UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

PRELIMINARY DETERMINATION OF EPICENTERS
MONTHLY LISTING

JANUARY - MARCH, 1987

NATIONAL EARTHQUAKE INFORMATION CENTER

Open File Report
87-786 A

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

1988

PRELIMINARY DETERMINATION OF EPICENTERS

MONTHLY LISTING

U.S. DEPARTMENT OF THE INTERIOR / GEOLOGICAL SURVEY

National Earthquake Information Center

J A N U A R Y 1 9 8 7

KEY	DAY	ORIGIN TIME UTC HR	MN	SEC	GEOGRAPHIC COORDINATES LAT		LONG		DEPTH		MAGNITUDES GS MB	Msz	SD	NO. STA USED	REGION, CONTRIBUTED MAGNITUDES AND COMMENTS
	01	00	25	36.3%	39.553	N	28.785	E	10	G			0.6	6	TURKEY
	01	01	01	02.7?	16.85	S	75.44	W	33	N			1.4	7	OFF COAST OF PERU
	01	01	58	21.3*	6.726	S	76.728	W	33	N	4.8		1.4	16	NORTHERN PERU
	01	03	19	14.9?	51.29	N	16.05	E	10	G			0.4	6	POLAND. ML 3.0 (VKA).
	01	04	01	53.7*	49.550	N	156.111	E	39	D	4.5		1.4	34	KURIL ISLANDS
	01	04	31	44.5*	24.492	N	63.195	E	33	N	4.6		1.0	7	NEAR COAST OF PAKISTAN
	01	04	55	35.5*	44.480	N	148.136	E	33	N	4.7		1.1	24	KURIL ISLANDS
	01	06	07	26.4	4.687	S	153.063	E	56		5.1		0.9	70	NEW IRELAND REGION
	01	07	22	44.6?	10.95	N	123.99	E	33	N	4.3		1.2	14	CEBU, PHILIPPINE ISLANDS
	01	07	24	21.0&	63.194	N	150.600	W	49					21	CENTRAL ALASKA. <AGS-P>.
	01	08	02	24.0*	42.788	N	103.482	W	5	G			1.6	5	NEBRASKA. mbLg 3.5 (NEIS). Felt (III) at Crawford, Harrisan and Whitney, Nebraska. Also felt (III) at Ardmare and Oglala, South Dakota.
	01	08	25	06.4&	34.030	N	116.650	W	12					20	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.3 (PAS). Felt in the Marango Valley area.
	01	09	20	13.3?	23.79	S	176.66	W	133	?	4.3		1.0	13	SOUTH OF FIJI ISLANDS
	01	10	25	35.8?	43.06	N	127.03	W	10	G	4.0		1.1	11	OFF COAST OF OREGON
	01	10	59	56.4%	40.750	N	27.325	E	10	G			0.9	5	TURKEY
	01	11	18	10.1*	15.944	S	176.781	W	403	*	4.8		0.8	13	FIJI ISLANDS REGION
	01	12	11	43.0*	42.072	N	24.056	E	5	G			0.6	5	BULGARIA
	01	12	30	58.0	39.037	N	27.982	E	10	G			0.5	6	TURKEY
	01	14	56	42.0*	35.195	N	71.338	E	241	?	3.9		1.4	12	PAKISTAN
a	01	16	25	34.1	2.715	S	138.363	E	74	G	5.8		1.0	177	WEST IRIAN. Depth from broadband displacement seismograms.
	01	16	46	39.4?	61.64	N	4.29	E	10	G			0.1	7	SOUTHERN NORWAY. MD 2.4 (BER).
	01	19	11	56.5	39.059	N	27.789	E	10	G			0.9	7	TURKEY
	01	21	12	33.9	10.193	S	161.096	E	93		5.0		1.0	38	SOLOMON ISLANDS. Felt (II) at Honiara.
	01	22	36	28.3?	35.74	N	27.46	E	33	N			0.8	6	DODECANESE ISLANDS
	01	22	41	14.6%	42.369	N	19.530	E	10	G			1.5	7	YUGOSLAVIA. ML 2.5 (TTG).
	02	00	33	46.8&	62.168	N	151.072	W	79					19	CENTRAL ALASKA. <AGS-P>.
	02	01	06	07.2&	61.398	N	152.136	W	115					31	SOUTHERN ALASKA. <AGS-P>.
	02	01	52	10.3*	38.289	N	25.168	E	10	G			1.0	5	AEGEAN SEA. ML 3.1 (ATH).
	02	03	36	23.9*	3.309	S	148.826	E	10	G	4.2		1.3	16	BISMARCK SEA
	02	03	40	39.9?	66.28	N	150.03	W	10	G			1.2	5	ALASKA. ML 3.8 (PMR).
	02	05	45	50.0*	10.386	N	126.121	E	67	*	4.6		1.2	33	PHILIPPINE ISLANDS REGION
a	02	07	42	43.7	42.437	S	18.428	W	10	G	5.1	5.1	1.1	47	SOUTH ATLANTIC RIDGE
	02	08	14	48.6*	35.373	N	3.691	W	10	G			1.2	7	STRAIT OF GIBRALTAR. MG 3.7 (AVE).
	02	09	36	53.8?	16.12	S	74.67	W	33	N	4.4		0.5	5	NEAR COAST OF PERU
	02	10	14	46.4	30.480	N	32.221	E	24		5.0		0.9	23	ARAB REPUBLIC OF EGYPT. Minor damage at Ismailiya. Also felt at Coiro.
	02	14	03	37.3*	3.660	S	146.915	E	33	N	4.1		1.2	6	BISMARCK SEA
	02	17	05	20.6	43.198	N	25.899	E	10	G			1.3	8	BULGARIA
	02	18	52	46.2*	36.216	N	140.702	E	69		4.2		0.8	17	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mita and (I JMA) at Utsunomiya.
	02	19	00	51.6*	39.994	N	26.025	E	10	G			0.5	5	TURKEY
	02	19	39	47.2&	59.008	N	154.395	W	128					20	SOUTHERN ALASKA. <AGS-P>.
	02	19	56	55.1	46.768	N	7.045	E	5	G			1.1	15	SWITZERLAND. ML 2.6 (LDG).
	02	20	42	21.5*	7.038	S	130.322	E	137	?	4.1		1.4	8	TANIMBAR ISLANDS REGION
	02	21	00	06.4*	4.607	S	143.203	E	33	N	3.5		1.3	5	PAPUA NEW GUINEA
	03	02	43	27.5?	51.21	N	19.80	E	10	G			0.4	5	POLAND. ML 2.9 (KRA).
	03	03	54	15.3?	33.86	S	71.64	W	33	N			0.3	5	NEAR COAST OF CENTRAL CHILE
	03	08	41	12.0&	62.249	N	155.023	W	4					12	CENTRAL ALASKA. <AGS-P>.
	03	08	50	16.5?	42.43	S	18.62	W	10	G	4.7		1.4	10	SOUTH ATLANTIC RIDGE
	03	09	01	44.8*	24.226	S	67.196	W	201	?			1.4	7	CHILE-ARGENTINA BORDER REGION
	03	09	25	36.0*	62.679	N	152.763	W	10	G			0.9	6	CENTRAL ALASKA. ML 3.1 (PMR).
	03	14	02	00.7	19.141	S	167.737	E	10	G	4.3		1.1	11	VANUATU ISLANDS REGION
	03	15	25	15.1?	45.70	N	151.50	E	33	N	4.9		1.2	20	KURIL ISLANDS
a	03	15	35	01.2	3.408	S	146.227	E	5	G	5.5	6.0	1.2	100	BISMARCK SEA

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
Single issues are available from Books and Open-File Reports Section, U.S. Geological Survey, P.O. Box 25425, Denver Federal Center, Denver, CO 80225.

	03	16	13	42.2•	3.333	S	146.304	E	33	N	3.9		1.4	6	BISMARCK SEA
o	03	16	30	27.0	3.443	S	146.307	E	5	G	5.6	6.2	1.1	117	BISMARCK SEA
	03	17	27	00.2•	13.279	S	167.281	E	214	•	4.8		1.1	35	VANUATU ISLANDS
	03	17	45	07.8	28.793	N	139.367	E	461	•	4.4		0.8	28	BONIN ISLANDS REGION
	03	17	51	30.6	2.778	S	138.302	E	60	•	5.0		1.2	48	WEST IRIAN
	03	17	56	07.9?	0.21	S	98.06	E	33	N			1.5	5	SOUTHERN SUMATERA
	03	18	01	06.2&	33.500	N	116.480	W	8					15	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.5 (PAS). Felt (III) at Cabozon, Indio, Palm Springs and Thousand Palms.
	03	18	14	41.3•	5.323	N	94.252	W	10	G	4.8		1.0	16	EAST CENTRAL PACIFIC OCEAN
	03	18	19	35.9?	5.64	N	93.70	W	10	G	4.5		0.8	14	EAST CENTRAL PACIFIC OCEAN
f	03	22	04	04.8	14.998	S	167.929	E	15	G	6.0	6.5	1.1	266	VANUATU ISLANDS. Ms 6.7 (BRK), 6.6 (PAS). Complex rupture. Depth from broadband displacement seismograms, based on dominant second event.
	03	22	36	58.3	14.646	S	167.914	E	33	N	5.0		1.0	49	VANUATU ISLANDS
	04	00	05	38.1	51.402	N	177.294	W	33	N	4.9		0.9	87	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.9 (PMR). Felt (III) at Adak.
	04	00	32	14.5	21.035	S	178.684	W	560		5.1		1.0	70	FIJI ISLANDS REGION
	04	00	54	51.3•	42.219	N	64.599	E	33	N	4.3		0.9	7	UZBEK SSR
o	04	01	38	52.5	27.193	S	176.563	W	33	N	5.4	5.4	1.1	74	KERMADEC ISLANDS REGION
	04	01	56	17.4•	27.367	S	176.421	W	33	N	5.2	5.3	1.3	13	KERMADEC ISLANDS REGION
	04	02	00	50.9?	15.11	S	168.15	E	33	N	4.8		1.5	12	VANUATU ISLANDS
	04	03	37	57.7?	51.62	N	16.46	E	10	G			0.5	9	POLAND. ML 3.4 (VKA).
	04	04	03	29.8?	31.66	S	71.58	W	10	G			1.3	8	NEAR COAST OF CENTRAL CHILE
	04	06	41	56.2	35.408	N	3.520	W	10	G			1.1	9	STRAIT OF GIBRALTAR. MG 3.8 (AVE).
	04	07	05	23.4	57.584	S	26.578	W	140	G	5.2		0.6	27	SOUTH SANDWICH ISLANDS REGION
	04	08	01	27.1	4.730	S	145.298	E	63	•	5.0		1.2	24	NEAR N COAST OF PAPUA NEW GUINEA
	04	08	52	59.6?	3.68	S	146.82	E	33	N	3.7		1.8	6	BISMARCK SEA
o	04	10	21	45.8	49.774	N	149.286	E	489	D	5.1		0.7	228	NORTHWEST OF KURIL ISLANDS
	04	10	25	54.1•	63.362	N	150.807	W	33	N			1.2	5	CENTRAL ALASKA. ML 3.4 (PMR).
	04	10	43	21.4•	27.459	S	176.477	W	33	N	5.1		1.3	39	KERMADEC ISLANDS REGION
	04	11	55	31.6•	57.971	S	25.504	W	56	D	4.6		0.7	12	SOUTH SANDWICH ISLANDS REGION
o	04	13	22	01.8	2.392	S	139.466	E	32	D	5.5	5.6	1.1	140	NEAR N. COAST OF WEST IRIAN
	04	16	28	59.6&	60.331	N	153.468	W	173					31	SOUTHERN ALASKA. <AGS-P>.
	04	17	28	12.7•	13.292	N	145.951	E	33	N	4.1		0.7	16	MARIANA ISLANDS
a	04	17	52	36.8	5.973	N	82.601	W	10	G	5.6	5.8	1.3	172	SOUTH OF PANAMA
	04	21	47	32.7•	32.868	S	69.711	W	33	N			1.3	6	MENDOZA PROVINCE, ARGENTINA
	05	00	30	12.4•	7.152	S	147.717	E	47	?			0.9	8	EAST PAPUA NEW GUINEA REGION
	05	01	00	55.5•	4.074	S	151.026	E	33	N	4.2		1.4	13	NEW BRITAIN REGION
	05	02	01	29.5&	60.065	N	153.418	W	150					34	SOUTHERN ALASKA. <AGS-P>.
	05	02	03	04.5•	35.974	N	139.510	E	104		4.1		1.0	10	NEAR S. COAST OF HONSHU, JAPAN. Felt (I JMA) at Ajiro and Utsunomiya.
	05	02	53	12.0?	65.93	N	150.11	W	10	G			1.8	5	ALASKA. ML 3.3 (PMR).
o	05	03	32	41.7	3.424	S	146.520	E	10	G	5.2	5.0	1.0	50	BISMARCK SEA
	05	04	43	00.9	45.899	N	0.353	W	10	G			1.1	13	FRANCE. ML 2.9 (LDG).
	05	04	54	08.3•	24.221	N	122.159	E	33	N	3.6		1.3	10	TAIWAN REGION
	05	05	12	48.7•	39.356	N	27.938	E	10	G			0.5	6	TURKEY
	05	05	36	11.6?	37.78	N	25.44	W	10	G			1.1	4	AZORES ISLANDS. Felt (IV) at Coldeiro Rio Grande; (III) at Porto Formoso, Aguo d'Alto and Ponto Garco.
	05	06	24	15.2•	0.759	S	99.756	E	108	•	3.9		1.3	13	SOUTHERN SUMATERA
	05	07	17	42.2•	12.024	S	166.652	E	86	•	4.9		1.0	16	SANTA CRUZ ISLANDS
	05	09	57	22.8	10.620	S	165.574	E	144	•	4.5		1.0	27	SANTA CRUZ ISLANDS
	05	10	14	29.4?	7.06	S	155.43	E	33	N	3.8		0.8	4	SOLOMON ISLANDS. Felt (II) at Arowa, Bougainville.
	05	10	43	02.1	7.698	S	127.420	E	188		4.8		1.3	42	BANDA SEA
f	05	12	11	55.7	52.448	N	169.381	W	33	N	6.1	6.7	1.1	361	FOX ISLANDS, ALEUTIAN ISLANDS. Ms 6.5 (BRK), 6.3 (PAS). Complex rupture. Felt (V) at Unolasko and (III) at Folse Poss. Also felt strongly at Nikolski.
	05	12	31	11.1	19.829	S	69.742	W	33	N			0.8	7	NORTHERN CHILE
	05	13	29	14.6%	33.591	S	70.742	W	33	N			1.3	5	CHILE-ARGENTINA BORDER REGION. Felt (II) at Santiago, Chile.
	05	13	29	30.8•	3.980	N	96.504	E	77	?	4.4		1.2	16	NORTHERN SUMATERA
	05	14	05	22.1	19.994	S	133.713	E	10	G	4.4		1.5	16	NORTHERN TERRITORY, AUSTRALIA. Felt at Tennant Creek and Three Ways.
	05	14	09	43.6	19.924	S	133.763	E	10	G	3.5		1 1	10	NORTHERN TERRITORY, AUSTRALIA
	05	14	12	43.0%	37.819	N	25.386	W	5	G			0.9	6	AZORES ISLANDS. Felt (IV) at Porto Formoso; (III) at Ponto Garco and Furnas.
	05	15	25	33.8?	5.84	N	93.20	W	10	G	4.2		1 2	13	EAST CENTRAL PACIFIC OCEAN
	05	18	17	41.1&	58.939	N	151.922	W	63					29	KODIAK ISLAND REGION. <AGS-P>.
	05	18	32	43.4	40.832	N	28.248	E	10	G			0.8	15	TURKEY
	05	18	47	10.0•	52.652	N	169.368	W	33	N	4.7		0.9	19	FOX ISLANDS, ALEUTIAN ISLANDS
a	05	20	51	47.6	14.931	S	167.208	E	132		5.5		0.8	134	VANUATU ISLANDS
	05	21	07	30.0?	28.69	S	177.45	W	113	•	4.6		1.5	10	KERMADEC ISLANDS REGION
	05	21	15	25.1•	52.393	N	169.006	W	33	N	4.6		1.2	22	FOX ISLANDS, ALEUTIAN ISLANDS
	05	22	34	55.0•	0.420	N	98.936	E	102	•	3.1		1.3	10	NORTHERN SUMATERA
	05	22	52	31.7	0.206	N	126.225	E	42	•	5.2	5.0	1.2	56	MOLUCCA PASSAGE
a	05	22	52	46.5	41.964	N	81.319	E	17	G	5.9	5.8	1.0	338	SOUTHERN XINJIANG, CHINA. Several people injured and damage in the Baicheng area. Felt in the Aksu-Kuqa-Wushi area. Depth from broadband displacement seismograms.
	06	00	05	15.2•	22.937	N	118.196	E	33	N			1.3	8	TAIWAN REGION
	06	01	16	42.4?	52.05	N	174.89	W	33	N			1.4	9	ANDREANOF ISLANDS, ALEUTIAN IS. ML 3.9 (PMR).
	06	02	12	37.8•	67.858	N	161.698	W	10	G			1.4	13	ALASKA. ML 4.0 (PMR).
a	06	05	07	48.1	23.976	N	121.729	E	38		5.8	5.5	1.0	304	TAIWAN. Felt (IV JMA) at Hua-lien; (III JMA) at Taipei, I-lan and Su-ao; (II JMA) at Tai-chung and Tai-tung. Felt (I JMA) on Ishigaki-shima, Ryukyu Islands.
	06	06	25	49.1	9.788	S	149.185	E	10	G	4.9		1.1	21	EAST PAPUA NEW GUINEA REGION
	06	06	55	33.0	36.251	N	28.039	E	33	N	4.2		1.4	17	DODECANESE ISLANDS. ML 4.1 (ATH).
	06	07	43	59.9•	22.306	S	67.534	W	200	?			1.4	10	CHILE-BOLIVIA BORDER REGION
	06	07	54	09.4	36.219	N	28.169	E	33	N	4.3		1.2	26	DODECANESE ISLANDS. ML 4.2 (ATH).
	06	08	00	49.3&	34.815	N	97.576	W	5	G				5	OKLAHOMA. <TUL>. MD 1.9 (TUL).
	06	10	32	29.0%	46.311	N	8.115	E	10	G			0.6	6	SWITZERLAND
	06	10	45	54.1	21.536	N	106.195	E	10	G			1.1	15	SOUTHEAST ASIA. ML 4.9 (KMI).
	06	10	57	29.6	6.126	S	130.599	E	153	•	5.1		1.1	36	BANDA SEA
	06	11	55	27.4•	21.976	S	68.801	W	109	•	4.3		1.4	10	CHILE-BOLIVIA BORDER REGION

