UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PRELIMINARY DETERMINATION OF EPICENTERS
MONTHLY LISTING

JANUARY - MARCH, 1983

NATIONAL EARTHQUAKE INFORMATION CENTER

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1989

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JANUARY 1988

K E Y	DAY	ORIGIN TIME UTC	GEOGRAPHIC COORDINATES	DEPTH	MAGNITUDES GS MB Msz	SD	NO. STA USED	REGION, CONTRIBUTED MAGNITUDES AND COMMENTS
		HR MN SEC	LAT LONG					
	01	00 03 09.9	27.995 N 142.736 E	28	5.1	1.0	68	BONIN ISLANDS REGION
	01	00 52 16.0?	45.63 N 13.72 E	10 G		0.2	5	NORTHERN ITALY. MD 2.3 (TRI).
	01	00 57 33.6	22.408 S 179.511 W	580 *	4.9	0.9	34	SOUTH OF FIJI ISLANDS
	01	01 04 32.5	44.759 N 16.837 E	10 G		1.1	8	YUGOSLAVIA. ML 2.8 (KBA).
	01	01 32 34.8*	49.127 S 120.728 E	10 G	4.8 3.5	1.4	12	SOUTH OF AUSTRALIA
	01	02 10 58.8&	61.362 N 149.956 W	43			39	SOUTHERN ALASKA. <AGS-P>. ML 3.9 (PMR). Felt (III) at Anchorage.
	01	03 22 43.2&	59.890 N 153.295 W	120			36	SOUTHERN ALASKA. <AGS-P>.
	01	03 39 46.7*	47.513 N 11.252 E	10 G		1.4	6	AUSTRIA. ML 2.3 (KBA).
	01	04 17 41.6	36.435 N 35.432 E	10 G		0.9	9	TURKEY ML 4.4 (BHL).
	01	05 41 14.7	47.082 N 11.317 E	10 G		1.1	10	AUSTRIA ML 2.3 (KBA).
	01	05 49 48.7?	38.27 N 22.83 E	10 G		0.2	4	GREECE ML 2.9 (ATH).
	01	07 07 58.9*	51.716 N 179.684 W	100 *	4.6	0.8	20	ANDREANOF ISLANDS, ALEUTIAN IS.
	01	09 01 09.4	30.612 S 118.063 E	10 G	3.8	0.5	10	WESTERN AUSTRALIA
	01	11 42 22.3	40.100 N 29.283 E	10 G		0.6	20	TURKEY. Felt at Burso.
	01	11 50 41.1	40.122 N 29.230 E	10 G		1.1	28	TURKEY. Felt at Burso.
	01	12 21 51.5	40.124 N 29.240 E	10 G	4.5	1.0	29	TURKEY. Felt at Burso.
	01	12 24 13.0?	17.94 S 178.82 W	569 *	4.1	1.4	29	FIJI ISLANDS REGION
	01	14 22 54.7&	40.078 N 29.318 E	10 G		0.1	7	TURKEY
	01	14 27 48.9	30.123 N 94.808 E	33 N	4.5	1.4	24	TIBET. ML 4.6 (BJI).
	01	14 36 09.5	74.655 N 130.962 E	10 G	5.1 4.6	1.0	149	LAPTEV SEA
	01	14 39 34.2*	1.379 N 99.041 E	128 *	4.1	1.2	15	NORTHERN SUMATERA
	01	15 15 22.5*	51.571 N 179.883 E	100 *	4.2	1.4	12	RAT ISLANDS, ALEUTIAN ISLANDS
	01	16 27 33.7&	59.934 N 152.334 W	82			27	SOUTHERN ALASKA. <AGS-P>.
	01	17 20 19.6	6.444 S 148.310 E	37 *	5.0 3.4	1.3	29	NEW BRITAIN REGION. ML 4.8 (PMG).
	01	18 32 01.7?	6.26 S 147.26 E	111 *	4.2	0.8	9	EAST PAPUA NEW GUINEA REGION
	01	21 02 51.4*	34.625 S 178.238 W	33 N	5.4 5.0	1.4	27	SOUTH OF KERMADEC ISLANDS
	01	21 15 02.7&	38.575 N 119.647 W	4			11	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.3 (BRK).
	01	21 22 03.7*	47.402 N 113.225 W	5 G		0.4	11	MONTANA. ML 3.1 (BUT).
	01	22 14 42.8	20.349 N 96.000 E	26 *	5.2 4.5	1.1	166	BURMA
	01	22 58 49.2&	58.159 N 143.306 W	10 G			35	GULF OF ALASKA. <AGS-P>. ML 3.3 (PMR).
	02	00 24 42.5	45.973 N 11.340 E	5 G		1.3	19	NORTHERN ITALY. ML 2.8 (KBA).
	02	01 05 22.1	23.856 N 121.728 E	50 *	3.8	1.3	20	TAIWAN
	02	03 01 56.3	42.067 N 19.289 E	10 G		0.7	10	YUGOSLAVIA. ML 2.5 (TTG).
	02	03 15 20.9&	37.110 N 121.530 W	6			18	CENTRAL CALIFORNIA. <BRK>. ML 3.7 (BRK). Felt at Morgan Hill.
	02	05 55 49.8?	2.22 S 138.79 E	33 N	3.9 3.5	1.0	7	WEST IRIAN
	02	06 36 09.8	20.478 S 169.764 E	136 D	5.6	1.1	114	VANUATU ISLANDS
	02	06 52 16.5*	53.386 N 164.657 W	33 N	4.6	1.0	20	UNIMAK ISLAND REGION
	02	09 05 52.2?	0.48 N 30.15 E	10 G		1.5	6	UGANDA. MG 4.6 (BUL).
	02	10 03 10.4&	40.703 N 29.060 E	10 G		0.4	6	TURKEY
	02	10 33 30.0	55.118 N 165.451 E	33 N	4.9	1.0	69	KOMANDORSKY ISLANDS REGION
	02	11 52 13.5	34.013 N 118.128 W	10 G		0.5	8	SOUTHERN CALIFORNIA. ML 3.2 (PAS). Felt at El Monte, Pasadena, Rosemead and Temple City.
	02	11 54 37.3*	42.640 S 16.034 W	10 G	4.7 4.5	1.0	16	SOUTH ATLANTIC RIDGE
	02	12 03 08.1*	43.312 N 127.050 W	10 G	4.0	0.6	29	OFF COAST OF OREGON
	f 02	12 42 02.5	43.295 N 142.419 E	177 D	6.0	0.9	530	HOKKAIDO, JAPAN REGION. mb 6.4 (BRK). Felt (III JMA) at Obihiro, Uraikawa and Kushiro; (II JMA) at Muroran, Hakodate and Nemuro; (I JMA) at Asahikawa, Sapporo and Rumoi. Also felt (III JMA) at Hachinohe, Aomori, Morioka and Ofunato; (II JMA) at Miyako; (I JMA) at Yamagata, Onohama, Mito and Ishinomaki, Honshu.
	02	13 37 24.8	12.384 N 143.594 E	51 *	5.3 4.5	1.1	81	SOUTH OF MARIANA ISLANDS
	02	15 43 52.2?	19.23 N 64.63 W	33 N	4.2	0.5	8	VIRGIN ISLANDS
	02	16 28 34.7*	11.600 N 125.213 E	239 ?	4.5	1.1	14	SAMAR, PHILIPPINE ISLANDS
	02	17 25 01.5&	61.633 N 149.732 W	40			36	SOUTHERN ALASKA <AGS-P>. ML 3.0 (PMR).
	02	18 24 34.2?	16.48 S 173.30 W	33 N	5.0 4.5	1.3	15	TONGA ISLANDS
	02	18 37 57.7	38.345 N 74.015 E	114 D	4.6	1.2	22	TAJIK-XINJIANG BORDER REGION

02	19 33 36.1	30.004 N	45.911 W	10 G	4.4 4.0	0.6	16	NORTH ATLANTIC RIDGE
02	19 40 51.7	34.173 N	116.405 W	5 G		0.7	14	SOUTHERN CALIFORNIA. ML 3.9 (PAS), 3.6 (NEIS). Felt in the Yucca Valley area.
02	19 43 00.9&	34.180 N	116.410 W	2			3	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
02	20 00 57.87	4.98 S	149.79 E	394 *	4.1	0.3	10	BISMARCK SEA
02	20 04 02.2*	16.531 S	173.293 W	33 N	4.4	0.8	17	TONGA ISLANDS
02	21 44 13.7	42.016 N	19.227 E	10 G		0.6	6	YUGOSLAVIA. ML 2.2 (TTG).
02	22 02 36.0*	40.060 N	77.344 E	33 N	4.9	1.3	12	KIRGHIZ-XINJIANG BORDER REGION
02	23 10 48.6	37.031 N	112.945 W	10 G		0.8	44	UTAH. ML 3.5 (NEIS). Felt (V) at Springdale, (III) at Rackville and (II) at Virgin. Also felt (III) at Fredania, Arizona.
02	23 18 05.7*	43.703 N	18.653 E	5 G		0.4	6	YUGOSLAVIA. ML 2.2 (TTG).
02	23 58 40.2&	57.198 N	142.774 W	10 G			19	GULF OF ALASKA. <AGS-P>.
03	02 02 21.2&	36.090 N	117.860 W	4			17	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS).
03	02 12 53.5&	59.848 N	6.579 E	10 G		0.7	5	SOUTHERN NORWAY. MD 2.1 (BER).
03	03 42 40.4	37.848 N	4.560 W	10 G		1.4	18	SPAIN. MG 4.0 (MDD). Felt (IV) at Santa Cruz.
03	04 58 19.97	14.36 N	59.37 W	33 N		0.7	8	WINDWARD ISLANDS. ML 3.0 (FDF).
03	04 59 38.1*	40.040 N	78.621 E	33 N	4.3	1.1	8	SOUTHERN XINJIANG, CHINA
03	06 17 02.6*	0.218 N	125.549 E	86 ?	4.8	1.4	23	MOLUCCA PASSAGE
03	06 28 30.8	62.618 N	150.668 W	114 ?		0.4	9	CENTRAL ALASKA
03	08 05 13.0	48.123 N	7.537 E	10 G		0.2	9	FRANCE. ML 2.7 (LDG).
03	08 06 26.07	4.04 N	76.64 W	33 N		0.2	4	COLOMBIA. MD 2.2 (UVC).
03	10 28 34.7	24.794 S	70.087 W	55 D	4.9	1.1	30	NEAR COAST OF NORTHERN CHILE
03	10 40 37.9	44.593 N	6.830 E	6		0.5	31	FRANCE. ML 3.0 (LDG).
03	10 53 00.4*	14.332 S	25.312 E	10 G	4.5	1.0	10	ZAMBIA
03	10 53 26.6*	38.353 N	21.644 E	33 N	3.7	0.5	7	GREECE. ML 3.1 (ATH).
03	11 18 01.8	36.626 N	71.188 E	230 *	4.5	1.2	29	AFGHANISTAN-USSR BORDER REGION
03	14 04 45.9*	7.452 S	129.125 E	150 ?	4.0	1.1	8	BANDA SEA
03	14 13 37.7&	2.917 N	76.833 W	10 G		0.4	5	COLOMBIA. MD 2.7 (UVC).
03	14 33 10.37	3.37 N	76.44 W	33 N		0.3	4	COLOMBIA. MD 2.6 (UVC).
03	14 36 18.9*	36.383 N	71.197 E	239 ?	3.8	0.6	13	AFGHANISTAN-USSR BORDER REGION
03	15 29 19.7&	44.615 N	6.913 E	10 G		0.5	7	FRANCE. ML 2.6 (LDG).
03	15 37 57.4	6.352 S	145.692 E	126	4.5	0.9	31	PAPUA NEW GUINEA
03	15 47 15.7&	33.030 N	117.860 W	6			9	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
03	15 53 31.7	39.050 N	29.337 E	10 G		1.1	12	TURKEY
03	18 07 07.5*	13.075 S	70.121 W	33 N		1.0	10	PERU
03	18 10 49.9&	63.024 N	150.879 W	146			18	CENTRAL ALASKA. <AGS-P>.
03	18 25 41.7	44.615 N	6.808 E	10 G		0.6	9	FRANCE. ML 2.5 (LDG).
03	19 12 33.7	36.616 N	141.529 E	33 N	3.9	0.9	16	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Yokohama and Mito; (I JMA) at Utsunomiya, Fukushima and Nikko.
03	19 36 12.4	44.649 N	6.956 E	10 G		0.4	8	FRANCE. ML 2.4 (LDG).
03	20 09 21.4	38.431 N	91.340 E	10 G	4.4	1.0	21	QINGHAI PROVINCE, CHINA. ML 4.1 (BJI).
03	20 46 42.8	34.711 N	27.091 E	17 *	4.4	1.5	86	EASTERN MEDITERRANEAN SEA. ML 4.2 (ATH).
a 03	21 32 25.3	38.111 N	106.336 E	14 D	5.5	1.0	185	NORTHERN CHINA. ML 5.7 (BJI). Approximately 60 people injured, more than 10,000 houses collapsed or damaged and 16 farm animals killed in the Lingwu area. Sandblows also occurred in the area.
03	22 52 18.4*	23.789 S	69.463 E	10 G	4.6	0.7	10	MID-INDIAN RISE
03	23 10 28.9	42.758 N	19.263 E	10 G		0.2	6	YUGOSLAVIA. ML 2.4 (TTG).
03	23 32 25.07	34.69 N	26.84 E	33 N		1.4	6	CRETE
04	01 27 43.37	39.36 N	27.90 E	10 G		1.3	4	TURKEY
04	03 52 18.4*	5.864 S	147.510 E	103 *	4.5	1.3	13	EAST PAPUA NEW GUINEA REGION
04	04 31 00.4*	35.075 S	179.775 E	144 *	5.1	1.0	31	OFF E. COAST OF N. ISLAND, N.Z.
04	04 38 35.8*	11.010 S	161.351 E	33 N	4.4	0.6	7	SOLOMON ISLANDS
04	05 52 09.2	40.077 N	15.981 E	10 G		1.5	11	SOUTHERN ITALY
04	06 16 55.1*	5.028 S	153.077 E	33 N	3.9	0.4	6	NEW IRELAND REGION
04	06 20 12.3*	16.866 N	98.214 W	33 N	4.6	1.1	22	NEAR COAST OF GUERRERO, MEXICO Felt (V) in the Oaxaca area. Also felt at Mexico City.
04	06 33 33.7&	58.711 N	142.670 W	10 G	4.1		51	GULF OF ALASKA. <AGS-P> ML 4.5 (PMR).
04	07 41 43.3&	62.804 N	151.347 W	150			20	CENTRAL ALASKA. <AGS-P>
04	08 39 01.7*	36.488 N	71.239 E	204 ?	4.2	1.1	13	AFGHANISTAN-USSR BORDER REGION
04	08 57 49.5	47.872 N	2.787 E	10 G		1.0	14	FRANCE. ML 3.2 (LDG).
04	09 28 52.3	39.392 N	27.900 E	10 G		1.0	21	TURKEY
04	09 33 14.0	47.631 N	2.768 E	10 G		1.3	12	FRANCE. ML 2.7 (LDG).
04	09 55 19.6&	3.270 N	76.414 W	33 N		0.4	5	COLOMBIA. MD 3.3 (UVC).
04	10 32 54.17	4.33 S	138.32 E	33 N	4.6	1.5	8	WEST IRIAN
a 04	10 37 03.4	46.512 N	149.879 E	205 D	5.2	0.9	201	KURIL ISLANDS
04	11 35 14.0&	37.784 N	4.600 W	10 G		0.6	5	SPAIN. MG 3.0 (MDD).
04	11 42 21.07	51.05 N	20.16 E	10 G		0.8	5	POLAND. ML 2.9 (KRA).
04	12 10 38.8&	37.761 N	4.582 W	10 G		0.8	7	SPAIN. MG 3.2 (MDD).
04	12 52 48.0&	39.371 N	27.951 E	10 G		0.9	6	TURKEY
04	13 26 05.07	22.98 N	120.00 E	33 N		0.4	5	TAIWAN
04	14 09 30.9	37.730 S	175.934 E	303	4.5	1.0	27	NORTH ISLAND, NEW ZEALAND. Felt in the Wellington area.
04	15 19 00.2&	41.761 N	13.544 E	10 G		0.5	7	SOUTHERN ITALY
04	17 20 02.5	7.448 S	128.222 E	142 D	5.1	1.2	74	BANDA SEA
04	18 51 54.0	39.662 N	20.262 E	5 G	4.3	1.5	63	GREECE-ALBANIA BORDER REGION. ML 4.2 (ATH), 4.1 (TTG).
04	20 27 28.8*	42.895 N	17.730 E	5 G		0.8	10	ADRIATIC SEA. MD 2.9 (TTG).
04	20 51 26.3&	38.041 N	106.347 E	10 G		0.5	5	NORTHERN CHINA. ML 3.7 (BJI).
04	21 38 08.97	25.55 N	95.65 E	84 ?	3.4	0.2	6	BURMA-INDIA BORDER REGION
04	22 45 39.6*	6.075 S	150.416 E	33 N	4.6	0.9	14	NEW BRITAIN REGION
05	01 09 02.7*	35.427 N	140.516 E	47 *	4.3	1.5	16	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Chiba and Kotsuura; (I JMA) at Ajiro, Tokyo and Yokohama.
05	01 24 25.6&	58.603 N	142.844 W	10 G			27	GULF OF ALASKA. <AGS-P>.
05	01 33 38.8&	3.740 N	76.219 W	33 N		0.7	5	COLOMBIA
05	01 47 07.8	46.190 N	14.885 E	10 G		0.7	10	YUGOSLAVIA. ML 2.9 (KBA). Felt (IV) at Vransko.
05	03 11 36.07	5.60 S	147.12 E	89 ?	3.6	1.3	8	EAST PAPUA NEW GUINEA REGION
05	04 44 42.17	56.31 N	157.70 W	33 N	4.1	1.6	10	ALASKA PENINSULA
05	06 23 14.7	38.056 N	74.034 E	165 *	4.9	1.1	30	TAJIK-XINJIANG BORDER REGION
05	06 41 16.9	26.807 S	26.639 E	5 G	5.2	1.1	21	REPUBLIC OF SOUTH AFRICA. At least 8 people killed at the Vaal Reefs gold mine.
05	07 07 21.3	15.815 N	61.292 W	113	4.7	0.9	30	LEEWARD ISLANDS. Felt (III) on Guadeloupe and (II) on

08	04 56 21.1	62.565 N	151.590 W	51					25	CENTRAL ALASKA. <AGS-P>.
08	05 34 13.8	44.596 N	9.689 E	10 G	1.0				12	NORTHERN ITALY. ML 2.5 (LDG).
08	07 18 37.9	47.055 N	122.148 W	0					47	WASHINGTON. <SEA>. CL 2.7 (SEA). Felt in the Enumclaw, Orting and South Prairie areas.
08	07 41 56.3	4.171 S	152.598 E	138	4.8	0.9			52	NEW BRITAIN REGION
08	09 07 02.6	0.348 S	81.878 E	10 G	4.6	1.2			8	SOUTH INDIAN OCEAN
08	10 32 18.8	61.73 N	4.50 E	10 G		0.5			7	SOUTHERN NORWAY. MD 2.3 (BER).
08	11 07 06.0	7.14 S	131.99 E	33 N	4.8	1.4			7	TANIMBAR ISLANDS REGION
08	12 24 02.1	14.48 S	173.19 W	33 N	4.7	1.0			31	SAMOA ISLANDS REGION
08	12 43 00.2	5.630 S	149.625 E	146	5.2	1.3			48	NEW BRITAIN REGION
08	13 05 46.5	40.084 N	16.006 E	10 G	4.8 3.8	1.2			167	SOUTHERN ITALY. ML 4.5 (TTG), 4.0 (SKO). MD 4.2 (ROM). Felt (V) in the Castrovillari-Patenzo area.
08	13 58 19.2	58.715 N	143.550 W	10 G	4.3				39	GULF OF ALASKA. <AGS-P>. ML 3.8 (PMR).
08	14 49 36.5	39.826 N	28.710 E	10 G		0.1			5	TURKEY
08	15 09 08.7	40.021 N	15.940 E	10 G		1.0			13	SOUTHERN ITALY
08	15 22 56.3	40.052 N	15.949 E	13		0.5			15	SOUTHERN ITALY
08	15 52 00.0	38.213 N	106.322 E	10 G	4.6	1.2			22	NORTHERN CHINA. ML 4.4 (BJI).
08	16 50 38.8	45.528 N	26.274 E	136	4.7	1.1			156	ROMANIA. Felt (V) in the Vrancea area and (IV) at Bucharest. Felt (III) at Kishinev, USSR.
08	18 50 57.4	58.199 N	142.778 W	10 G	3.9				32	GULF OF ALASKA. <AGS-P>.
08	21 42 03.7	50.93 N	6.63 E	5 G		1.8			5	GERMANY. Felt at Bergheim.
08	22 25 44.7	15.51 S	168.99 E	33 N	4.5 4.2	0.5			8	VANUATU ISLANDS
08	22 50 29.2	40.200 N	119.800 W	5					8	NEVADA. <BRK>. ML 3.0 (BRK).
08	23 40 30.2	58.547 N	141.536 W	10 G					23	OFF COAST OF SOUTHEASTERN ALASKA. <AGS-P>.
08	23 47 09.9	35.279 N	84.182 W	10					5	TENNESSEE. <TEIC>. MD 2.3 (TEIC).
08	23 59 09.1	60.164 N	153.329 W	132					21	SOUTHERN ALASKA. <AGS-P>.
09	00 16 55.4	35.274 N	84.188 W	9					13	TENNESSEE. <TEIC>. MD 2.9 (TEIC). Felt at Etowah, Tennessee and Unaka, North Carolina.
o 09	01 02 46.7	41.246 N	19.630 E	24 D	5.3 5.8	1.3			323	ALBANIA. ML 5.5 (TTG), 5.1 (ATH). Some people injured and 188 buildings damaged (VII) in the Tirana area. Felt throughout Albania. Felt (VI) in the Ulcinj-Bar area; (V) in the Petrovac-Katar-Titograd area and in western Macedonia; (IV) in northern Montenegro and southern Serbia, Yugoslavia.
09	01 07 40.7	35.275 N	84.201 W	12					16	TENNESSEE. <TEIC>. MD 3.3 (TEIC). Felt (IV) at Coker Creek, Copperhill, Mount Vernon and Tellico Plains, Tennessee. Also felt (IV) at Andrews, Brasstown, Hayesville, Marble and Unaka, North Carolina.
09	02 16 21.6	40.951 N	19.581 E	10 G		0.4			8	ALBANIA. ML 3.0 (TTG).
09	02 50 26.9	31.900 N	115.850 W	6 G					6	BAJA CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
o 09	03 12 38.8	47.012 N	154.149 E	33 N	5.2 4.9	0.9			122	KURIL ISLANDS
o 09	03 55 05.3	39.092 N	71.502 E	33 N	5.4 4.9	0.8			163	TAJIK SSR. Felt (V) at Dzhirgatal; (IV) at Fergana; (III) at Andizhan; (II) at Komarou, Khorog and Dushanbe.
09	05 23 52.7	47.514 N	0.428 W	10 G		0.2			5	FRANCE. ML 2.4 (LDG).
09	05 25 19.2	44.478 N	114.181 W	5 G		0.8			27	WESTERN IDAHO. ML 3.5 (NEIS), 4.1 (BUT). Felt (IV) at Challis and Ellis.
09	06 42 41.0	38.247 N	22.632 E	10 G		1.3			10	GREECE. ML 3.2 (ATH).
09	07 10 50.6	41.167 N	19.662 E	10 G	4.2	1.4			47	ALBANIA. ML 3.7 (TTG). Felt in the Tirana area.
09	08 49 04.7	11.70 S	73.50 W	33 N		2.0			5	PERU. Felt at Cuzco.
09	10 58 23.5	40.723 N	29.197 E	10 G		0.9			7	TURKEY
09	12 55 12.0	37.49 N	141.47 E	33 N		1.1			4	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Shirakawa. Also felt at Onahama.
09	15 03 47.8	5.76 S	147.27 E	189 ?	4.2	1.0			6	EAST PAPUA NEW GUINEA REGION
09	17 46 29.4	10.144 S	161.756 E	81 *	4.3	1.0			15	SOLOMON ISLANDS
09	18 30 15.3	35.789 N	30.879 E	33 N		1.2			6	EASTERN MEDITERRANEAN SEA
09	20 12 32.5	58.632 N	142.775 W	10 G					33	GULF OF ALASKA. <AGS-P>.
09	21 25 26.3	22.373 S	177.018 W	181 *	5.0	0.7			42	SOUTH OF FIJI ISLANDS
09	22 02 05.1	35.826 N	21.739 E	30	4.8 4.8	1.2			219	MEDITERRANEAN SEA ML 4.8 (ATH).
09	22 21 02.5	35.651 N	21.764 E	33 N	4.0	0.5			11	MEDITERRANEAN SEA
09	22 23 08.1	65.865 N	155.127 W	33 N		1.0			10	ALASKA. ML 3.6 (PMR).
09	22 38 48.8	3.503 S	145.210 E	10 G	4.3	1.1			12	NEAR N COAST OF PAPUA NEW GUINEA
09	23 07 35.1	23.317 S	179.962 W	486 *	4.6	1.0			34	SOUTH OF FIJI ISLANDS
09	23 54 21.1	27.329 S	73.370 E	10 G	4.6	0.8			16	MID-INDIAN RISE
10	00 18 01.8	43.739 N	20.500 E	10 G		1.2			24	YUGOSLAVIA. ML 3.0 (TTG). Minor damage (V) in the Trstenik-Vrnjacka Banja-Aleksandrovac area.
10	00 53 04.2	38.147 N	106.319 E	10 G	4.2	1.2			13	NORTHERN CHINA. ML 4.3 (BJI).
10	01 18 01.5	49.42 S	124.67 E	10 G	4.1 3.9	1.5			9	SOUTH OF AUSTRALIA
10	02 10 12.4	11.818 N	125.725 E	20 D	4.7	1.0			39	SAMAR, PHILIPPINE ISLANDS
10	02 34 38.6	39.130 N	71.457 E	33 N	4.7	1.3			45	TAJIK SSR. Felt (IV) at Dzhirgatal.
10	02 51 00.8	44.850 N	114.419 W	5 G		0.9			28	WESTERN IDAHO. ML 3.8 (NEIS), 4.2 (BUT). Felt at Challis.
10	03 22 43.6	44.829 N	114.401 W	5 G		0.8			10	WESTERN IDAHO. ML 3.3 (BUT).
o 10	03 25 50.4	19.763 N	109.234 W	10 G	5.2 5.2	1.0			77	REVILLA GIGEDO ISLANDS REGION. Ms 5.5 (BRK).
10	03 58 03.8	14.938 N	60.646 W	33 N		1.2			9	WINDWARD ISLANDS. ML 3.4 (FDF). Felt (III) on Martinique.
10	04 46 12.5	44.723 N	6.352 E	10 G		0.3			6	FRANCE. ML 2.5 (LDG).
10	04 48 25.8	6.235 S	154.765 E	33 N	4.3	0.9			13	SOLOMON ISLANDS
10	05 14 32.4	54.640 N	159.965 W	33 N	4.1	1.1			22	SOUTH OF ALASKA. ML 3.7 (PMR).
10	05 37 43.0	30.726 S	117.835 E	10 G		0.2			6	WESTERN AUSTRALIA
10	06 18 33.8	29.714 N	90.390 E	33 N	4.4	0.9			18	TIBET
10	06 19 55.0	62.863 S	164.360 W	10 G	5.0	0.9			10	SOUTH PACIFIC CORDILLERA
10	06 31 42.2	29.87 N	90.48 E	10 G	4.8	1.4			8	TIBET
10	07 24 35.8	38.171 N	106.358 E	10 G	5.1 4.9	1.2			85	NORTHERN CHINA
10	07 43 14.0	27.257 N	100.909 E	10 G	5.2 4.6	1.2			86	YUNNAN PROVINCE, CHINA
10	09 16 01.2	58.732 N	153.852 W	76					28	KODIAK ISLAND REGION. <AGS-P>.
10	09 26 17.7	34.383 N	23.317 E	33 N	4.4	1.3			42	CRETE. ML 3.8 (ATH).
10	10 59 56.1	36.573 N	28.589 E	131 ?		1.0			9	DODECANESE ISLANDS
10	11 04 34.4	43.014 N	18.678 E	10 G		0.9			6	YUGOSLAVIA. ML 2.6 (TTG).
10	12 09 25.7	44.795 N	114.537 W	5 G		0.5			8	WESTERN IDAHO. ML 3.1 (BUT).
10	13 33 23.9	53.195 N	162.805 W	33 N	4.7	1.0			33	SOUTH OF ALASKA. ML 4.8 (PMR).
10	13 35 53.1	36.572 N	28.702 E	152 ?		1.5			7	DODECANESE ISLANDS

10	13	43	46.00	58.720	N	142.805	W	10	G							34	GULF OF ALASKA. <AGS-P>. ML 3.4 (PMR).
10	13	49	52.57	20.46	S	177.98	W	521	?	4.8						21	FIJI ISLANDS REGION
10	15	55	24.7%	46.804	N	0.189	W	10	G							9	FRANCE. ML 2.8 (LDG).
10	16	34	42.8*	0.496	S	97.925	E	33	N	3.6						1.2	17 SOUTHWEST OF SUMATERA
10	17	17	26.8*	5.510	S	102.039	E	33	N	4.8	3.9					1.5	16 SOUTHERN SUMATERA
10	17	26	11.4%	37.523	N	121.677	W	8									11 CENTRAL CALIFORNIA. <BRK>. ML 2.7 (BRK).
10	17	32	07.0	63.313	N	151.272	W	33	N							0.8	9 CENTRAL ALASKA. ML 3.6 (PMR).
10	18	11	53.4%	60.405	N	151.659	W	65									33 KENAI PENINSULA, ALASKA. <AGS-P>.
10	18	30	16.87	3.74	N	76.99	W	33	N							0.8	5 COLOMBIA. ML 3.9 (UVC).
10	18	43	59.2	44.771	N	114.386	W	5	G							0.3	11 WESTERN IDAHO. ML 3.2 (BUT).
10	22	11	17.07	31.27	N	141.51	E	33	N	4.4						1.4	6 SOUTH OF HONSHU, JAPAN
10	22	12	14.9*	36.658	N	35.400	E	10	G							1.5	8 TURKEY. ML 3.4 (CSS).
10	22	17	46.07	18.30	S	168.05	E	33	N	4.8						1.4	10 VANUATU ISLANDS
10	23	22	19.5	44.840	N	114.377	W	5	G	4.8						1.2	40 WESTERN IDAHO. ML 4.4 (NEIS), 4.8 (BUT). Felt (III) at Carmen, Challis, Clayton, Ellis, Salmon and Shaup.
10	23	48	38.1	44.797	N	114.359	W	5	G							0.6	10 WESTERN IDAHO. ML 3.4 (BUT).
10	23	59	17.8*	59.535	S	26.048	W	51	D	4.9						1.1	27 SOUTH SANDWICH ISLANDS REGION
11	01	19	46.6*	6.775	N	73.862	W	33	N							1.1	8 NORTHERN COLOMBIA
11	02	37	18.7*	9.407	S	114.359	E	102	*	4.0						1.0	10 SOUTH OF BALI ISLAND
11	02	46	38.8	47.464	N	13.951	E	10	G							1.3	18 AUSTRIA. ML 3.6 (GRF), 3.5 (VKA). MD 3.4 (KBA). Felt (V) at Oeblarn.
11	02	50	35.57	46.86	N	153.04	E	33	N	4.9						0.9	11 KURIL ISLANDS
11	03	16	20.7*	47.410	N	13.880	E	10	G							1.5	8 AUSTRIA. ML 3.4 (VKA), 2.6 (KBA). Felt at Oeblarn.
11	03	27	54.7	1.043	S	127.253	E	36	*	5.1	4.3					1.1	55 HALMAHERA
11	04	06	59.2	36.612	N	28.202	E	10	G							1.1	23 DODECANESE ISLANDS
11	04	24	01.8*	34.841	N	23.470	E	33	N	4.6						1.5	15 CRETE
11	04	31	19.1	43.736	N	8.440	E	10	G							0.9	23 CORSICA. ML 3.2 (LDG).
11	06	15	23.1%	61.489	N	149.918	W	48									32 SOUTHERN ALASKA. <AGS-P>.
11	08	22	54.57	0.78	S	81.49	W	33	N							0.7	6 OFF COAST OF ECUADOR
11	08	33	42.9%	60.730	N	152.409	W	97									26 SOUTHERN ALASKA. <AGS-P>.
11	13	15	38.07	13.01	S	124.12	E	33	N	4.8						1.2	8 NORTHWEST OF AUSTRALIA
11	13	33	59.3*	18.002	S	167.510	E	22	*	4.5						1.2	18 VANUATU ISLANDS
11	14	49	41.3*	32.093	N	48.324	E	43	*	4.3						0.6	7 WESTERN IRAN
11	14	52	25.4%	60.708	N	5.602	E	0	G							0.5	6 SOUTHERN NORWAY. MD 2.3 (BER). Probable explosion.
11	15	42	25.2%	34.916	N	139.266	E	10	G							0.3	7 NEAR S. COAST OF HONSHU, JAPAN. Felt (III JMA) on Oshima, (II JMA) at Tateyama and (I JMA) at Ajira.
11	19	01	39.9	3.816	S	130.102	E	108	*	5.1						1.4	39 CERAM
a 11	21	07	29.7	54.779	N	161.656	E	43	D	5.8	4.9					0.9	313 NEAR EAST COAST OF KAMCHATKA
a 11	22	27	09.3	6.165	S	154.414	E	21	*	5.3	5.6					1.0	123 SOLOMON ISLANDS. Ms 5.9 (BRK). Felt (III) at Panguna and Arawa, Bougainville.
11	23	15	01.6	3.770	S	131.469	E	33	N	5.3	4.7					1.1	66 WEST IRIAN REGION
12	00	02	39.2%	62.923	N	150.223	W	158									7 CENTRAL ALASKA. <AGS-P>.
12	00	42	40.0%	72.930	N	70.160	W	18		3.9							18 BAFFIN BAY. <OTT>. ML 4.9 (OTT).
12	00	44	49.6*	6.495	S	154.503	E	33	N	4.7						1.5	12 SOLOMON ISLANDS
12	00	46	20.47	3.49	N	74.82	W	33	N							0.1	5 COLOMBIA
12	03	10	29.4	36.577	N	71.715	E	58	*	4.7						1.3	29 AFGHANISTAN-USSR BORDER REGION
12	03	28	59.7*	50.141	N	19.139	E	10	G							0.7	5 POLAND. ML 2.9 (VKA).
12	05	58	49.7*	3.822	S	135.516	E	33	N	5.0						1.3	15 WEST IRIAN REGION
12	06	31	26.3*	4.211	S	135.287	E	33	N	4.5						1.4	12 WEST IRIAN REGION
f 12	07	29	27.9	28.827	S	177.423	W	15	D	6.1	6.4					1.1	373 KERMADEC ISLANDS REGION. Ms 6.7 (BRK). Felt on Raoul.
12	09	17	19.6%	37.374	N	106.528	E	33	N							1.3	5 NORTHERN CHINA. ML 3.2 (BJI).
12	09	39	52.3*	0.263	S	123.109	E	120	*	3.7						1.6	9 MINAHASSA PENINSULA
12	10	08	48.4*	3.847	S	135.066	E	33	N	4.3						1.3	13 WEST IRIAN REGION
12	10	58	28.9*	20.101	S	177.642	W	414	*	4.8						1.3	25 FIJI ISLANDS REGION
12	11	15	51.5%	60.743	N	149.016	W	32									30 KENAI PENINSULA, ALASKA. <AGS-P>.
12	11	40	17.97	8.78	S	32.60	E	10	G	4.7						1.4	13 TANZANIA
12	12	51	25.7	27.817	N	139.818	E	494		4.6						0.9	64 BONIN ISLANDS REGION
12	13	15	07.57	11.56	N	85.82	W	156	?							0.3	11 NICARAGUA. MD 4.6 (HDC).
12	15	07	11.57	44.80	N	114.56	W	5	G							0.6	7 WESTERN IDAHO. ML 3.1 (BUT).
12	15	11	08.8%	60.062	N	152.734	W	97									29 SOUTHERN ALASKA. <AGS-P>.
12	21	01	33.6*	7.389	N	124.747	E	381	?	4.5						0.8	16 MINDANAO, PHILIPPINE ISLANDS
12	22	53	16.2*	14.017	S	166.995	E	33	N	4.5						1.4	38 VANUATU ISLANDS
12	23	01	01.2	40.332	N	15.482	E	28		4.0						1.1	98 SOUTHERN ITALY. ML 4.3 (LDG), 3.8 (TTG). MD 3.8 (ROM). Felt in the Salerno area.
a 13	01	00	29.9	51.383	N	174.643	W	33	N	5.0	5.1					1.0	116 ANDREANOF ISLANDS, ALEUTIAN IS.
a 13	01	01	50.2	51.309	N	174.654	W	33	N	5.6	5.2					1.1	144 ANDREANOF ISLANDS, ALEUTIAN IS.
13	01	07	10.3	51.319	N	174.709	W	33	N	5.2	5.2					1.0	103 ANDREANOF ISLANDS, ALEUTIAN IS.
13	01	09	35.2	51.339	N	174.671	W	33	N	5.1						0.9	79 ANDREANOF ISLANDS, ALEUTIAN IS.
a 13	01	14	03.7	6.256	S	154.538	E	42		4.7	5.2					1.2	39 SOLOMON ISLANDS. Felt (II) at Panguna, Bougainville.
13	01	17	07.2*	52.039	N	174.657	W	33	N	4.7						1.0	11 ANDREANOF ISLANDS, ALEUTIAN IS.
13	01	42	01.7	41.732	N	20.214	E	8								1.1	11 ALBANIA. ML 2.8 (SKO), 2.8 (TTG).
13	02	01	38.07	4.87	S	127.79	E	33	N	4.8						1.4	6 BANDA SEA
13	02	34	03.7*	3.978	S	142.579	E	33	N	4.5						1.5	9 NEAR N COAST OF PAPUA NEW GUINEA
13	03	53	19.6*	6.632	S	130.529	E	125	*	4.7						0.8	12 BANDA SEA
a 13	03	58	02.8	51.509	N	174.703	W	33	N	4.9	4.8					0.9	96 ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.2 (PMR).
13	05	56	57.5	37.276	N	54.415	E	33	N	4.8						1.0	25 IRAN-USSR BORDER REGION. Felt at Gargan, Iran.
13	06	55	49.8	51.407	N	174.685	W	33	N	5.1	4.7					1.0	111 ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.3 (PMR).
13	06	58	22.0*	42.541	N	142.925	E	121	*	4.4						1.1	14 HOKKAIDO, JAPAN REGION. Felt (I JMA) at Hirao and Obihiro.
13	07	40	36.07	37.60	N	30.05	E	10	G							1.7	5 TURKEY
13	07	58	45.4	38.340	N	30.834	E	14		4.5						1.2	52 TURKEY
13	08	03	52.5%	59.250	N	144.299	W	10	G								27 GULF OF ALASKA. <AGS-P>.
a 13	08	07	32.9*	32.508	S	179.728	W	33	N	5.6	5.0					1.2	22 SOUTH OF KERMADEC ISLANDS
13	08	36	06.8*	6.409	S	146.647	E	52	*	3.9	3.9					1.0	14 EAST PAPUA NEW GUINEA REGION
13	08	45	01.2*	6.374	S	146.689	E	54	*	4.1						1.3	15 EAST PAPUA NEW GUINEA REGION
13	08	53	02.3*	6.172	S	146.775	E	62	*	4.6						1.0	16 EAST PAPUA NEW GUINEA REGION
13	09	59	54.4%	40.594	N	30.238	E	10	G							0.7	6 TURKEY
13	10	22	44.6*	32.453	S	179.791	W	33	N	5.1						1.2	18 SOUTH OF KERMADEC ISLANDS
13	11	40	32.1*	61.514	S	154.829	E	10	G	5.3						1.2	27 BALLENY ISLANDS REGION
a 13	11	47	32.1	32.429	S	179.646	W	33	N	5.6	5.2					1.3	60 SOUTH OF KERMADEC ISLANDS
13	12	17	55.7*	32.417	S	179.763	W	33	N	4.9						1.1	15 SOUTH OF KERMADEC ISLANDS
13	14	21	13.1%	58.910	N	142.982	W	10	G								16 GULF OF ALASKA. <AGS-P>.
13	15	30	27.4	7.457	S	129.115	E	184	*	4.2						0.4	9 BANDA SEA

13	15 35 01.1	24.149 N	122.086 E	48	4.4	1.3	33	TAIWAN REGION
a 13	15 38 15.7	23.275 S	177.033 W	109	5.7	1.1	194	SOUTH OF FIJI ISLANDS
13	16 10 21.4	44.870 N	110.947 W	5 G		0.4	10	YELLOWSTONE NATIONAL PARK, WYO. ML 3.4 (BUT). Felt (III) at Mammoth Hot Springs. Also felt at West Yellowstone, Montana.
a 13	16 23 13.5	4.649 S	153.147 E	29 D	5.8 5.5	1.1	253	NEW IRELAND REGION. Felt (IV) at Rabaul, New Britain. Also felt (II) at Panguna, Bougainville.
13	16 57 48.4	32.457 S	179.749 W	33 N	5.8 5.6	1.5	22	SOUTH OF KERMADec ISLANDS
13	17 01 54.5	40.214 N	26.284 E	10 G		0.4	5	TURKEY
13	17 27 52.0	32.69 S	179.85 E	33 N	4.9	1.7	8	SOUTH OF KERMADec ISLANDS
a 13	17 32 04.2	15.007 S	167.265 E	150	5.5	1.1	103	VANUATU ISLANDS
13	17 57 45.7	6.533 S	154.462 E	33 *	4.5	1.1	12	SOLOMON ISLANDS
13	19 36 17.0	2.196 N	127.017 E	73 *	4.9	1.2	37	MOLUCCA PASSAGE
13	20 02 17.1	2.923 N	128.527 E	228 *	4.9	1.0	48	HALMAHERA
13	21 23 11.8	36.451 N	70.850 E	192	4.8	1.0	141	HINDU KUSH REGION. Felt in the Peshawar area, Pakistan.
13	22 02 03.6	61.657 N	149.498 W	39			28	SOUTHERN ALASKA. <AGS-P>.
a 13	22 16 49.0	32.388 S	179.580 W	59 ?	5.6 4.9	1.2	54	SOUTH OF KERMADec ISLANDS
14	01 16 49.1	24.727 S	176.069 W	67 ?	4.9 5.4	1.5	49	SOUTH OF FIJI ISLANDS
14	03 53 45.7	64.117 N	148.978 W	33 N		1.1	7	CENTRAL ALASKA. ML 3.4 (PMR).
14	04 48 42.5	2.75 N	75.08 W	33 N		0.7	5	COLOMBIA. ML 3.7 (UVC).
14	06 48 45.4	35.846 N	21.801 E	33 N	4.3	1.3	37	MEDITERRANEAN SEA. ML 4.3 (TTG). MD 4.1 (ATH).
14	07 14 36.2	6.433 S	154.488 E	28 *	4.0	0.8	7	SOLOMON ISLANDS
14	07 35 17.3	58.193 N	142.721 W	10 G			19	GULF OF ALASKA. <AGS-P>.
14	07 50 23.5	37.144 N	30.457 E	10 G		1.1	5	TURKEY
14	07 57 01.2	13.668 S	166.351 E	50 *	4.6	1.1	17	VANUATU ISLANDS
14	07 59 46.7	12.869 N	86.680 W	33 N		1.1	13	NICARAGUA. MD 4.3 (HDC).
14	08 17 42.9	60.126 N	152.962 W	106			27	SOUTHERN ALASKA. <AGS-P>.
14	09 36 39.1	40.500 N	126.100 W	16			7	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.6 (BRK).
14	10 29 46.2	51.552 N	7.720 E	15		1.1	22	GERMANY. ML 3.2 (GRF), 2.8 (BNS). Possible rockburst.
14	10 32 54.5	20.641 N	146.353 E	33 N	4.7 4.0	1.1	35	MARIANA ISLANDS REGION
14	11 21 26.1	61.348 N	151.046 W	65			36	SOUTHERN ALASKA. <AGS-P>.
14	11 29 20.2	36.01 N	50.60 E	33 N	4.6	1.4	6	IRAN
14	13 13 14.7	42.764 N	19.161 E	10 G		0.3	7	YUGOSLAVIA. ML 2.2 (TTG).
14	13 31 08.6	38.668 N	30.419 E	10 G		0.7	5	TURKEY
14	13 41 53.1	40.106 N	15.931 E	10 G		0.8	6	SOUTHERN ITALY
14	14 52 09.6	19.644 N	109.203 W	33 N	4.2	1.0	23	REVILLA GIGEDO ISLANDS REGION
14	14 56 22.5	38.753 N	30.637 E	10 G		0.9	15	TURKEY
14	15 28 23.1	4.883 S	153.190 E	33 N	4.2	1.5	8	NEW IRELAND REGION
14	17 23 36.5	46.559 N	89.621 W	5 G		1.1	12	MICHIGAN. mblg 3.6 (NEIS). Mine collapse. Felt (III) at Bergland. Also felt at White Pine.
14	17 32 46.2	39.680 N	20.509 E	10 G		1.3	5	GREECE-ALBANIA BORDER REGION. MD 3.4 (ATH).
14	18 33 57.9	5.841 S	154.551 E	31 *		0.9	8	SOLOMON ISLANDS
14	18 35 55.7	39.921 N	29.091 E	17	4.1	1.2	33	TURKEY
14	18 45 08.9	39.936 N	29.112 E	10 G		0.6	5	TURKEY
14	18 53 00.4	60.111 N	152.779 W	99			20	SOUTHERN ALASKA. <AGS-P>.
14	19 03 32.7	25.871 S	178.787 W	368 D	5.0	1.2	123	SOUTH OF FIJI ISLANDS
14	19 05 04.7	27.077 N	55.887 E	47 ?	4.7	1.0	34	SOUTHERN IRAN
a 14	19 27 27.9	0.931 N	99.101 E	117 *	5.0	1.1	66	NORTHERN SUMATERA
14	21 19 40.0	22.728 S	70.104 W	40 ?		1.4	10	NEAR COAST OF NORTHERN CHILE
14	21 57 59.8	62.476 N	148.203 W	78			23	CENTRAL ALASKA. <AGS-P>.
14	22 04 41.5	22.29 S	67.11 W	33 N		0.9	5	CHILE-BOLIVIA BORDER REGION
14	22 10 12.3	36.802 N	121.382 W	3			20	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK). Felt at Hollister.
14	22 51 13.3	30.656 N	103.330 E	33 *	4.5	1.2	15	SICHUAN PROVINCE, CHINA. ML 4.3 (BJI).
14	23 31 15.3	18.71 N	67.04 W	33 N		0.2	5	MONA PASSAGE
14	23 47 00.5	39.759 N	20.150 E	9	4.0	1.4	37	GREECE-ALBANIA BORDER REGION. ML 4.3 (ATH).
15	01 09 03.9	36.800 N	121.380 W	5			14	CENTRAL CALIFORNIA. <BRK>. ML 2.9 (BRK). Felt at Hollister.
15	01 57 34.2	62.108 N	151.860 W	107			28	CENTRAL ALASKA. <AGS-P>.
15	03 42 54.5	30.648 N	50.728 E	33 N	4.2	1.1	19	IRAN
15	06 22 51.0	9.949 S	25.285 E	10 G	4.3	0.7	6	ZAIRE REPUBLIC
15	07 22 02.2	5.198 S	153.693 E	66 *	4.9	1.0	9	NEW IRELAND REGION
15	07 33 29.2	37.515 N	106.684 W	5 G		0.7	17	COLORADO. ML 3.1 (NEIS). Felt at Summitville.
15	07 39 34.2	8.498 S	112.669 E	105 *	4.5	1.3	11	JAVA
f 15	08 40 23.9	20.789 S	175.993 W	214 D	6.2	1.0	404	TONGA ISLANDS
15	09 17 27.7	23.162 S	68.973 W	130 D	4.9	1.2	43	NORTHERN CHILE
15	10 40 29.1	33.545 N	138.862 E	236	4.4	1.2	26	SOUTH OF HONSHU, JAPAN
15	11 41 30.0	6.02 S	145.38 E	33 N		1.6	5	PAPUA NEW GUINEA
15	12 25 17.7	60.123 N	152.481 W	98			37	SOUTHERN ALASKA. <AGS-P>.
15	16 15 02.1	36.993 N	121.045 W	5			14	CENTRAL CALIFORNIA. <BRK>. ML 3.0 (BRK).
15	16 41 52.3	3.74 N	76.93 W	33 N		0.7	5	COLOMBIA. ML 3.4 (UVC).
15	16 50 01.9	30.302 N	138.489 E	447 *	4.5	0.8	42	SOUTH OF HONSHU, JAPAN
15	17 32 34.8	5.905 S	103.943 E	33 N	4.7	1.4	25	SOUTHERN SUMATERA
15	17 57 50.6	43.736 N	12.387 E	10 G		0.5	8	CENTRAL ITALY
15	18 27 39.3	60.129 N	152.686 W	98			22	SOUTHERN ALASKA. <AGS-P>.
15	20 24 30.1	46.249 N	13.119 E	10 G		1.0	11	AUSTRIA. ML 3.0 (KBA), 2.8 (TRI).
15	21 00 33.6	36.040 N	118.050 W	6 G			7	CENTRAL CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
a 15	21 07 11.4	27.179 S	11.334 W	10 G	5.4 5.4	1.1	155	SOUTH ATLANTIC RIDGE
15	22 27 11.9	8.814 S	127.258 E	33 N		0.1	5	TIMOR
15	22 34 07.7	38.978 N	16.182 E	10 G		1.2	5	SOUTHERN ITALY
16	00 37 30.8	43.175 N	19.009 E	10 G		1.1	6	YUGOSLAVIA. MD 2.3 (TTG).
a 16	00 43 36.9	2.257 S	140.212 E	34	5.5 5.1	1.1	114	NEAR N. COAST OF WEST IRIAN
16	03 58 13.4	39.939 N	29.148 E	10 G		0.4	7	TURKEY
16	05 16 12.0	25.088 S	68.616 W	92 *	4.7	1.2	19	CHILE-ARGENTINA BORDER REGION
a 16	05 46 51.4	60.365 S	154.209 E	10 G	5.7 5.5	1.5	85	WEST OF MACQUARIE ISLAND
16	06 05 01.6	43.713 N	20.162 E	10 G		0.7	6	YUGOSLAVIA. ML 2.5 (TTG).
16	08 00 52.3	32.453 S	179.727 W	33 N	5.2	0.9	22	SOUTH OF KERMADec ISLANDS
16	10 03 57.2	6.301 E	154.301 E	56 *	4.6	1.2	16	SOLOMON ISLANDS
16	11 42 12.1	35.250 N	140.344 E	48	5.1 4.5	1.3	147	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Tokyo, Tateyama and Yakahama; (II JMA) at Ajira, Kumagaya and an Oshima; (I JMA) in the Chashi-Maebashi-Mita area and an Hachija-jima.
16	12 51 50.4	5.13 S	149.55 E	67 ?	4.4	1.6	8	NEW BRITAIN REGION

16	12 54 59.8	42.512 N	19.179 E	10 G	1.2	9	YUGOSLAVIA. ML 2.3 (TTG).
o 16	13 01 24.3	18.462 S	177.962 W	573 4.9	1.1	118	FIJI ISLANDS REGION
16	13 35 24.6%	39.071 N	29.046 E	10 G	0.6	5	TURKEY
16	13 40 36.1*	18.455 N	145.730 E	225 * 4.6	1.2	43	MARIANA ISLANDS
16	17 12 06.2%	61.236 N	151.697 W	99		28	SOUTHERN ALASKA. <AGS-P>.
16	18 41 36.6	38.426 N	30.729 E	10 G	1.1	11	TURKEY
16	20 15 56.9*	50.863 N	14.649 E	10 G	0.5	5	CZECHOSLOVAKIA. ML 3.3 (VKA), 2.9 (KBA).
16	20 29 34.8*	44.796 N	114.472 W	5 G	0.4	10	WESTERN IDAHO. ML 3.5 (BUT).
16	21 17 57.77	38.09 N	30.13 E	10 G	1.5	5	TURKEY
16	22 47 39.6%	39.127 N	29.435 E	10 G	1.6	7	TURKEY
16	22 49 55.7*	0.698 N	127.630 E	33 N 3.6	1.3	14	HALMAHERA
17	00 41 17.3*	32.347 S	179.413 W	33 N 4.8	0.3	8	SOUTH OF KERMADEC ISLANDS
17	00 54 41.1	1.046 N	127.671 E	35 * 5.0	0.9	17	HALMAHERA
17	01 43 51.9%	37.525 N	121.688 W	6		11	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
17	02 47 16.7	7.761 S	127.756 E	33 N 4.9	1.2	26	BANDA SEA
17	03 36 05.0	36.110 N	70.798 E	116 D 4.9	1.1	151	HINDU KUSH REGION. Felt at Abbottabad and Chitral, Pakistan. Also felt in the Srinagar area, Kashmir.
17	03 41 48.0*	1.087 N	127.712 E	33 N 4.7	1.5	9	HALMAHERA
17	04 13 21.4*	36.148 N	29.038 E	10 G	0.6	6	TURKEY
17	04 22 48.2%	4.114 N	76.623 W	33 N	0.2	5	COLOMBIA. MD 3.9 (UVC).
17	05 09 15.8%	40.233 N	29.406 E	10 G	0.8	5	TURKEY
17	06 13 32.77	15.51 S	173.66 W	162 ? 5.2	0.6	9	TONGA ISLANDS
17	09 10 41.1	37.718 N	14.911 E	21 *	1.3	9	SICILY
17	09 25 21.3*	10.222 S	161.158 E	75 * 4.3	1.1	19	SOLOMON ISLANDS
17	10 44 44.5*	32.242 S	179.440 E	33 N 4.8	1.0	10	SOUTH OF KERMADEC ISLANDS
17	10 58 06.5*	3.075 S	75.479 W	136 * 4.4	1.1	11	NORTHERN PERU
17	11 11 47.77	1.54 S	133.05 E	33 N 4.0 3.7	1.1	8	WEST IRIAN REGION
17	11 26 48.2	4.993 S	132.025 E	47 * 4.7	1.3	21	WEST IRIAN REGION
17	12 25 14.4*	44.875 N	147.316 E	33 N 4.8	1.1	45	KURIL ISLANDS
o 17	13 51 36.7	32.367 S	179.590 W	51 * 5.3 5.1	1.1	52	SOUTH OF KERMADEC ISLANDS
17	15 11 49.0*	27.100 S	71.271 W	33 N 4.7	0.7	13	NEAR COAST OF NORTHERN CHILE
17	15 31 18.1	19.550 S	175.636 W	243 * 5.0	1.3	55	TONGA ISLANDS
17	16 17 44.1%	33.050 N	117.780 W	6 G		7	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
17	16 21 38.2*	33.510 N	47.565 E	33 N 4.4	1.0	7	WESTERN IRAN
17	16 44 16.2%	60.648 N	151.880 W	74		26	KENAI PENINSULA, ALASKA. <AGS-P>.
17	16 44 58.3%	39.935 N	29.153 E	10 G	0.7	7	TURKEY
17	16 48 05.6*	27.043 S	71.047 W	33 N 4.9	1.0	15	NEAR COAST OF NORTHERN CHILE
o 17	17 14 14.3	6.258 N	125.740 E	136 5.1	1.2	81	MINDANAO, PHILIPPINE ISLANDS
17	17 17 45.3	45.628 N	9.990 E	10 G	1.0	59	NORTHERN ITALY. ML 3.7 (KBA), 3.7 (VKA), 3.6 (LDG). MD 3.6 (TRI).
17	18 20 11.5	32.673 N	46.860 E	51 * 4.8	1.1	15	IRAN-IRAQ BORDER REGION
17	18 41 42.7*	32.699 N	46.534 E	40 * 4.6	1.5	14	IRAN-IRAQ BORDER REGION
17	21 06 24.2	43.645 N	20.539 E	10 G	1.2	15	YUGOSLAVIA. MD 2.8 (TTG). Felt (V) at Kraljevo and Brus.
17	21 06 48.7*	40.036 N	21.273 E	10 G	1.3	11	GREECE. ML 3.8 (ATH), 3.3 (TTG).
18	01 38 49.9*	1.008 N	127.443 E	33 N 4.8	0.5	10	HALMAHERA
18	01 40 05.9%	32.690 N	115.880 W	2		5	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
18	02 16 45.1%	61.321 N	150.588 W	76		33	SOUTHERN ALASKA. <AGS-P>.
18	02 39 16.8	20.554 N	122.257 E	164 4.6	0.9	35	PHILIPPINE ISLANDS REGION
18	04 32 02.5*	6.755 N	73.040 W	162 *	1.1	11	NORTHERN COLOMBIA
18	04 36 12.8*	32.524 S	179.643 W	33 N 5.2 5.6	1.1	22	SOUTH OF KERMADEC ISLANDS
18	05 25 58.07	4.88 N	76.81 W	33 N	1.1	5	COLOMBIA. ML 3.8 (UVC).
18	06 11 30.77	14.95 S	174.38 W	33 N 5.0	0.8	17	SAMOA ISLANDS REGION
18	06 47 39.4*	32.530 S	179.593 W	64 ?	0.9	11	SOUTH OF KERMADEC ISLANDS
18	06 57 49.1	46.797 N	7.201 E	12	1.1	13	SWITZERLAND. ML 2.7 (LDG).
18	07 35 17.0	6.860 N	73.014 W	157 4.8	1.1	32	NORTHERN COLOMBIA
18	07 42 24.2%	57.761 N	142.951 W	10 G		29	GULF OF ALASKA. <AGS-P>.
o 18	09 53 34.2	32.532 S	179.515 W	71 * 5.2	1.0	38	SOUTH OF KERMADEC ISLANDS
18	09 55 40.7	36.430 N	70.508 E	211 D 4.9	0.9	140	HINDU KUSH REGION
18	10 37 15.4%	35.581 N	139.882 E	26 *	0.8	7	NEAR S. COAST OF HONSHU, JAPAN. Felt (I JMA) at Tokyo, Tateyama and Kumagaya.
18	11 52 28.9*	24.373 N	122.552 E	33 N	1.0	14	TAIWAN REGION
18	12 47 47.7%	40.841 N	28.101 E	10 G	0.8	7	TURKEY
18	13 48 12.5	2.446 S	76.641 W	149 4.9	1.1	89	PERU-ECUADOR BORDER REGION
18	14 47 34.5	39.229 N	20.538 E	10 G 3.6	1.4	23	GREECE-ALBANIA BORDER REGION. ML 3.8 (ATH).
18	15 05 48.7%	15.937 N	60.564 W	10 G	1.2	6	LEEWARD ISLANDS. ML 2.5 (FDF).
18	15 35 58.8*	7.176 S	146.109 E	33 N 4.5	1.1	5	EAST PAPUA NEW GUINEA REGION
18	15 45 22.4	27.859 S	26.758 E	5 G	1.5	13	REPUBLIC OF SOUTH AFRICA. MG 3.8 (BUL).
18	18 35 50.4*	6.538 S	150.249 E	74 * 4.1	1.3	12	NEW BRITAIN REGION
18	19 02 38.6	4.936 N	96.218 E	63 * 4.4	1.1	20	NORTHERN SUMATERA
18	19 04 24.7%	37.839 N	1.258 W	10 G	0.9	6	SPAIN. MG 3.1 (MDD).
18	21 41 04.8	37.795 N	37.611 E	8 4.4	1.0	50	TURKEY
18	23 25 43.6%	38.803 N	122.797 W	3		13	NORTHERN CALIFORNIA. <BRK>. ML 3.4 (BRK). Mo=2.1*10**14 Nm (BRK).
o 18	23 45 55.2*	55.261 S	145.901 E	10 G 5.4	1.4	44	WEST OF MACQUARIE ISLAND
19	02 29 16.7	36.440 N	70.844 E	198 4.9	1.0	131	HINDU KUSH REGION. Felt in the Kabul area, Afghanistan.
19	03 01 18.5	63.146 N	150.974 W	108 ?	0.9	9	CENTRAL ALASKA
o 19	03 25 21.1	4.241 N	124.640 E	335 D 5.7	1.1	276	CELEBES SEA
19	05 21 07.7	63.590 N	145.486 W	33 N	0.8	22	CENTRAL ALASKA. ML 3.2 (PMR).
19	06 26 18.8%	46.351 N	2.510 E	10 G	0.3	11	FRANCE. ML 2.5 (LDG).
f 19	07 30 31.8	24.710 S	70.568 W	33 N 6.3 6.7	1.3	296	NEAR COAST OF NORTHERN CHILE. Ms 6.4 (BRK). Felt (V) at Antofagasta and Talitai; (IV) at Calama, Chanaral and Copiapo; (III) at Tocopilla.
19	10 11 04.47	47.01 N	8.35 E	10 G	0.3	5	SWITZERLAND. ML 2.5 (LDG).
19	10 31 53.4*	0.846 S	127.698 E	43 ? 4.4	1.0	14	HALMAHERA
19	10 39 58.6%	58.748 N	153.229 W	61		24	KODIAK ISLAND REGION. <AGS-P>.
19	11 08 55.4*	43.859 N	9.982 E	10 G	1.0	5	CORSICA
o 19	11 36 36.1	14.406 N	90.840 W	165 D 4.9	1.2	63	GUATEMALA
19	11 38 06.9%	3.840 N	76.167 W	33 N	1.5	5	COLOMBIA. MD 3.2 (UVC).
19	11 57 45.5%	47.441 N	5.169 E	10 G	0.1	6	FRANCE. ML 2.2 (LDG).
19	12 20 54.7%	36.875 N	121.340 W	7		8	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
19	12 32 06.0	5.719 S	130.796 E	116 D 5.1	1.2	27	BANDA SEA
19	13 17 43.2*	24.918 S	70.566 W	33 N 5.1	1.2	17	NEAR COAST OF NORTHERN CHILE

19	13 32 53.5	45.060 N	17.517 E	10 G	0 7	7	YUGOSLAVIA. MD 3.2 (TRI). ML 3.1 (KBA).
19	14 00 28.0	61.458 N	150.657 W	65	29	29	SOUTHERN ALASKA. <AGS-P>.
19	14 58 34.3	6.569 S	148.975 E	60 * 4.9	1.3	10	NEW BRITAIN REGION
19	15 52 01.8	39.941 N	29.164 E	10 G	0.3	6	TURKEY
19	16 00 28.6	18.861 N	103.037 W	78 5.3	1.1	162	NEAR COAST OF MICHOACAN, MEXICO
19	18 26 25.5	27.590 S	71.046 W	33 N 4.8	1.3	18	NEAR COAST OF NORTHERN CHILE
19	19 18 05.0	58.595 N	142.743 W	10 G		37	GULF OF ALASKA. <AGS-P>. ML 3.5 (PMR).
19	19 46 06.0	24.641 S	70.532 W	33 N 4.9	1.3	25	NEAR COAST OF NORTHERN CHILE
19	19 46 16.4	44.228 N	11.387 E	10 G	0.8	9	NORTHERN ITALY
19	19 49 31.7	3.87 N	75.68 W	33 N	1.4	5	COLOMBIA. MD 3.2 (UVC).
19	20 07 19.7	27.367 N	128.937 E	57 * 4.6	1.0	11	RYUKYU ISLANDS. Felt (I JMA) at Naze.
19	20 13 33.3	44.284 N	11.339 E	10 G	1.2	10	NORTHERN ITALY
19	20 34 54.9	44.269 N	11.432 E	10 G	1.3	27	NORTHERN ITALY. ML 3.1 (KBA), MD 3.0 (ROM).
19	20 41 50.9	44.231 N	11.369 E	10 G	0.4	6	NORTHERN ITALY
19	20 49 30.1	58.677 N	142.814 W	10 G	29	29	GULF OF ALASKA. <AGS-P>.
19	20 58 15.7	23.68 N	122.94 E	33 N	1.6	7	TAIWAN REGION
19	21 03 23.7	31.914 N	47.679 E	58 ? 4.2	1.2	7	IRAN-IRAQ BORDER REGION
19	21 07 59.9	55.236 N	161.793 E	33 N 4.9	1.0	44	NEAR EAST COAST OF KAMCHATKA
19	21 41 20.6	46.494 N	7.424 E	10 G	1.5	9	SWITZERLAND. ML 2.6 (LDG).
19	22 08 31.7	10.795 N	61.599 W	63 4.6	0.9	36	TRINIDAD. Felt (V) on northern Trinidad.
19	23 14 55.3	44.580 N	17.665 E	10 G 4.0	1.2	131	YUGOSLAVIA. ML 4.5 (KBA), 4.3 (TTG). MD 4.3 (TRI). Damage (VII) in the Prnjavor area. Also felt at Pecs, Hungary.
19	23 15 32.1	34.070 N	118.060 W	13		12	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS). Felt (V) at Artesia, Bell and Rosemead; (IV) at Arcadio, Glendale, Maywood, Monrovia, Monterey Park, Pasadena, Pico Rivera and West Covina; (III) at Azusa, Commerce, Compton, El Monte, Los Angeles, Montebello, San Gabriel and Whittier.
19	23 17 51.6	60.106 N	153.460 W	160		26	SOUTHERN ALASKA. <AGS-P>.
19	23 49 02.8	0.075 S	129.903 E	54 ? 4.9	1.3	38	HALMAHERA
20	01 10 17.0	36.201 N	30.256 E	10 G	0.7	5	TURKEY
20	01 48 14.2	2.75 N	76.67 W	33 N	2.0	5	COLOMBIA. ML 3.1 (UVC).
20	01 59 34.0	44.227 N	11.425 E	10 G	0.4	8	NORTHERN ITALY. ML 2.8 (KBA).
20	02 07 44.5	0.574 S	128.007 E	33 * 4.6	1.4	18	HALMAHERA
20	02 17 41.9	55.18 S	1.65 W	10 G 5.0	1.5	19	BOUVET ISLAND REGION
20	02 29 25.9	35.88 N	22.22 E	10 G	1.6	5	MEDITERRANEAN SEA. ML 3.6 (ATH).
20	02 48 31.2	3.54 N	74.94 W	33 N	1.0	4	COLOMBIA
20	02 54 26.0	21.182 S	70.364 W	33 N 4.8	1.2	27	NEAR COAST OF NORTHERN CHILE
20	02 54 45.1	39.074 N	27.975 E	10 G	1.6	5	TURKEY
20	04 47 11.6	51.589 N	7.371 E	10 G	1.4	8	GERMANY. ML 2.1 (BNS).
20	04 57 48.0	0.179 S	122.266 E	238 ? 4.6	1.3	17	MINAHASSA PENINSULA
20	05 22 30.8	3.31 N	76.92 W	33 N	0.4	4	COLOMBIA. MD 2.5 (UVC).
20	06 55 27.7	32.829 N	46.286 E	48 * 4.5	1.3	17	IRAN-IRAQ BORDER REGION
20	07 03 09.5	59.567 N	152.071 W	75		42	SOUTHERN ALASKA. <AGS-P>.
20	07 10 15.8	23.279 N	93.630 E	89 * 4.4	0.6	10	BURMA-INDIA BORDER REGION
20	08 58 56.7	51.55 N	16.26 E	10 G	0.5	7	POLAND. ML 3.4 (KBA).
20	10 49 08.7	25.290 N	124.652 E	7 4.9	1.3	34	NORTHEAST OF TAIWAN. Felt (I JMA) on Miyako-jima, Ryukyu Islands.
20	10 52 04.7	27.940 S	70.856 W	33 N 5.0	1.2	24	NEAR COAST OF NORTHERN CHILE
20	11 48 34.4	34.809 N	74.977 E	33 N 4.6	0.6	8	SOUTHWESTERN KASHMIR
20	12 06 18.6	4.35 N	76.68 W	33 N	1.0	5	COLOMBIA
20	12 13 48.9	3.955 S	123.294 E	33 N 4.6 3.4	1.4	12	SULAWESI
20	12 47 22.2	25.451 N	124.864 E	33 N	1.6	11	NORTHEAST OF TAIWAN
20	13 47 30.1	36.808 N	28.055 E	10 G	1.5	9	DODECANESE ISLANDS
a 20	15 01 29.6	24.690 S	70.521 W	33 * 5.3 5.1	1.2	104	NEAR COAST OF NORTHERN CHILE
20	17 07 49.3	47.478 N	12.005 E	10 G	1.4	5	AUSTRIA. ML 2.4 (KBA). Felt (IV) at Kirchbichl.
20	20 23 16.3	25.318 N	124.896 E	38 * 4.6	1.4	27	NORTHEAST OF TAIWAN
a 20	20 50 46.5	9.201 S	67.120 E	10 G 5.0 4.9	1.0	72	MID-INDIAN RISE
21	00 06 24.5	45.573 N	111.684 W	5 G	0.5	7	MONTANA. CL 1.6 (BUT). Felt at Norris.
21	00 08 03.5	45.562 N	111.684 W	5 G	0.3	7	MONTANA. ML 2.3 (BUT). Felt at Norris.
21	00 25 43.5	4.44 N	77.60 W	10 G	0.4	5	NEAR WEST COAST OF COLOMBIA
21	01 37 41.1	3.20 N	127.60 E	33 N 4.2	0.9	8	TALAUD ISLANDS
21	02 44 05.7	6.795 S	149.211 E	33 N 4.1	1.5	8	NEW BRITAIN REGION. ML 4.2 (PMG).
21	02 46 59.7	6.924 S	149.254 E	33 N 4.2	0.9	6	NEW BRITAIN REGION. ML 4.1 (PMG).
21	03 57 18.6	15.049 S	73.417 W	103 * 4.9	1.2	16	SOUTHERN PERU
21	05 32 02.3	39.213 N	20.579 E	8 3.6	0.8	25	GREECE-ALBANIA BORDER REGION. ML 3.8 (ATH).
21	05 42 22.4	40.066 N	29.315 E	10 G	0.5	5	TURKEY
21	07 17 22.5	26.49 S	177.59 W	162 ? 4.7	1.1	9	SOUTH OF FIJI ISLANDS
21	08 13 54.4	27.09 S	177.25 W	33 N 4.8	1.3	7	KERMADEC ISLANDS REGION
a 21	08 22 22.9	18.179 S	168.139 E	44 D 5.7 5.9	1.1	235	VANUATU ISLANDS. Ms 5.9 (BRK).
21	08 42 23.1	62.567 N	149.650 W	55		25	CENTRAL ALASKA. <AGS-P>.
21	09 31 01.8	18.338 S	168.056 E	33 N 4.6	1.3	27	VANUATU ISLANDS
21	09 46 56.7	45.033 N	23.003 E	33 N	1.1	9	ROMANIA
21	10 13 29.4	3.17 S	129.02 E	72 ? 4.3	1.0	8	CERAM
21	12 01 13.0	57.582 N	142.766 W	10 G 4.0		33	GULF OF ALASKA. <AGS-P>.
21	12 11 45.5	60.299 N	5.298 E	0 G	1.0	5	SOUTHERN NORWAY. MD 1.8 (BER). Probable explosion.
21	12 59 52.9	39.523 N	15.596 E	10 G	1.3	5	SOUTHERN ITALY
21	14 00 44.6	22.18 N	121.21 E	10 G	1.4	6	TAIWAN REGION
21	14 00 48.9	45.253 N	150.062 E	33 N 4.9	0.7	56	KURIL ISLANDS
21	15 19 08.2	4.30 N	77.09 W	33 N	1.4	5	NEAR WEST COAST OF COLOMBIA
21	15 28 06.5	58.435 N	1.439 E	10 G	0.8	16	NORTH SEA. ML 3.2 (BGS), 2.6 (BER).
21	15 45 18.4	41.140 N	28.866 E	10 G	0.2	6	TURKEY
21	15 52 19.9	36.318 N	69.636 E	33 N 4.0	0.4	6	HINDU KUSH REGION
21	16 02 06.4	36.988 N	121.032 W	1		11	CENTRAL CALIFORNIA. <BRK>. ML 2.9 (BRK).
21	16 12 01.4	60.104 N	10.452 E	10 G	1.0	6	SOUTHERN NORWAY. MD 2.4 (BER).
21	16 12 57.1	37.522 N	121.678 W	3		9	CENTRAL CALIFORNIA. <BRK>. ML 2.7 (BRK).
21	16 17 43.5	26.374 N	141.294 E	89 5.1	0.9	91	BONIN ISLANDS REGION. Felt (III JMA) on Chichi-shima.
21	16 38 23.3	7.81 S	127.87 E	136 ? 4.7	1.5	9	BANDA SEA
21	17 41 54.0	45.71 N	26.48 E	154 ?	1.3	10	ROMANIA
21	18 51 17.4	10.702 N	85.156 W	163 *	0.4	15	COSTA RICA. MD 4.5 (HDC).
21	19 36 10.7	51.219 N	174.264 W	33 N 5.0	0.9	57	ANDREANOF ISLANDS, ALEUTIAN IS.
21	19 46 21.1	4.10 S	138.54 E	33 N 4.0	1.1	6	WEST IRIAN

