

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

PRELIMINARY DETERMINATION OF EPICENTERS  
MONTHLY LISTING

APRIL - JUNE 1989

NATIONAL EARTHQUAKE INFORMATION CENTER

Open File Report

89-600-B



This report is preliminary and has not been reviewed for  
conformity with U.S. Geological Survey editorial standards.

1989



# PRELIMINARY DETERMINATION OF EPICENTERS

## MONTHLY LISTING

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

APRIL 1989

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 27 55.6	42.771 N 18.585 E	5 G		0.9	20	YUGOSLAVIA. MD 3.5 (TRI), 2.7 (TTG).
	01	01 31 26.8	30.954 S 116.836 E	10 G		0.4	5	WESTERN AUSTRALIA
	01	03 41 55.0	60.704 N 151.134 W	52			38	KENAI PENINSULA, ALASKA. <AGS-P>.
	01	04 30 51.7	5.271 N 126.514 E	63 *	4.8	1.0	40	MINDANAO, PHILIPPINE ISLANDS
	01	04 45 57.0	32.56 S 69.63 W	10 G		0.7	5	MENDOZA PROVINCE, ARGENTINA
	01	05 17 37.9	19.290 S 127.767 E	10 G		1.0	6	WESTERN AUSTRALIA
	01	08 22 21.9	37.61 N 71.21 E	33 N	3.8	1.0	9	AFGHANISTAN-USSR BORDER REGION
	01	08 27 43.8	35.497 N 24.035 E	113 *		1.2	18	CRETE
	01	08 42 49.7	39.289 N 27.702 E	10 G		0.2	5	TURKEY
	01	08 58 35.4	41.278 N 19.989 E	10 G		1.3	6	ALBANIA. MG 2.8 (TIR).
	01	09 10 21.0	13.133 S 34.089 E	10 G	4.3	0.8	8	MALAWI
	01	09 25 43.7	63.561 N 164.270 W	33 N		1.0	11	ALASKA. ML 4.1 (PMR).
	01	09 51 52.4	39.133 N 27.612 E	10 G		0.2	6	TURKEY
	01	10 05 02.6	39.163 N 27.583 E	10 G		0.7	5	TURKEY
	01	10 16 35.7	50.003 N 127.791 W	10 G	4.2	0.8	10	VANCOUVER ISLAND REGION
	01	11 34 38.7	3.152 S 127.909 E	33 N	5.1	0.4	16	CERAM
	01	11 36 12.5	5.119 S 151.477 E	110 *	4.8	1.2	22	NEW BRITAIN REGION
	01	11 43 25.7	41.209 N 20.005 E	10 G		0.7	5	ALBANIA. MG 2.4 (TIR).
	01	12 31 36.5	40.872 N 22.780 E	10 G		1.3	7	GREECE
	01	13 19 45.7	39.214 N 23.664 E	10 G		1.3	8	AEGEAN SEA. ML 3.0 (ATH).
	01	15 06 37.9	37.937 N 27.337 E	10 G		0.7	8	TURKEY
	01	17 10 09.3	37.62 N 20.55 E	10 G		1.0	5	IONIAN SEA. ML 3.3 (ATH).
	01	21 15 19.4	61.56 N 146.48 W	33 N		1.0	7	SOUTHERN ALASKA. ML 3.1 (PMR).
	01	21 29 58.7	32.849 N 39.816 W	10 G	4.4	1.1	24	NORTH ATLANTIC RIDGE
o	01	21 58 14.1	32.797 S 69.947 W	110 D	5.5	1.0	112	MENDOZA PROVINCE, ARGENTINA. Felt (V) at Santiago, Chile. Also felt in the Valparaiso, Chile area.
	01	22 22 59.0	34.438 N 26.770 E	137 ?		1.2	8	CRETE. MD 3.7 (ATH).
	02	00 14 20.3	44.623 N 7.049 E	10 G		0.7	25	NORTHERN ITALY. ML 2.5 (GEN).
	02	00 37 50.5	12.117 S 166.130 E	33 N	4.8	1.0	19	SANTA CRUZ ISLANDS
	02	01 10 19.9	19.791 S 175.487 W	232 *	5.1	1.3	30	TONGA ISLANDS
	02	01 24 11.5	36.212 N 28.036 E	10 G		0.6	6	DODECANESE ISLANDS. MD 3.2 (ATH).
	02	01 59 52.6	66.01 N 156.41 W	33 N		0.9	6	ALASKA. ML 3.2 (PMR).
	02	02 01 04.8	41.26 N 20.43 E	10 G		0.1	4	ALBANIA
	02	02 41 32.2	13.60 S 167.77 E	33 N	4.1	1.5	5	VANUATU ISLANDS
	02	03 46 19.8	44.627 N 7.041 E	10 G		0.6	14	NORTHERN ITALY. ML 2.3 (GEN), 2.3 (LDG).
	02	05 12 24.9	17.237 N 62.005 W	33 N		0.8	7	LEEWARD ISLANDS. ML 3.6 (FDF).
	02	05 28 19.9	8.098 S 107.716 E	33 N	4.6	1.2	18	JAVA
o	02	06 42 04.5	28.252 N 57.315 E	44	5.3 4.8	0.9	260	SOUTHERN IRAN
o	02	06 59 00.6	47.245 N 8.991 E	10 G		1.3	39	SWITZERLAND. ML 3.3 (GRF), 3.2 (LDG), 3.2 (KBA). MD 3.0 (STR).
	02	07 21 26.2	29.587 S 68.073 W	150 *		1.2	9	SAN JUAN PROVINCE, ARGENTINA
	02	09 21 21.0	43.97 N 149.06 E	33 N	3.9	0.7	10	KURIL ISLANDS REGION
	02	09 25 21.4	8.846 S 127.134 E	33 N	4.9	0.9	27	TIMOR
	02	09 29 35.2	34.47 N 140.18 E	10 G		0.8	6	NEAR EAST COAST OF HONSHU, JAPAN. MG 2.8 (JMA). Felt (I JMA) at Tateyama.
	02	10 30 13.9	35.297 N 46.507 E	5 G	4.3	1.4	14	IRAN-IRAQ BORDER REGION
o	02	10 35 57.1	11.063 N 85.352 W	70	5.0	0.9	117	NICARAGUA. MD 5.2 (HDC). Felt (V) at Playa Hermosa and Playa del Coco; (IV) at Nicoya and Santa Cruz; (III) at Puntarenas; (II) at Atenas and Los Chiles, Costa Rica. Felt at San Jose and in southern Costa Rica. Felt (III) at Managua, Nicaragua.
o	02	10 43 32.7	5.428 S 146.785 E	251 D	5.6	0.9	147	EAST PAPUA NEW GUINEA REGION
	02	12 22 37.6	36.176 N 28.010 E	10 G		0.5	6	DODECANESE ISLANDS. MD 3.5 (ATH).
	02	12 55 29.5	46.618 N 6.584 E	10 G		0.7	10	SWITZERLAND. ML 2.7 (LDG).
	02	14 11 04.4	36.052 N 31.182 E	10 G		1.1	6	TURKEY
	02	14 43 34.4	39.084 N 29.136 E	10 G		1.4	5	TURKEY
	02	14 50 52.6	12.37 N 144.36 E	33 N		0.6	8	SOUTH OF MARIANA ISLANDS
	02	15 23 33.5	23.82 N 142.56 E	33 N	4.6	0.9	9	VOLCANO ISLANDS REGION

02	16	12	20.87	22.65	S	66.75	W	326	?	0.7	7	JUJUY PROVINCE, ARGENTINA	
02	17	37	27.1	35.194	N	135.552	E	10	G	0.6	8	SOUTHERN HONSHU, JAPAN. MG 3.6 (JMA). Felt (I JMA) at Kyoto.	
02	18	26	49.8*	37.740	N	36.755	E	10	G	1.1	7	TURKEY	
a 02	20	52	02.6	30.941	S	179.998	E	400	5.1	1.0	159	KERMADEC ISLANDS REGION	
02	21	22	02.57	31.30	S	68.37	W	116	?	0.2	5	SAN JUAN PROVINCE, ARGENTINA	
a 02	21	24	36.9	32.621	N	47.782	E	33	5.4 5.0	1.0	339	IRAN-IRAQ BORDER REGION. Felt at Ilam and Ahvaz, Iran.	
02	21	30	30.7*	6.602	N	73.416	W	189	*	1.5	11	NORTHERN COLOMBIA	
03	00	05	58.87	36.18	N	27.23	E	10	G	0.8	4	DODECANESE ISLANDS. MD 3.2 (ATH).	
03	00	09	05.4	60.639	N	150.551	W	38			40	KENAI PENINSULA, ALASKA. <AGS-P>. ML 3.1 (PMR).	
03	00	26	22.37	10.75	N	60.82	W	10	G	1.2	6	TRINIDAD. MD 3.3 (TRN).	
03	01	18	13.17	51.63	N	170.31	W	33	N	4.5	1.5	14	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.3 (PMR).
03	01	37	21.27	33.08	S	72.31	W	33	N	0.6	7	OFF COAST OF CENTRAL CHILE	
03	01	45	50.7*	10.715	N	62.390	W	92	?	0.7	22	NEAR COAST OF VENEZUELA. MD 3.9 (TRN). Felt (II) on Trinidad.	
03	03	19	30.4*	31.591	S	68.680	W	10	G	1.0	6	SAN JUAN PROVINCE, ARGENTINA	
03	04	26	52.27	21.36	S	173.75	W	33	N	4.7	1.4	13	TONGA ISLANDS
03	05	16	06.9*	39.667	N	29.360	E	10	G	0.4	5	TURKEY	
03	05	16	58.07	33.90	S	72.08	W	10	G	0.4	8	OFF COAST OF CENTRAL CHILE	
03	06	58	44.2	39.322	N	25.516	E	11	3.7	0.9	38	AEGEAN SEA. ML 3.6 (ATH).	
03	08	36	23.9*	38.174	N	138.333	E	236	4.2	0.5	15	NEAR WEST COAST OF HONSHU, JAPAN	
03	08	58	49.6*	39.270	N	27.725	E	10	G	0.8	6	TURKEY	
03	09	10	42.5	46.056	N	14.138	E	10	G	1.0	10	YUGOSLAVIA. ML 2.7 (KBA), 2.1 (LJU). MD 2.7 (LJU). Felt (IV) at Poljane nad Skofjo Loko.	
03	09	14	29.6*	39.654	N	142.378	E	69	*	0.8	10	NEAR EAST COAST OF HONSHU, JAPAN. MG 3.7 (JMA). Felt (II JMA) at Miyako.	
03	09	33	05.6*	39.589	N	30.515	E	10	G	0.7	5	TURKEY	
03	09	58	05.2	46.110	N	14.106	E	10	G	1.4	7	YUGOSLAVIA. ML 2.1 (KBA), 1.9 (LJU). MD 1.7 (TRI).	
03	11	29	32.3*	17.897	N	99.654	W	33	N	1.2	6	GUERRERO, MEXICO	
03	13	15	57.1*	60.006	N	4.772	E	10	G	0.1	7	SOUTHERN NORWAY. MD 1.8 (BER).	
03	14	19	39.77	44.24	N	7.53	E	10	G	0.1	4	NORTHERN ITALY. MD 1.5 (STR).	
03	16	35	24.6*	62.236	N	151.204	W	78			5	CENTRAL ALASKA. <AGS-P>.	
03	17	04	18.2*	15.695	N	60.027	W	10	G	0.8	11	LEEWARD ISLANDS. ML 3.6 (FDF).	
03	17	08	53.4*	39.254	N	23.485	E	10	G	1.5	6	AEGEAN SEA. ML 2.7 (ATH).	
03	17	45	07.5*	3.555	N	124.562	E	323	*	0.4	15	CELEBES SEA	
03	17	46	34.4*	37.422	N	121.795	W	9	4.5 4.3		69	CENTRAL CALIFORNIA. <BRK>. ML 4.7 (BRK). Mo=2.2*10**16 Nm (BRK). Slight damage (VI) at San Jose. Felt (V) at Gilroy, Monte Serano, Santa Clara, Santa Cruz and Sunnyvale. Felt (IV) at Alviso, Brisbane, Brookdale, Burlingame, Campbell, Coyote, Felton, Fremont, Livermore, Los Altos, Los Gatos, Millbrae, Modesto, Monterey, Mountain View, New Almaden, Pleasanton, Redwood Estates, San Anselmo, San Bruno, San Carlos, San Francisco, San Martin, San Mateo and Stockton. Felt from Monterey to Santa Rosa.	
03	18	01	41.6	45.983	N	14.099	E	10	G	1.5	8	YUGOSLAVIA. ML 1.8 (KBA), 1.6 (LJU).	
03	18	06	10.67	14.93	S	167.99	E	195	?	4.9	1.2	8	VANUATU ISLANDS
a 03	19	32	41.1	41.616	N	143.896	E	43	4.8 5.0	1.0	46	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Urakawa.	
03	19	39	32.2	25.170	N	94.652	E	67	D	5.2	1.0	235	BURMA-INDIA BORDER REGION
03	22	20	30.6*	39.731	N	122.680	W	5	G	1.0	7	NORTHERN CALIFORNIA. ML 2.7 (BRK).	
03	23	15	17.5*	36.770	N	121.258	W	7			15	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK). Felt at Prunedale.	
03	23	37	04.4	40.353	N	20.554	E	5	G	1.3	13	GREECE-ALBANIA BORDER REGION. MD 3.1 (ATH).	
04	01	13	43.4*	42.820	N	144.260	E	33	N	4.7	0.7	15	HOKKAIDO, JAPAN REGION
04	06	39	58.2*	44.044	N	112.045	W	5	G	0.9	5	EASTERN IDAHO. ML 3.0 (BUT).	
04	08	44	29.2*	39.160	N	27.553	E	10	G	0.3	6	TURKEY	
04	08	50	16.6*	60.145	N	4.756	E	10	G	0.2	7	SOUTHERN NORWAY. MD 2.0 (BER).	
04	09	14	03.3	25.870	S	179.192	E	512	*	4.5	0.8	27	SOUTH OF FIJI ISLANDS
04	09	20	56.4*	60.033	N	4.846	E	10	G	0.2	7	SOUTHERN NORWAY. MD 1.8 (BER).	
04	10	01	30.3*	60.551	N	4.909	E	10	G	0.0	4	SOUTHERN NORWAY. MD 1.9 (BER).	
04	11	03	58.5	22.815	S	176.947	W	177	*	4.9	0.9	50	SOUTH OF FIJI ISLANDS
04	11	21	46.27	45.87	N	14.65	E	5	G	1.1	4	YUGOSLAVIA	
04	11	32	11.8	26.897	N	34.917	E	10	G	4.4	0.9	15	RED SEA
04	11	38	43.3*	59.365	N	6.062	E	10	G	0.1	5	SOUTHERN NORWAY. MD 1.8 (BER).	
04	13	12	46.8*	60.646	N	6.304	E	10	G	0.7	6	SOUTHERN NORWAY. MD 1.7 (BER).	
04	14	03	57.57	23.32	S	179.47	W	539	?	4.6	1.1	12	SOUTH OF FIJI ISLANDS
04	16	35	28.3*	62.479	N	150.920	W	74			50	CENTRAL ALASKA. <AGS-P>.	
04	17	08	08.6	46.438	N	5.041	E	10	G	1.2	14	FRANCE. ML 3.1 (LDG).	
04	17	17	19.3*	6.912	S	129.525	E	165	*	4.6	1.3	15	BANDA SEA
04	17	38	26.87	32.48	S	71.61	W	25			0.5	8	NEAR COAST OF CENTRAL CHILE
04	18	10	16.4	39.181	N	23.378	E	25			1.2	11	AEGEAN SEA. ML 2.8 (ATH).
04	18	15	57.07	7.10	S	129.59	E	164	?		1.8	7	BANDA SEA
04	18	31	52.8*	44.517	N	6.754	E	10	G	0.5	6	FRANCE. ML 2.4 (GEN).	
04	19	09	57.0*	18.972	N	155.288	W	24	4.6		78	HAWAII. <HVO-P>. MD 4.4 (HVO). Felt (IV) at Ninole and (III) at Paauhau. Also felt at Hawaii Volcanoes National Park, Hawaiian Ocean View Estates, Honakaa, Kono, Pahala, Papaikou, Naalehu, Paradise Park, Royal Gardens and Waimea.	
a 04	19	38	22.47	37.87	N	28.31	E	10	G	1.0	5	TURKEY	
04	20	10	52.1	25.017	N	123.359	E	141	5.0	1.0	106	NORTHEAST OF TAIWAN	
04	21	20	06.97	37.19	N	17.89	E	10	G	0.7	7	IONIAN SEA	
04	22	46	59.2*	58.181	N	151.546	W	50			42	KODIAK ISLAND REGION. <AGS-P>. ML 4.0 (PMR).	
05	00	04	27.7	3.473	S	136.515	E	81	D	5.1	0.8	18	WEST IRIAN
05	01	30	19.9	46.887	N	154.046	E	35	D	5.2 4.4	0.9	102	KURIL ISLANDS REGION
05	02	25	36.87	39.63	N	142.58	E	33	N		0.8	8	NEAR EAST COAST OF HONSHU, JAPAN. MG 3.6 (JMA). Felt (II JMA) at Miyako and (I JMA) at Ofunato.
05	04	36	01.1	46.442	N	12.378	E	10	G	1.0	6	NORTHERN ITALY. ML 2.0 (KBA). MD 2.5 (LJU).	
05	08	00	58.8*	62.394	N	151.445	W	87			26	CENTRAL ALASKA. <AGS-P>.	
05	09	23	32.3*	39.148	N	27.610	E	10	G	0.4	5	TURKEY	
05	10	57	52.1*	3.009	N	127.900	E	33	N	4.3	0.6	7	TALAUD ISLANDS
05	10	58	35.2*	35.344	N	24.531	E	10	G	0.8	5	CRETE. MD 3.8 (ATH).	
05	11	27	48.0	20.790	S	69.923	W	37	D	4.8	1.1	42	NORTHERN CHILE
05	11	54	03.0*	47.517	N	6.652	E	10	G	0.5	6	FRANCE. ML 2.5 (LDG).	

05	12 01 18.6& 48.807 N	122.070 W	2				19	WASHINGTON. <SEA>. CL 2.8 (SEA). Felt at Deming.
05	12 03 26.2% 60.629 N	6.251 E	10 G			0.8	7	SOUTHERN NORWAY. MD 1.6 (BER).
05	12 34 46.7* 18.976 N	145.329 E	232 *	4.4		0.5	15	MARIANA ISLANDS
05	12 47 32.5 40.852 N	30.471 E	10 G	3.8		1.0	25	TURKEY. Felt at Adopazari.
05	15 09 06.5 34.667 N	24.146 E	33	4.8 4.2		1.2	155	CRETE. ML 4.4 (ATH).
05	16 11 27.4? 9.78 N	56.54 E	10 G	4.9		0.4	11	CARLSBERG RIDGE
05	18 06 04.2? 23.02 N	142.46 E	33 N	4.5 3.9		1.3	7	VOLCANO ISLANDS REGION
05	18 44 45.6* 18.122 S	178.072 W	620 *	4.9		0.9	26	FIJI ISLANDS REGION
05	21 43 33.3* 36.710 N	71.568 E	33 N	3.8		0.4	8	AFGHANISTAN-USSR BORDER REGION
05	21 45 46.8? 51.05 N	15.78 E	10 G			1.2	5	POLAND. ML 3.0 (VKA), 2.7 (KBA).
05	22 04 33.9% 40.573 N	27.988 E	10 G			0.5	8	TURKEY
05	22 33 50.1* 11.384 S	122.832 E	151 *	4.8		1.3	14	SOUTH OF TIMOR
05	22 33 55.1& 60.068 N	152.821 W	90				27	SOUTHERN ALASKA. <AGS-P>.
05	22 36 35.9* 45.875 N	150.571 E	33 N	4.5		1.3	32	KURIL ISLANDS
a 05	23 47 49.3 20.857 S	69.028 W	112 D	5.7		1.1	199	NORTHERN CHILE. Felt (IV) in northern Chile and parts of southern Peru.
06	00 34 12.6 40.578 N	19.704 E	5 G			1.1	9	ALBANIA
06	02 35 51.3 44.511 N	71.144 W	5 G			0.6	16	NORTHERN NEW ENGLAND. mbLg 3.4 (NEIS), 3.5 (WES). Felt (IV) at Berlin, Garham and Lancaster, New Hampshire. Also felt (IV) at Bethel, Maine; Guildhall and Lunenburg, Vermont. Felt (III) at Bartlett, Gravelton, Jefferson, Lisbon, Littleton, Milan, Randolph, Sanbornville and Woodsville, New Hampshire. Also felt (III) at Bryant Pond, East Andover, Hanover, Locke Mills, Mexico, Rumford Center, Rumford Point, West Bethel and West Paris, Maine.
06	03 24 39.6* 11.019 S	167.047 E	33 N	4.4 4.1		1.3	12	SANTA CRUZ ISLANDS
06	04 13 37.6* 29.675 S	71.071 W	10 G			0.7	7	NEAR COAST OF CENTRAL CHILE
06	05 47 52.6* 25.120 N	95.257 E	116 ?	4.1		1.5	10	BURMA-INDIA BORDER REGION
06	06 45 43.2? 16.16 S	173.14 W	33 N	4.7		1.2	20	TONGA ISLANDS
06	06 47 20.7 51.479 N	175.730 W	33 N	4.7		1.2	40	ANDREANOF ISLANDS. ALEUTIAN IS. Felt on Adak.
06	07 32 24.9& 60.116 N	153.289 W	147				50	SOUTHERN ALASKA. <AGS-P>.
f 06	08 05 57.1 19.306 S	169.002 E	166 G	6.1		1.3	282	VANUATU ISLANDS. mb 6.3 (BRK). Felt at Chepenehe, Loyalty Islands and Noumea, New Caledonia. Two events about 4 seconds apart. Depth from broadband displacement seismograms, based on second, larger event.
06	08 45 54.1 33.480 N	132.429 E	13			0.7	11	SHIKOKU, JAPAN. MG 3.9 (JMA). Felt (II JMA) at Uwajima.
06	09 02 15.8& 60.288 N	153.699 W	192				52	SOUTHERN ALASKA. <AGS-P>.
06	09 27 09.0 44.582 N	7.225 E	10 G			0.4	24	NORTHERN ITALY. ML 2.9 (LDG), 2.5 (GEN).
06	10 32 51.3? 61.15 N	2.28 E	10 G			0.7	5	NORWEGIAN SEA. MD 2.1 (BER).
06	10 44 24.5? 60.91 N	4.86 E	10 G			0.5	4	SOUTHERN NORWAY. MD 1.7 (BER).
06	10 46 30.0% 41.154 N	28.892 E	10 G			0.5	6	TURKEY
06	11 26 00.2% 39.311 N	27.723 E	10 G			0.8	5	TURKEY
06	11 41 48.9 40.015 N	19.750 E	10 G			1.2	12	ALBANIA. MG 2.8 (TIR).
06	12 30 37.4% 60.722 N	5.536 E	10 G			0.5	7	SOUTHERN NORWAY. MD 1.6 (BER).
06	12 31 50.8% 60.617 N	5.492 E	10 G			0.3	6	SOUTHERN NORWAY. MD 1.6 (BER).
06	13 05 15.1 44.716 N	3.585 W	10 G			1.0	39	BAY OF BISCAY. ML 4.2 (LDG).
06	13 12 58.7? 58.10 N	6.35 E	0 G			0.5	5	SOUTHERN NORWAY. MD 2.2 (BER). Probable explosion.
06	13 48 44.3 43.925 N	146.686 E	124 *	4.8		1.0	83	KURIL ISLANDS. Felt (II JMA) at Nemuro and (I JMA) at Kushira, Hokkaido.
06	16 04 31.3& 60.720 N	150.771 W	50				41	KENAI PENINSULA, ALASKA. <AGS-P>.
06	16 10 04.0 36.046 N	114.661 W	5 G			0.6	17	SOUTHERN NEVADA. ML 2.7 (NEIS). Felt in the Boulder City area and at Hoover Dam.
06	16 54 29.9 19.072 S	67.130 W	242	4.8		1.1	22	SOUTHERN BOLIVIA
06	17 33 24.3? 29.74 S	177.86 W	56 ?	5.0		1.2	20	KERMADEC ISLANDS. Felt (IV) on Raoul Island.
06	18 34 35.7 39.268 N	23.496 E	10 G			0.8	9	AEGEAN SEA. ML 3.1 (ATH).
06	18 35 03.8 46.235 N	13.505 E	10 G			0.6	7	AUSTRIA. ML 1.9 (LJU), 1.9 (KBA). MD 2.1 (TRI).
06	18 50 44.4 40.321 S	75.036 W	33 N	5.2 3.9		1.1	53	OFF COAST OF SOUTHERN CHILE
06	18 55 16.5* 22.503 S	179.223 E	633 *	4.5		1.1	28	SOUTH OF FIJI ISLANDS
06	18 58 33.8? 39.08 N	29.53 E	10 G			1.6	5	TURKEY
06	18 59 18.5? 4.85 S	136.13 E	33 N	4.4		1.2	6	WEST IRIAN REGION
06	19 15 05.2* 11.020 S	166.739 E	33 N	4.6 4.3		1.2	19	SANTA CRUZ ISLANDS
06	22 10 21.0* 45.967 N	15.493 E	10 G			1.3	8	YUGOSLAVIA. MD 2.8 (LJU). ML 2.2 (KBA). Felt (V) at Brestanica.
06	22 16 16.8% 40.094 N	29.180 E	10 G			1.2	6	TURKEY
06	22 19 56.7% 40.095 N	29.156 E	10 G			1.1	7	TURKEY
06	22 30 38.1* 33.640 N	24.568 E	27 *	3.5		1.1	16	MEDITERRANEAN SEA
06	22 33 41.0 19.652 S	64.083 W	24 *	5.0		1.4	36	SOUTHERN BOLIVIA
06	23 36 49.5 34.022 N	24.804 E	45	4.5		0.9	71	CRETE
06	23 49 47.6 4.255 S	143.406 E	149 *	5.0		0.8	23	PAPUA NEW GUINEA
07	00 41 46.0* 33.462 N	24.470 E	33 N	4.1		1.4	8	MEDITERRANEAN SEA. MD 4.0 (ATH).
07	03 25 11.8? 3.21 S	104.11 E	341 *	4.7		1.0	12	SOUTHERN SUMATRA
07	03 27 00.5* 36.106 N	27.066 E	10 G			0.7	5	DODECANESE ISLANDS. MD 3.5 (ATH).
07	04 32 34.8? 34.41 N	17.58 E	10 G			1.3	13	MEDITERRANEAN SEA. MD 3.4 (ATH).
07	04 33 01.2 43.393 N	5.429 E	10			0.6	15	NEAR SOUTH COAST OF FRANCE. MD 3.0 (STR).
07	05 43 22.7* 33.720 N	73.078 E	33 N	4.2		1.4	12	PAKISTAN
07	06 35 36.9? 24.53 S	178.46 E	646 ?	4.8		1.2	9	SOUTH OF FIJI ISLANDS
07	06 36 13.5 48.090 N	7.950 E	10 G			0.7	11	FRANCE. ML 3.0 (LDG). MD 2.5 (STR).
07	06 45 29.0? 15.07 S	174.85 W	33 N			0.9	6	TONGA ISLANDS
07	08 26 48.9 47.716 N	105.602 W	5 G			0.9	14	MONTANA. ML 3.5 (NEIS), 3.9 (BUT).
07	08 51 48.9* 36.702 N	71.249 E	203 ?	4.3		0.8	13	AFGHANISTAN-USSR BORDER REGION
07	09 24 58.0% 39.150 N	27.582 E	10 G			0.2	5	TURKEY
07	09 55 15.2? 30.76 N	51.65 E	33 N			0.6	7	IRAN. ML 3.4 (BMU).
07	10 33 34.4 42.941 N	18.403 E	10 G			1.3	31	YUGOSLAVIA. MD 4.0 (TRI), 3.2 (TTG).
07	12 31 41.8& 60.130 N	153.562 W	155				11	SOUTHERN ALASKA. <AGS-P>.
07	12 54 41.6 6.809 N	73.036 W	151	4.9		1.1	70	NORTHERN COLOMBIA. Felt at Cucuta, Bucaramanga and Duitama.
07	13 32 11.6 51.341 N	29.981 W	10 G	5.3 4.8		1.0	228	NORTH ATLANTIC RIDGE
07	13 49 48.3 45.729 N	14.337 E	10 G			1.0	6	YUGOSLAVIA. MD 2.7 (LJU), 2.2 (TRI).
07	15 27 57.5? 59.51 S	29.70 W	10 G	4.5		1.0	6	SOUTH SANDWICH ISLANDS REGION
07	15 28 19.0% 60.634 N	6.239 E	10 G			0.7	7	SOUTHERN NORWAY. MD 1.9 (BER).
07	16 04 04.7? 2.96 N	126.99 E	89 ?	4.3		0.3	5	MOLUCCA PASSAGE

07	16 25 02.9	43.295 N	10.816 E	10 G	0.4	10	CENTRAL ITALY. MD 3.0 (FIR).
07	17 15 53.4*	39.233 N	23.467 E	10 G	0.3	5	AEGEAN SEA. ML 2.9 (ATH).
07	17 26 05.1*	44.65 N	6.93 E	10 G	0.4	4	FRANCE. ML 2.0 (GEN).
07	18 00 34.7*	36.611 N	141.612 E	33 N	0.8	8	NEAR EAST COAST OF HONSHU, JAPAN
07	18 17 03.1*	41.157 N	20.019 E	10 G	1.3	7	ALBANIA. ML 2.7 (SKO).
07	18 45 22.2	12.516 S	122.161 E	33 N 5.2	0.9	28	SOUTH OF TIMOR
07	19 13 16.8*	45.536 N	14.449 E	10 G	1.5	6	YUGOSLAVIA. MD 2.5 (LJU), 2.1 (TRI).
07	20 07 30.2*	33.620 N	117.900 W	13 5.0	74		SOUTHERN CALIFORNIA. <PAS-P>. ML 4.5 (PAS), 4.6 (BRK). Slight damage (VI) at Corona del Mar, Costa Mesa and Newport Beach. Felt (V) at Artesia, Anaheim, Buena Park, Camp Pendleton, Cypress, Dana Point, Garden Grove, Huntington Beach, Irvine, Laguna Beach, Long Beach, Orange, Santa Ana, Surfside and Tustin. Felt (IV) at Avalon, Bellflower, Bonsall, Downey, East Irvine, El Toro, La Mirada, Lakewood, Lomita, Los Angeles, Las Alamos, Norwalk, Oceanside, Pico Rivera, Placentia, San Clemente, San Luis Rey, South Gate, Stanton, Sunset Beach and Yorba Linda. Felt throughout much of southern California.
07	20 46 20.4*	34.103 N	135.214 E	10 G	0.9	5	NEAR S. COAST OF SOUTHERN HONSHU. MG 3.1 (JMA). Felt (II JMA) at Wakayama.
07	20 51 48.4	2.428 S	139.434 E	33 N 4.6 5.0	1.1	17	NEAR N. COAST OF WEST IRIAN
07	20 56 49.0*	34.11 N	135.23 E	10 G	0.3	4	NEAR S. COAST OF SOUTHERN HONSHU. MG 2.7 (JMA). Felt (I JMA) at Wakayama.
a 07	21 06 21.5	58.685 S	148.750 E	10 G 5.2 5.1	1.0	34	WEST OF MACQUARIE ISLAND
07	21 39 39.1	20.434 N	100.705 E	10 G 4.2	1.4	19	SOUTHEAST ASIA
07	21 40 43.9	54.085 N	162.711 W	33 N	1.4	13	ALASKA PENINSULA
07	21 45 18.6	20.576 N	100.586 E	10 G 4.6	1.2	50	SOUTHEAST ASIA
07	22 12 42.1	39.284 N	23.603 E	10 G	1.2	20	AEGEAN SEA. MD 3.4 (ATH).
07	22 35 25.7*	28.194 N	96.493 E	33 N	0.7	8	INDIA-CHINA BORDER REGION
07	22 43 22.5*	19.067 S	167.656 E	10 G 3.9	1.1	13	VANUATU ISLANDS REGION
07	23 17 59.9*	57.346 N	143.075 W	10 G		13	GULF OF ALASKA. <AGS-P>.
07	23 24 39.9	44.509 N	6.867 E	10 G	0.4	6	FRANCE. ML 1.8 (GEN).
07	23 56 07.3*	36.023 N	25.922 E	33 N	1.3	7	DODECANESE ISLANDS. ML 3.9 (ATH).
08	00 04 44.2	12.938 N	44.938 W	10 G 4.7 4.5	1.1	50	NORTH ATLANTIC RIDGE
08	00 07 00.8*	0.374 S	126.240 E	76 * 4.9	1.1	14	MOLUCCA SEA
08	00 09 04.5	12.976 N	44.780 W	10 G 4.4 4.8	0.8	17	NORTH ATLANTIC RIDGE
08	00 24 32.5	32.012 S	71.545 W	72 * 5.5	1.0	62	NEAR COAST OF CENTRAL CHILE. Felt (III) at Valparaiso.
08	00 57 43.6	33.999 N	24.582 E	33 N 4.0	1.0	17	MEDITERRANEAN SEA
08	01 15 13.6*	36.813 N	30.139 E	5 G	1.4	7	TURKEY
08	01 16 08.0*	57.093 N	143.388 W	10 G		37	GULF OF ALASKA. <AGS-P>.
a 08	01 22 23.2*	57.064 N	143.490 W	10 G 4.9 4.7	181		GULF OF ALASKA. <AGS-P>. ML 4.8 (PMR). Ms 4.7 (BRK).
08	01 24 43.8*	57.062 N	143.429 W	10 G	1.0	5	GULF OF ALASKA. ML 4.6 (PGC). Many readings lost in coda of previous event.
a 08	01 32 48.5	37.731 S	50.071 E	10 G 5.0 4.9	1.0	63	ATLANTIC-INDIAN RISE
08	01 47 07.7*	43.343 N	21.191 E	10 G	1.4	7	YUGOSLAVIA. MG 1.7 (BEO).
a 08	03 06 01.5	15.737 S	173.001 W	33 D 5.4 5.7	1.1	190	TONGA ISLANDS. Mo=1.3*10**18 Nm (PPT). Ms 5.7 (BRK).
08	03 36 46.2	39.409 N	8.913 W	18 4.5 4.7	1.3	98	PORTUGAL. Felt (V) in the Amies de Baixo area and (II) at Porto.
08	03 40 35.0*	60.086 N	153.231 W	128		12	SOUTHERN ALASKA. <AGS-P>.
08	04 25 04.9	42.830 N	18.733 E	40 * 3.7	1.4	118	YUGOSLAVIA. ML 4.5 (LJU), 4.3 (ZAG), 4.2 (ROM). MD 4.1 (TTG). Felt (VI) at Niksic and (IV) at Danilovgrad, Titograd, and Dubrovnik.
08	04 50 54.1	42.844 N	18.755 E	23	1.2	48	YUGOSLAVIA. MD 3.2 (TTG). Felt (IV) in the Niksic area.
08	05 45 50.6	42.664 N	2.412 W	10 G	1.0	9	SPAIN. MG 3.2 (MDD).
08	05 52 36.2	5.483 S	141.717 E	33 N 4.5	0.9	15	PAPUA NEW GUINEA
08	06 33 29.4*	39.23 N	8.91 W	5 G	1.1	5	PORTUGAL. MG 3.0 (MDD).
08	07 33 01.6	39.289 N	23.599 E	10	0.7	13	AEGEAN SEA. ML 3.1 (ATH).
08	08 02 19.7*	39.266 N	27.730 E	10 G	0.4	5	TURKEY
08	08 05 44.4	37.257 N	24.354 W	10 G 4.9 4.4	0.9	150	AZORES ISLANDS REGION. Felt (IV) on Santa Maria and (III) on southeastern Sao Miguel.
08	08 31 53.0*	39.150 N	27.654 E	10 G	0.4	5	TURKEY
08	08 49 40.3*	60.82 N	2.56 E	10 G	1.1	5	NORTH SEA. MD 1.8 (BER).
08	09 03 37.9	26.321 N	96.721 E	33 N 4.4	1.2	17	BURMA
08	09 29 00.4*	49.824 S	164.601 E	10 G 4.9	0.8	11	AUCKLAND ISLANDS REGION
08	12 40 28.4	0.755 S	123.508 E	75 * 4.7	1.2	14	MINAHASSA PENINSULA
08	14 44 35.8	47.350 N	153.242 E	56 D 4.9	0.8	49	KURIL ISLANDS
08	15 27 12.2*	7.658 N	75.326 W	87 *	1.2	12	NORTHERN COLOMBIA
08	19 52 34.5*	51.53 N	179.31 W	33 N 4.0	0.4	7	ANDREANOF ISLANDS, ALEUTIAN IS.
08	20 48 44.2*	19.79 S	174.07 E	33 N	0.4	5	VANUATU ISLANDS REGION
08	21 15 40.9	44.881 N	17.477 E	10 G	1.2	27	YUGOSLAVIA. ML 3.6 (ZAG), 3.4 (VKA), 3.2 (KBA), 2.7 (LJU). MD 3.6 (TRI). Felt (IV) at Banja Luka.
08	21 58 46.4*	17.909 N	101.275 W	37 D 4.5	1.5	20	NEAR COAST OF GUERRERO, MEXICO. Felt at Ixtapa.
08	22 42 45.1	44.189 N	7.245 E	10 G	0.3	8	NORTHERN ITALY. ML 2.1 (GEN).
08	22 52 21.3*	22.824 S	69.452 E	10 G 4.8	1.0	12	MID-INDIAN RISE
08	23 51 24.4	37.765 N	20.781 E	10 G	1.0	14	IONIAN SEA. ML 3.5 (ATH).
09	00 28 20.8*	27.561 S	69.436 W	126 ?	1.3	6	NORTHERN CHILE
09	02 07 38.1*	35.200 N	120.800 W	9		11	CENTRAL CALIFORNIA. <BRK>. ML 2.7 (BRK).
a 09	02 31 36.1	29.177 N	90.077 E	10 G 5.2 4.7	1.0	178	TIBET
09	02 32 00.2*	9.53 S	129.00 E	209 ? 4.4	0.7	7	TIMOR SEA
09	02 54 04.3	36.637 N	42.211 E	33 N 4.6	1.2	59	IRAQ
09	04 16 27.4	59.960 N	145.085 E	33 N 4.9	1.1	58	EASTERN SIBERIA. Felt (III) at Magadan.
09	04 42 59.5	44.137 N	21.655 E	10 G	1.5	15	YUGOSLAVIA. ML 3.0 (TTG).
09	05 03 44.5*	38.434 N	1.197 W	10 G	1.3	6	SPAIN. MD 3.1 (MDD).
a 09	05 07 50.6	51.510 N	178.386 W	33 N 5.2 4.7	0.8	224	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.7 (PMR). Felt (III) on Adak.
09	07 07 32.3*	51.076 N	177.999 W	33 N 4.8	1.3	23	ANDREANOF ISLANDS, ALEUTIAN IS.
09	07 29 03.6*	34.250 N	117.100 W	8		14	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
09	07 42 22.6*	35.63 N	26.35 E	33 N	0.5	4	CRETE. MD 3.1 (ATH).
09	07 51 37.9*	61.547 N	151.827 W	0		39	SOUTHERN ALASKA. <AGS-P>. ML 3.1 (PMR).
09	08 45 48.2*	61.534 N	151.790 W	0		36	SOUTHERN ALASKA. <AGS-P>.
a 09	09 14 34.1	16.265 S	172.845 W	25 D 5.1 4.9	1.2	76	SAMOA ISLANDS REGION
a 09	09 22 34.8	20.791 S	178.703 W	593 5.1	0.8	140	FIDJI ISLANDS REGION

09	09 38 29.1*	9.799 S	119.661 E	33 N	4.2	1.2	8	SUMBA ISLAND REGION
09	10 01 37.7?	47.17 N	7.28 E	10 G		0.4	5	SWITZERLAND. ML 2.3 (LDG).
09	10 33 34.5&	50.461 N	119.517 W	18 G			28	BRITISH COLUMBIA. <PGC-P>. ML 3.5 (PGC). CL 3.6 (SEA). Felt at Enderby, Salmon Arm, Sarrenta and Vernon.
09	10 52 21.5?	19.26 N	95.73 E	33 N	3.9	0.7	7	BURMA
09	11 24 19.3&	40.419 N	110.942 W	9			15	UTAH. <SLC-P>. ML 3.2 (SLC). Felt (II) at Tabiona.
09	12 38 15.8*	6.536 S	147.918 E	67 *	4.8	1.2	23	EAST PAPUA NEW GUINEA REGION
09	12 47 22.5*	2.675 N	128.533 E	33 N	5.1	0.8	16	HALMAHERA
09	12 50 40.2%	39.369 N	28.360 E	10 G		1.1	5	TURKEY
09	13 06 07.4?	40.88 N	122.39 E	10 G		0.4	4	NORTHEASTERN CHINA. ML 3.8 (BJI).
09	13 21 59.5%	39.368 N	28.373 E	10 G		0.6	7	TURKEY
09	15 48 46.1	2.930 N	84.347 W	10 G	5.0	1.1	55	OFF COAST OF CENTRAL AMERICA
09	15 50 13.3*	2.557 N	84.419 W	10 G	4.9	0.9	16	OFF COAST OF CENTRAL AMERICA
09	16 03 53.7&	58.966 N	153.016 W	75			33	KODIAK ISLAND REGION. <AGS-P>.
09	16 45 36.7	39.376 N	28.419 E	10 G		0.9	15	TURKEY. MD 3.2 (ATH).
09	16 57 06.5	20.527 S	174.378 E	33 N	5.1 5.1	1.0	53	VANUATU ISLANDS REGION
09	17 01 34.3%	39.381 N	28.411 E	10 G		1.2	9	TURKEY
09	17 36 19.7&	57.570 N	148.739 W	10 G			15	GULF OF ALASKA. <AGS-P>.
09	17 39 11.1%	39.362 N	28.383 E	10 G		0.6	13	TURKEY
09	17 50 35.7?	20.26 S	178.88 W	490 ?	4.2	1.2	19	FIJI ISLANDS REGION
09	19 11 25.9	39.373 N	28.448 E	10 G		1.1	15	TURKEY. MD 3.2 (ATH).
09	19 39 38.7*	37.779 N	14.778 E	10 G		1.0	6	SICILY
09	19 53 16.1?	11.37 S	33.99 E	10 G	4.2	0.3	5	MALAWI
09	20 43 18.6*	51.819 N	174.509 W	33 N	4.1	0.7	8	ANDREANOF ISLANDS, ALEUTIAN IS.
09	20 44 08.0	41.821 N	22.875 E	10 G		1.3	8	YUGOSLAVIA. ML 2.8 (SKO).
09	20 46 28.4*	41.855 N	22.803 E	10 G		1.3	8	YUGOSLAVIA. ML 2.3 (SKO).
09	20 50 05.1	41.830 N	22.863 E	10 G		1.3	15	YUGOSLAVIA. ML 3.1 (SKO). MD 2.9 (ATH).
09	20 52 32.8*	41.818 N	22.846 E	10 G		1.2	5	YUGOSLAVIA. ML 2.2 (SKO).
09	20 58 29.5&	37.422 N	121.807 W	6			22	CENTRAL CALIFORNIA. <BRK>. ML 3.3 (BRK). Felt (V) at San Jose. Felt (IV) at Alvisa and Cupertino.
09	21 25 49.5?	44.60 N	7.00 E	10 G		0.3	4	NORTHERN ITALY. ML 2.1 (GEN).
09	21 46 17.2	39.372 N	28.428 E	10 G		0.8	16	TURKEY. MD 3.2 (ATH).
09	22 01 03.3*	48.216 N	152.851 E	33 N	4.8	0.6	35	KURIL ISLANDS
09	22 04 26.2	18.980 N	145.073 E	554	4.5	0.7	49	MARIANA ISLANDS
09	22 13 30.2	41.817 N	22.862 E	10 G		1.0	9	YUGOSLAVIA. ML 2.4 (SKO).
09	23 08 17.7	42.101 N	15.581 E	10 G		1.1	9	ADRIATIC SEA
09	23 18 17.7*	36.487 N	1.286 E	33 N		1.5	8	ALGERIA. MG 3.4 (MDD).
09	23 41 37.5?	40.94 N	19.67 E	10 G		1.5	5	ALBANIA. ML 1.8 (SKO).
09	23 56 39.3*	44.244 N	129.540 W	10 G	4.2	0.8	34	OFF COAST OF OREGON
10	00 29 42.0%	39.330 N	28.375 E	10 G		0.7	8	TURKEY
10	00 44 56.9	56.682 N	156.890 W	83 ?		0.4	15	ALASKA PENINSULA
10	01 34 02.8	41.832 N	22.870 E	12		0.8	10	YUGOSLAVIA. ML 2.7 (SKO). MD 2.8 (ATH).
10	02 34 38.2	44.235 N	129.236 W	10 G	4.3	0.9	53	OFF COAST OF OREGON
10	03 32 33.0%	39.370 N	28.370 E	10 G		0.5	5	TURKEY
10	03 37 11.6%	40.021 N	30.434 E	10 G		0.4	5	TURKEY
10	03 37 13.3?	17.98 S	178.74 W	686 ?	4.7	0.5	13	FIJI ISLANDS REGION
10	03 45 29.0	39.362 N	28.487 E	10 G		1.2	17	TURKEY
10	03 50 40.2%	39.381 N	28.363 E	10 G		0.2	5	TURKEY
10	03 54 56.9?	34.37 N	28.93 E	10 G		0.7	5	EASTERN MEDITERRANEAN SEA
10	04 02 45.4%	39.379 N	28.429 E	17		0.8	13	TURKEY
10	04 08 16.7%	39.403 N	28.332 E	10 G		0.9	6	TURKEY
10	05 08 29.2%	39.375 N	28.374 E	10 G		0.8	9	TURKEY
10	06 48 51.9	39.298 N	23.623 E	9		1.1	16	AEGEAN SEA. ML 3.0 (ATH).
10	07 37 31.9%	16.761 S	126.458 E	10 G		0.5	5	WESTERN AUSTRALIA
10	08 18 05.2*	41.835 N	22.868 E	10 G		1.1	5	YUGOSLAVIA. ML 1.8 (SKO).
10	08 42 39.5*	44.196 N	129.344 W	10 G	4.2	0.4	18	OFF COAST OF OREGON
10	10 08 40.6	6.948 S	155.719 E	67	4.9	1.0	26	SOLOMON ISLANDS. Felt (III) at Arawa, Bougainville.
10	11 38 36.3	41.966 N	24.487 E	10 G		1.4	7	GREECE-BULGARIA BORDER REGION
10	11 43 06.9?	59.35 N	2.34 E	10 G		0.2	6	NORTH SEA. MD 2.3 (BER).
10	12 10 40.9%	11.200 N	61.788 W	10 G		1.0	5	WINDWARD ISLANDS. MD 3.4 (TRN).
10	12 17 15.1*	2.667 N	128.764 E	262 ?	4.5	0.7	18	HALMAHERA
10	13 06 49.1	3.213 S	128.012 E	104 ?	4.7	1.0	18	CERAM
10	13 40 21.4?	43.47 N	24.88 E	10 G		1.0	9	BULGARIA
10	14 47 36.8?	41.150 N	28.494 E	10 G		0.8	7	TURKEY
10	14 56 05.6%	40.527 N	27.569 E	10 G		1.5	7	TURKEY
10	15 59 52.9*	44.504 N	128.862 W	10 G	4.1	1.2	12	OFF COAST OF OREGON
10	16 13 54.4*	44.346 N	129.202 W	10 G	4.3	1.3	13	OFF COAST OF OREGON
10	17 56 51.4	44.332 N	129.270 W	10 G	4.3	1.0	35	OFF COAST OF OREGON
10	18 12 16.0&	37.136 N	82.068 W	0	4.3		10	WEST VIRGINIA. <BLA>. mbLg 3.8 (BLA). Coal bump in Buchanan County, Virginia. Felt (III) at Mavisdale, Virginia.
10	18 23 13.2?	13.67 N	60.23 W	33 N		0.1	7	WINDWARD ISLANDS. ML 3.1 (FDF).
10	18 28 09.4*	41.977 N	22.585 E	10 G		1.2	6	YUGOSLAVIA. ML 2.7 (SKO).
10	20 52 11.3	43.315 N	20.989 E	10 G		1.2	20	YUGOSLAVIA. ML 2.7 (TTG).
10	20 55 44.8	10.145 S	119.039 E	33 N	5.0	1.0	36	SUMBA ISLAND REGION
10	21 14 13.8%	60.750 N	11.265 E	10 G		1.3	5	SOUTHERN NORWAY. ML 1.8 (BER). Felt.
10	21 19 03.6	35.198 N	137.164 E	43 ?		0.9	11	HONSHU, JAPAN. MG 3.7 (JMA). Felt (I JMA) at Nagaya.
10	21 22 21.3	46.591 N	6.318 E	10 G		1.1	25	SWITZERLAND. ML 3.1 (LDG).
10	22 57 02.7?	51.39 N	20.27 E	10 G		0.8	5	POLAND. ML 2.9 (KRA), 2.8 (VKA).
10	23 05 29.3	7.469 S	156.875 E	40	5.0	0.9	45	SOLOMON ISLANDS
10	23 42 03.1&	37.955 N	122.315 W	2			10	CENTRAL CALIFORNIA. <BRK>. ML 2.2 (BRK). Ma=2.0*10**13 Nm (BRK). Felt at EL Cerrita, El Sabrante and Richmond.
10	23 49 49.3	36.366 N	26.765 E	151 *		0.7	14	DODECANESE ISLANDS
11	01 07 08.4	36.647 N	27.935 E	10 G		0.8	8	DODECANESE ISLANDS. ML 3.2 (ATH).
f 11	03 56 36.9	49.488 N	159.185 E	16 G	6.3 6.6	1.0	545	KURIL ISLANDS REGION. Ms 6.1 (BRK), 6.0 (PAS). Ma=3.0*10**19 Nm (PPT). Felt (V) at Severa-Kurilsk, Mys Vasilyeva and an Shumshu; (IV) at Petrapavlovsk-Kamchatskiy. Depth from broadband displacement seismograms.
11	05 23 00.1	29.722 N	64.090 E	33 N	4.6	1.5	26	PAKISTAN
11	07 14 21.3*	32.736 S	178.846 W	33 N	5.2 4.8	1.3	21	SOUTH OF KERMADEC ISLANDS
11	09 55 54.7%	11.228 N	61.694 W	10 G		1.4	5	WINDWARD ISLANDS. MD 3.0 (TRN).
11	10 59 52.9?	4.99 S	134.83 E	33 N	4.2	1.1	7	WEST IRIAN REGION

11	11	26	53.2*	18.211	S	167.316	E	33	N	4.9	4.4	1.3	29	VANUATU ISLANDS
11	12	23	07.1	40.474	N	23.406	E	10	G			1.5	12	GREECE. MD 3.1 (ATH).
11	12	31	57.0&	33.930	N	118.628	W	6	G				5	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS). Felt (IV) at Santa Monica.
11	13	06	16.1	63.651	N	148.378	W	33	N			0.4	9	CENTRAL ALASKA. ML 3.2 (PMR).
11	13	49	15.2	34.895	N	9.142	E	38	*	4.8		1.3	84	TUNISIA
11	13	50	08.57	35.86	N	81.23	E	33	N	4.1		1.2	5	SOUTHERN XINJIANG, CHINA
11	13	53	22.4	1.040	S	126.558	E	33	N	5.0	4.6	1.0	25	MOLUCCA SEA
11	14	02	02.4	63.425	N	147.630	W	33	N			0.6	10	CENTRAL ALASKA. ML 3.5 (PMR).
11	14	40	39.9*	6.867	S	147.742	E	31				0.7	10	EAST PAPUA NEW GUINEA REGION
11	14	45	27.0	40.294	N	29.459	E	10	G			1.5	8	TURKEY
11	15	30	24.1*	38.486	S	14.718	W	10	G	4.8		1.2	20	TRISTAN DA CUNHA REGION
11	16	18	54.3	44.152	N	8.197	E	10	G			0.7	10	NORTHERN ITALY. ML 2.6 (LDG), 2.3 (GEN).
11	16	32	59.9&	47.274	N	122.907	W	47					46	WASHINGTON. <SEA>. CL 2.8 (SEA).
11	16	56	41.2*	27.685	S	26.363	E	5	G			1.4	7	REPUBLIC OF SOUTH AFRICA. MG 3.5 (BUL).
11	18	04	25.5*	24.056	N	120.846	E	33	N			1.1	8	TAIWAN
11	19	01	20.2*	11.736	N	59.843	W	10	G			1.0	15	NORTH ATLANTIC OCEAN. ML 4.0 (FDF). MD 3.8 (TRN).
11	19	40	59.8	35.991	N	139.951	E	64		4.7		1.0	26	NEAR S. COAST OF HONSHU, JAPAN. Felt (III JMA) at Utsunomiya, (II JMA) at Mito and (I JMA) at Kumagaya and Nikka.
11	20	08	41.6?	5.53	S	29.57	E	10	G			1.3	6	LAKE TANGANYIKA REGION. MG 4.1 (LSZ).
11	20	26	21.6%	60.257	N	5.017	E	10	G			0.3	6	SOUTHERN NORWAY. MD 1.5 (BER).
11	20	40	34.8	44.624	N	7.043	E	10	G			0.3	15	NORTHERN ITALY. ML 2.5 (GEN), 2.4 (LDG).
11	21	26	12.6*	41.956	N	19.212	E	10	G			1.3	9	ALBANIA. MD 2.2 (TTG).
11	22	02	26.7*	40.727	N	29.739	E	10	G			1.0	5	TURKEY
11	22	57	53.2&	60.137	N	153.036	W	120					42	SOUTHERN ALASKA. <AGS-P>.
11	23	08	02.8*	18.261	N	65.339	W	10	G			1.1	11	PUERTO RICO REGION. Minor damage in eastern Puerto Rico. Felt throughout eastern Puerto Rico and western Virgin Islands.
12	00	01	19.6*	31.160	N	50.539	E	33	N			1.3	6	IRAN
12	01	28	14.8?	0.53	N	132.57	E	33	N	4.9	3.9	1.6	6	WEST IRIAN REGION
12	03	37	32.7*	39.265	N	23.560	E	12				1.4	10	AEGEAN SEA. ML 3.2 (ATH).
12	04	26	07.4	44.245	N	6.753	E	10	G			0.4	18	FRANCE. ML 2.3 (GEN), 2.1 (LDG).
12	04	46	59.9	44.299	N	10.798	E	10	G			1.1	75	NORTHERN ITALY. MD 3.7 (TRI). ML 3.7 (LDG), 3.6 (KBA). Felt at Pistoia.
12	05	05	15.9	13.308	N	39.984	E	33	N	4.9		0.8	69	ETHIOPIA. ML 5.0 (ARO).
12	06	39	38.4&	37.805	N	121.732	W	12					27	CENTRAL CALIFORNIA. <BRK>. ML 3.6 (BRK). Mo=5.1*10**14 Nm (BRK). Felt (IV) at Dublin and Pleasantan; (III) at San Lorenzo. Also felt at Livermore.
12	06	47	31.0*	11.281	S	167.101	E	42	?	4.8		1.2	14	SANTA CRUZ ISLANDS
12	07	26	27.9	41.440	N	142.227	E	72		4.1		1.1	20	HOKKAIDO, JAPAN REGION. Felt (II JMA) at Hachinohe.
12	08	40	38.7&	31.700	N	115.760	W	6	G				24	BAJA CALIFORNIA. <PAS-P>. ML 3.4 (PAS).
12	10	05	43.2	38.098	N	22.029	E	10	G	4.4	3.7	1.2	90	GREECE. ML 4.3 (ATH). Minor damage at Leondion. Felt throughout Akhoia.
12	10	46	02.6	39.246	N	23.560	E	10	G			1.1	14	AEGEAN SEA. ML 3.5 (ATH).
12	11	35	03.3%	37.978	N	21.847	E	10	G			0.7	7	SOUTHERN GREECE. MG 3.6 (TRN).
12	12	12	45.1&	48.419	N	122.230	W	1					9	WASHINGTON. <SEA>. CL 1.5 (SEA). Felt at Mount Vernon.
12	12	45	29.8?	7.56	S	131.07	E	33	N	4.3		1.4	8	TANIMBAR ISLANDS REGION
12	13	53	29.7	38.090	N	22.080	E	14		4.2		1.2	61	GREECE. ML 4.0 (ATH).
12	15	48	52.6%	39.041	N	27.629	E	10	G			1.2	7	TURKEY
12	16	37	06.4&	40.797	N	124.668	W	15					7	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.4 (BRK).
12	17	02	11.7	35.285	N	135.445	E	371		4.2		0.9	48	SOUTHERN HONSHU, JAPAN
12	17	10	29.5&	40.818	N	124.682	W	14					7	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).
12	17	26	59.7*	51.103	N	15.992	E	10	G			1.2	5	POLAND
12	18	22	05.8	40.342	N	21.842	E	10	G			1.5	20	GREECE. MG 3.2 (TIR).
12	18	30	18.6?	25.65	N	144.07	E	33	N	4.5		0.8	9	VOLCANO ISLANDS REGION
12	19	09	37.9	43.683	N	8.414	E	10	G			0.8	23	CORSICA. ML 2.7 (GEN), 2.7 (LDG).
12	19	24	02.7	38.104	N	21.972	E	28		4.2		1.4	69	GREECE. ML 3.9 (ATH).
12	20	10	53.6*	44.600	N	6.620	E	10	G			0.3	8	FRANCE. ML 2.5 (GEN).
12	20	17	06.9&	38.800	N	122.800	W	1					8	NORTHERN CALIFORNIA. <BRK>. ML 2.6 (BRK).
12	21	11	49.0%	31.655	N	35.671	E	10	G			0.8	6	DEAD SEA REGION
12	21	43	50.4	39.273	N	23.592	E	11		4.0		1.3	59	AEGEAN SEA. ML 3.6 (ATH).
12	22	23	38.4*	59.958	S	53.619	W	10	G	5.0		1.4	29	SCOTIA SEA
12	23	31	59.9	39.278	N	23.498	E	10	G			1.4	19	AEGEAN SEA. ML 3.1 (ATH).
12	23	49	25.6%	39.576	N	28.856	E	10	G			0.1	5	TURKEY
12	23	57	05.1?	35.78	N	140.65	E	70	*	4.2		1.3	15	NEAR EAST COAST OF HONSHU, JAPAN
13	00	08	34.6	38.604	N	27.291	E	14				1.3	11	TURKEY
13	00	42	15.9?	10.69	N	86.46	W	33	N			1.2	13	OFF COAST OF COSTA RICA. MD 4.2 (HDC).
a 13	00	43	11.2	39.533	S	75.002	W	33	N	5.8	5.5	1.0	190	OFF COAST OF CENTRAL CHILE
13	00	50	29.9%	40.106	N	29.325	E	10	G			0.8	7	TURKEY
13	01	15	19.1?	41.70	N	12.69	E	11				0.7	7	SOUTHERN ITALY
13	01	30	51.5	16.429	N	119.916	E	54		4.9	4.0	1.0	93	LUZON, PHILIPPINE ISLANDS
13	02	07	35.9	34.183	N	96.713	E	33	N	4.4		1.3	22	QINGHAI PROVINCE, CHINA
13	02	10	01.0	38.919	N	24.961	E	10	G			1.0	17	AEGEAN SEA. ML 3.0 (ATH).
13	02	17	56.3*	39.402	N	23.537	E	10	G			1.5	10	AEGEAN SEA. ML 3.2 (ATH).
13	02	39	50.3	45.413	N	26.138	E	10	G			0.9	10	ROMANIA
13	02	42	45.2%	38.599	N	27.145	E	10	G			1.4	12	TURKEY
13	02	46	23.3%	38.603	N	27.153	E	10	G			1.1	8	TURKEY
13	03	26	27.8?	38.07	S	73.56	W	33	N			0.8	11	NEAR COAST OF CENTRAL CHILE
13	03	33	28.3	38.640	N	27.241	E	10	G			1.3	11	TURKEY
13	03	49	43.7*	27.287	S	177.143	W	33	N	4.8		1.3	21	KERMADEC ISLANDS REGION
13	04	04	30.1*	53.482	S	140.176	E	10	G	5.1		1.5	30	WEST OF MACQUARIE ISLAND
13	05	02	35.6&	37.420	N	121.813	W	5					17	CENTRAL CALIFORNIA. <BRK>. ML 3.0 (BRK). Mo=1.7*10**14 Nm (BRK). Felt at San Jose.
13	05	26	27.1?	17.82	N	65.63	W	10	G			0.3	6	PUERTO RICO REGION. Felt at Caguas.
13	05	45	23.9?	17.82	N	65.66	W	10	G			0.2	5	PUERTO RICO REGION
13	06	33	51.0%	38.610	N	27.192	E	10	G			1.1	5	TURKEY
13	07	16	40.4?	35.70	N	141.39	E	31				0.6	8	NEAR EAST COAST OF HONSHU, JAPAN. MG 3.6 (JMA). Felt (I JMA) at Mito.
a 13	07	25	36.7	24.472	N	92.505	E	33	N	5.1	5.0	1.2	140	INDIA-BANGLADESH BORDER REGION. Felt in the Dhaka-Chittagong area, Bangladesh. Also felt in the Agartala-Silchar area, India.
13	07	28	40.7?	38.25	N	26.38	E	10	G			1.4	5	AEGEAN SEA

13	07 45 13.9%	40.829 N	27.913 E	10 G	1.3	6	TURKEY
13	07 49 20.3	41.764 N	45.855 E	33 N 4.8	1.2	91	EASTERN CAUCASUS. Felt (V) at Tbilisi and Stepanavan; (IV) at Kirovakan, Tumanyan and Krasnaselsk; (III) at Bakuriani and Makhachkala.
13	07 55 11.3	13.263 N	39.925 E	33 N 5.3 5.2	0.9	132	ETHIOPIA. ML 5.2 (ARO).
13	08 04 41.2*	38.579 N	27.191 E	10 G	1.4	11	TURKEY
13	08 22 49.6%	38.615 N	27.180 E	10 G	0.9	5	TURKEY
13	08 44 56.0*	38.636 N	27.285 E	10 G	1.2	8	TURKEY
13	09 03 39.5	27.972 S	66.491 W	173 4.3	1.1	35	CATAMARCA PROVINCE, ARGENTINA
13	09 52 03.0%	60.693 N	6.009 E	10 G	0.3	5	SOUTHERN NORWAY. MD 1.9 (BER).
13	10 47 44.9*	27.353 N	142.566 E	33 N 4.7	1.5	24	BONIN ISLANDS REGION. Felt (I JMA) on Chichi-shima.
13	12 00 57.0*	22.045 S	68.314 W	116 D 4.1	1.5	18	NORTHERN CHILE
o 13	12 17 31.3	13.290 N	39.980 E	33 N 4.9 4.9	1.4	91	ETHIOPIA
13	12 18 23.8	38.652 N	27.192 E	10 G	1.1	14	TURKEY Felt at Izmir.
13	12 35 04.3*	13.336 N	39.963 E	33 N 4.4	1.5	9	ETHIOPIA. ML 4.3 (ARO).
13	12 55 20.1%	61.710 N	149.657 W	30	0.9	36	SOUTHERN ALASKA. <AGS-P>.
13	13 00 48.7	13.351 N	40.011 E	33 N 4.8	1.1	43	ETHIOPIA. ML 4.8 (ARO).
13	13 04 04.1	38.626 N	27.275 E	10 G	1.1	14	TURKEY
13	13 55 49.5*	5.911 S	130.544 E	33 N 4.1	1.2	8	BANDA SEA
13	14 14 31.7%	11.375 N	61.799 W	10 G	1.0	7	WINDWARD ISLANDS. MG 3.6 (TRN).
13	14 34 37.5	45.767 N	26.691 E	120 4.7	1.1	47	ROMANIA
13	14 38 28.6?	4.11 N	32.51 W	10 G	1.3	7	CENTRAL MID-ATLANTIC RIDGE
13	15 52 46.9*	5.727 S	131.027 E	111 * 4.9	1.0	15	BANDA SEA
13	16 08 40.2	38.623 N	27.188 E	10 G	1.0	26	TURKEY
13	16 17 29.1%	38.665 N	27.234 E	10 G	1.0	8	TURKEY
13	16 19 49.7*	33.563 N	24.709 E	10 G	0.9	5	MEDITERRANEAN SEA. MD 3.8 (ATH).
13	16 58 50.8*	2.103 N	126.162 E	33 N 4.7	1.4	17	MOLUCCA PASSAGE
13	17 10 15.9%	38.559 N	26.960 E	10 G	1.5	7	AEGEAN SEA
13	18 49 24.6?	55.88 N	160.90 W	168 * 4.0	0.2	11	ALASKA PENINSULA
13	19 36 11.5*	51.204 N	15.552 E	10 G	1.3	10	POLAND. ML 3.7 (VKA), 3.4 (KBA).
13	20 04 19.6	36.514 N	24.025 E	66 * 3.9	1.1	21	SOUTHERN GREECE. MD 3.7 (ATH).
13	21 34 43.5*	50.730 N	14.244 E	10 G	0.2	5	CZECHOSLOVAKIA. ML 3.4 (VKA).
13	21 39 29.0	39.549 N	29.157 E	10 G	0.9	18	TURKEY
13	22 39 10.3	40.384 N	25.953 E	10 G	0.6	6	AEGEAN SEA. MD 2.9 (ATH).
13	23 45 12.9?	70.11 N	8.34 E	0 G	0.5	5	NORWEGIAN SEA. MD 3.1 (BER).
o 14	01 15 44.5	14.879 S	167.211 E	158 * 5.2	1.3	91	VANUATU ISLANDS
14	01 57 08.6?	42.14 N	145.97 E	33 N 4.8	1.1	13	HOKKAIDO, JAPAN REGION
14	02 34 00.0*	9.342 S	118.658 E	33 N	1.0	5	SUMBAWA ISLAND REGION
14	04 17 48.0?	39.05 N	23.67 E	10 G	0.9	7	AEGEAN SEA
14	05 55 14.1%	59.928 N	153.222 W	126	20	20	SOUTHERN ALASKA. <AGS-P>.
14	05 57 06.5	37.586 N	20.873 E	54 * 3.9	1.2	33	IONIAN SEA. MD 3.6 (ATH).
14	06 39 13.8?	49.37 N	155.97 E	33 N 4.6	0.6	10	KURIL ISLANDS
14	06 45 55.0%	36.563 N	121.202 W	8	21	21	CENTRAL CALIFORNIA. <BRK>. ML 3.3 (BRK).
14	07 00 30.9%	58.422 N	142.716 W	10 G	23	23	GULF OF ALASKA. <AGS-P>.
14	07 17 43.6*	11.008 S	164.165 E	50 ? 4.8 4.1	1.5	14	SANTA CRUZ ISLANDS REGION
14	07 56 45.1*	6.954 N	72.998 W	150 * 4.6	1.0	16	NORTHERN COLOMBIA
14	08 56 06.3%	59.809 N	153.404 W	120	11	11	SOUTHERN ALASKA. <AGS-P>.
14	10 03 27.7	19.116 N	69.598 W	94 4.8	1.0	82	DOMINICAN REPUBLIC REGION
14	10 28 59.8*	37.661 N	24.912 E	10 G	1.5	5	SOUTHERN GREECE. ML 2.7 (ATH).
14	10 55 27.3	15.031 N	59.602 W	22	0.7	22	LEEWARD ISLANDS. ML 3.9 (FDF).
14	11 07 41.9*	38.629 N	27.168 E	10 G	0.3	6	TURKEY
14	11 11 48.3%	47.655 N	122.200 W	0	15	15	WASHINGTON. <SEA>. CL 1.5 (SEA). Felt in the Juanita Creek area.
14	11 17 44.7*	37.879 N	72.415 E	33 N 4.3	1.0	11	TAJIK SSR
14	11 34 16.1	40.253 N	19.872 E	10 G	1.4	12	ALBANIA. MD 3.2 (ATH).
14	11 44 39.6*	53.122 N	171.401 E	33 N 4.9	0.9	23	NEAR ISLANDS, ALEUTIAN ISLANDS
14	11 54 49.0?	44.60 N	27.48 E	10 G	1.4	8	ROMANIA
14	12 33 43.8*	40.663 N	29.990 E	10 G	1.5	9	TURKEY
o 14	12 52 26.7	19.201 N	145.522 E	168 * 5.4	1.1	146	MARIANA ISLANDS
14	13 02 50.2*	38.182 N	20.705 E	10 G	1.2	6	GREECE. MD 3.4 (ATH).
o 14	13 02 52.6	18.172 S	178.393 W	636 5.4	0.9	223	FIJI ISLANDS REGION
14	13 03 44.3?	25.27 S	174.66 W	33 N	1.3	6	SOUTH OF TONGA ISLANDS
14	13 04 42.2	18.180 S	178.475 W	635 * 5.0	0.8	92	FIJI ISLANDS REGION
14	14 53 57.7	42.303 N	19.851 E	10 G 3.2	1.3	62	YUGOSLAVIA. MD 3.8 (ATH), 3.5 (TTG).
14	16 19 01.9	17.794 N	65.616 W	10 G	0.5	12	PUERTO RICO REGION
14	16 31 35.6*	14.085 S	34.143 E	10 G	1.5	5	MALAWI. MG 3.7 (LSZ).
14	17 05 42.9%	16.863 N	61.783 W	10 G	1.3	5	LEEWARD ISLANDS. ML 3.1 (FDF).
14	17 50 51.0	49.100 N	6.889 E	10 G	1.2	7	GERMANY. MD 2.6 (STR).
14	18 19 14.8?	19.53 S	177.58 W	437 * 4.8	1.4	14	FIJI ISLANDS REGION
14	19 45 08.0	67.561 N	142.655 W	33 N	0.9	8	ALASKA
14	20 08 00.3	44.381 N	7.171 E	10 G	0.6	13	NORTHERN ITALY. ML 3.6 (LDG).
14	20 23 57.2	42.352 N	19.913 E	14 *	0.7	13	YUGOSLAVIA. MD 2.2 (TTG).
14	20 36 12.0?	17.81 N	65.65 W	10 G	0.2	5	PUERTO RICO REGION. Felt in eastern Puerto Rico.
14	22 51 52.4	23.322 N	99.308 E	33 N 4.6	1.2	34	BURMA-CHINA BORDER REGION. ML 4.7 (BJI).
14	22 57 59.6	41.132 N	74.525 E	33 N 4.6	0.6	12	KIRGHIZ SSR
14	23 24 19.3	17.845 N	65.624 W	22	0.7	13	PUERTO RICO REGION. Felt in eastern Puerto Rico.
14	23 30 39.8	32.632 N	47.743 E	33 N 4.6	1.0	83	IRAN-IRAQ BORDER REGION
14	23 35 30.1	33.642 S	71.633 W	15 *	0.6	11	NEAR COAST OF CENTRAL CHILE
15	00 27 28.2%	44.002 N	7.436 E	10 G	0.3	5	NORTHERN ITALY. MD 1.0 (STR).
15	02 24 00.6	7.193 S	126.935 E	325 * 4.8	1.0	21	BANDA SEA
15	03 02 17.6%	40.803 N	27.955 E	10 G	0.5	7	TURKEY
15	05 42 13.4	44.227 N	6.329 E	2	0.4	14	FRANCE. ML 2.5 (LDG).
15	06 35 03.2?	50.34 N	18.37 E	10 G	1.5	5	POLAND
15	06 40 24.9	87.118 N	47.405 E	10 G 4.4	1.0	36	NORTH OF FRANZ JOSEF LAND
15	07 23 19.6*	38.060 N	21.915 E	10 G	1.3	6	GREECE. ML 3.0 (ATH).
15	07 51 10.1?	17.85 N	65.72 W	10 G	0.4	6	PUERTO RICO REGION
15	07 56 53.3	42.284 N	19.877 E	10 G	1.2	46	YUGOSLAVIA. MD 3.4 (ATH), 3.2 (TTG).
15	08 04 03.4*	3.779 N	82.721 W	33 N 4.6	1.5	15	SOUTH OF PANAMA
15	08 06 13.3*	35.443 N	141.112 E	33 N 4.1	1.1	10	NEAR EAST COAST OF HONSHU, JAPAN
15	08 58 24.5%	39.489 N	29.067 E	10 G	0.4	7	TURKEY
15	10 15 08.0	46.042 N	14.142 E	10 G	1.2	8	YUGOSLAVIA. ML 1.9 (KBA).
15	12 10 45.2*	41.845 N	22.759 E	10 G	1.2	6	YUGOSLAVIA. ML 2.7 (SKO).
15	12 30 50.5*	3.128 S	147.335 E	33 N 4.7 4.6	1.2	19	BISMARCK SEA

15	14 22 34.2	41.837 N	23.692 E	10 G		0.7	8	GREECE-BULGARIA BORDER REGION. ML 2.4 (SKO).
a 15	14 26 41.2	8.453 N	61.039 W	23 G	5.8 5.1	0.9	358	VENEZUELA. Felt on southern Trinidad. Depth from broadband displacement seismograms.
15	15 04 08.77	13.59 N	120.38 E	33 N	4.6	0.4	9	MINDORO, PHILIPPINE ISLANDS
15	16 03 04.5	40.542 N	139.396 E	41	4.8	1.0	44	NEAR WEST COAST OF HONSHU, JAPAN
15	16 39 51.1	36.557 N	89.711 W	5 G		0.6	9	NEW MADRID, MISSOURI REGION. mbLg 3.0 (NEIS).
15	17 22 02.4	39.853 N	19.602 E	10 G		1.1	15	GREECE-ALBANIA BORDER REGION. MD 3.4 (ATH).
15	17 40 01.97	5.72 S	130.14 E	33 N	4.6	1.4	8	BANDA SEA
15	18 15 56.37	38.28 N	20.23 E	10 G		1.2	6	GREECE. MD 3.4 (ATH).
15	18 43 17.4	5.341 S	145.516 E	95 *	4.7	1.0	24	EAST PAPUA NEW GUINEA REGION
f 15	20 34 08.9	29.987 N	99.195 E	13 G	6.2 6.2	1.2	406	SICHUAN PROVINCE, CHINA. Four people killed, 5 injured and considerable damage in the Batang area. Seven people killed, at least 37 injured and additional damage in the area due to a number of aftershocks. Depth from broadband displacement seismograms.
15	21 05 27.67	29.92 N	99.38 E	33 N	4.6	0.4	6	SICHUAN PROVINCE, CHINA
15	21 16 43.67	30.52 N	98.45 E	33 N	4.1	1.0	7	TIBET
15	22 03 27.5	42.035 N	142.612 E	72	4.8	0.9	56	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Hiroo, Tomakamai, Urokawa and Obihiro. Also felt (I JMA) at Hachinahe, Honshu.
15	22 33 32.5	24.828 N	122.440 E	118	4.5	0.8	17	TAIWAN REGION
a 15	23 48 36.8	13.723 S	171.926 E	602	5.2	1.2	173	VANUATU ISLANDS REGION
16	00 20 37.07	39.374 N	27.730 E	10 G		0.2	5	TURKEY
16	00 26 44.67	10.86 S	165.49 E	33 N	4.9 3.8	1.2	10	SANTA CRUZ ISLANDS
16	00 50 07.37	39.405 N	27.697 E	10 G		0.7	6	TURKEY
16	01 10 06.17	51.99 N	176.25 E	33 N	4.1	1.7	9	RAT ISLANDS, ALEUTIAN ISLANDS
16	03 48 39.57	17.99 N	65.70 W	33 N		1.1	5	PUERTO RICO REGION
16	04 37 58.27	40.841 N	27.779 E	10 G		1.3	7	TURKEY
16	04 46 29.6	47.572 N	12.183 E	10 G		1.0	9	AUSTRIA. ML 3.0 (VKA), 2.3 (KBA). Felt (V) at Woergl.
16	05 23 04.27	37.903 N	27.356 E	10 G		0.8	5	TURKEY
a 16	05 24 23.3	26.533 N	126.388 E	133	5.3	1.0	199	RYUKYU ISLANDS. Felt (II JMA) on Kume-shima. Also felt (II JMA) at Naha and (I JMA) at Nago, Okinawa.
16	06 20 54.97	13.855 N	43.113 E	10 G		0.1	7	WESTERN ARABIAN PENINSULA. ML 4.1 (ARO).
a 16	06 50 24.4	1.012 N	120.061 E	27 D	5.3 4.9	1.1	98	MINAHASSA PENINSULA
16	07 15 39.77	24.324 S	67.216 W	200 *		1.0	9	CHILE-ARGENTINA BORDER REGION
16	07 28 14.67	39.513 N	74.191 E	33 N	4.1	1.0	8	SOUTHERN XINJIANG, CHINA
a 16	08 04 29.57	4.612 N	32.651 W	10 G	4.9 4.7	1.3	34	CENTRAL MID-ATLANTIC RIDGE
16	08 07 11.47	38.71 N	19.73 E	10 G		0.8	5	IONIAN SEA. MD 3.2 (ATH).
16	08 32 56.0	38.640 N	102.524 E	66 *	4.3	1.3	17	GANSU PROVINCE, CHINA
a 16	08 35 03.2	4.462 N	32.573 W	10 G	5.4 4.9	0.9	93	CENTRAL MID-ATLANTIC RIDGE
16	08 43 04.1	22.000 S	169.914 E	33 N	5.2 5.1	1.5	71	LOYALTY ISLANDS REGION
16	08 51 11.7	39.199 N	23.687 E	10 G		1.3	9	AEGEAN SEA. ML 2.6 (THE).
16	09 19 26.17	23.056 S	114.850 W	10 G	4.6	1.0	17	EASTER ISLAND REGION
16	09 29 16.77	4.94 N	32.41 W	10 G	4.9	1.4	6	CENTRAL MID-ATLANTIC RIDGE
16	09 46 01.8	39.105 N	27.619 E	10 G		0.5	6	TURKEY
16	10 33 05.5	34.229 N	33.798 E	29 *		0.3	8	CYPRUS
a 16	10 51 16.5	4.630 N	32.664 W	10 G	5.4 5.4	1.1	214	CENTRAL MID-ATLANTIC RIDGE. Ms 5.6 (BRK).
16	11 05 29.37	31.582 S	177.735 W	33 N	4.8 4.8	1.4	17	KERMADEC ISLANDS REGION
16	11 49 38.6	25.137 N	95.846 E	33 N	4.7 4.2	1.3	53	BURMA-INDIA BORDER REGION
16	12 28 41.97	46.33 N	12.66 E	10 G		1.2	5	NORTHERN ITALY. ML 1.7 (KBA).
16	13 13 49.67	5.93 S	107.81 E	33 N	4.8	1.1	19	JAVA
16	13 15 32.87	42.585 N	18.992 E	10 G		0.4	8	YUGOSLAVIA. MD 2.0 (TTG)
16	13 22 37.5	42.639 N	18.965 E	10 G		0.8	23	YUGOSLAVIA. MD 3.0 (TTG).
16	14 38 22.07	15.503 N	60.885 W	33 N		1.5	9	LEEWARD ISLANDS. ML 2.8 (FDF).
16	14 53 03.57	34.991 N	140.709 E	33 N	4.7	1.3	12	NEAR EAST COAST OF HONSHU, JAPAN Felt (I JMA) at Utsunomiya.
16	14 57 15.57	0.757 N	120.994 E	33 N	4.8	0.5	14	MINAHASSA PENINSULA
16	15 08 12.87	4.140 S	142.510 E	66 *	4.5	0.9	20	PAPUA NEW GUINEA
16	15 35 55.18	48.421 N	122.225 W	0			21	WASHINGTON. <SEA>. CL 2.7 (SEA).
16	15 48 08.38	60.091 N	153.605 W	159			13	SOUTHERN ALASKA. <AGS-P>.
16	16 18 57.57	23.23 S	178.12 W	348 ?	4.5	0.4	8	SOUTH OF FIJI ISLANDS
16	18 25 52.2	29.872 N	99.270 E	35 *	5.1	1.3	32	SICHUAN PROVINCE, CHINA
16	18 33 35.07	42.300 N	19.877 E	10 G		0.4	6	YUGOSLAVIA. MD 2.5 (TTG)
16	19 46 11.57	39.360 N	16.977 E	10 G		1.5	6	SOUTHERN ITALY
a 16	19 48 14.6	21.039 S	178.942 W	610 D	5.7	1.2	338	FIJI ISLANDS REGION. mb 5.4 (BRK).
16	19 51 01.0	29.801 N	99.196 E	43 *	4.9	1.4	24	SICHUAN PROVINCE, CHINA
16	22 17 12.97	32.515 N	47.787 E	33 N	4.6	1.3	14	IRAN-IRAQ BORDER REGION
16	23 33 37.67	41.201 N	20.048 E	10 G		0.9	5	ALBANIA. ML 2.7 (SKO).
17	01 59 52.3	39.316 N	23.460 E	10 G		1.4	12	AEGEAN SEA
17	02 59 07.9	29.865 N	99.049 E	25 *	4.9	1.0	37	SICHUAN PROVINCE, CHINA
17	03 49 37.57	28.764 S	123.728 E	10 G		1.2	6	WESTERN AUSTRALIA
17	04 29 36.6	35.582 N	140.249 E	78 *		0.4	11	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Yokohama and Ajiro.
17	04 29 43.87	18.00 N	65.71 W	33 N		1.1	5	PUERTO RICO REGION
a 17	04 55 26.77	30.644 S	71.683 W	44 *	4.9 4.8	1.4	48	NEAR COAST OF CENTRAL CHILE
17	05 00 38.27	31.03 S	71.51 W	33 N		1.3	8	NEAR COAST OF CENTRAL CHILE
17	05 47 26.6	45.252 N	7.511 E	10 G		1.0	57	NORTHERN ITALY. ML 3.5 (LDG). MD 3.1 (STR).
17	06 29 53.97	44.390 N	141.467 E	33 N	4.7	0.6	10	HOKKAIDO, JAPAN REGION
17	06 33 16.27	6.24 S	151.06 E	33 N	4.4	1.6	9	NEW BRITAIN REGION
17	06 33 47.77	36.343 N	27.684 E	99 ?		0.9	7	DODECANESE ISLANDS
17	08 19 54.38	59.806 N	153.724 W	141			11	SOUTHERN ALASKA. <AGS-P>.
17	08 56 17.07	39.089 N	27.612 E	10 G		0.2	5	TURKEY
17	09 11 36.67	37.397 N	2.297 W	10 G		0.1	6	SPAIN. MG 2.9 (MDD).
17	09 26 53.37	32.94 S	72.03 W	33 N		0.5	8	OFF COAST OF CENTRAL CHILE
17	09 34 31.57	11.349 S	119.208 E	33 N	4.2	1.4	14	SOUTH OF SUMBA ISLAND
17	09 52 23.1	32.345 S	70.001 W	33 N		1.1	12	CHILE-ARGENTINA BORDER REGION
17	11 15 52.4	6.932 S	129.426 E	78	5.0	1.2	48	BANDA SEA
17	12 17 02.07	39.303 N	16.891 E	10 G		1.1	6	SOUTHERN ITALY
17	12 57 13.07	11.459 N	61.479 W	10 G		1.4	6	WINDWARD ISLANDS. MD 3.3 (TRN).
17	13 05 14.9	37.995 S	175.742 E	293	5.0	1.4	46	NORTH ISLAND, NEW ZEALAND
17	13 34 26.27	18.04 N	65.69 W	33 N		1.3	6	PUERTO RICO REGION
17	13 59 16.77	32.818 N	130.639 E	10 G		0.7	5	KYUSHU, JAPAN. MG 2.9 (JMA). Felt (I JMA) at Kumamoto.
17	14 20 31.1	8.179 S	112.924 E	113 ?	5.1	1.1	64	JAVA

17	14	24	03.67	31.90	S	178.00	W	33	N	1.4	14	KERMADEC ISLANDS REGION		
17	15	36	48.2	40.517	N	29.363	E	10	G	0.4	8	TURKEY		
17	15	39	46.4	60.055	N	152.836	W	104		4.6	68	SOUTHERN ALASKA. <AGS-P>.		
17	16	24	33.2	38.778	N	122.775	W	5			18	NORTHERN CALIFORNIA. <BRK>. ML 3.6 (BRK). Mo=4.6+10+14 Nm (BRK). Felt at St. Helena.		
17	16	30	54.37	23.69	N	122.36	E	33	N	4.3	1.5	9	TAIWAN REGION. Felt on eastern Taiwan.	
17	17	08	37.2	3.768	S	138.071	E	86	*	4.7	0.9	23	WEST IRIAN	
17	17	32	16.3	2.881	S	138.924	E	59	?	5.1	1.3	32	WEST IRIAN	
17	19	28	53.1	9.614	S	122.629	E	33	N	4.5	1.4	13	SAVU SEA	
17	19	52	59.9	35.200	N	120.900	W	5			12	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).		
17	19	53	54.6	23.417	N	123.407	E	24	*	4.5	1.0	48	SOUTHWESTERN RYUKYU ISLANDS	
17	20	14	57.47	18.01	N	65.71	W	33	N		1.0	5	PUERTO RICO REGION	
17	21	01	55.5	40.267	N	29.215	E	10	G		0.9	8	TURKEY	
17	21	28	15.5	18.254	N	119.244	E	52	*	4.7	0.6	37	PHILIPPINE ISLANDS REGION	
17	23	05	12.2	29.779	N	99.113	E	33	N	4.5	0.9	12	SICHUAN PROVINCE, CHINA	
18	00	01	36.3	33.718	N	133.462	E	10	G		1.4	10	SHIKOKU, JAPAN. MG 3.8 (JMA). Felt (1 JMA) at Kochi.	
18	00	47	58.1	39.296	N	23.600	E	10	G	3.9	1.3	69	AEGEAN SEA. ML 3.7 (ATH).	
18	00	50	59.3	39.261	N	23.532	E	10	G		1.5	7	AEGEAN SEA. ML 3.0 (ATH).	
18	01	20	56.3	6.336	S	154.072	E	54	?		1.6	6	SOLOMON ISLANDS	
18	01	25	11.1	60.066	N	152.774	W	98				60	SOUTHERN ALASKA. <AGS-P>.	
18	01	35	17.77	30.67	S	71.92	W	33	N		0.6	11	NEAR COAST OF CENTRAL CHILE	
o	18	02	01	27.1	21.538	S	178.955	W	580	5.2	0.9	216	FIJI ISLANDS REGION	
18	02	41	59.4	52.607	N	169.152	W	33	N	4.6	0.7	19	FOX ISLANDS, ALEUTIAN ISLANDS	
18	03	04	20.4	28.914	N	95.764	E	33	N	4.5	0.8	19	INDIA-CHINA BORDER REGION	
18	03	53	23.9	39.305	N	23.608	E	10	G		1.1	8	AEGEAN SEA. ML 2.8 (ATH).	
18	04	21	58.4	21.848	S	70.492	W	52	*	4.4	1.1	14	NEAR COAST OF NORTHERN CHILE	
18	06	59	50.2	38.793	N	122.772	W	4			1.4	14	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK).	
18	07	58	11.0	9.788	S	127.882	E	250	*	4.6	0.9	9	TIMOR SEA	
18	08	20	16.4	31.635	N	104.118	E	33	N	4.3	0.9	14	SICHUAN PROVINCE, CHINA	
18	08	33	51.7	60.717	N	5.544	E	10	G		0.7	8	SOUTHERN NORWAY. MD 1.9 (BER).	
18	08	48	46.6	50.664	N	114.160	W	5	G		0.5	10	ALBERTA PROVINCE, CANADA	
18	09	14	34.3	34.245	N	26.617	E	33	N		0.8	8	CRETE	
18	09	54	51.9	30.648	S	71.990	W	41	*	4.6	1.2	24	NEAR COAST OF CENTRAL CHILE	
18	10	45	47.6	34.669	N	110.925	W	5	G		0.8	17	EASTERN ARIZONA. ML 3.5 (NEIS).	
18	11	08	22.6	30.666	S	71.520	W	33	N		1.4	10	NEAR COAST OF CENTRAL CHILE	
18	11	33	30.4	60.901	N	4.844	E	10	G		0.6	5	SOUTHERN NORWAY. MD 1.5 (BER).	
o	18	12	33	52.1	23.834	S	179.944	E	524	G	5.8	0.9	277	SOUTH OF FIJI ISLANDS. mb 5.9 (BRK). Depth from broadband displacement seismograms.
18	12	56	45.87	37.24	N	52.72	E	33	N		1.5	7	CASPIAN SEA	
18	14	45	11.1	39.266	N	23.599	E	10	G		1.1	33	AEGEAN SEA. ML 3.3 (ATH).	
18	15	33	21.0	42.331	N	19.852	E	10	G		0.4	6	YUGOSLAVIA. MD 2.5 (TTG).	
18	17	02	20.8	10.599	N	85.032	W	165				12	COSTA RICA. <HDC>. MD 4.1 (HDC).	
18	17	13	47.1	52.119	N	175.560	E	69	*	4.0	0.8	10	RAT ISLANDS, ALEUTIAN ISLANDS	
18	17	14	12.1	39.293	N	23.545	E	10	G		0.6	7	AEGEAN SEA. ML 2.9 (ATH).	
18	18	15	35.7	33.690	N	120.080	W	6	G			9	OFF COAST OF CALIFORNIA. <PAS-P>. ML 3.0 (PAS).	
18	18	29	01.87	18.33	N	62.03	W	10	G		0.4	6	LEEWARD ISLANDS. ML 2.9 (FDF).	
18	19	00	22.7	63.493	N	148.660	W	33	N		1.0	12	CENTRAL ALASKA. ML 3.8 (PMR). Felt (IV) at Cantwell.	
18	19	10	14.37	29.52	S	178.81	W	227	?	4.7	1.4	22	KERMADEC ISLANDS	
18	19	28	25.8	58.294	N	6.769	E	10	G		0.9	7	SOUTHERN NORWAY. MD 2.0 (BER).	
18	19	28	46.8	43.454	N	12.640	E	10	G		0.8	8	CENTRAL ITALY	
18	19	43	45.37	9.55	S	129.80	E	284	?	4.5	0.6	7	TIMOR SEA	
18	21	28	15.3	57.778	N	143.129	W	10	G			12	GULF OF ALASKA. <AGS-P>.	
18	21	46	30.2	58.092	N	151.656	W	53	G			26	KODIAK ISLAND REGION. <AGS-P>.	
18	21	54	57.4	58.095	N	151.657	W	53	G			21	KODIAK ISLAND REGION. <AGS-P>.	
18	22	02	11.9	39.310	N	28.977	E	10	G		1 0	7	TURKEY	
18	22	12	38.3	18.183	N	66.080	W	31	*		0.2	6	PUERTO RICO REGION	
18	22	33	26.8	51.552	N	16.042	E	10	G		0.9	20	POLAND. ML 4.0 (VKA), 3.8 (KBA).	
18	23	01	45.7	50.476	N	18.868	E	10	G		1.1	14	POLAND. ML 3.6 (KBA), 3.2 (VKA).	
18	23	18	04.7	62.020	N	151.596	W	95				31	CENTRAL ALASKA. <AGS-P>.	
f	19	00	08	19.6	31.310	S	177.815	W	11	G	5.6 5.9	1 1	191	KERMADEC ISLANDS REGION. Ms 6.2 (BRK). Mo=9.0+10+17 Nm (PPT). Depth from broadband displacement seismograms.
19	03	12	55.07	16.71	N	59.68	W	22			0 9	16	LEEWARD ISLANDS. ML 3.7 (FDF).	
19	03	32	45.6	39.648	N	28.958	E	10	G		1.5	8	TURKEY	
19	03	46	08.4	36.247	N	27.090	E	10	G		0.8	6	DODECANESE ISLANDS	
19	03	59	16.3	39.100	N	27.842	E	10	G		0.4	5	TURKEY	
19	05	55	20.37	61.50	N	3.93	E	10	G		0.8	8	NORWEGIAN SEA. MD 2.3 (BER).	
19	06	01	58.17	38.18	N	3.88	W	10	G		0.9	4	SPAIN. MG 2.7 (MDD).	
o	19	07	03	59.3	31.521	S	177.763	W	61	D	5.2	1.2	43	KERMADEC ISLANDS REGION
19	07	30	46.9	40.273	N	29.557	E	10	G		0.3	5	TURKEY	
19	07	32	23.1	36.469	N	73.415	E	45	*	4.9	1.1	32	NORTHWESTERN KASHMIR	
19	08	59	49.6	16.355	N	98.682	W	10	G	4.9	1.1	57	NEAR COAST OF GUERRERO, MEXICO	
19	11	13	41.4	42.702	S	83.394	W	10	G	4.9	0.7	20	WEST CHILE RISE	
19	11	55	47.7	39.117	N	27.614	E	10	G		0.5	5	TURKEY	
19	12	26	41.8	42.551	N	24.172	E	10	G		1.5	11	BULGARIA	
19	12	43	33.07	13.46	N	90.74	W	48	?	4.7	1.5	26	NEAR COAST OF GUATEMALA	
19	13	09	25.27	27.92	S	178.54	W	268	?	4.1	1.0	25	KERMADEC ISLANDS REGION	
19	13	25	36.2	5.451	S	129.856	E	197	*	4.5	0.6	10	BANDA SEA	
19	13	27	13.9	48.696	N	123.343	W	20				25	VANCOUVER ISLAND REGION. <PGC>. ML 2.9 (PGC). CL 2.9 (SEA). Felt on the Saanich Peninsula from Sidney to Victoria. Also felt on Salt Spring Island.	
19	13	35	07.67	43.96	N	7.31	E	10	G		0.2	4	NEAR SOUTH COAST OF FRANCE. MD 1.0 (STR).	
19	13	41	37.3	36.414	N	5.550	W	10	G		1.1	6	STRAIT OF GIBRALTAR	
a	19	14	48	56.7	17.858	N	105.228	W	10	G	5.1 5.4	1.2	77	OFF COAST OF JALISCO, MEXICO. Ms 5.7 (BRK).
19	15	00	33.5	17.643	N	105.077	W	10	G		1.3	12	OFF COAST OF JALISCO, MEXICO	
19	16	15	28.8	17.659	N	105.270	W	10	G	4.2	1.0	12	OFF COAST OF JALISCO, MEXICO	
19	16	23	52.4	6.947	S	129.905	E	69	*	5.2	1.0	49	BANDA SEA	
19	16	38	22.5	60.737	N	151.901	W	76				34	KENAI PENINSULA, ALASKA. <AGS-P>.	
19	16	40	28.3	30.133	N	90.046	E	33	N	4.5	1.1	21	TIBET	
19	17	30	56.9	61.226	N	151.858	W	82				13	SOUTHERN ALASKA. <AGS-P>.	
19	19	06	15.0	37.651	N	30.013	E	10	G		1.1	5	TURKEY	
19	19	30	36.8	40.137	N	29.345	E	10	G		1.0	8	TURKEY	
19	19	49	34.6	37.711	N	14.693	E	10	G		0.6	5	SICILY	
19	20	08	41.0	59.692	N	153.084	W	99				22	SOUTHERN ALASKA. <AGS-P>.	