	06	12 05 29.9*	18.714	S	70.150	W	33	N			0.3	7	NEAR COAST OF NORTHERN CHILE
	06	12 57 41.1*	6.521	S	129.972	E	166	*	4.9		1.4	13	BANDA SEA
	06	15 08 19.1*	8.430	N	83.159	W	10	G			0.7	8	COSTA RICA. MD 4.2 (HDC).
	06	15 08 27.5*	13.271	N	145.076	E	86		4.7		0.5	14	MARIANA ISLANDS. Felt (III) on Guam.
	06	17 38 43.5*	22.529	S	66.931	W	197		4.3		1.2	16	JUJUY PROVINCE, ARGENTINA
	06	18 16 05.5?	1.73	N	126.56	E	90	?	4.1		1.4	6	MOLUCCA PASSAGE
	06	20 14 18.2	53.932	S	1.950	W	10	G	5.2		0.8	23	BOUVET ISLAND REGION
	06	20 29 34.5*	36.033	N	28.589	E	56	*			0.7	12	DODECANESE ISLANDS
	06	20 41 17.9*	18.190	N	122.383	E	10	G	4.8		1.0	12	LUZON, PHILIPPINE ISLANDS
	06	21 40 34.3?	32.17	S	71.63	W	33	N			0.3	8	NEAR COAST OF CENTRAL CHILE
	06	23 18 57.9%	40.553	N	29.867	E	10	G			1.0	7	TURKEY
	06	23 46 16.8*	24.011	N	121.783	E	41	*	4.1		1.5	21	TAIWAN. Felt on eastern Taiwan.
	07	00 24 15.7*	43.042	S	82.785	W	10	G	4.9		0.7	15	WEST CHILE RISE
	07	00 39 27.5	40.445	N	20.584	E	14		5.0	3.6	1.3	122	GREECE-ALBANIA BORDER REGION. ML 4.9 (ATH), 4.7 (TTG). Domage (VI) in the Erseke-Gostivisht area, Albania. Felt (IV) in the Bitola-Ohrid area, Yugoslavia. Felt in the Ipiros-Thessalia region of northern Greece.
	07	00 44 52.9*	40.487	N	20.735	E	10	G			1.3	10	GREECE-ALBANIA BORDER REGION. ML 4.1 (ATH).
	07	00 47 12.5*	40.597	N	20.664	E	13		3.5		1.3	15	GREECE-ALBANIA BORDER REGION. ML 4.1 (ATH).
	07	00 53 49.4*	40.473	N	20.887	E	10	G			0.6	5	GREECE-ALBANIA BORDER REGION
	07	01 06 28.9*	2.486	S	138.575	E	33	N	4.9		1.3	13	WEST IRIAN
	07	02 01 35.6&	59.879	N	153.197	W	116					17	SOUTHERN ALASKA. <AGS-P>.
	07	02 23 48.5	52.275	N	169.319	W	33	N	4.9	4.3	1.0	93	FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.1 (PMR).
	07	05 30 51.8	5.291	S	152.309	E	58		5.0		0.8	28	NEW BRITAIN REGION
	07	06 12 31.9?	33.45	S	176.54	W	33	N			1.5	5	SOUTH OF KERMADEC ISLANDS
	07	06 40 44.5?	37.35	N	25.16	W	10	G			0.2	5	AZORES ISLANDS
	07	07 12 46.2&	60.042	N	153.485	W	135					18	SOUTHERN ALASKA. <AGS-P>.
	07	07 14 48.8?	53.39	N	170.04	W	33	N	3.7		1.6	5	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.2 (PMR).
	07	07 47 48.2*	0.512	S	135.013	E	33	N	4.4		1.0	12	WEST IRIAN REGION
	07	08 28 49.6	37.997	N	73.076	E	136		4.8		1.5	32	TAJIK SSR
	07	11 36 50.8*	32.763	S	71.445	W	33	N			0.8	9	NEAR COAST OF CENTRAL CHILE. Felt (II) at Santiago.
	07	12 13 37.7&	38.790	N	122.782	W	2					20	NORTHERN CALIFORNIA. <BRK>. ML 4.0 (BRK). Mo=9.9*10**14 Nm (BRK). Felt at St. Helena.
	07	13 58 18.3*	19.568	S	176.210	W	33	N	4.8		1.4	15	FIJI ISLANDS REGION
	07	14 19 20.4	18.010	S	178.480	W	574		4.7		0.9	67	FIJI ISLANDS REGION
	07	14 42 22.9	47.301	N	7.653	E	10	G			1.0	15	SWITZERLAND. ML 2.9 (LDG).
	07	14 57 39.6%	60.401	N	5.843	E	0	G			0.3	6	SOUTHERN NORWAY. MD 2.1 (BER). Probable explosion.
	07	15 23 14.2*	21.082	S	168.512	E	18	*	4.9	4.3	1.2	50	LOYALTY ISLANDS
	07	16 23 32.4&	19.349	N	155.267	W	33					43	HAWAII. <HVO-P>. ML 4.0 (HVO). Felt (IV) at Hawaii Volcanoes National Park, Hilo, Mountainview, Popoikou, Pahala and Volcano. Felt (III) at Ahualoa, Honokaa and Kalapana.
	07	17 02 23.8*	31.909	S	69.056	W	33	N			1.4	9	SAN JUAN PROVINCE, ARGENTINA
	07	17 11 49.1*	25.285	N	123.989	E	33	N			1.4	13	NORTHEAST OF TAIWAN
	07	17 16 25.3	4.762	N	76.210	W	107		4.6		1.0	44	COLOMBIA. Felt at Manizales and in west central Colombia.
o	07	18 19 08.8	34.259	N	103.405	E	33	N	5.5	5.5	1.0	189	GANSU PROVINCE, CHINA. Felt strongly in southern Gansu Province. Also felt in the Nanping area, Sichuan Province.
	07	20 01 52.2	19.973	S	133.898	E	10	G	5.2		1.2	56	NORTHERN TERRITORY, AUSTRALIA
	07	20 30 37.7	36.199	N	28.106	E	45	*	4.2		1.4	37	DODECANESE ISLANDS
	07	20 40 50.0	15.918	S	167.762	E	152	*	5.1		1.0	49	VANUATU ISLANDS
	07	22 27 35.1?	19.99	S	176.65	W	297	*	4.6		1.1	16	FIJI ISLANDS REGION
	07	23 47 09.1?	39.00	N	23.86	E	10	G			0.8	6	AEGEAN SEA
o	08	00 50 59.7	22.572	S	171.999	E	50	*	5.4	4.7	1.1	40	LOYALTY ISLANDS REGION
	08	01 18 04.9*	7.269	S	105.960	E	33	N	4.9		1.0	27	JAVA
	08	01 32 03.5?	47.35	N	7.64	E	10	G			0.4	5	SWITZERLAND
	08	01 40 30.7*	32.647	S	71.535	W	10	G			1.0	12	NEAR COAST OF CENTRAL CHILE
	08	01 59 18.4	43.715	N	16.841	E	33	N	4.8		1.2	64	YUGOSLAVIA. ML 4.4 (KBA). MD 4.0 (TTG), 4.1 (TRI).
	08	02 14 28.3?	47.37	N	7.60	E	9	G			0.4	6	SWITZERLAND. ML 2.6 (LDG).
	08	02 38 03.1	19.952	S	133.693	E	10	G	4.5		1.2	19	NORTHERN TERRITORY, AUSTRALIA
	08	03 36 16.0	15.045	S	167.244	E	132	*	5.2		1.2	50	VANUATU ISLANDS
	08	04 29 05.8?	47.19	N	7.76	E	10	G			0.9	7	SWITZERLAND. ML 2.6 (LDG).
	08	04 43 20.4*	39.452	N	28.230	E	10	G			0.9	13	TURKEY
	08	05 05 58.3	40.576	N	20.997	E	10	G			1.0	9	GREECE-ALBANIA BORDER REGION
	08	05 14 34.1*	40.446	N	20.826	E	10	G			1.2	5	GREECE-ALBANIA BORDER REGION
	08	05 57 52.9%	46.189	N	8.223	E	10	G			0.6	5	SWITZERLAND
	08	06 50 08.4	21.052	S	178.875	W	603		4.5		0.8	33	FIJI ISLANDS REGION
	08	07 21 45.7*	14.838	N	145.858	E	33	N	4.6		0.4	14	MARIANA ISLANDS
	08	08 52 03.9?	3.52	S	78.21	W	33	N	4.6		1.0	9	PERU-ECUADOR BORDER REGION
	08	11 18 38.8?	16.00	N	60.56	W	33	N			0.4	5	LEEWARD ISLANDS. ML 3.3 (FDF).
	08	11 20 04.6	26.173	N	124.441	E	237		4.9		0.8	31	NORTHEAST OF TAIWAN
	08	11 43 10.3?	19.39	N	145.65	E	127	?	4.3		0.8	10	MARIANA ISLANDS
	08	12 08 55.2*	40.428	N	20.732	E	10	G			0.9	5	GREECE-ALBANIA BORDER REGION
	08	12 50 58.5%	39.464	N	28.262	E	10	G			1.0	5	TURKEY
	08	13 27 31.1&	38.093	N	122.167	W	7					12	NORTHERN CALIFORNIA. <BRK>. ML 2.4 (BRK). Mo=1.8*10**13 Nm (BRK). Felt at Vallejo.
	08	13 39 13.1*	25.203	S	69.404	W	188	?			0.8	7	NORTHERN CHILE
	08	15 48 20.5*	32.610	S	71.742	W	10	G			0.5	10	NEAR COAST OF CENTRAL CHILE
	08	16 30 31.3&	61.816	N	151.873	W	101					17	SOUTHERN ALASKA. <AGS-P>.
	08	16 55 36.1*	39.378	N	25.443	E	10	G			1.3	10	AEGEAN SEA. ML 3.6 (ATH).
	08	17 37 17.3?	20.48	S	177.81	W	626	?	4.9		0.9	15	FIJI ISLANDS REGION
	08	18 00 20.1	42.236	N	19.161	E	18		3.5		1.1	37	YUGOSLAVIA. ML 3.8 (TTG). Felt (IV) in the Montenegro coastal area and (III) at Titograd.
	08	18 09 43.9	18.991	N	147.111	E	33	N	4.9		1.0	27	MARIANA ISLANDS REGION
	08	18 49 03.4	3.592	S	144.278	E	16	*	4.9	4.8	1.2	25	NEAR N COAST OF PAPUA NEW GUINEA
	08	19 08 54.8	19.933	S	133.715	E	10	G			0.5	7	NORTHERN TERRITORY, AUSTRALIA
	08	19 16 00.0	47.363	N	7.520	E	10	G			0.4	8	SWITZERLAND. ML 2.6 (LDG).
	08	19 17 17.7	47.368	N	7.675	E	10	G			0.6	9	SWITZERLAND. ML 2.8 (LDG).
	08	19 24 20.7	47.286	N	7.593	E	10	G			1.1	21	SWITZERLAND. ML 3.0 (LDG).
	08	19 41 53.6	8.536	S	117.843	E	73	*	4.7		0.9	17	SUMBAWA ISLAND REGION
	08	19 46 34.8*	4.706	S	153.114	E	33	N			1.2	9	NEW IRELAND REGION
o	08	19 48 55.4	4.736	S	153.105	E	44		5.5	4.8	0.9	132	NEW IRELAND REGION