21	20 26 27.37	40.73 N	23.78 E	10 G		1.2	8	GREECE
21	21 03 48.67	27.63 N	34.48 E	10 G		0.4	5	RED SEA
21	21 33 27.4*	51.460 N	174.203 W	33 N	4.7	0.7	29	ANDREANOF ISLANDS, ALEUTIAN IS.
21	21 48 52.7*	44.352 N	7.089 E	10 G		0.3	5	NORTHERN ITALY. ML 2.5 (LDG).
21	22 09 32.2*	17.083 S	70.636 W	161 *		0.7	9	NEAR COAST OF PERU
21	23 44 10.2*	9.764 S	159.962 E	33 N	4.5	0.8	11	SOLOMON ISLANDS. Felt (IV) at Honiara.
f 22	00 35 58.0	19.847 S	133.803 E	5 G	6.1 6.3	1.0	270	NORTHERN TERRITORY, AUSTRALIA. Ms 6.4 (BRK). Damage in the Tennant Creek area.
22	00 52 20.7*	33.820 N	117.030 W	15			16	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS). Felt (IV) at Cabazon and (III) at Forest Falls. Also felt at Banning, Beaumont and Lakeview.
22	01 10 14.4*	19.025 S	133.620 E	5 G	4.3	1.2	10	NORTHERN TERRITORY, AUSTRALIA
22	01 41 22.7	45.975 N	15.399 E	14		1.1	27	YUGOSLAVIA. ML 3.5 (VKA), 3.4 (KBA). MD 3.4 (TRI). Felt in the Krsko area.
22	02 33 36.6	43.415 N	19.945 E	10 G		1.1	35	YUGOSLAVIA. MD 3.3 (TTG).
22	03 43 36.67	16.43 S	71.75 W	109 *		0.6	8	SOUTHERN PERU. Felt (IV) at Arequipa.
22	03 44 34.37	39.45 N	12.31 W	33 N		0.9	12	NORTH ATLANTIC OCEAN. MG 3.1 (MDD).
o 22	03 57 25.2	19.798 S	133.910 E	5 G	6.1 6.4	1.0	309	NORTHERN TERRITORY, AUSTRALIA. Ms 6.6 (BRK). Damage in the Tennant Creek area.
22	04 18 46.9*	19.978 S	133.663 E	5 G	5.1	1.5	17	NORTHERN TERRITORY, AUSTRALIA
22	04 47 22.0*	19.879 S	133.742 E	5 G	4.1	1.6	7	NORTHERN TERRITORY, AUSTRALIA
22	05 16 04.9*	19.773 S	133.818 E	5 G		1.3	5	NORTHERN TERRITORY, AUSTRALIA
22	05 28 01.9	15.241 S	70.457 W	202	5.1	1.2	75	SOUTHERN PERU. Felt (IV) at Arequipa.
22	06 18 55.1	38.642 N	20.980 E	37	4.9	1.2	99	GREECE. ML 4.6 (ATH).
22	06 50 47.4*	35.462 N	140.435 E	33 N		0.9	5	NEAR EAST COAST OF HONSHU, JAPAN
22	08 03 27.97	21.59 S	68.04 W	153 ?		1.4	8	CHILE-BOLIVIA BORDER REGION
22	09 20 17.57	19.82 S	133.69 E	5 G	4.1	1.4	7	NORTHERN TERRITORY, AUSTRALIA
22	10 52 40.7*	51.419 N	174.169 W	33 N	4.8	0.6	11	ANDREANOF ISLANDS, ALEUTIAN IS.
f 22	12 04 57.8	19.829 S	133.882 E	5 G	6.5 6.7	1.1	344	NORTHERN TERRITORY, AUSTRALIA. Ms 6.9 (BRK). Damage in the Tennant Creek area. Felt over two-thirds of Australia. According to preliminary reports from the Australian Bureau of Mineral Resources, Geology and Geophysics, two fault scarps about 8 km. apart striking approximately east-southeast were observed in the epicentral area. The southernmost scarp was about 15 km. long with a maximum throw of about one meter.
22	12 39 33.8	20.187 S	133.611 E	5 G	4.9	1.0	26	NORTHERN TERRITORY, AUSTRALIA
22	13 01 36.6*	20.253 S	133.692 E	5 G	4.7	1.0	12	NORTHERN TERRITORY, AUSTRALIA
22	13 46 57.0*	20.366 S	133.565 E	5 G	4.3	0.9	11	NORTHERN TERRITORY, AUSTRALIA
22	15 01 09.1*	19.765 S	133.989 E	5 G		1.5	7	NORTHERN TERRITORY, AUSTRALIA
22	15 24 59.6	60.721 N	5.657 E	0 G		0.8	6	SOUTHERN NORWAY. MD 2.3 (BER). Probable explosion.
22	17 04 18.4*	19.390 N	154.705 W	48			48	HAWAII. <HVO-P>. MD 4.1 (HVO).
22	18 03 57.2	4.485 S	144.067 E	130	5.0	1.2	60	NEAR N COAST OF PAPUA NEW GUINEA
22	18 23 13.2	19.824 S	133.876 E	5 G		1.0	9	NORTHERN TERRITORY, AUSTRALIA
22	18 48 10.8*	41.985 N	79.518 E	33 N	4.6	1.2	9	KIRGHIZ-XINJIANG BORDER REGION. ML 4.2 (BJI).
22	19 52 13.9*	19.691 S	133.955 E	5 G		1.6	5	NORTHERN TERRITORY, AUSTRALIA
22	19 59 21.9*	15.260 S	72.068 W	140 *		0.6	9	SOUTHERN PERU
o 22	20 54 03.0	19.857 S	133.991 E	5 G	5.8 4.9	1.0	176	NORTHERN TERRITORY, AUSTRALIA. Felt strongly at Tennant Creek.
22	21 18 32.9	51.425 N	174.251 W	33 N	5.0 4.5	0.8	68	ANDREANOF ISLANDS, ALEUTIAN IS.
22	21 43 45.4	44.827 N	114.421 W	5 G		0.9	16	WESTERN IDAHO. ML 3.3 (NEIS). Felt (II) at Challis.
22	22 23 45.8*	44.793 N	114.539 W	5 G		0.4	11	WESTERN IDAHO. ML 2.7 (NEIS).
22	23 13 29.1*	19.550 S	168.857 E	43 *	5.0	1.2	44	VANUATU ISLANDS
22	23 32 56.97	3.11 N	76.36 W	103 ?		0.1	5	COLOMBIA. MD 2.8 (UVC).
23	00 27 06.1*	51.300 N	174.283 W	33 N	4.6	1.4	21	ANDREANOF ISLANDS, ALEUTIAN IS. ML 3.9 (PMR).
23	00 52 41.6*	51.431 N	174.296 W	33 N	5.0	0.9	50	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.1 (PMR).
23	00 55 12.2*	35.390 N	117.820 W	8			9	CENTRAL CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
23	01 08 19.4*	19.698 S	133.922 E	5 G		1.1	5	NORTHERN TERRITORY, AUSTRALIA
23	01 57 16.3*	32.935 N	80.157 W	7			19	SOUTH CAROLINA. <GLD>. MD 3.3 (GLD), mblg 3.3 (NEIS). Felt (V) at Summerville; (IV) at Ladson and Mount Holly; (III) at Ridgeville and Wadmalaw Island.
23	02 43 30.4*	19.881 S	133.663 E	5 G		1.0	5	NORTHERN TERRITORY, AUSTRALIA
23	02 43 48.07	61.46 N	2.12 E	10 G		1.0	6	NORWEGIAN SEA. MD 2.0 (BER).
o 23	02 45 35.7	51.400 N	174.268 W	48 D	5.5 4.7	0.9	214	ANDREANOF ISLANDS, ALEUTIAN IS.
23	03 33 37.3	20.058 S	133.697 E	5 G	4.6	1.3	15	NORTHERN TERRITORY, AUSTRALIA
23	04 01 52.6*	31.630 N	115.770 W	6 G			10	BAJA CALIFORNIA. <PAS-P>. ML 3.6 (PAS).
23	04 23 46.7*	31.800 N	115.800 W	6 G			6	BAJA CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
23	06 21 32.8*	65.574 N	2.168 E	10 G	4.9	1.5	11	NORWEGIAN SEA
23	06 39 26.9	38.558 N	26.747 E	10 G		0.8	20	AEGEAN SEA. ML 3.9 (ATH).
23	06 50 00.77	51.56 N	174.21 W	33 N	4.6	0.9	7	ANDREANOF ISLANDS, ALEUTIAN IS. ML 3.8 (PMR).
23	07 03 11.1	19.931 S	133.855 E	5 G	4.1	1.3	14	NORTHERN TERRITORY, AUSTRALIA
23	07 28 58.0*	51.369 N	174.262 W	33 N	4.8	0.5	9	ANDREANOF ISLANDS, ALEUTIAN IS. ML 3.7 (PMR).
23	07 34 34.5	20.056 S	133.852 E	5 G	4.6	1.4	20	NORTHERN TERRITORY, AUSTRALIA
23	08 18 47.3	37.208 N	30.583 E	10		1.1	20	TURKEY
o 23	08 58 00.3	1.785 N	127.236 E	104	5.6	1.0	160	HALMAHERA
23	09 07 36.6	19.961 S	133.648 E	5 G	4.5	1.2	12	NORTHERN TERRITORY, AUSTRALIA
23	09 39 19.5*	45.428 N	0.066 W	10 G		0.8	8	FRANCE. ML 2.8 (LDG).
23	11 21 39.8*	19.884 S	133.805 E	5 G		1.1	5	NORTHERN TERRITORY, AUSTRALIA
o 23	11 45 45.0	46.183 N	153.499 E	34 D	5.7 5.3	1.0	287	KURIL ISLANDS
23	13 10 47.3*	19.876 S	133.726 E	5 G		1.3	5	NORTHERN TERRITORY, AUSTRALIA
23	14 44 21.37	40.91 N	30.52 E	10 G		0.7	5	TURKEY
23	15 10 47.1*	2.983 N	75.671 W	10 G		0.2	5	COLOMBIA. MD 3.5 (UVC).
23	15 24 25.4*	17.775 N	85.284 W	10 G	4.8	1.2	36	CARIBBEAN SEA
23	15 37 29.3	29.476 N	81.612 E	33 N	4.7	1.6	23	NEPAL
23	16 07 24.8	38.415 N	30.826 E	5		0.9	25	TURKEY
23	16 25 53.7	38.596 N	21.077 E	10 G		1.1	12	GREECE. ML 3.4 (ATH).
23	17 54 51.67	35.10 S	179.47 W	33 N	5.0	1.3	18	EAST OF NORTH ISLAND, N.Z.
23	20 09 55.3*	5.411 N	93.343 E	33 N	4.4	1.2	5	OFF W COAST OF NORTHERN SUMATRA
23	21 24 00.4*	40.446 N	28.398 E	10 G		1.1	8	TURKEY
o 23	22 01 57.3*	15.250 S	116.194 W	10 G	5.1 4.4	1.2	63	EASTER ISLAND CORDILLERA
o 23	22 48 30.1	23.595 S	177.365 W	202	5.3	1.1	102	SOUTH OF FIJI ISLANDS
23	23 21 08.5*	19.645 S	133.947 E	5 G		0.7	5	NORTHERN TERRITORY, AUSTRALIA
23	23 30 35.1	45.844 N	5.352 E	10 G		0.6	10	YUGOSLAVIA. MD 2.8 (TRI), 2.6 (KBA). Felt (IV) at

24	00 15 15.3*	54.090 N	161.648 W	33 N	4.8	1.2	28	ALASKA PENINSULA. ML 3.9 (PMR).
24	00 39 58.2	63.034 N	150.923 W	145 ?		0.4	9	CENTRAL ALASKA
24	01 06 17.7*	19.987 S	133.536 E	5 G		1.0	5	NORTHERN TERRITORY, AUSTRALIA
24	01 11 55.6*	65.330 N	148.429 W	33 N		1.6	6	ALASKA. ML 3.4 (PMR).
24	01 14 38.4*	27.947 N	53.715 E	33 N	4.1	1.4	9	SOUTHERN IRAN
24	01 50 49.4*	38.407 N	15.956 E	10 G		0.7	13	SICILY
24	01 53 02.1*	35.237 N	3.322 W	10 G		0.8	5	STRAIT OF GIBRALTAR
24	02 55 15.2	40.933 N	19.570 E	10 G		0.6	10	ALBANIA. ML 2.8 (TTG), 2.8 (SKO).
24	03 08 40.9*	33.73 N	35.66 E	10 G		0.7	6	JORDAN - SYRIA REGION
24	03 10 54.4*	60.071 N	141.677 W	11			22	SOUTHEASTERN ALASKA. <AGS-P>.
24	04 26 58.6	7.368 N	81.745 W	33 N	4.8 4.5	1.4	45	PANAMA. Felt (IV) on Coiba Island.
24	05 06 54.7	45.714 N	14.160 E	10 G		1.1	11	YUGOSLAVIA. ML 2.6 (KBA). MD 2.6 (TRI).
24	06 51 43.4*	8.149 N	82.884 W	27		0.6	14	PANAMA-COSTA RICA BORDER REGION. MD 4.2 (HDC). Felt at Boquete and Concepcion, Panama.
24	06 53 06.6	19.885 S	133.634 E	5 G		0.5	7	NORTHERN TERRITORY, AUSTRALIA
24	07 07 34.9*	2.827 N	31.168 W	10 G	4.6	1.0	8	CENTRAL MID-ATLANTIC RIDGE
24	07 12 19.5*	5.43 N	126.81 E	99 ?	4.7	1.0	11	MINDANAO, PHILIPPINE ISLANDS
24	07 27 14.5	10.124 S	118.357 E	33 N		0.9	6	SOUTH OF SUMBAWA ISLAND
24	07 50 12.9*	19.651 S	133.804 E	5 G		1.0	5	NORTHERN TERRITORY, AUSTRALIA
24	10 03 28.7	19.910 S	133.710 E	5 G		1.4	9	NORTHERN TERRITORY, AUSTRALIA
24	11 21 05.2*	7.374 N	81.709 W	30	4.2	0.7	15	PANAMA. Felt on Coiba Island.
o 24	14 15 24.5	26.716 N	128.019 E	57	5.6	1.1	231	RYUKYU ISLANDS. Felt (III JMA) at Nago and Naha; (II JMA) at Naze and on Kume-shima; (I JMA) on Miyako-jima. Felt (IV) at Futema.
24	15 03 30.8*	19.720 S	133.838 E	5 G		1.4	7	NORTHERN TERRITORY, AUSTRALIA
24	15 38 42.6	19.624 S	133.952 E	5 G		0.5	7	NORTHERN TERRITORY, AUSTRALIA
o 24	16 00 04.5	17.763 S	178.737 W	566 D	5.7	0.9	331	FIJI ISLANDS REGION
24	16 49 22.1	41.436 N	79.357 E	33 N	4.8	1.1	42	KIRGHIZ-XINJIANG BORDER REGION
24	18 46 01.5	38.898 N	29.264 E	10 G		1.3	11	TURKEY
24	19 22 48.9	51.168 N	15.707 E	10 G		1.2	16	POLAND. ML 3.6 (GRF), 3.6 (VKA), 3.4 (KBA).
24	19 28 46.8*	6.22 S	146.54 E	204 ?	4.6	1.0	5	EAST PAPUA NEW GUINEA REGION
24	19 33 23.5*	58.889 N	143.076 W	10 G			23	GULF OF ALASKA. <AGS-P>.
24	19 40 30.4*	40.422 N	125.122 W	5 G	4.2		27	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 4.1 (BRK).
24	22 49 55.9*	6.44 S	127.46 E	429 ?	4.8	1.2	7	BANDA SEA
24	22 57 34.8*	37.086 N	71.378 E	33 N	4.3	1.2	13	AFGHANISTAN-USSR BORDER REGION
24	23 02 37.2*	19.997 S	133.728 E	5 G		1.6	7	NORTHERN TERRITORY, AUSTRALIA
25	00 22 07.6*	62.472 N	150.992 W	97			34	CENTRAL ALASKA. <AGS-P>.
o 25	01 12 21.9	30.183 N	94.892 E	33 N	5.4 5.0	1.0	161	TIBET
25	01 30 48.8*	33.06 N	49.26 E	58 ?	3.9	0.7	5	WESTERN IRAN. Felt in the Do Rud area.
25	02 08 33.6*	3.567 N	75.786 W	10 G		0.1	5	COLOMBIA. MD 3.2 (UVC).
25	03 34 33.7*	30.04 N	139.11 E	403 ?	4.0	0.3	7	SOUTH OF HONSHU, JAPAN
25	04 41 45.5*	38.115 N	106.344 E	33 N		1.5	6	NORTHERN CHINA. ML 3.7 (BJI).
o 25	07 15 53.4	10.584 S	78.083 W	53 D	5.6	1.0	104	NEAR COAST OF PERU. Felt along the coast from Canete to Trujillo.
25	07 38 12.2*	26.385 S	63.171 W	596	4.6	0.7	36	SANTIAGO DEL ESTERO PROV., ARG.
25	09 01 14.2	9.010 N	84.050 W	34 *		1.1	17	COSTA RICA. MD 4.1 (HDC).
25	09 53 28.3*	52.661 N	159.952 E	33 N	5.1	1.0	26	OFF EAST COAST OF KAMCHATKA
25	11 05 52.4	12.108 S	65.743 E	10 G	4.9 4.3	0.9	36	MID-INDIAN RISE
25	11 41 14.9*	39.32 N	29.56 E	10 G		0.2	5	TURKEY
25	12 49 51.2	47.419 N	6.107 E	10 G		0.8	16	FRANCE. ML 3.1 (LDG).
25	13 08 06.5	20.150 S	133.874 E	5 G	4.8 4.6	1.3	29	NORTHERN TERRITORY, AUSTRALIA
25	13 17 10.3*	31.690 N	115.770 W	6 G	4.4		22	BAJA CALIFORNIA. <PAS-P>.
25	13 17 51.3	31.740 N	115.843 W	5 G	5.1 4.7	1.1	51	BAJA CALIFORNIA. Felt (V) at Calexico, California. Felt in San Diego, Imperial, Orange, San Bernardino and Riverside Counties, California. Also felt in northern Baja California, Mexico.
25	13 57 47.6*	31.820 N	115.800 W	6 G			4	BAJA CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
25	14 09 23.3*	31.850 N	115.860 W	6 G			6	BAJA CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
25	14 22 50.6*	33.688 N	135.203 E	58 *		1.1	12	NEAR S. COAST OF SOUTHERN HONSHU. Felt (II JMA) at Tokushima; (I JMA) at Owase, Shionomisaki and Wakayama.
25	14 36 12.3*	31.860 N	115.810 W	6 G			4	BAJA CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
25	15 14 31.9*	6.229 S	128.419 E	377 *	4.5	0.8	10	BANDA SEA
25	15 16 18.4*	31.840 N	115.820 W	6 G			5	BAJA CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
25	15 45 02.7*	31.750 N	115.810 W	6 G			4	BAJA CALIFORNIA. <PAS-P>. ML 3.4 (PAS).
25	16 27 35.0*	3.72 N	77.08 W	33 N		0.2	4	NEAR WEST COAST OF COLOMBIA. MD 2.6 (UVC).
25	17 25 22.5*	24.158 N	121.626 E	41 *		0.6	8	TAIWAN
25	17 30 19.9*	31.800 N	115.820 W	6 G			4	BAJA CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
25	19 10 27.3	37.524 N	112.046 E	10 G		0.9	6	NORTHEASTERN CHINA. ML 3.8 (BJI).
25	19 27 57.2	42.789 N	19.031 E	7		1.2	17	YUGOSLAVIA. MD 3.4 (TTG). Slight damage (VII) in the Niksic area. Felt (IV) at Danilavgrad and Cetinje and (III) at Titograd.
25	19 37 04.5*	31.850 N	115.850 W	6 G			3	BAJA CALIFORNIA. <PAS-P>. ML 3.4 (PAS).
25	19 59 01.5	22.941 N	121.374 E	37	4.6	1.2	30	TAIWAN REGION
25	20 02 06.6	42.837 N	17.629 E	10 G		1.2	40	ADRIATIC SEA. ML 4.0 (KBA), 3.9 (VKA). MD 4.1 (TRI), 3.7 (TTG). Felt (VI) in the Metkovic-Neum area, Yugoslavia.
25	20 13 38.2*	9.034 N	84.073 W	35	4.7	1.2	31	COSTA RICA. MD 4.3 (HDC). Felt at Alajuela, Quepos, San Isidro and San Jose.
o 25	20 20 06.6	37.312 N	141.606 E	44 D	5.5 5.1	1.0	236	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Tokyo, Yokohama, Marioka, Sendai, Fukushima, Mito and Utsunomiya; (I JMA) at Tateyama, Ofunato and Choshi.
25	20 22 38.4*	37.590 N	118.470 W	6 G			7	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.0 (PAS).
25	20 35 49.7	37.313 N	141.448 E	60	4.8	1.0	39	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Onahama and (I JMA) at Mito. Also felt at Sendai.
25	21 23 28.0*	31.750 N	115.800 W	6 G			6	BAJA CALIFORNIA. <PAS-P>. ML 3.5 (PAS).
25	21 47 30.6*	19.863 S	133.803 E	5 G		1.1	7	NORTHERN TERRITORY, AUSTRALIA
25	22 22 59.7*	0.634 S	127.705 E	29 *	4.9	1.2	27	HALMAHERA
25	22 37 47.8*	3.703 N	76.076 W	10 G		0.3	5	COLOMBIA
25	22 39 11.9	34.881 N	26.583 E	10 G		1.2	15	CRETE. ML 4.1 (ATH).
25	23 58 13.1*	58.150 N	142.938 W	10 G	4.1		24	GULF OF ALASKA. <AGS-P>.
26	01 04 36.1	19.967 S	133.848 E	5 G		1.5	12	NORTHERN TERRITORY, AUSTRALIA
26	01 55 44.0	34.945 N	26.570 E	10 G		1.1	10	CRETE ML 4.0 (ATH).

26	02 08 28.4	5.692 S	147.637 E	44 *	5.0 4.3	1.0	54	EAST PAPUA NEW GUINEA REGION
26	03 12 24.8*	1.195 S	145.998 E	33 N	4.5	1.2	16	ADMIRALTY ISLANDS REGION
26	04 12 24.5*	31.700 N	115.790 W	6 G			4	BAJA CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
26	04 43 44.6*	31.690 N	115.770 W	6 G			4	BAJA CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
26	05 28 48.8*	6.854 N	73.083 W	165 *	4.3	1.1	14	NORTHERN COLOMBIA
26	06 26 40.1*	40.107 N	29.246 E	10 G		0.6	7	TURKEY
26	06 59 29.8	36.474 N	140.715 E	100	4.5	0.9	22	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito and (I JMA) at Fukushima, Kumagaya and Utsunomiya. Also felt at Onahama.
26	08 00 11.9	36.238 N	6.880 W	33 N		0.9	19	STRAIT OF GIBRALTAR. MG 3.5 (MDD).
26	08 13 38.0*	47.414 N	121.816 W	20			52	WASHINGTON. <SEA>. CL 2.9 (SEA). Felt at North Bend.
26	09 03 10.0*	8.364 S	119.595 E	199 *	3.9	0.7	9	FLORES ISLAND REGION
26	09 13 37.0*	13.484 N	57.374 E	10 G	4.8	1.2	14	ARABIAN SEA
26	09 20 59.3	7.285 N	81.597 W	33	4.5	1.0	21	PANAMA. Felt on Caiba Island.
a 26	09 34 48.7	32.665 N	47.054 E	34	5.2 5.3	1.3	178	IRAN-IRAQ BORDER REGION. Felt at Ilam and Isfahabad, Iran.
26	09 45 50.1	32.962 N	47.189 E	78 *	5.0	1.1	45	IRAN-IRAQ BORDER REGION
26	10 53 26.4*	32.463 N	46.631 E	47 *	4.7	0.7	11	IRAN-IRAQ BORDER REGION
26	11 04 06.0	57.765 N	32.674 W	10 G	4.7 5.5	1.2	52	NORTH ATLANTIC OCEAN
26	11 15 09.8*	57.858 N	32.621 W	10 G	4.6	0.6	10	NORTH ATLANTIC OCEAN
26	11 38 08.4	57.889 N	32.643 W	10 G	4.6	1.2	54	NORTH ATLANTIC OCEAN
26	11 51 29.17	57.62 N	32.08 W	10 G	4.5	0.6	7	NORTH ATLANTIC OCEAN
26	11 59 38.0*	52.299 N	169.543 W	33 N	4.7	1.1	23	FOX ISLANDS, ALEUTIAN ISLANDS
26	11 59 41.6*	32.550 N	46.749 E	58 *	4.5	0.3	8	IRAN-IRAQ BORDER REGION
26	12 01 38.97	21.52 S	178.77 E	567 *	4.8	1.0	17	SOUTH OF FIJI ISLANDS
26	12 52 07.5*	6.873 N	73.743 W	33 N		0.5	5	NORTHERN COLOMBIA
26	13 17 28.6	32.648 N	46.856 E	45 *	4.5	1.1	18	IRAN-IRAQ BORDER REGION
26	13 48 23.7*	57.903 N	32.642 W	10 G	4.7	1.4	30	NORTH ATLANTIC OCEAN
26	13 49 55.2	57.885 N	32.470 W	10 G	4.8 4.3	1.1	69	NORTH ATLANTIC OCEAN
26	13 52 03.2*	58.285 N	34.117 W	10 G	4.8	0.7	10	NORTH ATLANTIC OCEAN
26	13 57 07.8	34.766 N	24.045 E	40 *	4.4	1.2	55	CRETE. ML 3.9 (ATH).
26	13 58 58.3*	58.192 N	142.820 W	10 G	4.9 4.2	1.02		GULF OF ALASKA. <AGS-P>. ML 4.9 (PMR). Felt (IV) at Yakutat.
26	14 19 35.1*	59.016 N	5.939 E	10 G		0.3	5	SOUTHERN NORWAY. MD 2.1 (BER).
26	14 36 30.3	32.633 N	46.918 E	36 *	4.9 4.0	1.1	41	IRAN-IRAQ BORDER REGION
26	14 42 14.17	3.84 N	75.96 W	33 N		0.4	4	COLOMBIA. MD 2.6 (UVC).
26	14 49 57.8	57.892 N	32.743 W	10 G	4.8	1.0	43	NORTH ATLANTIC OCEAN
26	15 42 45.1	57.935 N	32.629 W	10 G	4.8 4.5	1.2	78	NORTH ATLANTIC OCEAN
26	15 45 35.87	58.18 N	33.69 W	10 G	4.8	0.6	12	NORTH ATLANTIC OCEAN
26	16 02 26.2	21.027 S	178.719 W	590 *	4.9	1.0	56	FIJI ISLANDS REGION
26	16 31 23.2	57.968 N	32.555 W	10 G	4.7	1.1	60	NORTH ATLANTIC OCEAN
26	16 56 46.1*	55.930 S	27.472 W	112	5.3	1.2	41	SOUTH SANDWICH ISLANDS REGION
26	17 22 15.7*	38.783 N	122.810 W	2			18	NORTHERN CALIFORNIA. <BRK>. ML 3.4 (BRK).
26	17 49 10.4	43.001 N	18.682 E	10 G		0.8	9	YUGOSLAVIA. ML 2.5 (TTG).
26	18 02 41.2*	59.599 N	152.425 W	89			28	SOUTHERN ALASKA. <AGS-P>.
a 26	19 24 26.7	57.835 N	32.539 W	10 G	5.1 4.9	0.9	140	NORTH ATLANTIC OCEAN
26	19 27 49.8	57.834 N	32.653 W	10 G	4.8	0.7	36	NORTH ATLANTIC OCEAN
26	19 50 14.8*	31.760 N	115.840 W	6 G			4	BAJA CALIFORNIA. <PAS-P>. ML 3.4 (PAS).
26	20 10 46.4*	48.646 N	6.673 E	10 G		1.1	8	FRANCE. ML 2.9 (KBA), mbLg 2.5 (DOU).
26	20 39 47.0*	36.785 N	121.580 W	3			16	CENTRAL CALIFORNIA. <BRK>. ML 3.3 (BRK).
26	21 16 43.3*	59.956 N	6.226 E	0 G		0.7	5	SOUTHERN NORWAY. MD 2.0 (BER). Probable explosion.
26	21 40 59.5	19.894 S	133.744 E	5 G		1.2	12	NORTHERN TERRITORY, AUSTRALIA
26	22 45 42.1*	51.459 N	16.068 E	10 G		0.6	9	POLAND. ML 3.8 (VKA), 3.5 (KBA).
26	23 36 09.7*	4.222 S	101.525 E	33 N		1.0	6	SOUTHERN SUMATERA
27	00 00 31.9	38.742 N	141.158 E	30	4.7	1.3	28	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Ishinomaki and Ofunato; (I JMA) at Miyako and Morioka. Also felt at Sendai.
27	01 08 51.9	37.050 N	29.024 E	10 G		0.9	7	TURKEY
27	01 24 35.9*	19.325 N	155.057 W	5			46	HAWAII. <HVO-P>. MD 4.0 (HVO). Felt at Wahaule.
27	01 57 03.0	3.650 N	74.675 W	33 N		0.6	6	COLOMBIA
27	03 46 59.5	39.829 N	45.150 E	33 N	4.6 4.2	1.2	46	N.W. IRAN-USSR BORDER REGION
27	04 10 14.5*	7.340 S	129.239 E	110 ?	4.6	1.5	12	BANDA SEA
27	04 23 17.1*	38.039 N	21.790 E	10 G		0.9	8	GREECE. ML 3.2 (ATH).
27	07 11 54.8	8.849 S	124.076 E	141 *	5.0	1.3	49	TIMOR
27	07 44 14.2	32.662 N	46.947 E	37 *	5.0 3.7	1.1	52	IRAN-IRAQ BORDER REGION. Felt at Ilam, Iran.
27	08 16 35.3*	6.901 N	73.148 W	167		0.4	10	NORTHERN COLOMBIA
27	11 27 17.1	20.067 S	133.605 E	5 G	5.1	1.2	47	NORTHERN TERRITORY, AUSTRALIA
27	11 44 02.7*	19.911 S	133.668 E	5 G		1.6	9	NORTHERN TERRITORY, AUSTRALIA
27	11 45 32.4*	58.893 N	154.479 W	121			36	ALASKA PENINSULA. <AGS-P>.
27	11 56 27.8	57.805 N	32.626 W	10 G	4.7 4.4	0.7	62	NORTH ATLANTIC OCEAN
27	12 04 15.8	57.701 N	32.650 W	10 G	4.6 3.7	0.9	71	NORTH ATLANTIC OCEAN
27	12 16 03.5*	37.422 N	121.830 W	1			10	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK). Felt at East San Jose.
27	12 35 15.6*	46.197 N	7.736 E	10 G		0.4	5	SWITZERLAND
27	12 35 40.5	20.039 S	133.823 E	5 G	3.9	1.5	19	NORTHERN TERRITORY, AUSTRALIA
27	12 43 04.1	17.813 S	178.495 W	555 *	4.7	1.4	37	FIJI ISLANDS REGION
27	13 05 01.6	32.628 N	46.916 E	39 *	4.9	1.2	53	IRAN-IRAQ BORDER REGION
27	14 37 09.1	40.740 N	27.499 E	10 G		1.3	7	TURKEY
27	16 19 40.8	19.899 S	133.661 E	5 G		1.0	17	NORTHERN TERRITORY, AUSTRALIA
27	16 38 10.97	36.87 N	71.27 E	33 N	4.2	0.8	5	AFGHANISTAN-USSR BORDER REGION
27	16 47 18.7*	41.645 N	27.512 E	10 G		1.3	5	TURKEY
27	16 53 01.3	57.613 N	32.802 W	10 G	4.6	1.2	39	NORTH ATLANTIC OCEAN
27	16 58 40.1	35.358 N	139.482 E	131	4.6	0.7	25	NEAR S. COAST OF HONSHU, JAPAN. Felt (II JMA) at Chiba, Tokyo, Tateyama and Utsunomiya; (I JMA) at Ajiro, Kumagaya, Yokohama and an Oshima.
27	17 21 25.0	2.550 S	126.949 E	46 *	5.1 3.6	1.1	33	CERAM SEA
27	17 42 09.1*	60.198 N	153.220 W	143			32	SOUTHERN ALASKA. <AGS-P>.
a 27	19 16 45.4	57.888 N	32.653 W	10 G	5.1 5.1	0.9	182	NORTH ATLANTIC OCEAN
27	19 19 14.3	57.915 N	32.608 W	10 G	4.8	0.6	26	NORTH ATLANTIC OCEAN
27	19 20 19.8	57.973 N	32.627 W	10 G	4.9	0.9	50	NORTH ATLANTIC OCEAN
27	19 43 59.7*	24.574 S	70.780 W	64 ?	4.0	1.5	11	NEAR COAST OF NORTHERN CHILE
27	19 55 53.0	42.307 N	19.917 E	10 G		0.6	12	YUGOSLAVIA. ML 2.7 (TTG).
27	20 38 37.4	19.974 S	133.925 E	5 G		1.4	13	NORTHERN TERRITORY, AUSTRALIA

27	20	53	10.5	43.244	N	20.907	E	10	G	1.2	14	YUGOSLAVIA. ML 2.7 (TTG).			
27	21	46	24.9	51.487	N	6.367	E	0	G	1.2	21	GERMANY. ML 3.1 (LDG), 2.2 (BNS). Felt (IV) at Rheinberg. Possible rockburst.			
27	22	53	10.1	57.648	N	32.887	W	10	G	4.5	0.8	21	NORTH ATLANTIC OCEAN		
27	22	54	36.3?	8.57	S	74.30	W	184	?	1.0	9	PERU-BRAZIL BORDER REGION			
27	23	23	32.1	42.241	N	19.923	E	10	G	0.7	12	YUGOSLAVIA. ML 3.0 (TTG).			
27	23	32	08.2&	61.440	N	149.394	W	41			39	SOUTHERN ALASKA. <AGS-P>. ML 3.2 (PMR). Felt (III) at Anchorage.			
a	28	00	29	51.4	3.528	S	149.631	E	45	*	5.2	5.0	1.2	39	BISMARCK SEA
28	01	34	49.4	32.620	N	46.964	E	38	*	4.7	3.7		1.3	61	IRAN-IRAQ BORDER REGION. Felt in the Yasuj area, Iran.
28	01	44	57.0&	33.230	N	115.990	W	0						7	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
28	01	56	09.7*	20.783	S	120.122	E	10	G				1.3	11	WESTERN AUSTRALIA
28	02	54	02.3&	32.910	N	115.680	W	6	G	4.6				42	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 4.7 (PAS). Felt (V) at Brawley, Heber, Holtville, Imperial and Ocotilla, California. Felt (IV) at Calexico, El Centro, Niland and Seeley, California. Also felt at Yuma, Arizona.
28	03	19	48.8	6.328	S	130.708	E	69	*	5.0			1.2	37	BANDA SEA
28	04	44	03.5?	16.03	N	61.16	W	122	?				0.6	6	LEEWARD ISLANDS
28	05	03	08.6	32.535	N	46.935	E	36	*	4.7			1.1	37	IRAN-IRAQ BORDER REGION
28	05	26	54.4	42.482	N	19.794	E	10	G				0.7	9	YUGOSLAVIA. ML 2.7 (TTG).
28	05	31	31.3?	18.92	S	173.79	W	121	?	4.8			1.2	13	TONGA ISLANDS
28	05	32	58.6	32.916	N	47.168	E	75		5.0			0.4	18	IRAN-IRAQ BORDER REGION
28	06	35	29.9*	44.813	N	114.537	W	5	G				0.5	10	WESTERN IDAHO. ML 3.0 (NEIS).
28	07	54	10.5?	4.14	S	150.45	E	148	*	4.8			1.5	9	NEW BRITAIN REGION
28	08	09	47.9	58.363	N	34.364	W	10	G	4.7			0.8	26	NORTH ATLANTIC OCEAN
28	08	20	42.6	44.664	N	17.859	E	11					1.3	26	YUGOSLAVIA. ML 3.3 (TTG), 3.3 (KBA)..
28	08	20	54.1&	31.830	N	115.790	W	6	G					7	BAJA CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
28	08	38	28.0&	48.000	N	65.580	W	18						14	GASPE PENINSULA. <OTT-P>. mbLg 4.9 (NEIS), 4.9 (OTT). Felt on the Gaspe Peninsula.
28	08	48	19.4?	0.80	N	127.02	E	227	?				1.2	10	HALMAHERA
28	09	10	35.0*	3.806	S	149.404	E	62	?	4.9			1.3	29	BISMARCK SEA
28	10	40	15.2	11.478	S	114.793	E	33	N	5.0			1.1	41	SOUTH OF BALI ISLAND
a	28	11	20	08.1	5.327	N	126.369	E	44		5.5	5.5	1.3	163	MINDANAO, PHILIPPINE ISLANDS
28	13	28	20.8?	39.628	N	29.390	E	10	G				1.1	5	TURKEY
28	13	34	31.0*	45.715	N	27.261	E	33	N				1.4	5	ROMANIA
28	13	58	42.8?	25.23	S	175.44	W	33	N	4.8			1.3	10	SOUTH OF TONGA ISLANDS
28	14	15	02.6	60.639	N	5.652	E	0	G				0.4	7	SOUTHERN NORWAY. MD 2.1 (BER). Probable explosion.
28	14	26	22.2*	5.249	N	126.462	E	33	N	4.6			1.4	11	MINDANAO, PHILIPPINE ISLANDS
28	15	03	45.3?	4.87	N	126.07	E	33	N	4.7			1.7	5	TALAUD ISLANDS
a	28	15	48	08.1	32.413	N	21.150	E	10	G	4.8	4.8	1.4	178	NEAR COAST OF LIBYA
28	16	20	13.0?	36.47	N	28.22	E	10	G				0.9	5	DODECANESE ISLANDS
28	17	58	20.5*	44.498	N	9.676	E	10	G				1.5	9	NORTHERN ITALY. ML 2.5 (LDG).
28	18	32	47.1?	3.59	N	76.51	W	33	N				1.2	4	COLOMBIA. MD 2.3 (UVC).
28	19	12	17.1	32.243	N	21.160	E	10	G	4.4			1.4	45	NEAR COAST OF LIBYA
28	20	33	10.7	30.056	S	67.121	W	33	N	4.4			0.9	9	SAN JUAN PROVINCE, ARGENTINA
28	20	44	34.6*	22.661	S	68.952	W	88	D	4.7			1.1	28	NORTHERN CHILE
28	21	08	54.2	28.038	N	53.838	E	23	*	4.9	4.4		1.0	156	SOUTHERN IRAN
28	21	24	21.3&	59.354	N	153.784	W	123						35	SOUTHERN ALASKA. <AGS-P>.
28	21	28	44.3?	22.20	S	173.61	W	33	N	4.8	4.1		1.2	6	TONGA ISLANDS REGION
28	23	01	05.6?	39.796	N	16.104	E	10	G				0.6	7	SOUTHERN ITALY
29	00	32	08.0*	6.738	S	147.224	E	10	G	4.5			1.4	9	EAST PAPUA NEW GUINEA REGION
29	01	42	41.1	39.785	N	16.069	E	10	G				0.7	8	SOUTHERN ITALY
29	02	23	53.7*	72.009	N	2.971	W	10	G	4.5			1.1	11	JAN MAYEN ISLAND REGION
a	29	02	39	18.7	45.349	N	151.806	E	47	D	5.5	5.6	1.0	300	KURIL ISLANDS
29	03	00	00.5&	58.759	N	152.729	W	72						29	KODIAK ISLAND REGION. <AGS-P>.
29	06	28	02.9	45.161	N	152.008	E	62	D	5.2			1.0	92	KURIL ISLANDS REGION
29	07	17	59.0?	24.03	N	121.74	E	26	*				0.1	6	TAIWAN
29	08	01	20.3	42.083	N	19.403	E	10	G				0.3	9	YUGOSLAVIA. ML 2.4 (TTG).
29	08	09	03.6?	22.09	S	69.25	W	103	?				1.2	8	NORTHERN CHILE
29	10	19	30.8	20.003	S	133.745	E	5	G	5.6			1.2	98	NORTHERN TERRITORY, AUSTRALIA
29	10	32	52.1?	25.23	S	67.50	W	33	N				0.4	7	CATAMARCA PROVINCE, ARGENTINA
29	10	54	15.0	34.446	N	46.291	E	33	N	4.5			1.2	12	WESTERN IRAN
29	11	02	12.8*	8.475	S	117.296	E	33	N	4.0			0.9	6	SUMBAWA ISLAND REGION
29	12	05	14.5?	12.11	N	86.43	W	33	N	4.5	3.8		1.0	14	NICARAGUA
29	12	28	11.0?	16.76	N	62.39	W	33	N				1.1	5	LEEWARD ISLANDS. ML 3.4 (FDF).
29	13	09	41.2	41.897	N	19.394	E	10	G				1.2	9	ALBANIA. ML 2.3 (TTG).
29	15	29	30.3	28.073	N	53.837	E	33	N	4.7			1.1	72	SOUTHERN IRAN
29	16	15	16.6%	42.369	N	18.950	E	10	G				0.7	7	YUGOSLAVIA. MD 2.6 (TTG). Felt (III) at Cetinje and Budva.
29	16	18	12.3*	38.391	N	30.753	E	10	G				0.9	6	TURKEY
29	16	29	23.7	1.146	S	146.019	E	33	N	5.2			1.1	41	ADMIRALTY ISLANDS REGION
a	29	16	48	01.3	15.349	S	174.125	W	106	D	5.6		1.1	219	TONGA ISLANDS. mb 6.2 (BRK).
29	21	01	25.1	23.357	N	120.708	E	23		3.9			1.5	18	TAIWAN. ML 4.1 (BJI).
29	21	06	01.0	14.228	N	93.134	W	30	D	5.0			1.1	82	NEAR COAST OF CHIAPAS, MEXICO
29	21	18	48.2	36.713	N	140.728	E	77		5.0			1.1	71	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Mito; (II JMA) at Onahama and Utsunomiya; (I JMA) at Tokyo, Yokohama, Kumagaya and Fukushima.
29	21	40	00.8%	45.583	N	9.826	E	10	G				1.0	5	NORTHERN ITALY
29	23	54	54.8%	4.096	N	76.248	W	33	N				0.4	5	COLOMBIA. MD 3.0 (UVC).
30	00	02	38.5?	3.25	N	124.55	E	215	?	4.6			1.5	10	CELEBES SEA
30	00	02	46.0&	31.890	N	115.860	W	6	G					5	BAJA CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
30	00	48	43.8?	28.79	S	177.19	W	33	N	4.6			1.2	9	KERMADEC ISLANDS REGION
30	03	00	00.0	32.160	N	35.440	E	10	G				1.2	8	DEAD SEA REGION. ML 4.1 (JER), 3.7 (BHL). Felt in the Jordan Valley.
a	30	03	56	43.8*	46.252	S	96.091	E	10	G	5.3	5.4	1.2	31	SOUTHEAST INDIAN RISE
30	04	48	42.5*	22.806	N	102.880	E	33	N				0.9	5	YUNNAN PROVINCE, CHINA. ML 4.4 (BJI).
30	05	18	45.9*	3.534	N	31.668	W	10	G				0.6	10	CENTRAL MID-ATLANTIC RIDGE
30	05	26	45.8*	23.792	N	121.813	E	39	*	4.8			1.1	12	TAIWAN
30	08	47	09.9?	3.80	N	76.96	W	33	N				0.2	4	COLOMBIA. MD 2.7 (UVC).
30	09	23	49.4*	4.691	S	144.407	E	114	?	3.6			1.4	7	NEAR N COAST OF PAPUA NEW GUINEA
30	09	54	08.1	23.976	N	46.370	W	10	G	4.7	3.9		0.6	20	NORTH ATLANTIC RIDGE
30	10	13	20.7%	3.365	N	76.443	W	33	N				0.4	5	COLOMBIA. MD 2.4 (UVC).

30	10 27 58.17	17.98 S	69.72 W	150 ?	4.8	1.6	8	PERU-BOLIVIA BORDER REGION
30	11 29 23.28	60.748 N	151.408 W	62			36	KENAI PENINSULA, ALASKA. <AGS-P>.
30	12 01 29.7	34.358 S	70.222 W	10 G		0.8	11	CHILE-ARGENTINA BORDER REGION
30	12 11 51.24	42.727 N	19.122 E	10 G		0.8	5	YUGOSLAVIA. ML 2.3 (TTG).
30	13 13 39.64	13.300 N	143.182 E	211 *	4.6	0.8	15	SOUTH OF MARIANA ISLANDS
30	13 58 00.47	39.581 N	29.389 E	10 G		0.5	5	TURKEY
30	14 30 39.2	12.905 N	93.450 E	77 *	4.8	1.0	46	ANDAMAN ISLANDS REGION
30	16 56 53.84	57.932 S	25.232 W	33 N	4.5	0.9	14	SOUTH SANDWICH ISLANDS REGION
30	16 59 56.68	58.172 N	142.937 W	10 G			30	GULF OF ALASKA. <AGS-P>.
30	17 29 56.17	3.69 N	76.84 W	33 N		0.0	4	COLOMBIA. MD 2.5 (UVC).
30	19 10 10.84	36.406 N	28.099 E	27 *		1.6	8	DODECANESE ISLANDS. MD 3.6 (ATH).
30	19 47 23.27	17.95 N	67.12 W	33 N		0.3	5	MONA PASSAGE
30	19 50 25.34	31.292 N	51.269 E	33 N	4.4	1.6	10	IRAN
30	21 44 26.18	31.700 N	115.850 W	6 G			5	BAJA CALIFORNIA. <PAS-P>. ML 3.3 (PAS).
30	22 15 42.0	46.158 N	2.102 E	10 G		0.8	13	FRANCE. ML 2.5 (LDG).
30	22 26 55.04	7.013 N	33.816 W	10 G	5.1 3.1	0.9	49	CENTRAL MID-ATLANTIC RIDGE
30	22 59 20.48	36.380 N	98.466 W	5 G			8	OKLAHOMA. <TUL>. mbLg 1.9 (TUL).
30	23 02 00.37	36.51 N	28.20 E	10 G		0.7	5	DODECANESE ISLANDS
31	00 12 43.4	35.681 N	90.465 W	10 G		0.7	21	ARKANSAS. mbLg 3.5 (NEIS). Felt (V) at Lepanto; (IV) at Bay and Gilmore; (III) at Black Oak, Caraway, Marked Tree, Rivervale and Tyrnza.
31	01 13 11.77	17.63 S	167.85 E	246 *		1.4	10	VANUATU ISLANDS
31	01 45 05.3	11.559 S	118.180 E	33 N	5.3	0.9	17	SOUTH OF SUMBAWA ISLAND
31	03 24 03.04	35.262 N	132.155 E	11 *		0.1	6	SOUTHERN HONSHU, JAPAN. Felt (I JMA) at Hamada and Hiroshima.
31	06 19 24.74	33.280 N	131.954 E	72 ?		1.0	8	KYUSHU, JAPAN. Felt (I JMA) at Oita.
31	07 15 51.1	10.762 N	62.413 W	97	4.5	1.0	28	NEAR COAST OF VENEZUELA. Felt (IV) on northern Trinidad.
31	07 42 15.27	17.93 N	67.15 W	33 N		0.7	5	MONA PASSAGE
31	08 53 14.7	39.515 N	27.702 E	10 G		1.0	13	TURKEY
31	09 08 51.68	58.356 N	142.719 W	10 G			27	GULF OF ALASKA. <AGS-P>.
31	09 24 36.34	29.945 N	105.076 W	5 G	3.4	1.3	10	CHIHUAHUA, MEXICO. ML 4.0 (NEIS).
31	11 05 50.07	43.12 N	0.38 E	10 G		0.7	4	FRANCE. ML 3.2 (LDG).
31	11 17 31.97	16.63 N	62.25 W	33 N		1.4	5	LEEWARD ISLANDS. ML 4.0 (FDF).
31	11 39 40.37	24.73 N	122.61 E	102 ?		0.3	8	TAIWAN REGION
31	11 55 35.87	33.49 S	72.17 W	10 G		0.4	7	OFF COAST OF CENTRAL CHILE
31	12 19 54.24	46.000 N	16.045 E	10 G		1.1	8	YUGOSLAVIA. MD 2.8 (TRI). ML 2.5 (KBA).
31	13 10 21.98	58.681 N	142.901 W	10 G			29	GULF OF ALASKA. <AGS-P>.
31	14 25 54.17	46.34 S	96.97 E	10 G	4.6	1.2	7	SOUTHEAST INDIAN RISE
31	15 09 12.5	41.355 N	8.242 W	10 G		1.2	34	PORTUGAL. MG 4.0 (TOL). Felt (IV) in the Porto area.
31	15 34 56.5	45.086 N	112.793 W	5 G		0.5	7	MONTANA. ML 3.1 (BUT).
31	15 37 31.7	45.092 N	112.779 W	5 G		0.4	7	MONTANA. ML 3.2 (BUT).
o 31	15 42 27.8	16.647 S	174.118 W	118 D	5.4	1.0	134	TONGA ISLANDS
31	16 58 53.24	44.909 N	138.341 E	33 N	4.9	1.2	13	EASTERN SEA OF JAPAN
31	17 51 57.74	34.325 N	141.426 E	39 ?	4.8	0.9	24	OFF EAST COAST OF HONSHU, JAPAN
31	18 51 43.0	67.851 N	10.129 E	10 G	4.3	0.7	37	NORWEGIAN SEA. ML 4.6 (UPP), 4.0 (BER).
31	21 08 58.74	32.688 S	69.340 W	33 N		1.5	9	MENDOZA PROVINCE, ARGENTINA
31	21 09 47.27	51.46 N	16.39 E	10 G		0.5	6	POLAND. ML 2.8 (VKA).
31	22 04 04.77	5.96 S	146.90 E	203 ?	4.2	1.5	6	EAST PAPUA NEW GUINEA REGION
o 31	23 31 46.1	9.809 N	83.670 W	22	4.9 4.4	1.2	64	COSTA RICA. MD 4.4 (HDC). Felt (IV) in the Central Valley. Also felt along the Pacific coast and at La Suiza.

ADDITIONAL SOURCE PARAMETERS

01 14 36 09.58 74.655N 130.962E 10km 5.1mb (45 obs.) 4.6MsZ (2 obs.) LAPTEV SEA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 10S, 18C Centroid Location: Origin Time 14:36:12.4 0.9 Lat 74.39N 0.12 Lon 129.14E 0.53 Dep 15.0 FIX Half-duration 1.4 Principal Axes: Scale 10**16 Nm T Vol= 5.30 Plg=19 Azm=108 N 1.03 15 203 P -6.33 65 330 Best Double Couple:Mo=5.8*10**16 NP1:Strike=175 Dip=29 Slip=122 NP2: 31 65 -73	02 12 42 02.52 43.295N 142.419E 177km 6.0mb (94 obs.) HOKKAIDO, JAPAN REGION FAULT PLANE SOLUTION: P-Waves NP1:Strike=115 Dip=81 Slip= 46 NP2: 16 45 167 Principal Axes: T Plg=38 Azm=347 P 23 237 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting with a large strike-slip component. The preferred fault plane is not determined. RADIATED ENERGY No. of sta: 7 Focal mech. M Energy 2.4±0.5*10**13 Nm MOMENT TENSOR SOLUTION Dep 176 No. of sta: 16 Principal Axes: Scale 10**17 Nm T Vol= 6.98 Plg=31 Azm=327 N 0.05 50 101 P -7.02 24 222 Best Double Couple:Mo=7.0*10**17 NP1:Strike= 3 Dip=50 Slip= 174 NP2: 96 86 40 CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 34C Centroid Location: Origin Time 12:42: 4.4 0.2 Lat 43.27N 0.02 Lon 142.19E 0.04 Dep 180.4 1.0 Half-duration 3.5 Principal Axes: Scale 10**17 Nm	T Vol= 9.95 Plg=39 Azm=354 N -2.27 9 91 P -7.68 50 192 Best Double Couple:Mo=8.8*10**17 NP1:Strike= 36 Dip=11 Slip=-146 NP2: 272 84 -81
02 06 36 09.84 20.478S 169.764E 136km 5.6mb (19 obs.) VANUATU ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 21C Centroid Location: Origin Time 06:36:19.7 1.8 Lat 20.26S 0.17 Lon 169.28E 0.11 Dep 143.4 3.2 Half-duration 1.7 Principal Axes: Scale 10**16 Nm T Vol= 9.82 Plg=18 Azm= 79 N 0.17 8 172 P -10.00 70 284 Best Double Couple:Mo=9.9*10**16 NP1:Strike=157 Dip=27 Slip=-107 NP2: 356 64 -81	03 21 32 25.30 38.111N 106.336E 14km 5.5mb (66 obs.) NORTHERN CHINA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 9S, 18C Centroid Location: Origin Time 21:32:30.9 0.6 Lat 38.13N 0.15 Lon 106.86E 0.23 Dep 15.0 FIX Half-duration 1.7 Principal Axes: Scale 10**16 Nm T Vol= 9.55 Plg=25 Azm=328 N -2.57 57 191 P -6.98 19 68 Best Double Couple:Mo=8.3*10**16 NP1:Strike=110 Dip=57 Slip= 5 NP2: 17 86 147	04 10 37 03.45 46.512N 149.879E 205km 5.2mb (66 obs.) KURIL ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 9S, 17C Centroid Location: Origin Time 10:37: 3.4 1.0 Lat 47.02N 0.08 Lon 149.90E 0.12 Dep 180.1 4.0 Half-duration 1.5 Principal Axes:

Scale 10**16 Nm
T Val= 7.36 Plg=20 Azm= 36
N -1.09 41 288
P -6.27 42 146
Best Double Couple:Mo=6.8*10**16
NP1:Strike=171 Dip=44 Slip= -20
NP2: 276 76 -132

06 15 31 10.48 39.663N 75.477E 12km
5.1mb (34 obs.) 5.0Msz (6 obs.)
SOUTHERN XINJIANG, CHINA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 23C
Centroid Location:
Origin Time 15:31:16.4 1.0
Lat 39.01N 0.10 Lon 75.50E 0.08
Dep 36.7 4.8 Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 9.97 Plg=70 Azm= 27
N -0.49 10 266
P -9.48 17 173
Best Double Couple:Mo=9.7*10**16
NP1:Strike=248 Dip=30 Slip= 69
NP2: 92 63 102

07 09 24 19.34 59.036S 23.607W 31km
5.3mb (11 obs.) 5.2Msz (3 obs.)
SOUTH SANDWICH ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 28C
Centroid Location:
Origin Time 09:24:20.2 0.4
Lat 59.55S 0.07 Lon 22.96W 0.11
Dep 15.0 FIX Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 1.64 Plg=18 Azm=295
N -0.11 12 29
P -1.54 68 152
Best Double Couple:Mo=1.6*10**17
NP1:Strike= 6 Dip=29 Slip=-116
NP2: 215 64 -76

09 01 02 46.70 41.246N 19.630E 24km
5.3mb (45 obs.) 5.8Msz (6 obs.)
ALBANIA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 16C
Centroid Location:
Origin Time 01:02:48.4 0.8
Lat 40.37N 0.10 Lon 19.49E 0.06
Dep 15.0 FIX Half-duration 3.3
Principal Axes:
Scale 10**17 Nm
T Val= 8.74 Plg=55 Azm= 86
N 0.51 5 349
P -9.25 35 255
Best Double Couple:Mo=9.0*10**17
NP1:Strike=321 Dip=12 Slip= 62
NP2: 170 80 95

09 03 12 38.89 47.012N 154.149E 33km
5.2mb (39 obs.) 4.9Msz (1 obs.)
KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 15C
Centroid Location:
Origin Time 03:12:44.1 1.8
Lat 47.66N 0.19 Lon 153.88E 0.20
Dep 31.8 8.8 Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 7.52 Plg=56 Azm=336
N 0.43 16 220
P -7.95 29 121
Best Double Couple:Mo=7.7*10**16
NP1:Strike=175 Dip=22 Slip= 42
NP2: 45 76 106

09 03 55 05.35 39.092N 71.502E 33km
5.4mb (56 obs.) 4.9Msz (1 obs.)
TAJIK SSR
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 16C
Centroid Location:
Origin Time 03:55: 7.3 2.8
Lat 38.90N 0.24 Lon 71.01E 0.21

Dep 15.0 FIX Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 4.94 Plg=51 Azm=258
N 0.59 34 44
P -5.52 17 146
Best Double Couple:Mo=5.2*10**16
NP1:Strike=275 Dip=41 Slip= 148
NP2: 30 70 53

10 03 25 50.44 19.763N 109.234W 10km
5.2mb (27 obs.) 5.2Msz (2 obs.)
REVILLA GIGEDO ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 31C
Centroid Location:
Origin Time 03:25:41.5 0.8
Lat 18.39N 0.07 Lon 109.63W 0.05
Dep 15.0 FIX Half-duration 2.3
Principal Axes:
Scale 10**17 Nm
T Val= 3.36 Plg= 2 Azm= 85
N -0.34 87 301
P -3.01 2 175
Best Double Couple:Mo=3.2*10**17
NP1:Strike=220 Dip=87 Slip= 0
NP2: 130 90 177

11 21 07 29.71 54.779N 161.656E 43km
5.8mb (76 obs.) 4.9Msz (9 obs.)
NEAR EAST COAST OF KAMCHATKA
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=125 Dip=65 Slip= 90
NP2: 305 25 90
Principal Axes:
T Plg=70 Azm= 35
P 20 215
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 24C
Centroid Location:
Origin Time 21:07:32.0 0.5
Lat 54.66N 0.05 Lon 161.82E 0.09
Dep 60.8 3.7 Half-duration 1.8
Principal Axes:
Scale 10**17 Nm
T Val= 1.37 Plg=76 Azm= 67
N 0.02 10 291
P -1.38 10 199
Best Double Couple:Mo=1.4*10**17
NP1:Strike=277 Dip=37 Slip= 73
NP2: 118 55 102

11 22 27 09.38 6.165S 154.414E 21km
5.3mb (21 obs.) 5.6Msz (13 obs.)
SOLOMON ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 37C
Centroid Location:
Origin Time 22:27:16.5 0.3
Lat 6.36S 0.03 Lon 154.21E 0.02
Dep 42.9 1.8 Half-duration 3.3
Principal Axes:
Scale 10**17 Nm
T Val= 8.10 Plg=70 Azm= 0
N -0.42 14 133
P -7.68 14 226
Best Double Couple:Mo=7.9*10**17
NP1:Strike=335 Dip=33 Slip= 116
NP2: 125 60 74

12 07 29 27.96 28.827S 177.423W 15km
6.1mb (46 obs.) 6.4Msz (21 obs.)
KERMADEC ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 5 Dip=60 Slip= 90
NP2: 185 30 90
Principal Axes:
T Plg=75 Azm=275
P 15 95
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
RADIATED ENERGY

No. of sta: 5 Focal mech. F
Energy 3.9±0.7*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 39 No. of sta: 15
Principal Axes:
Scale 10**18 Nm
T Val= 8.67 Plg=76 Azm=245
N 0.59 3 349
P -9.26 14 80
Best Double Couple:Mo=9.0*10**18
NP1:Strike=174 Dip=32 Slip= 96
NP2: 347 59 86
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 44C M.W.: 12S, 26C
Centroid Location:
Origin Time 07:29:37.7 0.2
Lat 28.98S 0.02 Lon 177.26W 0.02
Dep 50.5 0.7 Half-duration 7.4
Principal Axes:
Scale 10**18 Nm
T Val= 8.15 Plg=75 Azm=285
N -0.46 1 191
P -7.69 15 100
Best Double Couple:Mo=7.9*10**18
NP1:Strike=189 Dip=30 Slip= 88
NP2: 11 60 91

13 01 00 29.98 51.383N 174.643W 33km
5.0mb (40 obs.) 5.1Msz (1 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 21C
Centroid Location:
Origin Time 01:00:33.8 0.9
Lat 51.73N 0.08 Lon 174.33W 0.17
Dep 33.0 FIX Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 1.27 Plg=74 Azm= 68
N 0.77 15 267
P -2.04 5 175
Best Double Couple:Mo=1.7*10**17
NP1:Strike=249 Dip=42 Slip= 67
NP2: 99 52 110

13 01 01 50.21 51.309N 174.654W 33km
5.6mb (54 obs.) 5.2Msz (8 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 30C
Centroid Location:
Origin Time 01:01:56.4 0.9
Lat 52.03N 0.07 Lon 175.08W 0.10
Dep 15.0 FIX Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 2.22 Plg=58 Azm=283
N 0.05 17 42
P -2.26 26 141
Best Double Couple:Mo=2.2*10**17
NP1:Strike=265 Dip=24 Slip= 135
NP2: 37 73 72

13 01 14 03.74 6.256S 154.538E 42km
4.7mb (5 obs.) 5.2Msz (1 obs.)
SOLOMON ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 23C
Centroid Location:
Origin Time 01:14: 9.4 0.9
Lat 6.16S 0.09 Lon 153.90E 0.07
Dep 53.3 4.7 Half-duration 1.8
Principal Axes:
Scale 10**16 Nm
T Val= 11.26 Plg=68 Azm=332
N 0.23 21 136
P -11.49 6 228
Best Double Couple:Mo=1.1*10**17
NP1:Strike=340 Dip=44 Slip= 122
NP2: 119 54 63

13 03 58 02.80 51.509N 174.703W 33km
4.9mb (33 obs.) 4.8Msz (5 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 27C
Centroid Location:
Origin Time 03:58: 7.6 1.1

Lat 52.11N 0.09 Lon 174.85W 0.13
Dep 32.4 6.3 Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 9.23 Plg=64 Azm=340
N 0.24 1 248
P -9.47 26 157
Best Double Couple: Mo=9.4*10**16
NP1: Strike=245 Dip=19 Slip= 87
NP2: 68 71 91

13 08 07 32.99 32.508S 179.728W 33km
5.6mb (3 abs.) 5.0Msz (2 abs.)
SOUTH OF KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 24C
Centroid Location:
Origin Time 08:07:35.2 1.6
Lat 32.25S 0.12 Lon 179.76E 0.13
Dep 15.0 FIX Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 8.11 Plg= 1 Azm=131
N -1.87 14 40
P -6.25 76 226
Best Double Couple: Mo=7.2*10**16
NP1: Strike=234 Dip=45 Slip= -71
NP2: 28 48 -109

13 11 47 32.17 32.429S 179.646W 33km
5.6mb (7 abs.) 5.2Msz (4 abs.)
SOUTH OF KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 28C
Centroid Location:
Origin Time 11:47:41.9 0.7
Lat 31.62S 0.08 Lon 179.99E 0.12
Dep 15.0 FIX Half-duration 2.3
Principal Axes:
Scale 10**17 Nm
T Val= 3.14 Plg=10 Azm=316
N -1.10 8 48
P -2.03 77 172
Best Double Couple: Mo=2.6*10**17
NP1: Strike= 37 Dip=35 Slip= -103
NP2: 233 56 -81

13 15 38 15.75 23.275S 177.033W 109km
5.7mb (33 abs.)
SOUTH OF FIJI ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 25C
Centroid Location:
Origin Time 15:38:24.9 0.5
Lat 23.25S 0.05 Lon 176.63W 0.04
Dep 142.7 1.4 Half-duration 2.3
Principal Axes:
Scale 10**17 Nm
T Val= 2.82 Plg=38 Azm=128
N -0.36 9 31
P -2.47 51 290
Best Double Couple: Mo=2.6*10**17
NP1: Strike=263 Dip=11 Slip= -37
NP2: 30 84 -99

13 16 23 13.55 4.649S 153.147E 29km
5.8mb (35 abs.) 5.5Msz (10 abs.)
NEW IRELAND REGION
FAULT PLANE SOLUTION: P-Waves
NP1: Strike= 20 Dip=70 Slip= 148
NP2: 122 60 23
Principal Axes:
T Plg=36 Azm=338
P 6 73
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a large normal component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 3 Focal mech. F
Energy 1.1±0.5*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 16 No. of sta: 9
Principal Axes:
Scale 10**17 Nm
T Val= 7.04 Plg=36 Azm=331
N 0.18 52 169
P -7.22 9 67

Best Double Couple: Mo=7.1*10**17
NP1: Strike=116 Dip=58 Slip= 22
NP2: 14 72 146
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 32C
Centroid Location:
Origin Time 16:23:15.2 0.5
Lat 5.32S 0.06 Lon 153.29E 0.04
Dep 26.4 2.5 Half-duration 3.5
Principal Axes:
Scale 10**17 Nm
T Val= 9.60 Plg=51 Azm=337
N -1.99 36 184
P -7.61 13 84
Best Double Couple: Mo=8.6*10**17
NP1: Strike=137 Dip=45 Slip= 33
NP2: 22 67 130

13 17 32 04.20 15.007S 167.265E 150km
5.5mb (27 abs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 19C
Centroid Location:
Origin Time 17:32: 3.0 2.3
Lat 15.63S 0.23 Lon 166.84E 0.12
Dep 122.5 6.2 Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 1.79 Plg=15 Azm=340
N 0.48 71 122
P -2.27 11 247
Best Double Couple: Mo=2.0*10**17
NP1: Strike= 23 Dip=71 Slip= 177
NP2: 114 87 19

13 22 16 49.05 32.388S 179.580W 59km
5.6mb (8 abs.) 4.9Msz (3 abs.)
SOUTH OF KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 17C
Centroid Location:
Origin Time 22:16:44.4 1.9
Lat 32.29S 0.13 Lon 179.75W 0.12
Dep 15.0 FIX Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 13.55 Plg= 5 Azm=314
N -4.93 9 223
P -8.62 80 72
Best Double Couple: Mo=1.1*10**17
NP1: Strike= 54 Dip=41 Slip= -76
NP2: 216 51 -102

14 19 27 27.98 0.931N 99.101E 117km
5.0mb (14 abs.)
NORTHERN SUMATERA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 18C
Centroid Location:
Origin Time 19:27:24.4 2.5
Lat 0.76N 0.21 Lon 98.63E 0.18
Dep 106.2 9.2 Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 5.04 Plg=39 Azm= 47
N 0.45 34 171
P -5.49 32 286
Best Double Couple: Mo=5.3*10**16
NP1: Strike= 72 Dip=35 Slip= 173
NP2: 168 86 55

15 08 40 23.93 20.789S 175.993W 214km
6.2mb (49 abs.)
TONGA ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1: Strike= 38 Dip=83 Slip= 90
NP2: 218 7 90
Principal Axes:
T Plg=52 Azm=308
P 38 128
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
RADIATED ENERGY
No. of sta: 4 Focal mech. M
Energy 1.3±0.4*10**13 Nm

MOMENT TENSOR SOLUTION
Dep 219 No. of sta: 14
Principal Axes:
Scale 10**18 Nm
T Val= 6.15 Plg=52 Azm=318
N -2.22 18 203
P -3.92 32 101
Best Double Couple: Mo=5.0*10**18
NP1: Strike=144 Dip=21 Slip= 29
NP2: 27 80 109
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 32C M.W.: 14S, 28C
Centroid Location:
Origin Time 08:40:30.5 0.1
Lat 20.68S 0.01 Lon 175.77W 0.01
Dep 221.3 0.9 Half-duration 6.0
Principal Axes:
Scale 10**18 Nm
T Val= 4.59 Plg=59 Azm=315
N 0.17 7 213
P -4.76 30 119
Best Double Couple: Mo=4.7*10**18
NP1: Strike=188 Dip=16 Slip= 64
NP2: 35 75 97

15 21 07 11.46 27.179S 11.334W 10km
5.4mb (44 abs.) 5.4Msz (9 abs.)
SOUTH ATLANTIC RIDGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 25C
Centroid Location:
Origin Time 21:07:20.0 0.5
Lat 27.20S 0.06 Lon 11.05W 0.06
Dep 15.0 FIX Half-duration 2.6
Principal Axes:
Scale 10**17 Nm
T Val= 4.91 Plg=20 Azm=322
N 0.10 30 64
P -5.00 52 203
Best Double Couple: Mo=4.9*10**17
NP1: Strike= 12 Dip=36 Slip= -148
NP2: 255 72 -58

16 00 43 36.95 2.257S 140.212E 34km
5.5mb (27 abs.) 5.1Msz (6 abs.)
NEAR N. COAST OF WEST IRIAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 22C
Centroid Location:
Origin Time 00:43:39.2 1.0
Lat 1.96S 0.12 Lon 139.84E 0.09
Dep 41.3 7.1 Half-duration 1.8
Principal Axes:
Scale 10**17 Nm
T Val= 1.78 Plg=39 Azm=187
N -0.21 15 84
P -1.58 47 338
Best Double Couple: Mo=1.7*10**17
NP1: Strike=339 Dip=15 Slip= -15
NP2: 83 86 -105

16 05 46 51.44 60.365S 154.209E 10km
5.7mb (14 abs.) 5.5Msz (4 abs.)
WEST OF MACQUARIE ISLAND
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 43C
Centroid Location:
Origin Time 05:47: 0.7 0.3
Lat 60.42S 0.03 Lon 153.24E 0.06
Dep 15.0 FIX Half-duration 3.5
Principal Axes:
Scale 10**17 Nm
T Val= 10.13 Plg=12 Azm= 23
N -1.75 76 228
P -8.39 5 114
Best Double Couple: Mo=9.3*10**17
NP1: Strike=159 Dip=77 Slip= 5
NP2: 68 85 167

16 13 01 24.32 18.462S 177.962W 573km
4.9mb (20 abs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 17C
Centroid Location:
Origin Time 13:01:29.0 1.6
Lat 18.68S 0.19 Lon 178.01W 0.11
Dep 589.4 6.7 Half-duration 1.5

Principal Axes:
Scale 10**16 Nm
T Val= 10.94 Plg= 9 Azm=245
N 0.24 49 145
P -11.18 40 343
Best Double Couple: Mo=1.1*10**17
NP1: Strike= 16 Dip=56 Slip= -24
NP2: 120 70 -144

17 13 51 36.76 32.367S 179.590W 51km
5.3mb (13 obs.) 5.1MsZ (3 obs.)
SOUTH OF KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 35C
Centroid Location:
Origin Time 13:51:32.3 0.4
Lat 32.26S 0.05 Lon 179.55W 0.06
Dep 15.0 FIX Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 2.20 Plg= 2 Azm=139
N -0.42 17 48
P -1.79 73 236
Best Double Couple: Mo=2.0*10**17
NP1: Strike=246 Dip=45 Slip= -66
NP2: 33 50 -112

17 17 14 14.33 6.258N 125.740E 136km
5.1mb (25 obs.)
MINDANAO, PHILIPPINE ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 17C
Centroid Location:
Origin Time 17:14:15.5 0.9
Lat 6.38N 0.08 Lon 125.58E 0.07
Dep 134.8 2.5 Half-duration 1.8
Principal Axes:
Scale 10**17 Nm
T Val= 1.56 Plg=73 Azm=184
N 0.18 16 346
P -1.74 5 78
Best Double Couple: Mo=1.6*10**17
NP1: Strike=185 Dip=43 Slip= 114
NP2: 333 52 69

18 09 53 34.21 32.532S 179.515W 71km
5.2mb (7 obs.)
SOUTH OF KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 25C
Centroid Location:
Origin Time 09:53:33.0 1.1
Lat 32.17S 0.09 Lon 179.90W 0.09
Dep 15.0 FIX Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 12.06 Plg= 4 Azm=315
N -2.81 21 46
P -9.26 68 215
Best Double Couple: Mo=1.1*10**17
NP1: Strike= 23 Dip=45 Slip= -121
NP2: 244 52 -63

18 23 45 55.28 55.261S 145.901E 10km
5.4mb (5 obs.)
WEST OF MACQUARIE ISLAND
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 28C
Centroid Location:
Origin Time 23:46: 0.6 0.6
Lat 55.23S 0.08 Lon 146.06E 0.11
Dep 15.0 FIX Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 10.74 Plg= 2 Azm= 35
N -1.52 71 298
P -9.22 18 126
Best Double Couple: Mo=1.0*10**17
NP1: Strike=169 Dip=75 Slip= -12
NP2: 262 79 -165

19 03 25 21.15 4.241N 124.640E 335km
5.7mb (62 obs.)
CELEBES SEA
FAULT PLANE SOLUTION: P-Waves
NP1: Strike= 35 Dip=70 Slip= -70
NP2: 168 28 -133
Principal Axes:
T Plg=22 Azm=110

P 60 334
Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting with a moderate strike-slip component. The preferred fault plane is not determined.
MOMENT TENSOR SOLUTION
Dep 288 No. of sta: 8
Principal Axes:
Scale 10**17 Nm
T Val= 6.03 Plg=19 Azm=106
N 0.29 26 205
P -6.32 57 344
Best Double Couple: Mo=6.2*10**17
NP1: Strike=161 Dip=35 Slip= -140
NP2: 36 68 -62
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 25C
Centroid Location:
Origin Time 03:25:23.0 0.7
Lat 4.21N 0.07 Lon 124.47E 0.04
Dep 317.7 2.1 Half-duration 3.0
Principal Axes:
Scale 10**17 Nm
T Val= 3.74 Plg= 8 Azm= 97
N 0.97 27 191
P -4.71 62 353
Best Double Couple: Mo=4.2*10**17
NP1: Strike=159 Dip=44 Slip= -130
NP2: 29 58 -58

19 07 30 31.86 24.710S 70.568W 33km
6.3mb (78 obs.) 6.7MsZ (23 obs.)
NEAR COAST OF NORTHERN CHILE
FAULT PLANE SOLUTION: P-Waves
NP1: Strike=176 Dip=79 Slip= 90
NP2: 356 11 90
Principal Axes:
T Plg=56 Azm= 86
P 34 266
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
RADIATED ENERGY
No. of sta: 6 Focal mech. F
Energy 4 1±1.1*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 40 No. of sta: 10
Principal Axes:
Scale 10**19 Nm
T Val= 4.14 Plg=59 Azm= 77
N -0.77 22 210
P -3.37 20 309
Best Double Couple: Mo=3.8*10**19
NP1: Strike= 72 Dip=32 Slip= 136
NP2: 201 69 66
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 19S, 49C M.W.: 13S, 28C
Centroid Location:
Origin Time 07:30:46.1 0.1
Lat 24.86S 0.01 Lon 70.55W 0.01
Dep 31.0 0.8 Half-duration 5.3
Principal Axes:
Scale 10**19 Nm
T Val= 3.45 Plg=62 Azm= 88
N 0.13 1 357
P -3.58 28 266
Best Double Couple: Mo=3.5*10**19
NP1: Strike=353 Dip=17 Slip= 87
NP2: 177 73 91

19 11 36 36.19 14.406N 90.840W 165km
4.9mb (8 obs.)
GUATEMALA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 14C
Centroid Location:
Origin Time 11:36:48.1 1.8
Lat 14.60N 0.18 Lon 91.27W 0.13
Dep 184.4 8.0 Half-duration 3.4
Principal Axes:
Scale 10**17 Nm
T Val= 6.95 Plg=41 Azm=205
N 2.28 49 25
P -9.23 0 295
Best Double Couple: Mo=8.1*10**17
NP1: Strike=348 Dip=62 Slip= 32

NP2: 242 62 148
20 15 01 29.66 24.690S 70.521W 33km
5.3mb (17 obs.) 5.1MsZ (3 obs.)
NEAR COAST OF NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 34C
Centroid Location:
Origin Time 15:01:38.0 0.2
Lat 24.73S 0.03 Lon 71.20W 0.04
Dep 15.0 FIX Half-duration 2.7
Principal Axes:
Scale 10**17 Nm
T Val= 7.17 Plg=67 Azm= 86
N 0.84 0 177
P -8.01 23 267
Best Double Couple: Mo=7.6*10**17
NP1: Strike=358 Dip=22 Slip= 91
NP2: 177 68 90

20 20 50 46.52 9.201S 67.120E 10km
5.0mb (18 obs.) 4.9MsZ (1 obs.)
MID-INDIAN RISE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 36C
Centroid Location:
Origin Time 20:50:55.4 0.6
Lat 9.10S 0.07 Lon 67.07E 0.04
Dep 15.0 FIX Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 2.32 Plg= 6 Azm=273
N -0.32 72 164
P -2.00 17 5
Best Double Couple: Mo=2.2*10**17
NP1: Strike= 48 Dip=74 Slip= -8
NP2: 140 83 -164

21 08 22 22.93 18.179S 168.139E 44km
5.7mb (45 obs.) 5.9MsZ (22 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 42C
Centroid Location:
Origin Time 08:22:30.6 0.3
Lat 17.93S 0.03 Lon 168.00E 0.02
Dep 38.9 1.3 Half-duration 4.5
Principal Axes:
Scale 10**18 Nm
T Val= 1.90 Plg=71 Azm= 12
N 0.07 18 168
P -1.97 7 261
Best Double Couple: Mo=1.9*10**18
NP1: Strike= 10 Dip=41 Slip= 118
NP2: 155 55 68

22 00 35 58.07 19.847S 133.803E 5km
6.1mb (25 obs.) 6.3MsZ (22 obs.)
NORTHERN TERRITORY, AUSTRALIA
FAULT PLANE SOLUTION: P-Waves
NP1: Strike=292 Dip=45 Slip= 90
NP2: 112 45 90
Principal Axes:
T Plg=90 Azm= 0
P 0 22
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 6 Focal mech. C
Energy 3.5±0.8*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 5 No. of sta: 10
Principal Axes:
Scale 10**18 Nm
T Val= 3.04 Plg=63 Azm= 82
N -0.08 25 289
P -2.96 11 194
Best Double Couple: Mo=3.0*10**18
NP1: Strike=256 Dip=40 Slip= 50
NP2: 124 61 119
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 41C M.W.: 10S, 21C
Centroid Location:
Origin Time 00:36: 2.8 0.3
Lat 19.69S 0.02 Lon 133.81E 0.02
Dep 15.0 FIX Half-duration 5.6

Principal Axes:
Scale 10**18 Nm
T Val= 2.59 Plg=B3 Azm= 42
N 0.27 3 290
P -2.86 7 200
Best Double Couple:Mo=2.7*10**18
NP1:Strike=286 Dip=38 Slip= 85
NP2: 112 52 94

22 03 57 25.26 19.798S 133.910E 5km
6.1mb (30 obs.) 6.4Msz (24 obs.)
NORTHERN TERRITORY, AUSTRALIA
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=139 Dip=73 Slip= 157
NP2: 236 68 18
Principal Axes:
T Plg=28 Azm= 97
P 3 188
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.

