123.49 E  | 33 N  | 4.1     | 1.3 | 5   | SULAWESI, INDONESIA   |
| 03   | 11 30 11.9* | 32.012 N | 114.845 W | 10    |         |     | 11  | W. ARIZONA-SONORA BORDER REGION. <ECX-P>. MD 3.8 (ECX). Felt at Riito, Sonora, Mexico.  |
| 03   | 11 57 41.6* | 31.31 S  | 68.69 W   | 79 ?  |         | 0.4 | 5   | SAN JUAN PROVINCE, ARGENTINA  |
| 03   | 12 17 51.5* | 39.116 N | 27.608 E  | 10 G  |         | 0.8 | 5   | TURKEY. ML 2.7 (ISK).   |
| 03   | 12 20 38.6* | 39.124 N | 27.565 E  | 10 G  |         | 0.7 | 5   | TURKEY. ML 2.8 (ISK).   |
| 03   | 12 31 30.0* | 40.979 N | 21.343 E  | 10 G  |         | 1.3 | 15  | GREECE. ML 3.2 (TTG), 2.8 (TIR).  |
| 03   | 12 37 27.6* | 33.684 S | 71.206 W  | 60 G  |         | 0.2 | 11  | NEAR COAST OF CENTRAL CHILE. MD 3.8 (SAN).  |
| 03   | 13 06 41.0* | 39.250 N | 27.696 E  | 10 G  |         | 0.9 | 5   | TURKEY. ML 2.7 (ISK).   |
| 03   | 13 09 56.2* | 62.663 N | 124.852 W | 10 G  | 3.7     | 1.2 | 11  | NORTHWEST TERRITORIES, CANADA   |
| 03   | 13 25 20.4* | 40.133 N | 29.517 E  | 10 G  |         | 1.0 | 6   | TURKEY. ML 2.7 (ISK).   |
| 03   | 13 46 52.2* | 10.164 N | 60.934 W  | 75 *  |         | 1.1 | 16  | TRINIDAD. MD 4.2 (TRN).   |
| a 03 | 14 00 48.6  | 32.066 N | 114.948 W | 10 G  | 4.5     | 1.1 | 61  | W. ARIZONA-SONORA BORDER REGION. Mw 5.2 (HRV). MD 4.9 (ECX). Felt (IV) at Gadsden; (III) at Welton; (II) at Dateland and Tacna, Arizona. Felt (III) at Jacumba and Winterhaven; (II) at Bard and Niland, California. Felt at Riito and San Luis Rio Colorado, Sonora, Mexico.   |

|   |    |             |          |           |       |         |     |     |  |   |  |  |  |  |  |  |  |  |  |
|---|----|-------------|----------|-----------|-------|---------|-----|-----|--|---|--|--|--|--|--|--|--|--|--|
|   |    |             |          |           |       |         |     |     |  | Also felt at Mexicali, Baja California, Mexico. |  |  |  |  |  |  |  |  |  |
| a | 03 | 14 47 07.9* | 2.228 S  | 133.762 E | 33 N  | 4.7     | 1.3 | 13  | IRIAN JAYA REGION, INDONESIA   |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 16 22 56.4  | 2.100 S  | 133.901 E | 33 N  | 4.9 4.6 | 1.4 | 34  | IRIAN JAYA REGION, INDONESIA. Mw 5.1 (HRV).  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 16 35 27.7* | 61.866 N | 152.049 W | 127   |         |     | 45  | SOUTHERN ALASKA. <AEIC>.   |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 17 54 10.7* | 9.686 N  | 69.765 W  | 10 G  |         | 0.8 | 9   | VENEZUELA. Felt at El Tocuyo and Guarico.  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 17 55 56.5  | 35.311 N | 139.465 E | 33 N  | 4.1     | 0.8 | 15  | NEAR S. COAST OF HONSHU, JAPAN   |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 18 16 04.5* | 62.309 N | 6.449 E   | 10 G  |         | 1.0 | 6   | SOUTHERN NORWAY. ML 2.5 (NAO). MD 2.5 (BER).   |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 18 17 21.1? | 34.63 S  | 71.11 W   | 80 G  |         | 0.2 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.6 (SAN).   |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 18 29 57.3* | 38.783 N | 122.749 W | 2     |         |     | 27  | NORTHERN CALIFORNIA. <GM-P>. MD 2.9 (GM).  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 19 16 58.4  | 46.325 N | 1.573 E   | 10 G  |         | 1.1 | 19  | FRANCE. ML 3.0 (LDG).  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 19 17 27.9* | 46.334 N | 1.387 E   | 10 G  |         | 0.4 | 8   | FRANCE. ML 3.1 (LDG).  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 19 25 05.9* | 40.405 N | 122.032 W | 22    |         |     | 26  | NORTHERN CALIFORNIA. <GM-P>. MD 3.2 (GM). ML 3.2 (GS).   |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 19 25 47.9* | 42.566 N | 19.025 E  | 10 G  |         | 0.3 | 8   | NORTHWESTERN BALKAN REGION. ML 2.2 (TTG).  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 19 54 42.4  | 39.927 N | 29.315 E  | 5 G   |         | 0.5 | 16  | TURKEY. ML 3.4 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 20 50 37.6? | 43.28 N  | 7.20 E    | 10 G  |         | 0.2 | 4   | NEAR SOUTH COAST OF FRANCE. ML 1.8 (LDG).  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 20 54 58.6* | 31.652 S | 68.628 W  | 93 ?  |         | 0.5 | 7   | SAN JUAN PROVINCE, ARGENTINA   |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 21 11 42.9* | 43.267 N | 7.182 E   | 10 G  |         | 0.2 | 7   | NEAR SOUTH COAST OF FRANCE. ML 2.0 (STR), 1.8 (LDG).   |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 21 18 08.6? | 43.29 N  | 7.18 E    | 10 G  |         | 0.1 | 4   | NEAR SOUTH COAST OF FRANCE. ML 1.9 (LDG).  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 21 30 15.7? | 38.94 N  | 29.72 E   | 10 G  |         | 1.2 | 4   | TURKEY. ML 2.8 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 22 48 44.3* | 39.938 N | 29.332 E  | 5 G   |         | 0.5 | 12  | TURKEY. ML 3.0 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 03 | 23 13 03.7  | 35.395 N | 136.799 E | 33 N  |         | 0.8 | 9   | WESTERN HONSHU, JAPAN  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 00 01 37.4* | 35.969 N | 0.699 W   | 10 G  |         | 1.0 | 11  | NORTHERN ALGERIA. mblg 3.7 (MDD).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 00 03 05.5? | 23.63 S  | 177.68 W  | 33 N  | 4.5     | 1.2 | 10  | SOUTH OF FIJI ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 00 25 33.0* | 33.196 N | 115.568 W | 4     |         |     | 9   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 00 55 02.3* | 59.586 N | 151.294 W | 5     |         |     | 67  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.9 (AEIC), 3.3 (PMR).   |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 01 53 44.0  | 5.869 S  | 130.728 E | 98 *  | 4.6     | 0.8 | 20  | BANDA SEA  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 02 01 30.2* | 38.388 N | 16.595 E  | 10 G  |         | 0.8 | 18  | SOUTHERN ITALY. ML 3.9 (TTG).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 02 42 37.8* | 10.754 N | 63.238 W  | 5 G   |         | 1.3 | 6   | NEAR COAST OF VENEZUELA. MD 3.8 (TRN). Felt at Carupano.   |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 02 44 51.1* | 31.614 S | 69.073 W  | 114 * |         | 1.1 | 19  | SAN JUAN PROVINCE, ARGENTINA. MD 4.4 (SAN).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 02 54 28.9? | 11.80 N  | 61.08 W   | 33 N  |         | 1.0 | 4   | WINDWARD ISLANDS. MD 3.1 (TRN).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 04 36 12.4? | 6.78 N   | 73.08 W   | 162 ? |         | 1.1 | 7   | NORTHERN COLOMBIA  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 05 32 54.3  | 39.885 N | 1.250 W   | 10 G  |         | 0.9 | 6   | SPAIN. mblg 2.7 (MDD).   |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 05 58 06.2  | 19.784 N | 109.214 W | 10 G  | 4.3     | 1.0 | 22  | REVILLA GIGEDO ISLANDS REGION  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 06 17 44.2* | 33.433 S | 70.783 W  | 70 G  |         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).   |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 06 23 11.6* | 32.116 S | 71.093 W  | 50 G  |         | 1.1 | 14  | NEAR COAST OF CENTRAL CHILE. MD 3.9 (SAN).   |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 07 19 55.5  | 47.756 N | 7.644 E   | 10 G  |         | 0.2 | 8   | SWITZERLAND. ML 1.7 (STR).   |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 07 21 50.0* | 38.745 N | 119.649 W | 0     |         |     | 37  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 08 19 37.9* | 39.668 N | 29.415 E  | 5 G   |         | 0.4 | 5   | TURKEY. ML 2.7 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 08 22 58.6* | 39.650 N | 29.399 E  | 10 G  |         | 0.5 | 7   | TURKEY. ML 2.7 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 08 49 12.9* | 39.706 N | 29.424 E  | 10 G  |         | 0.4 | 6   | TURKEY. ML 2.8 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 09 23 17.4? | 39.22 N  | 27.75 E   | 10 G  |         | 0.9 | 4   | TURKEY. ML 2.8 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 09 33 13.6? | 39.13 N  | 27.67 E   | 10 G  |         | 0.9 | 4   | TURKEY. ML 2.7 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 09 54 20.7  | 5.958 S  | 110.220 E | 652 * | 5.0     | 0.6 | 25  | JAVA SEA   |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 10 08 31.1? | 39.82 N  | 29.47 E   | 5 G   |         | 0.6 | 4   | TURKEY. ML 2.5 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 11 09 19.0* | 39.923 N | 29.370 E  | 10 G  |         | 0.9 | 5   | TURKEY. ML 2.7 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 11 35 54.0? | 40.72 N  | 29.90 E   | 5 G   |         | 0.0 | 4   | TURKEY. ML 2.6 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 11 48 26.6* | 39.716 N | 29.506 E  | 10 G  |         | 0.8 | 5   | TURKEY. ML 2.7 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 11 53 11.4* | 33.455 S | 71.099 W  | 70 G  |         | 0.6 | 9   | NEAR COAST OF CENTRAL CHILE. MD 3.1 (SAN).   |   |  |  |  |  |  |  |  |  |  |
| a | 04 | 12 09 40.1  | 6.218 S  | 104.891 E | 24 D  | 5.6 4.7 | 0.9 | 98  | SUNDA STRAIT. Mw 5.2 (HRV).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 12 15 32.0* | 39.651 N | 29.428 E  | 10 G  |         | 0.8 | 10  | TURKEY. ML 2.8 (ISK).  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 12 37 25.2* | 39.668 N | 29.443 E  | 5 G   |         | 0.4 | 5   | TURKEY. ML 2.8 (ISK).  |   |  |  |  |  |  |  |  |  |  |
| a | 04 | 13 22 55.8  | 43.773 N | 147.321 E | 14    | 7.3 8.1 | 0.9 | 672 | KURIL ISLANDS. Mw 8.2 (GS), 8.3 (HRV). Ms 7.9 (BRK). Mo=2.1*10**21 Nm (OBN), 2.0*10**21 Nm (PPT). At least 10 people killed or missing, many injured and damage on Iturup. Considerable damage (IX) on Shikotan from the earthquake and tsunami. Damage also occurred on Kunashir. Felt (IV) at Kurilsk; (III) at Severo-Kurilsk and on Matua; (II) on Simushir. One person died from a heart attack, at least 200 people were injured and extensive damage and landslides occurred along the eastern coast of Hokkaido. Felt strongly in northern Honshu and as far south as the Tokyo area. Tsunami wave heights from selected tide stations (peak-to-trough) were as follows: 346 cm. at Hanasaki, 164 cm. at Kushiro, 26 cm. at Abashiri, Hokkaido; 144 cm. at Miyako, 130 cm. at Hachinohe, 92 cm. at Ofunato, 62 cm. at Onahama, 46 cm. at Omae-zaki, 42 cm. at Choshi, Honshu; 162 cm. on Chichi-shima; 300 cm. at Yuzhno-Kurilsk, Kunashir Island, 15 cm. on Shemya, 16 cm. at Pago Pago, American Samoa, 17 cm. on Wake Island, 50 cm. on Midway Island and 48 cm. at Hilo, Hawaii. Complex event observed on broadband displacement seismograms. |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 13 40 25.5? | 43.70 N  | 148.32 E  | 33 N  |         | 1.1 | 8   | EAST OF KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 13 42 52.3  | 43.788 N | 147.187 E | 61 D  | 6.1     | 1.2 | 229 | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 13 51 10.6  | 43.682 N | 147.576 E | 60    | 5.6     | 0.8 | 63  | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 13 52 45.4  | 43.786 N | 147.760 E | 30 D  | 5.9     | 0.8 | 101 | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 13 57 02.8* | 43.381 N | 147.859 E | 10 G  | 5.4     | 0.9 | 37  | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 04 18.2? | 43.19 N  | 145.22 E  | 33 N  | 5.0     | 0.6 | 23  | HOKKAIDO, JAPAN REGION   |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 07 19.0? | 44.84 N  | 144.25 E  | 33 N  | 4.4     | 0.9 | 7   | HOKKAIDO, JAPAN REGION   |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 09 38.6* | 43.046 N | 147.676 E | 33 N  | 4.9     | 1.2 | 19  | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 12 06.5  | 43.790 N | 147.195 E | 60    | 5.4     | 0.9 | 110 | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 23 24.0* | 43.837 N | 147.369 E | 33 N  | 4.4     | 0.6 | 10  | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 24 12.2* | 44.208 N | 147.683 E | 34 *  | 4.9     | 0.8 | 39  | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 30 25.9  | 43.173 N | 147.586 E | 33 N  | 5.1     | 1.0 | 41  | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 33 14.0? | 43.75 N  | 148.06 E  | 100 ? | 4.6     | 0.8 | 17  | EAST OF KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 35 23.6  | 43.070 N | 147.131 E | 33 N  | 4.8     | 1.3 | 20  | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 38 28.7  | 43.672 N | 147.340 E | 48 D  | 5.2     | 0.8 | 83  | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 40 22.4? | 44.50 N  | 146.45 E  | 33 N  | 5.0     | 0.8 | 25  | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 41 51.9  | 43.766 N | 147.298 E | 33 N  | 5.4     | 0.8 | 128 | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |
|   | 04 | 14 42 36.2  | 43.963 N | 147.999 E | 33 N  | 5.7     | 0.8 | 154 | KURIL ISLANDS  |   |  |  |  |  |  |  |  |  |  |

|    |    |    |       |        |   |         |   |     |   |     |     |     |   |
|----|----|----|-------|--------|---|---------|---|-----|---|-----|-----|-----|---|
| 04 | 14 | 47 | 50.6  | 43.250 | N | 147.066 | E | 60  | * | 5.2 | 0.7 | 57  | KURIL ISLANDS   |
| 04 | 14 | 59 | 38.06 | 38.786 | N | 119.704 | W | 5   |   |     |     | 31  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM). |
|    |    |    |       |        |   |         |   |     |   |     |     |     | ML 3.1 (BRK).   |
| 04 | 15 | 04 | 34.8  | 43.311 | N | 147.367 | E | 33  | N | 5.0 | 0.7 | 59  | KURIL ISLANDS   |
| 04 | 15 | 09 | 17.6  | 43.375 | N | 147.850 | E | 33  | N | 4.9 | 0.8 | 36  | KURIL ISLANDS   |
| 04 | 15 | 10 | 39.37 | 43.51  | N | 147.08  | E | 33  | N |     | 0.8 | 22  | KURIL ISLANDS   |
| 04 | 15 | 18 | 15.67 | 42.14  | N | 147.04  | E | 33  | N | 5.1 | 1.4 | 39  | OFF COAST OF HOKKAIDO, JAPAN                          |
| 04 | 15 | 20 | 50.8* | 45.421 | N | 142.192 | E | 33  | N | 5.0 | 1.3 | 16  | HOKKAIDO, JAPAN REGION                                |
| 04 | 15 | 21 | 10.5* | 44.890 | N | 147.276 | E | 33  | N | 5.1 | 0.6 | 43  | KURIL ISLANDS   |
| 04 | 15 | 24 | 15.9  | 43.526 | N | 147.908 | E | 20  | D | 6.3 | 1.0 | 485 | KURIL ISLANDS   |
| 04 | 15 | 34 | 53.0  | 43.776 | N | 147.210 | E | 33  | N | 5.5 | 0.8 | 83  | KURIL ISLANDS   |
| 04 | 15 | 39 | 47.0* | 43.693 | N | 147.997 | E | 33  | N | 5.0 | 1.3 | 20  | KURIL ISLANDS   |
| 04 | 15 | 43 | 07.8  | 43.287 | N | 148.151 | E | 25  | D | 5.3 | 0.9 | 58  | EAST OF KURIL ISLANDS                                 |
| 04 | 15 | 49 | 44.7* | 43.367 | N | 147.775 | E | 37  | D | 4.9 | 1.0 | 40  | KURIL ISLANDS   |
| 04 | 15 | 55 | 14.3  | 43.377 | N | 146.850 | E | 44  | D | 5.2 | 0.9 | 120 | KURIL ISLANDS   |
| 04 | 15 | 59 | 18.07 | 44.47  | N | 7.27    | E | 10  | G |     | 0.1 | 4   | NORTHERN ITALY. ML 1.7 (GEN).                         |
| 04 | 15 | 59 | 33.87 | 44.48  | N | 147.14  | E | 33  | N | 4.8 | 0.4 | 25  | KURIL ISLANDS   |
| 04 | 16 | 01 | 02.4  | 43.706 | N | 147.991 | E | 16  | D | 6.3 | 0.9 | 507 | KURIL ISLANDS   |
| 04 | 16 | 04 | 25.9* | 43.940 | N | 147.987 | E | 33  | N |     | 1.0 | 17  | KURIL ISLANDS   |
| 04 | 16 | 06 | 20.6  | 43.430 | N | 147.902 | E | 18  | D | 6.0 | 1.3 | 259 | KURIL ISLANDS   |
| 04 | 16 | 16 | 11.2  | 43.655 | N | 147.639 | E | 48  | D | 5.2 | 0.7 | 118 | KURIL ISLANDS   |
| 04 | 16 | 24 | 33.0  | 43.303 | N | 146.412 | E | 22  | D | 5.1 | 0.9 | 91  | KURIL ISLANDS   |
| 04 | 16 | 26 | 38.5* | 43.571 | N | 147.934 | E | 33  | N | 5.2 | 0.8 | 53  | KURIL ISLANDS   |
| 04 | 16 | 30 | 53.87 | 44.14  | N | 147.52  | E | 33  | N | 4.9 | 0.4 | 32  | KURIL ISLANDS   |
| 04 | 16 | 32 | 43.5  | 43.492 | N | 147.877 | E | 42  | D | 5.2 | 0.9 | 77  | KURIL ISLANDS   |
| 04 | 16 | 35 | 02.5* | 43.491 | N | 148.098 | E | 33  | N | 5.0 | 0.9 | 39  | EAST OF KURIL ISLANDS                                 |
| 04 | 16 | 37 | 58.57 | 43.59  | N | 147.71  | E | 33  | N | 4.6 | 1.4 | 15  | KURIL ISLANDS   |
| 04 | 16 | 40 | 59.6* | 44.055 | N | 147.469 | E | 33  | N | 4.8 | 1.1 | 40  | KURIL ISLANDS   |
| 04 | 16 | 43 | 39.8  | 43.409 | N | 147.626 | E | 27  | D | 5.1 | 0.9 | 73  | KURIL ISLANDS   |
| 04 | 16 | 52 | 45.5  | 43.684 | N | 148.059 | E | 39  | D | 5.3 | 0.6 | 139 | EAST OF KURIL ISLANDS                                 |
| 04 | 16 | 54 | 31.3  | 43.839 | N | 147.760 | E | 33  | N | 4.8 | 0.7 | 22  | KURIL ISLANDS   |
| 04 | 16 | 55 | 24.7  | 43.630 | N | 147.465 | E | 33  | N | 4.9 | 0.6 | 44  | KURIL ISLANDS   |
| 04 | 16 | 58 | 22.2* | 15.425 | N | 93.632  | W | 106 | * | 4.5 | 1.0 | 14  | NEAR COAST OF CHIAPAS, MEXICO                         |
| 04 | 16 | 58 | 35.3* | 43.566 | N | 148.034 | E | 40  | D | 5.0 | 0.8 | 45  | EAST OF KURIL ISLANDS                                 |
| 04 | 17 | 01 | 23.9  | 43.591 | N | 147.320 | E | 33  | N | 5.0 | 0.9 | 55  | KURIL ISLANDS   |
| 04 | 17 | 05 | 31.67 | 43.33  | N | 151.13  | E | 33  | N | 4.8 | 1.0 | 16  | EAST OF KURIL ISLANDS                                 |
| 04 | 17 | 07 | 09.4  | 43.524 | N | 147.565 | E | 34  | D | 5.1 | 0.9 | 108 | KURIL ISLANDS   |
| 04 | 17 | 09 | 15.97 | 44.48  | N | 145.69  | E | 33  | N | 4.6 | 0.9 | 9   | HOKKAIDO, JAPAN REGION                                |
| 04 | 17 | 12 | 12.5  | 43.817 | N | 147.211 | E | 47  | D | 5.1 | 0.8 | 63  | KURIL ISLANDS   |
| 04 | 17 | 13 | 45.0* | 44.017 | N | 147.098 | E | 33  | N | 4.9 | 1.2 | 30  | KURIL ISLANDS   |
| 04 | 17 | 21 | 16.07 | 45.84  | N | 7.03    | E | 10  | G |     | 0.6 | 4   | NORTHERN ITALY. ML 2.2 (GEN).                         |
| 04 | 17 | 22 | 00.9* | 43.509 | N | 146.683 | E | 33  | N | 4.8 | 0.5 | 17  | KURIL ISLANDS   |
| 04 | 17 | 28 | 52.1  | 43.722 | N | 147.491 | E | 33  | N | 4.9 | 0.7 | 82  | KURIL ISLANDS   |
| 04 | 17 | 31 | 58.67 | 44.21  | N | 146.73  | E | 33  | N | 5.1 | 1.4 | 20  | KURIL ISLANDS   |
| 04 | 17 | 48 | 14.7  | 43.799 | N | 147.916 | E | 35  | D | 5.3 | 0.9 | 197 | KURIL ISLANDS   |
| 04 | 17 | 50 | 34.7* | 44.587 | N | 147.555 | E | 33  | N | 5.3 | 0.6 | 72  | KURIL ISLANDS   |
| 04 | 17 | 51 | 58.77 | 44.32  | N | 146.16  | E | 33  | N | 4.9 | 0.7 | 28  | KURIL ISLANDS   |
| 04 | 17 | 56 | 05.3  | 43.785 | N | 147.288 | E | 33  | N | 5.0 | 0.7 | 55  | KURIL ISLANDS   |
| 04 | 18 | 02 | 43.8  | 43.467 | N | 147.566 | E | 40  | D | 5.3 | 0.9 | 185 | KURIL ISLANDS   |
| 04 | 18 | 06 | 46.77 | 23.95  | S | 66.85   | W | 203 | ? |     | 1.1 | 13  | JUJUY PROVINCE, ARGENTINA                             |
| 04 | 18 | 07 | 00.3* | 43.962 | N | 146.757 | E | 33  | N | 5.0 | 0.6 | 52  | KURIL ISLANDS   |
| 04 | 18 | 09 | 39.6  | 43.660 | N | 147.445 | E | 33  | D | 5.5 | 0.9 | 300 | KURIL ISLANDS   |
| 04 | 18 | 14 | 26.17 | 45.23  | N | 146.36  | E | 33  | N | 4.8 | 1.1 | 30  | KURIL ISLANDS   |
| 04 | 18 | 17 | 22.7* | 43.463 | N | 148.171 | E | 33  | D | 5.0 | 0.9 | 26  | EAST OF KURIL ISLANDS                                 |
| 04 | 18 | 21 | 33.3  | 43.405 | N | 146.756 | E | 42  | D | 5.1 | 1.0 | 109 | KURIL ISLANDS   |
| 04 | 18 | 25 | 49.8* | 43.475 | N | 146.313 | E | 33  | N | 4.8 | 0.9 | 21  | KURIL ISLANDS   |
| 04 | 18 | 31 | 50.27 | 43.60  | N | 147.53  | E | 33  | N | 4.6 | 0.3 | 8   | KURIL ISLANDS   |
| 04 | 18 | 34 | 53.2* | 43.363 | N | 147.726 | E | 33  | N | 4.9 | 0.8 | 27  | KURIL ISLANDS   |
| 04 | 18 | 52 | 07.17 | 43.18  | N | 147.83  | E | 33  | N | 4.4 | 1.1 | 6   | KURIL ISLANDS   |
| 04 | 18 | 59 | 57.0* | 43.470 | N | 147.649 | E | 33  | N | 4.6 | 1.0 | 32  | KURIL ISLANDS   |
| 04 | 19 | 01 | 43.07 | 43.72  | N | 147.35  | E | 33  | N | 4.2 | 0.3 | 10  | KURIL ISLANDS   |
| 04 | 19 | 10 | 02.6* | 43.740 | N | 147.719 | E | 33  | N | 4.8 | 1.1 | 23  | KURIL ISLANDS   |
| 04 | 19 | 15 | 52.4* | 43.643 | N | 147.486 | E | 33  | N | 4.4 | 0.7 | 19  | KURIL ISLANDS   |
| 04 | 19 | 16 | 28.9  | 43.774 | N | 147.504 | E | 35  | D | 6.0 | 0.9 | 506 | KURIL ISLANDS   |
| 04 | 19 | 24 | 09.3  | 43.693 | N | 147.245 | E | 33  | N | 5.0 | 1.1 | 23  | KURIL ISLANDS   |
| 04 | 19 | 45 | 50.0* | 43.370 | N | 147.715 | E | 33  | N | 4.4 | 1.0 | 16  | KURIL ISLANDS   |
| 04 | 19 | 53 | 02.0  | 19.584 | N | 109.210 | W | 10  | G | 4.9 | 1.3 | 47  | REVILLA GIGEDO ISLANDS REGION                         |
| 04 | 19 | 55 | 57.5  | 43.730 | N | 148.026 | E | 33  | N | 4.7 | 0.9 | 36  | EAST OF KURIL ISLANDS                                 |
| 04 | 20 | 01 | 10.1  | 43.983 | N | 147.292 | E | 64  | D | 5.7 | 0.8 | 428 | KURIL ISLANDS. mb 5.7 (BRK).                          |
| 04 | 20 | 01 | 52.17 | 18.22  | N | 97.47   | W | 33  | N |     | 1.0 | 5   | CENTRAL MEXICO  |
| 04 | 20 | 06 | 30.1  | 43.267 | N | 147.779 | E | 36  | D | 5.4 | 0.9 | 106 | KURIL ISLANDS   |
| 04 | 20 | 13 | 39.8* | 43.270 | N | 147.899 | E | 33  | N | 4.7 | 1.2 | 8   | KURIL ISLANDS   |
| 04 | 20 | 16 | 54.2  | 43.465 | N | 147.737 | E | 47  | D | 5.2 | 0.9 | 93  | KURIL ISLANDS   |
| 04 | 20 | 31 | 36.2* | 45.763 | N | 145.688 | E | 33  | N | 4.8 | 0.5 | 14  | HOKKAIDO, JAPAN REGION                                |
| 04 | 20 | 34 | 32.17 | 43.26  | N | 147.60  | E | 33  | N | 4.7 | 1.3 | 29  | KURIL ISLANDS   |
| 04 | 20 | 42 | 00.5  | 43.157 | N | 147.394 | E | 33  | N | 5.0 | 0.8 | 27  | KURIL ISLANDS   |
| 04 | 20 | 56 | 56.37 | 45.62  | N | 145.38  | E | 33  | N | 4.7 | 0.8 | 16  | HOKKAIDO, JAPAN REGION                                |
| 04 | 21 | 03 | 16.97 | 43.61  | N | 147.29  | E | 33  | N | 4.2 | 1.0 | 10  | KURIL ISLANDS   |
| 04 | 21 | 07 | 46.37 | 43.79  | N | 146.48  | E | 33  | N | 4.7 | 0.4 | 24  | KURIL ISLANDS   |
| 04 | 21 | 10 | 36.9* | 43.370 | N | 146.903 | E | 33  | N | 4.7 | 0.8 | 11  | KURIL ISLANDS   |
| 04 | 21 | 14 | 51.77 | 43.16  | N | 146.68  | E | 33  | N | 4.4 | 0.2 | 5   | KURIL ISLANDS   |
| 04 | 21 | 21 | 31.96 | 58.240 | N | 153.334 | W | 27  |   |     |     | 47  | KODIAK ISLAND REGION. <AEIC>. ML 2.6 (AEIC).          |
| 04 | 21 | 22 | 24.1  | 43.684 | N | 147.641 | E | 33  | N | 5.0 | 0.8 | 70  | KURIL ISLANDS   |
| 04 | 21 | 26 | 11.1* | 43.207 | N | 147.425 | E | 33  | N | 4.8 | 0.7 | 30  | KURIL ISLANDS   |
| 04 | 21 | 29 | 59.7  | 44.162 | N | 147.407 | E | 30  | D | 5.0 | 0.7 | 61  | KURIL ISLANDS   |
| 04 | 21 | 33 | 11.38 | 33.972 | S | 70.894  | W | 70  | G |     | 0.1 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.2 (SAN).          |
| 04 | 21 | 37 | 04.2* | 43.077 | N | 147.721 | E | 33  | N | 4.8 | 0.7 | 19  | KURIL ISLANDS   |
| 04 | 21 | 39 | 28.9  | 43.798 | N | 147.138 | E | 38  | D | 5.5 | 0.8 | 244 | KURIL ISLANDS   |
| 04 | 21 | 48 | 05.17 | 15.72  | S | 173.19  | W | 33  | N | 4.7 | 0.7 | 12  | TONGA ISLANDS   |
| 04 | 21 | 51 | 20.77 | 43.32  | N | 148.40  | E | 31  | D | 4.7 | 1.0 | 13  | EAST OF KURIL ISLANDS                                 |
| 04 | 22 | 10 | 05.1  | 42.952 | N | 146.929 | E | 39  | D | 4.6 | 0.8 | 19  | OFF COAST OF HOKKAIDO, JAPAN                          |
| 04 | 22 | 14 | 43.67 | 43.43  | N | 146.71  | E | 33  | N | 4.2 | 0.5 | 12  | KURIL ISLANDS   |
| 04 | 22 | 26 | 22.47 | 35.05  | S | 71.28   | W | 80  | G |     | 0.4 | 10  | CENTRAL CHILE. MD 3.8 (SAN).                          |

|    |    |    |       |          |           |           |         |         |     |  |                       |
|----|----|----|-------|----------|-----------|-----------|---------|---------|-----|--|-----------------------|
| 04 | 22 | 27 | 45.1  | 43.871 N | 147.997 E | 46 D      | 4.8     | 0.7     | 61  | KURIL ISLANDS  |                       |
| 04 | 22 | 32 | 02.6  | 43.188 N | 147.440 E | 25 D      | 5.1 5.1 | 1.0     | 75  | KURIL ISLANDS  |                       |
| 04 | 22 | 45 | 01.22 | 40.28 N  | 27.95 E   | 10 G      |         | 0.8     | 4   | TURKEY. ML 2.6 (ISK).                                      |                       |
| 04 | 22 | 51 | 33.6  | 43.026 N | 147.184 E | 39 D      | 4.7     | 0.8     | 24  | KURIL ISLANDS  |                       |
| 04 | 22 | 56 | 30.5  | 43.654 N | 147.591 E | 53 D      | 5.4     | 0.9     | 232 | KURIL ISLANDS  |                       |
| 04 | 23 | 19 | 12.5  | 43.064 N | 147.073 E | 32 D      | 4.7     | 1.1     | 37  | KURIL ISLANDS  |                       |
| 04 | 23 | 20 | 32.6* | 44.331 N | 147.114 E | 171 *     | 4.6     | 1.0     | 43  | KURIL ISLANDS  |                       |
| 04 | 23 | 23 | 00.2  | 43.328 N | 147.658 E | 47 D      | 5.0     | 0.7     | 67  | KURIL ISLANDS  |                       |
| 04 | 23 | 38 | 53.38 | 33.582 S | 71.673 W  | 40 G      |         | 0.4     | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.6 (SAN).                 |                       |
| 04 | 23 | 45 | 15.5  | 43.383 N | 148.079 E | 42 D      | 4.9     | 0.8     | 51  | EAST OF KURIL ISLANDS                                      |                       |
| 04 | 23 | 46 | 41.6  | 43.515 N | 147.993 E | 42 D      | 5.2 5.3 | 1.1     | 97  | KURIL ISLANDS  |                       |
| 04 | 23 | 59 | 57.0  | 43.796 N | 147.949 E | 33 N      | 4.8     | 0.6     | 41  | KURIL ISLANDS  |                       |
| 05 | 00 | 02 | 42.6  | 43.545 N | 147.425 E | 29 D      | 5.2     | 0.8     | 179 | KURIL ISLANDS  |                       |
| 05 | 00 | 03 | 39.6? | 44.45 N  | 147.61 E  | 33 N      | 5.1     | 0.4     | 29  | KURIL ISLANDS  |                       |
| 05 | 00 | 08 | 26.2  | 43.793 N | 147.501 E | 33 N      | 5.1     | 0.8     | 85  | KURIL ISLANDS  |                       |
| 05 | 00 | 10 | 24.4* | 43.590 N | 148.078 E | 33 N      | 4.9     | 0.8     | 29  | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 00 | 13 | 39.08 | 58.350 N | 133.472 W | 5 G       |         |         | 3   | SOUTHEASTERN ALASKA. <PGC-P>. ML 3.1 (PGC).                |                       |
| 05 | 00 | 20 | 08.4? | 43.66 N  | 148.23 E  | 33 N      | 4.9     | 1.0     | 25  | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 00 | 22 | 32.5  | 43.185 N | 147.662 E | 33 N      | 5.1     | 0.8     | 97  | KURIL ISLANDS  |                       |
| 05 | 00 | 27 | 41.4  | 43.737 N | 147.568 E | 38 D      | 5.3 4.7 | 1.0     | 119 | KURIL ISLANDS  |                       |
| 05 | 00 | 35 | 00.8  | 43.795 N | 147.151 E | 41 D      | 5.4     | 0.9     | 207 | KURIL ISLANDS  |                       |
| 05 | 00 | 45 | 13.5  | 43.361 N | 146.091 E | 33 N      | 4.8     | 0.9     | 49  | KURIL ISLANDS  |                       |
| 05 | 00 | 53 | 47.3  | 43.289 N | 146.672 E | 55 D      | 5.1     | 0.8     | 124 | KURIL ISLANDS  |                       |
| 05 | 01 | 09 | 37.3* | 43.192 N | 147.381 E | 51 D      | 4.9     | 0.9     | 42  | KURIL ISLANDS  |                       |
| 05 | 01 | 13 | 27.3  | 23.101 N | 121.479 E | 70 D      | 5.5     | 1.1     | 167 | TAIWAN. Felt in the Cheng-kung area.                       |                       |
| 05 | 01 | 26 | 45.9  | 43.869 N | 147.639 E | 50 D      | 5.3     | 0.8     | 215 | KURIL ISLANDS  |                       |
| 05 | 01 | 42 | 03.4  | 43.525 N | 147.857 E | 43 D      | 4.9     | 0.9     | 77  | KURIL ISLANDS  |                       |
| 05 | 01 | 56 | 50.2* | 43.473 N | 147.227 E | 33 N      | 4.6     | 0.9     | 11  | KURIL ISLANDS  |                       |
| 05 | 01 | 58 | 45.5  | 43.314 N | 146.749 E | 21 D      | 5.1 5.3 | 1.0     | 119 | KURIL ISLANDS  |                       |
| 05 | 02 | 14 | 12.9  | 43.901 N | 147.382 E | 40 D      | 5.2 5.1 | 0.8     | 155 | KURIL ISLANDS  |                       |
| 05 | 02 | 36 | 55.4? | 43.97 N  | 147.50 E  | 36 D      | 4.5     | 1.0     | 14  | KURIL ISLANDS  |                       |
| 05 | 02 | 49 | 05.08 | 15.256 N | 61.163 W  | 130 G     |         | 0.3     | 13  | LEEWARD ISLANDS. MD 4.0 (TRN).                             |                       |
| 05 | 03 | 15 | 33.6  | 31.326 N | 129.235 E | 20 D      | 5.1     | 0.9     | 92  | KYUSHU, JAPAN. Felt (III JMA) at Kagoshima and Makurazaki. |                       |
| 05 | 03 | 19 | 45.6? | 44.85 N  | 147.19 E  | 33 N      | 4.6     | 0.7     | 13  | KURIL ISLANDS  |                       |
| 05 | 03 | 21 | 09.5  | 43.459 N | 146.465 E | 17 D      | 5.1     | 0.7     | 58  | KURIL ISLANDS  |                       |
| 05 | 03 | 23 | 48.5* | 43.323 N | 147.307 E | 52 D      | 4.7     | 0.7     | 41  | KURIL ISLANDS  |                       |
| 05 | 03 | 27 | 42.1? | 44.60 N  | 147.62 E  | 60 D      | 4.8     | 0.8     | 38  | KURIL ISLANDS  |                       |
| 05 | 03 | 38 | 56.7? | 43.02 N  | 146.94 E  | 33 N      | 4.0     | 1.3     | 7   | KURIL ISLANDS  |                       |
| 05 | 03 | 39 | 24.1? | 34.40 S  | 70.56 W   | 10 G      |         | 0.8     | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).               |                       |
| 05 | 03 | 43 | 26.2  | 43.877 N | 147.856 E | 51 D      | 5.2     | 0.8     | 140 | KURIL ISLANDS  |                       |
| 05 | 03 | 49 | 11.6* | 43.267 N | 147.584 E | 48 D      | 4.8     | 0.9     | 24  | KURIL ISLANDS  |                       |
| 05 | 03 | 56 | 51.7* | 43.471 N | 145.990 E | 33 N      | 4.6     | 0.7     | 10  | HOKKAIDO, JAPAN REGION                                     |                       |
| a  | 05 | 04 | 00    | 47.5     | 43.398 N  | 148.078 E | 40 D    | 5.8 5.6 | 0.9 | 368  | EAST OF KURIL ISLANDS |
| 05 | 04 | 04 | 28.0  | 43.429 N | 148.075 E | 33 N      | 5.4     | 0.8     | 99  | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 04 | 08 | 21.1* | 43.114 N | 148.122 E | 44 D      | 5.1     | 1.0     | 54  | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 04 | 17 | 36.7? | 32.48 S  | 71.02 W   | 50 G      |         | 0.5     | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.3 (SAN).                 |                       |
| 05 | 04 | 32 | 28.1? | 44.17 N  | 148.21 E  | 33 N      | 4.8     | 0.7     | 21  | KURIL ISLANDS  |                       |
| 05 | 04 | 35 | 54.7? | 42.74 N  | 148.04 E  | 38 D      | 4.7     | 1.2     | 20  | OFF COAST OF HOKKAIDO, JAPAN                               |                       |
| 05 | 04 | 44 | 42.5* | 44.115 N | 147.506 E | 33 N      | 4.8     | 1.0     | 36  | KURIL ISLANDS  |                       |
| 05 | 04 | 55 | 16.8  | 43.525 N | 147.930 E | 38 D      | 5.1     | 1.0     | 70  | KURIL ISLANDS  |                       |
| 05 | 05 | 01 | 31.4* | 43.316 N | 147.773 E | 33 N      | 4.7     | 0.8     | 19  | KURIL ISLANDS  |                       |
| 05 | 05 | 26 | 58.5* | 43.757 N | 147.581 E | 33 N      | 4.7     | 0.9     | 15  | KURIL ISLANDS  |                       |
| 05 | 05 | 29 | 00.1  | 43.371 N | 147.134 E | 54 D      | 4.7     | 0.7     | 33  | KURIL ISLANDS  |                       |
| 05 | 05 | 37 | 35.3* | 43.528 N | 148.008 E | 33 N      | 5.0     | 1.0     | 30  | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 06 | 56 | 02.2? | 11.56 N  | 61.73 W   | 33 N      |         | 1.5     | 5   | WINDWARD ISLANDS. MD 3.3 (TRN).                            |                       |
| 05 | 07 | 01 | 46.86 | 58.464 N | 133.334 W | 5 G       |         |         | 4   | SOUTHEASTERN ALASKA. <PGC-P>. ML 3.1 (PGC).                |                       |
| 05 | 07 | 07 | 25.8  | 43.291 N | 146.864 E | 42 D      | 5.0     | 0.9     | 102 | KURIL ISLANDS  |                       |
| 05 | 07 | 10 | 54.4* | 43.540 N | 147.140 E | 33 N      | 4.9     | 1.0     | 25  | KURIL ISLANDS  |                       |
| 05 | 07 | 16 | 07.3  | 43.686 N | 148.088 E | 38 D      | 5.7 5.4 | 0.9     | 293 | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 07 | 17 | 40.86 | 63.797 N | 150.721 W | 10        |         |         | 31  | CENTRAL ALASKA. <AEIC>. ML 2.7 (AEIC).                     |                       |
| 05 | 07 | 56 | 36.2  | 43.715 N | 147.403 E | 33 N      | 5.0     | 0.7     | 56  | KURIL ISLANDS  |                       |
| 05 | 07 | 58 | 06.6* | 18.800 S | 71.661 W  | 33 N      |         | 1.2     | 10  | OFF COAST OF NORTHERN CHILE                                |                       |
| 05 | 08 | 15 | 58.6* | 43.170 N | 147.996 E | 33 N      | 5.1     | 1.3     | 39  | KURIL ISLANDS  |                       |
| 05 | 08 | 45 | 21.06 | 60.022 N | 147.470 W | 19        |         |         | 72  | SOUTHERN ALASKA. <AEIC>. ML 3.3 (AEIC), 3.6 (PMR).         |                       |
| 05 | 08 | 53 | 45.26 | 59.518 N | 152.357 W | 69        |         |         | 58  | SOUTHERN ALASKA. <AEIC>. ML 2.9 (AEIC).                    |                       |
| 05 | 08 | 59 | 03.5  | 43.856 N | 148.101 E | 33 N      | 5.1     | 0.7     | 54  | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 09 | 10 | 06.2  | 43.547 N | 147.348 E | 33 N      | 5.2 4.8 | 1.0     | 146 | KURIL ISLANDS  |                       |
| 05 | 09 | 11 | 42.08 | 39.113 N | 27.628 E  | 10 G      |         | 0.5     | 5   | TURKEY. ML 2.8 (ISK).                                      |                       |
| 05 | 09 | 15 | 43.48 | 38.597 N | 27.070 E  | 10 G      |         | 0.6     | 5   | TURKEY. ML 3.1 (ISK).                                      |                       |
| 05 | 09 | 36 | 55.5* | 43.703 N | 146.906 E | 57 D      | 4.9     | 0.8     | 34  | KURIL ISLANDS  |                       |
| 05 | 09 | 41 | 43.28 | 10.893 N | 61.817 W  | 33 N      |         | 0.5     | 5   | TRINIDAD. MD 3.2 (TRN).                                    |                       |
| 05 | 09 | 47 | 18.0* | 43.984 N | 147.096 E | 33 N      | 5.0     | 0.6     | 12  | KURIL ISLANDS  |                       |
| 05 | 09 | 52 | 19.5? | 44.95 N  | 147.33 E  | 33 N      | 4.3     | 0.5     | 6   | KURIL ISLANDS  |                       |
| 05 | 09 | 59 | 21.2? | 44.03 N  | 146.38 E  | 33 N      | 3.9     | 0.4     | 5   | KURIL ISLANDS  |                       |
| 05 | 10 | 07 | 52.1* | 43.281 N | 147.987 E | 33 N      | 4.8     | 1.3     | 10  | KURIL ISLANDS  |                       |
| 05 | 10 | 10 | 03.4* | 43.428 N | 148.096 E | 33 N      | 4.7     | 1.3     | 16  | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 10 | 38 | 43.28 | 39.262 N | 27.715 E  | 10 G      |         | 0.8     | 5   | TURKEY. ML 2.8 (ISK).                                      |                       |
| 05 | 10 | 47 | 11.6? | 31.56 S  | 68.09 W   | 33 N      |         | 1.4     | 5   | SAN JUAN PROVINCE, ARGENTINA                               |                       |
| 05 | 10 | 58 | 07.8* | 44.376 N | 147.036 E | 33 N      | 4.6     | 1.1     | 13  | KURIL ISLANDS  |                       |
| 05 | 11 | 20 | 51.2? | 43.41 N  | 147.84 E  | 33 N      | 4.3     | 1.3     | 6   | KURIL ISLANDS  |                       |
| 05 | 11 | 31 | 32.0* | 43.469 N | 147.579 E | 33 N      | 4.2     | 1.2     | 13  | KURIL ISLANDS  |                       |
| 05 | 11 | 41 | 54.4? | 20.98 S  | 174.63 W  | 33 N      | 4.8     | 0.2     | 8   | TONGA ISLANDS  |                       |
| 05 | 11 | 53 | 05.6* | 43.715 N | 148.418 E | 33 N      | 4.8     | 0.9     | 31  | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 11 | 59 | 39.9  | 43.624 N | 147.824 E | 50 D      | 4.8     | 1.1     | 55  | KURIL ISLANDS  |                       |
| 05 | 12 | 05 | 01.2  | 43.421 N | 148.035 E | 11        | 5.4 5.2 | 0.9     | 212 | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 12 | 11 | 57.1  | 43.676 N | 148.217 E | 29 D      | 5.2     | 0.8     | 96  | EAST OF KURIL ISLANDS                                      |                       |
| 05 | 12 | 34 | 43.0  | 43.228 N | 147.400 E | 53 D      | 5.5     | 0.8     | 205 | KURIL ISLANDS  |                       |
| 05 | 12 | 39 | 30.6  | 43.627 N | 147.450 E | 41 D      | 5.7     | 0.8     | 248 | KURIL ISLANDS  |                       |
| 05 | 12 | 47 | 06.9? | 33.83 S  | 70.48 W   | 10 G      |         | 0.1     | 4   | CHILE-ARGENTINA BORDER REGION                              |                       |
| 05 | 13 | 10 | 00.96 | 40.394 N | 125.289 W | 15        |         |         | 15  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 2.9 (GM).     |                       |
| 05 | 13 | 54 | 18.6* | 43.742 N | 146.737 E | 33 N      | 5.0     | 0.8     | 42  | KURIL ISLANDS  |                       |
| 05 | 14 | 30 | 04.3? | 43.67 N  | 147.70 E  | 33 N      | 3.9     | 0.5     | 6   | KURIL ISLANDS  |                       |