19	20	25	30.1	37.849 N	14.705 E	10 G	1.4	12	SICILY
19	21	34	44.4	37.818 N	14.744 E	10 G	1.5	13	SICILY
19	22	05	57.8*	44.707 N	147.685 E	33 N 4.6	1.3	18	KURIL ISLANDS
19	22	39	28.7	37.257 N	115.096 W	3	0.3	55	SOUTHERN NEVADA. ML 3.5 (NEIS).
19	23	40	33.0	42.602 N	18.959 E	10 G	0.9	6	YUGOSLAVIA. MD 2.0 (TTG).
19	23	54	57.2?	7.18 N	73.81 W	129 ?	1.2	7	NORTHERN COLOMBIA
20	00	10	37.6*	46.862 N	152.900 E	33 N 4.8 4.3	0.9	31	KURIL ISLANDS
20	00	37	24.1	42.350 N	19.999 E	10 G	0.5	10	YUGOSLAVIA. MD 2.4 (TTG).
20	00	56	13.2?	32.36 S	72.05 W	33 N	0.6	8	OFF COAST OF CENTRAL CHILE
20	01	07	02.5*	59.892 N	150.464 W	50		62	KENAI PENINSULA, ALASKA. <AGS-P>.
20	02	16	05.9*	55.494 N	4.826 W	10 G	0.2	7	UNITED KINGDOM
20	02	45	45.5?	44.19 N	150.01 E	33 N 4.2	1.5	6	KURIL ISLANDS REGION
20	03	14	02.5*	22.708 N	121.691 E	33 N 4.0	1.4	11	TAIWAN REGION
20	04	36	04.0*	15.355 N	60.777 W	10 G	0.6	6	LEEWARD ISLANDS. ML 2.5 (FDF).
20	05	31	29.9?	44.32 N	149.84 E	33 N 4.2	1.6	6	KURIL ISLANDS
20	06	13	53.2	13.328 N	90.757 W	65 4.8	1.2	74	NEAR COAST OF GUATEMALA
20	06	35	55.3*	58.946 N	152.128 W	66		39	KODIAK ISLAND REGION. <AGS-P>.
20	06	53	26.3?	35.95 N	70.32 E	33 N 3.8	0.8	8	HINDU KUSH REGION
a 20	06	53	33.0	2.968 N	126.400 E	94 * 4.9	1.2	76	MOLUCCA PASSAGE
20	07	54	03.1	7.775 S	107.922 E	33 N 4.7	0.8	26	JAVA
a 20	08	08	51.0	9.259 S	79.033 W	63 G 5.8	1.0	299	OFF COAST OF NORTHERN PERU. Felt at Lima, Chimbote and Trujillo. Depth from broadband displacement seismograms.
20	08	12	32.4*	39.899 N	29.817 W	10 G 4.5	0.9	30	AZORES ISLANDS
20	08	42	03.4	40.001 N	29.869 W	10 G 4.9 4.7	1.2	96	AZORES ISLANDS REGION
20	09	37	37.3?	44.48 N	128.74 W	10 G 4.0	0.9	20	OFF COAST OF OREGON
20	09	48	21.3	44.281 N	7.492 E	10 G	0.5	10	NORTHERN ITALY
20	10	40	33.4	34.784 N	140.866 E	62 * 4.7	0.7	22	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) on Oshima.
20	11	14	49.9*	39.300 N	28.924 E	10 G	1.1	9	TURKEY
20	11	16	50.7*	39.267 N	28.932 E	10 G	0.5	9	TURKEY
20	11	28	09.1	28.858 N	139.185 E	470 * 4.5	0.9	36	BONIN ISLANDS REGION
20	11	46	09.3	36.281 N	5.543 W	10 G	1.2	7	STRAIT OF GIBRALTAR
20	12	11	39.7*	38.845 N	71.721 E	33 N 4.5	1.1	14	AFGHANISTAN-USSR BORDER REGION
20	12	13	59.6?	7.00 N	76.21 W	34 ? 4.2	1.5	13	NORTHERN COLOMBIA
20	12	45	52.7	38.494 N	117.806 W	4 4.3	0.7	79	NEVADA. ML 4.2 (BRK). Felt (IV) at Mino, (III) at Luning and Manhattan.
20	13	06	00.3?	46.22 S	75.63 W	33 N 4.9 4.9	1.6	15	NEAR COAST OF SOUTHERN CHILE
20	13	59	39.8	37.793 N	2.557 W	10 G	1.2	11	SPAIN. MG 3.4 (MDD). Felt (III) in the Galera area.
20	15	02	16.5*	45.712 S	75.560 W	10 G 5.5 5.3	1.6	56	OFF COAST OF SOUTHERN CHILE
20	16	14	14.2?	20.07 N	144.42 E	33 N 4.6	0.8	12	MARIANA ISLANDS
20	16	14	39.9?	9.93 S	124.04 E	33 N 4.5	1.5	7	TIMOR
20	16	29	07.3*	59.776 N	153.180 W	104		30	SOUTHERN ALASKA. <AGS-P>.
20	17	26	51.9	49.124 N	6.820 E	10 G	0.7	7	GERMANY. MD 1.5 (STR).
20	18	47	40.2	35.769 N	21.757 E	10 G 4.4	1.3	72	MEDITERRANEAN SEA. ML 4.2 (ATH).
20	19	57	12.3*	58.490 N	142.803 W	10 G		14	GULF OF ALASKA. <AGS-P>.
20	20	31	00.4	11.974 N	142.942 E	33 N 5.1 4.2	0.8	84	SOUTH OF MARIANA ISLANDS
f 20	22	59	54.0	57.166 N	121.976 E	26 G 6.1 6.5	0.9	545	EASTERN USSR. Ms 6.3 (BRK), 5.9 (PAS). Felt (VI) at Khani, Oleksa and Yuktali; (V) at Ikabya, Kuvykta, Khatymi, Neryungri and Berkakit; (IV) at Yakutsk, Chita and Blagoveshchensk. Also felt strongly at Ust-Nyukzha. Depth from broadband displacement seismograms.
20	23	26	46.5?	29.12 S	70.55 W	33 N	1.5	8	CENTRAL CHILE
20	23	44	33.2*	37.258 N	121.677 W	4		17	CENTRAL CALIFORNIA. <BRK>. ML 3.2 (BRK). Mo=1.4*10**14 Nm (BRK).
21	00	24	17.2*	41.265 N	22.760 E	10 G	0.4	5	YUGOSLAVIA
21	01	06	13.6?	21.04 S	68.45 W	133 ?	1.4	6	CHILE-BOLIVIA BORDER REGION
21	01	33	46.5*	11.135 N	62.132 W	33 N	0.9	8	WINDWARD ISLANDS. MD 3.6 (TRN).
21	03	01	48.1?	7.42 S	128.49 E	146 ? 4.9	0.4	7	BANDA SEA
21	04	17	05.1?	0.13 N	123.44 E	198 ? 4.7	0.7	10	MINAHASSA PENINSULA
21	05	35	33.4*	10.189 S	161.377 E	101 * 4.7	1.0	11	SOLOMON ISLANDS
21	07	29	36.4?	41.29 N	22.77 E	10 G	0.1	4	YUGOSLAVIA. ML 1.4 (SKO).
21	08	16	06.5	36.495 N	26.755 E	157 * 4.7	1.0	13	DOECANESE ISLANDS
21	08	38	20.5*	27.949 N	64.271 E	33 N 4.4	0.9	9	PAKISTAN
21	09	40	43.7*	47.392 N	122.056 W	5		48	WASHINGTON. <SEA>. CL 2.8 (SEA). Felt at Covington.
21	09	55	32.3*	38.613 N	27.947 E	10 G	0.5	6	TURKEY
21	12	10	44.5	38.389 N	22.129 E	10 G 4.2	1.5	51	GREECE. ML 3.5 (ATH).
21	12	17	35.5	42.752 N	13.334 E	10	0.6	13	CENTRAL ITALY
21	12	46	29.7*	21.652 N	95.494 E	59 ? 4.7	0.6	7	BURMA
21	13	34	35.3*	59.046 N	5.966 E	10 G	0.2	6	SOUTHERN NORWAY. MD 2.0 (BER).
21	13	51	37.7	37.397 N	23.554 E	21 * 4.7	1.2	12	SOUTHERN GREECE. ML 3.3 (ATH).
21	14	06	27.0	39.386 N	26.417 E	10 G	0.9	8	TURKEY. MD 3.5 (ATH).
21	15	10	06.1	42.341 N	19.870 E	7	0.7	15	YUGOSLAVIA. MD 2.9 (TTG).
21	16	15	04.7*	42.931 N	19.454 E	10 G	0.6	5	YUGOSLAVIA. MD 2.1 (TTG).
21	18	39	11.3*	18.311 N	100.829 W	33 N	0.6	8	GUERRERO, MEXICO
21	19	08	41.0	57.168 N	123.768 E	33 N 4.8	0.8	39	EASTERN USSR
21	19	28	51.6	40.519 N	15.789 E	10 G	1.5	13	SOUTHERN ITALY
21	19	43	59.8*	40.524 N	15.880 E	10 G	1.0	5	SOUTHERN ITALY
21	20	34	28.3	16.366 N	122.198 E	61 * 4.7	0.9	40	LUZON, PHILIPPINE ISLANDS
a 21	20	36	04.2	13.302 N	144.381 E	115 5.2	0.9	112	MARIANA ISLANDS. Felt (III) on Guam.
21	21	02	46.9*	37.762 N	29.172 E	10 G	0.9	5	TURKEY
21	22	06	27.7*	40.524 N	15.856 E	10 G	1.1	5	SOUTHERN ITALY
21	22	20	21.0*	37.537 N	20.621 E	10 G	0.7	13	IONIAN SEA. ML 3.4 (ATH).
21	23	16	30.4*	36.439 N	71.253 E	87 ? 4.1	1.4	12	AFGHANISTAN-USSR BORDER REGION
22	00	51	10.0*	51.079 N	178.578 W	33 N 5.2	1.2	16	ANDREANOF ISLANDS, ALEUTIAN IS.
22	04	06	39.4?	44.56 N	7.28 E	10 G	0.1	4	NORTHERN ITALY. ML 2.2 (GEN).
a 22	04	48	30.8*	35.576 S	102.935 W	10 G 5.0 4.8	1.2	57	SOUTHERN PACIFIC OCEAN
22	06	15	17.3*	0.997 S	123.202 E	33 N 4.5	0.2	6	MINAHASSA PENINSULA
22	06	19	37.1	8.966 S	115.512 E	33 N 4.7	0.6	16	BALI ISLAND REGION
22	07	15	56.9?	17.83 N	65.67 W	10 G	0.1	5	PUERTO RICO REGION
22	07	44	41.6?	24.94 N	123.94 E	109 ? 4.5	0.9	7	SOUTHWESTERN RYUKYU ISLANDS
22	08	03	25.1	40.513 N	23.526 E	10 G	0.7	8	GREECE
22	10	58	19.6	40.945 N	20.551 E	10 G	0.9	9	GREECE-ALBANIA BORDER REGION. MD 3.0 (ATH).

22	11	50	39.2	21.293	S	179.193	W	614	4.9	0.9	79	FIJI ISLANDS REGION		
22	12	05	28.1%	39.254	N	27.733	E	10	G	0.7	5	TURKEY		
22	12	12	52.5%	39.124	N	27.578	E	10	G	0.5	5	TURKEY		
22	12	18	09.8	44.624	N	7.039	E	10	G	0.5	22	NORTHERN ITALY. ML 2.6 (LDG), 2.4 (GEN).		
22	12	19	56.3%	44.60	N	7.00	E	10	G	0.3	4	FRANCE. ML 2.0 (GEN).		
22	12	31	58.7	1.177	S	136.925	E	33	N	5.2	4.0	22	WEST IRIAN REGION	
22	12	59	15.9%	34.41	N	134.82	E	10	G	0.8	4	NEAR S. COAST OF SOUTHERN HONSHU. MG 3.4 (JMA). Felt (I JMA) at Sumoto.		
22	13	21	29.2%	38.82	N	23.74	E	10	G	0.4	11	GREECE. MD 3.3 (ATH).		
22	13	55	49.7%	24.172	N	125.239	E	33	N	4.2	0.2	5	SOUTHWESTERN RYUKYU ISLANDS. Felt (I JMA) on Miyako-jimo.	
22	14	17	39.8%	17.302	N	94.925	E	33	N	1.3	5	BURMA		
22	14	53	20.3%	13.246	N	144.738	E	56	*	4.9	1.1	18	MARIANA ISLANDS. Felt (III) on Guam.	
22	15	15	45.7	38.153	N	117.811	W	8		0.5	34	NEVADA. ML 3.2 (NEIS).		
22	15	23	13.3	38.145	N	117.818	W	9		0.5	34	NEVADA. ML 2.9 (NEIS).		
22	15	56	25.8	36.068	N	1.582	W	10	G	1.2	21	WESTERN MEDITERRANEAN SEA. MG 3.5 (MDD).		
22	17	37	16.0	26.654	N	96.827	E	33	N	4.4	1.0	23	BURMA	
22	18	48	27.6%	61.61	N	3.34	E	10	G	1.3	11	NORWEGIAN SEA. MD 2.6 (BER).		
22	19	25	50.8%	44.410	N	6.469	E	10	G	0.3	10	FRANCE		
22	19	29	59.1%	9.19	N	125.55	E	41	?	1.4	7	MINDANAO, PHILIPPINE ISLANDS		
22	19	50	00.5	39.281	N	29.006	E	10	G	1.0	16	TURKEY		
22	19	50	45.5	29.618	N	141.357	E	33	N	4.5	1.1	29	SOUTH OF HONSHU, JAPAN	
22	20	02	30.6%	42.79	N	18.53	E	10	G	1.2	4	YUGOSLAVIA. MD 2.0 (TTG).		
22	21	22	27.9%	37.956	N	14.135	E	10	G	0.9	9	SICILY		
22	22	17	43.3	39.218	N	23.583	E	10	G	0.5	18	AEGEAN SEA. ML 3.0 (ATH).		
22	23	04	08.3	39.206	N	23.589	E	11		0.9	31	AEGEAN SEA. ML 3.2 (ATH).		
22	23	11	47.7%	38.484	N	15.387	E	150	?	1.1	10	SICILY		
22	23	21	46.5%	39.287	N	28.970	E	10	G	0.7	7	TURKEY		
22	23	33	46.7%	38.89	N	18.12	E	10	G	1.3	6	IONIAN SEA. ML 3.1 (ATH).		
22	23	56	54.9%	39.219	N	28.845	E	10	G	0.4	5	TURKEY		
23	00	18	02.1%	39.304	N	29.024	E	10	G	1.2	11	TURKEY		
23	00	35	50.8	21.199	N	119.558	E	33	N	4.1	1.1	24	TAIWAN REGION	
23	01	51	00.1%	37.72	N	15.01	E	10	G	0.1	4	SICILY		
23	02	25	05.3	39.224	N	23.648	E	10	G	4.1	1.2	73	AEGEAN SEA. ML 4.1 (ATH).	
23	03	00	03.4	40.325	S	175.997	E	42		5.1	1.1	29	NORTH ISLAND, NEW ZEALAND	
23	03	25	32.0%	31.739	S	67.629	W	10	G	1.3	6	SAN JUAN PROVINCE, ARGENTINA		
23	03	51	57.2%	39.052	N	72.655	E	33	N	4.5	1.3	14	KIRGHIZ SSR	
23	04	45	29.7	63.271	N	150.655	W	33	N	0.8	8	CENTRAL ALASKA. ML 3.3 (PMR).		
23	05	13	52.9	35.921	N	140.250	E	78		4.3	0.8	18	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Mito, Tokyo and Utsunomiya.	
23	05	46	41.0%	16.66	S	173.79	W	33	N	4.6	1.1	8	TONGA ISLANDS	
23	06	10	25.3	39.327	N	73.214	E	33	N	4.6	1.2	26	TAJIK-XINJIANG BORDER REGION	
23	06	45	55.1%	37.545	S	176.255	E	277		4.4	1.1	20	NORTH ISLAND, NEW ZEALAND	
23	06	47	27.6%	39.613	N	22.792	E	10	G	0.6	8	GREECE		
23	07	08	22.0%	23.81	N	93.70	E	33	N	0.5	7	BURMA-INDIA BORDER REGION		
23	07	44	06.2%	42.16	N	22.69	E	10	G	0.7	6	BULGARIA. ML 1.8 (SKO).		
23	07	50	30.4	14.826	S	166.692	E	61	*	5.0	1.1	98	VANUATU ISLANDS	
23	07	55	02.4%	36.081	N	1.657	W	10	G	0.6	6	WESTERN MEDITERRANEAN SEA. MG 3.1 (MDD).		
23	08	27	49.4%	58.730	S	25.261	W	33	N	5.2	0.8	17	SOUTH SANDWICH ISLANDS REGION	
23	08	45	28.7%	17.35	N	61.10	W	10	G	0.5	5	LEEWARD ISLANDS. ML 3.1 (FDF).		
23	08	47	06.5%	5.611	S	151.149	E	10	G	4.0	1.1	6	NEW BRITAIN REGION	
23	08	50	34.0%	44.197	N	17.772	E	10	G	1.2	12	YUGOSLAVIA. ML 2.7 (TTG).		
23	10	51	51.0%	31.98	S	71.71	W	33	N	0.3	5	NEAR COAST OF CENTRAL CHILE		
23	11	49	14.3%	16.944	N	61.637	W	33	N	0.5	5	LEEWARD ISLANDS. ML 2.6 (FDF).		
23	12	18	05.1%	59.740	N	152.829	W	90			48	SOUTHERN ALASKA. <AGS-P>.		
23	12	54	05.5%	17.92	N	65.75	W	10	G	0.3	4	PUERTO RICO REGION		
23	13	03	10.9	36.183	N	139.132	E	73	*	0.4	9	HONSHU, JAPAN		
23	13	47	21.9%	16.570	S	172.250	W	33	D	5.0	5.0	48	SAMOA ISLANDS REGION	
23	13	55	12.5	8.914	S	117.970	E	118	*	4.2	1.4	20	SUMBAWA ISLAND REGION	
23	13	56	53.4%	38.964	N	27.172	E	10	G	1.3	6	TURKEY		
23	14	17	04.8%	18.26	N	61.26	W	10	G	0.7	6	LEEWARD ISLANDS. ML 3.7 (FDF).		
23	14	23	49.7%	39.106	N	27.572	E	10	G	0.3	5	TURKEY		
23	15	17	15.9%	6.10	S	135.24	E	33	N	4.3	1.3	6	AROE ISLANDS REGION	
23	15	22	34.1	44.958	N	150.238	E	89	D	4.9	0.9	129	KURIL ISLANDS REGION	
23	15	41	45.0%	44.060	N	7.316	E	10	G	0.2	5	NORTHERN ITALY. ML 2.0 (GEN).		
23	16	17	22.3%	61.256	N	151.839	W	86			46	SOUTHERN ALASKA. <AGS-P>.		
23	16	35	27.6%	3.373	S	139.769	E	97	*	4.4	1.0	18	WEST IRIAN	
23	17	18	04.3	2.690	S	141.482	E	18	*	4.2	1.1	21	NEAR N COAST OF PAPUA NEW GUINEA	
23	17	56	14.8%	14.012	N	93.220	E	33	N	4.2	0.3	7	ANDAMAN ISLANDS REGION	
23	18	11	32.8%	40.515	N	24.293	E	10	G	1.3	7	AEGEAN SEA		
23	19	11	27.3%	66.946	N	156.186	W	5	G	1.2	11	ALASKA. ML 4.0 (PMR).		
23	19	20	35.5%	66.89	N	156.28	W	5	G	0.9	4	ALASKA. Small precursor.		
23	19	21	06.4	66.960	N	156.289	W	6	G	5.7	5.1	0.9	330	ALASKA. ML 5.3 (PMR). Ms 4.8 (BRK). Felt (IV) at Ambler and Kobuk. Felt (III) at Huslia. Depth from broadband displacement seismograms.
23	19	51	24.3	39.230	N	23.676	E	10		3.7	1.1	54	AEGEAN SEA. ML 3.4 (ATH).	
23	20	13	28.5%	66.980	N	156.236	W	5	G		1.2	11	ALASKA. ML 3.3 (PMR).	
23	21	31	19.4	66.946	N	156.296	W	5	G		0.5	10	ALASKA. ML 3.9 (PMR).	
23	21	35	34.2	6.538	S	105.826	E	75	*	5.1	1.1	59	SUNDA STRAIT	
23	22	14	47.6%	39.305	N	29.013	E	10	G		0.4	6	TURKEY	
23	22	17	50.0	39.319	N	29.022	E	9			1.1	12	TURKEY	
23	22	19	12.3%	66.900	N	156.293	W	5	G		0.9	8	ALASKA. ML 3.1 (PMR).	
23	22	31	24.1%	33.46	S	70.90	W	33	N		1.0	4	CHILE-ARGENTINA BORDER REGION	
23	23	32	20.6	41.764	N	12.684	E	17			1.1	31	SOUTHERN ITALY. ML 3.4 (KBA).	
23	23	44	36.6%	2.101	S	128.465	E	61	?	4.3	0.6	8	CERAM SEA	
23	23	47	27.3	66.970	N	156.350	W	5	G		0.7	11	ALASKA. ML 3.7 (PMR).	
23	23	56	19.4	41.966	N	23.509	E	7			0.8	23	GREECE-BULGARIA BORDER REGION. ML 2.5 (SKO).	
24	00	50	40.9%	66.989	N	156.390	W	5	G		1.3	11	ALASKA. ML 3.8 (PMR).	
24	01	09	45.2	66.905	N	156.331	W	5	G		0.3	7	ALASKA. ML 3.3 (PMR).	
24	01	30	41.9	28.795	N	129.569	E	33		4.9	0.8	24	RYUKYU ISLANDS. Felt (II JMA) at Naze.	
24	01	34	01.2	57.317	N	121.904	E	33	N	4.8	4.4	0.9	43	EASTERN USSR
24	01	35	31.1%	59.528	N	152.804	W	85		4.6		94	SOUTHERN ALASKA. <AGS-P>. Felt (IV) at Homer and Ninilchik. Felt (III) at Anchorage and Port Graham.	

24	02	01	44.9*	35.612 N	139.573 E	10 G	0.8	5	NEAR S. COAST OF HONSHU, JAPAN		
24	02	04	14.38	62.292 N	151.231 W	83	28	CENTRAL ALASKA. <AGS-P>.			
24	02	28	13.08	59.660 N	153.092 W	101	31	SOUTHERN ALASKA. <AGS-P>.			
24	03	07	17.5*	17.668 N	105.222 W	33 N	4.2	1.5	19	OFF COAST OF JALISCO, MEXICO	
24	03	57	22.9*	66.870 N	156.390 W	5 G		1.1	7	ALASKA. ML 3.3 (PMR).	
24	04	12	55.4*	17.445 N	61.991 W	31 *	0.3	8	LEEWARD ISLANDS. ML 2.7 (FDF). MD 2.8 (TRN).		
24	04	13	35.37	17.51 N	61.96 W	33 N		0.5	5	LEEWARD ISLANDS. ML 2.7 (FDF). MD 2.9 (TRN).	
24	04	15	01.3*	66.917 N	156.306 W	5 G		0.3	6	ALASKA. ML 3.0 (PMR).	
24	05	32	07.38	60.032 N	152.926 W	107			26	SOUTHERN ALASKA. <AGS-P>.	
24	08	47	41.6	66.919 N	156.268 W	5 G		0.7	10	ALASKA. ML 4.3 (PMR).	
24	09	07	05.4	39.228 N	23.555 E	10 G		0.4	18	AEGEAN SEA. ML 3.1 (ATH).	
24	09	18	04.5	66.919 N	156.347 W	5 G		0.4	8	ALASKA. ML 3.8 (PMR).	
24	11	49	07.2*	39.160 N	27.564 E	10 G		1.0	5	TURKEY	
24	12	11	18.1*	40.362 N	20.498 E	10 G		1.5	5	GREECE-ALBANIA BORDER REGION	
24	12	15	14.37	1.21 N	98.91 E	107 ?	4.9	1.1	10	NORTHERN SUMATERA	
24	12	32	59.88	62.478 N	151.222 W	87			25	CENTRAL ALASKA. <AGS-P>.	
24	12	50	51.1	43.459 N	5.454 E	10 G		0.6	14	NEAR SOUTH COAST OF FRANCE. MD 2.5 (STR).	
24	13	00	28.27	50.56 N	6.31 E	10 G		0.2	4	GERMANY. MD 1.8 (UCC).	
24	13	13	05.6*	4.067 N	126.869 E	66 ?	4.6	0.8	13	TALAUD ISLANDS	
24	13	24	19.7*	41.223 N	28.984 E	10 G		1.0	7	TURKEY	
24	13	33	38.5*	66.929 N	156.310 W	5 G		0.3	6	ALASKA. ML 3.4 (PMR).	
24	13	38	15.7*	66.950 N	156.321 W	5 G		0.5	7	ALASKA. ML 4.1 (PMR).	
24	13	47	17.1*	66.861 N	156.331 W	5 G		0.5	6	ALASKA. ML 3.2 (PMR).	
24	13	51	40.67	16.27 N	99.68 W	33 N	3.8	1.6	8	NEAR COAST OF GUERRERO, MEXICO. Felt at Acapulco.	
24	14	06	48.3*	7.222 S	129.979 E	100 *	4.7	1.3	15	BANDA SEA	
24	14	26	36.0	43.392 N	5.448 E	10 G		0.6	12	NEAR SOUTH COAST OF FRANCE. MD 2.6 (STR).	
24	14	30	30.08	59.945 N	153.412 W	130			10	SOUTHERN ALASKA. <AGS-P>.	
24	14	58	02.68	59.892 N	152.292 W	79			41	SOUTHERN ALASKA. <AGS-P>.	
24	15	10	03.37	42.47 N	19.87 E	10 G		0.6	7	YUGOSLAVIA. MG 2.0 (TIR).	
24	15	25	13.2	43.126 N	13.216 E	10 G		0.2	6	CENTRAL ITALY	
24	15	51	33.5*	66.877 N	156.331 W	5 G		0.5	6	ALASKA. ML 3.8 (PMR).	
24	16	29	36.9*	36.732 N	71.619 E	54 ?	4.5	0.9	12	AFGHANISTAN-USSR BORDER REGION	
24	16	32	45.8*	8.940 S	123.843 E	33 N	4.1	1.4	12	FLORES ISLAND REGION	
24	16	49	54.8	43.127 N	13.197 E	10 G		0.7	6	CENTRAL ITALY	
24	16	59	48.4	33.916 N	87.896 E	33 N	4.4	1.0	17	TIBET	
24	17	04	18.98	61.308 N	151.910 W	95			14	SOUTHERN ALASKA. <AGS-P>.	
24	17	12	29.27	16.69 S	174.73 W	33 N	4.8	0.9	13	TONGA ISLANDS	
24	17	45	16.5*	46.469 N	13.597 E	10 G		1.7	5	AUSTRIA. ML 1.9 (KBA).	
24	18	04	19.6	6.335 S	130.174 E	172	5.0	1.2	43	BANDA SEA	
24	18	11	41.4*	24.520 N	95.002 E	99 ?	4.7	1.3	14	BURMA	
24	19	02	01.8*	36.018 N	28.063 E	114 ?		1.0	7	DODECANESE ISLANDS	
24	19	19	26.58	59.588 N	152.839 W	100			28	SOUTHERN ALASKA. <AGS-P>.	
24	20	08	04.58	59.988 N	153.166 W	122			26	SOUTHERN ALASKA. <AGS-P>.	
a 24	20	32	55.8	17.484 S	167.835 E	28 *	5.1	1.2	45	VANUATU ISLANDS	
a 24	20	41	11.5	17.398 S	167.826 E	34 D	5.3	5.5	1.2	148	VANUATU ISLANDS. Ms 5.7 (BRK).
24	22	04	23.7*	66.828 N	156.191 W	5 G		0.6	5	ALASKA. ML 3.3 (PMR).	
24	22	06	09.2*	66.858 N	156.251 W	5 G		1.1	6	ALASKA. ML 3.4 (PMR).	
24	22	20	59.3*	40.360 N	20.550 E	10 G		1.1	6	GREECE-ALBANIA BORDER REGION	
24	22	23	00.8*	37.707 N	14.691 E	10 G		0.5	5	SICILY	
24	22	32	14.5*	42.540 N	18.648 E	10 G		0.6	6	YUGOSLAVIA. MD 2.3 (TTG).	
24	22	50	33.87	32.12 S	72.50 W	33 N		0.6	9	OFF COAST OF CENTRAL CHILE	
24	22	51	37.6*	37.732 N	29.229 E	10 G		1.0	5	TURKEY	
24	23	45	59.8*	17.519 S	167.942 E	42	4.3	1.0	25	VANUATU ISLANDS	
25	00	02	59.0	66.926 N	156.208 W	5 G	4.5	1.1	31	ALASKA. ML 4.9 (PMR).	
25	00	24	24.18	36.753 N	121.590 W	2			12	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).	
25	00	27	47.6	26.280 N	67.678 E	33 N	4.3	1.0	16	PAKISTAN	
a 25	00	31	38.6	25.499 S	179.653 E	497	5.0	0.9	85	SOUTH OF FIJI ISLANDS	
25	00	37	28.1*	30.087 N	130.041 E	71 ?	4.4	1.3	14	KYUSHU, JAPAN	
25	00	51	46.0	40.587 N	17.525 E	10 G		1.5	8	SOUTHERN ITALY	
25	01	08	39.6*	38.028 N	14.126 E	10 G		0.8	15	SICILY	
25	01	35	25.4*	31.154 S	72.045 W	26 *		1.4	9	OFF COAST OF CENTRAL CHILE	
25	01	43	18.47	30.87 S	71.01 W	10 G		1.3	5	NEAR COAST OF CENTRAL CHILE	
25	01	47	54.57	33.42 S	71.83 W	23 *		1.2	8	NEAR COAST OF CENTRAL CHILE	
25	01	48	40.0*	66.850 N	156.318 W	5 G		0.5	6	ALASKA. ML 3.6 (PMR).	
25	02	12	47.58	60.095 N	152.595 W	89			34	SOUTHERN ALASKA. <AGS-P>.	
f 25	02	13	20.8	30.048 N	99.419 E	8 G	6.2	6.0	1.0	441	SICHUAN PROVINCE, CHINA. Considerable damage in Batang County. Depth from broadband displacement seismograms.
25	03	00	26.97	29.56 N	99.83 E	10 G	4.2	1.0	7	SICHUAN PROVINCE, CHINA	
a 25	03	11	17.4	17.420 S	167.776 E	15 *	5.0	4.8	1.3	103	VANUATU ISLANDS
25	03	13	53.0*	29.934 N	99.238 E	10 G	4.4		1.4	12	SICHUAN PROVINCE, CHINA
25	03	23	31.6*	30.500 N	98.861 E	33 N	4.2		0.9	10	TIBET
25	03	26	25.0*	9.025 S	109.692 W	10 G	5.0		1.2	37	NORTHERN EASTER I. CORDILLERA
25	03	31	23.1*	30.363 N	98.993 E	34 *	4.3		1.0	11	TIBET
25	03	44	41.9*	38.296 N	22.261 E	10 G			1.8	13	GREECE. ML 3.0 (ATH).
25	03	57	51.8*	2.303 S	100.859 E	74 *	4.7		1.2	37	SOUTHERN SUMATERA
25	05	00	13.07	34.15 N	135.20 E	5 G		0.9	4	NEAR S. COAST OF SOUTHERN HONSHU. Felt (I JMA) at Wakayama.	
a 25	05	13	34.0	5.108 S	143.501 E	110 D	5.5	0.9	267	PAPUA NEW GUINEA	
a 25	06	11	32.2	11.073 N	86.761 W	46 *	4.8	4.5	0.9	38	NEAR COAST OF NICARAGUA
25	06	16	31.2	66.961 N	156.404 W	5 G		0.7	9	ALASKA. ML 4.1 (PMR).	
25	06	28	06.0*	40.182 N	23.962 E	10 G		0.4	7	GREECE	
25	06	55	08.6	39.305 N	23.619 E	10 G		1.3	22	AEGEAN SEA. ML 3.2 (ATH).	
25	07	21	03.4*	66.944 N	156.260 W	5 G	3.9	1.4	10	ALASKA. ML 4.5 (PMR).	
25	07	34	15.3	29.996 N	99.338 E	33 N	4.2	1.2	17	SICHUAN PROVINCE, CHINA	
25	07	54	07.47	66.91 N	156.40 W	5 G		1.3	7	ALASKA. ML 3.8 (PMR).	
25	07	55	02.7*	43.963 N	10.445 E	10 G		0.9	9	CENTRAL ITALY. MD 2.8 (FIR).	
25	08	03	52.4*	17.453 S	167.665 E	10 G	4.5	1.1	8	VANUATU ISLANDS	
25	08	07	57.5*	10.669 N	62.767 W	10 G		1.4	15	NEAR COAST OF VENEZUELA	
25	08	14	57.3*	29.706 N	99.291 E	10 G		1.4	10	SICHUAN PROVINCE, CHINA	
25	08	54	10.2*	39.274 N	27.898 E	10 G		0.5	6	TURKEY	
25	08	56	07.0*	43.071 N	12.990 E	10 G		0.5	5	CENTRAL ITALY	
25	09	09	33.7*	5.530 S	150.954 E	93 ?	4.3	0.7	6	NEW BRITAIN REGION	
25	09	10	51.6*	36.501 N	140.472 E	50 ?		0.7	9	NEAR EAST COAST OF HONSHU, JAPAN. MG 3.6 (JMA). Felt	

25	10 27 44.4	29.890 N	99.296 E	10 G	1.1	12	(II JMA) at Mito.
25	10 33 02.5*	66.900 N	156.337 W	5 G	0.4	5	SICHUAN PROVINCE, CHINA
25	11 16 17.4%	33.626 S	71.741 W	18 *	0.4	8	ALASKA. ML 3.5 (PMR).
25	11 31 57.4	42.332 N	19.958 E	10 G	0.5	12	NEAR COAST OF CENTRAL CHILE
25	11 44 17.5	42.986 N	13.701 E	10 G	0.7	7	YUGOSLAVIA. MD 2.4 (TTG).
25	13 42 59.9	66.902 N	156.331 W	10 G	0.2	5	CENTRAL ITALY
25	13 43 12.3?	51.38 N	179.51 W	33 N 4.4	0.8	5	ALASKA. MD 2.4 (TTG).
25	13 52 36.5*	38.916 N	21.090 E	10 G	1.6	5	ANDREANOF ISLANDS, ALEUTIAN IS.
25	13 55 02.9?	39.08 N	27.54 E	10 G	0.3	4	GREECE. MD 2.9 (ATH).
25	14 16 04.1?	42.39 N	0.38 W	10 G	0.9	6	TURKEY
25	14 18 12.3%	60.589 N	5.885 E	10 G	0.7	9	PYRENEES. ML 3.0 (LDG).
f 25	14 29 00.5	16.773 N	99.328 W	19 G 6.2 6.8	1.2	380	SOUTHERN NORWAY. MD 1.9 (BER).
							NEAR COAST OF GUERRERO, MEXICO. Ms 7.1 (BRK). 6.5 (PAS). Mo=1.4*10**19 Nm (PPT). Three people killed, a few injured and some damage at Mexico City. Minor damage reported in the Acapulco area. Felt strongly in much of southern Mexico and as far away as Guadalajara. Depth from broadband displacement seismograms.
25	14 56 25.0	40.715 N	23.387 E	10 G	1.0	10	GREECE. ML 2.4 (SKO).
25	15 12 48.4	29.803 N	99.171 E	10 G 4.5	1.3	15	SICHUAN PROVINCE, CHINA
25	15 59 16.9*	66.908 N	156.180 W	5 G	0.9	7	ALASKA. ML 3.8 (PMR).
25	16 26 43.9	16.411 N	99.302 W	22 D 4.8	1.2	44	NEAR COAST OF GUERRERO, MEXICO. Felt in the Acapulco-Mexico City area.
25	16 42 19.6?	39.29 N	23.60 E	30 *	0.6	9	AEGEAN SEA
25	16 42 58.6	30.053 N	99.461 E	10 G 4.7	1.3	31	SICHUAN PROVINCE, CHINA
25	16 44 33.1	66.929 N	156.273 W	5 G	0.5	10	ALASKA. ML 3.9 (PMR).
25	16 49 56.3%	44.619 N	7.045 E	10 G	0.2	5	NORTHERN ITALY. ML 2.2 (GEN).
25	17 18 38.0	35.842 N	140.361 E	71 5.5	0.9	253	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Chiba, (II JMA) at Tokyo and (I JMA) at Shizuoka.
25	17 53 17.1?	66.94 N	156.28 W	5 G	0.7	5	ALASKA. ML 3.1 (PMR).
25	18 26 52.0	30.049 N	99.306 E	10 G 4.5	1.2	15	SICHUAN PROVINCE, CHINA
25	19 02 39.3?	66.93 N	156.34 W	5 G	0.3	5	ALASKA. ML 3.6 (PMR).
25	19 19 23.2%	58.010 N	151.319 W	57		28	KODIAK ISLAND REGION. <AGS-P>.
25	19 37 07.6	45.957 N	14.700 E	10 G	0.9	9	YUGOSLAVIA. MD 3.4 (LJU), 2.8 (TRI).
25	20 45 16.8	36.884 N	140.811 E	102 4.6	1.0	59	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Onahama and Mito, (II JMA) at Utsunomiya and (I JMA) at Shirakawa.
25	22 12 37.0	66.941 N	156.323 W	5 G 4.2	0.8	11	ALASKA. ML 4.2 (PMR).
25	22 22 32.1	42.258 N	18.721 E	14	1.2	11	YUGOSLAVIA. MD 2.5 (TTG).
25	23 10 12.5?	15.82 N	99.88 W	33 N 4.5	1.6	6	OFF COAST OF GUERRERO, MEXICO
25	23 17 50.1%	33.472 S	70.470 W	83 ?	0.3	9	CHILE-ARGENTINA BORDER REGION
26	01 22 57.7*	66.898 N	156.363 W	5 G	0.2	5	ALASKA. ML 3.2 (PMR).
26	03 30 27.1?	9.48 S	123.81 E	33 N 4.2	0.5	5	TIMOR
26	03 31 21.6%	45.998 N	27.737 E	33 N	1.6	5	ROMANIA
26	05 22 18.9%	37.263 N	121.682 W	4		11	CENTRAL CALIFORNIA. <BRK>. ML 2.6 (BRK).
26	06 12 07.9	39.290 N	23.311 E	9	1.2	31	AEGEAN SEA. ML 3.5 (ATH).
26	06 47 19.5?	12.38 S	117.74 E	33 N 4.1	0.7	5	SOUTH OF SUMBAWA ISLAND
26	08 23 18.3	42.288 N	12.821 E	10	1.0	10	CENTRAL ITALY
26	08 46 58.1%	39.093 N	27.578 E	10 G	0.4	6	TURKEY
26	09 06 49.4%	39.124 N	27.630 E	10 G	0.5	5	TURKEY
26	09 16 44.7*	23.102 N	98.959 E	33 N	0.2	5	BURMA-CHINA BORDER REGION
26	10 08 35.7?	39.17 N	23.57 E	10 G	0.4	7	AEGEAN SEA
26	10 29 58.2*	37.675 N	20.647 E	10 G	0.7	5	IONIAN SEA. MD 3.3 (ATH).
26	11 09 04.8%	39.249 N	27.680 E	10 G	0.7	6	TURKEY
26	11 09 13.2?	14.67 N	93.32 W	49 * 4.5	1.1	20	NEAR COAST OF CHIAPAS, MEXICO
26	12 19 41.0	44.622 N	7.047 E	10 G	0.3	21	NORTHERN ITALY. ML 2.8 (LDG), 2.3 (GEN).
26	12 28 14.1	41.236 N	20.892 E	11 3.9	1.0	55	ALBANIA. ML 3.7 (TTG), 3.7 (ATH). Felt (V) at Kicevo and Resen, Yugoslavia.
26	13 40 35.1*	27.850 N	85.229 E	33 *	1.5	8	NEPAL
26	13 44 29.0	0.200 N	122.119 E	211 5.0	1.0	80	MINAHASSA PENINSULA
26	13 56 49.7%	60.635 N	6.244 E	10 G	0.8	6	SOUTHERN NORWAY. MD 1.8 (BER).
26	14 27 12.4*	66.969 N	156.510 W	5 G	0.7	8	ALASKA. ML 3.4 (PMR).
26	14 44 10.4%	59.870 N	5.089 E	10 G	0.6	6	SOUTHERN NORWAY. MD 1.9 (BER).
26	14 45 59.8	44.593 N	7.067 E	10 G	0.6	18	NORTHERN ITALY. ML 2.4 (GEN), 2.3 (LDG).
26	14 47 12.4%	34.510 N	120.690 W	1		11	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
26	15 37 17.0	44.588 N	7.065 E	10 G	0.6	20	NORTHERN ITALY. ML 2.4 (LDG), 2.3 (GEN).
26	16 12 06.9*	52.373 N	176.306 W	33 N	1.2	5	ANDREANOF ISLANDS, ALEUTIAN IS. Felt on Adak.
26	16 29 28.7	44.583 N	7.022 E	10 G	0.3	14	NORTHERN ITALY. ML 2.0 (GEN), 2.0 (LDG).
26	16 33 09.3	44.586 N	7.070 E	10 G	0.8	44	NORTHERN ITALY. ML 3.1 (LDG), 3.0 (GEN).
26	16 47 30.8*	36.273 N	141.350 E	16 * 4.3	1.2	13	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito and (I JMA) at Onahama.
26	16 50 39.5?	31.01 N	131.64 E	55 * 4.1	0.9	10	KYUSHU, JAPAN
26	18 46 03.3	39.318 N	23.457 E	10 G	0.8	14	AEGEAN SEA. ML 3.0 (ATH).
26	18 51 22.1	39.278 N	23.564 E	10 G	0.9	24	AEGEAN SEA. ML 3.3 (ATH).
26	19 00 40.6%	39.305 N	28.996 E	10 G	1.3	7	TURKEY
26	19 35 19.8	27.942 S	66.846 W	192 * 4.6	0.9	20	CATAMARCA PROVINCE, ARGENTINA
26	19 45 37.4%	44.555 N	6.977 E	10 G	0.2	7	FRANCE. ML 2.0 (GEN).
26	20 43 16.3	38.424 N	119.161 W	5 G	1.2	11	CALIFORNIA-NEVADA BORDER REGION. ML 2.7 (BRK).
26	21 08 17.5*	36.608 N	30.150 E	59 ?	0.6	7	TURKEY
26	21 28 58.2?	31.56 N	35.57 E	10 G	0.5	5	DEAD SEA REGION
26	22 10 08.3*	46.443 N	9.526 E	10 G	0.4	5	SWITZERLAND. ML 2.5 (LDG).
26	22 10 31.8%	33.930 N	118.580 W	11		16	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS). Felt in the Santa Monica-Torrance area.
26	22 30 13.9?	31.40 S	177.76 W	126 ? 4.7	1.3	9	KERMADEC ISLANDS REGION
26	23 08 22.2%	38.827 N	122.793 W	1		19	NORTHERN CALIFORNIA. <BRK>. ML 3.4 (BRK). Felt (IV) at Cobb.
26	23 40 46.2	5.165 S	143.491 E	111 * 5.0	1.1	16	PAPUA NEW GUINEA
27	00 08 57.1*	29.954 N	99.288 E	33 N 4.1	0.7	8	SICHUAN PROVINCE, CHINA
27	01 08 37.3%	60.138 N	153.136 W	121		16	SOUTHERN ALASKA. <AGS-P>.
27	02 02 22.9%	60.032 N	153.199 W	127		18	SOUTHERN ALASKA. <AGS-P>.
f 27	02 20 04.7	30.601 N	140.589 E	85 G 6.1	1.0	454	SOUTH OF HONSHU, JAPAN. mb 6.6 (BRK). Mo=6.0*10**17 Nm (PPT). Felt (II JMA) at Tokyo, Tateyama and on Chichi-shima; (I JMA) at Choshi, Hirao, Onahama and on

										Hachijo-jima. Depth from broadband displacement seismograms.
27	02 41 14.9	30.149 N	99.092 E	10 G	5.1	0.8	40	SICHUAN PROVINCE, CHINA		
27	04 05 37.6	30.553 N	140.613 E	93 D	4.9	1.0	82	SOUTH OF HONSHU, JAPAN		
27	04 07 01.7%	37.768 N	29.172 E	10 G		0.9	5	TURKEY		
27	04 18 58.9	30.657 N	140.596 E	90 D	4.8	0.8	60	SOUTH OF HONSHU, JAPAN		
27	04 19 15.8*	10.416 N	93.429 E	103 ?	4.7	1.3	11	ANDAMAN ISLANDS REGION		
27	04 35 15.6?	17.83 N	65.65 W	10 G		0.1	5	PUERTO RICO REGION		
27	05 11 56.0?	32.56 S	71.54 W	21		0.6	10	NEAR COAST OF CENTRAL CHILE		
27	06 32 50.9	17.787 N	65.643 W	23	4.4	1.1	49	PUERTO RICO REGION. Felt in eastern Puerto Rico, as far west as Cayey and San Juan.		
27	07 25 48.8?	37.19 N	22.99 E	10 G		1.3	4	SOUTHERN GREECE. ML 3.0 (ATH).		
27	07 31 17.8	26.028 N	128.530 E	33 N	4.8	1.0	32	RYUKYU ISLANDS		
27	07 45 46.4	17.799 N	65.581 W	10 G		0.3	8	PUERTO RICO REGION		
27	07 51 52.9	17.827 N	65.628 W	10 G		0.4	8	PUERTO RICO REGION		
27	08 31 19.9?	17.84 N	65.72 W	10 G		0.2	6	PUERTO RICO REGION		
27	08 38 44.7	24.008 S	67.182 W	178	4.8	0.9	69	CHILE-ARGENTINA BORDER REGION		
27	08 41 32.7&	61.929 N	152.408 W	145			8	SOUTHERN ALASKA. <AGS-P>.		
27	09 12 10.2?	39.06 N	23.58 E	23		0.5	10	AEGEAN SEA		
27	09 18 42.3%	39.004 N	27.488 E	10 G		0.1	5	TURKEY		
27	09 31 51.1	30.556 N	139.957 E	100 *	4.3	0.8	19	SOUTH OF HONSHU, JAPAN		
a 27	09 34 58.6	23.950 S	179.764 W	524	5.1	1.2	88	SOUTH OF FIJI ISLANDS		
27	10 10 41.??	41.76 N	12.74 E	10 G		0.2	4	SOUTHERN ITALY		
27	10 15 12.3*	37.636 N	20.510 E	10 G		1.1	16	IONIAN SEA. MD 3.9 (ATH).		
27	10 23 02.1%	46.262 N	0.469 W	10 G		1.3	8	FRANCE. ML 2.9 (LDG).		
a 27	10 39 36.9*	56.419 N	164.122 E	33 N	4.9 4.8	1.2	34	KOMANDORSKY ISLANDS REGION		
27	11 36 59.2%	61.461 N	6.313 E	10 G		0.5	8	SOUTHERN NORWAY. MD 1.8 (BER).		
27	11 41 45.2&	60.008 N	153.050 W	109			14	SOUTHERN ALASKA. <AGS-P>.		
27	12 37 32.8*	30.288 S	178.139 W	72 *	5.0	1.1	30	KERMADEC ISLANDS. Felt (III) on Raoul Island.		
27	13 14 15.4?	58.16 N	6.38 E	0 G		0.4	5	SOUTHERN NORWAY. MD 2.3 (BER). Probable explosion.		
27	13 15 35.1	63.022 N	149.446 W	101 *		1.2	15	CENTRAL ALASKA		
27	15 09 44.2&	60.084 N	152.979 W	119			31	SOUTHERN ALASKA. <AGS-P>.		
27	15 14 38.2*	29.787 N	99.318 E	10 G		0.8	7	SICHUAN PROVINCE, CHINA		
27	15 20 18.9*	38.659 N	70.107 E	33 N	4.1	0.5	7	AFGHANISTAN-USSR BORDER REGION		
27	15 26 47.0	37.542 N	141.354 E	65	5.1	1.0	115	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Fukushima and Sendai; (II JMA) at Ishinomaki, Mito, Morioka, Onahama and Utsunomiya.		
27	16 47 49.8	36.006 N	89.768 W	10 G	4.6	1.0	17	NEW MADRID, MISSOURI REGION. mbLg 4.3 (NEIS), 4.7 (BLA). Slight damage (VI) at Steele, Missouri. Felt (V) at Gabler, Hayti, Kennett and Senath, Missouri and at Blytheville AFB, Arkansas. Felt (IV) in parts of Arkansas, Illinois, Kentucky, Missouri and Tennessee.		
27	16 57 25.7	35.847 N	27.959 E	100 *		0.8	15	DODECANESE ISLANDS		
27	17 00 56.7	39.343 N	23.500 E	10 G		0.9	18	AEGEAN SEA		
27	18 21 37.2&	59.761 N	152.952 W	93			44	SOUTHERN ALASKA. <AGS-P>.		
27	18 34 24.5*	17.793 N	65.655 W	10 G		1.0	8	PUERTO RICO REGION. Felt at Humacao.		
27	18 39 52.7	66.981 N	156.303 W	5 G	5.0 4.8	1.0	106	ALASKA. ML 4.8 (PMR). Felt (III) at Kabuk.		
27	18 52 26.6	16.306 S	67.035 E	10 G	5.1	0.9	42	MID-INDIAN RISE		
27	19 09 47.9	66.899 N	156.284 W	5 G	4.4	1.1	38	ALASKA. ML 4.6 (PMR).		
27	19 37 37.9	33.585 N	80.645 E	33 N	4.7	1.4	33	TIBET		
27	19 43 11.6*	17.								

28	04	39	49.3	39.283	N	23.718	E	10	G			1.2	23	AEGEAN SEA. ML 3.1 (ATH).
28	04	54	57.6	39.244	N	23.609	E	10	G			0.8	22	AEGEAN SEA. ML 3.3 (ATH).
28	05	05	48.6?	37.26	N	27.97	E	10	G			1.4	4	TURKEY
28	05	15	07.7*	39.054	N	23.623	E	10	G			0.5	11	AEGEAN SEA. MD 3.5 (ATH).
28	05	29	55.2*	37.059	N	27.992	E	10	G			1.2	8	TURKEY
28	05	30	03.0	39.252	N	23.648	E	10	G			0.9	21	AEGEAN SEA. ML 3.2 (ATH).
28	05	40	22.9?	38.85	N	23.65	E	12				0.6	8	GREECE
28	06	37	32.5?	37.18	N	28.11	E	10	G			0.4	4	TURKEY
28	06	48	47.5*	37.092	N	27.912	E	5	G			1.4	5	TURKEY
28	07	02	45.6	39.265	N	23.497	E	10	G			0.8	16	AEGEAN SEA. ML 3.0 (ATH).
28	07	24	27.5?	37.207	N	27.997	E	10	G			1.2	6	TURKEY
o	28	07	48	19.6	13.245	N	89.675	W	59	5.2		1.2	173	EL SALVADOR. Felt (III) at San Salvador.
28	08	09	54.6*	37.077	N	27.925	E	10	G			1.3	6	TURKEY
28	08	12	13.9?	17.83	N	65.65	W	10	G			0.1	5	PUERTO RICO REGION. Felt at Humacao.
28	08	16	05.1*	37.076	N	27.999	E	10	G			1.1	7	TURKEY
28	08	22	43.3&	60.126	N	153.249	W	134					31	SOUTHERN ALASKA. <AGS-P>.
28	08	58	12.9?	39.032	N	27.650	E	10	G			1.4	7	TURKEY
o	28	09	13	46.2	20.163	S	67.478	E	10	G	5.2 4.9	1.0	51	MID-INDIAN RISE
28	09	22	06.9*	29.901	N	99.359	E	10	G	4.8		1.2	12	SICHUAN PROVINCE, CHINA
o	28	09	23	07.3	16.606	S	173.645	W	93	D	5.4	1.0	112	TONGA ISLANDS
28	10	04	00.8?	38.85	N	23.63	E	10	G			0.4	10	GREECE
28	10	10	02.8?	37.20	N	27.90	E	10	G			0.8	4	TURKEY
28	11	12	53.7	30.588	N	140.556	E	117	*	4.6		1.3	32	SOUTH OF HONSHU, JAPAN
28	11	21	22.3?	36.95	N	27.81	E	10	G			1.4	6	DODECANESE ISLANDS
28	11	39	46.4	39.256	N	23.570	E	10				0.7	23	AEGEAN SEA. ML 3.2 (ATH).
28	11	51	16.3?	31.715	S	117.064	E	10	G			0.3	5	WESTERN AUSTRALIA
28	12	31	19.0*	24.840	N	122.263	E	100	*	3.9		1.4	10	TAIWAN REGION
28	12	40	10.8*	37.103	N	27.998	E	10	G			1.4	7	TURKEY
28	13	14	58.5*	29.888	N	99.083	E	10	G	4.6		1.5	11	SICHUAN PROVINCE, CHINA
28	13	19	59.6?	41.98	N	23.08	E	10	G			0.7	5	GREECE-BULGARIA BORDER REGION
o	28	13	30	19.2	37.004	N	28.139	E	17	5.1 5.1		1.0	249	TURKEY. ML 5.4 (CSS), 5.0 (ATH). Slight damage in the Milas area. Felt in the Mugla area and at Izmir.
28	13	39	12.5*	37.086	N	27.881	E	10	G			1.5	6	TURKEY
28	13	43	34.4?	16.57	S	174.51	W	173	*	4.6		0.3	14	TONGA ISLANDS
28	13	44	05.1	36.982	N	28.006	E	20		4.0		1.2	24	DODECANESE ISLANDS
28	14	04	00.0?	37.12	N	28.05	E	10	G			0.4	4	TURKEY
28	14	05	35.2*	37.122	N	27.867	E	10	G			1.3	5	TURKEY
28	14	18	33.4*	37.123	N	27.847	E	10	G			1.3	8	TURKEY
28	14	33	59.7	36.537	N	70.890	E	174	*	3.9		0.7	13	HINDU KUSH REGION
28	14	50	15.5*	37.089	N	27.860	E	10	G			1.3	8	TURKEY
28	14	52	56.4	37.063	N	27.962	E	7		4.2		1.5	41	TURKEY
28	15	13	54.7	39.226	N	23.632	E	10	G			0.7	18	AEGEAN SEA. ML 3.0 (ATH).
28	15	29	37.1	39.241	N	23.601	E	22		3.6		0.9	39	AEGEAN SEA. ML 3.6 (ATH).
28	15	49	20.5	43.268	N	0.407	W	10	G			1.4	12	PYRENEES. MG 3.4 (MDD). Felt (IV) at Arudy, Bielle and in the Ossau Valley, France.
28	15	54	42.0	39.310	N	23.502	E	10	G			0.6	12	AEGEAN SEA. MD 3.1 (ATH).
28	16	01	50.5*	37.093	N	27.952	E	10	G			1.5	6	TURKEY
28	16	11	21.6*	37.089	N	28.005	E	10	G			0.4	5	TURKEY
28	16	48	16.7*	37.111	N	27.967	E	10	G			1.5	7	TURKEY
28	17	13	22.9*	37.095	N	27.909	E	10	G			1.3	7	TURKEY
28	17	24	33.6	37.115	N	27.940	E	10	G			1.2	11	TURKEY
o	28	17	38	26.4	4.354	S	101.413	E	27	D	5.4 5.8	1.0	154	SOUTHERN SUMATERA
28	17	40	13.4*	37.107	N	27.930	E	10	G			1.5	8	TURKEY
28	18	33	12.8	37.100	N	27.950	E	10	G			1.0	11	TURKEY
28	19	26	15.2?	41.93	N	128.24	W	10	G	4.5		1.7	7	OFF COAST OF NORTHERN CALIFORNIA
28	19	32	55.5	37.084	N	27.814	E	10	G			0.6	6	TURKEY
o	28	20	08	51.5	4.294	S	101.363	E	30	D	5.2 5.6	1.1	130	SOUTHERN SUMATERA
o	28	20	26	17.9*	59.515	S	29.397	W	22	D	5.5 5.7	1.4	44	SOUTH SANDWICH ISLANDS REGION
28	20	43	24.7?	37.17	N	27.99	E	10	G			1.5	5	TURKEY
28	20	53	50.2*	43.344	N	5.679	E	10	G			0.4	11	NEAR SOUTH COAST OF FRANCE. MD 2.6 (STR).
28	21	08	56.1*	37.083	N	27.916	E	10	G			0.3	5	TURKEY
o	28	21	09	57.6	4.210	S	101.370	E	32	D	5.4 5.7	1.0	150	SOUTHERN SUMATERA
28	21	11	42.6	37.081	N	27.915	E	10	G			1.1	24	TURKEY. MD 3.9 (ATH).
28	22	00	41.7?	37.162	N	27.938	E	10	G			0.8	9	TURKEY
28	22	13	03.5*	4.187	S	101.503	E	33	N	5.0		0.7	12	SOUTHERN SUMATERA
28	22	18	23.1	39.942	N	23.893	E	10	G			0.9	17	AEGEAN SEA
28	23	50	11.1	37.049	N	27.948	E	10	G	3.7		1.4	29	TURKEY
29	00	10	40.5	39.800	N	30.503	E	10	G	3.5		1.0	20	TURKEY
o	29	01	03	06.8	5.494	S	102.976	E	38	D	5.4 5.1	1.1	164	SOUTHERN SUMATERA
29	01	06	55.1?	37.74	N	23.61	E	10	G			1.0	9	SOUTHERN GREECE
29	01	38	33.6?	34.03	S	71.92	W	33	N			0.2	10	NEAR COAST OF CENTRAL CHILE
29	01	51	57.2?	39.22	N	23.28	E	10	G			0.6	9	AEGEAN SEA
29	02	14	20.3*	39.371	N	16.905	E	10	G			0.4	5	SOUTHERN ITALY
29	02	22	56.6?	37.156	N	27.968	E	5	G			0.9	5	TURKEY
29	02	23	57.4	39.327	N	16.774	E	10	G			0.6	6	SOUTHERN ITALY
29	02	25	20.2?	39.370	N	16.799	E	10	G			0.7	6	SOUTHERN ITALY
29	02	26	37.2?	39.329	N	16.797	E	10	G			0.7	6	SOUTHERN ITALY
29	02	55	51.0	37.787	N	142.446	E	33		4.6		1.1	44	OFF EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Fukushima.
29	03	10	40.8*	66.938	N	156.412	W	5	G			0.4	6	ALASKA. ML 3.0 (PMR).
29	03	16	32.4	66.940	N	156.339	W	5	G			0.2	9	ALASKA. ML 3.8 (PMR).
29	04	04	03.3*	37.022	N	27.966	E	10	G			1.4	5	TURKEY
29	04	11	12.1*	17.356	S	174.288	W	149	D	4.6		1.0	31	TONGA ISLANDS
29	04	11	12.8*	37.080	N	27.973	E	10	G			1.6	5	TURKEY
29	04	23	39.8	37.119	N	27.939	E	10	G			0.9	7	TURKEY
29	04	44	47.0?	37.204	N	27.921	E	10	G			1.4	9	TURKEY
29	05	41	33.3	37.105	N	27.886	E	10	G			1.4	10	TURKEY
29	06	15	15.7?	39.429	N	28.094	E	10	G			1.3	7	TURKEY
o	29	06	25	39.1	57.190	N	122.069	E	30	D	5.3 5.1	0.9	194	EASTERN USSR
29	06	26	52.8	46.167	N	11.919	E	10	G			0.8	6	NORTHERN ITALY. ML 2.8 (KBA). MD 2.9 (TRI).
29	06	40	49.7*	37.074	N	27.909	E	10	G			1.5	7	TURKEY
29	06	47	18.7	39.262	N	23.424	E	10	G			1.2	12	AEGEAN SEA. ML 3.0 (ATH).
29	07	29	27.2*	37.143	N	27.959	E	10	G			1.5	6	TURKEY

29	07 40 52.4	25.610 S	179.378 W	457 ?	4.6	1.1	18	SOUTH OF FIJI ISLANDS
29	08 08 08.0?	37.02 N	28.05 E	5 G		0.9	4	TURKEY
29	08 26 39.5	44.292 N	149.107 E	33 N	4.7	1.4	12	KURIL ISLANDS
29	08 43 58.5	40.565 N	24.180 E	10 G		0.8	7	AEGEAN SEA
29	08 58 04.7	44.291 N	7.487 E	10 G		0.5	16	NORTHERN ITALY. ML 2.2 (GEN).
29	09 09 42.0?	39.111 N	27.556 E	10 G		0.7	5	TURKEY
29	09 35 39.0	66.876 N	156.230 W	5 G		0.6	6	ALASKA. ML 2.8 (PMR).
29	10 14 33.0	7.320 S	120.692 E	490	4.6	1.0	58	FLORES SEA
29	10 37 26.1?	37.12 N	27.91 E	10 G		1.6	4	TURKEY
29	11 37 54.0?	37.02 N	27.97 E	10 G		0.8	4	TURKEY
29	12 10 33.2?	37.12 N	28.02 E	10 G		1.3	5	TURKEY
29	12 28 37.5	60.088 N	152.554 W	93			29	SOUTHERN ALASKA. <AGS-P>.
29	12 35 53.1?	34.28 N	139.87 E	33 N	4.8	0.9	6	NEAR S. COAST OF HONSHU, JAPAN
29	12 55 14.5?	25.25 N	91.60 E	33 N	4.3	0.4	7	INDIA-BANGLADESH BORDER REGION
29	13 50 12.0	36.599 N	141.038 E	58	4.3	0.8	26	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito and Onohama; (I JMA) at Utsunomiya.
29	15 04 25.0?	21.72 S	177.22 W	400 G	4.6	0.8	12	FIJI ISLANDS REGION
a 29	15 12 02.4	51.786 N	175.226 W	33 N	5.1 4.3	0.8	132	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.7 (PMR). Felt (IV) on Adak.
29	15 52 53.2	66.922 N	156.321 W	5 G	4.1	0.7	22	ALASKA. ML 4.2 (PMR). Felt at Kabuk.
29	16 40 07.7?	41.681 N	27.563 E	10 G		1.1	5	TURKEY
29	18 10 00.0?	2.03 N	126.53 E	113 ?	4.0	0.4	7	MOLUCCA PASSAGE
29	18 18 00.5	39.231 N	23.549 E	10 G		0.3	14	AEGEAN SEA. ML 3.0 (ATH).
29	18 42 35.6	38.947 N	23.407 E	10 G		1.1	13	GREECE. MD 3.2 (ATH).
29	18 51 22.2	66.900 N	156.327 W	5 G		0.2	5	ALASKA. ML 3.6 (PMR).
29	19 26 48.0	37.139 N	27.932 E	10 G		0.5	7	TURKEY
29	19 34 13.7	37.099 N	27.908 E	10 G		1.1	12	TURKEY
29	20 18 39.4	34.166 S	71.130 W	88 *		0.2	12	NEAR COAST OF CENTRAL CHILE
29	20 32 25.4?	16.04 S	173.63 W	92 D	4.6	0.9	12	TONGA ISLANDS
29	20 58 08.2	37.068 N	27.876 E	10 G		1.3	7	TURKEY
29	21 42 52.2?	45.01 N	3.57 E	10 G		1.1	9	FRANCE. ML 2.9 (LDG).
29	21 57 48.0	0.867 S	98.064 E	42 ?	4.4	1.2	23	SOUTHERN SUMATERA
29	21 59 28.1	60.391 N	152.220 W	99			39	SOUTHERN ALASKA. <AGS-P>.
29	22 01 45.7?	0.90 S	80.41 W	33 N	4.6	1.3	13	NEAR COAST OF ECUADOR
29	22 19 54.7	37.099 N	27.882 E	10 G		1.1	14	TURKEY
29	22 26 25.1	18.256 N	66.310 W	10 G		0.3	6	PUERTO RICO REGION
29	22 28 34.1	39.282 N	23.591 E	11		1.0	38	AEGEAN SEA. ML 3.3 (ATH).
29	22 31 06.0	37.098 N	27.904 E	10 G		1.3	9	TURKEY
29	23 52 26.7?	10.942 N	62.120 W	33 N		0.7	8	NEAR COAST OF VENEZUELA. MD 3.7 (TRN).
30	00 07 57.7	0.868 S	98.062 E	33 N	4.3	1.2	19	SOUTHERN SUMATERA
30	00 10 58.0?	41.79 N	12.74 E	10 G		0.1	4	SOUTHERN ITALY
30	00 29 44.9	11.297 N	68.071 W	10 G	4.9 4.2	1.3	50	NEAR COAST OF VENEZUELA
30	00 37 20.1	66.920 N	156.230 W	5 G		0.4	6	ALASKA. ML 3.1 (PMR).
30	00 48 21.2	66.978 N	156.159 W	5 G	4.5	1.1	34	ALASKA. ML 4.8 (PMR).
30	01 00 08.4	32.144 S	71.747 W	33 N		1.0	11	NEAR COAST OF CENTRAL CHILE
30	01 14 27.3	66.945 N	156.171 W	5 G		0.8	6	ALASKA. ML 3.8 (PMR).
30	01 58 45.9	40.024 N	23.173 E	10 G		0.9	11	GREECE. MD 3.0 (ATH).
30	02 18 27.2?	41.58 N	12.45 E	10 G		0.2	4	SOUTHERN ITALY
30	02 38 29.2	37.082 N	27.834 E	10 G		0.7	6	TURKEY
30	02 38 38.8	58.048 N	154.134 W	73			10	ALASKA PENINSULA. <AGS-P>.
30	03 04 04.6?	17.88 N	65.75 W	10 G		0.2	5	PUERTO RICO REGION
30	03 07 54.3?	18.46 N	65.91 W	10 G		1.1	4	PUERTO RICO REGION
30	03 15 21.4?	20.29 S	176.41 W	278 ?	4.4	0.6	11	FIJI ISLANDS REGION
30	03 36 20.0	34.925 N	137.072 E	33 N		0.4	7	NEAR S. COAST OF HONSHU, JAPAN. MG 3.6 (JMA). Felt (I JMA) at Nagoya and Gifu
30	03 38 00.6	47.298 N	6.605 E	21		0.8	51	FRANCE. ML 3.8 (LDG).
30	03 50 15.5	34.926 N	137.028 E	33 N		0.6	9	NEAR S. COAST OF HONSHU, JAPAN. MG 3.4 (JMA). Felt (I JMA) at Nagoya.
30	05 04 42.5	32.638 S	69.904 W	33 N		1.5	7	MENDOZA PROVINCE, ARGENTINA
30	05 11 00.5	39.277 N	23.580 E	20	4.0	1.0	70	AEGEAN SEA. ML 4.1 (ATH).
30	05 15 13.3	39.261 N	23.526 E	10 G		0.4	13	AEGEAN SEA. ML 3.0 (ATH).
30	06 49 48.3	42.019 N	19.206 E	10 G		1.1	11	YUGOSLAVIA. MD 2.9 (TTG).
30	07 44 05.0?	45.640 N	3.569 E	10 G		0.8	7	FRANCE. ML 2.5 (LDG).
30	07 44 58.5	60.321 N	150.862 W	57			34	KENAI PENINSULA, ALASKA. <AGS-P>.
a 30	08 22 54.0	10.960 N	68.325 W	20 G	5.9 6.0	1.0	345	NEAR COAST OF VENEZUELA. Ms 6.4 (BRK). 6.0 (PAS). Slight damage in the Valencia area. Felt at Caracas and in Aragua, Caraboba, Falcon and Yaracuy States. Depth from broadband displacement seismograms.
30	09 10 56.6	61.351 N	149.695 W	29	4.4		65	SOUTHERN ALASKA. <AGS-P>. ML 4.4 (PMR). Felt (V) at Chugiak and Eagle River; (IV) at Anchorage and Palmer.
30	09 30 06.4	11.758 N	68.416 W	10 G	4.6	1.2	12	NEAR COAST OF VENEZUELA
30	10 15 29.7?	21.84 S	67.10 W	213 ?		1.6	6	CHILE-BOLIVIA BORDER REGION
30	10 42 06.4?	39.24 N	23.54 E	10 G		0.5	9	AEGEAN SEA
30	11 03 36.4?	39.218 N	28.846 E	10 G		0.5	6	TURKEY
30	11 04 26.3	30.110 N	99.502 E	44 *	4.8	1.0	56	SICHUAN PROVINCE, CHINA
30	11 12 18.3	60.000 N	5.893 E	10 G		1.0	10	SOUTHERN NORWAY. MD 1.8 (BER).
30	11 49 25.9	30.743 S	72.066 W	62 ?	4.8	1.4	16	OFF COAST OF CENTRAL CHILE
30	11 54 32.9	66.888 N	156.340 W	5 G		0.3	6	ALASKA. ML 3.4 (PMR).
30	11 58 57.7	32.677 S	69.761 W	134 ?		0.3	9	MENDOZA PROVINCE, ARGENTINA
30	12 52 42.2	29.913 N	99.268 E	33 N	4.2	1.0	9	SICHUAN PROVINCE, CHINA
30	13 12 13.4	45.673 N	3.435 E	11		0.7	18	FRANCE. ML 3.5 (LDG).
30	13 22 08.4	45.708 N	3.492 E	10 G		1.1	14	FRANCE. ML 3.0 (LDG).
30	14 41 36.8	66.879 N	156.300 W	5 G		0.3	5	ALASKA. ML 3.4 (PMR).
30	15 32 57.9?	17.45 N	62.12 W	33 N		1.4	8	LEEWARD ISLANDS. ML 2.8 (FDF).
a 30	15 33 52.7	17.912 S	178.665 W	570 D	5.4	1.0	331	FIJI ISLANDS REGION. mb 5.6 (BRK).
30	16 11 23.9	35.596 N	30.951 E	33 N		1.0	9	EASTERN MEDITERRANEAN SEA
30	16 18 29.8	35.640 N	30.742 E	33 N		0.4	5	EASTERN MEDITERRANEAN SEA
30	16 26 43.9	43.163 N	136.072 E	356 *	4.2	0.9	24	EASTERN SEA OF JAPAN
30	17 03 03.2?	9.40 N	61.35 W	33 N		1.0	5	NEAR COAST OF VENEZUELA. MD 3.8 (TRN).
30	17 50 10.7	5.539 S	147.235 E	209 *	4.9	0.9	13	EAST PAPUA NEW GUINEA REGION
30	18 35 12.1	61.852 N	152.119 W	121			44	SOUTHERN ALASKA. <AGS-P>.
30	18 54 06.7	39.073 N	29.746 E	10 G		1.1	17	TURKEY
30	19 07 27.6	43.687 N	133.874 E	439 ?	4.2	0.9	25	NEAR E. COAST OF EASTERN USSR

30	19 50 33.5	66.944 N	156.325 W	5 G	1.3	6	ALASKA. ML 3.5 (PMR).
30	20 22 41.3	28.817 N	140.694 E	33 N 4.3	1.3	30	BONIN ISLANDS REGION
30	20 32 25.6	66.915 N	156.209 W	5 G	0.8	6	ALASKA. ML 3.6 (PMR).
30	21 24 52.6	11.238 N	68.053 W	10 G 4.6	1.3	14	NEAR COAST OF VENEZUELA
30	22 03 27.6	66.944 N	156.307 W	5 G	0.1	6	ALASKA. ML 3.8 (PMR).
30	23 05 26.7	30.071 N	99.507 E	15 D 5.1 4.8	0.9	142	SICHUAN PROVINCE, CHINA
30	23 44 35.7	32.15 N	96.89 E	33 N 4.4	1.2	11	QINGHAI PROVINCE, CHINA

## 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 21 58 14.19 32.797S 69.947W 110km 5.5mb ( 22 obs.) MENDOZA PROVINCE, ARGENTINA FAULT PLANE SOLUTION: P-Waves NP1:Strike= 25 Dip=75 Slip= -60 NP2: 139 33 -152 Principal Axes: T P1g=24 Azm= 92 P 51 329 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with a moderate strike-slip component. The preferred fault plane is NP1. CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 16S, 31C Centroid Location: Origin Time 21:58:18.4 0.4 Lat 32.86S 0.04 Lon 70.19W 0.08 Dep 119.0 3.2 Half-duration 1.6 Principal Axes: Scale 10**16 Nm T Val= 11.76 P1g=29 Azm= 93 N -1.47 9 188 P -10.30 59 294 Best Double Couple:Mo=1.1*10**17 NP1:Strike=158 Dip=18 Slip=-122 NP2: 10 75 -80	plane is NP1. MOMENT TENSOR SOLUTION Dep 238 No. of sta: 6 Principal Axes: Scale 10**17 Nm T Val= 2.86 P1g=34 Azm= 33 N 0.06 5 126 P -2.92 55 224 Best Double Couple:Mo=2.9*10**17 NP1:Strike=101 Dip=12 Slip=-116 NP2: 307 80 -85 CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 25C Centroid Location: Origin Time 10:43:39.0 0.6 Lat 5.23S 0.05 Lon 146.85E 0.04 Dep 227.8 2.3 Half-duration 2.5 Principal Axes: Scale 10**17 Nm T Val= 2.88 P1g=45 Azm= 55 N 0.58 17 307 P -3.46 40 202 Best Double Couple:Mo=3.2*10**17 NP1:Strike=225 Dip=17 Slip= 8 NP2: 128 88 107	NP2: 163 82 -171 04 20 10 52.15 25.017N 123.359E 141km 5.0mb ( 27 obs.) NORTHEAST OF TAIWAN CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 10S, 18C Centroid Location: Origin Time 20:10:50.0 0.6 Lat 24.62N 0.08 Lon 122.96E 0.11 Dep 121.1 5.2 Half-duration 1.7 Principal Axes: Scale 10**16 Nm T Val= 12.08 P1g=55 Azm=192 N -1.18 19 73 P -10.89 28 332 Best Double Couple:Mo=1.1*10**17 NP1:Strike= 22 Dip=24 Slip= 37 NP2: 258 76 110
02 06 42 04.57 28.252N 57.315E 44km 5.3mb ( 55 obs.) 4.8Msz ( 10 obs.) SOUTHERN IRAN CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 24C Centroid Location: Origin Time 06:42: 9.4 0.5 Lat 27.91N 0.06 Lon 57.25E 0.06 Dep 42.8 BDY Half-duration 1.7 Principal Axes: Scale 10**16 Nm T Val= 11.62 P1g=69 Azm=350 N 1.21 4 251 P -12.83 21 159 Best Double Couple:Mo=1.2*10**17 NP1:Strike=242 Dip=24 Slip= 81 NP2: 72 66 94	02 20 52 02.67 30.941S 179.998E 400km 5.1mb ( 32 obs.) KERMADEC ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 27C Centroid Location: Origin Time 20:52: 6.1 0.8 Lat 31.10S 0.09 Lon 179.91W 0.06 Dep 428.2 3.1 Half-duration 1.8 Principal Axes: Scale 10**17 Nm T Val= 1.47 P1g= 4 Azm= 94 N -0.31 9 184 P -1.17 80 342 Best Double Couple:Mo=1.3*10**17 NP1:Strike=174 Dip=42 Slip=-104 NP2: 12 50 -78	05 23 47 49.39 20.857S 69.028W 112km 5.7mb ( 46 obs.) NORTHERN CHILE CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 21S, 55C Centroid Location: Origin Time 23:47:54.8 0.2 Lat 21.13S 0.02 Lon 69.09W 0.03 Dep 122.3 1.3 Half-duration 4.6 Principal Axes: Scale 10**18 Nm T Val= 2.69 P1g=16 Azm= 78 N -0.86 11 345 P -1.83 70 222 Best Double Couple:Mo=2.3*10**18 NP1:Strike=185 Dip=30 Slip= -67 NP2: 339 62 -103
02 10 35 57.15 11.063N 85.352W 70km 5.0mb ( 26 obs.) NICARAGUA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 16S, 29C Centroid Location: Origin Time 10:36: 1.8 0.6 Lat 10.98N 0.07 Lon 85.26W 0.08 Dep 80.5 9.3 Half-duration 1.8 Principal Axes: Scale 10**16 Nm T Val= 14.02 P1g=39 Azm= 41 N -2.90 2 309 P -11.11 51 216 Best Double Couple:Mo=1.3*10**17 NP1:Strike=150 Dip= 6 Slip= -69 NP2: 309 84 -92	02 21 24 36.96 32.621N 47.782E 33km 5.4mb ( 71 obs.) 5.0Msz ( 7 obs.) IRAN-IRAQ BORDER REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 30C Centroid Location: Origin Time 21:24:40.1 0.9 Lat 32.89N 0.09 Lon 47.62E 0.09 Dep 15.0 FIX Half-duration 1.8 Principal Axes: Scale 10**17 Nm T Val= 1.12 P1g=29 Azm=112 N 0.60 40 355 P -1.72 37 227 Best Double Couple:Mo=1.4*10**17 NP1:Strike=256 Dip=40 Slip= -7 NP2: 351 85 -130	06 08 05 57.10 19.306S 169.002E 166km 6.1mb ( 30 obs.) VANUATU ISLANDS FAULT PLANE SOLUTION: P-Waves NP1:Strike=158 Dip=75 Slip= 90 NP2: 338 15 90 Principal Axes: T P1g=60 Azm= 68 P 30 248 Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting. The preferred fault plane is NP2. RADIATED ENERGY No. of sta: 10 Focal mech. F Energy 0.3±0.1*10**15 Nm MOMENT TENSOR SOLUTION Dep 151 No. of sta: 12 Principal Axes: Scale 10**19 Nm T Val= 2.69 P1g=61 Azm= 78 N -0.26 1 346 P -2.43 29 255 Best Double Couple:Mo=2.6*10**19 NP1:Strike=343 Dip=16 Slip= 87 NP2: 166 74 91 CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 23S, 62C M.W.: 18S, 47C Centroid Location: Origin Time 08:06: 7.6 0.1 Lat 19.48S 0.01 Lon 168.94E 0.01 Dep 164.6 0.5 Half-duration 11.0 Principal Axes: Scale 10**19 Nm T Val= 2.73 P1g=59 Azm= 90 N 0.04 8 346 P -2.77 29 252 Best Double Couple:Mo=2.8*10**19 NP1:Strike=318 Dip=17 Slip= 61 NP2: 169 75 99
02 10 43 32.79 5.428S 146.785E 251km 5.6mb ( 41 obs.) EAST PAPUA NEW GUINEA REGION FAULT PLANE SOLUTION: P-Waves NP1:Strike=300 Dip=72 Slip= -90 NP2: 120 18 -90 Principal Axes: T P1g=27 Azm= 30 P 63 210 Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting. The preferred fault	03 19 39 32.28 25.170N 94.652E 67km 5.2mb ( 70 obs.) BURMA-INDIA BORDER REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 24C Centroid Location: Origin Time 19:39:37.8 0.4 Lat 25.15N 0.06 Lon 94.81E 0.06 Dep 85.3 3.2 Half-duration 2.0 Principal Axes: Scale 10**17 Nm T Val= 2.85 P1g= 1 Azm=297 N -0.24 78 202 P -2.61 12 27 Best Double Couple:Mo=2.7*10**17 NP1:Strike= 71 Dip=81 Slip= -8	

07 21 06 21.54 58.685S 148.750E 10km  
5.2mb ( 6 obs.) 5.1msz ( 2 obs.)  
WEST OF MACQUARIE ISLAND  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 30C  
Centroid Location:  
Origin Time 21:06:26.7 0.5  
Lat 59.02S 0.05 Lon 148.35E 0.10  
Dep 15.0 FIX Half-duration 2.3  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.44 Plg=18 Azm= 27  
N -0.06 71 225  
P -2.38 5 119  
Best Double Couple:Mo=2.4\*10\*\*17  
NP1:Strike=165 Dip=74 Slip= 9  
NP2: 72 81 163

08 01 22 23.26 57.064N 143.490W 10km  
4.9mb ( 46 obs.) 4.7msz ( 3 obs.)  
GULF OF ALASKA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 24C  
Centroid Location:  
Origin Time 01:22:23.9 1.5  
Lat 57.27N 0.15 Lon 144.01W 0.17  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.22 Plg= 0 Azm=132  
N 0.09 90 180  
P -5.30 0 42  
Best Double Couple:Mo=5.3\*10\*\*16  
NP1:Strike=177 Dip=90 Slip= 180  
NP2: 267 90 0

08 01 32 48.56 37.731S 50.071E 10km  
5.0mb ( 15 obs.) 4.9msz ( 1 obs.)  
ATLANTIC-INDIAN RISE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 19S, 39C  
Centroid Location:  
Origin Time 01:32:56.2 0.7  
Lat 37.57S 0.08 Lon 50.61E 0.09  
Dep 15.0 FIX Half-duration 1.9  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.48 Plg=14 Azm= 2  
N -0.18 2 271  
P -1.30 76 172  
Best Double Couple:Mo=1.4\*10\*\*17  
NP1:Strike= 95 Dip=31 Slip= -85  
NP2: 270 59 -93

08 03 06 01.59 15.737S 173.001W 33km  
5.4mb ( 28 obs.) 5.7msz ( 24 obs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 41C  
Centroid Location:  
Origin Time 03:06: 8.7 0.2  
Lat 15.90S 0.03 Lon 172.91W 0.03  
Dep 15.0 BDY Half-duration 3.7  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 10.66 Plg=66 Azm=257  
N 0.88 3 354  
P -11.54 24 86  
Best Double Couple:Mo=1.1\*10\*\*18  
NP1:Strike=183 Dip=21 Slip= 99  
NP2: 353 69 86

09 02 31 36.17 29.177N 90.077E 10km  
5.2mb ( 52 obs.) 4.7msz ( 6 obs.)  
TIBET  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 23C  
Centroid Location:  
Origin Time 02:31:42.7 0.7  
Lat 28.74N 0.13 Lon 89.94E 0.10  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.66 Plg= 5 Azm=260  
N -0.49 19 352  
P -6.17 70 155  
Best Double Couple:Mo=6.4\*10\*\*16  
NP1:Strike=330 Dip=43 Slip=-119

NP2: 187 53 -65

09 05 07 50.60 51.510N 178.386W 33km  
5.2mb ( 59 obs.) 4.7msz ( 3 obs.)  
ANDREANOF ISLANDS, ALEUTIAN IS.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 19S, 35C  
Centroid Location:  
Origin Time 05:07:56.0 0.8  
Lat 51.92N 0.07 Lon 178.13W 0.10  
Dep 32.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 8.45 Plg=71 Azm=334  
N 1.18 2 239  
P -9.63 19 148  
Best Double Couple:Mo=9.0\*10\*\*16  
NP1:Strike=235 Dip=26 Slip= 86  
NP2: 60 64 92

09 09 14 34.17 16.265S 172.845W 25km  
5.1mb ( 15 obs.) 4.9msz ( 2 obs.)  
SAMOA ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 31C  
Centroid Location:  
Origin Time 09:14:42.9 0.6  
Lat 16.24S 0.06 Lon 172.79W 0.07  
Dep 15.0 FIX Half-duration 1.8  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.28 Plg=69 Azm=297  
N 0.16 6 191  
P -1.45 20 99  
Best Double Couple:Mo=1.4\*10\*\*17  
NP1:Strike=178 Dip=26 Slip= 76  
NP2: 13 65 97

09 09 22 34.81 20.791S 178.703W 593km  
5.1mb ( 30 obs.)  
FIJI ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 25C  
Centroid Location:  
Origin Time 09:22:41.6 0.8  
Lat 20.42S 0.08 Lon 179.23W 0.08  
Dep 604.1 5.4 Half-duration 2.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.34 Plg= 1 Azm=209  
N 0.84 30 118  
P -2.18 59 301  
Best Double Couple:Mo=1.8\*10\*\*17  
NP1:Strike=326 Dip=51 Slip= -50  
NP2: 92 53 -129

09 16 57 06.52 20.527S 174.378E 33km  
5.1mb ( 12 obs.) 5.1msz ( 2 obs.)  
VANUATU ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 31C  
Centroid Location:  
Origin Time 16:57:11.8 0.5  
Lat 20.34S 0.06 Lon 173.91E 0.04  
Dep 39.6 4.9 Half-duration 1.9  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.43 Plg= 3 Azm=227  
N 0.01 78 329  
P -1.45 12 136  
Best Double Couple:Mo=1.4\*10\*\*17  
NP1:Strike=272 Dip=80 Slip=-174  
NP2: 181 84 -10

11 03 56 36.91 49.488N 159.185E 16km  
6.3mb ( 80 obs.) 6.6msz ( 23 obs.)  
KURIL ISLANDS REGION  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=230 Dip=68 Slip= -90  
NP2: 50 22 -90  
Principal Axes:  
T Plg=23 Azm=320  
N 67 140  
P -1.39 43 265  
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.  
RADIATED ENERGY

No. of sta: 13 Focal mech. F  
Energy 3.0±0.6\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 26 No. of sta: 22  
Principal Axes:  
Scale 10\*\*19 Nm  
T Val= 1.10 Plg=20 Azm=332  
N -0.03 13 237  
P -1.07 66 116  
Best Double Couple:Mo=1.1\*10\*\*19  
NP1:Strike= 83 Dip=28 Slip= -62  
NP2: 231 66 -104  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 18S, 51C M.W.: 15S, 31C  
Centroid Location:  
Origin Time 03:56:42.8 0.1  
Lat 49.64N 0.01 Lon 159.41E 0.02  
Dep 15.0 FIX Half-duration 9.0  
Principal Axes:  
Scale 10\*\*19 Nm  
T Val= 1.55 Plg=11 Azm=326  
N -0.10 3 56  
P -1.45 79 160  
Best Double Couple:Mo=1.5\*10\*\*19  
NP1:Strike= 52 Dip=35 Slip= -95  
NP2: 238 56 -87  
GEOSCOPE MOMENT TENSOR (PAR)  
Dep 15.0 Half-duration 8.0  
Best Double Couple:Mo=2.0\*10\*\*19  
NP1:Strike= 59 Dip=29 Slip= -71  
NP2: 218 63 260

13 00 43 11.28 39.533S 75.002W 33km  
5.8mb ( 27 obs.) 5.5msz ( 6 obs.)  
OFF COAST OF CENTRAL CHILE  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 5 Dip=75 Slip= -90  
NP2: 185 15 -90  
Principal Axes:  
T Plg=30 Azm= 95  
P 60 275  
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.  
MOMENT TENSOR SOLUTION  
Dep 8 No. of sta: 5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 5.50 Plg=27 Azm= 98  
N 0.18 7 4  
P -5.68 62 262  
Best Double Couple:Mo=5.6\*10\*\*17  
NP1:Strike=204 Dip=19 Slip= -69  
NP2: 2 72 -97  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 19S, 44C  
Centroid Location:  
Origin Time 00:43:10.8 0.2  
Lat 39.96S 0.03 Lon 75.07W 0.04  
Dep 15.0 BDY Half-duration 2.5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 5.58 Plg=16 Azm= 86  
N 0.30 21 350  
P -5.88 63 211  
Best Double Couple:Mo=5.7\*10\*\*17  
NP1:Strike=204 Dip=34 Slip= -51  
NP2: 339 64 -113

13 07 25 36.70 24.472N 92.505E 33km  
5.1mb ( 44 obs.) 5.0msz ( 9 obs.)  
INDIA-BANGLADESH BORDER REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 23C  
Centroid Location:  
Origin Time 07:25:37.9 0.8  
Lat 24.25N 0.09 Lon 91.71E 0.16  
Dep 33.0 FIX Half-duration 1.9  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.01 Plg=47 Azm= 97  
N -0.63 6 1  
P -1.39 43 265  
Best Double Couple:Mo=1.7\*10\*\*17  
NP1:Strike=291 Dip= 6 Slip= 20  
NP2: 181 88 96

13 12 17 31.30 13.290N 39.980E 33km

4.9mb ( 23 obs.) 4.9Msz ( 1 obs.)  
 ETHIOPIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 35C  
 Centroid Location:  
 Origin Time 12:17:25.7 0.9  
 Lat 12.94N 0.06 Lon 39.48E 0.06  
 Dep 15.0 FIX Half-duration 2.0  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Vol= 1.77 Plg= 8 Azm= 64  
 N -0.02 13 332  
 P -1.75 75 185  
 Best Double Couple: Mo=1.8\*10\*\*17  
 NP1: Strike=168 Dip=39 Slip= -70  
 NP2: 323 54 -106

14 01 15 44.55 14.879S 167.211E 158km  
 5.2mb ( 17 obs.)  
 VANUATU ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 9S, 17C  
 Centroid Location:  
 Origin Time 01:15:48.2 1.7  
 Lat 15.44S 0.18 Lon 166.97E 0.17  
 Dep 133.4 6.0 Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Vol= 6.50 Plg=33 Azm=159  
 N -0.71 55 316  
 P -5.79 11 62  
 Best Double Couple: Mo=6.1\*10\*\*16  
 NP1: Strike=196 Dip=59 Slip= 163  
 NP2: 295 76 32

14 12 52 26.76 19.201N 145.522E 168km  
 5.4mb ( 36 obs.)  
 MARIANA ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 25C  
 Centroid Location:  
 Origin Time 12:52:28.1 0.9  
 Lat 19.46N 0.07 Lon 145.08E 0.10  
 Dep 156.1 3.8 Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Vol= 8.34 Plg=34 Azm=171  
 N -1.38 18 273  
 P -6.96 50 27  
 Best Double Couple: Mo=7.6\*10\*\*16  
 NP1: Strike=211 Dip=20 Slip= -154  
 NP2: 96 81 -71

14 13 02 52.66 18.172S 178.393W 636km  
 5.4mb ( 37 obs.)  
 FIJI ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 44C  
 Centroid Location:  
 Origin Time 13:03: 0.5 0.7  
 Lat 17.87S 0.05 Lon 178.74W 0.05  
 Dep 648.0 2.4 Half-duration 2.8  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Vol= 4.50 Plg= 8 Azm=328  
 N 0.43 31 63  
 P -4.93 57 225  
 Best Double Couple: Mo=4.7\*10\*\*17  
 NP1: Strike= 27 Dip=46 Slip= -136  
 NP2: 263 60 -53

15 14 26 41.25 8.453N 61.039W 23km  
 5.8mb ( 64 obs.) 5.1Msz ( 3 obs.)  
 VENEZUELA  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike= 95 Dip=75 Slip= -50  
 NP2: 202 42 -157  
 Principal Axes:  
 T Plg=20 Azm=156  
 P 45 45  
 Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a moderate normal component. The preferred fault plane is not determined.  
 RADIATED ENERGY  
 No. of sta: 5 Focal mech. C

Energy 8.4±3.5\*10\*\*12 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 13 No. of sta: 6  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Vol= 1.56 Plg= 9 Azm=151  
 N -0.01 44 249  
 P -1.55 45 52  
 Best Double Couple: Mo=1.6\*10\*\*17  
 NP1: Strike=202 Dip=53 Slip= -151  
 NP2: 93 67 -41  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 20S, 42C  
 Centroid Location:  
 Origin Time 14:26:41.4 0.6  
 Lat 8.50N 0.06 Lon 60.32W 0.06  
 Dep 18.5 4.6 Half-duration 1.9  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Vol= 1.60 Plg=28 Azm=149  
 N -0.36 26 254  
 P -1.24 51 20  
 Best Double Couple: Mo=1.4\*10\*\*17  
 NP1: Strike=194 Dip=29 Slip= -153  
 NP2: 80 77 -63

15 20 34 08.93 29.987N 99.195E 13km  
 6.2mb ( 68 obs.) 6.2Msz ( 18 obs.)  
 SICHUAN PROVINCE, CHINA  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike= 85 Dip=40 Slip= -90  
 NP2: 265 50 -90  
 Principal Axes:  
 T Plg= 5 Azm=355  
 P 85 175  
 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is not determined.  
 RADIATED ENERGY  
 No. of sta: 9 Focal mech. F  
 Energy 1.0±0.2\*10\*\*14 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 7 No. of sta: 14  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Vol= 3.70 Plg= 3 Azm= 8  
 N -0.33 15 99  
 P -3.37 75 266  
 Best Double Couple: Mo=3.5\*10\*\*18  
 NP1: Strike= 83 Dip=44 Slip= -111  
 NP2: 291 50 -71  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 38C M.W.: 19S, 39C  
 Centroid Location:  
 Origin Time 20:34:21.2 0.1  
 Lat 29.92N 0.01 Lon 99.37E 0.02  
 Dep 15.0 BDY Half-duration 6.3  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Vol= 5.38 Plg=16 Azm=171  
 N -0.11 8 78  
 P -5.27 72 323  
 Best Double Couple: Mo=5.3\*10\*\*18  
 NP1: Strike=273 Dip=29 Slip= -73  
 NP2: 74 62 -99

15 23 48 36.81 13.723S 171.926E 602km  
 5.2mb ( 36 obs.)  
 VANUATU ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 9S, 13C  
 Centroid Location:  
 Origin Time 23:48:42.9 1.6  
 Lat 13.69S FIX; Lon 171.89E FIX  
 Dep 575.010.8 Half-duration 2.0  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Vol= 2.73 Plg=41 Azm= 55  
 N 0.02 36 185  
 P -2.75 28 298  
 Best Double Couple: Mo=2.7\*10\*\*17  
 NP1: Strike= 80 Dip=37 Slip= 168  
 NP2: 179 83 53

16 05 24 23.34 26.533N 126.388E 133km  
 5.3mb ( 54 obs.)  
 RYUKYU ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN  
 L.P.B.: 12S, 24C  
 Centroid Location:  
 Origin Time 05:24:25.3 0.5  
 Lat 26.33N 0.04 Lon 125.96E 0.08  
 Dep 125.9 2.2 Half-duration 2.0  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Vol= 1.57 Plg=23 Azm=227  
 N 0.39 22 327  
 P -1.96 57 95  
 Best Double Couple: Mo=1.8\*10\*\*17  
 NP1: Strike=281 Dip=29 Slip= -140  
 NP2: 155 72 -67

16 06 50 24.46 1.012N 120.061E 27km  
 5.3mb ( 27 obs.) 4.9Msz ( 15 obs.)  
 MINAHASSA PENINSULA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 39C  
 Centroid Location:  
 Origin Time 06:50:29.6 0.4  
 Lat 1.52N 0.05 Lon 120.28E 0.07  
 Dep 35.1 4.3 Half-duration 2.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Vol= 2.38 Plg=59 Azm=204  
 N -0.03 23 71  
 P -2.35 21 332  
 Best Double Couple: Mo=2.4\*10\*\*17  
 NP1: Strike= 28 Dip=31 Slip= 43  
 NP2: 260 69 114

16 08 04 29.57 4.612N 32.651W 10km  
 4.9mb ( 11 obs.) 4.7Msz ( 2 obs.)  
 CENTRAL MID-ATLANTIC RIDGE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 11S, 18C  
 Centroid Location:  
 Origin Time 08:04:34.2 1.2  
 Lat 4.74N FIX; Lon 32.62W FIX  
 Dep 15.0 FIX Half-duration 1.6  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Vol= 3.57 Plg= 0 Azm=264  
 N -0.64 0 174  
 P -2.93 90 180  
 Best Double Couple: Mo=3.3\*10\*\*16  
 NP1: Strike=354 Dip=45 Slip= -90  
 NP2: 174 45 -90

16 08 35 03.25 4.462N 32.573W 10km  
 5.4mb ( 18 obs.) 4.9Msz ( 3 obs.)  
 CENTRAL MID-ATLANTIC RIDGE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 24C  
 Centroid Location:  
 Origin Time 08:35: 9.8 0.8  
 Lat 4.73N 0.08 Lon 32.41W 0.06  
 Dep 15.0 FIX Half-duration 1.6  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Vol= 6.93 Plg= 0 Azm=264  
 N 1.06 0 174  
 P -7.98 90 180  
 Best Double Couple: Mo=7.5\*10\*\*16  
 NP1: Strike=354 Dip=45 Slip= -90  
 NP2: 174 45 -90

16 10 51 16.52 4.630N 32.664W 10km  
 5.4mb ( 50 obs.) 5.4Msz ( 12 obs.)  
 CENTRAL MID-ATLANTIC RIDGE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 45C  
 Centroid Location:  
 Origin Time 10:51:26.8 0.3  
 Lat 4.89N 0.04 Lon 32.31W 0.03  
 Dep 15.0 FIX Half-duration 2.6  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Vol= 3.37 Plg= 6 Azm=267  
 N 0.14 2 177  
 P -3.51 84 68  
 Best Double Couple: Mo=3.4\*10\*\*17  
 NP1: Strike= 0 Dip=39 Slip= -87  
 NP2: 176 51 -93

16 19 48 14.69 21.039S 178.942W 610km  
 5.7mb ( 57 obs.)