RADIATED ENERGY
No. of sta: 7 Focal mech. F
Energy 8.7±0.9*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 13 No. of sta: 6
Principal Axes:
Scale 10**18 Nm
T Val= 3.31 Plg=32 Azm= 77
N -0.01 57 270
P -3.30 6 170
Best Double Couple:Mo=3.3*10**18
NP1:Strike=218 Dip=63 Slip= 20
NP2: 119 72 152
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 33C M.W.: 9S, 18C
Centroid Location:
Origin Time 03:57:31.3 0.3
Lat 19.66S 0.02 Lon 133.82E 0.02
Dep 15.0 FIX Half-duration 5.6
Principal Axes:
Scale 10**18 Nm
T Val= 2.84 Plg=83 Azm= 29
N 1.23 2 287
P -4.08 7 197
Best Double Couple:Mo=3.5*10**18
NP1:Strike=285 Dip=38 Slip= 88
NP2: 108 52 92

22 12 04 57.88 19.829S 133.882E 5km
6.5mb (47 obs.) 6.7Msz (30 obs.)
NORTHERN TERRITORY, AUSTRALIA
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=280 Dip=65 Slip= 90
NP2: 100 25 90
Principal Axes:
T Plg=70 Azm=190
P 20 10
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is not determined.

RADIATED ENERGY
No. of sta: 6 Focal mech. M
Energy 1.9±0.6*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 8 No. of sta: 10
Principal Axes:
Scale 10**18 Nm
T Val= 5.71 Plg=61 Azm= 82
N 0.35 28 276
P -6.06 6 183
Best Double Couple:Mo=5.9*10**18
NP1:Strike=245 Dip=46 Slip= 49
NP2: 116 57 124
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 38C M.W.: 7S, 19C
Centroid Location:
Origin Time 12:05: 3.4 0.3
Lat 19.76S 0.02 Lon 133.89E 0.02
Dep 15.0 FIX Half-duration 7.8
Principal Axes:
Scale 10**18 Nm
T Val= 9.15 Plg=88 Azm=102
N 0.02 2 293
P -9.17 0 203

Best Double Couple:Mo=9.2*10**18
NP1:Strike=290 Dip=45 Slip= 87
NP2: 115 45 93

22 20 54 03.07 19.857S 133.991E 5km
5.8mb (33 obs.) 4.9Msz (4 obs.)
NORTHERN TERRITORY, AUSTRALIA
MOMENT TENSOR SOLUTION
Dep 13 No. of sta: 7
Principal Axes:
Scale 10**17 Nm
T Val= 1.26 Plg=75 Azm=102
N -0.03 8 342
P -1.23 13 250
Best Double Couple:Mo=1.2*10**17
NP1:Strike=330 Dip=33 Slip= 76
NP2: 167 58 99
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 19C
Centroid Location:
Origin Time 20:54:14.4 1.4
Lat 19.02S 0.14 Lon 133.66E 0.07
Dep 15.0 FIX Half-duration 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 1.55 Plg=65 Azm=314
N -0.47 25 128
P -1.08 2 219
Best Double Couple:Mo=1.3*10**17
NP1:Strike=333 Dip=48 Slip= 124
NP2: 107 52 58

23 02 45 35.71 51.400N 174.268W 48km
5.5mb (62 obs.) 4.7Msz (3 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 18C
Centroid Location:
Origin Time 02:45:34.7 2.0
Lat 51.41N 0.18 Lon 173.90W 0.24
Dep 15.0 FIX Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 4.05 Plg=71 Azm=336
N -0.15 1 243
P -3.90 19 153
Best Double Couple:Mo=4.0*10**16
NP1:Strike=242 Dip=26 Slip= 88
NP2: 64 64 91

23 08 58 00.34 1.785N 127.236E 104km
5.6mb (41 obs.)
HALMAHERA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 28C
Centroid Location:
Origin Time 08:58: 0.7 0.3
Lat 1.72N 0.03 Lon 127.00E 0.03
Dep 105.6 2.3 Half-duration 3.2
Principal Axes:
Scale 10**17 Nm
T Val= 6.68 Plg=39 Azm=166
N -1.16 16 63
P -5.52 47 315
Best Double Couple:Mo=6.1*10**17
NP1:Strike=317 Dip=17 Slip= -15
NP2: 62 86 -106

23 11 45 45.05 46.183N 153.499E 34km
5.7mb (82 obs.) 5.3Msz (7 obs.)
KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 17C
Centroid Location:
Origin Time 11:45:47.5 0.4
Lat 46.90N 0.07 Lon 152.73E 0.06
Dep 20.1 2.9 Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 1.62 Plg=70 Azm=198
N 0.71 18 352
P -2.33 8 85
Best Double Couple:Mo=2.0*10**17
NP1:Strike=195 Dip=40 Slip= 119
NP2: 339 55 68

23 22 01 57.33 15.250S 116.194W 10km
5.1mb (13 obs.) 4.4Msz (1 obs.)
EASTER ISLAND CORDILLERA

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 25C
Centroid Location:
Origin Time 22:02: 6.3 0.4
Lat 15.40S 0.07 Lon 116.02W 0.07
Dep 15.0 FIX Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 1.55 Plg= 5 Azm= 30
N 0.27 10 121
P -1.82 79 275
Best Double Couple:Mo=1.7*10**17
NP1:Strike=109 Dip=41 Slip=-105
NP2: 309 51 -77

23 22 48 30.15 23.595S 177.365W 202km
5.3mb (31 obs.)
SOUTH OF FIJI ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 19C
Centroid Location:
Origin Time 22:48:34.2 1.6
Lat 23.19S 0.18 Lon 177.00W 0.14
Dep 167.4 3.8 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 8.97 Plg=41 Azm= 92
N 0.17 12 192
P -9.14 46 295
Best Double Couple:Mo=9.1*10**16
NP1:Strike=115 Dip=12 Slip=-168
NP2: 13 87 -78

24 14 15 24.56 26.716N 128.019E 57km
5.6mb (61 obs.)
RYUKYU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 22C
Centroid Location:
Origin Time 14:15:25.6 0.7
Lat 26.97N 0.06 Lon 127.16E 0.07
Dep 44.1 2.6 Half-duration 3.2
Principal Axes:
Scale 10**17 Nm
T Val= 6.38 Plg=60 Azm=144
N -0.12 30 327
P -6.26 2 236
Best Double Couple:Mo=6.3*10**17
NP1:Strike=299 Dip=51 Slip= 49
NP2: 173 54 129

24 16 00 04.55 17.763S 178.737W 566km
5.7mb (63 obs.)
FIJI ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=195 Dip=55 Slip= 90
NP2: 15 35 90
Principal Axes:
T Plg=80 Azm=105
P 10 285
Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting. The preferred fault plane is NP1.

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 35C
Centroid Location:
Origin Time 16:00:15.3 0.4
Lat 17.24S 0.04 Lon 178.70W 0.03
Dep 583.0 1.9 Half-duration 3.4
Principal Axes:
Scale 10**17 Nm
T Val= 7.85 Plg=60 Azm=353
N 0.62 28 151
P -8.46 10 246
Best Double Couple:Mo=8.1*10**17
NP1:Strike= 6 Dip=43 Slip= 134
NP2: 133 61 57

25 01 12 21.92 30.183N 94.892E 33km
5.4mb (63 obs.) 5.0Msz (2 obs.)
TIBET
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 13C
Centroid Location:
Origin Time 01:12:27.4 1.9
Lat 29.80N 0.20 Lon 94.87E 0.11

Dep 33.0 FIX Half-duration 1.8
Principal Axes:
Scale 10**16 Nm
T Val= 10.24 Plg=29 Azm=356
N -2.76 61 173
P -7.49 1 265
Best Double Couple:Mo=8.9*10**16
NP1:Strike= 37 Dip=69 Slip= 159
NP2: 135 71 23

25 07 15 53.47 10.584S 78.083W 53km
5.6mb (27 obs.)
NEAR COAST OF PERU
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 25C
Centroid Location:
Origin Time 07:16: 1.8 0.5
Lat 10.45S 0.04 Lon 78.32W 0.08
Dep 72.6 5.2 Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 2.32 Plg=64 Azm=242
N -0.60 11 355
P -1.73 23 90
Best Double Couple:Mo=2.0*10**17
NP1:Strike=201 Dip=24 Slip= 118
NP2: 351 69 78

25 20 20 06.65 37.312N 141.606E 44km
5.5mb (65 obs.) 5.1MsZ (4 obs.)
NEAR EAST COAST OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 17C
Centroid Location:
Origin Time 20:20: 9.9 0.6
Lat 37.04N 0.05 Lon 141.83E 0.07
Dep 27.7 3.5 Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 1.88 Plg=71 Azm=290
N 0.51 0 200
P -2.40 19 110
Best Double Couple:Mo=2.1*10**17
NP1:Strike=199 Dip=26 Slip= 89
NP2: 20 64 90

26 09 34 48.70 32.665N 47.054E 34km
5.2mb (43 obs.) 5.3MsZ (6 obs.)
IRAN-IRAQ BORDER REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 18C
Centroid Location:
Origin Time 09:34:51.1 0.4
Lat 32.33N 0.06 Lon 46.85E 0.06
Dep 19.9 4.0 Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 2.40 Plg=65 Azm= 54
N 0.45 4 316
P -2.85 25 224
Best Double Couple:Mo=2.6*10**17
NP1:Strike=306 Dip=20 Slip= 79
NP2: 137 70 94

26 19 24 26.71 57.835N 32.539W 10km
5.1mb (50 obs.) 4.9MsZ (6 obs.)
NORTH ATLANTIC OCEAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 18C
Centroid Location:
Origin Time 19:24:26.3 0.4
Lat 58.27N 0.09 Lon 31.89W 0.13
Dep 15.0 FIX Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 9.26 Plg=16 Azm=128
N -0.44 21 224
P -8.82 63 3
Best Double Couple:Mo=9.0*10**16
NP1:Strike=190 Dip=34 Slip=-129
NP2: 55 64 -67

27 19 16 45.46 57.888N 32.653W 10km
5.1mb (61 obs.) 5.1MsZ (14 obs.)
NORTH ATLANTIC OCEAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 21C
Centroid Location:
Origin Time 19:16:44.8 0.5
Lat 58.26N 0.07 Lon 32.08W 0.10
Dep 15.0 FIX Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.25 Plg=14 Azm=126
N 0.03 24 223
P -2.28 62 9
Best Double Couple:Mo=2.3*10**17
NP1:Strike=187 Dip=37 Slip=-132
NP2: 56 63 -63

28 00 29 51.43 3.528S 149.631E 45km
5.2mb (6 obs.) 5.0MsZ (2 obs.)
BISMARCK SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 32C
Centroid Location:
Origin Time 00:29:51.9 0.6
Lat 3.41S 0.06 Lon 149.53E 0.08
Dep 15.0 FIX Half-duration 2.0
Principal Axes:
Scale 10**16 Nm
T Val= 11.77 Plg= 2 Azm=157
N 0.38 79 258
P -12.14 11 66
Best Double Couple:Mo=1.2*10**17
NP1:Strike=202 Dip=81 Slip=-174
NP2: 111 84 -9

28 11 20 08.16 5.327N 126.369E 44km
5.5mb (35 obs.) 5.5MsZ (16 obs.)
MINDANAO, PHILIPPINE ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 33C
Centroid Location:
Origin Time 11:20:11.0 0.3
Lat 5.54N 0.03 Lon 126.54E 0.03
Dep 28.6 2.0 Half-duration 4.0
Principal Axes:
Scale 10**18 Nm
T Val= 1.44 Plg=62 Azm=309
N -0.02 17 184
P -1.42 21 87
Best Double Couple:Mo=1.4*10**18
NP1:Strike=149 Dip=28 Slip= 52
NP2: 11 68 108

28 15 48 08.15 32.413N 21.150E 10km
4.8mb (49 obs.) 4.8MsZ (1 obs.)
NEAR COAST OF LIBYA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 15C
Centroid Location:
Origin Time 15:48:13.1 1.1
Lat 32.41N 0.09 Lon 21.01E 0.12
Dep 15.0 FIX Half-duration 2.0
Principal Axes:
Scale 10**16 Nm
T Val= 8.07 Plg= 3 Azm=205
N 1.06 71 305
P -9.13 18 114
Best Double Couple:Mo=8.6*10**16
NP1:Strike=251 Dip=75 Slip=-169
NP2: 158 80 -16

29 02 39 18.77 45.349N 151.806E 47km
5.5mb (83 obs.) 5.6MsZ (13 obs.)
KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 30C
Centroid Location:
Origin Time 02:39:17.9 0.3
Lat 45.34N 0.03 Lon 151.70E 0.06
Dep 15.0 FIX Half-duration 3.2

Principal Axes:
Scale 10**17 Nm
T Val= 8.22 Plg=58 Azm=300
N 0.31 3 35
P -8.54 32 127
Best Double Couple:Mo=8.4*10**17
NP1:Strike=229 Dip=14 Slip= 104
NP2: 35 77 87

29 16 48 01.37 15.349S 174.125W 106km
5.6mb (45 obs.)
TONGA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 36C
Centroid Location:
Origin Time 16:48:11.7 0.3
Lat 15.02S 0.03 Lon 173.71W 0.03
Dep 119.0 1.4 Half-duration 3.7
Principal Axes:
Scale 10**17 Nm
T Val= 10.64 Plg=28 Azm=106
N 1.42 4 198
P -12.06 61 296
Best Double Couple:Mo=1.1*10**18
NP1:Strike=184 Dip=17 Slip=-105
NP2: 20 73 -85

30 03 56 43.81 46.252S 96.091E 10km
5.3mb (5 obs.) 5.4MsZ (4 obs.)
SOUTHEAST INDIAN RISE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 33C
Centroid Location:
Origin Time 03:56:53.1 0.3
Lat 46.36S 0.04 Lon 95.56E 0.04
Dep 15.0 FIX Half-duration 2.6
Principal Axes:
Scale 10**17 Nm
T Val= 4.23 Plg=14 Azm= 74
N -0.74 72 295
P -3.49 12 167
Best Double Couple:Mo=3.9*10**17
NP1:Strike=211 Dip=72 Slip= 2
NP2: 121 88 162

31 15 42 27.83 16.647S 174.118W 118km
5.4mb (31 obs.)
TONGA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 21C
Centroid Location:
Origin Time 15:42:40.4 1.4
Lat 16.27S 0.14 Lon 173.91W 0.10
Dep 115.5 5.5 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 10.28 Plg=27 Azm= 82
N -0.74 17 181
P -9.54 58 300
Best Double Couple:Mo=9.9*10**16
NP1:Strike=137 Dip=24 Slip=-136
NP2: 6 74 -72

31 23 31 46.10 9.809N 83.670W 22km
4.9mb (17 obs.) 4.4MsZ (2 obs.)
COSTA RICA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 7S, 15C
Centroid Location:
Origin Time 23:31:51.5 3.3
Lat 10.37N 0.25 Lon 83.76W 0.16
Dep 15.0 FIX Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 3.67 Plg= 0 Azm=104
N 0.62 90 180
P -4.29 0 14
Best Double Couple:Mo=4.0*10**16
NP1:Strike=149 Dip=90 Slip= 180
NP2: 239 90 0

EXPLANATION OF ABBREVIATIONS AND SYMBOLS APPEARING IN THIS PUBLICATION

Abbreviations in Heading

- MB - Body wave magnitudes.
 Msz - Vertical surface wave magnitudes.
 UTC - Coordinated Universal Time. HR MN SEC - Hour, minute, second.
 SD - Standard Deviation from the arithmetic mean of residuals.
 No. Sta. - Number of stations reporting P or PKP phases used in computation.
 KEY - (Printed vertically). A symbol in this column indicates additional source parameters and/or a focal sphere are published for this event in separate sections which follow the list of hypocenters. The symbols are:
 a - Additional source parameters
 f - Additional source parameters plus focal sphere

Symbols and Abbreviations Used in Comments

- AGS Alaska Seismic Project, U.S. Geological Survey, Menlo Park, California.
 APT University of Connecticut.
 BGS British Geological Survey, Edinburgh, United Kingdom.
 BLA Virginia Polytechnic Institute and State University, Blacksburg.
 BOU University of Colorado, Boulder.
 BRK University of California, Berkeley.
 BUT Montana Bureau of Mines and Geology, Butte.
 CL Coda length magnitude.
 DOE U.S. Department of Energy (formerly AEC and ERDA).
 EXPLO Some or all parameters of explosion (controlled or accidental) supplied by any group or individual other than DOE or its predecessor organizations.
 GLD U.S. Geological Survey, Golden, Colorado (other than NEIS).
 GS U.S. Geological Survey, Menlo Park, California.
 HRV Harvard University, Cambridge, Massachusetts.
 HVO Hawaiian Volcano Observatory.
 JMA Japan Meteorological Agency (generally used to indicate 7-point Japanese Intensity Scale).
 LDG Laboratoire de Detection et de Geophysique, Bruyeres-le-Chatel, France.
 MACRO Hypocenter based upon macroseismic information.
 MD Duration magnitude (shown as DUR prior to 1986).
 MDD Instituto Geografico Nacional, Madrid, Spain.
 MG Contributed local or regional magnitude of unspecified type (see "Contributed Magnitudes" below).
 MW Moment Magnitude.
 NEIS U.S. Geological Survey, National Earthquake Information Service, Golden, Colorado.
 OTT Earth Physics Branch, Ottawa, Canada.
 PAL Columbia University, Lamont-Doherty Geological Observatory, Palisades, New York.
 PAS California Institute of Technology, Pasadena.
 PGC Pacific Geoscience Centre, Sidney, British Columbia, Canada.
 PMR Alaska Tsunami Warning Center, Palmer, Alaska.
 REN University of Nevada, Reno.
 RF Rossi-Forel Intensity Scale.
 SEA University of Washington, Seattle.
 SLC University of Utah, Salt Lake City.
 SLM St. Louis University, Missouri.
 SPEC An NEIS solution based on use of dense local networks, a local crustal model, or other methods not routinely applied in calculating the hypocenter parameters.
 TEIC Center for Earthquake Research and Information, Memphis, Tennessee.
 TUL Oklahoma Geological Survey, Leonard.
 UVC Universidad del Valle, Cali, Colombia.
 WES Weston Observatory, Massachusetts.
 Roman Used to indicate intensity (when not followed by RF or JMA they refer to the Modified Mercalli Scale or any Numerals 12-point intensity scale closely related to it).
 " " Geographic degrees, minutes, seconds.
 -P Supplied hypocenter is a preliminary computation.

Any additional 3 to 5 letter codes enclosed in parentheses or angle brackets refer to individual station codes. These codes may be found in Geological Survey Open File Report 85-714, Seismograph Station Codes and Coordinates (1985). Addenda to OF 85-714 are printed at the end of the Earthquake Data Report for this month.

Symbols Following Depth

- N Indicates the depth was restrained at 33 km for earthquakes whose character on seismograms indicates a shallow focus but whose depth is not satisfactorily determined by the data.
 D Indicates the depth was restrained by the computer program based on 2 or more compatible pP phases and/or unidentified secondary arrivals used as pP.
 G Indicates the depth was restrained by a geophysicist.
 * Indicates a less well-constrained free depth. The 90% marginal confidence interval on depth is greater than 8.5 km and less than or equal to 16.0 km.
 ? Indicates a poorly-constrained free depth. The 90% marginal confidence interval on depth is greater than 16.0 km.
 The lack of any symbol indicates that the 90% marginal confidence interval on depth is less than or equal to 8.5 km, or that a contributed hypocenter was computed with a free depth, regardless of the size of the confidence interval.

Symbols Following Origin Time

- & Indicates that parameters of the hypocenter were supplied or determined by a computational procedure not normally used by the National Earthquake Information Service (NEIS). The source or nature of the determination is indicated by a 2 to 5 letter code enclosed by angle brackets and appearing in the first line of comments. A "-P" appended to the code indicates that the computation is preliminary. These codes are included with the list of abbreviations above.
- % Indicates a single network solution. A non-furnished hypocenter has been computed using data reported by a single network of stations for which the date and/or origin time cannot be confirmed from seismograms available to a NEIS analyst. The geometric mean of the semi-major and semi-minor axes of the horizontal 90% confidence ellipse is less than or equal to 16.0 km.
- Indicates a less reliable solution. In general, the geometric mean of the semi-major and semi-minor axes of the horizontal 90% confidence ellipse is greater than 8.5 km and less than or equal to 16.0 km.
- ? Indicates a poor solution, published for completeness of the catalog. In general, the geometric mean of the semi-major and semi-minor axes of the horizontal 90% confidence ellipse is greater than 16.0 km. This includes a poor solution computed using data reported by a single network.

The lack of any symbol indicates that the geometric mean of the semi-major and semi-minor axes of the horizontal 90% confidence ellipse is less than or equal to 8.5 km.

COMPARISON OF RATINGS OF INTENSITY SCALES APPEARING IN
PRELIMINARY DETERMINATION OF EPICENTERS

U.S.A. Modified Mercalli (M.M.), 1931	Japanese, 1950 (JMA)	Rossi-Forel, 1873 (RF)	European (Mercalli - Cancani-Sieberg), 1917
I	0	I	I
II	I	I-II	II
III	II	III	III
IV	II-III	IV-V	IV
V	III	V-VI	V
VI	IV	VI-VII	VI
VII	IV-V	VIII-	VII
VIII	V	VIII+-IX	VIII
IX	V-VI	IX+	IX
X	VI	X	X
XI	VII	X	XI
XII	VII	X	XII

TRAVEL-TIME TABLES

In general, all hypocenters have been computed based on the 1940 Jeffreys-Bullen P and 1968 Bolt PKP travel-time tables. Some other earth model or computational procedure may have been used for those hypocenters which have been indicated by an ampersand (&) following the origin time.

MACROSEISMIC INFORMATION

Macroseismic information is compiled from various sources, including newspaper articles, Foreign Broadcast Information Service messages, U.S. Geological Survey Earthquake Reports and seismological station reports.

GEOGRAPHIC REGIONS

The regions shown in the comments column are from the seismic and geographical regionalization of Flinn, Engdahl and Hill (1974), with occasional name changes which have been given in various issues of the Monthly Listing. The boundaries of these regions are defined at one degree intervals and differ slightly from irregular political boundaries.

DEPTHS FROM BROADBAND DISPLACEMENT SEISMOGRAMS

The NEIS routinely interprets broadband data from the GDSN and RSTN using methods described by Harvey and Choy (1982) and by Choy and Boatwright (1981) for events with $M_B \geq 5.8$. The notation that a depth is obtained from broadband seismograms indicates that a depth was obtained by inversion of differential travel times of depth phases that are clearly identifiable at several stations using broadband records that are flat to displacement between approximately 0.01 and 5.0 Hz.

Choy, G. L. and Engdahl, E. R., 1987, Analysis of broadband seismograms from selected IASPEI events: Physics of the Earth and Planetary Interiors, v. 47, p. 80-92.

Harvey, D. and Choy, G. L., 1982, Broadband deconvolution of GDSN data: Geophysical Journal of the Royal Astronomical Society, v. 69, p. 659-668.

FAULT PLANE SOLUTIONS

A fault plane solution is determined when possible for any earthquake having a magnitude ≥ 5.8 . A description of this solution is reported in the comments on the Preliminary Determination of Epicenters Monthly Listing. Focal sphere solutions and first motion parameters are available upon request from: National Earthquake Information Service, U.S. Geological Survey, Stop 967, Box 25046, Denver Federal Center, Denver, CO 80225.

NEIS MAGNITUDES

All magnitudes are NEIS magnitudes unless otherwise indicated. Average magnitudes are computed by a 25% trimmed mean as described by Rosenberger, J. L. and Gasko, M., 1983, "Comparing location estimators: trimmed means, medians, and trimean" in *Understanding Robust and Exploratory Data Analysis*, ed. Hoaglin, D.C., Mosteller, F., and Tukey, J. W., John Wiley, New York.

Ms These surface wave magnitudes are computed from the I.A.S.P.E.I. formula:

$$M_s = \log (A/T) + 1.66 \log D + 3.3$$

where:

A is the maximum ground amplitude in micrometers (microns) of the vertical component of the surface wave within the period range $18 \leq T \leq 22$.

T is the period in seconds.

D is the distance in geocentric degrees (station to epicenter) and $20^\circ \leq D \leq 160^\circ$.

No depth corrections are applied, and M_s magnitudes are not generally computed for depths greater than 50 km. The M_s value published is the average of the individual station magnitudes from reported T and A data.

If the uncertainty of the computed depth is considered great enough that the depth could be less than 50 km, an M_s value may still be published, computed by the I.A.S.P.E.I. formula and not corrected for depth.

In general, the M_s magnitude is more reliable than the MB magnitude as a means of yielding the relative "size" of a shallow-focus earthquake.

MB These compressional body wave (P-wave) magnitudes are computed according to the formula:

$$M_B = \log (A/T) + Q(D,h)$$

defined by Gutenberg and Richter (1956) except that T, the period in seconds, is restricted to $0.1 \leq T \leq 3.0$ and A, the ground amplitude in micrometers, is not necessarily the maximum in the P group. Q is a function of distance (D) and depth (h) where $D \geq 5^\circ$.

mbLg These Lg body wave magnitudes are computed according to the formula:

$$mbLg = 3.75 + 0.90 \log D + \log (A/T) \text{ for } 0.5^\circ \leq D \leq 4^\circ$$

$$mbLg = 3.30 + 1.66 \log D + \log (A/T) \text{ for } 4^\circ \leq D \leq 30^\circ$$

as proposed by Nuttli (1973) where A is the ground amplitude in micrometers and T is the period in seconds calculated from the vertical component 1-second Lg waves. D is the distance in geocentric degrees.

ML These local magnitudes are computed according to the formula:

$$M_L = \log A - \log A_0$$

defined by Richter (1935) where A is the maximum trace amplitude in micrometers recorded on a standard short-period torsion seismometer and $\log A_0$ is a standard value as a function of distance where distance ≤ 600 km.

CONTRIBUTED MAGNITUDES

Magnitudes appearing in the comments which have been contributed by organizations operating a network of stations may have been calculated from any one station in the network or may be an average magnitude from a number of stations from the network.

Beginning with January, 1986, a contributed magnitude of unspecified type may be quoted (using the designator MG) for events which have no other magnitudes given or computed. These MG magnitudes either have been reported by the contributor without listing the type (such as "Mag 3.5") or have been computed using procedures which are not defined by the magnitude types routinely reported in this bulletin. Direct inquiries should be made to the contributor (shown in parentheses after the magnitude) concerning the specific details of the computational procedures used to determine these values.

REFERENCES

- Gutenberg, B., and Richter, C. F., 1956, Magnitude and energy of earthquakes: *Annali di Geofisica*, v. 9, no. 1, p. 1-15.
- Nuttli, O. W., 1973, Seismic wave attenuation and magnitude relations for eastern North America: *Journal of Geophysical Research*, v. 78, no. 5, p. 876-885.
- Richter, C. F., 1935, An instrumental earthquake scale: *Bulletin of the Seismological Society of America*, v. 25, p. 1-32.

WAVEFORM PLOTS

Each month selected events with $M_B \geq 5.8$ will be shown. For each event, up to sixteen body phase waveforms will be selected for display around the periphery of an equal area plot of the lower hemisphere of the focal sphere. Each waveform will be connected by a dotted line to a symbol marking the corresponding azimuth and take-off angle on the focal sphere. For reference, the nodal planes, compression axis (P), and tension axis (T) will also be plotted when solutions are available. The dominant double couple of the USGS moment tensor will be shown in solid lines with the axes designated by P and T respectively. The NEIS first motions fault plane solution will be shown in dashed lines with the axes designated by P' and T' respectively. If both solutions are available, the primed axes may be suppressed unless they are sufficiently different from the unprimed axes. Each event will be titled with its origin date-time and Flinn-Engdahl region name to facilitate cross-referencing with the Monthly Listing text.

Each waveform will be identified by station code, data type, phase name and scale factor. The data type indicated by LP will be from the long-period channel at the designated station. Each LP waveform will be comprised of approximately one-half minute of noise followed by three minutes of signal. Time and amplitude are referenced to a set of axes shown in the lower right hand corner of each plot. The scale factor is an integer from which absolute amplitude, in micrometers of ground displacement at the dominant period of the pass-band (25 s), may be determined. Absolute amplitude may be recovered by measuring the amplitude of the seismogram relative to the amplitude axis and dividing it by the scale factor. Other data types are indicated by IP (intermediate-period channel), SP (short-period channel), and BB (broad-band displacement). As these types of data have a different pass-band than LP data, different time and amplitude scales than those used for LP data will generally be needed. These scales will be shown in the lower left hand corner of each plot. As with the LP waveforms, the absolute amplitudes of the other data types may be recovered from the amplitude scale and the scale factor. For IP data, the absolute amplitude is referenced to 10 seconds. For SP data, the absolute amplitude is referenced to the dominant period of the pass-band (1 s). BB data are directly proportional to displacement from 0.01 Hz to at least 2 Hz. In addition, each component will be identified by a direction indicator (i.e. N, E, Z, R and T for north-south, east-west, vertical, radial, and transverse, respectively). Note that the dominant period approximation will not be valid for IP data. However, the scaling will still be correct.

Waveforms will primarily be selected to display variations in the P waveform as a function of azimuth. If space permits, some PKP waveforms may be shown as well. To this end, waveforms which are clipped, non-linear, or very noisy will be rejected. Further, only one of several stations at similar distance and azimuth may be used if all show similar waveforms. Note that the importance of a record in focal parameter derivation will not be considered. Thus, many seismograms will be shown which have not been used in the USGS moment tensor solution. Conversely, records which have been important in constraining one or both solutions may have been passed over for lack of space. The data are derived from the U.S.G.S. Global Digital Seismograph Network (GDSN) and from data contributed by other organizations for distribution on either the Network Day Tapes or Event Tapes. For details on data sources, see the National Earthquake Information Center Newsletter.

R. P. Buland and M. Zirbes, U.S. Geological Survey, Mail Stop 967, Box 25046, Denver Federal Center, Denver, CO 80225 USA

FOCAL MECHANISM MAPS

Best double couple focal mechanisms are plotted as lower-hemisphere, equal-area projections for earthquakes having a seismic moment greater than 1×10^{17} Nm. The shaded quadrants represent compressional first motions. For each event, the mechanism shown is selected from either the Fault Plane Solution, Moment Tensor Solution or Centroid, Moment Tensor Solution. All these solutions are given in the Additional Source Parameters section of the Monthly Listing.

USGS RADIATED ENERGY

The energy radiated by an earthquake is estimated from the energy spectral density of the broadband P waves, using the method described by Boatwright and Chay (1986), where the energy flux in the P waves is integrated directly. No correction for source directivity or frequency-dependent interference of the depth phases is incorporated into these estimates of radiated energy. Data used are either direct P waves (for deep earthquakes) or the P wave group consisting of P, pP and sP (for shallow earthquakes) from GDSN and other stations that contribute digital data to the NEIC within two months of the occurrence of an event. The data are processed using the method of Harvey and Chay (1982) so that they are flat to velocity from low frequencies (generally 0.01 Hz) to at least 2.0 Hz. The effect of attenuation is corrected with the frequency-dependent Q of Chay and Cormier (1986). The focal mechanism used is either the P-wave first-motion solution (F), the USGS moment tensor solution (M) or the Harvard centroid solution (C).

Boatwright, J. and Chay, G. L., 1986, Teleseismic estimates of the energy radiated by shallow earthquakes: *Journal of Geophysical Research*, v. 91, p. 2095-2112.

Chay, G. L. and Cormier, V. F., 1986, Direct measurement of the mantle attenuation operator from broadband P and S waveforms: *Journal of Geophysical Research*, v. 91, p. 7326-7342.

Harvey, D. and Chay, G. L., 1982, Broadband deconvolution of GDSN data: *Geophysical Journal of the Royal Astronomical Society*, v. 69, p. 659-668.

EXPLANATION OF THE ENTRIES "MOMENT TENSOR SOLUTION" (USGS)

These solutions have been determined using the body-wave moment tensor inversion method described by Sipkin (1982).

1. NUMBER OF STATIONS: Number of GDSN stations with distances between approximately 30 and 95 degrees found to have suitable P waveforms. Only unfiltered long-period vertical components are used.
2. DEPTH: The source depth which gives the smallest normalized mean-squared-error. This is the only hypocentral parameter determined since the inversion procedure is insensitive to small errors in both epicenter and origin time.
3. SCALE)
4. PRINCIPAL AXES) See "Centroid, Moment Tensor (HRV)"
5. BEST DOUBLE COUPLE)

S. A. Sipkin, U.S. Geological Survey, Mail Stop 967, Box 25046, Denver Federal Center, Denver, CO 80225 USA

Sipkin, S. A., 1982, Estimation of earthquake source parameters by the inversion of waveform data: synthetic seismograms: *Physics of the Earth and Planetary Interiors*, v. 30, no. 2-3, p. 242-259.

EXPLANATION OF THE ENTRIES "CENTROID, MOMENT TENSOR (HRV)"

These solutions have been determined using the long period body and mantle wave moment tensor inversion method described by Dziewonski, et.al. (1981) considering corrections due to an aspherical earth structure of model M84C (Woodhouse and Dziewonski, 1984).

1. DATA USED; currently both GDSN and IDA data are used. The numbers following the entries L. P. BODY WAVES and MANTLE WAVES indicate the number of stations (S), total number of records (C) and T is the cut-off period of the low pass filter for each of the subsets of data. Mantle waves are routinely used in inversion for sources with moments greater than $10^{21.9}$ Newton-meters (Nm).
2. CENTROID LOCATION; hypocentral parameters obtained by adding perturbations resulting from inversion to the parameters reported in the PDE; standard errors follow the individual entries. If a given parameter is not perturbed in inversion, this is indicated by the letters FIX. If the depth is fixed to be consistent with waveform matching of reconstructed broad-band body waves, this is indicated by the letters BDY. The default depth for shallow earthquakes is increased to 15 km. in order to improve the stability of solutions; it was 10 km. in 1981-1985.
3. MOMENT TENSOR. The scale factor (e.g., $10^{22.0}$ Nm) is the number by which all subsequent entries related to values of the moment should be multiplied. For the moment tensor we give components in a spherical coordinate system: MRR = M_{rr}; MTT = M _{$\theta\theta$} ; MFF = M _{$\phi\phi$} ; MRT = M_{r θ} ; MRF = M_{r ϕ} ; MTF = M _{$\theta\phi$} . In another frequently used notation: MRR = M_{zz}; MTT = M_{xx}; MFF = M_{yy}; MRT = M_{xz}; MRF = -M_{yz}; MTF = -M_{xy} (see Aki and Richards, 1980, p. 118). The solutions are constrained to have MRR + MTT + MFF = 0. The values following the entries for the elements of the moment tensor and centroid co-ordinates are standard errors, calculated under the usual assumption of uncorrelated errors in the data. The lateral heterogeneity of the Earth, however, clearly leads to systematic errors, and so the errors listed probably underestimate the true error in the solution.
4. PRINCIPAL AXES; rotation of the moment tensor into the principal axes system. Most of the solutions are predominantly of the double couple type; the largest positive eigenvalue corresponds to the tension axis (T); the usually small, intermediate eigenvalue is associated with the null axis (N); the smallest negative eigenvalue is identified with the compression axis (P). PLG are the plunges and AZM the azimuths of the axes.
5. BEST DOUBLE COUPLE. If the eigenvalue (T) is σ_1 and (P) is $-\sigma_2$, then the scalar seismic moment is defined as $M_0 = 1/2(\sigma_1 + \sigma_2)$. The strike, dip and slip of the first (NP1) and second (NP2) nodal planes are calculated from the directions of the P, T, and N axes. The remainder is a linear-vector dipole (Knopoff and Randall, 1970); in most cases the magnitude of LVD is small. Although all such decompositions are highly non-unique, this particular one is the best in estimating the starting solution for the non-linear, constrained double couple inverse problem. The angles strike, dip, and slip are defined using the convention of Aki and Richards (1980, p. 106) and are the angles designated there as ϕ_s, δ, λ , respectively.

A. M. Dziewonski, J. Durek, G. Ekstrom, J. H. Woodhouse and G. Zwart, Department of Geological Sciences, Harvard University, Cambridge, MA 02138

Aki, K. and Richards, P. G., Quantitative Seismology, Volume 1, W. H. Freeman, San Francisco, 1980, 557 pp.

Dziewonski, A. M., Chou, T. A., and Woodhouse, J. H., 1980, Determination of earthquake source parameters from waveform data for studies of global and regional seismicity: Journal of Geophysical Research, v. 86, p. 2825-2852.

Knopoff, L. and Randall, M. J., 1970, The compensated linear-vector dipole: A possible mechanism for deep earthquakes: Journal of Geophysical Research, v. 75, p. 4957-4963.

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BERKELEY MOMENT

The seismic moment (M_0) contributed by the University of California, Berkeley (BRK), is given for regional earthquakes based on Wood-Anderson torsion seismograms recorded within 300 km of the epicenter with peak-to-peak amplitudes of at least 3 mm. This seismic moment (M_0) in dyne-cm is defined by $\log M_0 = 16.74 + 1.22 \log(CD\Delta)$, where C is the maximum peak-to-peak amplitude in mm, D is the duration in seconds from the time of the S-wave onset to the last time that the peak-to-peak amplitude exceeds C/3, and Δ is the epicentral distance in km. Seismic moments quoted in "Preliminary Determination of Epicenters" are converted to Newton-meters (1 Newton-meter = $10^{9.7}$ dyne-cm).

Bolt, B.A. and Herroiz, M. 1983, Simplified estimation of seismic moment from seismograms: Bulletin of the Seismological Society of America, v. 73, p. 735-748.

02 January 1988 12:42:02.52
Hokkaido, Japan Region

12 January 1988 07:29:27.96
Kermadec Islands Region

15 January 1988 08:40:23.93
Tonga Islands

COL (LPZ)
P x2

19 January 1988 07:30:31.86
Near Coast of Northern Chile

SCP (LPZ)
P x1

22 January 1988 00:35:58.07
Northern Territory, Australia

22 January 1988 12:04:57.88
Northern Territory, Australia

Earthquake Focal Mechanisms for January 1988

SIGNIFICANT EARTHQUAKES OF THE WORLD 1987

Earthquakes of magnitude 6.5 or greater or ones that caused fatalities, injuries or substantial damage.

BRK--Berkeley. PAS--Pasadena. FIR--Florence, Italy. FUR--Fuerstenfeldbruck, FRG. GRF--Groefenberg, FRG.

KBA--Barrage Koelnbrein, Austria. KRA--Krakow, Poland. LDG--Laboratoire de Detection et de Geophysique, France.

PMR--Palmer, Alaska. RIV--Riverview, Australia. ROM--Rome, Italy. SLM--St. Louis, Missouri. TRI--Trieste, Italy.

TTG--Titograd, Yugoslavia. VKA--Vienna-Kabenzl, Austria.

DATE	ORIGIN TIME			GEOGRAPHIC		DEPTH	MAGNITUDES			NO. STA USED	REGION. CONTRIBUTED MAGNITUDES AND COMMENTS
	UTC			COORDINATES			GS				
	HR	MN	SEC	LAT	LONG		MB	Ms	sz		
JAN 03	22	04	04.8	14.998 S	167.929 E	15 G	6.0	6.5	1.1	266	VANUATU ISLANDS. Ms 6.7 (BRK), 6.6 (PAS). Complex rupture. Depth from broadband displacement seismograms, based on dominant second event.
JAN 05	12	11	55.7	52.448 N	169.381 W	33 N	6.1	6.7	1.1	361	FOX ISLANDS, ALEUTIAN ISLANDS. Ms 6.5 (BRK), 6.3 (PAS). Complex rupture. Felt (V) at Unalaska and (III) at False Pass. Also felt strongly at Nikolski.
JAN 05	22	52	46.5	41.964 N	81.319 E	17 G	5.9	5.8	1.0	338	SOUTHERN XINJIANG, CHINA. Several people injured and damage in the Baicheng area. Felt in the Aksu-Kuqa-Wushi area. Depth from broadband displacement seismograms.
JAN 09	06	14	44.8	39.895 N	141.677 E	68 G	6.4		1.0	485	HONSHU, JAPAN. mb 6.8 (PAS), 6.6 (BRK). Minor damage (V JMA) in the Morioka-Ofunato area. Felt (IV JMA) at Hachinohe, Ishinomaki, Miyoko, Sakata and Sendai; (III JMA) in the Tokyo-Yokohama area and as far north as Kushiro, Hokkaido. Two events about 3 sec. apart. Depth from broadband displacement seismograms, based on the first event.
JAN 09	08	01	35.9	19.469 S	176.538 W	33 N	5.9	6.6	1.1	171	FIJI ISLANDS REGION. Ms 6.8 (BRK), 6.7 (PAS).
JAN 11	12	31	26.0	29.969 N	51.788 E	10 *	4.9	4.1	1.5	53	SOUTHERN IRAN. Three hundred houses damaged in the Doshman Ziari area.
JAN 14	11	03	48.7	42.565 N	142.850 E	102 G	6.5		1.1	521	HOKKAIDO, JAPAN REGION. mb 6.6 (BRK). Six people injured. Felt (V JMA) at Kushiro; (IV JMA) at Hirao, Nemuro, Obihiro and Uroko. Also felt (IV JMA) at Hachinohe and Morioka, Honshu. Felt (II JMA) in the Tokyo-Yokohama area, Honshu. Depth from broadband displacement seismograms.
JAN 22	05	10	51.1	43.515 N	10.154 E	22			1.1	62	CENTRAL ITALY. ML 4.2 (KBA), 3.9 (LDG). MD 4.1 (FIR). Two people died of heart attacks. Felt in the Livorno area.
JAN 24	08	09	21.3	41.529 N	79.318 E	29 D	5.9	5.9	1.2	254	KIRGHIZ-XINJIANG BORDER REGION. At least 417 houses damaged in the Wushi area, China. Felt (IV) in the Alma Ata-Przhevalsk area and (III) in the Frunze-Naryn area, USSR.
JAN 26	11	11	41.8	35.964 N	1.374 E	10 G	4.9	4.3	1.2	146	ALGERIA. One person killed, 7 injured and 629 homes damaged in the Mohammadio area. Felt at Oued Fadda and Tissemsilt.
JAN 30	22	29	42.0	60.063 S	26.916 W	48 D	6.2	7.0	1.4	172	SOUTH SANDWICH ISLANDS REGION. Ms 6.9 (BRK), 6.8 (PAS).
FEB 06	13	16	17.8	36.988 N	141.689 E	48	6.1	6.3	1.0	455	NEAR EAST COAST OF HONSHU, JAPAN. Ms 6.5 (PAS), 6.3 (BRK). Felt (V JMA) at Onahama and (IV JMA) at Mito, Sendai, Tokyo, Utsunomiya and Yokohama. Felt from Hikone and Wajima, Honshu to Kushiro, Hokkaido. Also felt on Oshima and Hachijo-jima. Local tsunami recorded with maximum wave heights 12 cm at Onahama; 8 cm at Ishinomaki; 7 cm at Ofunato. Two events about 4 seconds apart, observed on broadband displacement seismograms.
FEB 08	18	33	58.3	6.088 S	147.689 E	55		7.4	1.3	290	EAST PAPUA NEW GUINEA REGION. Ms 7.6 (BRK), 7.0 (PAS). Three people killed by a landslide and some damage (VI) on the Huan Peninsula. Several hundred people homeless and moderate damage (VII), landslides and ground cracks on Umboi Island. Liquefaction occurred in some sands on Malai Island. Felt (VI) in the Cape Gloucester area, New Britain. Felt (III) as far away as Wewak and Port Moresby, New Guinea and Rabaul, New Britain. Multiple event, observed on broadband displacement seismograms.
FEB 11	07	56	12.9	15.834 S	167.355 E	24 G	5.9	6.4	1.2	310	VANUATU ISLANDS. Ms 6.6 (BRK), 6.4 (PAS). Depth from broadband displacement seismograms.
FEB 13	07	18	29.0	0.670 N	126.167 E	32	6.2	6.5	1.3	344	MOLUCCA PASSAGE. Ms 6.4 (PAS). Felt on Ternate and at Manado, Sulawesi.
FEB 17	06	16	12.1	32.793 S	179.304 W	10 G	5.9	6.6	1.2	294	SOUTH OF KERMADEC ISLANDS. Ms 6.5 (BRK), 6.4 (PAS).
FEB 27	08	31	54.4	53.470 N	167.291 W	10 G	6.2	6.7	1.1	428	FOX ISLANDS, ALEUTIAN ISLANDS. Ms 6.8 (BRK), 6.5 (PAS). Minor damage at Dutch Harbor and Unalaska. Felt (V) at Akutan, (III) at Cold Bay and False Pass and (II) at Sandpoint.

DATE	ORIGIN TIME UTC HR MN SEC	GEOGRAPHIC COORDINATES LAT LONG	DEPTH	MAGNITUDES GS MB Msz	SD	NO. STA USED	REGION. CONTRIBUTED MAGNITUDES AND COMMENTS
MAR 02	01 42 34.1	37.965 S 176.765 E	19 G	5.9 6.6	1.5	198	NORTH ISLAND, NEW ZEALAND. Ms 6.8 (BRK), 6.4 (PAS). One person died from a heart attack, 25 injured and extensive damage (X) in the Edgcombe-Kawerou-Whokotane oreo. Felt throughout much of North Island. Landslides and sandblows occurred. A southwest trending fault scarp 6 km. long had extension openings of up to 1 m. and as much as 1.5 m. of downthrow on the northwest side. Peak ground acceleration of 0.33 g. was recorded within 15 km. of the epicenter. Depth from broadband displacement seismograms.
MAR 05	09 17 05.2	24.388 S 70.161 W	62 G	6.5 7.3	1.2	303	NEAR COAST OF NORTHERN CHILE. Ms 7.2 (BRK), 7.0 (PAS), mb 6.8 (PAS). One person killed and damage (VI) in the Antofagosto oreo. Felt (VI) at Chuquicamota; (V) in the Toltol-Tocanoa-Colamo oreo; (IV) at Arico; (III) at Vallenar. Felt (II) at Arequipo, Peru. Also felt at La Paz, Bolivia. Local tsunami generated with maximum wave heights 22 cm. at Caldero, 20 cm. at Coquimbo, 14 cm. at Valparaiso and 18 cm. at Arico. Depth from broadband displacement seismograms.
MAR 06	01 54 50.4	0.048 N 77.653 W	14 G	6.1 6.1	0.9	354	COLOMBIA-ECUADOR BORDER REGION. Ms 6.2 (BRK). One old building collapsed in Quito, Ecuador. Felt throughout northern Ecuador, central and southwestern Colombia, and northern Peru. Depth from broadband displacement seismograms.
MAR 06	04 10 41.9	0.151 N 77.821 W	10 G	6.5 6.9	1.2	344	COLOMBIA-ECUADOR BORDER REGION. Ms 7.0 (BRK), 6.7 (PAS). Approximately 1,000 people killed, 4,000 missing, 20,000 homeless, extensive damage, landslides and ground cracks in Napo Province and in the Quito-Tulcan oreo, Ecuador. About 27 km. of the oil pipeline in Ecuador, between Laga Agria and Balao, were destroyed or badly damaged. Landslides occurred in the Posta-Macaa oreo, Colombia. Felt (IV) at Iquitos, Peru. Felt strongly in many parts of Ecuador and southwestern Colombia. Also felt in central Colombia and northern Peru.
MAR 12	23 07 48.7?	51.37 N 20.21 E	10 G		0.1	5	POLAND. ML 2.6 (KRA). Three people killed and three injured in the Slask Mine at Ruda Slaska.
MAR 18	03 36 30.3	32.034 N 131.837 E	54 D	6.4	1.2	534	KYUSHU, JAPAN. Ms 6.7 (BRK), 6.6 (PAS). One person killed; also one person died from a heart attack and five people were injured. Damage (V JMA) and landslides in the Miyazaki oreo. Felt (IV JMA) in the Kumamoto-Nabeoka-Oita-Saga area; (III JMA) in the Fukuoka-Kagashima oreo and on southwestern Shikoku. Felt (I JMA) from Naze, Ryukyu Islands to Mito, Honshu. Seven cm. tsunami recorded along the coast of Kyushu.
APR 07	00 40 43.4	37.363 N 141.796 E	29 G	6.4 6.6	1.0	545	NEAR EAST COAST OF HONSHU, JAPAN. Ms 6.4 (PAS), 6.2 (BRK). Minor damage (V JMA) in the Onahama-Watari area. Felt (IV JMA) at Fukushima, Sendai and Tokyo; (III JMA) at Niigoto, Maebashi, and Yokohama; (II JMA) at Hachinohe and Ajiro, Honshu and Obihiro, Hokkaido. Felt (I JMA) from Shizuoka, Honshu to Kushiro, Hokkaido and on Hachijo-jima. Depth from broadband displacement seismograms.
APR 11	02 26 23.6	41.639 N 12.606 E	18		1.2	68	SOUTHERN ITALY. MD 4.1 (FIR), 3.8 (ROM). One person injured slightly and minor damage in the Genzano di Roma-Velletri oreo. Felt at Rome.
APR 22	20 13 23.1	37.155 N 141.573 E	30 G	6.1 6.6	1.1	505	NEAR EAST COAST OF HONSHU, JAPAN. Ms 6.6 (PAS), 6.4 (BRK). Slight damage (V JMA) at Shirakawa. Felt (IV JMA) at Fukushima, Mito and Onahama; (III JMA) from the Tokyo-Kofu-Toteyama oreo to Miyoko and Morioka; (II JMA) in the Maebashi-Niigata-Akita area and at Kushiro, Hokkaido. Felt (I JMA) on Hachijo-jima and Oshima and from Shizuoka, Honshu to Hakodate and Urakawa, Hokkaido. Depth from broadband displacement seismograms.
APR 25	19 22 07.2	2.244 N 98.866 E	11 D	5.9 6.6	1.3	284	NORTHERN SUMATERA. Ms 6.3 (PAS). Two people killed, 22 injured and more than 300 buildings damaged in the Tarutung-Lake Tobo oreo. A hot spring in the area stopped flowing but resumed later. Felt in the Sibolgo-Berastagi oreo. Also felt in the Kuala Lumpur area, Malaysia.
APR 29	14 27 35.7	19.013 S 177.736 W	385 G	5.9	1.1	441	FIJI ISLANDS REGION. mb 6.5 (PAS), 6.2 (BRK). Depth from broadband displacement seismograms.

DATE	ORIGIN TIME			GEOGRAPHIC		DEPTH	MAGNITUDES			NO. STA USED	REGION, CONTRIBUTED MAGNITUDES AND COMMENTS
	UTC	HR	MIN	SEC	COORDINATES		GS	MB	MsZ		
					LAT	LONG					
MAY 02	20 43 53.0	44.818 N	10.723 E	10 G	4.8		1.3	204			NORTHERN ITALY. ML 5.2 (FUR), 5.0 (LDG), 5.0 (TTG). One person died from a heart attack at Parma. Several people injured and slight damage (VII) in the Reggio nell'Emilia-Modeno area. Felt from Lucca and Genoa to Milan, Verona and Padova.
MAY 06	04 06 14.1	51.272 N	179.898 W	20 G	6.3 6.4		1.0	477			ANDREANOF ISLANDS, ALEUTIAN IS. ML 6.1 (PMR), Ms 6.5 (BRK), 6.2 (PAS). Felt (V) on Adak. Depth from broadband displacement seismograms.
MAY 07	03 05 49.1	46.736 N	139.232 E	430 G	6.0		0.9	653			NEAR E. COAST OF EASTERN USSR. mb 6.6 (BRK), 6.5 (PAS). Felt (IV) in parts of the Sikhote-Alin mountain range. Felt (II JMA) at Aomori, Hachinohe, Morioka and Miyako; (I JMA) at Akita, Takada, Tokyo and Yokohama, Honshu. Felt (II JMA) at Kushira and Urakawa; (I JMA) at Wakkanai, Rumoi and Asahikawa, Hokkaido. Two events about 4 seconds apart. Depth from broadband displacement seismograms, based on first event.
MAY 12	01 38 25.0	7.090 N	126.701 E	25 G	6.2 6.4		1.1	455			MINDANAO, PHILIPPINE ISLANDS. Ms 6.5 (BRK), 5.9 (PAS). Felt (II RF) at Cagayan de Oro. Also felt at Palo, Leyte. Depth from broadband displacement seismograms.
MAY 18	07 27 00.2	8.302 N	125.362 E	16 *	5.5 5.9		1.3	82			MINDANAO, PHILIPPINE ISLANDS. One person killed in Bukidnon Province. Felt (III RF) at Cagayan de Oro. Also felt in the Davao area.
MAY 23	17 09 04.4	8.047 N	125.410 E	32	5.1 5.2		1.2	99			MINDANAO, PHILIPPINE ISLANDS. One person was killed, two people injured and damage in the Talakag-Malaybalay area. Felt (II RF) at Cagayan de Oro and (I RF) at Butuan and Surigao.
MAY 29	06 27 50.7	34.076 N	48.266 E	41	4.9 4.6		1.2	147			WESTERN IRAN. Two people killed, 50 injured and damage in the Nohavand-Hamadan-Tuysarkon area.
JUN 10	23 48 54.8	38.713 N	87.954 W	10	4.9 4.4			173			SOUTHERN INDIANA. <SLM-P>. mbLg 5.1 (SLM), Ms 4.6 (BRK). One person injured and minor damage (VI) at Lawrenceville, Illinois. Minor damage also reported at Bridgeport, Mt. Carmel and Olney, Illinois; Bloomfield and New Albany, Indiana; and Louisville, Kentucky. Felt in parts of 21 states from Kansas to Pennsylvania and from South Carolina to Minnesota. Also felt in southern Ontario, Canada.
JUN 17	01 32 53.7	5.577 S	130.791 E	67 G	6.6		1.1	523			BANDA SEA. Ms 6.8 (BRK), 6.5 (PAS). mb 6.3 (PAS). Felt on Banda and Ambon. Depth from broadband displacement seismograms.
JUN 18	10 01 07.3	17.291 N	121.356 E	43	5.5 6.0		1.4	165			LUZON, PHILIPPINE ISLANDS. Eight people killed, five injured, one missing and five houses damaged from landslides. Felt (V RF) in the epicentral area; (IV RF) at Bogoia; (III RF) at Manila and Cagayan; (II RF) at Santa and Tuguegarao.
JUN 20	00 37 55.8	51.472 N	16.126 E	13	4.9		1.2	64			POLAND. ML 4.9 (GRF), 4.9 (VKA), 4.7 (KBA). At least three people injured in a mine in the Lubin area.
JUN 24	03 30 30.7	21.179 S	173.581 E	33 N	5.7 6.4		1.3	204			VANUATU ISLANDS REGION. Ms 6.7 (BRK), 6.4 (PAS).
JUN 24	15 04 57.8	33.436 S	150.131 E	40	4.4		1.0	21			NEAR S.E. COAST OF AUSTRALIA. ML 4.2 (RIV). Damage (VII) at Lithgow and slight damage at Sydney and Newcastle. Felt at Bathurst, Katoomba and Moss Vale.
JUN 27	00 17 04.6	2.164 S	138.170 E	21 G	5.7 6.5		1.3	231			WEST IRIAN. Ms 6.5 (BRK). Depth from broadband displacement seismograms.
JUL 06	02 49 42.7	14.074 S	167.828 E	48	5.9 6.6		1.0	304			VANUATU ISLANDS. Ms 7.1 (BRK), 6.5 (PAS). Felt strongly on the Banks Islands. A small local tsunami was reported.
JUL 15	07 16 13.5	17.522 N	97.153 W	67 D	5.9		1.1	392			OAXACA, MEXICO. mb 6.5 (BRK), 5.9 (PAS). Felt in Oaxaca, Guerrero and in the Mexico City area.
AUG 02	09 07 35.5	24.924 N	115.608 E	29 *	4.9		1.0	97			NEAR SOUTHEASTERN COAST OF CHINA. Eighty-four people injured and about 37,000 houses damaged in the Ganzhou-Xunwu area. Felt (IV) at Hong Kong. Also felt at Canton and Mocoo.

DATE	ORIGIN TIME UTC HR MN SEC	GEOGRAPHIC COORDINATES LAT LONG	DEPTH	MAGNITUDES GS MB Msz	SD	NO. STA USED	REGION. CONTRIBUTED MAGNITUDES AND COMMENTS
AUG 08	15 48 56.7	19.022 S 69.991 W	70 G	6.4 6.9	1.1	379	NORTHERN CHILE. mb 6.3 (BRK). Five people killed, 112 injured and more than 1,000 houses destroyed (VII) in the Arica area. Several landslides occurred along the Chile-Peru border. Damage (VI) at Iquique. Felt (V) at Tacopilla and (III) at Calama and Antofagasta. Felt (III) at La Paz, Bolivia. Felt strongly at Tacna, Moquegua and Lima, Peru. Appears to be two events about 5 seconds apart. Depth from broadband displacement seismograms, based on first event.
AUG 13	15 23 06.9	17.897 S 70.931 W	37 G	6.1 6.4	1.2	310	NEAR COAST OF PERU. Ms 6.2 (BRK). One person killed, one injured and additional damage (V) at Arica, Chile. Felt (IV) at Arequipa and Tacna, Peru. Depth from broadband displacement seismograms.
AUG 14	06 24 04.6	43.734 N 20.413 E	14	5.0	1.2	198	YUGOSLAVIA. ML 4.7 (TTG). Two people injured and damage (VII) in the Kraljeva-Bogutavocka Banja area. Felt (III) at Belgrade and in northern Montenegro. Felt (IV) in the Sofia-Pernik-Vidin area, Bulgaria.
SEP 03	06 40 13.9	58.893 S 158.513 E	33 N	5.9 7.3	1.0	292	MACQUARIE ISLANDS REGION. Ms 7.7 (BRK), 6.9 (PAS).
SEP 03	08 01 36.2	59.538 S 159.005 E	33 N	6.1 6.8	1.2	275	MACQUARIE ISLANDS REGION
SEP 04	16 42 49.1	43.242 N 13.874 E	19	5.1 4.6	1.2	225	CENTRAL ITALY. ML 4.7 (VKA), 4.7 (LDG), 4.7 (TRI). MD 5.1 (TTG), 4.8 (KBA). Two people injured and damage (VIII) in the Porto San Giorgio-Fermo-Pedasa area. Some damage in the Civitanova Marche-Porto Recanati area. Felt from Pesaro to Campobasso.
SEP 07	11 57 09.4	31.089 S 177.968 W	33 N	5.8 6.7	1.3	249	KERMADEC ISLANDS REGION. Ms 6.7 (BRK).
SEP 22	13 43 37.6	0.978 S 78.050 W	10 G	6.1 6.2	1.0	306	ECUADOR. Ms 6.1 (BRK). At least two people killed, twelve injured, several houses destroyed or seriously damaged and landslides in the Ambato area. Minor damage in the Latacunga and Riobamba area. Felt in southern Colombia and northern Peru.
SEP 22	16 21 35.1	1.082 S 78.127 W	10 G	5.9 5.6	1.1	221	ECUADOR. Additional damage in the Ambato area. Felt strongly in the Latacunga area. Felt in southern Colombia and northern Peru.
SEP 28	11 47 08.6	18.411 S 168.058 E	31 D	5.7 6.8	1.3	199	VANUATU ISLANDS. Ms 6.7 (BRK), 6.7 (PAS). Felt.
SEP 28	13 46 13.9	18.546 S 168.161 E	25 D	5.8 6.5	1.1	254	VANUATU ISLANDS
OCT 01	14 42 20.0	34.060 N 118.080 W	10	5.8 5.7		292	SOUTHERN CALIFORNIA. <PAS-P>. ML 5.9 (PAS), 6.1 (BRK). Eight people killed, many injured, about 2,200 homeless and more than 10,400 buildings damaged in the Los Angeles-Whittier-Pasadena area. The earthquake caused 358 million dollars in property damage. Maximum intensity (VIII) at Whittier. Felt strongly in much of southern California. Felt as far away as Las Vegas, Nevada.
OCT 02	22 27 55.8	8.143 S 77.954 W	20 *	5.4 5.1	1.0	144	PERU. Three people killed and several homes damaged at Santiago de Chuco. Felt (IV) at Trujillo and (III) at Chimbote.
OCT 04	10 59 38.1	34.070 N 118.100 W	8	5.2 4.8		151	SOUTHERN CALIFORNIA. <PAS-P>. ML 5.3 (PAS), 5.6 (BRK). One person died from a heart attack. Some injured and additional damage in the Pasadena-Alhambra-Whittier area. Felt from Ventura County to San Diego to Palm Springs.
OCT 06	04 19 06.0	17.940 S 172.225 W	16 G	6.7 7.3	1.0	455	TONGA ISLANDS REGION. Ms 7.3 (BRK), 7.2 (PAS). Felt at Nukualofa. Felt on American Samoa. Twenty-five cm. tsunami recorded at Pago Pago, American Samoa.
OCT 12	13 57 04.7	7.288 S 154.371 E	25	6.3 6.8	1.1	363	SOLOMON ISLANDS. Ms 6.8 (BRK), 6.7 (PAS). Felt (V) at Arawa and Panguna, Bougainville. Felt (III) at Rabaul, New Britain. Eight cm. tsunami recorded at Rabaul.
OCT 16	20 48 01.6	6.266 S 149.060 E	48 G	5.9 7.4	1.2	345	NEW BRITAIN REGION. Ms 7.7 (BRK), 7.0 (PAS). Damage (VIII) at Kondrion. Felt (V) at Kimbe and Hoskins, (IV) at Biella and (III) at Rabaul. Felt (V) at Finschhafen and also felt at Port Moresby, New Guinea. Felt (IV) at Bougainville. Local tsunami generated with 30 meter runup reported at Kandrian. Thirteen cm. tsunami recorded at Rabaul. Multiple event.
OCT 25	16 54 05.6	2.323 S 138.364 E	33 N	6.2 7.0	1.1	290	WEST IRIAN. Ms 6.7 (BRK), 6.7 (PAS). Felt at Jayapura.