|      |    |    |       |        |   |         |   |     |   |     |     |     |   |   |
|------|----|----|-------|--------|---|---------|---|-----|---|-----|-----|-----|---|---|
| 05   | 14 | 35 | 59.1  | 43.226 | N | 147.557 | E | 35  | D | 4.9 | 0.9 | 49  | KURIL ISLANDS   |   |
| 05   | 14 | 51 | 55.47 | 39.65  | N | 29.50   | E | 10  | G |     | 0.6 | 5   | TURKEY. ML 2.9 (ISK).   |   |
| 05   | 15 | 04 | 27.97 | 42.87  | N | 147.27  | E | 33  | N | 4.3 | 1.4 | 6   | OFF COAST OF HOKKAIDO, JAPAN  |   |
| 05   | 15 | 27 | 24.6  | 43.813 | N | 147.940 | E | 31  | D | 5.1 | 4.5 | 111 | KURIL ISLANDS   |   |
| 05   | 15 | 35 | 48.78 | 31.028 | S | 68.209  | W | 33  | N |     | 1.2 | 5   | SAN JUAN PROVINCE, ARGENTINA  |   |
| 05   | 15 | 37 | 31.7* | 58.823 | S | 26.239  | W | 161 | * | 5.4 | 0.4 | 20  | SOUTH SANDWICH ISLANDS REGION   |   |
| 05   | 16 | 08 | 40.98 | 46.267 | N | 1.678   | E | 10  | G |     | 0.9 | 15  | FRANCE. ML 2.5 (LDG).   |   |
| 05   | 16 | 10 | 11.17 | 39.72  | N | 29.48   | E | 10  | G |     | 1.2 | 6   | TURKEY. ML 2.8 (ISK).   |   |
| 05   | 16 | 28 | 31.9* | 43.599 | N | 147.897 | E | 33  | N | 4.7 | 1.1 | 11  | KURIL ISLANDS   |   |
| 05   | 16 | 30 | 22.8  | 43.338 | N | 146.835 | E | 33  | N | 4.7 | 4.3 | 1.0 | 24  | KURIL ISLANDS   |
| 05   | 16 | 38 | 41.07 | 43.89  | N | 147.54  | E | 33  | N | 3.9 | 1.0 | 6   | KURIL ISLANDS   |   |
| 05   | 16 | 59 | 29.88 | 33.431 | S | 117.814 | E | 10  | G |     | 1.0 | 6   | WESTERN AUSTRALIA   |   |
| 05   | 17 | 15 | 26.5  | 43.230 | N | 147.907 | E | 33  | N | 4.8 | 1.1 | 42  | KURIL ISLANDS   |   |
| 05   | 17 | 24 | 34.2* | 7.492  | S | 107.145 | E | 33  | N | 4.8 | 1.4 | 15  | JAWA, INDONESIA   |   |
| 05   | 17 | 25 | 33.8  | 43.942 | N | 147.374 | E | 50  |   | 5.0 | 0.9 | 78  | KURIL ISLANDS   |   |
| 05   | 17 | 33 | 35.5  | 42.844 | N | 18.052  | E | 10  | G |     | 1.2 | 14  | NORTHWESTERN BALKAN REGION. ML 3.0 (TTG).   |   |
| 05   | 17 | 42 | 28.67 | 41.74  | N | 148.40  | E | 33  | N | 3.9 | 0.5 | 6   | OFF COAST OF HOKKAIDO, JAPAN  |   |
| 05   | 17 | 51 | 42.8* | 43.195 | N | 146.742 | E | 32  | D | 4.6 | 0.6 | 13  | KURIL ISLANDS   |   |
| 05   | 18 | 10 | 12.3* | 43.039 | N | 148.207 | E | 33  | N | 4.4 | 0.9 | 16  | EAST OF KURIL ISLANDS   |   |
| 05   | 18 | 12 | 07.87 | 37.28  | N | 142.28  | E | 33  | N |     | 0.6 | 17  | OFF EAST COAST OF HONSHU, JAPAN   |   |
| 05   | 18 | 35 | 01.3  | 15.395 | S | 173.308 | W | 33  | N | 5.3 | 0.9 | 71  | TONGA ISLANDS   |   |
| 05   | 19 | 01 | 58.06 | 59.797 | N | 152.224 | W | 66  |   |     |     | 50  | SOUTHERN ALASKA. <AEIC>. ML 2.9 (AEIC).   |   |
| 05   | 19 | 38 | 38.0  | 43.815 | N | 147.368 | E | 52  | * | 5.0 | 0.9 | 60  | KURIL ISLANDS   |   |
| 05   | 19 | 59 | 28.17 | 43.54  | N | 148.41  | E | 33  | N |     | 1.3 | 7   | EAST OF KURIL ISLANDS   |   |
| 05   | 20 | 31 | 11.6  | 33.149 | S | 70.272  | W | 5   | G |     | 0.4 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).  |   |
| 05   | 20 | 33 | 34.66 | 60.731 | N | 151.546 | W | 16  |   |     |     | 40  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.5 (AEIC).                                       |   |
| a 05 | 20 | 37 | 29.3  | 43.592 | N | 147.449 | E | 13  | G | 5.8 | 0.9 | 451 | KURIL ISLANDS. Mw 5.9 (GS), 6.0 (HRV). Depth from broadband displacement seismograms. |   |
| 05   | 20 | 38 | 57.56 | 61.553 | N | 147.987 | W | 28  |   |     |     | 45  | SOUTHERN ALASKA. <AEIC>. ML 2.8 (AEIC).   |   |
| a 05 | 20 | 39 | 48.4  | 43.954 | N | 147.336 | E | 40  | G | 6.2 | 5.5 | 0.9 | 474   | KURIL ISLANDS. Mw 5.9 (GS), 6.1 (HRV). Ms 5.3 (BRK). Depth from broadband displacement seismograms. |
| 05   | 21 | 02 | 34.2  | 43.609 | N | 147.997 | E | 29  | D | 4.9 | 0.8 | 56  | KURIL ISLANDS   |   |
| 05   | 21 | 51 | 19.4  | 43.671 | N | 147.463 | E | 33  | N | 4.9 | 0.8 | 87  | KURIL ISLANDS   |   |
| 05   | 22 | 25 | 16.0* | 42.971 | N | 146.881 | E | 33  | N | 4.8 | 0.8 | 18  | OFF COAST OF HOKKAIDO, JAPAN  |   |
| 05   | 23 | 14 | 12.37 | 43.42  | N | 147.80  | E | 10  | G | 3.8 | 0.5 | 5   | KURIL ISLANDS   |   |
| 05   | 23 | 22 | 13.1* | 42.920 | N | 147.145 | E | 27  | D | 4.5 | 1.1 | 19  | OFF COAST OF HOKKAIDO, JAPAN  |   |
| 06   | 00 | 15 | 31.36 | 38.733 | N | 119.748 | W | 0   |   |     |     | 61  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.6 (GM). ML 3.5 (GS), 3.9 (BRK).         |   |
| 06   | 00 | 19 | 40.7  | 43.222 | N | 148.201 | E | 26  | D | 4.9 | 0.9 | 28  | EAST OF KURIL ISLANDS   |   |
| 06   | 01 | 45 | 15.1  | 43.834 | N | 148.216 | E | 23  |   | 5.0 | 0.8 | 78  | EAST OF KURIL ISLANDS   |   |
| 06   | 01 | 48 | 03.1  | 43.194 | N | 147.051 | E | 33  | N | 4.5 | 1.1 | 25  | KURIL ISLANDS   |   |
| 06   | 02 | 22 | 05.87 | 43.57  | N | 148.19  | E | 33  | N | 3.9 | 1.0 | 9   | EAST OF KURIL ISLANDS   |   |
| 06   | 04 | 07 | 44.8* | 43.683 | N | 147.760 | E | 37  | D | 4.6 | 4.2 | 1.3 | 27  | KURIL ISLANDS   |
| 06   | 04 | 32 | 07.3  | 43.872 | N | 147.701 | E | 33  | N | 4.6 | 4.4 | 0.9 | 47  | KURIL ISLANDS   |
| 06   | 04 | 35 | 04.7  | 43.612 | N | 147.275 | E | 33  | N | 4.7 | 0.7 | 31  | KURIL ISLANDS   |   |
| 06   | 05 | 03 | 43.27 | 43.41  | N | 147.43  | E | 33  | N | 4.4 | 1.5 | 10  | KURIL ISLANDS   |   |
| 06   | 05 | 16 | 18.5  | 43.879 | N | 147.851 | E | 30  | D | 4.9 | 0.9 | 59  | KURIL ISLANDS   |   |
| 06   | 05 | 30 | 58.46 | 59.924 | N | 145.950 | W | 2   |   |     |     | 43  | GULF OF ALASKA. <AEIC>. ML 2.9 (AEIC).  |   |
| 06   | 05 | 44 | 07.07 | 1.37   | S | 14.98   | W | 10  | G | 5.2 | 1.0 | 13  | NORTH OF ASCENSION ISLAND   |   |
| 06   | 06 | 10 | 33.3* | 43.463 | N | 147.760 | E | 33  | N | 4.8 | 1.1 | 15  | KURIL ISLANDS   |   |
| 06   | 06 | 11 | 55.9  | 10.889 | N | 62.359  | W | 70  | G |     | 0.6 | 7   | NEAR COAST OF VENEZUELA. MD 3.4 (TRN).  |   |
| 06   | 06 | 35 | 55.87 | 43.08  | N | 147.92  | E | 33  | N | 4.8 | 0.9 | 11  | KURIL ISLANDS   |   |
| 06   | 07 | 14 | 04.4* | 43.145 | N | 147.996 | E | 33  | N | 4.2 | 1.3 | 11  | KURIL ISLANDS   |   |
| 06   | 07 | 15 | 18.17 | 8.39   | S | 127.40  | E | 166 | ? | 4.9 | 1.0 | 10  | TIMOR REGION, INDONESIA   |   |
| 06   | 07 | 19 | 50.1* | 43.304 | N | 147.357 | E | 54  | * | 4.5 | 1.2 | 23  | KURIL ISLANDS   |   |
| 06   | 07 | 20 | 01.17 | 29.89  | S | 71.11   | W | 10  | G |     | 0.7 | 5   | NEAR COAST OF CENTRAL CHILE   |   |
| 06   | 07 | 21 | 03.4* | 43.612 | N | 149.798 | E | 39  | D | 4.8 | 0.7 | 34  | EAST OF KURIL ISLANDS   |   |
| a 06 | 07 | 38 | 48.7  | 43.239 | N | 148.458 | E | 30  | D | 5.3 | 5.2 | 1.3 | 128   | EAST OF KURIL ISLANDS. Mw 5.3 (HRV).  |
| 06   | 07 | 43 | 46.6* | 43.387 | N | 148.100 | E | 33  | N | 4.9 | 1.3 | 45  | EAST OF KURIL ISLANDS   |   |
| 06   | 07 | 46 | 35.4  | 43.239 | N | 148.061 | E | 33  | D | 5.3 | 5.6 | 1.0 | 83  | EAST OF KURIL ISLANDS   |
| 06   | 08 | 24 | 24.4* | 39.149 | N | 27.627  | E | 5   | G |     | 0.7 | 5   | TURKEY. ML 2.8 (ISK).   |   |
| 06   | 08 | 30 | 15.6* | 32.130 | S | 69.312  | W | 150 | G |     | 0.9 | 15  | MENDOZA PROVINCE, ARGENTINA. MD 3.8 (SAN).  |   |
| 06   | 08 | 41 | 54.77 | 39.22  | N | 27.71   | E | 10  | G |     | 0.2 | 4   | TURKEY. ML 2.8 (ISK).   |   |
| 06   | 08 | 57 | 10.97 | 39.62  | N | 29.36   | E | 10  | G |     | 1.5 | 4   | TURKEY. ML 2.7 (ISK).   |   |
| 06   | 08 | 57 | 18.1* | 43.123 | N | 148.326 | E | 33  | N | 4.3 | 1.4 | 10  | EAST OF KURIL ISLANDS   |   |
| 06   | 09 | 02 | 12.2  | 43.394 | N | 147.517 | E | 28  | D | 4.9 | 0.8 | 45  | KURIL ISLANDS   |   |
| 06   | 09 | 43 | 34.1* | 43.466 | N | 147.660 | E | 33  | N | 4.8 | 1.3 | 18  | KURIL ISLANDS   |   |
| 06   | 09 | 58 | 16.97 | 39.09  | N | 27.63   | E | 5   | G |     | 0.2 | 4   | TURKEY. ML 2.8 (ISK).   |   |
| 06   | 10 | 05 | 55.38 | 59.347 | N | 6.064   | E | 10  | G |     | 0.4 | 5   | SOUTHERN NORWAY. MD 1.6 (BER).  |   |
| 06   | 10 | 13 | 51.3  | 43.466 | N | 148.053 | E | 40  | D | 4.9 | 1.1 | 71  | EAST OF KURIL ISLANDS   |   |
| 06   | 10 | 25 | 26.8  | 43.541 | N | 147.406 | E | 33  | N | 4.7 | 0.8 | 22  | KURIL ISLANDS   |   |
| 06   | 10 | 58 | 42.9  | 43.748 | N | 147.977 | E | 33  | N | 4.9 | 0.9 | 44  | KURIL ISLANDS   |   |
| 06   | 11 | 27 | 56.7* | 32.653 | S | 71.727  | W | 13  |   |     | 0.7 | 14  | NEAR COAST OF CENTRAL CHILE. MD 4.0 (SAN).  |   |
| 06   | 11 | 31 | 28.06 | 33.352 | N | 116.363 | W | 11  |   |     |     | 6   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).   |   |
| 06   | 11 | 36 | 29.1  | 43.068 | N | 147.253 | E | 33  | N | 4.7 | 0.6 | 46  | KURIL ISLANDS   |   |
| 06   | 11 | 48 | 47.38 | 44.658 | N | 8.344   | E | 10  | G |     | 0.2 | 10  | NORTHERN ITALY. ML 2.7 (GEN).   |   |
| 06   | 11 | 52 | 31.4* | 43.498 | N | 147.594 | E | 33  | N | 4.3 | 1.4 | 14  | KURIL ISLANDS   |   |
| 06   | 11 | 55 | 44.2  | 43.671 | N | 147.452 | E | 48  | D | 5.2 | 4.5 | 0.8 | 171   | KURIL ISLANDS   |
| 06   | 12 | 39 | 45.3  | 43.237 | N | 147.390 | E | 56  | D | 4.8 | 1.0 | 80  | KURIL ISLANDS   |   |
| 06   | 12 | 43 | 22.07 | 39.10  | N | 27.69   | E | 10  | G |     | 0.8 | 4   | TURKEY. ML 2.8 (ISK).   |   |
| 06   | 12 | 45 | 36.0* | 43.848 | N | 147.329 | E | 56  | * | 4.5 | 1.0 | 18  | KURIL ISLANDS   |   |
| 06   | 12 | 46 | 03.2* | 43.285 | N | 147.330 | E | 33  | N | 4.8 | 0.6 | 24  | KURIL ISLANDS   |   |
| 06   | 13 | 17 | 37.9* | 43.229 | N | 147.643 | E | 33  | N |     | 1.2 | 7   | KURIL ISLANDS   |   |
| 06   | 13 | 24 | 01.2  | 43.748 | N | 147.438 | E | 33  | N | 4.8 | 0.8 | 51  | KURIL ISLANDS   |   |
| 06   | 14 | 42 | 44.4  | 43.677 | N | 147.849 | E | 33  | N | 4.8 | 0.8 | 52  | KURIL ISLANDS   |   |
| 06   | 14 | 59 | 32.6  | 43.263 | N | 146.994 | E | 33  | N | 4.6 | 1.0 | 37  | KURIL ISLANDS   |   |
| a 06 | 15 | 26 | 12.28 | 42.362 | N | 18.996  | E | 10  | G |     | 0.3 | 9   | NORTHWESTERN BALKAN REGION. ML 2.2 (TTG).   |   |
| a 06 | 15 | 42 | 14.1* | 56.628 | S | 141.923 | W | 10  | G | 5.8 | 5.2 | 1.2 | 26  | PACIFIC-ANTARCTIC RIDGE. Mw 5.5 (HRV).  |
| 06   | 15 | 53 | 24.66 | 38.796 | N | 119.678 | W | 0   | G |     |     | 7   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM).                                 |   |
| 06   | 16 | 21 | 28.5  | 43.587 | N | 147.456 | E | 33  | N | 4.8 | 0.9 | 24  | KURIL ISLANDS   |   |
| 06   | 16 | 33 | 00.0  | 43.543 | N | 147.427 | E | 33  | N | 4.9 | 4.9 | 1.0 | 57  | KURIL ISLANDS   |
| 06   | 17 | 45 | 34.1* | 11.376 | S | 113.685 | E | 33  | N | 4.0 | 1.1 | 6   | SOUTH OF JAWA, INDONESIA  |   |
| 06   | 17 | 45 | 39.0* | 43.659 | N | 148.367 | E | 33  | N | 4.6 | 1.2 | 10  | EAST OF KURIL ISLANDS   |   |

|      |             |          |           |       |         |     |   |
|------|-------------|----------|-----------|-------|---------|-----|---|
| 06   | 17 47 53.0s | 66.966 N | 135.793 W | 10 G  |         | 21  | NORTHERN YUKON TERRITORY, CANADA. <PGC>. ML 3.7 (PGC), 4.1 (PMR).   |
| 06   | 18 43 14.0  | 43.180 N | 147.283 E | 51 D  | 5.0     | 0.7 | 101 KURIL ISLANDS   |
| 06   | 18 47 47.5  | 40.572 N | 25.997 E  | 5 G   |         | 0.6 | 7 AEGEAN SEA. ML 3.1 (ISK). MD 3.4 (ATH).   |
| 06   | 19 19 03.5* | 33.385 S | 72.320 W  | 25    |         | 1.0 | 19 OFF COAST OF CENTRAL CHILE. MD 4.8 (SAN). Felt (III) in the Valparaiso-Vina del Mar area.  |
| 06   | 19 27 12.4? | 33.37 S  | 72.24 W   | 17    |         | 0.5 | 12 OFF COAST OF CENTRAL CHILE. MD 4.2 (SAN). Felt (II) in the Valparaiso-Vina del Mar area.   |
| 06   | 19 56 16.8? | 33.37 S  | 72.59 W   | 17    |         | 0.5 | 12 OFF COAST OF CENTRAL CHILE. MD 4.1 (SAN). Felt (II) in the Valparaiso-Vina del Mar area.   |
| 06   | 20 21 59.2s | 33.748 S | 70.148 W  | 22 *  |         | 0.5 | 10 CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).   |
| 06   | 20 32 43.0* | 39.541 N | 20.973 E  | 10 G  |         | 1.5 | 10 GREECE-ALBANIA BORDER REGION. MD 3.2 (ATH).  |
| 06   | 20 34 52.8  | 28.593 N | 139.699 E | 454 * | 4.5     | 0.7 | 24 BONIN ISLANDS REGION   |
| 06   | 20 45 28.8* | 39.646 N | 20.801 E  | 33 N  |         | 0.7 | 8 GREECE-ALBANIA BORDER REGION. MD 3.5 (ATH). ML 3.3 (TIR).   |
| 06   | 20 53 38.4? | 44.34 N  | 146.76 E  | 33 N  | 3.8     | 1.0 | 7 KURIL ISLANDS   |
| 06   | 20 56 28.8? | 44.16 N  | 148.31 E  | 33 N  | 4.7     | 1.3 | 9 KURIL ISLANDS   |
| 06   | 21 07 20.6  | 43.050 N | 147.305 E | 62    | 4.6     | 0.9 | 69 KURIL ISLANDS  |
| 06   | 21 10 48.3* | 34.345 N | 38.075 E  | 22    |         | 0.3 | 16 JORDAN - SYRIA REGION  |
| 06   | 22 04 41.1s | 59.028 N | 152.674 W | 92    |         |     | 38 SOUTHERN ALASKA. <AEIC>.   |
| 06   | 22 56 45.9  | 43.360 N | 147.681 E | 33 N  | 4.4     | 0.9 | 19 KURIL ISLANDS  |
| a 06 | 23 20 13.3  | 43.413 N | 147.321 E | 53 D  | 5.1     | 0.9 | 144 KURIL ISLANDS. Mw 5.1 (HRV).  |
| 06   | 23 57 43.0* | 43.035 N | 146.913 E | 57 D  | 4.7     | 0.7 | 34 KURIL ISLANDS  |
| 07   | 00 00 54.2* | 55.167 N | 167.065 W | 10 G  | 4.4     | 1.2 | 14 FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).   |
| 07   | 01 08 33.9  | 27.855 S | 26.538 E  | 5 G   |         | 1.3 | 11 REPUBLIC OF SOUTH AFRICA. mbLg 4.3 (BUL).  |
| 07   | 01 36 54.6? | 58.01 S  | 25.91 W   | 33 N  | 4.4     | 1.3 | 7 SOUTH SANDWICH ISLANDS REGION   |
| 07   | 01 56 02.5  | 27.868 S | 26.680 E  | 5 G   |         | 1.1 | 13 REPUBLIC OF SOUTH AFRICA. mbLg 4.4 (BUL).  |
| 07   | 02 06 02.2* | 33.393 S | 72.419 W  | 16    |         | 0.5 | 13 OFF COAST OF CENTRAL CHILE. MD 4.3 (SAN).  |
| 07   | 02 13 24.2? | 46.39 N  | 145.77 E  | 33 N  | 4.5     | 0.3 | 9 SEA OF OKHOTSK  |
| a 07 | 02 36 09.2  | 43.614 N | 147.289 E | 52 G  | 6.1     | 0.8 | 539 KURIL ISLANDS. Mw 5.6 (GS), 5.6 (HRV). Felt (III JMA) at Kushiro and (II JMA) at Nemuro, Hokkaido. Also felt in much of northern Honshu. Depth from broadband displacement seismograms. |
| 07   | 02 50 31.8* | 33.407 S | 72.035 W  | 23    |         | 0.7 | 14 OFF COAST OF CENTRAL CHILE. MD 4.4 (SAN).  |
| 07   | 03 01 27.8  | 43.443 N | 147.731 E | 43 D  | 5.0     | 0.8 | 81 KURIL ISLANDS  |
| 07   | 03 25 58.1  | 41.662 N | 88.753 E  | 0 G   | 6.0     | 0.9 | 456 SOUTHERN XINJIANG, CHINA. Probable underground nuclear explosion.   |
| 07   | 03 26 12.9* | 31.036 S | 68.334 W  | 33 N  |         | 0.8 | 5 SAN JUAN PROVINCE, ARGENTINA  |
| 07   | 04 42 22.9* | 42.682 N | 148.437 E | 33 N  | 4.2     | 1.2 | 12 OFF COAST OF HOKKAIDO, JAPAN   |
| 07   | 04 46 06.6s | 63.684 N | 152.203 W | 7     |         |     | 32 CENTRAL ALASKA. <AEIC>. ML 2.5 (AEIC), 2.8 (PMR).  |
| 07   | 05 41 11.5s | 32.044 N | 114.872 W | 16    |         |     | 15 W. ARIZONA-SONORA BORDER REGION. <ECX-P>. MD 3.7 (ECX). Felt at Riito, Sonora, Mexico.   |
| 07   | 05 55 07.2  | 44.546 N | 7.022 E   | 10 G  |         | 0.2 | 6 NORTHERN ITALY. ML 1.8 (GEN).   |
| 07   | 06 58 55.2s | 34.309 N | 119.281 W | 1     |         |     | 31 SOUTHERN CALIFORNIA. <PAS-P>. ML 2.6 (PAS), 2.8 (GS).  |
| a 07 | 07 00 52.1  | 43.117 N | 146.866 E | 55 D  | 5.5     | 0.8 | 286 KURIL ISLANDS. Mw 5.5 (HRV). mb 5.3 (BRK). Felt (III) at Misawa, Honshu.  |
| 07   | 07 59 28.9s | 59.972 N | 151.815 W | 47    |         |     | 56 KENAI PENINSULA, ALASKA. <AEIC>. ML 2.8 (AEIC).  |
| 07   | 08 03 34.2? | 39.69 N  | 29.46 E   | 10 G  |         | 1.2 | 4 TURKEY. ML 2.7 (ISK).   |
| 07   | 08 03 59.3? | 43.42 N  | 147.01 E  | 33 N  | 4.7     | 1.5 | 7 KURIL ISLANDS   |
| 07   | 08 24 21.8? | 43.47 N  | 147.65 E  | 33 N  |         | 1.4 | 6 KURIL ISLANDS   |
| 07   | 08 40 54.1? | 43.07 N  | 0.29 W    | 10 G  |         | 0.4 | 6 PYRENEES. ML 1.0 (STR).   |
| 07   | 08 41 17.9? | 44.76 N  | 147.21 E  | 33 N  | 3.7     | 1.1 | 5 KURIL ISLANDS   |
| 07   | 08 52 43.5  | 35.268 N | 4.048 W   | 36 *  | 4.3     | 1.3 | 58 STRAIT OF GIBRALTAR. MD 4.5 (RBA). Felt (II) in the Al Hoceima area, Morocco.  |
| 07   | 10 20 19.6* | 43.726 N | 147.429 E | 55 *  | 4.2     | 1.1 | 17 KURIL ISLANDS  |
| 07   | 10 43 02.4* | 46.916 N | 153.167 E | 33 N  | 4.6     | 0.9 | 27 KURIL ISLANDS  |
| 07   | 10 43 51.9? | 39.12 N  | 27.61 E   | 5 G   |         | 0.7 | 4 TURKEY. ML 2.8 (ISK).   |
| 07   | 11 03 28.2* | 43.169 N | 146.941 E | 33 N  | 4.5     | 1.5 | 8 KURIL ISLANDS   |
| 07   | 11 09 21.5? | 43.97 N  | 146.49 E  | 33 N  | 3.9     | 1.0 | 6 KURIL ISLANDS   |
| 07   | 11 20 16.8? | 43.15 N  | 147.65 E  | 33 N  | 3.9     | 1.1 | 6 KURIL ISLANDS   |
| 07   | 11 25 06.7* | 43.503 N | 147.752 E | 33 N  | 4.2     | 1.0 | 8 KURIL ISLANDS   |
| 07   | 11 36 48.9* | 43.649 N | 147.539 E | 33 N  | 4.7     | 1.1 | 22 KURIL ISLANDS  |
| 07   | 12 04 25.5? | 44.10 N  | 146.90 E  | 33 N  | 3.9     | 1.1 | 5 KURIL ISLANDS   |
| 07   | 12 10 08.3* | 43.120 N | 148.122 E | 33 N  | 4.7     | 1.0 | 27 EAST OF KURIL ISLANDS  |
| 07   | 12 46 13.5? | 8.22 S   | 102.59 W  | 10 G  | 4.1     | 0.6 | 12 CENTRAL EAST PACIFIC RISE  |
| 07   | 12 51 15.9  | 36.317 N | 6.076 W   | 14    |         | 1.2 | 22 STRAIT OF GIBRALTAR. mbLg 3.0 (MDD).   |
| 07   | 12 53 16.5? | 43.36 N  | 147.39 E  | 33 N  | 4.0     | 1.4 | 10 KURIL ISLANDS  |
| a 07 | 12 54 10.8* | 35.106 S | 179.137 E | 33 N  | 5.4     | 1.0 | 32 OFF E. COAST OF N. ISLAND, N.Z. Mw 5.3 (HRV).  |
| 07   | 13 48 14.4  | 43.166 N | 146.881 E | 44 D  | 5.0     | 1.0 | 122 KURIL ISLANDS   |
| 07   | 14 04 41.5? | 42.54 N  | 17.40 E   | 5 G   |         | 0.6 | 9 ADRIATIC SEA. ML 2.9 (TTG).   |
| 07   | 14 45 58.3s | 59.983 N | 153.282 W | 134   |         |     | 49 SOUTHERN ALASKA. <AEIC>.   |
| a 07 | 15 00 14.7  | 43.580 N | 148.218 E | 30 D  | 5.3 5.1 | 1.0 | 155 EAST OF KURIL ISLANDS. Mw 5.3 (HRV).  |
| 07   | 15 17 47.9  | 1.378 N  | 127.222 E | 160 * | 5.3     | 1.1 | 39 HALMAHERA, INDONESIA   |
| a 07 | 15 24 03.4  | 42.877 N | 146.063 E | 24 D  | 6.0 5.2 | 0.8 | 423 OFF COAST OF HOKKAIDO, JAPAN. Mw 5.4 (HRV).   |
| 07   | 15 25 13.4  | 37.263 N | 28.325 E  | 10 G  |         | 0.8 | 9 TURKEY. ML 3.6 (ISK).   |
| 07   | 15 48 04.2? | 39.71 N  | 29.54 E   | 10 G  |         | 1.0 | 6 TURKEY. ML 2.6 (ISK).   |
| 07   | 15 55 57.0* | 33.378 S | 72.230 W  | 10 G  |         | 0.7 | 12 OFF COAST OF CENTRAL CHILE. MD 4.3 (SAN).  |
| 07   | 16 50 15.1? | 42.92 N  | 147.27 E  | 33 N  | 3.9     | 1.2 | 5 OFF COAST OF HOKKAIDO, JAPAN  |
| 07   | 18 20 37.9* | 42.995 N | 146.982 E | 33 N  | 4.7     | 1.3 | 11 OFF COAST OF HOKKAIDO, JAPAN   |
| 07   | 18 28 06.2  | 43.764 N | 147.989 E | 36 D  | 4.7     | 0.8 | 42 KURIL ISLANDS  |
| 07   | 18 39 41.5* | 43.474 N | 146.893 E | 33 N  | 4.8     | 0.6 | 36 KURIL ISLANDS  |
| 07   | 18 49 50.7* | 46.029 N | 14.241 E  | 10 G  |         | 0.9 | 5 NORTHWESTERN BALKAN REGION. MD 2.4 (LJU).   |
| 07   | 19 18 03.2? | 34.77 S  | 70.96 W   | 100 G |         | 0.2 | 10 CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).   |
| 07   | 19 31 32.0? | 38.49 N  | 26.16 E   | 33 N  | 4.4     | 0.6 | 5 AEGEAN SEA  |
| 07   | 20 03 55.8s | 44.532 N | 7.326 E   | 10 G  |         | 0.2 | 9 NORTHERN ITALY. ML 2.1 (GEN).   |
| 07   | 21 04 36.4  | 43.167 N | 146.496 E | 33 D  | 5.1     | 0.8 | 102 KURIL ISLANDS   |
| 07   | 21 19 55.2? | 14.95 S  | 167.21 E  | 114 ? | 4.4     | 1.0 | 43 VANUATU ISLANDS  |
| 07   | 21 27 46.1* | 43.957 N | 147.162 E | 43 *  | 4.8     | 1.3 | 33 KURIL ISLANDS  |
| 07   | 22 42 52.3* | 23.952 S | 69.515 E  | 10 G  | 4.8 4.8 | 1.0 | 23 MID-INDIAN RIDGE   |
| 07   | 23 19 27.1s | 38.773 N | 119.708 W | 1     |         |     | 67 CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.4 (GM). ML 3.6 (BRK), 3.4 (GS).  |
| 07   | 23 26 38.2  | 8.297 S  | 116.763 E | 33 N  | 5.0     | 1.3 | 32 SUMBAWA REGION, INDONESIA  |
| 07   | 23 39 06.5  | 43.234 N | 147.485 E | 33 N  | 4.9     | 0.9 | 56 KURIL ISLANDS  |



|      |    |    |       |        |   |         |   |     |     |     |     |     |     |  |
|------|----|----|-------|--------|---|---------|---|-----|-----|-----|-----|-----|-----|--|
| 07   | 23 | 41 | 03.0% | 62.502 | N | 151.429 | W | 102 | 3.5 |     |     |     | 95  | CENTRAL ALASKA. <AEIC>. Felt at Skwentna.  |
| 08   | 00 | 05 | 22.5% | 40.469 | N | 125.936 | W | 25  |     |     |     |     | 57  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.5 (GM). ML 3.5 (BRK).   |
| 08   | 01 | 23 | 28.7% | 31.75  | S | 69.31   | W | 33  | N   |     |     | 1.1 | 5   | SAN JUAN PROVINCE, ARGENTINA   |
| 08   | 02 | 07 | 39.0% | 35.14  | S | 71.29   | W | 90  | G   |     |     | 0.3 | 7   | CENTRAL CHILE  |
| 08   | 02 | 23 | 22.1  | 32.208 | S | 71.292  | W | 33  | N   |     |     | 0.5 | 16  | NEAR COAST OF CENTRAL CHILE. MD 4.2 (SAN).   |
| 08   | 03 | 19 | 46.3% | 33.671 | S | 71.192  | W | 50  | G   |     |     | 0.3 | 9   | NEAR COAST OF CENTRAL CHILE  |
| 08   | 03 | 28 | 57.0% | 59.830 | N | 153.624 | W | 136 |     |     |     |     | 42  | SOUTHERN ALASKA. <AEIC>.   |
| 08   | 03 | 36 | 49.6% | 43.800 | N | 147.210 | E | 33  | N   | 4.3 |     | 0.9 | 12  | KURIL ISLANDS  |
| 08   | 04 | 59 | 00.7  | 42.195 | N | 147.361 | E | 45  | D   | 4.5 |     | 0.8 | 29  | OFF COAST OF HOKKAIDO, JAPAN   |
| a 08 | 05 | 28 | 26.8  | 43.319 | N | 146.676 | E | 26  | D   | 5.6 | 5.0 | 0.9 | 355 | KURIL ISLANDS. Mw 5.4 (HRV).   |
| 08   | 06 | 11 | 50.1% | 61.637 | N | 149.923 | W | 47  |     |     |     |     | 53  | SOUTHERN ALASKA. <AEIC>. ML 3.0 (AEIC), 2.8 (PMR).   |
| 08   | 06 | 18 | 49.2% | 43.70  | N | 146.99  | E | 33  | N   | 4.9 |     | 0.4 | 16  | KURIL ISLANDS  |
| 08   | 06 | 43 | 14.7% | 59.919 | N | 5.138   | E | 5   | G   |     |     | 1.0 | 5   | SOUTHERN NORWAY. MD 1.5 (BER).   |
| 08   | 06 | 50 | 34.0% | 45.16  | N | 146.34  | E | 33  | N   | 4.5 |     | 0.3 | 22  | KURIL ISLANDS  |
| 08   | 07 | 54 | 01.1% | 43.279 | N | 147.943 | E | 33  | N   | 4.7 |     | 1.0 | 25  | KURIL ISLANDS  |
| 08   | 08 | 34 | 33.6% | 61.336 | N | 148.109 | W | 15  |     |     |     |     | 43  | SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).  |
| 08   | 09 | 30 | 39.7  | 43.681 | N | 147.450 | E | 49  |     | 4.7 | 4.4 | 0.9 | 55  | KURIL ISLANDS  |
| a 08 | 09 | 54 | 34.2  | 43.873 | N | 148.171 | E | 9   | G   | 5.9 |     | 0.8 | 461 | EAST OF KURIL ISLANDS. Mw 5.4 (GS), 5.3 (HRV). Depth from broadband displacement seismograms.  |
| 08   | 09 | 56 | 54.2% | 12.70  | S | 76.75   | W | 33  | N   |     |     | 0.5 | 4   | NEAR COAST OF PERU. Felt (III) at Mala.  |
| 08   | 10 | 07 | 37.3% | 43.38  | N | 148.46  | E | 33  | N   | 3.9 |     | 1.4 | 8   | EAST OF KURIL ISLANDS  |
| 08   | 10 | 14 | 57.8% | 43.55  | N | 148.57  | E | 33  | N   | 3.7 |     | 1.4 | 6   | EAST OF KURIL ISLANDS  |
| 08   | 10 | 26 | 54.3% | 35.153 | N | 3.993   | W | 33  | N   |     |     | 1.1 | 8   | STRAIT OF GIBRALTAR. mbLg 3.4 (MDD). MD 3.3 (RBA).   |
| 08   | 10 | 28 | 36.2  | 43.086 | N | 147.512 | E | 11  | D   | 5.1 |     | 0.9 | 99  | KURIL ISLANDS  |
| 08   | 10 | 35 | 25.0% | 37.278 | N | 29.674  | E | 10  | G   |     |     | 0.5 | 5   | TURKEY. ML 3.3 (ISK).  |
| 08   | 11 | 25 | 41.6% | 26.59  | S | 27.50   | E | 5   | G   |     |     | 1.4 | 5   | REPUBLIC OF SOUTH AFRICA   |
| 08   | 11 | 44 | 59.1% | 26.328 | S | 27.638  | E | 5   | G   |     |     | 1.1 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.2 (PRE).  |
| 08   | 11 | 50 | 04.5% | 44.19  | N | 150.32  | E | 33  | N   | 3.6 |     | 1.5 | 5   | EAST OF KURIL ISLANDS  |
| a 08 | 12 | 13 | 49.0  | 43.219 | N | 147.742 | E | 59  | D   | 5.1 |     | 0.9 | 158 | KURIL ISLANDS. Mw 5.4 (HRV).   |
| 08   | 12 | 26 | 01.1% | 44.266 | N | 8.202   | E | 5   | G   |     |     | 0.4 | 5   | NORTHERN ITALY. ML 2.0 (GEN).  |
| 08   | 12 | 49 | 53.0% | 35.812 | N | 117.957 | W | 3   |     |     |     |     | 12  | CENTRAL CALIFORNIA. <PAS-P>. ML 2.8 (PAS).   |
| 08   | 13 | 41 | 25.0% | 43.231 | N | 147.283 | E | 33  | N   | 4.6 |     | 1.4 | 14  | KURIL ISLANDS  |
| 08   | 13 | 42 | 08.6% | 39.664 | N | 29.503  | E | 10  | G   |     |     | 0.9 | 7   | TURKEY. ML 2.9 (ISK).  |
| 08   | 14 | 33 | 53.2% | 31.517 | S | 69.429  | W | 32  | *   |     |     | 1.5 | 7   | SAN JUAN PROVINCE, ARGENTINA   |
| 08   | 14 | 38 | 52.2% | 41.667 | N | 13.822  | E | 10  | G   |     |     | 1.2 | 13  | SOUTHERN ITALY   |
| 08   | 16 | 42 | 36.9% | 0.879  | S | 131.148 | E | 33  | N   | 4.7 |     | 1.4 | 12  | IRIAN JAYA REGION, INDONESIA   |
| 08   | 16 | 44 | 28.9% | 43.95  | N | 147.37  | E | 33  | N   | 3.7 |     | 1.4 | 7   | KURIL ISLANDS  |
| 08   | 17 | 18 | 34.6% | 48.892 | N | 129.220 | W | 10  | G   |     |     |     | 18  | VANCOUVER ISLAND REGION. <PGC-P>. ML 3.5 (PGC).  |
| 08   | 17 | 25 | 44.2  | 43.904 | N | 147.279 | E | 33  | N   | 4.7 |     | 1.1 | 55  | KURIL ISLANDS  |
| 08   | 17 | 46 | 54.8% | 43.52  | N | 148.34  | E | 33  | N   | 3.5 |     | 1.2 | 7   | EAST OF KURIL ISLANDS  |
| 08   | 17 | 51 | 17.5% | 15.36  | S | 75.85   | W | 33  | N   |     |     | 1.3 | 7   | NEAR COAST OF PERU. Felt (II) at Ica.  |
| 08   | 18 | 03 | 03.1% | 60.395 | N | 153.063 | W | 151 |     | 3.7 |     |     | 86  | SOUTHERN ALASKA. <AEIC>.   |
| 08   | 18 | 03 | 21.4  | 44.560 | N | 7.341   | E | 10  | G   |     |     | 0.5 | 17  | NORTHERN ITALY. ML 2.3 (GEN), 2.0 (LDG).   |
| 08   | 19 | 02 | 59.0% | 26.876 | S | 26.733  | E | 5   | G   |     |     | 0.9 | 8   | REPUBLIC OF SOUTH AFRICA. ML 2.9 (PRE).  |
| 08   | 19 | 49 | 06.2% | 36.086 | N | 120.009 | W | 20  |     |     |     |     | 12  | CENTRAL CALIFORNIA. <GM-P>. MD 2.9 (GM). ML 2.7 (PAS).   |
| 08   | 20 | 46 | 18.8% | 43.61  | N | 147.98  | E | 10  | G   | 4.1 |     | 1.3 | 6   | KURIL ISLANDS  |
| 08   | 21 | 02 | 57.0% | 60.250 | N | 6.499   | E | 5   | G   |     |     | 0.6 | 6   | SOUTHERN NORWAY. MD 2.4 (BER).   |
| 08   | 21 | 41 | 45.1  | 43.577 | N | 147.487 | E | 48  |     | 4.8 |     | 0.7 | 52  | KURIL ISLANDS  |
| a 08 | 21 | 44 | 07.2  | 1.258  | S | 127.980 | E | 17  | G   | 6.4 | 6.8 | 1.2 | 260 | HALMAHERA, INDONESIA. Mw 6.8 (GS), 6.8 (HRV). Ms 6.8 (BRK). Mo=4.2*10**19 Nm (PPT). One person killed, 52 injured and nearly 500 buildings damaged on Obi. Also, some bridges and piers were damaged on Obi. Felt strongly on Ambon. Depth from broadband displacement seismograms.  |
| 08   | 21 | 49 | 59.0% | 1.311  | S | 127.770 | E | 33  | N   |     |     | 1.3 | 10  | HALMAHERA, INDONESIA   |
| 08   | 21 | 55 | 34.7% | 29.57  | N | 43.30   | E | 10  | G   | 3.7 |     | 1.1 | 12  | WESTERN ARABIAN PENINSULA  |
| 08   | 22 | 06 | 58.0% | 51.188 | N | 15.737  | E | 10  | G   |     |     | 0.3 | 5   | POLAND   |
| 08   | 22 | 23 | 22.7% | 13.94  | N | 144.66  | E | 145 |     | 4.4 |     | 0.7 | 7   | MARIANA ISLANDS. Felt (III) at Sinajana and Tamuning, Guam.  |
| 08   | 22 | 46 | 22.4% | 43.298 | N | 147.600 | E | 46  | *   | 4.6 |     | 1.1 | 17  | KURIL ISLANDS  |
| 08   | 22 | 59 | 22.1% | 34.050 | S | 70.526  | W | 10  | G   |     |     | 0.6 | 8   | CHILE-ARGENTINA BORDER REGION  |
| 08   | 23 | 07 | 21.5  | 42.054 | N | 19.235  | E | 10  | G   |     |     | 0.4 | 9   | NORTHWESTERN BALKAN REGION. ML 2.0 (TTG).  |
| 08   | 23 | 19 | 54.0% | 1.23   | S | 128.17  | E | 33  | N   | 4.8 |     | 1.1 | 7   | HALMAHERA, INDONESIA   |
| 08   | 23 | 25 | 58.2% | 32.576 | S | 71.045  | W | 60  | G   |     |     | 0.4 | 11  | NEAR COAST OF CENTRAL CHILE. MD 4.0 (SAN).   |
| 08   | 23 | 34 | 32.4% | 42.907 | N | 7.651   | E | 10  | G   |     |     | 0.1 | 5   | WESTERN MEDITERRANEAN SEA. ML 2.4 (LDG).   |
| 08   | 23 | 56 | 16.6% | 43.27  | N | 148.31  | E | 33  | N   | 4.9 |     | 1.4 | 8   | EAST OF KURIL ISLANDS  |
| 09   | 00 | 00 | 20.0% | 29.329 | S | 72.427  | W | 33  | N   |     |     | 1.0 | 9   | OFF COAST OF CENTRAL CHILE   |
| 09   | 00 | 04 | 25.2% | 1.321  | S | 127.930 | E | 33  | N   | 4.8 |     | 1.4 | 12  | HALMAHERA, INDONESIA   |
| 09   | 00 | 27 | 40.3  | 37.570 | N | 72.079  | E | 126 | *   | 4.8 |     | 1.2 | 18  | TAJIKISTAN   |
| 09   | 01 | 21 | 40.1% | 35.20  | N | 3.92    | W | 10  | G   |     |     | 0.9 | 6   | STRAIT OF GIBRALTAR. mbLg 3.3 (MDD).   |
| 09   | 01 | 31 | 33.7% | 59.277 | N | 151.762 | W | 18  |     |     |     |     | 80  | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.2 (AEIC), 3.5 (PMR).   |
| 09   | 01 | 52 | 11.2% | 33.938 | S | 71.418  | W | 33  | N   |     |     | 0.4 | 11  | NEAR COAST OF CENTRAL CHILE. MD 4.1 (SAN).   |
| 09   | 02 | 04 | 51.4% | 43.43  | N | 147.24  | E | 33  | N   | 3.7 |     | 1.5 | 8   | KURIL ISLANDS  |
| 09   | 02 | 16 | 18.3% | 0.27   | S | 130.01  | E | 33  | N   | 4.3 |     | 1.0 | 5   | IRIAN JAYA REGION, INDONESIA   |
| 09   | 02 | 22 | 01.6  | 43.712 | N | 147.467 | E | 33  | N   | 4.9 |     | 0.9 | 123 | KURIL ISLANDS  |
| 09   | 02 | 46 | 18.1% | 11.256 | N | 61.261  | W | 33  | N   |     |     | 0.8 | 6   | WINDWARD ISLANDS. MD 3.3 (TRN).  |
| 09   | 02 | 52 | 07.1% | 39.21  | N | 27.93   | E | 5   | G   |     |     | 0.0 | 4   | TURKEY. ML 2.8 (ISK).  |
| 09   | 03 | 27 | 20.9% | 58.972 | N | 152.628 | W | 73  |     |     |     |     | 29  | KODIAK ISLAND REGION. <AEIC>.  |
| 09   | 04 | 10 | 07.4% | 33.231 | N | 116.100 | W | 12  |     |     |     |     | 52  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.9 (PAS), 3.7 (GS).  |
| 09   | 06 | 09 | 20.8% | 46.646 | N | 6.706   | E | 10  | G   |     |     | 0.8 | 9   | SWITZERLAND. ML 2.0 (LDG).   |
| 09   | 06 | 23 | 30.6% | 43.265 | N | 17.749  | E | 10  | G   |     |     | 1.0 | 10  | NORTHWESTERN BALKAN REGION. ML 2.6 (TTG).  |
| 09   | 07 | 20 | 30.7% | 33.30  | S | 72.67   | W | 5   | G   |     |     | 1.1 | 12  | OFF COAST OF CENTRAL CHILE. MD 4.3 (SAN).  |
| 09   | 07 | 41 | 52.7% | 24.443 | N | 122.110 | E | 33  | N   | 4.6 |     | 1.1 | 16  | TAIWAN REGION  |
| a 09 | 07 | 55 | 39.5  | 43.905 | N | 147.916 | E | 33  | N   | 6.5 | 7.1 | 0.9 | 644 | KURIL ISLANDS. Mw 7.1 (GS), 7.3 (HRV). Ms 6.7 (BRK). Mo=1.2*10**20 Nm (PPT). Felt (VI) on Iturup. Felt (IV JMA) in the Kushiro area, Hokkaido. Tsunami wave heights (peak-to-trough) from tide stations were 18 cm. at Hanasaki and 6 cm. at Kushiro, Hokkaido. Two events about 2.8 seconds apart observed on broadband displacement seismograms. |
| 09   | 07 | 58 | 43.3% | 39.149 | N | 27.578  | E | 10  | G   |     |     | 0.4 | 5   | TURKEY. ML 2.8 (ISK).  |

|    |    |    |       |        |        |         |         |     |    |     |     |   |  |
|----|----|----|-------|--------|--------|---------|---------|-----|----|-----|-----|---|--|
| 09 | 07 | 59 | 43.0* | 38.340 | N      | 21.959  | E       | 5   | G  | 1.4 | 6   | GREECE. MD 3.2 (ATH).   |  |
| 09 | 08 | 07 | 04.9  | 43.714 | N      | 148.033 | E       | 41  | D  | 5.9 | 0.8 | 390 EAST OF KURIL ISLANDS   |  |
| 09 | 08 | 12 | 11.9  | 43.645 | N      | 148.103 | E       | 33  | N  | 5.1 | 0.8 | 64 EAST OF KURIL ISLANDS  |  |
| 09 | 08 | 17 | 07.5* | 60.199 | N      | 141.030 | W       | 2   |    |     | 17  | SOUTHEASTERN ALASKA. <AEIC>. ML 3.0 (AEIC).   |  |
| 09 | 08 | 30 | 45.8* | 43.918 | N      | 147.749 | E       | 33  | N  | 4.9 | 0.8 | 39 KURIL ISLANDS  |  |
| 09 | 08 | 30 | 46.2  | 28.022 | S      | 26.834  | E       | 5   | G  |     | 0.8 | 10 REPUBLIC OF SOUTH AFRICA   |  |
| 09 | 08 | 48 | 55.1  | 43.861 | N      | 148.063 | E       | 36  | D  | 5.9 | 6.1 | 0.9 419 EAST OF KURIL ISLANDS   |  |
| 09 | 08 | 53 | 44.2? | 46.09  | N      | 147.08  | E       | 33  | N  | 4.8 | 0.6 | 23 NORTHWEST OF KURIL ISLANDS   |  |
| 09 | 09 | 00 | 48.7  | 43.763 | N      | 148.084 | E       | 33  | N  | 4.9 | 0.9 | 46 EAST OF KURIL ISLANDS  |  |
| 09 | 09 | 08 | 52.8* | 33.868 | S      | 70.657  | W       | 80  | G  |     | 0.2 | 6 CHILE-ARGENTINA BORDER REGION   |  |
| 09 | 09 | 27 | 22.6* | 43.692 | N      | 147.830 | E       | 33  | N  | 5.1 | 0.7 | 15 KURIL ISLANDS  |  |
| 09 | 09 | 49 | 38.5* | 43.552 | N      | 147.544 | E       | 33  | N  | 4.7 | 1.3 | 18 KURIL ISLANDS  |  |
| 09 | 09 | 50 | 45.2* | 62.500 | N      | 148.895 | W       | 51  |    |     |     | 47 CENTRAL ALASKA. <AEIC>. ML 2.5 (AEIC).   |  |
| 09 | 10 | 08 | 06.1* | 39.640 | N      | 29.417  | E       | 10  | G  |     | 0.4 | 5 TURKEY. ML 2.7 (ISK).   |  |
| 09 | 10 | 51 | 05.5* | 60.081 | N      | 152.992 | W       | 116 |    |     |     | 48 SOUTHERN ALASKA. <AEIC>.   |  |
| 09 | 11 | 01 | 03.8* | 43.347 | N      | 146.560 | E       | 33  | N  | 4.5 | 0.8 | 18 KURIL ISLANDS  |  |
| 09 | 11 | 06 | 47.0* | 41.762 | N      | 148.669 | E       | 33  | N  | 4.0 | 1.3 | 11 OFF COAST OF HOKKAIDO, JAPAN   |  |
| 09 | 11 | 07 | 43.5  | 43.495 | N      | 148.237 | E       | 44  | D  | 5.3 | 5.6 | 0.9 150 EAST OF KURIL ISLANDS   |  |
| 09 | 11 | 07 | 58.9* | 70.463 | N      | 13.752  | E       | 10  | G  |     | 0.6 | 7 NORWEGIAN SEA. MD 2.4 (BER).  |  |
| 09 | 11 | 09 | 00.1  | 43.673 | N      | 147.029 | E       | 33  | N  | 5.2 | 0.9 | 110 KURIL ISLANDS   |  |
| 09 | 11 | 18 | 50.7? | 43.39  | N      | 148.38  | E       | 33  | N  | 3.5 | 1.5 | 10 EAST OF KURIL ISLANDS  |  |
| 09 | 11 | 20 | 30.9* | 43.801 | N      | 147.779 | E       | 33  | N  | 4.6 | 1.1 | 14 KURIL ISLANDS  |  |
| 09 | 11 | 28 | 07.1? | 33.56  | S      | 69.82   | W       | 130 | G  |     | 0.2 | 8 CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).  |  |
| 09 | 11 | 33 | 01.2* | 26.812 | S      | 26.838  | E       | 10  | G  |     | 1.2 | 10 REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).  |  |
| 09 | 11 | 37 | 08.5* | 43.377 | N      | 148.162 | E       | 33  | N  | 3.9 | 1.5 | 14 EAST OF KURIL ISLANDS  |  |
| a  | 09 | 11 | 43    | 25.5   | 26.887 | S       | 26.719  | E   | 5  | G   |     | 0.7   | 12 REPUBLIC OF SOUTH AFRICA. ML 3.6 (PRE). mbLg 3.8 (BUL). |
| a  | 09 | 12 | 24    | 22.8   | 43.883 | N       | 147.341 | E   | 46 | D   | 5.8 | 5.5   | 0.8 490 KURIL ISLANDS                                      |
| 09 | 12 | 47 | 18.2? | 43.69  | N      | 148.03  | E       | 33  | N  | 3.7 | 1.3 | 10 EAST OF KURIL ISLANDS  |  |
| 09 | 12 | 48 | 27.7* | 40.026 | N      | 27.749  | E       | 10  | G  |     | 0.2 | 6 TURKEY. ML 2.8 (ISK).   |  |
| 09 | 13 | 01 | 09.1? | 43.67  | N      | 147.78  | E       | 33  | N  | 3.4 | 1.3 | 6 KURIL ISLANDS   |  |
| 09 | 13 | 20 | 58.7* | 61.959 | N      | 149.565 | W       | 38  |    |     |     | 60 SOUTHERN ALASKA. <AEIC>. ML 2.8 (AEIC).  |  |
| 09 | 13 | 34 | 36.4  | 49.482 | N      | 155.930 | E       | 74  |    | 4.6 | 0.9 | 49 KURIL ISLANDS  |  |
| 09 | 13 | 58 | 29.2* | 42.943 | N      | 148.788 | E       | 33  | N  | 4.3 | 1.1 | 9 OFF COAST OF HOKKAIDO, JAPAN  |  |
| 09 | 14 | 05 | 19.2* | 43.653 | N      | 148.194 | E       | 37  | *  | 4.7 | 0.9 | 37 EAST OF KURIL ISLANDS  |  |
| 09 | 14 | 07 | 38.0  | 60.680 | N      | 3.905   | E       | 10  | G  |     | 1.2 | 10 NORTH SEA. MD 2.4 (BER).   |  |
| 09 | 15 | 01 | 22.6  | 16.800 | S      | 128.038 | E       | 10  | G  | 3.7 | 0.8 | 8 WESTERN AUSTRALIA   |  |
| 09 | 15 | 02 | 18.3? | 29.65  | N      | 131.62  | E       | 33  | N  | 4.7 | 1.2 | 16 SOUTHEAST OF RYUKYU ISLANDS  |  |
| 09 | 15 | 29 | 51.0* | 43.692 | N      | 148.170 | E       | 33  | N  | 4.7 | 4.9 | 0.8 42 EAST OF KURIL ISLANDS  |  |
| 09 | 15 | 34 | 14.6  | 11.601 | N      | 143.131 | E       | 46  | *  | 5.0 | 1.3 | 56 SOUTH OF MARIANA ISLANDS. Felt on Guam.  |  |
| 09 | 15 | 40 | 54.0? | 9.05   | N      | 126.68  | E       | 33  | N  | 4.9 | 0.6 | 20 MINDANAO, PHILIPPINE ISLANDS   |  |
| 09 | 16 | 04 | 24.7  | 43.525 | N      | 147.693 | E       | 33  | N  | 4.7 | 0.9 | 63 KURIL ISLANDS  |  |
| 09 | 16 | 24 | 11.8* | 47.315 | N      | 11.244  | E       | 10  | G  |     | 0.1 | 5 AUSTRIA. ML 1.5 (VIE).  |  |
| 09 | 16 | 33 | 09.2* | 43.216 | N      | 148.510 | E       | 33  | N  | 4.6 | 1.3 | 16 EAST OF KURIL ISLANDS  |  |
| 09 | 16 | 39 | 47.6* | 47.317 | N      | 11.247  | E       | 10  | G  |     | 0.1 | 5 AUSTRIA. ML 1.4 (VIE).  |  |
| 09 | 16 | 49 | 18.0* | 61.556 | N      | 150.583 | W       | 58  |    |     |     | 43 SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).  |  |
| 09 | 17 | 45 | 47.9  | 46.402 | N      | 7.786   | E       | 5   | G  |     | 0.7 | 44 SWITZERLAND. ML 2.8 (GEN), 2.8 (LDG).  |  |
| 09 | 17 | 51 | 18.9  | 43.301 | N      | 147.482 | E       | 47  | *  | 4.7 | 1.0 | 55 KURIL ISLANDS  |  |
| 09 | 18 | 01 | 54.4  | 42.037 | N      | 19.920  | E       | 10  | G  |     | 0.6 | 12 NORTHWESTERN BALKAN REGION. ML 2.5 (TTG), 2.0 (TIR).   |  |
| 09 | 18 | 12 | 31.4? | 44.23  | N      | 147.60  | E       | 33  | N  | 4.0 | 0.4 | 6 KURIL ISLANDS   |  |
| 09 | 18 | 19 | 37.8* | 34.506 | S      | 70.544  | W       | 120 | G  |     | 0.2 | 10 CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).   |  |
| 09 | 19 | 08 | 43.2  | 39.907 | N      | 77.117  | E       | 40  | *  | 4.9 | 4.5 | 0.9 94 SOUTHERN XINJIANG, CHINA   |  |
| 09 | 19 | 20 | 58.8* | 32.323 | N      | 115.229 | W       | 6   | G  |     |     | 29 CALIF.-BAJA CALIF. BORDER REGION. <PAS-P>. ML 3.4 (PAS), 3.0 (GS).   |  |
| 09 | 19 | 49 | 52.9? | 35.17  | N      | 4.45    | W       | 10  | G  |     | 1.1 | 5 STRAIT OF GIBRALTAR. mbLg 3.4 (MDD).  |  |
| 09 | 19 | 50 | 31.9* | 43.210 | N      | 148.105 | E       | 33  | N  | 4.1 | 1.1 | 12 EAST OF KURIL ISLANDS  |  |
| 09 | 19 | 55 | 19.0* | 43.041 | N      | 148.430 | E       | 33  | N  | 4.5 | 1.2 | 11 EAST OF KURIL ISLANDS  |  |
| a  | 09 | 20 | 25    | 08.5   | 43.843 | N       | 147.967 | E   | 35 | D   | 5.4 | 0.9   | 215 KURIL ISLANDS. Mw 5.2 (HRV).                           |
| 09 | 20 | 54 | 15.4  | 43.053 | N      | 147.373 | E       | 22  | D  | 4.9 | 4.3 | 1.1 117 KURIL ISLANDS   |  |
| 09 | 21 | 32 | 01.2* | 60.621 | N      | 152.073 | W       | 87  |    |     |     | 38 SOUTHERN ALASKA. <AEIC>.   |  |
| 09 | 21 | 36 | 01.7? | 24.94  | N      | 122.49  | E       | 33  | N  | 4.7 | 1.0 | 8 TAIWAN REGION   |  |
| 09 | 21 | 45 | 48.1* | 58.424 | N      | 133.471 | W       | 10  | G  |     |     | 3 SOUTHEASTERN ALASKA. <PGC-P>. ML 3.2 (PGC).   |  |
| 09 | 22 | 07 | 25.4* | 43.171 | N      | 147.855 | E       | 33  | N  | 4.6 | 1.0 | 15 KURIL ISLANDS  |  |
| 09 | 22 | 23 | 49.1  | 43.076 | N      | 146.849 | E       | 28  | D  | 5.0 | 0.9 | 125 KURIL ISLANDS   |  |
| 09 | 22 | 27 | 53.0  | 52.402 | N      | 152.361 | E       | 491 | *  | 3.9 | 0.6 | 38 NORTHWEST OF KURIL ISLANDS   |  |
| 09 | 22 | 48 | 44.7? | 31.64  | S      | 71.67   | W       | 33  | N  |     | 0.4 | 11 NEAR COAST OF CENTRAL CHILE. MD 3.8 (SAN).   |  |
| 09 | 23 | 08 | 51.8? | 43.17  | N      | 147.23  | E       | 33  | N  | 4.3 | 1.3 | 8 KURIL ISLANDS   |  |
| 09 | 23 | 36 | 07.2? | 43.17  | N      | 147.06  | E       | 77  | ?  | 4.6 | 1.2 | 15 KURIL ISLANDS  |  |
| 10 | 00 | 49 | 57.6* | 45.472 | N      | 5.333   | E       | 5   | G  |     | 1.2 | 8 FRANCE. ML 2.1 (LDG).   |  |
| 10 | 01 | 02 | 08.0  | 33.360 | S      | 70.138  | W       | 116 | ?  |     | 0.3 | 14 CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).   |  |
| 10 | 01 | 58 | 08.7  | 43.481 | N      | 147.664 | E       | 27  | D  | 5.0 | 0.8 | 108 KURIL ISLANDS   |  |
| 10 | 02 | 36 | 22.5? | 43.21  | N      | 147.88  | E       | 33  | N  |     | 1.3 | 7 KURIL ISLANDS   |  |
| 10 | 02 | 43 | 20.0  | 11.882 | N      | 60.188  | W       | 10  | G  | 4.6 | 1.0 | 14 WINDWARD ISLANDS. MD 4.3 (TRN).  |  |
| 10 | 03 | 07 | 07.3* | 38.746 | N      | 119.659 | W       | 1   |    | 4.3 | 104 | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 4.4 (GM). ML 4.8 (BRK), 4.3 (GS). Felt (IV) at Gardnerville, Genoa and Hawthorne; (III) at Smith and Yerington, Nevada. |  |
| 10 | 03 | 10 | 24.8* | 38.747 | N      | 119.662 | W       | 1   |    |     | 44  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.4 (GM). ML 3.4 (BRK), 3.2 (GS).   |  |
| 10 | 03 | 17 | 12.2* | 38.744 | N      | 119.661 | W       | 0   |    |     | 66  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.2 (GM). ML 3.2 (BRK).   |  |
| 10 | 03 | 33 | 59.1? | 43.06  | N      | 147.24  | E       | 33  | N  | 4.4 | 1.4 | 6 KURIL ISLANDS   |  |
| 10 | 03 | 50 | 46.8? | 9.27   | N      | 126.39  | E       | 33  | N  | 4.7 | 0.8 | 16 MINDANAO, PHILIPPINE ISLANDS   |  |
| 10 | 04 | 10 | 51.9* | 43.791 | N      | 148.056 | E       | 33  | N  | 4.6 | 0.9 | 13 EAST OF KURIL ISLANDS  |  |
| 10 | 04 | 17 | 03.2* | 61.493 | N      | 150.095 | W       | 44  |    |     |     | 40 SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).  |  |
| 10 | 04 | 28 | 05.9  | 58.369 | N      | 154.773 | W       | 10  | G  |     | 0.8 | 45 ALASKA PENINSULA. ML 3.3 (AEIC), 3.6 (PMR).  |  |
| 10 | 05 | 06 | 12.1* | 32.023 | N      | 114.896 | W       | 23  |    |     |     | 12 W. ARIZONA-SONORA BORDER REGION. <ECX-P>. MD 3.6 (ECX). Felt at Riito, Sonora, Mexico.   |  |
| 10 | 05 | 45 | 41.2* | 26.942 | S      | 26.757  | E       | 5   | G  |     | 1.0 | 5 REPUBLIC OF SOUTH AFRICA  |  |
| 10 | 07 | 02 | 33.8* | 33.928 | N      | 116.327 | W       | 8   |    |     |     | 6 SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).   |  |
| 10 | 07 | 21 | 33.9* | 60.208 | N      | 151.764 | W       | 56  |    |     |     | 44 KENAI PENINSULA, ALASKA. <AEIC>. ML 2.6 (AEIC).  |  |
| 10 | 08 | 27 | 28.6* | 31.568 | S      | 68.025  | W       | 100 | *  |     | 0.6 | 8 SAN JUAN PROVINCE, ARGENTINA  |  |
| 10 | 09 | 47 | 18.4* | 39.677 | N      | 29.498  | E       | 10  | G  |     | 1.1 | 5 TURKEY. ML 2.8 (ISK).   |  |
| 10 | 10 | 14 | 41.4* | 39.641 | N      | 29.410  | E       | 10  | G  |     | 0.4 | 5 TURKEY. ML 2.8 (ISK).   |  |

