

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PRELIMINARY DETERMINATION OF EPICENTERS
MONTHLY LISTING

JULY - SEPTEMBER, 1987

NATIONAL EARTHQUAKE INFORMATION CENTER

Open File Report

87-786 C



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

1988



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MONTHLY LISTING

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JULY 1987

K E Y	DAY	ORIGIN TIME			GEOGRAPHIC COORDINATES		DEPTH	MAGNITUDES		SD	NO. STA USED	REGION, CONTRIBUTED	MAGNITUDES	AND COMMENTS
		HR	MN	SEC	UTC	LAT		LONG	GS					
01	00	10	47.3*	36.655 N	9.497 E	33 N			1.1	14	TUNISIA			
01	00	58	15.3*	19.782 N	93.072 E	33 N	4.7		0.7	13	BURMA			
01	01	14	26.9*	36.274 S	52.722 E	10 G	4.5		0.9	5	ATLANTIC-INDIAN RISE			
01	08	39	11.6*	54.056 N	162.452 W	33 N	4.6		1.1	22	ALASKA PENINSULA. ML 4.4 (PMR).			
01	08	53	36.8	9.194 S	107.066 E	30 D	5.1		1.2	40	SOUTH OF JAVA			
01	09	02	12.7*	45.753 N	26.253 E	33 N			1.1	5	ROMANIA			
01	10	36	51.6*	18.35 S	64.32 W	33 N			0.6	5	BOLIVIA			
01	10	42	17.8	3.711 S	141.769 E	42 D	5.2 4.8		1.3	85	PAPUA NEW GUINEA			
01	11	10	15.6*	29.28 S	179.15 W	326 *	4.0		1.2	10	KERMADEC ISLANDS REGION			
01	13	06	35.8*	39.537 N	29.398 E	10 G			0.7	5	TURKEY			
01	14	09	43.4*	57.927 N	156.421 W	131 *	4.4		1.6	19	ALASKA PENINSULA			
01	14	21	45.6*	36.678 N	36.067 E	10 G			1.1	7	JORDAN - SYRIA REGION			
01	15	59	16.0*	45.395 N	25.187 E	5 G			1.1	7	ROMANIA			
01	16	49	57.0*	37.227 N	30.366 E	10 G			0.6	5	TURKEY			
01	17	33	09.1*	42.727 N	19.152 E	10 G			1.4	5	YUGOSLAVIA. ML 2.2 (TTG).			
01	17	55	34.8*	33.740 N	119.950 W	6 G				7	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).			
01	17	56	20.8	64.713 N	17.602 W	5 G	4.4 3.5		1.0	48	ICELAND			
01	18	02	50.8*	60.369 S	47.831 W	10 G	4.9		1.4	17	SCOTIA SEA			
01	18	51	03.6*	21.87 S	174.57 W	33 N	4.7		0.8	8	TONGA ISLANDS			
01	19	33	22.4*	32.004 S	178.643 W	53 ?	5.2		1.4	11	SOUTH OF KERMADEC ISLANDS			
01	21	05	23.5*	12.008 S	77.257 W	73	4.4		0.8	17	NEAR COAST OF PERU. Felt (V) at Lima.			
01	21	16	06.5*	40.076 N	27.746 E	10 G			0.5	5	TURKEY			
01	21	29	40.9*	36.505 N	69.397 E	33 N	4.3		0.8	7	HINDU KUSH REGION			
01	21	48	06.6	36.979 N	5.053 W	10 G			1.3	9	STRAIT OF GIBRALTAR. MG 3.5 (MDD).			
01	22	42	34.3*	8.791 S	118.586 E	98 ?	3.6		1.2	10	SUMBAWA ISLAND REGION			
01	22	54	36.4*	8.68 S	129.62 E	188 ?			1.1	7	TIMOR SEA			
02	01	13	12.8*	45.985 N	143.386 E	306 ?	4.5		0.9	41	HOKKAIDO, JAPAN REGION			
02	05	30	44.3*	41.986 N	19.182 E	10 G			0.3	5	ALBANIA. ML 2.2 (TTG).			
02	05	53	31.9*	8.438 N	61.694 W	33 N			1.2	9	VENEZUELA			
02	08	39	01.9*	16.81 S	173.71 W	33 N	4.6 4.5		1.2	22	TONGA ISLANDS			
02	08	44	32.2*	39.608 N	29.436 E	10 G			0.8	6	TURKEY			
02	10	38	30.6*	39.595 N	29.453 E	10 G			1.1	7	TURKEY			
02	10	45	00.6*	17.37 S	179.13 W	562 *	4.4		0.9	20	FIJI ISLANDS REGION			
02	11	03	26.5*	37.932 N	122.040 W	7				18	CENTRAL CALIFORNIA. <BRK>. ML 3.5 (BRK). Ma=3.1*10**14 Nm (BRK). Felt (III) at Alama and Danville. Also felt at Berkeley, Concord, Lafayette, Martinez, Orinda, Pleasant Hill and Walnut Creek.			
02	11	38	56.8	37.343 N	141.797 E	64	4.6		1.2	52	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Fukushima.			
02	12	16	41.0	42.585 N	24.151 E	5 G			1.2	6	BULGARIA			
02	13	10	41.0	43.409 N	148.059 E	31 *	5.3 5.3		0.9	188	KURIL ISLANDS REGION			
02	15	25	06.7*	42.443 N	27.509 E	10 G			1.3	6	BULGARIA			
02	15	38	03.0	30.141 N	108.077 E	45 *	4.2		1.3	19	SICHUAN PROVINCE, CHINA			
02	15	48	11.6*	51.99 N	17.13 E	10 G			1.2	7	POLAND. ML 3.1 (KBA).			
02	16	02	49.3	42.057 N	24.744 E	5 G			1.0	11	BULGARIA			
02	18	12	25.9*	5.701 S	145.565 E	71 ?	3.1		1.2	6	EAST PAPUA NEW GUINEA REGION			
02	19	21	23.6	9.381 S	159.137 E	19	5.0 4.6		0.9	73	SOLOMON ISLANDS. Felt (IV) at Honiara, Guadalcanal.			
02	20	19	59.9*	21.148 S	69.078 W	33 N			1.1	7	NORTHERN CHILE			
02	20	20	35.5*	50.301 N	19.307 E	10 G			0.4	6	POLAND. ML 2.9 (KRA).			
02	20	30	33.9	6.260 S	149.510 E	56 *	4.4		1.2	14	NEW BRITAIN REGION			
03	00	19	35.7	44.127 N	6.073 E	10 G			0.6	8	FRANCE. ML 2.6 (LDG).			
03	01	18	57.5	36.051 N	71.214 E	111 D	5.0		1.5	73	AFGHANISTAN-USSR BORDER REGION. Felt (III) at Ishkashim and Khorog, USSR.			
03	01	44	30.5*	62.059 N	151.095 W	86				32	CENTRAL ALASKA. <AGS-P>.			
03	02	04	17.1*	27.047 S	69.162 W	230 ?			0.5	9	NORTHERN CHILE			
03	04	36	17.8*	24.254 S	67.159 W	209 *			1.3	10	CHILE-ARGENTINA BORDER REGION			
03	04	41	36.3	6.274 S	154.849 E	62	4.8		1.0	26	SOLOMON ISLANDS. Felt (III) at Arawa and Panguna, Bougainville.			

03	05	54	53.9*	36.789 N	9.777 E	10 G	3.6	0.4	6	TUNISIA. Felt at Majaz al Bab.	
03	06	03	13.8?	18.47 S	177.79 W	674 ?	4.6	0.6	14	FIJI ISLANDS REGION	
03	06	50	57.2?	35.95 S	178.62 E	33 N	4.8	0.8	9	OFF E. COAST OF N. ISLAND, N.Z.	
03	06	52	19.1&	33.860 N	116.190 W	5			4	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).	
03	06	52	21.7&	33.860 N	116.180 W	1			3	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).	
03	07	30	32.0&	60.197 N	151.801 W	65			33	KENAI PENINSULA, ALASKA. <AGS-P>.	
03	07	43	34.5	35.639 S	179.259 E	37 D	4.9	1.4	14	OFF E. COAST OF N. ISLAND, N.Z.	
03	08	26	58.5*	7.115 S	129.814 E	157 ?	4.3	1.3	16	BANDA SEA	
03	09	52	57.3	24.066 N	108.788 W	10 G	5.1	4.7	1.2	90	GULF OF CALIFORNIA
03	10	10	43.7	31.196 N	130.322 E	168	5.8	0.9	402	KYUSHU, JAPAN. mb 6.1 (BRK). Felt (II JMA) at Kagoshima and Miyazaki; (I JMA) at Kumamoto, Saga, Kochi and Takushima.	
03	10	21	57.9	43.254 N	13.936 E	12	5.1	1.2	219	CENTRAL ITALY. MD 5.3 (TTG), 4.9 (ROM). ML 4.8 (LDG). Damage (VII) at Porto San Giorgio and Fermo. Felt strongly at Chieti, Sulmona and Avezzano. Also felt at Rome.	
03	10	42	29.5	43.564 N	13.459 E	10 G		1.1	21	CENTRAL ITALY. ML 3.6 (LDG), 3.2 (KBA). MD 3.4 (TRI).	
03	10	46	56.3	45.376 N	7.632 E	4		0.9	61	NORTHERN ITALY. ML 4.2 (LDG). MD 4.0 (TRI). Felt (V) in Torino Province.	
03	11	23	48.3	37.784 N	15.197 E	10 G		0.7	8	SICILY. MD 3.0 (ROM).	
03	11	36	36.4?	42.78 N	24.49 E	10 G		1.4	8	BULGARIA	
03	11	55	25.1	43.257 N	13.849 E	24		1.3	70	CENTRAL ITALY. ML 4.1 (LDG), 4.0 (KBA). MD 3.9 (TRI), 3.7 (ROM). Felt (V) at Porto San Giorgia.	
03	12	02	01.6*	21.619 S	67.663 W	33 N		1.0	8	CHILE-BOLIVIA BORDER REGION	
03	12	53	25.2	41.870 N	19.635 E	10 G		0.6	10	ALBANIA. MD 3.0 (TTG).	
03	12	55	31.6?	23.78 N	108.79 W	10 G	3.9	1.3	17	GULF OF CALIFORNIA	
03	13	54	01.3	43.312 N	13.862 E	10 G		0.5	10	CENTRAL ITALY. ML 3.1 (KBA).	
03	13	58	56.3?	10.79 N	126.27 E	10 G	4.5	1.5	9	PHILIPPINE ISLANDS REGION	
03	14	14	53.6	10.794 S	166.091 E	194 *	4.9	0.9	28	SANTA CRUZ ISLANDS	
03	15	05	34.1	24.027 N	108.813 W	10 G	5.0	5.0	1.1	70	GULF OF CALIFORNIA. Ms 5.2 (PAS), 5.1 (BRK).
03	16	51	00.4*	9.442 S	107.818 E	33 N	4.6	1.4	11	SOUTH OF JAVA	
03	17	38	03.0	43.265 N	13.896 E	10 G	3.8	1.2	109	CENTRAL ITALY. ML 4.4 (LDG), 3.9 (TTG). MD 4.3 (TRI).	
03	17	54	13.7?	8.33 S	123.50 E	215 *	4.5	1.0	13	FLORES ISLAND REGION	
03	18	03	59.7	6.786 S	72.247 E	26 D	5.3	5.4	0.9	231	CHAGOS ARCHIPELAGO REGION. Felt (III) on Diego Garcia.
03	19	30	11.6	43.305 N	13.771 E	10 G		1.3	34	CENTRAL ITALY. ML 3.6 (LDG), 3.3 (KBA). MD 3.5 (TRI).	
03	20	44	47.3	4.560 S	138.990 E	34	5.1	0.9	71	WEST IRIAN	
03	21	10	03.1	43.348 N	13.811 E	14		1.2	21	CENTRAL ITALY. ML 3.3 (LDG). MD 3.3 (TRI).	
03	21	10	03.1	43.310 N	13.853 E	10 G		0.8	9	CENTRAL ITALY. MD 3.3 (TRI).	
03	21	20	07.7*	6.725 S	146.626 E	41 *	3.6	1.3	9	EAST PAPUA NEW GUINEA REGION	
03	22	04	50.8*	43.864 N	147.637 E	33 N	4.7	4.4	1.2	52	KURIL ISLANDS
03	22	07	08.4*	43.510 N	147.732 E	38 D	4.7	0.9	33	KURIL ISLANDS	
03	22	23	42.8?	2.31 N	128.50 E	33 N	4.2	1.5	8	HALMAHERA	
03	22	39	21.5*	41.803 N	126.259 W	10 G	4.3	0.4	10	OFF COAST OF NORTHERN CALIFORNIA. ML 3.4 (BRK).	
03	22	58	29.5	40.991 S	178.507 E	32 D	5.3	1.2	44	OFF E. COAST OF N. ISLAND, N.Z.	
04	00	10	36.4&	40.900 N	125.400 W	5 G			8	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.0 (BRK).	
04	00	17	18.9*	43.640 N	147.820 E	38 D	4.8	1.1	69	KURIL ISLANDS	
04	01	25	10.9&	41.812 N	125.942 W	5 G	4.0		14	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.8 (BRK).	
04	02	15	20.9	37.061 N	142.219 E	33 N	4.6	1.1	22	OFF EAST COAST OF HONSHU, JAPAN	
04	03	12	33.2	43.505 N	147.912 E	39 D	4.9	4.7	1.1	82	KURIL ISLANDS
04	03	17	49.1?	35.30 S	179.97 E	33 N	4.9	1.3	11	OFF E. COAST OF N. ISLAND, N.Z.	
04	04	31	52.8*	33.808 S	71.731 W	10 G		0.7	9	NEAR COAST OF CENTRAL CHILE	
04	05	29	56.7	45.341 N	7.208 E	10 G		1.4	7	NORTHERN ITALY. ML 2.6 (LDG).	
04	05	34	33.9	3.652 S	141.661 E	33 N	4.7	1.0	22	PAPUA NEW GUINEA	
04	07	07	30.0	14.840 S	167.260 E	165 *	5.0	1.0	54	VANUATU ISLANDS	
04	08	39	38.5	38.498 N	12.392 E	5 G		1.1	15	SICILY. MD 3.2 (ROM).	
04	10	29	45.0*	14.491 N	93.384 W	33 N	4.6	1.1	31	NEAR COAST OF CHIAPAS, MEXICO	
04	10	39	19.7*	13.104 N	144.290 E	33 N	4.9	0.5	7	MARIANA ISLANDS. Felt (III) on Guam.	
04	12	08	11.2%	41.650 N	13.874 E	33 N		1.7	9	SOUTHERN ITALY	
04	13	35	25.9	14.213 S	167.005 E	262 *	4.7	0.8	35	VANUATU ISLANDS	
04	15	14	21.7	43.567 N	147.776 E	43 D	4.9	0.9	49	KURIL ISLANDS	
04	15	31	41.4	43.488 N	147.913 E	48 D	4.9	5.4	1.1	99	KURIL ISLANDS
04	15	33	25.6	42.547 N	19.360 E	10 G		1.0	11	YUGOSLAVIA. ML 2.4 (TTG).	
04	15	34	02.7*	43.784 N	147.576 E	42 D	4.9	5.2	1.2	45	KURIL ISLANDS
04	17	16	52.1	10.898 N	62.159 W	78	4.7	1.2	51	NEAR COAST OF VENEZUELA. Felt widely on Trinidad.	
04	17	59	37.9	3.372 S	147.116 E	10 G	5.0	4.6	1.1	28	BISMARCK SEA
04	18	01	31.4	26.062 S	27.962 E	5 G		0.9	7	REPUBLIC OF SOUTH AFRICA. MG 3.9 (BUL).	
04	18	17	32.4	3.312 S	146.904 E	10 G	5.2	4.6	1.3	33	BISMARCK SEA
04	19	07	33.2?	36.63 N	71.01 E	179 ?	4.2	1.4	11	AFGHANISTAN-USSR BORDER REGION	
04	20	28	13.9%	40.110 N	27.803 E	10 G		0.2	6	TURKEY	
04	20	45	06.3	10.193 N	126.568 E	33 N	4.7	1.3	46	PHILIPPINE ISLANDS REGION	
04	21	25	50.0%	42.541 N	19.414 E	10 G		0.2	6	YUGOSLAVIA. ML 1.9 (TTG).	
04	21	32	14.4*	7.500 S	155.637 E	121 *	3.6	1.2	8	SOLOMON ISLANDS	
04	21	34	18.4	43.430 N	147.874 E	38 D	4.7	5.1	1.1	64	KURIL ISLANDS
04	00	06	10.8	51.465 N	174.690 W	33 N	5.1	4.9	1.0	137	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.3 (PMR). Ms 4.9 (BRK).
05	00	17	47.8%	40.678 N	29.226 E	10 G		0.8	6	TURKEY	
05	00	28	41.4*	19.264 S	67.026 W	261 *	4.6	1.1	11	SOUTHERN BOLIVIA	
05	01	56	26.3?	22.57 S	179.77 W	572 ?	4.3	0.9	15	SOUTH OF FIJI ISLANDS	
05	02	17	06.9?	16.38 S	74.14 W	33 N	4.7	0.9	10	TONGA ISLANDS	
05	02	37	09.3&	44.657 N	175.558 W	5			4	NEW YORK. <OTT-P>. mbLg 2.9 (OTT). Felt in the Ogdensburg area.	
05	02	42	14.3	30.129 N	131.034 E	51	4.8	1.1	64	KYUSHU, JAPAN	
05	03	30	42.0%	36.364 N	6.023 W	10 G		1.5	7	STRAIT OF GIBRALTAR	
05	03	50	54.0*	41.079 N	25.425 E	10 G		1.2	6	GREECE-BULGARIA BORDER REGION	
05	04	54	44.4*	14.293 S	73.842 W	13	5.0	0.9	8	PERU	
05	04	57	04.0&	33.180 N	115.650 W	2			4	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).	
05	05	28	39.8	31.804 S	116.368 E	10 G		0.3	6	WESTERN AUSTRALIA	
05	05	39	31.9*	51.249 N	178.484 W	33 N	4.6	1.3	19	ANDREANOF ISLANDS, ALEUTIAN IS.	
05	06	21	56.9%	42.519 N	19.425 E	10 G		0.6	5	YUGOSLAVIA. ML 1.9 (TTG).	
05	07	11	17.6	43.758 N	12.244 E	7		1.1	35	CENTRAL ITALY. ML 3.4 (LDG). MD 3.5 (TRI).	
05	07	13	06.9*	6.462 S	149.549 E	33 N	4.5	1.3	13	NEW BRITAIN REGION. ML 4.5 (PMG).	
05	07	43	05.7	37.671 N	58.446 E	33 N	4.8	0.9	50	IRAN-USSR BORDER REGION. Felt (V) at Ashkhabad, USSR.	
05	07	50	23.2*	14.927 S	168.115 E	33 N	4.3	4.0	1.2	20	VANUATU ISLANDS

05	08 00 23.2	43.751 N	12.294 E	10 G			1.1	8	CENTRAL ITALY
05	08 34 02.6*	5.455 S	102.591 E	33 N	4.8		1.0	9	SOUTHERN SUMATERA
a	05 09 23 00.0	51.486 N	174.660 W	33 N		5.5 5.2	1.0	250	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.4 (PMR). Ms 5.1 (BRK). Felt (II) on Adak and Atka.
05	10 44 50.5*	33.393 S	70.391 W	107 ?			1.0	13	CHILE-ARGENTINA BORDER REGION
05	10 53 15.4	43.797 N	12.239 E	18			1.0	23	CENTRAL ITALY. ML 3.1 (LDG).
05	11 14 29.4*	43.354 N	147.936 E	42 D	4.5		0.8	19	KURIL ISLANDS
05	12 33 29.2&	59.557 N	152.940 W	99				36	SOUTHERN ALASKA. <AGS-P>.
05	12 47 05.7	56.886 S	67.051 W	10 G	5.2 4.2		1.1	44	DRAKE PASSAGE
05	13 12 36.8	43.785 N	12.227 E	11	4.5		1.1	114	CENTRAL ITALY. ML 4.5 (VKA), 4.5 (TTG), 4.4 (LDG). MD 4.3 (ROM), 4.3 (TRI). Felt at Firenze, Cesena and Pesaro.
05	13 43 00.3?	51.61 N	16.35 E	10 G			0.5	7	POLAND. MG 2.7 (KRA).
05	13 44 05.2?	43.92 N	147.48 E	36 D	4.8		1.1	22	KURIL ISLANDS
05	13 57 22.9*	43.815 N	147.517 E	36 D	4.5 4.2		0.8	26	KURIL ISLANDS
05	14 58 06.2&	62.599 N	149.832 W	75				44	CENTRAL ALASKA. <AGS-P>. Felt (II) at Talkeetna.
05	15 27 28.2	43.335 N	147.944 E	40 D	4.9		0.9	81	KURIL ISLANDS
05	15 54 19.4*	43.212 N	147.883 E	33 N	4.5		1.5	23	KURIL ISLANDS
05	16 23 53.5?	18.92 N	145.81 E	232 *	4.4		0.3	7	MARIANA ISLANDS
05	17 17 55.3	43.779 N	12.326 E	10 G			1.0	20	CENTRAL ITALY. ML 3.1 (KBA).
05	17 45 29.9	43.487 N	147.897 E	35 D	4.8		0.9	77	KURIL ISLANDS
05	18 18 55.3	16.695 N	98.484 W	33 N	4.6		0.7	43	NEAR COAST OF GUERRERO, MEXICO
05	19 39 44.2*	15.664 S	174.922 W	234 ?	4.7		1.0	41	TONGA ISLANDS
05	20 06 50.4*	36.802 S	177.499 E	166 *	4.8		1.2	14	OFF E. COAST OF N. ISLAND, N.Z.
05	23 04 11.1*	43.905 N	147.443 E	33 N	4.7		1.2	27	KURIL ISLANDS
05	23 08 15.6?	48.46 S	165.73 E	33 N	4.2		1.3	8	OFF W. COAST OF S. ISLAND, N.Z.
05	23 14 24.0	41.441 N	23.282 E	10 G			1.2	20	GREECE-BULGARIA BORDER REGION. ML 2.5 (SKO).
05	23 54 17.2	43.282 N	13.866 E	10 G	4.0		1.2	101	CENTRAL ITALY. ML 4.4 (KBA), 4.2 (LDG). MD 4.2 (TRI), 4.0 (TTG).
a	06 00 23 25.6	51.508 N	174.721 W	33 N		5.8 5.5	1.0	349	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.8 (PMR), Ms 5.7 (BRK). Felt (III) on Adak and Atka.
06	00 25 53.2*	51.763 N	174.586 W	33 N	5.1		0.4	28	ANDREANOF ISLANDS, ALEUTIAN IS.
06	00 44 09.1?	15.25 N	60.43 W	33 N			0.6	7	LEEWARD ISLANDS. ML 2.6 (FDI).
a	06 01 06 07.6	26.999 S	108.285 W	10 G		6.2 6.3	1.1	291	EASTER ISLAND REGION. Ms 6.3 (BRK), 5.7 (PAS). Felt (III) on Easter Island.
06	01 07 22.0?	50.82 N	174.85 W	33 N	4.3		1.6	21	ANDREANOF ISLANDS, ALEUTIAN IS.
06	02 23 46.3&	33.980 N	116.650 W	7 G				7	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS). Felt in the Palm Springs area.
06	02 32 06.1?	51.67 N	174.61 W	33 N	4.2		0.7	8	ANDREANOF ISLANDS, ALEUTIAN IS.
a	06 02 49 42.7	14.074 S	167.828 E	48		5.9 6.6	1.0	304	VANUATU ISLANDS. Ms 7.1 (BRK), 6.5 (PAS). Felt strongly on the Banks Islands. A small local tsunami was reported.
06	03 05 00.3	13.994 S	167.781 E	46		5.7	1.0	181	VANUATU ISLANDS. Felt on the Banks Islands.
06	03 37 23.9	43.256 N	13.924 E	11			1.1	30	CENTRAL ITALY. ML 3.5 (KBA).
06	03 47 54.2&	19.310 N	155.219 W	10				45	HAWAII. <HVO-P>. ML 3.8 (HVO). Felt in the southeastern part of the island.
06	04 14 09.8	53.830 N	167.132 W	33 N	4.7		1.0	51	FOX ISLANDS, ALEUTIAN ISLANDS
06	04 32 22.8?	41.16 N	1.10 W	10 G			1.2	5	SPAIN. MG 3.5 (MDD).
06	05 26 18.1	6.052 S	150.759 E	44 *	5.1		1.0	30	NEW BRITAIN REGION
06	05 36 14.8	13.915 S	167.724 E	33 N	5.4		1.0	96	VANUATU ISLANDS
06	05 55 16.7	51.408 N	174.564 W	33 N	5.2		1.0	136	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.0 (PMR).
06	06 04 54.6	38.409 N	13.000 E	10 G			1.2	11	SICILY. MD 3.7 (ROM). Felt at Palermo.
06	06 26 44.3	42.433 N	17.360 E	10 G			0.9	14	ADRIATIC SEA. MD 3.4 (TRI), 3.2 (TTG).
06	06 34 29.4	42.531 N	19.392 E	16			1.0	21	YUGOSLAVIA. MD 4.3 (TRI), 3.7 (TTG). Felt (V) in the Krzonja area and (IV) at Titograd.
06	06 51 50.7?	10.13 N	126.60 E	33 N	4.7		1.4	11	PHILIPPINE ISLANDS REGION
06	07 49 56.6?	39.556 N	29.014 E	10 G			0.3	5	TURKEY
06	08 44 27.8	10.166 N	126.407 E	33 N	4.8		1.2	31	PHILIPPINE ISLANDS REGION
06	08 57 49.8*	55.498 N	162.292 E	33 N	4.6		0.9	18	NEAR EAST COAST OF KAMCHATKA
06	09 19 14.1*	4.281 S	152.806 E	38 *	4.5		1.4	13	NEW BRITAIN REGION
06	10 02 45.5&	57.441 N	148.426 W	40				22	GULF OF ALASKA. <AGS-P>.
06	10 03 55.6*	47.222 N	9.585 E	5 G			1.5	11	GERMANY
06	10 44 58.4	43.161 N	13.754 E	10 G			1.5	8	CENTRAL ITALY. MD 3.2 (TRI).
06	11 51 36.7?	5.79 S	130.48 E	33 N	4.1		1.5	10	BANDA SEA
06	12 03 34.3?	30.06 S	176.28 W	33 N	4.8		1.0	11	KERMADEC ISLANDS REGION
06	12 56 17.5	14.044 S	167.805 E	33 N	4.9		1.1	54	VANUATU ISLANDS
06	12 56 27.7*	51.215 N	15.790 E	10 G			1.2	12	POLAND. ML 2.8 (KRA).
06	14 00 10.3?	37.225 N	30.418 E	10 G			0.5	6	TURKEY
06	15 37 09.3	14.022 S	167.850 E	33 N	4.4		1.0	35	VANUATU ISLANDS
06	15 42 30.9*	28.597 S	70.539 W	104 ?			1.5	15	CENTRAL CHILE
06	16 22 18.0	13.899 S	167.730 E	63 *	4.8		0.8	66	VANUATU ISLANDS
06	16 44 47.9	51.468 N	174.509 W	33 N	5.0		1.0	94	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.6 (PMR).
06	18 08 08.4	14.081 S	167.825 E	33 N	4.4		0.9	37	VANUATU ISLANDS
06	18 19 44.2	33.400 N	140.945 E	60 *	5.0		1.2	60	SOUTH OF HONSHU, JAPAN. Felt (I JMA) on Hachijo-jima.
06	18 55 46.2*	51.913 N	174.663 W	33 N	4.6		0.6	9	ANDREANOF ISLANDS, ALEUTIAN IS.
06	20 22 46.4	51.517 N	174.724 W	33 N	5.1		0.9	117	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.4 (PMR).
06	20 50 06.1*	44.872 N	16.658 E	10 G			0.9	6	YUGOSLAVIA. MD 3.1 (TRI).
06	21 42 26.7	17.836 S	178.643 W	573		5.0	0.9	119	FIJI ISLANDS REGION
a	06 23 22 06.1	53.434 N	158.318 E	149 D		5.3	0.9	251	NEAR EAST COAST OF KAMCHATKA
06	23 59 56.7	61.501 N	112.803 E	0 G		5.1	0.9	132	CENTRAL SIBERIA
07	01 25 50.4?	11.500 N	42.728 E	33 N			1.1	7	ETHIOPIA
07	01 56 42.8*	39.068 N	26.081 E	13			1.1	12	TURKEY
07	02 41 23.0*	43.727 N	147.616 E	38 D	4.6		1.1	39	KURIL ISLANDS
07	02 54 46.0*	39.025 N	26.172 E	10 G			1.0	12	TURKEY
07	03 06 45.4?	44.96 N	146.63 E	33 N	4.6		0.8	10	KURIL ISLANDS
07	04 34 29.9	41.487 N	20.188 E	10 G			1.3	11	ALBANIA. MD 3.1 (TTG).
07	04 38 55.7?	19.32 N	64.35 W	10 G			0.3	5	VIRGIN ISLANDS. ML 4.6 (FDI).
07	04 54 57.7	42.760 N	15.409 E	10 G			1.1	13	ADRIATIC SEA
07	05 41 04.0&	61.291 N	150.455 W	54				36	SOUTHERN ALASKA. <AGS-P>.
07	05 57 27.0	6.611 S	154.920 E	43 *	4.9		0.9	18	SOLOMON ISLANDS. Felt (III) at Panguna, Bougainville.
07	08 36 48.8?	14.36 N	146.96 E	33 N	4.0		0.5	5	MARIANA ISLANDS
07	08 47 56.8*	28.549 N	104.282 E	33 N	4.1		1.4	5	SICHUAN PROVINCE, CHINA
07	10 18 57.2&	61.382 N	151.623 W	80				29	SOUTHERN ALASKA. <AGS-P>.

a 07	10 36 03.7	4.403 N	125.028 E	70	5.6	1.2	201	TALAUD ISLANDS
07	12 34 26.67	42.40 N	7.07 E	10 G		0.1	5	WESTERN MEDITERRANEAN SEA. ML 2.7 (LDG).
07	12 41 03.9*	14.054 S	167.894 E	33 N	4.2 4.1	1.2	25	VANUATU ISLANDS
07	12 56 19.6*	40.829 N	25.884 E	10 G		0.9	5	AEGEAN SEA
07	13 18 26.0&	34.900 N	117.070 W	10			7	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
07	13 43 56.07	12.69 N	124.31 E	33 N	4.0	0.9	8	SAMAR, PHILIPPINE ISLANDS
07	15 04 46.9	7.642 E	127.665 E	130	5.1	1.0	100	BANDA SEA
a 07	17 07 30.9	56.650 N	120.857 E	33 N	5.0 4.6	0.9	130	EASTERN USSR
07	17 35 09.0	43.334 N	13.799 E	10 G		1.2	15	CENTRAL ITALY. ML 3.3 (LDG). MD 3.3 (TRI).
a 07	18 12 53.4	25.826 S	178.169 E	649 D	5.3	0.9	212	SOUTH OF FIJI ISLANDS
07	18 13 51.4*	21.513 S	68.437 W	173 ?		1.2	8	CHILE-BOLIVIA BORDER REGION
07	18 22 32.4	43.345 N	13.824 E	10 G		1.1	21	CENTRAL ITALY. ML 3.5 (LDG). MD 3.3 (TRI).
07	18 30 25.0&	37.252 N	121.667 W	5			22	CENTRAL CALIFORNIA. <BRK>. ML 3.8 (BRK). Mo=1.5*10**15 Nm (BRK). Felt (II) at Morgan Hill and Santa Clara. Also felt at San Jose.
07	18 45 49.5*	8.647 S	30.992 E	10 G	3.5	1.1	9	LAKE TANGANYIKA REGION
07	19 19 05.7	36.839 N	89.173 W	5 G		0.3	8	NEW MADRID, MISSOURI REGION. mblg 3.6 (NEIS). Felt (III) at Anniston, Marston, Wolf Island and Wyatt. Also felt in the Charleston area and at Royolton, Illinois.
07	20 03 54.7	44.707 N	12.464 E	10 G		1.3	35	NORTHERN ITALY. ML 3.2 (KBA), 3.2 (LDG).
07	20 40 38.0&	41.278 N	124.232 W	16			8	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).
07	21 04 15.6	40.789 N	27.634 E	10 G		1.3	11	TURKEY
07	21 07 11.4&	33.830 N	118.180 W	14			8	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS). Felt at Cerritos, Compton, Downey, Long Beach, South Gate and Wilmington.
07	21 48 46.9	44.207 N	12.083 E	10 G		1.1	22	NORTHERN ITALY. ML 3.0 (LDG).
07	21 54 39.7*	50.617 N	19.076 E	10 G		1.5	5	POLAND. ML 3.3 (KRA).
07	22 10 03.8	44.262 N	12.138 E	10 G		0.8	19	NORTHERN ITALY. ML 3.0 (LDG).
07	22 18 47.8&	60.791 N	151.706 W	77			33	KENAI PENINSULA, ALASKA. <AGS-P>.
07	22 51 07.17	35.48 N	120.77 W	5 G		0.6	4	CENTRAL CALIFORNIA. ML 2.7 (BRK).
07	23 09 27.27	43.32 N	20.06 E	10 G		1.4	6	YUGOSLAVIA. MD 4.1 (TTG).
07	23 15 24.1*	17.672 S	172.660 W	33 N	4.9 4.3	1.3	27	TONGA ISLANDS REGION
07	23 44 02.5	43.703 N	12.195 E	10 G		1.1	17	CENTRAL ITALY. ML 3.1 (LDG).
08	00 24 25.6	2.095 N	96.715 E	33 N	4.7	1.2	25	NORTHERN SUMATRA
08	01 02 51.3	42.358 N	19.942 E	10 G		0.4	7	YUGOSLAVIA. ML 2.4 (TTG).
08	01 08 10.07	3.68 S	128.23 E	33 N	4.5	0.9	8	CERAM
08	01 24 37.7*	4.850 S	138.969 E	33 N	4.6	1.4	16	WEST IRIAN
08	01 46 55.3*	15.125 N	97.271 W	33 N	4.5	1.0	23	NEAR COAST OF OAXACA, MEXICO
08	03 05 06.6	21.669 S	68.561 W	175 ?		1.0	8	CHILE-BOLIVIA BORDER REGION
08	03 10 47.6*	1.621 N	101.016 W	10 G	4.7 4.9	1.2	36	EAST CENTRAL PACIFIC OCEAN
08	03 28 19.3	37.198 N	141.664 E	44 D	4.8 4.4	1.3	33	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Onahama, Mito and Utsunomiya; (I JMA) at Fukushima.
08	04 20 43.2	16.985 N	121.275 E	14	4.8	1.1	44	LUZON, PHILIPPINE ISLANDS
08	04 29 16.7	43.754 N	12.208 E	12		1.1	54	CENTRAL ITALY. MD 3.8 (TRI). ML 3.7 (LDG).
08	05 44 45.6*	41.122 N	20.018 E	3 G		0.9	8	ALBANIA. ML 2.4 (TTG).
08	06 54 11.0*	17.663 S	175.083 W	274 D	4.9	1.3	37	TONGA ISLANDS
08	07 42 58.0*	1.724 N	101.060 W	10 G	4.7 4.5	1.0	34	EAST CENTRAL PACIFIC OCEAN
08	07 51 10.8	42.247 N	19.989 E	10 G		0.5	6	YUGOSLAVIA. ML 2.3 (TTG).
08	08 56 32.4*	12.859 N	89.292 W	64 *	4.6	1.2	43	OFF COAST OF CENTRAL AMERICA
08	09 00 43.5*	51.238 N	179.475 E	33 N	4.7	1.1	13	RAT ISLANDS, ALEUTIAN ISLANDS. ML 3.8 (PMR).
08	10 37 58.6	32.376 S	122.498 E	10 G	3.6	0.8	13	WESTERN AUSTRALIA
08	10 55 12.7%	45.256 N	25.653 E	5 G		0.4	6	ROMANIA
08	11 20 41.5*	3.464 N	96.284 E	56 ?	4.4	1.5	10	NORTHERN SUMATRA
f 08	11 50 14.7	26.969 S	108.156 W	10 G	6.1 5.9	0.9	315	EASTER ISLAND REGION. Felt (III) on Easter Island.
08	12 13 33.67	6.83 S	130.55 E	145 ?	4.3	1.2	7	BANDA SEA
08	12 43 32.5	36.584 N	71.058 E	228 *	4.3	1.0	23	AFGHANISTAN-USSR BORDER REGION
08	13 59 56.57	37.88 N	25.33 W	10 G		0.4	7	AZORES ISLANDS
08	14 16 59.57	14.85 N	120.38 E	138 ?	4.4	0.3	9	LUZON, PHILIPPINE ISLANDS
08	14 34 38.3	3.045 S	136.613 E	42 *	5.3 4.8	1.0	75	WEST IRIAN
o 08	16 16 40.4	5.701 S	129.883 E	33 N	5.2 4.6	1.1	64	BANDA SEA
08	16 55 57.0&	33.700 N	118.270 W	6			12	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.6 (PAS). Felt (IV) at Harbor City, Lomito, Long Beach, Paramount, San Pedro and Torrance.
08	17 01 25.5	13.907 N	144.696 E	142	5.0	1.0	40	MARIANA ISLANDS
08	18 02 59.9	67.925 N	150.580 W	10 G	4.3	0.9	21	ALASKA. ML 4.8 (PMR). Felt (III) at Anaktuvuk Pass.
08	18 34 21.1&	32.930 N	117.770 W	6 G			6	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
08	18 58 27.9&	58.462 N	151.111 W	79			27	KODIAK ISLAND REGION. <AGS-P>.
08	19 22 11.7?	53.02 N	172.95 E	33 N	4.6	0.8	10	NEAR ISLANDS, ALEUTIAN ISLANDS
08	19 22 20.9*	2.434 N	95.402 E	33 N	3.9	0.5	11	OFF W COAST OF NORTHERN SUMATRA
o 08	20 24 25.5	14.050 S	167.772 E	58 *	5.2	1.0	98	VANUATU ISLANDS
08	20 25 33.17	18.13 N	61.93 W	10 G		0.5	5	LEEWARD ISLANDS. ML 3.5 (FDF).
08	21 42 47.1*	11.875 N	143.613 E	33 *	4.9	1.0	31	SOUTH OF MARIANA ISLANDS
08	22 54 09.6	41.001 N	22.765 E	10 G		1.0	13	YUGOSLAVIA. ML 2.1 (SKO).
o 08	22 56 02.7	46.437 N	149.558 E	152 D	5.4	0.8	342	KURIL ISLANDS. Felt (I JMA) at Kushiro, Hokkaido.
09	00 23 07.6*	2.026 N	96.669 E	33 N	4.6	1.1	18	NORTHERN SUMATRA
09	00 42 14.8&	33.700 N	118.270 W	6 G			7	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS).
09	01 27 55.5	41.899 N	24.678 E	10 G		1.2	7	GREECE-BULGARIA BORDER REGION
09	02 44 33.2	40.548 N	21.395 E	10 G		0.9	10	GREECE
09	03 36 55.67	34.37 S	71.10 W	33 N		0.9	10	NEAR COAST OF CENTRAL CHILE
a 09	04 07 34.7	20.462 S	68.796 W	68	5.3	0.9	128	CHILE-BOLIVIA BORDER REGION
a 09	04 31 23.0	3.834 N	126.542 E	33 N	5.6 4.9	1.1	166	TALAUD ISLANDS
09	06 35 15.9?	10.94 S	123.96 E	33 N		0.9	6	TIMOR
09	06 37 16.1	31.143 S	117.698 E	10 G		1.3	7	WESTERN AUSTRALIA
a 09	07 27 34.2	56.375 S	25.642 W	33 N	5.6 5.7	1.0	154	SOUTH SANDWICH ISLANDS REGION
09	07 36 17.8?	51.36 N	175.32 E	33 N	4.5	0.8	13	RAT ISLANDS, ALEUTIAN ISLANDS
09	07 41 49.7	41.911 N	19.536 E	10 G		1.2	10	ALBANIA. MD 2.8 (TTG).
09	07 45 02.4?	51.36 N	175.30 E	33 N	4.3	1.3	6	RAT ISLANDS, ALEUTIAN ISLANDS
09	07 50 36.1*	40.964 N	20.789 E	10 G		1.0	7	GREECE-ALBANIA BORDER REGION. ML 2.7 (SKO), 2.6 (TTG).
09	09 11 31.4*	43.167 N	13.494 E	10 G		0.3	5	CENTRAL ITALY
09	10 19 05.5%	46.291 N	8.089 E	10 G		1.3	6	SWITZERLAND
09	11 11 31.3	39.756 N	20.804 E	5 G		0.8	15	GREECE-ALBANIA BORDER REGION
09	11 44 41.1	35.714 N	140.199 E	81	4.6	0.7	14	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Yokohama, Tokyo and Ajiro.

09	12 15 13.8*	49.609 N	16.862 E	5 G	1.2	9	CZECHOSLOVAKIA. ML 3.5 (VKA).	
09	13 21 51.4*	39.731 N	20.939 E	10 G	0.5	5	GREECE-ALBANIA BORDER REGION. MG 3.3 (ATH).	
09	13 25 54.8	40.169 N	29.443 E	10 G	0.9	8	TURKEY	
09	13 26 45.6*	14.098 S	167.883 E	33 N 4.6	1.0	22	VANUATU ISLANDS	
09	13 37 45.47	35.35 N	22.34 E	10 G 4.1	1.1	13	MEDITERRANEAN SEA. ML 4.1 (ATH).	
09	16 45 35.9&	36.320 N	118.370 W	6 G		20	CENTRAL CALIFORNIA. <PAS-P>. ML 3.2 (PAS), 3.3 (BRK).	
09	17 45 34.7&	59.884 N	152.888 W	92		37	SOUTHERN ALASKA. <AGS-P>.	
09	18 27 12.9	48.129 N	6.775 E	10 G	1.0	16	FRANCE. ML 3.2 (LDG).	
09	19 10 24.9	4.477 S	143.992 E	112	5.0	1.1	28	PAPUA NEW GUINEA
09	19 18 44.3*	11.722 S	166.449 E	33 N 4.9	0.8	20	SANTA CRUZ ISLANDS	
09	19 49 53.2	36.345 N	70.202 E	195 * 4.3	0.6	17	HINDU KUSH REGION	
09	20 44 56.3%	40.700 N	30.131 E	10 G	1.3	5	TURKEY	
09	20 52 11.4	44.675 N	150.316 E	45 D 5.0 4.6	1.0	100	KURIL ISLANDS REGION	
09	22 06 45.4*	44.332 N	98.292 W	10 G	1.7	7	SOUTH DAKOTA. mbLg 3.0 (NEIS). Felt (III) at Alpena, Huron, Lane and Woonsocket.	
a	22 18 57.2	12.078 S	166.572 E	121	5.6	0.8	125	SANTA CRUZ ISLANDS
09	23 00 23.2	38.834 N	25.690 E	11	4.0	0.9	37	AEGEAN SEA. ML 3.6 (ATH).
10	00 17 30.9*	39.379 N	27.704 E	10 G		1.4	9	TURKEY
10	01 25 28.1*	26.888 S	176.532 W	42 D 4.9	1.1	36	SOUTH OF FIJI ISLANDS	
10	03 41 47.6*	31.453 S	69.233 W	122 *	0.9	14	SAN JUAN PROVINCE, ARGENTINA	
10	04 27 02.9	34.455 N	24.195 E	33 N 4.2	1.2	35	CRETE	
10	07 04 41.7	2.730 N	126.868 E	104 * 4.8	1.2	39	MOLUCCA PASSAGE	
10	08 09 28.1	45.960 N	10.931 E	10 G	1.0	53	NORTHERN ITALY. ML 3.7 (LDG). MD 3.6 (TRI), 3.6 (ROM).	
10	08 17 33.4	27.358 N	96.926 E	33 N 4.8	1.1	43	BURMA-INDIA BORDER REGION	
10	09 19 43.57	42.37 N	7.09 E	10 G	0.1	5	WESTERN MEDITERRANEAN SEA. ML 3.3 (LDG).	
10	10 21 55.37	74.56 N	6.99 E	10 G 4.4	1.4	5	GREENLAND SEA	
10	10 45 25.7	18.265 S	178.294 W	643	4.9	0.9	53	FIJI ISLANDS REGION
10	11 41 45.2%	34.198 S	71.144 W	31 *	0.3	10	NEAR COAST OF CENTRAL CHILE	
10	11 56 43.57	11.68 S	76.55 W	33 N	0.7	5	PERU. Felt (III) at Lima.	
10	12 50 59.67	11.81 S	26.80 E	10 G	0.8	6	ZAIRE REPUBLIC. MG 3.2 (BUL).	
10	14 04 01.1	9.790 S	118.175 E	66 * 4.7	1.4	20	SUMBAWA ISLAND REGION	
10	14 08 04.8*	42.919 N	25.256 E	10 G	1.1	5	BULGARIA	
10	16 24 25.3	46.966 N	5.899 E	13	1.4	23	FRANCE. ML 3.4 (LDG).	
10	16 36 05.0*	14.895 N	145.814 E	33 N 4.3	0.5	23	MARIANA ISLANDS	
10	17 07 46.6%	46.932 N	5.946 E	10 G	1.3	13	FRANCE. ML 2.8 (LDG).	
10	18 31 07.37	43.75 N	147.23 E	33 N 4.8	1.3	16	KURIL ISLANDS	
10	18 31 17.6&	60.986 N	151.315 W	63		28	KENAI PENINSULA, ALASKA. <AGS-P>.	
10	18 32 24.7	22.953 S	177.412 W	224 * 5.0	1.2	46	SOUTH OF FIJI ISLANDS	
10	18 45 56.0	6.977 S	129.580 E	175 * 4.6	1.3	19	BANDA SEA	
f	10 18 49 53.9	55.137 N	165.525 E	33 N 6.1 6.3	1.1	464	KOMANDORSKY ISLANDS REGION. Ms 6.1 (BRK), 5.5 (PAS).	
10	19 40 53.5*	13.324 N	146.265 E	33 N 4.5	0.7	7	SOUTH OF MARIANA ISLANDS	
10	20 25 50.1	55.107 N	165.541 E	33 N 4.7	0.9	58	KOMANDORSKY ISLANDS REGION	
10	21 17 14.9*	13.357 N	146.247 E	33 N 4.7	1.1	20	SOUTH OF MARIANA ISLANDS	
10	23 26 42.0	54.597 N	161.229 E	33 N 4.6	0.7	26	NEAR EAST COAST OF KAMCHATKA	
11	00 04 29.4&	36.103 N	83.817 W	26		10	TENNESSEE. <TEIC>. MD 3.6 (TEIC), mbLg 3.3 (NEIC). Felt (V) at Clinton and (IV) at Alcoa, Caryville, Dandridge, Jacksboro, Knoxville, Mascot, Maynardville, New Tazewell, Powell, Seymour and Washburn. Felt in Anderson, Blount, Campbell, Claiborne, Cox, Cumberland, Grainger, Hamblen, Jefferson, Knox, Loudon, Sevier, Scott and Union Counties.	
11	00 19 30.4	22.248 S	69.846 W	52 D 5.1	1.2	102	NORTHERN CHILE	
11	00 22 18.7&	36.100 N	83.819 W	21		1	TENNESSEE. <TEIC>. MD 1.9 (TEIC).	
11	01 46 50.6	44.741 N	11.294 E	20 G 4.1	1.4	89	NORTHERN ITALY. MD 4.0 (TRI), 3.8 (ROM). Felt in the Cento-Modena-Bologna area.	
11	02 01 05.8*	6.988 S	130.100 E	136 * 5.0	1.5	22	BANDA SEA	
11	02 36 24.4*	32.387 S	71.496 W	33 N	1.2	12	NEAR COAST OF CENTRAL CHILE	
11	02 48 05.9&	36.100 N	83.820 W	24		7	TENNESSEE. <TEIC>. MD 3.3 (TEIC), mbLg 2.8 (NEIC). Felt (IV) at Bloine, Knoxville and Shorps Chapel. Felt (III) at Luttrell, Mascot, Maynardville, and Washburn.	
11	04 15 53.4	7.101 N	76.509 W	33 N	0.8	8	NORTHERN COLOMBIA	
11	04 47 11.7*	32.514 S	70.588 W	94 ?	0.2	8	CHILE-ARGENTINA BORDER REGION	
a	11 05 13 15.1	50.201 N	156.278 E	75 D 5.4	0.9	230	KURIL ISLANDS	
a	11 06 15 51.0	82.229 N	17.556 W	10 G 5.5 5.0	0.9	263	NEAR NORTH COAST OF GREENLAND. Ms 5.4 (PAS).	
11	07 54 45.4	44.087 N	9.938 E	10 G	1.1	39	NORTHERN ITALY	
11	08 00 07.8&	59.924 N	151.668 W	69		27	KENAI PENINSULA, ALASKA. <AGS-P>.	
11	08 12 51.5*	17.993 S	178.947 W	576 * 4.9	1.5	61	FIJI ISLANDS REGION	
11	09 43 01.07	13.39 S	66.76 E	10 G 4.5	1.2	11	MID-INDIAN RISE	
11	10 02 19.7	82.216 N	17.781 W	10 G 4.9 4.3	0.9	104	NEAR NORTH COAST OF GREENLAND	
11	11 31 41.5&	62.024 N	147.704 W	39		38	CENTRAL ALASKA. <AGS-P>.	
11	11 41 23.5	36.678 N	5.910 W	10 G	0.6	9	STRAIT OF GIBRALTAR	
11	12 46 08.2*	36.468 N	73.673 E	107 ? 4.3	1.5	9	NORTHWESTERN KASHMIR	
11	13 16 47.2*	39.450 N	26.207 E	10 G	1.1	10	TURKEY	
11	13 27 47.9*	39.490 N	26.225 E	10 G	1.0	6	TURKEY	
a	11 13 31 44.5	36.953 N	142.669 E	39 D 5.3 5.5	1.1	220	OFF EAST COAST OF HONSHU, JAPAN. Ms 5.2 (PAS). Felt (I JMA) at Onahama, Kofu and Ishinamaki.	
11	13 55 54.2	36.629 N	26.839 E	155 4.5	1.1	68	DODECANESE ISLANDS	
a	11 14 52 27.5	55.141 N	165.496 E	33 N 5.3	0.9	197	KOMANDORSKY ISLANDS REGION	
11	17 45 57.1*	22.199 S	176.298 W	33 N 5.2	1.2	13	SOUTH OF FIJI ISLANDS	
11	17 55 09.3	31.345 S	68.200 W	115 4.6	0.9	20	SAN JUAN PROVINCE, ARGENTINA	
11	19 00 23.3*	2.291 S	137.310 E	33 N 4.4	1.2	16	WEST IRIAN	
a	11 22 47 20.8	4.901 S	152.611 E	68 5.3	1.1	124	NEW BRITAIN REGION	
11	23 01 16.8*	7.354 N	76.246 W	33 N	0.5	5	NORTHERN COLOMBIA	
11	23 09 19.9	43.710 N	20.451 E	17 4.0	1.2	122	YUGOSLAVIA. MD 4.6 (TRI), 4.0 (TTG). Felt (VII) in the Kraljevo area.	
11	23 12 44.8*	34.912 N	33.790 E	10 G	1.3	6	CYPRUS	
11	23 45 09.6	39.678 N	16.519 E	10 G	0.9	10	SOUTHERN ITALY	
12	00 18 57.4	43.687 N	20.485 E	24	1.2	46	YUGOSLAVIA. MD 4.2 (TRI), 3.4 (TTG).	
12	01 07 53.9	43.774 N	12.247 E	10 G	0.6	6	CENTRAL ITALY. MD 3.0 (ROM).	
12	01 44 02.27	45.96 N	146.49 E	33 N 4.4	0.5	10	KURIL ISLANDS	
12	01 52 14.0*	43.787 N	12.261 E	10 G	0.8	5	CENTRAL ITALY. MD 2.9 (ROM).	
12	02 19 25.9	43.706 N	12.249 E	10 G	1.2	12	CENTRAL ITALY. MD 3.1 (ROM).	
12	02 21 46.3%	43.721 N	11.045 E	10 G	0.6	6	CENTRAL ITALY	

12	02 27 33.77	43.78 N	12.26 E	10 G	1.2	4	CENTRAL ITALY. MD 2.1 (ROM).
12	02 30 47.77	43.769 N	12.264 E	10 G	1.0	6	CENTRAL ITALY. MD 2.7 (ROM).
12	02 40 57.47	43.48 N	11.97 E	10 G	1.7	4	CENTRAL ITALY. MD 2.4 (ROM).
12	02 58 52.67	2.31 S	140.23 E	33 N 4.4	1.1	9	NEAR N. COAST OF WEST IRIAN
12	03 12 54.5*	43.801 N	12.257 E	10 G	1.3	5	CENTRAL ITALY. MD 2.9 (ROM).
12	03 31 26.7*	15.359 S	174.747 W	33 N 4.6	1.3	16	TONGA ISLANDS
12	04 04 55.57	14.38 S	34.76 E	10 G	1.6	6	MALAWI. MG 3.5 (BUL).
12	04 12 54.8	43.684 N	20.445 E	23	1.1	48	YUGOSLAVIA. MD 4.1 (TRI), 3.4 (TTG).
12	04 13 42.97	56.63 S	25.84 W	10 G 5.5	1.0	10	SOUTH SANDWICH ISLANDS REGION
12	04 31 30.1	36.145 N	139.955 E	66 4.8	1.1	95	HONSHU, JAPAN. Felt (III JMA) at Mita, Kumagaya and Utsunamiya; (II JMA) at Tokyo and Onahama; (I JMA) at Maebashi, Yokohama, Kafu and Ajiro.
12	04 59 48.3	43.680 N	20.595 E	10 G	1.3	14	YUGOSLAVIA. MD 2.7 (TTG).
12	05 22 15.5	43.764 N	12.282 E	10 G	0.9	12	CENTRAL ITALY. MD 3.3 (ROM).
12	07 33 14.6&	62.210 N	151.110 W	74		25	CENTRAL ALASKA. <AGS-P>.
12	08 18 56.5	2.053 N	126.489 E	33 N 5.2 4.6	1.3	82	MOLUCCA PASSAGE
12	08 50 48.9*	1.927 N	126.496 E	33 N 4.8	0.6	9	MOLUCCA PASSAGE
12	09 06 44.27	23.78 S	115.61 W	10 G 4.9	0.9	21	EASTER ISLAND CORDILLERA
12	10 24 39.6	17.809 N	94.255 W	146 * 4.5	0.7	44	CHIAPAS, MEXICO
12	11 44 45.3&	58.175 N	153.297 W	72		25	KODIAK ISLAND REGION. <AGS-P>.
12	11 46 32.0*	23.340 S	71.206 W	33 N	0.9	7	OFF COAST OF NORTHERN CHILE
12	12 06 54.8*	58.748 S	148.842 E	10 G 4.4	1.0	12	WEST OF MACQUARIE ISLAND
12	12 19 19.4	33.336 N	73.450 E	33 N 4.5 3.3	1.0	31	PAKISTAN
12	12 22 30.4*	39.504 N	25.932 E	10 G	1.2	6	AEGEAN SEA
12	13 00 26.6	40.501 N	23.530 E	10 G	1.0	14	GREECE
12	14 10 04.8	45.824 N	10.486 E	5	0.9	20	NORTHERN ITALY. ML 2.7 (LDG).
12	14 16 42.3&	62.487 N	151.161 W	84		27	CENTRAL ALASKA. <AGS-P>.
12	15 32 27.87	24.46 S	70.89 W	33 N	1.3	7	NEAR COAST OF NORTHERN CHILE
12	15 50 25.1*	49.337 N	153.771 E	33 N 4.5	0.6	18	KURIL ISLANDS
12	16 01 27.6	34.848 N	46.886 E	49 4.8 4.2	1.2	127	WESTERN IRAN. Felt in the Sanandaj area.
12	18 02 46.37	33.62 S	72.01 W	33 N	0.7	7	OFF COAST OF CENTRAL CHILE
12	18 49 23.6*	37.274 N	20.598 E	10 G	1.3	7	IONIAN SEA. ML 3.7 (ATH).
12	19 06 56.1	25.063 S	70.253 W	48 * 5.1	1.4	37	NEAR COAST OF NORTHERN CHILE. Felt (III) at Antafagasta.
12	19 37 30.9&	37.520 N	118.470 W	2		18	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (PAS), 3.4 (NEIS). Felt (II) at Bishop, California.
12	20 18 13.3*	22.885 N	120.912 E	9 * 4.5	1.5	34	TAIWAN
12	20 29 06.5	2.043 N	126.521 E	77 * 5.2	1.0	26	MOLUCCA PASSAGE
12	21 02 02.0	37.399 N	71.897 E	107 ? 4.8	1.0	47	AFGHANISTAN-USSR BORDER REGION. Felt (III) at Obigarm and Dzhrigatal, USSR.
12	21 41 55.07	1.34 S	124.65 E	33 N 4.0	1.0	9	MOLUCCA SEA
12	23 09 49.7*	37.116 N	21.359 E	33 N	1.1	9	SOUTHERN GREECE. ML 3.3 (ATH).
13	01 14 21.27	43.60 N	16.76 E	10 G	1.2	6	YUGOSLAVIA
o 13	01 45 54.1	26.020 S	177.338 W	107 D 5.3	1.2	64	SOUTH OF FIJI ISLANDS
13	03 19 24.57	14.23 S	167.79 E	33 N 4.2	1.5	8	VANUATU ISLANDS
13	05 49 17.4	41.896 N	80.767 W	5 G 3.5	0.6	17	OHIO. mbLg 3.8 (NEIS). Felt (IV) at Ashtabula, Conneaut, Kingsville and North Kingsville; (III) at Darset and Rome. Also felt in the western part of Erie County, Pennsylvania.
13	07 52 12.0&	41.900 N	80.800 W	5 G		7	OHIO. <SPEC>. mbLg 3.0 (NEIS). Felt in the Ashtabula area. Held to mainshack location.
13	08 01 30.4%	43.813 N	12.244 E	10 G	0.6	5	CENTRAL ITALY. MD 2.9 (ROM).
13	12 31 16.0	40.637 N	20.754 E	8	1.4	14	GREECE-ALBANIA BORDER REGION. ML 3.3 (TTG).
13	12 54 29.6*	39.153 N	43.574 E	10 G 4.4 3.4	1.4	14	TURKEY
13	13 05 22.0&	41.900 N	80.800 W	5 G		4	OHIO. <SPEC>. mbLg 2.9 (NEIS). Felt in the Ashtabula area. Held to mainshack location.
13	13 36 17.8	25.610 N	29.763 E	10 G 4.3	0.6	11	ARAB REPUBLIC OF EGYPT
13	13 44 44.0&	45.562 N	111.723 W	3		8	MONTANA. <BUT>. ML 2.5 (BUT).
13	14 02 39.9%	40.221 N	28.915 E	10 G	1.3	8	TURKEY
13	14 52 47.1	63.118 N	150.965 W	162 ?	0.3	9	CENTRAL ALASKA
o 13	16 33 41.1	30.547 N	137.917 E	479 * 4.6	0.7	35	SOUTH OF HONSHU, JAPAN
o 13	19 14 57.9	15.332 S	70.061 W	241 D 5.1	1.1	192	SOUTHERN PERU. Felt (V) at Arico, Chile. Felt (III) at Arequipa and (II) at Tacna. Also felt at Puno.
13	21 03 52.7*	44.434 N	129.216 W	10 G 4.2	1.2	25	OFF COAST OF OREGON
13	21 25 13.7*	21.618 S	68.927 W	232 ?	1.4	6	CHILE-BOLIVIA BORDER REGION
13	21 37 07.3&	60.579 N	152.901 W	119		21	SOUTHERN ALASKA. <AGS-P>.
13	23 45 46.9	9.740 S	122.639 E	33 N 4.7	1.5	24	SAVU SEA
13	23 59 07.4*	56.472 S	25.265 W	33 N 5.1	0.9	10	SOUTH SANDWICH ISLANDS REGION
14	02 46 49.2*	7.789 S	108.004 E	81 * 4.7	0.8	23	JAVA
14	03 37 39.2	47.042 N	8.983 E	10 G	0.4	10	SWITZERLAND
14	05 03 36.7&	58.911 N	152.712 W	70		35	KODIAK ISLAND REGION. <AGS-P>.
14	05 06 40.7*	6.319 S	146.410 E	63 * 4.4	1.2	11	EAST PAPUA NEW GUINEA REGION
14	06 56 05.4	21.907 N	119.584 E	33 N 4.2	1.1	12	TAIWAN REGION
14	09 19 56.0&	59.983 N	146.643 W	31		38	GULF OF ALASKA. <AGS-P>. ML 3.0 (PMR).
14	10 16 16.5*	9.687 N	69.671 W	10 G	1.2	6	VENEZUELA. Felt at El Tocuya.
14	10 17 43.37	5.39 S	29.17 E	10 G	0.8	6	LAKE TANGANYIKA REGION. MG 4.0 (BUL).
14	10 39 37.6	43.604 N	12.177 E	10 G	1.2	6	CENTRAL ITALY. ML 2.8 (LDG).
14	10 48 54.8	39.318 N	23.188 E	10 G	1.2	18	AEGEAN SEA. ML 3.2 (ATH).
14	11 01 50.6*	40.441 N	21.867 E	10 G	1.3	9	GREECE
14	12 18 29.7&	37.542 N	121.333 W	4		14	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
14	12 51 19.9	46.021 N	7.099 E	10 G	0.5	9	SWITZERLAND. ML 2.4 (LDG).
14	13 09 44.57	49.39 N	8.52 E	10 G	1.3	6	GERMANY. ML 2.6 (LDG).
14	13 46 05.1	43.956 N	16.124 E	10 G	1.2	21	YUGOSLAVIA. ML 3.0 (TTG). Felt at Knin.
14	14 51 10.0&	41.900 N	80.800 W	5 G		3	OHIO. <SPEC>. mbLg 2.8 (NEIS). Felt in the Ashtabula area. Held to mainshack location.
14	15 45 46.2*	2.015 S	138.946 E	33 N 4.1	1.4	13	WEST IRIAN
14	20 58 38.07	33.27 S	72.31 W	33 N	0.5	10	OFF COAST OF CENTRAL CHILE
14	21 26 55.7	43.345 N	19.755 E	10 G	1.3	13	YUGOSLAVIA. ML 2.4 (TTG).
14	22 10 13.27	16.95 S	176.65 W	33 N 4.9	1.5	9	FIJI ISLANDS REGION
14	23 39 40.4	49.981 N	19.114 E	10 G	0.8	8	POLAND. ML 3.2 (KRA).
f 14	23 46 03.5	49.631 N	147.828 E	576 D 5.7	0.8	489	SEA OF OKHOTSK. mb 6.0 (BRK).
o 15	00 44 53.2*	21.857 S	174.479 W	33 N 5.1	1.1	54	TONGA ISLANDS
o 15	04 13 37.5	29.255 N	130.567 E	51 5.3 5.8	1.3	177	RYUKYU ISLANDS. Felt (II JMA) at Naze.