DATE	ORIGIN TIME UTC HR MN SEC	GEOGRAPHIC COORDINATES LAT LONG	DEPTH	MAGNITUDES GS MB Msz	SD	NO. STA USED	REGION. CONTRIBUTED MAGNITUDES AND COMMENTS
NOV 17	03 40 08.9	12.534 N 87.030 W	76 D	5.8	1.2	392	NEAR COAST OF NICARAGUA. mb 6.2 (PAS). Three people injured and damage in the Chinandega-Leon-El Viejo area, Nicaragua. Felt throughout Nicaragua and (IV) at San Salvador, El Salvador. Also felt in Honduras, Guatemala and northern Costa Rica.
NOV 17	08 46 53.3	58.586 N 143.270 W	10 G	6.6 6.9		581	GULF OF ALASKA. <AGS-P>. ML 7.0 (PMR). Ms 7.0 (BRK), 6.8 (PAS). Complex event. Felt (V) at Anchorage, Haines, Seward, Trapper Creek, Valdez and Yakutat. Felt (IV) throughout much of southern Alaska from Juneau to Anchorage. Also felt (IV) at Whitehorse, Yukon Territory. Felt at Kodiak, Alaska and Carcross and Haines Junction, Yukon Territory. Ten cm. tsunami recorded at Yakutat.
NOV 24	01 54 14.5	33.083 N 115.775 W	5	5.7 6.2		237	SOUTHERN CALIFORNIA. <PAS-P>. ML 5.8 (PAS), 6.5 (BRK). Two people killed in an earthquake-related automobile accident about 80 km. east of Mexicali, Mexico. Slight damage (VI) at Calipatria, El Centro, Heber and Westmorland. Felt throughout much of southern California from San Diego and Los Angeles to Las Vegas, Nevada and Yuma, Arizona. Also felt at Mexicali, Tijuana and Ensenada, Mexico.
NOV 24	11 23 16.9	32.658 N 59.105 E	41	5.3 4.4	1.1	163	IRAN. About 485 buildings damaged in 15 villages west of Birjand. Felt at Birjand and Qaen.
NOV 24	13 15 56.4	33.010 N 115.840 W	2	6.0 6.6		327	SOUTHERN CALIFORNIA. <PAS-P>. ML 6.1 (PAS), 6.7 (BRK). Multiple event. At least 94 people injured and an estimated 4 million dollars damage in Imperial County. Additional injuries and damage occurred in the Mexicali area, Mexico, with an estimated 3,000 people temporarily homeless. Maximum intensities (VI-VII) at El Centro and Westmorland, (VI) at Brawley, Calexico, Calipatria, Heber, Holtville, Imperial and Seeley. Felt throughout much of southern California from San Diego and Los Angeles to Las Vegas, Nevada and Tempe, Arizona. Also felt at Tijuana and Ensenada, Mexico. Surface fault rupture and afterslip were mapped by California Division of Mines and Geology along a 23 kilometer segment of the Superstition Hills fault. A maximum of 65 centimeters of right-lateral displacement with a few centimeters of vertical displacement was measured. Strong-motion records indicate peak accelerations of 0.21g at Westmorland and 0.36g at El Centro.
NOV 26	01 43 14.0	8.247 S 124.155 E	33 N	5.8 6.5	1.3	158	TIMOR. Ms 6.3 (BRK), 6.3 (PAS). At least 37 people killed, 108 injured and 237 buildings damaged on Pantar Island. Landslides also occurred on the island. Mount Sirung started erupting on December 2.
NOV 27	08 26 43.7	32.691 N 59.100 E	33 N	4.7	0.7	50	IRAN. ML 4.4 (MHI). Two hundred forty-three buildings damaged in the Birjand area.
NOV 30	19 23 19.5	58.679 N 142.786 W	10 G	6.7 7.6		584	GULF OF ALASKA. <SPEC>. Ms 7.7 (BRK), 7.4 (PAS). ML 7.1 (PMR). Mo=1.2*10**20 Nm (BRK). Held to foreshock location. Damage (VI) at Yakutat from earthquake and tsunami. Felt (V) at Anchorage, Copper Center, Gakona, Haines, Homer, Juneau, Levelock, Petersburg, Seward and Skwentna. Also felt (V) in sections of Whitehorse, Yukon Territory, Canada. Felt (IV) throughout southern Alaska from the Ketchikan area to Glennallen and Kodiak Island and (III) as far away as Bethel and Fairbanks. Also felt at Sand Point and (II) at Anaktuvuk Pass. Some damage caused to 2 ships at sea in the epicentral area; felt strongly on 3 other ships in the area. Tsunami generated with wave heights (peak to trough) 85 cm. at Yakutat and 25 cm. at Sitka, Alaska; 15 cm. at Hilo, 12 cm. at Nawiliwili and 5 cm. at Honolulu, Hawaii; and 5 cm. at Presidio, California. Complex event, with major subevent occurring about 15 seconds after onset of the foreshock, observed on broadband displacement seismograms.
DEC 07	12 26 11.7	13.632 S 167.393 E	48	5.7 6.2	1.0	201	VANUATU ISLANDS. Ms 6.7 (BRK).
DEC 07	13 14 34.9	13.559 S 167.454 E	33 N	5.8 6.3	1.0	230	VANUATU ISLANDS. Ms 6.7 (BRK).
DEC 17	02 08 19.9	35.362 N 140.214 E	63 D	6.0	1.0	535	NEAR EAST COAST OF HONSHU, JAPAN. Ms 6.4 (BRK). Two people killed, 66 injured and damage in Chiba Prefecture and the Tokyo area. Felt (V JMA) at Choshi, Chiba and Katsuura; (IV JMA) in the Tokyo-Yokohama-Mito-Kumagaya area; (III JMA) in the Onahama-Shizuoka-Iida area and an Oshima and Machijo-jima. Felt (I JMA) from Tottori to Sendai.
DEC 17	20 22 58.3	9.169 S 114.610 E	46 G	5.7 5.5	1.1	234	SOUTH OF BALI ISLAND. Twenty people injured on Bali. Felt (III) on Lombok and in eastern Java. Depth from broadband displacement seismograms.

Compiled by: Woverly J. Person

Earthquake epicenters in Alaska and adjacent regions for January, 1988 (C. Stover).

Earthquake epicenters in the conterminous United States and adjacent regions for January, 1988 (C. Stover).

Earthquakes located in January, 1988 (C. Stover).

PRELIMINARY DETERMINATION OF EPICENTERS

MONTHLY LISTING

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

FEBRUARY 1988

K E Y	DAY	ORIGIN TIME UTC HR MN SEC	GEOGRAPHIC COORDINATES LAT LONG	DEPTH	MAGNITUDES GS MB Msz	SD	NO. STA USED	REGION, CONTRIBUTED MAGNITUDES AND COMMENTS
	01	01 19 38.77	33.42 S 72.77 W	10 G	2.3		13	OFF COAST OF CENTRAL CHILE
	01	02 17 06.38	40.405 N 124.497 W	17			5	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK). Mo=3.3*10**13 Nm (BRK).
	01	02 26 42.4*	22.473 S 67.436 W	190 *		0.6	8	CHILE-BOLIVIA BORDER REGION
	01	04 55 22.37	33.31 S 72.22 W	10 G		0.4	8	OFF COAST OF CENTRAL CHILE
	01	05 37 49.5	8.420 S 123.128 E	214 *	5.1	1.3	24	FLORES ISLAND REGION
	01	06 09 17.68	35.370 N 118.810 W	14			17	CENTRAL CALIFORNIA. <PAS-P>. ML 3.0 (PAS), 3.2 (BRK). Felt at Bakersfield.
	01	06 34 33.6*	20.634 S 69.374 W	156 ?		0.2	7	NORTHERN CHILE
	01	06 41 35.9	34.362 N 26.833 E	18	4.5	1.0	45	CRETE
	01	08 21 17.9*	15.351 S 174.121 W	63 *	4.9	0.8	19	TONGA ISLANDS
a	01	09 01 46.2	1.241 S 145.862 E	10 G	5.4 5.5	1.2	107	ADMIRALTY ISLANDS REGION. Ms 5.5 (BRK).
	01	09 04 34.6*	42.476 N 13.156 E	10 G		0.9	5	CENTRAL ITALY
	01	09 21 21.4	47.090 N 10.742 E	10 G		1.1	7	AUSTRIA. ML 3.0 (FUR), 2.9 (KBA).
	01	09 24 45.8*	1.320 S 145.860 E	33 N	4.6	1.4	14	ADMIRALTY ISLANDS REGION
	01	09 37 28.7	40.848 N 22.945 E	10 G		0.2	7	GREECE. ML 2.5 (SKO).
	01	10 16 40.6*	19.591 S 133.935 E	10 G		0.8	5	NORTHERN TERRITORY, AUSTRALIA
	01	11 22 44.8	46.289 N 13.156 E	5 G		1.3	41	AUSTRIA. ML 4.1 (GRF), 3.6 (VKA), 3.5 (LDG), 3.5 (FUR), 3.0 (KBA), MD 3.4 (TRI). Felt strongly in the Villach area. Felt (IV) in the Gorica-Tolmin-Kobarid area, Yugoslavia. Also felt at Jesenice, Yugoslavia. Felt strongly in northeastern Italy.
	01	11 23 53.48	61.571 N 141.350 W	0	4.1		39	SOUTHERN ALASKA. <AGS-P>. ML 4.1 (PMR).
	01	11 49 52.68	61.628 N 141.336 W	0	3.7		27	SOUTHERN ALASKA. <AGS-P>. ML 3.4 (PMR).
a	01	12 23 03.3	21.107 S 174.350 W	33 N	5.4 5.0	1.0	90	TONGA ISLANDS
	01	12 28 49.2	1.219 S 145.938 E	10 G	4.9	1.0	24	ADMIRALTY ISLANDS REGION
	01	12 39 05.27	31.30 S 69.57 W	33 N		1.3	7	SAN JUAN PROVINCE, ARGENTINA
	01	12 39 59.0	6.118 S 150.729 E	36 *	5.0	1.1	40	NEW BRITAIN REGION
	01	13 28 32.2*	44.844 N 149.220 E	33 N	4.5	1.0	27	KURIL ISLANDS
	01	13 29 28.0?	50.53 N 4.89 E	10 G		0.6	4	BELGIUM
a	01	13 32 51.9	24.675 S 70.405 W	30 D	5.2	1.1	108	NEAR COAST OF NORTHERN CHILE
	01	14 21 37.7	46.314 N 13.125 E	8	4.5	1.1	133	AUSTRIA. ML 5.4 (GRF), 5.1 (VIE), 4.8 (FUR), 4.8 (VKA), 4.5 (ZUR), 4.5 (LDG), 4.5 (ZAG). MD 4.1 (TRI). Minor damage (VI) at Amara; felt (IV) at Udine and (III) at Trieste, Italy. Felt strongly in the Gorica-Tolmin-Kobarid area; felt at Jesenice and Ljubljana, Yugoslavia. Felt strongly at Villach.
	01	15 22 20.2*	46.325 N 13.128 E	10 G		0.8	5	AUSTRIA. ML 2.2 (KBA).
	01	16 13 33.6*	17.283 S 167.176 E	33 N	4.5	0.9	6	VANUATU ISLANDS
	01	16 33 59.3	42.159 N 19.206 E	10 G		0.6	8	YUGOSLAVIA. ML 2.4 (TTG).
	01	16 51 45.8*	46.441 N 13.121 E	10 G		0.7	5	AUSTRIA. ML 2.0 (KBA).
	01	17 48 20.9*	45.280 N 26.954 E	33 N		1.2	6	ROMANIA
	01	17 48 40.7	46.364 N 13.199 E	11		1.4	32	AUSTRIA. ML 3.4 (LDG), 3.4 (VKA), 3.4 (GRF), 2.9 (KBA). MD 3.1 (TRI). Felt strongly in northeastern Italy.
	01	18 11 40.4*	25.783 N 102.667 E	10 G	4.3	0.9	5	YUNNAN PROVINCE, CHINA. ML 4.4 (BJI).
	01	18 37 46.8	38.755 N 116.512 W	5 G		1.0	8	NEVADA. ML 3.3 (NEIS).
	01	18 39 30.8*	46.384 N 13.118 E	5 G		0.5	5	AUSTRIA. ML 1.8 (KBA).
	01	19 15 39.27	0.21 S 124.93 E	88 *	4.3	1.0	7	MOLUCCA SEA
	01	22 01 44.3	44.785 N 114.388 W	5 G		0.4	10	WESTERN IDAHO. ML 2.7 (NEIS), 3.0 (BUT).
	02	01 29 10.4	44.184 N 17.737 E	10 G		1.2	13	YUGOSLAVIA. ML 3.0 (KBA), 2.3 (TTG).
	02	02 08 01.5?	62.12 N 4.51 E	10 G		0.7	6	NORWEGIAN SEA. MD 2.1 (BER).
	02	02 37 42.0?	21.11 S 68.73 W	241 ?		1.2	8	CHILE-BOLIVIA BORDER REGION
	02	03 18 56.6	46.326 N 13.162 E	5 G		1.3	8	AUSTRIA. ML 2.3 (KBA).
	02	03 21 07.8	46.286 N 13.194 E	10 G		1.4	7	AUSTRIA. ML 2.4 (KBA). MD 2.5 (TRI).
	02	03 36 24.5	46.342 N 13.178 E	10 G		1.3	8	AUSTRIA. ML 2.3 (KBA).
	02	04 16 57.3*	6.591 S 130.554 E	33 N	4.1	1.4	8	BANDA SEA
	02	04 29 17.2*	9.521 S 117.600 E	33 N	4.5 3.2	0.9	10	SUMBAWA ISLAND REGION
	02	04 59 05.1	46.108 N 7.708 E	10 G		1.0	7	SWITZERLAND

02	05	34	16.77	33.50	S	72.19	W	10	G	0.7	9	OFF COAST OF CENTRAL CHILE	
02	08	36	19.0	44.501	N	9.584	E	10	G	0.8	17	NORTHERN ITALY. ML 2.9 (LDG).	
02	08	54	38.3*	42.064	N	142.223	E	73	4.8	1.0	29	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Obihiro and Urakawa.	
02	09	58	02.9	44.505	N	9.608	E	10	G	0.8	16	NORTHERN ITALY. ML 3.0 (LDG).	
02	09	58	09.7	46.311	N	13.143	E	5	G	1.2	9	AUSTRIA. ML 2.7 (KBA). MD 2.9 (TRI).	
02	10	23	53.4	46.370	N	13.193	E	10	G	1.2	7	AUSTRIA. ML 2.6 (KBA). MD 2.7 (TRI).	
02	11	40	10.8	17.869	N	62.286	W	10	G	4.1 3.7	0.9	13	LEEWARD ISLANDS. ML 4.2 (FDF).
02	11	45	09.87	44.20	N	9.39	E	10	G	0.7	5	NORTHERN ITALY. ML 2.7 (LDG).	
02	12	09	56.4*	57.942	N	156.870	W	148	?	1.9	11	ALASKA PENINSULA	
02	12	48	41.27	31.18	S	178.46	W	33	N	5.0	1.1	8	KERMADEC ISLANDS REGION
02	13	47	57.57	30.17	S	72.13	W	10	G	1.5	7	OFF COAST OF CENTRAL CHILE	
02	15	58	50.2	45.294	N	150.093	E	51	D	5.2	109	KURIL ISLANDS	
02	16	09	05.4*	42.281	N	18.983	E	10	G	0.2	5	YUGOSLAVIA. MD 2.1 (TTG).	
02	18	12	09.5	44.509	N	9.549	E	10	G	0.9	23	NORTHERN ITALY. ML 3.1 (LDG). 2.9 (KBA).	
02	18	33	57.87	15.13	N	60.30	W	33	N	0.2	7	LEEWARD ISLANDS. ML 2.8 (FDF).	
02	19	01	30.0	37.907	S	177.433	E	85	4.6	1.2	17	OFF E. COAST OF N. ISLAND, N.Z. Felt at Whakatane and in the Bay of Plenty area.	
02	20	36	50.5	19.766	S	133.945	E	10	G	1.1	6	NORTHERN TERRITORY, AUSTRALIA	
02	21	03	22.9*	59.577	S	26.140	W	33	N	4.8	1.0	23	SOUTH SANDWICH ISLANDS REGION
02	21	11	06.5	0.937	N	126.089	E	65	*	4.8	0.9	27	MOLUCCA PASSAGE
02	22	30	14.1	1.816	N	127.197	E	96	5.3	1.1	77	HALMAHERA	
02	22	50	58.4*	46.358	N	13.165	E	10	G	1.0	5	AUSTRIA. ML 2.3 (KBA). MD 2.6 (TRI).	
02	23	33	55.07	23.50	N	122.06	E	10	G	0.2	5	TAIWAN REGION	
02	23	46	16.7	6.857	N	73.016	W	153	5.2	1.0	64	NORTHERN COLOMBIA	
03	00	09	18.1	44.482	N	9.581	E	11		1.1	31	NORTHERN ITALY. ML 3.0 (LDG). 2.6 (KBA).	
03	01	04	12.37	33.47	S	72.16	W	10	G	0.8	9	OFF COAST OF CENTRAL CHILE	
03	02	09	43.5	59.320	S	25.718	W	33	N	4.9	0.9	22	SOUTH SANDWICH ISLANDS REGION
03	04	19	41.4	16.435	N	147.976	E	37	D	4.8	1.0	30	MARIANA ISLANDS REGION
03	04	47	44.1*	36.985	N	121.717	W	11			14	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).	
03	05	31	19.4*	2.054	N	96.676	E	33	N	3.7	0.8	9	NORTHERN SUMATERA
03	05	43	00.2	34.799	N	140.066	E	88	4.9	1.2	94	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Tateyama and Katsuura; (II JMA) at Tokyo, Chiba, Ajiro, and an Oshima; (I JMA) at Mito and Utsunomiya.	
03	05	52	12.5	42.152	N	19.174	E	10	G	1.0	12	YUGOSLAVIA. MD 2.6 (TTG).	
03	05	55	52.0*	24.918	S	70.647	W	122	?	1.1	10	NEAR COAST OF NORTHERN CHILE	
03	07	05	26.5	27.813	N	142.692	E	36	*	4.9	0.9	42*	BONIN ISLANDS REGION
03	07	34	35.8*	55.161	S	1.740	W	10	G	4.7	0.9	9	BOUVET ISLAND REGION
03	08	17	42.3*	86.162	N	38.147	E	10	G	4.4	1.0	18	NORTH OF FRANZ JOSEF LAND
03	08	21	57.1*	44.315	N	4.597	E	10	G		1.3	7	FRANCE. ML 2.8 (LDG).
03	08	24	30.3*	27.751	N	142.799	E	45	*	4.5	1.3	12	BONIN ISLANDS REGION
03	08	35	30.4	40.465	N	23.669	E	10	G		0.8	12	GREECE
03	08	43	52.3*	65.436	S	179.638	E	10	G	5.0	1.2	16	BALLENY ISLANDS REGION
03	09	19	00.2*	36.200	N	120.800	W	7			14	CENTRAL CALIFORNIA. <BRK>. ML 2.9 (BRK).	
03	09	43	49.6	51.377	N	161.310	E	41	D	5.1 4.5	1.0	127	OFF EAST COAST OF KAMCHATKA
03	10	11	20.3	36.570	N	141.135	E	62	5.0	0.9	22	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Mito; (II JMA) at Onahama; (I JMA) at Utsunomiya, Fukushima, Tokyo and Maebashi. Felt also at Sendai.	
03	10	49	32.8	43.531	N	138.653	E	261	4.7	0.9	83	EASTERN SEA OF JAPAN	
03	11	40	52.5	44.512	N	9.548	E	10	G		1.1	19	NORTHERN ITALY. ML 2.9 (LDG).
03	12	26	37.3	19.871	S	133.641	E	10	G	4.6	1.4	16	NORTHERN TERRITORY, AUSTRALIA
03	12	52	18.2*	44.860	N	9.796	E	10	G		0.1	5	NORTHERN ITALY
03	14	37	21.37	60.39	N	2.62	E	10	G		0.8	6	NORTH SEA. MD 2.6 (BER).
03	15	34	45.1	1.042	N	85.128	W	10	G	5.0 4.3	1.1	51	OFF COAST OF ECUADOR
03	15	43	31.97	4.18	S	132.20	E	33	N		1.1	6	WEST IRIAN REGION
03	16	27	23.77	34.61	N	4.21	W	10	G		0.5	5	MOROCCO
03	17	03	43.7	47.399	N	9.536	E	10	G		1.1	7	GERMANY
03	17	34	53.2	27.832	N	142.758	E	39	D	5.2 5.0	1.1	115	BONIN ISLANDS REGION
03	19	43	41.3*	19.747	S	133.917	E	10	G		1.3	5	NORTHERN TERRITORY, AUSTRALIA
03	20	20	35.8*	61.777	N	151.800	W	96			26	SOUTHERN ALASKA. <AGS-P>.	
03	20	24	53.9*	9.208	S	66.978	E	10	G	5.1 5.1	1.5	53	MID-INDIAN RISE
03	21	16	56.7	44.469	N	9.549	E	5	G		1.1	19	NORTHERN ITALY. ML 2.8 (LDG).
03	21	57	18.9*	29.986	S	67.255	W	19	*		0.8	7	LA RIOJA PROVINCE, ARGENTINA
03	22	04	27.5*	15.821	S	167.101	E	33	N		0.7	8	VANUATU ISLANDS
04	00	17	43.1*	22.213	S	68.524	W	166	*		0.7	8	NORTHERN CHILE
04	00	59	16.77	7.85	S	126.48	E	33	N		1.2	5	BANDA SEA
04	02	30	02.9*	33.460	S	72.085	W	10	G		0.4	9	OFF COAST OF CENTRAL CHILE
04	02	35	59.6	50.750	N	173.500	E	33	N	5.0	1.1	93	ALEUTIAN ISLANDS REGION
04	02	44	29.9	52.862	N	159.894	E	32	D	5.4 5.0	0.9	232	OFF EAST COAST OF KAMCHATKA
04	02	49	31.7*	35.780	N	6.999	W	10	G		1.2	7	STRAIT OF GIBRALTAR
04	03	15	30.1*	47.368	N	12.080	E	10	G		1.2	6	AUSTRIA. ML 2.4 (KBA).
04	04	38	54.6*	21.388	S	68.130	W	33	N		1.3	7	CHILE-BOLIVIA BORDER REGION
04	05	16	05.4*	6.448	S	130.084	E	201	*	4.4	1.2	13	BANDA SEA
04	06	18	43.0*	40.203	N	77.737	E	33	N		0.4	6	KIRGHIZ-XINJIANG BORDER REGION
04	06	20	52.1*	34.912	N	26.518	E	33	N	4.2	1.2	11	CRETE. ML 4.3 (ATH).
04	06	27	22.7*	24.948	S	70.195	W	33	N		1.4	8	NEAR COAST OF NORTHERN CHILE
04	06	40	44.3*	61.948	N	150.723	W	80			23	SOUTHERN ALASKA. <AGS-P>.	
04	06	45	18.4*	60.113	N	152.981	W	114	4.1		44	SOUTHERN ALASKA. <AGS-P>.	
04	09	32	54.97	17.67	S	174.36	W	133	?	4.7	0.5	12	TONGA ISLANDS
04	11	26	47.97	43.48	N	20.30	E	10	G		1.4	9	YUGOSLAVIA. ML 2.6 (TTG).
04	11	49	55.9	2.591	S	121.210	E	44	*	5.1	0.8	17	SULAWESI
04	13	30	33.0	19.928	S	133.755	E	10	G	4.7	1.3	15	NORTHERN TERRITORY, AUSTRALIA
04	13	51	33.3*	19.731	S	133.950	E	10	G		1.5	6	NORTHERN TERRITORY, AUSTRALIA
04	16	02	38.67	28.89	S	71.08	W	170	?		0.8	12	NEAR COAST OF CENTRAL CHILE
04	16	04	43.4	18.849	S	67.155	W	255	4.2		0.9	21	BOLIVIA
04	16	52	52.57	36.64	N	106.29	E	10	G		1.5	4	NORTHERN CHINA. ML 3.8 (BJI).
04	17	37	04.47	51.19	N	16.14	E	10	G		1.0	4	POLAND
04	18	44	47.2	18.284	N	145.573	E	209	*	4.5	0.7	32	MARIANA ISLANDS
04	19	36	10.3	11.647	S	166.139	E	80	*	4.7	0.8	24	SANTA CRUZ ISLANDS
04	19	37	37.0	46.311	N	13.134	E	16	4.2		1.2	87	AUSTRIA. ML 4.6 (GRF). 4.3 (VKA). 4.1 (LDG). 4.1 (FUR). 3.7 (LJU). MD 3.8 (TRI). Felt (IV) at Kobarid and Tolmin, Yugoslavia.
04	20	30	56.9*	31.790	N	116.310	W	6	G		6	BAJA CALIFORNIA. <PAS-P>. ML 3.1 (PAS).	

04	21 15 57.6	40.675 N	23.119 E	10 G	0.3	8	GREECE. ML 2.1 (SKO).
04	22 23 27.4	39.127 N	23.215 E	10 G	0.5	8	AEGEAN SEA
04	23 45 30.0	16.943 S	179.325 W	525 ? 4.6	0.8	22	FIJI ISLANDS REGION
05	00 05 37.9	52.786 N	87.749 E	33 N 4.3	1.0	24	CENTRAL USSR
05	00 38 37.7	5.510 S	132.007 E	102 * 4.3	1.0	10	AROE ISLANDS REGION
05	00 48 12.77	18.63 N	65.75 W	10 G	0.7	5	PUERTO RICO REGION
05	01 42 56.9	31.680 N	115.750 W	6 G		5	BAJA CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
05	02 10 12.87	20.73 S	177.71 W	481 ? 4.4	1.5	12	FIJI ISLANDS REGION
05	02 10 27.87	34.93 N	21.92 E	33 N	0.8	9	MEDITERRANEAN SEA. ML 3.7 (ATH).
05	02 11 02.27	42.646 N	18.712 E	10 G	0.2	7	YUGOSLAVIA. ML 2.4 (TTG).
05	02 14 58.8	46.362 N	13.124 E	10 G	1.1	6	AUSTRIA. ML 2.3 (KBA). MD 2.5 (TRI).
05	02 23 23.1	47.300 N	7.200 E	10 G	0.7	9	SWITZERLAND. ML 2.2 (LDG).
o 05	03 25 32.2	9.171 S	124.111 E	79 D 5.5	1.2	130	TIMOR
05	03 30 31.2	61.786 N	151.169 W	75		35	SOUTHERN ALASKA. <AGS-P>.
05	04 14 34.8	47.716 N	5.503 E	10 G	0.7	12	FRANCE. ML 2.7 (LDG).
05	06 08 59.1	18.202 N	98.929 W	66	3.6	1.1	CENTRAL MEXICO
05	06 58 43.9	32.020 N	116.250 W	6 G		5	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
o 05	08 04 34.5	12.951 N	145.732 E	67	5.5	1.0	156 SOUTH OF MARIANA ISLANDS. Felt (II) on Guam.
05	08 16 33.6	41.112 N	22.654 E	10 G	0.5	7	YUGOSLAVIA. ML 1.9 (SKO).
05	08 23 39.4	9.289 S	124.177 E	33 N 4.9	1.2	19	TIMOR
05	08 36 39.7	45.665 N	0.892 W	10 G	0.8	28	FRANCE. ML 4.0 (LDG).
05	10 44 47.6	12.916 N	87.957 W	79 D 5.1	1.1	53	NEAR COAST OF NICARAGUA
05	11 41 07.1	45.586 N	151.497 E	49 D 4.7	1.1	31	KURIL ISLANDS
05	13 03 20.8	50.565 N	5.531 E	10 G	0.7	5	BELGIUM
05	13 03 31.1	39.783 N	27.855 E	10 G	0.9	8	TURKEY
05	13 44 47.2	18.136 S	178.200 W	609 5.2	0.9	126	FIJI ISLANDS REGION
05	13 44 48.1	50.652 N	6.042 E	10 G	0.9	5	GERMANY
05	13 53 08.0	58.826 N	151.691 W	60		40	KODIAK ISLAND REGION. <AGS-P>.
f 05	14 01 02.7	24.753 S	70.433 W	37 D 6.2 6.7	1.1	313	NEAR COAST OF NORTHERN CHILE. Ms 6.7 (PAS), 6.6 (BRK). Minor damage (VI) in the Taltal area; felt (VI) at Antofagasta; (V) at Mejillanes, Calama, Capiapa and Chanorral; (III) at Caldera. Also felt at La Serena. A tsunami with a maximum amplitude of 12 cm. peak to trough was recorded at Caldera.
05	15 25 56.07	24.74 S	71.15 W	33 N	1.4	6	OFF COAST OF NORTHERN CHILE
05	16 00 14.6	24.976 S	70.254 W	105 ?	1.1	8	NEAR COAST OF NORTHERN CHILE
05	16 47 09.7	34.739 N	80.530 E	33 N 4.3	1.4	18	TIBET
05	17 13 27.77	37.35 N	14.33 W	10 G	0.9	9	NORTH ATLANTIC OCEAN
05	17 24 57.2	6.790 S	155.434 E	48 * 3.9	0.7	9	SOLOMON ISLANDS
05	17 30 06.57	7.43 S	128.44 E	149 ? 4.6	0.6	6	BANDA SEA
05	17 37 05.7	46.370 N	13.185 E	10 G	1.2	9	AUSTRIA. ML 2.6 (KBA). MD 2.6 (TRI). Felt strongly in parts of Friuli, Italy.
05	18 15 26.3	15.102 S	175.155 E	618 4.9	0.7	47	FIJI ISLANDS REGION
05	18 35 07.8	24.657 S	70.111 W	33 N	1.5	11	NEAR COAST OF NORTHERN CHILE
o 05	18 49 31.8	24.893 S	70.554 W	31 D 6.0 6.1	1.0	259	NEAR COAST OF NORTHERN CHILE. Ms 5.9 (PAS). Felt (IV) at Calama, Mejillanes and Capiapa.
05	21 32 22.37	24.49 S	71.64 W	33 N	1.3	5	OFF COAST OF NORTHERN CHILE
05	21 46 26.0	36.742 N	12.770 E	33 N	1.0	20	MEDITERRANEAN SEA
05	21 58 19.07	31.94 S	68.78 W	30 *	1.3	6	SAN JUAN PROVINCE, ARGENTINA
05	23 24 40.2	24.382 S	71.031 W	33 N	1.5	7	OFF COAST OF NORTHERN CHILE
05	23 44 15.97	31.55 N	85.73 E	33 N 3.2	0.1	5	TIBET
06	00 22 47.37	47.29 N	1.34 W	10 G	0.7	7	FRANCE
06	01 51 18.4	62.213 N	150.985 W	66		30	CENTRAL ALASKA. <AGS-P>.
06	02 03 14.3	43.677 N	13.173 E	10 G	0.6	5	CENTRAL ITALY. ML 2.3 (KBA).
o 06	02 32 03.4	4.692 S	153.210 E	27	5.3 4.7	1.1	105 NEW IRELAND REGION
06	03 12 14.47	25.18 S	71.98 W	33 N	0.8	6	OFF COAST OF NORTHERN CHILE
06	04 19 11.1	49.799 N	78.064 E	33 N 4.8	0.8	30	EASTERN KAZAKH SSR
06	04 21 30.1	46.337 N	13.172 E	10 G	1.4	6	AUSTRIA. ML 2.4 (KBA). MD 2.6 (TRI).
06	05 10 00.7	53.642 N	167.090 W	33 N 4.7	0.9	50	FIJI ISLANDS, ALEUTIAN ISLANDS. ML 5.2 (PMR).
o 06	05 23 57.9	16.679 S	124.663 E	10 G 5.2	1.2	57	WESTERN AUSTRALIA. Felt at Derby.
06	05 38 32.1	39.227 N	29.138 E	5 G	1.4	8	TURKEY
06	07 09 39.9	25.027 S	70.776 W	33 N 4.7	1.1	19	NEAR COAST OF NORTHERN CHILE
06	07 25 24.27	6.28 S	130.21 E	191 ? 4.9	1.5	8	BANDA SEA
06	07 26 19.27	24.52 S	70.80 W	33 N	1.5	5	NEAR COAST OF NORTHERN CHILE
o 06	07 42 34.7	20.094 S	68.543 W	132 5.2	1.2	120	CHILE-BOLIVIA BORDER REGION
06	08 06 03.2	33.910 N	116.990 W	16		14	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS). Felt in Riverside County.
06	08 06 32.8	4.803 S	153.181 E	38 * 5.0	1.3	16	NEW IRELAND REGION
06	08 57 10.6	62.238 N	149.675 W	44		27	CENTRAL ALASKA. <AGS-P>.
06	09 11 27.0	61.568 N	141.356 W	0 4.1		37	SOUTHERN ALASKA. <AGS-P>. ML 3.9 (PMR).
06	09 18 16.5	44.188 N	147.553 E	70 D 4.6	1.1	30	KURIL ISLANDS
06	09 55 00.97	31.77 S	71.73 W	28	0.7	12	NEAR COAST OF CENTRAL CHILE
06	10 51 39.27	24.17 S	67.20 W	203 ?	0.2	5	CHILE-ARGENTINA BORDER REGION
06	11 29 16.6	23.933 S	178.869 E	569 * 5.1	0.9	26	SOUTH OF FIJI ISLANDS
06	11 29 43.8	36.090 N	120.048 W	11		17	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
06	11 47 21.9	31.380 N	115.390 W	6 G		5	BAJA CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
06	12 15 47.6	22.030 S	179.512 W	600 * 4.8	0.8	20	SOUTH OF FIJI ISLANDS
06	12 24 37.87	46.40 N	13.15 E	10 G	1.2	4	AUSTRIA. ML 1.3 (KBA).
06	12 34 25.7	40.395 N	28.950 E	10 G	1.1	8	TURKEY
06	12 51 44.8	47.666 N	120.024 W	7		47	WASHINGTON. <SEA>. CL 3.0 (SEA). Felt at Chelan.
06	14 48 41.47	29.22 S	72.54 W	33 N	1.1	10	OFF COAST OF CENTRAL CHILE
f 06	14 50 45.2	24.688 N	91.570 E	33 N 5.8 5.8	1.2	309	INDIA-BANGLADESH BORDER REGION. Two people killed, at least 100 injured and damage in the Sylhet, Bangladesh area. Felt throughout Bangladesh. Felt strongly in the Tripura-Assam, India area. Also felt at Gauhati and Shillong, India.
06	15 02 45.5	5.374 N	82.761 W	10 G 4.3	0.8	13	SOUTH OF PANAMA
o 06	15 15 40.9	6.543 S	131.907 E	39 D 5.9 5.6	1.0	195	TANIMBAR ISLANDS REGION
06	16 04 37.17	32.00 S	71.71 W	10 G	0.5	8	NEAR COAST OF CENTRAL CHILE
06	16 52 20.5	39.569 N	28.504 E	8	0.7	13	TURKEY
06	17 07 15.9	19.636 S	134.004 E	10 G	0.5	5	NORTHERN TERRITORY, AUSTRALIA
06	17 47 05.1	3.219 S	148.945 E	10 G 4.6	1.2	22	BISMARCK SEA
o 06	18 03 54.7	17.756 S	66.958 W	285 D 6.0	1.1	345	BOLIVIA. mb 6.2 (BRK). Felt (V) in the Tacna-Maquegua

06	18 42 17.3	42.137 N	19.107 E	16	3.6	1.2	91	area and (III) at Arequipa, Peru. YUGOSLAVIA. ML 3.8 (LJU). MD 4.6 (TRI). 4.0 (TTG). Felt (VI) at Bar and Ulcinj; (IV) at Titograd, Budva and Cetinje.
06	19 08 26.4*	19.567 S	133.799 E	10 G	5.0	1.4	7	NORTHERN TERRITORY, AUSTRALIA
06	20 09 31.5%	40.045 N	27.711 E	10 G		1.1	8	TURKEY
06	20 16 50.8	39.961 N	27.764 E	10 G		0.9	19	TURKEY
a 06	21 30 04.3	16.195 S	173.820 W	126 D	5.8	0.9	218	TONGA ISLANDS
06	21 40 41.4	24.573 S	70.934 W	33 N	4.8	1.1	19	NEAR COAST OF NORTHERN CHILE
06	22 20 59.2	42.166 N	19.185 E	10 G		0.5	8	YUGOSLAVIA. ML 2.4 (TTG).
06	22 44 04.8*	24.570 S	70.582 W	33 N		1.3	12	NEAR COAST OF NORTHERN CHILE
06	22 48 54.5	38.176 N	20.393 E	10 G	3.8	1.3	43	GREECE. ML 3.9 (ATH).
06	23 03 51.4	25.017 S	71.127 W	10 G	4.8	1.4	20	OFF COAST OF NORTHERN CHILE
06	23 38 23.5	42.164 N	19.173 E	10 G		0.6	9	YUGOSLAVIA. ML 2.4 (TTG).
07	00 53 56.9?	40.51 N	21.23 E	10 G		1.5	5	GREECE
07	02 25 26.7?	16.50 N	61.35 W	31 ?		0.3	5	LEEWARD ISLANDS. ML 2.0 (FDF).
07	03 20 28.0	36.431 N	71.786 E	33 N	4.7 4.2	1.1	14	AFGHANISTAN-USSR BORDER REGION
07	03 33 16.4	17.655 S	167.745 E	10 G	5.4 4.3	1.2	63	VANUATU ISLANDS
a 07	04 05 31.3	17.559 S	167.874 E	23 *	5.3 4.9	1.0	80	VANUATU ISLANDS
07	05 20 48.5?	17.64 S	168.12 E	49 *	4.5 4.9	1.3	12	VANUATU ISLANDS
07	05 30 40.5*	31.657 S	65.987 W	149 *	3.8	1.2	23	CORDOBA PROVINCE, ARGENTINA
07	05 35 00.4?	10.10 S	75.17 W	174 ?	4.7	1.0	17	PERU. Felt in the Lima area.
07	08 45 10.9?	24.57 S	70.85 W	33 N		0.1	5	NEAR COAST OF NORTHERN CHILE
a 07	08 46 58.6&	60.296 N	152.972 W	138	5.6	4.88		SOUTHERN ALASKA. <AGS-P>. mb 5.8 (PAS), 5.6 (BRK). Felt (V) at Anchorage, Anchor Point, Clam Gulch, Gustavus, Homer, Kasilof, Kenai, Moose Pass, Ninilchik, Palmer, Port Graham, Seldovia, Seward, Soldotna, Talkeetna, Trapper Creek, Whittier and Willow. Felt throughout the Cook Inlet area. Also felt at Kodiak and Fairbanks.
07	08 58 45.6	5.261 N	126.564 E	61 ?	5.1	1.5	15	MINDANAO, PHILIPPINE ISLANDS
07	09 07 11.5&	31.780 N	115.800 W	6 G			5	BAJA CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
07	09 23 21.4&	60.274 N	153.026 W	132			17	SOUTHERN ALASKA. <AGS-P>.
07	10 37 00.0&	59.912 N	153.233 W	120			18	SOUTHERN ALASKA. <AGS-P>.
07	10 45 49.9	3.305 N	84.173 W	10 G	4.6	1.0	17	OFF COAST OF CENTRAL AMERICA
07	11 13 17.9*	22.905 S	69.166 E	10 G	4.8 4.8	1.0	18	MID-INOIAN RISE
07	12 01 52.3?	57.36 N	5.72 W	10 G		0.3	7	UNITED KINGDOM. ML 2.4 (BGS).
07	14 26 48.3?	8.07 S	124.11 E	179 ?	4.5	1.4	9	TIMOR
07	15 03 29.0	54.080 N	165.687 W	64 *	4.8	0.9	51	FOX ISLANDS, ALEUTIAN ISLANDS
07	15 59 44.1*	13.942 S	167.903 E	10 G	4.2	0.9	29	VANUATU ISLANDS
07	16 02 09.7	40.731 N	29.732 E	12		1.2	12	TURKEY. Felt in the Izmit area.
07	16 43 06.0*	2.650 N	128.946 E	33 N	4.8	0.9	15	HALMAHERA
07	17 56 29.2	40.436 N	29.132 E	10 G		0.9	15	TURKEY
07	18 14 53.1?	31.33 S	178.49 W	33 N	5.6	1.3	14	KERMADEC ISLANDS REGION
f 07	18 15 05.6	50.785 N	173.465 E	33 N	6.2 6.0	1.1	445	ALEUTIAN ISLANDS REGION. Ms 6.3 (BRK), 5.9 (PAS). Felt (III) on Shemya.
07	18 51 29.6*	50.682 N	173.419 E	33 N	4.6	1.0	31	ALEUTIAN ISLANDS REGION. ML 4.7 (PMR).
07	19 01 31.8?	24.63 S	70.36 W	72 ?		0.7	6	NEAR COAST OF NORTHERN CHILE
07	20 54 22.7%	40.701 N	29.807 E	10 G		0.8	9	TURKEY
07	21 43 21.6%	40.690 N	29.692 E	10 G		0.6	7	TURKEY
07	21 44 39.8&	60.324 N	152.982 W	138			14	SOUTHERN ALASKA. <AGS-P>.
07	21 47 57.2*	17.524 S	178.617 W	555	5.0	0.8	22	FIJI ISLANDS REGION
07	21 49 04.4	45.377 N	3.680 E	10 G		1.0	22	FRANCE. ML 3.5 (LDG).
07	23 03 01.7*	18.081 S	177.876 W	580	4.8	0.9	29	FIJI ISLANDS REGION
08	01 17 11.4	40.462 N	29.173 E	10 G		0.9	15	TURKEY
08	01 34 01.2*	3.466 S	145.545 E	33 N	4.7	0.9	11	NEAR N COAST OF PAPUA NEW GUINEA
08	02 47 33.5	42.175 N	19.176 E	11		1.0	38	YUGOSLAVIA. MD 3.3 (TTG). Felt (V) in the Bar area.
08	03 50 10.8	42.154 N	19.166 E	10 G		0.8	12	YUGOSLAVIA. MD 2.6 (TTG). Felt (IV) at Bar.
08	04 43 25.8&	60.251 N	153.074 W	135			20	SOUTHERN ALASKA. <AGS-P>.
08	06 16 59.7	14.060 N	91.956 W	60	4.8	1.1	61	GUATEMALA
08	07 00 12.9	39.074 N	0.739 W	22 *		0.9	15	SPAIN. MG 3.0 (MDD). Felt (III) at Ouesa.
08	07 10 49.0?	18.37 S	65.59 W	10 G		0.8	5	BOLIVIA
08	07 39 35.7?	15.54 N	90.16 E	10 G	4.3	1.4	8	BAY OF BENGAL
08	07 41 28.6%	40.450 N	29.083 E	10 G		0.5	7	TURKEY
08	09 16 27.1?	24.73 S	70.06 W	33 N		1.2	7	NEAR COAST OF NORTHERN CHILE
08	09 49 55.0*	10.559 N	84.767 W	152 ?		0.4	12	COSTA RICA. MD 4.6 (HDC).
08	09 56 20.3*	19.682 S	133.947 E	10 G		1.2	8	NORTHERN TERRITORY, AUSTRALIA
08	11 00 06.5	44.185 N	10.430 E	12		1.0	15	NORTHERN ITALY. ML 3.0 (LDG).
08	11 24 46.2	44.188 N	10.541 E	24	3.8	1.1	116	NORTHERN ITALY. ML 4.3 (LDG), 4.1 (TRI).
08	12 04 23.9?	40.13 N	29.02 E	10 G		0.4	4	TURKEY
08	12 28 14.7	44.156 N	10.437 E	10 G		1.2	11	NORTHERN ITALY
08	13 18 20.7&	60.012 N	151.990 W	67			38	KENAI PENINSULA, ALASKA. <AGS-P>.
08	13 36 44.7	44.187 N	10.579 E	26	3.7	1.2	78	NORTHERN ITALY. ML 4.1 (LDG). MD 4.0 (TRI).
a 08	13 51 33.9	17.737 N	100.965 W	58	5.5	1.2	160	GUERRERO, MEXICO. Ms 5.8 (BRK), 5.0 (PAS). Felt strongly at Mexico City. Felt throughout Guerrero and in parts of Morelos and the state of Mexico.
08	14 08 23.1	44.147 N	10.528 E	21	3.4	1.1	70	NORTHERN ITALY. MD 3.8 (TRI).
08	14 09 15.3&	37.323 N	121.725 W	6			23	CENTRAL CALIFORNIA. <BRK>. ML 4.0 (BRK). Mo=3.8*10**14 Nm (BRK). Felt (III) at Campbell, Coyote, Los Gatos, Redwood Estates and San Jose. Also felt at Berkeley and San Francisco.
08	15 31 11.4	44.168 N	10.549 E	24		0.8	13	NORTHERN ITALY. ML 3.1 (LDG).
a 08	15 57 00.2	24.801 S	70.393 W	32	5.6 5.2	1.1	134	NEAR COAST OF NORTHERN CHILE
08	16 49 34.7&	60.290 N	153.022 W	132			19	SOUTHERN ALASKA. <AGS-P>.
08	17 28 43.5&	40.347 N	124.740 W	23			21	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 4.0 (BRK). Mo=8.1*10**14 Nm (BRK).
08	17 49 19.8	43.733 N	83.764 E	10 G	4.3	1.0	17	NORTHERN XINJIANG, CHINA
08	18 54 43.7	6.075 S	103.838 E	52 D	4.8	1.1	63	SOUTHWEST OF SUMATRA
08	21 20 46.5&	60.409 N	152.922 W	126	4.2		39	SOUTHERN ALASKA. <AGS-P>.
08	21 43 14.5	12.295 N	88.659 W	41	5.0 3.8	1.2	60	OFF COAST OF CENTRAL AMERICA
08	23 27 05.5&	60.132 N	153.378 W	147			20	SOUTHERN ALASKA. <AGS-P>.
08	23 58 22.9	42.441 N	19.781 E	10 G		0.6	7	YUGOSLAVIA. MD 2.7 (TTG).
09	00 15 07.6&	59.949 N	153.058 W	108			20	SOUTHERN ALASKA. <AGS-P>.
09	00 22 19.3	44.177 N	10.440 E	12		1.0	21	NORTHERN ITALY. ML 2.9 (LDG).

09	00 49 50.0*	30.507 N	35.165 E	10 G	0.9	7	DEAD SEA REGION
09	01 27 26.2	40.706 N	23.118 E	10 G	0.3	9	GREECE. ML 2.7 (SKO).
09	02 19 54.2	36.576 N	21.506 E	26 4.1	1.3	42	SOUTHERN GREECE. ML 3.7 (ATH).
o 09	02 22 31.2	18.616 N	62.889 W	50 5.3 5.0	0.9	219	LEEWARD ISLANDS. Felt on St. Martin and on St. Barthelemy.
09	03 15 34.8	25.022 S	70.832 W	33 N 5.0	1.1	27	NEAR COAST OF NORTHERN CHILE
09	03 51 38.3	16.526 S	172.459 W	34 D 4.7 4.6	1.1	39	SAMOA ISLANDS REGION
09	04 09 44.2*	60.268 N	152.990 W	134		38	SOUTHERN ALASKA. <AGS-P>. Felt (III) at Homer.
09	04 32 30.6	24.916 S	70.783 W	33 D 5.1	0.9	51	NEAR COAST OF NORTHERN CHILE
09	05 01 56.0*	0.172 N	100.011 E	33 N	0.7	5	NORTHERN SUMATERA
09	05 05 40.17	11.07 S	165.07 E	33 N 4.1	0.1	5	SANTA CRUZ ISLANDS
09	05 37 16.7*	21.926 S	67.242 W	203 * 4.4	1.3	10	CHILE-BOLIVIA BORDER REGION
09	06 59 39.1	33.415 S	68.605 W	10 G	0.7	10	MENDOZA PROVINCE, ARGENTINA
09	08 24 25.8*	40.110 N	28.761 E	10 G	0.9	8	TURKEY
09	08 34 31.3?	38.98 N	28.92 E	10 G	0.9	7	TURKEY
09	09 21 06.6?	15.31 N	61.25 W	134 ?	0.5	10	LEEWARD ISLANDS
09	09 48 58.6*	44.159 N	10.495 E	10 G	1.0	5	NORTHERN ITALY
09	11 27 31.3?	51.38 N	178.27 W	33 N	0.8	6	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.0 (PMR). Felt (III) on Adok.
09	11 49 56.9	26.457 S	27.228 E	5 G	1.3	7	REPUBLIC OF SOUTH AFRICA. MG 3.4 (BUL).
09	12 02 42.3*	26.382 S	27.209 E	5 G	1.5	7	REPUBLIC OF SOUTH AFRICA. MG 3.6 (BUL).
09	12 48 39.4	14.971 S	172.234 W	33 N 4.7	1.0	41	SAMOA ISLANDS
09	14 40 55.9?	17.80 S	178.26 W	560 ? 4.3	0.9	16	FIJI ISLANDS REGION
09	14 44 58.1*	18.932 N	64.967 W	33 N	0.8	10	VIRGIN ISLANDS
09	15 30 19.1	43.137 N	71.758 W	5 G	0.8	7	NORTHERN NEW ENGLAND. mblg 2.6 (NEIS). Felt (V) at Henniker and (III) at Hillsboro, New Hampshire. Also felt at Bow, Goffstown and Manchester, New Hampshire.
09	16 35 23.7*	15.669 N	60.844 W	33 N	0.3	10	LEEWARD ISLANDS. ML 2.8 (FDF).
09	17 16 04.0?	32.47 S	68.39 W	10 G	0.9	12	MENDOZA PROVINCE, ARGENTINA
09	18 15 05.0?	6.61 S	130.44 E	183 ? 4.6	0.9	6	BANDA SEA
09	18 17 37.8?	42.61 N	0.35 E	10 G	0.9	5	PYRENEES. ML 2.5 (LDG).
o 09	19 12 44.0	18.607 N	62.902 W	53 5.1 4.9	1.0	114	LEEWARD ISLANDS. Felt on St. Martin and on St. Barthelemy.
09	20 27 09.4*	52.725 N	160.630 E	33 N 5.1	1.0	30	OFF EAST COAST OF KAMCHATKA
09	21 00 14.3	40.199 N	73.684 E	33 N 4.7	0.7	25	KIRGHIZ SSR. Felt (V) in the epicentral area and (IV) at Gulcho.
09	21 58 28.5*	52.262 N	176.516 E	128 * 4.7	1.2	22	RAT ISLANDS, ALEUTIAN ISLANDS
09	22 18 14.0	46.339 N	13.153 E	10 G	1.0	8	AUSTRIA. MD 2.4 (TRI).
09	22 41 18.8*	60.305 N	152.978 W	129		14	SOUTHERN ALASKA. <AGS-P>.
09	23 26 41.4	12.165 N	144.142 E	35 * 5.1 4.5	1.2	50	SOUTH OF MARIANA ISLANDS
09	23 56 34.4	14.457 N	53.374 E	10 G 4.7	1.2	47	ARABIAN SEA
10	00 35 11.4*	33.449 S	72.132 W	10 G	0.4	11	OFF COAST OF CENTRAL CHILE
10	00 52 43.9	46.334 N	13.163 E	10 G	1.1	10	AUSTRIA. MD 2.8 (TRI).
10	03 36 53.8	18.793 N	62.736 W	30 3.6	0.6	12	LEEWARD ISLANDS. ML 3.9 (FDF).
10	04 53 53.2	41.271 N	20.003 E	10 G	0.6	9	ALBANIA. ML 2.7 (TTG).
10	05 33 27.3*	19.686 S	133.838 E	10 G	1.1	5	NORTHERN TERRITORY, AUSTRALIA
10	06 22 45.6?	25.31 N	95.48 E	119 ?	0.1	6	BURMA-INDIA BORDER REGION
10	06 38 07.0?	37.017 N	5.410 W	10 G	1.0	7	SPAIN. MG 2.8 (MDD).
10	06 38 55.8*	37.058 N	5.396 W	5 G	0.9	7	SPAIN. MG 3.0 (MDD).
10	07 08 13.2?	32.49 S	71.80 W	33 N	0.6	8	NEAR COAST OF CENTRAL CHILE
10	07 09 42.0	0.576 N	98.596 E	61 * 5.1	1.0	65	NORTHERN SUMATERA
10	08 26 52.4*	37.533 N	3.518 W	5 G	0.6	6	SPAIN. MG 3.2 (MDD).
10	09 08 20.5*	31.890 N	115.810 W	6 G		5	BAJA CALIFORNIA. <PAS-P>. ML 3.4 (PAS).
10	09 41 58.2	52.647 N	169.216 W	33 N 4.8	1.0	54	FOX ISLANDS, ALEUTIAN ISLANDS
10	10 08 34.1	38.626 N	26.153 E	14	1.0	26	AEGEAN SEA. ML 3.8 (ATH).
10	10 23 53.1*	37.793 N	143.536 E	59 * 4.4	0.8	21	OFF EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Ishinomaki, Fukushima and Ofunato.
10	10 38 00.0	54.209 N	168.192 W	33 N 4.4	1.0	47	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.3 (PMR).
10	12 22 20.0*	38.818 N	122.823 W	0		20	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK). Mo=7.4*10**14 Nm (BRK). Felt at Cobb.
10	12 44 49.9*	39.618 N	29.337 E	10 G	0.8	5	TURKEY
10	14 17 45.8?	58.21 N	6.44 E	10 G	0.6	6	SOUTHERN NORWAY. MD 2.5 (BER).
10	15 00 36.3	60.562 N	5.075 E	10 G	0.4	6	SOUTHERN NORWAY. MD 2.0 (BER).
10	15 14 20.0	17.779 S	69.802 W	162 4.7	0.7	13	PERU-BOLIVIA BORDER REGION
10	17 24 53.8*	35.940 N	116.730 W	6 G		6	CENTRAL CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
10	18 15 36.1*	59.198 N	152.580 W	64		41	SOUTHERN ALASKA. <AGS-P>. Felt (III) at Homer and Soldotna.
10	19 13 00.8*	24.163 N	122.140 E	10 G	0.5	6	TAIWAN REGION
10	20 49 08.5?	12.77 S	33.85 E	33 N 4.3	1.5	7	MALAWI
10	20 58 36.6*	50.607 N	10.094 E	10 G	1.4	7	GERMANY. ML 2.6 (GRF).
10	21 40 41.7	23.318 N	120.796 E	10 G	0.7	6	TAIWAN
10	21 44 50.4*	40.413 N	124.952 W	17		14	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).
10	22 19 00.1*	24.996 S	71.361 W	33 * 5.1	1.4	24	OFF COAST OF NORTHERN CHILE
10	22 41 18.1?	0.38 N	98.49 E	33 N 3.1	0.8	6	NORTHERN SUMATERA
10	22 59 09.3	9.587 N	84.848 W	34 4.4	1.3	37	COSTA RICA. MD 4.6 (SJS), 4.3 (HDC). Felt (IV) at Jaco and Cobuya; (III) at Orotina and Paquero; (II) at San Jose and Arenal. Also felt at Alajuela, Esparzo and Santo Domingo.
10	23 05 58.5*	6.875 N	73.035 W	148 ? 4.9	1.0	33	NORTHERN COLOMBIA
10	23 10 00.4	41.731 N	23.729 E	13	1.2	10	GREECE-BULGARIA BORDER REGION
11	01 16 07.5	47.713 N	16.035 E	10 G	1.4	16	AUSTRIA. ML 3.5 (KBA), 3.0 (VKA). Felt (V) in the epicentral area.
11	01 27 14.1*	39.036 N	26.809 E	10 G	1.2	11	TURKEY
11	01 47 23.8*	40.400 N	124.400 W	22		5	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 2.8 (BRK).
11	02 15 14.1?	25.00 S	71.88 W	33 N	1.5	7	OFF COAST OF NORTHERN CHILE
11	02 31 51.9	49.639 N	129.697 W	10 G 4.5	0.9	31	VANCOUVER ISLAND REGION
o 11	02 56 10.1*	35.616 S	102.268 W	10 G 5.3 5.3	1.2	54	SOUTHERN PACIFIC OCEAN
11	04 40 37.0	39.343 N	27.910 E	10 G	0.9	17	TURKEY
11	04 56 13.2?	16.18 N	60.33 W	10 G	0.2	5	LEEWARD ISLANDS. ML 2.6 (FDF).
11	05 19 06.2?	52.94 N	160.29 E	33 N 4.9	0.8	10	OFF EAST COAST OF KAMCHATKA
11	05 49 06.7?	53.31 N	158.96 E	33 N 4.5	0.4	6	NEAR EAST COAST OF KAMCHATKA
11	06 16 40.0?	27.70 N	54.88 E	33 N 4.3	1.6	5	SOUTHERN IRAN
11	07 34 11.7?	56.17 N	155.11 W	33 N 4.5	1.1	9	ALASKA PENINSULA

11	08	14	18.0%	40.038 N	27.984 E	10 G	0.3	6	TURKEY
11	08	57	29.1%	61.773 N	151.157 W	74		30	SOUTHERN ALASKA. <AGS-P>.
11	09	21	19.8%	37.500 N	71.350 E	33 N 4.4	1.1	8	AFGHANISTAN-USSR BORDER REGION
11	10	33	22.6%	61.197 N	151.667 W	81		29	SOUTHERN ALASKA. <AGS-P>.
11	11	05	34.0%	61.831 N	152.027 W	112		25	SOUTHERN ALASKA. <AGS-P>.
11	11	14	03.8%	62.155 N	149.635 W	51 3.5		42	CENTRAL ALASKA. <AGS-P>.
11	12	17	20.9	60.110 N	4.971 E	10 G	0.3	6	SOUTHERN NORWAY. MD 2.1 (BER).
11	12	51	18.8%	11.59 S	117.94 E	33 N	1.4	6	SOUTH OF SUMBAWA ISLAND
11	14	51	26.1%	43.53 N	0.62 W	11	1.1	10	PYRENEES. ML 3.5 (LDG).
11	15	25	55.6%	34.080 N	118.050 W	12 4.8		54	SOUTHERN CALIFORNIA. <PAS-P>. ML 4.7 (PAS), 4.8 (BRK). One person died from a heart attack. Some minor injuries and damage (VI) in the Whittier area. Felt (V) at Alhambra, Arcadio, Azusa, Baldwin Park, Bell Gardens, Commerce, Downey, Fullerton, Glendale, Inglewood, La Mirada, La Puente, Los Angeles, Maywood, Montebello, Norwalk, Pasadena, San Gabriel and Vernon. Felt strongly in much of southern California.
11	15	32	28.1%	52.967 N	160.017 E	33 N 5.0	1.0	35	OFF EAST COAST OF KAMCHATKA
11	19	07	37.8%	45.417 N	26.384 E	123 ?	1.2	10	ROMANIA
11	21	31	00.9%	39.957 S	71.198 W	150 ? 4.8	1.2	25	S. CHILE-ARGENTINA BORDER REGION
11	23	41	00.3%	6.694 S	149.540 E	23 * 5.1	1.5	32	NEW BRITAIN REGION
12	00	09	32.0%	43.737 N	20.523 E	10 G	1.0	6	YUGOSLAVIA. ML 2.3 (TTG).
12	01	19	17.7%	24.942 S	71.054 W	29 * 4.5	1.3	12	OFF COAST OF NORTHERN CHILE
12	01	20	18.4	46.441 N	142.886 E	334 * 4.4	1.0	37	SAKHALIN ISLAND
12	01	41	15.1	30.515 N	82.887 E	33 N 4.6	1.0	24	TIBET
12	03	35	39.0	24.949 S	70.962 W	41 * 4.8	1.6	35	NEAR COAST OF NORTHERN CHILE
o 12	05	23	56.4	30.105 N	113.896 W	10 G 5.3 5.4	1.7	75	GULF OF CALIFORNIA
12	05	50	46.9%	29.857 N	114.091 W	10 G 5.1	1.5	26	BAJA CALIFORNIA
12	05	51	38.5%	25.119 N	93.859 E	33 N 4.3	1.0	6	EASTERN INDIA
12	06	06	39.2%	46.36 N	10.05 E	10 G	1.5	6	NORTHERN ITALY
12	07	05	14.6%	60.482 N	152.559 W	99		34	SOUTHERN ALASKA. <AGS-P>.
12	07	57	19.9	32.670 S	69.716 W	153 *	0.5	16	MENDOZA PROVINCE, ARGENTINA
12	10	49	40.0	39.059 N	21.847 E	10 G	1.3	16	GREECE. ML 3.3 (ATH).
12	11	39	44.9	19.910 S	133.655 E	5 G	0.9	8	NORTHERN TERRITORY, AUSTRALIA
o 12	12	10	23.1	2.200 N	98.805 W	10 G 5.4 4.8	1.3	49	WEST OF GALAPAGOS ISLANDS
12	12	11	17.5%	58.806 N	152.616 W	59		26	KODIAK ISLAND REGION. <AGS-P>.
12	14	16	32.1%	37.744 N	25.447 W	10 G	0.8	5	AZORES ISLANDS
12	16	05	58.2	19.989 S	133.827 E	5 G	1.5	15	NORTHERN TERRITORY, AUSTRALIA
o 12	16	20	29.3	35.527 N	140.639 E	58 5.2	1.2	125	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Choshi; (II JMA) at Mito and Tateyama; (I JMA) at Tokyo, Ajiro and Utsunomiya.
12	17	54	13.4%	31.71 S	29.77 E	10 G 4.5	1.1	8	REPUBLIC OF SOUTH AFRICA
o 12	19	15	35.4	23.855 N	122.477 E	35 5.6 5.3	1.0	248	TAIWAN REGION. Felt on northeastern Taiwan.
12	19	30	03.9%	37.630 N	118.980 W	6 G		19	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS), 3.0 (BRK).
12	19	30	24.0%	30.541 S	29.007 E	10 G 4.6	1.3	12	REPUBLIC OF SOUTH AFRICA
12	19	32	00.3	43.831 N	4.108 E	10 G	0.9	26	NEAR SOUTH COAST OF FRANCE. ML 3.4 (LDG).
12	19	42	20.6%	23.66 N	122.90 E	33 N	1.3	7	TAIWAN REGION
12	20	02	24.9	5.400 N	126.166 E	100 * 5.1	1.2	76	MINDANAO, PHILIPPINE ISLANDS
12	20	48	42.5%	19.700 S	134.013 E	5 G	1.2	6	NORTHERN TERRITORY, AUSTRALIA
12	22	00	38.1%	59.952 N	153.383 W	115		14	SOUTHERN ALASKA. <AGS-P>.
12	22	07	45.7%	50.31 N	19.53 E	33 N	1.2	5	POLAND. ML 2.9 (KRA).
12	22	47	09.1%	24.554 S	69.647 W	33 N	1.5	10	NORTHERN CHILE
13	01	39	09.2	36.006 N	23.354 E	21 * 4.3	1.3	40	SOUTHERN GREECE. ML 3.6 (ATH).
13	01	47	37.1	36.121 N	1.798 E	10 G 4.0	1.1	30	ALGERIA. Felt at Ain Deflo.
13	02	44	53.6%	23.807 N	122.604 E	33 N 4.1	1.2	19	TAIWAN REGION
13	03	05	05.9	49.954 N	78.910 E	0 G 6.1 4.5	0.8	470	EASTERN KAZAKH SSR
13	03	11	19.5%	34.490 N	116.300 W	6 G		7	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
13	03	15	35.5	22.326 S	68.333 W	127 5.1	1.1	60	NORTHERN CHILE
13	03	52	56.9%	15.622 N	46.657 W	10 G 4.7 3.5	0.5	8	NORTH ATLANTIC RIDGE
13	05	03	44.4%	45.705 N	26.440 E	151 ?	0.6	10	ROMANIA
13	10	26	42.8%	10.689 N	85.131 W	33 N	0.8	9	COSTA RICA. MD 4.2 (HDC).
13	11	08	21.9%	19.435 S	169.371 E	103 *	1.0	23	VANUATU ISLANDS
13	12	01	30.7%	61.759 N	151.115 W	78		40	SOUTHERN ALASKA. <AGS-P>. Felt (II) at Skwentno.
13	13	15	15.9	43.625 N	5.444 E	10 G	0.6	11	NEAR SOUTH COAST OF FRANCE. ML 2.6 (LDG).
13	15	05	30.5%	25.861 S	176.500 W	33 N 5.2 4.2	1.3	29	SOUTH OF FIJI ISLANDS
13	15	46	21.3%	42.771 N	143.684 E	108 4.3	1.1	16	HOKKAIDO, JAPAN REGION. Felt (II JMA) at Kushiro; (I JMA) at Obihiro.
13	15	49	34.1%	29.195 N	51.876 E	33 N	1.0	5	SOUTHERN IRAN
13	17	26	16.0%	31.714 S	72.027 W	31	0.6	13	OFF COAST OF CENTRAL CHILE
13	17	48	44.7	5.966 S	105.533 E	47 * 5.2 4.8	1.1	59	SUNDA STRAIT
13	17	50	03.0	37.822 N	29.200 E	22		18	TURKEY
13	18	43	02.9	45.902 N	15.395 E	10 G	0.6	9	YUGOSLAVIA. ML 2.7 (VKA), 2.7 (KBA).
o 13	20	21	17.0	33.770 N	38.882 W	10 G 5.0 4.5	1.0	71	NORTH ATLANTIC RIDGE
13	21	51	48.4	0.009 N	123.631 E	162 * 5.0	1.3	54	MINAMASSA PENINSULA
13	22	52	44.5%	37.987 N	29.326 E	10 G	1.5	5	TURKEY
o 13	23	56	58.7	50.636 N	173.410 E	33 N 5.2 5.5	0.9	132	ALEUTIAN ISLANDS REGION
o 13	23	57	45.6	52.296 N	173.379 W	54 D 5.7	1.0	102	ANDREANOF ISLANDS, ALEUTIAN IS. Felt (II) on Adok.
o 14	00	48	43.2	21.663 N	142.941 E	311 5.3	0.9	170	MARIANA ISLANDS REGION
14	01	22	54.3%	37.562 N	121.692 W	3		12	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK). Mo=1.5+10+13 Nm (BRK).
14	03	42	51.9	7.841 N	124.674 E	56 * 5.1 3.8	1.0	46	MINDANAO, PHILIPPINE ISLANDS
14	04	40	28.2%	60.311 N	152.285 W	82		33	SOUTHERN ALASKA. <AGS-P>.
14	05	08	03.0	6.237 S	153.947 E	23 5.1 4.7	1.2	64	NEW BRITAIN REGION
14	06	43	55.8%	13.63 N	57.61 E	10 G 4.3	1.4	9	ARABIAN SEA
14	07	19	14.5%	32.28 S	71.99 W	8	0.5	11	NEAR COAST OF CENTRAL CHILE
14	09	03	23.7%	23.952 N	122.582 E	33 N 4.2	1.2	14	TAIWAN REGION
14	09	06	41.1%	23.938 N	122.657 E	33 N 4.1	1.1	18	TAIWAN REGION
14	09	41	18.5	45.710 N	11.077 E	10 G	1.4	15	NORTHERN ITALY. ML 2.6 (KBA).
14	10	53	45.4	39.069 N	23.440 E	10 G	1.1	18	AEGEAN SEA. ML 3.5 (ATH).
14	11	26	00.7	23.962 N	122.641 E	29 4.3	1.2	27	TAIWAN REGION
14	11	28	35.2	43.615 N	5.426 E	10 G	0.2	11	NEAR SOUTH COAST OF FRANCE. ML 2.8 (LDG).
14	14	07	23.1%	62.242 N	151.822 W	96		29	CENTRAL ALASKA. <AGS-P>.