	08	20	17	43.8%	42.819	N	18.473	E	10	G		1.3	5	YUGOSLAVIA. ML 2.2 (TTG).
	08	20	47	08.0*	4.681	S	153.112	E	33	N	4.4	1.0	11	NEW IRELAND REGION
	08	22	31	12.6%	39.436	N	28.245	E	10	G		0.8	7	TURKEY
	08	23	05	30.9*	36.574	N	140.528	E	71		4.8	1.3	22	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito and (I JMA) at Onahama and Utsunomiya.
	08	23	10	12.7	35.403	N	3.618	W	16		4.3	1.1	51	STRAIT OF GIBRALTAR
	08	23	50	18.3?	28.62	S	176.47	W	33	N	4.3	1.1	8	KERMADEC ISLANDS REGION
	09	00	18	29.7%	15.323	N	60.964	W	33	N		1.1	8	LEEWARD ISLANDS. ML 2.7 (FDF).
	09	00	30	26.4?	24.96	N	123.52	E	33	N	4.8	1.2	9	SOUTHWESTERN RYUKYU ISLANDS
	09	01	00	40.5	28.609	N	95.246	E	33	N	4.6	1.3	39	INDIA-CHINA BORDER REGION
	09	01	02	49.3	19.887	S	133.684	E	10	G	4.1	1.0	15	NORTHERN TERRITORY, AUSTRALIA
	09	02	46	21.6*	17.895	S	178.554	W	582	D	5.1	1.0	43	FIJI ISLANDS REGION
	09	03	45	14.8*	29.069	S	70.440	W	33	N		1.3	7	CENTRAL CHILE
	09	03	57	49.7*	22.910	S	63.813	W	549	*	4.4	0.4	14	SALTA PROVINCE, ARGENTINA
f	09	06	14	44.8	39.895	N	141.677	E	68	G	6.4	1.0	485	HONSHU, JAPAN. mb 6.8 (PAS), 6.6 (BRK). Minor damage (V JMA) in the Morioka-Ofunato area. Felt (IV JMA) at Hachinohe, Ishinamaki, Miyako, Sakata and Sendai; (III JMA) in the Takyo-Yakahama area and as far north as Kushiro, Hakkaido. Twa events abaut 3 sec. apart. Depth from broadband displacement seismograms, based an the first event.
	09	06	30	05.6*	39.837	N	141.747	E	83		4.8	0.8	16	HONSHU, JAPAN. Felt (II JMA) at Miyako and Ofunato; (I JMA) at Hachinahe and Moriaka.
a	09	08	01	35.9	19.469	S	176.538	W	33	N	5.9 6.6	1.1	171	FIJI ISLANDS REGION. Ms 6.8 (BRK), 6.7 (PAS).
	09	08	15	06.5*	19.560	S	176.559	W	33	N	4.8	1.4	32	FIJI ISLANDS REGION
	09	08	47	45.0	20.458	S	168.990	E	33	N	4.8	1.2	30	LOYALTY ISLANDS
	09	09	18	31.9	20.360	S	169.037	E	38	*	4.8	1.2	51	VANUATU ISLANDS
	09	09	55	22.5	20.391	S	168.877	E	33	*	5.3 5.4	1.3	67	LOYALTY ISLANDS
	09	10	01	26.2*	20.463	S	168.544	E	33	*	4.4	1.2	29	LOYALTY ISLANDS
	09	10	05	02.8?	47.50	N	7.43	E	10	G		0.5	5	SWITZERLAND
a	09	11	27	12.6	20.110	S	133.636	E	5	G	5.2	1.1	75	NORTHERN TERRITORY, AUSTRALIA
	09	12	02	23.3*	20.691	S	168.917	E	24		4.6	1.1	13	LOYALTY ISLANDS
	09	12	52	59.7?	27.91	N	112.03	W	10	G		1.4	8	BAJA CALIFORNIA
	09	13	31	42.4*	17.972	S	167.652	E	33	N	4.2	1.3	7	VANUATU ISLANDS
	09	13	35	23.5&	59.929	N	152.765	W	84				26	SOUTHERN ALASKA. <AGS-P>.
	09	13	51	03.8	62.121	N	124.321	W	10	G	4.1	1.1	12	NORTHWEST TERRITORIES, CANADA
	09	15	32	54.2*	2.609	N	128.641	E	33	N	4.4	1.1	11	HALMAHERA
	09	17	35	47.5*	39.859	N	25.504	E	10	G		0.9	9	AEGEAN SEA
	09	17	40	34.9	39.821	N	141.641	E	85		5.0	0.9	124	HONSHU, JAPAN. Felt (IV JMA) at Morioka; (II JMA) at Hachinohe, Miyaka and Ofunato.
	09	17	51	45.1%	48.000	N	6.696	E	10	G		1.0	10	FRANCE. ML 2.7 (LDG).
	09	19	01	56.8	20.408	S	168.818	E	43	*	5.1	1.3	51	LOYALTY ISLANDS
	09	19	24	06.1&	63.173	N	150.405	W	65				30	CENTRAL ALASKA. <AGS-P>.
	09	22	05	19.7*	29.964	N	51.859	E	10	G	4.1 4.0	1.1	10	SOUTHERN IRAN
	09	23	36	11.9*	39.466	N	25.482	E	10	G		1.3	7	AEGEAN SEA. ML 3.4 (ATH).
	09	23	45	51.5?	17.02	N	61.60	W	10	G		0.5	5	LEEWARD ISLANDS. ML 2.7 (FDF).
	10	00	46	35.6	52.555	N	179.140	W	235	D	4.7	0.8	68	ANDREANOF ISLANDS, ALEUTIAN IS.
	10	00	51	05.9?	48.27	N	5.19	W	10	G		0.9	21	NORTH ATLANTIC OCEAN. ML 3.8 (LDG).
	10	02	53	15.7*	19.498	S	176.409	W	33	N	5.2 4.7	1.3	20	FIJI ISLANDS REGION
	10	03	21	50.0&	34.552	N	97.425	W	5	G			5	OKLAHOMA. <TUL>. mbLg 2.3 (TUL).
	10	03	34	01.3*	34.558	N	80.333	E	33	N	4.6 4.0	1.3	15	TIBET
	10	03	53	29.3*	20.655	S	168.736	E	33	N	4.1 4.3	1.4	15	LOYALTY ISLANDS
	10	03	55	49.7	5.765	S	110.881	E	558		4.9	1.0	41	JAVA SEA
	10	04	32	17.6	51.411	N	15.881	E	10	G		0.6	12	POLAND. ML 3.6 (VKA), 3.5 (KBA).
	10	04	47	06.5	9.155	N	126.532	E	58	*	5.3 4.5	1.2	107	MINDANAO, PHILIPPINE ISLANDS
	10	05	08	59.2%	15.654	N	61.211	W	101	?		0.3	10	LEEWARD ISLANDS
	10	05	40	09.3*	39.828	N	141.801	E	82		4.7	0.5	10	HONSHU, JAPAN. Felt (III JMA) at Miyako, (II JMA) at Morioka and Ofunato and (I JMA) at Hachinohe.
	10	05	40	41.2?	73.05	N	5.09	E	10	G	4.3	0.5	5	GREENLAND SEA
	10	09	59	50.4*	20.671	S	178.373	W	525		4.6	0.8	46	FIJI ISLANDS REGION
	10	10	10	36.4	39.522	N	67.984	E	33	N	4.7	1.4	22	SOUTHEASTERN UZBEK SSR. Felt (III) at Pendzhikent, Samarkand and Leninabad; (II) at Tashkent.
	10	10	18	47.3?	52.52	N	169.62	W	33	N	4.5	0.5	8	FOX ISLANDS, ALEUTIAN ISLANDS
	10	10	24	56.5&	59.641	N	145.522	W	27		4.1		45	GULF OF ALASKA. <AGS-P>. ML 3.6 (PMR).
	10	10	42	44.0?	51.10	N	20.12	E	10	G		1.2	6	POLAND. ML 2.9 (KRA).
	10	11	23	37.3&	62.481	N	151.526	W	78				32	CENTRAL ALASKA. <AGS-P>.
	10	13	06	56.3	26.320	N	60.878	E	33	N	4.6	0.8	26	SOUTHERN IRAN
	10	13	37	19.9&	59.580	N	152.876	W	72				24	SOUTHERN ALASKA. <AGS-P>.
	10	15	03	55.4	34.659	N	33.282	E	37		4.3	1.1	25	CYPRUS. Felt in the Limassol area.
	10	15	25	16.1*	51.483	N	176.659	E	33	N	4.6	1.2	26	RAT ISLANDS, ALEUTIAN ISLANDS
	10	16	56	39.3	37.799	N	21.237	E	26		4.2	1.5	29	SOUTHERN GREECE. ML 3.9 (ATH).
	10	17	23	25.0*	7.193	S	146.157	E	173		4.5	1.3	26	EAST PAPUA NEW GUINEA REGION
	10	17	27	32.7&	58.764	N	152.845	W	78				19	KODIAK ISLAND REGION. <AGS-P>.
	10	18	03	21.2&	32.320	N	115.660	W	6	G			4	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
	10	18	05	23.5&	63.008	N	150.823	W	152				23	CENTRAL ALASKA. <AGS-P>.
	10	18	33	31.4?	24.48	N	121.36	E	57	*		1.2	8	TAIWAN
	10	18	54	27.3*	19.274	S	67.367	W	238	*		1.0	11	SOUTHERN BOLIVIA
	10	20	10	09.7&	60.939	N	151.009	W	61				35	KENAI PENINSULA, ALASKA. <AGS-P>.
	10	20	44	05.0*	37.835	N	20.840	E	10	G	4.3	1.2	5	IONIAN SEA. ML 3.5 (ATH).
	10	21	32	40.8%	15.924	N	61.231	W	33	N		1.4	5	LEEWARD ISLANDS. ML 2.3 (FDF).
	10	21	51	17.6*	17.589	S	178.760	W	551		5.2	1.0	42	FIJI ISLANDS REGION
	10	22	02	25.5	51.567	N	178.695	W	33	N	4.9	0.9	53	ANDREANOF ISLANDS, ALEUTIAN IS.
	10	23	01	12.8	62.505	N	124.538	W	10	G		1.2	13	NORTHWEST TERRITORIES, CANADA
	11	02	51	24.8?	19.26	S	174.35	W	117	?	4.5	1.3	11	TONGA ISLANDS
	11	05	26	32.1*	9.033	N	126.686	E	33	N		1.2	8	MINDANAO, PHILIPPINE ISLANDS
	11	06	42	57.8	57.357	N	33.049	W	10	G	4.6	0.8	31	NORTH ATLANTIC OCEAN
	11	07	30	11.1	18.815	S	174.069	W	104	*	5.1	1.1	95	TONGA ISLANDS
	11	08	32	32.9?	24.39	S	70.28	W	33	N		1.5	6	NEAR COAST OF NORTHERN CHILE. Felt (III) at Antofagasta.
	11	09	53	37.5*	1.927	S	151.868	E	37	*	4.1	0.8	11	NEW IRELAND REGION
	11	10	28	53.5*	62.325	N	124.259	W	10	G		0.9	6	NORTHWEST TERRITORIES, CANADA
	11	10	39	10.1*	3.137	S	12.231	W	10	G	4.9	1.4	12	NORTH OF ASCENSION ISLAND
	11	11	03	56.4	9.153	N	126.650	E	52	*	4.9	1.3	55	MINDANAO, PHILIPPINE ISLANDS

	11	12	12	27.2*	24.006	N	122.363	E	33	N	4.0	1.4	14	TAIWAN REGION
	11	12	31	26.0	29.969	N	51.788	E	10	*	4.9 4.1	1.5	53	SOUTHERN IRAN. Three hundred houses domaged in the Doshmon Ziari area.
	11	13	27	35.9&	60.499	N	153.196	W	153				28	SOUTHERN ALASKA. <AGS-P>.
	11	14	42	26.2%	42.284	N	19.352	E	10	G		0.5	7	YUGOSLAVIA. MD 2.3 (TTG).
	11	20	34	29.8*	9.467	S	113.556	E	84	*		0.1	6	SOUTH OF JAVA
	11	22	02	31.8	42.304	N	19.975	E	10	G		1.3	13	YUGOSLAVIA. MD 3.2 (TTG).
	11	23	04	37.3	31.012	N	49.937	E	33	N	4.3	0.5	8	WESTERN IRAN
	12	01	26	35.2%	40.226	N	28.962	E	10	G		0.5	7	TURKEY
	12	02	09	20.1&	61.025	N	150.319	W	63				35	SOUTHERN ALASKA. <AGS-P>.
	12	02	25	19.5%	42.289	N	19.888	E	10	G		0.6	9	YUGOSLAVIA. MD 2.6 (TTG).
	12	03	05	12.9	42.706	N	111.072	W	5	G		0.4	9	EASTERN IDAHO. ML 3.7 (NEIS). Felt (III) at Freedom, Grover ond Smoot, Wyoming. Felt (III) at Geneva, Idoho. Also felt ot Auburn and Afton, Wyoming.
	12	03	37	59.3	47.309	N	7.600	E	10	G		0.8	13	SWITZERLAND. ML 2.8 (LDG).
	12	05	09	45.7&	59.777	N	153.504	W	124				28	SOUTHERN ALASKA. <AGS-P>.
	12	09	23	42.7	7.364	N	34.944	W	10	G	4.7 4.4	0.9	30	CENTRAL MID-ATLANTIC RIDGE
	12	10	11	26.5*	41.474	N	29.478	W	10	G	4.6 4.6	1.2	44	AZORES ISLANDS REGION
	12	10	23	52.8*	17.955	S	178.552	W	603	*	4.6	0.8	23	FIJI ISLANDS REGION
	12	10	56	14.6?	2.52	N	98.71	W	10	G	4.9 3.9	0.7	8	WEST OF GALAPAGOS ISLANDS
	12	11	16	43.9	28.622	N	52.148	E	38	*	4.2	1.3	17	SOUTHERN IRAN
	12	11	40	02.8	44.277	N	10.621	E	32			0.9	33	NORTHERN ITALY. ML 3.8 (LDG), 3.7 (KBA). MD 3.5 (TRI).
	12	12	07	47.0&	62.256	N	151.113	W	112				27	CENTRAL ALASKA. <AGS-P>.
	12	12	17	29.0&	49.540	N	119.710	W	10				14	BRITISH COLUMBIA. <PGC-P>. ML 3.5 (PGC). Felt in the Osoyoos-Kelowna-Vernon area.
	12	12	18	36.9&	60.393	N	151.108	W	55				44	KENAI PENINSULA, ALASKA. <AGS-P>.
	12	12	23	14.7	51.580	N	175.820	W	33	N	5.0	1.2	72	ANDREANOF ISLANDS, ALEUTIAN IS. Felt (III) on Adak.
	12	17	04	43.7	1.641	S	120.274	E	33	N	4.7	1.3	39	SULAWESI
	12	18	54	35.4	31.269	N	133.573	E	10		5.0 4.5	1.0	71	SOUTHEAST OF SHIKOKU, JAPAN
	12	19	04	30.0*	51.378	N	175.413	W	33	N	4.7	0.9	20	ANDREANOF ISLANDS, ALEUTIAN IS.
	12	23	16	29.2*	31.451	N	131.874	E	28	*	4.4	1.0	16	KYUSHU, JAPAN
	13	00	03	55.8&	62.113	N	150.974	W	81				14	CENTRAL ALASKA. <AGS-P>.
	13	00	36	04.6*	17.878	N	61.496	W	33	N	4.4	0.7	10	LEEWARD ISLANDS. ML 4.1 (FDF).
	13	01	15	09.0&	37.326	N	115.033	W	8				29	SOUTHERN NEVADA. <GLD>. CL 3.6 (REN).
	13	04	37	20.5?	20.16	S	172.59	W	33	N	4.8	1.1	19	TONGA ISLANDS REGION
	13	04	43	28.9*	23.556	S	68.696	W	115	*	4.4	1.3	10	NORTHERN CHILE
	13	06	22	19.9	59.591	S	26.024	W	33	N	5.4	1.1	58	SOUTH SANDWICH ISLANDS REGION
	13	06	47	49.7	5.196	S	11.516	W	10	G	5.2 4.7	0.8	76	ASCENSION ISLAND REGION
a	13	08	03	00.5	13.463	S	166.477	E	53	*	5.4 5.1	1.1	108	VANUATU ISLANDS
	13	09	27	02.8*	44.383	N	9.832	E	10			1.4	20	NORTHERN ITALY. ML 3.0 (LDG).
	13	10	24	13.1	63.335	N	151.099	W	28			0.5	9	CENTRAL ALASKA. ML 3.4 (PMR).
	13	10	53	55.8?	17.41	N	61.04	W	10	G		0.7	5	LEEWARD ISLANDS. ML 3.1 (FDF).
a	13	10	55	17.9	29.292	S	177.524	W	60	D	5.3	1.2	90	KERMADEC ISLANDS
	13	12	17	02.3*	40.055	N	24.795	E	10	G		1.3	7	AEGEAN SEA
a	13	13	23	59.5	5.784	N	78.966	W	10	G	5.5 5.2	1.3	178	SOUTH OF PANAMA. Ms 5.3 (PAS). Felt (II) ot Panomo City. Also felt at La Palma.
	13	15	17	59.3	5.228	S	11.428	W	10	G	5.0	0.9	43	ASCENSION ISLAND REGION
	13	15	39	21.5%	39.678	N	27.702	E	10	G		1.3	5	TURKEY
	13	15	57	07.6?	5.28	S	12.11	W	10	G	4.7	1.0	6	ASCENSION ISLAND REGION
	13	16	44	01.7	5.056	S	11.509	W	10	G	4.9	0.9	50	ASCENSION ISLAND REGION
	13	17	53	13.4*	10.368	S	120.287	E	33	N	3.6	0.6	7	SUMBA ISLAND REGION
	13	18	36	49.7	47.347	N	7.653	E	10	G	3.5	1.5	18	SWITZERLAND. ML 2.6 (LDG).
	13	18	46	58.8?	51.06	N	179.52	W	33	N	4.4	0.9	16	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.2 (PMR).
	13	19	03	05.1?	33.34	S	72.42	W	33	N		0.5	7	OFF COAST OF CENTRAL CHILE
a	13	19	30	10.8	5.713	N	78.734	W	10	G	5.3 4.7	1.4	68	SOUTH OF PANAMA. Felt (II) at Panamo City.
	13	19	56	26.6	35.736	N	140.045	E	80		4.7	1.0	26	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Tokyo and Yokohomo.
	13	20	22	09.9*	15.359	S	175.009	W	288	*	4.9	1.2	95	TONGA ISLANDS
	13	20	57	33.9*	5.320	S	11.241	W	10	G	5.1	1.1	34	ASCENSION ISLAND REGION
	13	21	53	19.1*	54.810	N	161.845	E	33	N	5.0	1.1	19	NEAR EAST COAST OF KAMCHATKA
	13	22	49	01.6?	53.21	N	167.00	W	33	N	4.6	0.9	16	FOX ISLANDS, ALEUTIAN ISLANDS
	13	23	04	43.7	54.723	N	162.104	E	33	N	5.2 4.6	0.9	153	NEAR EAST COAST OF KAMCHATKA
	13	23	08	17.8&	61.387	N	149.535	W	42				46	SOUTHERN ALASKA. <AGS-P>. ML 3.5 (PMR).
	14	00	22	22.4	44.597	N	114.864	W	5	G		0.4	11	WESTERN IDAHO. ML 3.1 (NEIS).
	14	00	33	44.8?	56.80	S	141.23	W	10	G	4.8 5.0	1.2	10	SOUTH PACIFIC CORDILLERA
	14	02	06	07.7	44.424	N	7.096	E	10	G		0.6	11	NORTHERN ITALY. ML 2.7 (LDG).
	14	02	24	20.8*	52.182	N	169.862	W	33	N	4.0	1.1	10	FOX ISLANDS, ALEUTIAN ISLANDS
	14	02	59	11.9	31.485	S	68.618	W	115	*		1.1	18	SAN JUAN PROVINCE, ARGENTINA
	14	03	28	20.8*	54.746	N	162.090	E	33	N	5.0	1.1	23	NEAR EAST COAST OF KAMCHATKA
	14	04	27	04.3*	6.481	N	76.620	W	33	N		0.7	5	NORTHERN COLOMBIA
	14	05	27	02.3	47.529	N	7.714	E	9			1.0	12	SWITZERLAND. ML 2.6 (LDG).
	14	05	27	21.1*	47.544	N	8.200	E	10	G		1.5	10	SWITZERLAND. ML 2.8 (LDG).
	14	05	44	12.0*	5.145	S	11.970	W	10	G	4.9	1.0	14	ASCENSION ISLAND REGION
	14	06	09	50.5*	11.999	N	87.252	W	33	N	4.6 3.6	1.2	26	NEAR COAST OF NICARAGUA
	14	06	30	14.9	43.149	N	26.012	E	9			1.2	10	BULGARIA
	14	06	44	55.0*	4.960	S	11.666	W	10	G	4.9	0.8	8	NORTH OF ASCENSION ISLAND
	14	06	52	09.9	44.636	N	114.875	W	5	G		0.8	15	WESTERN IDAHO. ML 3.5 (NEIS). Felt (III) at Clayton.
	14	07	28	50.8&	58.198	N	151.605	W	53				17	KODIAK ISLAND REGION. <AGS-P>.
o	14	09	38	54.9*	50.063	S	113.884	W	10	G	5.0 5.6	1.4	43	EASTER ISLAND CORDILLERA
	14	10	11	03.1?	50.12	S	113.60	W	10	G	4.7	1.3	10	EASTER ISLAND CORDILLERA
f	14	11	03	48.7	42.565	N	142.850	E	102	G	6.5	1.1	521	HOKKAIDO, JAPAN REGION. mb 6.6 (BRK). Six people injured. Felt (V JMA) at Kushiro; (IV JMA) ot Hiroo, Nemuro, Obihiro and Urakawa. Also felt (IV JMA) at Hochinohe and Morioka, Honshu. Felt (II JMA) in the Tokyo-Yokohama area, Honshu. Depth from broadband displacement seismograms.
	14	12	05	24.3	33.362	S	68.959	W	25			0.3	12	MENDOZA PROVINCE, ARGENTINA. Felt at Mendozo.
	14	12	44	50.8	32.624	S	67.252	W	158	D	5.5	1.0	137	MENDOZA PROVINCE, ARGENTINA. Felt (III) in the San Juan-Mendozo area.
	14	13	07	39.9&	37.757	N	122.137	W	7				8	CENTRAL CALIFORNIA. <BRK>. ML 2.3 (BRK). Mo=1.3*10**13 Nm (BRK). Felt at Berkeley and Oakland.
	14	14	41	13.3?	53.30	N	169.68	W	33	N	4.5	1.0	8	FOX ISLANDS, ALEUTIAN ISLANDS
	14	15	37	40.2%	60.703	N	5.622	E	0	G		0.4	6	SOUTHERN NORWAY. MD 2.0 (BER). Probable explosion.