|      |    |    |       |        |   |         |   |     |   |         |     |     |   |
|------|----|----|-------|--------|---|---------|---|-----|---|---------|-----|-----|---|
| 10   | 10 | 20 | 28.2  | 42.995 | N | 146.856 | E | 64  | D | 4.4     | 0.9 | 33  | OFF COAST OF HOKKAIDO, JAPAN  |
| 10   | 10 | 31 | 44.3? | 43.04  | N | 147.52  | E | 33  | N | 5.3     | 1.0 | 11  | KURIL ISLANDS   |
| 10   | 10 | 33 | 43.8* | 43.577 | N | 148.095 | E | 48  | D | 4.5     | 1.4 | 35  | EAST OF KURIL ISLANDS   |
| 10   | 11 | 44 | 36.2* | 31.471 | S | 69.059  | W | 115 | ? |         | 0.5 | 8   | SAN JUAN PROVINCE, ARGENTINA  |
| 10   | 11 | 55 | 18.3? | 43.12  | N | 147.88  | E | 33  | N | 4.9     | 0.8 | 11  | KURIL ISLANDS   |
| 10   | 13 | 33 | 30.9  | 43.621 | N | 148.169 | E | 33  | N | 4.6     | 1.2 | 44  | EAST OF KURIL ISLANDS   |
| a 10 | 14 | 07 | 57.3  | 36.063 | N | 100.159 | E | 33  | N | 5.0     | 0.9 | 87  | QINGHAI, CHINA. Mw 5.1 (HRV).   |
| a 10 | 14 | 27 | 22.3  | 5.360  | S | 150.122 | E | 194 |   | 5.0     | 0.9 | 72  | NEW BRITAIN REGION, P.N.G. Mw 5.1 (HRV).  |
| 10   | 15 | 30 | 55.7* | 43.121 | N | 146.612 | E | 40  | ? | 4.9     | 1.3 | 27  | KURIL ISLANDS   |
| 10   | 15 | 31 | 07.7  | 41.101 | N | 21.312  | E | 5   | G |         | 1.1 | 31  | NORTHWESTERN BALKAN REGION. ML 3.8 (TTG), 3.4 (TIR). MD 3.7 (ATH).  |
| 10   | 16 | 25 | 17.9* | 42.847 | N | 147.542 | E | 33  | N | 4.5     | 1.5 | 8   | OFF COAST OF HOKKAIDO, JAPAN  |
| 10   | 16 | 27 | 47.4? | 7.75   | S | 129.42  | E | 211 | ? | 4.9     | 0.2 | 16  | BANDA SEA   |
| 10   | 16 | 33 | 32.2% | 28.005 | S | 26.764  | E | 5   | G |         | 0.9 | 9   | REPUBLIC OF SOUTH AFRICA. ML 3.1 (PRE).   |
| 10   | 17 | 04 | 20.4  | 26.386 | S | 27.441  | E | 5   | G |         | 0.9 | 11  | REPUBLIC OF SOUTH AFRICA. ML 3.4 (PRE). mbLg 3.7 (BUL).   |
| 10   | 17 | 50 | 36.6% | 44.745 | N | 9.784   | E | 10  | G |         | 0.5 | 8   | NORTHERN ITALY. ML 2.5 (LDG).   |
| 10   | 17 | 59 | 40.3  | 44.725 | N | 9.660   | E | 10  | G |         | 0.9 | 46  | NORTHERN ITALY. ML 3.3 (LDG).   |
| 10   | 18 | 06 | 14.1? | 33.3?  | S | 72.40   | W | 33  | N |         | 0.7 | 10  | OFF COAST OF CENTRAL CHILE. MD 4.0 (SAN).   |
| 10   | 18 | 10 | 58.3% | 44.760 | N | 9.798   | E | 10  | G |         | 0.3 | 6   | NORTHERN ITALY. ML 2.5 (LDG).   |
| 10   | 18 | 38 | 11.5* | 43.098 | N | 148.152 | E | 33  | N | 4.3 4.1 | 1.0 | 14  | EAST OF KURIL ISLANDS   |
| 10   | 18 | 41 | 36.6* | 43.272 | N | 147.143 | E | 33  | N | 4.8     | 1.3 | 16  | KURIL ISLANDS   |
| 10   | 18 | 49 | 12.2  | 3.765  | S | 77.908  | W | 23  | D | 4.9     | 1.0 | 59  | PERU-ECUADOR BORDER REGION  |
| 10   | 19 | 44 | 31.6  | 43.642 | N | 148.122 | E | 31  | D | 4.8 4.6 | 1.0 | 82  | EAST OF KURIL ISLANDS   |
| 10   | 20 | 19 | 09.4? | 1.13   | S | 128.03  | E | 33  | N | 4.8     | 1.0 | 5   | HALMAHERA, INDONESIA  |
| 10   | 20 | 43 | 35.6? | 42.95  | N | 0.05    | W | 5   | G |         | 0.8 | 5   | PYRENEES. ML 2.7 (LDG). Felt (II) at Bagneres-de-Bigorre, France.   |
| a 10 | 21 | 06 | 53.7  | 51.484 | N | 173.897 | W | 33  | N | 5.6 5.2 | 0.9 | 379 | ANDREANOF ISLANDS, ALEUTIAN IS. Mw 5.7 (HRV). ML 5.2 (PMR). Mo=4.2*10**17 Nm (PPT).   |
| 10   | 21 | 07 | 21.4? | 30.88  | S | 68.68   | W | 95  | ? |         | 0.4 | 6   | SAN JUAN PROVINCE, ARGENTINA  |
| 10   | 21 | 25 | 38.7  | 43.706 | N | 148.301 | E | 37  | D | 4.8     | 1.0 | 50  | EAST OF KURIL ISLANDS   |
| 10   | 21 | 29 | 09.4% | 33.145 | S | 70.499  | W | 90  | G |         | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
| 10   | 22 | 01 | 44.7* | 51.634 | N | 173.894 | W | 33  | N | 4.3     | 0.7 | 14  | ANDREANOF ISLANDS, ALEUTIAN IS.   |
| 10   | 22 | 17 | 43.5  | 43.165 | N | 147.336 | E | 19  |   | 4.9 4.5 | 1.1 | 118 | KURIL ISLANDS   |
| 10   | 23 | 20 | 04.9% | 60.073 | N | 152.748 | W | 92  |   |         |     | 31  | SOUTHERN ALASKA. <AEIC>.  |
| 10   | 23 | 25 | 47.5* | 31.120 | S | 68.458  | W | 33  | N |         | 1.4 | 5   | SAN JUAN PROVINCE, ARGENTINA  |
| 11   | 00 | 18 | 37.2* | 33.789 | S | 72.130  | W | 33  | N |         | 0.8 | 14  | OFF COAST OF CENTRAL CHILE. MD 4.5 (SAN). Felt (III) at Rocas de Santo Domingo and Valparaiso.  |
| 11   | 00 | 33 | 38.4? | 44.73  | N | 9.85    | E | 10  | G |         | 0.3 | 10  | NORTHERN ITALY. ML 2.7 (LDG).   |
| a 11 | 01 | 37 | 20.3  | 32.100 | S | 71.447  | W | 47  | G | 5.7 5.4 | 0.9 | 250 | NEAR COAST OF CENTRAL CHILE. Mw 5.8 (GS), 5.7 (HRV). MD 5.4 (SAN). Ms 5.0 (BRK). Mo=7.0*10**17 Nm (PPT). Felt (VI) at Illapel, Petorca, Quillota, San Felipe and Valparaiso; (IV) at Santiago. Depth from broadband displacement seismograms. |
| 11   | 01 | 45 | 24.5  | 27.393 | N | 129.634 | E | 35  | D | 5.0 5.2 | 1.0 | 53  | RYUKYU ISLANDS  |
| 11   | 02 | 19 | 00.7* | 32.328 | S | 71.586  | W | 33  | N |         | 0.5 | 11  | NEAR COAST OF CENTRAL CHILE. MD 4.0 (SAN).  |
| 11   | 02 | 29 | 06.7* | 51.632 | N | 7.769   | E | 10  | G |         | 0.2 | 5   | GERMANY. ML 2.2 (UCC).  |
| 11   | 02 | 46 | 42.4* | 1.219  | N | 97.711  | E | 33  | N | 4.9     | 0.9 | 23  | NORTHERN SUMATERA, INDONESIA  |
| 11   | 02 | 59 | 02.9  | 19.868 | S | 66.627  | W | 259 | D | 4.7     | 1.0 | 90  | SOUTHERN BOLIVIA  |
| 11   | 03 | 12 | 56.9? | 9.95   | S | 122.28  | E | 33  | N | 4.2     | 1.5 | 8   | SAVU SEA  |
| 11   | 03 | 33 | 25.4% | 38.842 | N | 119.769 | W | 3   |   |         |     | 30  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM).   |
| 11   | 05 | 22 | 02.2? | 44.41  | N | 147.57  | E | 33  | N | 4.2     | 0.4 | 7   | KURIL ISLANDS   |
| 11   | 05 | 26 | 33.9* | 43.068 | N | 147.755 | E | 33  | N | 4.5     | 1.2 | 16  | KURIL ISLANDS   |
| 11   | 05 | 30 | 01.8% | 38.901 | N | 122.999 | W | 6   |   |         |     | 31  | NORTHERN CALIFORNIA. <GM-P>. MD 3.0 (GM).   |
| 11   | 05 | 32 | 45.6* | 30.150 | N | 91.938  | E | 14  | D | 4.8     | 1.2 | 39  | XIZANG  |
| 11   | 05 | 45 | 57.4% | 44.493 | N | 6.975   | E | 5   | G |         | 0.9 | 5   | FRANCE. ML 1.9 (GEN).   |
| 11   | 06 | 19 | 09.0? | 10.87  | N | 62.36   | W | 33  | N |         | 0.3 | 6   | NEAR COAST OF VENEZUELA. MD 3.5 (TRN).  |
| 11   | 06 | 38 | 11.5  | 51.463 | N | 173.970 | W | 33  | N | 4.9     | 0.9 | 78  | ANDREANOF ISLANDS, ALEUTIAN IS.   |
| 11   | 06 | 44 | 06.8  | 43.536 | N | 147.765 | E | 33  | N | 4.7     | 1.0 | 39  | KURIL ISLANDS   |
| 11   | 06 | 58 | 24.8% | 34.792 | N | 118.923 | W | 14  |   |         |     | 26  | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).   |
| 11   | 07 | 24 | 11.7? | 32.49  | S | 71.55   | W | 33  | N |         | 0.9 | 14  | NEAR COAST OF CENTRAL CHILE. MD 4.1 (SAN).  |
| 11   | 08 | 30 | 53.1? | 39.14  | N | 27.67   | E | 10  | G |         | 0.9 | 4   | TURKEY. ML 2.8 (ISK).   |
| 11   | 09 | 31 | 35.0? | 39.74  | N | 29.52   | E | 10  | G |         | 0.2 | 4   | TURKEY. ML 2.7 (ISK).   |
| 11   | 10 | 16 | 28.5? | 40.34  | N | 27.11   | E | 10  | G |         | 0.4 | 4   | TURKEY. ML 2.6 (ISK).   |
| 11   | 11 | 13 | 25.6* | 51.403 | N | 173.963 | W | 33  | N | 4.5     | 0.8 | 30  | ANDREANOF ISLANDS, ALEUTIAN IS.   |
| 11   | 11 | 17 | 21.8? | 39.08  | N | 27.60   | E | 10  | G |         | 0.7 | 4   | TURKEY. ML 2.8 (ISK).   |
| 11   | 11 | 21 | 54.1* | 8.335  | N | 94.165  | E | 33  | N | 4.5     | 1.0 | 30  | NICOBAR ISLANDS, INDIA  |
| 11   | 11 | 28 | 52.5  | 43.245 | N | 146.794 | E | 33  | N | 5.0     | 0.8 | 135 | KURIL ISLANDS   |
| 11   | 12 | 00 | 14.8  | 42.960 | N | 147.037 | E | 38  | D | 4.6     | 1.0 | 54  | OFF COAST OF HOKKAIDO, JAPAN  |
| 11   | 12 | 00 | 39.0? | 39.69  | N | 29.44   | E | 10  | G |         | 0.1 | 4   | TURKEY. ML 2.7 (ISK).   |
| 11   | 12 | 01 | 26.1% | 36.858 | N | 121.601 | W | 8   |   |         |     | 72  | CENTRAL CALIFORNIA. <GM-P>. MD 3.1 (GM). ML 2.9 (GS).   |
| 11   | 12 | 02 | 09.1? | 39.26  | N | 27.55   | E | 10  | G |         | 1.0 | 4   | TURKEY. ML 2.8 (ISK).   |
| 11   | 12 | 18 | 19.2? | 39.70  | N | 29.49   | E | 10  | G |         | 0.6 | 4   | TURKEY. ML 2.8 (ISK).   |
| 11   | 12 | 21 | 24.9? | 60.48  | N | 5.48    | E | 5   | G |         | 0.0 | 4   | SOUTHERN NORWAY. MD 1.4 (BER).  |
| 11   | 12 | 36 | 26.0* | 2.340  | S | 133.886 | E | 33  | N | 4.9     | 1.6 | 20  | IRIAN JAYA REGION, INDONESIA  |
| 11   | 13 | 17 | 33.1* | 51.425 | N | 174.077 | W | 33  | N | 4.7     | 1.0 | 46  | ANDREANOF ISLANDS, ALEUTIAN IS.   |
| 11   | 13 | 31 | 12.1  | 43.269 | N | 147.416 | E | 33  | N | 5.0     | 0.8 | 90  | KURIL ISLANDS   |
| 11   | 14 | 05 | 50.4* | 43.262 | N | 147.199 | E | 33  | N | 4.7     | 0.8 | 9   | KURIL ISLANDS   |
| 11   | 14 | 11 | 15.8? | 7.48   | S | 127.00  | E | 354 | ? | 4.6     | 1.4 | 8   | BANDA SEA   |
| 11   | 14 | 55 | 02.5  | 39.363 | N | 27.684  | E | 10  | G |         | 0.6 | 18  | TURKEY. ML 3.6 (ISK).   |
| 11   | 14 | 56 | 46.4% | 33.641 | S | 118.054 | E | 10  | G |         | 1.1 | 5   | WESTERN AUSTRALIA   |
| 11   | 14 | 58 | 13.8  | 43.570 | N | 147.818 | E | 30  | D | 4.8     | 0.9 | 51  | KURIL ISLANDS   |
| 11   | 15 | 12 | 41.8* | 43.626 | N | 147.450 | E | 33  | N | 4.4     | 1.4 | 20  | KURIL ISLANDS   |
| 11   | 15 | 48 | 34.6? | 26.34  | S | 27.33   | E | 5   | G |         | 1.7 | 4   | REPUBLIC OF SOUTH AFRICA  |
| 11   | 15 | 51 | 00.0  | 19.773 | S | 175.990 | W | 157 | ? | 5.1     | 0.5 | 36  | TONGA ISLANDS   |
| a 11 | 17 | 08 | 03.1* | 11.444 | S | 166.196 | E | 50  | D | 5.0 4.9 | 1.3 | 45  | SANTA CRUZ ISLANDS. Mw 5.4 (HRV).   |
| 11   | 17 | 25 | 50.8* | 43.969 | N | 10.117  | E | 5   | G |         | 1.1 | 50  | CENTRAL ITALY. ML 3.0 (LDG), 3.0 (GEN), 2.9 (STR).  |
| 11   | 17 | 41 | 21.9? | 42.23  | N | 6.76    | W | 5   | G |         | 0.8 | 4   | SPAIN. mbLg 2.6 (MDD).  |
| 11   | 17 | 55 | 11.4  | 43.199 | N | 147.357 | E | 33  | N | 5.1     | 0.9 | 137 | KURIL ISLANDS   |
| 11   | 18 | 27 | 57.5% | 13.054 | N | 89.420  | W | 30  |   |         | 0.2 | 14  | EL SALVADOR. MD 3.4 (SSS). Felt (II) at San Salvador.   |
| 11   | 20 | 31 | 17.5* | 33.558 | N | 45.678  | E | 18  | D | 4.7     | 1.1 | 109 | IRAN-IRAQ BORDER REGION. Felt at Abadan, Iran.  |
| 11   | 20 | 45 | 11.7  | 35.960 | N | 100.299 | E | 33  | N | 4.7     | 0.7 | 40  | QINGHAI, CHINA. Felt strongly in the Gonghe area.   |
| 11   | 21 | 04 | 41.3* | 55.186 | S | 145.909 | E | 14  | D | 4.3     | 1.1 | 11  | WEST OF MACQUARIE ISLAND  |
| 11   | 22 | 44 | 49.4? | 10.45  | N | 61.62   | W | 10  | G |         | 0.6 | 4   | TRINIDAD. MD 2.8 (TRN).   |

|    |    |    |       |        |        |         |         |     |    |     |     |     |  |                                       |   |
|----|----|----|-------|--------|--------|---------|---------|-----|----|-----|-----|-----|--|---------------------------------------|---|
| 11 | 22 | 56 | 37.4? | 18.49  | S      | 166.83  | E       | 33  | N  |     | 0.8 | 4   | VANUATU ISLANDS REGION   |                                       |   |
| 11 | 23 | 04 | 34.0? | 30.71  | S      | 178.87  | W       | 268 | *  | 4.4 | 1.6 | 13  | KERMADEC ISLANDS, NEW ZEALAND  |                                       |   |
| 11 | 23 | 05 | 29.3? | 36.010 | N      | 117.819 | W       | 2   |    |     |     | 16  | CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 2.7 (PAS).  |                                       |   |
| 11 | 23 | 13 | 48.7* | 6.971  | S      | 102.764 | E       | 30  | D  | 5.2 | 1.2 | 30  | SOUTHWEST OF SUMATERA, INDONESIA   |                                       |   |
| 11 | 23 | 13 | 50.5? | 36.861 | N      | 121.603 | W       | 8   |    |     |     | 79  | CENTRAL CALIFORNIA. <GM-P>. MD 3.6 (GM). ML 3.7 (BRK).<br>Felt (IV) at Aromas and Soquel. Also felt at Gilroy and Watsonville. |                                       |   |
| 11 | 23 | 14 | 41.9? | 33.674 | N      | 116.722 | W       | 15  |    |     |     | 6   | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.8 (PAS).  |                                       |   |
| 12 | 01 | 21 | 09.0? | 44.353 | N      | 7.395   | E       | 5   | G  |     | 0.6 | 8   | NORTHERN ITALY. ML 2.0 (GEN).  |                                       |   |
| a  | 12 | 01 | 55    | 45.4   | 22.731 | N       | 143.900 | E   | 32 | D   | 5.2 | 0.9 | 100  | VOLCANO ISLANDS REGION. Mw 5.1 (HRV). |   |
| 12 | 02 | 58 | 00.2* | 1.519  | N      | 127.166 | E       | 150 | ?  | 5.1 | 1.5 | 15  | HALMAHERA, INDONESIA   |                                       |   |
| 12 | 03 | 11 | 37.1* | 43.808 | N      | 147.627 | E       | 33  | N  | 4.7 | 1.1 | 37  | KURIL ISLANDS  |                                       |   |
| 12 | 03 | 38 | 28.3? | 34.791 | N      | 116.301 | W       | 5   |    |     |     | 9   | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).  |                                       |   |
| 12 | 04 | 02 | 04.4  | 18.240 | N      | 68.366  | W       | 107 |    | 4.4 | 0.8 | 73  | MONA PASSAGE   |                                       |   |
| 12 | 04 | 07 | 34.6  | 32.483 | S      | 70.054  | W       | 124 | ?  |     | 0.3 | 14  | CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).   |                                       |   |
| 12 | 04 | 59 | 13.9  | 39.742 | N      | 15.381  | E       | 21  |    | 4.8 | 1.4 | 135 | SOUTHERN ITALY. MD 4.5 (TTG), 4.0 (FIR). ML 4.2 (TIR).   |                                       |   |
| 12 | 05 | 21 | 25.3? | 26.359 | S      | 27.511  | E       | 5   | G  |     | 1.0 | 10  | REPUBLIC OF SOUTH AFRICA. ML 2.7 (PRE).  |                                       |   |
| a  | 12 | 06 | 02    | 49.9   | 13.765 | N       | 124.538 | E   | 27 | D   | 5.5 | 5.7 | 1.1  | 156                                   | LUZON, PHILIPPINE ISLANDS. Mw 5.9 (HRV). Ms 5.6 (BRK).<br>Mo=1.4*10**18 Nm (PPT).   |
| 12 | 06 | 08 | 10.4* | 13.695 | N      | 124.548 | E       | 21  | D  | 5.4 | 1.0 | 70  | LUZON, PHILIPPINE ISLANDS  |                                       |   |
| 12 | 06 | 22 | 01.6* | 43.819 | N      | 148.344 | E       | 33  | N  | 4.9 | 1.0 | 42  | EAST OF KURIL ISLANDS  |                                       |   |
| 12 | 06 | 31 | 21.1  | 43.841 | N      | 147.352 | E       | 33  | N  | 4.9 | 0.9 | 54  | KURIL ISLANDS  |                                       |   |
| 12 | 06 | 34 | 22.5  | 13.807 | N      | 124.502 | E       | 28  | D  | 5.0 | 1.0 | 68  | LUZON, PHILIPPINE ISLANDS  |                                       |   |
| a  | 12 | 06 | 43    | 39.7   | 13.773 | N       | 124.529 | E   | 16 | G   | 5.8 | 6.1 | 1.2  | 293                                   | LUZON, PHILIPPINE ISLANDS. Mw 6.4 (GS), 6.4 (HRV).<br>Mo=6.6*10**18 Nm (PPT). Felt (III RF) at Bulusan, Legaspi and Sorsogon; (II RF) at Manila. Depth from broadband displacement seismograms. |
| 12 | 07 | 23 | 55.4* | 3.473  | S      | 130.872 | E       | 27  | D  | 5.0 | 1.4 | 38  | SERAM, INDONESIA   |                                       |   |
| 12 | 07 | 44 | 01.5* | 42.371 | N      | 44.430  | E       | 10  | G  | 4.3 | 1.6 | 9   | NORTHWESTERN CAUCASUS  |                                       |   |
| 12 | 08 | 27 | 49.9  | 43.883 | N      | 147.400 | E       | 33  | N  | 4.7 | 1.0 | 49  | KURIL ISLANDS  |                                       |   |
| 12 | 08 | 59 | 27.1? | 43.41  | N      | 147.75  | E       | 33  | N  |     | 1.4 | 5   | KURIL ISLANDS  |                                       |   |
| 12 | 09 | 08 | 20.2  | 24.811 | N      | 121.991 | E       | 77  | *  | 4.7 | 0.9 | 61  | TAIWAN   |                                       |   |
| 12 | 09 | 20 | 43.1? | 51.63  | N      | 173.69  | W       | 33  | N  |     | 0.9 | 5   | ANDREANOF ISLANDS, ALEUTIAN IS.  |                                       |   |
| 12 | 09 | 22 | 50.5  | 21.918 | S      | 67.483  | W       | 187 | *  | 4.7 | 1.2 | 22  | CHILE-BOLIVIA BORDER REGION  |                                       |   |
| 12 | 09 | 50 | 44.9  | 43.546 | N      | 146.840 | E       | 33  | N  | 5.1 | 4.5 | 1.0 | 103  | KURIL ISLANDS                         |   |
| a  | 12 | 10 | 33    | 22.0   | 51.605 | N       | 173.770 | W   | 33 | N   | 5.1 | 4.8 | 1.0  | 170                                   | ANDREANOF ISLANDS, ALEUTIAN IS. Mw 5.3 (HRV). ML 5.0 (PMR).   |
| 12 | 10 | 34 | 14.2? | 50.426 | N      | 4.826   | E       | 10  | G  |     | 0.1 | 5   | BELGIUM. ML 2.4 (UCC).   |                                       |   |
| 12 | 10 | 34 | 41.8* | 31.751 | S      | 67.896  | W       | 33  | N  |     | 1.3 | 7   | SAN JUAN PROVINCE, ARGENTINA   |                                       |   |
| 12 | 10 | 37 | 15.0* | 36.008 | N      | 31.295  | E       | 10  | G  |     | 1.7 | 10  | TURKEY. ML 3.6 (ISK).  |                                       |   |
| 12 | 11 | 09 | 33.7? | 43.38  | N      | 146.89  | E       | 33  | N  | 4.4 | 0.9 | 9   | KURIL ISLANDS  |                                       |   |
| 12 | 11 | 37 | 46.0? | 62.173 | N      | 124.131 | W       | 10  | G  |     |     | 9   | NORTHWEST TERRITORIES, CANADA. <PGC-P>. ML 3.6 (PGC).  |                                       |   |
| 12 | 11 | 42 | 54.9? | 63.255 | N      | 151.122 | W       | 6   |    |     |     | 76  | CENTRAL ALASKA. <AEIC>. ML 3.0 (AEIC), 3.5 (PMR).  |                                       |   |
| 12 | 11 | 44 | 18.2? | 35.47  | N      | 24.41   | E       | 10  | G  |     | 1.8 | 4   | CRETE. MD 3.4 (ATH).   |                                       |   |
| 12 | 11 | 51 | 35.9* | 7.486  | N      | 126.766 | E       | 108 | ?  | 4.5 | 0.8 | 16  | MINDANAO, PHILIPPINE ISLANDS   |                                       |   |
| 12 | 11 | 56 | 11.2? | 69.01  | N      | 29.96   | E       | 10  | G  |     | 1.2 | 5   | NORWAY-RUSSIA BORDER REGION. MD 2.7 (BER).   |                                       |   |
| 12 | 12 | 29 | 04.4? | 6.34   | S      | 130.21  | E       | 136 | ?  | 4.5 | 1.3 | 12  | BANDA SEA  |                                       |   |
| 12 | 13 | 59 | 25.0? | 32.23  | S      | 70.86   | W       | 80  | G  |     | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).   |                                       |   |
| 12 | 14 | 02 | 06.3? | 44.391 | N      | 7.403   | E       | 10  | G  |     | 0.4 | 9   | NORTHERN ITALY. ML 2.0 (GEN).  |                                       |   |
| 12 | 14 | 06 | 20.0? | 44.30  | N      | 147.29  | E       | 32  | D  | 4.7 | 1.3 | 18  | KURIL ISLANDS  |                                       |   |
| 12 | 14 | 46 | 32.2  | 43.352 | N      | 147.361 | E       | 33  | N  | 4.8 | 0.7 | 59  | KURIL ISLANDS  |                                       |   |
| 12 | 15 | 04 | 53.1  | 13.713 | N      | 124.492 | E       | 20  | D  | 5.0 | 1.3 | 59  | LUZON, PHILIPPINE ISLANDS  |                                       |   |
| 12 | 15 | 34 | 05.7? | 58.546 | N      | 150.772 | W       | 6   |    |     |     | 52  | GULF OF ALASKA. <AEIC>. ML 3.4 (AEIC).   |                                       |   |
| 12 | 16 | 39 | 59.8? | 42.805 | N      | 1.788   | E       | 10  | G  |     | 0.3 | 9   | PYRENEES. ML 1.8 (STR).  |                                       |   |
| a  | 12 | 16 | 43    | 27.0*  | 6.936  | S       | 155.781 | E   | 49 | D   | 5.5 | 5.2 | 1.0  | 174                                   | SOLOMON ISLANDS. Mw 5.5 (HRV).  |
| 12 | 18 | 32 | 05.8* | 37.700 | N      | 21.432  | E       | 10  | G  |     | 0.8 | 7   | SOUTHERN GREECE. ML 3.3 (ATH).   |                                       |   |
| 12 | 19 | 13 | 37.3? | 33.173 | S      | 70.314  | W       | 5   | G  |     | 0.4 | 7   | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).   |                                       |   |
| 12 | 19 | 16 | 08.5? | 16.41  | N      | 98.15   | W       | 33  | N  |     | 1.7 | 6   | NEAR COAST OF GUERRERO, MEXICO   |                                       |   |
| 12 | 19 | 29 | 22.4? | 58.401 | N      | 153.413 | W       | 56  |    |     |     | 61  | KODIAK ISLAND REGION. <AEIC>. ML 3.0 (AEIC).   |                                       |   |
| 12 | 20 | 04 | 17.8? | 28.010 | S      | 26.908  | E       | 5   | G  |     | 0.3 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.3 (PRE).  |                                       |   |
| 12 | 20 | 05 | 35.4? | 3.62   | S      | 130.77  | E       | 33  | N  |     | 1.1 | 13  | SERAM, INDONESIA   |                                       |   |
| 12 | 21 | 23 | 35.6  | 40.981 | N      | 25.225  | E       | 10  | G  |     | 0.6 | 9   | AEGEAN SEA. ML 3.4 (ISK). MD 3.3 (ATH).  |                                       |   |
| 12 | 21 | 44 | 21.3? | 43.05  | N      | 147.19  | E       | 33  | N  | 4.5 | 1.7 | 11  | KURIL ISLANDS  |                                       |   |
| 12 | 22 | 01 | 53.2? | 33.153 | S      | 70.307  | W       | 5   | G  |     | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).   |                                       |   |
| 12 | 22 | 11 | 20.1? | 59.856 | N      | 153.490 | W       | 126 |    |     |     | 31  | SOUTHERN ALASKA. <AEIC>.   |                                       |   |
| 12 | 22 | 13 | 44.9  | 26.831 | S      | 26.805  | E       | 5   | G  |     | 1.5 | 11  | REPUBLIC OF SOUTH AFRICA. mbLg 3.2 (BUL). ML 3.1 (PRE).  |                                       |   |
| 12 | 23 | 02 | 14.9? | 36.25  | N      | 1.93    | W       | 5   | G  |     | 0.9 | 7   | WESTERN MEDITERRANEAN SEA. mbLg 2.3 (MDD).   |                                       |   |
| 12 | 23 | 33 | 27.3* | 40.636 | N      | 72.437  | E       | 33  | N  | 4.3 | 1.3 | 17  | KYRGYZSTAN   |                                       |   |
| 13 | 00 | 13 | 39.8* | 31.614 | S      | 70.373  | W       | 120 | G  |     | 0.4 | 14  | CHILE-ARGENTINA BORDER REGION. MD 4.0 (SAN).   |                                       |   |
| 13 | 00 | 44 | 44.2? | 38.14  | N      | 21.22   | E       | 10  | G  |     | 0.7 | 4   | GREECE. MD 3.2 (ATH).  |                                       |   |
| 13 | 01 | 06 | 30.2  | 26.987 | S      | 26.734  | E       | 5   | G  |     | 1.2 | 15  | REPUBLIC OF SOUTH AFRICA. ML 4.0 (PRE). mbLg 3.7 (BUL).  |                                       |   |
| 13 | 01 | 17 | 33.4? | 26.352 | S      | 27.524  | E       | 5   | G  |     | 0.3 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.4 (PRE).  |                                       |   |
| 13 | 01 | 37 | 16.1* | 38.110 | N      | 21.066  | E       | 33  | N  |     | 1.0 | 7   | GREECE. MD 3.4 (ATH).  |                                       |   |
| 13 | 01 | 43 | 39.9? | 26.895 | S      | 26.751  | E       | 5   | G  |     | 0.8 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.6 (PRE).  |                                       |   |
| 13 | 02 | 53 | 17.9* | 41.762 | N      | 141.834 | E       | 33  | N  | 4.8 | 0.7 | 45  | HOKKAIDO, JAPAN REGION   |                                       |   |
| 13 | 03 | 15 | 39.9* | 36.705 | N      | 141.587 | E       | 10  | G  | 4.6 | 1.4 | 12  | NEAR EAST COAST OF HONSHU, JAPAN   |                                       |   |
| 13 | 03 | 18 | 10.8? | 18.15  | N      | 97.22   | W       | 33  | N  |     | 1.7 | 5   | CENTRAL MEXICO   |                                       |   |
| 13 | 04 | 14 | 41.0? | 44.26  | N      | 146.48  | E       | 33  | N  | 4.5 | 1.1 | 10  | KURIL ISLANDS  |                                       |   |
| a  | 13 | 05 | 04    | 24.9   | 1.212  | S       | 127.912 | E   | 11 | G   | 6.1 | 6.3 | 1.3  | 269                                   | HALMAHERA, INDONESIA. Mw 6.4 (GS), 6.4 (HRV).<br>Mo=1.2*10**19 Nm (PPT). Nineteen people injured and damage on Obi. Depth from broadband displacement seismograms.                              |
| 13 | 06 | 24 | 01.2? | 26.435 | S      | 27.413  | E       | 5   | G  |     | 0.7 | 10  | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).  |                                       |   |
| 13 | 07 | 29 | 30.9? | 34.46  | S      | 70.39   | W       | 10  | G  |     | 0.1 | 8   | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).   |                                       |   |
| 13 | 09 | 03 | 58.6? | 40.07  | N      | 143.27  | E       | 33  | N  | 3.9 | 1.1 | 9   | OFF EAST COAST OF HONSHU, JAPAN  |                                       |   |
| 13 | 09 | 42 | 37.4? | 26.354 | S      | 27.464  | E       | 5   | G  |     | 0.8 | 9   | REPUBLIC OF SOUTH AFRICA. ML 2.9 (PRE).  |                                       |   |
| 13 | 09 | 51 | 15.2? | 36.65  | N      | 143.06  | E       | 10  | G  | 4.4 | 1.6 | 9   | OFF EAST COAST OF HONSHU, JAPAN  |                                       |   |
| 13 | 10 | 04 | 28.0? | 40.737 | N      | 29.099  | E       | 10  | G  |     | 0.5 | 6   | TURKEY. ML 2.9 (ISK).  |                                       |   |
| 13 | 10 | 21 | 13.4? | 41.98  | N      | 2.31    | W       | 10  | G  |     | 0.2 | 4   | SPAIN. mbLg 2.9 (MDD).   |                                       |   |
| 13 | 11 | 14 | 40.1  | 28.746 | N      | 43.595  | W       | 10  | G  | 4.9 | 5.0 | 1.0 | 29   | NORTHERN MID-ATLANTIC RIDGE           |   |
| 13 | 11 | 27 | 06.5  | 43.859 | N      | 148.044 | E       | 33  | N  | 4.8 | 0.8 | 43  | EAST OF KURIL ISLANDS  |                                       |   |
| 13 | 11 | 28 | 36.0* | 43.395 | N      | 146.807 | E       | 33  | N  | 4.9 | 0.9 | 36  | KURIL ISLANDS  |                                       |   |
| 13 | 11 | 33 | 17.2? | 42.426 | N      | 19.248  | E       | 20  | *  |     | 0.1 | 8   | NORTHWESTERN BALKAN REGION. ML 1.4 (TTG).  |                                       |   |

|   |    |    |    |       |        |   |         |   |     |   |         |     |     |  |
|---|----|----|----|-------|--------|---|---------|---|-----|---|---------|-----|-----|--|
| a | 13 | 12 | 03 | 18.5  | 43.406 | N | 146.840 | E | 33  | N | 5.3     | 0.9 | 226 | KURIL ISLANDS. Mw 5.2 (HRV).   |
|   | 13 | 12 | 09 | 35.6? | 43.12  | N | 147.93  | E | 33  | N |         | 1.1 | 5   | KURIL ISLANDS  |
|   | 13 | 12 | 57 | 08.3  | 26.371 | S | 27.494  | E | 5   | G |         | 1.0 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.4 (PRE).  |
|   | 13 | 13 | 31 | 59.0  | 43.656 | N | 147.719 | E | 34  | D | 5.1     | 1.0 | 109 | KURIL ISLANDS  |
|   | 13 | 13 | 48 | 30.0  | 43.864 | N | 147.280 | E | 33  | N | 5.2     | 0.8 | 136 | KURIL ISLANDS  |
|   | 13 | 13 | 49 | 28.8  | 45.554 | N | 21.192  | E | 23  |   |         | 1.5 | 37  | ROMANIA. MD 4.1 (TTG).   |
|   | 13 | 13 | 50 | 53.9* | 15.763 |   | 94.188  | W | 85  | * | 4.0     | 1.5 | 24  | NEAR COAST OF OAXACA, MEXICO   |
|   | 13 | 14 | 48 | 09.9* | 42.759 | N | 147.200 | E | 33  | N | 4.4     | 0.6 | 10  | OFF COAST OF HOKKAIDO, JAPAN   |
|   | 13 | 15 | 24 | 20.3  | 19.131 | S | 169.161 | E | 172 |   | 5.0     | 1.0 | 64  | VANUATU ISLANDS  |
|   | 13 | 15 | 27 | 41.3? | 44.13  | N | 146.57  | E | 33  | N | 4.4     | 0.4 | 5   | KURIL ISLANDS  |
|   | 13 | 15 | 57 | 08.0  | 63.596 | N | 147.806 | W | 80  |   |         |     | 45  | CENTRAL ALASKA. <AEIC>.  |
|   | 13 | 16 | 16 | 04.5? | 31.09  | S | 68.61   | W | 100 | G |         | 0.3 | 5   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 13 | 16 | 22 | 55.8  | 43.189 | N | 146.470 | E | 33  | N | 4.9     | 0.9 | 70  | KURIL ISLANDS  |
|   | 13 | 16 | 35 | 00.2  | 26.462 | S | 27.486  | E | 5   | G |         | 1.1 | 14  | REPUBLIC OF SOUTH AFRICA. mbLg 3.6 (BUL). ML 3.4 (PRE).  |
|   | 13 | 16 | 37 | 55.9? | 43.78  | N | 147.10  | E | 33  | N | 4.3     | 0.4 | 4   | KURIL ISLANDS  |
|   | 13 | 17 | 10 | 02.2  | 43.727 | N | 28.798  | W | 10  | G | 4.7 4.0 | 0.9 | 50  | NORTHERN MID-ATLANTIC RIDGE  |
|   | 13 | 17 | 30 | 45.3  | 26.749 | S | 26.718  | E | 5   | G |         | 1.0 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.5 (PRE).  |
|   | 13 | 18 | 13 | 11.6  | 44.359 | N | 7.387   | E | 5   | G |         | 0.3 | 6   | NORTHERN ITALY. ML 1.8 (GEN).  |
|   | 13 | 18 | 13 | 23.0* | 43.907 | N | 147.426 | E | 33  | N | 4.5     | 0.9 | 12  | KURIL ISLANDS  |
|   | 13 | 18 | 43 | 10.6  | 44.366 | N | 7.377   | E | 5   | G |         | 0.3 | 6   | NORTHERN ITALY. ML 2.0 (GEN).  |
|   | 13 | 19 | 33 | 07.0  | 39.201 | N | 28.142  | E | 10  | G |         | 0.4 | 12  | TURKEY. ML 3.2 (ISK).  |
|   | 13 | 19 | 53 | 01.5  | 62.903 | N | 150.680 | W | 110 |   |         |     | 54  | CENTRAL ALASKA. <AEIC>.  |
|   | 13 | 20 | 15 | 00.8? | 31.44  | S | 68.32   | W | 100 | G |         | 0.1 | 5   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 13 | 21 | 31 | 30.7  | 43.472 | N | 147.513 | E | 22  | D | 4.9     | 0.8 | 56  | KURIL ISLANDS  |
|   | 13 | 21 | 50 | 15.7  | 56.786 | N | 5.755   | W | 10  | G |         | 0.4 | 17  | UNITED KINGDOM. ML 2.2 (BGS). Felt (II) at Kentra.   |
|   | 13 | 22 | 09 | 15.5  | 30.937 | S | 67.271  | W | 33  | N |         | 0.6 | 5   | SAN JUAN PROVINCE, ARGENTINA   |
| a | 13 | 22 | 23 | 10.2  | 42.989 | N | 148.218 | E | 33  | N | 5.1 5.0 | 1.0 | 98  | OFF COAST OF HOKKAIDO, JAPAN. Mw 5.1 (HRV).  |
|   | 13 | 22 | 31 | 20.0  | 33.146 | S | 70.319  | W | 5   | G |         | 0.5 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).   |
|   | 13 | 23 | 06 | 55.0  | 35.499 | N | 120.854 | W | 6   | G |         |     | 50  | CENTRAL CALIFORNIA. <PAS-P>. ML 2.9 (PAS), 3.0 (GS).   |
|   | 13 | 23 | 19 | 57.2  | 40.381 | N | 52.975  | E | 33  | N | 4.3     | 0.8 | 30  | TURKMENISTAN   |
|   | 13 | 23 | 31 | 27.5* | 45.493 | N | 21.004  | E | 10  | G | 4.7     | 1.2 | 25  | ROMANIA  |
|   | 13 | 23 | 47 | 57.4* | 31.366 | S | 68.683  | W | 110 |   | 4.0     | 0.9 | 19  | SAN JUAN PROVINCE, ARGENTINA. MD 4.6 (SAN).  |
|   | 13 | 23 | 48 | 48.5  | 42.128 | N | 19.282  | E | 10  | G |         | 0.4 | 6   | NORTHWESTERN BALKAN REGION. ML 1.8 (TTG).  |
|   | 14 | 00 | 03 | 08.7* | 8.634  | S | 118.843 | E | 33  | N | 4.3     | 0.1 | 5   | SUMBAWA REGION, INDONESIA  |
|   | 14 | 00 | 30 | 43.8? | 44.63  | N | 146.86  | E | 33  | N | 4.5     | 0.5 | 35  | KURIL ISLANDS  |
|   | 14 | 00 | 57 | 25.3  | 40.318 | N | 124.620 | W | 19  |   | 3.9     |     | 74  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 4.1 (GM). ML 4.2 (BRK). Mo=7.1*10**15 Nm (BRK). Felt (III) at Eureka, Fortuna, Honeydew, Rio Dell and Scotia. |
|   | 14 | 01 | 03 | 48.6  | 40.313 | N | 124.654 | W | 19  |   |         |     | 27  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.2 (GM). ML 3.2 (BRK), 3.1 (GS).   |
|   | 14 | 01 | 10 | 59.7  | 33.712 | S | 70.278  | W | 110 | G |         | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.1 (SAN).   |
|   | 14 | 02 | 38 | 40.7* | 9.392  | S | 115.871 | E | 106 | * | 4.6     | 1.2 | 25  | SOUTH OF BALI, INDONESIA. Felt (III) at Denpasar, Bali and (II) at Mataram, Lombok.  |
|   | 14 | 02 | 44 | 08.7  | 34.590 | N | 25.146  | E | 33  | N | 3.9     | 0.9 | 30  | CRETE. MD 4.2 (ATH).   |
|   | 14 | 03 | 26 | 16.7  | 35.516 | N | 3.859   | W | 10  | G |         | 1.3 | 10  | STRAIT OF GIBRALTAR. mbLg 3.3 (MDD).   |
|   | 14 | 03 | 58 | 47.8  | 44.100 | N | 8.045   | E | 5   | G |         | 0.6 | 6   | NORTHERN ITALY. ML 1.9 (GEN).  |
|   | 14 | 04 | 06 | 15.9  | 43.456 | N | 147.066 | E | 33  | N | 4.8     | 0.8 | 57  | KURIL ISLANDS  |
|   | 14 | 04 | 13 | 51.5? | 31.38  | S | 69.17   | W | 120 | G |         | 0.3 | 5   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 14 | 04 | 28 | 10.1  | 38.070 | N | 21.192  | E | 10  | G |         | 1.0 | 8   | GREECE. MD 3.5 (ATH).  |
|   | 14 | 06 | 02 | 30.7  | 31.252 | S | 68.335  | W | 100 | G |         | 1.5 | 5   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 14 | 06 | 04 | 30.2? | 30.96  | S | 68.66   | W | 100 | G |         | 0.7 | 5   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 14 | 06 | 33 | 25.6  | 40.427 | N | 124.418 | W | 19  |   |         |     | 30  | NEAR COAST OF NORTHERN CALIF. <GM-P>. MD 3.1 (GM). ML 3.2 (BRK), 3.0 (GS).   |
|   | 14 | 06 | 38 | 28.6  | 26.838 | S | 26.746  | E | 5   | G |         | 0.9 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.7 (PRE).  |
|   | 14 | 06 | 56 | 25.2? | 43.21  | N | 146.46  | E | 33  | N | 4.4     | 1.5 | 9   | KURIL ISLANDS  |
|   | 14 | 07 | 00 | 00.6  | 63.421 | N | 151.014 | W | 9   |   |         |     | 52  | CENTRAL ALASKA. <AEIC>. ML 2.9 (AEIC), 3.2 (PMR).  |
|   | 14 | 07 | 01 | 15.4? | 8.32   | S | 128.42  | E | 182 | ? | 4.5     | 1.3 | 9   | TIMOR SEA  |
|   | 14 | 07 | 13 | 27.3* | 43.778 | N | 147.893 | E | 33  | N | 4.4     | 1.0 | 11  | KURIL ISLANDS  |
|   | 14 | 08 | 42 | 48.3* | 14.409 | S | 166.793 | E | 33  | N | 4.8     | 1.1 | 52  | VANUATU ISLANDS  |
|   | 14 | 08 | 50 | 02.6  | 26.397 | S | 27.438  | E | 5   | G |         | 1.4 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.0 (PRE).  |
|   | 14 | 09 | 04 | 29.3* | 35.756 | N | 26.580  | E | 33  | N |         | 0.6 | 6   | CRETE. MD 3.9 (ATH).   |
|   | 14 | 09 | 12 | 27.1  | 42.098 | N | 19.233  | E | 10  | G |         | 1.3 | 31  | NORTHWESTERN BALKAN REGION. ML 3.5 (TTG), 3.4 (TIR), 3.0 (SKO).  |
|   | 14 | 09 | 21 | 11.4? | 44.10  | N | 6.68    | E | 10  | G |         | 0.2 | 5   | FRANCE   |
|   | 14 | 09 | 36 | 46.4  | 26.838 | S | 26.645  | E | 5   | G |         | 1.3 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.6 (PRE).  |
|   | 14 | 09 | 46 | 08.7? | 17.42  | S | 178.94  | W | 520 | ? | 4.5     | 0.7 | 11  | FIJI ISLANDS REGION  |
| a | 14 | 10 | 16 | 32.9  | 22.397 | N | 121.640 | E | 141 | * | 5.1     | 1.1 | 79  | TAIWAN REGION. Mw 5.2 (HRV).   |
|   | 14 | 10 | 31 | 11.2  | 42.120 | N | 19.264  | E | 10  | G |         | 0.6 | 15  | NORTHWESTERN BALKAN REGION. MD 2.9 (TTG). ML 2.8 (TIR).  |
|   | 14 | 10 | 36 | 59.9? | 72.06  | N | 0.13    | W | 10  | G | 4.0     | 1.4 | 7   | JAN MAYEN ISLAND REGION  |
|   | 14 | 12 | 27 | 33.2  | 69.326 | N | 30.595  | E | 10  | G |         | 1.7 | 6   | NORWAY-RUSSIA BORDER REGION  |
|   | 14 | 12 | 36 | 29.4  | 43.927 | N | 147.953 | E | 33  | N | 5.0     | 0.9 | 59  | KURIL ISLANDS  |
|   | 14 | 13 | 34 | 06.3  | 40.386 | N | 26.043  | E | 10  | G |         | 0.9 | 9   | TURKEY. ML 3.3 (ISK). MD 3.2 (ATH).  |
|   | 14 | 13 | 44 | 15.0  | 42.325 | N | 18.929  | E | 10  | G |         | 0.5 | 10  | NORTHWESTERN BALKAN REGION. ML 2.3 (TTG).  |
|   | 14 | 14 | 00 | 20.7? | 18.06  | S | 168.01  | E | 33  | N | 4.2     | 0.2 | 4   | VANUATU ISLANDS  |
|   | 14 | 15 | 30 | 29.4* | 46.180 | N | 16.178  | E | 10  | G |         | 0.6 | 8   | NORTHWESTERN BALKAN REGION. MD 2.7 (LJU).  |
|   | 14 | 16 | 08 | 17.7* | 43.755 | N | 147.593 | E | 33  | N | 4.1     | 1.5 | 14  | KURIL ISLANDS  |
|   | 14 | 16 | 33 | 22.8  | 42.127 | N | 19.298  | E | 10  | G |         | 0.3 | 8   | NORTHWESTERN BALKAN REGION. MD 2.1 (TTG).  |
|   | 14 | 17 | 00 | 56.9  | 42.123 | N | 19.294  | E | 10  | G |         | 0.4 | 8   | NORTHWESTERN BALKAN REGION. ML 1.6 (TTG).  |
|   | 14 | 17 | 14 | 14.1* | 51.444 | N | 15.818  | E | 10  | G |         | 0.7 | 10  | POLAND. ML 3.3 (GRF), 2.8 (CLL).   |
|   | 14 | 17 | 45 | 13.9? | 31.26  | S | 68.88   | W | 100 | G |         | 0.6 | 5   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 14 | 18 | 13 | 56.3  | 42.525 | N | 19.291  | E | 10  | G |         | 0.6 | 9   | NORTHWESTERN BALKAN REGION. ML 1.4 (TTG).  |
|   | 14 | 18 | 56 | 06.6  | 47.430 | N | 122.820 | W | 2   |   |         |     | 77  | WASHINGTON. <SEA-P>. MD 2.8 (SEA). ML 2.9 (GS). Felt (IV) at Belfair, (III) at Kent and (II) at Burley. Also felt at Port Orchard.                     |
|   | 14 | 19 | 45 | 55.5* | 51.336 | N | 176.124 | W | 33  | N | 4.2     | 1.4 | 7   | ANDREANOF ISLANDS, ALEUTIAN IS.  |
|   | 14 | 20 | 00 | 32.9? | 31.31  | S | 68.93   | W | 100 | G |         | 0.3 | 4   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 14 | 20 | 08 | 06.8  | 43.308 | N | 147.205 | E | 33  | N | 5.4     | 0.9 | 194 | KURIL ISLANDS  |
|   | 14 | 21 | 32 | 45.0  | 42.130 | N | 19.276  | E | 10  | G |         | 0.7 | 13  | NORTHWESTERN BALKAN REGION. MD 2.3 (TTG). ML 1.9 (TIR).  |
|   | 14 | 21 | 40 | 27.3  | 36.274 | N | 5.965   | W | 10  | G |         | 1.1 | 14  | STRAIT OF GIBRALTAR. MD 3.0 (SFS). mbLg 2.8 (MDD).   |
|   | 14 | 23 | 24 | 30.8? | 43.86  | N | 147.49  | E | 33  | N | 4.5     | 0.5 | 23  | KURIL ISLANDS  |
|   | 14 | 23 | 29 | 13.8? | 43.58  | N | 146.10  | E | 33  | N | 4.4     | 1.1 | 4   | KURIL ISLANDS  |
|   | 15 | 00 | 25 | 47.8? | 33.56  | S | 68.00   | W | 33  | N |         | 0.8 | 6   | MENDOZA PROVINCE, ARGENTINA  |
| a | 15 | 00 | 39 | 25.4  | 3.804  | S | 152.148 | E | 9   | G | 5.6 6.1 | 1.1 | 152 | NEW IRELAND REGION, P.N.G. Mw 6.1 (GS), 6.1 (HRV). Ms  |