15	04 29 33.8*	42.838 N	12.909 E	10 G	0.6	5	CENTRAL ITALY
15	07 08 17.2&	45.563 N	111.697 W	3		11	MONTANA. <BUT>. ML 3.4 (BUT), 3.4 (NEIS). Felt at Norris.
f	15	07 16 13.5	17.522 N	97.153 W	67 D 5.9	1.1 392	OAXACA, MEXICO. mb 6.5 (BRK), 5.9 (PAS). Felt in Oaxaca, Guerrero and in the Mexico City area.
15	08 15 21.1*	6.046 S	105.543 E	55 ? 4.8	0.9	17	SUNDA STRAIT
15	11 05 28.7	28.766 N	131.301 E	33 N 4.7 4.1	1.2	32	RYUKYU ISLANDS REGION
15	11 36 20.9	9.524 N	84.190 W	52 4.9 4.4	1.0	71	COSTA RICA. MD 4.4 (HDC). Damage (V) in the San Jose area. Felt (IV) at Quepos and (II) at Guanacaste, Limon and along the Costa Rica-Panama border.
15	13 19 40.5?	21.30 S	175.65 W	138 ? 3.9	1.2	10	TONGA ISLANDS
15	14 31 26.8	9.676 N	84.099 W	51 4.8 4.2	1.2	68	COSTA RICA. MD 4.3 (HDC). Damage (V) in the San Jose area. Felt (IV) at Quepos, (II) at Limon, Guanacaste and along the Costa Rica-Panama border.
15	15 18 05.8*	41.387 N	36.163 E	10 G	1.4	9	TURKEY
a	15	16 11 02.8	46.970 N	154.130 E	33 N 5.2 4.6	0.8 133	KURIL ISLANDS REGION
15	16 50 47.2	41.925 N	20.362 E	10 G	0.9	9	ALBANIA. ML 2.7 (SKO), 2.5 (TTG).
15	17 08 05.2	26.319 S	27.406 E	5 G	1.1	11	REPUBLIC OF SOUTH AFRICA. MG 3.7 (BUL).
15	17 50 33.0	19.512 S	169.200 E	140 * 4.8	1.1	50	VANUATU ISLANDS
15	18 06 30.8&	39.731 N	110.842 W	1		4	UTAH. <SLC-P>. ML 2.5 (SLC).
15	18 16 29.9*	39.616 N	118.610 E	33 N	1.1	5	NORTHEASTERN CHINA. ML 4.3 (BJI).
15	21 29 21.4?	7.16 S	129.06 E	155 ? 4.4	1.6	7	BANDA SEA
15	22 03 41.0*	29.250 N	130.675 E	39 ? 4.3	1.6	14	RYUKYU ISLANDS
15	23 30 59.5	9.490 N	84.150 W	56 4.7	0.9	30	COSTA RICA. MD 4.2 (HDC). Felt (V) at San Jose, (IV) at Quepos, (II) at Guanacaste, Limon and along the Costa Rica-Panama border.
16	00 23 05.6*	17.659 S	167.880 E	38 * 5.0	1.4	76	VANUATU ISLANDS
16	01 29 39.2	29.384 N	130.456 E	49 5.0 4.5	1.1	62	RYUKYU ISLANDS
16	02 19 15.8*	23.697 N	92.594 E	33 N 4.4	0.7	7	INDIA-BANGLADESH BORDER REGION
16	03 49 21.6	71.149 N	5.769 W	10 G 4.4	1.1	30	JAN MAYEN ISLAND REGION
16	04 37 36.8	42.326 N	19.872 E	10 G	0.4	6	YUGOSLAVIA. ML 2.4 (TTG).
16	04 49 40.0&	41.900 N	80.800 W	5 G		9	OHIO. <SPEC>. mblg 2.7 (NEIS). Felt in the Ashtabula area. Held to mainshock location.
16	05 17 29.9?	50.78 N	19.58 E	10 G	1.6	6	POLAND
a	16	05 46 29.5	33.059 N	138.096 E	310 5.3	1.1 359	SOUTH OF HONSHU, JAPAN. Felt (III JMA) in the Tokyo-Utsunomiya-Onahama area; (II JMA) in the Yokohama-Mito-Fukushima area and (I JMA) in the Ajiro-Sendai-Ofunato-Miyako area.
16	09 18 41.8	40.433 N	21.916 E	10 G	1.1	8	GREECE
16	09 39 44.6?	32.99 S	72.42 W	33 N	0.5	9	OFF COAST OF CENTRAL CHILE
16	11 23 20.6*	34.604 N	23.104 E	10 G 4.6	1.1	9	CRETE
16	11 29 49.3	29.650 N	50.638 E	54 * 4.6 4.1	1.2	35	SOUTHERN IRAN
16	11 41 25.8?	33.03 S	72.72 W	33 N	0.6	8	OFF COAST OF CENTRAL CHILE
16	13 10 16.2?	32.41 S	71.77 W	33 N	0.7	9	NEAR COAST OF CENTRAL CHILE
16	14 21 12.1	2.346 S	138.161 E	38 * 4.6	1.2	33	WEST IRIAN
16	15 23 29.5	30.693 N	137.491 E	494 * 4.7	0.8	40	SOUTH OF HONSHU, JAPAN
16	18 58 15.1?	26.05 N	61.19 E	33 N	1.4	6	SOUTHERN IRAN
16	19 00 00.0&	37.104 N	116.023 W	0 4.8		108	SOUTHERN NEVADA. <DOE>. ML 4.7 (BRK). 37° 06' 12.79" N., 116° 01' 24.07" W., Surface Elev. 1311 m., Depth of Burial 500 m., Shot Time 190000.077, "MIDLAND", Nevada Test Site (Dept. of Energy).
16	19 06 04.3	44.051 N	11.852 E	20 G	1.2	68	NORTHERN ITALY. ML 4.3 (KBA), 4.0 (LDG), 3.7 (VKA). MD 3.8 (TRI). Felt at Florence.
16	19 23 07.6	37.116 N	116.053 W	0 G	0.8	10	SOUTHERN NEVADA. ML 3.6 (BRK). Nevada Test Site Collapse.
16	22 30 08.6	12.049 S	166.488 E	45 D 5.1	0.9	34	SANTA CRUZ ISLANDS
16	23 16 48.9	6.649 S	154.614 E	48 * 4.8 4.2	0.9	22	SOLOMON ISLANDS
16	23 26 54.4*	16.690 S	175.126 E	58 ? 4.1	0.8	15	FIJI ISLANDS REGION
16	23 31 29.4*	28.519 N	51.768 E	33 N 4.2	1.1	13	SOUTHERN IRAN
a	17	01 03 37.7	55.948 S	27.683 W	102 D 5.8	1.0 125	SOUTH SANDWICH ISLANDS REGION
17	01 17 07.0	49.799 N	78.110 E	0 G 5.8 4.6	0.9	298	EASTERN KAZAKH SSR
a	17	01 57 38.6	1.496 N	85.300 W	10 G 5.4 5.5	1.1 130	OFF COAST OF ECUADOR. Ms 5.9 (BRK), 5.5 (PAS).
17	02 34 33.1*	2.976 S	80.644 W	33 N 4.7	0.9	20	NEAR COAST OF ECUADOR
17	03 50 56.0?	30.69 S	177.88 W	33 N 4.2	1.3	7	KERMADEC ISLANDS
17	04 21 56.6*	53.861 N	164.698 W	33 N 4.3	1.2	17	UNIMAK ISLAND REGION
17	05 17 22.2&	61.698 N	151.745 W	91		30	SOUTHERN ALASKA. <AGS-P>.
17	05 25 44.9*	4.874 S	123.537 E	33 N 5.1	0.7	8	BANDA SEA
17	05 34 41.8%	45.829 N	2.945 E	10 G	0.3	11	FRANCE. ML 2.6 (LDG).
17	06 01 08.0?	33.20 S	71.96 W	33 N	1.3	11	NEAR COAST OF CENTRAL CHILE
17	06 47 48.2	41.853 N	15.302 E	10 G	1.3	16	SOUTHERN ITALY
17	07 48 05.9*	1.071 N	85.280 W	10 G 4.9 4.7	1.4	22	OFF COAST OF ECUADOR
17	12 40 24.5&	45.575 N	111.718 W	6		9	MONTANA. <BUT>. ML 2.8 (BUT).
17	12 45 47.4*	40.838 N	19.614 E	10 G	1.0	9	ALBANIA. ML 2.4 (TTG).
17	13 11 45.6*	43.700 N	19.228 E	10 G	1.2	8	YUGOSLAVIA. ML 2.5 (TTG).
17	13 42 01.9	22.268 S	175.985 W	33 N 5.1 4.4	0.7	43	TONGA ISLANDS REGION
17	15 22 35.9*	44.123 N	11.927 E	10 G	0.5	5	NORTHERN ITALY. ML 2.9 (KBA).
17	15 40 26.0&	45.577 N	111.718 W	8		9	MONTANA. <BUT>. ML 2.7 (BUT).
17	16 27 56.4%	39.816 N	29.671 E	10 G	1.1	8	TURKEY
17	16 43 27.3	10.721 N	126.639 E	36 * 5.0	1.1	66	PHILIPPINE ISLANDS REGION
17	17 04 57.2*	10.652 N	126.743 E	33 N 4.8	1.2	18	PHILIPPINE ISLANDS REGION
a	17	17 22 29.6	17.779 S	178.664 W	560 5.3	1.1 131	FIJI ISLANDS REGION
17	17 23 26.9	38.723 N	70.722 E	33 N 4.8	1.4	41	AFGHANISTAN-USSR BORDER REGION. Felt (IV) at Garm; (III) at Komarau, Dzhirgotai, Obigarm and Dushanbe, USSR.
17	19 49 22.4?	19.13 N	108.40 W	10 G 4.5	0.9	25	REVILLA GIGEDO ISLANDS REGION
17	19 51 45.0%	39.822 N	29.687 E	10 G	0.8	6	TURKEY
17	20 56 57.0&	59.890 N	152.884 W	105		34	SOUTHERN ALASKA. <AGS-P>.
a	17	21 02 12.7	15.475 S	74.074 W	79 5.3	1.0 112	NEAR COAST OF PERU. Felt at Nazca, Ica and Lima.
17	21 12 33.5	27.692 N	92.881 E	33 N 4.8	1.0	27	INDIA-CHINA BORDER REGION
17	21 27 31.6	23.809 S	179.825 W	519 5.0	0.9	41	SOUTH OF FIJI ISLANDS
17	22 44 57.6*	5.171 S	151.206 E	155 * 4.4	1.0	12	NEW BRITAIN REGION
17	22 52 44.8*	39.755 N	22.587 E	10 G	1.4	7	GREECE
17	23 07 41.1	16.768 S	177.311 E	33 N 4.7 4.1	1.4	29	FIJI ISLANDS

17	23	40	40.3*	31.327 S	69.106 W	132 *	0.8	11	SAN JUAN PROVINCE, ARGENTINA			
18	01	17	51.2&	60.428 N	152.481 W	97		26	SOUTHERN ALASKA. <AGS-P>.			
18	02	31	55.9&	45.575 N	111.718 W	8		9	MONTANA. <BUT>. ML 2.6 (BUT).			
18	02	57	05.3&	37.173 N	121.600 W	3		13	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).			
18	02	58	48.6*	51.620 N	16.166 E	10 G	0.8	13	POLAND. ML 3.7 (KBA).			
18	04	10	13.4*	36.597 N	69.903 E	33 N	4.1	0.6	8	HINDU KUSH REGION		
18	05	07	26.9	19.056 N	68.037 W	33 N	4.7	1.2	44	NORTH ATLANTIC OCEAN		
18	05	19	50.0	41.684 N	19.400 E	10 G		1.2	22	ALBANIA. MD 3.3 (TTG).		
18	06	17	52.0*	22.413 N	143.377 E	122 ?	4.4	0.8	11	VOLCANO ISLANDS REGION		
18	07	21	02.7?	20.26 S	178.90 W	604 ?	4.3	0.6	11	FIJI ISLANDS REGION		
18	08	46	33.8?	42.68 N	20.53 E	10 G		1.2	5	YUGOSLAVIA. ML 1.9 (TTG).		
18	08	59	05.8	47.628 N	7.412 E	10 G		1.3	25	SWITZERLAND. ML 3.5 (LDG).		
18	10	13	45.1*	3.523 N	122.750 E	542 *	4.9	1.0	26	CELEBES SEA		
18	10	51	29.7	1.722 N	127.371 E	33 N	4.7	0.8	12	HALMAHERA		
18	10	58	04.5?	19.21 S	173.25 E	33 N	4.3	0.8	8	VANUATU ISLANDS REGION		
18	11	10	14.7&	59.941 N	152.203 W	61		39	SOUTHERN ALASKA. <AGS-P>.			
a	18	12	14	13.4	12.702 N	143.350 E	114	5.3	1.0	105	SOUTH OF MARIANA ISLANDS. Felt (III) on Guom.	
18	13	12	37.3%	40.791 N	22.938 E	10 G		0.5	6	GREECE		
18	13	51	58.6	63.580 N	148.970 W	85 ?		0.9	9	CENTRAL ALASKA		
18	14	30	41.7	36.138 N	28.074 E	25	4.2	1.4	53	DODECANESE ISLANDS		
18	14	39	05.9	38.061 N	75.924 E	146	4.5	0.6	15	SOUTHERN XINJIANG, CHINA		
18	15	00	50.4	30.778 N	137.464 E	502 *	5.0	0.8	47	SOUTH OF HONSHU, JAPAN		
18	15	33	24.0	16.763 N	145.535 E	435	4.6	0.9	44	MARIANA ISLANDS		
18	16	29	18.8	31.144 N	78.049 E	54 *	4.7	1.3	25	TIBET-INDIA BORDER REGION		
18	17	02	06.1	40.436 N	141.288 E	97	4.7	1.0	77	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Hachinohe; (II JMA) at Aomori, Morioka and Miyako.		
18	18	17	14.1&	60.963 N	147.012 W	18		47	SOUTHERN ALASKA. <AGS-P>. ML 3.5 (NEIS).			
18	19	00	36.8?	16.83 N	145.39 E	121 *	4.4	0.2	10	MARIANA ISLANDS		
18	19	09	18.7%	40.859 N	28.048 E	10 G		0.9	9	TURKEY		
18	19	18	36.2	50.637 N	29.613 W	10 G	4.7	4.2	0.9	59	NORTH ATLANTIC RIDGE	
18	19	33	17.8?	42.94 N	0.19 E	10 G		1.6	6	PYRENEES. ML 2.9 (LDG).		
18	19	36	51.0%	40.442 N	28.235 E	10 G		0.4	5	TURKEY		
18	19	41	36.6*	5.961 S	151.005 E	51 *	4.4	1.3	11	NEW BRITAIN REGION		
18	22	23	34.5*	33.540 S	71.603 W	31 *		0.5	9	NEAR COAST OF CENTRAL CHILE		
18	22	27	23.4?	12.17 N	45.10 E	10 G		0.5	11	WESTERN GULF OF ADEN		
18	22	51	27.0%	45.927 N	3.869 E	10 G		0.5	9	FRANCE. ML 2.3 (LDG).		
18	23	35	01.5*	21.346 S	69.236 W	186 ?		0.9	8	NORTHERN CHILE		
19	01	48	08.8	46.461 N	10.580 E	10 G		1.4	13	NORTHERN ITALY. ML 2.6 (KBA).		
19	02	18	57.5	45.534 N	27.611 E	40	4.1	1.4	76	ROMANIA		
19	03	03	21.3?	26.91 S	112.95 E	10 G	4.2	1.5	10	WESTERN AUSTRALIA		
19	03	58	35.9*	5.487 S	129.535 E	223 *	4.8	1.0	15	BANDA SEA		
19	05	01	43.4&	34.340 N	119.440 W	7		12	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS). Felt (IV) at Sumnerland.			
19	06	24	53.9	37.852 N	26.188 E	10 G		1.3	8	DODECANESE ISLANDS. ML 3.3 (ATH).		
19	10	22	27.0	29.326 N	130.676 E	33 N	4.5	1.3	29	RYUKYU ISLANDS		
19	10	48	38.5	22.394 N	120.471 E	18	5.1	4.5	0.9	91	TAIWAN	
19	12	54	32.5	6.988 N	73.187 W	159	4.1	1.3	22	NORTHERN COLOMBIA		
a	19	14	00	23.5	17.242 S	70.287 W	107 D	5.2	1.1	163	NEAR COAST OF PERU. Felt (IV) at Arequipa, Ilo and Moqueguo; (III) at Tocco. Felt (IV) at Arico, Chile.	
19	14	42	00.9	40.685 N	23.544 E	10 G		0.6	7	GREECE		
19	16	40	55.8?	14.04 S	26.68 E	10 G		0.3	5	ZAMBIA. MG 2.9 (BUL).		
a	19	20	01	16.9	4.819 N	82.630 W	10 G	4.8	1.1	60	SOUTH OF PANAMA	
19	22	20	03.5	45.985 N	7.881 E	9		1.1	15	NORTHERN ITALY. ML 2.6 (LDG).		
19	22	49	11.4	24.983 N	95.189 E	118 *	4.7	1.3	29	BURMA		
20	00	29	38.2	52.157 N	156.285 E	204 ?	4.4	0.9	37	KAMCHATKA		
20	01	28	00.1	54.008 N	164.348 W	33 N	4.8	4.0	1.0	57	UNIMAK ISLAND REGION. ML 4.2 (PMR).	
20	01	34	23.6?	32.99 S	72.33 W	33 N		0.5	9	OFF COAST OF CENTRAL CHILE		
20	02	29	27.4%	43.131 N	17.927 E	10 G		0.9	5	YUGOSLAVIA. ML 2.4 (TTG).		
20	02	36	14.2%	40.755 N	28.016 E	10 G		1.0	8	TURKEY		
20	04	09	48.9*	51.540 N	16.090 E	10 G		0.4	10	POLAND. ML 3.9 (GRF), 3.4 (VKA).		
20	04	31	13.7*	67.934 N	155.468 W	33 N		0.3	5	ALASKA. ML 3.2 (NEIS).		
20	04	43	55.3*	67.901 N	155.893 W	33 N		1.0	8	ALASKA. ML 3.8 (PMR).		
20	04	48	30.8*	29.047 N	131.059 E	33 N	3.9	0.7	11	RYUKYU ISLANDS REGION		
20	06	02	38.0&	37.998 N	121.857 W	15		15	CENTRAL CALIFORNIA. <BRK>. ML 2.6 (BRK). Mo=2.4*10**13 Nm (BRK).			
20	06	06	38.3	37.628 N	118.463 W	5 G		0.5	9	CALIFORNIA-NEVADA BORDER REGION. ML 2.7 (NEIS).		
a	20	07	53	46.7	4.079 N	126.480 E	81	5.3	1.1	109	TALAUD ISLANDS	
20	08	13	52.7	43.854 N	146.878 E	69	5.1	0.9	88	KURIL ISLANDS. Felt (II JMA) at Nemuro and (I JMA) at Kushiro, Hokkaido.		
20	08	38	14.7%	43.097 N	17.951 E	10 G		0.8	5	YUGOSLAVIA. ML 2.3 (TTG).		
20	09	19	20.4&	61.704 N	151.753 W	91		35	SOUTHERN ALASKA. <AGS-P>.			
20	10	41	48.0	33.946 S	70.307 W	9		0.4	11	CHILE-ARGENTINA BORDER REGION		
20	10	58	53.2?	17.03 S	178.45 W	575 *	3.9	1.0	17	FIJI ISLANDS REGION		
20	11	08	54.8	3.856 S	151.512 E	5 G	4.4	1.4	13	NEW IRELAND REGION		
20	11	35	18.4?	40.39 N	21.84 E	10 G		1.4	5	GREECE		
20	12	09	40.6*	6.040 S	151.052 E	38 *	4.1	1.4	15	NEW BRITAIN REGION		
20	12	22	28.6%	39.902 N	30.093 E	10 G		0.7	7	TURKEY		
20	12	43	51.8?	33.11 S	179.04 W	168 ?	4.9	1.0	14	SOUTH OF KERMADEC ISLANDS		
20	12	56	38.5*	44.051 N	148.558 E	33 N	4.8	0.9	28	KURIL ISLANDS		
20	16	19	16.1	38.955 N	106.507 W	5 G		0.8	19	COLORADO. ML 2.8 (NEIS).		
20	16	47	48.1	33.752 N	56.957 E	33 *	5.0	4.4	1.0	120	IRAN. Felt in the Tabas area.	
20	18	36	03.5	35.993 N	135.244 E	40	4.5	1.5	45	SOUTHERN HONSHU, JAPAN. Felt (I JMA) at Kyoto.		
20	19	49	54.9%	44.297 N	7.330 E	10 G		0.3	6	NORTHERN ITALY. ML 2.5 (LDG).		
20	19	50	03.0?	24.32 S	67.12 W	254 ?		2.1	8	CHILE-ARGENTINA BORDER REGION		
20	20	28	35.0	15.333 N	123.110 E	34 *	4.7	1.1	25	PHILIPPINE ISLANDS REGION		
a	20	21	54	37.7	6.413 S	154.861 E	54	5.6	5.0	1.0	156	SOLOMON ISLANDS. Ms 5.2 (BRK). Felt (V) at Arawa and Ponguwa, Bougainville.
20	22	26	30.7	51.637 N	16.242 E	10 G		0.5	12	POLAND. ML 3.6 (VKA), 3.4 (KBA).		
20	22	39	53.0*	12.306 N	93.055 E	33 N		1.0	9	ANDAMAN ISLANDS REGION		
21	00	54	29.6?	35.74 N	27.34 E	10 G		0.1	5	DODECANESE ISLANDS		
21	02	25	35.2	43.289 N	13.868 E	10 G		0.9	9	CENTRAL ITALY. MD 3.4 (TRI).		
21	02	26	46.0	50.474 N	18.949 E	10 G		1.2	10	POLAND. ML 3.2 (KRA).		
21	03	16	40.9	43.248 N	13.961 E	10 G		1.0	27	CENTRAL ITALY. ML 3.5 (LDG). MD 3.5 (TRI).		

21	03 20 14.4*	11.029 N	92.182 E	33 N	4.1 3.8	0.9	10	ANDAMAN ISLANDS REGION	
21	03 52 36.5	15.784 N	147.279 E	33 N	5.3 4.5	0.9	136	MARIANA ISLANDS REGION	
21	07 53 19.2	4.018 N	31.615 W	10 G	4.9 4.8	1.1	73	CENTRAL MID-ATLANTIC RIDGE	
21	10 52 44.3?	42.27 N	18.89 E	10 G		0.3	4	YUGOSLAVIA. ML 2.0 (TTG).	
21	11 40 02.5?	41.647 N	14.284 E	10 G		1.1	6	SOUTHERN ITALY	
21	12 14 19.4	23.406 S	179.945 W	563 ?	4.7	0.7	54	SOUTH OF FIJI ISLANDS	
21	12 19 13.9*	71.559 N	5.061 W	10 G	4.3	0.7	14	JAN MAYEN ISLAND REGION	
a	21	13 27 12.9	36.295 S	97.252 W	10 G	5.4 5.5	1.1	88	WEST CHILE RISE. Ms 5.6 (BRK).
21	13 47 07.3	10.226 N	126.591 E	27	5.0 4.7	1.2	44	PHILIPPINE ISLANDS REGION	
21	14 07 32.9	54.342 N	108.966 E	33 N	4.7 4.9	1.2	22	LAKE BAIKAL REGION	
21	14 55 48.5?	52.85 N	173.67 W	260 *	4.4	1.5	11	ANDREANOF ISLANDS, ALEUTIAN IS.	
21	15 17 19.9%	41.691 N	12.609 E	10 G		0.5	8	SOUTHERN ITALY	
21	15 30 48.3?	43.68 N	6.96 E	10 G		0.1	4	NEAR SOUTH COAST OF FRANCE. ML 2.4 (LDG).	
21	15 49 06.9	40.263 N	29.580 E	10 G		0.7	10	TURKEY	
21	16 28 15.4*	19.082 S	169.237 E	246 *	4.4	1.3	27	VANUATU ISLANDS	
21	20 35 15.3?	21.60 S	179.40 W	641 ?	4.5	0.4	9	FIJI ISLANDS REGION	
21	20 35 39.8&	45.555 N	111.685 W	5			14	MONTANA. <BUT>. ML 3.6 (BUT). Felt (IV) at Narris and Virginia City. Felt (III) at Harrison, McAllister and Pany.	
21	20 37 13.0?	31.41 S	71.47 W	159 ?		0.4	10	NEAR COAST OF CENTRAL CHILE	
21	20 38 05.0&	45.567 N	111.701 W	2			7	MONTANA. <BUT>. ML 3.4 (BUT). Felt at Narris.	
21	20 53 38.3&	45.550 N	111.707 W	3			8	MONTANA. <BUT>. ML 2.8 (BUT).	
21	22 18 20.3&	45.558 N	111.651 W	6			11	MONTANA. <BUT>. ML 3.2 (BUT). Felt at Narris.	
21	23 00 53.7	39.297 N	24.872 E	11		1.3	13	AEGEAN SEA. ML 3.1 (ATH).	
22	00 26 28.6*	10.745 S	160.649 E	33 N	3.8	0.8	5	SOLOMON ISLANDS	
22	00 58 17.0%	15.571 N	60.645 W	33 N		0.8	10	LEEWARD ISLANDS. ML 2.5 (FDF).	
22	01 17 21.4*	5.296 S	68.556 E	10 G	4.8	0.8	36	CHAGOS ARCHIPELAGO REGION	
22	01 35 20.9	5.587 S	151.801 E	39	5.2 4.5	1.2	97	NEW BRITAIN REGION	
22	01 53 42.2	5.824 S	151.930 E	10 G	4.3 3.9	1.3	11	NEW BRITAIN REGION	
22	01 54 17.9*	4.932 S	68.193 E	10 G	4.6	1.2	26	CHAGOS ARCHIPELAGO REGION	
22	02 06 18.9	44.636 N	7.259 E	10 G		0.4	8	NORTHERN ITALY. ML 2.7 (LDG).	
22	02 11 31.3*	31.978 S	69.694 W	120 G		0.4	6	SAN JUAN PROVINCE, ARGENTINA	
22	02 22 18.3*	5.839 S	151.949 E	10 G	4.6	1.3	12	NEW BRITAIN REGION	
22	03 54 05.2&	45.551 N	111.681 W	4			11	MONTANA. <BUT>. ML 3.0 (BUT). Felt at Narris.	
a	22	04 17 57.4	5.562 S	151.790 E	41	5.1 5.0	1.1	109	NEW BRITAIN REGION. Ms 5.4 (BRK).
22	04 47 38.2?	35.32 S	104.87 W	10 G	4.7	1.4	19	SOUTHERN PACIFIC OCEAN	
22	05 21 18.8*	5.588 S	151.877 E	33 N	3.7	0.8	7	NEW BRITAIN REGION	
22	05 23 06.8&	45.552 N	111.680 W	4	4.0		30	MONTANA. <BUT>. MD 4.2 (BUT), ML 4.1 (NEIS). Felt (V) at Harrison; (IV) at Alder, Bazeman, McAllister, Narris, Pony and Virginia City; (III) at Basin, Ennis, Gallatin Gateway, Ramsay, Sheridan and Wilsall.	
22	05 54 34.4*	42.092 S	88.369 E	10 G	4.6 4.7	0.5	8	SOUTHEAST INDIAN RISE	
22	06 05 25.6&	45.546 N	111.692 W	4			11	MONTANA. <BUT>. ML 3.1 (BUT). Felt at Narris.	
22	06 14 31.9&	45.576 N	111.705 W	3			9	MONTANA. <BUT>. ML 2.6 (BUT).	
22	06 18 52.0&	45.566 N	111.691 W	7			14	MONTANA. <BUT>. ML 3.5 (BUT). Felt (IV) at Narris and (III) at Bozeman.	
22	06 48 53.1&	62.254 N	149.334 W	51			28	CENTRAL ALASKA. <AGS-P>.	
22	06 53 04.8&	45.553 N	111.671 W	5			8	MONTANA. <BUT>. ML 3.1 (BUT). Felt at Narris.	
22	06 58 46.2?	50.98 N	175.97 W	33 N	4.1	1.9	5	ANDREANOF ISLANDS, ALEUTIAN IS. ML 3.8 (PMR).	
22	06 59 09.9	9.469 S	110.233 E	33 N	4.2	1.2	10	SOUTH OF JAVA	
a	22	08 03 17.2	4.051 N	125.582 E	51	5.4 4.8	1.3	125	TALAUD ISLANDS
22	08 03 55.1	21.176 S	169.827 E	66 D	5.4	1.0	113	LOYALTY ISLANDS REGION. mb 5.5 (BRK).	
22	08 05 43.2&	41.085 N	121.575 W	1			9	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK).	
a	22	08 23 04.3	15.792 N	93.372 W	105	5.1	1.2	119	NEAR COAST OF CHIAPAS, MEXICO. Felt in Chiapas and Oaxaca.
22	08 26 34.5&	45.556 N	111.701 W	3			9	MONTANA. <BUT>. ML 2.5 (BUT).	
22	08 32 14.7	5.786 S	151.825 E	34 *	4.9	1.3	25	NEW BRITAIN REGION	
22	08 56 12.5&	45.562 N	111.687 W	5			11	MONTANA. <BUT>. ML 3.1 (BUT). Felt at Narris.	
22	09 26 43.4?	39.68 N	23.78 E	10 G		1.5	5	AEGEAN SEA	
22	10 56 25.7&	45.569 N	111.691 W	5			9	MONTANA. <BUT>. ML 2.6 (BUT).	
22	10 59 12.0&	45.564 N	111.692 W	5			9	MONTANA. <BUT>. ML 2.6 (BUT).	
22	11 02 33.6?	51.13 N	15.90 E	10 G		1.6	6	POLAND. ML 2.7 (KRA).	
22	11 28 20.0*	52.653 N	164.106 W	33 N	4.6	0.9	13	SOUTH OF ALASKA	
22	12 25 02.0*	5.791 S	151.907 E	33 N	4.6	1.2	9	NEW BRITAIN REGION	
22	13 09 22.8	40.385 N	26.094 E	10 G		0.7	9	TURKEY	
22	14 03 27.8	3.817 N	125.509 E	33 N	4.6	1.0	13	TALAUD ISLANDS	
22	14 16 28.2	39.223 N	23.659 E	10 G		0.7	10	AEGEAN SEA. ML 3.1 (ATH).	
22	15 47 08.2&	45.555 N	111.692 W	4			11	MONTANA. <BUT>. ML 3.1 (BUT). Felt at Narris.	
22	15 49 50.0&	45.555 N	111.692 W	4			9	MONTANA. <BUT>. ML 2.7 (BUT).	
22	15 59 02.0?	5.03 S	129.54 E	237 ?	3.9	1.2	10	BANDA SEA	
22	16 00 53.6&	45.563 N	111.706 W	4			11	MONTANA. <BUT>. ML 3.2 (BUT). Felt at Narris.	
22	16 08 16.8&	45.558 N	111.704 W	4			11	MONTANA. <BUT>. ML 3.2 (BUT). Felt at Narris.	
22	16 14 41.7?	6.28 S	131.03 E	33 N	4.2	0.9	5	TANIMBAR ISLANDS REGION	
22	16 17 24.3&	45.572 N	111.719 W	8			8	MONTANA. <BUT>. ML 2.6 (BUT).	
22	17 52 37.9*	5.564 S	68.715 E	10 G	4.2	0.2	9	CHAGOS ARCHIPELAGO REGION	
22	18 05 08.7*	38.063 N	46.620 E	20 *	4.2 3.8	1.4	16	N.W. IRAN-USSR BORDER REGION. Felt in the Tabriz area, Iran.	
22	19 08 07.9&	40.175 N	124.985 W	5 G			5	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).	
22	22 05 24.6&	38.742 N	122.588 W	2 G			13	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK). Felt (III) at Cabb.	
22	22 47 15.8*	20.507 S	69.086 W	33 N		1.1	7	NORTHERN CHILE	
a	23	00 58 56.6	7.154 S	120.751 E	485	5.1	0.9	98	FLORES SEA
23	01 26 37.9*	47.597 N	113.708 W	5 G		0.3	7	MONTANA. ML 2.5 (NEIS), 3.2 (BUT). Felt at Candan.	
23	01 52 09.7	40.526 N	22.874 E	10 G	3.4	1.0	16	GREECE. ML 3.0 (SKO).	
23	01 52 57.7	47.716 N	113.673 W	5 G	3.7	1.1	20	MONTANA. ML 3.5 (NEIS), 4.2 (BUT). Felt (V) at Candan.	
a	23	03 57 58.6	23.391 S	179.785 W	563	5.1	1.0	49	SOUTH OF FIJI ISLANDS
23	05 14 54.6	44.840 N	10.166 E	10 G		0.7	17	NORTHERN ITALY. ML 3.0 (LDG).	
23	05 27 42.2*	34.789 N	70.067 E	33 N	4.4	0.9	10	AFGHANISTAN	
23	05 35 33.4*	52.168 N	170.567 W	33 N	4.5	0.7	24	FOX ISLANDS, ALEUTIAN ISLANDS	
23	05 41 33.6?	35.63 N	141.24 E	33 N	4.4	0.2	5	NEAR EAST COAST OF HONSHU, JAPAN	
23	07 07 36.7	38.670 N	27.739 E	11		0.6	15	TURKEY. ML 4.2 (ATH).	
23	07 57 23.9&	62.418 N	150.942 W	81			31	CENTRAL ALASKA. <AGS-P>.	
23	08 04 26.9*	5.626 S	151.820 E	33 N	3.8	0.7	6	NEW BRITAIN REGION	

23	08 11 31.3	43.098 N	10.722 E	10 G		0.8	19	CENTRAL ITALY
23	08 23 17.6&	45.546 N	111.673 W	5			13	MONTANA. <BUT>. ML 3.3 (BUT), 3.3 (NEIS). Felt (III) at Norris and McAllister.
23	08 35 11.57	6.05 S	130.57 E	110 ?	5.0	1.2	9	BANDA SEA
23	08 37 13.0*	16.462 S	178.270 E	33 N		1.4	10	FIJI ISLANDS
23	08 48 31.0	5.799 S	151.909 E	10 G	3.9	1.3	5	NEW BRITAIN REGION
23	09 32 28.5&	43.491 N	79.472 W	7			15	SOUTHERN ONTARIO. <OTT>. mbLg 3.4 (OTT). Felt in the Hamilton-Toronto area.
23	11 46 28.77	13.67 S	71.29 W	33 N		0.8	8	PERU
23	11 57 31.47	35.64 N	5.76 W	87 *		0.9	24	STRAIT OF GIBRALTAR. MG 3.5 (MDD).
23	12 21 26.1	14.011 S	167.798 E	33 N	4.5	1.3	33	VANUATU ISLANDS
23	12 30 18.5	34.441 N	26.495 E	22 *	4.2	1.0	16	CRETE. ML 4.2 (ATH).
23	13 16 18.6*	61.858 N	17.537 E	10 G		0.6	5	SWEDEN. ML 3.0 (UPP). Felt at Halsingland.
23	13 25 07.67	42.64 N	18.38 E	10 G		1.0	5	YUGOSLAVIA. ML 2.6 (TTG).
23	13 26 37.0*	6.931 S	147.466 E	33 N	4.2	0.7	8	EAST PAPUA NEW GUINEA REGION
23	14 23 52.67	17.08 N	60.42 W	28 *		0.8	9	LEEWARD ISLANDS. ML 3.4 (FDF).
23	14 36 32.1*	9.500 N	126.589 E	33 N	4.6	1.3	12	MINDANAO, PHILIPPINE ISLANDS
23	17 49 25.1&	59.392 N	153.700 W	125			34	SOUTHERN ALASKA. <AGS-P>.
23	17 56 48.3%	39.494 N	28.212 E	10 G		0.7	6	TURKEY
23	17 58 50.8%	39.550 N	28.265 E	10 G		1.1	6	TURKEY
a	23 19 28 01.6	46.442 N	153.477 E	33 N	5.3 4.6	0.9	137	KURIL ISLANDS
23	19 57 08.9%	44.243 N	6.853 E	10 G		0.5	6	FRANCE. ML 2.2 (LDG).
23	21 01 45.0*	29.909 N	80.879 E	33 N	4.0	0.8	8	NEPAL-INDIA BORDER REGION
23	21 15 58.67	40.71 N	30.34 E	10 G		1.1	8	TURKEY
23	22 12 04.5*	4.447 S	151.833 E	92 *	3.9	0.6	6	NEW BRITAIN REGION
23	23 53 15.97	32.37 S	72.07 W	33 N		0.5	10	OFF COAST OF CENTRAL CHILE
24	01 59 56.8	61.478 N	112.753 E	0 G	5.1	0.9	132	CENTRAL SIBERIA
24	03 00 07.8*	35.679 S	144.486 E	10 G		0.7	5	NEW SOUTH WALES, AUSTRALIA. ML 2.8 (BFD).
24	04 08 39.3*	22.111 S	176.449 W	178 *	4.8	1.1	18	SOUTH OF FIJI ISLANDS
24	04 47 38.9*	40.627 N	22.713 E	10 G		0.2	5	GREECE. ML 1.8 (SKO).
24	05 24 56.1*	66.437 N	149.788 W	10 G		1.5	5	ALASKA
a	24 05 25 10.5	56.231 N	153.650 W	33 N	5.5 5.3	0.9	259	KODIAK ISLAND REGION. ML 5.7 (PMR). Ms 5.9 (BRK). Felt (III) at Karluk and Larsen Bay. Felt (II) at Alitak.
24	05 44 01.27	38.91 N	27.64 E	10 G		0.8	6	TURKEY
24	08 09 52.4	36.219 N	3.368 E	10 G	4.5	0.7	44	ALGERIA
24	08 25 56.3*	18.913 N	121.060 E	50 ?	3.6	1.3	10	LUZON, PHILIPPINE ISLANDS
24	09 25 38.17	41.54 N	27.74 E	10 G		1.1	5	TURKEY
24	10 33 38.7	44.678 N	111.008 W	5 G		1.3	9	HEBGEN LAKE REGION. ML 3.2 (BUT).
24	10 54 52.7	8.083 S	122.400 E	201 *	5.0	1.2	45	FLORES ISLAND REGION
24	16 28 23.9*	11.151 S	113.420 E	33 N	3.9	1.2	7	SOUTH OF JAVA
24	16 50 21.6*	56.359 N	153.588 W	33 N	4.6	1.4	16	KODIAK ISLAND REGION. ML 4.0 (PMR).
24	17 14 28.0&	62.056 N	147.955 W	41			35	CENTRAL ALASKA. <AGS-P>. ML 3.2 (PMR). Felt (III) at Matanuska Glacier and (II) at Wasilla.
24	19 39 01.07	37.24 N	20.36 E	10 G		0.6	5	IONIAN SEA. ML 3.3 (ATH).
24	19 46 51.8*	2.731 N	127.090 E	33 N	4.4	0.8	9	MOLUCCA PASSAGE
24	20 47 26.6&	37.557 N	121.692 W	4			12	CENTRAL CALIFORNIA. <BRK>. ML 2.4 (BRK). Felt at Livermore.
24	21 04 26.2*	24.050 S	67.036 W	211 *	4.8	0.1	8	CHILE-ARGENTINA BORDER REGION
24	22 02 07.2*	23.987 S	66.638 W	189 ?	4.2	0.8	8	JUJUY PROVINCE, ARGENTINA
24	22 07 04.87	70.82 N	0.17 E	10 G	4.3	1.0	19	NORWEGIAN SEA
24	22 21 39.8	42.325 N	19.515 E	10 G		0.5	8	YUGOSLAVIA. ML 2.3 (TTG).
24	22 31 50.8&	38.800 N	122.800 W	5 G			10	NORTHERN CALIFORNIA. <BRK>. ML 2.8 (BRK).
24	22 43 19.6&	61.431 N	146.674 W	19			32	SOUTHERN ALASKA. <AGS-P>.
24	23 49 28.5	40.770 N	27.459 E	10 G		1.0	11	TURKEY
24	23 54 05.97	44.17 N	114.63 W	5 G		0.4	5	WESTERN IDAHO. ML 3.2 (BUT).
25	00 03 08.9&	60.279 N	151.860 W	71			37	KENAI PENINSULA, ALASKA. <AGS-P>.
25	01 10 22.5	25.596 N	122.890 E	270	4.2	0.9	29	TAIWAN REGION
a	25 01 11 48.8	60.155 N	153.771 W	167 D	5.0	0.9	252	SOUTHERN ALASKA. mb 5.1 (BRK). Felt (V) at Anchor Point, (IV) at Ninilchik and (III) at Kenai and Sterling. Also felt at Anchorage, Kodiak, Homer, Palmer and Seward.
25	03 06 09.47	33.34 S	78.05 E	10 G	4.7 4.7	1.4	6	MID-INDIAN RISE
25	03 59 10.07	32.94 S	72.11 W	10 G		0.6	6	OFF COAST OF CENTRAL CHILE
25	05 31 05.7	60.232 N	13.778 E	10 G		1.3	4	SWEDEN. ML 3.0 (UPP), 2.8 (NAO). Felt along the Norway-Sweden border.
25	06 00 02.8*	3.416 N	101.975 W	10 G	4.9 4.3	0.8	39	EAST CENTRAL PACIFIC OCEAN
25	06 25 50.57	2.12 S	134.63 E	33 N	3.7	0.3	5	WEST IRIAN REGION
25	08 13 04.4&	60.082 N	152.812 W	107			35	SOUTHERN ALASKA. <AGS-P>.
25	09 25 33.6	43.139 N	26.060 E	10 G		1.4	13	BULGARIA
25	09 30 19.77	51.31 N	20.58 E	10 G		1.2	6	POLAND. ML 3.0 (KRA).
25	10 08 49.2*	28.955 N	142.073 E	33 N	4.2	1.4	7	BONIN ISLANDS REGION
25	11 43 48.47	31.39 S	178.85 W	33 N	4.9	1.1	6	KERMADEC ISLANDS REGION
25	14 28 58.0*	8.063 S	104.641 E	33 N	4.7	1.2	22	SOUTHWEST OF SUMATERA
25	14 50 07.5*	10.145 N	126.495 E	33 N	4.7	1.4	29	PHILIPPINE ISLANDS REGION
25	14 51 04.1	39.699 N	20.919 E	10 G		0.5	12	GREECE-ALBANIA BORDER REGION
25	14 51 04.2&	40.305 N	124.633 W	18			10	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK). Felt at Fortuna.
25	15 05 06.3*	39.661 N	20.978 E	10 G		1.1	5	GREECE-ALBANIA BORDER REGION. MD 3.0 (ATH).
25	16 15 19.2	31.256 S	72.686 W	24 D	5.6	1.0	136	OFF COAST OF CENTRAL CHILE
25	16 54 40.1&	42.123 N	112.472 W	4			6	EASTERN IDAHO. <SLC-P>. ML 2.8 (SLC).
25	17 37 57.6*	45.983 S	166.059 E	33 N	3.9	0.7	7	OFF W. COAST OF S. ISLAND, N.Z.
25	18 12 05.9	18.442 S	168.640 E	112	4.9	1.2	89	VANUATU ISLANDS
25	21 26 54.2*	15.350 S	172.094 W	33 N	4.4 4.3	0.8	6	SAMOA ISLANDS REGION
25	22 09 38.9	6.858 N	72.985 W	156	4.8	1.0	42	NORTHERN COLOMBIA
25	22 24 54.67	31.58 S	69.20 W	33 N		1.5	9	SAN JUAN PROVINCE, ARGENTINA
25	22 33 39.2	44.317 N	6.784 E	10 G		0.3	8	FRANCE. ML 2.5 (LDG).
25	23 58 40.2&	61.557 N	150.984 W	76			30	SOUTHERN ALASKA. <AGS-P>.
a	26 00 22 40.0	18.913 N	101.350 W	73 D	5.0	1.1	81	GUERRERO, MEXICO
26	00 29 55.47	29.78 S	178.07 W	33 N	4.7	1.4	11	KERMADEC ISLANDS
26	03 41 39.8*	5.450 S	150.414 E	152 *	3.9	0.8	10	NEW BRITAIN REGION
26	04 33 38.7*	38.544 N	73.799 E	33 N	4.6	1.2	8	TAJIK-XINJIANG BORDER REGION
26	04 44 21.1&	60.783 N	151.667 W	78			40	KENAI PENINSULA, ALASKA. <AGS-P>.
26	04 55 40.4*	4.816 S	144.446 E	33 N	3.3	1.7	5	NEAR N COAST OF PAPUA NEW GUINEA

26	07 38 08.9	47.017 N	9.010 E	10 G	0.4	15	GERMANY. ML 2.7 (LDG).			
26	10 56 52.6	47.048 N	9.040 E	10 G	0.4	9	GERMANY. ML 2.6 (LDG).			
26	12 56 01.1*	39.536 N	25.962 E	10 G	0.9	12	AEGEAN SEA			
26	14 42 45.7*	42.395 N	1.093 E	10 G	0.9	6	PYRENEES. ML 2.8 (LDG).			
26	14 55 49.7&	60.316 N	152.379 W	96	4.0	46	SOUTHERN ALASKA. <AGS-P>.			
26	15 16 23.8*	8.179 S	158.532 E	33 N	3.5	0.6	6	SOLOMON ISLANDS		
26	15 26 57.9*	27.038 S	70.925 W	33 N	4.9	1.4	13	NEAR COAST OF NORTHERN CHILE		
26	15 29 48.9*	42.403 N	1.162 E	10 G		1.4	5	PYRENEES. ML 2.9 (LDG).		
26	16 01 44.9	51.032 N	175.116 E	33 N	4.8	1.0	43	RAT ISLANDS, ALEUTIAN ISLANDS		
26	17 15 28.6&	33.020 N	117.850 W	6 G			9	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).		
26	18 29 03.6*	1.413 S	99.586 E	33 N		0.9	6	SOUTHERN SUMATERA		
26	19 12 51.4	2.893 S	102.030 E	126	4.7	0.9	38	SOUTHERN SUMATERA		
26	20 11 44.7	14.193 S	75.992 W	52	4.8	1.2	23	NEAR COAST OF PERU. Felt (V) at Ica. Also felt at Chincha.		
							35	SOUTHERN ALASKA. <AGS-P>.		
26	20 28 57.0&	61.676 N	152.009 W	121	3.7		7	PERU		
26	20 29 14.9*	13.984 S	75.906 W	33 N		1.5				
a	26	21 59 41.9	30.210 S	165.781 E	33 N	5.5	5.4	1.2	78	NORTHWEST OF NEW ZEALAND. Felt (III) on Norfolk Island.
	26	22 29 11.3?	18.13 S	173.49 W	33 N	4.7		1.3	14	TONGA ISLANDS
a	26	23 17 42.2?	55.01 S	124.33 W	10 G	4.8	5.2	1.8	8	EASTER ISLAND CORDILLERA
	27	00 06 56.2	41.747 N	16.486 W	10 G	4.3		1.0	50	NORTH ATLANTIC OCEAN
	27	01 59 34.7*	41.829 N	19.510 E	10 G			1.3	8	ALBANIA. ML 2.2 (TTG).
	27	03 20 15.6	10.286 N	62.382 W	10 G	4.6	3.9	1.4	44	NEAR COAST OF VENEZUELA
	27	05 13 24.6*	3.342 S	145.324 E	33 N	4.4		1.3	6	NEAR N COAST OF PAPUA NEW GUINEA
	27	06 54 27.0?	31.18 S	68.96 W	132 ?			1.1	6	SAN JUAN PROVINCE, ARGENTINA
	27	07 06 46.3*	36.214 N	140.061 E	68	4.2		0.7	10	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito and Utsunomiya; (I JMA) at Kumagaya.
								0.7	7	CHILE-BOLIVIA BORDER REGION
	27	07 55 04.0*	22.512 S	67.411 W	193 *			1.1	20	SOUTH OF HONSHU, JAPAN
	27	09 00 48.1*	32.708 N	139.734 E	149 *	5.2		0.8	9	IONIAN SEA. MD 3.6 (ATH).
	27	09 06 11.5*	37.268 N	20.048 E	39 *	4.1		1.1	18	NEAR COAST OF PERU. Felt (IV) at Ica.
	27	11 19 21.3*	14.775 S	75.602 W	45 *	5.0		1.0	8	SOUTH OF SUMBAWA ISLAND
	27	11 46 19.8*	11.438 S	118.635 E	33 N	3.1		1.2	19	SOUTH OF HONSHU, JAPAN
	27	13 45 08.5*	29.003 N	142.314 E	33 N	4.3		1.3	10	NEW BRITAIN REGION
	27	14 29 02.7*	5.579 S	152.582 E	33 N	4.0		0.4	6	ZAMBIA. MG 3.3 (BUL).
	27	16 06 17.7?	14.50 S	26.10 E	10 G			1.1	15	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Urakawa.
	27	16 37 39.9*	41.893 N	141.161 E	138	4.2		1.5	19	NORTHWEST OF NEW ZEALAND
a	27	16 51 36.8&	60.176 N	152.904 W	114			0.6	6	NEAR COAST OF CENTRAL CHILE
	27	17 53 34.5*	30.504 S	165.729 E	33 N	5.1	4.9	1.1	15	SICILY. MD 3.5 (ROM). Felt at Agrigento.
	27	18 06 28.9?	32.09 S	71.72 W	33 N			0.9	27	EL SALVADOR
	27	19 14 33.1*	37.172 N	13.470 E	33 N			1.3	14	NEW BRITAIN REGION
	27	19 43 17.7	13.655 N	88.309 W	196	4.6		1.3	39	JAVA
	27	20 29 48.6*	6.486 S	150.895 E	10 G	4.6		0.8	15	GREECE. ML 3.5 (SKO), 2.8 (TTG).
	27	20 32 46.3	8.990 S	113.393 E	90 *	4.6		1.2	7	BALLENY ISLANDS REGION
	27	21 20 50.5	40.778 N	22.102 E	10	3.4		1.5	8	FRANCE. ML 2.6 (LDG).
	27	21 30 07.8*	63.390 S	170.693 E	10 G	4.5	4.7	0.8	40	UNIMAK ISLAND REGION. ML 4.7 (PMR).
	27	22 44 37.1?	45.38 N	6.52 E	10 G			0.4	8	PHILIPPINE ISLANDS REGION
	27	23 15 44.7	53.746 N	163.653 W	33 N	4.8		0.4	5	NORTHERN COLOMBIA
	27	23 35 06.1*	10.493 N	126.176 E	33 N	4.4		0.1	7	AZORES ISLANDS
	28	00 17 19.4*	6.988 N	76.396 W	33 N			0.9	101	CENTRAL MID-ATLANTIC RIDGE
a	28	01 02 11.8?	38.38 N	26.41 W	10 G	5.0	5.3	0.3	5	YUGOSLAVIA. ML 2.2 (TTG).
	28	01 44 09.9	0.658 N	25.998 W	10 G			1.5	29	CENTRAL ALASKA. <AGS-P>. ML 3.6 (PMR).
	28	02 27 50.9?	42.615 S	19.073 E	10 G			1.2	19	AFGHANISTAN-USSR BORDER REGION
	28	02 38 48.0&	62.453 N	153.914 W	8			1.2	20	NEW BRITAIN REGION
	28	03 02 02.6*	36.316 N	71.446 E	106 ?	4.6		1.3	15	PAKISTAN
	28	03 15 31.8	5.589 S	151.964 E	48 *	4.6		0.6	8	HALMAHERA
	28	03 19 34.5*	35.921 N	71.169 E	107 ?	4.5		1.4	10	NORTHERN ITALY. MD 3.1 (TRI).
	28	03 46 10.5*	1.168 N	128.066 E	31 *	4.4		0.5	11	TURKEY
	28	05 25 01.5*	44.976 N	9.797 E	10 G			0.6	9	TURKEY
	28	06 09 16.2	40.115 N	28.129 E	6				23	SOUTHERN ALASKA. <AGS-P>.
	28	07 55 20.9?	40.113 N	28.092 E	10 G			0.9	53	CENTRAL MID-ATLANTIC RIDGE
	28	08 06 16.8&	59.867 N	153.422 W	132			0.6	39	SOUTHERN ALASKA. <AGS-P>.
	28	08 39 45.2	8.859 N	40.211 W	10 G	4.8	4.6		10	CALIFORNIA-NEVADA BORDER REGION. ML 3.3 (NEIS). Felt (V) at Mina, Nevada and (III) at Luning, Nevada.
	28	08 40 33.1&	59.720 N	153.407 W	121				23	WEST OF MACQUARIE ISLAND
	28	09 05 07.7	38.364 N	118.073 W	5 G			1.2	13	WEST OF MACQUARIE ISLAND
a	28	09 49 48.5*	52.601 S	139.774 E	10 G	4.8	5.3	0.7	16	GREECE-ALBANIA BORDER REGION. ML 3.3 (TTG).
	28	09 50 54.5?	52.44 S	140.06 E	10 G	4.9		0.7	6	OFF COAST OF CENTRAL AMERICA
	28	10 05 21.4	40.660 N	20.792 E	10 G			1.1	4	NORTHEASTERN CHINA. ML 3.7 (BJI).
	28	10 15 08.2*	2.159 N	84.769 W	33 N	4.4		1.1	16	KURIL ISLANDS
	28	10 15 15.0?	38.38 N	119.70 E	33 N			1.0	41	VANUATU ISLANDS
	28	10 55 09.5*	43.978 N	146.517 E	33 N	4.8		1.2	6	TURKEY
	28	11 29 48.5	18.930 S	168.396 E	69 *	4.5		0.3	6	TURKEY
	28	12 51 37.3?	40.91 N	31.66 E	10 G			1.3	6	ZAIRE REPUBLIC. MG 3.5 (BUL).
	28	15 38 13.5?	2.13 S	68.45 E	10 G	4.5		0.2	11	CHILE-ARGENTINA BORDER REGION
	28	16 41 06.0?	41.119 N	27.751 E	10 G				37	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 4.7 (BRK). Felt (IV) at Mina, Nevada.
	28	18 41 24.2?	11.93 S	26.80 E	10 G			1.2	6	SPAIN. MG 3.3 (MDD).
	28	18 44 15.7*	31.990 S	70.328 W	130 ?			0.7	7	NEAR SOUTH COAST OF FRANCE. ML 2.9 (LDG).
	28	18 55 11.1&	38.383 N	118.117 W	14	4.3		1.4	10	SOUTH OF KERMADEC ISLANDS
								1.0	19	MARIANA ISLANDS. Felt (III) on Guam.
								1.0	9	MONTANA. <BUT>. ML 2.7 (BUT).
								1.1	7	YUGOSLAVIA
								0.9	107	MARIANA ISLANDS
								0.4	22	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.1 (PMR).
									5	LEEWARD ISLANDS. ML 2.4 (FDF).
								1.4	44	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 4.6 (BRK). Felt stragly at Mina, Nevada.
								1.1	10	SPAIN. MG 4.3 (MDD).
29	07 49 05.3*	37.036 N	1.986 W	10 G				1.1	7	NORTHWEST OF NEW ZEALAND
29	08 14 09.5*	30.176 S	166.422 E	33 N	4.7			0.7	22	GERMANY. ML 3.3 (LDG), 3.1 (KBA). Felt (IV) at Nenzing, Austria.
29	09 53 46.4	47.211 N	9.693 E	10						

o 29	10 01 11.2	30.205 S	177.025 W	10 G	5.0 5.6	1.3	63	KERMADEC ISLANDS. Ms 5.9 (BRK).
29	12 01 53.3*	5.109 S	151.257 E	158 *	4.0	1.5	10	NEW BRITAIN REGION
29	12 25 50.9	32.250 S	71.499 W	60 *	4.7	0.8	21	NEAR COAST OF CENTRAL CHILE
29	14 23 54.1	1.536 N	127.287 E	136 *	5.0	0.9	48	HALMAHERA
29	14 37 11.2?	20.62 S	178.81 W	613 *	4.5	0.9	13	FIJI ISLANDS REGION
o 29	15 22 33.1	28.869 S	67.150 W	142 D	5.4	1.1	140	LA RIOJA PROVINCE, ARGENTINA. Felt (III) at Copiopo, Chile.
29	15 59 32.9	40.882 N	28.460 E	10 G		0.7	10	TURKEY
29	16 39 19.3	42.270 S	120.114 E	10 G	5.4	1.0	65	SOUTH OF AUSTRALIA
29	17 32 47.5?	53.50 N	160.52 E	33 N	4.9 3.8	0.8	22	NEAR EAST COAST OF KAMCHATKA
29	18 53 05.3*	5.702 S	152.875 E	33 N	3.7	1.4	5	NEW BRITAIN REGION
29	19 10 45.7	43.384 N	17.708 E	10 G		1.0	14	YUGOSLAVIA. MD 3.2 (TTG).
o 29	20 37 13.4	18.240 S	178.208 W	625 D	5.1	0.9	142	FIJI ISLANDS REGION
29	20 41 02.0?	18.22 S	178.26 W	650 *	4.6	1.4	16	FIJI ISLANDS REGION
29	21 15 00.0	2.945 N	128.612 E	213 *	5.1	1.2	52	HALMAHERA
29	21 17 11.6*	32.610 S	71.611 W	18		0.6	11	NEAR COAST OF CENTRAL CHILE
o 29	21 32 31.8	18.309 S	178.134 W	637	5.2	1.0	241	FIJI ISLANDS REGION
29	21 41 15.5	38.374 N	118.049 W	5 G		0.5	7	CALIFORNIA-NEVADA BORDER REGION. ML 2.9 (NEIS). Felt (IV) at Mina, Nevada and (III) at Luning, Nevada.
29	21 43 34.0*	43.176 N	1.077 W	10 G		1.0	8	PYRENEES. ML 3.1 (LDG).
29	21 53 54.4*	23.063 S	176.520 W	100 ?	5.1	1.0	21	SOUTH OF FIJI ISLANDS
29	22 31 21.5?	30.94 S	68.50 W	106 ?		0.7	5	SAN JUAN PROVINCE, ARGENTINA
30	00 14 01.0&	37.398 N	121.755 W	4			13	CENTRAL CALIFORNIA. <BRK>. ML 2.6 (BRK).
30	00 59 17.5*	32.750 S	71.391 W	14		0.8	10	NEAR COAST OF CENTRAL CHILE
30	02 34 30.6&	61.863 N	151.824 W	116			37	SOUTHERN ALASKA. <AGS-P>.
30	02 39 12.5*	44.732 N	2.341 E	10 G		0.7	7	FRANCE. ML 2.5 (LDG).
30	03 39 25.5?	39.06 N	27.89 E	10 G		0.2	5	TURKEY
30	05 14 19.7	42.936 N	17.746 E	10 G	3.2	1.2	50	ADRIATIC SEA. MD 3.8 (TTG). Felt (IV) at Metkovic, Yugoslavia.
30	05 19 01.2&	45.548 N	111.689 W	4			9	MONTANA. <BUT>. ML 3.0 (BUT). Felt at Norris.
30	05 37 06.3*	6.063 S	151.161 E	55 ?	3.7	1.3	10	NEW BRITAIN REGION
30	06 23 48.0*	6.647 S	147.050 E	23	5.1	1.3	25	EAST PAPUA NEW GUINEA REGION
30	07 56 33.3?	33.81 S	72.10 W	28 *		1.0	9	OFF COAST OF CENTRAL CHILE
30	08 23 14.5*	7.558 S	146.945 E	125 *	4.1	1.3	13	EAST PAPUA NEW GUINEA REGION
30	09 16 34.2*	44.628 N	7.203 E	10 G		0.1	6	NORTHERN ITALY. ML 2.6 (LDG).
30	10 17 31.4&	45.561 N	111.712 W	3			7	MONTANA. <BUT>. ML 2.7 (BUT).
30	10 22 40.3&	62.322 N	151.037 W	75			25	CENTRAL ALASKA. <AGS-P>.
30	11 02 34.8*	21.409 N	144.374 E	33 N	4.3	1.2	15	MARIANA ISLANDS REGION
30	12 08 33.2?	42.63 N	19.15 E	10 G		0.2	4	YUGOSLAVIA. ML 2.2 (TTG).
30	12 13 59.1	38.382 N	118.045 W	5 G		1.0	8	CALIFORNIA-NEVADA BORDER REGION. ML 2.8 (NEIS). Felt (IV) at Mina, Nevada.
30	12 32 01.6	8.246 N	125.101 E	10 G	4.7	1.2	30	MINDANAO, PHILIPPINE ISLANDS. Felt (II RF) at Cagayan de Ora.
30	12 46 27.3*	26.849 S	26.536 E	5 G	5.0	1.0	13	REPUBLIC OF SOUTH AFRICA
30	13 27 51.1	30.226 N	131.048 E	56 *	4.7	1.3	37	KYUSHU, JAPAN
30	16 30 29.2*	38.597 N	27.838 E	10 G		1.2	7	TURKEY
30	17 46 19.4*	44.509 N	148.434 E	33 N	4.9	0.8	20	KURIL ISLANDS
30	17 53 11.5	44.638 N	111.058 W	5 G		0.6	7	HEBGEN LAKE REGION. ML 3.4 (BUT).
30	18 29 16.5?	15.84 N	62.83 W	33 N		1.2	5	LEEWARD ISLANDS. ML 3.2 (FDF).
30	19 37 52.3	21.734 N	144.070 E	33 N	5.0 4.4	1.0	69	MARIANA ISLANDS REGION
30	21 39 25.6*	21.563 N	122.540 E	33 N	4.2	1.4	12	TAIWAN REGION
30	21 56 35.6*	16.604 N	95.837 W	33 N	4.9	1.1	14	OAXACA, MEXICO
30	22 10 06.7*	21.193 N	144.172 E	33 N	4.5	1.4	15	MARIANA ISLANDS REGION
30	22 13 12.8	37.248 N	21.275 E	38	4.4	1.1	78	SOUTHERN GREECE. ML 3.9 (ATH).
30	23 44 55.7?	33.58 S	178.78 W	33 N	4.8	0.6	7	SOUTH OF KERMADEC ISLANDS
o 31	00 27 32.0	0.175 N	123.605 E	167	5.5	1.0	171	MINAHASSA PENINSULA
31	01 18 40.7&	40.357 N	124.392 W	23			7	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).
31	01 24 18.4?	0.21 S	99.53 E	108 *	4.6	1.2	12	SOUTHERN SUMATERA
31	01 38 31.1?	0.41 N	123.86 E	196 ?	3.8	0.2	8	MINAHASSA PENINSULA
31	02 09 25.2&	45.545 N	111.683 W	4			10	MONTANA. <BUT>. ML 2.7 (BUT).
31	02 13 11.0	38.213 N	22.162 E	17	3.8	1.3	28	GREECE. ML 3.8 (SKO). MD 3.7 (ATH). Felt in the Aiyon area.
31	02 24 03.4	36.371 N	7.852 E	10 G	3.7	0.8	27	ALGERIA
31	03 01 54.1*	17.462 N	61.759 W	33		0.4	10	LEEWARD ISLANDS. ML 3.4 (FDF).
31	03 04 23.7*	40.295 N	21.363 E	10 G		0.9	5	GREECE. MD 3.2 (ATH).
31	03 11 05.3*	29.684 S	178.451 W	168 *	4.4	1.3	13	KERMADEC ISLANDS
31	04 11 53.6?	17.57 N	61.78 W	33		0.3	8	LEEWARD ISLANDS. ML 3.3 (FDF).
31	04 31 47.4*	47.036 N	9.045 E	10 G		0.7	8	GERMANY
31	05 43 25.6*	40.466 N	28.118 E	10 G		0.9	8	TURKEY
31	07 19 52.6	43.646 N	127.184 W	10 G	4.1	0.7	29	OFF COAST OF OREGON
31	08 23 11.3	2.181 N	84.515 W	33 N	5.0 4.3	0.9	39	OFF COAST OF CENTRAL AMERICA
31	09 31 06.9*	39.939 N	26.036 E	10 G		1.3	10	TURKEY
31	11 13 53.0?	32.10 S	178.27 W	33 N	4.4	1.4	7	SOUTH OF KERMADEC ISLANDS
31	12 53 07.4	45.221 N	149.320 E	33 N	4.9	1.1	63	KURIL ISLANDS
31	14 11 33.6*	37.317 N	21.079 E	50 *	3.5 3.0	0.6	8	SOUTHERN GREECE
31	14 13 23.7&	61.026 N	152.375 W	110			34	SOUTHERN ALASKA. <AGS-P>.
31	15 45 19.2	33.488 N	4.101 W	10 G	3.7	0.9	8	MOROCCO
31	15 53 47.0?	30.70 S	179.25 W	246 ?	4.4	1.6	10	KERMADEC ISLANDS REGION
31	16 29 52.5	40.542 S	72.546 W	33 N	5.2	1.1	37	CENTRAL CHILE. Felt (V) at Osorno and Valdivia.
31	16 30 13.4*	5.140 S	152.235 E	48 *	4.3	1.4	16	NEW BRITAIN REGION
31	16 34 44.3	24.046 N	121.809 E	38 *	4.8	1.3	40	TAIWAN
31	19 04 08.6	41.336 N	141.482 E	116	5.0	1.0	112	HOKKAIDO, JAPAN REGION. Felt (III JMA) at Hachinabe; (II JMA) at Aomori and Miyako, Honshu; (II JMA) at Kushiro; (I JMA) at Hakodate, Obihira and Tomokamai, Hokkaido.
31	19 05 46.5*	1.314 S	80.589 W	33 N	4.8 4.3	1.2	25	NEAR COAST OF ECUADOR
31	19 25 35.4	38.593 N	27.713 E	10 G		0.4	7	TURKEY
31	19 30 00.8	37.624 N	29.674 E	10 G		0.4	6	TURKEY
31	22 36 15.0*	5.032 S	144.692 E	85 *	5.3	0.6	6	PAPUA NEW GUINEA
31	23 40 23.7	46.901 N	9.137 E	10		1.0	20	SWITZERLAND. ML 3.0 (GRF).
o 31	23 56 58.0&	40.415 N	124.407 W	16	5.6 6.0	2.86	286	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 5.5 (BRK). Rckslide at Petrolia and power lines down at Eureka. Minar damage (VI) at Arcata, Eureka, Ferndale,

Garberville, Petrolia and Scotia. Felt in Humboldt, Mendocino, Siskiyou and Trinity Counties. Maximum acceleration 0.6g recorded at Petrolia.

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

<p>02 13 10 41.01 43.409N 148.059E 31km 5.3mb (61 obs.) 5.3Msz (4 abs.) KURIL ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 28C Centroid Location: Origin Time 13:10:44.1 0.8 Lat 43.37N FIX; Lon 148.05E FIX Dep 21.3 5.5 Half-duration 1.5 Principal Axes: Scale 10**16 Nm T Val= 6.02 Plg=68 Azm=314 N 1.81 5 213 P -7.82 21 121 Best Double Couple: Mo=6.9*10**16 NP1: Strike=203 Dip=24 Slip= 79 NP2: 35 67 95</p>	<p>CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 17S, 30C Centroid Location: Origin Time 15:05:40.2 1.1 Lat 24.18N 0.09 Lon 108.93W 0.09 Dep 15.0 FIX Half-duration 2.0 Principal Axes: Scale 10**17 Nm T Val= 1.43 Plg=14 Azm=268 N 0.12 76 87 P -1.55 0 178 Best Double Couple: Mo=1.5*10**17 NP1: Strike=312 Dip=80 Slip= 170 NP2: 44 80 10</p>	<p>N 0.88 4 66 P -9.85 23 157 Best Double Couple: Mo=9.4*10**16 NP1: Strike=255 Dip=22 Slip= 101 NP2: 64 68 86</p>
<p>03 09 52 57.37 24.066N 108.788W 10km 5.1mb (44 obs.) 4.7Msz (1 obs.) GULF OF CALIFORNIA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 17S, 28C Centroid Location: Origin Time 09:53: 8.4 0.6 Lat 24.53N 0.06 Lon 108.59W 0.05 Dep 15.0 FIX Half-duration 2.5 Principal Axes: Scale 10**17 Nm T Val= 3.03 Plg=10 Azm=269 N -0.51 79 59 P -2.52 6 178 Best Double Couple: Mo=2.8*10**17 NP1: Strike=313 Dip=79 Slip= 177 NP2: 44 87 11</p>	<p>03 18 03 59.72 6.786S 72.247E 26km 5.3mb (73 obs.) 5.4Msz (15 abs.) CHAGOS ARCHIPELAGO REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 17S, 41C Centroid Location: Origin Time 18:04: 5.5 0.3 Lat 6.89S 0.04 Lon 72.21E 0.03 Dep 15.0 FIX Half-duration 2.6 Principal Axes: Scale 10**17 Nm T Val= 3.84 Plg=24 Azm=344 N -0.12 14 80 P -3.72 62 198 Best Double Couple: Mo=3.8*10**17 NP1: Strike= 48 Dip=25 Slip=-125 NP2: 265 70 -75</p>	<p>05 09 23 00.09 51.486N 174.660W 33km 5.5mb (79 abs.) 5.2Msz (14 obs.) ANDREANOF ISLANDS, ALEUTIAN IS. CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 16S, 28C Centroid Location: Origin Time 09:23: 3.8 0.5 Lat 51.85N 0.05 Lon 174.87W 0.08 Dep 35.5 3.3 Half-duration 2.4 Principal Axes: Scale 10**17 Nm T Val= 3.07 Plg=66 Azm=327 N 0.43 2 63 P -3.50 24 154 Best Double Couple: Mo=3.3*10**17 NP1: Strike=249 Dip=21 Slip= 97 NP2: 62 69 88</p>
<p>03 10 10 43.78 31.196N 130.322E 168km 5.8mb (92 obs.) KYUSHU, JAPAN FAULT PLANE SOLUTION: P-Waves NP1: Strike= 3 Dip=83 Slip= 81 NP2: 235 11 142 Principal Axes: T Plg=51 Azm=263 P 37 101 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.</p>	<p>03 22 58 29.53 40.991S 178.507E 32km 5.3mb (11 abs.) OFF E. COAST OF N. ISLAND, N.Z. CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 31C Centroid Location: Origin Time 22:58:30.6 0.7 Lat 41.11S 0.09 Lon 178.68E 0.11 Dep 34.4 5.7 Half-duration 1.5 Principal Axes: Scale 10**16 Nm T Val= 5.84 Plg=16 Azm=305 N -1.96 9 38 P -3.89 71 155 Best Double Couple: Mo=4.9*10**16 NP1: Strike= 22 Dip=30 Slip=-108 NP2: 223 62 -80</p>	<p>06 00 23 25.65 51.508N 174.721W 33km 5.8mb (71 abs.) 5.5Msz (20 abs.) ANDREANOF ISLANDS, ALEUTIAN IS. CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 19S, 47C Centroid Location: Origin Time 00:23:27.8 0.2 Lat 51.78N 0.02 Lon 174.72W 0.04 Dep 23.8 1.4 Half-duration 3.5 Principal Axes: Scale 10**17 Nm T Val= 7.88 Plg=66 Azm=333 N 0.52 0 63 P -8.40 24 153 Best Double Couple: Mo=8.1*10**17 NP1: Strike=244 Dip=21 Slip= 91 NP2: 63 69 90</p>
<p>RADIATED ENERGY No. of sta: 4 Focal mech. M Energy 2.5±1.7*10**13 Nm MOMENT TENSOR SOLUTION Dep 156 No. of sta: 8 Principal Axes: Scale 10**17 Nm T Val= 4.43 Plg=51 Azm=246 N 0.40 14 354 P -4.83 35 95 Best Double Couple: Mo=4.6*10**17 NP1: Strike=234 Dip=17 Slip= 150 NP2: 352 82 75 CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 27C Centroid Location: Origin Time 10:10:47.3 0.3 Lat 30.99N 0.04 Lon 130.40E 0.05 Dep 166.5 1.1 Half-duration 3.0 Principal Axes: Scale 10**17 Nm T Val= 6.73 Plg=49 Azm=270 N -1.44 5 6 P -5.30 41 100 Best Double Couple: Mo=6.0*10**17 NP1: Strike=239 Dip= 6 Slip= 144 NP2: 5 86 85</p>	<p>04 18 17 32.40 3.312S 146.904E 10km 5.2mb (12 obs.) 4.6Msz (1 obs.) BISMARCK SEA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 29C Centroid Location: Origin Time 18:17:35.8 0.8 Lat 3.44S 0.08 Lon 146.83E 0.08 Dep 15.0 FIX Half-duration 1.7 Principal Axes: Scale 10**16 Nm T Val= 8.91 Plg=19 Azm=146 N -0.08 63 14 P -8.83 19 243 Best Double Couple: Mo=8.9*10**16 NP1: Strike=285 Dip=63 Slip= 0 NP2: 195 90 153</p>	<p>06 01 06 07.68 26.999S 108.285W 10km 6.2mb (32 obs.) 6.3Msz (19 abs.) EASTER ISLAND REGION FAULT PLANE SOLUTION: P-Waves NP1: Strike=237 Dip=73 Slip= -90 NP2: 57 17 -90 Principal Axes: T Plg=28 Azm=327 P 62 147 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is not determined.</p>
<p>03 15 05 34.11 24.027N 108.813W 10km 5.0mb (25 abs.) 5.0Msz (2 abs.) GULF OF CALIFORNIA</p>	<p>05 00 06 10.85 51.465N 174.690W 33km 5.1mb (56 obs.) 4.9Msz (5 abs.) ANDREANOF ISLANDS, ALEUTIAN IS. CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 33C Centroid Location: Origin Time 00:06:11.9 0.7 Lat 51.64N 0.05 Lon 174.59W 0.08 Dep 35.5 3.3 Half-duration 1.7 Principal Axes: Scale 10**16 Nm T Val= 8.97 Plg=66 Azm=326</p>	<p>RADIATED ENERGY No. of sta: 5 Focal mech. M Energy 2.6±0.6*10**14 Nm MOMENT TENSOR SOLUTION Dep 12 No. of sta: 11 Principal Axes: Scale 10**19 Nm T Val= 1.45 Plg=29 Azm=321 N -0.07 8 56 P -1.38 60 161 Best Double Couple: Mo=1.4*10**19 NP1: Strike= 29 Dip=18 Slip=-119 NP2: 238 74 -81 CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN, IDA L.P.B.: 24S, 65C M.W.: 15S, 34C Centroid Location: Origin Time 01:06:17.1 0.2 Lat 27.34S 0.02 Lon 108.38W 0.01 Dep 15.0 FIX Half-duration 8.0 Principal Axes: Scale 10**19 Nm T Val= 1.48 Plg= 3 Azm=143 N -0.06 16 52 P -1.42 74 243 Best Double Couple: Mo=1.4*10**19 NP1: Strike=249 Dip=44 Slip= -67 NP2: 38 50 -111</p>

06 02 49 42.78 14.074S 167.828E 48km
5.9mb (52 obs.) 6.6Msz (23 obs.)
VANUATU ISLANDS
RADIATED ENERGY

No. of sta: 7 Focal mech. C
Energy 8.4±2.1*10**13 Nm
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 23S, 62C M.W.: 15S, 35C
Centroid Location:
Origin Time 02:49:49.1 0.2
Lot 13.94S 0.02 Lon 167.94E 0.01
Dep 15.0 FIX Half-duration 8.0
Principal Axes:
Scale 10**18 Nm
T Val= 9.66 Plg=85 Azm=304
N -0.20 4 163
P -9.46 3 73
Best Double Couple:Mo=9.6*10**18
NP1:Strike=159 Dip=42 Slip= 84
NP2: 347 48 95

06 23 22 06.19 53.434N 158.318E 149km
5.3mb (61 obs.)

NEAR EAST COAST OF KAMCHATKA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centroid Location:
Origin Time 23:22: 9.1 1.0
Lot 53.09N 0.08 Lon 158.45E 0.13
Dep 157.5 2.0 Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 8.63 Plg=33 Azm=138
N 1.73 1 228
P -10.36 57 320
Best Double Couple:Mo=9.5*10**16
NP1:Strike=225 Dip=12 Slip=-93
NP2: 49 78 -89

07 10 36 03.71 4.403N 125.028E 70km
5.6mb (35 obs.)

TALAUD ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 19C
Centroid Location:
Origin Time 10:36: 5.8 0.3
Lot 4.30N 0.04 Lon 125.23E 0.04
Dep 27.7 3.0 Half-duration 2.6
Principal Axes:
Scale 10**17 Nm
T Val= 3.94 Plg=69 Azm=184
N 0.20 21 3
P -4.14 0 93
Best Double Couple:Mo=4.0*10**17
NP1:Strike=203 Dip=48 Slip= 119
NP2: 344 49 62

07 17 07 30.94 56.650N 120.857E 33km
5.0mb (43 obs.) 4.6Msz (2 obs.)

EASTERN USSR
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 26C
Centroid Location:
Origin Time 17:07:25.8 0.6
Lot 56.67N 0.06 Lon 121.59E 0.14
Dep 16.0 FIX Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 8.37 Plg=18 Azm=170
N 1.22 0 260
P -9.58 72 351
Best Double Couple:Mo=9.0*10**16
NP1:Strike=260 Dip=27 Slip=-91
NP2: 80 63 -90

07 18 12 53.40 25.826S 178.169E 649km
5.3mb (38 obs.)

SOUTH OF FIJI ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 18S, 30C
Centroid Location:
Origin Time 18:12:59.7 0.4
Lot 25.52S 0.03 Lon 177.84E 0.04
Dep 655.3 2.4 Half-duration 2.6
Principal Axes:
Scale 10**17 Nm
T Val= 3.37 Plg=28 Azm=180
N 0.58 9 85

P -3.95 60 339
Best Double Couple:Mo=3.7*10**17
NP1:Strike=293 Dip=18 Slip=-61
NP2: 82 74 -99

08 11 50 14.79 26.969S 108.156W 10km
6.1mb (40 obs.) 5.9Msz (16 obs.)

EASTER ISLAND REGION
MOMENT TENSOR SOLUTION
Dep 9 No. of sta: 10
Principal Axes:
Scale 10**18 Nm
T Val= 4.96 Plg= 7 Azm=188
N -0.01 20 95
P -4.95 68 297
Best Double Couple:Mo=5.0*10**18
NP1:Strike=300 Dip=42 Slip=-59
NP2: 80 56 -115
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 25S, 62C M.W.: 17S, 33C
Centroid Location:
Origin Time 11:50:22.1 0.1
Lot 27.32S 0.01 Lon 108.27W 0.01
Dep 18.4 0.5 Half-duration 5.9
Principal Axes:
Scale 10**18 Nm
T Val= 5.68 Plg= 3 Azm=328
N -0.31 7 58
P -5.36 83 214
Best Double Couple:Mo=5.5*10**18
NP1:Strike= 51 Dip=42 Slip=-100
NP2: 244 48 -81

08 16 16 40.49 5.701S 129.883E 33km
5.2mb (19 obs.) 4.6Msz (1 obs.)

BANDA SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 39C
Centroid Location:
Origin Time 16:16:43.6 0.5
Lot 5.51S 0.05 Lon 130.02E 0.05
Dep 33.0 FIX Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 1.92 Plg= 1 Azm=109
N -0.30 89 248
P -1.62 1 19
Best Double Couple:Mo=1.8*10**17
NP1:Strike=154 Dip=89 Slip= 180
NP2: 244 90 1

08 20 24 25.52 14.050S 167.772E 58km
5.2mb (15 obs.)

VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 20C
Centroid Location:
Origin Time 20:24:23.2 1.0
Lot 14.28S 0.15 Lon 167.62E 0.13
Dep 15.0 FIX Half-duration 1.3
Principal Axes:
Scale 10**16 Nm
T Val= 5.11 Plg=58 Azm=232
N 0.34 15 347
P -5.45 28 85
Best Double Couple:Mo=5.3*10**16
NP1:Strike=208 Dip=22 Slip= 134
NP2: 343 74 74

08 22 56 02.76 46.437N 149.558E 152km
5.4mb (88 obs.)

KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 38C
Centroid Location:
Origin Time 22:56: 7.6 0.3
Lot 46.23N 0.03 Lon 149.53E 0.05
Dep 159.4 1.0 Half-duration 2.6
Principal Axes:
Scale 10**17 Nm
T Val= 3.76 Plg=30 Azm=117
N 0.05 3 26
P -3.81 59 290
Best Double Couple:Mo=3.8*10**17
NP1:Strike=217 Dip=15 Slip=-78
NP2: 25 75 -93

09 04 07 34.74 20.462S 68.796W 68km
5.3mb (31 obs.)

CHILE-BOLIVIA BORDER REGION
CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN
L.P.B.: 13S, 27C
Centroid Location:
Origin Time 04:07:47.6 0.5
Lot 20.51S 0.07 Lon 68.95W 0.07
Dep 123.9 3.7 Half-duration 1.9
Principal Axes:
Scale 10**16 Nm
T Val= 14.47 Plg=26 Azm= 47
N -2.48 15 309
P -11.98 60 193
Best Double Couple:Mo=1.3*10**17
NP1:Strike=167 Dip=23 Slip=-50
NP2: 305 72 -105

09 04 31 23.04 3.834N 126.542E 33km
5.6mb (45 obs.) 4.9Msz (7 obs.)

TALAUD ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 32C
Centroid Location:
Origin Time 04:31:24.4 0.6
Lot 3.79N 0.06 Lon 126.86E 0.10
Dep 52.0 FIX Half-duration 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 1.20 Plg=52 Azm=300
N 0.04 18 186
P -1.24 32 84
Best Double Couple:Mo=1.2*10**17
NP1:Strike=127 Dip=21 Slip= 30
NP2: 9 80 108

09 07 27 34.28 56.375S 25.642W 33km
5.6mb (22 obs.) 5.7Msz (19 obs.)

SOUTH SANDWICH ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 37C
Centroid Location:
Origin Time 07:27:40.8 0.2
Lot 56.36S 0.02 Lon 25.58W 0.04
Dep 15.0 FIX Half-duration 3.8
Principal Axes:
Scale 10**17 Nm
T Val= 12.31 Plg=67 Azm=269
N 1.47 3 173
P -13.78 23 81
Best Double Couple:Mo=1.3*10**18
NP1:Strike=165 Dip=22 Slip= 82
NP2: 354 68 93

09 22 18 57.25 12.078S 166.572E 121km
5.6mb (21 obs.)

SANTA CRUZ ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=190 Dip=60 Slip= 90
NP2: 10 30 90
Principal Axes:
T Plg=75 Azm=100
P 15 280
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.

MOMENT TENSOR SOLUTION
Dep 122 No. of sta: 3

Principal Axes:
Scale 10**16 Nm
T Val= 10.43 Plg=80 Azm= 89
N -1.91 0 180
P -8.52 10 270
Best Double Couple:Mo=9.5*10**16
NP1:Strike= 1 Dip=35 Slip= 90
NP2: 180 55 90

09 22 18 57.25 12.078S 166.572E 121km
5.6mb (21 obs.)

SANTA CRUZ ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 31C
Centroid Location:
Origin Time 22:19: 0.2 0.4
Lot 12.14S 0.03 Lon 166.19E 0.04
Dep 111.7 2.3 Half-duration 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 1.45 Plg=67 Azm=100
N -0.06 7 352
P -1.39 22 260
Best Double Couple:Mo=1.4*10**17
NP1:Strike=336 Dip=24 Slip= 72

NP2: 175 67 98

10 18 49 53.91 55.137N 165.525E 33km
6.1mb (85 obs.) 6.3Msz (27 obs.)
KOMANDORSKY ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=120 Dip=77 Slip= 160
NP2: 215 71 14
Principal Axes:
T Plg=23 Azm= 76
P 4 168
Comment: The focal mechanism is well controlled and corresponds to strike-slip faulting with a moderate reverse component. The preferred fault plane is not determined.