FIJI ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 18S, 48C  
 Centroid Location:  
 Origin Time 19:48:22.9 0.2  
 Lat 20.79S 0.02 Lon 179.18W 0.02  
 Dep 600.8 1.3 Half-duration 5.1  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 2.43 Plg=21 Azm= 78  
 N 0.98 30 182  
 P -3.41 51 319  
 Best Double Couple: Mo=2.9\*10\*\*18  
 NP1: Strike=127 Dip=36 Slip=-150  
 NP2: 12 73 -58

17 04 55 26.77 30.644S 71.683W 44km  
 4.9mb ( 14 obs.) 4.8Msz ( 1 obs.)  
 NEAR COAST OF CENTRAL CHILE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 20C  
 Centroid Location:  
 Origin Time 04:55:28.8 0.8  
 Lat 30.92S 0.12 Lon 71.85W 0.13  
 Dep 15.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 6.44 Plg=68 Azm= 90  
 N 1.73 2 355  
 P -8.17 22 265  
 Best Double Couple: Mo=7.3\*10\*\*16  
 NP1: Strike=351 Dip=23 Slip= 85  
 NP2: 176 67 92

18 02 01 27.13 21.538S 178.955W 580km  
 5.2mb ( 36 obs.)  
 FIJI ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 20S, 31C  
 Centroid Location:  
 Origin Time 02:01:34.9 0.6  
 Lat 21.23S 0.05 Lon 179.40W 0.05  
 Dep 603.5 3.0 Half-duration 1.9  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.48 Plg=22 Azm=123  
 N 0.33 16 220  
 P -1.81 62 344  
 Best Double Couple: Mo=1.6\*10\*\*17  
 NP1: Strike=185 Dip=27 Slip=-128  
 NP2: 47 69 -73

18 12 33 52.16 23.834S 179.944E 524km  
 5.8mb ( 50 obs.)  
 SOUTH OF FIJI ISLANDS  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike=190 Dip=82 Slip= 90  
 NP2: 10 8 90  
 Principal Axes:  
 T Plg=53 Azm=100  
 P 37 280  
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.  
 RADIATED ENERGY  
 No. of sta: 7 Focal mech. M  
 Energy 5.2±1.5\*10\*\*12 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 548 No. of sta: 13  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 1.60 Plg=50 Azm= 75  
 N -0.06 16 185  
 P -1.54 35 286  
 Best Double Couple: Mo=1.6\*10\*\*18  
 NP1: Strike= 67 Dip=18 Slip= 154  
 NP2: 182 82 74  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 12S, 30C  
 Centroid Location:  
 Origin Time 12:34: 1.2 0.3  
 Lat 23.87S 0.03 Lon 179.79E 0.02  
 Dep 547.9 1.3 Half-duration 3.8  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 9.72 Plg=48 Azm= 85  
 N 1.73 18 196

P -11.45 36 300  
 Best Double Couple: Mo=1.1\*10\*\*18  
 NP1: Strike= 85 Dip=19 Slip= 160  
 NP2: 194 84 72

19 00 08 19.65 31.310S 177.815W 11km  
 5.6mb ( 17 obs.) 5.9Msz ( 27 obs.)  
 KERMADEC ISLANDS REGION  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike= 15 Dip=70 Slip= 90  
 NP2: 195 20 90  
 Principal Axes:  
 T Plg=65 Azm=285  
 P 25 105  
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.  
 MOMENT TENSOR SOLUTION  
 Dep 10 No. of sta: 14  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 6.27 Plg=59 Azm=254  
 N -0.26 20 20  
 P -6.01 23 119  
 Best Double Couple: Mo=6.1\*10\*\*17  
 NP1: Strike=242 Dip=28 Slip= 135  
 NP2: 13 71 69  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 18S, 39C  
 Centroid Location:  
 Origin Time 00:08:27.4 0.4  
 Lat 31.36S 0.03 Lon 177.54W 0.04  
 Dep 19.7 1.6 Half-duration 3.2  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 5.82 Plg=71 Azm=271  
 N 1.43 5 16  
 P -7.25 18 108  
 Best Double Couple: Mo=6.5\*10\*\*17  
 NP1: Strike=206 Dip=28 Slip= 101  
 NP2: 14 63 84

19 07 03 59.31 31.521S 177.763W 61km  
 5.2mb ( 8 obs.)  
 KERMADEC ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 22C  
 Centroid Location:  
 Origin Time 07:04: 1.5 1.9  
 Lat 31.15S 0.12 Lon 177.66W 0.14  
 Dep 40.9 7.2 Half-duration 1.4  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 4.48 Plg=62 Azm=220  
 N 0.95 26 17  
 P -5.43 10 112  
 Best Double Couple: Mo=4.9\*10\*\*16  
 NP1: Strike=230 Dip=42 Slip= 131  
 NP2: 0 60 59

19 14 48 56.70 17.858N 105.228W 10km  
 5.1mb ( 10 obs.) 5.4Msz ( 7 obs.)  
 OFF COAST OF JALISCO, MEXICO  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 39C  
 Centroid Location:  
 Origin Time 14:49: 2.1 0.4  
 Lat 17.99N 0.04 Lon 105.47W 0.04  
 Dep 15.0 FIX Half-duration 2.9  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 5.40 Plg= 6 Azm= 82  
 N -0.47 84 254  
 P -4.93 1 352  
 Best Double Couple: Mo=5.2\*10\*\*17  
 NP1: Strike=127 Dip=85 Slip= 176  
 NP2: 217 86 5

20 06 53 33.06 2.968N 126.400E 94km  
 4.9mb ( 15 obs.)  
 MOLUCCA PASSAGE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 35C  
 Centroid Location:  
 Origin Time 06:53:32.5 0.4  
 Lat 3.07N 0.05 Lon 126.43E 0.06  
 Dep 33.3 3.2 Half-duration 2.0

Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.58 Plg=61 Azm=308  
 N 0.24 12 195  
 P -1.82 26 99  
 Best Double Couple: Mo=1.7\*10\*\*17  
 NP1: Strike=163 Dip=22 Slip= 56  
 NP2: 19 72 103

20 08 08 51.09 9.259S 79.033W 63km  
 5.8mb ( 55 obs.)  
 OFF COAST OF NORTHERN PERU  
 RADIATED ENERGY  
 No. of sta: 4 Focal mech. C  
 Energy 1.2±0.6\*10\*\*13 Nm  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 42C  
 Centroid Location:  
 Origin Time 08:08:56.4 0.3  
 Lat 9.43S 0.03 Lon 79.16W 0.04  
 Dep 63.1 2.3 Half-duration 2.4  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 3.14 Plg= 5 Azm=240  
 N -0.07 4 150  
 P -3.07 83 24  
 Best Double Couple: Mo=3.1\*10\*\*17  
 NP1: Strike=335 Dip=40 Slip= -84  
 NP2: 147 51 -95

20 22 59 54.07 57.166N 121.976E 26km  
 6.1mb ( 65 obs.) 6.5Msz ( 21 obs.)  
 EASTERN USSR  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike=129 Dip=75 Slip= 90  
 NP2: 309 15 90  
 Principal Axes:  
 T Plg=60 Azm= 39  
 P 30 219  
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.  
 RADIATED ENERGY  
 No. of sta: 7 Focal mech. M  
 Energy 0.6±0.2\*10\*\*14 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 22 No. of sta: 18  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 2.74 Plg=53 Azm= 22  
 N 0.34 16 134  
 P -3.08 32 234  
 Best Double Couple: Mo=2.9\*10\*\*18  
 NP1: Strike= 7 Dip=19 Slip= 145  
 NP2: 131 79 74  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 44C M.W.: 13S, 23C  
 Centroid Location:  
 Origin Time 23:00: 1.4 0.2  
 Lat 57.03N 0.01 Lon 121.23E 0.04  
 Dep 48.3 1.8 Half-duration 5.0  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 3.25 Plg=30 Azm=329  
 N -0.32 54 113  
 P -2.93 17 229  
 Best Double Couple: Mo=3.1\*10\*\*18  
 NP1: Strike= 6 Dip=56 Slip= 170  
 NP2: 101 82 35  
 GEOSCOPE MOMENT TENSOR (PAR)  
 Dep 25.0 Half-duration 7.0  
 Best Double Couple: Mo=5.0\*10\*\*18  
 NP1: Strike=115 Dip=86 Slip= 68  
 NP2: 14 23 168

21 20 36 04.23 13.302N 144.381E 115km  
 5.2mb ( 25 obs.)  
 MARIANA ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 26C  
 Centroid Location:  
 Origin Time 20:36: 8.6 0.4  
 Lat 13.19N 0.04 Lon 144.04E 0.06  
 Dep 107.2 3.1 Half-duration 1.8  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 12.32 Plg= 1 Azm=210  
 N 1.48 50 301

P -13.80 39 119  
Best Double Couple: Mo=1.3\*10\*\*17  
NP1: Strike=262 Dip=62 Slip=-150  
NP2: 157 64 -31

22 04 48 30.85 35.576S 102.935W 10km  
5.0mb ( 10 obs.) 4.8Msz ( 2 obs.)  
SOUTHERN PACIFIC OCEAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 19S, 42C  
Centroid Location:  
Origin Time 04:48:35.5 0.3  
Lat 36.05S 0.04 Lon 102.82W 0.04  
Dep 15.0 FIX Half-duration 2.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.21 Plg= 8 Azm= 53  
N -0.60 76 290  
P -1.61 12 145  
Best Double Couple: Mo=1.9\*10\*\*17  
NP1: Strike=189 Dip=76 Slip= -3  
NP2: 279 87 -166

23 15 22 34.17 44.958N 150.238E 89km  
4.9mb ( 43 obs.)  
KURIL ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 29C  
Centroid Location:  
Origin Time 15:22:32.5 0.7  
Lat 45.37N 0.05 Lon 150.65E 0.09  
Dep 44.2 4.7 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.10 Plg=72 Azm=257  
N 0.36 13 35  
P -6.46 12 128  
Best Double Couple Mo=6.3\*10\*\*16  
NP1: Strike=235 Dip=35 Slip= 114  
NP2: 27 58 74

23 19 21 06.47 66.960N 156.289W 6km  
5.7mb ( 65 obs.) 5.1Msz ( 16 obs.)  
ALASKA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 19S, 37C  
Centroid Location:  
Origin Time 19:21:10.4 0.3  
Lat 67.30N 0.05 Lon 157.02W 0.08  
Dep 15.0 BDY Half-duration 2.1  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.96 Plg= 6 Azm=258  
N -0.29 3 348  
P -1.67 83 104  
Best Double Couple Mo=1.8\*10\*\*17  
NP1: Strike=345 Dip=39 Slip= -95  
NP2: 171 51 -86

24 20 32 55.84 17.484S 167.835E 28km  
5.1mb ( 3 obs.)  
VANUATU ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 10S, 17C  
Centroid Location:  
Origin Time 20:32:59.7 1.4  
Lat 17.49S 0.14 Lon 167.75E 0.14  
Dep 37.3 9.4 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.12 Plg=74 Azm= 40  
N -0.86 7 157  
P -5.26 14 249  
Best Double Couple: Mo=5.7\*10\*\*16  
NP1: Strike=350 Dip=32 Slip= 104  
NP2: 153 60 81

24 20 41 11.54 17.398S 167.826E 34km  
5.3mb ( 16 obs.) 5.5Msz ( 19 obs.)  
VANUATU ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 37C  
Centroid Location:  
Origin Time 20:41:15.7 0.4  
Lat 17.44S 0.03 Lon 167.60E 0.03  
Dep 27.7 1.8 Half-duration 3.1  
Principal Axes:  
Scale 10\*\*17 Nm

T Val= 5.41 Plg=68 Azm= 37  
N 0.75 18 179  
P -6.16 13 273  
Best Double Couple: Mo=5.8\*10\*\*17  
NP1: Strike= 26 Dip=36 Slip= 122  
NP2: 168 60 69

25 00 31 38.67 25.499S 179.653E 497km  
5.0mb ( 27 obs.)  
SOUTH OF FIJI ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 27C  
Centroid Location:  
Origin Time 00:31:49.0 1.0  
Lat 25.38S 0.08 Lon 179.27E 0.09  
Dep 520.3 3.5 Half-duration 1.8  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.07 Plg=42 Azm= 62  
N 1.04 35 192  
P -12.11 28 303  
Best Double Couple: Mo=1.2\*10\*\*17  
NP1: Strike= 84 Dip=36 Slip= 166  
NP2: 186 82 55

25 02 13 20.83 30.048N 99.419E 8km  
6.2mb ( 84 obs.) 6.0Msz ( 16 obs.)  
SICHUAN PROVINCE, CHINA  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike= 75 Dip=45 Slip= -90  
NP2: 255 45 -90  
Principal Axes:  
T Plg= 0 Azm=165  
P 90 0  
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is not determined.  
RADIATED ENERGY  
No. of sta: 7 Focal mech. F  
Energy 5.1±0.7\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 7 No. of sta: 15  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.92 Plg=12 Azm=338  
N -0.24 21 73  
P -1.68 65 221  
Best Double Couple: Mo=1.8\*10\*\*18  
NP1: Strike= 43 Dip=38 Slip=-126  
NP2: 266 60 -65  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 34C M.W.: 15S, 24C  
Centroid Location:  
Origin Time 02:13:31.2 0.1  
Lat 29.90N 0.02 Lon 99.41E 0.03  
Dep 15.0 BDY Half-duration 4.6  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.85 Plg= 7 Azm=172  
N -0.11 16 264  
P -1.75 73 59  
Best Double Couple: Mo=1.8\*10\*\*18  
NP1: Strike=245 Dip=40 Slip=-114  
NP2: 96 54 -71

25 03 11 17.46 17.420S 167.776E 15km  
5.0mb ( 7 obs.) 4.8Msz ( 1 obs.)  
VANUATU ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 22C  
Centroid Location:  
Origin Time 03:11:21.8 1.0  
Lat 17.23S 0.08 Lon 167.69E 0.10  
Dep 20.4 4.4 Half-duration 2.4  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.00 Plg=62 Azm= 9  
N -0.62 27 174  
P -2.37 6 267  
Best Double Couple: Mo=2.7\*10\*\*17  
NP1: Strike= 24 Dip=46 Slip= 129  
NP2: 155 56 57

25 05 13 34.07 5.108S 143.501E 110km  
5.5mb ( 43 obs.)  
PAPUA NEW GUINEA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN

L.P.B.: 18S, 38C  
Centroid Location:  
Origin Time 05:13:39.6 0.3  
Lat 5.15S 0.03 Lon 143.26E 0.03  
Dep 105.9 2.3 Half-duration 3.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 5.60 Plg=11 Azm=249  
N 0.49 59 140  
P -6.09 28 345  
Best Double Couple: Mo=5.9\*10\*\*17  
NP1: Strike= 23 Dip=62 Slip= -13  
NP2: 120 78 -151

25 06 11 32.28 11.073N 86.761W 46km  
4.8mb ( 8 obs.) 4.5Msz ( 4 obs.)  
NEAR COAST OF NICARAGUA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 10S, 15C  
Centroid Location:  
Origin Time 06:11:25.7 1.3  
Lat 11.32N 0.18 Lon 86.00W 0.29  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.65 Plg=32 Azm= 73  
N -0.20 12 335  
P -11.46 55 226  
Best Double Couple: Mo=1.2\*10\*\*17  
NP1: Strike=199 Dip=17 Slip= -45  
NP2: 332 78 -103

25 14 29 00.51 16.773N 99.328W 19km  
6.2mb ( 56 obs.) 6.8Msz ( 29 obs.)  
NEAR COAST OF GUERRERO, MEXICO  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike=121 Dip=77 Slip= 90  
NP2: 301 13 90  
Principal Axes:  
T Plg=58 Azm= 31  
P 32 211  
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. C  
Energy 2.5±0.8\*10\*\*14 Nm  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 20S, 54C M.W.: 16S, 32C  
Centroid Location:  
Origin Time 14:29: 5.9 0.1  
Lat 16.83N 0.01 Lon 99.12W 0.01  
Dep 15.0 BDY Half-duration 9.0  
Principal Axes:  
Scale 10\*\*19 Nm  
T Val= 2.40 Plg=54 Azm= 36  
N -0.03 4 300  
P -2.38 36 207  
Best Double Couple: Mo=2.4\*10\*\*19  
NP1: Strike=276 Dip=10 Slip= 66  
NP2: 121 81 94  
GEOSCOPE MOMENT TENSOR (PAR)  
Dep 15.0 Half-duration 20.0  
Best Double Couple: Mo=2.6\*10\*\*19  
NP1: Strike=164 Dip=83 Slip= 101  
NP2: -73 13 33

27 02 20 04.74 30.601N 140.589E 85km  
6.1mb ( 86 obs.)  
SOUTH OF HONSHU, JAPAN  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike=178 Dip=87 Slip= 106  
NP2: 278 16 11  
Principal Axes:  
T Plg=46 Azm=104  
P 40 253  
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.  
RADIATED ENERGY  
No. of sta: 7 Focal mech. C  
Energy 5.1±1.7\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 91 No. of sta: 14  
Principal Axes:

Scale 10**18 Nm	N -0.08 72 357	Scale 10**18 Nm
T Val= 1.57 Plg=51 Azm= 89	P -3.19 17 153	T Val= 1.23 Plg=50 Azm= 40
N 0.16 15 340	Best Double Couple:Mo=3.2*10**17	N 0.10 3 306
P -1.73 35 239	NP1:Strike=291 Dip=73 Slip=-173	P -1.33 40 214
Best Double Couple:Mo=1.7*10**18	NP2: 198 83 -17	Best Double Couple:Mo=1.3*10**18
NP1:Strike=279 Dip=17 Slip= 28	28 07 48 19.63 13.245N 89.675W 59km	NP1:Strike=277 Dip= 6 Slip= 61
NP2: 162 82 105	5.2mb ( 44 obs.)	NP2: 127 85 93
CENTROID, MOMENT TENSOR (HRV)	EL SALVADOR	28 20 08 51.59 4.294S 101.363E 30km
Data Used: GDSN	CENTROID, MOMENT TENSOR (HRV)	5.2mb ( 21 obs.) 5.6Msz ( 17 obs.)
L.P.B.: 16S, 45C M.W.: 11S, 16C	Data Used: GDSN	SOUTHERN SUMATERA
Centroid Location:	L.P.B.: 17S, 28C	CENTROID, MOMENT TENSOR (HRV)
Origin Time 02:20: 7.4 0.1	Centroid Location:	Data Used: GDSN
Lat 30.48N 0.01 Lon 140.41E 0.01	Origin Time 07:48:17.8 0.6	L.P.B.: 20S, 38C
Dep 78.0 1.3 Half-duration 5.3	Lat 12.81N 0.09 Lon 90.10W 0.10	Centroid Location:
Principal Axes:	Dep 29.5 4.6 Half-duration 1.7	Origin Time 20:08:55.6 0.7
Scale 10**18 Nm	Principal Axes:	Lat 4.86S 0.06 Lon 101.18E 0.07
T Val= 3.25 Plg=56 Azm=109	Scale 10**16 Nm	Dep 15.0 FIX Half-duration 2.7
N -0.27 3 203	T Val= 8.03 Plg= 9 Azm=216	Principal Axes:
P -2.98 34 295	N 0.58 17 123	Scale 10**17 Nm
Best Double Couple:Mo=3.1*10**18	P -8.61 71 334	T Val= 3.58 Plg=62 Azm= 18
NP1:Strike= 37 Dip=12 Slip= 104	Best Double Couple:Mo=8.3*10**16	N 0.80 5 118
NP2: 203 79 87	NP1:Strike=326 Dip=39 Slip= -62	P -4.38 27 211
27 09 34 58.64 23.950S 179.764W 524km	NP2: 112 56 -110	Best Double Couple:Mo=4.0*10**17
5.1mb ( 28 obs.)	28 09 13 46.23 20.163S 67.478E 10km	NP1:Strike=315 Dip=19 Slip= 107
SOUTH OF FIJI ISLANDS	5.2mb ( 11 obs.) 4.9Msz ( 1 obs.)	NP2: 116 72 84
CENTROID, MOMENT TENSOR (HRV)	MID-INDIAN RISE	28 20 26 17.94 59.515S 29.397W 22km
Data Used: GDSN	CENTROID, MOMENT TENSOR (HRV)	5.5mb ( 10 obs.) 5.7Msz ( 2 obs.)
L.P.B.: 10S, 19C	Data Used: GDSN	SOUTH SANDWICH ISLANDS REGION
Centroid Location:	L.P.B.: 15S, 25C	CENTROID, MOMENT TENSOR (HRV)
Origin Time 09:35: 9.6 1.4	Centroid Location:	Data Used: GDSN
Lat 23.79S 0.15 Lon 179.75E 0.14	Origin Time 09:13:54.8 0.7	L.P.B.: 17S, 38C
Dep 543.8 6.4 Half-duration 1.6	Lat 20.30S 0.10 Lon 67.12E 0.10	Centroid Location:
Principal Axes:	Dep 15.0 FIX Half-duration 1.5	Origin Time 20:26:25.7 0.2
Scale 10**16 Nm	Principal Axes:	Lat 59.47S 0.03 Lon 29.54W 0.06
T Val= 8.77 Plg= 1 Azm= 8	Scale 10**16 Nm	Dep 15.0 FIX Half-duration 3.8
N -1.31 44 99	T Val= 5.35 Plg=10 Azm= 9	Principal Axes:
P -7.46 46 277	N 3.25 69 251	Scale 10**17 Nm
Best Double Couple:Mo=8.1*10**16	P -8.60 18 102	T Val=11.52 Plg= 6 Azm=290
NP1:Strike= 63 Dip=59 Slip=-145	Best Double Couple:Mo=7.0*10**16	N 0.25 83 136
NP2: 313 60 -37	NP1:Strike=145 Dip=70 Slip= -6	P -11.77 3 21
27 10 39 36.98 56.419N 164.122E 33km	NP2: 237 85 -160	Best Double Couple:Mo=1.2*10**18
4.9mb ( 12 obs.) 4.8Msz ( 3 obs.)	28 09 23 07.34 16.606S 173.645W 93km	NP1:Strike= 66 Dip=84 Slip= 2
KOMANDORSKY ISLANDS REGION	5.4mb ( 24 obs.)	NP2: 335 88 174
CENTROID, MOMENT TENSOR (HRV)	TONGA ISLANDS	28 21 09 57.66 4.210S 101.370E 32km
Data Used: GDSN	CENTROID, MOMENT TENSOR (HRV)	5.4mb ( 27 obs.) 5.7Msz ( 21 obs.)
L.P.B.: 16S, 32C	Data Used: GDSN	SOUTHERN SUMATERA
Centroid Location:	L.P.B.: 15S, 26C	CENTROID, MOMENT TENSOR (HRV)
Origin Time 10:39:40.6 0.4	Centroid Location:	Data Used: GDSN
Lat 56.53N 0.05 Lon 164.14E 0.09	Origin Time 09:23:14.2 0.7	L.P.B.: 16S, 31C
Dep 34.8 5.4 Half-duration 1.7	Lat 16.52S 0.12 Lon 173.69W 0.08	Centroid Location:
Principal Axes:	Dep 91.1 3.4 Half-duration 1.6	Origin Time 21:10: 4.4 1.0
Scale 10**16 Nm	Principal Axes:	Lat 4.21S FIX;Lon 101.39E FIX
T Val= 12.77 Plg=28 Azm=242	Scale 10**16 Nm	Dep 15.0 FIX Half-duration 2.7
N -1.90 59 37	T Val= 9.21 Plg= 7 Azm=226	Principal Axes:
P -10.87 11 146	N -0.97 38 130	Scale 10**18 Nm
Best Double Couple:Mo=1.2*10**17	P -8.23 51 325	T Val= 1.40 Plg=50 Azm= 34
NP1:Strike=281 Dip=62 Slip= 167	Best Double Couple:Mo=8.7*10**16	N 0.12 2 126
NP2: 17 79 29	NP1:Strike=351 Dip=50 Slip= -37	P -1.52 40 217
27 23 06 52.24 37.027N 28.180E 14km	NP2: 107 63 -134	Best Double Couple:Mo=1.5*10**18
5.3mb ( 44 obs.) 5.0Msz ( 7 obs.)	28 13 30 19.24 37.004N 28.139E 17km	NP1:Strike=324 Dip= 5 Slip= 108
TURKEY	5.1mb ( 39 obs.) 5.1Msz ( 4 obs.)	NP2: 126 85 88
CENTROID, MOMENT TENSOR (HRV)	TURKEY	29 01 03 06.85 5.494S 102.976E 38km
Data Used: GDSN	CENTROID, MOMENT TENSOR (HRV)	5.4mb ( 26 obs.) 5.1Msz ( 13 obs.)
L.P.B.: 13S, 21C	Data Used: GDSN	SOUTHERN SUMATERA
Centroid Location:	L.P.B.: 15S, 28C	CENTROID, MOMENT TENSOR (HRV)
Origin Time 23:06:55.3 0.6	Centroid Location:	Data Used: GDSN
Lat 36.71N 0.05 Lon 27.75E 0.08	Origin Time 13:30:22.8 0.5	L.P.B.: 15S, 24C
Dep 15.0 FIX Half-duration 2.2	Lat 36.95N 0.04 Lon 27.79E 0.06	Centroid Location:
Principal Axes:	Dep 15.0 FIX Half-duration 2.2	Origin Time 01:03:10.3 0.7
Scale 10**17 Nm	Principal Axes:	Lat 5.47S FIX;Lon 102.99E FIX
T Val= 2.26 Plg= 9 Azm= 4	Scale 10**17 Nm	Dep 33.2 6.5 Half-duration 1.6
N -0.53 2 95	T Val= 2.55 Plg= 4 Azm= 8	Principal Axes:
P -1.73 81 200	N -0.39 7 99	Scale 10**16 Nm
Best Double Couple:Mo=2.0*10**17	P -2.16 81 249	T Val= 7.67 Plg=61 Azm=133
NP1:Strike= 92 Dip=36 Slip= -94	Best Double Couple:Mo=2.4*10**17	N 1.04 29 326
NP2: 276 54 -87	NP1:Strike= 90 Dip=41 Slip=-101	P -8.71 6 233
28 02 34 25.31 17.830N 105.174W 10km	NP2: 285 50 -80	Best Double Couple:Mo=8.2*10**16
5.3mb ( 20 obs.) 5.2Msz ( 6 obs.)	28 17 38 26.42 4.354S 101.413E 27km	NP1:Strike=295 Dip=47 Slip= 49
OFF COAST OF JALISCO, MEXICO	5.4mb ( 25 obs.) 5.8Msz ( 30 obs.)	NP2: 167 57 125
CENTROID, MOMENT TENSOR (HRV)	SOUTHERN SUMATERA	29 06 25 39.12 57.190N 122.069E 30km
Data Used: GDSN	CENTROID, MOMENT TENSOR (HRV)	5.3mb ( 47 obs.) 5.1Msz ( 10 obs.)
L.P.B.: 18S, 37C	Data Used: GDSN	EASTERN USSR
Centroid Location:	L.P.B.: 18S, 42C	CENTROID, MOMENT TENSOR (HRV)
Origin Time 02:34:27.1 0.3	Centroid Location:	Data Used: GDSN
Lat 17.96N 0.04 Lon 105.22W 0.04	Origin Time 17:38:29.0 0.4	L.P.B.: 15S, 28C
Dep 15.0 FIX Half-duration 2.5	Lat 4.75S 0.04 Lon 101.12E 0.05	Centroid Location:
Principal Axes:	Dep 15.0 BDY Half-duration 3.9	Origin Time 06:25:43.9 0.4
Scale 10**17 Nm	Principal Axes:	Lat 57.13N 0.04 Lon 121.80E 0.10
T Val= 3.28 Plg= 7 Azm=246		

Dep 45.9 4.7 Half-duration 1.9	NP2: 40 66 74	T Val= 9.10 Plg=12 Azm=121
Principal Axes:		N 1.45 59 232
Scale 10**17 Nm	30 08 22 54.01 10.960N 68.325W 20km	P -10.56 28 25
T Val= 1.62 Plg=10 Azm=137	5.9mb ( 62 obs.) 6.0Msz ( 31 obs.)	Best Double Couple:Mo=9.8*10**17
N -0.19 73 261	NEAR COAST OF VENEZUELA	NP1:Strike=166 Dip=62 Slip=-168
P -1.43 14 45	RADIATED ENERGY	NP2: 70 79 -29
Best Double Couple:Mo=1.5*10**17	No. of sta: 5 Focal mech. M	
NP1:Strike=182 Dip=73 Slip=-177	Energy 4.3±1.5*10**13 Nm	30 15 33 52.73 17.912S 178.665W 570km
NP2: 91 87 -17	MOMENT TENSOR SOLUTION	5.4mb ( 46 obs.)
	Dep 15	FIJI ISLANDS REGION
29 15 12 02.42 51.786N 175.226W 33km	Principal Axes:	CENTROID, MOMENT TENSOR (HRV)
5.1mb ( 42 obs.) 4.3Msz ( 6 obs.)	Scale 10**17 Nm	Data Used: GDSN
ANDREANOF ISLANDS, ALEUTIAN IS.	T Val= 8.30 Plg=53 Azm=231	L.P.B.: 17S, 41C
CENTROID, MOMENT TENSOR (HRV)	N -0.38 30 10	Centroid Location:
Data Used: GDSN	P -7.91 20 112	Origin Time 15:34: 4.9 0.4
L.P.B.: 18S, 30C	Best Double Couple:Mo=8.1*10**17	Lat 17.675 0.03 Lon 179.15W 0.03
Centroid Location:	NP1:Strike=242 Dip=36 Slip= 147	Dep 591.2 1.3 Half-duration 4.0
Origin Time 15:12: 9.7 1.1	NP2: 359 71 58	Principal Axes:
Lat 52.17N 0.11 Lon 175.19W 0.13	CENTROID, MOMENT TENSOR (HRV)	Scale 10**17 Nm
Dep 45.7 6.9 Half-duration 1.4	Data Used: GDSN	T Val= 13.01 Plg=22 Azm=340
Principal Axes:	L.P.B.: 19S, 46C	N 0.06 37 88
Scale 10**16 Nm	Centroid Location:	P -13.08 45 227
T Val= 3.80 Plg=65 Azm=282	Origin Time 08:22:59.9 0.3	Best Double Couple:Mo=1.3*10**18
N -0.11 15 47	Lat 10.88N 0.04 Lon 68.08W 0.03	NP1:Strike= 25 Dip=40 Slip=-158
P -3.69 19 142	Dep 15.0 FIX Half-duration 3.7	NP2: 278 76 -52
Best Double Couple:Mo=3.8*10**16	Principal Axes:	
NP1:Strike=255 Dip=29 Slip= 122	Scale 10**17 Nm	

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

#### EXPLANATION OF THE ENTRIES "GEOSCOPE MOMENT TENSOR (PAR)"

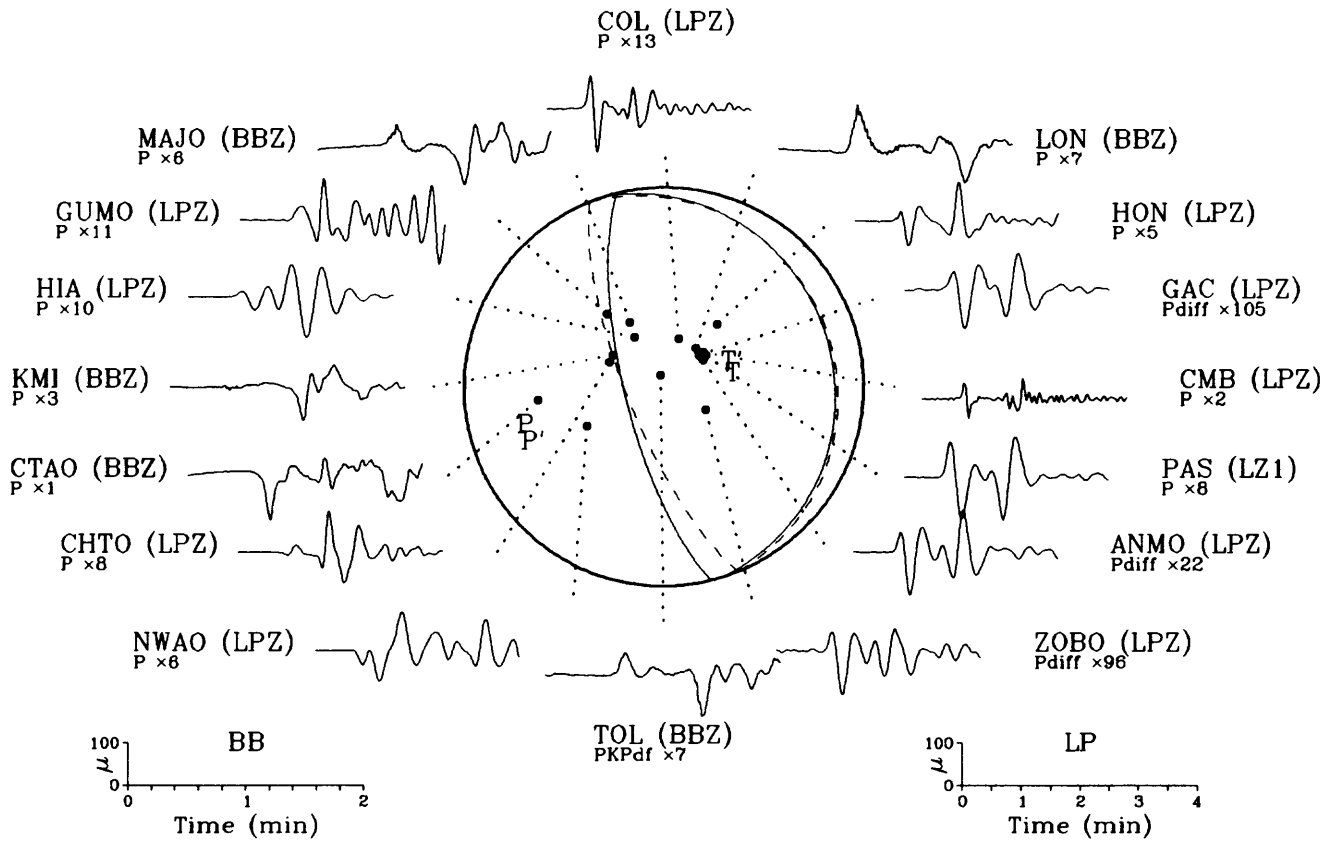
These solutions have been obtained from very long period Rayleigh wave data in the period range 180-310 seconds (R1 and R2 trains) using a two step moment tensor inversion method as described in Romanowicz and Guillemant (1984) and Romanowicz and Manfret (1986). Parameters solved for are centroid time, seismic moment, depth and moment tensor. Origin time and epicentral coordinates are kept fixed as given in the USGS Quick Epicenter Determinations (QED) or PDE. For shallow earthquakes the precision on depth is in general no greater than +/- 10 km.

The data used presently came from GEOSCOPE teletransmitted stations (usually 8 - 10 stations) and are available within a week after the event. The solutions are computed by the Institut de Physique du Globe, Universite Pierre et Marie Curie, Paris, France.

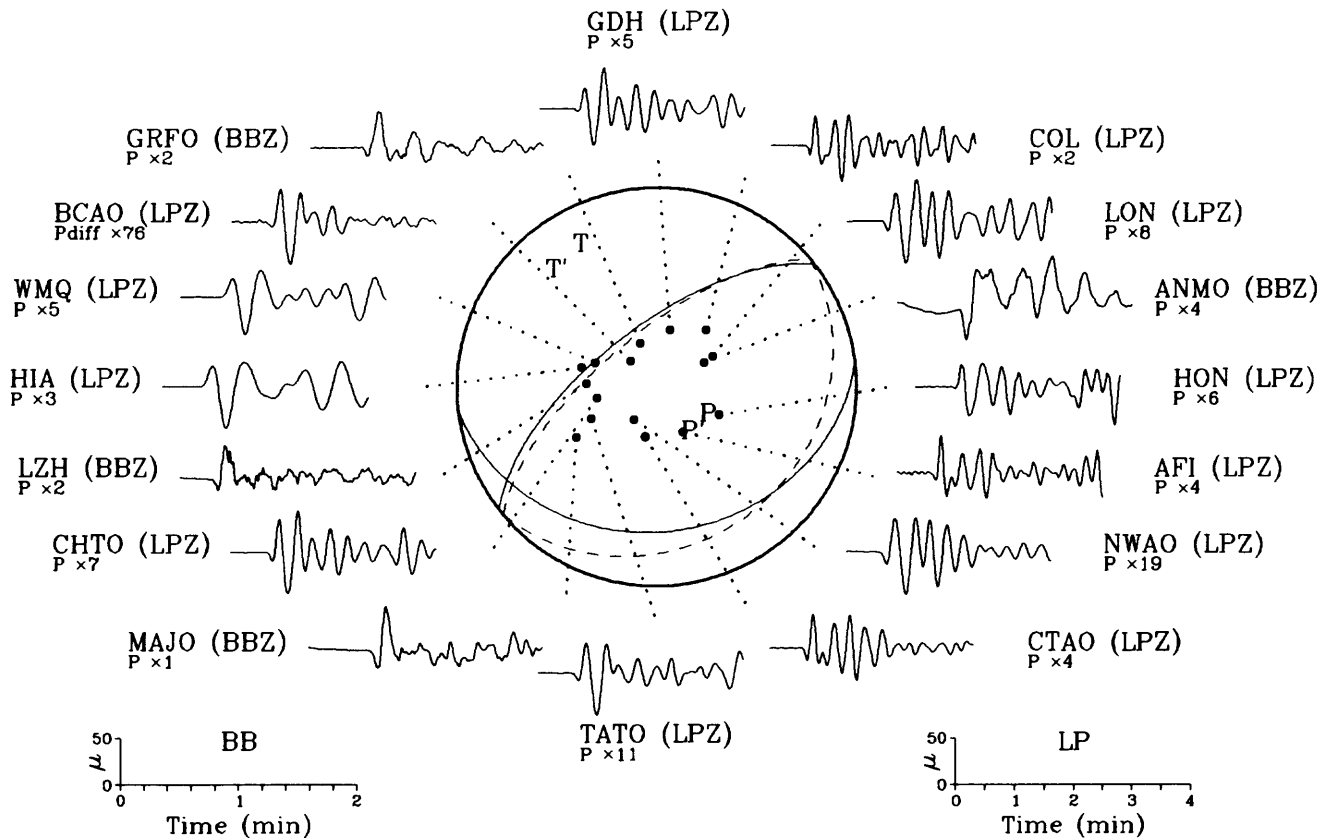
Romanowicz, B. and Guillemant, P., 1984, An experiment in the retrieval of depth and source mechanism of large earthquakes using very long-period Rayleigh wave data: Bulletin of the Seismological Society of America, v. 74, no. 2, p. 417-437.

Romanowicz, B. and Manfret, T., 1986, Source process times and depths of large earthquakes by moment tensor inversion of mantle wave data and the effect of lateral heterogeneity: Annales de Geophysique, v. B4, no. 3, p. 271-282.

06 April 1989 08:05:57.10  
Vanuatu Islands

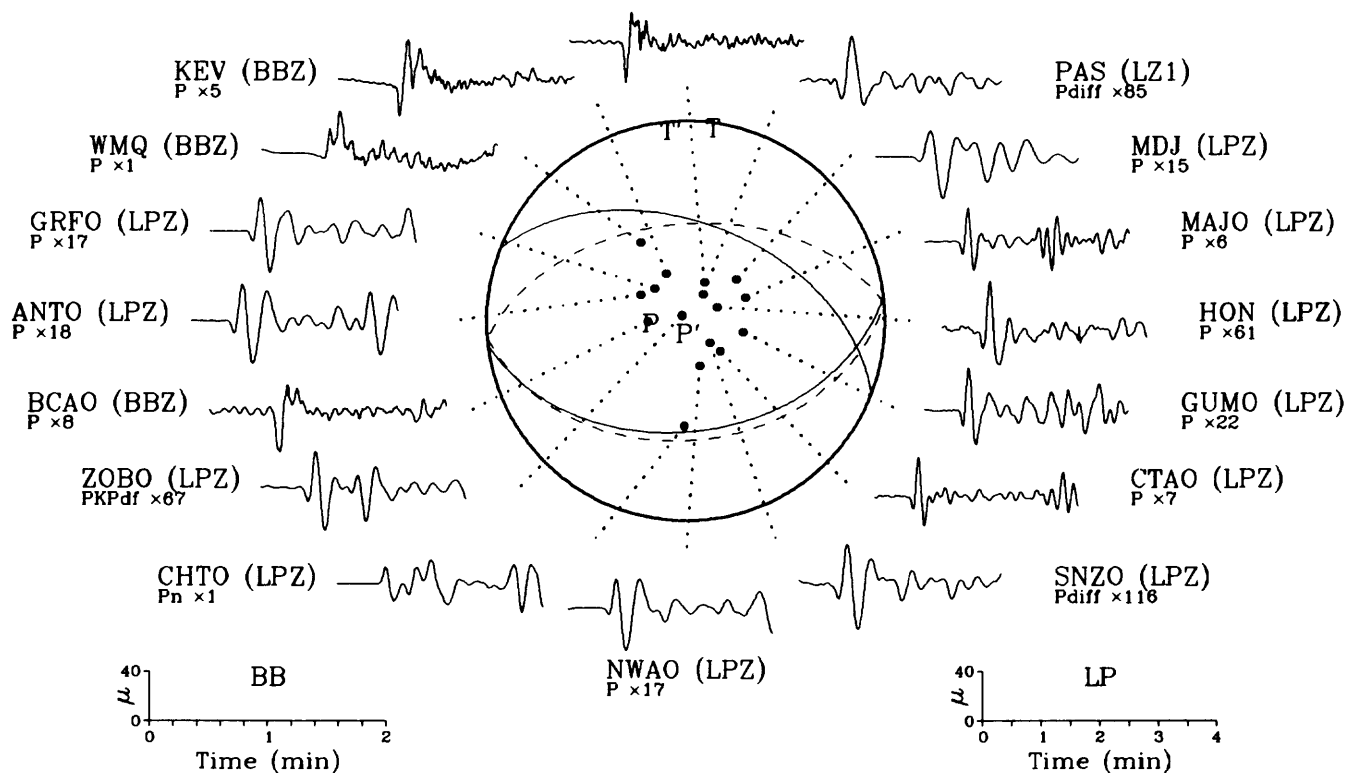


11 April 1989 03:56:36.91  
Kuril Islands Region



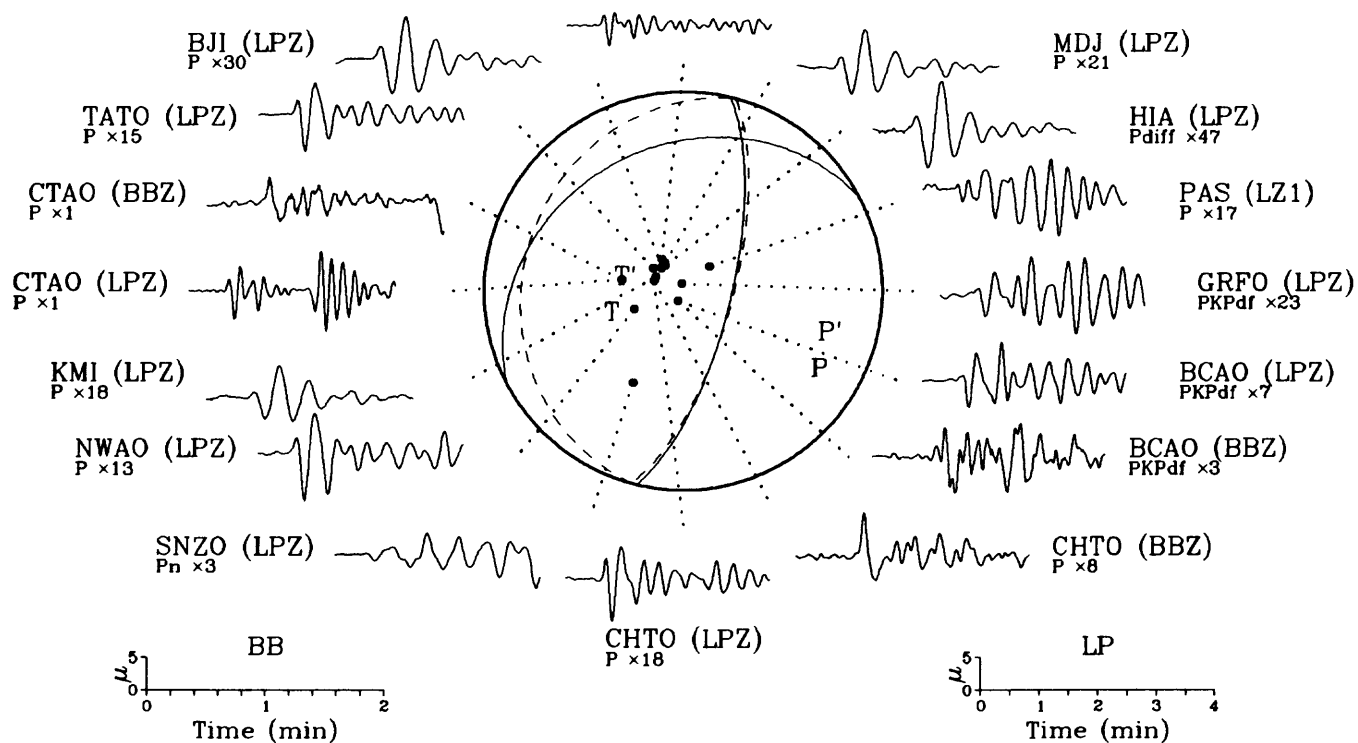
15 April 1989 20:34:08.93  
Sichuan Province, China

COL (BBZ)  
P x8



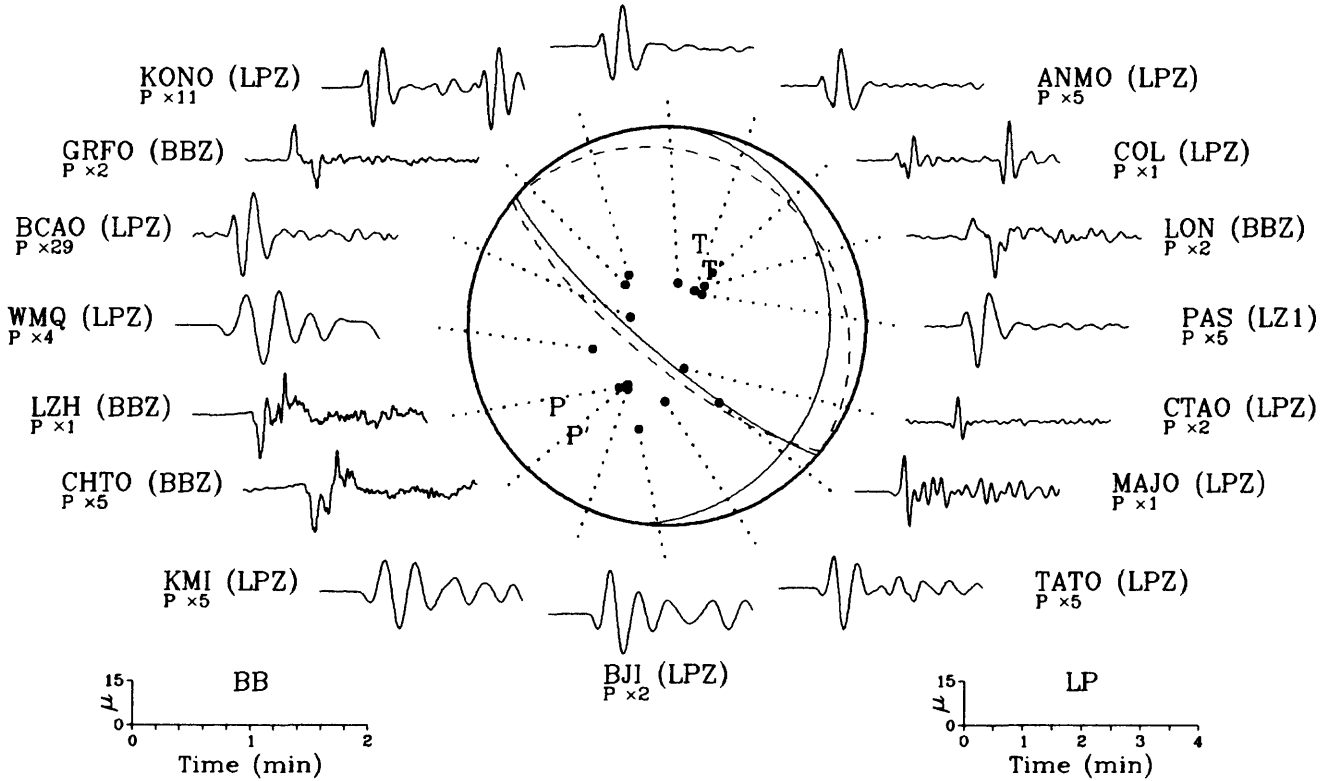
19 April 1989 00:08:19.65  
Kermadec Islands Region

MAJO (LPZ)  
P x2



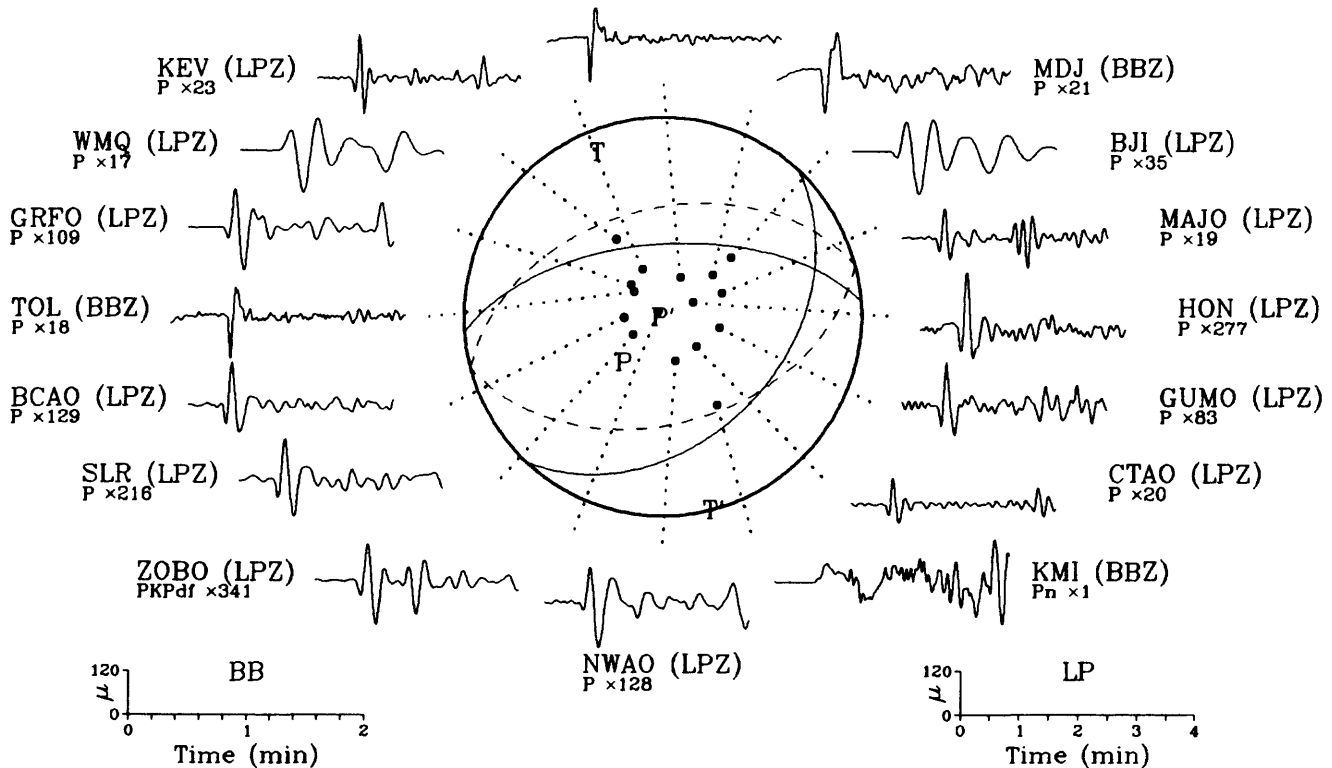
20 April 1989 22:59:54.07  
Eastern USSR

SCP (LPZ)  
P × 7

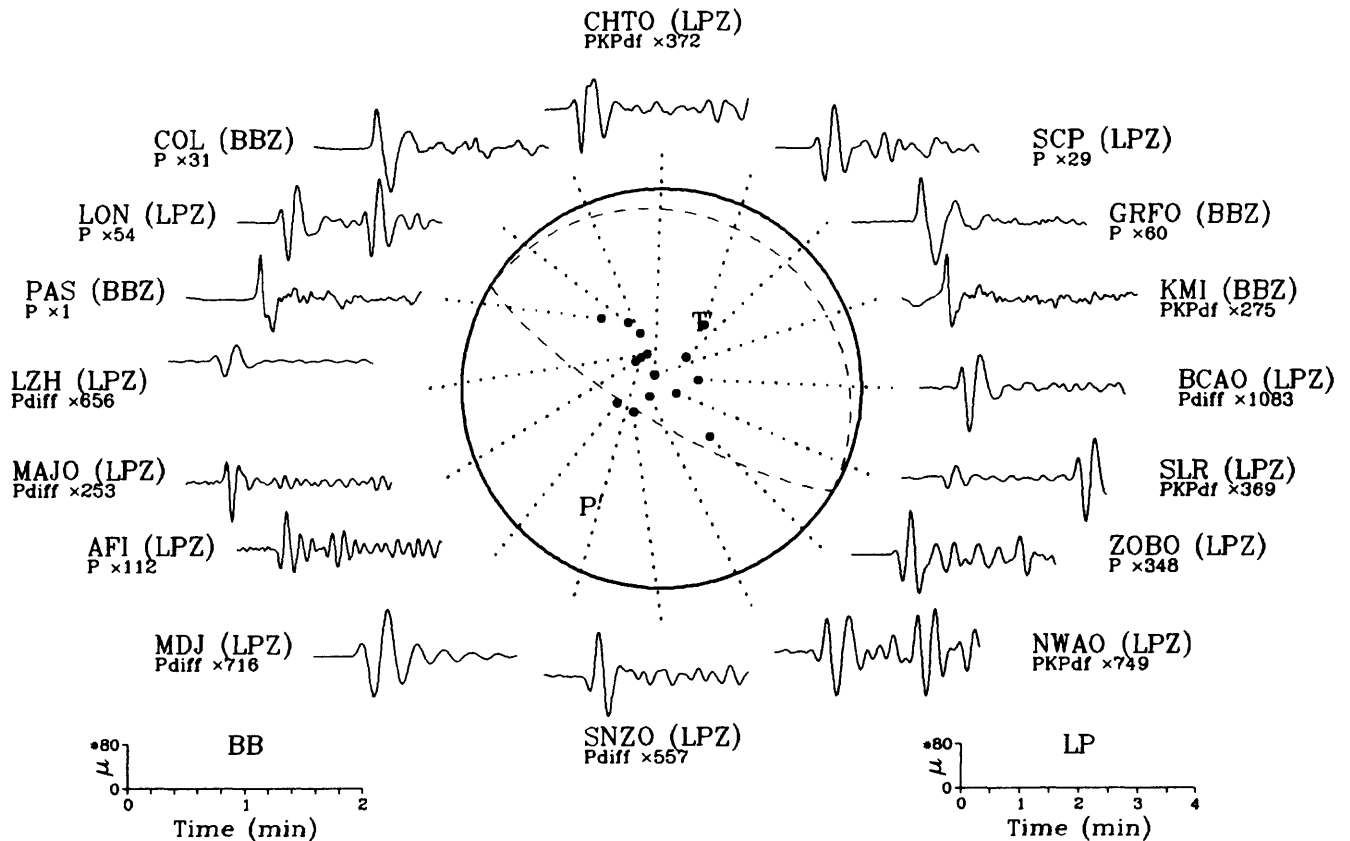


25 April 1989 02:13:20.83  
Sichuan Province, China

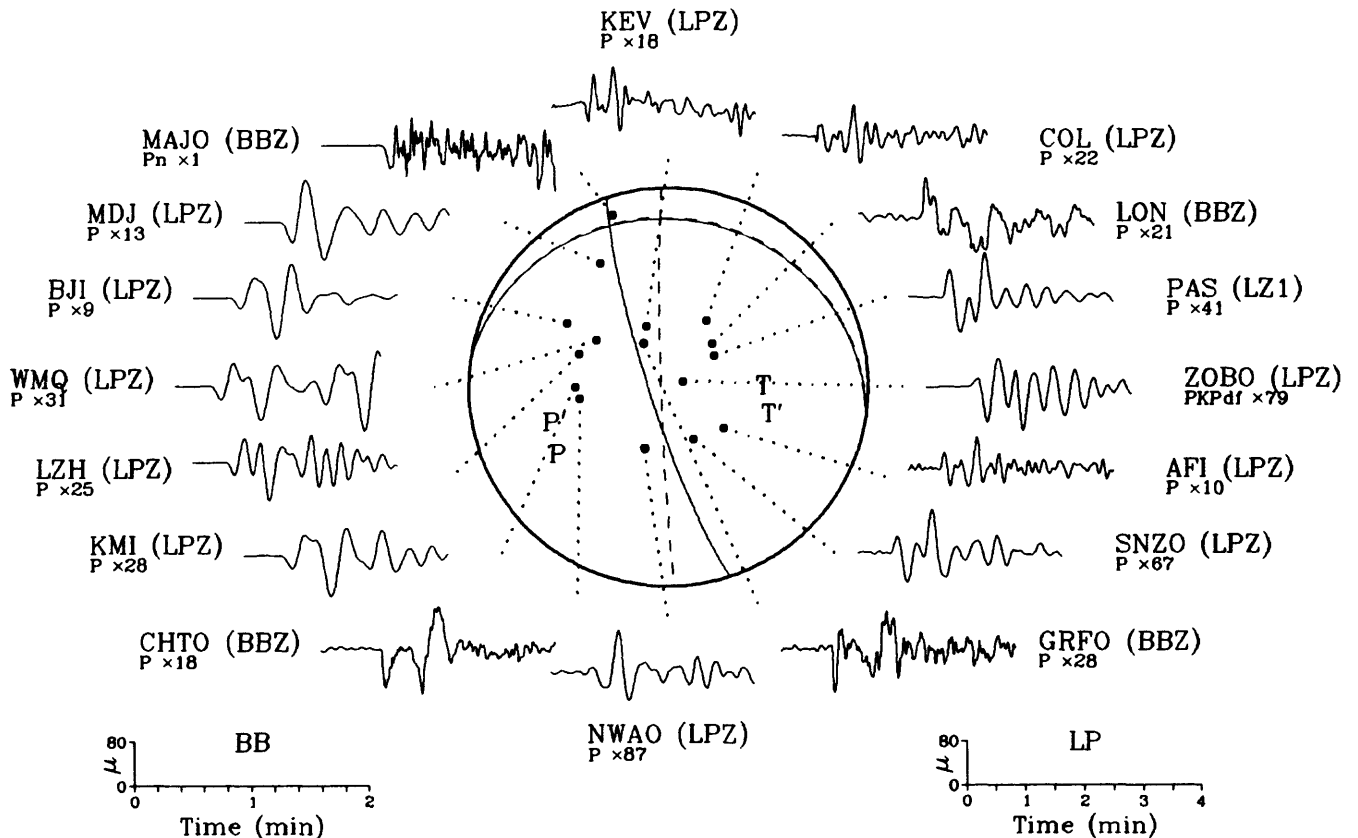
COL (BBZ)  
P × 19



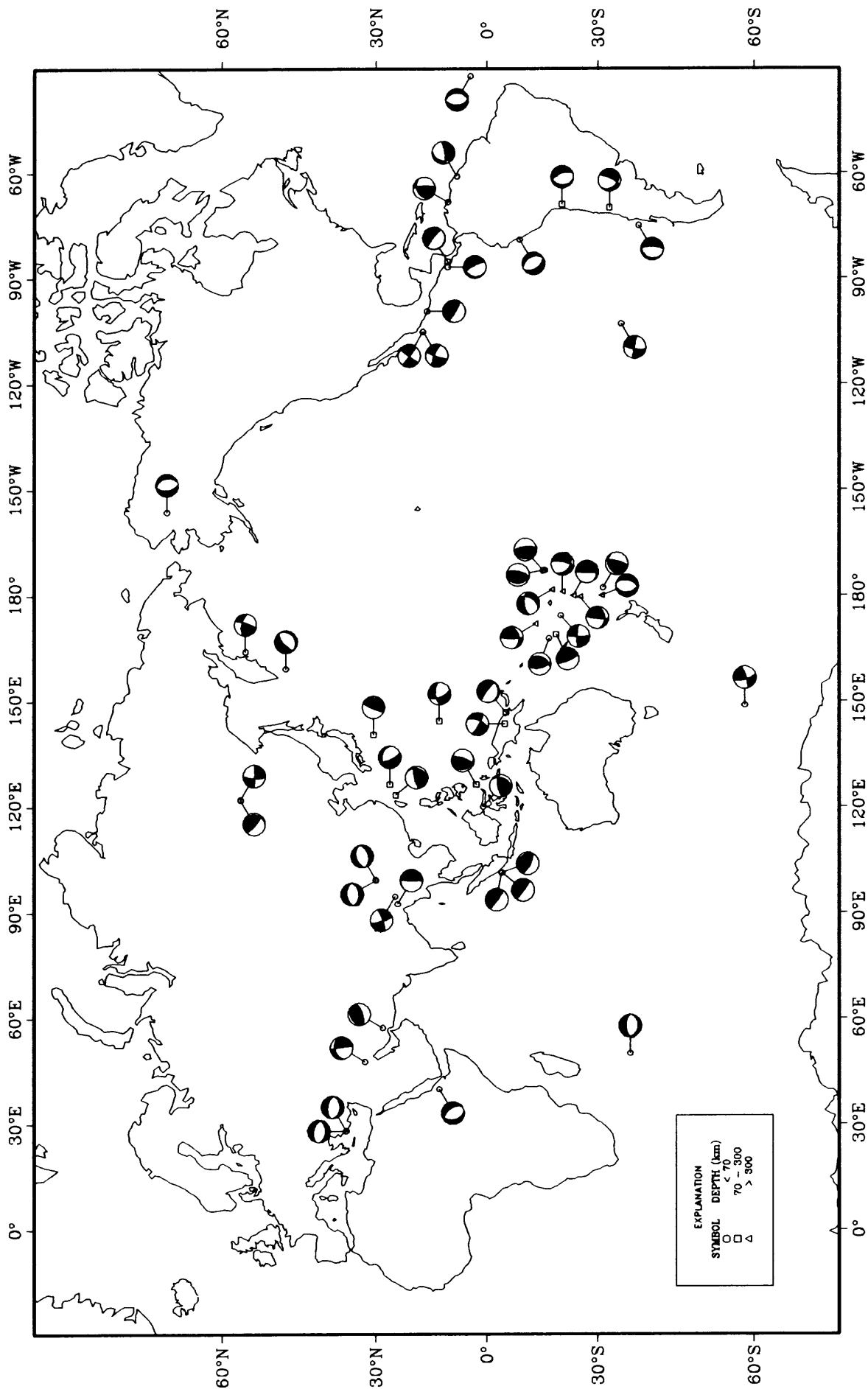
25 April 1989 14:29:00.51  
Near Coast of Guerrero, Mexico

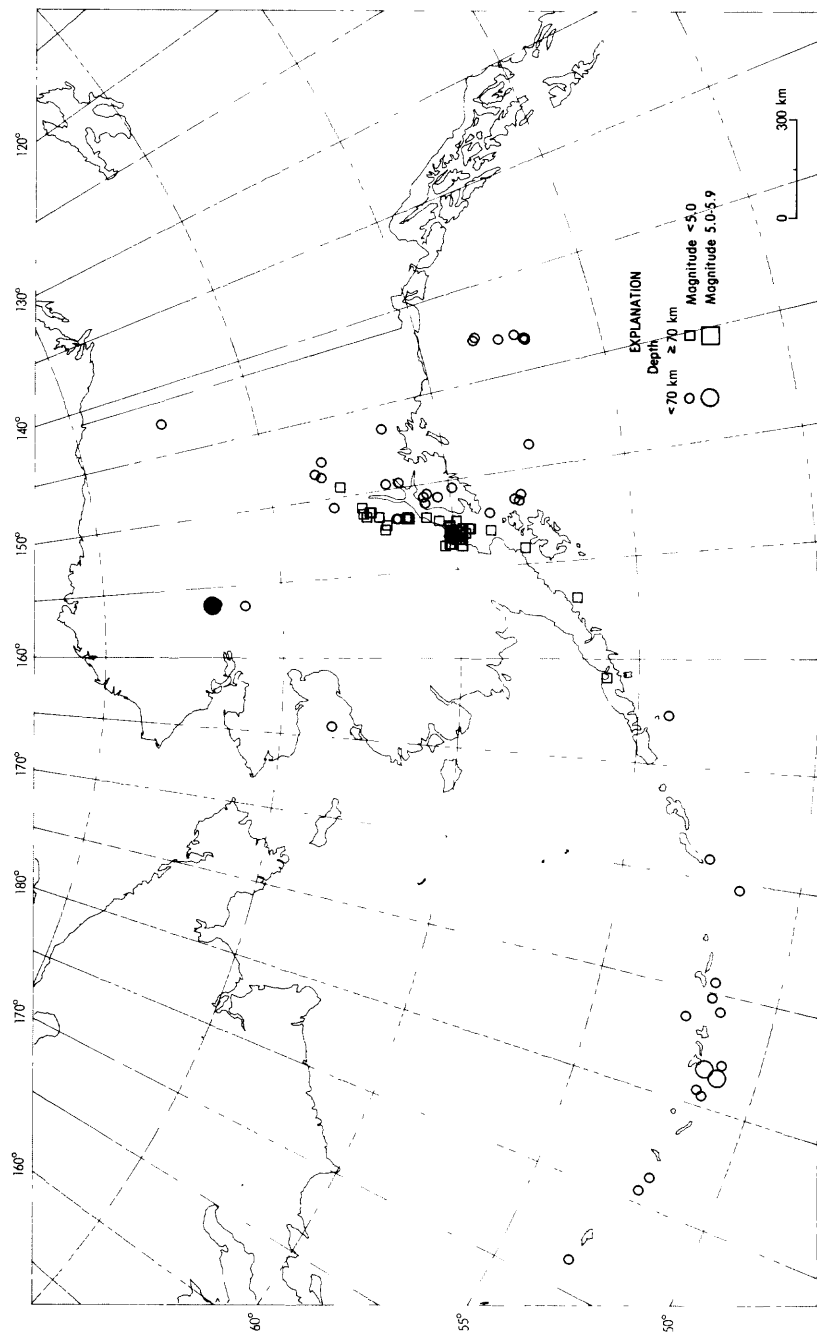


27 April 1989 02:20:04.74  
South of Honshu, Japan

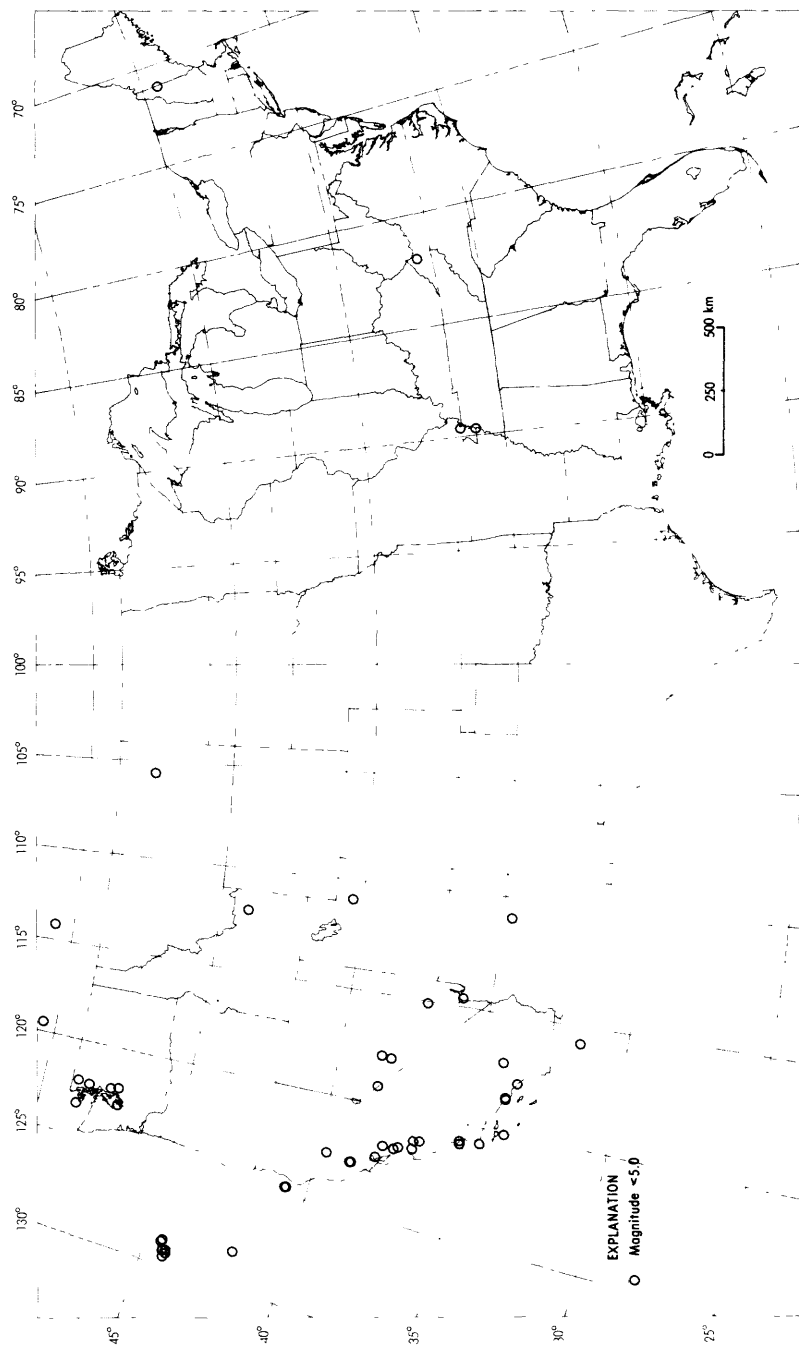


# Earthquake Focal Mechanisms for April 1989

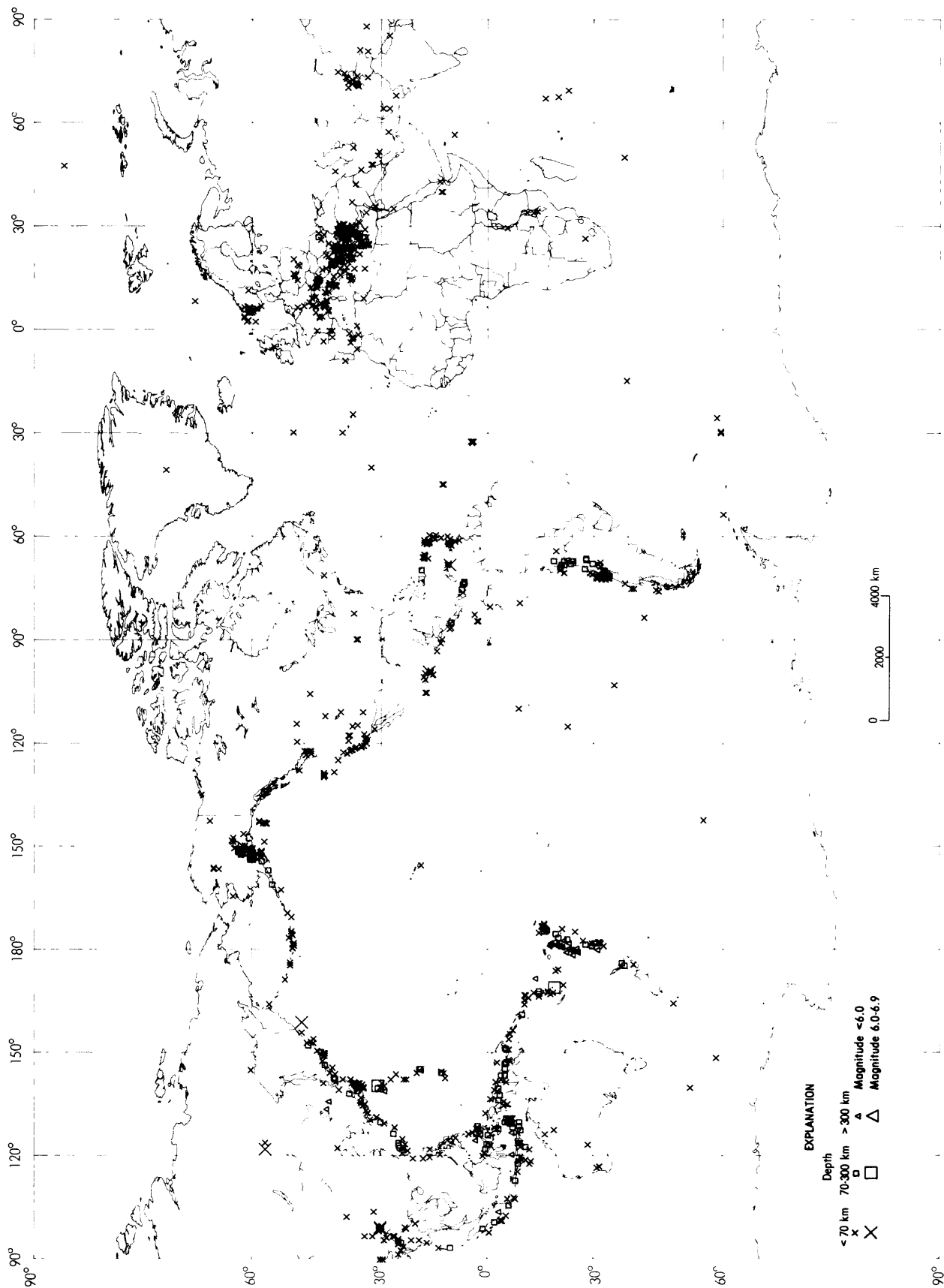




Earthquake epicenters in Alaska and adjacent regions for April, 1989 (C. Stover).



Earthquake epicenters in the conterminous United States and adjacent regions for April, 1989 (C. Stover).



Earthquakes located in April, 1989 (C. Stover).