|    |    |    |       |        |   |         |   |     |   |         |     |   |
|----|----|----|-------|--------|---|---------|---|-----|---|---------|-----|---|
| 15 | 00 | 49 | 16.4% | 42.133 | N | 19.258  | E | 10  | G | 0.4     | 9   | NORTHWESTERN BALKAN REGION. ML 1.6 (TTG).             |
| 15 | 01 | 06 | 37.5? | 34.20  | S | 70.22   | W | 5   | G | 0.6     | 5   | CHILE-ARGENTINA BORDER REGION                         |
| 15 | 01 | 22 | 39.8% | 38.757 | N | 119.719 | W | 0   |   |         | 11  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM). |
| 15 | 01 | 26 | 23.2  | 4.913  | S | 104.760 | E | 142 | D | 4.9     | 1.2 | 57 SOUTHERN SUMATERA, INDONESIA                       |
| 15 | 01 | 42 | 51.2  | 45.475 | N | 21.015  | E | 10  | G |         | 1.4 | 77 ROMANIA. ML 4.2 (TTG), 3.8 (TIR), 3.6 (VIE).       |
| 15 | 01 | 48 | 01.5? | 34.04  | S | 72.25   | W | 10  | G | 0.5     | 8   | NEAR COAST OF CENTRAL CHILE. MD 3.4 (SAN).            |
| 15 | 02 | 19 | 31.3? | 36.46  | N | 6.95    | W | 33  | N | 1.3     | 5   | STRAIT OF GIBRALTAR                                   |
| 15 | 02 | 29 | 14.3% | 44.437 | N | 7.248   | E | 5   | G | 0.5     | 10  | NORTHERN ITALY. ML 2.3 (GEN).                         |
| 15 | 03 | 56 | 00.7? | 40.62  | N | 30.00   | E | 10  | G | 0.1     | 4   | TURKEY. ML 2.7 (ISK).                                 |
| 15 | 05 | 24 | 16.8% | 60.078 | N | 153.544 | W | 151 |   |         | 57  | SOUTHERN ALASKA. <AEIC>.                              |
| 15 | 05 | 30 | 35.0% | 26.243 | S | 28.218  | E | 5   | G | 1.1     | 10  | REPUBLIC OF SOUTH AFRICA. ML 3.1 (PRE).               |
| 15 | 05 | 34 | 58.6? | 38.28  | N | 24.60   | E | 33  | N | 1.1     | 4   | AEGEAN SEA  |
| 15 | 05 | 45 | 24.1% | 63.071 | N | 150.767 | W | 120 |   |         | 78  | CENTRAL ALASKA. <AEIC>.                               |
| 15 | 06 | 48 | 00.2* | 58.823 | S | 158.601 | E | 33  | N | 4.9 5.0 | 1.3 | 28 MACQUARIE ISLANDS REGION. Mw 5.4 (HRV).            |
| 15 | 07 | 08 | 29.7* | 3.096  | S | 139.666 | E | 33  | N | 4.9     | 1.3 | 20 IRIAN JAYA, INDONESIA                              |
| 15 | 07 | 31 | 08.5* | 37.706 | N | 30.162  | E | 10  | G |         | 1.7 | 6 TURKEY. MD 3.9 (ATH). ML 3.4 (ISK).                 |
| 15 | 07 | 56 | 48.0? | 45.38  | N | 20.94   | E | 10  | G |         | 0.6 | 7 NORTHWESTERN BALKAN REGION                          |
| 15 | 08 | 09 | 00.0? | 6.22   | N | 126.00  | E | 33  | N | 4.9     | 1.2 | 20 MINDANAO, PHILIPPINE ISLANDS                       |
| 15 | 08 | 15 | 08.1  | 43.084 | N | 147.750 | E | 33  | N | 4.6     | 1.0 | 42 KURIL ISLANDS                                      |
| 15 | 09 | 03 | 02.7? | 39.26  | N | 27.69   | E | 10  | G |         | 0.3 | 4 TURKEY. ML 2.8 (ISK).                               |
| 15 | 10 | 10 | 12.4? | 43.19  | N | 147.71  | E | 33  | N |         | 1.6 | 7 KURIL ISLANDS                                       |
| 15 | 10 | 33 | 47.6  | 40.537 | N | 143.627 | E | 33  | N | 4.6 4.0 | 1.0 | 28 OFF EAST COAST OF HONSHU, JAPAN                    |
| 15 | 10 | 43 | 06.7? | 26.82  | N | 126.44  | E | 33  | N | 4.6     | 1.3 | 9 RYUKYU ISLANDS                                      |
| 15 | 10 | 44 | 41.9% | 65.964 | N | 151.288 | W | 10  | G |         |     | 13 NORTHERN ALASKA. <AEIC>. ML 2.9 (AEIC).            |
| 15 | 11 | 40 | 06.5? | 39.58  | N | 29.39   | E | 10  | G |         | 0.5 | 4 TURKEY. ML 2.7 (ISK).                               |
| 15 | 12 | 14 | 43.0? | 43.42  | N | 147.27  | E | 33  | N | 4.2     | 1.7 | 14 KURIL ISLANDS                                      |
| 15 | 12 | 27 | 59.1% | 60.790 | N | 147.310 | W | 23  |   |         |     | 51 SOUTHERN ALASKA. <AEIC>. ML 2.6 (AEIC).            |
| 15 | 12 | 32 | 30.0% | 44.999 | N | 6.735   | E | 5   | G |         | 0.6 | 6 FRANCE. ML 2.2 (GEN).                               |
| 15 | 12 | 40 | 49.5  | 40.751 | N | 26.263  | E | 10  | G |         | 0.6 | 9 TURKEY. ML 2.9 (ISK).                               |
| 15 | 12 | 51 | 12.8* | 3.024  | S | 139.617 | E | 33  | N | 4.7 4.5 | 1.4 | 20 IRIAN JAYA, INDONESIA                              |
| 15 | 12 | 55 | 50.4* | 32.760 | S | 71.513  | W | 33  | N |         | 1.0 | 13 NEAR COAST OF CENTRAL CHILE. MD 4.1 (SAN).         |
| 15 | 12 | 57 | 02.2% | 38.777 | N | 27.564  | E | 10  | G |         | 0.3 | 8 TURKEY. ML 3.3 (ISK).                               |
| 15 | 15 | 16 | 46.9  | 43.771 | N | 148.074 | E | 35  | D | 5.0     | 0.9 | 69 EAST OF KURIL ISLANDS                              |
| 15 | 15 | 20 | 31.3* | 31.828 | S | 71.796  | W | 10  | G |         | 0.4 | 13 NEAR COAST OF CENTRAL CHILE. MD 4.0 (SAN).         |
| 15 | 15 | 24 | 39.3  | 43.794 | N | 147.870 | E | 33  | N | 5.2     | 0.9 | 136 KURIL ISLANDS                                     |
| 15 | 18 | 10 | 46.8* | 39.035 | N | 23.490  | E | 10  | G |         | 1.6 | 8 AEGEAN SEA. ML 3.3 (ATH).                           |
| 15 | 19 | 04 | 25.5* | 1.394  | S | 127.546 | E | 19  | D | 4.8     | 1.3 | 16 HALMAHERA, INDONESIA                               |
| 15 | 19 | 20 | 48.5% |        |   |         |   |     |   |         |     |   |

|   |    |    |    |       |        |   |         |   |     |     |     |     |   |   |  |
|---|----|----|----|-------|--------|---|---------|---|-----|-----|-----|-----|---|---|--|
|   | 16 | 13 | 30 | 21.6% | 26.891 | S | 26.714  | E | 5   | G   | 1.3 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.2 (PRE). |   |  |
|   | 16 | 14 | 14 | 14.0? | 4.44   | S | 144.06  | E | 123 | *   | 4.9 | 1.3 | 22                                      | NEAR N COAST OF NEW GUINEA, PNG.            |  |
|   | 16 | 15 | 40 | 51.6? | 3.69   | S | 152.38  | E | 33  | N   | 4.2 | 1.5 | 5                                       | NEW IRELAND REGION, P.N.G.                  |  |
|   | 16 | 15 | 46 | 09.9? | 13.79  | N | 93.00   | W | 33  | N   | 4.1 | 1.1 | 9                                       | OFF COAST OF CHIAPAS, MEXICO                |  |
|   | 16 | 15 | 50 | 28.7? | 44.52  | N | 7.27    | E | 5   | G   |     | 0.1 | 4                                       | NORTHERN ITALY. ML 1.7 (GEN).               |  |
|   | 16 | 16 | 29 | 55.9% | 34.230 | N | 116.753 | W | 10  |     |     | 28  | 1                                       | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS). |  |
|   | 16 | 16 | 36 | 51.6? | 16.81  | S | 167.31  | E | 33  | N   |     | 0.7 | 7                                       | VANUATU ISLANDS                             |  |
|   | 16 | 16 | 55 | 51.0% | 61.132 | N | 152.003 | W | 104 |     |     | 52  | 1                                       | SOUTHERN ALASKA. <AEIC>.                    |  |
| a | 16 | 17 | 04 | 05.9* | 3.620  | S | 152.004 | E | 33  | N   | 4.6 | 4.7 | 1.4                                     | 9   | NEW IRELAND REGION, P.N.G. Mw 5.1 (HRV).   |
|   | 16 | 17 | 25 | 34.6* | 37.988 | N | 21.319  | E | 5   | G   |     | 0.5 | 11                                      | 1   | SOUTHERN GREECE. ML 3.5 (THE), 3.4 (ATH).  |
|   | 16 | 17 | 33 | 23.1? | 3.62   | S | 151.97  | E | 33  | N   | 4.2 | 1.1 | 7                                       | 1   | NEW IRELAND REGION, P.N.G.   |
| a | 16 | 17 | 56 | 28.6* | 3.614  | S | 151.998 | E | 33  | N   | 4.6 | 4.7 | 1.5                                     | 16  | NEW IRELAND REGION, P.N.G. Mw 5.2 (HRV).   |
|   | 16 | 18 | 00 | 47.6* | 31.758 | S | 71.877  | W | 33  | N   |     | 0.4 | 15                                      | 1   | NEAR COAST OF CENTRAL CHILE. MD 4.3 (SAN).   |
|   | 16 | 18 | 12 | 48.3* | 38.077 | N | 21.089  | E | 33  | N   |     | 1.4 | 7                                       | 1   | GREECE. MD 3.4 (ATH).  |
|   | 16 | 18 | 40 | 53.0% | 42.446 | N | 1.766   | E | 10  | G   |     | 0.3 | 6                                       | 1   | PYRENEES. ML 2.4 (STR).  |
|   | 16 | 18 | 41 | 27.4  | 43.748 | N | 147.428 | E | 33  | N   | 4.8 | 0.8 | 68                                      | 1   | KURIL ISLANDS  |
|   | 16 | 18 | 59 | 33.4? | 37.96  | N | 21.12   | E | 5   | G   |     | 1.1 | 6                                       | 1   | SOUTHERN GREECE. MD 3.3 (ATH).   |
|   | 16 | 19 | 47 | 38.6* | 6.863  | N | 73.094  | W | 162 |     | 4.7 | 1.1 | 24                                      | 1   | NORTHERN COLOMBIA  |
|   | 16 | 20 | 24 | 12.1? | 30.79  | S | 117.11  | E | 10  | G   |     | 0.6 | 4                                       | 1   | WESTERN AUSTRALIA  |
|   | 16 | 20 | 34 | 06.3  | 42.842 | N | 19.184  | E | 10  | G   |     | 0.7 | 9                                       | 1   | NORTHWESTERN BALKAN REGION. MD 2.3 (TTG).  |
|   | 16 | 21 | 34 | 40.6* | 38.111 | N | 21.211  | E | 5   | G   |     | 1.4 | 7                                       | 1   | GREECE. MD 3.4 (ATH).  |
|   | 16 | 23 | 18 | 15.2? | 31.58  | S | 68.62   | W | 10  | G   |     | 0.6 | 4                                       | 1   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 16 | 23 | 51 | 00.1? | 3.42   | S | 152.30  | E | 33  | N   | 4.1 | 0.4 | 4                                       | 1   | NEW IRELAND REGION, P.N.G.   |
|   | 17 | 00 | 26 | 52.1* | 42.995 | N | 16.479  | E | 5   | G   |     | 1.1 | 11                                      | 1   | ADRIATIC SEA. ML 2.6 (TTG).  |
|   | 17 | 01 | 06 | 57.7% | 61.530 | N | 151.036 | W | 66  |     |     | 47  | 1                                       | 1   | SOUTHERN ALASKA. <AEIC>. ML 2.6 (AEIC).  |
|   | 17 | 01 | 11 | 56.7? | 33.76  | S | 71.82   | W | 33  | N   |     | 0.7 | 8                                       | 1   | NEAR COAST OF CENTRAL CHILE. MD 3.3 (SAN).   |
|   | 17 | 01 | 46 | 12.2  | 42.675 | N | 111.079 | W | 5   | G   |     | 1.0 | 19                                      | 1   | EASTERN IDAHO. ML 3.5 (GS), 3.2 (BUT). Felt (III) at Smoot and (II) at Afton, Wyoming. |
|   | 17 | 02 | 17 | 32.5? | 31.39  | S | 68.69   | W | 100 | G   |     | 0.5 | 5                                       | 1   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 17 | 03 | 12 | 35.9? | 47.21  | N | 11.27   | E | 10  | G   |     | 0.2 | 4                                       | 1   | AUSTRIA. ML 1.1 (VIE).   |
|   | 17 | 03 | 23 | 21.9* | 27.590 | S | 71.215  | W | 33  | N   |     | 1.1 | 18                                      | 1   | NEAR COAST OF NORTHERN CHILE. Felt (III) at Caldera, Chanaral, Copiapo and Huasco.     |
|   | 17 | 03 | 48 | 39.3% | 36.355 | N | 5.987   | W | 10  | G   |     | 1.4 | 5                                       | 1   | STRAIT OF GIBRALTAR. MD 2.6 (SFS).   |
|   | 17 | 04 | 18 | 30.7  | 5.050  | N | 82.411  | W | 33  | N   | 4.5 | 0.9 | 15                                      | 1   | SOUTH OF PANAMA. MD 4.5 (UPA).   |
|   | 17 | 04 | 28 | 17.3  | 36.303 | N | 5.928   | W | 10  | G   |     | 1.5 | 11                                      | 1   | STRAIT OF GIBRALTAR. MD 2.8 (SFS). mbLg 2.5 (MDD).                                     |
|   | 17 | 05 | 15 | 57.1? | 31.27  | S | 68.41   | W | 100 | G   |     | 0.6 | 6                                       | 1   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 17 | 05 | 25 | 08.9? | 43.40  | N | 147.29  | E | 33  | N   | 4.2 | 1.2 | 9                                       | 1   | KURIL ISLANDS  |
|   | 17 | 06 | 30 | 17.3  | 42.365 | N | 19.285  | E | 10  | G   |     | 1.1 | 11                                      | 1   | NORTHWESTERN BALKAN REGION. MD 2.5 (TTG).  |
|   | 17 | 06 | 44 | 32.8% | 42.374 | N | 19.259  | E | 10  | G   |     | 0.7 | 9                                       | 1   | NORTHWESTERN BALKAN REGION. MD 2.2 (TTG).  |
|   | 17 | 07 | 40 | 42.7% | 60.202 | N | 153.367 | W | 124 |     | 4.7 | 148 | 1                                       | 1   | SOUTHERN ALASKA. <AEIC>. Felt at Kasilof.  |
|   | 17 | 07 | 49 | 43.7% | 39.169 | N | 27.415  | E | 10  | G   |     | 0.7 | 5                                       | 1   | TURKEY. ML 2.8 (ISK).  |
|   | 17 | 08 | 34 | 13.6? | 39.15  | N | 27.51   | E | 10  | G   |     | 0.3 | 4                                       | 1   | TURKEY. ML 2.8 (ISK).  |
|   | 17 | 09 | 02 | 12.8  | 37.473 | N | 20.810  | E | 33  | N   | 4.5 | 1.2 | 56                                      | 1   | IONIAN SEA. MD 4.4 (TTG), 4.1 (ATH).   |
|   | 17 | 09 | 04 | 25.2? | 37.25  | N | 3.69    | W | 10  | G   |     | 0.9 | 4                                       | 1   | SPAIN. mbLg 2.0 (MDD).   |
|   | 17 | 09 | 04 | 38.9% | 39.095 | N | 27.691  | E | 10  | G   |     | 0.6 | 5                                       | 1   | TURKEY. ML 2.8 (ISK).  |
|   | 17 | 09 | 08 | 27.2? | 34.28  | S | 71.98   | W | 33  | N   |     | 0.9 | 15                                      | 1   | NEAR COAST OF CENTRAL CHILE. MD 4.1 (SAN).   |
|   | 17 | 09 | 11 | 14.8? | 31.74  | S | 69.39   | W | 120 | G   |     | 0.5 | 6                                       | 1   | SAN JUAN PROVINCE, ARGENTINA   |
|   | 17 | 09 | 22 | 20.2* | 35.366 | N | 140.477 | E | 33  | N   | 4.3 | 1.1 | 12                                      | 1   | NEAR EAST COAST OF HONSHU, JAPAN   |
|   | 17 | 09 | 44 | 20.4* | 43.706 | N | 147.139 | E | 33  | N   | 4.6 | 0.8 | 20                                      | 1   | KURIL ISLANDS  |
|   | 17 | 10 | 03 | 33.7? | 38.88  | N | 28.91   | E | 10  | G   |     | 0.6 | 5                                       | 1   | TURKEY. ML 2.9 (ISK).  |
|   | 17 | 10 | 04 | 56.3% | 39.709 | N | 29.499  | E | 10  | G   |     | 0.4 | 5                                       | 1   | TURKEY. ML 2.8 (ISK).  |
|   | 17 | 10 | 17 | 47.8? | 35.72  | N | 140.22  | E | 60  | G   |     | 0.3 | 7                                       | 1   | NEAR EAST COAST OF HONSHU, JAPAN   |
|   | 17 | 10 | 33 | 01.9  | 41.711 | N | 27.306  | E | 10  | G   |     | 0.7 | 20                                      | 1   | TURKEY. ML 3.2 (ISK).  |
|   | 17 | 10 | 45 | 41.0? | 6.58   | S | 131.15  | E | 33  | N   |     | 1.6 | 5                                       | 1   | TANIMBAR ISLANDS REG., INDONESIA   |
|   | 17 | 10 | 54 | 14.7  | 39.357 | N | 25.975  | E | 28  |     | 3.9 | 1.2 | 51                                      | 1   | AEGEAN SEA. ML 4.1 (ISK), 3.8 (ATH).   |
|   | 17 | 10 | 58 | 02.7? | 37.26  | N | 3.71    | W | 10  | G   |     | 0.4 | 4                                       | 1   | SPAIN  |
|   | 17 | 11 | 54 | 13.6? | 4.84   | S | 145.59  | E | 33  | N   | 3.8 | 0.8 | 7                                       | 1   | NEAR N COAST OF NEW GUINEA, PNG.   |
|   | 17 | 13 | 12 | 47.1% | 39.223 | N | 27.779  | E | 10  | G   |     | 0.5 | 5                                       | 1   | TURKEY. ML 2.8 (ISK).  |
| a | 17 | 13 | 54 | 59.9  | 43.493 | N | 146.892 | E | 33  | N   | 5.5 | 0.9 | 236                                     | 1   | KURIL ISLANDS. Mw 5.2 (HRV).   |
|   | 17 | 13 | 59 | 11.9% | 42.139 | N | 145.100 | E | 33  | N   |     | 0.3 | 5                                       | 1   | HOKKAIDO, JAPAN REGION   |
|   | 17 | 14 | 00 | 57.1? | 51.42  | N | 15.73   | E | 10  | G   |     | 0.8 | 8                                       | 1   | POLAND. ML 2.4 (CLL).  |
|   | 17 | 14 | 11 | 01.4* | 34.957 | N | 25.682  | E | 5   | G   |     | 0.5 | 5                                       | 1   | CRETE. MD 3.8 (ATH).   |
|   | 17 | 14 | 12 | 02.5% | 63.874 | N | 146.141 | W | 10  |     |     | 63  | 1                                       | 1   | CENTRAL ALASKA. <AEIC>. ML 4.0 (AEIC), 4.1 (PMR). Felt (III) at Big Delta.             |
|   | 17 | 14 | 33 | 45.4% | 63.871 | N | 146.119 | W | 12  |     |     | 54  | 1                                       | 1   | CENTRAL ALASKA. <AEIC>. ML 2.8 (AEIC), 3.5 (PMR).                                      |
|   | 17 | 14 | 48 | 13.8% | 39.667 | N | 29.499  | E | 10  | G   |     | 0.4 | 7                                       | 1   | TURKEY. ML 2.8 (ISK).  |
|   | 17 | 14 | 58 | 52.6? | 24.13  | S | 179.52  | W | 500 | G   | 4.6 | 1.2 | 12                                      | 1   | SOUTH OF FIJI ISLANDS  |
|   | 17 | 15 | 38 | 42.1? | 39.92  | N | 28.01   | E | 10  | G   |     | 0.7 | 5                                       | 1   | TURKEY. ML 2.6 (ISK).  |
|   | 17 | 17 | 03 | 20.0  | 43.559 | N | 147.048 | E | 33  | N   | 4.7 | 1.0 | 48                                      | 1   | KURIL ISLANDS  |
|   | 17 | 18 | 59 | 46.7% | 39.053 | N | 27.832  | E | 10  | G   |     | 0.8 | 10                                      | 1   | TURKEY. ML 3.3 (ISK).  |
|   | 17 | 19 | 19 | 24.0? | 31.13  | S | 68.15   | W | 100 | G   |     | 0.4 | 7                                       | 1   | SAN JUAN PROVINCE, ARGENTINA   |
| a | 17 | 19 | 25 | 53.5* | 5.888  | S | 154.618 | E | 146 | D   | 5.4 | 0.9 | 168                                     | 1   | SOLOMON ISLANDS. Mw 5.3 (HRV).   |
|   | 17 | 21 | 02 | 54.8? | 34.91  | N | 26.33   | E | 33  | N   |     | 0.6 | 4                                       | 1   | CRETE. MD 3.8 (ATH).   |
|   | 17 | 21 | 23 | 16.0? | 4.37   | S | 142.23  | E | 104 | *   | 4.8 | 1.3 | 24                                      | 1   | NEW GUINEA, PAPUA NEW GUINEA   |
|   | 17 | 21 | 24 | 54.1? | 10.28  | N | 60.86   | W | 80  | G   |     | 1.6 | 4                                       | 1   | TRINIDAD. MD 3.0 (TRN).  |
|   | 17 | 21 | 58 | 57.4% | 44.356 | N | 7.387   | E | 10  | G   |     | 0.3 | 9                                       | 1   | NORTHERN ITALY. ML 2.0 (GEN).  |
|   | 17 | 23 | 03 | 57.8  | 33.799 | S | 71.111  | W | 59  | ?   |     | 0.3 | 11                                      | 1   | NEAR COAST OF CENTRAL CHILE. MD 3.4 (SAN).   |
|   | 17 | 23 | 26 | 16.2% | 44.929 | N | 7.255   | E | 10  | G   |     | 0.6 | 11                                      | 1   | NORTHERN ITALY. ML 2.3 (GEN).  |
|   | 18 | 00 | 59 | 56.7? | 40.95  | N | 79.89   | E | 33  | N   | 4.7 | 0.5 | 6                                       | 1   | SOUTHERN XINJIANG, CHINA   |
|   | 18 | 01 | 05 | 40.8* | 40.197 | N | 23.470  | E | 10  | G   |     | 1.7 | 10                                      | 1   | GREECE. MD 3.1 (ATH).  |
|   | 18 | 01 | 13 | 49.3% | 39.253 | N | 27.882  | E | 10  | G   |     | 0.3 | 6                                       | 1   | TURKEY. ML 2.8 (ISK).  |
|   | 18 | 01 | 26 | 11.7% | 43.228 | N | 0.608   | W | 10  | G   |     | 0.4 | 7                                       | 1   | PYRENEES. ML 1.0 (STR).  |
|   | 18 | 02 | 03 | 37.9% | 65.122 | N | 150.416 | W | 2   |     |     | 27  | 1                                       | 1   | NORTHERN ALASKA. <AEIC>. ML 2.7 (AEIC), 3.0 (PMR).                                     |
|   | 18 | 02 | 33 | 08.5  | 38.026 | N | 21.037  | E | 33  | N   |     | 1.2 | 9                                       | 1   | GREECE. MD 3.6 (ATH).  |
| a | 18 | 03 | 07 | 36.2  | 13.286 | N | 89.197  | W | 84  | 5.0 |     | 1.2 | 222                                     | 1   | EL SALVADOR. Mw 5.4 (HRV). MD 5.0 (GCG), 4.4 (SSS). Felt (V) at San Salvador.          |
|   | 18 | 03 | 10 | 38.8  | 17.350 | S | 178.660 | W | 531 |     | 4.9 | 1.1 | 72                                      | 1   | FIJI ISLANDS REGION  |
|   | 18 | 03 | 43 | 49.0? | 8.47   | S | 123.90  | E | 157 | ?   | 4.5 | 0.7 | 6                                       | 1   | FLORES REGION, INDONESIA   |
|   | 18 | 03 | 58 | 09.8% | 44.446 | N | 6.374   | E | 5   | G   |     | 0.4 | 7                                       | 1   | FRANCE. ML 2.1 (GEN).  |
|   | 18 | 04 | 04 | 22.2? | 12.90  | S | 166.62  | E | 33  | N   | 4.1 | 0.5 | 7                                       | 1   | SANTA CRUZ ISLANDS   |
|   | 18 | 04 | 46 | 33.3* | 18.826 | N | 102.047 | W | 86  | D   | 4.7 | 1.2 | 81                                      | 1   | MICHOACAN, MEXICO  |
|   | 18 | 06 | 34 | 17.8  | 33.342 | S | 70.218  | W | 100 | G   |     | 0.9 | 19                                      | 1   | CHILE-ARGENTINA BORDER REGION. MD 4.2 (SAN). Felt (IV) at Santiago, Chile.             |

|      |             |          |           |              |     |     |   |
|------|-------------|----------|-----------|--------------|-----|-----|---|
| 18   | 07 01 11.0? | 31.39 S  | 68.71 W   | 100 G        | 0.6 | 5   | SAN JUAN PROVINCE, ARGENTINA  |
| 18   | 08 02 40.1  | 59.141 N | 154.165 W | 11           |     | 43  | SOUTHERN ALASKA. <AEIC>. ML 2.6 (AEIC).   |
| 18   | 08 21 09.4? | 23.41 S  | 66.52 W   | 230 *        | 0.7 | 7   | JUJUY PROVINCE, ARGENTINA   |
| a 18 | 08 30 51.1* | 33.235 S | 176.679 W | 33 N 5.0 4.6 | 1.3 | 19  | SOUTH OF KERMADec ISLANDS. Mw 5.1 (HRV).  |
| 18   | 08 56 48.1  | 43.581 N | 147.651 E | 33 N 4.6     | 0.9 | 42  | KURIL ISLANDS   |
| 18   | 09 00 07.0  | 45.536 N | 26.399 E  | 161          | 4.2 | 1.0 | 52 ROMANIA. Felt (IV) in the epicentral area and (III) at Bucharest.  |
| 18   | 09 34 12.5  | 44.491 N | 7.278 E   | 10 G         | 0.4 | 10  | NORTHERN ITALY. ML 2.0 (GEN).   |
| 18   | 09 49 22.6* | 51.452 N | 175.751 W | 33 N 3.9     | 0.2 | 6   | ANDREANOF ISLANDS, ALEUTIAN IS.   |
| 18   | 10 12 28.3  | 51.477 N | 15.830 E  | 10 G         | 0.6 | 13  | POLAND. ML 3.8 (VIE), 3.8 (GRF), 3.5 (MOX), 3.2 (BRA).  |
| 18   | 10 32 01.2* | 17.823 S | 167.789 E | 33 N 4.2     | 0.8 | 6   | VANUATU ISLANDS   |
| a 18 | 10 42 55.4  | 43.439 N | 147.329 E | 33 N 5.5     | 0.8 | 261 | KURIL ISLANDS. Mw 5.2 (HRV).  |
| 18   | 11 19 02.6  | 36.776 N | 22.040 E  | 10 G         | 1.0 | 7   | SOUTHERN GREECE. MD 3.5 (ATH).  |
| 18   | 11 22 52.0? | 31.67 S  | 68.27 W   | 10 G         | 0.8 | 4   | SAN JUAN PROVINCE, ARGENTINA  |
| 18   | 11 25 49.5* | 16.457 N | 93.737 W  | 131          | 4.4 | 1.3 | 29 CHIAPAS, MEXICO  |
| 18   | 11 30 14.5  | 37.941 N | 29.357 E  | 10 G         | 0.9 | 5   | TURKEY. ML 3.3 (ISK).   |
| 18   | 11 41 23.5? | 43.69 N  | 147.23 E  | 33 N 4.6     | 0.7 | 6   | KURIL ISLANDS   |
| 18   | 13 22 34.7* | 40.265 N | 21.591 E  | 10 G         | 1.5 | 7   | GREECE. MD 3.2 (ATH).   |
| 18   | 13 33 26.5? | 40.22 N  | 21.59 E   | 10 G         | 1.0 | 7   | GREECE. MD 3.2 (ATH).   |
| 18   | 13 35 16.1  | 26.943 S | 26.747 E  | 5 G          | 1.0 | 11  | REPUBLIC OF SOUTH AFRICA. ML 3.1 (PRE).   |
| 18   | 13 36 15.8? | 34.64 S  | 70.31 W   | 5 G          | 0.1 | 7   | CHILE-ARGENTINA BORDER REGION   |
| 18   | 14 16 48.3* | 27.503 N | 142.638 E | 33 N 4.8     | 1.3 | 23  | BONIN ISLANDS REGION  |
| 18   | 14 46 34.7  | 41.051 N | 21.379 E  | 5 G          | 1.4 | 20  | NORTHWESTERN BALKAN REGION. ML 2.9 (TTG), 2.8 (SKO), 2.6 (THE), 2.5 (TIR).  |
| 18   | 14 54 48.9  | 39.697 N | 29.472 E  | 10 G         | 0.4 | 5   | TURKEY. ML 2.7 (ISK).   |
| 18   | 15 01 24.9  | 37.630 N | 137.358 E | 33 N 4.5     | 1.2 | 11  | NEAR WEST COAST OF HONSHU, JAPAN  |
| 18   | 15 02 12.7? | 32.40 S  | 68.24 W   | 33 N         | 1.3 | 6   | MENDOZA PROVINCE, ARGENTINA   |
| 18   | 15 13 04.2  | 10.752 S | 75.260 W  | 71 D 5.0     | 0.8 | 94  | CENTRAL PERU. Felt (II) at Lima.  |
| 18   | 15 29 00.2* | 43.873 N | 147.943 E | 33 N 4.9     | 1.2 | 16  | KURIL ISLANDS   |
| 18   | 15 38 07.0  | 59.331 N | 6.092 E   | 10 G         | 0.5 | 7   | SOUTHERN NORWAY. MD 1.8 (BER).  |
| 18   | 15 47 53.0? | 31.38 S  | 68.61 W   | 100 G        | 0.4 | 4   | SAN JUAN PROVINCE, ARGENTINA  |
| 18   | 15 58 25.5* | 66.795 N | 14.501 E  | 10 G         | 1.3 | 7   | NORTHERN NORWAY. MD 3.0 (BER).  |
| 18   | 16 34 13.0? | 33.35 S  | 72.33 W   | 10 G         | 0.3 | 11  | OFF COAST OF CENTRAL CHILE. MD 4.1 (SAN).   |
| 18   | 16 45 13.3  | 40.022 N | 20.264 E  | 10 G         | 1.3 | 10  | GREECE-ALBANIA BORDER REGION. MD 3.6 (ATH).   |
| 18   | 17 00 03.8? | 24.21 N  | 94.64 E   | 87 ? 4.5     | 0.8 | 8   | MYANMAR-INDIA BORDER REGION   |
| a 18 | 17 12 50.9  | 43.576 N | 147.097 E | 60 G 6.2     | 0.8 | 556 | KURIL ISLANDS. Mw 5.8 (GS), 5.9 (HRV). Mo=1.6*10**18 Nm (PPT). Depth from broadband displacement seismograms.                   |
| 18   | 18 09 51.5? | 37.26 N  | 2.37 W    | 10 G         | 1.2 | 4   | SPAIN   |
| 18   | 18 34 17.0? | 35.34 S  | 71.41 W   | 110 G        | 0.3 | 10  | CENTRAL CHILE. MD 3.6 (SAN).  |
| 18   | 18 38 18.9  | 55.510 N | 5.174 E   | 10 G         | 1.2 | 50  | NORTH SEA. ML 4.4 (BNS). Felt (II) in the Dan Oilfield area.  |
| 18   | 19 58 42.6  | 32.766 S | 70.797 W  | 68 *         | 0.6 | 15  | CHILE-ARGENTINA BORDER REGION. MD 3.9 (SAN).  |
| 18   | 20 05 45.1? | 11.06 S  | 161.99 E  | 33 N 4.7     | 1.6 | 8   | SOLOMON ISLANDS   |
| 18   | 20 45 02.3  | 24.163 N | 94.497 E  | 92 * 4.8     | 1.1 | 33  | MYANMAR-INDIA BORDER REGION   |
| 18   | 20 55 27.6* | 37.199 S | 179.136 E | 32 D 5.2     | 1.3 | 37  | OFF E. COAST OF N. ISLAND, N.Z.   |
| 18   | 21 23 32.3  | 60.410 N | 152.000 W | 77           |     | 61  | SOUTHERN ALASKA. <AEIC>.  |
| 18   | 21 32 35.5? | 31.23 S  | 68.65 W   | 100 G        | 0.2 | 4   | SAN JUAN PROVINCE, ARGENTINA  |
| 18   | 21 38 35.2* | 43.459 N | 146.728 E | 86 ? 4.5     | 1.1 | 14  | KURIL ISLANDS   |
| 18   | 22 41 17.3? | 31.39 S  | 69.20 W   | 120 G        | 0.6 | 5   | SAN JUAN PROVINCE, ARGENTINA  |
| 18   | 23 31 25.9  | 19.039 S | 169.407 E | 235 D 4.9    | 1.2 | 119 | VANUATU ISLANDS   |
| 18   | 23 46 59.6* | 42.149 N | 147.789 E | 33 N 4.3     | 1.1 | 10  | OFF COAST OF HOKKAIDO, JAPAN  |
| 18   | 23 48 56.5? | 34.80 S  | 71.00 W   | 100 G        | 0.1 | 7   | NEAR COAST OF CENTRAL CHILE   |
| 19   | 00 02 48.5  | 9.869 N  | 126.274 E | 33 N 5.2     | 0.9 | 56  | MINDANAO, PHILIPPINE ISLANDS  |
| 19   | 00 05 34.2? | 44.49 N  | 7.26 E    | 10 G         | 0.1 | 4   | NORTHERN ITALY. ML 1.2 (GEN).   |
| 19   | 00 14 56.9  | 39.907 N | 19.922 E  | 5 G 3.3      | 1.1 | 24  | GREECE-ALBANIA BORDER REGION. MD 3.5 (ATH). ML 3.3 (TTG), 3.1 (TIR). Felt slightly at Sarande, Albania.                         |
| 19   | 00 49 58.8  | 35.512 N | 117.494 W | 3            |     | 58  | CENTRAL CALIFORNIA. <PAS-P>. ML 4.2 (PAS), 4.1 (GS). Felt (IV) at Inyokern, Randsburg and Ridgecrest; (III) at Boron and Trona. |
| 19   | 00 58 18.7* | 37.813 N | 21.191 E  | 5 G          | 1.2 | 6   | SOUTHERN GREECE. MD 3.4 (ATH).  |
| 19   | 01 50 51.4  | 46.525 N | 0.236 E   | 5 G          | 1.2 | 10  | FRANCE. ML 2.4 (LDG).   |
| 19   | 02 32 39.6  | 43.647 N | 111.136 W | 5 G          | 0.7 | 16  | EASTERN IDAHO. ML 2.6 (GS).   |
| 19   | 02 51 12.9  | 60.492 N | 145.805 W | 24           |     | 41  | SOUTHERN ALASKA. <AEIC>. ML 2.7 (AEIC).   |
| 19   | 03 34 22.4  | 35.512 N | 117.492 W | 4            |     | 59  | CENTRAL CALIFORNIA. <PAS-P>. ML 3.5 (PAS), 3.5 (GS).  |
| 19   | 04 05 45.7? | 23.95 S  | 113.23 W  | 10 G 4.8     | 1.5 | 13  | EASTER ISLAND REGION  |
| 19   | 04 16 33.1  | 40.672 N | 30.076 E  | 10 G         | 0.5 | 9   | TURKEY. ML 3.4 (ISK).   |
| 19   | 04 22 39.0  | 42.537 N | 20.141 E  | 10 G         | 0.5 | 9   | NORTHWESTERN BALKAN REGION. ML 1.7 (TTG).   |
| 19   | 05 22 05.1* | 43.031 N | 147.736 E | 33 N 4.6     | 1.4 | 23  | KURIL ISLANDS   |
| 19   | 06 06 10.8* | 16.168 N | 93.074 W  | 172 4.3      | 1.0 | 13  | CHIAPAS, MEXICO   |
| 19   | 06 06 23.4* | 19.217 S | 177.507 W | 571 ? 4.6    | 1.1 | 17  | FIJI ISLANDS REGION   |
| 19   | 06 07 59.6  | 26.217 S | 28.196 E  | 5 G          | 1.0 | 10  | REPUBLIC OF SOUTH AFRICA. ML 3.1 (PRE).   |
| 19   | 06 37 03.4  | 42.542 N | 20.209 E  | 10 G         | 1.2 | 15  | NORTHWESTERN BALKAN REGION. ML 2.7 (TTG), 2.0 (TIR).  |
| 19   | 07 35 25.2  | 60.094 N | 4.519 E   | 5 G          | 1.0 | 9   | SOUTHERN NORWAY. MD 2.1 (BER).  |
| 19   | 07 35 33.5  | 44.476 N | 7.318 E   | 10 G         | 0.4 | 5   | NORTHERN ITALY. ML 2.0 (GEN).   |
| 19   | 07 36 18.4? | 34.45 S  | 70.36 W   | 10 G         | 0.0 | 6   | CHILE-ARGENTINA BORDER REGION   |
| 19   | 08 15 48.4* | 43.147 N | 148.066 E | 33 N 4.5     | 1.2 | 16  | EAST OF KURIL ISLANDS   |
| 19   | 08 39 55.2  | 63.138 N | 152.619 W | 9            |     | 38  | CENTRAL ALASKA. <AEIC>. ML 2.7 (AEIC).  |
| 19   | 09 33 33.0  | 40.384 N | 27.863 E  | 10 G         | 0.7 | 8   | TURKEY. ML 2.9 (ISK).   |
| a 19 | 09 47 09.1  | 5.129 S  | 151.808 E | 54 D 5.2     | 1.1 | 68  | NEW BRITAIN REGION, P.N.G. Mw 5.4 (HRV).  |
| 19   | 09 47 37.6? | 43.42 N  | 147.75 E  | 33 N 4.3     | 1.2 | 6   | KURIL ISLANDS   |
| 19   | 10 29 50.4? | 39.72 N  | 29.64 E   | 10 G         | 1.0 | 4   | TURKEY. ML 2.7 (ISK).   |
| 19   | 10 31 26.1? | 7.43 S   | 127.14 E  | 24 D 4.7     | 1.6 | 9   | BANDA SEA   |
| 19   | 11 19 28.3? | 51.23 N  | 15.55 E   | 10 G         | 1.4 | 10  | POLAND. ML 3.7 (VIE), 3.7 (GRF).  |
| 19   | 11 27 02.7* | 42.529 N | 147.248 E | 33 N 4.4     | 1.3 | 6   | OFF COAST OF HOKKAIDO, JAPAN  |
| 19   | 12 09 29.1  | 44.332 N | 7.092 E   | 10 G         | 0.2 | 6   | NORTHERN ITALY. ML 1.9 (GEN).   |
| 19   | 12 18 10.9  | 37.155 N | 3.708 W   | 10 G         | 1.0 | 10  | SPAIN. mbLg 2.8 (MDD).  |
| 19   | 12 33 20.2* | 43.164 N | 146.799 E | 37 D 4.0     | 0.5 | 8   | KURIL ISLANDS   |
| 19   | 12 48 24.8* | 15.648 S | 167.620 E | 153 * 4.7    | 1.3 | 38  | VANUATU ISLANDS   |
| a 19 | 12 54 08.4* | 9.521 S  | 159.453 E | 5 G 4.7 4.8  | 0.9 | 29  | SOLOMON ISLANDS. Mw 5.5 (HRV). Felt (V) at Honiara.   |
| 19   | 12 59 20.0  | 33.327 N | 136.842 E | 390 4.7      | 0.9 | 68  | NEAR S. COAST OF WESTERN HONSHU   |
| 19   | 13 11 43.6? | 10.62 S  | 162.17 E  | 33 N 4.8 4.6 | 1.7 | 9   | SOLOMON ISLANDS   |
| 19   | 13 14 55.6? | 26.39 S  | 27.45 E   | 5 G          | 0.9 | 4   | REPUBLIC OF SOUTH AFRICA  |
| 19   | 14 21 41.9? | 9.55 S   | 159.76 E  | 5 G 4.4      | 1.6 | 6   | SOLOMON ISLANDS. Felt (V) at Honiara.   |



