

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

PRELIMINARY DETERMINATION OF EPICENTERS  
MONTHLY LISTING

JULY - SEPTEMBER 1986

NATIONAL EARTHQUAKE INFORMATION CENTER

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1988



# PRELIMINARY DETERMINATION OF EPICENTERS

## MONTHLY LISTING

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

AUGUST 1986

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	02 27 44.2*	20.469 S 178.665 W	620	4.5		31	FIJI ISLANDS REGION
	01	03 36 31.5*	50.271 N 18.807 E	10 G		1.2	6	POLAND. ML 3.4 (KRA).
	01	04 13 33.8	21.056 S 68.898 W	33 N		0.5	6	CHILE-BOLIVIA BORDER REGION
	01	04 34 37.7*	19.973 N 146.401 E	59 *	4.9	1.0	25	MARIANA ISLANDS REGION
	01	05 04 41.0	37.508 N 118.326 W	10 G		0.6	13	CALIFORNIA-NEVADA BORDER REGION. ML 3.1 (NEIS).
	01	05 49 01.1?	33.35 S 72.06 W	10 G		0.4	8	OFF COAST OF CENTRAL CHILE
	01	06 34 42.9	37.561 N 118.394 W	10 G		0.6	26	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (BRK).
	01	07 00 36.8*	52.622 S 18.268 E	10 G	4.6 4.7	0.8	8	SOUTHWEST OF AFRICA
	01	07 32 13.1*	33.609 S 70.678 W	33 N		1.3	7	CHILE-ARGENTINA BORDER REGION
	01	07 55 48.6?	12.71 S 34.10 E	10 G		0.7	5	MALAWI. MG 3.5 (BUL).
	01	10 15 19.1?	32.12 S 71.49 W	10 G		0.8	6	NEAR COAST OF CENTRAL CHILE
	01	11 42 19.3?	33.04 S 72.32 W	33 N		0.3	6	OFF COAST OF CENTRAL CHILE
	01	13 27 01.7*	62.634 N 148.558 W	24			33	CENTRAL ALASKA. <AGS-P>.
	01	13 56 36.6*	72.914 N 55.858 E	10 G	4.7	1.2	30	NOVAYA ZEMLYA
	01	13 59 09.2	38.542 N 21.341 E	102 *		0.7	21	GREECE
	01	14 09 24.9	35.880 S 103.702 W	10 G	5.5 5.8	1.1	106	SOUTHERN PACIFIC OCEAN
	01	14 27 16.0	37.501 N 118.352 W	5 G	4.2	1.0	30	CALIFORNIA-NEVADA BORDER REGION. ML 4.3 (BRK).
	01	14 28 18.0	37.375 N 118.442 W	5 G	4.9	1.0	54	CALIFORNIA-NEVADA BORDER REGION. ML 4.7 (BRK).
	01	14 34 13.0*	43.176 N 25.859 E	10 G		1.3	7	BULGARIA
	01	14 35 47.2?	21.18 S 175.87 W	197 ?	4.5	1.0	14	TONGA ISLANDS
	01	14 40 28.0?	42.28 N 19.98 E	10 G		0.1	4	YUGOSLAVIA. ML 2.4 (TTG).
	01	15 02 08.2	39.320 N 23.549 E	10 G		0.5	13	AEGEAN SEA. ML 2.9 (ATH).
	01	15 10 44.2*	37.493 N 118.415 W	6			18	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.6 (BRK).
a	01	16 20 59.1	16.948 S 179.089 W	517	4.9	0.9	89	FIJI ISLANDS REGION
	01	16 43 06.4*	53.495 N 167.236 W	33 N	4.6	0.8	11	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.5 (PMR). Felt on Unalaska.
	01	18 37 17.4*	39.987 N 23.414 E	10 G		1.2	10	AEGEAN SEA
	01	19 46 34.9*	51.171 N 176.198 W	33 N	4.8	0.9	23	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.3 (PMR).
	01	20 24 59.4	51.163 N 176.138 W	33 N	4.8 4.9	0.9	54	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.9 (PMR). Felt on Adak.
	01	21 03 06.7	44.507 N 10.685 E	10 G		1.2	26	NORTHERN ITALY. ML 3.5 (LDG), 3.1 (KBA), 2.8 (TRI).
a	01	21 05 39.7	51.369 N 174.283 W	33 N	5.5 5.0	0.9	142	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.6 (PMR). Felt (IV) on Adak.
	01	21 41 23.4*	51.392 N 174.245 W	33 N	4.8	0.7	39	ANDREANOF ISLANDS, ALEUTIAN IS.
	01	21 48 40.8*	51.416 N 174.212 W	33 N	4.9	0.9	44	ANDREANOF ISLANDS, ALEUTIAN IS.
	01	21 49 18.9*	51.442 N 176.267 W	33 N	4.3	0.7	12	ANDREANOF ISLANDS, ALEUTIAN IS.
	01	22 09 26.5?	51.55 N 174.15 W	33 N	4.5	0.8	8	ANDREANOF ISLANDS, ALEUTIAN IS.
	01	22 17 38.9?	15.33 S 173.26 W	33 N	5.4	1.0	17	TONGA ISLANDS
	01	23 47 20.6	4.720 S 101.819 E	33 N	5.3 4.8	1.2	51	SOUTHERN SUMATRA
	02	01 52 40.0?	17.33 N 62.18 W	10 G		0.2	5	LEEWARD ISLANDS. ML 3.3 (FDF).
	02	04 39 12.0?	33.60 S 72.54 W	33 N		0.7	11	OFF COAST OF CENTRAL CHILE
	02	04 41 05.7?	33.57 S 72.60 W	33 N		0.4	8	OFF COAST OF CENTRAL CHILE
	02	04 52 15.9	40.026 N 22.274 E	10 G		1.2	10	GREECE
	02	05 03 13.4	40.434 N 21.597 E	10		0.7	18	GREECE. ML 2.7 (TTG).
	02	05 50 19.7*	30.385 N 50.581 E	33 N	4.1	1.3	8	IRAN
	02	05 58 10.6	41.116 N 19.613 E	13		1.1	23	ALBANIA. ML 3.4 (TTG).
	02	06 37 06.4*	51.314 N 175.992 W	33 N	5.0	1.1	12	ANDREANOF ISLANDS, ALEUTIAN IS.
	02	08 17 13.1*	19.847 S 177.270 W	549 *	4.4	0.6	18	FIJI ISLANDS REGION
	02	08 41 59.6*	39.295 N 23.870 E	11		1.5	17	AEGEAN SEA. ML 3.1 (ATH).
	02	11 18 52.0	18.199 S 167.959 E	33 N	5.0	1.4	54	VANUATU ISLANDS
	02	11 36 57.1	34.062 N 116.649 W	10 G		1.0	10	SOUTHERN CALIFORNIA. ML 3.5 (NEIS). Felt in the Palm Springs area.
	02	12 03 04.6?	43.45 N 12.68 E	10 G		0.5	6	CENTRAL ITALY. ML 2.8 (KBA).
	02	12 40 23.3*	28.103 S 177.931 W	33 N	5.0 5.1	1.2	14	KERMADEC ISLANDS REGION
	02	12 42 12.4	28.304 S 177.686 W	33 N	5.2 5.3	1.2	49	KERMADEC ISLANDS REGION
	02	12 44 42.7	43.507 N 12.462 E	10 G		1.2	18	CENTRAL ITALY. ML 3.8 (TRI), 3.7 (KBA).
	02	13 18 49.3*	59.740 N 153.464 W	114			17	SOUTHERN ALASKA. <AGS-P>.
	02	14 01 01.9*	52.802 N 168.198 W	33 N	4.3	1.1	11	FOX ISLANDS, ALEUTIAN ISLANDS

02	14 51 36.2	37.594 N	118.368 W	5 G	0.8	20	CALIFORNIA-NEVADA BORDER REGION. ML 3.7 (BRK).
02	16 36 17.5	52.06 N	17.31 E	10 G	0.7	10	POLAND. ML 3.8 (VKA).
02	17 49 25.6	13.973 N	88.886 W	80	5.4	1.0	210 EL SALVADOR. Felt (V) at San Salvador.
02	18 39 06.4	42.362 N	19.915 E	10 *	0.5	8	YUGOSLAVIA. ML 2.5 (TTG).
02	18 49 23.0	4.481 S	143.830 E	130	4.7	1.0	17 PAPUA NEW GUINEA
02	19 58 16.0	51.41 N	174.76 W	33 N	4.7	0.9	9 ANDREANOF ISLANDS, ALEUTIAN IS.
02	20 35 36.2	58.265 S	15.319 W	10 G	5.4 5.2	1.1	56 SOUTHWESTERN ATLANTIC OCEAN
02	23 31 58.2	7.581 N	126.682 E	33 N	4.7	0.9	27 MINDANAO, PHILIPPINE ISLANDS
03	00 08 34.9	17.075 N	62.052 W	100	4.9	0.8	62 LEEWARD ISLANDS. Felt (II) on Guadeloupe. Felt widely on Antigua and St. Kitts.
03	00 39 19.3	23.365 S	69.098 W	143 *	4.7	1.2	18 NORTHERN CHILE
03	01 33 20.3	37.200 N	37.300 E	12	5.0 4.1	1.1	130 TURKEY. Seventy houses damaged at Yesilce, Ugoze and Sam, Gaziantep Province; 3 houses damaged at Karabiyikli, Kahraman Maras Province. Felt at Kahramanmaras, Adiyaman and Malatya. Felt also in the Eskisehir area.
03	01 37 41.1	62.587 N	25.733 W	10 G	4.7	1.0	31 ICELAND REGION
03	02 39 28.8	51.408 N	174.163 W	33 N	5.0	1.1	82 ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.0 (PMR). Felt on Adak.
03	05 00 05.8	44.134 N	10.952 E	10 G		1.2	10 NORTHERN ITALY. ML 2.7 (LDG).
03	05 18 30.7	5.370 S	151.652 E	99 ?	4.3	1.0	8 NEW BRITAIN REGION
03	06 26 26.6	61.542 N	140.401 W	1			37 SOUTHERN YUKON TERRITORY, CANADA. <AGS-P>. ML 3.6 (PMR).
03	06 30 17.2	56.602 N	142.717 W	31			16 GULF OF ALASKA. <AGS-P>.
03	06 39 50.6	17.038 S	66.971 W	10 G		0.9	5 BOLIVIA
03	09 00 13.6	36.592 N	121.233 W	10 G		0.8	13 CENTRAL CALIFORNIA. ML 2.9 (BRK).
03	09 57 41.6	20.73 S	68.92 W	157 ?		1.1	7 CHILE-BOLIVIA BORDER REGION
03	10 33 04.5	37.615 N	118.410 W	5 G	3.6	0.7	35 CALIFORNIA-NEVADA BORDER REGION. ML 4.0 (BRK).
03	10 37 03.4	37.592 N	118.440 W	7			13 CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.4 (BRK).
03	12 15 11.9	15.717 N	92.428 W	136 D	4.5	0.9	48 MEXICO-GUATEMALA BORDER REGION
03	12 49 37.5	22.36 S	179.76 W	595 *	4.5	0.7	13 SOUTH OF FIJI ISLANDS
03	13 29 10.1	51.164 N	176.800 W	33 N	5.4 5.6	0.9	242 ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.6 (PMR), Ms 5.7 (BRK). Felt (IV) on Adak. Also felt on Atka.
03	13 44 55.0	51.112 N	176.706 W	33 N	4.7	1.2	35 ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.1 (PMR). Felt on Adak.
03	14 32 01.6	20.099 S	178.289 W	566 *	4.3	1.0	20 FIJI ISLANDS REGION
03	16 02 36.2	11.514 S	118.601 E	33 N	4.7	0.8	7 SOUTH OF SUMBAWA ISLAND
03	16 15 30.8	40.437 N	125.317 W	5 G	4.0		27 OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.9 (BRK).
03	16 37 22.7	39.081 N	27.034 E	10 G		0.5	5 TURKEY
03	17 45 12.0	5.556 N	127.057 E	168 ?	4.3	1.0	13 PHILIPPINE ISLANDS REGION
03	18 52 43.0	33.03 S	72.05 W	10 G		0.2	6 OFF COAST OF CENTRAL CHILE
03	20 08 20.7	51.092 N	176.707 W	33 N	4.8 4.9	1.0	41 ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.2 (PMR). Felt on Adak.
03	20 48 36.6	62.543 N	149.775 W	70			20 CENTRAL ALASKA. <AGS-P>.
03	21 36 21.5	51.147 N	176.688 W	33 N	4.7	0.9	16 ANDREANOF ISLANDS, ALEUTIAN IS.
03	21 52 56.1	7.203 S	129.318 E	160 ?	4.7	1.3	19 BANDA SEA
03	23 44 53.3	8.237 S	161.760 E	67 *	4.7	0.9	64 SOLOMON ISLANDS
04	00 37 43.4	4.160 S	152.646 E	49 *	4.6	1.2	19 NEW BRITAIN REGION
04	01 32 20.5	4.45 S	153.59 E	127 *	4.2	1.2	6 NEW IRELAND REGION
04	03 41 41.9	37.432 N	121.783 W	7			20 CENTRAL CALIFORNIA. <BRK>. ML 3.4 (BRK). Felt (IV) at San Jose and (III) at Santa Clara.
04	04 48 36.5	60.484 N	147.247 W	19			45 SOUTHERN ALASKA. <AGS-P>. ML 3.6 (PMR).
04	05 33 28.8	40.947 N	19.833 E	10 G		1.2	13 ALBANIA. ML 2.5 (TTG).
04	06 24 48.7	3.941 N	125.942 E	33 N	5.1	1.2	22 TALAUD ISLANDS
04	07 47 04.6	15.03 N	93.07 E	33 N	4.3	0.3	6 BAY OF BENGAL
04	08 13 09.4	30.198 S	68.974 W	10 G		1.1	10 SAN JUAN PROVINCE, ARGENTINA
04	09 54 01.3	11.881 S	117.183 E	33 N	5.1	1.2	17 SOUTH OF SUMBAWA ISLAND
04	10 48 11.9	42.261 N	144.585 E	34	5.0 5.0	1.1	86 HOKKAIDO, JAPAN REGION. Felt (III JMA) at Kushira; (I JMA) at Nemuro and Urakawa.
04	10 55 56.5	40.420 N	27.686 E	10 G		0.9	15 TURKEY
04	11 12 57.3	11.002 S	34.484 E	10 G	4.6	1.4	9 MALAWI
04	12 31 06.4	37.521 N	118.415 W	5 G		0.5	10 CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS).
04	12 35 46.1	39.364 N	27.402 E	10 G		0.8	7 TURKEY
04	13 28 32.5	51.600 N	159.433 E	33 N	4.9	0.9	46 OFF EAST COAST OF KAMCHATKA
04	13 54 07.1	2.370 S	138.893 E	48 *	5.1 5.2	1.1	58 WEST IRIAN
04	16 31 46.5	9.970 S	28.492 E	10 G		0.9	6 ZAIRE REPUBLIC. MG 3.4 (BUL).
04	17 58 13.1	43.05 N	1.09 W	10 G		0.3	6 PYRENEES
04	18 05 42.5	45.707 N	2.920 E	10 G		1.0	13 FRANCE. ML 2.7 (LDG).
04	18 07 46.6	29.85 S	177.96 W	33 N	4.9	1.2	9 KERMADEC ISLANDS
04	19 32 35.1	60.486 N	151.967 W	84			31 KENAI PENINSULA, ALASKA. <AGS-P>.
04	22 34 37.8	46.331 N	153.182 E	33 N	5.5 5.1	0.8	236 KURIL ISLANDS
04	23 09 26.3	44.162 N	12.578 E	10 G		1.1	11 NORTHERN ITALY. ML 3.1 (LDG), 2.7 (KBA).
04	23 18 45.4	37.120 N	5.306 W	10 G		0.3	5 SPAIN. MG 3.0 (MDD).
04	23 42 36.1	44.065 N	11.557 E	10 G		0.6	9 NORTHERN ITALY. ML 3.1 (KBA).
05	00 17 33.0	51.22 N	176.21 W	33 N		0.7	9 ANDREANOF ISLANDS, ALEUTIAN IS.
05	01 00 41.7	37.476 N	118.306 W	5 G		0.7	12 CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS).
05	02 32 07.8	37.446 N	118.288 W	5 G		0.8	20 CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK).
05	02 35 23.4	16.360 N	61.813 W	10 G		0.5	5 LEEWARD ISLANDS. ML 1.5 (FDF).
05	02 35 56.0	37.493 N	118.390 W	5 G		0.4	11 CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS).
05	04 38 33.0	42.39 N	19.89 E	10 G		0.3	4 YUGOSLAVIA. ML 1.9 (TTG).
05	04 50 31.3	24.31 S	177.16 W	33 N	4.5	1.5	8 SOUTH OF FIJI ISLANDS
05	04 56 32.4	53.374 N	164.371 W	33 N	4.5	1.0	8 UNIMAK ISLAND REGION. ML 4.3 (PMR).
05	05 20 31.4	76.36 N	146.51 E	10 G	4.7	1.2	18 NEW SIBERIAN ISLANDS
05	06 11 56.1	42.352 N	19.968 E	10 G		1.3	6 YUGOSLAVIA. ML 1.9 (TTG).
05	07 56 05.8	39.017 N	27.832 E	10 G		1.3	6 TURKEY
05	08 01 35.6	59.781 N	153.319 W	112			36 SOUTHERN ALASKA. <AGS-P>.
05	08 35 20.4	32.880 N	117.610 W	10 G		1.5	8 CALIFORNIA-MEXICO BORDER REGION. MD 3.0 (ECX).
05	08 48 13.2	52.929 N	166.713 W	33 N	4.6	1.0	9 FOX ISLANDS, ALEUTIAN ISLANDS
05	09 12 02.6	42.340 N	20.028 E	10 G		0.4	10 YUGOSLAVIA. ML 2.4 (TTG).
05	09 14 11.7	5.435 N	75.385 W	120	3.8	1.2	15 COLOMBIA. Felt at Chinchina and Manizales.
05	10 50 51.5	37.397 N	20.395 E	10 G	4.6	1.4	42 IONIAN SEA. ML 4.3 (ATH), 4.0 (TTG).
05	11 15 31.4	24.197 S	177.168 W	33 N	5.3 5.0	1.0	55 SOUTH OF FIJI ISLANDS
05	11 18 22.7	20.087 S	69.435 W	101	4.8	1.0	41 NORTHERN CHILE

05	12 33 13.8*	4.196 S	152.699 E	65 *	4.5	1.3	6	NEW BRITAIN REGION
05	13 12 43.8*	60.323 N	152.450 W	99			34	SOUTHERN ALASKA. <AGS-P>.
05	13 47 42.3	5.896 S	146.643 E	115 *	4.1	1.3	15	EAST PAPUA NEW GUINEA REGION
05	13 50 35.0	37.537 N	118.410 W	10 G		0.3	10	CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (NEIS).
05	14 08 40.9*	1.693 S	67.729 E	10 G	4.7	0.9	11	CARLSBERG RIDGE
05	14 21 18.5*	1.628 S	67.711 E	10 G	4.8	1.1	18	CARLSBERG RIDGE
05	14 48 41.1	54.852 S	1.081 W	10 G	5.1	1.0	21	BOUVET ISLAND REGION
05	15 46 12.0	18.798 S	179.227 W	683	4.8	1.2	100	FIJI ISLANDS REGION
05	15 58 18.7*	1.708 S	67.708 E	10 G	5.0	1.1	24	CARLSBERG RIDGE
05	16 02 56.37	36.27 S	70.41 W	33 N		1.1	7	CHILE-ARGENTINA BORDER REGION
05	16 12 20.7	1.250 S	150.385 E	30	4.9	0.8	23	NEW IRELAND REGION
05	17 32 25.3*	5.742 S	141.908 E	33 N	3.0	1.4	6	PAPUA NEW GUINEA
05	17 40 02.2	16.894 N	93.588 W	139	5.0	1.0	81	CHIAPAS, MEXICO
05	17 47 54.0	1.427 S	67.676 E	10 G	5.0	0.9	29	CARLSBERG RIDGE
05	18 26 50.5	7.191 S	129.232 E	126	5.3	1.1	98	BANDA SEA
05	18 52 36.0	6.063 S	152.691 E	42	5.1	1.0	26	NEW BRITAIN REGION
a 05	19 17 11.8	24.069 S	177.306 W	33 N	5.1 5.0	1.1	22	SOUTH OF FIJI ISLANDS
05	19 58 40.5	37.197 N	37.257 E	10 G	4.6	1.1	60	TURKEY
05	20 28 41.3*	42.170 N	145.142 E	33 N	4.2	1.2	5	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Kushiro.
05	20 30 50.7*	0.922 N	100.087 E	66 ?	4.6	1.5	7	NORTHERN SUMATERA
a 05	20 59 25.0	53.027 N	153.306 E	512 D	4.7	0.7	168	SEA OF OKHOTSK
05	22 10 33.77	16.81 S	69.68 W	191 ?	4.7	0.5	7	PERU-BOLIVIA BORDER REGION
05	23 27 44.3*	61.783 N	151.968 W	116			28	SOUTHERN ALASKA. <AGS-P>.
06	00 11 12.5	34.305 S	70.545 W	10 G		0.2	7	CHILE-ARGENTINA BORDER REGION
06	00 14 33.6*	32.753 S	178.934 W	33 N	5.4	1.4	22	SOUTH OF KERMADEC ISLANDS
06	01 37 49.0*	60.676 N	147.091 W	15			35	SOUTHERN ALASKA. <AGS-P>.
06	01 49 12.4*	8.081 S	119.882 E	211 *	4.5	1.4	14	FLORES ISLAND REGION
06	05 29 31.5	42.329 N	19.969 E	10 G		0.4	7	YUGOSLAVIA. ML 2.1 (TTG).
06	08 25 33.8*	60.112 N	153.467 W	150			23	SOUTHERN ALASKA. <AGS-P>.
06	09 09 39.3	37.570 N	118.422 W	10 G		0.7	12	CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (NEIS).
a 06	09 54 52.6	23.763 S	179.930 E	545 D	5.1	1.1	102	SOUTH OF FIJI ISLANDS
06	11 19 36.0*	46.370 N	75.220 W	18 G			14	SOUTHERN QUEBEC. <OTT-P>. mbLg 3.5 (OTT). Felt at Maniwaki and Mont Laurier.
06	12 18 31.4*	42.774 N	19.157 E	10 G		0.5	6	YUGOSLAVIA. ML 2.3 (TTG).
06	12 26 17.3*	39.203 N	27.830 E	10 G		0.4	5	TURKEY
06	12 41 17.2*	61.976 N	148.188 W	38			34	SOUTHERN ALASKA. <AGS-P>.
06	13 03 01.9	0.105 S	125.746 E	70 *	4.6	1.4	34	MOLUCCA SEA
06	13 34 09.37	51.20 N	179.39 E	33 N	4.6	1.1	12	RAT ISLANDS, ALEUTIAN ISLANDS
a 06	13 56 05.77	55.29 S	128.98 W	10 G	4.8 5.5	1.5	15	SOUTH PACIFIC CORDILLERA
06	14 00 57.8	47.089 N	146.349 E	354 *	4.2	0.7	21	NORTHWEST OF KURIL ISLANDS
06	14 44 34.1	36.333 N	120.941 W	10 G		0.5	10	CENTRAL CALIFORNIA. ML 2.7 (BRK).
06	15 57 00.97	2.15 S	143.30 E	134 ?	3.7	1.4	7	PAPUA NEW GUINEA REGION
06	17 01 26.17	31.69 S	69.04 W	10 G		1.2	6	SAN JUAN PROVINCE, ARGENTINA
06	18 07 19.4*	61.469 N	152.072 W	105			28	SOUTHERN ALASKA. <AGS-P>.
06	18 35 56.9*	6.995 S	155.202 E	33 N	3.8	1.1	5	SOLOMON ISLANDS
06	19 06 55.8*	44.243 N	28.415 W	10 G	4.5	1.2	20	NORTH ATLANTIC RIDGE
06	19 32 47.1*	28.375 S	68.599 W	128 ?	4.4	1.2	11	LA RIOJA PROVINCE, ARGENTINA
a 06	19 55 15.6	29.344 N	100.915 E	34	5.5 5.0	1.0	196	SICHUAN PROVINCE, CHINA
06	21 58 49.8	42.322 N	20.036 E	10 G		1.1	7	YUGOSLAVIA. ML 2.1 (TTG).
06	22 56 55.4	50.071 N	17.166 E	11		1.1	11	POLAND. ML 3.7 (VKA), 3.4 (KBA).
06	23 11 43.8*	61.755 N	151.978 W	110			29	SOUTHERN ALASKA. <AGS-P>.
07	00 30 09.2*	33.862 S	71.373 W	33 N		0.3	9	NEAR COAST OF CENTRAL CHILE
07	00 54 19.1*	4.972 N	127.435 E	137 ?	4.5	1.3	15	TALAUD ISLANDS
07	01 08 26.9*	6.031 S	130.152 E	92 ?	4.3	1.5	10	BANDA SEA
07	01 27 33.0*	14.479 N	93.091 W	33 N	4.5 3.4	1.2	28	NEAR COAST OF CHIAPAS, MEXICO
a 07	02 51 28.9	18.010 S	178.403 W	595	5.0	0.9	139	FIJI ISLANDS REGION
07	03 11 51.17	34.00 S	71.82 W	33 N		0.8	9	NEAR COAST OF CENTRAL CHILE
07	03 32 21.8	36.649 N	121.300 W	10 G		0.5	11	CENTRAL CALIFORNIA. ML 2.5 (BRK).
07	04 20 02.4*	45.455 N	27.045 E	10 G		1.2	8	ROMANIA
07	05 27 42.2	31.083 S	67.341 W	10		1.1	17	SAN JUAN PROVINCE, ARGENTINA
07	05 51 40.6	37.610 N	118.432 W	10 G		1.0	11	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS).
07	06 15 07.4*	49.378 N	128.726 W	10 G	4.1	0.8	13	VANCOUVER ISLAND REGION
07	06 49 06.5*	30.580 S	178.009 W	33 N	5.3	1.0	18	KERMADEC ISLANDS
07	09 07 44.6*	61.207 N	151.718 W	85			30	SOUTHERN ALASKA. <AGS-P>.
07	09 50 30.2*	45.648 N	27.191 E	10 G		1.2	6	ROMANIA
07	10 18 49.5*	45.470 N	27.014 E	10 G		1.1	6	ROMANIA
07	10 32 02.8*	40.664 N	29.653 E	10 G		0.2	7	TURKEY
07	10 53 29.9*	16.099 N	62.184 W	133 *	4.6	1.2	17	LEEWARD ISLANDS. Felt (II) on Guadeloupe.
07	11 00 57.0*	12.696 S	77.023 W	10 G		1.4	5	NEAR COAST OF PERU. Felt (II) at Lima.
07	12 05 35.8*	33.463 S	71.990 W	10 G		0.5	9	NEAR COAST OF CENTRAL CHILE
a 07	12 10 19.0	11.709 N	95.297 E	33 N	5.2	1.1	76	ANDAMAN ISLANDS REGION
07	12 19 17.6*	33.445 S	71.987 W	10 G		0.3	9	NEAR COAST OF CENTRAL CHILE
07	16 04 09.5*	44.613 N	4.579 E	10 G		1.4	9	FRANCE. ML 2.8 (LDG).
07	16 19 37.67	15.85 N	94.79 W	33 N	4.4	1.2	7	NEAR COAST OF OAXACA, MEXICO
07	17 20 02.87	34.14 S	72.59 W	10 G		0.5	7	NEAR COAST OF CENTRAL CHILE
07	17 45 24.5	44.507 N	3.669 E	10 G		0.8	15	FRANCE. ML 2.9 (LDG).
07	18 19 09.8	34.615 N	80.290 E	33 N	4.8	1.0	41	TIBET
07	18 20 35.6	34.662 N	80.254 E	33 N	4.8	0.7	20	TIBET
07	18 30 13.6	39.362 N	27.445 E	10 G		0.9	7	TURKEY
a 07	22 32 50.4	7.433 N	81.241 W	8	5.4 5.4	1.4	155	PANAMA. Felt (V) in the Gulf of Parita area and (IV) at David. Felt at Panama City.
07	22 54 07.4	7.259 N	81.345 W	10 G	4.9	1.2	35	PANAMA
07	23 12 10.3	51.839 N	178.268 W	92 D	4.5	0.8	30	ANDREANOF ISLANDS, ALEUTIAN IS.
08	00 18 39.0*	11.791 S	117.275 E	33 N	4.6	1.4	17	SOUTH OF SUMBAWA ISLAND
08	00 46 28.0*	43.140 N	18.640 E	10 G		0.8	5	YUGOSLAVIA. ML 2.3 (TTG).
08	01 10 41.6*	60.179 N	151.473 W	71			26	KENAI PENINSULA, ALASKA. <AGS-P>.
08	01 46 15.5	30.325 S	70.551 W	33 N		0.8	14	CHILE-ARGENTINA BORDER REGION
08	01 51 16.1	40.699 N	29.863 E	10 G		0.9	9	TURKEY
08	02 49 19.6	45.840 N	6.388 E	10 G		1.1	18	FRANCE. ML 2.8 (LDG).
08	03 07 10.37	39.76 N	30.55 E	10 G		1.6	7	TURKEY
08	03 08 56.0	14.964 S	167.281 E	156	5.0	1.1	67	VANUATU ISLANDS
08	03 46 41.9	36.746 N	25.752 E	56 *	4.1	1.5	27	DODECANESE ISLANDS
08	04 13 19.9*	36.850 N	25.127 E	10 G		1.0	6	DODECANESE ISLANDS. ML 3.7 (ATH).

08	04	31	21.3	53.594 N	167.320 W	33 N	4.5	4.3	1.1	46	FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.0 (PMR). Felt on Unalaska.
08	05	40	35.38	59.956 N	153.369 W	114				22	SOUTHERN ALASKA. <AGS-P>.
08	05	48	25.9	21.774 S	68.480 W	33 N			0.8	7	CHILE-BOLIVIA BORDER REGION
08	06	15	37.2*	27.330 S	68.632 W	179 ?			1.0	12	CHILE-ARGENTINA BORDER REGION
08	06	41	38.08	46.556 N	1.153 E	10 G			1.2	13	FRANCE. ML 2.6 (LDG).
08	08	31	24.9	27.291 N	57.833 E	33 N	5.0		1.1	73	SOUTHERN IRAN
08	13	40	15.9	36.294 N	139.999 E	91	4.5		0.8	21	HONSHU, JAPAN. Felt (III JMA) at Utsunomiya; (II JMA) at Mito; (I JMA) at Kumagaya, Onahama and on Oshima.
08	13	41	22.77	56.45 N	153.31 W	33 N	4.3		0.7	8	KODIAK ISLAND REGION. ML 3.5 (PMR).
08	14	04	16.9	42.346 N	19.961 E	10 G			0.3	10	YUGOSLAVIA. ML 2.2 (TTG).
08	14	06	09.1*	39.596 N	119.741 W	5 G			0.3	5	NEVADA. ML 2.7 (NEIS). Felt in the Reno-Sparks area.
08	14	30	38.3	37.653 N	118.363 W	5 G			0.9	12	CALIFORNIA-NEVADA BORDER REGION. ML 3.1 (NEIS).
08	16	18	58.1*	7.850 N	59.548 E	10 G	4.9	4.8	1.1	39	CARLSBERG RIDGE
08	16	59	19.2*	6.365 S	147.223 E	33 N	3.1		1.5	6	EAST PAPUA NEW GUINEA REGION
08	17	06	38.1	60.827 N	7.080 E	10 G			0.9	9	SOUTHERN NORWAY. MD 2.8 (BER). Felt.
08	17	31	34.68	40.823 N	123.608 W	5 G				11	NORTHERN CALIFORNIA. <BRK>. ML 3.2 (BRK). Double event about 4 seconds apart. Felt at Eureka.
08	18	51	43.5	37.954 N	37.699 E	10 G	4.6		1.1	80	TURKEY
08	19	24	35.4	7.449 S	128.355 E	161	5.2		1.0	66	BANDA SEA
08	19	47	44.47	51.78 N	16.65 E	10 G			0.6	7	POLAND. ML 2.8 (KBA).
08	19	51	36.27	43.32 N	0.75 W	5 G			1.2	8	PYRENEES. ML 2.8 (LDG).
08	20	10	49.2	45.696 N	27.216 E	10 G			1.2	8	ROMANIA
08	20	15	34.9*	18.868 S	169.150 E	217	4.5		1.2	31	VANUATU ISLANDS
08	21	12	11.5*	19.087 N	121.376 E	33 N	3.9		1.1	11	PHILIPPINE ISLANDS REGION. Felt (I RF) at Pasuquin.
08	21	26	09.87	4.66 S	143.79 E	104 ?	3.8		0.4	6	PAPUA NEW GUINEA
08	21	43	49.57	50.32 N	173.54 W	33 N	4.7		0.6	8	ANDREANOF ISLANDS, ALEUTIAN IS.
08	23	57	30.8	22.252 S	170.070 E	35 *	5.0		1.3	39	LOYALTY ISLANDS REGION
09	00	25	53.9	7.288 N	81.340 W	10 G	4.5	4.2	1.2	29	PANAMA
09	00	52	30.08	32.608 N	117.250 W	6 G				13	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.6 (PAS). Felt (III) at Spring Valley and (II) at San Diego. Also felt at Point Loma, Imperial Beach and Pacific Beach.
09	00	53	12.6	14.099 N	120.335 E	80	5.5		0.9	204	LUZON, PHILIPPINE ISLANDS. Felt (III) at Puerto Galera, Mindoro. Also felt in the Manila area.
09	01	31	09.9	0.559 N	121.195 E	100 ?	4.6		1.0	10	MINAHASSA PENINSULA
09	02	49	06.2	6.307 S	130.429 E	164 *	4.6		1.3	20	BANDA SEA
09	03	22	51.2*	6.532 S	130.250 E	163 ?	4.1		1.6	6	BANDA SEA
09	04	28	37.18	60.716 N	151.672 W	70				36	KENAI PENINSULA, ALASKA. <AGS-P>.
09	04	46	02.0*	26.889 S	176.258 W	33 N	4.7		1.2	15	SOUTH OF FIJI ISLANDS
09	04	51	16.4	43.342 N	3.710 E	12			0.6	15	NEAR SOUTH COAST OF FRANCE. ML 2.6 (LDG).
09	06	37	24.0	26.748 N	54.969 E	33 N	5.1	4.4	1.0	154	SOUTHERN IRAN
09	08	12	43.0	23.590 S	69.539 W	118 *			0.7	13	NORTHERN CHILE
09	09	20	12.9*	31.440 S	68.925 W	104 *			0.9	8	SAN JUAN PROVINCE, ARGENTINA
09	09	40	48.0*	31.211 S	72.534 W	33 N	4.6		0.9	18	OFF COAST OF CENTRAL CHILE
09	11	14	27.4	39.087 N	27.619 E	10 G			0.2	6	TURKEY
09	11	26	14.1*	39.211 N	27.864 E	10 G			0.4	5	TURKEY
09	12	13	07.57	13.60 N	92.33 W	33 N	3.8		0.7	9	OFF COAST OF CHIAPAS, MEXICO
09	13	20	44.9	37.594 N	118.328 W	10 G			0.4	13	CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (NEIS).
09	14	26	25.27	53.51 N	161.63 W	33 N	4.7		1.6	10	SOUTH OF ALASKA
09	15	11	36.5*	32.712 S	71.293 W	33 N			0.6	10	NEAR COAST OF CENTRAL CHILE
09	15	13	53.17	32.78 S	71.35 W	27 *			1.3	10	NEAR COAST OF CENTRAL CHILE
09	15	42	59.7*	28.393 N	140.720 E	24 *	5.0		1.4	27	BONIN ISLANDS REGION
09	16	57	38.7*	51.331 N	174.738 W	33 N	4.3		0.7	7	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.0 (PMR).
09	17	47	14.6	63.400 N	147.315 W	92 ?			0.4	9	CENTRAL ALASKA
09	20	03	00.5*	9.568 S	123.338 E	33 N	4.6		1.4	18	TIMOR
09	20	21	44.1*	7.458 S	154.689 E	33 N	4.9		1.3	14	SOLOMON ISLANDS
09	22	47	10.1*	32.009 S	71.290 W	33 N			0.4	10	NEAR COAST OF CENTRAL CHILE
10	00	26	37.4*	9.163 S	113.260 E	105 ?	3.8		0.5	6	SOUTH OF JAVA
10	00	31	37.1	14.789 S	66.556 E	10 G	4.9		0.7	50	MID-INDIAN RISE
10	01	47	19.1*	3.819 S	131.219 E	33 N	4.1		1.5	16	WEST IRIAN REGION
10	02	27	38.5*	16.485 S	28.433 E	10 G			1.1	5	ZAMBIA. MG 3.3 (BUL).
10	03	48	53.4*	31.797 S	68.207 W	124 *			0.9	13	SAN JUAN PROVINCE, ARGENTINA
10	04	40	49.7	1.985 N	128.271 E	104 G	6.1		1.1	335	HALMAHERA. Depth from broadband displacement seismograms.
10	05	01	02.77	60.00 N	5.38 E	10 G			0.2	4	SOUTHERN NORWAY. MD 1.7 (BER).
10	05	39	48.2	36.854 N	77.230 E	33 N	4.9		0.8	16	KASHMIR-XINJIANG BORDER REGION
10	05	42	08.2	7.563 S	154.803 E	33 N	5.2		0.9	70	SOLOMON ISLANDS
10	06	24	22.08	43.564 N	7.801 E	10 G			0.2	5	NEAR SOUTH COAST OF FRANCE. ML 2.4 (LDG).
10	08	25	03.0	28.702 S	67.419 W	149 *			0.7	10	LA RIOJA PROVINCE, ARGENTINA
10	08	50	39.7	40.664 N	140.722 E	20	5.0		1.0	70	HONSHU, JAPAN. Felt (III JMA) at Aomori.
10	11	08	12.6*	3.032 S	101.847 E	118 *	4.5		1.0	9	SOUTHERN SUMATRA
10	11	15	08.9*	50.222 N	17.136 E	10 G			0.9	9	POLAND. ML 3.5 (VKA), 3.3 (KBA).
10	11	58	40.3*	46.445 N	13.096 E	10 G			1.1	6	AUSTRIA. ML 2.6 (KBA), 2.6 (TRI).
10	13	38	13.4	41.222 N	7.089 W	12			1.0	17	PORTUGAL. MG 3.8 (MDD). Felt (III) in the Torre de Moncorvo area.
10	13	57	26.2	41.193 N	7.025 W	10 G			1.1	17	PORTUGAL. MG 3.4 (MDD). Felt (III) in the Torre de Moncorvo area.
10	14	13	53.6	33.363 N	140.885 E	62 *	5.1		0.9	35	SOUTH OF HONSHU, JAPAN. Felt (II JMA) at Hachijo-jima.
10	14	46	30.57	29.16 S	71.52 W	33 N			1.2	5	NEAR COAST OF CENTRAL CHILE
10	15	11	50.4	41.233 N	7.081 W	10 G			1.0	36	PORTUGAL. MG 4.3 (MDD). Felt (IV) in the Torre de Moncorvo area.
10	15	31	41.77	10.71 S	118.90 E	33 N	2.8		1.6	7	SOUTH OF SUMBAWA ISLAND
10	17	20	53.17	18.50 N	145.55 E	107 ?	4.2		0.4	8	MARIANA ISLANDS
10	17	47	55.7	38.537 N	43.436 E	43 *	4.7	3.8	1.0	79	TURKEY. Felt in the Van area.
10	18	08	07.3*	50.463 N	19.001 E	0 G			1.5	7	POLAND. ML 3.1 (KBA). Probable explosion.
10	19	07	56.38	60.092 N	152.732 W	96				38	SOUTHERN ALASKA. <AGS-P>.
10	19	20	00.57	18.64 S	167.47 E	107 ?	4.4		0.5	10	VANUATU ISLANDS
10	20	42	29.6*	7.333 N	81.254 W	45 *	4.7		1.1	15	PANAMA
10	21	13	19.3	3.589 S	131.217 E	33 N	4.6		1.5	28	WEST IRIAN REGION
11	00	50	12.2	43.229 N	20.866 E	10 G			1.4	12	YUGOSLAVIA. ML 2.1 (TTG).
11	01	25	22.8	36.198 N	26.804 E	126	4.2		0.9	58	DOOEANESE ISLANDS
11	02	29	23.07	27.55 N	101.17 E	33 N	4.5		1.9	7	SICHUAN PROVINCE, CHINA
11	02	44	48.08	40.168 N	28.850 E	10 G			0.6	7	TURKEY

11	02 50 37.1	18.309 S	168.156 E	23 D	4.7	1.4	62	VANUATU ISLANDS
11	03 56 10.0*	4.537 S	153.242 E	33 N	4.6	1.1	11	NEW IRELAND REGION
11	04 14 37.3*	4.15 S	131.05 E	33 N	3.3	0.7	6	BANDA SEA
11	04 59 10.2*	26.922 S	26.568 E	5 G	4.9	1.4	13	REPUBLIC OF SOUTH AFRICA
11	05 02 34.4*	18.431 S	69.363 W	128 *		0.8	8	NORTHERN CHILE
11	05 14 43.9*	48.17 N	114.64 W	5 G		0.3	5	MONTANA. ML 3.1 (BUT).
11	06 31 12.3*	14.959 N	147.172 E	33 N		0.5	9	MARIANA ISLANDS REGION
a 11	06 58 05.0	14.745 S	66.477 E	10 G	5.2 5.0	0.8	78	MID-INDIAN RISE
a 11	08 05 56.8	22.265 N	121.647 E	124 D	5.5	1.0	249	TAIWAN REGION
11	09 35 48.4*	20.10 N	121.46 E	33 N	5.0	0.9	61	PHILIPPINE ISLANDS REGION
a 11	10 37 59.1	20.101 N	121.312 E	33 N	5.4 5.0	1.3	186	PHILIPPINE ISLANDS REGION
11	10 42 52.5	31.215 S	68.685 W	119 *		1.0	16	SAN JUAN PROVINCE, ARGENTINA
11	11 05 14.4*	21.859 S	68.640 W	148 *		1.4	11	CHILE-BOLIVIA BORDER REGION
11	11 24 46.2*	37.476 N	20.167 E	10 G	4.2	1.1	8	IONIAN SEA. ML 4.0 (ATH).
11	12 01 51.2*	20.21 S	68.94 W	33 N		1.3	5	CHILE-BOLIVIA BORDER REGION
11	12 18 58.1*	42.687 N	19.089 E	10 G		0.1	5	YUGOSLAVIA. ML 1.8 (TTG).
11	13 34 54.0*	60.399 N	153.354 W	148		26		SOUTHERN ALASKA. <AGS-P>.
11	13 51 29.0*	41.836 N	19.389 E	10 G		1.0	5	ALBANIA. ML 2.0 (TTG).
11	17 00 57.1	2.006 N	127.192 E	123	5.5	1.2	68	MOLUCCA PASSAGE
11	18 00 57.9*	9.167 S	120.157 E	80 ?	4.8	1.7	20	SUMBA ISLAND REGION
11	19 34 47.3*	62.048 N	151.308 W	81		23		CENTRAL ALASKA. <AGS-P>.
a 11	19 43 13.1	0.075 S	17.852 W	10 G	5.0 4.6	0.8	83	NORTH OF ASCENSION ISLAND
11	19 58 42.8	27.481 N	101.301 E	43 *	4.8 4.5	1.3	30	SICHUAN PROVINCE, CHINA
11	20 13 40.1*	19.45 S	177.51 W	447 ?	4.7	0.5	10	FIJI ISLANDS REGION
11	20 23 18.0*	38.903 N	27.441 E	10 G		1.1	6	TURKEY
11	21 48 00.4*	30.355 N	53.144 E	33 N	4.3	1.0	7	IRAN
a 11	22 06 43.2	30.923 S	67.685 W	5 G	5.4 4.9	1.2	114	SAN JUAN PROVINCE, ARGENTINA. Felt (IV) in San Juan Province.
11	22 49 18.8*	41.16 N	15.41 E	218 *	3.9	1.2	18	SOUTHERN ITALY
11	23 22 37.6*	60.575 N	150.617 W	43		33		KENAI PENINSULA, ALASKA. <AGS-P>.
11	23 34 06.5*	4.697 S	101.984 E	53 *	4.7	1.0	29	SOUTHERN SUMATRA
11	23 50 45.4	11.154 S	74.334 W	33 N	4.4	0.9	15	PERU
12	00 56 51.6	37.224 N	141.891 E	40 *	4.6	1.0	25	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Fukushima and Sendai.
a 12	00 59 28.9*	23.987 S	177.199 W	33 N	5.1 5.1	1.5	29	SOUTH OF FIJI ISLANDS
12	01 38 09.4*	32.225 S	69.439 W	118 *	4.3	0.7	13	MENDOZA PROVINCE, ARGENTINA
12	03 17 07.9*	20.932 S	68.279 W	148 ?		0.3	7	CHILE-BOLIVIA BORDER REGION
a 12	04 07 16.7	5.967 N	82.591 W	10 G	5.4 5.1	1.2	122	SOUTH OF PANAMA. Ms 5.1 (BRK). Felt in Panama.
12	04 08 05.4*	11.42 S	166.00 E	70 ?	4.5	1.7	14	SANTA CRUZ ISLANDS
12	04 08 43.3*	61.811 N	151.608 W	83		19		SOUTHERN ALASKA. <AGS-P>.
a 12	05 09 07.7	0.111 N	100.237 E	47 *	5.2 5.3	1.2	125	NORTHERN SUMATRA. Felt in southern Singapore.
12	07 00 28.9	36.061 N	117.741 W	5 G		1.0	9	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (NEIS).
12	08 18 42.9	7.403 N	81.395 W	10 G	4.4 3.6	1.4	28	PANAMA. Felt.
12	08 34 19.0	30.673 S	71.392 W	33 N		0.9	13	NEAR COAST OF CENTRAL CHILE
12	08 47 31.8*	59.313 N	6.962 E	10 G		1.2	7	SOUTHERN NORWAY. MD 2.2 (BER).
12	09 29 48.0*	37.487 N	118.377 W	8		23		CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.5 (BRK).
12	10 34 10.3	7.736 N	81.481 W	10 G	4.5 3.8	1.2	20	PANAMA. Felt.
12	10 45 51.7	27.684 N	101.268 E	10 G	5.0 4.6	1.3	90	SICHUAN PROVINCE, CHINA
12	11 46 29.5	63.124 N	150.616 W	33 N		0.6	7	CENTRAL ALASKA. ML 3.4 (PMR).
12	12 16 06.1*	39.101 N	27.593 E	10 G		0.5	5	TURKEY
12	12 39 48.7	62.185 N	124.414 W	10 G	4.6	1.2	38	NORTHWEST TERRITORIES, CANADA
12	15 10 03.6	44.573 N	9.575 E	31		0.9	19	NORTHERN ITALY. ML 3.2 (LDG), 2.8 (KBA).
12	15 37 27.9*	37.503 N	118.477 W	4 G		27		CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.5 (BRK).
12	16 09 37.3	2.502 N	127.457 E	33 N	5.3	1.1	28	MOLUCCA PASSAGE
12	16 54 54.8*	39.002 N	27.930 E	10 G		1.1	6	TURKEY
12	17 51 38.3	39.782 N	27.720 E	10 G		1.5	11	TURKEY
12	18 35 57.4*	60.717 N	5.614 E	10 G		0.8	5	SOUTHERN NORWAY. MD 1.9 (BER).
12	19 42 22.7	38.877 N	27.597 E	10 G		1.3	7	TURKEY
12	19 47 17.5*	61.882 N	151.011 W	65		25		SOUTHERN ALASKA. <AGS-P>.
12	20 04 16.7	38.838 N	27.531 E	10 G		0.4	7	TURKEY
12	21 06 02.9	32.532 S	69.760 W	121 ?		0.8	15	MENDOZA PROVINCE, ARGENTINA
12	21 38 56.0*	39.074 N	27.653 E	10 G		1.4	6	TURKEY
12	23 01 46.7*	8.88 N	85.43 W	33 N	4.7	1.5	9	OFF COAST OF COSTA RICA. Felt in the Naranja-Grecia-Alajuela area.
12	23 46 33.7	5.810 N	82.639 W	10 G	4.3 3.9	1.2	18	SOUTH OF PANAMA
13	00 29 01.3*	27.33 N	101.10 E	33 N	4.1	1.4	7	SICHUAN PROVINCE, CHINA
13	02 17 21.8	34.981 N	26.853 E	62 *	4.0	1.3	32	CRETE
13	02 31 58.9*	27.245 N	101.228 E	33 N	4.6	1.3	18	SICHUAN PROVINCE, CHINA
13	02 42 55.6	38.814 N	106.996 W	5 G		0.5	12	COLORADO. ML 2.6 (NEIS). Felt at Crested Butte.
a 13	04 11 41.0	5.842 N	82.413 W	10 G	5.4 5.2	1.3	189	SOUTH OF PANAMA
13	04 12 16.7*	35.87 S	178.01 E	186 *	5.1	1.1	8	OFF E. COAST OF N. ISLAND, N.Z.
13	04 37 46.1	52.954 N	159.875 E	33 N	5.4 5.3	0.9	160	OFF EAST COAST OF KAMCHATKA
13	04 55 18.4*	45.131 N	74.246 W	24		10		SOUTHERN ONTARIO. <PAL-P>. CL 3.4 (PAL), mblg 3.3 (OTT). Felt (IV) at Huntingdon Coteau Station and Valleyfield. Also felt (IV) at Cornwall, Ontario. Felt at Hogansburg, Potsdam, Malone, Massena, Moira, Trout River and Westville, New York.
13	05 06 30.9*	45.129 N	74.233 W	18		4		SOUTHERN ONTARIO. <PAL-P>. CL 2.4 (PAL).
13	05 29 03.5*	23.750 S	66.269 W	33 N		1.5	8	JUJUY PROVINCE, ARGENTINA
13	07 01 08.9*	18.77 N	108.84 W	10 G	3.8	1.4	11	REVILLA GIGEDO ISLANDS REGION
13	08 18 10.9*	30.567 S	67.003 W	33 N		1.3	11	SAN JUAN PROVINCE, ARGENTINA
13	08 38 21.4*	5.83 S	147.10 E	173 ?	4.5	1.2	8	EAST PAPUA NEW GUINEA REGION
13	09 08 47.7	39.246 N	27.697 E	10 G		1.0	7	TURKEY
13	10 29 24.7*	45.127 N	74.244 W	23		3		SOUTHERN ONTARIO. <PAL-P>. CL 2.3 (PAL).
13	11 16 55.5	37.754 N	20.488 E	38 *	4.6	1.0	51	IONIAN SEA. ML 4.5 (TTG), 3.9 (ATH).
13	12 08 31.4*	38.858 N	107.035 W	5 G		0.6	10	COLORADO. ML 2.1 (NEIS).
13	12 13 43.9	38.879 N	107.039 W	5 G		0.4	13	COLORADO. ML 2.4 (NEIS). Felt at Crested Butte and at Meridian Park about 4.5 miles north of Crested Butte.
13	13 44 31.8*	59.575 N	152.971 W	89		17		SOUTHERN ALASKA. <AGS-P>.
a 13	15 27 21.8	7.691 N	74.713 W	60	5.0	1.2	178	NORTHERN COLOMBIA. Felt in the Armenia-Manizales-Pereira area.
13	16 32 40.7*	27.005 S	71.912 W	33 N		1.3	7	NEAR COAST OF NORTHERN CHILE
13	18 25 36.3*	4.349 S	142.292 E	121 *	4.9	1.1	20	PAPUA NEW GUINEA

13	19 02 03.6	34.388 N	26.621 E	19 *	4.2	1.3	28	CRETE
13	19 13 09.0	39.076 N	28.056 E	10 G		0.6	7	TURKEY
13	21 09 57.3	62.466 N	149.662 W	64			25	CENTRAL ALASKA. <AGS-P>.
13	21 45 11.8	39.347 N	27.372 E	10 G		0.8	7	TURKEY
13	23 29 38.2	45.56 N	15.84 E	10 G		0.4	5	YUGOSLAVIA. MG 2.0 (ZAG).
13	23 32 50.7	16.194 N	98.224 W	33 N		0.5	6	NEAR COAST OF GUERRERO, MEXICO
14	00 50 40.7	40.352 N	124.353 W	19			18	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.4 (BRK). Felt (III) at Rio Dell. Also felt at Scotio.
14	01 53 35.8	23.603 S	177.204 W	33 N	4.7	0.8	21	SOUTH OF FIJI ISLANDS
14	01 54 28.2	59.559 N	153.258 W	97			25	SOUTHERN ALASKA. <AGS-P>.
14	02 13 23.7	53.91 N	164.49 W	33 N	4.6	1.6	11	UNIMAK ISLAND REGION
14	02 43 28.8	6.116 S	148.645 E	72 *	4.0	1.4	8	NEW BRITAIN REGION
14	03 02 35.5	31.053 S	67.716 W	33 N		1.4	9	SAN JUAN PROVINCE, ARGENTINA
14	04 13 28.1	59.502 N	149.771 W	43			40	KENAI PENINSULA, ALASKA. <AGS-P>.
14	04 31 22.8	37.502 N	118.403 W	7			22	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.3 (BRK).
14	04 41 50.9	20.48 S	177.88 W	559 ?	4.5	0.5	8	FIJI ISLANDS REGION
14	05 45 13.1	6.728 S	128.664 E	229 *	4.3	1.3	16	BANDA SEA
14	05 58 16.1	6.695 S	106.053 E	138 ?	4.9	1.1	18	JAVA
14	06 25 37.6	13.161 N	145.046 E	49	4.6	0.5	13	MARIANA ISLANDS. Felt (III) on Guam.
14	07 08 11.5	42.463 N	143.040 E	101	4.7	0.9	48	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Urukawa.
14	09 20 24.1	24.56 S	177.71 W	33 N	4.8	0.4	6	SOUTH OF FIJI ISLANDS
14	09 54 38.3	38.831 N	27.462 E	10 G		1.1	8	TURKEY
14	10 12 38.5	43.607 N	0.359 W	10 G		1.1	12	PYRENEES. ML 2.5 (LDG).
14	10 33 55.4	34.27 S	72.28 W	33 N		0.3	10	NEAR COAST OF CENTRAL CHILE
14	11 31 36.6	15.97 N	60.65 W	33 N		0.5	6	LEEWARD ISLANDS. ML 3.1 (FDF).
14	12 46 33.8	38.83 N	27.52 E	10 G		0.7	4	TURKEY
14	12 50 51.6	30.036 S	177.243 W	33 N	5.2 4.7	1.3	36	KERMADEC ISLANDS
14	13 03 02.0	38.895 N	27.463 E	10 G		0.6	5	TURKEY
14	13 42 35.4	38.846 N	27.435 E	10 G		1.2	5	TURKEY
14	14 08 47.2	37.865 N	28.804 E	10 G		0.8	6	TURKEY
14	14 15 47.1	36.601 N	121.223 W	5 G		0.7	11	CENTRAL CALIFORNIA. ML 2.6 (BRK).
14	14 28 52.1	51.676 N	175.180 W	33 N	4.8	0.9	27	ANDREANOF ISLANDS, ALEUTIAN IS.
14	14 39 57.9	59.43 N	6.62 E	10 G		1.4	5	SOUTHERN NORWAY. MD 2.3 (BER).
14	15 08 45.2	2.979 S	138.558 E	33 N	4.2	1.1	7	WEST IRIAN
14	15 26 53.5	38.817 N	27.552 E	10 G		0.7	6	TURKEY
14	16 00 08.8	29.700 N	61.315 E	33 N	4.3	1.3	10	PAKISTAN
14	16 11 26.2	40.270 N	51.673 E	33 N	4.5	0.8	14	CASPIAN SEA
14	17 39 25.9	38.908 N	107.082 W	5 G		0.4	13	COLORADO. ML 2.6 (NEIS). Felt at Crested Butte.
f 14	19 39 13.6	1.795 N	126.519 E	33 N	6.6 7.2	1.4	441	MOLUCCA PASSAGE. Ms 7.4 (BRK). Felt (IV) at Manado, Sulawesi and (II RF) at Cogoyon de Oro, Mindanao.
14	19 41 45.8	14.977 N	60.410 W	33 N		0.4	7	WINDWARD ISLANDS. ML 2.5 (FDF).
14	20 11 54.4	2.084 N	126.804 E	33 N	5.4	1.2	68	MOLUCCA PASSAGE
14	20 15 29.3	60.103 N	151.528 W	61			23	KENAI PENINSULA, ALASKA. <AGS-P>.
14	20 29 26.4	2.240 N	126.952 E	33 N	5.0	0.8	19	MOLUCCA PASSAGE
14	20 48 08.4	32.277 S	178.520 W	33 N	5.7	1.5	56	SOUTH OF KERMADEC ISLANDS
14	21 02 56.1	2.026 N	126.883 E	33 N	4.8	1.3	15	MOLUCCA PASSAGE
14	21 05 20.8	1.88 N	126.89 E	33 N	5.0	1.3	11	MOLUCCA PASSAGE
14	21 08 02.2	1.881 N	126.506 E	33 N	4.9	1.2	32	MOLUCCA PASSAGE
14	21 16 14.2	1.883 N	126.606 E	33 N	5.1	1.2	71	MOLUCCA PASSAGE
14	21 54 02.9	11.123 N	126.065 E	33 N	4.7	1.1	23	PHILIPPINE ISLANDS REGION
14	22 10 55.0	21.724 S	70.050 W	50 *	4.6	1.3	22	NEAR COAST OF NORTHERN CHILE
14	22 41 04.3	1.883 N	126.750 E	33 N	5.0	1.2	28	MOLUCCA PASSAGE
14	22 46 31.4	24.054 S	67.007 W	199 *	4.5	1.1	12	CHILE-ARGENTINA BORDER REGION
14	22 55 07.2	2.127 N	126.993 E	33 N	5.6 5.9	1.1	171	MOLUCCA PASSAGE
14	23 19 54.7	2.166 N	126.966 E	33 N	4.9	1.0	36	MOLUCCA PASSAGE
14	23 25 34.7	31.43 S	178.42 W	33 N	4.8	1.4	13	KERMADEC ISLANDS REGION
14	23 53 24.0	1.857 N	126.918 E	33 N	4.7	0.9	14	MOLUCCA PASSAGE
15	00 31 38.1	33.259 S	177.680 W	33 N	4.8	1.4	23	SOUTH OF KERMADEC ISLANDS
a 15	00 41 20.4	8.689 S	124.212 E	108 D	5.8	1.4	174	TIMOR
15	01 17 11.0	2.326 N	127.081 E	33 N	4.8	1.5	14	MOLUCCA PASSAGE
15	01 20 52.5	2.134 N	127.350 E	33 N	4.9	0.9	10	MOLUCCA PASSAGE
15	02 10 17.9	2.213 N	126.836 E	33 N	4.8	0.8	9	MOLUCCA PASSAGE
15	06 09 43.4	55.40 N	164.51 E	33 N	4.3	1.4	7	KOMANDORSKY ISLANDS REGION
15	06 35 08.3	2.198 N	126.948 E	33 N	5.0 4.4	1.2	32	MOLUCCA PASSAGE
15	07 13 13.4	2.113 N	126.827 E	33 N	4.9	1.2	26	MOLUCCA PASSAGE
15	07 34 35.1	2.031 N	126.667 E	33 N	4.6	0.8	5	MOLUCCA PASSAGE
a 15	07 40 44.7	1.929 N	126.482 E	33 N	5.6 5.8	1.3	222	MOLUCCA PASSAGE
15	08 45 18.4	36.240 N	120.850 W	3			15	CENTRAL CALIFORNIA. <BRK>. ML 3.0 (BRK).
15	10 43 40.9	2.093 N	126.873 E	33 N	4.6	1.5	12	MOLUCCA PASSAGE
15	10 49 41.9	23.926 S	177.266 W	55 *	5.0	1.1	31	SOUTH OF FIJI ISLANDS
15	11 02 26.6	1.796 N	126.380 E	33 N	4.9	1.1	28	MOLUCCA PASSAGE
15	11 48 14.3	15.973 N	61.949 W	33 N		0.4	6	LEEWARD ISLANDS. ML 2.2 (FDF).
15	12 11 36.1	47.703 N	6.314 E	10 G		1.1	13	FRANCE. ML 2.5 (LDG).
15	12 14 11.2	1.737 N	126.330 E	33 N	4.9	1.4	14	MOLUCCA PASSAGE
15	13 09 46.0	32.940 N	117.813 W	10 G		0.9	9	CALIFORNIA-MEXICO BORDER REGION. ML 3.4 (NEIS).
15	13 33 30.0	34.08 S	72.19 W	33 N		0.7	8	NEAR COAST OF CENTRAL CHILE
15	13 34 57.9	4.21 N	124.61 E	346 ?	4.2	0.3	8	CELEBES SEA
15	14 40 07.3	19.196 S	177.641 W	595 *	4.5	1.2	24	FIJI ISLANDS REGION
15	14 53 45.9	61.455 N	140.522 W	3			24	SOUTHERN YUKON TERRITORY, CANADA. <AGS-P>.
15	15 31 23.3	1.99 N	127.11 E	33 N	4.3	0.8	5	HALMAHERA
15	16 20 17.5	1.982 N	126.605 E	33 N	5.1 4.8	1.5	67	MOLUCCA PASSAGE
15	16 35 16.9	24.005 S	177.282 W	72 *	5.1	1.0	26	SOUTH OF FIJI ISLANDS
15	17 53 14.0	48.240 N	126.464 E	33 N	4.3	1.4	12	NORTHEASTERN CHINA
15	18 45 14.5	32.867 N	117.874 W	10 G		0.7	12	CALIFORNIA-MEXICO BORDER REGION. ML 3.8 (NEIS).
15	19 09 16.4	1.67 N	126.83 E	33 N	4.8	1.2	8	MOLUCCA PASSAGE
15	19 49 03.3	37.64 N	26.43 E	10 G		1.4	4	DODECANESE ISLANDS
a 15	20 20 37.3	48.638 N	126.621 E	33 N	5.0 5.1	0.8	127	NORTHEASTERN CHINA
15	20 48 22.6	38.780 N	27.589 E	10 G		1.3	9	TURKEY
15	21 13 27.7	31.768 S	70.328 W	122 ?		1.1	13	CHILE-ARGENTINA BORDER REGION
15	21 23 51.5	43.215 N	26.043 E	10 G		1.5	8	BULGARIA
15	23 31 28.5	23.447 S	69.165 W	114 *	4.5	1.4	18	NORTHERN CHILE
15	23 34 58.3	23.263 S	179.083 E	553	5.0	1.1	131	SOUTH OF FIJI ISLANDS
16	00 11 44.5	39.940 N	77.604 E	33 N	4.8	1.3	54	SOUTHERN XINJIANG, CHINA

16	00 45 36.2*	17.634 S	27.613 E	5 G	1.5	6	ZIMBABWE. MG 3.8 (BUL).
16	02 04 39.5?	1.94 N	127.07 E	33 N 4.7	0.9	7	HALMAHERA
16	03 27 30.4?	14.31 N	92.99 W	33 N 3.8	1.0	10	NEAR COAST OF CHIAPAS, MEXICO
16	04 16 32.3	39.511 N	26.144 E	10	1.0	10	TURKEY
16	04 40 35.9	43.097 N	18.892 E	10 G	0.8	8	YUGOSLAVIA. ML 2.4 (TTG).
16	06 08 11.2*	1.906 N	126.546 E	33 N 4.6	0.8	16	MOLUCCA PASSAGE
16	06 41 25.2	45.594 N	26.335 E	157 4.7	1.1	126	ROMANIA. Felt (V) in the Vrancea area and (IV) at Bucharest. Also felt (V) in southern Moldavia and (IV) at Kishinev, USSR.
16	09 48 56.1	37.480 N	118.311 W	5 G	0.8	15	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS).
16	09 51 45.7*	62.333 N	124.442 W	10 G	1.6	6	NORTHWEST TERRITORIES, CANADA
16	13 02 29.6?	33.38 S	72.10 W	33 N	0.6	9	OFF COAST OF CENTRAL CHILE
16	14 21 46.0?	33.56 S	72.84 W	33 N	0.3	8	OFF COAST OF CENTRAL CHILE
16	14 40 17.0	1.945 N	126.575 E	33 N 5.1	1.0	55	MOLUCCA PASSAGE
16	14 51 26.8	19.460 S	64.005 W	61 * 4.9	1.5	33	SOUTHERN BOLIVIA
16	16 33 02.5*	36.949 N	137.837 E	225 4.3	0.5	12	HONSHU, JAPAN
16	17 00 11.5*	37.670 N	30.515 E	10 G	0.9	5	TURKEY
a	17 19 23.0	1.864 N	126.522 E	33 N 5.8 5.9	1.4	234	MOLUCCA PASSAGE
16	18 10 40.2	37.254 N	3.223 W	10 G	0.9	7	SPAIN. MG 2.9 (MDD).
16	20 25 12.8	25.397 S	178.386 E	601 5.3	1.0	159	SOUTH OF FIJI ISLANDS
a	16 21 08 28.2	1.765 N	126.442 E	33 N 5.7 5.4	1.3	221	MOLUCCA PASSAGE
16	22 36 49.8	22.689 N	94.196 E	75 * 4.5	1.2	32	BURMA
16	22 39 21.7	1.914 N	126.658 E	33 N 5.0	1.0	37	MOLUCCA PASSAGE
16	22 44 50.1*	22.555 N	94.085 E	95 * 4.5	1.1	15	BURMA
16	23 25 44.9	8.492 S	121.684 E	123 * 5.2	1.4	66	FLORES ISLAND REGION
16	23 59 10.3*	44.079 N	11.019 E	10 G	1.0	7	NORTHERN ITALY. MD 3.1 (TRI). ML 2.9 (LDG), 2.9 (KBA).
17	00 31 58.8?	5.26 S	147.46 E	228 * 3.9	0.1	6	EAST PAPUA NEW GUINEA REGION
17	03 45 03.1%	40.214 N	28.287 E	10 G	1.4	7	TURKEY
17	04 05 34.5	36.535 N	26.933 E	153 4.1	0.8	45	DODECANESE ISLANDS
17	04 33 14.0	2.082 N	126.949 E	33 N 5.0	1.0	21	MOLUCCA PASSAGE
17	05 11 41.2	39.508 N	23.500 E	11	1.3	15	AEGEAN SEA. ML 3.2 (ATH).
17	05 57 39.0*	40.879 N	140.100 E	189 * 4.7	0.6	11	HONSHU, JAPAN
17	06 09 29.4	1.218 S	13.113 W	10 G 4.9 4.4	0.9	74	NORTH OF ASCENSION ISLAND
17	08 48 28.3*	38.712 N	27.116 E	10 G	1.1	5	TURKEY
17	08 54 02.3*	38.672 N	26.995 E	10 G	1.3	14	AEGEAN SEA
17	08 56 12.3*	38.690 N	27.077 E	10 G	1.1	6	TURKEY
17	09 06 20.3*	38.688 N	27.046 E	10 G	0.9	5	TURKEY
17	09 21 40.3*	38.686 N	27.042 E	10 G	1.2	11	TURKEY
17	09 34 31.1*	38.730 N	27.127 E	10 G	1.2	7	TURKEY
17	09 38 10.1*	38.732 N	27.113 E	10 G	0.9	5	TURKEY
17	09 40 05.9*	38.692 N	27.079 E	10 G	0.4	5	TURKEY
17	10 02 37.1*	38.708 N	27.100 E	10 G	0.2	5	TURKEY
17	10 03 18.2*	38.710 N	27.059 E	10 G	1.3	9	TURKEY
17	10 23 28.1	38.698 N	27.030 E	10 G	0.8	12	TURKEY
17	10 26 37.1	1.837 N	126.531 E	33 N 5.3 4.7	1.2	113	MOLUCCA PASSAGE
17	10 54 35.2	34.005 N	139.590 E	129 4.8	1.0	86	NEAR S. COAST OF HONSHU, JAPAN. Felt (II JMA) on Oshima.
17	11 37 13.8	14.290 S	75.742 W	50 5.1	1.2	74	NEAR COAST OF PERU. Felt (IV) at Ica and (III) at Canete. Also felt at Pisco.
17	11 49 53.8%	16.048 N	61.922 W	33 N	1.3	5	LEEWARD ISLANDS. ML 3.1 (FDF).
17	11 56 17.5	45.711 N	26.534 E	129 4.3	1.1	33	ROMANIA
17	12 45 57.7*	38.944 N	107.126 W	5 G	0.4	9	COLORADO. ML 1.8 (NEIS).
f	17 15 27 41.2	2.276 N	126.959 E	31 G 5.8 6.3	1.2	284	MOLUCCA PASSAGE. Depth from broadband displacement seismograms.
17	15 31 19.0	2.161 N	127.113 E	33 N 6.0 6.3	1.2	68	MOLUCCA PASSAGE
17	15 44 26.7	2.214 N	127.042 E	33 N 5.0	1.1	19	MOLUCCA PASSAGE
17	15 52 09.9	2.219 N	126.960 E	33 N 5.5	1.4	155	MOLUCCA PASSAGE
17	16 09 26.9	2.309 N	126.980 E	33 N 5.0	1.0	41	MOLUCCA PASSAGE
17	16 11 56.6?	32.67 S	71.29 W	33 N	0.2	6	NEAR COAST OF CENTRAL CHILE
17	16 14 51.3	2.224 N	126.934 E	33 N 5.1	1.0	39	MOLUCCA PASSAGE
17	16 21 01.1	2.238 N	126.943 E	33 N 5.4	1.2	117	MOLUCCA PASSAGE
17	16 27 42.9	5.042 S	144.549 E	81 4.7	1.0	28	PAPUA NEW GUINEA
17	16 58 48.9	2.271 N	127.037 E	33 N 4.8	1.0	25	MOLUCCA PASSAGE
17	17 40 14.5	23.958 S	177.179 W	33 N 5.1	1.1	29	SOUTH OF FIJI ISLANDS
17	18 25 21.2	2.266 N	126.765 E	33 N 4.7	1.1	31	MOLUCCA PASSAGE
17	18 34 28.6	2.328 N	126.894 E	33 N 5.2	1.0	73	MOLUCCA PASSAGE
17	18 53 08.3*	2.329 N	126.902 E	33 N 4.9	0.9	16	MOLUCCA PASSAGE
17	19 28 40.2	2.283 N	126.865 E	33 N 5.0	1.1	40	MOLUCCA PASSAGE
17	20 36 32.4*	32.909 N	80.171 W	10	5	SOUTH CAROLINA. <GLD>. MD 1.7 (GLD).	
17	20 55 24.1*	13.882 N	61.446 W	33 N	0.6	7	WINDWARD ISLANDS. ML 4.3 (FDF).
17	21 02 58.9*	60.685 N	153.083 W	163	36	SOUTHERN ALASKA. <AGS-P>.	
17	21 20 43.2*	14.382 N	123.923 E	44 * 4.5	1.3	27	LUZON, PHILIPPINE ISLANDS
17	21 55 46.6*	18.870 S	69.575 W	135 ?	0.8	9	NORTHERN CHILE
17	22 07 30.0%	40.665 N	29.957 E	10 G	1.2	7	TURKEY
17	22 10 28.3	38.897 N	107.076 W	5 G	0.5	10	COLORADO. ML 2.4 (NEIS). Felt at Crested Butte.
17	23 47 25.0*	23.927 N	103.083 E	33 N	0.9	6	YUNNAN PROVINCE, CHINA
18	00 38 33.5	36.201 N	68.593 E	33 N 4.6	1.2	23	HINDU KUSH REGION
18	01 11 23.7*	2.164 N	126.581 E	33 N 4.8	1.0	17	MOLUCCA PASSAGE
18	01 15 15.0	38.914 N	107.087 W	5 G	0.5	11	COLORADO. ML 3.0 (NEIS). Felt (III) at Aspen and Carbondale. Also felt at Crested Butte and Snowmass Village.
18	01 48 49.9	41.508 N	20.139 E	27	1.3	35	ALBANIA. ML 3.6 (TTG). Felt (IV) at Bulqiza, Peshkapi and Tirana.
f	18 01 59 54.5	20.492 S	174.207 W	20 G 5.9 5.9	1.1	270	TONGA ISLANDS. Ms 5.8 (BRK). Depth from broadband displacement seismograms.
18	07 35 49.4	39.053 N	28.665 E	10	1.2	17	TURKEY. Felt at Demirci.
18	07 50 47.7	39.110 N	28.626 E	10 G	1.4	11	TURKEY
18	08 05 32.1	38.692 N	27.074 E	10 G	0.4	7	TURKEY
18	08 07 52.9?	38.87 N	26.99 E	10 G	1.3	11	AEGEAN SEA
18	08 10 28.5*	38.710 N	27.052 E	10 G	1.0	8	TURKEY
18	08 11 26.6	38.718 N	27.014 E	10 G	1.2	16	TURKEY
18	08 11 31.5	38.593 N	27.060 E	10 G 4.0	0.8	26	TURKEY. ML 3.6 (ATH). Felt at Demirci and Izmir.
18	09 45 29.5	42.360 N	19.772 E	10 G	1.3	6	YUGOSLAVIA. MD 2.4 (TTG).