	14	18	11	57.5*	17.217	N	120.442	E	33	N			1.2	6	LUZON, PHILIPPINE ISLANDS. Felt (II RF) at Santa.
	14	19	07	54.5*	24.023	S	67.084	W	215	*			0.7	6	CHILE-ARGENTINA BORDER REGION
	14	21	34	02.2*	50.123	N	19.279	E	10	G			0.9	6	POLAND. ML 3.6 (KBA).
	14	23	38	40.8	45.141	N	26.266	E	19	*			1.0	8	ROMANIA
	15	01	05	36.9*	17.736	N	107.075	W	10	G	4.2		0.8	27	OFF COAST OF JALISCO, MEXICO
	15	02	05	55.6*	42.225	N	19.245	E	10	G			0.3	5	YUGOSLAVIA. MD 2.4 (TTG).
	15	02	31	04.8?	42.30	N	19.84	E	10	G			1.7	5	YUGOSLAVIA. MD 2.5 (TTG).
	15	02	53	12.6*	5.500	S	151.441	E	80	*	4.3		0.7	12	NEW BRITAIN REGION
	15	03	11	38.8	43.631	N	20.753	E	10	G			1.2	19	YUGOSLAVIA. MD 3.0 (TTG). Felt (VI) in the Kapaanik area.
	15	03	35	04.7&	36.370	N	121.860	W	6					18	CENTRAL CALIFORNIA. <BRK>. ML 3.0 (BRK). Felt (IV) at Carmel Valley. Felt (III) at Carmel and Marina.
	15	03	36	12.3&	38.340	N	122.655	W	4					8	NORTHERN CALIFORNIA. <BRK>. ML 2.7 (BRK). Felt at Rohnert Park and Santa Rosa.
	15	05	27	49.2?	5.76	S	148.88	E	153	*	4.8		0.6	11	NEW BRITAIN REGION
	15	07	46	49.0&	34.020	N	116.770	W	10					7	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
	15	08	05	09.7	17.575	N	95.142	W	139	?	4.6		0.9	39	OAXACA, MEXICO
	15	08	41	06.6%	60.136	N	4.717	E	0	G			0.4	7	SOUTHERN NORWAY. MD 2.1 (BER). Probable explosion.
	15	09	07	22.4%	60.159	N	4.777	E	0	G			0.5	7	SOUTHERN NORWAY. MD 2.0 (BER). Probable explosion.
	15	09	21	40.4	2.433	S	139.481	E	33	N	4.8	4.8	1.0	50	NEAR N. COAST OF WEST IRIAN
	15	10	57	59.3	43.562	N	20.698	E	10	G			0.9	12	YUGOSLAVIA. ML 3.0 (TTG). Felt at Kraljevo.
	15	11	11	15.5	55.692	S	26.227	W	50	D	5.5	4.3	1.0	35	SOUTH SANDWICH ISLANDS REGION
	15	11	19	08.4	7.754	S	130.008	E	39	D	5.1	5.0	1.4	64	TANIMBAR ISLANDS REGION
	15	11	19	34.6	34.678	N	33.905	E	34		5.0	3.7	1.0	106	CYPRUS. Minor damage in the Nicosia area. Felt in the Larnaca area. Also felt in southern Lebanon and northern Israel.
	15	12	07	07.9?	40.24	N	25.53	E	10	G			1.6	5	AEGEAN SEA
	15	12	24	44.5?	25.99	N	125.03	E	170	?	4.4		1.0	9	SOUTHWESTERN RYUKYU ISLANDS
	15	12	50	53.8&	60.152	N	152.983	W	108					26	SOUTHERN ALASKA. <AGS-P>.
	15	13	30	39.1	38.782	N	122.739	W	10	G			0.8	12	NORTHERN CALIFORNIA. ML 2.7 (BRK).
	15	14	21	15.2	47.600	N	2.882	W	12	G			0.8	19	FRANCE. ML 3.7 (LDG).
	15	14	52	43.3&	38.337	N	122.643	W	2					11	NORTHERN CALIFORNIA. <BRK>. ML 2.7 (BRK). Felt at Rohnert Park and Santa Rosa.
	15	16	17	40.1%	44.513	N	6.156	E	10	G			0.2	7	FRANCE. ML 2.9 (LDG).
	15	16	33	37.2	5.894	S	151.340	E	60	*	4.8		1.2	17	NEW BRITAIN REGION
	15	16	43	34.7	13.952	N	89.344	W	10	G			1.2	12	EL SALVADOR. MG 4.0 (GCG). Some buildings previously damaged from the October 10, 1986 earthquake collapsed.
	15	19	41	42.1	22.913	N	120.197	E	18		4.9	4.3	1.3	70	TAIWAN. Felt (IV JMA) at Tai-nan, (III JMA) at Kao-hsiung, (II JMA) at Chia-i and (I JMA) at Tai-tung.
	15	20	48	58.1*	44.365	N	10.031	E	10	G			1.4	12	NORTHERN ITALY
	15	22	37	46.4?	2.74	S	79.70	W	33	N	4.6		0.7	9	NEAR COAST OF ECUADOR
	15	22	41	40.2?	53.35	N	167.08	W	33	N	4.6		1.1	17	FOX ISLANDS, ALEUTIAN ISLANDS
	16	00	05	26.5*	51.230	N	176.069	W	33	N	4.6		1.0	21	ANDREANOF ISLANDS, ALEUTIAN IS.
	16	00	27	46.9?	58.80	S	26.44	W	33	N	4.9		1.2	12	SOUTH SANDWICH ISLANDS REGION
	16	01	13	18.2	43.411	N	11.863	E	21		3.7		1.1	49	CENTRAL ITALY. ML 3.9 (KBA), 3.7 (LDG). MD 3.7 (TRI). Felt at Arezzo.
	16	01	33	45.9&	62.895	N	150.623	W	157					18	CENTRAL ALASKA. <AGS-P>.
	16	01	35	43.3*	16.872	N	147.337	E	33	N	4.5		1.4	22	MARIANA ISLANDS REGION
	16	02	43	32.0	29.985	N	138.226	E	78	*	4.7		0.6	25	SOUTH OF HONSHU, JAPAN
	16	03	25	35.7	35.893	N	89.978	W	5	G			0.6	8	TENNESSEE. mbLg 3.0 (NEIS). Felt (III) at Blytheville and Dell, Arkansas.
a	16	05	12	48.5	42.791	N	145.103	E	54		5.1	5.1	1.0	171	HOKKAIDO, JAPAN REGION. Felt (III JMA) at Kushiro and Nemuro, (II JMA) at Obihiro and (I JMA) at Urakawa.
	16	07	16	29.4?	11.86	N	86.53	W	148	?	4.1		0.7	11	NEAR COAST OF NICARAGUA
	16	08	48	58.4?	40.80	N	19.58	E	10	G			1.5	6	ALBANIA. ML 2.5 (TTG).
	16	10	42	43.2	10.792	S	161.290	E	60	*	4.8	4.5	1.3	40	SOLOMON ISLANDS
	16	12	04	27.0*	25.179	N	122.866	E	196	*	4.0		0.8	12	TAIWAN REGION
	16	12	45	58.8	39.997	N	23.339	E	10	G			0.8	7	AEGEAN SEA
a	16	13	18	08.5*	22.223	S	173.628	W	33	N	5.1		1.3	41	TONGA ISLANDS REGION
	16	13	26	30.4*	38.638	N	25.934	E	10	G			1.4	6	AEGEAN SEA. ML 3.4 (ATH).
	16	13	30	35.2*	10.802	S	161.537	E	33	N	4.3		1.5	11	SOLOMON ISLANDS
	16	13	51	26.0*	7.550	S	131.234	E	87	*	4.9		1.0	11	TANIMBAR ISLANDS REGION
	16	14	00	10.5	41.203	N	19.527	E	10	G			1.1	20	ALBANIA. MD 3.1 (TTG).
	16	14	13	50.4	17.939	S	178.458	W	597		4.9		1.0	60	FIJI ISLANDS REGION
	16	14	42	08.1*	10.715	S	161.236	E	63	*	4.5	4.7	1.0	17	SOLOMON ISLANDS
a	16	15	14	59.3	52.904	S	27.444	E	10	G	5.5	4.9	1.2	106	SOUTH OF AFRICA
	16	16	03	54.3%	42.338	N	18.937	E	10	G			0.4	6	YUGOSLAVIA. ML 2.1 (TTG).
	16	16	29	59.3	30.000	S	68.626	W	114		4.4		0.9	47	SAN JUAN PROVINCE, ARGENTINA
	16	19	40	03.3*	1.581	S	28.767	E	10	G	4.8		1.5	10	ZAIRE REPUBLIC
	16	20	19	59.9&	40.392	N	123.993	W	5	G				22	NORTHERN CALIFORNIA. <BRK>. ML 3.7 (BRK). Felt (V) at Scotia, (IV) at Rio Dell and (III) at Redcrest. Also felt at Eureka.
	16	21	36	57.9*	19.991	N	121.061	E	52	*	4.2		1.4	27	PHILIPPINE ISLANDS REGION
	16	22	17	00.4*	21.355	S	69.045	W	101	?			1.5	7	NORTHERN CHILE
	16	23	56	12.6*	35.166	N	139.883	E	48	*			1.2	10	NEAR S. COAST OF HONSHU, JAPAN. Felt (II JMA) at Tokyo and (I JMA) at Chiba, Tateyama, Katsuura and Yokahama.
	17	00	27	55.5	39.955	N	24.256	E	25	*			0.9	8	AEGEAN SEA. ML 3.4 (ATH).
	17	00	30	30.4	39.801	N	24.327	E	17		3.6		0.9	26	AEGEAN SEA. ML 4.0 (ATH).
	17	03	25	10.5?	20.38	S	70.91	W	53	*	4.7		1.7	23	NEAR COAST OF NORTHERN CHILE
	17	03	35	30.6	1.291	N	132.830	E	33	N	5.0		1.2	22	WEST IRIAN REGION
	17	04	13	53.8&	35.051	N	97.517	W	5	G				8	OKLAHOMA. <TUL>. mbLg 2.3 (TUL).
	17	06	17	14.7?	56.28	N	154.07	W	33	N	4.1		1.1	6	KODIAK ISLAND REGION
	17	06	29	34.5%	43.352	N	8.045	E	10	G			0.8	7	CORSICA. ML 2.7 (LDG).
	17	08	52	38.5?	52.64	S	27.39	E	10	G	4.7		1.3	9	SOUTH OF AFRICA
	17	09	14	38.6&	61.257	N	149.764	W	45					44	SOUTHERN ALASKA. <AGS-P>. Felt (II) at Anchorage and Eagle River.
	17	10	04	08.1	39.821	N	141.667	E	83		5.0		0.9	166	HONSHU, JAPAN. Felt (IV JMA) at Miyako, (III JMA) at Morioka, Hachinohe and Ofunato, (II JMA) at Ishinomaki and (I JMA) at Sendai and Shirakawa.
	17	11	14	52.0	10.731	S	161.328	E	52	*	4.5		1.1	27	SOLOMON ISLANDS
a	17	11	22	01.6	10.771	S	161.271	E	51	*	4.8	5.4	1.3	39	SOLOMON ISLANDS. Ms 5.7 (BRK).
	17	12	06	12.5*	10.872	S	161.339	E	24	*	4.3		1.5	15	SOLOMON ISLANDS
	17	13	24	05.6	21.547	S	179.418	W	623		4.7		0.9	42	FIJI ISLANDS REGION