|    |    |    |       |        |        |         |         |     |     |     |     |   |  |  |                              |
|----|----|----|-------|--------|--------|---------|---------|-----|-----|-----|-----|---|--|--|------------------------------|
| 19 | 14 | 25 | 51.8? | 28.61  | N      | 34.65   | E       | 10  | G   | 0.1 | 4   | EGYPT. MD 3.1 (RYD).  |  |  |                              |
| 19 | 14 | 36 | 08.4? | 28.60  | N      | 34.63   | E       | 10  | G   | 0.1 | 4   | EGYPT. MD 3.0 (RYD).  |  |  |                              |
| 19 | 14 | 39 | 30.8* | 37.192 | N      | 72.901  | E       | 34  | D   | 1.7 | 24  | TAJIKISTAN  |  |  |                              |
| 19 | 14 | 46 | 54.7% | 26.210 | S      | 28.181  | E       | 5   | G   | 1.1 | 12  | REPUBLIC OF SOUTH AFRICA. ML 3.2 (PRE).   |  |  |                              |
| 19 | 17 | 20 | 29.5* | 20.422 | S      | 169.733 | E       | 33  | N   | 1.0 | 12  | VANUATU ISLANDS   |  |  |                              |
| 19 | 17 | 44 | 40.3% | 62.286 | N      | 151.027 | W       | 73  |     |     | 90  | CENTRAL ALASKA. <AEIC>.   |  |  |                              |
| a  | 19 | 17 | 55    | 23.6   | 22.433 | N       | 118.715 | E   | 16  | D   | 5.2 | 0.9   | 49   | TAIWAN REGION. Mw 5.0 (HRV).   |                              |
| 19 | 18 | 02 | 17.5  | 43.722 | N      | 147.153 | E       | 33  | N   | 4.9 | 0.8 | 36  | KURIL ISLANDS                                |  |                              |
| 19 | 18 | 20 | 32.6  | 43.552 | N      | 147.566 | E       | 23  | D   | 4.9 | 0.9 | 74  | KURIL ISLANDS                                |  |                              |
| 19 | 18 | 46 | 56.1? | 44.05  | N      | 147.30  | E       | 33  | N   | 4.3 | 1.5 | 12  | KURIL ISLANDS                                |  |                              |
| 19 | 19 | 51 | 27.7% | 39.174 | N      | 30.270  | E       | 10  | G   | 0.6 | 11  | TURKEY. ML 3.5 (ISK).   |  |  |                              |
| 19 | 20 | 04 | 50.9% | 34.449 | N      | 116.499 | W       | 3   |     |     | 28  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS), 2.8 (GS).                                     |  |  |                              |
| 19 | 20 | 07 | 38.7? | 35.09  | S      | 123.75  | E       | 10  | G   | 1.0 | 7   | OFF SOUTH COAST OF AUSTRALIA  |  |  |                              |
| 19 | 21 | 16 | 54.7? | 33.34  | S      | 72.16   | W       | 33  | N   | 0.9 | 12  | OFF COAST OF CENTRAL CHILE. MD 4.2 (SAN).   |  |  |                              |
| 19 | 21 | 20 | 02.9% | 44.996 | N      | 6.761   | E       | 5   | G   | 0.2 | 5   | FRANCE. ML 2.1 (GEN).   |  |  |                              |
| 19 | 22 | 28 | 52.4  | 43.615 | N      | 147.405 | E       | 33  | N   | 4.8 | 0.9 | 36  | KURIL ISLANDS                                |  |                              |
| 19 | 22 | 32 | 18.1* | 46.291 | N      | 7.443   | E       | 5   | G   | 0.7 | 21  | SWITZERLAND. ML 2.5 (LDG).  |  |  |                              |
| 19 | 23 | 07 | 27.1  | 46.125 | N      | 7.861   | E       | 5   | G   | 1.0 | 9   | SWITZERLAND. ML 2.3 (LDG).  |  |  |                              |
| 19 | 23 | 30 | 49.3% | 26.453 | S      | 27.501  | E       | 5   | G   | 0.4 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.3 (PRE).   |  |  |                              |
| 19 | 23 | 48 | 34.6  | 45.527 | N      | 5.739   | E       | 10  | G   | 0.7 | 35  | FRANCE. ML 2.9 (LDG). MD 2.9 (STR).   |  |  |                              |
| 20 | 00 | 27 | 58.7% | 60.437 | N      | 151.564 | W       | 50  |     |     | 47  | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.5 (AEIC).   |  |  |                              |
| a  | 20 | 01 | 15    | 16.1   | 39.187 | S       | 70.811  | W   | 162 | G   | 5.8 | 1.0   | 279  | SOUTHERN ARGENTINA. Mw 6.0 (GS), 6.0 (HRV). mb 5.9 (BRK). MD 5.6 (SAN). Mo=1.3*10**18 Nm (PPT). Depth from broadband displacement seismograms. |                              |
| 20 | 02 | 37 | 23.6% | 35.292 | N      | 118.574 | W       | 2   |     |     | 35  | CENTRAL CALIFORNIA. <PAS-P>. ML 2.9 (PAS), 2.8 (GS).                                      |  |  |                              |
| 20 | 02 | 56 | 39.2% | 32.724 | N      | 115.929 | W       | 3   |     |     | 8   | CALIF.-BAJA CALIF. BORDER REGION. <PAS-P>. ML 3.3 (PAS), 3.0 (GS). MD 3.5 (ECX).          |  |  |                              |
| 20 | 03 | 12 | 27.6% | 38.840 | N      | 122.786 | W       | 2   |     |     | 45  | NORTHERN CALIFORNIA. <GM-P>. MD 3.1 (GM). ML 3.2 (GS), 3.0 (BRK).                         |  |  |                              |
| 20 | 03 | 44 | 37.9? | 45.60  | N      | 146.16  | E       | 33  | N   | 4.6 | 0.7 | 12  | KURIL ISLANDS                                |  |                              |
| a  | 20 | 04 | 05    | 33.2   | 21.917 | S       | 175.058 | W   | 33  | N   | 5.2 | 5.1   | 1.2  | 67   | TONGA ISLANDS. Mw 5.5 (HRV). |
| 20 | 04 | 11 | 05.2% | 39.001 | N      | 3.554   | W       | 10  | G   | 0.9 | 11  | SPAIN. mbLg 3.2 (MDD).  |  |  |                              |
| 20 | 04 | 54 | 59.3% | 36.999 | N      | 3.717   | W       | 5   | G   | 1.0 | 12  | STRAIT OF GIBRALTAR. mbLg 2.9 (MDD).  |  |  |                              |
| a  | 20 | 05 | 03    | 03.3   | 3.258  | S       | 146.657 | E   | 33  | N   | 4.8 | 4.8   | 1.1  | 19   | BISMARCK SEA. Mw 5.4 (HRV).  |
| 20 | 05 | 08 | 38.9* | 37.990 | N      | 21.260  | E       | 5   | G   | 1.6 | 7   | SOUTHERN GREECE. MD 3.5 (ATH).  |  |  |                              |
| 20 | 05 | 53 | 03.9* | 37.993 | N      | 21.184  | E       | 5   | G   | 1.7 | 5   | SOUTHERN GREECE. MD 3.2 (ATH).  |  |  |                              |
| 20 | 06 | 01 | 29.5  | 41.130 | N      | 7.779   | W       | 10  | G   | 0.9 | 14  | PORTUGAL. mbLg 3.4 (MDD). Felt (IV) in the Peso da Regua area.                            |  |  |                              |
| 20 | 06 | 26 | 33.2% | 26.123 | S      | 27.743  | E       | 5   | G   | 1.1 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).   |  |  |                              |
| 20 | 06 | 27 | 48.0  | 43.327 | N      | 1.436   | W       | 5   | G   | 1.3 | 33  | PYRENEES. mbLg 3.3 (MDD). ML 3.1 (STR), 3.1 (LDG). Felt (III) in the Basque area, France. |  |  |                              |
| 20 | 06 | 44 | 58.9% | 31.681 | N      | 115.892 | W       | 19  |     |     | 5   | BAJA CALIFORNIA, MEXICO. <ECX-P>. MD 3.2 (ECX).   |  |  |                              |
| 20 | 07 | 52 | 16.7? | 33.52  | N      | 136.48  | E       | 33  | N   | 4.6 | 1.6 | 8   | NEAR S. COAST OF WESTERN HONSHU              |  |                              |
| 20 | 08 | 30 | 23.9? | 39.12  | N      | 27.65   | E       | 10  | G   | 0.1 | 4   | TURKEY. ML 2.8 (ISK).   |  |  |                              |
| 20 | 08 | 47 | 47.6? | 39.89  | N      | 29.30   | E       | 10  | G   | 0.4 | 4   | TURKEY. ML 2.7 (ISK).   |  |  |                              |
| 20 | 08 | 49 | 17.7? | 39.22  | N      | 27.82   | E       | 10  | G   | 0.9 | 4   | TURKEY. ML 2.9 (ISK).   |  |  |                              |
| 20 | 09 | 55 | 35.0% | 60.200 | N      | 152.505 | W       | 87  |     |     | 71  | SOUTHERN ALASKA. <AEIC>.  |  |  |                              |
| 20 | 10 | 05 | 52.5* | 38.054 | N      | 21.295  | E       | 5   | G   | 1.4 | 7   | GREECE. MD 3.5 (ATH).   |  |  |                              |
| 20 | 10 | 11 | 25.7? | 31.28  | S      | 69.14   | W       | 120 | G   | 1.0 | 5   | SAN JUAN PROVINCE, ARGENTINA  |  |  |                              |
| 20 | 10 | 56 | 47.8* | 40.785 | N      | 20.812  | E       | 5   | G   | 1.6 | 23  | GREECE-ALBANIA BORDER REGION. ML 3.5 (TTG), 2.9 (TIR), 2.7 (SKO). MD 3.3 (ATH).           |  |  |                              |
| 20 | 11 | 10 | 51.1% | 61.111 | N      | 152.074 | W       | 90  |     |     | 53  | SOUTHERN ALASKA. <AEIC>.  |  |  |                              |
| 20 | 11 | 21 | 51.5% | 62.106 | N      | 151.672 | W       | 92  |     |     | 71  | CENTRAL ALASKA. <AEIC>.   |  |  |                              |
| 20 | 11 | 28 | 26.1? | 30.63  | S      | 72.23   | W       | 50  | G   | 0.6 | 15  | OFF COAST OF CENTRAL CHILE. MD 4.3 (SAN).   |  |  |                              |
| 20 | 11 | 30 | 37.6% | 39.577 | N      | 29.561  | E       | 10  | G   | 0.7 | 7   | TURKEY. ML 2.9 (ISK).   |  |  |                              |
| 20 | 11 | 51 | 52.4% | 44.295 | N      | 7.426   | E       | 5   | G   | 0.4 | 7   | NORTHERN ITALY. ML 1.8 (GEN).   |  |  |                              |
| 20 | 12 | 18 | 44.1? | 39.18  | N      | 26.85   | E       | 10  | G   | 0.4 | 4   | TURKEY. ML 2.9 (ISK).   |  |  |                              |
| 20 | 12 | 30 | 14.3  | 40.787 | N      | 20.822  | E       | 5   | G   | 1.4 | 13  | GREECE-ALBANIA BORDER REGION. ML 2.5 (SKO).   |  |  |                              |
| 20 | 12 | 31 | 55.0? | 38.73  | N      | 26.55   | E       | 10  | G   | 1.2 | 4   | AEGEAN SEA. ML 2.8 (ISK).   |  |  |                              |
| 20 | 12 | 37 | 28.5  | 43.527 | N      | 148.243 | E       | 27  | D   | 4.4 | 0.9 | 19  | EAST OF KURIL ISLANDS                        |  |                              |
| 20 | 13 | 06 | 38.8% | 36.578 | N      | 121.172 | W       | 8   |     |     | 84  | CENTRAL CALIFORNIA. <GM-P>. MD 3.4 (GM). ML 3.3 (BRK), 3.2 (GS).                          |  |  |                              |
| 20 | 13 | 26 | 05.0  | 21.340 | S      | 68.166  | W       | 123 | D   | 5.2 | 1.2 | 54  | CHILE-BOLIVIA BORDER REGION                  |  |                              |
| 20 | 14 | 00 | 29.2% | 59.320 | N      | 6.106   | E       | 10  | G   | 0.6 | 5   | SOUTHERN NORWAY. MD 1.8 (BER).  |  |  |                              |
| 20 | 14 | 07 | 02.2% | 45.972 | N      | 2.701   | E       | 10  | G   | 0.4 | 10  | FRANCE. ML 2.1 (LDG).   |  |  |                              |
| 20 | 14 | 07 | 07.5% | 45.992 | N      | 2.682   | E       | 10  | G   | 0.4 | 11  | FRANCE. ML 2.4 (LDG).   |  |  |                              |
| 20 | 14 | 08 | 21.8? | 39.88  | N      | 29.41   | E       | 10  | G   | 0.6 | 4   | TURKEY. ML 2.6 (ISK).   |  |  |                              |
| 20 | 14 | 34 | 16.9? | 34.29  | S      | 71.05   | W       | 70  | G   | 0.2 | 7   | NEAR COAST OF CENTRAL CHILE   |  |  |                              |
| 20 | 14 | 36 | 20.9? | 38.17  | N      | 21.26   | E       | 5   | G   | 1.7 | 7   | GREECE. MD 3.3 (ATH). ML 2.6 (THE).   |  |  |                              |
| 20 | 14 | 36 | 47.2% | 63.483 | N      | 151.122 | W       | 8   |     |     | 24  | CENTRAL ALASKA. <AEIC>. ML 2.5 (AEIC).  |  |  |                              |
| 20 | 14 | 42 | 52.9? | 39.71  | N      | 29.47   | E       | 10  | G   | 0.7 | 4   | TURKEY. ML 2.6 (ISK).   |  |  |                              |
| 20 | 14 | 46 | 24.7? | 38.10  | N      | 21.13   | E       | 10  | G   | 1.8 | 4   | GREECE. MD 3.3 (ATH).   |  |  |                              |
| 20 | 15 | 06 | 57.4% | 45.973 | N      | 2.698   | E       | 10  | G   | 0.3 | 11  | FRANCE. ML 2.2 (LDG).   |  |  |                              |
| 20 | 15 | 08 | 12.3% | 46.046 | N      | 2.711   | E       | 10  | G   | 0.2 | 7   | FRANCE. ML 1.6 (LDG).   |  |  |                              |
| 20 | 15 | 25 | 10.7? | 31.42  | S      | 68.68   | W       | 100 | G   | 0.4 | 4   | SAN JUAN PROVINCE, ARGENTINA  |  |  |                              |
| 20 | 15 | 35 | 54.5* | 18.378 | S      | 168.135 | E       | 33  | N   | 0.6 | 5   | VANUATU ISLANDS   |  |  |                              |
| 20 | 15 | 49 | 48.5? | 1.03   | S      | 128.31  | E       | 33  | N   | 4.4 | 1.4 | 4   | HALMAHERA, INDONESIA                         |  |                              |
| 20 | 16 | 21 | 24.3? | 1.09   | S      | 128.15  | E       | 33  | N   | 4.6 | 0.7 | 7   | HALMAHERA, INDONESIA                         |  |                              |
| 20 | 17 | 42 | 25.2% | 45.972 | N      | 2.690   | E       | 10  | G   | 0.3 | 11  | FRANCE. ML 1.8 (LDG).   |  |  |                              |
| 20 | 18 | 07 | 00.6% | 40.372 | N      | 29.506  | E       | 10  | G   | 0.4 | 8   | TURKEY. ML 2.8 (ISK).   |  |  |                              |
| 20 | 18 | 36 | 09.0* | 31.942 | S      | 70.058  | W       | 114 | ?   |     | 0.3 | 13  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN). |  |                              |
| 20 | 18 | 45 | 41.2% | 33.119 | S      | 70.128  | W       | 10  | G   | 0.6 | 6   | CHILE-ARGENTINA BORDER REGION. MD 3.3 (SAN).  |  |  |                              |
| 20 | 19 | 24 | 34.5? | 40.47  | N      | 29.44   | E       | 10  | G   | 0.2 | 4   | TURKEY. ML 2.7 (ISK).   |  |  |                              |
| 20 | 19 | 47 | 01.1* | 43.037 | N      | 146.847 | E       | 35  | D   | 4.3 | 1.6 | 20  | KURIL ISLANDS                                |  |                              |
| 20 | 20 | 01 | 42.8  | 44.104 | N      | 147.946 | E       | 33  | N   | 5.0 | 0.6 | 63  | KURIL ISLANDS                                |  |                              |
| 20 | 20 | 18 | 19.9  | 32.637 | S      | 70.299  | W       | 110 | G   | 0.2 | 15  | CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).  |  |  |                              |
| 20 | 21 | 24 | 07.3% | 26.921 | S      | 26.718  | E       | 5   | G   | 0.9 | 9   | REPUBLIC OF SOUTH AFRICA. ML 2.7 (PRE).   |  |  |                              |
| 20 | 22 | 47 | 38.9  | 45.968 | N      | 2.714   | E       | 10  | G   | 0.4 | 15  | FRANCE. ML 2.4 (LDG).   |  |  |                              |
| 20 | 23 | 28 | 07.5* | 13.205 | S      | 167.257 | E       | 33  | N   | 4.4 | 1.3 | 16  | VANUATU ISLANDS                              |  |                              |
| 21 | 01 | 05 | 45.0  | 63.983 | N      | 149.155 | W       | 10  | G   | 0.8 | 13  | CENTRAL ALASKA. ML 3.3 (PMR).   |  |  |                              |
| 21 | 01 | 34 | 55.1? | 11.33  | N      | 61.56   | W       | 10  | G   | 0.4 | 4   | WINDWARD ISLANDS. MD 3.0 (TRN).   |  |  |                              |
| 21 | 03 | 31 | 49.1* | 2.305  | N      | 128.097 | E       | 33  | N   | 4.8 | 1.4 | 12  | HALMAHERA, INDONESIA                         |  |                              |
| 21 | 03 | 31 | 56.5? | 32.03  | S      | 68.37   | W       | 100 | G   | 0.5 | 7   | MENDOZA PROVINCE, ARGENTINA   |  |  |                              |

|    |            |            |           |           |         |         |   |  |  |
|----|------------|------------|-----------|-----------|---------|---------|---|--|--|
| 21 | 03 32 19.9 | 43.740 N   | 8.150 E   | 23        | 0.5     | 18      | CORSICA. ML 2.5 (GEN), 2.5 (LDG), 2.1 (STR).                                  |  |  |
| 21 | 04 03 53.1 | 46.826 N   | 6.799 E   | 10 G      | 0.4     | 6       | SWITZERLAND. ML 2.0 (LDG).  |  |  |
| 21 | 04 20 12.4 | 60.011 N   | 152.513 W | 97        |         | 54      | SOUTHERN ALASKA. <AEIC>.  |  |  |
| a  | 21         | 05 06 21.0 | 36.391 N  | 69.708 E  | 47 D    | 5.4 5.3 | 0.9 250   | HINDU KUSH REGION, AFGHANISTAN. Mw 5.5 (HRV).                            |  |
| 21 | 06 07 44.8 | 43.254 N   | 148.022 E | 149 ?     | 4.1     | 0.8     | 9   | EAST OF KURIL ISLANDS  |  |
| 21 | 08 18 35.5 | 39.12 N    | 27.50 E   | 10 G      |         | 0.1     | 4   | TURKEY. ML 2.8 (ISK).  |  |
| 21 | 08 35 36.2 | 39.744 N   | 29.487 E  | 10 G      |         | 0.4     | 6   | TURKEY. ML 2.7 (ISK).  |  |
| 21 | 08 52 29.9 | 39.66 N    | 29.39 E   | 5 G       |         | 0.2     | 4   | TURKEY. ML 2.7 (ISK).  |  |
| 21 | 09 35 31.6 | 45.714 N   | 149.359 E | 128 *     | 4.5     | 0.8     | 50  | KURIL ISLANDS  |  |
| 21 | 09 38 12.6 | 39.289 N   | 27.624 E  | 10 G      |         | 0.4     | 5   | TURKEY. ML 2.8 (ISK).  |  |
| 21 | 09 48 08.4 | 5.71 S     | 146.94 E  | 201 ?     | 4.5     | 1.1     | 8   | EASTERN NEW GUINEA REG., P.N.G.  |  |
| 21 | 09 58 29.1 | 20.170 N   | 121.693 E | 33 N      | 5.0     | 0.5     | 7   | PHILIPPINE ISLANDS REGION  |  |
| 21 | 10 27 23.7 | 47.441 N   | 12.556 E  | 10 G      |         | 0.8     | 11  | AUSTRIA. ML 2.9 (FUR), 2.7 (GRF), 2.7 (VIE).                             |  |
| 21 | 10 37 41.2 | 39.66 N    | 29.41 E   | 5 G       |         | 0.1     | 4   | TURKEY. ML 2.7 (ISK).  |  |
| 21 | 10 54 51.1 | 42.764 N   | 18.682 E  | 10 G      |         | 0.3     | 6   | NORTHWESTERN BALKAN REGION. ML 1.6 (TTG).                                |  |
| 21 | 11 10 16.3 | 46.028 N   | 13.734 E  | 10 G      |         | 0.7     | 6   | AUSTRIA. MD 2.4 (LJU), 2.2 (TRI). ML 2.3 (VIE).                          |  |
| 21 | 11 26 18.4 | 36.410 N   | 71.156 E  | 237 D     | 4.8     | 0.9     | 131   | AFGHANISTAN-TAJIKISTAN BORD REG. Felt at Chitral and Peshawar, Pakistan. |  |
| a  | 21         | 11 36 51.1 | 1.256 S   | 127.705 E | 10 G    | 5.1     | 1.5   | 14   | HALMAHERA, INDONESIA. Mw 5.3 (HRV).      |
| 21 | 11 42 08.3 | 35.018 N   | 118.958 W | 8         |         |         | 70  | CENTRAL CALIFORNIA. <PAS-P>. ML 3.3 (PAS), 3.3 (GS).                     |  |
| 21 | 11 46 27.6 | 38.250 N   | 56.955 E  | 33 N      | 4.9     | 1.0     | 95  | TURKMENISTAN-IRAN BORDER REGION  |  |
| 21 | 12 07 09.1 | 68.94 N    | 30.23 E   | 10 G      |         | 1.1     | 4   | BALTICS-BELARUS-NW RUSSIA REG. MD 3.0 (BER).                             |  |
| 21 | 12 08 27.7 | 30.04 S    | 177.96 W  | 207 *     | 4.7     | 1.5     | 11  | KERMADEC ISLANDS, NEW ZEALAND  |  |
| 21 | 12 16 17.3 | 47.25 N    | 11.26 E   | 10 G      |         | 0.2     | 4   | AUSTRIA. ML 0.9 (VIE).   |  |
| 21 | 12 47 02.1 | 39.20 N    | 27.24 E   | 5 G       |         | 0.6     | 4   | TURKEY. ML 2.8 (ISK).  |  |
| 21 | 12 48 01.0 | 39.53 N    | 29.82 E   | 5 G       |         | 0.9     | 4   | TURKEY. ML 2.6 (ISK).  |  |
| 21 | 12 48 44.3 | 39.210 N   | 27.735 E  | 10 G      |         | 0.7     | 5   | TURKEY. ML 3.0 (ISK).  |  |
| 21 | 12 57 51.0 | 16.041 N   | 60.702 W  | 33 N      |         | 0.4     | 9   | LEEWARD ISLANDS. MG 2.9 (FDF).   |  |
| 21 | 13 00 19.2 | 46.387 N   | 12.544 E  | 10 G      |         | 1.0     | 9   | NORTHERN ITALY   |  |
| 21 | 14 02 52.7 | 39.089 N   | 27.526 E  | 23 *      |         | 0.8     | 11  | TURKEY   |  |
| 21 | 14 07 37.1 | 43.506 N   | 147.394 E | 81 ?      | 4.9     | 1.0     | 19  | KURIL ISLANDS  |  |
| 21 | 14 27 58.0 | 19.107 N   | 145.832 E | 155 *     | 4.2     | 0.3     | 12  | MARIANA ISLANDS  |  |
| 21 | 15 52 04.7 | 38.041 N   | 21.284 E  | 5 G       | 3.8     | 1.3     | 9   | GREECE. ML 3.4 (ATH).  |  |
| 21 | 16 00 26.8 | 43.651 N   | 7.049 E   | 5 G       |         | 0.1     | 8   | NEAR SOUTH COAST OF FRANCE. ML 1.9 (LDG), 1.4 (STR).                     |  |
| 21 | 16 23 55.2 | 50.286 N   | 129.832 W | 10 G      | 4.3     | 1.1     | 44  | VANCOUVER ISLAND REGION  |  |
| 21 | 16 30 42.9 | 43.799 N   | 147.518 E | 33 N      | 4.3     | 1.1     | 19  | KURIL ISLANDS  |  |
| 21 | 17 03 56.6 | 26.377 S   | 27.402 E  | 5 G       |         | 1.2     | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.0 (PRE).                                  |  |
| 21 | 17 12 40.3 | 26.924 S   | 26.744 E  | 5 G       |         | 0.6     | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.1 (PRE).                                  |  |
| 21 | 17 42 37.5 | 46.632 N   | 0.238 W   | 5 G       |         | 1.3     | 5   | FRANCE. ML 2.2 (LDG).  |  |
| 21 | 19 06 33.1 | 50.223 N   | 18.774 E  | 10 G      |         | 1.4     | 4   | POLAND. ML 3.3 (CLL).  |  |
| 21 | 19 26 38.5 | 43.120 N   | 146.817 E | 33 N      | 4.6     | 0.8     | 20  | KURIL ISLANDS  |  |
| 21 | 19 45 16.1 | 37.616 N   | 118.883 W | 5         |         | 35      | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.1 (GM). ML 3.0 (BRK), 2.9 (GS). |  |  |
| 21 | 20 07 13.7 | 44.514 N   | 6.816 E   | 5 G       |         | 0.4     | 9   | FRANCE. ML 2.0 (GEN).  |  |
| 21 | 20 34 50.3 | 26.877 S   | 26.831 E  | 5 G       |         | 0.4     | 7   | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).                                  |  |
| 21 | 20 36 23.9 | 50.29 N    | 18.80 E   | 10 G      |         | 0.3     | 4   | POLAND   |  |
| 21 | 20 43 11.3 | 18.84 S    | 71.96 W   | 33 N      | 4.8     | 0.9     | 5   | OFF COAST OF NORTHERN CHILE  |  |
| 21 | 21 21 01.4 | 8.699 N    | 140.835 E | 33 N      | 5.1 4.6 | 1.3     | 44  | WESTERN CAROLINE ISLANDS   |  |
| 21 | 21 34 41.1 | 43.691 N   | 148.098 E | 91 ?      | 4.6     | 0.9     | 17  | EAST OF KURIL ISLANDS  |  |
| 21 | 21 53 30.3 | 37.613 N   | 118.882 W | 4         |         | 43      | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.3 (GM). ML 3.2 (BRK), 3.2 (GS). |  |  |
| 21 | 22 20 31.6 | 50.607 N   | 158.404 E | 62 D      | 4.8     | 0.9     | 113   | EAST OF KURIL ISLANDS  |  |
| 21 | 22 56 23.0 | 26.385 S   | 27.399 E  | 5 G       |         | 0.6     | 9   | REPUBLIC OF SOUTH AFRICA. ML 2.6 (PRE).                                  |  |
| 21 | 23 20 13.4 | 59.984 N   | 151.832 W | 51        |         | 55      | KENAI PENINSULA, ALASKA. <AEIC>. ML 3.1 (AEIC).                               |  |  |
| 21 | 23 30 13.3 | 37.615 N   | 118.882 W | 5         |         | 6       | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.8 (GM). ML 2.7 (GS).            |  |  |
| 22 | 00 11 44.0 | 36.63 N    | 2.99 W    | 10 G      |         | 1.3     | 5   | STRAIT OF GIBRALTAR. mbLg 2.8 (MDD).                                     |  |
| 22 | 01 01 56.2 | 43.086 N   | 3.268 E   | 10 G      |         | 0.8     | 21  | NEAR SOUTH COAST OF FRANCE. ML 3.2 (LDG).                                |  |
| 22 | 02 38 55.6 | 60.122 N   | 148.357 W | 18        |         | 60      | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.8 (AEIC).                               |  |  |
| a  | 22         | 03 16 53.1 | 7.772 N   | 127.562 E | 33 N    | 5.1     | 1.0   | 51   | PHILIPPINE ISLANDS REGION. Mw 5.1 (HRV). |
| 22 | 04 04 50.6 | 14.019 N   | 93.585 W  | 10 G      | 4.5     | 1.0     | 9   | NEAR COAST OF CHIAPAS, MEXICO. MD 4.5 (GCG).                             |  |
| 22 | 05 00 10.3 | 38.739 N   | 119.702 W | 1         |         |         | 34  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM).                    |  |
| 22 | 05 04 35.8 | 26.339 S   | 27.516 E  | 5 G       |         | 0.8     | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.4 (PRE).                                  |  |
| 22 | 05 06 44.9 | 60.289 N   | 152.365 W | 90        |         | 47      | SOUTHERN ALASKA. <AEIC>.  |  |  |
| 22 | 05 16 05.8 | 11.095 S   | 113.516 E | 33 N      | 4.5     | 0.9     | 5   | SOUTH OF JAWA, INDONESIA   |  |
| 22 | 05 54 02.2 | 11.251 S   | 118.312 E | 33 N      | 4.7     | 1.3     | 8   | SOUTH OF SUMBAWA, INDONESIA  |  |
| 22 | 05 54 38.1 | 12.52 S    | 77.00 W   | 33 N      |         | 0.5     | 4   | NEAR COAST OF PERU. Felt at Lima and Pucusana.                           |  |
| 22 | 06 21 55.3 | 31.76 S    | 68.88 W   | 100 G     |         | 0.1     | 5   | SAN JUAN PROVINCE, ARGENTINA   |  |
| 22 | 07 33 51.5 | 31.74 S    | 179.45 E  | 442 *     | 4.3     | 0.4     | 6   | KERMADEC ISLANDS REGION  |  |
| 22 | 07 36 40.8 | 37.465 N   | 6.229 W   | 10 G      |         | 0.8     | 8   | SPAIN. mbLg 3.1 (MDD).   |  |
| 22 | 08 08 51.3 | 54.95 N    | 156.73 W  | 33 N      | 3.9     | 1.3     | 13  | SOUTH OF ALASKA  |  |
| 22 | 08 38 55.7 | 47.726 N   | 13.514 E  | 5 G       |         | 0.5     | 14  | AUSTRIA. ML 3.1 (VIE), 2.7 (FUR).  |  |
| 22 | 09 11 10.6 | 41.656 N   | 120.336 E | 33 N      | 4.5     | 0.8     | 53  | NORTHEASTERN CHINA   |  |
| 22 | 09 35 22.9 | 35.587 N   | 80.573 E  | 33 N      | 4.6     | 1.2     | 23  | KASHMIR-XIZANG BORDER REGION   |  |
| 22 | 10 01 31.9 | 38.12 N    | 28.87 E   | 5 G       |         | 0.4     | 4   | TURKEY. ML 2.9 (ISK).  |  |
| 22 | 10 06 10.7 | 39.72 N    | 29.40 E   | 10 G      |         | 0.1     | 4   | TURKEY. ML 2.6 (ISK).  |  |
| 22 | 10 11 15.9 | 46.490 N   | 5.451 E   | 10 G      |         | 0.3     | 6   | FRANCE. ML 2.0 (LDG).  |  |
| 22 | 10 13 53.9 | 59.483 N   | 152.820 W | 79        |         | 51      | SOUTHERN ALASKA. <AEIC>.  |  |  |
| 22 | 10 19 33.7 | 5.19 S     | 102.86 E  | 87 ?      | 4.4     | 0.5     | 9   | SOUTHERN SUMATERA, INDONESIA   |  |
| 22 | 10 36 42.6 | 39.65 N    | 29.45 E   | 10 G      |         | 0.5     | 4   | TURKEY. ML 2.6 (ISK).  |  |
| 22 | 10 45 24.6 | 26.320 S   | 27.613 E  | 5 G       |         | 1.1     | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.3 (PRE).                                  |  |
| 22 | 12 21 44.5 | 62.532 N   | 149.264 W | 61        |         | 73      | CENTRAL ALASKA. <AEIC>. ML 2.8 (AEIC), 3.1 (PMR).                             |  |  |
| 22 | 12 54 17.8 | 39.70 N    | 29.61 E   | 5 G       |         | 0.9     | 4   | TURKEY. ML 2.6 (ISK).  |  |
| 22 | 13 51 38.2 | 26.384 S   | 27.467 E  | 5 G       |         | 0.7     | 7   | REPUBLIC OF SOUTH AFRICA. ML 2.3 (PRE).                                  |  |
| 22 | 14 26 38.6 | 32.287 N   | 115.122 W | 6 G       |         | 26      | CALIF.-BAJA CALIF. BORDER REGION. <PAS-P>. ML 2.8 (PAS).                      |  |  |
| 22 | 14 29 10.1 | 44.281 N   | 7.404 E   | 10 G      |         | 0.4     | 7   | NORTHERN ITALY. ML 1.9 (GEN).  |  |
| 22 | 14 46 32.8 | 38.630 N   | 119.677 W | 0 G       |         | 43      | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.0 (GM).                         |  |  |
| 22 | 14 50 10.1 | 37.18 N    | 3.76 W    | 10 G      |         | 0.3     | 4   | SPAIN. mbLg 2.0 (MDD).   |  |
| 22 | 15 23 38.5 | 28.649 N   | 142.455 E | 33 N      | 4.9 4.5 | 1.1     | 32  | BONIN ISLANDS REGION   |  |
| 22 | 15 39 47.9 | 16.01 N    | 94.39 W   | 33 N      |         | 0.9     | 4   | OAXACA, MEXICO   |  |
| 22 | 15 42 18.8 | 33.087 S   | 70.401 W  | 102 *     |         | 0.5     | 15  | CHILE-ARGENTINA BORDER REGION. MD 4.1 (SAN). Felt at Santiago, Chile.    |  |

|    |    |    |       |        |        |         |         |     |    |         |         |     |   |                                      |
|----|----|----|-------|--------|--------|---------|---------|-----|----|---------|---------|-----|---|--------------------------------------|
| 22 | 16 | 05 | 02.6* | 3.478  | S      | 152.453 | E       | 10  | G  | 4.1     | 1.0     | 5   | NEW IRELAND REGION, P.N.G.  |                                      |
| 22 | 16 | 09 | 49.0? | 44.90  | N      | 6.30    | E       | 5   | G  |         | 0.5     | 5   | FRANCE. ML 2.2 (GEN).   |                                      |
| 22 | 16 | 42 | 57.7& | 32.402 | N      | 115.142 | W       | 11  |    |         |         | 4   | CALIF.-BAJA CALIF. BORDER REGION. <ECX-P>. MD 3.2 (ECX). ML 2.8 (PAS).  |                                      |
| 22 | 17 | 33 | 14.2* | 44.368 | N      | 7.297   | E       | 10  | G  |         | 0.3     | 7   | NORTHERN ITALY. ML 2.1 (GEN).   |                                      |
| 22 | 17 | 45 | 14.2* | 44.640 | N      | 6.783   | E       | 10  | G  |         | 0.3     | 6   | FRANCE. ML 1.9 (GEN).   |                                      |
| 22 | 18 | 21 | 51.5& | 63.430 | N      | 151.015 | W       | 11  |    |         |         | 36  | CENTRAL ALASKA. <AEIC>. ML 2.7 (AEIC), 2.8 (PMR).   |                                      |
| 22 | 18 | 35 | 09.4* | 44.392 | N      | 7.334   | E       | 5   | G  |         | 0.2     | 5   | NORTHERN ITALY. ML 1.8 (GEN).   |                                      |
| a  | 22 | 18 | 43    | 49.3   | 0.578  | S       | 127.721 | E   | 33 | N       | 4.9 4.4 | 1.2 | 34  | HALMAHERA, INDONESIA. Mw 5.2 (HRV).  |
| 22 | 18 | 47 | 47.4* | 44.403 | N      | 7.332   | E       | 10  | G  |         | 0.2     | 7   | NORTHERN ITALY. ML 2.0 (GEN).   |                                      |
| 22 | 18 | 58 | 40.7  | 45.752 | N      | 5.977   | E       | 6   |    |         | 0.7     | 19  | FRANCE. ML 2.7 (LDG).   |                                      |
| 22 | 19 | 07 | 56.4* | 39.123 | N      | 27.683  | E       | 10  | G  |         | 0.6     | 5   | TURKEY. ML 2.9 (ISK).   |                                      |
| 22 | 20 | 01 | 27.6  | 8.582  | N      | 141.117 | E       | 33  | N  | 4.9 4.5 | 1.3     | 24  | WESTERN CAROLINE ISLANDS  |                                      |
| 22 | 20 | 35 | 32.5? | 38.45  | N      | 28.05   | E       | 10  | G  |         | 0.3     | 4   | TURKEY. ML 2.8 (ISK).   |                                      |
| 22 | 20 | 38 | 28.4* | 6.228  | S      | 150.585 | E       | 66  | *  | 3.8     | 1.0     | 8   | NEW BRITAIN REGION, P.N.G.  |                                      |
| 22 | 20 | 39 | 24.2* | 39.066 | N      | 27.797  | E       | 10  | G  |         | 0.6     | 10  | TURKEY. ML 3.2 (ISK).   |                                      |
| 22 | 20 | 40 | 20.4* | 39.028 | N      | 27.848  | E       | 10  | G  |         | 0.7     | 6   | TURKEY. ML 3.3 (ISK).   |                                      |
| 22 | 20 | 47 | 30.6* | 39.015 | N      | 27.837  | E       | 5   | G  |         | 0.2     | 5   | TURKEY. ML 2.9 (ISK).   |                                      |
| 22 | 21 | 04 | 26.6  | 44.053 | N      | 7.186   | E       | 5   | G  |         | 0.5     | 20  | NORTHERN ITALY. ML 2.3 (GEN), 1.9 (LDG).  |                                      |
| 22 | 21 | 05 | 13.3* | 39.043 | N      | 27.737  | E       | 10  | G  |         | 0.6     | 7   | TURKEY. ML 3.0 (ISK).   |                                      |
| 22 | 21 | 21 | 51.0* | 39.024 | N      | 27.766  | E       | 10  | G  |         | 0.3     | 6   | TURKEY. ML 2.9 (ISK).   |                                      |
| 22 | 22 | 19 | 48.6  | 39.042 | N      | 27.872  | E       | 10  | G  |         | 0.5     | 26  | TURKEY. ML 3.9 (ISK). MD 3.8 (ATH). Felt at Izmir.  |                                      |
| 22 | 22 | 31 | 13.4* | 39.059 | N      | 27.758  | E       | 10  | G  |         | 0.8     | 5   | TURKEY. ML 2.9 (ISK).   |                                      |
| 22 | 22 | 43 | 43.4* | 51.089 | N      | 178.028 | E       | 33  | N  | 4.0     | 1.2     | 21  | RAT ISLANDS, ALEUTIAN ISLANDS. ML 4.1 (PMR).  |                                      |
| 22 | 23 | 21 | 04.3? | 8.28   | S      | 114.90  | E       | 178 | *  | 4.5     | 0.8     | 7   | BALI REGION, INDONESIA  |                                      |
| 22 | 23 | 29 | 49.0  | 58.398 | N      | 150.601 | W       | 10  | G  |         | 0.8     | 55  | GULF OF ALASKA. ML 3.0 (AEIC).  |                                      |
| 22 | 23 | 37 | 27.3? | 33.86  | S      | 178.54  | W       | 33  | N  | 4.1     | 0.6     | 6   | SOUTH OF KERMADEC ISLANDS   |                                      |
| 22 | 23 | 56 | 05.2* | 39.019 | N      | 27.808  | E       | 10  | G  |         | 0.6     | 7   | TURKEY. ML 3.1 (ISK).   |                                      |
| 23 | 00 | 11 | 32.7* | 39.130 | N      | 27.614  | E       | 10  | G  |         | 0.3     | 5   | TURKEY. ML 2.9 (ISK).   |                                      |
| 23 | 00 | 14 | 39.9* | 43.790 | N      | 146.400 | E       | 33  | N  | 4.6     | 1.1     | 25  | KURIL ISLANDS   |                                      |
| 23 | 00 | 46 | 23.4* | 39.109 | N      | 27.734  | E       | 10  | G  |         | 0.4     | 5   | TURKEY. ML 2.9 (ISK).   |                                      |
| 23 | 01 | 01 | 39.9  | 43.446 | N      | 146.951 | E       | 39  | D  | 5.0     | 0.9     | 107 | KURIL ISLANDS   |                                      |
| 23 | 01 | 33 | 35.5& | 38.797 | N      | 119.618 | W       | 9   |    |         |         | 6   | CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.1 (BRK). MD 2.9 (GM).  |                                      |
| 23 | 02 | 05 | 42.5& | 59.983 | N      | 152.676 | W       | 90  |    | 4.2     |         | 110 | SOUTHERN ALASKA. <AEIC>.  |                                      |
| 23 | 02 | 18 | 10.3& | 62.886 | N      | 151.122 | W       | 108 |    |         |         | 42  | CENTRAL ALASKA. <AEIC>.   |                                      |
| 23 | 02 | 39 | 17.3* | 17.464 | N      | 94.283  | W       | 148 | *  | 3.6     | 1.1     | 12  | CHIAPAS, MEXICO   |                                      |
| 23 | 03 | 34 | 07.9  | 12.983 | N      | 145.427 | E       | 33  | N  | 4.2     | 0.7     | 16  | SOUTH OF MARIANA ISLANDS  |                                      |
| 23 | 03 | 34 | 28.8& | 40.229 | N      | 125.389 | W       | 19  |    |         |         | 25  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.2 (GM).  |                                      |
| 23 | 03 | 51 | 35.8* | 12.387 | N      | 125.493 | E       | 43  | ?  | 4.7     | 1.4     | 16  | SAMAR, PHILIPPINE ISLANDS   |                                      |
| 23 | 04 | 19 | 48.4* | 40.655 | N      | 30.453  | E       | 5   | G  |         | 0.8     | 8   | TURKEY. ML 2.8 (ISK).   |                                      |
| 23 | 04 | 25 | 48.7& | 66.164 | N      | 149.324 | W       | 10  | G  |         |         | 39  | NORTHERN ALASKA. <AEIC>. ML 3.6 (AEIC), 3.9 (PMR).  |                                      |
| 23 | 04 | 31 | 45.4? | 45.55  | N      | 14.38   | E       | 10  | G  |         | 0.2     | 4   | NORTHWESTERN BALKAN REGION. MD 2.3 (LJU), 2.1 (TRI).  |                                      |
| 23 | 05 | 08 | 52.5* | 44.372 | N      | 7.371   | E       | 10  | G  |         | 0.3     | 7   | NORTHERN ITALY. ML 1.8 (GEN).   |                                      |
| 23 | 05 | 41 | 47.1* | 31.397 | S      | 68.609  | W       | 100 | G  |         | 0.6     | 5   | SAN JUAN PROVINCE, ARGENTINA  |                                      |
| 23 | 06 | 16 | 14.1  | 32.176 | S      | 71.569  | W       | 10  | G  |         | 0.4     | 13  | NEAR COAST OF CENTRAL CHILE. MD 4.0 (SAN).  |                                      |
| 23 | 06 | 22 | 26.3  | 43.760 | N      | 147.400 | E       | 33  | N  | 4.7     | 0.8     | 35  | KURIL ISLANDS   |                                      |
| 23 | 07 | 36 | 30.2? | 19.18  | N      | 145.78  | E       | 33  | N  | 4.9     | 0.3     | 6   | MARIANA ISLANDS   |                                      |
| 23 | 07 | 52 | 37.7? | 40.18  | N      | 31.15   | E       | 10  | G  |         | 1.0     | 6   | TURKEY. ML 2.8 (ISK).   |                                      |
| 23 | 07 | 57 | 42.0  | 43.294 | N      | 146.864 | E       | 43  | D  | 5.2     | 0.8     | 201 | KURIL ISLANDS   |                                      |
| 23 | 08 | 07 | 01.1* | 45.089 | N      | 6.718   | E       | 5   | G  |         | 0.3     | 5   | FRANCE. ML 2.1 (GEN).   |                                      |
| 23 | 08 | 10 | 23.2? | 35.89  | S      | 70.12   | W       | 148 | *  |         | 1.0     | 20  | CHILE-ARGENTINA BORDER REGION. MD 4.0 (SAN).  |                                      |
| 23 | 08 | 46 | 45.9  | 32.021 | S      | 71.081  | W       | 61  | ?  |         | 0.3     | 13  | NEAR COAST OF CENTRAL CHILE. MD 3.8 (SAN).  |                                      |
| 23 | 08 | 47 | 58.8? | 43.46  | N      | 18.82   | E       | 10  | G  |         | 0.7     | 9   | NORTHWESTERN BALKAN REGION. ML 2.2 (TTG).   |                                      |
| 23 | 09 | 05 | 20.4& | 40.383 | N      | 125.471 | W       | 23  |    |         |         | 42  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.2 (GM). ML 2.8 (GS).   |                                      |
| 23 | 09 | 17 | 47.4? | 9.15   | S      | 129.98  | E       | 265 | ?  | 4.3     | 0.2     | 5   | TIMOR SEA   |                                      |
| 23 | 09 | 26 | 43.8? | 39.71  | N      | 29.50   | E       | 5   | G  |         | 0.1     | 4   | TURKEY. ML 2.6 (ISK).   |                                      |
| 23 | 09 | 35 | 05.7  | 41.825 | N      | 20.073  | E       | 10  | G  |         | 0.4     | 13  | ALBANIA. ML 2.1 (TIR).  |                                      |
| 23 | 10 | 03 | 08.5? | 5.57   | S      | 145.57  | E       | 10  | G  |         | 1.3     | 4   | EASTERN NEW GUINEA REG., P.N.G.   |                                      |
| 23 | 11 | 10 | 54.0* | 43.205 | N      | 146.847 | E       | 33  | N  | 4.6     | 0.6     | 13  | KURIL ISLANDS   |                                      |
| 23 | 12 | 06 | 40.6* | 39.693 | N      | 29.456  | E       | 10  | G  |         | 0.5     | 5   | TURKEY  |                                      |
| 23 | 12 | 15 | 17.2& | 62.294 | N      | 148.859 | W       | 47  |    |         |         | 48  | CENTRAL ALASKA. <AEIC>. ML 2.6 (AEIC).  |                                      |
| 23 | 12 | 38 | 54.6  | 45.609 | N      | 26.488  | E       | 157 | *  | 3.2     | 0.7     | 14  | ROMANIA   |                                      |
| 23 | 15 | 36 | 36.3  | 42.791 | S      | 83.379  | W       | 10  | G  | 5.1 4.8 | 0.7     | 24  | WEST CHILE RISE   |                                      |
| 23 | 15 | 42 | 26.6  | 12.080 | N      | 87.841  | W       | 70  | *  | 4.7     | 0.8     | 48  | NEAR COAST OF NICARAGUA. MD 4.7 (UPA).  |                                      |
| 23 | 16 | 18 | 59.7* | 33.683 | S      | 70.400  | W       | 10  | G  |         | 0.2     | 6   | CHILE-ARGENTINA BORDER REGION   |                                      |
| 23 | 16 | 20 | 37.2* | 12.133 | N      | 87.763  | W       | 65  | ?  | 4.6 3.9 | 0.9     | 41  | NEAR COAST OF NICARAGUA   |                                      |
| 23 | 16 | 51 | 45.0? | 45.63  | N      | 3.65    | E       | 10  | G  |         | 0.5     | 6   | FRANCE. ML 2.0 (LDG).   |                                      |
| 23 | 17 | 51 | 12.6  | 43.414 | N      | 18.838  | E       | 10  | G  |         | 0.7     | 10  | NORTHWESTERN BALKAN REGION. ML 2.0 (TTG).   |                                      |
| 23 | 17 | 54 | 13.0? | 13.01  | N      | 145.32  | E       | 54  | ?  | 4.0     | 0.7     | 11  | MARIANA ISLANDS   |                                      |
| 23 | 18 | 05 | 07.1& | 35.832 | N      | 116.874 | W       | 0   |    |         |         | 18  | CENTRAL CALIFORNIA. <PAS-P>. ML 3.1 (PAS), 2.8 (GS).  |                                      |
| 23 | 18 | 26 | 46.0? | 37.18  | N      | 28.07   | E       | 10  | G  |         | 0.4     | 4   | TURKEY. ML 3.2 (ISK).   |                                      |
| 23 | 19 | 23 | 08.2  | 45.561 | N      | 26.487  | E       | 156 | *  | 3.3     | 0.7     | 14  | ROMANIA   |                                      |
| 23 | 19 | 32 | 08.2  | 11.767 | N      | 60.295  | W       | 51  | ?  |         | 0.7     | 18  | WINDWARD ISLANDS. MD 3.6 (TRN).   |                                      |
| 23 | 20 | 34 | 25.0& | 36.892 | N      | 121.628 | W       | 7   |    |         |         | 57  | CENTRAL CALIFORNIA. <GM-P>. MD 3.1 (GM).  |                                      |
| 23 | 21 | 02 | 43.6& | 50.429 | N      | 130.112 | W       | 10  | G  |         |         | 48  | VANCOUVER ISLAND REGION. <PGC-P>. ML 3.6 (PGC).   |                                      |
| 23 | 21 | 04 | 06.5  | 43.175 | N      | 0.943   | W       | 10  | G  |         | 1.2     | 7   | PYRENEES. ML 2.6 (LDG). mbLg 2.9 (MDD).   |                                      |
| 23 | 21 | 35 | 39.4  | 20.540 | N      | 122.260 | E       | 200 |    | 4.8     | 0.9     | 85  | PHILIPPINE ISLANDS REGION   |                                      |
| 23 | 22 | 23 | 52.5  | 45.669 | N      | 6.866   | E       | 5   | G  |         | 0.7     | 24  | FRANCE. ML 2.5 (GEN), 2.5 (LDG).  |                                      |
| 23 | 22 | 40 | 56.3* | 6.922  | S      | 129.358 | E       | 153 | *  | 4.6     | 1.1     | 14  | BANDA SEA   |                                      |
| a  | 24 | 00 | 24    | 46.5   | 43.259 | N       | 148.037 | E   | 45 | D       | 5.3     | 0.8 | 160   | EAST OF KURIL ISLANDS. Mw 5.3 (HRV). |
| 24 | 00 | 44 | 31.4* | 44.949 | N      | 6.603   | E       | 5   | G  |         | 0.4     | 6   | FRANCE. ML 2.1 (GEN).   |                                      |
| 24 | 00 | 50 | 28.2* | 15.700 | S      | 173.196 | W       | 36  | D  | 4.7     | 0.9     | 44  | TONGA ISLANDS   |                                      |
| 24 | 01 | 06 | 07.5? | 6.44   | S      | 130.19  | E       | 107 | ?  | 4.5     | 1.0     | 5   | BANDA SEA   |                                      |
| 24 | 01 | 20 | 35.1& | 40.422 | N      | 125.428 | W       | 26  |    |         |         | 46  | OFF COAST OF NORTHERN CALIFORNIA. <GM-P>. MD 3.4 (GM). ML 3.1 (GS).   |                                      |
| 24 | 01 | 38 | 21.0* | 31.877 | S      | 70.691  | W       | 100 | G  |         | 0.5     | 12  | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |                                      |
| 24 | 01 | 39 | 51.8* | 40.849 | N      | 27.791  | E       | 5   | G  |         | 0.5     | 7   | TURKEY. ML 2.7 (ISK).   |                                      |
| 24 | 01 | 59 | 30.2& | 37.725 | N      | 122.138 | W       | 1   |    |         |         | 33  | CENTRAL CALIFORNIA. <BRK>. ML 2.6 (BRK), 2.8 (GS). MD 2.8 (GM). Felt at Castro Valley, Hayward and San Leandro. |                                      |
| 24 | 02 | 00 | 06.7* | 51.087 | N      | 176.195 | W       | 33  | N  | 4.7     | 1.3     | 19  | ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.5 (PMR).   |                                      |

|   |    |             |          |           |       |         |     |     |   |
|---|----|-------------|----------|-----------|-------|---------|-----|-----|---|
| a | 24 | 02 02 20.9  | 4.594 N  | 127.991 E | 69 *  | 5.2     | 1.1 | 83  | TALAUD ISLANDS, INDONESIA. Mw 5.1 (HRV).  |
|   | 24 | 02 05 22.3* | 33.118 S | 71.572 W  | 10 G  |         | 0.5 | 9   | NEAR COAST OF CENTRAL CHILE. MD 3.4 (SAN).  |
|   | 24 | 02 51 02.2* | 34.943 N | 135.301 E | 5 G   | 3.6     | 0.5 | 10  | NEAR S. COAST OF WESTERN HONSHU. Felt (III JMA) at Kyoto and (II JMA) at Osaka.   |
|   | 24 | 02 52 37.6* | 35.831 N | 116.870 W | 7     |         |     | 43  | CENTRAL CALIFORNIA. <PAS-P>. ML 3.4 (PAS), 3.4 (GS).  |
|   | 24 | 03 01 00.8* | 36.982 N | 3.720 W   | 10 G  |         | 0.8 | 9   | STRAIT OF GIBRALTAR. mbLg 3.3 (MDD).  |
|   | 24 | 03 17 02.9* | 35.513 N | 117.494 W | 3     |         |     | 35  | CENTRAL CALIFORNIA. <PAS-P>. ML 3.0 (PAS), 3.0 (GS).  |
|   | 24 | 04 04 37.8  | 52.375 N | 160.059 E | 33 N  | 5.2     | 0.9 | 171 | OFF EAST COAST OF KAMCHATKA. Felt (III) at Petropavlovsk-Kamchatskiy.   |
| a | 24 | 04 44 34.6* | 16.728 S | 172.835 W | 33 N  | 4.7 4.7 | 1.2 | 49  | SAMOA ISLANDS REGION. Mw 5.4 (HRV).   |
|   | 24 | 04 58 16.2* | 61.212 N | 151.275 W | 62    |         |     | 51  | SOUTHERN ALASKA. <AEIC>. ML 2.7 (AEIC).   |
|   | 24 | 05 36 40.7* | 6.37 S   | 129.90 E  | 82 ?  | 3.3     | 0.9 | 5   | BANDA SEA   |
|   | 24 | 06 17 28.3* | 13.680 N | 124.738 E | 43 ?  | 4.7     | 1.4 | 18  | LUZON, PHILIPPINE ISLANDS   |
|   | 24 | 07 20 08.1  | 43.708 N | 147.353 E | 33 N  | 4.8     | 0.9 | 58  | KURIL ISLANDS. Felt (IV) on Shikotan.   |
|   | 24 | 08 56 57.0* | 26.871 S | 26.708 E  | 5 G   |         | 0.7 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.3 (PRE).   |
|   | 24 | 09 01 23.2* | 44.717 N | 10.364 E  | 10 G  |         | 0.7 | 10  | NORTHERN ITALY  |
|   | 24 | 09 26 47.4* | 40.58 N  | 30.56 E   | 10 G  |         | 0.7 | 7   | TURKEY. ML 2.7 (ISK).   |
|   | 24 | 10 03 21.9* | 39.10 N  | 27.67 E   | 10 G  |         | 0.1 | 4   | TURKEY. ML 2.8 (ISK).   |
|   | 24 | 10 15 11.1* | 39.670 N | 29.461 E  | 5 G   |         | 0.5 | 6   | TURKEY. ML 2.7 (ISK).   |
|   | 24 | 10 17 02.7* | 39.668 N | 29.494 E  | 10 G  |         | 0.3 | 7   | TURKEY. ML 2.8 (ISK).   |
|   | 24 | 10 43 59.5* | 26.806 S | 26.778 E  | 5 G   |         | 1.0 | 7   | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).   |
|   | 24 | 10 55 03.5* | 37.55 N  | 25.31 W   | 5 G   |         | 0.3 | 4   | AZORES ISLANDS  |
|   | 24 | 11 34 04.4* | 39.021 N | 27.788 E  | 5 G   |         | 0.3 | 5   | TURKEY. ML 2.9 (ISK).   |
|   | 24 | 11 39 03.6* | 39.688 N | 29.436 E  | 5 G   |         | 0.7 | 5   | TURKEY. ML 2.8 (ISK).   |
|   | 24 | 11 44 55.3  | 47.780 N | 7.945 E   | 5 G   |         | 0.7 | 12  | SWITZERLAND. ML 2.3 (LDG).  |
|   | 24 | 11 45 09.8* | 35.52 S  | 71.26 W   | 120 G |         | 0.4 | 12  | CENTRAL CHILE. MD 4.1 (SAN).  |
|   | 24 | 12 17 00.0  | 12.684 N | 60.716 W  | 87 *  |         | 0.6 | 18  | WINDWARD ISLANDS. MD 3.8 (TRN).   |
|   | 24 | 12 41 25.3* | 39.659 N | 29.412 E  | 5 G   |         | 0.7 | 5   | TURKEY. ML 2.7 (ISK).   |
|   | 24 | 12 59 03.8* | 7.39 S   | 129.33 E  | 119 ? | 4.4     | 1.4 | 6   | BANDA SEA   |
|   | 24 | 14 03 45.1* | 22.73 S  | 68.94 W   | 33 N  | 4.8     | 1.5 | 7   | NORTHERN CHILE  |
|   | 24 | 14 30 52.1* | 33.018 S | 69.821 W  | 130 G |         | 0.2 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |
|   | 24 | 14 31 01.4* | 14.64 N  | 61.09 W   | 33 N  |         | 0.1 | 4   | WINDWARD ISLANDS. MG 1.3 (FDF).   |
|   | 24 | 14 59 52.1* | 37.728 N | 21.230 E  | 10 G  |         | 0.2 | 5   | SOUTHERN GREECE. ML 3.4 (ATH).  |
|   | 24 | 15 17 56.0* | 34.265 N | 116.458 W | 0     |         |     | 30  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS), 3.1 (GS). Felt in the Joshua Tree area.   |
|   | 24 | 16 06 37.0* | 27.168 N | 92.361 E  | 33 N  | 4.2     | 0.5 | 6   | EASTERN XIZANG-INDIA BORDER REG.  |
|   | 24 | 16 20 16.8* | 31.326 S | 68.300 W  | 111 * |         | 1.1 | 17  | SAN JUAN PROVINCE, ARGENTINA. MD 4.2 (SAN).   |
|   | 24 | 17 01 42.9  | 54.998 N | 156.865 W | 33 N  | 5.0 4.5 | 0.9 | 145 | SOUTH OF ALASKA. ML 4.9 (PMR).  |
|   | 24 | 17 09 05.8  | 54.986 N | 156.807 W | 33 N  | 4.3     | 1.0 | 47  | SOUTH OF ALASKA. ML 3.9 (AEIC).   |
|   | 24 | 17 29 58.8  | 38.849 N | 119.664 W | 5 G   |         | 0.6 | 10  | CALIFORNIA-NEVADA BORDER REGION. MD 2.9 (GM).   |
|   | 24 | 17 33 54.5* | 57.636 N | 152.757 W | 55    |         |     | 41  | KODIAK ISLAND REGION. <AEIC>. ML 2.9 (AEIC).  |
|   | 24 | 18 38 20.8* | 38.77 N  | 20.89 E   | 10 G  |         | 0.4 | 4   | GREECE. MD 2.9 (ATH).   |
| a | 24 | 19 26 27.9  | 43.084 N | 147.096 E | 57 D  | 5.7     | 0.7 | 351 | KURIL ISLANDS. Mw 5.4 (HRV).  |
|   | 24 | 19 30 32.9  | 38.462 N | 21.397 E  | 10 G  | 3.6     | 1.0 | 13  | GREECE. MD 3.5 (ATH). ML 3.5 (TIR).   |
|   | 24 | 19 48 34.8* | 43.242 N | 147.231 E | 33 N  | 4.6     | 1.3 | 13  | KURIL ISLANDS   |
|   | 24 | 20 01 54.2* | 39.417 N | 28.152 E  | 10 G  |         | 0.6 | 5   | TURKEY. ML 2.8 (ISK).   |
|   | 24 | 20 28 34.4* | 33.531 S | 70.826 W  | 70 G  |         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.5 (SAN).  |
|   | 24 | 20 37 18.5  | 9.970 N  | 62.470 W  | 34 *  | 3.9     | 1.2 | 30  | NEAR COAST OF VENEZUELA. Felt at Puerto Ordaz and San Felix.  |
|   | 24 | 21 20 24.3* | 35.512 N | 117.495 W | 3     |         |     | 33  | CENTRAL CALIFORNIA. <PAS-P>. ML 3.0 (PAS), 3.0 (GS).  |
|   | 24 | 22 49 24.0* | 59.535 N | 152.809 W | 107   |         |     | 62  | SOUTHERN ALASKA. <AEIC>.  |
|   | 24 | 23 22 48.2  | 45.864 N | 11.203 E  | 18    |         | 1.1 | 74  | NORTHERN ITALY. ML 4.3 (VIE), 4.3 (FUR), 4.1 (LDG), 4.1 (MOX), 3.9 (STR). MD 3.9 (FIR), 3.8 (TRI).  |
|   | 24 | 23 58 26.7* | 32.736 S | 71.705 W  | 10 G  |         | 0.4 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.5 (SAN).  |
|   | 25 | 00 42 29.3  | 47.623 N | 8.347 E   | 10 G  |         | 1.2 | 10  | SWITZERLAND. ML 2.2 (LDG).  |
|   | 25 | 00 46 40.3* | 34.81 S  | 70.94 W   | 120 G |         | 0.2 | 9   | CHILE-ARGENTINA BORDER REGION. MD 3.4 (SAN).  |
|   | 25 | 00 51 09.2  | 25.058 S | 178.489 E | 563 * | 5.0     | 0.9 | 81  | SOUTH OF FIJI ISLANDS   |
| a | 25 | 00 54 34.3  | 36.359 N | 70.957 E  | 239 G | 5.9     | 1.0 | 566 | HINDU KUSH REGION, AFGHANISTAN. Mw 6.0 (GS), 5.9 (HRV). mb 6.2 (BRK). Felt (V) at Termiz, (IV) at Samarqand and (III) at Tashkent, Uzbekistan. Felt at Chitral, Dera Ismail Khan, Islamabad, Multan, Peshawar and Rawalpindi, Pakistan. Also felt at Amritsar, Srinagar and other parts of northern India. Two events about 2.6 seconds apart. Depth from broadband displacement seismograms, based on first event. |
|   | 25 | 01 24 18.7* | 35.378 N | 3.993 W   | 10 G  |         | 1.0 | 9   | STRAIT OF GIBRALTAR. mbLg 3.4 (MDD).  |
|   | 25 | 01 58 17.3* | 46.206 N | 11.321 E  | 10 G  |         | 0.7 | 8   | NORTHERN ITALY. ML 2.5 (VIE).   |
|   | 25 | 02 06 23.9* | 35.648 N | 3.489 W   | 10 G  |         | 0.8 | 5   | STRAIT OF GIBRALTAR   |
|   | 25 | 02 14 11.0* | 37.91 N  | 20.04 E   | 5 G   |         | 1.3 | 12  | IONIAN SEA. MD 3.3 (ATH). ML 2.9 (THE).   |
|   | 25 | 02 34 09.9* | 18.00 S  | 179.77 W  | 570 G | 4.4     | 1.0 | 39  | FIJI ISLANDS REGION   |
|   | 25 | 02 46 41.8* | 59.149 N | 153.654 W | 112   |         |     | 21  | SOUTHERN ALASKA. <AEIC>.  |
| a | 25 | 04 37 45.0  | 1.830 N  | 126.023 E | 41 *  | 5.2 4.7 | 1.1 | 68  | NORTHERN MOLUCCA SEA. Mw 5.5 (HRV).   |
|   | 25 | 05 01 32.0  | 10.440 S | 161.767 E | 51 *  | 4.5     | 0.9 | 15  | SOLOMON ISLANDS. Felt on San Cristobal.   |
|   | 25 | 06 06 18.8  | 35.109 N | 138.942 E | 33 N  | 4.4     | 1.1 | 37  | EASTERN HONSHU, JAPAN   |
|   | 25 | 06 11 52.6* | 44.481 N | 7.264 E   | 10 G  |         | 0.2 | 5   | NORTHERN ITALY. ML 1.9 (GEN).   |
|   | 25 | 06 11 59.5* | 43.314 N | 146.599 E | 33 N  | 4.7     | 0.7 | 25  | KURIL ISLANDS   |
|   | 25 | 06 14 59.5* | 57.215 N | 17.927 E  | 10 G  |         | 0.5 | 5   | BALTIC SEA. ML 2.4 (NAO).   |
|   | 25 | 06 59 52.1* | 7.31 S   | 128.96 E  | 175 ? | 4.5     | 1.9 | 5   | BANDA SEA   |
|   | 25 | 07 18 42.3  | 27.329 N | 129.284 E | 33 N  | 5.0     | 0.9 | 71  | RYUKYU ISLANDS  |
|   | 25 | 07 29 06.1  | 27.136 N | 92.295 E  | 33 N  | 4.9 4.5 | 0.9 | 50  | EASTERN XIZANG-INDIA BORDER REG.  |
|   | 25 | 08 09 24.2* | 12.212 S | 123.691 E | 33 N  | 4.4     | 0.4 | 6   | SOUTH OF TIMOR, INDONESIA   |
|   | 25 | 09 00 19.8* | 33.84 S  | 71.98 W   | 10 G  |         | 0.6 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.5 (SAN).  |
|   | 25 | 09 19 15.6* | 55.900 S | 27.896 W  | 33 N  | 5.2     | 0.7 | 10  | SOUTH SANDWICH ISLANDS REGION   |
|   | 25 | 09 38 00.0* | 38.64 N  | 13.88 W   | 10 G  |         | 0.5 | 12  | NORTH ATLANTIC OCEAN. mbLg 3.0 (MDD).   |
|   | 25 | 09 38 08.3* | 39.94 N  | 30.19 E   | 10 G  |         | 1.5 | 4   | TURKEY. ML 2.6 (ISK).   |
|   | 25 | 09 40 05.7* | 34.266 N | 116.458 W | 1     |         |     | 10  | SOUTHERN CALIFORNIA. <PAS-P>. ML 2.9 (PAS).   |
|   | 25 | 09 47 39.5* | 39.39 N  | 29.81 E   | 10 G  |         | 0.6 | 4   | TURKEY. ML 2.6 (ISK).   |
|   | 25 | 09 48 25.0* | 26.410 S | 27.378 E  | 5 G   |         | 0.9 | 5   | REPUBLIC OF SOUTH AFRICA  |
|   | 25 | 09 51 00.6* | 39.686 N | 29.481 E  | 10 G  |         | 0.5 | 5   | TURKEY. ML 2.7 (ISK).   |
|   | 25 | 10 06 17.3* | 29.19 S  | 68.09 W   | 100 G |         | 1.3 | 7   | SAN JUAN PROVINCE, ARGENTINA  |
|   | 25 | 10 10 17.2* | 39.91 N  | 29.33 E   | 10 G  |         | 0.1 | 4   | TURKEY. ML 2.7 (ISK).   |
|   | 25 | 10 42 44.6* | 39.747 N | 29.414 E  | 10 G  |         | 0.6 | 6   | TURKEY. ML 2.6 (ISK).   |
|   | 25 | 10 53 08.1* | 39.696 N | 29.464 E  | 10 G  |         | 0.3 | 5   | TURKEY. ML 2.7 (ISK).   |