18	09 49 15.7	35.865 N	44.399 E	33 N	4.9	1.1	15	IRAQ
18	10 49 38.9	37.537 N	118.452 W	11			24	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.4 (BRK).
18	14 05 45.5	36.945 N	29.161 E	10 G		1.9	5	TURKEY
a 18	14 16 14.1	1.739 N	126.575 E	33 N	5.5 5.2	1.2	149	MOLUCCA PASSAGE
18	14 36 08.1	34.257 S	70.206 W	33 N		0.7	7	CHILE-ARGENTINA BORDER REGION
18	15 01 00.7	21.460 S	177.318 W	328 *	4.8	1.0	43	FIJI ISLANDS REGION
18	16 16 13.5	38.900 N	107.069 W	5 G		0.5	14	COLORADO. ML 2.3 (NEIS).
18	17 20 14.3	38.063 N	27.099 E	10 G		0.9	5	TURKEY
18	17 56 57.3	14.503 N	146.676 E	64 *	5.1	1.0	26	MARIANA ISLANDS
18	17 59 06.2	38.864 N	21.419 E	10 G	4.0	1.4	9	GREECE ML 3.2 (ATH).
18	18 20 49.7	6.808 N	72.969 W	161	4.6	1.0	10	NORTHERN COLOMBIA
18	19 48 36.9	24.075 S	177.433 W	33 N	4.9 4.9	1.5	19	SOUTH OF FIJI ISLANDS
18	20 55 53.5	10.352 N	67.014 W	10	4.8	1.5	59	NEAR COAST OF VENEZUELA. Felt in the Caracas area.
18	21 35 03.6	35.873 N	137.704 E	18		0.9	15	HONSHU, JAPAN. Felt (11 JMA) at Nagoya and (1 JMA) at Iida.
18	22 20 16.7	24.092 S	177.179 W	33 N	5.0	1.2	23	SOUTH OF FIJI ISLANDS
18	22 27 36.3	32.786 S	71.567 W	33 N		1.0	11	NEAR COAST OF CENTRAL CHILE
18	23 16 05.4	44.543 N	149.398 E	33 N	4.7	1.2	37	KURIL ISLANDS
19	00 17 45.7	15.981 S	69.446 W	265		1.3	14	PERU-BOLIVIA BORDER REGION
a 19	00 27 35.9	8.376 N	126.601 E	33 N	5.6 4.9	1.2	174	MINDANAO, PHILIPPINE ISLANDS
19	02 24 29.2	26.403 N	128.800 E	33 N	4.9	1.2	50	RYUKYU ISLANDS
19	02 34 07.3	51.838 N	176.095 W	33 N	4.2	0.4	7	ANDREANOF ISLANDS, ALEUTIAN IS.
19	03 19 34.9	62.131 N	150.821 W	65			21	CENTRAL ALASKA. <AGS-P>.
19	04 05 44.3	43.165 N	26.007 E	29		0.9	33	BULGARIA. ML 3.8 (SKO). Felt (V) at Strazhitsa and (III) at Popova and Asenavo.
19	04 38 15.5	28.095 N	140.645 E	33 N	4.8	1.4	14	BONIN ISLANDS REGION
19	06 03 54.5	39.019 N	28.743 E	13	4.1	1.2	45	TURKEY. ML 4.3 (ATH). Minor damage at Demirci.
19	06 12 45.9	39.052 N	28.727 E	10 G		1.2	11	TURKEY
19	08 13 08.5	38.877 N	107.053 W	5 G		0.4	12	COLORADO. ML 2.1 (NEIS).
19	09 37 01.4	31.89 S	69.07 W	132 ?		0.6	7	SAN JUAN PROVINCE, ARGENTINA
19	10 22 09.6	37.519 N	71.934 E	33 N	5.1	0.8	9	AFGHANISTAN-USSR BORDER REGION
19	12 17 16.5	42.50 N	24.09 E	10 G		1.9	6	BULGARIA
19	12 41 35.6	5.627 S	145.698 E	33 N	4.4	1.5	15	EAST PAPUA NEW GUINEA REGION
19	12 52 41.1	4.122 S	129.324 E	33 N	5.3	1.4	56	BANDA SEA
19	12 54 16.6	60.298 N	5.346 E	10 G		0.5	5	SOUTHERN NORWAY. MD 1.6 (BER).
19	13 29 12.6	34.563 N	25.131 E	19 *	4.4	1.5	37	CRETE. ML 4.4 (ATH).
19	13 35 58.1	2.312 N	126.951 E	33 N	4.4	0.9	9	MOLUCCA PASSAGE
19	16 23 56.6	59.965 N	4.991 E	10 G		0.3	5	SOUTHERN NORWAY. MD 1.7 (BER).
19	17 12 53.9	4.54 S	130.74 E	33 N		0.8	7	BANDA SEA
19	17 29 37.4	38.927 N	107.074 W	5 G		0.4	10	COLORADO. ML 1.6 (NEIS).
19	17 55 55.8	60.089 N	153.234 W	128			19	SOUTHERN ALASKA. <AGS-P>.
19	20 38 47.2	37.477 N	118.272 W	10 G		0.6	15	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (NEIS).
19	20 56 40.4	51.67 N	16.27 E	10 G		0.2	6	POLAND
19	21 06 14.6	33.52 S	72.67 W	33 N		0.3	8	OFF COAST OF CENTRAL CHILE
19	22 41 35.8	12.514 N	124.478 E	98 D	5.3	1.2	72	SAMAR, PHILIPPINE ISLANDS
19	22 42 27.5	38.735 N	27.133 E	10 G		0.5	6	TURKEY
19	22 45 46.6	6.029 S	154.236 E	57	5.4	1.2	59	SOLOMON ISLANDS
19	23 02 21.9	16.063 N	61.032 W	33 N		0.2	6	LEEWARD ISLANDS. ML 2.3 (FDF).
19	23 31 27.0	38.904 N	107.054 W	5 G		0.4	13	COLORADO. ML 1.9 (NEIS).
19	23 53 39.6	37.482 N	118.372 W	6			18	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.4 (BRK).
20	00 23 47.3	38.869 N	25.765 E	10 G		1.2	13	AEGEAN SEA. ML 3.1 (ATH).
20	00 30 59.6	13.374 S	166.918 E	195 ?	4.8	1.3	31	VANUATU ISLANDS
20	00 37 04.8	44.503 N	10.712 E	12		1.4	19	NORTHERN ITALY. ML 3.3 (LDG).
20	01 14 22.9	42.304 N	19.919 E	10 G		1.4	18	YUGOSLAVIA. ML 3.2 (TTG).
20	01 33 11.5	36.00 N	30.83 E	10 G		0.0	5	TURKEY
20	02 37 03.8	40.371 N	24.193 E	10 G		0.8	6	AEGEAN SEA
20	03 18 52.0	33.89 S	72.28 W	33 N		0.4	8	OFF COAST OF CENTRAL CHILE
20	03 49 46.2	37.276 N	118.146 W	5 G		0.8	13	CALIFORNIA-NEVADA BORDER REGION. ML 2.9 (BRK).
20	03 53 24.9	42.355 N	19.976 E	10 G		0.7	5	YUGOSLAVIA. ML 2.3 (TTG).
20	04 34 46.3	17.258 N	63.561 W	21		0.6	9	LEEWARD ISLANDS. ML 3.8 (FDF).
20	04 43 40.1	38.892 N	107.077 W	5 G		0.5	15	COLORADO. ML 2.3 (NEIS). Felt at Crested Butte.
20	04 48 35.0	53.736 N	163.163 W	33 N	4.6	1.2	17	UNIMAK ISLAND REGION
20	05 14 03.9	2.693 S	139.031 E	33 N	5.0	1.1	11	NEAR N. COAST OF WEST IRIAN
20	05 25 17.0	39.646 N	77.632 E	33 N	4.8	1.3	31	SOUTHERN XINJIANG, CHINA
20	07 02 16.8	37.122 N	121.563 W	6			16	CENTRAL CALIFORNIA. <BRK>. ML 3.4 (BRK). Felt at Morgan Hill and Gilroy.
a 20	07 05 01.6	5.325 S	151.331 E	79 G	5.8	1.1	263	NEW BRITAIN REGION. Felt (III) at Arawa, Bougainville. Depth from broadband displacement seismograms.
20	08 22 18.0	41.242 N	7.132 W	10 G		1.3	31	PORTUGAL. MG 3.9 (MDD). Felt (IV) at Torre de Mancorva and (II) in the Douro area.
20	08 39 21.7	61.544 N	146.420 W	30			35	SOUTHERN ALASKA. <AGS-P>.
20	08 42 11.8	6.057 S	152.014 E	33 N	4.7	1.5	7	NEW BRITAIN REGION
20	09 07 45.2	45.59 N	26.48 E	157 ?		0.6	7	ROMANIA
20	09 50 21.0	37.120 N	121.562 W	6 G			13	CENTRAL CALIFORNIA. <BRK>. ML 2.9 (BRK). Felt at Morgan Hill and Gilroy.
20	09 57 05.0	37.118 N	121.565 W	7			17	CENTRAL CALIFORNIA. <BRK>. ML 3.3 (BRK). Felt at Morgan Hill and Gilroy.
a 20	10 09 32.6	16.941 S	173.507 W	33 N	5.6 4.7	1.3	160	TONGA ISLANDS
20	10 28 18.0	6.30 S	128.06 E	33 N		0.5	6	BANDA SEA
20	11 49 32.7	26.10 S	27.33 E	5 G		1.5	9	REPUBLIC OF SOUTH AFRICA. MG 3.6 (BUL).
20	12 12 22.9	2.240 N	127.039 E	33 N	4.2	1.2	7	MOLUCCA PASSAGE
20	14 43 49.0	39.179 N	27.858 E	10 G		0.1	5	TURKEY
20	16 37 46.6	5.844 S	150.234 E	74	5.0	1.1	33	NEW BRITAIN REGION
20	17 18 39.8	62.120 N	151.191 W	88			14	CENTRAL ALASKA. <AGS-P>.
20	17 27 23.8	11.850 N	43.372 E	10 G		0.6	5	ETHIOPIA. MG 4.0 (ARO).
20	17 31 24.9	49.814 N	1.175 E	10 G		0.6	15	FRANCE. ML 2.7 (LDG).
20	17 31 33.7	31.44 S	69.35 W	33 N		1.4	8	SAN JUAN PROVINCE, ARGENTINA
20	18 08 43.9	17.345 S	172.538 W	33 N	5.2 4.9	1.5	19	TONGA ISLANDS REGION
a 20	18 15 38.8	2.069 N	126.534 E	33 N	5.4 4.5	1.1	118	MOLUCCA PASSAGE
20	18 54 12.4	61.798 N	124.403 W	10 G	4.4	1.3	11	NORTHWEST TERRITORIES, CANADA
20	18 55 11.1	59.126 N	153.782 W	97			13	SOUTHERN ALASKA. <AGS-P>.
20	20 21 32.9	38.892 N	107.068 W	5 G		0.4	12	COLORADO. ML 2.7 (NEIS). Felt at Crested Butte.
20	21 15 46.4	1.973 S	87.088 E	10 G	5.3	0.9	154	SOUTH INDIAN OCEAN

a	20	21	23	54.8	34.572 N	91.633 E	33 N	5.4	6.5	1.2	191	QINGHAI PROVINCE, CHINA
	20	22	01	37.0	31.405 N	140.390 E	98 D	4.8		1.2	54	SOUTH OF HONSHU, JAPAN
	20	22	09	51.1*	29.563 S	71.672 W	33 N			1.5	16	NEAR COAST OF CENTRAL CHILE
	20	22	32	05.6	34.424 N	91.742 E	33 N	4.8		1.5	38	QINGHAI PROVINCE, CHINA
	20	22	47	29.4*	60.253 N	141.122 W	12				23	SOUTHEASTERN ALASKA. <AGS-P>.
	20	23	44	19.7?	65.90 N	155.43 W	33 N			0.2	6	ALASKA. ML 3.9 (PMR).
	21	01	04	29.2*	37.533 N	121.675 W	6				14	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK).
	21	01	23	22.0	7.933 N	72.920 W	10 G	4.6		1.3	25	NORTHERN COLOMBIA
	21	01	34	17.3	36.472 N	71.083 E	235 D	5.4		0.9	267	AFGHANISTAN-USSR BORDER REGION. Felt (III) at Dushanbe and Khorog and (II) at Andizhan, USSR. Felt at Peshawar, Pakistan.
	21	02	11	08.5*	45.554 N	26.503 E	140 G			0.7	7	ROMANIA
	21	02	58	36.8	24.244 S	66.935 W	190	4.6		1.2	33	SALTA PROVINCE, ARGENTINA
	21	03	00	36.8*	27.504 N	139.967 E	469 ?	4.5		0.7	15	BONIN ISLANDS REGION
	21	04	08	38.2*	34.822 S	178.988 E	33 N	5.2		1.2	27	SOUTH OF KERMADEC ISLANDS
	21	04	18	31.4?	66.12 N	155.75 W	33 N			0.5	6	ALASKA. ML 4.0 (PMR).
	21	06	11	23.1*	41.955 N	141.904 E	80 ?			1.4	6	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Urukawa.
	21	06	37	09.1	53.819 N	160.443 E	33 N	5.4	3.9	0.9	131	NEAR EAST COAST OF KAMCHATKA. Felt (IV) at Petropavlovsk-Kamchatskiy.
	21	07	25	56.3*	39.498 N	28.358 E	5 G			1.5	5	TURKEY
	21	08	09	45.3*	62.298 N	151.148 W	81				16	CENTRAL ALASKA. <AGS-P>.
	21	09	05	21.2?	59.37 N	6.60 E	5 G			1.1	6	SOUTHERN NORWAY. MD 2.1 (BER).
	21	09	24	01.2*	12.217 S	76.577 W	33 N			0.2	5	NEAR COAST OF PERU. Felt (II) at Camacho.
	21	09	24	25.5?	2.13 N	126.53 E	33 N			0.8	8	MOLUCCA PASSAGE
	21	09	26	37.5	39.091 N	27.679 E	10 G			0.4	6	TURKEY
	21	09	34	39.9?	5.98 S	35.55 W	10 G	4.2		1.2	10	BRAZIL. Felt at Joao Camara and Natal.
	21	09	50	15.4?	34.65 S	179.30 E	33 N	4.7		0.9	5	SOUTH OF KERMADEC ISLANDS
	21	10	00	47.1*	60.134 N	140.994 W	13				14	SOUTHEASTERN ALASKA. <AGS-P>.
	21	10	48	03.1?	4.77 S	130.65 E	33 N			1.3	6	BANDA SEA
	21	11	27	10.4	55.855 N	3.137 W	10			0.4	12	UNITED KINGDOM. ML 2.5 (ESK). Felt (IV) at Rosewell. Also felt at Lasswade and Roslin, Scotland.
	21	11	29	49.9?	3.45 S	139.06 E	33 N			1.6	5	WEST IRIAN
	21	11	46	08.0*	1.612 S	77.914 W	132 ?	4.4		0.6	10	ECUADOR
	21	12	24	31.7*	51.689 N	175.745 W	33 N	4.3		0.4	11	ANDREANOF ISLANDS, ALEUTIAN IS.
	21	12	40	10.8	0.076 N	123.995 E	113 *	4.7		1.1	37	MINAHASSA PENINSULA
	21	13	13	52.8*	39.122 N	27.675 E	10 G			0.5	5	TURKEY
	21	13	46	35.8?	16.05 S	35.95 E	10 G			0.1	4	MALAWI. MG 3.4 (BUL). Felt (III) at Mulanje.
	21	13	48	37.7*	4.570 S	104.603 E	217 *	4.3		0.7	9	SOUTHERN SUMATERA
	21	14	09	31.0*	4.714 S	153.426 E	89 *	4.4		0.8	8	NEW IRELAND REGION
	21	14	11	31.6	38.903 N	107.063 W	5 G			0.5	12	COLORADO. ML 1.9 (NEIS). Felt at Crested Butte.
	21	14	41	24.2	4.787 S	151.869 E	131			0.8	16	NEW BRITAIN REGION
	21	16	42	43.2?	10.62 S	166.07 E	119 ?	4.2		0.8	10	SANTA CRUZ ISLANDS
a	21	17	01	27.2*	9.071 S	109.551 W	10 G	5.0	5.3	1.3	34	NORTHERN EASTER I. CORDILLERA
	21	17	10	30.4*	9.031 S	109.677 W	10 G	4.9	4.9	1.0	30	NORTHERN EASTER I. CORDILLERA
	21	17	38	10.6	1.901 N	126.708 E	33 N	4.7		1.2	25	MOLUCCA PASSAGE
	21	17	51	00.0	40.717 N	25.785 E	10 G			1.1	15	AEGEAN SEA
	21	17	55	29.4	1.603 N	127.562 E	44 *	5.2		0.9	28	HALMAHERA
	21	18	33	42.8*	73.807 N	9.490 E	10 G	4.5		1.0	15	GREENLAND SEA
	21	18	34	02.0?	45.66 N	150.90 E	33 N	4.6		0.7	12	KURIL ISLANDS
	21	19	13	28.0?	51.27 N	16.14 E	10 G			0.9	6	POLAND. ML 3.0 (KBA), 3.0 (VKA).
	21	19	19	35.3*	60.408 N	151.150 W	51				26	KENAI PENINSULA, ALASKA. <AGS-P>.
	21	19	24	14.2*	23.036 S	69.010 W	159 *			1.3	9	NORTHERN CHILE
	21	19	40	08.0*	37.327 N	20.276 E	10 G	3.7		1.1	11	IONIAN SEA. ML 3.8 (ATH).
	21	19	51	38.4*	17.519 S	168.465 E	27 *	4.6		1.4	42	VANUATU ISLANDS
	21	21	34	22.6*	22.233 S	67.282 W	196 ?			1.3	6	CHILE-BOLIVIA BORDER REGION
	21	23	48	56.0*	2.668 N	127.777 E	33 N	5.0		0.8	10	MOLUCCA PASSAGE
	22	01	10	55.0*	8.867 S	109.838 W	10 G	4.6	4.4	1.3	18	NORTHERN EASTER I. CORDILLERA
	22	01	40	18.8*	6.205 S	149.553 E	72 *	4.5		1.2	8	NEW BRITAIN REGION
	22	02	15	48.9*	23.904 S	65.878 W	271 *			0.6	7	JUJUY PROVINCE, ARGENTINA
	22	03	16	03.2?	17.12 N	61.30 W	33 N			0.5	5	LEEWARD ISLANDS. ML 2.7 (PAG).
	22	04	13	47.3*	1.138 N	100.153 E	216	4.9		1.2	19	NORTHERN SUMATERA
	22	05	15	50.6?	33.46 S	72.00 W	33 N			0.3	7	NEAR COAST OF CENTRAL CHILE
	22	05	40	36.7	6.152 S	130.189 E	149 *	4.9		0.7	18	BANDA SEA
	22	06	45	58.3	40.162 N	28.279 E	10 G			0.6	10	TURKEY
	22	06	54	55.5*	14.554 S	174.807 E	642 *	4.7		0.8	24	FIJI ISLANDS REGION
	22	09	01	22.9*	60.398 N	153.017 W	120				14	SOUTHERN ALASKA. <AGS-P>.
	22	09	47	53.6*	8.407 N	103.636 W	10 G	4.5	3.8	0.7	13	OFF COAST OF MEXICO
	22	09	54	25.8?	8.58 N	103.42 W	10 G	4.5	4.0	1.0	16	OFF COAST OF MEXICO
	22	11	10	28.6	38.897 N	107.072 W	5 G			0.4	13	COLORADO. ML 2.2 (NEIS).
	22	11	32	57.3?	60.70 N	4.59 E	10 G			0.5	4	SOUTHERN NORWAY. MD 1.4 (BER).
	22	11	35	57.1?	46.00 N	14.32 E	10 G			0.7	4	YUGOSLAVIA
	22	12	04	41.9*	7.212 N	126.965 E	33 N	4.6		1.0	19	MINDANAO, PHILIPPINE ISLANDS
	22	12	19	28.6*	1.481 N	126.663 E	33 N	4.5		1.0	18	MOLUCCA PASSAGE
	22	12	23	48.8?	30.78 S	71.07 W	33 N			0.6	5	NEAR COAST OF CENTRAL CHILE
	22	12	25	51.9	1.675 N	126.843 E	33 N	4.8		1.1	47	MOLUCCA PASSAGE
	22	12	36	33.5*	7.433 S	126.856 E	295 *			1.0	9	BANDA SEA
	22	13	26	33.3	37.420 N	110.574 W	5 G			0.8	22	UTAH. ML 4.0 (SLC), 3.8 (NEIS). Felt (V) in the Monument Valley area.
	22	13	27	42.9*	56.067 S	27.039 W	33 N	5.1		1.0	12	SOUTH SANDWICH ISLANDS REGION
	22	13	39	33.3	34.595 N	91.790 E	10 G	4.7		1.1	26	QINGHAI PROVINCE, CHINA
	22	14	31	52.6?	52.08 N	170.69 W	33 N	4.2		0.1	6	FOX ISLANDS, ALEUTIAN ISLANDS
	22	14	44	17.0	36.611 N	116.366 W	5 G			0.5	18	CALIFORNIA-NEVADA BORDER REGION. ML 3.1 (NEIS).
	22	16	50	39.1*	35.121 N	29.517 E	33 N			1.0	5	EASTERN MEDITERRANEAN SEA
	22	16	54	49.6	36.636 N	121.125 W	10 G			0.8	12	CENTRAL CALIFORNIA. ML 2.5 (BRK).
	22	20	12	28.2	1.818 N	126.676 E	35 *	4.6		1.2	44	MOLUCCA PASSAGE
	22	20	32	10.4*	45.707 N	2.933 E	10 G			1.0	12	FRANCE. ML 2.5 (LDG).
	22	23	32	56.6	36.339 N	70.752 E	144 *	4.7		1.0	47	HINDU KUSH REGION. Felt (III) at Ishkashim, Khorog and Dushanbe, USSR.
	22	23	34	44.6*	7.869 N	94.256 E	83 *	4.4		1.1	9	NICOBAR ISLANDS REGION
	23	00	05	30.4*	34.037 S	71.350 W	33 N			0.2	8	NEAR COAST OF CENTRAL CHILE
	23	00	15	06.0*	34.480 N	92.030 E	33 N			1.6	6	QINGHAI PROVINCE, CHINA
	23	00	36	23.3	42.347 N	19.975 E	10 G			0.9	6	YUGOSLAVIA. MD 2.4 (TTG).
	23	02	54	18.4?	36.43 N	29.28 E	10 G			1.5	6	TURKEY

23	02 54 24.9*	38.155 N	4.090 W	10 G	1.6	6	SPAIN. ML 3.1 (TOL).
23	03 01 29.9	37.528 N	118.331 W	5 G	0.7	22	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK). Felt (III) at Bishop, California.
23	03 52 16.4%	45.711 N	2.941 E	10 G	0.7	11	FRANCE. ML 2.8 (LDG).
23	04 13 57.0?	36.27 N	139.86 E	104 4.0	1.1	8	HONSHU, JAPAN. Felt (II JMA) at Utsunomiya.
23	04 49 51.9*	14.776 N	147.270 E	33 N 4.1	1.2	14	MARIANA ISLANDS REGION
23	05 13 03.0	38.905 N	107.095 W	5 G	0.4	10	COLORADO. ML 2.4 (NEIS). Felt at Crested Butte.
23	05 14 43.2?	4.15 N	77.14 W	112 ? 4.2	1.0	14	NEAR WEST COAST OF COLOMBIA
23	06 02 07.3*	30.817 S	117.049 E	10 G	0.1	5	WESTERN AUSTRALIA
23	06 28 40.7?	51.02 N	15.67 E	10 G	0.9	5	POLAND
23	11 25 57.9	22.641 S	170.670 E	33 N 4.6	1.4	36	LOYALTY ISLANDS REGION
23	11 40 43.8%	60.061 N	152.924 W	99	4.4	44	SOUTHERN ALASKA. <AGS-P>.
23	11 40 50.2?	0.88 N	126.33 E	33 N	1.0	6	MOLUCCA PASSAGE
23	11 42 23.7*	40.724 S	43.208 E	10 G 4.8	0.9	14	ATLANTIC-INDIAN RISE
23	11 55 12.0	53.547 N	165.855 W	33 N 4.8	1.1	72	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.2 (PMR).
23	12 23 01.8*	1.105 N	126.533 E	33 N	0.4	7	MOLUCCA PASSAGE
23	12 26 33.1%	38.585 N	4.137 W	0 G	0.6	5	SPAIN. Probable explosion.
23	14 35 27.2	31.812 S	69.449 W	124 4.1	1.1	17	SAN JUAN PROVINCE, ARGENTINA
23	14 43 24.5	42.366 N	19.946 E	10 G	0.5	9	YUGOSLAVIA. MD 2.7 (TTG).
23	14 45 47.6*	40.820 S	43.168 E	10 G 4.9	1.1	25	ATLANTIC-INDIAN RISE
23	15 17 27.3	44.460 N	10.663 E	10 G	1.2	36	NORTHERN ITALY. ML 3.9 (KBA), 3.7 (LDG). MD 3.5 (FIR), 3.5 (TRI).
23	16 13 55.8*	6.815 S	154.931 E	41 * 4.8	0.9	14	SOLOMON ISLANDS
23	16 29 33.0?	33.90 S	71.82 W	33 N	1.0	9	NEAR COAST OF CENTRAL CHILE
a 23	17 11 47.1	31.675 N	40.938 W	10 G 5.3 5.2	1.0	133	NORTH ATLANTIC RIDGE
23	17 13 27.8*	36.618 N	25.386 E	33 N	0.4	5	DODECANESE ISLANDS. ML 3.7 (ATH).
23	17 23 29.8	31.685 N	40.908 W	10 G 4.8 5.1	0.9	55	NORTH ATLANTIC RIDGE
23	17 51 50.5*	22.614 S	170.591 E	33 N 4.4	1.5	19	LOYALTY ISLANDS REGION
23	18 18 04.7*	34.702 S	72.303 W	33 N 4.4	1.3	20	NEAR COAST OF CENTRAL CHILE
23	18 27 35.9	1.900 N	126.633 E	33 N 5.0	1.3	30	MOLUCCA PASSAGE
23	19 53 49.9*	2.312 N	127.173 E	33 N 4.8	1.3	16	MOLUCCA PASSAGE
23	20 06 29.7	5.794 S	35.410 W	10 G	0.8	8	BRAZIL
23	20 22 11.1	40.594 N	23.920 E	10 G	1.3	15	GREECE
23	21 49 14.6?	21.09 S	70.74 W	33 N	0.3	5	NEAR COAST OF NORTHERN CHILE
23	22 29 50.3%	45.681 N	2.982 E	10 G	0.9	10	FRANCE. ML 2.5 (LDG).
a 23	23 47 48.8	34.549 S	179.288 E	32 D 6.1 6.5	1.2	115	SOUTH OF KERMADEC ISLANDS. Ms 6.3 (BRK).
24	01 08 55.0	38.908 N	24.271 E	11	0.9	35	AEGEAN SEA. ML 3.9 (ATH).
24	01 55 22.4?	40.81 N	49.66 E	33 N 4.5	1.2	6	EASTERN CAUCASUS
24	02 09 43.4*	2.201 N	127.194 E	33 N 4.6	1.3	10	MOLUCCA PASSAGE
24	02 35 00.2	36.371 N	138.383 E	25 4.8	1.4	59	HONSHU, JAPAN. Felt (III JMA) at Nogano and (II JMA) at Maeboshi.
24	03 59 17.5	38.967 N	107.141 W	5 G	0.3	11	COLORADO. ML 2.1 (NEIS). Felt at Crested Butte.
24	04 00 35.1?	28.45 N	56.41 E	33 N	1.1	6	SOUTHERN IRAN
24	04 42 53.0*	2.951 S	140.466 E	33 N	1.5	8	NEAR N. COAST OF WEST IRIAN. Felt (III) at Jayapura.
24	04 54 32.1	21.645 S	126.709 E	10 G 3.8	1.3	12	WESTERN AUSTRALIA
24	05 22 16.7?	22.30 S	170.36 E	33 N 4.1	1.5	5	LOYALTY ISLANDS REGION
24	06 52 44.6*	2.143 N	126.839 E	33 N 5.0	0.9	17	MOLUCCA PASSAGE
24	07 08 15.1?	23.64 S	179.98 E	524 ? 4.5	0.9	5	SOUTH OF FIJI ISLANDS
24	07 39 36.1	14.838 N	99.163 E	10 G	0.9	6	SOUTHEAST ASIA
24	08 05 00.6?	40.73 N	30.36 E	10 G	1.3	5	TURKEY
24	08 19 32.6?	37.86 S	146.53 E	10 G	0.5	5	NEAR S.E. COAST OF AUSTRALIA. ML 3.3 (BFD), 3.0 (TOO).
24	08 42 42.3?	14.13 S	167.95 E	33 N 4.3	1.3	6	VANUATU ISLANDS
24	09 04 06.1%	39.288 N	27.625 E	10 G	1.7	6	TURKEY
24	09 17 31.3?	2.47 N	126.80 E	104 ? 4.0	1.3	8	MOLUCCA PASSAGE
24	09 20 39.8*	2.084 N	127.007 E	33 N 4.3	1.2	7	MOLUCCA PASSAGE
24	09 37 23.4?	2.37 N	127.27 E	33 N 4.2	1.5	10	MOLUCCA PASSAGE
24	09 53 28.6*	6.878 S	130.453 E	33 N	1.5	10	BANDA SEA
24	10 13 33.9*	14.627 N	146.340 E	97 * 4.6	1.0	15	MARIANA ISLANDS
o 24	10 45 00.2	24.056 S	177.137 W	33 N 5.4 5.1	1.0	63	SOUTH OF FIJI ISLANDS
24	10 49 43.0%	61.765 N	150.035 W	45	3.5	35	SOUTHERN ALASKA. <AGS-P>.
24	10 54 21.0	36.088 N	32.133 E	100 4.3	0.9	45	TURKEY
24	11 59 21.7*	0.267 S	123.599 E	172 * 3.9	0.2	6	MINAHASSA PENINSULA
o 24	13 03 35.7	27.271 S	176.418 W	33 N 5.3 4.9	1.1	69	KERMADEC ISLANDS REGION
24	14 36 55.3%	61.611 N	146.416 W	30	3.0	30	SOUTHERN ALASKA. <AGS-P>.
24	16 15 38.1	38.895 N	107.063 W	5 G	0.5	15	COLORADO. ML 2.4 (NEIS).
24	17 29 27.1*	4.648 S	128.601 E	33 N 4.0	1.4	14	BANDA SEA
24	17 29 42.3	37.584 N	118.438 W	5 G	0.4	10	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (NEIS).
24	17 37 44.9	35.842 N	72.942 E	45 * 4.8 4.3	1.0	87	PAKISTAN
24	17 54 02.8*	5.718 S	142.182 E	33 N 3.2	1.6	5	PAPUA NEW GUINEA
24	18 04 24.5	45.790 N	111.568 W	10 G	0.4	16	MONTANA. ML 3.9 (NEIS). Felt (IV) at Monhotton and Willow Creek. Felt (III) at Three Forks.
24	19 28 32.5*	8.645 S	112.456 E	124 * 3.6	0.8	7	JAVA
o 24	19 31 11.8	11.204 N	142.232 E	94 * 5.0	1.2	38	SOUTH OF MARIANA ISLANDS
24	19 38 10.9	23.894 S	177.201 W	33 N 5.3 5.1	1.2	35	SOUTH OF FIJI ISLANDS
24	21 35 56.1%	59.810 N	153.408 W	117	3.5	35	SOUTHERN ALASKA. <AGS-P>.
24	21 37 10.2%	59.819 N	153.415 W	119	2.7	27	SOUTHERN ALASKA. <AGS-P>.
24	21 39 08.3?	19.86 S	178.28 W	605 * 4.5	1.3	11	FIJI ISLANDS REGION
24	22 05 32.0*	36.583 N	1.159 E	5 G	0.3	6	ALGERIA. MG 3.3 (ABA).
24	22 55 49.9%	40.828 N	28.470 E	10 G	0.8	6	TURKEY
24	23 03 22.7?	48.16 N	1.87 W	10 G	0.4	5	FRANCE. ML 2.4 (LDG).
o 24	23 46 51.2	2.100 N	126.873 E	35 * 5.3 5.1	1.3	97	MOLUCCA PASSAGE
25	00 13 38.7	2.066 N	126.801 E	33 N 5.0	1.2	38	MOLUCCA PASSAGE
25	00 19 08.9	1.984 N	126.705 E	33 N 4.7	0.9	26	MOLUCCA PASSAGE
25	00 56 29.5*	34.688 N	91.497 E	33 N	1.3	9	QINGHAI PROVINCE, CHINA
25	01 21 41.6*	36.815 N	44.828 E	10 G	0.9	6	IRAN-IRAQ BORDER REGION
25	01 21 56.0*	36.980 N	44.916 E	10 G 4.6 4.0	1.2	22	IRAN-IRAQ BORDER REGION. Felt in the Orumiyeh-Oshnoviyeh area, Iran.
25	02 38 55.8*	36.641 N	58.943 E	33 N	1.5	7	IRAN. Felt in the Neyshabur area.
25	03 30 17.7?	36.27 N	13.39 W	10 G	0.8	18	NORTH ATLANTIC OCEAN
25	03 59 19.6?	18.83 S	173.38 E	33 N 4.0	1.4	7	FIJI ISLANDS REGION
25	04 08 06.6*	38.839 N	24.322 E	10 G	1.1	5	AEGEAN SEA. ML 3.2 (ATH).
25	05 41 34.2%	40.768 N	29.129 E	10 G	1.2	7	TURKEY
25	06 21 30.1%	62.711 N	148.768 W	75	4.3	43	CENTRAL ALASKA. <AGS-P>.

25	06 35 13.9	23.914 S	177.189 W	33 N	5.0 4.9	0.8	17	SOUTH OF FIJI ISLANDS
25	08 13 27.4	37.617 N	118.422 W	5 G		0.8	8	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS).
25	08 20 58.0	37.642 N	118.394 W	5 G		0.6	9	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (NEIS).
25	09 07 50.3	4.284 S	142.838 E	86 ?		0.9	6	PAPUA NEW GUINEA
25	09 11 23.7	39.103 N	27.652 E	10 G		0.3	5	TURKEY
25	10 55 20.4	44.584 N	9.848 E	10 G		0.6	9	NORTHERN ITALY. ML 2.7 (LDG).
25	11 33 31.2	19.535 S	175.108 W	79 *	4.9	0.8	37	TONGA ISLANDS
25	11 47 51.2	37.747 N	121.968 W	4			9	CENTRAL CALIFORNIA. <BRK>. ML 2.4 (BRK). Felt at Danville and San Ramon.
25	14 17 53.6	31.798 S	68.120 W	121 *	4.5	1.0	17	SAN JUAN PROVINCE, ARGENTINA. Felt (III) at San Juan.
25	14 41 34.1	30.73 S	71.84 W	33 N		1.5	9	NEAR COAST OF CENTRAL CHILE
a 25	15 40 31.5	16.316 S	173.050 W	33 N	4.9 5.0	1.0	60	TONGA ISLANDS
25	16 28 45.4	4.95 S	130.89 E	33 N	3.8	1.2	5	BANDA SEA
25	17 06 36.9	39.638 N	119.803 W	5 G			8	NEVADA. <REN-P>. ML 2.8 (NEIS). Felt (III) at Sparks. Also felt at Reno.
25	17 25 04.1	10.195 N	67.074 W	10 G	4.9 4.3	1.1	38	NEAR COAST OF VENEZUELA. Felt at Caracas and Maracay.
25	17 57 42.1	39.638 N	119.803 W	5 G			7	NEVADA. <REN-P>. ML 2.5 (NEIS). Felt at Reno and Sparks.
25	18 17 35.4	42.714 N	0.079 W	10 G		0.6	16	PYRENEES. ML 3.2 (LDG).
25	18 20 09.8	28.277 N	140.577 E	26 *	5.1	1.2	38	BONIN ISLANDS REGION
25	18 28 47.8	53.852 N	159.898 E	33 N	4.6	1.3	13	NEAR EAST COAST OF KAMCHATKA
25	18 42 16.5	44.936 N	141.568 E	33 N	4.3	0.7	8	HOKKAIDO, JAPAN REGION
25	19 15 24.9	42.865 N	17.929 E	10 G		1.0	6	ADRIATIC SEA. MD 2.6 (TTG).
25	20 49 34.1	4.889 S	152.798 E	33 N		0.5	5	NEW BRITAIN REGION
25	22 14 48.4	55.97 N	160.79 E	33 N	4.6	1.0	6	KAMCHATKA
25	22 54 51.1	32.69 S	71.45 W	33 N		1.1	6	NEAR COAST OF CENTRAL CHILE
25	23 27 54.3	61.352 N	150.333 W	47	4.5		53	SOUTHERN ALASKA. <AGS-P>. Felt (III) at Anchorage, Palmer and Willow. Felt (II) at Tokkeetno.
26	02 06 02.6	38.900 N	107.041 W	5 G		0.7	18	COLORADO. ML 3.1 (NEIS). Small precursor about 15 seconds prior to this event. Felt (III) about 9 miles south of Corbendale. Felt in the Aspen-Crested Butte-Redstone area.
26	03 20 09.3	10.674 N	62.895 W	10 G	4.1	1.1	17	NEAR COAST OF VENEZUELA. Felt at Pilar and Rio Caribe.
26	03 36 22.3	10.122 N	67.040 W	10 G		1.2	7	NEAR COAST OF VENEZUELA
26	04 02 28.3	23.285 S	66.474 W	251 *	3.7	1.2	8	JUJUY PROVINCE, ARGENTINA
26	06 42 22.2	40.336 N	19.440 E	10 G		1.4	14	ALBANIA. MG 3.5 (TIR). Felt (IV) at Rexhepaj, Mertiraj, Gernec and Kacul.
26	06 44 40.1	55.980 S	27.846 W	154 ?	5.3	1.0	56	SOUTH SANDWICH ISLANDS REGION
26	07 13 56.6	24.872 N	123.365 E	117 ?		1.4	11	SOUTHWESTERN RYUKYU ISLANDS
26	07 39 55.9	16.298 N	98.082 W	33 N	4.5	1.3	22	NEAR COAST OF GUERRERO, MEXICO
26	07 53 33.2	5.990 S	131.063 E	123 *	4.8	0.6	10	BANDA SEA
26	08 26 45.0	30.782 S	69.288 W	33 N		0.6	7	CHILE-ARGENTINA BORDER REGION
f 26	09 43 00.3	37.724 N	101.496 E	8 G	6.2 5.9	1.1	346	QINGHAI PROVINCE, CHINA. Minor damage at Huzuo and Menyuan. Felt in the Gulang-Lonzhong-Zhangye area, Ganzu Province. Depth from broadband displacement seismograms.
26	10 29 58.9	37.675 N	101.585 E	10 G	5.4	0.9	119	QINGHAI PROVINCE, CHINA
26	12 24 44.1	40.278 N	127.247 W	5 G			17	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 4.0 (BRK).
26	13 11 25.7	37.693 N	101.718 E	23	5.0	1.1	41	QINGHAI PROVINCE, CHINA
26	13 15 01.9	6.214 S	152.788 E	48 *	4.6	1.1	14	NEW BRITAIN REGION
26	13 37 41.6	45.015 N	7.401 E	10 G		1.0	16	NORTHERN ITALY. ML 3.0 (LDG).
26	14 29 59.3	31.57 S	71.81 W	33 N		1.2	7	NEAR COAST OF CENTRAL CHILE
26	16 03 25.0	36.093 N	77.921 E	33 N	4.9	1.1	47	KASHMIR-XINJIANG BORDER REGION
26	16 41 24.2	38.340 N	89.790 W	5 G			17	SOUTHERN ILLINOIS. <SLM-P>. mbLg 3.7 (NEIS). Felt (V) at Belleville, Lenzburg and Moriso. Felt (IV) at Alhambra, Baldwin, Coulterville, Hecker, Lebanon, Modoc, New Athens, New Memphis, Prairie du Rocher, Smithton, St. Jacob, Summerfield and Troy.
26	17 16 49.8	36.38 N	78.19 E	33 N	4.1	1.4	5	KASHMIR-XINJIANG BORDER REGION
26	17 52 55.9	60.718 N	5.571 E	10 G		0.3	6	SOUTHERN NORWAY. MD 1.8 (BER).
26	18 10 49.8	36.564 N	70.976 E	233 *	4.8	1.0	38	HINDU KUSH REGION
26	19 03 49.7	2.286 N	126.988 E	33 N	4.6	1.0	11	MOLUCCA PASSAGE
26	19 07 20.7	37.553 N	118.395 W	5 G		0.7	16	CALIFORNIA-NEVADA BORDER REGION. ML 3.4 (BRK).
26	19 21 31.6	60.627 N	4.851 E	10 G		0.2	6	SOUTHERN NORWAY. MD 1.7 (BER).
26	19 36 15.7	56.257 N	164.020 E	33 N	4.7	0.6	12	KOMANDORSKY ISLANDS REGION
a 26	21 52 26.6	15.192 S	173.481 W	21 D	5.6 5.8	1.2	134	TONGA ISLANDS
26	21 58 02.6	62.187 N	148.503 W	35			25	CENTRAL ALASKA. <AGS-P>.
26	22 11 39.0	15.103 S	173.467 W	33 N	5.2 5.7	1.3	61	TONGA ISLANDS
26	23 03 45.7	31.682 S	71.104 W	53 D	5.4 5.7	1.0	79	NEAR COAST OF CENTRAL CHILE. Felt (III) along the coast and at Santiago.
27	01 15 52.5	2.24 N	126.82 E	33 N	4.2	1.3	11	MOLUCCA PASSAGE
27	01 33 19.1	41.203 N	22.317 E	10 G		0.7	8	YUGOSLAVIA
27	02 55 23.3	38.919 N	21.788 E	10 G	3.9	0.9	14	GREECE. ML 3.3 (ATH).
27	03 54 40.4	60.071 N	153.073 W	116			18	SOUTHERN ALASKA. <AGS-P>.
27	05 24 48.2	42.325 N	20.007 E	10 G		0.9	11	YUGOSLAVIA. MD 2.9 (TTG).
27	05 59 56.9	15.010 N	146.898 E	33 N	4.5	0.7	12	MARIANA ISLANDS
27	06 35 13.3	42.388 N	19.912 E	10 G		0.5	7	YUGOSLAVIA. ML 2.3 (TTG).
27	07 44 22.7	45.865 N	27.123 E	33 N		1.7	7	ROMANIA
27	08 47 17.7	32.059 S	71.556 W	33 N		1.0	9	NEAR COAST OF CENTRAL CHILE
27	09 20 40.9	37.598 N	118.457 W	13			21	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.3 (BRK).
27	10 41 50.9	34.162 S	177.381 W	33 N	5.3	1.1	36	SOUTH OF KERMADEC ISLANDS
27	11 16 41.7	36.118 N	139.705 E	70	4.3	0.9	15	HONSHU, JAPAN. Felt (III JMA) at Utsunomiya, (II JMA) at Mito and (I JMA) at Maebashi, Tokyo and Yokohama.
27	11 45 47.5	14.924 N	146.931 E	33 N	5.1 4.8	1.0	73	MARIANA ISLANDS
27	13 15 22.6	37.703 N	101.787 E	10 G	4.3	1.3	17	QINGHAI PROVINCE, CHINA
27	13 35 27.8	39.474 N	28.332 E	10 G		1.5	5	TURKEY
27	14 12 10.4	59.025 N	142.758 W	30 G	4.5		59	GULF OF ALASKA. <AGS-P>. ML 4.3 (PMR).
27	14 20 26.6	53.601 N	160.111 E	33 N	5.0	0.7	18	NEAR EAST COAST OF KAMCHATKA
27	15 41 53.5	16.183 S	34.143 E	10 G	4.5	1.4	10	MOZAMBIQUE. Felt (III) at Chilika, Malawi.
27	15 54 09.5	60.29 N	5.44 E	10 G		0.2	4	SOUTHERN NORWAY. MD 1.6 (BER).
27	16 15 05.0	51.177 N	15.790 E	10 G		1.6	8	POLAND. ML 3.5 (VKA), 3.3 (KBA).
27	17 28 40.9	44.98 N	28.51 E	5 G		1.3	5	ROMANIA
27	18 06 56.3	35.160 N	105.094 W	5 G		1.2	8	NEW MEXICO. ML 3.2 (NEIS), mbLg 3.0 (TUL). Felt at

27	18 36 24.9	6.215 S	105.145 E	76 *	5.2	1.0	40	Anton Chico and Las Vegas.
27	20 15 41.87	0.58 S	16.07 W	10 G	4.6	0.2	5	SUNDA STRAIT
27	20 41 31.8	2.350 S	138.374 E	33 N	5.2	1.2	55	NORTH OF ASCENSION ISLAND
27	20 48 34.17	38.73 N	22.17 E	10 G		1.5	5	WEST IRIAN
27	21 04 01.37	17.79 S	177.55 W	289 ?	4.3	1.0	14	GREECE
27	21 08 34.0	12.937 S	166.299 E	33 N	5.1	0.8	21	FIJI ISLANDS REGION
27	21 35 52.2	38.884 N	107.057 W	5 G		0.4	12	SANTA CRUZ ISLANDS
27	21 36 29.3	24.312 S	67.238 W	192 *		1.1	13	COLORADO. ML 2.3 (NEIS).
27	22 23 37.5%	40.813 N	28.152 E	10 G		0.8	7	CHILE-ARGENTINA BORDER REGION
27	23 44 17.1	4.567 S	76.149 W	125 D	4.7	1.0	46	TURKEY
27	23 46 03.0*	34.503 S	70.611 W	119 ?		0.1	9	NORTHERN PERU
27	23 51 50.4*	33.604 S	70.590 W	68 ?		0.4	8	CHILE-ARGENTINA BORDER REGION
28	00 28 24.6%	39.448 N	28.858 E	10 G		0.5	5	CHILE-ARGENTINA BORDER REGION
28	01 09 53.6	34.664 N	91.710 E	33 N		0.6	8	TURKEY
28	02 57 29.87	37.42 N	3.47 W	5 G		0.3	4	QINGHAI PROVINCE, CHINA
28	03 21 09.2*	46.907 N	121.865 W	10 G		1.3	5	SPAIN. MG 2.6 (MDD).
28	04 43 08.27	19.35 N	109.43 W	10 G	4.1	0.7	16	WASHINGTON. ML 2.4 (NEIS).
28	06 38 20.0*	38.488 N	25.012 E	10 G		0.8	6	REVILLA GIGEDO ISLANDS REGION
28	10 14 18.0%	32.585 N	117.310 W	5 G			6	AEGEAN SEA. ML 3.3 (ATH).
							11	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.7 (PAS).
								Felt (V) at San Diego and Solana Beach, California.
								Felt (III) at Spring Valley, California.
28	10 23 11.5*	29.315 N	129.697 E	33 N		1.7	5	RYUKYU ISLANDS
28	11 47 26.3	62.514 N	124.086 W	10 G	4.2	0.7	9	NORTHWEST TERRITORIES, CANADA
28	12 58 07.3*	37.697 N	101.744 E	10 G	4.5	1.2	11	QINGHAI PROVINCE, CHINA
28	13 11 43.6	34.563 N	91.882 E	33 N		1.1	12	QINGHAI PROVINCE, CHINA
28	14 39 32.6%	41.975 N	25.554 E	10 G		0.5	6	GREECE-BULGARIA BORDER REGION
28	15 33 56.87	4.68 S	133.83 E	33 N		0.8	6	WEST IRIAN REGION
28	16 02 11.97	5.44 S	152.64 E	33 N		1.3	5	NEW BRITAIN REGION
28	16 05 52.7%	39.520 N	28.373 E	5 G		1.6	5	TURKEY
28	16 19 54.3	51.330 N	157.565 E	76 D	5.0	0.7	60	NEAR EAST COAST OF KAMCHATKA
28	16 59 12.67	18.51 S	66.33 W	131 ?		1.2	5	BOLIVIA
28	17 06 27.2*	35.971 N	69.489 E	102 ?	4.6	1.1	13	HINDU KUSH REGION
28	20 59 42.8*	44.177 N	18.006 E	10 G		1.5	10	YUGOSLAVIA
28	21 13 15.9*	32.420 S	69.958 W	144 ?		0.6	10	MENDOZA PROVINCE, ARGENTINA
28	21 47 01.0*	37.863 N	101.858 E	10 G	4.2	1.2	7	QINGHAI PROVINCE, CHINA
28	22 21 48.4%	45.610 N	26.544 E	140 G		0.6	8	ROMANIA
28	23 41 39.5*	5.154 S	152.327 E	33 N		0.8	6	NEW BRITAIN REGION
28	23 55 09.3	40.634 N	29.707 E	10 G		1.3	9	TURKEY
29	00 20 52.8*	1.645 S	120.026 E	10 G	4.0	1.5	5	SULAWESI
29	02 14 35.7*	21.225 S	68.873 W	33 N		0.9	6	CHILE-BOLIVIA BORDER REGION
29	04 30 09.5	20.716 S	70.702 W	40 *	5.0 4.1	1.4	51	NEAR COAST OF NORTHERN CHILE
29	05 12 21.3*	36.499 N	70.942 E	91 ?	4.1	0.7	9	HINDU KUSH REGION
29	05 13 56.3*	51.949 N	171.413 W	33 N	4.3	1.2	11	FOX ISLANDS, ALEUTIAN ISLANDS
29	05 19 36.6*	28.737 S	67.743 W	12 *		0.8	7	LA RIOJA PROVINCE, ARGENTINA
29	06 44 42.6%	35.877 N	120.493 W	5			22	CENTRAL CALIFORNIA. <BRK>. ML 3.2 (BRK). Felt (III) at
								Paso Robles and San Ardo. Also felt at Parkfield.
29	07 38 19.6*	60.735 N	4.115 E	10 G		1.5	9	SOUTHERN NORWAY. ML 2.9 (BER).
29	07 46 53.3	33.953 N	116.623 W	10 G		1.2	13	SOUTHERN CALIFORNIA. ML 4.0 (PAS). Felt (VI) at Hemet,
								(V) at Desert Hot Springs and (IV) at Cathedral City,
								Indio, North Palm Springs and Yucca Valley. Also felt
								at Palm Springs, Beaumont, Cobazon, Forest Falls and
								White Water.
29	08 04 56.0*	33.534 N	94.907 E	33 N	3.6	1.3	6	QINGHAI PROVINCE, CHINA
29	08 09 01.6*	51.700 N	171.797 W	33 N	4.4	0.7	8	FOX ISLANDS, ALEUTIAN ISLANDS
29	08 26 24.0%	42.106 N	111.655 W	1 G			12	EASTERN IDAHO. <SLC-P>. ML 3.2 (SLC).
29	09 09 14.67	42.82 N	18.78 E	10 G		0.4	4	YUGOSLAVIA. ML 2.2 (TTG).
29	09 37 34.6%	42.105 N	111.652 W	1 G			9	EASTERN IDAHO. <SLC-P>. ML 2.4 (SLC). Felt (III) at
								Preston.
29	10 00 31.2	42.195 N	19.552 E	10 G		0.9	8	YUGOSLAVIA. ML 2.6 (TTG).
29	10 21 33.0	12.506 S	166.659 E	108	4.9	0.7	55	SANTA CRUZ ISLANDS
29	13 41 20.1	1.070 N	126.080 E	75	4.8	1.0	42	MOLUCCA PASSAGE
29	14 00 59.3	63.064 N	150.793 W	119	4.4	0.7	20	CENTRAL ALASKA
29	14 42 28.2%	59.175 N	153.620 W	107			31	SOUTHERN ALASKA. <AGS-P>.
29	14 57 02.8	46.343 N	12.470 E	10 G	4.8	1.1	130	NORTHERN ITALY. ML 4.8 (LDG), 4.4 (TRI). Slight damage
								(VI) and landslides in the Pieve di Cadore area. Felt
								in the Bolzano-Treviso-Udine area.
29	15 00 50.2	46.319 N	12.436 E	10 G		0.9	43	NORTHERN ITALY. ML 4.4 (LDG), 3.8 (TRI), 3.7 (FIR).
								Felt in the Belluno area.
29	18 52 25.4*	42.495 N	20.174 E	10 G		0.5	5	YUGOSLAVIA. MD 2.4 (TTG).
29	19 30 20.8	43.185 N	25.937 E	10 G		1.0	10	BULGARIA
29	20 59 27.97	27.62 S	66.46 W	236 ?		0.5	7	CATAMARCA PROVINCE, ARGENTINA
29	23 03 08.6%	40.613 N	124.885 W	6 G			5	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).
30	01 01 27.17	43.05 N	18.01 E	10 G		0.7	6	YUGOSLAVIA. ML 2.8 (TTG).
30	01 49 56.4	33.599 S	72.305 W	33 N	4.3	1.0	23	OFF COAST OF CENTRAL CHILE
30	03 40 12.4*	6.789 S	146.723 E	33 N		1.4	6	EAST PAPUA NEW GUINEA REGION
30	04 22 09.5*	34.890 N	25.352 E	122 ?	3.8	0.7	9	CRETE
30	04 47 10.7	39.087 N	27.859 E	10 G		0.9	24	TURKEY. ML 4.1 (ATH).
30	05 49 04.7	39.125 N	27.821 E	10 G		0.9	14	TURKEY
30	05 55 02.7%	39.035 N	27.890 E	10 G		1.1	6	TURKEY
30	06 07 02.2%	39.071 N	27.833 E	10 G		0.4	7	TURKEY
30	07 45 46.67	34.50 N	88.20 E	33 N	4.2	1.4	6	TIBET
30	07 49 24.1	39.070 N	27.866 E	10 G		0.6	9	TURKEY
30	09 24 35.7	39.096 N	27.831 E	10 G		1.1	7	TURKEY
30	10 20 13.4%	41.988 N	24.753 E	10 G		0.5	5	GREECE-BULGARIA BORDER REGION
30	10 30 45.8	39.124 N	27.770 E	10 G		1.2	9	TURKEY
30	11 37 03.0	11.223 S	118.477 E	33 N	5.0	1.2	22	SOUTH OF SUMBAWA ISLAND
30	11 42 28.6	38.881 N	107.053 W	5 G		1.0	19	COLORADO. ML 2.5 (NEIS).
30	12 09 34.0*	39.392 N	28.200 E	10 G		1.3	5	TURKEY
30	12 09 43.17	39.28 N	27.94 E	10 G		1.2	5	TURKEY
30	12 42 46.7	39.079 N	27.842 E	10 G		0.6	9	TURKEY
30	12 50 08.67	5.20 S	154.48 E	33 N	4.7	0.5	6	SOLOMON ISLANDS
30	13 00 12.7	39.071 N	27.845 E	10 G		0.9	8	TURKEY

30	13 06 23.07	5.14 S	154.48 E	33 N	4.6	1.4	5	SOLOMON ISLANDS
30	13 37 43.4	20.408 S	66.752 W	258 ?		1.4	9	SOUTHERN BOLIVIA
30	14 08 50.6	28.072 N	54.478 E	33 N	4.2	0.9	11	SOUTHERN IRAN
30	14 13 42.9	38.874 N	28.272 E	10 G		1.2	7	TURKEY
30	15 04 46.4	8.258 S	121.118 E	210 *	4.3	1.0	10	FLORES ISLAND REGION
30	15 05 50.97	26.39 S	27.39 E	5 G		1.6	4	REPUBLIC OF SOUTH AFRICA. MG 3.6 (BUL).
30	15 52 12.6	5.010 S	153.617 E	85 *	4.1	1.3	21	NEW IRELAND REGION
30	17 58 22.5	25.364 S	179.651 E	537 *	4.5	0.9	10	SOUTH OF FIJI ISLANDS
30	18 12 22.87	33.48 N	82.14 E	33 N	4.1	1.6	6	TIBET
30	18 43 32.6	39.099 N	27.860 E	10 G		0.8	6	TURKEY
30	18 45 15.4	9.504 S	113.002 E	60 *	5.2	1.3	75	SOUTH OF JAVA
30	19 08 39.2	41.694 N	24.253 E	10 G		1.0	10	GREECE-BULGARIA BORDER REGION
30	19 16 21.67	41.688 N	24.250 E	10 G		0.5	6	GREECE-BULGARIA BORDER REGION
30	19 16 27.3	51.265 N	15.782 E	10 G		1.5	8	POLAND. ML 3.6 (VKA), 3 5 (KBA).
30	20 02 09.07	59.39 N	6.57 E	5 G		1.1	6	SOUTHERN NORWAY. MD 1.9 (BER).
30	20 29 40.5	39.111 N	27.782 E	10 G		1.0	9	TURKEY
30	21 12 18.1	45.141 N	3.297 E	10 G		0.7	9	FRANCE. ML 2.8 (LDG).
30	21 13 29.3	37.444 N	20.363 E	10 G	4.3	1.1	11	IONIAN SEA. ML 3.9 (ATH).
f 30	21 28 35.4	45.547 N	26.316 E	132 G	6.4 6.9	1.1	554	ROMANIA. Damage (VIII) in the Focsani-Birlad area, including the collapse of a church. Felt (VII) at Bucharest. Two people killed, 558 injured, and about 55,000 homes damaged, leaving more than 12,500 people homeless in the Kishinev-Kogul area, USSR. Felt (VII) in northern Bulgaria; (V) in the Skopje area, Yugoslavia; (IV) at Simferopol and Kiev, USSR and Belgrade, Yugoslavia; (III) at Moscow, USSR and Titograd, Yugoslavia. Felt throughout central and eastern Hungary. Also felt in Greece, Turkey, southern Italy and eastern Poland. Depth from broadband displacement seismograms.
30	22 20 47.07	39.060 N	27.919 E	10 G		0.4	6	TURKEY
30	22 56 51.4	28.650 S	178.413 W	258 *	5.0	1.1	29	KERMADEC ISLANDS REGION
31	02 39 56.7	41.655 N	24.239 E	10 G		0.8	6	GREECE-BULGARIA BORDER REGION
31	02 44 50.1	19.144 N	121.129 E	51	4.8	0.9	70	PHILIPPINE ISLANDS REGION. Felt (II RF) at Pasuquin.
31	03 12 02.3	37.490 N	71.281 E	33 N	4.1	1.1	7	AFGHANISTAN-USSR BORDER REGION
31	06 09 30.37	4.53 N	75.25 W	33 N		0.0	4	COLOMBIA. Felt at Ibagu.
31	06 19 50.87	45.494 N	26.542 E	140 G		0.8	8	ROMANIA
31	06 24 45.97	8.46 S	158.29 E	33 N		0.9	5	SOLOMON ISLANDS
31	06 58 00.97	45.580 N	26.528 E	140 G		0.7	8	ROMANIA
31	07 59 11.2	33.005 S	72.019 W	10 G		0.2	10	OFF COAST OF CENTRAL CHILE
a 31	08 38 39.4	18.458 S	175.050 W	208 D	5.3	1.1	126	TONGA ISLANDS
31	09 23 04.7	23.042 N	144.120 E	46 *	5.4 5.9	1.1	155	VOLCANO ISLANDS REGION. Ms 5.9 (BRK).
31	09 37 18.1	22.985 N	144.212 E	33 N	5.0	0.9	20	VOLCANO ISLANDS REGION
31	11 38 22.7	22.621 S	170.571 E	33 N	4.8	1.3	14	LOYALTY ISLANDS REGION
31	12 24 58.57	6.63 S	154.90 E	33 N		0.9	4	SOLOMON ISLANDS
31	12 35 08.5	45.471 N	26.360 E	150 *	3.2	0.7	11	ROMANIA
31	14 34 31.6	11.340 S	118.777 E	33 N	4.8	1.1	16	SOUTH OF SUMBAWA ISLAND
31	14 42 49.2	39.116 N	27.874 E	10 G		1.1	5	TURKEY
31	14 55 15.6	17.584 S	173.862 W	33 N	4.9	1.1	29	TONGA ISLANDS
31	17 33 46.4	10.913 S	119.183 E	33 N		0.6	5	SUMBA ISLAND REGION
31	19 30 25.17	44.622 N	6.902 E	10 G		0.3	5	FRANCE. ML 1.9 (LDG).
31	19 30 45.87	44.614 N	6.981 E	10 G		0.4	5	FRANCE. ML 2.1 (LDG).
31	19 47 20.47	63.29 S	173.35 E	10 G	4.4	1.2	5	BALLENY ISLANDS REGION
31	20 18 50.57	45.114 N	3.060 E	10 G		1.0	7	FRANCE. ML 1.8 (LDG).
31	21 20 15.3	19.965 N	97.973 E	10 G		0.7	6	BURMA
31	22 26 00.27	46.79 N	0.54 E	10 G		0.1	4	FRANCE. ML 2.1 (LDG).
31	22 57 34.5	37.141 N	3.162 W	10 G		1.3	23	SPAIN. MG 3.7 (MDD). Felt (IV) at Finana, La Calahorra, Trevelez and Ugijar and (III) at Cadiz.
31	23 25 48.47	37.39 N	3.00 W	10 G		0.4	4	SPAIN. MG 2.9 (MDD). Felt (V) at Aldeire.
31	23 27 56.4	18.337 N	65.076 W	33 N		0.5	10	PUERTO RICO REGION. Felt at Aguas Buenas and Bayamon.
31	23 29 33.1	41.875 N	126.331 W	10 G	4.4 4.1	1.2	40	OFF COAST OF NORTHERN CALIFORNIA

## ADDITIONAL SOURCE PARAMETERS

01 14 09 24.97 35.880S 103.702W 10km 5.5mb ( 20 obs.) 5.8Ms ( 1 obs.) SOUTHERN PACIFIC OCEAN CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 32C Centroid Location: Origin Time 14:09:31.4 0.3 Lat 35.73S 0.06 Lon 103.66W 0.06 Dep 15.0 FIX Half-duration 2.1 Principal Axes: Scale 10**24 D-CM T Val= 2.25 Plg= 3 Azm=231 N -0.17 78 125 P -2.08 11 321 Best Double Couple:Mo=2.2*10**24 NP1:Strike= 6 Dip=80 Slip= -6 NP2: 97 84 -170	Dep 531.3 5.8 Half-duration 1.7 Principal Axes: Scale 10**23 D-CM T Val= 10.43 Plg=18 Azm=137 N -1.35 72 312 P -9.08 1 46 Best Double Couple:Mo=9.8*10**23 NP1:Strike=180 Dip=76 Slip= 168 NP2: 273 78 14	02 12 42 12.40 28.304S 177.686W 33km 5.2mb ( 9 obs.) 5.3Ms ( 5 obs.) KERMADEC ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 32C Centroid Location: Origin Time 12:42:13.5 0.6 Lat 28.21S 0.04 Lon 177.97W 0.05 Dep 15.0 FIX Half-duration 2.3 Principal Axes: Scale 10**24 D-CM T Val= 3.09 Plg= 8 Azm=114 N -0.65 13 22 P -2.44 74 236 Best Double Couple:Mo=2.8*10**24 NP1:Strike=220 Dip=38 Slip= -68 NP2: 13 55 -107
01 16 20 59.18 16.948S 179.089W 517km 4.9mb ( 27 obs.) FIJI ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 21C Centroid Location: Origin Time 16:21: 4.4 1.1 Lat 17.03S 0.11 Lon 178.91W 0.10	01 21 05 39.78 51.369N 174.283W 33km 5.5mb ( 63 obs.) 5.0Ms ( 9 obs.) ANDREANOF ISLANDS, ALEUTIAN IS. CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 28C Centroid Location: Origin Time 21:05:43.1 0.6 Lat 51.58N 0.06 Lon 173.92W 0.14 Dep 15.0 FIX Half-duration 1.7 Principal Axes: Scale 10**23 D-CM T Val= 14.64 Plg=63 Azm=318 N 0.48 6 59 P -15.12 27 152 Best Double Couple:Mo=1.5*10**24 NP1:Strike=256 Dip=19 Slip= 108 NP2: 57 72 84	02 17 49 25.69 13.073N 88.806W 80km 5.4mb ( 57 obs.) EL SALVADOR CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 29C Centroid Location: Origin Time 17:49:21.2 0.3 Lat 12.75N 0.04 Lon 89.12W 0.04

Dep 53.7 2.6 Half-duration 2.4  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 3.19 Plg=19 Azm= 53  
N 0.05 6 321  
P -3.24 70 215  
Best Double Couple:Mo=3.2\*10\*\*24  
NP1:Strike=153 Dip=27 Slip= -77  
NP2: 318 64 -96

02 20 35 36.20 58.265S 15.319W 10km  
5.4mb ( 9 obs.) 5.2Msz ( 1 abs.)  
SOUTHWESTERN ATLANTIC OCEAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 37C  
Centroid Location:  
Origin Time 20:35:40.2 0.3  
Lat 58.74S 0.04 Lon 15.47W 0.07  
Dep 15.0 FIX Half-duration 2.1  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 2.23 Plg=17 Azm=308  
N -0.34 55 193  
P -1.89 30 48  
Best Double Couple:Mo=2.1\*10\*\*24  
NP1:Strike= 85 Dip=56 Slip= -10  
NP2: 181 81 -146

03 13 29 10.17 51.164N 176.800W 33km  
5.4mb ( 78 obs.) 5.6Msz ( 26 abs.)  
ANDREANOF ISLANDS, ALEUTIAN IS.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 37C  
Centroid Location:  
Origin Time 13:29:10.8 0.3  
Lat 51.57N 0.03 Lon 177.01W 0.07  
Dep 18.0 BDY Half-duration 3.5  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 7.94 Plg=62 Azm=318  
N 0.30 10 67  
P -8.24 26 162  
Best Double Couple:Mo=8.1\*10\*\*24  
NP1:Strike=275 Dip=21 Slip= 120  
NP2: 64 72 79

04 13 54 07.17 2.370S 138.893E 48km  
5.1mb ( 17 abs.) 5.2Msz ( 1 abs.)  
WEST IRIAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 8S, 17C  
Centroid Location:  
Origin Time 13:54: 8.5 0.9  
Lat 2.24S 0.09 Lon 138.88E 0.12  
Dep 39.411.8 Half-duration 1.5  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 4.78 Plg=74 Azm= 70  
N 0.96 3 330  
P -5.74 16 239  
Best Double Couple:Mo=5.3\*10\*\*23  
NP1:Strike=325 Dip=29 Slip= 85  
NP2: 152 61 93

04 22 34 37.87 46.331N 153.182E 33km  
5.5mb ( 72 obs.) 5.1Msz ( 13 abs.)  
KURIL ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 9S, 23C  
Centroid Location:  
Origin Time 22:34:38.5 0.5  
Lat 46.33N 0.06 Lon 153.35E 0.10  
Dep 17.2 3.4 Half-duration 1.9  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.45 Plg=74 Azm=322  
N -0.01 4 218  
P -1.44 16 127  
Best Double Couple:Mo=1.4\*10\*\*24  
NP1:Strike=212 Dip=30 Slip= 82  
NP2: 41 61 94

05 11 15 31.41 24.197S 177.168W 33km  
5.3mb ( 15 obs.) 5.0Msz ( 4 abs.)  
SOUTH OF FIJI ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 24C  
Centroid Location:  
Origin Time 11:15:33.1 0.9  
Lat 24.36S 0.08 Lon 177.42W 0.09  
Dep 15.0 FIX Half-duration 1.7  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 10.15 Plg=16 Azm=104  
N 0.32 22 7  
P -10.48 62 227  
Best Double Couple:Mo=1.0\*10\*\*24  
NP1:Strike=223 Dip=35 Slip= -49  
NP2: 356 65 -115

05 19 17 11.84 24.069S 177.306W 33km  
5.1mb ( 8 obs.) 5.0Msz ( 2 abs.)  
SOUTH OF FIJI ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 23C  
Centroid Location:  
Origin Time 19:17:13.9 1.1  
Lat 24.30S 0.09 Lon 177.24W 0.10  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 8.08 Plg= 9 Azm=299  
N -1.07 69 53  
P -7.00 19 206  
Best Double Couple:Mo=7.5\*10\*\*23  
NP1:Strike=344 Dip=70 Slip= -172  
NP2: 252 83 -20

05 20 59 25.04 53.027N 153.306E 512km  
4.7mb ( 64 abs.)  
SEA OF OKHOTSK  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 25C  
Centroid Location:  
Origin Time 20:59:30.5 0.6  
Lat 52.91N 0.06 Lon 152.85E 0.12  
Dep 511.5 4.0 Half-duration 1.7  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 9.92 Plg=30 Azm= 90  
N -0.35 1 180  
P -9.56 60 271  
Best Double Couple:Mo=9.7\*10\*\*23  
NP1:Strike=178 Dip=15 Slip= -92  
NP2: 0 75 -89

06 09 54 52.64 23.763S 179.930E 545km  
5.1mb ( 31 abs.)  
SOUTH OF FIJI ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 9S, 21C  
Centroid Location:  
Origin Time 09:54:56.5 1.1  
Lat 24.09S 0.11 Lon 179.98E 0.10  
Dep 558.4 4.7 Half-duration 1.6  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 9.21 Plg=66 Azm=116  
N -0.87 9 228  
P -8.34 21 321  
Best Double Couple:Mo=8.8\*10\*\*23  
NP1:Strike= 68 Dip=25 Slip= 112  
NP2: 224 67 80

06 13 56 05.75 55.29 S 128.98 W 10km  
4.8mb ( 8 abs.) 5.5Msz ( 1 abs.)  
SOUTH PACIFIC CORDILLERA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 38C  
Centroid Location:  
Origin Time 13:56:13.0 0.2  
Lat 55.35S 0.03 Lon 128.93W 0.04  
Dep 15.0 FIX Half-duration 3.0  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 5.40 Plg=11 Azm=336  
N 0.07 64 90  
P -5.47 23 241  
Best Double Couple:Mo=5.4\*10\*\*24  
NP1:Strike= 21 Dip=65 Slip= -171  
NP2: 287 82 -25

06 19 55 15.66 29.344N 100.915E 34km  
5.5mb ( 71 abs.) 5.0Msz ( 5 abs.)  
SICHUAN PROVINCE, CHINA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN

L.P.B.: 12S, 25C  
Centroid Location:  
Origin Time 19:55:20.3 0.4  
Lat 29.15N 0.07 Lon 101.20E 0.10  
Dep 15.0 BDY Half-duration 1.8  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 10.72 Plg=23 Azm=357  
N 2.07 39 107  
P -12.79 43 244  
Best Double Couple:Mo=1.2\*10\*\*24  
NP1:Strike= 40 Dip=41 Slip= -162  
NP2: 296 78 -50

07 02 51 28.99 18.010S 178.403W 595km  
5.0mb ( 35 abs.)  
FIJI ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 26C  
Centroid Location:  
Origin Time 02:51:33.1 1.1  
Lat 18.02S 0.10 Lon 178.27W 0.09  
Dep 603.4 5.0 Half-duration 2.0  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.20 Plg=14 Azm= 18  
N 0.06 47 123  
P -1.27 40 276  
Best Double Couple:Mo=1.2\*10\*\*24  
NP1:Strike= 65 Dip=52 Slip= -159  
NP2: 322 73 -40

07 12 10 19.08 11.709N 95.297E 33km  
5.2mb ( 42 abs.)  
ANDAMAN ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 25C  
Centroid Location:  
Origin Time 12:10:17.0 0.9  
Lat 11.86N 0.11 Lon 94.64E 0.10  
Dep 33.0 FIX Half-duration 1.4  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 4.35 Plg=11 Azm=129  
N 0.54 79 309  
P -4.89 0 39  
Best Double Couple:Mo=4.6\*10\*\*23  
NP1:Strike=173 Dip=82 Slip= 172  
NP2: 265 82 8

07 22 32 50.43 7.433N 81.241W 8km  
5.4mb ( 64 abs.) 5.4Msz ( 17 abs.)  
PANAMA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 30C  
Centroid Location:  
Origin Time 22:32:58.0 0.3  
Lat 7.53N 0.04 Lon 81.06W 0.04  
Dep 15.0 BDY Half-duration 2.5  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 3.67 Plg= 3 Azm=124  
N 0.47 52 30  
P -4.14 38 216  
Best Double Couple:Mo=3.9\*10\*\*24  
NP1:Strike=253 Dip=62 Slip= -27  
NP2: 356 67 -150

08 16 18 58.18 7.850N 59.548E 10km  
4.9mb ( 14 abs.) 4.8Msz ( 1 abs.)  
CARLSBERG RIDGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 22C  
Centroid Location:  
Origin Time 16:19: 1.6 1.1  
Lat 8.36N 0.20 Lon 59.46E 0.08  
Dep 15.0 FIX Half-duration 1.4  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 5.90 Plg=12 Azm= 59  
N -0.45 17 153  
P -5.46 68 295  
Best Double Couple:Mo=5.7\*10\*\*23  
NP1:Strike=128 Dip=36 Slip= -120  
NP2: 344 60 -70

09 00 53 12.63 14.099N 120.335E 80km  
5.5mb ( 71 obs.)  
LUZON, PHILIPPINE ISLANDS

CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 31C  
 Centroid Location:  
 Origin Time 00:53:13.6 0.3  
 Lat 13.95N 0.03 Lon 120.19E 0.04  
 Dep 80.0 BDY Half-duration 2.2  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 1.75 Plg=26 Azm=119  
 N 0.66 23 17  
 P -2.42 54 252  
 Best Double Couple: Mo=2.1\*10\*\*24  
 NP1: Strike=250 Dip=28 Slip= -34  
 NP2: 11 75 -114

10 04 40 49.77 1.985N 128.271E 104km  
 6.1mb ( 63 obs.)  
 HALMAHERA  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike=122 Dip=68 Slip= 80  
 NP2: 327 24 113  
 Principal Axes:  
 T Plg=66 Azm= 15  
 P 22 220  
 Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting with a small right-lateral strike-slip component. The preferred fault plane is NP2.

MOMENT TENSOR SOLUTION  
 Dep 110 No. of sta: 10  
 Principal Axes:  
 Scale 10\*\*25 d-cm  
 T Val= 4.42 Plg=57 Azm=327  
 N 0.06 29 117  
 P -4.48 13 215  
 Best Double Couple: Mo=4.5\*10\*\*25  
 NP1: Strike=338 Dip=41 Slip= 138  
 NP2: 102 64 57  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 20S, 47C M.W.: 7S, 14C  
 Centroid Location:  
 Origin Time 04:40:54.0 0.2  
 Lat 1.95N 0.02 Lon 128.11E 0.02  
 Dep 109.6 0.9 Half-duration 5.0  
 Principal Axes:  
 Scale 10\*\*25 D-CM  
 T Val= 2.62 Plg=67 Azm=351  
 N -0.09 13 115  
 P -2.52 18 209  
 Best Double Couple: Mo=2.6\*10\*\*25  
 NP1: Strike=320 Dip=29 Slip= 118  
 NP2: 108 65 75

11 06 58 05.06 14.745S 66.477E 10km  
 5.2mb ( 28 obs.) 5.0Msz ( 3 obs.)  
 MID-INDIAN RISE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 12S, 22C  
 Centroid Location:  
 Origin Time 06:58:12.2 1.5  
 Lat 14.51S 0.14 Lon 66.54E 0.12  
 Dep 15.0 FIX Half-duration 1.4  
 Principal Axes:  
 Scale 10\*\*23 D-CM  
 T Val= 4.67 Plg= 7 Azm=232  
 N 0.48 26 325  
 P -5.16 63 129  
 Best Double Couple: Mo=4.9\*10\*\*23  
 NP1: Strike=296 Dip=45 Slip=128  
 NP2: 163 57 -59

11 08 05 56.83 22.265N 121.647E 124km  
 5.5mb ( 79 obs.)  
 TAIWAN REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 25C  
 Centroid Location:  
 Origin Time 08:05:59.1 0.6  
 Lat 22.35N 0.05 Lon 121.42E 0.07  
 Dep 131.6 2.3 Half-duration 2.0  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 1.71 Plg=68 Azm=140  
 N -0.08 21 340  
 P -1.63 7 247  
 Best Double Couple: Mo=1.7\*10\*\*24

NP1: Strike=314 Dip=42 Slip= 58  
 NP2: 175 55 116

11 10 37 59.17 20.101N 121.312E 33km  
 5.4mb ( 64 obs.) 5.0Msz ( 7 obs.)  
 PHILIPPINE ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 12S, 24C  
 Centroid Location:  
 Origin Time 10:38: 1.5 0.4  
 Lat 19.93N 0.04 Lon 120.70E 0.04  
 Dep 20.0 BDY Half-duration 2.2  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 2.54 Plg=80 Azm= 46  
 N 0.57 6 169  
 P -3.10 8 259  
 Best Double Couple: Mo=2.8\*10\*\*24  
 NP1: Strike=356 Dip=37 Slip= 99  
 NP2: 165 54 83

11 19 43 13.18 0.075S 17.852W 10km  
 5.0mb ( 45 obs.) 4.6Msz ( 2 obs.)  
 NORTH OF ASCENSION ISLAND  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 33C  
 Centroid Location:  
 Origin Time 19:43:21.2 0.5  
 Lat 0.29N 0.05 Lon 17.67W 0.05  
 Dep 15.0 FIX Half-duration 1.7  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 1.11 Plg=10 Azm= 36  
 N -0.05 79 236  
 P -1.06 4 126  
 Best Double Couple: Mo=1.1\*10\*\*24  
 NP1: Strike=171 Dip=80 Slip= 5  
 NP2: 81 85 170

11 22 06 43.28 30.923S 67.685W 5km  
 5.4mb ( 21 obs.) 4.9Msz ( 4 obs.)  
 SAN JUAN PROVINCE, ARGENTINA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 28C  
 Centroid Location:  
 Origin Time 22:06:49.5 0.4  
 Lat 31.19S 0.06 Lon 67.76W 0.07  
 Dep 26.5 5.5 Half-duration 1.8  
 Principal Axes:  
 Scale 10\*\*23 D-CM  
 T Val= 13.67 Plg=35 Azm=155  
 N -0.76 48 296  
 P -12.91 20 50  
 Best Double Couple: Mo=1.3\*10\*\*24  
 NP1: Strike=187 Dip=49 Slip= 167  
 NP2: 285 80 41

12 00 59 28.98 23.987S 177.199W 33km  
 5.1mb ( 8 obs.) 5.1Msz ( 7 obs.)  
 SOUTH OF FIJI ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 12S, 29C  
 Centroid Location:  
 Origin Time 00:59:33.4 0.7  
 Lat 24.18S 0.05 Lon 177.24W 0.06  
 Dep 15.0 FIX Half-duration 1.9  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 1.49 Plg= 3 Azm=291  
 N -0.07 5 22  
 P -1.42 84 171  
 Best Double Couple: Mo=1.4\*10\*\*24  
 NP1: Strike= 16 Dip=42 Slip= -97  
 NP2: 206 48 -83

12 04 07 16.78 5.967N 82.591W 10km  
 5.4mb ( 57 obs.) 5.1Msz ( 13 obs.)  
 SOUTH OF PANAMA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 32C  
 Centroid Location:  
 Origin Time 04:07:25.1 0.3  
 Lat 6.00N 0.03 Lon 82.47W 0.04  
 Dep 15.0 FIX Half-duration 2.9  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 6.32 Plg=17 Azm=316  
 N -0.91 70 102

P -5.42 11 223  
 Best Double Couple: Mo=5.9\*10\*\*24  
 NP1: Strike=358 Dip=70 Slip= 175  
 NP2: 90 86 20

12 05 09 07.73 0.111N 100.237E 47km  
 5.2mb ( 38 obs.) 5.3Msz ( 5 obs.)  
 NORTHERN SUMATERA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 13S, 28C  
 Centroid Location:  
 Origin Time 05:09: 7.0 0.7  
 Lat 0.17N 0.08 Lon 100.28E 0.07  
 Dep 15.0 BDY Half-duration 1.8  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 1.63 Plg=13 Azm=290  
 N -0.23 77 110  
 P -1.40 0 20  
 Best Double Couple: Mo=1.5\*10\*\*24  
 NP1: Strike= 66 Dip=81 Slip= 10  
 NP2: 334 81 170

13 04 11 41.09 5.842N 82.413W 10km  
 5.4mb ( 69 obs.) 5.2Msz ( 16 obs.)  
 SOUTH OF PANAMA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 37C  
 Centroid Location:  
 Origin Time 04:11:47.3 0.4  
 Lat 5.93N 0.03 Lon 82.49W 0.04  
 Dep 15.0 FIX Half-duration 2.7  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 5.46 Plg=19 Azm=345  
 N -1.27 71 181  
 P -4.18 5 77  
 Best Double Couple: Mo=4.8\*10\*\*24  
 NP1: Strike=122 Dip=73 Slip= 10  
 NP2: 29 81 163

13 15 27 21.81 7.691N 74.713W 60km  
 5.0mb ( 52 obs.)  
 NORTHERN COLOMBIA  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 14S, 27C  
 Centroid Location:  
 Origin Time 15:27:29.0 0.7  
 Lat 8.00N 0.07 Lon 74.74W 0.08  
 Dep 78.5 7.2 Half-duration 1.6  
 Principal Axes:  
 Scale 10\*\*23 D-CM  
 T Val= 6.84 Plg=16 Azm=140  
 N 2.40 48 32  
 P -9.24 38 243  
 Best Double Couple: Mo=8.0\*10\*\*23  
 NP1: Strike=274 Dip=51 Slip= -18  
 NP2: 16 76 -140

14 19 39 13.67 1.795N 126.519E 33km  
 6.6mb ( 63 obs.) 7.2Msz ( 14 obs.)  
 MOLUCCA PASSAGE  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike=224 Dip=83 Slip= 60  
 NP2: 122 31 166  
 Principal Axes:  
 T Plg=44 Azm=105  
 P 31 338  
 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.

MOMENT TENSOR SOLUTION  
 Dep 38 No. of sta: 10  
 Principal Axes:  
 Scale 10\*\*27 d-cm  
 T Val= 1.50 Plg=38 Azm= 98  
 N 0.07 43 234  
 P -1.57 24 348  
 Best Double Couple: Mo=1.5\*10\*\*27  
 NP1: Strike=127 Dip=44 Slip= 168  
 NP2: 226 81 47  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 47C M.W.: 13S, 34C  
 Centroid Location:  
 Origin Time 19:39:28.9 0.1



Lat 2.08N 0.01 Lon 126.89E 0.01  
Dep 20.2 0.7 Half-duration 15.0  
Principal Axes:  
Scale 10\*\*27 D-CM  
T Val= 2.45 Plg=52 Azm=150  
N -0.38 14 42  
P -2.07 35 302  
Best Double Couple:Mo=2.3\*10\*\*27  
NP1:Strike=347 Dip=16 Slip= 34  
NP2: 224 81 104

15 00 41 20.47 8.689S 124.212E 108km  
5.8mb ( 31 abs.)  
TIMOR  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=119 Dip=78 Slip= 43  
NP2: 18 48 164  
Principal Axes:  
T Plg=38 Azm=348  
P 19 242  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a large reverse component. The preferred fault plane is not determined.

15 07 40 44.71 1.929N 126.482E 33km  
5.6mb ( 38 abs.) 5.8Msz ( 19 abs.)  
MOLUCCA PASSAGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 32C  
Centroid Location:  
Origin Time 07:40:48.6 0.2  
Lat 1.61N 0.04 Lon 126.54E 0.05  
Dep 15.0 FIX Half-duration 4.3  
Principal Axes:  
Scale 10\*\*25 D-CM  
T Val= 2.66 Plg=35 Azm=129  
N 0.03 4 36  
P -2.69 55 300  
Best Double Couple:Mo=2.7\*10\*\*25  
NP1:Strike=237 Dip=11 Slip= -68  
NP2: 35 80 -94

15 20 20 37.37 48.638N 126.621E 33km  
5.0mb ( 48 abs.) 5.1Msz ( 1 abs.)  
NORTHEASTERN CHINA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 8S, 17C  
Centroid Location:  
Origin Time 20:20:39.3 1.7  
Lat 48.61N 0.17 Lon 126.09E 0.33  
Dep 15.0 BDY Half-duration 1.2  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 3.10 Plg=11 Azm=342  
N 0.50 61 231  
P -3.60 27 77  
Best Double Couple:Mo=3.4\*10\*\*23  
NP1:Strike=116 Dip=63 Slip= -12  
NP2: 212 79 -153

16 17 19 23.02 1.864N 126.522E 33km  
5.8mb ( 48 abs.) 5.9Msz ( 18 abs.)  
MOLUCCA PASSAGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 32C  
Centroid Location:  
Origin Time 17:19:27.2 0.2  
Lat 1.72N 0.03 Lon 126.65E 0.03  
Dep 15.0 FIX Half-duration 5.0  
Principal Axes:  
Scale 10\*\*25 D-CM  
T Val= 5.37 Plg=34 Azm=118  
N -0.53 1 208  
P -4.85 56 300  
Best Double Couple:Mo=5.1\*10\*\*25  
NP1:Strike=205 Dip=11 Slip= -94  
NP2: 29 79 -89

16 21 08 28.22 1.765N 126.442E 33km  
5.7mb ( 45 abs.) 5.4Msz ( 14 abs.)  
MOLUCCA PASSAGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 29C  
Centroid Location:  
Origin Time 21:08:31.6 0.2  
Lat 1.46N 0.05 Lon 126.20E 0.04

Dep 15.0 FIX Half-duration 5.6  
Principal Axes:  
Scale 10\*\*25 D-CM  
T Val= 1.34 Plg=38 Azm=176  
N 0.06 9 273  
P -1.41 50 15  
Best Double Couple:Mo=1.4\*10\*\*25  
NP1:Strike=217 Dip=11 Slip= -147  
NP2: 94 84 -80

17 15 27 41.26 2.276N 126.959E 31km  
5.8mb ( 52 abs.) 6.3Msz ( 21 abs.)  
MOLUCCA PASSAGE  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=128 Dip=59 Slip= 116  
NP2: 265 40 54  
Principal Axes:  
T Plg=65 Azm= 86  
P 10 200  
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting with a moderate strike-slip component. The preferred fault plane is not determined.