14	14	36	42.8*	19.719 S	133.897 E	5 G	0.9	5	NORTHERN TERRITORY, AUSTRALIA	
14	14	50	59.5	23.982 N	122.537 E	39	4.9 4.2	1.1	63 TAIWAN REGION	
14	15	10	01.1	37.538 N	29.993 E	10 G		1.1	10 TURKEY	
14	15	54	56.8	23.990 N	122.585 E	38	5.0	1.3	68 TAIWAN REGION	
14	16	03	13.8	24.006 N	122.537 E	43	5.1	1.1	86 TAIWAN REGION	
14	16	16	12.2	23.978 N	122.512 E	39	4.8 5.1	1.1	47 TAIWAN REGION	
14	16	46	05.0*	50.715 N	5.650 E	10 G		0.2	5 BELGIUM	
14	18	32	40.5	40.626 N	108.532 W	5 G		0.6	10 COLORADO. ML 3.3 (NEIS). Felt (IV) at Maybell.	
14	19	48	47.9	39.073 N	23.413 E	10		0.6	11 AEGEAN SEA. ML 3.0 (ATH).	
14	20	58	32.8*	22.548 S	69.095 W	114 *	4.4	1.4	15 NORTHERN CHILE. Felt (IV) at Colama.	
14	21	32	11.2	37.575 N	29.928 E	10 G		0.9	12 TURKEY	
14	23	46	22.9*	18.728 S	177.977 W	532 ?	5.0	0.9	21 FIJI ISLANDS REGION	
15	01	45	45.6*	61.880 N	151.307 W	71			31 SOUTHERN ALASKA. <AGS-P>.	
15	02	19	33.7	21.500 N	93.856 E	70	4.7	0.8	26 BURMA	
15	04	03	02.9	44.470 N	7.291 E	12		0.5	24 NORTHERN ITALY. ML 2.9 (LDG).	
15	04	15	09.3*	59.474 N	151.936 W	43			27 KENAI PENINSULA, ALASKA. <AGS-P>. ML 3.2 (PMR).	
15	04	28	40.9*	34.610 N	118.660 W	9			13 SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS).	
15	04	28	56.7*	7.309 S	129.438 E	148 ?	4.8	1.6	8 BANDA SEA	
15	05	39	51.1*	61.865 N	150.847 W	72			30 SOUTHERN ALASKA. <AGS-P>.	
15	06	39	59.5*	37.535 N	30.071 E	29 *		1.3	6 TURKEY	
15	07	10	36.7*	62.061 N	151.706 W	96			24 CENTRAL ALASKA. <AGS-P>.	
15	08	01	35.1*	66.735 N	146.308 W	33 N		1.2	6 ALASKA. ML 3.0 (PMR).	
15	08	33	58.4*	57.096 N	149.674 W	10 G	4.1		52 GULF OF ALASKA. <AGS-P>. ML 4.3 (PMR).	
15	10	42	54.9*	26.981 N	57.005 E	33 N	4.3	0.9	9 SOUTHERN IRAN	
15	11	06	53.6*	61.313 N	150.843 W	75			27 SOUTHERN ALASKA. <AGS-P>.	
15	11	50	31.0	28.953 S	13.001 W	10 G	4.9	0.7	15 SOUTH ATLANTIC RIDGE	
15	11	58	39.1*	19.784 S	168.817 E	33 N	4.4 4.0	1.6	22 VANUATU ISLANDS	
15	13	08	46.8	12.120 N	87.758 W	42	4.5 4.3	0.9	33 NEAR COAST OF NICARAGUA	
15	13	50	08.8*	40.830 N	19.553 E	10 G		0.5	7 ALBANIA. ML 2.5 (TTG).	
15	14	14	36.8*	41.135 N	28.870 E	10 G		0.2	5 TURKEY	
15	14	38	22.7*	2.102 S	100.352 E	33 N	4.9	1.3	10 SOUTHERN SUMATERA	
15	16	22	26.4*	6.232 S	153.201 E	21 *	4.0	1.1	10 NEW BRITAIN REGION	
15	16	50	39.2*	18.66 S	178.81 W	503 *	4.7	0.8	21 FIJI ISLANDS REGION	
15	18	10	00.0*	37.314 N	116.471 W	0	5.3		174 SOUTHERN NEVADA. <DOE>. ML 5.3 (BRK). 37' 18" 51.98" N., 116' 28" 17.34" W., Surface Elev. 1926 m., Depth of Burial 500 m., Shot Time 181000.089, "KERNVILLE," Nevada Test Site (Dept. of Energy). Felt at Las Vegas.	
15	18	44	21.0	13.148 S	76.120 W	72	5.1	0.7	52 NEAR COAST OF PERU. Felt (V) at Chincha, (IV) at Canete and Pisco and (III) at Ico.	
a	15	18	49	18.2	25.216 S	70.932 W	10	5.2 4.6	1.4	62 NEAR COAST OF NORTHERN CHILE. Felt (IV) in the Antafagasta area
15	19	16	14.2*	58.981 N	142.829 W	10 G	5.0 4.7		104 GULF OF ALASKA. <AGS-P>. ML 4.6 (PMR).	
15	20	05	35.4	16.255 S	178.283 E	11	5.0 4.9	1.3	93 FIJI ISLANDS	
15	20	38	07.1*	24.848 S	70.127 W	33 N		1.2	7 NEAR COAST OF NORTHERN CHILE	
15	20	43	00.0	43.879 N	10.427 E	10 G		0.6	11 CENTRAL ITALY	
15	23	32	31.3*	11.103 S	119.039 E	33 N	4.1	1.4	12 SOUTH OF SUMBA ISLAND	
16	01	02	30.4	30.019 N	94.836 E	33 N	4.7	1.4	13 TIBET	
16	01	52	48.4*	61.781 N	151.127 W	76			25 SOUTHERN ALASKA. <AGS-P>.	
16	02	04	38.9*	22.53 S	178.17 W	359 *	4.6	0.9	18 SOUTH OF FIJI ISLANDS	
16	02	04	56.3	36.140 N	31.558 E	102	3.8	0.8	32 TURKEY	
16	02	10	57.0	51.509 N	174.955 E	33 N	4.9	0.9	46 NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.4 (PMR).	
16	02	38	46.7*	51.51 N	175.21 E	33 N		1.5	5 RAT ISLANDS, ALEUTIAN ISLANDS. ML 3.7 (PMR).	
16	02	43	42.9*	51.494 N	174.968 E	33 N	4.6	1.0	11 NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.2 (PMR).	
16	03	29	44.3	51.562 N	174.969 E	33 N	5.2 4.7	0.9	184 NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).	
16	03	53	41.1*	60.220 N	153.182 W	132			17 SOUTHERN ALASKA. <AGS-P>.	
16	04	11	56.7	19.648 S	133.848 E	5 G		0.8	6 NORTHERN TERRITORY, AUSTRALIA	
16	04	18	37.0*	59.749 N	152.885 W	92			26 SOUTHERN ALASKA. <AGS-P>.	
a	16	04	22	36.1	51.564 N	175.041 E	33 N	5.9 5.7	1.0	377 RAT ISLANDS, ALEUTIAN ISLANDS. ML 5.6 (PMR), Ms 5.6 (BRK).
16	05	08	50.9*	51.578 N	174.958 E	33 N	4.9	1.0	34 NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.3 (PMR).	
16	05	22	07.9	30.007 N	138.823 E	402	4.9	0.8	130 SOUTH OF HONSHU, JAPAN. Felt (I JMA) at Utsunamiyo.	
a	16	05	44	38.6	51.495 N	175.054 E	33 N	5.5 5.0	1.0	237 RAT ISLANDS, ALEUTIAN ISLANDS. ML 5.0 (PMR).
16	05	52	13.0*	59.919 N	153.416 W	130			25 SOUTHERN ALASKA. <AGS-P>.	
16	06	05	49.5	51.638 N	174.978 E	33 N	4.9	0.9	87 NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.5 (PMR).	
16	06	20	06.2	4.839 N	126.776 E	43 *	5.1 5.0	1.4	70 TALAUD ISLANDS	
16	06	28	13.4*	51.525 N	174.908 E	33 N	4.8	0.8	12 NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.3 (PMR).	
16	06	50	28.6*	51.539 N	174.907 E	33 N	4.9 5.1	1.0	22 NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.2 (PMR).	
16	08	41	33.0	9.534 N	84.868 W	19 *		0.3	13 COSTA RICA. MD 4.0 (SJS), 3.9 (HDC).	
16	09	16	56.3	5.341 S	103.147 E	53 *	5.3 4.5	1.0	67 SOUTHERN SUMATERA	
16	09	54	30.2*	25.053 S	70.389 W	33 N		1.2	8 NEAR COAST OF NORTHERN CHILE	
16	10	05	39.8*	62.730 N	152.061 W	0			40 CENTRAL ALASKA. <AGS-P>. ML 4.1 (PMR).	
16	11	20	16.8	35.203 N	27.141 E	38 *	4.8	1.1	32 DODECANESE ISLANDS. MD 4.2 (ATH).	
16	12	14	43.2*	10.170 N	126.104 E	33 N	4.7	0.9	17 PHILIPPINE ISLANDS REGION	
16	12	35	43.1*	51.467 N	174.963 E	33 N	4.6	1.0	17 NEAR ISLANDS, ALEUTIAN ISLANDS. ML 3.9 (PMR).	
16	12	44	46.4	28.085 N	53.677 E	51	4.9 4.4	0.9	121 SOUTHERN IRAN. Felt in the Jahram area.	
16	13	52	22.6*	19.05 S	171.70 W	47 D	4.8 4.0	1.2	18 TONGA ISLANDS REGION	
16	13	54	10.8	51.628 N	16.219 E	13		1.3	24 POLAND. ML 4.2 (VKA).	
16	14	31	18.7*	40.703 N	27.459 E	10 G		1.0	5 TURKEY	
16	14	38	15.6*	59.874 N	153.208 W	125	3.9		46 SOUTHERN ALASKA. <AGS-P>.	
16	15	26	54.5	36.561 N	82.304 W	5 G		0.6	12 TENNESSEE. mbLg 3.2 (NEIS), 3.3 (BLA). Felt (IV) at Bristol and Blountville. Also felt (IV) at Hiltans, Virginia.	
16	15	51	07.2*	59.54 N	9.27 E	10 G		0.6	5 SOUTHERN NORWAY. MD 2.0 (BER).	
16	16	19	05.8*	9.800 N	93.084 E	33 N	4.1	1.4	9 NICOBAR ISLANDS REGION	
16	17	44	01.3*	36.355 N	28.723 E	33 N		1.1	6 DODECANESE ISLANDS	
16	17	56	16.5*	28.511 N	52.996 E	33 N	3.9	0.7	7 SOUTHERN IRAN. Felt in the Jahram area.	
16	20	56	19.0	39.300 N	27.744 E	15		1.2	17 TURKEY	
16	21	42	30.1*	18.456 S	168.318 E	39 *	5.1 4.2	1.5	66 VANUATU ISLANDS	
16	23	21	26.8	44.013 N	7.277 E	10 G		1.2	13 NORTHERN ITALY. ML 2.8 (LDG).	
16	23	47	40.7	44.446 N	11.978 E	22		1.2	49 NORTHERN ITALY. ML 3.6 (KBA), 3.4 (LDG). MD 3.4 (TRI).	
17	01	02	04.3*	24.522 N	91.432 E	39 *	4.5	0.3	8 INDIA-BANGLADESH BORDER REGION	
17	01	55	47.8*	31.184 S	68.727 W	120 *		0.9	15 SAN JUAN PROVINCE, ARGENTINA	
17	03	06	32.6*	14.035 N	119.410 E	33 N	4.5	0.9	18 LUZON, PHILIPPINE ISLANDS	

17	03 36 28.9*	0.107 N	125.350 E	33 N	4.4	1.3	13	MOLUCCA PASSAGE
17	03 46 32.7	4.937 S	152.385 E	60	4.8	1.1	36	NEW BRITAIN REGION
17	04 25 13.4	53.489 N	160.348 E	33 N	4.8	0.9	34	NEAR EAST COAST OF KAMCHATKA
o 17	05 22 23.6	51.531 N	174.784 E	33 N	5.2 5.0	1.0	180	NEAR ISLANDS, ALEUTIAN ISLANDS
17	05 22 41.5*	37.985 N	30.929 W	5 G	4.5	1.4	24	AZORES ISLANDS
17	05 24 44.87	52.52 N	175.40 E	33 N	5.1	0.6	19	RAT ISLANDS, ALEUTIAN ISLANDS
17	06 30 13.1	27.139 N	92.216 E	44 *	4.8	1.2	42	INDIA-CHINA BORDER REGION. Felt in northeastern Indio.
17	06 53 58.5*	37.338 N	121.742 W	5			11	CENTRAL CALIFORNIA. <BRK>. ML 2.9 (BRK).
o 17	07 15 05.9	51.542 N	174.866 E	33 N	5.4 4.9	1.0	214	NEAR ISLANDS, ALEUTIAN ISLANDS
17	07 52 55.17	51.71 N	174.23 E	33 N	4.4	0.5	4	NEAR ISLANDS, ALEUTIAN ISLANDS
17	07 53 14.6	51.659 N	174.753 E	33 N	5.2	1.2	54	NEAR ISLANDS, ALEUTIAN ISLANDS
17	09 28 51.3	46.651 N	152.776 E	33 N	5.0	0.9	56	KURIL ISLANDS
17	10 09 23.6	27.693 N	54.253 E	45 *	4.6 4.3	1.4	71	SOUTHERN IRAN
17	12 12 02.3	4.701 S	153.197 E	47	5.2	0.9	43	NEW IRELAND REGION
17	12 18 45.6	10.729 S	117.289 E	49 *	3.2	1.4	20	SOUTH OF SUMBAWA ISLAND
17	12 47 25.87	58.79 N	6.16 E	10 G		0.3	5	SOUTHERN NORWAY. MD 2.1 (BER).
17	13 19 50.5*	47.544 N	112.769 W	5 G		0.7	10	MONTANA. ML 3.3 (BUT).
17	13 26 53.0*	58.120 N	142.896 W	10 G			18	GULF OF ALASKA. <AGS-P>.
17	14 06 15.7	53.232 N	35.262 W	10 G	5.0 4.6	1.1	87	NORTH ATLANTIC OCEAN
17	14 09 38.1*	59.912 N	153.439 W	134			18	SOUTHERN ALASKA. <AGS-P>.
17	16 01 53.77	52.67 N	169.36 W	33 N	4.5	1.4	7	FOX ISLANDS, ALEUTIAN ISLANDS
17	17 33 33.0*	33.605 N	81.715 W	5 G		0.8	7	SOUTH CAROLINA. mBLg 2.5 (NEIS). Felt at Aiken.
17	17 56 21.0*	17.988 S	178.413 W	611 *	4.4	1.1	22	FIJI ISLANDS REGION
17	19 06 49.57	23.83 N	122.33 E	10 G		1.5	5	TAIWAN REGION
17	20 11 22.0	37.685 N	29.159 E	10 G		1.4	9	TURKEY
17	23 30 58.9	23.862 S	66.506 W	234	4.7	0.8	16	JUJUY PROVINCE, ARGENTINA
o 17	23 39 25.1	3.841 N	126.534 E	20 *	5.5 5.2	1.4	144	TALAUD ISLANDS
17	23 43 58.87	54.64 N	160.12 E	33 N	4.5	0.6	14	NEAR EAST COAST OF KAMCHATKA
17	23 56 51.4*	33.260 N	116.090 W	3			8	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS).
18	00 22 15.4	26.103 S	179.365 E	504 *	5.1	0.9	66	SOUTH OF FIJI ISLANDS
18	00 34 38.7*	40.193 N	27.661 E	10 G		1.0	8	TURKEY
18	00 37 45.9	35.366 N	83.853 W	5 G		0.5	11	NORTH CAROLINA. mBLg 3.5 (NEIS), 3.5 (BLA). Felt (IV) at Almond, Aquone, Fontana Dam and Robbinsville.
18	00 50 33.3	51.660 N	16.133 E	9		0.9	22	POLAND. ML 3.9 (VKA), 3.7 (KBA).
18	01 17 22.9*	11.826 S	166.291 E	33 N	4.6	0.9	9	SANTA CRUZ ISLANDS
18	03 09 47.2*	0.017 S	123.238 E	181 *	4.7	0.8	15	MINAHASSA PENINSULA
18	05 04 08.1	26.116 N	127.583 E	35	5.0	1.1	63	RYUKYU ISLANDS. Felt (III JMA) at Noho and (I JMA) at Nago.
18	05 27 05.5*	50.770 N	101.890 W	0 G			14	MANITOBA PROVINCE, CANADA. <OTT-P>. mBLg 3.1 (OTT). Possible rockburst.
18	05 27 07.6*	20.405 S	167.725 E	33 N	4.6 4.3	1.5	22	LOYALTY ISLANDS
18	05 58 52.7	3.791 N	126.603 E	58 *	5.0	1.0	44	TALAUD ISLANDS
18	07 47 09.57	2.55 S	130.17 E	33 N	4.3	1.2	7	CERAM
18	08 53 35.4*	11.974 S	166.109 E	33 N	5.0	1.0	30	SANTA CRUZ ISLANDS
18	09 00 40.0	42.449 N	26.090 E	10 G		1.4	7	BULGARIA
18	09 19 08.37	32.12 S	71.65 W	33 N		0.7	12	NEAR COAST OF CENTRAL CHILE
18	11 11 34.3	39.077 N	23.453 E	15	4.1	1.2	79	AEGEAN SEA. ML 4.6 (ATH), 3.8 (TTG). Felt on Limnos and Evvoia.
18	11 19 38.0*	17.228 S	171.960 W	39 D	5.0 4.4	1.5	71	TONGA ISLANDS REGION
18	13 03 10.87	30.08 S	71.27 W	33 N		0.6	10	NEAR COAST OF CENTRAL CHILE
18	13 20 40.9	42.576 N	24.101 E	10 G		1.3	7	BULGARIA
o 18	13 52 36.0	23.513 S	67.706 W	142	5.7	1.0	278	CHILE-ARGENTINA BORDER REGION. Felt (II) at Antofagasto, Chile.
18	14 12 26.5	40.581 N	23.429 E	10 G		1.4	14	GREECE. ML 2.8 (SKO).
18	14 33 25.5*	38.511 N	70.460 E	110 ?	4.7	1.2	19	AFGHANISTAN-USSR BORDER REGION
18	14 37 09.6	21.343 S	66.544 W	235	4.8	1.2	62	SOUTHERN BOLIVIA
18	14 37 27.87	15.85 N	60.78 W	10 G		0.7	5	LEEWARD ISLANDS. ML 2.1 (FDF).
18	14 47 11.5	3.751 N	126.731 E	37 *	5.0	1.3	57	TALAUD ISLANDS
18	15 44 13.3*	9.684 S	73.767 W	33 N		1.2	10	PERU-BRAZIL BORDER REGION
18	18 00 46.2*	37.782 N	121.717 W	11			18	CENTRAL CALIFORNIA. <BRK>. ML 3.6 (BRK). Mo=4.2*10**14 Nm (BRK). Felt at Dublin, Livermore and Pleasanton.
18	18 14 10.9	27.532 N	54.434 E	33 N	4.4	1.2	22	SOUTHERN IRAN
18	18 38 42.3	18.869 N	99.168 E	5 G	4.2	0.8	8	SOUTHEAST ASIA. Felt in northern Thailand.
18	19 33 58.3*	3.636 N	126.626 E	44 *	4.6	0.8	19	TALAUD ISLANDS
18	20 00 17.0	3.762 N	126.587 E	33 N	5.1	1.0	53	TALAUD ISLANDS
18	20 04 31.9*	23.373 S	68.156 W	33 N		1.3	6	NORTHERN CHILE
18	20 37 45.4*	13.725 N	90.549 W	83	4.2	1.0	23	NEAR COAST OF GUATEMALA
18	21 50 33.37	60.72 N	2.95 E	10 G		1.1	8	NORTH SEA. MD 2.7 (BER).
o 19	00 13 26.2*	37.476 S	51.092 E	10 G	5.1 5.2	1.1	28	SOUTH INDIAN OCEAN
19	01 33 49.4*	37.143 N	121.532 W	6			11	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK).
19	02 18 00.1	39.293 N	22.951 E	45 ?	3.7	1.2	31	GREECE. MD 3.5 (ATH).
19	02 33 51.8	51.589 N	174.821 E	33 N	4.9	0.9	78	NEAR ISLANDS, ALEUTIAN ISLANDS
o 19	04 15 12.7	7.440 S	128.259 E	168	5.5	1.0	160	BANDA SEA
19	04 19 03.3*	33.658 N	46.901 E	88	4.6	0.6	10	IRAN-IRAQ BORDER REGION
19	04 23 29.1*	62.347 N	151.774 W	105			30	CENTRAL ALASKA. <AGS-P>.
19	04 53 31.6*	58.495 N	142.678 W	10 G	4.7		61	GULF OF ALASKA. <AGS-P>. ML 4.6 (PMR).
19	07 02 02.17	34.55 S	71.31 W	32 *		0.2	8	NEAR COAST OF CENTRAL CHILE
19	07 06 21.6*	39.661 N	23.065 E	11		0.6	11	AEGEAN SEA
19	07 47 36.1*	50.470 N	19.184 E	10 G		0.4	5	POLAND. ML 3.4 (VKA), 3.2 (KRA).
19	08 16 41.87	44.47 N	114.15 W	5 G		0.8	6	WESTERN IDAHO. ML 2.7 (NEIS), 3.2 (BUT).
19	09 38 52.0*	17.830 S	178.915 W	652 ?	4.8	0.7	32	FIJI ISLANDS REGION
19	09 49 09.87	19.58 N	65.50 W	33 N		1.1	10	PUERTO RICO REGION
19	11 39 23.1	42.978 N	146.044 E	33 N	4.9	1.1	40	OFF COAST OF HOKKAIDO, JAPAN. Felt (II JMA) at Nemuro.
19	12 42 09.7*	33.769 N	118.258 W	5 G		0.7	6	SOUTHERN CALIFORNIA. ML 2.5 (NEIS), 2.8 (PAS). Felt in the Long Beach-Pasadena-Signal Hill area.
19	13 02 08.4	46.319 N	13.120 E	10 G		1.1	12	AUSTRIA. ML 3.2 (VKA), MD 3.1 (TRI).
19	13 29 00.1*	9.374 S	157.517 E	33 N	4.5	0.9	12	SOLOMON ISLANDS
19	14 07 44.6	33.327 N	137.441 E	366	4.5	0.9	37	NEAR S. COAST OF HONSHU, JAPAN
19	15 10 33.8*	43.240 N	20.504 E	10 G		0.8	6	YUGOSLAVIA
19	17 06 24.37	7.20 S	129.43 E	165 ?	4.2	1.5	7	BANDA SEA
19	17 45 00.9	33.518 N	94.934 E	33 N	4.9	1.2	41	QINGHAI PROVINCE, CHINA
19	18 19 55.7*	39.018 N	15.941 E	10 G		0.2	5	SOUTHERN ITALY
o 19	19 07 42.9	10.226 S	161.381 E	86 D	5.4	1.0	140	SOLOMON ISLANDS. Felt (II) at Honiara, Guadalcanal.

19	19 50 33.4	34.890 N	139.255 E	29	4.3	1.4	21	NEAR S. COAST OF HONSHU, JAPAN. Felt (III JMA) at Tateyama and on Oshima; (II JMA) at Tokyo, Ajiro, Iro-zaki and on Miyake-jima. Also felt at Mishima.
19	22 00 00.8&	58.304 N	142.656 W	10 G			16	GULF OF ALASKA. <AGS-P>.
19	22 28 42.4*	3.025 S	141.943 E	42 *	4.3	1.1	16	PAPUA NEW GUINEA
o 19	22 37 11.5	52.758 N	158.253 E	120 D	5.2	0.7	265	NEAR EAST COAST OF KAMCHATKA
19	22 41 11.2	24.363 N	120.591 E	30		0.6	10	TAIWAN
a 19	23 17 14.9	18.382 N	95.074 E	67 D	5.2	0.9	218	BURMA
19	23 21 01.4&	61.685 N	151.320 W	72			32	SOUTHERN ALASKA. <AGS-P>.
20	01 06 53.4	45.059 N	26.832 E	33 N		0.8	12	ROMANIA
o 20	01 25 58.1	7.140 S	127.004 E	315 D	5.8	1.1	356	BANDA SEA. mb 5.5 (PAS).
20	01 51 01.9*	37.397 N	69.545 E	33 N	5.0	1.5	14	AFGHANISTAN-USSR BORDER REGION
20	02 43 53.7	13.021 N	88.783 W	61	4.8	1.2	61	EL SALVADOR
20	02 48 56.7	35.510 N	25.137 E	54 *	4.0	1.4	64	CRETE. MD 3.8 (ATH).
20	02 48 57.1	56.235 N	152.679 W	33 N	4.4	0.9	34	KODIAK ISLAND REGION
20	03 56 47.4	63.483 N	149.500 W	127 ?	3.6	0.9	13	CENTRAL ALASKA
20	04 45 23.4	24.051 S	66.975 W	199	4.7	1.1	21	SALTA PROVINCE, ARGENTINA
20	04 47 04.7&	19.354 N	155.026 W	9			45	HAWAII. <HVO-P>. ML 4.1 (HVO). Felt.
20	06 49 32.9	43.432 N	127.089 W	10 G	4.3	0.7	45	OFF COAST OF OREGON
20	07 12 23.6	37.772 N	14.848 E	10 G		0.5	6	SICILY
20	08 39 57.5&	36.803 N	121.302 W	9	4.5 4.0		62	CENTRAL CALIFORNIA. <BRK>. ML 5.3 (BRK). Mo=4.7*10**16 Nm (BRK). Felt (V) at Carmel Valley, Chualar, Tres Pinos and Watsonville. Felt in Alameda, Merced, Monterey, San Benito, Santa Clara, Santa Cruz, San Luis Obispo, San Mateo and Stanislaus Counties.
20	10 24 18.0	39.184 N	23.422 E	10 G		0.9	16	AEGEAN SEA. ML 3.4 (ATH).
20	12 51 34.4*	6.100 N	125.773 E	140 *	4.4	1.1	18	MINDANAO, PHILIPPINE ISLANDS
20	13 00 14.7*	9.728 S	124.488 E	33 N	4.3	1.4	9	TIMOR
20	13 11 55.6%	42.301 N	1.467 E	10 G		1.2	8	PYRENEES. ML 3.2 (LDG).
20	13 16 37.8?	42.07 N	1.34 E	10 G		0.3	5	PYRENEES. ML 3.2 (LDG).
20	13 19 08.8*	34.107 S	70.220 W	30 *		1.5	11	CHILE-ARGENTINA BORDER REGION
20	13 32 59.5	42.345 N	1.473 E	19		1.2	22	PYRENEES. ML 3.6 (LDG).
20	13 46 11.5?	33.82 S	72.03 W	33 N		1.2	9	OFF COAST OF CENTRAL CHILE
20	14 48 50.7&	61.701 N	141.287 W	0	4.5		63	SOUTHERN ALASKA. <AGS-P>. ML 4.3 (PMR).
20	15 27 12.2*	36.588 N	141.716 E	18	4.6 4.0	1.1	18	NEAR EAST COAST OF HONSHU, JAPAN
20	15 50 30.9?	42.21 N	1.42 E	10 G		1.1	6	PYRENEES. ML 3.1 (LDG).
20	15 55 51.5	44.488 N	7.358 E	10 G		0.2	7	NORTHERN ITALY. ML 2.2 (LDG).
20	16 38 44.9	42.343 N	1.478 E	11		1.1	25	PYRENEES. ML 3.8 (LDG). Felt (III) in the Seo de Urgel area, Spain.
20	18 18 13.8	46.186 N	8.287 E	10 G		0.7	22	SWITZERLAND. ML 2.7 (LDG).
20	18 38 11.9*	36.655 N	7.545 W	23		1.4	16	STRAIT OF GIBRALTAR. MD 3.3 (MDD).
20	20 40 54.1	42.379 N	1.430 E	9		1.0	23	PYRENEES. ML 3.6 (LDG).
20	21 03 53.9*	42.219 N	1.434 E	10 G		0.8	9	PYRENEES. ML 3.0 (LDG).
o 20	22 12 00.0	46.670 N	152.590 E	54 D	5.6	0.8	335	KURIL ISLANDS
20	22 51 12.6	4.387 N	73.708 W	26	5.0	1.4	43	COLOMBIA. Felt at Bogota and Villavicencio.
20	23 08 39.7	17.076 S	70.122 W	169	5.4	0.7	17	NEAR COAST OF PERU
21	01 02 58.5?	6.25 S	151.72 E	33 N	4.2	1.2	5	NEW BRITAIN REGION
21	01 05 14.1	28.912 N	139.307 E	434 *	4.5	0.8	80	BONIN ISLANDS REGION
21	01 32 57.1	10.429 N	125.367 E	33 N	5.1 4.7	1.2	44	LEYTE, PHILIPPINE ISLANDS
21	01 54 41.8	36.018 N	140.085 E	82	4.1	0.7	12	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito; (I JMA) at Kumagaya, Tokyo and Utsunomiya.
21	01 58 21.5	24.903 S	70.624 W	99 *		0.6	10	NEAR COAST OF NORTHERN CHILE
21	03 08 58.8	34.881 N	23.059 E	33 N	3.9	1.2	22	CRETE. ML 4.1 (ATH).
21	03 34 11.2*	38.864 N	27.003 E	10 G		0.1	5	TURKEY
21	04 41 42.0	42.259 N	19.935 E	10 G		0.5	9	YUGOSLAVIA. MD 2.4 (TTG).
o 21	05 20 17.2	15.811 S	172.780 W	63 D	5.0	1.0	100	SAMOA ISLANDS REGION
21	05 44 07.1	44.428 N	115.751 W	5 G		0.7	30	WESTERN IDAHO. ML 3.8 (NEIS), 4.0 (BUT). Felt (II) at Challis.
21	06 31 07.7&	62.604 N	150.148 W	76			22	CENTRAL ALASKA. <AGS-P>.
21	08 00 35.4	42.367 N	20.009 E	10 G		1.0	9	YUGOSLAVIA. ML 2.6 (TTG).
21	08 10 01.0?	42.54 N	146.35 E	33 N	4.3	0.2	5	OFF COAST OF HOKKAIDO, JAPAN. Felt (I JMA) at Nemuro.
21	08 27 18.5?	17.19 S	75.02 W	33 N		1.3	5	OFF COAST OF PERU
21	08 34 18.7	15.181 S	173.245 W	33 N	5.1	1.0	45	TONGA ISLANDS
21	08 54 06.6	19.871 S	133.697 E	5 G		1.0	7	NORTHERN TERRITORY, AUSTRALIA
21	09 06 07.5?	15.90 S	173.34 W	33 N	4.5	1.1	16	TONGA ISLANDS
o 21	09 22 12.8	6.893 S	129.393 E	149	5.4	1.0	104	BANDA SEA
21	09 46 20.4?	33.51 S	71.77 W	26		0.4	9	NEAR COAST OF CENTRAL CHILE
21	10 06 21.9?	18.80 N	67.31 W	29 *		0.5	7	MONA PASSAGE
21	10 21 50.4	8.860 S	127.123 E	33 N	4.9	0.7	16	TIMOR
21	10 27 36.1?	40.33 N	121.37 E	33 N		0.3	4	NORTHEASTERN CHINA. ML 4.3 (BJI).
21	11 52 29.4*	52.488 N	170.548 W	33 N	4.4 4.3	1.0	16	FOX ISLANDS, ALEUTIAN ISLANDS
21	15 33 26.8&	41.100 N	120.282 W	7			9	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK). Felt at Likely.
21	16 31 29.3&	61.972 N	150.700 W	73			40	SOUTHERN ALASKA. <AGS-P>.
21	16 45 41.5*	4.825 N	126.734 E	33 N	4.4	1.5	11	TALAUD ISLANDS
o 21	16 55 21.0	13.284 N	145.735 E	57	5.5 5.3	1.0	145	MARIANA ISLANDS. Felt (IV) on Guam.
21	18 21 18.7?	12.56 N	88.81 E	33 N		1.5	8	BAY OF BENGAL
o 21	19 03 23.1	11.705 N	86.638 W	59 *	5.2	1.2	80	NEAR COAST OF NICARAGUA
21	19 27 10.7	0.248 N	122.171 E	184 *	5.0	1.0	25	MINAHASSA PENINSULA
21	20 52 56.2*	39.488 N	26.380 E	10 G		0.6	6	TURKEY
21	20 53 10.3*	16.543 S	178.544 E	33 N	3.8	1.3	9	FIJI ISLANDS
21	21 26 06.0	7.977 N	71.811 W	33 N	4.6	0.6	13	VENEZUELA
21	21 26 39.7	39.079 N	23.557 E	28		0.8	16	AEGEAN SEA. ML 3.4 (ATH).
21	22 00 13.3*	32.556 S	71.865 W	10 G		0.7	13	NEAR COAST OF CENTRAL CHILE
21	22 01 47.4?	32.54 S	71.74 W	10 G		0.5	9	NEAR COAST OF CENTRAL CHILE
21	22 14 14.6?	25.80 N	123.00 E	33 N	4.0	0.3	7	NORTHEAST OF TAIWAN
21	22 49 11.7?	32.12 S	72.30 W	10 G		0.5	9	OFF COAST OF CENTRAL CHILE
21	23 37 43.2	19.715 S	133.788 E	5 G		1.1	6	NORTHERN TERRITORY, AUSTRALIA
22	00 15 37.3*	51.446 N	174.921 E	33 N	4.7	1.4	28	NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.7 (PMR).
22	01 06 51.4	24.327 S	67.130 W	190		1.0	15	CHILE-ARGENTINA BORDER REGION
22	01 46 39.7	39.080 N	28.743 E	10 G		1.0	10	TURKEY
o 22	01 58 49.1	1.095 S	13.916 W	10 G	5.2 5.1	0.9	117	NORTH OF ASCENSION ISLAND
22	05 41 04.2&	58.320 N	142.772 W	10 G			28	GULF OF ALASKA. <AGS-P>. ML 3.9 (PMR).

22	07 29 22.8*	51.124 N	6.347 E	10 G	1.2	6	GERMANY	
22	07 41 32.7	51.145 N	6.319 E	10 G	0.5	9	GERMANY. ML 3.3 (LDG), 2.7 (BNS). Felt (III) in the epicentral area.	
22	07 43 14.1&	35.508 N	119.733 W	15	4.3	34	CENTRAL CALIFORNIA. <BRK>. ML 4.2 (BRK), 3.8 (PAS). Felt (IV) at Lost Hills and Paso Robles, (III) at Avenal, Creston, New Cuyama, Shandon and Templeton. Also felt at Bakersfield and San Luis Obispo.	
a 22	08 45 45.5	4.459 S	102.772 E	69	5.3	1.1	126	SOUTHERN SUMATERA. Felt (III) in the Kepahiang area.
22	09 21 55.4*	39.166 N	27.902 E	10 G	1.1	6	TURKEY	
22	09 59 27.2	42.385 N	19.940 E	10 G	0.9	7	YUGOSLAVIA. ML 2.3 (TTG).	
22	12 29 36.97	11.76 S	77.29 W	33 N	1.0	10	NEAR COAST OF PERU. Felt (III) at Lima.	
22	14 26 24.5	39.101 N	27.894 E	10 G	1.0	9	TURKEY	
22	14 51 54.3	27.145 N	53.223 E	69 *	4.8	0.9	93	SOUTHERN IRAN. Felt at Lar.
22	15 10 32.7*	27.231 N	53.274 E	54 ?	4.0	1.0	16	SOUTHERN IRAN
22	15 42 03.8	52.662 N	173.495 W	33 N	4.7	1.0	62	ANDREANOF ISLANDS, ALEUTIAN IS.
22	15 51 46.7	44.325 N	6.799 E	12		0.7	18	FRANCE. ML 2.9 (LDG).
22	16 53 02.3%	44.076 N	10.936 E	10 G		0.9	7	NORTHERN ITALY
22	17 04 59.5	62.905 N	151.151 W	129		0.8	15	CENTRAL ALASKA
22	18 05 26.4%	32.111 N	35.739 E	10 G		0.6	5	DEAD SEA REGION
22	18 30 45.9	17.165 N	120.201 E	61	4.8	0.9	43	LUZON, PHILIPPINE ISLANDS
22	18 43 02.9*	17.524 S	69.541 W	177	4.6	0.4	13	PERU-BOLIVIA BORDER REGION
22	19 04 44.5	51.501 N	6.622 E	10 G		0.4	5	GERMANY
f 22	19 13 17.7	20.833 S	69.785 W	70 D	5.9	1.1	310	NORTHERN CHILE. Ms 5.7 (BRK), 5.5 (PAS). Felt (V) at Iquique. Felt in many areas of northern Chile. Felt (IV) at Arequipa and (II) at Tacna, Peru.
22	20 24 22.17	51.62 N	16.26 E	10 G		0.6	7	POLAND. ML 3.0 (VKA).
22	21 47 07.9*	1.884 N	99.232 E	33 N		1.7	9	NORTHERN SUMATERA
22	22 42 16.57	51.99 N	20.10 E	10 G		1.0	5	POLAND. ML 3.0 (KRA).
23	00 07 38.6%	46.313 N	1.595 E	10 G		0.9	12	FRANCE. ML 2.2 (LDG).
23	00 48 44.5	35.910 N	114.937 W	5 G		0.4	18	CALIFORNIA-NEVADA BORDER REGION. ML 3.7 (NEIS), 3.3 (PAS). Felt (V) at Henderson and (IV) at Boulder City, Nevada. Felt (III) at Cottonwood Cove, Nevada and Dolan Springs, Arizona.
23	01 01 17.2*	38.424 N	25.196 E	10 G		0.8	6	AEGEAN SEA. ML 2.9 (ATH).
23	01 02 21.0*	5.634 S	151.458 E	33 N		1.1	6	NEW BRITAIN REGION
23	01 40 12.97	22.31 S	68.02 W	229 ?		0.2	5	NORTHERN CHILE
o 23	01 58 45.3	60.574 S	159.676 E	33 N	5.6 5.6	1.2	55	MACQUARIE ISLANDS REGION
23	03 43 35.0%	38.712 N	15.106 E	33 N		1.0	7	SICILY
23	06 41 06.7	27.166 N	53.310 E	33 N	4.8	1.0	86	SOUTHERN IRAN
23	06 46 01.5*	12.915 N	88.634 W	63 ?	4.6	1.0	29	OFF COAST OF CENTRAL AMERICA. Felt at San Salvador, El Salvador.
23	06 57 32.67	6.13 S	128.26 E	33 N	4.4	0.8	7	BANDA SEA
23	07 35 26.4*	53.850 N	160.737 E	33 N	4.6	1.1	29	NEAR EAST COAST OF KAMCHATKA
23	08 01 54.0	17.872 S	69.358 W	162 *	4.6	1.0	12	PERU-BOLIVIA BORDER REGION
23	08 10 21.9&	38.842 N	122.803 W	6			29	NORTHERN CALIFORNIA. <BRK>. ML 3.7 (BRK). Mo=6.0*10**14 Nm (BRK). Felt (IV) at Cobb and (III) at Middletown.
23	08 14 11.4*	53.787 N	161.148 E	33 N	4.9	0.9	33	OFF EAST COAST OF KAMCHATKA
23	08 52 52.37	54.09 N	160.38 E	33 N	4.6	1.0	7	NEAR EAST COAST OF KAMCHATKA
23	11 48 29.7%	39.813 N	28.793 E	10 G		0.7	8	TURKEY
23	16 06 24.4	2.046 N	126.913 E	70 ?	5.0	1.2	48	MOLUCCA PASSAGE
23	16 18 40.9	35.330 N	36.329 W	10 G	4.8	0.9	41	NORTH ATLANTIC RIDGE
23	16 19 18.2*	36.853 N	28.943 E	10 G		1.1	8	DODECANESE ISLANDS
23	17 13 14.8	11.678 S	118.284 E	33 N	4.0	0.9	12	SOUTH OF SUMBAWA ISLAND
23	17 33 29.8*	11.423 S	118.654 E	33 N		0.7	6	SOUTH OF SUMBAWA ISLAND
23	17 41 05.6	39.055 N	23.435 E	10 G		0.6	10	AEGEAN SEA. ML 3.1 (ATH).
23	18 53 28.7*	20.528 S	69.000 W	33 N		1.4	5	NORTHERN CHILE
23	19 36 22.27	36.75 N	27.44 E	10 G		1.2	6	DODECANESE ISLANDS
24	01 41 19.87	36.74 N	27.48 E	10 G		0.7	5	DODECANESE ISLANDS
o 24	01 56 31.7	1.366 N	126.172 E	74 D	5.3	1.3	100	MOLUCCA PASSAGE
24	02 09 31.2&	58.234 N	142.403 W	10 G			24	GULF OF ALASKA. <AGS-P>.
24	02 42 42.67	50.84 N	19.66 E	10 G		0.9	5	POLAND. ML 2.6 (VKA).
o 24	02 54 22.6	51.723 N	176.797 W	60	5.5	1.0	150	ANDREANOF ISLANDS, ALEUTIAN IS. Felt (III) on Adak.
24	02 56 06.9*	13.527 N	124.746 E	33 N	4.7	1.0	19	LUZON, PHILIPPINE ISLANDS
24	02 56 47.1&	58.052 N	142.422 W	10 G			31	GULF OF ALASKA. <AGS-P>.
24	03 24 36.4	26.038 N	95.654 E	95 *	4.5	1.0	24	BURMA-INDIA BORDER REGION
24	03 28 27.3	6.975 S	155.716 E	68	5.2	0.9	44	SOLOMON ISLANDS
24	03 30 15.9	41.917 N	20.378 E	10 G		0.4	6	ALBANIA. ML 2.4 (TTG).
f 24	03 52 03.2	13.477 N	124.616 E	25 D	6.0 7.0	1.0	453	LUZON, PHILIPPINE ISLANDS. Ms 7.1 (BRK), 6.9 (PAS). Slight damage (VI RF) at Virac. Felt (V RF) in the Naga-Legospi-Catbalagan area and (III RF) at Cebu and Manila.
24	05 36 59.1*	13.242 N	124.887 E	33 N	4.7	0.9	15	LUZON, PHILIPPINE ISLANDS
24	06 11 28.9	46.738 N	152.690 E	33 N	5.0	0.9	39	KURIL ISLANDS
24	06 16 13.9	46.346 N	11.533 E	10 G		0.9	8	NORTHERN ITALY. MD 2.5 (TRI). ML 2.4 (KBA).
24	08 44 35.4	13.321 N	124.714 E	33 N	4.4	1.3	56	LUZON, PHILIPPINE ISLANDS
24	08 44 54.6	13.318 N	124.811 E	33 N	5.2 5.6	1.1	33	LUZON, PHILIPPINE ISLANDS
24	10 03 22.5	32.485 N	130.582 E	25	4.6	1.1	13	KYUSHU, JAPAN. Felt (III JMA) at Kumamoto and Unzendake; (I JMA) at Nagasaki.
24	10 04 36.8	0.469 S	91.575 W	10 G	5.0	0.7	45	GALAPAGOS ISLANDS
24	10 42 36.2	50.747 N	173.620 E	33 N	5.0	1.1	79	ALEUTIAN ISLANDS REGION
24	10 58 21.8	45.083 N	112.763 W	5 G		0.4	10	MONTANA. ML 3.2 (BUT).
24	13 20 11.9	60.015 N	4.970 E	0 G		0.7	7	SOUTHERN NORWAY. MD 2.3 (BER). Probable explosion.
24	13 21 52.67	15.45 S	167.59 E	160 *	3.8	1.5	10	VANUATU ISLANDS
24	13 53 01.67	37.15 N	140.37 E	33 N		0.9	4	HONSHU, JAPAN. Felt (I JMA) at Onohama.
24	14 01 48.8*	0.600 S	91.619 W	10 G	4.7	0.8	21	GALAPAGOS ISLANDS
24	14 07 28.9	23.344 N	94.111 E	75 *	4.9	1.4	28	BURMA-INDIA BORDER REGION
24	14 58 34.9*	13.399 N	124.607 E	33 N	4.5	1.1	20	LUZON, PHILIPPINE ISLANDS
24	15 11 53.7	46.122 N	12.298 E	10 G		0.6	6	NORTHERN ITALY. ML 2.4 (KBA).
o 24	15 43 15.3	0.507 S	91.653 W	10 G	5.5 4.5	0.9	171	GALAPAGOS ISLANDS
24	16 15 17.67	42.15 N	19.92 E	10 G		0.1	4	YUGOSLAVIA. ML 2.2 (TTG).
24	16 32 51.3*	25.359 N	142.747 E	33 N	4.7	0.9	12	VOLCANO ISLANDS REGION
24	17 09 26.2*	13.455 N	124.773 E	33 N	4.5	1.1	22	LUZON, PHILIPPINE ISLANDS
o 24	17 18 00.9	13.453 N	124.632 E	31 D	5.0 5.3	1.1	82	LUZON, PHILIPPINE ISLANDS

24	18 34 44.3	38.996 N	22.259 E	10 G	3.7	0.7	20	GREECE. ML 3.4 (ATH).
24	19 01 00.3	43.684 N	16.705 E	10 G		1.0	15	YUGOSLAVIA. ML 2.5 (TTG).
24	19 17 12.4*	27.492 N	101.227 E	33 N		1.6	5	SICHUAN PROVINCE, CHINA. ML 3.7 (BJI).
24	20 22 44.5	0.427 S	91.627 W	10 G	5.3 4.0	0.9	83	GALAPAGOS ISLANDS
24	20 25 58.8*	38.406 N	21.448 E	28 *		1.5	7	GREECE. MD 3.3 (ATH).
24	20 59 02.7*	35.268 N	29.379 E	10 G		1.0	7	EASTERN MEDITERRANEAN SEA
24	21 35 55.6*	1.804 N	127.277 E	33 N	5.0	0.8	12	HALMAHERA
24	22 08 42.7	0.441 S	91.572 W	10 G	5.1 4.0	1.1	65	GALAPAGOS ISLANDS
24	22 19 23.7	38.611 N	21.330 E	10 G		0.5	15	GREECE. ML 3.3 (ATH).
24	23 16 30.5?	0.04 S	91.29 W	10 G	4.9	0.3	6	GALAPAGOS ISLANDS
24	23 30 53.3*	50.488 N	155.251 E	33 N	4.7	0.9	28	KURIL ISLANDS
24	23 43 47.2*	36.251 N	8.286 W	10 G		1.0	12	WEST OF GIBRALTAR. MG 3.0 (MDD).
24	23 44 42.2	0.236 S	91.489 W	10 G	5.1	0.9	48	GALAPAGOS ISLANDS
24	23 50 57.4	0.290 S	91.467 W	10 G	5.1	0.9	42	GALAPAGOS ISLANDS
25	00 35 49.8	3.457 N	97.153 E	95 *	4.5	1.0	18	NORTHERN SUMATERA
25	02 38 04.4*	30.500 N	35.376 E	10 G		0.8	8	DEAD SEA REGION
25	02 55 33.6?	31.38 S	69.68 W	130 ?	4.6	0.3	6	SAN JUAN PROVINCE, ARGENTINA
25	03 53 10.1	0.331 S	126.081 E	33 N	4.8	1.1	31	MOLUCCA SEA
25	05 59 27.3	42.324 N	122.485 E	27	4.4	0.8	18	NORTHEASTERN CHINA. ML 4.7 (BJI). Slight damage in Zhongwu County.
25	06 40 39.2	30.036 N	69.769 E	33 N	4.7 4.4	1.0	52	PAKISTAN
25	08 06 13.9	35.364 N	140.331 E	31	4.7	0.7	9	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Chiba; (I JMA) at Tokyo and Yokohama.
25	09 40 26.5?	59.87 N	2.48 E	10 G		0.2	6	NORTH SEA. MD 2.4 (BER).
25	10 10 15.5*	8.114 S	120.238 E	33 N	3.7	1.1	14	FLORES ISLAND REGION
25	10 47 48.6	8.084 N	71.890 W	30 *	4.6	0.8	24	VENEZUELA
25	11 45 06.0	41.804 N	133.527 E	468	4.4	0.8	37	SEA OF JAPAN. Felt (I JMA) at Wakayama, Honshu.
25	14 10 17.4*	31.100 S	64.629 W	33 N		1.0	11	CORDOBA PROVINCE, ARGENTINA
25	14 22 10.8	21.246 S	173.810 W	55 ?	4.7 4.5	1.1	44	TONGA ISLANDS
25	14 30 36.9*	41.548 N	19.637 E	10 G		0.5	7	ALBANIA. ML 2.6 (TTG).
25	14 50 05.6*	50.859 N	9.101 E	10 G		0.7	5	GERMANY
25	16 26 54.1	60.700 N	5.642 E	0 G		0.5	8	SOUTHERN NORWAY. MD 2.4 (BER). Probable explosion.
25	16 46 34.8*	19.671 S	70.038 W	33 N		0.8	7	NEAR COAST OF NORTHERN CHILE
25	18 02 05.4*	4.783 S	152.551 E	86 ?	4.0	0.9	6	NEW BRITAIN REGION
25	18 39 26.7*	27.725 S	71.728 W	33 N	5.1	1.2	18	NEAR COAST OF NORTHERN CHILE. Felt (III) at Copiapo and (II) at Vallenor.
25	19 55 16.3?	38.66 N	21.14 E	10 G		1.5	5	GREECE. MD 3.2 (ATH).
25	22 27 55.5*	57.888 N	142.763 W	10 G	4.2		36	GULF OF ALASKA. <AGS-P>.
25	23 14 56.4*	38.885 N	27.020 E	10 G		1.1	5	TURKEY
26	00 26 42.1	4.857 S	151.846 E	144	5.0	1.1	21	NEW BRITAIN REGION
26	01 02 22.6?	15.95 N	61.04 W	10 G		1.0	5	LEEWARD ISLANDS. ML 2.0 (FDF).
26	01 05 41.7*	36.630 N	5.853 W	10 G		1.2	8	STRAIT OF GIBRALTAR
26	01 05 45.9*	21.212 S	69.193 W	168 ?		1.2	8	NORTHERN CHILE
26	01 19 59.3	47.523 N	9.202 E	10 G		1.3	10	GERMANY. ML 2.8 (LDG), 2.7 (KBA).
26	02 31 20.1	18.011 S	69.605 W	124 D	5.2	1.0	196	NORTHERN CHILE. Felt (V) at Arica. Felt (V) at Tacna and (IV) at Arequipa, Peru.
26	03 32 17.4?	65.69 N	167.79 W	10 G		0.4	7	ALASKA. ML 3.5 (PMR)
26	04 08 36.9*	38.704 N	21.312 E	69 *	4.0	0.9	23	GREECE. MD 4.2 (ATH). Felt in the Agrinion area.
26	05 31 27.0*	62.310 N	124.270 W	10 G			9	NORTHWEST TERRITORIES, CANADA. <PGC-P>.
26	05 47 59.3*	38.854 N	27.774 E	10 G		0.7	5	TURKEY
26	06 17 31.5	37.319 S	47.989 E	10 G	6.1 6.7	1.1	375	ATLANTIC-INDIAN RISE
26	08 34 19.3?	31.60 S	73.18 W	10 G		0.4	9	OFF COAST OF CENTRAL CHILE
26	09 30 09.5	37.337 S	47.786 E	10 G	4.9	0.7	23	ATLANTIC-INDIAN RISE
26	09 36 23.4	18.240 S	69.062 W	151 D	4.5	1.3	58	NORTHERN CHILE. Felt (III) at Arica.
26	09 53 27.7?	19.19 N	109.10 W	33 N	4.3	1.0	31	REVILLA GIGEDO ISLANDS REGION
26	09 55 35.3	17.871 S	172.001 W	33 N	5.5 5.3	0.9	153	TONGA ISLANDS REGION
26	10 40 13.2*	66.325 N	149.782 W	33 N		1.3	6	ALASKA. ML 4.2 (PMR).
26	11 50 32.9	36.216 N	68.733 E	42 D	4.7 4.0	1.1	39	HINDU KUSH REGION
26	12 14 12.4?	60.62 N	5.72 E	0 G		0.5	4	SOUTHERN NORWAY. MD 1.9 (BER). Probable explosion.
26	13 01 35.0*	33.219 S	71.248 W	33 N		0.5	9	NEAR COAST OF CENTRAL CHILE
26	13 42 27.1	37.187 S	47.792 E	10 G	5.5 5.2	0.9	94	ATLANTIC-INDIAN RISE
26	13 56 23.3?	27.00 S	26.55 E	5 G	4.0	1.2	7	REPUBLIC OF SOUTH AFRICA
26	14 43 42.2	41.927 N	20.386 E	10 G		0.9	7	ALBANIA. ML 2.5 (TTG).
26	14 55 29.3?	52.08 N	17.19 E	10 G		0.9	8	POLAND. ML 3.5 (KBA), 3.5 (VKA), 3.3 (GRF).
26	15 08 41.5?	5.68 S	147.11 E	216 ?	4.0	0.5	6	EAST PAPUA NEW GUINEA REGION
26	17 32 02.0*	35.205 N	6.242 W	10 G		1.2	13	STRAIT OF GIBRALTAR. MG 3.2 (MDD).
26	17 51 00.0?	31.61 N	35.17 E	10 G		0.6	6	DEAD SEA REGION
26	17 52 34.7	37.132 S	47.770 E	10 G	5.4 5.2	1.0	79	ATLANTIC-INDIAN RISE
26	18 38 12.9*	9.152 S	116.742 E	150 *	4.7	1.3	9	SUMBAWA ISLAND REGION
26	18 41 12.5*	60.442 N	4.360 E	0 G		1.6	7	SOUTHERN NORWAY. MD 2.3 (BER). Probable explosion.
26	19 21 43.3*	58.136 N	142.505 W	10 G	3.7		33	GULF OF ALASKA. <AGS-P>. ML 3.4 (PMR).
26	19 26 49.8*	58.245 N	142.466 W	10 G	3.8		35	GULF OF ALASKA. <AGS-P>. ML 3.6 (PMR).
26	19 29 50.6*	58.125 N	142.512 W	10 G			25	GULF OF ALASKA. <AGS-P>.
26	20 26 16.7?	61.03 S	42.06 W	10 G	4.8 3.9	1.1	13	SCOTIA SEA
26	22 00 24.2*	77.310 N	84.270 W	18 G			9	QUEEN ELIZABETH ISLANDS. <OTT>. mbLg 4.0 (OTT).
26	22 51 54.6*	24.493 S	70.444 W	102 ?		1.5	11	NEAR COAST OF NORTHERN CHILE
26	23 20 22.5?	21.11 S	68.74 W	210 ?		0.8	7	CHILE-BOLIVIA BORDER REGION
27	00 46 16.8?	18.20 N	66.90 W	33 N		0.2	5	PUERTO RICO REGION
27	00 51 04.3	5.522 N	0.386 W	10 G		0.2	7	NORTHWEST AFRICA. MG 3.4 (KUK).
27	00 55 11.8	42.399 N	23.877 E	10 G		0.6	12	BULGARIA
27	03 20 06.4	19.943 S	133.699 E	5 G	4.9	1.1	20	NORTHERN TERRITORY, AUSTRALIA
27	03 28 37.3?	4.50 S	131.60 E	33 N		0.6	7	BANDA SEA
27	04 37 17.6*	38.803 N	122.810 W	1			10	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK).
27	04 50 27.1	6.822 N	73.019 W	158 D	4.9	0.8	69	NORTHERN COLOMBIA
27	05 32 55.9	37.297 S	47.973 E	10 G	5.3 4.5	1.1	49	ATLANTIC-INDIAN RISE
27	07 11 39.4?	41.47 S	73.27 W	33 N	4.8	0.9	16	NEAR COAST OF SOUTHERN CHILE
27	07 28 27.5	5.283 S	131.115 E	33 N	5.1	1.0	92	BANDA SEA
27	07 47 41.8	42.469 N	13.175 E	10 G		0.6	9	CENTRAL ITALY
27	07 50 02.8	48.038 N	155.109 E	33 N	4.9 4.5	0.8	60	KURIL ISLANDS
27	09 11 59.4?	14.44 N	61.04 W	33 N		0.7	9	WINDWARD ISLANDS. ML 3.6 (FDF).
27	10 14 02.3	9.351 S	114.187 E	70 *	5.1	1.1	53	SOUTH OF BALI ISLAND
27	10 51 29.8	24.615 S	177.296 W	173 D	4.9	1.1	62	SOUTH OF FIJI ISLANDS
27	12 02 42.5*	50.919 N	175.071 W	33 N	4.6	1.0	40	ANDREANOF ISLANDS, ALEUTIAN IS.

27	12 35 23.8*	4.559 S	102.399 E	33 N	4.5	1.1	8	SOUTHERN SUMATERA
27	12 36 57.0*	60.434 N	5.050 E	0 G		0.6	6	SOUTHERN NORWAY. MD 1.6 (BER). Probable explosion.
27	13 00 33.17	22.27 S	179.41 W	559 ?	4.4	0.9	18	SOUTH OF FIJI ISLANDS
27	13 32 46.57	38.27 N	140.63 E	10 G	4.2	1.5	6	HONSHU, JAPAN
a 27	13 46 15.8	21.022 S	173.764 W	33 N	5.2 5.3	1.3	105	TONGA ISLANDS
27	16 23 34.9*	59.986 S	27.784 W	77 D	4.7	1.3	24	SOUTH SANDWICH ISLANDS REGION
27	17 02 11.5	46.333 N	13.187 E	10		1.2	22	AUSTRIA. MD 3.0 (TRI), ML 2.8 (KBA).
27	17 45 23.3*	13.531 N	124.994 E	33 N	4.7	0.7	17	LUZON, PHILIPPINE ISLANDS
27	18 09 48.8	43.899 N	7.486 E	10 G		0.9	21	NEAR SOUTH COAST OF FRANCE. ML 2.9 (LDG).
27	18 51 48.7*	61.047 N	150.936 W	60			36	SOUTHERN ALASKA. <AGS-P>.
27	20 22 49.8	13.525 N	124.960 E	75 *	4.8	1.1	34	LUZON, PHILIPPINE ISLANDS
27	21 02 31.2	43.942 N	7.469 E	10 G		0.6	9	NEAR SOUTH COAST OF FRANCE. MD 1.0 (STR).
27	21 12 43.5	38.687 N	21.255 E	10 G		0.8	12	GREECE. ML 3.2 (ATH).
27	21 26 03.9*	62.302 N	150.743 W	39			26	CENTRAL ALASKA. <AGS-P>.
27	22 23 20.5*	62.278 N	150.082 W	5			33	CENTRAL ALASKA. <AGS-P>.
27	23 14 51.0	1.398 N	126.286 E	81 *	4.9	1.1	43	MOLUCCA PASSAGE
27	23 28 14.2*	59.325 N	153.020 W	73			18	SOUTHERN ALASKA. <AGS-P>.
28	00 24 05.6*	18.945 S	69.342 W	154 ?		0.6	7	NORTHERN CHILE
28	00 42 11.1	42.379 N	19.934 E	10 G		0.6	12	YUGOSLAVIA. MD 2.6 (TTG).
28	01 35 34.8	6.814 S	130.515 E	103 *	5.1	1.1	55	BANDA SEA
28	02 17 45.9	42.378 N	19.973 E	10 G		0.8	11	YUGOSLAVIA. MD 2.7 (TTG).
a 28	03 19 35.1	11.079 N	93.469 E	120 D	5.1	1.0	210	ANDAMAN ISLANDS REGION
28	03 25 10.6	40.886 N	22.936 E	10 G		0.3	8	GREECE. MD 3.1 (ATH), ML 2.4 (SKO).
28	04 43 57.7*	31.964 N	36.360 E	10 G		0.8	7	DEAD SEA REGION
28	04 44 36.8*	32.092 N	35.859 E	10 G		1.5	5	DEAD SEA REGION
28	05 01 04.0	16.936 N	119.853 E	16	4.6	0.7	14	LUZON, PHILIPPINE ISLANDS
28	05 02 59.5*	32.630 N	115.830 W	7			6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.3 (PAS).
28	05 03 56.3*	32.630 N	115.830 W	6			3	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
28	05 25 02.5*	32.630 N	115.830 W	6			7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.6 (PAS).
28	05 39 15.3*	32.630 N	115.830 W	6			5	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.4 (PAS).
28	05 55 49.6	24.700 N	91.571 E	29	4.6	0.8	22	INDIA-BANGLADESH BORDER REGION
28	06 00 32.8	46.496 N	9.855 E	10 G		1.0	11	SWITZERLAND
28	06 10 17.0	43.955 N	7.455 E	10 G		0.4	9	NEAR SOUTH COAST OF FRANCE. MD 1.0 (STR).
28	07 24 19.5*	59.869 N	153.305 W	109			27	SOUTHERN ALASKA. <AGS-P>.
28	07 52 52.2*	32.640 N	115.840 W	7			18	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.7 (PAS). Felt (V) at Ocotillo; (IV) at El Centro and Plaster City; (III) at Colton, Heber and Julian, California. Also felt at Mexicali, Mexico.
28	07 56 11.2*	32.640 N	115.840 W	7			10	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.6 (PAS).
28	07 58 23.0*	32.630 N	115.840 W	7			6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.2 (PAS).
28	10 24 10.87	17.05 S	70.91 W	33 N	4.9	0.8	6	NEAR COAST OF PERU
28	12 04 16.9	0.038 N	83.087 E	10 G	4.8 4.1	1.4	17	NORTH INDIAN OCEAN
28	12 40 35.8*	22.725 N	120.925 E	5 G		1.5	5	TAIWAN
28	13 03 51.6*	37.263 N	121.448 W	2			11	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
28	14 27 13.97	0.08 N	125.67 E	109 ?	4.7	1.1	8	MOLUCCA PASSAGE
28	14 31 40.8	36.332 S	179.674 E	155 ?	4.4	1.3	8	OFF E. COAST OF N. ISLAND, N.Z.
28	14 45 17.8	39.227 N	25.866 E	10		1.0	10	AEGEAN SEA. ML 3.2 (ATH).
28	15 27 30.87	40.41 N	127.06 W	10 G		0.2	8	OFF COAST OF NORTHERN CALIFORNIA. ML 3.6 (BRK).
28	16 38 10.6*	41.746 N	14.129 E	11		1.1	9	SOUTHERN ITALY
28	16 45 02.7	38.157 N	21.953 E	10 G		0.8	14	GREECE. ML 3.1 (ATH).
28	17 17 30.9	40.363 N	20.909 E	10 G		0.9	12	GREECE-ALBANIA BORDER REGION. MG 3.2 (TIR).
28	18 39 41.9	45.941 N	0.700 W	20		0.9	17	FRANCE. ML 3.4 (LDG).
28	19 27 20.9*	4.780 S	153.015 E	66 *	4.4	0.9	8	NEW IRELAND REGION
28	20 58 44.07	19.87 S	179.30 W	611 *	4.3	0.9	13	FIJI ISLANDS REGION
28	21 15 08.17	11.46 S	117.81 E	33 N		1.3	5	SOUTH OF SUMBAWA ISLAND
28	22 18 26.6*	42.449 N	16.442 E	10 G		0.9	7	ADRIATIC SEA. ML 3.1 (KBA).
28	22 29 25.7*	40.000 N	122.900 W	11			8	NORTHERN CALIFORNIA. <BRK>. ML 2.6 (BRK).
28	22 49 25.7*	39.879 N	23.499 E	31 *		1.2	8	AEGEAN SEA
29	00 03 14.6*	52.201 N	174.574 E	33 N	4.7	1.4	21	NEAR ISLANDS, ALEUTIAN ISLANDS. ML 5.0 (PMR).
29	02 58 31.8	22.347 S	179.516 W	595	5.2	0.9	79	SOUTH OF FIJI ISLANDS
29	04 13 27.1*	44.488 N	148.017 E	122 *	4.8	1.0	28	KURIL ISLANDS
f 29	05 31 41.4	55.149 N	167.430 E	33 N	6.1 6.8	1.1	446	KOMANDORSKY ISLANDS REGION. Ms 6.6 (PAS), 6.5 (BRK).
29	05 49 05.6	55.197 N	166.953 E	33 N	5.3	0.9	141	KOMANDORSKY ISLANDS REGION. ML 4.8 (PMR).
29	06 17 34.7	55.114 N	167.123 E	33 N	5.0	1.1	67	KOMANDORSKY ISLANDS REGION. ML 4.7 (PMR).
29	06 20 09.9	55.180 N	167.089 E	33 N	5.0	0.9	46	KOMANDORSKY ISLANDS REGION. ML 4.4 (PMR).
29	07 22 36.47	21.25 S	68.85 W	33 N		1.0	5	CHILE-BOLIVIA BORDER REGION
29	07 24 06.9*	55.438 N	166.732 E	33 N	4.3	0.7	12	KOMANDORSKY ISLANDS REGION
29	07 35 20.5*	55.529 N	169.390 E	33 N	4.3	1.4	10	KOMANDORSKY ISLANDS REGION. ML 4.0 (PMR).
29	07 38 44.5	41.574 N	141.997 E	76	4.7	1.1	57	HOKKAIDO, JAPAN REGION. Felt (II JMA) at Hachinohe and Miyoko, Honshu; (I JMA) at Morioka, Honshu.
29	07 45 47.2	55.149 N	167.173 E	33 N	5.0	1.0	68	KOMANDORSKY ISLANDS REGION. ML 4.6 (PMR).
29	07 49 10.6*	55.104 N	167.111 E	33 N	4.6	1.2	23	KOMANDORSKY ISLANDS REGION
29	09 07 55.3	39.129 N	28.641 E	10 G		1.0	6	TURKEY
29	09 53 37.67	22.46 S	172.45 E	33 N	4.3	0.6	6	LOYALTY ISLANDS REGION
29	10 03 38.9	2.307 N	128.602 E	62 *	5.2	1.2	94	HALMAHERA
29	10 06 44.7*	0.252 N	122.274 E	157 ?	5.3	1.1	21	MINAHASSA PENINSULA
29	10 56 21.3	29.252 S	68.899 W	104	5.0	1.4	24	SAN JUAN PROVINCE, ARGENTINA
29	11 11 39.9*	55.478 N	166.780 E	33 N	4.6	0.8	21	KOMANDORSKY ISLANDS REGION
29	11 18 22.1	24.817 S	179.566 E	502 *	4.8	0.9	50	SOUTH OF FIJI ISLANDS
29	11 24 15.5	37.592 N	72.179 E	107 *	4.7	0.8	37	TAJIK SSR
29	12 08 12.6*	37.035 N	5.316 W	10 G		1.1	6	SPAIN
29	13 36 04.1*	4.589 N	126.299 E	33 N	4.9	1.4	17	TALAUD ISLANDS
29	15 25 06.8*	34.030 N	116.250 W	5			8	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
29	15 30 52.9*	36.250 N	141.152 E	33 N	3.8	0.9	6	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito. Felt at Onahama.
29	15 32 20.1	35.786 N	31.261 E	11		0.8	12	CYPRUS
29	16 21 38.1	78.063 N	6.788 E	10 G	4.4	1.1	23	SVALBARD REGION
29	16 33 27.0*	23.586 S	66.690 W	231 *		0.9	9	JUJUY PROVINCE, ARGENTINA
29	20 02 26.4*	61.863 N	150.417 W	63			32	SOUTHERN ALASKA. <AGS-P>.
29	21 48 33.4	39.947 N	23.337 E	10 G		0.9	12	AEGEAN SEA
29	21 53 45.6*	36.922 N	121.542 W	8			15	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK).
29	22 14 00.1	59.992 N	6.007 E	10 G		0.3	8	SOUTHERN NORWAY. MD 1.9 (BER).

ADDITIONAL SOURCE PARAMETERS

01 09 01 46.20 1.241S 145.862E 10km 5.4mb (27 obs.) 5.5Msz (6 obs.) ADMIRALTY ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 29C Centroid Location: Origin Time 09:01:45.9 0.7 Lat 1.47S 0.05 Lon 145.78E 0.04 Dep 15.0 FIX Half-duration 2.6 Principal Axes: Scale 10**17 Nm T Val= 3.50 Plg= 0 Azm=104 N 0.45 85 194 P -3.95 5 14 Best Double Couple:Mo=3.7*10**17 NP1:Strike=149 Dip=87 Slip=-177 NP2: 59 87 -3	P -10.92 26 314 Best Double Couple:Mo=1.0*10**17 NP1:Strike= 33 Dip=19 Slip= 76 NP2: 228 71 95	Dep 15.0 FIX Half-duration 1.3 Principal Axes: Scale 10**16 Nm T Val= 4.70 Plg=14 Azm=219 N -1.77 31 318 P -2.93 55 108 Best Double Couple:Mo=3.8*10**16 NP1:Strike=274 Dip=41 Slip=-142 NP2: 153 66 -55
01 12 23 03.32 21.187S 174.350W 33km 5.4mb (20 obs.) 5.0Msz (3 obs.) TONGA ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 22C Centroid Location: Origin Time 12:23:14.5 1.1 Lat 20.68S 0.10 Lon 174.01W 0.07 Dep 15.0 FIX Half-duration 2.1 Principal Axes: Scale 10**17 Nm T Val= 1.74 Plg=66 Azm=332 N 0.36 15 205 P -2.10 19 110 Best Double Couple:Mo=1.9*10**17 NP1:Strike=176 Dip=30 Slip= 58 NP2: 33 65 107	03 08 43 52.31 65.436S 179.638E 10km 5.0mb (2 obs.) BALLENY ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 25C Centroid Location: Origin Time 08:43:59.7 0.4 Lat 65.52S 0.04 Lon 179.96E 0.11 Dep 15.0 FIX Half-duration 2.1 Principal Axes: Scale 10**17 Nm T Val= 1.94 Plg= 0 Azm=184 N -0.06 90 180 P -1.88 0 94 Best Double Couple:Mo=1.9*10**17 NP1:Strike=229 Dip=90 Slip= 180 NP2: 319 90 0	05 03 25 32.26 9.171S 124.111E 79km 5.5mb (26 obs.) TIMOR CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 33C Centroid Location: Origin Time 03:25:31.4 0.6 Lat 9.23S 0.04 Lon 124.12E 0.06 Dep 58.6 3.0 Half-duration 2.7 Principal Axes: Scale 10**17 Nm T Val= 4.25 Plg=36 Azm=290 N -0.40 54 114 P -3.85 2 21 Best Double Couple:Mo=4.1*10**17 NP1:Strike= 72 Dip=64 Slip= 26 NP2: 330 67 151
01 13 32 51.94 24.675S 70.405W 30km 5.2mb (20 obs.) NEAR COAST OF NORTHERN CHILE CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 18C Centroid Location: Origin Time 13:33: 2.0 0.7 Lat 23.90S FIX;Lon 69.89W FIX Dep 40.4 8.5 Half-duration 1.7 Principal Axes: Scale 10**16 Nm T Val= 10.26 Plg=47 Azm= 58 N -0.76 27 181 P -9.50 31 289 Best Double Couple:Mo=9.9*10**16 NP1:Strike= 70 Dip=29 Slip= 161 NP2: 176 81 62	03 15 34 45.13 1.042N 85.128W 10km 5.0mb (10 obs.) 4.3Msz (1 obs.) OFF COAST OF ECUADOR CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 31C Centroid Location: Origin Time 15:34:43.2 0.8 Lat 0.61N 0.06 Lon 85.14W 0.06 Dep 15.0 FIX Half-duration 1.8 Principal Axes: Scale 10**17 Nm T Val= 1.22 Plg= 0 Azm=137 N -0.08 90 180 P -1.13 0 47 Best Double Couple:Mo=1.2*10**17 NP1:Strike=182 Dip=90 Slip= 180 NP2: 272 90 0	05 08 04 34.58 12.951N 145.732E 67km 5.5mb (34 obs.) SOUTH OF MARIANA ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 27C Centroid Location: Origin Time 08:04:35.4 0.3 Lat 12.88N 0.03 Lon 145.85E 0.04 Dep 55.1 3.8 Half-duration 2.1 Principal Axes: Scale 10**17 Nm T Val= 1.86 Plg=77 Azm=344 N -0.05 7 224 P -1.81 11 133 Best Double Couple:Mo=1.8*10**17 NP1:Strike=215 Dip=34 Slip= 78 NP2: 49 56 98
02 15 58 50.20 45.294N 150.093E 51km 5.2mb (43 obs.) KURIL ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 22C Centroid Location: Origin Time 15:58:47.0 2.0 Lat 45.02N 0.11 Lon 150.73E 0.20 Dep 62.1 7.4 Half-duration 1.3 Principal Axes: Scale 10**16 Nm T Val= 2.88 Plg=88 Azm=127 N 1.19 0 217 P -4.07 2 307 Best Double Couple:Mo=3.5*10**16 NP1:Strike= 37 Dip=43 Slip= 90 NP2: 217 47 90	03 17 34 53.22 27.832N 142.758E 39km 5.2mb (27 obs.) 5.0Msz (1 obs.) BONIN ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 21C Centroid Location: Origin Time 17:34:53.2 1.0 Lat 27.81N 0.12 Lon 142.77E 0.10 Dep 15.0 BDY Half-duration 1.7 Principal Axes: Scale 10**16 Nm T Val= 6.79 Plg=66 Azm=263 N 0.35 10 16 P -7.13 22 110 Best Double Couple:Mo=7.0*10**16 NP1:Strike=218 Dip=25 Slip= 114 NP2: 12 67 79	05 14 01 02.75 24.753S 70.433W 37km 6.2mb (74 obs.) 6.7Msz (16 obs.) NEAR COAST OF NORTHERN CHILE FAULT PLANE SOLUTION: P-Waves NP1:Strike=165 Dip=70 Slip= 110 NP2: 298 28 47 Principal Axes: T Plg=60 Azm=104 P 22 240 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting with a moderate right-lateral strike-slip component. The preferred fault plane is NP2.
02 22 30 14.10 1.816N 127.197E 96km 5.3mb (17 obs.) HALMAHERA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 24C Centroid Location: Origin Time 22:30:12.5 0.6 Lat 2.19N 0.07 Lon 126.88E 0.09 Dep 75.5 7.9 Half-duration 1.7 Principal Axes: Scale 10**16 Nm T Val= 9.57 Plg=63 Azm=145 N 1.35 4 46	03 20 24 53.96 9.208S 66.978E 10km 5.1mb (9 obs.) 5.1Msz (2 obs.) MID-INDIAN RISE CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 31C Centroid Location: Origin Time 20:25: 0.9 0.5 Lat 9.06S 0.05 Lon 67.02E 0.03 Dep 15.0 FIX Half-duration 2.8 Principal Axes: Scale 10**17 Nm T Val= 5.16 Plg= 0 Azm= 93 N -0.88 85 183 P -4.28 5 3 Best Double Couple:Mo=4.7*10**17 NP1:Strike=138 Dip=86 Slip=-176 NP2: 48 86 -4	RADIATED ENERGY No. of sta: 6 Focal mech. M Energy 2.9±0.9*10**14 Nm MOMENT TENSOR SOLUTION Dep 54 No. of sta: 11 Principal Axes: Scale 10**19 Nm T Val= 5.26 Plg=57 Azm=104 N -0.01 23 333 P -5.25 22 233 Best Double Couple:Mo=5.3*10**19 NP1:Strike=287 Dip=31 Slip= 40 NP2: 162 71 114 CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 41C M.W.: 10S, 28C Centroid Location: Origin Time 14:01:16.7 0.1 Lat 24.93S 0.01 Lon 70.56W 0.01 Dep 17.2 0.7 Half-duration 12.0 Principal Axes: Scale 10**19 Nm T Val= 6.57 Plg=62 Azm= 95 N 0.12 2 0 P -6.69 28 269 Best Double Couple:Mo=6.6*10**19
04 02 35 59.64 50.750N 173.500E 33km 5.0mb (31 obs.) ALEUTIAN ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 8S, 16C Centroid Location: Origin Time 02:36: 0.2 1.0 Lat 51.21N 0.14 Lon 173.08E 0.15		

NP1:Strike=353 Dip=17 Slip= 82
NP2: 181 73 92

05 18 49 31.85 24.893S 70.554W 31km
6.0mb (59 obs.) 6.1MsZ (8 obs.)
NEAR COAST OF NORTHERN CHILE
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=197 Dip=70 Slip= 90
NP2: 17 20 90

Principal Axes:
T Plg=65 Azm=107
P 25 287

Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.