|      |    |    |       |        |   |         |   |     |   |         |     |  |  |
|------|----|----|-------|--------|---|---------|---|-----|---|---------|-----|--|--|
| 25   | 12 | 03 | 32.6% | 39.194 | N | 27.871  | E | 10  | G | 0.5     | 5   | TURKEY. ML 2.7 (ISK).  |  |
| 25   | 12 | 12 | 24.5% | 26.400 | S | 27.338  | E | 5   | G | 0.8     | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.6 (PRE).                          |  |
| 25   | 12 | 20 | 17.7% | 39.08  | N | 27.74   | E | 10  | G | 0.8     | 4   | TURKEY. ML 2.8 (ISK).  |  |
| 25   | 12 | 41 | 18.4% | 26.411 | S | 27.361  | E | 5   | G | 1.0     | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).                          |  |
| 25   | 12 | 48 | 12.1% | 36.196 | N | 120.753 | W | 7   |   |         | 59  | CENTRAL CALIFORNIA. <GM-P>. MD 3.1 (GM). ML 3.0 (GS), 2.9 (PAS). |  |
| 25   | 12 | 58 | 36.9* | 23.154 | N | 99.369  | E | 44  | ? | 4.2     | 0.7 | 6  | MYANMAR-CHINA BORDER REGION  |
| 25   | 13 | 06 | 57.17 | 5.94   | S | 129.71  | E | 91  | ? | 3.9     | 0.1 | 5  | BANDA SEA  |
| a 25 | 13 | 30 | 26.8  | 43.771 | N | 147.698 | E | 35  | D | 5.5 4.8 | 0.8 | 262  | KURIL ISLANDS. Mw 5.4 (HRV).   |
| 25   | 13 | 39 | 19.6% | 36.857 | N | 121.601 | W | 8   |   |         | 13  | CENTRAL CALIFORNIA. <GM-P>. MD 2.6 (GM). ML 2.7 (GS).            |  |
| 25   | 14 | 29 | 37.6% | 40.812 | N | 30.214  | E | 10  | G |         | 0.5 | 6  | TURKEY. ML 2.7 (ISK).  |
| 25   | 14 | 44 | 29.1% | 40.220 | N | 28.800  | E | 10  | G |         | 0.3 | 5  | TURKEY. ML 2.5 (ISK).  |
| 25   | 14 | 59 | 09.6* | 43.337 | N | 17.569  | E | 5   | G |         | 1.2 | 10   | NORTHWESTERN BALKAN REGION. ML 2.4 (TTG).  |
| 25   | 15 | 09 | 38.3  | 46.066 | N | 11.052  | E | 10  | G |         | 1.1 | 23   | NORTHERN ITALY. ML 3.1 (VIE), 2.8 (LDG).   |
| 25   | 15 | 46 | 55.97 | 39.41  | N | 29.56   | E | 10  | G |         | 0.3 | 4  | TURKEY. ML 2.6 (ISK).  |
| 25   | 15 | 56 | 06.7* | 44.708 | N | 129.255 | W | 10  | G | 4.2     | 0.5 | 42   | OFF COAST OF OREGON  |
| 25   | 15 | 59 | 44.0  | 44.563 | N | 129.885 | W | 10  | G | 4.3     | 0.6 | 112  | OFF COAST OF OREGON  |
| 25   | 16 | 05 | 18.2% | 33.156 | S | 70.301  | W | 5   | G |         | 0.4 | 10   | CHILE-ARGENTINA BORDER REGION  |
| 25   | 16 | 29 | 38.2* | 67.012 | N | 21.126  | E | 10  | G |         | 1.4 | 5  | SWEDEN. MD 2.6 (BER).  |
| 25   | 17 | 22 | 15.7* | 66.996 | N | 21.037  | E | 10  | G |         | 1.0 | 6  | SWEDEN. MD 2.8 (BER).  |
| 25   | 17 | 27 | 40.0% | 39.395 | N | 28.219  | E | 10  | G |         | 0.6 | 8  | TURKEY. ML 2.9 (ISK).  |
| 25   | 17 | 32 | 14.77 | 44.13  | N | 147.76  | E | 33  | N | 3.9     | 0.6 | 8  | KURIL ISLANDS  |
| 25   | 17 | 36 | 39.7  | 38.435 | N | 21.274  | E | 5   | G | 3.6     | 0.6 | 6  | GREECE. ML 3.3 (ATH).  |
| 25   | 17 | 45 | 37.87 | 38.19  | N | 21.22   | E | 10  | G |         | 0.7 | 4  | GREECE. MD 3.3 (ATH).  |
| 25   | 17 | 48 | 39.3* | 37.976 | N | 21.200  | E | 10  | G |         | 1.4 | 6  | SOUTHERN GREECE. MD 3.4 (ATH).   |
| 25   | 17 | 51 | 56.6% | 60.193 | N | 153.153 | W | 136 |   |         |     | 57   | SOUTHERN ALASKA. <AEIC>.   |
| 25   | 17 | 55 | 47.6  | 44.835 | N | 117.009 | W | 10  | G |         | 0.6 | 36   | OREGON. ML 3.1 (GS). Felt (III) at Halfway, Oxbow and Richland. Also felt at Brownlee. |
| a 25 | 18 | 50 | 57.7  | 43.234 | N | 147.098 | E | 52  | D | 5.3     | 0.9 | 241  | KURIL ISLANDS. Mw 5.1 (HRV).   |
| 25   | 18 | 53 | 32.2% | 34.097 | S | 70.326  | W | 10  | G |         | 0.2 | 7  | CHILE-ARGENTINA BORDER REGION. MD 3.2 (SAN).   |
| 25   | 20 | 09 | 31.7* | 51.666 | N | 16.166  | E | 10  | G |         | 1.4 | 7  | POLAND. ML 2.5 (MOX).  |
| 25   | 20 | 10 | 00.47 | 30.93  | S | 68.42   | W | 33  | N |         | 0.8 | 5  | SAN JUAN PROVINCE, ARGENTINA   |
| 25   | 20 | 16 | 59.3* | 51.486 | N | 16.140  | E | 10  | G |         | 1.4 | 5  | POLAND. ML 3.4 (MOX).  |
| 25   | 20 | 25 | 20.6% | 38.301 | N | 26.158  | W | 5   | G |         | 0.2 | 7  | AZORES ISLANDS   |
| a 25 | 21 | 00 | 39.9  | 27.523 | S | 63.216  | W | 573 | D | 5.1     | 0.8 | 202  | SANTIAGO DEL ESTERO PROV., ARG. Mw 5.4 (HRV).  |
| 25   | 21 | 36 | 40.7% | 38.804 | N | 119.727 | W | 0   |   |         |     | 10   | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM). ML 2.8 (GS).                     |
| 25   | 22 | 05 | 29.9* | 51.133 | N | 171.024 | W | 33  | N | 4.3     | 0.9 | 23   | FOX ISLANDS, ALEUTIAN ISLANDS  |
| 25   | 22 | 51 | 22.6% | 26.405 | S | 27.388  | E | 5   | G |         | 0.5 | 5  | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).  |
| 25   | 23 | 35 | 42.5* | 35.798 | S | 17.768  | W | 10  | G | 4.9     | 1.3 | 9  | SOUTHERN MID-ATLANTIC RIDGE  |
| 26   | 01 | 08 | 42.27 | 32.63  | S | 71.87   | W | 33  | N |         | 0.4 | 8  | NEAR COAST OF CENTRAL CHILE. MD 3.7 (SAN).   |
| 26   | 01 | 21 | 11.5  | 40.801 | N | 20.884  | E | 5   | G |         | 1.1 | 20   | GREECE-ALBANIA BORDER REGION. MD 3.1 (ATH). ML 3.0 (TTG), 2.7 (TIR).                   |
| 26   | 03 | 13 | 01.5% | 66.773 | N | 134.153 | W | 10  | G |         |     | 3  | NORTHERN YUKON TERRITORY, CANADA. <PGC-P>. ML 3.0 (PGC).                               |
| a 26 | 03 | 22 | 07.77 | 31.81  | S | 69.15   | W | 120 | G |         | 0.3 | 5  | SAN JUAN PROVINCE, ARGENTINA   |
| 26   | 03 | 31 | 16.8* | 27.520 | S | 176.909 | W | 168 | ? | 4.9     | 1.1 | 53   | KERMADEC ISLANDS REGION. Mw 5.4 (HRV).   |
| 26   | 03 | 58 | 35.8* | 37.327 | N | 134.718 | E | 390 | * | 4.3     | 0.6 | 12   | SEA OF JAPAN   |
| 26   | 04 | 48 | 48.6* | 5.278  | S | 101.426 | E | 33  | N | 5.0 4.8 | 0.8 | 25   | SOUTHWEST OF SUMATERA, INDONESIA   |
| 26   | 05 | 58 | 05.5  | 33.541 | S | 71.020  | W | 60  | G |         | 0.2 | 9  | NEAR COAST OF CENTRAL CHILE  |
| 26   | 06 | 19 | 46.07 | 16.75  | N | 62.51   | W | 10  | G |         | 1.5 | 7  | LEEWARD ISLANDS. MD 2.4 (TRN).   |
| 26   | 06 | 36 | 00.5% | 44.732 | N | 7.395   | E | 10  | G |         | 0.6 | 5  | NORTHERN ITALY. ML 1.9 (GEN).  |
| 26   | 06 | 45 | 06.87 | 29.86  | S | 68.10   | W | 100 | G |         | 0.6 | 6  | SAN JUAN PROVINCE, ARGENTINA   |
| 26   | 06 | 51 | 14.1% | 18.461 | N | 67.025  | W | 10  | G |         | 0.4 | 5  | MONA PASSAGE   |
| 26   | 07 | 26 | 09.67 | 28.33  | S | 67.48   | W | 200 | G |         | 0.3 | 7  | LA RIOJA PROVINCE, ARGENTINA   |
| 26   | 07 | 30 | 42.3  | 43.351 | N | 147.149 | E | 33  | N | 4.4     | 1.2 | 24   | KURIL ISLANDS  |
| 26   | 08 | 16 | 14.27 | 31.57  | S | 72.13   | W | 33  | N |         | 1.0 | 4  | OFF COAST OF CENTRAL CHILE   |
| 26   | 08 | 39 | 20.7* | 43.308 | N | 147.372 | E | 33  | N | 4.6     | 1.4 | 24   | KURIL ISLANDS  |
| 26   | 09 | 06 | 57.87 | 7.91   | S | 129.27  | E | 117 | ? | 4.3     | 0.4 | 6  | BANDA SEA  |
| 26   | 09 | 43 | 27.6* | 16.543 | N | 61.032  | W | 28  | * |         | 0.7 | 8  | LEEWARD ISLANDS  |
| 26   | 10 | 00 | 00.2% | 35.053 | N | 117.342 | W | 0   |   |         |     | 10   | CENTRAL CALIFORNIA. <PAS-P>. ML 2.9 (PAS).   |
| 26   | 10 | 00 | 56.37 | 43.22  | N | 147.89  | E | 33  | N | 4.0     | 1.6 | 5  | KURIL ISLANDS  |
| 26   | 10 | 17 | 53.9  | 43.696 | N | 147.632 | E | 33  | N | 4.5     | 1.0 | 12   | KURIL ISLANDS  |
| 26   | 10 | 52 | 00.0% | 39.757 | N | 29.555  | E | 10  | G |         | 0.1 | 5  | TURKEY. ML 2.6 (ISK).  |
| 26   | 11 | 01 | 45.9% | 40.425 | N | 28.450  | E | 10  | G |         | 0.5 | 7  | TURKEY. ML 2.7 (ISK).  |
| 26   | 11 | 05 | 27.0* | 11.359 | S | 118.284 | E | 33  | N | 3.3     | 1.3 | 6  | SOUTH OF SUMBAWA, INDONESIA  |
| 26   | 11 | 46 | 55.07 | 39.72  | N | 29.42   | E | 5   | G |         | 0.1 | 4  | TURKEY. ML 2.7 (ISK).  |
| 26   | 11 | 51 | 10.8% | 16.737 | N | 61.631  | W | 33  | N |         | 0.7 | 5  | LEEWARD ISLANDS. ML 2.2 (FDF).   |
| 26   | 12 | 12 | 21.07 | 29.14  | S | 71.04   | W | 145 | ? |         | 1.1 | 10   | NEAR COAST OF CENTRAL CHILE  |
| 26   | 13 | 12 | 20.6% | 60.311 | N | 151.881 | W | 67  |   |         |     | 62   | KENAI PENINSULA, ALASKA. <AEIC>. ML 2.7 (AEIC).  |
| 26   | 13 | 21 | 22.0  | 32.924 | S | 70.633  | W | 5   | G |         | 0.6 | 10   | CHILE-ARGENTINA BORDER REGION. MD 3.6 (SAN).   |
| a 26 | 13 | 52 | 32.4  | 43.726 | N | 147.353 | E | 33  | D | 5.1     | 0.8 | 174  | KURIL ISLANDS. Mw 5.1 (HRV).   |
| 26   | 13 | 56 | 02.9% | 39.670 | N | 29.571  | E | 10  | G |         | 0.6 | 6  | TURKEY. ML 2.8 (ISK).  |
| 26   | 14 | 44 | 29.27 | 33.55  | S | 179.06  | W | 33  | N | 4.8     | 1.5 | 9  | SOUTH OF KERMADEC ISLANDS  |
| 26   | 15 | 00 | 26.57 | 39.75  | N | 27.91   | E | 10  | G |         | 0.5 | 6  | TURKEY. ML 2.7 (ISK).  |
| 26   | 15 | 22 | 11.17 | 39.29  | N | 29.98   | E | 10  | G |         | 1.0 | 4  | TURKEY. ML 2.6 (ISK).  |
| 26   | 16 | 03 | 37.8* | 7.255  | S | 124.853 | E | 495 | ? | 4.1     | 0.7 | 8  | BANDA SEA  |
| 26   | 16 | 07 | 18.4* | 43.865 | N | 147.476 | E | 40  | * | 4.7     | 0.7 | 58   | KURIL ISLANDS  |
| 26   | 16 | 50 | 31.17 | 34.45  | S | 70.55   | W | 110 | G |         | 0.1 | 10   | CHILE-ARGENTINA BORDER REGION. MD 3.8 (SAN).   |
| 26   | 16 | 59 | 20.4  | 13.381 | N | 89.677  | W | 65  |   | 4.6     | 1.2 | 75   | EL SALVADOR. MD 4.7 (GCG). Felt (III) at San Salvador.                                 |
| 26   | 18 | 02 | 37.2* | 22.339 | N | 118.783 | E | 33  | N | 4.1     | 1.2 | 7  | TAIWAN REGION  |
| 26   | 18 | 47 | 45.7  | 36.555 | N | 3.050   | W | 5   | G |         | 1.0 | 23   | STRAIT OF GIBRALTAR. mbLg 3.4 (MDD). Felt (IV) in the Adra area, Spain.                |
| 26   | 19 | 12 | 30.0  | 33.690 | N | 31.542  | E | 10  | G | 3.1     | 0.7 | 29   | EASTERN MEDITERRANEAN SEA  |
| 26   | 20 | 41 | 52.07 | 43.79  | N | 19.32   | E | 10  | G |         | 1.6 | 11   | NORTHWESTERN BALKAN REGION. ML 2.7 (TTG).  |
| 26   | 20 | 49 | 43.6* | 31.590 | S | 68.325  | W | 10  | G |         | 1.3 | 5  | SAN JUAN PROVINCE, ARGENTINA   |
| 26   | 20 | 52 | 31.77 | 31.24  | S | 69.03   | W | 190 | G |         | 0.5 | 10   | SAN JUAN PROVINCE, ARGENTINA. MD 4.4 (SAN).  |
| 26   | 23 | 32 | 15.27 | 38.08  | N | 29.15   | E | 10  | G |         | 1.4 | 4  | TURKEY. ML 3.0 (ISK).  |
| 26   | 23 | 47 | 20.1  | 51.879 | N | 175.932 | W | 50  | D | 4.9     | 1.2 | 61   | ANDREANOF ISLANDS, ALEUTIAN IS. Felt (IV) on Adak and (III) on Atka.                   |
| 26   | 23 | 49 | 42.67 | 3.62   | S | 130.20  | E | 94  | ? | 4.8     | 1.4 | 8  | SERAM, INDONESIA   |
| 27   | 01 | 34 | 21.7* | 45.551 | N | 6.371   | E | 5   | G |         | 0.7 | 8  | FRANCE. ML 2.2 (GEN).  |
| 27   | 02 | 00 | 44.27 | 7.24   | S | 129.63  | E | 87  | ? | 3.4     | 0.1 | 5  | BANDA SEA  |

|      |             |          |           |       |         |     |     |   |
|------|-------------|----------|-----------|-------|---------|-----|-----|---|
| 27   | 03 03 45.8* | 4.904 N  | 95.632 E  | 111 * | 4.6     | 1.1 | 30  | NORTHERN SUMATERA, INDONESIA  |
| 27   | 03 11 44.9* | 61.752 N | 147.191 W | 32    |         |     | 57  | SOUTHERN ALASKA. <AEIC>. ML 2.6 (AEIC).   |
| 27   | 03 35 53.8  | 44.814 N | 117.001 W | 10 G  |         | 0.6 | 48  | OREGON. ML 3.6 (GS), 4.0 (BUT). Felt (IV) at Brownlee Village. Also felt at Halfway and Oxbow.  |
| 27   | 03 43 02.3* | 3.389 N  | 124.180 E | 416 * | 4.3     | 0.8 | 13  | CELEBES SEA   |
| 27   | 04 38 23.5  | 43.236 N | 126.406 W | 10 G  | 4.2     | 0.7 | 91  | OFF COAST OF OREGON   |
| 27   | 05 07 36.8* | 37.283 N | 28.531 E  | 10 G  |         | 0.4 | 5   | TURKEY. ML 3.2 (ISK).   |
| 27   | 05 24 56.7  | 10.795 N | 85.787 W  | 33 N  | 4.7     | 1.1 | 60  | COSTA RICA  |
| 27   | 05 50 36.6* | 40.394 N | 28.449 E  | 10 G  |         | 0.5 | 8   | TURKEY. ML 2.9 (ISK).   |
| 27   | 06 03 07.4* | 36.78 N  | 2.97 W    | 10 G  |         | 0.0 | 4   | STRAIT OF GIBRALTAR. mbLg 2.6 (MDD).  |
| 27   | 06 46 08.4* | 40.76 N  | 30.31 E   | 10 G  |         | 0.3 | 4   | TURKEY. ML 2.4 (ISK).   |
| 27   | 07 02 31.9  | 37.757 N | 21.068 E  | 45    | 4.5     | 1.1 | 48  | SOUTHERN GREECE. MD 4.2 (ATH). Felt in the Pargos area.   |
| 27   | 07 32 42.4* | 17.26 N  | 61.85 W   | 33 N  |         | 0.1 | 6   | LEEWARD ISLANDS. MD 2.5 (TRN). ML 2.2 (FDF).  |
| 27   | 07 39 06.8* | 37.879 N | 3.342 W   | 10 G  |         | 0.8 | 7   | SPAIN. mbLg 2.9 (MDD).  |
| 27   | 08 04 18.6* | 62.500 N | 151.414 W | 91    |         |     | 43  | CENTRAL ALASKA. <AEIC>.   |
| 27   | 08 18 20.9* | 39.58 N  | 29.41 E   | 5 G   |         | 0.7 | 4   | TURKEY. ML 2.6 (ISK).   |
| a 27 | 09 14 35.1  | 25.704 N | 109.632 W | 10 G  | 4.9     | 1.0 | 68  | GULF OF CALIFORNIA. Mw 5.1 (HRV).   |
| 27   | 09 33 51.2  | 5.717 S  | 146.675 E | 131   | 4.7     | 1.0 | 31  | EASTERN NEW GUINEA REG., P.N.G.   |
| 27   | 10 04 08.4* | 41.109 N | 28.675 E  | 10 G  |         | 0.4 | 7   | TURKEY. ML 2.7 (ISK).   |
| 27   | 10 05 26.2* | 31.019 S | 68.479 W  | 10 G  |         | 1.4 | 5   | SAN JUAN PROVINCE, ARGENTINA  |
| 27   | 10 06 23.4* | 39.13 N  | 27.60 E   | 10 G  |         | 0.1 | 4   | TURKEY. ML 2.7 (ISK).   |
| 27   | 12 01 49.5* | 28.044 S | 26.882 E  | 5 G   |         | 0.3 | 7   | REPUBLIC OF SOUTH AFRICA. ML 2.9 (PRE).   |
| 27   | 13 19 11.3  | 31.430 N | 49.409 E  | 33 N  | 4.6     | 0.7 | 31  | WESTERN IRAN  |
| 27   | 13 27 17.4* | 40.199 N | 29.227 E  | 10 G  |         | 0.2 | 7   | TURKEY. ML 2.7 (ISK).   |
| 27   | 13 42 51.6  | 49.876 N | 18.455 E  | 10 G  |         | 0.4 | 8   | CZECH AND SLOVAK REPUBLICS. ML 3.5 (GRF), 3.3 (MOX), 3.3 (CLL).   |
| 27   | 13 46 47.1* | 44.412 N | 7.295 E   | 10 G  |         | 0.5 | 6   | NORTHERN ITALY. ML 2.0 (GEN).   |
| 27   | 13 47 40.6* | 39.660 N | 29.527 E  | 10 G  |         | 0.8 | 8   | TURKEY. ML 2.8 (ISK).   |
| 27   | 14 20 50.3  | 45.805 N | 5.805 E   | 5 G   |         | 0.3 | 11  | FRANCE. ML 2.7 (LDG).   |
| 27   | 14 29 22.8* | 16.119 N | 60.876 W  | 72 ?  |         | 0.5 | 9   | LEEWARD ISLANDS   |
| 27   | 15 30 38.8* | 59.35 N  | 6.05 E    | 10 G  |         | 0.7 | 4   | SOUTHERN NORWAY. MD 1.2 (BER).  |
| 27   | 15 58 01.0* | 44.281 N | 7.407 E   | 10 G  |         | 0.4 | 8   | NORTHERN ITALY. ML 1.8 (GEN).   |
| 27   | 16 27 56.9* | 42.511 N | 19.140 E  | 10 G  |         | 0.5 | 5   | NORTHWESTERN BALKAN REGION. ML 1.4 (TTG).   |
| 27   | 17 06 45.0  | 43.427 N | 16.950 E  | 23    | 3.6     | 1.3 | 93  | NORTHWESTERN BALKAN REGION. ML 4.2 (ZAG), 4.1 (TTG), 4.1 (TIR). Felt at Imotski, Makarska, Sinj and Split.  |
| 27   | 17 44 05.2* | 26.367 S | 27.405 E  | 5 G   |         | 0.6 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.0 (PRE).   |
| 27   | 17 44 39.1* | 26.364 S | 27.476 E  | 5 G   |         | 1.2 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.1 (PRE).   |
| a 27 | 17 45 58.0  | 43.515 N | 127.427 W | 20 G  | 5.6 6.0 | 1.2 | 239 | OFF COAST OF OREGON. Mw 6.3 (GS), 6.3 (HRV). Mo=3.2*10**18 Nm (BRK). Complex event observed on broadband displacement seismograms.  |
| 27   | 18 07 52.5* | 57.089 N | 155.951 W | 48    |         |     | 53  | ALASKA PENINSULA. <AEIC>. ML 4.2 (AEIC), 3.9 (PMR). Felt (II) at Karluk, Kodiak Island.   |
| 27   | 18 10 04.8  | 50.243 N | 19.065 E  | 10 G  |         | 0.6 | 7   | POLAND. ML 2.8 (CLL).   |
| 27   | 19 22 10.6* | 18.695 N | 121.174 E | 10 G  | 4.3     | 0.6 | 5   | LUZON, PHILIPPINE ISLANDS   |
| 27   | 20 18 15.4  | 40.798 N | 20.875 E  | 5 G   |         | 1.0 | 22  | GREECE-ALBANIA BORDER REGION. ML 3.2 (TTG), 2.8 (TIR). MD 3.1 (ATH).  |
| 27   | 20 43 33.6  | 43.380 N | 147.178 E | 33 N  | 4.8     | 0.8 | 63  | KURIL ISLANDS   |
| 27   | 21 32 48.3* | 40.33 N  | 20.99 E   | 10 G  |         | 1.0 | 4   | GREECE-ALBANIA BORDER REGION. MD 3.1 (ATH).   |
| 27   | 21 33 34.3* | 26.424 S | 27.378 E  | 5 G   |         | 0.5 | 7   | REPUBLIC OF SOUTH AFRICA. ML 2.6 (PRE).   |
| a 27 | 22 20 28.5  | 25.778 S | 179.339 E | 519 G | 5.9     | 1.0 | 457 | SOUTH OF FIJI ISLANDS. Mw 6.6 (GS), 6.7 (HRV). Mo=1.5*10**19 Nm (PPT). Two events about 5.1 seconds apart. Depth from broadband displacement seismograms, based on first event. |
| 27   | 22 43 04.7* | 39.495 N | 27.773 E  | 10 G  |         | 0.5 | 5   | TURKEY. ML 2.8 (ISK).   |
| 27   | 23 46 29.8  | 15.002 S | 75.264 W  | 45 D  | 5.1     | 0.9 | 89  | NEAR COAST OF PERU  |
| 28   | 00 04 49.1  | 45.106 N | 9.063 E   | 10 G  |         | 0.9 | 66  | NORTHERN ITALY. ML 3.5 (LDG), 3.5 (STR), 3.3 (VIE), 3.2 (GEN).  |
| 28   | 01 00 04.7? | 3.95 S   | 153.23 E  | 33 N  | 4.1     | 0.3 | 5   | NEW IRELAND REGION, P.N.G.  |
| 28   | 01 03 05.0* | 45.71 N  | 14.17 E   | 10 G  |         | 0.3 | 4   | NORTHWESTERN BALKAN REGION. MD 2.3 (LJU), 1.6 (TRI).  |
| 28   | 01 23 33.8  | 26.946 S | 26.873 E  | 5 G   |         | 0.8 | 9   | REPUBLIC OF SOUTH AFRICA. mbLg 3.5 (BUL). ML 3.0 (PRE).   |
| 28   | 01 26 59.8* | 43.844 N | 147.740 E | 33 N  | 4.7     | 0.9 | 31  | KURIL ISLANDS   |
| 28   | 01 34 08.3* | 39.305 N | 27.650 E  | 5 G   |         | 0.6 | 7   | TURKEY. ML 3.1 (ISK).   |
| 28   | 02 09 24.5* | 29.99 S  | 70.99 W   | 30 ?  |         | 0.8 | 5   | CENTRAL CHILE   |
| 28   | 02 14 10.1* | 42.580 N | 19.005 E  | 10 G  |         | 0.5 | 6   | NORTHWESTERN BALKAN REGION. ML 1.7 (TTG).   |
| 28   | 03 19 45.7* | 44.32 N  | 7.42 E    | 10 G  |         | 0.3 | 4   | NORTHERN ITALY. ML 1.7 (GEN).   |
| 28   | 03 35 34.6* | 60.820 N | 151.665 W | 74    |         |     | 86  | KENAI PENINSULA, ALASKA. <AEIC>.  |
| 28   | 03 48 16.8* | 43.033 N | 147.075 E | 33 N  | 4.3     | 1.3 | 13  | KURIL ISLANDS   |
| 28   | 04 22 21.8  | 44.220 N | 147.389 E | 33 N  | 4.6     | 0.8 | 32  | KURIL ISLANDS   |
| 28   | 05 02 59.2  | 45.348 N | 6.718 E   | 10 G  |         | 0.3 | 7   | FRANCE. ML 2.3 (GEN).   |
| 28   | 05 38 38.8* | 61.315 N | 152.268 W | 0     |         |     | 67  | SOUTHERN ALASKA. <AEIC>. ML 2.8 (AEIC), 2.9 (PMR).  |
| 28   | 07 55 30.1* | 61.711 N | 149.741 W | 39    |         |     | 20  | SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).   |
| 28   | 08 08 21.1* | 26.322 S | 27.631 E  | 5 G   |         | 1.0 | 7   | REPUBLIC OF SOUTH AFRICA. ML 2.5 (PRE).   |
| 28   | 08 25 53.7* | 43.045 N | 0.965 W   | 10 G  |         | 0.1 | 5   | PYRENEES. ML 1.0 (STR).   |
| 28   | 08 56 45.8* | 39.76 N  | 30.10 E   | 5 G   |         | 0.7 | 4   | TURKEY. ML 2.6 (ISK).   |
| a 28 | 09 06 51.8  | 6.190 S  | 154.480 E | 59 *  | 5.0 5.3 | 1.2 | 72  | SOLOMON ISLANDS. Mw 5.8 (HRV).  |
| a 28 | 09 11 20.0  | 14.537 N | 103.755 W | 33 N  | 5.2 5.5 | 0.9 | 125 | OFF COAST OF GUERRERO, MEXICO. Mw 5.9 (HRV).  |
| 28   | 09 32 13.7  | 43.495 N | 127.281 W | 10 G  | 4.4     | 0.8 | 158 | OFF COAST OF OREGON. ML 4.3 (BRK).  |
| 28   | 09 59 05.0* | 31.02 S  | 68.60 W   | 89 ?  |         | 0.1 | 5   | SAN JUAN PROVINCE, ARGENTINA  |
| 28   | 10 29 00.9* | 40.783 N | 27.789 E  | 10 G  |         | 0.7 | 6   | TURKEY. ML 2.7 (ISK).   |
| 28   | 10 34 33.4* | 39.14 N  | 27.47 E   | 10 G  |         | 0.7 | 4   | TURKEY. ML 2.8 (ISK).   |
| 28   | 11 00 33.7  | 53.750 N | 171.157 E | 33 N  | 4.5     | 1.0 | 43  | NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.8 (PMR).   |
| 28   | 11 13 32.0  | 29.069 S | 71.643 W  | 33 N  |         | 1.1 | 18  | NEAR COAST OF CENTRAL CHILE. MD 4.7 (SAN). Felt at La Higuera and Paihuano.   |
| 28   | 12 37 39.6* | 39.63 N  | 30.20 E   | 5 G   |         | 0.8 | 4   | TURKEY. ML 2.8 (ISK).   |
| 28   | 12 45 39.8* | 26.353 S | 27.481 E  | 5 G   |         | 1.0 | 9   | REPUBLIC OF SOUTH AFRICA. ML 2.8 (PRE).   |
| 28   | 12 57 29.8  | 15.303 N | 93.713 W  | 65    | 4.8     | 0.9 | 79  | NEAR COAST OF CHIAPAS, MEXICO   |
| 28   | 12 57 49.9* | 63.273 N | 150.474 W | 127   |         |     | 78  | CENTRAL ALASKA. <AEIC>.   |
| 28   | 13 08 01.2* | 40.830 N | 27.773 E  | 10 G  |         | 0.6 | 8   | TURKEY. ML 2.7 (ISK).   |
| 28   | 13 16 25.9* | 39.68 N  | 29.41 E   | 10 G  |         | 0.4 | 4   | TURKEY. ML 2.5 (ISK).   |
| 28   | 13 43 50.5* | 43.353 N | 16.913 E  | 5 G   |         | 1.1 | 10  | NORTHWESTERN BALKAN REGION. ML 2.6 (TTG).   |
| 28   | 13 47 33.4* | 39.36 N  | 40.78 E   | 10 G  |         | 0.4 | 4   | TURKEY. ML 3.8 (ISK).   |
| 28   | 14 05 36.7* | 39.717 N | 29.553 E  | 10 G  |         | 0.5 | 6   | TURKEY. ML 2.8 (ISK).   |
| 28   | 15 00 39.6* | 65.900 N | 151.868 W | 40    |         |     | 26  | NORTHERN ALASKA. <AEIC>. ML 2.9 (AEIC), 3.4 (PMR).  |

|      |    |    |       |        |   |         |   |     |   |         |     |     |   |
|------|----|----|-------|--------|---|---------|---|-----|---|---------|-----|-----|---|
| 28   | 17 | 31 | 43.2* | 34.946 | N | 141.971 | E | 38  | D | 4.9     | 1.2 | 69  | OFF EAST COAST OF HONSHU, JAPAN   |
| 28   | 18 | 05 | 33.0* | 15.026 | S | 171.723 | W | 33  | N | 5.1     | 1.0 | 17  | SAMOA ISLANDS REGION  |
| 28   | 18 | 11 | 41.7% | 38.736 | N | 119.724 | W |     |   | 0       |     | 57  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 3.2 (GM). ML 3.2 (GS), 3.3 (BRK).                               |
| 28   | 18 | 58 | 22.6? | 15.16  | S | 167.36  | E | 142 | ? | 4.6     | 1.0 | 32  | VANUATU ISLANDS   |
| 28   | 20 | 02 | 07.7* | 43.889 | N | 127.551 | W | 10  | G | 4.1     | 1.1 | 25  | OFF COAST OF OREGON   |
| 28   | 20 | 20 | 36.0? | 36.63  | N | 4.40    | W | 10  | G |         | 0.3 | 4   | STRAIT OF GIBRALTAR   |
| 28   | 20 | 49 | 23.0  | 43.389 | N | 146.762 | E | 58  | D | 4.9     | 0.8 | 89  | KURIL ISLANDS   |
| 28   | 20 | 59 | 25.1  | 33.306 | S | 70.206  | W | 106 |   | 4.9     | 0.9 | 79  | CHILE-ARGENTINA BORDER REGION. MD 4.9 (SAN). Felt (IV) at Santiago, Chile. Felt (II) at Mendoza, Argentina. |
| 28   | 21 | 51 | 54.3% | 26.873 | S | 26.741  | E | 5   | G |         | 0.9 | 8   | REPUBLIC OF SOUTH AFRICA. ML 3.1 (PRE).   |
| 28   | 22 | 03 | 12.5* | 6.975  | S | 155.733 | E | 81  | * | 4.3     | 1.1 | 23  | SOLOMON ISLANDS   |
| 28   | 22 | 24 | 26.3% | 26.878 | S | 26.769  | E | 5   | G |         | 0.2 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.4 (PRE).   |
| 28   | 22 | 37 | 36.7  | 53.703 | N | 165.803 | W | 46  | D | 4.7 4.6 | 0.9 | 81  | FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.2 (PMR). Felt (IV) at Akutan and (III) at Unalaska.                     |
| 28   | 23 | 04 | 43.2? | 43.30  | N | 5.98    | E | 10  | G |         | 0.3 | 9   | NEAR SOUTH COAST OF FRANCE. ML 2.6 (STR). Mining induced.   |
| 28   | 23 | 23 | 23.2* | 14.399 | N | 93.193  | W | 33  | N | 4.3     | 1.3 | 16  | NEAR COAST OF CHIAPAS, MEXICO. MD 4.5 (GCG).  |
| 28   | 23 | 41 | 07.6? | 26.54  | N | 56.50   | E | 33  | N | 4.2     | 0.9 | 9   | SOUTHERN IRAN   |
| a 28 | 23 | 51 | 12.2  | 24.759 | N | 122.208 | E | 33  | N | 5.5 5.4 | 1.1 | 193 | TAIWAN REGION. Mw 5.6 (HRV).  |
| 29   | 01 | 14 | 10.2* | 34.972 | S | 70.242  | W | 10  | G |         | 1.0 | 10  | CHILE-ARGENTINA BORDER REGION. MD 3.7 (SAN).  |
| 29   | 01 | 22 | 36.2? | 35.31  | S | 70.92   | W | 110 | G |         | 0.3 | 10  | CHILE-ARGENTINA BORDER REGION. MD 4.0 (SAN).  |
| 29   | 02 | 29 | 03.0* | 2.915  | S | 139.080 | E | 33  | N | 4.7 4.2 | 1.1 | 21  | NEAR NORTH COAST OF IRIAN JAYA  |
| 29   | 03 | 48 | 45.8% | 35.508 | N | 117.492 | W | 3   |   |         |     | 9   | CENTRAL CALIFORNIA. <PAS-P>. ML 3.0 (PAS).  |
| 29   | 04 | 06 | 24.9? | 39.69  | N | 28.03   | E | 10  | G |         | 0.5 | 6   | TURKEY. ML 2.8 (ISK).   |
| 29   | 04 | 15 | 37.8? | 31.38  | S | 68.58   | W | 100 | G |         | 0.8 | 5   | SAN JUAN PROVINCE, ARGENTINA  |
| 29   | 04 | 29 | 47.6* | 13.673 | N | 91.706  | W | 48  | * | 4.0     | 1.2 | 19  | NEAR COAST OF GUATEMALA. MD 4.5 (GCG).  |
| a 29 | 04 | 30 | 20.4  | 23.928 | N | 123.492 | E | 33  | N | 4.9 4.4 | 1.0 | 63  | SOUTHWESTERN RYUKYU ISLANDS. Mw 5.3 (HRV).  |
| 29   | 05 | 18 | 00.4% | 39.172 | N | 28.181  | E | 5   | G |         | 0.5 | 9   | TURKEY. ML 3.0 (ISK).   |
| 29   | 05 | 20 | 35.9  | 42.360 | N | 19.401  | E | 20  | * |         | 0.3 | 10  | NORTHWESTERN BALKAN REGION. ML 2.2 (TTG).   |
| 29   | 05 | 24 | 41.1% | 38.728 | N | 119.724 | W | 0   |   |         |     | 32  | CALIFORNIA-NEVADA BORDER REGION. <GM-P>. MD 2.9 (GM). ML 3.0 (BRK), 2.8 (GS).                               |
| 29   | 05 | 37 | 40.7? | 9.95   | N | 81.11   | W | 33  | N |         | 1.0 | 4   | PANAMA. MD 4.1 (UPA).   |
| 29   | 05 | 43 | 50.5% | 44.443 | N | 7.292   | E | 10  | G |         | 0.3 | 7   | NORTHERN ITALY. ML 1.6 (GEN).   |
| 29   | 06 | 22 | 43.3? | 14.98  | N | 61.06   | W | 130 | G |         | 0.4 | 7   | WINDWARD ISLANDS. MG 2.7 (PDF).   |
| 29   | 07 | 54 | 48.5? | 38.40  | N | 26.92   | E | 10  | G |         | 0.3 | 5   | AEGEAN SEA. ML 3.2 (ISK).   |
| 29   | 08 | 03 | 12.8  | 39.254 | N | 116.070 | W | 5   | G |         | 0.7 | 19  | NEVADA. ML 3.2 (GS).  |
| 29   | 08 | 10 | 17.2  | 39.280 | N | 116.065 | W | 5   | G |         | 0.8 | 15  | NEVADA. ML 3.3 (GS).  |
| 29   | 12 | 19 | 14.9? | 35.12  | N | 96.25   | E | 33  | N | 4.0     | 1.6 | 5   | QINGHAI, CHINA  |
| 29   | 12 | 52 | 26.4* | 43.795 | N | 148.682 | E | 33  | N | 4.7     | 1.1 | 23  | EAST OF KURIL ISLANDS   |
| 29   | 13 | 27 | 27.3% | 39.705 | N | 29.551  | E | 10  | G |         | 0.6 | 9   | TURKEY. ML 2.8 (ISK).   |
| 29   | 14 | 43 | 08.3  | 34.857 | N | 140.512 | E | 77  |   | 4.8     | 1.0 | 54  | NEAR EAST COAST OF HONSHU, JAPAN  |
| 29   | 14 | 47 | 34.1% | 41.150 | N | 28.575  | E | 5   | G |         | 0.4 | 6   | TURKEY. ML 2.7 (ISK).   |
| 29   | 15 | 53 | 19.8  | 14.092 | S | 167.160 | E | 200 | D | 4.9     | 1.0 | 88  | VANUATU ISLANDS   |
| 29   | 16 | 20 | 53.6* | 7.261  | N | 76.716  | W | 33  | N | 4.0     | 1.2 | 5   | NORTHERN COLOMBIA. MD 4.3 (UPA).  |
| 29   | 16 | 35 | 07.1  | 44.095 | N | 6.968   | E | 9   |   |         | 0.5 | 18  | FRANCE. ML 2.5 (GEN), 2.5 (LDG).  |
| 29   | 16 | 44 | 05.9  | 17.008 | N | 99.681  | W | 50  |   | 4.5     | 1.4 | 51  | GUERRERO, MEXICO  |
| 29   | 17 | 52 | 37.4* | 1.412  | S | 23.460  | W | 10  | G | 4.5     | 0.8 | 16  | CENTRAL MID-ATLANTIC RIDGE  |
| 29   | 18 | 10 | 05.8% | 44.628 | N | 6.757   | E | 5   | G |         | 0.4 | 5   | FRANCE. ML 1.9 (GEN).   |
| 29   | 18 | 15 | 09.2  | 31.261 | S | 71.918  | W | 10  | G |         | 1.0 | 17  | NEAR COAST OF CENTRAL CHILE. MD 4.5 (SAN).  |
| 29   | 18 | 40 | 27.8? | 35.06  | N | 88.20   | E | 33  | N | 4.4     | 1.2 | 7   | XIZANG  |
| 29   | 19 | 10 | 24.3? | 43.49  | N | 19.22   | E | 10  | G |         | 0.6 | 8   | NORTHWESTERN BALKAN REGION. ML 2.2 (TTG).   |
| 29   | 19 | 27 | 23.5? | 29.60  | N | 142.76  | E | 33  | N | 4.5     | 0.8 | 11  | SOUTH OF HONSHU, JAPAN  |
| 29   | 19 | 28 | 43.4  | 42.837 | N | 17.621  | E | 5   | G | 3.7     | 1.3 | 13  | ADRIATIC SEA. ML 3.0 (TTG).   |
| 29   | 20 | 00 | 55.9  | 24.036 | N | 121.889 | E | 33  | N | 4.4     | 1.0 | 17  | TAIWAN  |
| 29   | 20 | 09 | 29.0% | 32.422 | N | 115.206 | W | 0   |   |         |     | 25  | CALIF.-BAJA CALIF. BORDER REGION. <ECX-P>. MD 3.4 (ECX). ML 2.9 (PAS).                                      |
| 29   | 21 | 47 | 52.3% | 35.510 | N | 3.737   | W | 10  | G |         | 1.1 | 10  | STRAIT OF GIBRALTAR. mbLg 3.4 (MDD).  |
| 29   | 21 | 50 | 42.7* | 5.361  | S | 102.692 | E | 33  | N | 4.1     | 1.3 | 9   | SOUTHERN SUMATERA, INDONESIA  |
| 29   | 22 | 11 | 14.8? | 44.11  | N | 147.64  | E | 33  | N | 4.1     | 1.6 | 5   | KURIL ISLANDS   |
| 29   | 22 | 20 | 42.2% | 11.085 | N | 61.476  | W | 60  | G |         | 0.3 | 8   | WINDWARD ISLANDS. MD 3.3 (TRN).   |
| 29   | 22 | 27 | 52.1  | 36.081 | N | 114.119 | W | 5   | G |         | 0.4 | 25  | SOUTHERN NEVADA. ML 3.6 (GS).   |
| 29   | 23 | 05 | 45.9? | 4.84   | N | 76.42   | W | 118 | ? | 3.9     | 1.3 | 7   | COLOMBIA  |
| 30   | 01 | 29 | 32.4* | 34.222 | N | 25.876  | E | 11  |   |         | 0.5 | 11  | CRETE. MD 3.7 (ATH).  |
| 30   | 01 | 53 | 18.5* | 17.324 | N | 60.590  | W | 33  | N |         | 0.4 | 15  | LEEWARD ISLANDS. MD 3.8 (TRN).  |
| 30   | 02 | 23 | 18.1  | 43.538 | N | 127.512 | W | 10  | G |         | 0.7 | 76  | OFF COAST OF OREGON   |
| 30   | 03 | 04 | 30.1* | 33.327 | S | 72.235  | W | 5   | G |         | 1.0 | 14  | OFF COAST OF CENTRAL CHILE  |
| 30   | 03 | 20 | 12.9% | 46.866 | N | 0.501   | E | 5   | G |         | 0.9 | 10  | FRANCE. ML 2.6 (LDG).   |
| 30   | 03 | 25 | 13.3? | 51.56  | N | 174.05  | W | 33  | N | 4.1     | 0.7 | 5   | ANDREANOF ISLANDS, ALEUTIAN IS.   |
| 30   | 04 | 17 | 36.8  | 43.874 | N | 147.241 | E | 33  | N | 4.7     | 0.8 | 51  | KURIL ISLANDS   |
| 30   | 04 | 19 | 53.1? | 40.62  | N | 146.53  | E | 33  | N | 4.5     | 0.9 | 7   | OFF EAST COAST OF HONSHU, JAPAN   |
| 30   | 05 | 20 | 49.0? | 31.46  | S | 68.66   | W | 100 | G |         | 0.9 | 4   | SAN JUAN PROVINCE, ARGENTINA  |
| 30   | 05 | 26 | 57.9  | 44.647 | N | 8.326   | E | 9   |   |         | 0.8 | 49  | NORTHERN ITALY. ML 3.2 (LDG), 3.1 (GEN).  |
| 30   | 05 | 27 | 36.6? | 29.26  | S | 68.36   | W | 120 | G |         | 1.5 | 7   | SAN JUAN PROVINCE, ARGENTINA  |
| 30   | 06 | 06 | 27.4  | 28.032 | S | 26.738  | E | 5   | G | 5.6 4.7 | 0.8 | 260 | REPUBLIC OF SOUTH AFRICA. ML 5.1 (PRE).   |
| 30   | 06 | 24 | 21.3% | 28.007 | S | 26.767  | E | 5   | G |         | 0.9 | 5   | REPUBLIC OF SOUTH AFRICA. ML 2.5 (PRE).   |
| 30   | 06 | 53 | 52.4* | 43.709 | N | 127.694 | W | 10  | G |         | 0.8 | 40  | OFF COAST OF OREGON   |
| 30   | 07 | 16 | 46.5% | 10.996 | N | 62.008  | W | 70  | G |         | 0.2 | 6   | NEAR COAST OF VENEZUELA. MD 3.2 (TRN).  |
| a 30 | 08 | 11 | 29.8  | 6.183  | S | 129.446 | E | 264 | D | 5.6     | 1.0 | 201 | BANDA SEA. Mw 5.9 (HRV). Felt at Darwin, Australia.   |
| 30   | 08 | 17 | 52.6% | 44.954 | N | 7.063   | E | 5   | G |         | 0.8 | 7   | NORTHERN ITALY. ML 2.2 (GEN).   |
| 30   | 08 | 47 | 22.5% | 39.683 | N | 29.473  | E | 10  | G |         | 0.5 | 7   | TURKEY. ML 2.6 (ISK).   |
| 30   | 09 | 00 | 02.4% | 43.410 | N | 18.869  | E | 5   | G |         | 0.7 | 8   | NORTHWESTERN BALKAN REGION. ML 2.0 (TTG).   |
| 30   | 09 | 35 | 20.4  | 35.944 | N | 30.100  | E | 47  |   | 4.0     | 1.1 | 85  | EASTERN MEDITERRANEAN SEA. MD 4.5 (ATH).  |
| 30   | 10 | 30 | 24.5% | 39.683 | N | 29.486  | E | 10  | G |         | 0.6 | 6   | TURKEY. ML 2.7 (ISK).   |
| 30   | 10 | 31 | 24.6? | 1.26   | S | 134.55  | E | 10  | G | 4.7     | 0.7 | 5   | IRIAN JAYA REGION, INDONESIA  |
| 30   | 10 | 50 | 42.6? | 36.96  | N | 140.33  | E | 10  | G |         | 0.7 | 5   | NEAR EAST COAST OF HONSHU, JAPAN  |
| 30   | 11 | 44 | 12.4% | 26.761 | S | 26.739  | E | 5   | G |         | 1.1 | 6   | REPUBLIC OF SOUTH AFRICA. ML 2.2 (PRE).   |
| 30   | 11 | 47 | 41.0% | 28.008 | S | 26.783  | E | 5   | G |         | 1.1 | 8   | REPUBLIC OF SOUTH AFRICA. ML 2.7 (PRE).   |
| 30   | 12 | 39 | 40.3  | 40.484 | N | 29.125  | E | 10  | G |         | 0.7 | 8   | TURKEY. ML 2.6 (ISK).   |
| 30   | 13 | 58 | 31.6% | 39.720 | N | 29.539  | E | 10  | G |         | 0.6 | 7   | TURKEY. ML 2.7 (ISK).   |
| 30   | 14 | 01 | 07.3% | 44.483 | N | 10.178  | E | 14  |   |         | 0.9 | 12  | NORTHERN ITALY  |
| 30   | 14 | 24 | 52.8% | 39.723 | N | 29.455  | E | 10  | G |         | 0.7 | 6   | TURKEY. ML 2.6 (ISK).   |
| 30   | 14 | 29 | 39.2% | 61.918 | N | 149.829 | W | 10  |   |         |     | 42  | SOUTHERN ALASKA. <AEIC>. ML 2.5 (AEIC).   |