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# PRELIMINARY DETERMINATION OF EPICENTERS

## MONTHLY LISTING

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

MAY 1989

K E Y	DAY	ORIGIN TIME			GEOGRAPHIC COORDINATES		DEPTH	MAGNITUDES		SD	NO. STA USED	REGION, CONTRIBUTED MAGNITUDES AND COMMENTS
		UTC HR MN SEC	LAT	LONG				GS MB Msz				
	01	01 24 42.9	25.694 N	142.785 E		33 N	5.0 4.0	1.1	36			VOLCANO ISLANDS REGION
	01	02 45 08.9?	36.34 N	70.63 E		234 ?	4.2	1.0	14			HINDU KUSH REGION
	01	02 46 18.8	63.001 N	150.225 W		33 N		0.4	6			CENTRAL ALASKA. ML 3.0 (PMR).
	01	03 03 10.9?	38.97 N	23.56 E		10 G		0.6	7			GREECE
	01	03 22 44.9	66.980 N	156.383 W		5 G		0.3	17			ALASKA. ML 3.5 (PMR).
	01	03 22 52.8*	50.500 N	18.894 E		10 G		0.5	5			POLAND. ML 3.7 (KRA), 3.3 (VKA).
	01	03 42 57.3*	59.788 N	149.454 W		27			49			KENAI PENINSULA, ALASKA. <AGS-P>. ML 3.2 (PMR).
	01	04 19 10.1	39.164 N	21.871 E		24		1.0	16			GREECE. MD 3.4 (ATH).
	01	05 11 40.4	66.906 N	156.228 W		5 G		0.4	18			ALASKA. ML 3.5 (PMR).
	01	05 32 28.2	39.950 N	23.331 E		10 G		0.1	5			AEGEAN SEA
	01	06 38 28.3*	67.031 N	156.455 W		5 G		0.4	11			ALASKA
	01	07 24 34.4	39.649 N	21.289 E		5 G	3.4	1.4	19			GREECE. MD 3.6 (ATH).
	01	07 27 53.2	38.917 N	27.591 E		10 G		0.4	5			TURKEY
	01	07 38 10.3?	19.45 N	66.00 W		10 G		0.3	6			PUERTO RICO REGION
	01	07 57 23.0?	44.62 N	7.03 E		10 G		0.1	4			NORTHERN ITALY. ML 1.9 (GEN).
	01	08 39 25.9?	37.19 N	28.03 E		5 G		1.3	5			TURKEY
o	01	08 45 21.6	4.200 S	101.366 E		31 D	5.6 5.6	1.0	235			SOUTHERN SUMATERA
	01	08 54 30.0	9.469 N	84.898 W		33 N		0.5	16			COSTA RICA. MD 4.4 (SJR), 4.3 (HDC). Felt (III) at Jaco and Esterillos; (II) at Orotina.
	01	09 04 46.8?	44.76 N	6.46 E		10 G		0.2	5			FRANCE. ML 2.0 (GEN).
	01	09 36 49.3*	20.285 S	67.045 E		10 G	4.6	0.7	20			MID-INDIAN RISE
	01	09 41 05.2	39.240 N	23.523 E		10 G		0.5	11			AEGEAN SEA. MD 3.0 (ATH).
	01	09 43 01.2?	28.77 N	140.76 E		33 N	4.4	1.2	6			BONIN ISLANDS REGION
	01	10 36 52.0?	37.127 N	28.095 E		10 G		0.4	5			TURKEY
	01	11 34 56.6	37.118 N	27.890 E		10 G		0.8	14			TURKEY
	01	12 27 51.4?	32.08 S	178.83 E		458 ?	3.9	0.9	21			SOUTH OF KERMADEC ISLANDS
	01	13 23 05.4	44.639 N	7.080 E		10 G		0.5	5			NORTHERN ITALY. ML 2.1 (GEN).
	01	13 45 28.5?	61.62 N	4.47 E		10 G		0.7	4			SOUTHERN NORWAY. MD 1.9 (BER).
	01	14 00 10.0?	37.17 N	27.98 E		5 G		1.4	5			TURKEY
	01	14 37 08.4?	18.71 S	172.83 W		33 N	5.1	0.9	9			TONGA ISLANDS REGION
	01	15 33 03.0	66.992 N	156.227 W		5 G	4.1	0.8	28			ALASKA. ML 3.8 (PMR). Felt (IV) at Kabuk.
	01	16 08 18.0?	42.403 N	19.821 E		10 G		0.6	6			YUGOSLAVIA. MD 2.2 (TTG).
	01	16 28 26.9	39.094 N	23.202 E		13		0.5	15			AEGEAN SEA. ML 3.1 (ATH).
	01	16 54 56.6	44.672 N	7.161 E		10 G		0.2	5			NORTHERN ITALY. ML 2.0 (GEN).
	01	17 34 09.7	29.960 N	99.370 E		10 G	4.9	1.2	15			SICHUAN PROVINCE, CHINA
	01	17 46 00.6	31.592 N	96.679 E		33 N	4.1	0.5	7			TIBET
	01	18 10 19.0*	20.627 S	68.178 W		33 N		0.9	5			CHILE-BOLIVIA BORDER REGION
	01	18 35 05.6	37.142 N	113.815 W		1			28			UTAH. <SLC-P>. CL 3.7 (SLC). ML 3.5 (NEIS). Felt (V) at St. George and (III) at Santa Clara.
	01	19 04 43.0*	20.350 S	168.102 E		29 D	4.8	1.1	46			LOYALTY ISLANDS
	01	19 06 26.3*	17.141 N	62.337 W		60 ?		0.7	9			LEEWARD ISLANDS
	01	20 12 07.9	66.909 N	156.314 W		5 G		0.7	18			ALASKA. ML 3.5 (PMR).
	01	20 16 35.5*	45.077 N	15.106 E		10 G		0.7	8			YUGOSLAVIA. MD 3.2 (LJU), 2.7 (TRI). ML 2.2 (KBA).
	01	21 03 38.6	37.212 N	21.145 E		10 G	4.8	1.4	209			SOUTHERN GREECE. ML 4.6 (ATH), 4.6 (TTG). Felt in southwestern Greece.
	01	21 26 38.6	51.934 N	178.917 E		129 *	4.5	0.9	35			RAT ISLANDS, ALEUTIAN ISLANDS
	01	21 38 57.7?	40.76 N	30.49 E		10 G		1.3	7			TURKEY
	01	22 29 34.0	19.218 N	64.389 W		38 *	4.0	1.1	34			VIRGIN ISLANDS. ML 4.8 (FDF).
	01	22 39 44.2?	4.24 S	101.51 E		33 N	3.9	0.5	10			SOUTHERN SUMATERA
	01	23 14 13.1?	6.89 S	130.59 E		110 ?	4.3	1.2	13			BANDA SEA
	01	23 30 51.7?	18.245 N	66.310 W		10 G		0.2	6			PUERTO RICO REGION
02	00	20 55.5?	50.74 N	179.50 E		33 N	5.1	1.9	13			RAT ISLANDS, ALEUTIAN ISLANDS. ML 4.5 (PMR).
02	01	06 12.3*	7.238 N	76.371 W		89 *	3.6	0.7	8			NORTHERN COLOMBIA
02	01	42 12.3	38.406 N	22.890 E		10 G		0.8	21			GREECE. ML 3.2 (ATH).
02	01	49 50.0	6.436 S	147.622 E		80 *	4.4	1.1	17			EAST PAPUA NEW GUINEA REGION
02	02	25 10.9	46.398 N	3.466 E		10 G		0.7	5			FRANCE. ML 1.8 (LDG).
02	02	30 19.0	3.858 N	126.391 E		33 N	5.1	0.8	69			TALAUD ISLANDS
02	02	33 30.6	41.737 S	73.589 W		29 D	5.1 4.5	1.0	47			NEAR COAST OF SOUTHERN CHILE

02	04	02	42.8	39.141 N	23.287 E	17	0.7	20	AEGEAN SEA. MD 3.1 (ATH).
02	05	11	01.2	66.945 N	156.160 W	5 G	1.0	22	ALASKA. ML 4.3 (PMR).
02	05	12	19.6*	45.187 N	28.261 W	10 G 4.3	1.0	15	NORTH ATLANTIC RIDGE
02	05	22	47.7	45.130 N	28.203 W	10 G 4.6	1.0	69	NORTH ATLANTIC RIDGE
02	05	40	24.5	66.914 N	156.173 W	5 G	0.3	15	ALASKA. ML 3.5 (PMR).
02	05	49	36.7*	0.410 N	80.422 W	33 N 4.3	1.0	11	NEAR COAST OF ECUADOR
02	05	51	35.2?	37.13 N	28.10 E	10 G	1.2	5	TURKEY
02	06	11	00.5*	45.018 N	28.104 W	10 G 4.5	0.9	26	NORTH ATLANTIC RIDGE
02	06	25	33.3	45.134 N	28.031 W	10 G 5.0	1.1	179	NORTH ATLANTIC RIDGE
o 02	06	27	28.2	45.060 N	28.141 W	10 G 5.2 5.6	1.1	194	NORTH ATLANTIC RIDGE
02	06	58	41.3*	26.521 S	67.466 W	139 * 5.1	1.4	21	CATAMARCA PROVINCE, ARGENTINA
02	07	08	16.8	35.276 N	136.576 E	54 4.7	1.0	52	SOUTHERN HONSHU, JAPAN. Felt (III JMA) at Gifu; (II JMA) at Hikone, Nagoya, Tsu, and Fukui, (I JMA) at Kyoto, Iida and Shizuoka.
02	07	42	49.3	66.933 N	156.227 W	5 G	0.4	12	ALASKA
02	08	24	12.6%	46.074 N	2.858 E	10 G	0.3	9	FRANCE. ML 2.1 (LDG).
02	08	25	27.0?	46.05 N	2.92 E	10 G	0.2	4	FRANCE. MD 2.7 (STR).
02	08	45	16.4*	46.268 N	12.787 E	10 G	0.9	5	NORTHERN ITALY. MD 2.8 (LJU). ML 1.7 (KBA).
02	09	27	35.8*	44.857 N	28.153 W	10 G 4.6	1.1	37	NORTH ATLANTIC RIDGE
o 02	09	30	15.5	16.747 N	99.343 W	10 G 5.4 4.9	1.0	189	NEAR COAST OF GUERRERO, MEXICO. Felt (IV) at Mexico City. Also felt in ports of Guerrero.
o 02	09	30	58.9	44.968 N	28.025 W	10 G 5.0 5.5	1.0	197	NORTH ATLANTIC RIDGE
02	09	39	31.7?	47.43 N	7.72 W	10 G	0.7	15	NORTH ATLANTIC OCEAN. ML 3.4 (LDG).
02	10	01	33.5	44.948 N	28.128 W	10 G 4.7	1.0	84	NORTH ATLANTIC RIDGE
02	10	05	36.4*	44.832 N	28.098 W	10 G 4.6	1.1	31	NORTH ATLANTIC RIDGE
02	10	12	58.1?	31.58 S	68.20 W	10 G 4.1	1.3	12	SAN JUAN PROVINCE, ARGENTINA
02	10	39	14.4*	50.963 N	6.542 E	10 G	1.5	5	GERMANY. MD 3.1 (DOU).
02	11	52	30.5*	53.219 N	173.029 E	33 N 5.1	1.2	21	NEAR ISLANDS, ALEUTIAN ISLANDS
02	12	19	23.1?	17.99 N	65.80 W	10 G	0.7	6	PUERTO RICO REGION
02	12	21	34.8%	42.760 N	19.181 E	10 G	0.1	5	YUGOSLAVIA. MD 2.4 (ITG).
02	13	37	06.4?	62.25 N	4.59 E	10 G	0.6	6	NORWEGIAN SEA. MD 2.0 (BER).
02	13	37	14.4%	32.730 N	118.060 W	6 G	1.0	7	OFF COAST OF CALIFORNIA. <PAS-P>. ML 3.3 (PAS).
02	13	41	38.5?	62.26 N	4.43 E	10 G	0.6	7	NORWEGIAN SEA. MD 2.1 (BER).
02	14	11	49.1	40.791 N	28.039 E	10 G	1.5	10	TURKEY
02	15	06	30.4?	42.88 N	13.00 E	10 G	0.1	4	CENTRAL ITALY. MD 2.3 (SSO).
02	16	51	31.6%	59.983 N	153.463 W	135	1.4	14	SOUTHERN ALASKA. <AGS-P>.
02	16	56	18.0?	31.41 S	70.39 W	33 N	1.2	9	CHILE-ARGENTINA BORDER REGION
02	17	39	11.8*	37.246 N	28.099 E	10 G	1.6	5	TURKEY
02	17	42	59.2*	35.531 N	44.353 E	33 N 3.9	1.2	5	IRAQ
02	18	02	38.7*	36.779 N	28.025 E	10 G	1.2	7	DODECANESE ISLANDS. MD 3.7 (ATH).
02	18	26	58.6	39.328 N	23.547 E	12	1.1	33	AEGEAN SEA. ML 3.3 (ATH).
02	19	23	05.8%	61.808 N	149.784 W	35	1.1	45	SOUTHERN ALASKA. <AGS-P>. ML 3.4 (PMR). Felt (III) at Hatcher Pass.
02	19	28	21.4%	46.437 N	0.970 W	10 G	1.5	7	FRANCE
02	19	38	33.4*	2.452 N	128.461 E	33 N 4.7	0.6	14	HALMAHERA
02	19	52	39.4?	50.31 N	159.05 E	39 D 4.6	1.3	14	KURIL ISLANDS REGION
02	20	53	04.7	40.386 N	25.981 E	10 G	0.9	13	AEGEAN SEA. MD 3.0 (ATH).
02	21	36	48.4%	62.975 N	149.974 W	91	1.2	8	CENTRAL ALASKA. <AGS-P>.
02	22	11	22.0?	4.32 S	101.19 E	52 ? 4.3	1.2	9	SOUTHERN SUMATERA
02	22	13	03.4%	60.201 N	153.187 W	138	1.2	26	SOUTHERN ALASKA. <AGS-P>.
02	22	14	04.9*	17.298 N	62.326 W	33 N	1.2	8	LEEWARD ISLANDS. ML 2.6 (FDF).
02	22	52	44.4	66.970 N	156.218 W	5 G	0.9	19	ALASKA. ML 3.6 (PMR).
02	23	01	10.2	53.806 N	160.561 E	60 D 5.3	0.9	214	NEAR EAST COAST OF KAMCHATKA
02	23	09	14.2	39.275 N	23.551 E	18	0.9	43	AEGEAN SEA. ML 3.8 (ATH).
02	23	16	22.1	39.246 N	23.576 E	13 3.8	0.8	52	AEGEAN SEA. ML 3.6 (ATH).
03	00	26	01.7	43.192 N	14.454 E	33 N	1.4	98	ADRIATIC SEA. MD 3.8 (KBA), 3.9 (TRI). ML 3.7 (VKA).
03	02	54	32.6*	44.999 N	28.110 W	10 G 4.2	1.0	28	NORTH ATLANTIC RIDGE
03	02	56	25.5%	60.129 N	146.980 W	8 4.9	1.0	152	SOUTHERN ALASKA. <AGS-P>. ML 4.9 (PMR). Felt (III) at Whittier.
03	02	57	48.7	42.633 N	13.026 E	10 G	0.4	6	CENTRAL ITALY. MD 2.4 (SSO).
03	03	03	13.1*	44.595 N	27.087 W	10 G 4.2	0.6	15	NORTH ATLANTIC RIDGE
03	03	06	54.3?	37.17 N	28.00 E	10 G	1.6	5	TURKEY
03	03	09	21.7%	60.115 N	147.056 W	9	1.2	35	SOUTHERN ALASKA. <AGS-P>. ML 3.4 (PMR).
03	03	33	08.7%	64.476 N	146.914 W	8	1.4	14	CENTRAL ALASKA. <AGS-P>.
03	03	40	48.0*	1.057 S	78.251 W	10 G 4.4	1.2	13	ECUADOR
03	04	01	24.2	39.257 N	23.513 E	13	1.2	34	AEGEAN SEA. ML 3.2 (ATH).
03	04	40	38.8?	3.68 S	134.40 E	33 N 4.3	1.1	5	WEST IRIAN REGION
03	05	04	26.1	42.840 N	111.611 W	5 G	1.1	8	EASTERN IDAHO. ML 3.4 (NEIS).
03	05	15	11.1?	20.73 S	170.54 E	104 ? 4.6	0.1	5	VANUATU ISLANDS
03	05	25	15.3	50.659 N	129.564 W	10 G 4.6 3.8	1.0	78	VANCOUVER ISLAND REGION. Felt at Halberg and Port Hardy.
03	05	42	49.4*	61.486 N	1.414 E	10 G	0.9	12	NORWEGIAN SEA. MD 2.7 (BER).
f 03	05	53	01.1	30.091 N	99.475 E	14 G 6.1 6.1	1.0	422	SICHUAN PROVINCE, CHINA. Two people injured by a landslide which blocked the highway between Chengdu and Batang. Depth from broadband displacement seismograms.
03	06	10	43.4	32.994 S	178.821 W	10 G 4.8	1.1	32	SOUTH OF KERMADEC ISLANDS
03	06	17	21.7	67.099 N	156.562 W	5 G	0.4	12	ALASKA
03	06	41	33.0	30.001 N	99.403 E	10 G 5.1	1.2	89	SICHUAN PROVINCE, CHINA
03	07	44	10.5	46.382 N	2.421 E	16	0.7	40	FRANCE. ML 3.8 (LDG).
03	08	12	04.9	30.085 N	99.285 E	10 G 4.4	1.3	31	SICHUAN PROVINCE, CHINA
03	08	19	07.0	30.046 N	99.363 E	10 G 4.3	1.4	20	SICHUAN PROVINCE, CHINA
03	08	19	27.1?	19.27 S	178.04 W	428 ? 4.5	1.0	15	FIJI ISLANDS REGION
03	08	37	50.1*	30.145 N	99.307 E	10 G 4.8	1.5	15	SICHUAN PROVINCE, CHINA
03	09	12	41.8	29.857 N	51.797 E	10 G 4.9	1.2	182	SOUTHERN IRAN
o 03	09	13	24.2	29.964 N	51.655 E	33 N 5.1	1.1	61	SOUTHERN IRAN. Felt in the Mamasani area.
03	09	28	45.7	30.086 N	99.316 E	10 G 4.8	1.2	26	SICHUAN PROVINCE, CHINA
03	09	52	04.4	30.163 N	99.148 E	10 G 4.9	1.5	36	SICHUAN PROVINCE, CHINA
03	11	22	48.5%	60.129 N	147.014 W	1	1.2	32	SOUTHERN ALASKA. <AGS-P>.
03	11	52	36.3	42.567 N	12.545 E	10 G	0.8	13	CENTRAL ITALY. MD 3.4 (TRI), 3.4 (SSO).
03	12	16	40.7	29.893 N	51.819 E	10 G 4.8	1.0	27	SOUTHERN IRAN
03	12	59	22.4	35.336 N	27.723 E	10 G	1.5	16	DODECANESE ISLANDS. MD 4.0 (ATH).
03	13	00	25.9	3.519 N	125.850 E	140 * 5.0	0.7	35	TALAUD ISLANDS
03	13	18	32.2	1.936 N	128.748 E	33 N 5.0	1.0	25	HALMAHERA

03	13	22	46.6%	60.722 N	5.552 E	10 G	0.5	7	SOUTHERN NORWAY. MD 1.9 (BER).
03	14	20	33.3	45.552 N	151.030 E	33 N 5.0 4.1	0.8	88	KURIL ISLANDS
03	14	20	42.7	26.025 N	124.732 E	191 D 4.7	0.9	49	NORTHEAST OF TAIWAN
a 03	15	41	30.8	30.053 N	99.499 E	8 G 5.8 5.9	1.0	385	SICHUAN PROVINCE, CHINA. Depth from broadband displacement seismograms.
03	15	50	50.77	18.01 N	65.85 W	10 G	0.5	6	PUERTO RICO REGION
03	17	20	19.27	67.19 N	156.38 W	5 G	0.4	11	ALASKA
03	17	22	10.5*	30.343 N	99.492 E	10 G 4.2	1.2	9	SICHUAN PROVINCE, CHINA
03	17	28	21.0	30.073 N	99.432 E	10 G 5.3 4.6	1.0	159	SICHUAN PROVINCE, CHINA
03	17	28	39.7	6.944 N	94.778 E	33 N 4.4	0.9	13	NICOBAR ISLANDS REGION
03	17	33	27.5	51.567 N	173.643 W	48 D 4.8	0.9	116	ANDREANOF ISLANDS, ALEUTIAN IS.
03	17	37	21.2*	51.536 N	173.651 W	50 D 4.7	1.1	36	ANDREANOF ISLANDS, ALEUTIAN IS.
03	17	53	46.5*	51.929 N	173.824 W	33 N 4.5	1.2	42	ANDREANOF ISLANDS, ALEUTIAN IS.
03	17	54	46.1*	30.092 N	99.321 E	10 G	1.4	9	SICHUAN PROVINCE, CHINA
03	18	19	31.9	29.937 N	99.260 E	10 G 4.3	1.0	11	SICHUAN PROVINCE, CHINA
a 03	18	44	54.2	6.955 N	94.592 E	33 N 4.9 4.8	1.1	103	NICOBAR ISLANDS REGION
03	19	27	53.0%	11.244 N	60.900 W	33 *	1.1	10	WINDWARD ISLANDS. MD 3.5 (TRN).
03	19	29	27.4	37.936 N	29.113 E	10 G	1.0	16	TURKEY. MD 3.4 (ATH).
03	19	59	18.4	38.776 N	70.711 E	33 N 4.7	0.9	65	AFGHANISTAN-USSR BORDER REGION. Felt (IV) at Garm, Deonasu, Nurek, Komarou and Gissar; (III) at Obigarm, Dzhrigatal, Dushanbe and Tashkent, USSR.
03	20	20	25.6?	5.36 S	131.33 E	126 ?	1.8	5	BANDA SEA
03	20	37	48.0*	39.000 N	28.213 W	10 G 4.1	0.7	15	AZORES ISLANDS. Felt (IV) on Graciosa and (III) on Sao Jorge.
03	21	07	22.1*	30.180 N	99.277 E	10 G 4.5	1.5	13	SICHUAN PROVINCE, CHINA
03	21	11	01.3	49.150 N	6.932 E	10 G	1.0	13	GERMANY. MD 2.6 (UCC).
03	22	20	47.5%	62.910 N	151.296 W	114		24	CENTRAL ALASKA. <AGS-P>.
03	22	38	59.0?	31.06 S	68.45 W	115 ?	1.5	12	SAN JUAN PROVINCE, ARGENTINA
03	23	06	31.5*	3.294 N	126.743 E	33 N 4.1	0.4	8	TALAUD ISLANDS
03	23	26	40.5*	26.990 S	26.651 E	5 G	1.4	14	REPUBLIC OF SOUTH AFRICA
03	23	47	52.2	37.107 N	27.870 E	5 G	1.0	9	TURKEY
a 04	00	22	06.7	11.038 N	68.270 W	16 5.4 5.2	1.0	227	NEAR COAST OF VENEZUELA. More than 2,000 people made homeless in the Tucacas area. Felt strongly in the states of Falcon and Caraboba. Also felt at Caracas and in parts of Aragua and Miranda.
04	00	43	45.5	39.291 N	23.488 E	10 G	0.4	9	AEGEAN SEA. ML 3.0 (ATH).
04	00	49	53.4%	37.188 N	28.000 E	10 G	1.0	8	TURKEY
04	01	06	51.4	39.735 N	30.792 E	10 G	1.0	14	TURKEY
04	01	31	19.9	29.999 N	99.490 E	10 G 5.0 4.3	1.1	94	SICHUAN PROVINCE, CHINA
04	02	24	13.6?	40.84 N	27.85 E	10 G	1.6	5	TURKEY
04	02	35	47.6%	60.839 N	151.419 W	71		30	KENAI PENINSULA, ALASKA. <AGS-P>.
04	02	40	01.5?	6.22 S	134.26 E	33 N 4.2	1.0	6	AROE ISLANDS REGION
a 04	03	37	39.2%	40.537 N	127.437 W	5 G 5.0 4.1	1.73	173	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 4.7 (BRK).
04	04	52	51.8?	50.04 N	157.00 E	41 D 4.6	1.3	25	KURIL ISLANDS
04	05	30	46.1	30.053 N	99.340 E	10 G 5.1	1.1	20	SICHUAN PROVINCE, CHINA
04	05	33	19.0*	40.585 N	21.398 E	10 G	0.6	7	GREECE. ML 2.9 (SKO).
04	05	41	14.3%	11.790 N	61.102 W	30 *	1.1	10	WINDWARD ISLANDS. MD 3.5 (TRN).
04	05	48	44.4?	49.16 N	6.93 E	10 G	1.5	5	GERMANY
04	05	54	20.6	37.076 N	27.984 E	10 G	1.0	7	TURKEY
04	05	56	48.5*	40.577 N	21.410 E	10 G	0.8	5	GREECE. ML 2.5 (SKO).
04	06	41	25.0%	63.498 N	149.178 W	93		15	CENTRAL ALASKA. <AGS-P>.
04	07	13	27.9%	64.049 N	146.822 W	14		18	CENTRAL ALASKA. <AGS-P>.
04	08	06	00.5%	37.807 N	29.271 E	10 G	1.1	5	TURKEY
04	08	25	50.8	29.947 N	99.153 E	10 G 4.4	1.0	13	SICHUAN PROVINCE, CHINA
04	09	03	33.6*	37.112 N	21.094 E	28 3.8	1.1	16	SOUTHERN GREECE
a 04	10	30	06.9	6.609 S	75.760 W	33 N 5.5 5.1	0.8	238	NORTHERN PERU
04	10	56	58.6	29.968 N	99.396 E	10 G 4.4	1.3	12	SICHUAN PROVINCE, CHINA
04	11	00	33.6	43.116 N	13.461 E	10 G	1.4	7	CENTRAL ITALY. MD 3.1 (TRI), 2.6 (SSO).
04	11	26	41.1	43.083 N	13.475 E	10 G	1.2	13	CENTRAL ITALY. MD 3.4 (TRI), 3.3 (SSO).
04	11	27	42.0	37.630 N	118.822 W	5 G	0.6	33	CALIFORNIA-NEVADA BORDER REGION. ML 3.1 (NEIS), 3.1 (PAS).
04	11	53	01.8?	4.96 S	144.32 E	126 * 4.1	0.7	11	NEAR N COAST OF PAPUA NEW GUINEA
04	12	17	06.5	23.249 S	66.921 W	163 4.2	0.5	20	JUJUY PROVINCE, ARGENTINA
04	12	22	15.7?	31.35 S	68.09 W	33 N	1.2	5	SAN JUAN PROVINCE, ARGENTINA
04	12	46	38.1*	5.364 S	147.856 E	33 N 4.3	0.9	7	EAST PAPUA NEW GUINEA REGION
a 04	13	15	08.0	21.963 S	179.305 W	591 D 5.4	0.9	242	FIJI ISLANDS REGION
04	14	15	10.0	39.121 N	24.598 E	8	1.1	18	AEGEAN SEA. ML 3.1 (ATH).
04	14	21	59.1	29.987 N	99.349 E	10 G 4.7	1.2	44	SICHUAN PROVINCE, CHINA
04	14	34	48.1*	27.841 N	56.359 E	33 N 4.0 3.9	0.4	7	SOUTHERN IRAN
04	14	37	01.8?	37.12 N	27.97 E	10 G	1.1	5	TURKEY
04	15	29	55.7	9.341 N	56.977 E	10 G 4.9	0.8	36	CARLSBERG RIDGE
04	16	26	13.2	27.503 N	106.311 E	10 G 4.2	1.3	11	EASTERN CHINA. ML 4.6 (BJI).
04	16	46	46.8*	8.804 N	147.718 E	33 N 4.0	0.8	13	CAROLINE ISLANDS REGION
04	16	54	38.9%	60.537 N	147.380 W	12		26	SOUTHERN ALASKA. <AGS-P>.
04	16	55	56.9%	37.938 N	29.091 E	10 G	1.2	6	TURKEY
04	17	38	48.4%	59.400 N	157.002 W	0		8	SOUTHERN ALASKA. <AGS-P>.
04	18	10	28.7	30.046 N	99.483 E	10 G 4.7	1.3	47	SICHUAN PROVINCE, CHINA
04	18	23	00.0*	39.521 N	23.519 E	10 G	0.6	8	AEGEAN SEA
a 04	18	32	55.6	13.039 S	76.195 W	72 5.3	1.0	118	NEAR COAST OF PERU. Felt (III) at Ico and Lima.
04	19	31	15.1	37.104 N	27.912 E	10 G	1.0	11	TURKEY. MD 3.4 (ATH).
04	20	00	03.7?	37.08 N	27.89 E	5 G	1.5	5	TURKEY
04	20	10	02.7?	37.65 N	20.56 E	10 G	1.4	8	IONIAN SEA. ML 3.5 (ATH).
04	20	22	03.1	2.156 S	80.588 W	33 N	1.4	7	NEAR COAST OF ECUADOR
04	20	22	16.9*	34.534 N	29.893 E	10 G	0.7	6	EASTERN MEDITERRANEAN SEA
04	20	41	53.1*	13.078 N	90.216 W	34 * 4.6	1.3	36	NEAR COAST OF GUATEMALA
04	20	53	31.9	40.834 N	22.932 E	10 G	0.4	9	GREECE
04	21	27	06.1	42.303 N	19.904 E	10 G	0.6	9	YUGOSLAVIA. MD 2.5 (TTG).
04	22	15	30.4?	31.48 S	68.14 W	33 N	1.4	6	SAN JUAN PROVINCE, ARGENTINA
04	22	25	26.0	38.194 N	72.432 E	57 * 4.8	1.2	43	TAJIK SSR. Felt (III) at Kharag, Rushan, Vanch, Vir, Savnab and Ishkashim.
04	23	42	20.6	37.082 N	27.943 E	14	1.3	16	TURKEY. MD 3.6 (ATH).
05	00	54	11.6	37.005 N	27.965 E	20	1.5	17	TURKEY. MD 3.8 (ATH).
05	01	27	52.1*	32.296 S	71.824 W	10 G	0.8	10	NEAR COAST OF CENTRAL CHILE

05	02 47 31 4?	10.43 N	60.62 W	56 ?	0.2	9	TRINIDAD. MD 3.6 (TRN).
05	06 16 59.1*	17.988 S	131.408 E	10 G	1.1	7	NORTHERN TERRITORY, AUSTRALIA. ML 4.1 (QIS).
05	06 19 08.4	31.286 N	104.440 E	10 G	0.7	7	SICHUAN PROVINCE, CHINA
05	06 54 49.3*	44.630 N	7.075 E	10 G	0.1	6	NORTHERN ITALY. ML 1.8 (GEN).
05	08 11 38.9	3.189 N	76.331 W	10	1.0	11	COLOMBIA
05	08 33 18.2*	18.247 N	66.311 W	10 G	0.4	6	PUERTO RICO REGION
05	09 01 07.1?	38.35 N	20.02 E	10 G	1.4	7	GREECE. MD 3.7 (ATH).
05	09 17 17.8?	28.79 N	86.74 E	10 G	1.4	5	TIBET
05	09 44 20.7	44.519 N	7.344 E	10	0.9	33	NORTHERN ITALY. ML 3.1 (GEN).
05	10 20 01.2*	37.955 N	122.350 W	6	14	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK). Mo=2.6*10**13 Nm (BRK). Felt at El Sobrante, Pinole, Richmond and San Pablo.	
05	10 25 54.1*	18.246 N	66.312 W	10 G	0.5	5	PUERTO RICO REGION
05	10 35 32.5*	17.444 N	100.680 W	33 N	1.3	8	GUERRERO, MEXICO
05	10 44 34.2?	42.27 N	22.71 E	10 G	0.9	5	BULGARIA
05	11 23 39.5*	39.817 N	123.225 W	12	10	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 2.9 (BRK). Felt (III) at Cavelo.	
05	11 53 35.0*	33.924 S	71.125 W	33 N	0.4	7	NEAR COAST OF CENTRAL CHILE
05	12 21 51.0*	13.999 S	166.273 E	33 N	4.7	17	VANUATU ISLANDS
05	13 30 40.1	31.984 S	178.658 W	10 G	5.3 4.9	120	KERMADEC ISLANDS REGION
05	14 11 55.1*	32.950 N	117.740 W	6 G	24	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.4 (PAS). Felt (II) at San Diego, California.	
05	16 00 40.3*	11.464 S	114.785 E	33 N	0.8	6	SOUTH OF BALI ISLAND
05	16 32 22.7*	61.737 N	149.755 W	41	34	SOUTHERN ALASKA. <AGS-P>.	
05	16 58 47.6*	30.035 N	99.270 E	10 G	4.7	13	SICHUAN PROVINCE, CHINA
05	17 11 07.1	29.993 N	99.255 E	10 G	1.3	14	SICHUAN PROVINCE, CHINA. ML 3.8 (BJI).
05	17 11 58.6	41.840 N	19.284 E	17	1.0	23	ALBANIA. ML 3.0 (TTG). MD 3.4 (ATH).
f 05	18 28 39.4	8.281 S	71.381 W	593 G	6.4	1.0	589 WESTERN BRAZIL. mb 6.7 (BRK). 6.5 (PAS). Mo=5.0*10**19 Nm (PPT). Felt at Feijó, Brazil and Puyo, Ecuador. Depth from broadband displacement seismograms.
05	19 10 45.0?	7.25 S	71.08 W	600 G	4.9	0.8	16 WESTERN BRAZIL
05	20 22 28.4?	26.13 S	178.82 E	501 ?	4.6	1.5	8 SOUTH OF FIJI ISLANDS
05	20 39 56.6	43.225 N	13.318 E	10 G	1.1	9	CENTRAL ITALY. MD 2.6 (SSO).
06	00 31 07.4*	40.505 N	22.624 E	10 G	0.1	5	GREECE
06	01 41 29.9	66.971 N	156.229 W	5 G	0.7	9	ALASKA. ML 4.0 (PMR).
06	02 40 56.2	22.471 N	99.776 E	10 G	4.7 4.5	1.3	54 BURMA-CHINA BORDER REGION
06	02 43 30.9*	8.472 S	67.809 E	10 G	0.6	9	MID-INDIAN RISE
06	02 45 26.3*	39.259 N	28.905 E	10 G	0.4	6	TURKEY
06	03 54 05.6	6.332 S	130.766 E	86 *	4.5	0.9	24 BANDA SEA
06	04 12 15.7	36.475 N	28.190 E	77 ?	0.5	7	DODECANESE ISLANDS
06	04 12 42.5	29.726 N	99.329 E	10 G	4.8	1.0	13 SICHUAN PROVINCE, CHINA
06	04 53 47.5*	40.975 N	22.160 E	10 G	0.5	6	GREECE. ML 1.2 (SKO).
06	06 27 41.8	12.438 N	120.972 E	33 N	4.7 4.3	1.0	39 MINDORO, PHILIPPINE ISLANDS
06	07 26 46.4*	24.458 N	94.214 E	10 G	0.4	8	BURMA-INDIA BORDER REGION
06	08 21 15.7?	11.98 N	86.55 W	100 G	0.3	17	NEAR COAST OF NICARAGUA
06	08 47 47.9*	62.332 N	159.574 W	74	0.4	8	CENTRAL ALASKA. <AGS-P>.
06	09 11 45.1*	67.398 N	156.753 W	5 G	0.4	11	ALASKA
06	09 57 58.7	2.005 S	151.458 E	33 N	4.3	1.4	5 NEW IRELAND REGION
06	11 19 01.7?	36.08 N	24.90 E	33 N	0.7	5	SOUTHERN GREECE. MD 3.5 (ATH).
06	11 31 14.0*	8.497 S	125.014 E	292 *	5.3	1.1	14 TIMOR
06	12 02 21.6	51.263 N	178.252 E	39 D	4.9	1.1	73 RAT ISLANDS, ALEUTIAN ISLANDS. ML 4.7 (PMR).
06	12 30 43.8*	53.239 N	160.293 E	100 G	4.4	0.8	16 NEAR EAST COAST OF KAMCHATKA
06	13 07 18.0*	38.852 N	112.989 E	10 G	1.0	5	NORTHEASTERN CHINA. ML 3.1 (BJI).
06	14 32 29.6	41.836 N	12.727 E	10 G	0.5	9	SOUTHERN ITALY
06	14 32 52.8	15.853 N	95.098 W	27	4.8	1.1	70 NEAR COAST OF OAXACA, MEXICO
06	16 25 07.9*	23.846 N	122.001 E	33 N	3.5	1.1	9 TAIWAN REGION
06	16 35 55.7	66.905 N	156.077 W	5 G	0.8	18	ALASKA
06	17 02 03.1	34.458 N	27.457 E	33 N	0.6	7	EASTERN MEDITERRANEAN SEA. MD 3.7 (ATH).
06	17 11 15.8	39.781 N	25.585 E	5	0.6	19	AEGEAN SEA
06	17 51 26.3?	38.04 N	22.00 E	10 G	0.1	4	GREECE. ML 2.9 (ATH).
06	18 38 09.6	37.118 N	27.979 E	10 G	1.5	11	TURKEY. MD 3.3 (ATH).
06	18 52 12.2*	67.146 N	156.578 W	5 G	0.6	6	ALASKA
06	19 04 25.2	36.441 N	71.694 E	85 *	4.6	0.6	15 AFGHANISTAN-USSR BORDER REGION
06	19 50 28.0*	37.114 N	27.853 E	10 G	1.4	7	TURKEY
06	20 03 45.3	51.296 N	178.214 E	42 D	4.9	1.0	49 RAT ISLANDS, ALEUTIAN ISLANDS
06	21 01 59.1*	21.839 N	143.298 E	232 ?	4.3	1.0	18 MARIANA ISLANDS REGION
06	21 14 57.4	36.477 N	70.115 E	219 D	4.8	1.0	190 HINDU KUSH REGION. Felt (III) at Obigarm, Dushanbe and Lyangar; (II) at Kulyab, USSR.
06	21 40 41.5	66.947 N	156.262 W	5 G	0.5	13	ALASKA
06	23 00 13.7*	40.505 N	22.617 E	10 G	0.3	5	GREECE
06	23 29 33.2	40.918 N	22.092 E	10 G	1.0	22	GREECE. MD 3.3 (ATH). ML 2.8 (SKO).
06	23 37 43.5	16.225 N	95.250 W	11	4.9	1.1	61 OAXACA, MEXICO
06	23 46 13.0*	64.719 N	17.322 W	10 G	4.2 4.1	1.2	7 ICELAND
a 07	00 38 18.5	23.553 N	99.526 E	33 N	5.3 5.6	1.1	266 BURMA-CHINA BORDER REGION. At least one person killed, 91 injured and 5,300 houses destroyed in the Gengma oreo, China. Felt strongly in Lancang and Menglion Counties. Direct economic losses of more than 54 million dollars were sustained.
07	01 32 19.4*	37.563 N	71.870 E	33 N	4.3	1.5	7 AFGHANISTAN-USSR BORDER REGION
07	01 49 05.2	37.740 N	15.104 E	10 G	0.9	11	SICILY
07	03 00 24.9	29.909 N	99.318 E	10 G	4.9	1.3	17 SICHUAN PROVINCE, CHINA
07	03 02 45.2	41.478 N	142.051 E	72	4.6	1.1	52 HOKKAIDO, JAPAN REGION. Felt (I JMA) at Hachinohe, Hanshu.
07	03 55 02.9*	30.064 N	99.254 E	10 G	1.4	7	SICHUAN PROVINCE, CHINA
07	03 57 38.4?	5.22 S	145.91 E	33 N	4.3	1.3	7 EAST PAPUA NEW GUINEA REGION
07	04 43 47.3	38.309 N	22.782 E	10 G	0.9	22	GREECE. ML 3.4 (ATH).
07	04 58 55.0*	37.082 N	27.877 E	10 G	1.3	7	TURKEY
07	05 47 45.2*	61.981 N	150.413 W	43	29	SOUTHERN ALASKA. <AGS-P>.	
07	06 07 47.5*	33.930 N	117.910 W	4	15	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.6 (PAS). Felt (V) at Los Nietas and Whittier; (IV) at Bellflower, Brea, Buena Park, Fullerton, La Habra, Lakewood, La Puente, Orange and Silverado; (III) at Atwood, Cypress, Chino Hills, Lang Beach, Tustin, Westminster and Yorba Linda.	

07	06 23 35.9&	62.277 N	149.742 W	50				38	CENTRAL ALASKA. <AGS-P>.
07	06 37 59.5?	33.76 S	178.50 E	161 ?	4.6	1.2	14	SOUTH OF KERMADEC ISLANDS	
07	06 52 03.1&	60.677 N	150.718 W	48			57	KENAI PENINSULA, ALASKA. <AGS-P>. ML 3.6 (PMR).	
07	06 56 28.0	34.965 N	135.573 E	10 G		0.5	8	NEAR S. COAST OF SOUTHERN HONSHU. MG 3.6 (JMA). Felt (II JMA) at Kyoto.	
07	07 01 50.2?	54.53 N	161.74 W	33 N	4.7	1.0	14	ALASKA PENINSULA	
07	08 37 37.8?	38.29 N	22.59 E	10 G		0.4	4	GREECE. ML 2.8 (ATH).	
07	08 55 58.1	27.424 N	127.748 E	117	4.8	1.3	33	RYUKYU ISLANDS. Felt (I JMA) at Naha.	
07	10 36 21.4	38.304 N	22.789 E	29	4.3	0.9	26	GREECE. ML 3.5 (ATH).	
07	10 46 50.1	38.320 N	22.740 E	33	4.1	1.3	93	GREECE. ML 4.4 (ATH), 4.1 (TTG).	
07	11 36 40.7?	38.29 N	22.61 E	10 G		0.2	4	GREECE. ML 3.2 (ATH).	
07	12 02 59.6*	38.281 N	22.583 E	10 G		0.7	5	GREECE. ML 3.2 (ATH).	
07	12 27 32.9	8.690 S	75.443 W	127 D	4.8	0.7	45	PERU	
07	12 28 21.3	7.149 S	129.215 E	176 *	5.0	1.3	34	BANDA SEA	
07	13 05 22.7*	36.895 N	71.580 E	112 *	4.5	1.5	23	AFGHANISTAN-USSR BORDER REGION	
07	13 40 44.7	39.693 N	20.283 E	10 G	4.2	1.3	81	GREECE-ALBANIA BORDER REGION. ML 4.2 (KBA), 4.5 (TTG). MD 4.1 (ATH).	
07	14 04 51.0&	37.125 N	121.550 W	9			16	CENTRAL CALIFORNIA. <BRK>. ML 3.2 (BRK). Felt (III) at Gilroy and San Martin. Also felt at Morgan Hill.	
07	14 23 39.8	37.158 N	27.838 E	10 G		1.5	10	TURKEY. MD 3.3 (ATH).	
07	14 42 16.8&	60.674 N	150.721 W	47			37	KENAI PENINSULA, ALASKA. <AGS-P>.	
07	14 59 11.9*	66.843 N	156.269 W	5 G		0.5	11	ALASKA	
07	15 37 19.2*	22.016 S	174.974 W	33 N	4.8 4.2	1.1	20	TONGA ISLANDS REGION	
07	15 39 13.6	42.945 N	17.612 E	5 G	3.1	1.2	59	ADRIATIC SEA. ML 4.1 (KBA), 4.1 (ZAG), 4.0 (TTG), 3.4 (LJU). MD 4.2 (TRI), 4.0 (BEO).	
07	15 48 10.2?	58.54 N	10.47 E	10 G		0.8	4	SWEDEN. ML 2.2 (BER).	
07	16 28 05.1	57.147 N	122.158 E	27 D	4.9 4.1	1.1	105	EASTERN USSR	
07	16 53 45.3	21.815 S	175.474 W	33 N	5.0 4.5	1.1	62	TONGA ISLANDS	
07	17 45 47.9?	32.91 N	5.09 W	10 G		1.3	4	MOROCCO. MD 3.7 (TIO).	
07	21 09 51.5*	37.865 N	27.427 E	10 G		1.4	10	TURKEY	
07	21 32 12.5*	36.020 N	68.765 E	33 N	4.1	1.0	9	HINDU KUSH REGION	
07	22 08 29.6*	51.772 N	172.847 W	33 N	5.0	0.5	14	ANDREANOF ISLANDS, ALEUTIAN IS.	
07	22 08 39.2*	22.655 N	141.993 E	228 *	4.2	0.6	17	VOLCANO ISLANDS REGION	
07	22 25 08.5	40.412 N	25.843 E	5 G		1.2	13	AEGEAN SEA	
07	23 49 41.9	37.153 N	139.039 E	153	4.7	0.8	135	HONSHU, JAPAN. Felt (II JMA) at Utsunomiya; (I JMA) at Mito, Kafu, Tokyo and an Oshima.	
07	23 50 39.8	36.740 N	71.172 E	169 ?	4.6	0.6	17	AFGHANISTAN-USSR BORDER REGION	
08	00 03 13.5	44.792 N	79.785 E	33 N	4.6	1.0	33	EASTERN KAZAKH SSR. Felt (IV) at Amanbakter and (II) at Alma-Ata.	
08	00 34 49.9?	37.18 N	28.01 E	5 G		1.2	5	TURKEY	
08	01 15 48.6?	31.64 N	140.70 E	33 N	4.7	1.1	7	SOUTH OF HONSHU, JAPAN	
08	01 33 35.5?	18.03 N	101.94 W	10 G		1.3	6	GUERRERO, MEXICO	
08	01 52 52.7	66.944 N	156.316 W	5 G		0.3	15	ALASKA. ML 3.6 (PMR).	
08	02 23 08.9*	37.112 N	27.896 E	10 G		1.9	7	TURKEY	
08	02 24 45.6	37.706 N	14.981 E	10 G		0.8	6	SICILY	
08	02 32 40.1%	32.895 N	130.930 E	10 G		0.1	5	KYUSHU, JAPAN. Felt (III JMA) in the Mt. Asa area.	
08	02 45 34.4?	40.67 N	22.45 E	10 G		0.4	5	GREECE	
08	03 19 42.1	23.492 N	99.344 E	10 G		0.9	13	BURMA-CHINA BORDER REGION	
a 08	03 36 38.4	18.891 S	178.845 W	531 D	5.4	1.1	198	FIJI ISLANDS REGION	
08	03 53 47.2&	60.095 N	153.484 W	158	4.6		64	SOUTHERN ALASKA. <AGS-P>.	
08	04 15 22.8?	37.22 N	27.97 E	10 G		1.6	5	TURKEY	
08	04 21 21.6?	14.77 N	60.06 W	24		0.2	10	WINDWARD ISLANDS. ML 3.1 (FDF).	
08	04 33 06.6%	39.332 N	28.381 E	10 G		0.3	8	TURKEY	
08	04 41 49.8?	10.43 S	124.13 E	226 ?	4.5	1.1	10	TIMOR	
08	05 09 57.7*	39.500 N	106.491 E	10 G	3.9	0.5	6	NORTHERN CHINA. ML 4.0 (BJI).	
08	06 17 17.5?	40.57 N	22.45 E	10 G		1.5	6	GREECE. ML 2.3 (SKO).	
a 08	06 20 02.0	0.019 N	126.696 E	76 *	5.1	1.3	54	MOLUCCA PASSAGE	
08	07 07 16.1?	3.41 N	127.24 E	33 N	4.3	1.0	7	TALAUD ISLANDS	
08	08 05 40.1*	14.918 S	167.185 E	150 *	4.8	1.0	39	VANUATU ISLANDS	
08	08 19 51.7*	33.838 N	28.500 E	33 N		0.4	8	EASTERN MEDITERRANEAN SEA	
08	08 22 24.0	34.521 N	32.381 E	33 N		1.3	13	CYPRUS	
08	09 02 34.3&	59.782 N	152.867 W	86			65	SOUTHERN ALASKA. <AGS-P>.	
08	09 09 08.9&	57.815 N	152.532 W	46	4.6		75	KODIAK ISLAND REGION. <AGS-P>. ML 4.2 (PMR). Felt (IV) at Kodiak.	
08	09 21 11.3?	44.50 N	114.31 W	5 G		0.1	6	WESTERN IDAHO. ML 3.2 (BUT).	
08	09 43 28.1?	44.06 N	8.79 E	10 G		1.4	5	NORTHERN ITALY	
08	09 45 41.7	6.162 S	153.599 E	58 *	4.8	1.3	24	NEW BRITAIN REGION	
08	09 57 53.8%	36.423 N	5.750 W	10 G		1.5	6	STRAIT OF GIBRALTAR	
08	10 22 54.8*	36.688 N	21.365 E	28 *	3.5	1.1	11	SOUTHERN GREECE. ML 3.3 (ATH).	
08	11 20 01.6?	51.58 N	172.91 W	33 N	5.0	1.6	12	ANDREANOF ISLANDS, ALEUTIAN IS. ML 3.7 (PMR).	
08	11 34 05.5*	31.330 N	96.937 E	33 N		0.6	7	TIBET	
08	11 48 17.5?	37.09 N	27.93 E	10 G		1.5	4	TURKEY	
08	11 50 08.1?	6.34 S	149.77 E	33 N	4.1	1.3	7	NEW BRITAIN REGION	
08	11 56 13.9&	61.207 N	147.092 W	17			23	SOUTHERN ALASKA. <AGS-P>.	
08	12 13 19.0*	18.848 N	145.457 E	200	4.6	0.5	18	MARIANA ISLANDS	
08	12 45 33.4*	33.832 N	117.990 W	5 G		0.4	6	SOUTHERN CALIFORNIA. ML 3.0 (NEIS). Felt at Anaheim, Brea, Buena Park and Fullerton.	
08	12 47 54.9	17.014 N	62.365 W	10 G		0.4	6	LEEWARD ISLANDS. ML 2.8 (FDF).	
08	13 27 54.0%	40.577 N	23.031 E	10 G		0.6	5	GREECE	
08	13 31 56.9%	38.301 N	28.092 E	10 G		1.2	7	TURKEY	
08	13 46 07.6	66.981 N	156.243 W	5 G		0.7	28	ALASKA. ML 4.3 (PMR). Felt (IV) at Kobuk and (III) at Shungnak.	
08	13 48 34.4*	6.384 S	153.505 E	79 *	4.4	1.0	11	NEW BRITAIN REGION	
08	14 01 56.4*	11.732 S	117.172 E	33 N		1.3	6	SOUTH OF SUMBAWA ISLAND	
a 08	14 28 30.9	23.427 S	179.953 W	548 D	5.6	1.1	352	SOUTH OF FIJI ISLANDS. mb 5.7 (BRK).	
08	14 58 32.6%	37.774 N	30.564 E	5 G		1.4	6	TURKEY	
08	15 25 40.9&	32.350 N	115.250 W	6 G			5	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.3 (PAS).	
08	16 19 08.8&	63.171 N	150.864 W	136			29	CENTRAL ALASKA. <AGS-P>.	
08	16 20 32.8*	23.550 S	179.777 E	600 G	4.5	0.5	12	SOUTH OF FIJI ISLANDS	
08	17 04 14.0*	17.720 N	95.051 W	33 N		1.1	7	OAXACA, MEXICO	
08	17 33 48.4*	60.630 N	6.231 E	10 G		0.6	8	SOUTHERN NORWAY. MD 1.7 (BER).	
08	17 51 10.5	36.134 N	140.060 E	82	4.9	1.1	104	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Utsunomiya; (II JMA) at Mito and Kumagaya; (I JMA) at	

08	17	54	43.5	36.225	N	28.086	E	87	3.9	1.1	31	Yokohama, Ajiro, Kowaguchi-ko and on Oshima.
08	18	28	59.0	7.004	S	147.415	E	84	4.9	0.6	18	DODECANESE ISLANDS
08	19	21	40.18	62.161	N	149.395	W	36			36	EAST PAPUA NEW GUINEA REGION
08	20	07	45.4	43.047	N	13.319	E	10	G	1.0	10	CENTRAL ALASKA. <AGS-P>.
08	20	37	50.8	37.459	N	11.685	E	10	G	0.3	8	CENTRAL ITALY. MD 2.7 (SSO).
08	20	48	06.8	40.540	N	15.833	E	10	G	0.7	5	SICILY
08	21	21	11.9	50.698	N	129.746	W	10	G	4.2	34	SOUTHERN ITALY
08	21	30	36.7	15.781	S	177.738	E	22	D	4.9	26	VANCOUVER ISLAND REGION
08	22	31	31.3	15.059	N	60.136	W	33	N		17	FIJI ISLANDS
08	22	35	06.8	17.977	S	178.825	W	680	?	4.7	35	LEEWARD ISLANDS. ML 2.8 (FDF). MD 2.9 (TRN).
08	23	18	43.6	32.282	N	137.626	E	390		5.1	250	FIJI ISLANDS REGION
08	23	28	28.8	34.982	N	45.000	E	47	*	4.7	7	SOUTH OF HONSHU, JAPAN. Felt (II JMA) at Utsunomiya and (I JMA) at Tokyo.
09	00	35	07.7	45.554	N	3.554	E	5	G		18	IRAQ
09	01	28	42.6	41.901	N	20.560	E	5	G		11	FRANCE. ML 2.9 (LDG).
09	02	00	54.0	41.890	N	20.668	E	10	G		6	ALBANIA. ML 2.7 (SKO). MD 2.5 (TTG).
09	02	30	37.8	28.071	N	16.156	W	23	D	5.2 4.6	202	ALBANIA. ML 2.0 (SKO).
09	03	23	09.4	35.465	N	27.900	E	10	G		11	CANARY ISLANDS REGION. Felt (V) on Tenerife and Gran Canaria.
09	04	19	41.2	42.697	N	12.719	E	10	G		7	DODECANESE ISLANDS. MD 3.7 (ATH).
09	04	39	25.3	60.074	N	5.218	E	10	G		9	CENTRAL ITALY. MD 2.4 (SSO).
09	05	02	03.8	18.10	S	70.18	W	122	?		5	SOUTHERN NORWAY. ML 1.8 (BER).
09	05	16	05.1	36.608	N	70.976	E	165	?	4.4	10	NEAR COAST OF NORTHERN CHILE
09	05	17	47.5	38.478	N	28.105	E	10	G		6	HINDU KUSH REGION
09	05	51	13.3	17.86	N	60.88	W	33	N		7	TURKEY
09	06	01	24.9	35.547	N	27.702	E	10	G		7	LEEWARD ISLANDS. MD 3.2 (FDF).
09	06	15	53.0	38.317	N	22.737	E	10	G		6	DODECANESE ISLANDS. MD 3.5 (ATH).
09	06	23	38.6	38.348	N	22.760	E	33	N		6	GREECE. ML 3.3 (ATH).
09	06	25	13.1	41.876	N	20.582	E	10	G		6	GREECE. ML 2.7 (ATH).
09	07	42	06.5	59.678	N	153.362	W	127			49	ALBANIA. ML 2.5 (OHR).
09	08	24	19.1	10.015	S	161.022	E	33	N	4.3 4.4	12	SOUTHERN ALASKA. <AGS-P>.
09	10	22	43.0	38.358	N	22.590	E	10	G		8	SOLOMON ISLANDS
09	10	27	34.5	20.064	S	133.997	E	10	G		5	GREECE. ML 3.2 (ATH).
09	10	38	16.9	19.365	N	104.801	W	65	*	4.5	40	NORTHERN TERRITORY, AUSTRALIA
09	11	41	41.0	41.627	N	125.488	W	5	G		9	NEAR COAST OF JALISCO, MEXICO
09	13	11	50.1	58.19	N	6.37	E	10	G		5	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.4 (BRK).
09	13	24	54.9	17.69	S	179.09	W	692	?	4.5	14	SOUTHERN NORWAY. MD 2.3 (BER).
09	15	34	09.6	52.991	S	159.386	E	10	G	5.3 4.8	24	FIJI ISLANDS REGION
09	16	12	24.3	64.642	N	156.258	W	0		4.0	32	MACQUARIE ISLANDS REGION
09	16	17	17.8	22.879	N	92.504	E	105	*	4.0	6	CENTRAL ALASKA. <AGS-P>. ML 4.8 (PMR). Felt (IV) at Galena and Ruby.
09	16	30	55.9	34.10	S	71.10	W	33	N		10	INDIA-BANGLADESH BORDER REGION
09	16	48	18.8	62.857	N	148.221	W	67			52	NEAR COAST OF CENTRAL CHILE
09	18	28	45.5	48.230	N	119.853	W	16			45	CENTRAL ALASKA. <AGS-P>.
09	18	55	40.4	37.388	N	122.172	W	7			20	WASHINGTON. <SEA>. ML 4.4 (SEA). Slight damage (VI) at Okanagan. Felt (V) at Chelan, Coulee Dam, Malott, Manson, Methaw and Winthrop; (IV) at Ardenvoir, Brewster, Bridgeport, Carlton, Condonally, Dryden, Electric City, Elmer City, Entiat, Grand Coulee, Hartline, Omak, Orondo, Pateras, Stehakin, Twisp, Waterville and Wenatchee.
09	18	56	53.7	33.91	N	140.46	E	10	G		7	CENTRAL CALIFORNIA. <BRK>. ML 3.0 (BRK). Felt (IV) at Las Altos and (III) at Mountain View.
09	21	13	46.8	5.591	N	125.388	E	80		5.0	59	SOUTH OF HONSHU, JAPAN
09	21	23	43.6	45.568	N	6.798	E	5	G		13	MINDANAO, PHILIPPINE ISLANDS
09	21	42	07.0	11.545	N	61.986	W	30	*		7	FRANCE. ML 2.5 (GEN). 2.4 (LDG).
09	22	17	33.2	2.413	N	127.990	E	33	N	4.5	19	WINDWARD ISLANDS. MD 3.3 (TRN).
09	22	31	11.7	16.507	N	46.588	W	10	G	4.7	23	MOLUCCA PASSAGE
09	22	53	10.2	11.93	N	141.99	E	33	N		6	NORTH ATLANTIC RIDGE
10	01	06	49.6	22.146	S	69.303	E	10	G	5.2 5.1	94	WEST CAROLINE ISLANDS
10	01	37	33.5	34.234	N	26.671	E	36		4.1 3.4	81	MID-INDIAN RISE
10	02	25	23.2	30.281	S	69.191	W	33	N		8	CRETE. ML 4.4 (ATH).
10	03	05	29.3	39.688	N	27.905	E	19		4.2 3.5	114	CHILE-ARGENTINA BORDER REGION
10	03	25	28.3	39.698	N	27.910	E	19			33	TURKEY. ML 4.6 (ATH). Felt at Balikesir.
10	03	45	59.5	60.273	N	148.802	W	8			30	TURKEY. ML 4.1 (ATH). Felt at Balikesir.
10	03	50	47.6	31.561	S	70.177	W	123	?	4.1	16	KENAI PENINSULA, ALASKA. <AGS-P>.
10	04	23	22.6	37.228	N	121.630	W	7			13	CHILE-ARGENTINA BORDER REGION. Felt (III) at San Juan, Argentina.
10	05	16	12.3	22.100	S	69.420	E	10	G	5.0 4.7	19	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
10	07	01	48.4	62.112	N	150.428	W	2			36	MID-INDIAN RISE
10	07	39	00.2	83.199	N	4.930	W	10	G	4.3	28	CENTRAL ALASKA. <AGS-P>. ML 3.2 (PMR). Felt (I) at Palmer.
10	07	59	35.7	45.560	N	7.865	E	10	G		5	NORTH OF SVALBARD
10	08	23	24.5	2.688	N	128.424	E	54	?	5.2	27	NORTHERN ITALY. ML 2.3 (GEN).
10	09	02	27.8	60.423	N	147.680	W	20			35	HALMAHERA
10	10	06	19.8	40.230	N	143.739	E	33	N	5.1 4.7	126	SOUTHERN ALASKA. <AGS-P>.
10	10	08	03.5	11.543	N	87.060	W	52	?	4.4 3.6	23	OFF EAST COAST OF HONSHU, JAPAN
10	10	36	31.6	37.281	N	27.822	E	10	G		5	NEAR COAST OF NICARAGUA
10	10	47	03.6	39.900	N	27.914	E	10	G		8	TURKEY
10	11	00	39.5	8.266	S	129.522	E	176	?	4.4	7	TURKEY
10	12	19	18.1	41.651	N	20.443	E	10	G		6	TIMOR SEA
10	13	36	20.5	39.730	N	27.853	E	10	G		6	ALBANIA. ML 2.4 (SKO).
10	13	59	17.9	30.032	N	99.393	E	10	G	4.4	8	TURKEY
10	14	59	05.7	43.161	N	25.400	E	5	G		8	SICHUAN PROVINCE, CHINA
10	15	36	28.7	62.343	N	150.083	W	9			35	BULGARIA
10	15	45	06.3	32.865	N	141.779	E	34	*	5.0 4.0	71	CENTRAL ALASKA. <AGS-P>.
10	16	13	49.0	60.567	N	5.034	E	10	G		7	SOUTH OF HONSHU, JAPAN
10	16	15	16.0	39.754	N	27.865	E	10	G		7	SOUTHERN NORWAY. MD 1.3 (BER).
10	16	24	44.3	58.784	N	139.016	W	0			12	TURKEY
10	17	13	05.1	39.58	N	19.48	E	10	G		8	OFF COAST OF SOUTHEASTERN ALASKA. <AGS-P>.
10	18	51	55.7	62.520	N	149.362	W	57			16	GREECE-ALBANIA BORDER REGION
10	19	32	39.5	5.498	S	145.757	E	127	?	3.3	6	CENTRAL ALASKA. <AGS-P>.
10	19	32	39.5	5.498	S	145.757	E	127	?	3.3	6	EAST PAPUA NEW GUINEA REGION

10	20	05	27.4	33.313	N	75.447	E	33	N	3.9	0.5	8	EASTERN KASHMIR
10	20	19	21.9	33.221	N	75.519	E	42	*	4.8 4 0	1.1	43	EASTERN KASHMIR. Felt in the Peshawar-Lahore area, Pakistan.
10	21	19	00.57	22.34	S	69.14	E	10	G	4.4	0.6	10	MID-INDIAN RISE
10	22	18	46.1	23.282	S	69.190	W	96	D	5.3	1.0	145	NORTHERN CHILE. Felt (IV) at Chuquicamata and Calama; (III) at Antofagasta.
10	22	23	36.5	37.052	N	27.897	E	10	G	3.7	1.0	25	TURKEY. MD 4.2 (ATH).
10	22	35	22.7	37.046	N	27.939	E	10	G		1.1	9	TURKEY
10	22	44	55.97	39.261	N	29.532	E	10	G		1.5	6	TURKEY
10	23	27	32.97	37.16	N	27.93	E	10	G		1.3	7	TURKEY
11	00	36	15.5	44.305	N	6.470	E	10	G		0.5	16	FRANCE. ML 2.3 (LDG).
11	00	47	00.98	36.923	N	121.673	W	11				16	CENTRAL CALIFORNIA. <BRK>. ML 3.0 (BRK). Felt at Carralitos, Mass Landing and Watsonville.
11	01	24	26.9	42.856	N	17.701	E	10	G		1.3	19	ADRIATIC SEA. MD 3.4 (TRI), 2.7 (TTG).
11	01	42	45.98	60.038	N	152.978	W	112				37	SOUTHERN ALASKA. <AGS-P>.
11	02	21	02.27	15.30	N	99.51	W	33	N		0.8	6	OFF COAST OF GUERRERO, MEXICO
11	02	47	44.3	51.828	N	170.093	W	33	N	5.0 4.5	1.0	84	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.5 (PMR).
11	02	52	14.57	16.25	N	99.75	W	33	N		1.2	5	NEAR COAST OF GUERRERO, MEXICO
11	03	49	10.57	66.46	N	13.10	E	10	G		1.1	5	NORTHERN NORWAY. MD 3.3 (BER).
11	04	32	11.07	37.036	N	27.854	E	10	G		1.1	7	TURKEY
11	05	00	11.38	59.748	N	150.626	W	27				31	KENAI PENINSULA, ALASKA. <AGS-P>.
11	05	42	25.4	38.766	N	22.173	E	10	G		1.0	9	GREECE. ML 3.1 (ATH).
11	05	44	59.4	14.806	N	55.673	E	10	G	4.7	1.3	27	ARABIAN SEA
11	07	35	53.5	30.389	S	72.621	W	33	N		1.4	14	OFF COAST OF CENTRAL CHILE
11	09	00	19.57	42.767	N	19.125	E	10	G		0.7	6	YUGOSLAVIA. MD 2.2 (TTG).
11	09	47	28.07	13.81	N	60.08	W	23	*		0.6	7	WINDWARD ISLANDS. ML 3.0 (FDF).
11	11	40	32.87	44.643	N	6.873	E	10	G		0.5	8	FRANCE. ML 2.2 (GEN).
11	12	18	02.8	42.453	N	24.265	E	10	G		1.2	7	BULGARIA
11	12	24	49.9	29.265	S	71.465	W	33	N		1.1	9	NEAR COAST OF CENTRAL CHILE
11	12	34	11.57	37.48	N	71.39	E	33	N	4.7	0.5	7	AFGHANISTAN-USSR BORDER REGION
11	13	09	29.27	43.955	N	7.467	E	10	G		1.0	8	NEAR SOUTH COAST OF FRANCE
11	16	02	07.1	43.508	N	147.607	E	68		4.9	1.0	99	KURIL ISLANDS. Felt (III) at Kurilsk. Also felt (II JMA) at Nemura, Hokkaido.
11	16	02	18.77	67.20	N	156.62	W	5	G		0.4	12	ALASKA
11	16	44	58.2	21.853	S	139.006	W	0	G	5.6	1.3	53	TUAMOTU ARCHIPELAGO REGION
11	18	30	27.17	55.24	N	162.31	W	33	N	4.3	2.3	5	ALASKA PENINSULA
11	20	53	51.0	8.946	N	39.982	E	10	G	4.9 4.7	1.1	87	ETHIOPIA. ML 5.0 (ARO). Felt at Metehara.
11	22	37	28.0	2.609	N	127.235	E	33	N	4.9	0.7	9	MOLUCCA PASSAGE
11	23	32	27.1	37.143	N	27.900	E	10	G		1.3	16	TURKEY. MD 3.7 (ATH).
12	00	02	05.3	21.316	S	179.530	W	641	*	5.0	0.6	25	FIJI ISLANDS REGION
12	00	40	48.5	32.260	N	71.095	E	33	N	4.7	1.0	32	PAKISTAN
12	02	37	28.6	39.662	N	27.917	E	10	G		1.3	23	TURKEY. MD 3.4 (ATH).
12	03	58	24.27	37.10	N	27.91	E	10	G		1.6	5	TURKEY
12	05	33	41.6	20.035	S	69.348	W	113	*		1.2	12	NORTHERN CHILE
12	05	46	32.28	59.826	N	151.033	W	39				32	KENAI PENINSULA, ALASKA. <AGS-P>.
12	06	07	27.3	17.013	N	62.308	W	24			0.5	10	LEEWARD ISLANDS. ML 3.1 (FDF).
12	06	38	01.8	39.294	N	23.653	E	10	G		1.1	26	AEGEAN SEA. ML 3.2 (ATH).
12	07	28	11.0	11.877	S	124.838	E	33	N	4.6	1.1	6	SOUTH OF TIMOR
12	07	30	05.6	16.456	N	94.238	W	33	N		1.3	9	OAXACA, MEXICO
12	08	07	12.87	36.141	N	139.879	E	33	N		0.8	6	HONSHU, JAPAN
12	09	27	38.4	44.631	N	7.304	E	10	G		0.7	66	NORTHERN ITALY. ML 3.6 (GEN), 3.6 (LDG).
12	11	01	31.2	39.755	N	23.187	E	10	G		0.6	6	AEGEAN SEA
12	11	45	38.9	18.772	S	168.663	E	112	*	4.1	0.9	11	VANUATU ISLANDS
12	15	04	14.2	43.477	N	110.737	W	5	G		0.7	11	WYOMING. ML 2.6 (BUT).
12	15	05	01.3	43.415	N	110.707	W	5	G		0.7	6	WYOMING. ML 3.1 (BUT). Felt (III) at Jackson.
12	16	43	19.6	13.310	N	59.536	W	10	G		0.6	23	WINDWARD ISLANDS. ML 3.5 (FDF).
12	16	59	51.47	44.093	N	6.941	E	10	G		0.3	6	FRANCE. ML 1.9 (LDG).
12	17	00	11.9	40.270	N	25.880	E	10	G		1.5	8	AEGEAN SEA
12	18	12	13.3	37.501	N	69.614	E	33	N	4.1	1.5	8	AFGHANISTAN-USSR BORDER REGION
12	19	26	25.37	59.85	N	2.37	E	10	G		0.6	6	NORTH SEA. MD 2.3 (BER).
12	20	07	04.8	67.122	N	156.588	W	5	G		0.2	12	ALASKA. ML 3.7 (PMR).
12	21	01	36.1	66.916	N	156.298	W	5	G		0.2	7	ALASKA. ML 3.6 (PMR).
12	22	15	54.2	36.067	N	29.379	E	10	G		1.3	7	TURKEY
12	22	25	25.8	12.952	N	87.947	W	57	D	5.4	1.3	49	NEAR COAST OF NICARAGUA. MD 5.3 (HDC).
12	23	03	37.87	33.440	S	70.590	W	33	N		1.5	6	CHILE-ARGENTINA BORDER REGION
12	23	07	41.57	35.05	N	23.10	E	10	G		0.5	5	CRETE. MD 3.8 (ATH).
12	23	14	58.8	28.810	N	142.373	E	33	N	5.0	0.9	69	BONIN ISLANDS REGION
13	00	14	48.77	12.26	N	143.83	E	33	N		0.8	6	SOUTH OF MARIANA ISLANDS
13	00	43	39.98	60.494	N	144.790	W	0				19	SOUTHERN ALASKA. <AGS-P>.
13	01	05	56.68	59.129	N	138.110	W	0				9	SOUTHEASTERN ALASKA. <AGS-P>.
13	01	10	03.4	42.548	N	13.271	E	10	G		0.3	7	CENTRAL ITALY. MD 2.1 (SSO).
13	02	02	33.28	35.040	N	118.920	W	12				14	CENTRAL CALIFORNIA. <PAS-P>. ML 3.3 (PAS).
13	02	19	57.9	36.635	N	23.619	E	33	N		0.8	8	SOUTHERN GREECE
13	03	12	54.48	66.899	N	156.090	W	10				9	ALASKA. <AGS-P>.
13	03	35	02.8	50.103	N	105.360	E	36	D	5.6 5.6	1.1	273	USSR-MONGOLIA BORDER REGION
13	04	18	32.3	46.038	N	14.746	E	10	G		0.5	11	YUGOSLAVIA. Felt (IV) at Litija, Kresnice and Dalsko.
13	04	36	32.88	59.464	N	152.671	W	82				51	SOUTHERN ALASKA. <AGS-P>.
13	04	41	20.67	52.44	N	168.51	W	33	N	4.8	1.4	11	FOX ISLANDS, ALEUTIAN ISLANDS
13	06	25	22.0	39.199	N	23.702	E	10	G		1.1	24	AEGEAN SEA. ML 3.1 (ATH).
13	06	42	30.38	56.321	N	148.193	W	12		4.5		34	GULF OF ALASKA. <AGS-P>.
13	11	39	14.5	21.400	S	178.822	W	410	?	4.8	1.3	33	FIJI ISLANDS REGION
13	11	44	30.3	25.603	N	142.470	E	33	N	4.6	0.9	13	VOLCANO ISLANDS REGION
13	12	15	04.1	18.983	N	107.519	W	33	N	4.9 4.9	1.0	67	OFF COAST OF JALISCO, MEXICO
13	12	31	43.7	14.194	N	146.702	E	80	*		0.7	13	MARIANA ISLANDS
13	12	39	46.1	41.194	N	22.462	E	10	G		1.1	28	YUGOSLAVIA. MD 3.4 (ATH). ML 3.2 (SKO).
13	13	39	38.1	7.543	S	129.519	E	33	N		0.7	6	BANDA SEA
13	13	42	55.4	15.231	N	61.103	W	106	*		0.7	19	LEEWARD ISLANDS
13	16	08	13.97	15.895	N	60.251	W	10	G		0.4	10	LEEWARD ISLANDS
13	18	48	51.57	44.572	N	7.130	E	10	G		0.3	8	NORTHERN ITALY. ML 2.4 (GEN).
13	19	37	40.7	66.933	N	156.195	W	5	G		0.5	14	ALASKA
13	21	01	48.88	38.473	N	108.924	W	8				12	COLORADO. <SLC-P>. MD 3.1 (SLC).
13	21	35	39.3	4.154	N	122.547	E	617	*	4.8	0.9	34	CELEBES SEA
13	21	58	18.1	33.160	S	70.022	W	33	N		1.5	13	CHILE-ARGENTINA BORDER REGION

a	13	23 19 41.8	35.220 N	91.575 E	33 N	4 9 4.9	1.3	76	QINGHAI PROVINCE, CHINA
	13	23 42 34.3	41.069 N	20.152 E	10 G		1.3	32	ALBANIA. ML 3.0 (TTG), 3.0 (SKO).
	13	23 52 21.0&	61.540 N	149.985 W	37			24	SOUTHERN ALASKA. <AGS-P>.
	14	00 14 41.0&	60.111 N	152.493 W	78			26	SOUTHERN ALASKA. <AGS-P>.
	14	00 16 09.5&	36.740 N	89.710 W	2			43	NEW MADRID, MISSOURI REGION. <SLM>. mbLg 3.7 (NEIS), 3.7 (TUL). Felt (V) at Mayti; (IV) at Canalou and Matthews; (III) at Cooter, Daniphan, Fredericktown, Grayridge, Kewanee, New Madrid, Risco, Senath and Sikeston. Also felt (III) at Pollard, Arkansas and Bardwell, Hickman and Kevill, Kentucky.
	14	00 41 09.0	41.051 N	20.177 E	10 G	3.4	1.4	61	ALBANIA. ML 3.8 (SKO). MD 3.7 (TTG). Felt (IV) at Librazhd and (III) at Elbasan.
f	14	00 59 50.4	30.523 S	178.414 W	44 G	5.9 6.6	1.1	396	KERMADEC ISLANDS. Ms 6.4 (BRK), 6.3 (PAS). Mo=2.5*10**19 Nm (PPT). Felt (IV) on Raoul. Two events about 5 seconds apart. Depth from broadband displacement seismograms based on second event.
	14	01 34 54.6?	30.72 S	177.96 W	33 N		1.5	12	KERMADEC ISLANDS
	14	02 13 30.0%	44.439 N	7.344 E	10 G		0.4	7	NORTHERN ITALY. ML 2.0 (GEN).
	14	02 31 41.9?	13.32 N	59.98 W	10 G		0.2	9	WINDWARD ISLANDS. ML 3.1 (FDF).
	14	04 28 37.5&	61.214 N	146.913 W	3			22	SOUTHERN ALASKA. <AGS-P>.
	14	06 32 09.7	38.209 N	15.038 E	10 G		1.1	7	SICILY
	14	06 34 20.8*	32.720 S	71.407 W	10 G		1.4	9	NEAR COAST OF CENTRAL CHILE
	14	06 52 55.6%	61.235 N	3.858 E	10 G		1.1	6	NORWEGIAN SEA. MD 2.0 (BER).
	14	07 32 48.2?	22.55 S	66.35 W	317 ?		0.6	7	JUJUY PROVINCE, ARGENTINA
	14	07 49 22.2	45.620 N	27.681 E	10 G		0.9	9	ROMANIA
	14	08 03 31.0	25.231 S	179.971 E	512	5.1	1.2	89	SOUTH OF FIJI ISLANDS
	14	08 41 45.0*	16.431 N	62.481 W	10 G		1.4	6	LEEWARD ISLANDS. ML 2.9 (FDF).
	14	08 55 39.4*	15.534 N	93.333 W	33 N		1.4	7	NEAR COAST OF CHIAPAS, MEXICO
a	14	09 10 25.3	2.922 S	127.669 E	33 N	5.4 4.7	1.4	115	CERAM SEA
a	14	09 40 46.5	13.733 S	66.248 E	10 G	5.2 5.6	1.3	172	MID-INDIAN RISE
	14	11 32 56.8&	60.409 N	147.749 W	15			33	SOUTHERN ALASKA. <AGS-P>.
	14	11 46 55.9*	50.844 N	51.243 E	33 N	4.5	1.3	21	WESTERN KAZAKH SSR
	14	11 58 30.2&	60.204 N	153.170 W	145			29	SOUTHERN ALASKA. <AGS-P>.
	14	12 32 09.1?	41.21 N	24.50 E	10 G		1.4	6	GREECE-BULGARIA BORDER REGION
	14	12 47 10.9&	11.253 N	85.595 W	162			7	NICARAGUA. <HDC>. MD 4.4 (HDC).
	14	12 59 00.1	39.164 N	23.567 E	10 G		0.4	12	AEGEAN SEA. ML 2.9 (ATH).
	14	15 17 08.6&	8.344 N	82.890 W	38			20	PANAMA-COSTA RICA BORDER REGION. <HDC>. MD 4.3 (HDC).
a	14	17 05 05.1	7.439 S	128.048 E	112	5.3	1.2	97	BANDA SEA
	14	18 44 22?	44.25 N	148.84 E	33 N	4.9	1.5	12	KURIL ISLANDS
	14	19 12 39.7?	16.56 N	61.09 W	10 G		1.7	5	LEEWARD ISLANDS. ML 2.7 (FDF).
	14	20 35 16.0?	18.69 N	146.33 E	91 *		0.3	8	MARIANA ISLANDS
	14	21 35 19.1&	61.701 N	146.684 W	14			23	SOUTHERN ALASKA. <AGS-P>.
	14	21 58 16.9	46.268 N	13.220 E	10 G		1.0	9	AUSTRIA. MD 2.7 (LJU), 2.7 (TRI). ML 2.3 (KBA).
a	14	22 53 36.2	52.671 N	35.037 W	10 G	5.0 5.4	1.5	168	NORTH ATLANTIC OCEAN
	14	23 13 13.3*	35.252 N	26.869 E	10 G		0.6	8	CRETE. MD 3.9 (ATH).
	15	00 23 19.1?	9.26 S	66.70 E	10 G		1.0	6	MID-INDIAN RISE
	15	00 57 28.2*	17.648 S	178.707 W	654 ?	4.8	0.7	24	FIJI ISLANDS REGION
	15	01 10 29.9&	62.653 N	151.300 W	94			18	CENTRAL ALASKA. <AGS-P>.
	15	01 34 37.0*	10.550 S	165.040 E	93 *	5.1	1.0	32	SANTA CRUZ ISLANDS
	15	02 15 12.8&	60.680 N	152.163 W	85			23	SOUTHERN ALASKA. <AGS-P>.
	15	04 43 39.6	52.220 N	157.369 E	89 ?	4.9	1.0	50	KAMCHATKA
	15	05 10 22.5*	5.143 S	129.711 E	219 ?	4.4	0.8	13	BANDA SEA
	15	06 13 31.3	18.365 S	67.937 W	203 D	4.8	1.1	99	BOLIVIA
	15	06 49 54.3?	28.19 N	128.43 E	33 N	3.9	1.6	6	RYUKYU ISLANDS
	15	08 33 27.1	45.097 N	6.781 E	10 G		1.4	18	FRANCE. ML 2.5 (LDG), 2.4 (GEN).
	15	09 22 42.6	38.311 N	21.816 E	34	4.8 4.5	1.4	174	GREECE. ML 4.5 (TTG), 4.3 (ATH). Minor damage at Patras.
	15	09 37 12.5?	35.97 N	0.81 W	10 G		0.6	6	ALGERIA. mbLg 3.5 (MDD).
	15	09 48 38.8	37.749 N	14.312 E	10 G		1.0	8	SICILY
	15	09 50 42.5*	37.035 N	27.842 E	10 G		0.4	5	TURKEY
	15	09 54 39.7	43.118 N	147.967 E	33 *	5.0 4.0	0.9	71	KURIL ISLANDS
	15	11 09 54.4%	44.385 N	6.345 E	10 G		0.4	6	FRANCE. ML 2.2 (LDG).
	15	11 25 32.9*	52.968 N	167.186 W	33 N	4.7	1.0	12	FOX ISLANDS, ALEUTIAN ISLANDS
	15	11 39 31.8*	52.848 N	167.132 W	33 N	4.6	0.8	14	FOX ISLANDS, ALEUTIAN ISLANDS
	15	11 56 00.7&	58.282 N	155.106 W	0			21	ALASKA PENINSULA. <AGS-P>. ML 3.3 (PMR).
	15	11 58 34.0	71.140 N	6.729 W	10 G		1.2	9	JAN MAYEN ISLAND REGION
	15	12 10 18.0*	38.255 N	21.741 E	10 G		1.4	7	GREECE. MD 3.3 (ATH).
	15	13 10 00.0&	37.108 N	116.121 W	0	4.4		48	SOUTHERN NEVADA. <DOE>. ML 4.4 (BRK). 37' 06" 27.40" N., 116' 07" 15.19" W., Surface Elev. 1365 m., Depth of Burial 400 m., Shot Time 131000.087, "PALISADE," Nevada Test Site (Dept. of Energy).
	15	13 45 47.0*	51.507 N	169.302 W	33 N	4.7	1.1	11	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.4 (PMR).
	15	15 39 38.0&	36.690 N	121.353 W	2			26	CENTRAL CALIFORNIA. <BRK>. ML 3.4 (BRK).
	15	15 40 03.8*	42.590 N	26.000 E	10 G		1.4	6	BULGARIA
	15	16 03 32.4*	17.359 N	100.774 W	10 G		1.3	11	GUERRERO, MEXICO
	15	17 14 27.3?	44.64 N	6.70 E	0 G		0.3	4	FRANCE. ML 2.3 (GEN).
	15	18 02 27.1?	32.58 S	31.22 E	10 G		1.5	8	OFF COAST OF SOUTH AFRICA
a	15	18 05 38.2	24.087 N	122.278 E	47	5.2	0.9	131	TAIWAN REGION
	15	18 12 55.2	16.643 S	173.872 W	86 *	5.5	0.9	152	TONGA ISLANDS
a	15	18 16 16.8	1.550 N	127.268 E	106 *	5.5	1.1	91	HALMAHERA
a	15	19 24 26.3	43.212 N	147.879 E	33 N	5.2 4.9	1.0	169	KURIL ISLANDS. Felt (I JMA) at Hiroo, Hokkaido.
	15	19 43 43.1	4.612 S	154.946 E	495	5.1	0.9	89	SOLOMON ISLANDS
	15	19 53 44.1	7.844 N	126.903 E	33 N	4.7	0.8	22	MINDANAO, PHILIPPINE ISLANDS
	15	20 15 58.6?	32.54 S	71.93 W	21		0.4	9	NEAR COAST OF CENTRAL CHILE
	15	20 36 41.6	39.279 N	23.417 E	22		1.1	25	AEGEAN SEA. ML 3.1 (ATH).
	15	20 42 19.3&	61.014 N	150.429 W	4			23	SOUTHERN ALASKA. <AGS-P>.
	15	20 48 29.4	19.299 N	145.290 E	199	4.8	0.8	34	MARIANA ISLANDS
	15	21 02 58.2*	42.971 N	148.158 E	33 N	4.6	1.5	10	OFF COAST OF HOKKAIDO, JAPAN
a	15	21 23 51.4	45.472 N	151.693 E	33 N	5.3 4.9	1.0	176	KURIL ISLANDS
	15	22 03 04.5&	40.282 N	122.102 W	12			9	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK).
	15	23 20 11.1*	49.782 N	97.520 E	33 N		1.2	9	USSR-MONGOLIA BORDER REGION
a	15	23 34 33.6	9.803 S	159.531 E	24 G	5.9 5.9	1.0	263	SOLOMON ISLANDS. Ms 5.7 (BRK). Mo=1.3*10**18 Nm (PPT). Depth from broadband displacement seismograms.

16	01 30 22.7	45.471 N	26.225 E	128 *	3.5	1.1	24	ROMANIA
16	02 57 15.9	11.180 N	85.632 W	156			10	NICARAGUA. <HDC>. MD 4.3 (HDC).
16	04 07 59.3	62.379 N	142.750 W	5			29	CENTRAL ALASKA. <AGS-P>. ML 3.9 (PMR).
16	04 38 59.8	37.753 N	21.105 E	10 G		1.3	11	SOUTHERN GREECE. ML 3.5 (ATH).
16	06 03 24.3	62.354 N	142.760 W	0			13	CENTRAL ALASKA. <AGS-P>.
16	08 39 36.4	40.300 N	124.400 W	22			8	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 2.6 (BRK).
16	09 48 50.9	43.500 N	83.625 E	33 N	4.3	1.0	10	NORTHERN XINJIANG, CHINA
16	11 04 36.0	38.686 N	14.357 E	10 G		1.0	5	SICILY
a	16 12 21 10.7	43.555 N	127.632 W	10 G	5.3 5.3	1.2	209	OFF COAST OF OREGON
16	12 23 10.6	10.403 N	93.439 E	105 *	4.3	1.0	27	ANDAMAN ISLANDS REGION
16	12 52 20.7	31.607 S	71.871 W	59 ?		1.5	13	NEAR COAST OF CENTRAL CHILE
16	12 56 57.1	5.01 S	147.28 E	128 *	4.4	1.3	7	EAST PAPUA NEW GUINEA REGION
16	13 13 33.8	39.902 N	25.600 E	10 G		0.3	6	AEGEAN SEA. MD 3.0 (ATH).
16	14 07 25.2	2.992 S	130.317 E	33 N	4.9	1.3	52	CERAM
16	14 22 40.6	43.913 N	149.551 E	33 N	4.4	1.3	15	KURIL ISLANDS REGION
16	14 30 07.5	6.680 S	130.361 E	127 *	4.6	1.1	12	BANDA SEA
16	15 25 19.8	45.285 N	151.808 E	33 N	4.9 4.2	1.1	66	KURIL ISLANDS
16	15 49 12.6	6.97 N	73.15 W	158 *		1.6	7	NORTHERN COLOMBIA
a	16 16 01 00.4	45.394 N	151.772 E	33 N	5.5 4.9	1.0	191	KURIL ISLANDS
16	17 05 11.1	59.598 N	151.699 W	49	4.6		86	KENAI PENINSULA, ALASKA. <AGS-P>. ML 4.3 (PMR). Felt (IV) at Homer.
a	16 17 22 52.9	56.329 S	139.125 W	10 G	5.8 5.8	1.1	118	SOUTH PACIFIC CORDILLERA. Mo=2.0*10**18 Nm (PPT).
16	20 03 22.7	10.27 N	60.46 W	27 *		1.0	10	TRINIDAD. MD 3.5 (TRN).
16	20 38 00.0	16.027 N	98.448 W	33 N		1.1	11	NEAR COAST OF GUERRERO, MEXICO
16	21 07 54.6	49.29 N	6.90 E	10 G		1.2	5	GERMANY
16	21 11 03.7	76.746 N	5.728 E	10 G		1.2	14	SVALBARD REGION
16	21 14 50.3	37.949 N	1.513 W	10 G		0.4	5	SPAIN. mbLg 2.8 (MDD).
16	21 19 33.7	51.53 N	16.21 E	10 G		0.6	8	POLAND. ML 3.7 (VKA).
16	21 44 53.5	61.486 N	151.033 W	61			22	SOUTHERN ALASKA. <AGS-P>.
16	22 15 30.6	35.943 N	92.045 E	33 N	4.2	1.5	15	QINGHAI PROVINCE, CHINA
16	22 46 18.8	42.109 N	21.339 E	10 G		0.5	7	YUGOSLAVIA. ML 2.3 (SKO).
16	22 59 39.2	35.716 N	140.754 E	61 *	4.4	1.4	30	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Utsunomiya.
16	23 26 56.2	52.271 N	168.308 W	33 N	4.9	1.0	103	FOX ISLANDS, ALEUTIAN ISLANDS
17	00 58 26.5	59.646 N	152.258 W	73			23	SOUTHERN ALASKA. <AGS-P>.
17	01 09 51.0	44.657 N	6.914 E	10 G		0.4	15	FRANCE. ML 2.3 (GEN), 2.0 (LDG).
17	01 30 31.9	44.367 N	7.334 E	10 G		0.2	5	NORTHERN ITALY. ML 1.8 (GEN).
17	03 36 38.3	10.43 S	161.29 E	80 *		0.1	6	SOLOMON ISLANDS
17	04 21 18.4	17.934 S	69.565 W	154		0.9	12	PERU-BOLIVIA BORDER REGION
17	04 45 44.1	13.94 N	90.79 W	33 N		1.3	11	NEAR COAST OF GUATEMALA
a	17 05 04 35.9	57.086 N	122.018 E	31 D	5.6 5.9	1.1	373	EASTERN USSR. Ms 5.8 (BRK).
17	05 46 50.0	7.158 S	129.432 E	111 *	5.0	1.0	42	BANDA SEA
17	05 59 58.1	44.644 N	6.876 E	10 G		0.1	8	FRANCE. ML 2.5 (GEN).
17	06 12 17.5	45.319 N	7.799 E	10 G		1.0	5	NORTHERN ITALY. ML 1.8 (GEN).
17	07 00 11.6	44.303 N	6.705 E	10 G		0.2	10	FRANCE. ML 2.2 (GEN).
17	07 14 41.0	32.800 S	71.587 W	33 N		1.0	11	NEAR COAST OF CENTRAL CHILE
17	08 24 24.1	22.872 S	66.306 W	257	4.5	1.0	22	JUJUY PROVINCE, ARGENTINA
17	09 05 11.1	6.847 N	94.982 E	59 ?	4.0 4.2	1.4	21	NICOBAR ISLANDS REGION
17	09 30 31.9	20.862 S	66.419 W	279 *		1.5	13	SOUTHERN BOLIVIA
17	10 25 36.1	6.889 S	156.238 E	142	5.0	1.0	36	SOLOMON ISLANDS
17	11 54 14.9	42.119 N	24.576 E	20 *		0.6	7	BULGARIA
17	12 15 47.5	44.391 N	7.148 E	10 G		0.4	28	NORTHERN ITALY. ML 2.7 (LDG), 2.6 (GEN).
17	12 42 28.8	61.84 N	2.51 E	10 G		0.9	8	NORWEGIAN SEA. MD 2.6 (BER).
17	13 59 21.1	43.137 N	18.782 E	10 G		0.8	5	YUGOSLAVIA. MD 2.3 (TTG).
a	17 15 31 42.5	8.660 S	109.294 W	10 G	4.9 5.0	1.1	18	NORTHERN EASTER I. CORDILLERA
17	15 55 15.6	56.12 N	122.18 E	33 N	4.5	0.9	7	EASTERN USSR
a	17 16 12 54.5	62.104 S	154.634 E	10 G	5.0 5.3	1.3	18	BALLENY ISLANDS REGION
17	16 39 54.1	34.683 N	140.005 E	104 ?	4.4	0.5	16	NEAR EAST COAST OF HONSHU, JAPAN
17	16 45 13.8	61.08 N	2.97 E	10 G		1.1	7	NORWEGIAN SEA. MD 1.9 (BER).
17	16 49 17.4	47.158 N	0.262 E	10 G		1.4	10	FRANCE. ML 2.7 (LDG).
17	18 07 42.6	9.717 S	159.638 E	33 N	4.5 4.2	0.9	19	SOLOMON ISLANDS
17	18 15 57.7	42.957 N	19.297 E	10 G		0.9	14	YUGOSLAVIA. MD 2.5 (TTG).
a	17 18 16 14.6	7.825 N	127.025 E	48 ?	4.9 4.0	1.5	52	PHILIPPINE ISLANDS REGION
17	18 18 43.1	46.744 N	154.192 E	33 N	5.0 4.3	0.9	79	KURIL ISLANDS REGION
17	18 20 21.6	7.562 S	156.796 E	408	4.5	0.9	41	SOLOMON ISLANDS
17	18 56 31.1	29.912 N	99.329 E	33 N		1.1	6	SICHUAN PROVINCE, CHINA
17	19 13 39.0	11.122 N	85.531 W	163			8	NICARAGUA. <HDC>. MD 4.3 (HDC).
17	19 28 27.9	40.692 N	30.091 E	10 G		1.0	10	TURKEY
17	19 48 34.3	40.790 N	30.217 E	10 G		0.7	7	TURKEY
18	01 06 57.7	33.545 S	70.978 W	33 N		1.0	9	CHILE-ARGENTINA BORDER REGION
18	01 53 21.4	17.038 N	62.315 W	10 G		0.4	6	LEEWARD ISLANDS. MD 2.3 (TRN).
18	02 12 13.7	37.997 N	20.287 E	10 G		1.1	16	IONIAN SEA. ML 3.6 (ATH).
18	02 40 11.8	38.971 N	27.759 E	10 G		1.2	11	TURKEY. MD 3.2 (ATH).
18	02 55 53.8	23.741 N	93.163 E	33 N	1.8	0.3	9	BURMA-INDIA BORDER REGION
18	03 33 19.0	36.452 N	35.391 E	10 G		0.9	8	TURKEY
18	04 40 36.2	60.246 N	151.695 W	59			31	KENAI PENINSULA, ALASKA. <AGS-P>.
18	04 45 14.8	5.591 S	150.677 E	94 *	4.4	0.8	13	NEW BRITAIN REGION
18	07 46 19.2	7.724 S	74.403 W	160 *	4.8	0.9	24	PERU-BRAZIL BORDER REGION
18	07 59 22.1	58.588 N	151.644 W	72			41	KODIAK ISLAND REGION. <AGS-P>.
18	08 59 41.1	38.692 N	20.389 E	10 G		1.4	12	GREECE
18	09 54 24.1	3.638 N	127.822 E	140 ?		1.2	21	TALAUD ISLANDS
18	11 03 41.6	44.620 N	7.055 E	10 G		0.2	11	NORTHERN ITALY. ML 1.9 (GEN).
18	11 59 04.3	44.474 N	7.047 E	10 G		0.2	8	NORTHERN ITALY. ML 1.8 (GEN).
18	12 21 44.4	44.535 N	7.206 E	10 G		0.5	7	NORTHERN ITALY. ML 1.6 (GEN).
18	13 18 43.5	39.566 N	120.336 W	5 G		0.9	11	NORTHERN CALIFORNIA. ML 2.9 (BRK).
18	13 42 31.6	19.52 N	66.38 W	10 G		0.3	5	PUERTO RICO REGION
18	13 44 54.6	53.24 N	167.50 W	33 N	4.8	0.9	18	FOX ISLANDS, ALEUTIAN ISLANDS
18	13 47 44.2	53.58 N	167.87 W	33 N	4.7	1.8	8	FOX ISLANDS, ALEUTIAN ISLANDS
18	14 17 34.9	36.243 N	26.506 E	33 N		0.9	9	DODECANESE ISLANDS. MD 3.7 (ATH).
18	16 00 36.8	60.182 N	153.095 W	124			33	SOUTHERN ALASKA. <AGS-P>.
18	16 36 44.6	32.734 N	132.145 E	53 *	4.2	1.1	19	SHIKOKU, JAPAN. Felt (II JMA) at Uwajima and (I JMA) at Oita, Kyushu.
18	17 33 16.0	13.42 S	130.92 E	10 G		0.8	5	NORTHERN TERRITORY, AUSTRALIA

18	17 37 36.6	39.128 N	21.921 E	10 G	1.3	20	GREECE. MD 3.5 (ATH).
18	19 07 18.4?	51.33 N	176.60 W	33 N 4.7	1.5	8	ANDREANOF ISLANDS, ALEUTIAN IS. Felt on Adok.
18	21 30 53.2*	34.264 N	26.773 E	93 ? 3.4	1.1	13	CRETE
o 18	22 00 39.6	17.852 N	147.009 E	56 * 5.5 5.1	1.1	162	MARIANA ISLANDS REGION
18	22 58 02.0*	38.254 N	23.142 E	10 G	1.5	8	GREECE. ML 2.7 (ATH).
18	23 58 41.3&	61.764 N	151.673 W	99		39	SOUTHERN ALASKA. <AGS-P>.
19	01 14 13.1?	11.08 S	166.99 E	75 ? 4.4	1.3	22	SANTA CRUZ ISLANDS
19	01 15 35.1&	58.685 N	155.965 W	156		15	ALASKA PENINSULA. <AGS-P>.
19	01 38 07.6*	30.918 S	68.977 W	10 G	1.3	10	SAN JUAN PROVINCE, ARGENTINA
19	01 59 32.1	17.845 N	146.940 E	66 * 4.8	1.0	38	MARIANA ISLANDS
19	02 01 57.1?	34.27 S	71.56 W	10 G	0.7	8	NEAR COAST OF CENTRAL CHILE
19	02 07 04.4*	43.426 S	92.120 E	10 G 5.0	0.9	23	SOUTHEAST INDIAN RISE
f 19	02 21 56.3	54.305 N	165.574 W	104 G 6.1	1.0	611	FOX ISLANDS, ALEUTIAN ISLANDS. mb 5.4 (BRK). Mo=3.0*10**18 Nm (PPT). Felt (V) on Unalaska and Akutan and (IV) at Cold Bay and False Pass. Depth from broadband displacement seismograms.
19	02 43 43.4%	44.734 N	7.239 E	10 G	0.4	10	NORTHERN ITALY. ML 2.3 (GEN).
19	02 45 37.0*	17.776 S	168.128 E	76	0.9	15	VANUATU ISLANDS
19	02 46 47.9	1.710 S	77.832 W	164 4.7	0.7	67	ECUADOR
19	03 34 08.1	30.094 N	99.568 E	33 N 4.8	1.1	103	SICHUAN PROVINCE, CHINA
19	05 49 36.4	15.672 N	60.432 W	10 G	0.8	8	LEEWARD ISLANDS. ML 2.8 (FDF).
19	06 23 20.7	40.162 N	141.924 E	76 4.5	1.2	42	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Miyako; (II JMA) at Mito, Morioka and Ofunato.
19	07 14 07.2	42.068 N	19.167 E	10 G	1.1	7	YUGOSLAVIA. MD 2.0 (TTG).
19	10 10 41.3?	45.62 N	6.31 E	10 G	1.1	6	FRANCE. ML 2.3 (GEN).
19	10 16 05.0?	18.97 N	66.79 W	10 G	0.9	6	PUERTO RICO REGION
19	10 22 12.0*	39.112 N	23.389 E	10 G	1.6	5	AEGEAN SEA. ML 2.8 (ATH).
19	10 47 23.1&	36.808 N	121.543 W	6		16	CENTRAL CALIFORNIA. <BRK>. ML 2.9 (BRK).
19	11 50 06.9*	2.306 N	128.138 E	216 ? 4.7	1.2	18	HALMAHERA
a 19	11 50 54.3	24.839 S	70.019 W	52 D 5.5	1.0	155	NEAR COAST OF NORTHERN CHILE. Felt (IV) at Antofagasta.
19	12 20 58.2?	23.20 N	141.59 E	33 N 4.6	0.6	6	VOLCANO ISLANDS REGION
19	12 36 50.5*	34.122 S	70.666 W	71	0.6	12	CHILE-ARGENTINA BORDER REGION
19	12 51 41.1*	4.102 S	141.847 E	109 * 4.7	1.2	10	PAPUA NEW GUINEA
19	13 42 17.9	10.088 N	93.047 E	33 N 4.6	0.9	20	ANDAMAN ISLANDS REGION
19	14 37 20.8	50.579 N	5.538 E	14	0.4	7	BELGIUM. MD 2.1 (DOU).
19	16 10 54.5*	0.170 N	122.006 E	217 ? 4.6	0.8	21	MINAHASSA PENINSULA
19	16 28 49.1?	66.99 N	156.24 W	5 G	0.3	9	ALASKA
19	18 00 37.9	36.882 N	23.076 E	89 4.1	1.3	106	SOUTHERN GREECE
19	18 47 41.7	5.464 N	127.422 E	33 N 4.9	1.1	28	PHILIPPINE ISLANDS REGION
19	19 09 12.1	39.611 N	27.766 E	10 G	1.2	8	TURKEY
19	19 37 45.5	8.489 S	114.634 E	141 * 4.9	0.9	35	BALI ISLAND REGION
19	21 43 25.4?	29.25 S	72.76 W	33 N	0.8	10	OFF COAST OF CENTRAL CHILE
19	22 20 39.7&	59.580 N	150.682 W	34		22	KENAI PENINSULA, ALASKA. <AGS-P>.
19	22 21 40.2	42.749 N	13.006 E	10 G	0.3	6	CENTRAL ITALY. MD 2.2 (SSO).
19	23 10 08.6*	37.191 N	28.033 E	10 G	1.3	5	TURKEY
20	00 19 10.8	40.681 N	23.355 E	10 G	0.7	15	GREECE. MD 3.3 (ATH). ML 3.2 (SKO).
20	01 28 04.2*	36.848 N	26.279 E	10 G	0.9	7	DODECANESE ISLANDS. MD 3.4 (ATH).
20	05 59 37.3	20.009 S	169.268 E	33 N 5.5 4.5	1.3	155	VANUATU ISLANDS
20	07 10 17.9	40.221 N	63.765 E	33 N 4.5	0.8	34	UZBEK SSR. Felt (III) at Gazli.
20	08 14 32.1?	32.12 S	70.16 W	33 N	1.4	9	CHILE-ARGENTINA BORDER REGION
20	08 15 53.7*	43.438 N	12.980 E	10 G	0.4	5	CENTRAL ITALY
20	08 57 26.8&	36.578 N	121.212 W	4		16	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
20	10 46 29.3*	7.158 S	151.223 E	33 N	1.0	5	NEW BRITAIN REGION
20	10 50 29.6%	43.971 N	8.023 E	10 G	0.1	7	CORSICA. ML 2.2 (GEN).
20	12 07 39.8	38.741 N	23.489 E	10 G	0.7	12	GREECE. MD 3.2 (ATH).
20	12 28 43.1	23.333 N	125.822 E	33 N 5.1	1.0	68	SOUTHWESTERN RYUKYU ISLANDS
20	13 02 02.3	36.485 N	70.837 E	213 4.8	0.9	164	HINDU KUSH REGION. Felt (III) at Ishkashim, Khorag and Dushanbe; (II) at Tashkent, USSR.
20	13 08 39.7*	17.076 N	120.778 E	33 N 4.8	1.5	27	LUZON, PHILIPPINE ISLANDS
20	14 18 20.9	34.996 N	29.327 E	10 G	0.8	9	EASTERN MEDITERRANEAN SEA
20	15 28 50.4*	44.551 N	141.360 E	227 ? 4.2	0.9	22	HOKKAIDO, JAPAN REGION
20	15 35 41.5	6.727 S	75.752 W	33 N 5.0	1.3	42	NORTHERN PERU
f 20	16 01 43.6	30.508 S	178.270 W	29 G 5.7 5.9	1.3	335	KERMADEC ISLANDS. Ms 6.0 (BRK), 5.4 (PAS). Depth from broadband displacement seismograms.
20	16 35 05.1	43.645 N	127.441 W	10 G 4.3	0.4	31	OFF COAST OF OREGON
20	16 36 48.2*	36.263 N	141.391 E	28 4.7	1.4	21	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito and (I JMA) at Onahama.
20	16 44 13.6%	15.711 N	60.822 W	10 G	0.8	7	LEEWARD ISLANDS. ML 2.6 (FDF).
20	16 58 05.8	17.274 N	62.280 W	10 G	0.7	18	LEEWARD ISLANDS. ML 4.0 (FDF).
20	17 59 04.6&	60.321 N	151.025 W	44		36	KENAI PENINSULA, ALASKA. <AGS-P>.
20	18 09 27.5	11.954 N	57.817 E	10 G 4.7	1.2	51	ARABIAN SEA
a 20	20 44 02.2	39.553 N	40.172 E	38 5.0 5.1	1.2	264	TURKEY. Twenty houses were damaged and several cattle killed in the Erzincan area.
20	21 37 23.0*	58.169 N	32.147 W	10 G 4.3	1.1	9	NORTH ATLANTIC OCEAN
20	21 40 00.8?	9.68 S	124.44 E	128 ? 4.5	1.4	10	TIMOR
20	22 03 19.2	53.636 N	169.338 E	33 N 4.7 4.6	1.0	57	KOMANDORSKY ISLANDS REGION
20	22 49 04.3	42.574 N	13.146 E	10 G	0.3	11	CENTRAL ITALY. MD 2.6 (SSO).
21	01 14 08.3?	41.69 N	12.86 E	10 G	0.1	4	SOUTHERN ITALY
21	01 55 57.3?	22.08 S	68.83 W	33 N	0.8	5	NORTHERN CHILE
21	02 15 14.3&	36.200 N	120.300 W	6		14	CENTRAL CALIFORNIA. <BRK>. ML 2.9 (BRK). Felt (II) at Coolinga.
21	02 15 41.0	45.497 N	26.359 E	148 4.3	0.9	65	ROMANIA
21	02 57 08.2	35.270 N	136.886 E	47 *	0.6	10	SOUTHERN HONSHU, JAPAN. MG 3.4 (JMA). Felt (I JMA) at Nagaya.
21	03 35 13.7?	20.34 S	174.99 W	75 D 4.6	1.2	6	TONGA ISLANDS
21	03 40 53.9	44.478 N	10.890 E	13	1.2	33	NORTHERN ITALY. MD 3.3 (ROM). ML 3.1 (KBA).
21	03 51 10.6?	40.01 N	27.46 E	10 G	0.7	4	TURKEY
21	03 53 38.8	38.282 N	21.679 E	10 G 3.4	0.9	8	GREECE. MD 3.4 (ATH).
a 21	04 03 42.2	31.111 S	177.801 W	50 D 5.3	1.1	47	KERMADEC ISLANDS REGION
21	04 22 03.5&	62.918 N	151.295 W	114		20	CENTRAL ALASKA. <AGS-P>.
21	04 39 41.3?	16.15 N	60.44 W	10 G	0.3	6	LEEWARD ISLANDS. ML 2.6 (FDF).
21	04 46 22.0%	16.206 N	60.559 W	10 G	0.6	8	LEEWARD ISLANDS. ML 2.8 (FDF).
21	06 21 18.7*	31.277 S	177.635 W	40 D 5.0 4.6	1.3	20	KERMADEC ISLANDS REGION