RADIATED ENERGY
No. of sta: 4 Focal mech. M
Energy 2.0±0.8*10**13 Nm

MOMENT TENSOR SOLUTION
Dep 33 No. of sta: 10

Principal Axes:
Scale 10**18 Nm
T Val= 6.02 Plg=64 Azm= 85
N 0.29 16 211
P -6.31 20 307

Best Double Couple:Mo=6.2*10**18
NP1:Strike= 62 Dip=29 Slip= 125
NP2: 204 67 73

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 31C M.W.: 6S, 12C
Centroid Location:
Origin Time 18:49:42.3 0.3
Lat 25.04S 0.04 Lon 70.63W 0.04
Dep 22.1 2.1 Half-duration 6.0

Principal Axes:
Scale 10**18 Nm
T Val= 4.00 Plg=64 Azm= 91
N 0.26 1 358
P -4.25 26 268

Best Double Couple:Mo=4.1*10**18
NP1:Strike=355 Dip=20 Slip= 86
NP2: 179 71 91

06 02 32 03.48 4.692S 153.210E 27km
5.3mb (15 obs.) 4.7MsZ (4 obs.)
NEW IRELAND REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 7S, 15C
Centroid Location:
Origin Time 02:32:10.6 2.0
Lat 4.89S 0.25 Lon 153.31E 0.10
Dep 15.0 FIX Half-duration 1.6

Principal Axes:
Scale 10**17 Nm
T Val= 0.93 Plg=56 Azm= 16
N 0.36 29 164
P -1.29 15 262

Best Double Couple:Mo=1.1*10**17
NP1:Strike= 27 Dip=39 Slip= 141
NP2: 149 66 58

06 05 23 57.95 16.679S 124.663E 10km
5.2mb (11 obs.)
WESTERN AUSTRALIA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 19C
Centroid Location:
Origin Time 05:24: 3.7 2.2
Lat 16.13S 0.21 Lon 124.85E 0.15
Dep 15.0 FIX Half-duration 1.5

Principal Axes:
Scale 10**16 Nm
T Val= 4.84 Plg=11 Azm=153
N 1.38 64 41
P -6.22 23 248

Best Double Couple:Mo=5.5*10**16
NP1:Strike=288 Dip=66 Slip= -10
NP2: 22 81 -155

06 07 42 34.72 20.094S 68.543W 132km
5.2mb (32 obs.)
CHILE-BOLIVIA BORDER REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 17C
Centroid Location:
Origin Time 07:42:41.2 0.7
Lat 19.77S 0.09 Lon 68.87W 0.08

Dep 135.0 3.6 Half-duration 1.7

Principal Axes:
Scale 10**16 Nm
T Val= 12.43 Plg=28 Azm= 67
N -1.05 31 318
P -11.38 46 190

Best Double Couple:Mo=1.2*10**17
NP1:Strike=206 Dip=33 Slip= -19
NP2: 312 80 -121

06 14 50 45.29 24.688N 91.570E 33km
5.8mb (75 obs.) 5.8MsZ (13 obs.)
INDIA-BANGLADESH BORDER REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=114 Dip=63 Slip= 148
NP2: 220 62 31

Principal Axes:
T Plg=41 Azm= 77
P 1 167

Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a large reverse component. The preferred fault plane is not determined.

MOMENT TENSOR SOLUTION
Dep 34 No. of sta: 9

Principal Axes:
Scale 10**17 Nm
T Val= 5.90 Plg=36 Azm= 76
N 0.19 53 240
P -6.08 8 340

Best Double Couple:Mo=6.0*10**17
NP1:Strike=112 Dip=59 Slip= 158
NP2: 214 72 33

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 29C
Centroid Location:
Origin Time 14:50:43.6 0.5
Lat 24.05N 0.05 Lon 91.66E 0.05
Dep 31.0 BDY Half-duration 3.3

Principal Axes:
Scale 10**17 Nm
T Val= 6.80 Plg=16 Azm=103
N -0.19 74 297
P -6.60 4 194

Best Double Couple:Mo=6.7*10**17
NP1:Strike=239 Dip=76 Slip= 9
NP2: 147 82 166

06 15 15 40.99 6.543S 131.907E 39km
5.9mb (36 obs.) 5.6MsZ (6 obs.)
TANIMBAR ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=200 Dip=75 Slip= 148
NP2: 299 59 18

Principal Axes:
T Plg=33 Azm=156
P 10 252

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.

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 39C
Centroid Location:
Origin Time 15:15:43.2 0.4
Lat 6.62S 0.03 Lon 131.85E 0.03
Dep 55.2 2.2 Half-duration 4.8

Principal Axes:
Scale 10**18 Nm
T Val= 2.56 Plg=14 Azm=294
N -0.02 75 100
P -2.55 3 203

Best Double Couple:Mo=2.6*10**18
NP1:Strike=338 Dip=77 Slip= 172
NP2: 70 82 13

06 18 03 54.78 17.756S 66.958W 285km
6.0mb (79 obs.)
BOLIVIA
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=350 Dip=88 Slip=-102
NP2: 251 12 -10

Principal Axes:
T Plg=42 Azm= 91
P 46 248

Comment: The focal mechanism is poorly controlled and

corresponds to normal faulting with a small left-lateral strike-slip component. The preferred fault plane is NP1.

RADIATED ENERGY
No. of sta: 5 Focal mech. F
Energy 5.8±1.6*10**13 Nm

MOMENT TENSOR SOLUTION
Dep 278 No. of sta: 8

Principal Axes:
Scale 10**18 Nm
T Val= 6.20 Plg=36 Azm= 83
N -0.10 10 180
P -6.10 53 283

Best Double Couple:Mo=6.2*10**18
NP1:Strike=132 Dip=13 Slip=-139
NP2: 1 81 -80

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 41C M.W.: 11S, 26C
Centroid Location:
Origin Time 18:03:59.3 0.2
Lat 18.03S 0.02 Lon 67.02W 0.02
Dep 284.9 0.8 Half-duration 6.8

Principal Axes:
Scale 10**18 Nm
T Val= 6.51 Plg=37 Azm= 95
N 0.25 6 1
P -6.76 53 263

Best Double Couple:Mo=6.6*10**18
NP1:Strike=216 Dip=10 Slip= -55
NP2: 0 82 -96

06 21 30 04.36 16.195S 173.820W 126km
5.8mb (46 obs.)
TONGA ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=185 Dip=85 Slip= -90
NP2: 5 5 -90

Principal Axes:
T Plg=40 Azm=275
P 50 95

Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP1.

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 40C
Centroid Location:
Origin Time 21:30:11.0 0.3
Lat 16.10S 0.03 Lon 173.49W 0.03
Dep 124.0 1.1 Half-duration 4.6

Principal Axes:
Scale 10**18 Nm
T Val= 2.17 Plg=39 Azm=277
N -0.14 1 186
P -2.03 51 94

Best Double Couple:Mo=2.1*10**18
NP1:Strike= 19 Dip= 6 Slip= -76
NP2: 185 84 -91

07 04 05 31.33 17.559S 167.874E 23km
5.3mb (12 obs.) 4.9MsZ (2 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 22C
Centroid Location:
Origin Time 04:05:37.4 1.0
Lat 17.52S 0.12 Lon 167.92E 0.13
Dep 16.4 5.4 Half-duration 1.8

Principal Axes:
Scale 10**17 Nm
T Val= 1.60 Plg=52 Azm= 44
N -0.06 12 151
P -1.54 35 250

Best Double Couple:Mo=1.6*10**17
NP1:Strike= 24 Dip=15 Slip= 145
NP2: 149 81 77

07 08 46 58.61 60.296N 152.972W 138km
5.6mb (97 obs.)
SOUTHERN ALASKA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 40C M.W.: 11S, 24C
Centroid Location:
Origin Time 08:47: 3.7 0.1
Lat 60.44N 0.01 Lon 153.08W 0.02
Dep 147.5 0.5 Half-duration 6.5

Principal Axes:

Scale 10**18 Nm
 T Val= 6.00 Plg=25 Azm=279
 N -0.27 65 98
 P -5.73 0 188
 Best Double Couple:Mo=5.9*10**18
 NP1:Strike=321 Dip=72 Slip= 162
 NP2: 56 73 19

07 18 15 05.63 50.785N 173.465E 33km
 6.2mb (79 obs.) 6.0Msz (20 obs.)
 ALEUTIAN ISLANDS REGION
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=100 Dip=72 Slip=-176
 NP2: 9 86 -18
 Principal Axes:
 T Val= 15 Azm= 56
 P 15 323
 Comment: The focal mechanism is moderately well controlled and corresponds to a strike-slip faulting with a moderate normal component. The preferred fault plane is not determined.

RADIATED ENERGY
 No. of sta: 10 Focal mech. M
 Energy 1.2±0.3*10**14 Nm
 MOMENT TENSOR SOLUTION
 Dep 10 No. of sta: 22
 Principal Axes:
 Scale 10**18 Nm
 T Val= 3.86 Plg= 2 Azm= 82
 N 0.04 59 348
 P -3.90 31 173
 Best Double Couple:Mo=3.9*10**18
 NP1:Strike=213 Dip=67 Slip= -22
 NP2: 312 70 -155
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 36C M.W.: 10S, 19C
 Centroid Location:
 Origin Time 18:15: 7.8 0.1
 Lat 50.94N 0.01 Lon 173.38E 0.02
 Dep 15.0 FIX Half-duration 5.7
 Principal Axes:
 Scale 10**18 Nm
 T Val= 3.72 Plg= 1 Azm= 40
 N -0.83 18 309
 P -2.89 72 132
 Best Double Couple:Mo=3.3*10**18
 NP1:Strike=147 Dip=47 Slip= -65
 NP2: 293 48 -114

08 13 51 33.95 17.737N 100.965W 58km
 5.5mb (53 obs.)
 GUERRERO, MEXICO
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 36C
 Centroid Location:
 Origin Time 13:51:32.4 0.5
 Lat 17.03N 0.04 Lon 100.35W 0.03
 Dep 47.8 2.1 Half-duration 3.3
 Principal Axes:
 Scale 10**17 Nm
 T Val= 5.58 Plg=71 Azm= 71
 N 3.58 16 282
 P -9.16 9 189
 Best Double Couple:Mo=7.4*10**17
 NP1:Strike=261 Dip=38 Slip= 63
 NP2: 113 56 110

08 15 57 00.23 24.801S 70.393W 32km
 5.6mb (22 obs.) 5.2Msz (4 obs.)
 NEAR COAST OF NORTHERN CHILE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 23C
 Centroid Location:
 Origin Time 15:57: 7.8 0.4
 Lat 25.02S 0.07 Lon 70.92W 0.07
 Dep 17.5 3.2 Half-duration 2.8
 Principal Axes:
 Scale 10**17 Nm
 T Val= 5.86 Plg=57 Azm=107
 N -0.56 12 358
 P -5.30 31 261
 Best Double Couple:Mo=5.6*10**17
 NP1:Strike=318 Dip=18 Slip= 48
 NP2: 181 77 102

09 02 22 31.21 18.616N 62.889W 50km
 5.3mb (37 obs.) 5.0Msz (9 obs.)

LEEWARD ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 23C
 Centroid Location:
 Origin Time 02:22:33.5 0.8
 Lat 18.94N 0.11 Lon 63.13W 0.12
 Dep 15.0 FIX Half-duration 2.0
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.43 Plg=49 Azm=276
 N 0.04 24 156
 P -1.47 31 50
 Best Double Couple:Mo=1.4*10**17
 NP1:Strike= 90 Dip=26 Slip= 22
 NP2: 340 81 114

09 19 12 44.07 18.607N 62.902W 53km
 5.1mb (20 obs.) 4.9Msz (3 obs.)
 LEEWARD ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 25C
 Centroid Location:
 Origin Time 19:12:48.1 0.7
 Lat 18.71N 0.10 Lon 62.84W 0.13
 Dep 15.0 FIX Half-duration 1.8
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.86 Plg=47 Azm=262
 N -0.09 9 162
 P -1.77 42 63
 Best Double Couple:Mo=1.8*10**17
 NP1:Strike= 88 Dip=10 Slip= 16
 NP2: 342 87 99

11 02 56 10.10 35.616S 102.268W 10km
 5.3mb (11 obs.) 5.3Msz (1 obs.)
 SOUTHERN PACIFIC OCEAN
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 35C
 Centroid Location:
 Origin Time 02:56:15.3 0.2
 Lat 35.94S 0.03 Lon 102.02W 0.03
 Dep 15.0 FIX Half-duration 2.5
 Principal Axes:
 Scale 10**17 Nm
 T Val= 3.15 Plg= 0 Azm=231
 N -0.30 90 180
 P -2.85 0 141
 Best Double Couple:Mo=3.0*10**17
 NP1:Strike=276 Dip=90 Slip= 180
 NP2: 6 90 0

12 05 23 56.47 30.105N 113.896W 10km
 5.3mb (26 obs.) 5.4Msz (6 obs.)
 GULF OF CALIFORNIA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 34C
 Centroid Location:
 Origin Time 05:23:58.4 0.6
 Lat 29.62N 0.05 Lon 114.15W 0.05
 Dep 15.0 FIX Half-duration 3.0
 Principal Axes:
 Scale 10**17 Nm
 T Val= 5.57 Plg=10 Azm= 83
 N -0.29 72 205
 P -5.29 15 350
 Best Double Couple:Mo=5.4*10**17
 NP1:Strike=127 Dip=72 Slip=-177
 NP2: 36 87 -18

12 12 10 23.12 2.200N 98.805W 10km
 5.4mb (6 obs.) 4.8Msz (2 obs.)
 WEST OF GALAPAGOS ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 30C
 Centroid Location:
 Origin Time 12:10:24.1 0.4
 Lat 2.32N 0.04 Lon 98.39W 0.05
 Dep 15.0 FIX Half-duration 2.1
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.67 Plg= 8 Azm=163
 N 0.38 79 298
 P -2.04 8 72
 Best Double Couple:Mo=1.9*10**17
 NP1:Strike=207 Dip=79 Slip= 180
 NP2: 297 90 11

12 16 20 29.39 35.527N 140.639E 58km
 5.2mb (27 obs.)
 NEAR EAST COAST OF HONSHU, JAPAN
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 7S, 16C
 Centroid Location:
 Origin Time 16:20:30.3 0.9
 Lat 35.41N 0.10 Lon 140.93E 0.10
 Dep 61.0 FIX Half-duration 1.7
 Principal Axes:
 Scale 10**16 Nm
 T Val= 6.88 Plg=67 Azm=249
 N 1.74 10 3
 P -8.62 21 97
 Best Double Couple:Mo=7.8*10**16
 NP1:Strike=204 Dip=26 Slip= 113
 NP2: 359 66 79

12 19 15 35.43 23.855N 122.477E 35km
 5.6mb (63 obs.) 5.3Msz (4 obs.)
 TAIWAN REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 22C
 Centroid Location:
 Origin Time 19:15:35.1 0.6
 Lat 23.60N 0.06 Lon 121.88E 0.07
 Dep 66.4 4.0 Half-duration 2.4
 Principal Axes:
 Scale 10**17 Nm
 T Val= 3.70 Plg= 4 Azm=281
 N -0.57 45 14
 P -3.13 45 187
 Best Double Couple:Mo=3.4*10**17
 NP1:Strike=334 Dip=57 Slip=-147
 NP2: 225 63 -37

13 20 21 17.03 33.770N 38.882W 10km
 5.0mb (24 obs.) 4.5Msz (2 obs.)
 NORTH ATLANTIC RIDGE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 26C
 Centroid Location:
 Origin Time 20:21:20.7 1.1
 Lat 33.82N 0.10 Lon 39.04W 0.07
 Dep 15.0 FIX Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 6.30 Plg= 0 Azm=150
 N -1.41 90 180
 P -4.90 0 60
 Best Double Couple:Mo=5.6*10**16
 NP1:Strike=195 Dip=90 Slip= 180
 NP2: 285 90 0

13 23 56 58.78 50.636N 173.410E 33km
 5.2mb (48 obs.) 5.5Msz (1 obs.)
 ALEUTIAN ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 22C
 Centroid Location:
 Origin Time 23:57: 3.4 0.9
 Lat 50.09N 0.10 Lon 172.53E 0.16
 Dep 15.0 FIX Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 6.21 Plg=29 Azm= 35
 N 3.17 9 130
 P -9.38 60 236
 Best Double Couple:Mo=7.8*10**16
 NP1:Strike=101 Dip=18 Slip=-120
 NP2: 312 74 -81

13 23 57 45.63 52.296N 173.379W 54km
 5.7mb (25 obs.)
 ANDREANOF ISLANDS, ALEUTIAN IS.
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 28C
 Centroid Location:
 Origin Time 23:57:49.1 0.8
 Lat 52.58N 0.07 Lon 173.28W 0.07
 Dep 58.6 3.4 Half-duration 1.6
 Principal Axes:
 Scale 10**16 Nm
 T Val= 9.48 Plg=73 Azm=264
 N 0.40 13 45
 P -9.89 10 138
 Best Double Couple:Mo=9.7*10**16
 NP1:Strike=244 Dip=37 Slip= 113

```

5.2mb ( 43 obs.)  5.0Msz ( 9 obs.)
NEAR ISLANDS, ALEUTIAN ISLANDS
CENTROID, MOMENT TENSOR      (HRV)
Data Used: GDSN
L.P.B.: 12S, 29C
Centroid Location:
Origin Time      05:22:25.7 0.4
Lat 51.93N 0.05 Lon 174.63E 0.10
Dep 15.0 FIX Half-duration 2.1
Principal Axes:
  Scale 10**17 Nm
  T Val=  2.38  P1g=56  Azm=328
  N      0.04    12     76
  P     -2.42   31    173
Best Double Couple: Mo=2.4*10**17
NP1: Strike=297 Dip=17 Slip= 132
NP2:      73      77      78

```

Best Double Couple: Mo=7.1*10**17
NP1: Strike=106 Dip=31 Slip=-175
NP2: 12 88 -59

```

17 07 15 05.94 51.542N 174.866E 33km
5.4mb ( 66 obs.) 4.9MsZ ( 3 obs.)
NEAR ISLANDS, ALEUTIAN ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 23C
Centroid Location:
Origin Time 07:15: 5.0 0.8
Lat 51.64N 0.07 Lon 174.67E 0.13
Dep 15.0 FIX Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 12.52 P1g=61 Azm=326
N 0.70 9 72
P -13.21 27 167
Best Double Couple: Mo=1.3*10**17
NP1: Strike=279 Dip=19 Slip= 118
NP2: 70 73 80

```

```

19 00 13 26.21 37.4765 51.092E 10km
5.1mb ( 7 obs.) 5.2msz ( 2 obs.)
SOUTH INDIAN OCEAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 20C
Centroid Location:
Origin Time 00:13:30.1 1.6
Lat 37.49S 0.16 Lon 51.45E 0.12
Dep 15.0 FIX Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 3.68 P1g= 0 Azm=175
N 0.24 0 85
P -3.93 90 180
Best Double Couple: Mo=3.8*10**16
NP1: Strike=265 Dip=45 Slip= -90
NP2: 85 45 -90

```

```

17 23 39 25.11 3.841N 126.534E 20km
5.5mb ( 38 obs.) 5.2Msz ( 13 obs.)
TALAUD ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 26C
Centroid Location:
Origin Time 23:39:32.7 0.6
Lat 4.36N 0.05 Lon 126.65E 0.06
Dep 21.0 BDY Half-duration 2.4
Principal Axes:
Scale 10**17 Nm
T Val= 3.42 Plg=70 Azm=343
N 0.47 19 182
P -3.89 6 90
Best Double Couple: Mo=3.7*10**17
NP1: Strike=160 Dip=42 Slip= 61
NP2: 17 54 113

```

```

19 04 15 12.70 7.440S 128.259E 168km
5.5mb (27 obs.)
BANDA SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 22C
Centroid Location:
Origin Time 04:15: 9.6 0.8
Lat 7.68S 0.06 Lon 128.88E 0.10
Dep 164.8 1.7 Half-duration 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 1.76 Plg=72 Azm=288
N -0.56 15 145
P -1.21 11 52
Best Double Couple: Mo=1.5*10**17
NP1: Strike=124 Dip=37 Slip= 65
NP2: 335 57 108

```

```

18 13 52 36.09 23.513S 67.706W 142km
5.7mb ( 68 obs.)
CHILE-ARGENTINA BORDER REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=325 Dip=80 Slip=-105
NP2:      202      18      -34
Principal Axes:
T                               P1g=33 Azm= 68
P                               53      217
Comment: The focal mechanism is
poorly controlled and
corresponds to normal faulting
with a small strike-slip
component. The preferred fault
plane is NP1.
MOMENT TENSOR SOLUTION

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```

19 19 07 42.96 10.226S 161.381E 86km
5.4mb ( 21 obs.)
SOLOMON ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 35C
Centroid Location:
Origin Time 19:07:44.1 0.3
Lat 10.48S 0.02 Lon 161.53E 0.03
Dep 80.0 1.9 Half-duration 3.4
Principal Axes:
Scale 10-17 Nm
T Val= 8.45 Plg=24 Azm=136
N -0.59 60 276
P -7.87 17 39
Best Double Couple: Mo=8.2*10-17
NP1:Strike=176 Dip=60 Slip= 175
NP2: 269 86 30

```

```

Principal Axes:
  Scale 10**17 Nm
    T Val= 6.08 Plg=56 Azm= 76
    N      -0.23  14      324
    P      -5.85  30      226
Best Double Couple:Ma=6.0*10**17
NP1:Strike=279 Dip=20 Slip= 43
NP2:      148      77      105
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 32C
Centroid Location:
Origin Time      13:52:44.5 0.3
Lat 23.44S 0.03 Lon 67.84W 0.04
Dep 156.5 1.0 Half-duration 3.2
Principal Axes:
  Scale 10**17 Nm
    T Val= 7.89 Plg=35 Azm= 76
    N      -1.67  31      190
    P      -6.22  40      310

```

```

19 22 37 11.59 52.758N 158.253E 120km
5.2mb ( 65 abs.)
NEAR EAST COAST OF KAMCHATKA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 22C
Centroid Location:
Origin Time 22:37:16.4 0.4
Lat 52.78N 0.04 Lon 158.14E 0.06
Dep 119.2 1.8 Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.13 Plg=42 Azm=115
N -0.05 13 217
P -2.08 45 320
Best Double Couple: Mo=2.1*10**17
NP1:Strike=132 Dip=13 Slip=-175
NP2: 37 89 -77

```

```

19 23 17 14.99 18.382N 95.074E 67km
5.2mb ( 70 abs.)
BURMA
CENTROID, MOMENT TENSOR (HRV)
Date Used: GDSN
L.P.B.: 9S, 18C
Centroid Location:
Origin Time 23:17:16.3 0.7
Lot 18.62N 0.07 Lon 95.57E 0.11
Dep 66.0 FIX Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
I Val= 8.11 Plq=33 Azm= 52

```

N -1.37 8 148
 P -6.74 56 250
 Best Double Couple: Mo=7.4*10**16
 NP1: Strike=114 Dip=14 Slip=-124
 NP2: 329 78 -82

20 01 25 58.19 7.140S 127.004E 315km
 5.8mb (49 obs.)
 BANDA SEA
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=138 Dip=74 Slip=-90
 NP2: 318 16 -90
 Principal Axes:
 T P1g=29 Azm=228
 P 61 48
 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.
 RADIATED ENERGY
 No. of sto: 5 Focal mech. M
 Energy 9.7±3.8*10**13 Nm
 MOMENT TENSOR SOLUTION
 Dep 304 No. of sto: 10
 Principal Axes:
 Scale 10**18 Nm
 T Vol= 5.67 P1g=23 Azm=220
 N -0.03 24 321
 P -5.64 56 91
 Best Double Couple: Mo=5.7*10**18
 NP1: Strike=273 Dip=30 Slip=-142
 NP2: 149 72 -65
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 33C M.W.: 9S, 17C
 Centroid Location:
 Origin Time 01:26: 1.4 0.2
 Lot 7.24S 0.01 Lon 127.19E 0.02
 Dep 320.8 0.7 Half-duration 6.3
 Principal Axes:
 Scale 10**18 Nm
 T Vol= 4.28 P1g=30 Azm=232
 N 1.77 13 329
 P -6.05 57 80
 Best Double Couple: Mo=5.2*10**18
 NP1: Strike=288 Dip=19 Slip=-132
 NP2: 152 76 -77

20 22 12 00.05 46.670N 152.590E 54km
 5.6mb (89 obs.)
 KURIL ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 27C
 Centroid Location:
 Origin Time 22:12: 2.9 0.7
 Lot 46.83N 0.05 Lon 152.43E 0.08
 Dep 52.2 3.0 Half-duration 2.0
 Principal Axes:
 Scale 10**17 Nm
 T Vol= 1.61 P1g=78 Azm=307
 N 0.30 2 208
 P -1.91 12 118
 Best Double Couple: Mo=1.8*10**17
 NP1: Strike=205 Dip=33 Slip= 87
 NP2: 29 57 92

21 05 20 17.29 15.811S 172.780W 63km
 5.0mb (25 obs.)
 SAMOA ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 19C
 Centroid Location:
 Origin Time 05:20:20.0 0.8
 Lot 15.61S 0.11 Lon 172.81W 0.10
 Dep 42.5 6.1 Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Vol= 6.48 P1g=21 Azm=228
 N -0.46 10 322
 P -6.02 66 77
 Best Double Couple: Mo=6.3*10**16
 NP1: Strike=300 Dip=26 Slip=-115
 NP2: 147 67 -79

21 09 22 12.85 6.893S 129.393E 149km
 5.4mb (27 obs.)
 BANDA SEA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 26C

Centroid Location:
 Origin Time 09:22:14.1 0.9
 Lot 7.12S 0.08 Lon 129.60E 0.07
 Dep 163.5 1.6 Half-duration 2.1
 Principal Axes:
 Scale 10**17 Nm
 T Vol= 2.24 P1g=30 Azm=258
 N -0.41 25 152
 P -1.84 49 30
 Best Double Couple: Mo=2.0*10**17
 NP1: Strike= 37 Dip=27 Slip=-23
 NP2: 147 80 -115

21 16 55 21.05 13.284N 145.735E 57km
 5.5mb (42 obs.) 5.3MsZ (8 obs.)
 MARIANA ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 25C
 Centroid Location:
 Origin Time 16:55:19.3 0.6
 Lot 13.02N 0.04 Lon 146.08E 0.06
 Dep 32.0 4.7 Half-duration 2.4
 Principal Axes:
 Scale 10**17 Nm
 T Vol= 3.22 P1g=26 Azm=321
 N -0.61 50 197
 P -2.61 29 67
 Best Double Couple: Mo=2.9*10**17
 NP1: Strike=103 Dip=50 Slip= -2
 NP2: 195 88 -140

21 19 03 23.11 11.705N 86.638W 59km
 5.2mb (18 obs.)
 NEAR COAST OF NICARAGUA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 21C
 Centroid Location:
 Origin Time 19:03:20.0 0.7
 Lot 10.94N 0.12 Lon 87.51W 0.12
 Dep 15.0 FIX Half-duration 1.6
 Principal Axes:
 Scale 10**16 Nm
 T Vol= 7.01 P1g=69 Azm= 73
 N 0.56 12 310
 P -7.56 17 216
 Best Double Couple: Mo=7.3*10**16
 NP1: Strike=288 Dip=30 Slip= 65
 NP2: 136 63 103

22 01 58 49.13 1.095S 13.916W 10km
 5.2mb (44 obs.) 5.1MsZ (5 obs.)
 NORTH OF ASCENSION ISLAND
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 8S, 18C
 Centroid Location:
 Origin Time 01:58:56.5 0.6
 Lot 0.52S 0.05 Lon 13.56W 0.04
 Dep 17.9 FIX Half-duration 2.0
 Principal Axes:
 Scale 10**17 Nm
 T Vol= 1.51 P1g= 0 Azm=210
 N 0.07 90 180
 P -1.58 0 120
 Best Double Couple: Mo=1.6*10**17
 NP1: Strike=255 Dip=90 Slip= 180
 NP2: 345 90 0

22 08 45 45.50 4.459S 102.772E 69km
 5.3mb (20 obs.)
 SOUTHERN SUMATRA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 9S, 18C
 Centroid Location:
 Origin Time 08:45:47.6 1.2
 Lot 4.81S 0.10 Lon 102.70E 0.16
 Dep 58.211.1 Half-duration 1.3
 Principal Axes:
 Scale 10**16 Nm
 T Vol= 4.14 P1g=64 Azm= 15
 N -0.08 2 281
 P -4.06 26 189
 Best Double Couple: Mo=4.1*10**16
 NP1: Strike=274 Dip=19 Slip= 83
 NP2: 101 71 92

22 19 13 17.74 20.833S 69.785W 70km
 5.9mb (68 obs.)
 NORTHERN CHILE
 FAULT PLANE SOLUTION: P-Waves

NP1: Strike=320 Dip=86 Slip= -80
 NP2: 72 11 -158
 Principal Axes:
 T P1g=40 Azm= 41
 P 48 241
 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with a small strike-slip component. The preferred fault plane is NP1.
 RADIATED ENERGY
 No. of sto: 5 Focal mech. M
 Energy 3.2±0.9*10**14 Nm
 MOMENT TENSOR SOLUTION
 Dep 65 No. of sto: 9
 Principal Axes:
 Scale 10**19 Nm
 T Vol= 1.20 P1g=35 Azm= 41
 N -0.06 7 136
 P -1.13 54 236
 Best Double Couple: Mo=1.2*10**19
 NP1: Strike=101 Dip=12 Slip=-126
 NP2: 317 80 -83
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 37C M.W.: 8S, 19C
 Centroid Location:
 Origin Time 19:13:26.7 0.1
 Lot 20.53S 0.01 Lon 69.57W 0.01
 Dep 66.9 1.1 Half-duration 7.2
 Principal Axes:
 Scale 10**18 Nm
 T Vol= 8.97 P1g=33 Azm= 49
 N -0.06 12 311
 P -8.92 54 203
 Best Double Couple: Mo=8.9*10**18
 NP1: Strike=178 Dip=16 Slip= -42
 NP2: 309 79 -102

23 01 58 45.33 60.574S 159.676E 33km
 5.6mb (16 obs.) 5.6MsZ (3 obs.)
 MACQUARIE ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 30C
 Centroid Location:
 Origin Time 01:58:49.5 0.4
 Lot 60.30S 0.04 Lon 159.15E 0.07
 Dep 15.0 FIX Half-duration 3.4
 Principal Axes:
 Scale 10**17 Nm
 T Vol= 9.58 P1g= 2 Azm=129
 N -0.36 77 227
 P -9.22 13 39
 Best Double Couple: Mo=9.4*10**17
 NP1: Strike=175 Dip=80 Slip=-172
 NP2: 83 82 -10

24 01 56 31.72 1.366N 126.172E 74km
 5.3mb (30 obs.)
 MOLUCCA PASSAGE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 24C
 Centroid Location:
 Origin Time 01:56:33.0 0.4
 Lot 1.44N 0.04 Lon 126.27E 0.04
 Dep 44.3 3.5 Half-duration 2.4
 Principal Axes:
 Scale 10**17 Nm
 T Vol= 3.04 P1g=72 Azm=142
 N 0.34 15 354
 P -3.37 9 261
 Best Double Couple: Mo=3.2*10**17
 NP1: Strike=333 Dip=39 Slip= 65
 NP2: 184 56 109

24 02 54 22.62 51.723N 176.797W 60km
 5.5mb (33 obs.)
 ANDREANOF ISLANDS, ALEUTIAN IS.
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 23C
 Centroid Location:
 Origin Time 02:54:25.3 1.1
 Lot 52.27N 0.09 Lon 176.88W 0.11
 Dep 57.3 5.2 Half-duration 1.7
 Principal Axes:
 Scale 10**16 Nm
 T Vol= 11.57 P1g=71 Azm=346
 N 0.04 4 243
 P -11.61 19 152

Best Double Couple: Mo=1.2*10**17
 NP1: Strike=234 Dip=27 Slip= 80
 NP2: 66 64 95

24 03 52 03.29 13.477N 124.616E 25km
 6.0mb (90 obs.) 7.0Msz (23 obs.)
 LUZON, PHILIPPINE ISLANDS
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=348 Dip=78 Slip= 90
 NP2: 168 12 90
 Principal Axes:
 T P1g=57 Azm=258
 P 33 78
 Comment: The focal mechanism is
 poorly controlled and
 corresponds to reverse
 faulting. The preferred fault
 plane is NP2.

RADIATED ENERGY
 No. of sta: 6 Focal mech. M
 Energy 1.1±0.2*10**15 Nm

MOMENT TENSOR SOLUTION
 Dep 37 No. of sta: 13
 Principal Axes:
 Scale 10**19 Nm
 T Val= 8.17 P1g=56 Azm=257
 N -0.08 5 354
 P -8.09 34 87
 Best Double Couple: Mo=8.1*10**19
 NP1: Strike=195 Dip=12 Slip= 112
 NP2: 353 79 85
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 34C M.W.: 10S, 25C
 Centroid Location:
 Origin Time 03:52:13.5 0.2
 Lat 13.42N 0.02 Lon 125.03E 0.02
 Dep 34.7 0.8 Half-duration 18.0
 Principal Axes:
 Scale 10**19 Nm
 T Val= 8.70 P1g=65 Azm=259
 N -0.12 3 162
 P -8.58 25 70
 Best Double Couple: Mo=8.6*10**19
 NP1: Strike=153 Dip=20 Slip= 80
 NP2: 343 70 94

24 15 43 15.33 0.507S 91.653W 10km
 5.5mb (45 obs.) 4.5Msz (3 obs.)
 GALAPAGOS ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 21C
 Centroid Location:
 Origin Time 15:43:18.8 0.5
 Lat 0.73S 0.06 Lon 91.58W 0.07
 Dep 15.0 FIX Half-duration 1.9
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.78 P1g=83 Azm=199
 N 0.09 7 358
 P -1.88 3 88
 Best Double Couple: Mo=1.8*10**17
 NP1: Strike=185 Dip=43 Slip= 100
 NP2: 352 48 81

24 17 18 00.91 13.453N 124.632E 31km
 5.0mb (22 obs.) 5.3Msz (4 obs.)
 LUZON, PHILIPPINE ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 9S, 18C
 Centroid Location:
 Origin Time 17:18: 2.3 0.5
 Lat 13.74N 0.06 Lon 124.46E 0.14
 Dep 15.0 FIX Half-duration 2.2
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.90 P1g=51 Azm=270
 N -0.27 9 169
 P -2.63 38 71
 Best Double Couple: Mo=2.8*10**17
 NP1: Strike=113 Dip=11 Slip= 34
 NP2: 350 84 100

24 20 22 44.51 0.427S 91.627W 10km
 5.3mb (17 obs.) 4.0Msz (2 obs.)
 GALAPAGOS ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 9S, 16C
 Centroid Location:
 Origin Time 20:22:47.5 1.5

Lot 0.18S 0.21 Lon 91.66W 0.23
 Dep 15.0 FIX Half-duration 1.3
 Principal Axes:
 Scale 10**16 Nm
 T Val= 3.52 P1g=71 Azm= 6
 N 0.83 19 176
 P -4.35 3 267
 Best Double Couple: Mo=3.9*10**16
 NP1: Strike= 16 Dip=45 Slip= 117
 NP2: 160 51 66

26 02 31 20.14 18.011S 69.605W 124km
 5.2mb (52 obs.)
 NORTHERN CHILE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 19C
 Centroid Location:
 Origin Time 02:31:26.3 0.9
 Lat 17.99S 0.08 Lon 70.09W 0.09
 Dep 146.2 2.9 Half-duration 2.0
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.07 P1g=26 Azm= 76
 N -0.20 10 341
 P -1.87 61 233
 Best Double Couple: Mo=2.0*10**17
 NP1: Strike=189 Dip=20 Slip= -61
 NP2: 338 72 -100

26 06 17 31.53 37.319S 47.989E 10km
 6.1mb (53 obs.) 6.7Msz (25 obs.)
 ATLANTIC-INDIAN RISE
 RADIATED ENERGY
 No. of sta: 9 Focal mech. M
 Energy 2.9±0.4*10**14 Nm

MOMENT TENSOR SOLUTION
 Dep 2 No. of sta: 14
 Principal Axes:
 Scale 10**19 Nm
 T Val= 1.64 P1g=64 Azm=360
 N 0.14 13 119
 P -1.78 22 215
 Best Double Couple: Mo=1.7*10**19
 NP1: Strike=328 Dip=26 Slip= 122
 NP2: 114 68 75
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 32C M.W.: 10S, 25C
 Centroid Location:
 Origin Time 06:17:41.2 0.1
 Lat 36.88S 0.01 Lon 48.03E 0.01
 Dep 15.0 FIX Half-duration 10.0
 Principal Axes:
 Scale 10**19 Nm
 T Val= 1.78 P1g=78 Azm= 50
 N 0.12 0 318
 P -1.90 12 228
 Best Double Couple: Mo=1.8*10**19
 NP1: Strike=318 Dip=33 Slip= 89
 NP2: 139 57 90

26 13 42 27.13 37.187S 47.792E 10km
 5.5mb (30 obs.) 5.2Msz (1 obs.)
 ATLANTIC-INDIAN RISE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 7S, 16C
 Centroid Location:
 Origin Time 13:42:33.9 0.9
 Lat 36.45S 0.12 Lon 47.93E 0.12
 Dep 15.0 FIX Half-duration 1.7
 Principal Axes:
 Scale 10**16 Nm
 T Val= 8.57 P1g=78 Azm= 82
 N 4.32 7 319
 P -12.89 10 228
 Best Double Couple: Mo=1.1*10**17
 NP1: Strike=310 Dip=35 Slip= 79
 NP2: 144 55 98

26 17 52 34.77 37.132S 47.770E 10km
 5.4mb (18 obs.) 5.2Msz (1 obs.)
 ATLANTIC-INDIAN RISE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 7S, 16C
 Centroid Location:
 Origin Time 17:52:39.8 0.8
 Lat 36.87S 0.11 Lon 48.21E 0.15
 Dep 15.0 FIX Half-duration 1.6
 Principal Axes:
 Scale 10**16 Nm

T Val= 8.78 P1g=55 Azm= 98
 N 2.64 15 345
 P -11.43 31 246
 Best Double Couple: Mo=1.0*10**17
 NP1: Strike=298 Dip=20 Slip= 41
 NP2: 169 77 105

27 07 28 27.52 5.283S 131.115E 33km
 5.1mb (15 obs.)
 BANDA SEA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 20C
 Centroid Location:
 Origin Time 07:28:29.7 0.9
 Lat 4.91S 0.06 Lon 131.71E 0.12
 Dep 72.9 6.9 Half-duration 1.2
 Principal Axes:
 Scale 10**16 Nm
 T Val= 4.54 P1g=71 Azm=346
 N 0.41 9 103
 P -4.95 17 195
 Best Double Couple: Mo=4.7*10**16
 NP1: Strike=298 Dip=30 Slip= 108
 NP2: 98 62 80

27 13 46 15.89 21.022S 173.764W 33km
 5.2mb (29 obs.) 5.3Msz (15 obs.)
 TONGA ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 22C
 Centroid Location:
 Origin Time 13:46:18.7 0.5
 Lat 21.16S 0.05 Lon 173.54W 0.05
 Dep 15.0 FIX Half-duration 2.2
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.12 P1g=69 Azm=314
 N 0.13 12 192
 P -2.25 17 99
 Best Double Couple: Mo=2.2*10**17
 NP1: Strike=171 Dip=29 Slip= 66
 NP2: 18 63 103

28 03 19 35.10 11.079N 93.469E 120km
 5.1mb (57 obs.)
 ANDAMAN ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 9S, 16C
 Centroid Location:
 Origin Time 03:19:36.6 0.8
 Lat 10.97N 0.07 Lon 93.13E 0.11
 Dep 122.9 4.0 Half-duration 1.6
 Principal Axes:
 Scale 10**16 Nm
 T Val= 10.40 P1g=50 Azm=109
 N -2.04 34 251
 P -8.36 19 354
 Best Double Couple: Mo=9.4*10**16
 NP1: Strike=125 Dip=39 Slip= 151
 NP2: 238 72 54

29 05 31 41.47 55.149N 167.430E 33km
 6.1mb (97 obs.) 6.8Msz (20 obs.)
 KOMANDORSKY ISLANDS REGION
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike= 24 Dip=90 Slip= -28
 NP2: 114 62 -180
 Principal Axes:
 T P1g=19 Azm= 73
 P 19 335
 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.

RADIATED ENERGY
 No. of sta: 12 Focal mech. C
 Energy 7.0±1.5*10**14 Nm

CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 33C M.W.: 11S, 24C
 Centroid Location:
 Origin Time 05:31:47.5 0.2
 Lat 55.31N 0.01 Lon 167.15E 0.02
 Dep 17.0 1.0 Half-duration 10.2
 Principal Axes:
 Scale 10**19 Nm
 T Val= 2.37 P1g=19 Azm= 89

N	0.41	56	209	
P	-2.78	27	349	
Best Double Couple: Mo=2.6+10**19				
NP1: Strike=131 Dip=56 Slip=-173				
NP2:	38	84	-34	

Compiled by Willis S. Jacobs, Leonard E. Kerry, John H. Minsch, Russell E. Needham, Waverly J. Person,
Bruce W. Presgrave and William H. Schmieder.

Correction to Monthly Listing for February, 1987

Delete GS MB magnitude for the Yugoslavia earthquake of 25 February 1987 at 12 20 47.7 UTC.

Earthquake Focal Mechanisms for February 1988

05 February 1988 14:01:02.75
Near Coast of Northern Chile

06 February 1988 14:50:45.29
India-Bangladesh Border Region

07 February 1988 18:15:05.63
Aleutian Islands Region

22 February 1988 19:13:17.74
Northern Chile

24 February 1988 03:52:03.29
Luzon, Philippine Islands

26 February 1988 06:17:31.53
Atlantic-Indian Rise

29 February 1988 05:31:41.47 Komandorsky Islands Region

Earthquake epicenters in Alaska and adjacent regions for February, 1988 (C. Stover).

Earthquake epicenters in the conterminous United States and adjacent regions for February, 1988 (C. Stover).

Earthquakes located in February, 1988 (C. Stover).

MONTHLY LISTING

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

MARCH 1988

KEY	DAY	ORIGIN TIME			GEOGRAPHIC COORDINATES		DEPTH	MAGNITUDES			SD	NO. STA USED	REGION, CONTRIBUTED	MAGNITUDES	AND COMMENTS
		UTC			LAT	LONG		GS	MsZ						
		HR	MN	SEC					MB	MsZ					
	01	00	01	43.5*	7.341 S	128.786 E	160 ?	4.9		1.3	18	BANDA SEA			
	01	00	03	00.17	30.92 S	70.87 W	33 N			1.0	8	CHILE-ARGENTINA BORDER REGION			
	01	01	02	02.9	34.486 N	50.818 E	15	4.3		0.6	13	IRAN. Felt at Qam.			
	01	01	16	12.97	18.45 S	69.82 W	33 N			0.2	5	NORTHERN CHILE			
	01	01	53	05.8	5.434 N	124.930 E	49 *	5.1	4.8	1.3	69	MINDANAO, PHILIPPINE ISLANDS			
o	01	02	13	50.5	55.556 N	166.537 E	33 N	4.9	5.0	1.1	81	KOMANDORSKY ISLANDS REGION. ML 5.2 (PMR).			
	01	02	17	51.17	21.42 S	173.82 W	33 N	4.3		0.5	17	TONGA ISLANDS			
	01	02	51	48.9	22.644 S	65.935 W	274	4.5		1.1	40	JUJUY PROVINCE, ARGENTINA			
	01	03	01	28.97	56.03 N	167.43 E	38 D	4.3		1.4	11	KOMANDORSKY ISLANDS REGION			
	01	03	25	19.0*	45.792 N	1.185 W	10 G			1.4	8	FRANCE. ML 2.8 (LDG)			
	01	03	40	55.0*	6.962 S	129.975 E	146 ?	4.6		1.0	8	BANDA SEA			
	01	08	34	01.7*	4.747 S	131.457 E	33 N	4.2		1.3	12	BANDA SEA			
	01	08	40	33.6*	38 175 S	175.776 E	193	4.7		1.2	29	NORTH ISLAND, NEW ZEALAND. Felt in the Bay of Plenty-Hawkes Bay-Wellington area.			
	01	09	45	38.37	17.25 N	61.28 W	10 G			0.5	5	LEEWARD ISLANDS. ML 2.5 (FDF).			
	01	11	07	02.67	36.01 S	178.83 E	266 ?	3.8		1.2	8	OFF E. COAST OF N. ISLAND, N.Z.			
	01	11	13	14.07	35.54 S	70.74 W	10 G			0.4	7	CHILE-ARGENTINA BORDER REGION			
	01	12	16	31.5*	29.799 N	139.079 E	400 *	4.0		0.8	13	SOUTH OF HONSHU, JAPAN			
	01	12	17	47.1*	51.763 N	160.133 E	33 N	4.2		1.2	11	OFF EAST COAST OF KAMCHATKA			
	01	13	24	57.4*	31.944 S	69.454 W	81 ?			1.5	12	SAN JUAN PROVINCE, ARGENTINA			
	01	13	43	52.4*	33.260 N	115.960 W	2				8	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).			
	01	14	42	17.8*	59.000 N	5.924 E	10 G			0.2	5	SOUTHERN NORWAY. ML 1.6 (BER).			
	01	14	54	46.07	13.60 N	124.72 E	33 N	4.7		1.0	18	LUZON, PHILIPPINE ISLANDS			
	01	15	35	21.7*	18.679 S	168.139 E	151 *	4.9		1.1	24	VANUATU ISLANDS			
	01	15	45	39.1	40.194 N	77.638 E	62 *	4.2		0.6	9	KIRGHIZ-XINJIANG BORDER REGION			
	01	15	46	52.9*	40.159 N	28.087 E	10 G			1.1	8	TURKEY			
	01	16	18	36.0*	45.902 N	8.827 W	10 G			0.9	13	FRANCE. ML 3.2 (LDG).			
	01	17	43	47.9	42.277 N	19.920 E	10 G			0.4	11	YUGOSLAVIA. ML 2.8 (TTG).			
	01	18	55	33.1*	45.774 N	1.124 W	10 G			1.0	8	FRANCE. ML 2.8 (LDG).			
	01	19	30	55.9	42.385 N	20.010 E	10 G			1.2	10	YUGOSLAVIA. ML 2.6 (TTG).			
	01	20	33	39.4*	36.605 N	70.291 E	211 *	4.2		0.9	17	HINDU KUSH REGION			
	01	23	58	47.7*	62.998 N	148.260 W	40				21	CENTRAL ALASKA. <AGS-P>.			
	02	00	40	52.3*	47.130 N	2.684 E	10 G			0.2	5	FRANCE. ML 1.7 (LDG).			
	02	01	49	31.4*	15.016 N	60.542 W	33 N			0.5	10	LEEWARD ISLANDS. ML 2.6 (FDF).			
	02	02	03	21.0*	41.195 N	113.152 W	8				7	UTAH. <SLC-P>. ML 2.8 (SLC).			
	02	02	21	39.2*	61.832 N	151.087 W	77				30	SOUTHERN ALASKA. <AGS-P>.			
	02	04	45	07.5*	10.624 N	93.552 E	123 ?	4.2		0.6	11	ANDAMAN ISLANDS REGION			
	02	04	59	48.7*	40.242 N	124.751 W	10 G			0.4	9	NEAR COAST OF NORTHERN CALIF. ML 2.7 (BRK).			
	02	05	28	10.8	33.003 S	70.254 W	114 ?			0.5	13	CHILE-ARGENTINA BORDER REGION			
	02	06	32	24.1*	7.388 S	145.308 E	33 N	3.7		1.4	6	NEAR S COAST OF PAPUA NEW GUINEA			
	02	06	38	08.3*	61.571 N	151.672 W	76				28	SOUTHERN ALASKA. <AGS-P>.			
o	02	07	13	16.3	9.729 N	84.711 W	44	5.0	5.1	1.2	119	COSTA RICA. Ms 5.2 (BRK). Felt (V) in the Puntarenas-Nicoya-Cabana-Herradura area; (III) in the central valley including San Jose; (II) in northern Costa Rica.			
	02	08	41	56.5*	19.329 N	155.213 W	10	4.9			79	HAWAII. <HVO-P>. MD 4.7 (HVO). Felt (V) at Hilo and (IV) at Hakalau, Hanaunau, Halualoa, Hanakaa, Hanomuu, Keaou, Lapohaeohae, Ninole, Ooakala, Poouhau, Pohala, Papaikou, Pepeekeo and Volcano.			
	02	09	28	30.1	6.389 S	104.822 E	65 D	5.4		1.1	106	SUNDA STRAIT			
	02	09	35	04.87	24.18 N	73.24 E	33 N			1.5	5	NORTHERN INDIA			
	02	09	42	13.4*	10.812 N	86.943 W	33 N	4.2		0.2	7	OFF COAST OF COSTA RICA. MD 4.4 (HDC).			
	02	10	00	37.5	51.711 N	16.195 E	10 G	4.4		0.9	13	POLAND. ML 4.2 (VKA), 4.1 (GRF), 4.0 (KBA).			
	02	10	29	48.27	49.61 N	16.84 E	10 G			0.3	4	CZECHOSLOVAKIA. ML 3.0 (VKA).			
	02	11	08	28.6*	60.132 N	4.849 E	10 G			0.1	6	SOUTHERN NORWAY. ML 2.6 (BER).			
	02	11	59	56.3*	7.409 S	130.878 E	33 N	4.5		0.9	7	TANIMBAR ISLANDS REGION			
	02	14	07	18.2	63.157 N	150.499 W	110	4.3		1.0	24	CENTRAL ALASKA			
	02	14	45	09.3	33.251 N	34.623 E	33 N			0.7	13	EASTERN MEDITERRANEAN SEA. ML 3.6 (JER).			

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02	14 58 43.2	61.368 N	150.699 W	62			30	SOUTHERN ALASKA. <AGS-P>.
02	16 31 41.2	38.902 N	29.269 E	5 G	1.4		9	TURKEY
02	16 51 49.5	58.56 S	26.31 W	33 N	4.3	1.5	9	SOUTH SANDWICH ISLANDS REGION
02	17 32 40.8	12.06 S	121.72 E	33 N	3.8	1.0	9	SOUTH OF TIMOR
02	18 00 34.6	47.078 N	9.215 E	10 G		0.3	8	GERMANY
02	18 42 10.6	40.885 N	71.205 E	49 *	4.9 4.1	0.7	79	TAJIK SSR. Felt (IV) at Namangan; (III) at Isfara, Gulistan, Tashkent and Ura-Tyube; (II) at Andizhan and Fergana.
02	20 08 59.4	25.132 N	122.282 E	33 N	4.6	1.1	14	TAIWAN REGION
02	22 35 37.2	38.83 N	21.30 E	10 G		1.4	7	GREECE. ML 3.5 (ATH).
02	22 44 53.2	32.952 S	71.990 W	33 N	4.9	1.2	32	NEAR COAST OF CENTRAL CHILE. Felt (IV) at Valparaiso.
02	22 59 41.4	42.713 N	12.236 E	21		1.3	23	CENTRAL ITALY. ML 2.9 (KBA).
03	00 28 34.5	7.145 S	129.310 E	145 D	5.4	1.1	93	BANDA SEA
03	03 05 21.7	2.065 N	127.785 E	33 N	4.4	0.7	8	MOLUCCA PASSAGE
03	03 13 06.5	33.344 S	72.189 W	24 *		1.4	16	OFF COAST OF CENTRAL CHILE
03	03 21 20.1	23.851 N	121.835 E	35	4.9 4.9	1.3	105	TAIWAN
03	03 55 24.5	35.400 S	54.183 E	10 G	4.9	1.3	25	SOUTH INDIAN OCEAN
03	07 33 55.3	36.941 N	114.537 W	5 G		0.6	31	SOUTHERN NEVADA. ML 3.8 (NEIS), 3.3 (PAS). Felt (V) at Caliente and (III) at Bunkerville.
03	07 36 08.7	37.208 N	141.848 E	33 N	4.5	1.4	10	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Onahama; (I JMA) at Fukushima, Sendai and Utsunomiya.
03	09 39 41.4	42.390 N	20.004 E	10 G		0.8	11	YUGOSLAVIA. ML 2.5 (TTG).
03	09 54 21.1	42.392 N	20.025 E	13 G		0.5	10	YUGOSLAVIA. ML 2.5 (TTG).
03	10 17 37.1	9.385 S	113.145 E	79 *	4.9	1.0	45	SOUTH OF JAVA
03	11 35 56.9	40.757 N	29.070 E	10 G		0.4	7	TURKEY
03	11 55 14.4	51.481 N	157.261 E	33 N	4.3	0.9	16	NEAR EAST COAST OF KAMCHATKA
03	13 38 11.6	15.34 N	61.31 W	150 ?		0.4	9	LEEWARD ISLANDS
03	14 16 17.8	5.789 S	151.676 E	33 N	3.9	1.0	6	NEW BRITAIN REGION
03	14 53 23.8	33.126 S	72.070 W	50 *		1.4	22	OFF COAST OF CENTRAL CHILE. Felt (IV) at Valparaiso; (III) at Santiago and Villa Alemana.
03	15 19 34.0	39.108 N	29.694 E	10 G		0.9	21	TURKEY
03	16 24 01.4	35.344 S	54.097 E	10 G	4.6	0.9	25	SOUTH INDIAN OCEAN
03	16 25 10.8	4.168 S	143.419 E	130 ?	3.9	0.5	6	PAPUA NEW GUINEA
03	16 59 05.5	33.09 S	72.00 W	12		0.3	9	NEAR COAST OF CENTRAL CHILE
03	18 03 37.8	39.364 N	27.877 E	10 G		1.0	7	TURKEY
03	18 06 23.5	27.64 S	176.78 W	33 N	4.5	1.3	10	KERMADEC ISLANDS REGION
03	18 43 51.7	40.389 N	119.764 W	13			8	NEVADA. <REN>. MD 3.5 (REN). ML 3.2 (NEIS).
03	19 56 39.0	44.545 N	8.370 E	10 G		1.5	8	NORTHERN ITALY. ML 2.7 (LDG).
03	20 02 48.5	40.387 N	19.125 E	10 G		1.2	24	ALBANIA. MG 3.4 (TIR).
03	21 20 42.3	31.686 S	70.867 W	33 N		1.4	15	CHILE-ARGENTINA BORDER REGION
03	22 28 24.7	40.451 N	19.070 E	22	4.0	1.2	59	ALBANIA. ML 4.1 (ATH), 3.9 (THE), 3.6 (SKO). MD 3.8 (TTG).
03	22 49 43.7	40.106 N	18.582 E	10 G		1.0	8	ADRIATIC SEA
03	22 57 56.1	40.288 N	19.168 E	10 G		1.1	12	ALBANIA. MG 3.2 (TIR).
03	23 33 13.7	4.071 S	139.696 E	33 N		1.2	9	WEST IRIAN
03	23 34 57.7	38.218 N	23.542 E	10 G		1.3	13	GREECE. ML 3.1 (ATH).
03	23 39 26.6	31.53 N	35.70 E	10 G		1.4	6	DEAD SEA REGION
03	23 49 46.8	6.54 S	129.65 E	103 ?	4.4	1.2	10	BANDA SEA
04	00 15 13.4	20.62 S	69.10 W	33 N		1.4	5	NORTHERN CHILE
04	00 16 31.5	40.370 N	19.114 E	10 G		1.0	7	ALBANIA
04	00 31 08.1	22.111 S	68.795 W	109 *	4.5	1.2	14	NORTHERN CHILE
04	01 05 23.2	6.366 N	147.740 E	33 N	4.8 3.9	1.4	13	CAROLINE ISLANDS REGION
04	01 49 33.9	36.24 N	5.57 W	10 G		1.3	7	STRAIT OF GIBRALTAR. MG 2.6 (MDD).
04	02 47 47.3	63.046 N	148.262 W	77 ?		1.2	11	CENTRAL ALASKA
04	02 58 33.6	26.817 N	34.964 E	10 G	4.0	1.0	16	RED SEA
04	03 08 15.4	17.993 S	178.521 W	590	5.5	0.9	197	FIJI ISLANDS REGION. mb 5.5 (BRK).
04	03 17 54.3	16.607 S	67.106 E	10 G	4.9	1.2	15	MID-INDIAN RISE
04	04 19 32.6	32.31 N	36.05 E	10 G		0.1	5	DEAD SEA REGION
04	04 28 08.9	34.76 N	26.63 E	33 N		0.6	5	CRETE
04	05 11 05.2	22.769 S	70.293 W	63 *	4.8	1.4	30	NEAR COAST OF NORTHERN CHILE. Felt (II) at Antafagasta.
04	06 01 04.6	41.80 N	19.19 E	10 G		0.2	7	ALBANIA. ML 2.5 (TTG).
04	08 54 06.4	16.45 S	71.83 W	10 G		0.7	5	SOUTHERN PERU. Felt (III) at Arequipa.
04	08 58 13.5	59.893 N	152.848 W	95			32	SOUTHERN ALASKA. <AGS-P>.
04	09 27 23.6	2.856 S	137.659 E	33 N	4.5 4.2	1.1	7	WEST IRIAN
04	09 45 12.1	63.110 N	151.055 W	33 N		0.8	6	CENTRAL ALASKA. ML 2.7 (PMR).
04	10 58 14.7	36.702 N	30.570 E	10 G		1.2	8	TURKEY
04	11 32 34.9	45.531 N	7.656 E	10 G		0.6	11	NORTHERN ITALY. ML 2.6 (LDG).
04	12 42 22.3	40.608 N	23.481 E	10 G		0.5	8	GREECE. ML 2.2 (THE).
04	12 55 16.0	44.627 N	9.559 E	10 G		0.9	42	NORTHERN ITALY. ML 3.4 (LDG).
04	13 25 19.5	44.435 N	10.676 E	28		1.1	51	NORTHERN ITALY. ML 3.6 (LDG). MD 3.4 (TRI).
04	13 40 45.1	44.635 N	9.568 E	11		0.9	40	NORTHERN ITALY. ML 3.3 (LDG).
04	23 19 54.7	58.406 N	142.700 W	10 G	4.8		85	GULF OF ALASKA. <AGS-P>. ML 4.7 (PMR).
05	00 04 25.1	27.670 S	69.477 W	34	4.8	1.2	39	NORTHERN CHILE
05	00 57 16.8	35.04 N	67.93 E	33 N	4.1	1.3	8	HINDU KUSH REGION
05	01 35 19.1	19.745 S	178.278 W	601	4.7	0.6	39	FIJI ISLANDS REGION
05	01 38 52.1	18.02 N	67.06 W	10 G		0.4	5	MONA PASSAGE. Minor damage at San German and felt in the Mayaguez-Lares-Caba Raja area, Puerto Rico.
05	01 58 50.5	52.257 S	114.497 E	10 G	5.6 5.3	1.1	85	SOUTH OF AUSTRALIA
05	02 16 21.9	18.018 N	67.061 W	10 G		0.4	5	MONA PASSAGE. Felt in the San German area, Puerto Rico.
05	02 38 50.8	44.205 N	6.914 E	10 G		0.1	6	FRANCE. ML 2.2 (LDG).
05	03 54 55.5	16.434 N	61.169 W	33 N		0.8	7	LEEWARD ISLANDS. ML 2.3 (FDF).
05	04 51 18.6	2.227 N	126.876 E	33 N	4.8 3.6	0.7	18	MOLUCCA PASSAGE
05	04 52 00.3	33.032 S	71.109 W	60 *		0.3	11	NEAR COAST OF CENTRAL CHILE
05	05 17 33.3	16.097 N	61.268 W	33 N		0.6	5	LEEWARD ISLANDS. ML 1.5 (FDF).
05	05 57 55.0	17.970 N	63.530 W	33 N		0.6	10	LEEWARD ISLANDS. ML 3.7 (FDF).
05	08 42 10.8	3.886 S	136.986 E	127 *	5.0	1.0	59	WEST IRIAN
05	11 20 00.5	58.291 N	151.086 W	62			24	KODIAK ISLAND REGION. <AGS-P>.
05	11 22 41.7	1.46 N	126.85 E	33 N	4.0	1.1	11	MOLUCCA PASSAGE
05	11 38 03.1	54.07 S	133.81 W	10 G	4.7	1.3	15	SOUTH PACIFIC CORDILLERA
05	12 06 49.6	18.137 S	168.245 E	48	5.3 5.4	1.0	144	VANUATU ISLANDS
05	12 40 01.4	3.759 S	151.233 E	10 G	5.3 5.1	1.1	83	NEW IRELAND REGION
05	13 26 45.3	60.112 N	152.395 W	75			35	SOUTHERN ALASKA. <AGS-P>.
05	13 56 41.7	51.716 N	16.508 E	10 G		0.5	11	POLAND. ML 4.0 (GRF).