|      |    |    |       |        |   |         |   |     |   |         |     |     |  |
|------|----|----|-------|--------|---|---------|---|-----|---|---------|-----|-----|--|
| 30   | 14 | 34 | 42.6& | 32.070 | N | 115.409 | W | 2   |   |         |     | 29  | CALIF.-BAJA CALIF. BORDER REGION. <ECX-P>. MD 3.5 (ECX). ML 3.5 (GS).  |
| 30   | 15 | 06 | 52.5% | 44.561 | N | 7.243   | E | 10  | G |         | 0.6 | 10  | NORTHERN ITALY. ML 2.0 (GEN).  |
| 30   | 15 | 53 | 14.1? | 31.43  | S | 68.74   | W | 100 | G |         | 0.7 | 4   | SAN JUAN PROVINCE, ARGENTINA   |
| 30   | 16 | 29 | 07.9? | 54.10  | S | 7.84    | E | 10  | G | 5.0 4.5 | 1.3 | 9   | BOUVET ISLAND REGION   |
| 30   | 16 | 40 | 42.1  | 55.102 | N | 160.288 | E | 117 | D | 4.8     | 0.8 | 107 | KAMCHATKA  |
| 30   | 17 | 21 | 08.2  | 6.868  | S | 129.023 | E | 191 | * | 5.0     | 1.1 | 58  | BANDA SEA  |
| 30   | 18 | 23 | 07.3% | 46.792 | N | 6.942   | E | 10  | G |         | 1.4 | 6   | SWITZERLAND  |
| 30   | 18 | 31 | 50.9% | 40.626 | N | 29.130  | E | 10  | G |         | 0.5 | 6   | TURKEY. ML 2.5 (ISK).  |
| 30   | 18 | 40 | 40.6? | 8.19   | S | 127.38  | E | 111 | ? | 4.2     | 1.2 | 5   | TIMOR REGION, INDONESIA  |
| 30   | 18 | 47 | 40.2& | 60.161 | N | 153.288 | W | 137 |   |         |     | 56  | SOUTHERN ALASKA. <AEIC>.   |
| 30   | 19 | 51 | 20.3% | 41.161 | N | 29.718  | E | 10  | G |         | 0.4 | 9   | TURKEY. ML 2.9 (ISK).  |
| 30   | 20 | 43 | 30.1? | 31.70  | S | 69.86   | W | 33  | N |         | 0.8 | 4   | SAN JUAN PROVINCE, ARGENTINA   |
| 30   | 20 | 54 | 03.3  | 43.656 | N | 127.672 | W | 10  | G |         | 0.6 | 70  | OFF COAST OF OREGON  |
| 30   | 22 | 33 | 29.5& | 63.082 | N | 130.705 | W | 10  | G |         |     | 5   | SOUTHERN YUKON TERRITORY, CANADA. <PGC-P>. ML 3.1 (PGC).   |
| 30   | 23 | 48 | 39.1  | 6.130  | S | 147.495 | E | 81  |   | 4.9     | 0.8 | 25  | EASTERN NEW GUINEA REG., P.N.G.  |
| 31   | 00 | 31 | 37.5? | 29.26  | S | 71.55   | W | 33  | N |         | 1.2 | 7   | NEAR COAST OF CENTRAL CHILE  |
| 31   | 00 | 45 | 23.9& | 34.374 | N | 116.455 | W | 3   |   |         |     | 42  | SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS), 3.2 (GS).  |
| 31   | 00 | 53 | 31.6? | 32.26  | S | 71.16   | W | 70  | G |         | 0.3 | 10  | NEAR COAST OF CENTRAL CHILE. MD 3.9 (SAN).   |
| 31   | 01 | 41 | 37.1? | 17.94  | S | 178.15  | W | 577 | * | 4.8     | 1.0 | 13  | FIJI ISLANDS REGION  |
| 31   | 01 | 42 | 35.7  | 42.516 | N | 21.818  | E | 5   | G |         | 1.0 | 38  | NORTHWESTERN BALKAN REGION. MD 3.8 (ATH). ML 3.5 (TTG), 3.4 (SKO). Felt (IV) in the Kumanovo area.                                     |
| 31   | 01 | 48 | 22.1  | 42.539 | N | 21.853  | E | 5   | G |         | 0.9 | 37  | NORTHWESTERN BALKAN REGION. MD 3.8 (ATH). ML 3.6 (TTG), 3.4 (SKO), 3.4 (TIR). Felt (IV) in the Kumanovo area.                          |
| 31   | 02 | 30 | 04.5* | 51.171 | N | 15.809  | E | 5   | G |         | 1.0 | 6   | POLAND. ML 2.4 (CLL).  |
| 31   | 02 | 52 | 53.2  | 43.219 | N | 147.302 | E | 53  | D | 4.6     | 0.6 | 65  | KURIL ISLANDS  |
| 31   | 03 | 31 | 02.0% | 44.284 | N | 6.958   | E | 5   | G |         | 0.5 | 8   | FRANCE. ML 2.0 (GEN).  |
| 31   | 04 | 05 | 00.7  | 45.877 | N | 10.969  | E | 10  | G |         | 0.5 | 11  | NORTHERN ITALY. ML 2.8 (VIE).  |
| 31   | 04 | 44 | 37.7% | 35.314 | N | 3.950   | W | 10  | G |         | 1.1 | 10  | STRAIT OF GIBRALTAR. mbLg 3.3 (MDD).   |
| 31   | 06 | 42 | 33.1? | 45.35  | N | 146.81  | E | 138 | ? | 4.5     | 0.5 | 15  | KURIL ISLANDS  |
| 31   | 06 | 52 | 41.0% | 40.172 | N | 28.305  | E | 10  | G |         | 0.3 | 11  | TURKEY. ML 3.3 (ISK). Felt at Bursa.   |
| 31   | 07 | 29 | 08.7  | 31.883 | S | 70.495  | W | 102 | ? |         | 0.8 | 15  | CHILE-ARGENTINA BORDER REGION. MD 3.9 (SAN).   |
| 31   | 08 | 01 | 19.6? | 33.42  | S | 118.22  | E | 10  | G |         | 0.8 | 5   | WESTERN AUSTRALIA  |
| 31   | 08 | 17 | 49.6& | 60.032 | N | 152.710 | W | 99  |   |         |     | 53  | SOUTHERN ALASKA. <AEIC>.   |
| 31   | 10 | 15 | 23.3? | 40.76  | N | 29.97   | E | 10  | G |         | 0.5 | 4   | TURKEY. ML 2.5 (ISK).  |
| 31   | 11 | 08 | 48.0? | 40.22  | N | 29.61   | E | 10  | G |         | 0.2 | 4   | TURKEY. ML 2.6 (ISK).  |
| a 31 | 11 | 48 | 13.9  | 3.019  | N | 96.192  | E | 29  | G | 5.7 6.2 | 1.1 | 377 | NORTHERN SUMATERA, INDONESIA. Mw 6.1 (GS), 6.2 (HRV). Felt (III) at Gunungsitoli, Nias. Depth from broadband displacement seismograms. |
| 31   | 12 | 06 | 21.1% | 40.697 | N | 30.024  | E | 5   | G |         | 0.6 | 5   | TURKEY. ML 2.6 (ISK).  |



## A D D I T I O N A L   S O U R C E   P A R A M E T E R S

01 15 03 31.31 17.849S 167.805E 26km  
 5.4mb ( 23 obs.) 5.3Msz ( 32 obs.)  
 VANUATU ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 43S, 78C  
 Centroid Location:  
 Origin Time 15:03:35.5 0.2  
 Lat 17.72S 0.02 Lon 167.65E 0.02  
 Dep 15.0 FIX Half-duration 1.8  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 4.06 Plg=56 Azm= 15  
 N -0.15 20 137  
 P -3.90 26 237  
 Best Double Couple:Mo=4.0\*10\*\*17  
 NP1:Strike= 5 Dip=26 Slip= 141  
 NP2: 131 74 69

01 16 35 20.79 17.745S 167.682E 17km  
 5.9mb ( 56 obs.) 6.5Msz ( 53 obs.)  
 VANUATU ISLANDS  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike=132 Dip=76 Slip= 90  
 NP2: 312 14 90  
 Principal Axes:  
 T Plg=59 Azm= 42  
 P 31 222  
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.  
 RADIATED ENERGY  
 No. of sta: 23 Focal mech. M  
 Energy 1.1±0.2\*10\*\*14 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 17 No. of sta: 31  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 4.60 Plg=55 Azm= 45  
 N 0.00 13 296  
 P -4.60 32 198  
 Best Double Couple:Mo=4.6\*10\*\*18  
 NP1:Strike=251 Dip=18 Slip= 44  
 NP2: 119 78 103  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 65S,163C M.W.: 43S, 80C  
 Centroid Location:  
 Origin Time 16:35:27.0 0.1  
 Lat 17.70S 0.01 Lon 167.65E 0.01  
 Dep 15.9 0.4 Half-duration 4.6  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 6.66 Plg=58 Azm=358  
 N 0.26 24 135  
 P -6.92 19 234  
 Best Double Couple:Mo=6.8\*10\*\*18  
 NP1:Strike=358 Dip=33 Slip= 139  
 NP2: 125 69 64

01 17 46 37.58 17.768S 167.830E 33km  
 5.8mb ( 39 obs.) 6.3Msz ( 32 obs.)  
 VANUATU ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 43S, 82C M.W.: 30S, 46C  
 Centroid Location:  
 Origin Time 17:46:40.9 0.2  
 Lat 17.71S 0.02 Lon 167.70E 0.02  
 Dep 17.0 1.1 Half-duration 3.4  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 2.48 Plg=18 Azm=248  
 N -0.38 27 149  
 P -2.11 56 8  
 Best Double Couple:Mo=2.3\*10\*\*18  
 NP1:Strike= 14 Dip=36 Slip= -39  
 NP2: 137 68 -120

01 23 28 56.24 17.638S 167.787E 18km  
 5.2mb ( 17 obs.)  
 VANUATU ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 46S, 69C  
 Centroid Location:  
 Origin Time 23:29: 6.9 0.2  
 Lat 17.60S 0.04 Lon 167.47E 0.03

Dep 15.0 FIX Half-duration 1.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.50 Plg=77 Azm=356  
 N -0.06 13 175  
 P -1.44 0 265  
 Best Double Couple:Mo=1.5\*10\*\*17  
 NP1:Strike= 8 Dip=46 Slip= 108  
 NP2: 162 47 72

01 23 53 59.40 17.884S 167.436E 33km  
 4.9mb ( 13 obs.) 4.9Msz ( 3 obs.)  
 VANUATU ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 18S, 22C  
 Centroid Location:  
 Origin Time 23:54: 1.2 0.8  
 Lat 17.45S 0.09 Lon 167.78E 0.06  
 Dep 34.8 6.1 Half-duration 1.1  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.39 Plg= 1 Azm= 19  
 N -0.12 72 112  
 P -1.27 18 289  
 Best Double Couple:Mo=1.3\*10\*\*17  
 NP1:Strike= 65 Dip=77 Slip=-168  
 NP2: 332 78 -13

02 00 55 37.44 8.121N 93.935E 33km  
 5.1mb ( 60 obs.) 4.6Msz ( 2 obs.)  
 NICOBAR ISLANDS, INDIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 7S, 10C  
 Centroid Location:  
 Origin Time 00:55:34.3 1.4  
 Lat 8.03N 0.23 Lon 93.63E 0.21  
 Dep 33.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 6.57 Plg= 6 Azm=300  
 N -0.68 50 38  
 P -5.89 39 205  
 Best Double Couple:Mo=6.2\*10\*\*16  
 NP1:Strike=350 Dip=58 Slip=-154  
 NP2: 246 68 -35

02 10 14 32.38 17.563S 168.053E 10km  
 5.3mb ( 14 obs.) 4.9Msz ( 5 obs.)  
 VANUATU ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 38S, 61C  
 Centroid Location:  
 Origin Time 10:14:39.2 0.3  
 Lat 17.45S 0.04 Lon 167.63E 0.03  
 Dep 18.6 1.7 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.39 Plg=67 Azm= 15  
 N -0.14 20 164  
 P -1.25 11 258  
 Best Double Couple:Mo=1.3\*10\*\*17  
 NP1:Strike= 11 Dip=38 Slip= 124  
 NP2: 151 59 66

02 22 10 39.60 25.327S 177.081W 65km  
 5.4mb ( 42 obs.)  
 SOUTH OF FIJI ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 27S, 40C  
 Centroid Location:  
 Origin Time 22:10:46.5 0.6  
 Lat 25.26S 0.07 Lon 176.60W 0.05  
 Dep 55.4 5.4 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 6.78 Plg=50 Azm=232  
 N 3.21 21 349  
 P -9.99 32 93  
 Best Double Couple:Mo=8.4\*10\*\*16  
 NP1:Strike=233 Dip=23 Slip= 156  
 NP2: 345 81 69

03 14 00 48.63 32.066N 114.948W 10km  
 4.5mb ( 7 obs.)  
 W. ARIZONA-SONORA BORDER REGION  
 CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN  
 L.P.B.: 11S, 12C  
 Centroid Location:  
 Origin Time 14:00:51.7 0.6  
 Lat 31.92N 0.10 Lon 114.93W 0.11  
 Dep 15.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 8.38 Plg= 0 Azm=104  
 N -0.23 90 180  
 P -8.15 0 14  
 Best Double Couple:Mo=8.3\*10\*\*16  
 NP1:Strike=149 Dip=90 Slip=-180  
 NP2: 239 90 0

03 16 22 56.44 2.100S 133.901E 33km  
 4.9mb ( 11 obs.) 4.6Msz ( 4 obs.)  
 IRIAN JAYA REGION, INDONESIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 11S, 17C  
 Centroid Location:  
 Origin Time 16:23: 0.1 2.4  
 Lat 2.03S 0.18 Lon 133.68E 0.17  
 Dep 15.211.3 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 5.84 Plg=17 Azm=107  
 N -0.46 60 230  
 P -5.38 23 9  
 Best Double Couple:Mo=5.6\*10\*\*16  
 NP1:Strike=149 Dip=61 Slip=-175  
 NP2: 57 86 -29

04 12 09 40.15 6.218S 104.891E 24km  
 5.6mb ( 26 obs.) 4.7Msz ( 2 obs.)  
 SUNDA STRAIT  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 22C  
 Centroid Location:  
 Origin Time 12:09:51.7 1.0  
 Lat 6.40S 0.07 Lon 104.98E 0.11  
 Dep 58.3 7.5 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 7.61 Plg=62 Azm= 22  
 N 1.14 4 285  
 P -8.75 28 193  
 Best Double Couple:Mo=8.2\*10\*\*16  
 NP1:Strike=273 Dip=17 Slip= 78  
 NP2: 106 73 94

04 13 22 55.84 43.773N 147.321E 14km  
 7.3mb ( 71 obs.) 8.1Msz ( 38 obs.)  
 KURIL ISLANDS  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike= 55 Dip=78 Slip= 145  
 NP2: 153 56 15  
 Principal Axes:  
 T Plg=33 Azm= 9  
 P 14 108  
 Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a large reverse component. The preferred fault plane is not determined. Complex rupture; focal mechanism based on second subevent.  
 RADIATED ENERGY  
 No. of sta: 33 Focal mech. F  
 Energy 1.1±0.1\*10\*\*17 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 61 No. of sta: 41  
 Principal Axes:  
 Scale 10\*\*21 Nm  
 T Val= 1.81 Plg=44 Azm= 5  
 N 0.39 37 229  
 P -2.20 23 120  
 Best Double Couple:Mo=2.0\*10\*\*21  
 NP1:Strike=163 Dip=39 Slip= 19  
 NP2: 58 78 128  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 M.W.: 60S,166C  
 Centroid Location:  
 Origin Time 13:23:28.5 0.1  
 Lat 43.60N 0.00 Lon 147.63E 0.01

Dep 68.2 0.4 Half-duration 25.0  
Principal Axes:  
Scale 10\*\*21 Nm  
T Val= 2.93 Plg=46 Azm=359  
N 0.12 37 218  
P -3.06 20 112  
Best Double Couple:Mo=3.0\*10\*\*21  
NP1:Strike=158 Dip=41 Slip= 24  
NP2: 50 74 128

05 04 00 47.51 43.398N 148.078E 40km  
5.8mb (127 obs.) 5.6Msz ( 27 obs.)  
EAST OF KURIL ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 20 Dip=90 Slip= 132  
NP2: 110 42 360  
Principal Axes:  
T Plg=32 Azm=324  
P 32 76  
Comment: The focal mechanism is poorly controlled and corresponds to vertical faulting with a large strike-slip component. The preferred fault plane is not determined.

05 20 37 29.31 43.592N 147.449E 13km  
5.8mb (131 obs.)  
KURIL ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=255 Dip=58 Slip=-146  
NP2: 145 62 -37  
Principal Axes:  
T Plg= 2 Azm=201  
P 45 109  
Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a large normal component. The preferred fault plane is not determined.

RADIATED ENERGY  
No. of sta: 17 Focal mech. F  
Energy 1.1±0.2\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 8 No. of sta: 33  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 9.09 Plg= 6 Azm=182  
N -0.33 20 274  
P -8.76 69 78  
Best Double Couple:Mo=8.9\*10\*\*17  
NP1:Strike=251 Dip=43 Slip=-121  
NP2: 110 54 -64  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 53S,113C  
Centroid Location:  
Origin Time 20:37:34.1 0.1  
Lat 43.63N 0.02 Lon 147.37E 0.03  
Dep 15.0 FIX Half-duration 2.1  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 8.99 Plg=21 Azm=192  
N 1.09 16 288  
P -10.08 63 52  
Best Double Couple:Mo=9.5\*10\*\*17  
NP1:Strike=255 Dip=28 Slip=-127  
NP2: 115 68 -73

05 20 39 48.42 43.954N 147.336E 40km  
6.2mb (136 obs.) 5.5Msz ( 18 obs.)  
KURIL ISLANDS  
RADIATED ENERGY  
No. of sta: 19 Focal mech. M  
Energy 3.3±0.7\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 29 No. of sta: 12  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 9.43 Plg=28 Azm= 39  
N -2.57 47 164  
P -6.85 29 291  
Best Double Couple:Mo=8.1\*10\*\*17  
NP1:Strike= 76 Dip=47 Slip=-179  
NP2: 345 89 -43  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 30S, 40C  
Centroid Location:  
Origin Time 20:39:52.7 0.4

Lat 44.22N 0.05 Lon 147.31E 0.06  
Dep 25.6 2.3 Half-duration 3.3  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.89 Plg=39 Azm= 37  
N -0.60 4 130  
P -1.29 50 225  
Best Double Couple:Mo=1.6\*10\*\*18  
NP1:Strike= 94 Dip= 7 Slip=-126  
NP2: 311 84 -86

06 07 38 48.77 43.239N 148.458E 30km  
5.3mb ( 78 obs.) 5.2Msz ( 7 obs.)  
EAST OF KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 22C  
Centroid Location:  
Origin Time 07:38:51.6 0.4  
Lat 43.60N 0.06 Lon 148.05E 0.09  
Dep 33.0 FIX Half-duration 1.1  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 8.44 Plg= 2 Azm= 11  
N 4.27 55 278  
P -12.71 35 102  
Best Double Couple:Mo=1.1\*10\*\*17  
NP1:Strike=141 Dip=64 Slip= -25  
NP2: 242 67 -152

06 15 42 14.18 56.628S 141.923W 10km  
5.8mb ( 12 obs.) 5.2Msz ( 2 obs.)  
PACIFIC-ANTARCTIC RIDGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 47S, 84C  
Centroid Location:  
Origin Time 15:42:22.0 0.2  
Lat 56.55S 0.03 Lon 141.94W 0.05  
Dep 15.0 FIX Half-duration 1.4  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.16 Plg=19 Azm=355  
N -0.10 69 151  
P -2.06 8 262  
Best Double Couple:Mo=2.1\*10\*\*17  
NP1:Strike= 37 Dip=71 Slip= 171  
NP2: 130 82 19

06 23 20 13.37 43.413N 147.321E 53km  
5.1mb ( 75 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 22C  
Centroid Location:  
Origin Time 23:20:12.0 1.5  
Lat 43.03N 0.13 Lon 148.09E 0.13  
Dep 56.9 6.6 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.56 Plg=65 Azm=324  
N 0.06 6 221  
P -5.61 24 128  
Best Double Couple:Mo=5.6\*10\*\*16  
NP1:Strike=205 Dip=22 Slip= 73  
NP2: 43 69 97

07 02 36 09.29 43.614N 147.289E 52km  
6.1mb (167 obs.)  
KURIL ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=270 Dip=88 Slip=-105  
NP2: 173 15 -8  
Principal Axes:  
T Plg=41 Azm= 14  
P 45 165  
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with a small strike-slip component. The preferred fault plane is not determined.

RADIATED ENERGY  
No. of sta: 13 Focal mech. F  
Energy 2.7±0.7\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 47 No. of sta: 15  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.07 Plg=44 Azm= 34  
N -0.44 24 278

P -2.63 36 170  
Best Double Couple:Mo=2.8\*10\*\*17  
NP1:Strike=200 Dip=24 Slip= 11  
NP2: 100 86 114  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 37S, 78C  
Centroid Location:  
Origin Time 02:36:12.7 0.2  
Lat 43.58N 0.02 Lon 147.28E 0.03  
Dep 42.8 2.5 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.73 Plg=51 Azm= 17  
N 0.20 10 285  
P -2.93 37 178  
Best Double Couple:Mo=2.8\*10\*\*17  
NP1:Strike=221 Dip=12 Slip= 35  
NP2: 97 83 100

07 07 00 52.17 43.117N 146.866E 55km  
5.5mb (106 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 41S, 77C  
Centroid Location:  
Origin Time 07:00:55.3 0.2  
Lat 42.94N 0.03 Lon 147.06E 0.03  
Dep 55.9 2.2 Half-duration 1.3  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.78 Plg=66 Azm=328  
N 0.45 8 221  
P -2.22 23 128  
Best Double Couple:Mo=2.0\*10\*\*17  
NP1:Strike=203 Dip=23 Slip= 71  
NP2: 44 68 98

07 12 54 10.81 35.106S 179.137E 33km  
5.4mb ( 15 obs.)  
OFF E. COAST OF N. ISLAND, N.Z.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 13C  
Centroid Location:  
Origin Time 12:54:22.8 0.8  
Lat 35.08S FIX;Lon 179.13E FIX  
Dep 33.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 12.03 Plg=34 Azm=316  
N -1.92 5 222  
P -10.11 55 124  
Best Double Couple:Mo=1.1\*10\*\*17  
NP1:Strike= 69 Dip=12 Slip= -62  
NP2: 221 80 -96

07 15 00 14.78 43.580N 148.218E 30km  
5.3mb ( 81 obs.) 5.1Msz ( 32 obs.)  
EAST OF KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 26S, 40C  
Centroid Location:  
Origin Time 15:00:18.5 0.4  
Lat 43.50N 0.05 Lon 148.51E 0.06  
Dep 31.9 3.2 Half-duration 1.2  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.88 Plg=68 Azm=328  
N 2.73 11 209  
P -12.61 19 116  
Best Double Couple:Mo=1.1\*10\*\*17  
NP1:Strike=188 Dip=28 Slip= 66  
NP2: 35 65 102

07 15 24 03.44 42.877N 146.063E 24km  
6.0mb (138 obs.) 5.2Msz ( 8 obs.)  
OFF COAST OF HOKKAIDO, JAPAN  
RADIATED ENERGY  
No. of sta: 9 Focal mech. C  
Energy 1.2±0.4\*10\*\*13 Nm  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 25C  
Centroid Location:  
Origin Time 15:24: 3.6 0.6  
Lat 42.68N 0.08 Lon 146.18E 0.08  
Dep 33.9 3.7 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.23 Plg=69 Azm= 21

N 0.00 20 189  
 P -1.23 4 280  
 Best Double Couple:Mo=1.2\*10\*\*17  
 NP1:Strike= 31 Dip=45 Slip= 120  
 NP2: 172 52 64

08 05 28 26.80 43.319N 146.676E 26km  
 5.6mb (119 obs.) 5.0Msz ( 18 obs.)  
 KURIL ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 29S, 52C  
 Centroid Location:  
 Origin Time 05:28:29.1 0.3  
 Lat 43.37N 0.04 Lon 146.39E 0.05  
 Dep 21.8 4.0 Half-duration 1.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.49 Plg= 7 Azm= 9  
 N 0.15 62 266  
 P -1.64 27 103  
 Best Double Couple:Mo=1.6\*10\*\*17  
 NP1:Strike=143 Dip=66 Slip= -15  
 NP2: 239 76 -155

08 09 54 34.26 43.873N 148.171E 9km  
 5.9mb (146 obs.)  
 EAST OF KURIL ISLANDS  
 RADIATED ENERGY  
 No. of sta: 7 Focal mech. M  
 Energy 8.6±2.7\*10\*\*12 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 23 No. of sta: 8  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.52 Plg=65 Azm=198  
 N -0.10 19 334  
 P -1.42 17 70  
 Best Double Couple:Mo=1.5\*10\*\*17  
 NP1:Strike=185 Dip=33 Slip= 126  
 NP2: 324 64 69  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 35S, 55C  
 Centroid Location:  
 Origin Time 09:54:39.1 0.3  
 Lat 43.80N 0.04 Lon 148.13E 0.04  
 Dep 34.5 2.1 Half-duration 1.1  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.00 Plg=79 Azm= 10  
 N 0.22 11 187  
 P -1.22 0 277  
 Best Double Couple:Mo=1.1\*10\*\*17  
 NP1:Strike= 18 Dip=46 Slip= 106  
 NP2: 177 47 75

08 12 13 49.03 43.219N 147.742E 59km  
 5.1mb ( 74 obs.)  
 KURIL ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 25S, 40C  
 Centroid Location:  
 Origin Time 12:13:50.6 0.4  
 Lat 43.08N 0.05 Lon 147.63E 0.05  
 Dep 52.9 3.8 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.21 Plg=23 Azm= 10  
 N -0.01 64 219  
 P -1.20 12 105  
 Best Double Couple:Mo=1.2\*10\*\*17  
 NP1:Strike=149 Dip=65 Slip= 8  
 NP2: 55 82 155

08 21 44 07.21 1.258S 127.980E 17km  
 6.4mb ( 81 obs.) 6.8Msz ( 60 obs.)  
 HALMAHERA, INDONESIA  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike=192 Dip=84 Slip= 174  
 NP2: 283 84 6  
 Principal Axes:  
 T Plg= 8 Azm=147  
 P 0 57  
 Comment: The focal mechanism is 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: 9 Focal mech. F  
 Energy 2.2±0.7\*10\*\*15 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 20 No. of sta: 24  
 Principal Axes:  
 Scale 10\*\*19 Nm  
 T Val= 1.76 Plg= 0 Azm=317  
 N 0.26 82 227  
 P -2.03 8 47  
 Best Double Couple:Mo=1.9\*10\*\*19  
 NP1:Strike= 92 Dip=84 Slip= -6  
 NP2: 183 84 -174  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 70S,178C M.W.: 64S,135C  
 Centroid Location:  
 Origin Time 21:44:13.5 0.1  
 Lat 1.19S 0.01 Lon 127.87E 0.01  
 Dep 15.0 FIX Half-duration 6.2  
 Principal Axes:  
 Scale 10\*\*19 Nm  
 T Val= 1.84 Plg=11 Azm=313  
 N -0.30 72 187  
 P -1.55 14 46  
 Best Double Couple:Mo=1.7\*10\*\*19  
 NP1:Strike= 90 Dip=72 Slip= -2  
 NP2: 180 88 -162

09 07 55 39.58 43.905N 147.916E 33km  
 6.5mb (134 obs.) 7.1Msz ( 57 obs.)  
 KURIL ISLANDS  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike= 28 Dip=77 Slip= 90  
 NP2: 208 13 90  
 Principal Axes:  
 T Plg=58 Azm=298  
 P 32 118  
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is not determined.  
 RADIATED ENERGY  
 No. of sta: 37 Focal mech. F  
 Energy 6.3±0.9\*10\*\*14 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 43 No. of sta: 18  
 Principal Axes:  
 Scale 10\*\*19 Nm  
 T Val= 5.70 Plg=63 Azm=293  
 N 0.24 2 28  
 P -5.95 27 119  
 Best Double Couple:Mo=5.8\*10\*\*19  
 NP1:Strike=215 Dip=18 Slip= 98  
 NP2: 27 72 87  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 63S,178C M.W.: 60S,153C  
 Centroid Location:  
 Origin Time 07:55:49.4 0.1  
 Lat 43.87N 0.00 Lon 147.96E 0.01  
 Dep 33.2 0.3 Half-duration 10.8  
 Principal Axes:  
 Scale 10\*\*19 Nm  
 T Val= 9.21 Plg=63 Azm=294  
 N 0.33 5 33  
 P -9.54 27 125  
 Best Double Couple:Mo=9.4\*10\*\*19  
 NP1:Strike=227 Dip=19 Slip= 104  
 NP2: 31 72 85

09 12 24 22.85 43.883N 147.341E 46km  
 5.8mb (148 obs.) 5.5Msz ( 19 obs.)  
 KURIL ISLANDS  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike= 50 Dip=55 Slip= 80  
 NP2: 247 36 104  
 Principal Axes:  
 T Plg=77 Azm=286  
 P 9 147  
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting with a small strike-slip component. The preferred fault plane is not determined.

09 20 25 08.52 43.843N 147.967E 35km  
 5.4mb (105 obs.)  
 KURIL ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN

L.P.B.: 7S, 11C  
 Centroid Location:  
 Origin Time 20:25: 9.5 1.6  
 Lat 43.92N 0.18 Lon 149.05E 0.18  
 Dep 35.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 5.45 Plg=82 Azm=337  
 N 1.11 5 210  
 P -6.56 6 120  
 Best Double Couple:Mo=6.0\*10\*\*16  
 NP1:Strike=204 Dip=39 Slip= 82  
 NP2: 34 52 96

10 14 07 57.31 36.063N 100.159E 33km  
 5.0mb ( 46 obs.)  
 QINGHAI, CHINA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 22S, 29C  
 Centroid Location:  
 Origin Time 14:08: 5.3 0.9  
 Lat 36.13N 0.09 Lon 100.18E 0.10  
 Dep 33.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 5.39 Plg=77 Azm=321  
 N -0.94 13 133  
 P -4.45 2 223  
 Best Double Couple:Mo=4.9\*10\*\*16  
 NP1:Strike=327 Dip=45 Slip= 109  
 NP2: 121 48 72

10 14 27 22.33 5.360S 150.122E 194km  
 5.0mb ( 27 obs.)  
 NEW BRITAIN REGION, P.N.G.  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 10S, 19C  
 Centroid Location:  
 Origin Time 14:27:29.5 0.7  
 Lat 5.37S FIX;Lon 150.13E FIX  
 Dep 178.0 3.0 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 4.97 Plg= 3 Azm=343  
 N 1.70 4 73  
 P -6.66 85 212  
 Best Double Couple:Mo=5.8\*10\*\*16  
 NP1:Strike= 68 Dip=42 Slip= -96  
 NP2: 257 49 -85

10 21 06 53.74 51.484N 173.897W 33km  
 5.6mb (109 obs.) 5.2Msz ( 48 obs.)  
 ANDREANOF ISLANDS, ALEUTIAN IS.  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 51S, 97C  
 Centroid Location:  
 Origin Time 21:06:55.7 0.2  
 Lat 51.48N 0.02 Lon 173.90W 0.03  
 Dep 15.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 3.61 Plg=62 Azm=325  
 N 0.03 4 63  
 P -3.63 27 154  
 Best Double Couple:Mo=3.6\*10\*\*17  
 NP1:Strike=254 Dip=18 Slip= 102  
 NP2: 61 72 86

11 01 37 20.37 32.100S 71.447W 47km  
 5.7mb ( 70 obs.) 5.4Msz ( 18 obs.)  
 NEAR COAST OF CENTRAL CHILE  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike=175 Dip=70 Slip= 140  
 NP2: 281 53 25  
 Principal Axes:  
 T Plg=42 Azm=132  
 P 11 232  
 Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a large reverse component. The preferred fault plane is not determined.  
 RADIATED ENERGY  
 No. of sta: 11 Focal mech. F  
 Energy 1.1±0.3\*10\*\*13 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 57 No. of sta: 19  
 Principal Axes:

Scale 10\*\*17 Nm  
T Val= 5.25 Plg=47 Azm=125  
N 0.06 42 315  
P -5.31 5 220  
Best Double Couple:Mo=5.3\*10\*\*17  
NP1:Strike=275 Dip=54 Slip= 34  
NP2: 163 63 139  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 62S,124C  
Centroid Location:  
Origin Time 01:37:25.1 0.1  
Lat 32.22S 0.02 Lon 71.91W 0.02  
Dep 57.8 1.6 Half-duration 1.9  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 5.41 Plg=55 Azm=108  
N -1.44 26 332  
P -3.97 21 232  
Best Double Couple:Mo=4.7\*10\*\*17  
NP1:Strike=284 Dip=33 Slip= 37  
NP2: 162 71 118

11 17 08 03.18 11.444S 166.196E 50km  
5.0mb ( 15 obs.) 4.9Msz ( 1 obs.)  
SANTA CRUZ ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 51S, 79C  
Centroid Location:  
Origin Time 17:08: 6.6 0.2  
Lat 11.53S 0.02 Lon 165.96E 0.02  
Dep 52.5 1.5 Half-duration 1.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.45 Plg=79 Azm=321  
N 0.04 10 172  
P -1.49 6 81  
Best Double Couple:Mo=1.5\*10\*\*17  
NP1:Strike=160 Dip=40 Slip= 75  
NP2: 0 52 102

12 01 55 45.43 22.731N 143.900E 32km  
5.2mb ( 39 obs.)  
VOLCANO ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 20C  
Centroid Location:  
Origin Time 01:55:47.8 0.9  
Lat 23.16N 0.12 Lon 143.93E 0.15  
Dep 21.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.03 Plg=34 Azm=220  
N -0.87 9 317  
P -5.16 54 59  
Best Double Couple:Mo=5.6\*10\*\*16  
NP1:Strike=276 Dip=14 Slip=-132  
NP2: 138 80 -81

12 06 02 49.90 13.765N 124.538E 27km  
5.5mb ( 75 obs.) 5.7Msz ( 19 obs.)  
LUZON, PHILIPPINE ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 55S,119C  
Centroid Location:  
Origin Time 06:02:52.9 0.2  
Lat 13.94N 0.02 Lon 124.67E 0.02  
Dep 20.0 BDY Half-duration 2.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 9.03 Plg=58 Azm=252  
N -0.20 3 157  
P -8.83 32 65  
Best Double Couple:Mo=8.9\*10\*\*17  
NP1:Strike=142 Dip=13 Slip= 75  
NP2: 338 77 93

12 06 43 39.73 13.773N 124.529E 16km  
5.8mb (104 obs.) 6.1Msz ( 46 obs.)  
LUZON, PHILIPPINE ISLANDS  
FAULT PLANE SOLUTION: P-waves  
NP1:Strike=340 Dip=78 Slip= 90  
NP2: 160 12 90  
Principal Axes:  
T Plg=57 Azm=250  
P 33 70  
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.

RADIATED ENERGY  
No. of sta: 9 Focal mech. F  
Energy 3.3±1.0\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 26 No. of sta: 10  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 3.84 Plg=58 Azm=264  
N 0.47 9 159  
P -4.31 30 64  
Best Double Couple:Mo=4.1\*10\*\*18  
NP1:Strike=128 Dip=17 Slip= 58  
NP2: 342 76 99  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 58S,147C M.W.: 47S, 75C  
Centroid Location:  
Origin Time 06:43:47.6 0.1  
Lat 13.89N 0.01 Lon 124.82E 0.01  
Dep 22.0 BDY Half-duration 4.0  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 4.31 Plg=63 Azm=262  
N 0.04 5 163  
P -4.35 26 70  
Best Double Couple:Mo=4.3\*10\*\*18  
NP1:Strike=149 Dip=19 Slip= 75  
NP2: 344 72 95

12 10 33 22.08 51.605N 173.770W 33km  
5.1mb ( 80 obs.) 4.8Msz ( 10 obs.)  
ANDREANOF ISLANDS, ALEUTIAN IS.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 23C  
Centroid Location:  
Origin Time 10:33:22.1 0.8  
Lat 51.31N 0.09 Lon 173.95W 0.15  
Dep 32.8 6.5 Half-duration 1.2  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.98 Plg=59 Azm=304  
N -3.07 7 46  
P -8.91 30 140  
Best Double Couple:Mo=1.0\*10\*\*17  
NP1:Strike=251 Dip=16 Slip= 117  
NP2: 44 75 83

12 16 43 27.03 6.936S 155.781E 49km  
5.5mb ( 45 obs.) 5.2Msz ( 31 obs.)  
SOLOMON ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 57S, 93C  
Centroid Location:  
Origin Time 16:43:31.7 0.1  
Lat 7.19S 0.01 Lon 155.80E 0.02  
Dep 49.2 1.3 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.32 Plg=85 Azm= 19  
N 0.02 2 135  
P -2.34 4 226  
Best Double Couple:Mo=2.3\*10\*\*17  
NP1:Strike=318 Dip=41 Slip= 93  
NP2: 134 49 87

13 05 04 24.98 1.212S 127.912E 11km  
6.1mb ( 73 obs.) 6.3Msz ( 44 obs.)  
HALMAHERA, INDONESIA  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 7 Dip=90 Slip=-175  
NP2: 277 85 -360  
Principal Axes:  
T Plg= 4 Azm=142  
P 4 232  
Comment: The focal mechanism is well controlled and corresponds to strike-slip faulting. The preferred fault plane is not determined.

RADIATED ENERGY  
No. of sta: 10 Focal mech. F  
Energy 9.4±2.1\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 12 No. of sta: 16  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 4.62 Plg=11 Azm=134  
N -0.02 78 335  
P -4.60 4 225  
Best Double Couple:Mo=4.6\*10\*\*18

NP1:Strike=270 Dip=79 Slip= 5  
NP2: 179 85 169  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 66S,157C M.W.: 59S,120C  
Centroid Location:  
Origin Time 05:04:30.6 0.1  
Lat 1.13S 0.01 Lon 127.94E 0.01  
Dep 18.7 0.6 Half-duration 4.2  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 5.51 Plg= 7 Azm=312  
N -0.73 79 86  
P -4.78 8 221  
Best Double Couple:Mo=5.1\*10\*\*18  
NP1:Strike=357 Dip=79 Slip=-180  
NP2: 267 90 -11

13 12 03 18.52 43.406N 146.840E 33km  
5.3mb ( 90 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 9S, 12C  
Centroid Location:  
Origin Time 12:03:23.6 0.9  
Lat 43.38N FIX;Lon 146.86E FIX  
Dep 53.511.8 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.41 Plg=46 Azm= 28  
N 2.30 36 248  
P -8.71 21 141  
Best Double Couple:Mo=7.6\*10\*\*16  
NP1:Strike=188 Dip=40 Slip= 24  
NP2: 79 75 128

13 22 23 10.20 42.989N 148.218E 33km  
5.1mb ( 61 obs.) 5.0Msz ( 31 obs.)  
OFF COAST OF HOKKAIDO, JAPAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 21C  
Centroid Location:  
Origin Time 22:23:14.4 1.1  
Lat 42.98N 0.11 Lon 148.74E 0.16  
Dep 36.3 7.2 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.50 Plg=65 Azm=221  
N -1.32 25 41  
P -4.18 0 131  
Best Double Couple:Mo=4.8\*10\*\*16  
NP1:Strike=243 Dip=50 Slip= 123  
NP2: 18 50 57

14 10 16 32.98 22.397N 121.640E 141km  
5.1mb ( 34 obs.)  
TAIWAN REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 20S, 24C  
Centroid Location:  
Origin Time 10:16:33.0 0.4  
Lat 22.48N 0.06 Lon 121.73E 0.08  
Dep 138.3 3.2 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.80 Plg=31 Azm=300  
N 1.08 17 40  
P -8.87 54 156  
Best Double Couple:Mo=8.3\*10\*\*16  
NP1:Strike=348 Dip=21 Slip=-144  
NP2: 224 78 -72

15 00 39 25.49 3.804S 152.148E 9km  
5.6mb ( 46 obs.) 6.1Msz ( 55 obs.)  
NEW IRELAND REGION, P.N.G.  
RADIATED ENERGY  
No. of sta: 10 Focal mech. M  
Energy 9.1±1.8\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 15 No. of sta: 26  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.70 Plg= 5 Azm=168  
N 0.13 82 37  
P -1.83 6 259  
Best Double Couple:Mo=1.8\*10\*\*18  
NP1:Strike=303 Dip=82 Slip= 0  
NP2: 34 90 -172  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN

L.P.B.: 62S,137C M.W.: 40S, 58C  
Centroid Location:  
Origin Time 00:39:33.6 0.1  
Lat 3.67S 0.01 Lon 152.06E 0.01  
Dep 15.0 FIX Half-duration 2.9  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.69 Plg=13 Azm=171  
N -0.18 76 341  
P -1.51 2 80  
Best Double Couple:Mo=1.6\*10\*\*18  
NP1:Strike=215 Dip=79 Slip= 172  
NP2: 306 82 11

15 06 48 00.20 58.823S 158.601E 33km  
4.9mb ( 4 obs.) 5.0Ms ( 2 obs.)  
MACQUARIE ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 35S, 54C  
Centroid Location:  
Origin Time 06:48: 6.9 0.3  
Lat 58.49S 0.04 Lon 158.15E 0.06  
Dep 15.0 FIX Half-duration 1.1  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 10.33 Plg=67 Azm=343  
N 2.70 20 130  
P -13.03 11 224  
Best Double Couple:Mo=1.2\*10\*\*17  
NP1:Strike=338 Dip=38 Slip= 123  
NP2: 118 59 67

16 00 06 49.14 9.297S 75.775W 128km  
5.4mb ( 94 obs.)  
CENTRAL PERU  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=345 Dip=55 Slip= -90  
NP2: 165 35 -90  
Principal Axes:  
T Plg=10 Azm= 75  
P 80 255  
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.  
MOMENT TENSOR SOLUTION  
Dep 126 No. of sta: 14  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.93 Plg= 0 Azm= 53  
N -0.91 30 144  
P -2.02 60 323  
Best Double Couple:Mo=2.5\*10\*\*17  
NP1:Strike=117 Dip=52 Slip=-129  
NP2: 350 52 -51  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 55S, 78C  
Centroid Location:  
Origin Time 00:06:54.2 0.2  
Lat 9.21S 0.02 Lon 75.57W 0.03  
Dep 139.2 0.9 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.54 Plg= 7 Azm= 56  
N -0.29 15 148  
P -2.25 73 301  
Best Double Couple:Mo=2.4\*10\*\*17  
NP1:Strike=129 Dip=40 Slip=-114  
NP2: 339 54 -71

16 05 10 00.93 45.749N 149.167E 117km  
6.4mb (135 obs.)  
KURIL ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 51 Dip=64 Slip= 162  
NP2: 149 74 27  
Principal Axes:  
T Plg=30 Azm= 12  
P 7 278  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a moderate reverse component. The preferred fault plane is not determined. Double event. Mechanism for second event appears to have a larger slip vector.  
RADIATED ENERGY

No. of sta: 26 Focal mech. F  
Energy 3.4±0.6\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 112 No. of sta: 45  
Principal Axes:  
Scale 10\*\*19 Nm  
T Val= 1.31 Plg=31 Azm= 23  
N -0.09 48 154  
P -1.22 26 276  
Best Double Couple:Mo=1.3\*10\*\*19  
NP1:Strike= 57 Dip=48 Slip= 176  
NP2: 150 87 42  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 62S,164C M.W.: 58S,135C  
Centroid Location:  
Origin Time 05:10: 6.6 0.1  
Lat 45.78N 0.01 Lon 149.32E 0.01  
Dep 121.1 0.4 Half-duration 5.6  
Principal Axes:  
Scale 10\*\*19 Nm  
T Val= 1.33 Plg=24 Azm= 17  
N 0.08 58 152  
P -1.41 20 278  
Best Double Couple:Mo=1.4\*10\*\*19  
NP1:Strike= 57 Dip=58 Slip= 177  
NP2: 148 88 32

16 17 04 05.91 3.620S 152.004E 33km  
4.6mb ( 5 obs.) 4.7Ms ( 1 obs.)  
NEW IRELAND REGION, P.N.G.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 15C  
Centroid Location:  
Origin Time 17:04: 9.9 0.8  
Lat 3.60S 0.09 Lon 152.22E 0.09  
Dep 36.3 9.5 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.41 Plg=11 Azm= 4  
N -0.01 78 154  
P -5.40 6 272  
Best Double Couple:Mo=5.4\*10\*\*16  
NP1:Strike= 48 Dip=78 Slip= 177  
NP2: 138 87 12

16 17 56 28.67 3.614S 151.998E 33km  
4.6mb ( 9 obs.) 4.7Ms ( 3 obs.)  
NEW IRELAND REGION, P.N.G.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 22C  
Centroid Location:  
Origin Time 17:56:31.2 0.7  
Lat 3.70S 0.09 Lon 152.09E 0.09  
Dep 17.5 9.2 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.72 Plg=23 Azm=358  
N -1.08 64 206  
P -6.64 11 93  
Best Double Couple:Mo=7.2\*10\*\*16  
NP1:Strike=138 Dip=65 Slip= 9  
NP2: 44 82 155

17 13 54 59.93 43.493N 146.892E 33km  
5.5mb ( 93 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 14C  
Centroid Location:  
Origin Time 13:55: 6.8 0.8  
Lat 43.43N FIX;Lon 146.94E FIX  
Dep 21.1 9.7 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.05 Plg=38 Azm= 26  
N 0.42 50 227  
P -6.47 11 124  
Best Double Couple:Mo=6.3\*10\*\*16  
NP1:Strike=172 Dip=55 Slip= 22  
NP2: 69 72 143

17 19 25 53.55 5.888S 154.618E 146km  
5.4mb ( 53 obs.)  
SOLOMON ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 19S, 32C  
Centroid Location:  
Origin Time 19:25:51.4 0.7

Lat 6.30S 0.06 Lon 154.66E 0.07  
Dep 136.4 2.6 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.05 Plg=78 Azm= 75  
N 0.46 3 331  
P -9.51 12 240  
Best Double Couple:Mo=9.3\*10\*\*16  
NP1:Strike=326 Dip=33 Slip= 84  
NP2: 153 57 94

18 03 07 36.23 13.286N 89.197W 84km  
5.0mb ( 88 obs.)  
EL SALVADOR  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 29S, 55C  
Centroid Location:  
Origin Time 03:07:34.4 0.3  
Lat 12.94N 0.03 Lon 89.56W 0.03  
Dep 45.4 2.6 Half-duration 1.2  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 12.29 Plg=28 Azm= 25  
N 0.36 0 295  
P -12.65 62 205  
Best Double Couple:Mo=1.2\*10\*\*17  
NP1:Strike=116 Dip=17 Slip= -89  
NP2: 295 73 -90

18 08 30 51.12 33.235S 176.679W 33km  
5.0mb ( 8 obs.) 4.6Ms ( 1 obs.)  
SOUTH OF KERMADEC ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 10S, 11C  
Centroid Location:  
Origin Time 08:30:55.0 1.3  
Lat 33.06S FIX;Lon 176.70W FIX  
Dep 33.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 4.96 Plg=19 Azm=287  
N 1.75 45 37  
P -6.71 39 181  
Best Double Couple:Mo=5.8\*10\*\*16  
NP1:Strike=331 Dip=48 Slip=-163  
NP2: 230 78 -43

18 10 42 55.49 43.439N 147.329E 33km  
5.5mb (100 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 18S, 23C  
Centroid Location:  
Origin Time 10:43: 2.3 0.7  
Lat 43.23N 0.07 Lon 147.24E 0.09  
Dep 49.3 5.8 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.68 Plg=50 Azm= 20  
N -1.19 38 221  
P -6.49 11 123  
Best Double Couple:Mo=7.1\*10\*\*16  
NP1:Strike=176 Dip=48 Slip= 34  
NP2: 62 66 132

18 17 12 50.92 43.576N 147.097E 60km  
6.2mb (149 obs.)  
KURIL ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 53 Dip=90 Slip= 90  
NP2: 90 0 360  
Principal Axes:  
T Plg=45 Azm=323  
P 45 143  
Comment: The focal mechanism is poorly controlled and corresponds to vertical faulting. The preferred fault plane is not determined.  
RADIATED ENERGY  
No. of sta: 13 Focal mech. M  
Energy 1.6±0.3\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 61 No. of sta: 34  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 6.37 Plg=47 Azm=328  
N 0.04 16 221  
P -6.41 39 118  
Best Double Couple:Mo=6.4\*10\*\*17

NP1:Strike=147 Dip=16 Slip= 15  
 NP2: 42 86 106  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 47S,104C M.W.: 12S, 13C  
 Centroid Location:  
 Origin Time 17:12:53.8 0.2  
 Lat 43.70N 0.02 Lon 147.32E 0.03  
 Dep 82.6 1.8 Half-duration 2.0  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 8.27 Plg=40 Azm=332  
 N -1.75 34 209  
 P -6.52 32 94  
 Best Double Couple:Mo=7.4\*10\*\*17  
 NP1:Strike=128 Dip=34 Slip= 7  
 NP2: 32 86 124

19 09 47 09.19 5.129S 151.808E 54km  
 5.2mb ( 25 obs.)  
 NEW BRITAIN REGION, P.N.G.  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 47S, 72C  
 Centroid Location:  
 Origin Time 09:47:15.3 0.3  
 Lat 5.16S 0.04 Lon 152.13E 0.04  
 Dep 40.9 2.3 Half-duration 1.2  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 11.38 Plg=64 Azm= 23  
 N 2.81 18 252  
 P -14.20 19 156  
 Best Double Couple:Mo=1.3\*10\*\*17  
 NP1:Strike=219 Dip=31 Slip= 53  
 NP2: 80 66 110

19 12 54 08.40 9.521S 159.453E 5km  
 4.7mb ( 9 obs.) 4.8Msz ( 1 obs.)  
 SOLOMON ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 25S, 33C  
 Centroid Location:  
 Origin Time 12:54:13.6 0.5  
 Lat 9.34S 0.07 Lon 159.35E 0.07  
 Dep 15.0 FIX Half-duration 1.2  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.74 Plg=59 Azm= 77  
 N 0.00 0 347  
 P -1.74 31 257  
 Best Double Couple:Mo=1.7\*10\*\*17  
 NP1:Strike=346 Dip=14 Slip= 90  
 NP2: 167 76 90