	17	18	57	08.1*	49.984	S	7.730	W	10	G	4.8	4.7	1.1	16	SOUTH ATLANTIC RIDGE
	17	22	48	28.9&	60.265	N	152.601	W	99					21	SOUTHERN ALASKA. <AGS-P>.
	17	23	54	24.8	42.344	N	18.888	E	10	G			1.4	10	YUGOSLAVIA. MD 2.9 (TTG).
	18	00	51	22.5	42.318	N	19.967	E	10	G			1.0	11	YUGOSLAVIA. MD 2.8 (TTG).
	18	06	33	42.5*	20.791	S	67.431	W	185		4.8		0.9	11	SOUTHERN BOLIVIA
	18	09	32	46.0	43.122	N	26.055	E	10	G			1.3	9	BULGARIA
	18	10	57	24.6%	44.317	N	6.746	E	10	G			0.6	12	FRANCE. ML 2.8 (LDG).
	18	13	03	46.8	36.192	N	71.280	E	95		4.8		1.3	91	AFGHANISTAN-USSR BORDER REGION. Felt (II) at Khorog, USSR.
	18	18	15	48.5*	25.886	N	128.870	E	33	N	4.5		0.9	7	RYUKYU ISLANDS
a	18	18	16	11.7	19.460	S	175.666	W	242	D	5.2		1.0	94	TONGA ISLANDS
	18	18	29	05.9	6.244	S	154.825	E	64		4.6		1.0	27	SOLOMON ISLANDS. Felt (II) at Arawa, Baugainville.
	18	18	43	13.5*	66.246	N	149.818	W	10	G			1.2	5	ALASKA. ML 3.3 (PMR).
	18	19	55	44.1*	32.204	S	70.946	W	22	*			1.4	12	CHILE-ARGENTINA BORDER REGION
	18	20	32	09.4*	36.622	N	70.189	E	158	?	4.2		1.2	15	HINDU KUSH REGION
	18	23	35	27.0*	30.715	N	142.640	E	33	N	4.4		1.0	13	SOUTH OF HONSHU, JAPAN
	19	00	23	24.0*	14.072	N	51.766	E	10	G	4.8		1.0	17	EASTERN GULF OF ADEN
	19	03	49	13.6&	36.545	N	121.082	W	7					14	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
	19	04	07	24.2	55.566	N	5.608	E	5	G			1.0	24	NORTH SEA. ML 3.6 (BGS).
	19	04	12	29.1	43.945	N	147.646	E	48	D	4.8		0.8	87	KURIL ISLANDS
a	19	06	47	43.0	54.744	N	163.277	E	42	D	5.4	5.2	1.1	226	OFF EAST COAST OF KAMCHATKA
	19	07	22	56.3*	41.703	N	19.389	E	10	G			1.1	12	ALBANIA. ML 3.0 (TTG).
	19	07	46	24.4	28.385	N	83.682	E	33	N	5.2	4.3	1.0	119	NEPAL. Felt at Kathmandu.
	19	08	09	04.4&	37.150	N	121.582	W	7					28	CENTRAL CALIFORNIA. <BRK>. ML 4.3 (BRK). Ma=1.6*10**15 Nm (BRK). Felt (IV) at San Martin, (III) at Las Gatas, Santa Cruz and San Matea. Alsa felt at Santa Clara and San Francisca.
	19	08	12	05.8	28.243	N	83.572	E	33	N	4.9		1.1	71	NEPAL. Felt at Kathmandu.
	19	09	08	25.2*	28.803	S	70.852	W	33	N			1.3	8	CENTRAL CHILE
	19	09	35	43.5	29.892	S	72.441	W	33	N	4.5		1.0	15	OFF COAST OF CENTRAL CHILE
	19	10	21	36.2?	42.80	N	0.03	W	10	G			1.0	12	PYRENEES. ML 3.5 (LDG).
	19	10	54	38.0*	10.282	S	78.978	W	33	N	4.6		1.4	23	NEAR COAST OF PERU. Felt at Huarmey.
	19	11	21	55.4%	42.347	N	18.943	E	10	G			0.2	6	YUGOSLAVIA. ML 2.2 (TTG).
	19	11	27	02.9	50.780	N	129.633	W	10	G	4.2		1.3	40	VANCOUVER ISLAND REGION
	19	13	24	19.9*	44.027	N	114.860	W	5	G			1.3	7	WESTERN IDAHO. ML 3.0 (NEIS).
	19	14	15	01.8*	34.477	N	46.268	E	33	N	4.3		1.1	9	WESTERN IRAN
	19	15	54	50.8	2.081	N	127.090	E	33	N	5.1		1.2	47	MOLUCCA PASSAGE
	19	19	40	39.3*	29.106	S	178.083	W	90	*	5.0		1.5	26	KERMADEC ISLANDS
	19	20	11	58.3*	39.215	N	36.436	E	10	G	3.9		1.5	10	TURKEY
	19	21	24	01.7	56.083	N	164.411	E	33	N	4.9	4.9	1.0	105	KOMANDORSKY ISLANDS REGION
	19	21	25	36.5&	61.287	N	146.899	W	29					30	SOUTHERN ALASKA. <AGS-P>.
	19	22	09	34.1&	58.512	N	150.926	W	94		4.3			39	GULF OF ALASKA. <AGS-P>.
	19	23	52	01.9	0.874	N	99.527	E	27		4.9		1.3	41	NORTHERN SUMATERA
	20	00	01	37.6*	40.009	N	141.239	E	24	*	4.4		1.1	8	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Miyako and Mariaka.
	20	02	20	29.6	39.015	N	23.521	E	10	G			1.2	17	AEGEAN SEA. ML 3.3 (ATH).
	20	03	59	02.5	6.917	N	72.136	W	43		4.8		1.0	76	NORTHERN COLOMBIA. Felt at Bucaramanga.
	20	05	33	01.5	47.291	N	11.526	E	10	G			1.5	10	AUSTRIA. ML 2.7 (KBA).
	20	06	22	26.8	31.975	N	50.743	E	33	N	4.6		1.0	25	IRAN
	20	07	09	24.8*	4.836	S	133.811	E	33	N	4.1		1.5	6	WEST IRIAN REGION
	20	07	18	10.2*	36.383	N	71.053	E	183	?	4.5		1.2	14	AFGHANISTAN-USSR BORDER REGION
	20	08	28	39.4	24.051	S	66.759	W	198		4.7		1.2	70	SALTA PROVINCE, ARGENTINA
	20	08	34	04.6	44.316	N	114.290	W	5	G			0.6	7	WESTERN IDAHO. ML 3.0 (NEIS).
	20	11	10	18.9*	43.414	N	11.943	E	10	G			1.2	17	CENTRAL ITALY. MD 3.4 (FIR), ML 3.4 (KBA).
	20	13	03	35.6	41.701	N	19.383	E	10	G			0.7	14	ALBANIA. MD 3.2 (TTG).
	20	15	01	03.7	36.260	S	72.465	W	33	N			0.4	8	NEAR COAST OF CENTRAL CHILE. Felt (IV) at Talca.
	20	15	08	01.4?	35.47	S	71.79	W	28				0.9	8	CENTRAL CHILE. Felt (III) at Talca.
	20	15	53	02.2	14.614	S	167.269	E	191	*	4.9		1.2	99	VANUATU ISLANDS
	20	16	23	58.7%	43.688	N	7.041	E	10	G			0.6	6	NEAR SOUTH COAST OF FRANCE. ML 2.2 (LDG).
	20	17	10	43.3	36.418	N	26.876	E	149		4.1		0.8	42	DODECANESE ISLANDS
	20	19	09	06.7*	3.399	S	135.450	E	33	N	4.1		1.1	9	WEST IRIAN REGION
	20	19	50	25.4*	8.087	N	83.489	W	28		4.4	3.4	1.2	17	COSTA RICA
	20	23	28	28.3&	63.029	N	150.705	W	142					39	CENTRAL ALASKA. <AGS-P>.
	20	23	36	05.6	38.632	N	141.974	E	67		5.0		1.1	131	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Morioka, Miyako, Ofunato and Sendai; (II JMA) at Fukushima, Hachinohe, Ishinomaki, Mita and Onahama.
a	20	23	43	52.7	51.581	N	174.413	W	33	N	5.2	4.5	0.9	138	ANDREANOF ISLANDS, ALEUTIAN IS.
	21	01	09	34.2	26.876	N	143.872	E	33	N	5.1		0.8	91	BONIN ISLANDS REGION
	21	01	17	03.6*	57.945	S	25.449	W	33	N	5.4		1.2	37	SOUTH SANDWICH ISLANDS REGION
a	21	01	51	17.6	5.602	S	130.788	E	55		5.3		1.0	118	BANDA SEA
	21	02	51	44.2*	43.360	N	17.165	E	10	G			1.2	8	YUGOSLAVIA. ML 3.0 (TTG).
	21	03	38	23.0	46.279	N	7 401	E	10	G			1.0	8	SWITZERLAND
a	21	04	47	03.1	6.664	S	129.815	E	159	D	5.4		1.1	161	BANDA SEA
	21	05	29	50.2&	63.269	N	150.565	W	45					20	CENTRAL ALASKA. <AGS-P>.
	21	05	54	46.8	3.346	S	137.406	E	71	D	5.1		1.0	46	WEST IRIAN
	21	06	56	56.7*	42.766	N	13.151	E	10	G			1.3	21	CENTRAL ITALY. ML 3.8 (KBA). MD 3.7 (TRI).
	21	09	03	20.9?	16.08	N	60.47	W	33	N			0.3	5	LEEWARD ISLANDS. ML 2.5 (FDF).
	21	09	54	04.5	43.365	N	26.210	E	20				1.5	38	BULGARIA. Damage (V) to previausly damaged buildings in the Strazhitza area.
	21	10	05	36.0	43.237	N	26.163	E	10	G			1.2	10	BULGARIA
	21	11	18	27.3&	37.442	N	118.382	W	7					25	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.4 (BRK), 3 2 (PAS).
	21	11	24	04.4*	28.028	S	71.024	W	33	N			0.2	5	NEAR COAST OF CENTRAL CHILE
a	21	11	26	36.6	20.608	N	144.885	E	118	D	5.6		1.1	271	MARIANA ISLANDS. mb 5.8 (BRK).
	21	11	33	47.3	31.855	S	66.298	W	33	N			1.4	20	LA RIOJA PROVINCE, ARGENTINA
	21	11	42	57.1&	37.447	N	118.382	W	7					30	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.5 (BRK), 3.4 (PAS). Felt (III) at Bentan, Califarnia.
	21	14	15	32.2&	59.510	N	153.203	W	103					24	SOUTHERN ALASKA. <AGS-P>.
	21	15	19	58.3?	32.02	S	178.91	W	33	N	5.1		1.4	9	SOUTH OF KERMADEC ISLANDS
	21	16	06	11.8*	50.835	N	5.453	E	10	G			1.5	6	BELGIUM
	21	16	35	12.6*	1.049	S	77.631	W	138	D	4.3		1.4	16	ECUADOR
	21	17	08	23.3*	30.510	N	131.316	E	42	*	4.6		1.1	19	KYUSHU, JAPAN
	21	17	56	08.3?	6.07	S	130.21	E	141	?	4.1		0.9	9	BANDA SEA

	21	19	49	32.5*	64.888	N	152.488	W	33	N			1.2	6	CENTRAL ALASKA. ML 3.1 (PMR).
	21	20	01	06.1	32.745	N	47.646	E	55	*	4.7		0.7	37	IRAN-IRAQ BORDER REGION
	21	20	09	11.7	48.394	N	8.558	E	10	G			1.1	9	GERMANY. ML 2.7 (LDG).
	21	20	26	42.5?	16.79	N	60.97	W	10	G			0.2	5	LEEWARD ISLANDS. ML 2.6 (FDF).
a	21	20	37	03.5	6.008	S	128.836	E	268		5.3		1.0	145	BANDA SEA
	21	22	16	17.6*	33.707	S	71.830	W	10	G			0.3	10	NEAR COAST OF CENTRAL CHILE
	21	22	21	26.8&	60.779	N	150.962	W	18					27	KENAI PENINSULA, ALASKA. <AGS-P>.
	21	22	40	23.1%	60.118	N	5.084	E	0	G			0.8	7	SOUTHERN NORWAY. MD 2.3 (BER). Probable explosion.
	21	22	52	25.1*	65.020	N	152.107	W	33	N			1.3	8	ALASKA. ML 3.5 (PMR).
	21	23	15	24.7%	15.440	N	60.691	W	33	N			0.2	8	LEEWARD ISLANDS. ML 2.7 (FDF).
	21	23	16	12.2*	23.900	N	142.107	E	46	?	4.7		0.9	29	VOLCANO ISLANDS REGION
	22	00	12	11.1*	6.787	S	155.356	E	57	*	4.5		0.5	9	SOLOMON ISLANDS
	22	01	24	54.5	37.484	N	118.405	W	5	G			0.6	13	CALIFORNIA-NEVADA BORDER REGION. ML 3.0 (NEIS).
	22	01	30	59.7	5.069	S	102.814	E	38	D	5.1	4.1	0.9	51	SOUTHERN SUMATERA
	22	01	37	24.4?	33.94	S	72.18	W	33	N			0.7	7	OFF COAST OF CENTRAL CHILE
	22	01	51	14.7?	39.11	S	15.92	W	10	G		4.1	1.3	9	TRISTAN DA CUNHA REGION
	22	02	59	08.2	39.302	N	23.223	E	10	G			0.6	8	AEGEAN SEA. ML 2.8 (ATH).
	22	03	33	24.6	36.609	N	138.200	E	10		4.4		1.4	17	HONSHU, JAPAN. Felt (III JMA) at Nagano.
	22	03	35	02.4&	60.457	N	151.381	W	55					27	KENAI PENINSULA, ALASKA. <AGS-P>.
	22	04	11	06.4?	20.47	S	177.61	W	515	*	4.6		1.0	20	FIJI ISLANDS REGION
	22	04	21	04.7+	12.356	N	41.303	E	10	G	4.3		0.3	11	ETHIOPIA
	22	05	10	51.1	43.515	N	10.154	E	22				1.1	62	CENTRAL ITALY. ML 4.2 (KBA), 3.9 (LDG). MD 4.1 (FIR). Two people died of heart attacks. Felt in the Livorno area.
a	22	05	33	16.3	18.830	S	175.736	W	269	D	5.2		0.9	169	TONGA ISLANDS
	22	05	47	23.3	29.274	N	141.992	E	40	D	4.9		1.0	69	SOUTH OF HONSHU, JAPAN
	22	07	00	21.5	43.510	N	10.240	E	27				1.0	32	CENTRAL ITALY. MD 3.7 (FIR). ML 3.6 (KBA), 3.4 (LDG). Felt in the Livorno area.
	22	09	26	22.4*	8.211	N	137.321	E	33	N	4.6		1.4	15	WEST CAROLINE ISLANDS
	22	10	03	29.4*	7.577	N	82.317	W	23		4.4		1.1	21	SOUTH OF PANAMA
	22	10	22	18.0	40.560	N	21.658	E	10	G			1.1	15	GREECE. MG 3.1 (TIR).
a	22	12	15	44.5	43.159	N	146.479	E	65		5.4		0.8	211	KURIL ISLANDS. Felt (IV) on Shikotan and (III) at Yuzhno-Kurilsk. Felt (III JMA) at Nemuro and (II JMA) at Kushiro, Hokkaido. Felt (I JMA) at Morioka, Honshu.
	22	13	11	01.5*	38.388	N	142.306	E	33	N	4.8		0.5	6	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Ofunato and Sendai.
	22	14	07	57.9	31.301	S	179.880	E	398		5.1		1.2	110	KERMADEC ISLANDS REGION
	22	16	44	23.6*	37.988	S	78.249	E	10	G	5.1		1.0	19	MID-INDIAN RISE
	22	16	58	51.4?	51.35	N	20.06	E	10	G			0.6	5	POLAND. ML 2.6 (KRA).
	22	16	59	48.9	43.471	N	3.869	W	10	G			1.0	22	SPAIN. ML 3.6 (LDG).
	22	17	05	32.4	29.404	N	51.657	E	25	*	4.4		1.5	18	SOUTHERN IRAN. ML 4.3 (BJA).
	22	17	58	36.5*	23.888	N	121.898	E	10	G			0.8	6	TAIWAN
	22	18	43	59.9	32.784	S	71.741	W	10	G			0.6	16	NEAR COAST OF CENTRAL CHILE
	22	19	22	50.2*	45.822	N	26.662	E	77	?			0.8	6	ROMANIA
	22	20	15	11.5	15.122	N	122.856	E	36		4.6		1.1	46	PHILIPPINE ISLANDS REGION
	22	20	47	53.8	42.360	N	18.984	E	10	G			0.6	12	YUGOSLAVIA. MD 3.4 (TTG). Felt (V) at Cetinje; (IV) at Titograd, Budva and Petrovac.
	22	23	56	34.2*	33.035	S	71.947	W	10	G			0.4	10	NEAR COAST OF CENTRAL CHILE
	23	01	52	53.4	52.173	N	171.230	W	33	N	4.7		0.6	64	FOX ISLANDS, ALEUTIAN ISLANDS
	23	02	06	17.6?	52.11	N	171.29	W	33	N	4.3		1.5	10	FOX ISLANDS, ALEUTIAN ISLANDS
	23	03	57	16.6*	18.008	S	71.219	W	33	N			1.1	5	OFF COAST OF NORTHERN CHILE. Felt (II) at Arequipa, Peru.
	23	04	55	06.7*	52.120	N	169.428	W	33	N	4.5		1.1	36	FOX ISLANDS, ALEUTIAN ISLANDS
	23	05	44	42.9*	26.723	S	71.920	W	87	*			1.1	14	OFF COAST OF NORTHERN CHILE
	23	05	47	23.2*	20.819	S	68.518	W	107	D	4.9		1.4	20	CHILE-BOLIVIA BORDER REGION
	23	08	47	32.3?	5.74	S	147.06	E	206	?	4.6		1.3	7	EAST PAPUA NEW GUINEA REGION
	23	10	24	03.0	5.369	S	152.308	E	44	*	4.5		1.1	16	NEW BRITAIN REGION
	23	11	55	24.5*	45.200	N	27.943	E	33	N			0.8	6	ROMANIA
	23	13	57	41.5%	44.697	N	6.866	E	10	G			0.3	6	FRANCE. ML 2.5 (LDG).
	23	15	25	19.4?	37.98	S	178.25	E	159	?	3.9		0.7	8	OFF E. COAST OF N. ISLAND, N.Z.
	23	17	05	19.5&	60.854	N	151.836	W	88					39	KENAI PENINSULA, ALASKA. <AGS-P>.
a	23	17	51	09.2	1.646	N	126.531	E	72	D	5.6		1.2	201	MOLUCCA PASSAGE
	23	18	16	41.3	2.884	S	141.485	E	31		5.3	5.1	1.0	105	NEAR N COAST OF PAPUA NEW GUINEA
	23	18	43	44.5	2.864	S	141.362	E	46	*	4.6		1.1	23	NEAR N COAST OF PAPUA NEW GUINEA
	23	18	52	30.0&	37.463	N	118.413	W	9					23	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.0 (BRK), 3.2 (PAS).
	23	18	56	19.2*	3.045	S	141.201	E	69	?	3.9		0.8	12	PAPUA NEW GUINEA
	23	19	15	21.0?	7.56	S	128.52	E	33	N	4.9		1.6	13	BANDA SEA
	23	19	21	13.4*	0.883	N	99.627	E	33	N	4.0		0.6	6	NORTHERN SUMATERA
	23	19	21	35.8*	0.773	N	99.476	E	33	N	4.3		1.4	11	NORTHERN SUMATERA
	23	20	34	16.2*	9.297	S	158.727	E	61	*	4.7		1.3	21	SOLOMON ISLANDS
	23	20	58	07.2	44.395	N	7.305	E	10	G			0.2	7	NORTHERN ITALY. ML 2.6 (LDG).
	23	21	10	11.0*	41.684	N	22.866	E	10	G			1.3	5	YUGOSLAVIA. ML 2.3 (SKO).
	23	21	16	51.3?	8.40	N	83.12	W	33	N			0.9	6	COSTA RICA. ML 4.0 (HDC).
	23	21	18	09.4	13.930	N	144.717	E	155		5.0		1.1	148	MARIANA ISLANDS. Felt (IV) on Guam.
	23	21	46	02.9	2.948	S	141.267	E	48		4.5		0.9	22	NEAR N COAST OF PAPUA NEW GUINEA
	24	01	42	32.0?	36.30	N	31.90	E	10	G			1.6	5	TURKEY
	24	02	58	00.0%	15.968	N	61.109	W	33	N			1.0	5	LEEWARD ISLANDS. ML 2.4 (FDF).
	24	06	33	47.7	41.800	N	22.829	E	10	G			0.3	8	YUGOSLAVIA. ML 2.1 (SKO).
	24	07	01	01.7%	15.914	N	60.796	W	31				0.2	11	LEEWARD ISLANDS. ML 3.4 (FDF).
f	24	08	09	21.3	41.529	N	79.318	E	29	D	5.9	5.9	1.2	254	KIRGHIZ-XINJIANG BORDER REGION. At least 417 houses damaged in the Wushi area, China. Felt (IV) in the Almo Ata-Przhevalsk area and (III) in the Frunze-Naryn area, USSR.
	24	08	13	14.4*	41.412	N	79.348	E	33	N	5.5		0.8	19	KIRGHIZ-XINJIANG BORDER REGION
	24	08	30	37.7*	5.189	S	153.564	E	69	?	4.2		1.2	13	NEW IRELAND REGION
	24	08	33	16.5*	32.390	S	71.941	W	33	N			1.1	12	NEAR COAST OF CENTRAL CHILE
	24	08	45	45.8*	41.313	N	79.360	E	33	N	4.6		1.2	15	KIRGHIZ-XINJIANG BORDER REGION
	24	08	48	31.6?	41.26	N	79.19	E	33	N	4.7		0.6	12	KIRGHIZ-XINJIANG BORDER REGION
	24	08	59	33.8	41.245	N	79.196	E	33	N	4.7		0.8	11	KIRGHIZ-XINJIANG BORDER REGION
	24	10	34	26.1	27.657	N	92.686	E	27		4.9		0.9	79	INDIA-CHINA BORDER REGION
	24	10	37	00.4?	32.66	S	71.78	W	33	N			1.2	7	NEAR COAST OF CENTRAL CHILE
	24	12	44	48.1?	32.20	S	179.29	E	475	?	4.2		1.6	9	SOUTH OF KERMADEC ISLANDS