05	14	03	46.9	10.625 S	13.081 W	10 G	4.5	0.7	19	ASCENSION ISLAND REGION
05	14	09	04.4	10.774 S	13.085 W	10 G		0.9	9	ASCENSION ISLAND REGION
05	14	59	31.9	24.144 S	179.787 E	555 ?	4.8	1.0	35	SOUTH OF FIJI ISLANDS
05	16	53	44.2	42.525 N	16.173 E	5 G		1.1	21	ADRIATIC SEA. ML 3.0 (TTG).
05	18	24	45.6	18.040 S	167.876 E	38 *	4.6 4.5	1.3	48	VANUATU ISLANDS
05	21	27	53.7	40.831 N	28.270 E	10 G		0.9	17	TURKEY
05	21	49	26.9	49.599 N	28.731 W	10 G	4.6 4.1	1.3	43	NORTH ATLANTIC RIDGE
05	23	08	17.0	16.199 N	61.232 W	33 N		0.4	6	LEEWARD ISLANDS. ML 1.6 (FDF)
06	00	05	55.9	20.087 S	178.402 W	592	4.9	1.0	46	FIJI ISLANDS REGION
06	00	08	26.5	33.108 S	71.082 W	58 *		0.4	9	NEAR COAST OF CENTRAL CHILE
06	00	52	30.1	38.480 N	26.777 E	27		0.9	26	AEGEAN SEA. ML 3.5 (THE).
06	00	59	31.9	47.655 N	152.911 E	115 D	4.4	0.9	19	KURIL ISLANDS
06	01	17	02.9	38.499 N	26.763 E	10 G		0.6	5	AEGEAN SEA
06	02	51	33.7	43.066 N	145.346 E	101	4.7	0.8	14	HOKKAIDO, JAPAN REGION. Felt (II JMA) at Nemuro and (I JMA) at Kushiro. Felt (I JMA) at Miyako, Honshu.
06	03	01	03.0	3.862 N	95.363 E	47 *	3.7	0.4	14	OFF W COAST OF NORTHERN SUMATERA
06	03	11	30.8	60.008 N	5.868 E	10 G		0.3	7	SOUTHERN NORWAY. ML 1.0 (BER).
06	03	57	50.8	18.353 N	146.234 E	71 *	4.5	0.7	18	MARIANA ISLANDS
06	04	43	17.5	25.990 N	95.412 E	93 *	4.7	1.3	15	BURMA-INDIA BORDER REGION
06	06	33	58.7	46.043 N	2.994 E	10 G		0.5	11	FRANCE. ML 2.6 (LDG).
06	07	01	01.9	5.725 S	130.514 E	33 N	4.4	1.1	10	BANDA SEA
06	07	09	08.9	40.830 N	27.988 E	10 G		0.3	6	TURKEY
06	08	11	10.4	63.486 N	151.364 W	33 N		1.2	8	CENTRAL ALASKA. ML 3.5 (PMR).
06	08	23	41.6	33.655 S	179.380 W	33 N	4.7 4.0	1.0	25	SOUTH OF KERMADEC ISLANDS
06	09	59	38.6	7.339 S	128.49 E	155 ?	4.7	1.1	6	BANDA SEA
06	10	42	37.1	5.008 S	151.637 E	123 *	4.4	0.9	15	NEW BRITAIN REGION
06	11	39	27.0	42.066 N	13.809 E	10 G		0.9	21	CENTRAL ITALY
06	12	15	07.7	5.626 N	0.272 W	10 G		0.1	5	NORTHWEST AFRICA
06	12	59	18.6	6.020 S	131.945 E	33 N	4.1	1.3	9	TANIMBAR ISLANDS REGION
06	14	23	17.1	5.346 S	68.667 E	10 G	5.2 4.3	0.9	67	CHAGOS ARCHIPELAGO REGION
06	14	52	12.3	40.484 N	123.474 W	5 G		0.8	5	NORTHERN CALIFORNIA. ML 2.8 (BRK).
06	15	00	58.5	23.678 S	68.017 W	144	4.8	1.2	21	NORTHERN CHILE
06	18	13	18.1	47.000 N	66.600 W	5 G			11	NEW BRUNSWICK. <OTT-P>. mbLg 3.3 (OTT).
06	18	16	44.0	59.785 N	153.323 W	118			24	SOUTHERN ALASKA. <AGS-P>.
06	19	37	41.4	18.296 S	70.232 W	33 N		1.0	6	NEAR COAST OF NORTHERN CHILE. Felt (III) at Tacna, Peru.
06	20	21	31.3	34.452 N	87.472 E	33 N	4.4 4.2	1.2	18	TIBET
06	22	33	42.9	45.574 N	151.307 E	37 D	5.7	0.8	170	KURIL ISLANDS
06	22	35	38.1	56.953 N	143.032 W	10 G	6.8 7.6		759	GULF OF ALASKA. <AGS-P>. ML 7.4 (PMR), Ms 7.5 (BRK). Felt (V) at Anchorage, Cordova, Glennallen, Gustavus, Homer, Juneau, Mellakotia, Pelican, Port Graham, Sitka and Valdez. Also felt (V) in some sections of Whitehorse, Yukon Territory, Canada. Felt (IV) at Kodiak, (III) at Craig and Ketchikan and (II) at King Salmon. Estimated 5,000 dollars damage caused to the ships "Exxon North Slope," "Exxon Boston" and "Exxon New Orleans" located at 57° 38' North, 142° 45' West. Tsunami generated with wave heights (peak to trough) 38 cm. at Yakutat, 12 cm. at Sitka and 8 cm. at Kodiak.
06	23	05	56.8	56.751 N	142.987 W	10 G	5.1		41	GULF OF ALASKA. <AGS-P>. ML 4.7 (PMR).
06	23	11	05.1	56.907 N	143.038 W	10 G			30	GULF OF ALASKA. <AGS-P>. ML 4.4 (PMR).
06	23	14	38.4	57.499 N	142.803 W	10 G	6.2		328	GULF OF ALASKA. <AGS-P>. ML 6.3 (PMR).
06	23	23	59.9	57.675 N	142.941 W	10 G	4.4		21	GULF OF ALASKA. <AGS-P>.
06	23	33	32.5	57.397 N	142.887 W	10 G		1.1	9	GULF OF ALASKA. ML 4.2 (PMR).
06	23	37	47.6	57.738 N	142.966 W	10 G		0.9	9	GULF OF ALASKA. ML 4.1 (PMR).
06	23	39	49.5	57.099 N	142.898 W	10 G	4.5		34	GULF OF ALASKA. <AGS-P>. ML 4.5 (PMR).
07	00	15	47.4	57.000 N	143.012 W	10 G			33	GULF OF ALASKA. <AGS-P>. ML 3.8 (PMR).
07	00	31	32.7	57.15 N	142.90 W	10 G	3.8	1.0	7	GULF OF ALASKA. ML 3.3 (PMR).
07	00	33	40.9	56.895 N	143.370 W	10 G			30	GULF OF ALASKA. <AGS-P>.
07	00	37	56.7	36.603 N	71.749 E	33 N	4.6	1.1	13	AFGHANISTAN-USSR BORDER REGION
07	00	39	43.8	57.072 N	144.070 W	10 G			32	GULF OF ALASKA. <AGS-P>. ML 3.6 (PMR).
07	00	42	49.5	57.500 N	142.949 W	10 G	3.7		33	GULF OF ALASKA. <AGS-P>. ML 3.6 (PMR).
07	00	44	59.2	57.540 N	142.939 W	10 G			31	GULF OF ALASKA. <AGS-P>. ML 3.6 (PMR).
07	00	54	27.4	56.974 N	143.336 W	10 G			39	GULF OF ALASKA. <AGS-P>. ML 4.0 (PMR).
07	01	18	26.3	57.960 N	142.986 W	10 G	4.3		48	GULF OF ALASKA. <AGS-P>. ML 4.2 (PMR).
07	01	29	08.7	57.081 N	143.329 W	10 G			31	GULF OF ALASKA. <AGS-P>. ML 3.9 (PMR).
07	01	34	35.0	57.071 N	142.889 W	10 G	4.1		26	GULF OF ALASKA. <AGS-P>. ML 3.8 (PMR).
07	01	57	14.2	57.119 N	144.091 W	10 G	4.3		49	GULF OF ALASKA. <AGS-P>. ML 4.1 (PMR).
07	01	59	00.3	57.178 N	142.638 W	10 G			9	GULF OF ALASKA. <AGS-P>.
07	02	28	48.4	56.849 N	140.712 W	10 G	4.3		55	OFF COAST OF SOUTHEASTERN ALASKA. <AGS-P>. ML 4.6 (PMR).
07	02	59	53.8	57.013 N	143.290 W	10 G	4.4		81	GULF OF ALASKA. <AGS-P>. ML 4.5 (PMR).
07	03	10	17.2	7.92 S	119.84 E	193 ?	4.5	0.9	5	FLORES SEA
07	03	28	42.9	57.524 N	142.876 W	10 G	4.0		44	GULF OF ALASKA. <AGS-P>. ML 3.8 (PMR).
07	03	42	36.7	57.574 N	142.847 W	10 G	3.6		32	GULF OF ALASKA. <AGS-P>. ML 3.5 (PMR).
07	03	51	20.7	30.022 N	141.363 E	93 *	4.5	1.0	33	SOUTH OF HONSHU, JAPAN
07	04	19	36.9	57.598 N	142.980 W	10 G			30	GULF OF ALASKA. <AGS-P>. ML 3.6 (PMR).
07	04	58	09.3	57.739 N	142.563 W	10 G		1.7	9	GULF OF ALASKA. ML 3.4 (PMR).
07	05	01	12.4	57.761 N	142.599 W	10 G	3.9		30	GULF OF ALASKA. <AGS-P>. ML 3.4 (PMR).
07	05	28	19.2	57.772 N	143.028 W	10 G			29	GULF OF ALASKA. <AGS-P>. ML 3.3 (PMR).
07	05	33	43.9	57.013 N	142.719 W	10 G	4.2		40	GULF OF ALASKA. <AGS-P>. ML 4.0 (PMR).
07	05	57	21.9	57.540 N	142.816 W	10 G			31	GULF OF ALASKA. <AGS-P>. ML 3.8 (PMR).
07	08	12	11.5	57.536 N	142.886 W	10 G			28	GULF OF ALASKA. <AGS-P>.
07	08	33	08.4	57.177 N	142.730 W	10 G			31	GULF OF ALASKA. <AGS-P>.
07	08	50	44.1	44.52 S	93.26 W	10 G	4.9	1.1	11	SOUTHERN PACIFIC OCEAN
07	11	08	54.1	57.744 N	143.085 W	10 G			29	GULF OF ALASKA. <AGS-P>.
07	11	20	04.0	11.678 S	74.071 W	43 *	5.1	1.2	91	PERU
07	11	30	36.4	57.680 N	142.697 W	10 G	3.9		35	GULF OF ALASKA. <AGS-P>. ML 4.1 (PMR).
07	11	34	07.9	57.703 N	142.956 W	10 G			27	GULF OF ALASKA. <AGS-P>.
07	12	51	49.9	2.283 S	99.976 E	28 D	5.0 4.2	1.1	54	SOUTHERN SUMATERA
07	13	18	21.8	57.700 N	143.057 W	10 G	3.8		35	GULF OF ALASKA. <AGS-P>. ML 3.9 (PMR).
07	13	38	09.2	57.410 N	143.132 W	10 G	4.0		34	GULF OF ALASKA. <AGS-P>. ML 4.0 (PMR).
07	13	45	55.8	15.986 S	172.901 W	33 N	5.0 4.7	1.2	69	SAMOA ISLANDS REGION

07	13 50 36.8	57.738 N	143.016 W	10 G	3.7		27	GULF OF ALASKA. <AGS-P>.
07	13 57 24.17	20.71 S	69.74 W	33 N		1.2	5	NORTHERN CHILE
07	14 03 06.8	35.859 N	30.931 E	33 N		0.2	7	EASTERN MEDITERRANEAN SEA
07	14 29 15.9	50.546 N	4.915 E	10 G		0.6	5	BELGIUM
07	15 05 12.3	57.217 N	143.108 W	10 G			27	GULF OF ALASKA. <AGS-P>.
o 07	15 21 06.8	41.669 N	152.222 E	10 G	5.9 5.1	0.9	342	NORTH PACIFIC OCEAN. Ms 5.4 (BRK). Note the unusual location of this event.
07	15 48 44.4	42.277 N	19.897 E	10 G		0.6	10	YUGOSLAVIA. MD 2.8 (TTG).
07	16 59 40.87	16.43 N	122.53 E	33 N	4.6	1.0	11	LUZON, PHILIPPINE ISLANDS
07	18 00 04.4	57.834 N	142.633 W	10 G			30	GULF OF ALASKA. <AGS-P>.
07	18 44 39.5	30.590 N	116.290 W	6 G			2	BAJA CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
07	20 24 33.8	41.765 N	23.726 E	10 G		0.5	18	GREECE-BULGARIA BORDER REGION. ML 2.9 (THE), 2.7 (SKO).
07	21 02 57.5	47.451 N	153.128 E	33 N	4.4	0.8	13	KURIL ISLANDS
07	21 06 03.1	35.889 N	114.924 W	5 G		0.8	16	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (NEIS), 3.4 (PAS). Felt (III) at Boulder City, Nevada.
07	21 13 48.8	3.589 N	128.363 E	33 N	5.0	1.2	28	NORTH OF MALMAHERA
07	22 57 56.2	42.291 N	19.929 E	10 G		0.5	7	YUGOSLAVIA. ML 2.3 (TTG).
08	02 09 27.3	57.186 N	143.364 W	10 G	3.8		35	GULF OF ALASKA. <AGS-P>. ML 3.5 (PMR).
08	03 22 09.1	62.142 N	149.990 W	50			35	CENTRAL ALASKA. <AGS-P>.
08	03 25 16.77	37.62 N	72.25 E	33 N	4.4	1.2	7	TAJIK SSR
08	03 39 35.0	29.537 N	140.957 E	74 ?	4.7	0.6	18	SOUTH OF HONSHU, JAPAN
08	06 41 41.1	57.291 N	143.146 W	10 G			30	GULF OF ALASKA. <AGS-P>. ML 3.6 (PMR).
08	07 06 40.8	57.753 N	142.850 W	10 G			34	GULF OF ALASKA. <AGS-P>. ML 3.5 (PMR).
08	07 30 04.1	9.883 S	154.203 E	33 N	3.6	1.5	8	DENTRECASTEAUX ISLANDS REGION
08	08 13 42.77	50.42 N	19.05 E	10 G		0.3	4	POLAND. ML 3.0 (KRA).
08	08 40 13.67	38.424 N	15.940 E	21		0.9	11	SICILY
08	09 24 25.3	45.535 N	151.518 E	33 D	5.3 4.5	0.9	132	KURIL ISLANDS
08	09 45 58.3	57.001 N	143.150 W	10 G			25	GULF OF ALASKA. <AGS-P>.
08	10 22 34.7	57.193 N	143.207 W	10 G	4.0		33	GULF OF ALASKA. <AGS-P>. ML 4.5 (PMR).
08	10 33 57.7	56.884 N	142.978 W	10 G	4.2		44	GULF OF ALASKA. <AGS-P>. ML 4.0 (PMR).
08	11 02 08.7	28.653 N	142.546 E	37 D	4.9 4.5	1.0	67	BONIN ISLANDS REGION
08	11 38 57.0	38.870 N	21.194 E	47	4.5 3.7	1.3	112	GREECE
08	13 56 44.6	37.382 N	31.237 E	10 G		1.4	7	TURKEY
08	14 01 24.2	39.235 N	123.195 W	1 G			7	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 2.2 (BRK). Felt at Redwood Valley.
08	14 35 43.47	59.085 N	5.912 E	10 G		0.6	5	SOUTHERN NORWAY. ML 1.5 (BER).
o 08	15 38 26.3	2.184 S	125.310 E	48 D	5.6 5.2	1.1	109	CERAM SEA
08	16 14 50.4	17.697 S	178.820 W	607 *	4.8	0.8	60	FIJI ISLANDS REGION
o 08	16 27 18.8	51.340 N	176.862 E	33 N	5.5 5.5	1.2	268	RAT ISLANDS, ALEUTIAN ISLANDS. ML 5.5 (PMR), Ms 6.1 (BRK).
08	17 36 18.2	35.843 N	141.420 E	50	4.4	1.0	27	NEAR EAST COAST OF HONSHU, JAPAN
08	17 43 30.27	40.780 N	29.137 E	5 G		0.3	6	TURKEY
08	17 45 49.9	57.073 N	142.946 W	10 G			31	GULF OF ALASKA. <AGS-P>.
08	18 22 33.9	3.180 N	96.425 E	65 *	3.6	1.1	13	NORTHERN SUMATRA
08	18 48 51.0	62.274 N	147.219 W	44			32	CENTRAL ALASKA. <AGS-P>. ML 3.2 (PMR).
08	19 02 45.1	39.763 N	15.343 E	284	4.5	1.2	130	SOUTHERN ITALY
08	19 47 01.67	42.670 N	12.289 E	10 G		0.9	5	CENTRAL ITALY
08	20 08 55.8	15.173 N	144.717 E	33 N	4.9	0.7	10	MARIANA ISLANDS REGION
08	20 23 30.4	57.858 N	143.074 W	10 G	3.7		33	GULF OF ALASKA. <AGS-P>. ML 3.5 (PMR).
08	21 09 43.17	2.23 N	28.74 W	10 G	4.7	1.2	8	CENTRAL MID-ATLANTIC RIDGE
08	21 30 57.1	39.546 S	176.518 E	76	5.0	1.4	19	NORTH ISLAND, NEW ZEALAND. Felt on central North Island from Napier to Wanganui.
08	22 48 02.3	43.813 N	7.882 E	10 G		0.4	14	NEAR SOUTH COAST OF FRANCE. ML 2.4 (LDG).
08	23 16 58.4	34.799 N	26.672 E	40 *	4.2	1.1	60	CRETE. ML 4.2 (ATH).
09	00 04 52.3	57.468 N	142.965 W	10 G	4.2		55	GULF OF ALASKA. <AGS-P>. ML 4.5 (PMR).
09	00 07 57.27	46.698 N	9.034 E	10 G		1.0	5	SWITZERLAND
09	00 13 19.7	57.604 N	142.943 W	10 G	4.0		56	GULF OF ALASKA. <AGS-P>. ML 4.6 (PMR).
09	02 23 20.0	24.978 S	71.094 W	33 N		1.2	13	OFF COAST OF NORTHERN CHILE
09	03 11 33.6	57.507 N	142.977 W	10 G	4.0		46	GULF OF ALASKA. <AGS-P>.
09	03 17 14.9	61.362 N	150.948 W	56			29	SOUTHERN ALASKA. <AGS-P>.
09	04 02 03.6	57.069 N	142.905 W	10 G			31	GULF OF ALASKA. <AGS-P>.
o 09	04 42 52.6	4.662 S	131.137 E	33 N	5.5 4.7	1.2	88	BANDA SEA
09	05 00 34.9	31.232 S	68.642 W	111 D	5.4	0.9	133	SAN JUAN PROVINCE, ARGENTINA. Felt (IV) at San Juan.
09	05 02 00.7	37.896 N	26.995 E	10 G		1.2	7	DODECANESE ISLANDS
09	06 17 17.5	34.424 S	70.276 W	11	4.4	1.1	23	CHILE-ARGENTINA BORDER REGION
09	07 11 11.07	8.68 S	124.31 E	33 N		1.3	7	TIMOR
09	07 53 09.3	57.401 N	143.118 W	10 G			28	GULF OF ALASKA. <AGS-P>.
09	08 48 26.37	41.479 N	29.325 E	10 G		0.4	5	TURKEY
09	09 08 08.27	21.25 S	176.34 W	252 ?	4.9	0.9	14	FIJI ISLANDS REGION
09	09 20 47.6	57.807 N	142.913 W	10 G			36	GULF OF ALASKA. <AGS-P>.
09	10 49 46.87	39.602 N	29.406 E	10 G		0.7	6	TURKEY
09	11 02 23.6	57.221 N	142.331 W	10 G			33	GULF OF ALASKA. <AGS-P>.
09	11 47 56.07	6.19 S	147.40 E	100 *		0.6	6	EAST PAPUA NEW GUINEA REGION
09	12 47 27.7	32.831 S	71.639 W	10 G		0.9	12	NEAR COAST OF CENTRAL CHILE
09	14 49 45.8	59.206 N	143.938 W	10 G			25	GULF OF ALASKA. <AGS-P>.
09	14 56 36.5	23.856 S	66.687 W	212 *		1.3	11	JUJUY PROVINCE, ARGENTINA
09	15 21 00.4	42.862 N	23.060 E	10 G		1.2	6	BULGARIA
09	15 38 36.4	29.547 N	141.459 E	33 N	4.4	1.0	12	SOUTH OF HONSHU, JAPAN
09	15 47 09.2	23.913 S	68.561 W	154 *		0.9	10	NORTHERN CHILE
09	16 26 45.07	45.61 N	8.91 E	10 G		1.2	5	NORTHERN ITALY
09	17 02 30.77	15.976 N	60.581 W	10 G		0.4	10	LEEWARD ISLANDS. ML 2.7 (FDF).
09	17 07 09.17	61.10 N	3.43 E	10 G		0.9	8	NORWEGIAN SEA. ML 2.3 (BER).
09	17 08 47.0	51.968 N	175.362 E	33 N	4.9 4.7	1.0	101	RAT ISLANDS, ALEUTIAN ISLANDS. ML 5.1 (PMR).
09	17 29 49.9	6.835 N	73.037 W	158	4.7	1.0	32	NORTHERN COLOMBIA
09	19 11 23.1	56.856 N	142.687 W	10 G	3.7		29	GULF OF ALASKA. <AGS-P>.
09	19 34 43.57	16.270 N	61.123 W	33 N		0.5	5	LEEWARD ISLANDS. ML 1.7 (FDF).
09	20 21 13.7	57.419 N	143.070 W	10 G			29	GULF OF ALASKA. <AGS-P>.
09	20 35 03.7	57.089 N	143.466 W	10 G	4.0		28	GULF OF ALASKA. <AGS-P>.
09	20 56 10.7	24.737 S	70.138 W	52 D	5.0	1.4	29	NEAR COAST OF NORTHERN CHILE
09	21 01 31.07	32.94 S	70.38 W	84 ?		0.3	8	CHILE-ARGENTINA BORDER REGION
o 09	21 33 53.7	17.327 S	74.154 W	32 D	6.0 5.9	1.0	292	OFF COAST OF PERU. Felt (II) at Arequipa.
09	21 41 10.8	18.313 S	69.543 W	119	5.4	1.1	166	NORTHERN CHILE. Felt (V) at Arica. Felt (II) at Arequipa, Peru.

09	21	46	04.27	33.08	S	72.24	W	33	N	0.6	7	OFF COAST OF CENTRAL CHILE	
09	22	49	57.98	57.307	N	143.192	W	10	G	33	33	GULF OF ALASKA. <AGS-P>.	
09	23	19	44.0	20.319	S	68.714	W	127	*	4.7	1.4	33 CHILE-BOLIVIA BORDER REGION	
09	23	46	33.58	57.362	N	143.079	W	10	G	17	17	GULF OF ALASKA. <AGS-P>.	
10	00	07	41.9	44.128	N	7.228	E	10	G	0.2	12	NORTHERN ITALY. ML 2.7 (LDG).	
10	01	38	59.18	57.093	N	142.674	W	10	G	23	23	GULF OF ALASKA. <AGS-P>.	
10	02	00	21.38	34.940	N	116.700	W	0		10	10	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS).	
10	02	08	34.1*	18.550	S	69.231	W	165	?	1.1	8	NORTHERN CHILE	
10	03	24	53.3*	8.811	S	67.674	E	10	G	4.8	1.4	13 MID-INDIAN RISE	
10	03	37	38.1	10.172	S	161.054	E	102	5.2	1.0	44	SOLOMON ISLANDS	
10	03	43	19.98	57.334	N	143.096	W	10	G	16	16	GULF OF ALASKA. <AGS-P>.	
10	04	11	17.7	40.438	N	26.090	E	10	G	0.9	14	TURKEY	
a	10	04	16	34.58	59.236	N	144.335	W	10	G	5.1	5.1	170 GULF OF ALASKA. <AGS-P>.
f	10	06	17	23.3	10.402	N	60.587	W	56	D	6.2	6.4	1.1 458 TRINIDAD. Ms 6.6 (BRK), 6.3 (PAS). Slight damage (VI) on Trinidad. Felt strongly throughout Trinidad, on offshore oil platforms and in northeastern Venezuela. Also felt in Guyana and on Tobago, Martinique, Grenada and St. Vincent. Felt as far away as Caracas, Venezuela.
10	06	29	48.0?	13.00	N	59.13	W	33	N	1.4	11	11 WINDWARD ISLANDS	
10	06	30	25.4	10.396	N	60.577	W	54	D	5.4	1.0	164 TRINIDAD	
10	06	33	24.3	10.387	N	60.504	W	48	D	5.1	0.8	97 TRINIDAD	
10	06	50	48.3*	10.226	N	60.102	W	33	N	1.0	16	16 TRINIDAD. MG 3.9 (TRN).	
10	06	54	01.4?	10.47	N	60.22	W	33	N	0.7	9	9 TRINIDAD. MG 3.5 (TRN).	
10	07	00	15.9*	21.144	S	68.584	W	156	*	1.2	8	8 CHILE-BOLIVIA BORDER REGION	
10	07	12	33.48	10.791	N	60.950	W	33	N	0.4	5	5 TRINIDAD. MG 3.5 (TRN).	
10	07	17	25.8?	9.34	N	59.11	W	33	N	0.8	15	15 NORTH ATLANTIC OCEAN. MG 3.7 (TRN).	
10	07	22	05.1*	10.156	N	60.159	W	33	N	4.6	0.8	24 TRINIDAD	
10	07	24	16.6*	17.188	S	13.470	E	5	G	4.7	1.2	15 NAMIBIA	
10	07	26	28.4?	10.49	N	60.60	W	33	N	1.2	6	6 TRINIDAD	
10	07	39	04.18	57.586	N	142.814	W	10	G	3.7	24	24 GULF OF ALASKA. <AGS-P>.	
10	07	44	24.78	61.333	N	150.920	W	63		3.7	36	36 SOUTHERN ALASKA. <AGS-P>. Felt (III) at Anchorage and (II) at Palmer.	
10	07	47	22.0?	10.17	N	60.32	W	33	N	4.5	0.8	7 TRINIDAD	
a	10	07	58	21.0	7.273	S	122.281	E	613	5.6	0.9	206 FLORES SEA	
10	08	09	10.6?	10.56	N	60.44	W	33	N	0.6	6	6 TRINIDAD. MG 2.9 (TRN).	
10	09	10	12.7?	10.70	N	60.79	W	33	N	0.8	5	5 TRINIDAD. MG 4.3 (TRN).	
10	09	13	07.48	56.989	N	142.705	W	10	G	4.4	39	39 GULF OF ALASKA. <AGS-P>.	
10	09	32	53.0	44.864	N	7.697	E	10	G	0.7	28	28 NORTHERN ITALY. ML 3.2 (LDG).	
10	09	37	15.18	59.870	N	145.548	W	20		23	23 GULF OF ALASKA. <AGS-P>.		
10	09	37	45.18	59.847	N	145.527	W	29	4.3	32	32 GULF OF ALASKA. <AGS-P>.		
10	09	50	15.7?	21.94	S	67.72	W	3					

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12	23 10 47.6	45.133 N	25.423 E	27	1.3	17	ROMANIA
13	01 00 11.5	33.831 N	26.103 E	10 G 4.0	1.0	25	EASTERN MEDITERRANEAN SEA
13	01 39 24.3*	24.463 N	122.190 E	63 * 4.6	0.9	17	TAIWAN REGION
13	03 32 08.4&	62.209 N	151.017 W	77		17	CENTRAL ALASKA. <AGS-P>.
13	06 18 04.6*	8.315 S	111.082 E	128 * 4.7	1.0	18	JAVA
13	06 20 54.1&	61.296 N	150.308 W	45		39	SOUTHERN ALASKA. <AGS-P>. ML 3.1 (PMR).
13	08 18 27.1*	3.820 S	130.049 E	33 N	1.5	10	CERAM
13	08 43 48.5&	57.454 N	142.911 W	10 G 3.9		47	GULF OF ALASKA. <AGS-P>. ML 4.2 (PMR).
13	09 27 15.9	13.954 N	119.301 E	37 D 5.0	1.1	80	PHILIPPINE ISLANDS REGION
13	11 13 49.5*	28.903 N	81.359 E	90 ? 4.3	1.6	11	NEPAL-INDIA BORDER REGION
a 13	11 31 32.8*	33.673 S	72.216 W	41 * 5.3 6.0	1.4	89	OFF COAST OF CENTRAL CHILE. Felt (II) at Santiago.
13	12 10 05.3?	33.71 S	72.54 W	33 N	0.5	11	OFF COAST OF CENTRAL CHILE
13	12 25 41.7	16.438 S	167.901 E	194 * 5.3	1.3	146	VANUATU ISLANDS
13	12 37 59.9&	57.094 N	143.413 W	10 G 3.9		39	GULF OF ALASKA. <AGS-P>.
a 13	12 59 15.8	37.283 S	51.848 E	10 G 5.7 5.9	1.1	187	SOUTH INDIAN OCEAN
13	13 05 21.8*	37.473 S	51.878 E	10 G 5.5	1.1	40	SOUTH INDIAN OCEAN
13	13 48 30.3	42.182 N	75.443 E	33 N 4.5	1.1	21	ALMA-ATA REGION. Minor damage (V) to some old buildings in the Kochkorka area. Felt (II) at Frunze.
13	14 20 35.1&	57.629 N	142.979 W	10 G		36	GULF OF ALASKA. <AGS-P>. ML 4.0 (PMR).
13	15 33 29.3?	61.78 N	4.51 E	10 G	1.4	6	SOUTHERN NORWAY. ML 1.8 (BER).
13	15 44 03.9&	56.815 N	142.816 W	10 G		17	GULF OF ALASKA. <AGS-P>.
13	17 00 25.7	10.210 N	60.169 W	31 * 4.6	1.2	26	TRINIDAD. ML 5.1 (FDF).
13	17 41 19.9?	45.65 N	26.53 E	152 ?	0.5	5	ROMANIA
13	18 09 13.6&	60.005 N	146.558 W	25		33	SOUTHERN ALASKA. <AGS-P>. ML 2.9 (PMR).
13	19 21 04.6&	36.718 N	120.697 W	3		16	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
13	19 24 56.2?	54.36 N	162.08 E	33 N 4.3	1.0	7	NEAR EAST COAST OF KAMCHATKA
13	20 53 29.2&	57.674 N	143.060 W	10 G 3.6		43	GULF OF ALASKA. <AGS-P>.
13	21 03 50.7?	42.17 N	19.36 E	10 G	0.7	4	YUGOSLAVIA. ML 2.1 (TTG).
13	21 18 57.0*	15.302 N	61.449 W	164 ?	0.4	15	LEEWARD ISLANDS. MG 3.5 (TRN).
13	21 32 08.6&	60.182 N	153.365 W	139		20	SOUTHERN ALASKA. <AGS-P>.
13	23 27 33.4*	36.198 S	78.525 E	10 G 5.5	0.9	27	MID-INDIAN RISE
13	23 28 48.9	13.195 N	89.164 W	87 * 4.9	1.3	120	EL SALVADOR. Felt (IV) at San Salvador.
14	00 09 13.9&	35.400 N	117.790 W	9		15	CENTRAL CALIFORNIA. <PAS-P>. ML 3.3 (PAS). Felt (III) at Ridgecrest.
14	00 27 57.2?	1.06 S	139.56 E	33 N 4.1	1.0	7	NEAR N. COAST OF WEST IRIAN
14	01 13 30.1?	11.20 N	87.31 W	33 N	0.5	10	NEAR COAST OF NICARAGUA
14	01 47 28.9&	57.275 N	142.890 W	10 G		19	GULF OF ALASKA. <AGS-P>.
14	01 50 23.0*	30.401 S	72.037 W	33 N	1.0	15	OFF COAST OF CENTRAL CHILE
14	02 26 39.4	24.922 N	62.869 E	33 N 4.6	1.0	42	NEAR COAST OF PAKISTAN
14	03 02 05.1?	10.57 N	60.97 W	33 N	0.1	4	TRINIDAD. MG 3.4 (TRN).
14	04 43 19.1&	16.527 N	61.268 W	10 G	1.0	5	LEEWARD ISLANDS. ML 2.3 (FDF).
14	05 20 02.9?	31.26 S	68.26 W	33 N	1.3	5	SAN JUAN PROVINCE, ARGENTINA
14	05 25 13.2	46.214 N	6.886 E	10 G	0.8	32	SWITZERLAND. ML 3.1 (LDG).
14	05 46 53.4&	57.847 N	142.944 W	10 G		27	GULF OF ALASKA. <AGS-P>. ML 3.3 (PMR).
14	07 29 54.0	35.747 N	80.699 E	33 N 4.8	1.5	27	KASHMIR-TIBET BORDER REGION
14	07 48 21.1*	30.384 S	116.882 E	10 G	1.4	7	WESTERN AUSTRALIA
14	07 56 48.5&	60.168 N	152.803 W	99		41	SOUTHERN ALASKA. <AGS-P>.
14	08 20 42.7*	34.326 S	70.187 W	26 *	0.9	10	CHILE-ARGENTINA BORDER REGION
14	09 25 48.2*	36.535 N	70.372 E	170 ? 4.3	0.6	14	HINDU KUSH REGION
14	09 34 14.3	23.639 S	68.322 W	142 * 4.8	1.5	23	NORTHERN CHILE. Felt (II) at Antofagasta.
14	09 51 22.7*	11.956 S	26.620 E	10 G 4.1	0.3	6	ZAIRE REPUBLIC
14	10 25 31.7*	34.892 N	26.888 E	33 N	0.5	7	CRETE
a 14	10 32 45.5	14.538 S	73.603 W	87 * 5.1	1.0	93	PERU
14	10 59 49.5*	30.011 S	178.288 W	268 ? 4.7	1.1	39	KERMADEC ISLANDS
14	11 35 00.5?	45.72 N	26.51 E	96 ?	0.5	5	ROMANIA
14	11 53 32.7	10.097 N	60.092 W	33 N 4.3	0.8	20	TRINIDAD. ML 4.4 (FDF).
14	11 54 00.8	41.272 N	29.006 E	10 G	0.6	7	TURKEY
14	12 29 49.4	7.380 S	74.783 W	141 D 5.4	0.8	219	PERU-BRAZIL BORDER REGION
14	13 54 28.2&	60.290 N	5.341 E	10 G	0.4	5	SOUTHERN NORWAY. ML 1.2 (BER).
14	14 49 19.5?	10.39 N	60.36 W	33 N	0.5	15	TRINIDAD. ML 4.5 (FDF).
14	15 49 52.6	50.209 N	7.234 E	10 G	1.1	19	GERMANY. ML 3.3 (LDG), 2.7 (BNS), 2.6 (GRF). Felt (III) in the Ochtdung area.
14	15 53 56.4&	57.348 N	143.080 W	10 G		20	GULF OF ALASKA. <AGS-P>.
a 14	18 00 27.4	52.219 S	123.745 E	10 G 5.3	1.2	77	SOUTH OF AUSTRALIA
14	18 24 41.8&	40.430 N	124.615 W	21		4	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.2 (BRK).
14	18 40 27.8	45.284 N	150.862 E	33 N 4.8	0.8	65	KURIL ISLANDS
14	19 00 30.0	46.363 N	13.156 E	10 G	1.3	8	AUSTRIA. ML 2.2 (KBA), MD 2.5 (TRI).
a 14	19 17 04.0	49.674 N	156.310 E	61 D 5.3	0.9	209	KURIL ISLANDS
14	19 28 44.4&	62.981 N	150.159 W	120 3.6		42	CENTRAL ALASKA. <AGS-P>.
14	20 09 18.3?	3.75 N	63.08 E	10 G 4.7	1.4	7	CARLSBERG RIDGE
14	20 19 02.9	29.905 N	67.876 E	16 4.4 4.0	1.0	25	PAKISTAN
14	20 21 08.2&	37.756 N	15.009 E	10 G	1.3	5	SICILY
14	20 29 25.4&	37.761 N	15.043 E	10 G	0.5	6	SICILY
14	20 36 24.7	47.410 N	113.908 W	5 G	0.6	11	MONTANA. ML 3.4 (BUT).
14	20 54 08.8*	37.963 N	29.340 E	10 G	0.7	5	TURKEY
14	21 13 58.1&	10.477 N	60.611 W	55 G	0.1	5	TRINIDAD. MG 3.3 (TRN).
14	21 41 39.2*	6.466 S	150.215 E	63 ? 4.4	1.3	8	NEW BRITAIN REGION
14	22 50 35.0&	10.534 N	60.673 W	33 N	0.4	7	TRINIDAD. MG 3.0 (TRN).
14	23 29 12.4?	10.65 N	60.76 W	33 N	0.6	5	TRINIDAD. MG 2.9 (TRN).
15	00 31 47.4	45.721 N	26.568 E	163 *	0.7	23	ROMANIA
15	03 30 36.8	45.928 N	12.021 E	10 G	0.7	13	NORTHERN ITALY. ML 2.9 (KBA), MD 2.7 (TRI).
15	04 12 53.2?	36.51 N	27.69 E	10 G	1.0	7	DODECANESE ISLANDS
15	04 23 40.3*	36.699 N	73.161 E	77 * 4.5	1.6	19	NORTHWESTERN KASHMIR. Felt (II) at Khorag, USSR.
15	05 14 25.7&	57.386 N	143.109 W	10 G		27	GULF OF ALASKA. <AGS-P>.
15	05 47 34.8&	39.422 N	28.324 E	10 G	1.0	5	TURKEY
15	05 56 13.1*	32.733 S	71.458 W	33 N	1.2	9	NEAR COAST OF CENTRAL CHILE
15	06 33 08.7	63.552 N	147.219 W	96 ?	0.3	8	CENTRAL ALASKA
15	08 22 20.8?	10.49 N	60.63 W	33 N	0.4	6	TRINIDAD. MG 3.2 (TRN).
15	08 39 40.5?	15.45 N	60.53 W	33 N	1.3	6	LEEWARD ISLANDS. ML 2.1 (FDF).
a 15	09 25 05.6	11.843 N	143.279 E	17 5.3 5.2	1.2	127	SOUTH OF MARIANA ISLANDS
15	10 14 31.8&	39.593 N	29.348 E	10 G	0.5	5	TURKEY
15	10 54 01.5?	7.20 S	145.96 E	182 ? 4.7	1.2	9	NEAR S COAST OF PAPUA NEW GUINEA
15	11 04 26.3	46.138 N	2.446 W	11	0.7	19	BAY OF BISCAY. ML 3.7 (LDG).

15	11 16 07.1*	19.553 S	133.921 E	5 G		0.5	5	NORTHERN TERRITORY, AUSTRALIA
15	12 03 16.4	44.858 N	10.688 E	10 G	3.8	1.3	141	NORTHERN ITALY. ML 4.5 (LDG), 4.5 (FUR). MD 4.1 (TRI), 4.1 (ROM). Felt strongly in the epicentral area.
15	12 05 43.1?	32.45 S	178.74 W	33 N	5.0 5.1	1.4	12	SOUTH OF KERMADec ISLANDS
15	12 15 08.5	44.789 N	10.732 E	16		1.0	14	NORTHERN ITALY
15	12 35 39.5?	10.42 N	60.71 W	33 N		0.2	7	TRINIDAD. MG 4.2 (TRN).
15	12 51 46.8?	36.13 N	22.06 E	10 G		0.7	5	SOUTHERN GREECE. ML 3.5 (ATH).
15	13 09 31.5	44.820 N	10.793 E	10 G		0.4	6	NORTHERN ITALY
15	14 25 14.6&	57.482 N	142.956 W	10 G	4.1		41	GULF OF ALASKA. <AGS-P>. ML 4.4 (PMR).
15	14 56 29.8?	61.59 N	5.16 E	10 G		0.8	5	SOUTHERN NORWAY. MD 1.9 (BER).
15	15 55 24.3*	42.210 N	75.509 E	33 N	4.5	1.3	14	ALMA-ATA REGION. Minor damage (V) in the epicentral area. Felt (IV) at Kochkorko, (III) at Rybachye and (II) at Frunze.
15	17 10 47.5*	7.024 N	123.677 E	33 N	4.9	1.1	9	MINDANAO, PHILIPPINE ISLANDS
15	17 42 49.9*	37.383 S	51.462 E	10 G	4.5	1.1	22	SOUTH INDIAN OCEAN
15	17 53 35.5&	57.608 N	142.844 W	10 G			37	GULF OF ALASKA. <AGS-P>. ML 3.5 (PMR).
15	20 09 32.1	41.765 N	20.082 E	10 G		0.8	11	ALBANIA. ML 3.3 (SKO). MD 2.9 (TTG).
15	20 18 04.0	42.456 N	19.787 E	10 G		0.8	8	YUGOSLAVIA. MD 2.2 (TTG).
15	20 22 30.1*	13.243 N	124.705 E	52 ?	4.8 4.6	1.1	30	LUZON, PHILIPPINE ISLANDS
15	20 28 47.3*	28.318 N	130.343 E	51 *	4.8	1.2	31	RYUKYU ISLANDS
15	21 05 37.7&	60.264 N	153.486 W	165			28	SOUTHERN ALASKA. <AGS-P>.
15	21 53 57.2*	9.422 S	150.063 E	17 ?		0.7	10	EAST PAPUA NEW GUINEA REGION
15	22 40 33.3&	40.480 N	124.547 W	15			11	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).
15	23 28 33.9	44.788 N	10.874 E	10 G		0.5	7	NORTHERN ITALY
a 15	23 56 17.2&	57.037 N	142.898 W	10 G	5.0 4.6		135	GULF OF ALASKA. <AGS-P>. ML 4.8 (PMR).
16	00 37 50.2*	24.503 N	125.795 E	68 *	4.2	1.3	21	SOUTHWESTERN RYUKYU ISLANDS
a 16	00 44 47.1	3.582 S	146.488 E	18 *	5.1 5.7	1.0	40	BISMARCK SEA
16	02 52 24.9&	59.896 N	153.561 W	138			19	SOUTHERN ALASKA. <AGS-P>.
16	03 56 43.5?	51.50 N	20.89 E	10 G		1.5	5	POLAND
16	04 07 25.2%	44.652 N	5.307 E	10 G		0.7	14	FRANCE. ML 2.6 (LDG).
16	04 09 28.7*	14.808 N	99.078 E	33 N		1.2	5	SOUTHEAST ASIA
a 16	05 48 03.8	10.211 N	60.607 W	56	5.7	1.0	357	TRINIDAD. Ms 5.2 (BRK). Felt on Trinidad and on offshore oil platforms. Felt (II) on Martinique.
16	06 08 38.0	21.117 S	70.214 W	64 D	5.0	1.3	50	NEAR COAST OF NORTHERN CHILE
16	06 18 50.8&	36.563 N	121.203 W	7			17	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK). Felt (III) at Soledad.
16	07 21 28.3%	39.969 N	29.142 E	10 G		0.9	6	TURKEY
16	09 04 37.6*	14.890 N	99.092 E	33 N		0.6	5	SOUTHEAST ASIA
16	09 13 34.8*	36.441 N	21.322 E	33 N		0.7	7	SOUTHERN GREECE. ML 3.5 (ATH).
16	10 44 24.0	1.097 S	99.939 E	77 *	5.0	1.3	46	SOUTHERN SUMATERA
16	10 56 18.3*	19.671 S	133.837 E	5 G		1.3	6	NORTHERN TERRITORY, AUSTRALIA
a 16	12 11 05.9	17.767 S	175.034 W	256 D	5.3	1.1	138	TONGA ISLANDS
16	13 29 56.7*	23.939 S	179.794 E	529 *	4.7	0.8	51	SOUTH OF FIJI ISLANDS
16	14 24 25.5	10.452 N	60.451 W	57	4.9	1.2	58	TRINIDAD
16	16 37 00.4?	34.93 N	14.35 E	10 G		1.4	12	MEDITERRANEAN SEA
16	16 46 34.6?	10.67 N	60.82 W	33 N		1.4	5	TRINIDAD. MG 3.1 (TRN).
16	17 24 19.6&	57.167 N	143.077 W	10 G	4.1		37	GULF OF ALASKA. <AGS-P>.
16	20 02 08.6	40.157 N	19.667 E	29	4.3	1.5	42	ALBANIA. ML 4.1 (ATH), 3.7 (TTG). Felt (V) in the Himore-Fterre area; (IV) in the Borsh area. Also felt in the Soronda-Golem-Kardhiq area.
16	21 18 59.7	42.401 N	2.173 E	10 G		0.9	37	PYRENEES. ML 3.8 (LDG). Felt (III) in the Campdevanai area, Spain.
16	22 32 36.8	15.715 S	13.265 W	10 G	4.5 4.6	0.8	32	SOUTH ATLANTIC RIDGE
16	22 55 24.2	21.183 S	68.535 W	116 D	5.1	0.9	79	CHILE-BOLIVIA BORDER REGION
16	23 06 37.1?	16.51 S	15.10 W	10 G	4.6	1.6	12	SOUTH ATLANTIC RIDGE
16	23 09 44.7?	7.40 S	129.56 E	165 ?	4.6	1.5	10	BANDA SEA
16	23 10 00.3*	51.469 N	6.603 E	10 G		1.5	6	GERMANY
16	23 10 06.9&	37.283 N	121.697 W	3			13	CENTRAL CALIFORNIA. <BRK>. ML 2.6 (BRK).
17	00 01 17.7?	36.03 N	5.79 W	10 G		0.7	6	STRAIT OF GIBRALTAR. MG 2.7 (MDD).
17	01 23 46.4	16.134 N	61.116 W	10 G		0.4	7	LEEWARD ISLANDS. ML 2.3 (FDF).
17	06 12 23.9&	59.819 N	153.402 W	134			35	SOUTHERN ALASKA. <AGS-P>.
17	06 57 58.2*	62.338 N	124.223 W	10 G		1.2	7	NORTHWEST TERRITORIES, CANADA
17	07 21 09.4?	18.48 S	69.31 W	33 N		0.8	5	NORTHERN CHILE
17	08 45 44.9*	18.150 S	179.336 W	627 ?	4.7	1.0	48	FIJI ISLANDS REGION
17	09 49 49.3	44.845 N	10.757 E	21		1.1	34	NORTHERN ITALY. ML 3.4 (LDG). MD 3.1 (TRI).
17	10 06 02.9?	1.80 N	122.05 E	402 ?		0.7	7	MINAHASSA PENINSULA
17	10 23 07.3	10.168 S	154.060 E	33 N	5.0 4.6	1.2	65	DENTRECASTEAUX ISLANDS REGION
17	10 32 54.2&	58.498 N	142.390 W	10 G			27	GULF OF ALASKA. <AGS-P>.
17	11 00 59.8	35.918 N	114.922 W	5 G		0.4	17	CALIFORNIA-NEVADA BORDER REGION. ML 2.8 (NEIS), 3.1 (PAS). Felt at Boulder City and Las Vegas, Nevada.
17	11 17 04.5	10.471 N	60.555 W	62	4.6	0.9	39	TRINIDAD
17	11 53 24.5%	10.763 N	60.911 W	33 N		1.1	6	TRINIDAD. MG 3.4 (TRN).
17	11 57 56.2?	60.60 N	8.22 E	10 G		1.3	5	SOUTHERN NORWAY. ML 1.2 (BER).
17	12 02 42.4*	5.853 S	76.414 W	33 N	4.9	1.0	48	NORTHERN PERU
17	12 08 58.6	44.832 N	10.722 E	10 G		0.8	6	NORTHERN ITALY
a 17	12 19 56.9	17.579 S	178.452 W	550	5.3	1.1	140	FIJI ISLANDS REGION
17	12 31 23.4?	10.21 N	60.26 W	33 N		0.9	7	TRINIDAD. MG 4.0 (TRN).
17	13 12 02.7*	51.325 S	176.810 W	33 N	4.6	1.0	17	ANDREANOF ISLANDS, ALEUTIAN IS. Felt (III) on Adok.
17	13 51 40.0*	3.295 S	146.725 E	33 N	4.7	1.0	8	BISMARCK SEA
17	13 58 04.1*	41.478 N	141.981 E	68 ?	4.6	1.4	21	HOKKAIDO, JAPAN REGION
17	14 13 10.2?	58.23 N	6.21 E	10 G		0.5	5	SOUTHERN NORWAY. ML 1.7 (BER).
17	14 35 12.9%	42.552 N	7.801 E	10 G		0.5	9	WESTERN MEDITERRANEAN SEA. ML 3.1 (LDG).
17	14 59 31.4?	4.49 S	150.81 E	33 N	3.7	0.0	6	NEW BRITAIN REGION
17	15 31 58.9&	58.123 N	143.217 W	10 G			35	GULF OF ALASKA. <AGS-P>.
17	15 36 23.8	21.415 S	173.884 W	40 *	5.2 5.9	1.1	91	TONGA ISLANDS
17	15 37 28.0	42.468 N	2.239 E	10 G		0.5	14	PYRENEES. ML 3.2 (LDG).
17	15 50 09.2&	57.456 N	142.968 W	10 G			35	GULF OF ALASKA. <AGS-P>.
17	17 07 13.8?	59.73 S	25.83 W	33 N	4.8 4.0	1.3	11	SOUTH SANDWICH ISLANDS REGION
17	19 46 04.3	40.106 N	29.326 E	10 G		0.5	8	TURKEY
17	19 58 48.5%	10.966 N	61.890 W	33 N		0.5	6	TRINIDAD. MG 3.5 (TRN).
a 17	20 34 29.2	35.633 N	139.619 E	103	5.4	1.1	325	NEAR S. COAST OF HONSHU, JAPAN. Ten people injured in the Tokyo area. Slight damage (IV JMA) at Chiba, Kowaguchi-ko, Kumagaya, Tateyomo and Utsunomiya. Felt

20	10	13	18.9*	6.914 S	130.613 E	113 *	4.6	1.5	11	BANDA SEA	
20	10	34	58.7*	5.588 S	147.342 E	158 ?	4.9	1.4	15	EAST PAPUA NEW GUINEA REGION	
a	20	10	41	51.0	9.991 S	153.815 E	33 N	5.8 5.2	185	DENTRECASTEAUX ISLANDS REGION	
20	11	09	46.7	5.812 S	151.016 E	54 *	4.8	1.3	37	NEW BRITAIN REGION	
20	11	13	26.4*	9.958 S	154.056 E	33 N	5.1	0.7	14	DENTRECASTEAUX ISLANDS REGION	
20	11	42	32.0*	10.069 S	154.554 E	33 N	4.4	1.0	12	DENTRECASTEAUX ISLANDS REGION	
20	11	48	53.8*	30.381 S	69.863 W	188 ?		1.0	14	CHILE-ARGENTINA BORDER REGION	
20	12	29	07.2?	51.98 N	17.25 E	10 G		0.5	6	POLAND. ML 2.8 (KBA).	
20	13	30	59.7*	41.272 N	123.428 W	24			10	NORTHERN CALIFORNIA. <BRK>. ML 3.2 (BRK).	
20	13	32	03.9*	37.663 N	122.073 W	3			7	CENTRAL CALIFORNIA. <BRK>. ML 2.2 (BRK). Ma=2.1*10**13 Nm (BRK). Felt at Hayward.	
20	13	57	13.3?	31.56 S	70.20 W	33 N		1.4	6	CHILE-ARGENTINA BORDER REGION	
20	13	57	42.4	42.355 N	16.520 E	17		1.2	42	ADRIATIC SEA. ML 3.8 (KBA). MD 4.2 (TRI), 3.5 (TTG).	
20	14	39	31.0	70.958 N	6.495 W	10 G	4.7 3.5	1.1	64	JAN MAYEN ISLAND REGION	
20	14	48	21.5	17.026 N	62.350 W	23 *		0.3	7	LEEWARD ISLANDS. ML 2.7 (FDF).	
20	15	25	59.9*	19.354 N	155.071 W	10			48	HAWAII. <HVO-P>. MD 4.4 (HVO). Felt.	
20	15	35	20.6*	38.192 N	22.768 E	10 G		0.8	7	GREECE. ML 2.9 (ATH).	
20	15	45	00.9*	32.794 S	70.277 W	110 ?		0.3	10	CHILE-ARGENTINA BORDER REGION	
20	16	16	57.8*	39.098 N	119.667 W	8			13	NEVADA. <BRK>. ML 3.0 (BRK), 2.7 (NEIS). Felt at Carson City.	
20	18	41	07.3*	40.413 N	124.992 W	14			10	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).	
20	19	10	48.9*	66.509 N	149.725 W	10 G		1.4	5	ALASKA	
20	19	44	45.6*	37.108 N	2.007 W	10 G		1.3	8	SPAIN. MG 2.8 (MDD).	
20	20	09	09.9*	44.343 N	6.661 E	10 G		0.2	6	FRANCE. ML 2.2 (LDG).	
21	00	00	49.0?	15.21 N	120.16 E	128 ?	4.3	0.7	6	LUZON, PHILIPPINE ISLANDS	
21	00	53	35.9*	19.946 S	178.331 W	595 *	4.8	0.9	22	FIJI ISLANDS REGION	
21	01	18	37.9?	32.33 N	35.77 E	10 G		0.3	6	DEAD SEA REGION	
21	02	55	07.6*	34.441 S	70.408 W	33 *	4.5	1.3	25	CHILE-ARGENTINA BORDER REGION	
21	03	00	45.5*	34.393 S	70.432 W	10 G		0.3	6	CHILE-ARGENTINA BORDER REGION	
21	03	03	16.2*	40.443 N	125.300 W	5 G			24	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.5 (BRK).	
21	03	32	38.8*	13.967 N	91.289 W	68	4.5	1.2	30	NEAR COAST OF GUATEMALA	
21	04	45	17.5	23.767 N	142.910 E	33 N	5.0 4.0	0.8	78	VOLCANO ISLANDS REGION	
21	05	49	15.2	43.131 N	19.104 E	10 G		0.2	6	YUGOSLAVIA. ML 2.5 (TTG).	
21	06	38	09.0*	32.030 N	115.500 W	6 G			7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.5 (PAS).	
21	07	19	03.6*	20.535 S	69.113 W	141 *		1.2	10	NORTHERN CHILE	
21	10	29	47.0?	38.15 N	26.09 W	10 G		0.4	5	AZORES ISLANDS	
21	10	31	40.7?	22.19 N	143.30 E	33 N	4.6	0.8	19	VOLCANO ISLANDS REGION	
21	10	51	42.4*	57.160 N	143.404 W	10 G			38	GULF OF ALASKA. <AGS-P>. ML 3.9 (PMR).	
21	11	01	16.6*	32.080 N	115.500 W	6 G			6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).	
21	12	20	36.0*	57.026 N	143.376 W	10 G	4.6 4.7		107	GULF OF ALASKA. <AGS-P>. ML 4.9 (PMR).	
a	21	12	51	19.5?	22.50 N	144.74 E	33 N	4.7	0.8	12	VOLCANO ISLANDS REGION
21	13	17	37.5	8.186 S	118.933 E	24 D	5.4 4.6	1.1	67	SUMBAWA ISLAND REGION	
21	13	23	43.6	43.118 N	110.857 W	5 G		0.5	9	WYOMING. ML 2.5 (NEIS).	
21	14	05	19.3*	27.057 N	102.852 E	33 N	4.3	0.8	5	SICHUAN PROVINCE, CHINA. ML 3.9 (BJI).	
21	14	30	12.0?	41.80 N	20.12 E	10 G		0.4	6	ALBANIA. ML 2.9 (TTG).	
21	15	15	41.1	8.226 S	118.972 E	33 N	5.3 4.0	1.0	41	SUMBAWA ISLAND REGION	
21	15	21	05.6	39.457 N	28.136 E	10 G		1.2	10	TURKEY	
21	17	22	37.4*	57.572 N	142.963 W	10 G			41	GULF OF ALASKA. <AGS-P>. ML 3.7 (PMR).	
21	17	26	03.6?	13.57 N	126.02 E	33 N		1.1	5	PHILIPPINE ISLANDS REGION	
21	18	51	12.2	49.924 N	8.099 E	10 G		0.6	8	GERMANY	
21	19	03	12.6	6.896 S	125.054 E	541 *	5.2	1.0	55	BANDA SEA	
21	19	23	56.3	6.867 S	154.043 E	10 G	5.0 3.8	1.2	22	SOLOMON ISLANDS	
21	19	57	41.1*	57.344 N	142.496 W	10 G			24	GULF OF ALASKA. <AGS-P>.	
21	20	19	44.7*	61.443 N	4.478 E	10 G		0.7	9	SOUTHERN NORWAY. ML 2.9 (BER).	
21	20	44	37.2*	22.648 S	68.647 W	153 *	4.6	1.4	15	NORTHERN CHILE	
21	21	23	01.1*	14.378 N	80.294 E	33 N		1.1	6	INDIA. Felt (IV) in the Nellore area.	
21	21	55	41.0*	50.341 N	7.366 E	10 G		0.7	5	GERMANY	
f	21	23	24	25.9	20.963 S	178.872 W	627	5.4	0.9	135	FIJI ISLANDS REGION
21	23	31	21.6	77.601 N	125.451 E	10 G	6.0 6.0	0.9	421	LAPTEV SEA. Ms 6.2 (BRK), 6.0 (PAS).	
21	23	49	22.6*	31.620 N	115.750 W	6 G			8	BAJA CALIFORNIA. <PAS-P>. ML 3.6 (PAS).	
21	23	51	01.3*	57.073 N	142.971 W	10 G	4.0		17	GULF OF ALASKA. <AGS-P>.	
22	01	01	45.2	62.621 N	149.200 W	33 N		0.3	8	CENTRAL ALASKA. ML 3.1 (PMR).	
22	01	50	50.8*	39.597 N	27.698 E	10 G		1.3	6	TURKEY	
22	01	54	35.7*	9.731 N	84.952 W	25 *		0.3	9	COSTA RICA. MD 3.7 (HDC).	
22	02	00	21.3*	18.453 S	69.198 W	148		1.2	16	NORTHERN CHILE	
22	03	03	44.3*	27.653 S	69.193 W	33 N		0.7	5	NORTHERN CHILE	
22	03	41	27.4*	61.693 N	150.092 W	49	3.9		49	SOUTHERN ALASKA. <AGS-P>. Felt (III) at Anchorage.	
22	03	43	49.5?	37.60 N	22.60 E	10 G		0.3	9	SOUTHERN GREECE	
22	03	48	43.4?	10.09 S	124.32 E	33 N	4.2	1.4	6	TIMOR	
22	05	03	56.9*	57.750 N	142.953 W	10 G			35	GULF OF ALASKA. <AGS-P>.	
22	05	39	47.1*	19.104 N	66.562 W	33 N		0.4	7	PUERTO RICO REGION	
22	06	41	02.3	52.483 N	175.561 W	150 *	4.8	1.2	37	ANDREANOF ISLANDS, ALEUTIAN IS.	
22	07	05	03.2*	46.713 N	153.863 E	33 N	4.9	1.1	42	KURIL ISLANDS	
22	07	13	36.4*	38.830 N	15.448 E	10 G		0.9	5	SICILY. MD 2.7 (ROM).	
22	08	35	28.9*	8.143 S	118.988 E	33 N	4.5	1.2	11	SUMBAWA ISLAND REGION	
22	08	45	44.0?	58.49 N	5.82 E	10 G		0.5	6	SOUTHERN NORWAY. MD 2.2 (BER).	
22	09	06	42.6*	40.355 N	124.355 W	3			10	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).	
22	10	03	34.9	6.909 S	124.971 E	529	5.2	0.9	54	BANDA SEA	
22	10	40	16.3?	50.98 N	174.79 W	33 N	4.3	1.3	12	ANDREANOF ISLANDS, ALEUTIAN IS. ML 3.9 (PMR).	
22	11	35	47.4*	49.343 N	16.978 E	10 G		1.5	5	CZECHOSLOVAKIA	
22	13	25	55.7*	8.256 S	119.342 E	33 N	4.1	1.2	5	FLORES ISLAND REGION	
22	13	31	35.9?	6.17 S	150.82 E	33 N		1.1	7	NEW BRITAIN REGION	
22	13	53	45.2	20.073 S	133.650 E	5 G		1.4	10	NORTHERN TERRITORY, AUSTRALIA	
22	15	11	04.9*	0.101 S	123.325 E	162 *	4.7	1.5	9	MINAHASSA PENINSULA	
22	15	30	09.1*	7.500 S	129.122 E	148 *	4.6	1.4	12	BANDA SEA	
22	19	39	59.2?	24.86 N	123.07 E	150 ?		1.3	7	SOUTHWESTERN RYUKYU ISLANDS	
22	20	25	42.8	38.386 N	73.443 E	107 *	4.3	1.1	20	TAJIK-XINJIANG BORDER REGION	
22	21	04	17.9*	11.729 N	83.512 W	33 N		0.6	10	NICARAGUA. MD 4.3 (HDC), 3.8 (SJR). Felt (III) at Colorado and (II) at San Jose, Costa Rica.	
22	21	40	50.0*	59.599 N	144.636 W	10 G			26	GULF OF ALASKA. <AGS-P>. ML 3.5 (PMR).	
22	22	28	14.6?	28.18 N	53.58 E	33 N	3.9	1.5	6	SOUTHERN IRAN	
22	23	35	09.2*	36.833 N	121.578 W	4			12	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK).	
22	23	46	57.6*	31.977 S	71.830 W	33		0.7	12	NEAR COAST OF CENTRAL CHILE	

22	23	50	37.3?	8.54	S	130.10	E	33	N	1.1	5	TANIMBAR ISLANDS REGION
23	00	07	14.2*	36.017	N	70.727	E	104	?	4.1	0.8	11 HINDU KUSH REGION
23	00	31	44.0	19.717	N	104.868	W	26	*	4.9	4.4	1.0 63 NEAR COAST OF JALISCO, MEXICO. Felt in the states of Jalisco, Nayarit and Colima.
23	00	49	01.3	40.530	N	23.528	E	10	G		0.6	9 GREECE
23	00	56	19.1?	50.05	S	120.02	E	10	G	5.0	0.9	9 SOUTH OF AUSTRALIA
23	01	36	22.2?	61.51	N	4.95	E	10	G		1.6	5 SOUTHERN NORWAY. MD 2.3 (BER).
23	01	38	07.7?	57.225	N	143.281	W	10	G	3.7		33 GULF OF ALASKA. <AGS-P>.
23	01	42	02.5*	25.174	N	122.713	E	237		4.1	0.7	15 TAIWAN REGION
23	03	08	35.8?	57.449	N	143.187	W	10	G	3.9		34 GULF OF ALASKA. <AGS-P>.
o 23	05	07	15.6?	27.62	S	176.05	W	33	N	5.4	5.0	1.5 27 KERMADEC ISLANDS REGION
23	05	25	10.4*	32.674	S	71.520	W	13			0.6	9 NEAR COAST OF CENTRAL CHILE
23	05	31	47.6*	4.570	N	73.903	W	33	N	3.9		1.3 6 COLOMBIA. Felt in the Villavicencio area.
23	07	20	26.1%	10.478	N	61.829	W	10	G		0.4	8 TRINIDAD. MG 4.2 (TRN). Felt (II) on southern Trinidad.
23	07	39	02.2	9.885	N	84.164	W	81		4.7	1.0	43 COSTA RICA. MD 4.3 (HDC), 4.1 (SJR). Felt strongly in eastern Costa Rica. Felt (III) at San Jose and (II) at Limon.
23	07	45	25.7?	59.857	N	152.244	W	71				40 SOUTHERN ALASKA. <AGS-P>.
23	07	48	45.8	7.454	S	128.330	E	162	*	5.1	1.1	23 BANDA SEA
o 23	08	04	52.0	4.208	S	131.453	E	55	*	5.2	4.8	1.0 59 BANDA SEA
23	08	27	59.7?	58.146	N	142.643	W	10	G			25 GULF OF ALASKA. <AGS-P>.
23	08	42	46.9?	34.250	N	119.620	W	16		4.4		37 SOUTHERN CALIFORNIA. <PAS-P>. ML 4.0 (PAS). Felt (IV) at Carpinteria, Goleta and Santa Barbara. Also felt at Isla Vista, Ojai, Oxnard and Ventura.
23	08	57	02.8?	34.260	N	119.630	W	14				9 SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
23	10	15	31.3*	28.513	N	66.060	E	33	N	4.3	0.9	12 PAKISTAN
23	10	38	41.4?	4.52	S	131.48	E	33	N		1.1	7 BANDA SEA
23	12	18	57.2	17.914	N	121.384	E	34		5.1	1.1	98 LUZON, PHILIPPINE ISLANDS. Felt (III RF) at Colloa, Penablonco and Tuguegarao; (II RF) at Posuquin.
o 23	13	43	58.0*	26.885	S	176.515	W	162	?	4.7	1.3	38 SOUTH OF FIJI ISLANDS
23	15	15	29.7	53.784	N	160.598	E	33	N	4.9	1.0	67 NEAR EAST COAST OF KAMCHATKA
23	15	22	00.8*	6.284	S	154.932	E	66	*	4.7	1.3	8 SOLOMON ISLANDS
o 23	15	50	18.2	10.850	N	43.556	W	10	G	5.4	5.6	1.4 128 NORTH ATLANTIC RIDGE. Felt strongly on board the ship "MV Kossel," located at 10° 54' North, 43° 01' West.
23	16	11	46.8	42.065	N	24.792	E	10	G		1.1	7 BULGARIA
23	18	58	48.6	41.706	N	22.717	E	27			1.5	18 YUGOSLAVIA. Felt (III) in southwestern Bulgaria.
23	19	00	24.1	41.780	N	22.868	E	10	G		0.4	10 YUGOSLAVIA
23	19	08	38.0	36.934	N	71.464	E	117	*	4.8	1.2	29 AFGHANISTAN-USSR BORDER REGION
23	19	18	54.5?	57.374	N	142.894	W	10	G	3.8		35 GULF OF ALASKA. <AGS-P>.
23	19	19	31.4	23.890	N	122.593	E	34	*	4.5	1.3	23 TAIWAN REGION
23	19	32	22.7?	37.095	N	121.502	W	7				6 CENTRAL CALIFORNIA. <BRK>. ML 2.9 (BRK).
23	19	54	51.5%	44.513	N	6.709	E	10	G		0.4	6 FRANCE. ML 2.4 (LDG).
o 23	20	22	44.6	52.520	N	169.339	W	33	N	5.1	5.1	1.2 173 FOX ISLANDS, ALEUTIAN ISLANDS
23	21	08	40.9*	78.444	N	6.578	E	10	G	3.4	0.6	7 SVALBARD REGION
23	21	11	36.9	47.660	N	7.475	E	10	G		0.2	8 SWITZERLAND. ML 3.0 (LDG).
23	23	55	08.3	13.678	N	40.565	E	10	G	4.9	1.2	46 ETHIOPIA
24	00	01	16.8?	39.45	N	22.94	E	10	G		0.3	7 GREECE
24	02	25	47.9?	35.414	N	96.573	W	5	G			7 OKLAHOMA. <TUL>. MD 2.3 (TUL).
24	02	54	49.0?	17.57	S	178.91	W	596	?	4.9	0.6	15 FIJI ISLANDS REGION
24	04	46	19.1	38.565	N	26.906	E	10	G		1.4	12 AEGEAN SEA
24	05	02	12.2%	10.644	N	60.767	W	33	N		0.5	6 TRINIDAD. MG 3.4 (TRN).
24	05	40	15.5%	31.787	N	36.349	E	10	G		0.6	5 DEAD SEA REGION
24	06	32	32.0	17.749	N	61.544	W	44	*	4.3	0.8	35 LEEWARD ISLANDS. ML 4.2 (FDF).
24	11	48	12.4?	61.702	N	149.929	W	44		3.5		40 SOUTHERN ALASKA. <AGS-P>. ML 3.8 (PMR). Felt at Eagle River, Girdwood and Palmer.
24	12	11	38.0?	39.28	N	29.68	E	10	G		1.1	5 TURKEY
24	12	14	30.0?	24.14	N	122.77	E	10	G		0.5	5 TAIWAN REGION
24	12	46	17.2	6.269	S	151.176	E	33	N	3.8	1.1	11 NEW BRITAIN REGION
24	13	43	10.3?	60.310	N	150.701	W	46				31 KENAI PENINSULA, ALASKA. <AGS-P>.
24	14	44	51.9*	10.449	N	60.547	W	70	*		0.8	22 TRINIDAD. MG 4.4 (FDF).
24	15	02	38.6*	5.070	S	152.501	E	61	*	4.8	0.8	9 NEW BRITAIN REGION
24	15	30	09.3	21.905	S	68.357	W	125		5.1	1.2	84 CHILE-BOLIVIA BORDER REGION
24	17	02	20.4?	38.97	N	22.53	E	25			0.5	8 GREECE
24	17	21	57.2	80.023	N	0.150	W	10	G	4.2	4.7	26 NORTH OF SVALBARD
24	17	33	42.5%	15.469	N	60.688	W	10	G		0.1	5 LEEWARD ISLANDS. ML 2.2 (FDF).
24	17	36	28.4*	46.040	N	7.373	E	10	G		1.0	5 SWITZERLAND. ML 2.5 (LDG).
24	17	55	07.4	22.035	S	179.497	W	591		5.3	0.8	52 SOUTH OF FIJI ISLANDS
24	17	56	35.3?	32.250	N	115.250	W	6	G			5 CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.4 (PAS).
24	18	45	26.3?	31.85	N	89.61	E	33	N		1.1	6 TIBET
24	19	24	33.6?	31.870	N	115.820	W	6	G			2 BAJA CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
24	20	20	46.5?	32.940	N	115.830	W	5				3 CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
24	21	06	50.9*	32.494	N	140.235	E	94		4.3	0.5	16 SOUTH OF HONSHU, JAPAN. Felt (I JMA) on Hochijo-jima.
24	21	15	45.1*	15.673	S	167.117	E	33	N	4.6	3.6	0.9 19 VANUATU ISLANDS
24	22	38	44.5	33.313	S	70.157	W	117	?		0.5	11 CHILE-ARGENTINA BORDER REGION
24	22	42	17.2?	17.77	N	61.55	W	10	G		0.7	7 LEEWARD ISLANDS. ML 3.1 (FDF).
24	22	46	33.1*	39.078	N	29.925	E	10	G		1.1	5 TURKEY
24	23	00	00.9?	60.162	N	153.154	W	126				35 SOUTHERN ALASKA. <AGS-P>.
24	23	08	32.7?	19.849	N	155.588	W	23				48 HAWAII. <HVO-P>. MD 3.9 (HVO). Felt.
24	23	44	47.2?	57.842	N	142.994	W	10	G	4.2		34 GULF OF ALASKA. <AGS-P>.
25	00	11	46.2?	3.64	S	131.29	E	33	N	4.7	1.3	6 WEST IRIAN REGION
25	00	24	34.8?	59.928	N	152.497	W	74				31 SOUTHERN ALASKA. <AGS-P>.
25	00	29	50.5?	19.992	N	156.454	W	0		5.3	4.5	130 HAWAII. <HVO-P>. Felt (III) at Honolulu, Honaunou and Kukuiahaele. Felt on Hawaii, Maui and Oahu.
25	01	00	34.5%	5.595	N	0.281	W	10	G		0.6	5 NORTHWEST AFRICA
25	02	07	55.8	44.706	N	79.604	E	33	N	4.5	1.2	23 EASTERN KAZAKH SSR
25	03	25	44.3?	12.28	S	74.17	W	273	?	4.5	0.8	7 PERU
25	03	38	07.3%	10.676	N	60.903	W	33	N		0.4	7 TRINIDAD. MG 2.8 (TRN).
25	03	49	19.2*	9.002	N	126.427	E	33	N	4.8	0.6	8 MINDANAO, PHILIPPINE ISLANDS
25	03	57	05.6	32.417	S	14.371	W	10	G	5.1	0.9	41 SOUTH ATLANTIC RIDGE
25	03	57	22.3?	37.662	N	122.485	W	11				9 CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK). Ma=1.5*10**13 Nm (BRK).
o 25	04	07	20.0*	32.522	S	14.463	W	10	G	5.0	1.5	38 SOUTH ATLANTIC RIDGE
25	04	19	43.3*	32.241	S	14.728	W	10	G	5.0	1.0	27 SOUTH ATLANTIC RIDGE

25	04 22 19.3	33.155 N	13.388 E	10 G	4.4	1.1	68	MEDITERRANEAN SEA. Felt at Tripoli, Libya.
25	04 39 29.57	32.34 S	14.21 W	10 G	5.0	1.2	12	SOUTH ATLANTIC RIDGE
25	04 48 46.87	32.22 S	14.02 W	10 G	4.8	0.7	13	SOUTH ATLANTIC RIDGE
a 25	05 21 44.5	19.323 S	177.493 W	559 D	5.5	1.0	196	FIJI ISLANDS REGION
25	05 24 07.8	32.366 S	14.416 W	10 G	4.7	1.1	24	SOUTH ATLANTIC RIDGE
25	05 51 19.17	32.59 S	14.48 W	10 G	.	1.0	8	SOUTH ATLANTIC RIDGE
25	08 54 40.97	65.94 N	146.90 W	33 N		2.2	5	ALASKA. ML 3.1 (PMR).
25	09 02 39.3	41.289 N	141.486 E	97	4.1	0.5	11	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Muroran. Also felt at Aomori, Honshu.
25	11 38 19.9	36.443 N	70.278 E	239 ?	4.5	0.9	9	HINDU KUSH REGION
25	12 32 02.47	10.559 N	85.043 W	33 N		1.0	7	COSTA RICA
25	12 46 21.8	36.320 N	71.371 E	136 ?	4.5	0.9	17	AFGHANISTAN-USSR BORDER REGION. Felt (II) at Khorog, USSR.
25	13 43 13.07	42.74 N	19.18 E	10 G		0.3	4	YUGOSLAVIA. ML 2.1 (TTG).
25	13 56 57.6	60.873 N	150.451 W	51			31	KENAI PENINSULA, ALASKA. <AGS-P>.
25	14 32 43.67	58.97 N	5.96 E	10 G		1.1	6	SOUTHERN NORWAY. MD 2.2 (BER).
25	14 52 22.37	10.86 N	62.29 W	33 N		0.7	5	NEAR COAST OF VENEZUELA
25	15 43 14.3	13.936 N	124.501 E	33 N	4.7 4.1	1.1	45	LUZON, PHILIPPINE ISLANDS
25	16 03 17.5	59.869 N	151.283 W	42			29	KENAI PENINSULA, ALASKA. <AGS-P>.
25	16 17 15.0	41.309 N	22.572 E	10 G		0.7	13	YUGOSLAVIA. ML 2.4 (SKO). Felt (III) at Valandovo.
a 25	16 20 47.1	10.176 N	60.604 W	56	5.2	1.0	130	TRINIDAD. Felt (V) on southern Trinidad. Also felt strongly on offshore oil platforms.
25	17 20 53.1	31.336 S	67.822 W	26	5.3	1.1	112	SAN JUAN PROVINCE, ARGENTINA. Felt (IV) at San Juan.
25	18 20 46.5	60.889 N	153.126 W	123	4.6		48	SOUTHERN ALASKA. <AGS-P>.
25	18 22 09.6	33.295 N	13.885 E	10 G	4.1	1.1	15	MEDITERRANEAN SEA
25	18 28 15.07	39.913 N	27.474 E	10 G		0.5	7	TURKEY
25	18 37 01.1	23.422 N	143.248 E	49 D	4.8 3.9	0.8	52	VOLCANO ISLANDS REGION
25	18 57 05.77	35.44 N	22.43 E	33 N	3.7	0.8	8	MEDITERRANEAN SEA
25	19 21 42.0	6.172 S	152.087 E	19 *	4.6	1.0	14	NEW BRITAIN REGION
f 25	19 36 46.4	62.154 N	124.182 W	10 G	6.1 6.0	0.9	382	NORTHWEST TERRITORIES, CANADA. Ms 6.1 (BRK), 5.9 (PAS). Felt at Wrigley. Also felt at Whitehorse, Yukon Territory and Fort Vermilion, Peace River and Edmonton, Alberta.
25	19 52 36.6	62.246 N	124.242 W	10 G	5.4	0.9	104	NORTHWEST TERRITORIES, CANADA
25	20 08 23.4	45.363 N	150.904 E	33 N	5.1	0.9	39	KURIL ISLANDS
25	20 38 36.9	62.263 N	123.816 W	10 G		0.9	6	NORTHWEST TERRITORIES, CANADA
25	20 58 13.7	62.142 N	123.869 W	10 G		1.4	7	NORTHWEST TERRITORIES, CANADA
25	21 01 25.1	38.641 N	23.690 E	9		0.8	19	GREECE. ML 3.4 (ATH).
25	21 58 20.5	54.776 N	159.840 W	33 N	5.4 4.6	1.0	202	SOUTH OF ALASKA. ML 5.9 (PMR). Felt (IV) at Chignik, Perryville and Sand Point. Felt (II) at King Cove.
25	22 14 00.6	50.600 N	102.140 W	1 G			19	SASKATCHEWAN PROVINCE, CANADA. <OTT-P>. mbLg 3.7 (OTT). Rockburst in a potash mine.
26	00 33 33.4	34.586 N	24.041 E	33 N	4.0	1.5	19	CRETE. ML 3.9 (ATH).
26	00 39 00.9	57.657 N	142.901 W	10 G	4.3		42	GULF OF ALASKA. <AGS-P>. ML 3.8 (PMR).
26	01 13 09.27	4.41 N	127.08 E	149 ?	4.3	0.8	8	TALAUD ISLANDS
26	01 47 28.8	38.600 N	21.354 E	13		0.3	7	GREECE. MD 3.2 (ATH).
26	01 52 36.2	35.500 N	22.596 E	33 N		1.3	17	MEDITERRANEAN SEA. ML 3.6 (ATH).
26	03 11 50.0	51.074 N	15.811 E	10 G		1.1	9	POLAND. ML 3.3 (VKA), 3.2 (KBA).
26	03 34 40.3	1.109 S	126.709 E	44 *	5.0	1.2	43	MOLUCCA SEA
26	04 03 32.6	33.541 S	71.718 W	71	4.7	0.8	37	NEAR COAST OF CENTRAL CHILE
26	04 40 07.8	58.711 N	23.278 W	33 N	4.7	0.4	13	SOUTH SANDWICH ISLANDS REGION
26	06 06 57.57	44.104 N	7.147 E	10 G		0.4	5	NORTHERN ITALY. ML 2.4 (LDG).
26	06 11 23.0	57.643 N	143.173 W	10 G	4.8		109	GULF OF ALASKA. <AGS-P>. ML 4.7 (PMR).
26	06 25 35.4	33.532 S	71.760 W	70 *	4.3	1.3	15	NEAR COAST OF CENTRAL CHILE
a 26	06 26 59.6	22.994 S	13.623 W	10 G	5.3 4.7	1.1	89	SOUTH ATLANTIC RIDGE
26	07 35 48.3	63.012 N	150.052 W	33 N		1.1	8	CENTRAL ALASKA. ML 3.0 (PMR).
26	07 41 55.67	7.27 S	131.88 E	174 *	4.7	1.3	9	TANIMBAR ISLANDS REGION
26	08 22 50.8	61.639 N	147.404 W	27			42	SOUTHERN ALASKA. <AGS-P>. ML 3.3 (PMR).
26	08 42 23.1	30.013 N	67.468 E	25 *	4.6	0.8	28	PAKISTAN. Felt at Quetta.
26	09 42 39.3	18.263 S	167.932 E	17 *	5.1 4.7	1.1	70	VANUATU ISLANDS
26	10 06 21.77	5.64 S	146.92 E	238 ?	4.2	1.2	6	EAST PAPUA NEW GUINEA REGION
26	10 53 52.77	39.534 N	29.367 E	10 G		1.4	5	TURKEY
26	11 26 15.27	39.647 N	29.443 E	10 G		1.0	6	TURKEY
a 26	12 07 29.4	33.186 N	13.280 E	10 G	4.7 5.2	1.1	163	MEDITERRANEAN SEA. Felt at Tripoli, Libya.
26	12 17 08.8	44.479 N	6.559 E	6		0.8	60	FRANCE. ML 3.6 (LDG).
26	12 22 18.6	3.830 N	32.535 W	10 G	4.8	1.0	7	CENTRAL MID-ATLANTIC RIDGE
26	12 53 49.5	31.055 N	49.963 E	49	4.5	0.7	26	WESTERN IRAN
26	14 54 20.4	34.000 N	118.710 W	14			18	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.7 (PAS). Felt (IV) at Hawthorne, Malibu, Reseda and Santa Monica. Felt in parts of Los Angeles, Orange and Ventura Counties.
26	16 54 20.6	38.851 N	27.890 E	10 G		0.9	6	TURKEY
26	18 07 06.4	62.310 N	123.896 W	10 G		1.0	7	NORTHWEST TERRITORIES, CANADA
26	18 40 32.27	39.410 N	28.166 E	10 G		1.1	7	TURKEY
26	18 49 20.8	62.285 N	147.206 W	48	4.4		84	CENTRAL ALASKA. <AGS-P>. Felt (III) at Palmer, Sheep Mountain and Sutton; (II) at Talkeetna and Voldez.
26	18 55 47.67	42.729 N	13.211 E	10 G		0.3	5	CENTRAL ITALY
26	19 47 56.2	62.426 N	149.420 W	45	4.0		47	CENTRAL ALASKA. <AGS-P>. ML 3.8 (PMR). Felt (III) at Talkeetna.
26	20 18 28.8	16.956 N	60.739 W	14		0.4	10	LEEWARD ISLANDS. ML 3.2 (FDF).
26	20 35 13.4	40.100 N	19.890 E	39	5.0 4.7	1.3	247	ALBANIA. MD 4.9 (TTG). Damage (VI) in the Gjirrokaster area. Felt at Berat, Korce, Permet, Tepelena, Sarande and Vlora. Also felt on Corfu and in Ipiras, Greece and at Toronto, Italy.
26	21 01 44.3	25.753 S	70.773 W	44 *	5.0	1.1	22	NEAR COAST OF NORTHERN CHILE. Felt (II) at Antofagasta.
26	21 05 26.1	37.250 N	121.663 W	5			14	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
26	21 20 46.3	35.990 N	120.123 W	12			15	CENTRAL CALIFORNIA. <BRK>. ML 2.6 (BRK), 3.2 (PAS).
26	21 25 14.0	9.687 S	107.450 E	33 N	4.7	1.3	21	SOUTH OF JAVA
26	21 31 05.6	43.087 N	0.069 W	10 G		1.4	6	PYRENEES. ML 3.1 (LDG).
26	21 43 18.0	7.561 S	124.761 E	386 *	4.6	1.3	15	BANDA SEA
26	21 51 21.07	18.017 N	67.098 W	10 G		0.5	6	MONA PASSAGE
26	22 09 54.97	19.26 S	69.35 W	149 ?		0.7	6	NORTHERN CHILE
a 26	22 58 42.8	38.309 N	73.234 E	121	5.7	0.9	321	TAJIK-XINJIANG BORDER REGION. Felt (III) at Andizhan, Fergana and in the Dushanbe-Dzhirgatal-Khorog area.