MOMENT TENSOR SOLUTION  
Dep 42 No. of sta: 10  
Principal Axes:  
Scale 10\*\*25 d-cm  
T Val= 4.65 Plg=88 Azm=310  
N 0.05 2 132  
P -4.70 0 42  
Best Double Couple:Mo=4.7\*10\*\*25  
NP1:Strike=130 Dip=45 Slip= 87  
NP2: 314 45 93  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 29C  
Centroid Location:  
Origin Time 15:27:51.7 0.2  
Lat 2.59N 0.03 Lon 127.35E 0.03  
Dep 25.0 BDY Half-duration 5.5  
Principal Axes:  
Scale 10\*\*25 D-CM  
T Val= 5.77 Plg=64 Azm=288  
N -1.15 22 141  
P -4.62 13 46  
Best Double Couple:Mo=5.2\*10\*\*25  
NP1:Strike=109 Dip=38 Slip= 52  
NP2: 334 61 115

18 01 59 54.50 20.492S 174.207W 20km  
5.9mb ( 54 abs.) 5.9Msz ( 23 abs.)  
TONGA ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 22 Dip=75 Slip= 90  
NP2: 202 15 90  
Principal Axes:  
T Plg=60 Azm=292  
P 30 112  
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.: 17S, 41C  
Centroid Location:  
Origin Time 02:00: 3.2 0.2  
Lat 20.75S 0.02 Lon 173.88W 0.02  
Dep 15.0 FIX Half-duration 4.3  
Principal Axes:  
Scale 10\*\*25 D-CM  
T Val= 1.81 Plg=67 Azm=274  
N 0.16 6 17  
P -1.98 22 110  
Best Double Couple:Mo=1.9\*10\*\*25  
NP1:Strike=211 Dip=23 Slip= 105  
NP2: 15 67 84

18 14 16 14.14 1.739N 126.575E 33km  
5.5mb ( 35 abs.) 5.2Msz ( 7 obs.)  
MOLUCCA PASSAGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 31C  
Centroid Location:  
Origin Time 14:16:22.5 0.3  
Lat 2.20N 0.04 Lon 126.35E 0.03  
Dep 23.9 1.8 Half-duration 2.8  
Principal Axes:

Scale 10\*\*24 D-CM  
T Val= 5.01 Plg=82 Azm= 46  
N 0.80 3 158  
P -5.81 7 249  
Best Double Couple:Mo=5.4\*10\*\*24  
NP1:Strike=342 Dip=38 Slip= 95  
NP2: 156 52 86

19 00 27 35.94 8.376N 126.601E 33km  
5.6mb ( 48 abs.) 4.9Msz ( 4 abs.)  
MINDANAO, PHILIPPINE ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 26C  
Centroid Location:  
Origin Time 00:27:39.0 0.5  
Lat 8.02N 0.05 Lon 126.77E 0.04  
Dep 40.0 BDY Half-duration 2.1  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.99 Plg=64 Azm=341  
N 0.17 23 188  
P -2.16 10 94  
Best Double Couple:Mo=2.1\*10\*\*24  
NP1:Strike=158 Dip=40 Slip= 52  
NP2: 23 59 117

20 07 05 01.60 5.325S 151.331E 79km  
5.8mb ( 52 abs.)  
NEW BRITAIN REGION  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=180 Dip=58 Slip= 170  
NP2: 275 82 32  
Principal Axes:  
T Plg=29 Azm=142  
P 16 44  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a large reverse component. The preferred fault plane is not determined.

CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 20S, 45C  
Centroid Location:  
Origin Time 07:05: 7.8 0.1  
Lat 5.54S 0.02 Lon 151.26E 0.02  
Dep 82.7 1.5 Half-duration 5.1  
Principal Axes:  
Scale 10\*\*25 D-CM  
T Val= 2.98 Plg=43 Azm=142  
N -0.49 46 309  
P -2.49 7 46  
Best Double Couple:Mo=2.7\*10\*\*25  
NP1:Strike=174 Dip=56 Slip= 151  
NP2: 282 66 38

20 10 09 32.60 16.941S 173.507W 33km  
5.6mb ( 36 abs.) 4.7Msz ( 1 abs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 23C  
Centroid Location:  
Origin Time 10:09:39.1 0.6  
Lat 16.85S 0.08 Lon 173.18W 0.09  
Dep 75.9 5.4 Half-duration 1.8  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.24 Plg=27 Azm=241  
N 0.26 13 337  
P -1.50 60 90  
Best Double Couple:Mo=1.4\*10\*\*24  
NP1:Strike=303 Dip=22 Slip= -127  
NP2: 161 73 -77

20 18 15 38.87 2.069N 126.534E 33km  
5.4mb ( 19 abs.) 4.5Msz ( 1 abs.)  
MOLUCCA PASSAGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 24C  
Centroid Location:  
Origin Time 18:15:46.5 0.3  
Lat 1.97N 0.05 Lon 126.52E 0.04  
Dep 33.0 FIX Half-duration 1.8  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 2.10 Plg=72 Azm=167  
N -0.12 17 7  
P -1.98 6 276  
Best Double Couple:Mo=2.0\*10\*\*24

NP1:Strike=348 Dip=42 Slip= 64  
NP2: 201 53 111

20 21 23 54.88 34.572N 91.633E 33km  
5.4mb ( 52 obs.) 6.5Msz ( 12 obs.)  
QINGHAI PROVINCE, CHINA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 39C  
Centroid Location:  
Origin Time 21:24: 3.0 0.2  
Lat 34.58N 0.03 Lon 91.96E 0.03  
Dep 15.0 BDY Half-duration 5.4  
Principal Axes:  
Scale 10\*\*25 D-CM  
T Val= 4.74 Plg= 3 Azm=121  
N 0.28 62 26  
P -5.02 28 213  
Best Double Couple:Mo=4.9\*10\*\*25  
NP1:Strike=253 Dip=69 Slip= -18  
NP2: 350 73 -158

21 17 01 27.21 9.071S 109.551W 10km  
5.0mb ( 10 obs.) 5.3Msz ( 3 obs.)  
NORTHERN EASTER I. CORDILLERA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 38C  
Centroid Location:  
Origin Time 17:01:31.7 0.3  
Lat 9.00S 0.05 Lon 109.58W 0.04  
Dep 15.0 FIX Half-duration 2.0  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 2.10 Plg=16 Azm=302  
N -0.09 67 170  
P -2.00 16 37  
Best Double Couple:Mo=2.1\*10\*\*24  
NP1:Strike= 79 Dip=67 Slip= 0  
NP2: 169 90 -157

23 17 11 47.12 31.675N 40.938W 10km  
5.3mb ( 42 obs.) 5.2Msz ( 12 obs.)  
NORTH ATLANTIC RIDGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 35C  
Centroid Location:  
Origin Time 17:11:54.0 0.3  
Lat 31.78N 0.06 Lon 40.45W 0.06  
Dep 15.0 FIX Half-duration 2.0  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 2.14 Plg=21 Azm=291  
N 0.06 29 33  
P -2.20 53 170  
Best Double Couple:Mo=2.2\*10\*\*24  
NP1:Strike=342 Dip=35 Slip= -147  
NP2: 224 72 -60

23 23 47 48.85 34.549S 179.288E 32km  
6.1mb ( 25 obs.) 6.5Msz ( 14 obs.)  
SOUTH OF KERMADEC ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=351 Dip=85 Slip= -173  
NP2: 260 83 -5  
Principal Axes:  
T Plg= 1 Azm=126  
P 8 216  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a small normal component. The preferred fault plane is not determined.

## MOMENT TENSOR SOLUTION

Dep 26 No. of sta: 8

Principal Axes:

Scale 10\*\*25 d-cm

T Val= 7.99 Plg=10 Azm=298

N -0.03 78 83

P -7.96 7 207

Best Double Couple:Mo=8.0\*10\*\*25

NP1:Strike=342 Dip=78 Slip= 178

NP2: 73 88 12

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 21S, 52C M.W.: 10S, 23C

Centroid Location:

Origin Time 23:47:51.4 0.2

Lat 34.51S 0.01 Lon 179.33E 0.02

Dep 15.0 FIX Half-duration 6.3

Principal Axes:

Scale 10\*\*25 D-CM  
T Val= 5.62 Plg=28 Azm=312  
N -1.50 58 163  
P -4.12 14 49  
Best Double Couple:Mo=4.9\*10\*\*25  
NP1:Strike= 93 Dip=60 Slip= 11  
NP2: 358 81 150

24 10 45 00.21 24.056S 177.137W 33km  
5.4mb ( 13 obs.) 5.1Msz ( 4 obs.)  
SOUTH OF FIJI ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 31C  
Centroid Location:  
Origin Time 10:45: 4.7 0.7  
Lat 24.20S 0.07 Lon 177.43W 0.07  
Dep 15.0 BDY Half-duration 1.8  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 12.87 Plg= 2 Azm=297  
N -2.10 34 28  
P -10.77 56 204  
Best Double Couple:Mo=1.2\*10\*\*24  
NP1:Strike=357 Dip=53 Slip= -135  
NP2: 235 56 -47

24 13 03 35.72 27.271S 176.418W 33km  
5.3mb ( 14 obs.) 4.9Msz ( 2 obs.)  
KERMADEC ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 20C  
Centroid Location:  
Origin Time 13:03:40.9 1.0  
Lat 27.22S 0.12 Lon 176.52W 0.12  
Dep 15.0 FIX Half-duration 1.4  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 7.15 Plg=61 Azm=276  
N -0.15 2 10  
P -7.00 29 102  
Best Double Couple:Mo=7.1\*10\*\*23  
NP1:Strike=198 Dip=16 Slip= 98  
NP2: 10 74 88

24 19 38 10.97 23.894S 177.201W 33km  
5.3mb ( 10 obs.) 5.1Msz ( 5 obs.)  
SOUTH OF FIJI ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 32C  
Centroid Location:  
Origin Time 19:38:13.2 0.4  
Lat 24.30S 0.04 Lon 177.37W 0.04  
Dep 15.4 2.2 Half-duration 1.9  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.92 Plg= 1 Azm=291  
N -0.05 24 21  
P -1.87 66 199  
Best Double Couple:Mo=1.9\*10\*\*24  
NP1:Strike=358 Dip=49 Slip= -123  
NP2: 223 50 -58

24 23 46 51.25 2.100N 126.873E 35km  
5.3mb ( 18 obs.) 5.1Msz ( 7 obs.)  
MOLUCCA PASSAGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 27C  
Centroid Location:  
Origin Time 23:46:53.8 0.5  
Lat 2.32N 0.05 Lon 126.68E 0.05  
Dep 17.8 2.5 Half-duration 2.1  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 2.52 Plg=75 Azm=340  
N -0.33 14 144  
P -2.19 4 235  
Best Double Couple:Mo=2.4\*10\*\*24  
NP1:Strike=339 Dip=43 Slip= 111  
NP2: 132 50 72

25 15 40 31.51 16.316S 173.050W 33km  
4.9mb ( 11 obs.) 5.0Msz ( 3 obs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 33C  
Centroid Location:  
Origin Time 15:40:36.0 0.7  
Lat 16.93S 0.07 Lon 172.50W 0.07

Dep 15.0 FIX Half-duration 1.6  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.78 Plg=60 Azm=273  
N -0.03 5 12  
P -1.75 30 106  
Best Double Couple:Mo=1.8\*10\*\*24  
NP1:Strike=212 Dip=16 Slip= 110  
NP2: 11 75 84

26 09 43 00.39 37.724N 101.496E 8km  
6.2mb ( 79 obs.) 5.9Msz ( 13 obs.)  
QINGHAI PROVINCE, CHINA  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 5 Dip=65 Slip= 90  
NP2: 185 25 90  
Principal Axes:  
T Plg=70 Azm=275  
P 20 95  
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.

## MOMENT TENSOR SOLUTION

Dep 6 No. of sta: 18

Principal Axes:

Scale 10\*\*25 d-cm

T Val= 0.99 Plg=52 Azm=253

N 0.02 11 357

P -1.02 36 95

Best Double Couple:Mo=1.0\*10\*\*25

NP1:Strike=230 Dip=13 Slip= 144

NP2: 356 82 79

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 19S, 44C

Centroid Location:

Origin Time 09:43: 6.8 0.3

Lat 37.80N 0.03 Lon 101.72E 0.04

Dep 15.0 BDY Half-duration 3.7

Principal Axes:

Scale 10\*\*24 D-CM

T Val= 10.30 Plg=66 Azm=301

N 0.28 20 154

P -10.58 12 59

Best Double Couple:Mo=1.0\*10\*\*25

NP1:Strike=125 Dip=37 Slip= 55

NP2: 346 60 113

26 21 52 26.67 15.192S 173.481W 21km  
5.6mb ( 24 obs.) 5.8Msz ( 14 obs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 35C  
Centroid Location:  
Origin Time 21:52:33.9 0.2  
Lat 14.81S 0.03 Lon 173.56W 0.02  
Dep 15.0 FIX Half-duration 3.4  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 7.95 Plg=28 Azm=322  
N 1.60 50 194  
P -9.56 26 67  
Best Double Couple:Mo=8.8\*10\*\*24  
NP1:Strike=105 Dip=50 Slip= 1  
NP2: 15 89 140

30 21 28 35.45 45.547N 26.316E 132km  
6.4mb ( 60 obs.) 6.9Msz ( 10 obs.)  
ROMANIA  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=230 Dip=70 Slip= 69  
NP2: 98 29 135

Principal Axes:

T Plg=60 Azm=110

P 22 336

Comment: The focal mechanism is well controlled and corresponds to reverse

faulting with a moderate

strike-slip component. The

preferred fault plane is not

determined.

## MOMENT TENSOR SOLUTION

Dep 142 No. of sta: 12

Principal Axes:

Scale 10\*\*26 d-cm

T Val= 5.62 Plg=60 Azm=106

N -0.06 19 232

P -5.56 23 330

Best Double Couple:Mo=5.6\*10\*\*26

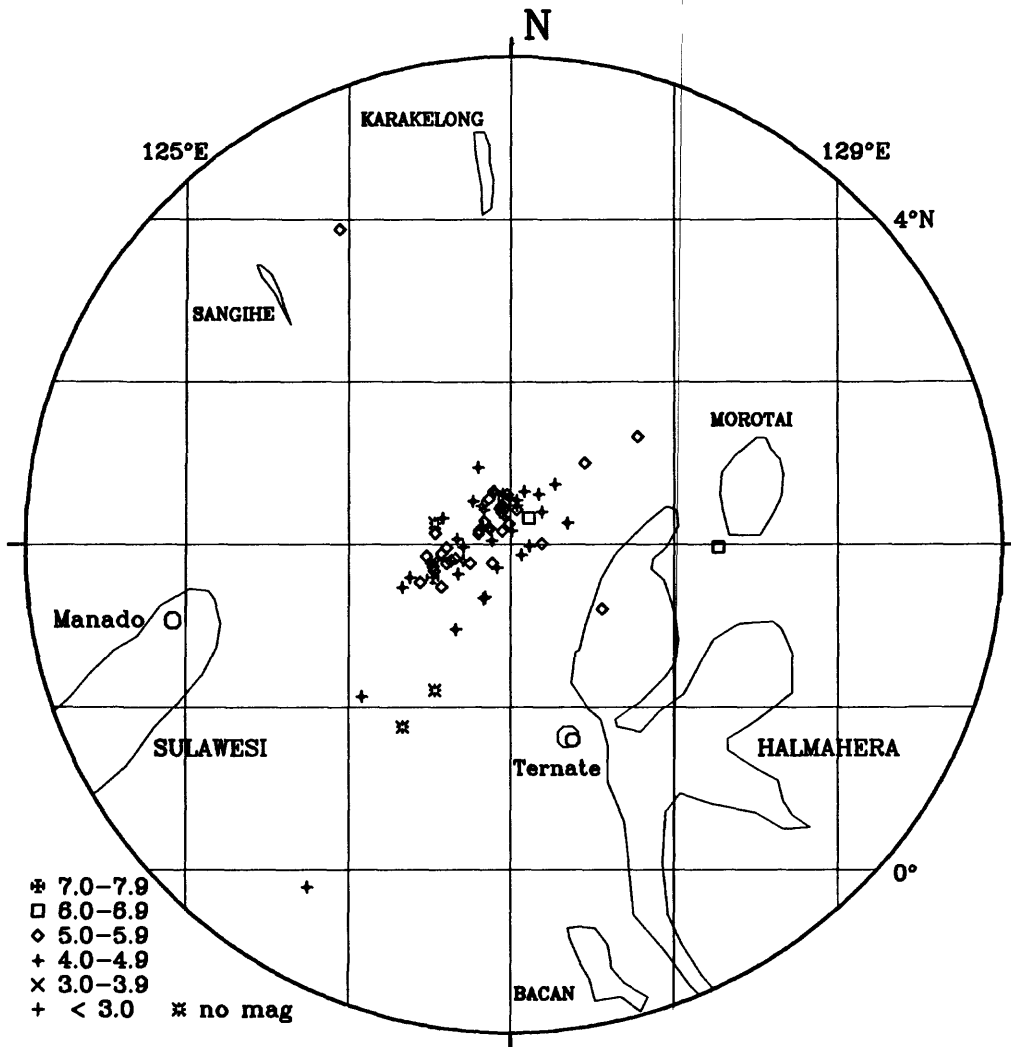
NP1:Strike= 93 Dip=28 Slip= 134  
 NP2: 225 70 70  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 18S, 33C M.W.: 15S, 43C  
 Centroid Location:  
 Origin Time 21:28:51.0 0.2  
 Lat 45.76N 0.02 Lon 26.53E 0.03  
 Dep 132.7 1.1 Half-duration 15.8  
 Principal Axes:  
 Scale  $10^{+26}$  D-CM  
 T Vol= 8.28 Plg=63 Azm=160  
 N -0.73 6 58  
 P -7.55 27 324  
 Best Double Couple:Mo=7.9\* $10^{+26}$   
 NP1:Strike= 39 Dip=19 Slip= 70  
 NP2: 240 72 97

Centroid Location:  
 Origin Time 09:23: 5.5 0.2  
 Lat 22.90N 0.04 Lon 144.42E 0.03  
 Dep 15.0 FIX Half-duration 3.3  
 Principal Axes:  
 Scale  $10^{+24}$  D-CM  
 T Vol= 8.84 Plg=59 Azm=252  
 N 0.78 3 158  
 P -9.62 31 66  
 Best Double Couple:Mo=9.2\* $10^{+24}$   
 NP1:Strike=147 Dip=15 Slip= 79  
 NP2: 338 76 93

31 09 23 04.70 23.042N 144.120E 46km  
 5.4mb ( 29 obs.) 5.9Msz ( 16 obs.)  
 VOLCANO ISLANDS REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 33C

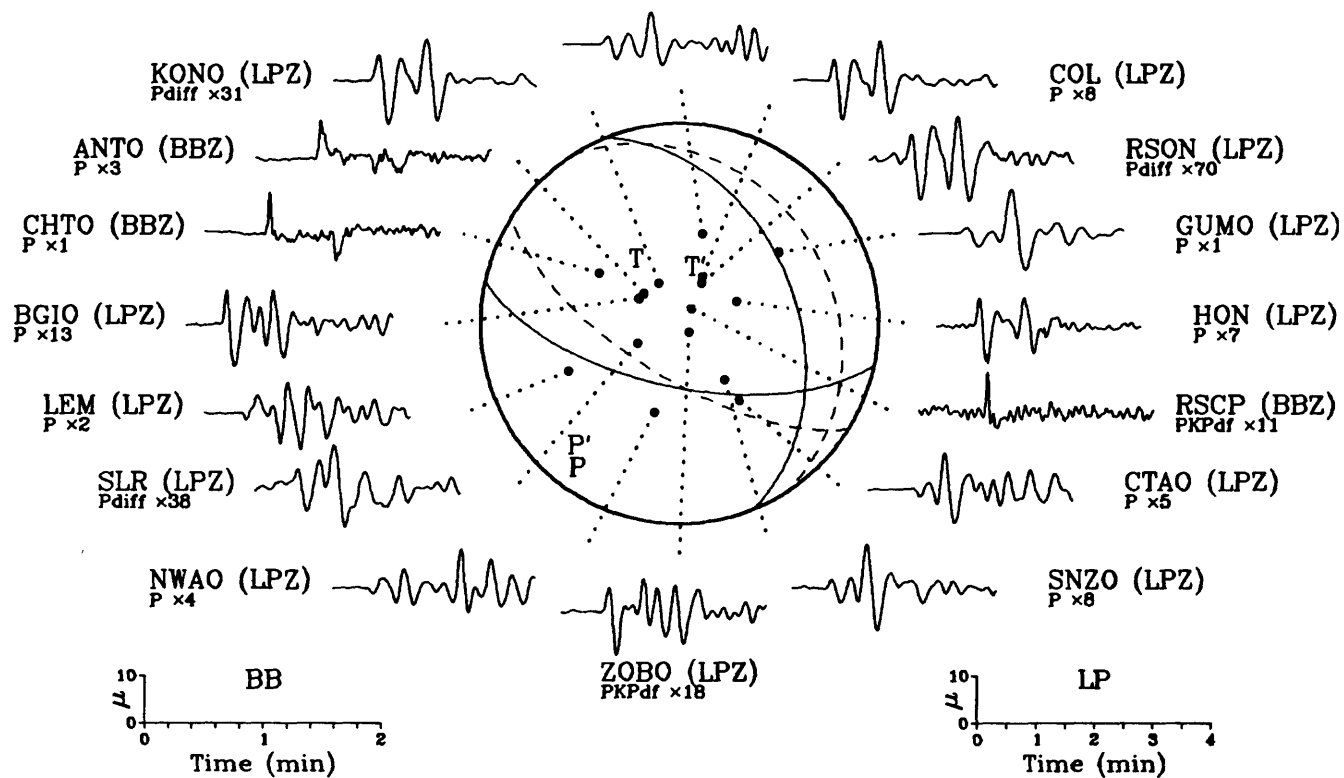
Compiled by Willis S. Jacobs, Leonard E. Kerry, John H. Minsch, Russell E. Needham, Waverly J. Person,  
 Bruce W. Presgrave and William H. Schmieder.

## Earthquake Epicenters in the Molucca Passage August, 1986



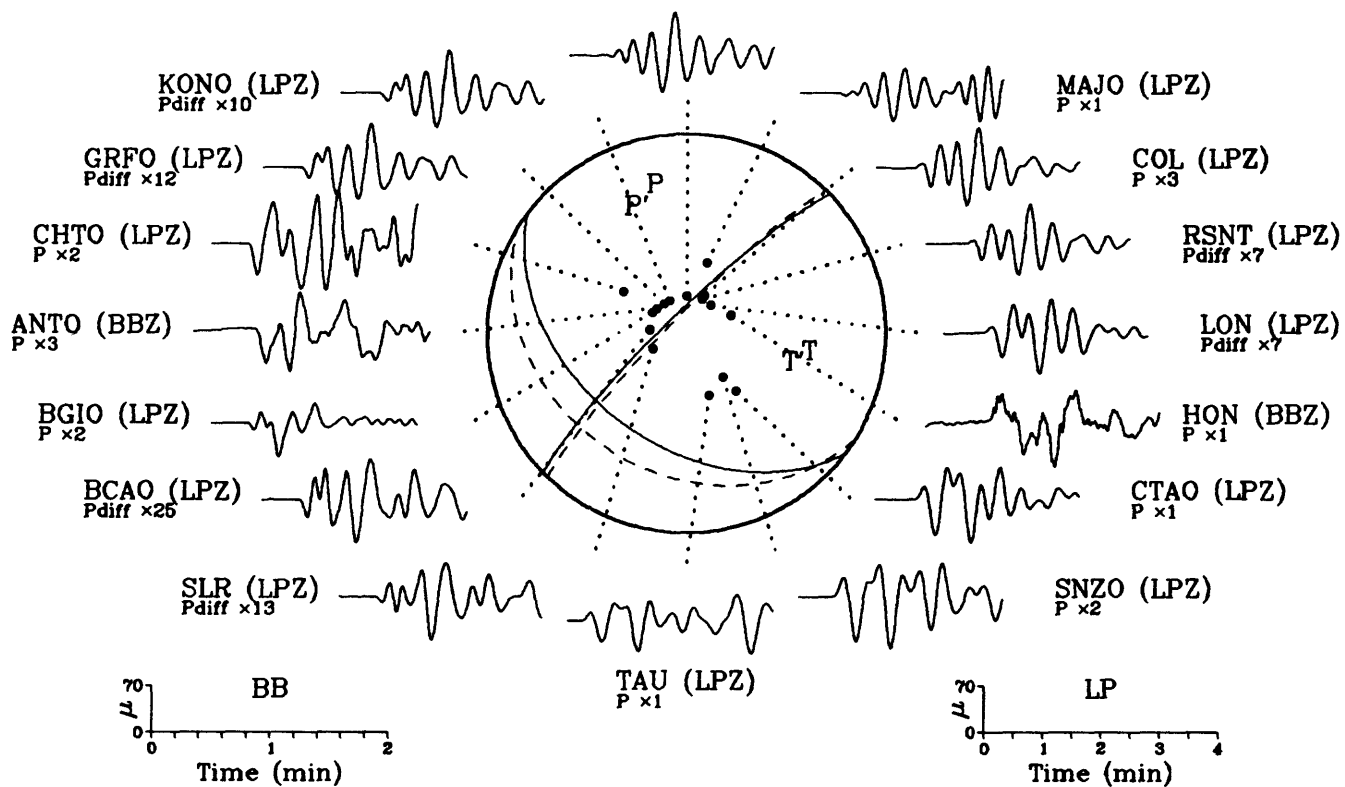
10 August 1986 04:40:49.77

Halmahera

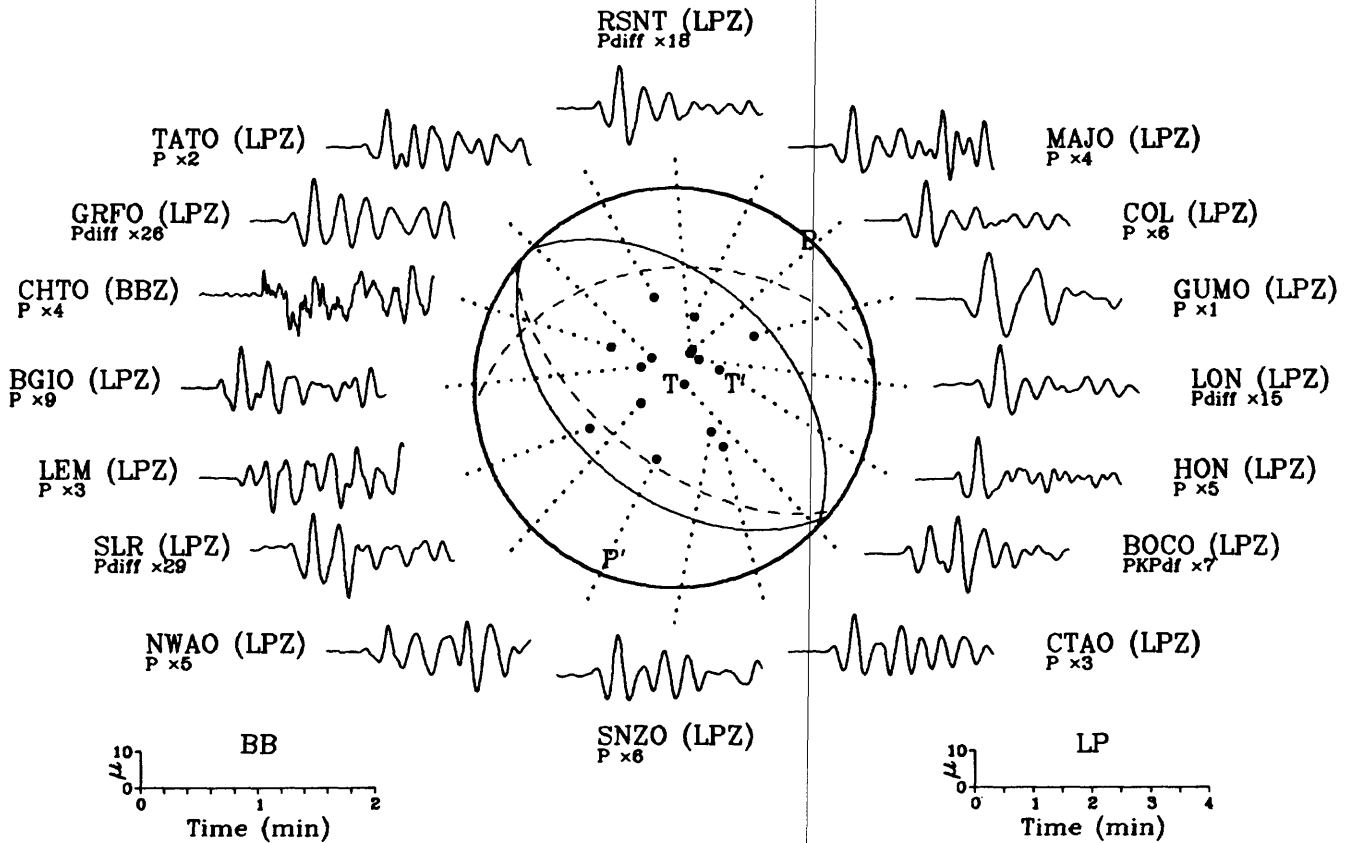
MAJO (LPZ)  
P x2

14 August 1986 19:39:13.67

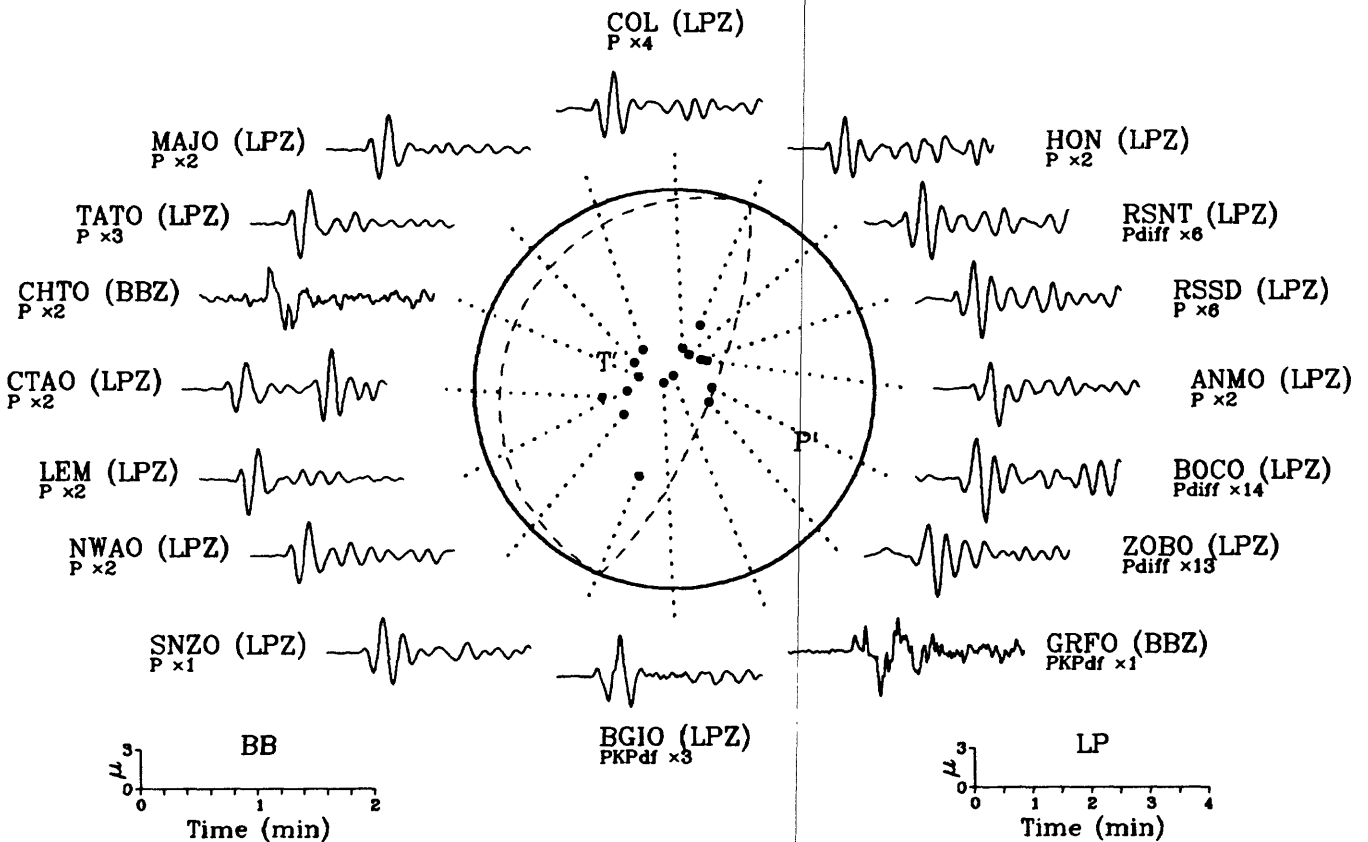
Molucca Passage

GDH (LPZ)  
Pdiff x11

17 August 1986 15:27:41.26  
Molucca Passage

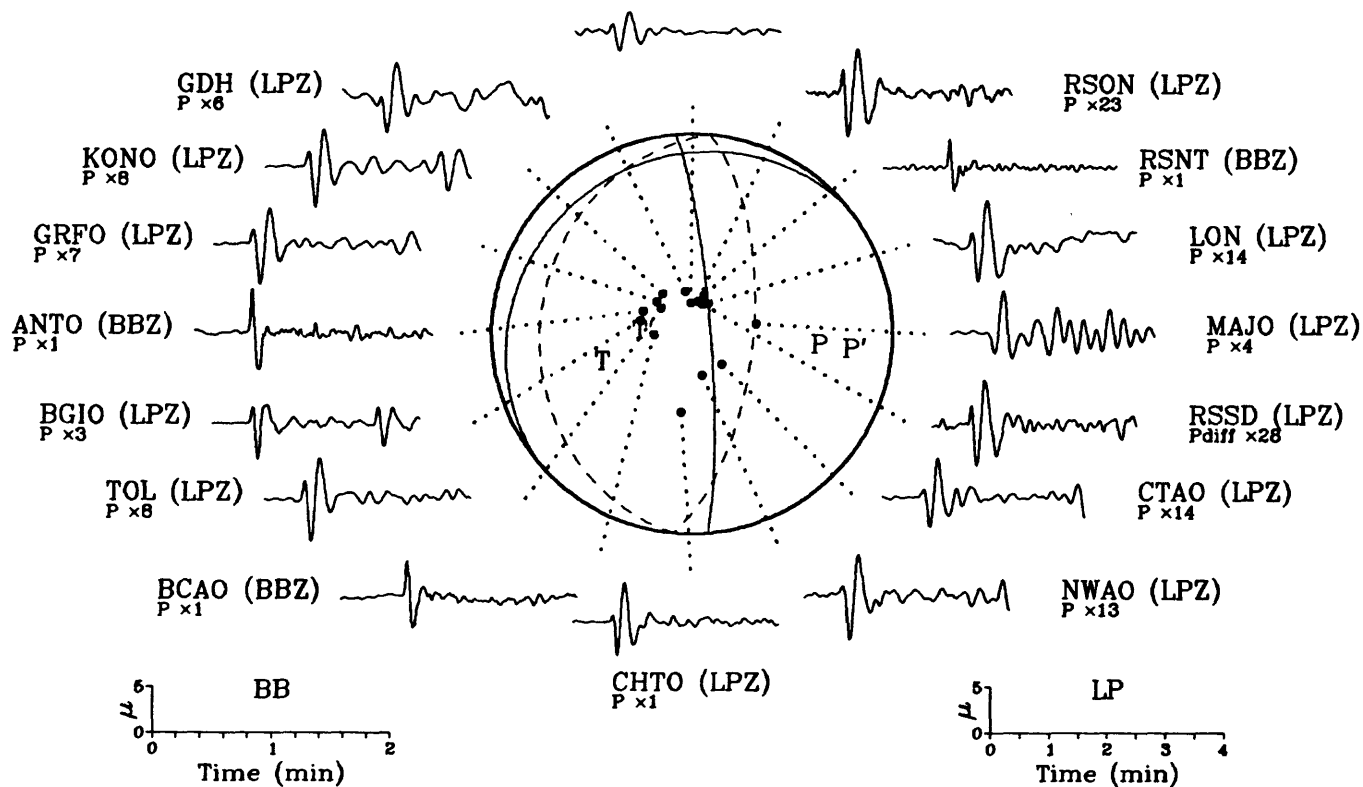


18 August 1986 01:59:54.50  
Tonga Islands



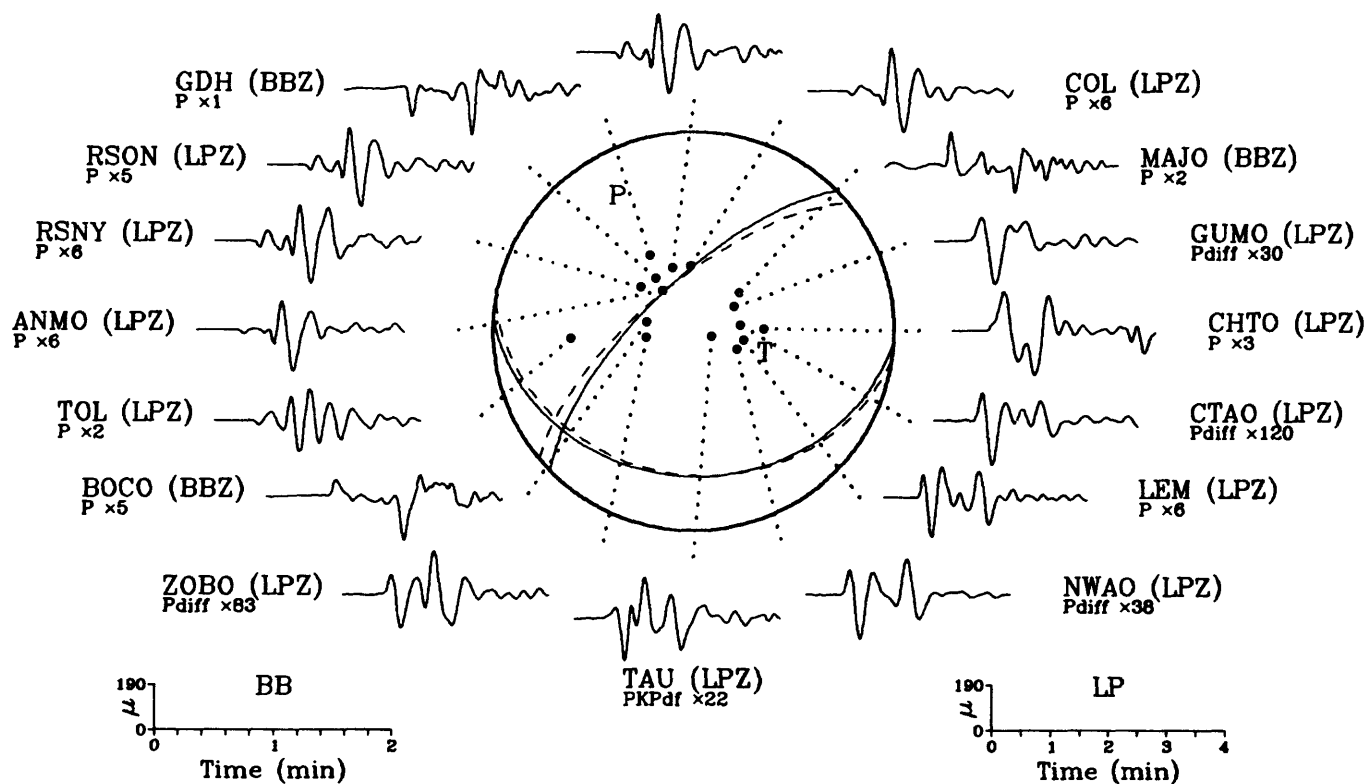
26 August 1986 09:43:00.39  
Qinghai Province, China

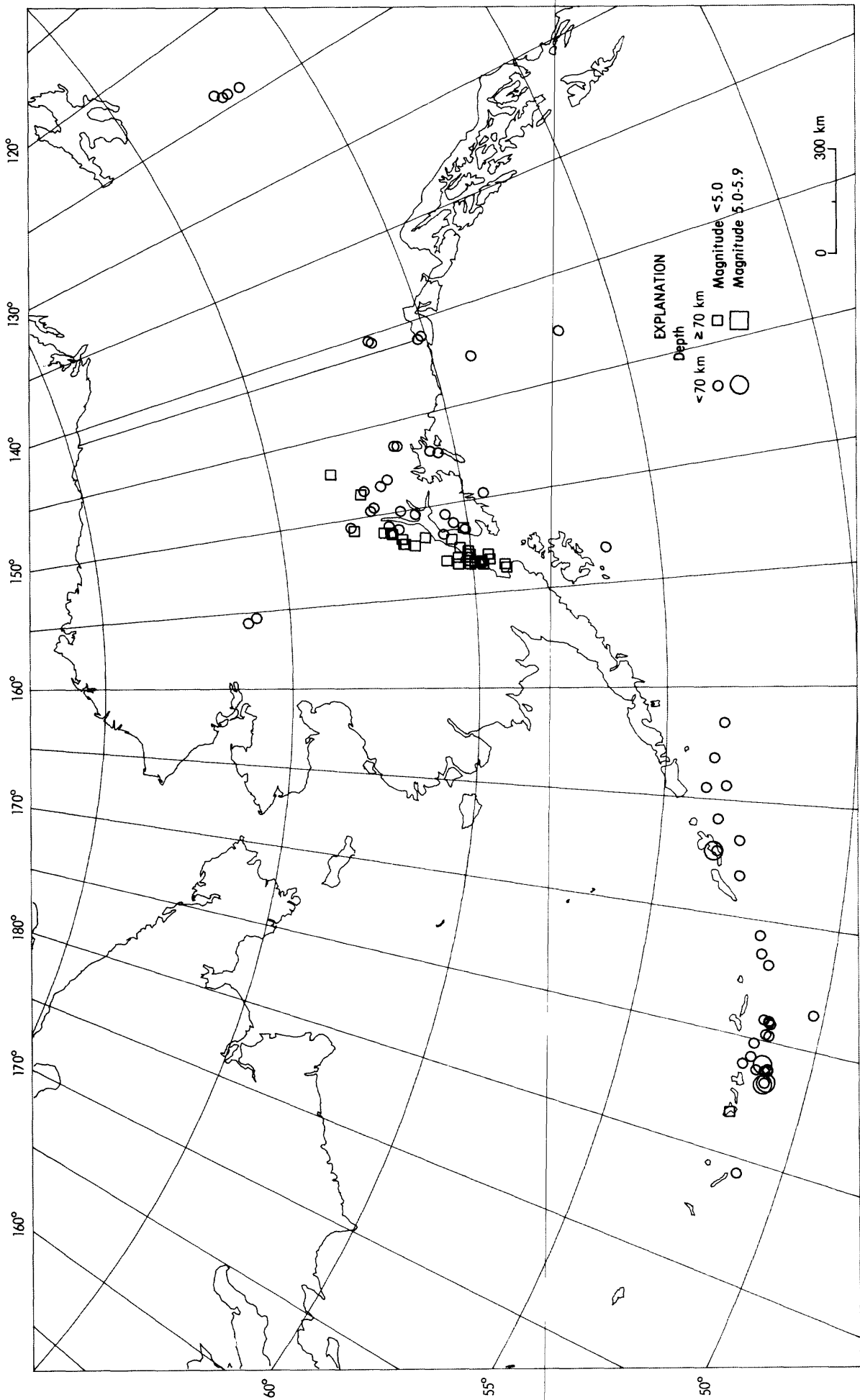
GAC (LPZ)  
Pdiff  $\times 15$



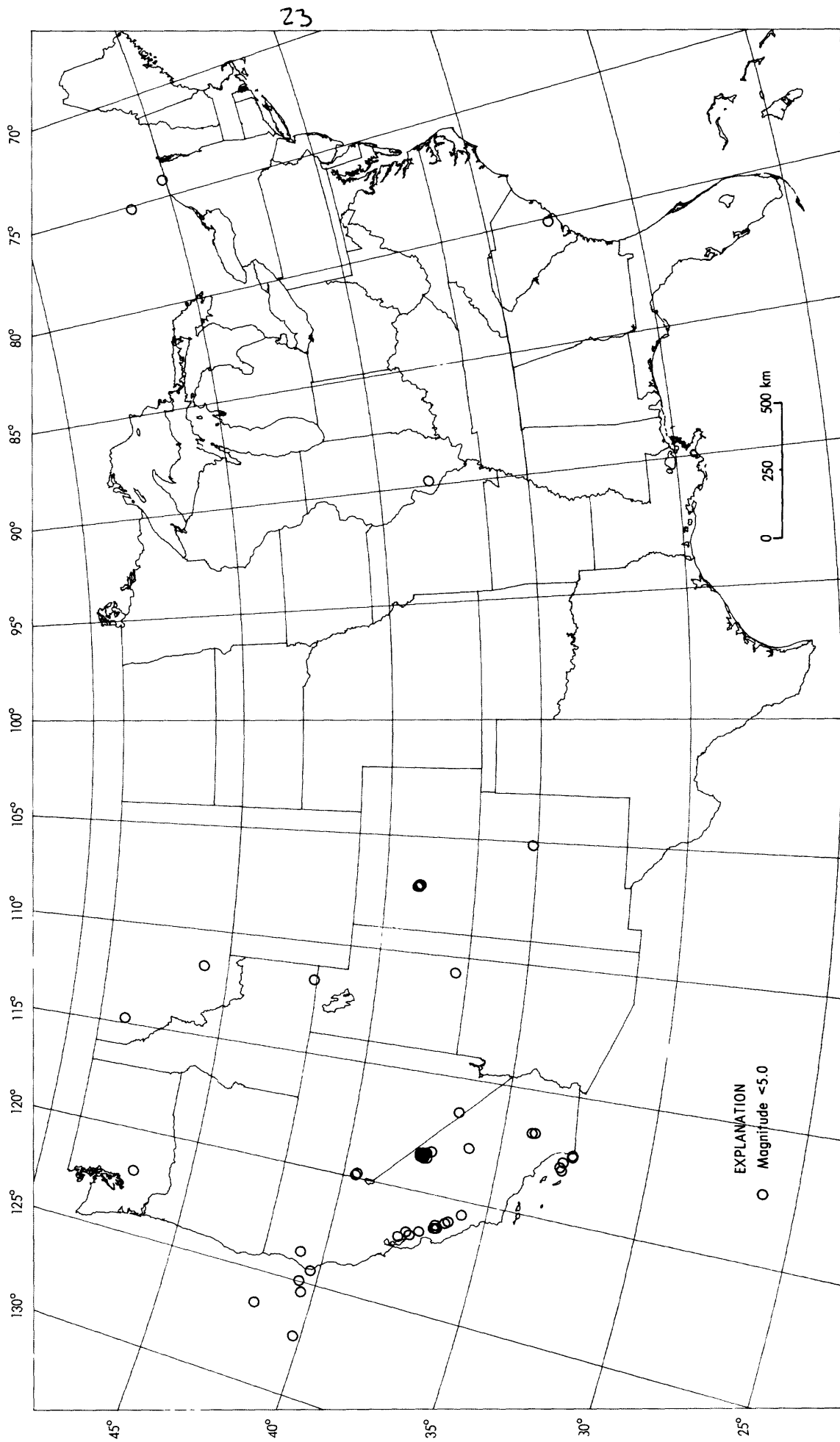
30 August 1986 21:28:35.45  
Romania

RSNT (LPZ)  
P  $\times 5$





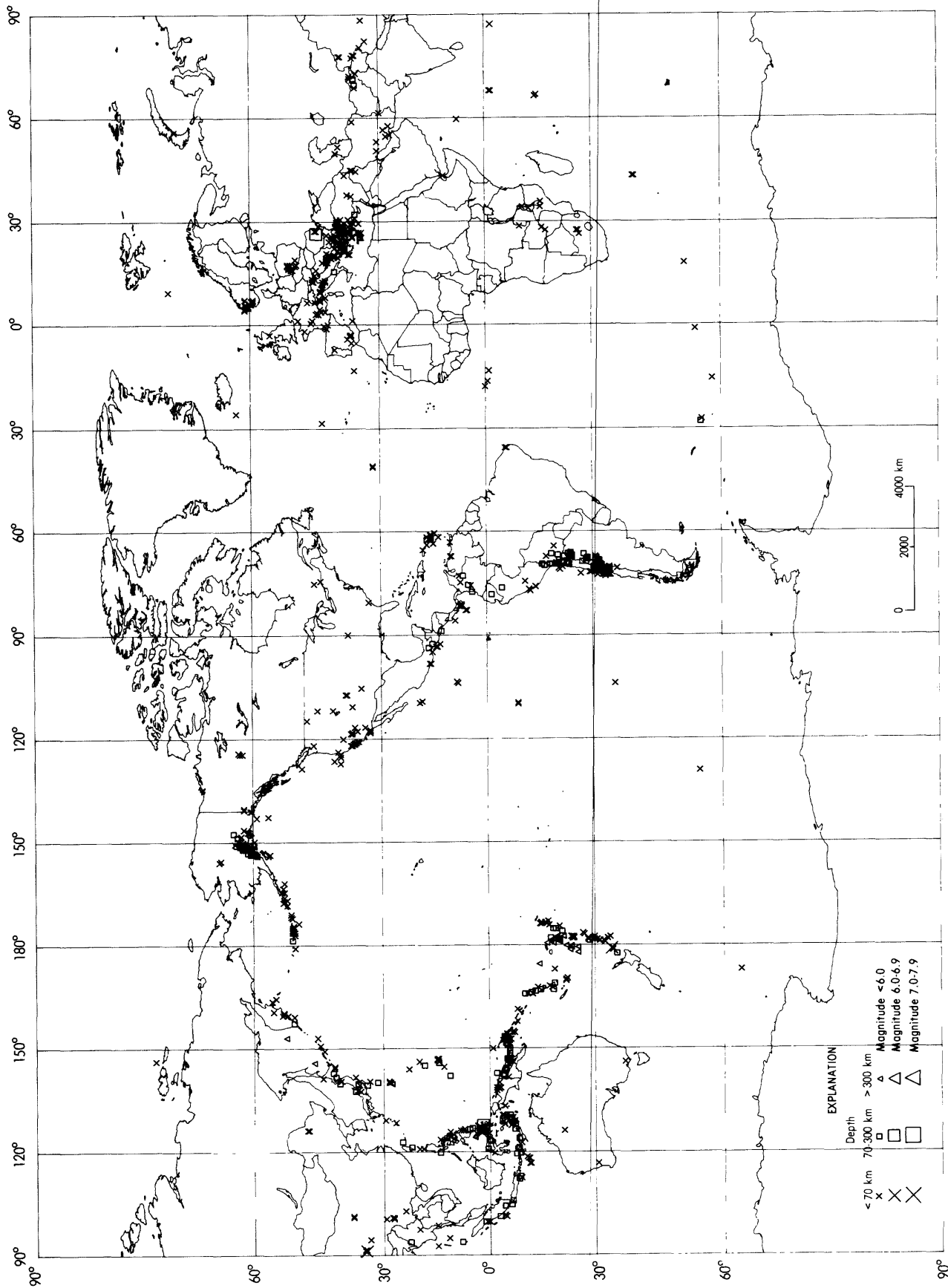
Earthquake epicenters in Alaska and adjacent regions for August, 1986 (C. Stover).



Earthquake epicenters in the conterminous United States and adjacent regions for August, 1986 (C. Stover).



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Earthquakes located in August, 1986 (C. Stover).



# PRELIMINARY DETERMINATION OF EPICENTERS

## MONTHLY LISTING

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

SEPTEMBER 1986

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	03 06.0	38.546 N 15.765 E	216 *	4.2	1.2	34	SICILY
01	03	40 21.5	20.14 N 98.43 W	10 G		1.3	6	VERA CRUZ, MEXICO
01	04	16 28.7	45.09 N 3.17 E	10 G		0.9	7	FRANCE. ML 1.5 (LDG).
01	04	19 28.9	45.090 N 3.199 E	10 G		0.7	9	FRANCE. ML 2.4 (LDG).
01	04	19 42.0	45.043 N 3.388 E	10 G		0.4	9	FRANCE. ML 2.7 (LDG).
01	04	49 19.7	24.378 S 70.303 W	70 *	4.2	1.3	8	NEAR COAST OF NORTHERN CHILE
01	05	09 51.7	45.093 N 3.331 E	10 G		0.8	10	FRANCE. ML 2.6 (LDG).
01	05	23 23.7	45.158 N 3.294 E	10 G		0.9	10	FRANCE. ML 2.8 (LDG).
01	05	42 28.7	45.09 N 3.17 E	10 G		0.8	6	FRANCE. ML 1.8 (LDG).
01	05	54 35.5	39.092 N 27.871 E	10 G		0.2	5	TURKEY
01	06	28 43.8	15.199 N 61.014 W	120 G		0.3	9	LEEWARD ISLANDS
01	06	44 47.6	45.189 N 3.018 E	10 G		1.2	12	FRANCE. ML 2.2 (LDG).
01	08	26 02.5	37.81 N 31.44 E	10 G		0.9	5	TURKEY
01	09	04 24.1	48.295 N 28.002 W	10 G	4.7 4.4	1.0	56	NORTH ATLANTIC RIDGE
01	09	07 01.8	45.791 N 26.525 E	82 ?	3.6	0.4	7	ROMANIA
01	10	32 59.1	16.81 N 60.93 W	5 G		1.0	6	LEEWARD ISLANDS. ML 2.5 (FDF).
01	11	52 19.8	45.049 N 3.380 E	10 G		0.4	10	FRANCE. ML 2.8 (LDG).
01	13	36 48.4	60.168 N 5.000 E	10 G		0.3	6	SOUTHERN NORWAY. MD 2.0 (BER).
01	13	53 47.1	31.560 S 117.081 E	10 G		1.5	8	WESTERN AUSTRALIA
01	14	46 45.2	9.617 S 113.065 E	33 N		1.3	5	SOUTH OF JAVA
01	15	54 23.9	59.37 N 6.75 E	0 G		0.5	6	SOUTHERN NORWAY. MD 2.1 (BER). Probable explosion.
01	16	38 10.8	44.610 N 7.058 E	10 G		0.3	6	NORTHERN ITALY. ML 2.4 (LDG).
01	17	13 58.1	39.032 N 27.969 E	5 G		0.4	5	TURKEY
01	17	19 22.6	30.24 S 71.46 W	10 G		0.6	8	NEAR COAST OF CENTRAL CHILE. Felt (III) at Lo Sereno.
01	18	20 03.5	44.601 N 6.997 E	10 G		0.1	6	FRANCE. ML 2.8 (LDG).
01	18	46 53.2	51.670 N 175.167 W	33 N	4.4	0.5	7	ANDREANOF ISLANDS, ALEUTIAN IS.
01	19	10 47.3	26.452 N 126.458 E	116	4.7	1.1	38	RYUKYU ISLANDS
01	19	43 01.2	35.920 N 120.470 W	6 G			11	CENTRAL CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
01	19	44 08.5	16.501 S 172.265 W	33 N	4.6	0.9	19	SAMOA ISLANDS REGION
01	21	47 35.0	46.631 N 150.010 E	148	5.2	0.9	197	KURIL ISLANDS
01	22	11 19.5	60.839 N 2.628 E	10 G		1.4	51	NORTH SEA. ML 3.8 (BGS), MD 3.5 (BER).
01	22	11 41.0	45.983 N 26.328 E	198 *		1.3	13	ROMANIA
01	23	11 25.8	45.802 N 13.380 E	10 G		0.9	5	NORTHERN ITALY. ML 2.7 (KBA), 2.4 (TRI).
01	23	53 14.6	2.281 N 126.877 E	33 N	5.0	0.5	13	MOLUCCA PASSAGE
02	00	11 08.3	43.234 N 26.021 E	5 G		0.9	9	BULGARIA
02	00	49 48.8	37.590 N 118.450 W	5 G			28	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.5 (BRK).
02	02	00 49.7	45.547 N 26.422 E	153	4.1	1.1	45	ROMANIA. Additional damage in the Kishinev-Kogul area, USSR.
02	04	22 53.9	45.129 N 3.056 E	10 G		0.9	10	FRANCE. ML 2.1 (LDG).
02	05	48 01.6	30.342 S 177.782 W	33 N	5.0	1.3	13	KERMADEC ISLANDS
02	06	09 19.7	45.114 N 3.307 E	10 G		0.9	11	FRANCE. ML 3.0 (LDG).
02	08	17 29.4	39.042 N 27.968 E	10 G		0.4	6	TURKEY
02	09	03 22.9	45.02 N 26.63 E	140 G		1.2	5	ROMANIA
02	09	37 09.3	39.069 N 27.789 E	10 G		1.0	8	TURKEY
02	10	00 07.8	45.550 N 26.418 E	140 G		0.1	5	ROMANIA
02	12	03 10.2	39.076 N 27.632 E	10 G		0.4	6	TURKEY
02	12	09 32.1	39.577 N 28.770 E	10 G		0.7	9	TURKEY
02	12	45 30.2	8 317 S 109.442 E	73 ?	4.4	1.4	21	JAVA
02	12	53 51.3	59.35 N 6.78 E	10 G		0.9	6	SOUTHERN NORWAY. MD 2.3 (BER).
02	12	58 59.1	9.733 S 159.953 E	33 N	4.6	0.8	8	SOLOMON ISLANDS. Felt (I) at Honiara.
02	13	17 03.7	58.64 N 6.23 E	10 G		0.7	7	SOUTHERN NORWAY. MD 2.7 (BER).
02	13	19 59.0	34.684 N 96.483 W	5 G			6	OKLAHOMA. <TUL>. MD 2.1 (TUL).
02	13	41 24.5	39.471 N 28.245 E	10 G		1.3	7	TURKEY
02	13	59 56.8	41.058 N 123.685 W	5 G			5	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK). Felt.
02	14	17 06.0	46.422 N 4.826 W	10 G		0.8	26	BAY OF BISCAY. ML 3.7 (LDG).
02	14	47 56.3	49.962 N 5.303 W	10 G		1.1	22	NORTH ATLANTIC OCEAN. ML 3.4 (LDG), 3.1 (HTL). Felt (V) at Constantine, United Kingdom. Also felt at Helston, Falmouth and Lanner, United Kingdom.

02	18 27 48.2	40.300 N	63.926 E	33 N	4.6	1.1	55	UZBEK SSR
02	19 32 22.47	60.62 N	4.82 E	10 G		0.1	4	SOUTHERN NORWAY. MD 1.6 (BER).
02	21 34 05.07	10.97 S	165.29 E	33 N	4.2	0.7	9	SANTA CRUZ ISLANDS
02	22 54 41.87	44.99 N	3.40 E	10 G		1.6	5	FRANCE. ML 1.5 (LDG).
02	23 21 47.67	45.88 N	26.76 E	33 N		0.5	5	ROMANIA
03	01 16 03.97	5.38 S	35.97 W	5 G		0.7	7	BRAZIL
03	01 20 05.8	39.086 N	27.810 E	10 G		1.2	12	TURKEY
03	01 30 26.3	2.963 S	139.844 E	33 N	5.0	1.3	27	NEAR N. COAST OF WEST IRIAN
03	01 54 26.3	49.990 N	6.027 E	10 G		1.3	12	GERMANY. ML 2.9 (LDG).
03	02 37 53.3%	45.072 N	3.189 E	10 G		1.2	9	FRANCE. ML 2.0 (LDG).
03	03 20 24.67	34.66 S	70.68 W	10 G		0.8	7	CHILE-ARGENTINA BORDER REGION
03	04 31 14.8%	37.295 N	121.667 W	10			23	CENTRAL CALIFORNIA. <BRK>. ML 4.2 (BRK). Felt (V) at Soquel, (IV) at Cambrian Park, Fremont, Loma Mar, Mount Hamilton, Mount Hermon, New Almaden and Redwood Estates. Felt (III) at Aptos, Coyote, Freedom, Felton, Gilroy, Morgan Hill and San Jose.
03	06 11 11.3%	44.010 N	114.792 W	5 G		0.9	10	WESTERN IDAHO. ML 3.2 (NEIS).
03	06 20 50.9	38.912 N	107.090 W	5 G		0.3	14	COLORADO. ML 3.5 (NEIS). Felt (V) at Aspen and Crested Butte. Felt (III) at Gunnison.
03	07 22 10.6	50.514 N	18.975 E	23 *		1.4	10	POLAND. ML 3.9 (KBA), 3.6 (KRA), 3.4 (VKA).
03	09 28 18.2	41.590 N	43.468 E	10 G	4.7 3.7	1.3	102	TURKEY-USSR BORDER REGION. Felt (V) at Bagdonovka; (IV) at Bokurioni and Leninokan; (III) at Tbilisi, USSR.
03	10 41 38.87	52.53 N	168.32 W	33 N	4.7	1.4	8	FOX ISLANDS, ALEUTIAN ISLANDS
03	10 42 02.6%	44.023 N	10.641 E	10 G		0.2	6	NORTHERN ITALY. ML 2.5 (LDG).
03	10 46 39.1%	39.663 N	20.359 E	77 *	3.5	1.2	29	GREECE-ALBANIA BORDER REGION
03	10 59 36.77	51.25 N	16.05 E	10 G		0.7	5	POLAND. MG 2.8 (KRA).
03	11 51 05.0	51.352 N	178.288 W	33 N	5.0	1.0	79	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.0 (PMR). Felt (III) on Adak.
03	12 42 44.2%	11.317 S	165.083 E	33 N	4.6	0.9	9	SANTA CRUZ ISLANDS
03	12 59 56.4	39.088 N	27.961 E	10 G		0.2	7	TURKEY
03	13 31 25.77	53.96 S	134.20 W	10 G	5.0	1.2	13	SOUTH PACIFIC CORDILLERA
03	13 50 41.7	41.651 N	19.274 E	8		0.8	30	ALBANIA. MD 3.4 (TTG).
03	14 00 21.4	41.652 N	19.299 E	10 G		1.1	26	ALBANIA. MD 3.4 (TTG).
03	14 16 44.8%	50.437 N	6.162 E	10 G		0.5	5	GERMANY
03	15 37 19.2%	23.370 N	143.669 E	33 N	4.4	0.6	18	VOLCANO ISLANDS REGION
03	16 26 36.6	46.819 N	9.996 E	10 G		1.1	10	SWITZERLAND
03	17 21 51.5%	53.468 N	167.138 W	33 N	4.5	1.4	17	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).
03	18 07 32.4%	23.379 N	143.650 E	33 N	4.6	1.2	19	VOLCANO ISLANDS REGION
03	18 42 53.5	40.203 N	24.950 E	19		1.1	29	AEGEAN SEA. ML 3.6 (ATH).
03	18 53 49.1	44.039 N	114.764 W	5 G		0.8	16	WESTERN IDAHO. ML 3.9 (NEIS). Felt (III) at Clayton.
03	19 05 28.8%	51.921 N	17.535 E	10 G		0.9	10	POLAND. ML 3.3 (VKA), 3.2 (KBA).
03	20 14 53.7%	31.441 S	177.696 W	33 N	5.0	1.4	11	KERMADEC ISLANDS REGION
03	21 53 07.8%	7.094 S	120.173 E	424 ?	4.9	0.7	7	FLORES SEA
03	23 37 42.67	17.34 N	94.27 W	33 N		0.7	4	CHIAPAS, MEXICO
03	23 54 18.7%	50.249 N	18.925 E	10 G		0.7	5	POLAND. ML 3.0 (KRA).
03	23 58 50.8%	1.798 S	77.735 W	167 ?	4.4	0.5	12	ECUADOR
04	01 29 00.0	39.080 N	27.889 E	10 G		1.3	9	TURKEY
04	01 52 58.17	2.46 N	127.16 E	33 N		1.2	5	MOLUCCA PASSAGE
04	02 01 11.6%	4.334 S	139.734 E	33 N		0.6	5	WEST IRIAN
04	02 43 13.7%	43.865 N	147.509 E	33 N	4.5	1.2	15	KURIL ISLANDS
04	03 32 25.97	16.51 N	94.77 W	131 ?		1.4	14	OAXACA, MEXICO
04	04 15 55.8%	43.993 N	114.803 W	5 G		1.0	8	WESTERN IDAHO. ML 3.4 (NEIS).
04	04 23 47.9%	22.334 S	171.622 E	33 N	4.9	1.2	16	LOYALTY ISLANDS REGION
04	04 38 20.0	44.066 N	114.745 W	5 G		1.0	17	WESTERN IDAHO. ML 4.0 (NEIS).
04	05 00 00.47	4.68 S	152.73 E	10 G		1.0	5	NEW BRITAIN REGION
04	07 06 54.87	39.89 N	28.89 E	31 ?		1.2	5	TURKEY
04	09 09 01.4	39.032 N	27.962 E	10 G		0.6	7	TURKEY
04	11 00 07.67	51.78 N	173.28 W	33 N		1.1	7	ANDREANOF ISLANDS, ALEUTIAN IS.
04	11 25 01.9%	39.017 N	27.998 E	10 G		0.2	6	TURKEY
04	12 43 47.6	44.036 N	114.719 W	5 G		1.0	9	WESTERN IDAHO. ML 3.3 (NEIS).
04	12 48 17.5%	60.294 N	5.406 E	10 G		0.4	6	SOUTHERN NORWAY. MD 1.6 (BER).
04	13 16 56.6%	44.423 N	6.768 E	10 G		1.1	6	FRANCE. ML 2.6 (LDG).
04	14 07 24.97	33.61 S	72.26 W	10 G		0.6	8	OFF COAST OF CENTRAL CHILE
04	15 07 09.4%	45.174 N	5.623 E	10 G		0.7	11	FRANCE. ML 2.7 (LDG).
04	16 09 00.1	37.236 N	116.352 W	5 G		0.4	37	SOUTHERN NEVADA. ML 3.5 (NEIS).
04	16 15 11.27	7.26 S	127.08 E	317 ?	4.3	0.9	10	BANDA SEA
04	17 29 14.0%	36.421 N	138.321 E	10 G		1.3	6	HONSHU, JAPAN. Felt (I JMA) at Nagano.
04	17 33 17.4%	34.477 N	96.503 W	5 G			7	OKLAHOMA. <TUL>. mbLg 2.6 (TUL).
04	18 22 14.67	16.54 S	177.08 E	33 N	4.4	1.4	7	FIJI ISLANDS
04	18 30 54.0%	44.296 N	7.182 E	10 G		0.1	5	NORTHERN ITALY. ML 2.9 (LDG).
04	18 46 14.9%	11.731 S	34.833 E	10 G	4.4	1.2	10	MALAWI
04	18 53 16.6	41.701 N	19.393 E	10 G		1.0	11	ALBANIA. MD 2.9 (TTG).
04	19 13 26.5%	21.181 S	71.252 W	105 ?		1.0	7	OFF COAST OF NORTHERN CHILE
04	20 08 16.7%	59.726 N	154.022 W	154			25	SOUTHERN ALASKA. <AGS-P>.
04	20 50 50.4%	46.339 N	12.448 E	10 G		1.5	7	NORTHERN ITALY. ML 2.5 (KBA).
04	21 54 01.0%	61.476 N	151.430 W	79			36	SOUTHERN ALASKA. <AGS-P>.
04	22 36 47.3%	43.570 N	146.783 E	66 *	4.5	1.0	25	KURIL ISLANDS. Felt (I JMA) at Nemuro, Hokkaido.
04	22 51 17.6	55.166 N	162.556 E	62 *	4.7	0.9	66	NEAR EAST COAST OF KAMCHATKA
04	23 01 50.0	20.002 S	178.432 W	610	4.9	0.9	57	FIJI ISLANDS REGION
04	23 31 28.6%	16.676 N	98.020 W	53 *	4.6	1.0	28	NEAR COAST OF GUERRERO, MEXICO. Felt slightly at Mexico City.
04	23 38 51.47	37.12 N	21.39 E	33 N		1.5	5	SOUTHERN GREECE. ML 3.3 (ATH).
04	23 48 10.1%	39.314 N	27.953 E	10 G		0.2	5	TURKEY
05	02 02 15.2%	45.955 N	26.794 E	33 N		0.8	5	ROMANIA
a 05	02 47 17.7	59.493 S	29.529 W	28 D	5.8 5.9	1.1	84	SOUTH SANDWICH ISLANDS REGION
05	03 11 10.9	20.864 S	175.699 W	62 D	5.1	0.9	49	TONGA ISLANDS
05	03 43 15.6%	7.375 N	126.922 E	69 *	5.0	1.1	24	MINDANAO, PHILIPPINE ISLANDS
05	05 36 47.6	50.540 N	19.088 E	10 G		1.5	9	POLAND. ML 3.5 (KBA), 3.1 (VKA).
05	05 48 01.7	62.994 N	148.484 W	102 ?		0.4	9	CENTRAL ALASKA
05	05 50 14.9%	17.820 S	178.865 W	655 ?	4.5	0.5	16	FIJI ISLANDS REGION
a 05	06 06 15.5	37.073 S	71.814 W	93	5.6	1.0	133	S. CHILE-ARGENTINA BORDER REGION. Felt (IV) in the Chillan area, Chile. Felt from Concepcion to Valdivia, Chile.

05	07	23	39.9*	19.916 N	121.184 E	79 *	4.4	0.6	9	PHILIPPINE ISLANDS REGION
05	07	31	19.47	43.47 N	17.55 E	10 G		1.4	5	YUGOSLAVIA. ML 2.9 (TTG).
05	08	34	25.6*	29.147 N	85.142 E	33 N	4.1	1.4	12	TIBET
05	10	32	22.3	0.187 S	17.932 W	10 G	4.8 4.0	0.9	59	NORTH OF ASCENSION ISLAND
05	12	16	49.1*	22.598 S	66.964 W	118 ?	4.2	1.1	11	JUJUY PROVINCE, ARGENTINA
05	13	28	43.57	32.81 N	26.84 E	10 G		0.3	5	EASTERN MEDITERRANEAN SEA
05	14	22	09.1	28.124 N	111.396 W	10 G	5.0	1.2	65	GULF OF CALIFORNIA
05	15	34	30.97	44.92 N	3.47 E	10 G		1.4	10	FRANCE. ML 2.5 (LDG).
05	15	42	26.0*	60.000 N	152.286 W	72		43	SOUTHERN ALASKA. <AGS-P>.	
05	15	55	55.7%	60.724 N	5.572 E	10 G		0.6	5	SOUTHERN NORWAY. MD 2.0 (BER).
05	16	14	35.7	25.873 N	96.343 E	33 N	4.1	1.2	17	BURMA
05	17	06	54.3*	32.858 S	71.586 W	10 G		0.4	7	NEAR COAST OF CENTRAL CHILE
05	18	13	41.4*	38.828 N	122.802 W	2 G			11	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK).
05	18	55	50.67	18.36 N	100.09 W	33 N		1.1	9	GUERRERO, MEXICO
05	19	03	41.0	8.327 S	130.996 E	33 N	4.7	1.2	29	TANIMBAR ISLANDS REGION
05	19	20	51.0	44.008 N	114.752 W	5 G		0.6	9	WESTERN IDAHO. ML 4.0 (NEIS).
05	19	23	48.6*	43.979 N	114.744 W	5 G		0.9	6	WESTERN IDAHO. ML 3.4 (NEIS).
05	19	53	24.3	36.052 N	31.718 E	75	4.3	1.1	111	TURKEY. Felt at Antalya, Turkey and Nicosia, Cyprus.
05	21	08	24.7	1.864 N	126.778 E	73 *	4.8	1.1	32	MOLUCCA PASSAGE
05	21	14	29.37	23.01 S	68.73 W	199 ?	3.9	0.8	6	NORTHERN CHILE
05	21	49	07.4	15.812 N	59.637 W	33 N	4.1	0.8	20	LEEWARD ISLANDS. ML 3.9 (PAG).
05	22	40	26.0	6.979 N	94.501 E	33 N	4.9	1.2	28	NICOBAR ISLANDS REGION
06	00	11	05.5	15.775 S	177.935 W	439	5.0	0.9	180	FIJI ISLANDS REGION
06	01	35	37.6*	37.072 N	29.328 E	10 G		1.1	5	TURKEY
06	02	24	05.9	15.020 S	177.653 W	383	4.8	0.9	97	FIJI ISLANDS REGION
06	02	26	08.2*	38.154 N	20.710 E	10 G		1.2	5	GREECE
06	04	04	35.7	1.517 N	127.375 E	139 *	4.8	0.9	34	HALMAHERA
06	04	14	57.4*	41.723 N	19.454 E	10 G		1.0	7	ALBANIA. ML 2.9 (TTG).
06	04	59	22.2	50.128 N	17.230 E	11		0.7	10	POLAND. ML 3.7 (VKA), 3.4 (KBA).
06	08	52	25.5	23.280 S	176.745 W	122	5.6	1.0	208	SOUTH OF FIJI ISLANDS
06	11	13	03.0	46.930 N	1.884 W	15		0.7	21	FRANCE. ML 3.6 (LDG).
06	11	38	11.9*	60.700 N	152.120 W	79			30	SOUTHERN ALASKA. <AGS-P>.
06	11	47	44.6*	43.129 N	17.259 E	10 G		0.8	8	YUGOSLAVIA. ML 3.0 (KBA), 2.9 (TTG).
06	14	40	03.9*	11.853 N	143.164 E	33 N	4.3	0.3	6	SOUTH OF MARIANA ISLANDS
06	14	46	44.7*	48.748 N	125.254 W	24			11	VANCOUVER ISLAND REGION. <PGC-P>. ML 3.7 (PGC).
06	15	31	01.8	36.407 N	71.330 E	84	5.0	1.1	128	AFGHANISTAN-USSR BORDER REGION. Felt (III) at Khorog, Ishkashim and in the Moskovskiy region, USSR.
06	15	34	54.8	36.371 N	138.350 E	10 G	4.3	1.1	10	HONSHU, JAPAN. Felt (I JMA) at Nagano.
06	16	46	43.27	3.09 S	101.41 E	149 ?	4.9	1.4	10	SOUTHERN SUMATERA
06	17	55	20.0*	44.020 N	114.788 W	5 G		0.9	8	WESTERN IDAHO. ML 3.5 (NEIS).
06	20	03	01.77	48.36 N	1.18 W	10 G		1.7	5	FRANCE. ML 2.3 (LDG).
06	20	04	23.7	20.669 S	178.457 W	587 D	5.5	0.9	211	FIJI ISLANDS REGION
06	20	20	02.7	51.685 N	16.234 E	10 G		0.8	22	POLAND. ML 4.2 (VKA), 4.1 (GRF), 4.1 (KBA).
06	21	13	19.1	38.898 N	107.080 W	5 G		0.4	10	COLORADO. ML 2.2 (NEIS).
06	21	16	43.5%	42.943 N	18.862 E	10 G		0.8	5	YUGOSLAVIA. ML 2.2 (TTG).
06	22	54	54.2*	30.420 N	41.979 W	10 G	4.3	0.8	19	NORTH ATLANTIC RIDGE
06	23	05	07.3%	39.035 N	28.035 E	10 G		0.6	5	TURKEY
06	23	06	44.1	5.346 N	126.087 E	109	5.3	1.2	69	MINDANAO, PHILIPPINE ISLANDS
07	00	08	37.5	6.773 N	72.996 W	168	4.2	0.6	19	NORTHERN COLOMBIA
07	00	22	32.5*	60.244 N	143.445 W	18			41	SOUTHERN ALASKA. <AGS-P>. ML 3.8 (PMR).
07	01	44	19.9	12.824 S	169.518 E	665	4.9	0.8	119	SANTA CRUZ ISLANDS REGION
07	02	13	49.1	23.041 S	177.086 W	190	5.4	1.2	106	SOUTH OF FIJI ISLANDS
07	04	03	15.0*	18.757 S	177.893 W	563	4.5	0.6	26	FIJI ISLANDS REGION
07	04	45	23.1*	45.592 N	26.265 E	123 ?	3.5	1.4	12	ROMANIA
07	04	58	29.3*	32.500 N	115.060 W	6 G			2	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
07	05	47	38.57	33.44 S	72.00 W	33 N		1.1	9	NEAR COAST OF CENTRAL CHILE
07	05	50	26.0*	32.380 N	115.160 W	6 G			5	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.5 (PAS).
07	06	28	46.2	27.943 S	66.586 W	160 *	4.9	1.2	34	CATAMARCA PROVINCE, ARGENTINA
07	07	50	39.4*	8.055 S	97.627 W	10 G	4.8 3.9	1.0	44	SOUTHWEST OF GALAPAGOS ISLANDS
07	08	09	36.5	38.379 N	25.104 E	10 G		0.8	8	AEGEAN SEA. ML 3.3 (ATH).
07	09	24	45.9	53.749 N	2.816 E	10 G		0.7	27	NORTH SEA. ML 3.6 (LDG), 3.3 (BGS). mbLg 3.2 (DOU).
07	09	29	57.0*	60.027 N	152.696 W	89			35	SOUTHERN ALASKA. <AGS-P>.
07	10	47	53.8	43.206 N	26.023 E	10 G		0.9	13	BULGARIA
07	10	54	02.2	43.192 N	26.085 E	10 G		1.1	10	BULGARIA
07	11	43	25.8*	3.324 N	127.580 E	33 N	4.3	1.0	14	TALAUD ISLANDS
07	13	25	20.0*	7.058 S	154.796 E	45 *	4.9	1.3	13	SOLOMON ISLANDS
07	17	12	38.57	32.33 S	70.18 W	33 N		1.5	8	CHILE-ARGENTINA BORDER REGION
07	18	15	45.97	18.13 S	178.44 W	625 *	5.0	1.0	19	FIJI ISLANDS REGION
07	18	34	08.1*	2.428 S	77.659 W	33 N	4.0	0.8	7	PERU-ECUADOR BORDER REGION
07	20	11	08.8	59.542 S	26.098 W	33 N	5.4 5.0	1.0	59	SOUTH SANDWICH ISLANDS REGION
07	21	51	54.2	18.567 S	69.644 W	119	4.7	1.3	32	NORTHERN CHILE
07	22	10	35.5*	2.134 N	127.013 E	33 N		0.5	7	MOLUCCA PASSAGE
07	22	20	35.3*	19.735 S	167.690 E	33 N	4.6	1.3	6	VANUATU ISLANDS REGION
07	23	57	04.6*	9.640 S	112.190 E	81 ?	4.6	0.8	9	SOUTH OF JAVA
08	00	36	15.8	12.782 S	169.460 E	641 D	4.9	1.0	87	SANTA CRUZ ISLANDS REGION
08	00	58	21.0	48.234 N	154.253 E	54 D	4.7	0.7	50	KURIL ISLANDS
08	02	39	52.4	4.417 N	96.370 E	40	5.2 5.1	1.2	132	NORTHERN SUMATERA
08	03	37	41.1*	40.342 N	124.262 W	5 G			8	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).
08	03	46	05.5*	4.429 N	96.400 E	33 N		1.6	5	NORTHERN SUMATERA
08	05	10	48.1*	28.665 N	129.869 E	33 N		0.6	6	RYUKYU ISLANDS. Felt (I JMA) at Naze.
08	06	03	29.9	6.835 N	73.132 W	161	4.6	1.1	24	NORTHERN COLOMBIA
08	06	38	40.5*	8.215 N	93.981 E	74 ?	4.4	1.5	14	NICOBAR ISLANDS REGION
08	07	03	15.4	25.336 N	66.600 E	33 N	4.6 3.8	1.2	37	PAKISTAN
08	09	37	58.77	4.62 N	96.45 E	33 N		0.9	5	NORTHERN SUMATERA
08	11	07	29.7*	32.940 N	117.770 W	10			6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
08	11	51	25.0*	6.425 S	108.300 E	285 *	4.6	1.0	22	JAVA
08	12	39	28.7*	45.613 N	26.489 E	165 ?		0.6	12	ROMANIA
08	13	03	36.77	17.84 N	95.46 W	33 N		1.1	8	OAXACA, MEXICO
08	16	22	44.8*	36.840 N	121.390 W	5			14	CENTRAL CALIFORNIA. <BRK>. ML 2.0 (BRK). Felt at Hollister.
08	16	43	52.2	0.553 N	122.101 E	120 *	4.9	0.6	14	MINAHASSA PENINSULA
08	16	55	42.6	6.355 S	154.652 E	48 *	4.4	0.9	19	SOLOMON ISLANDS
08	17	19	43.9*	45.497 N	26.344 E	140 G		0.6	6	ROMANIA