RADIATED ENERGY
No. of sta: 10 Focal mech. F
Energy 8.8±2.6*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 15 No. of sta: 16
Principal Axes:
Scale 10**18 Nm
T Val= 4.36 Plg=10 Azm= 72
N -0.73 80 250
P -3.63 0 342
Best Double Couple:Mo=4.0*10**18
NP1:Strike=116 Dip=83 Slip= 173
NP2: 207 83 7
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 19S, 54C M.W.: 15S, 35C
Centroid Location:
Origin Time 18:49:57.0 0.1
Lat 55.33N 0.01 Lon 165.19E 0.01
Dep 28.4 0.9 Half-duration 5.7
Principal Axes:
Scale 10**18 Nm
T Val= 3.58 Plg= 4 Azm= 79
N -0.05 67 340
P -3.53 23 170
Best Double Couple:Mo=3.6*10**18
NP1:Strike=212 Dip=71 Slip= -14
NP2: 307 77 -161

11 05 13 15.18 50.201N 156.278E 75km
5.4mb (71 obs.)
KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 17C
Centroid Location:
Origin Time 05:13:17.9 0.5
Lat 49.95N 0.06 Lon 156.18E 0.12
Dep 48.4 9.6 Half-duration 1.7
Principal Axes:
Scale 10**17 Nm
T Val= 1.32 Plg=47 Azm=121
N -0.01 12 18
P -1.31 41 278
Best Double Couple:Mo=1.3*10**17
NP1:Strike=303 Dip=12 Slip= 15
NP2: 199 87 102

11 06 15 51.03 82.229N 17.556W 10km
5.5mb (60 obs.) 5.0Msz (9 obs.)
NEAR NORTH COAST OF GREENLAND
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 7S, 17C
Centroid Location:
Origin Time 06:15:56.6 1.3
Lat 82.34N 0.21 Lon 18.21W 0.73
Dep 15.0 FIX Half-duration 2.3
Principal Axes:
Scale 10**17 Nm
T Val= 2.22 Plg= 2 Azm=126
N 0.51 16 36
P -2.72 74 223
Best Double Couple:Mo=2.5*10**17
NP1:Strike=232 Dip=67 Slip= -68
NP2: 22 49 -111

11 13 31 44.52 36.953N 142.669E 39km
5.3mb (53 obs.) 5.5Msz (5 obs.)
OFF EAST COAST OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 28C
Centroid Location:
Origin Time 13:31:45.3 0.3

Lat 36.73N 0.04 Lon 142.68E 0.07
Dep 15.0 BDY Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.76 Plg=59 Azm=282
N 0.16 5 21
P -2.92 30 114
Best Double Couple:Mo=2.8*10**17
NP1:Strike=220 Dip=16 Slip= 110
NP2: 20 75 85

11 14 52 27.56 55.141N 165.496E 33km
5.3mb (71 obs.)
KOMANDORSKY ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 26C
Centroid Location:
Origin Time 14:52:29.3 0.8
Lat 55.37N 0.07 Lon 165.21E 0.20
Dep 39.3 8.3 Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 4.69 Plg=28 Azm= 76
N 1.09 56 295
P -5.78 18 176
Best Double Couple:Mo=5.2*10**16
NP1:Strike=218 Dip=57 Slip= 7
NP2: 124 84 147

11 22 47 20.86 4.901S 152.611E 68km
5.3mb (13 obs.)
NEW BRITAIN REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 7S, 11C
Centroid Location:
Origin Time 22:47:27.1 2.0
Lat 4.81S 0.14 Lon 152.65E 0.21
Dep 96.917.3 Half-duration 2.7
Principal Axes:
Scale 10**16 Nm
T Val= 3.88 Plg=17 Azm= 33
N 0.22 50 282
P -4.10 35 135
Best Double Couple:Mo=4.0*10**16
NP1:Strike=169 Dip=52 Slip= -15
NP2: 268 78 -141

13 01 45 54.10 26.020S 177.338W 107km
5.3mb (14 obs.)
SOUTH OF FIJI ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 24C
Centroid Location:
Origin Time 01:45:59.6 0.6
Lat 25.95S 0.06 Lon 177.23W 0.08
Dep 105.8 4.1 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 7.11 Plg=43 Azm=112
N 0.86 20 221
P -7.97 41 329
Best Double Couple:Mo=7.5*10**16
NP1:Strike=128 Dip=20 Slip= 177
NP2: 221 89 70

13 19 14 57.92 15.332S 70.061W 241km
5.1mb (53 obs.)
SOUTHERN PERU
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 31C
Centroid Location:
Origin Time 19:15: 4.0 0.4
Lat 15.15S 0.05 Lon 70.03W 0.04
Dep 226.5 2.2 Half-duration 3.4
Principal Axes:
Scale 10**18 Nm
T Val= 1.37 Plg=20 Azm=355
N -0.11 60 125
P -1.26 21 257
Best Double Couple:Mo=1.3*10**18
NP1:Strike= 37 Dip=60 Slip=-179
NP2: 306 89 -30

14 23 46 03.51 49.631N 147.828E 576km
5.7mb (82 obs.)
SEA OF OKHOTSK
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=201 Dip=78 Slip= 90
NP2: 21 12 90

Principal Axes:
T Plg=57 Azm=111
P 33 291
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP1.

RADIATED ENERGY
No. of sta: 6 Focal mech. M
Energy 3.2±0.5*10**12 Nm
MOMENT TENSOR SOLUTION
Dep 586 No. of sta: 12
Principal Axes:
Scale 10**17 Nm
T Val= 8.05 Plg=59 Azm=108
N -0.03 2 201
P -8.02 31 292
Best Double Couple:Mo=8.0*10**17
NP1:Strike= 29 Dip=14 Slip= 98
NP2: 200 76 88
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 32C
Centroid Location:
Origin Time 23:46: 8.5 0.3
Lat 49.59N 0.03 Lon 147.67E 0.04
Dep 588.6 1.7 Half-duration 3.3
Principal Axes:
Scale 10**17 Nm
T Val= 8.15 Plg=51 Azm=142
N 0.35 21 22
P -8.50 30 279
Best Double Couple:Mo=8.3*10**17
NP1:Strike=322 Dip=24 Slip= 28
NP2: 207 79 112

15 04 13 37.59 29.255N 130.567E 51km
5.3mb (42 obs.) 5.8Msz (8 obs.)
RYUKYU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 27C
Centroid Location:
Origin Time 04:13:37.8 0.5
Lat 29.05N 0.08 Lon 130.48E 0.08
Dep 26.7 3.1 Half-duration 2.7
Principal Axes:
Scale 10**17 Nm
T Val= 3.85 Plg=41 Azm=306
N 1.19 6 41
P -5.05 49 138
Best Double Couple:Mo=4.4*10**17
NP1:Strike=344 Dip= 8 Slip=-147
NP2: 221 86 -84

15 07 16 13.55 17.522N 97.153W 67km
5.9mb (71 obs.)
OAXACA, MEXICO
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=305 Dip=54 Slip= -90
NP2: 125 36 -90
Principal Axes:
T Plg= 9 Azm= 35
P 81 215
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is not determined.

RADIATED ENERGY
No. of sta: 4 Focal mech. M
Energy 5.3±1.0*10**12 Nm
MOMENT TENSOR SOLUTION
Dep 81 No. of sta: 8
Principal Axes:
Scale 10**18 Nm
T Val= 2.55 Plg= 1 Azm=197
N -0.01 19 106
P -2.54 71 290
Best Double Couple:Mo=2.5*10**18
NP1:Strike=305 Dip=47 Slip= -64
NP2: 89 49 -115
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 15S, 39C M.W.: 11S, 19C
Centroid Location:
Origin Time 07:16:13.4 0.2
Lat 17.42N 0.02 Lon 96.91W 0.02
Dep 72.4 0.9 Half-duration 4.9
Principal Axes:
Scale 10**18 Nm
T Val= 2.59 Plg= 6 Azm=209

N -0.09 0 299
 P -2.50 84 31
 Best Double Couple:Mo=2.6*10**18
 NP1:Strike=299 Dip=39 Slip=-90
 NP2: 119 51 -90

15 16 11 02.83 46.970N 154.130E 33km
 5.2mb (51 obs.) 4.6Msz (2 obs.)
 KURIL ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 26C
 Centroid Location:
 Origin Time 16:11: 4.2 1.6
 Lat 47.26N 0.15 Lon 154.71E 0.24
 Dep 15.0 FIX Half-duration 1.2
 Principal Axes:
 Scale 10**16 Nm
 T Val= 3.48 Plg=65 Azm=349
 N -0.25 13 229
 P -3.23 21 134
 Best Double Couple:Mo=3.4*10**16
 NP1:Strike=202 Dip=27 Slip= 60
 NP2: 55 67 104

16 05 46 29.56 33.059N 138.096E 310km
 5.3mb (69 obs.)
 SOUTH OF HONSHU, JAPAN
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 26C
 Centroid Location:
 Origin Time 05:46:32.6 0.3
 Lat 33.04N 0.03 Lon 137.97E 0.04
 Dep 301.4 1.4 Half-duration 3.3
 Principal Axes:
 Scale 10**17 Nm
 T Val= 7.29 Plg=53 Azm= 52
 N 0.45 25 181
 P -7.74 25 283
 Best Double Couple:Mo=7.5*10**17
 NP1:Strike= 54 Dip=30 Slip= 147
 NP2: 173 74 64

17 01 03 37.73 55.948S 27.683W 102km
 5.8mb (18 obs.)
 SOUTH SANDWICH ISLANDS REGION
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=285 Dip=76 Slip= 90
 NP2: 105 14 90
 Principal Axes:
 T Plg=59 Azm=195
 P 31 15
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is not determined.
 MOMENT TENSOR SOLUTION
 Dep 91 No. of sto: 3
 Principal Axes:
 Scale 10**17 Nm
 T Val= 6.92 Plg=37 Azm=142
 N -0.56 48 287
 P -6.35 18 38
 Best Double Couple:Mo=6.6*10**17
 NP1:Strike=174 Dip=50 Slip= 165
 NP2: 274 78 41
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 39C
 Centroid Location:
 Origin Time 01:03:41.5 0.2
 Lat 55.58S 0.02 Lon 27.97W 0.04
 Dep 92.4 1.6 Half-duration 2.8
 Principal Axes:
 Scale 10**17 Nm
 T Val= 4.88 Plg=47 Azm=144
 N -0.15 36 284
 P -4.73 21 30
 Best Double Couple:Mo=4.8*10**17
 NP1:Strike=163 Dip=40 Slip= 155
 NP2: 272 75 53

17 01 57 38.64 1.496N 85.300W 10km
 5.4mb (36 obs.) 5.5Msz (9 obs.)
 OFF COAST OF ECUADOR
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 41C
 Centroid Location:
 Origin Time 01:57:46.3 0.3
 Lat 1.53N 0.03 Lon 85.48W 0.03

Dep 15.0 FIX Half-duration 4.4
 Principal Axes:
 Scale 10**18 Nm
 T Val= 1.82 Plg= 0 Azm=137
 N 0.37 69 228
 P -2.20 21 47
 Best Double Couple:Mo=2.0*10**18
 NP1:Strike=184 Dip=75 Slip=-165
 NP2: 90 76 -15

17 17 22 29.68 17.779S 178.664W 560km
 5.3mb (29 obs.)
 FIJI ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 22C
 Centroid Location:
 Origin Time 17:22:31.6 1.8
 Lat 17.90S 0.16 Lon 179.27W 0.12
 Dep 537.9 7.4 Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 8.16 Plg=19 Azm= 25
 N 1.32 47 136
 P -9.48 37 280
 Best Double Couple:Mo=8.8*10**16
 NP1:Strike= 68 Dip=50 Slip=-165
 NP2: 329 79 -41

17 21 02 12.76 15.475S 74.074W 79km
 5.3mb (25 obs.)
 NEAR COAST OF PERU
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 26C
 Centroid Location:
 Origin Time 21:02:21.7 0.5
 Lat 15.19S 0.04 Lon 73.76W 0.04
 Dep 92.6 2.9 Half-duration 1.9
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.59 Plg=35 Azm=255
 N 1.01 31 140
 P -2.61 39 20
 Best Double Couple:Mo=2.1*10**17
 NP1:Strike= 45 Dip=31 Slip= -4
 NP2: 138 88 -121

18 12 14 13.42 12.702N 143.350E 114km
 5.3mb (20 obs.)
 SOUTH OF MARIANA ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 25C
 Centroid Location:
 Origin Time 12:14:22.0 1.5
 Lat 13.04N 0.19 Lon 143.61E 0.06
 Dep 105 8 4 3 Half-duration 1.6
 Principal Axes:
 Scale 10**16 Nm
 T Val= 8.25 Plg= 6 Azm= 74
 N -0.13 54 336
 P -8.13 35 168
 Best Double Couple:Mo=8.2*10**16
 NP1:Strike=205 Dip=61 Slip= -23
 NP2: 307 70 -149

19 14 00 23.54 17.242S 70.287W 107km
 5.2mb (50 obs.)
 NEAR COAST OF PERU
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 27C
 Centroid Location:
 Origin Time 14:00:33.9 0.6
 Lat 17.25S 0.06 Lon 70.64W 0.07
 Dep 127.8 3.0 Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 9.32 Plg=46 Azm= 58
 N -2.98 4 323
 P -6.34 43 229
 Best Double Couple:Mo=7.8*10**16
 NP1:Strike=251 Dip= 5 Slip= 10
 NP2: 143 89 94

19 20 01 16.92 4.819N 82.630W 10km
 4.8mb (17 obs.)
 SOUTH OF PANAMA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 17S, 33C
 Centroid Location:

Origin Time 20:01:28.1 0.9
 Lat 5.37N 0.08 Lon 82.84W 0.06
 Dep 15.0 FIX Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 6.60 Plg= 0 Azm=134
 N 0.31 90 180
 P -6.91 0 44
 Best Double Couple:Mo=6.8*10**16
 NP1:Strike=179 Dip=90 Slip= 180
 NP2: 269 90 0

20 07 53 46.71 4.079N 126.480E 81km
 5.3mb (19 obs.)
 TALAUD ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 28C
 Centroid Location:
 Origin Time 07:53:44.5 1.5
 Lat 4.01N 0.10 Lon 126.41E 0.10
 Dep 77.5 6.0 Half-duration 1.6
 Principal Axes:
 Scale 10**16 Nm
 T Val= 8.50 Plg= 2 Azm= 17
 N -1.37 29 285
 P -7.13 60 110
 Best Double Couple:Mo=7.8*10**16
 NP1:Strike=133 Dip=50 Slip= -50
 NP2: 261 54 -128

20 21 54 37.73 6.413S 154.861E 54km
 5.6mb (31 obs.) 5.0Msz (2 obs.)
 SOLOMON ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 30C
 Centroid Location:
 Origin Time 21:54:41.7 0.7
 Lat 6.56S 0.07 Lon 154.73E 0.05
 Dep 49.5 4.2 Half-duration 1.8
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.05 Plg=80 Azm=359
 N 0.15 8 136
 P -1.20 7 227
 Best Double Couple:Mo=1.1*10**17
 NP1:Strike=326 Dip=39 Slip= 102
 NP2: 131 52 80

21 13 27 12.97 36.295S 97.252W 10km
 5.4mb (14 obs.) 5.5Msz (8 obs.)
 WEST CHILE RISE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 19S, 49C
 Centroid Location:
 Origin Time 13:27:14.2 0.2
 Lat 36.67S 0.03 Lon 97.01W 0.03
 Dep 15.0 FIX Half-duration 3.1
 Principal Axes:
 Scale 10**17 Nm
 T Val= 5.46 Plg= 0 Azm=224
 N -0.01 90 180
 P -5.45 0 134
 Best Double Couple:Mo=5.5*10**17
 NP1:Strike=269 Dip=90 Slip= 180
 NP2: 359 90 0

22 04 17 57.49 5.562S 151.790E 41km
 5.1mb (14 obs.) 5.0Msz (5 obs.)
 NEW BRITAIN REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 35C
 Centroid Location:
 Origin Time 04:18: 2.4 0.4
 Lat 5.46S 0.06 Lon 152.18E 0.08
 Dep 15.0 BDY Half-duration 2.0
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.76 Plg=53 Azm= 15
 N 0.30 15 264
 P -3.06 33 164
 Best Double Couple:Mo=2.9*10**17
 NP1:Strike=209 Dip=18 Slip= 33
 NP2: 87 80 105

22 08 03 17.23 4.051N 125.502E 51km
 5.4mb (26 obs.) 4.8Msz (4 obs.)
 TALAUD ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN

L.P.B.: 15S, 41C
Centroid Location:
Origin Time 08:03:18.3 0.5
Lat 4.01N 0.06 Lon 125.39E 0.05
Dep 31.7 4.5 Half-duration 2.5
Principal Axes:
Scale 10**17 Nm
T Val= 2.78 Plg=72 Azm=120
N 0.28 9 2
P -3.06 16 269
Best Double Couple:Mo=2.9*10**17
NP1:Strike=347 Dip=30 Slip= 73
NP2: 187 61 100

22 08 23 04.37 15.792N 93.372W 105km
5.1mb (39 obs.)
NEAR COAST OF CHIAPAS, MEXICO
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 14C
Centroid Location:
Origin Time 08:23:16.1 2.4
Lat 16.05N 0.18 Lon 94.17W 0.19
Dep 98.0 FIX Half-duration 1.8
Principal Axes:
Scale 10**17 Nm
T Val= 1.37 Plg= 4 Azm=104
N 0.11 58 8
P -1.48 31 197
Best Double Couple:Mo=1.4*10**17
NP1:Strike=236 Dip=65 Slip= -21
NP2: 335 71 -154

23 00 58 56.60 7.154S 120.751E 485km
5.1mb (20 obs.)
FLORES SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 22C
Centroid Location:
Origin Time 00:59: 4.3 1.2
Lat 6.95S 0.11 Lon 120.62E 0.09
Dep 495.6 5.6 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 8.81 Plg=20 Azm= 84
N -1.23 65 226
P -7.58 14 349
Best Double Couple:Mo=8.2*10**16
NP1:Strike=126 Dip=65 Slip= 176
NP2: 218 86 25

23 03 57 58.61 23.391S 179.785W 563km
5.1mb (14 obs.)
SOUTH OF FIJI ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 22C
Centroid Location:
Origin Time 03:58: 8.2 1.3
Lat 23.35S 0.12 Lon 179.73E 0.10
Dep 594.9 5.1 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 8.29 Plg=25 Azm=345
N -0.12 2 75
P -8.16 65 169
Best Double Couple:Mo=8.2*10**16
NP1:Strike= 71 Dip=20 Slip= -95
NP2: 256 70 -88

23 19 28 01.69 46.442N 153.477E 33km
5.3mb (62 obs.) 4.6Msz (3 obs.)
KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 27C
Centroid Location:
Origin Time 19:28: 2.8 1.4
Lat 46.55N 0.10 Lon 153.80E 0.16
Dep 27.5 5.9 Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 5.06 Plg=71 Azm=253
N 1.24 13 26
P -6.30 14 119
Best Double Couple:Mo=5.7*10**16
NP1:Strike=226 Dip=33 Slip= 114
NP2: 18 60 75

24 05 25 10.56 56.231N 153.650W 33km
5.5mb (83 obs.) 5.3Msz (13 obs.)
KODIAK ISLAND REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 28C
Centroid Location:
Origin Time 05:25:12.4 0.4
Lat 55.94N 0.06 Lon 153.49W 0.08
Dep 41.8 5.1 Half-duration 1.3
Principal Axes:
Scale 10**17 Nm
T Val= 3.58 Plg=57 Azm=310
N -0.03 3 45
P -3.55 33 138
Best Double Couple:Mo=3.6*10**17
NP1:Strike=241 Dip=12 Slip= 106
NP2: 45 78 86

25 01 11 48.86 60.155N 153.771W 167km
5.0mb (45 obs.)
SOUTHERN ALASKA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 40C
Centroid Location:
Origin Time 01:11:52.5 0.4
Lat 60.02N 0.04 Lon 153.43W 0.07
Dep 174.6 1.5 Half-duration 3.4
Principal Axes:
Scale 10**17 Nm
T Val= 3.12 Plg=40 Azm=289
N -0.07 49 93
P -3.05 8 192
Best Double Couple:Mo=3.1*10**17
NP1:Strike=323 Dip=56 Slip= 155
NP2: 67 69 36

26 00 22 40.06 18.913N 101.350W 73km
5.0mb (27 obs.)
GUERRERO, MEXICO
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 20C
Centroid Location:
Origin Time 00:22:43.3 1.1
Lat 18.56N 0.11 Lon 101.40W 0.10
Dep 74.1 7.3 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 4.94 Plg=23 Azm= 13
N 1.02 3 281
P -5.96 66 184
Best Double Couple:Mo=5.4*10**16
NP1:Strike=109 Dip=22 Slip= -82
NP2: 280 68 -93

26 21 59 41.93 30.210S 165.781E 33km
5.5mb (11 obs.) 5.4Msz (5 obs.)
NORTHWEST OF NEW ZEALAND
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 20S, 50C
Centroid Location:
Origin Time 21:59:46.0 0.4
Lat 29.77S 0.03 Lon 165.74E 0.04
Dep 17.2 3.0 Half-duration 4.0
Principal Axes:
Scale 10**17 Nm
T Val= 3.40 Plg=20 Azm=171
N -0.46 62 304
P -2.94 19 74
Best Double Couple:Mo=3.2*10**17
NP1:Strike=212 Dip=62 Slip= 179
NP2: 303 89 28

26 23 17 42.21 55.01 S 124.33 W 10km
4.8mb (4 obs.) 5.2Msz (2 obs.)
EASTER ISLAND CORDILLERA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 19S, 48C
Centroid Location:
Origin Time 23:17:52.3 0.2
Lat 55.92S 0.03 Lon 124.26W 0.03
Dep 15.0 FIX Half-duration 3.5
Principal Axes:
Scale 10**17 Nm
T Val= 10.64 Plg= 0 Azm=151
N 6.56 90 180
P -5.37 0 61
Best Double Couple:Mo=8.0*10**17
NP1:Strike=196 Dip=90 Slip= 180
NP2: 286 90 0

27 17 53 34.50 30.504S 165.729E 33km
5.1mb (4 obs.) 4.9Msz (2 obs.)
NORTHWEST OF NEW ZEALAND
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 15C
Centroid Location:
Origin Time 17:53:31.7 1.4
Lat 30.38S FIX;Lon 165.52E FIX
Dep 15.0 FIX Half-duration 1.9
Principal Axes:
Scale 10**16 Nm
T Val= 7.36 Plg= 7 Azm=345
N 0.21 61 88
P -7.57 28 252
Best Double Couple:Mo=7.5*10**16
NP1:Strike= 32 Dip=66 Slip=-165
NP2: 295 76 -25

28 01 44 09.91 0.658N 25.998W 10km
5.0mb (36 obs.) 5.3Msz (5 obs.)
CENTRAL MID-ATLANTIC RIDGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 23S, 55C
Centroid Location:
Origin Time 01:44:24.1 0.2
Lat 1.02N 0.01 Lon 25.62W 0.02
Dep 15.0 FIX Half-duration 3.4
Principal Axes:
Scale 10**17 Nm
T Val= 9.00 Plg= 0 Azm=217
N 0.31 90 180
P -9.30 0 127
Best Double Couple:Mo=9.1*10**17
NP1:Strike=262 Dip=90 Slip= 180
NP2: 352 90 0

28 09 49 48.57 52.601S 139.774E 10km
4.8mb (5 obs.) 5.3Msz (1 obs.)
WEST OF MACQUARIE ISLAND
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 13C
Centroid Location:
Origin Time 09:49:57.8 1.6
Lat 52.68S 0.18 Lon 140.13E 0.22
Dep 15.0 FIX Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 8.93 Plg=14 Azm=230
N 3.17 60 345
P -12.10 26 133
Best Double Couple:Mo=1.1*10**17
NP1:Strike=274 Dip=61 Slip=-171
NP2: 180 82 -29

29 10 01 11.23 30.205S 177.025W 10km
5.0mb (10 obs.) 5.6Msz (11 obs.)
KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 21C
Centroid Location:
Origin Time 10:01:17.9 0.7
Lat 30.36S 0.06 Lon 177.14W 0.08
Dep 41.2 4.9 Half-duration 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 1.34 Plg=72 Azm=274
N -0.10 8 29
P -1.24 16 121
Best Double Couple:Mo=1.3*10**17
NP1:Strike=223 Dip=29 Slip= 106
NP2: 24 62 81

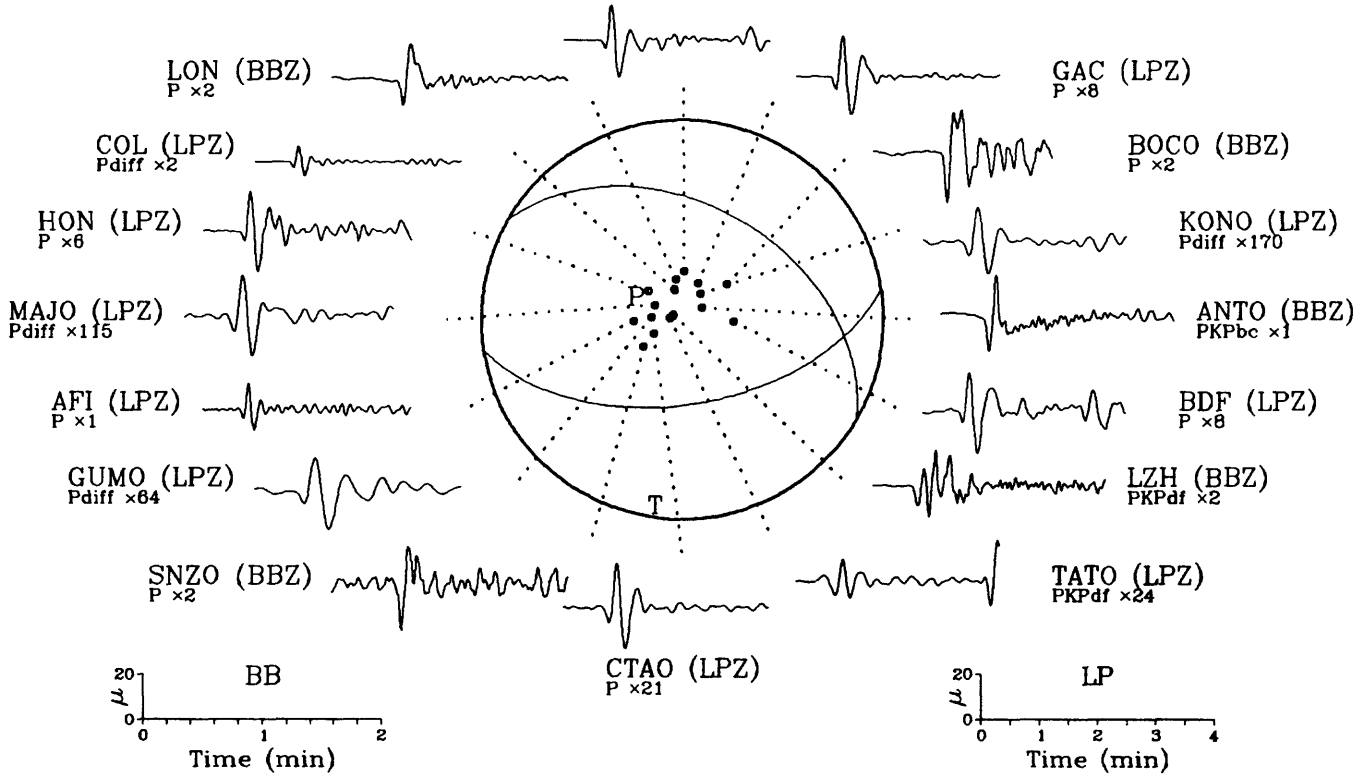
29 15 22 33.10 28.869S 67.150W 142km
5.4mb (25 obs.)
LA RIOJA PROVINCE, ARGENTINA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centroid Location:
Origin Time 15:22:38.0 0.6
Lat 28.33S 0.08 Lon 66.96W 0.09
Dep 150.7 2.8 Half-duration 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 1.76 Plg= 2 Azm=236
N -0.60 5 146
P -1.16 84 344
Best Double Couple:Mo=1.5*10**17
NP1:Strike=332 Dip=44 Slip= -82
NP2: 141 47 -97

<p>29 20 37 13.45 18.240S 178.208W 625km 5.1mb (29 obs.) FIJI ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 19S, 38C Centroid Location: Origin Time 20:37:20.2 0.5 Lat 18.20S 0.04 Lon 178.35W 0.04 Dep 645.3 2.0 Half-duration 2.8 Principal Axes: Scale 10**17 Nm T Val= 4.00 Plg=11 Azm=343 N -0.50 28 79 P -3.49 59 233 Best Double Couple:Mo=3.7*10**17 NP1:Strike= 42 Dip=42 Slip=-136 NP2: 275 62 -57</p>	<p>Origin Time 21:32:39.0 0.6 Lat 18.05S 0.05 Lon 178.33W 0.04 Dep 654.0 2.7 Half-duration 2.8 Principal Axes: Scale 10**17 Nm T Val= 4.17 Plg= 5 Azm=343 N -0.37 37 77 P -3.80 53 246 Best Double Couple:Mo=4.0*10**17 NP1:Strike= 40 Dip=51 Slip=-140 NP2: 282 60 -46</p>	<p>P -2.15 30 126 Best Double Couple:Mo=2.1*10**17 NP1:Strike=189 Dip=17 Slip= 56 NP2: 45 76 100</p>
<p>29 21 32 31.81 18.309S 178.134W 637km 5.2mb (41 obs.) FIJI ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 16S, 40C Centroid Location:</p>	<p>31 00 27 32.03 0.175N 123.605E 167km 5.5mb (32 obs.) MINAHASSA PENINSULA CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 37C Centroid Location: Origin Time 00:27:32.7 0.4 Lat 0.17N 0.05 Lon 123.96E 0.07 Dep 142.5 2.4 Half-duration 2.2 Principal Axes: Scale 10**17 Nm T Val= 2.13 Plg=58 Azm=328 N 0.02 10 222</p>	<p>31 23 56 58.00 40.415N 124.407W 16km 5.6mb (77 obs.) 6.0Msz (17 obs.) NEAR COAST OF NORTHERN CALIF. CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 17S, 42C Centroid Location: Origin Time 23:57: 2.6 0.3 Lat 40.28N 0.02 Lon 124.19W 0.03 Dep 17.8 1.9 Half-duration 4.0 Principal Axes: Scale 10**18 Nm T Val= 0.97 Plg= 0 Azm= 91 N 0.43 90 180 P -1.40 0 1 Best Double Couple:Mo=1.2*10**18 NP1:Strike=136 Dip=90 Slip= 180 NP2: 226 90 0</p>

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

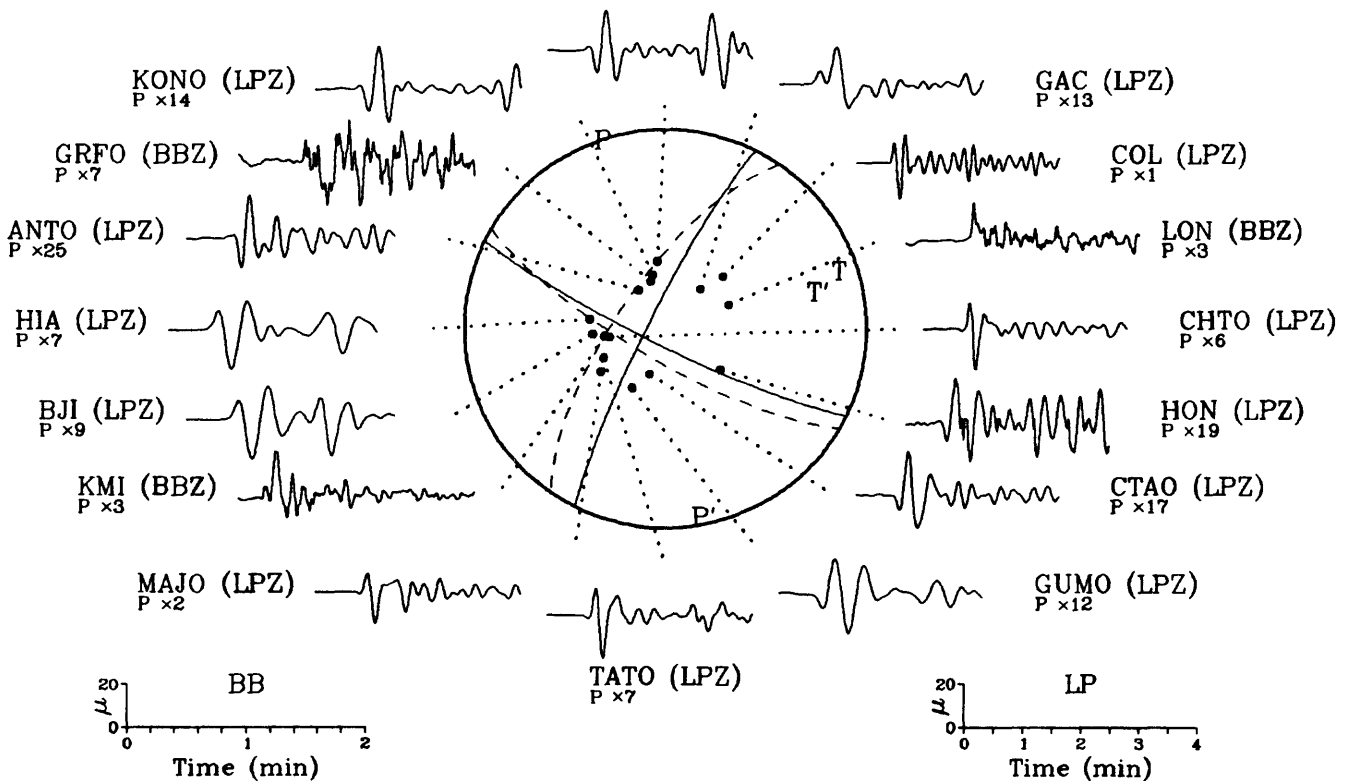
08 July 1987 11:50:14.79 Easter Island Region

ANMO (LPZ)
P x4



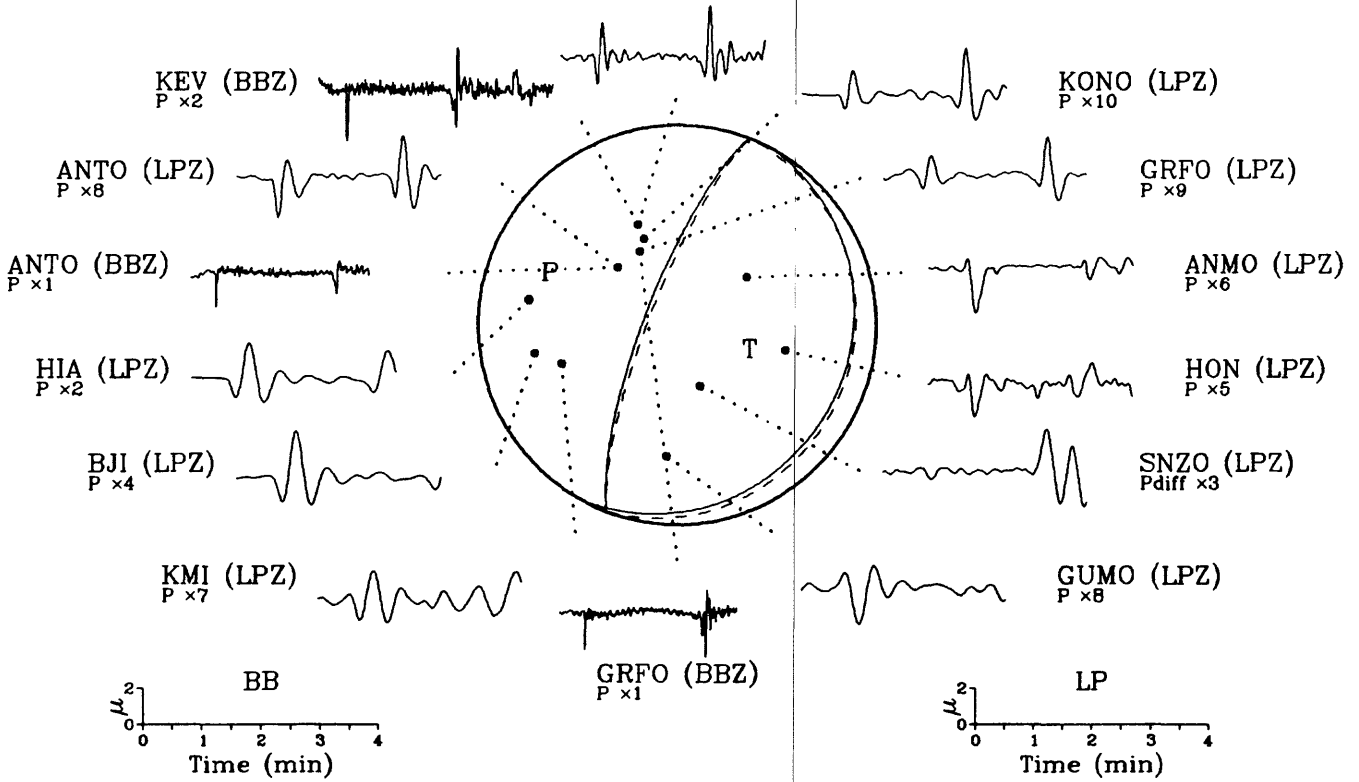
10 July 1987 18:49:53.91 Komandorsky Islands Region

KBS (LPZ)
P x8



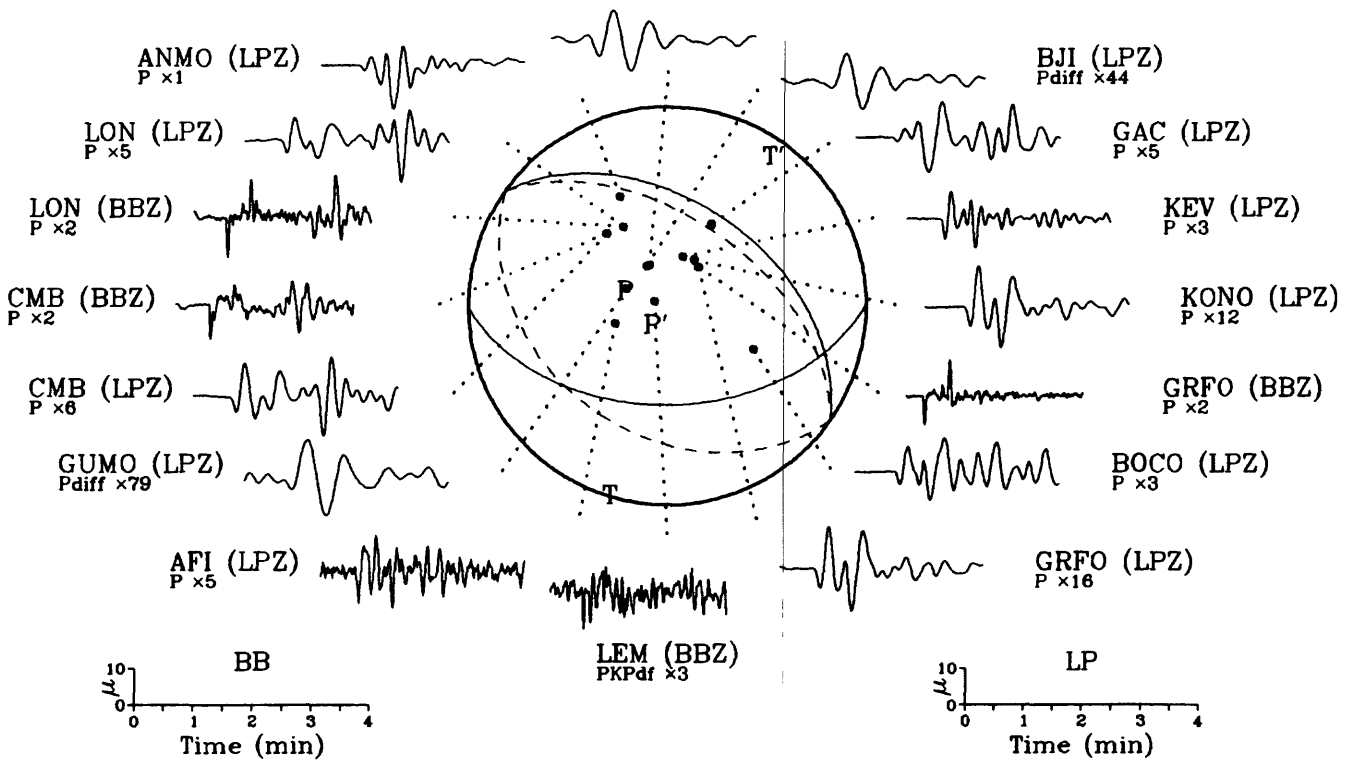
14 July 1987 23:46:03.51
Sea of Okhotsk

KEV (LPZ)
P x3

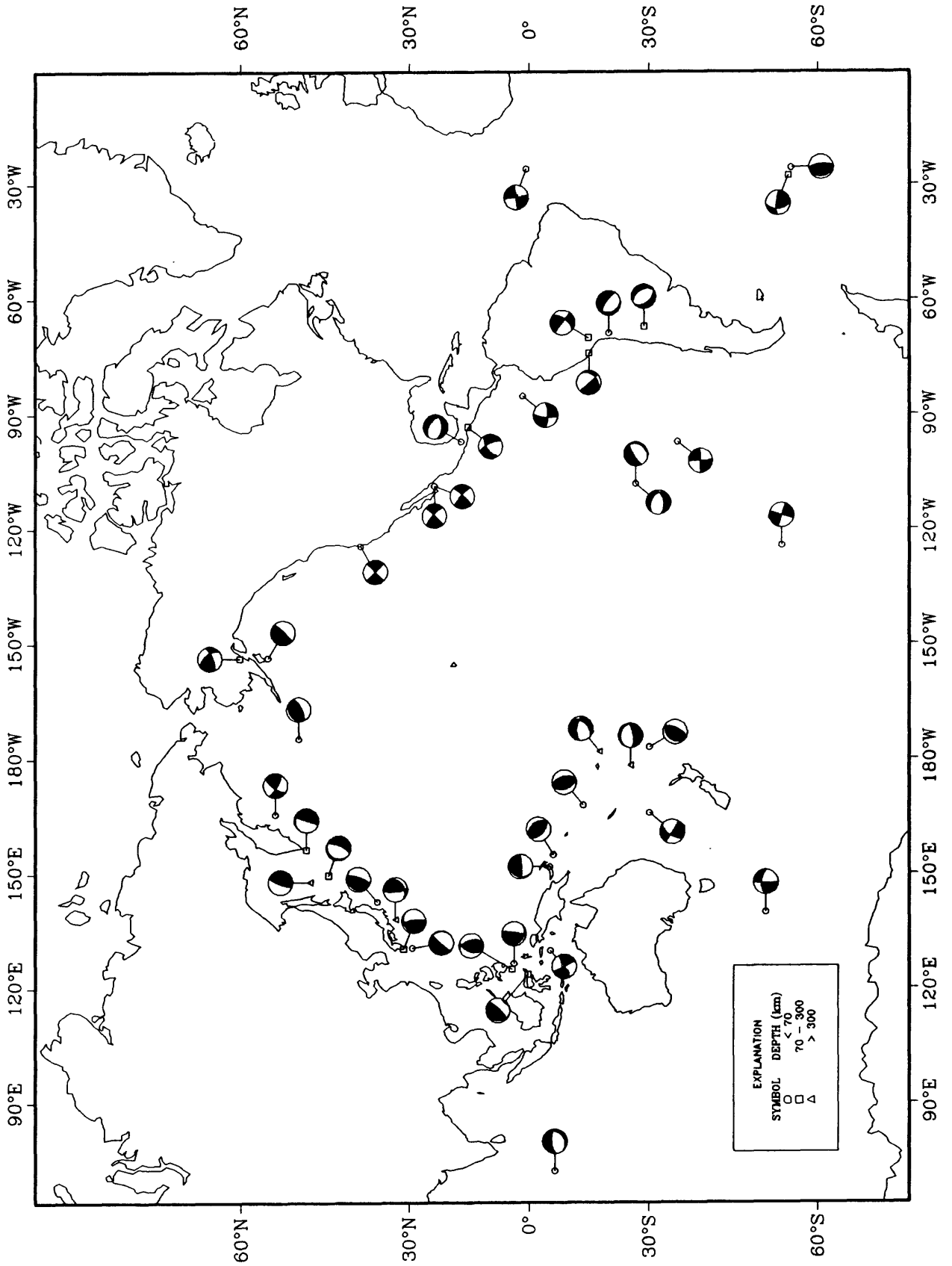


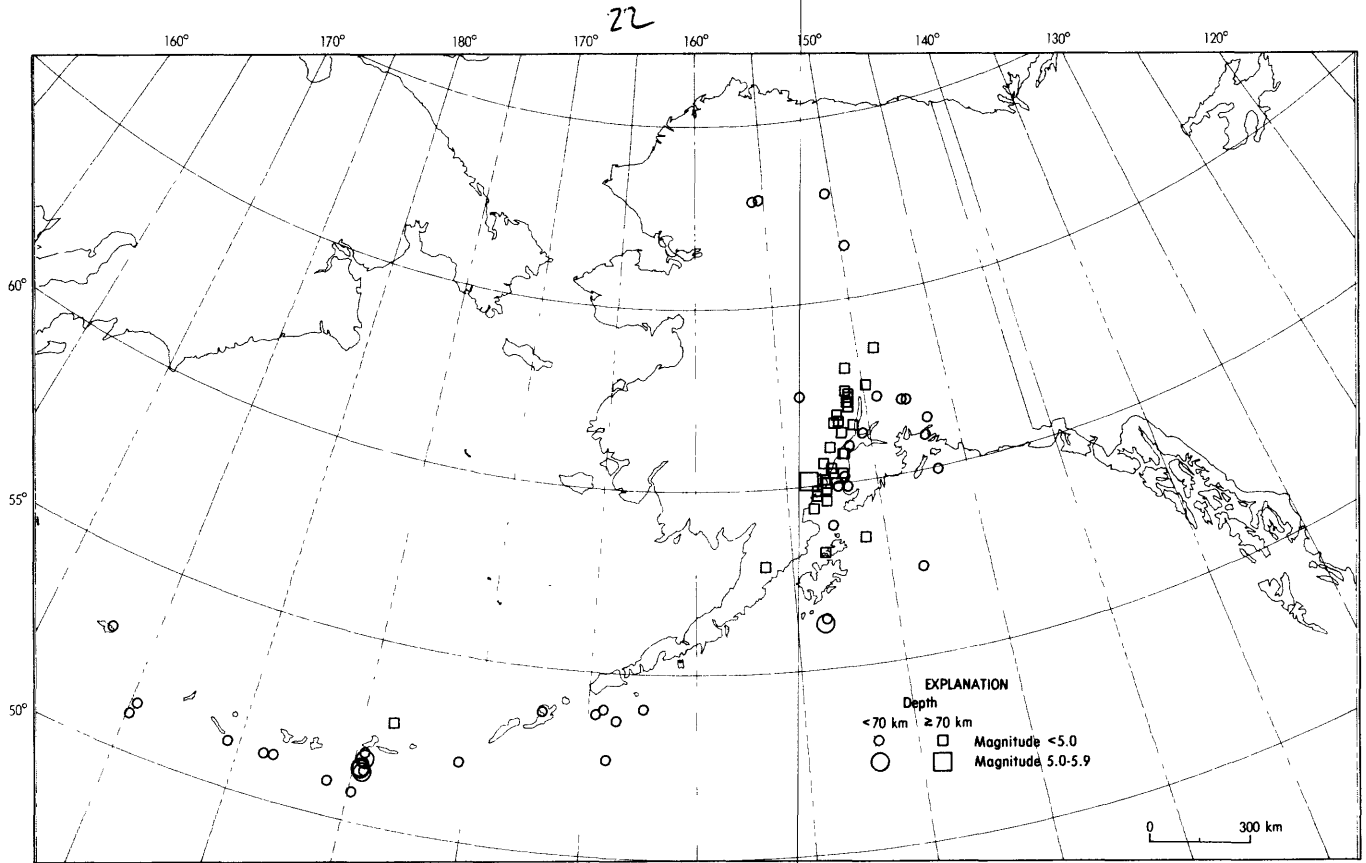
15 July 1987 07:16:13.55
Oaxaca, Mexico

HIA (LPZ)
Pdiff x33

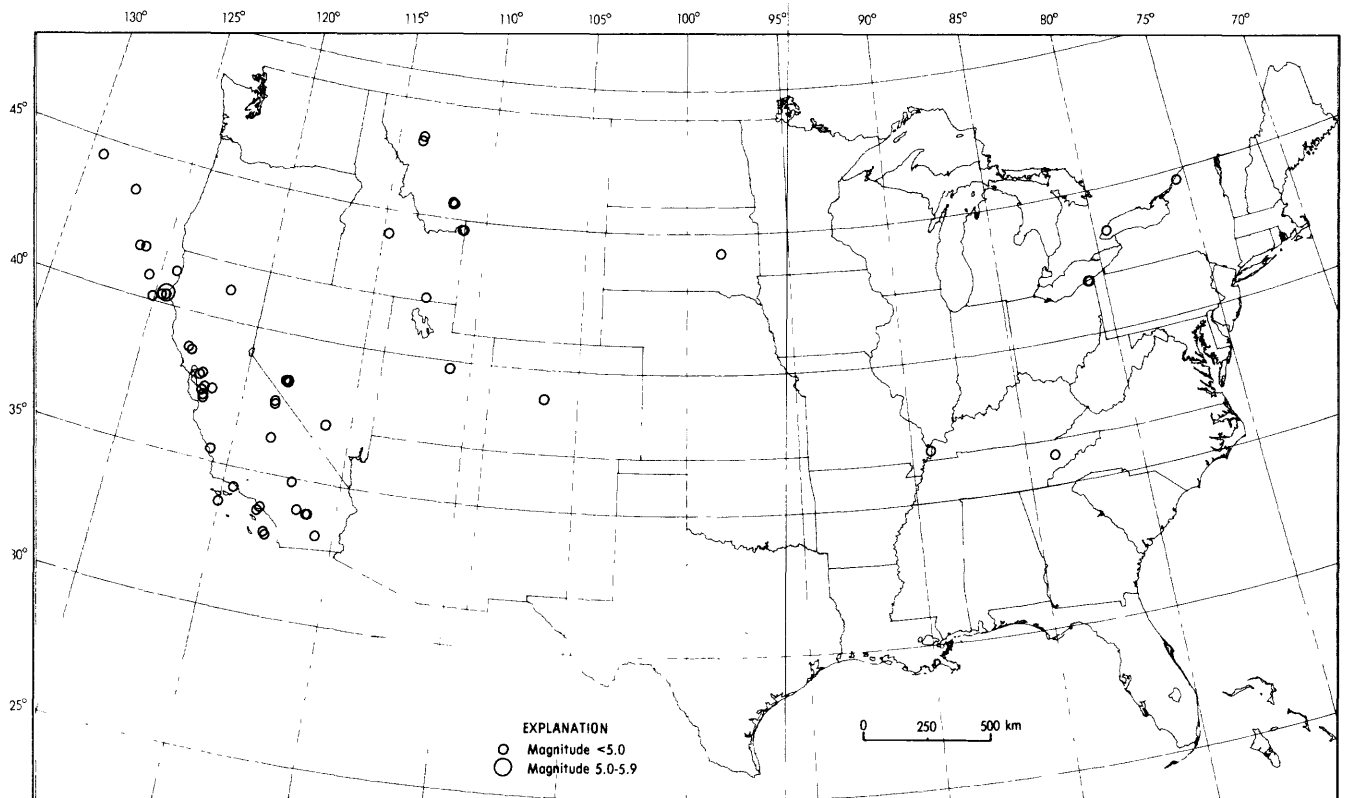


Earthquake Focal Mechanisms for July 1987

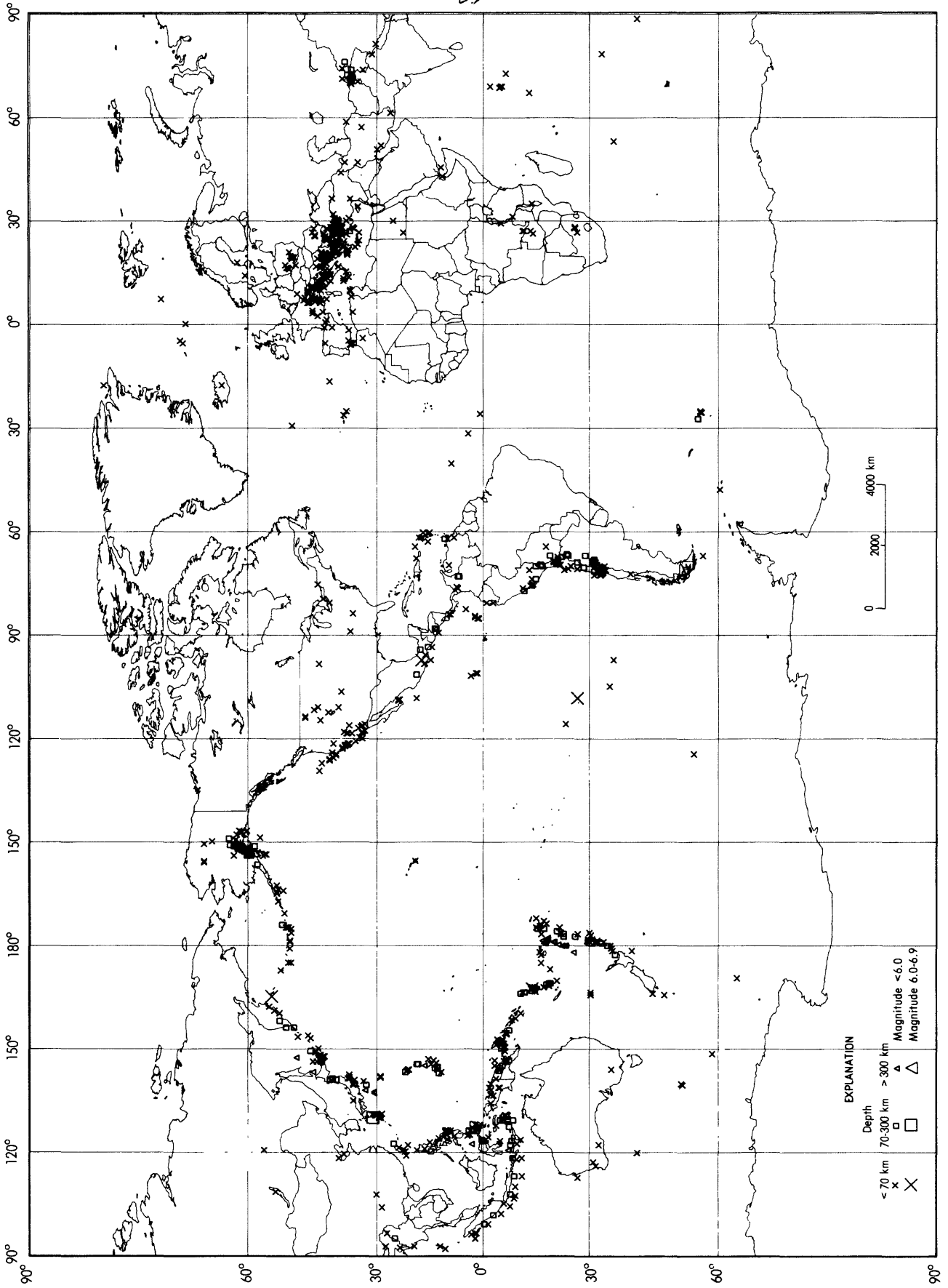




Earthquake epicenters in Alaska and adjacent regions for July, 1987 (C. Stover).



Earthquake epicenters in the conterminous United States and adjacent regions for July, 1987 (C. Stover).



Earthquakes located in July, 1987 (C. Stover).

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:
 o - Additional source parameters
 f - Additional source parameters plus focal sphere

Symbols and Abbreviations Used in Comments

- AGS Alaska Seismic Project, U.S. Geological Survey, Menlo Park, California.
 APT University of Connecticut.
 BGS British Geological Survey, Edinburgh, United Kingdom.
 BLA Virginia Polytechnic Institute and State University, Blacksburg.
 BOU University of Colorado, Boulder.
 BRK University of California, Berkeley.
 BUT Montana Bureau of Mines and Geology, Butte.
 CL Coda length magnitude.
 DOE U.S. Department of Energy (formerly AEC and ERDA).
 EXPLO Some or all parameters of explosion (controlled or accidental) supplied by any group or individual other than DOE or its predecessor organizations.
 GLD U.S. Geological Survey, Golden, Colorado (other than NEIS).
 GS U.S. Geological Survey, Menlo Park, California.
 HRV Harvard University, Cambridge, Massachusetts.
 HVO Hawaiian Volcano Observatory.
 JMA Japan Meteorological Agency (generally used to indicate 7-point Japanese Intensity Scale).
 LDG Laboratoire de Detection et de Geophysique, Bruyeres-le-Chatel, France.
 MACRO Hypocenter based upon macroseismic information.
 MD Duration magnitude (shown as DUR prior to 1986).
 MDD Instituto Geografico Nacional, Madrid, Spain.
 MG Contributed local or regional magnitude of unspecified type (see "Contributed Magnitudes" below).
 MW Moment Magnitude.
 NEIS U.S. Geological Survey, National Earthquake Information Service, Golden, Colorado.
 OTT Earth Physics Branch, Ottawa, Canada.
 PAL Columbia University, Lamont-Doherty Geological Observatory, Palisades, New York.
 PAS California Institute of Technology, Pasadena.
 PGC Pacific Geoscience Centre, Sidney, British Columbia, Canada.
 PMR Alaska Tsunami Warning Center, Palmer, Alaska.
 REN University of Nevada, Reno.
 RF Rossi-Forel Intensity Scale.
 SEA University of Washington, Seattle.
 SLC University of Utah, Salt Lake City.
 SLM St. Louis University, Missouri.
 SPEC An NEIS solution based on use of dense local networks, a local crustal model, or other methods not routinely applied in calculating the hypocenter parameters.
 TEIC Tennessee Earthquake Information Center, Memphis.
 TUL Oklahoma Geological Survey, Leonard.
 WES Weston Observatory, Massachusetts.
 Roman 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). Addendo to OF 85-714 are printed at the end of the Earthquake Data Report for this month.

Symbols Following Depth

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

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

Symbols Following Origin Time

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

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

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

TRAVEL-TIME TABLES

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

MACROSEISMIC INFORMATION

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

GEOGRAPHIC REGIONS

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

DEPTHS FROM BROADBAND DISPLACEMENT SEISMOGRAMS

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

Choy, G. L. and Boatwright, J., 1981, The rupture characteristics of two deep earthquakes inferred from broadband GDSN data: Bulletin of the Seismological Society of America, v. 71, p. 691-711.

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

FAULT PLANE SOLUTIONS

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

NEIS MAGNITUDES

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

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

$$M_s = \text{Log } (A/T) + 1.66 \text{ Log } D + 3.3$$

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 Ms magnitudes are not generally computed for depths greater than 50 km. The Ms 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 MS value may still be published, computed by the I.A.S.P.E.I. formula and q corrected for depth.

In general, the Ms 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:

$$M_B = \text{Log } (A/T) + Q(D,h)$$

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:

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

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

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:

$$M_L = \text{Log } A - \text{Log } A_0$$

defined by Richter (1935) where A is the maximum trace amplitude in micrometers recorded on a standard short-period torsion seismometer and Log A₀ is a standard value as a function of distance where distance ≤ 600 km.

CONTRIBUTED MAGNITUDES

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

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

REFERENCES

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

WAVEFORM PLOTS

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

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

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

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FOCAL MECHANISM MAPS

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

USGS RADIATED ENERGY

The energy radiated by an earthquake is estimated from the energy spectral density of the broadband P waves, using the method described by Boatwright and Choy (1986), where the energy flux in the P waves is integrated directly. No correction for source directivity or frequency-dependent interference of the depth phases is incorporated into these estimates of radiated energy. Data used are either direct P waves (for deep earthquakes) or the P wave group consisting of P, pP and sP (for shallow earthquakes) from GDSN and other stations that contribute digital data to the NEIC within two months of the occurrence of an event. The data are processed using the method of Harvey and Choy (1982) so that they are flat to velocity from low frequencies (generally 0.01 Hz) to at least 2.0 Hz. The effect of attenuation is corrected with the frequency-dependent t_0 of Choy and Cormier (1986). The focal mechanism used is either the P-wave first-motion solution (F), the USGS moment tensor solution (M) or the Harvard centroid solution (C).

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

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

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

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

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

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

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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.

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

These solutions have been determined using the long period body and mantle wave moment tensor inversion method described by Dziewonski, et al. (1981) considering corrections due to an aspherical earth structure of model MB4C (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^{19} Newton-meters (Nm).
2. CENTROID LOCATION; hypocentral parameters obtained by adding perturbations resulting from inversion to the parameters reported in the PDE; standard errors follow the individual entries. If a given parameter is not perturbed in inversion, this is indicated by the letters FIX. If the depth is fixed to be consistent with waveform matching of reconstructed broad-band body waves, this is indicated by the letters BDY. The default depth for shallow earthquakes is increased to 15 km. in order to improve the stability of solutions; it was 10 km. in 1981-1985.
3. MOMENT TENSOR. The scale factor (e.g., 10^{20} Nm) is the number by which all subsequent entries related to values of the moment should be multiplied. For the moment tensor we give components in a spherical coordinate system: MRR = M_{rr}; MTT = M_{θθ}; MFF = M_{φφ}; MRT = M_{rθ}; MRF = M_{rφ}; MTF = M_{θφ}. In another frequently used notation: MRR = M_{zz}; MTT = M_{xx}; MFF = M_{yy}; MRT = M_{xz}; MRF = -M_{yz}; MTF = -M_{xy} (see Aki and Richards, 1980, p. 118). The solutions are constrained to have MRR + MTT + MFF = 0. The values following the entries for the elements of the moment tensor and centroid co-ordinates are standard errors, calculated under the usual assumption of uncorrelated errors in the data. The lateral heterogeneity of the Earth, however, clearly leads to systematic errors, and so the errors listed probably underestimate the true error in the solution.
4. PRINCIPAL AXES; rotation of the moment tensor into the principal axes system. Most of the solutions are predominantly of the double couple type: the largest positive eigenvalue corresponds to the tension axis (T); the usually small, intermediate eigenvalue is associated with the null axis (N); the smallest negative eigenvalue is identified with the compression axis (P). PLG are the plunges and AZM the azimuths of the axes.
5. BEST DOUBLE COUPLE. If the eigenvalue (T) is σ_1 and (P) is $-\sigma_2$, then the scalar seismic moment is defined as $M_0 = 1/2(\sigma_1 + \sigma_2)$. The strike, dip and slip of the first (NP1) and second (NP2) nodal planes are calculated from the directions of the P, T, and N axes. The remainder is a linear-vector dipole (Knopoff and Rondall, 1970); in most cases the magnitude of LVD is small. Although all such decompositions are highly non-unique, this particular one is the best in estimating the starting solution for the non-linear, constrained double couple inverse problem. The angles strike, dip, and slip are defined using the convention of Aki and Richards (1980, p. 106) and are the angles designated there as ϕ_s, δ, λ , respectively.

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

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

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

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

Woodhouse, J. H. and Dziewonski, A. M., 1984, Mapping the upper mantle: Three dimensional modelling of earth structure by inversion of seismic waveforms: Journal of Geophysical Research, v. 89, p. 5953-5986.

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 $\text{Log } M_0 = 16.74 + 1.22 \text{Log}(CD\Delta)$, where C is the maximum peak-to-peak amplitude in mm, D is the duration in seconds from the time of the S-wave onset to the last time that the peak-to-peak amplitude exceeds C/3, and Δ is the epicentral distance in km. Seismic moments quoted in "Preliminary Determination of Epicenters" are converted to Newton-meters (1 Newton-meter = 10^{10} dyne-cm).

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



PRELIMINARY DETERMINATION OF EPICENTERS

MONTHLY LISTING

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

AUGUST 1987

K E Y	DAY	ORIGIN TIME			GEOGRAPHIC COORDINATES		DEPTH	MAGNITUDES		SD	NO. STA USED	REGION, CONTRIBUTED MAGNITUDES AND COMMENTS		
		HR	MN	SEC	UTC	LAT		LONG	MB				Msz	
01	00	02	16.0	40.395	N	124.518	W	19			3	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.2 (BRK).		
01	00	04	46.1	40.370	N	124.612	W	6			4	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.2 (BRK).		
01	00	06	01.9	40.448	N	124.540	W	20			8	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.4 (BRK).		
01	00	11	04.2	40.442	N	123.717	W	15	G		5	NORTHERN CALIFORNIA. <BRK>. ML 3.0 (BRK).		
01	00	17	07.0	40.372	N	124.703	W	19			5	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).		
01	00	18	38.0	40.368	N	124.598	W	24			17	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.8 (BRK).		
01	00	25	02.6	40.338	N	124.565	W	10			6	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).		
01	00	29	25.0	40.327	N	124.513	W	14			5	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).		
01	00	33	37.9	40.38	N	124.10	W	15	G	0.1	5	NEAR COAST OF NORTHERN CALIF. ML 3.0 (BRK).		
01	00	46	00.3	40.398	N	124.592	W	17			16	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.7 (BRK).		
01	00	57	25.3	40.415	N	124.450	W	21			13	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.5 (BRK).		
01	01	04	40.3	40.362	N	124.665	W	15			6	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.2 (BRK).		
01	01	22	20.5	40.363	N	124.592	W	11			6	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).		
01	01	23	23.1	40.383	N	124.595	W	15			7	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 2.8 (BRK).		
01	02	08	25.3	46.814	N	9.320	E	10	G	1.5	6	SWITZERLAND		
01	02	21	46.7	40.44	N	124.05	W	15	G	0.2	5	NEAR COAST OF NORTHERN CALIF. ML 2.9 (BRK).		
01	02	22	27.4	20.406	S	177.584	W	505		4.4	0.9	45	FIJI ISLANDS REGION	
01	02	29	47.3	40.333	N	124.196	W	15	G	0.2	6	NEAR COAST OF NORTHERN CALIF. ML 2.8 (BRK).		
01	02	41	26.8	40.392	N	124.585	W	11			5	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).		
01	02	43	16.4	51.693	N	173.115	W	33	N	4.7	1.0	36	ANDREANOF ISLANDS, ALEUTIAN IS.	
01	03	21	03.0	51.099	N	178.592	W	33	N	4.6	1.2	24	ANDREANOF ISLANDS, ALEUTIAN IS.	
01	03	21	54.9	51.290	N	178.662	W	33	N	4.8	0.8	34	ANDREANOF ISLANDS, ALEUTIAN IS.	
01	04	02	41.5	40.37	N	124.13	W	15	G	0.4	5	NEAR COAST OF NORTHERN CALIF. ML 2.9 (BRK).		
01	04	31	04.4	20.66	S	178.09	W	517	*	4.2	1.2	11	FIJI ISLANDS REGION	
01	04	46	24.9	41.410	N	123.905	W	14			11	NORTHERN CALIFORNIA. <BRK>. ML 4.0 (BRK).		
01	04	57	13.2	40.390	N	124.643	W	11			6	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).		
01	05	07	40.6	40.528	N	124.242	W	20			11	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.6 (BRK).		
01	06	22	55.1	40.408	N	124.530	W	14			10	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).		
01	07	17	03.7	23.35	S	174.26	W	200	G	4.6	0.6	10	TONGA ISLANDS REGION	
01	08	54	05.3	40.40	N	124.08	W	15	G	0.2	5	NEAR COAST OF NORTHERN CALIF. ML 3.4 (BRK).		
01	09	52	17.1	40.403	N	124.532	W	17			9	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.2 (BRK).		
01	10	59	39.1	51.677	N	30.215	W	10	G	4.6	3.9	0.7	49	NORTH ATLANTIC RIDGE
01	11	28	52.4	40.387	N	124.488	W	15			12	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.7 (BRK).		
01	12	05	46.6	33.134	S	72.151	W	27		4.7	1.5	33	OFF COAST OF CENTRAL CHILE. Felt (III) in central Chile.	
01	12	13	11.8	7.94	S	129.52	E	183	?	4.0	1.0	6	BANDA SEA	
01	13	43	19.4	29.989	N	57.672	E	14	D	4.7	1.3	43	SOUTHERN IRAN	
01	13	55	16.7	29.982	N	57.714	E	13	D	4.7	1.3	57	SOUTHERN IRAN	
01	17	31	11.2	8.31	S	129.40	E	143	?	3.8	1.2	8	TIMOR SEA	
01	18	43	10.5	31.025	S	29.590	E	5	G		1.1	10	REPUBLIC OF SOUTH AFRICA. MG 4.3 (BUL).	
01	19	44	01.8	29.528	N	142.065	E	33	N	4.8	0.6	21	SOUTH OF HONSHU, JAPAN	
01	20	28	28.0	39.085	N	21.732	E	10	G		0.7	18	GREECE. ML 3.3 (ATH).	
01	20	48	21.2	40.423	N	124.463	W	18			6	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.2 (BRK).		
01	21	09	10.3	38.142	N	22.154	E	10	G		1.2	9	GREECE. ML 3.2 (ATH).	
01	21	46	11.7	38.410	N	20.534	E	10	G		1.0	10	GREECE. MD 3.4 (ATH).	
01	23	05	54.7	7.182	S	129.432	E	112	*	5.0	1.4	23	BANDA SEA	
01	23	17	42.5	38.06	N	20.05	E	33	N		0.6	8	GREECE. ML 3.4 (ATH).	
02	00	58	06.8	49.880	N	78.917	E	0	G	5.9	3.8	0.8	407	EASTERN KAZAKH SSR
02	01	43	53.4	39.088	N	23.182	E	10	G		0.6	11	AEGEAN SEA. ML 2.7 (ATH).	
02	01	54	50.0	10.939	S	161.876	E	33	N	3.9	0.8	9	SOLOMON ISLANDS	
02	01	59	59.8	73.339	N	54.626	E	0	G	5.8	3.4	0.8	414	NOVAYA ZEMLYA
02	02	12	31.6	32.434	N	131.826	E	54		4.7	1.0	51	KYUSHU, JAPAN. Felt (III JMA) at Nobeoka; (II JMA) at Asosan, Oita, Kumamoto and Unzendake. Felt (I JMA) at Shimanozaki, Honshu.	
02	02	19	42.1	3.973	S	126.264	E	37	*	5.1	3.8	1.1	45	BURU
02	02	20	27.5	44.682	N	15.400	E	10	G		0.8	7	YUGOSLAVIA. MD 3.1 (TRI).	
02	03	00	39.1	40.351	N	124.058	W	15	G		0.8	6	NEAR COAST OF NORTHERN CALIF. ML 3.2 (BRK).	
02	03	12	56.9	14.97	S	173.78	W	33	N	5.0	1.5	10	SAMOA ISLANDS REGION	

02	03	43	35.5	59.899	N	153.194	W	110		41	SOUTHERN ALASKA. <AGS-P>.			
02	04	00	36.8	22.272	N	143.082	E	183 *	4.8	0.8	31 VOLCAND ISLANDS REGION			
02	04	43	07.0?	0.90	S	131.28	E	33	N	1.3	5 WEST IRIAN REGION			
02	04	43	44.9%	45.622	N	2.871	E	10	G	0.1	5 FRANCE. ML 2.2 (LDG).			
02	05	53	34.3?	11.35	S	161.33	E	84 ?	4.0	1.5	8 SOLOMON ISLANDS			
02	06	01	17.8%	40.595	N	27.645	E	10	G	0.3	8 TURKEY			
02	06	02	06.4%	58.388	N	152.848	W	76		1.2	19 KODIAK ISLAND REGION. <AGS-P>.			
02	06	49	17.4?	63.95	N	160.07	W	15	G	1.0	4 CENTRAL ALASKA. ML 3.0 (PMR).			
02	08	47	44.1	11.001	S	161.584	E	33	N	1.0	14 SOLOMON ISLANDS			
02	09	07	35.5	24.924	N	115.608	E	29 *	4.9	1.0	97 NEAR SOUTHEASTERN COAST OF CHINA. Eighty-four people injured and about 37,000 houses damaged in the Ganzhou-Xunwu area. Felt (IV) at Hong Kong. Also felt at Canton and Macao.			
02	09	57	48.6	41.862	N	19.660	E	10	G	0.3	9 ALBANIA. ML 2.5 (TTG).			
02	10	37	46.8*	4.032	N	32.665	W	10	G	0.6	14 CENTRAL MID-ATLANTIC RIDGE			
02	11	19	17.2?	30.65	S	179.87	W	379 ?	4.6	1.3	10 KERMADEC ISLANDS REGION			
02	12	55	50.4*	36.723	N	71.151	E	199 ?	4.5	1.3	18 AFGHANISTAN-USSR BORDER REGION			
02	12	56	00.4?	31.90	S	69.06	W	33	N	1.4	10 SAN JUAN PROVINCE, ARGENTINA			
02	14	20	38.7	48.270	N	8.943	E	10	G	0.6	7 GERMANY. ML 2.5 (KBA).			
02	14	47	30.7	21.385	N	144.068	E	33	N	0.7	36 MARIANA ISLANDS REGION			
02	15	34	04.1	4.534	S	152.672	E	96	4.6	1.1	28 NEW BRITAIN REGION			
02	17	16	21.8%	60.468	N	150.218	W	47		0.8	32 KENAI PENINSULA, ALASKA. <AGS-P>.			
02	17	53	46.8*	32.435	N	137.807	E	382 *	3.9	0.8	10 SOUTH OF HONSHU, JAPAN			
02	18	26	48.2	21.568	N	144.090	E	33	N	4.4	1.0	70 MARIANA ISLANDS REGION		
o	02	18	53	53.9	21.256	N	144.087	E	33	N	5.2	5.2	1.1	106 MARIANA ISLANDS REGION. Ms 5.1 (BRK).
o	02	19	08	24.1	8.971	S	123.904	E	43 *	4.8	1.2	21 FLORES ISLAND REGION		
o	02	19	40	16.2%	59.739	N	152.741	W	91		1.0	41 SOUTHERN ALASKA. <AGS-P>.		
o	02	19	47	43.2	14.731	N	146.663	E	64 *	5.0	1.0	75 MARIANA ISLANDS		
o	02	19	57	11.7	21.318	N	144.152	E	33	N	5.0	1.2	72 MARIANA ISLANDS REGION	
o	02	21	30	07.6	21.822	N	144.057	E	33	N	4.8	1.1	36 MARIANA ISLANDS REGION	
o	02	21	44	43.6?	26.89	S	27.98	E	5	G	0.9	5	5	REPUBLIC OF SOUTH AFRICA. MG 3.7 (BUL).
o	02	22	04	00.9*	27.061	N	66.366	E	33	N	4.4	1.4	15 PAKISTAN	
o	02	22	15	09.5	26.955	N	66.094	E	33	N	4.8	4.2	1.0	78 PAKISTAN
o	02	22	17	49.8*	41.379	N	22.814	E	10	G	0.9	5	YUGOSLAVIA	
o	02	22	50	47.5*	26.936	N	66.374	E	33	N	4.3	1.4	10 PAKISTAN	
o	02	23	19	10.5	25.133	N	115.603	E	10	G	4.7	1.3	31 EASTERN CHINA. Felt in the Ganzhou-Xunwu area. Felt (III) at Hang Kang.	
o	02	23	47	11.5	39.487	N	23.236	E	10	G	0.5	7	AEGEAN SEA	
o	03	01	16	03.1	3.847	S	152.251	E	21 *	4.1	1.3	11 NEW IRELAND REGION		
o	03	01	17	10.1	7.666	N	77.489	W	33	N	4.3	1.1	13 PANAMA-COLOMBIA BORDER REGION	
o	03	02	21	31.3*	3.822	S	152.282	E	10	G	4.1	1.5	5 NEW IRELAND REGION	
o	03	02	22	46.2	12.528	S	166.837	E	116	D	5.1	1.0	82 SANTA CRUZ ISLANDS	
o	03	02	50	03.2?	6.49	S	130.07	E	196 ?	4.8	1.2	7 BANDA SEA		
o	03	03	08	08.3	7.657	N	77.550	W	33	N	5.1	4.2	1.0	116 PANAMA-COLOMBIA BORDER REGION
o	03	03	15	26.9%	40.432	N	27.295	E	10	G	1.3	7	TURKEY	
o	03	04	26	19.7	38.514	N	20.410	E	10	G	4.0	1.5	39 GREECE. ML 4.0 (ATH), 3.9 (TTG).	
o	03	05	21	09.9	13.584	N	144.549	E	122	D	5.3	0.9	129 MARIANA ISLANDS. Felt (IV) on Guam.	
o	03	07	37	40.6	86.906	N	63.095	E	10	G	5.0	4.5	1.0	133 NORTH OF FRANZ JOSEF LAND
o	03	07	46	38.0%	58.991	N	152.498	W	75		1.0	6	KODIAK ISLAND REGION. <AGS-P>.	
o	03	09	15	01.3%	61.554	N	146.230	W	33			35	SOUTHERN ALASKA. <AGS-P>.	
o	03	09	26	37.4?	21.44	S	66.36	W	273 *	4.2	1.2	8 SOUTHERN BOLIVIA		
o	03	09	48	03.7%	38.390	N	118.060	W	18	3.9	44	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 4.4 (BRK). Felt (IV) at Mina, Nevada.		
o	03	09	48	10.8%	40.353	N	124.673	W	8		4	4	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).	
o	03	10	00	14.7	18.659	N	146.188	E	33	N	4.0	1.4	11 MARIANA ISLANDS	
o	03	10	45	01.5?	15.28	N	61.35	W	140 ?		0.9	8	LEeward ISLANDS	
o	03	10	45	06.9*	40.363	N	21.872	E	5	G	1.4	7	GREECE	
o	03	11	11	04.4	38.532	N	20.384	E	10	G	4.3	1.3	62 GREECE. MD 4.3 (ATH). ML 4.2 (TTG).	
o	03	12	18	47.8%	33.802	S	71.523	W	10	G	0.7	9	NEAR COAST OF CENTRAL CHILE	
o	03	13	02	50.6	41.294	N	22.668	E	10	G	1.5	13	YUGOSLAVIA. MG 2.7 (SKO). Felt (III) at Valandovo.	
o	03	13	07	48.0	21.823	N	119.654	E	33	N	4.2	1.3	24 TAIWAN REGION	
o	03	13	48	34.7	40.114	N	23.639	E	10	G	0.9	12	GREECE	
o	03	14	08	38.8*	37.557	S	179.743	E	33	N	4.9	4.5	1.4	20 OFF E. COAST OF N. ISLAND, N.Z.
o	03	14	55	16.8	13.583	N	144.517	E	132	5.2	1.0	142 MARIANA ISLANDS. Felt (III) on Guam.		
o	03	15	42	05.5	16.306	N	146.969	E	64 *	4.7	1.0	49 MARIANA ISLANDS		
o	03	15	55	44.1?	32.96	S	72.04	W	10	G	0.6	9	OFF COAST OF CENTRAL CHILE	
o	03	16	03	19.6?	37.94	N	19.52	E	10	G	1.0	10	IONIAN SEA. ML 3.5 (ATH).	
o	03	16	04	50.5?	32.86	S	72.34	W	10	G	0.5	8	OFF COAST OF CENTRAL CHILE	
o	03	16	21	06.4*	26.245	S	28.321	E	5	G	1.2	7	REPUBLIC OF SOUTH AFRICA. MG 3.4 (BUL).	
o	03	16	25	15.9*	14.861	N	146.964	E	33	N	4.3	0.9	16 MARIANA ISLANDS	
o	03	16	32	45.5	21.271	N	144.244	E	33	N	5.2	1.1	21 MARIANA ISLANDS REGION	
o	03	16	39	20.7	7.250	S	128.952	E	144 *	4.7	0.6	20 BANDA SEA		
o	03	17	14	12.3?	35.79	N	26.89	E	33	N	1.1	8	CRETE	
o	03	20	14	18.4	41.820	N	23.923	E	10	G	1.0	9	GREECE-BULGARIA BORDER REGION. ML 2.5 (SKO).	
o	03	20	24	38.9*	6.099	S	147.624	E	107 *	4.4	1.4	10 EAST PAPUA NEW GUINEA REGION		
o	03	21	33	45.0%	45.541	N	111.688	W	3			9	MONTANA. <BUT>. ML 3.0 (BUT). Felt at Narris.	
o	03	21	36	16.4	38.901	N	21.810	E	10	G	3.6	1.2	21 GREECE. ML 3.3 (ATH).	
o	03	22	31	38.2	22.833	S	68.634	W	33	N	0.6	6	NORTHERN CHILE	
o	03	22	37	17.4	21.239	N	144.115	E	33	N	4.9	0.9	23 MARIANA ISLANDS REGION	
o	03	22	39	42.7*	41.023	N	121.968	W	5	G	0.4	5	NORTHERN CALIFORNIA. ML 2.5 (BRK).	
o	03	22	40	25.4%	45.540	N	111.689	W	3			10	MONTANA. <BUT>. ML 3.1 (BUT). Felt at Narris.	
o	03	23	20	30.3?	53.01	S	22.49	E	10	G	4.6	4.6	1.1	11 SOUTH OF AFRICA
o	03	23	38	02.4	46.096	N	6.406	E	10	G	0.8	27	SWITZERLAND. ML 3.3 (LDG).	
o	04	00	31	11.9	41.534	N	20.185	E	10	G	1.2	29	ALBANIA. ML 3.5 (TTG).	
o	04	00	44	47.2?	6.16	S	147.29	E	109 *	4.6	1.2	7 EAST PAPUA NEW GUINEA REGION		
o	04	01	11	44.7*	17.263	N	94.564	W	33	N	4.4	1.1	12 CHIAPAS, MEXICO	
o	04	01	25	41.7?	48.15	N	1.38	W	10	G	0.8	4	FRANCE. ML 2.7 (LDG).	
o	04	01	38	49.6	38.802	N	24.955	E	18	4.3	0.6	25 AEGEAN SEA		
o	04	02	40	10.2%	32.970	N	117.780	W	6	G	7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).		
o	04	04	42	47.2%	47.463	N	2.059	E	10	G	0.4	9	FRANCE. ML 2.6 (LDG).	
o	04	04	54	05.4?	6.85	S	127.14	E	408 ?	4.7	1.3	8 BANDA SEA		
o	04	06	37	48.9?	44.26	N	114.32	W	5	G	0.3	6	WESTERN IDAHO. ML 3.6 (BUT).	
o	04	07	34	20.6*	64.288	N	151.574	W	33	N	1.5	6	CENTRAL ALASKA. ML 3.4 (PMR).	