21	06 47 41.3	40.395 N	15.555 E	11	1.5	13	SOUTHERN ITALY
21	07 11 10.4*	4.571 S	128.641 E	179 *	4.9	1.3	12 BANDA SEA
21	08 36 01.3&	40.813 N	124.420 W	24		13	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.5 (BRK). Felt (11) at Fortuna.
21	08 57 50.2%	39.138 N	27.580 E	10 G	0.6	5	TURKEY
21	09 30 20.9%	39.199 N	27.502 E	10 G	0.5	5	TURKEY
21	09 40 48.2&	58.204 N	151.170 W	65		8	KODIAK ISLAND REGION. <AGS-P>.
21	10 38 40.3*	17.485 S	66.535 E	10 G	4.9 4.9	1.6	18 MASCARENE ISLANDS REGION
21	11 09 48.9?	24.33 N	121.09 E	66 *	0.9	6	TAIWAN
21	11 26 17.7	37.085 N	27.953 E	10 G	0.6	6	TURKEY
21	11 46 37.5?	39.15 N	27.61 E	10 G	0.3	4	TURKEY
21	12 14 38.7?	49.56 N	0.10 E	10 G	0.7	12	FRANCE. MD 3.3 (DOU).
21	12 51 08.9*	16.782 N	99.404 W	33 N	1.3	7	NEAR COAST OF GUERRERO, MEXICO
21	13 07 34.3*	15.988 S	178.262 E	33 N	4.8	0.9	45 FIJI ISLANDS
21	13 55 51.8	15.106 N	60.307 W	29		0.4	17 LEEWARD ISLANDS. ML 3.0 (FDF).
21	14 52 27.3	40.574 N	20.830 E	10 G	1.3	8	GREECE-ALBANIA BORDER REGION. MD 3.2 (ATH). ML 2.8 (SKO).
21	17 48 12.3	1.538 N	99.742 E	189	4.7	0.8	27 NORTHERN SUMATERA
21	17 54 27.6*	43.453 N	4.184 E	10 G		1.4	11 NEAR SOUTH COAST OF FRANCE. ML 2.8 (LDG).
21	18 41 31.9*	5.003 S	144.850 E	63 ?	4.1	1.3	10 PAPUA NEW GUINEA
21	18 49 30.2*	34.935 N	132.261 E	10 G		0.3	5 SOUTHERN HONSHU, JAPAN. MG 3.2 (JMA). Felt (1 JMA) at Hamada.
21	19 23 41.1	2.586 N	126.702 E	58	5.3	1.1	138 MOLUCCA PASSAGE
21	19 30 07.1	2.545 N	126.537 E	77 *	5.4	1.3	54 MOLUCCA PASSAGE
21	21 00 05.5&	61.910 N	147.432 W	9			37 SOUTHERN ALASKA. <AGS-P>.
21	21 23 02.6	2.620 N	126.629 E	58 ?	5.0 5.1	1.1	58 MOLUCCA PASSAGE
21	21 44 06.9*	24.587 S	70.278 W	53 *		0.9	11 NEAR COAST OF NORTHERN CHILE
21	21 45 38.7*	39.042 N	21.723 E	10 G		1.0	5 GREECE. MD 2.8 (ATH).
21	21 56 48.6	17.952 S	178.593 W	584 G	5.7	0.8	414 FIJI ISLANDS REGION. mb 5.6 (BRK). Depth from broadband displacement seismograms.
21	22 02 52.6&	60.089 N	153.546 W	170			31 SOUTHERN ALASKA. <AGS-P>.
21	23 03 48.3*	59.740 N	30.070 W	10 G	4.2	1.2	19 NORTH ATLANTIC OCEAN
21	23 05 30.4%	39.334 N	29.063 E	10 G		0.8	7 TURKEY
21	23 29 19.6?	13.80 N	60.19 W	33 N		0.2	10 WINDWARD ISLANDS. ML 2.7 (FDF).
21	23 41 57.3&	59.504 N	152.639 W	75			22 SOUTHERN ALASKA. <AGS-P>.
21	23 53 51.4	36.845 N	115.931 W	7		0.4	39 CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (NEIS).
22	00 14 14.0	59.834 N	29.846 W	10 G	4.7 4.7	1.1	79 NORTH ATLANTIC OCEAN
22	00 17 00.1?	60.06 N	29.78 W	10 G	4.3	1.2	11 NORTH ATLANTIC OCEAN
22	01 02 25.5%	31.689 N	35.797 E	10 G		0.1	5 DEAD SEA REGION
22	01 14 27.3*	59.978 N	29.922 W	10 G	4.3	0.6	15 NORTH ATLANTIC OCEAN
22	01 52 20.7	60.184 N	29.384 W	10 G	4.2	0.6	19 NORTH ATLANTIC OCEAN
22	02 02 04.0	59.802 N	29.809 W	10 G	5.0 5.0	1.0	149 NORTH ATLANTIC OCEAN. Ms 5.5 (BRK).
22	02 09 20.7?	59.62 N	30.17 W	10 G	4.1	1.3	5 NORTH ATLANTIC OCEAN
22	02 18 36.1	59.954 N	29.736 W	10 G	4.7 4.6	1.2	63 NORTH ATLANTIC OCEAN
22	02 29 14.3	59.941 N	29.710 W	10 G	4.5	1.0	39 NORTH ATLANTIC OCEAN
22	02 36 45.5	59.776 N	29.608 W	10 G	4.4	0.9	43 NORTH ATLANTIC OCEAN
22	02 38 37.6	59.858 N	29.740 W	10 G	4.9 4.7	1.2	100 NORTH ATLANTIC OCEAN
22	02 46 36.7	59.869 N	29.638 W	10 G	4.9 4.4	1.0	128 NORTH ATLANTIC OCEAN
22	02 49 31.3&	34.940 N	116.780 W	3			10 SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
22	02 58 26.6*	59.288 N	30.161 W	10 G	4.4	1.5	32 NORTH ATLANTIC OCEAN
22	03 06 34.8	36.710 N	12.865 E	33 N		0.6	13 MEDITERRANEAN SEA. MD 2.8 (ROM).
22	03 09 03.5	59.674 N	29.808 W	10 G	4.3	1.0	32 NORTH ATLANTIC OCEAN
22	03 12 54.7	59.949 N	29.656 W	10 G	4.8 4.6	0.9	63 NORTH ATLANTIC OCEAN
22	03 16 13.9&	63.339 N	150.253 W	14			41 CENTRAL ALASKA. <AGS-P>. ML 4.2 (PMR).
22	03 20 54.1*	59.641 N	29.868 W	10 G	4.2	1.0	21 NORTH ATLANTIC OCEAN
22	03 23 16.0	36.775 N	12.892 E	33 N		0.4	8 MEDITERRANEAN SEA. MD 2.6 (ROM).
22	03 31 08.6?	60.06 N	29.67 W	10 G	4.1	0.2	7 NORTH ATLANTIC OCEAN
22	03 37 01.8*	59.420 N	30.076 W	10 G	4.0	0.6	6 NORTH ATLANTIC OCEAN
22	03 57 35.8*	67.007 N	156.419 W	5 G		0.2	8 ALASKA. ML 3.8 (PMR).
22	04 06 21.9	59.950 N	29.657 W	10 G	4.8 4.1	0.8	69 NORTH ATLANTIC OCEAN
22	04 18 30.3	66.923 N	156.233 W	5 G		0.7	20 ALASKA. ML 4.3 (PMR).
22	04 20 53.1	59.655 N	29.916 W	10 G	4.7 4.5	1.0	68 NORTH ATLANTIC OCEAN
22	04 36 25.5*	5.294 S	145.771 E	110 *	4.8	1.3	18 EAST PAPUA NEW GUINEA REGION
22	04 37 01.1	59.945 N	29.634 W	10 G	4.2	0.6	22 NORTH ATLANTIC OCEAN
22	04 42 41.1*	59.995 N	29.800 W	10 G	4.2	0.8	12 NORTH ATLANTIC OCEAN
22	04 45 34.4	59.855 N	29.699 W	10 G	4.7 3.8	0.8	56 NORTH ATLANTIC OCEAN
22	04 52 08.2%	40.638 N	27.626 E	10 G		0.9	6 TURKEY
22	05 00 27.2*	59.601 N	29.842 W	10 G	4.3	1.3	13 NORTH ATLANTIC OCEAN
22	05 15 48.3*	59.915 N	29.568 W	10 G	4.2	1.2	16 NORTH ATLANTIC OCEAN
22	05 25 18.9*	59.810 N	29.726 W	10 G	4.1	1.0	18 NORTH ATLANTIC OCEAN
22	05 41 41.4*	36.210 N	139.724 E	10 G		0.3	5 HONSHU, JAPAN
22	05 59 22.7*	38.348 N	126.166 E	33 N		1.3	13 NORTH KOREA. ML 4.1 (BJI).
22	06 01 30.4*	43.307 N	19.186 E	10 G		1.4	9 YUGOSLAVIA. MD 2.4 (ITG).
22	06 03 38.1	59.627 N	29.900 W	10 G	4.4	0.9	43 NORTH ATLANTIC OCEAN
22	06 40 31.0	41.942 N	20.379 E	10 G		0.7	6 ALBANIA. ML 2.5 (SKO).
22	07 04 26.5%	18.108 N	66.750 W	33 N		0.2	5 PUERTO RICO REGION
22	07 21 36.7	52.798 N	173.539 W	156 *	5.0	1.0	64 ANDREANOF ISLANDS, ALEUTIAN IS.
22	08 07 34.4	60.009 N	29.683 W	10 G	4.9 4.5	0.7	121 NORTH ATLANTIC OCEAN
22	08 09 14.1*	32.672 S	70.188 W	121 ?		0.4	10 CHILE-ARGENTINA BORDER REGION
22	09 27 59.9	59.633 N	29.937 W	10 G	4.5	0.9	42 NORTH ATLANTIC OCEAN
22	09 33 18.2&	65.710 N	147.926 W	0			10 ALASKA. <AGS-P>.
22	09 34 35.4	53.779 N	161.439 E	33 N	4.9 4.1	1.1	48 OFF EAST COAST OF KAMCHATKA
22	09 41 21.5&	63.512 N	147.995 W	10			28 CENTRAL ALASKA. <AGS-P>. ML 3.6 (PMR).
22	09 48 13.3*	53.863 N	161.381 E	33 N	4.8 4.5	1.0	16 OFF EAST COAST OF KAMCHATKA
22	10 23 31.4	44.355 N	7.300 E	10 G		0.4	10 NORTHERN ITALY. ML 2.4 (GEN).
22	10 33 01.9%	60.633 N	6.229 E	10 G		0.6	8 SOUTHERN NORWAY. MD 1.9 (BER).
22	10 50 29.9	59.781 N	29.876 W	10 G	4.8 3.9	1.1	66 NORTH ATLANTIC OCEAN
22	11 08 06.0	53.597 N	161.657 E	41 D	5.0 5.2	1.0	182 OFF EAST COAST OF KAMCHATKA
22	11 35 04.4*	59.740 N	29.729 W	10 G	4.2	0.8 *	15 NORTH ATLANTIC OCEAN
22	13 26 32.3	54.119 N	160.543 E	33 N	4.8	0.9	65 NEAR EAST COAST OF KAMCHATKA
22	14 19 39.7?	54.02 N	161.03 E	33 N	4.8	0.4	7 NEAR EAST COAST OF KAMCHATKA
22	14 24 00.6?	54.50 N	159.23 E	33 N	4.3	1.2	8 NEAR EAST COAST OF KAMCHATKA
22	14 40 21.2?	1.67 S	149.17 E	33 N	4.0	1.5	5 NEW IRELAND REGION

22	15	29	32.37	17.23	N	61.01	W	10	G	0.7	5	LEEWARD ISLANDS. ML 2.7 (FDF).	
22	15	43	16.3	13.105	S	167.054	E	223	*	5.1	1.2	84 VANUATU ISLANDS	
22	17	16	01.8*	46.197	N	16.066	E	10	G		0.9	6 YUGOSLAVIA. ML 2.6 (KBA).	
22	18	05	20.8	44.621	N	7.059	E	10	G		0.3	13 NORTHERN ITALY. ML 2.3 (GEN), 2.3 (LDG).	
22	18	11	17.7*	18.512	N	147.055	E	69	?	4.5	0.7	14 MARIANA ISLANDS REGION	
22	19	24	34.9	27.243	N	87.886	E	34	*	5.0	0.9	97 NEPAL. Felt in eastern Nepal.	
22	20	00	28.8*	59.877	N	29.647	W	10	G	4.2	0.8	16 NORTH ATLANTIC OCEAN	
22	20	16	18.3	44.023	N	7.669	E	9			0.6	29 NORTHERN ITALY. ML 2.8 (GEN), 2.8 (LDG).	
22	20	24	12.8*	2.275	S	140.533	E	33	N	5.1 4.5	1.1	15 NEAR N. COAST OF WEST IRIAN	
22	20	31	50.1	59.731	N	29.675	W	10	G	4.3	0.7	32 NORTH ATLANTIC OCEAN	
22	21	11	16.3	44.378	N	7.243	E	10	G		0.3	6 NORTHERN ITALY. ML 2.1 (GEN).	
22	21	45	36.5*	59.628	N	29.974	W	10	G	4.3	0.6	12 NORTH ATLANTIC OCEAN	
22	22	04	42.7	33.373	N	132.105	E	33	N		0.6	9 SHIKOKU, JAPAN. Felt (11 JMA) at Uwajima.	
22	22	16	23.2*	59.533	N	153.176	W	101				29 SOUTHERN ALASKA. <AGS-P>.	
22	23	05	43.2*	22.344	N	104.465	E	33	N	4.1	1.0	8 YUNNAN PROVINCE, CHINA	
22	23	13	25.3	36.648	N	25.839	E	41	*	4.0	1.5	21 DODECANESE ISLANDS. ML 4.1 (ATH).	
22	23	48	11.97	10.53	N	93.14	E	33	N	4.3	0.4	5 ANDAMAN ISLANDS REGION	
23	03	44	45.1*	66.728	N	13.230	E	10	G		0.5	5 NORTHERN NORWAY. MD 2.8 (BER).	
23	03	48	03.3*	48.565	S	121.096	E	10	G	4.1 4.1	1.1	17 SOUTH OF AUSTRALIA	
23	04	31	58.3	30.532	N	35.177	E	10	G		0.6	10 DEAD SEA REGION	
23	04	53	02.7*	41.786	N	12.738	E	10	G		0.2	5 SOUTHERN ITALY	
23	05	47	00.2	45.261	N	110.378	W	5	G		0.6	8 MONTANA. ML 3.0 (BUT).	
23	07	14	03.5*	21.304	S	67.375	W	178	*		0.5	7 CHILE-BOLIVIA BORDER REGION	
23	07	50	55.4*	0.666	S	123.596	E	33	N	4.0	1.0	6 MINAHASSA PENINSULA	
23	09	28	48.4*	18.25	N	67.43	W	33	N		1.3	5 MONA PASSAGE	
23	09	47	23.2	59.815	N	29.770	W	10	G	4.5	1.1	35 NORTH ATLANTIC OCEAN	
f	23	10	54	46.3	52.341	S	160.568	E	10	G	6.4 8.2	1.3	399 MACQUARIE ISLANDS REGION. Ms 8.0 (BRK), 7.8 (PAS). Mo=2.5*10**21 Nm (PPT). Felt (V) on Campbell Island. Also felt on Macquarie Island. Small tsunami reported along the southeastern coast of Tasmania and in Jervis Bay and Sydney Harbour, Australia. Complex event, observed on broadband displacement seismograms.
23	11	24	17.5*	51.37	S	161.45	E	10	G	5.6	1.0	16 NORTH OF MACQUARIE ISLAND	
23	11	48	28.5*	60.272	N	5.417	E	10	G		0.8	7 SOUTHERN NORWAY. MD 1.6 (BER).	
23	12	11	17.0	59.863	N	29.653	W	10	G	4.6	0.6	31 NORTH ATLANTIC OCEAN	
23	13	33	36.2	44.481	N	112.187	W	5	G		0.5	8 EASTERN IDAHO. ML 3.2 (BUT).	
23	13	53	59.7	9.305	S	119.415	E	51	?	4.9	1.3	30 SUMBA ISLAND REGION	
23	14	09	35.3*	52.087	S	161.100	E	10	G	5.5	1.3	47 MACQUARIE ISLANDS REGION	
23	14	23	10.9	38.672	N	30.635	E	10	G		0.7	6 TURKEY	
23	15	33	12.2*	14.796	N	61.055	W	130	G		0.3	9 WINDWARD ISLANDS	
23	16	07	55.1	52.117	S	160.741	E	10	G	5.4	1.1	49 MACQUARIE ISLANDS REGION	
23	16	58	33.3*	41.180	N	121.960	W	7			1.0	10 NORTHERN CALIFORNIA. <BRK>. ML 3.5 (BRK). Felt (IV) at Big Bend and Pandasa. Felt (III) at Dunsuir and Mt. Shasta. Also felt at Castella and McCloud.	
23	17	01	18.4*	61.809	N	7.414	E	10	G		1.2	9 SOUTHERN NORWAY. MD 2.0 (BER).	
23	17	02	01.8*	41.188	N	121.950	W	12				9 NORTHERN CALIFORNIA. <BRK>. ML 3.7 (BRK). Felt at Dunsuir, McCloud and Weed.	
a	23	17	11	42.8	51.886	S	160.563	E	10	G	5.9 6.0	1.0	126 NORTH OF MACQUARIE ISLAND. Ms 6.0 (BRK).
23	17	19	05.2	37.807	N	21.029	E	20		3.9	1.3	46 SOUTHERN GREECE. MD 3.8 (ATH).	
23	17	45	14.6	35.670	N	27.297	E	75	*		0.9	10 DODECANESE ISLANDS. MD 3.6 (ATH).	
23	17	52	21.2	2.777	S	77.431	W	118		4.5	0.9	18 PERU-EQUADOR BORDER REGION	
23	17	58	05.8*	51.41	S	158.68	E	10	G	5.5 5.2	0.9	13 NORTH OF MACQUARIE ISLAND	
23	18	15	45.9*	21.352	S	68.915	W	138	?		1.5	8 CHILE-BOLIVIA BORDER REGION	
23	18	52	23.6*	17.64	N	145.70	E	88	*	4.5	0.5	18 MARIANA ISLANDS	
23	19	02	18.8*	43.83	N	128.64	W	10	G		0.5	18 OFF COAST OF OREGON. CL 3.9 (SEA).	
23	23	51	22.9*	30.01	S	178.44	W	88	?	4.8	1.6	13 KERMADEC ISLANDS	
24	00	51	24.7*	8.114	N	82.564	W	10	G		0.3	6 PANAMA-COSTA RICA BORDER REGION. MD 4.1 (UPA).	
24	01	22	09.9	10.962	N	65.033	W	25		3.8	1.2	22 NEAR COAST OF VENEZUELA. Felt at Caracas and Barlovento.	
24	01	53	44.1*	46.01	N	14.73	E	12	?		0.6	5 YUGOSLAVIA. ML 2.0 (KBA).	
24	02	15	04.9*	52.187	S	159.888	E	10	G	5.0	1.2	29 MACQUARIE ISLANDS REGION	
24	02	16	57.5	52.503	S	160.584	E	10	G	5.7 5.2	0.9	150 MACQUARIE ISLANDS REGION	
24	03	08	32.7	49.803	N	147.641	E	596	?	4.1	0.7	29 SEA OF OKHOTSK	
24	05	18	57.8*	59.936	N	29.663	W	10	G	4.4	0.9	31 NORTH ATLANTIC OCEAN	
24	05	38	09.0*	61.539	N	149.852	W	44				27 SOUTHERN ALASKA. <AGS-P>.	
24	05	58	53.3*	40.358	N	124.603	W	14			5	5 NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).	
24	06	58	47.4*	39.348	N	23.490	E	10	G	3.7	0.9	7 AEGEAN SEA. MD 3.2 (ATH).	
24	07	00	09.1*	53.478	S	160.434	E	10	G	4.6	0.7	7 MACQUARIE ISLANDS REGION	
24	07	04	41.5*	36.681	N	28.177	E	10	G		1.4	5 DODECANESE ISLANDS	
24	07	44	18.1	52.217	S	159.564	E	10	G	5.2 5.1	1.1	41 MACQUARIE ISLANDS REGION	
a	24	08	05	47.6	3.748	S	123.256	E	22		5.6 5.0	1.0	171 SULAWESI
24	08	51	45.0*	18.36	N	103.08	W	33	N	4.2	1.2	10 NEAR COAST OF MICHOACAN, MEXICO	
24	12	32	30.5*	3.604	S	149.796	E	10	G	4.3	1.3	13 BISMARCK SEA	
24	12	34	00.1*	14.930	N	60.952	W	30	*		0.5	9 WINDWARD ISLANDS. ML 2.4 (FDF).	
f	24	13	31	14.4	56.177	N	164.264	E	19	G	5.9 6.1	1.1	426 KOMANDORSKY ISLANDS REGION. Ms 5.8 (BRK), 5.6 (PAS). Mo=6.0*10**18 Nm (PPT). Depth from broadband displacement seismograms.
24	13	32	27.5*	38.030	N	31.917	E	10	G		1.5	6 TURKEY	
24	14	17	12.5*	44.366	N	7.363	E	14	*		0.3	7 NORTHERN ITALY. ML 2.3 (GEN).	
24	14	42	58.2*	35.334	N	136.899	E	5	G		1.5	5 SOUTHERN HONSHU, JAPAN. MG 3.1 (JMA). Felt (1 JMA) at Gifu.	
24	14	51	14.7*	55.746	N	166.178	E	33	N	4.6	1.0	21 KOMANDORSKY ISLANDS REGION	
24	15	21	04.5	51.783	S	161.425	E	10	G	5.6 4.8	1.2	35 NORTH OF MACQUARIE ISLAND	
a	24	15	43	34.3	56.173	N	164.185	E	36	D	5.5 5.4	1.0	277 KOMANDORSKY ISLANDS REGION. Ms 5.2 (BRK).
24	16	27	51.5*	36.90	N	20.55	E	16	*	3.7	1.4	23 MEDITERRANEAN SEA. ML 3.6 (ATH).	
24	16	43	33.0	85.116	N	95.611	E	10	G	4.6	0.9	56 NORTH OF SEVERNAYA ZEMLYA	
24	17	30	19.8*	52.571	S	160.083	E	10	G	4.8	1.2	11 MACQUARIE ISLANDS REGION	
a	24	17	59	07.0	55.472	N	35.140	W	10	G	4.9 5.0	1.3	111 NORTH ATLANTIC OCEAN
24	18	49	42.6*	1.48	N	127.14	E	128	?	4.5	0.6	10 HALMAHERA	
24	19	13	33.6	55.493	N	35.165	W	10	G	4.5	0.9	50 NORTH ATLANTIC OCEAN	
24	19	33	40.6*	58.740	N	5.961	E	10	G		0.6	7 SOUTHERN NORWAY. MD 1.6 (BER).	
24	19	59	26.3	55.543	N	35.212	W	10	G	4.6 4.3	1.2	55 NORTH ATLANTIC OCEAN	
24	20	22	55.7*	60.729	N	5.576	E	10	G		1.4	9 SOUTHERN NORWAY. MD 1.7 (BER).	

24	23 41 23.8*	52.645 S	160.247 E	10 G	4.8	1.4	20	MACQUARIE ISLANDS REGION
a 25	00 54 52.1	52.272 S	159.833 E	10 G	5.7 5.6	1.0	195	MACQUARIE ISLANDS REGION. Ms 5.4 (BRK). Mo=1.25*10**18 Nm (PPT).
25	01 24 16.0%	37.723 N	4.038 W	10 G		1.4	6	SPAIN. mbLg 3.0 (MDD).
25	01 27 28.9%	47.373 N	122.689 W	20			48	WASHINGTON. <SEA>. CL 2.8 (SEA).
25	01 48 47.8	40.640 N	21.623 E	10 G		1.3	11	GREECE. MD 3.3 (ATH).
25	03 33 04.5	8.882 N	62.014 W	33 N		0.5	9	VENEZUELA
25	03 47 56.4	37.796 N	29.256 E	10 G		1.5	8	TURKEY
25	04 03 22.7	38.254 N	21.792 E	10 G	3.5	1.4	13	GREECE. ML 3.1 (ATH).
25	04 31 46.4*	31.455 S	68.057 W	115 *		1.1	16	SAN JUAN PROVINCE, ARGENTINA
o 25	04 43 10.7	52.334 S	160.748 E	10 G	5.5 4.8	1.1	55	MACQUARIE ISLANDS REGION
25	04 54 41.5%	0.056 N	78.610 W	10 G		0.2	5	COLOMBIA-ECUADOR BORDER REGION
25	04 57 42.0%	31.52 S	179.14 W	190 ?	4.4	1.5	12	KERMADEC ISLANDS REGION
25	05 56 51.8*	33.449 N	104.625 E	33 N		0.9	6	GANSU PROVINCE, CHINA. ML 3.7 (BJI).
25	06 46 26.9*	31.029 S	177.764 W	33 N	4.8 4.8	1.0	12	KERMADEC ISLANDS REGION
o 25	07 24 15.5%	54.98 S	129.20 W	10 G	5.2 5.1	1.0	10	SOUTH PACIFIC CORDILLERA
25	07 43 18.5	30.846 N	109.332 W	5 G	4.6	1.0	43	NORTHWESTERN MEXICO. ML 4.3 (NEIS).
25	07 52 25.9*	11.455 S	118.090 E	33 N	4.1	1.4	8	SOUTH OF SUMBAWA ISLAND
25	08 03 07.9?	1.76 N	122.86 E	33 N	4.7	1.2	6	MINAHASSA PENINSULA
a 25	08 06 32.6	5.850 S	148.300 E	112	5.9	1.0	170	NEW BRITAIN REGION
25	08 45 37.5*	43.535 N	7.850 E	10 G		0.2	9	NEAR SOUTH COAST OF FRANCE. ML 2.1 (GEN).
25	09 34 42.5?	29.77 N	83.78 E	33 N		0.2	6	NEPAL
a 25	09 39 25.4	52.071 S	159.931 E	10 G	5.5 5.5	1.1	85	MACQUARIE ISLANDS REGION
25	10 21 35.1%	60.602 N	6.221 E	10 G		1.5	8	SOUTHERN NORWAY. MD 1.7 (BER).
25	10 35 47.6?	2.30 N	126.66 E	91 ?	4.5	0.6	11	MOLUCCA PASSAGE
25	11 37 33.7*	52.143 S	160.868 E	10 G	5.4 5.0	1.3	31	MACQUARIE ISLANDS REGION
25	11 43 48.6?	39.10 N	27.58 E	10 G		0.6	4	TURKEY
25	11 43 49.5	59.681 N	29.771 W	33 N	4.6	0.6	44	NORTH ATLANTIC OCEAN
25	11 51 13.7	44.515 N	7.150 E	10 G		0.3	15	NORTHERN ITALY. ML 2.4 (GEN).
a 25	11 56 21.6	7.332 S	128.539 E	171	5.5	0.8	235	BANDA SEA
25	12 34 49.4*	85.603 N	90.492 E	10 G	4.7	1.2	8	NORTH OF SEVERNAYA ZEMLYA
25	12 40 09.3%	35.862 N	120.398 W	10			22	CENTRAL CALIFORNIA. <GS>. ML 3.6 (BRK). 3.8 (PAS). Felt (IV) at Shandan and Templeton; (III) at Lockwood and Paso Robles. Also felt at Parkfield, Coalinga and Creston.
a 25	13 01 34.2*	36.961 S	177.434 E	287	4.9	1.1	57	OFF E. COAST OF N. ISLAND, N.Z. Felt throughout North Island.
25	13 15 33.4?	58.03 N	6.39 E	0 G		0.6	7	SOUTHERN NORWAY. MD 2.3 (BER). Probable explosion.
25	13 28 16.1?	32.85 S	179.69 E	169 ?	4.9	1.0	9	SOUTH OF KERMADEC ISLANDS
25	13 53 30.8?	44.13 N	127.54 W	10 G		0.4	30	OFF COAST OF OREGON. CL 3.4 (SEA).
25	15 19 43.0?	45.12 N	7.06 E	10 G		0.6	4	NORTHERN ITALY. ML 2.1 (GEN).
25	15 30 21.7*	1.392 S	79.285 W	38 *	4.9	1.2	39	ECUADOR. Felt in central Ecuador.
25	16 12 24.8*	21.814 S	68.482 W	122 *		1.4	9	CHILE-BOLIVIA BORDER REGION
25	16 58 10.5	44.519 N	7.153 E	10 G		0.4	23	NORTHERN ITALY. ML 2.8 (LDG). 2.7 (GEN).
25	17 46 10.9*	37.208 N	70.789 E	33 N	3.6	0.8	7	AFGHANISTAN-USSR BORDER REGION
25	18 04 23.9	38.553 N	20.552 E	13		1.3	26	GREECE. ML 3.6 (ATH).
25	18 14 36.5*	9.404 N	126.102 E	33 N	5.0	0.9	20	MINDANAO, PHILIPPINE ISLANDS
25	18 32 16.5%	60.701 N	5.505 E	10 G		0.7	9	SOUTHERN NORWAY. MD 1.7 (BER).
25	18 52 26.5	13.998 N	91.900 W	68	4.8	1.1	45	NEAR COAST OF GUATEMALA
25	18 55 04.2	17.105 N	62.301 W	30 *		0.9	9	LEEWARD ISLANDS. ML 2.8 (FDF).
25	19 01 37.6	60.126 N	29.525 W	10 G	4.3	1.0	25	NORTH ATLANTIC OCEAN
a 25	19 49 15.9	15.259 S	172.811 W	73 D	5.0	1.1	72	SAMOA ISLANDS REGION
25	19 59 56.8	44.406 N	6.433 E	12		0.4	21	FRANCE. ML 2.7 (LDG).
a 25	20 13 33.4	51.677 N	172.128 E	33 N	5.3 4.6	1.0	192	NEAR ISLANDS, ALEUTIAN ISLANDS
25	21 33 38.2?	15.11 N	60.34 W	10 G		0.3	7	LEEWARD ISLANDS. ML 2.6 (FDF).
a 25	21 36 21.2	13.968 N	91.804 W	69	5.0	0.9	138	NEAR COAST OF GUATEMALA
25	22 57 06.2?	45.52 N	3.78 E	10 G		0.3	4	FRANCE. ML 1.9 (LDG).
25	23 28 30.9?	44.81 N	6.54 E	10 G		0.6	4	FRANCE. ML 2.2 (GEN).
25	23 43 56.2	15.442 N	61.332 W	10 G		0.1	6	LEEWARD ISLANDS. ML 2.1 (FDF).
26	01 08 45.8	39.345 N	75.436 E	35 *	4.8 4.4	1.0	91	SOUTHERN XINJIANG, CHINA
26	01 24 26.3	17.034 N	62.282 W	11		1.2	18	LEEWARD ISLANDS. ML 3.8 (FDF).
26	01 54 16.2*	53.230 S	159.282 E	10 G	5.2 4.5	1.2	21	MACQUARIE ISLANDS REGION
26	02 16 16.6	15.432 N	61.299 W	10 G		0.3	10	LEEWARD ISLANDS. ML 2.3 (FDF).
26	02 34 27.9?	34.16 N	135.18 E	10 G		0.4	4	NEAR S. COAST OF SOUTHERN HONSHU. MG 2.7 (JMA). Felt (I JMA) at Wakayama.
26	03 54 02.6%	60.153 N	140.646 W	4			14	SOUTHEASTERN ALASKA. <AGS-P>.
26	04 18 33.8?	53.30 N	164.90 W	33 N	4.4	2.1	8	UNIMAK ISLAND REGION
26	06 57 37.8*	52.645 S	160.150 E	10 G	4.9	1.4	20	MACQUARIE ISLANDS REGION
26	06 58 19.8%	39.569 N	34.014 E	10 G		1.2	5	TURKEY
a 26	07 00 01.7	52.583 S	160.106 E	10 G	5.6 5.3	1.1	62	MACQUARIE ISLANDS REGION
26	07 13 29.4	17.997 N	61.517 W	41 *		0.6	29	LEEWARD ISLANDS. ML 4.4 (FDF).
26	07 20 22.7	38.391 N	25.135 E	17		1.0	16	AEGEAN SEA. ML 3.7 (ATH).
26	08 01 05.0	38.360 N	25.190 E	10 G		0.7	7	AEGEAN SEA. ML 3.1 (ATH).
26	08 44 46.1*	33.318 S	70.566 W	82 ?		1.1	11	CHILE-ARGENTINA BORDER REGION
26	09 08 10.7*	30.326 N	109.144 W	5 G		0.6	13	NORTHWESTERN MEXICO. ML 3.5 (NEIS).
26	09 23 47.7*	15.915 S	172.917 W	33 N	4.9 4.8	1.3	43	SAMOA ISLANDS REGION
26	11 20 55.3	1.421 S	119.853 E	33 N	4.7 4.0	1.2	22	SULAWESI
26	11 32 02.6*	32.336 S	69.335 W	33 N		1.0	8	MENDOZA PROVINCE, ARGENTINA
26	11 45 29.4	18.537 N	145.696 E	197 *	4.8	0.9	69	MARIANA ISLANDS
26	12 08 18.3	40.807 N	20.705 E	20	3.4	1.2	50	GREECE-ALBANIA BORDER REGION. ML 4.4 (ATH). 3.5 (TTG). Felt (IV) at Pogradec and Maliq; (III) at Korca, Albania.
a 26	12 56 18.3*	51.926 S	161.386 E	10 G	5.3 4.9	1.2	27	NORTH OF MACQUARIE ISLAND
a 26	14 28 37.8*	4.406 S	105.270 W	10 G	4.7 5.2	1.4	24	NORTHERN EASTER I. CORDILLERA
26	16 09 20.4	36.088 N	26.679 E	144 *		0.8	13	DODECANESE ISLANDS
26	18 02 07.9%	44.504 N	7.293 E	10 G		0.3	5	NORTHERN ITALY. ML 1.6 (GEN).
26	18 07 00.0%	37.086 N	116.055 W	0			28	SOUTHERN NEVADA. <DOE>. ML 3.7 (NEIS). 37' 05' 09.12" N., 116' 03' 18.47" W., Surface Elev. 1257 m., Depth at Burial 400 m., Shot Time 180700.021, "TULIA," Nevada Test Site (Dept. of Energy).
26	18 22 31.2	43.137 N	17.983 E	10 G		1.2	57	YUGOSLAVIA. MD 3.8 (ATH). ML 3.7 (TTG).
26	19 48 30.7*	36.579 N	71.035 E	182 ?	3.6	0.9	10	AFGHANISTAN-USSR BORDER REGION
26	20 08 37.9*	30.205 N	50.576 E	33 N		1.3	9	IRAN

26	20 33 37.6	41.857 N	20.611 E	10 G	0.7	6	ALBANIA. ML 2.5 (SKO).	
26	22 19 16.6%	38.219 N	15.079 E	10 G	0.9	8	SICILY	
26	22 31 20.7%	40.664 N	29.091 E	10 G	0.8	6	TURKEY	
27	00 16 20.4	44.798 N	6.761 E	10 G	0.3	7	FRANCE. ML 1.7 (GEN).	
27	00 43 47.4	42.511 N	18.496 E	10 G	0.9	11	YUGOSLAVIA. MD 2.5 (TTG).	
27	02 03 10.2?	45.14 N	14.58 E	10 G	1.2	6	YUGOSLAVIA. MD 2.6 (LJU).	
27	02 44 09.8	13.612 N	120.908 E	175	4.6	0.9	52	MINDORO, PHILIPPINE ISLANDS
a 27	03 01 24.9	55.279 S	133.192 W	10 G	5.5 5.7	1.3	100	SOUTH PACIFIC CORDILLERA. Ms 5.9 (BRK). Mo=5.0*10**18 Nm (PPT).
27	04 14 43.0	29.925 N	99.347 E	33 N	4.8 5.2	1.1	17	SICHUAN PROVINCE, CHINA
27	06 49 11.6	40.125 N	19.773 E	18	3.5	1.5	40	ALBANIA. MD 3.9 (ATH). Felt (IV) at Borsh, Dhermi, Carraj, Kuc and Himare.
27	07 34 09.6&	57.627 N	154.094 W	40	4.4		31	KODIAK ISLAND REGION. <AGS-P>. ML 3.3 (PMR).
27	08 07 27.4&	57.419 N	154.539 W	23			8	KODIAK ISLAND REGION. <AGS-P>.
a 27	08 31 18.7	3.451 S	138.855 E	49	5.4 4.4	1.1	145	WEST IRIAN
27	11 54 41.4*	7.940 N	82.859 W	34 ?	4.1	0.8	22	SOUTH OF PANAMA
27	12 59 33.0*	17.129 N	62.319 W	32 *		0.3	6	LEEWARD ISLANDS. MD 2.9 (TRN).
27	13 39 47.4%	45.857 N	0.361 W	10 G		1.3	11	FRANCE. ML 2.8 (LDG).
a 27	14 27 46.4	50.236 S	158.073 E	10 G	5.5 4.9	1.1	112	NORTH OF MACQUARIE ISLAND
27	15 56 42.9*	30.925 S	71.605 W	128 ?	4.2	0.7	12	NEAR COAST OF CENTRAL CHILE
27	16 38 17.4%	40.609 N	14.987 E	10 G		0.5	5	SOUTHERN ITALY
27	16 48 24.2*	16.870 S	177.211 W	33 N	4.9 5.0	1.0	22	FIJI ISLANDS REGION
27	16 51 21.5?	7.57 S	129.56 E	245 ?	4.4	1.1	9	BANDA SEA
27	17 18 46.5%	42.288 N	18.722 E	10 G		0.5	6	YUGOSLAVIA. MD 2.0 (TTG).
27	17 34 39.2	46.358 N	12.898 E	10 G		1.1	36	NORTHERN ITALY. ML 3.3 (FUR), 3.2 (LDG), 2.8 (KBA).
27	17 52 29.4*	30.090 N	51.005 E	33 N	4.8	0.8	9	IRAN
a 27	20 08 37.3	30.167 N	50.921 E	31	5.6 5.8	1.0	405	IRAN. Ms 5.4 (BRK). Seventeen people injured, several houses damaged and about 100 cattle killed in the Do Gabadan area. Felt in the Bushehr-Shiraz area and at Mamasani. Also felt in Kuwait.
27	20 36 05.2	30.209 N	50.924 E	28	4.6	1.0	87	IRAN
27	20 39 58.5*	30.482 N	50.968 E	33 N	4.5	1.5	19	IRAN
27	21 31 57.2	29.942 N	50.803 E	33 N	4.5	1.0	34	SOUTHERN IRAN
27	21 43 04.4&	63.717 N	148.832 W	107			16	CENTRAL ALASKA. <AGS-P>.
27	22 40 39.5*	30.220 N	50.685 E	33 N	4.1 3.7	1.8	8	IRAN
27	23 25 51.3	42.026 N	19.780 E	10 G		0.7	13	YUGOSLAVIA. ML 2.4 (TTG).
27	23 36 15.0?	18.78 N	67.59 W	25 *		0.3	6	MONA PASSAGE
28	00 27 44.5	34.680 N	135.586 E	7		1.0	8	NEAR S. COAST OF SOUTHERN HONSHU. MG 2.9 (JMA). Felt (II JMA) at Osaka.
28	01 22 09.1*	15.560 S	73.918 W	110 ?	4.6	1.4	16	SOUTHERN PERU
28	01 54 35.7*	53.225 S	160.012 E	10 G	4.4	0.1	5	MACQUARIE ISLANDS REGION
28	02 28 28.1	42.920 N	17.942 E	7		1.2	33	ADRIATIC SEA. MD 3.0 (TTG). ML 3.4 (KBA).
28	02 55 19.6	25.053 S	130.781 E	10 G	5.8 5.1	0.9	132	NORTHERN TERRITORY, AUSTRALIA. Felt strongly in the Uluru area.
28	03 23 45.9*	51.200 S	159.341 E	10 G	4.7 4.3	1.4	11	NORTH OF MACQUARIE ISLAND
28	03 30 52.4	42.914 N	17.997 E	10 G		0.9	19	ADRIATIC SEA. MD 2.8 (TTG).
28	03 47 41.6?	38.48 N	23.89 E	10 G		0.1	4	GREECE. ML 2.7 (ATH).
28	04 03 23.5	9.228 S	158.879 E	10 G	5.1	1.0	55	SOLOMON ISLANDS. Felt at Honiara.
28	04 53 44.5?	34.05 S	68.25 W	10 G		0.9	13	MENDOZA PROVINCE, ARGENTINA
28	05 35 27.7*	34.575 N	141.583 E	41 *	4.7	1.2	28	OFF EAST COAST OF HONSHU, JAPAN
28	05 52 22.9%	35.310 N	118.888 E	33 N		0.4	5	EASTERN CHINA. ML 3.8 (BJI).
28	06 08 45.0*	30.190 N	50.837 E	33 N	3.9	0.4	6	IRAN
28	09 29 20.0	39.349 N	23.272 E	10 G		0.8	16	AEGEAN SEA. ML 3.2 (ATH).
a 28	09 46 28.2	16.714 S	173.278 W	35 G	5.7 5.5	1.0	334	TONGA ISLANDS. Ms 5.8 (BRK). Mo=4.6*10**17 Nm (PPT). Depth from broadband displacement seismograms.
a 28	10 20 00.3	16.723 S	173.247 W	50 D	5.2	1.0	166	TONGA ISLANDS
28	10 32 17.9?	46.64 N	0.49 W	10 G		0.9	4	FRANCE. ML 2.2 (LDG).
28	10 33 44.5*	39.516 N	117.833 W	5 G		1.0	5	NEVADA. ML 2.5 (BRK).
28	11 25 21.8?	53.50 S	158.35 E	10 G	4.2	1.1	8	MACQUARIE ISLANDS REGION
28	11 51 15.3	30.198 N	50.868 E	28 *	4.3	1.5	20	IRAN
28	11 56 29.0	44.636 N	7.297 E	14		0.8	61	NORTHERN ITALY. ML 3.7 (LDG), 3.5 (GEN).
28	12 16 03.2	6.508 S	147.747 E	46 *	4.6 4.4	1.0	27	EAST PAPUA NEW GUINEA REGION
28	12 36 40.6?	44.65 N	6.97 E	10 G		0.3	4	FRANCE. ML 1.7 (GEN).
28	14 07 30.9?	41.81 N	12.74 E	10 G		0.1	4	SOUTHERN ITALY
28	14 28 41.3*	4.996 S	151.298 E	102 *	4.7	1.3	24	NEW BRITAIN REGION
28	15 01 11.4	5.960 S	148.435 E	92 *	5.0	1.0	34	NEW BRITAIN REGION
a 28	15 19 07.1	6.515 S	147.799 E	33	5.5 5.5	1.1	137	EAST PAPUA NEW GUINEA REGION. Ms 5.6 (BRK).
28	15 26 30.7?	6.68 S	147.75 E	80 ?	4.5	0.9	7	EAST PAPUA NEW GUINEA REGION
a 28	15 52 54.2	51.053 S	159.682 E	10 G	5.3	1.0	36	NORTH OF MACQUARIE ISLAND
28	16 28 43.0	30.151 N	50.647 E	65 *	4.7	1.1	18	IRAN
28	16 35 57.3	38.343 N	22.721 E	10 G		1.0	6	GREECE. ML 2.9 (ATH).
28	16 44 05.2*	36.467 N	38.351 E	10 G	3.9	1.4	14	JORDAN - SYRIA REGION
28	17 09 16.8?	6.58 S	147.66 E	56 ?	4.5 3.9	1.0	6	EAST PAPUA NEW GUINEA REGION
28	17 25 46.6?	44.20 N	148.62 E	33 N	5.0	1.5	13	KURIL ISLANDS
28	18 22 08.7?	6.43 S	147.64 E	33 N	4.8 3.7	0.1	5	EAST PAPUA NEW GUINEA REGION
28	18 29 27.7%	45.192 N	7.469 E	10 G		0.5	7	NORTHERN ITALY. ML 2.0 (GEN).
28	18 43 17.2*	7.032 S	147.721 E	33 N	4.7 4.4	1.3	10	EAST PAPUA NEW GUINEA REGION
28	20 01 57.7?	39.80 N	20.98 E	10 G		0.7	11	GREECE-ALBANIA BORDER REGION. MG 3.6 (TIR).
28	20 05 05.0*	40.130 N	20.665 E	10 G		1.6	5	GREECE-ALBANIA BORDER REGION. ML 2.7 (SKO).
28	20 19 45.9	44.644 N	7.300 E	11		0.8	33	NORTHERN ITALY. ML 3.0 (GEN), 2.9 (LDG).
28	20 51 41.5	39.043 N	21.748 E	10 G		1.1	30	GREECE. ML 3.4 (ATH).
28	21 01 25.6*	0.384 N	28.914 W	10 G	4.6 4.8	1.3	12	CENTRAL MID-ATLANTIC RIDGE
28	21 03 06.7	18.635 S	177.913 W	570	4.9	0.9	85	FIJI ISLANDS REGION
28	21 34 48.5&	58.098 N	143.172 W	10 G			29	GULF OF ALASKA. <AGS-P>.
28	22 29 11.6%	31.485 N	36.070 E	10 G		0.2	6	DEAD SEA REGION
29	00 27 28.7?	1.56 N	92.05 W	12 D	4.7 4.3	0.8	9	GALAPAGOS ISLANDS REGION
29	01 08 13.2	44.717 N	7.277 E	10 G		0.4	6	NORTHERN ITALY. ML 1.9 (GEN).
29	01 13 04.0?	17.37 N	61.85 W	33 N		0.1	5	LEEWARD ISLANDS. MD 2.7 (TRN).
29	01 15 05.7	36.058 N	27.455 E	33 *		1.4	17	DODECANESE ISLANDS. MD 4.0 (ATH).
29	01 29 38.0	6.667 S	147.821 E	48 *	4.6 4.4	1.1	22	EAST PAPUA NEW GUINEA REGION
a 29	02 12 27.8	48.914 S	121.346 E	10 G	5.2 5.2	1.1	64	SOUTH OF AUSTRALIA
a 29	03 42 34.3	6.499 S	147.730 E	40	5.4 4.8	1.0	118	EAST PAPUA NEW GUINEA REGION
29	04 02 52.4	28.066 N	130.590 E	26	5.0 4.8	1.0	75	RYUKYU ISLANDS. Felt (I JMA) at Naze.

29	04 05 24.9&	58.481 N	153.956 W	77				23	KODIAK ISLAND REGION. <AGS-P>.
29	05 10 02.9	30.011 N	99.504 E	33 N	5.0	1.1	113	SICHUAN PROVINCE, CHINA	
29	05 45 35.67	35.43 N	22.86 E	10 G		0.5	5	MEDITERRANEAN SEA. MD 3.9 (ATH).	
29	05 46 41.9	30.088 N	50.908 E	40	5.0 4.3	1.2	119	IRAN. Felt at Gach Saran and Mamasani.	
29	05 55 42.4	59.597 N	29.904 W	10 G	4.5	0.7	35	NORTH ATLANTIC OCEAN	
29	06 12 04.8*	33.468 S	70.893 W	51 ?		0.5	8	CHILE-ARGENTINA BORDER REGION. Felt (IV) in the Santiago area and (III) at Valparaiso.	
29	07 48 23.5?	39.11 N	27.56 E	10 G		0.7	4	TURKEY	
29	08 27 05.1%	41.387 N	29.236 E	10 G		0.6	5	TURKEY	
29	08 29 27.4	41.957 N	142.215 E	73	5.0	1.0	151	HOKKAIDO, JAPAN REGION. Felt (II JMA) at Hirao, Tamakamai and Urakawa; (I JMA) at Kushiro and Obihiro. Also felt (II JMA) at Hachinohe, Hanshu.	
29	09 25 46.2	6.589 S	147.765 E	55	4.7	1.1	31	EAST PAPUA NEW GUINEA REGION	
29	09 49 56.4%	44.254 N	7.520 E	10 G		0.2	5	NORTHERN ITALY. ML 2.0 (GEN).	
29	09 52 45.4	6.517 S	147.769 E	51 *	4.3	0.8	17	EAST PAPUA NEW GUINEA REGION	
29	10 29 37.0	6.632 S	147.792 E	43 *	5.0	0.9	14	EAST PAPUA NEW GUINEA REGION	
29	11 19 12.5	40.586 N	15.758 E	25	4.1	1.0	90	SOUTHERN ITALY. ML 4.5 (TTG). MD 4.3 (ATH).	
29	11 22 04.5%	38.444 N	26.574 E	10 G		0.9	7	AEGEAN SEA	
29	11 22 10.3&	59.776 N	153.440 W	127			27	SOUTHERN ALASKA. <AGS-P>.	
29	12 16 52.4%	38.306 N	26.543 E	10 G		1.5	6	AEGEAN SEA	
29	12 24 38.0	36.653 N	71.109 E	268 *	4.2	0.9	19	AFGHANISTAN-USSR BORDER REGION	
29	12 44 53.8*	38.520 S	176.024 E	33 N		1.0	10	NORTH ISLAND, NEW ZEALAND	
29	16 00 03.5*	56.623 N	156.885 W	33 N		1.0	5	ALASKA PENINSULA. ML 3.5 (PMR).	
29	17 16 55.0?	9.61 N	84.85 W	33 N		0.6	6	COSTA RICA. MD 3.5 (SJR). Felt in the Golfo de Nicoya area.	
29	17 17 08.0%	61.816 N	7.433 E	10 G		1.0	8	SOUTHERN NORWAY. MD 2.1 (BER).	
29	18 51 56.2?	31.67 S	69.67 W	166 ?		0.4	11	SAN JUAN PROVINCE, ARGENTINA	
29	19 06 14.1	49.164 N	6.951 E	10 G		1.1	11	GERMANY. MD 2.2 (UCC).	
29	19 38 01.1%	60.313 N	7.252 E	10 G		0.6	9	SOUTHERN NORWAY. MD 2.1 (BER).	
29	20 37 05.2?	33.93 N	140.42 E	33 N		0.8	6	SOUTH OF HONSHU, JAPAN	
29	20 44 16.7%	40.149 N	28.860 E	10 G		0.4	7	TURKEY	
29	21 49 19.4	15.788 N	89.948 W	24	5.0	1.0	80	GUATEMALA. Felt in the Coban area.	
a 29	22 07 11.8	10.204 S	161.395 E	86 D	5.6	1.0	182	SOLOMON ISLANDS	
a 29	22 22 30.7	23.897 S	70.337 W	32 D	5.5 4.9	1.1	213	NEAR COAST OF NORTHERN CHILE. Felt (V) at Antofagasta, (IV) at Calama and (II) at Taltai and Tocopilla.	
30	00 10 49.2	38.585 N	26.883 E	10 G		1.0	12	AEGEAN SEA. MD 3.6 (ATH).	
30	01 03 19.0?	10.55 N	60.57 W	33 N		0.7	5	TRINIDAD. MD 3.4 (TRN).	
30	05 59 32.5*	44.568 S	174.314 E	33 N	4.8	1.2	15	OFF E. COAST OF S. ISLAND, N.Z.	
30	06 28 07.9	43.225 N	0.410 W	19		1.2	56	PYRENEES. ML 4.5 (LDG). Felt (V) at Arudy and Castet, (III) at Tarbes and (II) at Pau, France.	
30	06 56 53.1	42.030 N	19.778 E	10 G		0.5	10	YUGOSLAVIA. MD 2.5 (TTG).	
30	06 58 36.7	42.033 N	19.755 E	11		0.4	11	YUGOSLAVIA. MD 2.9 (TTG).	
30	07 23 44.6	42.049 N	19.737 E	10 G		0.6	8	YUGOSLAVIA. MD 2.4 (TTG).	
30	07 25 40.2?	24.20 S	66.78 W	177 ?		0.6	7	SALTA PROVINCE, ARGENTINA	
30	08 45 03.9&	12.120 N	86.910 W	54 G			15	NICARAGUA. <HDC>. MD 4.2 (SJR).	
30	10 04 56.1	42.031 N	19.757 E	10 G		0.4	10	YUGOSLAVIA. MD 2.5 (TTG).	
30	10 41 42.1*	28.889 N	52.169 E	33 N	4.3	0.8	10	SOUTHERN IRAN	
30	11 28 20.8	19.924 S	175.537 W	217 D	5.0	1.1	80	TONGA ISLANDS	
30	12 23 28.2&	63.748 N	148.972 W	0			14	CENTRAL ALASKA. <AGS-P>. ML 3.1 (PMR).	
30	12 29 47.4	19.250 N	64.547 W	39	4.6 4.2	1.1	63	VIRGIN ISLANDS. Felt at San Juan, Cidra, Bayaman and Rio Grande, Puerto Rico.	
a 30	13 39 17.1	17.851 S	173.043 W	38 D	5.0 4.7	1.4	78	TONGA ISLANDS	
a 30	13 50 56.2	17.401 N	94.645 W	138 D	5.2	1.0	236	CHIAPAS, MEXICO. Felt at Juchitan, Oaxaca, Veracruz, Mexico City, Malpasos, Penitas, Tuxtla Gutierrez, Puebla and Villahermosa.	
30	13 52 50.1	21.272 S	174.091 W	33 N	5.1 5.1	1.2	69	TONGA ISLANDS	
30	15 07 58.5%	39.245 N	27.763 E	10 G		0.4	5	TURKEY	
30	16 50 45.9	6.469 S	147.765 E	49	5.2 4.6	1.1	61	EAST PAPUA NEW GUINEA REGION	
30	16 51 34.1*	37.089 N	59.788 E	10 G		1.3	5	IRAN-USSR BORDER REGION. ML 3.8 (TEH). Felt at Tarbat-e-Heydariyeh, Iran.	
30	17 08 28.9?	21.02 S	68.66 W	33 N		0.9	5	CHILE-BOLIVIA BORDER REGION	
30	17 17 44.5?	47.71 N	8.11 E	10 G		0.7	5	SWITZERLAND	
30	17 43 53.9?	41.74 N	12.58 E	10 G		0.5	4	SOUTHERN ITALY	
30	18 22 44.9	34.078 N	135.226 E	5 G		0.4	8	NEAR S. COAST OF SOUTHERN HONSHU. MG 3.6 (JMA). Felt (II JMA) at Wakayama.	
30	20 11 03.5%	46.537 N	2.124 E	10		0.8	9	FRANCE. ML 2.1 (LDG).	
30	20 13 06.9*	0.530 N	126.694 E	75 ?		0.9	9	MOLUCCA PASSAGE	
30	20 13 43.4	29.781 N	99.187 E	33 N	4.4	1.3	16	SICHUAN PROVINCE, CHINA	
30	20 16 28.6	42.038 N	19.758 E	10 G		0.1	6	YUGOSLAVIA. MD 2.0 (TTG).	
30	20 58 21.4?	37.20 N	28.63 E	10 G		0.8	4	TURKEY	
30	21 04 35.4&	62.493 N	151.232 W	84			31	CENTRAL ALASKA. <AGS-P>.	
30	21 20 45.6?	32.63 S	71.32 W	55 ?		0.4	9	NEAR COAST OF CENTRAL CHILE	
30	22 37 23.3*	39.661 N	20.974 E	10 G		1.0	6	GREECE-ALBANIA BORDER REGION. MD 3.2 (ATH).	
30	23 15 50.3	40.426 N	63.390 E	33 N	4.7	0.8	32	UZBEK SSR. Felt (III) at Gazli.	
30	23 16 57.8%	59.935 N	6.299 E	10 G		1.6	7	SOUTHERN NORWAY. MD 1.5 (BER).	
31	00 46 40.5&	58.961 N	154.362 W	135	3.6		49	ALASKA PENINSULA. <AGS-P>.	
31	01 14 13.8*	15.355 S	177.295 W	380 *	5.0	1.2	22	FIJI ISLANDS REGION	
31	02 56 17.3	38.115 N	20.629 E	16		1.1	14	GREECE. ML 3.6 (ATH).	
31	03 24 26.9&	59.799 N	152.357 W	59			25	SOUTHERN ALASKA. <AGS-P>.	
31	04 04 06.2?	50.33 N	18.98 E	10 G		0.5	4	POLAND. ML 3.0 (KRA).	
31	04 15 14.8	6.804 N	73.023 W	172 D	5.1	0.8	85	NORTHERN COLOMBIA	
31	04 41 42.6*	36.386 N	35.531 E	33 N		1.3	9	TURKEY	
31	05 49 56.6&	59.947 N	152.509 W	72			26	SOUTHERN ALASKA. <AGS-P>.	
f 31	05 54 20.5	45.383 S	167.086 E	23 G	5.8 6.3	1.2	278	SOUTH ISLAND, NEW ZEALAND. Ms 6.5 (BRK). Mo=6.0*10**18 Nm (PPT). Felt strongly in the southwestern part of South Island. Also felt at Wellington. Depth from broadband displacement seismograms.	
31	06 05 27.7&	61.329 N	152.220 W	123			24	SOUTHERN ALASKA. <AGS-P>.	
31	06 41 07.5?	40.08 N	29.37 E	10 G		0.2	4	TURKEY	
31	08 10 33.2?	37.83 N	15.05 E	10 G		0.1	4	SICILY	
31	09 36 07.5%	39.124 N	27.622 E	10 G		0.4	5	TURKEY	
31	09 52 46.1*	42.778 N	12.657 E	10 G		0.1	5	CENTRAL ITALY. MD 2.4 (SSO).	
31	10 00 02.5*	31.190 S	68.829 W	10 G		0.9	10	SAN JUAN PROVINCE, ARGENTINA. Felt slightly.	

31	10 01 07.3%	37.743 N	29.172 E	10 G	0.5	5	TURKEY
31	10 03 41.0?	42.71 N	19.10 E	10 G	0.4	4	YUGOSLAVIA. MD 2.1 (TTG).
31	10 31 01.2?	41.61 N	12.53 E	10 G	0.3	6	SOUTHERN ITALY
31	10 38 04.7	18.177 S	168.044 E	55 *	4.9 4.3	1.1	40 VANUATU ISLANDS
31	11 54 53.0*	32.877 S	71.229 W	57 ?	0.3	10	NEAR COAST OF CENTRAL CHILE
31	12 14 59.0	34.719 N	32.237 E	16	0.9	12	CYPRUS. ML 3.5 (CSS). Felt (IV) in the Paphos area.
31	12 24 28.7&	60.501 N	152.301 W	93		27	SOUTHERN ALASKA. <AGS-P>.
31	12 46 57.4&	47.952 N	121.894 W	18		30	WASHINGTON. <SEA>. CL 2.6 (SEA). Felt at Granite Falls.
a 31	14 20 24.1	3.006 S	142.078 E	33 N	5.2 4.5	1.1	67 NEAR N COAST OF PAPUA NEW GUINEA
31	16 18 08.2	44.490 N	7.313 E	10 G	0.4	9	NORTHERN ITALY. ML 2.0 (GEN).
31	16 25 03.1?	44.45 N	7.26 E	10 G	0.1	4	NORTHERN ITALY. ML 1.7 (GEN).
31	16 51 05.0	27.998 S	66.601 W	168	4.5	1.4	42 CATAMARCA PROVINCE, ARGENTINA
31	17 12 07.3?	34.14 N	135.26 E	10 G	0.3	4	NEAR S. COAST OF SOUTHERN HONSHU. MG 1.9 (JMA). Felt (I JMA) at Wakayama.
31	17 24 48.3*	22.666 N	94.372 E	106 *	4.2	1.4	13 BURMA
31	17 30 47.2?	41.76 N	12.73 E	10 G	0.2	4	SOUTHERN ITALY
a 31	19 10 37.0	6.512 S	147.817 E	43	5.2 4.8	1.0	62 EAST PAPUA NEW GUINEA REGION
31	20 53 18.8?	44.18 N	12.31 E	10 G	0.3	4	NORTHERN ITALY
31	22 33 42.9*	6.689 S	147.747 E	60 ?	4.5 4.0	1.4	10 EAST PAPUA NEW GUINEA REGION
31	23 43 24.2	39.620 N	27.795 E	9		1.0	40 TURKEY

### ADDITIONAL SOURCE PARAMETERS

01 08 45 21.60 4.200S 101.366E 31km  
5.6mb ( 42 obs.) 5.6Msz ( 28 obs.)  
SOUTHERN SUMATERA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 35C  
Centroid Location:

T Val= 1.91 Plg=17 Azm=271  
N -0.40 16 6  
P -1.51 67 137  
Best Double Couple: Mo=1.7\*10\*\*17  
NP1: Strike=339 Dip=31 Slip=-121  
NP2: 194 64 -73

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

RADIATED ENERGY

```

Origin Time      08:45:22.0 0.6
Lat  4.98S 0.05 Lon 101.01E 0.05
Dep  23.1 2.8 Half-duration 3.0
Principal Axes:
  Scale 10**17 Nm
    T Val= 3.67 P1g=65 Azm= 9
    N      0.80      3      106
    P     -4.46     25     197
Best Double Couple: Mo=4.1*10**17
NP1: Strike=294 Dip=21 Slip= 99
NP2:      105      70      87

```

03 05 53 01.17 30.091N 99.475E 14km  
6.1mb ( 77 obs.) 6.1msz ( 15 obs.)  
SICHUAN PROVINCE, CHINA  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=111 Dip=75 Slip= -38  
NP2: 212 54 -161

```

RADIAL TENSOR ENERGY
NA of sta:      8   Focal mech.  F
Energy          0.4±0.1±10**14 Nm
MOMENT TENSOR SOLUTION
Dep            6      No. of sta:  6
Principal Axes:
Scale 10**17 Nm
T Val=  6.61   Plg=  8   Azm=350
N       -2.38      48    251
P       -4.23      41    87

```

Best Double Couple:  $M_0 = 5.4 \times 10^{17}$   
NP1: Strike=120 Dip=56 Slip= -27

```

02 06 27 28.26 45.060N 28.141W 10km
5.2mb ( 50 obs.) 5.6Msz ( 10 obs.)
NORTH ATLANTIC RIDGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 26C
Centroid Location:
Origin Time 06:27:31.2 0.5
Lat 44.54N 0.10 Lon 28.12W 0.04
Dep 15.0 FIX Half-duration 2.4
Principal Axes:
Scale 10**17 Nm
T Val= 2.02 P1g= 0 Azm= 90
N -0.05 0 180
P -1.97 90 180
Best Double Couple: Mo=2.0*10**17
NP1: Strike=180 Dip=45 Slip= -90
NP2: 0 45 -90

```

corresponds to strike-slip faulting with a large normal component. The preferred fault plane is not determined.

RADIATED ENERGY  
No. of sta: 10 Focal mech. C  
Energy  $0.5 \pm 0.1 \times 10^{+14}$  Nm

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 33C M.W.: 14S, 24C

Centroid Location:  
Origin Time 05:53:12.2 0.1  
Lat 30.00N 0.02 Lon 99.69E 0.03

Dep 15.0 FIX Half-duration 5.0  
Principal Axes:  
Scale 10\*\*18 Nm

T	Val=	2.30	Plg=	4	Azm=	169
N		-0.15		18		260
P		-2.15		71		67

```

02 09 38 15.52 16.747N 99.343W 10km
5.4mb ( 57 obs.) 4.9msz ( 4 obs.)
NEAR COAST OF GUERRERO, MEXICO
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 30C
Centroid Location:
Origin Time 09:38:17.6 0.5
Lat 16.82N FIX; Lon 99.35W FIX
Dep 47.9 5.7 Half-duration 2.8
Principal Axes:
Scale 10**17 Nm
T Vol= 1.57 Plg=52 Azm= 94
N 0.68 32 311
P -2.25 18 209
Best Double Couple: Mo=1.9*10**17
NP1: Strike=260 Dip=39 Slip= 33
NP2: 144 70 124

```

NP1: Strike=240 Dip=44 Slip=-117  
NP2: 95 52 -66

03 09 13 24.23 29.964N 51.655E 33km  
5.1mb ( 12 abs.)  
SOUTHERN IRAN

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 25C

Centroid Location:  
Origin Time 09:13:20.4 1.4  
Lat 29.64N 0.16 Lon 51.42E 0.15

Dep 15.0 FIX Half-duration 1.7  
Principal Axes:  
Scale 10\*\*16 Nm

```

T  Val=  8.42  Plg=15  Azm=108
N      -0.02    53      219
P      -8.40    33       8

```

```

02 09 30 58.97 44.968N 28.025W 10km
5.0mb ( 57 obs.) 5.5msz ( 11 obs.)
NORTH ATLANTIC RIDGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 22C
Centroid Location:
Origin Time 09:31: 3.1 0.5
Lat 44.75N 0.09 Lon 27.82W 0.09
Dep 15.0 FIX Half-duration 1.8
Principal Axes:
Scale 10**17 Nm

```

NP1: Strike=153 Dip=55 Slip=-166  
NP2: 55 78 -36

03 15 41 30.88 30.053N 99.499E 8km  
5.8mb ( 84 obs.) 5.9Msz ( 14 obs.)  
SICHUAN PROVINCE, CHINA

FAULT PLANE SOLUTION: P-Waves  
NP1: Strike=111 Dip=68 Slip= -31  
NP2:       214       61       -155

Principal Axes:

T	Plg= 4	Azm=164
P	37	70

03 18 44 54.26 6.955N 94.592E 33km  
4.9mb ( 31 obs.) 4.8Msz ( 2 obs.)  
NICOBAR ISLANDS REGION

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 25C

Centroid Location:  
Origin Time 18:44:58.1 1.0  
Lot 6.90N 0.11 Lon 95.13E 0.12

Dep 33.0 FIX Half-duration 1.6  
Principal Axes:  
Scale 10\*\*16 Nm

T	Vol=	6.43	P1g=26	Azm=274
N		-0.52	49	149
P		-5.91	29	20

Best Double Couple: Mo=6.2\*10\*\*16  
NP1: Strike= 56 Dip=49 Slip= -2  
NP2: 148 89 -139

04 00 22 06.74 11.03BN 68.270W 16km  
5.4mb ( 62 obs.) 5.2Msz ( 9 obs.)  
NEAR COAST OF VENEZUELA

NEAR COAST OF VENEZUELA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 18S. 33C

Centroid Location:  
Origin Time 00:22:11.9 0.8  
Lat 10.96N 0.07 Lon 68.42W 0.06

Dep 15.0 FIX Half-duration 2.1  
Principal Axes:  
Scale 10\*\*17 Nm

T	Vol=	2.30	Plg=22	Azm=104
N		-0.34	51	224
P		-1.96	30	0

Best Double Couple: Mo=2.1\*10\*\*17  
 NP1: Strike=145 Dip=51 Slip=-174  
 NP2: 51 85 -39

04 03 37 39.20 40.537N 127.437W 5km  
 5.0mb ( 33 obs.) 4.1MsZ ( 1 obs.)  
 OFF COAST OF NORTHERN CALIFORNIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 23C  
 Centroid Location:  
 Origin Time 03:37:45.4 1.0  
 Lat 40.46N 0.12 Lon 127.72W 0.11  
 Dep 15.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 4.14 Plg= 0 Azm=237  
 N -0.22 0 147  
 P -3.92 90 180  
 Best Double Couple: Mo=4.0\*10\*\*16  
 NP1: Strike=327 Dip=45 Slip=-90  
 NP2: 147 45 -90

04 10 30 06.96 6.609S 75.760W 33km  
 5.5mb ( 64 obs.) 5.1MsZ ( 4 obs.)  
 NORTHERN PERU  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 24C  
 Centroid Location:  
 Origin Time 10:30:13.4 0.5  
 Lat 6.31S 0.08 Lon 76.18W 0.10  
 Dep 36.3 5.5 Half-duration 1.4  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 5.92 Plg=72 Azm=287  
 N 0.16 13 150  
 P -6.08 12 57  
 Best Double Couple: Mo=6.0\*10\*\*16  
 NP1: Strike=130 Dip=35 Slip= 66  
 NP2: 338 58 106

04 13 15 08.06 21.963S 179.305W 591km  
 5.4mb ( 49 obs.)  
 FIJI ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 19S, 41C  
 Centroid Location:  
 Origin Time 13:15:14.9 0.4  
 Lat 21.96S 0.03 Lon 179.34W 0.03  
 Dep 616.4 1.4 Half-duration 2.8  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 4.21 Plg=68 Azm=169  
 N 0.59 15 38  
 P -4.81 16 303  
 Best Double Couple: Mo=4.5\*10\*\*17  
 NP1: Strike= 12 Dip=32 Slip= 60  
 NP2: 226 63 107

04 18 32 55.69 13.039S 76.195W 72km  
 5.3mb ( 19 obs.)  
 NEAR COAST OF PERU  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 26C  
 Centroid Location:  
 Origin Time 18:33: 2.3 0.5  
 Lat 12.84S 0.06 Lon 76.20W 0.09  
 Dep 84.0 6.2 Half-duration 1.4  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 5.88 Plg=65 Azm=239  
 N -0.92 5 339  
 P -4.96 24 71  
 Best Double Couple: Mo=5.4\*10\*\*16  
 NP1: Strike=172 Dip=21 Slip= 103  
 NP2: 337 70 85

05 18 28 39.45 8.281S 71.381W 593km  
 6.4mb ( 71 obs.)  
 WESTERN BRAZIL  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike=145 Dip=60 Slip=-103  
 NP2: 350 32 -69  
 Principal Axes:  
 T Plg=14 Azm=244  
 P 72 24  
 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with a small right-lateral

strike-slip component. The preferred fault plane is NP1.  
 RADIATED ENERGY  
 No. of sta: 7 Focal mech. M  
 Energy 0.9±0.3\*10\*\*15 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 597 No. of sta: 12  
 Principal Axes:  
 Scale 10\*\*19 Nm  
 T Val= 3.93 Plg= 8 Azm=235  
 N 0.00 5 326  
 P -3.94 81 88  
 Best Double Couple: Mo=3.9\*10\*\*19  
 NP1: Strike=319 Dip=37 Slip=-98  
 NP2: 149 53 -84  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 24S, 63C M.W.: 15S, 35C  
 Centroid Location:  
 Origin Time 18:28:49.4 0.1  
 Lat 8.05S 0.01 Lon 71.49W 0.01  
 Dep 606.0 0.7 Half-duration 12.0  
 Principal Axes:  
 Scale 10\*\*19 Nm  
 T Val= 4.58 Plg=15 Azm=249  
 N 0.42 3 158  
 P -5.00 75 57  
 Best Double Couple: Mo=4.8\*10\*\*19  
 NP1: Strike=344 Dip=31 Slip=-84  
 NP2: 157 60 -93

07 00 38 18.53 23.553N 99.526E 33km  
 5.3mb ( 67 obs.) 5.6MsZ ( 10 obs.)  
 BURMA-CHINA BORDER REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 29C  
 Centroid Location:  
 Origin Time 00:38:20.3 0.4  
 Lat 23.46N 0.04 Lon 99.65E 0.06  
 Dep 15.0 FIX Half-duration 2.5  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 3.26 Plg=18 Azm=292  
 N 0.13 72 103  
 P -3.39 3 201  
 Best Double Couple: Mo=3.3\*10\*\*17  
 NP1: Strike=335 Dip=76 Slip= 169  
 NP2: 68 79 15

08 03 36 38.45 18.891S 178.845W 531km  
 5.4mb ( 44 obs.)  
 FIJI ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 27C  
 Centroid Location:  
 Origin Time 03:36:45.6 0.6  
 Lat 18.72S 0.07 Lon 179.37W 0.05  
 Dep 516.8 3.3 Half-duration 2.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.66 Plg= 5 Azm=203  
 N -0.19 73 95  
 P -2.47 16 294  
 Best Double Couple: Mo=2.6\*10\*\*17  
 NP1: Strike=337 Dip=75 Slip=-8  
 NP2: 69 82 -165

08 06 20 02.09 0.019N 126.696E 76km  
 5.1mb ( 13 obs.)  
 MOLUCCA PASSAGE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 24C  
 Centroid Location:  
 Origin Time 06:20: 3.2 0.6  
 Lat 0.04S 0.07 Lon 126.09E 0.06  
 Dep 33.0 FIX Half-duration 1.9  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.49 Plg=61 Azm= 93  
 N 0.26 1 0  
 P -1.75 28 269  
 Best Double Couple: Mo=1.6\*10\*\*17  
 NP1: Strike=355 Dip=17 Slip= 85  
 NP2: 181 73 92

08 14 28 30.99 23.427S 179.953W 548km  
 5.6mb ( 41 obs.)  
 SOUTH OF FIJI ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN

L.P.B.: 19S, 49C  
 Centroid Location:  
 Origin Time 14:28:39.3 0.2  
 Lat 23.62S 0.02 Lon 180.01E 0.02  
 Dep 558.1 1.1 Half-duration 5.1  
 Principal Axes:  
 Scale 10\*\*18 Nm  
 T Val= 2.93 Plg=63 Azm=137  
 N -0.03 0 228  
 P -2.90 27 318  
 Best Double Couple: Mo=2.9\*10\*\*18  
 NP1: Strike= 49 Dip=18 Slip= 91  
 NP2: 228 72 90

08 23 18 43.61 32.282N 137.626E 390km  
 5.1mb ( 65 obs.)  
 SOUTH OF HONSHU, JAPAN  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 11S, 22C  
 Centroid Location:  
 Origin Time 23:18:46.5 0.5  
 Lat 32.12N 0.04 Lon 137.46E 0.09  
 Dep 381.3 2.9 Half-duration 1.9  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.48 Plg=39 Azm= 97  
 N -0.01 4 4  
 P -1.48 51 269  
 Best Double Couple: Mo=1.5\*10\*\*17  
 NP1: Strike=218 Dip= 7 Slip=-55  
 NP2: 3 84 -94

09 02 30 37.86 28.071N 16.156W 23km  
 5.2mb ( 51 obs.) 4.6MsZ ( 1 obs.)  
 CANARY ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 13S, 19C  
 Centroid Location:  
 Origin Time 02:30:32.2 1.3  
 Lat 28.03N FIX; Lon 16.17W FIX  
 Dep 15.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 4.53 Plg=60 Azm= 91  
 N -0.91 24 312  
 P -3.62 18 214  
 Best Double Couple: Mo=4.1\*10\*\*16  
 NP1: Strike=273 Dip=34 Slip= 45  
 NP2: 143 67 116

09 15 34 09.65 52.991S 159.386E 10km  
 5.3mb ( 12 obs.) 4.8MsZ ( 1 obs.)  
 MACQUARIE ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 33C  
 Centroid Location:  
 Origin Time 15:34:16.7 0.4  
 Lat 52.94S FIX; Lon 158.73E FIX  
 Dep 15.0 FIX Half-duration 2.1  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.94 Plg= 1 Azm=167  
 N -0.07 75 259  
 P -1.87 15 77  
 Best Double Couple: Mo=1.9\*10\*\*17  
 NP1: Strike=213 Dip=79 Slip=-170  
 NP2: 121 80 -11

10 01 06 49.67 22.146S 69.303E 10km  
 5.2mb ( 29 obs.) 5.1MsZ ( 4 obs.)  
 MID-INDIAN RISE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 13S, 19C  
 Centroid Location:  
 Origin Time 01:06:53.5 0.7  
 Lat 22.23S FIX; Lon 69.27E FIX  
 Dep 15.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 6.91 Plg= 0 Azm=238  
 N -2.54 0 148  
 P -4.37 90 180  
 Best Double Couple: Mo=5.6\*10\*\*16  
 NP1: Strike=328 Dip=45 Slip=-90  
 NP2: 148 45 -90

12 22 25 25.87 12.952N 87.947W 57km  
 5.4mb ( 7 obs.)  
 NEAR COAST OF NICARAGUA

CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 29C  
 Centroid Location:  
 Origin Time 22:25:30.9 0.5  
 Lat 12.89N FIX; Lon 87.78W FIX  
 Dep 63.3 4.8 Half-duration 1.7  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 11.02 Plg=55 Azm= 62  
 N 0.16 27 283  
 P -11.18 20 183  
 Best Double Couple:Ma=1.1\*10\*\*17  
 NP1:Strike=236 Dip=35 Slip= 37  
 NP2: 114 70 119

13 03 35 02.85 50.103N 105.360E 36km  
 5.6mb ( 73 obs.) 5.6Msz ( 13 obs.)  
 USSR-MONGOLIA BORDER REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 34C  
 Centroid Location:  
 Origin Time 03:35: 4.3 0.4  
 Lat 50.32N 0.05 Lon 105.93E 0.09  
 Dep 15.0 FIX Half-duration 2.7  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 3.95 Plg=10 Azm=162  
 N -0.70 69 278  
 P -3.24 19 69  
 Best Double Couple:Ma=3.6\*10\*\*17  
 NP1:Strike=206 Dip=70 Slip=-174  
 NP2: 114 84 -20

13 12 15 04.17 18.983N 107.519W 33km  
 4.9mb ( 16 obs.) 4.9Msz ( 1 abs.)  
 OFF COAST OF JALISCO, MEXICO  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 28C  
 Centroid Location:  
 Origin Time 12:15: 6.0 0.8  
 Lat 19.25N 0.10 Lon 108.24W 0.09  
 Dep 15.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 7.42 Plg=16 Azm= 62  
 N -0.26 69 284  
 P -7.16 13 156  
 Best Double Couple:Ma=7.3\*10\*\*16  
 NP1:Strike=199 Dip=69 Slip= 2  
 NP2: 109 88 159

13 23 19 41.82 35.220N 91.575E 33km  
 4.9mb ( 20 obs.) 4.9Msz ( 3 obs.)  
 QINGHAI PROVINCE, CHINA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 13S, 24C  
 Centroid Location:  
 Origin Time 23:19:47.8 0.6  
 Lat 35.69N 0.06 Lon 91.65E 0.07  
 Dep 15.0 FIX Half-duration 1.8  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 9.63 Plg=18 Azm=110  
 N 0.89 66 333  
 P -10.52 15 205  
 Best Double Couple:Ma=1.0\*10\*\*17  
 NP1:Strike=248 Dip=66 Slip= 2  
 NP2: 157 88 156

14 00 59 50.45 30.523S 178.414W 44km  
 5.9mb ( 44 obs.) 6.6Msz ( 21 obs.)  
 KERMADEC ISLANDS  
 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 0.4±0.1\*10\*\*14 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 32 No. of sta: 15  
 Principal Axes:

Scale 10\*\*19 Nm  
 T Val= 1.82 Plg=60 Azm=281  
 N 0.21 5 183  
 P -2.04 29 90  
 Best Double Couple:Ma=1.9\*10\*\*19  
 NP1:Strike=167 Dip=16 Slip= 73  
 NP2: 4 75 95

CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 41C M.W.: 10S, 23C  
 Centroid Location:  
 Origin Time 01:00: 2.0 0.2  
 Lat 30.84S 0.01 Lon 177.87W 0.01  
 Dep 44.2 0.7 Half-duration 10.5  
 Principal Axes:  
 Scale 10\*\*19 Nm  
 T Val= 2.49 Plg=73 Azm=266  
 N 0.00 5 12  
 P -2.50 16 104  
 Best Double Couple:Ma=2.5\*10\*\*19  
 NP1:Strike=201 Dip=29 Slip= 100  
 NP2: 9 61 84

GEOSCOPE MOMENT TENSOR (PAR)  
 Dep 50.0 Half-duration 11.0  
 Best Double Couple:Ma=3.8\*10\*\*19  
 NP1:Strike=221 Dip=65 Slip= 106  
 NP2: 6 29 59

14 09 10 25.37 2.922S 127.669E 33km  
 5.4mb ( 24 obs.) 4.7Msz ( 7 obs.)  
 CERAM SEA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 25C  
 Centroid Location:  
 Origin Time 09:10:29.0 0.6  
 Lat 2.83S 0.08 Lon 127.65E 0.07  
 Dep 21.3 7.8 Half-duration 2.2  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.43 Plg= 3 Azm=341  
 N 0.17 82 96  
 P -2.60 7 251  
 Best Double Couple:Ma=2.5\*10\*\*17  
 NP1:Strike= 26 Dip=83 Slip=-177  
 NP2: 296 87 -7

14 09 40 46.57 13.733S 66.248E 10km  
 5.2mb ( 41 obs.) 5.6Msz ( 17 obs.)  
 MID-INDIAN RISE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 20S, 44C  
 Centroid Location:  
 Origin Time 09:40:54.7 0.3  
 Lat 13.45S 0.04 Lon 66.06E 0.03  
 Dep 15.0 FIX Half-duration 3.4  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 10.77 Plg=13 Azm= 98  
 N -2.35 72 237  
 P -8.42 11 6  
 Best Double Couple:Ma=9.6\*10\*\*17  
 NP1:Strike=142 Dip=72 Slip= 179  
 NP2: 232 89 18

14 17 05 05.14 7.439S 128.048E 112km  
 5.3mb ( 15 obs.)  
 BANDA SEA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 28C  
 Centroid Location:  
 Origin Time 17:05: 8.7 1.3  
 Lat 7.80S 0.12 Lon 127.97E 0.09  
 Dep 144.0 2.7 Half-duration 1.7  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 10.36 Plg=55 Azm=219  
 N -1.38 27 82  
 P -8.98 20 342  
 Best Double Couple:Ma=9.7\*10\*\*16  
 NP1:Strike= 34 Dip=34 Slip= 37  
 NP2: 273 70 119

14 22 53 36.25 52.671N 35.037W 10km  
 5.0mb ( 50 obs.) 5.4Msz ( 7 obs.)  
 NORTH ATLANTIC OCEAN  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 38C  
 Centroid Location:  
 Origin Time 22:53:41.3 0.6

Lat 52.46N 0.05 Lon 34.60W 0.06  
 Dep 15.0 FIX Half-duration 2.6  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 3.90 Plg= 0 Azm=229  
 N -0.87 90 180  
 P -3.03 0 139  
 Best Double Couple:Ma=3.5\*10\*\*17  
 NP1:Strike=274 Dip=90 Slip= 180  
 NP2: 4 90 0

15 18 05 38.29 24.087N 122.278E 47km  
 5.2mb ( 41 obs.)  
 TAIWAN REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 9S, 15C  
 Centroid Location:  
 Origin Time 18:05:38.9 0.8  
 Lat 23.93N 0.07 Lon 122.25E 0.18  
 Dep 69.7 6.4 Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 5.68 Plg=57 Azm=316  
 N 1.72 33 129  
 P -7.39 3 221  
 Best Double Couple:Ma=6.5\*10\*\*16  
 NP1:Strike=341 Dip=51 Slip= 134  
 NP2: 103 56 49

15 18 16 16.87 1.550N 127.268E 106km  
 5.5mb ( 28 obs.)  
 HALMAHERA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 28C  
 Centroid Location:  
 Origin Time 18:16:16.9 0.8  
 Lat 1.75N 0.08 Lon 127.24E 0.08  
 Dep 80.9 4.9 Half-duration 1.8  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 10.92 Plg=60 Azm=215  
 N -0.54 30 39  
 P -10.38 2 308  
 Best Double Couple:Ma=1.1\*10\*\*17  
 NP1:Strike= 11 Dip=51 Slip= 50  
 NP2: 244 54 128

15 19 24 26.35 43.212N 147.879E 33km  
 5.2mb ( 62 obs.) 4.9Msz ( 4 obs.)  
 KURIL ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 25C  
 Centroid Location:  
 Origin Time 19:24:31.5 0.7  
 Lat 43.54N 0.10 Lon 147.46E 0.18  
 Dep 15.0 FIX Half-duration 1.4  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 8.24 Plg=57 Azm=292  
 N -1.00 8 34  
 P -7.24 32 129  
 Best Double Couple:Ma=7.7\*10\*\*16  
 NP1:Strike=243 Dip=15 Slip= 120  
 NP2: 32 77 82

15 21 23 51.46 45.472N 151.693E 33km  
 5.3mb ( 47 obs.) 4.9Msz ( 12 obs.)  
 KURIL ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 28C  
 Centroid Location:  
 Origin Time 21:23:53.4 0.6  
 Lat 45.63N 0.08 Lon 152.26E 0.13  
 Dep 15.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 9.06 Plg=70 Azm=270  
 N 0.38 12 36  
 P -9.44 16 130  
 Best Double Couple:Ma=9.3\*10\*\*16  
 NP1:Strike=237 Dip=31 Slip= 114  
 NP2: 30 62 76

15 23 34 33.65 9.803S 159.531E 24km  
 5.9mb ( 48 obs.) 5.9Msz ( 21 obs.)  
 SOLOMON ISLANDS  
 FAULT PLANE SOLUTION: P-Waves  
 NP1:Strike= 95 Dip=85 Slip= 16  
 NP2: 4 74 175

Principal Axes:  
 T Plg=15 Azm=320  
 P 8 228  
 Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a moderate reverse component. The preferred fault plane is not determined.

RADIATED ENERGY  
 No. of sta: 8 Focal mech. M  
 Energy  $0.1 \pm 0.0 \times 10^{+15}$  Nm

MOMENT TENSOR SOLUTION  
 Dep 9 No. of sta: 11  
 Principal Axes:  
 Scale  $10^{+18}$  Nm  
 T Val= 1.61 Plg=27 Azm=307  
 N 0.03 33 56  
 P -1.65 46 186  
 Best Double Couple: Ma=1.6\*10<sup>+18</sup>  
 NP1: Strike=349 Dip=35 Slip=-161  
 NP2: 243 79 -57

CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 38C  
 Centroid Location:  
 Origin Time 23:34:40.3 0.3  
 Lat 9.94S 0.03 Lon 159.56E 0.04  
 Dep 28.1 2.5 Half-duration 3.3  
 Principal Axes:  
 Scale  $10^{+17}$  Nm  
 T Val= 7.45 Plg=27 Azm=332  
 N 1.93 29 79  
 P -9.38 48 207  
 Best Double Couple: Ma=8.4\*10<sup>+17</sup>  
 NP1: Strike= 15 Dip=32 Slip=-158  
 NP2: 266 79 -60

16 12 21 10.74 43.555N 127.632W 10km  
 5.3mb ( 54 abs.) 5.3Msz ( 11 abs.)  
 OFF COAST OF OREGON  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 30C  
 Centroid Location:  
 Origin Time 12:21:13.4 0.6  
 Lat 43.38N 0.07 Lon 128.12W 0.05  
 Dep 15.0 FIX Half-duration 2.4  
 Principal Axes:  
 Scale  $10^{+17}$  Nm  
 T Val= 2.44 Plg= 2 Azm=248  
 N 0.35 71 343  
 P -2.80 18 158  
 Best Double Couple: Ma=2.6\*10<sup>+17</sup>  
 NP1: Strike=295 Dip=76 Slip=-168  
 NP2: 202 78 -14

16 16 01 00.45 45.394N 151.772E 33km  
 5.5mb ( 54 abs.) 4.9Msz ( 7 abs.)  
 KURIL ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 24C  
 Centroid Location:  
 Origin Time 16:01: 4.4 1.1  
 Lat 45.73N 0.07 Lon 152.24E 0.11  
 Dep 33.3 4.8 Half-duration 1.6  
 Principal Axes:  
 Scale  $10^{+16}$  Nm  
 T Val= 6.89 Plg=78 Azm=293  
 N 2.46 3 36  
 P -9.35 11 126  
 Best Double Couple: Ma=8.1\*10<sup>+16</sup>  
 NP1: Strike=220 Dip=34 Slip= 95  
 NP2: 34 56 87

16 17 22 52.97 56.329S 139.125W 10km  
 5.8mb ( 7 abs.) 5.8Msz ( 5 abs.)  
 SOUTH PACIFIC CORDILLERA  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike= 10 Dip=65 Slip=-179  
 NP2: 280 89 -25  
 Principal Axes:  
 T Plg=17 Azm=328  
 P 18 232  
 Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a moderate normal component. The preferred fault plane is not determined.

CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 39C  
 Centroid Location:  
 Origin Time 17:23: 0.9 0.2  
 Lat 56.48S 0.03 Lon 138.91W 0.05  
 Dep 15.0 FIX Half-duration 3.4  
 Principal Axes:  
 Scale  $10^{+17}$  Nm  
 T Val= 6.96 Plg= 2 Azm=335  
 N 2.67 70 71  
 P -9.63 20 244  
 Best Double Couple: Ma=8.3\*10<sup>+17</sup>  
 NP1: Strike= 21 Dip=74 Slip=-167  
 NP2: 288 78 -16

17 05 04 35.94 57.086N 122.018E 31km  
 5.6mb ( 85 abs.) 5.9Msz ( 19 abs.)  
 EASTERN USSR  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 34C  
 Centroid Location:  
 Origin Time 05:04:39.8 0.2  
 Lat 57.07N 0.03 Lon 122.03E 0.06  
 Dep 29.0 FIX Half-duration 3.5  
 Principal Axes:  
 Scale  $10^{+17}$  Nm  
 T Val= 9.05 Plg=19 Azm=334  
 N 1.86 45 83  
 P -10.91 39 228  
 Best Double Couple: Ma=1.0\*10<sup>+18</sup>  
 NP1: Strike= 18 Dip=48 Slip=-163  
 NP2: 277 77 -43

17 15 31 42.50 8.660S 109.294W 10km  
 4.9mb ( 6 abs.) 5.0Msz ( 1 abs.)  
 NORTHERN EASTER I. CORDILLERA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 13S, 22C  
 Centroid Location:  
 Origin Time 15:31:43.7 1.2  
 Lat 9.16S 0.08 Lon 109.38W 0.09  
 Dep 15.2 FIX Half-duration 1.6  
 Principal Axes:  
 Scale  $10^{+16}$  Nm  
 T Val= 8.31 Plg= 0 Azm=139  
 N -1.92 90 180  
 P -6.39 0 49  
 Best Double Couple: Ma=7.4\*10<sup>+16</sup>  
 NP1: Strike=184 Dip=90 Slip= 180  
 NP2: 274 90 0

17 16 12 54.51 62.104S 154.634E 10km  
 5.0mb ( 5 abs.) 5.3Msz ( 4 abs.)  
 BALLENY ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 13S, 29C  
 Centroid Location:  
 Origin Time 16:13: 1.8 0.3  
 Lat 62.34S FIX; Lon 153.74E FIX  
 Dep 15.0 FIX Half-duration 2.8  
 Principal Axes:  
 Scale  $10^{+17}$  Nm  
 T Val= 4.48 Plg= 2 Azm=199  
 N -0.29 86 79  
 P -4.19 3 289  
 Best Double Couple: Ma=4.3\*10<sup>+17</sup>  
 NP1: Strike=334 Dip=86 Slip= -1  
 NP2: 64 89 -176

17 18 16 14.62 7.825N 127.025E 48km  
 4.9mb ( 6 abs.) 4.0Msz ( 1 abs.)  
 PHILIPPINE ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 11S, 17C  
 Centroid Location:  
 Origin Time 18:16:10.6 0.8  
 Lat 8.21N 0.12 Lon 125.88E 0.16  
 Dep 15.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale  $10^{+17}$  Nm  
 T Val= 1.36 Plg=38 Azm=302  
 N -0.12 33 181  
 P -1.25 35 65  
 Best Double Couple: Ma=1.3\*10<sup>+17</sup>  
 NP1: Strike= 96 Dip=33 Slip= 4  
 NP2: 3 88 123

18 22 00 39.63 17.852N 147.009E 56km  
 5.5mb ( 33 abs.) 5.1Msz ( 17 abs.)  
 MARIANA ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 30C  
 Centroid Location:  
 Origin Time 22:00:41.1 0.3  
 Lat 17.89N 0.04 Lon 147.34E 0.03  
 Dep 15.0 BDY Half-duration 2.2  
 Principal Axes:  
 Scale  $10^{+17}$  Nm  
 T Val= 2.31 Plg=76 Azm=250  
 N 0.60 5 1  
 P -2.91 13 93  
 Best Double Couple: Ma=2.6\*10<sup>+17</sup>  
 NP1: Strike=190 Dip=32 Slip= 100  
 NP2: 358 58 84

19 02 21 56.38 54.305N 165.574W 104km  
 6.1mb (100 abs.)  
 FOX ISLANDS, ALEUTIAN ISLANDS  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike= 65 Dip=83 Slip= -83  
 NP2: 200 10 -135  
 Principal Axes:  
 T Plg=38 Azm=149  
 P 52 343  
 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with a small right-lateral strike-slip component. The preferred fault plane is NP1.

RADIATED ENERGY  
 No. of sta: 8 Focal mech. C  
 Energy  $0.2 \pm 0.1 \times 10^{+14}$  Nm

MOMENT TENSOR SOLUTION  
 Dep 106 No. of sta: 18  
 Principal Axes:  
 Scale  $10^{+18}$  Nm  
 T Val= 3.05 Plg=41 Azm=149  
 N -0.59 2 58  
 P -2.46 49 326  
 Best Double Couple: Ma=2.8\*10<sup>+18</sup>  
 NP1: Strike=263 Dip= 4 Slip= -65  
 NP2: 58 86 -92

CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 44C M.W.: 11S, 16C  
 Centroid Location:  
 Origin Time 02:22: 1.0 0.1  
 Lat 54.25N 0.01 Lon 165.65W 0.02  
 Dep 103.9 1.0 Half-duration 4.7  
 Principal Axes:  
 Scale  $10^{+18}$  Nm  
 T Val= 2.25 Plg=46 Azm=165  
 N -0.46 9 66  
 P -1.79 43 327  
 Best Double Couple: Ma=2.0\*10<sup>+18</sup>  
 NP1: Strike=344 Dip= 9 Slip= 8  
 NP2: 246 89 99

19 11 50 54.38 24.839S 70.019W 52km  
 5.5mb ( 49 abs.)  
 NEAR COAST OF NORTHERN CHILE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 32C  
 Centroid Location:  
 Origin Time 11:51: 1.3 0.3  
 Lat 24.86S FIX; Lon 70.07W FIX  
 Dep 50.4 5.0 Half-duration 2.1  
 Principal Axes:  
 Scale  $10^{+17}$  Nm  
 T Val= 1.61 Plg=51 Azm= 58  
 N -0.15 18 173  
 P -1.45 33 275  
 Best Double Couple: Ma=1.5\*10<sup>+17</sup>  
 NP1: Strike= 52 Dip=21 Slip= 151  
 NP2: 169 80 71

20 16 01 43.61 30.508S 178.270W 29km  
 5.7mb ( 34 abs.) 5.9Msz ( 23 abs.)  
 KERMADECE ISLANDS  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike= 10 Dip=68 Slip= 90  
 NP2: 190 22 90  
 Principal Axes:  
 T Plg=67 Azm=280  
 P 23 100  
 Comment: The focal mechanism is poorly controlled and corresponds to reverse

faulting. The preferred fault plane is NP2.