08	17 35 39.6*	4.710 S	130.510 E	33 N	1.4	9	BANDA SEA
08	18 02 02.27	32.38 S	71.75 W	10 G	0.5	8	NEAR COAST OF CENTRAL CHILE
08	21 23 27.9*	21.905 S	68.712 W	145 ?	4.1	1.5	11 CHILE-BOLIVIA BORDER REGION
08	22 21 14.7*	39.522 N	15.563 E	266 *	4.1	1.3	42 SOUTHERN ITALY
08	23 35 29.5*	55.891 S	27.115 W	23 D	5.0	0.7	17 SOUTH SANDWICH ISLANDS REGION
09	00 03 43.8*	13.846 N	92.076 W	58 *	4.5 3.3	1.5	20 OFF COAST OF CHIAPAS, MEXICO
09	00 15 34.97	14.67 N	60.94 W	125 G		0.5	10 WINDWARD ISLANDS
09	00 18 13.8*	6.672 N	77.486 W	10 G	3.8	1.5	8 NEAR WEST COAST OF COLOMBIA
09	00 23 55.9*	6.680 N	77.586 W	10 G		1.2	8 NEAR WEST COAST OF COLOMBIA
09	00 29 15.6*	34.914 S	179.063 E	33 N	5.2 5.0	0.9	8 SOUTH OF KERMADEC ISLANDS
09	00 30 49.5	45.180 N	114.759 E	10 G	4.5 4.1	1.0	25 MONGOLIA
09	03 19 48.9	23.125 S	66.507 W	209	5.0	1.1	82 JUJUY PROVINCE, ARGENTINA
09	03 49 12.07	45.82 N	26.26 E	173 ?		1.3	16 ROMANIA
09	04 37 50.4*	4.639 S	11.426 W	10 G	4.6 4.4	1.0	41 NORTH OF ASCENSION ISLAND
09	07 33 01.4	28.429 N	138.554 E	535	4.8	0.7	56 BONIN ISLANDS REGION
09	08 50 22.8*	31.700 N	115.940 W	6 G			3 BAJA CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
09	08 53 52.0*	36.135 N	71.420 E	141 ?	4.6	1.5	8 AFGHANISTAN-USSR BORDER REGION
09	10 26 33.0*	50.946 S	28.942 E	10 G	4.7	0.7	10 SOUTH OF AFRICA
09	10 28 53.57	17.32 N	99.78 W	10 G		1.4	6 GUERRERO, MEXICO
09	13 29 39.2	37.452 N	118.438 W	5 G		0.6	12 CALIFORNIA-NEVADA BORDER REGION. ML 3.4 (NEIS).
09	14 10 42.9*	12.083 S	166.068 E	33 N		0.7	8 SANTA CRUZ ISLANDS
09	14 17 43.47	39.56 N	72.89 E	33 N	4.3	1.4	5 KIRGHIZ SSR
09	14 29 03.47	34.01 S	72.34 W	10 G		0.6	7 NEAR COAST OF CENTRAL CHILE
09	14 37 20.3	42.539 N	19.746 E	10 G		0.5	7 YUGOSLAVIA. ML 2.3 (TTG).
09	14 42 44.4	1.095 N	127.865 E	33 N	4.6	1.1	35 HALMAHERA
09	15 16 34.2	62.635 N	151.145 W	110 *		0.8	31 CENTRAL ALASKA
09	15 58 22.5	0.927 N	127.944 E	33 N	5.5 5.3	1.2	104 HALMAHERA
09	16 22 50.6*	33.970 N	116.570 W	6		28	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.5 (PAS). Felt (IV) at Cabazon, Desert Hot Springs, North Palm Springs, Morongo Valley and Mountain Center. Felt (III) at Palm Springs, Joshua Tree and La Quinta.
09	16 22 51.9	31.621 N	85.026 E	33 N	4.8	1.1	42 TIBET
09	16 24 26.6	31.546 N	85.067 E	33 N	5.2 4.9	1.1	91 TIBET
09	16 40 13.2	31.587 N	85.040 E	33 N	4.8	1.3	28 TIBET
09	17 22 34.5*	45.322 N	146.098 E	176 ?	4.5	1.0	36 KURIL ISLANDS
09	17 55 57.4*	59.320 N	6.790 E	10 G		1.4	7 SOUTHERN NORWAY. MD 2.3 (BER).
09	23 24 04.9	21.857 S	68.704 W	106 *	4.7	1.1	19 CHILE-BOLIVIA BORDER REGION
10	01 47 30.2	19.130 S	174.789 W	165 *	5.0	1.1	43 TONGA ISLANDS
10	02 35 54.9*	46.471 N	12.326 E	10 G		0.4	6 NORTHERN ITALY. ML 2.3 (KBA).
10	05 05 07.6*	33.625 S	70.908 W	33 N		0.7	7 CHILE-ARGENTINA BORDER REGION
10	05 06 59.07	37.70 N	19.98 E	10 G	4.1	1.0	12 IONIAN SEA. ML 4.0 (ATH).
10	05 44 04.4*	21.650 S	68.936 W	185 ?		1.5	8 CHILE-BOLIVIA BORDER REGION
10	06 09 50.17	18.75 S	173.94 W	33 N	4.7	1.4	15 TONGA ISLANDS
10	06 47 45.8	37.992 N	39.123 E	10 G	4.1	1.4	17 TURKEY
10	07 50 25.5	25.385 N	92.077 E	43 D	5.2 4.5	1.0	109 INDIA-BANGLADESH BORDER REGION. Felt strongly in Assam and Meghalaya, India.
10	09 24 45.3	44.593 N	11.313 E	10 G		1.0	17 NORTHERN ITALY. ML 3.4 (KBA), 3.2 (LDG).
10	10 54 42.0*	16.062 S	172.888 W	33 N	4.8	1.2	25 SAMOA ISLANDS REGION
10	13 46 15.37	36.89 N	76.81 E	33 N	4.8	1.1	8 KASHMIR-XINJIANG BORDER REGION
10	13 46 46.1	2.811 S	101.279 E	84 *	5.3	1.1	69 SOUTHERN SUMATERA
10	14 35 39.3*	11.248 S	166.101 E	153 *	5.1	1.1	25 SANTA CRUZ ISLANDS
10	15 11 48.77	25.20 N	141.18 E	33 N	4.6	1.5	8 VOLCANO ISLANDS REGION
10	15 49 24.3*	39.552 N	27.951 E	10 G		0.2	5 TURKEY
10	15 51 52.3*	33.960 N	116.670 W	9		11	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS). Felt in the Palm Springs area.
10	16 56 08.07	21.73 S	179.48 W	626 *	5.1	0.8	27 FIJI ISLANDS REGION
10	17 03 34.2*	50.240 S	71.290 W	33 N	5.0	1.4	16 S. CHILE-ARGENTINA BORDER REGION
10	17 28 39.0	0.395 N	125.834 E	77 *	5.0	1.2	40 MOLUCCA PASSAGE
10	18 52 04.6*	55.748 N	160.780 E	145 D	4.7	0.8	67 KAMCHATKA
10	19 32 26.5*	36.129 N	48.968 E	33 N	4.2	0.9	6 NORTHWESTERN IRAN
10	19 43 46.47	21.85 S	65.97 W	33 N		1.0	6 SOUTHERN BOLIVIA
10	21 10 12.3*	45.523 N	26.379 E	140 G		0.5	6 ROMANIA
10	21 58 58.5*	60.706 N	151.198 W	58		27	KENAI PENINSULA, ALASKA. <AGS-P>.
10	22 20 48.5	8.823 S	157.522 E	10 G	5.5 5.2	1.3	116 SOLOMON ISLANDS
10	23 16 51.37	51.01 N	171.88 W	33 N	4.6	1.0	10 FOX ISLANDS, ALEUTIAN ISLANDS
10	23 17 48.9	50.067 N	17.156 E	10 G		0.9	13 POLAND. ML 3.8 (VKA), 3.5 (GRF), 3.5 (KBA).
10	23 37 28.1*	40.016 N	28.163 E	10 G		0.7	6 TURKEY
11	00 18 25.5	5.187 S	152.442 E	51 D	5.8 6.4	1.3	298 NEW BRITAIN REGION. Ms 6.7 (BRK). Felt (V) at Rabaul.
11	00 27 57.5	5.370 S	152.713 E	34 *		1.1	16 NEW BRITAIN REGION
11	00 35 49.0	6.006 S	128.440 E	394	4.7	1.0	24 BANDA SEA
11	01 11 17.97	45.68 N	26.45 E	140 ?		0.2	6 ROMANIA
11	02 07 28.4	44.053 N	114.705 W	5 G		0.9	13 WESTERN IDAHO. ML 3.5 (NEIS).
11	02 16 51.8*	19.741 N	98.577 W	5 G	3.8	0.8	5 CENTRAL MEXICO
11	02 27 37.4*	60.074 N	153.144 W	115		22	SOUTHERN ALASKA. <AGS-P>.
11	03 49 08.1*	43.940 N	114.837 W	5 G		0.7	7 WESTERN IDAHO. ML 3.4 (NEIS).
11	03 55 12.7	44.067 N	114.701 W	5 G		0.7	17 WESTERN IDAHO. ML 4.0 (NEIS).
11	04 22 30.6	32.662 N	78.559 E	33 N	4.8	1.4	54 KASHMIR-TIBET BORDER REGION
11	04 37 31.37	71.00 N	15.24 W	10 G	4.8	0.7	9 JAN MAYEN ISLAND REGION
11	04 55 34.6	45.114 N	7.500 E	5 G		0.7	25 NORTHERN ITALY. ML 2.9 (LDG).
11	05 02 11.4	5.229 S	152.604 E	46 *	4.9	1.3	19 NEW BRITAIN REGION
11	08 57 26.97	32.42 S	71.50 W	33 N		0.5	8 NEAR COAST OF CENTRAL CHILE
11	10 30 03.27	6.14 S	154.87 E	59 *	4.5	1.3	7 SOLOMON ISLANDS. Felt (II) at Arawa.
11	12 46 49.9*	34.552 N	139.282 E	5 G		1.1	6 NEAR S. COAST OF HONSHU, JAPAN. Felt (III JMA) on Oshima.
11	12 58 25.1*	0.499 N	125.989 E	33 N	4.7	1.1	15 MOLUCCA PASSAGE
11	13 16 49.7*	4.928 S	152.224 E	78 *	4.8	0.8	7 NEW BRITAIN REGION
11	13 22 59.5*	1.075 S	98.265 E	33 N	5.3	1.2	5 SOUTHERN SUMATERA
11	14 57 00.1*	37.069 N	116.050 W	0		18	SOUTHERN NEVADA. <DOE>. ML 3.2 (NEIS). 37° 04' 08.68" N., 116° 02' 58.89" W., Surface Elev. 1244 m., Depth of Burial 500 m., Shot Time 145700.107, "ALEMAN", Nevada Test Site (Dept. of Energy).
11	15 25 13.3*	4.957 S	151.911 E	79 *	4.8	1.8	7 NEW BRITAIN REGION
11	16 57 19.6	5.217 S	152.641 E	40	5.3	1.2	60 NEW BRITAIN REGION

	11	17 07 25.1%	39.949 N	26.601 E	10 G	0.4	5	TURKEY
	11	17 41 19.2%	46.385 N	9.940 E	10 G	1.7	5	SWITZERLAND
	11	17 47 08.3%	39.105 N	27.730 E	10 G	1.0	5	TURKEY
a	11	17 54 03.0	0.474 N	125.862 E	33 N	5.4 5.0	1.3	130 MOLUCCA PASSAGE
	11	19 15 34.3%	5.109 S	152.242 E	63 *	5.3	1.6	10 NEW BRITAIN REGION
	11	19 33 37.7	2.154 S	138.260 E	33 N	4.6	1.2	35 WEST IRIAN
	11	22 20 55.9?	50.91 N	178.99 E	33 N	4.4	1.1	4 RAT ISLANDS, ALEUTIAN ISLANDS
	12	00 11 48.2	2.911 N	96.130 E	37	5.0 4.4	0.9	122 NORTHERN SUMATERA
	12	00 11 57.2	39.058 N	7.439 W	10 G		1.3	9 PORTUGAL. MG 3.7 (MTH). Felt at Sousel.
	12	00 34 50.4	10.860 N	69.391 W	21 *	4.6 3.9	1.1	24 VENEZUELA
	12	01 19 12.3?	43.99 N	128.92 W	10 G	4.3 4.5	1.3	12 OFF COAST OF OREGON
	12	01 52 33.7%	40.764 N	31.581 E	10 G		0.9	6 TURKEY
	12	03 30 57.9%	17.984 N	59.466 W	33 N		0.7	18 LEEWARD ISLANDS. ML 4.3 (FDF).
	12	05 43 18.1?	5.42 S	131.59 E	225 ?	3.8	0.8	5 BANDA SEA
	12	05 52 59.4	32.315 S	69.911 W	116	4.4	0.7	21 MENDOZA PROVINCE, ARGENTINA. Felt (III) in the Mendoza area. Also felt (II) in the Santiago, Chile area.
	12	07 24 41.4%	20.142 S	168.679 E	10	4.8	1.4	35 LOYALTY ISLANDS
	12	08 43 17.5%	45.634 N	26.594 E	148 ?		0.5	8 ROMANIA
	12	09 02 33.8%	40.682 N	29.060 E	10 G		1.0	6 TURKEY
	12	10 34 51.2	40.251 N	27.330 E	10 G		0.7	31 TURKEY. ML 4.1 (ATH).
a	12	10 39 40.6	22.510 S	70.176 W	80	5.1	1.1	87 NEAR COAST OF NORTHERN CHILE. Felt (IV) in the Antofagasta-Calama area. Felt (II) at Arequipa, Peru.
	12	10 49 29.9%	21.602 S	177.318 W	389 *	4.6	1.1	15 FIJI ISLANDS REGION
	12	11 18 17.5	23.833 S	179.801 W	552 *	4.9	1.0	53 SOUTH OF FIJI ISLANDS
	12	11 27 02.8%	5.227 N	125.404 E	33 N	5.2	1.1	22 MINDANAO, PHILIPPINE ISLANDS
	12	13 58 57.2?	37.35 N	21.44 E	33 N		0.6	5 SOUTHERN GREECE. ML 3.5 (ATH).
	12	14 08 54.3	34.533 N	91.999 E	33 N	4.7	1.3	39 QINGHAI PROVINCE, CHINA
	12	15 49 08.5%	0.096 N	122.827 E	209 ?		0.6	7 MINAHASSA PENINSULA
a	12	16 18 48.2	5.387 S	153.740 E	59	5.2	1.2	106 NEW IRELAND REGION
	12	16 33 55.3%	60.712 N	5.594 E	10 G		0.5	7 SOUTHERN NORWAY. MD 2.2 (BER).
	12	20 07 06.9%	51.559 N	178.546 W	33 N	4.3	0.8	25 ANDREANOF ISLANDS, ALEUTIAN IS.
	12	20 13 24.3%	61.814 N	149.935 W	43			49 SOUTHERN ALASKA. <AGS-P>. ML 3.4 (PMR).
	12	20 45 01.4%	29.107 S	71.116 W	33 N		1.0	10 NEAR COAST OF CENTRAL CHILE
	12	21 54 52.1%	6.984 S	110.293 E	33 N	4.8	1.5	29 JAVA. Felt in the Semarang area.
	12	23 33 17.2?	43.31 N	2.84 W	10 G		0.8	6 SPAIN. ML 2.6 (LDG).
	12	23 38 11.2%	36.243 N	120.485 W	8			13 CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK), 3.3 (PAS).
f	12	23 57 15.6	56.201 N	153.405 W	31 G	6.1 6.3	1.1	356 KODIAK ISLAND REGION. Ms 6.0 (BRK). Double event about 4.5 seconds apart. Felt (IV) at Larsen Bay. Depth from broadband displacement seismograms.
	13	00 26 54.0?	44.08 N	11.06 E	10 G		0.7	5 NORTHERN ITALY. ML 2.6 (KBA), 2.5 (LDG).
	13	00 41 36.5%	56.167 N	153.804 W	33 N	4.6	1.9	7 KODIAK ISLAND REGION. ML 3.4 (PMR).
	13	00 59 38.2?	40.58 N	16.29 E	10 G		1.1	5 SOUTHERN ITALY
	13	01 44 22.0?	17.12 S	178.92 W	550	4.6	1.5	39 FIJI ISLANDS REGION
	13	01 57 30.6	3.592 N	145.352 E	33 N	5.1	0.9	53 CAROLINE ISLANDS REGION
	13	02 52 02.8%	23.072 S	66.423 W	219 *	4.3	1.4	16 JUJUY PROVINCE, ARGENTINA
	13	03 05 41.5%	56.252 N	153.594 W	33 N		1.7	7 KODIAK ISLAND REGION. ML 3.8 (PMR).
	13	03 11 19.1	56.138 N	153.639 W	33 N	4.8	0.9	60 KODIAK ISLAND REGION. ML 4.8 (PMR).
	13	03 36 55.3%	42.889 N	145.466 E	48 *	4.8	1.2	35 HOKKAIDO, JAPAN REGION. Felt (II JMA) at Nemuro.
	13	03 38 10.2?	56.52 N	152.79 W	33 N		1.7	6 KODIAK ISLAND REGION. ML 3.4 (PMR).
	13	03 47 41.9	39.074 N	27.757 E	10 G		1.4	9 TURKEY
	13	04 19 59.7%	56.102 N	153.310 W	33 N	4.0	1.1	10 KODIAK ISLAND REGION. ML 3.9 (PMR).
	13	04 25 42.5%	1.962 N	79.525 W	33 N	4.4	1.1	7 NEAR COAST OF ECUADOR
	13	05 08 25.3%	59.976 N	152.824 W	88			32 SOUTHERN ALASKA. <AGS-P>.
	13	06 46 29.9%	36.160 N	69.812 E	169 ?	4.8	1.1	10 HINDU KUSH REGION
	13	07 16 53.6%	25.466 N	142.637 E	33 N	4.7	0.9	26 VOLCANO ISLANDS REGION
a	13	09 28 24.4	60.797 S	36.779 W	10 G	5.8 6.1	1.2	130 SCOTIA SEA
	13	09 58 43.5	18.637 N	145.643 E	195	5.1	1.2	137 MARIANA ISLANDS
	13	11 26 37.3	0.473 N	125.899 E	33 N	4.9	1.3	54 MOLUCCA PASSAGE
	13	12 30 40.7%	61.245 N	146.939 W	42			50 SOUTHERN ALASKA. <AGS-P>. ML 3.8 (PMR). Felt at Valdez.
	13	14 06 30.2%	32.735 S	71.271 W	33 N		1.0	11 NEAR COAST OF CENTRAL CHILE
	13	14 14 54.3	36.442 N	70.766 E	200	4.9	1.0	169 HINDU KUSH REGION. Felt (IV) at Ishkashim and (III) at Khorog and Kulyob, USSR.
	13	15 16 15.0?	54.98 N	150.97 W	33 N		1.2	5 SOUTH OF ALASKA. ML 3.8 (PMR).
f	13	15 17 21.0	31.827 S	179.937 W	215 G	5.9	1.1	391 KERMADEC ISLANDS REGION. Felt (III) on Raoul. Depth from broadband displacement seismograms.
	13	16 30 02.9%	55.635 N	160.612 W	33 N		1.3	7 ALASKA PENINSULA. ML 3.8 (PMR).
a	13	17 24 31.4	37.014 N	22.176 E	11 G	6.0 5.8	1.4	362 SOUTHERN GREECE. ML 5.7 (ATH). At least twenty people killed, about 300 injured, 2500 homeless and 1500 buildings damaged or destroyed (X) in the Kalamoi area. Felt in Lakonia and on Zakynthos. Also felt at Athens and in central Greece. Depth from broadband displacement seismograms.
	13	17 45 22.9	0.350 N	125.844 E	33 N	5.1	1.2	25 MOLUCCA PASSAGE
	13	18 00 47.7	23.032 S	66.405 W	197	4.9	1.2	62 JUJUY PROVINCE, ARGENTINA
	13	18 30 36.0?	36.82 N	22.22 E	33 N		1.1	6 SOUTHERN GREECE. ML 3.4 (ATH).
	13	18 34 45.9?	41.78 N	22.27 E	10 G		0.2	4 YUGOSLAVIA. MG 1.8 (SKO).
	13	18 50 18.2?	36.76 N	22.00 E	33 N		1.1	5 SOUTHERN GREECE. ML 3.2 (ATH).
	13	20 30 36.6	36.927 N	71.129 E	106 *	4.7	1.1	25 AFGHANISTAN-USSR BORDER REGION
	13	21 00 46.1	37.444 N	20.605 E	50	4.4 3.9	1.3	143 IONIAN SEA
	13	21 36 29.1	17.850 N	145.504 E	399	4.8	1.0	81 MARIANA ISLANDS
	13	21 56 44.4	38.985 N	135.398 E	383	4.5	0.9	35 SEA OF JAPAN
	13	22 40 16.4	37.127 N	22.146 E	33 N	3.8	1.2	14 SOUTHERN GREECE. ML 3.7 (ATH).
	13	22 47 32.0%	16.900 N	120.468 E	122 *		1.0	7 LUZON, PHILIPPINE ISLANDS
a	14	00 05 54.5	23.368 S	179.102 E	549	5.2	1.1	166 SOUTH OF FIJI ISLANDS
	14	01 03 28.3%	23.036 S	68.773 W	112 *	4.7	1.3	14 NORTHERN CHILE
	14	01 11 29.5	56.319 N	153.501 W	33 N	4.5	0.9	37 KODIAK ISLAND REGION
	14	02 42 50.2%	34.028 S	71.949 W	33 N	4.2	0.9	11 NEAR COAST OF CENTRAL CHILE
	14	02 58 38.1%	61.015 N	151.272 W	70			39 SOUTHERN ALASKA. <AGS-P>.
	14	03 38 31.3	6.071 S	105.526 E	33 N	5.1	1.4	69 SUNDA STRAIT
	14	04 46 00.8%	40.080 N	29.385 E	13 *		0.4	7 TURKEY
	14	05 52 05.8?	37.96 N	25.53 E	10 G		1.0	6 DODECANESE ISLANDS. ML 3.5 (ATH).
	14	06 06 06.0?	31.54 S	68.34 W	134 *	4.1	0.9	11 SAN JUAN PROVINCE, ARGENTINA
	14	08 15 54.3%	6.055 S	146.791 E	76 *	3.8	1.3	11 EAST PAPUA NEW GUINEA REGION

14	08 15 55.3	36.882 N	121.325 W	7			14	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK).
14	09 08 41.0	44.690 N	6.925 E	5		0.3	9	FRANCE. ML 2.9 (LDG).
14	09 57 49.27	18.30 N	100.54 W	33 N		0.7	5	GUERRERO, MEXICO
14	11 27 13.6	56.707 N	34.241 W	10 G	4.9 3.5	0.9	85	NORTH ATLANTIC OCEAN
14	11 33 39.5	63.186 N	147.191 W	33 N		1.4	7	CENTRAL ALASKA. ML 3.1 (PMR).
14	11 38 53.6	61.703 N	149.682 W	47		38		SOUTHERN ALASKA. <AGS-P>. Felt at Palmer.
14	12 31 39.8	44.13 N	18.37 E	10 G		1.6	5	YUGOSLAVIA. ML 2.2 (TTG).
14	12 36 08.4	43.139 N	18.696 E	10 G		0.9	5	YUGOSLAVIA. ML 2.4 (TTG).
14	12 42 32.3	24.084 N	141.910 E	33 N	5.2	1.1	57	VOLCANO ISLANDS REGION
14	13 13 24.1	1.777 N	97.554 E	71 ?	4.1	0.9	9	NORTHERN SUMATERA
14	13 22 09.0	5.073 S	102.691 E	56 *	5.0	1.2	32	SOUTHERN SUMATERA
14	13 54 41.9	43.784 N	147.621 E	49 *	5.1	0.9	99	KURIL ISLANDS. Felt (I JMA) at Nemuro, Hokkaido.
14	14 51 40.1	0.097 S	123.418 E	197 *	5.1	1.3	49	MINAHASSA PENINSULA
14	16 01 49.4	43.968 N	114.751 W	5 G		0.5	7	WESTERN IDAHO. ML 3.1 (NEIS).
14	16 27 47.0	42.296 N	19.957 E	10 G		0.6	5	YUGOSLAVIA. ML 2.3 (TTG).
14	16 56 23.0	47.129 N	153.934 E	33 N	5.0 4.1	0.8	50	KURIL ISLANDS
14	17 05 36.7	37.646 N	36.007 E	10 G		1.5	7	TURKEY
14	17 41 27.5	58.825 N	137.022 W	6		16		SOUTHEASTERN ALASKA. <AGS-P>.
14	17 47 05.5	47.104 N	154.100 E	33 N	4.8	1.2	23	KURIL ISLANDS
14	17 53 19.7	34.307 N	25.828 E	54 *	4.4	1.4	80	CRETE
14	19 33 07.7	28.930 N	129.722 E	80 *	4.1	1.2	16	RYUKYU ISLANDS. Felt (II JMA) at Naze.
14	20 16 58.2	1.738 N	126.408 E	33 N	4.9	0.8	28	MOLUCCA PASSAGE
14	20 51 28.6	42.335 N	20.043 E	10 G		1.5	6	YUGOSLAVIA. MD 2.1 (TTG).
o 14	20 58 23.1	6.470 S	154.916 E	59	5.6	1.1	225	SOLOMON ISLANDS. Felt (V) at Arawa and Pongono, Bougainville.
14	22 03 50.1	40.393 N	26.087 E	10 G		0.6	6	TURKEY
14	22 12 20.6	7.121 N	77.105 W	47	4.7	1.1	54	PANAMA-COLOMBIA BORDER REGION
14	22 48 40.6	36.80 N	22.12 E	33 N		1.3	12	SOUTHERN GREECE. ML 3.6 (ATH).
14	23 33 16.0	61.228 N	146.846 W	16		43		SOUTHERN ALASKA. <AGS-P>.
15	00 25 48.1	18.490 N	62.485 W	33 N	4.2	0.7	18	LEEWARD ISLANDS. ML 4.2 (FDF).
15	03 26 07.6	60.77 S	36.41 W	10 G	4.6	1.3	10	SCOTIA SEA
15	04 23 19.5	31.970 N	116.320 W	10		5		BAJA CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
15	05 02 34.1	23.911 S	66.672 W	207	4.6	1.2	28	JUJUY PROVINCE, ARGENTINA
15	05 47 29.1	24.031 N	114.426 E	33 N		1.3	8	NEAR SOUTHEASTERN COAST OF CHINA. MG 3.8 (GZH).
15	06 29 35.8	51.561 N	177.085 W	33 N	4.9 4.0	1.0	105	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.8 (PMR). Felt on Adak.
15	06 58 40.37	18.56 S	177.76 W	573 *	5.0	0.9	21	FIJI ISLANDS REGION
15	07 06 30.6	26.269 S	27.432 E	5 G	4.9	1.1	22	REPUBLIC OF SOUTH AFRICA
15	07 53 29.0	43.108 N	29.077 W	10 G	4.6 4.4	1.0	48	NORTH ATLANTIC RIDGE
15	08 21 57.8	47.347 N	11.081 E	10 G		1.4	8	AUSTRIA. ML 3.0 (KBA).
15	08 46 56.1	38.433 N	25.028 E	10 G		1.2	8	AEGEAN SEA. ML 3.7 (ATH).
o 15	08 48 11.4	22.748 S	175.288 W	33 N	5.7 5.8	1.2	193	TONGA ISLANDS REGION
15	09 13 02.4	48.519 N	153.073 E	33 N	5.1	0.7	74	KURIL ISLANDS
15	10 18 15.5	0.11 S	125.30 E	33 N	4.3	1.2	11	MOLUCCA SEA
15	11 38 31.3	5.757 S	146.417 E	129 *	4.5	1.4	12	EAST PAPUA NEW GUINEA REGION
15	11 41 27.8	36.930 N	22.175 E	10 G	4.9 4.8	1.4	180	SOUTHERN GREECE. ML 4.8 (ATH). Thirty-seven people injured and additional damage in the Kalamai area.
15	12 47 38.7	37.243 N	22.141 E	33 N		1.0	17	SOUTHERN GREECE. ML 3.7 (ATH).
15	13 19 47.8	39.121 N	27.807 E	12		1.2	13	TURKEY
15	14 17 52.1	41.073 N	20.819 E	10 G		1.1	32	ALBANIA. ML 3.6 (SKO), MD 3.4 (TTG). Felt (V) in the Ohrid-Struga area, Yugoslavia.
15	14 48 22.1	61.528 N	143.800 W	52	4.5	86		SOUTHERN ALASKA. <AGS-P>. Felt (IV) at Chitina. Felt (III) at Cordova and Valdez.
15	15 09 14.0	46.547 N	2.462 E	10 G		1.0	11	FRANCE. ML 2.6 (LDG).
15	16 42 52.7	24.642 N	98.782 E	33 N	4.4	1.1	7	BURMA-CHINA BORDER REGION
15	16 53 54.1	47.270 N	153.914 E	33 N	4.9 4.8	1.0	74	KURIL ISLANDS
15	17 00 33.2	47.329 N	153.797 E	33 N	5.0 4.6	0.9	87	KURIL ISLANDS
15	17 08 04.27	46.08 N	14.79 E	10 G		0.4	5	YUGOSLAVIA. ML 2.1 (KBA).
15	17 54 11.5	33.250 N	30.405 E	33 N		0.8	7	EASTERN MEDITERRANEAN SEA
15	18 43 26.8	21.197 S	68.735 W	119 *		1.2	8	CHILE-BOLIVIA BORDER REGION
15	19 43 07.9	21.377 S	67.339 W	189 *	4.5	1.2	24	CHILE-BOLIVIA BORDER REGION
15	20 05 38.0	7.425 N	74.963 W	70	4.8	1.0	79	NORTHERN COLOMBIA. Felt at Medellin.
15	20 17 49.8	37.296 N	121.657 W	5 G		0.5	11	CENTRAL CALIFORNIA. ML 2.5 (BRK).
15	21 11 08.7	44.582 N	11.330 E	10 G		1.1	16	NORTHERN ITALY. ML 3.1 (KBA), 3.0 (LDG). MD 3.0 (FIR).
15	21 23 03.1	44.614 N	11.318 E	10 G		0.7	15	NORTHERN ITALY. ML 3.0 (KBA), 2.9 (LDG). MD 3.0 (FIR).
o 15	21 42 29.2	36.714 N	71.092 E	89 G	5.8	1.0	333	AFGHANISTAN-USSR BORDER REGION. Felt (IV) at Regar and in the Ishkashim-Obigarm-Parkhar area; (III) at Dushanbe and Samarkand, USSR. Felt at Chitral and Peshawar, Pakistan. Depth from broadband displacement seismograms.
15	23 00 28.4	15.84 N	60.28 W	28 *		1.5	8	LEEWARD ISLANDS
15	23 29 52.5	39.117 N	27.721 E	10 G		0.6	8	TURKEY
15	23 32 41.5	39.142 N	27.777 E	10 G		1.2	8	TURKEY
16	00 07 41.2	37.625 N	118.455 W	5 G		1.0	8	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (PAS).
16	01 23 10.1	9.344 S	122.061 E	33 N	4.8	1.4	31	SAVU SEA
16	04 28 56.4	9.549 S	78.324 W	33 N		0.8	6	NEAR COAST OF NORTHERN PERU. Felt (III) at Chimbote and (II) at Casma.
16	04 57 42.4	21.245 S	68.722 W	154 ?		0.4	7	CHILE-BOLIVIA BORDER REGION
16	05 01 43.5	37.642 N	118.398 W	5 G		0.9	9	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (PAS).
16	06 01 07.8	16.01 S	175.04 W	190 ?	4.5	1.4	27	TONGA ISLANDS
16	06 36 57.8	37.610 N	118.445 W	5 G		19		CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.3 (BRK), 3.2 (PAS).
16	06 38 12.8	5.267 S	102.209 E	33 N	4.9	1.0	28	SOUTHERN SUMATERA
o 16	08 14 39.6	44.518 N	10.769 E	10 G		0.5	12	NORTHERN ITALY. ML 3.0 (LDG), 2.7 (KBA).
16	08 57 10.7	12.353 S	166.595 E	135 *	5.5	1.0	117	SANTA CRUZ ISLANDS
16	09 31 54.9	39.051 N	27.892 E	10		0.4	7	TURKEY
16	11 33 40.4	10.034 S	114.114 E	33 N	3.9	1.5	9	SOUTH OF BALI ISLAND
16	11 44 46.0	39.04 N	29.25 E	10 G		0.7	7	TURKEY
16	12 53 19.7	59.892 N	140.652 W	4		16		SOUTHEASTERN ALASKA. <AGS-P>.
16	13 14 25.9	37.595 N	118.413 W	5 G		19		CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.5 (BRK). Felt (III) at Benton, California. Also felt at Chalfant, California.
16	13 18 37.6	50.387 N	6.085 E	10 G		0.2	5	GERMANY

16	13	29	04.8*	31.172	N	86.673	E	33	N	4.4	1.5	16	TIBET	
16	13	59	44.07	32.46	N	26.31	E	10	G		0.4	6	EASTERN MEDITERRANEAN SEA	
16	14	18	09.9	63.407	N	23.965	W	10	G	4.6	1.2	32	ICELAND REGION	
16	14	43	27.17	17.63	N	103.93	W	33	N	4.2	1.4	10	NEAR COAST OF MICHOACAN, MEXICO	
16	16	01	37.2*	30.993	N	86.607	E	33	N	4.5	1.3	11	TIBET	
16	16	30	02.1*	15.239	N	61.371	W	10	G		0.5	9	LEEWARD ISLANDS. ML 3.3 (FDF).	
f	16	18	20	17.7	19.376	N	146.301	E	48	6.5 6.7	1.1	521	MARIANA ISLANDS REGION. Ms 6.8 (BRK).	
16	18	56	32.9	19.242	N	146.347	E	74	*	5.1	1.0	72	MARIANA ISLANDS REGION	
16	19	43	20.37	15.30	N	121.03	E	100	*	4.4	1.5	6	LUZON, PHILIPPINE ISLANDS	
16	20	11	25.7	37.750	N	101.636	E	18	*	5.3	1.1	133	QINGHAI PROVINCE, CHINA. Damage at Haomen. Felt in the Xining area.	
o	16	20	57	21.9	56.222	N	153.600	W	33	N	5.3 5.5	0.9	178	KODIAK ISLAND REGION. ML 5.1 (PMR), Ms 5.1 (BRK). Felt (III) at Kodiak.
16	21	00	18.8*	44.065	N	114.726	W	5	G		1.3	9	WESTERN IDAHO. ML 3.5 (NEIS).	
16	21	52	35.3	37.760	N	101.726	E	19		5.3	1.0	106	QINGHAI PROVINCE, CHINA	
16	23	49	48.8*	37.898	N	101.625	E	10	G	4.4	1.6	10	QINGHAI PROVINCE, CHINA	
17	03	04	43.1	38.966	N	28.127	E	10	G		0.9	10	TURKEY	
17	03	37	07.8*	65.900	N	152.962	W	33	N		1.4	7	ALASKA. ML 3.9 (PMR).	
17	03	44	57.0*	19.574	N	146.510	E	33	N	4.9	0.9	19	MARIANA ISLANDS REGION	
17	04	39	01.5*	26.653	N	128.825	E	33	N	4.4	1.3	15	RYUKYU ISLANDS	
17	04	42	30.3	26.547	N	128.680	E	41	*	5.0 4.9	1.0	34	RYUKYU ISLANDS	
17	05	58	24.1	37.635	N	118.356	W	5	G		0.7	19	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK), 3.2 (PAS).	
17	06	16	12.37	31.45	S	70.03	W	33	N		0.8	9	CHILE-ARGENTINA BORDER REGION	
o	17	06	42	20.2	3.934	S	128.829	E	25	5.4 5.1	1.3	119	CERAM	
17	06	44	53.5	3.835	S	128.811	E	33	N	5.5	1.2	68	CERAM	
17	07	04	45.6	7.076	S	154.737	E	36	*	4.9	1.3	28	SOLOMON ISLANDS	
17	07	30	57.6*	62.216	N	150.649	W	72			27	CENTRAL ALASKA. <AGS-P>.		
17	08	06	01.0*	7.116	S	154.842	E	46	*	4.2	1.1	12	SOLOMON ISLANDS	
17	09	15	33.7*	31.846	S	69.393	W	33	N		0.6	9	SAN JUAN PROVINCE, ARGENTINA	
17	09	33	49.4*	32.928	N	80.152	W	8			5		SOUTH CAROLINA. <GLD>. MD 2.6 (GLD). Felt (IV) at Summerville. Also felt at Middleton Gardens.	
a	17	11	01	18.5	26.539	N	128.631	E	34	D	5.4 5.5	1.1	132	RYUKYU ISLANDS. Felt (I JMA) at Nago.
17	12	04	30.6*	39.416	N	25.749	E	19	*		1.3	10	AEGEAN SEA	
a	17	12	08	09.4	37.290	N	71.730	E	120	D	5.5	1.0	274	AFGHANISTAN-USSR BORDER REGION. Felt (V) at Khorog, (IV) in the Parkhar-Gorm-Rushon area and (III) at Dushanbe, Fergana, Samarkand and Tashkent, USSR.
17	12	43	29.5*	40.702	N	27.526	E	10	G		0.5	7	TURKEY	
17	12	57	10.2	33.438	S	72.302	W	33	N	4.0	0.6	13	OFF COAST OF CENTRAL CHILE. Felt (II) at Santiago.	
17	13	00	51.1*	45.491	N	26.589	E	170	*	3.2	1.1	18	ROMANIA	
17	14	04	50.6*	60.184	N	152.777	W	109			20		SOUTHERN ALASKA. <AGS-P>.	
17	15	16	41.77	14.96	S	167.20	E	133	?	4.3	1.4	18	VANUATU ISLANDS	
17	16	28	08.6*	46.490	N	9.570	E	10	G		0.4	5	SWITZERLAND	
17	17	46	11.6*	19.404	N	146.471	E	33	N	4.8	1.1	14	MARIANA ISLANDS REGION	
17	18	41	10.3*	62.527	N	149.519	W	91			15		CENTRAL ALASKA. <AGS-P>.	
17	18	45	37.2*	17.304	S	167.895	E	33	N	4.2	0.8	7	VANUATU ISLANDS	
17	19	57	15.7	20.160	N	97.975	E	48	*	4.4	1.4	41	BURMA	
17	20	51	50.1*	33.906	N	135.386	E	68	*	4.2	0.0	7	NEAR S. COAST OF SOUTHERN HONSHU. Felt (I JMA) at Wakayama.	
a	17	21	25	15.0	10.497	N	56.983	E	10	G	5.8 6.0	1.3	269	CARLSBERG RIDGE
17	22	12	28.3	39.043	N	28.627	E	10	G		1.3	9	TURKEY	
17	22	33	59.8*	7.264	N	127.087	E	33	N	4.8	1.0	12	PHILIPPINE ISLANDS REGION	
17	23	10	54.9	6.670	N	144.695	E	33	N	4.8	1.4	36	CAROLINE ISLANDS REGION	
18	00	12	03.7	26.611	N	54.617	E	33	N	4.6	1.0	83	SOUTHERN IRAN	
18	01	02	10.7	36.011	N	9.936	W	70	*		0.7	23	WEST OF GIBRALTAR	
18	01	02	54.5	39.059	N	27.696	E	10	G		1.2	9	TURKEY	
18	01	54	18.87	51.05	N	176.96	W	33	N	4.5	1.6	9	ANDREANOF ISLANDS, ALEUTIAN IS.	
18	02	37	40.0*	40.342	N	124.192	W	5	G		6		NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).	
18	02	46	03.57	30.97	S	72.57	W	33	N		0.6	9	OFF COAST OF CENTRAL CHILE	
18	04	53	21.6	38.937	N	107.116	W	5	G		0.8	14	COLORADO. ML 3.2 (NEIS). Felt in the Crested Butte area.	
18	05	07	31.1	30.971	N	130.384	E	144		4.9	0.9	86	KYUSHU, JAPAN. Felt (I JMA) at Naze, Ryukyu Islands.	
18	05	59	39.2	20.221	S	168.970	E	46	*	5.1 4.8	1.4	92	LOYALTY ISLANDS	
18	06	22	46.6*	49.990	N	151.785	E	402	?	4.2	1.2	17	NORTHWEST OF KURIL ISLANDS	
18	06	40	00.7*	27.630	S	178.277	W	33	N	4.8	1.1	21	KERMADEC ISLANDS REGION	
18	07	19	08.7	16.319	N	98.929	W	26	D	4.9	1.1	51	NEAR COAST OF GUERRERO, MEXICO. Felt slightly at Puebla.	
18	07	59	47.5	37.632	N	118.392	W	5	G		0.7	30	CALIFORNIA-NEVADA BORDER REGION. ML 4.1 (BRK), 4.2 (PAS).	
18	08	06	01.8*	16.401	N	98.880	W	42	*	4.6	1.2	29	NEAR COAST OF GUERRERO, MEXICO. Felt slightly at Puebla.	
18	09	26	38.1	38.925	N	107.086	W	5	G		0.4	15	COLORADO. ML 3.4 (NEIS). Felt (III) at Aspen and Snowmass Village. Also felt in the Crested Butte area.	
18	09	39	24.57	13.18	N	91.85	W	33	N	4.1	1.5	12	NEAR COAST OF GUATEMALA	
18	10	07	56.3	40.149	N	29.325	E	10	G		1.0	13	TURKEY	
18	11	59	34.7	9.466	S	116.610	E	73	*	4.6	0.6	12	SUMBAWA ISLAND REGION	
18	12	19	18.8*	52.528	S	25.899	E	10	G	5.1	1.1	17	SOUTH OF AFRICA	
18	15	48	44.3*	61.999	N	151.986	W	120			14		SOUTHERN ALASKA. <AGS-P>.	
18	16	56	42.3*	46.588	N	9.462	E	10	G		1.3	6	SWITZERLAND	
18	17	41	31.6*	60.516	N	153.025	W	139			12		SOUTHERN ALASKA. <AGS-P>.	
18	20	56	05.8	61.798	N	149.721	W	57		4.6	0.9	120	SOUTHERN ALASKA. Felt (IV) at Chugiak, Eagle River, Wasilla and Willow. Felt (III) at Anchorage, Moose Pass and Sutton. Also felt at Girdwood, King Mountain Lodge, Palmer, Whittier and at mile 90 on the Glenn Highway.	
19	00	21	34.3	45.589	N	26.566	E	150		4.0	1.0	55	ROMANIA. Felt (IV) in Moldavia, USSR.	
19	01	14	50.1	39.235	N	23.826	E	10	G		1.1	9	AEGEAN SEA. ML 3.0 (ATH).	
19	03	10	25.47	33.70	S	72.23	W	33	N		0.8	8	OFF COAST OF CENTRAL CHILE	
19	03	13	28.2*	43.808	N	147.192	E	33	N	4.7	0.7	13	KURIL ISLANDS	
19	04	33	31.0*	60.219	N	153.199	W	131			25		SOUTHERN ALASKA. <AGS-P>.	
19	04	48	52.1*	5.504	S	152.530	E	33	N	4.4	1.4	7	NEW BRITAIN REGION	
19	06	04	59.2*	40.583	N	30.119	E	10	G		1.4	6	TURKEY	
19	06	26	34.6*	36.293	N	120.373	W	9			10		CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).	
19	06	40	33.87	59.32	N	6.84	E	10	G		1.1	6	SOUTHERN NORWAY. MD 2.3 (BER).	



19	07 01 35.4?	23.45 S	179.90 E	575 ?	4.8	1.2	16	SOUTH OF FIJI ISLANDS
19	09 24 36.0?	51.87 N	21.04 E	10 G		1.5	5	POLAND. MG 2.9 (KRA).
19	10 41 28.2&	41.466 N	111.704 W	5			17	UTAH. <SLC-P>. ML 3.4 (SLC). Felt (IV) at Hyrum and Paradise. Felt (III) at Millville, Wellsville and Willard.
19	10 52 00.9?	9.72 N	86.69 W	33 N	4.7 3.7	1.5	17	OFF COAST OF COSTA RICA
19	12 27 52.1	39.338 N	28.879 E	10 G		0.9	6	TURKEY
19	13 04 01.4?	60.364 N	5.326 E	10 G		0.5	6	SOUTHERN NORWAY. MD 1.7 (BER).
19	13 44 35.3	55.756 N	161.892 E	33 N	4.9	0.7	38	NEAR EAST COAST OF KAMCHATKA
19	13 51 35.1	22.777 S	179.686 W	585 *	5.1	1.1	50	SOUTH OF FIJI ISLANDS
19	14 44 42.5&	19.333 N	155.349 W	31			45	HAWAII. <HVO-P>. ML 4.0 (HVO). Felt at Homestead, Honou, Kiolaka'a, Naalehu, Ocean View Estates, Pahala and Papaikou.
19	15 06 25.4	43.283 N	0.651 W	10 G		1.0	10	PYRENEES. ML 2.6 (LDG).
19	15 11 59.4	44.864 N	8.892 E	10 G		1.0	20	NORTHERN ITALY. ML 2.9 (LDG).
19	15 53 01.0&	47.300 N	70.320 W	22			12	SOUTHERN QUEBEC. <OTT-P>. mbLg 4.2 (OTT). Felt at La Pocatiere.
19	16 31 09.5	53.304 N	2.034 E	10 G		0.9	42	NORTH SEA. ML 3.8 (LDG), 3.8 (BGS). mbLg 3.4 (DOU).
a 19	19 01 15.4	2.957 S	139.552 E	38 *	5.1 4.7	1.4	86	NEAR N. COAST OF WEST IRIAN
19	22 30 43.4	2.998 S	139.330 E	53 *	5.3	1.4	34	NEAR N. COAST OF WEST IRIAN
19	22 43 46.6?	41.81 N	19.38 E	10 G		0.6	9	ALBANIA. ML 3.0 (TTG).
19	22 49 44.9?	41.84 N	19.45 E	10 G		0.6	8	ALBANIA. ML 2.6 (TTG).
a 20	01 31 13.9	0.843 N	29.233 W	10 G	5.4 4.7	1.0	169	CENTRAL MID-ATLANTIC RIDGE
20	02 17 32.0	53.578 N	167.249 W	33 N	4.6	0.8	34	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.2 (PMR).
20	02 26 02.6	54.218 N	162.871 W	33 N	4.8	0.9	50	ALASKA PENINSULA
20	02 59 42.2?	3.02 S	139.67 E	33 N	4.7	1.6	15	WEST IRIAN
20	03 04 58.7	36.454 N	140.520 E	75	5.1	1.2	126	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Mito, Nikko and Utsunomiya; (II JMA) at Tokyo, Kumagaya and Onahama; (I JMA) at Chiba, Kofu and Sendai.
20	04 27 59.0&	60.790 N	151.790 W	78			28	KENAI PENINSULA, ALASKA. <AGS-P>.
20	05 54 23.6	8.490 N	73.498 W	49 *	4.4 3.1	1.3	14	NORTHERN COLOMBIA
20	07 01 34.8*	5.045 S	76.905 W	132 *	4.5	1.1	13	NORTHERN PERU
20	09 33 09.0?	39.15 N	21.94 E	10 G		0.5	4	GREECE. ML 3.3 (ATH).
a 20	10 05 00.7	13.034 N	93.354 E	76	4.9	0.9	99	ANDAMAN ISLANDS REGION
20	10 52 09.4*	23.947 S	66.779 W	202 *	4.3	1.2	10	JUJUY PROVINCE, ARGENTINA
20	12 24 02.7	30.577 N	137.830 E	491	4.6	0.8	62	SOUTH OF HONSHU, JAPAN
20	13 51 04.1*	45.438 N	26.376 E	128 ?		1.4	7	ROMANIA
20	15 00 35.1*	45.556 N	26.318 E	170 *	3.7	0.7	9	ROMANIA
20	15 08 39.7&	60.312 N	152.094 W	69			23	SOUTHERN ALASKA. <AGS-P>.
20	18 40 12.3&	62.098 N	150.217 W	59			23	CENTRAL ALASKA. <AGS-P>.
20	19 00 11.7*	24.346 N	122.750 E	121 *		1.3	15	TAIWAN REGION
20	21 33 08.7&	60.378 N	152.908 W	125			21	SOUTHERN ALASKA. <AGS-P>.
20	22 15 01.5*	59.799 N	16.301 E	10 G		1.2	10	SWEDEN. ML 3.6 (UPP). Felt at Avesta, Fagersta, Nardberg, Arboga and Vaesteras.
21	02 59 15.8&	40.438 N	125.903 W	21			4	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.5 (BRK).
21	03 15 52.1?	35.64 N	29.51 E	10 G		1.4	5	EASTERN MEDITERRANEAN SEA
21	08 47 38.7	39.331 N	27.194 E	10 G		1.4	16	TURKEY
21	08 49 30.4	23.755 N	123.022 E	33 N	4.3	1.3	25	SOUTHWESTERN RYUKYU ISLANDS
21	09 20 46.6*	39.597 N	105.285 W	5 G		0.9	6	COLORADO. ML 2.5 (NEIS). Felt at Conifer and Tiny Town.
a 21	12 18 06.6	17.023 N	147.273 E	48 *	5.1 4.5	0.9	87	MARIANA ISLANDS REGION
21	13 22 58.4*	16.957 N	147.365 E	56 *	4.9	1.0	20	MARIANA ISLANDS REGION
21	13 36 54.6*	26.280 S	68.881 W	93 ?	4.6	1.4	12	CHILE-ARGENTINA BORDER REGION
21	15 19 19.5	16.479 N	98.144 W	33	4.6	1.1	35	NEAR COAST OF GUERRERO, MEXICO. Felt (III) at Oaxaca and Puebla.
21	15 57 12.1&	37.600 N	118.290 W	6 G			8	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.0 (PAS).
21	16 26 23.0*	66.314 N	149.521 W	10 G		0.8	6	ALASKA
21	18 21 47.0*	31.621 S	69.908 W	116 *	4.5	0.7	11	SAN JUAN PROVINCE, ARGENTINA
21	18 38 44.2*	18.829 S	173.104 W	33 N	4.8	0.8	16	TONGA ISLANDS
21	20 59 02.5?	43.86 N	7.32 E	10 G		0.6	4	NEAR SOUTH COAST OF FRANCE. ML 2.2 (LDG).
21	21 36 41.3%	42.150 N	25.165 E	10 G		0.3	7	BULGARIA
21	22 10 44.5&	62.604 N	149.146 W	55			24	CENTRAL ALASKA. <AGS-P>.
21	23 38 17.5	52.858 N	160.089 E	50	5.1 4.1	0.9	128	OFF EAST COAST OF KAMCHATKA
22	00 52 50.6?	33.57 S	72.20 W	33 N		0.4	8	OFF COAST OF CENTRAL CHILE
22	01 25 00.2%	43.305 N	8.177 E	10 G		0.3	5	CORSICA. ML 2.7 (LDG).
22	01 54 06.5*	46.444 N	9.856 E	10 G		1.1	6	SWITZERLAND
22	02 17 58.0	25.017 N	123.622 E	33 N	4.7	1.1	39	NORTHEAST OF TAIWAN
22	03 40 35.9*	6.596 S	145.652 E	33 N	3.2	0.7	5	PAPUA NEW GUINEA
22	05 38 51.9	44.040 N	114.756 W	5 G		0.7	10	WESTERN IDAHO. ML 3.4 (NEIS).
22	06 00 15.1*	24.409 N	123.220 E	33 N	4.4	0.7	5	SOUTHWESTERN RYUKYU ISLANDS
22	06 17 57.6?	6.24 S	151.54 E	33 N	3.7	0.7	5	NEW BRITAIN REGION
22	06 20 16.9	38.930 N	107.097 W	5 G		0.5	13	COLORADO. ML 2.5 (NEIS).
22	07 53 22.8?	11.73 S	76.86 W	115 ?		1.3	12	PERU. Felt (III) at Lima.
22	08 07 08.7*	56.028 N	153.562 W	33 N	4.3	1.2	8	KODIAK ISLAND REGION. ML 3.9 (PMR).
22	08 20 09.5*	16.707 S	167.136 E	33 N	4.4	1.0	17	VANUATU ISLANDS
22	08 48 47.5	14.911 S	167.154 E	163 *	4.7	1.3	49	VANUATU ISLANDS
22	09 21 52.5*	7.166 S	155.478 E	33 N	4.2	1.5	7	SOLOMON ISLANDS. Felt (II) at Arawa, Bougainville.
22	10 33 39.9*	18.840 S	69.967 W	33 N	4.7	1.2	6	NORTHERN CHILE
22	10 42 34.8?	55.49 S	25.95 W	33 N	4.8	1.1	6	SOUTH SANDWICH ISLANDS REGION
22	12 30 36.5*	52.671 N	160.827 E	33 N	4.7 4.0	1.2	16	OFF EAST COAST OF KAMCHATKA
22	14 21 43.5	34.267 S	145.575 E	10 G	3.0	0.7	9	NEW SOUTH WALES, AUSTRALIA. ML 3.7 (TOO), 3.6 (CMS).
22	15 22 07.4*	35.845 N	24.173 E	83 ?		0.7	6	CRETE
a 22	16 15 05.8	6.716 S	130.427 E	123 D	5.6	1.0	202	BANDA SEA
22	16 22 30.1%	44.454 N	7.254 E	10 G		0.2	5	NORTHERN ITALY. ML 2.6 (LDG).
22	16 44 29.0	34.693 N	29.936 E	36	4.4 3.7	1.2	56	EASTERN MEDITERRANEAN SEA. ML 4.3 (JER), 4.2 (BHL).
22	17 38 16.1*	10.105 S	154.098 E	33 N	4.6	0.9	12	DENTRECASTEUX ISLANDS REGION
22	18 19 19.9	32.218 S	71.478 W	53	5.1	0.9	40	NEAR COAST OF CENTRAL CHILE. Felt (IV) at La Ligua, Los Andes, Quillota and Vina del Mar and (II) at Santiago.
22	19 15 14.1	34.389 S	70.639 W	26	4.6	1.3	18	CHILE-ARGENTINA BORDER REGION
22	19 23 57.7	25.605 S	70.129 E	10 G	5.2	0.9	40	MID-INDIAN RISE
22	20 15 17.2*	21.957 N	111.524 E	33 N		0.9	5	EASTERN CHINA. MG 3.6 (GZH).
22	20 59 14.1?	39.13 N	27.59 E	10 G		0.6	4	TURKEY
22	21 13 20.7	34.674 N	29.978 E	12	4.0	1.3	25	EASTERN MEDITERRANEAN SEA
22	23 17 05.4*	23.042 N	143.863 E	33 N	4.8	0.7	10	VOLCANO ISLANDS REGION

23	00 24 29.5*	56.287 N	153.537 W	33 N	4.5	1.5	32	KODIAK ISLAND REGION. ML 4.2 (PMR).
23	00 42 40.3*	30.329 S	73.067 W	48 *	4.6	1.1	18	OFF COAST OF CENTRAL CHILE
23	01 45 10.3*	45.512 N	26.348 E	152 ?		0.6	9	ROMANIA
23	04 35 48.1	31.479 S	69.046 W	115	4.5	1.1	25	SAN JUAN PROVINCE, ARGENTINA
23	05 48 28.4*	16.029 N	96.324 W	33 N		1.1	5	OAXACA, MEXICO
23	05 56 19.7	7.469 S	128.509 E	137	5.5	1.1	122	BANDA SEA
23	06 15 51.2*	36.632 N	121.292 W	3			17	CENTRAL CALIFORNIA. <BRK>. ML 2.9 (BRK).
23	06 19 46.2*	36.635 N	121.292 W	3			14	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
23	06 49 56.7*	16.431 N	93.809 W	33 N		1.3	6	CHIAPAS, MEXICO
23	08 27 12.0*	16.78 N	60.13 W	10 G		0.1	5	LEEWARD ISLANDS. ML 2.4 (FDF).
23	08 35 49.4*	39.11 N	27.68 E	10 G		0.1	4	TURKEY
23	08 37 17.4*	7.104 N	76.421 W	33 N		0.5	6	NORTHERN COLOMBIA
23	08 41 24.5	39.101 N	27.842 E	14		0.9	21	TURKEY. ML 3.9 (ATH).
23	09 31 52.3*	17.013 S	72.829 W	33 N	4.2	1.3	12	NEAR COAST OF PERU
23	10 14 37.7*	45.978 N	14.260 E	10 G		0.6	5	YUGOSLAVIA. MD 2.0 (TRI), ML 1.8 (KBA).
23	10 51 05.6	10.066 S	154.145 E	33 N	4.8	0.8	19	DENTRECASTEAUX ISLANDS REGION
a 23	11 41 51.3	56.558 N	164.032 E	31 D	5.3 4.6	0.9	223	KOMANDORSKY ISLANDS REGION
23	11 53 30.9*	10.047 S	154.178 E	33 N	4.5	1.1	12	DENTRECASTEAUX ISLANDS REGION
23	12 26 57.6*	39.11 N	27.73 E	10 G		0.1	4	TURKEY
23	12 39 50.8*	39.00 N	28.02 E	10 G		0.3	4	TURKEY
23	13 03 11.6*	42.31 N	20.00 E	10 G		1.7	4	YUGOSLAVIA. ML 2.3 (TTG).
a 23	13 30 15.3	16.621 S	167.265 E	19 D	5.5 5.7	1.2	146	VANUATU ISLANDS
23	14 41 15.1*	37.365 N	121.742 W	6			16	CENTRAL CALIFORNIA. <BRK>. ML 3.2 (BRK). Mo=3.4*10**20 (BRK). Felt (11) at Cupertino and Mount Hamilton.
23	15 18 19.4*	21.309 S	68.950 W	187 ?	4.6	1.1	9	CHILE-BOLIVIA BORDER REGION
23	16 42 39.4*	53.068 N	159.645 E	33 N	4.9	0.8	60	NEAR EAST COAST OF KAMCHATKA
23	17 09 37.4	39.075 N	27.717 E	10 G		1.0	8	TURKEY
23	18 11 26.2*	36.010 N	141.406 E	56 *	4.4	1.3	13	NEAR EAST COAST OF HONSHU, JAPAN. Felt (1 JMA) at Mito.
23	18 50 59.7*	18.86 S	173.13 W	33 N	4.7	0.8	9	TONGA ISLANDS
23	19 06 29.3*	20.699 S	68.978 W	33 N		1.0	6	CHILE-BOLIVIA BORDER REGION
23	19 27 56.7*	36.068 N	121.800 W	17			22	CENTRAL CALIFORNIA. <BRK>. ML 3.7 (BRK). Mo=1.9*10*21 (BRK). Felt (11) at Big Sur. Also felt at King City.
23	20 13 34.6	20.007 N	121.063 E	48 *	4.5 4.5	1.3	35	PHILIPPINE ISLANDS REGION
23	20 44 50.1*	37.881 N	20.102 E	10 G	4.0	1.1	17	IONIAN SEA. ML 3.6 (ATH).
23	21 26 34.4	41.494 N	23.295 E	10 G		0.5	9	GREECE-BULGARIA BORDER REGION. ML 2.5 (THE).
23	21 43 05.0*	44.580 N	129.685 W	10 G	4.1	0.9	18	OFF COAST OF OREGON
24	00 38 38.9*	36.63 N	70.31 E	99 ?	4.6	0.8	7	HINDU KUSH REGION
24	01 14 15.1	39.056 N	27.821 E	10 G		0.6	6	TURKEY
24	01 46 40.7	39.100 N	27.744 E	10 G		1.1	8	TURKEY
24	01 49 16.4	39.051 N	27.818 E	10 G		0.9	6	TURKEY
24	03 02 01.1*	39.652 N	23.489 E	10 G		0.6	9	AEGEAN SEA. ML 3.3 (THE).
24	03 22 42.6*	32.665 S	71.560 W	10 G		0.3	9	NEAR COAST OF CENTRAL CHILE
24	04 33 40.7*	31.21 S	179.24 W	223 ?	4.6	1.0	12	KERMADEC ISLANDS REGION
24	06 04 53.7	54.082 N	55.166 W	10 G	4.2 3.3	1.4	32	EAST OF LABRADOR. mbLg 4.7 (OTT).
24	07 35 59.0*	30.421 S	71.193 W	111 *	4.3	1.2	12	NEAR COAST OF CENTRAL CHILE
24	08 05 42.1*	32.06 S	71.47 W	33 N		0.4	7	NEAR COAST OF CENTRAL CHILE
24	08 41 33.3	41.856 N	20.064 E	10 G		1.4	8	ALBANIA. ML 2.6 (TTG).
24	10 17 12.8*	16.51 N	60.96 W	33 N		0.5	5	LEEWARD ISLANDS. ML 2.2 (FDF).
24	10 46 30.1*	34.540 N	119.040 W	18			21	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS).
24	11 39 56.9*	57.595 S	149.229 W	11			23	GULF OF ALASKA. <AGS-P>.
24	11 54 30.9*	61.241 S	25.787 W	33 N	5.3	0.9	19	SOUTH SANDWICH ISLANDS REGION
24	12 04 23.2*	28.359 N	140.684 E	33 N	4.9	1.2	35	BONIN ISLANDS REGION
24	13 31 19.3*	8.292 S	107.225 E	33 N	3.9	1.0	13	JAVA
24	14 16 11.3*	16.267 S	173.281 W	33 N	4.8	1.2	30	TONGA ISLANDS
a 24	14 19 37.5	13.630 S	173.055 E	620 D	5.4	0.8	171	FIJI ISLANDS REGION
24	14 20 33.6	37.374 N	117.199 W	5 G		0.5	16	CALIFORNIA-NEVADA BORDER REGION. ML 4.3 (BRK).
24	14 35 55.9	37.351 N	117.206 W	5 G		0.7	16	CALIFORNIA-NEVADA BORDER REGION. ML 4.3 (BRK).
24	14 39 04.6	44.378 N	10.868 E	10 G	4.6	1.3	15	NORTHERN ITALY. ML 3.2 (KBA), 2.9 (LDG), MD 3.9 (FIR).
24	15 26 47.2	55.956 S	26.824 W	33 N	5.3	0.9	21	SOUTH SANDWICH ISLANDS REGION
24	15 32 26.7	44.003 N	114.755 W	5 G		0.5	9	WESTERN IDAHO. ML 3.7 (NEIS). Felt at Clayton.
24	16 13 33.6	11.682 S	117.054 E	33 N	4.7	1.3	29	SOUTH OF SUMBAWA ISLAND
24	16 18 18.2	58.410 S	23.137 W	33 N	5.1	1.1	31	SOUTH SANDWICH ISLANDS REGION
24	16 29 30.1	6.185 S	146.861 E	130 *		0.8	9	EAST PAPUA NEW GUINEA REGION
24	17 09 22.2*	22.750 N	108.052 W	33 N	4.7	1.1	40	OFF COAST OF CENTRAL MEXICO
24	17 49 23.6*	9.847 S	118.809 E	33 N	4.4	1.1	11	SUMBAWA ISLAND REGION
24	17 53 52.4*	0.661 N	120.813 E	72 *		0.5	11	MINAHASSA PENINSULA
24	19 32 08.0*	47.825 N	5.621 E	10 G		1.3	5	FRANCE. ML 2.2 (LDG).
24	19 35 57.3*	24.76 S	179.90 E	504 ?	4.3	1.4	9	SOUTH OF FIJI ISLANDS
24	20 19 48.1	40.752 N	27.487 E	10 G		1.4	11	TURKEY
24	20 56 55.7*	51.48 N	16.07 E	10 G		0.9	11	POLAND. ML 3.7 (GRF), 3.6 (KBA), 3.6 (VKA).
24	21 29 29.5*	41.747 N	23.690 E	10 G		1.5	5	GREECE-BULGARIA BORDER REGION
24	21 35 21.8*	42.209 N	25.125 E	10 G		0.8	5	BULGARIA
25	00 08 05.5*	59.883 N	153.234 W	118			17	SOUTHERN ALASKA. <AGS-P>.
25	00 14 07.4*	21.992 S	174.084 W	33 N	5.1	1.4	19	TONGA ISLANDS
25	00 55 40.3	14.875 S	171.523 E	633	5.2	1.0	108	VANUATU ISLANDS REGION
25	05 05 15.0*	42.402 N	19.871 E	10 G		0.5	5	YUGOSLAVIA. ML 2.2 (TTG).
a 25	06 15 54.8	23.032 N	108.061 W	10 G	5.3 5.7	1.4	100	GULF OF CALIFORNIA. Ms 5.4 (BRK).
25	06 31 47.4	36.792 N	8.827 W	33 N	4.0	1.1	30	WEST OF GIBRALTAR. Felt at Algarve, Portugal.
25	08 26 08.5*	35.568 N	141.088 E	60 *	4.3	1.0	14	NEAR EAST COAST OF HONSHU, JAPAN
25	08 45 42.7*	51.105 N	15.683 E	10 G		0.5	7	POLAND. ML 3.2 (KBA).
25	09 00 13.7*	44.89 N	9.18 E	10 G		0.3	7	NORTHERN ITALY. ML 2.9 (KBA).
25	11 04 59.2	2.973 S	139.627 E	33 N	4.8	1.3	44	NEAR N. COAST OF WEST IRIAN
25	11 09 50.8*	11.180 S	164.434 E	33 N	5.1	1.1	18	SANTA CRUZ ISLANDS REGION
25	11 11 28.7*	15.93 N	61.49 W	107 ?		0.4	9	LEEWARD ISLANDS
25	11 11 38.2	51.595 N	7.663 E	10 G		1.4	25	GERMANY. ML 3.3 (LDG), 3.1 (BNS). mbLg 2.7 (DOU).
25	11 37 31.3*	11.25 S	164.50 E	33 N	4.3	1.2	8	SANTA CRUZ ISLANDS REGION
25	12 45 31.3*	38.614 N	112.553 W	1			10	UTAH. <SLC-P>. ML 2.8 (NEIS).
25	13 57 12.9*	21.36 S	172.40 E	33 N	4.7	0.8	8	LOYALTY ISLANDS REGION
25	14 17 54.4*	41.07 N	20.99 E	11		0.2	7	ALBANIA
25	14 18 29.2*	16.14 N	98.62 W	33 N		1.4	7	NEAR COAST OF GUERRERO, MEXICO
25	14 29 42.1	20.498 S	177.870 W	543	4.9	1.0	35	FIJI ISLANDS REGION
25	15 20 36.2*	39.23 N	27.80 E	10 G		0.9	4	TURKEY
25	15 25 43.2*	33.19 N	140.57 E	180 *	4.1	0.5	6	SOUTH OF HONSHU, JAPAN

25	15 25 49.0*	13.456 S	71.257 W	78 *	4.2	0.5	7	PERU. Felt (IV) at Cuzco.
25	15 52 53.1*	35.713 N	121.227 W	7			12	CENTRAL CALIFORNIA. <BRK>. ML 2.6 (BRK).
25	16 23 21.7	44.499 N	10.750 E	10 G		0.8	10	NORTHERN ITALY. ML 3.0 (KBA), 3.0 (LDG).
25	18 25 23.0	46.651 N	1.425 E	14		1.1	18	FRANCE. ML 3.0 (LDG).
25	18 25 45.7*	46.700 N	1.329 E	10 G		0.5	7	FRANCE. ML 2.8 (LDG).
25	18 49 16.3*	36.97 N	22.25 E	10 G		0.6	6	SOUTHERN GREECE. ML 3.2 (ATH).
25	19 20 09.9*	46.782 N	1.676 E	10 G		0.8	8	FRANCE. ML 2.4 (LDG).
25	20 06 12.5	3.677 N	126.777 E	45	5.6 5.6	1.2	169	TALAUD ISLANDS
25	20 07 20.0	63.464 N	151.189 W	33 N	4.4	1.0	14	CENTRAL ALASKA. ML 3.8 (PMR).
25	20 52 07.3	39.080 N	25.970 E	10 G		0.7	22	AEGEAN SEA. ML 3.5 (ATH).
25	22 05 31.9*	39.065 N	27.895 E	10 G		0.2	5	TURKEY
26	00 46 21.5*	20.10 S	178.43 W	563 ?	4.2	0.7	12	FIJI ISLANDS REGION
26	00 56 38.4*	19.01 S	178.03 W	500 *	4.1	0.4	15	FIJI ISLANDS REGION
26	01 07 19.2	3.569 N	126.566 E	69 *	5.0	1.3	81	TALAUD ISLANDS
26	01 49 34.3	42.408 N	13.297 E	10 G		1.1	29	CENTRAL ITALY. MD 3.8 (FIR), 3.8 (TRI). ML 3.3 (KBA).
26	01 49 45.5*	1.45 N	127.11 E	144 ?	4.7	1.1	11	HALMAHERA
26	03 22 41.5	40.358 N	22.401 E	10 G		0.8	6	GREECE. ML 2.5 (THE).
26	04 00 10.5*	47.346 N	9.125 E	10 G		0.3	6	GERMANY
26	04 09 00.6*	48.02 N	9.23 E	10 G		0.8	7	GERMANY. ML 2.7 (LDG).
26	04 09 10.6	54.066 N	165.204 W	33 N	5.0 4.1	0.9	122	FOX ISLANDS, ALEUTIAN ISLANDS
26	05 27 12.3*	44.455 N	10.654 E	10 G		1.3	7	NORTHERN ITALY. ML 2.9 (KBA). MD 2.7 (TRI), 2.4 (FIR).
26	07 31 46.7	9.917 N	122.198 E	35 *	4.8	1.1	46	NEGROS, PHILIPPINE ISLANDS
26	08 41 59.3	41.759 N	23.717 E	10 G		0.8	13	GREECE-BULGARIA BORDER REGION. ML 2.7 (THE).
26	09 28 33.8*	39.24 N	27.66 E	10 G		0.1	4	TURKEY
26	09 36 20.9*	39.613 N	29.425 E	10 G		0.6	5	TURKEY
26	10 36 16.9*	21.84 S	171.65 W	33 N	5.1	0.7	8	TONGA ISLANDS REGION
26	12 23 20.3*	18.55 N	119.48 E	33 N	4.1	1.0	7	PHILIPPINE ISLANDS REGION
26	13 13 40.4*	34.683 S	103.419 W	10 G	4.5	0.6	17	WEST CHILE RISE
26	13 27 05.3*	17.288 S	177.875 W	396 *	5.1	1.0	29	FIJI ISLANDS REGION
26	14 27 07.2*	59.953 N	153.424 W	130			20	SOUTHERN ALASKA. <AGS-P>.
26	17 27 08.4*	51.66 N	16.30 E	10 G		0.8	6	POLAND
26	17 59 52.0*	38.851 N	27.359 E	10 G		0.3	5	TURKEY
26	18 12 20.0	34.262 N	26.192 E	39	4.5 3.6	1.2	119	CRETE. ML 4.7 (ATH).
26	19 02 06.8	40.119 N	24.770 E	10		0.7	16	AEGEAN SEA. ML 3.3 (THE).
26	20 18 06.7	46.427 N	2.528 E	12		0.3	12	FRANCE. ML 2.6 (LDG).
26	20 29 35.0	52.774 N	162.635 E	38 D	4.9	0.9	111	OFF EAST COAST OF KAMCHATKA
26	20 30 59.9*	16.89 N	101.33 W	33 N		1.0	7	NEAR COAST OF GUERRERO, MEXICO
26	20 41 57.9	39.081 N	27.716 E	10 G		0.8	8	TURKEY
26	21 04 52.2*	49.002 N	128.727 W	10 G	4.3	0.9	17	VANCOUVER ISLAND REGION
26	21 28 08.5	44.016 N	114.750 W	5 G		1.0	14	WESTERN IDAHO. ML 4.3 (NEIS). Felt (IV) at Clayton and Stanley.
26	21 45 49.9*	42.401 N	20.034 E	10 G		1.5	6	YUGOSLAVIA. ML 2.5 (TTG).
26	21 49 30.0*	40.212 N	124.258 W	7			3	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).
26	21 52 42.2*	40.172 N	124.368 W	10			3	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).
26	21 55 01.5*	37.29 N	22.26 E	33 N		1.2	5	SOUTHERN GREECE. ML 3.2 (ATH).
26	22 25 03.5*	24.945 N	127.965 E	33 N	4.3	1.5	15	RYUKYU ISLANDS REGION
26	22 39 55.4	7.818 N	126.703 E	64 *	4.8	1.0	28	MINDANAO, PHILIPPINE ISLANDS
26	22 48 57.9	44.043 N	114.756 W	5 G	4.6	0.9	19	WESTERN IDAHO. ML 4.5 (NEIS). Felt at Clayton and Ketchum.
26	22 50 04.0	40.075 N	24.745 E	10 G		0.6	15	AEGEAN SEA
26	22 56 15.3	39.109 N	27.762 E	10 G		0.3	8	TURKEY
26	23 32 27.5*	8.643 S	149.047 E	122 *	3.9	1.3	9	EAST PAPUA NEW GUINEA REGION
26	23 56 14.5*	46.475 N	2.495 E	10 G		0.4	10	FRANCE. ML 2.0 (LDG).
26	23 57 29.7*	46.423 N	2.510 E	10 G		0.5	11	FRANCE. ML 2.3 (LDG).
27	00 02 35.6*	15.24 S	173.80 W	33 N	4.6	0.6	7	TONGA ISLANDS
27	02 31 24.2	7.957 N	77.903 W	33 N	4.7 3.5	0.9	11	PANAMA-COLOMBIA BORDER REGION
27	02 34 31.9*	13.87 N	92.78 W	33 N	4.6 3.6	1.2	18	OFF COAST OF CHIAPAS, MEXICO
27	03 41 38.4*	33.940 S	70.631 W	10 G		0.3	6	CHILE-ARGENTINA BORDER REGION
27	04 50 15.9	4.188 S	37.681 E	10 G	4.7	1.0	32	TANZANIA
27	06 10 39.6	8.966 S	123.225 E	33 N	4.8	1.1	22	FLORES ISLAND REGION
27	07 06 30.5*	40.527 N	126.000 W	5 G			6	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.8 (BRK).
27	07 45 00.2*	5.37 S	145.09 E	154 ?	4.5	0.1	5	EAST PAPUA NEW GUINEA REGION
27	08 15 00.1*	43.543 N	0.589 W	10 G		0.9	11	PYRENEES. ML 3.3 (LDG).
27	08 58 47.8*	46.549 N	9.812 E	10 G		1.1	6	SWITZERLAND
27	09 36 34.9	22.404 N	121.092 E	19 *	4.4	1.3	31	TAIWAN REGION
27	10 37 23.2	9.921 S	120.525 E	33 N	4.8	1.1	23	SUMBA ISLAND REGION
27	11 26 51.4*	5.70 S	151.14 E	94 ?	3.9	1.1	7	NEW BRITAIN REGION
27	11 32 47.5*	34.491 N	91.753 E	33 N	3.8 4.3	1.5	13	QINGHAI PROVINCE, CHINA
27	11 51 40.9*	62.63 N	124.01 W	10 G	4.7	1.6	6	NORTHWEST TERRITORIES, CANADA
27	12 25 03.5*	52.24 N	170.97 W	33 N	4.5	1.1	9	FOX ISLANDS, ALEUTIAN ISLANDS
27	12 47 35.3*	67.835 N	161.808 W	33 N		0.8	8	ALASKA. ML 3.0 (PMR).
27	13 02 01.7*	44.017 N	114.780 W	5 G		0.8	9	WESTERN IDAHO. ML 3.3 (NEIS).
27	13 43 14.0*	54.333 S	1.093 W	10 G	5.3	1.0	17	BOUVET ISLAND REGION
27	14 05 40.5*	16.234 N	61.713 W	10 G		0.3	5	LEEWARD ISLANDS. ML 2.4 (FDF).
27	15 16 03.0*	7.004 N	76.389 W	33 N		1.1	5	NORTHERN COLOMBIA
27	17 11 52.9*	23.45 N	123.66 E	33 N		1.4	7	SOUTHWESTERN RYUKYU ISLANDS
27	17 23 22.9*	16.53 N	61.72 W	33 N		1.2	5	LEEWARD ISLANDS. ML 2.5 (FDF).
27	17 28 09.7*	13.772 S	167.206 E	276 *	4.6	1.2	55	VANUATU ISLANDS
27	17 47 37.6*	23.53 S	115.65 W	10 G	4.8 4.1	1.2	8	EASTER ISLAND CORDILLERA
27	18 18 26.3*	5.19 S	138.77 E	33 N	3.5	1.0	7	NEAR S. COAST OF WEST IRIAN
27	18 45 20.7*	4.338 N	96.763 E	50 ?	4.5	1.1	15	NORTHERN SUMATERA
27	18 56 17.7*	44.055 N	114.781 W	5 G		1.1	10	WESTERN IDAHO. ML 3.3 (NEIS).
27	18 59 09.1*	43.948 N	114.770 W	5 G		0.5	9	WESTERN IDAHO. ML 3.8 (NEIS).
27	19 38 42.1	27.867 N	142.777 E	30	5.1 4.3	0.8	111	BONIN ISLANDS REGION
27	20 28 09.8*	32.960 N	117.790 W	10			6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
27	21 04 43.8	27.648 N	55.917 E	53 *	4.4	1.3	14	SOUTHERN IRAN
27	21 22 21.9*	33.908 N	24.894 E	33 N	3.8	0.8	9	MEDITERRANEAN SEA
27	23 48 47.6*	3.785 N	126.439 E	84 *	4.7	0.9	18	TALAUD ISLANDS
28	00 00 01.7*	51.28 N	175.39 W	33 N	4.1	1.2	7	ANDREANOF ISLANDS, ALEUTIAN IS.
28	00 02 44.7	20.643 N	122.226 E	29 *	4.7	1.2	63	PHILIPPINE ISLANDS REGION
28	00 31 35.0	39.872 N	27.763 E	10 G		0.6	12	TURKEY
28	00 42 32.7*	17.309 S	179.133 E	33 N		1.5	6	FIJI ISLANDS
28	00 51 03.9*	41.57 N	18.91 E	10 G		0.2	4	ADRIATIC SEA. ML 2.3 (TTG).