04	08 22 31.7&	60.250 N	152.544 W	98				34	SOUTHERN ALASKA. <AGS-P>.
04	08 26 13.8	40.756 N	27.449 E	12			1.0	32	TURKEY. Felt in the Tekirdag area.
04	09 03 19.8%	40.663 N	22.977 E	10 G			1.1	5	GREECE
04	10 18 31.2?	20.66 S	178.00 W	247 ?	4.6		1.4	7	FIJI ISLANDS REGION
04	12 22 08.2*	83.964 N	22.613 W	10 G	4.4		0.6	13	NEAR NORTH COAST OF GREENLAND
04	14 00 36.8%	40.636 N	23.073 E	10 G			0.4	6	GREECE
04	15 04 40.0	40.469 S	73.189 W	38 D	5.9	4.9	1.0	145	NEAR COAST OF CENTRAL CHILE. Felt (V) at Valdivia and (IV) at Puerto Montt and Osarno.
04	16 00 34.5	41.962 N	142.448 E	72	4.7		1.0	50	HOKKAIDO, JAPAN REGION. Felt (III JMA) at Urukawa; (I JMA) at Obihiro and Kushiro.
04	16 24 23.6%	60.708 N	5.576 E	0 G			0.3	5	SOUTHERN NORWAY. MD 2.4 (BER). Probable explosion.
04	16 53 27.9*	39.630 N	24.041 E	10 G			0.4	7	AEGEAN SEA
04	17 21 46.4?	39.47 N	28.43 E	10 G			0.8	6	TURKEY
04	18 24 25.9?	30.51 S	72.53 W	33 N			0.4	7	OFF COAST OF CENTRAL CHILE
04	18 25 04.7	44.205 N	12.230 E	10 G			1.0	6	NORTHERN ITALY
04	19 06 05.2	24.663 S	70.446 W	47 *	4.9		1.3	34	NEAR COAST OF NORTHERN CHILE. Felt (III) at Antafagasta.
04	19 13 37.6*	2.843 N	128.708 E	229 ?	4.5		1.1	19	HALMAHERA
04	19 15 34.5*	32.397 S	71.007 W	96 *	4.4		0.7	13	NEAR COAST OF CENTRAL CHILE
04	19 52 00.3	15.277 S	167.540 E	135	5.0		1.0	71	VANUATU ISLANDS
04	19 53 45.0*	26.587 S	31.576 E	10 G	4.4		1.1	14	SWAZILAND. Felt.
04	22 15 40.5	29.292 S	176.202 W	33 N	5.5	5.2	1.1	90	KERMADEC ISLANDS REGION
04	22 52 11.4*	24.843 S	70.631 W	33 N	4.6		1.0	9	NEAR COAST OF NORTHERN CHILE
04	22 56 56.3?	15.43 N	60.51 W	33 N			0.5	5	LEEWARD ISLANDS. ML 2.4 (FDF).
04	23 10 19.6	40.518 N	19.524 E	10 G			0.6	17	ALBANIA. ML 2.8 (TTG).
05	00 42 06.1?	38.96 N	22.09 E	10 G			0.3	8	GREECE
05	01 59 57.7*	31.658 S	68.056 W	10 G			1.0	9	SAN JUAN PROVINCE, ARGENTINA
05	02 03 53.1*	6.244 S	148.733 E	33 N	3.6		1.7	5	NEW BRITAIN REGION
05	06 58 09.0	31.615 S	69.242 W	120	4.5		1.1	44	SAN JUAN PROVINCE, ARGENTINA. Felt (III) at San Juan.
05	07 34 21.1&	36.235 N	120.287 W	6 G			1.0	10	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
05	10 24 21.0	41.315 N	82.125 E	33 N	4.8	4.5	1.1	79	SOUTHERN XINJIANG, CHINA
05	11 19 29.3%	41.250 N	22.762 E	10 G			0.2	6	YUGOSLAVIA
05	11 40 19.1*	50.306 N	179.363 E	33 N	4.3		0.4	7	RAT ISLANDS, ALEUTIAN ISLANDS
05	12 06 18.8?	25.20 S	66.99 W	33 N			1.2	9	SALTA PROVINCE, ARGENTINA
05	12 33 49.1%	36.446 N	6.028 W	10 G			1.0	5	STRAIT OF GIBRALTAR
05	13 44 11.1&	37.130 N	121.533 W	6			0.3	11	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
05	14 03 46.9%	40.465 N	23.081 E	10 G			0.3	6	GREECE
05	14 24 57.4&	61.748 N	149.953 W	57			0.3	34	SOUTHERN ALASKA. <AGS-P>.
05	15 46 57.8	21.656 N	142.952 E	315 *	4.9		0.9	108	MARIANA ISLANDS REGION
05	16 08 02.3&	60.306 N	153.083 W	125			0.8	29	SOUTHERN ALASKA. <AGS-P>.
05	16 43 35.0?	22.51 S	172.07 E	33 N	4.7		0.8	8	LOYALTY ISLANDS REGION
05	17 26 45.4	39.369 N	9.347 W	10 G			0.8	34	PORTUGAL. MG 4.0 (PTO). Felt (IV) at Torres Vedras.
05	18 34 37.1?	13.11 N	142.31 E	33 N	4.8		0.5	7	SOUTH OF MARIANA ISLANDS
05	18 40 44.0?	2.25 S	141.01 E	33 N	3.8		1.1	5	NEAR N COAST OF PAPUA NEW GUINEA
05	20 04 28.2	24.852 N	99.083 E	10 G	4.4		1.1	38	YUNNAN PROVINCE, CHINA. ML 4.6 (BJI). Minar damage in Yunnan Province.
05	20 13 56.6%	39.475 N	27.294 E	10 G			1.3	7	TURKEY
05	21 36 06.6&	61.166 N	152.185 W	133			0.2	33	SOUTHERN ALASKA. <AGS-P>.
05	22 31 10.6?	12.55 S	167.00 E	353 ?	3.8		0.2	7	SANTA CRUZ ISLANDS
05	23 32 06.3?	37.13 N	21.80 E	10 G			0.3	6	SOUTHERN GREECE. MD 3.2 (ATH).
06	01 42 14.1&	40.392 N	124.480 W	16			0.9	7	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.4 (BRK).
06	03 06 28.0?	54.70 N	165.18 E	33 N	4.5		0.9	17	KOMANDORSKY ISLANDS REGION
06	06 21 29.8	39.202 N	26.297 E	24	4.4	3.7	1.1	94	TURKEY. ML 4.7 (ATH). Felt at Balikesir and Izmir. Also felt on Lesvos.
06	06 35 05.9*	36.216 N	139.888 E	101 *	4.4		1.5	6	HONSHU, JAPAN
06	06 54 33.7&	40.423 N	124.412 W	19			0.8	8	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).
06	07 53 48.3&	35.848 N	118.288 W	8 G			1.9	19	CENTRAL CALIFORNIA. <BRK>. ML 3.3 (BRK). Felt (IV) at Lake Isabella.
06	08 14 57.2?	54.78 N	165.21 E	33 N	4.4		0.2	6	KOMANDORSKY ISLANDS REGION
06	08 17 10.3	43.098 N	25.944 E	10 G			1.1	11	BULGARIA. Felt at Strazhitsa.
06	09 06 48.3	38.065 N	72.982 E	142 *	4.8		1.0	86	TAJIK SSR
06	09 52 10.0	12.986 S	169.383 E	659	4.9		0.8	115	SANTA CRUZ ISLANDS REGION
06	11 14 56.9?	36.30 N	28.15 E	33 N			1.1	5	DODECANESE ISLANDS
06	11 25 59.2	12.900 S	169.459 E	654	5.1		0.8	98	SANTA CRUZ ISLANDS REGION
06	11 39 27.0?	13.16 S	169.28 E	683 ?	4.8		1.0	24	VANUATU ISLANDS REGION
06	11 57 20.3?	15.13 N	62.01 W	33 N			1.4	7	LEEWARD ISLANDS. ML 3.3 (FDF).
06	12 43 00.2?	11.59 N	85.60 W	33 N			0.6	8	NICARAGUA. MD 4.3 (HDC).
06	12 55 44.7?	16.20 N	95.66 W	33 N	4.4		1.4	7	OAXACA, MEXICO
06	13 09 37.0	7.707 S	127.560 E	158 D	5.1		1.1	80	BANDA SEA
06	14 32 54.4%	60.696 N	5.583 E	0 G			0.2	6	SOUTHERN NORWAY. MD 2.0 (BER). Probable explosion.
06	15 11 49.6	4.555 S	133.412 E	33 N	4.8		1.3	14	WEST IRIAN REGION
06	15 15 34.7	5.417 S	105.015 W	10 G	5.6	5.2	0.9	129	NORTHERN EASTER I. CORDILLERA
06	15 42 03.3&	40.380 N	124.593 W	9			1.1	8	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).
06	15 54 36.5*	6.850 S	125.161 E	543 *	4.5		1.1	16	BANDA SEA
06	16 34 13.8	18.176 S	177.978 W	613	5.2		1.0	113	FIJI ISLANDS REGION
06	16 54 46.6	63.305 N	149.196 W	33 N			0.4	6	CENTRAL ALASKA. ML 3.5 (PMR).
06	16 55 17.6	44.446 N	148.207 E	60 G	4.7		0.8	44	KURIL ISLANDS
06	17 28 06.1?	24.04 S	67.09 W	198 *			0.9	10	CHILE-ARGENTINA BORDER REGION
06	17 48 00.8*	50.191 N	19.316 E	10 G			1.0	5	POLAND. ML 3.5 (KRA), 3.4 (VKA).
06	18 02 15.7*	5.719 N	127.089 E	73 ?	4.6		1.0	9	PHILIPPINE ISLANDS REGION
06	18 39 02.6	22.291 S	174.414 W	33 N	5.1	4.9	1.0	76	TONGA ISLANDS REGION
06	19 28 21.4	8.847 S	108.677 E	33 N	4.7		1.2	35	JAVA
06	19 57 39.6	24.031 N	122.546 E	36 *	4.4		1.3	29	TAIWAN REGION
06	21 12 42.5&	48.130 N	122.764 W	22			1.3	54	WASHINGTON. <SEA-P>. CL 2.7 (SEA). Felt on Whidbey Island.
06	21 51 53.8*	3.756 N	125.344 E	71 *	4.3		0.8	6	TALAUD ISLANDS
06	22 16 10.0*	20.289 S	69.413 W	173 *			1.2	10	NORTHERN CHILE
06	23 11 24.3	0.937 N	28.557 W	10 G	5.2	5.2	1.0	127	CENTRAL MID-ATLANTIC RIDGE
06	23 38 33.2*	39.296 N	25.566 E	10 G			1.3	9	AEGEAN SEA
07	02 02 26.4*	23.871 N	104.767 E	10 G			0.6	5	YUNNAN PROVINCE, CHINA. ML 3.4 (BJI).
07	03 10 04.7	42.808 N	13.340 E	10 G			0.7	8	CENTRAL ITALY. MD 3.2 (TRI).
07	03 33 03.7	38.821 N	25.675 E	10 G			0.8	15	AEGEAN SEA. ML 3.6 (ATH).
07	03 39 23.7&	58.693 N	153.184 W	70			1.9	19	KODIAK ISLAND REGION. <AGS-P>.

a	07	04	39	18.2*	21.997	S	174.255	W	33	N	5.3	4.9	1.2	37	TONGA ISLANDS
	07	04	44	00.67	15.87	N	60.59	W	33	N			0.6	5	LEEWARD ISLANDS. ML 2.8 (FDF).
	07	06	46	12.7*	32.948	N	117.683	W	5	G			0.1	5	CALIFORNIA-MEXICO BORDER REGION. ML 3.1 (NEIS).
	07	06	54	46.8	38.937	N	23.860	E	10	G			1.0	13	GREECE. ML 3.4 (ATH).
	07	09	07	25.3*	31.444	S	67.585	W	10	G			1.2	10	SAN JUAN PROVINCE, ARGENTINA
	07	09	37	04.17	44.50	N	10.02	E	10	G			1.3	6	NORTHERN ITALY
	07	10	33	13.6%	40.844	N	29.247	E	10	G			0.9	6	TURKEY
	07	10	56	00.4	15.080	S	166.730	E	33	N	5.2	4.3	1.0	45	VANUATU ISLANDS
	07	11	47	48.9	38.332	N	118.073	W	5	G			1.1	10	CALIFORNIA-NEVADA BORDER REGION. ML 2.9 (NEIS). Felt (II) at Mina, Nevada.
	07	12	15	56.6	20.620	S	169.238	E	33	N	5.3		1.2	69	VANUATU ISLANDS
	07	12	53	37.7	7.102	S	129.115	E	178		5.0		1.1	41	BANDA SEA
	07	13	40	59.4%	40.438	N	28.471	E	10	G			0.8	8	TURKEY
	07	14	32	12.6%	16.120	N	61.217	W	10	G			1.0	5	LEEWARD ISLANDS. ML 2.3 (FDF).
	07	15	50	32.6*	6.858	N	73.036	W	166		4.5		1.3	13	NORTHERN COLOMBIA
	07	15	57	51.3	37.353	N	21.211	E	50	*	4.1		1.1	32	SOUTHERN GREECE. Felt in the Pirgos area.
	07	16	58	06.2*	4.079	S	142.102	E	111	?	4.4		1.1	11	PAPUA NEW GUINEA
	07	18	19	54.87	31.88	S	71.85	W	33	N			0.6	7	NEAR COAST OF CENTRAL CHILE
	07	18	32	40.67	43.48	S	82.33	W	10	G	5.0		1.0	17	WEST CHILE RISE
	07	18	37	23.9%	61.351	N	150.613	W	57					33	SOUTHERN ALASKA. <AGS-P>.
	07	18	46	08.57	21.54	S	70.63	W	33	N			0.6	5	NEAR COAST OF NORTHERN CHILE
a	07	20	32	57.8	0.048	S	123.242	E	176		5.2		1.2	93	MINAHASSA PENINSULA
	07	20	37	49.27	0.52	S	18.11	W	10	G	4.8		1.1	10	CENTRAL MID-ATLANTIC RIDGE
	07	21	12	17.17	17.17	N	61.80	W	33	N			0.7	5	LEEWARD ISLANDS. ML 3.1 (FDF).
	07	21	31	58.6*	41.657	N	24.662	E	10	G			0.9	6	GREECE-BULGARIA BORDER REGION
	07	23	47	16.2	43.397	N	3.490	E	10	G			0.4	9	NEAR SOUTH COAST OF FRANCE. ML 3.1 (LDG).
	08	00	39	33.7*	6.144	S	154.859	E	61	*	4.5		0.7	11	SOLOMON ISLANDS. Felt (III) at Panguna, Bougainville.
	08	01	33	14.7%	45.556	N	111.709	W	3					10	MONTANA. <BUT>. ML 2.8 (BUT).
	08	04	13	32.4	37.404	N	21.063	E	46	*	3.6		0.6	14	SOUTHERN GREECE
	08	05	11	10.6*	40.151	N	112.174	E	10	G			0.5	5	NORTHEASTERN CHINA. MG 3.3 (BJI).
	08	05	24	21.2%	59.964	N	153.624	W	157					33	SOUTHERN ALASKA. <AGS-P>.
a	08	05	41	54.1	58.688	S	158.224	E	33	N	5.4	4.5	1.3	53	MACQUARIE ISLANDS REGION
	08	06	43	13.5*	52.491	N	168.529	W	33	N	4.6	4.3	1.1	19	FOX ISLANDS, ALEUTIAN ISLANDS
	08	07	03	52.8%	57.787	N	138.579	W	15	G				19	OFF COAST OF SOUTHEASTERN ALASKA. <AGS-P>.
	08	07	42	59.5	41.987	N	20.057	E	10	G			0.4	9	ALBANIA. ML 2.6 (TTG).
a	08	07	48	02.3	37.004	S	178.938	E	33		5.3	5.6	1.1	122	OFF E. COAST OF N. ISLAND, N.Z.
	08	09	00	37.5%	60.252	N	151.327	W	53					35	KENAI PENINSULA, ALASKA. <AGS-P>.
	08	09	10	47.8	25.776	N	109.922	W	10	G	4.7	4.9	1.3	49	GULF OF CALIFORNIA
	08	09	35	01.1*	42.197	S	178.548	E	33	N	4.5		1.1	12	OFF E. COAST OF S. ISLAND, N.Z.
	08	09	43	22.3%	40.611	N	28.692	E	10	G			0.3	5	TURKEY
	08	12	02	11.6	38.610	N	71.472	E	33	N	4.6	3.7	0.6	31	AFGHANISTAN-USSR BORDER REGION
	08	12	09	34.77	20.50	S	177.93	W	620	?	4.4		1.2	16	FIJI ISLANDS REGION
	08	12	14	53.0*	40.269	N	29.477	E	10	G			0.7	6	TURKEY
	08	14	17	21.5%	61.035	N	152.518	W	125					31	SOUTHERN ALASKA. <AGS-P>.
	08	14	17	43.57	33.03	S	70.81	W	33	N			1.4	5	CHILE-ARGENTINA BORDER REGION
	08	15	40	34.5*	22.899	S	68.921	W	163	?			1.4	9	NORTHERN CHILE
f	08	15	48	56.7	19.022	S	69.991	W	70	G	6.4	6.9	1.1	379	NORTHERN CHILE. mb 6.3 (BRK). Five people killed, 112 injured and more than 1,000 houses destroyed (VII) in the Arica area. Several landslides occurred along the Chile-Peru border. Damage (VI) at Iquique. Felt (V) at Tocopilla and (III) at Calama and Antofagasta. Felt (III) at La Paz, Bolivia. Felt strongly at Tacna, Moquegua and Lima, Peru. Appears to be two events about 5 seconds apart. Depth from broadband displacement seismograms, based on first event.
	08	17	38	54.5%	45.556	N	111.709	W	3					7	MONTANA. <BUT>. ML 2.0 (BUT). Felt in the Norris area.
	08	17	54	17.6*	53.830	N	167.205	W	33	N	4.6		1.0	20	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.7 (PMR).
	08	18	35	15.4%	45.994	N	2.775	E	10	G			0.4	9	FRANCE. ML 2.2 (LDG).
	08	18	51	19.37	33.78	S	70.80	W	33	N			1.3	8	CHILE-ARGENTINA BORDER REGION
	08	19	47	04.07	2.47	N	128.00	E	33	N	4.5		1.2	8	HALMAHERA
	08	20	16	37.6*	12.014	N	146.362	E	33	N	4.6		0.5	9	SOUTH OF MARIANA ISLANDS
	08	22	14	17.2	40.112	N	24.876	E	16				1.1	25	AEGEAN SEA. ML 3.9 (ATH).
	08	22	15	17.3	40.166	N	24.945	E	10	G	4.1		1.2	67	AEGEAN SEA. ML 4.7 (ATH).
	08	23	28	50.2%	46.033	N	2.767	E	10	G			0.4	7	FRANCE. ML 2.0 (LDG).
	09	00	07	11.5	38.928	N	23.773	E	18				1.0	20	GREECE. ML 3.3 (ATH).
	09	00	25	50.7%	62.699	N	149.658	W	83					34	CENTRAL ALASKA. <AGS-P>.
	09	00	40	15.9*	40.100	N	24.858	E	10	G			0.5	6	AEGEAN SEA
	09	01	14	23.9	36.388	N	5.288	W	10	G			1.1	13	STRAIT OF GIBRALTAR. MD 3.1 (MDD).
	09	01	48	22.1%	62.119	N	151.165	W	86		4.0			41	CENTRAL ALASKA. <AGS-P>.
	09	03	12	43.3%	35.770	N	118.370	W	6	G				16	CENTRAL CALIFORNIA. <PAS-P>. ML 3.1 (PAS). Felt (IV) at Kernville and (III) at Lake Isabella.
	09	03	14	39.4%	35.770	N	118.360	W	6	G				1	CENTRAL CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
	09	04	10	08.2*	40.041	N	24.843	E	10	G			0.8	6	AEGEAN SEA
	09	04	21	13.7	29.089	S	69.509	W	104		4.7		1.2	37	CHILE-ARGENTINA BORDER REGION
	09	04	47	06.0*	32.331	S	71.877	W	56	*	3.5		1.3	16	NEAR COAST OF CENTRAL CHILE
	09	04	57	21.47	32.20	S	71.96	W	33	N			0.9	8	NEAR COAST OF CENTRAL CHILE
	09	05	16	02.77	32.48	S	71.75	W	33	N			0.5	8	NEAR COAST OF CENTRAL CHILE
	09	05	24	45.97	33.43	S	71.88	W	33	N			0.6	8	NEAR COAST OF CENTRAL CHILE
	09	06	37	28.9*	41.112	N	141.986	E	75		4.8		1.3	46	HOKKAIDO, JAPAN REGION. Felt (II JMA) at Hachinohe, Honshu.
	09	06	44	31.8*	7.849	N	125.729	E	10	G	4.9		0.9	21	MINDANAO, PHILIPPINE ISLANDS. Felt (I RF) at Cagayan de Oro.
	09	08	05	12.2*	40.132	N	24.913	E	10	G			0.7	6	AEGEAN SEA
a	09	08	17	50.8	0.508	N	126.079	E	50		5.3	4.7	1.1	93	MOLUCCA PASSAGE
a	09	08	24	19.67	35.14	S	104.06	W	10	G	5.1	5.0	1.5	21	SOUTHERN PACIFIC OCEAN
	09	09	13	08.4	13.435	N	124.116	E	72	D	4.7		0.8	41	LUZON, PHILIPPINE ISLANDS
	09	09	52	16.3%	40.304	N	27.254	E	10	G			0.4	6	TURKEY
	09	12	08	27.1*	40.024	N	21.664	E	10	G			1.1	8	GREECE
	09	15	06	27.1*	2.333	N	126.745	E	33	N	4.4		0.9	8	MOLUCCA PASSAGE
	09	15	32	07.0	10.108	N	74.275	W	46		5.1	4.1	0.9	126	NEAR NORTH COAST OF COLOMBIA. Felt in northern Colombia. Also felt at Maracaibo, Venezuela.
	09	15	40	08.4*	16.219	S	168.178	E	219	*	4.6		1.0	8	VANUATU ISLANDS
	09	16	29	38.57	19.16	N	144.70	E	108	*	4.4		0.3	8	MARIANA ISLANDS

09	18 25 28.9*	45.603 N	14.396 E	10 G		0.8	5	YUGOSLAVIA. ML 2.9 (KBA). MD 2.8 (TRI).
09	18 52 57.2*	6.188 S	147.673 E	91 *	3.5	1.1	6	EAST PAPUA NEW GUINEA REGION
09	20 20 31.0*	31.760 N	115.600 W	6 G			5	BAJA CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
09	20 27 50.8%	16.178 N	61.293 W	10 G		0.7	5	LEEWARD ISLANDS. ML 2.2 (FDF).
o 09	21 15 00.0	29.502 N	83.714 E	48	5.6 4.8	1.0	297	NEPAL
09	22 29 18.9	40.751 N	23.203 E	10 G		0.4	9	GREECE. MG 2.1 (SKO).
09	23 10 42.4	35.565 N	135.692 E	352	4.3	1.0	48	SOUTHERN HONSHU, JAPAN
10	00 20 52.2*	17.683 S	175.140 W	196 ?	4.9	1.0	37	TONGA ISLANDS
10	01 08 06.3%	37.462 N	118.617 W	11			22	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.2 (BRK). 3.2 (PAS).
10	02 21 56.7?	39.92 N	141.80 E	80 ?	4.0	0.4	5	HONSHU, JAPAN. Felt (I JMA) at Miyako and Mariaka.
10	03 58 25.5*	37.656 N	29.102 E	10 G		1.0	5	TURKEY
10	04 05 31.8%	60.963 N	151.183 W	67			33	KENAI PENINSULA, ALASKA. <AGS-P>.
10	04 30 05.3*	6.296 S	150.507 E	10 G	3.6	1.3	9	NEW BRITAIN REGION
o 10	04 34 45.2*	15.863 S	178.697 W	33 N	5.1 5.3	1.4	61	FIJI ISLANDS REGION
10	04 45 04.4%	40.420 N	124.485 W	18			7	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.4 (BRK).
10	04 53 20.9*	37.134 S	178.943 E	33 N	5.2 5.1	1.3	17	OFF E. COAST OF N. ISLAND, N.Z.
10	05 21 59.2	0.072 S	122.966 E	178	5.1	1.1	90	MINAHASSA PENINSULA
10	06 00 52.3?	51.03 N	179.53 E	33 N	4.4	2.0	6	RAT ISLANDS, ALEUTIAN ISLANDS
10	06 55 24.3*	21.716 S	70.178 W	33 N		1.3	8	NEAR COAST OF NORTHERN CHILE
10	07 03 26.6%	40.377 N	124.513 W	16			8	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 2.9 (BRK).
o 10	09 15 40.3	16.092 N	146.889 E	41 D	5.7 5.6	1.0	205	MARIANA ISLANDS
10	09 37 43.3	23.773 S	179.823 W	513	5.2	0.8	84	SOUTH OF FIJI ISLANDS. mb 5.5 (BRK).
o 10	09 58 02.9	5.888 N	125.660 E	202	5.6	1.0	196	MINDANAO, PHILIPPINE ISLANDS
10	10 10 42.9*	19.616 N	121.195 E	33 N	4.4	1.3	7	PHILIPPINE ISLANDS REGION
10	10 22 02.2*	5.829 S	153.712 E	33 N	3.7	0.8	6	NEW IRELAND REGION
o 10	10 52 19.9	29.867 N	63.840 E	165 D	5.6	1.0	320	PAKISTAN. Felt at Quetta and Chamon.
10	11 17 55.2*	41.513 N	141.898 E	70 *	4.5	1.3	25	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Hachinohe, Honshu.
o 10	12 12 14.1	38.118 N	106.357 E	10 G	5.4	1.3	106	NORTHERN CHINA. ML 5.2 (BJI).
10	12 26 47.8	37.994 N	106.621 E	10 G	4.6 4.4	1.3	25	NORTHERN CHINA. ML 4.5 (BJI).
10	12 46 37.2	38.006 N	106.531 E	10 G	4.7	1.4	27	NORTHERN CHINA. ML 4.7 (BJI).
10	14 30 36.4*	19.285 S	70.471 W	33 N		1.2	8	NEAR COAST OF NORTHERN CHILE
10	14 53 20.2?	24.14 S	179.24 E	568 ?	4.7	1.3	16	SOUTH OF FIJI ISLANDS
10	15 28 16.6	9.146 S	79.293 W	33 N	5.2	1.0	73	OFF COAST OF NORTHERN PERU. Felt at Chimbote.
10	16 40 55.6%	60.247 N	152.994 W	123			27	SOUTHERN ALASKA. <AGS-P>.
10	16 54 31.2	61.261 S	55.418 W	33 N	5.0	0.7	20	SOUTH SHETLAND ISLANDS
10	17 03 40.6*	23.969 S	66.742 W	232 *		0.6	8	JUJUY PROVINCE, ARGENTINA
10	17 57 43.9	43.625 N	147.660 E	54	5.2 4.0	1.0	151	KURIL ISLANDS. Felt (II JMA) at Nemuro, Hokkaido.
o 10	18 15 44.4	6.215 S	104.885 E	33 N	5.4 4.4	1.0	131	SUNDA STRAIT
10	18 15 51.3*	41.965 N	23.169 E	10 G		0.5	5	GREECE-BULGARIA BORDER REGION
10	19 27 02.3%	45.545 N	111.685 W	4			9	MONTANA. <BUT>. ML 2.8 (BUT).
10	23 16 49.3	43.278 N	25.953 E	10 G		0.5	8	BULGARIA
10	23 35 39.5%	61.073 N	149.714 W	42			40	SOUTHERN ALASKA. <AGS-P>.
11	00 27 47.9	44.479 N	10.331 E	22		1.1	40	NORTHERN ITALY. ML 3.6 (KBA), 3.5 (LDG). MD 3.3 (TRI).
11	01 53 11.8*	40.548 N	21.053 E	10 G		0.3	7	GREECE
11	01 55 01.3?	25.00 S	179.95 E	500 ?	4.8	1.2	11	SOUTH OF FIJI ISLANDS
11	02 08 39.4%	62.140 N	151.029 W	69			38	CENTRAL ALASKA. <AGS-P>.
11	02 14 06.8*	52.706 S	20.196 E	10 G	4.8	1.5	16	SOUTH OF AFRICA
11	02 14 41.8	24.287 N	123.389 E	62	4.9	1.1	75	SOUTHWESTERN RYUKYU ISLANDS. Felt (I JMA) on Ishigaki-shima.
11	03 34 32.1*	5.433 S	146.998 E	225	4.7	1.0	18	EAST PAPUA NEW GUINEA REGION
11	03 37 33.8*	32.473 S	71.741 W	57 ?	3.6	1.4	19	NEAR COAST OF CENTRAL CHILE
o 11	04 34 58.9	18.067 S	178.477 W	601	5.4	0.9	197	FIJI ISLANDS REGION
11	07 52 31.4	4.591 S	153.449 E	102	5.0	1.1	54	NEW IRELAND REGION
11	07 59 29.7%	38.263 N	106.364 E	33 N		0.8	6	NORTHERN CHINA. ML 3.6 (BJI).
11	08 14 31.4	9.103 S	157.833 E	42 *	4.7	1.4	45	SOLOMON ISLANDS
11	09 40 17.6*	6.724 S	146.960 E	25	5.0 3.9	1.6	25	EAST PAPUA NEW GUINEA REGION. ML 4.7 (PMG).
11	09 55 32.9*	13.828 N	92.125 W	33 N	4.4	0.8	18	OFF COAST OF CHIAPAS, MEXICO
11	10 32 09.4	5.540 S	147.167 E	214	4.9	1.0	68	EAST PAPUA NEW GUINEA REGION
11	10 44 00.3%	40.235 N	27.017 E	10 G		0.1	5	TURKEY
11	11 35 09.4*	56.325 N	152.375 W	33 N		1.1	8	KODIAK ISLAND REGION. ML 3.4 (PMR).
11	12 13 54.2	51.259 N	179.303 E	33 N	4.8 3.9	1.1	66	RAT ISLANDS, ALEUTIAN ISLANDS. ML 5.0 (PMR).
11	16 16 51.5%	61.297 N	150.905 W	61			33	SOUTHERN ALASKA. <AGS-P>.
11	16 39 34.8*	43.150 N	26.809 E	10 G		0.9	5	BULGARIA
11	16 41 29.6?	52.41 N	175.28 W	33 N	4.3	0.5	4	ANDREANOF ISLANDS, ALEUTIAN IS.
11	17 39 04.5*	29.535 S	68.085 W	33 N		1.5	9	SAN JUAN PROVINCE, ARGENTINA
o 11	17 44 53.6	6.350 S	154.712 E	78	5.3	1.0	129	SOLOMON ISLANDS. Felt (V) at Arowa and Panguno, Bougainville.
11	19 31 14.6?	6.60 S	147.06 E	23 *	4.1	1.6	7	EAST PAPUA NEW GUINEA REGION. ML 4.0 (PMG).
11	21 23 21.2	19.092 S	12.337 W	10 G	4.9 4.4	0.8	36	SOUTH ATLANTIC RIDGE
11	21 48 26.8*	21.164 S	69.170 W	163 *		1.2	12	NORTHERN CHILE
o 12	00 06 29.2	12.262 S	166.649 E	114 D	5.4	1.1	212	SANTA CRUZ ISLANDS
12	00 27 07.4?	9.69 N	125.98 E	33 N	4.7 4.5	1.2	9	MINDANAO, PHILIPPINE ISLANDS
12	01 29 56.8	61.455 N	112.760 E	0 G	5.0	0.8	99	CENTRAL SIBERIA
12	02 47 42.8	43.196 N	0.424 W	5 G		1.3	8	PYRENEES. ML 3.1 (LDG).
12	02 56 01.5	41.660 N	20.172 E	10 G		0.4	8	ALBANIA. ML 2.5 (TTG).
o 12	03 09 59.5	14.089 N	59.257 W	52 G	5.7 5.3	1.1	275	WINDWARD ISLANDS. Ms 5.3 (BRK). Felt (III) on Martinique. Also felt on Barbados and St. Vincent. Depth from broadband displacement seismograms.
o 12	04 34 31.1	54.898 N	162.893 E	44 D	5.1 4.7	1.2	214	NEAR EAST COAST OF KAMCHATKA
12	06 01 08.7*	19.487 S	173.426 E	33 N	4.9 4.7	1.4	60	VANUATU ISLANDS REGION
o 12	06 10 40.7	31.658 S	58.453 E	10 G	5.6 5.0	1.1	169	ATLANTIC-INDIAN RISE
12	06 23 53.1%	45.556 N	111.688 W	4			7	MONTANA. <BUT>. ML 2.8 (BUT). Felt at Norris.
12	10 23 08.9?	45.22 N	20.85 E	10 G		0.8	5	YUGOSLAVIA. ML 2.5 (TTG).
12	11 16 40.6*	19.608 S	173.496 E	33 N	4.9	1.2	43	VANUATU ISLANDS REGION
12	11 17 23.6%	62.089 N	151.361 W	92			35	CENTRAL ALASKA. <AGS-P>.
12	12 14 48.9*	55.115 N	162.794 E	33 N	4.5	0.8	12	NEAR EAST COAST OF KAMCHATKA
12	13 14 17.6%	59.758 N	152.564 W	70			46	SOUTHERN ALASKA. <AGS-P>.
12	13 41 05.5*	38.126 N	22.099 E	26 *		1.4	13	GREECE. MD 3.5 (ATH).
12	13 44 25.4%	44.126 N	6.082 E	10 G		1.0	6	FRANCE. ML 2.5 (LDG).
12	14 01 48.8?	15.11 N	62.06 W	33 N		1.3	7	LEEWARD ISLANDS. ML 2.8 (FDF).
12	15 15 56.4?	43.63 N	18.99 E	10 G		1.3	7	YUGOSLAVIA. ML 2.7 (TTG).

	12	16 43 16.5*	45.093 N	148.402 E	33 N	4.3	0.7	11	KURIL ISLANDS
	12	17 31 04.9	47.381 N	9.544 E	10 G		0.5	6	GERMANY. ML 2.6 (KBA).
	12	20 46 18.5	38.188 N	23.253 E	31	4.0	0.9	29	GREECE. MD 3.8 (ATH).
	13	00 25 30.8	47.543 N	7.453 E	10 G		0.6	8	SWITZERLAND. ML 2.7 (LDG).
	13	01 19 45.27	51.24 N	178.98 W	33 N	5.0	0.7	11	ANDREANOF ISLANDS, ALEUTIAN IS.
	13	04 04 37.2	40.700 N	30.324 E	10 G		0.9	12	TURKEY
	13	04 20 28.8	47.587 N	7.635 E	10		1.4	12	SWITZERLAND. ML 2.9 (LDG).
	13	05 12 21.9	38.657 N	8.151 W	10 G		0.8	12	PORTUGAL. MG 3.3 (MDD).
	13	06 37 55.3	19.562 S	70.213 W	53 *	4.4	0.9	13	NEAR COAST OF NORTHERN CHILE
	13	07 01 35.4*	34.661 S	71.832 W	67 *	4.6	0.9	24	NEAR COAST OF CENTRAL CHILE
	13	07 22 09.2	37.901 N	15.065 E	41	4.8	1.3	116	SICILY. MD 4.3 (ROM). Felt (VII) in the Etna area.
	13	08 21 16.8	21.272 N	144.159 E	33 N	4.7 4.0	0.9	47	MARIANA ISLANDS REGION
	13	08 44 07.8*	30.871 S	177.987 W	56 D	5.3	1.3	32	KERMADEC ISLANDS
	13	09 05 54.7&	40.378 N	124.543 W	14			8	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 2.7 (BRK).
a	13	09 21 22.7	14.028 N	91.243 W	62 D	4.9	1.2	94	GUATEMALA. mb 5.1 (BRK). Felt along the Pacific coast of Guatemala.
	13	10 06 28.17	44.136 N	6.096 E	10 G		1.0	7	FRANCE. ML 2.5 (LDG).
	13	12 55 33.2&	60.235 N	153.192 W	168			29	SOUTHERN ALASKA. <AGS-P>.
	13	14 00 00.0&	37.061 N	116.045 W	0	5.9 4.4		271	SOUTHERN NEVADA. <DOE>. ML 5.5 (BRK). 37° 03' 39.46" N., 116° 02' 43.11" W., Surface Elev. 1239 m., Depth of Burial 600 m., Shot Time 140000.088, "TAHOKA", Nevada Test Site (Dept. of Energy). Felt at Las Vegas.
	13	15 14 04.3&	36.598 N	121.857 W	3			10	CENTRAL CALIFORNIA. <BRK>. ML 2.4 (BRK). Felt at Monterey and Salinas.
f	13	15 23 06.9	17.897 S	70.931 W	37 G	6.1 6.4	1.2	310	NEAR COAST OF PERU. Ms 6.2 (BRK). One person killed, one injured and additional damage (V) at Arica, Chile. Felt (IV) at Arequipa and Tacna, Peru. Depth from broadband displacement seismograms.
	13	15 28 42.1&	62.396 N	149.224 W	52			30	CENTRAL ALASKA. <AGS-P>.
	13	16 21 19.37	5.88 S	129.73 E	33 N		1.6	5	BANDA SEA
	13	16 25 48.7?	32.43 S	71.89 W	33 N		0.9	8	NEAR COAST OF CENTRAL CHILE
	13	17 38 38.0?	49.60 N	0.53 W	10 G		0.5	6	FRANCE. ML 2.9 (LDG).
a	13	20 32 47.9	11.333 S	165.444 E	23 *	5.4	1.0	123	SANTA CRUZ ISLANDS
	13	21 07 56.37	16.66 S	73.35 W	70 ?	5.1	1.4	21	NEAR COAST OF PERU
	13	21 18 20.87	25.099 N	115.633 E	10 G		1.1	5	EASTERN CHINA
	13	21 39 30.5&	58.822 N	154.304 W	121	4.6		43	ALASKA PENINSULA. <AGS-P>.
	13	21 46 53.2	14.815 S	167.985 E	33 N	5.6 5.2	1.0	188	VANUATU ISLANDS
	13	22 30 04.8*	14.180 N	59.195 W	33 N		0.4	9	WINDWARD ISLANDS. ML 3.6 (FDF).
	13	23 28 21.4*	40.180 N	20.127 E	10 G		1.2	5	GREECE-ALBANIA BORDER REGION. MD 3.2 (ATH).
	13	23 58 22.57	15.68 N	63.29 W	33 N		1.5	8	LEEWARD ISLANDS. ML 2.9 (FDF).
	14	00 14 47.37	40.488 N	23.441 E	10 G		0.5	6	GREECE
	14	00 50 33.2*	8.195 S	119.833 E	181 *	4.7	1.4	21	FLORES ISLAND REGION
	14	01 49 10.4	37.654 N	15.220 E	10 G		0.9	9	SICILY
	14	02 13 56.47	40.99 N	48.25 E	33 N	4.3 3.2	1.0	11	EASTERN CAUCASUS. Minor damage (V) at Kutkashen.
	14	02 29 52.3*	21.255 N	144.195 E	33 N	4.7	0.9	17	MARIANA ISLANDS REGION
	14	02 59 59.1	36.642 N	137.707 E	205 D	4.5	0.9	86	HONSHU, JAPAN
	14	03 33 10.3&	61.123 N	151.324 W	77			31	SOUTHERN ALASKA. <AGS-P>.
	14	04 16 46.67	6.59 S	105.68 E	90 ?	4.7	1.4	18	SUNDA STRAIT
	14	04 37 06.37	42.142 N	19.078 E	10 G		0.4	7	YUGOSLAVIA. ML 2.5 (TTG).
	14	04 41 47.6*	26.140 N	128.717 E	33 N	4.2	0.7	11	RYUKYU ISLANDS
f	14	05 59 04.2	12.580 S	166.589 E	29 G	5.6 5.8	1.2	188	SANTA CRUZ ISLANDS. Depth from broadband displacement seismograms.
	14	06 24 04.6	43.734 N	20.413 E	14	5.0	1.2	198	YUGOSLAVIA. ML 4.7 (TTG). Two people injured and damage (VII) in the Kraljevo-Bogutovacka Banja area. Felt (III) at Belgrade and in northern Montenegro. Felt (IV) in the Sofia-Pernik-Vidin area, Bulgaria.
	14	06 50 27.97	39.919 N	28.930 E	11		0.5	8	TURKEY
	14	07 03 41.3*	43.485 N	20.186 E	10 G		1.4	7	YUGOSLAVIA. ML 2.8 (TTG).
	14	07 34 45.3*	43.639 N	20.406 E	10 G		1.4	7	YUGOSLAVIA. ML 2.9 (TTG).
	14	07 55 35.3	40.722 N	30.074 E	10 G		0.8	8	TURKEY
a	14	08 24 53.6	16.587 S	172.368 W	33 N	5.2 5.3	1.2	124	SAMOA ISLANDS REGION
	14	09 18 42.2*	7.786 S	127.960 E	142 *	5.1	1.4	19	BANDA SEA
	14	09 40 32.47	19.01 N	96.11 W	131 ?	4.4	1.2	14	VERA CRUZ, MEXICO
	14	10 02 10.6	43.148 N	126.722 W	10 G	3.7	0.8	55	OFF COAST OF OREGON
	14	10 09 49.17	32.93 S	72.80 W	33 N		0.6	9	OFF COAST OF CENTRAL CHILE
	14	10 47 52.67	37.812 N	2.502 W	10 G		1.1	7	SPAIN. MG 2.9 (MDD).
	14	10 57 30.9&	35.420 N	118.720 W	10			11	CENTRAL CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
	14	11 22 09.7*	40.030 N	24.892 E	26 *		0.9	7	AEGEAN SEA
	14	12 53 12.9*	0.004 S	123.755 E	139 *	3.6	1.3	12	MINAHASSA PENINSULA
	14	13 42 08.4*	51.012 N	15.792 E	10 G		1.4	7	POLAND. ML 3.3 (VKA).
	14	13 54 33.6*	43.566 N	20.230 E	10 G		1.1	7	YUGOSLAVIA. ML 2.6 (TTG).
	14	14 18 34.37	40.696 N	23.293 E	10 G		0.6	5	GREECE
	14	15 25 21.0*	5.937 S	131.057 E	125 *	4.4	1.2	9	BANDA SEA
	14	15 34 11.3&	41.002 N	123.200 W	23			6	NORTHERN CALIFORNIA. <BRK>. ML 3.8 (BRK).
	14	16 48 07.2*	29.155 S	70.964 W	33 N		1.6	7	CENTRAL CHILE
	14	16 59 51.5	25.106 N	115.570 E	10 G	4.0	1.0	19	EASTERN CHINA. Felt (V) in the Ganzhou-Xunwu area. Also felt at Hong Kong.
f	14	17 39 32.2	53.416 N	169.113 W	118 G	5.7	1.0	389	FOX ISLANDS, ALEUTIAN ISLANDS. mb 5.6 (BRK). Felt (IV) at Nikolski and (II) at Akutan. Depth from broadband displacement seismograms.
	14	17 40 30.5*	6.466 N	126.329 E	83 *	4.5	1.4	28	MINDANAO, PHILIPPINE ISLANDS
	14	18 51 08.17	4.69 S	139.54 E	33 N	3.8	1.2	5	WEST IRIAN
	14	19 22 38.7*	12.323 S	117.758 E	33 N		0.7	5	SOUTH OF SUMBAWA ISLAND
	14	20 20 26.9*	38.121 N	29.068 E	10 G		1.2	6	TURKEY
	14	20 24 27.7	43.746 N	20.479 E	10 G		1.2	20	YUGOSLAVIA. ML 3.2 (TTG).
	14	20 41 42.8&	36.988 N	121.655 W	8			12	CENTRAL CALIFORNIA. <BRK>. ML 2.7 (BRK).
	14	21 23 48.2*	8.324 S	107.322 E	33 N	4.5	1.1	21	JAVA
	14	21 36 58.0*	2.835 N	128.473 E	33 N	4.5	1.2	12	HALMAHERA
a	14	22 20 42.0	19.107 S	63.932 W	598	5.3	0.8	235	SOUTHERN BOLIVIA
	14	22 33 24.8*	43.607 N	20.876 E	10 G		0.7	7	YUGOSLAVIA. ML 2.6 (TTG).
	14	23 22 42.6	36.859 N	141.614 E	53	4.9	1.1	70	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) in the Onahama-Sendai-Takyo area.
a	15	00 31 49.5	52.681 N	152.643 E	527	4.9	0.7	242	NORTHWEST OF KURIL ISLANDS

15	02 07 28.5	46.348 N	7.552 E	10 G			1.3	14	SWITZERLAND. ML 2.6 (LDG).
15	03 57 11.8	36.184 N	4.312 W	10			1.3	14	STRAIT OF GIBRALTAR. MG 3.0 (MDD).
15	04 57 39.7?	15.43 N	61.51 W	163 ?			0.7	10	LEEWARD ISLANDS
15	05 29 14.4?	4.17 S	143.85 E	137 *	4.1		1.0	6	PAPUA NEW GUINEA
15	06 49 06.1	45.040 N	7.373 E	15			0.8	42	NORTHERN ITALY. ML 3.3 (LDG).
15	07 19 08.0?	33.07 S	72.38 W	33 N			0.4	7	OFF COAST OF CENTRAL CHILE
15	08 02 25.6*	38.267 N	38.718 E	10 G			0.3	5	TURKEY
15	09 12 06.7	34.217 N	26.549 E	28 *	4.5		1.2	80	CRETE. ML 3.8 (ATH).
a	15	09 34 47.4	23.136 S	68.574 W	101 D	5.1	1.1	100	NORTHERN CHILE. Felt (II) at Antofagasta.
15	10 10 39.1	40.295 N	22.971 E	10 G			0.3	7	GREECE
15	11 25 06.7	46.244 N	7.530 E	10 G			1.1	10	SWITZERLAND. ML 2.6 (LDG).
15	11 34 59.5	43.730 N	20.471 E	21			1.2	74	YUGOSLAVIA. ML 3.5 (TTG), 3.4 (SKO). Felt (VII) at Kraljevo. Also felt at Titova Uzice and Priboj.
15	12 02 31.5*	0.057 N	123.373 E	162 ?	4.0		0.6	9	MINAHASSA PENINSULA
15	12 51 52.0	15.255 N	61.348 W	151	5.1		0.7	150	LEEWARD ISLANDS. Felt (II) on Martinique and Guadeloupe.
15	13 36 30.2	8.151 S	118.730 E	191	4.8		1.0	42	SUMBAWA ISLAND REGION
15	13 46 37.9	1.165 S	78.093 W	59 *	4.6		1.2	30	ECUADOR. Felt (IV) in the Lotacunga-Teno-Amboto area. Also felt (II) at Quito.
15	13 47 00.6*	6.187 S	150.460 E	60 *	4.6		0.7	10	NEW BRITAIN REGION
15	13 49 11.2	20.019 S	175.406 W	195 *	4.9		1.0	60	TONGA ISLANDS
15	15 05 13.0	43.709 N	20.521 E	11			1.1	28	YUGOSLAVIA. ML 3.2 (TTG), 3.1 (SKO). Felt (V) in the Kraljevo area.
15	15 56 49.6?	36.38 N	28.16 E	32 *			0.8	7	DODECANESE ISLANDS
15	16 08 36.5	37.293 N	141.528 E	57	4.8		1.1	82	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito, Utsunomiya and Onahama; (I JMA) at Fukushima and Ishinomaki.
15	17 32 44.6*	2.440 S	127.264 E	48 ?	4.0		1.5	10	CERAM SEA
15	17 43 52.0	7.392 S	128.430 E	184 *	4.8		1.3	38	BANDA SEA
f	15	18 04 23.1	28.135 S	70.884 W	37 G	6.0 6.1	1.2	310	CENTRAL CHILE. Ms 5.9 (BRK), 5.7 (PAS). Damage (VI) in the Vallenar-Huasco area. Felt (V) at Ovalle and Copiapo and (III) at Santiago. Also felt at San Juan and (II) at Mendoza, Argentina. Depth from broadband displacement seismograms.
15	18 18 07.1	47.050 N	0.855 E	10 G			1.3	19	FRANCE. ML 3.2 (LDG).
15	19 12 39.8?	37.18 N	22.32 E	10 G			0.6	5	SOUTHERN GREECE. ML 3.2 (ATH).
15	20 52 48.9*	32.795 S	68.712 W	33 N			1.3	9	MENDOZA PROVINCE, ARGENTINA
a	16	00 44 03.4*	20.362 S	174.361 W	33 N	4.8 5.0	1.2	30	TONGA ISLANDS
16	01 02 48.5	12.981 N	88.750 W	73 *	4.9		1.0	63	OFF COAST OF CENTRAL AMERICA. Felt (III) at San Salvador, El Salvador.
16	02 36 01.2*	36.794 S	177.044 E	253	4.6		1.0	16	OFF E. COAST OF N. ISLAND, N.Z.
16	03 07 37.8%	45.737 N	1.239 W	13			1.1	13	FRANCE. ML 3.1 (LDG).
16	03 52 44.7?	5.75 S	130.21 E	215 ?	4.1		1.0	7	BANDA SEA
16	06 19 54.1%	46.182 N	1.763 E	10 G			0.5	8	FRANCE. ML 2.0 (LDG).
16	10 49 23.2?	3.60 N	123.85 E	425 *	4.6		1.4	12	CELEBES SEA
16	11 45 44.6?	5.63 S	131.40 E	86 ?	4.7		0.1	6	BANDA SEA
16	13 14 15.1%	60.774 N	151.674 W	80			1.4	34	KENAI PENINSULA, ALASKA. <AGS-P>.
16	14 22 20.6?	39.35 N	26.17 E	10 G			0.7	7	TURKEY
16	15 39 41.2	8.961 N	84.164 W	27			1.0	14	OFF COAST OF COSTA RICA. MD 4.1 (SJR), 4.0 (MDC). Felt (IV) at Quepos.
16	16 58 31.5	47.869 N	6.339 E	10 G			0.5	25	FRANCE. ML 3.5 (LDG).
16	17 05 43.7*	37.717 N	21.727 E	67 *	3.6		1.0	10	SOUTHERN GREECE
16	19 10 25.6%	40.407 N	124.430 W	18			0.8	15	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.7 (BRK).
16	20 07 59.4	33.143 N	137.715 E	344	4.4		0.8	56	NEAR S. COAST OF HONSHU, JAPAN
16	20 33 08.7?	15.13 N	61.58 W	10 G			0.8	5	LEEWARD ISLANDS. ML 2.1 (FDF).
a	16	21 38 48.1	34.963 S	179.654 E	74 *	5.5	1.3	181	SOUTH OF KERMADEC ISLANDS
16	22 41 56.9	21.202 N	144.258 E	33 N	4.9		0.8	29	MARIANA ISLANDS REGION
17	01 30 51.8?	32.05 S	71.36 W	31 *			0.3	7	NEAR COAST OF CENTRAL CHILE
17	02 45 01.6*	44.827 N	9.806 E	13			1.0	16	NORTHERN ITALY. ML 2.9 (LDG).
17	03 13 06.1*	20.182 N	69.832 W	33 N			1.6	9	DOMINICAN REPUBLIC REGION
17	03 44 19.9	44.046 N	114.747 W	5 G	4.0		0.7	50	WESTERN IDAHO. ML 4.4 (NEIS). Felt (III) at Clayton.
17	04 39 59.5*	6.131 S	104.589 E	104 *	4.7		0.9	17	SUNDA STRAIT
17	05 26 28.8*	9.832 S	117.197 E	33 N	3.8		1.5	7	SUMBAWA ISLAND REGION
17	05 41 51.1?	2.48 S	139.76 E	33 N	4.2 4.1		1.4	7	NEAR N. COAST OF WEST IRIAN
17	05 51 48.5	20.102 N	69.925 W	33 N	4.7 3.8		1.5	20	DOMINICAN REPUBLIC REGION
17	06 29 53.7?	17.60 S	178.90 W	502 ?	4.3		1.0	26	FIJI ISLANDS REGION
17	10 38 04.6?	39.27 N	21.97 E	10 G			1.4	5	GREECE
17	12 45 27.9*	17.528 S	167.822 E	21 *	4.6 4.1		1.4	26	VANUATU ISLANDS
17	14 28 07.4%	36.555 N	121.158 W	8			1.1	11	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
17	15 38 58.2%	59.763 N	4.952 E	10 G			0.7	6	SOUTHERN NORWAY. MD 1.9 (BER).
17	15 41 05.0%	59.777 N	4.924 E	10 G			0.1	6	SOUTHERN NORWAY. MD 2.0 (BER).
17	16 40 18.1*	44.094 N	114.543 W	5 G			0.9	6	WESTERN IDAHO. ML 3.0 (NEIS), 3.3 (BUT).
17	18 37 02.3%	34.300 N	116.930 W	3			1.0	10	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
17	18 45 22.1*	5.726 N	124.261 E	33 N	4.6		1.3	11	MINDANAO, PHILIPPINE ISLANDS
17	20 38 33.7	22.599 N	107.558 W	10 G	4.6 3.8		1.1	37	OFF COAST OF CENTRAL MEXICO
18	00 41 28.8	30.575 S	69.238 W	64 *	4.5		1.2	19	CHILE-ARGENTINA BORDER REGION
18	00 46 53.6*	39.925 N	24.063 E	10 G			1.1	8	AEGEAN SEA
a	18	01 50 18.2	6.924 S	129.705 E	138	5.3	1.1	111	BANDA SEA
18	02 14 14.2	36.453 N	71.111 E	207 D	4.9		0.9	151	AFGHANISTAN-USSR BORDER REGION. Felt at Peshawar, Pakistan.
a	18	02 18 50.6	5.593 S	151.686 E	50	5.6 5.8	1.1	191	NEW BRITAIN REGION. Ms 6.2 (BRK). Felt (IV) at Rabaul.
18	02 34 08.8*	32.425 S	68.449 W	33 N			1.1	8	MENDOZA PROVINCE, ARGENTINA
18	02 39 46.4?	42.52 N	20.32 E	10 G			0.6	6	YUGOSLAVIA. ML 2.3 (TTG).
18	03 14 17.6*	23.710 S	70.845 W	10 G			1.1	9	NEAR COAST OF NORTHERN CHILE. Felt (II) at Antofagasta.
18	04 43 07.9%	60.639 N	147.570 W	18			0.9	40	SOUTHERN ALASKA. <AGS-P>. ML 3.0 (PMR).
18	09 05 39.8	55.788 N	164.452 E	33 N	4.6		0.9	29	KOMANDORSKY ISLANDS REGION
18	09 32 14.3	38.808 N	27.928 E	10 G			0.9	15	TURKEY
18	13 52 09.5	22.110 S	63.717 W	543	4.4		0.8	23	SALTA PROVINCE, ARGENTINA
18	16 45 21.7	6.079 S	148.205 E	100 *	4.9		1.4	19	NEW BRITAIN REGION
18	17 52 06.3	8.727 N	126.850 E	54 *	5.2 4.8		1.1	87	MINDANAO, PHILIPPINE ISLANDS
18	20 05 13.4	41.765 N	19.694 E	9			0.6	10	ALBANIA. ML 2.4 (TTG).
18	20 20 00.0	41.728 N	23.660 E	12			1.0	15	GREECE-BULGARIA BORDER REGION
18	20 54 20.3?	8.52 N	126.73 E	74 ?	4.7		1.4	12	MINDANAO, PHILIPPINE ISLANDS

	18	22 05 52.3*	46.670 N	9.633 E	10 G	0.3	5	SWITZERLAND	
	19	00 23 18.2	44.095 N	12.006 E	20 G	1.3	62	NORTHERN ITALY. ML 3.9 (LDG). MD 4.0 (VKA), 3.7 (TRI).	
	19	00 25 26.07	34.83 S	179.25 W	33 N 4.8	1.1	10	SOUTH OF KERMADEC ISLANDS	
	19	00 35 20.7*	36.978 N	142.191 E	33 N 4.8	1.1	11	OFF EAST COAST OF HONSHU, JAPAN	
	19	04 18 12.8%	15.057 N	60.999 W	33 N	1.3	8	LEEWARD ISLANDS. ML 3.0 (FDF).	
	19	04 25 40.9%	40.116 N	29.376 E	10 G	0.5	7	TURKEY	
	19	04 50 06.4*	47.967 N	148.182 E	350 ? 4.4	0.7	30	NORTHWEST OF KURIL ISLANDS	
	19	04 55 02.97	36.95 S	70.55 W	154 ? 4.2	1.2	13	CHILE-ARGENTINA BORDER REGION	
	19	06 14 00.4*	32.053 S	69.869 W	141 ?	1.1	15	MENDOZA PROVINCE, ARGENTINA	
	19	06 54 06.1*	6.757 S	130.616 E	85 * 4.7	1.4	21	BANDA SEA	
a	19	07 52 44.2	24.088 S	66.932 W	153 5.4	0.9	188	SALTA PROVINCE, ARGENTINA. mb 5.5 (BRK).	
	19	08 31 37.3*	43.434 N	19.702 E	10 G	1.2	10	YUGOSLAVIA. ML 2.5 (TTG).	
	19	08 39 04.17	5.94 S	147.84 E	33 N 4.0 3.7	0.9	7	EAST PAPUA NEW GUINEA REGION	
	19	09 15 53.7%	41.076 N	27.805 E	10 G	1.4	5	TURKEY	
	19	09 40 02.7%	33.580 N	118.000 W	13		12	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).	
	19	13 34 41.47	37.69 N	21.11 E	31 * 3.5	1.2	10	SOUTHERN GREECE. ML 3.6 (ATH).	
	19	13 47 44.0%	40.600 N	123.900 W	15 G		4	NORTHERN CALIFORNIA. <BRK>. ML 2.9 (BRK).	
	19	15 00 21.4*	20.195 S	178.539 W	343 ? 4.7	1.3	71	FIJI ISLANDS REGION	
	19	16 41 45.3*	22.664 N	121.309 E	33 N 4.0	1.4	13	TAIWAN REGION	
	19	17 32 07.0%	37.342 N	112.225 E	10 G	1.1	5	NORTHEASTERN CHINA. ML 3.9 (BJI).	
	19	18 30 21.47	36.53 N	7.78 W	10 G	0.7	8	STRAIT OF GIBRALTAR	
	19	18 41 44.9*	32.807 S	71.771 W	33 N	1.1	9	NEAR COAST OF CENTRAL CHILE	
	19	19 17 01.0*	37.179 S	176.605 E	252 4.5	1.0	15	NORTH ISLAND, NEW ZEALAND	
	19	19 58 16.87	18.05 S	178.73 W	627 ? 4.6	1.1	13	FIJI ISLANDS REGION	
	19	20 21 28.17	45.12 N	7.76 E	10 G	0.6	5	NORTHERN ITALY. ML 2.3 (LDG).	
	19	21 44 34.37	41.83 N	22.60 E	10 G	0.4	6	YUGOSLAVIA. MG 2.0 (SKO).	
	19	22 34 49.0*	28.534 S	12.581 W	10 G 4.6	0.5	18	SOUTH ATLANTIC RIDGE	
	19	23 27 45.3*	4.143 S	135.403 E	33 N 4.1	0.6	6	WEST IRIAN REGION	
	20	00 22 54.9*	4.697 N	96.400 E	56 ? 4.3	1.1	7	NORTHERN SUMATERA	
	20	00 26 05.4*	41.264 N	22.734 E	10 G	0.4	5	YUGOSLAVIA. MG 1.0 (SKO).	
	20	02 19 30.4	5.336 N	82.604 W	10 G 4.7 4.2	1.2	47	SOUTH OF PANAMA	
	20	02 54 37.4	46.416 N	15.032 E	10 G	0.9	14	YUGOSLAVIA. ML 3.3 (KBA), 3.1 (VKA). MD 3.2 (TRI). Felt (IV) at Sostanj and Slovenjgradec.	
	20	04 56 26.7*	4.646 N	96.400 E	62 ? 4.3	1.4	9	NORTHERN SUMATERA	
	20	05 39 14.2%	45.540 N	111.664 W	5		11	MONTANA. <BUT>. ML 3.5 (BUT). Felt at Norris.	
a	20	05 40 52.6	24.213 S	179.158 E	527 5.2	1.0	139	SOUTH OF FIJI ISLANDS	
	20	05 41 47.9%	45.613 N	111.712 W	2		7	MONTANA. <BUT>. ML 3.0 (BUT). Felt at Norris.	
	20	05 58 32.7*	38.263 N	119.167 W	5 G	0.7	6	CALIFORNIA-NEVADA BORDER REGION. ML 2.6 (NEIS).	
	20	06 32 27.8*	43.249 N	13.793 E	10 G	1.5	6	CENTRAL ITALY	
	20	07 05 26.3%	57.945 N	156.039 W	136		38	ALASKA PENINSULA. <AGS-P>.	
	20	07 44 35.5%	45.541 N	111.670 W	6		12	MONTANA. <BUT>. ML 3.3 (BUT), 3.4 (NEIS). Felt at Norris.	
	20	08 51 31.8*	11.887 N	142.585 E	33 N 4.8	0.8	13	SOUTH OF MARIANA ISLANDS	
	20	11 09 51.4%	61.979 N	149.876 W	52		40	SOUTHERN ALASKA. <AGS-P>.	
	20	13 14 03.97	32.53 S	72.07 W	33 N	0.8	8	OFF COAST OF CENTRAL CHILE	
	20	13 37 58.5	19.622 S	68.946 W	150 4.6	0.9	27	CHILE-BOLIVIA BORDER REGION	
	20	14 04 51.5	8.013 N	82.950 W	28		0.5	11	PANAMA-COSTA RICA BORDER REGION. MD 4.5 (HDC).
	20	15 00 50.4%	15.670 N	62.038 W	30 * 1.3	1.3	8	LEEWARD ISLANDS. ML 3.1 (FDF).	
	20	15 18 10.2	43.750 N	20.438 E	10 G	1.4	17	YUGOSLAVIA. ML 2.9 (TTG).	
	20	16 54 19.1*	14.199 N	92.048 W	48 * 4.5 3.3	1.2	31	NEAR COAST OF CHIAPAS, MEXICO. Felt (II) in the Retalhuleu area, Guatemala.	
	20	20 21 06.1	39.159 N	25.475 E	10 3.4	0.8	29	AEGEAN SEA. ML 3.5 (ATH).	
	20	21 14 56.3	22.104 N	144.198 E	116 * 4.7	0.9	64	VOLCANO ISLANDS REGION	
	20	22 29 36.3%	60.741 N	151.998 W	84		37	KENAI PENINSULA, ALASKA. <AGS-P>.	
	20	23 01 39.8	22.108 S	68.845 W	121 * 4.7	1.6	19	NORTHERN CHILE	
	21	00 26 07.0	31.723 N	80.183 E	55 * 4.7	1.3	28	TIBET	
	21	02 55 05.6	34.818 N	135.569 E	11 *	0.5	10	NEAR S. COAST OF SOUTHERN HONSHU. Felt (III JMA) at Nara; (II JMA) at Osaka and Kyata; (I JMA) at Kobe and Tsu.	
	21	03 04 08.47	14.93 N	60.33 W	33 N	0.5	9	WINDWARD ISLANDS. ML 2.7 (FDF).	
	21	04 52 56.3	13.332 S	166.687 E	33 N 5.1 4.3	1.1	52	VANUATU ISLANDS	
	21	04 56 14.5	2.740 N	97.948 E	103 * 4.5	0.9	19	NORTHERN SUMATERA	
	21	05 31 05.9*	18.313 S	71.643 W	33 N	0.6	5	OFF COAST OF NORTHERN CHILE	
	21	05 40 23.2%	37.733 N	122.115 W	7		11	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK). Felt at Castro Valley, Daly City, Emeryville and San Leandro.	
	21	06 20 00.6	15.096 S	71.250 W	33 N 4.7	1.0	19	SOUTHERN PERU	
	21	07 52 34.17	6.88 S	151.22 E	33 N 3.8	1.1	6	NEW BRITAIN REGION	
	21	07 55 02.3%	41.402 N	125.025 W	5 G		7	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.5 (BRK). Ma=1.0*10**13 Nm (BRK). Felt at Fortuna.	
	21	10 05 59.2%	45.557 N	111.675 W	5		9	MONTANA. <BUT>. ML 2.7 (BUT).	
	21	12 12 32.4%	40.408 N	124.530 W	14		6	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 2.8 (BRK). Felt at Fortuna.	
	21	13 08 22.07	5.49 S	152.34 E	107 ? 3.4	0.5	6	NEW BRITAIN REGION	
	21	13 34 24.47	42.32 N	18.93 E	10 G	0.1	4	YUGOSLAVIA. ML 1.9 (TTG).	
	21	14 00 56.3	20.985 S	178.007 W	426 * 4.5	0.7	33	FIJI ISLANDS REGION	
	21	14 59 32.9	43.472 N	17.100 E	10 G	1.0	15	YUGOSLAVIA. ML 3.5 (TTG).	
	21	15 31 27.3*	18.007 N	120.453 E	33 N 4.7	1.2	26	LUZON, PHILIPPINE ISLANDS	
	21	15 36 47.77	22.08 S	179.24 E	656 ? 4.7	0.6	15	SOUTH OF FIJI ISLANDS	
	21	15 55 05.6*	26.396 N	141.741 E	33 N 4.9	0.6	7	BONIN ISLANDS REGION. Felt (I JMA) on Chichi-shima.	
	21	16 32 48.87	24.37 S	179.39 E	603 ? 4.8	1.0	21	SOUTH OF FIJI ISLANDS	
	21	16 58 32.1*	10.561 S	119.228 E	33 N 3.5	1.5	9	SUMBA ISLAND REGION	
	21	17 46 07.9	5.586 S	151.901 E	33 N 4.6	1.3	13	NEW BRITAIN REGION	
	21	17 46 21.97	18.67 S	168.42 E	228 ? 5.0	0.5	6	VANUATU ISLANDS	
	21	18 19 27.97	8.56 S	127.72 E	194 ? 4.3	1.4	7	TIMOR	
	21	18 20 10.0	5.528 S	151.885 E	46 5.1	1.1	110	NEW BRITAIN REGION. Felt (IV) at Rabaul.	
f	21	18 22 37.4	5.483 S	151.732 E	36 G 5.7 5.7	0.9	211	NEW BRITAIN REGION. Depth from broadband displacement seismograms.	
a	21	19 44 19.0	6.526 S	154.877 E	62 5.6	1.0	246	SOLOMON ISLANDS. Felt (V) at Arawa and Panguna, Bougainville.	
	21	20 05 29.0%	61.397 N	146.884 W	18		49	SOUTHERN ALASKA. <AGS-P>. ML 3.7 (PMR). Felt (III) at Valdez.	
	21	20 20 30.5*	8.179 S	119.795 E	177 ? 5.0	1.3	14	FLORES ISLAND REGION	
	21	20 48 41.67	8.39 S	112.20 E	131 * 4.4	1.0	9	JAVA	