RADIATED ENERGY  
No. of sta: 8 Focal mech. C  
Energy  $0.5 \pm 0.1 \times 10^{13}$  Nm

MOMENT TENSOR SOLUTION  
Dep 35 No. of sta: 14  
Principal Axes:  
Scale  $10^{18}$  Nm  
T Val= 2.64 Plg=69 Azm=282  
N 0.05 1 15  
P -2.69 21 105  
Best Double Couple: Mo=2.7\*10<sup>18</sup>  
NP1: Strike=197 Dip=24 Slip= 93  
NP2: 14 66 89

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 48C M.W.: 11S, 21C  
Centroid Location:  
Origin Time 16:01:53.8 0.2  
Lat 30.64S 0.01 Lon 178.15W 0.01  
Dep 49.2 0.8 Half-duration 5.1  
Principal Axes:  
Scale  $10^{18}$  Nm  
T Val= 2.64 Plg=74 Azm=263  
N 0.38 5 13  
P -3.02 15 104  
Best Double Couple: Mo=2.8\*10<sup>18</sup>  
NP1: Strike=202 Dip=31 Slip= 101  
NP2: 9 60 84

20 20 44 02.26 39.553N 40.172E 38km  
5.0mb ( 56 obs.) 5.1Msz ( 15 obs.)  
TURKEY  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 31C  
Centroid Location:  
Origin Time 20:44: 1.6 0.5  
Lat 38.87N 0.06 Lon 40.01E 0.05  
Dep 15.0 FIX Half-duration 2.2  
Principal Axes:  
Scale  $10^{17}$  Nm  
T Val= 1.50 Plg= 0 Azm=260  
N 0.01 90 180  
P -1.51 0 170  
Best Double Couple: Mo=1.5\*10<sup>17</sup>  
NP1: Strike=305 Dip=90 Slip= 180  
NP2: 35 90 0

21 04 03 42.23 31.111S 177.801W 50km  
5.3mb ( 5 obs.)  
KERMADEC ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 22C  
Centroid Location:  
Origin Time 04:03:43.9 0.6  
Lat 31.26S 0.06 Lon 177.53W 0.07  
Dep 25.7 4.0 Half-duration 1.8  
Principal Axes:  
Scale  $10^{16}$  Nm  
T Val= 10.38 Plg=68 Azm=281  
N 1.65 0 191  
P -12.04 22 101  
Best Double Couple: Mo=1.1\*10<sup>17</sup>  
NP1: Strike=190 Dip=23 Slip= 89  
NP2: 11 67 90

21 13 07 34.37 15.988S 178.262E 33km  
4.8mb ( 9 obs.)  
FIJI ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 22C  
Centroid Location:  
Origin Time 13:07:35.0 1.8  
Lat 16.27S 0.10 Lon 178.26E 0.13  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale  $10^{16}$  Nm  
T Val= 6.81 Plg= 0 Azm=113  
N -2.56 0 23  
P -4.25 90 180  
Best Double Couple: Mo=5.5\*10<sup>16</sup>  
NP1: Strike=203 Dip=45 Slip= -90  
NP2: 23 45 -90

21 19 23 41.18 2.586N 126.702E 58km  
5.3mb ( 29 obs.)  
MOLUCCA PASSAGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN

L.P.B.: 12S, 24C  
Centroid Location:  
Origin Time 19:23:47.9 0.8  
Lat 2.81N 0.07 Lon 126.49E 0.12  
Dep 15.0 FIX Half-duration 1.9  
Principal Axes:  
Scale  $10^{17}$  Nm  
T Val= 1.58 Plg=69 Azm= 97  
N 0.04 9 342  
P -1.62 19 249  
Best Double Couple: Mo=1.6\*10<sup>17</sup>  
NP1: Strike=323 Dip=27 Slip= 69  
NP2: 166 65 100

21 19 30 07.19 2.545N 126.537E 77km  
5.4mb ( 13 obs.)  
MOLUCCA PASSAGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 14C  
Centroid Location:  
Origin Time 19:30:14.7 1.4  
Lat 2.53N FIX; Lon 126.56E FIX  
Dep 15.0 FIX Half-duration 1.6  
Principal Axes:  
Scale  $10^{17}$  Nm  
T Val= 3.39 Plg=44 Azm=192  
N -0.34 33 321  
P -3.05 28 71  
Best Double Couple: Mo=3.2\*10<sup>17</sup>  
NP1: Strike=211 Dip=34 Slip= 163  
NP2: 315 80 57

21 21 56 48.63 17.952S 178.593W 584km  
5.7mb ( 49 obs.)  
FIJI ISLANDS REGION  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike=302 Dip=68 Slip= -32  
NP2: 45 61 -155  
Principal Axes:  
T Plg= 5 Azm=355  
P 38 261  
Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a large normal component. The preferred fault plane is not determined.

RADIATED ENERGY  
No. of sta: 8 Focal mech. C  
Energy  $0.2 \pm 0.1 \times 10^{14}$  Nm

MOMENT TENSOR SOLUTION  
Dep 599 No. of sta: 9  
Principal Axes:  
Scale  $10^{17}$  Nm  
T Val= 7.36 Plg=11 Azm=350  
N 0.04 56 98  
P -7.40 32 253  
Best Double Couple: Mo=7.4\*10<sup>17</sup>  
NP1: Strike= 36 Dip=59 Slip=164  
NP2: 298 77 -32

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 34C  
Centroid Location:  
Origin Time 21:56:57.2 0.4  
Lat 17.64S 0.03 Lon 178.91W 0.03  
Dep 599.2 1.7 Half-duration 3.2  
Principal Axes:  
Scale  $10^{17}$  Nm  
T Val= 8.04 Plg=17 Azm= 7  
N -0.80 36 110  
P -7.23 49 256  
Best Double Couple: Mo=7.6\*10<sup>17</sup>  
NP1: Strike= 56 Dip=42 Slip=-151  
NP2: 304 71 -52

22 02 02 04.00 59.802N 29.809W 10km  
5.0mb ( 46 obs.) 5.0Msz ( 8 obs.)  
NORTH ATLANTIC OCEAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 7S, 12C  
Centroid Location:  
Origin Time 02:01:51.2 0.5  
Lat 59.78N FIX; Lon 29.82W FIX  
Dep 15.0 FIX Half-duration 1.7  
Principal Axes:  
Scale  $10^{16}$  Nm  
T Val= 7.22 Plg= 0 Azm=187  
N 2.54 90 180  
P -9.76 0 97  
Best Double Couple: Mo=8.5\*10<sup>16</sup>

NP1: Strike=232 Dip=90 Slip= 180  
NP2: 322 90 0

22 11 08 06.07 53.597N 161.657E 41km  
5.0mb ( 53 obs.) 5.2Msz ( 14 obs.)  
OFF EAST COAST OF KAMCHATKA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 21C  
Centroid Location:  
Origin Time 11:08:11.9 0.6  
Lat 53.75N 0.10 Lon 162.02E 0.14  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale  $10^{16}$  Nm  
T Val= 8.45 Plg=60 Azm=274  
N 0.25 6 14  
P -8.70 30 107  
Best Double Couple: Mo=8.6\*10<sup>16</sup>  
NP1: Strike=214 Dip=16 Slip= 111  
NP2: 13 75 84

23 10 54 46.32 52.341S 160.568E 10km  
6.4mb ( 28 obs.) 8.2Msz ( 12 obs.)  
MACQUARIE ISLANDS REGION  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike=120 Dip=85 Slip= 0  
NP2: 210 90 185  
Principal Axes:  
T Plg= 4 Azm=345  
P 4 75  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting. The preferred fault plane is not determined.

RADIATED ENERGY  
No. of sta: 4 Focal mech. C  
Energy  $1.0 \pm 0.1 \times 10^{17}$  Nm

MOMENT TENSOR SOLUTION  
Dep 15 No. of sta: 5  
Principal Axes:  
Scale  $10^{21}$  Nm  
T Val= 1.51 Plg= 0 Azm=354  
N 0.04 89 105  
P -1.55 1 264  
Best Double Couple: Mo=1.5\*10<sup>21</sup>  
NP1: Strike= 39 Dip=89 Slip=-179  
NP2: 309 89 -1

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 1S, 3C M.W.: 21S, 61C  
Centroid Location:  
Origin Time 10:55:12.2 0.2  
Lat 52.15S 0.01 Lon 160.41E 0.02  
Dep 15.0 FIX Half-duration 18.0  
Principal Axes:  
Scale  $10^{21}$  Nm  
T Val= 1.39 Plg=21 Azm=352  
N -0.06 67 151  
P -1.32 8 259  
Best Double Couple: Mo=1.4\*10<sup>21</sup>  
NP1: Strike= 34 Dip=69 Slip= 170  
NP2: 127 81 21

GEOSCOPE MOMENT TENSOR (PAR)  
Dep 30.0 Half-duration 29.0  
Best Double Couple: Mo=2.1\*10<sup>21</sup>  
NP1: Strike= 36 Dip=85 Slip= 197  
NP2: 305 73 -6

23 17 11 42.85 51.886S 160.563E 10km  
5.9mb ( 30 obs.) 6.0Msz ( 12 obs.)  
NORTH OF MACQUARIE ISLAND  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike=128 Dip=89 Slip= 0  
NP2: 218 90 181  
Principal Axes:  
T Plg= 1 Azm=353  
P 1 83  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting. The preferred fault plane is not determined.

24 08 05 47.61 3.748S 123.256E 22km  
5.6mb ( 29 obs.) 5.0Msz ( 13 obs.)  
SULAWESI  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 20C  
Centroid Location:  
Origin Time 08:05:50.9 0.6

Lat 4.04S 0.08 Lan 123.32E 0.09  
Dep 15.0 BDY Half-duration 2.8  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 6.56 Plg=57 Azm=213  
N 0.01 20 337  
P -6.57 25 77  
Best Double Couple:Ma=6.6\*10\*\*17  
NP1:Strike=204 Dip=27 Slip= 140  
NP2: 330 73 69

24 13 31 14.48 56.177N 164.264E 19km  
5.9mb ( 87 obs.) 6.1MsZ ( 35 abs.)  
KOMANDORSKY ISLANDS REGION  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=300 Dip=90 Slip= 177  
NP2: 30 87 360  
Principal Axes:  
T Plg= 2 Azm=255  
P 2 345  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting. The preferred fault plane is not determined.  
RADIATED ENERGY  
No. of sta: 10 Focal mech. C  
Energy 0.4±0.1\*10\*\*15 Nm  
MOMENT TENSOR SOLUTION  
Dep 15 Na. of sta: 15  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 3.14 Plg= 6 Azm=244  
N 0.52 78 124  
P -3.66 10 335  
Best Double Couple:Ma=3.4\*10\*\*18  
NP1:Strike= 19 Dip=79 Slip= -3  
NP2: 110 87 -169  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 49C  
Centroid Location:  
Origin Time 13:31:20.4 0.2  
Lat 56.42N 0.02 Lan 164.05E 0.04  
Dep 43.6 2.5 Half-duration 5.6  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 3.66 Plg=12 Azm=242  
N -0.23 78 73  
P -3.43 2 332  
Best Double Couple:Ma=3.5\*10\*\*18  
NP1:Strike= 18 Dip=80 Slip= 7  
NP2: 286 83 170

24 15 43 34.39 56.173N 164.185E 36km  
5.5mb ( 86 obs.) 5.4MsZ ( 18 abs.)  
KOMANDORSKY ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 35C  
Centroid Location:  
Origin Time 15:43:38.2 0.3  
Lat 56.42N 0.03 Lan 164.09E 0.06  
Dep 43.0 3.7 Half-duration 3.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 7.84 Plg=12 Azm=241  
N -0.55 76 94  
P -7.29 8 332  
Best Double Couple:Ma=7.6\*10\*\*17  
NP1:Strike= 17 Dip=76 Slip= 3  
NP2: 286 87 166

24 17 59 07.05 55.472N 35.140W 10km  
4.9mb ( 43 abs.) 5.0MsZ ( 4 abs.)  
NORTH ATLANTIC OCEAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 10S, 19C  
Centroid Location:  
Origin Time 17:59: 9.6 0.5  
Lat 54.72N 0.11 Lan 35.25W 0.07  
Dep 15.0 FIX Half-duration 1.7  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.17 Plg= 0 Azm=104  
N -0.27 0 14  
P -0.90 90 180  
Best Double Couple:Ma=1.0\*10\*\*17  
NP1:Strike=194 Dip=45 Slip= -90  
NP2: 14 45 -90

5.7mb ( 32 abs.) 5.6MsZ ( 12 obs.)  
MACQUARIE ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 19S, 42C  
Centroid Location:  
Origin Time 00:55: 2.6 0.2  
Lat 51.90S 0.03 Lan 159.10E 0.04  
Dep 15.0 FIX Half-duration 3.7  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 11.49 Plg= 4 Azm=199  
N -2.34 41 293  
P -9.15 49 105  
Best Double Couple:Ma=1.0\*10\*\*18  
NP1:Strike=255 Dip=54 Slip=-144  
NP2: 142 61 -41

25 04 43 10.70 52.334S 160.748E 10km  
5.5mb ( 23 obs.) 4.8MsZ ( 3 obs.)  
MACQUARIE ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 20C  
Centroid Location:  
Origin Time 04:43: 7.3 0.7  
Lat 52.51S 0.14 Lan 160.84E 0.22  
Dep 15.0 FIX Half-duration 1.6  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.17 Plg=56 Azm=299  
N 3.69 8 40  
P -9.86 32 135  
Best Double Couple:Ma=8.0\*10\*\*16  
NP1:Strike=252 Dip=14 Slip= 122  
NP2: 39 78 82

25 07 24 15.56 54.98 S 129.20 W 10km  
5.2mb ( 4 obs.) 5.1MsZ ( 2 obs.)  
SOUTH PACIFIC CORDILLERA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 27C  
Centroid Location:  
Origin Time 07:24:25.6 0.5  
Lat 55.56S 0.10 Lan 128.74W 0.09  
Dep 15.0 FIX Half-duration 1.7  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.25 Plg= 0 Azm=156  
N -0.47 90 180  
P -8.78 0 66  
Best Double Couple:Ma=9.0\*10\*\*16  
NP1:Strike=201 Dip=90 Slip= 180  
NP2: 291 90 0

25 08 06 32.64 5.850S 148.300E 112km  
5.9mb ( 32 abs.)  
NEW BRITAIN REGION  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=215 Dip=52 Slip= 180  
NP2: 125 90 322  
Principal Axes:  
T Plg=26 Azm=177  
P 26 73  
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.  
MOMENT TENSOR SOLUTION  
Dep 105 Na. of sta: 6  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 4.24 Plg=22 Azm=168  
N 0.01 54 292  
P -4.24 27 66  
Best Double Couple:Ma=4.2\*10\*\*17  
NP1:Strike=209 Dip=54 Slip=-176  
NP2: 116 87 -36  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 30C  
Centroid Location:  
Origin Time 08:06:38.3 0.3  
Lat 5.97S 0.03 Lan 148.51E 0.04  
Dep 96.3 2.6 Half-duration 3.4  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 7.62 Plg=16 Azm=168  
N -0.01 66 298  
P -7.61 17 72

Best Double Couple:Ma=7.6\*10\*\*17  
NP1:Strike=210 Dip=66 Slip=-179  
NP2: 120 89 -24

25 09 39 25.49 52.071S 159.931E 10km  
5.5mb ( 18 abs.) 5.5MsZ ( 8 abs.)  
MACQUARIE ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 18S, 41C  
Centroid Location:  
Origin Time 09:39:34.5 0.3  
Lat 51.96S 0.04 Lan 159.22E 0.05  
Dep 15.0 FIX Half-duration 3.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 7.64 Plg= 6 Azm= 27  
N -2.14 57 288  
P -5.50 32 121  
Best Double Couple:Ma=6.6\*10\*\*17  
NP1:Strike=159 Dip=63 Slip= -20  
NP2: 258 72 -152

25 11 56 21.67 7.332S 128.539E 171km  
5.5mb ( 40 abs.)  
BANDA SEA  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 70 Dip=60 Slip= 90  
NP2: 250 30 90  
Principal Axes:  
T Plg=75 Azm=340  
P 15 160  
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.: 14S, 23C  
Centroid Location:  
Origin Time 11:56:24.0 0.8  
Lat 7.63S 0.07 Lan 128.26E 0.07  
Dep 170.7 1.8 Half-duration 2.1  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.07 Plg=80 Azm=325  
N -0.03 10 152  
P -2.04 1 61  
Best Double Couple:Ma=2.1\*10\*\*17  
NP1:Strike=142 Dip=45 Slip= 76  
NP2: 341 47 103

25 13 01 34.23 36.961S 177.434E 287km  
4.9mb ( 12 abs.)  
OFF E. COAST OF N. ISLAND, N.Z.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 29C  
Centroid Location:  
Origin Time 13:01:39.7 0.7  
Lat 36.38S 0.08 Lan 176.91E 0.10  
Dep 265.1 3.6 Half-duration 1.7  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 10.88 Plg=33 Azm=234  
N 0.73 51 19  
P -11.62 17 132  
Best Double Couple:Ma=1.1\*10\*\*17  
NP1:Strike=268 Dip=53 Slip= 167  
NP2: 6 80 37

25 19 49 15.90 15.259S 172.811W 73km  
5.0mb ( 9 abs.)  
SAMOA ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 26C  
Centroid Location:  
Origin Time 19:49:18.5 0.6  
Lat 15.39S 0.09 Lan 173.07W 0.07  
Dep 53.4 5.9 Half-duration 1.7  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.99 Plg=62 Azm=207  
N 2.81 10 317  
P -8.81 26 51  
Best Double Couple:Ma=7.4\*10\*\*16  
NP1:Strike=164 Dip=21 Slip= 119  
NP2: 313 72 80

25 20 13 33.42 51.677N 172.128E 33km  
5.3mb ( 70 abs.) 4.6MsZ ( 4 abs.)

NEAR ISLANDS, ALEUTIAN ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 28C  
Centroid Location:  
Origin Time 20:13:36.4 0.4  
Lat 51.47N 0.09 Lon 171.44E 0.09  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.53 Plg=20 Azm= 58  
N -0.93 11 324  
P -6.60 67 207  
Best Double Couple:Ma=7.1\*10\*\*16  
NP1:Strike=167 Dip=27 Slip= -65  
NP2: 319 66 -102

25 21 36 21.27 13.968N 91.804W 69km  
5.0mb ( 25 obs.)  
NEAR COAST OF GUATEMALA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 32C  
Centroid Location:  
Origin Time 21:36:17.8 0.5  
Lat 13.68N 0.06 Lon 92.26W 0.06  
Dep 32.2 3.5 Half-duration 1.8  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.59 Plg=70 Azm= 54  
N 1.05 8 300  
P -12.64 18 207  
Best Double Couple:Ma=1.2\*10\*\*17  
NP1:Strike=284 Dip=28 Slip= 72  
NP2: 124 64 99

26 07 00 01.71 52.583S 160.106E 10km  
5.6mb ( 14 obs.) 5.3MsZ ( 10 obs.)  
MACQUARIE ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 26C  
Centroid Location:  
Origin Time 07:00:10.5 0.6  
Lat 52.00S 0.09 Lon 160.32E 0.13  
Dep 15.0 FIX Half-duration 2.1  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.44 Plg=51 Azm=102  
N 0.00 7 201  
P -3.43 38 296  
Best Double Couple:Ma=3.4\*10\*\*17  
NP1:Strike= 68 Dip= 9 Slip= 138  
NP2: 200 84 83

26 12 56 18.32 51.926S 161.386E 10km  
5.3mb ( 8 obs.) 4.9MsZ ( 2 obs.)  
NORTH OF MACQUARIE ISLAND  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 30C  
Centroid Location:  
Origin Time 12:56:29.5 0.7  
Lat 51.87S 0.11 Lon 160.43E 0.08  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 4.75 Plg= 0 Azm=178  
N 0.67 90 180  
P -5.42 0 88  
Best Double Couple:Ma=5.1\*10\*\*16  
NP1:Strike=223 Dip=90 Slip= 180  
NP2: 313 90 0

26 14 28 37.82 4.406S 105.270W 10km  
4.7mb ( 10 obs.) 5.2MsZ ( 4 obs.)  
NORTHERN EASTER I. CORDILLERA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 35C  
Centroid Location:  
Origin Time 14:28:42.1 0.3  
Lat 4.72S 0.02 Lon 105.09W 0.03  
Dep 15.0 FIX Half-duration 2.6  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.86 Plg= 0 Azm=142  
N -0.44 90 180  
P -2.43 0 52  
Best Double Couple:Ma=2.6\*10\*\*17  
NP1:Strike=187 Dip=90 Slip= 180  
NP2: 277 90 0

27 03 01 24.92 55.279S 133.192W 10km  
5.5mb ( 19 obs.) 5.7MsZ ( 11 obs.)  
SOUTH PACIFIC CORDILLERA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 18S, 44C  
Centroid Location:  
Origin Time 03:01:33.5 0.2  
Lat 55.06S 0.03 Lon 132.89W 0.05  
Dep 15.0 FIX Half-duration 4.2  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.53 Plg=12 Azm=346  
N 0.05 3 77  
P -1.58 78 180  
Best Double Couple:Ma=1.6\*10\*\*18  
NP1:Strike= 72 Dip=33 Slip= -95  
NP2: 258 57 -87

27 08 31 18.76 3.451S 138.855E 49km  
5.4mb ( 20 obs.) 4.4MsZ ( 3 obs.)  
WEST IRIAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 23C  
Centroid Location:  
Origin Time 08:31:25.2 0.7  
Lat 3.49S 0.05 Lon 138.73E 0.06  
Dep 71.2 5.6 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.11 Plg=12 Azm= 92  
N -0.89 16 185  
P -8.22 70 326  
Best Double Couple:Ma=8.7\*10\*\*16  
NP1:Strike=162 Dip=36 Slip=-117  
NP2: 15 59 -72

27 14 27 46.44 50.236S 158.073E 10km  
5.5mb ( 23 obs.) 4.9MsZ ( 5 obs.)  
NORTH OF MACQUARIE ISLAND  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 33C  
Centroid Location:  
Origin Time 14:27:55.2 0.7  
Lat 50.47S 0.06 Lon 156.84E 0.11  
Dep 15.0 FIX Half-duration 1.7  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.98 Plg=14 Azm= 35  
N 3.45 65 158  
P -13.42 20 299  
Best Double Couple:Ma=1.2\*10\*\*17  
NP1:Strike= 78 Dip=65 Slip=-176  
NP2: 346 86 -25

27 20 08 37.31 30.167N 50.921E 31km  
5.6mb ( 87 obs.) 5.8MsZ ( 26 obs.)  
IRAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 18S, 37C  
Centroid Location:  
Origin Time 20:08:41.4 0.4  
Lat 29.86N 0.05 Lon 50.69E 0.04  
Dep 15.0 BDY Half-duration 3.7  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.40 Plg=63 Azm=297  
N -0.30 27 133  
P -1.10 7 40  
Best Double Couple:Ma=1.3\*10\*\*18  
NP1:Strike=103 Dip=45 Slip= 51  
NP2: 332 57 122

28 09 46 28.27 16.714S 173.278W 35km  
5.7mb ( 42 obs.) 5.5MsZ ( 20 obs.)  
TONGA ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=132 Dip=83 Slip= 147  
NP2: 227 57 8  
Principal Axes:  
T Plg=28 Azm= 84  
P 17 184  
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 39 Na. of sta: 10

Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 4.95 Plg=48 Azm= 88  
N 0.11 38 297  
P -5.06 15 195  
Best Double Couple:Ma=5.0\*10\*\*17  
NP1:Strike=245 Dip=45 Slip= 29  
NP2: 134 70 131  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 33C  
Centroid Location:  
Origin Time 09:46:37.7 0.4  
Lat 16.04S 0.03 Lon 172.84W 0.04  
Dep 39.9 2.5 Half-duration 2.9  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 5.97 Plg=43 Azm= 65  
N -0.96 43 274  
P -5.01 15 169  
Best Double Couple:Ma=5.5\*10\*\*17  
NP1:Strike=217 Dip=49 Slip= 23  
NP2: 111 73 136

28 10 20 00.35 16.723S 173.247W 50km  
5.2mb ( 30 obs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 23C  
Centroid Location:  
Origin Time 10:20: 8.8 0.9  
Lat 16.24S 0.09 Lon 173.40W 0.09  
Dep 38.8 5.8 Half-duration 1.8  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 14.75 Plg=58 Azm= 63  
N -3.32 23 292  
P -11.43 22 192  
Best Double Couple:Ma=1.3\*10\*\*17  
NP1:Strike=248 Dip=31 Slip= 41  
NP2: 120 70 114

28 15 19 07.19 6.515S 147.799E 33km  
5.5mb ( 30 obs.) 5.5MsZ ( 20 obs.)  
EAST PAPUA NEW GUINEA REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 38C  
Centroid Location:  
Origin Time 15:19:15.4 0.4  
Lat 6.75S 0.04 Lon 147.90E 0.05  
Dep 15.0 FIX Half-duration 3.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 6.02 Plg=55 Azm=272  
N 1.44 10 168  
P -7.46 33 72  
Best Double Couple:Ma=6.7\*10\*\*17  
NP1:Strike=127 Dip=15 Slip= 48  
NP2: 350 79 100

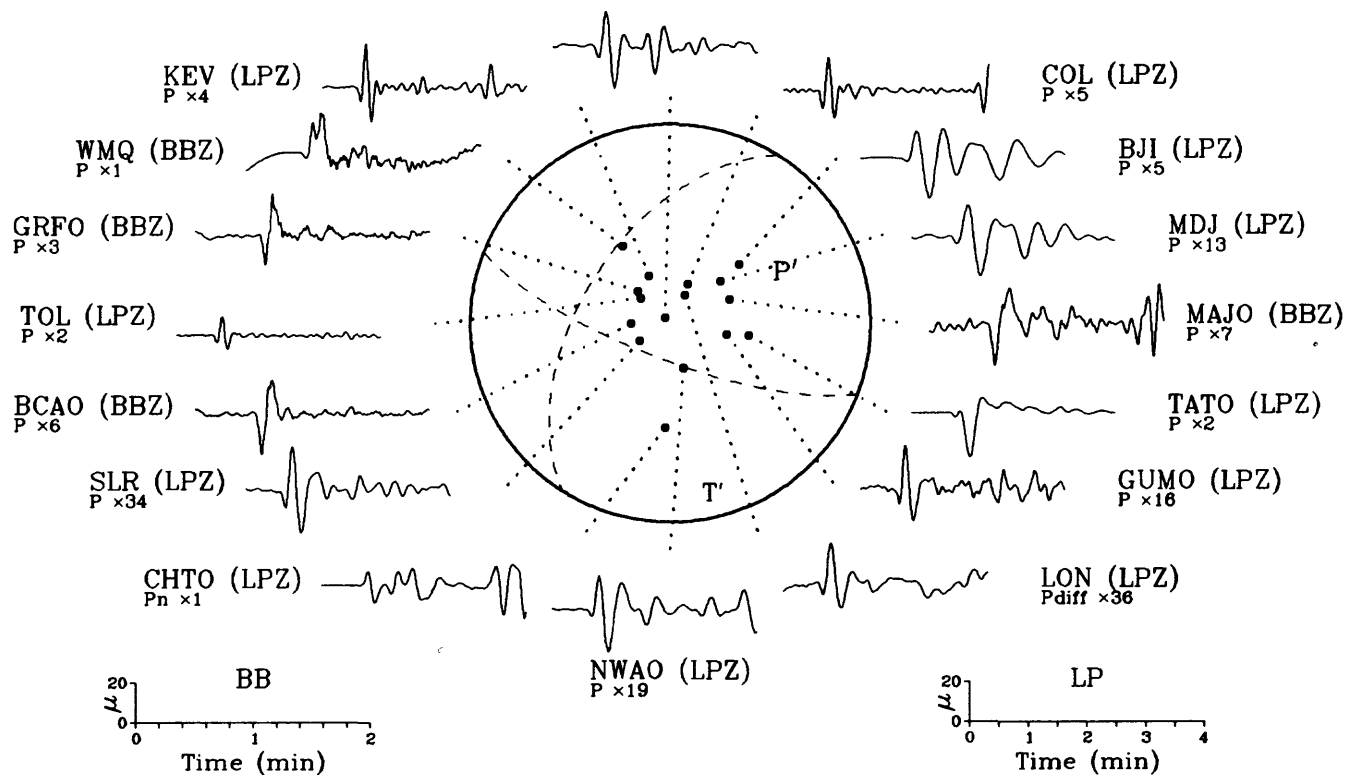
28 15 52 54.28 51.053S 159.682E 10km  
5.3mb ( 7 obs.)  
NORTH OF MACQUARIE ISLAND  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 23C  
Centroid Location:  
Origin Time 15:53: 7.0 1.0  
Lat 50.54S 0.12 Lon 158.29E 0.16  
Dep 15.0 FIX Half-duration 1.9  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 15.56 Plg=23 Azm= 19  
N -3.87 63 233  
P -11.68 14 114  
Best Double Couple:Ma=1.4\*10\*\*17  
NP1:Strike=158 Dip=64 Slip= 7  
NP2: 65 84 154

29 02 12 27.88 48.914S 121.346E 10km  
5.2mb ( 7 obs.) 5.2MsZ ( 1 obs.)  
SOUTH OF AUSTRALIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 22C  
Centroid Location:  
Origin Time 02:12:33.2 0.5  
Lat 48.67S 0.04 Lon 121.31E 0.09  
Dep 15.0 FIX Half-duration 2.2  
Principal Axes:  
Scale 10\*\*17 Nm

T Val= 1.15 P1g= 0 Azm=199	NP1:Strike= 65 Dip=32 Slip= 158	Scale 10**18 Nm
N -0.11 0 109	NP2: 174 79 60	T Val= 4.14 P1g=49 Azm=343
P -1.04 90 180		N -1.02 27 108
Best Double Couple:Mo=1.1*10**17	30 13 39 17.14 17.851S 173.043W 38km	P -3.12 28 214
NP1:Strike=289 Dip=45 Slip= -90	5.0mb ( 18 obs.) 4.7Msz ( 4 obs.)	Best Double Couple:Mo=3.6*10**18
NP2: 109 45 -90	TONGA ISLANDS	NP1:Strike=351 Dip=29 Slip= 155
	CENTROID, MOMENT TENSOR (HRV)	NP2: 102 78 63
29 03 42 34.38 6.499S 147.730E 40km	Data Used: GDSN	CENTROID, MOMENT TENSOR (HRV)
5.4mb ( 36 obs.) 4.8Msz ( 7 obs.)	L.P.B.: 12S, 22C	Data Used: GDSN
EAST PAPUA NEW GUINEA REGION	Centroid Location:	L.P.B.: 18S, 47C M.W.: 9S, 21C
CENTROID, MOMENT TENSOR (HRV)	Origin Time 13:39:15.1 1.4	Centroid Location:
Data Used: GDSN	Lat 18.12S 0.13 Lon 172.56W 0.14	Origin Time 05:54:27.4 0.2
L.P.B.: 11S, 19C	Dep 15.0 FIX Half-duration 1.7	Lat 45.20S 0.02 Lon 166.59E 0.02
Centroid Location:	Principal Axes:	Dep 18.0 BDY Half-duration 6.7
Origin Time 03:42:41.3 0.5	Scale 10**16 Nm	Principal Axes:
Lat 6.93S 0.08 Lon 148.13E 0.08	T Val= 12.74 P1g=55 Azm=276	Scale 10**18 Nm
Dep 53.8 6.5 Half-duration 1.7	N -3.46 8 18	T Val= 5.37 P1g=46 Azm= 25
Principal Axes:	P -9.28 33 113	N -0.08 31 154
Scale 10**16 Nm	Best Double Couple:Mo=1.1*10**17	P -5.30 28 262
T Val= 8.03 P1g=49 Azm=145	NP1:Strike=233 Dip=14 Slip= 126	Best Double Couple:Mo=5.3*10**18
N 3.97 41 336	NP2: 17 79 82	NP1:Strike= 41 Dip=33 Slip= 161
P -12.00 6 241		NP2: 147 80 58
Best Double Couple:Mo=1.0*10**17	30 13 50 56.26 17.401N 94.645W 138km	31 14 20 24.18 3.006S 142.078E 33km
NP1:Strike=296 Dip=53 Slip= 35	5.2mb ( 65 obs.)	5.2mb ( 14 obs.) 4.5Msz ( 7 obs.)
NP2: 183 62 138	CHIAPAS, MEXICO	NEAR N COAST OF PAPUA NEW GUINEA
	CENTROID, MOMENT TENSOR (HRV)	CENTROID, MOMENT TENSOR (HRV)
29 22 07 11.88 10.204S 161.395E 86km	Data Used: GDSN	Data Used: GDSN
5.6mb ( 36 obs.)	L.P.B.: 15S, 31C	L.P.B.: 9S, 19C
SOLOMON ISLANDS	Centroid Location:	Centroid Location:
CENTROID, MOMENT TENSOR (HRV)	Origin Time 13:51: 0.9 0.4	Origin Time 14:20:28.2 0.5
Data Used: GDSN	Lat 17.63N 0.04 Lon 94.84W 0.04	Lat 3.14S 0.07 Lon 142.37E 0.08
L.P.B.: 16S, 39C	Dep 142.4 1.1 Half-duration 3.2	Dep 28.1 6.0 Half-duration 1.6
Centroid Location:	Principal Axes:	Principal Axes:
Origin Time 22:07:14.0 0.2	Scale 10**17 Nm	Scale 10**16 Nm
Lat 10.25S 0.02 Lon 161.27E 0.03	T Val= 7.37 P1g= 4 Azm= 62	T Val= 7.01 P1g=72 Azm=192
Dep 57.7 2.2 Half-duration 2.8	N -0.49 43 328	N 1.73 12 321
Principal Axes:	P -6.87 46 156	P -8.74 14 53
Scale 10**17 Nm	Best Double Couple:Mo=7.1*10**17	Best Double Couple:Mo=7.9*10**16
T Val= 5.26 P1g=63 Azm=126	NP1:Strike=188 Dip=56 Slip= -34	NP1:Strike=159 Dip=33 Slip= 112
N -1.21 20 261	NP2: 298 63 -141	NP2: 314 60 76
P -4.05 17 358		
Best Double Couple:Mo=4.7*10**17	31 05 54 20.56 45.383S 167.086E 23km	31 19 10 37.09 6.512S 147.817E 43km
NP1:Strike=115 Dip=33 Slip= 128	5.8mb ( 29 obs.) 6.3Msz ( 29 obs.)	5.2mb ( 21 obs.) 4.8Msz ( 6 obs.)
NP2: 252 65 68	SOUTH ISLAND, NEW ZEALAND	EAST PAPUA NEW GUINEA REGION
	FAULT PLANE SOLUTION: P-Waves	CENTROID, MOMENT TENSOR (HRV)
29 22 22 30.72 23.897S 70.337W 32km	NP1:Strike=105 Dip=84 Slip= 90	Data Used: GDSN
5.5mb ( 56 obs.) 4.9Msz ( 1 obs.)	NP2: 285 6 90	L.P.B.: 13S, 24C
NEAR COAST OF NORTHERN CHILE	Principal Axes:	Centroid Location:
CENTROID, MOMENT TENSOR (HRV)	T P1g=51 Azm= 15	Origin Time 19:10:39.0 1.0
Data Used: GDSN	P 39 195	Lat 7.00S 0.09 Lon 148.17E 0.10
L.P.B.: 13S, 26C	Comment: The focal mechanism is	Dep 15.0 FIX Half-duration 1.4
Centroid Location:	poorly controlled and	Principal Axes:
Origin Time 22:22:39.7 0.4	corresponds to reverse	Scale 10**16 Nm
Lat 23.52S 0.10 Lon 70.21W 0.08	faulting. The preferred fault	T Val= 11.39 P1g=38 Azm=310
Dep 25.2 6.2 Half-duration 2.2	plane is NP2.	N 0.40 31 192
Principal Axes:	RADIATED ENERGY	P -11.79 36 76
Scale 10**17 Nm	No. of sta: 4 Focal mech. C	Best Double Couple:Mo=1.2*10**17
T Val= 2.47 P1g=48 Azm= 52	Energy 0.1±0.0*10**15 Nm	NP1:Strike=104 Dip=31 Slip= 2
N -0.21 29 180	MOMENT TENSOR SOLUTION	NP2: 13 89 121
P -2.26 27 287	Dep 12 No. of sta: 11	
Best Double Couple:Mo=2.4*10**17	Principal Axes:	

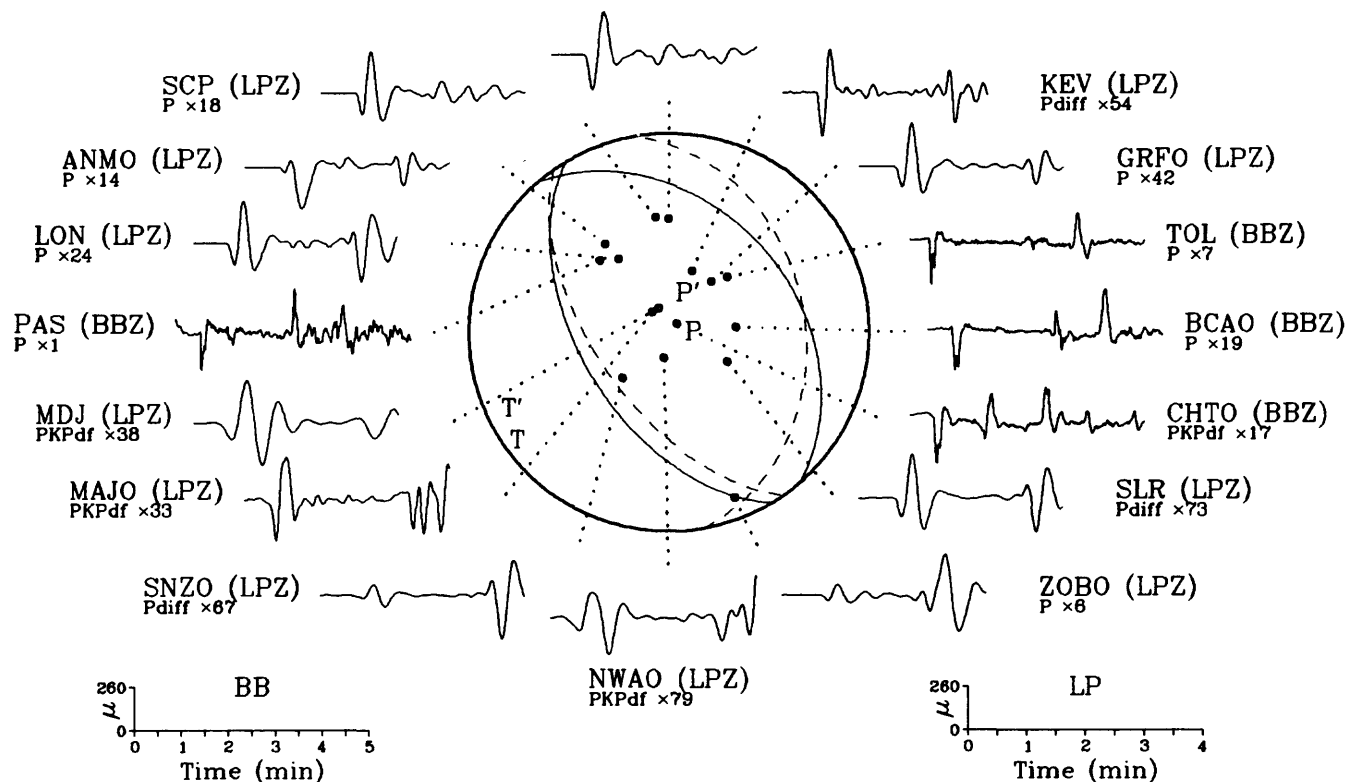
03 May 1989 05:53:01.17  
Sichuan Province, China

ZOBO (LPZ)  
PKPdf  $\times 48$



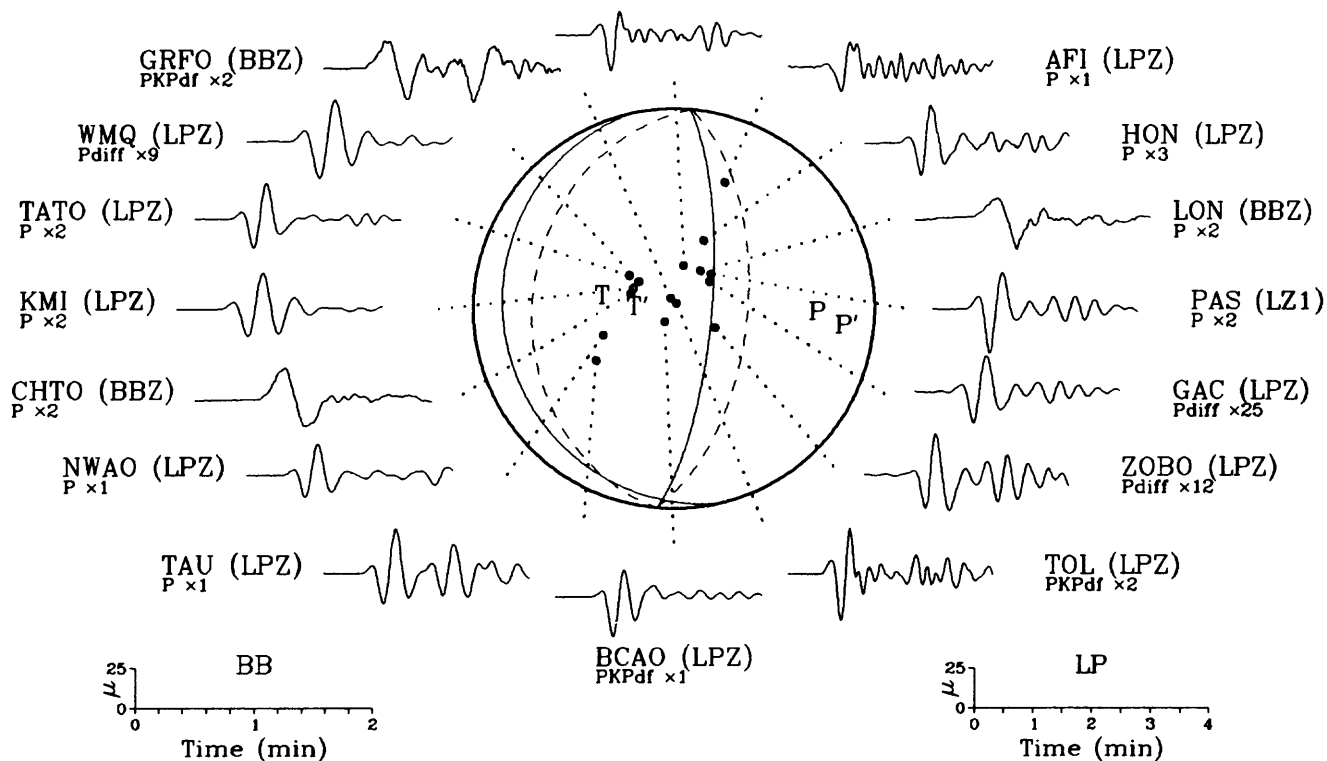
05 May 1989 18:28:39.45  
Western Brazil

HRV (LZ1)  
 $P \times 18$



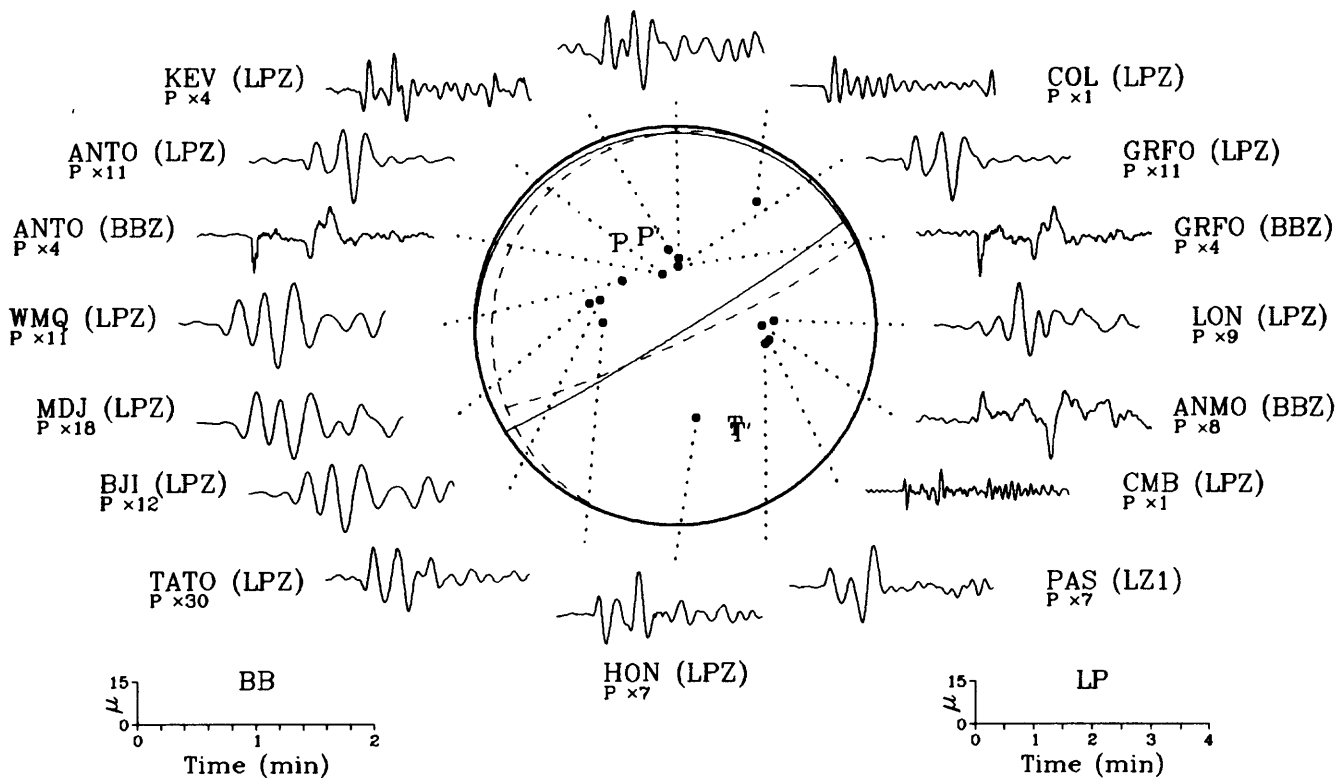
14 May 1989 00:59:50.45  
Kermadec Islands

COL (LPZ)  
Pdiff x4

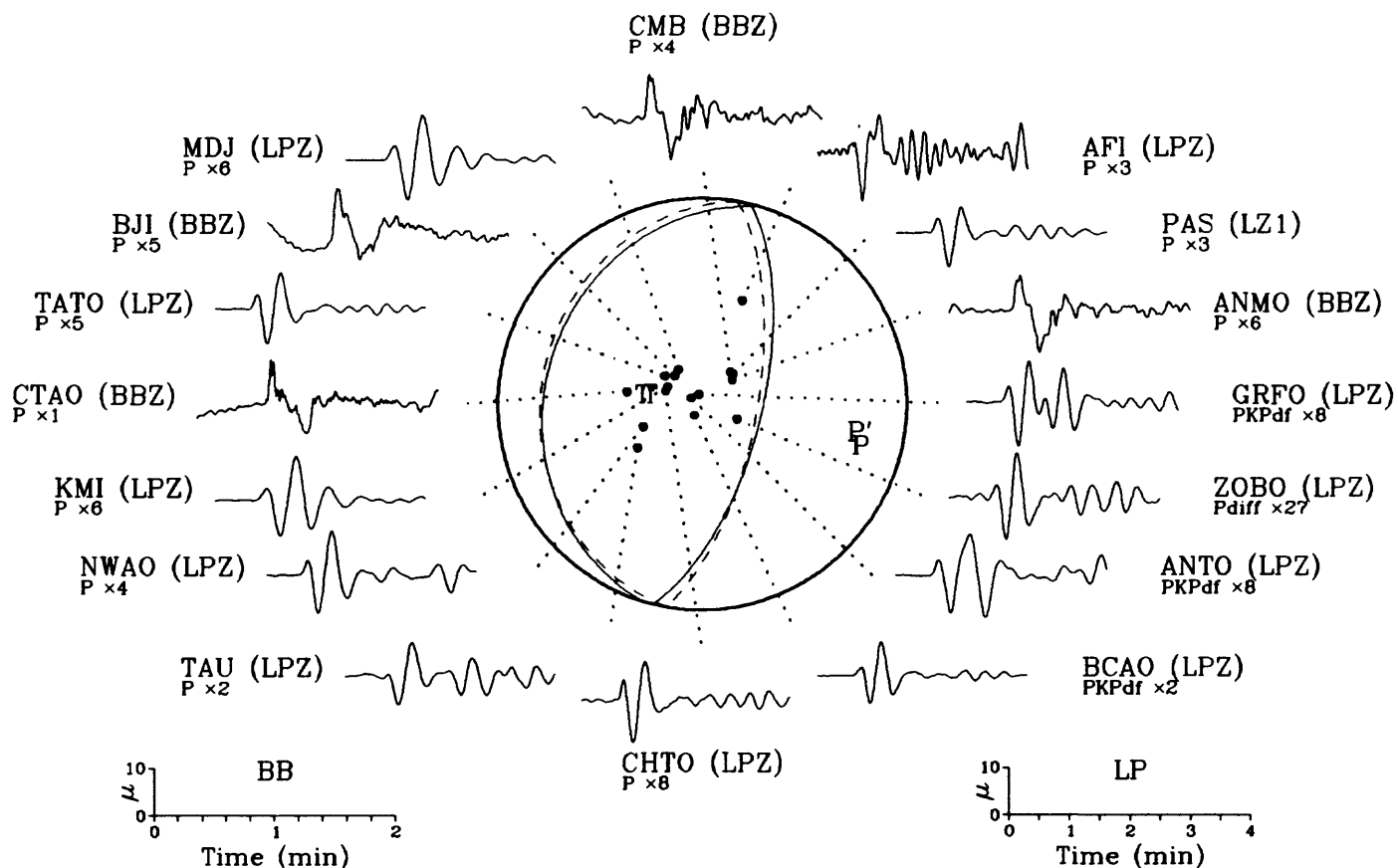


19 May 1989 02:21:56.38  
Fox Islands, Aleutian Islands

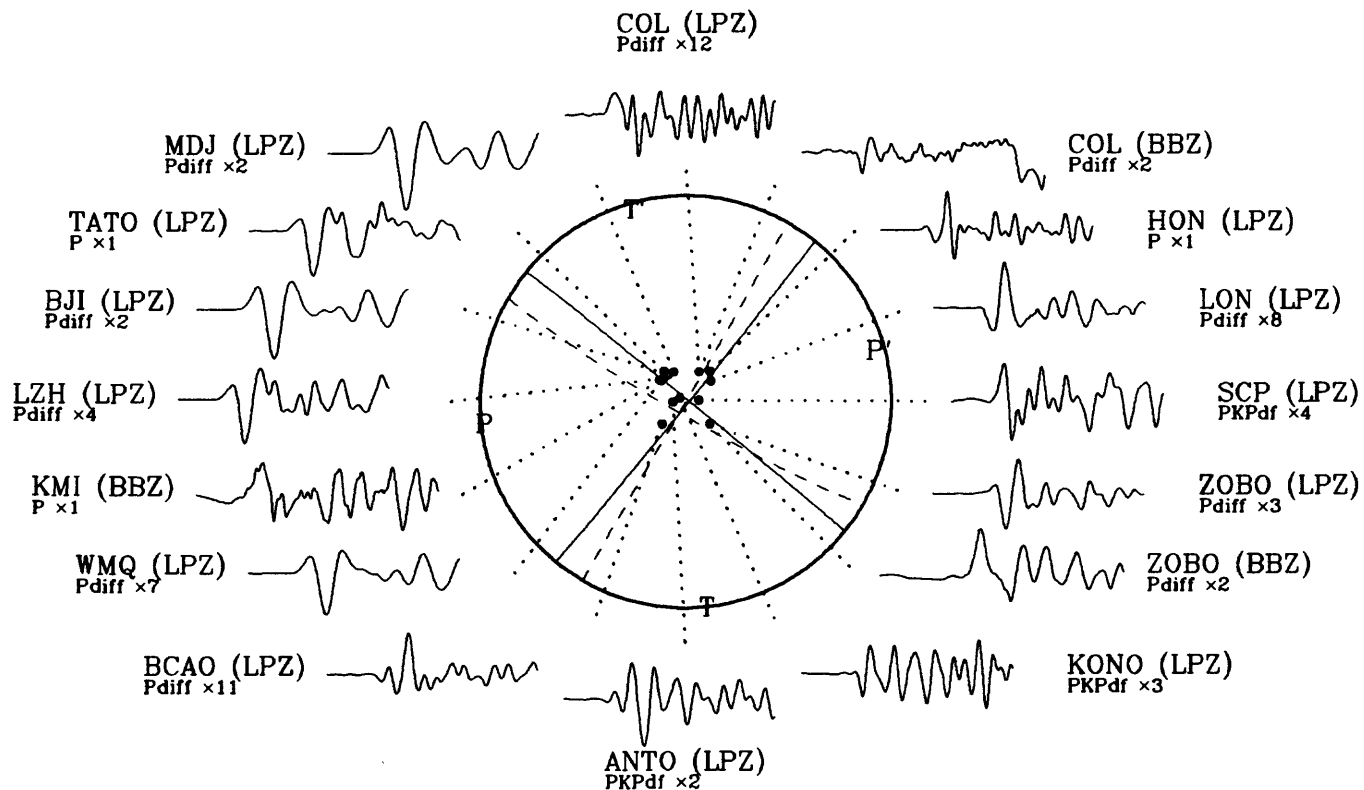
KONO (LPZ)  
P x28



20 May 1989 16:01:43.61  
Kermadec Islands

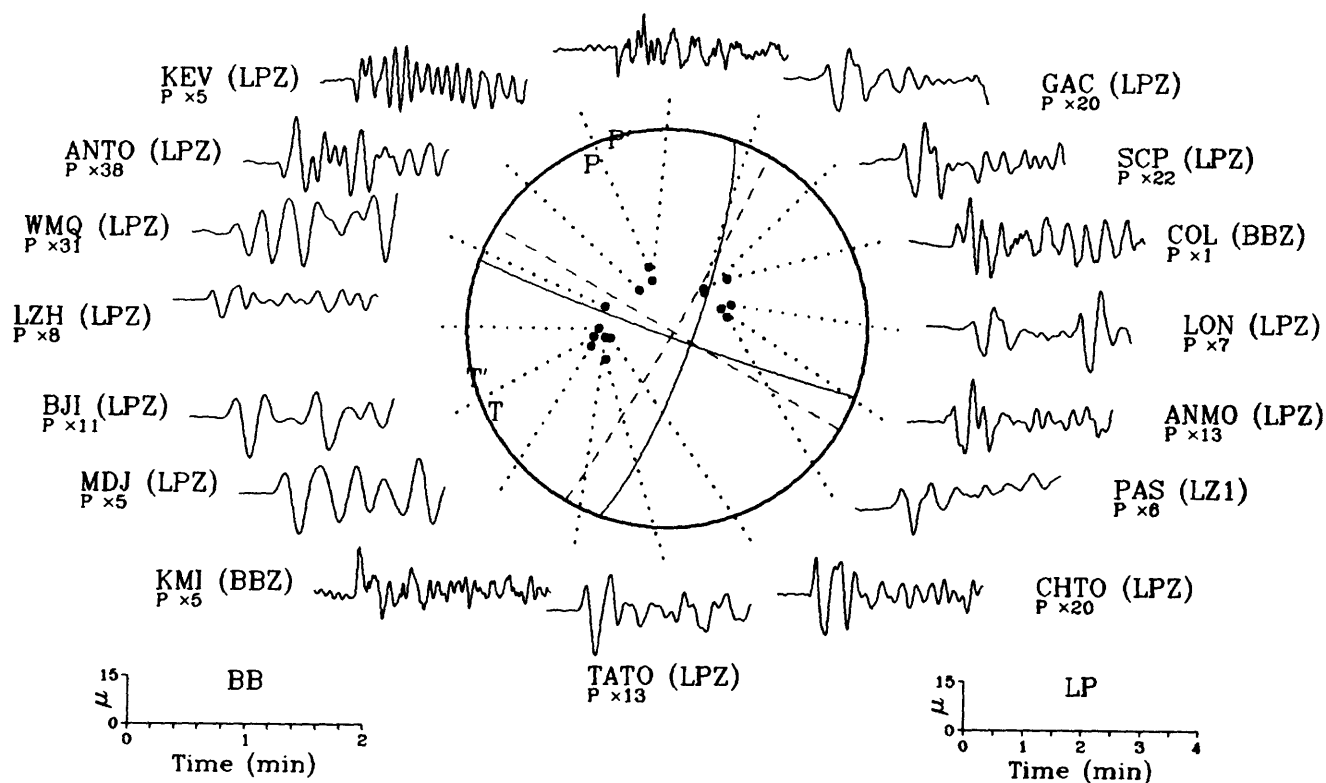


23 May 1989 10:54:46.32  
Macquarie Islands Region



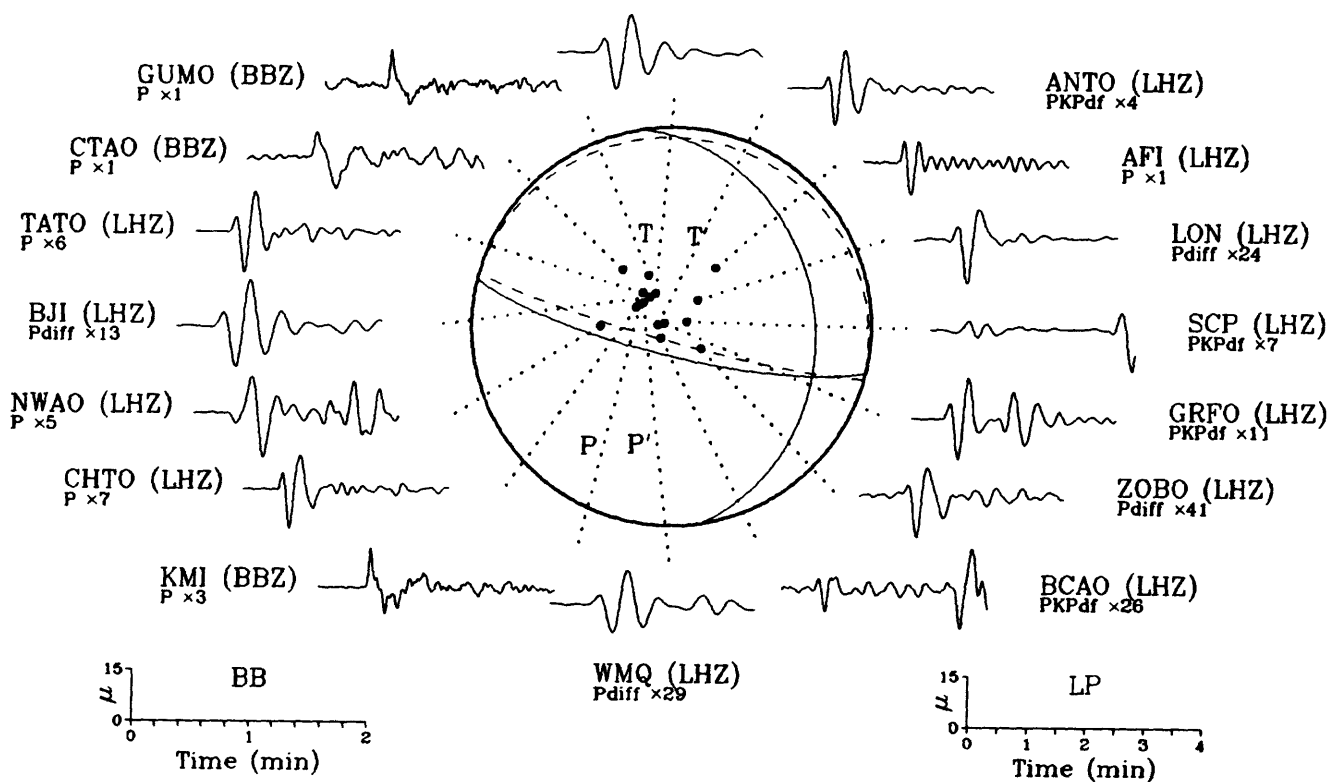
24 May 1989 13:31:14.48  
Komandorsky Islands Region

GRFO (BBZ)  
P x4

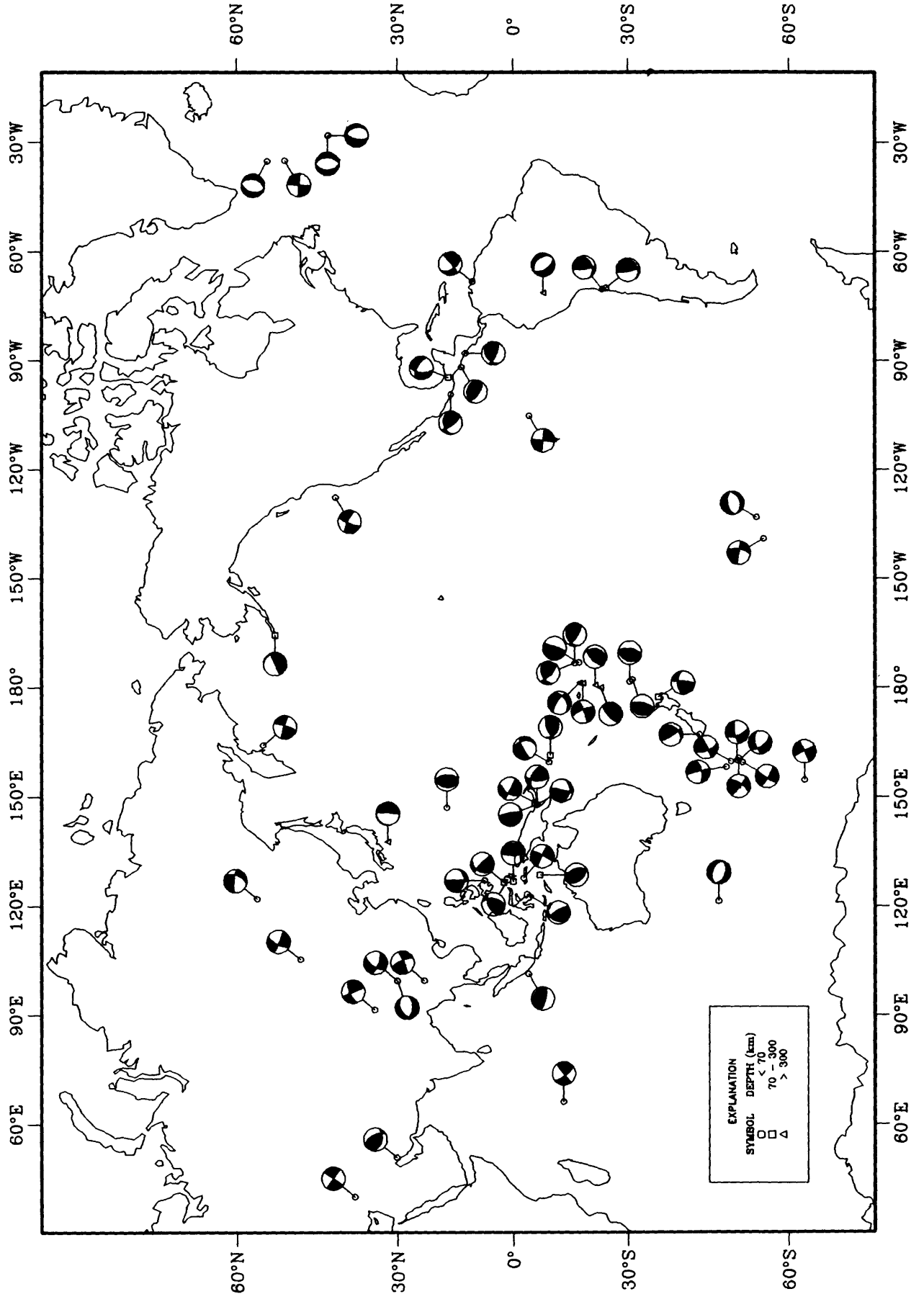


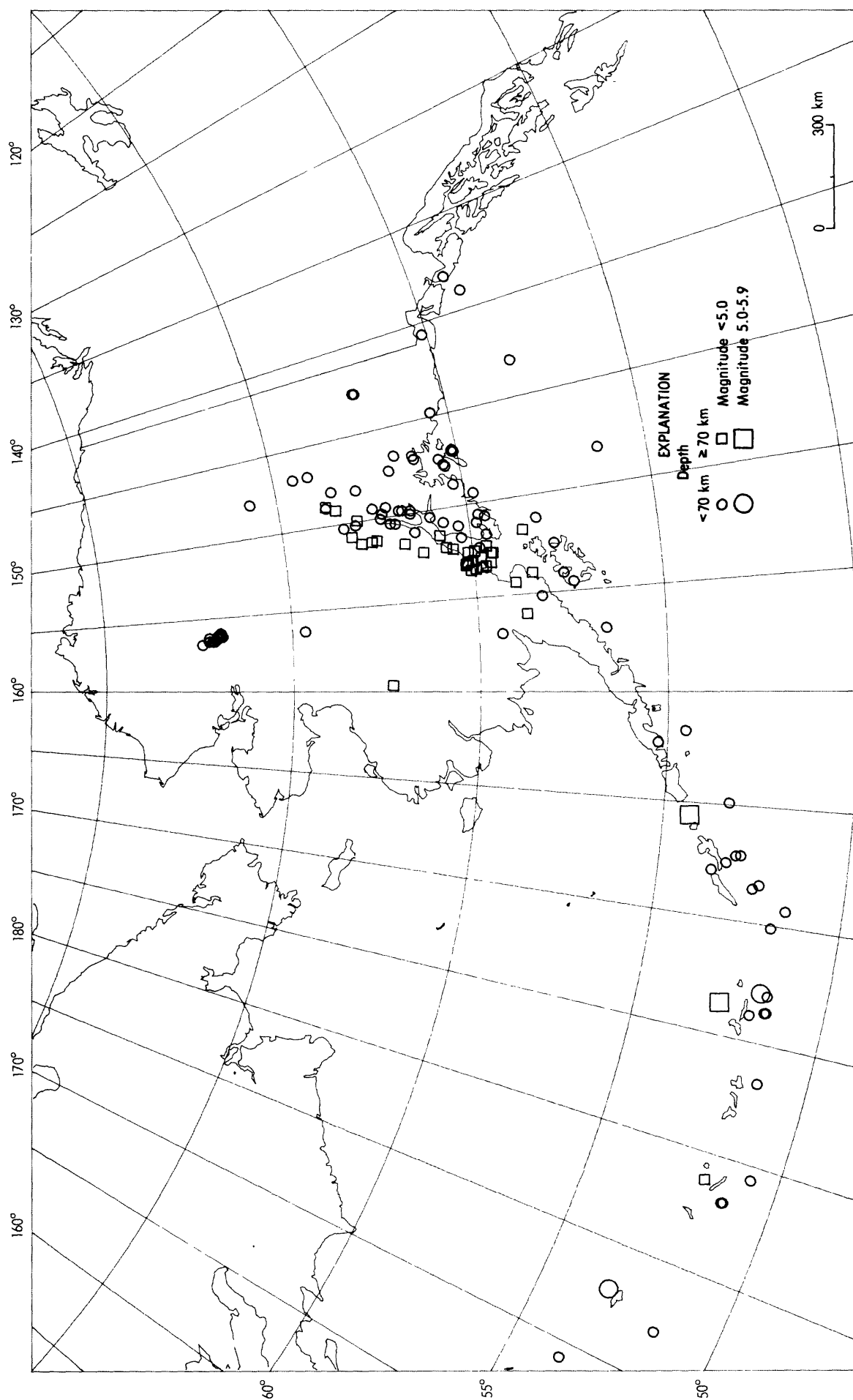
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South Island, New Zealand

MDJ (LHZ)  
Pdiffer x11

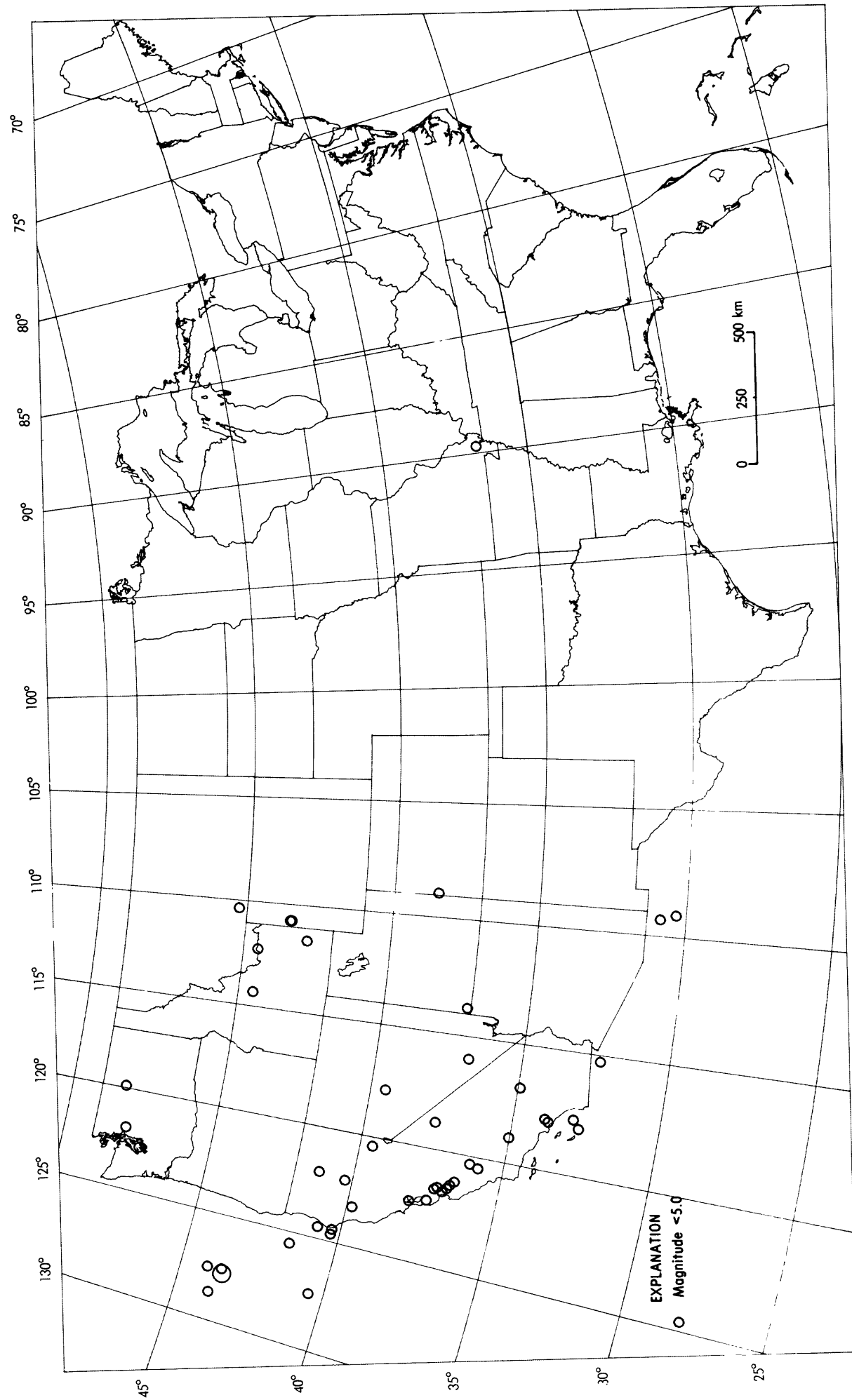


# Earthquake Focal Mechanisms for May 1989

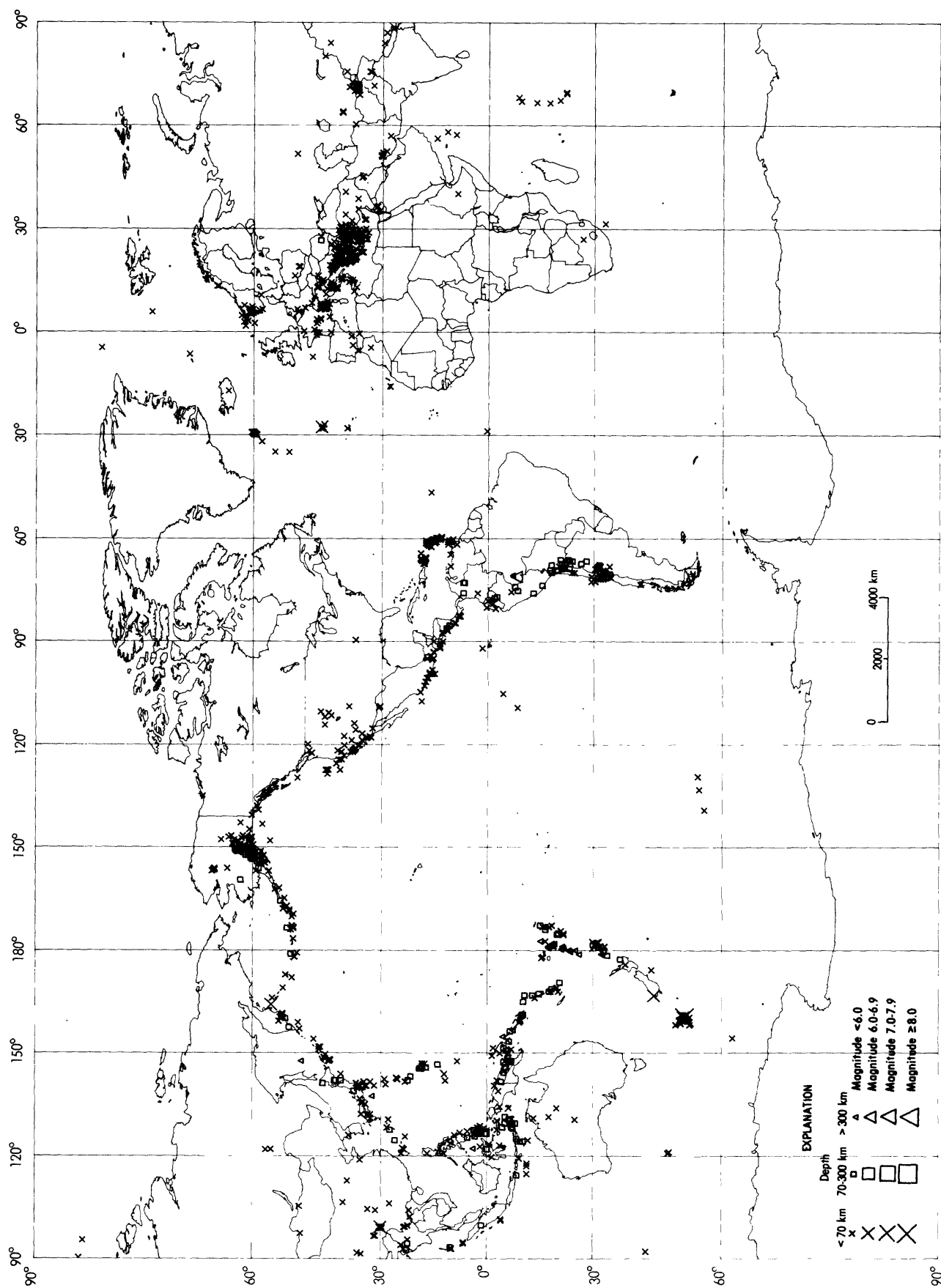




Earthquake epicenters in Alaska and adjacent regions for May, 1989 (C. Stover).



Earthquake epicenters in the conterminous United States and adjacent regions for May, 1989 (C. Stover).



Earthquakes located in May, 1989 (C. Stover).

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# PRELIMINARY DETERMINATION OF EPICENTERS

## MONTHLY LISTING

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

JUNE 1989

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	00 13 43.7	40.133 N 29.325 E	10 G		0.7	6	TURKEY
	01	02 11 30.5	39.616 N 27.846 E	10 G		0.8	5	TURKEY
	01	03 51 11.3	63.143 N 150.847 W	124			20	CENTRAL ALASKA. <AGS-P>.
a	01	04 08 18.9	10.966 S 165.449 E	33 N	5.0 4.8	0.8	73	SANTA CRUZ ISLANDS
	01	04 39 41.4	37.013 N 141.703 E	65	4.9	0.9	98	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Fukushima; (I JMA) at Onahama, Mito, Shirakawa, Sendai and Utsunomiya.
	01	05 14 19.8	6.83 S 147.78 E	33 N		1.5	7	EAST PAPUA NEW GUINEA REGION
	01	06 14 11.9	6.344 S 145.540 E	10 G		1.2	8	PAPUA NEW GUINEA
	01	06 18 03.9	60.703 N 5.494 E	10 G		0.7	9	SOUTHERN NORWAY. ML 1.8 (BER).
	01	06 20 19.0	0.500 N 100.112 E	177	5.0	0.9	34	NORTHERN SUMATERA
	01	07 23 59.7	40.818 N 27.589 E	10 G		1.1	9	TURKEY
a	01	07 25 06.4	52.004 S 159.679 E	10 G	5.2 4.8	1.1	51	MACQUARIE ISLANDS REGION
	01	07 35 07.9	3.24 N 64.52 E	10 G	4.8	1.0	11	CARLSBERG RIDGE
	01	07 57 42.9	10.518 N 62.216 W	10 G		1.1	11	NEAR COAST OF VENEZUELA. MD 3.6 (TRN).
	01	08 00 49.4	52.115 N 176.157 W	154 *	4.4	1.0	13	ANDREANOF ISLANDS, ALEUTIAN IS.
	01	08 48 25.4	38.673 N 71.435 E	33 N	4.6	1.2	21	AFGHANISTAN-USSR BORDER REGION
	01	09 06 18.3	45.748 N 7.033 E	10 G		0.3	10	NORTHERN ITALY. ML 2.3 (GEN). MD 2.2 (ROM).
	01	09 25 57.0	44.54 N 5.36 E	10 G		0.7	9	FRANCE. MD 2.2 (ROM).
	01	09 33 51.2	34.010 N 117.170 W	12			19	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.5 (PAS). Felt (IV) at Redlands and Yucaipa. Felt (III) at Angelus Oaks, Crestline, Highland, Lakeview, Mentone, Moreno Valley, Rialto and San Bernardino.
	01	09 49 10.4	44.595 N 7.383 E	10 G		0.6	9	NORTHERN ITALY. MD 1.9 (ROM).
	01	11 29 57.4	60.642 N 5.914 E	10 G		0.6	5	SOUTHERN NORWAY. MD 1.5 (BER).
	01	12 18 50.3	36.79 S 95.83 W	10 G	4.9	1.0	18	WEST CHILE RISE
	01	12 25 49.1	43.892 N 15.685 E	10 G		0.9	6	ADRIATIC SEA
	01	12 37 47.2	35.637 N 27.733 E	10 G		0.8	9	DODECANESE ISLANDS
	01	13 02 59.1	42.480 N 24.048 E	10 G		1.4	7	BULGARIA
	01	13 16 34.2	12.44 N 87.95 W	123 ?	4.5	1.0	18	NEAR COAST OF NICARAGUA
	01	13 24 58.7	2.201 S 123.046 E	30 D	5.1 4.3	1.3	61	SULAWESI
	01	13 41 33.3	20.84 S 178.98 W	625 ?	4.4	0.5	10	FIJI ISLANDS REGION
	01	14 23 22.3	34.260 N 117.270 W	4			8	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS). Felt (IV) at Crestline and (III) at Highland and Redlands.
	01	15 37 45.0	6.45 S 148.05 E	33 N		1.1	7	NEW BRITAIN REGION
	01	16 13 41.7	61.816 N 7.459 E	10 G		0.9	8	SOUTHERN NORWAY. ML 2.3 (BER).
	01	16 43 07.1	31.905 S 71.732 W	69 *	4.5	1.3	17	NEAR EAST COAST OF CENTRAL CHILE. Felt (III) in the Valparaiso area.
	01	17 19 12.2	30.106 N 50.821 E	34 *	4.1	1.4	26	IRAN
	01	17 27 39.1	37.85 N 15.27 E	10 G		0.4	5	SICILY. MD 2.7 (ROM).
	01	17 33 14.9	37.696 N 15.031 E	10 G		0.5	5	SICILY. MD 2.6 (ROM).
	01	18 03 42.7	31.576 N 109.048 E	31 *	4.6	1.3	31	SICHUAN PROVINCE, CHINA
	01	18 07 37.5	59.069 N 5.887 E	13		0.5	8	SOUTHERN NORWAY. MD 1.9 (BER).
	01	18 36 56.4	19.345 N 155.043 W	10			45	HAWAII. <HVO-P>. MD 4.0 (HVO). Felt at Hilo and in the Puna and Volcano areas.
	01	19 27 18.5	59.896 N 152.525 W	96			36	SOUTHERN ALASKA. <AGS-P>.
	01	20 07 34.3	60.503 N 151.913 W	77			17	KENAI PENINSULA, ALASKA. <AGS-P>.
	01	20 39 54.2	36.585 N 140.474 E	33 N		1.5	8	NEAR EAST COAST OF HONSHU, JAPAN. MG 3.1 (JMA). Felt (I JMA) at Mito.
	01	20 53 22.9	43.458 N 5.468 E	10 G		0.5	7	NEAR SOUTH COAST OF FRANCE. MD 2.5 (STR).
	01	20 56 00.2	23.887 S 70.267 W	44	5.2	1.1	96	NEAR COAST OF NORTHERN CHILE. Felt (IV) at Antofagasta; (II) at Talta and Mejillones.
	01	21 14 09.9	9.604 N 74.270 W	34 ?	4.7	1.2	26	NORTHERN COLOMBIA
	01	21 57 06.4	14.195 N 61.095 W	31 *		0.5	11	WINDWARD ISLANDS. ML 2.7 (FDF). MD 3.3 (TRN).
	01	22 29 05.4	4.443 S 138.379 E	151 *	4.8	0.4	13	WEST IRIAN
02	00 00 38.3	5.359 S 153.081 E	52 *	4.5		1.2	15	NEW IRELAND REGION
02	00 06 29.9	60.857 N 151.624 W	72				13	KENAI PENINSULA, ALASKA. <AGS-P>.
02	01 46 16.5	46.470 N 12.995 E	10 G			1.5	12	NORTHERN ITALY. MD 3.0 (LJU). 2.7 (ROM). 2.4 (TRI).

02	02	00	00.5%	41.664 N	14.047 E	10 G	1.1	5	SOUTHERN ITALY. MD 3.0 (ROM).	
02	03	18	35.1	24.013 N	122.363 E	39	4.9 4.0	1.0	39	TAIWAN REGION
02	03	20	11.2%	38.440 N	26.485 E	10 G		1.1	5	AEGEAN SEA
02	04	07	42.6	36.315 N	139.182 E	112	3.7	0.7	10	HONSHU, JAPAN
02	04	21	28.1	43.111 N	13.435 E	10 G		0.3	5	CENTRAL ITALY. MD 2.2 (SSO).
02	04	41	57.5*	30.046 N	50.510 E	33 N	4.1	1.2	8	IRAN
02	05	04	34.0&	32.934 N	80.166 W	6			18	SOUTH CAROLINA. <GLD>. MD 2.0 (GLD). Felt (IV) at Summerville.
02	05	07	30.5&	61.088 N	149.902 W	30			20	SOUTHERN ALASKA. <AGS-P>.
02	05	38	50.7*	17.840 N	146.969 E	56 *	4.8	0.7	20	MARIANA ISLANDS
02	05	40	06.4*	40.440 N	21.208 E	10 G		0.9	6	GREECE. ML 2.7 (SKO). MD 3.2 (ATH).
02	06	03	43.6	11.432 S	118.226 E	33 N	4.8	1.2	18	SOUTH OF SUMBAWA ISLAND
02	06	27	37.2&	61.464 N	146.727 W	31			38	SOUTHERN ALASKA. <AGS-P>. ML 4.1 (PMR). Felt (IV) at Valdez and (III) at Anchorage and Palmer.
02	06	32	39.8*	13.288 N	123.021 E	33 N	4.2 4.4	1.4	16	LUZON, PHILIPPINE ISLANDS
02	08	03	19.9%	39.275 N	28.293 E	10 G		0.6	10	TURKEY
02	08	24	29.9%	39.168 N	27.603 E	10 G		1.5	5	TURKEY
02	10	00	54.9*	40.054 N	21.917 E	10 G		1.2	6	GREECE. MD 3.8 (ATH).
02	10	12	39.3%	60.310 N	5.420 E	10 G		1.3	9	SOUTHERN NORWAY. ML 1.5 (BER).
02	10	50	39.4?	7.58 S	152.19 E	33 N		1.0	6	NEW BRITAIN REGION
02	10	53	36.9*	10.974 S	160.948 E	33 N	4.2	0.7	6	SOLOMON ISLANDS
02	11	02	19.8	19.068 S	168.833 E	100	5.3	0.9	176	VANUATU ISLANDS
02	11	17	58.2?	7.31 S	129.36 E	150 ?	4.6	1.3	13	BANDA SEA
02	11	55	56.9?	13.71 S	76.73 W	33 N		1.1	5	NEAR COAST OF PERU
02	12	49	19.1?	42.72 N	19.14 E	10 G		0.2	4	YUGOSLAVIA. ML 2.0 (TTG).
02	13	26	09.6?	38.89 N	23.73 E	10 G		0.4	6	GREECE
02	13	28	38.6?	3.63 S	102.01 E	96 ?		0.3	7	SOUTHERN SUMATERA
02	14	02	17.3	11.800 N	73.147 W	60 *	4.5 3.9	0.9	21	NEAR NORTH COAST OF COLOMBIA
02	15	06	57.1*	33.278 N	48.101 E	33 N	4.1	1.0	5	WESTERN IRAN
02	15	38	02.0	44.420 N	7.399 E	10 G		0.3	12	NORTHERN ITALY. ML 2.2 (GEN).
02	15	57	22.7*	55.145 N	160.592 W	58	4.8	1.0	39	ALASKA PENINSULA. Felt (IV) at Sand Point.
02	18	32	06.0*	2.760 N	127.125 E	33 N	4.5	1.2	7	MOLUCCA PASSAGE
02	18	47	34.0	13.503 N	123.018 E	47 *	4.7 4.6	1.3	62	LUZON, PHILIPPINE ISLANDS
02	19	37	07.2?	6.68 S	147.81 E	48 *	4.3 3.6	1.5	8	EAST PAPUA NEW GUINEA REGION
02	19	57	13.3&	61.800 N	150.755 W	66			26	SOUTHERN ALASKA. <AGS-P>.
02	20	44	19.7&	61.457 N	150.048 W	39			16	SOUTHERN ALASKA. <AGS-P>.
02	20	56	10.2?	0.29 N	100.18 E	172 *	4.9	1.5	9	NORTHERN SUMATERA
02	21	01	18.2	4.669 S	153.014 E	72	5.4	0.9	78	NEW IRELAND REGION
02	21	37	59.0*	37.249 N	142.030 E	26	4.7	1.3	22	OFF EAST COAST OF HONSHU, JAPAN
02	21	55	44.9	9.923 S	74.562 W	40 *	5.2	1.0	80	PERU
03	00	01	20.9	42.073 N	143.499 E	55	4.8	1.0	54	HOKKAIDO, JAPAN REGION. Felt (II JMA) at Tomakomai; (I JMA) at Hiroo and Urakawa.
03	00	20	18.4	44.263 N	6.771 E	11	3.2	0.8	42	FRANCE. ML 2.9 (GEN), 2.8 (LDG). MD 3.0 (ROM), 2.6 (STR).
03	00	23	41.4	31.740 N	50.823 E	36	4.8 3.9	1.2	105	IRAN. Felt in the Farsan area.
03	00	50	29.4*	9.979 N	60.344 W	88 ?		0.4	15	NEAR COAST OF VENEZUELA. MD 3.5 (TRN).
03	02	33	53.8?	43.08 N	2.44 E	10 G		0.7	5	FRANCE. ML 3.0 (LDG).
03	02	51	12.5	44.704 N	9.915 E	10 G		0.7	10	NORTHERN ITALY. MD 2.8 (ROM).
03	02	56	52.6	6.826 S	156.216 E	171	5.4	0.9	184	SOLOMON ISLANDS
03	05	10	54.6	6.338 S	130.329 E	154 *	4.9	0.9	28	BANDA SEA
03	05	37	53.6*	41.918 N	16.100 E	10 G		0.5	7	SOUTHERN ITALY. MD 2.8 (ROM).
03	08	03	51.2*	37.703 N	21.041 E	10 G		0.5	5	SOUTHERN GREECE. MD 3.4 (ATH).
03	12	37	17.2&	40.463 N	126.102 W	5 G			15	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.7 (BRK).
03	12	45	37.3	42.798 N	19.064 E	10 G		0.7	10	YUGOSLAVIA. ML 2.4 (TTG).
03	13	24	47.7*	0.122 N	121.954 E	209 ?	4.7	0.5	11	MINAHASSA PENINSULA
03	14	13	41.2*	7.097 S	129.442 E	179 *	4.9	1.5	22	BANDA SEA
03	15	47	05.2&	59.898 N	150.794 W	26			26	KENAI PENINSULA, ALASKA. <AGS-P>. ML 3.2 (PMR). Felt (II) at Homer.
03	16	05	14.2*	16.442 N	61.146 W	33 N		0.5	6	LEEWARD ISLANDS. ML 2.6 (FDF).
03	16	33	51.0	6.596 S	147.767 E	42 *	4.2 4.5	1.3	26	EAST PAPUA NEW GUINEA REGION. ML 4.9 (PMG).
03	16	37	37.8	41.904 N	23.186 E	10 G		1.0	17	GREECE-BULGARIA BORDER REGION. ML 3.3 (SKO).
03	17	23	09.5	6.693 S	147.818 E	51 *	4.5 3.8	0.9	17	EAST PAPUA NEW GUINEA REGION
03	17	29	58.4	21.835 S	138.996 W	0 G	5.3	0.8	70	TUAMOTU ARCHIPELAGO REGION
03	17	38	28.5	39.405 N	20.449 E	10 G	3.9	1.2	31	GREECE-ALBANIA BORDER REGION. ML 4.0 (ATH).
03	18	22	18.1	45.910 N	6.794 E	10 G		1.4	18	FRANCE. ML 2.7 (LDG).
03	19	32	10.1?	36.04 N	7.64 W	10 G		1.1	6	STRAIT OF GIBRALTAR
03	19	49	56.5*	41.826 N	23.184 E	10 G		0.5	7	GREECE-BULGARIA BORDER REGION. ML 2.5 (SKO).
03	20	37	22.1?	32.45 S	72.03 W	10 G		0.6	8	OFF COAST OF CENTRAL CHILE
03	21	52	01.7	45.265 N	6.645 E	12		1.2	24	FRANCE. ML 2.9 (LDG). MD 2.9 (ROM).
03	22	19	15.9?	6.38 S	148.08 E	33 N	4.1	1.5	9	NEW BRITAIN REGION
03	22	25	08.4&	59.708 N	153.314 W	108			10	SOUTHERN ALASKA. <AGS-P>.
03	22	45	34.6*	30.768 S	72.504 W	61 ?		0.9	15	OFF COAST OF CENTRAL CHILE
03	22	46	51.4*	35.087 N	28.264 E	33 N		0.3	9	EASTERN MEDITERRANEAN SEA
03	23	13	10.4	33.350 N	136.868 E	388	4.8	1.0	149	NEAR S. COAST OF SOUTHERN HONSHU. Felt (I JMA) at Utsunomiya.
04	00	40	15.3*	46.838 N	14.747 E	10 G		0.7	5	YUGOSLAVIA. MD 2.4 (LJU). ML 2.1 (KBA).
04	01	21	52.9	29.992 N	99.370 E	10 G	4.7	1.3	32	SICHUAN PROVINCE, CHINA
04	02	06	07.9	23.184 N	121.609 E	40	4.5 4.1	1.2	46	TAIWAN
04	02	20	36.9%	37.888 N	29.328 E	10 G		1.1	6	TURKEY
04	02	46	34.5*	4.729 S	133.971 E	33 N	4.4	1.3	13	WEST IRIAN REGION
04	02	49	55.1*	4.663 S	134.023 E	33 N	4.4	1.3	6	WEST IRIAN REGION
04	02	59	18.1*	13.355 N	123.133 E	33 N	4.5 4.0	1.2	20	LUZON, PHILIPPINE ISLANDS
04	04	07	06.7	15.619 N	95.392 W	33 N	4.8 3.5	1.0	51	NEAR COAST OF OAXACA, MEXICO
04	04	49	03.5	37.784 N	29.256 E	10 G	3.7	1.0	25	TURKEY. MD 4.1 (ATH). Felt at Denizli.
04	05	24	19.6	37.447 N	21.124 E	10 G	3.6	1.0	31	SOUTHERN GREECE. ML 3.5 (ATH).
04	05	43	07.5*	38.294 N	26.619 E	10 G		0.6	6	AEGEAN SEA
04	07	07	39.6?	51.91 S	160.87 E	10 G		1.2	7	NORTH OF MACQUARIE ISLAND
04	08	47	55.3?	3.35 S	130.42 E	33 N		1.2	6	CERAM
04	09	48	33.7?	12.87 N	144.69 E	56 *		0.2	7	SOUTH OF MARIANA ISLANDS
04	09	58	16.9*	16.516 S	173.638 W	58 *	4.5	1.0	28	TONGA ISLANDS
04	10	28	18.0*	23.804 N	121.834 E	10 G		0.3	6	TAIWAN
04	10	39	08.0*	38.759 N	45.315 E	33 N	3.6	1.1	8	N.W. IRAN-USSR BORDER REGION
04	12	02	35.9*	11.698 N	43.968 E	10 G	4.9	1.4	31	ETHIOPIA. ML 4.4 (ARO).