28	01 38 40.4?	7.72 S	128.01 E	173 ?	1.0	5	BANDA SEA
28	02 50 35.9%	45.114 N	0.206 W	10 G	1.0	10	FRANCE. ML 2.8 (LDG).
28	04 12 56.6	19.060 N	69.526 W	36	4.9 4.4	0.9	103 DOMINICAN REPUBLIC REGION
28	04 25 44.6?	37.55 N	21.15 E	10 G	0.3	5	SOUTHERN GREECE. ML 3.5 (ATH).
28	05 01 53.9*	21.112 S	68.632 W	33 N	1.1	6	CHILE-BOLIVIA BORDER REGION
28	06 14 35.0?	21.01 S	174.15 W	33 N	4.7	1.4	26 TONGA ISLANDS
28	06 49 29.8?	37.69 S	72.77 W	33 N	4.0 3.3	0.4	13 CENTRAL CHILE
28	07 06 26.8%	34.010 N	116.580 W	10		10	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS). Felt (IV) at Morongo Valley.
28	07 20 12.5?	33.44 S	72.61 W	33 N		0.3	8 OFF COAST OF CENTRAL CHILE
28	08 11 25.4?	33.73 S	72.13 W	33 N		0.6	8 OFF COAST OF CENTRAL CHILE
28	08 12 04.5*	37.220 N	141.438 E	84 *	4.1	1.0	12 NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Fukushima, Mito, Onahama, Sendai and Utsunomiya.
28	08 50 28.6	54.759 N	164.444 W	110 *	4.7	1.0	53 UNIMAK ISLAND REGION
28	09 31 06.2	42.750 N	19.130 E	10 G		0.7	6 YUGOSLAVIA. ML 2.1 (TTG).
28	10 13 27.7	4.845 N	83.336 W	10 G		1.3	6 OFF COAST OF CENTRAL AMERICA
28	10 28 47.8?	33.44 S	72.84 W	33 N		0.4	8 OFF COAST OF CENTRAL CHILE
28	10 41 48.8%	59.782 N	152.320 W	61		39	SOUTHERN ALASKA. <AGS-P>. Felt (III) at Homer.
28	11 17 32.6?	39.89 N	20.43 E	10 G		0.3	10 GREECE-ALBANIA BORDER REGION. ML 3.2 (THE).
28	11 23 43.8*	51.532 N	175.175 W	33 N	4.1	0.9	20 ANDREANOF ISLANDS, ALEUTIAN IS.
28	13 43 27.7?	42.37 N	19.07 E	10 G		0.7	4 YUGOSLAVIA. ML 2.2 (TTG).
28	13 47 55.5*	27.815 N	142.653 E	33 N		0.9	12 BONIN ISLANDS REGION
28	14 08 35.9?	6.32 S	114.33 E	571 ?	4.1	0.9	9 BALI SEA
28	14 50 59.7?	33.61 S	71.93 W	33 N		0.9	8 NEAR COAST OF CENTRAL CHILE
28	14 54 03.0*	9.817 S	120.684 E	33 N	4.2	1.2	17 SUMBA ISLAND REGION
28	16 59 01.1	43.883 N	147.878 E	38	4.7	0.9	61 KURIL ISLANDS
28	20 25 48.0*	24.015 N	122.504 E	27 *	4.5	1.5	21 TAIWAN REGION
28	21 37 49.2*	10.636 N	57.063 E	10 G	4.6	1.3	21 CARLSBERG RIDGE
28	23 17 34.5*	35.286 N	140.099 E	73 *		0.5	9 NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Ajira, Tateyama, Tokyo and Yokahama.
29	00 00 28.5*	62.131 N	125.368 W	10 G		1.1	6 NORTHWEST TERRITORIES, CANADA
29	00 02 21.8	40.588 N	23.155 E	10 G		0.8	11 GREECE. ML 2.8 (THE).
29	00 29 41.1	33.424 S	72.099 W	46 *	4.7	1.0	31 OFF COAST OF CENTRAL CHILE
29	00 37 00.5*	33.437 S	72.256 W	40 *	4.6	0.8	17 OFF COAST OF CENTRAL CHILE
29	01 04 10.7*	11.185 S	164.732 E	33 N	4.5	1.3	9 SANTA CRUZ ISLANDS REGION
29	01 14 15.4	40.321 N	27.391 E	12		0.4	11 TURKEY
29	01 33 31.2	56.483 N	5.857 W	10 G		0.7	15 UNITED KINGDOM. ML 4.2 (BGS). Felt (V) at Oban. Felt throughout western Scotland.
29	03 01 36.8%	58.808 N	151.742 W	65		19	KODIAK ISLAND REGION. <AGS-P>.
29	03 20 07.8*	33.548 S	71.387 W	33 N		1.0	8 NEAR COAST OF CENTRAL CHILE
29	05 48 06.2?	13.82 N	92.03 W	55 ?	4.3 3.3	1.4	13 OFF COAST OF CHIAPAS, MEXICO
29	06 17 32.0	37.514 N	118.398 W	10 G		0.8	11 CALIFORNIA-NEVADA BORDER REGION. ML 3.4 (PAS).
29	06 31 31.9	14.932 S	167.255 E	120	5.5	0.9	129 VANUATU ISLANDS
29	07 10 37.5	10.633 N	57.068 E	10 G	5.2 4.9	1.1	103 CARLSBERG RIDGE
29	10 24 36.2%	39.646 N	28.894 E	10 G		1.3	5 TURKEY
29	10 41 23.4	24.888 S	179.962 E	492 *	4.8	1.2	47 SOUTH OF FIJI ISLANDS
29	12 20 44.2	51.326 N	174.969 W	33 N	5.0 4.5	1.0	127 ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.2 (PMR). Felt (III) on Adak.
29	12 43 25.8?	53.31 N	159.21 E	33 N	4.5	0.6	11 NEAR EAST COAST OF KAMCHATKA
29	14 17 44.0*	6.986 S	129.857 E	150 ?	4.0	1.5	9 BANDA SEA
29	14 22 37.9?	31.48 S	69.21 W	33 N		1.1	7 SAN JUAN PROVINCE, ARGENTINA
29	14 38 43.1*	9.722 N	57.857 E	10 G	4.7	1.4	36 CARLSBERG RIDGE
29	15 20 18.5	37.653 N	118.413 W	5 G		0.8	14 CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS).
29	15 39 56.4	10.602 N	57.049 E	10 G	5.0	0.9	75 CARLSBERG RIDGE
29	16 06 22.1	10.720 N	57.002 E	10 G	4.7	1.0	39 CARLSBERG RIDGE
29	16 42 48.3?	42.37 N	18.92 E	10 G		1.0	4 YUGOSLAVIA. ML 2.0 (TTG).
29	17 13 34.1%	58.805 N	156.056 W	217		30	ALASKA PENINSULA. <AGS-P>.
29	17 38 03.9	39.091 N	27.864 E	11		0.9	21 TURKEY
29	17 42 03.1*	37.880 N	29.343 E	10 G		0.7	5 TURKEY
29	18 51 23.5	39.069 N	27.836 E	11		0.6	13 TURKEY
29	20 38 23.3?	5.43 S	150.84 E	171 *	4.1	0.7	7 NEW BRITAIN REGION
29	20 54 42.5*	7.668 S	119.491 E	287 *	4.4	0.9	10 FLORES SEA
29	21 35 46.1*	44.272 N	17.794 E	10 G		1.2	8 YUGOSLAVIA. ML 2.8 (TTG).
29	21 57 20.7	30.687 S	117.200 E	10 G		0.9	6 WESTERN AUSTRALIA
29	23 03 36.4*	39.061 N	27.853 E	10 G		0.9	5 TURKEY
29	23 30 44.7	30.969 S	69.204 W	33 N		1.2	14 CHILE-ARGENTINA BORDER REGION
30	00 01 56.0	23.473 N	94.022 E	69 *	4.5	1.4	18 BURMA-INDIA BORDER REGION
30	00 18 42.2%	35.900 N	117.660 W	6 G		3	CENTRAL CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
30	00 26 28.4*	15.008 N	119.972 E	33 N		0.8	5 LUZON, PHILIPPINE ISLANDS
30	04 11 39.6*	66.402 N	149.772 W	10 G		1.5	8 ALASKA. ML 3.6 (PMR).
30	05 04 35.9	34.738 N	24.223 E	47 *	4.2	1.2	55 CRETE
30	07 19 27.5	16.447 S	177.785 W	26 *	4.7	1.2	17 FIJI ISLANDS REGION
30	07 23 57.4	39.032 N	21.412 E	10 G	4.2	0.7	19 GREECE. ML 3.6 (ATH), 3.4 (THE).
30	08 07 09.5*	17.252 N	84.765 W	10 G	4.5	1.0	14 CARIBBEAN SEA
30	09 42 48.4%	62.453 N	150.670 W	74		29	CENTRAL ALASKA. <AGS-P>.
30	09 52 11.8%	32.980 N	117.800 W	10		25	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.9 (PAS). Felt (IV) at Lakeside and Pala, (III) at Avalon, Escandido, Laguna Hills, Mission Vieja, San Luis Rey, San Marcos and Vista, California.
30	10 52 05.5*	16.249 S	177.699 W	33 N	4.7 4.5	1.2	17 FIJI ISLANDS REGION
30	11 54 51.1	65.700 N	152.435 W	33 N	4.4	0.8	8 ALASKA. ML 3.6 (PMR).
30	12 00 04.2	65.739 N	152.273 W	33 N		0.5	9 ALASKA. ML 3.0 (PMR).
30	12 37 07.3	13.854 N	120.670 E	130	4.8	0.6	43 MINDORO, PHILIPPINE ISLANDS. Felt (II RF) at Puerto Galera.
30	13 58 48.3?	9.83 S	160.89 E	33 N	4.4	1.5	7 SOLOMON ISLANDS
30	15 50 14.9*	16.635 S	73.792 W	50 *	4.2	1.5	14 NEAR COAST OF PERU
30	16 07 35.9	21.812 S	68.330 W	127 *	4.7	1.2	25 CHILE-BOLIVIA BORDER REGION
30	16 11 53.5	43.996 N	113.942 W	5 G		0.4	8 EASTERN IDAHO. ML 3.6 (NEIS).
30	17 05 50.6	39.083 N	27.765 E	10 G		0.6	6 TURKEY
30	17 15 48.1	44.228 N	10.188 E	10 G		1.4	17 NORTHERN ITALY. ML 3.1 (LDG), 3.1 (KBA). MD 3.0 (FIR).
30	17 16 25.8*	6.837 N	73.169 W	161 *	4.6	1.4	10 NORTHERN COLOMBIA
30	17 24 35.1*	39.085 N	27.721 E	10 G		1.5	6 TURKEY
30	18 36 47.8	39.050 N	27.682 E	10 G		1.0	6 TURKEY

30	18 56 56.2*	16.617 N	97.919 W	33 N 4.5	0.8	7	OAXACA, MEXICO. Felt slightly at Puebla.
30	20 15 43.4*	42.316 N	19.389 E	10 G	0.1	5	YUGOSLAVIA. ML 2.1 (TTG).
30	20 47 37.4*	38.812 N	23.488 E	10 G	0.6	6	GREECE. ML 2.9 (ATH).
30	20 55 44.17	16.32 S	179.26 W	549 3.7	0.5	9	FIJI ISLANDS REGION
30	21 15 05.0	39.088 N	27.828 E	10 G	0.8	18	TURKEY
30	22 30 00.1*	37.300 N	116.307 W	0 5.5 4.5		218	SOUTHERN NEVADA. <DOE>. ML 5.2 (BRK). 37' 18" 00.29" N., 116' 18" 26.74" W., Surface Elev. 2127 m., Depth of Burial 600 m., Shot Time 223000.102, "LABQUARK", Nevada Test Site (Dept. of Energy).
30	22 53 49.8*	36.364 N	40.361 E	10 G	0.5	5	JORDAN - SYRIA REGION
30	23 03 05.5*	29.635 N	141.980 E	33 N 5.2	0.7	15	SOUTH OF HONSHU, JAPAN
30	23 24 58.1*	39.062 N	27.928 E	10 G	1.1	5	TURKEY
30	23 52 19.0*	4.495 N	96.515 E	58 ? 4.0	1.3	6	NORTHERN SUMATERA

## 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

05 02 47 17.77 59.493S 29.529W 28km 5.8mb ( 17 obs.) 5.9Msz ( 17 obs.) SOUTH SANDWICH ISLANDS REGION FAULT PLANE SOLUTION: P-Waves NP1:Strike=33 Dip=65 Slip= 170 NP2: 127 81 25 Principal Axes: T Val= 1.31 P1g=24 Azm=353 N 0.37 3 10 P -1.68 68 273 Best Double Couple:Ma=1.5*10**24 NP1:Strike=197 Dip=24 Slip=-83 NP2: 9 67 -93	Centroid Location: Origin Time 08:52:31.4 0.5 Lat 23.15S 0.05 Lon 176.86W 0.06 Dep 128.8 2.2 Half-duration 1.8 Principal Axes: Scale 10**24 D-CM T Val= 1.31 P1g=21 Azm=101 N 0.37 3 10 P -1.68 68 273 Best Double Couple:Ma=1.5*10**24 NP1:Strike=197 Dip=24 Slip=-83 NP2: 9 67 -93	Centroid Location: Origin Time 02:39:54.1 0.6 Lat 4.74N 0.08 Lon 96.09E 0.08 Dep 21.9 8.1 Half-duration 1.8 Principal Axes: Scale 10**24 D-CM T Val= 1.48 P1g=25 Azm= 78 N -0.20 64 243 P -1.28 6 345 Best Double Couple:Ma=1.4*10**24 NP1:Strike=118 Dip=68 Slip= 166 NP2: 214 77 22
05 06 06 15.58 37.073S 71.814W 93km 5.6mb ( 27 obs.) S. CHILE-ARGENTINA BORDER REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 23C Centroid Location: Origin Time 06:06:20.2 0.6 Lat 37.05S 0.07 Lon 72.53W 0.13 Dep 80.5 9.7 Half-duration 1.6 Principal Axes: Scale 10**23 D-CM T Val= 11.37 P1g=42 Azm=111 N 0.60 24 226 P -11.97 38 336 Best Double Couple:Ma=1.2*10**24 NP1:Strike=129 Dip=24 Slip= 174 NP2: 225 88 66	07 01 44 19.93 12.824S 169.518E 665km 4.9mb ( 18 obs.) SANTA CRUZ ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 9S, 14C Centroid Location: Origin Time 01:44:23.9 1.6 Lat 12.88S 0.12 Lon 169.80E 0.13 Dep 671.4 6.7 Half-duration 1.6 Principal Axes: Scale 10**23 D-CM T Val= 7.49 P1g=18 Azm=304 N 0.77 7 36 P -8.26 71 147 Best Double Couple:Ma=7.9*10**23 NP1:Strike= 23 Dip=28 Slip=-105 NP2: 220 63 -82	09 15 58 22.59 0.927N 127.944E 33km 5.5mb ( 29 obs.) 5.3Msz ( 10 obs.) MALMAHERA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 23C Centroid Location: Origin Time 15:58:26.0 0.5 Lat 0.98N 0.05 Lon 128.03E 0.07 Dep 15.0 8.1 Half-duration 2.2 Principal Axes: Scale 10**24 D-CM T Val= 2.75 P1g=15 Azm= 0 N -0.20 3 91 P -2.55 75 193 Best Double Couple:Ma=2.6*10**24 NP1:Strike= 85 Dip=30 Slip=-97 NP2: 273 60 -86
06 00 11 05.55 15.775S 177.935W 439km 5.0mb ( 27 obs.) FIJI ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 30C Centroid Location: Origin Time 00:11:11.4 0.6 Lat 15.60S 0.05 Lon 177.85W 0.05 Dep 435.8 2.5 Half-duration 1.8 Principal Axes: Scale 10**24 D-CM T Val= 1.27 P1g=79 Azm= 27 N -0.10 4 277 P -1.16 10 187 Best Double Couple:Ma=1.2*10**24 NP1:Strike=272 Dip=35 Slip= 84 NP2: 100 55 94	07 20 11 08.87 59.542S 26.098W 33km 5.4mb ( 14 obs.) 5.0Msz ( 4 obs.) SOUTH SANDWICH ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 17S, 29C Centroid Location: Origin Time 20:11:16.2 0.3 Lat 59.90S 0.05 Lon 26.42W 0.10 Dep 15.0 8.1 Half-duration 2.2 Principal Axes: Scale 10**24 D-CM T Val= 2.77 P1g=61 Azm=234 N -0.11 20 3 P -2.75 21 101 Best Double Couple:Ma=2.8*10**24 NP1:Strike=222 Dip=29 Slip= 133 NP2: 356 69 69	10 22 20 48.57 8.823S 157.522E 10km 5.5mb ( 15 obs.) 5.2Msz ( 2 obs.) SOLOMON ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 25C Centroid Location: Origin Time 22:20:56.5 0.3 Lat 8.86S 0.05 Lon 157.35E 0.05 Dep 15.4 2.7 Half-duration 2.5 Principal Axes: Scale 10**24 D-CM T Val= 2.90 P1g=64 Azm= 54 N -0.04 2 149 P -2.86 26 240 Best Double Couple:Ma=2.9*10**24 NP1:Strike=335 Dip=19 Slip= 96 NP2: 148 71 88
06 08 52 25.59 23.280S 176.745W 122km 5.6mb ( 39 obs.) SOUTH OF FIJI ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 30C	08 02 39 52.44 4.417N 96.370E 40km 5.2mb ( 42 obs.) 5.1Msz ( 6 obs.) NORTHERN SUMATERA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 17C	11 00 18 25.59 5.187S 152.442E 51km 5.8mb ( 44 obs.) 6.4Msz ( 28 obs.) NEW BRITAIN REGION FAULT PLANE SOLUTION: P-Waves NP1:Strike= 95 Dip=70 Slip= 87 NP2: 284 20 98 Principal Axes: T Val= 1.27 P1g=65 Azm=360 P 25 187 Comment: The focal mechanism is poorly controlled and corresponds to a reverse faulting. The preferred fault plane is NP2. MOMENT TENSOR SOLUTION Dep 23 Na. of sta: 12 Principal Axes: Scale 10**25 d-cm T Val= 5.29 P1g=59 Azm= 34 N 0.21 21 265 P -5.50 22 166 Best Double Couple:Ma=5.4*10**25 NP1:Strike=223 Dip=29 Slip= 44 NP2: 93 70 112 CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN  
 L.P.B.: 21S, 55C M.W.: 10S, 23C  
 Centroid Location:  
 Origin Time 00:18:29.2 0.1  
 Lat 5.33S 0.02 Lon 152.58E 0.02  
 Dep 24.8 0.9 Half-duration 5.7  
 Principal Axes:  
 Scale 10\*\*25 D-CM  
 T Val= 6.30 Plg=58 Azm=337  
 N -0.09 4 73  
 P -6.20 32 165  
 Best Double Couple: Mo=6.3\*10\*\*25  
 NP1: Strike=268 Dip=13 Slip= 106  
 NP2: 72 77 86

11 17 54 03.03 0.474N 125.862E 33km  
 5.4mb (29 obs.) 5.0Msz (7 obs.)  
 MOLLUCCA PASSAGE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 9S, 21C  
 Centroid Location:  
 Origin Time 17:54: 8.0 0.3  
 Lat 0.44N 0.07 Lon 125.37E 0.07  
 Dep 15.0 BDY Half-duration 2.9  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 5.96 Plg=54 Azm= 91  
 N 0.52 5 188  
 P -6.48 35 282  
 Best Double Couple: Mo=6.2\*10\*\*24  
 NP1: Strike= 35 Dip=11 Slip= 117  
 NP2: 188 80 85

12 10 39 40.62 22.510S 70.176W 80km  
 5.1mb (19 obs.)  
 NEAR COAST OF NORTHERN CHILE  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 9S, 19C  
 Centroid Location:  
 Origin Time 10:39:47.0 0.6  
 Lat 21.88S 0.11 Lon 70.96W 0.08  
 Dep 108.8 5.0 Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*23 D-CM  
 T Val= 7.23 Plg=20 Azm=105  
 N -1.70 7 13  
 P -5.53 69 264  
 Best Double Couple: Mo=6.4\*10\*\*23  
 NP1: Strike=207 Dip=26 Slip= -74  
 NP2: 9 65 -98

12 16 18 48.29 5.387S 153.740E 59km  
 5.2mb (28 obs.)  
 NEW IRELAND REGION  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 8S, 16C  
 Centroid Location:  
 Origin Time 16:18:54.0 0.6  
 Lat 5.40S 0.08 Lon 153.30E 0.08  
 Dep 64.3 5.7 Half-duration 1.5  
 Principal Axes:  
 Scale 10\*\*23 D-CM  
 T Val= 6.18 Plg=79 Azm=326  
 N 0.80 11 142  
 P -6.98 1 232  
 Best Double Couple: Mo=6.6\*10\*\*23  
 NP1: Strike=333 Dip=45 Slip= 105  
 NP2: 132 47 75

12 23 57 15.61 56.201N 153.405W 31km  
 6.1mb (112 obs.) 6.3Msz (39 obs.)  
 KODIAK ISLAND REGION  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike= 27 Dip=80 Slip= 37  
 NP2: 290 54 168  
 Principal Axes:  
 T Plg=33 Azm=255  
 P 17 153  
 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 22 No. of sta: 16  
 Principal Axes:  
 Scale 10\*\*25 d-cm  
 T Val= 7.34 Plg=31 Azm=223  
 N -1.08 59 37

P -6.26 3 131  
 Best Double Couple: Mo=6.8\*10\*\*25  
 NP1: Strike=263 Dip=67 Slip= 159  
 NP2: 1 70 25  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 16S, 40C  
 Centroid Location:  
 Origin Time 23:57:21.1 0.3  
 Lat 55.90N 0.05 Lon 153.65W 0.09  
 Dep 15.0 FIX Half-duration 6.6  
 Principal Axes:  
 Scale 10\*\*25 D-CM  
 T Val= 5.95 Plg=49 Azm=316  
 N 0.23 6 53  
 P -6.18 40 148  
 Best Double Couple: Mo=6.1\*10\*\*25  
 NP1: Strike=289 Dip=8 Slip= 146  
 NP2: 52 86 84

13 09 28 24.46 60.797S 36.779W 10km  
 5.8mb (28 obs.) 6.1Msz (12 obs.)  
 SCOTIA SEA  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike=340 Dip=85 Slip= 147  
 NP2: 73 57 6  
 Principal Axes:  
 T Plg=26 Azm=291  
 P 19 31  
 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 27 No. of sta: 7  
 Principal Axes:  
 Scale 10\*\*25 d-cm  
 T Val= 3.02 Plg=38 Azm=293  
 N 0.08 44 156  
 P -3.10 23 42  
 Best Double Couple: Mo=3.1\*10\*\*25  
 NP1: Strike= 83 Dip=45 Slip= 13  
 NP2: 344 81 134  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 38C M.W.: 9S, 21C  
 Centroid Location:  
 Origin Time 09:28:30.8 0.2  
 Lat 61.11S 0.01 Lon 36.46W 0.03  
 Dep 15.0 FIX Half-duration 5.6  
 Principal Axes:  
 Scale 10\*\*25 D-CM  
 T Val= 3.83 Plg= 5 Azm=324  
 N -0.25 79 207  
 P -3.58 9 55  
 Best Double Couple: Mo=3.7\*10\*\*25  
 NP1: Strike= 99 Dip=80 Slip= -3  
 NP2: 190 87 -170

13 15 17 21.01 31.827S 179.937W 215km  
 5.9mb (40 obs.)  
 KERMADEC ISLANDS REGION  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike=178 Dip=50 Slip=-130  
 NP2: 51 54 -53  
 Principal Axes:  
 T Plg= 2 Azm=115  
 P 60 21  
 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with a large strike-slip component. The preferred fault plane is not determined.  
 MOMENT TENSOR SOLUTION  
 Dep 219 No. of sta: 13  
 Principal Axes:  
 Scale 10\*\*25 d-cm  
 T Val= 6.51 Plg= 4 Azm=116  
 N 0.09 26 208  
 P -6.60 63 19  
 Best Double Couple: Mo=6.6\*10\*\*25  
 NP1: Strike=181 Dip=47 Slip=-127  
 NP2: 49 54 -57  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 17S, 40C M.W.: 11S, 27C  
 Centroid Location:  
 Origin Time 15:17:30.4 0.1  
 Lat 31.73S 0.01 Lon 179.94W 0.01  
 Dep 231.0 0.5 Half-duration 6.0

Principal Axes:  
 Scale 10\*\*25 D-CM  
 T Val= 5.83 Plg= 2 Azm=282  
 N 0.18 35 190  
 P -6.01 55 15  
 Best Double Couple: Mo=5.9\*10\*\*25  
 NP1: Strike= 42 Dip=53 Slip= -44  
 NP2: 162 57 -134

13 17 24 31.49 37.014N 22.176E 11km  
 6.0mb (100 obs.) 5.8Msz (18 obs.)  
 SOUTHERN GREECE  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike=205 Dip=50 Slip= -68  
 NP2: 353 45 -114  
 Principal Axes:  
 T Plg= 3 Azm=280  
 P 73 181  
 Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting with a moderate strike-slip component. The preferred fault plane is not determined.  
 MOMENT TENSOR SOLUTION  
 Dep 21 No. of sta: 10  
 Principal Axes:  
 Scale 10\*\*24 d-cm  
 T Val= 6.39 Plg=10 Azm= 85  
 N 0.46 23 351  
 P -6.85 65 196  
 Best Double Couple: Mo=6.6\*10\*\*24  
 NP1: Strike=200 Dip=41 Slip= -53  
 NP2: 335 58 -117  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 10S, 17C  
 Centroid Location:  
 Origin Time 17:24:34.6 0.4  
 Lat 36.80N 0.08 Lon 22.64E 0.08  
 Dep 15.0 BDY Half-duration 3.4  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 9.69 Plg= 6 Azm=287  
 N 0.24 28 20  
 P -9.94 62 187  
 Best Double Couple: Mo=9.8\*10\*\*24  
 NP1: Strike=350 Dip=46 Slip=-130  
 NP2: 221 56 -56

14 00 05 54.51 23.368S 179.102E 549km  
 5.2mb (29 obs.)  
 SOUTH OF FIJI ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 7S, 14C  
 Centroid Location:  
 Origin Time 00:06: 0.0 0.7  
 Lat 23.16S 0.12 Lon 178.85E 0.10  
 Dep 571.3 4.0 Half-duration 2.0  
 Principal Axes:  
 Scale 10\*\*24 D-CM  
 T Val= 1.86 Plg= 2 Azm=238  
 N -0.04 28 329  
 P -1.82 62 144  
 Best Double Couple: Mo=1.8\*10\*\*24  
 NP1: Strike=302 Dip=50 Slip=-128  
 NP2: 172 53 -54

14 20 58 23.19 6.470S 154.916E 59km  
 5.6mb (39 obs.)  
 SOLOMON ISLANDS  
 CENTROID, MOMENT TENSOR (HRV)  
 Data Used: GDSN  
 L.P.B.: 15S, 31C  
 Centroid Location:  
 Origin Time 20:58:28.2 0.2  
 Lat 6.81S 0.03 Lon 154.86E 0.03  
 Dep 59.8 2.1 Half-duration 4.2  
 Principal Axes:  
 Scale 10\*\*25 D-CM  
 T Val= 1.49 Plg=71 Azm= 89  
 N 0.34 14 311  
 P -1.83 12 218  
 Best Double Couple: Mo=1.7\*10\*\*25  
 NP1: Strike=290 Dip=35 Slip= 65  
 NP2: 140 59 107

15 08 48 11.44 22.748S 175.288W 33km  
 5.7mb (40 obs.) 5.8Msz (14 obs.)  
 TONGA ISLANDS REGION  
 FAULT PLANE SOLUTION: P-Waves  
 NP1: Strike= 30 Dip=77 Slip= 90

NP2: 210 13 90  
Principal Axes:  
T P1g=58 Azm=300  
P 32 120  
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.

## MOMENT TENSOR SOLUTION

Dep 7 No. of sta: 10  
Principal Axes:

Scale 10\*\*24 d-cm  
T Val= 6.75 P1g=56 Azm=288  
N -0.35 5 25  
P -6.40 33 118

Best Double Couple: Mo=6.6\*10\*\*24

NP1: Strike=228 Dip=13 Slip= 113

NP2: 24 78 85

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 12S, 28C

Centroid Location:

Origin Time 08:48:16.1 0.4

Lat 23.03S 0.03 Lon 174.70W 0.04

Dep 15.0 FIX Half-duration 3.0

Principal Axes:

Scale 10\*\*24 D-CM

T Val= 5.17 P1g=68 Azm=258

N 0.42 11 17

P -5.59 18 110

Best Double Couple: Mo=5.4\*10\*\*24

NP1: Strike=218 Dip=28 Slip= 114

NP2: 11 64 78

15 21 42 29.29 36.714N 71.092E 89km

5.8mb (128 obs.)

AFGHANISTAN-USSR BORDER REGION

FAULT PLANE SOLUTION: P-Waves

NP1: Strike=210 Dip=73 Slip= 20

NP2: 114 71 162

Principal Axes:

T P1g=26 Azm= 72

P 1 342

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.

MOMENT TENSOR SOLUTION

Dep 77 No. of sta: 14

Principal Axes:

Scale 10\*\*24 d-cm

T Val= 2.60 P1g=30 Azm= 74

N 0.07 59 236

P -2.66 8 339

Best Double Couple: Mo=2.6\*10\*\*24

NP1: Strike=113 Dip=63 Slip= 164

NP2: 210 75 28

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 15S, 31C

Centroid Location:

Origin Time 21:42:33.6 0.3

Lat 36.52N 0.04 Lon 70.56E 0.05

Dep 105.3 2.5 Half-duration 2.4

Principal Axes:

Scale 10\*\*24 D-CM

T Val= 2.82 P1g=56 Azm= 98

N -0.02 28 240

P -2.81 18 340

Best Double Couple: Mo=2.8\*10\*\*24

NP1: Strike=105 Dip=37 Slip= 142

NP2: 228 68 60

16 08 57 10.70 12.353S 166.595E 135km

5.5mb ( 21 obs.)

SANTA CRUZ ISLANDS

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 13S, 18C

Centroid Location:

Origin Time 08:57:12.6 0.5

Lat 12.44S 0.08 Lon 166.28E 0.06

Dep 117.6 3.2 Half-duration 1.7

Principal Axes:

Scale 10\*\*24 D-CM

T Val= 0.85 P1g=68 Azm=193

N 0.32 20 351

P -1.17 7 84

Best Double Couple: Mo=1.0\*10\*\*24

NP1: Strike=196 Dip=42 Slip= 121

NP2: 336 55 65

16 18 20 17.75 19.376N 146.301E 48km

6.5mb (144 obs.) 6.7Msz ( 56 obs.)

MARIANA ISLANDS REGION

FAULT PLANE SOLUTION: P-Waves

NP1: Strike=107 Dip=67 Slip= -90

NP2: 287 23 -90

Principal Axes:

T P1g=22 Azm=197

P 68 17

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

MOMENT TENSOR SOLUTION

Dep 38 No. of sta: 13

Principal Axes:

Scale 10\*\*26 d-cm

T Val= 1.21 P1g=18 Azm=201

N -0.06 3 292

P -1.15 72 32

Best Double Couple: Mo=1.2\*10\*\*26

NP1: Strike=286 Dip=27 Slip= -97

NP2: 114 63 -86

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 14S, 36C M.W.: 11S, 25C

Centroid Location:

Origin Time 18:20:23.9 0.1

Lat 19.29N 0.02 Lon 146.47E 0.02

Dep 31.5 0.8 Half-duration 7.8

Principal Axes:

Scale 10\*\*25 D-CM

T Val= 9.32 P1g=13 Azm=230

N 0.39 25 134

P -9.71 61 345

Best Double Couple: Mo=9.5\*10\*\*25

NP1: Strike=349 Dip=39 Slip= -48

NP2: 120 62 -119

16 20 57 21.95 56.222N 153.600W 33km

5.3mb ( 66 obs.) 5.5Msz ( 8 obs.)

KODIAK ISLAND REGION

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 12S, 19C

Centroid Location:

Origin Time 20:57:27.2 1.0

Lat 56.06N 0.13 Lon 153.21W 0.21

Dep 15.0 FIX Half-duration 3.0

Principal Axes:

Scale 10\*\*24 D-CM

T Val= 6.88 P1g=56 Azm=312

N 1.57 3 47

P -8.45 34 139

Best Double Couple: Mo=7.7\*10\*\*24

NP1: Strike=241 Dip=11 Slip= 105

NP2: 46 79 87

17 06 42 20.24 3.934S 128.829E 25km

5.4mb ( 21 obs.) 5.1Msz ( 3 obs.)

CERAM

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 9S, 19C

Centroid Location:

Origin Time 06:42:23.2 0.5

Lat 3.68S 0.05 Lon 128.75E 0.07

Dep 15.0 FIX Half-duration 2.3

Principal Axes:

Scale 10\*\*24 D-CM

T Val= 2.73 P1g=40 Azm= 96

N 0.64 40 320

P -3.37 24 208

Best Double Couple: Mo=3.1\*10\*\*24

NP1: Strike=250 Dip=42 Slip= 15

NP2: 149 80 131

17 11 01 18.53 26.539N 128.631E 34km

5.4mb ( 36 obs.) 5.5Msz ( 1 obs.)

RYUKYU ISLANDS

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 7S, 14C

Centroid Location:

Origin Time 11:01:15.7 0.9

Lat 26.35N 0.14 Lon 129.41E 0.20

Dep 15.0 FIX Half-duration 1.6

Principal Axes:

Scale 10\*\*23 D-CM

T Val= 8.23 P1g=58 Azm=333

N 1.27 5 234

P -9.50 32 141

Best Double Couple: Mo=8.9\*10\*\*23

NP1: Strike=213 Dip=14 Slip= 68

NP2: 56 77 95

17 12 08 09.46 37.290N 71.730E 120km

5.5mb ( 81 obs.)

AFGHANISTAN-USSR BORDER REGION

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 12S, 25C

Centroid Location:

Origin Time 12:08:16.0 0.4

Lat 37.34N 0.06 Lon 71.55E 0.05

Dep 135.6 2.4 Half-duration 2.3

Principal Axes:

Scale 10\*\*24 D-CM

T Val= 2.51 P1g=41 Azm=143

N 0.15 27 27

P -2.66 38 274

Best Double Couple: Mo=2.6\*10\*\*24

NP1: Strike=301 Dip=27 Slip= 4

NP2: 208 88 117

17 21 25 15.06 10.497N 56.983E 10km

5.8mb ( 67 obs.) 6.0Msz ( 20 obs.)

CARLSBERG RIDGE

FAULT PLANE SOLUTION: P-Waves

NP1: Strike=217 Dip=83 Slip= 15

NP2: 125 75 173

Principal Axes:

T P1g=16 Azm= 82

P 5 350

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.

MOMENT TENSOR SOLUTION

Dep 28 No. of sta: 11

Principal Axes:

Scale 10\*\*25 d-cm

T Val= 2.68 P1g= 7 Azm= 97

N 0.51 71 208

P -3.19 17 5

Best Double Couple: Mo=2.9\*10\*\*25

NP1: Strike=142 Dip=73 Slip= -173

NP2: 50 83 -17

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 18S, 44C

Centroid Location:

Origin Time 21:25:18.9 0.2

Lat 10.76N 0.02 Lon 57.00E 0.02

Dep 15.0 FIX Half-duration 4.8

Principal Axes:

Scale 10\*\*25 D-CM

T Val= 2.25 P1g= 6 Azm= 81

N 0.14 81 210

P -2.39 7 351

Best Double Couple: Mo=2.3\*10\*\*25

NP1: Strike=126 Dip=81 Slip= -179

NP2: 36 89 -9

19 19 01 15.41 2.957S 139.552E 38km

5.1mb ( 15 obs.) 4.7Msz ( 1 obs.)

NEAR N. COAST OF WEST IRIAN

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 14S, 27C

Centroid Location:

Origin Time 19:01:19.3 1.0

Lat 2.79S 0.11 Lon 139.76E 0.12

Dep 15.0 FIX Half-duration 1.6

Principal Axes:

Scale 10\*\*23 D-CM

T Val= 9.65 P1g=63 Azm=154

N -2.70 18 283

P -6.95 20 20

Best Double Couple: Mo=8.3\*10\*\*23

NP1: Strike=138 Dip=30 Slip= 128

NP2: 275 67 70

20 01 31 13.99 0.843N 29.233W 10km

5.4mb ( 68 obs.) 4.7Msz ( 7 obs.)

CENTRAL MID-ATLANTIC RIDGE

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 15S, 36C

Centroid Location:

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Origin Time          01:31:23.0 0.4
Lat  0.72N 0.05 Lon 29.00W 0.04
Dep 15.0 BDY Half-duration 2.0
Principal Axes:
  Scale 10**24 D-CM
  T Val= 1.24 Ptg=75 Azm=156
  N      0.38      0      246
  P     -1.63     15     336
Best Double Couple:Mo=1.4*10**24
NP1:Strike= 66 Dip=30 Slip= 90
NP2:      246      60      90

20 10 05 00.71 13.034N 93.354E 76km
4.9mb ( 42 obs.)
ANDAMAN ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 20C
Centroid Location:
Origin Time          10:04:58.7 0.8
Lat 12.82N 0.11 Lon 93.16E 0.10
Dep 21.6 7.3 Half-duration 1.5
Principal Axes:
  Scale 10**23 D-CM
  T Val= 5.58 Ptg=62 Azm=114
  N      0.50     12      1
  P     -6.08     25     266
Best Double Couple:Mo=5.8*10**23
NP1:Strike=332 Dip=23 Slip= 59
NP2:      185      71     102

21 12 18 06.67 17.023N 147.273E 48km
5.1mb ( 18 obs.) 4.5Msz ( 1 obs.)
MARIANA ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 25C
Centroid Location:
Origin Time          12:18: 7.7 0.6
Lat 16.74N 0.08 Lon 147.48E 0.08
Dep 15.0 FIX Half-duration 1.5
Principal Axes:
  Scale 10**23 D-CM
  T Val= 10.94 Ptg=65 Azm=234
  N      0.63     14     356
  P     -11.57    21     91
Best Double Couple:Mo=1.1*10**24
NP1:Strike=204 Dip=27 Slip= 122
NP2:      350      67     75

22 16 15 05.89 6.716S 130.427E 123km
5.6mb ( 40 obs.)
BANDA SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 36C
Centroid Location:
Origin Time          16:15: 6.4 0.3
Lat  6.71S 0.03 Lon 130.38E 0.03
Dep 109.6 1.5 Half-duration 2.7
Principal Axes:
  Scale 10**24 D-CM
  T Val= 4.56 Ptg=69 Azm=285
  N     -0.30     20     125
  P     -4.26      7     33
Best Double Couple:Mo=4.4*10**24
NP1:Strike=102 Dip=42 Slip= 60

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NP2:           320           55           114

23 11 41 51.32 56.558N 164.032E 31km
5.3mb ( 90 obs.) 4.6MsZ ( 7 abs.)
KOMANDORSKY ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 23C
Centroid Location:
Origin Time 11:41:50.1 0.5
Lat 56.74N 0.08 Lon 164.13E 0.10
Dep 32.0 5.9 Half-duration 1.7
Principal Axes:
Scale 10**23 D-CM
T Val= 7.63 Plg=77 Azm= 14
N 3.28 1 110
P -10.92 13 200
Best Double Couple:Mo=9.3*10**23
NP1:Strike=292 Dip=32 Slip= 93
NP2: 109 58 88

23 13 30 15.37 16.621S 167.265E 19km
5.5mb ( 22 obs.) 5.7MsZ ( 11 abs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 34C
Centroid Location:
Origin Time 13:30:18.9 0.4
Lat 16.80S 0.03 Lon 167.52E 0.03
Dep 15.0 FIX Half-duration 3.3
Principal Axes:
Scale 10**24 D-CM
T Val= 9.11 Plg=13 Azm=135
N -1.68 74 348
P -7.43 8 227
Best Double Couple:Mo=8.3*10**24
NP1:Strike=271 Dip=75 Slip= 4
NP2: 181 87 165

24 14 19 37.54 13.630S 173.055E 620km
5.4mb ( 44 obs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 23C
Centroid Location:
Origin Time 14:19:41.3 0.6
Lat 13.87S 0.06 Lon 173.08E 0.05
Dep 634.8 3.5 Half-duration 2.3
Principal Axes:
Scale 10**24 D-CM
T Val= 2.57 Plg=27 Azm=210
N 0.25 49 336
P -2.82 28 104
Best Double Couple:Mo=2.7*10**24
NP1:Strike=248 Dip=49 Slip=-179
NP2: 157 89 -41

25 06 15 54.83 23.032N 108.061W 10km
5.3mb ( 40 obs.) 5.7MsZ ( 13 abs.)
GULF OF CALIFORNIA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 33C
Centroid Location:
Origin Time 06:16: 2.5 0.2

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Lat 22.90N 0.02 Lon 108.17W 0.02
Dep 15.0 FIX Half-duration 3.9
Principal Axes:
  Scale 10**25 D-CM
  T Val= 1.26 P1g= 7 Azm=263
  N -0.16 83 67
  P -1.11 2 173
Best Double Couple:Mo=1.2*10**25
NP1:Strike=308 Dip=84 Slip= 176
NP2: 38 86 7

20 06 12.50 3.677N 126.777E 45km
5.6mb ( 37 obs.) 5.6Msz ( 10 obs.)
TALAUD ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 40C
Centroid Location:
Origin Time 20:06:17.4 0.2
Lat 3.77N 0.03 Lon 126.67E 0.02
Dep 28.0 1.8 Half-duration 3.9
Principal Axes:
  Scale 10**24 D-CM
  T Val= 14.52 P1g=52 Azm=334
  N -2.74 31 194
  P -11.78 20 92
Best Double Couple:Mo=1.3*10**25
NP1:Strike=143 Dip=37 Slip= 32
NP2: 26 71 123

06 31 31.98 14.932S 167.255E 120km
5.5mb ( 31 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 23C
Centroid Location:
Origin Time 06:31:35.6 0.8
Lat 15.10S 0.07 Lon 167.07E 0.08
Dep 110.8 2.6 Half-duration 1.9
Principal Axes:
  Scale 10**23 D-CM
  T Val= 10.49 P1g=78 Azm= 93
  N 2.14 4 202
  P -12.63 11 293
Best Double Couple:Mo=1.2*10**24
NP1:Strike= 28 Dip=34 Slip= 97
NP2: 199 56 85

07 10 37.56 10.633N 57.068E 10km
5.2mb ( 34 obs.) 4.9Msz ( 1 obs.)
CARLSBERG RIDGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 22C
Centroid Location:
Origin Time 07:10:44.4 0.6
Lat 10.87N 0.10 Lon 57.20E 0.08
Dep 15.0 FIX Half-duration 1.6
Principal Axes:
  Scale 10**23 D-CM
  T Val= 6.89 P1g=21 Azm=199
  N 1.16 68 8
  P -8.05 4 108
Best Double Couple:Mo=7.5*10**23
NP1:Strike=242 Dip=72 Slip= 167
NP2: 336 78 18

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ANTARCTIC EVENT, SEPTEMBER 17, 1986

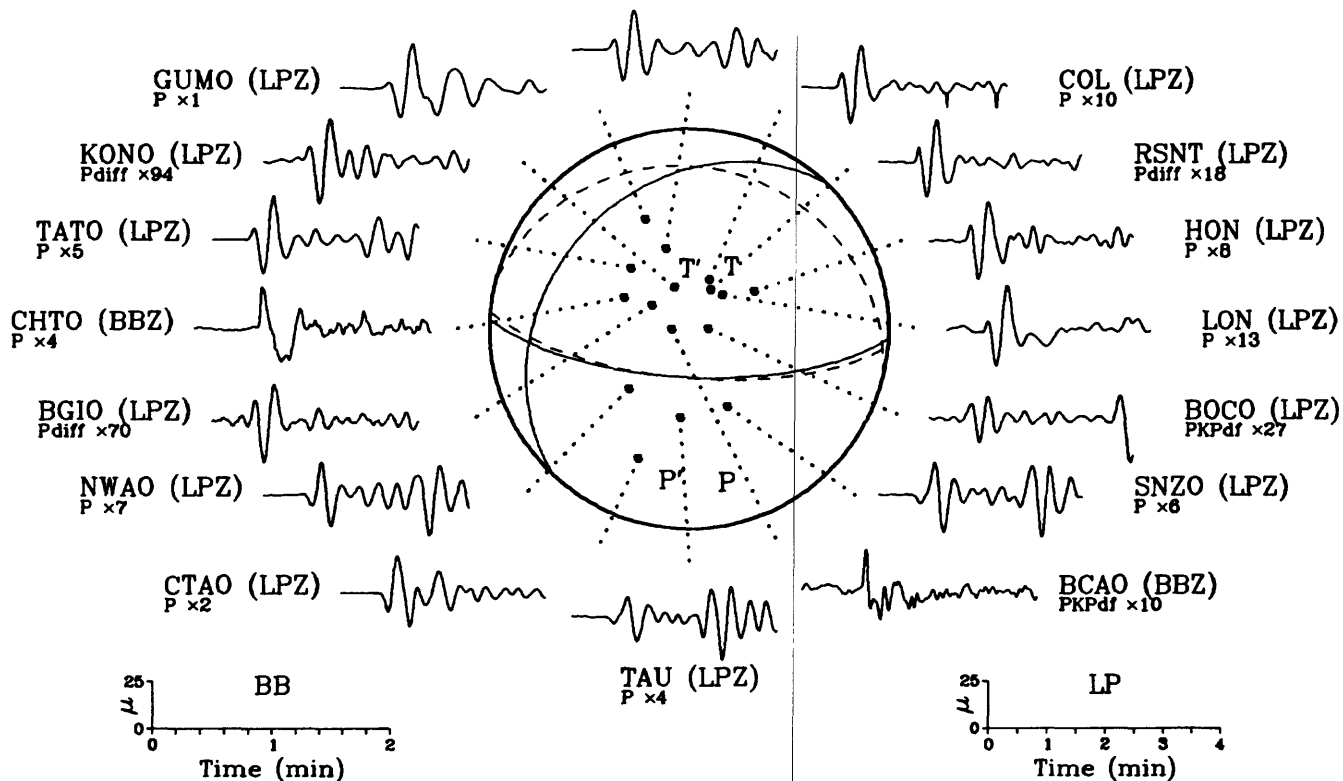
A local event was detected on the South Pole, Antarctica seismograph station at 07 15 02.0 UTC on September 17. From S-P time differences and P-wave polarities, the event occurred about 1.5 degrees from SPA at approximately 88.5° S, 45° W. The origin time was approximately 07 14 40 UTC, and the magnitude was estimated to be 3.0. No data were reported for this event from any other Antarctic stations.

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



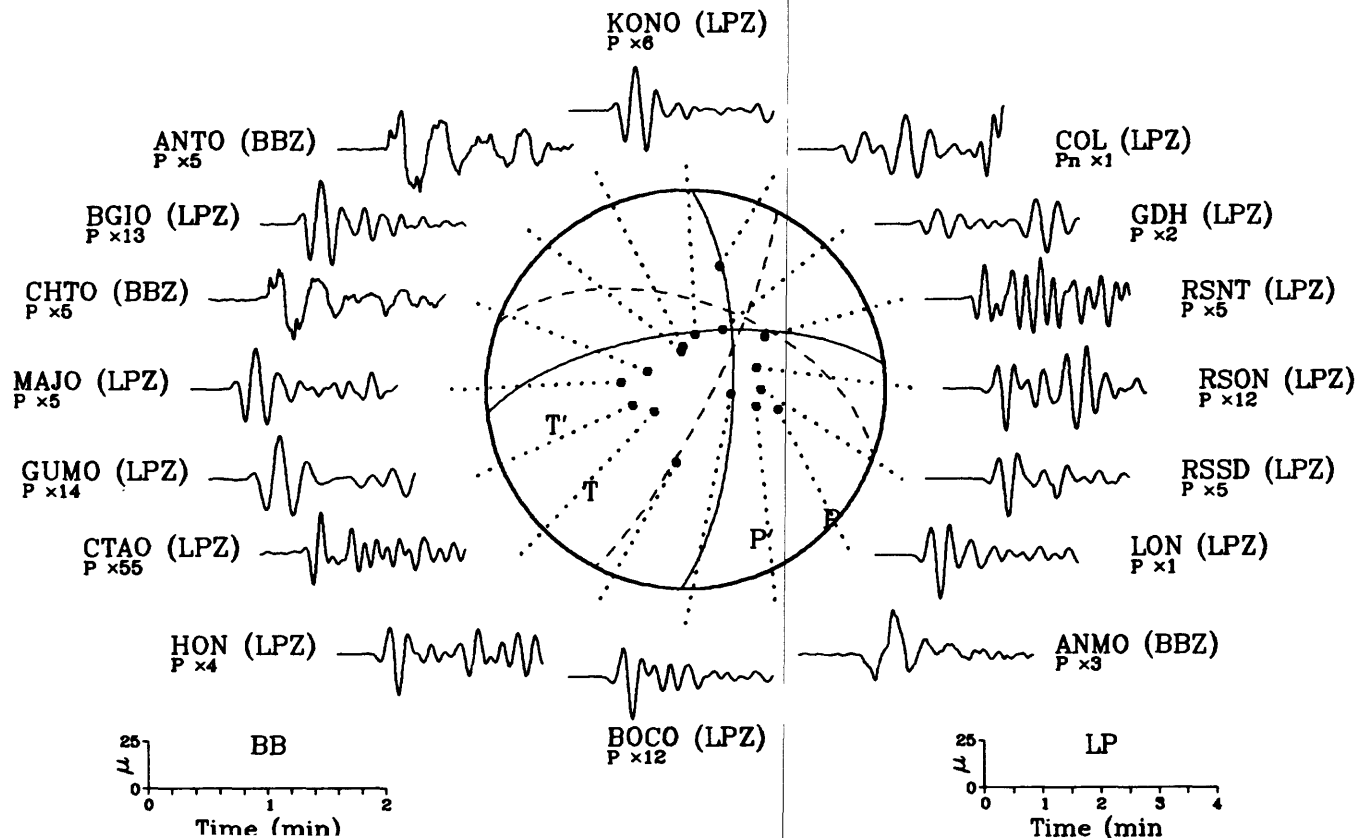
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New Britain Region

MAJO (LPZ)  
P x5



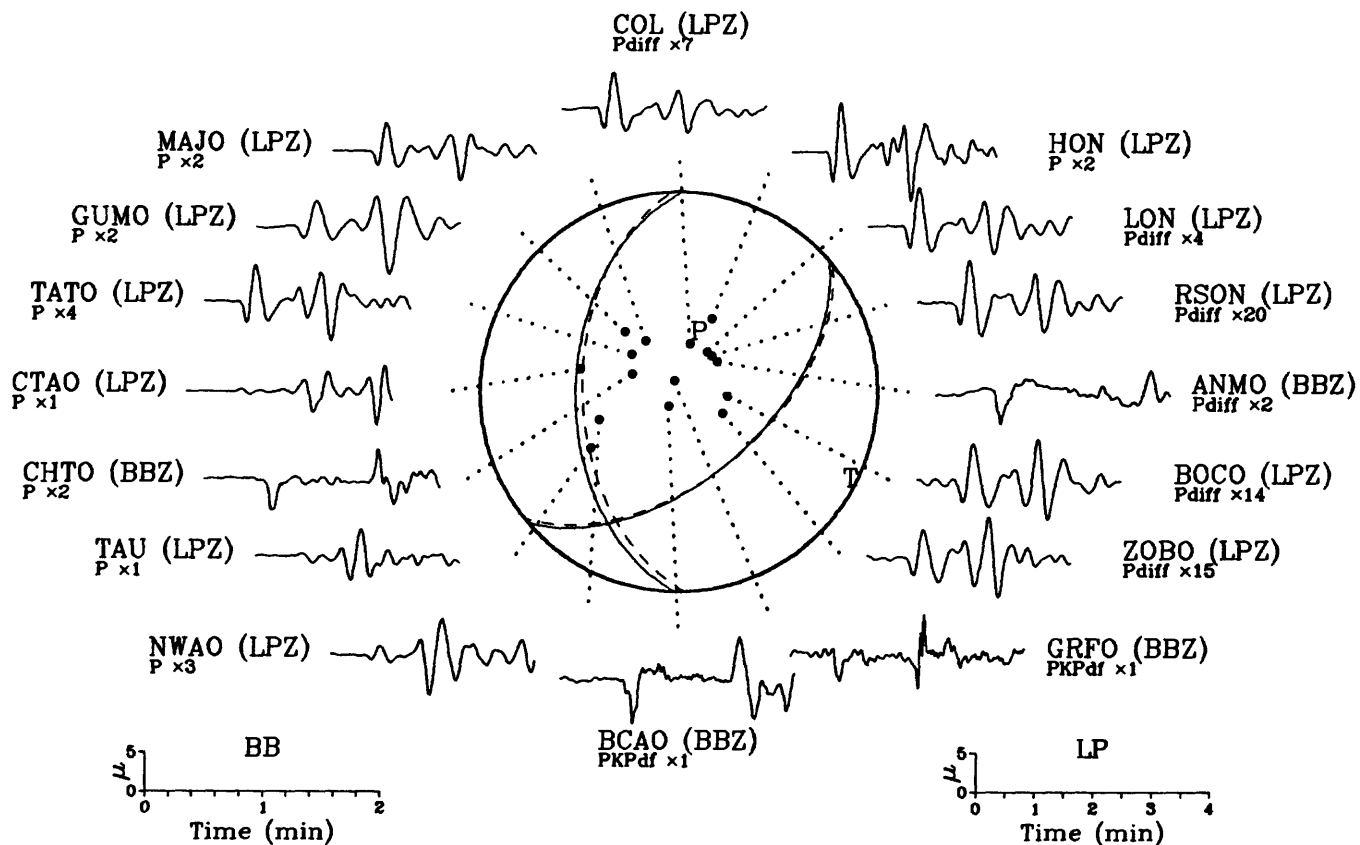
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Kodiak Island Region

KONO (LPZ)  
P x6



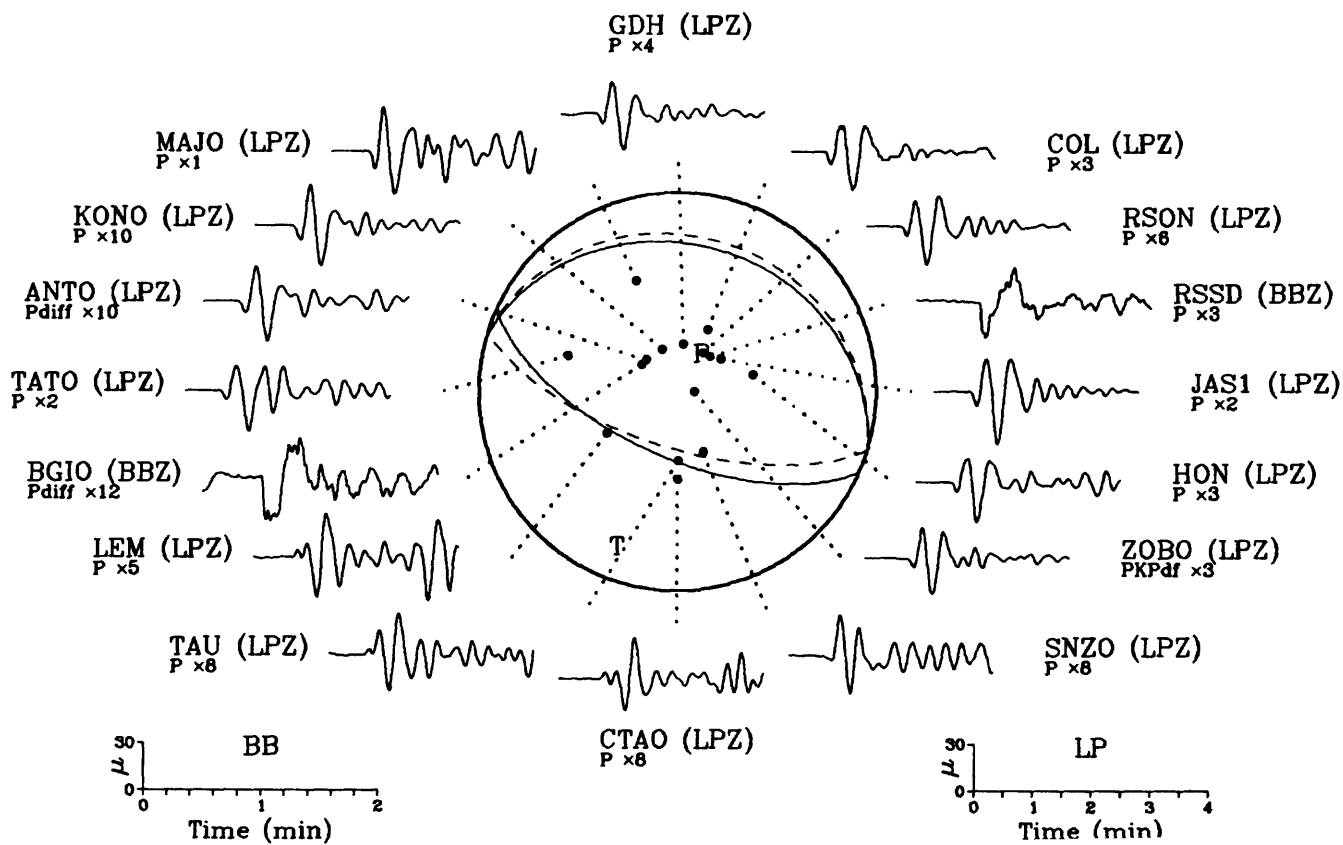
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## Kermadec Islands Region

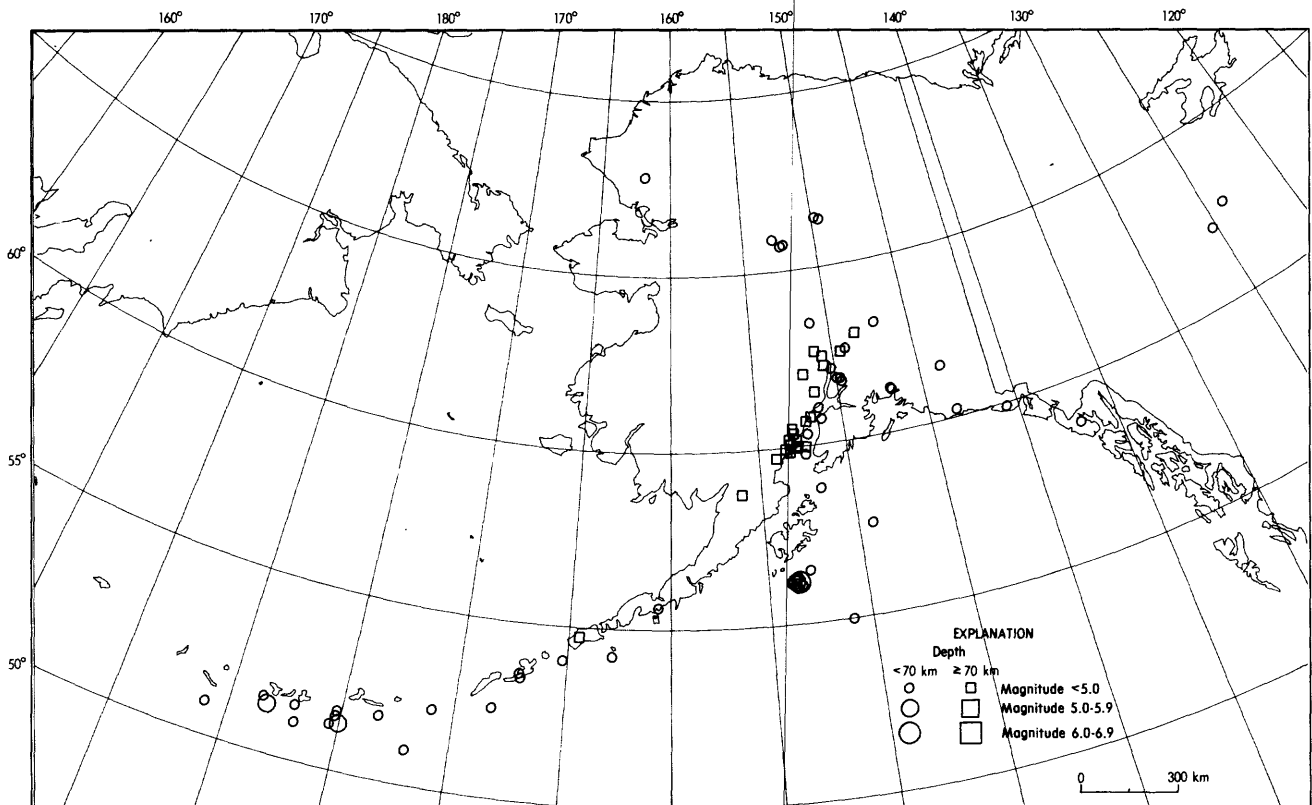
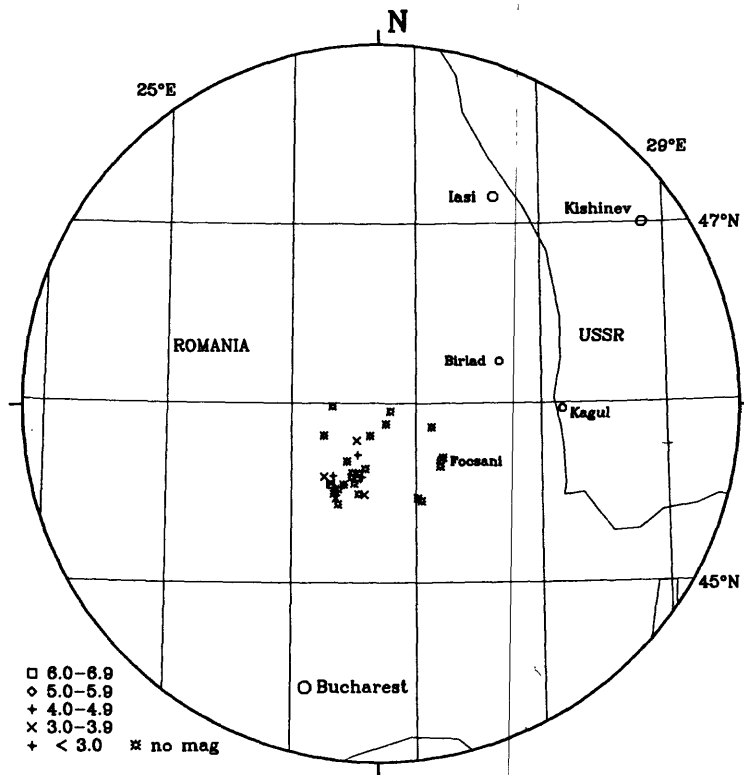


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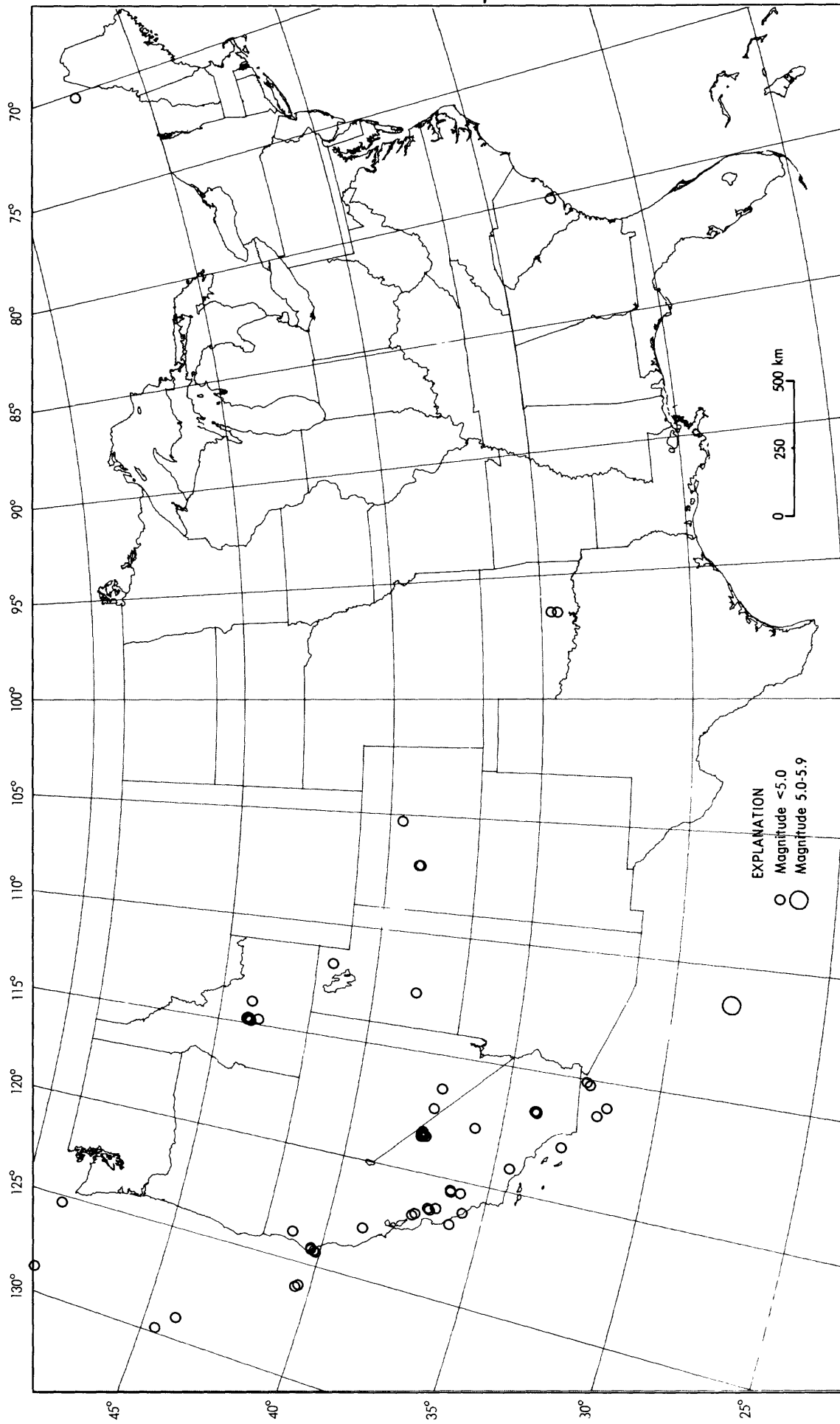
## Mariana Islands Region



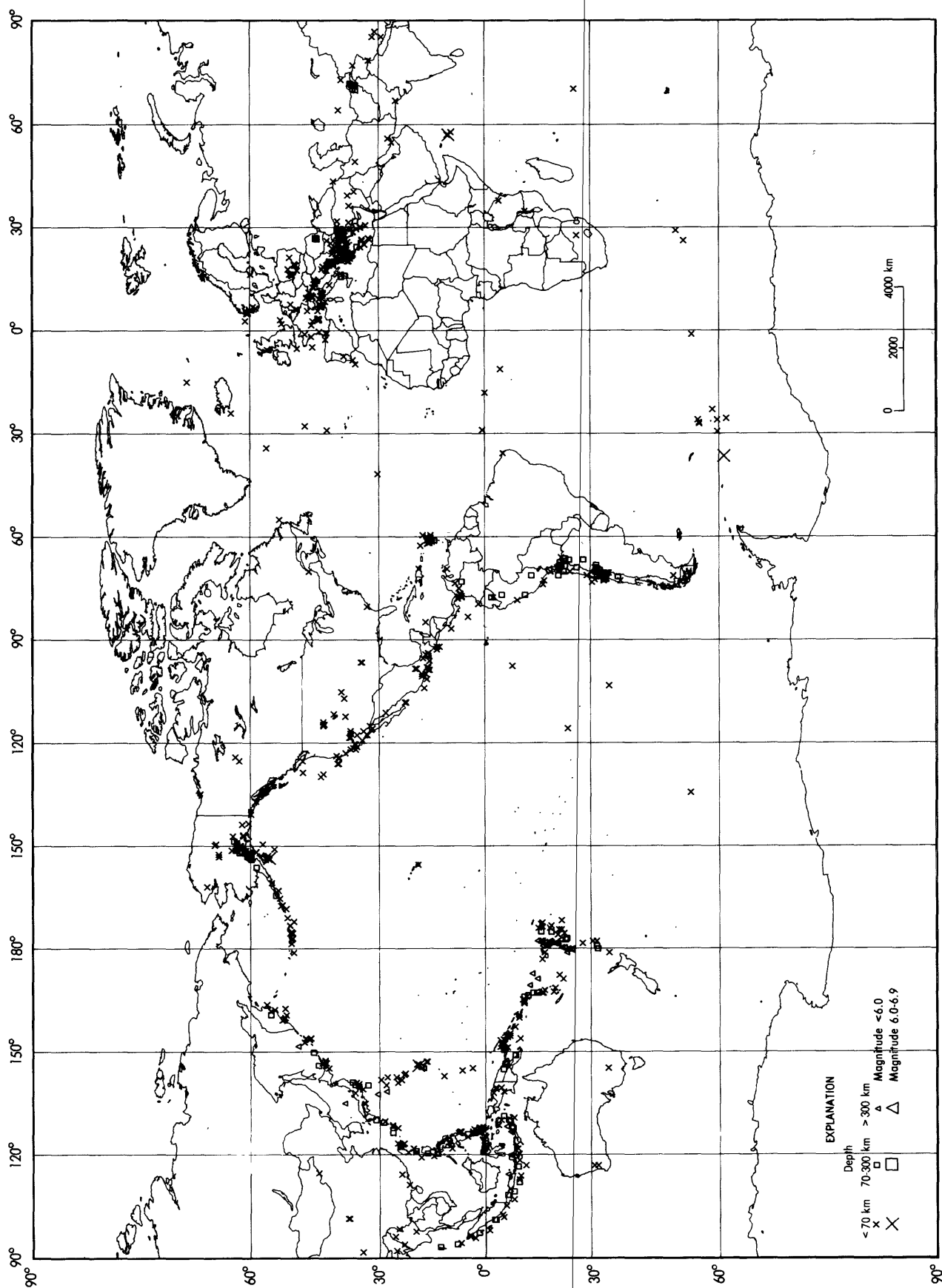
# Earthquake Epicenters in the Vrancea Region, Romania, August and September, 1986



Earthquake epicenters in Alaska and adjacent regions for September, 1986 (C. Stover).



Earthquake epicenters in the conterminous United States and adjacent regions for September, 1986 (C. Stover).



Earthquakes located in September, 1986 (C. Stover).



# PRELIMINARY DETERMINATION OF EPICENTERS

## MONTHLY LISTING

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

J U L Y 1 9 8 6

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
a	01	00 49 07.1	15.564 S 172.452 W	33 N	5.4 5.7	1.1	144	SAMOA ISLANDS REGION. Ms 5.8 (BRK).
	01	00 58 46.0	63.318 N 149.736 W	118 ?		0.2	9	CENTRAL ALASKA
	01	01 03 32.67	15.57 S 172.95 W	33 N	4.4	1.2	19	SAMOA ISLANDS REGION
	01	01 06 46.8	15.812 S 172.718 W	33 N	5.4 5.7	1.1	138	SAMOA ISLANDS REGION
	01	02 17 01.27	15.64 S 172.48 W	33 N	4.3	1.0	7	SAMOA ISLANDS REGION
	01	03 38 27.17	59.38 N 6.60 E	5 G		1.5	5	SOUTHERN NORWAY. MD 2.2 (BER).
	01	04 32 10.6	6.007 N 123.953 E	558	5.2	0.8	51	MINDANAO, PHILIPPINE ISLANDS
	01	05 10 15.7	15.636 S 172.846 W	33 N	5.1 5.1	1.1	105	SAMOA ISLANDS REGION. Ms 5.2 (BRK).
	01	05 11 13.7*	52.460 S 12.912 E	10 G	5.0	1.2	13	SOUTHWEST OF AFRICA
	01	05 37 06.4*	60.135 N 152.586 W	93			27	SOUTHERN ALASKA. <AGS-P>.
a	01	06 03 09.5	4.758 S 127.989 E	33 N	5.6 5.5	1.3	103	BANDA SEA
	01	06 38 19.4	9.909 S 118.953 E	33 N	4.1	1.3	12	SUMBAWA ISLAND REGION
a	01	07 32 54.0	3.236 S 148.498 E	10 G	5.3 5.6	1.2	101	BISMARCK SEA. Ms 5.5 (BRK).
	01	08 25 40.0*	39.415 N 28.345 E	10 G		1.1	10	TURKEY
a	01	08 40 01.1	3.213 S 148.527 E	10 G	5.4 5.5	1.5	61	BISMARCK SEA
	01	08 42 14.0*	40.385 N 127.440 W	5 G			19	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.9 (BRK).
	01	08 56 40.8*	3.178 S 148.835 E	10 G	4.5	1.5	7	BISMARCK SEA
	01	09 17 16.6	3.123 S 148.684 E	10 G	4.2	0.7	8	BISMARCK SEA
	01	10 55 36.5*	39.913 N 28.820 E	10 G		0.9	5	TURKEY
	01	12 31 00.1*	38.536 N 4.113 W	0 G	1.0	1.0	5	SPAIN. Probable explosion.
	01	12 40 17.2*	5.539 S 29.028 E	33 N		1.4	9	LAKE TANGANYIKA REGION. MG 4.1 (LSZ).
	01	13 09 36.6*	14.313 N 92.828 W	10 G	4.7	1.0	29	NEAR COAST OF CHIAPAS, MEXICO
	01	13 54 11.4	36.988 N 140.014 E	41	4.3	0.8	13	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Utsunomiya and Onohama.
	01	19 26 42.6*	61.597 N 149.704 W	43			40	SOUTHERN ALASKA. <AGS-P>. ML 3.7 (PMR). Felt (III) at Anchorage and Eagle River. Felt (II) at Palmer.
	01	20 17 50.9	44.591 N 9.673 E	16		1.1	30	NORTHERN ITALY. ML 3.2 (LDG), 3.1 (TRI).
	01	20 31 00.47	46.04 N 3.06 E	10 G		0.3	5	FRANCE. ML 1.9 (LDG).
	01	21 00 43.67	4.54 S 130.98 E	33 N	3.4	1.1	6	BANDA SEA
	01	21 31 59.0	37.517 N 121.660 W	5 G		0.6	11	CENTRAL CALIFORNIA. ML 2.9 (BRK).
	01	22 14 01.3*	13.969 N 91.420 W	72	4.0	1.3	21	NEAR COAST OF GUATEMALA
	01	23 32 48.5*	6.273 S 145.859 E	33 N	3.2	0.9	5	PAPUA NEW GUINEA
	01	23 43 08.8*	72.534 N 2.212 E	10 G		0.6	5	NORWEGIAN SEA
	01	23 54 09.7	47.549 N 151.455 E	157 D	4.8	1.0	72	KURIL ISLANDS
	02	00 15 22.1*	28.222 N 140.723 E	33 N	4.6	0.7	10	BONIN ISLANDS REGION
a	02	01 37 33.6	0.679 S 99.966 E	90	5.3	0.9	124	SOUTHERN SUMATRA
	02	02 09 58.9	25.141 N 96.746 E	33 N	4.4	0.9	23	BURMA
	02	03 56 57.47	38.14 N 119.14 E	33 N	4.4	1.3	8	NORTHEASTERN CHINA. ML 4.4 (BJI).
a	02	04 16 57.7	22.038 S 179.534 W	598 D	5.6	0.9	246	SOUTH OF FIJI ISLANDS. mb 6.0 (BRK).
	02	04 35 45.8*	38.370 S 15.993 W	10 G	4.8	0.8	25	TRISTAN DA CUNHA REGION
	02	08 10 21.1*	36.620 N 116.320 W	6 G			14	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.0 (PAS).
	02	08 11 03.1*	33.990 N 117.230 W	6 G			6	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
	02	08 56 50.2*	31.581 S 68.107 W	10 G		1.0	6	SAN JUAN PROVINCE, ARGENTINA
	02	09 43 15.0*	41.550 N 25.284 E	10 G		1.3	8	GREECE-BULGARIA BORDER REGION
	02	10 11 40.87	16.29 S 28.77 E	10 G		0.5	4	ZAMBIA. MB 3.6 (BUL).
a	02	10 20 25.3	7.807 S 150.640 E	29 D	5.5 4.6	1.1	106	NEW BRITAIN REGION
	02	11 59 42.3	49.590 N 16.847 E	10 G		1.4	9	CZECHOSLOVAKIA. ML 3.1 (KBA).
	02	12 42 32.67	32.36 S 71.45 W	33 N		0.8	7	NEAR COAST OF CENTRAL CHILE
a	02	12 53 08.1	59.550 S 26.164 W	53 D	5.6	1.0	67	SOUTH SANDWICH ISLANDS REGION
	02	13 23 29.8*	44.167 N 149.166 E	47 D	4.8 4.9	1.0	43	KURIL ISLANDS
	02	13 26 34.77	44.89 N 148.74 E	33 N	4.8	0.8	14	KURIL ISLANDS
	02	13 30 21.6*	31.339 S 68.088 W	10 G		1.4	8	SAN JUAN PROVINCE, ARGENTINA
	02	14 47 39.5*	55.360 S 33.018 W	10 G	4.7	0.2	6	SOUTH GEORGIA ISLAND REGION
a	02	20 45 50.5	26.775 S 114.283 W	10 G	5.6 5.5	1.1	134	EASTER ISLAND REGION. Ms 6.2 (BRK).
	02	22 06 42.4	50.258 N 12.393 E	10 G		0.5	6	GERMANY
	02	22 57 02.0*	40.355 N 27.685 E	10 G		0.4	7	TURKEY
a	03	00 12 14.0	59.264 S 26.934 W	33 N	5.4 4.9	1.2	47	SOUTH SANDWICH ISLANDS REGION
	03	00 41 18.6*	18.378 S 177.989 W	448 *	4.6	0.9	22	FIJI ISLANDS REGION

03	00	46	08.0*	18.473 S	178.111 W	450 *	5.0	1.0	31	FIJI ISLANDS REGION
03	01	41	45.1	14.467 N	146.687 E	56 *	5.3 4.6	1.0	87	MARIANA ISLANDS
03	01	41	57.5*	5.477 S	145.214 E	33 N	3.8	1.3	7	EAST PAPUA NEW GUINEA REGION
03	02	51	07.0*	7.085 N	127.183 E	33 N	4.4	0.6	6	PHILIPPINE ISLANDS REGION
03	03	17	42.7*	59.300 N	151.878 W	53			23	KENAI PENINSULA, ALASKA. <AGS-P>.
03	04	30	01.8*	5.551 N	123.603 E	531 *	4.3	1.4	10	MINDANAO, PHILIPPINE ISLANDS
03	04	38	21.5*	43.696 N	6.303 E	10 G		0.6	5	NEAR SOUTH COAST OF FRANCE. ML 2.2 (LDG).
03	04	56	48.4	2.305 N	126.722 E	33 N	5.0	1.1	26	MOLUCCA PASSAGE
03	05	00	34.7	41.462 N	141.964 E	74	4.7	1.0	35	HOKKAIDO, JAPAN REGION
03	05	44	47.2*	62.200 N	152.093 W	112			17	CENTRAL ALASKA. <AGS-P>.
03	06	43	35.3	6.727 S	155.844 E	44 D	4.6	0.9	27	SOLOMON ISLANDS
03	08	33	28.0*	21.639 S	174.664 W	33 N	4.8 4.6	1.2	29	TONGA ISLANDS
03	08	52	29.3*	51.242 N	15.652 E	5 G		1.2	12	POLAND. ML 4.3 (GRF), 3.6 (VKA), 3.5 (KBA).
03	09	21	29.7*	15.934 S	172.731 W	33 N	4.8 4.8	1.2	28	SAMOA ISLANDS REGION
03	09	23	51.3*	6.523 S	130.383 E	166 ?	4.5	0.6	10	BANDA SEA
03	11	41	20.0*	60.954 N	152.685 W	142			28	SOUTHERN ALASKA. <AGS-P>.
03	11	42	31.7*	14.99 N	60.42 W	33 N		0.6	8	WINDWARD ISLANDS. ML 2.8 (FDF).
03	11	47	33.2*	43.91 N	84.70 E	33 N	4.4	1.0	8	NORTHERN XINJIANG, CHINA
03	12	23	50.0*	2.410 N	98.849 E	161 *	3.7	1.3	7	NORTHERN SUMATERA
03	14	11	11.0	65.728 N	152.313 W	33 N		0.7	9	ALASKA. ML 3.4 (PMR).
03	14	54	27.2*	36.520 N	70.956 E	246 D	4.6	0.9	14	HINDU KUSH REGION
03	15	05	09.2*	18.09 N	100.25 W	33 N		0.7	6	GUERRERO, MEXICO
03	15	37	36.0*	26.294 S	27.197 E	5 G	4.7	1.2	7	REPUBLIC OF SOUTH AFRICA
03	17	33	30.5	51.502 N	175.938 W	33 N	5.0	0.9	25	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.8 (PMR). Felt on Adak and Atka.
03	21	20	29.4*	47.208 N	1.100 E	10 G		1.4	11	FRANCE. ML 2.3 (LDG).
03	23	18	17.9*	5.018 S	139.395 E	33 N	3.5	0.9	9	WEST IRIAN
03	23	28	54.6	35.841 N	139.381 E	152	4.7	1.1	91	NEAR S. COAST OF HONSHU, JAPAN. Felt (II JMA) at Kumagaya, Kofu, Utsunomiya, Ajira and on Oshima; (I JMA) at Tokyo, Moebashi, Mito, Yokohama and Toteyama.
04	01	20	38.4*	60.488 N	147.364 W	19			36	SOUTHERN ALASKA. <AGS-P>.
04	02	42	24.1*	31.025 S	68.303 W	10 G		0.7	6	SAN JUAN PROVINCE, ARGENTINA
04	05	20	31.0*	23.61 S	179.18 E	689 ?	4.3	1.0	9	SOUTH OF FIJI ISLANDS
04	05	58	48.1*	51.503 N	175.717 W	33 N	4.9	1.4	33	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.7 (PMR). Felt on Adak.
04	06	13	54.8*	8.689 S	106.765 E	33 N	4.3	0.9	12	SOUTH OF JAVA
04	06	28	39.4	44.526 N	9.651 E	10 G		1.2	26	NORTHERN ITALY. ML 3.2 (LDG).
04	07	21	35.2*	39.409 N	28.301 E	10 G		0.9	6	TURKEY
04	07	24	10.4*	40.691 N	29.917 E	10 G		1.1	9	TURKEY
04	07	45	00.6*	61.071 N	151.357 W	63			42	SOUTHERN ALASKA. <AGS-P>.
04	08	54	37.6	62.284 N	124.117 W	10 G	4.7 4.4	1.0	59	NORTHWEST TERRITORIES, CANADA
04	09	23	14.5	32.397 S	70.118 W	105 *	4.5	1.1	19	CHILE-ARGENTINA BORDER REGION
04	10	26	46.5*	33.11 S	72.94 W	10 G		0.7	8	OFF COAST OF CENTRAL CHILE
04	11	28	22.7*	41.076 N	28.550 E	10 G		0.6	6	TURKEY
04	12	28	03.1	20.772 S	178.654 W	626	5.1	1.0	60	FIJI ISLANDS REGION
04	12	28	14.0*	42.690 N	24.108 E	10 G		1.4	5	BULGARIA
04	13	21	16.1*	32.762 S	71.743 W	33 N		1.2	12	NEAR COAST OF CENTRAL CHILE
04	13	44	48.5*	46.140 N	2.842 E	10 G		0.2	7	FRANCE. ML 2.3 (LDG).
04	13	57	34.8*	5.367 S	145.177 E	33 N	3.6	1.3	7	EAST PAPUA NEW GUINEA REGION
04	14	38	09.4*	10.841 N	42.613 W	10 G	4.9 4.0	1.2	21	NORTH ATLANTIC RIDGE
04	15	04	16.2*	37.086 N	30.167 E	10 G		0.8	6	TURKEY
04	15	23	46.9*	64.022 N	149.080 W	33 N		0.5	6	CENTRAL ALASKA. ML 3.1 (PMR).
04	16	44	46.0*	46.310 N	13.164 E	10 G		1.2	6	AUSTRIA. ML 2.7 (KBA), MD 2.7 (TRI).
04	19	36	52.0*	33.254 S	71.783 W	10 G		0.6	11	NEAR COAST OF CENTRAL CHILE
04	19	55	34.7*	41.055 N	124.657 W	5 G			8	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).
04	21	33	47.7*	33.251 S	71.745 W	10 G		0.9	14	NEAR COAST OF CENTRAL CHILE
04	21	37	20.5*	42.326 N	19.982 E	10 G		0.6	7	YUGOSLAVIA. MD 2.6 (TTG).
04	22	18	52.3*	3.532 S	145.163 E	10 G	4.3	1.5	10	NEAR N COAST OF PAPUA NEW GUINEA
04	22	46	09.1*	33.253 S	71.793 W	10 G		0.8	10	NEAR COAST OF CENTRAL CHILE
04	23	51	34.6*	42.337 N	7.232 W	10 G		0.4	5	SPAIN. MG 3.5 (MDD). Felt (IV) in the Samos-Pueblo de Trives area.
05	00	07	09.1*	21.100 S	67.767 W	33 N		1.5	7	CHILE-BOLIVIA BORDER REGION
05	02	18	04.7	44.640 N	111.014 W	5 G		0.6	12	HEBGEN LAKE REGION. ML 3.6 (NEIS).
05	03	01	32.6	51.248 N	179.746 W	33 N	5.6 5.2	1.0	214	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.2 (PMR), Ms 5.1 (BRK).
05	03	15	37.2*	51.47 N	179.96 E	33 N	4.2	1.7	11	RAT ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).
05	03	24	22.9*	35.080 N	119.090 W	18			7	CENTRAL CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
05	06	53	52.2	63.053 N	150.426 W	119 ?		0.4	9	CENTRAL ALASKA
05	08	09	39.1*	33.278 S	71.760 W	10 G		0.8	12	NEAR COAST OF CENTRAL CHILE
05	09	52	44.7	37.897 N	22.459 E	90	4.5	1.1	119	SOUTHERN GREECE. Felt on northern Peloponnisos.
05	10	22	09.1	0.394 S	16.127 W	10 G	5.0	0.8	80	NORTH OF ASCENSION ISLAND
05	10	54	53.1*	10.659 S	76.401 W	122 *	4.8	1.4	17	PERU
05	11	44	27.1	24.604 N	125.019 E	39	4.7	0.8	24	SOUTHWESTERN RYUKYU ISLANDS. Felt (II JMA) on Miyoko-jimo.
05	11	57	17.5*	57.134 N	154.892 W	93	4.4		54	KODIAK ISLAND REGION. <AGS-P>.
05	13	57	46.6*	39.549 N	28.364 E	10 G		0.3	5	TURKEY
05	14	11	17.7	12.183 N	140.933 E	38 *	5.4 5.1	1.1	104	WEST CAROLINE ISLANDS
05	14	11	59.8*	35.700 N	117.640 W	8			8	CENTRAL CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
05	16	35	02.8	38.847 N	0.214 W	10 G		1.4	21	SPAIN. ML 3.6 (LDG). Felt (III) in the Javea area.
05	16	36	52.4*	9.880 N	72.916 W	33 N	4.6	1.4	6	VENEZUELA
05	16	48	40.7	38.433 N	25.120 E	10 G		1.1	23	AEGEAN SEA. ML 3.7 (ATH).
05	18	37	01.9*	40.741 N	30.130 E	5 G		1.5	7	TURKEY
05	19	45	02.4*	4.440 S	143.904 E	114 ?	4.2	1.4	9	PAPUA NEW GUINEA
05	19	57	38.6*	60.721 S	153.771 E	10 G	5.5 5.6	1.1	46	WEST OF MACQUARIE ISLAND
05	21	13	30.8*	39.422 N	28.321 E	10 G		0.5	7	TURKEY
05	21	19	58.8	57.281 S	25.860 W	33 N	5.5 5.2	1.1	76	SOUTH SANDWICH ISLANDS REGION
05	22	09	36.9	15.467 N	92.582 W	112 D	5.4	1.1	272	MEXICO-GUATEMALA BORDER REGION. Felt in southwestern Guatemala. Felt also at Tuxtla Gutierrez, Mexico.
05	22	31	49.2*	59.967 N	141.844 W	16			22	SOUTHEASTERN ALASKA. <AGS-P>. ML 4.1 (PMR).
05	23	24	16.6	33.325 S	70.647 W	89 *		0.4	13	CHILE-ARGENTINA BORDER REGION
05	23	40	50.9*	32.394 S	177.666 W	33 N	4.7	1.1	12	SOUTH OF KERMADEC ISLANDS
06	02	17	48.1*	6.353 S	122.825 E	33 N	4.6	0.8	9	FLORES SEA
06	05	51	07.4*	29.556 S	70.817 W	33 N		1.4	13	CENTRAL CHILE