21	20 50 12.0*	0.134 N	123.421 E	227 ?	4.9	1.2	24	MINAHASSA PENINSULA
21	20 53 22.2*	39.400 N	2.484 W	10 G		0.4	5	SPAIN. MG 3.3 (MDD).
21	20 58 24.2*	40.232 N	25.826 E	10 G		1.6	5	AEGEAN SEA
21	21 08 57.7	46.307 N	10.664 E	5		0.8	39	NORTHERN ITALY. ML 3.2 (KBA), 3.0 (LDG). MD 3.1 (TRI).
a 21	21 38 56.6	47.649 S	99.860 E	10 G	5.3 5.5	0.8	30	SOUTHEAST INDIAN RISE
21	22 29 24.0*	27.991 S	179.811 W	437 *	4.5	1.0	37	KERMADEC ISLANDS REGION
a 21	23 00 52.8	23.893 N	108.738 W	10 G	5.3 5.2	1.1	95	GULF OF CALIFORNIA. Ms 5.3 (BRK).
22	00 10 39.7	5.867 S	149.247 E	112 *	4.7	1.0	13	NEW BRITAIN REGION
22	00 17 10.1?	30.79 N	109.82 W	10 G		1.6	8	NORTHWESTERN MEXICO
22	00 21 52.9*	43.811 N	85.290 E	58 ?	4.4	0.6	7	NORTHERN XINJIANG, CHINA
22	01 22 26.5	51.632 N	16.323 E	10 G		0.6	22	POLAND. ML 3.9 (KBA), 3.9 (VKA).
22	01 36 06.2?	17.18 N	61.78 W	31 ?		0.1	5	LEEWARD ISLANDS. ML 3.2 (FDF).
22	02 08 19.4%	45.581 N	2.971 E	10 G		0.3	6	FRANCE. ML 1.8 (LDG).
22	02 32 07.1&	31.960 N	116.310 W	6 G			6	BAJA CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
22	03 39 08.1	15.195 N	60.923 W	127	4.9	0.6	100	LEEWARD ISLANDS. Felt (II) on Martinique.
22	04 59 57.3*	52.098 N	179.492 E	144 *	4.5	0.8	14	RAT ISLANDS, ALEUTIAN ISLANDS
a 22	05 09 14.4	52.164 N	174.066 E	33 N	5.5 4.8	0.9	229	NEAR ISLANDS, ALEUTIAN ISLANDS. ML 5.2 (PMR). Felt (IV) on Shemya.
22	06 29 17.7*	17.949 S	63.323 W	33 N		1.4	9	BOLIVIA. Felt in the Santa Cruz area.
22	07 24 33.8?	17.72 S	62.84 W	33 N		1.1	6	BOLIVIA
22	08 10 12.8*	5.666 S	151.877 E	37 ?	4.6	1.3	14	NEW BRITAIN REGION
22	10 34 03.7?	16.46 S	173.17 W	33 N	4.2	1.6	9	TONGA ISLANDS
22	10 42 41.5	49.445 N	129.743 W	10 G	4.3	0.8	40	VANCOUVER ISLAND REGION
22	11 18 45.4?	56.36 N	161.54 W	150 G	4.2	0.2	6	ALASKA PENINSULA
22	12 18 00.0*	17.493 S	167.789 E	33 N	4.2	0.2	5	VANUATU ISLANDS
22	13 14 02.4%	40.170 N	27.318 E	10 G		0.9	5	TURKEY
22	13 34 17.0?	32.75 S	71.32 W	29 *		0.7	7	NEAR COAST OF CENTRAL CHILE
22	13 38 01.0?	32.45 S	72.01 W	10 G		0.7	6	OFF COAST OF CENTRAL CHILE
22	14 14 26.7%	40.149 N	27.335 E	10 G		0.1	5	TURKEY
22	14 29 00.0&	45.548 N	111.678 W	5			8	MONTANA. <BUT>. ML 2.5 (BUT).
22	14 30 31.0*	35.517 N	27.340 E	10 G		0.2	5	DODECANESE ISLANDS. ML 4.2 (ATH).
22	15 14 02.0	46.790 N	151.887 E	57 ?	4.8	0.8	79	KURIL ISLANDS
22	16 01 39.7?	6.00 S	146.08 E	141 ?	3.4	0.8	5	EAST PAPUA NEW GUINEA REGION
22	16 03 01.4	44.087 N	12.869 E	10 G		0.9	16	NORTHERN ITALY. ML 3.3 (LDG).
22	16 55 09.6&	61.767 N	149.970 W	42			37	SOUTHERN ALASKA. <AGS-P>.
22	17 58 42.9*	13.146 N	86.622 W	33 N	4.4	1.2	22	NICARAGUA
22	18 03 14.8&	38.740 N	122.700 W	3			12	NORTHERN CALIFORNIA. <BRK>. ML 2.7 (BRK).
22	18 45 21.9*	16.691 S	172.849 W	33 N	4.7	1.4	19	SAMOA ISLANDS REGION
22	20 28 33.2?	1.91 S	126.36 E	33 N	4.5	1.4	5	MOLUCCA SEA
22	21 45 35.2	39.584 N	141.460 E	91	4.6	1.0	45	HONSHU, JAPAN. Felt (III JMA) at Ofunata; (II JMA) at Morioko, Miyako and Ishinomaki; (I JMA) at Hachinohe and Sendai.
23	00 11 18.6	45.994 N	6.380 E	10 G		0.9	17	FRANCE. ML 2.9 (LDG).
23	00 14 28.0*	39.769 N	20.843 E	10 G		1.0	6	GREECE-ALBANIA BORDER REGION. MD 3.8 (ATH).
23	01 04 29.6*	6.910 S	129.701 E	134 ?	4.1	0.9	8	BANDA SEA
23	01 21 12.3*	2.468 S	128.236 E	85 *	4.0	0.6	6	CERAM SEA
23	01 30 39.3	36.239 N	26.894 E	33 N	4.0	1.1	9	DODECANESE ISLANDS. ML 4.5 (ATH).
23	05 29 05.5?	1.60 N	128.04 E	128 ?	4.4	1.4	5	HALMAHERA
23	05 33 38.9?	32.63 S	71.64 W	10 G		0.4	7	NEAR COAST OF CENTRAL CHILE
23	06 07 57.9	46.049 N	6.458 E	10 G		0.5	14	SWITZERLAND. ML 2.8 (LDG).
23	07 35 55.5*	25.805 S	70.512 E	10 G	5.4	1.0	15	MID-INDIAN RISE
23	08 55 10.1?	8.13 S	128.26 E	187 ?	4.0	1.4	6	TIMOR SEA
23	09 47 31.7%	15.960 N	60.885 W	33 N		1.1	9	LEEWARD ISLANDS. ML 2.5 (FDF).
23	10 00 42.8*	32.500 S	71.780 W	52 ?	4.7	1.0	14	NEAR COAST OF CENTRAL CHILE
23	11 50 51.2	10.779 S	66.676 E	10 G	4.8 4.6	0.9	56	MID-INDIAN RISE
23	13 24 25.5	47.410 N	11.460 E	10 G		1.5	18	AUSTRIA. ML 3.1 (KBA).
23	13 24 33.9	42.966 N	0.019 W	10 G		1.2	14	PYRENEES. ML 3.3 (LDG).
23	14 15 10.8?	44.21 N	146.52 E	151 *	4.6	0.9	14	KURIL ISLANDS
23	14 25 53.2*	39.728 N	20.796 E	10 G		0.5	5	GREECE-ALBANIA BORDER REGION. MD 3.4 (ATH).
23	14 36 38.9*	20.694 S	69.046 W	33 N		1.5	8	NORTHERN CHILE
23	14 44 54.0	45.640 N	6.834 E	10 G		0.7	11	FRANCE. ML 2.7 (LDG).
23	15 29 11.9*	23.363 S	69.149 W	144 *	4.3	0.9	9	NORTHERN CHILE
23	16 43 16.1	41.979 N	20.362 E	8		0.9	29	ALBANIA. ML 3.5 (TTG), MD 3.9 (ATH).
23	16 48 50.9%	38.405 N	0.173 W	10 G		0.6	7	SPAIN. MG 3.0 (MDD).
23	20 01 59.2	43.789 N	10.831 E	10 G		0.3	9	CENTRAL ITALY. ML 2.6 (LDG).
23	20 49 07.3&	45.547 N	111.672 W	6			8	MONTANA. <BUT>. ML 2.9 (BUT).
23	23 08 08.4	46.530 N	153.613 E	33 N	5.0 4.4	0.9	102	KURIL ISLANDS
23	23 18 58.7&	35.950 N	117.030 W	6 G			16	CENTRAL CALIFORNIA. <PAS-P>. ML 3.3 (PAS).
23	23 32 04.6	39.417 N	27.878 E	17		0.8	27	TURKEY
23	23 53 59.9	46.472 N	153.733 E	33 N	5.0	0.9	72	KURIL ISLANDS
24	00 12 25.2&	33.980 N	116.970 W	16			9	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
24	00 31 31.6	5.556 S	151.937 E	53	4.8 4.4	1.3	33	NEW BRITAIN REGION
24	01 25 43.2%	39.329 N	27.851 E	10 G		1.3	6	TURKEY
24	02 06 46.8*	5.552 S	151.957 E	33 N	3.5	0.6	5	NEW BRITAIN REGION
24	03 24 23.6	16.720 N	61.973 W	115	4.5	0.8	38	LEEWARD ISLANDS. Felt on Guadeloupe.
24	03 24 58.5&	62.262 N	149.296 W	43			37	CENTRAL ALASKA. <AGS-P>.
24	03 57 40.7	21.207 N	144.178 E	33 N	5.0 4.4	0.9	53	MARIANA ISLANDS REGION
24	04 06 59.1?	21.14 N	144.39 E	33 N	5.0	1.0	8	MARIANA ISLANDS REGION
24	04 17 55.0%	15.907 N	61.145 W	31		0.3	10	LEEWARD ISLANDS. ML 2.5 (FDF).
24	04 18 30.7*	21.078 N	144.109 E	33 N	4.9	1.4	30	MARIANA ISLANDS REGION
24	04 50 43.4*	6.407 S	154.503 E	33 N	3.9	0.7	6	SOLOMON ISLANDS
a 24	06 09 43.6	20.096 S	70.632 W	33 N	5.2 4.5	1.1	71	NEAR COAST OF NORTHERN CHILE
24	06 23 08.4*	37.429 N	6.673 W	10 G		0.7	5	SPAIN. MG 3.4 (MTH).
24	08 19 44.9*	11.527 S	13.405 W	10 G	4.3	1.0	5	ASCENSION ISLAND REGION
24	09 24 28.8*	22.282 S	67.597 W	152 ?	4.4	0.8	6	CHILE-BOLIVIA BORDER REGION
a 24	09 24 40.5	23.089 N	94.402 E	93 D	5.1	1.1	169	BURMA-INDIA BORDER REGION
24	10 35 32.4	36.464 N	71.386 E	112 *	4.8	0.9	51	AFGHANISTAN-USSR BORDER REGION
24	11 00 46.1&	57.587 N	154.200 W	44 G	4.3		74	KODIAK ISLAND REGION. <AGS-P>. Felt (IV) at Larsen Bay and (III) at Port Lions.
24	11 33 47.0?	5.68 S	148.50 E	84 ?	4.1	1.0	9	NEW BRITAIN REGION
24	12 29 32.9*	40.630 N	22.842 E	10 G		0.9	5	GREECE. MG 2.8 (SKO).
24	14 11 23.5&	62.423 N	151.501 W	94			30	CENTRAL ALASKA. <AGS-P>.
24	14 28 46.6	15.332 N	89.209 W	10 G	4.5 3.6	0.8	20	GUATEMALA. Slight damage at Morales. Felt (II) at

24	16 53 28.8*	46.429 N	16.777 E	10 G		0.4	5	YUGOSLAVIA	
24	17 32 49.57	36.99 N	5.34 W	10 G		0.8	5	STRAIT OF GIBRALTAR	
24	18 16 18.7	33.145 S	71.013 W	21 *		0.5	9	NEAR COAST OF CENTRAL CHILE	
24	18 43 02.7	41.002 N	1.630 E	10 G	4.0	1.4	41	SPAIN. ML 4.4 (LDG). Felt (IV) in the Torredembarra-Stiges area and (III) in the Barcelona-Balaguer-Castellidans area.	
24	19 36 20.5*	32.813 S	71.250 W	68 ?		0.3	10	NEAR COAST OF CENTRAL CHILE	
24	20 12 24.2&	61.754 N	149.574 W	40			50	SOUTHERN ALASKA. <AGS-P>. ML 4.0 (PMR). Felt (IV) at Hatched Pass and Palmer; (III) at Eagle River; (II) at Anchorage.	
24	20 33 11.4*	51.079 N	2.408 E	10 G		0.4	11	NORTH SEA. ML 2.8 (LDG).	
24	23 43 01.5*	51.459 N	174.595 W	33 N	4.7	0.9	38	ANDREANOF ISLANDS, ALEUTIAN IS.	
25	00 34 27.8&	61.762 N	149.863 W	45			37	SOUTHERN ALASKA. <AGS-P>.	
25	00 35 20.6*	5.648 S	152.055 E	10 G	4.4	1.1	9	NEW BRITAIN REGION	
25	01 15 11.2&	62.494 N	151.456 W	95			30	CENTRAL ALASKA. <AGS-P>.	
25	02 09 52.0*	17.551 S	167.318 E	21 ?	4.8	1.2	16	VANUATU ISLANDS	
25	03 08 46.3*	6.596 S	146.934 E	26		1.3	17	EAST PAPUA NEW GUINEA REGION	
25	03 26 22.4	34.569 N	26.515 E	24 *	4.4	1.3	58	CRETE. ML 4.1 (ATH).	
25	03 49 57.97	12.64 N	87.60 W	33 N	4.5	1.2	8	NEAR COAST OF NICARAGUA	
25	04 22 57.3%	61.842 N	7.138 E	10 G		0.8	5	SOUTHERN NORWAY. MD 2.1 (BER).	
25	04 25 17.0*	38.491 N	26.721 E	10 G		0.8	8	AEGEAN SEA	
25	04 30 59.9*	2.652 S	98.099 E	92 *	3.6	1.2	6	NORTHERN SUMATERA	
25	06 06 10.2*	5.738 S	151.995 E	25 *	4.6	1.2	14	NEW BRITAIN REGION	
25	06 27 26.6&	34.360 N	117.580 W	9			32	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.6 (PAS). Felt (IV) at Altdioma, Lytle Creek, Mt. Baldy, Pinon Hills and Wrightwood.	
25	06 42 20.77	50.78 N	179.75 W	33 N	4.3	1.3	7	ANDREANOF ISLANDS, ALEUTIAN IS.	
25	07 14 28.6*	21.152 N	144.249 E	33 N	4.4	0.7	9	MARIANA ISLANDS REGION	
25	08 12 18.9*	17.007 S	172.454 W	33 N	4.2	0.2	6	TONGA ISLANDS REGION	
25	09 47 02.4	43.425 N	145.892 E	78	4.9	1.0	86	HOKKAIDO, JAPAN REGION. Felt (III JMA) at Nemuro.	
25	11 43 00.57	35.02 N	139.24 E	10 G		0.2	4	NEAR S. COAST OF HONSHU, JAPAN. Felt (II JMA) on Oshima and (I JMA) at Ajira.	
25	12 32 25.7&	45.542 N	111.666 W	6			9	MONTANA. <BUT>. ML 2.5 (BUT).	
25	14 09 37.2*	8.247 N	83.087 W	23	4.7	0.9	12	COSTA RICA. MD 4.3 (HDC). Felt (III) at David, Panama.	
25	14 52 58.2%	16.482 N	60.903 W	33 N		0.3	8	LEEWARD ISLANDS. ML 3.2 (FDF).	
25	15 15 48.9*	26.235 S	27.318 E	5 G		0.8	5	REPUBLIC OF SOUTH AFRICA. MG 3.5 (BUL).	
25	16 59 25.9%	43.007 N	7.936 E	10 G		0.1	5	NEAR SOUTH COAST OF FRANCE. ML 3.0 (LDG).	
25	18 05 51.8*	18.783 N	104.171 W	33 N	4.4	1.3	30	NEAR COAST OF JALISCO, MEXICO	
25	18 08 25.5*	18.831 N	104.273 W	33 N	5.0	1.4	49	NEAR COAST OF JALISCO, MEXICO	
25	18 47 37.2	38.670 N	21.203 E	10 G		0.6	6	GREECE. ML 3.3 (ATH).	
25	18 59 27.6*	35.761 N	141.133 E	33 N	4.1	0.2	5	NEAR EAST COAST OF HONSHU, JAPAN	
25	20 06 27.57	51.62 N	16.25 E	10 G		0.6	9	POLAND. ML 3.4 (VKA).	
25	21 05 53.7*	21.181 N	144.323 E	33 N	4.4	0.3	7	MARIANA ISLANDS REGION	
25	22 08 36.87	51.59 N	16.21 E	10 G		0.4	8	POLAND. ML 3.4 (KBA), 3.4 (VKA).	
25	23 48 55.8*	6.279 S	130.422 E	157 *	4.4	1.3	16	BANDA SEA	
25	23 59 43.97	18.86 N	144.57 E	33 N		0.9	7	MARIANA ISLANDS	
26	00 22 06.6*	17.505 S	178.267 W	449 ?	4.3	0.5	16	FIJI ISLANDS REGION	
26	01 40 30.4	9.342 N	122.428 E	24 D	5.2 4.6	1.0	84	NEGROS, PHILIPPINE ISLANDS	
26	01 44 46.8	9.357 N	122.363 E	30 D	5.2 4.7	1.1	88	NEGROS, PHILIPPINE ISLANDS	
26	02 00 39.2	9.297 N	122.227 E	33 N	4.8	0.7	27	NEGROS, PHILIPPINE ISLANDS	
26	03 25 29.47	61.68 N	149.82 W	33 N		2.0	4	SOUTHERN ALASKA. ML 2.7 (PMR). Felt (II) at Palmer.	
26	04 25 46.0%	40.756 N	27.598 E	10 G		0.9	5	TURKEY	
26	04 37 44.7*	9.009 N	122.241 E	33 N	4.3 3.9	0.8	5	NEGROS, PHILIPPINE ISLANDS	
26	05 09 07.97	12.08 N	88.48 W	33 N	4.6	1.3	11	OFF COAST OF CENTRAL AMERICA	
a	26	06 33 20.7*	21.288 S	174.502 W	114 ?	5.1	1.1	34	TONGA ISLANDS
a	26	06 56 46.2	20.749 S	178.464 W	569 G	5.7	0.9	260	FIJI ISLANDS REGION. Depth from broadband displacement seismograms.
26	08 46 41.1*	35.558 N	28.219 E	33 N		1.4	7	EASTERN MEDITERRANEAN SEA	
26	08 51 22.3&	38.225 N	119.378 W	10			20	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.3 (BRK). Felt (III) at Bridgeport, California.	
26	08 53 00.2*	10.276 S	161.455 E	104 *	4.4	1.1	12	SOLOMON ISLANDS	
26	08 55 39.1&	38.200 N	119.400 W	9			10	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 2.7 (BRK).	
26	09 10 21.4&	38.217 N	119.388 W	6			12	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.1 (BRK).	
26	09 18 24.37	17.34 S	61.84 W	33 N		0.5	5	BOLIVIA	
26	09 46 20.3	13.643 N	91.530 W	58	4.9 4.4	1.1	68	NEAR COAST OF GUATEMALA	
26	09 49 46.6&	37.150 N	121.148 W	3			19	CENTRAL CALIFORNIA. <BRK>. ML 3.7 (BRK). Mo=8.4*10**14 Nm (BRK). Felt in the Gilray area.	
26	10 08 27.1*	9.260 N	121.844 E	33 N	4.8	0.9	6	SULU SEA	
26	10 10 52.2	3.644 S	135.805 E	34 D	5.3	0.9	29	WEST IRAN REGION	
26	10 49 20.97	9.88 S	76.53 W	33 N	4.8	1.4	17	PERU. Felt at Lima.	
26	10 58 55.1*	21.807 N	94.425 E	127 *	4.4	1.3	8	BURMA	
a	26	13 01 23.0*	37.262 S	95.296 W	10 G	5.1	1.0	37	SOUTHERN PACIFIC OCEAN
26	13 45 49.0*	21.449 S	69.037 W	164 ?	4.6	1.4	9	NORTHERN CHILE	
26	15 55 13.77	60.94 N	5.56 E	10 G		0.6	4	SOUTHERN NORWAY. MD 2.3 (BER).	
26	16 48 25.8*	35.626 N	110.970 E	33 N		1.5	5	EASTERN CHINA. MG 3.3 (BJI).	
26	16 56 10.4*	29.881 S	177.376 W	33 N	5.0	1.5	23	KERMADEC ISLANDS	
26	17 03 51.3%	61.077 N	9.566 E	10 G		0.8	5	SOUTHERN NORWAY. MD 2.3 (BER).	
26	19 32 49.5	2.129 N	126.617 E	45 *	5.2 4.4	1.2	90	MOLUCCA PASSAGE	
26	20 15 38.77	52.03 N	17.14 E	10 G		0.5	9	POLAND. ML 3.6 (VKA), 3.3 (KBA).	
26	21 06 27.5	19.940 S	66.695 W	255	4.7	0.9	59	SOUTHERN BOLIVIA	
26	21 08 52.27	8.21 S	129.12 E	164 ?	4.3	1.3	8	TIMOR SEA	
26	21 38 51.3*	17.875 S	178.631 W	607 *	4.7	0.7	17	FIJI ISLANDS REGION	
26	22 21 56.3	13.219 N	90.305 W	42	4.4 4.1	1.1	43	NEAR COAST OF GUATEMALA	
27	00 04 42.8	41.040 N	22.853 E	10 G		0.2	7	YUGOSLAVIA. MG 1.9 (SKO).	
27	00 22 42.3*	14.276 N	92.362 W	68 *	4.5	0.7	30	NEAR COAST OF CHIAPAS, MEXICO	
27	00 49 56.0	43.248 N	13.006 E	10 G		1.1	20	CENTRAL ITALY. ML 3.3 (KBA).	
27	01 00 28.3&	62.053 N	150.065 W	44			42	CENTRAL ALASKA. <AGS-P>.	
27	01 13 34.7*	53.453 N	167.364 W	33 N	4.7	1.3	25	FOX ISLANDS, ALEUTIAN ISLANDS	
27	01 54 29.3*	42.469 N	19.677 E	10 G		0.3	5	YUGOSLAVIA. ML 2.3 (TTG).	
27	01 59 28.0&	60.248 N	153.814 W	194			34	SOUTHERN ALASKA. <AGS-P>.	
27	02 56 29.7*	22.441 S	70.840 W	33 N		1.1	9	NEAR COAST OF NORTHERN CHILE	

27	02 57	26.9%	40.766 N	30.044 E	10 G				1.2	6	TURKEY
27	04 03	20.5*	6.403 S	148.706 E	68 *	3.9			1.3	7	NEW BRITAIN REGION
27	04 05	42.9	43.761 N	20.415 E	15				1.3	24	YUGOSLAVIA. ML 3.4 (TTG).
27	04 34	59.8?	5.45 S	147.00 E	253 ?	4.4			0.3	5	EAST PAPUA NEW GUINEA REGION
27	04 42	01.2%	39.583 N	29.019 E	10 G				0.9	9	TURKEY
27	04 48	42.1?	29.28 S	177.74 W	94 *	4.7			0.4	6	KERMADEC ISLANDS
27	07 45	14.8*	2.574 S	128.631 E	33 N	4.2			0.6	8	CERAM SEA
27	08 36	19.5?	1.39 S	137.94 E	33 N	4.2			1.4	7	NEAR N. COAST OF WEST IRIAN
27	09 23	30.6*	5.384 N	125.524 E	33 N	4.4			1.2	17	MINDANAO, PHILIPPINE ISLANDS
o 27	10 06	58.7	46.141 N	27.551 W	10 G	4.8	5.0		1.2	50	NORTH ATLANTIC RIDGE
27	10 15	23.3?	51.69 N	174.54 W	33 N	4.6			0.9	7	ANDREANOF ISLANDS, ALEUTIAN IS.
27	11 18	10.3?	23.58 N	124.33 E	33 N	3.9			1.1	5	SOUTHWESTERN RYUKYU ISLANDS
27	11 37	32.2	23.904 N	121.645 E	19	4.4			0.9	18	TAIWAN
27	11 56	38.7&	41.817 N	126.073 W	5 G					49	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.8 (BRK).
27	13 34	13.3	37.569 N	118.473 W	5 G				0.4	14	CALIFORNIA-NEVADA BORDER REGION. ML 2.5 (NEIS).
27	13 54	32.4?	4.99 S	136.97 E	33 N	3.1			0.3	5	WEST IRIAN REGION
27	14 51	58.1*	8.360 N	125.324 E	52 *	4.4			1.1	13	MINDANAO, PHILIPPINE ISLANDS
27	15 32	45.6?	24.39 S	70.44 W	33 N				0.8	6	NEAR COAST OF NORTHERN CHILE
27	15 55	45.4*	38.057 N	74.014 E	164 *				1.2	9	TAJIK-XINJIANG BORDER REGION
27	16 13	28.9*	23.998 S	66.805 W	219 *				0.6	9	JUJUY PROVINCE, ARGENTINA
27	16 41	46.0	37.704 N	72.479 E	126 *	4.6			1.3	37	TAJIK SSR. Felt (iii) at Dushanbe and (ii) at Dzhrigatal.
27	16 46	48.5	38.904 N	23.757 E	25	4.8	3.6		1.2	142	GREECE. ML 4.7 (ATH), 4.6 (TTG), 4.3 (SKO). Felt.
27	16 52	01.3	9.451 N	84.223 W	30	4.6			0.8	22	COSTA RICA. MD 4.4 (SJR), 4.1 (HDC). Felt (v) at Quepas and (iv) at San Jase. Also felt at Alajuela, Cartago and Heredia.
27	17 00	46.6	42.743 N	19.136 E	10 G				0.5	8	YUGOSLAVIA. ML 2.2 (TTG).
27	17 52	34.6	38.970 N	23.800 E	10 G				1.2	13	GREECE. ML 3.3 (ATH).
27	18 00	06.7	6.290 S	130.046 E	128 *	4.8			1.0	45	BANDA SEA
27	20 07	25.4	44.575 N	10.184 E	10 G				1.2	19	NORTHERN ITALY. ML 2.8 (LDG), 2.8 (KBA).
27	20 37	26.0?	64.46 N	147.95 W	10 G				0.7	4	CENTRAL ALASKA. ML 3.0 (NEIS).
27	21 25	38.8	38.922 N	23.870 E	10 G				0.9	11	GREECE. ML 3.2 (ATH).
27	21 59	14.8*	17.242 S	168.287 E	226 *	4.9			1.2	27	VANUATU ISLANDS
27	22 14	10.9*	27.617 S	71.823 W	33 N				1.5	8	NEAR COAST OF NORTHERN CHILE
27	23 00	21.1	1.926 N	127.343 E	126 *	5.2			0.9	36	HALMAHERA
28	01 48	51.5*	19.115 N	145.268 E	33 N	4.6			0.7	10	MARIANA ISLANDS
28	03 55	25.9*	9.227 N	122.258 E	33 N	4.4			1.3	9	NEGROS, PHILIPPINE ISLANDS
28	04 35	33.7*	9.140 N	122.119 E	33 N	4.9			1.5	13	NEGROS, PHILIPPINE ISLANDS
28	04 46	00.4	20.136 N	70.033 W	12	4.6	4.7		1.1	53	DOMINICAN REPUBLIC REGION
28	05 16	33.8&	37.923 N	122.290 W	8					15	CENTRAL CALIFORNIA. <BRK>. ML 3.4 (BRK). Ma=7.1*10**13 Nm (BRK). Felt (iv) at Berkeley, Oakland and Richmond; (iii) at Dublin, El Cerrita, Pittsburg and Rheem Valley.
28	05 48	31.3&	37.922 N	122.283 W	7					10	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK). Ma=1.7*10**13 Nm (BRK). Felt in the East Bay area.
28	07 20	20.6&	45.567 N	111.691 W	4					7	MONTANA. <BUT>. ML 2.1 (BUT). Felt in the Narris area.
28	07 29	39.3*	6.493 S	149.316 E	37 *	4.4			1.5	16	NEW BRITAIN REGION
28	07 42	47.7%	15.299 N	60.740 W	10 G				0.4	5	LEEWARD ISLANDS. ML 2.2 (FDF).
28	07 47	41.6	6.515 S	128.071 E	393 *	4.9			1.1	23	BANDA SEA
28	09 20	19.9&	59.235 N	151.037 W	55					41	KENAI PENINSULA, ALASKA. <AGS-P>.
28	09 32	10.6?	17.39 S	173.72 W	33 N	4.8			1.3	6	TONGA ISLANDS
28	09 59	59.7	40.449 N	21.848 E	10 G				0.8	8	GREECE
28	10 56	59.3*	28.227 S	67.787 W	33 N				1.4	11	LA RIOJA PROVINCE, ARGENTINA
28	11 40	56.1*	7.051 N	82.739 W	10 G	4.6			0.7	14	SOUTH OF PANAMA. MD 4.1 (HDC).
28	13 01	12.5	11.214 S	161.625 E	35 *	5.0			0.9	78	SOLOMON ISLANDS
28	13 02	48.1?	43.38 N	22.36 E	10 G				0.2	5	YUGOSLAVIA
28	13 17	58.6*	23.144 S	179.638 W	549 *	4.9			0.8	29	SOUTH OF FIJI ISLANDS
28	13 34	05.9&	40.505 N	127.278 W	5 G	4.1	3.8			29	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.6 (BRK).
28	15 32	49.8*	48.158 N	128.040 W	10 G	3.8			0.7	39	VANCOUVER ISLAND REGION
28	16 03	58.0%	36.237 N	5.763 W	10 G				1.4	5	STRAIT OF GIBRALTAR
28	16 12	25.3*	34.780 N	5.968 W	10 G				1.6	6	MOROCCO
28	16 44	45.2	10.281 N	126.362 E	52 *	4.8	4.4		1.1	44	PHILIPPINE ISLANDS REGION
28	19 16	57.1	35.081 N	24.705 E	88	3.9			0.9	27	CRETE
28	19 22	04.1&	33.650 N	118.560 W	11					6	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
28	19 29	22.6?	51.41 N	19.96 E	10 G				1.2	5	POLAND. ML 3.2 (KRA), 3.2 (VKA).
29	00 06	24.6&	36.270 N	121.728 W	3					16	CENTRAL CALIFORNIA. <BRK>. ML 3.2 (BRK).
o 29	00 31	49.5	4.144 S	152.334 E	162	5.0			0.9	136	NEW BRITAIN REGION
29	03 59	33.7&	38.212 N	119.412 W	5 G					15	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.5 (BRK).
29	04 08	36.7	38.248 N	119.391 W	5 G				0.8	6	CALIFORNIA-NEVADA BORDER REGION. ML 2.5 (NEIS).
29	04 37	36.9&	60.033 N	153.256 W	126					51	SOUTHERN ALASKA. <AGS-P>.
29	05 22	02.7*	14.544 N	147.032 E	33 N	3.9			0.3	11	MARIANA ISLANDS REGION
29	07 52	18.1?	2.63 S	137.97 E	33 N	3.5			1.2	9	WEST IRIAN
29	08 05	53.4*	19.008 N	102.588 W	114 ?	4.3			0.9	17	MICHOACAN, MEXICO
29	09 13	57.4*	16.467 S	178.281 W	477	4.1			0.4	15	FIJI ISLANDS REGION
29	09 52	45.9	16.599 N	25.699 W	10 G	4.4			0.7	33	NORTH ATLANTIC OCEAN
29	10 12	57.8*	37.477 N	142.951 E	39 ?	4.7	4.3		1.1	21	OFF EAST COAST OF HONSHU, JAPAN
29	10 51	30.8?	26.80 S	65.56 W	32 *				1.3	7	TUCUMAN PROVINCE, ARGENTINA. Felt (ii) in the San Miguel area.
29	11 37	13.8?	16.92 N	62.01 W	156 ?				0.2	9	LEEWARD ISLANDS
29	12 51	10.3	6.272 N	125.981 E	33 N	5.0			1.3	39	MINDANAO, PHILIPPINE ISLANDS
29	12 52	30.4%	42.786 N	19.125 E	10 G				1.1	8	YUGOSLAVIA. ML 2.3 (TTG).
29	13 20	21.3?	5.59 N	95.05 E	100 *	3.6			0.7	7	NORTHERN SUMATERA
29	13 40	23.5?	7.96 S	128.19 E	137 ?				1.3	6	BANDA SEA
o 29	14 15	18.3	56.536 S	25.621 W	33 N	6.0	4.8		1.0	38	SOUTH SANDWICH ISLANDS REGION
29	14 44	52.4	22.627 S	66.178 W	258	4.8			1.0	21	JUJUY PROVINCE, ARGENTINA
o 29	15 14	07.8	56.504 S	25.505 W	33 N	5.0	4.9		1.0	67	SOUTH SANDWICH ISLANDS REGION
29	15 50	35.4?	56.87 S	26.41 W	33 N	5.3			0.6	8	SOUTH SANDWICH ISLANDS REGION
29	17 58	10.6	34.584 N	79.888 E	33 N	4.6			1.0	31	KASHMIR-TIBET BORDER REGION
29	19 24	18.3?	18.44 S	172.92 W	33 N	4.6			0.4	6	TONGA ISLANDS REGION
29	19 24	21.5*	71.712 N	2.640 W	10 G	4.3	4.4		1.2	24	JAN MAYEN ISLAND REGION
29	21 04	45.5?	11.00 S	163.92 E	33 N	4.0			1.3	6	SOLOMON ISLANDS
o 29	22 12	11.2	52.840 N	168.892 W	33 N	5.2	4.7		1.0	106	FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.4 (PMR).
30	01 01	28.0?	6.11 S	147.10 E	182 *	4.2			1.3	8	EAST PAPUA NEW GUINEA REGION

Data Used: GDSN
L.P.B.: 15S, 30C
Centroid Location:
Origin Time 22:15:44.3 0.6
Lat 29.08S 0.06 Lon 176.11W 0.06
Dep 15.0 FIX Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 11.11 Plg=23 Azm=265
N -1.08 0 175
P -10.04 67 84
Best Double Couple:Mo=1.1*10**17
NP1:Strike=355 Dip=22 Slip=-89
NP2: 174 68 -90

06 11 25 59.23 12.900S 169.459E 654km
5.1mb (19 obs.)
SANTA CRUZ ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 22C
Centroid Location:
Origin Time 11:26: 5.4 0.9
Lat 12.66S 0.07 Lon 168.86E 0.09
Dep 627.9 6.0 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 10.12 Plg=41 Azm=293
N -1.91 38 66
P -8.21 26 178
Best Double Couple:Mo=9.2*10**16
NP1:Strike=318 Dip=39 Slip= 165
NP2: 59 81 52

06 15 15 34.73 5.417S 105.015W 10km
5.6mb (22 obs.) 5.2Msz (2 obs.)
NORTHERN EASTER I. CORDILLERA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 19S, 47C
Centroid Location:
Origin Time 15:15:43.5 0.2
Lat 5.38S 0.03 Lon 104.91W 0.03
Dep 15.0 FIX Half-duration 2.5
Principal Axes:
Scale 10**17 Nm
T Val= 3.51 Plg= 8 Azm= 59
N 0.26 10 327
P -3.77 77 184
Best Double Couple:Mo=3.6*10**17
NP1:Strike=161 Dip=38 Slip=-73
NP2: 320 54 -103

06 16 34 13.80 18.176S 177.978W 613km
5.2mb (40 obs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 20C
Centroid Location:
Origin Time 16:34:17.3 1.2
Lat 18.30S 0.10 Lon 178.51W 0.09
Dep 623.8 6.4 Half-duration 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 1.34 Plg=44 Azm= 97
N 0.12 7 193
P -1.46 46 290
Best Double Couple:Mo=1.4*10**17
NP1:Strike=112 Dip= 7 Slip=-171
NP2: 13 89 -83

06 23 11 24.33 0.937N 28.557W 10km
5.2mb (44 obs.) 5.2Msz (10 obs.)
CENTRAL MID-ATLANTIC RIDGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 42C
Centroid Location:
Origin Time 23:11:32.6 0.3
Lat 1.09N 0.03 Lon 28.06W 0.03
Dep 15.0 FIX Half-duration 2.3
Principal Axes:
Scale 10**17 Nm
T Val= 2.52 Plg= 2 Azm= 39
N 0.21 75 138
P -2.73 15 308
Best Double Couple:Mo=2.6*10**17
NP1:Strike= 85 Dip=78 Slip=-171
NP2: 353 81 -12

07 04 39 18.25 21.997S 174.255W 33km
5.3mb (11 obs.) 4.9Msz (1 obs.)

TONGA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 20C
Centroid Location:
Origin Time 04:39:17.3 1.6
Lat 21.98S 0.14 Lon 173.58W 0.17
Dep 15.0 FIX Half-duration 1.3
Principal Axes:
Scale 10**16 Nm
T Val= 5.21 Plg=54 Azm=355
N -0.87 26 224
P -4.35 24 122
Best Double Couple:Mo=4.8*10**16
NP1:Strike=172 Dip=31 Slip= 34
NP2: 52 73 117

07 20 32 57.80 0.048S 123.242E 176km
5.2mb (27 obs.)
MINAHASSA PENINSULA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 21C
Centroid Location:
Origin Time 20:32:55.9 0.8
Lat 0.29S 0.07 Lon 122.79E 0.12
Dep 126.2 5.2 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 5.96 Plg=37 Azm=316
N 1.25 41 87
P -7.21 27 204
Best Double Couple:Mo=6.6*10**16
NP1:Strike=346 Dip=42 Slip= 171
NP2: 82 84 48

08 05 41 54.16 58.688S 158.224E 33km
5.4mb (8 obs.) 4.5Msz (1 obs.)
MACQUARIE ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 38C
Centroid Location:
Origin Time 05:41:58.4 0.3
Lat 58.32S 0.04 Lon 157.77E 0.07
Dep 15.0 FIX Half-duration 2.5
Principal Axes:
Scale 10**17 Nm
T Val= 3.30 Plg=11 Azm=105
N 0.01 71 343
P -3.32 16 198
Best Double Couple:Mo=3.3*10**17
NP1:Strike=241 Dip=71 Slip=-4
NP2: 332 86 -161

08 07 48 02.31 37.004S 178.938E 33km
5.3mb (10 obs.) 5.6Msz (6 obs.)
OFF E. COAST OF N. ISLAND, N.Z.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 18S, 44C
Centroid Location:
Origin Time 07:48: 7.5 0.3
Lat 36.58S 0.04 Lon 178.89E 0.03
Dep 15.0 FIX Half-duration 2.7
Principal Axes:
Scale 10**17 Nm
T Val= 3.78 Plg=82 Azm=181
N 0.34 8 358
P -4.12 0 88
Best Double Couple:Mo=3.9*10**17
NP1:Strike=186 Dip=45 Slip= 101
NP2: 350 46 79

08 15 48 56.75 19.022S 69.991W 70km
6.4mb (64 obs.) 6.9Msz (22 obs.)
NORTHERN CHILE
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=345 Dip=73 Slip=-90
NP2: 165 17 -90
Principal Axes:
T Plg=28 Azm= 75
P 62 255
Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sta: 3 Focal mech. M
Energy 1.9±1.1*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 87 No. of sta: 9

Principal Axes:
Scale 10**19 Nm
T Val= 7.08 Plg=22 Azm= 68
N 0.44 5 161
P -7.52 68 263
Best Double Couple:Mo=7.3*10**19
NP1:Strike=149 Dip=24 Slip=-103
NP2: 343 67 -84
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 19S, 53C M.W.: 14S, 39C
Centroid Location:
Origin Time 15:49:10.2 0.1
Lat 18.96S 0.01 Lon 70.02W 0.01
Dep 79.5 0.8 Half-duration 10.0
Principal Axes:
Scale 10**19 Nm
T Val= 8.43 Plg=25 Azm= 84
N -1.10 1 353
P -7.33 65 261
Best Double Couple:Mo=7.9*10**19
NP1:Strike=176 Dip=20 Slip=-87
NP2: 353 70 -91

09 08 17 50.86 0.508N 126.079E 50km
5.3mb (25 obs.) 4.7Msz (1 obs.)
MOLUCCA PASSAGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 29C
Centroid Location:
Origin Time 08:18: 0.4 0.9
Lat 1.08N 0.10 Lon 125.87E 0.07
Dep 37.4 6.6 Half-duration 1.7
Principal Axes:
Scale 10**17 Nm
T Val= 0.94 Plg=72 Azm=187
N 0.12 18 12
P -1.07 2 282
Best Double Couple:Mo=1.0*10**17
NP1:Strike=354 Dip=46 Slip= 64
NP2: 209 49 114

09 08 24 19.66 35.14 S 104.06 W 10km
5.1mb (3 obs.) 5.0Msz (1 obs.)
SOUTHERN PACIFIC OCEAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 19S, 48C
Centroid Location:
Origin Time 08:24:28.0 0.3
Lat 35.76S 0.03 Lon 103.89W 0.03
Dep 15.0 FIX Half-duration 1.7
Principal Axes:
Scale 10**17 Nm
T Val= 2.73 Plg= 0 Azm=234
N -0.25 90 180
P -2.48 0 144
Best Double Couple:Mo=2.6*10**17
NP1:Strike=279 Dip=90 Slip= 180
NP2: 9 90 0

09 21 15 00.01 29.502N 83.714E 48km
5.6mb (81 obs.) 4.8Msz (2 obs.)
NEPAL
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 32C
Centroid Location:
Origin Time 21:15:10.0 0.4
Lat 29.30N 0.08 Lon 83.77E 0.10
Dep 34.0 FIX Half-duration 9.0
Principal Axes:
Scale 10**17 Nm
T Val= 2.38 Plg=26 Azm=300
N 0.60 43 184
P -2.98 37 151
Best Double Couple:Mo=2.7*10**17
NP1:Strike= 81 Dip=43 Slip=-10
NP2: 178 83 -133

10 04 34 45.29 15.863S 178.697W 33km
5.1mb (13 obs.) 5.3Msz (3 obs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 20S, 47C
Centroid Location:
Origin Time 04:34:47.8 0.4
Lat 15.28S 0.04 Lon 179.02W 0.04
Dep 16.9 4.5 Half-duration 2.4
Principal Axes:
Scale 10**17 Nm

T Val= 2.63 P1g= 2 Azm= 90
 N 0.17 81 345
 P -2.80 9 180
 Best Double Couple:Mo=2.7*10**17
 NP1:Strike=225 Dip=82 Slip=-5
 NP2: 315 85 -172

10 09 15 40.38 16.092N 146.889E 41km
 5.7mb (50 obs.) 5.6Msz (11 obs.)
 MARIANA ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 20S, 46C
 Centroid Location:
 Origin Time 09:15:43.2 0.3
 Lat 16.05N 0.04 Lon 147.20E 0.03
 Dep 15.0 FIX Half-duration 2.4
 Principal Axes:
 Scale 10**17 Nm
 T Val= 3.39 P1g=28 Azm=293
 N 0.49 14 31
 P -3.88 58 144
 Best Double Couple:Mo=3.6*10**17
 NP1:Strike=350 Dip=21 Slip=-133
 NP2: 215 75 -75

10 09 58 02.98 5.888N 125.660E 202km
 5.6mb (54 obs.)
 MINDANAO, PHILIPPINE ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 20S, 47C
 Centroid Location:
 Origin Time 09:58: 3.4 0.3
 Lat 5.90N 0.03 Lon 125.82E 0.04
 Dep 180.9 1.2 Half-duration 2.4
 Principal Axes:
 Scale 10**17 Nm
 T Val= 4.19 P1g=66 Azm=254
 N -1.50 20 37
 P -2.69 13 132
 Best Double Couple:Mo=3.4*10**17
 NP1:Strike=247 Dip=36 Slip= 125
 NP2: 26 61 67

10 10 52 19.94 29.867N 63.840E 165km
 5.6mb (88 obs.)
 PAKISTAN
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 25S, 61C
 Centroid Location:
 Origin Time 10:52:22.6 0.3
 Lat 29.65N 0.03 Lon 63.72E 0.02
 Dep 157.2 0.7 Half-duration 4.6
 Principal Axes:
 Scale 10**18 Nm
 T Val= 1.55 P1g=14 Azm=247
 N -0.32 9 155
 P -1.23 74 33
 Best Double Couple:Mo=1.4*10**18
 NP1:Strike=349 Dip=32 Slip=-73
 NP2: 149 59 -100

10 12 12 14.14 38.118N 106.357E 10km
 5.4mb (50 obs.)
 NORTHERN CHINA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 9S, 20C
 Centroid Location:
 Origin Time 12:12:19.6 1.0
 Lat 37.57N 0.14 Lon 105.63E 0.19
 Dep 21.3 7.1 Half-duration 2.0
 Principal Axes:
 Scale 10**16 Nm
 T Val= 10.58 P1g=20 Azm=234
 N 1.56 6 142
 P -12.14 69 35
 Best Double Couple:Mo=1.1*10**17
 NP1:Strike=336 Dip=25 Slip=-75
 NP2: 139 66 -97

10 18 15 44.41 6.215S 104.885E 33km
 5.4mb (25 obs.) 4.4Msz (2 obs.)
 SUNDA STRAIT
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 26C
 Centroid Location:
 Origin Time 18:15:55.2 0.7
 Lat 6.52S 0.07 Lon 104.38E 0.12
 Dep 36.7 6.9 Half-duration 1.7

Principal Axes:
 Scale 10**16 Nm
 T Val= 6.61 P1g=57 Azm= 55
 N -0.47 14 302
 P -6.14 29 204
 Best Double Couple:Mo=6.4*10**16
 NP1:Strike=259 Dip=20 Slip= 45
 NP2: 126 76 105

11 04 34 58.90 18.067S 178.477W 601km
 5.4mb (44 obs.)
 FIJI ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 25C
 Centroid Location:
 Origin Time 04:35:10.3 0.9
 Lat 17.94S 0.10 Lon 178.60W 0.07
 Dep 621.5 4.1 Half-duration 1.8
 Principal Axes:
 Scale 10**16 Nm
 T Val= 13.19 P1g=45 Azm= 45
 N 1.09 42 200
 P -14.28 13 302
 Best Double Couple:Mo=1.4*10**17
 NP1:Strike= 72 Dip=49 Slip= 153
 NP2: 181 70 45

11 17 44 53.61 6.350S 154.712E 78km
 5.3mb (20 obs.)
 SOLOMON ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 23S, 50C
 Centroid Location:
 Origin Time 17:44:57.6 0.2
 Lat 6.53S 0.03 Lon 154.68E 0.02
 Dep 61.0 2.0 Half-duration 2.5
 Principal Axes:
 Scale 10**17 Nm
 T Val= 3.26 P1g=84 Azm= 70
 N 0.54 3 312
 P -3.81 6 222
 Best Double Couple:Mo=3.5*10**17
 NP1:Strike=308 Dip=39 Slip= 85
 NP2: 134 51 94

12 00 06 29.29 12.262S 166.649E 114km
 5.4mb (30 obs.)
 SANTA CRUZ ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 24S, 55C
 Centroid Location:
 Origin Time 00:06:32.1 0.2
 Lat 12.39S 0.02 Lon 166.47E 0.02
 Dep 103.9 1.1 Half-duration 3.3
 Principal Axes:
 Scale 10**17 Nm
 T Val= 8.18 P1g= 2 Azm=262
 N -0.69 60 170
 P -7.50 30 353
 Best Double Couple:Mo=7.8*10**17
 NP1:Strike= 34 Dip=68 Slip= -21
 NP2: 132 70 -156

12 03 09 59.50 14.089N 59.257W 52km
 5.7mb (78 obs.) 5.3Msz (17 obs.)
 WINDWARD ISLANDS
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=355 Dip=71 Slip= 173
 NP2: 87 83 19
 Principal Axes:
 T P1g=18 Azm=313
 P 9 220
 Comment: The focal mechanism is well controlled and corresponds to strike-slip faulting with a small normal component. The preferred fault plane is not determined.
 RADIATED ENERGY
 No. of sta: 5 Focal mech. M
 Energy 9.7±3.1*10**12 Nm
 MOMENT TENSOR SOLUTION
 Dep 62 No. of sta: 7
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.50 P1g=14 Azm=322
 N 0.00 74 120
 P -2.50 6 231
 Best Double Couple:Mo=2.5*10**17
 NP1:Strike= 6 Dip=76 Slip= 174

NP2: 97 84 14
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 18S, 38C
 Centroid Location:
 Origin Time 03:10: 1.5 0.3
 Lat 14.12N 0.03 Lon 59.08W 0.02
 Dep 15.0 FIX Half-duration 2.4
 Principal Axes:
 Scale 10**17 Nm
 T Val= 3.89 P1g= 0 Azm=107
 N -0.80 90 180
 P -3.09 0 17
 Best Double Couple:Mo=3.5*10**17
 NP1:Strike=152 Dip=90 Slip= 180
 NP2: 242 90 0

12 04 34 31.11 54.898N 162.893E 44km
 5.1mb (74 obs.) 4.7Msz (6 obs.)
 NEAR EAST COAST OF KAMCHATKA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 21C
 Centroid Location:
 Origin Time 04:34:35.7 0.9
 Lat 54.87N 0.19 Lon 162.36E 0.25
 Dep 22.0 FIX Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 6.45 P1g=30 Azm=264
 N -0.65 27 11
 P -5.80 48 134
 Best Double Couple:Mo=6.1*10**16
 NP1:Strike=304 Dip=29 Slip=-159
 NP2: 196 80 -63

12 06 18 40.74 31.658S 58.453E 10km
 5.6mb (53 obs.) 5.0Msz (3 obs.)
 ATLANTIC-INDIAN RISE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 33C
 Centroid Location:
 Origin Time 06:18:47.0 0.4
 Lat 31.84S 0.05 Lon 58.43E 0.06
 Dep 15.0 FIX Half-duration 2.5
 Principal Axes:
 Scale 10**17 Nm
 T Val= 3.52 P1g=30 Azm=323
 N -1.37 23 219
 P -2.15 51 98
 Best Double Couple:Mo=2.8*10**17
 NP1:Strike=100 Dip=26 Slip= -27
 NP2: 214 79 -113

13 09 21 22.79 14.028N 91.243W 62km
 4.9mb (17 obs.)
 GUATEMALA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 17C
 Centroid Location:
 Origin Time 09:21:21.6 1.0
 Lat 13.81N 0.10 Lon 91.41W 0.10
 Dep 53.6 5.5 Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 5.08 P1g=17 Azm=207
 N 0.54 7 300
 P -5.62 72 53
 Best Double Couple:Mo=5.4*10**16
 NP1:Strike=286 Dip=29 Slip=-106
 NP2: 124 62 -82

13 15 23 06.93 17.897S 70.931W 37km
 6.1mb (79 obs.) 6.4Msz (27 obs.)
 NEAR COAST OF PERU
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=160 Dip=74 Slip= 90
 NP2: 340 16 90
 Principal Axes:
 T P1g=61 Azm= 70
 P 29 250
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
 MOMENT TENSOR SOLUTION
 Dep 37 No. of sta: 11
 Principal Axes:
 Scale 10**18 Nm
 T Val= 10.00 P1g=61 Azm= 72

N -0.31 11 183
 P -9.69 27 279
 Best Double Couple:Mo=9.8*10**18
 NP1:Strike= 34 Dip=21 Slip= 124
 NP2: 179 73 78
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 27S, 56C M.W.: 15S, 32C
 Centroid Location:
 Origin Time 15:23:17.5 0.1
 Lat 18.08S 0.02 Lon 71.59W 0.02
 Dep 35.9 1.0 Half-duration 3.0
 Principal Axes:
 Scale 10**18 Nm
 T Val= 6.54 Plg=63 Azm= 79
 N 0.24 4 340
 P -6.78 27 248
 Best Double Couple:Mo=6.7*10**18
 NP1:Strike=327 Dip=18 Slip= 76
 NP2: 161 72 95

13 20 32 47.92 11.333S 165.444E 23km
 5.4mb (17 obs.)
 SANTA CRUZ ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 8S, 12C
 Centroid Location:
 Origin Time 20:32:49.3 1.7
 Lat 11.99S 0.24 Lon 165.69E 0.26
 Dep 15.0 FIX Half-duration 1.6
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.07 Plg=35 Azm=274
 N 0.19 13 13
 P -1.25 52 121
 Best Double Couple:Mo=1.2*10**17
 NP1:Strike=318 Dip=16 Slip=-146
 NP2: 196 81 -77

14 05 59 04.23 12.580S 166.589E 29km
 5.6mb (28 obs.) 5.8Msz (14 obs.)
 SANTA CRUZ ISLANDS
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=210 Dip=48 Slip= 125
 NP2: 344 53 58
 Principal Axes:
 T Plg=65 Azm=191
 P 2 96
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting with a large strike-slip component. The preferred fault plane is not determined.

RADIATED ENERGY
 No. of sta: 5 Focal mech. M
 Energy 4.2±1.2*10**13 Nm
 MOMENT TENSOR SOLUTION
 Dep 35 No. of sta: 17
 Principal Axes:
 Scale 10**18 Nm
 T Val= 1.32 Plg=84 Azm=124
 N -0.04 1 20
 P -1.28 6 290
 Best Double Couple:Mo=1.3*10**18
 NP1:Strike= 18 Dip=39 Slip= 88
 NP2: 201 51 92
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 23S, 55C
 Centroid Location:
 Origin Time 05:59:12.4 0.2
 Lat 12.50S 0.02 Lon 166.15E 0.02
 Dep 50.5 1.4 Half-duration 3.6
 Principal Axes:
 Scale 10**17 Nm
 T Val= 9.99 Plg=75 Azm=333
 N 0.32 14 174
 P -10.30 5 82
 Best Double Couple:Mo=1.0*10**18
 NP1:Strike=157 Dip=42 Slip= 69
 NP2: 5 52 108

14 08 24 53.68 16.587S 172.368W 33km
 5.2mb (27 obs.) 5.3Msz (7 obs.)
 SAMOA ISLANDS REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 25C
 Centroid Location:
 Origin Time 08:24:55.1 0.8
 Lat 17.33S 0.08 Lon 172.42W 0.08

Dep 15.0 FIX Half-duration 2.5
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.37 Plg=60 Azm=276
 N 0.03 2 9
 P -1.40 30 101
 Best Double Couple:Mo=1.4*10**17
 NP1:Strike=197 Dip=15 Slip= 98
 NP2: 9 75 88

14 17 39 32.22 53.416N 169.113W 118km
 5.7mb (102 obs.)
 FOX ISLANDS, ALEUTIAN ISLANDS
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike= 88 Dip=70 Slip= -90
 NP2: 268 20 -90
 Principal Axes:
 T Plg=25 Azm=178
 P 65 358
 Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.

RADIATED ENERGY
 No. of sta: 8 Focal mech. M
 Energy 3.4±1.1*10**12 Nm
 MOMENT TENSOR SOLUTION
 Dep 103 No. of sta: 17
 Principal Axes:
 Scale 10**18 Nm
 T Val= 1.17 Plg=32 Azm=152
 N -0.01 20 255
 P -1.16 52 11
 Best Double Couple:Mo=1.2*10**18
 NP1:Strike=195 Dip=22 Slip=-151
 NP2: 78 79 -70
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 21S, 51C
 Centroid Location:
 Origin Time 17:39:35.7 0.2
 Lat 53.29N 0.02 Lon 169.19W 0.02
 Dep 103.5 1.3 Half-duration 3.7
 Principal Axes:
 Scale 10**17 Nm

T Val= 11.03 Plg=34 Azm=149
 N -0.53 20 253
 P -10.50 49 8
 Best Double Couple:Mo=1.1*10**18
 NP1:Strike=186 Dip=22 Slip=-158
 NP2: 76 82 -70

14 22 20 42.05 19.107S 63.932W 598km
 5.3mb (69 obs.)
 SOUTHERN BOLIVIA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 23C
 Centroid Location:
 Origin Time 22:20:46.5 0.7
 Lat 19.31S 0.08 Lon 64.27W 0.10
 Dep 590.2 5.1 Half-duration 1.7
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.39 Plg=39 Azm=248
 N -0.17 10 150
 P -1.22 49 47
 Best Double Couple:Mo=1.3*10**17
 NP1:Strike= 34 Dip=11 Slip= -25
 NP2: 149 85 -100

15 00 31 49.57 52.681N 152.643E 527km
 4.9mb (83 obs.)
 NORTHWEST OF KURIL ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 9S, 14C
 Centroid Location:
 Origin Time 00:31:51.4 1.0
 Lat 52.19N 0.08 Lon 152.35E 0.16
 Dep 518.8 7.9 Half-duration 1.4
 Principal Axes:
 Scale 10**16 Nm
 T Val= 4.56 Plg=25 Azm=196
 N 2.31 38 84
 P -6.87 41 310
 Best Double Couple:Mo=5.7*10**16
 NP1:Strike=335 Dip=40 Slip= -15
 NP2: 77 80 -129

15 09 34 47.46 23.136S 68.574W 101km
 5.1mb (19 obs.)

NORTHERN CHILE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 18C
 Centroid Location:
 Origin Time 09:34:56.1 0.7
 Lat 22.88S 0.14 Lon 68.89W 0.07
 Dep 133.9 3.2 Half-duration 1.4
 Principal Axes:
 Scale 10**16 Nm
 T Val= 6.59 Plg= 4 Azm=263
 N -1.58 39 356
 P -5.01 50 168
 Best Double Couple:Mo=5.8*10**16
 NP1:Strike=319 Dip=54 Slip=-142
 NP2: 204 60 -43

15 18 04 23.12 28.135S 70.884W 37km
 6.0mb (72 obs.) 6.1Msz (16 obs.)
 CENTRAL CHILE
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike=170 Dip=68 Slip= 43
 NP2: 61 51 151
 Principal Axes:
 T Plg=45 Azm= 33
 P 11 292
 Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a large reverse component. The preferred fault plane is not determined.

RADIATED ENERGY
 No. of sta: 5 Focal mech. C
 Energy 8.1±3.1*10**13 Nm
 MOMENT TENSOR SOLUTION
 Dep 51 No. of sta: 8
 Principal Axes:
 Scale 10**18 Nm
 T Val= 6.50 Plg=66 Azm= 57
 N -0.05 6 160
 P -6.45 23 253
 Best Double Couple:Mo=6.5*10**18
 NP1:Strike=354 Dip=23 Slip= 105
 NP2: 158 68 84
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 20S, 47C M.W.: 13S, 25C
 Centroid Location:
 Origin Time 18:04:33.3 0.1
 Lat 28.25S 0.02 Lon 71.37W 0.02
 Dep 44.2 1.1 Half-duration 9.0
 Principal Axes:
 Scale 10**18 Nm
 T Val= 4.31 Plg=71 Azm= 61
 N 0.18 10 182
 P -4.49 16 275
 Best Double Couple:Mo=4.4*10**18
 NP1:Strike= 20 Dip=30 Slip= 110
 NP2: 176 62 78

16 00 44 03.43 20.362S 174.361W 33km
 4.8mb (9 obs.) 5.0Msz (2 obs.)
 TONGA ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 9S, 15C
 Centroid Location:
 Origin Time 00:44: 8.6 1.7
 Lat 20.78S 0.21 Lon 174.18W 0.22
 Dep 33.0 FIX Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 3.81 Plg=71 Azm=238
 N -0.39 11 1
 P -3.42 16 95
 Best Double Couple:Mo=3.6*10**16
 NP1:Strike=200 Dip=31 Slip= 112
 NP2: 355 61 78

16 21 38 48.14 34.963S 179.654E 74km
 5.5mb (14 obs.)
 SOUTH OF KERMADEC ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 23S, 62C
 Centroid Location:
 Origin Time 21:38:48.8 0.2
 Lat 34.81S 0.02 Lon 179.93W 0.02
 Dep 30.5 1.5 Half-duration 4.1
 Principal Axes:
 Scale 10**18 Nm
 T Val= 1.58 Plg=68 Azm=268

N 0.37 6 12
P -1.95 22 105
Best Double Couple: Mo=1.8*10**18
NP1: Strike=205 Dip=24 Slip= 104
NP2: 10 67 84

18 01 50 18.28 6.924S 129.705E 138km
5.3mb (23 obs.)

BANDA SEA

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 13S, 21C

Centroid Location:

Origin Time 01:50:21.3 0.8

Lat 6.83S 0.07 Lon 129.88E 0.09

Dep 137.6 2.5 Half-duration 2.0

Principal Axes:

Scale 10**16 Nm

T Val= 11.64 Plg=61 Azm=292

N 0.73 29 114

P -12.37 1 23

Best Double Couple: Mo=1.2*10**17

NP1: Strike= 87 Dip=51 Slip= 51

NP2: 319 53 128

18 02 18 50.64 5.593S 151.686E 50km
5.6mb (25 obs.) 5.8Msz (16 obs.)

NEW BRITAIN REGION

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 21S, 51C

Centroid Location:

Origin Time 02:18:55.3 0.2

Lat 5.71S 0.03 Lon 151.90E 0.03

Dep 18.3 1.9 Half-duration 4.1

Principal Axes:

Scale 10**18 Nm

T Val= 1.38 Plg=62 Azm=358

N 0.06 3 262

P -1.44 28 170

Best Double Couple: Mo=1.4*10**18

NP1: Strike=251 Dip=18 Slip= 79

NP2: 83 73 94

19 07 52 44.24 24.088S 66.932W 153km
5.4mb (54 obs.)

SALTA PROVINCE, ARGENTINA

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 14S, 21C

Centroid Location:

Origin Time 07:52:51.5 0.6

Lat 24.14S 0.07 Lon 67.07W 0.07

Dep 181.9 3.1 Half-duration 1.6

Principal Axes:

Scale 10**16 Nm

T Val= 10.04 Plg=17 Azm= 88

N -1.59 5 179

P -8.45 73 284

Best Double Couple: Mo=9.3*10**16

NP1: Strike=171 Dip=28 Slip=-100

NP2: 1 62 -85

20 05 40 52.61 24.213S 179.158E 527km
5.2mb (34 obs.)

SOUTH OF FIJI ISLANDS

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 14S, 28C

Centroid Location:

Origin Time 05:41: 0.4 1.0

Lat 24.16S 0.12 Lon 178.89E 0.12

Dep 542.3 6.9 Half-duration 1.9

Principal Axes:

Scale 10**17 Nm

T Val= 1.26 Plg=33 Azm= 58

N 0.23 40 180

P -1.49 33 303

Best Double Couple: Mo=1.4*10**17

NP1: Strike= 90 Dip=40 Slip= 180

NP2: 180 90 50

21 18 22 37.49 5.483S 151.732E 36km
5.7mb (30 obs.) 5.7Msz (11 obs.)

NEW BRITAIN REGION

FAULT PLANE SOLUTION: P-Waves

NP1: Strike= 77 Dip=58 Slip= 90

NP2: 257 32 90

Principal Axes:

T Plg=77 Azm=347

P 13 167

Comment: The focal mechanism is poorly controlled and

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

RADIATED ENERGY

No. of sta: 7 Focal mech. M
Energy 1.1±0.3*10**12 Nm

MOMENT TENSOR SOLUTION

Dep 27 No. of sta: 9

Principal Axes:

Scale 10**17 Nm

T Val= 6.29 Plg=76 Azm=354

N 0.64 1 258

P -6.93 14 168

Best Double Couple: Mo=6.6*10**17

NP1: Strike=256 Dip=31 Slip= 87

NP2: 79 59 92

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 18S, 47C

Centroid Location:

Origin Time 18:22:43.2 0.3

Lat 5.58S 0.03 Lon 151.87E 0.04

Dep 15.0 FIX Half-duration 3.4

Principal Axes:

Scale 10**17 Nm

T Val= 8.98 Plg=60 Azm=347

N 0.30 3 82

P -9.28 30 174

Best Double Couple: Mo=9.1*10**17

NP1: Strike=273 Dip=15 Slip= 101

NP2: 81 75 87

21 19 44 19.04 6.526S 154.877E 62km
5.6mb (33 obs.)

SOLOMON ISLANDS

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 19S, 53C

Centroid Location:

Origin Time 19:44:23.6 0.2

Lat 6.67S 0.02 Lon 154.80E 0.02

Dep 57.6 2.0 Half-duration 3.3

Principal Axes:

Scale 10**17 Nm

T Val= 6.84 Plg=81 Azm=359

N 0.47 7 135

P -7.30 7 225

Best Double Couple: Mo=7.1*10**17

NP1: Strike=323 Dip=39 Slip= 101

NP2: 129 52 81

21 21 38 56.65 47.649S 99.860E 10km
5.3mb (6 obs.) 5.5Msz (2 obs.)

SOUTHEAST INDIAN RISE

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 15S, 35C

Centroid Location:

Origin Time 21:39: 3.8 0.6

Lat 47.86S 0.06 Lon 99.60E 0.10

Dep 15.0 FIX Half-duration 2.1

Principal Axes:

Scale 10**17 Nm

T Val= 1.31 Plg= 0 Azm=169

N -0.02 90 180

P -1.29 0 79

Best Double Couple: Mo=1.3*10**17

NP1: Strike=214 Dip=90 Slip= 180

NP2: 304 90 0

21 23 00 52.84 23.893N 108.738W 10km
5.3mb (39 obs.) 5.2Msz (3 obs.)

GULF OF CALIFORNIA

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 16S, 31C

Centroid Location:

Origin Time 23:00:57.4 0.6

Lat 23.93N 0.07 Lon 108.77W 0.07

Dep 15.0 FIX Half-duration 1.9

Principal Axes:

Scale 10**17 Nm

T Val= 2.09 Plg= 1 Azm=269

N -0.39 75 1

P -1.70 15 179

Best Double Couple: Mo=1.9*10**17

NP1: Strike=315 Dip=79 Slip=-169

NP2: 223 80 -11

22 05 09 14.42 52.164N 174.066E 33km
5.5mb (91 obs.) 4.8Msz (9 obs.)

NEAR ISLANDS, ALEUTIAN ISLANDS

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 13S, 23C

Centroid Location:

Origin Time 05:09:16.0 0.9

Lat 52.47N 0.07 Lon 174.13E 0.15

Dep 52.6 5.0 Half-duration 1.7

Principal Axes:

Scale 10**16 Nm

T Val= 8.23 Plg=64 Azm=311

N 2.72 15 74

P -10.95 21 170

Best Double Couple: Mo=9.6*10**16

NP1: Strike=285 Dip=28 Slip= 124

NP2: 68 67 74

24 06 09 43.62 20.096S 70.632W 33km
5.2mb (17 obs.) 4.5Msz (1 obs.)

NEAR COAST OF NORTHERN CHILE

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

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

Centroid Location:

Origin Time 06:09:49.4 0.7

Lat 20.41S 0.14 Lon 71.36W 0.10

Dep 15.0 FIX Half-duration 1.5

Principal Axes:

Scale 10**16 Nm

T Val= 4.59 Plg=77 Azm=173

N -0.20 13 344

P -4.39 2 75

Best Double Couple: Mo=4.5*10**16

NP1: Strike=178 Dip=44 Slip= 109

NP2: 332 49 72

24 09 24 40.59 23.089N 94.402E 93km
5.1mb (46 obs.)

BURMA-INDIA BORDER REGION

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 12S, 29C

Centroid Location:

Origin Time 09:24:44.4 0.7

Lat 23.04N 0.09 Lon 94.53E 0.13

Dep 126.5 4.6 Half-duration 1.7

Principal Axes:

Scale 10**16 Nm

T Val= 11.38 Plg=54 Azm=119

N -3.23 33 270

P -8.15 14 9

Best Double Couple: Mo=9.8*10**16

NP1: Strike=135 Dip=42 Slip= 144

NP2: 254 67 54

26 06 33 20.76 21.288S 174.502W 114km
5.1mb (14 obs.)

TONGA ISLANDS

CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN

L.P.B.: 7S, 13C

Centroid Location:

Origin Time 06:33:26.1 1.4

Lat 21.14S 0.15 Lon 175.53W 0.14

Dep 141.7 5.5 Half-duration 1.7

Principal Axes:

Scale 10**16 Nm

T Val= 9.98 Plg=59 Azm=258

N -2.69 16 17

P -7.29 25 115

Best Double Couple: Mo=8.6*10**16

NP1: Strike=236 Dip=24 Slip= 132

NP2: 12 72 73

26 06 56 46.25 20.749S 178.464W 569km
5.7mb (49 obs.)