	24	13	13	27.6	4.419	N	62.554	E	10	G	4.9	1.1	43	CARLSBERG RIDGE
	24	13	35	37.2?	2.25	N	125.89	E	33	N	4.5	0.5	6	TALAUD ISLANDS
	24	13	40	40.3	41.442	N	79.248	E	33	N	5.2	0.8	114	KIRGHIZ-XINJIANG BORDER REGION. Some animals killed in the Wushi area, China.
	24	13	42	49.6*	4.359	N	62.575	E	10	G	5.0	0.7	11	CARLSBERG RIDGE
	24	13	53	27.6?	33.69	N	86.35	E	33	N	4.5	1.6	8	TIBET
	24	14	05	09.9&	32.970	N	115.550	W	14				4	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.4 (PAS). Felt in Imperial County, California.
	24	14	26	40.1*	4.330	N	62.538	E	10	G	4.7	1.1	7	CARLSBERG RIDGE
	24	14	45	57.3*	41.381	N	79.512	E	33	N	4.4	0.5	11	KIRGHIZ-XINJIANG BORDER REGION
	24	15	31	49.3*	36.656	N	71.594	E	33	N	4.6	0.9	9	AFGHANISTAN-USSR BORDER REGION
	24	16	08	17.0&	35.828	N	98.097	W	5	G			12	OKLAHOMA. <TUL>. mbLg 3.1 (TUL). Felt (V) at Daver and Kingfisher. Felt in Blaine, Canadian and Kingfisher Counties.
	24	16	21	35.7	11.396	N	125.416	E	78	*	4.9	1.0	31	SAMAR, PHILIPPINE ISLANDS
	24	16	55	11.1*	5.292	S	145.296	E	94	*	4.2	1.6	23	EAST PAPUA NEW GUINEA REGION
	24	16	58	29.9?	22.64	S	171.90	E	33	N		0.8	8	LOYALTY ISLANDS REGION
	24	17	39	04.9&	59.078	N	152.650	W	70				28	SOUTHERN ALASKA. <AGS-P>.
	24	19	12	53.0*	56.317	N	152.030	W	33	N	4.6	0.7	21	KODIAK ISLAND REGION
	24	19	52	09.9?	5.33	S	103.81	E	33	N	4.7	0.7	9	SOUTHERN SUMATERA
	24	21	22	44.2	42.347	N	20.009	E	10	G		0.4	8	YUGOSLAVIA. ML 2.2 (TTG).
	24	23	15	08.2?	15.08	N	60.63	W	33	N		1.3	7	LEEWARD ISLANDS. ML 3.2 (FDF).
	24	23	51	12.0*	21.403	S	66.493	W	244		4.8	0.9	11	SOUTHERN BOLIVIA
	25	00	06	29.0%	47.177	N	0.697	E	10	G		0.4	6	FRANCE. ML 2.1 (LDG).
	25	00	32	46.7	2.952	S	141.533	E	31		5.0	1.1	73	NEAR N COAST OF PAPUA NEW GUINEA
	25	00	33	21.7	43.162	N	25.950	E	10	G		1.2	8	BULGARIA
	25	00	35	37.7*	32.384	N	132.247	E	32	*		0.6	6	SHIKOKU, JAPAN. Felt (I JMA) at Nabeaka.
	25	01	57	49.4?	70.65	N	8.47	E	10	G		0.8	7	NORWEGIAN SEA
	25	02	13	43.9	32.253	S	71.722	W	45	*	4.6	1.0	27	NEAR COAST OF CENTRAL CHILE
	25	03	12	44.7?	80.79	N	9.29	E	10	G	4.4	1.4	6	SVALBARD REGION
	25	04	18	18.1*	32.383	S	72.190	W	33	N		0.5	8	OFF COAST OF CENTRAL CHILE
	25	04	40	08.5	18.144	S	178.180	W	577		5.2	0.9	87	FIJI ISLANDS REGION
	25	06	10	56.3	41.347	N	79.305	E	33	N	4.5	1.0	20	KIRGHIZ-XINJIANG BORDER REGION
	25	07	20	43.9?	32.38	S	72.30	W	10	G		1.1	9	OFF COAST OF CENTRAL CHILE
	25	08	30	53.8	42.370	N	19.883	E	10	G		1.1	8	YUGOSLAVIA. ML 2.3 (TTG).
	25	09	43	57.7%	38.819	N	30.442	E	10	G		1.4	5	TURKEY
a	25	10	31	22.8	3.054	N	79.334	W	13		5.6 5.2	1.1	222	SOUTH OF PANAMA
	25	14	13	35.7?	28.32	S	176.32	W	33	N	4.6	1.6	13	KERMADEC ISLANDS REGION
	25	15	02	08.3*	36.934	N	140.785	E	100		4.4	1.3	13	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mito and Utsunomiya.
	25	15	27	04.5*	21.656	S	68.355	W	162	?		0.7	7	CHILE-BOLIVIA BORDER REGION
	25	15	36	42.7*	42.860	N	143.985	E	111		4.4	0.8	20	HOKKAIDO, JAPAN REGION. Felt (II JMA) at Kushiro and (I JMA) at Obihira.
	25	16	00	41.3*	41.853	N	19.466	E	10	G		1.2	5	ALBANIA. ML 2.4 (TTG).
	25	21	30	11.9*	32.322	S	72.291	W	33	N	4.5	1.1	12	OFF COAST OF CENTRAL CHILE
	25	22	49	12.2	41.343	N	79.304	E	33	N	4.5	0.9	20	KIRGHIZ-XINJIANG BORDER REGION
	26	00	38	17.6?	39.37	N	73.36	E	33	N	4.5	1.3	14	TAJIK-XINJIANG BORDER REGION
	26	01	38	33.1	40.829	N	27.678	E	10	G		0.6	5	TURKEY
	26	02	33	51.3*	32.362	S	71.824	W	11			0.6	11	NEAR COAST OF CENTRAL CHILE
	26	04	39	51.1	8.588	N	83.020	W	63			0.7	18	COSTA RICA. MD 4.3 (HDC). Felt (III) in Chiriqui Province, Panama.
	26	05	17	29.7	15.338	S	72.263	W	149		4.6	0.7	21	SOUTHERN PERU
	26	05	28	40.8	41.324	N	79.195	E	33	N	4.5	0.8	21	KIRGHIZ-XINJIANG BORDER REGION
	26	08	08	09.3*	8.222	N	82.919	W	14		4.0	0.6	15	PANAMA-COSTA RICA BORDER REGION. MD 4.3 (HDC). Felt (III) at Chiriqui, Panama. Felt at Golfito and in the Panama-Costa Rica border area.
	26	08	43	54.3?	24.29	S	175.22	W	33	N	4.5	1.0	11	SOUTH OF TONGA ISLANDS
	26	08	58	13.9*	7.623	S	32.229	E	10	G	4.3	1.1	6	TANZANIA
	26	09	13	04.5*	43.209	N	26.008	E	10	G		1.4	5	BULGARIA
	26	11	11	41.8	35.964	N	1.374	E	10	G	4.9 4.3	1.2	146	ALGERIA. One person killed, 7 injured and 629 homes damaged in the Mohammadia area. Felt at Oued Fodda and Tissemsilt.
	26	12	44	27.7?	35.85	N	115.03	W	5	G		0.6	9	CALIFORNIA-NEVADA BORDER REGION. ML 2.7 (NEIS). Felt at Boulder City, Nevada.
	26	13	17	24.7?	24.58	S	179.25	E	625	?	4.5	1.2	17	SOUTH OF FIJI ISLANDS
	26	14	52	12.6*	32.246	S	72.126	W	53	*	4.5	1.2	20	OFF COAST OF CENTRAL CHILE
	26	15	05	52.7*	32.165	S	72.120	W	44	*	4.8	1.0	27	OFF COAST OF CENTRAL CHILE
	26	15	41	14.9*	32.060	S	71.818	W	40	*	5.3	0.9	24	NEAR COAST OF CENTRAL CHILE
	26	15	57	06.6	11.585	N	87.980	W	33	N	4.5 3.6	0.8	12	NEAR COAST OF NICARAGUA
	26	17	19	28.6	12.979	N	125.052	E	28	*	4.6	1.1	31	SAMAR, PHILIPPINE ISLANDS
	26	19	52	51.4*	6.254	S	150.133	E	44	*	4.0	0.7	9	NEW BRITAIN REGION
	26	21	10	28.3	18.591	N	81.705	W	10	G	4.0 3.8	1.3	23	CARIBBEAN SEA. Felt (IV) at Georgetown and West Bay, Grand Cayman.
	26	21	16	38.7*	14.714	N	54.543	E	10	G	4.5	0.7	16	ARABIAN SEA
	26	21	52	38.6*	14.675	N	54.732	E	10	G	4.4	1.3	12	ARABIAN SEA
a	26	23	11	33.4	6.373	N	12.453	E	10	G	4.8 4.8	0.7	65	CAMEROON. Felt in the Banya-Tibati-N'Gaoundere area.
	26	23	29	11.6	32.163	S	72.277	W	32		4.8	0.9	31	OFF COAST OF CENTRAL CHILE
	26	23	32	22.7*	32.138	S	71.882	W	51	*	4.9	1.1	30	NEAR COAST OF CENTRAL CHILE
	26	23	37	25.2*	43.290	N	26.079	E	10	G		0.9	8	BULGARIA
	27	00	25	18.4	41.957	N	142.654	E	69		5.1	1.0	110	HOKKAIDO, JAPAN REGION. Felt (II JMA) at Urokawa and (I JMA) at Hachinohe and Obihiro.
	27	00	36	27.3	14.831	N	54.628	E	10	G	5.0	1.0	46	ARABIAN SEA
	27	01	30	38.5	35.484	N	140.825	E	61		5.1	1.1	132	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Tateyama. Also felt in the Chiba area.
	27	01	36	56.6%	15.195	N	60.827	W	33	N		0.9	7	LEEWARD ISLANDS. ML 2.3 (FDF).
	27	01	58	22.9*	10.786	S	75.721	W	33	N		1.2	6	PERU
	27	02	22	06.9	10.259	N	86.481	W	33	N	4.4	0.7	11	OFF COAST OF COSTA RICA. MD 4.3 (HDC).
	27	02	50	00.6	32.152	S	72.097	W	44	*	4.7	1.1	32	OFF COAST OF CENTRAL CHILE
	27	03	14	09.0*	22.620	S	66.419	W	310	?		0.6	8	JUJUY PROVINCE, ARGENTINA
	27	03	40	11.0	32.211	S	72.227	W	47	*	4.2	1.1	24	OFF COAST OF CENTRAL CHILE
	27	04	01	57.5*	14.841	N	54.672	E	10	G	4.6 4.3	0.9	22	ARABIAN SEA
	27	04	54	30.7*	32.575	S	71.703	W	21			0.7	13	NEAR COAST OF CENTRAL CHILE
a	27	07	06	51.9	32.154	S	72.082	W	35		5.0 5.4	1.1	72	OFF COAST OF CENTRAL CHILE

	27	07 39 03.5*	41.225	N	19.254	E	10	G			0.8	9	ALBANIA. ML 2.8 (TTG).
	27	08 12 22.5?	2.02	S	100.79	E	86	?	4.5		0.7	8	SOUTHERN SUMATERA
	27	08 51 20.1?	32.33	S	72.59	W	33	N			1.3	9	OFF COAST OF CENTRAL CHILE
	27	09 27 01.8	10.710	N	56.945	E	10	G	4.8		1.0	49	CARLSBERG RIDGE
	27	09 37 38.6*	19.796	S	133.769	E	10	G			1.1	6	NORTHERN TERRITORY, AUSTRALIA
	27	09 45 51.4	3.344	N	122.220	E	609	*	5.0		0.8	21	CELEBES SEA
	27	09 51 52.2	32.424	S	72.285	W	33	N			1.0	17	OFF COAST OF CENTRAL CHILE
	27	12 28 57.8*	20.936	S	178.426	W	434	*	4.6		1.0	21	FIJI ISLANDS REGION
	27	12 34 50.0*	32.245	S	72.420	W	30				0.9	14	OFF COAST OF CENTRAL CHILE
	27	13 23 22.5*	65.151	N	151.910	W	33	N			0.9	7	ALASKA. ML 3.3 (PMR).
	27	13 29 56.4&	62.827	N	149.617	W	6					39	CENTRAL ALASKA. <AGS-P>. ML 3.5 (PMR).
	27	13 32 21.0%	60.231	N	5.261	E	0	G			0.6	7	SOUTHERN NORWAY. MD 2.0 (BER). Probable explasion.
	27	15 26 21.5	41.933	N	143.477	E	37	*	4.4		1.0	25	HOKKAIDO, JAPAN REGION
	27	16 07 17.9*	3.491	S	130.083	E	33	N	4.2		1.2	15	CERAM
	27	16 33 28.8*	19.947	N	98.536	W	33	N	4.2		1.0	17	CENTRAL MEXICO. Felt in Hidalgo and at Mexico City.
	27	16 39 57.2*	33.089	N	141.836	E	33	N	4.7		1.1	17	OFF EAST COAST OF HONSHU, JAPAN
	27	17 57 11.3&	37.608	N	118.463	W	6					37	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.8 (BRK), 3.5 (PAS).
	27	18 09 02.3?	33.35	S	179.63	W	33	N	4.4		1.6	9	SOUTH OF KERMADEC ISLANDS
	27	19 08 25.3?	32.47	S	71.97	W	33	N			1.0	9	NEAR COAST OF CENTRAL CHILE
	27	19 10 53.4*	41.587	N	73.726	E	33	N	4.7		1.1	13	KIRGHIZ SSR
	27	20 10 50.1*	32.550	S	71.936	W	33	N			0.8	11	NEAR COAST OF CENTRAL CHILE
	27	21 25 00.4*	7.268	S	106.670	E	33	N	4.6		0.6	9	JAVA
	27	23 34 16.2	24.171	N	122.828	E	60		4.6		1.0	51	TAIWAN REGION
	28	00 01 39.9	41.331	N	79.210	E	33	N	4.5		0.6	19	KIRGHIZ-XINJIANG BORDER REGION
	28	00 03 39.0*	8.218	N	58.621	E	10	G	4.7	5.3	1.2	20	CARLSBERG RIDGE
	28	01 47 28.7*	9.972	S	33.715	E	10	G	4.8		0.7	8	TANZANIA
	28	02 39 51.8*	1.815	S	99.477	E	33	N	4.0		1.0	16	SOUTHERN SUMATERA
	28	04 59 09.7*	16.378	N	122.297	E	33	N	4.5		0.7	8	LUZON, PHILIPPINE ISLANDS
	28	05 33 21.8	40.951	N	15.474	E	10		4.1		1.0	50	SOUTHERN ITALY. ML 4.6 (TTG), 4.4 (TRI).
	28	06 10 10.9*	32.390	S	72.220	W	10	G			0.9	12	OFF COAST OF CENTRAL CHILE
	28	06 26 01.6*	32.743	S	71.214	W	29	*			1.4	12	NEAR COAST OF CENTRAL CHILE
	28	06 47 21.1	41.935	N	19.495	E	10	G	3.4		1.0	23	ALBANIA. MD 3.4 (TTG). Felt (IV) at Kaplik. Felt also at Shkodra.
	28	07 14 49.0	39.748	N	20.813	E	10	G			0.6	13	GREECE-ALBANIA BORDER REGION
	28	07 48 47.0*	66.438	N	149.861	W	10	G			1.2	6	ALASKA. ML 3.6 (PMR).
	28	08 31 44.3?	39.99	N	23.55	E	10	G			1.0	6	AEGEAN SEA
	28	09 07 57.2	8.951	N	126.373	E	50	*	5.1	5.2	0.9	77	MINDANAO, PHILIPPINE ISLANDS
a	28	09 12 49.3	1.180	S	129.675	E	17	D	5.5	5.5	1.2	81	HALMAHERA
	28	09 58 53.9*	2.894	N	96.033	E	33	N	4.4		1.5	8	NORTHERN SUMATERA
	28	12 12 15.9	45.361	N	96.142	E	33	N	5.1		0.9	83	MONGOLIA
	28	13 14 43.6&	40.387	N	122.052	W	11					7	NORTHERN CALIFORNIA. <BRK>. ML 3.1 (BRK).
	28	14 03 28.5?	17.85	S	168.43	E	151	?	4.3		0.8	5	VANUATU ISLANDS
	28	15 04 25.2	2.723	N	79.719	W	33	N	4.7	4.0	0.9	36	SOUTH OF PANAMA
	28	15 17 40.3?	27.28	S	177.91	W	33	N	4.7		0.6	6	KERMADEC ISLANDS REGION
	28	17 09 20.4*	20.865	S	69.118	W	150	?			0.5	6	NORTHERN CHILE
	28	18 46 23.1	41.805	N	22.931	E	10	G			0.8	10	YUGOSLAVIA. ML 2.0 (SKO).
	28	18 55 12.7	40.396	N	23.574	E	10	G			0.7	10	GREECE
	28	19 04 13.6	63.280	N	152.485	W	33	N			0.9	8	CENTRAL ALASKA. ML 3.7 (PMR).
a	28	20 14 37.5	61.090	S	153.856	E	10	G	5.5	5.5	1.0	57	BALLENY ISLANDS REGION
	28	22 15 12.1*	19.186	S	69.505	W	140	*			1.5	11	NORTHERN CHILE
	28	22 23 58.9?	35.98	N	140.77	E	57	*			1.3	6	NEAR EAST COAST OF HONSHU, JAPAN
	28	23 24 26.7	18.584	N	147.724	E	60	*	5.2		1.0	120	MARIANA ISLANDS REGION
	29	00 07 00.6	47.445	N	9.236	E	12				1.0	45	GERMANY. ML 3.8 (VKA), 3.4 (FUR), 3.3 (KBA), 3.3 (LDG).
	29	00 11 03.5*	12.427	S	167.293	E	235	?	4.2		1.0	28	SANTA CRUZ ISLANDS
	29	02 06 16.3	24.607	N	122.421	E	76	*	4.1		0.9	13	TAIWAN REGION
f	29	02 43 47.6	1.265	N	126.232	E	48	D	5.8	5.9	1.2	220	MOLUCCA PASSAGE
	29	03 04 39.8	6.342	S	154.945	E	75		5.5		1.1	71	SOLOMON ISLANDS. Felt (IV) at Arawa and Panguna, Bougainville.
	29	03 39 08.9	6.901	S	129.508	E	74	*	4.7		0.8	25	BANDA SEA
	29	04 35 07.1%	60.248	N	5.605	E	10	G			1.2	5	SOUTHERN NORWAY. MD 2.5 (BER).
	29	04 51 10.6%	45.606	N	6.514	E	10	G			0.9	6	FRANCE. ML 2.5 (LDG).
	29	05 52 49.0*	32.348	S	72.129	W	33	N			0.9	12	OFF COAST OF CENTRAL CHILE
	29	08 05 44.3	33.723	S	71.030	W	61	*			0.5	11	NEAR COAST OF CENTRAL CHILE. Felt (II) at Santiago.
	29	08 06 44.0*	38.701	N	14.781	E	316	*	4.2		0.9	21	SICILY
	29	08 16 54.3?	51.64	N	16.52	E	10	G			0.3	6	POLAND. ML 3.4 (VKA), 3.3 (KBA).
	29	08 48 46.8*	9.094	S	123.888	E	33	N	4.5		0.9	7	TIMOR
	29	11 30 51.4*	12.449	N	143.387	E	379		4.6		1.4	41	SOUTH OF MARIANA ISLANDS
	29	11 58 06.0	38.678	N	26.809	E	12				1.0	23	AEGEAN SEA. ML 3.9 (ATH).
	29	12 52 48.0*	41.383	N	19.983	E	10	G			1.4	7	ALBANIA. ML 2.9 (TTG).
	29	12 59 08.6&	59.950	N	153.183	W	117					33	SOUTHERN ALASKA. <AGS-P>.
	29	13 35 19.8	36.292	N	12.700	E	30		4.0		0.8	22	MEDITERRANEAN SEA. MD 4.3 (ROM).
	29	14 05 27.4?	8.70	S	109.11	W	10	G	4.8		1.4	16	NORTHERN EASTER I. CORDILLERA
	29	15 13 00.3&	58.163	N	151.568	W	28					32	KODIAK ISLAND REGION. <AGS-P>. ML 3.3 (PMR).
	29	15 58 24.8	41.836	N	20.685	E	10	G			0.9	9	ALBANIA. ML 3.3 (SKO), 2.8 (TTG).
	29	16 34 51.8&	60.320	N	152.778	W	113					27	SOUTHERN ALASKA. <AGS-P>.
a	29	17 22 39.4	29.765	S	71.208	W	65	D	5.4		1.0	135	NEAR COAST OF CENTRAL CHILE. Felt (V) at La Serena and Ovalle; (IV) at Illapel, Santo Domingo and Vallenar; (III) at Canela, Cabarbala, La Campana and Salamanca.
	29	17 52 05.9?	32.39	S	71.89	W	33	N			0.9	8	NEAR COAST OF CENTRAL CHILE
	29	19 09 03.0*	31.828	S	72.064	W	39	*	4.9		1.1	27	OFF COAST OF CENTRAL CHILE
	29	20 56 46.4	14.466	N	93.773	W	33	N	4.8		0.7	36	NEAR COAST OF CHIAPAS, MEXICO
	29	21 43 31.4	43.095	N	26.036	E	10	G			1.2	18	BULGARIA
	29	22 09 02.9?	18.98	N	98.96	E	33	N			1.0	5	SOUTHEAST ASIA. Felt at Chiang Mai, Thailond.
	29	22 38 10.8?	14.02	S	77.13	W	33	N			0.6	6	OFF COAST OF PERU
	29	23 14 52.0*	37.185	N	141.382	E	57		4.2		1.3	25	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Onohama.
	29	23 38 12.4?	13.91	S	76.61	W	33	N			1.2	6	NEAR COAST OF PERU
	30	01 34 44.8&	37.732	N	122.145	W	9					21	CENTRAL CALIFORNIA. <BRK>. ML 3.5 (BRK). Felt (V) at San Lorenzo, (IV) at Moraga, Oakland, Redwood City and San Francisco. Felt (III) at Alamedo, Canyon, Hayward and San Leandro. Also felt at Daly City, Fremont, Montclare, San Mateo and Walnut Creek.