06	06	15	51.77	26.92	S	72.23	W	33	N			1.5	5	OFF COAST OF NORTHERN CHILE
06	07	34	35.48	56.176	N	149.990	W	39		4.1			51	GULF OF ALASKA. <AGS-P>.
06	07	48	42.5	12.965	N	88.486	W	84	*	5.0		1.2	61	OFF COAST OF CENTRAL AMERICA. Felt (IV) at San Salvador, El Salvador.
06	09	08	42.6*	10.275	S	124.783	E	33	N	4.4		1.5	7	TIMOR
06	09	29	02.0	40.803	N	28.426	E	5	G			1.4	12	TURKEY
06	09	45	47.67	36.75	N	69.70	E	33	N	4.3		0.6	11	HINDU KUSH REGION
06	10	56	06.7	21.977	S	179.305	W	589		5.1		1.0	66	FIJI ISLANDS REGION
06	11	38	37.8	3.603	S	144.100	E	35	*	4.6		1.0	14	NEAR N COAST OF PAPUA NEW GUINEA
06	11	57	38.08	60.970	N	147.191	W	14					35	SOUTHERN ALASKA. <AGS-P>.
06	16	34	37.48	32.490	N	115.240	W	6	G				3	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
06	17	42	59.1*	6.011	S	130.790	E	139	*	4.6		1.0	15	BANDA SEA
06	19	24	22.9	34.424	N	80.161	E	9	G	5.8	6.1	1.3	266	TIBET. Felt in northeastern Tibet. Depth from broadband displacement seismograms.
06	20	15	19.8%	40.891	N	28.327	E	10	G			0.4	5	TURKEY
06	20	21	55.37	34.67	N	79.72	E	33	N	4.3		1.6	8	KASHMIR-TIBET BORDER REGION
06	20	29	36.67	34.65	N	21.81	E	33	N	3.4		1.1	5	MEDITERRANEAN SEA. ML 4.0 (ATH).
06	20	30	02.17	16.93	N	62.26	W	5	G			0.5	6	LEEWARD ISLANDS. ML 3.5 (FDF).
06	20	39	59.3	34.488	N	80.032	E	33	N	4.5		1.0	20	TIBET
06	21	40	12.2	4.341	S	143.957	E	122		5.3		1.0	63	PAPUA NEW GUINEA
06	21	45	24.4	34.458	N	80.108	E	33	N	4.8		0.8	20	TIBET
06	22	55	51.4*	28.762	S	176.577	W	33	N	4.8	5.0	1.2	17	KERMADEC ISLANDS REGION
06	23	04	56.3	24.864	N	122.949	E	33	N	5.0		0.9	19	TAIWAN REGION
07	02	07	51.97	42.84	N	18.27	E	5	G			0.6	6	YUGOSLAVIA. ML 2.6 (TTG).
07	02	57	10.3*	30.310	S	178.986	W	258	?	4.3		1.0	22	KERMADEC ISLANDS
07	03	39	42.2	15.393	N	60.595	W	33	N			0.2	8	LEEWARD ISLANDS. ML 2.9 (FDF).
07	03	49	16.88	38.788	N	122.780	W	2					15	NORTHERN CALIFORNIA. <BRK>. ML 3.2 (BRK).
07	04	45	28.3*	49.942	N	29.323	W	10	G	4.5	3.7	1.2	21	NORTH ATLANTIC RIDGE
07	05	11	06.5	19.202	N	121.132	E	33	N	4.5		1.0	21	PHILIPPINE ISLANDS REGION. Felt (III RF) at Pasuquin and (I RF) at Santa.
07	07	12	26.18	58.794	N	153.281	W	83		4.3			50	KODIAK ISLAND REGION. <AGS-P>.
07	08	19	13.9*	11.969	N	143.859	E	33	N	4.8		0.7	17	SOUTH OF MARIANA ISLANDS
07	09	13	22.68	34.150	N	117.740	W	5					8	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
07	09	31	39.8	51.375	N	176.022	W	33	N	4.5		1.1	41	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.1 (PMR).
07	10	30	47.4*	15.133	N	93.061	W	105		4.0		1.0	25	NEAR COAST OF CHIAPAS, MEXICO
07	10	35	04.1	5.826	S	130.766	E	80	*	4.8		1.2	32	BANDA SEA
07	11	29	58.3	56.416	N	153.402	W	33	N	4.4		1.1	12	KODIAK ISLAND REGION
07	11	47	02.6	63.704	N	152.470	W	33	N			1.3	10	CENTRAL ALASKA. ML 3.1 (PMR).
07	11	53	17.2	43.248	N	111.090	W	5	G			1.0	8	EASTERN IDAHO. ML 3.3 (NEIS).
07	12	06	51.2*	32.062	N	141.646	E	33	N	4.1		0.5	8	SOUTH OF HONSHU, JAPAN
07	12	15	37.37	44.64	N	149.13	E	33	N	4.5		1.1	11	KURIL ISLANDS
07	12	24	15.0*	13.584	N	122.777	E	33	N	3.8		1.2	11	LUZON, PHILIPPINE ISLANDS
07	12	36	17.9%	45.104	N	27.038	E	10	G			0.8	8	ROMANIA
07	13	27	33.2*	29.921	N	139.088	E	412	*	4.2		0.6	12	SOUTH OF HONSHU, JAPAN
07	13	39	30.1*	5.097	S	150.733	E	243	*	4.2		0.6	9	NEW BRITAIN REGION
07	14	17	26.0	34.830	N	33.554	E	51		4.5	3.3	1.3	72	CYPRUS. Felt at Nicosia, Larnaca and Limassol. Felt at Haifa and Qiryat Shemona, Israel.
07	14	25	50.8*	27.149	S	67.791	W	230	?			0.6	7	CATAMARCA PROVINCE, ARGENTINA
07	14	37	34.2*	39.379	N	25.426	E	10	G			0.8	8	AEGEAN SEA
07	16	26	56.6	10.389	N	56.832	E	8	G	6.4	6.2	1.2	346	CARLSBERG RIDGE. Ms 6.1 (BRK). Depth from broadband displacement seismograms.
07	16	33	06.1	17.331	S	167.740	E	27	*	5.1		1.3	58	VANUATU ISLANDS
07	17	50	00.7*	44.867	N	3.463	E	10	G			1.4	9	FRANCE. ML 2.8 (LDG).
07	19	08	36.4	4.927	S	153.419	E	68		5.0		1.2	38	NEW IRELAND REGION
07	19	33	02.8	51.585	N	16.197	E	17				0.6	31	POLAND. ML 3.9 (VKA).
07	19	54	06.97	17.16	N	101.05	W	33	N			1.4	6	NEAR COAST OF GUERRERO, MEXICO
07	20	24	05.4	30.816	S	117.132	E	10	G			1.0	7	WESTERN AUSTRALIA
07	20	54	13.6*	0.215	S	126.952	E	69	?	4.4		1.4	10	MOLUCCA SEA
07	21	08	34.58	60.038	N	152.991	W	107					34	SOUTHERN ALASKA. <AGS-P>.
07	21	09	08.9	10.613	N	62.977	W	35		4.3		0.9	38	NEAR COAST OF VENEZUELA
07	21	22	24.3	5.276	N	77.551	W	21		5.3	4.6	1.2	143	NEAR WEST COAST OF COLOMBIA
07	22	12	47.37	37.78	N	26.26	E	33	N			0.5	6	DODECANESE ISLANDS
07	22	25	09.4*	8.086	S	120.876	E	196	*	4.5		0.6	11	FLORES ISLAND REGION
07	23	18	42.27	17.05	N	61.31	W	33	N			0.2	5	LEEWARD ISLANDS. ML 2.8 (FDF).
07	23	44	43.57	28.07	S	72.14	W	33	N	4.9		1.3	10	OFF COAST OF CENTRAL CHILE
07	23	53	20.9	40.859	N	28.366	E	10	G			1.1	15	TURKEY
08	00	06	02.5	40.830	N	28.337	E	10	G			1.4	16	TURKEY
08	00	40	22.98	36.080	N	121.862	W	14		4.4			38	CENTRAL CALIFORNIA. <BRK>. ML 4.4 (BRK), 3.6 (PAS). Mo=3.4*10**22 (BRK). Felt (IV) at Big Sur and (III) at Monterey. Also felt at Santa Cruz.
08	02	19	42.0*	33.979	S	70.263	W	10	G			0.4	5	CHILE-ARGENTINA BORDER REGION
08	04	27	34.6	1.997	N	124.305	E	245	D	5.7		1.2	199	MINAHASSA PENINSULA
08	05	16	32.58	48.265	N	122.516	W	61					15	WASHINGTON. <SEA-P>. CL 3.5 (SEA). Felt (V) at Lyman; (IV) at Coupeville, Freeland, Hamilton, Mukilteo, Oak Harbor and Silvana; (III) at Burlington, La Conner, Mount Vernon and Shaw Island; (II) at Lake Stevens. Also felt at Alger, Arlington, Concrete, Greenbank, Ledgewood Beach and Marysville, Washington and Victoria, British Columbia.
08	06	59	55.8	44.106	N	10.113	E	21				0.9	30	NORTHERN ITALY. ML 3.5 (LDG).
08	08	13	42.0	39.243	N	21.557	E	8		3.5		1.0	20	GREECE. ML 3.4 (ATH).
08	08	34	35.4	44.112	N	10.027	E	13				1.1	32	NORTHERN ITALY. ML 3.6 (LDG), 3.2 (KBA).
08	09	20	44.58	34.000	N	116.610	W	12		5.8	6.0		300	SOUTHERN CALIFORNIA. <PAS-P>. ML 6.0 (PAS). At least 29 people injured and some damage in the Palm Springs-Maranga Valley area. Landslides occurred in the area. The most serious damage (VII) occurred at the Devers substation of Southern California Edison Company. Also some residences in the Whitewater Canyon area were badly damaged. Preliminary estimate of damage approximately 4.5 million dollars. Damage (VI) at Angelus Oaks, Desert Hot Springs, North Palm Springs, Palm Desert, Palm Springs and Yucca Valley. Felt throughout much of southern California. Also felt at



										Las Vegas, Nevada, Lake Havasu City, Arizona and in northern Baja California, Mexico. Depth 8.5 km. from broadband displacement seismograms.										
08	09	26	25.8	33.970	N	116.620	W	6	G	1	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.2 (PAS).							
08	09	27	10.7	33.970	N	116.620	W	6	G	1	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.6 (PAS).							
08	09	27	50.4	15.760	N	60.757	W	33	N	0.7	10	LEEWARD ISLANDS.	ML 3.3 (PAG).							
08	09	30	23.6	33.980	N	116.620	W	6	G	2	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.6 (PAS).							
08	09	32	20.8	33.980	N	116.620	W	6	G	2	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.1 (PAS).							
08	09	34	16.2	33.970	N	116.620	W	6	G	2	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.3 (PAS).							
08	09	37	53.6	34.010	N	116.600	W	2		2	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.0 (PAS).							
08	09	39	10.3	33.980	N	116.570	W	13		3	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.2 (PAS).							
08	09	42	56.6	33.980	N	116.650	W	6	G	5	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.3 (PAS).							
08	09	44	18.8	33.970	N	116.620	W	6	G	2	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.3 (PAS).							
08	09	46	15.3	34.030	N	116.640	W	10		11	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.3 (PAS).							
08	09	49	49.7	33.990	N	116.560	W	8		16	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.5 (PAS).							
08	09	51	34.3	33.980	N	116.580	W	3		3	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.5 (PAS).							
08	09	53	24.0	33.980	N	116.560	W	10		3	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.3 (PAS).							
08	10	04	52.9	33.960	N	116.580	W	5		15	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.4 (PAS).							
08	10	07	45.5	34.030	N	116.670	W	10		6	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.2 (PAS).							
08	10	09	02.9	33.970	N	116.580	W	8	4.3	37	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.9 (PAS).	4.2 (BRK).						
08	10	11	00.0	34.020	N	116.670	W	3		8	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.3 (PAS).							
08	10	12	33.5	33.970	N	116.620	W	6	G	1	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.1 (PAS).							
08	10	14	41.8	34.030	N	116.650	W	11		9	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.3 (PAS).							
08	10	22	38.0	34.051	N	116.665	W	10	G	4.2	0.8	33	SOUTHERN CALIFORNIA.	ML 4.4 (PAS).	4.4 (BRK).					
08	10	27	43.7	34.030	N	116.680	W	10		2	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.0 (PAS).							
08	10	34	14.5	34.020	N	116.680	W	9		16	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.4 (PAS).							
08	11	24	58.4	34.020	N	116.620	W	10		14	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.4 (PAS).							
08	11	44	10.6	40.864	N	28.312	E	10	G	0.8	5	TURKEY								
08	11	50	41.1	33.980	N	116.620	W	6	G	4	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.2 (PAS).							
08	12	03	38.2	33.970	N	116.570	W	7		11	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.2 (PAS).							
08	12	32	22.6	44.499	N	9.689	E	10	G	1.3	18	NORTHERN ITALY.	ML 3.0 (LDG).	2.5 (KBA).						
08	13	12	32.7	42.162	N	25.402	E	10	G	1.3	7	BULGARIA								
08	13	55	34.6	34.030	N	116.630	W	12		10	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.1 (PAS).							
08	14	13	26.2	33.970	N	116.620	W	6	G	3	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.2 (PAS).							
08	14	48	32.6	33.970	N	116.620	W	6	G	7	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.5 (PAS).							
08	15	42	22.3	34.010	N	116.610	W	10		13	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.2 (PAS).							
08	15	55	18.7	34.057	N	116.646	W	10	G	0.7	12	SOUTHERN CALIFORNIA.	ML 4.0 (PAS).							
08	16	15	07.3	37.794	N	20.919	E	49	4.4	1.1	63	IONIAN SEA								
08	16	17	56.5	35.149	N	139.029	E	34	4.4	0.7	22	NEAR S. COAST OF HONSHU, JAPAN.	Felt (I JMA) at Ajiro, Tokyo and an Oshima; (I JMA) at Yokohama, Kofu and Tateyama. Also felt at Mishima.							
08	16	34	16.0	45.65	N	25.86	E	161	?	1.3	10	ROMANIA								
08	16	39	44.1	34.000	N	116.590	W	12		15	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.6 (PAS).							
08	16	45	50.2	41.977	N	19.131	E	10		0.8	14	ALBANIA.	ML 3.1 (TTG).	Felt (IV) at Ulcinj, Yugoslavia.						
08	18	04	14.4	33.970	N	116.550	W	10		11	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.3 (PAS).							
08	18	20	07.8	34.030	N	116.650	W	9		5	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.0 (PAS).							
08	18	20	40.0	35.136	S	106.537	W	10	G	4.8	1.0	20	EASTER ISLAND CORDILLERA							
08	18	47	27.3	59.744	N	153.414	W	128		31	SOUTHERN ALASKA.	<AGS-P>.								
08	18	55	56.5	33.980	N	116.570	W	8		6	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.2 (PAS).							
08	19	32	20.6	17.930	N	99.185	W	10	G	1.3	5	GUERRERO, MEXICO								
08	19	33	28.3	7.83	S	129.10	E	146	?	1.4	9	BANDA SEA								
08	19	35	36.4	37.28	N	6.70	E	10	G	0.9	8	WESTERN MEDITERRANEAN SEA								
08	19	36	20.1	34.010	N	116.620	W	11		17	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.9 (PAS).							
08	19	48	29.9	29.949	S	71.816	W	10	G	1.0	11	NEAR COAST OF CENTRAL CHILE.	Felt (II) in the La Serena-Coquimbo area.							
08	20	34	26.3	43.818	N	146.397	E	80	5.0	0.9	123	KURIL ISLANDS.	Felt (III) on Shikotan. Felt (II JMA) at Nemuro and Kushiro; (I JMA) at Urakawa, Hokkaido.							
08	21	53	03.1	34.010	N	116.590	W	11		9	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.1 (PAS).							
08	22	25	29.6	27.48	S	65.25	W	33	N	0.4	5	TUCUMAN PROVINCE, ARGENTINA								
08	23	18	35.5	3.70	N	125.54	E	33	N	4.5	0.8	9	TALAUD ISLANDS							
08	23	24	05.5	8.030	S	123.059	E	233	*	4.5	0.6	14	FLORES ISLAND REGION							
09	00	12	32.1	33.990	N	116.570	W	6	4.2	30	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 4.4 (PAS).	4.1 (BRK).						
09	00	24	35.2	4.042	S	142.294	E	118	*	4.6	1.3	14	PAPUA NEW GUINEA							
09	03	08	12.6	24.76	S	179.66	W	536	?	4.7	0.6	11	SOUTH OF FIJI ISLANDS							
09	03	36	11.6	16.46	S	179.41	W	615	*	0.5	9	FIJI ISLANDS REGION								
09	03	53	39.8	51.400	N	175.152	W	33	N	4.5	1.0	24	ANDREANOF ISLANDS, ALEUTIAN IS.	ML 3.8 (PMR).						
09	04	52	47.3	15.827	N	60.834	W	33	N	0.5	10	LEEWARD ISLANDS.	ML 2.8 (FDF).							
09	05	26	00.8	21.906	S	68.899	W	175	*	4.7	1.3	13	CHILE-BOLIVIA BORDER REGION							
09	06	11	10.8	17.69	N	105.55	W	10	G	4.6	1.3	21	OFF COAST OF JALISCO, MEXICO							
09	07	37	36.8	8.77	S	122.70	E	136	?	4.1	1.5	6	FLORES ISLAND REGION							
09	09	36	37.0	33.960	N	116.520	W	6		6	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.4 (PAS).							
09	09	41	21.0	33.970	N	116.570	W	10		20	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.5 (PAS).							
09	09	54	11.0	6.303	S	146.954	E	113	*	4.8	0.8	13	EAST PAPUA NEW GUINEA REGION							
09	11	03	30.9	8.81	S	29.64	E	10	G	1.6	5	LAKE TANGANYIKA REGION								
09	11	23	43.4	4.067	N	126.555	E	82	*	4.8	1.1	12	TALAUD ISLANDS							
09	11	32	21.1	33.980	N	116.570	W	10		20	SOUTHERN CALIFORNIA.	<PAS-P>.	ML 3.5 (PAS).							
09	12	28	09.1	19.552	N	155.999	W	20	4.2	60	HAWAII.	<HVO-P>.	ML 4.6 (HVO).	Felt (IV) at Captain Cook, Kealahou and Napoapao. Felt (III) at Seaview and (II) at Pahala.						
09	12	53	59.7	37.565	N	118.435	W	4		10	CALIFORNIA-NEVADA BORDER REGION.	<REN-P>.	MD 3.4 (REN).	Felt at Chalfant, California.						
09	13	28	31.4	59.36	N	6.54	E	5	G	1.1	5	SOUTHERN NORWAY.	MD 2.2 (BER).							
09	13	58	57.8	56.010	S	27.525	W	134	D	5.1	0.7	20	SOUTH SANDWICH ISLANDS REGION							
09	17	10	22.8	51.907	N	176.239	W	50	D	5.2	4.9	190	ANDREANOF ISLANDS, ALEUTIAN IS.	Ms 4.9 (BRK).	Felt (IV) on Adak and Atka.					
09	17	15	13.3	21.118	S	67.731	W	33	N	1.8	7	CHILE-BOLIVIA BORDER REGION								
09	18	41	38.5	40.837	N	28.313	E	10	G	0.2	6	TURKEY								
09	19	17	02.5	40.26	N	30.71	E	10	G	1.4	6	TURKEY								
09	19	24	07.2	27.660	S	67.728	W	147	4.4	1.2	30	CATAMARCA PROVINCE, ARGENTINA								
09	20	09	38.3	14.002	S	167.129	E	33	N	4.7	1.3	29	VANUATU ISLANDS							
09	20	24	51.9	51.683	N	176.868	W	57	4.9	0.7	98	ANDREANOF ISLANDS, ALEUTIAN IS.	Felt on Adak and Atka.							
09	22	19	52.2	17.205	N	97.853	W	69	4.3	1.1	23	OAXACA, MEXICO								
09	22	46	06.3	47.638	N	5.521	E	11		1.0	23	FRANCE.	ML 3.2 (LDG).							

f 09	23 10 53.1	1.904 N	126.525 E	28 G	6.2 6.5	1.1	352	MOLUCCA PASSAGE. Ms 6.4 (BRK). Felt (IV) at Manado, Sulawesi. Depth from broadband displacement seismograms.
10	00 52 42.6	39.410 N	28.393 E	10 G		0.8	13	TURKEY
10	01 03 52.1*	1.725 N	126.332 E	33 N	4.4	1.5	10	MOLUCCA PASSAGE
10	01 15 29.9	27.580 N	101.498 E	33 N	4.8	1.1	48	SICHUAN PROVINCE, CHINA
10	01 29 35.8	1.792 N	126.387 E	33 N	5.6 5.9	1.3	182	MOLUCCA PASSAGE
10	02 10 45.0	36.233 N	140.509 E	84	4.5	1.1	50	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Onahama and Mito; (II JMA) at Utsunomiya and on Oshima; (I JMA) in the Ajiro-Chashi-Sendai area.
10	02 43 53.4*	38.356 N	25.174 E	10 G		0.6	6	AEGEAN SEA. ML 3.0 (ATH).
10	02 53 18.5	1.809 N	126.478 E	33 N	5.0	1.2	48	MOLUCCA PASSAGE
10	03 37 13.7	1.825 N	126.548 E	33 N	4.9	1.1	33	MOLUCCA PASSAGE
10	04 01 28.8	36.827 N	121.598 W	5 G		0.6	12	CENTRAL CALIFORNIA. ML 2.9 (BRK).
10	04 24 42.7*	40.688 N	124.752 W	5 G			4	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).
10	05 02 20.4*	5.515 S	29.019 E	10 G	5.0	1.5	6	LAKE TANGANYIKA REGION
10	05 07 17.3*	5.453 N	74.154 W	5 G		0.9	5	COLOMBIA
10	05 43 16.6	8.954 S	124.295 E	33 N	4.9	1.3	28	TIMOR
a 10	06 53 04.3	4.275 N	32.618 W	10 G	5.4 5.0	0.8	128	CENTRAL MID-ATLANTIC RIDGE
10	07 10 44.3	1.876 N	126.560 E	33 N	5.0	1.5	26	MOLUCCA PASSAGE
10	07 14 42.5*	58.883 S	25.344 W	33 N	4.8	1.1	14	SOUTH SANDWICH ISLANDS REGION
10	07 49 25.4*	67.284 N	160.731 W	33 N		1.0	6	ALASKA. ML 3.1 (PMR).
10	08 53 53.1*	40.101 N	29.305 E	10 G		0.3	7	TURKEY
10	09 42 10.7*	33.980 N	116.630 W	2			8	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
10	09 43 16.3*	67.269 N	160.733 W	33 N		1.1	6	ALASKA. ML 3.0 (PMR).
10	09 50 58.1*	3.95 N	32.77 W	10 G	4.5	1.0	8	CENTRAL MID-ATLANTIC RIDGE
10	12 02 50.9*	33.960 N	116.600 W	11			17	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS). Felt (V) at North Palm Springs, Palm Desert, Palm Springs and Whitewater.
10	16 00 00.5*	49.610 N	122.450 W	8			24	BRITISH COLUMBIA. <PGC-P>. ML 3.3 (PGC), 3.8 (NEIS). Felt at Burnaby, Port Coquitlam, North Vancouver and Vancouver.
10	16 13 19.3*	28.201 N	140.649 E	33 N	5.0 4.8	1.3	24	BONIN ISLANDS REGION
a 10	18 35 04.9	19.895 S	175.776 W	233 D	5.3	1.1	117	TONGA ISLANDS
10	18 43 53.8	43.739 N	18.152 E	10 G		1.3	10	YUGOSLAVIA. ML 2.9 (TTG).
10	18 57 17.2	38.376 N	45.114 E	33 N	4.7 3.7	1.5	24	N.W. IRAN-USSR BORDER REGION
10	19 22 58.2*	41.935 N	22.964 E	10 G		1.4	5	YUGOSLAVIA
10	19 44 21.1	1.057 S	126.869 E	33 N	5.1	1.2	35	MOLUCCA SEA
10	20 36 23.5*	36.948 S	177.122 E	253 *	5.0	1.2	32	OFF E. COAST OF N. ISLAND, N.Z.
10	20 52 43.4*	40.483 N	124.703 W	14			9	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.4 (BRK).
10	21 20 26.5*	39.422 N	28.367 E	10 G		0.8	8	TURKEY
10	22 10 13.6	26.294 S	132.600 E	10 G		1.2	11	SOUTH AUSTRALIA
10	23 47 22.1*	33.970 N	116.660 W	9			5	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
10	23 56 04.1*	43.73 N	146.18 E	92 *	4.2	0.5	6	KURIL ISLANDS. Felt (I JMA) at Nemuro, Hokkaido.
11	00 13 07.8	32.110 N	141.712 E	33 N	4.8 4.6	0.9	30	SOUTH OF HONSHU, JAPAN
11	00 22 44.4*	36.41 N	70.32 E	33 N	4.4	1.2	6	HINDU KUSH REGION
11	00 23 26.4*	1.634 N	126.618 E	33 N	4.5	1.4	11	MOLUCCA PASSAGE
11	01 28 53.5*	62.322 N	150.254 W	68			33	CENTRAL ALASKA. <AGS-P>.
11	02 11 22.8	81.120 N	120.882 E	10 G	4.5	0.9	24	EAST OF SEVERNAYA ZEMLYA
11	02 39 55.7*	5.048 S	81.809 W	81 D	4.6	1.4	17	NEAR COAST OF NORTHERN PERU
11	02 40 34.1*	1.883 N	126.691 E	33 N	4.7	1.2	8	MOLUCCA PASSAGE
11	03 07 20.9*	4.665 S	144.127 E	124 *	4.5	1.2	18	NEAR N COAST OF PAPUA NEW GUINEA
a 11	07 17 59.0	26.079 S	132.736 E	10 G	5.6 5.3	1.0	100	SOUTH AUSTRALIA
11	07 48 14.0*	34.000 N	116.570 W	11			5	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
11	08 00 28.6	10.569 N	63.262 W	33 N	4.8	1.3	50	NEAR COAST OF VENEZUELA. Felt at Guiria, Irapa and El Pilar.
a 11	08 27 46.4	45.987 S	166.334 E	32 *	5.4 5.6	1.3	89	OFF W. COAST OF S. ISLAND, N.Z. Felt at Christchurch and Invercargill.
11	08 51 28.7*	33.970 N	116.580 W	5			13	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
11	09 16 51.2*	4.283 S	127.035 E	284 ?	4.7	1.2	16	BANDA SEA
11	11 13 02.6*	38.749 N	21.348 E	10 G		1.7	6	GREECE
11	12 00 04.0*	43.42 N	20.83 E	10 G		1.7	7	YUGOSLAVIA. ML 2.3 (TTG).
11	13 22 18.1*	40.116 N	29.265 E	10 G		1.3	6	TURKEY
11	13 24 54.6*	40.108 N	29.256 E	10 G		1.1	5	TURKEY
11	14 26 14.4	34.946 N	84.971 W	5 G	3.7	0.8	30	GEORGIA. mblg 3.8 (NEIS). Slight damage (VI) at Cohutta, Georgia. Felt (V) at Chattanooga, Tennessee and Tunnel Hill, Georgia. Felt (IV) at Apison, Bentan, Charleston, Collegedale, East Ridge, Ocoee and Ooltewah, Tennessee. Also felt (IV) at Blue Ridge, Cisca, Crandall, Fort Oglethorpe, Ringgold, Rocky Face and Varnell, Georgia. Felt in southeastern Tennessee and northwestern Georgia.
11	15 11 20.5*	2.169 S	139.136 E	33 N	4.7	1.2	11	NEAR N. COAST OF WEST IRIAN
11	15 13 30.6*	34.030 N	116.660 W	10			17	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS).
11	15 20 50.9*	2.167 S	139.112 E	33 N	4.7	1.5	17	NEAR N. COAST OF WEST IRIAN
11	15 33 20.5*	2.070 S	139.121 E	33 N	4.4	0.5	6	NEAR N. COAST OF WEST IRIAN
11	15 59 51.9*	34.020 N	116.620 W	10			6	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
11	16 56 41.2*	44.315 S	167.400 E	33 N	4.2	0.9	5	SOUTH ISLAND, NEW ZEALAND
a 11	17 02 03.9	24.329 N	126.899 E	33 N	5.3 5.1	1.0	87	RUKYU ISLANDS
11	17 32 45.9*	34.471 S	72.258 W	33 N	4.4	1.4	13	NEAR COAST OF CENTRAL CHILE
11	18 12 31.5*	34.020 N	116.670 W	11			5	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
11	18 24 01.0*	60.975 N	151.594 W	77			23	KENAI PENINSULA, ALASKA. <AGS-P>.
11	19 54 15.3*	46.517 N	2.402 E	10 G		0.2	11	FRANCE. ML 2.7 (LDG).
11	20 02 52.8	38.808 N	122.728 W	5 G		0.8	8	NORTHERN CALIFORNIA. ML 2.8 (BRK).
11	20 12 31.2*	7.566 N	78.184 W	33 N		1.5	8	PANAMA. MG 3.8 (UPA).
11	20 22 38.4*	2.279 S	138.931 E	33 N		0.5	10	WEST IRIAN
11	20 42 27.6*	46.793 N	143.488 E	215 ?	4.2	0.5	29	SAKHALIN ISLAND
11	20 48 03.9*	18.724 N	120.853 E	33 N	4.0	1.2	12	LUZON, PHILIPPINE ISLANDS. Felt (II RF) at Pasuquin.
11	21 02 32.7*	47.987 N	26.718 E	10 G		1.5	12	ROMANIA
11	21 28 50.9	34.292 N	118.284 W	5 G		0.4	8	SOUTHERN CALIFORNIA. ML 3.0 (PAS). Felt (IV) at Pacoima and Sierra Madre. Also felt at Burbank, Canyon Country and Glendale.
11	22 17 45.2*	33.431 S	71.704 W	10 G		0.8	9	NEAR COAST OF CENTRAL CHILE

11	23 03 33.0	43.182 S	172.258 E	33 N	4.6	1.4	21	SOUTH ISLAND, NEW ZEALAND. Felt at Christchurch.
12	00 29 54.87	35.96 N	71.09 E	33 N		0.2	5	PAKISTAN
12	00 32 20.0	38.749 N	24.884 E	10 G		1.1	19	AEGEAN SEA. ML 3.2 (ATH).
12	01 15 50.88	62.184 N	151.107 W	72			29	CENTRAL ALASKA. <AGS-P>.
12	04 30 15.1	9.283 N	124.112 E	543	4.9	0.9	30	MINDANAO, PHILIPPINE ISLANDS
12	05 25 27.57	35.42 N	3.46 W	10 G		0.8	8	STRAIT OF GIBRALTAR
12	05 45 27.58	33.990 N	116.650 W	6			28	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.9 (PAS).
12	06 17 53.7*	37.540 N	20.273 E	27 *	3.7	1.3	21	IONIAN SEA. ML 4.2 (ATH).
a 12	07 54 26.8	29.962 N	51.582 E	10 G	5.7 5.6	1.2	272	SOUTHERN IRAN. One person killed, four injured and about 300 homes damaged in the Mamasani area. Felt at Shiraz.
12	08 04 45.6	37.520 N	121.660 W	5 G		0.6	10	CENTRAL CALIFORNIA. ML 2.6 (BRK).
12	08 12 21.4*	2.147 S	139.118 E	57 ?	4.6	0.7	15	NEAR N. COAST OF WEST IRIAN
12	08 19 37.9	40.537 N	84.371 W	10 G	4.5	0.8	43	OHIO. Slight damage (VI) at Anna, Lima, Minster, New Bremen and St. Marys. Felt in much of Ohio and in parts of Michigan, Indiana, Kentucky and West Virginia.
12	09 06 56.1	1.858 N	127.414 E	109 *	5.1	1.1	37	HALMAHERA
a 12	10 17 25.5	5.575 N	125.406 E	88	5.3	1.3	112	MINDANAO, PHILIPPINE ISLANDS
12	10 29 32.8	32.461 N	30.507 E	21 *	4.0	1.2	15	EASTERN MEDITERRANEAN SEA. ML 4.0 (JER). Felt in northern Israel.
12	12 19 37.5*	46.414 N	12.733 E	10 G		0.5	5	NORTHERN ITALY
12	12 24 43.9*	42.809 N	19.150 E	10 G		0.8	7	YUGOSLAVIA. ML 2.3 (TTG).
12	13 36 02.4*	26.406 S	175.628 W	33 N	4.8	1.1	10	SOUTH OF TONGA ISLANDS
12	15 06 30.5*	17.994 N	99.562 W	10 G		0.9	8	GUERRERO, MEXICO
a 12	16 05 14.2	1.845 N	126.404 E	40 *	5.3 5.4	1.3	133	MOLUCCA PASSAGE
12	16 56 02.38	34.080 N	116.530 W	4			6	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
12	17 00 53.1	38.438 N	45.164 E	36 *	4.8	1.0	60	N.W. IRAN-USSR BORDER REGION
12	17 28 30.78	34.030 N	116.680 W	9			19	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS).
12	17 31 40.7*	29.926 N	51.658 E	33 N	4.5	1.1	20	SOUTHERN IRAN
12	18 47 10.2*	36.124 N	121.877 W	10 G		0.8	10	CENTRAL CALIFORNIA. ML 2.5 (BRK).
12	20 11 21.77	42.94 N	18.15 E	10 G		1.1	8	YUGOSLAVIA. ML 2.5 (TTG).
12	20 54 26.0*	4.913 N	127.429 E	136 ?	4.3	1.1	12	TALAUD ISLANDS
12	22 43 17.37	20.34 S	71.43 W	33 N		1.3	6	OFF COAST OF NORTHERN CHILE
12	23 00 42.4*	41.500 N	5.564 W	10 G		1.5	10	SPAIN. MG 3.2 (MDD). Felt (IV) in the Zamora area.
12	23 22 47.5*	2.400 N	128.306 E	33 N	4.7	0.7	11	HALMAHERA
13	00 04 08.1	43.325 N	20.884 E	10 G		1.2	9	YUGOSLAVIA. MG 3.3 (SKO).
13	00 48 45.5	29.986 N	51.520 E	10 G	4.9 4.6	1.1	145	SOUTHERN IRAN. Additional damage to homes in the Mamasani area.
13	01 13 14.9*	65.721 N	152.274 W	33 N		0.3	5	ALASKA. ML 3.0 (PMR).
13	01 14 22.4	40.727 N	23.314 E	10 G		0.3	7	GREECE
13	01 41 38.28	33.950 N	116.620 W	11			21	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.5 (PAS).
13	03 54 40.58	62.254 N	150.228 W	11			39	CENTRAL ALASKA. <AGS-P>. ML 3.9 (PMR). Felt at Big Lake, Palmer and Talkeetna.
13	03 58 02.57	62.22 N	150.29 W	10 G		0.6	4	CENTRAL ALASKA. ML 3.0 (PMR). Felt at Talkeetna.
13	07 25 57.6*	40.114 N	29.282 E	10 G		0.6	7	TURKEY
f 13	09 12 10.7	16.061 N	93.901 W	80 G	5.9	1.3	302	CHIAPAS, MEXICO. Depth from broadband displacement seismograms.
13	09 18 04.7*	14.584 N	93.974 W	33 N	4.7	0.7	19	NEAR COAST OF CHIAPAS, MEXICO
13	09 45 30.2*	24.896 S	179.628 E	470 *	4.4	0.8	26	SOUTH OF FIJI ISLANDS
13	10 14 38.1	28.177 S	71.064 W	60	5.4	1.1	100	NEAR COAST OF CENTRAL CHILE
13	10 26 07.1	0.607 S	77.957 W	5 G	4.9	1.1	36	ECUADOR. Felt (III) at Quito and Cotacachi.
13	11 25 34.98	32.650 N	117.140 W	10 G			5	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
a 13	13 47 08.28	32.970 N	117.870 W	10	5.6 5.8		268	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 5.3 (PAS). Twenty nine people injured, one critically and at least 50 buildings damaged in the Newport Beach-San Diego area. Preliminary estimate of damage 720 thousand dollars. Also some damage reported in the Tijuana area, Mexico. A small landslide occurred near Lakeside in eastern San Diego County. Felt throughout the coastal area of southern California, from Santa Barbara to San Diego, east to Palm Springs and as far as Yuma, Arizona.
13	13 53 27.98	32.970 N	117.820 W	6 G			7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.9 (PAS).
13	13 58 52.58	33.070 N	117.710 W	6 G			6	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS).
13	14 01 33.08	32.990 N	117.850 W	12	4.8		39	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 4.6 (PAS).
13	14 02 52.08	33.010 N	117.840 W	12			1	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
13	14 11 01.08	32.970 N	117.790 W	10			18	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.7 (PAS).
13	14 11 54.68	32.970 N	117.780 W	10			1	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
13	14 26 01.58	32.960 N	117.780 W	12			14	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.6 (PAS).
13	14 34 25.4	44.563 N	9.665 E	10 G		0.7	24	NORTHERN ITALY. ML 3.1 (LDG).
13	14 44 41.78	32.980 N	117.780 W	10			7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
13	15 27 08.08	32.960 N	117.730 W	12			16	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.3 (PAS).
13	15 50 05.28	32.880 N	117.740 W	12			16	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.7 (PAS).
13	15 52 09.98	32.990 N	117.770 W	10			7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
13	16 10 18.18	32.960 N	117.790 W	12			9	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.2 (PAS).
13	16 18 33.1	44.567 N	9.627 E	10 G		0.8	24	NORTHERN ITALY. ML 3.0 (LDG).
13	16 37 01.58	32.960 N	117.780 W	12			8	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
13	18 11 14.1*	8.625 S	127.613 E	33 N	4.9	1.3	10	TIMOR
13	18 56 04.1*	26.829 S	177.616 W	106 ?	4.8	1.4	12	SOUTH OF FIJI ISLANDS
13	19 02 41.6	3.114 S	77.603 W	118 *	4.6	1.1	43	PERU-ECUADOR BORDER REGION
13	19 13 08.07	30.75 S	69.60 W	33 N		0.6	6	CHILE-ARGENTINA BORDER REGION
13	19 42 46.2	30.100 N	51.727 E	10 G	4.5	1.3	43	IRAN
13	20 10 33.78	40.572 N	30.038 E	10 G		0.8	9	TURKEY
13	20 42 44.47	12.91 S	34.33 E	10 G		1.7	5	MALAWI. MG 3.3 (BUL).
13	21 03 54.87	7.33 S	128.75 E	119 ?	4.6	0.8	7	BANDA SEA
13	21 36 30.58	40.620 N	30.086 E	10 G		1.3	10	TURKEY
13	23 25 13.58	32.960 N	117.750 W	12			15	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.4 (PAS).
13	23 53 42.98	32.960 N	117.770 W	6			19	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.6 (PAS).
14	00 32 46.28	32.970 N	117.800 W	10	4.0		28	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 4.0 (PAS).
14	01 11 10.38	32.950 N	117.840 W	10			18	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.7 (PAS).
14	01 30 16.17	28.74 S	70.26 W	33 N		0.4	6	CENTRAL CHILE
14	01 43 30.68	34.000 N	116.590 W	10			6	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
14	02 24 48.5	42.382 N	19.888 E	10 G		0.5	9	YUGOSLAVIA. ML 2.7 (TTG).

14	02 25 34.1*	42.317 N	19.986 E	10 G	0.5	8	YUGOSLAVIA. ML 2.9 (TTG).	
14	03 18 31.2	10.641 N	63.215 W	33 N	1.5	14	NEAR COAST OF VENEZUELA. ML 4.6 (FDF). Felt at Irapa, El Pilar, Yuguaraparo and Tunapuy.	
14	03 20 43.5	10.758 N	63.228 W	33 N	4.6	0.9	26	NEAR COAST OF VENEZUELA. ML 4.8 (FDF).
14	03 39 32.6*	39.481 N	25.179 E	10 G	1.1	7	AEGEAN SEA	
14	04 10 37.67	16.29 N	98.71 W	33 N	0.9	7	NEAR COAST OF GUERRERO, MEXICO	
14	04 29 09.1*	60.633 N	151.879 W	69	32	32	KENAI PENINSULA, ALASKA. <AGS-P>.	
14	04 32 52.0	7.503 S	128.347 E	180	5.0	1.1	59	BANDA SEA
14	05 36 44.9*	32.960 N	117.830 W	6	12	12	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.4 (PAS).	
14	06 34 44.5	9.656 S	72.433 W	33 N	4.9	1.2	23	PERU-BRAZIL BORDER REGION
14	06 35 42.5*	17.543 N	105.566 W	33 N	4.5	1.1	39	OFF COAST OF JALISCO, MEXICO
14	06 37 15.8*	59.872 N	152.661 W	77	28	28	SOUTHERN ALASKA. <AGS-P>.	
14	07 17 35.4*	32.960 N	117.810 W	10	21	21	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.6 (PAS).	
14	07 52 17.5	4.812 S	144.625 E	93	4.8	1.1	16	NEAR N COAST OF PAPUA NEW GUINEA
14	08 21 57.1	44.575 N	7.150 E	10 G	0.4	7	NORTHERN ITALY. ML 2.5 (LDG).	
14	09 07 54.0*	32.960 N	117.820 W	10	18	18	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.6 (PAS).	
14	09 07 58.5*	6.633 N	94.428 E	33 N	4.1	1.3	9	NICOBAR ISLANDS REGION
14	10 36 40.1	35.990 S	144.238 E	10 G	0.1	6	NEW SOUTH WALES, AUSTRALIA. ML 3.3 (STK).	
14	12 02 30.9	2.142 S	138.926 E	39 *	5.0	1.1	33	WEST IRIAN
14	13 50 31.5	58.365 N	13.818 E	10 G	1.2	41	SWEDEN. ML 4.8 (NAO), 4.1 (UPP). MD 3.9 (BER). Felt in the Huskvarna-Mariestad area.	
14	14 44 08.7*	32.970 N	117.820 W	10	15	15	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.7 (PAS).	
14	14 45 27.3*	58.282 N	13.878 E	10 G	1.2	9	SWEDEN. ML 3.4 (NAO), 3.0 (UPP). MD 3.1 (BER). Felt in the Huskvarna-Mariestad area.	
14	16 20 09.9*	33.000 N	117.840 W	10	12	12	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS).	
14	17 14 43.1*	32.980 N	117.770 W	10	13	13	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.4 (PAS).	
14	18 26 55.0*	12.230 N	144.245 E	45 *	4.1	0.9	10	SOUTH OF MARIANA ISLANDS
14	19 41 06.37	41.33 S	88.09 W	10 G	4.8 4.8	1.3	16	WEST CHILE RISE
14	20 14 50.3	12.293 N	143.931 E	27	5.3 5.0	1.3	91	SOUTH OF MARIANA ISLANDS
14	21 05 34.4*	33.224 S	70.300 W	117 ?	0.3	11	CHILE-ARGENTINA BORDER REGION	
14	21 23 09.8*	32.950 N	117.770 W	10	7	7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).	
14	22 58 50.2*	32.960 N	117.800 W	10	7	7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).	
14	23 28 19.2	40.286 N	26.112 E	10 G	0.8	7	TURKEY	
14	23 35 45.77	28.18 N	140.68 E	33 N	0.9	8	BONIN ISLANDS REGION	
15	02 23 26.87	12.78 N	57.85 E	10 G	4.5	0.7	18	ARABIAN SEA
15	02 53 37.77	23.77 S	175.56 W	33 N	4.6	1.5	9	TONGA ISLANDS REGION
15	03 15 40.0*	39.157 N	28.761 E	10 G	0.1	5	TURKEY	
15	03 17 40.3*	34.000 N	116.900 W	11	5	5	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).	
15	03 48 35.3	37.539 N	118.609 W	5 G	0.5	21	CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (BRK), 3.4 (PAS).	
15	05 46 51.57	32.51 S	71.57 W	33 N	1.2	15	NEAR COAST OF CENTRAL CHILE	
15	06 00 25.3	37.850 S	74.675 W	33 N	5.1	1.2	62	OFF COAST OF CENTRAL CHILE
15	09 16 33.6*	60.357 S	52.778 W	10 G	5.0	1.3	19	SOUTH SHETLAND ISLANDS
15	09 32 35.3	38.762 N	75.010 E	33 N	4.7	0.9	24	SOUTHERN XINJIANG, CHINA
15	10 15 01.4*	14.427 S	167.330 E	33 N	4.3	1.2	25	VANUATU ISLANDS
15	11 39 38.47	54.25 N	155.43 E	33 N	4.7	1.1	21	KAMCHATKA
15	11 51 05.5*	31.807 S	68.185 W	33 N	1.6	6	SAN JUAN PROVINCE, ARGENTINA	
15	14 28 13.0	28.036 S	66.714 W	173	5.0	1.3	31	CATAMARCA PROVINCE, ARGENTINA
15	14 39 35.2	1.954 N	126.499 E	43 *	4.8	1.1	36	MOLUCCA PASSAGE
15	15 02 45.3*	32.950 N	117.760 W	10	7	7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).	
15	15 03 03.6*	12.073 S	40.774 E	10 G	4.8	1.2	12	MOZAMBIQUE
15	15 15 52.0	36.606 N	22.993 E	104 *	3.9	1.0	34	SOUTHERN GREECE
15	18 32 14.5*	33.980 N	116.640 W	6	8	8	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).	
15	18 45 35.3*	66.824 N	13.174 E	10 G	0.7	8	NORTHERN NORWAY. ML 3.4 (NAO), MD 3.4 (BER). Felt.	
15	19 20 18.57	11.54 N	85.75 W	169 *	4.0	0.6	11	NICARAGUA
15	19 20 56.1	17.752 S	73.898 W	33 N	1.4	20	OFF COAST OF PERU	
15	23 12 58.3	44.484 N	6.965 E	10 G	0.8	7	FRANCE. ML 2.3 (LDG).	
15	23 35 17.8*	31.556 N	137.955 E	374 *	4.3	0.9	21	SOUTH OF HONSHU, JAPAN
15	23 46 52.3	38.379 N	25.076 E	10 G	1.2	17	AEGEAN SEA. ML 3.2 (ATH).	
15	23 57 07.6*	34.921 N	26.826 E	33 N	3.9	1.4	15	CRETE
16	00 38 16.6*	60.062 N	153.127 W	106	17	17	SOUTHERN ALASKA. <AGS-P>.	
16	02 19 49.6*	8.002 S	105.988 E	33 N	4.6	1.5	15	SOUTH OF JAVA
16	03 40 19.2*	27.686 S	70.966 W	33 N	1.4	15	NEAR COAST OF NORTHERN CHILE	
16	03 49 16.57	44.23 N	10.15 E	10 G	0.7	5	NORTHERN ITALY	
16	05 20 51.2*	32.980 N	117.770 W	10	8	8	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.2 (PAS).	
16	06 59 00.1	37.266 N	32.053 W	10 G	4.6 4.5	0.7	31	AZORES ISLANDS REGION
16	07 00 11.8*	35.074 N	137.252 E	33 N	0.4	5	HONSHU, JAPAN. Felt (1 JMA) at Iida, Gifu and Nagoya.	
16	07 08 57.6*	31.950 N	115.620 W	6 G	8	8	BAJA CALIFORNIA. <PAS-P>. ML 3.1 (PAS).	
16	09 33 42.87	44.26 N	7.65 E	10 G	0.3	5	NORTHERN ITALY. ML 2.6 (LDG).	
f 16	12 41 28.3	19.511 S	169.165 E	111 G	6.2	1.2	390	VANUATU ISLANDS. Depth from broadband displacement seismograms.
16	12 47 01.5*	32.950 N	117.820 W	10	16	16	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.7 (PAS). Felt (V) at Bonsall, El Cajon, Escondido, Loguna Hills, Poway, San Diego, San Marcos and Spring Valley.	
16	14 06 03.7	38.893 N	27.551 E	10 G	0.7	6	TURKEY	
16	14 38 51.1*	36.429 N	31.662 E	10 G	1.4	12	TURKEY	
16	14 46 57.5*	60.227 N	5.236 E	10 G	0.3	5	SOUTHERN NORWAY. MD 2.0 (BER).	
16	16 27 49.9*	37.747 N	121.972 W	4	11	11	CENTRAL CALIFORNIA. <BRK>. ML 2.2 (BRK). Felt at San Ramon.	
16	16 46 03.2*	44.904 N	26.179 E	33 N	1.3	6	ROMANIA	
16	17 02 53.17	50.09 N	19.77 E	10 G	1.5	6	POLAND	
16	17 38 51.1*	38.356 N	25.079 E	10 G	0.6	5	AEGEAN SEA. ML 3.3 (ATH).	
16	17 49 24.87	59.23 N	7.23 E	10 G	0.4	5	SOUTHERN NORWAY. MD 2.6 (BER).	
16	19 13 11.1*	23.424 S	68.824 W	33 N	1.5	6	NORTHERN CHILE	
16	19 15 39.2	41.141 N	14.549 E	10 G	0.9	23	SOUTHERN ITALY. MG 3.7 (LJU).	
16	20 46 42.6	42.367 N	19.913 E	10 G	1.0	9	YUGOSLAVIA. ML 2.6 (TTG).	
16	20 59 03.8*	37.297 N	121.662 W	6	13	13	CENTRAL CALIFORNIA. <BRK>. ML 3.0 (BRK). Felt in the eastern part of San Jose.	
16	21 25 44.07	25.47 S	179.52 E	500 ?	4.6	1.2	15	SOUTH OF FIJI ISLANDS
a 16	22 03 10.7	31.049 N	77.997 E	33 N	5.6 5.2	1.0	257	NORTHERN INDIA. Felt at Chandigarh and in Haryana, Punjab and Himochol Pradesh. Also felt at Dehra Dun and Delhi.
16	22 14 01.8	46.314 N	112.070 W	5 G	0.5	11	MONTANA. ML 3.6 (NEIS).	

16	22 29 37.9*	15.994 N	61.530 W	117 ?	0.4	10	LEEWARD ISLANDS
16	22 37 11.1	46.309 N	112.060 W	5 G	0.5	11	MONTANA. ML 3.6 (NEIS).
16	23 12 05.07	80.46 N	1.64 W	10 G 4.3	1.6	8	NORTH OF SVALBARD
17	00 12 01.4*	38.444 N	45.397 E	33 N 4.5	1.4	12	N.W. IRAN-USSR BORDER REGION
17	00 24 00.1	56.094 N	162.968 E	33 N 4.9 4.1	0.8	55	NEAR EAST COAST OF KAMCHATKA
17	01 00 41.28	60.052 N	153.448 W	135		24	SOUTHERN ALASKA. <AGS-P>.
17	02 34 34.3	46.109 N	7.634 E	10 G	1.1	9	SWITZERLAND. ML 2.8 (LDG).
17	02 47 04.5	23.500 S	179.959 E	542 * 4.7	1.1	40	SOUTH OF FIJI ISLANDS
17	03 22 45.38	34.000 N	116.630 W	8		13	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
17	04 50 55.4	22.934 S	66.712 W	220 4.4	1.0	37	JUJUY PROVINCE, ARGENTINA
17	05 01 54.4	9.970 N	57.069 E	10 G 4.8	0.8	26	CARLSBERG RIDGE
17	05 12 11.08	58.173 N	151.281 W	45		20	KODIAK ISLAND REGION. <AGS-P>.
17	06 53 43.0*	1.002 N	28.531 W	10 G 4.8 4.1	1.4	14	CENTRAL MID-ATLANTIC RIDGE
17	06 55 30.8	10.231 S	160.986 E	91 5.0	1.0	29	SOLOMON ISLANDS
17	07 35 34.3	44.522 N	7.293 E	10 G	0.2	7	NORTHERN ITALY. ML 3.1 (LDG).
17	08 15 35.6*	43.322 N	77.857 E	33 N 4.5	1.2	13	ALMA-ATA REGION. Felt (III) at Alma-Ata.
17	09 58 14.5	10.027 S	119.552 E	33 N 4.4	1.3	17	SUMBA ISLAND REGION
17	10 06 59.1*	50.616 N	5.302 E	10 G	0.3	5	BELGIUM
17	10 20 52.8	38.432 N	25.017 E	10 G	1.0	16	AEGEAN SEA. ML 3.4 (ATH).
17	10 42 23.4*	44.277 N	27.066 E	33 N	1.3	7	ROMANIA
17	10 54 30.4*	6.851 S	130.538 E	88 * 4.9	1.5	20	BANDA SEA
17	11 06 14.57	33.99 S	72.12 W	33 N	0.3	7	OFF COAST OF CENTRAL CHILE
17	12 16 27.7*	47.578 N	5.650 E	10 G	1.1	8	FRANCE. ML 2.6 (LDG).
17	12 27 28.7*	38.613 N	4.125 W	0 G	0.7	5	SPAIN. Probable explosion.
17	12 59 49.5	9.541 S	152.220 E	13 5.0	1.3	21	DENTRECASTEAUX ISLANDS REGION
17	13 42 08.1*	46.390 N	0.319 E	10 G	1.2	11	FRANCE. ML 2.8 (LDG).
a 17	14 32 16.7	21.771 S	179.515 W	597 4.8	1.0	65	FIJI ISLANDS REGION
17	14 34 02.77	14.93 N	60.26 W	10 G	0.5	8	WINDWARD ISLANDS. ML 2.9 (FDF).
17	14 58 05.0*	39.691 N	62.789 E	33 N 4.4	1.1	13	TURKMEN SSR
a 17	15 46 37.0	36.668 N	71.247 E	47 * 5.3 5.3	1.3	202	AFGHANISTAN-USSR BORDER REGION. Felt (V) at Khorog; (III) at Dzhirgatal, Dushanbe, Garm and Namangan; (II) at Andizhan and Tashkent, USSR.
17	15 57 05.8	37.089 N	4.200 W	10 G	0.8	11	SPAIN. MG 3.5 (MDD). Felt (III) at Loja, Salar, Zagra and Santa Cruz de Alhama.
17	16 40 10.88	59.058 N	152.689 W	81		30	SOUTHERN ALASKA. <AGS-P>.
17	16 56 15.4*	60.743 N	5.503 E	10 G	0.2	5	SOUTHERN NORWAY. MD 2.1 (BER).
17	17 22 45.2	41.148 N	24.336 E	9	1.1	13	GREECE-BULGARIA BORDER REGION
17	17 56 51.07	59.31 N	6.86 E	10 G	1.0	5	SOUTHERN NORWAY. MD 2.2 (BER).
17	18 11 22.9*	9.159 S	79.935 W	33 N 4.9	1.5	16	OFF COAST OF NORTHERN PERU
17	18 37 20.6	51.439 N	174.583 W	33 N 4.8	1.0	54	ANDREANOF ISLANDS, ALEUTIAN IS. Felt on Adak.
17	18 51 28.3*	16.327 N	98.668 W	16 4.3	1.1	15	NEAR COAST OF GUERRERO, MEXICO
17	19 01 37.9	39.055 N	28.660 E	10 G	1.0	9	TURKEY
17	19 04 27.2*	51.118 N	15.914 E	10 G	1.0	7	POLAND
17	19 55 52.6	44.003 N	7.912 E	10 G	0.4	7	NORTHERN ITALY. ML 2.8 (LDG).
17	20 35 15.08	33.990 N	116.650 W	6 4.4		45	SOUTHERN CALIFORNIA. <PAS-P>. ML 4.0 (PAS). Felt (V) at Coachella and (IV) at Angelus Oaks, Desert Hot Springs, Forest Falls, Indio, Morongo Valley, Palm Springs and Whitewater. Felt in Riverside, San Bernardino, Orange, Los Angeles, Imperial and San Diego Counties.
17	21 00 00.08	37.279 N	116.356 W	0 5.7		243	SOUTHERN NEVADA. <DOE>. ML 5.5 (BRK), 37' 16" 43.22" N., 116' 21" 20.19" W., Surface Elev. 2044 m., Depth of Burial 600 m., Shot Time 210000.055, "CYBAR", Nevada Test Site (Dept. of Energy).
17	21 13 49.6*	34.702 N	111.149 W	5 G	1.3	7	EASTERN ARIZONA. ML 2.6 (NEIS).
17	21 15 15.1	10.304 S	123.609 E	33 N 5.0 3.9	1.5	47	TIMOR
17	21 54 45.18	33.990 N	116.650 W	7 4.1		34	SOUTHERN CALIFORNIA. <PAS-P>. ML 4.4 (PAS). Felt (IV) at Yucaipa.
17	22 55 37.6*	10.905 N	56.686 E	10 G 4.7	0.5	23	CARLSBERG RIDGE
17	23 51 11.48	33.990 N	116.650 W	7		12	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
18	00 21 40.0*	19.748 S	126.046 W	10 G 5.0 4.6	1.1	29	SOUTH PACIFIC OCEAN
18	00 21 40.4*	39.045 N	28.599 E	10 G	1.3	5	TURKEY
18	01 26 44.1	43.297 N	26.098 E	10 G	1.4	11	BULGARIA
18	02 44 48.68	62.081 N	149.840 W	52		34	CENTRAL ALASKA. <AGS-P>.
18	05 45 40.5	0.170 S	17.997 W	10 G 4.9 4.0	0.9	54	NORTH OF ASCENSION ISLAND
18	06 04 05.67	31.21 S	68.96 W	111 ?	0.8	5	SAN JUAN PROVINCE, ARGENTINA
18	06 27 28.0	15.398 N	120.886 E	194 4.8	0.9	35	LUZON, PHILIPPINE ISLANDS
18	07 18 05.4	37.575 N	118.827 W	5 G	0.8	15	CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (BRK), 3.0 (PAS).
18	12 48 35.7*	45.764 N	26.521 E	96 ?	0.7	10	ROMANIA
18	13 43 24.0*	32.620 S	68.056 W	127 ?	0.8	8	MENDOZA PROVINCE, ARGENTINA
18	14 25 26.6*	7.231 S	122.781 E	612 ? 4.6	0.4	10	FLORES SEA
a 18	15 07 51.7	16.356 S	28.502 E	17 5.5 4.6	1.0	184	ZAMBIA. Felt at Kariba, Karoi, Harare and Marondera, Zimbabwe.
18	15 33 01.1	37.176 N	71.943 E	114 * 4.7	0.9	40	AFGHANISTAN-USSR BORDER REGION
18	15 58 33.88	37.573 N	118.447 W	5		12	CALIFORNIA-NEVADA BORDER REGION. <REN-P>. MD 3.4 (REN), ML 3.0 (PAS). Felt in the Chalfant Valley, California.
18	16 00 08.38	37.573 N	118.445 W	5		20	CALIFORNIA-NEVADA BORDER REGION. <REN-P>. ML 3.9 (BRK), 3.6 (PAS). Felt in the Chalfant Valley, California.
18	16 05 24.7	16.943 S	174.661 W	145 * 4.8	1.1	38	TONGA ISLANDS
18	17 00 36.08	36.090 N	117.850 W	1		27	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.7 (PAS), 3.8 (BRK). Felt (V) at Camp Nelson, (IV) at Keeler and Trona and (III) at China Lake, California.
18	17 02 50.68	36.100 N	117.850 W	3		5	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.4 (PAS).
18	17 06 35.9*	19.878 N	121.409 E	30 * 4.4	1.4	10	PHILIPPINE ISLANDS REGION
f 18	17 22 38.2	10.770 N	69.428 W	7 G 5.9 4.9	1.0	307	VENEZUELA. One person died from a heart attack and about 30 homes damaged in the Churuguara area. Felt in Falcon, Lara, Carabobo, Zulia, Aragua and Miranda. Depth from broadband displacement seismograms.
18	17 25 47.48	37.670 N	118.430 W	6 G		3	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS).
18	18 55 43.08	36.090 N	117.850 W	2		7	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (PAS).
18	19 26 36.4*	38.884 N	27.500 E	10 G	0.6	5	TURKEY
18	19 58 01.88	33.970 N	116.570 W	6		15	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS). Felt (V) at Angelus Oaks and Forest Falls. Felt (IV) at Calimesa,

18	20 24 30.77	7.12 S	129.81 E	116 ?	1.3	9	Colton, India, Palm Springs and Whitewater.
18	20 35 49.27	21.16 S	69.07 W	33 N	0.5	5	BANDA SEA
18	20 42 39.77	44.21 N	128.24 W	10 G	1.9	5	NORTHERN CHILE
18	22 07 05.8*	56.160 N	152.762 W	33 N	4.2	1.4	5 OFF COAST OF OREGON
18	22 09 05.4*	10.410 S	123.968 E	33 N	4.6	1.5	5 KODIAK ISLAND REGION. ML 3.3 (PMR).
18	22 24 38.2*	36.311 N	9.137 W	10 G	1.3	9	TIMOR
19	00 21 31.7	10.917 N	69.394 W	10 G	4.9 4.0	0.9	28 WEST OF GIBRALTAR. MG 3.9 (MDD).
19	01 23 13.9*	0.575 N	29.834 W	10 G	4.7	1.4	76 VENEZUELA
19	01 49 19.3*	53.603 N	167.273 W	33 N	4.6	1.2	11 CENTRAL MID-ATLANTIC RIDGE
19	02 20 56.4*	53.602 N	167.291 W	33 N	4.4	1.0	30 FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).
19	02 24 43.9*	36.310 N	120.360 W	14		5	16 FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.4 (PMR).
19	04 11 02.6	42.308 N	19.984 E	3		0.7	5 CENTRAL CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
a 19	04 31 55.9	53.352 N	165.882 W	33 N	5.5 5.1	1.1	21 YUGOSLAVIA. ML 3.1 (TTG).
19	04 35 51.3*	5.938 N	126.004 E	145 *	5.0	0.9	265 FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.9 (PMR), Ms 4.9 (BRK). Felt (IV) at Unalaska. Also felt on Akutan.
a 19	05 04 08.2	53.339 N	165.859 W	33 N	5.1 4.5	1.0	18 MINDANAO, PHILIPPINE ISLANDS
19	05 18 33.3*	60.136 N	152.552 W	87		0.9	132 FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.6 (PMR). Felt (III) at Unalaska. Also felt on Akutan.
f 19	05 59 36.2	47.264 N	151.127 E	141 G	5.9	0.9	24 SOUTHERN ALASKA. <AGS-P>.
a 19	06 53 17.8	53.600 N	167.171 W	33 N	5.5 5.7	1.1	426 KURIL ISLANDS. Felt (I JMA) at Nemuro, Obihiro and Uraokawa, Hokkaido. Depth from broadband displacement seismograms.
19	07 16 10.6*	53.403 N	167.087 W	33 N	4.5	1.2	205 FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.8 (PMR), Ms 5.6 (BRK). Felt strongly on Unalaska. Also felt on Akutan.
19	07 49 42.1	24.718 S	179.947 E	498	5.1	1.1	23 FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).
19	07 57 28.0*	53.507 N	167.242 W	33 N	4.8	1.2	61 SOUTH OF FIJI ISLANDS
19	08 20 24.4*	53.527 N	167.170 W	33 N	4.2	1.2	21 FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.4 (PMR).
19	08 25 57.3	13.784 N	120.778 E	117	4.9	1.0	25 FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.7 (PMR).
19	08 27 52.7*	35.920 N	117.720 W	6 G		1.0	46 MINDORO, PHILIPPINE ISLANDS
19	09 12 23.3	28.362 N	56.864 E	66 *	4.8	1.0	5 CENTRAL CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
19	09 25 48.5*	42.56 N	127.36 W	10 G	4.1	1.6	82 SOUTHERN IRAN
19	09 43 06.4	1.992 N	126.503 E	79 *	5.1	1.3	11 OFF COAST OF OREGON
19	10 02 14.2*	37.640 N	118.450 W	6 G		1.4	63 MOLUCCA PASSAGE
19	10 15 52.3*	46.671 N	2.089 E	10 G		1.4	4 CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (PAS).
19	10 23 38.9*	32.940 N	117.840 W	10		1.6	16 FRANCE. ML 2.8 (LDG).
19	10 47 03.3*	34.126 N	79.659 E	33 N	4.6	1.2	7 CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
19	11 31 07.5	53.617 N	167.408 W	33 N	5.0 4.6	0.9	14 KASHMIR-TIBET BORDER REGION
19	13 07 54.6*	34.199 N	133.242 E	33 N		1.3	107 FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.1 (PMR). Felt on Akutan and Unalaska.
19	13 21 00.5*	36.090 N	117.850 W	3		1.3	7 NEAR S. COAST OF SOUTHERN HONSHU
19	13 42 55.5*	51.50 N	175.16 W	33 N	4.0	1.3	8 CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS).
19	13 45 26.5*	32.950 N	117.830 W	10		0.3	9 ANDREANOF ISLANDS, ALEUTIAN IS.
19	14 09 13.2*	40.555 N	29.193 E	10 G		1.5	9 CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.2 (PAS).
19	14 35 22.8	30.747 S	68.991 W	46 *	5.0	0.9	7 TURKEY
19	14 35 59.2*	62.114 N	148.884 W	40		1.2	25 SAN JUAN PROVINCE, ARGENTINA
19	15 18 47.1	40.391 N	25.797 E	10 G		1.2	40 CENTRAL ALASKA. <AGS-P>.
19	15 24 34.5	40.402 N	25.880 E	10 G		1.2	15 AEGEAN SEA
19	17 32 17.7*	53.50 N	167.25 W	33 N	4.4	1.2	22 AEGEAN SEA
19	17 33 19.9*	44.607 N	6.961 E	10 G		0.4	10 FOX ISLANDS, ALEUTIAN ISLANDS
19	19 18 19.0*	36.090 N	117.850 W	2		1.4	6 FRANCE. ML 2.2 (LDG).
a 19	20 12 55.2	31.260 N	86.910 E	33 N	5.1 4.6	1.2	14 CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.3 (PAS).
19	20 52 09.6	53.662 N	167.184 W	33 N	4.9	1.0	113 TIBET
19	21 19 32.6*	4.72 S	13.74 W	10 G	4.9	1.5	49 FOX ISLANDS, ALEUTIAN ISLANDS
19	22 09 16.8*	61.672 N	152.019 W	114		1.0	14 NORTH OF ASCENSION ISLAND
o 19	22 32 36.0	53.521 N	167.301 W	33 N	5.6 5.6	1.0	28 SOUTHERN ALASKA. <AGS-P>.
19	23 37 59.5*	15.07 S	168.46 E	109 ?	4.7	1.2	277 FOX ISLANDS, ALEUTIAN ISLANDS. Ms 5.6 (BRK). Slight damage (V) at Dutch Harbor Airport and Unalaska. Also felt on Akutan.
19	23 46 45.0*	35.696 N	141.145 E	33 N	4.0	1.1	14 VANUATU ISLANDS
20	00 25 08.6*	31.231 S	68.373 W	112 *		1.1	12 NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Choshi.
a 20	01 59 08.2	53.530 N	167.344 W	33 N	4.9 4.5	1.1	14 SAN JUAN PROVINCE, ARGENTINA
20	02 16 56.8*	15.23 N	60.32 W	10 G		0.3	70 FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.2 (PMR). Felt (III) at Cold Bay. Also felt on Unalaska.
20	02 29 20.3	44.415 N	116.002 W	5 G		0.8	5 LEeward ISLANDS. ML 2.8 (FDF).
20	02 29 41.8	32.874 S	69.131 W	21		0.6	13 WESTERN IDAHO. ML 3.2 (NEIS).
20	02 48 55.1*	10.465 S	123.899 E	33 N	4.7	1.4	17 MENDOZA PROVINCE, ARGENTINA
20	03 42 50.1*	29.754 S	71.741 W	33 N		1.3	11 TIMOR
20	03 47 14.0*	29.56 S	71.76 W	33 N		1.1	15 NEAR COAST OF CENTRAL CHILE
20	04 01 18.5*	37.839 N	35.905 E	10 G	4.2	1.4	10 NEAR COAST OF CENTRAL CHILE
20	05 07 18.1*	39.51 N	32.28 E	10 G		1.4	20 TURKEY
20	05 09 20.6*	53.434 N	167.155 W	33 N	4.4	0.9	7 TURKEY
20	05 35 09.8*	53.66 N	169.37 W	33 N	4.5	1.5	12 FOX ISLANDS, ALEUTIAN ISLANDS
20	05 52 16.2*	15.914 S	75.272 W	33 N	4.6	1.4	11 FOX ISLANDS, ALEUTIAN ISLANDS
20	08 01 36.2*	39.092 N	28.511 E	10 G		1.0	33 NEAR COAST OF PERU
20	08 02 46.6*	61.663 N	150.333 W	67		1.0	10 TURKEY
20	08 48 24.2*	53.49 N	166.95 W	33 N	4.3	1.3	39 SOUTHERN ALASKA. <AGS-P>.
20	09 00 29.4	39.249 N	27.737 E	10 G		0.6	12 FOX ISLANDS, ALEUTIAN ISLANDS
20	11 54 08.7*	38.13 N	19.96 E	10 G		1.2	8 TURKEY
20	13 02 23.2*	32.930 N	117.780 W	10		1.1	12 IONIAN SEA
a 20	14 29 45.5*	37.580 N	118.450 W	8	5.6 5.6	253	11 CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.3 (PAS).
20	14 42 31.6	36.868 N	121.293 W	5 G		0.9	11 CALIFORNIA-NEVADA BORDER REGION. <GS>. ML 5.9 (BRK), 5.9 (PAS). Felt (V) at Bishop, Benton and Big Pine, California. Also felt (V) at Dyer, Nevada. Felt at Fresno and Bakersfield, California and in parts of southwestern Nevada.
20	14 46 08.5*	37.597 N	118.423 W	10 G		1.3	22 CENTRAL CALIFORNIA. ML 2.8 (BRK).
20	14 55 02.6*	37.580 N	118.450 W	6 G		1.3	17 CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 4.1 (BRK).
20	15 20 40.0*	6.137 S	123.046 E	33 N	4.8	1.3	3 CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (PAS).
20	15 26 43.2*	37.535 N	118.432 W	7 G		1.3	17 BANDA SEA
20	15 29 29.0*	37.577 N	118.477 W	8 G		1.5	18 CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.2 (BRK), 3.3 (PAS).
							15 CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.5 (BRK).

	20	15	34	35.1&	37.590 N	118.480 W	6 G							5.4 (PAS).
	20	15	37	39.9*	45.137 N	7.151 E	10 G							CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS).
	20	15	40	23.6&	58.752 N	152.721 W	80		0.9					NORTHERN ITALY. ML 2.8 (LDG).
	20	15	56	23.1	29.988 N	51.694 E	10 G	4.6		1.1				KODIAK ISLAND REGION. <AGS-P>.
	20	16	02	50.2	44.319 N	6.704 E	10 G			0.5				SOUTHERN IRAN
	20	16	19	46.8?	52.02 N	174.57 W	33 N	4.6		1.1				FRANCE. ML 2.6 (LDG).
	20	16	23	02.5&	37.563 N	118.505 W	5							ANDREANOF ISLANDS, ALEUTIAN IS.
														CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.5 (BRK),
														3.3 (PAS).
	20	16	27	52.6&	58.862 N	154.614 W	141							ALASKA PENINSULA. <AGS-P>.
	20	16	32	35.1&	37.575 N	118.467 W	8 G							CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.9 (BRK),
														3.5 (PAS).
	20	16	37	25.5&	37.567 N	118.485 W	8 G							CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.7 (BRK),
														3.2 (PAS).
	20	16	43	02.6	37.592 N	118.351 W	10 G		0.8					CALIFORNIA-NEVADA BORDER REGION. ML 3.4 (PAS).
	20	17	29	04.2*	25.942 S	178.602 E	660 ?	4.8		0.5				SOUTH OF FIJI ISLANDS
	20	17	41	56.2&	37.542 N	118.473 W	10 G							CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.5 (BRK),
														3.5 (PAS).
	20	17	45	43.8&	37.570 N	118.470 W	6 G							CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS).
	20	18	03	46.8	10.484 S	74.029 W	132	4.9		1.1				PERU. Felt at Chanchamayo, Oxapampa and Satipa.
a	20	18	09	06.8	56.739 S	3.577 W	10 G	5.8	5.0	0.9				SOUTH ATLANTIC RIDGE
	20	18	36	54.0&	37.525 N	118.483 W	1 G							CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.8 (BRK),
														3.4 (PAS). Felt (V) at Bishop, California.
	20	18	38	53.3&	37.558 N	118.468 W	5 G	3.9						CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 4.7 (BRK),
														4.8 (PAS). Felt (V) at Bishop, California and (III) at
														Dyer, Nevada.
	20	18	40	50.9&	37.580 N	118.420 W	6 G							CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS),
														3.8 (BRK).
	20	18	49	40.1&	37.600 N	118.500 W	6 G							CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS).
	20	18	53	20.2&	37.570 N	118.470 W	6 G							CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.3 (PAS).
	20	18	59	36.4	37.617 N	118.408 W	10 G			1.1				CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (PAS).
	20	19	05	32.6	44.455 N	116.033 W	5 G			0.7				WESTERN IDAHO. ML 3.6 (NEIS).
	20	19	25	53.2&	37.570 N	118.500 W	6 G							CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (PAS).
	20	19	27	40.0&	37.560 N	118.470 W	6 G							CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS).
	20	19	37	47.4&	61.996 N	151.033 W	71							SOUTHERN ALASKA. <AGS-P>.
	20	19	44	29.7&	57.042 N	154.533 W	92	4.6						KODIAK ISLAND REGION. <AGS-P>.
	20	20	05	05.3*	1.077 N	29.896 E	10 G	4.4		1.3				ZAIRE REPUBLIC
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21	14 45 21.0&	37.580 N	118.420 W	6 G				1	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 4.6 (PAS).
21	14 51 11.0&	37.520 N	118.412 W	10 G	5.1			87	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 5.7 (BRK), 5.4 (PAS). Mo=4.5*10**23 (BRK). Felt (V) at Benton and Big Pine, California.
21	14 53 58.1&	37.580 N	118.420 W	6 G				1	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 4.9 (PAS).
21	14 57 49.4	37.531 N	118.326 W	10 G	4.7		0.5	30	CALIFORNIA-NEVADA BORDER REGION. ML 4.8 (BRK), 4.7 (PAS). Mo=6.5*10**22 (BRK).
21	15 00 46.6&	37.580 N	118.420 W	6 G				6	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.7 (PAS).
21	15 05 41.0&	37.560 N	118.384 W	10 G			0.9	10	CALIFORNIA-NEVADA BORDER REGION. ML 3.9 (BRK), 4.1 (PAS).
21	15 10 15.0&	37.550 N	118.430 W	6 G				10	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (BRK), 3.8 (PAS).
21	15 10 30.2+	37.682 N	118.405 W	10 G			0.6	7	CALIFORNIA-NEVADA BORDER REGION. ML 3.7 (BRK).
21	15 11 30.7&	37.600 N	118.490 W	6 G				4	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 4.7 (PAS).
21	15 11 32.4+	37.781 N	31.089 E	10 G			1.1	7	TURKEY
21	15 15 29.4+	37.628 N	118.349 W	10 G			0.6	12	CALIFORNIA-NEVADA BORDER REGION. ML 3.7 (BRK).
21	15 19 35.4&	37.513 N	118.425 W	10 G				22	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 4.7 (BRK), 4.5 (PAS). Mo=4.3*10**22 (BRK).
21	15 24 45.9	56.592 N	153.361 W	33 N	5.0		0.7	72	KODIAK ISLAND REGION. ML 5.1 (PMR).
21	15 26 49.3&	37.547 N	118.503 W	10 G				17	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 4.6 (BRK), 4.3 (PAS). Mo=2.2*10**22 (BRK).
21	15 29 10.8	37.621 N	118.369 W	10 G				9	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.4 (PAS).
21	15 31 05.5	37.663 N	118.414 W	10 G				11	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.4 (PAS).
21	15 36 50.1	37.599 N	118.368 W	10 G				16	CALIFORNIA-NEVADA BORDER REGION. ML 3.7 (BRK), 4.1 (PAS).
21	15 41 22.1	37.574 N	118.304 W	10 G				21	CALIFORNIA-NEVADA BORDER REGION. ML 3.8 (BRK), 3.9 (PAS).
21	15 46 24.8&	37.665 N	118.487 W	10 G				23	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 4.5 (BRK). Mo=1.8*10**22 (BRK).
21	15 47 03.3	48.818 N	150.725 E	319 ?	4.6		0.9	36	NORTHWEST OF KURIL ISLANDS
21	15 50 22.3+	37.677 N	118.435 W	10 G			0.8	6	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK), 3.1 (PAS).
21	15 54 43.9+	33.757 S	72.003 W	46 *	5.1		1.0	28	OFF COAST OF CENTRAL CHILE
21	15 58 17.17	33.86 S	71.81 W	33 N			0.6	7	NEAR COAST OF CENTRAL CHILE
21	16 19 04.5&	37.580 N	118.420 W	6 G				5	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.4 (PAS).
21	16 26 44.3	37.514 N	118.307 W	5 G				21	CALIFORNIA-NEVADA BORDER REGION. ML 4.6 (BRK), 4.3 (PAS). Mo=2.1*10**22 (BRK).
21	16 36 43.6	37.540 N	118.385 W	10 G				17	CALIFORNIA-NEVADA BORDER REGION. ML 3.8 (PAS).
21	17 05 33.4	37.530 N	118.463 W	10 G	3.6		0.7	26	CALIFORNIA-NEVADA BORDER REGION. ML 4.4 (BRK), 4.6 (PAS). Mo=2.1*10**22 (BRK).
21	17 08 33.7+	37.622 N	118.390 W	10 G			0.6	6	CALIFORNIA-NEVADA BORDER REGION. ML 3.4 (BRK).
21	17 18 55.3	23.904 S	66.609 W	213	4.6		1.3	20	JUJUY PROVINCE, ARGENTINA
21	17 20 00.4	37.470 N	118.321 W	10 G			0.9	12	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (NEIS), 3.9 (PAS).
21	17 30 30.5	37.614 N	118.318 W	10 G				12	CALIFORNIA-NEVADA BORDER REGION. ML 3.9 (BRK), 3.4 (PAS).
21	17 40 55.9	37.597 N	118.354 W	10 G				23	CALIFORNIA-NEVADA BORDER REGION. ML 4.3 (BRK), 4.2 (PAS). Mo=1.9*10**22 (BRK).
21	17 53 03.1	37.634 N	118.397 W	10 G			0.7	13	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK).
21	18 13 57.5+	37.664 N	118.487 W	10 G			1.3	7	CALIFORNIA-NEVADA BORDER REGION. ML 4.1 (BRK), 3.5 (PAS).
21	18 17 20.2&	32.980 N	117.770 W	10				2	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
21	18 18 33.9&	37.580 N	118.420 W	6 G				8	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.7 (BRK), 3.4 (PAS).