FIJI ISLANDS REGION

FAULT PLANE SOLUTION: P-Waves

NP1: Strike= 37 Dip=89 Slip= -70

NP2: 130 20 -177

Principal Axes:

T Plg=41 Azm=108

P 43 326

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 583 No. of sta: 11

Principal Axes:

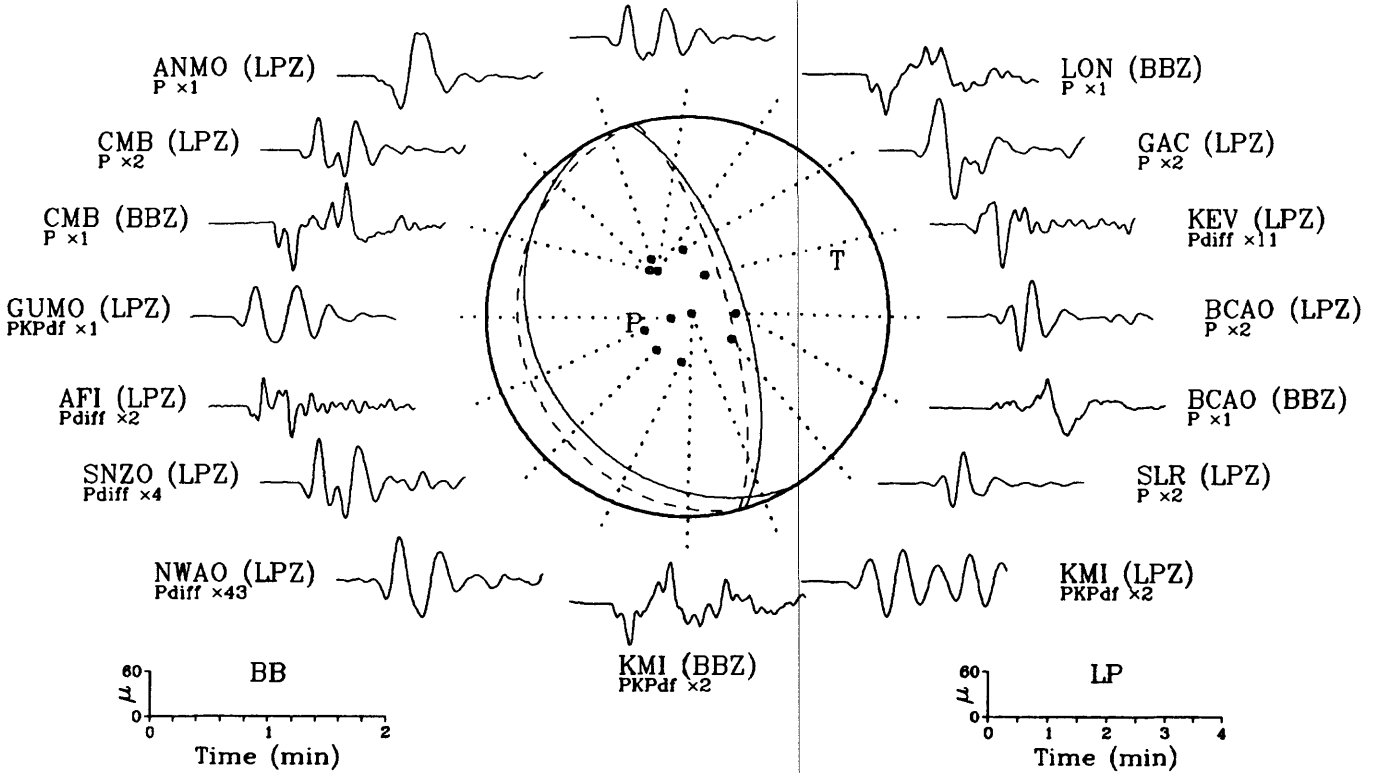
Scale 10**18 Nm

T Val= 1.67 Plg=32 Azm=117

<p>P -1.65 58 304 Best Double Couple:Mo=1.7*10**18 NP1:Strike=196 Dip=14 Slip=-104 NP2: 30 77 -87 CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 19S, 48C Centroid Location: Origin Time 06:56:53.7 0.3 Lot 20.80S 0.03 Lon 178.60W 0.02 Dep 588.3 1.4 Half-duration 4.4 Principal Axes: Scale 10**18 Nm T Val= 1.66 Plg=39 Azm=103 N 0.23 17 208 P -1.89 45 316 Best Double Couple:Mo=1.8*10**18 NP1:Strike=129 Dip=17 Slip=-170 NP2: 29 87 -73</p>	<p>29 00 31 49.54 4.144S 152.334E 162km 5.0mb (17 obs.) NEW BRITAIN REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 19C Centroid Location: Origin Time 00:31:53.6 1.3 Lot 4.39S 0.16 Lon 152.23E 0.12 Dep 151.4 5.1 Half-duration 1.5 Principal Axes: Scale 10**16 Nm T Val= 6.15 Plg= 5 Azm= 52 N 0.49 29 144 P -6.64 61 314 Best Double Couple:Mo=6.4*10**16 NP1:Strike=115 Dip=48 Slip=-130 NP2: 346 56 -55</p>	<p>29 22 12 11.29 52.840N 168.892W 33km 5.2mb (23 obs.) 4.7Msz (7 obs.) FOX ISLANDS, ALEUTIAN ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 21C Centroid Location: Origin Time 22:12:15.3 0.7 Lot 52.89N 0.09 Lon 168.86W 0.11 Dep 56.6 7.3 Half-duration 1.6 Principal Axes: Scale 10**16 Nm T Val= 6.89 Plg=33 Azm=226 N 1.86 44 356 P -8.75 27 116 Best Double Couple:Mo=7.8*10**16 NP1:Strike=258 Dip=44 Slip= 175 NP2: 352 86 46</p>
<p>26 13 01 23.04 37.262S 95.296W 10km 5.1mb (10 obs.) SOUTHERN PACIFIC OCEAN CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 18C Centroid Location: Origin Time 13:01:25.2 0.6 Lot 36.96S 0.12 Lon 95.24W 0.14 Dep 15.0 FIX Half-duration 1.5 Principal Axes: Scale 10**16 Nm T Val= 7.02 Plg= 7 Azm=263 N -1.91 9 172 P -5.11 78 28 Best Double Couple:Mo=6.1*10**16 NP1:Strike= 4 Dip=39 Slip=-75 NP2: 165 52 -102</p>	<p>29 14 15 18.35 56.536S 25.621W 33km 6.0mb (3 obs.) 4.8Msz (1 obs.) SOUTH SANDWICH ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 13S, 24C Centroid Location: Origin Time 14:15:17.6 1.1 Lot 56.97S 0.11 Lon 25.26W 0.26 Dep 15.0 FIX Half-duration 1.5 Principal Axes: Scale 10**16 Nm T Val= 9.29 Plg=58 Azm=175 N -1.74 22 304 P -7.55 23 44 Best Double Couple:Mo=8.4*10**16 NP1:Strike=169 Dip=30 Slip= 139 NP2: 296 71 67</p>	<p>30 12 15 35.46 30.330S 177.997W 56km 5.4mb (6 obs.) KERMADEC ISLANDS CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 20C Centroid Location: Origin Time 12:15:40.9 1.6 Lot 30.07S 0.15 Lon 178.12W 0.15 Dep 29.2 9.6 Half-duration 1.5 Principal Axes: Scale 10**16 Nm T Val= 3.65 Plg=72 Azm=256 N 0.53 8 12 P -4.18 16 104 Best Double Couple:Mo=3.9*10**16 NP1:Strike=206 Dip=30 Slip= 107 NP2: 7 62 81</p>
<p>27 10 06 58.70 46.141N 27.551W 10km 4.8mb (23 obs.) 5.0Msz (7 obs.) NORTH ATLANTIC RIDGE CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 12S, 25C Centroid Location: Origin Time 10:07: 4.6 0.8 Lot 46.22N 0.15 Lon 27.73W 0.07 Dep 15.0 FIX Half-duration 1.6 Principal Axes: Scale 10**16 Nm T Val= 6.31 Plg= 0 Azm=103 N -0.16 0 13 P -6.15 90 180 Best Double Couple:Mo=6.2*10**16 NP1:Strike=193 Dip=45 Slip=-90 NP2: 13 45 -90</p>	<p>29 15 14 07.87 56.504S 25.505W 33km 5.0mb (9 obs.) 4.9Msz (1 obs.) SOUTH SANDWICH ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 14S, 37C Centroid Location: Origin Time 15:14:12.0 0.4 Lot 56.45S 0.05 Lon 25.08W 0.09 Dep 15.0 FIX Half-duration 1.9 Principal Axes: Scale 10**17 Nm T Val= 1.60 Plg=79 Azm=223 N -0.06 3 331 P -1.54 11 61 Best Double Couple:Mo=1.6*10**17 NP1:Strike=156 Dip=34 Slip= 96 NP2: 328 56 86</p>	<p>31 06 52 52.08 27.080S 178.447W 309km 5.0mb (19 obs.) KERMADEC ISLANDS REGION CENTROID, MOMENT TENSOR (HRV) Data Used: GDSN L.P.B.: 15S, 30C Centroid Location: Origin Time 06:53: 1.1 0.7 Lot 26.74S 0.10 Lon 178.65W 0.06 Dep 315.5 3.2 Half-duration 2.0 Principal Axes: Scale 10**17 Nm T Val= 1.51 Plg=20 Azm=102 N -0.02 48 216 P -1.49 35 357 Best Double Couple:Mo=1.5*10**17 NP1:Strike=144 Dip=50 Slip=-168 NP2: 47 81 -41</p>

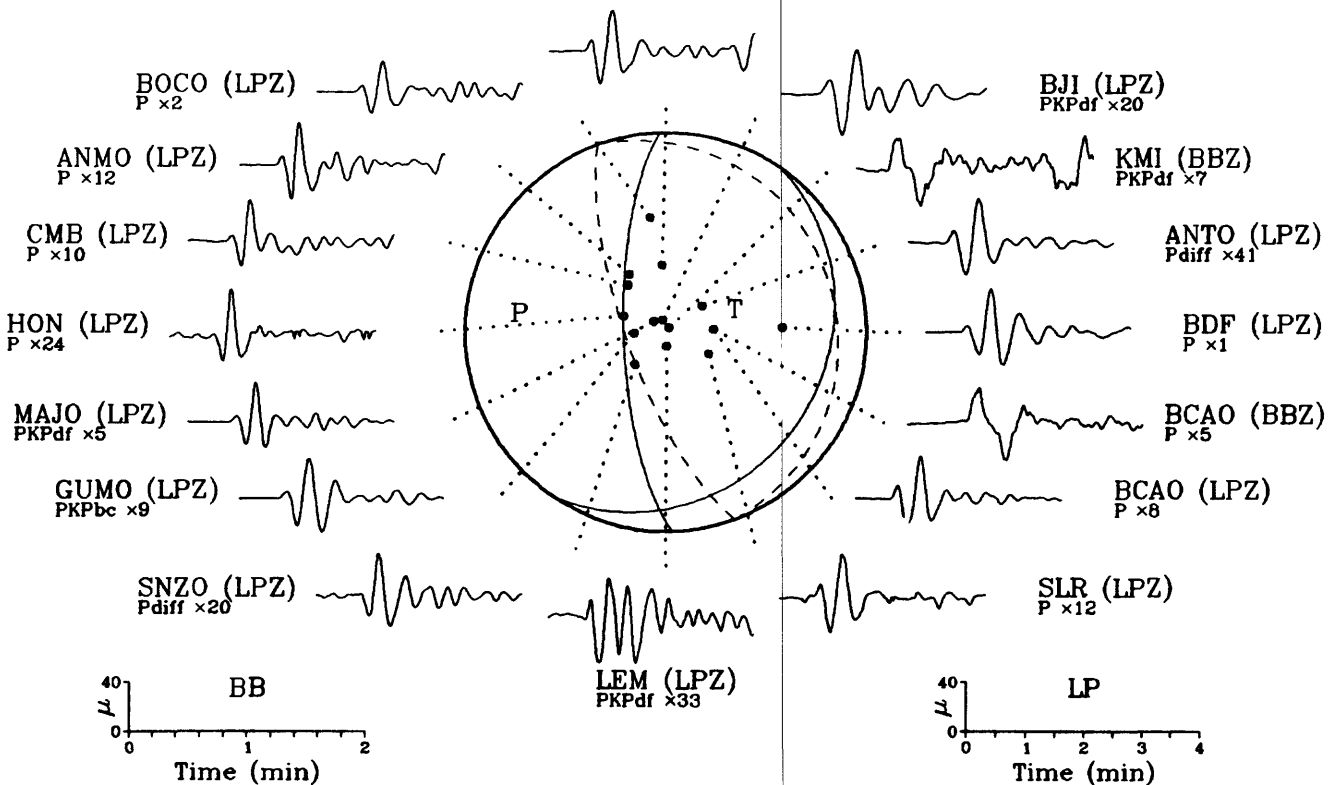
08 August 1987 15:48:56.75 Northern Chile

LON (LPZ)
P x2

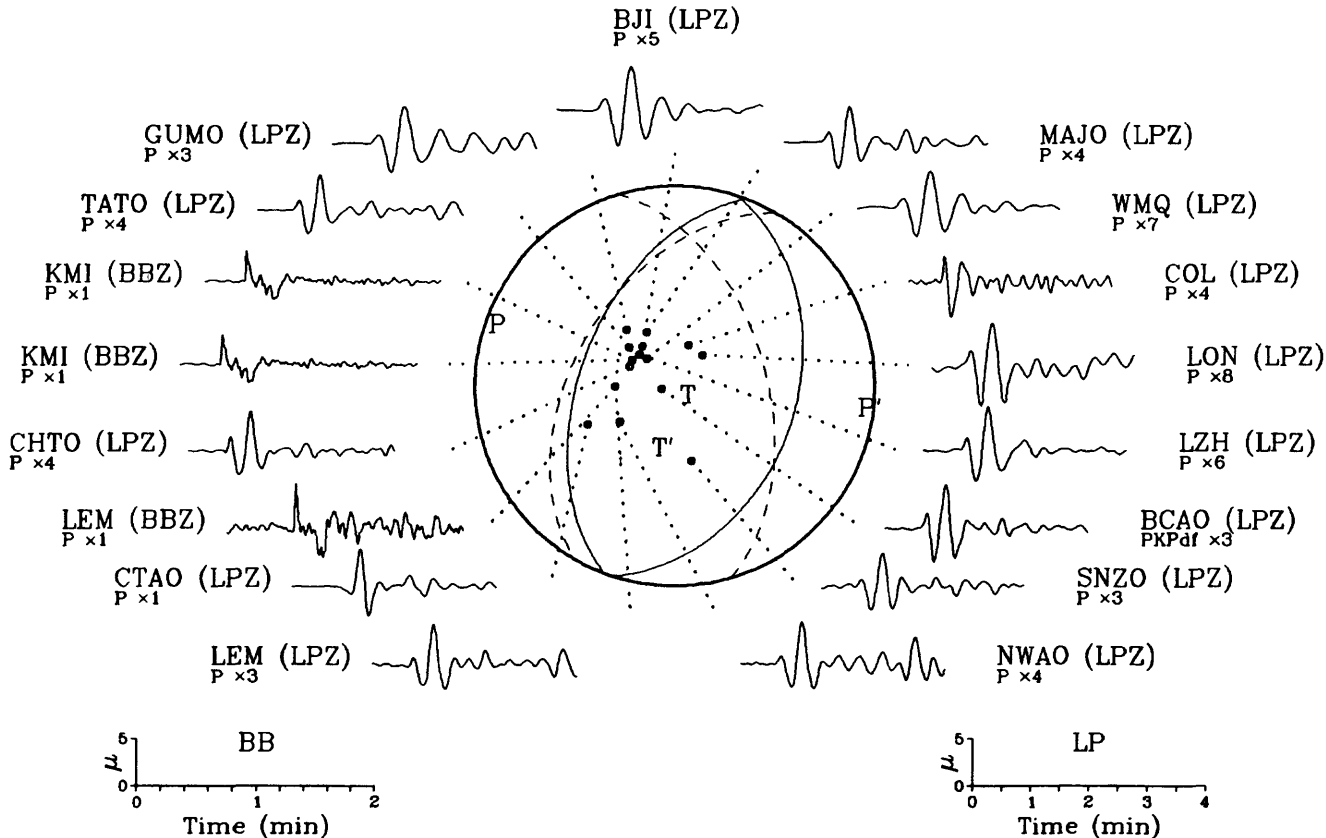


13 August 1987 15:23:06.93 Near Coast of Peru

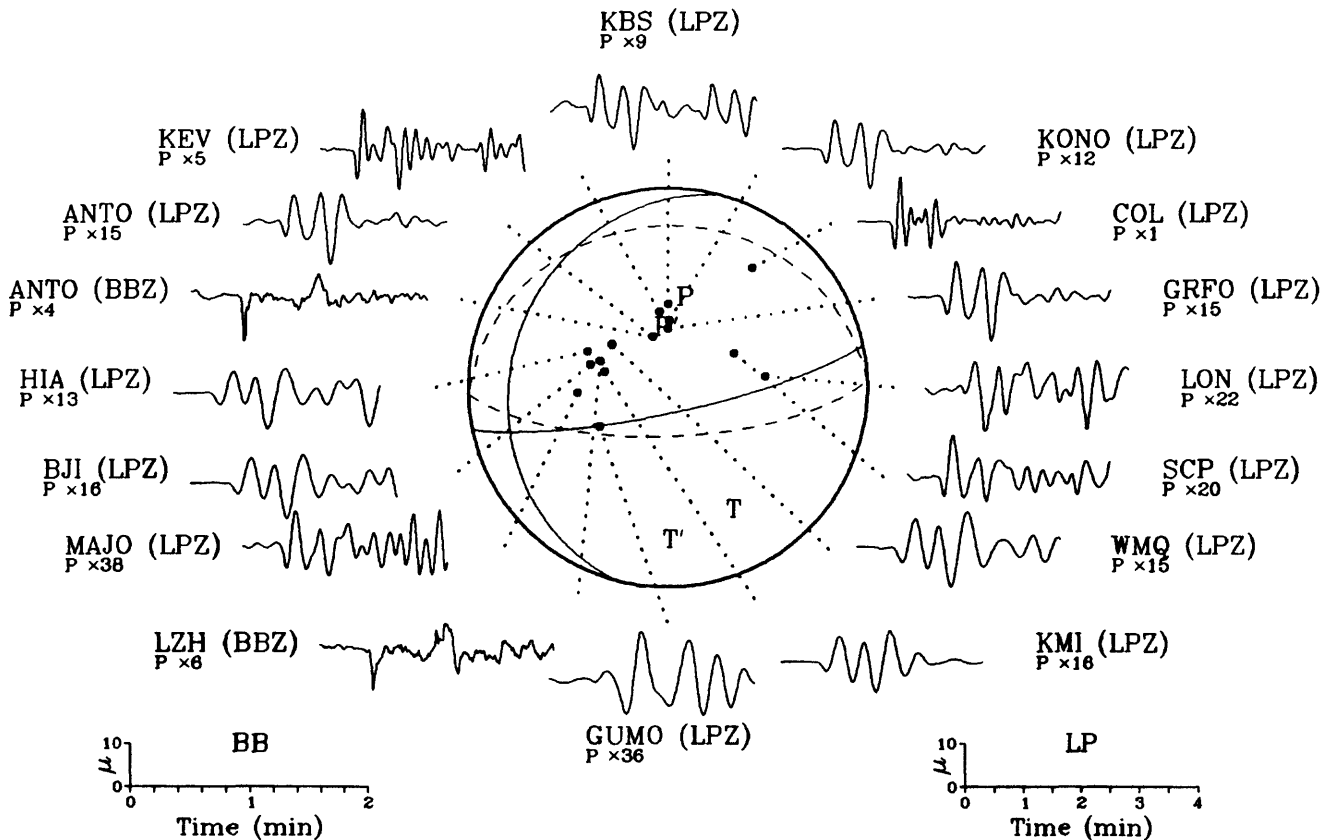
GAC (LPZ)
P x8



14 August 1987 05:59:04.23 Santa Cruz Islands

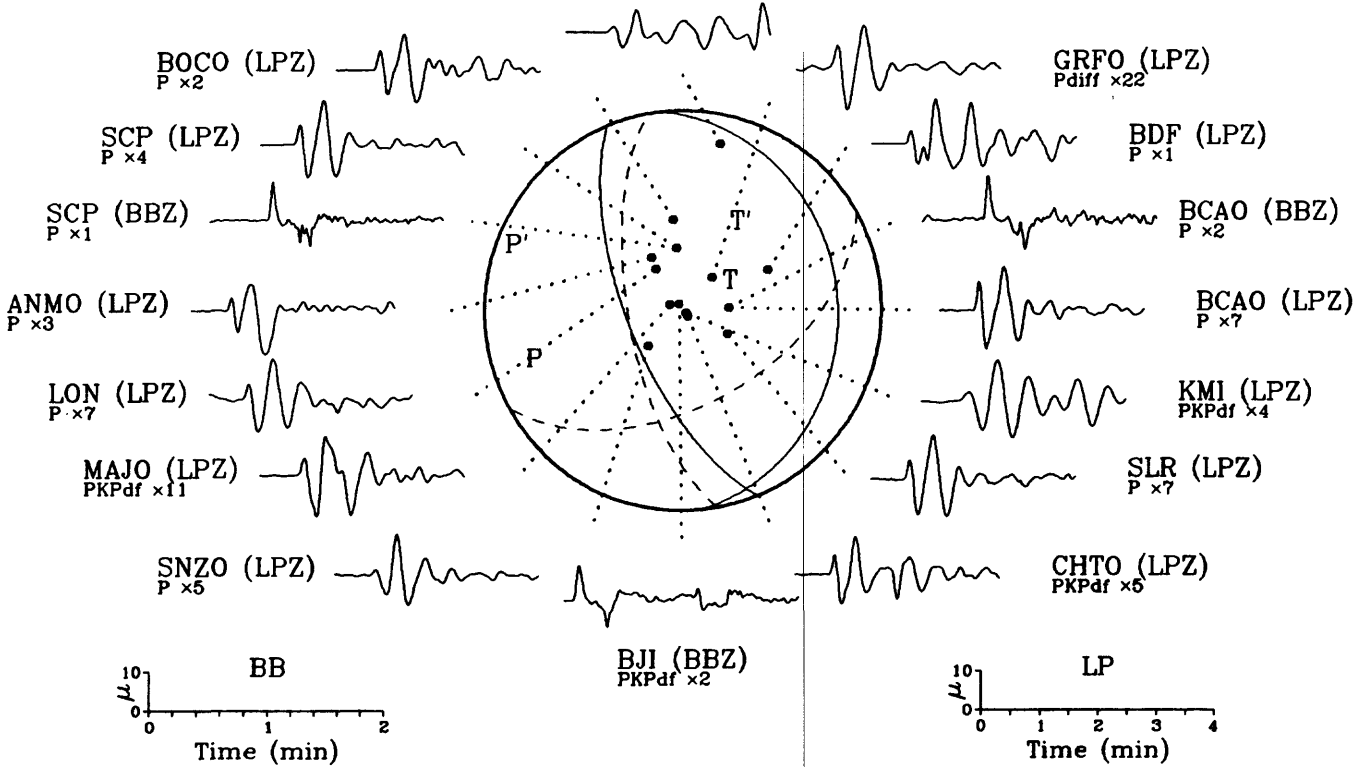


14 August 1987 17:39:32.22 Fox Islands, Aleutian Islands



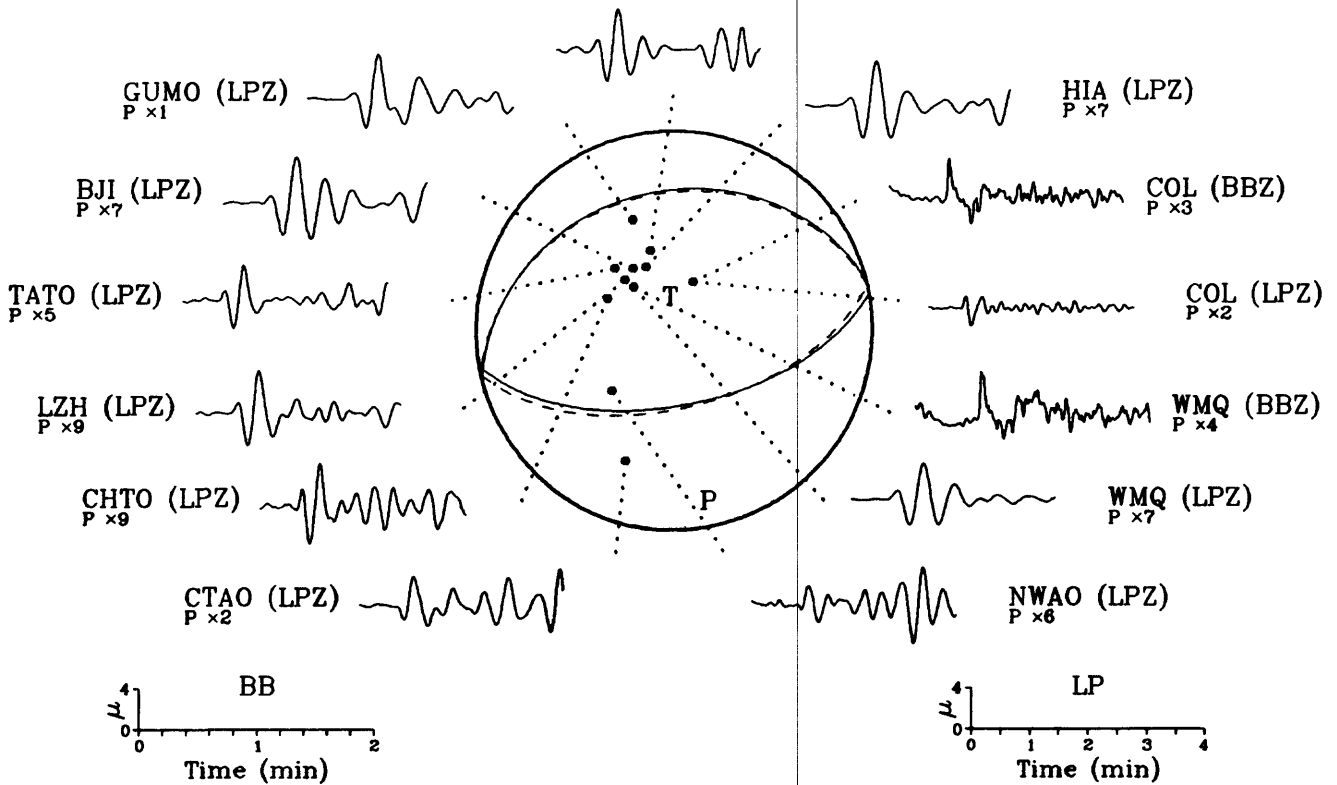
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Central Chile

ZOBO (LPZ)
Pn x1

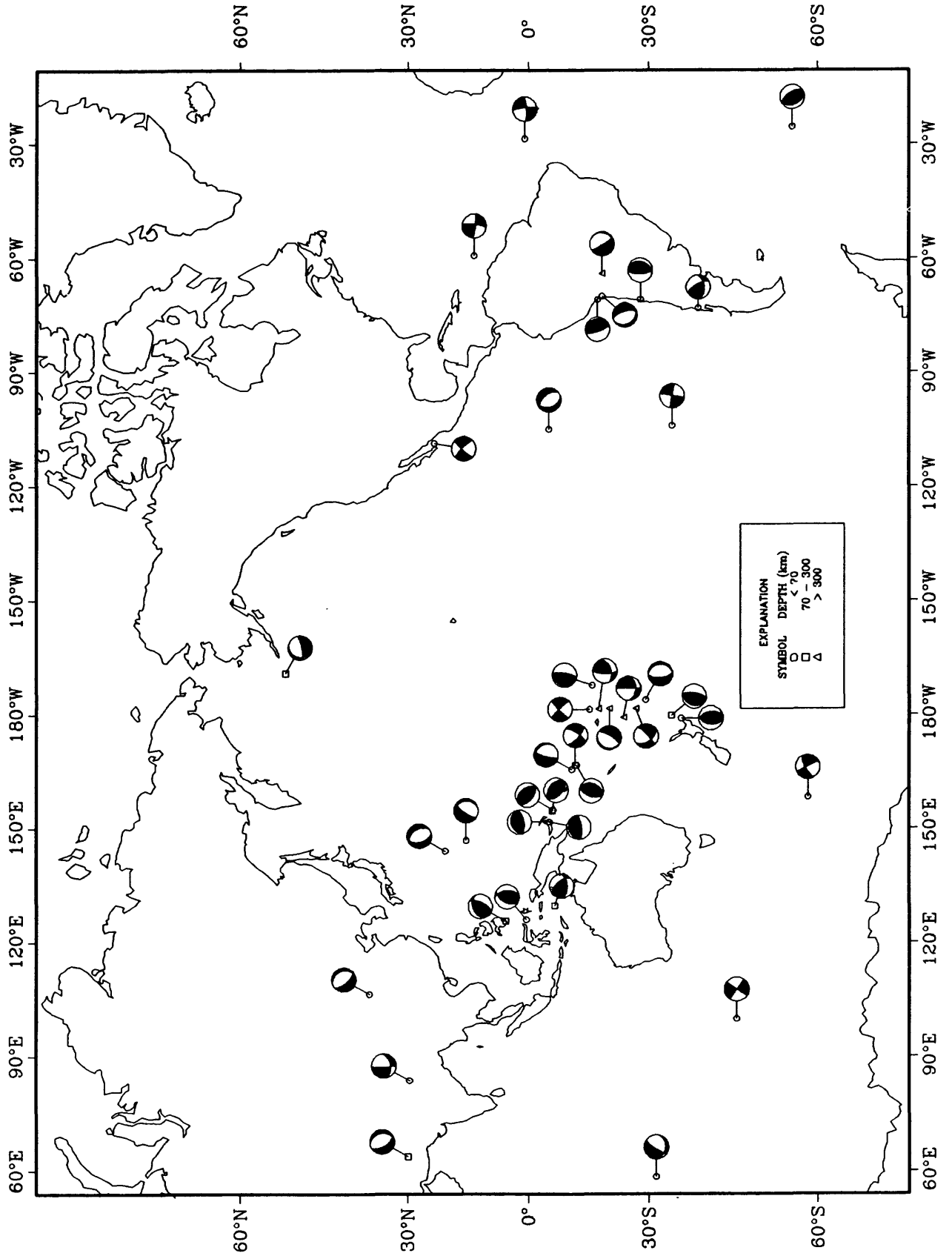


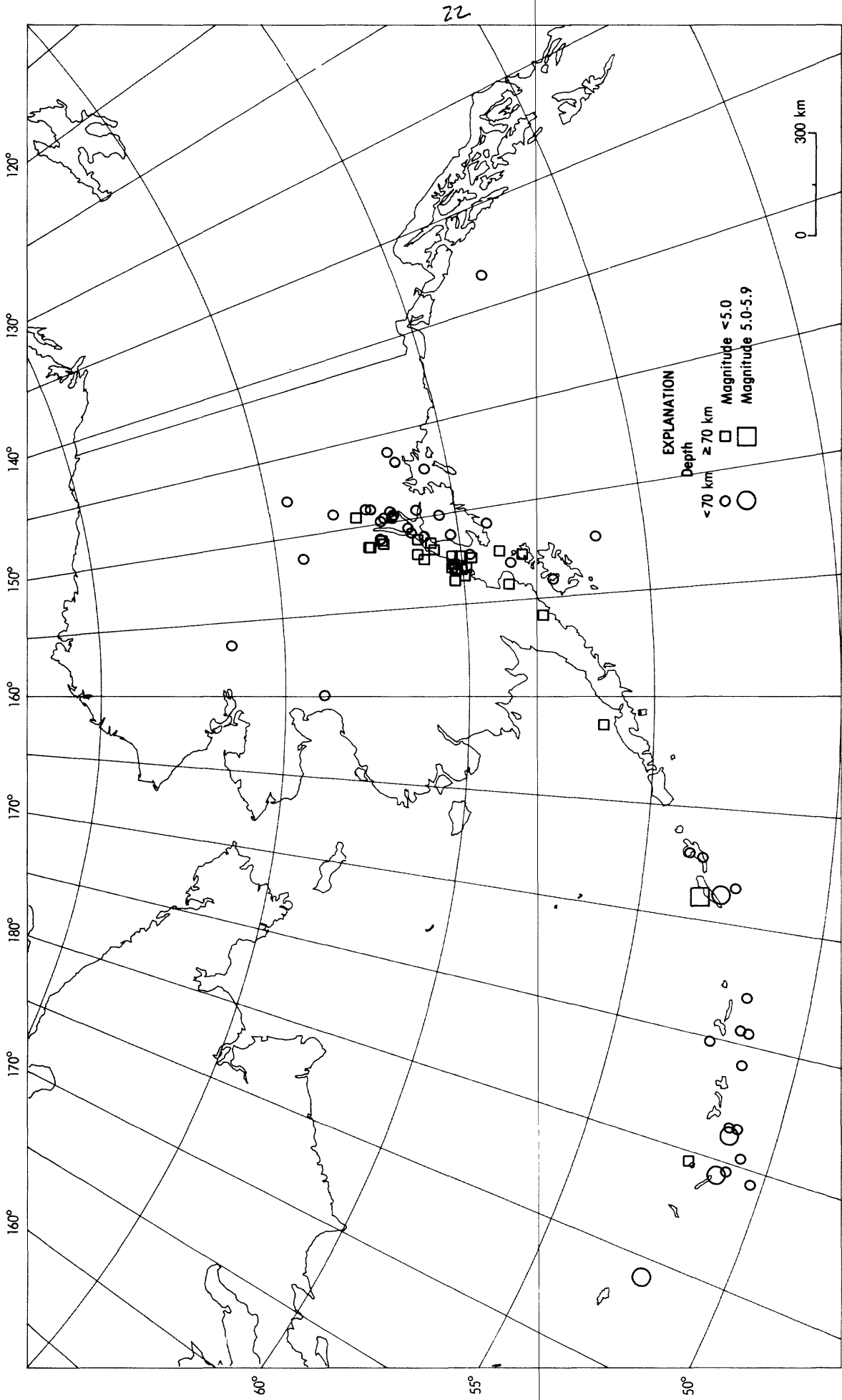
21 August 1987 18:22:37.49
New Britain Region

MAJO (LPZ)
P x8

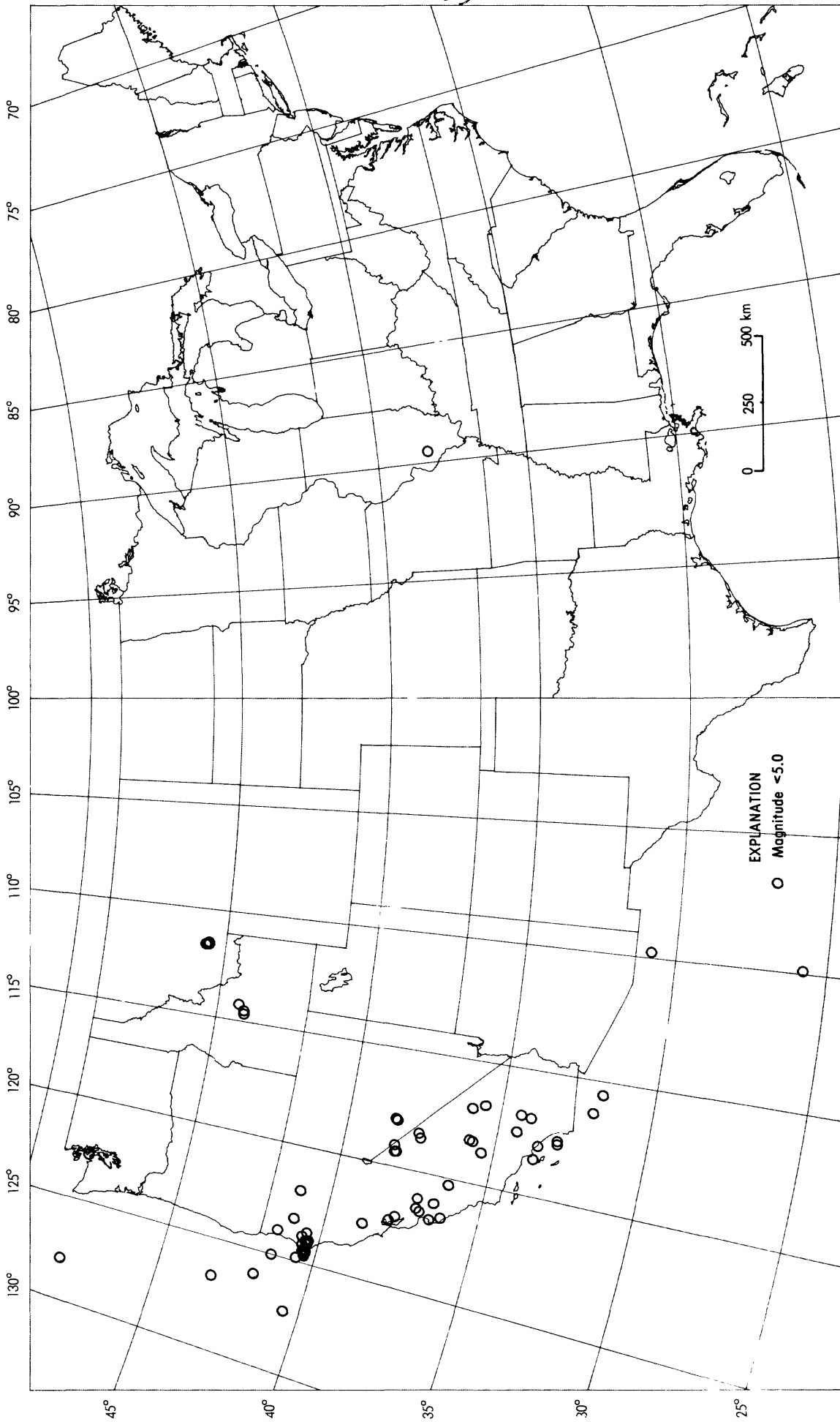


Earthquake Focal Mechanisms for August 1987



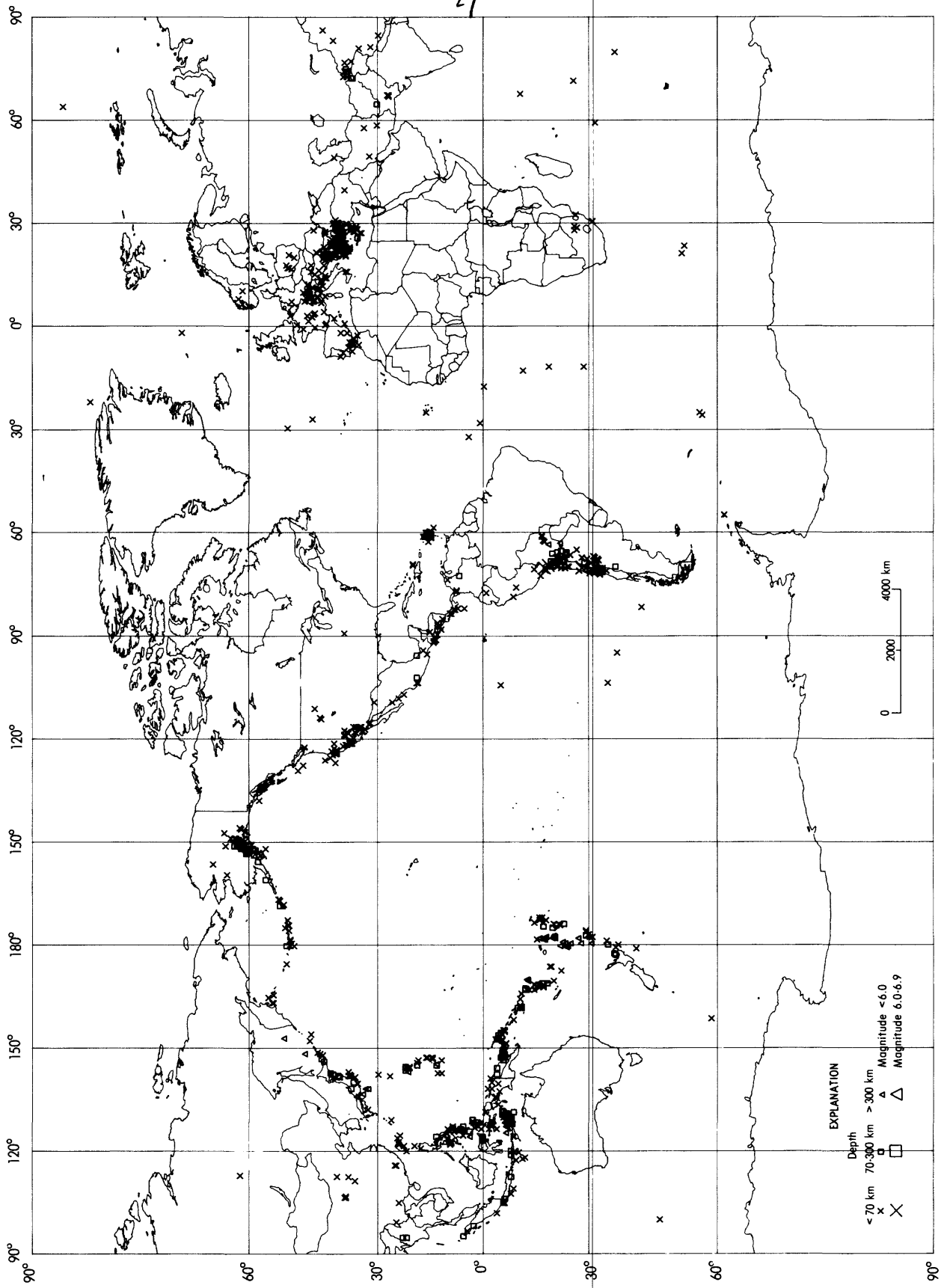


Earthquake epicenters in Alaska and adjacent regions for August, 1987 (C. Stover).



Earthquake epicenters in the conterminous United States and adjacent regions for August, 1987 (C. Stover).

24



Earthquakes located in August, 1987 (C. Stover).



PRELIMINARY DETERMINATION OF EPICENTERS

MONTHLY LISTING

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

S E P T E M B E R 1 9 8 7

K DAY E Y	ORIGIN TIME UTC			GEOGRAPHIC COORDINATES		DEPTH	MAGNITUDES SD		NO. STA USED	REGION, CONTRIBUTED MAGNITUDES AND COMMENTS	
	HR	MN	SEC	LAT	LONG		GS	MsZ			
01	00	04	41.5	40.709 N	15.486 E	22	3.4	1.3	27	SOUTHERN ITALY	
01	00	14	19.8	53.770 N	167.208 W	33 N	5.0	0.9	54	FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.1 (PMR). Felt (V) at Unalaska.	
01	00	55	22.6*	53.745 N	167.053 W	33 N	4.6	1.2	14	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).	
01	01	34	45.8?	23.57 S	66.74 W	223 *		1.5	8	JUJUJ PROVINCE, ARGENTINA	
01	02	02	05.1*	51.348 N	175.274 W	33 N	4.8	1.2	18	ANDREANOF ISLANDS, ALEUTIAN IS. ML 3.9 (PMR).	
01	02	20	38.5&	40.700 N	124.600 W	20			5	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 2.9 (BRK).	
01	04	08	07.0?	5.79 S	147.35 E	177 ?	4.7	1.5	6	EAST PAPUA NEW GUINEA REGION	
01	04	15	39.3	53.741 N	167.125 W	33 N	4.9	4.6	1.1	93	FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.4 (PMR), Ms 4.6 (BRK). Felt (IV) at Unalaska.
01	04	22	12.8*	53.656 N	166.956 W	33 N	4.6	1.2	21	FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.0 (PMR).	
f 01	04	26	07.4	23.052 S	66.529 W	199	6.0	1.0	348	JUJUJ PROVINCE, ARGENTINA. mb 6.3 (BRK), 6.3 (PAS). Felt (V) at Antofagasta, Calama and Tacapilla. Felt at Arequipa, Peru and Sao Paulo, Brazil.	
01	04	26	55.9*	53.769 N	167.065 W	33 N	4.6	1.1	22	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.8 (PMR).	
01	04	37	56.3?	16.83 S	178.17 E	33 N		1.4	7	FIJI ISLANDS	
01	04	44	16.6&	59.575 N	152.941 W	100			29	SOUTHERN ALASKA. <AGS-P>.	
01	06	27	16.3?	7.08 S	119.45 E	304 ?	4.4	0.7	7	FLORES SEA	
01	06	34	12.7	40.595 N	23.777 E	10 G		0.9	11	GREECE	
01	07	11	51.2	53.699 N	166.989 W	33 N	4.5	1.3	31	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.8 (PMR).	
01	10	35	55.6%	61.855 N	7.159 E	10 G		0.7	5	SOUTHERN NORWAY. ML 2.4 (BER).	
01	13	07	05.6?	61.07 N	10.06 E	10 G		1.2	5	SOUTHERN NORWAY. MD 2.6 (BER).	
01	13	08	53.2*	32.585 S	69.046 W	33 N		1.2	6	MENDOZA PROVINCE, ARGENTINA	
01	13	36	43.6	32.379 N	141.120 E	60 *	5.0	1.0	54	SOUTH OF HONSHU, JAPAN	
01	13	39	48.2?	6.81 S	129.44 E	143 ?	4.0	1.2	9	BANDA SEA	
01	13	48	37.7%	59.627 N	5.784 E	10 G		0.9	6	SOUTHERN NORWAY. ML 2.4 (BER).	
a 01	13	51	20.7	16.244 N	95.873 W	37 D	5.1	0.7	93	OAXACA, MEXICO. Felt in Oaxaca.	
01	15	08	25.1*	11.684 N	73.632 W	77 ?		1.5	11	NEAR NORTH COAST OF COLOMBIA. Felt at Santa Marta.	
01	15	32	16.9%	33.766 S	70.650 W	33 N		1.0	5	CHILE-ARGENTINA BORDER REGION	
01	16	32	16.2	32.298 N	35.422 E	10 G		0.6	8	DEAD SEA REGION	
01	16	41	49.4&	38.778 N	122.832 W	3			9	NORTHERN CALIFORNIA. <BRK>. ML 2.8 (BRK).	
01	18	01	39.9*	35.562 S	78.381 E	10 G	4.5	0.7	11	MID-INDIAN RISE	
01	21	18	29.2?	20.75 S	34.84 E	10 G		0.8	6	MOZAMBIQUE. MG 3.6 (BUL).	
01	21	38	24.1*	36.331 N	69.133 E	33 N	4.2	4.1	1.5	19	HINDU KUSH REGION
a 01	22	46	50.7	21.870 S	179.455 W	593 D	5.5	0.9	142	FIJI ISLANDS REGION	
01	23	50	06.0%	40.293 N	27.302 E	10 G		0.2	5	TURKEY	
02	00	02	29.9	19.879 S	177.468 W	377	4.8	0.9	41	FIJI ISLANDS REGION	
02	00	37	13.7	24.510 N	123.261 E	79	5.0	0.9	118	SOUTHWESTERN RYUKYU ISLANDS. Felt (II JMA) on Ishigaki-shima.	
02	01	49	04.3&	61.291 N	146.895 W	40			35	SOUTHERN ALASKA. <AGS-P>.	
02	04	20	38.6	31.317 S	68.226 W	112	4.5	1.0	28	SAN JUAN PROVINCE, ARGENTINA	
02	05	00	20.5&	38.559 N	112.695 W	1			27	UTAH. <SLC-P>. ML 3.4 (SLC).	
02	05	23	14.5	39.272 S	174.703 E	196	4.9	1.2	43	NORTH ISLAND, NEW ZEALAND. Felt on southern North Island and at Christchurch, South Island.	
02	05	56	33.2*	5.499 S	152.253 E	50 *	4.1	1.2	13	NEW BRITAIN REGION	
02	06	57	20.5?	8.35 S	148.63 E	188 *	4.1	1.0	6	EAST PAPUA NEW GUINEA REGION	
02	08	59	54.0?	37.95 N	37.14 E	10 G		1.3	7	TURKEY	
02	09	09	35.5&	45.569 N	111.704 W	4			6	MONTANA. <BUT>. ML 2.6 (BUT). Felt in the Norris area.	
02	10	15	48.3	43.489 N	21.569 E	10 G		1.2	14	YUGOSLAVIA. ML 2.7 (TTG).	
02	10	34	00.2	40.357 N	25.228 E	10 G		1.2	9	AEGEAN SEA	
02	10	39	19.1*	31.352 S	67.997 W	10 G		1.1	8	SAN JUAN PROVINCE, ARGENTINA	
02	10	41	25.3&	38.552 N	112.704 W	1			13	UTAH. <SLC-P>. ML 2.9 (SLC).	
02	11	01	19.1*	30.829 N	35.816 E	0 G		0.8	8	DEAD SEA REGION. Probable explosion.	
02	11	19	36.8*	4.796 S	128.256 E	229 *	4.7	1.0	12	BANDA SEA	
02	12	13	30.4*	31.089 N	36.230 E	0 G		0.9	7	DEAD SEA REGION. Probable explosion.	
02	12	32	58.7*	29.601 N	101.888 E	33 N	4.3	1.5	6	SICHUAN PROVINCE, CHINA	
02	13	13	56.7?	58.23 N	6.15 E	0 G		1.4	5	SOUTHERN NORWAY. ML 2.4 (BER). Probable explosion.	
02	14	00	18.8*	36.800 N	138.682 E	33 N	3.9	0.6	5	HONSHU, JAPAN	

02	14 55 47.3*	8.661 S	159.579 E	97	4.5	1.0	26	SOLOMON ISLANDS. Felt at Honiara.
02	15 23 19.6*	37.668 N	21.758 E	68 *	3.8	0.9	8	SOUTHERN GREECE
02	17 39 29.2?	13.93 S	164.05 E	33 N	4.5	1.4	8	VANUATU ISLANDS REGION
02	18 51 05.3?	27.03 N	66.87 E	33 N	3.7	1.1	5	PAKISTAN
02	19 00 07.6	9.236 N	122.192 E	33 N	4.5	1.2	21	NEGROS, PHILIPPINE ISLANDS
02	19 29 17.8	37.988 N	27.397 E	10 G		1.1	17	TURKEY. MD 3.8 (ATH).
02	19 48 09.9*	36.437 N	9.672 W	10 G		1.4	8	WEST OF GIBRALTAR. MG 3.4 (MTH).
02	20 22 55.8*	9.150 S	118.930 E	33 N	3.1	0.8	6	SUMBAWA ISLAND REGION
02	20 41 49.2*	60.014 N	152.158 W	63			49	SOUTHERN ALASKA. <AGS-P>.
02	21 02 30.7*	26.073 S	28.317 E	5 G		1.2	7	REPUBLIC OF SOUTH AFRICA. MG 3.9 (BUL).
02	22 33 02.9*	21.551 S	67.652 W	33 N		1.2	7	CHILE-BOLIVIA BORDER REGION
02	22 50 02.5*	12.580 S	166.863 E	136 *	4.9	0.9	47	SANTA CRUZ ISLANDS
02	23 37 03.6?	26.65 S	117.80 E	10 G		1.0	7	WESTERN AUSTRALIA
03	00 04 53.4	19.745 N	71.460 W	34	5.0 5.0	1.0	180	DOMINICAN REPUBLIC REGION. Minor damage in the Monte Cristi-Castanuela-Villa Vasquez area.
03	00 04 56.1*	36.686 N	71.468 E	33 N	4.7	1.3	14	AFGHANISTAN-USSR BORDER REGION
03	00 50 25.0	19.502 S	177.763 W	439 ?	4.3	0.9	22	FIJI ISLANDS REGION
03	00 52 55.3	21.270 N	93.829 E	53 D	4.8	0.7	79	BURMA
a 03	01 15 33.7	2.836 S	129.510 E	20	5.7 4.8	1.1	119	CERAM
03	02 38 48.2*	63.168 N	147.755 W	0			42	CENTRAL ALASKA. <AGS-P>. ML 3.3 (PMR).
03	02 57 54.1*	24.315 S	69.997 W	159 ?		0.9	7	NORTHERN CHILE
03	03 59 19.9	3.996 N	126.044 E	170 *	5.1	1.0	33	TALAUD ISLANDS
o 03	04 10 13.4	9.360 N	122.279 E	52	5.3 4.7	1.0	111	NEGROS, PHILIPPINE ISLANDS
03	04 24 35.3	9.268 N	122.254 E	33 N	4.8	1.0	26	NEGROS, PHILIPPINE ISLANDS
03	04 28 03.8?	11.80 N	86.47 W	177 ?	4.4	0.3	12	NEAR COAST OF NICARAGUA
03	04 51 03.9*	39.678 N	27.882 E	10 G		0.4	7	TURKEY
03	05 01 25.2*	41.747 N	22.996 E	10 G		0.6	7	YUGOSLAVIA. ML 2.6 (SKO).
03	06 39 58.7*	43.660 N	20.495 E	10 G		1.2	9	YUGOSLAVIA. ML 2.8 (TTG).
f 03	06 40 13.9	58.893 S	158.513 E	33 N	5.9 7.3	1.0	292	MACQUARIE ISLANDS REGION. Ms 7.7 (BRK), 6.9 (PAS). Multiple event, based on broadband displacement seismograms.
03	07 46 01.9	41.448 N	19.846 E	10 G		0.6	11	ALBANIA. MD 2.9 (TTG).
o 03	08 01 36.2	59.538 S	159.005 E	33 N	6.1 6.8	1.2	275	MACQUARIE ISLANDS REGION
03	08 33 22.9*	6.367 S	104.826 E	33 N	4.9	1.0	17	SUNDA STRAIT
03	08 36 15.5	59.553 S	159.062 E	33 N	5.4	0.8	40	MACQUARIE ISLANDS REGION
03	09 08 11.7	38.784 N	75.289 E	33 N	4.8	1.2	48	SOUTHERN XINJIANG, CHINA
03	09 20 06.1?	59.51 S	159.17 E	33 N	4.7	0.9	5	MACQUARIE ISLANDS REGION
03	09 31 03.4	30.886 N	131.628 E	51	5.1	1.2	43	KYUSHU, JAPAN
03	09 42 29.2	59.434 S	159.147 E	33 N	5.0	1.0	47	MACQUARIE ISLANDS REGION
03	10 05 08.4	11.166 N	61.951 W	83 *		1.3	22	WINDWARD ISLANDS. Felt (III) on Trinidad.
03	11 08 22.5	59.588 S	159.270 E	33 N	5.5 5.9	0.9	117	MACQUARIE ISLANDS REGION
03	11 31 12.8*	59.432 S	159.253 E	33 N	4.6	1.3	11	MACQUARIE ISLANDS REGION
03	11 32 18.6*	40.355 N	25.960 E	10 G		1.5	8	AEGEAN SEA
03	12 22 05.4	35.840 N	140.097 E	80	4.8	1.0	36	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito and Utsunomiya; (I JMA) at Tokyo, Yokohama and Ajira.
03	12 39 55.0	35.895 N	30.623 E	45	5.0 4.4	1.1	214	EASTERN MEDITERRANEAN SEA. Felt on southern Cyprus.
03	14 08 43.8?	59.18 S	160.02 E	33 N	4.4	0.9	6	MACQUARIE ISLANDS REGION
03	14 41 17.4*	6.523 S	103.688 E	33 N	4.8	1.1	21	SOUTHWEST OF SUMATRA
03	15 26 21.1	7.156 S	154.283 E	33 N	4.9	1.2	34	SOLOMON ISLANDS. Felt (III) at Arawa, Baugainville.
03	16 00 48.5	32.250 S	71.274 W	33 N		1.3	14	NEAR COAST OF CENTRAL CHILE
03	16 24 53.5	40.489 N	29.263 E	11	4.1	1.3	38	TURKEY
03	16 32 55.3*	40.461 N	29.273 E	10 G		0.1	5	TURKEY
03	17 14 31.1*	40.466 N	29.211 E	10 G		0.4	7	TURKEY
03	18 15 50.5	9.130 S	80.734 W	33 N	4.9	0.8	42	OFF COAST OF NORTHERN PERU
03	18 25 42.0?	37.88 N	25.62 W	10 G		1.5	5	AZORES ISLANDS
03	18 30 41.8*	40.461 N	29.229 E	10 G		0.5	9	TURKEY
03	20 35 17.5	9.367 N	122.446 E	33 N	4.9 4.2	1.1	53	NEGROS, PHILIPPINE ISLANDS
03	21 02 23.2*	36.577 N	27.051 E	150 ?	3.9	0.7	19	DODECANESE ISLANDS
03	22 36 00.9*	59.996 N	152.171 W	81			37	SOUTHERN ALASKA. <AGS-P>.
03	23 10 21.1*	50.755 N	6.025 E	10 G		0.8	5	GERMANY
03	23 11 18.1?	29.40 S	176.90 W	33 N	4.6	0.9	10	KERMADEC ISLANDS REGION
04	00 24 25.8*	40.507 N	29.238 E	10 G		1.4	5	TURKEY
a 04	00 30 43.1	16.411 S	167.742 E	192	5.1	1.2	52	VANUATU ISLANDS
04	00 35 56.0*	9.455 N	122.743 E	33 N	4.7	1.0	14	NEGROS, PHILIPPINE ISLANDS
04	01 19 30.5	22.904 N	121.407 E	33 N	4.4 4.6	1.1	35	TAIWAN REGION. Felt on southeastern Taiwan.
04	01 40 29.9	45.665 N	26.472 E	161	4.4	1.0	123	ROMANIA
04	02 06 13.7*	33.670 N	137.304 E	351	4.0	0.7	18	NEAR S. COAST OF HONSHU, JAPAN
f 04	04 27 08.8	49.293 N	156.410 E	33 N	5.9 6.2	0.9	398	KURIL ISLANDS. Ms 5.9 (BRK), 5.8 (PAS). Felt (V) on Shumshu and at Mys Vasilyeva; (IV) at Severo-Kurilsk.
04	07 25 24.1	34.860 N	34.511 E	10 G		1.1	14	CYPRUS. ML 3.7 (BHL).
04	07 35 04.7	15.683 N	46.682 W	10 G	4.8 4.5	1.1	28	NORTH ATLANTIC RIDGE
04	08 38 06.5*	61.760 N	1.539 E	10 G		1.1	14	NORWEGIAN SEA. MD 2.9 (BER).
04	08 57 06.8*	23.642 S	66.737 W	219 *		0.6	8	JUJUY PROVINCE, ARGENTINA
04	09 46 18.1*	25.689 S	64.386 W	33 N		0.2	5	SALTA PROVINCE, ARGENTINA
04	09 58 33.0	45.652 N	26.461 E	169	4.3	1.2	45	ROMANIA
04	10 50 37.6?	5.97 S	146.74 E	193 *	4.3	0.8	9	EAST PAPUA NEW GUINEA REGION
04	10 59 39.7*	31.022 N	36.031 E	0 G		0.9	7	DEAD SEA REGION. Probable explosion.
04	11 00 00.9	35.635 N	27.347 E	72	4.2	1.1	44	DODECANESE ISLANDS
04	11 06 23.9	15.595 N	46.710 W	10 G	5.0 4.7	0.8	45	NORTH ATLANTIC RIDGE
04	11 23 46.1	23.957 S	66.777 W	202	4.8	1.1	78	JUJUY PROVINCE, ARGENTINA
04	11 42 32.9?	36.50 S	72.66 W	33 N	3.4	1.4	8	NEAR COAST OF CENTRAL CHILE
04	12 00 55.1*	46.814 N	9.074 E	10 G		1.0	5	SWITZERLAND
04	14 02 08.7*	40.466 N	29.178 E	10 G		0.8	10	TURKEY
04	14 34 38.7	5.363 S	152.220 E	50	5.0 3.9	1.1	45	NEW BRITAIN REGION
04	14 48 01.1*	7.084 S	131.234 E	123 *	4.2	1.0	8	TANIMBAR ISLANDS REGION
04	16 10 36.0*	49.860 N	154.638 E	33 N	4.7	0.8	39	KURIL ISLANDS
04	16 42 49.1	43.242 N	13.874 E	19	5.1 4.6	1.2	225	CENTRAL ITALY. ML 4.7 (VKA), 4.7 (LDG), 4.7 (TRI). MD 5.1 (TTG), 4.8 (KBA). Two people injured and damage (VIII) in the Porto San Giargio-Fermo-Pedasa area. Same damage in the Civitanova Marche-Porto Recanati area. Felt from Pesaro to Campobasso.
04	17 31 59.7*	61.821 S	54.165 W	10 G	4.6	1.4	11	SOUTH SHETLAND ISLANDS
04	18 23 47.8*	40.446 N	29.215 E	10 G		0.8	6	TURKEY

04	18 34 35.8%	46.355 N	7 431 E	10 G	1.3	6	SWITZERLAND
04	19 23 18.6*	5.903 S	154.952 E	242	4.5	0.9	14 SOLOMON ISLANDS
04	20 15 35.1	40.444 N	29.202 E	10 G	3.5	0.9	22 TURKEY
04	20 29 08.3%	40.452 N	29.260 E	10 G		0.4	7 TURKEY
04	20 47 37.0*	3.188 N	126.895 E	33 N	4.6	1.3	26 TALAUD ISLANDS
04	20 57 47.3?	3.37 N	126.93 E	33 N	4.4	1.1	9 TALAUD ISLANDS
04	21 28 42.7*	3.196 N	126.880 E	33 N	4.7	1.2	22 TALAUD ISLANDS
04	22 02 32.8%	40.442 N	29.213 E	10 G		0.5	7 TURKEY
04	22 05 30.7?	3.17 S	142.91 E	33 N	3.7	1.4	6 NEAR N COAST OF PAPUA NEW GUINEA
04	22 16 08.4*	49.041 N	6.719 E	10 G		0.9	8 GERMANY
04	22 39 32.1?	13.37 N	90.74 W	33 N	4.6	0.7	11 NEAR COAST OF GUATEMALA
04	23 31 17.2*	43.343 N	146.582 E	51 *	4.6	0.7	13 KURIL ISLANDS. Felt (I JMA) at Nemura, Hokkaido.
05	01 17 20.8*	65.686 N	12.318 E	10 G		1.5	6 NORTHERN NORWAY. MD 3.4 (BER).
a 05	02 59 50.3*	59.561 S	158.603 E	33 N	4.5	1.1	13 MACQUARIE ISLANDS REGION
05	05 32 40.7?	4.78 S	135.07 E	33 N	3.6	0.6	6 WEST IRIAN REGION
05	06 06 43.7*	20.715 S	69.523 W	154 *		1.0	9 NORTHERN CHILE
05	06 49 27.9	43.440 N	19.842 E	10 G		0.9	8 YUGOSLAVIA. ML 2.5 (TTG).
05	08 41 07.5	23.850 N	93.820 E	74 *	4.8	1.3	15 BURMA-INDIA BORDER REGION
05	08 54 39.3?	7.03 S	129.91 E	184 *	4.2	1.3	12 BANDA SEA
05	11 15 57.6	31.021 N	36.015 E	0 G		0.9	8 DEAD SEA REGION. Probable explosion.
05	11 33 30.0*	28.318 N	140.167 E	319 ?	4.3	1.1	29 BONIN ISLANDS REGION
05	11 51 09.4*	31.767 S	67.161 W	127 *		1.1	14 SAN JUAN PROVINCE, ARGENTINA
05	12 24 40.3?	7.87 S	128.73 E	110 ?	4.1	1.5	8 BANDA SEA
05	12 49 59.4*	65.306 N	1.201 E	10 G		1.3	14 NORWEGIAN SEA. ML 3.1 (BER).
05	13 50 38.9*	3.179 N	126.888 E	33 N	4.8	1.4	29 TALAUD ISLANDS
05	14 26 51.6?	2.72 N	127.07 E	33 N	4.5	0.4	7 MOLUCCA PASSAGE
a 05	15 58 41.5	10.553 S	161.569 E	108	5.0	0.9	73 SOLOMON ISLANDS
05	16 37 59.6	40.479 N	29.250 E	10 G		0.6	9 TURKEY
05	16 59 13.5	44.294 N	6.678 E	19		0.9	28 FRANCE. ML 3.2 (LDG).
05	17 01 14.0%	40.367 N	124.490 W	17			6 NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).
05	18 22 43.1?	41.60 N	1.85 E	10 G		1.2	8 SPAIN. ML 3.2 (LDG).
05	19 09 29.4?	8.57 S	109.54 E	134 ?	4.5	1.1	11 JAVA
05	19 48 37.3	3.579 S	150.807 E	33 N	4.7	1.4	31 NEW IRELAND REGION
05	20 43 08.9?	31.34 S	67.90 W	33 N		1.4	B SAN JUAN PROVINCE, ARGENTINA
05	20 46 12.1	22.500 N	118.730 E	11	5.1 4.1	1.0	103 TAIWAN REGION. Felt in the Chaazhou-Zhangzhou-Quanzhou area, Peoples Republic of China.
05	22 30 24.4	33.340 N	140.671 E	85	4.6	0.7	23 SOUTH OF HONSHU, JAPAN. Felt (II JMA) on Hachija-jima.
05	23 37 42.4?	22.69 N	118.54 E	33 N		1.4	5 TAIWAN REGION
05	23 46 28.4?	7.69 S	128.50 E	195 ?	3.8	0.5	6 BANDA SEA
05	23 51 50.7?	33.42 N	4.02 W	10 G		1.5	7 MOROCCO
06	00 46 18.4?	8.80 S	128.38 E	33 N	4.4	1.0	7 TIMOR SEA
06	01 46 17.4	44.080 N	13.026 E	10 G		1.3	67 ADRIATIC SEA. ML 4.0 (KBA), 3.6 (LDG). MD 3.7 (TRI).
06	02 33 31.0	15.949 N	93.164 W	97 D	4.9	1.1	59 NEAR COAST OF CHIAPAS, MEXICO
06	02 46 11.9?	39.10 N	40.35 E	10 G	4.3	0.9	7 TURKEY
06	03 54 51.4%	57.343 N	149.949 W	42			32 GULF OF ALASKA. <AGS-P>.
06	05 02 48.4	44.521 N	6.911 E	10 G		0.4	10 FRANCE. ML 2.7 (LDG).
06	05 59 08.6	44.428 N	7.337 E	10 G		0.3	8 NORTHERN ITALY. ML 2.7 (LDG).
06	06 54 00.2*	1.497 S	77.487 W	198 ?	4.4	0.9	19 ECUADOR
06	07 16 38.9?	8.63 S	130.95 E	33 N	4.7	1.4	5 TANIMBAR ISLANDS REGION
06	07 46 39.7*	41.540 N	141.648 E	33 N	4.4	1.2	11 HOKKAIDO, JAPAN REGION. Felt (I JMA) at Hachinohe, Honshu.
06	08 04 09.2*	43.666 N	12.929 E	10 G		1.1	5 CENTRAL ITALY
06	08 05 27.5	34.748 S	8.716 E	10 G	4.7 3.8	1.0	23 SOUTH ATLANTIC OCEAN. Believed to be the first earthquake located in this area since October, 1957.
06	09 05 53.9	26.979 N	35.018 E	10 G	4.9	1.0	35 RED SEA
06	09 20 12.0?	23.06 N	142.32 E	33 N	4.6	0.8	8 VOLCANO ISLANDS REGION
06	12 55 50.7	6.920 S	155.145 E	33 N	4.3	1.4	13 SOLOMON ISLANDS. Felt (III) at Arawa and Panguna, Bougainville.
06	14 31 13.5?	40.94 N	125.54 W	10 G		0.4	5 OFF COAST OF NORTHERN CALIFORNIA. ML 3.1 (BRK).
a 06	15 27 22.4	49.262 N	156.266 E	43 D	5.7 5.5	0.8	344 KURIL ISLANDS
06	16 02 48.5%	40.476 N	29.212 E	10 G		1.0	9 TURKEY
06	17 08 31.1%	62.752 N	150.604 W	87			37 CENTRAL ALASKA. <AGS-P>.
06	17 36 12.6?	43.56 N	146.63 E	70 *	4.4	0.3	8 KURIL ISLANDS
06	19 42 44.1	40.062 N	21.534 E	10 G		0.8	12 GREECE
06	19 59 35.0	49.132 N	156.186 E	51 D	5.2	0.9	121 KURIL ISLANDS
06	20 06 22.9*	39.127 N	28.038 E	10 G		1.1	5 TURKEY
06	20 33 33.2%	45.555 N	111.720 W	3			6 MONTANA. <BUT>. ML 2.6 (BUT).
06	20 41 42.3	6.062 S	148.506 E	43 *	4.7 4.5	1.3	35 NEW BRITAIN REGION
06	20 48 48.2	28.900 S	67.514 W	155 *		1.0	16 LA RIOJA PROVINCE, ARGENTINA
a 06	21 54 00.9	49.213 N	156.221 E	33 N	5.3 5.6	1.0	249 KURIL ISLANDS
06	22 15 44.7?	49.19 N	156.30 E	33 N	4.6	0.9	17 KURIL ISLANDS
06	22 17 31.0*	7.053 S	129.463 E	168 ?		1.5	8 BANDA SEA
06	23 28 22.5?	8.44 S	130.79 E	33 N	4.5	0.9	5 TANIMBAR ISLANDS REGION
06	23 38 52.4	26.689 N	93.414 E	44 D	5.1 4.3	0.9	137 EASTERN INDIA
06	23 48 05.2	6.896 S	128.653 E	242 *	4.8	1.0	19 BANDA SEA
06	23 54 38.0*	6.088 S	150.415 E	67 ?	4.3	1.2	8 NEW BRITAIN REGION
07	00 01 01.2	23.766 S	179.941 E	533 *	5.0	0.9	38 SOUTH OF FIJI ISLANDS
07	01 08 10.8	43.175 N	26.023 E	5 G		1.2	8 BULGARIA
07	02 20 31.0*	4.057 S	138.798 E	33 N	5.2	1.3	19 WEST IRIAN
07	05 44 30.1	9.348 N	122.396 E	33 N	5.0 3.9	1.0	44 NEGROS, PHILIPPINE ISLANDS
07	05 46 43.2%	59.972 N	152.966 W	106			29 SOUTHERN ALASKA. <AGS-P>.
07	06 47 14.5*	6.304 S	151.039 E	33 N	4.4	1.3	8 NEW BRITAIN REGION
07	07 09 48.6*	2.250 N	99.739 W	10 G	5.0 4.8	1.3	43 WEST OF GALAPAGOS ISLANDS
07	10 05 46.3	36.394 N	70.783 E	201 *	4.5	1.1	25 HINDU KUSH REGION
07	10 17 02.7%	33.235 S	70.603 W	33 N		1.2	6 CHILE-ARGENTINA BORDER REGION
07	10 38 07.0	37.554 N	118.387 W	5 G		0.6	12 CALIFORNIA-NEVADA BORDER REGION. ML 3.1 (PAS).
07	11 21 40.9	37.043 N	3.602 W	5 G		1.1	9 SPAIN. MG 3.2 (MDD). Felt (III) at Dilar.
07	11 22 14.4*	2.162 N	129.651 E	33 N	4.4	0.8	9 HALMAHERA
a 07	11 32 27.3	39.367 N	54.755 E	37 D	5.5 5.5	0.9	286 TURKMEN SSR
a 07	11 57 09.4	31.089 S	177.968 W	33 N	5.8 6.7	1.3	249 KERMADEC ISLANDS REGION. Ms 6.7 (BRK).
07	12 25 05.9	43.744 N	20.390 E	10 G		0.8	7 YUGOSLAVIA. ML 2.8 (TTG).
07	12 30 15.8?	5.72 S	154.59 E	415 *	4.0	1.1	11 SOLOMON ISLANDS
07	13 14 56.9	64.955 N	147.929 W	23	4.3	0.6	13 CENTRAL ALASKA. ML 4.2 (PMR). Felt (IV) at Fairbanks.

09	19	20	40.3*	59.093	S	159.493	E	33	N	4.6	0.5	7	MACQUARIE ISLANDS REGION
09	20	22	50.7	38.351	N	22.372	E	30		3.7	1.1	19	GREECE. ML 3.4 (ATH).
09	21	15	02.0*	46.580	N	7.313	E	10	G		1.2	10	SWITZERLAND. ML 2.5 (LDG).
09	21	40	09.1	41.702	N	19.390	E	29		3.7	1.3	54	ALBANIA. MD 3.9 (ATH), 3.5 (TTG).
09	22	45	16.9&	62.284	N	150.410	W	6				40	CENTRAL ALASKA. <AGS-P>. ML 3.9 (PMR) Felt (IV) at Talkeetna.
09	23	29	30.0	33.710	N	47.125	E	68		4.7	0.9	42	WESTERN IRAN
10	00	16	20.5	37.065	N	3.603	W	5	G		0.8	7	SPAIN. MG 2.8 (MDD).
10	00	45	03.5	80.568	N	3.936	W	10	G	4.7	1.2	48	NORTH OF SVALBARD
10	00	46	59.1	25.390	N	128.559	E	33	N	5.0	1.1	43	RYUKYU ISLANDS
10	02	26	23.4	7.123	S	123.290	E	604		5.4	0.9	181	BANDA SEA
10	02	32	54.7?	10.58	N	85.21	W	33	N		1.2	6	COSTA RICA. MD 4.0 (HDC).
10	02	36	16.2&	62.362	N	150.274	W	55				24	CENTRAL ALASKA. <AGS-P>.
10	03	11	56.7*	23.424	N	122.996	E	33	N	4.3	1.4	11	TAIWAN REGION
10	03	40	56.4	19.197	S	68.532	W	33	N		0.6	8	CHILE-BOLIVIA BORDER REGION
10	03	48	44.8	51.931	N	176.006	W	49	D	5.1	0.9	144	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.5 (PMR). Felt (IV) an Adak.
10	04	03	37.5	34.404	N	23.116	E	33	N	4.2	1.3	60	CRETE. ML 4.1 (ATH).
10	04	45	56.8	44.686	N	114.195	W	5	G		0.6	14	WESTERN IDAHO. ML 3.4 (NEIS). Felt at Challis.
10	07	18	55.2*	2.594	S	133.991	E	33	N	4.5	1.3	26	WEST IRIAN REGION
10	08	05	22.8?	18.29	N	66.99	W	33	N		1.2	6	PUERTO RICO REGION
10	08	26	26.7*	28.546	S	69.174	W	218	?		0.7	7	CHILE-ARGENTINA BORDER REGION
10	09	47	57.9?	6.20	N	82.61	W	10	G		0.2	9	SOUTH OF PANAMA. MD 4.3 (HDC).
10	10	18	45.3&	58.906	N	152.495	W	73				16	KODIAK ISLAND REGION. <AGS-P>.
10	10	32	32.0	6.861	N	73.181	W	156		4.9	0.8	59	NORTHERN COLOMBIA. Felt at Bucaramanga and in parts of northeastern Colombia.
10	11	28	40.0?	9.01	S	108.40	W	10	G	4.8	1.4	24	NORTHERN EASTER I. CORDILLERA
10	13	24	22.6	43.248	N	13.892	E	10	G	3.7	1.1	113	CENTRAL ITALY. ML 4.6 (KBA), 4.3 (TRI), 4.2 (LDG), 4.1 (TTG).
10	13	36	43.9	43.341	N	13.875	E	11			1.2	30	CENTRAL ITALY. ML 3.7 (LDG).
10	14	04	59.7?	37.34	N	20.39	E	10	G	4.4	1.3	8	IONIAN SEA. ML 3.6 (ATH).
10	14	43	47.1	3.069	N	126.697	E	71	*	5.2	1.3	69	TALAUD ISLANDS
10	14	54	10.3?	36.33	N	5.50	W	10	G		1.5	5	STRAIT OF GIBRALTAR
10	14	57	28.8%	37.019	N	4.673	W	10	G		1.3	12	SPAIN
10	16	09	17.4	41.956	N	20.950	E	10	G		1.1	25	ALBANIA. ML 3.6 (SKO). Felt (V) at Tetovo, Yugoslavia.
10	16	20	47.3	48.255	N	7.705	E	10	G		0.2	7	FRANCE. ML 2.3 (LDG).
10	16	34	46.2*	43.797	N	20.698	E	10	G	3.3	0.9	7	YUGOSLAVIA
10	17	12	15.3*	46.066	N	0.073	W	10	G		1.3	7	FRANCE. ML 2.7 (LDG).
10	17	58	16.0	3.080	N	126.721	E	73	*	5.0	1.1	62	TALAUD ISLANDS
10	18	07	29.0?	7.66	N	125.61	E	85	?		0.8	10	MINDANAO, PHILIPPINE ISLANDS
10	20	17	34.9*	28.024	S	66.728	W	179	?		0.6	6	CATAMARCA PROVINCE, ARGENTINA
10	20	31	42.5*	24.037	S	175.435	W	33	N	4.8	0.9	20	SOUTH OF TONGA ISLANDS
10	21	20	46.9	49.144	N	6.815	E	9			0.8	15	GERMANY. ML 2.8 (KBA).
10	21	53	15.0	43.905	N	147.834	E	37	*	5.2	0.9	112	KURIL ISLANDS
10	21	55	23.3*	30.409	S	178.121	W	33	N	4.3	1.2	9	KERMADEC ISLANDS
10	22	16	12.7	46.109	N	0.068	E	10	G		1.1	13	FRANCE. ML 3.1 (LDG).
11	00	06	51.7*	22.332	S	67.635	W	192	*	4.8	1.5	13	CHILE-BOLIVIA BORDER REGION
11	00	11	10.2*	78.719	N	4.888	E	10	G	3.7	1.2	5	GREENLAND SEA
11	00	34	52.1	22.329	S	68.384	W	130		5.4	1.0	150	NORTHERN CHILE. Felt (V) at Calama and (III) at Antofagasta.
11	00	45	07.6*	40.878	N	28.344	E	10	G		0.6	5	TURKEY
11	00	48	16.4?	16.99	N	40.34	E	10	G	4.8	1.0	15	RED SEA
11	01	11	48.2*	33.143	S	71.752	W	52	*		1.2	19	NEAR COAST OF CENTRAL CHILE. Felt (II) at Santiago.
11	01	29	53.1*	31.423	S	177.746	W	33	N	5.1	1.5	18	KERMADEC ISLANDS REGION
11	03	19	40.0	39.474	N	20.385	E	15		3.5	1.0	25	GREECE-ALBANIA BORDER REGION. MD 3.4 (ATH), 3.3 (TIR).
11	04	02	02.7	31.431	S	70.756	W	90	D	5.2	0.9	91	CHILE-ARGENTINA BORDER REGION. Felt (II) at Santiago, Chile.
11	05	25	50.3	44.530	N	7.275	E	6			0.7	19	NORTHERN ITALY. ML 3.0 (LDG).
11	05	57	17.0	44.687	N	9.023	E	10	G		0.3	10	NORTHERN ITALY
11	06	39	53.7*	31.484	S	72.204	W	33	N		1.0	12	OFF COAST OF CENTRAL CHILE
11	10	28	09.3	7.447	S	128.653	E	158	*	4.7	1.2	19	BANDA SEA
11	12	28	47.1	10.137	N	86.817	W	33	N	4.5	0.5	19	OFF COAST OF COSTA RICA. MD 4.5 (HDC), 4.4 (SJR).
11	13	03	03.4	35.730	N	4.538	W	118			0.9	40	STRAIT OF GIBRALTAR
11	13	13	10.9&	46.353	N	122.251	W	13				89	WASHINGTON. <SEA-P>. CL 2.8 (SEA).
11	13	19	04.0?	22.08	S	175.40	W	116	?	4.6	1.2	18	TONGA ISLANDS REGION
11	14	46	33.3&	41.465	N	72.500	W	5				7	SOUTHERN NEW ENGLAND. <WES>. CL 2.4 (WES). Felt (V) at East Haddam and (IV) at Chester, Hadlyme and Moodus, Connecticut. Also felt at Calchester and Marlborough, Connecticut.
11	15	34	29.3?	15.43	N	61.35	W	158	?		0.3	9	LEEWARD ISLANDS
11	16	42	08.0	36.900	N	5.261	W	10	G		1.2	7	STRAIT OF GIBRALTAR
11	18	04	39.3?	52.05	N	17.17	E	10	G		0.7	8	POLAND. ML 3.6 (VKA), 3.5 (KBA).
11	18	05	46.3?	51.56	N	178.71	W	33	N	4.4	1.3	7	ANDREANOF ISLANDS, ALEUTIAN IS.
11	19	22	17.0?	30.96	S	70.72	W	190	?		1.4	7	CHILE-ARGENTINA BORDER REGION
11	20	14	28.0*	66.436	N	149.777	W	10	G	4.1	1.2	9	ALASKA
11	22	08	33.0&	61.078	N	152.456	W	133		3.8		46	SOUTHERN ALASKA. <AGS-P>.
11	23	58	27.6*	52.482	S	13.260	E	10	G	4.6	0.9	12	SOUTHWEST OF AFRICA
12	00	14	17.2	38.199	N	20.486	E	22		4.3	1.4	59	GREECE. ML 4.1 (TTG), 3.9 (ATH).
12	00	18	06.1?	45.45	N	149.04	E	33	N	4.4	0.7	12	KURIL ISLANDS
12	00	40	10.5	38.772	N	100.072	E	17	*	4.6	1.5	26	GANSU PROVINCE, CHINA. ML 4.8 (BJI).
12	01	10	42.6	40.445	N	29.279	E	10	G		1.0	8	TURKEY
12	01	57	19.7?	6.38	S	130.37	E	186	?	4.6	1.5	11	BANDA SEA
12	03	06	52.9*	4.612	S	152.229	E	13	*	4.5	1.1	9	NEW BRITAIN REGION
12	04	06	13.9?	6.17	S	122.39	E	33	N		1.1	5	FLORES SEA
12	04	25	28.4?	13.01	N	46.56	W	10	G	4.6	1.0	13	NORTH ATLANTIC RIDGE
12	08	06	55.9*	42.005	N	20.429	E	10	G		1.5	10	YUGOSLAVIA. ML 2.6 (TTG).
12	08	13	40.2%	59.602	N	5.857	E	10	G		1.2	6	SOUTHERN NORWAY. MD 2.4 (BER).
12	08	14	35.0*	40.708	N	52.053	E	33	N	4.5	0.7	15	TURKMEN SSR
12	10	05	59.2	5.337	S	145.980	E	71		4.6	1.0	33	EAST PAPUA NEW GUINEA REGION
12	11	11	52.1	51.344	N	15.798	E	10	G		1.2	20	POLAND. ML 4.0 (VKA), 3.9 (KBA).
12	11	36	43.1*	20.749	S	169.034	E	19		4.8	1.3	54	VANUATU ISLANDS
12	11	36	55.3?	44.50	N	114.52	W	5	G		1.0	4	WESTERN IDAHO. ML 2.9 (NEIS).
12	12	02	47.6&	61.692	N	151.878	W	102		4.4		54	SOUTHERN ALASKA. <AGS-P>.