04	13	33	32.77	16.55	S	174.17	W	76 ?	4.3	1.3	12	TONGA ISLANDS
04	15	00	26.6*	43.765	N	17.492	E	10 G		1.0	16	YUGOSLAVIA. ML 3.2 (ZAG), 2.5 (LJU). MD 3.1 (TRI). Felt in the Knin area.
04	15	07	46.3	23.443	N	99.325	E	10 G	5.0	1.2	16	BURMA-CHINA BORDER REGION. ML 4.6 (BJI).
04	16	35	59.4*	7.074	S	129.813	E	131 *	5.0	1.2	25	BANDA SEA
04	18	34	36.4?	36.79	N	98.52	E	10 G		1.6	5	QINGHAI PROVINCE, CHINA
04	19	13	11.4	39.674	N	20.013	E	21	4.1	1.4	71	GREECE-ALBANIA BORDER REGION. ML 4.4 (ATH), 4.0 (TTG).
04	19	25	45.8	37.089	N	29.014	E	10 G		0.9	9	TURKEY
04	19	39	19.1?	18.90	S	173.43	W	33 N	4.7	1.1	10	TONGA ISLANDS
04	20	29	45.8*	52.738	S	160.713	E	10 G	5.2 4.6	1.0	10	MACQUARIE ISLANDS REGION
04	21	33	59.7&	34.600	N	116.840	W	2	4.2	4.3	43	SOUTHERN CALIFORNIA. <PAS-P>. ML 4.5 (PAS), 4.2 (BRK). Felt (V) at Apple Valley; (IV) at Burbank; (III) at Borstow, Cathedral City, Daggett, Fawnskin, Hesperia, Lucerne Valley, Mentone, Newberry Springs, Palm Desert, Posadero, Rialto and Wilmington.
04	21	36	15.7	30.087	N	50.717	E	26 *	4.3	1.2	22	IRAN
04	22	43	28.5	27.586	N	140.882	E	38 *	4.7 4.4	1.2	50	BONIN ISLANDS REGION. Felt (I JMA) on Chichi-shimo.
05	00	24	27.6	30.226	N	51.012	E	37 *	4.0	1.0	13	IRAN
05	01	31	57.6	30.112	N	99.225	E	10 G	4.5	1.1	13	SICHUAN PROVINCE, CHINA
05	02	53	43.5	40.874	N	22.989	E	10 G		0.6	21	GREECE. ML 2.7 (SKO). MD 3.2 (ATH).
05	03	43	55.1?	37.86	N	29.57	E	10 G		1.8	5	TURKEY
05	04	49	27.2*	43.144	N	13.941	E	10 G		0.7	8	CENTRAL ITALY. MD 2.8 (SSO), 2.7 (ROM).
05	07	00	03.7*	44.899	N	14.747	E	10 G		0.6	7	ADRIATIC SEA. MD 2.5 (TRI), 2.5 (LJU).
05	07	13	46.0&	61.676	N	150.826	W	67			20	SOUTHERN ALASKA. <AGS-P>.
05	07	32	09.0*	46.284	N	13.335	E	10 G		1.5	5	AUSTRIA. MD 2.9 (LJU), 2.6 (ROM), 2.3 (TRI).
05	08	56	30.2%	39.254	N	27.720	E	10 G		0.7	5	TURKEY
05	10	09	20.3*	37.253	N	4.535	W	10 G		1.5	6	SPAIN
05	10	28	40.3%	60.635	N	6.225	E	10 G		0.6	8	SOUTHERN NORWAY. MD 1.8 (BER).
05	11	12	43.0*	18.665	N	142.692	E	33 N		0.7	7	MARIANA ISLANDS REGION
05	13	37	32.1?	17.69	N	61.99	W	33 N		0.9	5	LEEWARD ISLANDS. ML 2.9 (FDF).
05	13	55	32.6?	13.97	N	121.01	E	33 N	4.6	1.0	13	MINDORO, PHILIPPINE ISLANDS
05	15	56	19.0	43.415	N	5.433	E	10 G		1.2	8	NEAR SOUTH COAST OF FRANCE. MD 2.5 (STR).
05	15	59	24.5?	16.14	N	99.70	W	33 N		1.3	5	NEAR COAST OF GUERRERO, MEXICO
05	16	23	40.4	12.002	S	14.563	E	10 G	5.1 4.2	1.5	75	ANGOLA
05	17	50	13.0*	35.228	N	22.249	E	33 N		1.3	12	MEDITERRANEAN SEA. MD 4.2 (ATH).
05	17	54	36.5*	84.823	N	5.990	E	10 G	4.1	1.2	11	NORTH OF SVALBARD
05	19	09	11.0*	16.981	N	62.319	W	33 N		0.5	5	LEEWARD ISLANDS. MD 2.6 (TRN).
05	20	00	42.3	5.943	S	105.443	E	104 ?	4.8	1.3	39	SUNDA STRAIT
05	20	12	44.3?	16.54	N	99.59	W	10 G		1.1	8	NEAR COAST OF GUERRERO, MEXICO
05	20	38	48.1	39.628	N	27.802	E	10 G		1.3	16	TURKEY. MD 3.2 (ATH). Felt at Bandirma.
05	20	39	15.0?	9.84	S	161.76	E	118 ?	4.1	0.7	6	SOLOMON ISLANDS
05	21	50	11.7	37.765	N	29.242	E	10 G		1.3	8	TURKEY
05	21	56	26.2	46.008	N	6.609	E	10 G		1.0	19	SWITZERLAND. ML 2.8 (LDG).
05	22	21	17.3	60.103	N	29.525	W	10 G	4.4	0.7	40	NORTH ATLANTIC OCEAN
05	22	40	55.5?	44.98	N	6.27	E	10 G		1.1	6	FRANCE. ML 2.6 (LDG).
05	22	42	54.2&	60.523	N	150.589	W	35			16	KENAI PENINSULA, ALASKA. <AGS-P>.
05	23	33	29.9&	62.575	N	149.075	W	49			21	CENTRAL ALASKA. <AGS-P>. ML 3.4 (PMR).
05	23	54	26.6	37.773	N	29.236	E	10 G		1.1	9	TURKEY
06	00	55	07.1?	16.10	N	99.91	W	10 G		1.5	8	NEAR COAST OF GUERRERO, MEXICO
06	01	17	44.3*	17.502	N	145.893	E	171 *	4.8	0.6	14	MARIANA ISLANDS
06	02	41	17.7	17.517	S	178.934	W	557 *	5.1	0.9	40	FIJI ISLANDS REGION
06	02	51	45.4*	4.221	N	82.046	W	10 G	4.7 3.7	1.1	18	SOUTH OF PANAMA
06	03	45	03.9?	40.35	N	126.79	W	10 G		1.1	12	OFF COAST OF NORTHERN CALIFORNIA. ML 3.4 (BRK).
06	07	20	22.1&	51.111	N	124.543	W	20 G			21	BRITISH COLUMBIA. <PGC-P>. ML 3.6 (PGC).
06	07	24	56.6	18.457	N	146.302	E	58 D	5.4	1.0	168	MARIANA ISLANDS
06	07	33	25.4?	18.51	N	144.39	E	114 ?		1.1	8	MARIANA ISLANDS
06	07	56	50.7?	61.88	N	4.30	E	10 G		0.9	7	SOUTHERN NORWAY. MD 2.1 (BER).
06	08	22	47.6*	29.933	N	138.708	E	453 ?	4.6	0.4	16	SOUTH OF HONSHU, JAPAN
06	08	28	31.8%	33.740	S	71.224	W	33 N		0.5	9	NEAR COAST OF CENTRAL CHILE
06	09	00	29.4	37.764	N	26.712	E	10 G		1.2	21	DODECANESE ISLANDS
06	09	11	34.1	43.711	N	18.737	E	10 G		1.3	15	YUGOSLAVIA
06	09	53	10.0&	59.887	N	153.370	W	126			11	SOUTHERN ALASKA. <AGS-P>.
06	10	41	43.8%	60.842	N	6.417	E	10 G		0.4	5	SOUTHERN NORWAY
06	11	29	48.0	38.375	N	119.319	W	5 G		1.2	11	CALIFORNIA-NEVADA BORDER REGION. ML 2.5 (BRK).
06	12	48	38.8	15.632	N	60.581	W	10 G		0.3	8	LEEWARD ISLANDS. ML 3.0 (FDF).
06	13	17	55.2*	30.585	S	178.337	W	242 ?	5.0	1.0	18	KERMADEC ISLANDS
06	14	04	29.0?	52.87	S	159.39	E	10 G	4.6	0.6	8	MACQUARIE ISLANDS REGION
06	14	09	17.9	6.628	S	147.730	E	45 *	4.9	0.9	19	EAST PAPUA NEW GUINEA REGION
06	14	35	15.8*	50.441	N	6.155	E	10 G		0.1	5	GERMANY. MD 1.9 (UCC)
06	16	36	33.7*	21.838	N	143.110	E	236 ?	4.1	0.7	19	MARIANA ISLANDS REGION
06	16	59	11.9	45.904	N	6.768	E	5 G		1.1	14	FRANCE. ML 2.8 (LDG).
06	17	06	35.1?	61.78	N	7.43	E	1 G		0.9	4	SOUTHERN NORWAY. MD 2.2 (BER).
06	17	15	21.2*	31.228	S	71.041	W	33 N		1.1	10	NEAR COAST OF CENTRAL CHILE
06	18	04	21.7*	37.780	N	26.714	E	10 G		1.4	10	DODECANESE ISLANDS. MD 3.4 (ATH).
06	19	03	29.7%	43.758	N	12.543	E	10 G		1.1	5	CENTRAL ITALY. MD 2.1 (ROM).
06	19	45	26.9&	61.878	N	147.722	W	24			26	SOUTHERN ALASKA. <AGS-P>. ML 3.2 (PMR).
06	20	02	34.2	44.789	N	111.512	W	5 G		0.4	7	HEBGEN LAKE REGION. CL 2.9 (BUT).
06	21	31	37.0	52.673	N	34.836	W	27 D	4.7	1.4	45	NORTH ATLANTIC OCEAN
06	23	27	05.1&	61.900	N	147.714	W	24			13	SOUTHERN ALASKA. <AGS-P>.
07	00	07	25.9	37.178	N	4.451	W	10 G		1.3	6	SPAIN. mbLg 2.7 (MDD).
07	00	12	49.2	37.252	N	4.490	W	10 G		1.2	20	SPAIN. mbLg 3.5 (MDD). Felt (III) at Palenciano.
07	00	18	19.2	48.779	N	19.210	E	16		0.9	25	CZECHOSLOVAKIA. ML 4.3 (KRA), 3.5 (BRA), 3.4 (VKA), 3.4 (KBA). Felt (V) in the Banska Bystrica-Brezno-Kremnica area.
07	00	28	34.5	37.150	N	4.527	W	10 G		1.1	10	SPAIN. mbLg 3.1 (MDD).
07	01	35	20.5*	60.126	N	29.367	W	10 G	4.3	1.0	13	NORTH ATLANTIC OCEAN
07	01	54	22.4	37.312	N	4.534	W	10 G		1.3	13	SPAIN. mbLg 3.2 (MDD).
07	01	57	40.2	37.279	N	4.557	W	10 G		1.1	13	SPAIN. mbLg 2.8 (MDD).
07	02	33	38.7%	37.337	N	4.558	W	10 G		1.4	6	SPAIN. mbLg 2.6 (MDD).
07	02	47	47.0	43.919	N	6.470	W	10 G		1.2	15	SPAIN. mbLg 3.3 (MDD).
07	02	48	08.9*	7.085	S	129.195	E	69 ?	5.1	1.1	27	BANDA SEA
07	02	59	13.6	37.312	N	4.549	W	10 G		1.4	13	SPAIN. mbLg 3.3 (MDD).
07	03	31	22.2%	38.928	N	27.713	E	10 G		1.5	6	TURKEY

07	05	07	47.6*	37.102 N	4.418 W	10 G	1.4	10	SPAIN. mbLg 2.9 (MDD).
07	05	08	47.3?	57.89 S	26.97 W	33 N 4.4	1.0	12	SOUTH SANDWICH ISLANDS REGION
07	05	10	48.6	37.331 N	4.494 W	10 G	0.6	7	SPAIN. mbLg 2.6 (MDD).
07	05	25	44.5?	16.28 N	62.51 W	33 N	0.6	6	LEEWARD ISLANDS
07	06	00	24.5	37.314 N	4.560 W	10 G	1.3	9	SPAIN. mbLg 2.7 (MDD).
07	07	04	41.0	37.315 N	4.555 W	10 G	1.3	10	SPAIN. mbLg 2.9 (MDD).
07	07	38	15.4*	37.321 N	4.546 W	10 G	0.4	5	SPAIN. mbLg 2.7 (MDD).
07	09	58	16.2*	8.956 S	106.549 E	33 N 5.0 3.5	0.9	17	SOUTH OF JAVA
07	10	03	19.2*	16.311 S	173.487 W	48 D 5.1	0.9	24	TONGA ISLANDS
07	11	17	41.5	60.701 N	5.509 E	10 G	0.7	9	SOUTHERN NORWAY. ML 1.7 (BER).
07	11	50	00.9*	57.348 N	155.206 W	54	1.0	10	ALASKA PENINSULA. <AGS-P>.
07	12	19	48.3	14.131 N	51.745 E	10 G 4.7 4.5	1.1	57	EASTERN GULF OF ADEN
07	13	10	29.0*	33.242 N	141.372 E	33 N 4.5	0.4	13	OFF EAST COAST OF HONSHU, JAPAN
07	14	35	30.5*	51.258 N	15.727 E	5 G	1.2	9	POLAND. ML 3.6 (VKA), 3.0 (KRA).
07	15	08	25.1	34.596 N	27.994 E	33 N	1.4	10	EASTERN MEDITERRANEAN SEA
07	15	17	48.3	6.591 S	147.836 E	48 * 5.0 4.5	1.4	43	EAST PAPUA NEW GUINEA REGION
07	15	42	07.8*	63.605 N	146.213 W	0	33	CENTRAL ALASKA. <AGS-P>. ML 3.6 (PMR).	
07	16	08	12.3	37.257 N	4.557 W	10 G	0.7	8	SPAIN. mbLg 2.7 (MDD).
07	16	31	49.3	36.150 N	120.081 W	5 G	1.1	11	CENTRAL CALIFORNIA. ML 2.7 (BRK).
07	17	40	04.9*	9.202 S	78.940 W	67 D 5.0	0.9	17	NEAR COAST OF NORTHERN PERU. Felt (IV) at Chimbote.
07	18	03	40.2*	61.596 N	151.760 W	76	9	SOUTHERN ALASKA. <AGS-P>.	
07	18	26	19.1	37.035 N	4.552 W	10 G	1.3	10	SPAIN. mbLg 2.9 (MDD).
07	18	30	06.1*	21.803 N	121.393 E	75 * 3.9	0.9	16	TAIWAN REGION
07	18	42	33.0*	64.460 N	149.472 W	16	27	CENTRAL ALASKA. <AGS-P>.	
07	18	53	12.6*	40.048 S	74.623 W	33 N 4.9	1.4	18	OFF COAST OF SOUTHERN CHILE
07	19	15	12.3?	51.70 N	16.44 E	10 G	0.4	8	POLAND. ML 3.3 (VKA).
a 07	19	45	53.7	38.057 N	21.620 E	25 5.0 4.8	1.4	282	GREECE. ML 5.0 (TTG), 4.7 (ATH). MD 5.1 (VKA), 4.8 (KBA). Cracks in many buildings in the Kato Akhalia area. Felt widely on northern Peloponnissos and an Zakynthos and Kefallinia.
07	21	01	48.8	39.366 N	28.140 E	10 G	1.2	13	TURKEY. MD 3.3 (ATH).
a 07	21	47	35.0	5.632 N	125.732 E	170 5.1	1.0	95	MINDANAO, PHILIPPINE ISLANDS
07	23	51	23.4*	34.262 N	91.930 E	10 G 3.5	1.5	18	QINGHAI PROVINCE, CHINA
08	00	02	06.0	47.855 N	7.187 E	10 G	0.8	8	SWITZERLAND. ML 2.5 (LDG). MD 1.6 (STR).
08	00	17	58.3?	35.12 N	21.17 E	33 N	1.3	5	MEDITERRANEAN SEA. MD 3.5 (ATH).
08	01	11	12.8	37.965 N	21.491 E	10 G	1.1	8	SOUTHERN GREECE. ML 3.2 (ATH).
08	01	24	56.7	14.678 S	167.215 E	132 * 5.1	1.1	64	VANUATU ISLANDS
08	01	33	48.2	44.167 N	10.872 E	20	1.5	36	NORTHERN ITALY. ML 3.1 (LDG). MD 2.9 (ROM).
08	01	37	25.7?	14.42 N	59.51 W	10 G	0.2	5	WINDWARD ISLANDS. ML 3.0 (FDF).
08	01	41	49.8*	29.900 N	99.472 E	10 G 5.3	1.4	15	SICHUAN PROVINCE, CHINA
08	02	22	33.5*	58.209 N	142.663 W	10 G	1.5	15	GULF OF ALASKA. <AGS-P>.
08	02	48	28.1	53.748 N	162.535 E	33 N 5.0	1.1	32	OFF EAST COAST OF KAMCHATKA
08	04	07	44.3*	55.550 S	28.029 W	25 D 5.2	0.8	15	SOUTH SANDWICH ISLANDS REGION
08	04	48	59.4	37.269 N	4.544 W	10 G	0.9	16	SPAIN. mbLg 3.3 (MDD).
08	04	55	09.6*	35.438 N	27.504 E	10 G	0.9	6	DODECANESE ISLANDS. MD 3.7 (ATH).
08	06	05	27.2	46.465 N	10.641 E	10 G	1.0	13	NORTHERN ITALY. MD 2.7 (ROM).
08	06	20	40.7*	57.082 N	149.403 W	10 G	41	GULF OF ALASKA. <AGS-P>. ML 4.0 (PMR).	
a 08	06	24	09.6	6.837 N	37.878 E	19 5.0 4.8	0.9	91	ETHIOPIA. Minor injuries to a few people and damage at Sodo.
08	08	38	39.2*	13.798 N	91.736 W	33 N 4.3 3.4	1.0	28	NEAR COAST OF GUATEMALA
08	09	09	28.2*	61.779 N	149.690 W	43	28	SOUTHERN ALASKA. <AGS-P>.	
08	09	25	57.7	30.179 N	50.991 E	33 N	1.0	11	IRAN
08	09	41	35.9*	59.876 N	5.736 E	10 G	0.6	8	SOUTHERN NORWAY. MD 1.8 (BER).
a 08	09	51	56.8	19.531 S	173.736 W	23 D 5.5 5.4	1.1	178	TONGA ISLANDS. Mo=1.0*10**18 Nm (PPT). Ms 5.4 (BRK).
08	10	07	26.4?	9.87 S	124.31 E	80 ? 4.4	0.5	7	TIMOR
08	10	54	32.9	37.751 N	26.749 E	13	1.3	15	DODECANESE ISLANDS. ML 3.6 (ATH).
08	12	25	57.3?	1.29 S	101.42 E	167 * 4.5	1.4	13	SOUTHERN SUMATRA
08	13	29	16.7*	18.057 N	145.559 E	33 N 4.9	0.2	9	MARIANA ISLANDS
08	13	46	28.0	23.496 N	121.493 E	27 D 5.0 4.0	1.4	77	TAIWAN
08	14	14	22.9?	42.04 N	19.31 E	10 G	0.3	4	YUGOSLAVIA. ML 2.1 (TTG).
08	15	31	14.0*	41.084 N	29.207 E	10 G	1.1	7	TURKEY
08	15	41	13.0*	45.565 N	26.281 E	148 ?	1.1	19	ROMANIA
08	16	35	50.1*	61.779 N	7.367 E	10 G	1.1	6	SOUTHERN NORWAY. ML 2.1 (BER).
08	17	17	41.7	41.299 N	22.795 E	10 G	0.6	7	YUGOSLAVIA. ML 1.9 (SKO).
08	18	18	43.3	39.165 N	99.477 W	5 G	0.7	14	KANSAS. mbLg 4.0 (NEIS), 3.8 (TUL). Felt (V) at Damar, Palco and Zurich; (III) at Bogue, Plainville and Wakeeney; (II) at Hays, Ogallah and Struttgart. Also felt in the Stockton area.
08	18	33	25.1?	31.81 N	96.61 E	10 G	0.9	7	TIBET
08	18	47	09.5*	12.487 S	77.992 W	10 G	1.2	11	NEAR COAST OF PERU. Felt (II) at Lima
08	19	57	58.0*	62.953 N	150.941 W	110	24	CENTRAL ALASKA. <AGS-P>.	
08	21	42	53.0*	35.260 N	118.590 W	8	11	CENTRAL CALIFORNIA. <PAS-P>. ML 3.0 (PAS).	
08	21	43	41.6?	37.90 N	47.82 E	10 G	0.4	7	NORTHWESTERN IRAN
08	22	02	11.8	18.510 N	106.159 W	72 * 3.9	0.8	27	OFF COAST OF JALISCO, MEXICO
09	00	24	38.9	36.423 N	70.197 E	223 D 4.5	1.1	29	HINDU KUSH REGION
09	00	48	48.9?	30.97 S	68.18 W	153 ?	1.0	9	SAN JUAN PROVINCE, ARGENTINA
09	05	38	30.8?	41.34 N	20.95 E	10 G	1.0	4	ALBANIA. ML 2.5 (SKO).
09	06	23	22.6*	10.141 S	161.154 E	89 * 4.3	1.3	12	SOLOMON ISLANDS
09	06	24	38.1	37.960 N	21.453 E	10 G	1.2	8	SOUTHERN GREECE. ML 3.3 (ATH).
09	06	31	36.7?	37.45 N	4.67 W	10 G	0.8	6	SPAIN. mbLg 2.9 (MDD).
09	06	40	22.4?	41.37 N	20.89 E	10 G	1.5	4	ALBANIA. ML 2.6 (SKO).
a 09	07	14	28.7	5.038 S	151.278 E	157 5.1	1.0	144	NEW BRITAIN REGION
09	08	14	16.1	71.398 N	3.855 W	10 G 4.9 3.3	1.2	60	JAN MAYEN ISLAND REGION
09	09	06	46.7*	10.137 N	93.346 E	33 N 4.3	1.5	13	ANDAMAN ISLANDS REGION
09	09	46	15.2*	71.575 N	4.378 W	10 G 4.7	1.2	30	JAN MAYEN ISLAND REGION
09	09	49	42.3*	39.638 N	29.491 E	10 G	1.0	6	TURKEY
09	09	53	43.1	10.393 N	92.774 E	33 N 4.8	0.9	54	ANDAMAN ISLANDS REGION
09	10	27	37.0?	13.73 N	92.45 W	33 N 4.3	1.4	9	OFF COAST OF CHIAPAS, MEXICO
09	10	28	33.1*	60.636 N	6.236 E	10 G	0.6	7	SOUTHERN NORWAY. MD 1.8 (BER).
09	10	32	06.9*	62.572 N	149.757 W	72	28	CENTRAL ALASKA. <AGS-P>. Felt (II) at Willow.	
09	11	08	03.4?	23.09 N	121.65 E	33 N	1.3	7	TAIWAN
09	11	43	10.9?	51.65 N	16.35 E	10 G	0.3	6	POLAND ML 2.9 (KRA).
09	12	10	42.1	37.014 N	27.931 E	10 G	0.7	7	TURKEY

09	12 19 35.7	71.432 N	4.371 W	10 G	5.6 5 4	1.3	246	JAN MAYEN ISLAND REGION
09	12 25 56.7	71.699 N	3.717 W	10 G	4.4	0.9	15	JAN MAYEN ISLAND REGION
09	13 02 00.5	60.699 N	5.517 E	10 G		0.8	8	SOUTHERN NORWAY. MD 1.7 (BER).
09	13 09 44.0	10.608 S	119.517 E	33 N	4.4	1.5	17	SUMBA ISLAND REGION
09	13 38 06.9	41.673 N	19.961 E	10 G		1.0	11	ALBANIA. ML 2.7 (TTG).
09	13 39 55.5	10.566 S	119.460 E	33 N	4.6	1.4	17	SUMBA ISLAND REGION
09	13 55 49.3	60.713 N	151.857 W	73			14	KENAI PENINSULA, ALASKA. <AGS-P>.
09	14 46 04.9	29.395 N	102.302 E	10 G	5.1 4.4	1.1	112	SICHUAN PROVINCE, CHINA
09	15 06 32.9	60.913 N	149.283 W	17			24	KENAI PENINSULA, ALASKA. <AGS-P>.
09	15 34 11.6	7.865 S	117.517 E	245 G	5.8	1.0	216	BALI SEA. Felt (III) at Karangasem, Bali. Depth from broadband displacement seismograms.
09	16 29 44.9	23.384 N	121.413 E	10 G		1.2	6	TAIWAN
09	16 38 13.4	8.112 S	117.581 E	242 *	4.6	1.0	17	SUMBAWA ISLAND REGION
09	16 52 12.1	20.260 N	145.147 E	149 D	5.4	1.1	174	MARIANA ISLANDS
09	18 04 05.7	39.671 N	74.490 E	33 N	5.2 4.7	1.2	185	SOUTHERN XINJIANG, CHINA
09	18 08 19.9	45.95 N	2.72 E	10 G		1.0	4	FRANCE. MD 1.5 (STR).
09	18 43 43.0	7.968 N	127.211 E	33 N	4.7	1.0	10	PHILIPPINE ISLANDS REGION
09	19 27 46.4	38.284 N	22.707 E	10 G		1.1	13	GREECE. ML 3.0 (ATH).
09	21 11 23.4	25.265 N	101.976 E	37 *	4.5	1.0	19	YUNNAN PROVINCE, CHINA. ML 4.4 (BJI).
09	21 52 51.7	39.191 N	29.547 E	10 G		0.3	5	TURKEY
09	22 14 01.3	37.972 N	0.181 E	10 G		0.9	6	WESTERN MEDITERRANEAN SEA. mbLg 3.0 (MDD).
10	00 28 02.2	38.365 N	27.078 E	10 G		1.2	6	TURKEY. MD 3.0 (ATH).
10	02 06 32.3	37.234 N	4.533 W	5 G		1.2	13	SPAIN. mbLg 2.9 (MDD).
10	02 06 38.9	17.121 S	166.731 E	33 N	4.7	1.1	51	VANUATU ISLANDS
10	02 56 41.0	4.770 S	102.496 E	33 N	4.4	0.9	17	SOUTHERN SUMATRA
10	04 53 21.5	71.484 N	3.800 W	10 G	5.0 4.5	1.1	91	JAN MAYEN ISLAND REGION
10	06 52 12.8	61.801 N	150.675 W	58			6	SOUTHERN ALASKA. <AGS-P>.
10	07 15 06.9	42.105 N	7.754 W	10 G		0.6	7	SPAIN. mbLg 3.3 (MDD).
10	08 44 55.3	30.044 S	71.218 W	104 *	4.3	1.2	24	NEAR COAST OF CENTRAL CHILE
10	09 09 53.9	1.69 S	77.70 W	183 *	3.9	1.2	10	ECUADOR
10	09 10 01.4	38.899 N	20.716 E	10 G		1.1	8	GREECE. MD 3.3 (ATH).
10	10 37 18.6	40.596 N	22.170 E	10 G		0.7	6	GREECE. ML 1.7 (SKO).
10	10 43 12.4	37.662 N	30.006 E	10 G		1.0	7	TURKEY
10	11 43 18.4	61.88 N	3.95 E	10 G		1.4	9	NORWEGIAN SEA. MD 2.0 (BER).
10	12 02 03.0	6.373 S	154.814 E	66 ?	4.1	0.8	9	SOLOMON ISLANDS
10	13 40 47.8	16.393 N	61.277 W	75 *		0.4	13	LEEWARD ISLANDS
10	14 08 32.9	38.387 N	27.140 E	9		0.8	20	TURKEY
10	14 43 52.3	4.012 S	139.592 E	74 ?	4.7	0.7	12	WEST IRIAN
10	17 07 35.8	59.793 N	153.277 W	121			25	SOUTHERN ALASKA. <AGS-P>.
10	17 29 58.1	22.252 S	138.734 W	0 G	5.5	0.9	139	TUAMOTU ARCHIPELAGO REGION
10	17 38 22.5	36.689 N	22.877 E	25 *	4.2	1.2	14	SOUTHERN GREECE. ML 3.3 (ATH).
10	17 59 09.2	58.117 N	153.732 W	62			9	KODIAK ISLAND REGION. <AGS-P>.
10	18 26 28.7	36.464 N	22.693 E	10 G		1.5	6	SOUTHERN GREECE. ML 3.2 (ATH).
10	18 35 00.8	41.947 N	125.034 W	5 G	4.2		18	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.8 (BRK).
10	19 09 16.3	36.682 N	22.924 E	15	4.2	1.2	33	SOUTHERN GREECE. ML 3.5 (ATH). Felt in the eastern Lakonikos Kalpos area.
10	19 39 54.7	51.51 N	6.68 E	10 G		1.6	5	GERMANY
10	21 22 06.0	37.174 N	4.566 W	21 *		1.3	14	SPAIN. mbLg 2.8 (MDD).
10	21 50 56.9	36.369 N	31.965 E	112	4.0	0.8	39	TURKEY
10	22 32 23.1	42.790 N	12.675 E	10 G		0.3	6	CENTRAL ITALY. MD 2.7 (ROM).
11	00 51 26.7	36.250 N	120.300 W	6 G			16	CENTRAL CALIFORNIA. <PAS-P>. ML 3.1 (PAS), 2.7 (BRK).
11	01 18 03.5	43.824 N	8.263 E	10 G		0.3	11	CORSICA. ML 2.4 (GEN).
11	01 46 44.6	59.778 N	153.418 W	130			27	SOUTHERN ALASKA. <AGS-P>.
11	04 44 51.6	36.494 N	71.262 E	224	4.1	0.8	41	AFGHANISTAN-USSR BORDER REGION
11	05 03 42.3	36.620 N	27.974 E	10 G		1.3	5	DODECANESE ISLANDS. MD 3.4 (ATH).
11	06 05 07.9	47.173 N	7.492 E	10 G		1.2	16	SWITZERLAND. MD 2.6 (STR).
11	06 45 47.3	6.415 S	148.081 E	33 N	4.7	1.0	15	NEW BRITAIN REGION. ML 4.7 (PMG).
11	06 57 30.5	30.261 N	51.643 E	33 N	3.3	1.6	10	IRAN. ML 3.7 (BMU).
11	06 59 50.5	41.622 N	72.902 E	33 N	4.9	0.9	8	KIRGHIZ SSR
11	07 08 30.8	59.679 N	29.800 W	10 G	4.3	0.8	14	NORTH ATLANTIC OCEAN
11	09 29 18.2	38.845 N	122.808 W	4			12	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK).
11	09 53 30.9	13.348 N	144.274 E	126	4.3	0.4	12	MARIANA ISLANDS. Felt (III) on Guam.
11	10 08 27.2	59.605 N	29.815 W	10 G	4.4	0.8	43	NORTH ATLANTIC OCEAN
11	10 38 10.8	60.032 N	29.706 W	10 G	4.3	1.0	15	NORTH ATLANTIC OCEAN
11	11 26 09.2	59.103 N	30.212 W	10 G	4.5	1.3	15	NORTH ATLANTIC OCEAN
11	11 33 04.3	11.289 N	126.123 E	33 N	4.8	0.9	15	PHILIPPINE ISLANDS REGION
11	11 34 49.1	57.459 N	142.885 W	10 G	4.5		84	GULF OF ALASKA. <AGS-P>. ML 3.9 (PMR).
11	12 00 32.9	44.477 N	124.895 W	10 G	4.1	0.8	19	NEAR COAST OF OREGON
11	12 21 49.7	51.75 S	158.85 E	10 G	5 2 5 1	1.6	29	NORTH OF MACQUARIE ISLAND
11	12 42 16.2	59.606 N	29.871 W	10 G	4.3	0.7	27	NORTH ATLANTIC OCEAN
11	12 44 53.3	59.400 N	30.159 W	10 G	4.4	1.1	16	NORTH ATLANTIC OCEAN
11	12 53 25.6	59.961 N	29.686 W	10 G	4.6	0.5	9	NORTH ATLANTIC OCEAN
11	13 08 51.7	42.131 N	7.769 W	10 G		0.2	6	SPAIN. mbLg 3.1 (MDD).
11	13 16 55.4	66.936 N	156.375 W	5 G		0.9	16	ALASKA. ML 3.7 (PMR).
11	13 24 32.0	35.107 N	35.008 W	10 G	5.8 5.5	1.0	343	NORTH ATLANTIC RIDGE. Ms 5.8 (BRK). Depth from broadband displacement seismograms.
11	13 42 44.1	26.419 N	90.763 E	33 N	4.6 4.3	0.9	36	EASTERN INDIA. Felt at Shillong and Gauhati.
11	14 52 33.7	19.960 S	133.731 E	5 G	4.3	1.5	17	NORTHERN TERRITORY, AUSTRALIA
11	14 55 26.7	11.80 S	77.73 W	33 N		1.4	9	NEAR COAST OF PERU. Felt (IV) at Lima.
11	16 49 49.2	6.598 S	147.909 E	33 N	4.3 3.5	1.4	12	EAST PAPUA NEW GUINEA REGION
11	16 55 35.2	37.330 N	20.735 E	10 G	4.2	1.4	22	IONIAN SEA. ML 3.7 (ATH).
11	17 22 46.5	32.410 N	115.370 W	6 G			4	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
11	18 11 54.0	34.180 N	24.563 E	10 G		1.4	10	CRETE. MD 4.0 (ATH).
11	18 22 22.2	37.332 N	2.144 W	10 G		0.6	6	SPAIN. mbLg 3.0 (MDD).
11	19 34 24.6	59.601 N	30.003 W	10 G	4.2	0.6	21	NORTH ATLANTIC OCEAN
11	20 03 51.3	35.183 N	140.821 E	67 *	3.9	0.9	21	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Tateyama, Yokohama and an Oshima.
11	21 46 05.4	43.880 N	12.002 E	9 G		0.2	9	CENTRAL ITALY. MD 2.4 (ROM).
11	21 54 28.3	60.288 N	140.448 W	13			7	SOUTHEASTERN ALASKA. <AGS-P>.
11	23 14 23.0	61.940 N	150.770 W	0			19	SOUTHERN ALASKA. <AGS-P>.
11	23 24 39.0	6.463 S	147.857 E	49	5.1 4 8	1.1	108	EAST PAPUA NEW GUINEA REGION
11	23 57 37.7	12.519 S	129.558 E	10 G		1.3	5	NORTHERN TERRITORY, AUSTRALIA
12	00 04 09.7	21.861 N	89.763 E	6 G	6.1 5.1	0.9	412	BANGLADESH. One person killed, at least 100 injured and

[illegible]

14	17 29 51.4*	66.958 N	20.614 E	10 G	0.5	5	SWEDEN. MD 3.1 (BER).
o 14	18 06 38.2	34.289 N	26.055 E	14	5.2 5 1	1.2	322 CRETE. ML 4.8 (ATH).
14	18 26 20.8	34.194 N	26.180 E	40 *	4.3	1.3	84 CRETE
14	18 29 26.0	33.972 N	26.201 E	10 G	4.4	1.2	21 EASTERN MEDITERRANEAN SEA. MD 4.3 (ATH).
14	19 47 47.0?	44.32 N	142.74 E	225 *	4.6	1.1	9 HOKKAIDO, JAPAN REGION
o 14	21 44 35.1	40.085 N	144.609 E	33 N	5.3 4.6	0.9	227 OFF EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Miyako and (I JMA) at Morioka.
14	21 49 43.4&	41.042 N	124.218 W	23		9	NEAR COAST OF NORTHERN CALIF. <BRK>. Felt (IV) at Eureka and Samoa. Also felt at Arcata, Bayside and Trinidad.
o 14	22 37 11.3	14.013 S	65.945 E	10 G	5.1 4.9	0.9	150 MID-INDIAN RISE
14	22 49 41.6	10.206 N	60.021 W	10 G		0.9	11 TRINIDAD
15	01 27 57.3	40.851 N	20.361 E	10 G		1.4	7 GREECE-ALBANIA BORDER REGION. ML 1.4 (SKO).
15	01 40 19.4?	43.67 N	13.75 E	10 G		1.6	5 CENTRAL ITALY. MD 2.7 (ROM).
15	01 59 51.9	43.035 N	12.984 E	10 G		0.6	9 CENTRAL ITALY. MD 2.5 (ROM), 2.4 (SSO).
15	02 10 01.6*	2.438 N	128.352 E	33 N	4.9	0.8	16 HALMAHERA
15	03 00 10.7?	21.84 S	174.20 W	33 N	4.9 4.0	1.5	24 TONGA ISLANDS
15	04 11 18.9?	51.25 N	177.96 E	33 N	4.5	1.3	13 RAT ISLANDS, ALEUTIAN ISLANDS
15	07 13 08.1*	39.964 N	71.032 E	33 N	4.6 4.0	1.3	16 TAJIK SSR. Felt (V) at Isfara, Neftebad, Oftubruy, Shurab and Konibodom; (III) at Fergana, Tashkent and Andizhan; (II) at Namangan.
15	08 42 55.1&	62.822 N	148.195 W	54		38	CENTRAL ALASKA. <AGS-P>.
15	09 57 59.8&	67.346 N	157.398 W	37		7	ALASKA. <AGS-P>.
15	10 30 53.9	42.347 N	20.094 E	10 G		1.3	14 YUGOSLAVIA. ML 2.5 (TTG).
15	11 10 17.4?	34.36 N	26.40 E	10 G		0.9	5 CRETE. MD 3.6 (ATH).
15	12 10 17.7?	23.84 S	179.79 W	558 *	4.7	1.4	17 SOUTH OF FIJI ISLANDS
15	12 11 54.7	51.625 N	174.280 W	33 N	4.9 4.4	1.0	73 ANDREANOF ISLANDS, ALEUTIAN IS.
15	12 36 18.8*	29.923 S	70.143 W	33 N		1.0	10 CENTRAL CHILE
15	12 42 14.2%	60.637 N	6.207 E	10 G		0.7	8 SOUTHERN NORWAY. MD 1.8 (BER).
15	15 45 44.3*	45.698 N	11.096 E	10 G		1.1	6 NORTHERN ITALY. MD 2.5 (ROM).
o 15	15 51 58.6	6.800 N	73.019 W	162 D	5.1	0.9	218 NORTHERN COLOMBIA. Felt at Bogota, Bucaramanga, Medellin, Cucuta and Tunja.
15	16 54 56.2?	51.04 N	177.90 E	33 N	4.4	1.4	8 RAT ISLANDS, ALEUTIAN ISLANDS
15	16 59 41.0*	33.943 N	26.302 E	10 G		0.8	6 EASTERN MEDITERRANEAN SEA. MD 3.9 (ATH).
15	18 14 26.9*	33.053 S	117.627 E	10 G		1.0	5 WESTERN AUSTRALIA
o 15	19 32 45.6	6.824 N	82.309 W	10 G	4.9 4.9	1.2	103 SOUTH OF PANAMA. Ms 5.1 (BRK).
15	19 39 39.2%	15.944 N	60.966 W	24 *		0.2	6 LEEWARD ISLANDS. ML 2.1 (FDF).
15	20 01 05.5%	60.720 N	5.524 E	10 G		0.5	8 SOUTHERN NORWAY. MD 1.6 (BER).
15	20 08 50.3*	23.504 N	94.989 E	33 N		1.5	8 BURMA-INDIA BORDER REGION
15	21 15 28.3	34.727 N	101.442 E	18 *	4.7 4.3	1.5	32 QINGHAI PROVINCE, CHINA
15	21 38 48.7*	34.293 N	26.730 E	10 G		1.0	6 CRETE. MD 3.8 (ATH).
15	22 00 56.7&	58.674 N	142.927 W	10 G		7	GULF OF ALASKA. <AGS-P>.
15	22 22 14.9%	32.892 S	71.223 W	33 N		0.5	8 NEAR COAST OF CENTRAL CHILE
15	22 41 33.9%	61.217 N	3.532 E	10 G		1.6	10 NORWEGIAN SEA. MD 1.9 (BER).
15	23 07 39.0	15.916 N	60.959 W	10 G		0.8	8 LEEWARD ISLANDS. ML 2.8 (FDF).
16	01 33 57.6&	61.421 N	152.041 W	106	3.5	29	SOUTHERN ALASKA. <AGS-P>.
16	02 12 53.4	10.379 S	119.530 E	33 N	5.1	1.3	44 SUMBA ISLAND REGION
16	04 15 40.1	44.826 N	9.040 E	10 G		0.6	10 NORTHERN ITALY. ML 2.6 (GEN). MD 2.2 (ROM).
16	04 19 45.2	52.407 N	159.572 E	33 N	4.9 4.2	1.0	67 OFF EAST COAST OF KAMCHATKA
16	07 00 47.5&	34.830 N	121.010 W	6 G		17	OFF COAST OF CALIFORNIA. <PAS-P>. ML 3.3 (PAS).
16	07 08 28.4?	44.34 N	6.67 E	10 G		0.9	7 FRANCE
o 16	07 18 35.4	13.224 N	145.154 E	68	5.5	1.1	199 MARIANA ISLANDS. Felt (IV) on Guam.
16	08 38 43.5&	37.037 N	121.477 W	7		14	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
16	09 09 49.9%	41.681 N	13.694 E	10 G		1.3	5 SOUTHERN ITALY. MD 2.6 (ROM).
16	09 26 30.8*	44.310 N	8.189 E	10 G		0.5	6 NORTHERN ITALY. ML 2.1 (GEN).
16	09 27 42.5&	63.544 N	151.269 W	18		24	CENTRAL ALASKA. <AGS-P>. ML 3.7 (PMR).
16	09 55 46.0*	44.233 N	7.434 E	10 G		0.7	5 NORTHERN ITALY. MD 2.5 (ROM).
16	10 27 56.3	36.907 N	5.240 W	10 G		1.5	25 STRAIT OF GIBRALTAR. mbLg 3.7 (MDD). MD 3.5 (TAF). Felt (III) in the Algodonales-Ronda area, Spain.
16	10 35 16.8	36.926 N	5.291 W	10 G		1.4	12 STRAIT OF GIBRALTAR. mbLg 3.0 (MDD).
16	10 36 59.6*	20.713 S	174.428 W	152 ?	4.4	0.6	14 TONGA ISLANDS
16	10 39 47.4%	36.831 N	5.301 W	10 G		1.0	5 STRAIT OF GIBRALTAR. mbLg 2.6 (MDD).
o 16	10 51 21.5&	57.755 N	153.992 W	58	5.8	511	KODIAK ISLAND REGION. <AGS-P>. Slight damage (V) at Kodiak and Larsen Bay. Felt (IV) at Akhiak, Karluk and Port Lions; (III) at Homer, Kenai and Ninilchik. Depth 51.1 kilometers from broadband displacement seismograms
16	11 16 22.2	48.053 N	6.656 E	10 G		0.4	6 FRANCE MD 1.0 (STR).
16	12 18 42.7%	61.817 N	7.433 E	14		0.8	8 SOUTHERN NORWAY MD 1.9 (BER).
16	13 06 16.3	36.849 N	5.222 W	10 G		1.0	16 STRAIT OF GIBRALTAR. mbLg 3.1 (MDD).
16	13 17 14.3&	57.683 N	154.157 W	41		14	KODIAK ISLAND REGION. <AGS-P>.
16	14 47 48.6&	58.438 N	142.718 W	10 G		29	GULF OF ALASKA. <AGS-P>.
16	14 53 53.1	39.143 N	99.457 W	5 G		0.7	14 KANSAS. mbLg 3.8 (NEIS), 3.6 (TUL). Felt (V) at Polco and Zurich
16	15 35 28.4	50.841 N	6.228 E	10 G		0.3	8 GERMANY. ML 1.9 (JCK).
16	16 44 46.6*	10.250 N	62.407 W	33 N		0.9	22 NEAR COAST OF VENEZUELA. ML 4.8 (FDF).
o 16	20 12 31.2	20.672 N	102.446 E	33 N	5.1 5.5	1.2	117 SOUTHEAST ASIA
16	20 18 10.6*	34.424 N	22.830 E	10 G		1.4	19 MEDITERRANEAN SEA. ML 3.7 (ATH).
16	20 28 44.7&	57.577 N	154.232 W	58	3.6	26	KODIAK ISLAND REGION. <AGS-P>.
16	20 57 24.1	39.500 N	26.733 E	10 G		1.1	21 TURKEY. MD 3.5 (ATH).
16	21 13 30.0	36.859 N	5.240 W	13		1.2	24 STRAIT OF GIBRALTAR. mbLg 3.5 (MDD). MD 3.5 (TAF). Felt at Ronda, Spain.
16	21 22 23.4*	36.865 N	5.335 W	10 G		1.1	5 STRAIT OF GIBRALTAR
16	21 24 14.2*	36.872 N	5.242 W	10 G		1.3	6 STRAIT OF GIBRALTAR
16	22 16 11.5*	47.458 S	100.032 E	10 G	4.8	1.1	11 SOUTHEAST INDIAN RISE
16	22 25 22.8&	45.705 N	111.368 W	1		12	MONTANA. <BUT>. ML 3.6 (BUT). Felt (III) at Belgrade, Ennis and Gallatin Gateway. Also felt in the Amsterdam area
16	22 31 13.4*	40.793 N	29.287 W	10 G	4.3	1.0	11 AZORES ISLANDS REGION
16	22 39 20.4	47.448 S	100.080 E	10 G	5.3	1.2	41 SOUTHEAST INDIAN RISE
16	22 51 08.9*	47.492 S	100.156 E	10 G	5.4 5.4	1.4	37 SOUTHEAST INDIAN RISE
16	23 30 52.3&	62.025 N	150.628 W	21		10	CENTRAL ALASKA <AGS-P>.
o 16	23 42 35.1	31.807 N	137.982 E	360 G	5.9	0.9	484 SOUTH OF HONSHU, JAPAN. mb 6.2 (BRK). Felt (III JMA) at

Fukushima, Mito, Tateyama, Tokyo, Utsunomiya and Yokohama; (11 JMA) at Kumagaya and on Hachijo-jima; (1 JMA) at Kofu, Kawaguchi-ko, Mishima and on Oshima. Depth from broadband displacement seismograms.

17	00	13	25.6*	2.902 S	143.462 E	33 N	5.3	4.7	1.4	39	PAPUA NEW GUINEA REGION
17	00	48	01.7?	17.27 N	62.48 W	32 *			1.7	6	LEEWARD ISLANDS. ML 3.4 (FDF).
17	01	04	17.3	51.469 N	174.115 W	33 N	4.8		0.7	70	ANDREANOF ISLANDS, ALEUTIAN IS.
17	01	49	10.6	35.978 N	27.607 E	10 G			0.3	6	DODECANESE ISLANDS. MD 3.5 (ATH).
17	04	00	49.4*	3.109 S	147.333 E	33 N	4.8	4.9	1.4	21	BISMARCK SEA
17	04	38	25.6	41.807 N	142.695 E	63	4.3		0.8	15	HOKKAIDO, JAPAN REGION
17	05	24	31.7%	34.027 S	70.810 W	33 N			0.9	9	CHILE-ARGENTINA BORDER REGION
17	05	52	00.3*	45.159 N	6.507 E	10 G			0.2	8	FRANCE. ML 2.4 (GEN).
17	07	47	03.2*	3.082 S	147.176 E	33 N	4.7	4.5	1.1	21	BISMARCK SEA
17	08	31	10.0*	9.646 S	108.877 E	28 D	5.0	4.5	1.2	31	SOUTH OF JAVA
17	10	06	31.5%	33.626 S	71.706 W	18 *			0.6	8	NEAR COAST OF CENTRAL CHILE
17	10	09	16.6%	33.619 S	71.785 W	26			0.6	9	NEAR COAST OF CENTRAL CHILE
17	10	14	39.3	60.879 N	3.677 E	10 G			1.2	10	NORTH SEA. MD 2.4 (BER).
17	10	45	52.0	42.059 N	19.671 E	10 G			0.8	9	YUGOSLAVIA. MD 2.2 (TTG).
17	11	26	09.8%	60.904 N	3.445 E	10 G			1.2	7	NORTH SEA. MD 1.6 (BER).
17	12	21	46.2%	61.896 N	152.089 W	117				12	SOUTHERN ALASKA. <AGS-P>.
17	13	16	35.2%	63.557 N	150.782 W	0				15	CENTRAL ALASKA. <AGS-P>.
17	14	39	16.9*	12.318 N	143.735 E	12	5.0	3.9	1.2	43	SOUTH OF MARIANA ISLANDS
17	14	57	48.4	31.419 S	67.550 W	28	5.3	4.5	0.9	78	SAN JUAN PROVINCE, ARGENTINA. Felt (V) at Caucete and (IV) at San Juan.
17	15	30	02.4*	31.505 S	179.951 W	284 *	4.2		1.1	23	KERMADEC ISLANDS REGION
17	15	36	08.6*	39.850 N	21.050 E	19 *			0.7	7	GREECE. MD 3.1 (ATH).
17	16	52	54.9	29.856 N	59.706 E	33 N	4.8	4.6	1.1	124	SOUTHERN IRAN
17	16	58	52.3%	33.549 S	71.370 W	33 N			0.4	10	NEAR COAST OF CENTRAL CHILE
17	17	49	48.2*	38.849 N	23.319 E	10 G			1.0	8	GREECE. ML 3.3 (ATH).
17	18	17	22.8	43.430 N	12.776 E	10 G			0.6	6	CENTRAL ITALY. MD 2.3 (ROM).
17	18	28	08.6	40.494 S	74.674 W	33 N	5.6	5.0	1.2	117	OFF COAST OF SOUTHERN CHILE
17	19	24	36.0%	36.278 N	27.499 E	10 G			1.2	5	DODECANESE ISLANDS. MD 3.4 (ATH).
17	19	47	01.0*	52.304 S	160.542 E	10 G	4.9	4.5	1.5	10	MACQUARIE ISLANDS REGION
17	20	08	43.7	60.736 N	4.267 E	22 *			1.1	10	SOUTHERN NORWAY. MD 1.5 (BER).
17	20	47	14.6	1.437 S	24.169 W	10 G	5.1	4.9	1.1	144	CENTRAL MID-ATLANTIC RIDGE
17	20	56	10.0	37.997 N	21.976 E	40 ?	4.1		1.5	34	SOUTHERN GREECE. ML 3.9 (ATH).
17	21	28	21.2%	59.859 N	5.930 E	10 G			1.1	6	SOUTHERN NORWAY. MD 1.5 (BER).
17	22	13	37.1	50.331 N	7.366 E	10 G			0.9	10	GERMANY. ML 2.5 (JCK).
17	23	02	51.9?	46.62 N	10.01 E	10 G			0.4	5	NORTHERN ITALY
18	00	30	46.5	35.373 N	27.424 E	13			1.3	18	DODECANESE ISLANDS. ML 4.1 (ATH).
18	01	07	31.3	44.554 N	6.883 E	10 G			0.4	18	FRANCE. ML 2.6 (GEN). 2.5 (LDG).
18	01	58	30.3	2.502 N	126.581 E	33 N	5.0		1.2	44	MOLUCCA PASSAGE
18	02	20	41.2*	23.207 S	70.003 W	103 ?	4.3		1.3	8	NEAR COAST OF NORTHERN CHILE
18	03	15	51.9	38.297 N	20.437 E	31	4.0		1.1	55	GREECE. ML 4.0 (ATH). 3.7 (ROM).
18	04	00	31.1	36.864 N	5.253 W	10 G			1.3	15	STRAIT OF GIBRALTAR. mbLg 2.8 (MDD).
18	04	02	33.1%	58.479 N	152.699 W	56				21	KODIAK ISLAND REGION. <AGS-P>.
18	04	16	49.7*	10.622 S	165.960 E	146 ?	4.4		1.4	11	SANTA CRUZ ISLANDS
18	04	38	13.9%	63.239 N	150.514 W	121				19	CENTRAL ALASKA. <AGS-P>.
18	04	54	42.8*	18.211 S	177.911 W	424 *	4.6		1.5	31	FIJI ISLANDS REGION
18	05	09	30.2	78.935 N	3.520 E	10 G	4.8	4.6	1.1	60	GREENLAND SEA
18	05	54	58.8	44.408 N	14.879 E	10 G			1.5	62	ADRIATIC SEA. ML 3.8 (ROM). 3.7 (TTG). 3.6 (KBA). MD 3.8 (VKA). Felt in the Zadar area, Yugoslavia.
18	06	09	39.0	41.241 N	19.355 E	10 G			1.4	39	ALBANIA. ML 3.7 (ROM). MD 3.6 (ATH). 3.0 (TTG).
18	07	28	44.5?	59.97 N	2.79 E	10 G			0.9	8	NORTH SEA. MD 2.1 (BER).
18	09	10	58.8%	60.006 N	6.623 E	19 *			0.2	7	SOUTHERN NORWAY. MD 1.3 (BER).
18	09	32	32.3?	28.52 S	68.79 W	70 ?			1.1	18	LA RIOJA PROVINCE, ARGENTINA
18	09	45	47.8%	58.360 N	142.838 W	9				15	GULF OF ALASKA. <AGS-P>.
18	10	47	37.0%	63.114 N	148.417 W	81				21	CENTRAL ALASKA. <AGS-P>.
18	11	34	04.0?	40.26 N	125.01 W	10 G			0.4	6	OFF COAST OF NORTHERN CALIFORNIA. ML 3.1 (BRK).
18	12	43	08.7%	63.840 N	148.417 W	102				19	CENTRAL ALASKA. <AGS-P>.
18	12	44	41.3?	20.98 S	178.66 W	575 *	5.0		1.4	34	FIJI ISLANDS REGION
18	13	09	37.9%	36.577 N	121.223 W	7				9	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
18	14	06	28.8	17.761 N	68.811 W	62 G	5.9		0.9	466	MONA PASSAGE. Ms 5.1 (BRK). Felt in the Dominican Republic and throughout Puerto Rico. Also felt at Caracas and in towns along the central coast of Venezuela. Depth from broadband displacement seismograms.
18	14	51	56.6*	31.776 S	71.447 W	33 N			0.8	13	NEAR COAST OF CENTRAL CHILE
18	15	07	22.1%	36.847 N	5.275 W	10 G			1.2	6	STRAIT OF GIBRALTAR
18	15	40	45.4%	63.034 N	150.764 W	118				18	CENTRAL ALASKA. <AGS-P>.
18	15	49	14.1	12.449 S	121.520 E	33 N	5.1	4.2	1.1	55	SOUTH OF TIMOR
18	16	48	04.0	2.414 S	138.772 E	33 N	4.8	3.9	0.9	43	WEST IRIAN
18	17	00	04.5*	5.162 N	125.771 E	33 N	4.8		1.4	30	MINDANAO, PHILIPPINE ISLANDS
18	17	08	33.0%	37.580 N	118.688 W	3				19	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.1 (BRK). 3.1 (PAS).
18	17	38	20.5*	6.745 S	147.707 E	55 *	4.9		1.4	25	EAST PAPUA NEW GUINEA REGION
18	18	20	58.9%	36.866 N	5.237 W	10 G			1.5	6	STRAIT OF GIBRALTAR
18	18	32	29.4	36.869 N	5.333 W	10 G			0.9	6	STRAIT OF GIBRALTAR
18	18	57	29.5*	35.646 N	24.534 E	10 G			0.8	5	CRETE. MD 3.7 (ATH).
18	19	04	03.5?	34.03 N	23.39 E	10 G			1.4	7	CRETE. MD 3.8 (ATH).
18	19	28	29.1	2.671 S	139.781 E	33 N	4.5	3.8	1.4	26	NEAR N. COAST OF WEST IRIAN
18	19	37	49.8%	58.115 N	154.535 W	86				17	ALASKA PENINSULA. <AGS-P>.
18	20	06	17.1*	43.970 N	12.515 E	10 G			0.4	5	CENTRAL ITALY. MD 2.2 (ROM).
18	20	38	37.3%	47.410 N	122.776 W	45	4.1			96	WASHINGTON. <SEA>. ML 4.4 (SEA). Felt (V) at Kingston and Paulsbo. Felt (IV) at Bremerton, Burley, Clinton, Dackton, Gig Harbor, Graham, Hansville, Indianola, Lakebay, Lilliwaup, Littlerock, Longbranch, Manchester, Matlack, Port Ludlow, Seattle, Seabeck, Sultan, Sumner, Suquamish, Tracyton, Vashon and Wilkeson. Felt as far as Sidney and Victoria, British Columbia, Canada.
18	20	38	57.5?	45.52 N	9.12 E	10 G			1.4	5	NORTHERN ITALY. ML 2.1 (GEN). MD 1.8 (ROM).
18	21	11	58.8*	2.023 N	79.017 W	33 N	4.7	4.2	1.4	17	SOUTH OF PANAMA
18	21	16	51.0	15.900 N	95.431 W	38 *	5.0		1.2	78	NEAR COAST OF OAXACA, MEXICO

18	22 55 36.3& 38.837 N 122.780 W 3				15	NORTHERN CALIFORNIA. <BRK>. ML 3.6 (BRK). Mo=1.2*10**14 Nm (BRK).
18	23 44 35.5* 40.119 N 123.548 W 5 G			0.8	7	NORTHERN CALIFORNIA. ML 2.6 (BRK).
19	00 23 14.4 40.279 N 25.132 E 10 G			1.0	15	AEGEAN SEA. MD 3.1 (ATH).
19	01 09 28.2? 38.49 N 25.10 E 10 G			0.5	4	AEGEAN SEA. ML 2.8 (ATH).
19	02 10 18.3* 2.404 N 126.592 E 99 ? 4.7			1.1	28	MOLUCCA PASSAGE
19	04 17 45.4 40.366 N 24.019 E 10 G			1.2	17	AEGEAN SEA. ML 3.5 (ATH).
19	04 19 30.4? 13.11 N 90.27 W 33 N 4.8			1.2	29	NEAR COAST OF GUATEMALA
19	04 53 56.3? 2.86 N 72.88 W 33 N			1.2	5	COLOMBIA
19	06 03 52.8 5.584 N 74.386 W 117 4.4			0.9	25	COLOMBIA
19	06 30 31.1 37.707 N 14.979 E 10 G			0.7	6	SICILY. MD 2.5 (ROM).
19	06 33 18.4* 37.712 N 14.975 E 10 G			0.5	5	SICILY. MD 2.7 (ROM).
19	06 35 12.6* 37.719 N 14.932 E 10 G			0.8	5	SICILY. MD 2.5 (ROM).
19	06 41 47.5 37.750 N 14.952 E 10 G			1.2	7	SICILY. MD 2.8 (ROM).
19	06 46 02.1* 37.721 N 14.936 E 10 G			0.9	5	SICILY. MD 2.7 (ROM).
19	07 19 02.8* 6.173 S 130.214 E 108 ? 4.6			1.0	18	BANDA SEA
19	11 29 00.7* 40.160 N 113.026 E 10 G			1.1	5	NORTHEASTERN CHINA. ML 3.3 (BJI).
19	12 17 55.8* 13.951 N 61.317 W 32 *			1.3	10	WINDWARD ISLANDS. ML 3.0 (FDF).
19	12 40 16.1% 61.315 N 10.280 E 10 G			1.0	4	SOUTHERN NORWAY. MD 2.3 (BER).
19	13 00 40.6 13.157 S 167.128 E 239 * 5.0			1.1	73	VANUATU ISLANDS
19	13 24 36.2& 60.329 N 153.577 W 204				19	SOUTHERN ALASKA. <AGS-P>.
19	15 35 06.0* 19.191 N 107.903 W 33 N 4.4			1.4	21	OFF COAST OF JALISCO, MEXICO
a 19	16 00 47.9 22.113 S 67.559 W 189 D 5.5			1.1	246	CHILE-BOLIVIA BORDER REGION
19	16 24 33.3* 37.721 N 14.909 E 10 G			1.3	5	SICILY. MD 2.6 (ROM).
19	18 03 27.0 37.129 N 27.868 E 10 G			1.5	8	TURKEY
19	18 53 44.7? 21.29 S 69.03 W 177 ?			1.6	8	NORTHERN CHILE
19	19 10 42.3? 4.16 S 143.47 E 110 ? 4.6			1.3	19	PAPUA NEW GUINEA
a 19	20 16 10.5 55.672 S 28.247 W 33 N 5.6 5.1			1.2	37	SOUTH SANDWICH ISLANDS REGION
19	20 28 28.1? 34.18 S 71.16 W 33 N			0.6	8	NEAR COAST OF CENTRAL CHILE
19	21 02 16.2& 38.835 N 122.785 W 4				13	NORTHERN CALIFORNIA. <BRK>. ML 3.2 (BRK).
19	21 10 21.7% 44.146 N 9.937 E 10 G			0.2	5	NORTHERN ITALY. MD 2.4 (ROM).
19	21 22 12.5* 37.705 N 16.692 E 10 G			0.3	6	IONIAN SEA. MD 2.6 (ROM).
19	23 52 01.1* 38.931 N 23.217 E 10 G			1.6	11	GREECE. ML 3.0 (ATH).
20	01 36 47.0* 3.396 S 129.689 E 33 N 4.4			0.5	5	CERAM
20	03 52 57.8 41.302 N 20.068 E 10 G			0.8	7	ALBANIA. ML 1.8 (SKO).
20	04 06 58.4 40.849 N 20.373 E 10 G			1.1	8	GREECE-ALBANIA BORDER REGION. ML 2.2 (SKO).
20	05 38 02.3* 44.207 N 11.441 E 10 G			0.8	6	NORTHERN ITALY. MD 2.3 (ROM).
a 20	05 41 43.5 52.334 N 174.184 E 48 D 5.2 4.3			0.9	231	NEAR ISLANDS, ALEUTIAN ISLANDS. ML 5.2 (PMR). Felt (IV) on Shemya.
20	06 19 46.3 3.564 N 124.424 E 310 * 5.0			1.1	66	CELEBES SEA
20	06 32 12.1 40.868 N 20.352 E 10 G			1.2	6	GREECE-ALBANIA BORDER REGION. ML 2.3 (SKO).
20	11 57 25.0& 33.500 N 116.450 W 6 G				4	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS). Felt at Palm Springs.
20	12 05 37.3& 63.305 N 149.591 W 92				12	CENTRAL ALASKA. <AGS-P>.
20	16 38 25.3? 18.50 N 61.99 W 10 G			0.7	8	LEEWARD ISLANDS. ML 3.1 (FDF).
20	17 35 23.4? 12.66 N 41.93 E 10 G			0.3	8	ETHIOPIA. ML 3.3 (ARO).
a 20	18 07 43.6 52.527 N 172.508 E 33 N 5.2 4.6			0.8	211	NEAR ISLANDS, ALEUTIAN ISLANDS. ML 4.9 (PMR). Felt (III) on Attu.
20	19 41 18.4% 38.844 N 29.141 E 10 G			1.0	6	TURKEY
20	21 11 51.2* 12.685 N 41.832 E 10 G			0.4	9	ETHIOPIA. ML 4.5 (ARO).
20	21 28 08.1& 58.796 N 143.128 W 10 G				4	GULF OF ALASKA. <AGS-P>.
20	21 49 49.9* 36.302 N 70.674 E 145 * 4.5			1.5	18	HINDU KUSH REGION
20	22 04 16.9* 41.027 N 22.845 E 10 G			1.2	6	YUGOSLAVIA. ML 2.7 (SKO).
20	23 24 44.7% 42.026 N 12.839 E 10 G			0.2	5	CENTRAL ITALY. MD 2.3 (ROM).
a 20	23 40 38.8 3.867 S 86.993 E 10 G 5.2 4.6			1.0	178	SOUTH INDIAN OCEAN
20	23 55 50.4? 18.66 N 67.05 W 33 N			0.5	5	MONA PASSAGE
21	00 07 07.6 1.458 N 126.408 E 46 * 5.0 5.0			1.3	69	MOLUCCA PASSAGE
21	00 43 47.7 10.076 S 116.140 E 55 * 4.9			1.4	45	SOUTH OF SUMBAWA ISLAND
21	00 59 18.0& 37.612 N 119.055 W 7				14	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK), 3.0 (PAS).
21	01 28 53.4& 37.383 N 121.737 W 9				15	CENTRAL CALIFORNIA. <BRK>. ML 3.5 (BRK). Mo=2.4*10**14 Nm (BRK). Felt (III) at San Jose.
21	01 44 37.4? 40.83 N 14.86 E 10 G			1.1	4	SOUTHERN ITALY. MD 2.7 (ROM).
21	02 09 59.9 16.834 N 62.336 W 33 N			0.7	9	LEEWARD ISLANDS. ML 2.9 (FDF).
21	03 00 53.0* 44.809 N 146.189 E 219 * 4.3			0.8	32	KURIL ISLANDS
21	04 53 33.2 35.118 N 45.868 E 33 N			1.0	9	IRAN-IRAQ BORDER REGION
21	05 33 52.5* 21.419 N 144.283 E 33 N 4.3			1.3	12	MARIANA ISLANDS REGION
21	06 21 35.9 36.388 N 69.663 E 33 N 4.2			0.7	10	HINDU KUSH REGION
21	07 02 23.8? 18.65 N 67.06 W 33 N			0.3	4	MONA PASSAGE
21	07 37 56.8 17.682 S 179.789 W 620 4.5			0.7	36	FIJI ISLANDS REGION
21	08 52 43.6& 63.627 N 150.719 W 5				20	CENTRAL ALASKA <AGS-P> ML 3.0 (PMR)
21	08 58 18.4* 52.362 S 160.350 E 10 G 5.2 4.7			1.1	28	MACQUARIE ISLANDS REGION
21	10 37 22.5% 60.608 N 6.248 E 10 G			1.0	6	SOUTHERN NORWAY. MD 1.7 (BER).
21	11 12 03.0& 60.120 N 147.035 W 6				28	SOUTHERN ALASKA. <AGS-P>.
21	11 31 43.4? 9.13 S 112.40 E 43 ?			0.6	5	SOUTH OF JAVA
21	11 44 40.5 46.098 N 12.949 E 10 G			1.2	9	NORTHERN ITALY. MD 2.6 (ROM), 2.5 (TRI).
21	12 24 36.5? 18.14 N 62.06 W 9			0.7	12	LEEWARD ISLANDS. ML 3.7 (FDF).
21	13 13 34.3? 58.13 N 6.37 E 0 G			0.3	7	SOUTHERN NORWAY. MD 2.2 (BER). Probable explosion.
21	13 30 36.6% 60.713 N 5.562 E 10 G			1.1	7	SOUTHERN NORWAY. MD 1.6 (BER).
21	13 52 27.4& 63.029 N 150.677 W 108				22	CENTRAL ALASKA. <AGS-P>.
21	15 46 27.8% 61.620 N 5.217 E 10 G			0.9	5	SOUTHERN NORWAY. MD 1.8 (BER).
21	15 48 53.2* 8.106 N 126.836 E 33 N 4.6			0.8	19	MINDANAO, PHILIPPINE ISLANDS
21	16 46 21.4% 38.294 N 15.043 E 10 G			0.6	6	SICILY. MD 2.6 (ROM).
21	17 28 47.9* 53.561 S 157.171 E 10 G 4.8			1.5	12	MACQUARIE ISLANDS REGION
21	19 06 21.7? 13.78 S 75.32 W 150 ?			0.6	5	PERU
21	20 42 25.1* 22.018 S 170.006 E 33 N 5.0 4.7			1.4	39	LOYALTY ISLANDS REGION
21	21 34 48.6 36.078 N 139.853 E 33 N			0.7	11	HONSHU, JAPAN. MG 3.6 (JMA). Felt (II JMA) at Mito and Utsunomiya.
21	21 54 18.5& 41.708 N 112.373 W 8				13	UTAH. <SLC-P>. ML 4.1 (SLC). Felt (IV) at Howell and Riverside; (III) at Corinne, Garland and Plymouth. Also felt at Tremonton and at the Thiokol Plant.
21	21 57 28.4% 38.821 N 15.519 E 176 ?			0.6	9	SICILY. MD 2.7 (ROM).
21	22 13 18.1* 4.800 S 102.915 E 77 * 4.8			0.9	37	SOUTHERN SUMATERA
21	22 43 32.8 6.974 S 122.407 E 33 N 4.6 4.2			1.2	26	FLORES SEA

21	23 10 36 1	44.726 N	6.800 E	10	1.0	12	FRANCE. ML 2.3 (LDG)
a 21	23 51 01.9	21 785 S	176.493 W	182 D 5.6	1.0	287	FIJI ISLANDS REGION
22	00 32 28.9%	32.247 N	132.725 E	33 N	0.3	6	SHIKOKU, JAPAN
22	01 12 02.9%	38 035 N	121.860 W	14		11	NORTHERN CALIFORNIA. <BRK>. ML 2.6 (BRK).
22	01 13 25.2%	38 037 N	121.862 W	16	4.0	40	NORTHERN CALIFORNIA. <BRK>. ML 4.3 (BRK). Mo=2.6*10**1 Nm (BRK). Felt (V) at Albany, Pittsburg, Rio Vista and Travis Air Force Base. Felt (IV) at Antioch, Benicia, Birds Landing, Byron, Daly City, Isletan, Oakley, Part Costa, San Anselmo, San Pablo and South San Francisco. Felt from San Francisco to Vacaville to Stockton.
22	01 29 23.1?	30.72 N	49.85 E	33 N 4.1	0.8	10	WESTERN IRAN
22	02 37 21.7	45.702 N	26.622 E	108 *	0.9	16	ROMANIA
22	03 08 14.5	37.601 N	141.341 E	59	4.6	1.1	48 NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Fukushima, Mita, Onahama, Ofunato, Shirakawa and Utsunomiya.
22	06 51 54.7?	39.60 N	21.69 E	10 G	1.3	5	GREECE
22	06 53 04.4	40.241 N	21.514 E	10 G	1.3	15	GREECE. MD 3.6 (ATH).
22	08 23 17.9%	60.445 N	142.869 W	2		21	SOUTHERN ALASKA. <AGS-P>.
22	08 27 04.7*	5.393 S	152.404 E	58 *	4.8 3.9	1.0	20 NEW BRITAIN REGION
22	08 39 27.3%	58.442 N	142.778 W	10 G		7	GULF OF ALASKA. <AGS-P>.
22	10 07 10.3%	10.654 N	60.840 W	33 N	0.6	6	TRINIDAD
22	10 44 08.7%	62.112 N	151.755 W	0		29	CENTRAL ALASKA. <AGS-P>. ML 3.3 (PMR).
22	10 46 35.9?	61.32 N	6.78 E	10 G	1.5	4	SOUTHERN NORWAY. MD 2.1 (BER).
a 22	11 06 06.8	28.252 N	130.644 E	33 D 5.3	1.0	143	RYUKYU ISLANDS. Felt (I JMA) at Naze.
22	11 12 54.9*	34.518 N	140.254 E	28 *	4.4	0.7	12 NEAR EAST COAST OF HONSHU, JAPAN
22	12 04 55.7%	15.674 N	60.957 W	24 *	0.3	8	LEEWARD ISLANDS. ML 2.3 (FDF).
22	12 05 58.2*	47.899 N	18.299 E	12	1.3	7	HUNGARY. ML 2.6 (BRA), 2.9 (VKA). Felt at Komarno, Marcelova and Hurbanovo, Czechoslovakia.
22	12 11 17.4?	31.39 S	70.05 W	170 ?	0.5	10	CHILE-ARGENTINA BORDER REGION
22	12 25 25.6*	20.303 S	71.028 W	33 N 4.5	1.3	11	OFF COAST OF NORTHERN CHILE
22	12 44 52.9*	16.803 N	62.240 W	33 N	1.3	9	LEEWARD ISLANDS. ML 3.0 (FDF).
22	13 14 05.7%	61.801 N	149.464 W	12		8	SOUTHERN ALASKA. <AGS-P>.
22	13 27 53.8	42.791 N	12.917 E	10 G	1.0	8	CENTRAL ITALY. MD 2.6 (SSO), 2.3 (ROM).
22	13 45 54.4?	36.78 N	29.09 E	10 G	0.9	4	TURKEY
22	14 04 54.9	47.989 N	6.659 E	12	0.9	11	FRANCE. ML 2.9 (LDG).
22	14 34 58.0*	61.596 N	5.300 E	10 G	0.5	6	SOUTHERN NORWAY. MD 1.7 (BER).
22	15 08 46.1	6.704 S	81.593 W	32 D 4.9	1.1	61	NEAR COAST OF NORTHERN PERU
22	16 30 15.2%	60.470 N	142.933 W	0		15	SOUTHERN ALASKA. <AGS-P>.
22	16 31 30.2%	38.264 N	15.043 E	10 G	0.2	5	SICILY. MD 2.4 (ROM).
22	17 43 06.5%	60.233 N	152.430 W	82		21	SOUTHERN ALASKA. <AGS-P>.
22	19 51 48.5	27.171 S	71.369 W	36 D 5.1	1.2	28	NEAR COAST OF NORTHERN CHILE
22	21 06 01.8*	30.395 N	114.262 W	10 G 4.6	1.3	21	GULF OF CALIFORNIA
22	21 15 00.8%	37.283 N	116.412 W	0	5.3 4.8	221	SOUTHERN NEVADA. <DOE>. ML 5.2 (BRK). 37' 16' 58.35" N., 116' 24' 44.30" W., Surface Elev. 2007 m., Depth of Burial 500 m., Shot Time 211500.83, "CONTACT," Nevada Test Site (Dept. of Energy).
22	21 28 51.4*	29.786 N	114.204 W	10 G 4.0	1.2	15	BAJA CALIFORNIA
22	21 44 13.9*	51.585 N	16.072 E	10 G	0.6	10	POLAND. ML 2.9 (VKA).
22	22 07 33.0%	61.224 N	152.413 W	126		12	SOUTHERN ALASKA. <AGS-P>.
22	22 15 45.8*	30.333 N	114.252 W	10 G 4.5	0.9	13	GULF OF CALIFORNIA
22	22 28 29.5%	37.748 N	15.079 E	10 G	1.2	5	SICILY. MD 2.7 (ROM).
23	00 27 25.2%	37.754 N	14.447 E	10 G	1.1	5	SICILY. MD 2.4 (ROM).
a 23	00 32 14.4	40.697 N	22.823 E	10 G	0.7	7	GREECE. MD 3.2 (ATH). ML 3.0 (SKO).
23	00 35 42.6*	17.098 S	172.656 W	33 N 4.9 5.0	1.1	76	TONGA ISLANDS REGION
23	00 51 45.9*	30.188 N	114.292 W	10 G 4.5	1.3	28	GULF OF CALIFORNIA
23	03 23 38.9*	34.304 N	24.327 E	33 N 4.0	0.9	12	CRETE. MD 4.2 (ATH).
23	04 22 04.8?	10.14 S	162.78 E	135 ?	0.5	5	SOLOMON ISLANDS
23	05 35 51.0*	40.130 N	20.789 E	10 G	1.4	6	GREECE-ALBANIA BORDER REGION. ML 2.8 (SKO).
23	06 28 43.7*	39.230 N	30.413 E	10 G	1.4	8	TURKEY
23	07 08 24.3	17.144 N	62.290 W	33 N	0.4	7	LEEWARD ISLANDS. ML 2.8 (FDF).
23	07 17 26.6*	37.273 N	20.591 E	25	3.7	1.1	26 IONIAN SEA. ML 3.6 (ATH), 3.4 (ROM).
23	07 19 12.7	45.306 N	6.573 E	10 G	0.3	17	FRANCE. ML 2.8 (LDG).
23	08 08 31.6%	58.269 N	143.031 W	10 G		11	GULF OF ALASKA. <AGS-P>.
23	08 43 09.0	17.799 N	65.604 W	15	4.5	1.0	34 PUERTO RICO REGION
23	08 47 14.4	46.035 N	14.355 E	10 G	0.4	9	YUGOSLAVIA. MD 2.9 (LJU), 2.6 (ROM).
23	08 51 07.5*	17.973 N	65.864 W	10 G	0.6	6	PUERTO RICO REGION
23	08 54 40.0*	17.812 N	65.608 W	10 G	1.3	8	PUERTO RICO REGION
23	09 02 51.9*	14.251 N	91.177 W	95 *	4.3	1.4	26 GUATEMALA
23	09 08 18.5?	17.97 S	178.73 W	651 ?	4.8	0.7	17 FIJI ISLANDS REGION
23	09 54 21.4	44.409 N	8.316 E	10 G	0.7	19	NORTHERN ITALY. ML 2.7 (GEN). MD 2.5 (ROM).
23	10 11 43.8?	44.24 N	7.44 E	10 G	0.1	4	NORTHERN ITALY
23	10 16 15.8*	18.117 N	66.167 W	10 G	1.0	5	PUERTO RICO REGION
23	11 02 51.7%	60.637 N	6.246 E	10 G	0.5	8	SOUTHERN NORWAY. MD 2.0 (BER).
23	11 44 45.9?	0.33 N	125.55 E	33 N	1.4	5	MOLUCCA PASSAGE
a 23	12 00 53.2	22.311 N	142.996 E	170 D 5.3	1.1	171	VOLCANO ISLANDS REGION
23	12 19 19.7	37.808 N	29.228 E	10 G	1.4	8	TURKEY
23	12 27 58.4%	61.626 N	5.279 E	10 G	1.0	8	SOUTHERN NORWAY. MD 1.8 (BER).
23	12 39 05.7?	43.38 N	14.35 E	10 G	1.0	8	ADRIATIC SEA. MD 2.7 (SSO).
23	14 01 47.7?	21.71 S	175.74 W	211 ?	4.3	0.9	8 TONGA ISLANDS
23	14 09 13.8?	40.63 S	175.45 E	33 N	1.1	6	NORTH ISLAND, NEW ZEALAND
23	14 41 55.3*	50.682 N	6.014 E	10 G	1.5	5	GERMANY
23	15 03 24.5?	8.04 S	129.37 E	173 ?	1.1	7	TIMOR SEA
23	15 47 20.6	32.014 N	54.442 E	33 N	0.8	10	IRAN. ML 4.0 (BMU).
23	15 55 02.4?	17.94 N	65.81 W	10 G	0.5	5	PUERTO RICO REGION
23	16 26 19.1?	44.38 N	7.28 E	10 G	0.0	4	NORTHERN ITALY. ML 1.8 (GEN).
23	16 37 56.8	57.925 S	25.382 W	33 N 5.3	0.9	45	SOUTH SANDWICH ISLANDS REGION
23	17 53 23.2%	37.787 N	29.205 E	10 G	0.6	5	TURKEY
23	18 49 24.0*	2.754 S	141.750 E	10 G 3.7	0.7	8	NEAR N COAST OF PAPUA NEW GUINEA
23	19 59 43.7	38.289 N	140.845 E	20	4.5	1.1	22 HONSHU, JAPAN. Felt (III JMA) at Sendai, (II JMA) at Yamagata and (I JMA) at Ishinomaki and Shirakawa.
23	20 04 50.4	39.675 N	20.265 E	24	3.8	1.3	53 GREECE-ALBANIA BORDER REGION. ML 4.0 (ATH), 3.7 (TTG). Felt (IV) at Koraq, Grave, Grazhdan and Zminic, Albania

23	22 37 53.2	51.608 N	16.122 E	5		0.5	19	POLAND. ML 3.9 (GRF), 3.8 (VKA), 3.5 (KBA).
23	23 21 15.77	50.43 S	164.74 E	10 G	4.4 4.7	1.1	12	AUCKLAND ISLANDS REGION
24	00 15 53.77	32.90 N	88.52 E	10 G		1.2	7	TIBET
24	02 21 03.67	37.904 N	14.665 E	17 *		1.5	8	SICILY. MD 2.7 (ROM).
24	02 34 18.6	37.882 N	14.785 E	10 G		1.1	12	SICILY. MD 2.9 (ROM).
a 24	03 09 57.5	36.719 N	35.943 E	42	4.9 4.2	1.0	220	TURKEY
24	03 38 22.9	38.985 S	14.713 W	10 G	5.0	1.0	45	TRISTAN DA CUNHA REGION
24	04 45 47.4	41.062 S	88.302 W	10 G	5.0 4.4	1.1	21	WEST CHILE RISE
24	05 49 35.47	37.893 N	14.705 E	14		0.9	14	SICILY. MD 3.1 (ROM).
24	06 09 17.2	34.002 S	70.133 W	10 G		0.3	9	CHILE-ARGENTINA BORDER REGION
24	06 11 00.3	39.193 N	26.505 E	10 G		1.2	13	TURKEY. MD 3.4 (ATH).
24	07 13 27.0	3.800 N	126.416 E	116 ?	4.1	1.0	10	TALAUD ISLANDS
24	08 27 18.77	34.75 N	139.33 E	27 *		0.6	6	NEAR S. COAST OF HONSHU, JAPAN. MG 3.1 (JMA). Felt (I JMA) on Oshima.
24	09 24 49.8	43.504 N	110.758 W	5 G		0.7	33	WYOMING. ML 3.8 (NEIS). Felt strongly at Jackson. Felt (III) at Kelly.
24	10 04 10.4	33.527 S	71.012 W	67 ?		0.1	10	NEAR COAST OF CENTRAL CHILE
24	10 25 06.0	43.515 N	110.772 W	5 G		0.8	33	WYOMING. ML 3.7 (NEIS). Felt strongly at Jackson.
24	10 33 41.97	17.86 N	65.72 W	10 G		0.2	5	PUERTO RICO REGION
24	10 59 35.7	41.902 N	20.237 E	10 G		1.4	7	ALBANIA
24	11 02 09.1	61.778 N	149.884 W	38			27	SOUTHERN ALASKA. <AGS-P>.
24	11 14 44.67	20.54 S	179.10 W	686 ?	4.2	0.6	14	FIJI ISLANDS REGION
24	11 17 26.1	35.038 N	24.289 E	10 G	4.0	1.2	12	CRETE. MD 3.9 (ATH).
24	11 37 10.47	26.57 N	142.30 E	33 N	4.5	0.8	7	BONIN ISLANDS REGION
24	12 13 35.17	61.758 N	7.487 E	10 G		1.2	10	SOUTHERN NORWAY. MD 2.1 (BER).
24	12 40 04.3	29.739 S	179.147 W	284 *	3.9	0.9	20	KERMADEC ISLANDS REGION
a 24	12 58 39.0	28.336 S	66.312 W	22 D	5.4 5.2	1.0	172	CATAMARCA PROVINCE, ARGENTINA. Felt in Catamarca, Cordoba, La Rioja, Santiago del Estero and Tucuman Provinces.
24	14 03 56.0	5.635 N	124.982 E	67 *	4.9	1.0	64	MINDANAO, PHILIPPINE ISLANDS
24	14 10 32.2	61.684 N	150.012 W	46			8	SOUTHERN ALASKA. <AGS-P>.
24	15 01 26.8	37.082 N	28.084 E	34	4.3	1.1	82	TURKEY. ML 4.2 (ATH).
24	15 02 07.7	1.974 N	79.066 W	25 D	5.3 4.6	1.1	180	NEAR COAST OF ECUADOR. Felt in southwestern Colombia.
24	15 12 33.4	26.605 N	142.365 E	33 N	4.7 3.9	0.9	17	BONIN ISLANDS REGION
24	17 47 09.2	43.480 N	126.863 W	10 G	4.0	0.7	36	OFF COAST OF OREGON
24	17 53 08.3	43.522 N	110.752 W	5 G		0.2	21	WYOMING. ML 3.0 (NEIS).
24	18 07 15.8	61.736 N	150.967 W	66			6	SOUTHERN ALASKA. <AGS-P>.
24	18 20 12.67	36.888 N	5.273 W	10 G		1.5	11	STRAIT OF GIBRALTAR
24	18 25 21.17	36.839 N	5.202 W	10 G		1.1	10	STRAIT OF GIBRALTAR. mblg 2.6 (MDD).
24	18 46 41.27	36.827 N	5.287 W	10 G		1.4	5	STRAIT OF GIBRALTAR
24	18 49 20.87	36.807 N	5.189 W	10 G		0.8	4	STRAIT OF GIBRALTAR
24	19 13 55.07	47.51 N	155.34 E	33 N	4.6	1.5	8	KURIL ISLANDS REGION
24	19 14 16.8	63.140 N	149.565 W	89			17	CENTRAL ALASKA. <AGS-P>.
24	19 36 30.67	36.80 N	5.18 W	10 G		0.7	4	STRAIT OF GIBRALTAR
24	20 32 51.7	43.515 N	110.753 W	5 G		0.2	19	WYOMING. ML 3.0 (NEIS).
24	20 39 40.27	16.81 S	173.87 W	70 ?	4.4	1.0	17	TONGA ISLANDS
24	21 00 44.7	41.958 N	20.365 E	10 G		0.9	6	ALBANIA. ML 2.3 (SKO).
24	21 21 01.1	61.067 N	149.720 W	47			15	SOUTHERN ALASKA. <AGS-P>.
25	00 36 25.1	51.880 N	170.356 W	33 N	4.7	0.8	46	FOX ISLANDS, ALEUTIAN ISLANDS
25	00 42 20.2	40.448 N	124.700 W	22			12	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).
25	01 08 27.7	40.637 N	22.672 E	9		1.0	11	GREECE. MD 3.2 (ATH).
25	01 52 23.5	37.176 N	142.054 E	39 *	4.8	1.3	44	OFF EAST COAST OF HONSHU, JAPAN
25	02 22 49.7	40.812 N	19.803 E	10 G		0.9	9	ALBANIA. MD 3.1 (ATH), 2.8 (ROM). ML 2.7 (SKO).
25	02 36 28.8	63.367 N	149.632 W	103	3.8		45	CENTRAL ALASKA. <AGS-P>. Felt (II) at Cantwell.
25	03 00 47.6	39.716 N	26.141 E	9		1.2	9	TURKEY. MD 2.9 (ATH).
25	03 33 09.6	43.168 N	145.022 E	104	4.1	0.6	9	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Nemuro and Kushiro.
25	04 48 01.8	18.940 S	169.345 E	255 *	4.8	1.0	16	VANUATU ISLANDS
25	05 17 15.8	10.751 N	85.851 W	59 *	4.3 3.7	1.1	20	COSTA RICA
25	06 18 21.2	42.797 N	13.047 E	7		1.0	23	CENTRAL ITALY. MD 3.0 (SSO), 2.9 (ROM).
25	06 22 38.4	12.464 N	143.333 E	20	5.0 4.5	0.8	73	SOUTH OF MARIANA ISLANDS
25	06 26 10.9	42.798 N	12.977 E	10 G		0.3	5	CENTRAL ITALY. MD 2.2 (SSO), 2.1 (ROM).
25	06 35 53.1	18.633 S	178.167 W	487	4.8	0.8	61	FIJI ISLANDS REGION
25	06 41 16.1	33.269 S	68.492 W	10 G	4.5	1.0	22	MENDOZA PROVINCE, ARGENTINA. Felt (IV) at Mendoza.
25	06 50 05.1	42.816 N	12.989 E	10 G		0.3	5	CENTRAL ITALY. MD 2.1 (SSO).
25	06 52 12.7	38.426 N	118.404 W	5 G	3.7	1.0	12	CALIFORNIA-NEVADA BORDER REGION. ML 3.7 (NEIS), 3.0 (PAS).
25	06 54 07.2	62.992 N	150.499 W	98			34	CENTRAL ALASKA. <AGS-P>.
25	08 09 49.1	42.803 N	13.000 E	10 G		0.2	5	CENTRAL ITALY. MD 2.3 (ROM), 2.3 (SSO).
25	08 47 45.77	39.53 N	26.05 E	10 G		1.4	5	TURKEY
25	09 06 38.2	32.968 N	39.668 W	10 G	4.9 4.3	0.8	125	NORTH ATLANTIC RIDGE
25	09 10 46.1	46.357 N	153.391 E	33 N	4.9	1.0	62	KURIL ISLANDS
25	09 13 21.1	37.786 N	141.128 E	33 N		0.3	7	NEAR EAST COAST OF HONSHU, JAPAN
25	09 31 24.5	61.937 N	150.406 W	0			24	SOUTHERN ALASKA. <AGS-P>. ML 3.6 (PMR). Felt (IV) at Willow.
25	09 36 27.7	38.018 N	122.308 W	8			9	NORTHERN CALIFORNIA. <BRK>. ML 2.9 (BRK). Mo=1.6*10**14 Nm (BRK). Felt (IV) at Hercules and Son Pablo. Also felt at Pinole and Richmond.
25	09 50 01.9	21.454 N	93.492 E	60 *	4.5	1.1	10	BURMA
25	10 44 52.0	59.883 N	153.324 W	119			16	SOUTHERN ALASKA. <AGS-P>.
25	11 15 59.3	32.912 N	39.609 W	10 G	5.2 4.6	0.7	224	NORTH ATLANTIC RIDGE
a 25	12 30 05.9	6.113 S	149.062 E	72 *	5.2	1.1	78	NEW BRITAIN REGION
25	12 37 41.3	38.798 N	31.712 E	10 G		1.0	6	TURKEY
25	12 48 05.07	10.58 S	120.88 E	33 N	5.1	1.2	6	SUMBA ISLAND REGION
25	12 54 27.37	17.07 N	101.44 W	33 N	3.8	1.0	7	NEAR COAST OF GUERRERO, MEXICO
25	14 13 03.5	35.517 N	27.486 E	10 G		0.5	5	DODECANESE ISLANDS. MD 3.7 (ATH).
25	14 13 40.6	44.500 N	7.115 E	10		0.2	8	NORTHERN ITALY
25	14 32 36.17	38.32 N	24.02 E	10 G		0.4	4	AEGEAN SEA. ML 2.7 (ATH).
25	15 03 17.97	32.046 N	35.857 E	10 G		1.1	5	DEAD SEA REGION
25	16 11 54.1	40.679 N	22.687 E	5		1.2	17	GREECE. MD 3.4 (ATH).
25	16 13 03.0	42.819 N	12.992 E	10 G		0.8	7	CENTRAL ITALY. MD 2.5 (SSO), 2.4 (ROM).
25	17 52 34.7	40.422 N	27.640 E	10 G		1.2	8	TURKEY
25	18 16 33.8	59.962 N	153.496 W	143			8	SOUTHERN ALASKA. <AGS-P>.