22	02 21 31.5	37.640 N	118.417 W	10 G		0.6	21	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.8 (PAS).
22	02 23 31.9	38.929 N	24.954 E	13		1.1	29	AEGEAN SEA. ML 3.6 (ATH).
22	03 02 10.6	37.604 N	118.403 W	10 G		0.5	20	CALIFORNIA-NEVADA BORDER REGION. ML 3.8 (BRK), 3.8 (PAS).
22	03 08 41.7&	37.580 N	118.420 W	6 G			4	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.3 (PAS).
22	03 18 48.3	37.553 N	118.361 W	10 G		0.7	13	CALIFORNIA-NEVADA BORDER REGION. ML 3.9 (BRK).
22	04 09 22.4*	53.203 N	167.650 W	33 N	4.5	1.1	17	FOX ISLANDS, ALEUTIAN ISLANDS
22	04 31 58.6	39.422 N	28.384 E	10 G		0.9	14	TURKEY
22	04 56 44.57	18.02 S	178.34 W	626 *	4.5	1.0	16	FIJI ISLANDS REGION
22	05 05 23.3&	37.580 N	118.420 W	6 G			5	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (PAS).
22	05 16 58.77	15.04 N	62.13 W	30 *		1.4	7	LEEWARD ISLANDS. ML 2.6 (FDF).
22	05 24 08.1	37.594 N	118.337 W	10 G		0.5	15	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.2 (PAS).
22	05 40 45.3	37.594 N	118.386 W	10 G		0.5	25	CALIFORNIA-NEVADA BORDER REGION. ML 4.1 (BRK), 3.9 (PAS).
22	06 12 27.1	38.471 N	141.910 E	102	4.4	0.9	21	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Ofunato, (II JMA) at Miyako and (I JMA) at Ishinomaki and Morioko.
22	06 21 52.5	37.452 N	118.348 W	10 G		0.7	28	CALIFORNIA-NEVADA BORDER REGION. ML 4.2 (BRK), 4.1 (PAS).
22	06 33 39.3	37.549 N	118.351 W	10 G		0.5	15	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK).
22	06 58 11.2	37.604 N	118.391 W	10 G		1.3	13	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.1 (PAS).
22	07 14 04.4*	45.844 N	16.239 E	10 G		1.3	5	YUGOSLAVIA
22	08 29 16.7	37.579 N	118.396 W	10 G		1.0	25	CALIFORNIA-NEVADA BORDER REGION. ML 4.0 (BRK), 3.6 (PAS).
22	08 30 55.5&	32.860 N	117.810 W	10			3	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
22	09 34 16.3	37.464 N	118.288 W	10 G		0.5	18	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK), 3.1 (PAS).
22	10 02 24.77	31.47 S	69.20 W	110 ?		0.7	5	SAN JUAN PROVINCE, ARGENTINA
22	10 09 41.9&	37.580 N	118.420 W	6 G			3	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS).
22	10 14 24.9	6.513 S	154.909 E	56	5.0	1.0	37	SOLOMON ISLANDS. Felt (IV) at Ponguna, Bougainville.
22	10 21 40.8	36.936 N	121.454 W	5 G		0.6	9	CENTRAL CALIFORNIA. ML 2.7 (BRK).
22	10 25 52.5&	37.580 N	118.420 W	6 G			3	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.0 (PAS).
22	11 28 33.2	0.790 S	134.444 E	27 D	5.2 4.9	1.2	49	WEST IRIAN REGION
22	11 58 59.1	38.175 N	28.821 E	10 G		1.2	7	TURKEY
22	12 24 49.7	37.526 N	118.443 W	10 G	3.7	0.5	23	CALIFORNIA-NEVADA BORDER REGION. ML 4.4 (BRK), 4.6 (PAS). Mo=2.4*10**22 (BRK).
22	12 33 28.9&	37.580 N	118.420 W	6 G			3	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.2 (PAS).
22	12 36 44.5&	32.940 N	117.760 W	10			6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
22	13 33 59.5	37.526 N	118.429 W	10 G	4.2	0.8	28	CALIFORNIA-NEVADA BORDER REGION. ML 4.7 (BRK), 5.0 (PAS). Mo=4.8*10**22 (BRK).
22	13 44 04.8&	37.550 N	118.490 W	6			4	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (PAS).
22	13 48 59.6	37.510 N	118.474 W	10 G	4.5	1.2	38	CALIFORNIA-NEVADA BORDER REGION. ML 5.1 (BRK), 5.2 (PAS).
22	13 57 34.6	37.559 N	118.424 W	10 G		0.3	15	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.4 (PAS).
22	14 40 45.6	37.616 N	118.378 W	10 G		0.7	10	CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (NEIS).
22	15 24 23.8*	28.485 S	68.499 W	10 G		0.8	10	LA RIOJA PROVINCE, ARGENTINA
22	15 44 16.8*	31.257 S	68.327 W	109 ?		0.5	6	SAN JUAN PROVINCE, ARGENTINA
22	15 50 08.8*	33.657 S	178.488 W	33 N	5.0	1.4	15	SOUTH OF KERMADEC ISLANDS
22	16 28 38.7	37.522 N	118.276 W	10 G		0.8	13	CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (NEIS).
22	17 12 01.5	37.528 N	118.385 W	10 G		0.5	20	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (BRK).
22	17 17 21.3	37.545 N	118.365 W	10 G		0.5	23	CALIFORNIA-NEVADA BORDER REGION. ML 3.7 (BRK), 3.4 (PAS).
22	17 24 46.1*	31.594 S	68.878 W	109 ?		1.0	8	SAN JUAN PROVINCE, ARGENTINA
22	17 39 18.3	37.583 N	118.404 W	10 G		0.6	21	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.9 (PAS).
22	18 16 53.0	37.590 N	118.390 W	10 G		0.8	17	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK), 3.8 (PAS).
22	18 19 36.3	37.494 N	118.290 W	10 G		0.6	20	CALIFORNIA-NEVADA BORDER REGION. ML 4.2 (BRK), 4.2 (PAS).
22	18 29 44.0	37.473 N	118.314 W	10 G	3.7	0.7	30	CALIFORNIA-NEVADA BORDER REGION. ML 4.7 (BRK), 4.4 (PAS).
22	19 13 26.77	39.643 N	27.690 E	10 G		0.6	5	TURKEY
22	19 38 00.17	51.63 N	16.36 E	10 G		0.4	8	POLAND. MG 2.6 (KRA).
22	19 53 52.5*	4.365 N	75.919 W	170 *	4.7	1.0	11	COLOMBIA
22	20 11 33.8	37.629 N	118.411 W	10 G		0.4	15	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (BRK), 3.1 (PAS).
22	20 17 00.1	37.554 N	118.359 W	10 G	3.7	0.8	28	CALIFORNIA-NEVADA BORDER REGION. ML 4.2 (BRK), 4.4 (PAS).
22	20 22 26.4	37.614 N	118.409 W	10 G		0.6	22	CALIFORNIA-NEVADA BORDER REGION. ML 4.3 (BRK), 4.2 (PAS).
22	20 49 15.1	37.514 N	118.279 W	10 G		0.5	19	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK), 3.5 (PAS).
22	21 26 38.27	5.86 S	132.46 E	33 N	4.4	1.4	6	AROE ISLANDS REGION
22	22 06 41.8	37.513 N	118.294 W	10 G		0.5	18	CALIFORNIA-NEVADA BORDER REGION. ML 4.2 (BRK).
22	22 49 00.5&	32.931 N	80.168 W	6			5	SOUTH CAROLINA. <GLD>. MD 1.8 (GLD).
22	23 38 16.6	37.502 N	118.314 W	10 G		0.6	9	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS).
22	23 40 55.4	37.843 N	20.185 E	29	4.3	1.1	37	IONIAN SEA. ML 4.0 (ATH).
23	00 08 41.4	51.438 N	176.194 W	33 N	5.2	0.8	32	ANDREANOF ISLANDS, ALEUTIAN IS.
23	00 52 31.0*	2.462 S	102.470 E	58	4.5	0.6	12	SOUTHERN SUMATRA
23	02 12 13.6	37.518 N	118.429 W	10 G		0.6	15	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.5 (PAS).
23	02 27 40.0	32.419 S	72.086 W	33 N		0.9	17	OFF COAST OF CENTRAL CHILE
23	02 36 21.4*	1.195 S	127.667 E	33 N	4.8	1.1	11	HALMAHERA
23	02 57 58.5&	32.960 N	117.810 W	10			13	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.5 (PAS).
23	02 58 20.4	37.556 N	118.358 W	10 G		0.6	16	CALIFORNIA-NEVADA BORDER REGION. ML 3.8 (BRK), 3.4 (PAS).
23	03 01 02.4	37.626 N	118.410 W	10 G		0.7	15	CALIFORNIA-NEVADA BORDER REGION. ML 3.7 (BRK), 3.2 (PAS).
23	03 47 40.3	51.191 N	176.152 W	33 N	4.9 4.3	1.0	67	ANDREANOF ISLANDS, ALEUTIAN IS.

23	03 53 34.7	43.279 N	20.945 E	10 G	3.1	1.2	43	YUGOSLAVIA. ML 3.6 (TTG). Some houses destroyed and roads damaged in the Brzece-Knezevo area.
23	05 18 33.97	26.87 N	95.04 E	33 N	5.4	1.5	7	BURMA-INDIA BORDER REGION
23	06 17 53.6	37.535 N	118.320 W	10 G		0.7	10	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (NEIS).
23	07 35 27.3	61.934 S	154.774 E	10 G	5.4 5.7	1.0	74	BALLENY ISLANDS REGION
23	07 39 09.8	38.653 N	119.539 W	5 G		0.7	19	CALIFORNIA-NEVADA BORDER REGION. ML 4.3 (BRK).
23	07 41 43.37	43.49 N	5.61 E	10 G		1.6	5	NEAR SOUTH COAST OF FRANCE. ML 2.6 (LDG).
23	08 19 50.1	40.678 N	15.657 E	15	4.5	1.1	68	SOUTHERN ITALY. ML 4.6 (TRI), MD 4.5 (TTG). Slight damage at Patenza.
23	08 56 27.7	37.504 N	118.300 W	10 G		0.8	9	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (NEIS).
23	09 05 41.5%	40.124 N	29.289 E	10 G		0.5	10	TURKEY
23	09 26 37.6	37.607 N	118.381 W	10 G		0.5	11	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS).
23	10 25 46.4	39.515 N	28.378 E	10 G		1.2	7	TURKEY
23	10 26 38.0	20.527 S	177.770 W	557	5.0	1.1	44	FIJI ISLANDS REGION
23	10 29 01.9%	33.010 N	117.830 W	10			11	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS).
23	11 03 09.9*	31.639 S	67.891 W	33 N		0.9	5	SAN JUAN PROVINCE, ARGENTINA
23	11 06 55.7	21.292 S	68.048 W	147 *	4.3	0.8	10	CHILE-BOLIVIA BORDER REGION
23	11 34 16.7*	23.305 S	66.530 W	228 *	4.1	1.5	13	JUJUY PROVINCE, ARGENTINA
23	12 11 42.5	40.710 N	29.826 E	10 G		0.8	11	TURKEY
23	12 32 53.9*	36.683 N	71.347 E	175 ?	4.4	0.9	11	AFGHANISTAN-USSR BORDER REGION
23	12 55 46.1*	8.711 S	105.253 E	33 N	4.7	1.2	20	SOUTH OF JAVA
23	12 59 32.7%	60.344 N	152.283 W	75			22	SOUTHERN ALASKA. <AGS-P>.
23	15 39 11.6	37.517 N	118.409 W	10 G	4.1	1.1	29	CALIFORNIA-NEVADA BORDER REGION. ML 4.7 (BRK), 4.9 (PAS).
23	15 57 26.3*	14.604 N	119.374 E	33 N	4.0	1.1	6	LUZON, PHILIPPINE ISLANDS
23	16 26 34.7	1.812 N	126.321 E	63 *	4.7	1.1	45	MOLUCCA PASSAGE
23	16 27 41.0	37.597 N	118.426 W	10 G		0.5	18	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK).
23	17 20 14.7	38.934 N	21.971 E	10 G		1.1	9	GREECE
23	17 22 16.8%	32.990 N	117.760 W	10			10	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.3 (PAS).
23	18 20 59.87	31.01 S	68.89 W	33 N		0.9	6	SAN JUAN PROVINCE, ARGENTINA
23	20 16 07.7	18.840 S	69.410 W	151	4.6	1.1	24	NORTHERN CHILE
23	20 47 10.9%	59.428 N	6.599 E	10 G		0.8	6	SOUTHERN NORWAY. MD 2.4 (BER).
23	22 01 40.7	37.504 N	118.306 W	10 G		0.4	14	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (PAS).
23	22 34 33.5	37.496 N	118.382 W	10 G		0.5	13	CALIFORNIA-NEVADA BORDER REGION. ML 3.4 (NEIS).
24	00 00 23.87	18.16 S	178.71 W	615 ?	4.5	1.5	14	FIJI ISLANDS REGION
24	00 33 17.3*	32.794 S	68.741 W	33 N		0.4	5	MENDOZA PROVINCE, ARGENTINA
24	00 38 34.7%	34.010 N	116.650 W	6			5	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
24	00 42 01.3*	51.401 N	176.693 W	33 N	4.9 4.5	1.0	31	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.3 (PMR). Felt on Adak and Atka.
24	01 17 09.8	37.596 N	118.393 W	10 G		0.6	22	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK).
24	01 58 23.1%	33.970 N	116.560 W	9			12	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS).
24	02 35 54.5*	7.079 S	129.403 E	112 *	5.0	1.5	18	BANDA SEA
24	02 43 11.2	37.583 N	118.417 W	10 G		0.8	28	CALIFORNIA-NEVADA BORDER REGION. ML 4.1 (BRK), 4.2 (PAS).
24	03 05 32.1?	56.49 N	153.07 W	33 N	4.3	1.3	17	KODIAK ISLAND REGION. ML 3.6 (PMR).
24	03 08 53.8*	6.684 S	155.082 E	48 *	4.5	0.2	6	SOLOMON ISLANDS
24	03 26 01.5	37.514 N	118.307 W	10 G		0.5	9	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (NEIS).
24	04 15 49.77	7.53 S	122.38 E	253 ?	4.4	1.1	8	FLORES SEA
24	04 16 51.3	14.203 N	93.128 W	33 N	4.5	1.1	40	NEAR COAST OF CHIAPAS, MEXICO
24	04 39 53.7*	38.153 N	72.396 E	33 N	4.6	0.4	8	TAJIK SSR
24	05 02 41.1?	43.79 N	87.25 E	33 N	4.5	0.5	6	NORTHERN XINJIANG, CHINA
24	05 13 54.6%	59.896 N	153.277 W	115			27	SOUTHERN ALASKA. <AGS-P>.
24	06 05 46.97	25.26 N	109.62 W	10 G	4.4	1.3	17	GULF OF CALIFORNIA
24	06 10 05.1	37.479 N	118.316 W	10 G		0.4	21	CALIFORNIA-NEVADA BORDER REGION. ML 4.2 (BRK), 3.8 (PAS).
24	06 14 04.6	15.482 S	167.692 E	139 *	5.0	1.2	54	VANUATU ISLANDS
24	06 24 58.6%	46.284 N	2.832 E	10 G		0.3	11	FRANCE. ML 2.5 (LDG).
24	06 36 38.9%	42.377 N	19.945 E	10 G		0.6	7	YUGOSLAVIA. ML 2.6 (TTG).
24	07 28 12.4*	21.539 S	66.672 W	256 *	4.6	1.1	10	SOUTHERN BOLIVIA
24	07 52 26.6	37.359 N	121.722 W	5 G		1.0	10	CENTRAL CALIFORNIA. ML 2.7 (BRK).
24	09 22 30.8	37.568 N	118.307 W	10 G		0.6	17	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK).
24	10 00 08.9	37.638 N	118.391 W	5 G		0.5	11	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (NEIS).
24	10 35 05.0*	18.137 S	66.036 W	33 N		0.2	5	BOLIVIA
24	10 53 24.3	6.747 S	129.559 E	212 *	4.4	1.0	13	BANDA SEA
24	11 11 42.2	23.412 S	179.856 E	556	4.9	0.9	51	SOUTH OF FIJI ISLANDS
24	11 16 09.07	53.33 N	167.73 W	33 N	4.3	1.0	12	FOX ISLANDS, ALEUTIAN ISLANDS
24	11 34 51.5	37.530 N	118.367 W	10 G		0.9	11	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS).
24	14 03 26.8	51.669 N	175.254 W	33 N	4.9 4.5	1.2	71	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.3 (PMR). Felt on Adak and Atka.
24	14 16 34.6*	14.344 N	92.945 W	33 N	4.4	1.3	28	NEAR COAST OF CHIAPAS, MEXICO
24	14 58 45.2	37.514 N	118.289 W	10 G		0.7	16	CALIFORNIA-NEVADA BORDER REGION. ML 3.7 (BRK), 3.5 (PAS).
24	15 05 00.0%	37.143 N	116.071 W	0	4.4		47	SOUTHERN NEVADA. <DOE>. ML 4.4 (BRK). 37' 08' 33.89" N., 116' 04' 16.02" W., Surface Elev. 1314 m., Depth of Burial 400 m., Shot Time 150500.086, "CORNUCOPIA", Nevada Test Site (Dept. of Energy).
24	15 28 55.5%	62.480 N	149.265 W	66			37	CENTRAL ALASKA. <AGS-P>.
24	16 10 42.6	28.434 N	139.166 E	505 *	4.8	0.9	29	BONIN ISLANDS REGION
24	16 37 42.2%	62.450 N	148.196 W	43			29	CENTRAL ALASKA. <AGS-P>.
24	16 44 40.7	37.529 N	118.398 W	10 G		0.5	17	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (BRK).
24	17 44 30.1	37.672 N	20.851 E	33 N	4.1	1.3	61	IONIAN SEA. ML 4.8 (ATH).
24	17 54 54.9	37.509 N	118.305 W	10 G		1.1	6	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (NEIS).
24	19 03 25.9	37.467 N	118.297 W	10 G		0.7	18	CALIFORNIA-NEVADA BORDER REGION. ML 4.3 (BRK), 4.0 (PAS).
24	19 50 51.0	37.485 N	118.315 W	10 G		0.8	7	CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (NEIS).
24	20 22 11.3%	32.980 N	117.770 W	10			7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
24	20 36 09.6	37.577 N	118.402 W	10 G		0.6	14	CALIFORNIA-NEVADA BORDER REGION. ML 3.4 (BRK).
24	21 30 15.3%	58.425 N	152.128 W	55			21	KODIAK ISLAND REGION. <AGS-P>.
24	21 42 23.9	37.598 N	118.366 W	10 G		0.6	6	CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (NEIS).
24	22 57 55.1	37.516 N	118.370 W	10 G		0.5	9	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (NEIS).
24	23 23 26.6*	46.120 N	12.394 E	10 G		1.2	6	NORTHERN ITALY. ML 2.5 (KBA).
24	23 24 14.07	6.30 N	123.89 E	536 ?	4.8	0.6	11	MINDANAO, PHILIPPINE ISLANDS
25	00 31 31.5%	33.000 N	117.790 W	10			7	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).

25	01 52 27.8?	36.03 N	139.65 E	33 N	1.2	4	HONSHU, JAPAN. Felt (1 JMA) at Mito.
25	02 24 02.3	42.857 N	18.622 E	10 G	0.9	8	YUGOSLAVIA. ML 2.5 (TTG).
25	02 52 35.4?	40.26 N	15.00 E	10 G	0.8	5	SOUTHERN ITALY
25	03 50 08.8&	32.940 N	117.800 W	10		7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.2 (PAS).
25	05 44 03.5&	34.440 N	118.420 W	6		12	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS). Felt (III) at Canyon Country and (II) at Leona Valley.
25	06 10 31.2	37.504 N	118.416 W	10 G	0.7	11	CALIFORNIA-NEVADA BORDER REGION. ML 3.1 (PAS).
a 25	09 01 32.4	51.247 N	176.173 W	33 N	5.3 5.6	1.0 193	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.3 (PMR), Ms 5.5 (BRK). Felt (IV) on Adak.
25	09 04 16.5	51.223 N	176.035 W	33 N	5.4 5.6	0.9 95	ANDREANOF ISLANDS, ALEUTIAN IS. Felt on Adak.
25	09 22 30.0	7.097 S	145.654 E	65 +	4.8	1.2 15	NEAR S COAST OF PAPUA NEW GUINEA
25	09 31 38.7	37.554 N	118.397 W	10 G		0.2 6	CALIFORNIA-NEVADA BORDER REGION. ML 3.5 (NEIS).
25	10 06 33.0*	51.754 N	175.648 W	33 N	4.6	1.1 14	ANDREANOF ISLANDS, ALEUTIAN IS.
25	10 08 05.7	28.085 N	57.287 E	34 D	5.2	1.0 135	SOUTHERN IRAN
25	10 11 04.4	37.600 N	118.427 W	10 G		0.8 21	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.2 (PAS).
25	10 17 26.2%	46.002 N	3.273 E	10 G		0.3 10	FRANCE. ML 1.9 (LDG).
25	10 17 53.4*	31.225 S	68.009 W	10 G		0.7 7	SAN JUAN PROVINCE, ARGENTINA
25	10 35 49.5?	33.57 S	178.79 W	33 N	4.6	0.8 7	SOUTH OF KERMADEC ISLANDS
25	10 47 41.2%	46.471 N	2.973 E	10 G		0.3 11	FRANCE. ML 3.0 (LDG).
25	11 02 05.9	37.604 N	118.423 W	10 G		0.5 7	CALIFORNIA-NEVADA BORDER REGION. ML 3.4 (NEIS).
25	11 29 35.3&	34.140 N	117.460 W	6 G		9	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
25	11 39 09.4&	34.040 N	116.580 W	6 G		6	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
25	14 30 03.8*	26.548 N	126.199 E	33 N	4.1	1.4 6	RYUKYU ISLANDS
25	15 27 32.3?	13.84 N	93.02 W	33 N	3.4	1.1 13	OFF COAST OF CHIAPAS, MEXICO
25	15 33 05.5%	46.477 N	2.957 E	10 G		0.5 7	FRANCE. ML 2.1 (LDG).
25	17 17 02.0?	4.73 N	95.11 E	87 ?	4.3	1.3 13	NORTHERN SUMATERA
25	17 21 18.5	63.121 N	151.123 W	33 N		0.7 7	CENTRAL ALASKA. ML 3.3 (PMR).
25	20 05 22.2?	19.41 S	175.88 W	237 ?	4.9	1.2 16	TONGA ISLANDS
25	20 43 58.6?	45.27 N	15.42 E	10 G		1.0 6	YUGOSLAVIA. ML 2.8 (KBA).
25	20 58 53.8?	4.90 S	150.62 E	55 ?	3.7	1.0 8	NEW BRITAIN REGION
25	21 15 32.2*	49.795 N	18.552 E	10 G		1.1 7	CZECHOSLOVAKIA. ML 2.8 (VKA), 2.6 (KBA).
25	21 33 23.5*	2.494 S	139.166 E	33 N	4.6	1.1 15	NEAR N. COAST OF WEST IRIAN
25	21 35 35.0?	15.92 N	60.39 W	33 N		0.2 5	LEEWARD ISLANDS. ML 2.6 (FDF).
25	21 51 58.0&	32.950 N	117.700 W	10		5	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
25	21 52 21.8	31.942 S	178.164 W	33 N	5.0 4.8	1.1 26	KERMADEC ISLANDS REGION
25	22 17 32.7	48.922 N	0.062 E	10 G		1.1 15	FRANCE. ML 3.0 (LDG).
25	22 50 35.1	31.185 S	68.453 W	108 *		0.9 16	SAN JUAN PROVINCE, ARGENTINA
25	23 25 03.1*	11.501 N	142.011 E	33 N	4.1	1.2 9	SOUTH OF MARIANA ISLANDS
25	23 27 22.2	51.161 N	175.919 W	33 N	4.7	0.8 36	ANDREANOF ISLANDS, ALEUTIAN IS.
a 25	23 41 08.6	26.384 N	125.917 E	22	5.6 6.2	1.2 185	NORTHEAST OF TAIWAN
26	00 08 40.0?	36.41 N	64.68 E	33 N	3.9	1.1 7	TURKMEN-AFGHANISTAN BORDER REG.
26	01 11 49.9&	32.980 N	117.820 W	10		7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.2 (PAS).
26	01 19 49.2?	30.84 S	177.71 W	33 N	4.9	1.4 14	KERMADEC ISLANDS
26	01 28 37.5?	30.06 S	178.14 W	33 N	4.6	1.2 9	KERMADEC ISLANDS
26	01 28 50.7*	30.471 S	177.432 W	33 N	5.3	1.6 19	KERMADEC ISLANDS
26	01 51 35.1?	31.20 S	177.04 W	33 N	4.8	0.6 6	KERMADEC ISLANDS REGION
26	02 00 10.8	0.284 S	123.000 E	194 *	4.9	1.0 20	MINAHASSA PENINSULA
26	02 43 37.6&	34.010 N	116.650 W	6 G		6	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
26	03 22 54.1&	61.843 N	150.671 W	53		30	SOUTHERN ALASKA. <AGS-P>.
26	03 26 09.2*	26.667 N	126.120 E	33 N	4.2	1.2 7	RYUKYU ISLANDS
26	03 32 23.7*	3.137 S	143.303 E	10 G	4.0	1.0 9	NEAR N COAST OF PAPUA NEW GUINEA
26	04 17 23.8&	34.591 N	96.620 W	5 G		9	OKLAHOMA. <TUL>. mbLg 2.3 (TUL).
26	04 33 06.5?	30.07 S	177.13 W	33 N	4.9	0.7 6	KERMADEC ISLANDS
26	05 40 31.4&	34.010 N	116.560 W	6 G		5	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
26	06 03 57.5*	30.910 S	177.934 W	33 N	4.9	1.2 11	KERMADEC ISLANDS
26	06 15 37.1&	60.004 N	152.823 W	92		41	SOUTHERN ALASKA. <AGS-P>.
26	06 54 15.9?	7.75 S	127.70 E	187 ?		1.1 6	BANDA SEA
26	07 12 15.9	37.529 N	121.645 W	5 G		0.8 13	CENTRAL CALIFORNIA. ML 3.1 (BRK).
26	07 46 41.0?	37.06 N	21.30 E	33 N	3.3	1.1 8	SOUTHERN GREECE. ML 3.6 (ATH).
26	07 46 46.8?	17.91 N	65.40 W	33 N		0.6 7	PUERTO RICO REGION
26	08 02 33.0?	31.29 S	177.82 W	33 N	4.6	0.9 7	KERMADEC ISLANDS REGION
26	08 04 03.6	46.216 N	8.548 E	10 G		1.2 5	SWITZERLAND
26	08 41 14.7	31.710 S	117.062 E	10 G		0.2 6	WESTERN AUSTRALIA
26	08 43 17.6*	5.105 S	153.328 E	103 *	4.4	1.2 9	NEW IRELAND REGION
26	08 43 56.2?	30.22 S	177.97 W	33 N	4.4	1.4 6	KERMADEC ISLANDS
26	09 15 25.4&	60.424 N	151.724 W	61		32	KENAI PENINSULA, ALASKA. <AGS-P>.
26	09 18 48.4	37.248 N	21.455 E	58 *	3.6	1.2 19	SOUTHERN GREECE
26	10 27 48.7*	31.758 S	67.815 W	10		1.5 9	SAN JUAN PROVINCE, ARGENTINA
26	11 05 15.4	44.210 N	10.322 E	10 G		1.2 20	NORTHERN ITALY. ML 3.3 (LDG).
26	11 43 11.3	30.475 S	177.743 W	33 N	5.1 4.6	1.2 48	KERMADEC ISLANDS
26	12 32 58.7?	29.78 S	177.71 W	33 N	4.4	0.5 5	KERMADEC ISLANDS
26	12 53 36.4?	0.49 S	122.16 E	33 N	4.4	0.9 5	MINAHASSA PENINSULA
26	13 42 53.4	41.147 N	7.141 W	10 G		0.4 6	PORTUGAL. MG 3.2 (MDD).
26	13 45 56.1*	42.367 N	19.936 E	10 G		0.3 5	YUGOSLAVIA. ML 2.6 (TTG).
26	13 55 13.3?	28.93 S	72.62 W	33 N		1.2 13	OFF COAST OF CENTRAL CHILE
26	14 21 38.7	39.398 N	28.309 E	10 G		1.1 17	TURKEY
26	14 39 40.7	37.526 N	118.407 W	10 G		0.8 24	CALIFORNIA-NEVADA BORDER REGION. ML 4.2 (BRK), 4.2 (PAS).
26	14 40 22.6*	7.486 S	129.957 E	113 *	4.8	1.2 13	BANDA SEA
26	14 46 18.9	45.422 N	137.070 E	310 *	5.3	0.8 145	NEAR E. COAST OF EASTERN USSR
26	14 49 38.3*	30.451 S	177.725 W	33 N	5.4 4.8	1.4 39	KERMADEC ISLANDS
26	18 07 46.7?	30.39 S	177.95 W	33 N	4.6	1.4 7	KERMADEC ISLANDS
26	18 38 10.7*	60.446 N	148.846 W	33 N		1.1 7	KENAI PENINSULA, ALASKA. ML 3.5 (PMR).
26	18 52 44.8	53.280 N	167.191 W	33 N	4.7 4.4	0.9 68	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.8 (PMR).
26	19 22 27.0?	17.04 N	62.07 W	33 N		0.2 5	LEEWARD ISLANDS. ML 3.7 (FDF).
26	19 52 51.3%	46.343 N	1.431 E	10 G		0.9 13	FRANCE. ML 2.9 (LDG).
a 26	20 07 02.6	18.066 S	173.202 W	33 N	5.2	1.3 103	TONGA ISLANDS
a 26	20 24 47.8	23.753 N	94.177 E	27	5.2 5.1	1.0 147	BURMA-INDIA BORDER REGION
26	21 58 47.4	37.615 N	118.393 W	10 G		0.7 22	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.1 (PAS).
26	22 13 04.8&	59.159 N	136.084 W	30		5	SOUTHEASTERN ALASKA. <AGS-P>.
26	22 55 02.5	46.411 N	13.700 E	10 G		0.7 7	AUSTRIA. ML 3.0 (VKA), 2.7 (KBA), 2.6 (FUR). Felt at

27	00 01 55.3&	59.826 N	152.946 W	113					35	Kranjska Gora and Ratece, Yugoslavia.
27	01 21 56.67	18.70 S	172.63 W	33 N	5.0	1.4			19	SOUTHERN ALASKA. <AGS-P>.
27	01 55 25.3	37.542 N	118.445 W	10 G		1.0			21	TONGA ISLANDS REGION
									21	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (BRK), 3.4 (PAS).
27	01 59 43.2	18.282 S	172.807 W	33 N	5.0	1.4			24	TONGA ISLANDS REGION
27	02 30 18.3*	23.277 S	66.671 W	225	4.2	1.0			11	JUJUY PROVINCE, ARGENTINA
27	02 44 27.8	42.347 N	20.003 E	10 G		0.5			10	YUGOSLAVIA. ML 2.8 (TTG).
27	02 54 34.4*	10.054 S	76.356 W	33 N	4.7	0.9			8	PERU
27	03 18 14.9*	51.054 N	176.132 W	33 N	4.4	0.9			14	ANDREANOF ISLANDS, ALEUTIAN IS.
27	03 35 15.7?	16.96 S	72.51 W	33 N		0.5			6	NEAR COAST OF PERU. Felt (II) at Arequipa.
27	03 49 40.5	37.367 N	118.217 W	10 G		0.6			24	CALIFORNIA-NEVADA BORDER REGION. ML 4.2 (BRK).
27	04 16 15.5?	31.83 S	67.90 W	10 G	4.6	0.9			5	SAN JUAN PROVINCE, ARGENTINA
27	04 22 18.6&	32.960 N	117.820 W	10					6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
27	04 26 59.6	31.218 S	68.663 W	116 *		0.9			18	SAN JUAN PROVINCE, ARGENTINA
27	04 30 36.8	30.264 S	177.432 W	33 N	5.2	1.1			14	KERMADEC ISLANDS
27	04 55 30.7?	52.78 N	169.73 W	33 N	4.4	1.4			10	FOX ISLANDS, ALEUTIAN ISLANDS
27	06 13 47.9	35.823 N	139.887 E	130	4.3	0.5			14	NEAR S. COAST OF HONSHU, JAPAN. Felt (I JMA) at Mito and Utsunomiya.
27	06 30 11.3?	33.36 S	178.83 W	33 N	4.8	1.2			9	SOUTH OF KERMADEC ISLANDS
27	06 30 25.8*	5.250 N	73.176 W	33 N		1.3			6	COLOMBIA
27	07 18 49.6	37.503 N	118.317 W	10 G		0.6			10	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (NEIS).
27	07 31 07.2&	60.581 N	153.034 W	139					24	SOUTHERN ALASKA. <AGS-P>.
27	08 47 29.9	37.574 N	118.347 W	10 G		0.4			9	CALIFORNIA-NEVADA BORDER REGION. ML 3.2 (NEIS).
27	10 04 42.7&	61.987 N	149.680 W	44					30	SOUTHERN ALASKA. <AGS-P>.
27	10 08 02.3	37.537 N	118.314 W	10 G		0.8			24	CALIFORNIA-NEVADA BORDER REGION. ML 3.9 (BRK), 4.0 (PAS).
a 27	10 43 26.0	25.848 S	177.490 W	147 G	5.8	1.1			217	SOUTH OF FIJI ISLANDS. Depth from broadband displacement seismograms.
27	10 47 45.2?	15.99 S	178.07 E	33 N		0.5			7	FIJI ISLANDS
27	12 36 04.1*	17.437 S	71.834 W	85 *		0.4			8	NEAR COAST OF PERU
27	12 43 47.5	39.466 N	28.262 E	10 G		1.1			11	TURKEY
a 27	12 58 17.6	33.119 S	178.594 W	33 N	5.1 4.7	1.2			36	SOUTH OF KERMADEC ISLANDS
27	15 35 59.3	17.708 N	69.918 W	47	4.9	0.6			88	DOMINICAN REPUBLIC REGION. Felt in the Santo Domingo area.
27	16 48 00.8*	23.930 N	122.620 E	33 N	4.2	0.4			7	TAIWAN REGION
27	17 39 02.5*	34.580 N	80.156 E	33 N	4.7	1.1			13	TIBET
27	17 48 22.5?	16.59 N	99.35 W	33 N	4.4	1.0			19	NEAR COAST OF GUERRERO, MEXICO
27	17 50 31.2&	60.411 N	152.973 W	118					22	SOUTHERN ALASKA. <AGS-P>.
27	18 09 11.3?	18.87 S	172.62 W	33 N	4.2	1.2			8	TONGA ISLANDS REGION
27	18 09 21.7*	18.455 S	172.732 W	33 N	4.5 4.6	1.1			20	TONGA ISLANDS REGION
27	18 50 27.8?	18.15 S	172.91 W	33 N	4.9	1.3			14	TONGA ISLANDS REGION
27	20 17 55.3*	40.905 N	28.344 E	10 G		0.4			5	TURKEY
27	22 37 30.3	38.229 N	22.760 E	10 G		0.6			8	GREECE. ML 3.1 (ATH).
27	22 58 39.1	37.523 N	121.680 W	10 G		0.5			12	CENTRAL CALIFORNIA. ML 2.6 (BRK).
27	23 37 41.6*	20.822 S	178.801 W	596	4.7	0.8			34	FIJI ISLANDS REGION
27	23 47 33.1*	33.308 S	178.476 W	33 N	4.9 5.0	1.3			21	SOUTH OF KERMADEC ISLANDS
28	00 23 16.9&	62.790 N	151.286 W	46					18	CENTRAL ALASKA. <AGS-P>.
28	00 31 19.7	44.714 N	10.333 E	10 G		1.4			23	NORTHERN ITALY. ML 3.3 (LDG), 3.1 (KBA).
28	00 43 36.3	32.480 N	130.524 E	14	4.5	1.0			19	KYUSHU, JAPAN. Felt (III JMA) at Kumamoto, (II JMA) at Asosan, Fukuoka, Nobeoka, Saga and Unzendake, and (I JMA) at Nagasaki.
28	00 47 35.1*	6.527 S	130.658 E	58 ?	4.5	1.5			11	BANDA SEA
28	01 04 32.6?	28.30 N	52.00 E	33 N	3.5	1.3			5	SOUTHERN IRAN
28	01 19 14.2	33.545 N	87.860 E	33 N	4.8	0.8			69	TIBET
28	02 04 50.9?	29.10 S	176.36 W	33 N	4.7 4.4	1.6			8	KERMADEC ISLANDS REGION
28	02 54 45.9&	32.940 N	117.820 W	10					20	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.6 (PAS).
28	03 03 24.4?	33.31 S	71.86 W	33 N		1.2			10	NEAR COAST OF CENTRAL CHILE
28	03 29 56.0?	33.276 S	72.045 W	41 *	4.7 4.7	1.1			42	OFF COAST OF CENTRAL CHILE. Felt (III) at Santiago.
28	03 54 19.2?	33.47 S	72.60 W	33 N		0.4			8	OFF COAST OF CENTRAL CHILE
28	03 56 08.7?	33.45 S	72.63 W	33 N		0.5			8	OFF COAST OF CENTRAL CHILE
a 28	04 06 50.2	51.599 N	174.096 W	33 N	5.4 4.8	0.9			196	ANDREANOF ISLANDS, ALEUTIAN IS. Ms 4.6 (BRK), ML 4.5 (PMR). Felt (II) an Adak.
28	04 54 15.8*	51.871 N	175.992 W	33 N	4.8 4.6	1.1			30	ANDREANOF ISLANDS, ALEUTIAN IS.
28	05 01 59.6	52.862 N	166.590 W	33 N	5.0 4.6	0.9			95	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.7 (PMR). Felt at Unalaska.
28	05 49 19.0?	33.48 S	72.48 W	33 N		0.5			7	OFF COAST OF CENTRAL CHILE
28	05 53 30.2*	45.496 N	26.530 E	33 N		0.8			5	ROMANIA
28	07 02 37.8*	28.417 S	69.501 W	138 ?		1.3			11	CHILE-ARGENTINA BORDER REGION
28	08 28 20.8&	62.135 N	149.778 W	50					33	CENTRAL ALASKA. <AGS-P>.
28	09 04 42.5*	2.404 S	128.118 E	33 N	4.3	1.2			12	CERAM SEA
28	09 26 03.8%	39.130 N	29.610 E	10 G		0.8			11	TURKEY
28	09 30 58.0?	6.39 S	150.37 E	33 N	3.8	1.4			6	NEW BRITAIN REGION
28	10 16 09.8?	45.53 N	26.52 E	145 ?		0.4			8	ROMANIA
28	10 33 09.3&	32.900 N	117.850 W	10					7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.4 (PAS).
28	10 48 52.1	34.257 N	9.474 E	10 G	4.4	1.1			34	TUNISIA
28	11 03 19.6*	2.373 S	128.191 E	33 N	4.5	1.3			18	CERAM SEA
28	11 48 33.1	39.140 S	174.796 E	137 *	4.5	1.3			17	NORTH ISLAND, NEW ZEALAND. Felt in the southern part of North Island.
									6	SEA OF JAPAN. Felt (II JMA) at Tattari and (I JMA) at Saigo.
28	13 39 07.7*	36.465 N	134.175 E	33 N		1.2			39	SOUTHERN ALASKA. <AGS-P>.
28	13 58 55.3&	59.848 N	153.400 W	124					6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
28	14 00 57.4&	32.950 N	117.720 W	10					8	OFF COAST OF CENTRAL CHILE
28	14 24 01.8?	33.54 S	72.34 W	33 N		1.0			56	KENAI PENINSULA, ALASKA. <AGS-P>. Felt (IV) at Anchorage. Also felt at Homer, Kenai, Palmer and Seward.
28	14 31 14.1&	60.577 N	150.386 W	47	4.4					
28	16 57 53.2	24.072 S	67.099 W	200 *		0.5			7	CHILE-ARGENTINA BORDER REGION
28	17 20 02.3	32.910 S	72.517 W	33 N	4.1	0.7			14	OFF COAST OF CENTRAL CHILE
28	18 46 49.3	42.375 N	19.913 E	10 G		0.5			9	YUGOSLAVIA. ML 2.5 (TTG).
a 28	20 29 02.7	33.282 S	71.934 W	41 *	5.1 5.3	1.3			86	NEAR COAST OF CENTRAL CHILE. Felt (IV) at Santa Domingo, Quillata, Vina del Mar and San Antonio, and (III) at Santiago and Valparaisa.

28	20	39	06.3*	33.488	S	72.079	W	33	N		0.7	9	OFF COAST OF CENTRAL CHILE
28	20	43	50.5?	33.50	S	72.70	W	33	N		0.3	8	OFF COAST OF CENTRAL CHILE
28	20	44	48.4*	39.586	N	28.390	E	10	G		0.5	5	TURKEY
28	20	54	53.7	70.915	N	7.219	W	10	G	4.3 4.6	0.9	37	JAN MAYEN ISLAND REGION
28	21	11	19.0	33.314	S	72.031	W	45	*	5.0 5.1	1.2	55	OFF COAST OF CENTRAL CHILE. Felt.
28	21	30	30.1*	33.612	S	72.129	W	33	N	4.3	1.0	13	OFF COAST OF CENTRAL CHILE. Felt.
o 28	21	57	13.0	51.776	N	175.301	W	33	N	5.4 4.9	0.9	167	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.9 (PMR). Felt on Adak.
28	21	59	08.7?	33.51	S	72.23	W	33	N		0.8	9	OFF COAST OF CENTRAL CHILE
28	22	38	00.6?	33.49	S	72.40	W	33	N		0.6	9	OFF COAST OF CENTRAL CHILE
28	22	50	35.7	21.008	S	68.671	W	134		4.7	1.2	35	CHILE-BOLIVIA BORDER REGION
28	23	21	22.6	51.001	N	5.519	E	10	G		0.8	6	NETHERLANDS
28	23	29	18.1	51.748	N	175.203	W	33	N	4.7 4.3	1.1	63	ANDREANOF ISLANDS, ALEUTIAN IS.
28	23	38	51.5	39.447	N	28.291	E	10	G		1.3	11	TURKEY
29	02	55	36.0*	33.510	S	72.538	W	33	N		0.7	12	OFF COAST OF CENTRAL CHILE
29	03	16	55.1*	51.905	N	175.097	W	33	N	4.4	0.4	7	ANDREANOF ISLANDS, ALEUTIAN IS.
29	03	17	36.5	36.420	N	45.436	E	17		4.6	1.2	14	IRAN-IRAQ BORDER REGION
29	03	20	26.1?	23.63	S	70.78	W	10	G		1.7	5	NEAR COAST OF NORTHERN CHILE. Felt (III) at Antofagasto.
29	03	36	26.0*	37.931	N	28.893	E	10	G		0.2	5	TURKEY
29	06	43	50.2*	33.970	N	116.590	W	7				11	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
29	07	09	21.3*	7.336	S	129.872	E	95	?	4.6	0.8	7	BANDA SEA
29	07	11	58.6	37.540	N	118.367	W	10	G		0.7	26	CALIFORNIA-NEVADA BORDER REGION. ML 4.2 (BRK), 4.3 (PAS).
29	07	54	20.1	34.937	N	26.221	E	51	*	4.0	0.8	26	CRETE
29	08	07	23.1	33.427	S	72.413	W	33	N	4.3	1.0	17	OFF COAST OF CENTRAL CHILE
29	08	13	02.7?	33.54	S	72.20	W	33	N		0.7	9	OFF COAST OF CENTRAL CHILE
o 29	08	14	59.5	21.264	S	175.544	W	110	D	5.4	1.0	92	TONGA ISLANDS
29	08	17	41.6*	32.930	N	117.840	W	10		3.9		42	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 4.3 (PAS). Felt (V) at Oceanside, San Diego and Powoy. Felt (IV) at Copistrano Beach, Escondido, San Marcos, Santee and Vista.
29	08	50	40.8?	31.66	S	68.27	W	129	*		0.3	7	SAN JUAN PROVINCE, ARGENTINA
29	09	24	53.7	20.500	S	68.822	W	132	*	4.3	1.5	30	CHILE-BOLIVIA BORDER REGION
29	09	52	52.9*	32.940	N	117.810	W	10				6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
29	09	56	24.5?	2.26	S	77.91	W	190	?	4.4	1.2	13	PERU-ECUADOR BORDER REGION
29	09	57	57.0	37.593	N	118.447	W	10	G	3.7	0.7	38	CALIFORNIA-NEVADA BORDER REGION. ML 4.6 (BRK), 4.6 (PAS). Felt (IV) at Bishop, California.
29	09	58	32.1*	49.400	S	121.454	E	10	G	4.3	1.5	15	SOUTH OF AUSTRALIA
29	10	22	58.4*	13.968	N	144.420	E	149		4.7	0.6	13	MARIANA ISLANDS
29	11	22	22.5*	32.930	N	117.830	W	10				13	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.5 (PAS).
o 29	11	57	47.5	17.622	S	178.517	W	560		5.1	0.9	110	FIJI ISLANDS REGION
29	12	03	19.4*	34.000	N	116.570	W	6	G			5	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
29	13	13	40.8?	59.41	N	6.76	E	10	G		1.4	5	SOUTHERN NORWAY. MD 2.3 (BER).
29	13	32	05.9*	32.970	N	117.810	W	10	G			6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.2 (PAS).
29	15	14	25.2	37.447	N	118.304	W	10	G		0.6	23	CALIFORNIA-NEVADA BORDER REGION. ML 4.2 (BRK), 3.5 (PAS).
29	15	21	33.5	42.381	N	19.951	E	10	G		0.4	7	YUGOSLAVIA. ML 2.5 (TTG).
29	17	40	50.0	36.664	N	27.849	E	100		4.0	1.1	47	DODECANESE ISLANDS
29	17	50	39.3*	33.504	S	72.351	W	12		4.1	1.0	14	OFF COAST OF CENTRAL CHILE
29	18	25	49.0	43.927	N	147.126	E	73	D	4.8	0.9	63	KURIL ISLANDS. Felt (I JMA) at Kushiro and Nemuro, Hokkaido.
29	19	04	18.9	44.247	N	114.136	W	5	G		0.9	10	WESTERN IDAHO. ML 3.5 (NEIS).
29	21	34	18.4?	12.30	S	77.96	W	33	N		0.5	6	NEAR COAST OF PERU. Felt (IV) at Lima.
29	22	46	03.6	42.348	N	19.991	E	10	G		0.8	9	YUGOSLAVIA. ML 2.6 (TTG).
29	23	50	38.0*	32.960	N	117.800	W	10				5	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.2 (PAS).
30	00	26	30.3*	32.950	N	117.830	W	10				17	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.4 (PAS).
30	00	29	50.8*	62.549	N	151.412	W	95				17	CENTRAL ALASKA. <AGS-P>.
30	00	46	50.1	37.561	N	118.455	W	10	G		0.7	22	CALIFORNIA-NEVADA BORDER REGION. ML 3.6 (BRK), 3.3 (PAS).
30	02	12	58.7	34.680	N	32.343	E	36		4.8	1.1	142	CYPRUS. ML 4.8 (JER), 4.4 (BHL). Felt at Paphos and Limassol.
30	02	40	24.4*	42.410	N	18.630	E	10	G		0.5	5	YUGOSLAVIA. ML 2.0 (TTG).
30	03	03	20.9	7.214	S	129.422	E	152		5.3	1.1	73	BANDA SEA
o 30	04	02	53.4	18.048	S	174.864	W	174		5.0	0.8	71	TONGA ISLANDS
30	04	03	24.8	33.160	N	75.793	E	33	N	4.6	0.6	18	EASTERN KASHMIR
30	04	14	02.5*	44.578	N	5.862	E	10	G		0.3	6	FRANCE. ML 2.5 (LDG).
30	04	38	22.0*	24.752	N	94.156	E	67	?		1.3	8	BURMA-INDIA BORDER REGION
30	04	57	03.4?	5.32	N	94.77	E	99	?	4.3	0.4	5	NORTHERN SUMATERA
30	05	55	14.4	15.229	N	146.371	E	82	*	4.7	0.8	33	MARIANA ISLANDS
30	06	03	32.1	37.633	N	118.403	W	10	G		0.5	27	CALIFORNIA-NEVADA BORDER REGION. ML 4.0 (BRK), 3.8 (PAS).
30	06	09	16.6?	30.19	S	75.71	W	33	N		0.9	11	OFF COAST OF CENTRAL CHILE
30	06	41	52.7	37.562	N	118.424	W	10	G	4.1	0.9	44	CALIFORNIA-NEVADA BORDER REGION. ML 4.8 (BRK), 4.8 (PAS). Felt (V) at Benton, California and (IV) at Bishop, California.
30	07	58	37.5*	38.118	N	72.293	E	33	N	4.3	0.7	5	TAJIK SSR
30	08	19	06.5	42.481	N	111.223	W	5	G		0.6	9	EASTERN IDAHO. ML 3.5 (NEIS).
30	09	12	26.8*	4.657	N	94.943	E	55	*	4.4	0.7	10	OFF W COAST OF NORTHERN SUMATERA
30	11	10	06.6*	15.797	S	167.980	E	169	?	4.5	1.3	26	VANUATU ISLANDS
o 30	11	31	50.1	24.611	N	121.782	E	33	N	5.6 5.6	1.1	209	TAIWAN. Felt on eastern Taiwan.
30	13	26	20.9	63.072	N	151.021	W	112	?		0.9	8	CENTRAL ALASKA
30	14	03	53.6*	62.439	N	148.182	W	42				32	CENTRAL ALASKA. <AGS-P>.
30	14	20	58.5	42.371	N	19.979	E	10	G		0.6	8	YUGOSLAVIA. ML 2.4 (TTG).
30	14	33	03.5*	39.098	N	27.709	E	10	G		0.6	5	TURKEY
30	14	36	54.7*	20.746	S	169.318	E	61	*	4.5	1.2	31	VANUATU ISLANDS
30	15	18	41.9*	10.991	S	166.359	E	33	N	4.4	1.2	23	SANTA CRUZ ISLANDS
30	15	25	15.2*	5.983	S	146.750	E	81	?		1.0	6	EAST PAPUA NEW GUINEA REGION
30	16	45	44.3	39.423	N	28.345	E	10	G		1.1	8	TURKEY
30	17	01	17.5*	42.369	N	19.963	E	10	G		0.7	6	YUGOSLAVIA. ML 2.6 (TTG).
30	17	59	39.7?	59.40	N	6.71	E	10	G		0.8	6	SOUTHERN NORWAY. MD 2.4 (BER).
30	18	26	56.4*	6.145	S	122.984	E	33	N	4.5	1.2	13	FLORES SEA
30	18	35	54.3*	60.314	N	153.466	W	174				30	SOUTHERN ALASKA. <AGS-P>.

30	18 39 49.7*	38.977 N	30.019 E	10 G	1.7	5	TURKEY
30	18 59 30.17	36.39 N	28.50 E	33 N	0.3	5	DODECANESE ISLANDS
30	19 22 07.0	11.089 N	86.031 W	33 N 5.0 4.6	1.0	70	NEAR COAST OF NICARAGUA
30	19 33 07.3*	37.933 N	20.900 E	10 G	0.8	8	IONIAN SEA. ML 3.7 (ATH).
30	20 24 38.6	8.243 S	159.305 E	83	4.6	1.1	24 SOLOMON ISLANDS. Felt (1) at Honiara.
a 30	21 25 35.4*	52.441 S	18.180 E	10 G	5.4 4.7	1.2	33 SOUTHWEST OF AFRICA
30	22 17 41.3*	52.559 S	18.447 E	10 G	4.9 4.9	0.8	13 SOUTHWEST OF AFRICA
30	22 51 13.0*	32.990 N	117.800 W	10		23	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.9 (PAS).
a 30	22 58 40.4*	52.556 S	17.927 E	10 G	5.1 5.3	1.1	28 SOUTHWEST OF AFRICA
30	23 02 32.1	18.852 N	69.814 W	90 D	4.7	0.8	83 DOMINICAN REPUBLIC REGION
30	23 35 45.0*	37.26 N	19.84 E	10 G		0.6	5 IONIAN SEA. ML 3.6 (ATH).
30	23 35 53.5*	52.436 S	18.337 E	10 G	5.0 4.8	1.1	22 SOUTHWEST OF AFRICA
a 31	00 12 42.5*	52.512 S	18.494 E	10 G	5.2 5.0	1.1	33 SOUTHWEST OF AFRICA
31	00 18 07.0*	52.38 S	18.53 E	10 G	4.8	1.0	6 SOUTHWEST OF AFRICA
31	00 45 53.5*	45.65 N	4.86 E	10 G		1.2	7 FRANCE. ML 2.9 (LDG).
31	01 17 26.4*	62.346 N	151.030 W	76		32	CENTRAL ALASKA. <AGS-P>.
31	02 53 58.0*	52.55 S	18.01 E	10 G	5.0	1.5	11 SOUTHWEST OF AFRICA
31	03 25 29.9*	33.58 S	72.72 W	33 N		0.8	12 OFF COAST OF CENTRAL CHILE
31	03 53 50.2	42.358 N	19.991 E	10 G		0.4	7 YUGOSLAVIA. ML 2.4 (TTG).
a 31	04 00 20.3*	52.515 S	18.608 E	10 G	5.4 4.9	1.3	22 SOUTHWEST OF AFRICA
31	04 50 14.2*	34.010 N	116.630 W	10		5	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
31	05 36 26.2	42.356 N	20.014 E	10 G		0.6	6 YUGOSLAVIA. ML 2.4 (TTG).
31	05 58 25.6*	33.56 S	72.12 W	33 N		1.0	11 OFF COAST OF CENTRAL CHILE
a 31	07 22 40.2	37.463 N	118.374 W	5 G	5.5 5.2	1.0	187 CALIFORNIA-NEVADA BORDER REGION. ML 5.8 (BRK), 5.9 (PAS). Felt strongly in the Bishop-Chalfant Valley area, California. Felt (V) at Big Pine, Camp Nelson, Sonora and Sequoia National Park, California. Also felt (V) at Dyer, Nevada.
31	07 28 03.8*	37.530 N	118.420 W	6 G		12	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 4.5 (BRK), 4.4 (PAS).
31	07 36 02.4*	37.472 N	118.397 W	4		17	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 4.0 (BRK), 3.8 (PAS).
31	07 50 46.0	37.506 N	118.311 W	5 G		0.9	15 CALIFORNIA-NEVADA BORDER REGION. ML 3.8 (BRK), 3.7 (PAS).
31	07 51 42.9*	33.970 N	116.570 W	7		9	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS).
31	08 10 42.7	37.458 N	118.294 W	10 G		0.6	25 CALIFORNIA-NEVADA BORDER REGION. ML 3.8 (BRK), 3.5 (PAS).
31	08 15 39.4	37.516 N	118.307 W	10 G		0.7	19 CALIFORNIA-NEVADA BORDER REGION. ML 4.0 (BRK), 3.4 (PAS).
31	09 16 32.4*	60.717 N	151.044 W	50		32	KENAI PENINSULA, ALASKA. <AGS-P>.
31	09 33 14.3*	61.767 N	149.567 W	41		38	SOUTHERN ALASKA. <AGS-P>. ML 3.2 (PMR). Felt at Anchorage, Palmer and Willow.
a 31	09 37 24.0*	52.566 S	18.430 E	10 G	5.1 5.5	1.4	27 SOUTHWEST OF AFRICA
31	10 06 38.0*	31.291 S	67.470 W	33 N		1.1	6 SAN JUAN PROVINCE, ARGENTINA
31	10 57 09.3	5.761 S	150.556 E	90	4.7	1.2	31 NEW BRITAIN REGION
31	11 14 01.1*	52.55 S	18.61 E	10 G	5.0 4.0	0.7	7 SOUTHWEST OF AFRICA
31	11 25 49.8	37.572 N	118.411 W	10 G		0.4	9 CALIFORNIA-NEVADA BORDER REGION. ML 3.1 (NEIS).
a 31	11 36 35.4	24.829 N	122.761 E	33 N	5.1 5.2	1.2	44 TAIWAN REGION
31	12 26 10.7	42.765 N	17.964 E	10 G		1.4	22 ADRIATIC SEA. ML 4.2 (TRI). Felt at Popovo Polje, Yugoslavia.
31	13 12 14.5*	58.314 N	6.214 E	10 G		0.7	6 SOUTHERN NORWAY. MD 2.2 (BER).
31	13 30 43.2*	19.936 S	173.853 W	33 N	4.6	1.0	15 TONGA ISLANDS
31	14 04 34.5*	60.797 N	149.614 W	45		39	KENAI PENINSULA, ALASKA. <AGS-P>. ML 3.7 (PMR). Felt at Anchorage and Girdwood.
31	14 05 23.5*	10.191 S	114.116 E	33 N	4.4	1.5	9 SOUTH OF BALI ISLAND
31	14 17 23.3*	14.196 N	92.769 W	33 N		1.0	14 NEAR COAST OF CHIAPAS, MEXICO. Felt (1) in the Tacana Volcano area.
31	14 50 55.5*	10.565 S	113.644 E	33 N	4.2	0.6	7 SOUTH OF JAVA
31	15 19 28.0*	40.268 N	124.407 W	5 G		7	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.2 (BRK).
31	15 58 21.2*	24.586 S	70.544 W	99 *		1.3	12 NEAR COAST OF NORTHERN CHILE
31	16 06 27.6*	45.551 N	25.467 E	10 G		1.1	5 ROMANIA
31	17 21 01.2*	60.048 N	140.718 W	7		17	SOUTHEASTERN ALASKA. <AGS-P>.
31	18 13 40.0*	32.950 N	117.820 W	6 G		6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.2 (PAS).
31	18 30 35.9*	52.35 S	18.51 E	10 G	4.9	1.4	15 SOUTHWEST OF AFRICA
31	18 31 03.7*	1.768 S	128.701 E	33 N	4.0	0.8	7 HALMAHERA
31	18 43 15.2*	9.51 N	121.00 E	194 ?		0.5	5 SUMBA ISLAND REGION
31	18 43 21.9*	38.21 N	20.09 E	10 G		1.5	11 GREECE. ML 3.8 (ATH).
31	19 13 31.1*	53.443 N	167.171 W	33 N	4.7	1.2	14 FOX ISLANDS, ALEUTIAN ISLANDS
a 31	19 33 58.4*	52.421 S	18.099 E	10 G	5.1 4.7	1.1	35 SOUTHWEST OF AFRICA
31	20 26 08.8*	38.001 N	30.648 E	10 G		1.3	8 TURKEY
31	20 38 11.7*	27.802 N	142.595 E	51 *	4.7	0.9	13 BONIN ISLANDS REGION

## ADDITIONAL SOURCE PARAMETERS

01 00 49 07.18 15.564S 172.452W 33km 5.4mb ( 38 obs.) 5.7Msz ( 18 obs.) SAMOA ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 16S, 48C Centroid Location: Origin Time 00:49:15.5 0.3 Lat 15.92S 0.03 Lon 172.69W 0.03 Dep 15.0 BDY Half-duration 3.4 Principal Axes: Scale 10**25 D-CM T Val= 1.34 P1g=59 Azm=244 N 0.22 16 2 P -1.57 26 100 Best Double Couple:Mo=1.5*10**25 NP1:Strike=222 Dip=24 Slip= 132 NP2: 357 72 73	P -4.81 65 287 Best Double Couple:Mo=4.2*10**23 NP1:Strike=124 Dip=31 Slip=125 NP2: 343 65 -71	Dep 19.2 5.5 Half-duration 1.5 Principal Axes: Scale 10**23 D-CM T Val= 7.76 P1g=65 Azm=355 N -0.96 5 96 P -6.81 24 189 Best Double Couple:Mo=7.3*10**23 NP1:Strike=290 Dip=22 Slip= 105 NP2: 94 69 84
01 06 03 09.55 4.758S 127.989E 33km 5.6mb ( 40 obs.) 5.5Msz ( 11 obs.) BANDA SEA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 25C Centroid Location: Origin Time 06:03: 9.3 0.6 Lat 5.53S 0.07 Lon 128.13E 0.03 Dep 36.9 3.8 Half-duration 3.2 Principal Axes: Scale 10**24 D-CM T Val= 7.38 P1g= 2 Azm=257 N 1.21 62 163 P -8.59 28 348 Best Double Couple:Mo=8.0*10**24 NP1:Strike= 29 Dip=69 Slip= -19 NP2: 126 72 -158	02 04 16 57.74 22.038S 179.534W 598km 5.6mb ( 49 obs.) SOUTH OF FIJI ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 27C Centroid Location: Origin Time 04:17: 3.7 0.3 Lat 22.04S 0.04 Lon 179.49W 0.03 Dep 598.3 1.8 Half-duration 2.8 Principal Axes: Scale 10**24 D-CM T Val= 4.70 P1g=38 Azm= 96 N 0.75 17 200 P -5.45 47 309 Best Double Couple:Mo=5.1*10**24 NP1:Strike=125 Dip=18 Slip=166 NP2: 21 86 -73	05 03 01 32.60 51.248N 179.746W 33km 5.6mb ( 88 obs.) 5.2Msz ( 19 obs.) ANDREANOF ISLANDS, ALEUTIAN IS. CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 33C Centroid Location: Origin Time 03:01:36.6 0.4 Lat 51.44N 0.04 Lon 179.87E 0.07 Dep 15.0 BDY Half-duration 2.4 Principal Axes: Scale 10**24 D-CM T Val= 3.48 P1g=64 Azm=319 N 0.11 5 59 P -3.58 26 151 Best Double Couple:Mo=3.5*10**24 NP1:Strike=252 Dip=20 Slip= 104 NP2: 57 71 85
01 07 32 54.08 3.236S 148.498E 10km 5.3mb ( 22 obs.) 5.6Msz ( 8 obs.) BISMARCK SEA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 30C Centroid Location: Origin Time 07:33: 0.2 0.4 Lat 3.36S 0.04 Lon 148.81E 0.04 Dep 15.0 BDY Half-duration 3.3 Principal Axes: Scale 10**24 D-CM T Val= 7.69 P1g=12 Azm=333 N 0.51 77 134 P -8.19 4 242 Best Double Couple:Mo=7.9*10**24 NP1:Strike= 17 Dip=79 Slip= 174 NP2: 108 84 11	02 10 20 25.38 7.807S 150.640E 29km 5.5mb ( 38 obs.) 4.6Msz ( 1 obs.) NEW BRITAIN REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 10S, 22C Centroid Location: Origin Time 10:20:31.2 2.0 Lat 7.93S 0.13 Lon 150.85E 0.14 Dep 15.0 BDY Half-duration 1.4 Principal Axes: Scale 10**23 D-CM T Val= 2.35 P1g= 0 Azm=138 N 0.97 0 48 P -3.32 90 180 Best Double Couple:Mo=2.8*10**23 NP1:Strike=228 Dip=45 Slip= -90 NP2: 48 45 -90	05 14 11 17.79 12.183N 140.933E 38km 5.4mb ( 40 obs.) 5.1Msz ( 1 obs.) WEST CAROLINE ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 28C Centroid Location: Origin Time 14:11:17.9 0.5 Lat 12.14N 0.04 Lon 141.21E 0.05 Dep 15.0 BDY Half-duration 2.0 Principal Axes: Scale 10**24 D-CM T Val= 1.86 P1g=14 Azm=324 N 0.40 21 229 P -2.26 65 87 Best Double Couple:Mo=2.1*10**24 NP1:Strike= 81 Dip=36 Slip= -53 NP2: 218 62 -113
01 08 40 01.12 3.213S 148.527E 10km 5.4mb ( 17 obs.) 5.5Msz ( 3 obs.) BISMARCK SEA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 29C Centroid Location: Origin Time 08:40: 5.3 0.6 Lat 3.42S 0.06 Lon 148.59E 0.06 Dep 15.0 BDY Half-duration 2.9 Principal Axes: Scale 10**24 D-CM T Val= 4.47 P1g= 1 Azm=153 N 1.47 69 247 P -5.93 21 63 Best Double Couple:Mo=5.2*10**24 NP1:Strike=200 Dip=74 Slip= -166 NP2: 106 76 -16	02 12 53 08.14 59.550S 26.164W 53km 5.6mb ( 14 obs.) SOUTH SANDWICH ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 30C Centroid Location: Origin Time 12:53:13.6 0.3 Lat 60.02S 0.05 Lon 26.36W 0.10 Dep 20.9 2.7 Half-duration 2.2 Principal Axes: Scale 10**24 D-CM T Val= 2.23 P1g=57 Azm=237 N -0.07 23 9 P -2.16 21 109 Best Double Couple:Mo=2.2*10**24 NP1:Strike=234 Dip=31 Slip= 139 NP2: 0 70 65	05 19 57 38.62 60.721S 153.771E 10km 5.5mb ( 17 obs.) 5.6Msz ( 9 obs.) WEST OF MACQUARIE ISLAND CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 37C Centroid Location: Origin Time 19:57:52.4 0.1 Lat 60.05S 0.02 Lon 152.98E 0.04 Dep 15.0 FIX Half-duration 3.7 Principal Axes: Scale 10**25 D-CM T Val= 1.49 P1g= 2 Azm= 22 N -0.08 71 285 P -1.40 19 113 Best Double Couple:Mo=1.4*10**25 NP1:Strike=156 Dip=75 Slip= -12 NP2: 249 79 -165
02 01 37 33.65 0.679S 99.966E 90km 5.3mb ( 33 obs.) SOUTHERN SUMATRA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 22C Centroid Location: Origin Time 01:37:37.2 1.1 Lat 0.68S 0.09 Lon 99.70E 0.14 Dep 83.9 9.8 Half-duration 1.3 Principal Axes: Scale 10**23 D-CM T Val= 3.63 P1g=17 Azm= 59 N 1.17 17 155	02 20 45 50.53 26.775S 114.283W 10km 5.6mb ( 33 obs.) 5.5Msz ( 12 obs.) EASTER ISLAND REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 16S, 37C Centroid Location: Origin Time 20:45:56.1 0.2 Lat 26.97S 0.04 Lon 114.28W 0.03 Dep 15.0 FIX Half-duration 2.5 Principal Axes: Scale 10**24 D-CM T Val= 4.42 P1g=14 Azm= 57 N -1.29 19 152 P -3.13 66 294 Best Double Couple:Mo=3.8*10**24 NP1:Strike=123 Dip=35 Slip= -124 NP2: 343 61 -68	05 22 09 36.95 15.467N 92.582W 112km 5.4mb ( 92 obs.) MEXICO-GUATEMALA BORDER REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 30C Centroid Location: Origin Time 22:09:35.8 0.3 Lat 15.31N 0.04 Lon 92.68W 0.03 Dep 72.4 2.5 Half-duration 3.7 Principal Axes: Scale 10**24 D-CM T Val= 14.03 P1g=23 Azm= 45 N -3.73 2 314 P -10.30 66 218 Best Double Couple:Mo=1.2*10**25 NP1:Strike=139 Dip=22 Slip= -84 NP2: 313 69 -92
	03 00 12 14.02 59.264S 26.934W 33km 5.4mb ( 11 obs.) 4.9Msz ( 2 obs.) SOUTH SANDWICH ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 27C Centroid Location: Origin Time 00:12:17.7 0.8 Lat 59.17S 0.09 Lon 27.09W 0.22	06 19 24 22.99 34.424N 80.161E 9km 5.8mb ( 86 obs.) 6.1Msz ( 17 obs.) TIBET FAULT PLANE SOLUTION: P-Waves

NP1:Strike=270 Dip=68 Slip= -12  
NP2: 5 79 -158  
Principal Axes:  
T P1g= 7 Azm=136  
P 24 229  
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.  
MOMENT TENSOR SOLUTION  
Dep 8 No. of sta: 10  
Principal Axes:  
Scale 10\*\*24 d-cm  
T Val= 4.49 P1g=14 Azm=157  
N -0.37 44 53  
P -4.13 43 260  
Best Double Couple:Mo=4.3\*10\*\*24  
NP1:Strike=288 Dip=50 Slip= -24  
NP2: 35 72 -137  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 135, 33C  
Centroid Location:  
Origin Time 19:24:29.5 0.2  
Lat 34.24N 0.03 Lon 80.15E 0.04  
Dep 15.0 BDY Half-duration 3.8  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 11.22 P1g= 1 Azm=129  
N -2.36 69 37  
P -8.85 21 220  
Best Double Couple:Mo=1.0\*10\*\*25  
NP1:Strike=263 Dip=74 Slip= -15  
NP2: 357 76 -164

07 16 26 56.61 10.389N 56.832E 8km  
6.4mb ( 68 obs.) 6.2Msz ( 30 obs.)  
CARLSBERG RIDGE  
MOMENT TENSOR SOLUTION  
Dep 2 No. of sta: 8  
Principal Axes:  
Scale 10\*\*25 d-cm  
T Val= 6.16 P1g=58 Azm=356  
N 0.37 6 256  
P -6.53 31 162  
Best Double Couple:Mo=6.3\*10\*\*25  
NP1:Strike=233 Dip=15 Slip= 66  
NP2: 78 76 96  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 175, 43C M.W.: 9S, 22C  
Centroid Location:  
Origin Time 16:27: 7.7 0.2  
Lat 11.29N 0.02 Lon 57.33E 0.02  
Dep 15.0 BDY Half-duration 5.9  
Principal Axes:  
Scale 10\*\*25 D-CM  
T Val= 4.17 P1g=84 Azm=267  
N -0.38 5 56  
P -3.78 3 147  
Best Double Couple:Mo=4.0\*10\*\*25  
NP1:Strike=242 Dip=42 Slip= 98  
NP2: 52 48 83

08 09 20 44.50 34.000N 116.610W 12km  
5.8mb ( 87 obs.) 6.0Msz ( 14 obs.)  
SOUTHERN CALIFORNIA  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 49 Dip=80 Slip= 35  
NP2: 312 56 168  
Principal Axes:  
T P1g=31 Azm=276  
P 16 176  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a large reverse component. The preferred fault plane is not determined.  
MOMENT TENSOR SOLUTION  
Dep 5 No. of sta: 10  
Principal Axes:  
Scale 10\*\*25 d-cm  
T Val= 2.24 P1g=43 Azm=291  
N 0.13 40 74  
P -2.37 20 181  
Best Double Couple:Mo=2.3\*10\*\*25  
NP1:Strike=316 Dip=44 Slip= 159  
NP2: 61 76 48  
CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN  
L.P.B.: 9S, 26C  
Centroid Location:  
Origin Time 09:20:47.7 0.6  
Lat 33.63N 0.06 Lon 116.57W 0.03  
Dep 15.0 BDY Half-duration 3.6  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 13.43 P1g=47 Azm=277  
N -0.04 34 53  
P -13.39 23 160  
Best Double Couple:Mo=1.3\*10\*\*25  
NP1:Strike=294 Dip=37 Slip= 156  
NP2: 44 76 55

09 17 10 22.87 51.907N 176.239W 50km  
5.2mb ( 67 obs.) 4.9Msz ( 10 obs.)  
ANDREANOF ISLANDS, ALEUTIAN IS.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 31C  
Centroid Location:  
Origin Time 17:10:26.4 0.5  
Lat 51.97N 0.04 Lon 176.30W 0.07  
Dep 63.0 2.3 Half-duration 2.1  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 2.00 P1g=76 Azm=289  
N 0.15 9 58  
P -2.15 11 150  
Best Double Couple:Mo=2.1\*10\*\*24  
NP1:Strike=251 Dip=35 Slip= 106  
NP2: 52 57 79

09 20 24 51.97 51.683N 176.868W 57km  
4.9mb ( 29 obs.)  
ANDREANOF ISLANDS, ALEUTIAN IS.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 9S, 20C  
Centroid Location:  
Origin Time 20:24:55.8 1.9  
Lat 51.81N 0.17 Lon 177.49W 0.30  
Dep 62.0 9.9 Half-duration 1.3  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 3.91 P1g=47 Azm=239  
N -0.37 41 38  
P -3.54 10 137  
Best Double Couple:Mo=3.7\*10\*\*23  
NP1:Strike=265 Dip=49 Slip= 149  
NP2: 17 67 45

09 23 10 53.10 1.904N 126.525E 28km  
6.2mb ( 68 obs.) 6.5Msz ( 24 obs.)  
MOLUCCA PASSAGE  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=182 Dip=48 Slip= 75  
NP2: 24 44 106  
Principal Axes:  
T P1g=79 Azm= 23  
P 2 283  
Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting with a small strike-slip component. The preferred fault plane is not determined.  
MOMENT TENSOR SOLUTION  
Dep 26 No. of sta: 8  
Principal Axes:  
Scale 10\*\*26 d-cm  
T Val= 1.73 P1g=76 Azm=103  
N 0.02 5 351  
P -1.75 13 260  
Best Double Couple:Mo=1.7\*10\*\*26  
NP1:Strike=343 Dip=32 Slip= 80  
NP2: 174 58 96  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 37C M.W.: 8S, 21C  
Centroid Location:  
Origin Time 23:11: 2.6 0.2  
Lat 1.99N 0.02 Lon 126.64E 0.02  
Dep 34.9 0.8 Half-duration 9.2  
Principal Axes:  
Scale 10\*\*26 D-CM  
T Val= 1.65 P1g=76 Azm=173  
N -0.14 12 24  
P -1.50 7 293  
Best Double Couple:Mo=1.6\*10\*\*26  
NP1:Strike= 9 Dip=39 Slip= 71  
NP2: 213 53 105

10 06 53 04.32 4.275N 32.618W 10km  
5.4mb ( 46 obs.) 5.0Msz ( 11 obs.)  
CENTRAL MID-ATLANTIC RIDGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 29C  
Centroid Location:  
Origin Time 06:53:12.4 0.6  
Lat 4.31N 0.08 Lon 32.49W 0.07  
Dep 15.0 FIX Half-duration 1.8  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.30 P1g= 4 Azm=273  
N 0.11 16 4  
P -1.42 73 171  
Best Double Couple:Mo=1.4\*10\*\*24  
NP1:Strike=347 Dip=44 Slip=-114  
NP2: 198 51 -69

10 18 35 04.92 19.895S 175.776W 233km  
5.3mb ( 40 obs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 22C  
Centroid Location:  
Origin Time 18:35:10.6 0.6  
Lat 19.58S 0.10 Lon 175.69W 0.09  
Dep 226.2 3.6 Half-duration 1.8  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.42 P1g=46 Azm=139  
N -0.12 19 28  
P -1.30 38 283  
Best Double Couple:Mo=1.4\*10\*\*24  
NP1:Strike=312 Dip=20 Slip= 13  
NP2: 210 86 109

11 07 17 59.07 26.079S 132.736E 10km  
5.6mb ( 22 obs.) 5.3Msz ( 4 obs.)  
SOUTH AUSTRALIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 26C  
Centroid Location:  
Origin Time 07:18: 8.7 0.8  
Lat 25.52S 0.10 Lon 132.64E 0.06  
Dep 15.0 FIX Half-duration 1.7  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 0.91 P1g=39 Azm=175  
N 0.53 50 339  
P -1.44 8 78  
Best Double Couple:Mo=1.2\*10\*\*24  
NP1:Strike=209 Dip=57 Slip= 156  
NP2: 313 70 36

11 08 27 46.48 45.987S 166.334E 32km  
5.4mb ( 16 obs.) 5.6Msz ( 5 obs.)  
OFF W. COAST OF S. ISLAND, N.Z.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 36C  
Centroid Location:  
Origin Time 08:27:50.8 0.3  
Lat 46.06S 0.07 Lon 166.09E 0.07  
Dep 15.0 FIX Half-duration 2.2  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 2.71 P1g=59 Azm= 44  
N 0.10 6 144  
P -2.81 31 238  
Best Double Couple:Mo=2.8\*10\*\*24  
NP1:Strike=346 Dip=15 Slip= 113  
NP2: 143 76 84

11 17 02 03.94 24.329N 126.899E 33km  
5.3mb ( 38 obs.) 5.1Msz ( 3 obs.)  
RYUKYU ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 24C  
Centroid Location:  
Origin Time 17:02: 4.2 0.6  
Lat 24.48N 0.07 Lon 126.20E 0.10  
Dep 15.0 FIX Half-duration 1.7  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 14.98 P1g=40 Azm=164  
N -3.02 48 323  
P -11.97 11 65  
Best Double Couple:Mo=1.3\*10\*\*24  
NP1:Strike=196 Dip=54 Slip= 157



NP2: 300 71 38

12 07 54 26.88 29.962N 51.582E 10km  
5.7mb ( 65 obs.) 5.6Msz ( 14 obs.)  
SOUTHERN IRAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 8S, 22C  
Centroid Location:  
Origin Time 07:54:31.1 0.4  
Lat 29.79N 0.04 Lon 51.36E 0.04  
Dep 33.0 FIX Half-duration 2.6  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 4.33 Plg=12 Azm=134  
N -0.42 78 307  
P -3.90 1 43  
Best Double Couple:Mo=4.1\*10\*\*24  
NP1:Strike=178 Dip=81 Slip= 172  
NP2: 269 82 10

12 10 17 25.56 5.575N 125.406E 88km  
5.3mb ( 28 obs.)  
MINDANAO, PHILIPPINE ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 11S, 22C  
Centroid Location:  
Origin Time 10:17:23.7 0.5  
Lat 5.73N 0.06 Lon 125.63E 0.06  
Dep 40.1 5.6 Half-duration 1.8  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.68 Plg=65 Azm=295  
N 0.56 12 178  
P -2.24 21 83  
Best Double Couple:Mo=2.0\*10\*\*24  
NP1:Strike=153 Dip=26 Slip= 62  
NP2: 3 67 103