12	12 03 17.9?	51.48 N	16.08 E	10 G		0.4	8	POLAND. ML 3.5 (VKA). 3.1 (KBA).
12	14 27 44.2*	38.161 N	22.111 E	10 G		1.1	5	GREECE. ML 3.0 (ATH)
12	15 24 41.1%	39.835 N	29.665 E	10 G		0.9	7	TURKEY
12	17 42 29.2	43.638 N	11.966 E	10 G		1.2	29	CENTRAL ITALY. ML 3.3 (KBA). 3.2 (LDG).
12	18 54 16.8&	37.290 N	121.688 W	8			17	CENTRAL CALIFORNIA. <BRK>. ML 3.4 (BRK). Mo=2.7*10**14 Nm (BRK).
12	18 59 41.2	3.064 N	126.802 E	33 N	5.1	1.2	43	TALAUD ISLANDS
12	22 00 55.8*	35.156 N	23.930 E	22 *	4.3	1.4	112	CRETE. ML 4.0 (ATH).
12	22 06 18.2*	6.617 S	154.675 E	64 *		1.2	9	SOLOMON ISLANDS
12	23 37 34.5*	6.276 S	154.610 E	74 *	4.7	1.1	10	SOLOMON ISLANDS
13	00 43 18.4*	49.236 N	156.168 E	33 N	4.8	0.7	52	KURIL ISLANDS
13	01 23 13.9?	40.63 N	40.95 E	10 G	4.4	1.5	10	TURKEY
13	02 18 04.4	38.178 N	117.843 W	5 G		1.2	8	NEVADA. ML 2.6 (NEIS).
13	02 18 09.3*	0.635 S	13.552 W	10 G	4.5 5.0	1.1	12	NORTH OF ASCENSION ISLAND
13	02 52 36.2%	34.869 N	139.214 E	10 G		1.1	6	NEAR S. COAST OF HONSHU, JAPAN. Felt (II JMA) on Oshima and (I JMA) at Ajiro.
13	03 01 29.0?	37.50 N	26.41 E	10 G		1.6	5	DODECANESE ISLANDS
13	07 28 40.5?	3.32 S	138.75 E	33 N	4.8	1.2	7	WEST IRAN
13	07 28 53.9?	15.26 N	60.83 W	108 ?		0.3	7	LEEWARD ISLANDS
13	08 39 41.1*	17.749 S	167.547 E	33 N	4.6 4.4	1.2	23	VANUATU ISLANDS
13	10 51 50.2	37.959 N	26.828 E	10 G		1.5	12	DODECANESE ISLANDS. ML 3.9 (ATH). Felt at Izmir, Turkey.
13	11 01 37.0*	19.241 S	70.183 W	33 N		0.4	6	NEAR COAST OF NORTHERN CHILE
13	11 08 47.0?	12.06 N	89.07 W	33 N	4.3	0.5	9	OFF COAST OF CENTRAL AMERICA
a 13	11 20 52.2	14.272 N	89.979 W	123	5.1	1.0	247	GUATEMALA. mb 5.6 (BRK). Felt in southeastern Guatemala. Felt (IV) at San Salvador, El Salvador.
13	12 27 05.2	40.709 N	29.729 E	10 G		0.7	9	TURKEY
13	12 51 25.8*	16.084 N	61.186 W	33 N		0.5	5	LEEWARD ISLANDS. ML 2.1 (FDF).
a 13	14 07 43.6	39.429 N	144.732 E	34 D	5.6 4.9	0.9	281	OFF EAST COAST OF HONSHU, JAPAN. Ms 5.0 (BRK). Felt (I JMA) at Kushira and Nemuro, Hokkaido.
13	14 24 28.2?	23.04 S	66.47 W	246 ?		1.1	7	JUJUY PROVINCE, ARGENTINA
13	14 55 35.9*	39.409 N	144.821 E	33 N	4.5	0.8	9	OFF EAST COAST OF HONSHU, JAPAN
13	16 10 11.0?	6.34 S	125.17 E	555 ?	3.9	1.4	10	BANDA SEA
13	16 52 04.4	40.639 N	29.786 E	10 G		1.3	11	TURKEY
13	16 56 31.4?	35.45 N	141.23 E	33 N	4.3	1.3	5	NEAR EAST COAST OF HONSHU, JAPAN
13	19 13 15.9	36.947 N	138.423 E	28	4.6	1.5	33	HONSHU, JAPAN. Felt (I JMA) at Mito, Nagano and Takada.
a 13	20 08 51.6	34.333 S	69.971 W	10 G	5.8 5.6	1.2	195	CHILE-ARGENTINA BORDER REGION. Ms 5.7 (BRK). Felt (III) at Santiago, Chile.
13	20 12 07.8	33.889 S	70.695 W	10 G		1.4	7	CHILE-ARGENTINA BORDER REGION
13	20 23 00.4?	34.36 S	70.34 W	10 G		0.3	7	CHILE-ARGENTINA BORDER REGION
13	20 51 54.3?	34.41 S	70.30 W	10 G		0.2	7	CHILE-ARGENTINA BORDER REGION
13	22 58 35.4?	34.27 S	70.44 W	10 G		0.7	7	CHILE-ARGENTINA BORDER REGION
13	23 06 33.6	39.166 N	27.864 E	10 G		1.0	10	TURKEY
13	23 27 48.0*	41.726 N	126.963 W	10 G	3.9	0.8	41	OFF COAST OF NORTHERN CALIFORNIA
13	23 48 12.5	41.729 N	126.762 W	10 G	4.3	0.8	50	OFF COAST OF NORTHERN CALIFORNIA
13	23 55 00.0	32.643 N	24.366 E	33 N	4.1	1.5	44	NEAR COAST OF LIBYA
14	00 56 25.5	33.874 S	70.743 W	10 G		1.1	7	CHILE-ARGENTINA BORDER REGION
14	01 04 38.0?	34.28 S	70.29 W	10 G		0.2	7	CHILE-ARGENTINA BORDER REGION
14	02 04 04.1%	38.320 N	1.745 W	10 G		1.1	6	SPAIN
14	02 28 28.4*	60.384 S	28.113 W	33 N	4.6	1.2	9	SOUTH SANDWICH ISLANDS REGION
14	03 24 54.4*	5.335 S	153.517 E	60 ?	4.1	1.2	9	NEW IRELAND REGION
14	03 27 30.1&	32.647 N	117.155 W	6 G			3	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 2.7 (PAS). Felt in the San Diego area, California.
14	04 09 24.7?	21.81 S	65.88 W	293 ?		0.8	9	SOUTHERN BOLIVIA
14	04 53 50.7	17.464 S	178.893 W	580	4.9	0.8	102	FIJI ISLANDS REGION
14	05 00 51.6	39.511 N	32.031 E	18		1.4	18	TURKEY. Felt at Afyon.
14	06 57 01.5	43.667 N	12.006 E	10 G		1.5	11	CENTRAL ITALY. ML 3.2 (KBA).
14	07 25 42.8*	39.429 N	122.938 W	5 G		1.1	9	NORTHERN CALIFORNIA. ML 2.6 (BRK).
14	08 39 15.7*	34.418 S	70.274 W	10 G		0.2	7	CHILE-ARGENTINA BORDER REGION
14	09 44 27.8*	41.406 N	20.671 E	10 G		1.2	8	ALBANIA. ML 2.7 (TTG).
14	09 44 47.3?	34.31 S	70.33 W	10 G		0.3	7	CHILE-ARGENTINA BORDER REGION
14	10 09 50.5?	40.69 N	29.80 E	10 G		0.5	6	TURKEY
a 14	10 17 15.0	30.488 N	139.671 E	171 D	5.7	1.0	351	SOUTH OF HONSHU, JAPAN. mb 5.7 (BRK). Felt (I JMA) on Chichi-shima and Hachija-jima.
14	10 22 59.2*	23.637 S	177.260 W	199 *	5.0	1.3	18	SOUTH OF FIJI ISLANDS
14	11 38 40.7*	34.409 S	70.269 W	10 G		1.1	11	CHILE-ARGENTINA BORDER REGION
14	13 54 41.3*	34.428 S	70.351 W	10 G	4.6	1.3	19	CHILE-ARGENTINA BORDER REGION
14	15 05 47.2	6.524 S	154.390 E	33 N	3.9	0.5	10	SOLOMON ISLANDS
14	15 51 55.0	36.758 N	31.110 E	110	4.7	1.2	168	TURKEY
14	18 09 22.0*	6.901 N	73.194 W	158 *	4.5	1.4	11	NORTHERN COLOMBIA
14	18 31 09.1	31.775 S	71.541 W	33 N	4.2	0.8	11	NEAR COAST OF CENTRAL CHILE
14	19 53 36.3	40.476 N	19.625 E	10		0.9	22	ALBANIA. ML 3.0 (TTG).
14	20 31 46.1*	39.037 N	106.553 W	5 G		0.7	14	COLORADO. ML 2.5 (NEIS). Felt in the Aspen area.
14	22 13 19.2*	39.712 N	20.882 E	10 G		1.2	12	GREECE-ALBANIA BORDER REGION. MD 3.2 (ATH).
15	00 00 26.9%	11.244 N	41.580 E	10 G		0.2	9	ETHIOPIA
15	02 04 34.7	23.783 N	114.496 E	33 N	4.7	1.4	39	NEAR SOUTHEASTERN COAST OF CHINA. Felt (III) at Hang Kong.
15	02 06 43.2&	36.118 N	119.943 W	27			23	CENTRAL CALIFORNIA. <BRK>. ML 3.2 (BRK). 3.2 (PAS). Possibly a double event. Felt (IV) at Avenal.
15	02 33 48.2	46.446 N	7.019 E	10 G		1.5	16	SWITZERLAND. ML 2.8 (LDG).
15	03 32 55.8%	61.853 N	7.082 E	10 G		1.5	6	SOUTHERN NORWAY. MD 2.4 (BER).
15	04 24 40.9*	39.123 N	28.051 E	10 G		1.3	6	TURKEY
15	04 28 51.3&	58.085 N	150.894 W	101			39	GULF OF ALASKA. <AGS-P>.
15	04 33 40.0?	33.31 S	71.37 W	33 N		0.3	8	NEAR COAST OF CENTRAL CHILE
15	06 16 45.2	39.642 N	119.204 W	5 G		0.8	10	NEVADA. ML 2.8 (NEIS). Felt (IV) at Fernley and Wadsworth.
15	06 49 15.5&	62.718 N	152.010 W	0			42	CENTRAL ALASKA. <AGS-P>. ML 3.8 (PMR).
15	06 58 52.2&	58.975 N	152.185 W	74			29	KODIAK ISLAND REGION. <AGS-P>.
15	07 25 54.7*	51.059 N	179.270 E	33 N	4.9	1.2	20	RAT ISLANDS, ALEUTIAN ISLANDS. ML 4.4 (PMR).
15	07 49 00.0&	58.545 N	153.597 W	84			30	KODIAK ISLAND REGION. <AGS-P>.
15	07 59 52.3*	37.405 N	21.647 E	55 *	4.0	1.6	45	SOUTHERN GREECE. MD 3.8 (ATH).
a 15	08 50 09.9	4.709 S	153.157 E	63	5.3	1.0	160	NEW IRELAND REGION. Felt (IV) at Robaul and Kakapa, New Britain.

15	10 48 37.2&	36.212 N	120.307 W	13					19	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
15	15 24 17.4%	40.794 N	30.093 E	10 G		0.6			8	TURKEY
15	16 02 06.9	37.852 N	26.934 E	14	4.7	1.4			33	DODECANESE ISLANDS. ML 3.8 (ATH).
15	17 14 31.8*	56.670 S	26.190 W	85 ?	5.6	1.2			34	SOUTH SANDWICH ISLANDS REGION
15	17 47 08.4&	61.587 N	150.952 W	69					31	SOUTHERN ALASKA. <AGS-P>.
15	17 47 32.6*	41.131 N	22.874 E	10 G		1.3			5	YUGOSLAVIA
15	17 48 58.1*	41.846 N	22.653 E	10 G		0.8			5	YUGOSLAVIA
15	20 15 57.9*	6.392 N	72.400 W	33 N		0.8			5	NORTHERN COLOMBIA
15	20 58 38.6	63.017 N	150.622 W	141 ?		0.4			9	CENTRAL ALASKA
15	21 03 06.8*	24.894 S	71.433 W	33 N		0.8			8	OFF COAST OF NORTHERN CHILE
15	23 26 06.7	38.151 N	23.862 E	7		1.0			21	GREECE. ML 3.3 (ATH). Felt in the Athens area.
16	00 07 34.7&	40.348 N	124.618 W	20					8	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).
16	00 08 02.9?	32.69 S	178.90 W	33 N	4.8 4.5	1.3			11	SOUTH OF KERMADEC ISLANDS
16	01 18 14.2	36.787 N	21.506 E	66	4.3	1.3			100	SOUTHERN GREECE
16	01 34 09.0*	44.659 N	7.275 E	10 G		0.1			5	NORTHERN ITALY. ML 2.4 (LDG).
16	01 54 46.4?	34.23 S	70.38 W	10 G		0.5			8	CHILE-ARGENTINA BORDER REGION
16	02 19 08.6*	6.351 S	148.579 E	69 ?	4.1	1.5			7	NEW BRITAIN REGION
16	02 37 42.6*	66.450 N	18.129 W	10 G	4.2	1.0			22	ICELAND REGION
16	04 02 19.3?	3.82 S	143.20 E	97 ?	4.1	1.0			6	NEAR N COAST OF PAPUA NEW GUINEA
16	05 28 06.2?	34.27 S	70.34 W	10 G		0.5			8	CHILE-ARGENTINA BORDER REGION
16	05 41 25.0*	15.301 S	173.523 W	33 N	4.9	1.3			44	TONGA ISLANDS
16	05 41 50.5?	15.85 N	60.21 W	33 N		1.3			6	LEEWARD ISLANDS ML 2.7 (FDF).
16	06 40 15.5%	40.026 N	27.522 E	10 G		0.5			5	TURKEY
16	07 53 32.5*	61.577 N	6.915 E	10 G		0.6			5	SOUTHERN NORWAY MD 2.5 (BER).
16	08 38 48.2*	10.520 S	123.679 E	33 N		0.8			6	TIMOR
16	09 09 52.6*	24.355 N	125.264 E	52 *	4.8	1.4			26	SOUTHWESTERN RYUKYU ISLANDS
16	09 20 24.9?	15.06 N	60.49 W	33 N		0.1			6	LEEWARD ISLANDS ML 2.5 (FDF).
16	11 18 29.7?	46.59 N	0.94 W	26 *		0.8			7	FRANCE. ML 2.4 (LDG).
16	12 16 03.5	7.288 S	126.110 E	455 *	4.7	1.1			26	BANDA SEA
16	12 29 43.1?	28.79 S	177.98 W	231 *	4.9	1.2			13	KERMADEC ISLANDS REGION
16	12 41 56.4	9.073 N	126.572 E	60 *	5.2 4.2	1.3			87	MINDANAO, PHILIPPINE ISLANDS
16	13 01 54.7	41.265 N	23.736 E	10 G		1.3			12	GREECE-BULGARIA BORDER REGION. ML 2.2 (SKO).
16	13 07 54.6	45.942 N	13.890 E	10 G		0.9			6	NORTHERN ITALY. ML 3.1 (KBA). MD 2.9 (TRI).
16	13 23 22.0*	9.069 N	126.715 E	33 N	4.7	1.3			18	MINDANAO, PHILIPPINE ISLANDS
16	14 01 25.7	38.878 N	23.573 E	10 G		1.2			7	GREECE. ML 3.4 (ATH).
16	16 06 03.3	37.404 N	57.221 E	34 *	4.6	1.1			48	IRAN-USSR BORDER REGION. Felt at Bojnurd, Iran.
16	16 17 38.6&	61.812 N	149.662 W	41					39	SOUTHERN ALASKA. <AGS-P>. ML 3.0 (PMR).
16	17 57 26.4	52.087 N	95.699 E	33 N	4.8	1.0			73	CENTRAL USSR
16	18 36 03.3	46.562 N	10.562 E	10 G		1.4			10	NORTHERN ITALY. ML 2.4 (KBA).
16	19 22 03.1?	16.80 S	69.92 W	183 *		0.6			6	PERU-BOLIVIA BORDER REGION
16	19 43 48.4*	26.729 S	176.392 W	33 N	5.1 4.9	1.3			26	SOUTH OF FIJI ISLANDS
16	19 58 22.1	41.054 N	143.624 E	33 *	4.7	0.9			46	HOKKAIDO, JAPAN REGION
16	20 02 34.9*	44.205 N	12.923 E	10 G		1.3			6	NORTHERN ITALY
16	20 10 42.2&	49.083 N	122.709 W	1					61	BRITISH COLUMBIA. <PGC-P>. ML 3.0 (PGC), 3.0 (NEIS). Felt (IV) in the White Rock-Cloverdale-Langley area. Also felt at Bloine, Washington.
16	21 42 02.8	11.655 S	117.185 E	33 N	3.7	0.9			9	SOUTH OF SUMBAWA ISLAND
16	21 43 01.2	50.928 N	130.025 W	10 G	4.5	0.8			110	VANCOUVER ISLAND REGION
16	22 00 33.1	37.060 N	3.673 E	10 G	4.8 3.9	1.2			130	WESTERN MEDITERRANEAN SEA. Felt at Algiers, Algeria.
16	23 32 01.4?	43.55 N	0.64 W	10 G		0.9			8	PYRENEES. ML 3.2 (LDG).
16	23 58 05.6*	18.099 S	35.066 E	10 G		0.7			5	MOZAMBIQUE. MG 3.4 (BUL).
17	01 25 50.4?	50.38 N	128.36 W	10 G	3.8	1.4			6	VANCOUVER ISLAND REGION
17	01 34 47.9	30.317 N	94.862 E	33 N	4.9	1.1			81	TIBET
17	04 15 16.7*	33.599 S	70.707 W	33 N		1.4			10	CHILE-ARGENTINA BORDER REGION
17	04 16 56.1&	61.718 N	149.749 W	42					24	SOUTHERN ALASKA. <AGS-P>.
o 17	04 47 13.3	4.118 S	145.706 E	15	5.4 6.1	1.2			121	NEAR N COAST OF PAPUA NEW GUINEA. ML 6.0 (PMG).
17	05 19 56.1*	4.015 S	145.792 E	33 N	3.6	1.5			6	NEAR N COAST OF PAPUA NEW GUINEA
17	06 38 50.1?	30.19 N	94.72 E	33 N	3.9	0.5			5	TIBET
17	08 31 26.4&	41.196 N	113.140 W	6	4.1				29	UTAH. <SLC-P>. ML 3.8 (SLC). Felt (II) at Garland.
17	09 12 48.8%	40.737 N	29.946 E	10 G		1.5			7	TURKEY
17	09 28 15.4*	53.387 S	159.587 E	10 G	4.5	1.1			15	MACQUARIE ISLANDS REGION
17	10 07 15.0*	11.269 N	86.898 W	33 N	4.5	1.1			33	NEAR COAST OF NICARAGUA
17	10 54 22.2	30.613 S	71.383 W	69	5.1	1.1			65	NEAR COAST OF CENTRAL CHILE
17	14 21 03.1	9.081 N	126.587 E	38 D	5.1 5.1	1.1			92	MINDANAO, PHILIPPINE ISLANDS
17	17 43 25.8	50.880 N	129.625 W	10 G	4.5	1.2			25	VANCOUVER ISLAND REGION
17	18 04 53.7	50.907 N	129.871 W	10 G	4.8 4.8	1.3			43	VANCOUVER ISLAND REGION
17	19 04 53.6?	34.24 S	70.40 W	10 G		0.6			9	CHILE-ARGENTINA BORDER REGION
17	19 46 27.4	50.915 N	129.992 W	10 G	4.6 4.7	0.9			67	VANCOUVER ISLAND REGION
17	21 17 49.2*	50.866 N	130.193 W	10 G	4.4	1.0			13	VANCOUVER ISLAND REGION
o 17	21 24 52.2	18.412 S	175.249 W	253 *	5.2	1.2			83	TONGA ISLANDS
17	21 28 51.6?	50.86 N	130.32 W	10 G	3.8	1.0			11	VANCOUVER ISLAND REGION
17	22 53 11.6	10.788 N	61.134 W	10 G		1.6			14	TRINIDAD. MD 4.1 (TRN). Felt (IV) on northern Trinidad.
17	23 46 30.5	10.811 N	61.142 W	10 G		0.5			10	TRINIDAD. MD 4.1 (TRN). Felt (IV) on northern Trinidad.
18	02 05 01.7?	17.75 S	25.56 E	10 G	4.2	1.0			7	ZAMBIA
18	02 32 09.1?	50.18 N	78.02 E	5 G	4.3	0.4			7	EASTERN KAZAKH SSR
18	03 18 12.5*	26.314 S	27.202 E	5 G		1.1			6	REPUBLIC OF SOUTH AFRICA. MG 3.6 (BUL).
18	03 40 16.2&	40.468 N	124.347 W	21					9	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.2 (BRK). Felt (II) at Rio Dell.
18	04 04 25.9?	31.79 S	177.89 W	33 N	4.5	1.3			7	KERMADEC ISLANDS REGION
18	04 15 40.2	43.541 N	19.954 E	10 G		0.5			9	YUGOSLAVIA. ML 2.5 (TTG).
18	04 57 29.9&	57.976 N	152.549 W	78	4.1				37	KODIAK ISLAND REGION. <AGS-P>. Felt (III) at Kodiak.
18	05 02 07.1?	22.50 S	66.30 W	250 ?		1.0			8	JUJUY PROVINCE, ARGENTINA
18	07 25 44.6	51.392 N	178.586 W	33 N	4.7 4.1	0.8			54	ANDREANOF ISLANDS, ALEUTIAN IS.
o 18	08 43 29.3	24.269 S	69.148 W	97 D	5.5	1.1			198	NORTHERN CHILE. Felt (V) at Antofagasta.
18	08 59 15.1*	39.172 N	27.671 E	10 G		0.7			5	TURKEY
18	09 29 17.1?	7.32 S	126.81 E	286 ?	4.9	0.9			9	BANDA SEA
18	09 34 47.2	6.018 S	129.969 E	187 *	4.8	1.0			19	BANDA SEA
18	09 40 51.7&	36.250 N	120.355 W	9					16	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
18	10 26 48.5*	13.324 N	120.942 E	33 N	5.3	1.3			18	MINDORO, PHILIPPINE ISLANDS
18	11 12 46.7*	53.549 N	167.369 W	33 N	4.7	1.2			27	FOX ISLANDS, ALEUTIAN ISLANDS. Felt at Unalaska.
18	11 34 49.9*	18.019 N	64.538 W	5 G		1.4			16	VIRGIN ISLANDS
18	12 01 28.0*	6.059 S	147.801 E	68 *	4.7	1.2			16	EAST PAPUA NEW GUINEA REGION
18	13 44 56.8	37.800 N	26.826 E	10 G		1.2			18	DODECANESE ISLANDS. ML 3.7 (ATH).

18	14	39	06.4%	40.199	N	28.715	E	10	G	0.5	6	TURKEY	
18	15	29	16.8?	34.37	S	70.29	W	19	*	3.3	1.3	10 CHILE-ARGENTINA BORDER REGION	
18	15	30	05.0%	39.174	N	27.621	E	10	G	0.8	5	TURKEY	
18	17	04	55.9*	38.475	S	175.842	E	191	4.5	1.0	14	NORTH ISLAND, NEW ZEALAND	
18	17	55	51.1	44.857	N	18.778	E	10	G	1.2	8	YUGOSLAVIA	
18	17	56	01.8%	61.139	N	9.860	E	10	G	1.0	5	SOUTHERN NORWAY. MD 2.5 (BER).	
18	18	50	30.4%	49.005	N	122.708	W	4			10	BRITISH COLUMBIA. <PGC-P>. ML 2.3 (PGC). Felt in the White Rock-Langley area.	
18	21	06	11.6	50.967	N	129.745	W	10	G	4.4	1.1	33 VANCOUVER ISLAND REGION	
18	21	18	26.2*	50.974	N	130.163	W	10	G	4.1	1.1	16 VANCOUVER ISLAND REGION	
a	18	21	58	41.5	47.017	N	89.658	E	33	N	5.3	4.8	1.4 167 NORTHERN XINJIANG, CHINA
18	22	05	33.0%	46.334	N	1.352	E	10	G	1.0	10	FRANCE. ML 2.5 (LDG).	
18	23	00	25.9	2.496	N	128.631	E	242	?	4.8	0.8	27 HALMAHERA	
19	01	48	57.8?	16.15	N	60.07	W	33	N	0.9	9	LEEWARD ISLANDS. ML 3.4 (FDF).	
19	02	21	38.5%	61.718	N	150.840	W	57			28	SOUTHERN ALASKA. <AGS-P>.	
19	04	35	26.2*	39.615	N	23.628	E	15	*		1.3	13	AEGEAN SEA
19	05	45	07.1	22.224	S	171.519	E	113	*	4.9	1.1	41 LOYALTY ISLANDS REGION	
19	06	11	42.9%	39.730	N	27.909	E	10	G	0.4	8	TURKEY	
19	06	20	40.8?	52.01	N	17.16	E	10	G	0.6	9	POLAND. ML 2.9 (KBA).	
19	06	32	55.0	43.452	N	27.853	E	10	G	1.0	14	BULGARIA	
19	07	52	45.6?	36.03	N	26.89	E	10	G	0.9	10	DODECANESE ISLANDS	
a	19	09	21	40.8	15.001	S	75.667	W	28	*	5.1	5.1	1.1 141 NEAR COAST OF PERU
19	09	36	47.8	48.846	N	6.774	E	21	*		0.7	9	FRANCE. ML 2.7 (LDG).
19	09	37	07.2%	19.304	N	155.820	W	12			46	HAWAII. <HVO-P>. MD 4.0 (HVO).	
19	10	30	11.6?	21.94	S	170.46	E	32	*	4.1	1.7	11 LOYALTY ISLANDS REGION	
19	11	12	16.6?	31.70	N	35.92	E	0	G	0.3	5	DEAD SEA REGION. Probable explosion.	
19	11	25	27.6%	32.990	N	117.807	W	6	G		3	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 2.9 (PAS). Felt in the San Diego area, California.	
a	19	11	42	40.6*	48.488	S	107.002	E	10	G	4.9	5.0	1.5 43 SOUTHEAST INDIAN RISE
19	11	55	32.0?	17.25	N	98.79	W	81	*	3.8	1.0	15 GUERRERO, MEXICO	
19	12	00	11.3?	30.82	N	36.93	E	0	G		1.5	7	DEAD SEA REGION. Probable explosion.
19	12	57	07.7	39.910	N	26.787	E	10	G		1.0	10	TURKEY
19	16	38	07.6	41.451	N	142.013	E	74	4.9	1.1	83	HOKKAIDO, JAPAN REGION. Felt (11 JMA) at Hachinohe and (1 JMA) at Miyako, Honshu.	
19	18	33	59.3%	37.785	N	122.577	W	12			16	CENTRAL CALIFORNIA. <BRK>. ML 3.3 (BRK). Felt at San Francisco.	
19	18	53	26.7?	5.66	S	147.39	E	198	?	4.3	1.5	6 EAST PAPUA NEW GUINEA REGION	
19	18	59	38.2	30.353	N	94.881	E	33	N	4.7	1.0	48 TIBET	
19	19	29	56.1?	42.01	N	23.20	E	10	G		0.2	5	BULGARIA
19	19	33	30.1	4.081	S	83.161	W	33	N	4.8	1.2	34 OFF COAST OF NORTHERN PERU	
19	19	56	33.7	11.571	N	92.590	E	69	*	4.1	1.0	11 ANDAMAN ISLANDS REGION	
19	19	59	25.6%	37.867	N	122.238	W	10			17	CENTRAL CALIFORNIA. <BRK>. ML 2.7 (BRK). Felt at Berkeley.	
19	20	01	59.5?	41.56	N	23.68	E	10	G		0.5	6	GREECE-BULGARIA BORDER REGION
19	20	24	32.9*	62.548	S	155.497	E	10	G	4.3	4.1	0.7 7 BALLENY ISLANDS REGION	
a	19	21	18	25.7	9.186	S	79.059	W	68	D	5.7	0.9	226 OFF COAST OF NORTHERN PERU. Ms 5.7 (BRK). Damage at Chimbote. Felt at Caraz, Pomabamba and Trujillo. Also felt by some people in high-rise buildings in Lima.
a	19	21	58	00.8	49.647	N	156.318	E	85	D	5.4	0.9	244 KURIL ISLANDS
20	01	35	56.8?	44.08	N	147.38	E	33	N	4.6	1.1	12 KURIL ISLANDS	
20	02	03	45.9%	46.072	N	1.460	E	10	G		1.2	6	FRANCE. ML 2.5 (LDG).
20	03	03	21.6	9.698	N	84.388	W	55			0.6	17	COSTA RICA. MD 4.5 (SJR), 4.2 (HDC). Felt (111) at San Jose. Felt throughout central Costa Rica.
20	03	54	06.5	42.916	N	77.615	E	41	*	4.6	4.2	0.9 47 ALMA-ATA REGION	
20	04	22	36.3	6.329	S	130.051	E	124		5.1	1.1	78 BANDA SEA	
a	20	05	07	57.3	4.293	N	32.523	W	10	G	4.9	4.6	0.9 87 CENTRAL MID-ATLANTIC RIDGE
20	05	26	04.5%	41.138	N	27.720	E	10	G		0.4	7	TURKEY
20	05	34	43.1%	61.124	N	149.774	W	43			37	SOUTHERN ALASKA. <AGS-P>.	
20	05	57	11.2	9.209	S	79.058	W	64	D	5.0	0.8	69 OFF COAST OF NORTHERN PERU. Felt (V) at Chimbote.	
20	06	10	28.3%	40.720	N	23.345	E	10	G		0.2	6	GREECE
20	06	35	44.9	6.421	N	125.240	E	132	4.7	1.0	44	MINDANAO, PHILIPPINE ISLANDS	
20	06	36	33.8%	40.250	N	124.428	W	13			13	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.7 (BRK). Mo=1.3*10**14 Nm (BRK). Felt.	
20	06	55	52.4%	48.140	N	122.754	W	22			63	WASHINGTON. <SEA-P>. CL 2.8 (SEA). Felt at Port Townsend.	
20	07	17	47.9*	5.640	N	75.772	W	117	?		0.7	7	COLOMBIA
20	08	45	57.2	39.441	N	28.439	E	10	G		0.7	10	TURKEY
20	08	53	13.2%	48.056	N	122.952	W	55			61	WASHINGTON. <SEA-P>. CL 2.8 (SEA).	
20	11	17	53.9?	30.66	N	36.18	E	0	G		0.4	6	DEAD SEA REGION. Probable explosion.
20	11	24	33.0	34.853	N	113.732	W	5	G		0.4	15	WESTERN ARIZONA. ML 3.0 (NEIS).
20	11	41	08.1	34.96?	N	25.650	E	19	4.8	4.3	1.2	203 CRETE. ML 4.6 (ATH). Felt strongly in the Ierapetra-Iraklian-Ayios Nikolaos area.	
20	11	53	57.2	46.815	N	7.108	E	10			1.2	74	SWITZERLAND. ML 4.2 (LDG), 3.8 (KBA).
20	12	23	48.2	42.279	N	19.915	E	10	G		0.6	6	YUGOSLAVIA. ML 2.3 (TTG).
20	12	30	38.0	46.802	N	7.369	E	10	G		1.3	15	SWITZERLAND. ML 2.8 (LDG).
20	14	32	28.6%	46.859	N	7.212	E	10	G		0.4	5	SWITZERLAND
20	16	00	06.9*	25.771	N	96.545	E	33	N		1.2	9	BURMA
20	16	53	50.9*	22.485	S	68.799	W	162	?		1.5	9	NORTHERN CHILE
20	17	20	14.3%	15.548	N	60.729	W	10	G		0.6	9	LEEWARD ISLANDS. ML 2.5 (FDF).
20	18	23	24.2%	38.805	N	122.768	W	2			21	NORTHERN CALIFORNIA. <BRK>. ML 3.7 (BRK).	
20	18	42	12.1	43.542	N	146.585	E	61	4.6	0.8	63	KURIL ISLANDS. Felt (IV) at Yuzhno-Kurilsk. Felt (I JMA) at Nemuro, Hokkaido.	
20	18	42	20.4%	34.300	N	119.580	W	9			11	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.4 (PAS).	
20	18	50	24.8	47.972	N	6.685	E	18			1.1	11	FRANCE. ML 2.9 (LDG).
20	18	52	59.8%	42.212	N	19.468	E	10	G		0.4	9	YUGOSLAVIA. ML 2.4 (TTG).
20	19	35	40.3	65.713	N	149.768	W	33	N	4.1	1.3	11	ALASKA
20	20	07	50.1?	50.97	N	5.55	E	10	G		0.8	5	BELGIUM
20	20	39	23.2	46.805	N	7.393	E	10	G		1.4	21	SWITZERLAND. ML 2.9 (LDG).
20	21	51	59.4?	34.74	N	25.69	E	33	N		0.8	7	CRETE
20	22	32	55.3?	4.51	N	82.92	W	10	G		0.2	7	SOUTH OF PANAMA
20	23	09	36.7	42.179	N	2.350	W	10	G		1.2	27	SPAIN. ML 3.5 (LDG). MD 3.4 (MDD). Felt (V) at Santa Cruz Yanguas; (IV) in the Enciso-Vizmanos-Arnedillo area.

20	23 14 30.9	48.019 N	6.695 E	10 G		0.7	6	FRANCE. ML 2.4 (LDG).
20	23 14 31.8%	40.885 N	24.074 E	10 G		0.5	6	AGEAN SEA
21	00 34 36.6&	62.046 N	151.898 W	107			32	CENTRAL ALASKA. <AGS-P>.
21	01 47 05.2*	32.266 N	25.908 E	10 G	3.9	1.3	15	EASTERN MEDITERRANEAN SEA
21	02 41 49.9?	28.71 N	51.78 E	33 N	4.3	1.0	16	SOUTHERN IRAN
21	03 54 48.5?	24.07 N	141.40 E	101 ?	4.4	0.4	7	VOLCANO ISLANDS REGION
21	04 31 23.9?	3.54 N	127.16 E	33 N	4.5	1.2	6	TALAUD ISLANDS
21	08 57 53.9?	14.80 N	60.37 W	33 N		0.6	8	WINDWARD ISLANDS. ML 2.7 (FDF).
21	10 00 36.5%	18.254 N	66.929 W	33 N		0.1	5	PUERTO RICO REGION
21	10 03 43.6?	10.61 S	113.16 E	33 N	4.1	1.0	10	SOUTH OF JAVA
21	10 08 31.6*	28.457 N	57.119 E	33 N	4.3	0.6	8	SOUTHERN IRAN
21	10 38 20.3%	16.539 N	61.095 W	33 N		0.3	6	LEEWARD ISLANDS. ML 2.4 (FDF).
21	11 56 53.8?	30.65 N	36.20 E	0 G		0.2	5	DEAD SEA REGION. Probable explosion.
21	12 18 57.4?	33.07 S	72.07 W	10 G		0.1	8	OFF COAST OF CENTRAL CHILE
21	12 52 20.2*	32.448 S	68.831 W	33 N		1.4	8	MENDOZA PROVINCE. ARGENTINA
21	14 14 51.5?	30.53 S	177.18 W	73 ?	4.6	1.2	11	KERMADEC ISLANDS
21	16 59 19.9%	39.271 N	27.831 E	10 G		1.1	7	TURKEY
21	17 00 24.8*	25.997 N	125.106 E	169 *	4.3	1.0	19	SOUTHWESTERN RYUKYU ISLANDS
21	17 50 53.6*	21.528 N	119.795 E	33 N	4.0	1.6	8	TAIWAN REGION
21	18 21 52.9*	1.842 N	99.499 E	183 *	4.5	1.0	8	NORTHERN SUMATERA
21	18 30 30.5*	74.110 N	9.643 E	10 G	4.6	1.0	15	GREENLAND SEA
21	19 30 02.0?	23.22 S	171.68 E	33 N	4.5 4.0	1.5	9	LOYALTY ISLANDS REGION
21	20 39 18.2*	59.525 S	159.240 E	10 G	4.6 3.9	1.1	6	MACQUARIE ISLANDS REGION
21	21 45 17.9*	30.739 S	68.871 W	33 N		0.8	5	SAN JUAN PROVINCE. ARGENTINA
21	22 47 35.3	41.327 S	173.451 E	88 *	4.7	1.4	21	SOUTH ISLAND, NEW ZEALAND. Felt at Wellington, Christchurch, Blenheim and Nelson.
22	01 25 56.4	35.742 N	78.006 E	49 *	4.7 3.9	0.9	38	EASTERN KASHMIR
22	04 24 54.8	43.295 N	13.859 E	11		1.2	46	CENTRAL ITALY. ML 3.7 (KBA), 3.8 (VKA). MD 3.9 (TRI).
22	04 27 33.0	27.396 S	68.148 W	132	4.9	1.2	30	CHILE-ARGENTINA BORDER REGION
a 22	07 17 23.8	0.791 S	84.399 E	10 G	5.5 5.0	0.9	206	SOUTH INDIAN OCEAN
22	07 28 37.7	31.315 N	35.379 E	10 G		0.5	7	DEAD SEA REGION
22	07 56 31.2*	37.882 N	23.097 E	10 G		1.1	5	SOUTHERN GREECE. ML 3.5 (ATH).
22	09 26 53.2?	35.26 N	21.94 E	10 G		1.6	15	MEDITERRANEAN SEA. ML 3.9 (ATH).
22	10 34 33.0&	60.188 N	153.271 W	128			32	SOUTHERN ALASKA. <AGS-P>.
22	11 07 53.7?	30.75 N	36.03 E	0 G		0.2	6	DEAD SEA REGION. Probable explosion.
22	11 57 24.9?	31.15 N	36.15 E	0 G		0.4	6	DEAD SEA REGION. Probable explosion.
22	12 31 05.0*	33.689 N	48.072 E	33 N		0.8	6	WESTERN IRAN
22	12 52 48.5	15.027 S	167.296 E	142 *	4.9	1.0	44	VANUATU ISLANDS
o 22	13 43 37.6	0.978 S	78.050 W	10 G	6.1 6.2	1.0	306	ECUADOR. Ms 6.1 (BRK). At least two people killed, twelve injured, several houses destroyed or seriously damaged and landslides in the Ambato area. Minor damage in the Latacunga and Riobamba area. Felt in southern Colombia and northern Peru.
22	13 49 05.4?	42.26 N	23.32 E	10 G		1.0	7	BULGARIA. ML 1.9 (SKD).
22	14 24 25.1	27.651 N	55.270 E	28 *	4.6	1.1	52	SOUTHERN IRAN
22	14 50 32.9	30.291 N	94.855 E	33 N	4.8	1.2	40	TIBET
22	15 49 12.7?	0.90 S	79.40 W	33 N	3.8	1.3	8	ECUADOR
22	15 54 41.7	2.419 N	125.663 E	121 *	5.1	1.2	50	TALAUD ISLANDS
22	15 58 10.3*	34.623 N	25.720 E	10 G		1.3	6	CRETE
22	16 12 44.1	0.091 S	123.089 E	182	5.2	1.3	49	MINAHASSA PENINSULA
o 22	16 21 35.1	1.082 S	78.127 W	10 G	5.9 5.6	1.1	221	ECUADOR. Additional damage in the Ambato area. Felt strongly in the Latacunga area. Felt in southern Colombia and northern Peru.
22	17 23 50.1&	35.623 N	84.311 W	19			19	TENNESSEE. <TEIC> mbLg 3.3 (NEIS). Felt (V) at Vonore; (IV) at Maryville; (III) at Alcoa, Friendsville, Greenback and Mount Vernon. Also felt at Modisville and Binfield.
22	17 28 33.2?	31.87 S	71.96 W	33 N		0.4	8	NEAR COAST OF CENTRAL CHILE
22	18 45 36.8?	24.93 S	179.86 E	546 ?	4 5	1.3	15	SOUTH OF FIJI ISLANDS
22	19 20 25.6*	33.078 S	71.988 W	10 G		0.3	10	NEAR COAST OF CENTRAL CHILE
22	20 16 39.1*	33.134 S	72.032 W	19 *		1.3	15	OFF COAST OF CENTRAL CHILE
a 22	22 05 15.8	76.421 N	134.275 E	14 D	5.6 5.1	0.9	289	LAPTEV SEA
22	23 02 58.6?	31.89 S	71.75 W	10 G		0.4	6	NEAR COAST OF CENTRAL CHILE
22	23 34 13.9	42.637 N	13.182 E	10 G		1.1	15	CENTRAL ITALY. ML 2.9 (KBA). MD 3.5 (TRI).
22	23 47 53.0%	40.242 N	23.933 E	10 G		0.6	5	GREECE
23	02 14 15.7	46.687 N	10.450 E	10 G		1.2	10	NORTHERN ITALY. ML 2.1 (KBA).
23	02 55 27.8%	16.199 N	61.397 W	33 N		0.8	5	LEEWARD ISLANDS. ML 1.7 (FDF).
23	02 59 51.5*	30.455 N	94.726 E	33 N	4.4	1.0	6	TIBET
23	04 15 41.8?	1.14 S	79.18 W	33 N		1.1	8	ECUADOR
23	06 40 09.6?	1.14 S	79.20 W	33 N	4.0	1.3	6	ECUADOR
23	06 40 45.7?	4.72 S	133.91 E	33 N	3.9	1.3	5	WEST IRIAN REGION
23	07 00 45.4	39.243 N	25.455 E	11		1.2	11	AGEAN SEA. MD 3.5 (ATH).
23	07 04 29.1	40.799 N	27.522 E	10 G		1.4	8	TURKEY
o 23	07 15 43.2	45.960 N	149.519 E	131 D	5.9	0.9	426	KURIL ISLANDS. Felt (II JMA) at Nemuro and Kushiro; (I JMA) at Obihiro, Hokkaido. Also felt (II JMA) at Hachinabe, Honshu.
23	10 10 10.2*	6.601 S	147.947 E	80 *	4.2	1.2	6	EAST PAPUA NEW GUINEA REGION
23	10 41 51.3?	13.96 S	173.12 W	33 N	4.6	1.0	15	SAMOA ISLANDS REGION
23	12 40 47.7&	60.215 N	153.167 W	143			32	SOUTHERN ALASKA. <AGS-P>.
23	12 47 19.5&	60.128 N	152.578 W	82			27	SOUTHERN ALASKA. <AGS-P>.
23	13 05 09.1%	41.136 N	28.521 E	10 G		0.3	5	TURKEY
23	13 09 01.6	46.787 N	7.095 E	10 G		0.9	30	SWITZERLAND. ML 3.8 (GRF), 3.4 (LDG).
23	14 42 10.2*	30.329 N	131.276 E	65 *	4.3	1.2	14	KYUSHU, JAPAN
23	14 59 26.8*	6.968 N	73.173 W	155	4 4	1.3	12	NORTHERN COLOMBIA
a 23	15 14 56.2	50.716 S	139.279 E	10 G	5.8 6.1	1.0	230	SOUTH OF AUSTRALIA
a 23	15 22 46.2	50.468 S	139.528 E	10 G	5.5 5.9	1.4	66	SOUTH OF AUSTRALIA
23	17 01 13.6	46.841 N	7.292 E	10 G		1.2	13	SWITZERLAND. ML 2.8 (LDG).
23	17 01 43.9*	63.116 S	171.298 E	10 G	4.7	1.0	10	BALLENY ISLANDS REGION
23	17 10 37.3?	16.09 N	60.16 W	33 N		0.6	7	LEEWARD ISLANDS. ML 2.8 (FDF).
23	17 55 09.1%	40.502 N	29.203 E	17 *		0.9	8	TURKEY
23	19 19 53.3	36.244 N	70.896 E	120 *	4.9	1.0	24	HINDU KUSH REGION. Felt (III) at Ishkoshim, USSR.
23	20 40 18.7	45.567 N	26.601 E	150 *		1.0	23	ROMANIA
23	21 42 35.5&	40.300 N	124.600 W	47			3	NEAR COAST OF NORTHERN CALIF. <BRK>.

23	22 10 06.6?	20.33 N	95.03 E	33 N	4.2	0.2	6	BURMA
23	22 35 49.3*	23.785 S	179.953 W	507 ?	4.6	0.8	42	SOUTH OF FIJI ISLANDS
23	23 13 00.1?	41.02 N	24.28 E	10 G		0.7	6	GREECE-BULGARIA BORDER REGION
23	23 20 39.9	10.460 S	118.656 E	33 N	4.1	1.1	11	SOUTH OF SUMBAWA ISLAND
23	23 41 44.4?	44.90 N	146.44 E	142 ?	4.2	1.4	9	KURIL ISLANDS
24	01 46 34.2	0.481 N	126.140 E	53 *	5.2 4.5	1.1	57	MOLUCCA PASSAGE
24	02 18 27.1&	40.400 N	124.600 W	21			4	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 2.5 (BRK).
24	03 35 33.5	17.933 S	178.590 W	600	5.0	0.8	59	FIJI ISLANDS REGION
24	03 39 09.7*	16.780 S	72.440 W	33 N		1.0	7	NEAR COAST OF PERU. Felt (III) at Arequipa.
24	03 51 06.9*	48.771 N	6.227 E	10 G		1.5	7	FRANCE. ML 2.7 (LDG).
a 24	04 55 21.2	36.600 N	141.301 E	42 D	5.5 5.8	1.1	296	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) in the Tokyo-Maebashi-Sendai area; (II JMA) in the Miyako-Kumagaya-Yamagata area; (I JMA) in the Urakawa-Ajira-Kafu area.
a 24	06 03 19.8	21.841 S	179.454 W	593 D	5.5	0.9	149	FIJI ISLANDS REGION
24	07 11 14.2?	6.52 N	82.47 W	10 G		0.3	11	SOUTH OF PANAMA
24	07 17 09.8?	6.60 N	82.47 W	10 G		0.3	9	SOUTH OF PANAMA. MD 4.2 (HDC).
24	07 45 56.9?	17.67 S	179.03 W	641 ?	4.7	0.5	12	FIJI ISLANDS REGION
24	07 47 38.2?	9.49 N	79.47 W	33 N		0.2	7	PANAMA. MD 4.4 (UPA). Felt in the Panama City area.
24	07 54 10.9*	49.122 N	156.316 E	33 N	4.6	0.9	21	KURIL ISLANDS
24	07 54 50.7*	54.021 N	163.879 W	33 N	4.7	1.1	13	UNIMAK ISLAND REGION
24	09 00 53.3?	15.53 S	70.40 W	197 ?		0.2	6	SOUTHERN PERU
24	09 01 30.4%	60.721 N	5.564 E	10 G		0.4	6	SOUTHERN NORWAY. MD 2.2 (BER).
24	09 54 05.4*	43.302 N	25.852 E	10 G		1.2	5	BULGARIA
24	11 09 07.5*	53.442 N	160.488 E	33 N	4.8	0.9	23	NEAR EAST COAST OF KAMCHATKA
24	12 02 35.6*	4.851 S	144.182 E	108 *	4.1	0.8	9	NEAR N COAST OF PAPUA NEW GUINEA
24	12 07 06.2*	50.507 S	139.034 E	10 G	4.3	1.0	8	SOUTH OF AUSTRALIA
24	12 38 57.1%	40.469 N	29.225 E	12 *		1.1	8	TURKEY
24	14 00 21.7*	35.587 S	71.539 W	79 *	4.6	0.6	22	CENTRAL CHILE
24	14 42 48.3?	42.04 N	2.36 W	10 G		0.5	4	SPAIN. MG 2.8 (MDD).
24	15 00 00.0&	37.228 N	116.375 W	0	5.7 4.3		239	SOUTHERN NEVADA. <DOE>. ML 5.4 (BRK). 37' 13' 40.78" N., 116' 22' 28.95" W., Surface Elev. 2072 m., Depth of Burial 600 m., Shot Time 150000.055. "LOCKNEY", Nevada Test Site (Dept. of Energy). Felt at Las Vegas. Also felt at Furnace Creek, Scotty's Castle and Death Valley National Monument, California.
24	15 26 53.4%	36.350 N	5.461 W	33 N		1.5	5	STRAIT OF GIBRALTAR
24	15 52 47.8%	16.554 N	60.988 W	33 N		0.3	10	LEEWARD ISLANDS. ML 3.0 (FDF).
24	16 10 31.5*	48.225 N	1.272 W	24		0.6	18	FRANCE. ML 3.2 (LDG).
24	16 45 40.9&	62.004 N	149.548 W	42			42	CENTRAL ALASKA. <AGS-P>. ML 2.9 (PMR).
24	17 09 59.3?	46.82 N	7.86 E	10 G		0.9	6	SWITZERLAND. ML 2.5 (LDG).
24	17 21 26.8*	18.652 S	167.083 E	33 N	4.2 3.9	1.3	18	VANUATU ISLANDS
24	18 42 58.9%	15.338 N	60.648 W	10 G		0.3	5	LEEWARD ISLANDS. ML 2.4 (FDF).
24	19 24 05.5*	50.784 N	152.014 E	359 ?	4.3	0.7	13	NORTHWEST OF KURIL ISLANDS
24	20 46 55.2?	20.23 S	116.07 E	33 N	3.7	1.5	6	WESTERN AUSTRALIA
24	21 16 33.7	58.774 S	25.186 W	33 N	5.2	0.9	67	SOUTH SANDWICH ISLANDS REGION
24	21 19 33.5?	63.18 N	150.94 W	33 N		0.7	4	CENTRAL ALASKA. ML 3.5 (PMR).
24	21 20 05.1%	18.228 N	66.992 W	33 N		0.6	6	PUERTO RICO REGION
24	21 43 44.5%	40.742 N	27.376 E	10 G		0.9	6	TURKEY
25	00 41 12.9%	40.730 N	22.998 E	10 G		1.0	8	GREECE
25	01 20 06.8?	39.53 N	23.77 E	10 G		0.3	5	AEGEAN SEA
25	01 58 12.8	44.376 N	7.058 E	10 G		0.4	7	NORTHERN ITALY. ML 2.3 (LDG).
25	03 59 01.8%	32.117 N	35.740 E	10 G		0.7	5	DEAD SEA REGION
25	04 09 54.5&	41.208 N	113.132 W	11			23	UTAH. <SLC-P>. ML 4.1 (SLC). Felt in the Salt Lake City area.
25	04 27 58.1&	41.210 N	113.152 W	10	4.7 4.6		90	UTAH. <SLC-P>. ML 4.7 (SLC). Felt (V) at Ray; (IV) at Bear River City, Fielding, Hooper, Howell and Park Valley. Also felt (IV) at Stone, Idaho and Mantella, Nevada.
25	05 18 13.6&	41.196 N	113.212 W	6	4.2		26	UTAH. <SLC-P>. ML 4.4 (SLC). Felt in the Salt Lake City area.
25	07 55 16.2	45.788 N	26.659 E	144	4.5	1.2	108	ROMANIA
25	08 01 40.0	51.419 N	176.038 W	33 N	5.0	1.2	23	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.6 (PMR). Felt (III) on Adak.
25	08 27 17.0%	30.667 S	117.928 E	10 G		0.6	6	WESTERN AUSTRALIA
25	09 04 32.7?	15.60 S	72.64 W	33 N		1.3	7	SOUTHERN PERU
25	10 01 00.4	10.619 N	86.499 W	33 N	4.3	0.3	14	OFF COAST OF COSTA RICA. MD 4.5 (HDC).
25	10 19 31.1	35.211 N	137.795 E	30 *		1.1	15	HONSHU, JAPAN. Felt (II JMA) at Iida and Nagaya; (I JMA) at Ajira, Hamamatsu, Hikone and Kafu.
25	10 51 30.5?	22.51 S	67.74 W	93 ?		1.0	8	CHILE-BOLIVIA BORDER REGION
25	11 45 32.8%	39.208 N	27.808 E	10 G		0.7	5	TURKEY
25	11 57 30.4*	30.990 N	36.091 E	0 G		0.4	7	DEAD SEA REGION. Probable explosion.
25	13 49 11.2*	50.555 N	4.799 E	10 G		0.3	5	BELGIUM
25	14 03 40.8?	42.08 N	22.67 E	10 G		0.4	5	BULGARIA
25	15 05 17.6	22.867 S	63.748 W	537	5.0	1.0	26	SALTA PROVINCE, ARGENTINA
25	15 24 59.9&	59.309 N	153.389 W	94			28	SOUTHERN ALASKA. <AGS-P>.
25	15 41 54.7%	60.454 N	4.950 E	10 G		0.8	6	SOUTHERN NORWAY. MD 2.3 (BER).
25	16 42 12.3%	45.757 N	1.038 W	10 G		1.2	9	FRANCE. ML 3.0 (LDG).
25	17 01 26.3	3.145 N	128.257 E	91 ?	5.0	0.8	23	NORTH OF HALMAHERA
25	17 25 14.7&	62.093 N	150.938 W	65			34	CENTRAL ALASKA. <AGS-P>.
25	19 17 48.3	37.165 N	4.987 W	10 G		1.1	8	SPAIN. MG 3.0 (MDD).
25	20 10 12.5&	62.280 N	148.237 W	37			36	CENTRAL ALASKA. <AGS-P>.
25	21 01 59.5*	28.777 S	68.812 W	200 ?		0.7	8	LA RIOJA PROVINCE, ARGENTINA
a 25	23 16 30.7	29.866 S	90.440 E	33 N	5.2 4.9	1.1	96	TIBET. Felt.
26	00 24 18.6	21.529 S	70.819 W	45	5.1 5.3	1.0	39	NEAR COAST OF NORTHERN CHILE
26	00 28 02.1&	41.210 N	113.150 W	10			18	UTAH. <SLC-P>. ML 4.0 (SLC).
26	00 41 57.7	41.866 N	19.767 E	10 G		0.8	11	ALBANIA. ML 2.7 (TTG).
26	01 03 03.0	29.824 N	90.452 E	33 N	4.4	0.6	14	TIBET. Felt.
26	01 12 23.4*	6.354 S	130.946 E	81 *	4.7	1.0	15	BANDA SEA
26	02 43 01.7?	13.67 S	73.32 W	33 N		1.3	7	PERU
26	02 52 08.3&	60.638 N	151.844 W	74			30	KENAI PENINSULA, ALASKA. <AGS-P>.
26	03 15 20.9	24.950 N	99.133 E	33 N	4.8	1.2	13	YUNNAN PROVINCE, CHINA. ML 4.3 (BJI).
26	05 29 15.9*	35.913 N	0.651 W	10 G		0.4	9	ALGERIA. MG 3.5 (MDD).

o 26	05 30 36.4	55 463 N	164.537 E	35 D	5 1 5.1	1.0	123	KOMANDORSKY ISLANDS REGION
26	05 53 53.8&	37 132 N	122.015 W	14			16	CENTRAL CALIFORNIA. <BRK>. ML 3.2 (BRK). Felt at Boulder Creek and Santa Cruz.
26	06 46 02.3%	15 499 N	60.868 W	33 N		0.4	8	LEEWARD ISLANDS. ML 2.2 (FDF).
26	08 00 08.0	21 370 S	68.489 W	33 N		0.5	7	CHILE-BOLIVIA BORDER REGION
26	08 02 30.6*	7 499 S	129.296 E	159 ?	4.6	1.4	8	BANDA SEA
26	10 41 02.7	52 897 N	167.072 W	33 N	4 7	0.8	27	FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.0 (PMR).
26	11 30 18.9*	31 235 N	35.021 E	0 G		1.2	8	DEAD SEA REGION. Probable explosion.
26	11 35 20.0%	39 468 N	28.002 E	10 G		0.6	5	TURKEY
26	11 42 19.6*	31 082 N	36.292 E	0 G		0.4	6	DEAD SEA REGION. Probable explosion.
26	12 55 50.4*	52 423 N	169.257 W	33 N	4 8	1.2	17	FOX ISLANDS, ALEUTIAN ISLANDS
26	13 07 25.5	21 817 N	94.156 E	105 *	4 3	1.3	22	BURMA
26	14 47 49.4&	41 199 N	113.171 W	9			14	UTAH. <SLC-P>. ML 3.1 (SLC). Felt (III) at Park Valley and Snowville.
26	14 58 43.2*	1 014 S	77.944 W	58 ?	3 9	0.9	9	ECUADOR
26	15 08 30.2*	6 635 N	126.922 E	143 ?	4 5	1.2	20	MINDANAO, PHILIPPINE ISLANDS
26	16 40 56.7&	40 407 N	124.512 W	14			5	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).
26	17 44 06.9	44 375 N	74.517 W	10 G		0.9	23	NEW YORK. mbLg 3.5 (NEIS), 3.8 (OTT), ML 3.5 (PAL). Felt (IV) at Altana, Bloomingdale, Childswald, Ellenburg Center, Gabriels, Keene, Onchipta, Poul Smiths, Peru, Piercefield, Ray Brook, Redford, Saint Regis Falls, Saranac Lake, Schraan Lake, Tupper Lake, Upper Jay, Vermontville, Wilmington and Witherbee. Felt in Clinton, Essex, Franklin, St. Lawrence and Warren Counties. Also felt in Chittenden County, Vermont.
26	19 40 27.0&	59 929 N	150.931 W	45			31	KENAI PENINSULA, ALASKA. <AGS-P>.
26	19 48 30.0?	3 76 S	128.31 E	33 N	4 2	1.5	8	CERAM. Felt (III) at Amban.
26	21 01 30.6*	4 093 S	131.750 E	33 N	3.8	0.9	7	BANDA SEA
26	21 22 53.8	48 151 N	154.842 E	33 N	5.2 4.9	0.9	117	KURIL ISLANDS
26	22 06 17.2?	39 77 N	25.61 E	10 G		0.5	5	AEGEAN SEA
26	22 23 49.0&	61 986 N	148.237 W	39			40	SOUTHERN ALASKA. <AGS-P>. ML 2.7 (PMR). Felt (II) at Sulton.
26	22 38 48.1?	31 05 S	72.27 W	33 N		0.3	5	OFF COAST OF CENTRAL CHILE
26	23 07 53.7?	39 07 N	35.90 E	10 G		0.4	5	TURKEY
26	23 14 39.5&	41 212 N	113.173 W	6			8	UTAH. <SLC-P>. ML 2.9 (SLC).
27	02 21 51.9	43 931 N	15.310 E	10		1.4	22	ADRIATIC SEA. ML 3.5 (KBA), 3.5 (VKA). MD 3.3 (TRI).
27	02 44 28.0	39 245 N	25.393 E	11		0.7	18	AEGEAN SEA. ML 3.2 (ATH).
27	03 40 11.8	4 485 S	134.113 E	33 N	5.1 4.8	1.1	104	WEST IRIAN REGION
o 27	04 06 52.8	6 533 S	81.094 W	33 N	5.2 4.6	1.1	88	NEAR COAST OF NORTHERN PERU
27	04 42 47.2%	40 738 N	23.086 E	10 G		0.3	6	GREECE
27	05 24 52.6?	6 83 N	73.06 W	159 ?		0.9	7	NORTHERN COLOMBIA
27	05 58 00.7*	3 229 S	135.914 E	33 N	4.0	1.4	9	WEST IRIAN REGION
27	06 12 42.9	34 163 N	80.749 E	33 N	4.9 4.5	1.0	65	TIBET
27	06 51 45.8%	18 273 N	66.439 W	33 N		1.5	6	PUERTO RICD REGION
27	07 16 32.3	40 458 N	23.631 E	10 G		0.6	9	GREECE
27	07 30 57.9*	39 943 N	27.266 E	10 G		1.3	7	TURKEY
27	07 36 35.3%	40 835 N	28.325 E	10 G		0.2	7	TURKEY
27	08 21 37.6*	66 512 N	149.718 W	10 G		1.5	7	ALASKA. ML 3.1 (PMR).
o 27	08 30 00.7	18 166 N	103.761 W	33 N	5.0 4.7	1.3	110	NEAR COAST OF MICHOACAN, MEXICO
27	09 23 42.0*	7 889 S	156.429 E	72 ?	4.5	0.5	7	SOLOMON ISLANDS
27	09 47 15.4?	37 36 N	27.07 E	10 G		1.4	6	TURKEY
27	10 20 17.4*	10 564 N	86.548 W	29		0.4	13	OFF COAST OF COSTA RICA. MD 4.2 (HDC), 4.2 (SJR).
27	10 39 55.8*	10 741 N	86.565 W	33 N	4.2	0.9	14	OFF COAST OF COSTA RICA. MD 4.3 (SJR), 4.0 (HDC).
27	11 07 27.6%	37 156 N	3.709 W	10 G		0.1	7	SPAIN. MG 2.7 (MDD).
27	11 47 56.3	39 575 N	29.214 E	10 G		1.0	9	TURKEY
27	12 10 50.0%	30 750 S	117.170 E	10 G		0.8	5	WESTERN AUSTRALIA
27	12 23 07.9*	42 940 N	146.775 E	33 N	4.6	0.2	8	OFF COAST OF HOKKAIDO, JAPAN
27	12 42 33.4?	35 90 N	5.41 W	10 G		0.9	6	STRAIT OF GIBRALTAR
27	13 01 11.8*	30 767 N	35.474 E	0 G		0.3	7	DEAD SEA REGION. Probable explosion.
27	13 13 06.4?	4 87 S	133.95 E	33 N	3.9	1.4	6	WEST IRIAN REGION
27	15 34 42.5&	40 367 N	124.527 W	15			4	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.3 (BRK).
27	16 01 44.5*	20 583 S	146.585 E	10 G		1.2	11	QUEENSLAND, AUSTRALIA. Felt at Charters Towers, Ingham and Prosperpine. Also felt along the Great Barrier Reef.
27	16 39 47.2*	37 784 N	21.225 E	79 ?	3.9	1.4	10	SOUTHERN GREECE
27	17 30 45.8?	18 87 N	65.49 W	33 N		0.1	6	PUERTO RICO REGION
27	17 46 42.6&	64 523 N	129.824 W	18			9	NORTHWEST TERRITORIES, CANADA. <PGC-P>. ML 4.3 (PGC).
27	20 22 30.2	3 378 S	139.186 E	33 N	4.3	1.3	8	WEST IRIAN
27	21 03 42.4	40 150 N	24.789 E	10		0.8	15	AEGEAN SEA
o 27	21 19 05.0	10 812 N	86.347 W	40 *	4 9 5.1	1.4	59	OFF COAST OF COSTA RICA. MD 4.9 (HDC). Felt (II) at Playas del Coco.
27	21 22 35.4	21 503 S	169.778 E	33 N	5.3 5.6	1.2	77	LOYALTY ISLANDS REGION
27	21 29 12.7*	10 586 N	86.771 W	33 N		0.8	13	OFF COAST OF COSTA RICA. MD 4.4 (HDC), 4.2 (SJR).
27	21 52 46.1*	10 750 N	86.426 W	33 N	4.7	1.4	41	OFF COAST OF COSTA RICA. MD 4.8 (SJR), 4.7 (HDC).
27	22 30 27.6*	10 740 N	86.404 W	27	4.3 4.3	1.4	31	OFF COAST OF COSTA RICA. MD 4.7 (SJR), 4.6 (HDC).
27	22 41 11.2?	0 39 N	17.43 W	10 G	4.9	0.5	9	NORTH OF ASCENSION ISLAND
27	23 02 11.7&	40 398 N	124.412 W	13			5	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).
27	23 33 08.0?	10 19 N	61.90 W	33 N		0.7	6	TRINIDAD
27	23 38 30.8?	48 55 N	157.64 E	33 N	4.7	1.4	11	KURIL ISLANDS REGION
28	01 07 48.2?	18 82 N	67.17 W	33 N		0.4	6	MONA PASSAGE
28	01 16 25.1	51 787 N	175.917 W	67	4.9	0.9	55	ANDREANOF ISLANDS, ALEUTIAN IS.
28	01 55 04.9*	32 007 S	69.745 W	150 ?		0.4	7	MENDOZA PROVINCE, ARGENTINA
28	02 50 26.3?	30 91 S	68.58 W	124 ?		1.0	10	SAN JUAN PROVINCE, ARGENTINA
28	03 00 59.8*	6 677 S	147.303 E	39 *	4.3	1.3	8	EAST PAPUA NEW GUINEA REGION
28	03 04 36.9	51 336 N	176.926 W	33 N	4.9	1.2	42	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.0 (PMR). Felt (II) an Adak.
28	03 30 39.2	39 248 N	23.017 E	10 G		0.7	11	AEGEAN SEA. ML 3.1 (ATH).
28	04 09 32.8*	37 784 N	21.551 E	10 G		1.0	5	SOUTHERN GREECE. ML 3.3 (ATH).
28	05 28 11.4?	7 22 S	129.96 E	101 ?	4.8	1.3	7	BANDA SEA
28	05 28 46.8%	40 713 N	23.253 E	10 G		0.3	5	GREECE
28	06 06 52.2&	41 225 N	113.179 W	9			30	UTAH. <SLC-P>. ML 4.1 (SLC). Felt (III) at Fielding, Ibapah and Snowville. Also felt at Cedar Valley, Garland and Tremontan.
28	06 21 02.6?	19 27 N	66.48 W	33 N		0.2	6	PUERTO RICO REGION

a	28	07 15 38.2	18.404 S	168.266 E	32 D	5 4 5.9	1.2	157	VANUATU ISLANDS. Ms 5 9 (BRK).
	28	07 58 32.0*	10.556 N	86.771 W	33 N		0.7	12	OFF COAST OF COSTA RICA MD 4.2 (SJR), 4 1 (HDC).
	28	08 17 59.1*	18.392 S	168.297 E	33 N	4 4	1.2	15	VANUATU ISLANDS
	28	08 36 59.6	20.839 S	178.582 W	543		0.9	92	FIJI ISLANDS REGION
	28	10 12 37.4	21.451 S	178.957 W	537		5.0	91	FIJI ISLANDS REGION
	28	11 23 32.9?	31.29 N	36.14 E	0 G		0.1	6	DEAD SEA REGION. Probable explosion.
f	28	11 47 08.6	18.411 S	168.058 E	31 D	5.7 6.8	1.3	199	VANUATU ISLANDS. Ms 6.7 (BRK), 6 7 (PAS). Felt.
	28	12 16 51.9	18.397 S	168.105 E	31 *	5.3	0.9	91	VANUATU ISLANDS
	28	12 41 05.5*	18.122 S	167.731 E	33 N	4.6	1.2	30	VANUATU ISLANDS
a	28	13 46 13.9	18.546 S	168.161 E	25 D	5.8 6.5	1.1	254	VANUATU ISLANDS
	28	13 48 18.6?	31.23 S	69.89 W	149 ?		0.5	11	SAN JUAN PROVINCE, ARGENTINA
	28	15 00 53.3?	13.29 S	121.35 E	33 N	4.0	1.2	6	NORTHWEST OF AUSTRALIA
	28	15 01 02.2	18.138 S	168.001 E	55 *	5.0	1.2	66	VANUATU ISLANDS
	28	15 06 30.8?	10.68 S	125.52 E	33 N	4.7	0.8	6	TIMOR SEA
	28	15 33 51.6?	39.137 N	27.660 E	10 G		0.2	5	TURKEY
	28	15 48 48.9?	47.12 N	112.95 W	5 G		1.4	5	MONTANA, ML 3.3 (BUT)
	28	18 01 54.7?	17.89 S	167.69 E	33 N		0.6	6	VANUATU ISLANDS
	28	19 06 46.1?	15.00 S	175.91 W	200 G	4.4	1.3	32	TONGA ISLANDS
	28	19 19 35.5?	46.86 N	7.83 E	10 G		0.3	5	SWITZERLAND. ML 2.4 (LDG).
	28	22 31 14.1?	19.15 N	66.46 W	30 *		0.2	6	PUERTO RICO REGION
a	28	23 09 37.1*	18.340 S	168.122 E	32 *	5.2 4.9	1.1	88	VANUATU ISLANDS
	29	00 04 56.1	36.884 N	89.153 W	5 G	4.6	0.7	24	NEW MADRID, MISSOURI REGION mbLg 4 5 (NEIS), 4.5 (TUL). Felt (V) at East Prairie, Wolf Island and Wyatt, Missouri. Felt (IV) at Anniston and Charleston, Missouri. Also felt (IV) at Arlington, Bardwell, Columbus and Lovelaceville, Kentucky. Felt in parts of Missouri, Illinois and Kentucky
a	29	00 40 34.6	2.321 N	127.037 E	39 *	5.4 5.0	1.2	114	MOLUCCA PASSAGE
	29	01 54 02.5*	10.462 N	86.709 W	33 N		0.9	14	OFF COAST OF COSTA RICA. MD 4.2 (HDC), 4.1 (SJR).
	29	03 05 30.1	33.865 S	70.975 W	33 N		0.5	9	CHILE-ARGENTINA BORDER REGION
	29	04 12 47.2*	37.224 N	141.831 E	10 G		0.6	6	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Onahama.
	29	07 02 09.6?	19.34 N	65.21 W	10 G		0.2	5	PUERTO RICO REGION
	29	07 04 10.2&	38.795 N	122.768 W	1			11	NORTHERN CALIFORNIA. <BRK>. ML 3.0 (BRK).
	29	07 04 50.9*	38.754 N	122.722 W	5 G		0.9	5	NORTHERN CALIFORNIA. ML 3.2 (BRK).
	29	08 19 09.6	9.227 N	126.457 E	62 *	4.9	1.2	65	MINDANAO, PHILIPPINE ISLANDS
	29	09 59 21.5	40.749 N	21.611 E	26		1.0	13	GREECE
	29	11 32 19.5?	38.569 N	14.814 E	10 G		0.3	10	SICILY, MD 3.1 (ROM). Felt on Vulcano Island.
	29	12 39 29.7&	61.509 N	148.682 W	41			39	SOUTHERN ALASKA. <AGS-P>.
	29	14 03 25.9?	33.22 S	72.25 W	33 N		0.7	9	OFF COAST OF CENTRAL CHILE
	29	15 06 02.6*	18.351 S	168.107 E	33 N	4.3 4 0	1.0	11	VANUATU ISLANDS
	29	15 43 24.4	20.513 S	69.495 W	166 *	4.4	1.0	12	NORTHERN CHILE
	29	16 20 27.1&	45.186 N	120.111 W	1			25	WASHINGTON-OREGON BORDER REGION. <SEA-P> CL 2.7 (SEA). Felt.
	29	16 48 08.3&	60.538 N	151.663 W	69			42	KENAI PENINSULA, ALASKA. <AGS-P>
	29	17 30 28.4	29.853 N	90.437 E	33 N	4.7	1.3	19	TIBET
	29	18 11 42.0*	36.583 N	139.684 E	102 *	4.3	1.0	7	HONSHU, JAPAN. Felt (I JMA) at Utsunomiya.
	29	18 36 13.7	28.554 N	52.806 E	35	5 0	0.9	166	SOUTHERN IRAN. Felt in the Korzin-Dir area.
	29	19 29 20.5*	14.824 S	130.246 E	10 G	4.3	1.1	6	NORTHERN TERRITORY, AUSTRALIA
	29	19 33 50.7?	33.89 N	23.97 E	33 N	3.9	0.9	5	MEDITERRANEAN SEA
	29	21 12 28.8	29.819 N	90.435 E	33 N	4.5	1.2	15	TIBET
	29	23 18 06.0*	6.201 S	147.449 E	130 *	4.2	0.7	8	EAST PAPUA NEW GUINEA REGION
	30	00 41 28.0?	30.73 N	35.66 E	0 G		0.4	7	DEAD SEA REGION. Probable explosion.
a	30	01 39 28.0	18.162 S	167.865 E	51 D	5 4 6.3	1.2	206	VANUATU ISLANDS. Ms 6.0 (BRK).
	30	02 26 40.6	43.737 N	11.177 E	10		0.8	20	CENTRAL ITALY. MD 3.1 (ROM), 3.1 (KBA). Felt at Firenze and Scandicci.
	30	03 58 12.1?	43.24 N	10.70 E	10 G		0.6	5	CENTRAL ITALY
	30	04 00 51.3*	38.928 N	23.130 E	32		0.6	10	GREECE. ML 2.9 (ATH).
	30	06 22 44.2?	23.38 S	112.99 W	10 G	4.4	1.1	15	EASTER ISLAND REGION
	30	06 34 01.3?	43.812 N	11.198 E	10 G		0.7	5	CENTRAL ITALY. MD 3.2 (FIR).
	30	07 03 01.1?	5.46 S	146.09 E	136 ?	3.5	0.9	7	EAST PAPUA NEW GUINEA REGION
	30	07 37 36.2	26.843 S	26.682 E	5 G	4.9	0.8	28	REPUBLIC OF SOUTH AFRICA
	30	07 49 27.1?	16.39 S	174.62 W	33 N	4.3	1.4	11	TONGA ISLANDS
	30	08 15 26.3?	18.49 S	167.86 E	33 N	4.4	1.4	8	VANUATU ISLANDS
	30	08 28 06.5?	18.28 S	167.72 E	33 N	4.3 4.2	1.5	11	VANUATU ISLANDS
	30	09 18 46.1*	6.042 S	146.837 E	56 *	4.2 3.7	1.5	13	EAST PAPUA NEW GUINEA REGION
	30	11 32 56.2?	8.92 S	124.47 E	184 ?	4.3	0.6	6	TIMOR
	30	11 49 24.9	41.736 N	23.694 E	12		0.9	18	GREECE-BULGARIA BORDER REGION
	30	12 27 51.8	43.563 N	126.919 W	10 G		0.6	38	OFF COAST OF OREGON
	30	12 33 16.7	42.351 N	19.915 E	10 G		0.8	9	YUGOSLAVIA. ML 2.7 (SKO), 2.5 (TTG).
	30	13 54 05.6*	41.922 N	19.398 E	10 G		0.4	7	ALBANIA. ML 2.4 (TTG).
	30	14 05 28.1&	37.475 N	121.742 W	5			13	CENTRAL CALIFORNIA <BRK> ML 2.5 (BRK).
	30	14 19 17.6*	31.112 N	36.280 E	0 G		0.3	8	DEAD SEA REGION. Probable explosion.
	30	16 17 27.6?	16.192 N	61.408 W	33 N		0.9	5	LEEWARD ISLANDS. ML 1.4 (FDF)
	30	18 59 32.3*	0.889 N	121.470 E	84 ?	4.4	0.4	7	MINAHASSA PENINSULA
	30	20 14 01.5*	35.442 N	139.237 E	10 G		0.5	5	NEAR S. COAST OF HONSHU, JAPAN. Felt (I JMA) at Ajiro.
	30	21 13 34.7*	63.862 N	149.260 W	33 N		0.7	6	CENTRAL ALASKA. ML 3 1 (PMR).
	30	22 14 39.2	9.029 S	123.544 E	127	4.9	1.2	64	TIMOR