	30	04	51	07.6?	50.77	N	19.54	E	10	G			1.6	5	POLAND. ML 2.8 (KRA).
	30	05	39	35.2?	27.93	S	70.98	W	33	N			0.8	7	NEAR COAST OF NORTHERN CHILE
	30	07	42	14.3*	3.425	S	144.201	E	33	N	3.8	3.6	1.3	9	NEAR N COAST OF PAPUA NEW GUINEA
	30	07	55	12.4*	16.531	S	173.414	E	33	N	4.7		1.2	25	FIJI ISLANDS REGION
	30	11	12	19.5*	38.100	S	176.791	E	96	*	4.1		0.4	7	NORTH ISLAND, NEW ZEALAND
	30	11	25	07.3*	13.908	N	92.082	W	33	N	3.7		0.9	11	OFF COAST OF CHIAPAS, MEXICO
	30	11	30	25.2*	17.928	S	179.613	W	635		4.6		0.9	36	FIJI ISLANDS REGION
	30	12	38	47.1?	37.70	S	73.68	W	33	N		3.6	1.1	11	NEAR COAST OF CENTRAL CHILE
	30	15	28	18.9*	4.229	S	130.530	E	118	?	4.5		0.8	11	BANDA SEA
	30	15	50	48.2?	15.34	S	69.55	W	164	?			0.9	5	PERU-BOLIVIA BORDER REGION
	30	16	57	54.4*	11.137	S	75.240	W	33	N			1.5	13	PERU
	30	17	21	09.9?	7.83	S	110.70	E	159	*	4.0		0.9	9	JAVA
	30	17	42	49.7	19.941	S	133.692	E	10	G	4.3		1.4	19	NORTHERN TERRITORY, AUSTRALIA
	30	18	03	19.1?	50.74	N	20.29	E	10	G			0.7	5	POLAND. ML 3.3 (VKA), 2.9 (KRA).
	30	18	56	59.5?	47.70	N	2.15	W	10	G			0.9	5	FRANCE. ML 2.9 (LDG).
	30	21	23	33.7*	20.976	S	69.016	W	136	*			1.4	12	NORTHERN CHILE
f	30	22	29	42.0	60.063	S	26.916	W	48	D	6.2	7.0	1.4	172	SOUTH SANDWICH ISLANDS REGION. Ms 6.9 (BRK), 6.8 (PAS).
	30	23	38	00.5	35.744	N	27.124	E	52		4.2		1.1	47	DODECANESE ISLANDS
	30	23	42	30.9*	58.337	S	14.565	W	10	G	5.0		1.4	23	SOUTHWESTERN ATLANTIC OCEAN
	31	00	17	55.0	60.063	S	26.573	W	34	D	4.9		0.9	30	SOUTH SANDWICH ISLANDS REGION
	31	00	22	26.2*	60.085	S	26.642	W	35	D	5.1		1.1	35	SOUTH SANDWICH ISLANDS REGION
	31	01	27	20.5?	60.15	S	26.60	W	33	N			1.5	9	SOUTH SANDWICH ISLANDS REGION
	31	01	29	13.7	40.466	N	24.038	E	10	G			0.7	25	AEGEAN SEA. ML 3.6 (ATH).
	31	01	49	11.3	60.204	S	26.542	W	28	D	5.1		0.9	39	SOUTH SANDWICH ISLANDS REGION
	31	01	53	38.8*	60.402	S	26.662	W	33	N	5.1	4.8	0.7	17	SOUTH SANDWICH ISLANDS REGION
	31	02	03	00.5*	60.400	S	26.737	W	33	N	5.0		1.0	18	SOUTH SANDWICH ISLANDS REGION
	31	02	21	06.4	60.145	S	26.563	W	30	D	5.4		1.0	44	SOUTH SANDWICH ISLANDS REGION
	31	02	23	45.7	18.154	S	178.251	W	644	*	5.2		1.1	78	FIJI ISLANDS REGION
	31	02	24	50.1*	59.905	S	26.327	W	33	N	5.0		1.0	27	SOUTH SANDWICH ISLANDS REGION
	31	03	03	00.8&	36.347	N	121.467	W	6					17	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK), 3.2 (PAS).
	31	03	19	32.5?	60.48	S	27.15	W	33	N	5.1		1.5	12	SOUTH SANDWICH ISLANDS REGION
	31	03	21	05.4?	61.51	N	4.62	E	10	G			0.7	5	SOUTHERN NORWAY. MD 2.3 (BER).
	31	03	42	55.7?	30.99	S	112.46	W	10	G	5.1	4.8	1.2	14	EASTER ISLAND REGION
	31	03	50	28.5?	59.85	S	26.87	W	33	N	4.8		0.6	14	SOUTH SANDWICH ISLANDS REGION
a	31	04	40	16.5	60.090	S	26.477	W	33	N	5.4		1.1	56	SOUTH SANDWICH ISLANDS REGION
	31	04	44	15.3	40.401	N	23.954	E	10	G			1.0	9	GREECE
	31	04	56	39.6*	60.239	S	26.527	W	33	N	4.7		0.7	15	SOUTH SANDWICH ISLANDS REGION
a	31	06	26	17.6	18.036	S	178.461	W	586	D	5.3		0.8	135	FIJI ISLANDS REGION
a	31	08	43	44.1	60.079	S	26.461	W	31	D	5.2	5.0	0.9	47	SOUTH SANDWICH ISLANDS REGION
	31	09	00	39.4*	32.689	S	71.492	W	20	*			0.5	11	NEAR COAST OF CENTRAL CHILE
	31	10	30	55.7?	28.32	S	176.49	W	33	N	4.7		1.3	8	KERMADEC ISLANDS REGION
	31	10	40	40.9*	36.710	N	27.061	E	33	N	4.6		0.9	6	DODECANESE ISLANDS. ML 4.3 (ATH).
	31	11	43	10.8*	35.251	S	78.650	E	10	G	4.9	4.8	0.6	10	MID-INDIAN RISE
	31	11	51	02.3*	21.072	S	68.599	W	33	N			1.4	6	CHILE-BOLIVIA BORDER REGION
	31	13	14	46.7%	45.556	N	26.416	E	161	?			0.6	8	ROMANIA
	31	13	17	42.7	33.912	N	141.311	E	33	N	4.3		0.9	25	OFF EAST COAST OF HONSHU, JAPAN
	31	14	21	12.0	50.299	N	129.725	W	10	G	4.4		1.1	26	VANCOUVER ISLAND REGION
	31	14	22	44.7?	33.99	S	179.98	W	33	N	4.4		1.2	9	SOUTH OF KERMADEC ISLANDS
	31	14	25	48.3	50.289	N	129.799	W	10	G	4.6		1.0	23	VANCOUVER ISLAND REGION
	31	15	42	31.3	53.764	N	164.833	W	33	N	4.8		0.8	26	UNIMAK ISLAND REGION
	31	16	06	18.6	36.215	N	28.134	E	31	*	4.2		1.3	53	DODECANESE ISLANDS. ML 4.4 (ATH).
	31	16	52	37.1?	12.90	N	87.91	W	33	N	4.1		0.8	8	NEAR COAST OF NICARAGUA
	31	17	48	27.0	43.217	N	26.035	E	10	G			1.3	13	BULGARIA
	31	18	15	34.1*	19.149	S	67.417	W	239	*			1.3	12	SOUTHERN BOLIVIA
	31	18	55	12.6	5.831	N	79.012	W	33	N	4.4		0.9	17	SOUTH OF PANAMA. Felt in Chiriqui Province, Panama.
	31	19	30	03.3*	60.327	S	26.657	W	34	D	5.3	4.9	1.3	45	SOUTH SANDWICH ISLANDS REGION
	31	20	15	54.6*	79.406	N	2.535	E	10	G	3.9		1.2	7	GREENLAND SEA
	31	20	27	57.2*	50.259	N	129.932	W	10	G	4.4		1.5	14	VANCOUVER ISLAND REGION
	31	22	02	31.2	14.492	N	123.595	E	51	*	4.6		1.2	18	LUZON, PHILIPPINE ISLANDS
	31	22	16	03.8&	31.800	N	115.790	W	6	G				5	BAJA CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
	31	22	43	34.1%	45.332	N	27.046	E	33	N			1.1	5	ROMANIA
	31	23	23	38.5*	43.134	N	18.559	E	10	G			1.2	10	YUGOSLAVIA. ML 2.9 (TTG).

ADDITIONAL SOURCE PARAMETERS

01 16 25 34.11 2.715S 138.363E 74km
5.8mb (38 obs.)
WEST IRIAN
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=100 Dip=57 Slip= 90
NP2: 280 33 90
Principal Axes:
T Plg=78 Azm= 10
P 12 190
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
RADIATED ENERGY
No. of sta: 4 Focal mech. M
Energy 2.0±0.6*10**12 Nm
MOMENT TENSOR SOLUTION
Dep 72 No. of sta: 6
Principal Axes:
Scale 10**17 Nm
T Val= 2.79 Plg=86 Azm=198
N -0.37 1 91
P -2.42 4 1
Best Double Couple:Mo=2.6*10**17
NP1:Strike= 90 Dip=41 Slip= 88
NP2: 272 49 91

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 34C
Centroid Location:
Origin Time 16:25:38.0 0.3
Lat 2.37S 0.02 Lon 138.20E 0.03
Dep 78.4 2.6 Half-duration 2.4
Principal Axes:
Scale 10**17 Nm
T Val= 2.70 Plg=56 Azm=327
N 0.39 33 129
P -3.09 9 224
Best Double Couple:Mo=2.9*10**17
NP1:Strike=347 Dip=46 Slip= 138
NP2: 108 61 52

02 07 42 43.75 42.437S 18.428W 10km
5.1mb (11 obs.) 5.1Msz (2 obs.)
SOUTH ATLANTIC RIDGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 26C
Centroid Location:
Origin Time 07:42:50.6 0.4
Lat 42.41S 0.05 Lon 18.37W 0.07
Dep 15.0 FIX Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 1.84 Plg= 8 Azm=350
N 0.38 73 106
P -2.22 15 258
Best Double Couple:Mo=2.0*10**17
NP1:Strike= 35 Dip=74 Slip=-175
NP2: 303 85 -16

03 15 35 01.22 3.408S 146.227E 5km
5.5mb (13 obs.) 6.0Msz (5 obs.)
BISMARCK SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 43C
Centroid Location:
Origin Time 15:35: 7.8 0.3
Lat 3.41S 0.03 Lon 146.28E 0.02
Dep 15.0 FIX Half-duration 4.5
Principal Axes:
Scale 10**18 Nm
T Val= 2.01 Plg=16 Azm=129
N -0.04 73 329
P -1.97 6 220
Best Double Couple:Mo=2.0*10**18
NP1:Strike=266 Dip=75 Slip= 8
NP2: 174 83 164

03 16 30 27.01 3.443S 146.307E 5km
5.6mb (17 obs.) 6.2Msz (7 obs.)
BISMARCK SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 40C
Centroid Location:
Origin Time 16:30:32.9 0.4
Lat 3.45S 0.03 Lon 146.37E 0.03
Dep 15.0 FIX Half-duration 4.9
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	2.88	21	133
N	-0.34	68	329
P	-2.54	6	225

Best Double Couple:Mo=2.7*10**18
NP1:Strike=271 Dip=71 Slip= 11
NP2: 177 80 161

03 22 04 04.83 14.998S 167.929E 15km
6.0mb (54 obs.) 6.5Msz (24 obs.)
VANUATU ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=184 Dip=52 Slip= 90
NP2: 4 38 90
Principal Axes:

	Plg=	Azm=
T	83	94
P	7	274

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. F
Energy 1.3±0.4*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 44 No. of sta: 13
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	8.55	68	124
N	-0.03	11	6
P	-8.52	19	272

Best Double Couple:Mo=8.5*10**18
NP1:Strike=345 Dip=28 Slip= 66
NP2: 191 65 102
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 18S, 51C M.W.: 13S, 31C
Centroid Location:
Origin Time 22:04:14.3 0.1
Lat 15.06S 0.01 Lon 168.20E 0.01
Dep 16.8 0.5 Half-duration 8.0
Principal Axes:
Scale 10**19 Nm