25	19 34 30.1*	28.034 S	67.207 W	259 *	4.7	1.2	18	LA RIOJA PROVINCE, ARGENTINA
25	19 50 05.0?	37.73 S	176.13 E	334 ?		0.3	20	NORTH ISLAND, NEW ZEALAND
f 25	20 37 32.4	1.134 N	79.616 W	15 G	5.9 6.1	1 0	364	NEAR COAST OF ECUADOR. Ms 6.0 (BRK), 6.0 (PAS). Thirty people injured and 12 homes damaged (VII) in the Esmeraldas area. Felt (III) at Guayaquil and (II) at Quito. Felt throughout Ecuador and southwestern Colombia. Depth from broadband displacement seismograms.
25	20 43 34.5	42.821 N	12.963 E	10 G		1.2	7	CENTRAL ITALY. MD 2.3 (ROM), 2.3 (SSO).
25	21 00 23.7*	37.155 N	72.075 E	243 ?	4.1	1.3	11	TAJIK SSR
25	21 57 38.2	42.824 N	12.985 E	10 G		0.8	6	CENTRAL ITALY. MD 2.5 (ROM), 2.5 (SSO).
25	22 55 06.7	41.065 N	20.068 E	10 G		1.0	10	ALBANIA. ML 2.4 (ROM).
25	23 56 39.5&	58.284 N	142.768 W	10 G	4.1		35	GULF OF ALASKA. <AGS-P>. ML 4.1 (PMR).
26	00 25 44.0	44.480 N	7.437 E	33 N		0.7	25	NORTHERN ITALY. ML 3.0 (LDG), 3.0 (ROM).
26	00 52 11.6?	32.73 S	70.90 W	71 ?		0.4	10	CHILE-ARGENTINA BORDER REGION
26	02 27 17.4*	38.049 N	16.738 E	33 N		0.4	7	SOUTHERN ITALY
26	02 28 50.1*	17.739 N	65.646 W	10 G		0.7	8	PUERTO RICO REGION
f 26	03 27 03.9&	19.362 N	155.083 W	9	5.8 6.1		302	HAWAII. <HVO-P>. MD 6.2 (HVO). Ms 6.2 (BRK), 6.2 (PAS). Five people injured slightly, 5 homes destroyed and about 100 homes damaged in the Puna District. Landslides occurred in several places and blocked a road at Hanamu. Slight damage (VI) at Hawaii National Park, Hilo, Hanamu and Keaou. Felt (V) at Hanakaa, Kapaau, Kurtistown, Ninale, Oakala, Paauhau and Volcano; (IV) at Hakalau, Hawi, Halualaa, Hanounau, Loupahaehae and Pohala. Felt throughout the island of Hawaii. Also felt on Maui and Oahu. A small tsunami was generated with maximum wave heights (peak-to-trough) of 57 cm. at Honuapo, 21 cm. at Kopaha and 14 cm. at Hilo. Two events about 5 seconds apart, observed on broadband displacement seismograms.
26	03 41 03.2*	41.883 N	22.090 E	10 G		0.7	5	YUGOSLAVIA. ML 1.9 (SKO).
26	03 44 00.1*	37.587 N	31.427 E	10 G		1.0	6	TURKEY
26	04 37 52.8*	17.839 N	65.626 W	12 *		0.3	6	PUERTO RICO REGION
26	05 42 09.3?	43.50 N	19.27 E	10 G		0.7	5	YUGOSLAVIA. ML 2.2 (TTG).
26	05 58 50.4*	38.756 N	31.859 E	10 G		1.5	8	TURKEY
26	06 06 10.6&	19.368 N	154.974 W	4			34	HAWAII. <HVO-P>. MD 4.4 (HVO).
26	06 52 28.1?	32.76 S	68.85 W	33 N		1.2	10	MENDOZA PROVINCE, ARGENTINA
26	07 29 07.0	44.666 N	7.224 E	10 G		0.2	13	NORTHERN ITALY
26	07 52 03.4*	38.825 N	31.663 E	10 G		0.4	5	TURKEY
26	08 38 30.4*	37.653 N	20.674 E	10 G		1.0	7	IONIAN SEA. ML 3.5 (ATH).
26	08 51 25.7?	52.24 N	159.52 E	33 N	4.7	0.5	11	OFF EAST COAST OF KAMCHATKA
26	09 10 37.2	32.947 N	39.559 W	10 G	4.9 4.2	0.6	40	NORTH ATLANTIC RIDGE
26	09 39 43.9*	38.762 N	31.880 E	10 G		1.2	7	TURKEY
26	09 58 29.5?	44.22 N	7.46 E	10 G		0.4	4	NORTHERN ITALY. MD 2.4 (ROM).
a 26	10 38 39.4	39.112 N	28.242 W	11 G	5.7 5.7	1.1	390	AZORES ISLANDS. Ms 5.4 (BRK). Several people injured slightly and minor damage (VI) on Graciosa. Felt (V) on Terceira and (IV) on Faial, Pico and Sao Jorge. Depth from broadband displacement seismograms.
26	11 18 13.5	31.466 S	138.368 E	10 G		1.3	14	SOUTH AUSTRALIA
26	12 21 07.6*	6.833 N	73.009 W	163 *	4.7	1.1	15	NORTHERN COLOMBIA
26	13 07 06.3*	11.836 S	117.321 E	33 N	3.9	0.8	7	SOUTH OF SUMBAWA ISLAND
26	13 59 42.9*	30.691 N	142.499 E	10 G	4.7	1.0	11	SOUTH OF HONSHU, JAPAN
26	14 01 14.5*	2.322 S	79.329 W	114 *	4.8	0.9	23	NEAR COAST OF ECUADOR
26	14 20 45.8*	10.263 N	122.326 E	33 N	4.7	0.4	11	PANAY, PHILIPPINE ISLANDS
26	14 59 41.8	35.681 N	70.543 E	118 *	4.9	1.0	116	HINDU KUSH REGION. Felt (II) at Khorag and Dushanbe, USSR. Felt at Peshawar, Pakistan.
26	16 27 25.9&	61.969 N	151.003 W	75			17	SOUTHERN ALASKA. <AGS-P>.
26	16 52 46.1&	43.214 N	0.169 E	10 G		0.9	6	FRANCE. ML 3.3 (LDG).
26	16 57 20.9	46.274 N	7.333 E	14		1.2	10	SWITZERLAND
26	18 13 47.8	20.031 S	133.743 E	5 G		1.2	15	NORTHERN TERRITORY, AUSTRALIA. ML 4.2 (OIS).
26	18 39 42.9*	36.556 N	70.113 E	188 ?	4.5	1.2	15	HINDU KUSH REGION
26	18 39 59.8?	36.06 N	21.07 E	10 G		1.2	8	SOUTHERN GREECE. MD 3.5 (ATH).
26	18 52 27.8&	19.339 N	154.956 W	2			34	HAWAII. <HVO-P>. MD 4.2 (HVO).
26	19 03 45.1?	38.01 N	21.24 E	10 G		1.0	8	GREECE. ML 3.5 (ATH).
26	21 40 30.6	39.023 N	75.274 E	22 *	4.2	1.2	24	SOUTHERN XINJIANG, CHINA
26	22 53 41.7*	28.452 N	51.426 E	33 N	4.3	1.1	17	SOUTHERN IRAN
26	23 09 06.7&	37.128 N	121.517 W	7			10	CENTRAL CALIFORNIA. <BRK>. ML 2.7 (BRK).
26	23 23 57.3	14.637 N	60.360 W	43 ?		0.6	19	WINDWARD ISLANDS Felt (II) on Martinique
26	23 55 57.0	34.305 N	70.775 E	33 N	4.5	0.9	29	AFGHANISTAN
27	02 25 59.9&	62.742 N	150.721 W	89			36	CENTRAL ALASKA. <AGS-P>.
27	02 45 49.4&	61.463 N	151.523 W	82			14	SOUTHERN ALASKA. <AGS-P>.
27	06 37 55.5	18.529 S	174.832 W	188 ?	4.7	1.1	29	TONGA ISLANDS
a 27	07 10 22.6	51.568 N	174.339 W	33 N	5.2 5.0	1.1	161	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.5 (PMR) Felt (IV) on Adak.
27	07 16 46.1	51.522 N	174.391 W	33 N	4.8 4.6	0.7	44	ANDREANOF ISLANDS, ALEUTIAN IS.
27	07 17 24.5*	51.834 N	174.326 W	33 N	4.9	0.5	25	ANDREANOF ISLANDS, ALEUTIAN IS.
27	08 10 17.0	15.940 S	75.086 W	34	4.8 4.2	1.0	40	NEAR COAST OF PERU
27	08 23 54.7%	17.586 N	94.510 W	33 N		1.4	5	CHIAPAS, MEXICO
27	08 47 24.1%	60.692 N	5.510 E	10 G		1.0	8	SOUTHERN NORWAY. MD 1.7 (BER).
27	09 05 48.1&	62.153 N	149.614 W	44			20	CENTRAL ALASKA. <AGS-P>.
27	09 07 29.1?	17.85 N	65.66 W	10 G		0.2	5	PUERTO RICO REGION
27	09 18 04.5	42.902 N	13.035 E	10 G		0.2	6	CENTRAL ITALY. MD 2.4 (ROM), 2.4 (SSO).
27	09 24 22.3*	37.413 N	142.078 E	33 N		0.9	11	OFF EAST COAST OF HONSHU, JAPAN
27	10 08 56.9%	61.611 N	5.217 E	10 G		0.9	9	SOUTHERN NORWAY. MD 2.1 (BER).
27	10 59 34.1	51.522 N	174.342 W	33 N	4.9 4.3	0.8	72	ANDREANOF ISLANDS, ALEUTIAN IS
27	11 26 46.2*	22.594 S	175.448 W	117 ?	4.9	1.1	22	TONGA ISLANDS REGION
27	11 57 48.9?	17.90 N	65.82 W	10 G		0.2	4	PUERTO RICO REGION
27	12 29 01.8%	42.727 N	19.127 E	10 G		0.7	5	YUGOSLAVIA. ML 2.7 (TTG).
27	14 12 26.1*	32.056 N	96.633 E	33 N	4.2	1.4	5	QINGHAI PROVINCE, CHINA
27	14 47 03.2&	60.128 N	152.819 W	113			14	SOUTHERN ALASKA. <AGS-P>.
27	15 30 00.0&	37.275 N	116.354 W	0	4.9		102	SOUTHERN NEVADA <DOE> ML 4.8 (BRK). 37' 16" 31 65" N., 116' 21" 12.81" W. Surface Elev. 2046 m., Depth of

										Burial 600 m., Shot Time 153000 020, "AMARILLO," Nevada Test Site (Dept. of Energy).										
27	15	51	49.6	41.795	N	112.734	W	6		6	UTAH. <SLC-P>. ML 3.0 (SLC).									
27	16	28	29.2	41.795	N	112.729	W	6		6	UTAH. <SLC-P>. ML 2.9 (SLC).									
27	16	37	47.5	59.265	N	153.037	W	79		13	SOUTHERN ALASKA. <AGS-P>.									
27	17	01	36.7	42.063	N	142.633	E	63	4.0	1.2	18	HOKKAIDO, JAPAN REGION. Felt (II JMA) at Urakawa and Hiroo.								
27	17	09	21.2	10.56	N	61.84	W	10	G	0.8	5	TRINIDAD								
27	17	26	33.6	36.916	N	71.448	E	33	N	4.5	1.3	11	AFGHANISTAN-USSR BORDER REGION							
a	27	17	43	09.0	63.72	S	156.10	W	10	G	5.4	5.5	1.3	23	SOUTH PACIFIC CORDILLERA					
27	18	06	44.1	15.216	N	60.497	W	10	G	0.4	7	LEEWARD ISLANDS. ML 2.6 (FDF).								
27	18	20	00.5	59.571	N	153.025	W	96			20	SOUTHERN ALASKA. <AGS-P>.								
27	18	40	26.3	32.14	S	71.64	W	33	N	0.7	10	NEAR COAST OF CENTRAL CHILE								
27	18	40	46.0	42.554	N	145.746	E	33	N	4.5	1.3	12	HOKKAIDO, JAPAN REGION							
27	19	52	59.1	10.684	N	61.712	W	33	N	1.3	5	TRINIDAD								
27	20	26	45.7	3.368	S	132.146	E	33	N	3.5	1.2	5	WEST IRIAN REGION							
27	21	48	49.0	61.265	N	152.039	W	109			30	SOUTHERN ALASKA. <AGS-P>.								
27	22	15	20.7	41.67	N	12.70	E	10	G	0.8	4	SOUTHERN ITALY. MD 2.2 (ROM).								
27	23	12	23.3	58.217	N	142.715	W	10	G		20	GULF OF ALASKA. <AGS-P>.								
27	23	24	01.5	57.986	N	143.795	W	10	G		11	GULF OF ALASKA. <AGS-P>.								
28	00	01	55.1	11.51	N	60.07	W	10	G	0.2	7	WINDWARD ISLANDS								
28	00	14	58.6	45.99	N	150.63	E	33	N	4.8	4.0	1.1	39	KURIL ISLANDS						
28	01	41	13.4	25.662	N	140.677	E	195	D	4.7	1.0	38	VOLCANO ISLANDS REGION							
28	02	04	26.9	12.214	N	125.632	E	33	N	5.0	0.9	19	SAMAR, PHILIPPINE ISLANDS							
a	28	03	00	28.9	45.096	N	151.292	E	44	D	5.6	5.1	0.9	216	KURIL ISLANDS					
28	03	04	58.2	37.91	N	26.49	W	10	G	0.4	4	AZORES ISLANDS								
28	03	16	33.6	44.345	N	112.365	W	5	G	0.8	7	EASTERN IDAHO. ML 3.1 (BUT).								
28	03	47	06.9	17.376	N	95.020	W	116	?	3.9	1.2	8	OAXACA, MEXICO							
28	04	56	51.7	63.243	N	150.490	W	122		4.6	1.0	69	CENTRAL ALASKA. Felt (IV) at Nenana; (III) at Skwentna and Talkeetna.							
28	08	15	16.9	38.258	N	20.489	E	10	G	0.8	7	GREECE. MD 3.5 (ATH).								
28	09	22	40.0	36.571	N	140.441	E	33	N	1.1	8	NEAR EAST COAST OF HONSHU, JAPAN. MG 3.3 (JMA). Felt (I JMA) at Mito.								
28	10	19	48.9	56.173	N	150.850	W	0		4.2	21	GULF OF ALASKA. <AGS-P>. ML 3.6 (PMR).								
28	10	46	57.7	61.608	N	5.302	E	10	G	0.5	7	SOUTHERN NORWAY. MD 1.7 (BER).								
28	12	05	29.7	51.44	N	174.18	W	33	N	4.5	1.7	12	ANDREANOF ISLANDS, ALEUTIAN IS.							
28	12	08	32.4	23.851	N	94.387	E	76	D	5.0	1.0	138	BURMA-INDIA BORDER REGION							
28	12	36	28.7	23.730	N	91.234	E	33	N		1.0	8	INDIA-BANGLADESH BORDER REGION							
28	12	42	26.5	42.76	N	19.17	E	10	G	0.2	4	YUGOSLAVIA. ML 2.0 (TTG).								
28	13	35	10.3	5.79	S	145.64	E	85	*	4.5	1.0	7	EAST PAPUA NEW GUINEA REGION							
28	13	39	10.7	44.522	N	26.028	E	21			0.7	13	ROMANIA							
28	14	53	16.8	9.841	S	121.757	E	71	?	4.5	1.2	12	SAVU SEA							
28	15	11	27.1	61.613	N	5.295	E	10	G	0.6	8	SOUTHERN NORWAY. MD 2.1 (BER).								
28	15	16	18.4	4.535	N	76.066	W	129		4.7	0.9	40	COLOMBIA. Felt in Chaco and Valle del Cauca Departments.							
28	15	40	47.8	17.165	N	62.287	W	19	*		0.5	9	LEEWARD ISLANDS. ML 3.3 (FDF).							
28	16	00	41.4	40.655	N	122.120	W	12			11	NORTHERN CALIFORNIA. <BRK>. ML 3.0 (BRK). Felt (IV) at Bella Vista, Central Valley, Millville, Oak Run, Palo Cedra, Project City and Whitmore; (III) at Anderson, Cottonwood, Mantion, Montgomery Creek, Round Mountain and Summit City. Also felt at Redding and Shingletown.								
28	16	03	58.5	43.929	N	7.795	E	10	G	0.1	5	NEAR SOUTH COAST OF FRANCE. ML 2.0 (GEN).								
28	16	50	03.1	1.80	N	126.23	E	105	?	4.5	0.5	8	MOLUCCA PASSAGE							
28	17	11	42.1	32.95	S	122.30	E	10	G		1.4	4	WESTERN AUSTRALIA							
28	19	35	31.1	61.624	N	146.566	W	24			18	SOUTHERN ALASKA. <AGS-P>.								
28	19	51	51.7	6.84	S	13.09	W	10	G	4.8	1.6	11	ASCENSION ISLAND REGION							
28	19	57	02.0	35.35	N	24.45	E	10	G		1.6	5	CRETE. MD 3.8 (ATH).							
28	20	24	18.9	39.020	N	28.383	W	10	G	4.6	4.2	1.2	32	AZORES ISLANDS. Felt (IV) on Gracioso and (II) on Faial and Pico.						
28	20	58	14.2	63.084	N	150.914	W	127			18	CENTRAL ALASKA. <AGS-P>.								
a	28	21	24	12.4	57.788	S	147.449	W	10	G	5.5	5.7	1.2	75	SOUTH PACIFIC CORDILLERA					
28	21	36	30.5	37.681	N	15.185	E	10	G	0.9	8	SICILY. MD 2.8 (ROM).								
28	21	52	16.8	61.816	N	7.381	E	10	G	1.0	8	SOUTHERN NORWAY. MD 1.8 (BER).								
28	22	03	39.7	37.65	N	15.18	E	10	G	0.2	4	SICILY. MD 2.5 (ROM).								
a	28	22	11	58.9	6.223	S	148.814	E	50	D	5.4	1.0	105	NEW BRITAIN REGION						
28	22	57	54.2	49.341	N	8.429	E	10			1.5	19	GERMANY. MD 2.7 (UCC), 2.6 (STR). ML 2.5 (GRF).							
a	28	23	44	51.3	7.604	S	127.342	E	173	D	5.3	0.8	267	BANDA SEA						
a	29	00	18	39	8	22	960	S	175	319	W	35	D	5.2	5.1	1.1	69	TONGA ISLANDS REGION		
29	01	21	09	3	17	40	N	61.04	W	10	G	0	3	7	LEEWARD ISLANDS ML 3 3 (FDF).					
29	02	41	37	5	39	401	N	19.654	E	47	*	3.9	1	2	71	GREECE-ALBANIA BORDER REGION. Felt (IV) at Vrine and Konispol, Albania				
29	02	58	54.7	35.10	N	3.74	W	10	G	1.1	5	STRAIT OF GIBRALTAR								
a	29	03	57	33.1	6.289	S	154.817	E	82	*	5.3	1.0	111	SOLOMON ISLANDS						
29	03	59	55.4	14.071	N	93.166	W	54	*	4.8	1.2	13	NEAR COAST OF CHIAPAS, MEXICO							
29	04	18	44.3	43.616	N	7.646	E	10	G	0.8	23	NEAR SOUTH COAST OF FRANCE. ML 2.6 (LDG), 2.1 (GEN).								
29	04	18	46.7	43.631	N	7.587	E	10	G	0.3	11	NEAR SOUTH COAST OF FRANCE. ML 3.1 (LDG), 2.8 (GEN).								
29	04	56	34.2	49.923	N	18.628	E	10	G	1.0	5	CZECHOSLOVAKIA. ML 2.6 (KRA).								
29	04	58	41.9	31.364	S	71.624	W	98	*		0.7	15	NEAR COAST OF CENTRAL CHILE							
a	29	05	25	51.5	4.497	S	102.018	E	42	D	5.3	5.0	1.0	138	SOUTHERN SUMATERA. Felt at Bengkulu.					
29	06	51	38.7	15.772	N	89.966	W	7		4.9	4.0	1.0	69	GUATEMALA						
29	07	52	36.4	38.625	N	25.158	E	10	G	1.4	13	AEGEAN SEA. ML 3.0 (ATH).								
29	10	32	54.6	60.524	N	4.840	E	10	G	0.2	7	SOUTHERN NORWAY. MD 1.7 (BER).								
29	10	40	02.7	44.411	N	7.242	E	11			0.5	22	NORTHERN ITALY. ML 3.2 (LDG), 2.8 (GEN), 3.2 (ROM).							
29	10	55	39.8	0.405	S	124.388	E	82	?	4.7	1.2	31	MOLUCCA SEA							
29	11	43	57.5	36.588	N	5.788	W	10	G	1.5	5	STRAIT OF GIBRALTAR								
29	12	29	04.5	39.953	N	28														

29	13 42 41.8	62.664 S	165.105 E	10 G	4.5 4.5	1.1	6	BALLENY ISLANDS REGION
29	16 21 17.2	60.543 N	5.037 E	10 G		0.5	7	SOUTHERN NORWAY. MD 1.6 (BER).
29	17 21 08.1	13.590 N	58.592 W	13	5.0	0.8	153	NORTH ATLANTIC OCEAN. ML 4.7 (FDF).
29	17 33 50.9	51.438 N	16.120 E	14	4.7	0.9	70	POLAND. ML 4.7 (GRF). 4.7 (VKA). 4.6 (KBA).
29	17 46 42.5	16.878 N	61.897 W	33 N		1.5	5	LEEWARD ISLANDS
29	18 36 28.5	59.086 N	152.890 W	75	3.6		14	SOUTHERN ALASKA. <AGS-P>.
29	19 45 38.4	25.251 N	124.412 E	122 *	4.2	1.0	25	NORTHEAST OF TAIWAN
29	20 11 09.9	43.26 N	5.62 E	10 G		0.5	9	NEAR SOUTH COAST OF FRANCE. MD 2.9 (STR).
29	23 14 08.1	61.733 N	150.798 W	60			26	SOUTHERN ALASKA. <AGS-P>.
29	23 18 15.2	11.517 N	59.846 W	10 G	4.5	1.1	20	NORTH ATLANTIC OCEAN
30	00 08 21.3	39.326 N	23.572 E	10 G		1.2	15	AEGEAN SEA. MD 3.0 (ATH).
30	01 16 07.7	18.910 S	175.801 W	273 D	5.0	1.0	99	TONGA ISLANDS
30	01 34 31.9	6.759 S	130.517 E	107	5.1	0.9	68	BANDA SEA
30	01 58 11.6	60.283 N	151.626 W	57			14	KENAI PENINSULA, ALASKA. <AGS-P>.
30	02 05 06.9	0.41 N	78.85 W	33 N		1.4	5	COLOMBIA-ECUADOR BORDER REGION
30	02 30 23.5	40.637 N	22.619 E	10 G		0.8	16	GREECE. MD 3.5 (ATH).
30	02 50 11.5	64.897 N	147.707 W	21			20	CENTRAL ALASKA. <AGS-P>. ML 3.6 (PMR).
30	03 50 03.6	66.872 N	156.247 W	34			10	ALASKA. <AGS-P>.
30	05 24 14.7	44.810 N	6.786 E	10 G		0.6	22	FRANCE. ML 2.7 (LDG). 2.4 (GEN).
30	06 02 46.8	17.26 N	60.84 W	10 G		0.3	4	LEEWARD ISLANDS
30	06 15 08.0	17.149 N	62.433 W	10 G		1.0	6	LEEWARD ISLANDS
30	07 00 55.5	48.86 S	113.56 W	10 G	4.9 5.0	1.1	21	EASTER ISLAND CORDILLERA
30	07 13 00.7	41.630 N	142.607 E	56	4.1	0.9	19	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Urukawa and (I JMA) at Hiroo.
30	07 15 22.3	41.558 N	142.647 E	48	4.6	0.9	26	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Tomakomai and Urukawa. Felt (I JMA) at Hachinohe, Honshu.
30	08 59 41.9	62.529 N	151.362 W	88			18	CENTRAL ALASKA. <AGS-P>.
30	10 07 57.7	35.294 N	3.711 W	10 G		1.4	15	STRAIT OF GIBRALTAR. mblg 3.0 (MDD).
30	10 31 56.9	61.604 N	5.234 E	10 G		0.5	7	SOUTHERN NORWAY. MD 2.1 (BER).
30	11 29 50.5	38.312 N	22.661 E	10 G		1.3	7	GREECE. ML 3.1 (ATH).
30	12 52 50.8	40.104 N	107.866 W	5 G		1.1	6	COLORADO. ML 2.2 (NEIS). Felt at Meeker.
30	13 24 18.0	6.17 S	146.52 E	125 ?	3.5	0.6	6	EAST PAPUA NEW GUINEA REGION
30	14 55 47.8	43.435 N	5.455 E	8		0.7	15	NEAR SOUTH COAST OF FRANCE. MD 2.6 (STR).
30	16 24 03.3	35.426 N	139.010 E	41	4.6	1.1	41	NEAR S. COAST OF HONSHU, JAPAN. Felt (III JMA) at Kawaguchi-ko, (I JMA) at Kofu, Tokyo and (I JMA) at Ajira, Maebashi, Mishima, Utsunomiya, Yokohama and on Oshima.
30	16 37 23.7	12.25 S	166.95 E	115 ?	4.7	0.8	15	SANTA CRUZ ISLANDS
30	16 39 20.8	35.466 N	139.017 E	10 G		0.5	6	NEAR S. COAST OF HONSHU, JAPAN. MG 3.2 (JMA). Felt (I JMA) at Kawaguchi-ko.
30	17 08 46.0	39.533 N	119.817 W	5 G		1.7	5	NEVADA. ML 2.6 (BRK).
30	18 52 54.4	8.952 N	126.254 E	33 N	4.6	1.1	16	MINDANAO, PHILIPPINE ISLANDS
30	19 04 09.4	28.036 N	55.302 E	54	4.4	0.8	36	SOUTHERN IRAN
30	20 45 40.0	46.208 N	14.758 E	10 G		0.3	5	YUGOSLAVIA. MD 2.6 (LJU).
30	20 48 24.3	50.515 N	18.936 E	10 G		0.8	27	POLAND. ML 4.2 (KRA).
30	21 17 53.2	35.79 N	26.31 E	10 G		1.0	4	CRETE. MD 3.3 (ATH).
30	21 48 07.9	52.540 N	155.888 E	33 N	4.6	0.9	25	NORTHWEST OF KURIL ISLANDS
30	22 17 34.1	62.408 N	151.080 W	69			9	CENTRAL ALASKA. <AGS-P>.
30	22 58 27.8	0.42 N	78.85 W	33 N		1.2	5	COLOMBIA-ECUADOR BORDER REGION
30	23 18 36.5	10.964 S	162.011 E	70 G	5.0	0.9	26	SOLDMON 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 04 08 18.91 10.966S 165.449E 33km	5.3mb ( 18 obs.)	SOLOMON ISLANDS
5.0mb ( 7 obs.) 4.8msz ( 2 obs.)	VANUATU ISLANDS	CENTROID, MOMENT TENSOR (HRV)
SANTA CRUZ ISLANDS	CENTROID, MOMENT TENSOR (HRV)	Data Used: GDSN
CENTROID, MOMENT TENSOR (HRV)	Data Used: GDSN	L.P.B.: 18S, 31C
Data Used: GDSN	L.P.B.: 17S, 28C	Centroid Location:
L.P.B.: 11S, 20C	Centroid Location:	Origin Time 02:56:56.4 0.6
Centroid Location:	Origin Time 11:02:25.3 0.7	Lat 6.84S 0.05 Lon 156.00E 0.05
Origin Time 04:08:21.7 0.6	Lat 18.95S 0.06 Lon 168.04E 0.06	Dep 163.2 1.6 Half-duration 2.2
Lat 11.42S 0.11 Lon 165.52E 0.10	Dep 105.1 3.2 Half-duration 1.7	Principal Axes:
Dep 15.0 FIX Half-duration 1.6	Principal Axes:	Scale 10**17 Nm
Principal Axes:	Scale 10**16 Nm	T Val= 2.02 P1g=18 Azm=303
Scale 10**16 Nm	T Val= 12.05 P1g=18 Azm=127	N 0.16 14 208
T Val= 10.03 P1g=58 Azm= 66	N 0.37 25 226	P -2.18 07 82
N 0.02 1 335	P -12.41 59 5	Best Double Couple:Mo=2.1*10**17
P -10.05 32 244	Best Double Couple:Mo=1 2*10**17	NP1:Strike= 55 Dip=30 Slip= -60
Best Double Couple Mo=1 0*10**17	NP1:Strike=184 Dip=35 Slip=137	NP2: 201 65 -106
NP1:Strike=331 Dip=13 Slip= 86	NP2: 57 67 -63	
NP2: 155 77 91		
01 07 25 06.47 52.004S 159.679E 10km	02 21 01 18.21 4.669S 153.014E 72km	06 07 24 56.64 18.457N 146.302E 58km
5.2mb ( 12 obs.) 4.8msz ( 3 obs.)	5.4mb ( 19 obs.)	5.4mb ( 36 obs.)
MACQUARIE ISLANDS REGION	NEW IRELAND REGION	MARIANA ISLANDS
CENTROID, MOMENT TENSOR (HRV)	CENTROID, MOMENT TENSOR (HRV)	CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN	Data Used: GDSN	Data Used: GDSN
L.P.B.: 14S, 25C	L.P.B.: 10S, 18C	L.P.B.: 14S, 24C
Centroid Location:	Centroid Location:	Centroid Location:
Origin Time 07:25:14.2 0.5	Origin Time 21:01:21.5 0.9	Origin Time 07:25: 1.3 0.5
Lat 52.12S FIX;Lon 158.56E FIX	Lat 4.59S 0.10 Lon 152.89E 0.11	Lat 18.46N 0.06 Lon 146.25E 0.06
Dep 15.0 FIX Half-duration 1.5	Dep 21.8 9.0 Half-duration 1.5	Dep 28.7 4.9 Half-duration 1.5
Principal Axes:	Principal Axes:	Principal Axes:
Scale 10**16 Nm	Scale 10**16 Nm	Scale 10**16 Nm
T Val= 5.34 P1g= 0 Azm=210	T Val= 5.53 P1g=23 Azm= 55	T Val= 8.77 P1g=64 Azm=327
N 2.54 90 180	N 0.04 10 150	N -1.64 16 201
P -7.88 0 120	P -5.56 65 263	P -7.12 20 105
Best Double Couple:Mo=6.6*10**16	Best Double Couple:Mo=5 5*10**16	Best Double Couple:Mo=7.9*10**16
NP1:Strike=255 Dip=90 Slip= 180	NP1:Strike=126 Dip=24 Slip=116	NP1:Strike=169 Dip=29 Slip= 55
NP2: 345 90 0	NP2: 334 68 -79	NP2: 28 67 108
02 11 02 19.83 19.068S 168.833E 100km	03 02 56 52.60 6.826S 156.216E 171km	07 19 45 53.70 38.057N 21.620E 25km
5.4mb ( 38 obs.)	5.4mb ( 38 obs.)	5.0mb ( 58 obs.) 4.8msz ( 4 obs.)
		GREECE

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 135, 24C  
Centroid Location:  
Origin Time 19:45:58.9 0.9  
Lat 38.05N FIX; Lon 21.63E FIX  
Dep 25.0 FIX Half-duration 1.6  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.62 Plg= 2 Azm= 25  
N 2.66 54 292  
P -8.29 36 116  
Best Double Couple: Mo=6.9\*10\*\*16  
NP1: Strike=154 Dip=64 Slip= -26  
NP2: 256 67 -152

07 21 47 35.05 5.632N 125.732E 170km  
5.1mb ( 18 obs.)  
MINDANAO, PHILIPPINE ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 23C  
Centroid Location:  
Origin Time 21:47:34.2 1.0  
Lat 5.55N 0.07 Lon 125.76E 0.11  
Dep 158.6 2.2 Half-duration 1.6  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.92 Plg=67 Azm=257  
N -2.03 20 109  
P -5.90 11 15  
Best Double Couple: Mo=6.9\*10\*\*16  
NP1: Strike= 82 Dip=38 Slip= 57  
NP2: 301 59 113

08 06 24 09.61 6.837N 37.878E 19km  
5.0mb ( 26 obs.) 4.8Msz ( 1 obs.)  
ETHIOPIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 9S, 20C  
Centroid Location:  
Origin Time 06:24:17.5 1.5  
Lat 7.35N 0.16 Lon 38.16E 0.13  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 3.35 Plg= 0 Azm=110  
N -0.93 0 20  
P -2.42 90 180  
Best Double Couple: Mo=2.9\*10\*\*16  
NP1: Strike=200 Dip=45 Slip= -90  
NP2: 20 45 -90

08 09 51 56.84 19.531S 173.736W 23km  
5.5mb ( 37 obs.) 5.4Msz ( 28 obs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 36C  
Centroid Location:  
Origin Time 09:52: 4.3 0.3  
Lat 19.73S 0.03 Lon 173.57W 0.03  
Dep 17.7 1.4 Half-duration 3.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 5.74 Plg=73 Azm=266  
N 0.58 4 9  
P -6.32 17 100  
Best Double Couple: Mo=6.0\*10\*\*17  
NP1: Strike=196 Dip=29 Slip= 98  
NP2: 6 62 86

09 07 14 28.78 5.038S 151.278E 157km  
5.1mb ( 22 obs.)  
NEW BRITAIN REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 18C  
Centroid Location:  
Origin Time 07:14:30.0 1.2  
Lat 5.30S 0.12 Lon 151.27E 0.12  
Dep 142.3 4.3 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 4.88 Plg=15 Azm=176  
N 0.10 19 271  
P -4.97 65 51  
Best Double Couple: Mo=4.9\*10\*\*16  
NP1: Strike=241 Dip=34 Slip= -126  
NP2: 102 63 -68

09 12 19 35.70 71.432N 4.371W 10km  
5.6mb ( 54 obs.) 5.4Msz ( 19 obs.)  
JAN MAYEN ISLAND REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 37C  
Centroid Location:  
Origin Time 12:19:41.5 0.3  
Lat 70.99N 0.05 Lon 3.69W 0.14  
Dep 15.0 FIX Half-duration 2.3  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.19 Plg=12 Azm=313  
N -0.45 19 47  
P -2.74 68 192  
Best Double Couple: Mo=3.0\*10\*\*17  
NP1: Strike= 20 Dip=37 Slip= -122  
NP2: 238 59 -68

09 15 34 11.64 7.865S 117.517E 245km  
5.8mb ( 37 obs.)  
BALL SEA  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike= 50 Dip=80 Slip= 90  
NP2: 230 10 90  
Principal Axes:  
T Plg=55 Azm=320  
P 35 140  
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. M  
Energy 0.4±0.2\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 244 No. of sta: 10  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.81 Plg=50 Azm=331  
N -0.01 8 231  
P -3.80 39 135  
Best Double Couple: Mo=3.8\*10\*\*17  
NP1: Strike=179 Dip=10 Slip= 37  
NP2: 52 84 98  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 34C  
Centroid Location:  
Origin Time 15:34:13.9 0.4  
Lat 8.05S 0.04 Lon 117.29E 0.04  
Dep 247.6 1.8 Half-duration 2.6  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 4.09 Plg=41 Azm=326  
N -0.42 17 72  
P -3.67 44 178  
Best Double Couple: Mo=3.9\*10\*\*17  
NP1: Strike=346 Dip=17 Slip= -175  
NP2: 252 89 -73

09 16 52 12.10 20.260N 145.147E 149km  
5.4mb ( 39 obs.)  
MARIANA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 23C  
Centroid Location:  
Origin Time 16:52:14.6 0.9  
Lat 20.16N 0.06 Lon 144.73E 0.09  
Dep 149.3 2.7 Half-duration 1.6  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 9.78 Plg=10 Azm=158  
N 2.16 43 258  
P -11.95 45 58  
Best Double Couple: Mo=1.1\*10\*\*17  
NP1: Strike=209 Dip=51 Slip= -152  
NP2: 101 68 -42

11 12 21 49.71 51.75 S 158.85 E 10km  
5.2mb ( 4 obs.) 5.1Msz ( 2 obs.)  
NORTH OF MACQUARIE ISLAND  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 26C  
Centroid Location:  
Origin Time 12:21:55.3 0.8  
Lat 51.84S 0.10 Lon 158.13E 0.12  
Dep 15.0 FIX Half-duration 1.7  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 10.36 Plg=12 Azm=191

N -2.38 75 332  
P -7.98 9 99  
Best Double Couple: Mo=9.2\*10\*\*16  
NP1: Strike=235 Dip=75 Slip= 178  
NP2: 325 88 15

11 13 24 32.07 35.107N 35.008W 10km  
5.8mb ( 83 obs.) 5.5Msz ( 17 obs.)  
NORTH ATLANTIC RIDGE  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike=325 Dip=76 Slip= 166  
NP2: 58 76 14  
Principal Axes:  
T Plg=20 Azm=282  
P 0 192  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a small reverse component. The preferred fault plane is not determined.  
RADIATED ENERGY  
No. of sta: 6 Focal mech. M  
Energy 0.1±0.1\*10\*\*15 Nm  
MOMENT TENSOR SOLUTION  
Dep 23 No. of sta: 10  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 1.97 Plg= 7 Azm=285  
N -0.12 82 76  
P -1.85 4 194  
Best Double Couple: Mo=1.9\*10\*\*18  
NP1: Strike=330 Dip=82 Slip= 178  
NP2: 60 88 8

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 37C  
Centroid Location:  
Origin Time 13:24:39.7 0.3  
Lat 35.10N 0.04 Lon 34.88W 0.04  
Dep 15.0 FIX Half-duration 3.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 6.92 Plg= 7 Azm=148  
N -1.24 81 289  
P -5.68 6 57  
Best Double Couple: Mo=6.3\*10\*\*17  
NP1: Strike=192 Dip=81 Slip= 179  
NP2: 282 89 9

11 23 24 39.00 6.463S 147.857E 49km  
5.1mb ( 11 obs.) 4.8Msz ( 6 obs.)  
EAST PAPUA NEW GUINEA REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 22C  
Centroid Location:  
Origin Time 23:24:41.5 0.6  
Lat 6.64S 0.07 Lon 147.50E 0.08  
Dep 47.5 4.5 Half-duration 1.6  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 8.48 Plg= 8 Azm=328  
N -1.66 47 229  
P -6.82 42 65  
Best Double Couple: Mo=7.6\*10\*\*16  
NP1: Strike= 97 Dip=55 Slip= -27  
NP2: 204 68 -142

12 00 04 09.76 21.861N 89.763E 61km  
6.1mb ( 61 obs.) 5.1Msz ( 19 obs.)  
BANGLADESH  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike=350 Dip=78 Slip= 175  
NP2: 81 85 12  
Principal Axes:  
T Plg=12 Azm=306  
P 5 215  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a small reverse component. The preferred fault plane is not determined.  
RADIATED ENERGY  
No. of sta: 7 Focal mech. C  
Energy 0.5±0.2\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 18 No. of sta: 5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 4.29 Plg=40 Azm=322  
N 0.10 43 104

P -4.40 20 213  
 Best Double Couple Mo=4.3\*10\*\*17  
 NP1 Strike=349 Dip=46 Slip= 163  
 NP2 92 78 46  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 10S, 21C  
 Centroid Location:  
 Origin Time 00:04:16.3 0.4  
 Lat 22.13N 0.05 Lon 89.88E 0.05  
 Dep 15.0 FIX Half-duration 3.0  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 5.38 Plg=28 Azm=314  
 N 0.85 62 120  
 P -6.23 6 221  
 Best Double Couple: Mo=5.8\*10\*\*17  
 NP1: Strike=354 Dip=67 Slip= 164  
 NP2: 90 75 24

12 05 47 35.76 15.283S 167.572E 247km  
 5.4mb ( 19 abs.)  
 VANUATU ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 13S, 23C  
 Centroid Location:  
 Origin Time 05:47:40.8 0.8  
 Lat 15.31S 0.06 Lon 167.56E 0.07  
 Dep 252.4 2.9 Half-duration 2.2  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.20 Plg=41 Azm=232  
 N -0.03 39 98  
 P -2.17 25 346  
 Best Double Couple: Mo=2.2\*10\*\*17  
 NP1: Strike= 27 Dip=41 Slip= 15  
 NP2: 286 80 130

12 18 21 03.30 22.554S 175.826W 71km  
 5.5mb ( 32 abs.)  
 TONGA ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 28C  
 Centroid Location:  
 Origin Time 18:21: 7.7 0.5  
 Lat 22.48S 0.06 Lon 175.88W 0.06  
 Dep 67.7 5.7 Half-duration 1.8  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 1.36 Plg=53 Azm=102  
 N -0.15 16 349  
 P -1.22 32 248  
 Best Double Couple: Mo=1.3\*10\*\*17  
 NP1: Strike=295 Dip=20 Slip= 35  
 NP2: 172 79 107

13 17 49 40.57 3.670S 140.139E 71km  
 5.4mb ( 17 abs.)  
 WEST IRIAN  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, -27C  
 Centroid Location:  
 Origin Time 17:49:45.5 0.3  
 Lat 3.64S 0.02 Lon 140.10E 0.04  
 Dep 65.9 3.8 Half-duration 2.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.80 Plg=15 Azm=230  
 N -0.27 7 322  
 P -2.53 73 76  
 Best Double Couple: Mo=2.7\*10\*\*17  
 NP1: Strike=310 Dip=31 Slip=-104  
 NP2: 146 60 -82

13 22 59 33.41 43.342S 38.969E 10km  
 5.0mb ( 9 abs.) 5.0Msz ( 1 abs.)  
 PRINCE EDWARD ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 38C  
 Centroid Location:  
 Origin Time 22:59:39.0 0.4  
 Lat 43.21S 0.04 Lon 39.49E 0.05  
 Dep 15.0 FIX Half-duration 2.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.46 Plg=10 Azm=149  
 N -0.28 80 335  
 P -2.17 1 239  
 Best Double Couple Mo=2.3\*10\*\*17

NP1: Strike=284 Dip=82 Slip= 0  
 NP2 194 84 172

14 00 29 00.04 51.488N 174.300W 33km  
 5.2mb ( 50 obs.) 4.5Msz ( 2 obs.)  
 ANDREANOF ISLANDS, ALEUTIAN IS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 12S, 23C  
 Centroid Location:  
 Origin Time 00:29: 3.2 2.0  
 Lat 51.68N 0.18 Lon 174.12W 0.25  
 Dep 33.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 3.40 Plg=69 Azm= 6  
 N 0.72 11 246  
 P -4.12 18 152  
 Best Double Couple: Mo=3.8\*10\*\*16  
 NP1: Strike=225 Dip=29 Slip= 66  
 NP2: 71 64 102

14 10 17 35.24 12.875N 143.351E 126km  
 5.5mb ( 46 abs.)  
 SOUTH OF MARIANA ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 29C  
 Centroid Location:  
 Origin Time 10:17:39.9 0.2  
 Lat 12.41N 0.02 Lon 143.11E 0.03  
 Dep 115.3 1.6 Half-duration 2.6  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 3.46 Plg= 5 Azm=232  
 N 0.12 26 139  
 P -3.58 64 332  
 Best Double Couple: Mo=3.5\*10\*\*17  
 NP1: Strike=347 Dip=46 Slip= -53  
 NP2: 120 55 -122

14 18 06 38.26 34.289N 26.055E 14km  
 5.2mb ( 56 abs.) 5.1Msz ( 8 abs.)  
 CRETE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 12S, 24C  
 Centroid Location:  
 Origin Time 18:06:40.4 0.6  
 Lat 34.30N FIX; Lon 26.10E FIX  
 Dep 15.0 FIX Half-duration 1.8  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.42 Plg=37 Azm=353  
 N -0.26 3 261  
 P -2.16 52 167  
 Best Double Couple: Mo=2.3\*10\*\*17  
 NP1: Strike=102 Dip= 8 Slip= -68  
 NP2: 260 83 -93

14 21 44 35.18 40.085N 144.609E 33km  
 5.3mb ( 63 abs.) 4.6Msz ( 9 abs.)  
 OFF EAST COAST OF HONSHU, JAPAN  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 10S, 17C  
 Centroid Location:  
 Origin Time 21:44:33.5 0.9  
 Lat 39.82N 0.14 Lon 144.60E 0.12  
 Dep 33.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 4.63 Plg= 2 Azm= 87  
 N -0.35 18 178  
 P -4.28 72 352  
 Best Double Couple: Mo=4.5\*10\*\*16  
 NP1: Strike=160 Dip=46 Slip=-115  
 NP2: 14 49 -66

14 22 37 11.36 14.013S 65.945E 10km  
 5.1mb ( 32 abs.) 4.9Msz ( 5 abs.)  
 MID-INDIAN RISE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 9S, 17C  
 Centroid Location:  
 Origin Time 22:37 19.5 0.7  
 Lat 13.74S 0.08 Lon 65.78E 0.08  
 Dep 15.0 FIX Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 5.79 Plg=72 Azm=317  
 N 1.02 13 182

P -6.81 12 89  
 Best Double Couple Mo=6.3\*10\*\*16  
 NP1 Strike=162 Dip=35 Slip= 66  
 NP2 10 59 105

15 15 51 58.60 6.800N 73.019W 162km  
 5.1mb ( 46 obs.)  
 NORTHERN COLOMBIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 25C  
 Centroid Location:  
 Origin Time 15:52: 2.1 0.8  
 Lat 6.87N 0.08 Lon 73.09W 0.08  
 Dep 156.8 1.9 Half-duration 1.6  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 9.06 Plg=43 Azm= 94  
 N 0.58 8 191  
 P -9.64 45 289  
 Best Double Couple: Mo=9.4\*10\*\*16  
 NP1: Strike=109 Dip= 8 Slip=-173  
 NP2: 12 89 -82

15 19 32 45.63 6.824N 82.309W 10km  
 4.9mb ( 24 abs.) 4.9Msz ( 2 abs.)  
 SOUTH OF PANAMA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 29C  
 Centroid Location:  
 Origin Time 19:32:53.7 0.4  
 Lat 6.78N 0.04 Lon 82.29W 0.05  
 Dep 15.0 FIX Half-duration 2.3  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 2.54 Plg=16 Azm=316  
 N -0.59 73 124  
 P -1.95 3 225  
 Best Double Couple: Mo=2.3\*10\*\*17  
 NP1: Strike= 0 Dip=76 Slip= 171  
 NP2: 92 81 14

16 07 18 35.45 13.224N 145.154E 68km  
 5.5mb ( 37 abs.)  
 MARIANA ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 20C  
 Centroid Location:  
 Origin Time 07:18:36.3 0.7  
 Lat 12.89N 0.08 Lon 145.34E 0.07  
 Dep 55.9 9.6 Half-duration 1.7  
 Principal Axes:  
 Scale 10\*\*16 Nm  
 T Val= 8.11 Plg=55 Azm=321  
 N 0.73 21 199  
 P -8.84 27 98  
 Best Double Couple: Mo=8.5\*10\*\*16  
 NP1: Strike=147 Dip=26 Slip= 36  
 NP2: 24 75 112

16 10 51 21.56 57.755N 153.992W 58km  
 5.8mb ( 81 abs.)  
 KODIAK ISLAND REGION  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike=240 Dip=85 Slip= -65  
 NP2: 341 25 -168  
 Principal Axes:  
 T Plg=35 Azm=309  
 P 44 175  
 Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting with a small left-lateral strike-slip component. The preferred fault plane is NP1.  
 RADIATED ENERGY  
 Na. of sta: 4 Focal mech. F  
 Energy 0.3±0.2\*10\*\*14 Nm  
 MOMENT TENSOR SOLUTION  
 Dep 61 Na. of sta: 17  
 Principal Axes:  
 Scale 10\*\*17 Nm  
 T Val= 5.10 Plg=33 Azm=308  
 N -0.06 18 51  
 P -5.03 51 164  
 Best Double Couple: Mo=5.1\*10\*\*17  
 NP1: Strike=350 Dip=20 Slip=-152  
 NP2: 234 81 -72  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B. 18S, 35C

Centroid Location  
Origin Time 10 51 24 3 0 3  
Lat 57.70N 0.04 Lon 154.64W 0.05  
Dep 72.8 4.1 Half-duration 2.6  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.72 Plg=37 Azm=290  
N 0.05 28 44  
P -3.78 40 161  
Best Double Couple:Mo=3.8\*10\*\*17  
NP1:Strike=319 Dip=28 Slip=-176  
NP2: 225 88 -62

16 20 12 31.26 20.672N 102.446E 33km  
5.1mb ( 30 obs.) 5.5MsZ ( 6 obs.)  
SOUTHEAST ASIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 25C  
Centroid Location:  
Origin Time 20:12:32.8 0.3  
Lat 20.61N 0.04 Lon 102.61E 0.06  
Dep 15.0 FIX Half-duration 2.5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.99 Plg=12 Azm=249  
N -0.28 63 135  
P -2.71 24 345  
Best Double Couple:Mo=2.9\*10\*\*17  
NP1:Strike= 25 Dip=65 Slip= -9  
NP2: 119 82 -154

16 23 42 35.12 31.807N 137.982E 360km  
5.9mb ( 90 obs.)  
SOUTH OF HONSHU, JAPAN  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 15 Dip=85 Slip= -90  
NP2: 195 5 -90  
Principal Axes:  
T Plg=40 Azm=105  
P 50 285  
Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting. The preferred fault plane is NP1.  
RADIATED ENERGY  
No. of sta: 9 Focal mech. M  
Energy 0.2±0.0\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 354 No. of sta: 12  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 4.45 Plg=39 Azm= 80  
N -0.07 21 188  
P -4.38 44 299  
Best Double Couple:Mo=4.4\*10\*\*18  
NP1:Strike=106 Dip=21 Slip=-173  
NP2: 9 87 -69  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 44C M.W.: 13S, 25C  
Centroid Location:  
Origin Time 23:42:40.2 0.1  
Lat 31.76N 0.01 Lon 138.11E 0.02  
Dep 366.1 0.9 Half-duration 6.0  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 4.17 Plg=44 Azm= 95  
N 0.02 12 197  
P -4.19 43 299  
Best Double Couple:Mo=4.2\*10\*\*18  
NP1:Strike=105 Dip=12 Slip= 178  
NP2: 197 90 78

17 18 28 08.62 40.494S 74.674W 33km  
5.6mb ( 20 obs.) 5.0MsZ ( 7 obs.)  
OFF COAST OF SOUTHERN CHILE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 25C  
Centroid Location:  
Origin Time 18:28:14.4 0.5  
Lat 41.10S 0.07 Lon 75.21W 0.13  
Dep 15.0 FIX Half-duration 2.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.38 Plg=24 Azm=115  
N 0.76 29 10  
P -3.14 51 237  
Best Double Couple:Mo=2.8\*10\*\*17  
NP1:Strike=247 Dip=34 Slip= -28  
NP2: 1 75 -121

17 20 47 14.62 1.437S 24.169W 101m  
5.1mb ( 52 obs.) 4.9MsZ ( 6 obs.)  
CENTRAL MID-ATLANTIC RIDGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 38C  
Centroid Location:  
Origin Time 20:47:24.3 0.6  
Lat 0.87S 0.05 Lon 23.93W 0.05  
Dep 15.0 FIX Half-duration 2.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.38 Plg= 2 Azm=219  
N -0.63 72 315  
P -1.76 18 128  
Best Double Couple:Mo=2.1\*10\*\*17  
NP1:Strike=265 Dip=76 Slip=-169  
NP2: 172 79 -14

18 14 06 28.83 17.761N 68.811W 62km  
5.9mb ( 69 obs.)  
MONA PASSAGE  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 35 Dip=65 Slip= -20  
NP2: 134 72 -154  
Principal Axes:  
T Plg= 5 Azm=263  
P 31 356  
Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a moderate normal component. The preferred fault plane is not determined.  
RADIATED ENERGY  
No. of sta: 6 Focal mech. C  
Energy 0.7±0.2\*10\*\*13 Nm  
MOMENT TENSOR SOLUTION  
Dep 70 No. of sta: 6  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.39 Plg= 6 Azm= 82  
N 0.06 59 182  
P -3.45 31 348  
Best Double Couple:Mo=3.4\*10\*\*17  
NP1:Strike=129 Dip=64 Slip=-161  
NP2: 31 73 -27  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 34C  
Centroid Location:  
Origin Time 14:06:30.8 0.5  
Lat 17.28N 0.06 Lon 68.53W 0.05  
Dep 73.2 4.0 Half-duration 2.1  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.56 Plg= 4 Azm=263  
N 0.39 57 167  
P -1.95 33 355  
Best Double Couple:Mo=1.8\*10\*\*17  
NP1:Strike= 34 Dip=64 Slip= -22  
NP2: 134 70 -153

18 15 49 14.11 12.449S 121.520E 33km  
5.1mb ( 18 obs.) 4.2MsZ ( 2 obs.)  
SOUTH OF TIMOR  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 20C  
Centroid Location:  
Origin Time 15:49:17.1 1.4  
Lat 12.49S FIX Lon 121.48E FIX  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.80 Plg=29 Azm= 24  
N 0.76 6 117  
P -8.56 60 218  
Best Double Couple:Mo=8.2\*10\*\*16  
NP1:Strike= 97 Dip=17 Slip=-111  
NP2: 299 74 -84

19 16 00 47.94 22.113S 67.559W 189km  
5.5mb ( 65 obs.)  
CHILE-BOLIVIA BORDER REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 34C  
Centroid Location:  
Origin Time 16:00:52.5 0.2  
Lat 22.05S 0.03 Lon 67.60W 0.04  
Dep 186.0 1.1 Half-duration 2.6

Principal Axes  
Scale 10\*\*17 Nm  
T Val= 3.71 Plg=40 Azm= 91  
N 0.05 6 357  
P -3.76 49 260  
Best Double Couple:Mo=3.7\*10\*\*17  
NP1:Strike=228 Dip= 7 Slip= -38  
NP2: 356 86 -96

19 20 16 10.53 55.672S 28.247W 33km  
5.6mb ( 6 obs.) 5.1MsZ ( 2 obs.)  
SOUTH SANDWICH ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 29C  
Centroid Location:  
Origin Time 20:16:16.9 0.4  
Lat 55.64S 0.06 Lon 28.61W 0.11  
Dep 49.9 6.5 Half-duration 2.1  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.62 Plg=40 Azm=112  
N -0.22 18 218  
P -1.40 44 327  
Best Double Couple:Mo=1.5\*10\*\*17  
NP1:Strike=136 Dip=19 Slip=-173  
NP2: 39 88 -72

20 05 41 43.52 52.334N 174.184E 48km  
5.2mb ( 63 obs.) 4.3MsZ ( 5 obs.)  
NEAR ISLANDS, ALEUTIAN ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 21C  
Centroid Location:  
Origin Time 05:41:45.7 0.6  
Lat 52.47N 0.12 Lon 173.72E 0.10  
Dep 49.0 8.4 Half-duration 1.8  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 6.72 Plg=55 Azm=162  
N 0.20 6 64  
P -6.91 35 330  
Best Double Couple:Mo=6.8\*10\*\*16  
NP1:Strike= 35 Dip=11 Slip= 60  
NP2: 245 80 96

20 18 07 43.60 52.527N 172.508E 33km  
5.2mb ( 53 obs.) 4.6MsZ ( 12 obs.)  
NEAR ISLANDS, ALEUTIAN ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 27C  
Centroid Location:  
Origin Time 18:07:46.5 0.7  
Lat 52.95N 0.06 Lon 172.38E 0.15  
Dep 48.5 5.6 Half-duration 1.7  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 8.29 Plg=53 Azm=297  
N 0.42 28 72  
P -8.71 22 175  
Best Double Couple:Mo=8.5\*10\*\*16  
NP1:Strike=305 Dip=34 Slip= 147  
NP2: 63 73 61

20 23 40 38.88 3.867S 86.993E 10km  
5.2mb ( 49 obs.) 4.6MsZ ( 3 obs.)  
SOUTH INDIAN OCEAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 22C  
Centroid Location:  
Origin Time 23:40:44.7 0.8  
Lat 3.39S 0.08 Lon 86.89E 0.08  
Dep 15.0 FIX Half-duration 1.9  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 12.37 Plg=58 Azm=288  
N -2.13 23 59  
P -10.24 22 159  
Best Double Couple:Mo=1.1\*10\*\*17  
NP1:Strike=284 Dip=31 Slip= 139  
NP2: 51 70 66

21 23 51 01.98 21.785S 176.493W 182km  
5.6mb ( 42 obs.)  
FIJI ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 38C  
Centroid Location:  
Origin Time 23:51.9 2.0 0.3

Lat 21.735 0 04 Lon 176.74W 0.03  
Dep 190.5 1 3 Half-duration 2.6  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 3.89 Plg=36 Azm=129  
N -0.11 9 33  
P -3.77 53 291  
Best Double Couple: Mo=3.8\*10\*\*17  
NP1: Strike=258 Dip=12 Slip= -44  
NP2: 32 82 -99

22 11 06 06.80 28.252N 130.644E 33km  
5.3mb ( 31 obs.)  
RYUKYU ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 17C  
Centroid Location:  
Origin Time 11:06: 9.6 0.6  
Lat 28.02N 0.11 Lon 130.35E 0.13  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 5.07 Plg= 7 Azm=121  
N 0.59 2 212  
P -5.66 83 316  
Best Double Couple: Mo=5.4\*10\*\*16  
NP1: Strike=209 Dip=38 Slip= -88  
NP2: 33 52 -93

23 00 35 42.62 17.098S 172.656W 33km  
4.9mb ( 12 obs.) 5.0Msz ( 1 obs.)  
TONGA ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 18C  
Centroid Location:  
Origin Time 00:35:41.5 1.4  
Lat 17.94S 0.17 Lon 172.84W 0.16  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 1.30 Plg=49 Azm=277  
N 0.08 5 13  
P -1.38 40 107  
Best Double Couple: Mo=1.3\*10\*\*17  
NP1: Strike=237 Dip= 7 Slip= 134  
NP2: 12 85 85

23 12 00 53.27 22.311N 142.996E 170km  
5.3mb ( 55 obs.)  
VOLCANO ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 18C  
Centroid Location:  
Origin Time 12:00:55.3 1.0  
Lat 22.33N 0.11 Lon 143.09E 0.11  
Dep 189.7 5.7 Half-duration 1.7  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.12 Plg=53 Azm=172  
N 0.54 20 52  
P -7.66 29 310  
Best Double Couple: Mo=7.4\*10\*\*16  
NP1: Strike=356 Dip=24 Slip= 32  
NP2: 237 78 111

24 03 09 57.56 36.719N 35.943E 42km  
4.9mb ( 57 obs.) 4.2Msz ( 2 obs.)  
TURKEY  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 23C  
Centroid Location:  
Origin Time 03:09:58.6 1.1  
Lat 36.28N 0.14 Lon 36.13E 0.17  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 4.61 Plg=17 Azm=115  
N 0.86 2 206  
P -5.47 73 301  
Best Double Couple: Mo=5.0\*10\*\*16  
NP1: Strike=203 Dip=28 Slip= -93  
NP2: 27 62 -88

24 12 58 39.08 28.336S 66.312W 22km  
5.4mb ( 35 obs.) 5.2Msz ( 3 obs.)  
CATAMARCA PROVINCE, ARGENTINA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 35C

Centroid Location  
Origin Time 12 58 47 1 0 4  
Lat 28.53S 0 05 Lon 66.20W 0 05  
Dep 21.0 FIX Half-duration 2.2  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 2.04 Plg= 3 Azm= 43  
N -0.01 75 145  
P -2.04 15 312  
Best Double Couple: Mo=2.0\*10\*\*17  
NP1: Strike= 88 Dip=77 Slip=-172  
NP2: 357 82 -13

25 12 30 05.91 6.113S 149.062E 72km  
5.2mb ( 24 obs.)  
NEW BRITAIN REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 31C  
Centroid Location:  
Origin Time 12:30:10.0 0.5  
Lat 6.40S 0.04 Lon 148.92E 0.06  
Dep 52.0 5.2 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 7.42 Plg=68 Azm=286  
N 1.89 21 89  
P -9.31 6 181  
Best Double Couple: Mo=8.4\*10\*\*16  
NP1: Strike=293 Dip=43 Slip= 121  
NP2: 73 54 64

25 20 37 32.46 1.134N 79.616W 15km  
5.9mb ( 77 obs.) 6.1Msz ( 33 obs.)  
NEAR COAST OF ECUADOR  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike=193 Dip=73 Slip= 90  
NP2: 13 17 90  
Principal Axes:  
T Plg=62 Azm=103  
P 28 283  
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 0.3±0.1\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 13 No. of sta: 15  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 3.63 Plg=61 Azm=107  
N 0.00 7 209  
P -3.62 28 303  
Best Double Couple: Mo=3.6\*10\*\*18  
NP1: Strike= 50 Dip=18 Slip= 112  
NP2: 207 73 83  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 45C  
Centroid Location:  
Origin Time 20:37:43.2 0.2  
Lat 0.81N 0.03 Lon 79.92W 0.03  
Dep 16.0 1.6 Half-duration 5.2  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 3.38 Plg=64 Azm= 63  
N 0.02 12 179  
P -3.40 23 274  
Best Double Couple: Mo=3.4\*10\*\*18  
NP1: Strike= 27 Dip=25 Slip= 120  
NP2: 174 69 77

26 03 27 03.96 19.362N 155.083W 9km  
5.8mb ( 35 obs.) 6.1Msz ( 18 obs.)  
HAWAII  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike= 42 Dip=86 Slip= 115  
NP2: 141 25 9  
Principal Axes:  
T Plg=44 Azm=336  
P 36 110  
Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting with a moderate strike-slip component. The preferred fault plane is not determined.  
RADIATED ENERGY  
No. of sta: 7 Focal mech. C

Energy 0.4±0.1\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 11 No. of sta: 19  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 5.45 Plg=43 Azm=331  
N -0.01 6 236  
P -5.44 46 140  
Best Double Couple: Mo=5.4\*10\*\*18  
NP1: Strike=130 Dip= 6 Slip= -15  
NP2: 236 88 -96  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 38C M.W.: 14S, 25C  
Centroid Location:  
Origin Time 03:27:16.6 0.2  
Lat 19.47N 0.02 Lon 155.06W 0.02  
Dep 15.0 FIX Half-duration 5.7  
Principal Axes:  
Scale 10\*\*18 Nm  
T Val= 5.25 Plg=52 Azm=317  
N -0.09 1 49  
P -5.16 38 140  
Best Double Couple: Mo=5.2\*10\*\*18  
NP1: Strike=238 Dip= 7 Slip= 99  
NP2: 49 83 89

26 10 38 39.46 39.112N 28.242W 11km  
5.7mb ( 59 obs.) 5.7Msz ( 13 obs.)  
AZORES ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1: Strike=187 Dip=83 Slip= 175  
NP2: 278 85 7  
Principal Axes:  
T Plg= 8 Azm=142  
P 1 52  
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: 7 Focal mech. M  
Energy 0.6±0.2\*10\*\*14 Nm  
MOMENT TENSOR SOLUTION  
Dep 33 No. of sta: 13  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 6.65 Plg=16 Azm= 51  
N 0.18 73 248  
P -6.83 5 143  
Best Double Couple: Mo=6.7\*10\*\*17  
NP1: Strike=188 Dip=75 Slip= 8  
NP2: 96 82 165  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 44C  
Centroid Location:  
Origin Time 10:38:45.7 0.3  
Lat 39.11N 0.03 Lon 28.32W 0.06  
Dep 15.0 FIX Half-duration 3.0  
Principal Axes:  
Scale 10\*\*17 Nm  
T Val= 5.57 Plg=14 Azm= 29  
N -0.29 11 122  
P -5.28 72 248  
Best Double Couple: Mo=5.4\*10\*\*17  
NP1: Strike=105 Dip=32 Slip=-110  
NP2: 308 60 -78

27 07 10 22.62 51.568N 174.339W 33km  
5.2mb ( 53 obs.) 5.0Msz ( 18 obs.)  
ANDREANOF ISLANDS, ALEUTIAN IS.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 25C  
Centroid Location:  
Origin Time 07:10:27.5 0.7  
Lat 51.93N 0.07 Lon 174.61W 0.09  
Dep 23.9 3.5 Half-duration 1.9  
Principal Axes:  
Scale 10\*\*16 Nm  
T Val= 11.43 Plg=66 Azm=356  
N -0.04 8 248  
P -11.40 22 155  
Best Double Couple: Mo=1.1\*10\*\*17  
NP1: Strike=231 Dip=24 Slip= 71  
NP2: 71 68 98

27 17 43 09.01 63.72 S 156.10 W 10km  
5.4mb ( 4 obs.) 5.5Msz ( 3 obs.)  
SOUTH PACIFIC CORDILLERA

<p>CENTROID, MOMENT TENSOR (HRV)            Data Used: GDSN            L.P.B.: 14S, 32C            Centroid Location:            Origin Time 17:43:14 3 0.4            Lat 63.78S FIX; Lon 156.15W FIX            Dep 15.0 FIX Half-duration 2.9            Principal Axes:            Scale 10**17 Nm            T Val= 6.72 Plg=51 Azm=327            N -2.98 4 232            P -3.74 39 138            Best Double Couple: Mo=5.2*10**17            NP1: Strike=196 Dip= 8 Slip= 54            NP2: 52 84 94</p>	<p>NEW BRITAIN REGION            CENTROID, MOMENT TENSOR (HRV)            Data Used: GDSN            L.P.B.: 8S, 18C            Centroid Location:            Origin Time 22:12: 4.2 0.5            Lat 6.81S 0.07 Lon 148.85E 0.07            Dep 15.0 FIX Half-duration 2.4            Principal Axes:            Scale 10**17 Nm            T Val= 2.21 Plg=74 Azm= 57            N 0.06 14 268            P -2.27 8 176            Best Double Couple: Mo=2.2*10**17            NP1: Strike=250 Dip=39 Slip= 67            NP2: 98 54 107</p>	<p>5.3mb ( 20 obs.)            SOLOMON ISLANDS            CENTROID, MOMENT TENSOR (HRV)            Data Used: GDSN            L.P.B.: 9S, 17C            Centroid Location:            Origin Time 03:57:40.2 0.7            Lat 6.13S 0.12 Lon 154.24E 0.11            Dep 68.5 7.7 Half-duration 1.5            Principal Axes:            Scale 10**16 Nm            T Val= 4.46 Plg=77 Azm=147            N 0.44 11 295            P -4.90 7 26            Best Double Couple: Mo=4.7*10**16            NP1: Strike=128 Dip=40 Slip= 107            NP2: 287 52 77</p>
<p>28 03 00 28.92 45.096N 151.292E 44km            5.6mb ( 61 obs.) 5.1Msz ( 10 obs.)            KURIL ISLANDS            CENTROID, MOMENT TENSOR (HRV)            Data Used: GDSN            L.P.B.: 14S, 27C            Centroid Location:            Origin Time 03:00:30.6 0.8            Lat 45.28N 0.05 Lon 151.61E 0.09            Dep 15.0 FIX Half-duration 1.9            Principal Axes:            Scale 10**17 Nm            T Val= 1.49 Plg=64 Azm=248            N -0.01 19 23            P -1.48 17 119            Best Double Couple: Mo=1.5*10**17            NP1: Strike=236 Dip=32 Slip= 128            NP2: 13 65 69</p>	<p>28 23 44 51.39 7.604S 127.342E 173km            5.3mb ( 29 obs.)            BANDA SEA            CENTROID, MOMENT TENSOR (HRV)            Data Used: GDSN            L.P.B.: 15S, 26C            Centroid Location:            Origin Time 23:44:54.7 1.2            Lat 7.53S 0.09 Lon 127.15E 0.09            Dep 177.9 2.5 Half-duration 2.2            Principal Axes:            Scale 10**17 Nm            T Val= 2.76 Plg=57 Azm=318            N -0.61 32 158            P -2.14 9 62            Best Double Couple: Mo=2.4*10**17            NP1: Strike=121 Dip=45 Slip= 43            NP2: 358 61 127</p>	<p>29 05 25 51.52 4.497S 102.018E 42km            5.3mb ( 22 obs.) 5.0Msz ( 10 obs.)            SOUTHERN SUMATRA            CENTROID, MOMENT TENSOR (HRV)            Data Used: GDSN            L.P.B.: 14S, 29C            Centroid Location:            Origin Time 05:25:53.8 0.8            Lat 4.93S 0.05 Lon 101.77E 0.07            Dep 44.5 3.6 Half-duration 2.0            Principal Axes:            Scale 10**17 Nm            T Val= 1.28 Plg=71 Azm= 52            N 0.37 6 302            P -1.65 17 210            Best Double Couple: Mo=1.5*10**17            NP1: Strike=290 Dip=28 Slip= 77            NP2: 126 63 97</p>
<p>28 21 24 12.45 57.788S 147.449W 10km            5.5mb ( 8 obs.) 5.7Msz ( 3 obs.)            SOUTH PACIFIC CORDILLERA            CENTROID, MOMENT TENSOR (HRV)            Data Used: GDSN            L.P.B.: 14S, 33C            Centroid Location:            Origin Time 21:24:19.0 0.3            Lat 58.14S 0.04 Lon 147.18W 0.07            Dep 15.0 FIX Half-duration 3.0            Principal Axes:            Scale 10**17 Nm            T Val= 5.79 Plg= 5 Azm=344            N -0.11 82 109            P -5.68 6 253            Best Double Couple: Mo=5.7*10**17            NP1: Strike= 28 Dip=82 Slip=-179            NP2: 298 89 -8</p>	<p>29 00 18 39.81 22.960S 175.319W 35km            5.2mb ( 11 obs.) 5.1Msz ( 7 obs.)            TONGA ISLANDS REGION            CENTROID, MOMENT TENSOR (HRV)            Data Used: GDSN            L.P.B.: 11S, 23C            Centroid Location:            Origin Time 00:18:42.3 1.1            Lat 23.02S 0.06 Lon 174.79W 0.09            Dep 24.3 4.2 Half-duration 2.0            Principal Axes:            Scale 10**17 Nm            T Val= 0.98 Plg=74 Azm=337            N 0.42 13 194            P -1.39 10 102            Best Double Couple: Mo=1.2*10**17            NP1: Strike=177 Dip=37 Slip= 68            NP2: 23 56 106</p>	<p>30 01 34 31.90 6.759S 130.517E 107km            5.1mb ( 22 obs.)            BANDA SEA            CENTROID, MOMENT TENSOR (HRV)            Data Used: GDSN            L.P.B.: 10S, 21C            Centroid Location:            Origin Time 01:34:36.9 0.8            Lat 6.78S 0.08 Lon 130.31E 0.14            Dep 103.7 4.8 Half-duration 1.5            Principal Axes:            Scale 10**16 Nm            T Val= 5.31 Plg=35 Azm=311            N 2.22 55 128            P -7.54 1 220            Best Double Couple: Mo=6.4*10**16            NP1: Strike=350 Dip=65 Slip= 155            NP2: 91 67 27</p>
<p>28 22 11 58.90 6.223S 148.814E 50km            5.4mb ( 22 obs.)</p>	<p>29 03 57 33.13 6.289S 154.817E 82km</p>	

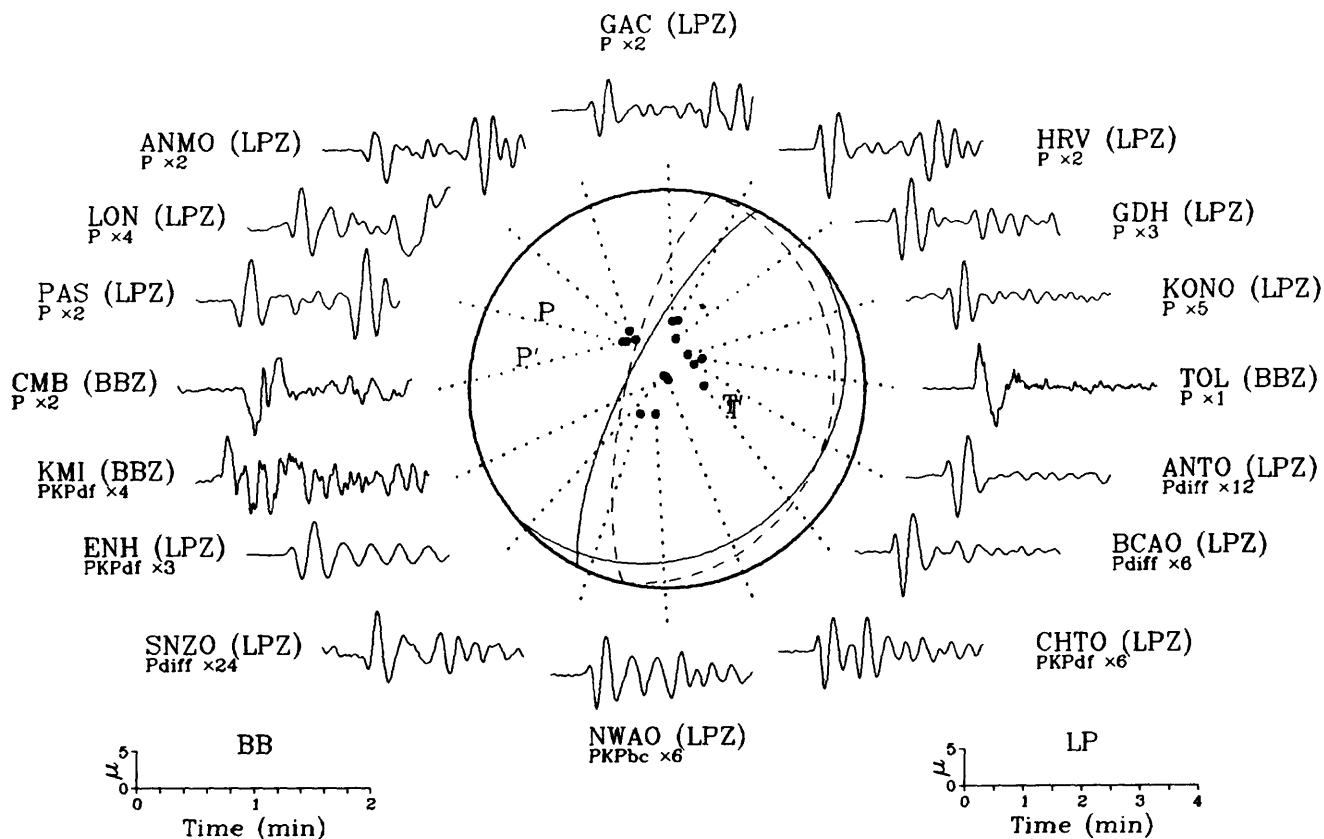
Compiled by Willis S. Jacobs, Leonard E. Kerry, John H. Minsch, Russell E. Needham, Waverly J. Person,  
 Bruce W. Presgrave and William H. Schmieder.

#### ANNOUNCEMENT

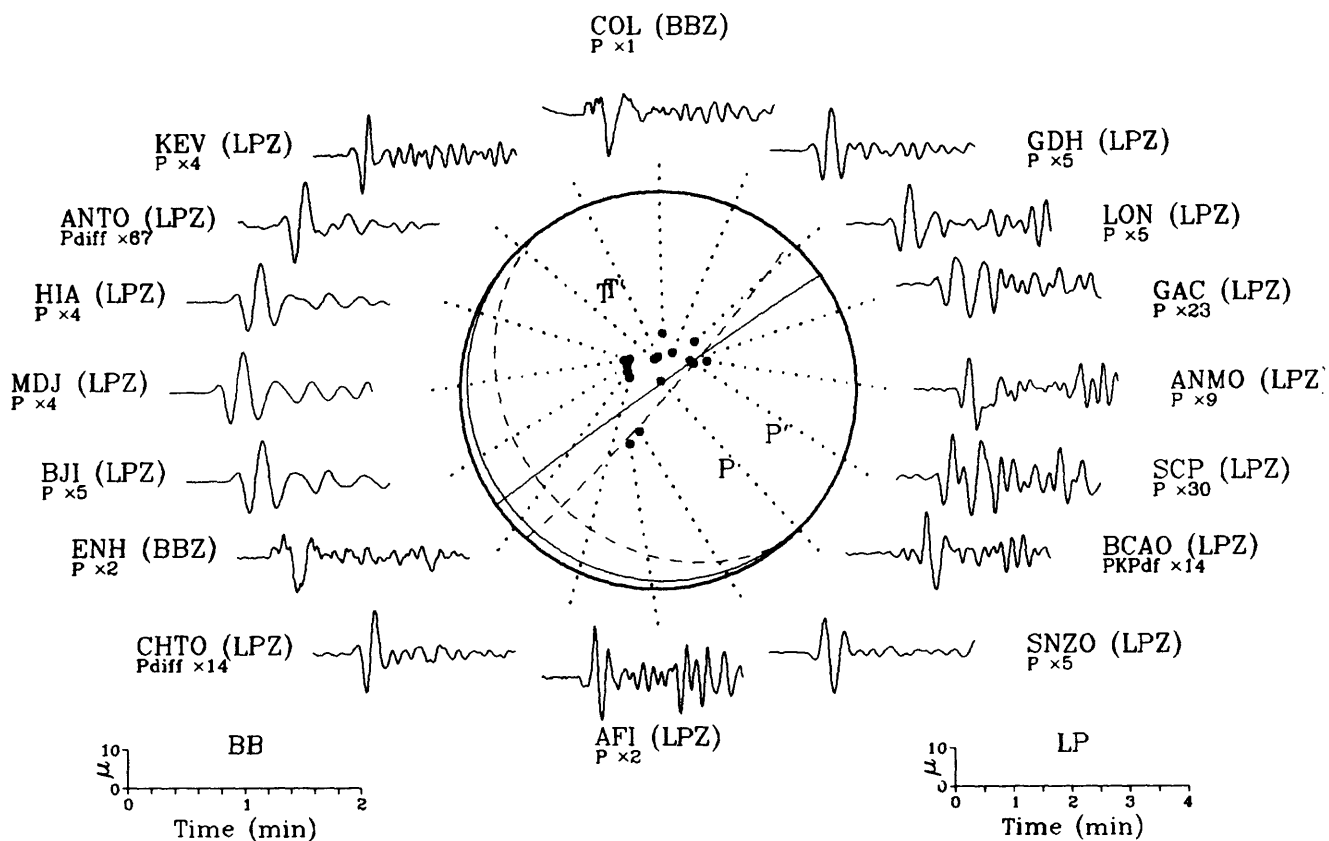
A machine-readable version of the Earthquake Data Report (EDR) is now available on floppy disk from the U.S. Geological Survey's Books and Open-File Reports Section, beginning with the EDR for January 1989. The disks are 1.2 megabyte, 5 1/4-inch diskettes and most months use 3 disks. The current price is \$18.00 for a normal (3-disk) month. The EDR is a listing of all data which are used to compute the hypocenters printed in the Preliminary Determination of Epicenters, Monthly Listing.

For more information about this new service, call Jon Jacobs (NEIC) at 303-236-1500, or call Books and Open-File Reports Section at 303-236-7476.

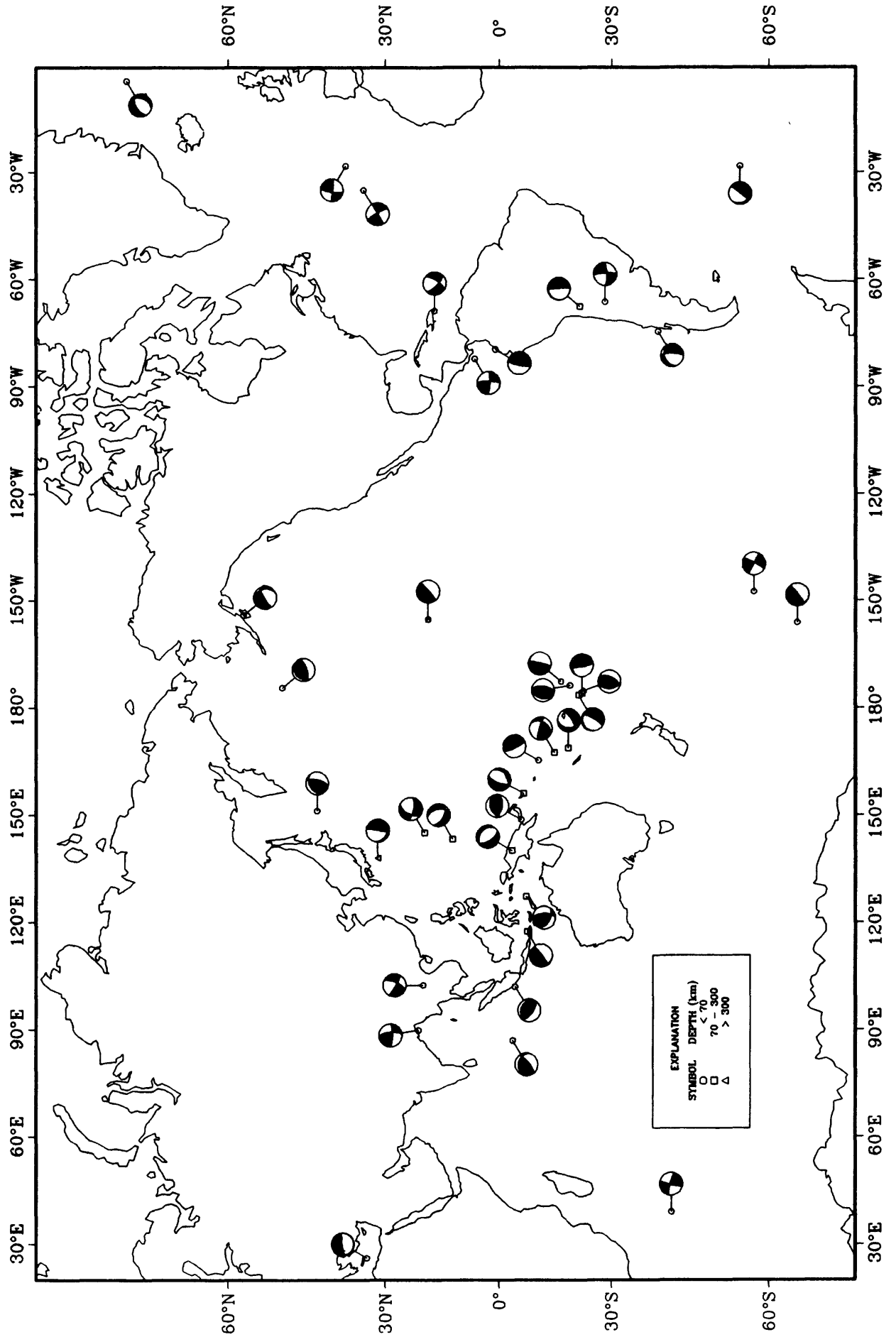
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Near Coast of Ecuador

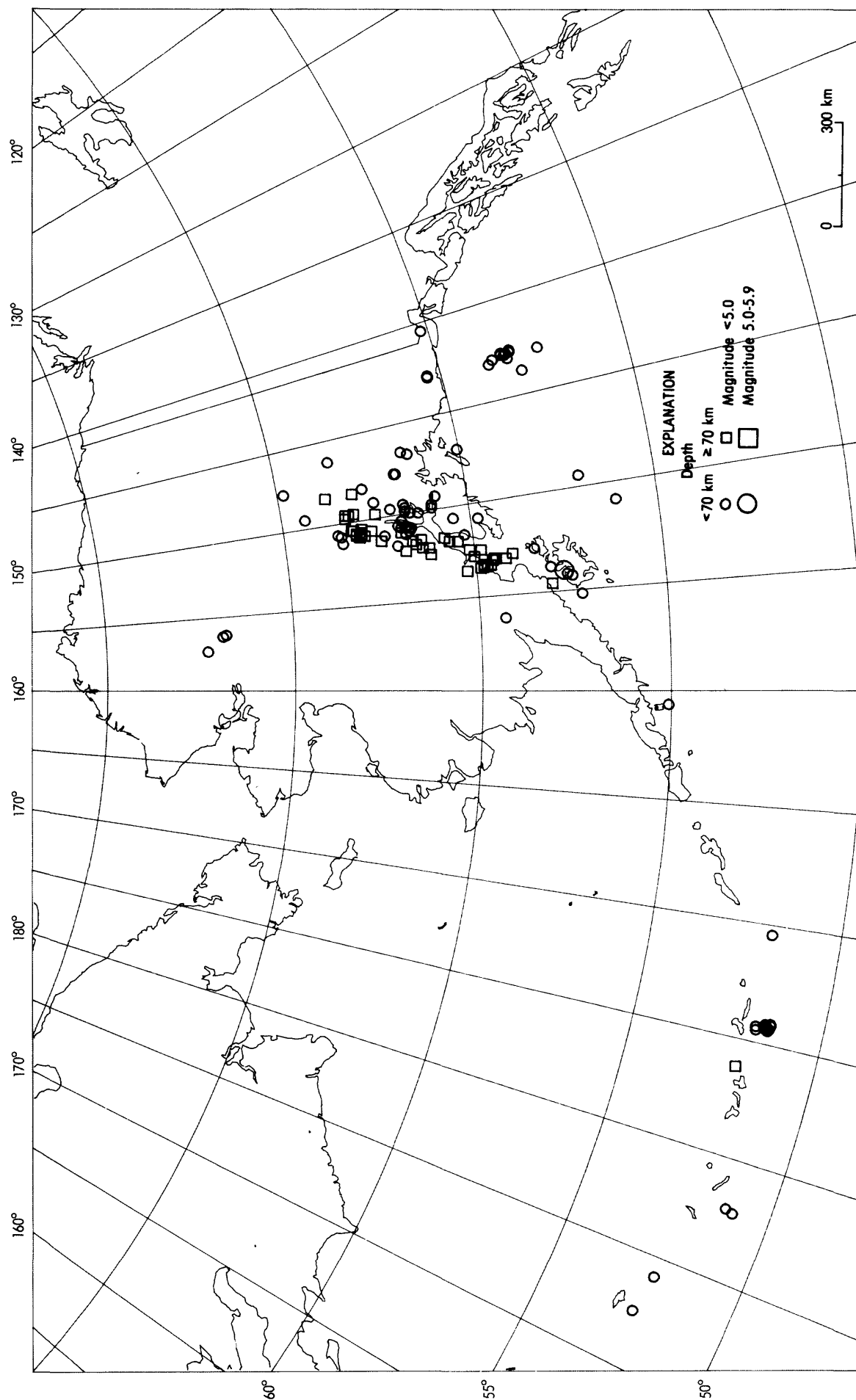


26 June 1989 03:27:03.96  
Hawaii

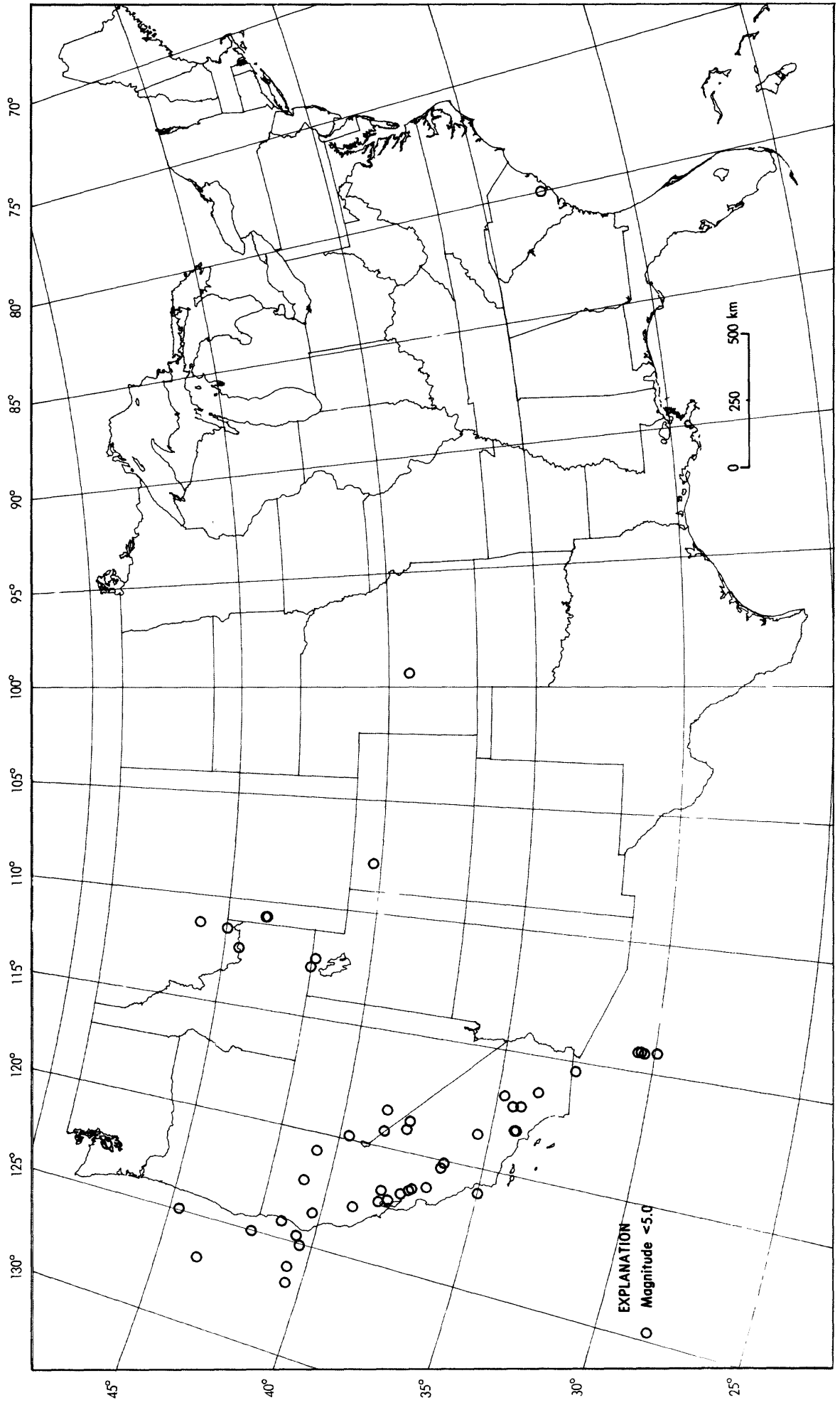


# Earthquake Focal Mechanisms for June 1989

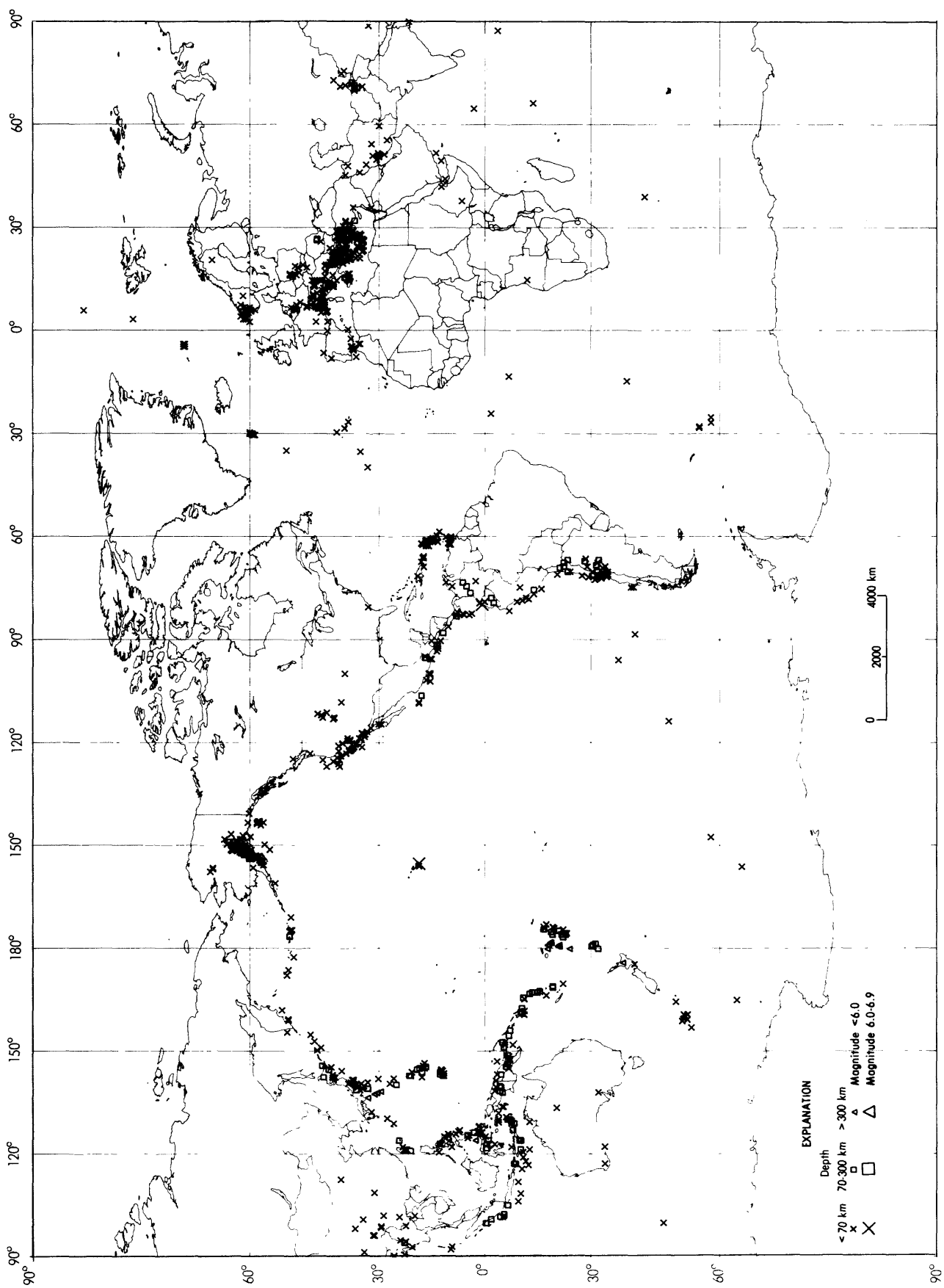




Earthquake epicenters in Alaska and adjacent regions for June, 1989 (C. Stover).



Earthquake epicenters in the conterminous United States and adjacent regions for June, 1989 (C. Stover).



Earthquakes located in June, 1989 (C. Stover).