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

01 04 26 07.46 23.052S 66.529W 199km
6.0mb (81 obs.)
JUJUY PROVINCE, ARGENTINA
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 18 Dip=83 Slip=-85
NP2: 162 9 -125
Principal Axes:
T P1g=38 Azm=104
P 52 294
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with a small strike-slip component. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sta: 5 Focal mech. F
Energy 2.9±0.9*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 256 No. of sta: 6
Principal Axes:
Scale 10**19 Nm
T Val= 1.31 P1g=43 Azm=134
N -0.09 2 41
P -1.22 47 309
Best Double Couple:Ma=1.3*10**19
NP1:Strike=278 Dip=3 Slip=-34
NP2: 41 88 -92
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 31C M.W.: 9S, 18C
Centroid Location:
Origin Time 04:26:18.9 0.2
Lat 23.09S 0.02 Lon 66.51W 0.02
Dep 248.8 1.4 Half-duration 5.9
Principal Axes:
Scale 10**18 Nm
T Val= 3.94 P1g=35 Azm=123
N -0.37 1 32
P -3.57 55 300
Best Double Couple:Ma=3.8*10**18
NP1:Strike=218 Dip=10 Slip=-84
NP2: 32 80 -91

01 13 51 20.70 16.244N 95.873W 37km
5.1mb (33 obs.)
OAXACA, MEXICO
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 7S, 9C
Centroid Location:
Origin Time 13:51:14.9 1.1
Lat 15.74N 0.13 Lon 95.95W 0.17
Dep 53.0 6.1 Half-duration 1.3
Principal Axes:
Scale 10**16 Nm
T Val= 5.59 P1g=17 Azm= 99
N 1.68 10 192
P -7.27 70 311
Best Double Couple:Ma=6.4*10**16
NP1:Strike=174 Dip=29 Slip=-110
NP2: 17 63 -79

01 22 46 50.78 21.870S 179.455W 593km
5.5mb (40 obs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 16C
Centroid Location:
Origin Time 22:46:57.9 1.2
Lat 21.81S 0.11 Lon 179.44W 0.09
Dep 612.5 6.1 Half-duration 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 1.35 P1g=45 Azm= 87
N -0.20 16 194
P -1.15 41 298
Best Double Couple:Ma=1.3*10**17
NP1:Strike= 97 Dip=16 Slip= 173
NP2: 193 88 74

03 01 15 33.71 2.836S 129.510E 20km
5.7mb (21 obs.) 4.8Msz (2 obs.)
CERAM
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 22C
Centroid Location:
Origin Time 01:15:38.4 0.7

Lat 2.59S 0.06 Lon 129.26E 0.07
Dep 39.1 5.2 Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 10.17 P1g=74 Azm=227
N -0.65 2 324
P -9.53 16 55
Best Double Couple:Ma=9.9*10**16
NP1:Strike=148 Dip=29 Slip= 94
NP2: 323 61 88

03 04 10 13.43 9.360N 122.279E 52km
5.3mb (28 obs.) 4.7Msz (3 obs.)
NEGROS, PHILIPPINE ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 5S, 13C
Centroid Location:
Origin Time 04:10:11.1 0.7
Lat 9.43N 0.07 Lon 121.98E 0.11
Dep 15.0 FIX Half-duration 1.8
Principal Axes:
Scale 10**17 Nm
T Val= 1.93 P1g=22 Azm=207
N -0.70 18 110
P -1.23 61 344
Best Double Couple:Ma=1.6*10**17
NP1:Strike=327 Dip=28 Slip=-49
NP2: 103 69 -109

03 06 40 13.91 58.893S 158.513E 33km
5.9mb (43 obs.) 7.3Msz (20 obs.)
MACQUARIE ISLANDS REGION
RADIATED ENERGY
No. of sta: 5 Focal mech. C
Energy 8.6±1.3*10**14 Nm
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 42C M.W.: 14S, 33C
Centroid Location:
Origin Time 06:40:36.2 0.1
Lat 59.28S 0.01 Lon 158.80E 0.02
Dep 15.0 FIX Half-duration 15.0
Principal Axes:
Scale 10**20 Nm
T Val= 1.20 P1g= 9 Azm=110
N 0.37 68 223
P -1.57 20 17
Best Double Couple:Ma=1.4*10**20
NP1:Strike=155 Dip=69 Slip=-172
NP2: 62 83 -21

03 08 01 36.24 59.538S 159.005E 33km
6.1mb (40 obs.) 6.8Msz (4 obs.)
MACQUARIE ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 18C
Centroid Location:
Origin Time 08:01:44.9 0.4
Lat 59.05S 0.05 Lon 158.63E 0.11
Dep 15.0 FIX Half-duration 10.0
Principal Axes:
Scale 10**19 Nm
T Val= 1.97 P1g=59 Azm=308
N -0.18 31 126
P -1.78 1 217
Best Double Couple:Ma=1.9*10**19
NP1:Strike=334 Dip=52 Slip= 131
NP2: 100 53 50

04 00 30 43.19 16.411S 167.742E 192km
5.1mb (6 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 7S, 11C
Centroid Location:
Origin Time 00:30:43.4 2.5
Lat 15.77S 0.19 Lon 167.89E 0.24
Dep 182.7 8.4 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 6.46 P1g=46 Azm=160
N -0.13 33 293
P -6.32 25 40
Best Double Couple:Ma=6.4*10**16
NP1:Strike=177 Dip=36 Slip= 159
NP2: 285 78 56

04 04 27 08.88 49.293N 156.410E 33km
5.9mb (74 obs.) 6.2Msz (25 obs.)
KURIL ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 35 Dip=68 Slip= 90
NP2: 215 22 90
Principal Axes:
T P1g=67 Azm=305
P 23 125
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
RADIATED ENERGY
No. of sta: 10 Focal mech. F
Energy 2.5±0.6*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 23 No. of sta: 21
Principal Axes:
Scale 10**18 Nm
T Val= 2.42 P1g=50 Azm=329
N 0.10 26 205
P -2.51 28 100
Best Double Couple:Ma=2.5*10**18
NP1:Strike=143 Dip=29 Slip= 26
NP2: 30 78 116
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 34C
Centroid Location:
Origin Time 04:27:13.6 0.2
Lat 49.05N 0.02 Lon 156.78E 0.03
Dep 22.2 1.4 Half-duration 5.2
Principal Axes:
Scale 10**18 Nm
T Val= 2.58 P1g=74 Azm=335
N 0.46 8 217
P -3.04 14 125
Best Double Couple:Ma=2.8*10**18
NP1:Strike=204 Dip=32 Slip= 76
NP2: 41 59 99

05 02 59 50.34 59.561S 158.603E 33km
4.5mb (2 obs.)
MACQUARIE ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 15C
Centroid Location:
Origin Time 02:59:55.9 0.9
Lat 59.10S 0.18 Lon 158.57E 0.25
Dep 15.0 FIX Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 10.21 P1g=65 Azm=334
N -2.00 14 98
P -8.22 20 193
Best Double Couple:Ma=9.2*10**16
NP1:Strike=306 Dip=28 Slip= 121
NP2: 92 66 74

05 15 58 41.51 10.553S 161.569E 108km
5.0mb (8 obs.)
SOLOMON ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 19C
Centroid Location:
Origin Time 15:58:37.7 1.2
Lat 11.03S 0.09 Lon 161.87E 0.10
Dep 73.1 5.7 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 8.15 P1g=12 Azm=119
N 2.29 67 238
P -10.43 20 24
Best Double Couple:Ma=9.3*10**16
NP1:Strike=163 Dip=68 Slip=-174
NP2: 70 85 -22

06 15 27 22.41 49.262N 156.266E 43km
5.7mb (68 obs.) 5.5Msz (9 obs.)
KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 31C
Centroid Location:
Origin Time 15:27:24.6 0.4
Lat 49.23N 0.03 Lon 156.78E 0.05

Dep 31.1 2.1 Half-duration 3.0
Principal Axes:
Scale 10**17 Nm
T Val= 3.78 Plg=74 Azm=330
N 0.80 7 215
P -4.58 14 123
Best Double Couple:Mo=4.2*10**17
NP1:Strike=204 Dip=31 Slip= 77
NP2: 39 60 98

06 21 54 00.98 49.213N 156.221E 33km
5.3mb (62 abs.) 5.6Msz (10 abs.)
KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 27C
Centroid Location:
Origin Time 21:54: 5.5 0.4
Lat 48.95N 0.03 Lon 156.63E 0.05
Dep 23.5 1.8 Half-duration 2.8
Principal Axes:
Scale 10**17 Nm
T Val= 3.14 Plg=77 Azm=308
N 0.49 0 216
P -3.64 13 126
Best Double Couple:Mo=3.4*10**17
NP1:Strike=215 Dip=32 Slip= 89
NP2: 36 58 91

07 11 32 27.39 39.367N 54.755E 37km
5.5mb (87 abs.) 5.5Msz (5 abs.)
TURKMEN SSR
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 23C
Centroid Location:
Origin Time 11:32:30.9 0.6
Lat 39.13N 0.07 Lon 54.87E 0.05
Dep 29.0 BDY Half-duration 2.7
Principal Axes:
Scale 10**17 Nm
T Val= 4.17 Plg=58 Azm= 21
N 0.04 4 117
P -4.21 32 209
Best Double Couple:Mo=4.2*10**17
NP1:Strike=312 Dip=14 Slip= 106
NP2: 116 77 86

07 11 57 09.43 31.089S 177.968W 33km
5.8mb (39 abs.) 6.7Msz (25 abs.)
KERMADEC ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 25 Dip=65 Slip= 90
NP2: 205 25 90
Principal Axes:
T Plg=70 Azm=295
P 20 115
Comment: The focal mechanism is
poorly controlled and
corresponds to reverse
faulting. The preferred fault
plane is NP2.
MOMENT TENSOR SOLUTION
Dep 28 No. of sta: 13
Principal Axes:
Scale 10**18 Nm
T Val= 8.14 Plg=54 Azm=243
N 0.20 29 22
P -8.34 20 124
Best Double Couple:Mo=8.2*10**18
NP1:Strike=252 Dip=36 Slip= 145
NP2: 11 71 59
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 37C M.W.: 10S, 26C
Centroid Location:
Origin Time 11:57:16.9 0.1
Lat 31.19S 0.02 Lon 177.77W 0.01
Dep 23.4 0.6 Half-duration 7.6
Principal Axes:
Scale 10**18 Nm
T Val= 8.45 Plg=71 Azm=251
N 0.40 8 6
P -8.85 17 99
Best Double Couple:Mo=8.6*10**18
NP1:Strike=201 Dip=29 Slip= 107
NP2: 2 62 81

07 17 43 39.62 31.218S 177.804W 40km
5.5mb (20 abs.) 5.5Msz (12 abs.)
KERMADEC ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 50 Dip=82 Slip= 90

NP2: 230 8 90
Principal Axes:
T Plg=53 Azm=320
P 37 140
Comment: The focal mechanism is
poorly controlled and
corresponds to reverse
faulting. The preferred fault
plane is NP2.
MOMENT TENSOR SOLUTION
Dep 25 No. of sta: 7
Principal Axes:
Scale 10**17 Nm
T Val= 2.86 Plg=56 Azm=344
N 0.03 18 225
P -2.89 28 125
Best Double Couple:Mo=2.9*10**17
NP1:Strike=177 Dip=24 Slip= 40
NP2: 50 75 109
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 19C
Centroid Location:
Origin Time 17:43:46.0 0.5
Lat 31.05S 0.11 Lon 178.24W 0.10
Dep 15.8 5.6 Half-duration 2.4
Principal Axes:
Scale 10**17 Nm
T Val= 3.81 Plg=51 Azm=267
N 0.70 3 1
P -4.51 39 93
Best Double Couple:Mo=4.2*10**17
NP1:Strike=206 Dip= 7 Slip= 116
NP2: 0 84 87

08 02 58 50.50 6.521N 82.572W 10km
5.4mb (75 abs.) 5.6Msz (10 abs.)
SOUTH OF PANAMA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 35C
Centroid Location:
Origin Time 02:58:59.6 0.3
Lat 6.52N 0.03 Lon 82.76W 0.03
Dep 21.9 3.5 Half-duration 3.7
Principal Axes:
Scale 10**17 Nm
T Val= 10.95 Plg=20 Azm=322
N -0.07 66 176
P -10.88 12 56
Best Double Couple:Mo=1.1*10**18
NP1:Strike=100 Dip=67 Slip= 6
NP2: 8 85 157

08 13 35 16 19 49.612N 156.360E 83km
5.6mb (79 abs.)
KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 24C
Centroid Location:
Origin Time 13:35:18.6 0.5
Lat 49.46N 0.05 Lon 156.79E 0.08
Dep 105.1 4.4 Half-duration 2.7
Principal Axes:
Scale 10**17 Nm
T Val= 3.94 Plg=28 Azm=283
N -1.21 23 26
P -2.74 52 150
Best Double Couple:Mo=3.3*10**17
NP1:Strike=330 Dip=27 Slip=149
NP2: 212 77 -66

08 21 37 00.02 31.419S 177.801W 33km
5.2mb (11 abs.) 5.1Msz (5 abs.)
KERMADEC ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 7S, 14C
Centroid Location:
Origin Time 21:37: 4.7 0.7
Lat 31.22S 0.10 Lon 177.88W 0.09
Dep 33.0 7.1 Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 8.56 Plg=56 Azm=245
N 2.83 16 359
P -11.40 30 98
Best Double Couple:Mo=1.0*10**17
NP1:Strike=227 Dip=21 Slip= 159
NP2: 355 77 74

10 02 26 23.49 7.123S 123.290E 604km
5.4mb (29 abs.)
BANDA SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 18C
Centroid Location:
Origin Time 02:26:28.3 0.7
Lat 7.50S 0.06 Lon 123.00E 0.07
Dep 623.2 4.9 Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.33 Plg=34 Azm=195
N -0.02 27 305
P -2.31 45 64
Best Double Couple:Mo=2.3*10**17
NP1:Strike=229 Dip=27 Slip=-167
NP2: 128 84 -63

11 00 34 52.14 22.329S 68.384W 130km
5.4mb (33 abs.)
NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 37C
Centroid Location:
Origin Time 00:34:58.9 0.4
Lat 22.11S 0.06 Lon 68.85W 0.05
Dep 132.9 2.2 Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.95 Plg=13 Azm= 83
N -1.18 7 351
P -1.77 75 233
Best Double Couple:Mo=2.4*10**17
NP1:Strike=182 Dip=33 Slip= -77
NP2: 347 58 -98

11 04 02 02.70 31.431S 70.756W 90km
5.2mb (15 abs.)
CHILE-ARGENTINA BORDER REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 26C
Centroid Location:
Origin Time 04:02: 6.8 0.6
Lat 31.67S 0.06 Lon 71.02W 0.11
Dep 114.2 4.5 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 6.45 Plg=38 Azm=278
N 0.84 8 182
P -7.29 51 83
Best Double Couple:Mo=6.9*10**16
NP1:Strike= 52 Dip=10 Slip= -39
NP2: 181 84 -98

13 11 20 52.22 14.272N 89.979W 123km
5.1mb (68 abs.)
GUATEMALA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 37C
Centroid Location:
Origin Time 11:20:57.5 0.3
Lat 14.16N 0.03 Lon 90.21W 0.03
Dep 115.2 1.5 Half-duration 3.0
Principal Axes:
Scale 10**17 Nm
T Val= 5.89 Plg=46 Azm= 11
N -1.13 39 225
P -4.77 18 120
Best Double Couple:Mo=5.3*10**17
NP1:Strike=168 Dip=44 Slip= 25
NP2: 59 73 131

13 14 07 43.61 39.429N 144.732E 34km
5.6mb (80 abs.) 4.9Msz (3 abs.)
OFF EAST COAST OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 29C
Centroid Location:
Origin Time 14:07:43.2 0.4
Lat 39.39N 0.05 Lon 144.65E 0.05
Dep 15.0 FIX Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.32 Plg= 9 Azm=268
N -0.22 5 177
P -2.10 80 58
Best Double Couple:Mo=2.2*10**17
NP1:Strike= 4 Dip=37 Slip= -82
NP2: 173 54 -96

13 20 08 51.69 34.333S 69.971W 10km
 5.8mb (44 obs.) 5.6Msz (11 obs.)
 CHILE-ARGENTINA BORDER REGION
 MOMENT TENSOR SOLUTION
 Dep 33 No. of sta: 5
 Principal Axes:
 Scale 10**18 Nm
 T Val= 1.03 Plg=20 Azm= 2
 N 0.00 68 153
 P -1.03 10 268
 Best Double Couple:Mo=1.0*10**18
 NP1:Strike= 44 Dip=69 Slip= 173
 NP2: 136 83 21
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 18S, 44C
 Centroid Location:
 Origin Time 20:08:53.4 0.3
 Lat 34.59S 0.03 Lon 70.00W 0.04
 Dep 15.0 FIX Half-duration 2.9
 Principal Axes:
 Scale 10**17 Nm
 T Val= 8.11 Plg=24 Azm=348
 N -0.78 58 124
 P -7.33 20 249
 Best Double Couple:Mo=7.7*10**17
 NP1:Strike= 27 Dip=58 Slip= 176
 NP2: 119 87 32

14 10 17 15.00 30.488N 139.671E 171km
 5.7mb (82 obs.)
 SOUTH OF HONSHU, JAPAN
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike= 32 Dip=85 Slip= -65
 NP2: 133 25 -168
 Principal Axes:
 T Plg=35 Azm=101
 P 44 327
 Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting with a moderate strike-slip component. The preferred fault plane is not determined.
 RADIATED ENERGY
 No. of sta: 5 Focal mech. C
 Energy 3.9±1.2*10**12 Nm
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 30C
 Centroid Location:
 Origin Time 10:17:16.1 0.5
 Lat 30.36N 0.05 Lon 139.77E 0.05
 Dep 167.1 1.4 Half-duration 2.5
 Principal Axes:
 Scale 10**17 Nm
 T Val= 3.15 Plg=35 Azm= 90
 N 0.26 27 201
 P -3.41 43 319
 Best Double Couple:Mo=3.3*10**17
 NP1:Strike=122 Dip=27 Slip=-170
 NP2: 23 85 -63

15 08 50 09.94 4.709S 153.157E 63km
 5.3mb (21 obs.)
 NEW IRELAND REGION
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 18S, 50C
 Centroid Location:
 Origin Time 08:50:18.8 0.2
 Lat 4.75S 0.02 Lon 152.91E 0.02
 Dep 59.2 1.8 Half-duration 3.9
 Principal Axes:
 Scale 10**17 Nm
 T Val= 13.26 Plg=62 Azm=316
 N -0.51 20 90
 P -12.75 19 187
 Best Double Couple:Mo=1.3*10**18
 NP1:Strike=307 Dip=32 Slip= 131
 NP2: 81 67 68

17 04 47 13.33 4.118S 145.706E 15km
 5.4mb (21 obs.) 6.1Msz (21 obs.)
 NEAR N COAST OF PAPUA NEW GUINEA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 17S, 45C M.W.: 14S, 26C
 Centroid Location:
 Origin Time 04:47:19.2 0.1
 Lat 4.04S 0.01 Lon 145.78E 0.01
 Dep 17.5 1.4 Half-duration 5.0
 Principal Axes:
 Scale 10**18 Nm
 T Val= 1.71 Plg= 6 Azm=304
 N 0.25 84 105
 P -1.96 2 214
 Best Double Couple:Mo=1.8*10**18
 NP1:Strike=349 Dip=84 Slip= 177
 NP2: 79 87 6

17 21 24 52.20 18.412S 175.249W 253km
 5.2mb (28 obs.)
 TONGA ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 16S, 32C
 Centroid Location:
 Origin Time 21:24:58.4 0.5
 Lat 18.48S 0.05 Lon 175.30W 0.06
 Dep 246.1 2.3 Half-duration 2.0
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.63 Plg=37 Azm=141
 N 0.01 18 37
 P -1.65 48 286
 Best Double Couple:Mo=1.6*10**17
 NP1:Strike=289 Dip=19 Slip=-18
 NP2: 35 84 -108

18 08 43 29.39 24.269S 69.148W 97km
 5.5mb (50 obs.)
 NORTHERN CHILE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 15S, 32C
 Centroid Location:
 Origin Time 08:43:35.8 0.3
 Lat 24.36S 0.04 Lon 69.25W 0.03
 Dep 117.9 1.8 Half-duration 2.2
 Principal Axes:
 Scale 10**17 Nm
 T Val= 3.23 Plg=14 Azm= 62
 N 0.10 25 325
 P -3.33 61 178
 Best Double Couple:Mo=3.3*10**17
 NP1:Strike=182 Dip=38 Slip= -46
 NP2: 311 64 -119

18 21 58 41.53 47.017N 89.658E 33km
 5.3mb (61 obs.) 4.8Msz (1 abs.)
 NORTHERN XINJIANG, CHINA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 24C
 Centroid Location:
 Origin Time 21:58:39.9 0.5
 Lat 47.24N 0.05 Lon 89.69E 0.06
 Dep 15.0 FIX Half-duration 1.9
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.29 Plg= 0 Azm=109
 N -0.01 90 180
 P -1.27 0 19
 Best Double Couple:Mo=1.3*10**17
 NP1:Strike=154 Dip=90 Slip= 180
 NP2: 244 90 0

19 09 21 40.85 15.001S 75.667W 28km
 5.1mb (35 obs.) 5.1Msz (6 obs.)
 NEAR COAST OF PERU
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 17S, 35C
 Centroid Location:
 Origin Time 09:21:49.4 0.3
 Lat 14.78S 0.05 Lon 75.80W 0.05
 Dep 39.3 2.8 Half-duration 2.2
 Principal Axes:
 Scale 10**17 Nm
 T Val= 2.52 Plg=69 Azm=101
 N 0.11 7 351
 P -2.63 19 258
 Best Double Couple:Mo=2.6*10**17
 NP1:Strike=336 Dip=26 Slip= 73
 NP2: 174 65 98

19 11 42 40.68 48.488S 107.002E 10km
 4.9mb (6 obs.) 5.0Msz (1 obs.)
 SOUTHEAST INDIAN RISE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 14S, 25C
 Centroid Location:
 Origin Time 11:42:42.9 0.8
 Lat 48.74S 0.08 Lon 106.43E 0.17

19 21 18 25.78 9.186S 79.059W 68km
 5.7mb (63 obs.)
 OFF COAST OF NORTHERN PERU
 FAULT PLANE SOLUTION: P-Waves
 NP1:Strike= 12 Dip=60 Slip=-40
 NP2: 125 56 -143
 Principal Axes:
 T Plg= 2 Azm= 69
 P 48 337
 Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a large normal component. The preferred fault plane is not determined.
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 18S, 44C
 Centroid Location:
 Origin Time 21:18:32.5 0.3
 Lat 9.17S 0.03 Lon 79.25W 0.04
 Dep 69.6 2.2 Half-duration 2.7
 Principal Axes:
 Scale 10**17 Nm
 T Val= 4.70 Plg= 7 Azm=245
 N -0.79 18 152
 P -3.91 71 356
 Best Double Couple:Mo=4.3*10**17
 NP1:Strike=354 Dip=41 Slip= -62
 NP2: 139 55 -112

19 21 58 00.83 49.647N 156.318E 85km
 5.4mb (70 obs.)
 KURIL ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 25C
 Centroid Location:
 Origin Time 21:58: 9.5 1.3
 Lat 50.37N 0.13 Lon 155.79E 0.21
 Dep 72.413.7 Half-duration 1.6
 Principal Axes:
 Scale 10**16 Nm
 T Val= 7.70 Plg=32 Azm=300
 N 1.08 3 208
 P -8.78 58 114
 Best Double Couple:Mo=8.2*10**16
 NP1:Strike= 39 Dip=14 Slip= -78
 NP2: 208 77 -93

20 05 07 57.36 4.293N 32.523W 10km
 4.9mb (44 obs.) 4.6Msz (2 obs.)
 CENTRAL MID-ATLANTIC RIDGE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 23C
 Centroid Location:
 Origin Time 05:08: 6.1 0.7
 Lat 4.67N 0.09 Lon 32.53W 0.05
 Dep 15.0 FIX Half-duration 1.6
 Principal Axes:
 Scale 10**16 Nm
 T Val= 3.13 Plg= 0 Azm= 93
 N 0.59 0 3
 P -3.71 90 180
 Best Double Couple:Mo=3.4*10**16
 NP1:Strike=183 Dip=45 Slip= -90
 NP2: 3 45 -90

22 07 17 23.84 0.791S 84.399E 10km
 5.5mb (70 obs.) 5.0Msz (8 obs.)
 SOUTH INDIAN OCEAN
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 11S, 23C
 Centroid Location:
 Origin Time 07:17:28.0 0.6
 Lat 0.41S 0.05 Lon 84.51E 0.05
 Dep 15.0 FIX Half-duration 1.8
 Principal Axes:
 Scale 10**16 Nm
 T Val= 9.18 Plg= 0 Azm=262
 N 0.98 90 180

P -10.16 0 172
Best Double Couple: Mo=9 7*10**16
NP1: Strike=307 Dip=90 Slip= 180
NP2: 37 90 0

22 13 43 37.68 0.978S 78.050W 10km
6.1mb (77 obs.) 6.2Msz (24 obs.)
ECUADOR
FAULT PLANE SOLUTION: P-Waves
NP1: Strike=120 Dip=50 Slip= 50
NP2: 353 54 127
Principal Axes:
T Val= 1.48 Plg=60 Azm=323
N 0.00 21 128
P -1.47 15 32
Best Double Couple: Mo=1.5*10**18
NP1: Strike= 95 Dip=35 Slip= 51
NP2: 319 63 114
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 44C M.W.: 15S, 37C
Centroid Location:
Origin Time 13:43:45.1 0.2
Lat 0.89S 0.02 Lon 78.24W 0.02
Dep 15.0 FIX Half-duration 5.9
Principal Axes:
Scale 10**18 Nm
T Val= 3.81 Plg=52 Azm=201
N 0.51 34 349
P -4.32 15 90
Best Double Couple: Mo=4.1*10**18
NP1: Strike=218 Dip=42 Slip= 147
NP2: 334 68 53

22 16 21 35.13 1.082S 78.127W 10km
5.9mb (62 obs.) 5.6Msz (14 obs.)
ECUADOR
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 42C
Centroid Location:
Origin Time 16:21:41.6 0.2
Lat 0.98S 0.03 Lon 78.24W 0.03
Dep 19.4 1.5 Half-duration 3.7
Principal Axes:
Scale 10**17 Nm
T Val= 10.71 Plg=63 Azm=190
N -0.10 25 346
P -10.60 9 80
Best Double Couple: Mo=1.1*10**18
NP1: Strike=197 Dip=42 Slip= 129
NP2: 330 59 61

22 22 05 15.84 76.421N 134.275E 14km
5.6mb (78 obs.) 5.1Msz (10 obs.)
LAPTEV SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 28C
Centroid Location:
Origin Time 22:05:18.7 0.2
Lat 76.02N 0.03 Lon 134.50E 0.16
Dep 15.0 FIX Half-duration 2.3
Principal Axes:
Scale 10**17 Nm
T Val= 2.61 Plg= 6 Azm=261
N -0.64 14 170
P -1.98 75 14
Best Double Couple: Mo=2.3*10**17
NP1: Strike= 6 Dip=41 Slip= -69
NP2: 159 52 -107

23 07 15 43.25 45.960N 149.519E 131km
5.9mb (80 obs.)
KURIL ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1: Strike= 57 Dip=70 Slip=-147
NP2: 314 59 -23
Principal Axes:
T Val= 2.03 Plg= 7 Azm=184
N -0.38 74 324
P -1.65 16 138
Best Double Couple: Mo=1.8*10**18
NP1: Strike=274 Dip=77 Slip=-170

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 145 No. of sta: 9
Principal Axes:
Scale 10**17 Nm
T Val= 4.73 Plg=19 Azm= 11
N -0.35 58 134
P -4.39 25 271
Best Double Couple: Mo=4.6*10**17
NP1: Strike= 52 Dip=58 Slip=-176
NP2: 320 86 -32
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 35C
Centroid Location:
Origin Time 07:15:45.8 0.3
Lat 45.70N 0.02 Lon 149.57E 0.04
Dep 130.9 1.1 Half-duration 3.1
Principal Axes:
Scale 10**17 Nm
T Val= 5.40 Plg= 3 Azm=192
N 0.83 59 97
P -6.24 31 283
Best Double Couple: Mo=5.8*10**17
NP1: Strike=323 Dip=67 Slip= -21
NP2: 62 70 -155

23 15 14 56.29 50.716S 139.279E 10km
5.8mb (28 obs.) 6.1Msz (20 obs.)
SOUTH OF AUSTRALIA
FAULT PLANE SOLUTION: P-Waves
NP1: Strike=275 Dip=72 Slip= 165
NP2: 10 76 19
Principal Axes:
T Val= 3.81 Plg=23 Azm=233
N 0.51 34 349
P -4.32 15 90
Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a small reverse component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 3 Focal mech. M
Energy 1.2±0.2*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 6 No. of sta: 5
Principal Axes:
Scale 10**18 Nm
T Val= 1.17 Plg=37 Azm=240
N 0.00 48 27
P -1.17 17 137
Best Double Couple: Mo=1.2*10**18
NP1: Strike=272 Dip=51 Slip= 163
NP2: 12 77 40
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 39C
Centroid Location:
Origin Time 15:15: 8 4 0.3
Lat 50.24S 0.03 Lon 139.19E 0.04
Dep 15.0 FIX Half-duration 10.0
Principal Axes:
Scale 10**18 Nm
T Val= 2.05 Plg= 0 Azm=230
N 0.34 90 180
P -2.39 0 140
Best Double Couple: Mo=2.2*10**18
NP1: Strike=275 Dip=90 Slip= 180
NP2: 5 90 0

23 15 22 46.22 50.468S 139.528E 10km
5.5mb (7 obs.) 5.9Msz (4 obs.)
SOUTH OF AUSTRALIA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 24C
Centroid Location:
Origin Time 15:22:51.5 0.8
Lat 50.52S 0.08 Lon 139.67E 0.12
Dep 15.0 FIX Half-duration 4.2
Principal Axes:
Scale 10**18 Nm
T Val= 2.03 Plg= 2 Azm=229
N -0.38 74 324
P -1.65 16 138
Best Double Couple: Mo=1.8*10**18
NP1: Strike=274 Dip=77 Slip=-170

NP2: 182 80 -13

24 04 55 21.27 36.600N 141.301E 42km
5.5mb (69 obs.) 5.8Msz (9 obs.)
NEAR EAST COAST OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 30C
Centroid Location:
Origin Time 04:55:24.5 0.3
Lat 36.50N 0.04 Lon 141.60E 0.05
Dep 19.5 2.4 Half-duration 3.7
Principal Axes:
Scale 10**17 Nm
T Val= 7.28 Plg=58 Azm=286
N 0.98 4 22
P -8.27 32 114
Best Double Couple: Mo=7.8*10**17
NP1: Strike=217 Dip=14 Slip= 106
NP2: 21 77 86

24 06 03 19.84 21.841S 179.454W 593km
5.5mb (44 obs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 18C
Centroid Location:
Origin Time 06:03:29.6 2.2
Lat 21.69S 0.15 Lon 179.68W 0.21
Dep 613.9 7.0 Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 1.80 Plg=55 Azm= 85
N 0.08 4 181
P -1.87 34 274
Best Double Couple: Mo=1.8*10**17
NP1: Strike= 21 Dip=11 Slip= 110
NP2: 180 80 86

25 23 16 30.70 29.866N 90.440E 33km
5.2mb (40 obs.) 4.9Msz (3 obs.)
TIBET
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 19C
Centroid Location:
Origin Time 23:16:34.2 0.8
Lat 29.47N 0.09 Lon 90.34E 0.12
Dep 15.0 FIX Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 3.73 Plg= 0 Azm=111
N -0.63 0 21
P -3.10 90 180
Best Double Couple: Mo=3.4*10**16
NP1: Strike=201 Dip=45 Slip= -90
NP2: 21 45 -90

26 05 30 36.44 55.463N 164.537E 35km
5.1mb (40 obs.) 5.1Msz (6 obs.)
KOMANDORSKY ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centroid Location:
Origin Time 05:30:37.5 0.5
Lat 55.64N 0.04 Lon 164.84E 0.08
Dep 17.1 4.5 Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.38 Plg= 9 Azm=273
N -0.34 74 37
P -2.05 13 181
Best Double Couple: Mo=2.2*10**17
NP1: Strike=317 Dip=74 Slip=-177
NP2: 226 87 -16

27 04 06 52.89 6.533S 81.094W 33km
5.2mb (38 obs.) 4.6Msz (1 obs.)
NEAR COAST OF NORTHERN PERU
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 15C
Centroid Location:
Origin Time 04:06:54.1 0.7
Lat 6.75S 0.11 Lon 81.69W 0.10
Dep 15.0 FIX Half-duration 1.7
Principal Axes:
Scale 10**17 Nm
T Val= 1.80 Plg=61 Azm= 61
N 0.34 3 156
P -2.14 29 248

Best Double Couple: Mo=2.0*10**17
 NP1: Strike=347 Dip=17 Slip= 101
 NP2: 156 74 87

27 08 30 00.77 18.166N 103.761W 33km
 5.0mb (43 obs.) 4.7Msz (1 obs.)
 NEAR COAST OF MICHUACAN, MEXICO
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 8S, 17C
 Centroid Location:
 Origin Time 08:29:54.5 1.0
 Lat 17.06N 0.14 Lon 102.98W 0.12
 Dep 15.0 FIX Half-duration 1.5
 Principal Axes:
 Scale 10**16 Nm
 T Val= 8.93 P1g=62 Azm= 21
 N 0.12 2 115
 P -9.04 28 206
 Best Double Couple: Mo=9.0*10**16
 NP1: Strike=300 Dip=18 Slip= 96
 NP2: 114 73 88

27 21 19 05.08 10.812N 86.347W 40km
 4.9mb (13 obs.) 5.1Msz (2 obs.)
 OFF COAST OF COSTA RICA
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 10S, 26C
 Centroid Location:
 Origin Time 21:19: 7.2 0.4
 Lat 10.47N 0.06 Lon 87.05W 0.06
 Dep 29.9 3.3 Half-duration 2.0
 Principal Axes:
 Scale 10**16 Nm
 T Val= 13.89 P1g=66 Azm= 9
 N 3.06 10 123
 P -16.95 21 217
 Best Double Couple: Mo=1.5*10**17
 NP1: Strike=325 Dip=25 Slip= 114
 NP2: 119 67 79

28 07 15 38.24 18.404S 168.266E 32km
 5.4mb (18 obs.) 5.9Msz (18 obs.)
 VANUATU ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 18S, 48C
 Centroid Location:
 Origin Time 07:15:49.4 0.2
 Lat 18.24S 0.02 Lon 167.56E 0.02
 Dep 21.5 1.1 Half-duration 4.2
 Principal Axes:
 Scale 10**18 Nm
 T Val= 1.41 P1g=73 Azm= 40
 N 0.10 9 161
 P -1.51 14 254
 Best Double Couple: Mo=1.5*10**18
 NP1: Strike=357 Dip=32 Slip= 107
 NP2: 156 60 80

28 11 47 08.61 18.411S 168.058E 31km
 5.7mb (32 obs.) 6.8Msz (25 obs.)
 VANUATU ISLANDS
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=157 Dip=75 Slip= 90
 NP2: 337 15 90
 Principal Axes:

T P1g=60 Azm= 67
 P 30 247
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
 RADIATED ENERGY
 No. of sta: 9 Focal mech. M
 Energy 6.7±1.4*10**13 Nm
 MOMENT TENSOR SOLUTION
 Dep 32 No. of sta: 15
 Principal Axes:
 Scale 10**19 Nm
 T Val= 1.80 P1g=65 Azm= 59
 N 0.31 10 171
 P -2.11 23 265
 Best Double Couple: Mo=2.0*10**19
 NP1: Strike= 15 Dip=24 Slip= 115
 NP2: 167 68 79
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 22S, 60C M.W.: 19S, 47C
 Centroid Location:
 Origin Time 11:47:21.8 0.1
 Lat 18.42S 0.01 Lon 167.79E 0.01
 Dep 23.0 0.5 Half-duration 9.4
 Principal Axes:
 Scale 10**19 Nm
 T Val= 1.87 P1g=69 Azm= 60
 N 0.07 3 159
 P -1.94 20 250
 Best Double Couple: Mo=1.9*10**19
 NP1: Strike=346 Dip=25 Slip= 98
 NP2: 157 65 86

28 13 46 13.95 18.546S 168.161E 25km
 5.8mb (28 obs.) 6.5Msz (18 obs.)
 VANUATU ISLANDS
 FAULT PLANE SOLUTION: P-Waves
 NP1: Strike=163 Dip=73 Slip= 90
 NP2: 343 17 90
 Principal Axes:
 T P1g=62 Azm= 73
 P 28 253
 Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
 RADIATED ENERGY
 No. of sta: 6 Focal mech. M
 Energy 8.3±2.1*10**13 Nm
 MOMENT TENSOR SOLUTION
 Dep 27 No. of sta: 12
 Principal Axes:
 Scale 10**18 Nm
 T Val= 7.41 P1g=68 Azm= 73
 N 0.09 2 167
 P -7.49 22 258
 Best Double Couple: Mo=7.4*10**18
 NP1: Strike=352 Dip=23 Slip= 95
 NP2: 166 67 88
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 21S, 52C M.W.: 19S, 41C
 Centroid Location:
 Origin Time 13:46:25.7 0.2

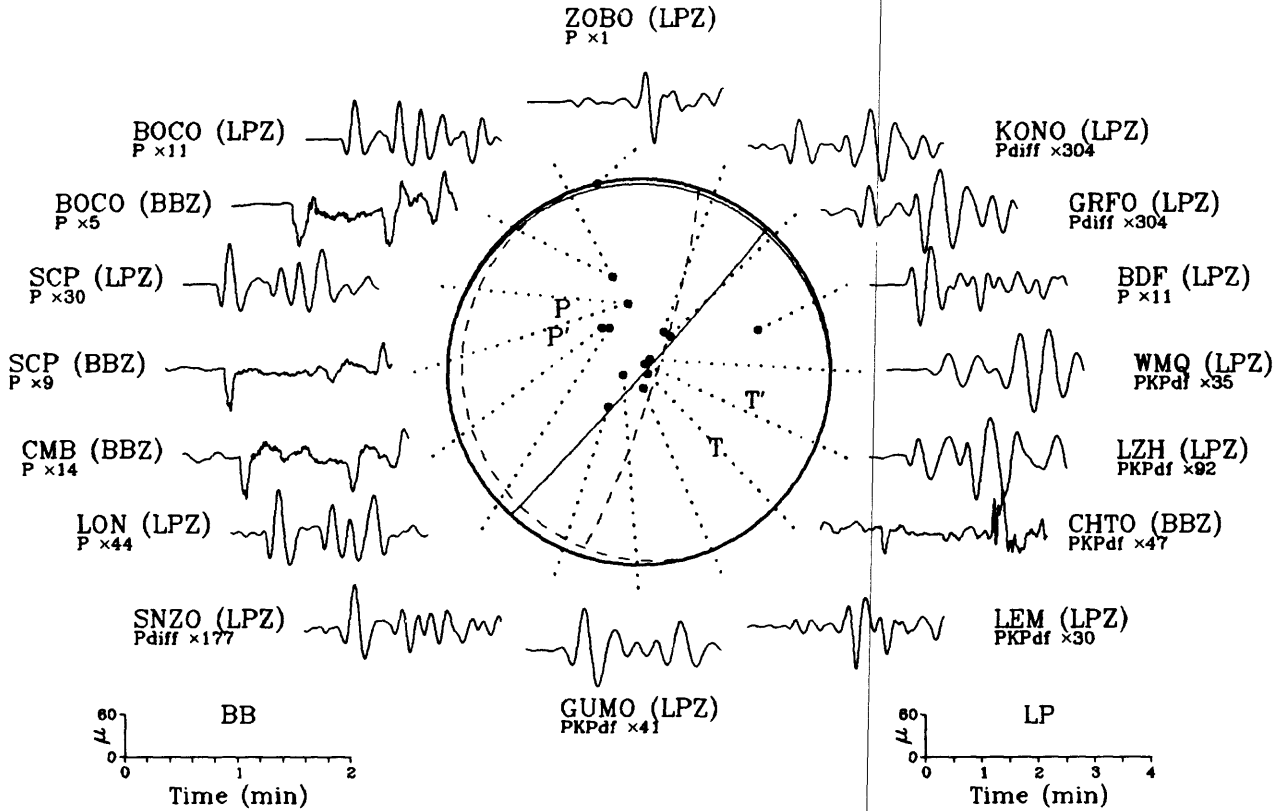
Lat 18.40S 0.02 Lon 167.86E 0.02
 Dep 21.8 0.9 Half-duration 7.6
 Principal Axes:
 Scale 10**18 Nm
 T Val= 7.57 P1g=69 Azm= 49
 N 0.17 6 156
 P -7.74 20 248
 Best Double Couple: Mo=7.6*10**18
 NP1: Strike=349 Dip=26 Slip= 105
 NP2: 153 65 83

28 23 09 37.10 18.340S 168.122E 32km
 5.2mb (10 obs.) 4.9Msz (6 obs.)
 VANUATU ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 13S, 23C
 Centroid Location:
 Origin Time 23:09:45.2 0.4
 Lat 18.34S 0.04 Lon 167.69E 0.04
 Dep 36.2 2.6 Half-duration 2.3
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.83 P1g=77 Azm= 98
 N 0.61 4 350
 P -2.44 12 259
 Best Double Couple: Mo=2.1*10**17
 NP1: Strike=343 Dip=33 Slip= 82
 NP2: 172 57 95

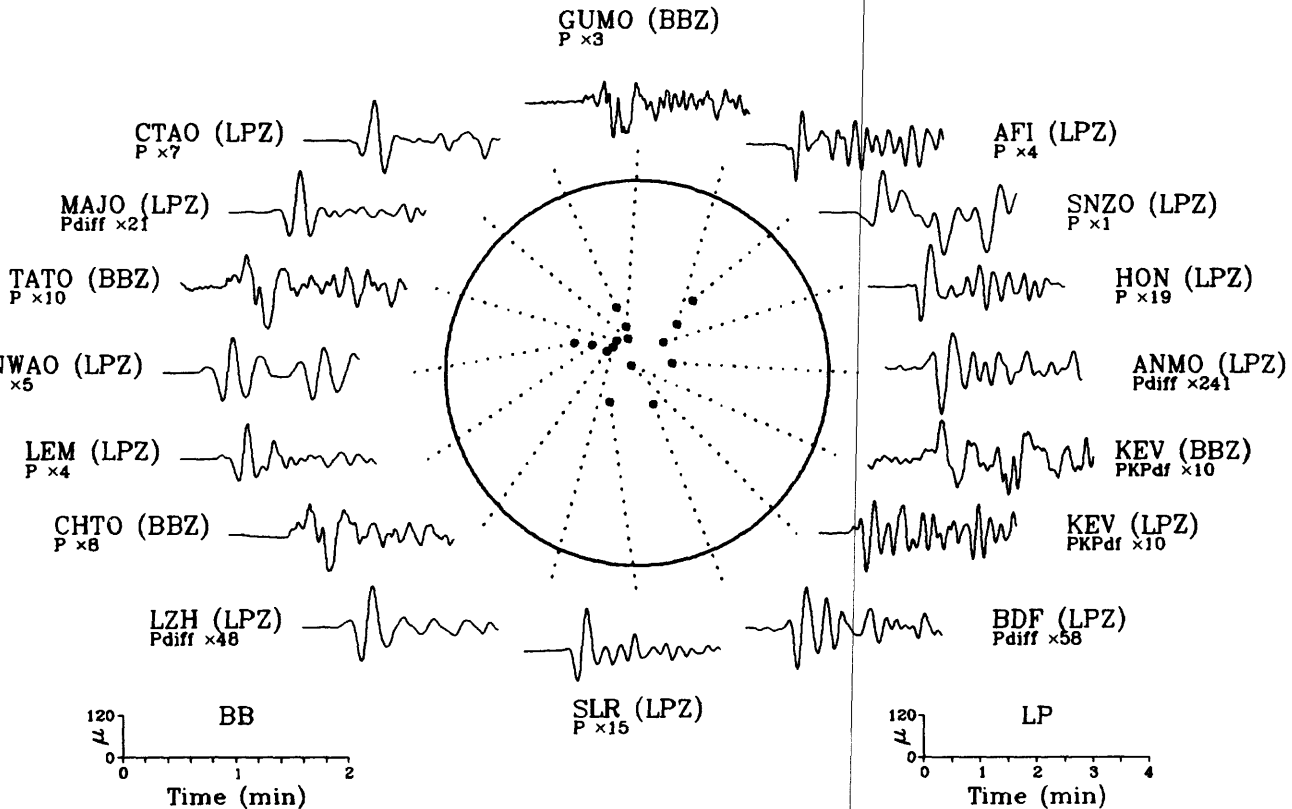
29 00 40 34.69 2.321N 127.037E 39km
 5.4mb (27 obs.) 5.0Msz (2 obs.)
 MOLUCCA PASSAGE
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 12S, 25C
 Centroid Location:
 Origin Time 00:40:37.4 0.6
 Lat 2.63N 0.07 Lon 126.51E 0.07
 Dep 15.0 FIX Half-duration 1.7
 Principal Axes:
 Scale 10**17 Nm
 T Val= 1.24 P1g=84 Azm= 83
 N 0.05 2 334
 P -1.29 6 244
 Best Double Couple: Mo=1.3*10**17
 NP1: Strike=331 Dip=39 Slip= 87
 NP2: 155 51 93

30 01 39 28.09 18.162S 167.865E 51km
 5.4mb (12 obs.) 6.3Msz (25 obs.)
 VANUATU ISLANDS
 CENTROID, MOMENT TENSOR (HRV)
 Data Used: GDSN
 L.P.B.: 21S, 51C M.W.: 16S, 38C
 Centroid Location:
 Origin Time 01:39:35.3 0.1
 Lat 18.09S 0.01 Lon 167.63E 0.01
 Dep 17.3 0.6 Half-duration 7.0
 Principal Axes:
 Scale 10**18 Nm
 T Val= 7.28 P1g=62 Azm= 60
 N 0.00 4 159
 P -7.27 28 251
 Best Double Couple: Mo=7.3*10**18
 NP1: Strike=353 Dip=18 Slip= 105
 NP2: 158 73 85

01 September 1987 04:26:07.46
 Jujuy Province, Argentina



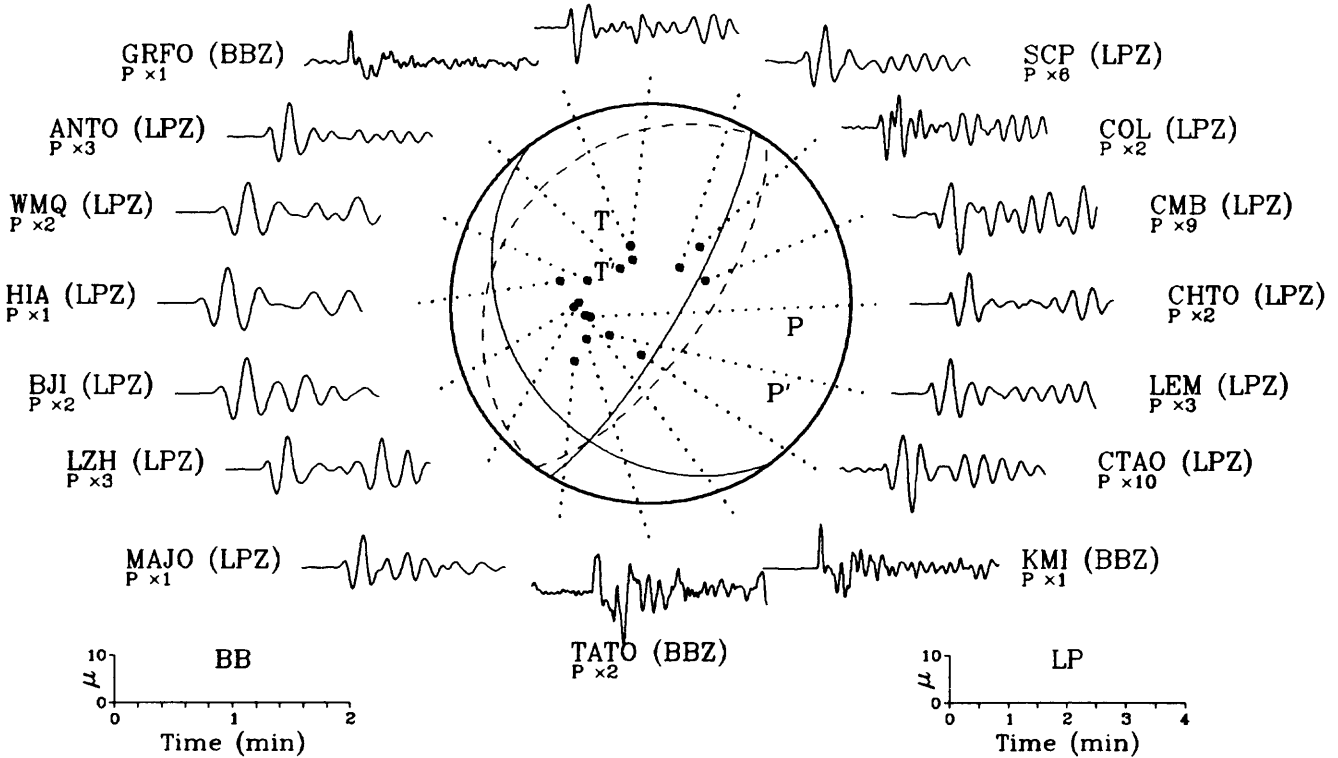
03 September 1987 06:40:13.91
 Macquarie Islands Region



Multiple event: mainshock follows foreshock by approximately 8 s.
 (Derived from broadband displacement seismograms.)

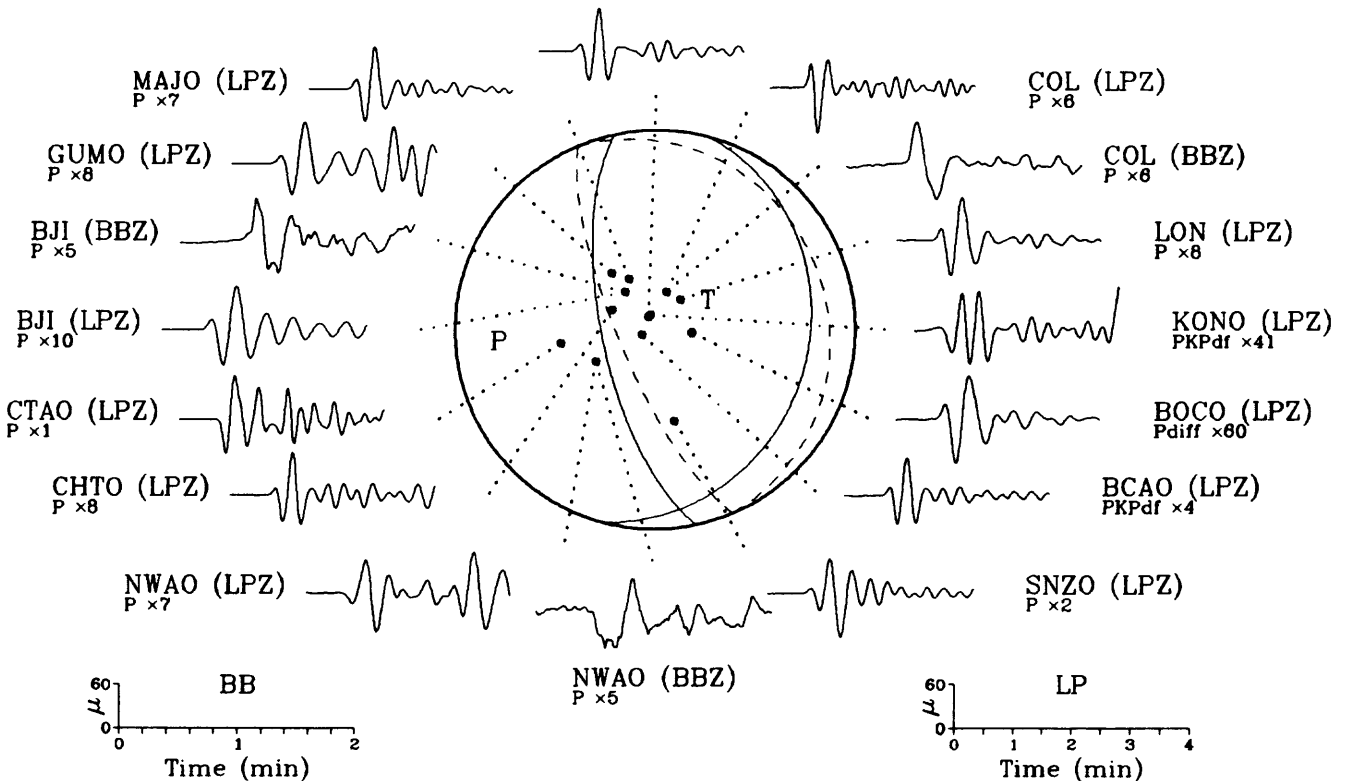
04 September 1987 04:27:08.88
Kuril Islands

KEV (LPZ)
P x2

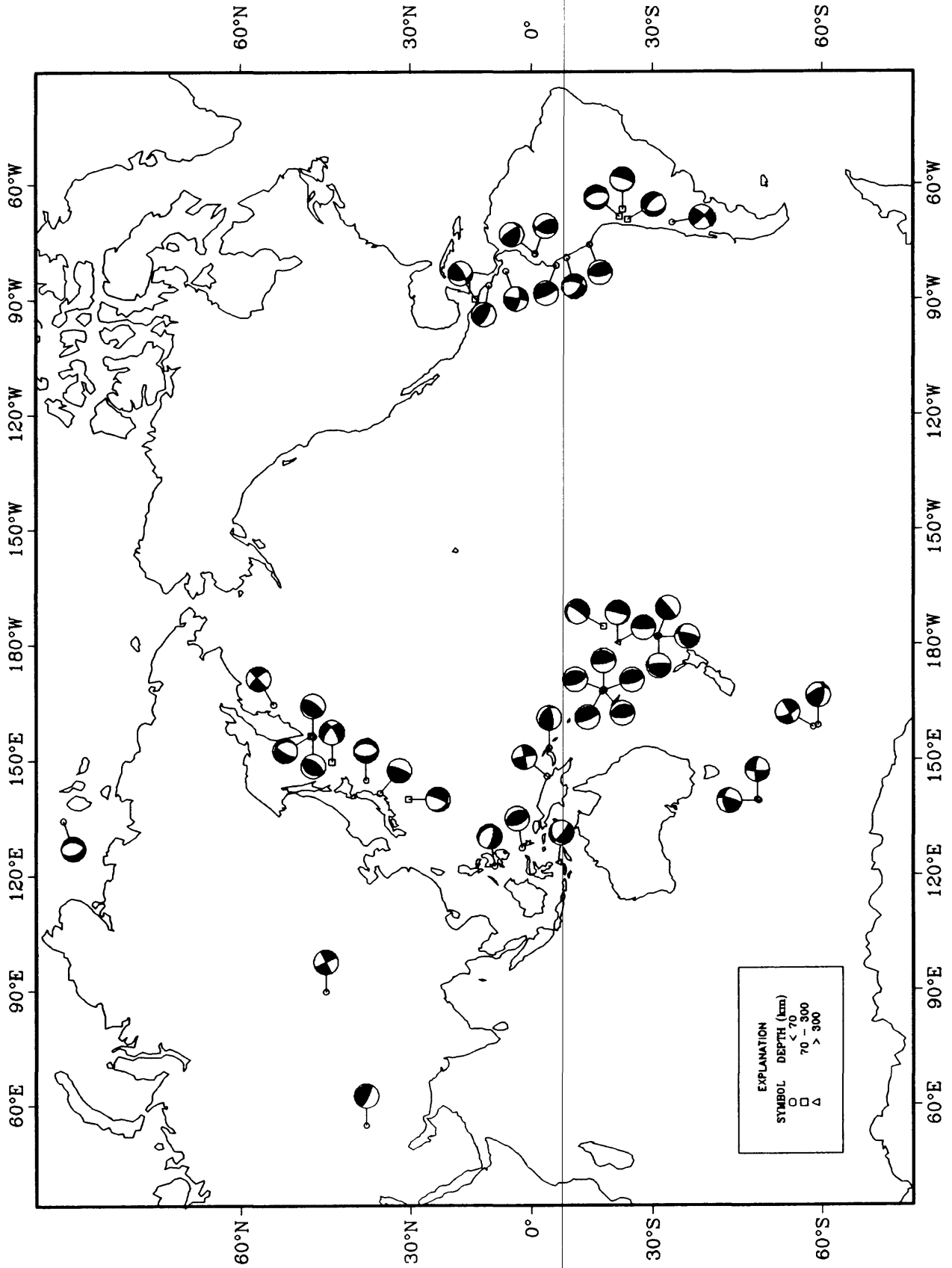


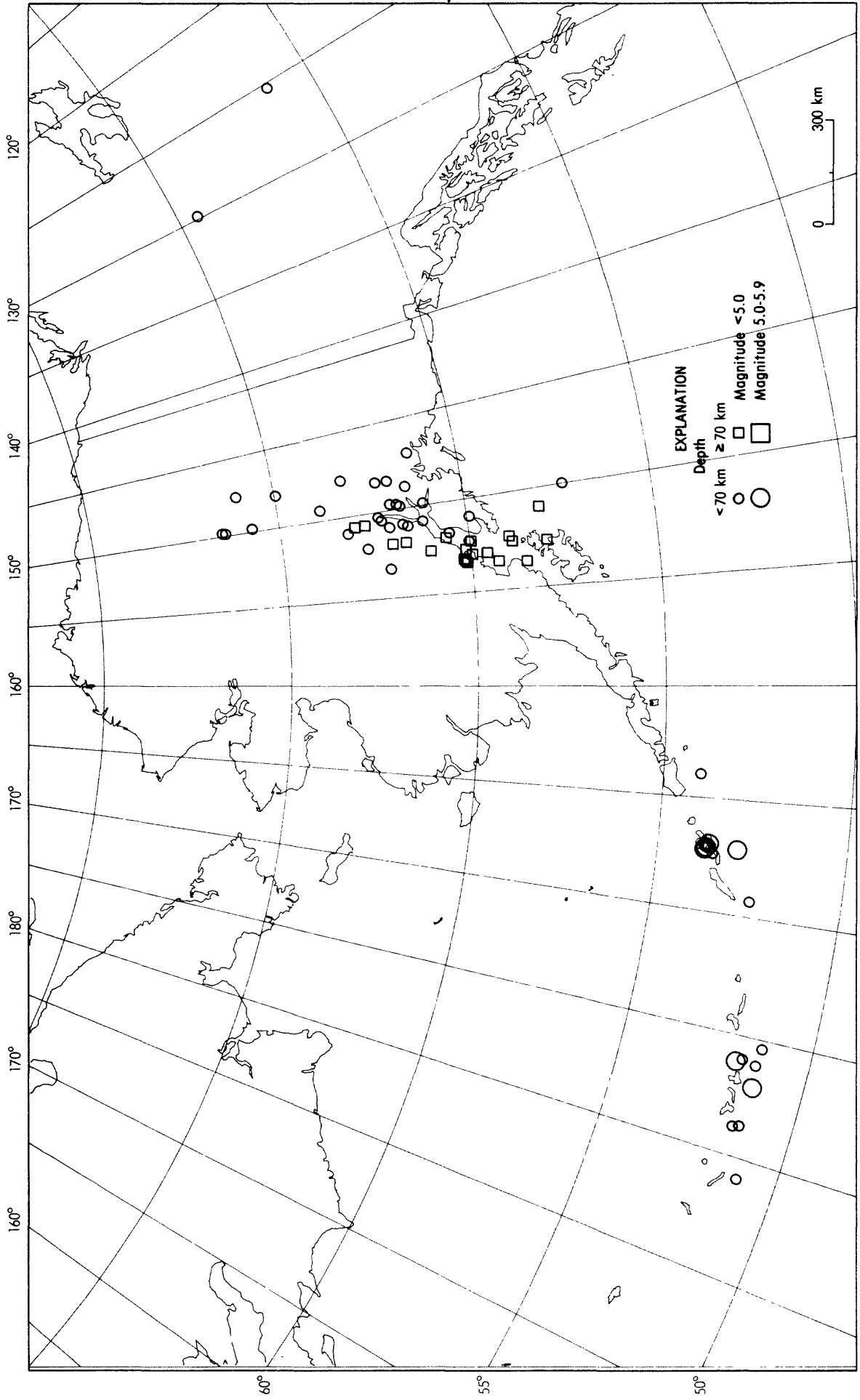
28 September 1987 11:47:08.61
Vanuatu Islands

GRFO (LPZ)
PKPdf x5

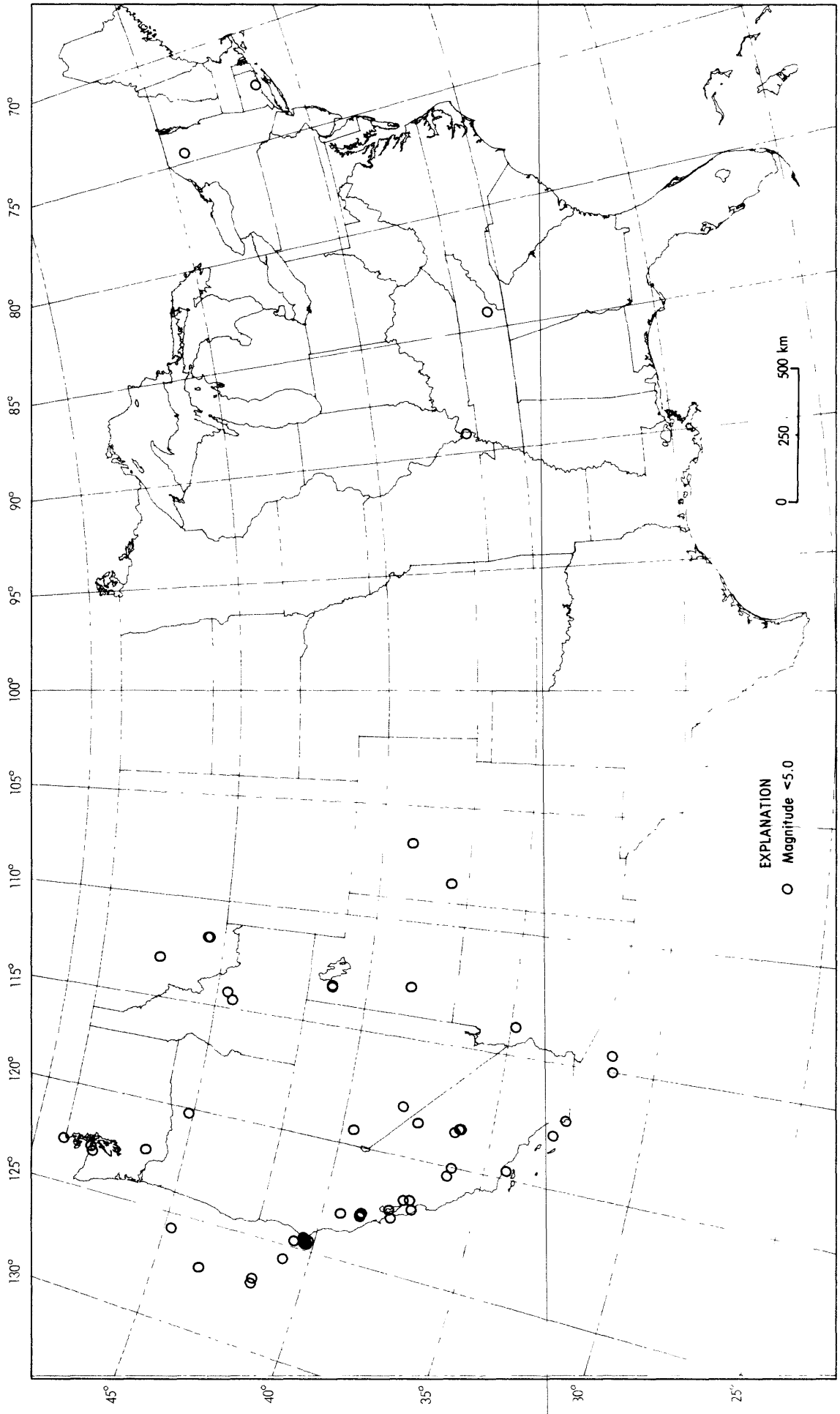


Earthquake Focal Mechanisms for September 1987



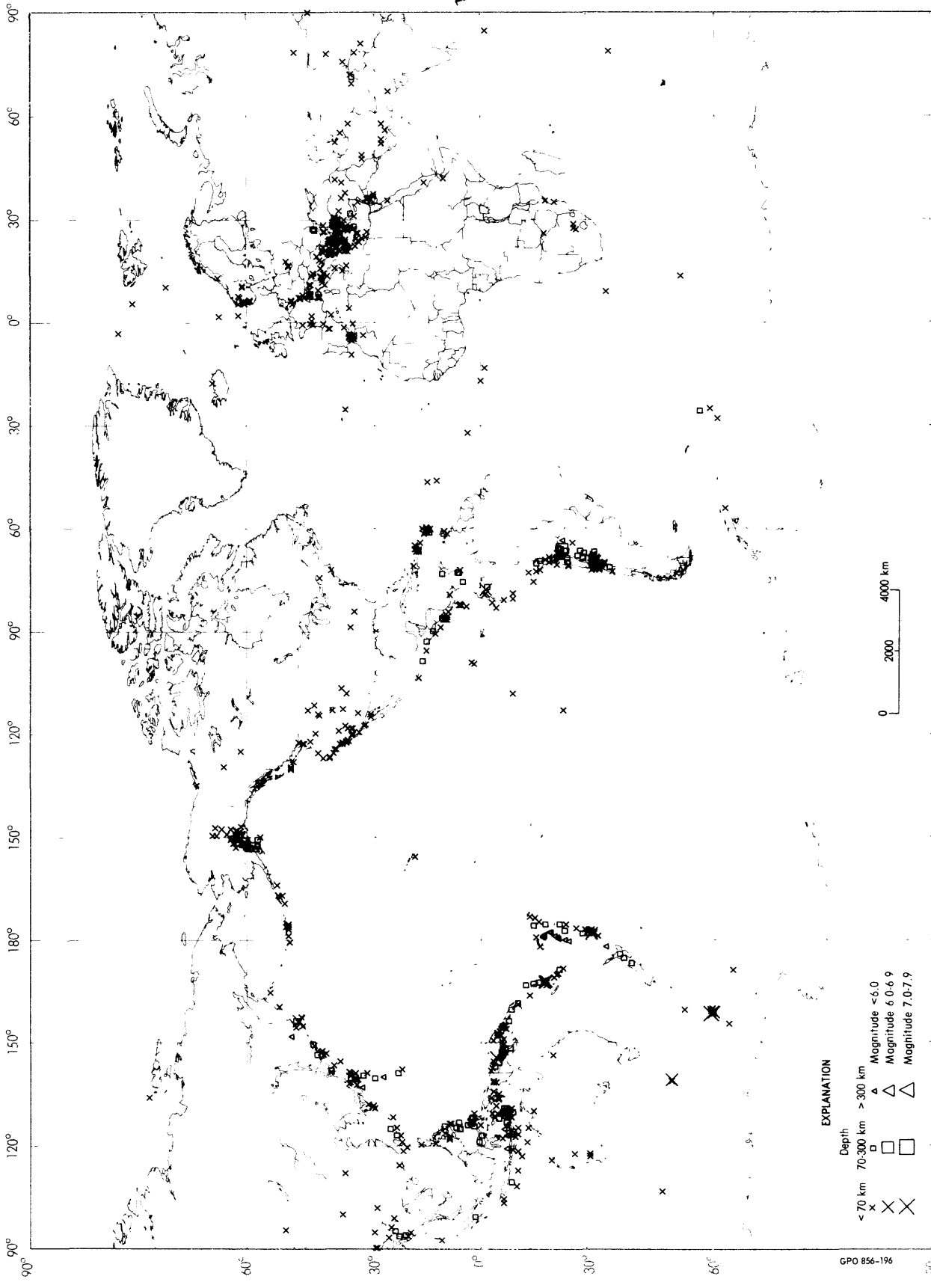


Earthquake epicenters in Alaska and adjacent regions for September, 1987 (C. Stover).



Earthquake epicenters in the conterminous United States and adjacent regions for September, 1987 (C. Stover).

23



Earthquakes located in September, 1987 (C. Stover).

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