26	23 16 54.0%	11.473 N	61.980 W	30 *	0.6	9	USSR. Felt (II) at Ishkashim, USSR.
27	02 07 12.4%	57.251 N	143.179 W	10 G	4.1	51	WINDWARD ISLANDS. MG 3.6 (TRN).
27	02 41 39.0	45.985 N	14.315 E	10 G	0.8	7	GULF OF ALASKA. <AGS-P>. ML 4.4 (PMR).
							YUGOSLAVIA. MD 2.6 (LJU), ML 2.3 (KBA). Felt at Brezavici.
27	03 31 16.4	6.209 S	130.116 E	124 *	5.0	1.1	41 BANDA SEA
27	04 31 08.7%	51.61 N	173.22 W	33 N	4.6	0.9	5 ANDREANOF ISLANDS, ALEUTIAN IS.
27	06 01 01.8	30.092 N	67.914 E	20 *	4.6	0.8	36 PAKISTAN
a 27	07 46 19.9	15.442 S	174.868 W	284 *	5.2	0.9	118 TONGA ISLANDS
27	09 04 51.6*	0.079 S	97.528 E	33 N	4.4	1.0	16 SOUTHWEST OF SUMATERA
27	09 09 34.6	3.868 N	77.145 W	72 *	4.8	1.1	62 NEAR WEST COAST OF COLOMBIA
27	09 25 58.1%	42.753 N	13.381 E	10 G		0.1	5 CENTRAL ITALY
27	10 29 56.3%	40.506 N	22.930 E	10 G		0.5	6 GREECE
27	10 45 56.7	18.010 S	174.215 W	170 *	4.9	1.0	48 TONGA ISLANDS
27	10 48 54.0%	39.50 N	22.98 E	10 G		0.3	7 GREECE
27	11 04 05.7	9.603 N	83.763 W	5 G		0.5	10 COSTA RICA. MD 3.8 (SJR), 3.7 (HDC). Felt (III) at La Lucha and (II) at San Jose.
27	11 29 30.5%	24.75 N	121.82 E	144 ?		0.4	6 TAIWAN
27	15 10 51.9	36.356 N	71.077 E	92 *	4.8	1.5	42 AFGHANISTAN-USSR BORDER REGION. Felt (III) at Khorog and Ishkashim, USSR.
27	15 46 14.2*	21.688 S	67.732 W	33 N		1.2	6 CHILE-BOLIVIA BORDER REGION
27	16 07 12.2%	29.54 S	72.23 W	33 N		1.4	5 OFF COAST OF CENTRAL CHILE
27	17 24 42.8*	24.226 S	66.950 W	213 ?		1.1	6 SALTA PROVINCE, ARGENTINA
27	18 57 30.7*	6.886 N	72.945 W	158 *	4.6	1.1	12 NORTHERN COLOMBIA
27	19 58 49.0*	6.700 S	154.289 E	13 *	4.7	0.8	13 SOLOMON ISLANDS
27	21 37 23.6	53.534 N	160.199 E	33 N	4.8	0.8	67 NEAR EAST COAST OF KAMCHATKA
27	22 03 19.6%	58.168 N	142.958 W	10 G	4.4		64 GULF OF ALASKA. <AGS-P>. ML 4.5 (PMR).
27	23 18 18.0	3.481 S	130.929 E	69 *	5.1	1.0	56 CERAM
27	23 23 52.9*	34.232 N	25.471 E	33 N		0.8	8 CRETE
27	23 42 05.6%	44.796 N	7.301 E	10 G		0.7	6 NORTHERN ITALY. ML 2.3 (LDG).
28	00 05 05.6%	8.61 S	115.18 E	122 ?	4.2	0.4	5 BALI ISLAND REGION
28	00 07 52.2%	10.747 N	60.955 W	33 N		1.6	6 TRINIDAD
28	00 27 07.8	20.072 S	133.786 E	5 G	4.5	0.9	16 NORTHERN TERRITORY, AUSTRALIA
28	02 00 50.2	42.480 N	16.642 E	33 N	4.1	1.4	14 ADRIATIC SEA
28	02 12 47.0%	51.13 N	19.83 E	10 G		0.9	7 POLAND. ML 2.6 (WAR).
28	02 27 34.9%	19.36 S	177.52 W	395 *	4.7	0.5	13 FIJI ISLANDS REGION
28	02 42 54.8*	2.564 S	140.279 E	33 N	4.3 3.5	1.0	12 NEAR N. COAST OF WEST IRIAN
28	03 32 41.3%	56.959 N	140.884 W	10 G			25 OFF COAST OF SOUTHEASTERN ALASKA. <AGS-P>.
a 28	03 33 40.8%	19.936 N	156.445 W	1	5.6 5.1	209	HAWAII. <HVO-P>. Ms 5.0 (BRK). Felt (V) at Hawi, Kalaupapa and Kurtistown. Felt on Hawaii, Lanai, Maui and Oahu.
28	03 42 09.9*	1.503 N	90.524 W	10 G	4.9	1.0	11 GALAPAGOS ISLANDS REGION
28	03 58 33.7%	19.966 N	156.449 W	46	4.2	52	HAWAII. <HVO-P>. Felt on Maui.
28	05 08 02.7*	31.437 S	69.809 W	113 *		1.4	12 SAN JUAN PROVINCE, ARGENTINA
28	05 58 01.8%	40.845 N	28.456 E	10 G		0.4	8 TURKEY
28	06 24 02.9	24.273 S	67.199 W	200 *		0.9	12 CHILE-ARGENTINA BORDER REGION
28	07 16 29.4	42.389 N	16.591 E	10 G		1.2	39 ADRIATIC SEA. ML 3.7 (TTG), 3.7 (KBA). MD 4.2 (TRI).
28	07 32 39.2%	19.967 N	156.436 W	2		45	HAWAII. <HVO-P>. MD 4.0 (HVO).
28	08 31 17.6%	62.30 N	0.59 E	10 G		0.2	7 NORWEGIAN SEA. MD 2.6 (BER).
28	08 37 48.5*	47.659 N	7.497 E	10 G		0.3	6 SWITZERLAND. ML 2.5 (LDG).
28	09 35 40.6*	35.992 N	69.672 E	183 ?	4.2	0.2	6 HINDU KUSH REGION
28	10 16 21.5%	58.302 N	142.739 W	10 G			29 GULF OF ALASKA. <AGS-P>.
28	10 17 43.0%	40.800 N	28.430 E	10 G		1.0	7 TURKEY
28	11 51 25.5	29.917 N	95.077 E	33 N	4.3	1.4	22 INDIA-CHINA BORDER REGION
28	12 07 27.2%	61.166 N	151.938 W	95		26	SOUTHERN ALASKA. <AGS-P>.
28	13 26 24.4*	5.513 S	147.398 E	194 *	4.7	1.5	15 EAST PAPUA NEW GUINEA REGION
28	13 39 52.8	29.912 N	67.966 E	18 *	4.3	1.2	21 PAKISTAN
28	14 22 56.0%	44.85 N	129.41 W	10 G	4.1	0.9	25 OFF COAST OF OREGON
28	15 40 51.1	30.759 N	50.112 E	40	4.7	1.0	33 IRAN
28	16 41 15.2%	5.35 S	147.59 E	20 *	4.3 3.6	1.4	9 EAST PAPUA NEW GUINEA REGION
28	17 26 24.1*	45.026 N	11.649 E	10 G		1.5	5 NORTHERN ITALY. ML 2.4 (KBA).
28	17 48 36.2%	6.72 S	136.34 E	33 N	4.4	1.2	6 WEST IRIAN REGION
a 28	18 36 26.4	36.039 S	102.843 W	10 G	5.7 5.2	1.1	159 SOUTHERN PACIFIC OCEAN
28	23 39 51.9	53.630 N	165.711 W	33 N	4.7	0.9	47 FOX ISLANDS, ALEUTIAN ISLANDS
28	23 43 21.1%	53.84 N	165.74 W	33 N	4.5	0.9	8 FOX ISLANDS, ALEUTIAN ISLANDS
29	00 14 00.2	42.058 N	21.470 E	10 G		1.0	20 YUGOSLAVIA. ML 3.0 (SKO), 2.9 (TTG). Felt (IV) at Skopje.
29	01 16 26.1%	57.278 N	143.051 W	10 G	5.0 4.1	165	GULF OF ALASKA. <AGS-P>. ML 5.0 (PMR).
29	01 42 58.3%	10.92 N	62.11 W	33 N		0.4	6 NEAR COAST OF VENEZUELA
29	02 03 56.9*	22.073 S	67.359 W	202 ?		1.4	6 CHILE-BOLIVIA BORDER REGION
29	02 37 33.8%	38.369 N	14.641 E	10 G		0.4	5 SICILY
29	03 04 01.6%	5.94 S	147.33 E	168 ?	4.5	1.1	7 EAST PAPUA NEW GUINEA REGION
29	04 10 12.6*	40.551 N	30.148 E	10 G		0.9	10 TURKEY
29	04 43 37.0*	62.185 N	124.004 W	10 G		1.0	6 NORTHWEST TERRITORIES, CANADA
29	05 12 49.0%	62.940 N	151.242 W	138		29	CENTRAL ALASKA. <AGS-P>.
29	05 55 38.2*	62.136 N	124.103 W	10 G		1.4	6 NORTHWEST TERRITORIES, CANADA
29	06 25 25.5*	51.121 N	15.732 E	10 G		1.2	8 POLAND. ML 3.8 (GRF), 3.8 (VKA), 3.6 (KBA).
29	08 01 19.5*	27.961 N	56.148 E	33 N	4.1	0.9	8 SOUTHERN IRAN
o 29	08 31 31.9	52.278 N	168.182 W	33 N	5.4 5.5	1.2	226 FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.1 (PMR), Ms 5.3 (BRK).
29	08 38 18.1	52.487 N	168.218 W	33 N	4.5	0.7	17 FOX ISLANDS, ALEUTIAN ISLANDS
29	09 45 25.5	46.350 N	13.179 E	10 G		0.1	6 AUSTRIA. MD 2.5 (TRI), ML 2.1 (KBA).
29	10 08 39.9*	23.088 S	66.594 W	255 *		1.3	9 JUJUY PROVINCE, ARGENTINA
29	10 50 12.2*	43.778 N	147.816 E	33 N	4.7	1.0	41 KURIL ISLANDS
29	11 12 13.7	38.057 N	20.856 E	10 G		0.7	16 GREECE. ML 3.5 (ATH).
29	11 50 36.8*	38.971 N	27.578 E	10 G		1.0	5 TURKEY
29	11 53 59.3*	21.174 S	70.051 W	145 ?		1.0	9 NEAR COAST OF NORTHERN CHILE
29	12 25 23.1%	42.71 N	19.08 E	10 G		0.1	4 YUGOSLAVIA. MD 2.2 (TTG).
o 29	13 37 54.4	10.473 N	65.011 W	17	5.1 4.8	1.1	109 NEAR COAST OF VENEZUELA. Felt in the Caracas-Cumana area.
29	13 38 35.7%	38.608 N	6.118 W	10 G		0.2	5 SPAIN. MG 3.0 (MDD).
29	13 46 36.7	10.481 N	64.935 W	19	4.8	0.9	53 NEAR COAST OF VENEZUELA. Felt in the Caracas-Cumana area.

29	14	36	41.57	52.17	N	167.74	W	33	N	4.1	0.8	6	FOX ISLANDS, ALEUTIAN ISLANDS
29	15	33	03.7	54.179	N	163.505	W	33	N	5.0	0.8	110	UNIMAK ISLAND REGION. ML 4.7 (PMR). Felt (IV) at False Pass.
29	15	50	44.1	56.493	N	163.984	E	35	D	5.0	0.8	54	NEAR EAST COAST OF KAMCHATKA
29	16	12	12.5	38.790	N	122.767	W	1				12	NORTHERN CALIFORNIA. <BRK>. ML 3.4 (BRK).
29	16	54	04.1*	5.597	N	0.109	W	10	G		0.4	8	NORTHWEST AFRICA. ML 3.5 (KUK). Felt at Accra and Legon, Ghana.
29	17	17	09.8	40.472	N	28.406	E	10	G		0.4	6	TURKEY
29	17	31	13.6?	23.81	S	70.81	W	39	*		1.2	10	NEAR COAST OF NORTHERN CHILE. Felt (II) in the Antofagasta area.
29	18	31	14.1*	68.090	N	158.583	W	33	N		1.0	6	ALASKA. ML 3.6 (PMR).
29	20	26	11.0?	42.492	N	13.104	E	10	G		0.7	5	CENTRAL ITALY
29	21	05	09.3*	20.569	N	70.453	W	93	*		1.4	16	NEAR COAST OF NORTHERN CHILE. Felt (IV) in the Iquique area.
29	21	16	21.0*	6.258	S	129.923	E	159	*	4.7	1.4	20	BANDA SEA
29	23	07	40.0?	16.598	N	61.378	W	33	N		1.0	5	LEEWARD ISLANDS. ML 2.1 (FDF).
29	23	08	44.6*	12.539	S	14.713	W	10	G	4.7	1.1	17	SOUTH ATLANTIC RIDGE
29	23	36	12.8*	3.513	N	126.979	E	33	N		1.5	7	TALAUD ISLANDS
a 30	02	12	42.8	30.890	N	50.194	E	33		5.4 5.7	1.1	306	IRAN. Twenty-four people injured, at least 700 houses damaged and landslides in the Deh Dasht area.
30	03	14	56.9	30.731	N	50.186	E	43	*	4.6	1.1	46	IRAN
30	04	07	47.7?	10.76	N	61.02	W	33	N		1.0	5	TRINIDAD
30	04	40	08.1*	24.823	S	179.848	E	515	?	5.0	1.1	32	SOUTH OF FIJI ISLANDS
30	04	41	36.6*	52.837	N	176.485	W	233		4.6	1.1	54	ANDREANOF ISLANDS, ALEUTIAN IS.
30	04	41	45.1*	22.593	S	68.673	W	149	?	4.2	1.4	9	NORTHERN CHILE
30	05	41	50.5*	13.598	N	93.821	E	33	N		1.6	7	ANDAMAN ISLANDS REGION
30	06	33	51.6	16.404	N	41.059	E	10	G	4.8	0.9	46	RED SEA
30	07	31	39.2?	41.129	N	28.680	E	10	G		1.0	5	TURKEY
30	07	52	48.7	5.506	N	123.882	E	526		5.5	0.9	125	MINDANAO, PHILIPPINE ISLANDS
30	08	14	12.3	60.111	N	152.639	W	95				30	SOUTHERN ALASKA. <AGS-P>.
30	08	31	28.5?	4.96	S	144.59	E	87	?	4.4	1.3	5	NEAR N COAST OF PAPUA NEW GUINEA
30	09	16	02.1	58.051	N	155.911	W	29		4.1		41	ALASKA PENINSULA. <AGS-P>. ML 3.8 (PMR).
30	10	03	51.2?	10.627	N	60.909	W	33	N		0.7	6	TRINIDAD
30	10	10	39.6?	10.54	N	60.58	W	33	N		0.8	5	TRINIDAD
30	10	33	26.6*	37.266	N	20.991	E	75	*	3.7	1.3	12	IONIAN SEA
30	11	19	27.1	38.400	N	14.758	E	28		4.4	1.0	69	SICILY. MD 3.9 (ROM). Felt at Capa d'Orlando and on Lipari Island.
30	11	39	43.8?	7.23	S	129.44	E	198	?		1.1	5	BANDA SEA
30	14	40	20.0?	38.395	N	14.664	E	10	G		0.8	5	SICILY
30	14	41	16.4?	38.454	N	14.632	E	10	G		0.6	5	SICILY
30	15	28	25.9	16.837	S	69.588	W	202		4.5	1.4	18	PERU-BOLIVIA BORDER REGION
30	15	46	55.3	36.310	N	98.543	W	5	G			4	OKLAHOMA. <TUL>. MD 2.3 (TUL).
30	15	47	36.9	19.334	N	155.065	W	9				42	HAWAII. <HVO-P>. MD 4.1 (HVO). Felt.
30	16	21	50.1	19.978	N	156.499	W	46				45	HAWAII. <HVO-P>. MD 4.1 (HVO).
30	16	58	53.6*	41.006	N	19.619	E	10	G		1.0	9	ALBANIA. ML 2.5 (TTG).
30	18	11	32.2?	38.819	N	15.484	E	33	N		0.6	9	SICILY
30	18	31	04.6*	13.544	N	125.250	E	33	N	4.5	0.8	21	PHILIPPINE ISLANDS REGION
30	18	41	15.3	4.920	S	153.459	E	76	*	4.5	1.3	27	NEW IRELAND REGION
30	19	26	18.1?	30.43	S	178.75	W	236	?	4.3	1.4	8	KERMADEC ISLANDS
30	19	58	45.6*	39.793	N	96.133	E	37	?	4.1	0.7	8	GANSU PROVINCE, CHINA
30	20	29	58.7*	33.409	S	72.178	W	62	*		0.9	14	OFF COAST OF CENTRAL CHILE. Felt (III) in the Valparaiso area.
30	20	36	14.3?	13.54	N	124.88	E	33	N	3.8	0.5	8	LUZON, PHILIPPINE ISLANDS
30	21	30	34.6*	6.459	N	125.980	E	140	*		0.9	17	MINDANAO, PHILIPPINE ISLANDS
30	21	42	04.1	39.276	N	40.460	E	10	G	4.5 3.3	0.9	20	TURKEY. Four houses damaged in the Bingol area.
30	22	30	18.1?	34.90	N	50.46	E	33	N	3.9	0.5	5	IRAN
30	23	19	54.9*	10.648	N	62.587	W	80	*	4.1	0.6	17	NEAR COAST OF VENEZUELA
30	23	37	35.3?	38.258	N	26.230	W	10	G		0.5	7	AZORES ISLANDS
f 30	23	50	56.9	24.926	S	70.461	W	41	D	5.8 5.7	1.1	207	NEAR COAST OF NORTHERN CHILE. Felt (III) in the Antofagasta area. Felt strongly in the Copiapo area.
31	00	02	02.4?	10.24	N	60.76	W	33	N		0.2	5	TRINIDAD
31	00	17	13.7?	1.16	N	121.35	E	33	N	5.0	0.7	8	MINAHASSA PENINSULA
31	00	36	38.4?	4.45	S	40.22	W	10	G		1.8	5	BRAZIL. Felt at Sobral.
31	01	50	38.9*	13.189	N	89.613	W	56		4.3	1.2	38	EL SALVADOR. Felt (II) at San Salvador.
31	01	58	22.7	40.764	N	21.668	E	10	G		0.9	11	GREECE. MG 3.0 (TIR).
31	01	59	12.9	58.082	N	142.719	W	10	G			28	GULF OF ALASKA. <AGS-P>.
31	01	59	17.7	7.099	N	126.645	E	175		5.2	1.0	76	MINDANAO, PHILIPPINE ISLANDS
31	02	04	40.2?	38.560	N	14.783	E	14			0.8	14	SICILY. MD 3.3 (ROM).
31	02	48	10.2?	16.665	N	61.232	W	10	G		0.6	5	LEEWARD ISLANDS. ML 1.9 (FDF).
31	02	56	03.1	56.444	N	3.434	E	10	G		0.9	28	NORTH SEA. ML 3.4 (BGS). Felt (IV) on oil platforms Ekofisk, Bravo and 24 Alpha.
31	03	23	32.3*	11.729	S	34.287	E	10	G	4.3	1.2	10	MALAWI. Felt (III) at Mzuzu.
31	04	53	02.9*	2.818	S	138.936	E	33	N	4.4	1.4	15	WEST IRIAN
31	04	57	49.9?	9.25	S	75.73	W	33	N		1.3	9	PERU
31	05	26	48.1*	51.111	N	15.760	E	10	G		1.3	9	POLAND. ML 3.6 (VKA), 3.4 (KBA).
31	06	28	05.5?	20.64	S	171.03	E	33	N	4.7	0.7	6	VANUATU ISLANDS REGION
31	07	03	16.0?	24.00	S	66.81	W	222	?		0.4	5	JUJUY PROVINCE, ARGENTINA
a 31	07	34	28.8	18.209	N	97.797	W	61	*	5.1	1.1	123	CENTRAL MEXICO
31	08	11	39.6	39.426	N	28.386	E	10	G		0.9	10	TURKEY
31	08	16	39.2?	10.504	N	61.010	W	33	N		0.3	5	TRINIDAD
31	08	27	14.3*	50.842	N	6.604	E	10	G		0.2	5	GERMANY
a 31	08	39	05.8	24.696	S	176.286	W	51	*	5.3 5.2	0.9	51	SOUTH OF FIJI ISLANDS
31	12	21	08.1*	33.873	N	140.442	E	30	*	4.8	1.3	16	SOUTH OF HONSHU, JAPAN. Felt (I JMA) on Hachijo-jima.
31	12	29	18.8	36.703	N	21.550	E	50	*	4.4	1.1	27	SOUTHERN GREECE
31	12	46	49.7	19.924	N	156.486	W	0				45	HAWAII. <HVO-P>. MD 4.3 (HVO).
31	13	19	55.1*	13.769	N	124.844	E	33	N	4.6	0.9	6	LUZON, PHILIPPINE ISLANDS
31	14	49	00.6	0.011	S	124.865	E	82	D	4.9	1.3	56	MOLUCCA SEA
31	16	57	07.7?	37.62	N	17.58	E	10	G		0.2	6	IONIAN SEA
31	18	12	37.0?	7.35	S	121.81	E	294	?	4.6	1.4	6	FLORES SEA
31	19	08	56.3?	42.786	N	11.479	E	14			0.4	8	CENTRAL ITALY
31	20	46	53.6	13.734	N	120.766	E	132	*	4.6	0.6	21	MINDORO, PHILIPPINE ISLANDS
31	21	26	12.1	9.094	S	78.872	W	59	D	5.0	0.6	32	NEAR COAST OF NORTHERN PERU. Felt at Chimbote, Trujillo and Huaraz.

31	21	28	04.97	27.86	N	55.56	E	33	N	4.4	0.8	5	SOUTHERN IRAN
31	22	15	41.08	60.580	N	142.761	W	25				20	SOUTHERN ALASKA. <AGS-P>.
31	22	22	06.17	52.98	N	168.65	W	33	N	4.9	1.1	11	FOX ISLANDS, ALEUTIAN ISLANDS
31	22	22	43.2	35.518	N	140.096	E	73		4.8	1.0	70	NEAR EAST COAST OF HONSHU, JAPAN. Felt (11 JMA) at Tokyo and Yokohama; (1 JMA) at Choshi, Mito, Toteyama and on Oshima.
31	22	58	16.47	33.89	S	178.67	W	33	N	4.8	1.4	10	SOUTH OF KERMADEC ISLANDS

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	02	13	50.55	55.556N	166.537E	33km	Centroid Location: Origin Time 01:59: 2.5 0.2 Lot 52.74S 0.04 Lon 114.52E 0.06 Dep 15.0 FIX Half-duration 2.5 Principal Axes: Scale 10**17 Nm T Val= 3.45 Plg=52 Azm= 68 N -0.10 33 216 P -3.34 16 317 Best Double Couple:Mo=3.4*10**17 NP1:Strike= 85 Dip=41 Slip= 147 NP2: 201 69 54	Centroid Location: Origin Time 22:35:51.6 0.2 Lat 57.37N 0.01 Lon 143.53W 0.03 Dep 15.0 FIX Half-duration 18.0 Principal Axes: Scale 10**20 Nm T Val= 4.47 Plg= 2 Azm=136 N 0.79 71 233 P -5.27 18 45 Best Double Couple:Mo=4.9*10**20 NP1:Strike=182 Dip=75 Slip=-168 NP2: 89 79 -15															
02	07	13	16.38	9.729N	84.711W	44km	5.0mb (33 obs.) 5.1MsZ (6 obs.) CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 27C Centroid Location: Origin Time 07:13:20.3 0.5 Lot 9.65N 0.06 Lon 84.91W 0.07 Dep 29.6 3.4 Half-duration 2.0 Principal Axes: Scale 10**17 Nm T Val= 1.97 Plg=63 Azm= 57 N 0.15 8 310 P -2.12 25 216 Best Double Couple:Mo=2.0*10**17 NP1:Strike=288 Dip=21 Slip= 66 NP2: 133 71 99	07	15	21	06.85	41.669N	152.222E	10km	5.9mb (87 obs.) 5.1MsZ (6 obs.) NORTH PACIFIC OCEAN FAULT PLANE SOLUTION: P-Waves NP1:Strike=139 Dip=59 Slip= 90 NP2: 319 31 90 Principal Axes: T Plg=76 Azm= 49 P 14 229 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2. RADIATED ENERGY No. of sta: 5 Focal mech. C Energy 1.4±0.4*10**13 Nm MOMENT TENSOR SOLUTION Dep 9 No. of sta: 7 Principal Axes: Scale 10**17 Nm T Val= 3.25 Plg=54 Azm=143 N -0.10 34 343 P -3.15 9 246 Best Double Couple:Mo=3.2*10**17 NP1:Strike=302 Dip=47 Slip= 39 NP2: 183 63 129 CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 8S, 20C Centroid Location: Origin Time 15:21:10.8 0.7 Lat 41.86N 0.09 Lon 151.75E 0.09 Dep 15.0 BDY Half-duration 2.1 Principal Axes: Scale 10**17 Nm T Val= 1.99 Plg=73 Azm=209 N 0.37 15 0 P -2.36 7 92 Best Double Couple:Mo=2.2*10**17 NP1:Strike=199 Dip=40 Slip= 113 NP2: 350 54 72								
03	00	28	34.54	7.145S	129.310E	145km	5.4mb (23 obs.) BANDA SEA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 23C Centroid Location: Origin Time 00:28:37.5 0.8 Lot 6.92S 0.09 Lon 129.60E 0.12 Dep 153.8 3.5 Half-duration 1.5 Principal Axes: Scale 10**16 Nm T Val= 9.12 Plg=45 Azm=311 N -1.56 28 75 P -7.56 31 184 Best Double Couple:Mo=8.3*10**16 NP1:Strike=326 Dip=30 Slip= 164 NP2: 70 82 61	06	14	23	17.18	5.346S	68.667E	10km	5.2mb (18 obs.) 4.3MsZ (3 obs.) CHAGOS ARCHIPELAGO REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 10S, 22C Centroid Location: Origin Time 14:23:24.7 1.5 Lot 5.23S 0.12 Lon 68.89E 0.11 Dep 15.0 FIX Half-duration 1.5 Principal Axes: Scale 10**16 Nm T Val= 6.00 Plg= 4 Azm= 89 N -0.73 82 207 P -5.27 7 359 Best Double Couple:Mo=5.6*10**16 NP1:Strike=134 Dip=82 Slip=-178 NP2: 44 88 -8	08	15	38	26.34	2.184S	125.310E	48km	5.6mb (30 obs.) 5.2MsZ (6 obs.) CERAM SEA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 36C Centroid Location: Origin Time 15:38:27.8 0.3 Lat 1.95S 0.03 Lon 125.24E 0.04 Dep 33.0 FIX Half-duration 3.6 Principal Axes: Scale 10**17 Nm T Val= 10.07 Plg= 5 Azm=116 N -1.41 74 224 P -8.66 15 25 Best Double Couple:Mo=9.4*10**17 NP1:Strike=161 Dip=76 Slip=-173 NP2: 69 83 -14
04	03	08	15.48	17.993S	178.521W	590km	5.5mb (48 obs.) FIJI ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 10S, 26C Centroid Location: Origin Time 03:08:24.8 0.5 Lot 17.68S 0.05 Lon 178.69W 0.05 Dep 598.6 2.2 Half-duration 3.2 Principal Axes: Scale 10**17 Nm T Val= 7.40 Plg=33 Azm= 27 N -0.18 40 150 P -7.22 33 273 Best Double Couple:Mo=7.3*10**17 NP1:Strike= 60 Dip=40 Slip= 180 NP2: 150 90 50	06	22	35	38.14	56.953N	143.032W	10km	6.8mb (93 obs.) 7.6MsZ (14 obs.) GULF OF ALASKA FAULT PLANE SOLUTION: P-Waves NP1:Strike= 61 Dip=79 Slip= -2 NP2: 151 88 -169 Principal Axes: T Plg= 6 Azm=286 P 9 17 Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a small normal component. The preferred fault plane is not determined. RADIATED ENERGY No. of sta: 14 Focal mech. F Energy 9.7±2.3*10**16 Nm MOMENT TENSOR SOLUTION Dep 18 No. of sta: 15 Principal Axes: Scale 10**20 Nm T Val= 1.04 Plg=34 Azm=283 N -0.01 42 155 P -1.03 29 35 Best Double Couple:Mo=1.0*10**20 NP1:Strike= 71 Dip=43 Slip= 4 NP2: 338 87 133 CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 34C M.W.: 11S, 31C	08	16	27	18.85	51.340N	176.862E	33km	5.5mb (68 obs.) 5.5MsZ (17 obs.) RAT ISLANDS, ALEUTIAN ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 30C Centroid Location:
05	01	58	58.58	52.257S	114.497E	10km	5.6mb (11 obs.) 5.3MsZ (7 obs.) SOUTH OF AUSTRALIA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 27C																

Origin Time 16:27:19.6 0.4
 Lat 51.59N 0.04 Lon 176.13E 0.11
 Dep 15.0 BDY Half-duration 3.2
 Principal Axes:
 Scale 10**17 Nm
 T Val= 5.93 Plg=55 Azm=319
 N 0.59 14 70
 P -6.51 31 168
 Best Double Couple:Mo=6.2*10**17
 NP1:Strike=296 Dip=19 Slip= 138
 NP2: 66 78 76

09 04 42 52.64 4.662S 131.137E 33km
 5.5mb (26 obs.) 4.7Msz (5 obs.)
 BANDA SEA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 34C
 Centroid Location:
 Origin Time 04:42:57.0 0.3
 Lat 4.72S 0.04 Lon 130.98E 0.05
 Dep 60.4 3.2 Half-duration 2.1
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.21 Plg=29 Azm=230
 N 0.15 59 26
 P -2.37 11 134
 Best Double Couple:Mo=2.3*10**17
 NP1:Strike=268 Dip=62 Slip= 166
 NP2: 5 78 29

09 21 33 53.79 17.327S 74.154W 32km
 6.0mb (67 obs.) 5.9Msz (13 obs.)
 OFF COAST OF PERU
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=340 Dip=50 Slip= -90
 NP2: 160 40 -90
 Principal Axes:
 T Plg= 5 Azm= 70
 P 85 250
 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.

RADIATED ENERGY
 No. of sta: 5 Focal mech. C
 Energy 1.3±0.3*10**13 Nm
 MOMENT TENSOR SOLUTION
 Dep 21 No. of sta: 7
 Principal Axes:
 Scale 10**18 Nm
 T Val= 1.28 Plg=18 Azm= 83
 N -0.01 25 344
 P -1.27 59 205
 Best Double Couple:Ma=1.3*10**18
 NP1:Strike=206 Dip=35 Slip= -43
 NP2: 333 67 -117
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 41C
 Centroid Location:
 Origin Time 21:33:53.7 0.2
 Lat 17.40S 0.03 Lon 74.91W 0.03
 Dep 51.3 1.7 Half-duration 3.5
 Principal Axes:
 Scale 10**17 Nm
 T Val= 9.99 Plg=11 Azm= 47
 N -1.86 12 139
 P -8.13 74 275
 Best Double Couple:Mo=9.1*10**17
 NP1:Strike=122 Dip=36 Slip= -111
 NP2: 327 57 -76

10 04 16 34.56 59.236N 144.335W 10km
 5.1mb (53 obs.) 5.1Msz (4 obs.)
 GULF OF ALASKA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 22C
 Centroid Location:
 Origin Time 04:16:31.8 1.0
 Lat 59.22N 0.12 Lon 144.92W 0.15
 Dep 15.0 BDY Half-duration 1.5
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.45 Plg=53 Azm= 1
 N -0.24 7 261
 P -1.21 36 166
 Best Double Couple:Mo=1.3*10**17
 NP1:Strike=223 Dip=11 Slip= 51
 NP2: 82 81 97

10 06 17 23.31 10.402N 60.587W 56km
 6.2mb (75 obs.) 6.4Msz (26 obs.)
 TRINIDAD
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=252 Dip=58 Slip= -32
 NP2: 0 63 -144

Principal Axes:
 T Plg= 3 Azm=125
 P 44 218
 Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a large normal component. The preferred fault plane is not determined.

RADIATED ENERGY
 No. of sta: 9 Focal mech. F
 Energy 2.3±0.6*10**14 Nm
 MOMENT TENSOR SOLUTION
 Dep 49 No. of sta: 11

Principal Axes:
 Scale 10**19 Nm
 T Val= 1.03 Plg=11 Azm=326
 N 0.04 38 65
 P -1.07 50 222
 Best Double Couple:Mo=1.1*10**19
 NP1:Strike= 19 Dip=47 Slip= -146
 NP2: 265 66 -48

CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 17S, 45C M.W.: 10S, 25C

Centroid Location:
 Origin Time 06:17:21.1 0.2
 Lat 10.09N 0.01 Lon 60.10W 0.02
 Dep 54.0 FIX Half-duration 8.0
 Principal Axes:
 Scale 10**18 Nm
 T Val= 11.61 Plg= 9 Azm=150
 N -1.33 14 58
 P -10.28 73 274
 Best Double Couple:Mo=1.1*10**19
 NP1:Strike=256 Dip=38 Slip= -67
 NP2: 48 56 -107

10 07 58 21.03 7.273S 122.281E 613km
 5.6mb (37 obs.)
 FLORES SEA
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=210 Dip=60 Slip= -40
 NP2: 323 56 -143

Principal Axes:
 T Plg= 2 Azm=267
 P 48 175

Comment: The focal mechanism is well controlled and corresponds to strike-slip faulting with a large normal component. The preferred fault plane is not determined.

RADIATED ENERGY
 No. of sta: 4 Focal mech. F
 Energy 1.8±0.8*10**14 Nm

10 10 25 05.30 20.917S 178.645W 623km
 6.1mb (55 obs.)
 FIJI ISLANDS REGION
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike= 72 Dip=85 Slip= -90
 NP2: 252 5 -90

Principal Axes:
 T Plg=40 Azm=162
 P 50 342

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. M
 Energy 2.4±0.3*10**13 Nm
 MOMENT TENSOR SOLUTION
 Dep 613 No. of sta: 15

Principal Axes:
 Scale 10**18 Nm
 T Val= 9.19 Plg=34 Azm=188
 N -0.03 23 82
 P -9.16 48 325
 Best Double Couple:Mo=9.2*10**18
 NP1:Strike=332 Dip=24 Slip= -19
 NP2: 79 82 -113

CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 39C M.W.: 11S, 23C

Centroid Location:
 Origin Time 10:25:13.3 0.2
 Lat 21.02S 0.02 Lon 178.44W 0.02
 Dep 635.9 1.1 Half-duration 7.5
 Principal Axes:
 Scale 10**18 Nm
 T Val= 9.45 Plg=32 Azm=188
 N 0.82 33 75
 P -10.27 41 311
 Best Double Couple:Mo=9.9*10**18
 NP1:Strike=334 Dip=33 Slip= -9
 NP2: 72 85 -123

10 14 42 12.91 23.853S 177.651W 266km
 5.1mb (25 obs.)
 SOUTH OF FIJI ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 17C
 Centroid Location:
 Origin Time 14:42:12.8 1.7
 Lat 23.99S 0.14 Lon 177.28W 0.14
 Dep 282.5 7.6 Half-duration 1.9
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.84 Plg=25 Azm=105
 N -0.33 58 329
 P -1.51 20 205
 Best Double Couple:Mo=1.7*10**17
 NP1:Strike=246 Dip=58 Slip= 4
 NP2: 154 87 148

11 02 36 59.14 37.412S 47.991E 10km
 5.5mb (26 obs.) 5.6Msz (1 obs.)
 ATLANTIC-INDIAN RISE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 21C
 Centroid Location:
 Origin Time 02:37: 3.8 0.6
 Lat 36.90S 0.08 Lon 48.17E 0.09
 Dep 15.0 FIX Half-duration 1.8
 Principal Axes:
 Scale 10**16 Nm
 T Val= 10.71 Plg=63 Azm=111
 N 1.57 19 338
 P -12.28 19 242
 Best Double Couple:Mo=1.2*10**17
 NP1:Strike=303 Dip=31 Slip= 51
 NP2: 167 66 111

11 03 44 57.10 9.105N 82.985W 23km
 5.4mb (41 obs.) 6.0Msz (18 obs.)
 PANAMA-COSTA RICA BORDER REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 17S, 44C
 Centroid Location:
 Origin Time 03:45: 5.9 0.3
 Lat 9.48N 0.03 Lon 83.15W 0.03
 Dep 37.4 2.5 Half-duration 3.9
 Principal Axes:
 Scale 10**17 Nm
 T Val= 12.59 Plg=18 Azm=110
 N 0.65 54 354
 P -13.24 30 211
 Best Double Couple:Mo=1.3*10**18
 NP1:Strike=248 Dip=55 Slip= -9
 NP2: 343 82 -145

11 16 01 07.01 10.167N 60.603W 53km
 5.2mb (53 obs.) 4.7Msz (3 obs.)
 TRINIDAD
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 24C
 Centroid Location:
 Origin Time 16:01: 1.3 0.6
 Lat 9.88N 0.05 Lon 59.85W 0.08
 Dep 47.0 FIX Half-duration 1.7
 Principal Axes:
 Scale 10**16 Nm
 T Val= 8.74 Plg=14 Azm=152
 N -1.03 24 248
 P -7.70 62 35
 Best Double Couple:Mo=8.2*10**16
 NP1:Strike=213 Dip=38 Slip= -132
 NP2: 81 63 -62

12 00 44 14.82 32.714S 178.975W 67km
 5.3mb (4 obs.)
 SOUTH OF KERMADEC ISLANDS
 CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN
L.P.B.: 11S, 21C
Centroid Location:
Origin Time 00:44:19.0 1.0
Lat 32.68S 0.10 Lon 179.08W 0.14
Dep 38.5 8.0 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 10.40 Plg=51 Azm=272
N -0.09 9 13
P -10.31 38 111
Best Double Couple:Mo=1.0*10**17
NP1:Strike=247 Dip=11 Slip= 144
NP2: 12 83 81

12 04 32 10.30 10.144N 60.569W 52km
5.7mb (82 obs.) 5.4Msz (14 obs.)
TRINIDAD
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 36C
Centroid Location:
Origin Time 04:32: 8.0 0.3
Lat 9.81N 0.03 Lon 60.43W 0.04
Dep 33.0 FIX Half-duration 3.4
Principal Axes:
Scale 10**17 Nm
T Val= 5.87 Plg=20 Azm=343
N 0.41 21 80
P -6.28 61 213
Best Double Couple:Mo=6.1*10**17
NP1:Strike= 42 Dip=31 Slip=-133
NP2: 269 68 -68

12 08 38 49.29 54.711N 161.607E 20km
5.7mb (73 obs.) 4.5Msz (5 obs.)
NEAR EAST COAST OF KAMCHATKA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 21C
Centroid Location:
Origin Time 08:38:54.9 0.8
Lat 54.77N 0.05 Lon 161.48E 0.16
Dep 66.7 4.5 Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 5.35 Plg=77 Azm= 97
N -1.48 12 273
P -3.87 1 3
Best Double Couple:Mo=4.6*10**16
NP1:Strike=105 Dip=45 Slip= 108
NP2: 261 47 73

12 12 11 12.18 0.683S 133.518E 49km
5.2mb (30 obs.) 5.6Msz (10 obs.)
WEST IRIAN REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 41C
Centroid Location:
Origin Time 12:11:13.1 0.2
Lat 0.63S 0.02 Lon 133.53E 0.03
Dep 27.8 2.0 Half-duration 3.5
Principal Axes:
Scale 10**17 Nm
T Val= 8.76 Plg=72 Azm=200
N -0.02 4 303
P -8.74 18 35
Best Double Couple:Mo=8.8*10**17
NP1:Strike=131 Dip=27 Slip= 99
NP2: 301 63 85

13 11 31 32.86 33.673S 72.216W 41km
5.3mb (16 obs.) 6.0Msz (5 obs.)
OFF COAST OF CENTRAL CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 38C
Centroid Location:
Origin Time 11:31:35.3 0.3
Lat 33.82S 0.04 Lon 73.07W 0.04
Dep 15.0 FIX Half-duration 2.9
Principal Axes:
Scale 10**17 Nm
T Val= 6.96 Plg=58 Azm= 47
N 0.15 20 173
P -7.11 24 273
Best Double Couple:Mo=7.0*10**17
NP1:Strike= 38 Dip=28 Slip= 138
NP2: 166 72 68

13 12 59 15.88 37.283S 51.848E 10km
5.7mb (28 obs.) 5.9Msz (5 obs.)

SOUTH INDIAN OCEAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 38C
Centroid Location:
Origin Time 12:59:20.1 0.3
Lat 37.32S 0.03 Lon 51.94E 0.04
Dep 15.0 FIX Half-duration 3.5
Principal Axes:
Scale 10**17 Nm
T Val= 8.74 Plg= 8 Azm= 3
N -0.14 14 270
P -8.60 74 123
Best Double Couple:Mo=8.7*10**17
NP1:Strike=109 Dip=39 Slip= -67
NP2: 260 55 -107

14 10 32 45.52 14.538S 73.603W 87km
5.1mb (20 obs.)
PERU
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 21C
Centroid Location:
Origin Time 10:32:54.9 0.7
Lat 14.34S 0.08 Lon 73.42W 0.11
Dep 110.1 4.7 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 6.61 Plg=12 Azm=271
N 0.33 37 173
P -6.93 51 16
Best Double Couple:Mo=6.8*10**16
NP1:Strike= 38 Dip=46 Slip= -34
NP2: 153 66 -131

14 18 00 27.43 52.219S 123.745E 10km
5.3mb (16 obs.)
SOUTH OF AUSTRALIA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 16C
Centroid Location:
Origin Time 18:00:37.3 2.1
Lat 51.69S 0.22 Lon 125.11E 0.23
Dep 15.0 FIX Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 7.13 Plg= 8 Azm= 68
N -0.77 66 177
P -6.36 23 334
Best Double Couple:Mo=6.7*10**16
NP1:Strike=113 Dip=68 Slip=-169
NP2: 19 80 -23

14 19 17 04.09 49.674N 156.310E 61km
5.3mb (67 obs.)
KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 16C
Centroid Location:
Origin Time 19:17: 3.0 1.2
Lat 49.36N 0.06 Lon 157.05E 0.13
Dep 51.8 4.8 Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 8.35 Plg= 9 Azm=201
N 3.43 80 350
P -11.78 5 111
Best Double Couple:Mo=1.0*10**17
NP1:Strike=246 Dip=80 Slip= 178
NP2: 336 88 10

15 09 25 05.69 11.843N 143.279E 17km
5.3mb (27 obs.) 5.2Msz (9 obs.)
SOUTH OF MARIANA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 32C
Centroid Location:
Origin Time 09:25: 9.7 0.3
Lat 11.70N 0.04 Lon 143.37E 0.04
Dep 15.0 FIX Half-duration 2.3
Principal Axes:
Scale 10**17 Nm
T Val= 2.94 Plg=62 Azm= 32
N 0.40 17 268
P -3.33 22 170
Best Double Couple:Mo=3.1*10**17
NP1:Strike=232 Dip=27 Slip= 51
NP2: 94 69 108

15 23 56 17.24 57.037N 142.898W 10km
5.0mb (20 obs.) 4.6Msz (4 obs.)
GULF OF ALASKA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 19C
Centroid Location:
Origin Time 23:56:15.4 1.3
Lat 57.08N 0.13 Lon 143.41W 0.21
Dep 15.0 FIX Half-duration 1.3
Principal Axes:
Scale 10**16 Nm
T Val= 3.84 Plg=22 Azm=141
N 1.29 63 282
P -5.13 16 45
Best Double Couple:Mo=4.5*10**16
NP1:Strike=182 Dip=63 Slip= 175
NP2: 274 86 27

16 00 44 47.19 3.5B2S 146.488E 18km
5.1mb (6 obs.) 5.7Msz (5 obs.)
BISMARCK SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 49C
Centroid Location:
Origin Time 00:45: 0.9 0.3
Lat 3.67S 0.03 Lon 146.68E 0.03
Dep 15.0 FIX Half-duration 3.2
Principal Axes:
Scale 10**17 Nm
T Val= 6.26 Plg= 5 Azm=129
N 1.09 77 16
P -7.35 12 220
Best Double Couple:Mo=6.8*10**17
NP1:Strike=264 Dip=78 Slip= -5
NP2: 355 85 -168

16 05 48 03.81 10.211N 60.607W 56km
5.7mb (79 obs.)
TRINIDAD
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 28C
Centroid Location:
Origin Time 05:48: 0.8 0.3
Lat 9.75N 0.03 Lon 60.31W 0.04
Dep 55.0 FIX Half-duration 3.0
Principal Axes:
Scale 10**17 Nm
T Val= 4.58 Plg= 3 Azm=330
N 0.03 19 61
P -4.61 70 230
Best Double Couple:Mo=4.6*10**17
NP1:Strike= 40 Dip=45 Slip=-118
NP2: 257 51 -65

16 12 11 05.96 17.767S 175.034W 256km
5.3mb (32 obs.)
TONGA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 21C
Centroid Location:
Origin Time 12:11:13.5 0.6
Lat 17.58S 0.06 Lon 175.23W 0.05
Dep 269.7 2.2 Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 1.84 Plg=30 Azm=110
N 0.11 6 16
P -1.95 59 276
Best Double Couple:Mo=1.9*10**17
NP1:Strike=218 Dip=16 Slip= -68
NP2: 15 75 -96

17 12 19 56.98 17.579S 178.452W 550km
5.3mb (35 obs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centroid Location:
Origin Time 12:20: 3.9 0.3
Lat 17.62S 0.03 Lon 178.56W 0.03
Dep 561.7 1.5 Half-duration 3.3
Principal Axes:
Scale 10**17 Nm
T Val= 8.53 Plg=33 Azm=126
N -0.64 54 331
P -7.89 12 224
Best Double Couple:Mo=8.2*10**17
NP1:Strike=270 Dip=58 Slip= 17

NP2: 171 76 147
 17 20 34 29.22 35.633N 139.619E 103km
 5.4mb (67 obs.)
 NEAR S. COAST OF HONSHU, JAPAN
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 24C
 Centroid Location:
 Origin Time 20:34:29.5 0.3
 Lat 35.69N 0.03 Lon 139.10E 0.04
 Dep 94.5 2.6 Half-duration 2.4
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.50 Plg=19 Azm=359
 N 1.10 23 260
 P -3.61 59 124
 Best Double Couple:Mo=3.1*10**17
 NP1:Strike=121 Dip=33 Slip=-44
 NP2: 250 68 -115

18 22 51 19.63 3.667S 146.561E 33km
 5.5mb (26 obs.) 6.1Msz (17 obs.)
 BISMARCK SEA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 28C M.W.: 9S, 20C
 Centroid Location:
 Origin Time 22:51:24.6 0.3
 Lat 3.43S 0.02 Lon 146.48E 0.03
 Dep 15.0 FIX Half-duration 4.9
 Principal Axes:
 Scale 10**18 Nm
 T Val= 2.55 Plg=18 Azm=300
 N -0.35 68 81
 P -2.20 13 205
 Best Double Couple:Mo=2.4*10**18
 NP1:Strike=342 Dip=68 Slip=176
 NP2: 73 87 22

19 20 19 15.94 29.999N 67.910E 15km
 5.4mb (56 obs.) 5.3Msz (9 obs.)
 PAKISTAN
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 22C
 Centroid Location:
 Origin Time 20:19:20.3 0.5
 Lat 30.41N 0.07 Lon 68.10E 0.08
 Dep 15.0 FIX Half-duration 2.4
 Principal Axes:
 Scale 10**17 Nm
 T Val= 4.27 Plg=44 Azm=335
 N 0.48 6 239
 P -4.76 45 143
 Best Double Couple:Mo=4.5*10**17
 NP1:Strike=142 Dip=6 Slip=-7
 NP2: 239 89 -96

20 04 05 28.12 10.069S 153.882E 33km
 5.4mb (12 obs.) 4.7Msz (1 obs.)
 DENTRECASTEUX ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 8S, 13C
 Centroid Location:
 Origin Time 04:05:29.5 2.7
 Lat 10.05S 0.27 Lon 153.60E 0.13
 Dep 15.0 FIX Half-duration 1.7
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.40 Plg=18 Azm=105
 N -0.20 14 200
 P -1.20 67 326
 Best Double Couple:Mo=1.3*10**17
 NP1:Strike=173 Dip=30 Slip=-120
 NP2: 27 65 -74

20 10 41 51.07 9.991S 153.815E 33km
 5.8mb (31 obs.) 5.2Msz (9 obs.)
 DENTRECASTEUX ISLANDS REGION
 RADIATED ENERGY
 No. of sta: 4 Focal mech. C
 Energy 2.8±1.3*10**13 Nm
 MOMENT TENSOR SOLUTION
 Dep 22 No. of sta: 11
 Principal Axes:
 Scale 10**17 Nm
 T Val= 4.17 Plg=10 Azm=315
 N -0.17 5 224
 P -4.01 79 106
 Best Double Couple:Mo=4.1*10**17
 NP1:Strike= 52 Dip=36 Slip=-81

NP2: 221 55 -96
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 9S, 21C
 Centroid Location:
 Origin Time 10:41:59.0 1.0
 Lat 9.81S 0.08 Lon 154.17E 0.05
 Dep 15.0 FIX Half-duration 2.9
 Principal Axes:
 Scale 10**17 Nm
 T Val= 5.79 Plg= 3 Azm=113
 N -2.07 12 22
 P -3.72 78 216
 Best Double Couple:Mo=4.8*10**17
 NP1:Strike=215 Dip=43 Slip=-73
 NP2: 12 49 -105

21 13 17 37.58 8.186S 118.933E 24km
 5.4mb (13 obs.) 4.6Msz (4 obs.)
 SUMBAWA ISLAND REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 22C
 Centroid Location:
 Origin Time 13:17:38.7 0.8
 Lat 8.17S FIX;Lon 118.94E FIX
 Dep 15.2 FIX Half-duration 2.0
 Principal Axes:
 Scale 10**16 Nm
 T Val= 9.03 Plg=56 Azm=234
 N -2.00 23 106
 P -7.03 24 5
 Best Double Couple:Mo=8.0*10**16
 NP1:Strike= 57 Dip=29 Slip= 37
 NP2: 293 73 114

21 23 31 21.68 77.601N 125.451E 10km
 6.0mb (62 obs.) 6.0Msz (22 obs.)
 LAPTEV SEA
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=330 Dip= 8 Slip= 90
 NP2: 150 82 90
 Principal Axes:
 T Plg=53 Azm= 60
 P 37 240
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is not determined.
 RADIATED ENERGY
 No. of sta: 10 Focal mech. M
 Energy 9.6±2.4*10**13 Nm
 MOMENT TENSOR SOLUTION
 Dep 2 No. of sta: 16
 Principal Axes:
 Scale 10**18 Nm
 T Val= 6.02 Plg=30 Azm= 74
 N 0.01 7 340
 P -6.03 59 239
 Best Double Couple:Mo=6.0*10**18
 NP1:Strike=185 Dip=16 Slip=-64
 NP2: 338 76 -97

CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 27C M.W.: 9S, 23C
 Centroid Location:
 Origin Time 23:31:24.7 0.3
 Lat 77.64N 0.03 Lon 125.78E 0.11
 Dep 15.0 FIX Half-duration 6.0
 Principal Axes:
 Scale 10**18 Nm
 T Val= 4.38 Plg=12 Azm= 77
 N -0.14 9 345
 P -4.24 75 219
 Best Double Couple:Mo=4.3*10**18
 NP1:Strike=178 Dip=34 Slip=-73
 NP2: 339 58 -101

23 05 07 15.69 27.62 S 176.05 W 33km
 5.4mb (4 obs.) 5.0Msz (2 obs.)
 KERMADEC ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 18C
 Centroid Location:
 Origin Time 05:07:19.8 1.3
 Lat 26.95S 0.10 Lon 176.23W 0.14
 Dep 15.0 FIX Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 8.43 Plg=65 Azm=294
 N 1.33 3 198

P -9.77 25 107
 Best Double Couple:Mo=9.1*10**16
 NP1:Strike=190 Dip=20 Slip= 82
 NP2: 19 70 93

23 08 04 52.03 4.208S 131.453E 55km
 5.2mb (19 obs.) 4.8Msz (2 obs.)
 BANDA SEA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 9S, 16C
 Centroid Location:
 Origin Time 08:04:53.9 1.0
 Lat 4.28S 0.09 Lon 131.63E 0.15
 Dep 15.0 FIX Half-duration 1.7
 Principal Axes:
 Scale 10**16 Nm
 T Val= 10.00 Plg=65 Azm=218
 N 1.58 10 331
 P -11.58 23 65
 Best Double Couple:Mo=1.1*10**17
 NP1:Strike=175 Dip=24 Slip= 116
 NP2: 327 68 79

23 13 43 58.09 26.885S 176.515W 162km
 4.7mb (7 obs.)
 SOUTH OF FIJI ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 26C
 Centroid Location:
 Origin Time 13:43:48.1 0.7
 Lat 26.87S 0.05 Lon 176.21W 0.07
 Dep 15.0 FIX Half-duration 2.0
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.75 Plg=69 Azm=255
 N 0.29 10 12
 P -2.03 18 105
 Best Double Couple:Mo=1.9*10**17
 NP1:Strike=211 Dip=28 Slip= 111
 NP2: 7 64 79

23 15 50 18.29 10.850N 43.556W 10km
 5.4mb (42 obs.) 5.6Msz (14 obs.)
 NORTH ATLANTIC RIDGE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 42C
 Centroid Location:
 Origin Time 15:50:29.1 0.2
 Lat 10.86N 0.02 Lon 43.39W 0.02
 Dep 15.0 FIX Half-duration 3.0
 Principal Axes:
 Scale 10**18 Nm
 T Val= 2.09 Plg=13 Azm= 42
 N -0.16 71 271
 P -1.92 14 135
 Best Double Couple:Mo=2.0*10**18
 NP1:Strike=178 Dip=71 Slip=-1
 NP2: 269 89 -161

23 20 22 44.66 52.520N 169.339W 33km
 5.1mb (50 obs.) 5.1Msz (9 obs.)
 FOX ISLANDS, ALEUTIAN ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 26C
 Centroid Location:
 Origin Time 20:22:48.8 0.6
 Lat 52.73N 0.06 Lon 169.32W 0.08
 Dep 38.3 3.8 Half-duration 2.3
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.42 Plg=57 Azm=306
 N 0.79 10 52
 P -3.21 31 148
 Best Double Couple:Mo=2.8*10**17
 NP1:Strike=268 Dip=17 Slip= 127
 NP2: 49 77 80

25 04 07 20.09 32.522S 14.463W 10km
 5.0mb (11 obs.)
 SOUTH ATLANTIC RIDGE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 8S, 16C
 Centroid Location:
 Origin Time 04:07:32.0 2.2
 Lat 31.45S 0.16 Lon 14.99W 0.19
 Dep 15.0 FIX Half-duration 1.7
 Principal Axes:
 Scale 10**16 Nm

T Val= 11.48 Plg=10 Azm= 46
 N -3.38 76 183
 P -8.10 9 314
 Best Double Couple: Mo=9.8*10**16
 NP1: Strike= 90 Dip=76 Slip= 179
 NP2: 180 89 14

25 05 21 44.50 19.323S 177.493W 559km
 5.5mb (38 obs.)
 FIJI ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 23C
 Centroid Location:
 Origin Time 05:21:54.3 1.1
 Lat 19.11S 0.07 Lon 178.03W 0.09
 Dep 590.6 2.8 Half-duration 2.6
 Principal Axes:
 Scale 10**17 Nm
 T Val= 3.77 Plg= 1 Azm=122
 N 0.21 29 32
 P -3.98 61 214
 Best Double Couple: Mo=3.9*10**17
 NP1: Strike=238 Dip=51 Slip= -52
 NP2: 7 53 -127

25 16 20 47.16 10.176N 60.604W 56km
 5.2mb (32 obs.)
 TRINIDAD
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 27C
 Centroid Location:
 Origin Time 16:20:43.1 0.5
 Lat 9.67N 0.04 Lon 60.31W 0.07
 Dep 56.0 FIX Half-duration 2.3
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.49 Plg=15 Azm=333
 N -0.33 62 93
 P -2.16 23 236
 Best Double Couple: Mo=2.3*10**17
 NP1: Strike= 16 Dip=63 Slip= -174
 NP2: 283 85 -27

25 19 36 46.47 62.154N 124.182W 10km
 6.1mb (53 obs.) 6.0Msz (11 obs.)
 NORTHWEST TERRITORIES, CANADA
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=345 Dip=65 Slip= 90
 NP2: 165 25 90
 Principal Axes:
 T Plg=70 Azm=255
 P 20 75
 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 6.7±1.2*10**13 Nm
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 28C M.W.: 12S, 18C
 Centroid Location:
 Origin Time 19:36:52.5 0.2
 Lat 62.39N 0.02 Lon 124.29W 0.03
 Dep 16.1 0.6 Half-duration 5.2
 Principal Axes:
 Scale 10**18 Nm
 T Val= 2.57 Plg=80 Azm=204
 N -0.19 7 341
 P -2.37 7 72
 Best Double Couple: Mo=2.5*10**18
 NP1: Strike=170 Dip=39 Slip= 101
 NP2: 336 52 81

26 06 26 59.64 22.994S 13.623W 10km
 5.3mb (30 obs.) 4.7Msz (2 obs.)
 SOUTH ATLANTIC RIDGE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 21C
 Centroid Location:
 Origin Time 06:27: 4.8 0.8
 Lat 22.85S 0.08 Lon 13.87W 0.09
 Dep 16.0 FIX Half-duration 1.7
 Principal Axes:
 Scale 10**16 Nm
 T Val= 10.57 Plg= 4 Azm=123
 N 0.12 85 340
 P -10.69 3 213

Best Double Couple: Mo=1.1*10**17
 NP1: Strike=258 Dip=85 Slip= 1
 NP2: 168 89 175

26 12 07 29.47 33.186N 13.280E 10km
 4.7mb (36 obs.) 5.2Msz (1 obs.)
 MEDITERRANEAN SEA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 20C
 Centroid Location:
 Origin Time 12:07:36.4 1.8
 Lat 33.41N 0.13 Lon 13.29E 0.13
 Dep 15.0 FIX Half-duration 1.8
 Principal Axes:
 Scale 10**16 Nm
 T Val= 6.98 Plg=17 Azm= 38
 N -1.67 61 275
 P -5.31 23 136
 Best Double Couple: Mo=6.1*10**16
 NP1: Strike=176 Dip=61 Slip= -5
 NP2: 268 86 -151

26 22 58 42.87 38.309N 73.234E 121km
 5.7mb (72 obs.)
 TAJIK-XINJIANG BORDER REGION
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike= 6 Dip=82 Slip= -10
 NP2: 97 80 -172
 Principal Axes:
 T Plg= 1 Azm= 52
 P 13 322
 Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a small normal component. The preferred fault plane is not determined.
 MOMENT TENSOR SOLUTION
 Dep 126 No. of sta: 9
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.87 Plg=13 Azm= 69
 N 0.09 38 169
 P -1.95 49 324
 Best Double Couple: Mo=1.9*10**17
 NP1: Strike=120 Dip=46 Slip= -149
 NP2: 8 68 -48
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 22C
 Centroid Location:
 Origin Time 22:58:46.9 0.6
 Lat 38.23N 0.06 Lon 73.60E 0.05
 Dep 128.3 2.8 Half-duration 2.2
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.15 Plg=15 Azm= 63
 N 0.10 42 167
 P -2.25 44 318
 Best Double Couple: Mo=2.2*10**17
 NP1: Strike=111 Dip=47 Slip= -155
 NP2: 4 72 -45

27 07 46 19.90 15.442S 174.868W 284km
 5.2mb (12 obs.)
 TONGA ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 17C
 Centroid Location:
 Origin Time 07:46:22.4 0.8
 Lat 15.67S 0.11 Lon 174.88W 0.09
 Dep 290.8 4.8 Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 6.22 Plg= 6 Azm= 81
 N -0.32 16 349
 P -5.89 73 191
 Best Double Couple: Mo=6.1*10**16
 NP1: Strike=188 Dip=41 Slip= -66
 NP2: 337 53 -110

28 03 33 40.87 19.936N 156.445W 1km
 5.6mb (26 obs.) 5.1Msz (7 obs.)
 HAWAII
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 29C
 Centroid Location:
 Origin Time 03:33:44.6 0.5
 Lat 19.72N 0.05 Lon 156.25W 0.09
 Dep 15.0 FIX Half-duration 2.0

Principal Axes:
 Scale 10**17 Nm
 T Val= 1.32 Plg= 7 Azm= 99
 N 0.68 80 230
 P -2.00 8 8
 Best Double Couple: Mo=1.7*10**17
 NP1: Strike=144 Dip=80 Slip= -179
 NP2: 54 89 -10

28 18 36 26.47 36.039S 102.843W 10km
 5.7mb (19 obs.) 5.2Msz (3 obs.)
 SOUTHERN PACIFIC OCEAN
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 38C
 Centroid Location:
 Origin Time 18:36:32.2 0.2
 Lat 36.09S 0.02 Lon 102.55W 0.03
 Dep 15.0 FIX Half-duration 3.3
 Principal Axes:
 Scale 10**17 Nm
 T Val= 7.76 Plg= 7 Azm= 56
 N -0.80 71 166
 P -6.96 18 324
 Best Double Couple: Mo=7.4*10**17
 NP1: Strike=101 Dip=72 Slip= -172
 NP2: 8 82 -18

29 08 31 31.99 52.278N 168.182W 33km
 5.4mb (69 obs.) 5.5Msz (15 obs.)
 FOX ISLANDS, ALEUTIAN ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 36C
 Centroid Location:
 Origin Time 08:31:34.6 0.3
 Lat 52.56N 0.04 Lon 168.33W 0.05
 Dep 15.0 FIX Half-duration 2.9
 Principal Axes:
 Scale 10**17 Nm
 T Val= 5.48 Plg=57 Azm=325
 N 0.36 1 234
 P -5.84 33 143
 Best Double Couple: Mo=5.7*10**17
 NP1: Strike=228 Dip=12 Slip= 85
 NP2: 54 78 91

29 13 37 54.48 10.473N 65.011W 17km
 5.1mb (26 obs.) 4.8Msz (3 obs.)
 NEAR COAST OF VENEZUELA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 21C
 Centroid Location:
 Origin Time 13:37:51.9 0.7
 Lat 9.69N 0.06 Lon 64.88W 0.08
 Dep 15.0 FIX Half-duration 1.6
 Principal Axes:
 Scale 10**16 Nm
 T Val= 7.58 Plg= 0 Azm=197
 N 1.01 90 180
 P -8.59 0 107
 Best Double Couple: Mo=8.1*10**16
 NP1: Strike=242 Dip=90 Slip= 180
 NP2: 332 90 0

30 02 12 42.86 30.890N 50.194E 33km
 5.4mb (63 obs.) 5.7Msz (12 obs.)
 IRAN
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 32C
 Centroid Location:
 Origin Time 02:12:42.2 0.6
 Lat 30.29N 0.05 Lon 49.84E 0.03
 Dep 15.0 FIX Half-duration 3.2
 Principal Axes:
 Scale 10**17 Nm
 T Val= 7.06 Plg=77 Azm= 26
 N 0.76 0 116
 P -7.82 13 206
 Best Double Couple: Mo=7.4*10**17
 NP1: Strike=296 Dip=32 Slip= 90
 NP2: 116 58 90

30 23 50 56.94 24.926S 70.461W 41km
 5.8mb (44 obs.) 5.7Msz (11 obs.)
 NEAR COAST OF NORTHERN CHILE
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=184 Dip=70 Slip= 110
 NP2: 317 28 47
 Principal Axes:
 T Plg=60 Azm=123

P 22 259
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting with a moderate left-lateral strike-slip component. The preferred fault plane is NP2.

MOMENT TENSOR SOLUTION

Dep 34 No. of sta: 8

Principal Axes:

Scale 10^{+18} Nm

T Vol= 2.26 Plg=70 Azm= 48

N 0.01 5 153

P -2.26 19 245

Best Double Couple: Mo=2.3* 10^{+18}

NP1: Strike=343 Dip=27 Slip= 101

NP2: 150 64 84

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 11S, 26C

Centroid Location:

Origin Time 23:51: 5.3 0.3

Lat 24.89S 0.05 Lon 71.17W 0.06

Dep 15.0 FIX Half-duration 4.4

Principal Axes:

Scale 10^{+18} Nm

T Vol= 2.13 Plg=57 Azm= 67

N 0.25 0 337

P -2.39 33 247

Best Double Couple: Mo=2.3* 10^{+18}

NP1: Strike=337 Dip=12 Slip= 90

NP2: 157 78 90

31 07 34 28.89 18.209N 97.797W 61km

5.1mb (36 obs.)

CENTRAL MEXICO

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 10S, 17C

Centroid Location:

Origin Time 07:34:27.5 1.6

Lat 17.74N 0.16 Lon 97.30W 0.16

Dep 69.7 7.3 Half-duration 1.3

Principal Axes:

Scale 10^{+16} Nm

T Vol= 3.37 Plg= 8 Azm=210

N 0.52 6 301

P -3.90 81 67

Best Double Couple: Mo=3.6* 10^{+16}

NP1: Strike=293 Dip=38 Slip= -99

NP2: 125 53 -83

31 08 39 05.86 24.696S 176.286W 51km

5.3mb (13 obs.) 5.2Msz (1 obs.)

SOUTH OF FIJI ISLANDS

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

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

Centroid Location:

Origin Time 08:39: 8.9 0.7

Lat 24.65S 0.06 Lon 176.07W 0.07

Dep 29.6 3.5 Half-duration 2.0

Principal Axes:

Scale 10^{+17} Nm

T Vol= 1.54 Plg=67 Azm=285

N 0.17 1 193

P -1.72 23 102

Best Double Couple: Mo=1.6* 10^{+17}

NP1: Strike=190 Dip=22 Slip= 87

NP2: 13 68 91

06 March 1988 22:35:38.14
Gulf of Alaska

10 March 1988 06:17:23.31
Trinidad

GDH (LPZ)
P x3

10 March 1988 10:25:05.30
Fiji Islands Region

21 March 1988 23:31:21.68
Laptev Sea

25 March 1988 19:36:46.47
Northwest Territories, Canada

30 March 1988 23:50:56.94
Near Coast of Northern Chile

Earthquake Focal Mechanisms for March 1988

Earthquake epicenters in Alaska and adjacent regions for March, 1988 (C. Stover).

Earthquake epicenters in the conterminous United States and adjacent regions for March, 1988 (C. Stover).

Earthquakes located in March, 1988 (C. Stover).