19 17 55 23.66 22.433N 118.715E 16km  
 5.2mb ( 26 obs.)  
 TAIWAN REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 11S, 15C  
 Centroid Location:  
 Origin Time 17:55:23.5 0.9  
 Lat 22.36N 0.09 Lon 118.48E 0.14  
 Dep 16.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 3.88 Plg= 6 Azm=352  
 N -0.41 13 83  
 P -3.48 76 239  
 Best Double Couple:Mo=3.7\*10\*\*16  
 NP1:Strike= 67 Dip=41 Slip=-110  
 NP2: 274 52 -73

20 01 15 16.18 39.187S 70.811W 162km  
 5.8mb ( 62 obs.)  
 SOUTHERN ARGENTINA  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike=347 Dip=85 Slip= 90  
 NP2: 167 5 90  
 Principal Axes:  
 T Plg=50 Azm=257  
 P 40 77  
 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 3.1±0.8\*10\*\*13 Nm  
 MOMENT TENSOR SOLUTION

Dep 168 No. of sta: 18  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 9.97 Plg=46 Azm=233  
 N -0.60 20 346  
 P -9.36 37 92  
 Best Double Couple:Mo=9.7\*10\*\*17  
 NP1:Strike=241 Dip=21 Slip= 167  
 NP2: 344 85 70  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 59S,125C  
 Centroid Location:  
 Origin Time 01:15:20.5 0.1  
 Lat 39.19S 0.01 Lon 70.80W 0.02  
 Dep 170.2 0.4 Half-duration 2.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 9.40 Plg=48 Azm=238  
 N 0.32 14 344  
 P -9.72 39 86  
 Best Double Couple:Mo=9.6\*10\*\*17  
 NP1:Strike=234 Dip=15 Slip= 161  
 NP2: 343 85 76

20 04 05 33.26 21.917S 175.058W 33km  
 5.2mb ( 25 obs.) 5.1Msz ( 29 obs.)  
 TONGA ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 41S, 69C  
 Centroid Location:  
 Origin Time 04:05:38.5 0.2  
 Lat 21.91S 0.04 Lon 174.48W 0.03  
 Dep 15.0 FIX Half-duration 1.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.11 Plg=63 Azm=332  
 N 0.03 17 206  
 P -2.14 21 109  
 Best Double Couple:Mo=2.1\*10\*\*17  
 NP1:Strike=173 Dip=28 Slip= 53  
 NP2: 33 68 108

20 05 03 03.31 3.258S 146.657E 33km  
 4.8mb ( 6 obs.) 4.8Msz ( 1 obs.)  
 BISMARCK SEA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 32S, 47C  
 Centroid Location:  
 Origin Time 05:03: 7.0 0.5  
 Lat 3.31S 0.06 Lon 146.74E 0.05  
 Dep 25.6 5.3 Half-duration 1.1  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.52 Plg=25 Azm=127  
 N -0.29 65 299  
 P -1.23 3 35  
 Best Double Couple:Mo=1.4\*10\*\*17  
 NP1:Strike=168 Dip=70 Slip= 164  
 NP2: 264 75 20

21 05 06 21.08 36.391N 69.708E 47km  
 5.4mb ( 93 obs.) 5.3Msz ( 38 obs.)  
 HINDU KUSH REGION, AFGHANISTAN  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 40S, 65C  
 Centroid Location:  
 Origin Time 05:06:25.2 0.3  
 Lat 36.50N 0.06 Lon 68.97E 0.04  
 Dep 15.0 FIX Half-duration 1.1  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.92 Plg=56 Azm=177  
 N 0.03 27 38  
 P -1.95 19 298  
 Best Double Couple:Mo=1.9\*10\*\*17  
 NP1:Strike=352 Dip=35 Slip= 38  
 NP2: 229 69 119

21 11 36 51.15 1.256S 127.705E 10km  
 5.1mb ( 5 obs.)  
 HALMAHERA, INDONESIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 10S, 17C  
 Centroid Location:  
 Origin Time 11:36:53.4 0.9  
 Lat 0.85S 0.15 Lon 127.87E 0.15  
 Dep 38.811.0 Half-duration 1.0  
 Principal Axes:

Scale 10\*\*16 Nm  
 T Val= 10.05 Plg=25 Azm=141  
 N -2.18 65 311  
 P -7.86 4 49  
 Best Double Couple:Mo=8.9\*10\*\*16  
 NP1:Strike=183 Dip=70 Slip= 165  
 NP2: 278 76 21

22 03 16 53.16 7.772N 127.562E 33km  
 5.1mb ( 24 obs.)  
 PHILIPPINE ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 12S, 13C  
 Centroid Location:  
 Origin Time 03:16:54.9 0.7  
 Lat 7.68N 0.11 Lon 127.91E 0.12  
 Dep 15.0 FIX Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 5.08 Plg= 5 Azm=239  
 N -0.20 19 331  
 P -4.88 70 135  
 Best Double Couple:Mo=5.0\*10\*\*16  
 NP1:Strike=309 Dip=43 Slip=-118  
 NP2: 166 53 -66

22 18 43 49.32 0.578S 127.721E 33km  
 4.9mb ( 16 obs.) 4.4Msz ( 2 obs.)  
 HALMAHERA, INDONESIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 32C  
 Centroid Location:  
 Origin Time 18:43:50.0 0.6  
 Lat 0.47S 0.07 Lon 127.79E 0.07  
 Dep 35.6 5.3 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 9.11 Plg=17 Azm=150  
 N -3.73 68 290  
 P -5.38 13 56  
 Best Double Couple:Mo=7.2\*10\*\*16  
 NP1:Strike=192 Dip=68 Slip= 177  
 NP2: 283 87 22

24 00 24 46.56 43.259N 148.037E 45km  
 5.3mb ( 94 obs.)  
 EAST OF KURIL ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 27C  
 Centroid Location:  
 Origin Time 00:24:47.9 0.5  
 Lat 43.17N 0.07 Lon 147.85E 0.07  
 Dep 34.0 5.4 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 8.25 Plg=29 Azm=355  
 N 1.08 49 225  
 P -9.33 26 101  
 Best Double Couple:Mo=8.8\*10\*\*16  
 NP1:Strike=139 Dip=49 Slip= 3  
 NP2: 47 88 139

24 02 02 20.90 4.594N 127.991E 69km  
 5.2mb ( 32 obs.)  
 TALAUD ISLANDS, INDONESIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 16C  
 Centroid Location:  
 Origin Time 02:02:24.7 1.7  
 Lat 5.23N 0.12 Lon 127.57E 0.15  
 Dep 54.712.4 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 4.80 Plg=29 Azm=171  
 N 0.17 35 284  
 P -4.97 42 52  
 Best Double Couple:Mo=4.9\*10\*\*16  
 NP1:Strike=210 Dip=36 Slip=-167  
 NP2: 109 82 -55

24 04 44 34.60 16.728S 172.835W 33km  
 4.7mb ( 9 obs.) 4.7Msz ( 3 obs.)  
 SAMOA ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 13S, 15C  
 Centroid Location:  
 Origin Time 04:44:33.7 1.1  
 Lat 16.61S 0.17 Lon 172.81W 0.13

Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.63 Plg=45 Azm=132  
N 3.87 3 39  
P -13.50 45 305  
Best Double Couple:Mo=1.2\*10\*\*17  
NP1:Strike=313 Dip= 3 Slip= 5  
NP2: 219 90 93

24 19 26 27.95 43.084N 147.096E 57km  
5.7mb (120 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 34S, 61C  
Centroid Location:  
Origin Time 19:26:30.8 0.3  
Lat 43.02N 0.04 Lon 146.97E 0.04  
Dep 55.2 3.6 Half-duration 1.2  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 13.73 Plg=58 Azm=334  
N 0.48 15 219  
P -14.21 28 121  
Best Double Couple:Mo=1.4\*10\*\*17  
NP1:Strike=178 Dip=22 Slip= 46  
NP2: 44 75 105

25 00 54 34.30 36.359N 70.957E 239km  
5.9mb (137 obs.)  
HINDU KUSH REGION, AFGHANISTAN  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=265 Dip=40 Slip= 105  
NP2: 66 52 78  
Principal Axes:  
T Plg=79 Azm=286  
P 6 164  
Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting with a small strike-slip component. The preferred fault plane is not determined. Two events; focal mechanism based on second event.

RADIATED ENERGY  
No. of sta: 19 Focal mech. F  
Energy 3.3±0.7\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 242 No. of sta: 23  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.00 Plg=81 Azm=267  
N 0.03 9 94  
P -1.03 1 4  
Best Double Couple:Mo=1.0\*10\*\*18  
NP1:Strike= 85 Dip=45 Slip= 77  
NP2: 282 47 102  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 62S,127C  
Centroid Location:  
Origin Time 00:54:39.4 0.2  
Lat 36.25N 0.02 Lon 71.00E 0.02  
Dep 258.3 1.1 Half-duration 2.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 8.67 Plg=76 Azm=285  
N -1.84 13 76  
P -6.82 7 168  
Best Double Couple:Mo=7.7\*10\*\*17  
NP1:Strike=272 Dip=40 Slip= 110  
NP2: 67 53 74

25 04 37 45.07 1.830N 126.023E 41km  
5.2mb ( 31 obs.) 4.7Msz ( 5 obs.)  
NORTHERN MOLUCCA SEA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 50S, 84C  
Centroid Location:  
Origin Time 04:37:53.1 0.2  
Lat 2.44N 0.03 Lon 126.32E 0.03  
Dep 44.5 2.0 Half-duration 1.3  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.75 Plg=76 Azm=180  
N 0.28 9 47  
P -2.03 10 315  
Best Double Couple:Mo=1.9\*10\*\*17  
NP1:Strike= 34 Dip=36 Slip= 74

NP2: 234 55 102

25 13 30 26.81 43.771N 147.698E 35km  
5.5mb (104 obs.) 4.8Msz ( 41 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 36S, 64C  
Centroid Location:  
Origin Time 13:30:30.8 0.2  
Lat 43.77N 0.03 Lon 147.86E 0.04  
Dep 36.9 2.1 Half-duration 1.1  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.42 Plg=72 Azm=288  
N 1.39 5 34  
P -12.81 17 125  
Best Double Couple:Mo=1.2\*10\*\*17  
NP1:Strike=223 Dip=28 Slip= 100  
NP2: 31 62 84

25 18 50 57.72 43.234N 147.098E 52km  
5.3mb ( 93 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 24S, 29C  
Centroid Location:  
Origin Time 18:51: 3.8 0.6  
Lat 42.94N 0.08 Lon 146.64E 0.06  
Dep 61.4 5.5 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 4.30 Plg=68 Azm=191  
N 2.77 22 11  
P -7.07 0 101  
Best Double Couple:Mo=5.7\*10\*\*16  
NP1:Strike=212 Dip=49 Slip= 120  
NP2: 350 49 60

25 21 00 39.92 27.523S 63.216W 573km  
5.1mb ( 72 obs.)  
SANTIAGO DEL ESTERO PROV., ARG.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 28S, 35C  
Centroid Location:  
Origin Time 21:00:46.3 0.4  
Lat 27.32S 0.05 Lon 63.19W 0.03  
Dep 580.7 2.8 Half-duration 1.2  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.44 Plg=18 Azm=255  
N 0.72 20 158  
P -12.16 63 24  
Best Double Couple:Mo=1.2\*10\*\*17  
NP1:Strike= 13 Dip=32 Slip= -51  
NP2: 149 66 -112

26 03 31 16.81 27.520S 176.909W 168km  
4.9mb ( 17 obs.)  
KERMADEC ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 43S, 69C  
Centroid Location:  
Origin Time 03:31: 4.9 0.3  
Lat 27.52S 0.04 Lon 176.20W 0.03  
Dep 15.0 FIX Half-duration 1.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.27 Plg=70 Azm=303  
N 0.13 8 191  
P -1.40 19 98  
Best Double Couple:Mo=1.3\*10\*\*17  
NP1:Strike=175 Dip=27 Slip= 72  
NP2: 14 64 99

26 13 52 32.45 43.726N 147.353E 33km  
5.1mb ( 81 obs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 9S, 12C  
Centroid Location:  
Origin Time 13:52:33.5 1.4  
Lat 43.59N 0.15 Lon 147.40E 0.16  
Dep 32.211.8 Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 3.72 Plg=25 Azm= 75  
N 1.81 12 340  
P -5.53 62 226

Best Double Couple:Mo=4.6\*10\*\*16  
NP1:Strike=190 Dip=23 Slip= -57  
NP2: 335 71 -103

27 09 14 35.13 25.704N 109.632W 10km  
4.9mb ( 30 obs.)  
GULF OF CALIFORNIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 14C  
Centroid Location:  
Origin Time 09:14:36.5 0.8  
Lat 25.56N 0.07 Lon 109.86W 0.11  
Dep 15.0 FIX Half-duration 1.0  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 4.57 Plg= 0 Azm=258  
N -0.14 90 180  
P -4.43 0 168  
Best Double Couple:Mo=4.5\*10\*\*16  
NP1:Strike=303 Dip=90 Slip=-180  
NP2: 33 90 0

27 17 45 58.00 43.515N 127.427W 20km  
5.6mb ( 93 obs.) 6.0Msz ( 46 obs.)  
OFF COAST OF OREGON  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=205 Dip=90 Slip= 0  
NP2: 115 90 180  
Principal Axes:  
T Plg= 0 Azm= 70  
P 0 160  
Comment: The focal mechanism is moderately well controlled and corresponds to right-lateral strike slip faulting. The preferred fault plane is NP2.

RADIATED ENERGY  
No. of sta: 7 Focal mech. F  
Energy 2.5±0.8\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 16 No. of sta: 7  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 3.13 Plg=22 Azm= 61  
N 0.40 52 299  
P -3.53 29 164  
Best Double Couple:Mo=3.3\*10\*\*18  
NP1:Strike=201 Dip=53 Slip= -5  
NP2: 294 86 -142  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 59S,158C  
Centroid Location:  
Origin Time 17:46: 7.1 0.1  
Lat 43.42N 0.01 Lon 128.11W 0.01  
Dep 15.0 FIX Half-duration 3.7  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 3.50 Plg= 2 Azm= 70  
N -0.05 84 316  
P -3.45 5 161  
Best Double Couple:Mo=3.5\*10\*\*18  
NP1:Strike=205 Dip=85 Slip= -2  
NP2: 296 88 -175

27 22 20 28.54 25.778S 179.339E 519km  
5.9mb ( 60 obs.)  
SOUTH OF FIJI ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=200 Dip=85 Slip= 65  
NP2: 99 25 168  
Principal Axes:  
T Plg=44 Azm= 85  
P 35 311  
Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting with a moderate left-lateral strike-slip component. The preferred fault plane is NP1.

RADIATED ENERGY  
No. of sta: 25 Focal mech. F  
Energy 3.5±0.5\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 540 No. of sta: 43  
Principal Axes:  
Scale 10\*\*19 Nm  
T Val= 1.00 Plg=47 Azm= 81  
N 0.02 26 203  
P -1.02 31 310

Best Double Couple:Mo=1.0\*10\*\*19  
 NP1:Strike= 91 Dip=28 Slip= 160  
 NP2: 198 81 64  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 71S,191C  
 Centroid Location:  
 Origin Time 22:20:37.2 0.1  
 Lat 25.75S 0.01 Lon 179.39E 0.01  
 Dep 540.6 0.5 Half-duration 5.2  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 11.74 Plg=49 Azm= 92  
 N -0.82 20 206  
 P -10.91 34 310  
 Best Double Couple:Mo=1.1\*10\*\*19  
 NP1:Strike= 93 Dip=21 Slip= 158  
 NP2: 203 82 70

28 09 06 51.89 6.190S 154.480E 59km  
 5.0mb ( 25 obs.) 5.3msz ( 8 obs.)  
 SOLOMON ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 43S, 79C  
 Centroid Location:  
 Origin Time 09:06:54.0 0.2  
 Lat 6.39S 0.02 Lon 154.45E 0.02  
 Dep 34.7 2.1 Half-duration 2.1  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 6.07 Plg=69 Azm= 5  
 N -0.39 10 123  
 P -5.68 18 216  
 Best Double Couple:Mo=5.9\*10\*\*17  
 NP1:Strike=322 Dip=28 Slip= 112  
 NP2: 118 64 79

28 09 11 20.05 14.537N 103.755W 33km  
 5.2mb ( 54 obs.) 5.5msz ( 28 obs.)  
 OFF COAST OF GUERRERO, MEXICO  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 45S, 94C  
 Centroid Location:  
 Origin Time 09:11:22.8 0.2  
 Lat 14.75N 0.02 Lon 103.90W 0.02  
 Dep 15.0 BDY Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 9.59 Plg= 7 Azm=235  
 N -1.62 75 352  
 P -7.97 13 144  
 Best Double Couple:Mo=8.8\*10\*\*17  
 NP1:Strike=280 Dip=76 Slip=-175  
 NP2: 189 86 -14

28 23 51 12.28 24.759N 122.208E 33km  
 5.5mb ( 74 obs.) 5.4msz ( 36 obs.)  
 TAIWAN REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 48S, 88C  
 Centroid Location:  
 Origin Time 23:51:10.7 0.2  
 Lat 24.63N 0.02 Lon 121.93E 0.02  
 Dep 32.7 1.5 Half-duration 1.6  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 3.95 Plg= 7 Azm=186  
 N -1.35 17 94  
 P -2.61 72 298  
 Best Double Couple:Mo=3.3\*10\*\*17  
 NP1:Strike=294 Dip=41 Slip= -63  
 NP2: 81 54 -111

29 04 30 20.48 23.928N 123.492E 33km  
 4.9mb ( 27 obs.) 4.4msz ( 2 obs.)

SOUTHWESTERN RYUKYU ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 12S, 18C  
 Centroid Location:  
 Origin Time 04:30:25.1 0.6  
 Lat 23.84N 0.08 Lon 123.15E 0.09  
 Dep 33.0 FIX Half-duration 1.2  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 7.34 Plg=42 Azm=273  
 N 2.58 35 43  
 P -9.92 28 155  
 Best Double Couple:Mo=8.6\*10\*\*16  
 NP1:Strike=296 Dip=36 Slip= 166  
 NP2: 37 82 54

30 08 11 29.83 6.183S 129.446E 264km  
 5.6mb ( 53 obs.)  
 BANDA SEA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 63S,131C  
 Centroid Location:  
 Origin Time 08:11:32.4 0.2  
 Lat 6.24S 0.02 Lon 129.46E 0.02  
 Dep 253.8 0.8 Half-duration 2.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 9.52 Plg=21 Azm= 10  
 N -0.49 47 255  
 P -9.03 35 116  
 Best Double Couple:Mo=9.3\*10\*\*17  
 NP1:Strike=148 Dip=49 Slip= -11  
 NP2: 245 81 -138

31 11 48 13.92 3.019N 96.192E 29km  
 5.7mb (100 obs.) 6.2msz ( 60 obs.)  
 NORTHERN SUMATERA, INDONESIA  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike=123 Dip=75 Slip= 90  
 NP2: 303 15 90  
 Principal Axes:  
 T Plg=60 Azm= 33  
 P 30 213  
 Comment: The focal mechanism is  
 poorly controlled and  
 corresponds to reverse  
 faulting. The preferred fault  
 plane is NP2.  
 RADIATED ENERGY  
 No. of sta: 23 Focal mech. M  
 Energy 4.7±0.9\*10\*\*12 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 24 No. of sta: 26  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 1.80 Plg=59 Azm= 37  
 N -0.01 1 305  
 P -1.80 31 215  
 Best Double Couple:Mo=1.8\*10\*\*18  
 NP1:Strike=301 Dip=14 Slip= 85  
 NP2: 126 76 91  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 65S,160C M.W.: 37S, 40C  
 Centroid Location:  
 Origin Time 11:48:18.3 0.1  
 Lat 2.63N 0.01 Lon 96.00E 0.01  
 Dep 37.2 0.8 Half-duration 3.1  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 1.72 Plg=64 Azm= 59  
 N 0.28 12 304  
 P -1.99 23 209  
 Best Double Couple:Mo=1.9\*10\*\*18  
 NP1:Strike=276 Dip=24 Slip= 59  
 NP2: 129 69 103

31 17 22 54.71 15.401N 93.721W 51km  
 5.1mb ( 61 obs.) 4.8msz ( 3 obs.)  
 NEAR COAST OF CHIAPAS, MEXICO  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 28C  
 Centroid Location:  
 Origin Time 17:22:57.6 0.5  
 Lat 15.22N 0.05 Lon 93.91W 0.05  
 Dep 76.8 4.0 Half-duration 1.0  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 6.57 Plg=20 Azm=225  
 N 1.59 16 129  
 P -8.16 64 4  
 Best Double Couple:Mo=7.4\*10\*\*16  
 NP1:Strike=341 Dip=28 Slip= -55  
 NP2: 122 67 -107

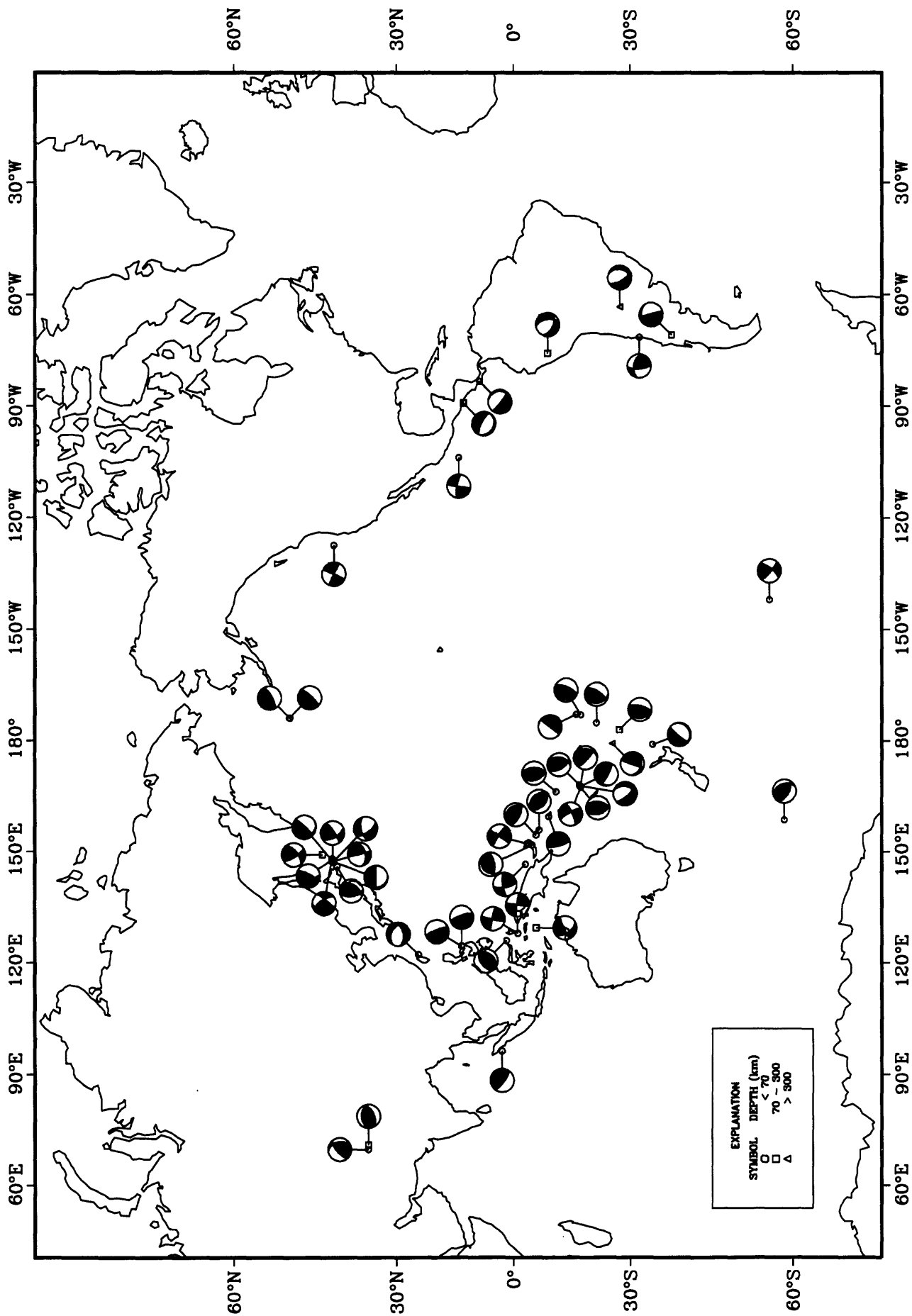
31 21 19 07.87 2.358S 138.376E 10km  
 5.2mb ( 29 obs.) 4.6msz ( 8 obs.)  
 IRIAN JAYA, INDONESIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 31C  
 Centroid Location:  
 Origin Time 21:19:14.8 1.0  
 Lat 2.44S 0.10 Lon 138.13E 0.10  
 Dep 15.4 4.9 Half-duration 1.1  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 8.33 Plg=55 Azm=102  
 N -1.24 17 217  
 P -7.10 30 317  
 Best Double Couple:Mo=7.7\*10\*\*16  
 NP1:Strike= 87 Dip=21 Slip= 142  
 NP2: 213 77 73

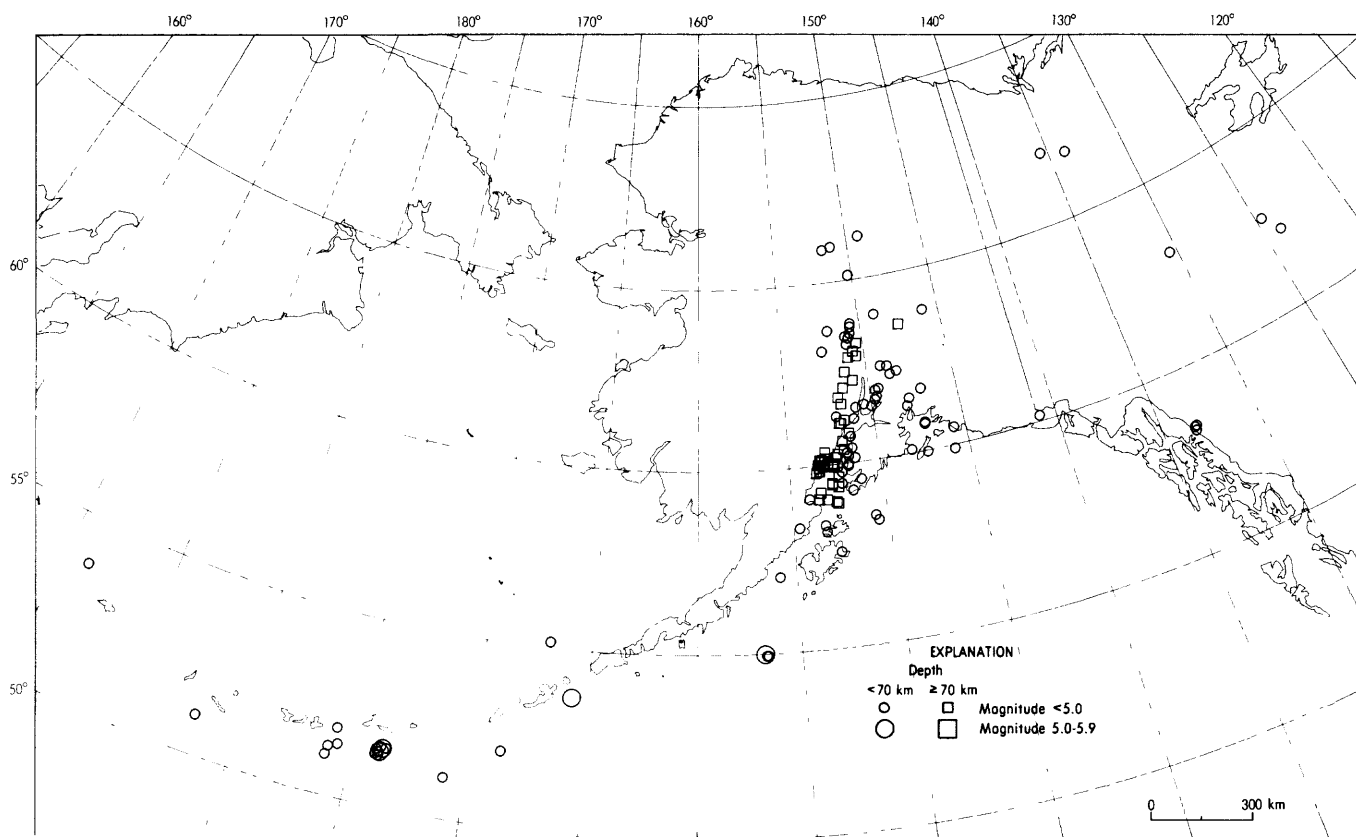
31 22 59 26.31 9.037N 83.323W 56km  
 5.6mb ( 96 obs.)  
 COSTA RICA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 35S, 50C  
 Centroid Location:  
 Origin Time 22:59:28.9 0.3  
 Lat 8.98N 0.05 Lon 83.26W 0.05  
 Dep 15.0 BDY Half-duration 1.1  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.52 Plg=35 Azm=228  
 N 0.41 11 131  
 P -2.93 53 26  
 Best Double Couple:Mo=2.7\*10\*\*17  
 NP1:Strike= 0 Dip=14 Slip= -39  
 NP2: 129 81 -101

31 23 04 07.69 17.876S 172.883W 33km  
 5.2mb ( 23 obs.) 5.1msz ( 4 obs.)  
 TONGA ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 32S, 57C  
 Centroid Location:  
 Origin Time 23:04:11.4 0.4  
 Lat 17.98S 0.04 Lon 172.61W 0.04  
 Dep 15.0 FIX Half-duration 1.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.79 Plg=68 Azm=295  
 N 0.01 1 203  
 P -1.80 22 113  
 Best Double Couple:Mo=1.8\*10\*\*17  
 NP1:Strike=202 Dip=23 Slip= 88  
 NP2: 24 67 91

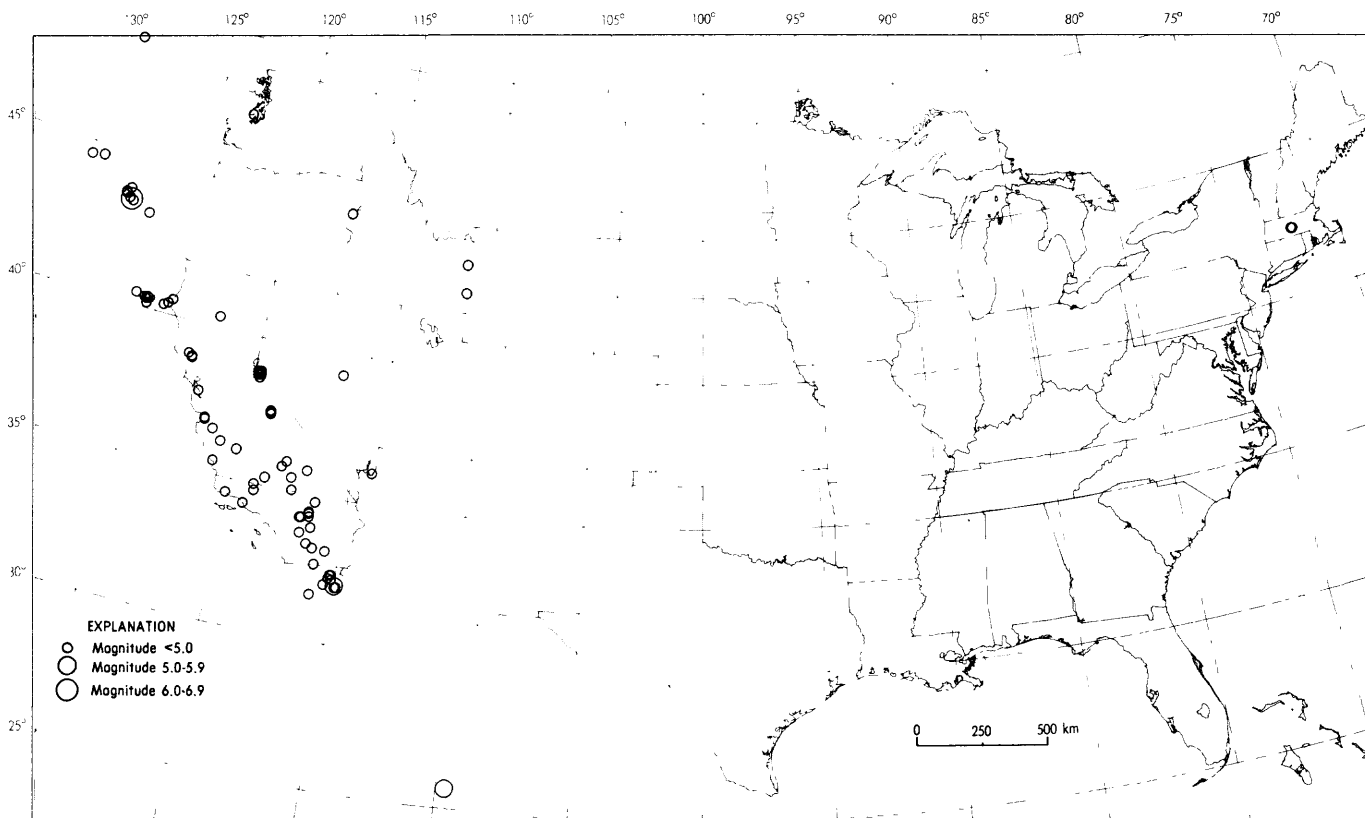


# Earthquake Focal Mechanisms for October 1994

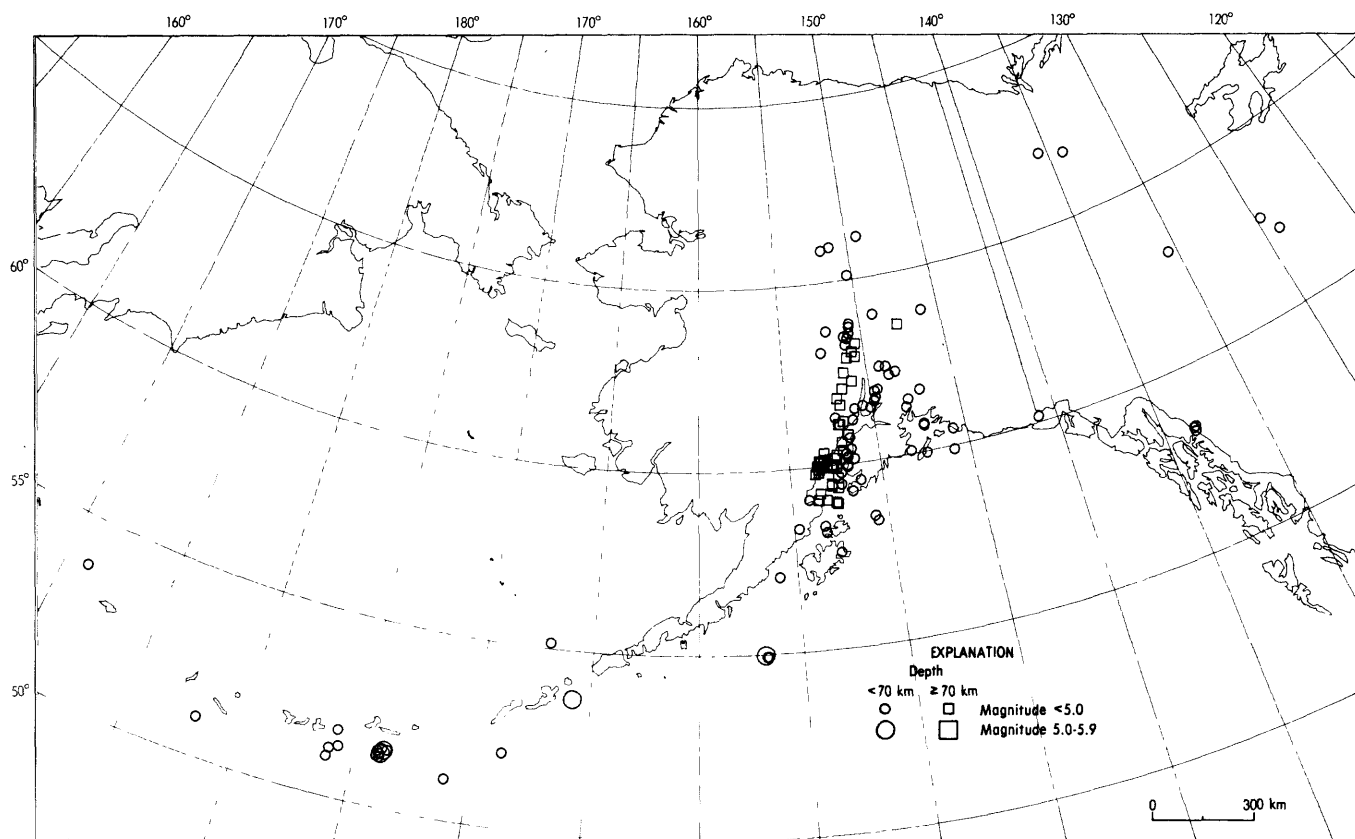




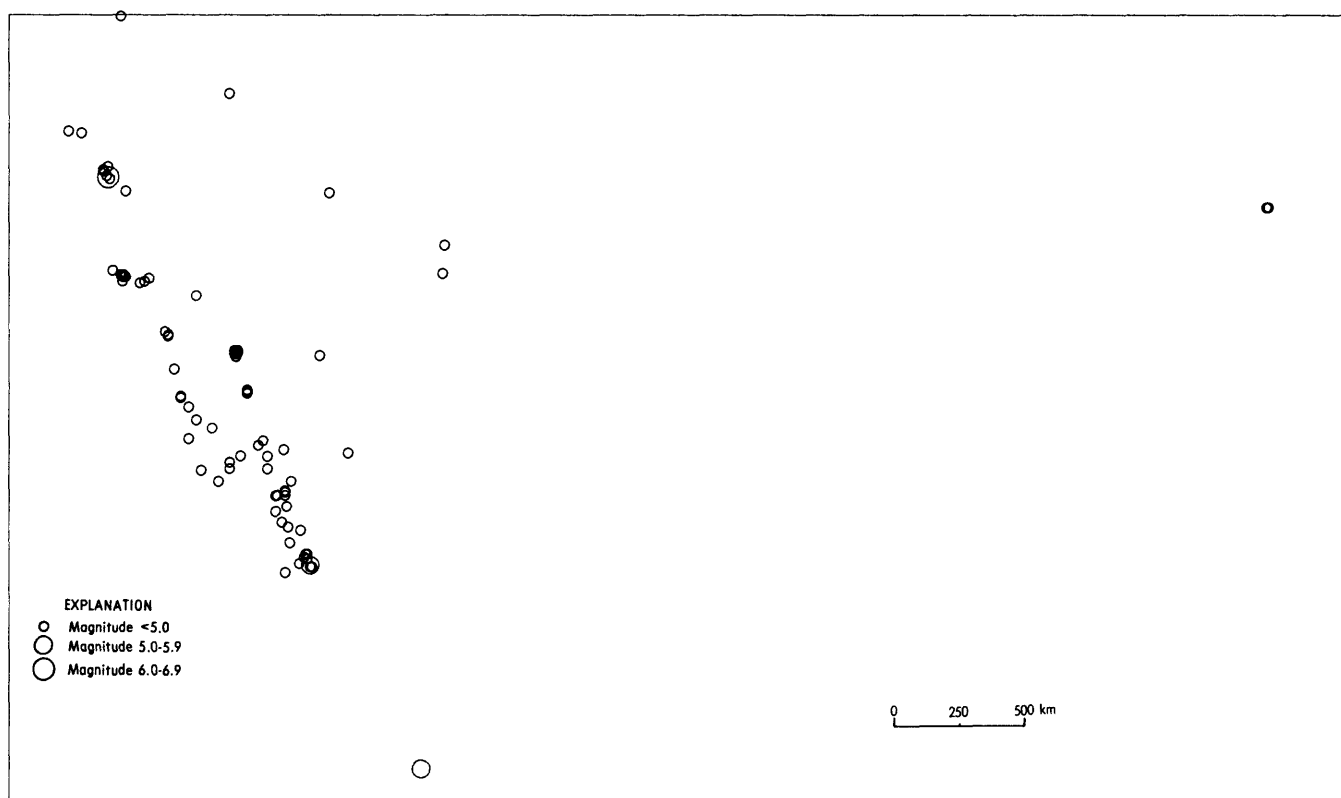
Earthquake epicenters in Alaska and adjacent regions for October, 1994



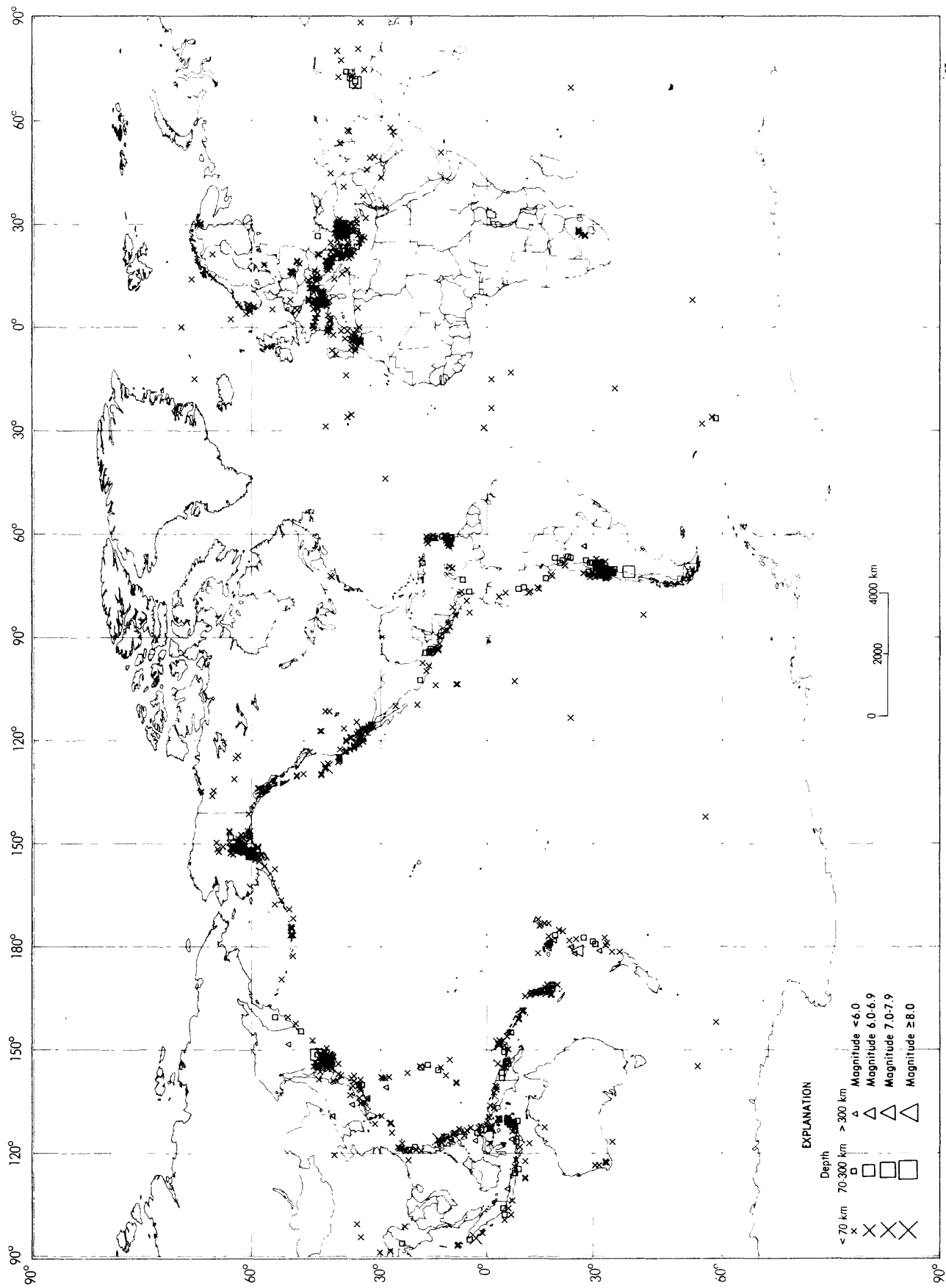
Earthquake epicenters in the conterminous United States and adjacent regions for October, 1994



Earthquake epicenters in Alaska and adjacent regions for October, 1994



Earthquake epicenters in the conterminous United States and adjacent regions for October, 1994



Earthquakes located in October, 1994

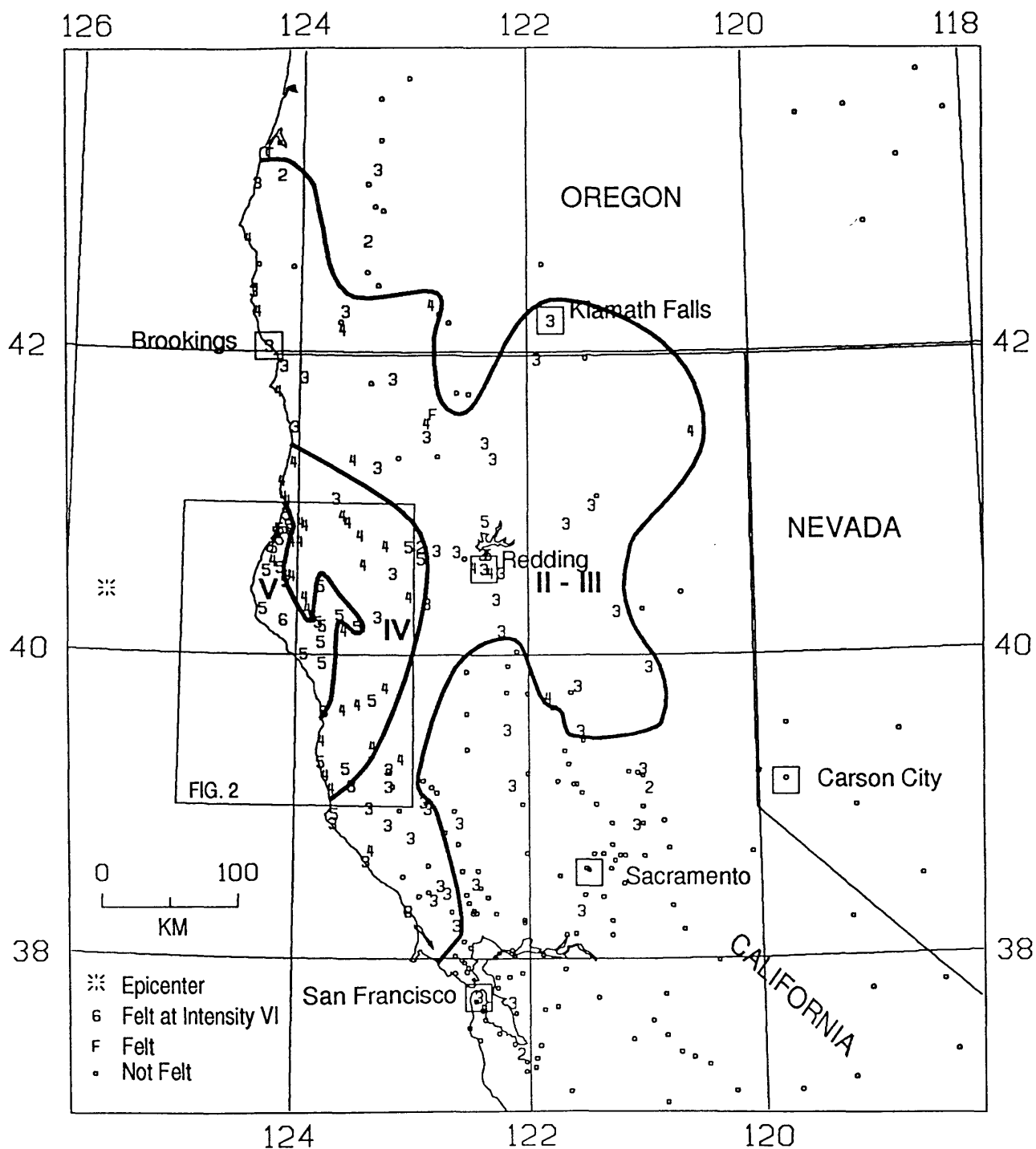


Figure 1. Isoseismal map for the earthquake of September 1, 15:15 UTC, that occurred off the coast of northern California. Roman numerals give average Modified Mercalli intensities for the regions between isoseismals; Arabic numerals represent intensities in individual communities. Squares denote towns labeled in the figure. Box labeled "FIG. 2" identifies boundaries of that figure.

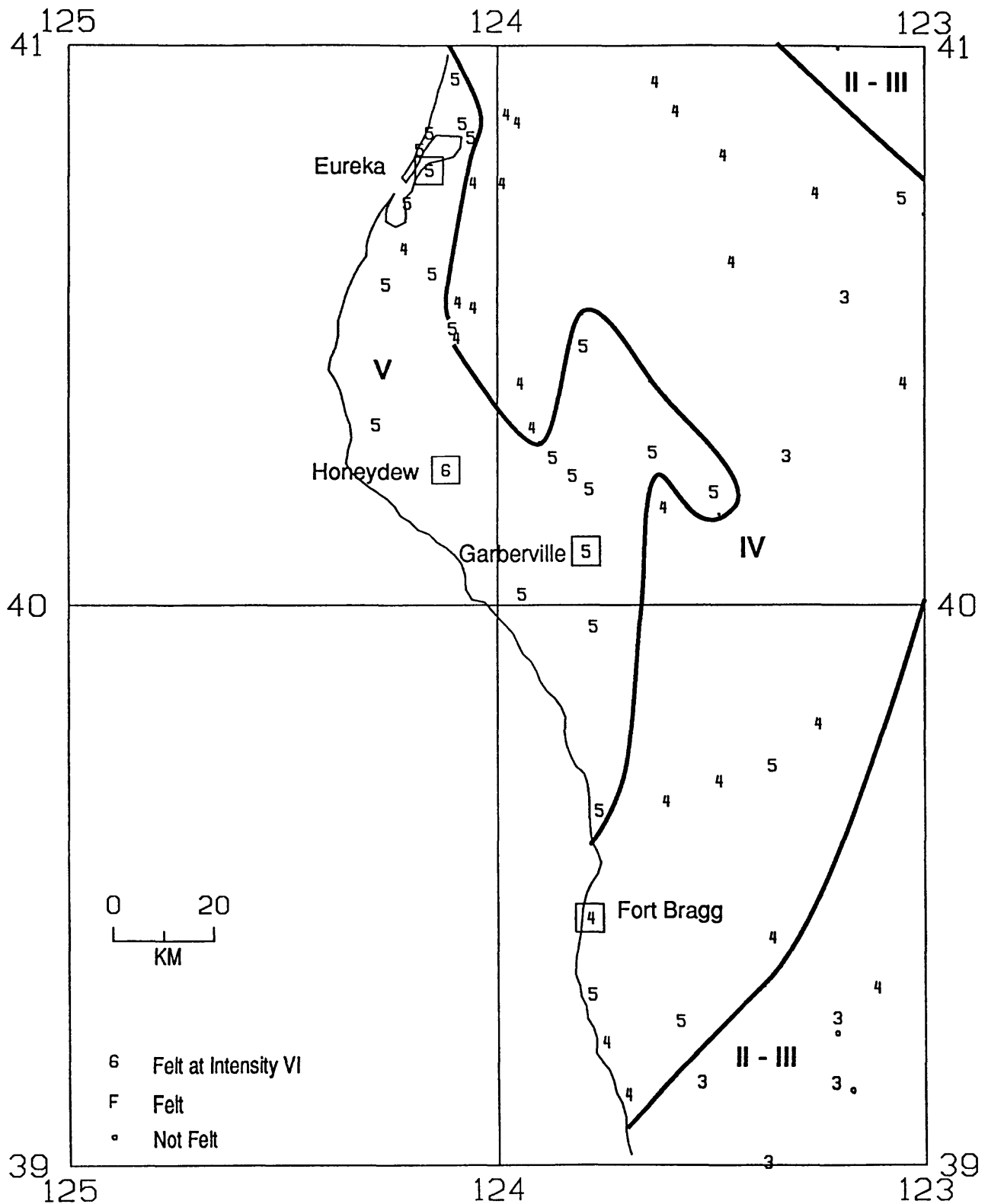


Figure 2. Distribution of Modified Mercalli intensities in the regions nearest the epicenter of the earthquake of September 1, 15:15 UTC. Roman numerals give average intensities within isoseismals. Arabic numerals represent intensities in individual communities. Squares denote towns labeled in the figure.