12 16 05 14.23 1.845N 126.404E 40km  
5.3mb ( 25 obs.) 5.4Msz ( 9 obs.)  
MOLUCCA PASSAGE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 32C  
Centroid Location:  
Origin Time 16:05:17.9 0.5  
Lat 1.51N 0.04 Lon 126.61E 0.04  
Dep 36.2 1.6 Half-duration 3.2  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 7.66 Plg=85 Azm=109  
N 1.27 1 210  
P -8.93 5 300  
Best Double Couple:Mo=8.3\*10\*\*24  
NP1:Strike= 31 Dip=40 Slip= 91  
NP2: 209 50 89

13 09 12 10.71 16.061N 93.901W 80km  
5.9mb ( 72 obs.)  
CHIAPAS, MEXICO  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike=120 Dip=83 Slip= 90  
NP2: 300 7 90  
Principal Axes:  
T Plg=52 Azm= 30  
P 38 210  
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.  
MOMENT TENSOR SOLUTION  
Dep 87 No. of sta: 12  
Principal Axes:  
Scale 10\*\*24 d-cm  
T Val= 8.28 Plg=44 Azm= 46  
N -1.25 14 302  
P -7.03 43 199  
Best Double Couple:Mo=7.7\*10\*\*24  
NP1:Strike=214 Dip=14 Slip= 1  
NP2: 122 90 104  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 9S, 22C  
Centroid Location:  
Origin Time 09:12:11.8 0.2  
Lat 15.92N 0.05 Lon 93.96W 0.04  
Dep 65.8 3.8 Half-duration 3.3  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 8.99 Plg=33 Azm= 41

N -2.18 18 298  
P -6.82 51 185  
Best Double Couple:Mo=7.9\*10\*\*24  
NP1:Strike=179 Dip=20 Slip= -28  
NP2: 295 81 -108

13 13 47 08.20 32.970N 117.870W 10km  
5.6mb ( 73 obs.) 5.8Msz ( 15 obs.)  
CALIFORNIA-MEXICO BORDER REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 6S, 17C  
Centroid Location:  
Origin Time 13:47:10.4 0.4  
Lat 32.74N 0.11 Lon 117.44W 0.05  
Dep 15.0 FIX Half-duration 3.1  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 5.81 Plg=77 Azm=157  
N 1.46 9 293  
P -7.27 9 25  
Best Double Couple:Mo=6.5\*10\*\*24  
NP1:Strike=126 Dip=37 Slip= 106  
NP2: 287 55 78

14 20 14 50.39 12.293N 143.931E 27km  
5.3mb ( 22 obs.) 5.0Msz ( 3 obs.)  
SOUTH OF MARIANA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 9S, 21C  
Centroid Location:  
Origin Time 20:14:54.7 1.3  
Lat 12.22N 0.10 Lon 144.17E 0.10  
Dep 21.6 8.2 Half-duration 1.6  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 9.23 Plg=62 Azm= 0  
N 1.33 15 241  
P -10.56 24 144  
Best Double Couple:Mo=9.9\*10\*\*23  
NP1:Strike=207 Dip=25 Slip= 53  
NP2: 66 70 106

16 12 41 28.32 19.511S 169.165E 111km  
6.2mb ( 63 obs.)  
VANUATU ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 78 Dip=72 Slip= -90  
NP2: 258 18 -90  
Principal Axes:  
T Plg=27 Azm=168  
P 63 348  
Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting. The preferred fault plane is NP1.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 19S, 46C M.W.: 11S, 27C  
Centroid Location:  
Origin Time 12:41:35.2 0.2  
Lat 19.71S 0.01 Lon 169.21E 0.02  
Dep 117.7 0.7 Half-duration 7.1  
Principal Axes:  
Scale 10\*\*25 D-CM  
T Val= 8.86 Plg=19 Azm=162  
N -0.91 3 253  
P -7.96 71 353  
Best Double Couple:Mo=8.4\*10\*\*25  
NP1:Strike=246 Dip=26 Slip= -98  
NP2: 74 64 -86

16 22 03 10.79 31.049N 77.997E 33km  
5.6mb ( 93 obs.) 5.2Msz ( 7 obs.)  
NORTHERN INDIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 10S, 21C  
Centroid Location:  
Origin Time 22:03:12.4 0.8  
Lat 30.48N 0.11 Lon 78.19E 0.12  
Dep 15.0 BDY Half-duration 1.7  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.61 Plg=53 Azm= 79  
N 0.11 14 330  
P -1.71 33 231  
Best Double Couple:Mo=1.7\*10\*\*24  
NP1:Strike=278 Dip=17 Slip= 37  
NP2: 152 80 104

17 14 32 16.77 21.771S 179.515W 597km  
4.8mb ( 16 obs.)  
FIJI ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 8S, 14C  
Centroid Location:  
Origin Time 14:32:18.3 1.4  
Lat 22.06S 0.15 Lon 179.07W 0.14  
Dep 599.0 9.0 Half-duration 1.6  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 8.20 Plg=37 Azm=160  
N 0.48 33 41  
P -8.68 35 283  
Best Double Couple:Mo=8.4\*10\*\*23  
NP1:Strike=313 Dip=33 Slip= 2  
NP2: 221 89 123

17 15 46 37.02 36.668N 71.247E 47km  
5.3mb ( 67 obs.) 5.3Msz ( 2 obs.)  
AFGHANISTAN-USSR BORDER REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 30C  
Centroid Location:  
Origin Time 15:46:46.7 0.3  
Lat 36.47N 0.04 Lon 71.13E 0.04  
Dep 97.2 3.3 Half-duration 2.3  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 2.92 Plg=30 Azm= 61  
N -0.08 46 294  
P -2.84 28 169  
Best Double Couple:Mo=2.9\*10\*\*24  
NP1:Strike=205 Dip=46 Slip= 1  
NP2: 114 89 136

18 15 07 51.75 16.356S 28.502E 17km  
5.5mb ( 55 obs.) 4.6Msz ( 4 obs.)  
ZAMBIA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 31C  
Centroid Location:  
Origin Time 15:07:55.6 0.5  
Lat 16.10S 0.06 Lon 28.36E 0.06  
Dep 15.0 FIX Half-duration 1.6  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 6.62 Plg= 2 Azm=144  
N 2.41 4 54  
P -9.03 85 265  
Best Double Couple:Mo=7.8\*10\*\*23  
NP1:Strike=238 Dip=43 Slip= -84  
NP2: 50 48 -95

18 17 22 38.24 10.770N 69.428W 7km  
5.9mb ( 71 obs.) 4.9Msz ( 11 obs.)  
VENEZUELA  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 30C  
Centroid Location:  
Origin Time 17:22:43.8 0.6  
Lat 10.84N 0.06 Lon 69.24W 0.07  
Dep 15.0 FIX Half-duration 1.9  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.68 Plg=78 Azm= 78  
N 0.21 11 232  
P -1.88 5 323  
Best Double Couple:Mo=1.8\*10\*\*24  
NP1:Strike= 64 Dip=41 Slip= 106  
NP2: 223 51 76

19 04 31 55.97 53.352N 165.882W 33km  
5.5mb ( 96 obs.) 5.1Msz ( 12 obs.)  
FOX ISLANDS, ALEUTIAN ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 35C  
Centroid Location:  
Origin Time 04:31:59.7 0.2  
Lat 53.25N 0.02 Lon 165.76W 0.04  
Dep 56.7 2.1 Half-duration 2.4  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 3.04 Plg=73 Azm=260  
N -0.40 17 96  
P -2.65 4 4  
Best Double Couple:Mo=2.8\*10\*\*24  
NP1:Strike= 77 Dip=43 Slip= 65



P -1.36 4 38  
Best Double Couple:Mo=1.4\*10\*\*24  
NP1:Strike=173 Dip=78 Slip= 173  
NP2: 264 84 12

23 07 35 27.38 61.934S 154.774E 10km  
5.4mb ( 11 obs.) 5.7Msz ( 8 obs.)  
BALLENY ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 37C  
Centroid Location:  
Origin Time 07:35:36.8 0.2  
Lat 61.81S 0.03 Lon 154.31E 0.05  
Dep 15.0 FIX Half-duration 3.2  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 7.67 Plg= 1 Azm=200  
N 0.09 82 101  
P -7.76 8 290  
Best Double Couple:Mo=7.7\*10\*\*24  
NP1:Strike=334 Dip=84 Slip= -5  
NP2: 65 85 -174

25 09 01 32.42 51.247N 176.173W 33km  
5.3mb ( 65 obs.) 5.6Msz ( 15 obs.)  
ANDREANOF ISLANDS, ALEUTIAN IS.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 39C  
Centroid Location:  
Origin Time 09:01:34.7 0.3  
Lat 51.21N 0.03 Lon 175.82W 0.07  
Dep 25.0 2.3 Half-duration 3.0  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 5.90 Plg=66 Azm=328  
N 0.40 1 61  
P -6.30 24 151  
Best Double Couple:Mo=6.1\*10\*\*24  
NP1:Strike=244 Dip=21 Slip= 94  
NP2: 60 69 89

25 23 41 08.64 26.384N 125.917E 22km  
5.6mb ( 46 obs.) 6.2Msz ( 11 obs.)  
NORTHEAST OF TAIWAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 35C  
Centroid Location:  
Origin Time 23:41:11.1 0.2  
Lat 26.29N 0.02 Lon 125.73E 0.03  
Dep 15.0 FIX Half-duration 4.3  
Principal Axes:  
Scale 10\*\*25 D-CM  
T Val= 1.78 Plg= 6 Azm=326  
N 0.00 83 110  
P -1.79 4 236  
Best Double Couple:Mo=1.8\*10\*\*25  
NP1:Strike= 11 Dip=83 Slip= 179  
NP2: 101 89 7

26 20 07 02.68 18.066S 173.202W 33km  
5.2mb ( 30 obs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 7S, 11C  
Centroid Location:  
Origin Time 20:07: 6.7 1.9  
Lat 17.44S 0.55 Lon 172.98W 0.34  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 5.26 Plg= 0 Azm=171  
N -0.54 68 81  
P -4.73 22 261  
Best Double Couple:Mo=5.0\*10\*\*23  
NP1:Strike=303 Dip=74 Slip= -16  
NP2: 38 74 -164

26 20 24 47.88 23.753N 94.177E 27km  
5.2mb ( 57 obs.) 5.1Msz ( 2 obs.)  
BURMA-INDIA BORDER REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 29C  
Centroid Location:  
Origin Time 20:24:55.7 0.5  
Lat 23.86N 0.06 Lon 94.19E 0.05  
Dep 64.9 3.7 Half-duration 1.9  
Principal Axes:  
Scale 10\*\*24 D-CM

T Val= 1.65 Plg=23 Azm=352  
N 0.17 67 179  
P -1.82 2 83  
Best Double Couple:Mo=1.7\*10\*\*24  
NP1:Strike=130 Dip=72 Slip= 15  
NP2: 36 76 162

27 10 43 26.09 25.848S 177.490W 147km  
5.8mb ( 44 obs.)  
SOUTH OF FIJI ISLANDS  
FAULT PLANE SOLUTION: P-Waves  
NP1:Strike= 50 Dip=73 Slip= -39  
NP2: 153 53 -159  
Principal Axes:  
T Plg=13 Azm=106  
P 39 5  
Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a large normal component. The preferred fault plane is not determined.  
MOMENT TENSOR SOLUTION  
Dep 105 Na. of sta: 9  
Principal Axes:  
Scale 10\*\*24 d-cm  
T Val= 7.84 Plg=14 Azm= 96  
N -1.02 42 199  
P -6.82 44 352  
Best Double Couple:Mo=7.3\*10\*\*24  
NP1:Strike=145 Dip=48 Slip= -155  
NP2: 37 72 -45  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 17S, 38C  
Centroid Location:  
Origin Time 10:43:26.6 0.2  
Lat 25.98S 0.02 Lon 177.42W 0.02  
Dep 109.2 1.3 Half-duration 3.3  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 7.19 Plg=29 Azm=106  
N -0.11 42 226  
P -7.08 35 353  
Best Double Couple:Mo=7.1\*10\*\*24  
NP1:Strike=142 Dip=42 Slip= -175  
NP2: 48 87 -48

27 12 58 17.66 33.119S 178.594W 33km  
5.1mb ( 7 obs.) 4.7Msz ( 1 obs.)  
SOUTH OF KERMADEC ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 27C  
Centroid Location:  
Origin Time 12:58:23.6 1.2  
Lat 32.73S 0.09 Lon 178.42W 0.12  
Dep 15.0 FIX Half-duration 1.5  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 7.38 Plg=65 Azm=332  
N 1.76 17 202  
P -9.14 18 106  
Best Double Couple:Mo=8.3\*10\*\*23  
NP1:Strike=171 Dip=31 Slip= 55  
NP2: 30 65 109

28 04 06 50.25 51.599N 174.096W 33km  
5.4mb ( 81 obs.) 4.8Msz ( 12 obs.)  
ANDREANOF ISLANDS, ALEUTIAN IS.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 15S, 31C  
Centroid Location:  
Origin Time 04:06:55.5 0.6  
Lat 52.00N 0.05 Lon 173.91W 0.10  
Dep 38.3 3.8 Half-duration 1.8  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 12.38 Plg=69 Azm=311  
N 2.05 7 60  
P -14.43 20 153  
Best Double Couple:Mo=1.3\*10\*\*24  
NP1:Strike=255 Dip=26 Slip= 107  
NP2: 57 65 82

28 20 29 02.75 33.282S 71.934W 41km  
5.1mb ( 13 obs.) 5.3Msz ( 7 obs.)  
NEAR COAST OF CENTRAL CHILE  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 16S, 32C  
Centroid Location:

Origin Time 20:29: 5.8 0.3  
Lat 33.53S 0.05 Lon 72.47W 0.04  
Dep 18.2 2.1 Half-duration 2.6  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 4.13 Plg=66 Azm= 77  
N 0.21 4 176  
P -4.34 23 267  
Best Double Couple:Mo=4.2\*10\*\*24  
NP1:Strike= 4 Dip=22 Slip= 100  
NP2: 174 68 86

28 21 57 13.05 51.776N 175.301W 33km  
5.4mb ( 70 obs.) 4.9Msz ( 6 obs.)  
ANDREANOF ISLANDS, ALEUTIAN IS.  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 27C  
Centroid Location:  
Origin Time 21:57:19.3 0.6  
Lat 51.93N 0.05 Lon 174.97W 0.08  
Dep 41.0 3.4 Half-duration 1.8  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.78 Plg=70 Azm=307  
N 0.24 6 55  
P -2.03 19 147  
Best Double Couple:Mo=1.9\*10\*\*24  
NP1:Strike=248 Dip=27 Slip= 104  
NP2: 52 64 83

29 08 14 59.51 21.264S 175.544W 110km  
5.4mb ( 21 obs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 13S, 26C  
Centroid Location:  
Origin Time 08:15:11.8 0.7  
Lat 20.67S 0.07 Lon 175.71W 0.08  
Dep 137.1 2.6 Half-duration 1.7  
Principal Axes:  
Scale 10\*\*24 D-CM  
T Val= 1.14 Plg=18 Azm=103  
N 0.24 5 11  
P -1.38 71 265  
Best Double Couple:Mo=1.3\*10\*\*24  
NP1:Strike=202 Dip=28 Slip= -78  
NP2: 8 63 -96

29 11 57 47.53 17.622S 178.517W 560km  
5.1mb ( 30 obs.)  
FIJI ISLANDS REGION  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 12S, 21C  
Centroid Location:  
Origin Time 11:57:53.2 0.8  
Lat 17.56S 0.15 Lon 178.61W 0.11  
Dep 559.7 5.0 Half-duration 1.7  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 8.68 Plg= 5 Azm= 57  
N 1.35 41 152  
P -10.03 49 321  
Best Double Couple:Mo=9.4\*10\*\*23  
NP1:Strike=112 Dip=53 Slip= -144  
NP2: 359 62 -42

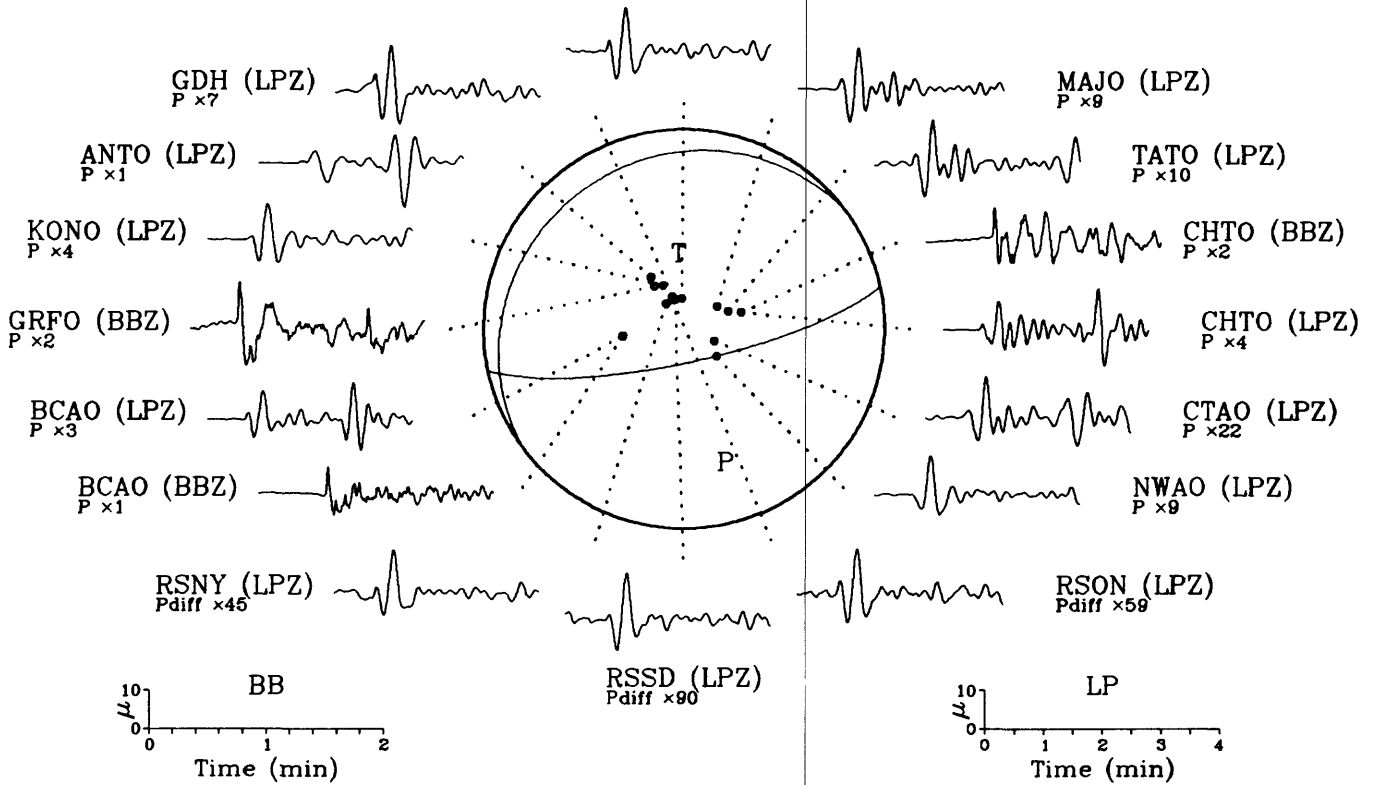
30 04 02 53.45 18.048S 174.864W 174km  
5.0mb ( 25 obs.)  
TONGA ISLANDS  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN  
L.P.B.: 14S, 22C  
Centroid Location:  
Origin Time 04:03: 0.9 0.8  
Lat 17.93S 0.13 Lon 175.21W 0.11  
Dep 196.8 4.4 Half-duration 1.6  
Principal Axes:  
Scale 10\*\*23 D-CM  
T Val= 6.53 Plg=22 Azm= 21  
N 0.74 46 266  
P -7.27 36 129  
Best Double Couple:Mo=6.9\*10\*\*23  
NP1:Strike=160 Dip=47 Slip= -11  
NP2: 258 82 -137

30 11 31 50.19 24.611N 121.782E 33km  
5.6mb ( 57 obs.) 5.6Msz ( 9 obs.)  
TAIWAN  
CENTROID, MOMENT TENSOR (HRV)  
Data Used: GDSN

<p>L.P.B.: 11S, 24C Centroid Location: Origin Time 11:31:50.1 0.4 Lat 24.24N 0.06 Lon 121.40E 0.07 Dep 15.0 FIX Half-duration 2.3 Principal Axes: Scale 10**24 D-CM T Vol= 2.66 Plg= 7 Azm=312 N -0.92 13 43 P -1.74 75 196 Best Double Couple:Mo=2.2*10**24 NP1:Strike=27 Dip=40 Slip=-111 NP2: 233 53 -74</p>	<p>CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 11S, 23C Centroid Location: Origin Time 00:12:45.1 0.9 Lat 52.47S FIX;Lon 18.73E FIX Dep 15.0 FIX Half-duration 1.7 Principal Axes: Scale 10**23 D-CM T Vol= 9.94 Plg=11 Azm=202 N 0.24 4 111 P -10.18 78 3 Best Double Couple:Mo=1.0*10**24 NP1:Strike=296 Dip=34 Slip=-84 NP2: 109 56 -94</p>	<p>5.1mb ( 3 obs.) 5.5Msz ( 3 obs.) SOUTHWEST OF AFRICA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 37C Centroid Location: Origin Time 09:37:33.1 0.4 Lat 52.48S 0.05 Lon 19.10E 0.09 Dep 15.0 FIX Half-duration 2.2 Principal Axes: Scale 10**24 D-CM T Vol= 2.32 Plg= 4 Azm=212 N -0.11 2 302 P -2.21 86 65 Best Double Couple:Mo=2.3*10**24 NP1:Strike=300 Dip=41 Slip=-94 NP2: 124 49 -87</p>
<p>30 21 25 35.42 52.441S 18.180E 10km 5.4mb ( 6 obs.) 4.7Msz ( 1 obs.) SOUTHWEST OF AFRICA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 27C Centroid Location: Origin Time 21:25:42.4 1.0 Lat 52.22S 0.10 Lon 19.08E 0.16 Dep 15.0 FIX Half-duration 1.5 Principal Axes: Scale 10**23 D-CM T Vol= 7.78 Plg=10 Azm=221 N -1.29 0 131 P -6.49 80 41 Best Double Couple:Mo=7.1*10**23 NP1:Strike=311 Dip=35 Slip=-90 NP2: 131 55 -90</p>	<p>31 04 00 20.36 52.515S 18.608E 10km 5.4mb ( 5 obs.) 4.9Msz ( 1 obs.) SOUTHWEST OF AFRICA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 27C Centroid Location: Origin Time 04:00:28.0 0.8 Lat 52.50S 0.08 Lon 18.83E 0.16 Dep 15.0 FIX Half-duration 1.5 Principal Axes: Scale 10**23 D-CM T Vol= 7.70 Plg= 2 Azm= 34 N 0.37 8 125 P -8.07 82 292 Best Double Couple:Mo=7.9*10**23 NP1:Strike=116 Dip=44 Slip=-102 NP2: 312 47 -79</p>	<p>31 11 36 35.45 24.829N 122.761E 33km 5.1mb ( 10 obs.) 5.2Msz ( 2 obs.) TAIWAN REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 21C Centroid Location: Origin Time 11:36:33.3 0.5 Lat 24.61N 0.08 Lon 122.50E 0.12 Dep 20.5 5.8 Half-duration 1.7 Principal Axes: Scale 10**23 D-CM T Vol= 8.41 Plg= 4 Azm= 30 N 1.74 4 299 P -10.15 84 164 Best Double Couple:Mo=9.3*10**23 NP1:Strike=125 Dip=41 Slip=-83 NP2: 296 49 -96</p>
<p>30 22 58 40.47 52.556S 17.927E 10km 5.1mb ( 5 obs.) 5.3Msz ( 3 obs.) SOUTHWEST OF AFRICA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 18S, 39C Centroid Location: Origin Time 22:58:47.7 0.3 Lat 52.44S 0.03 Lon 18.86E 0.09 Dep 15.0 FIX Half-duration 2.6 Principal Axes: Scale 10**24 D-CM T Vol= 4.19 Plg=11 Azm=200 N -0.10 5 291 P -4.09 78 45 Best Double Couple:Mo=4.1*10**24 NP1:Strike=284 Dip=35 Slip=-99 NP2: 114 56 -84</p>	<p>31 07 22 40.21 37.463N 118.374W 5km 5.5mb ( 57 obs.) 5.2Msz ( 6 obs.) CALIFORNIA-NEVADA BORDER REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 10S, 24C Centroid Location: Origin Time 07:22:49.5 1.2 Lat 37.70N 0.09 Lon 118.56W 0.10 Dep 15.0 FIX Half-duration 1.9 Principal Axes: Scale 10**24 D-CM T Vol= 2.11 Plg= 5 Azm=294 N -0.17 61 195 P -1.94 28 27 Best Double Couple:Mo=2.0*10**24 NP1:Strike= 67 Dip=66 Slip=-17 NP2: 164 74 -155</p>	<p>31 19 33 58.42 52.421S 18.099E 10km 5.1mb ( 7 obs.) 4.7Msz ( 2 obs.) SOUTHWEST OF AFRICA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 25C Centroid Location: Origin Time 19:34: 7.7 1.0 Lat 52.20S 0.10 Lon 18.75E 0.21 Dep 15.0 FIX Half-duration 1.5 Principal Axes: Scale 10**23 D-CM T Vol= 8.85 Plg=19 Azm=205 N -0.31 8 112 P -8.55 69 0 Best Double Couple:Mo=8.7*10**23 NP1:Strike=309 Dip=27 Slip=-72 NP2: 108 65 -99</p>
<p>31 00 12 42.59 52.512S 18.494E 10km 5.2mb ( 4 obs.) 5.0Msz ( 1 obs.) SOUTHWEST OF AFRICA</p>	<p>31 09 37 24.02 52.566S 18.430E 10km</p>	

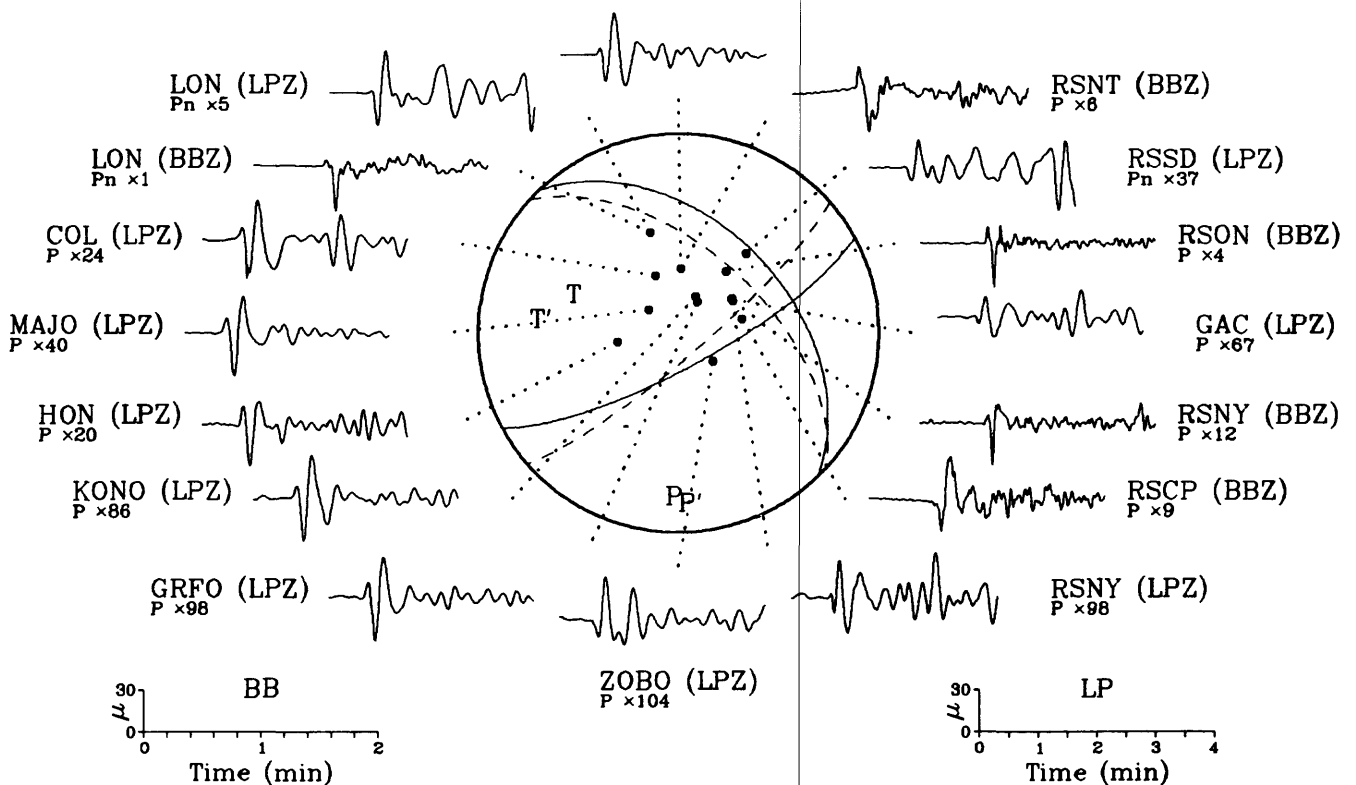
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Carlsberg Ridge

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Pdiff x37

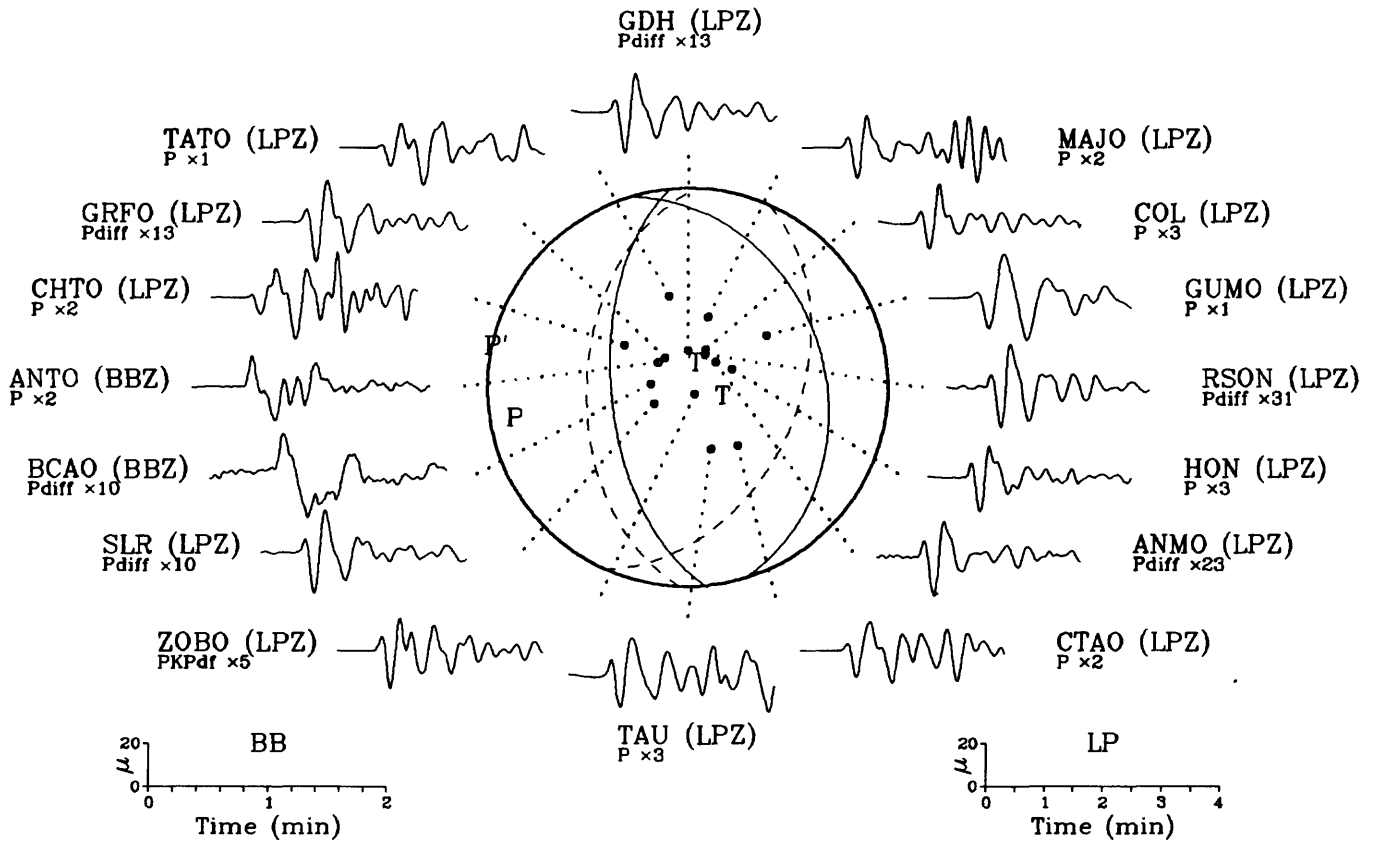


08 July 1986 09:20:44.50  
Southern California

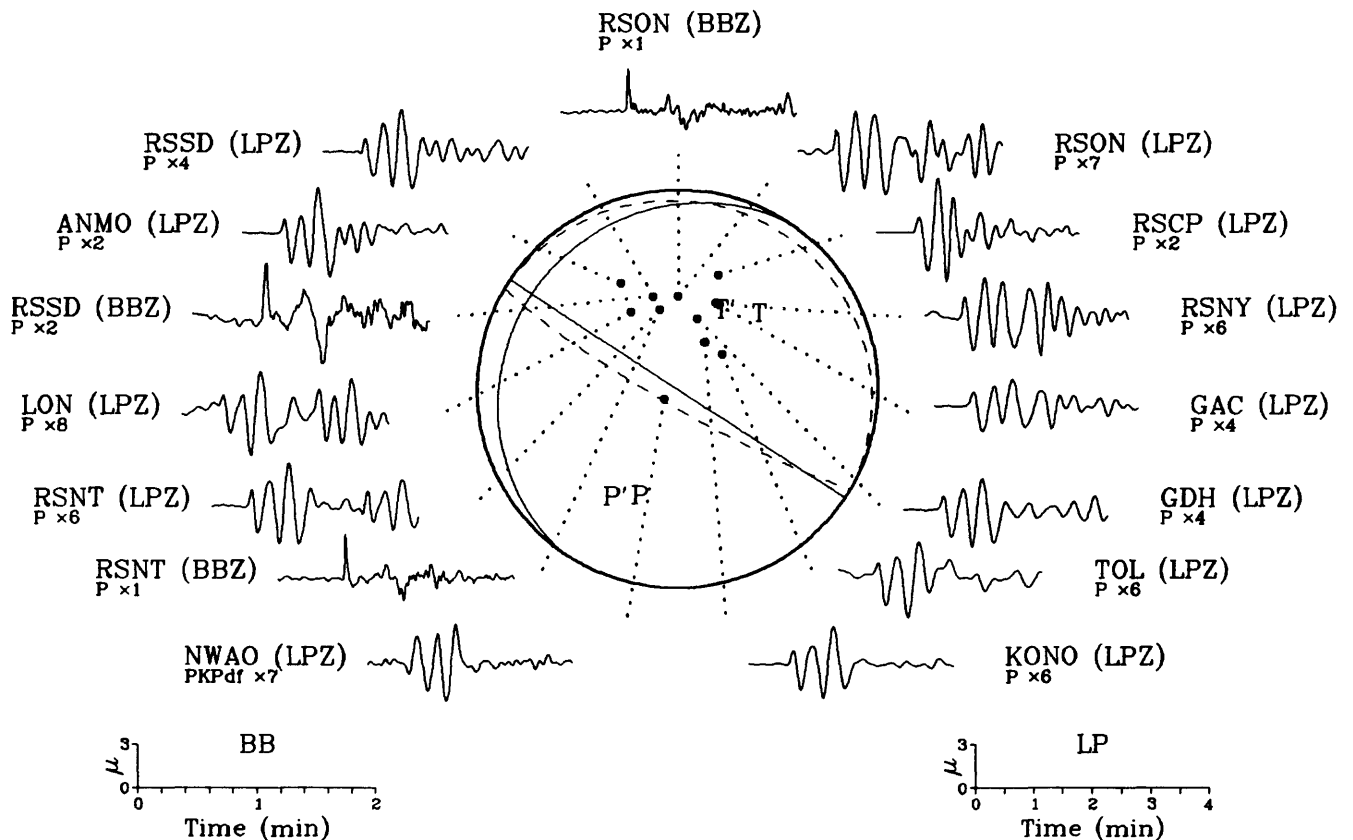
RSNT (LPZ)  
P x17



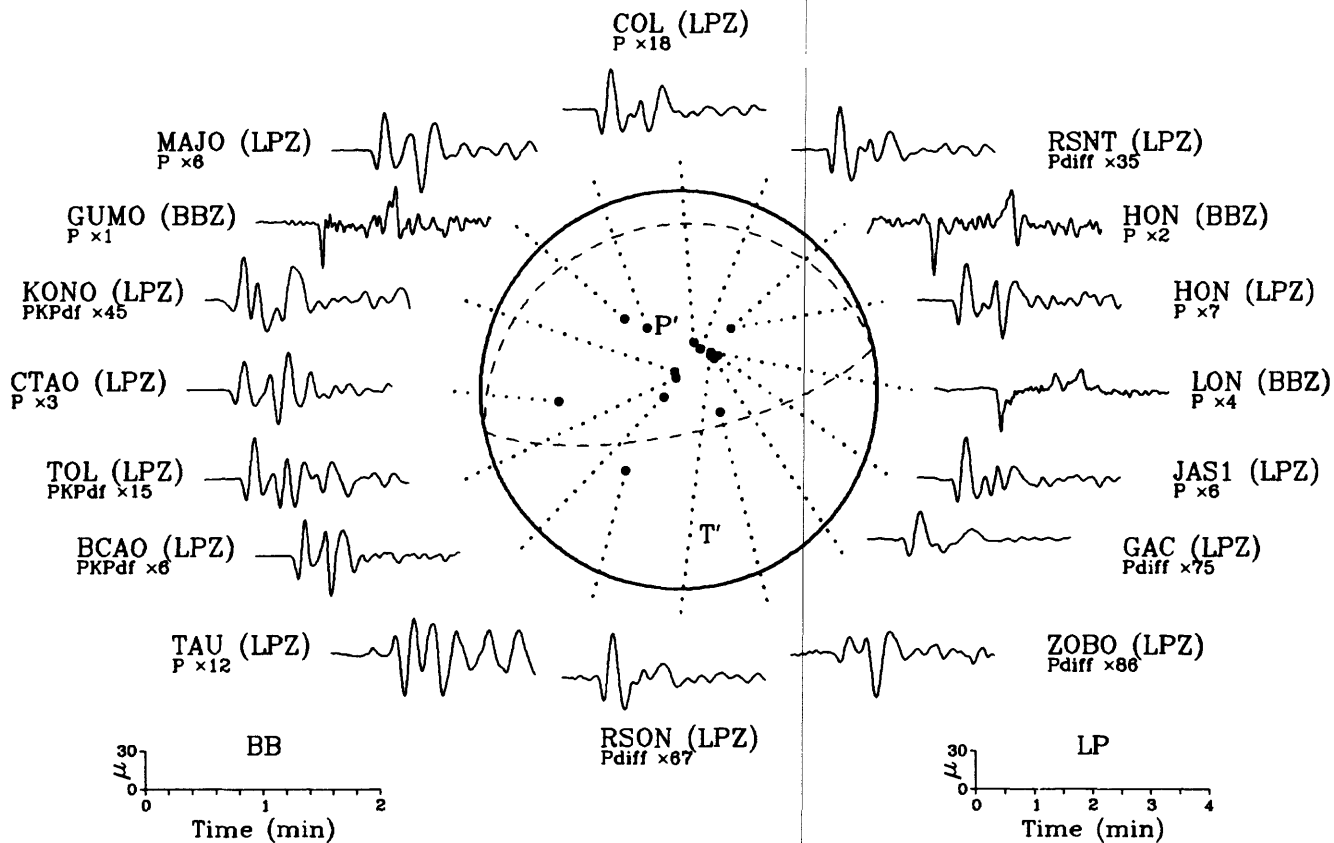
09 July 1986 23:10:53.10  
Molucca Passage



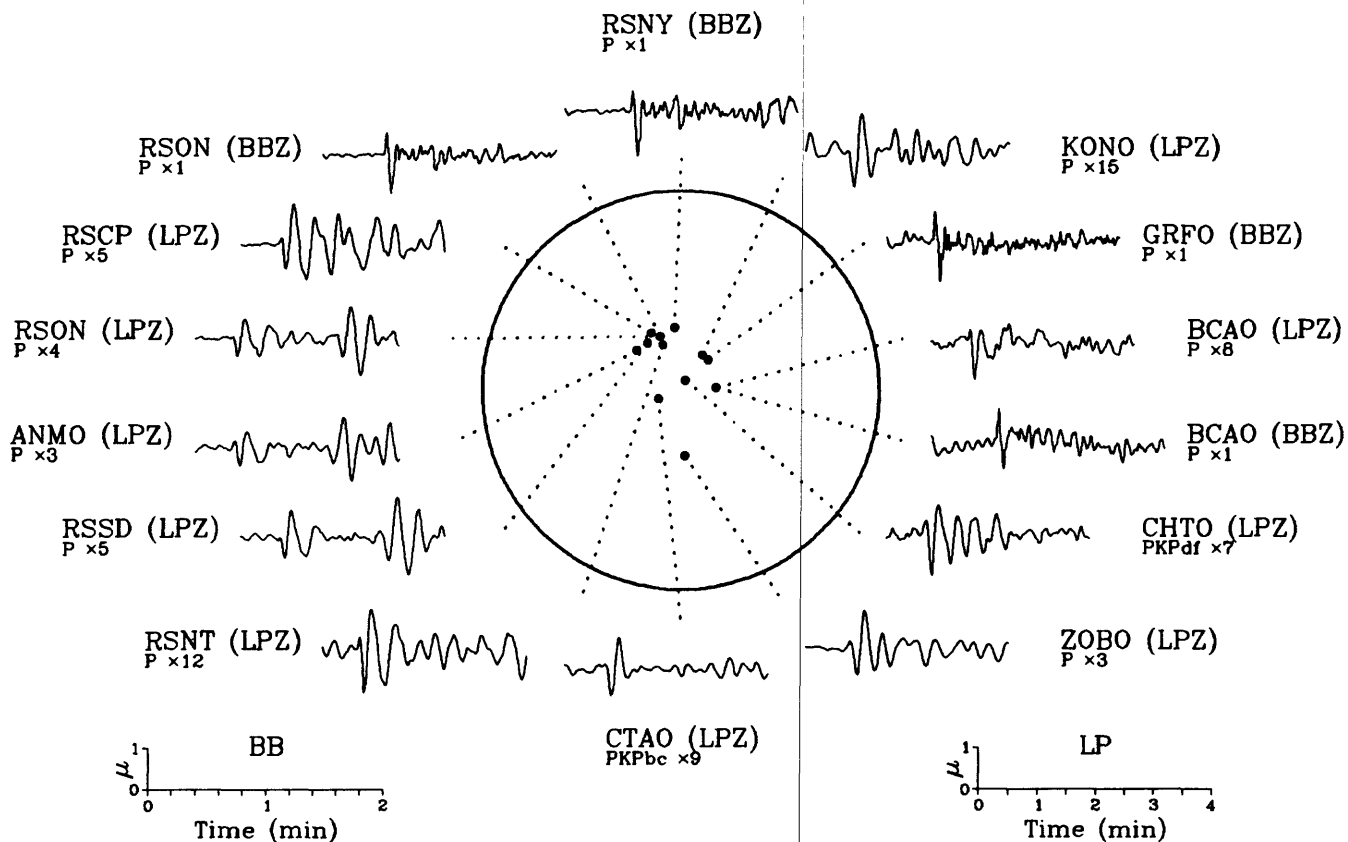
13 July 1986 09:12:10.71  
Chiapas, Mexico



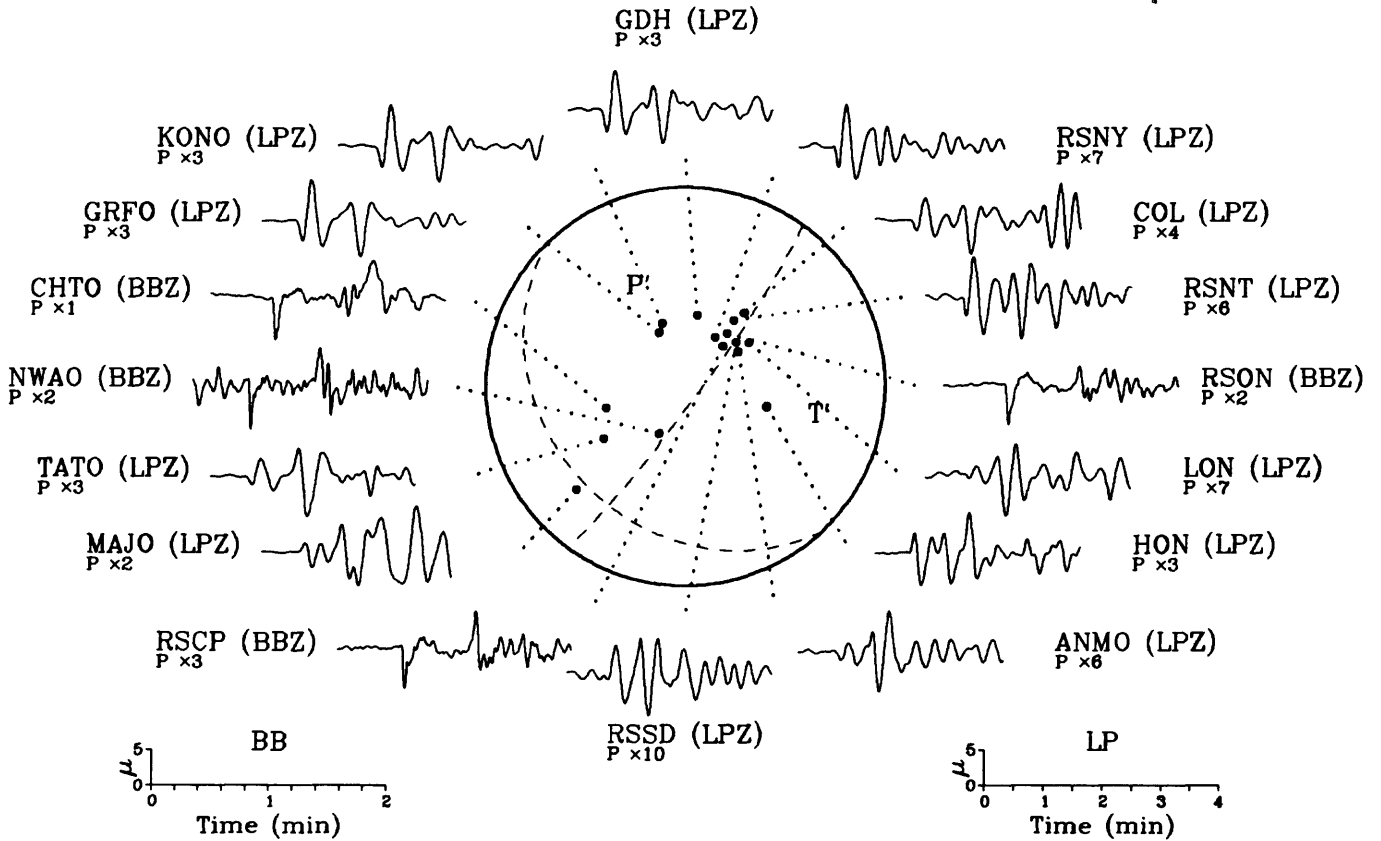
16 July 1986 12:41:28.32  
Vanuatu Islands



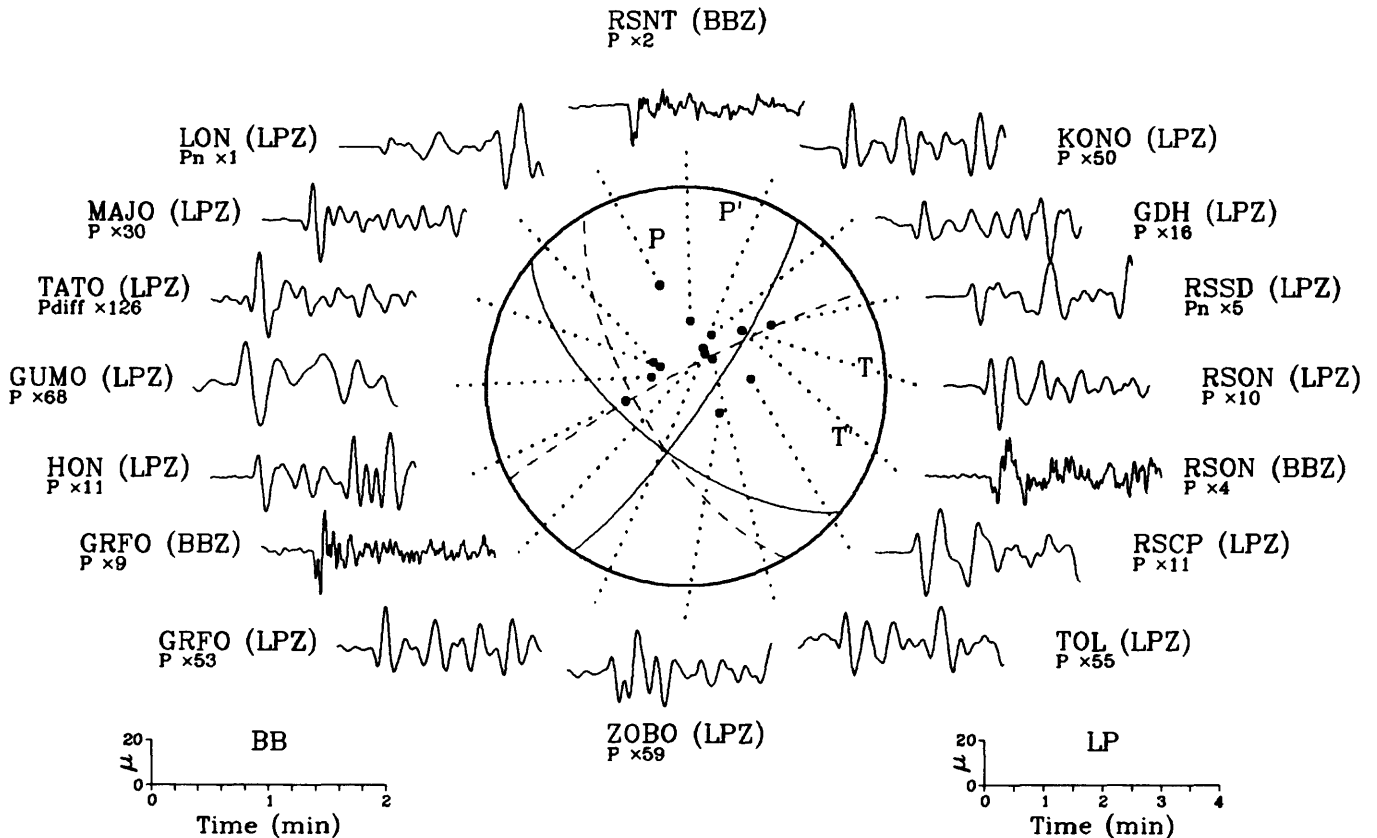
18 July 1986 17:22:38.24  
Venezuela



19 July 1986 05:59:36.21  
Kuril Islands



21 July 1986 14:42:26.60  
California-Nevada Border Region





## EXPLANATION OF ABBREVIATIONS AND SYMBOLS APPEARING IN THIS PUBLICATION

## Abbreviations in Heading

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

## Symbols and Abbreviations Used in Comments

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

Romon Numerals Used to indicate intensity (when not followed by RF or JMA they refer to the Modified Mercalli Scale or any 12-point intensity scale closely related to it).

° ' " Geographic degrees, minutes, seconds.

-P Supplied hypocenter is a preliminary computation.

Any additional 3 to 5 letter codes enclosed in parentheses or angle brackets refer to individual station codes. These codes may be found in Geological Survey Open File Report 85-714, Seismograph Station Codes and Coordinates (1985).

## Symbols Following Depth

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

The lack of any symbol indicates that the 90% marginal confidence interval on depth is less than or equal to 8.5 km, or that a contributed hypocenter was computed with a free depth, regardless of the size of the confidence interval.

## Symbols Following Origin Time

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

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

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

## TRAVEL-TIME TABLES

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

## MACROSEISMIC INFORMATION

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

## DEPTHS FROM BROADBAND DISPLACEMENT SEISMOGRAMS

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

Chay, G. L. and J. Baatwright, The rupture characteristics of two deep earthquakes inferred from broadband GDSN data, *Bull. Seism. Soc. Am.*, 71, 691-711, 1981.

Harvey, D. and G. L. Chay, Broadband deconvolution of GDSN data, *Geophys. J. R. Astr. Soc.*, 69, 659-668, 1982.

## FAULT PLANE SOLUTIONS

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

## NEIS MAGNITUDES

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

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

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

where:

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

T is the period in seconds.

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

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

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

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

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

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

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

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

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

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

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

**ML** These local magnitudes are computed according to the formula:

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

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

## CONTRIBUTED MAGNITUDES

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

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

## REFERENCES

- Gutenberg, B., and Richter, C. F., 1956, Magnitude and energy of earthquakes: *Annali di Geofisica*, v. 9, no. 1, p. 1-15.
- Nuttli, O. W., 1973, Seismic wave attenuation and magnitude relations for eastern North America: *Journal of Geophysical Research*, v. 78, no. 5, p. B76-B85.
- Richter, C. F., 1935, An instrumental earthquake scale: *Bulletin of the Seismological Society of America*, v. 25, p. 1-32.

## WAVEFORM PLOTS

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

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

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

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

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

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

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

## BERKELEY MOMENT

The seismic moment ( $M_0$ ) contributed by the University of California, Berkeley (BRK), is given for regional earthquakes based on Wood-Anderson torsion seismograms recorded within 300 km of the epicenter with peak-to-peak amplitudes of at least 3 mm. This seismic moment ( $M_0$ ) in dyne-cm is defined by  $\log M_0 = 16.74 + 1.22 \log(CD\Delta)$ , where C is the maximum peak-to-peak amplitude in mm, D is the duration in seconds from the time of the S-wave onset to the last time that the peak-to-peak amplitude exceeds  $C/3$ , and  $\Delta$  is the epicentral distance in km.

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

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

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

1. DATA USED; currently both GDSN and IDA data are used. The numbers following the entries L. P. BODY WAVES and MANTLE WAVES indicate the number of stations (S), total number of records (C) and T is the cut-off period of the low pass filter for each of the subsets of data. Mantle waves are routinely used in inversion for sources with moments greater than  $10^{26}$  dyne-cm.
2. CENTROID LOCATION; hypocentral parameters obtained by adding perturbations resulting from inversion to the parameters reported in the PDE; standard errors follow the individual entries. If a given parameter is not perturbed in inversion, this is indicated by the letters FIX. If the depth is fixed to be consistent with waveform matching of reconstructed broad-band body waves, this is indicated by the letters BDY. The default depth for shallow earthquakes is increased to 15 km. in order to improve the stability of solutions; it was 10 km. in 1981-1985.
3. MOMENT TENSOR. The scale factor (e.g.,  $10^{27}$ -CM) is the number by which all subsequent entries related to values of the moment should be multiplied. For the moment tensor we give components in a spherical coordinate system:  $MRR = M_{rr}$ ;  $MTT = M_{\theta\theta}$ ;  $MFF = M_{\phi\phi}$ ;  $MRT = M_{r\theta}$ ;  $MRF = M_{r\phi}$ ;  $MTF = M_{\theta\phi}$ . In another frequently used notation:  $MRR = M_{zz}$ ;  $MTT = M_{xx}$ ;  $MFF = M_{yy}$ ;  $MRT = M_{xz}$ ;  $MRF = -M_{yz}$ ;  $MTF = -M_{xy}$  (see Aki and Richards, 1980, p. 118). The solutions are constrained to have  $MRR + MTT + MFF = 0$ . The values following the entries for the elements of the moment tensor and centroid co-ordinates are standard errors, calculated under the usual assumption of uncorrelated errors in the data. The lateral heterogeneity of the Earth, however, clearly leads to systematic errors, and so the errors listed probably underestimate the true error in the solution.
4. PRINCIPAL AXES; rotation of the moment tensor into the principal axes system. Most of the solutions are predominantly of the double couple type: the largest positive eigenvalue corresponds to the tension axis (T); the usually small, intermediate eigenvalue is associated with the null axis (N); the smallest negative eigenvalue is identified with the compression axis (P). PLG are the plunges and AZM the azimuths of the axes.
5. BEST DOUBLE COUPLE. If the eigenvalue (T) is  $\sigma_1$  and (P) is  $-\sigma_2$ , then the scalar seismic moment is defined as  $M_0 = 1/2(\sigma_1 + \sigma_2)$ . The strike, dip and slip of the first (NP1) and second (NP2) nodal planes are calculated from the directions of the P, T, and N axes. The remainder is a linear-vector dipole (Knopoff and Randall, 1970); in most cases the magnitude of LVD is small. Although all such decompositions are highly non-unique, this particular one is the best in estimating the starting solution for the non-linear, constrained double couple inverse problem. The angles strike, dip, and slip are defined using the convention of Aki and Richards (1980, p. 106) and are the angles designated there as  $\phi$ ,  $\delta$ ,  $\lambda$ , respectively.

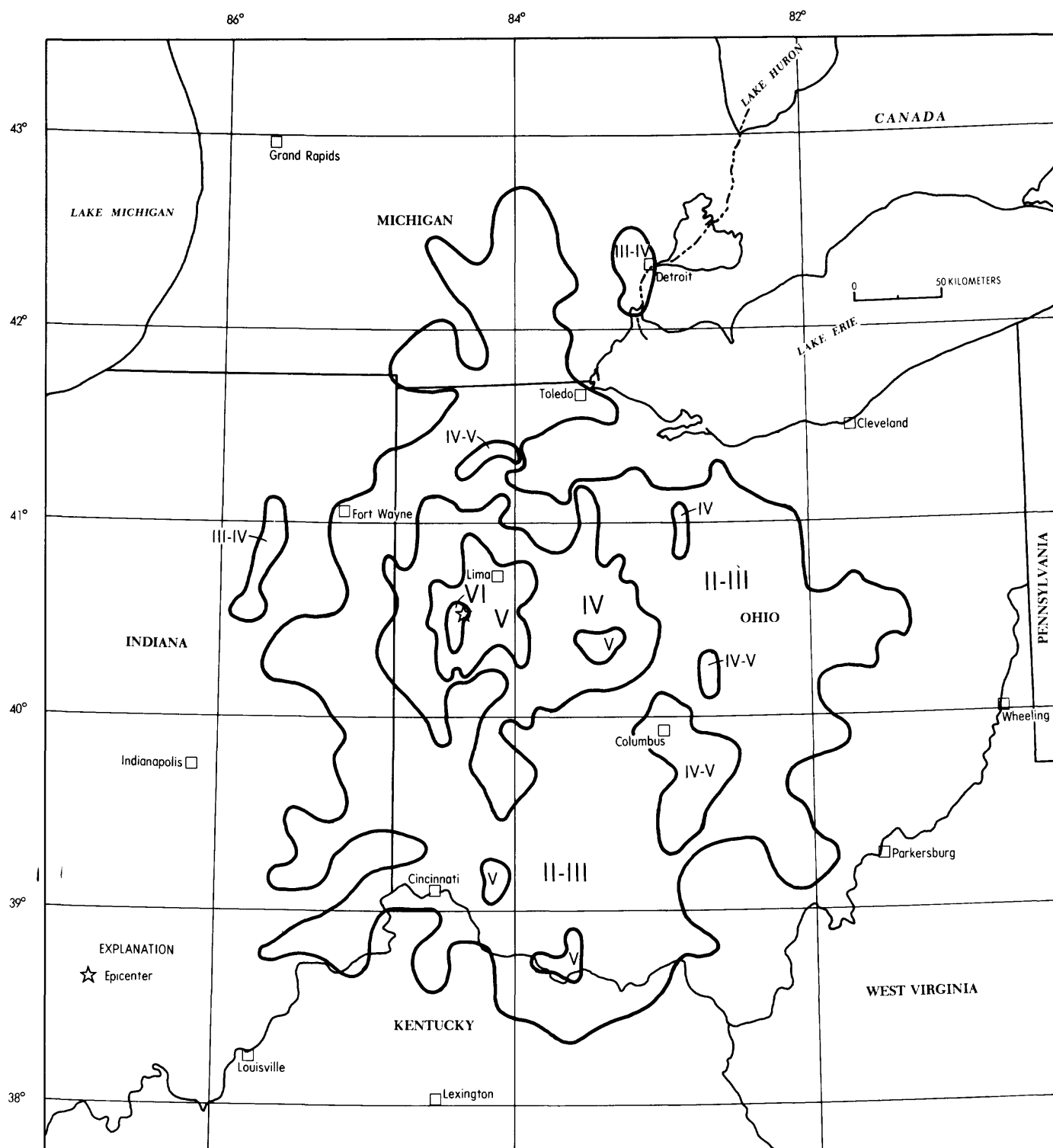
A. M. Dziewonski, G. Ekstrom, J. Fronzen, D. Giardini and J. H. Woodhouse, Department of Geological Sciences, Harvard University, Cambridge, MA 02138

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

Dziewonski, A. M., Chou, T. A., Woodhouse, J. H., Determination of earthquake source parameters from waveform data for studies of global and regional seismicity, *J. Geophys. Res.*, 86, 2825-2852, 1981.

Knopoff, L. and Randall, M. J., The compensated linear-vector dipole: A possible mechanism for deep earthquakes, *J. Geophys. Res.*, 75, 4957-4963, 1970.

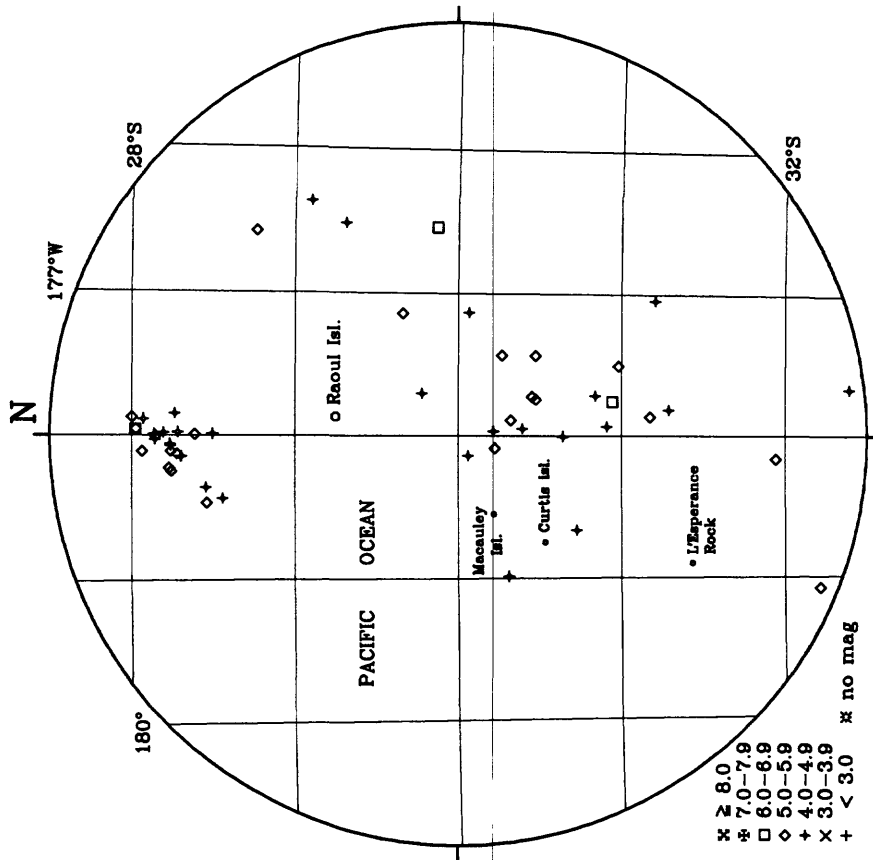
Woodhouse, J. H. and A. M. Dziewonski, Mapping the upper mantle: Three dimensional modelling of earth structure by inversion of seismic waveforms, *J. Geophys. Res.*, 89, 5953-5986, 1984.



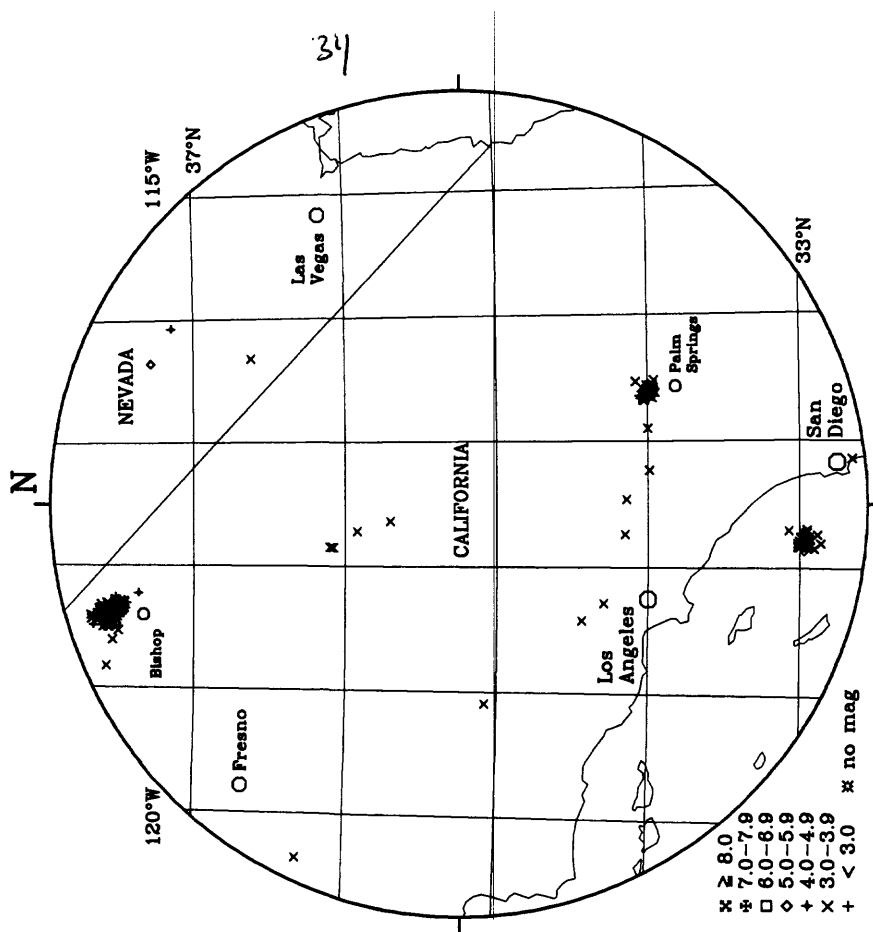
Isoseismal map of the 12 July 1986 Ohio earthquake.

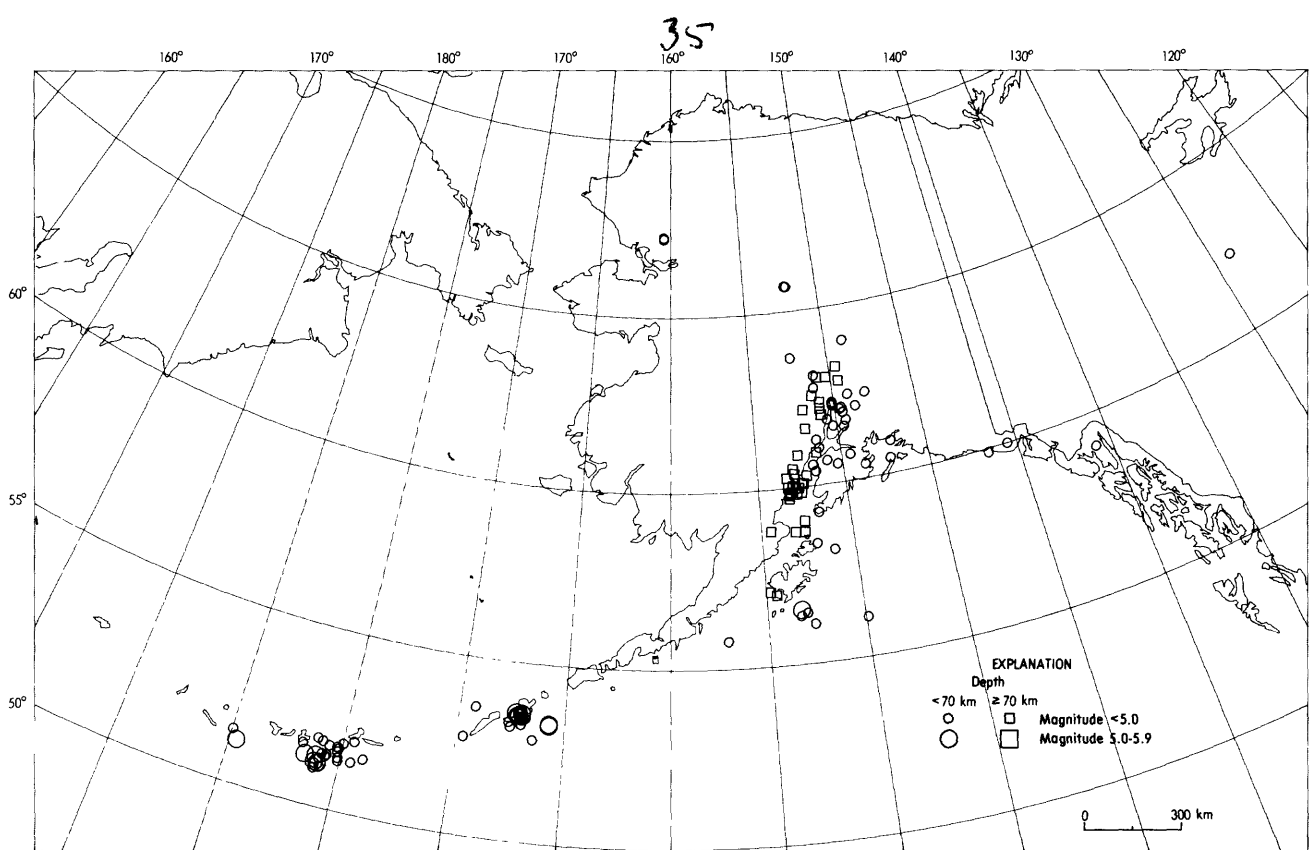
by Carl W. Stover

# Earthquake Epicenters in the Kermadec Islands June and July, 1986



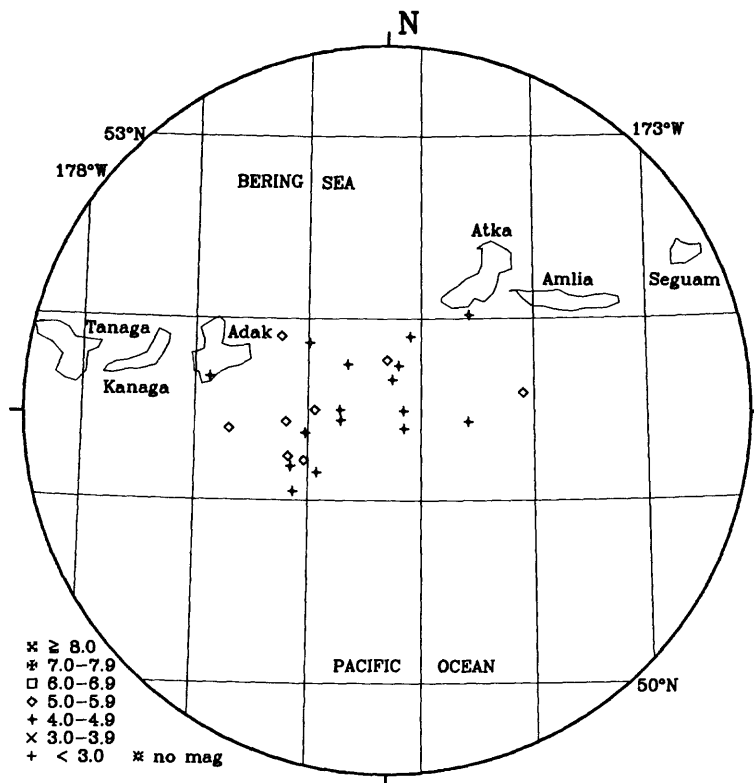
# Earthquake Epicenters in Southern California July, 1986



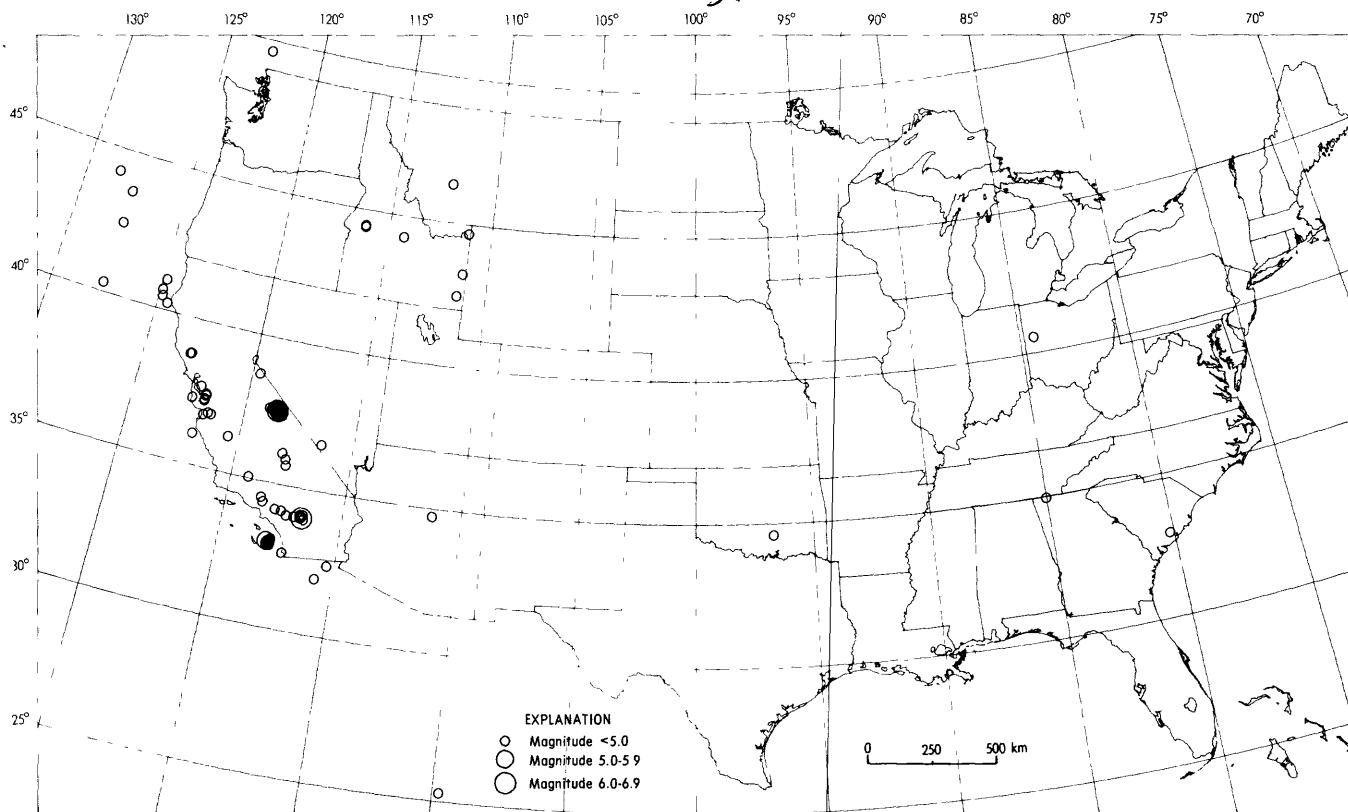


Earthquake epicenters in Alaska and adjacent regions for July, 1986 (C. Stover).

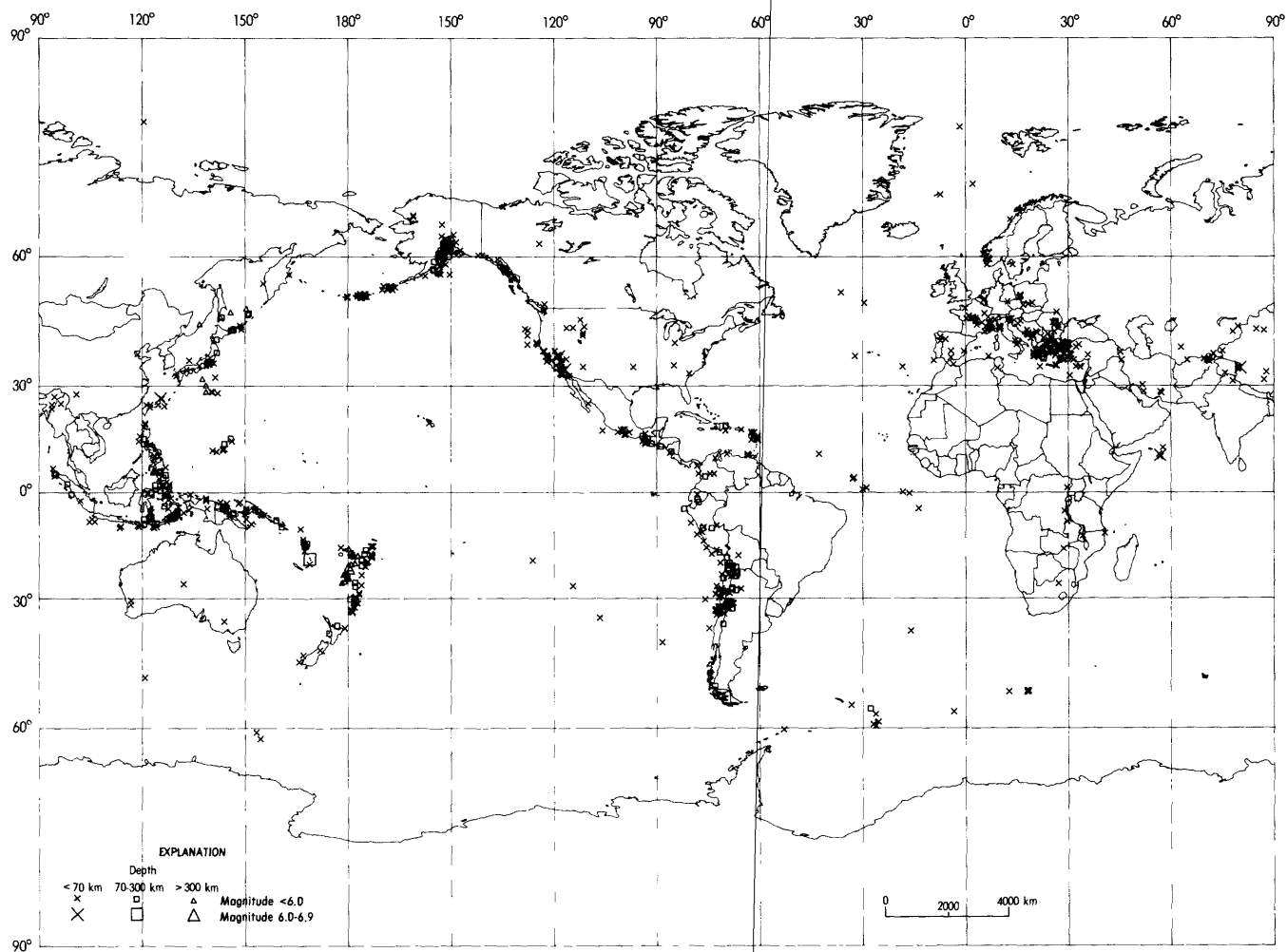
### Earthquake Epicenters in the Andreanof Islands, Alaska, July 1986







Earthquake epicenters in the conterminous United States and adjacent regions for July, 1986 (C. Stover).



Earthquakes located in July, 1986 (C. Stover).