	Val=	Plg=	Azm=
T	1.17	73	292
N	-0.02	8	172
P	-1.15	14	80

Best Double Couple:Mo=1.2*10**19
NP1:Strike=158 Dip=32 Slip= 74
NP2: 357 60 100

04 01 38 52.54 27.193S 176.563W 33km
5.4mb (8 obs.) 5.4Msz (2 obs.)
KERMADEC ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 20C
Centroid Location:
Origin Time 01:39: 2.7 0.9
Lat 26.95S 0.09 Lon 176.97W 0.11
Dep 15.0 BDY Half-duration 2.9
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	4.99	59	286
N	0.90	0	16
P	-5.89	31	106

Best Double Couple:Mo=5.4*10**17
NP1:Strike=198 Dip=14 Slip= 92
NP2: 16 76 90

04 10 21 45.88 49.774N 149.286E 489km
5.1mb (73 obs.)
NORTHWEST OF KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 22C
Centroid Location:
Origin Time 10:21:47.7 0.9
Lat 49.53N 0.09 Lon 149.51E 0.13
Dep 505.4 4.5 Half-duration 1.7
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	8.84	28	96
N	1.55	14	194
P	-10.39	58	308

Best Double Couple:Mo=9.6*10**16
NP1:Strike=154 Dip=21 Slip=-132
NP2: 18 74 -75

04 13 22 01.84 2.392S 139.466E 32km
5.5mb (30 obs.) 5.6Msz (8 obs.)
NEAR N. COAST OF WEST IRIAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 36C
Centroid Location:
Origin Time 13:22: 5.6 0.3
Lat 2.35S 0.03 Lon 139.68E 0.04
Dep 40.4 3.4 Half-duration 3.5
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	8.23	46	292
N	0.91	36	152
P	-9.14	21	45

Best Double Couple:Mo=8.7*10**17
NP1:Strike= 91 Dip=40 Slip= 23
NP2: 343 75 128

04 17 52 36.82 5.973N 82.601W 10km
5.6mb (65 obs.) 5.8Msz (13 obs.)
SOUTH OF PANAMA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 45C
Centroid Location:
Origin Time 17:52:44.7 0.2
Lat 5.69N 0.02 Lon 82.57W 0.02
Dep 15.0 FIX Half-duration 5.3
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	3.34	9	315
N	-0.22	81	142
P	-3.13	1	45

Best Double Couple:Mo=3.2*10**18
NP1:Strike= 90 Dip=83 Slip= 5
NP2: 359 85 173

05 03 32 41.79 3.424S 146.520E 10km
5.2mb (7 obs.) 5.0Msz (1 obs.)
BISMARCK SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 20C
Centroid Location:
Origin Time 03:32:49.8 1.1
Lat 3.75S 0.07 Lon 146.25E 0.09
Dep 15.0 FIX Half-duration 1.5
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	8.57	0	162
N	-0.22	90	180
P	-8.35	0	72

Best Double Couple:Mo=8.5*10**16
NP1:Strike=207 Dip=90 Slip= 180
NP2: 297 90 0

05 12 11 55.77 52.448N 169.381W 33km
6.1mb (114 obs.) 6.7Msz (52 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 60 Dip=70 Slip= 90
NP2: 240 20 90
Principal Axes:

	Plg=	Azm=
T	65	330
P	25	150

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. C
Energy 1.1±0.2*10**14 Nm
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 19S, 53C M.W.: 13S, 33C
Centroid Location:
Origin Time 12:12: 6.6 0.2
Lat 52.53N 0.01 Lon 169.05W 0.02
Dep 33.7 0.8 Half-duration 9.6
Principal Axes:
Scale 10**19 Nm

	Val=	Plg=	Azm=
T	1.58	71	326
N	-0.09	2	61
P	-1.50	19	152

Best Double Couple:Mo=1.5*10**19
NP1:Strike=246 Dip=26 Slip= 95
NP2: 60 64 88

05 20 51 47.62 14.931S 167.208E 132km
5.5mb (31 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 24C
Centroid Location:
Origin Time 20:51:51.8 1.2
Lat 14.57S 0.09 Lon 166.93E 0.11
Dep 102.8 3.6 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	6.65	74	148
N	2.56	11	13
P	-9.21	11	281

Best Double Couple:Mo=7.9*10**16
NP1:Strike=357 Dip=35 Slip= 71
NP2: 201 57 103

05 22 52 46.55 41.964N 81.319E 17km
5.9mb (113 obs.) 5.8Msz (6 obs.)
SOUTHERN XINJIANG, CHINA
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 90 Dip=70 Slip= 90
NP2: 270 20 90
Principal Axes:

	Plg=	Azm=
T	65	0
P	25	180

Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
MOMENT TENSOR SOLUTION
Dep 19 No. of sta: 8
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	3.33	73	45
N	0.22	15	256
P	-3.55	8	164

Best Double Couple:Mo=3.4*10**17
NP1:Strike=237 Dip=39 Slip= 66
NP2: 87 55 108
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 26C
Centroid Location:
Origin Time 22:52:50.9 0.5
Lat 41.77N 0.07 Lon 81.48E 0.11
Dep 15.0 BDY Half-duration 2.5
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	4.24	58	19
N	-0.23	14	267
P	-4.01	29	169

Best Double Couple:Mo=4.1*10**17
NP1:Strike=226 Dip=21 Slip= 47
NP2: 90 75 104

06 05 07 48.13 23.976N 121.729E 38km
5.8mb (81 obs.) 5.5Msz (9 obs.)
TAIWAN
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=220 Dip=65 Slip= 138
NP2: 331 53 32
Principal Axes:

	Plg=	Azm=
T	47	180
P	7	278

Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a large reverse component. The preferred fault plane is not determined.
MOMENT TENSOR SOLUTION
Dep 2 No. of sta: 7
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	6.17	44	169
N	0.45	46	349
P	-6.62	0	79

Best Double Couple:Mo=6.4*10**17
NP1:Strike=205 Dip=61 Slip= 146
NP2: 313 61 34
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 24C
Centroid Location:
Origin Time 05:07:51.8 0.4

Lat 23.78N 0.05 Lon 120.94E 0.07
Dep 48.1 3.6 Half-duration 2.6
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	3.76	67	132
N	0.48	12	13
P	-4.23	20	278

Best Double Couple:Mo=4.0*10**17
NP1:Strike=349 Dip=27 Slip= 63
NP2: 198 66 103

07 18 19 08.80 34.259N 103.405E 33km
5.5mb (75 obs.) 5.5Msz (7 obs.)
GANSU PROVINCE, CHINA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 21C
Centroid Location:
Origin Time 18:19:11.4 0.3
Lat 34.23N 0.08 Lon 103.86E 0.07
Dep 15.0 BDY Half-duration 1.9
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.39	37	29
N	0.10	53	209
P	-1.49	0	119

Best Double Couple:Mo=1.4*10**17
NP1:Strike=170 Dip=65 Slip= 28
NP2: 68 65 152

08 00 50 59.78 22.572S 171.999E 50km
5.4mb (7 obs.) 4.7Msz (1 obs.)
LOYALTY ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 28C
Centroid Location:
Origin Time 00:51: 7.2 1.1
Lat 22.17S 0.09 Lon 171.37E 0.12
Dep 15.0 FIX Half-duration 1.7
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	6.86	12	269
N	3.90	45	11
P	-10.76	42	167

Best Double Couple:Mo=8.8*10**16
NP1:Strike=317 Dip=51 Slip=-155
NP2: 212 71 -41

08 19 48 55.46 4.736S 153.105E 44km
5.5mb (21 obs.) 4.8Msz (3 obs.)
NEW IRELAND REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centroid Location:
Origin Time 19:49: 0.5 0.6
Lat 4.91S 0.06 Lon 152.95E 0.06
Dep 31.6 5.4 Half-duration 1.8
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	12.49	58	304
N	1.69	20	179
P	-14.18	24	80

Best Double Couple:Mo=1.3*10**17
NP1:Strike=136 Dip=28 Slip= 43
NP2: 6 71 111

09 06 14 44.87 39.895N 141.677E 68km
6.4mb (99 obs.)
HONSHU, JAPAN
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=198 Dip=77 Slip= 83
NP2: 47 15 118
Principal Axes:

	Plg=	Azm=
T	57	99
P	32	294

Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting with a small strike-slip component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 5 Focal mech. C
Energy 1.4±0.4*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 58 No. of sta: 11
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	9.42	36	62
N	0.46	45	199
P	-9.88	23	314

Best Double Couple:Mo=9.6*10**18
NP1:Strike= 93 Dip=46 Slip= 169
NP2: 190 82 44
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 14S, 36C M.W.: 11S, 25C
Centroid Location:
Origin Time 06:14:50.0 0.1
Lat 39.80N 0.01 Lon 141.38E 0.02
Dep 59.5 1.2 Half-duration 7.0
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	9.20	53	89
N	-0.83	9	192
P	-8.37	35	289

Best Double Couple:Mo=8.8*10**18
NP1:Strike= 57 Dip=13 Slip= 136
NP2: 190 81 80

09 08 01 35.95 19.469S 176.538W 33km
5.9mb (32 obs.) 6.6Msz (21 obs.)
FIJI ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=122 Dip=87 Slip= 177
NP2: 212 87 3
Principal Axes:

	Plg=	Azm=
T	4	77
P	0	347

Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting. The preferred fault plane is not determined.
MOMENT TENSOR SOLUTION
Dep 60 No. of sta: 6
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	5.62	8	255
N	0.01	81	100
P	-5.63	4	346

Best Double Couple:Mo=5.6*10**18
NP1:Strike= 31 Dip=81 Slip= 3
NP2: 300 87 171
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 17S, 47C M.W.: 12S, 29C
Centroid Location:
Origin Time 08:01:40.2 0.1
Lat 19.28S 0.01 Lon 176.52W 0.01
Dep 16.6 1.3 Half-duration 7.0
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	7.92	9	246
N	-1.66	78	28
P	-6.25	7	155

Best Double Couple:Mo=7.1*10**18
NP1:Strike=290 Dip=78 Slip= 179
NP2: 21 89 12

09 11 27 12.68 20.110S 133.636E 5km
5.2mb (19 obs.)
NORTHERN TERRITORY, AUSTRALIA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 4S, 9C
Centroid Location:
Origin Time 11:27:16.7 2.3
Lat 20.03S FIX;Lon 133.71E FIX
Dep 15.0 FIX Half-duration 1.8
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.67	58	304
N	-0.13	24	169
P	-1.54	20	70

Best Double Couple:Mo=1.6*10**17
NP1:Strike=125 Dip=32 Slip= 41
NP2: 359 69 115

13 08 03 00.50 13.463S 166.477E 53km
5.4mb (21 obs.) 5.1Msz (4 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 31C
Centroid Location:
Origin Time 08:03: 2.9 0.5
Lat 13.48S 0.04 Lon 166.33E 0.04
Dep 49.0 2.3 Half-duration 2.2
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.93	71	346
N	0.43	19	178
P	-2.36	4	87

Best Double Couple:Mo=2.1*10**17
NP1:Strike=158 Dip=44 Slip= 63
NP2: 14 52 114

13 10 55 17.99 29.292S 177.524W 60km
5.3mb (10 obs.)
KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 38C
Centroid Location:
Origin Time 10:55:24.7 0.4
Lat 29.00S 0.03 Lon 177.57W 0.03
Dep 54.9 1.8 Half-duration 2.7
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	3.45	76	289
N	1.14	1	194
P	-4.58	14	104

Best Double Couple:Mo=4.0*10**17
NP1:Strike=193 Dip=31 Slip= 88
NP2: 15 59 91

13 13 23 59.57 5.784N 78.966W 10km
5.5mb (49 obs.) 5.2Msz (13 obs.)
SOUTH OF PANAMA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 39C
Centroid Location:
Origin Time 13:24: 5.4 0.3
Lat 5.68N 0.03 Lon 78.90W 0.03
Dep 15.0 FIX Half-duration 3.7
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	1.33	20	318
N	-0.44	69	120
P	-0.89	6	226

Best Double Couple:Mo=1.1*10**18
NP1:Strike= 0 Dip=72 Slip= 170
NP2: 94 80 18

13 19 30 10.84 5.713N 78.734W 10km
5.3mb (21 obs.) 4.7Msz (4 obs.)
SOUTH OF PANAMA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 39C
Centroid Location:
Origin Time 19:30:23.1 0.3
Lat 5.87N 0.03 Lon 78.86W 0.03
Dep 15.0 FIX Half-duration 3.1
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	7.15	14	319
N	-1.71	73	104
P	-5.45	9	227

Best Double Couple:Mo=6.3*10**17
NP1:Strike= 3 Dip=74 Slip= 177
NP2: 94 87 16

14 09 38 54.90 50.063S 113.884W 10km
5.0mb (12 obs.) 5.6Msz (3 obs.)
EASTER ISLAND CORDILLERA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 43C
Centroid Location:
Origin Time 09:39: 4.3 0.2
Lat 49.92S 0.03 Lon 114.10W 0.04
Dep 15.0 FIX Half-duration 3.5
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	9.58	2	144
N	-0.12	87	271
P	-9.46	2	54

Best Double Couple:Mo=9.5*10**17
NP1:Strike=189 Dip=87 Slip=-180
NP2: 99 90 -3

14 11 03 48.75 42.565N 142.850E 102km
6.5mb (93 obs.)
HOKKAIDO, JAPAN REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=260 Dip=84 Slip= -87
NP2: 53 7 -116
Principal Axes:

	Plg=	Azm=
T	39	347
P	51	173

Comment: The focal mechanism is moderately well controlled and corresponds to normal faulting. The preferred fault

plane is not determined.
RADIATED ENERGY
No. of sta: 8 Focal mech. M
Energy 4.2±0.6*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 97 No. of sta: 13
Principal Axes:
Scale 10**19 Nm

	Val=	Plg=	Azm=
T	1.92	40	348
N	-0.15	2	256
P	-1.77	49	163

Best Double Couple:Mo=1.8*10**19

	Strike=	Dip=	Slip=
NP1:	105	5	-61
NP2:	256	86	-92

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 14S, 40C M.W.: 10S, 21C
Centroid Location:
Origin Time 11:03:54.1 0.2
Lat 42.73N 0.01 Lon 142.73E 0.02
Dep 89.4 1.5 Half-duration 9.2
Principal Axes:
Scale 10**19 Nm

	Val=	Plg=	Azm=
T	1.78	38	349
N	-0.18	4	82
P	-1.60	52	177

Best Double Couple:Mo=1.7*10**19

	Strike=	Dip=	Slip=
NP1:	52	8	-121
NP2:	262	83	-86

16 05 12 48.53 42.791N 145.103E 54km
5.1mb (72 obs.) 5.1Msz (6 obs.)
HOKKAIDO, JAPAN REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 24C
Centroid Location:
Origin Time 05:12:55.4 0.6
Lat 42.76N 0.05 Lon 144.81E 0.07
Dep 50.6 3.9 Half-duration 1.9
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.17	48	18
N	0.53	37	234
P	-1.70	18	129

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

	Strike=	Dip=	Slip=
NP1:	178	42	27
NP2:	67	73	129

16 13 18 08.51 22.223S 173.628W 33km
5.1mb (7 obs.)
TONGA ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 20C
Centroid Location:
Origin Time 13:18: 5.8 2.1
Lat 22.34S 0.14 Lon 173.13W 0.15
Dep 54.3 9.0 Half-duration 1.3
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	4.14	66	302
N	0.14	1	34
P	-4.28	24	124

Best Double Couple:Mo=4.2*10**16

	Strike=	Dip=	Slip=
NP1:	216	21	92
NP2:	33	69	89

16 15 14 59.31 52.904S 27.444E 10km
5.5mb (14 obs.) 4.9Msz (4 obs.)
SOUTH OF AFRICA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 30C
Centroid Location:
Origin Time 15:15: 6.1 0.7
Lat 52.51S 0.07 Lon 27.91E 0.13
Dep 15.0 FIX Half-duration 2.2
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	2.87	25	165
N	-0.77	12	70
P	-2.11	62	317

Best Double Couple:Mo=2.5*10**17

	Strike=	Dip=	Slip=
NP1:	279	23	-58
NP2:	66	71	-102

17 11 22 01.61 10.771S 161.271E 51km
4.8mb (8 obs.) 5.4Msz (8 obs.)
SOLOMON ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 35C
Centroid Location:
Origin Time 11:22: 4.5 0.6
Lat 11.09S 0.07 Lon 161.58E 0.07
Dep 15.0 FIX Half-duration 2.9
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	6.94	56	65
N	-0.26	1	157
P	-6.68	34	248

Best Double Couple:Mo=6.8*10**17

	Strike=	Dip=	Slip=
NP1:	343	12	97
NP2:	156	79	89

18 18 16 11.76 19.460S 175.666W 242km
5.2mb (32 obs.)
TONGA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 29C
Centroid Location:
Origin Time 18:16:17.9 0.7
Lat 19.33S 0.08 Lon 175.60W 0.08
Dep 245.6 3.1 Half-duration 1.8
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	10.64	47	136
N	0.27	27	13
P	-10.91	30	266

Best Double Couple:Mo=1.1*10**17

	Strike=	Dip=	Slip=
NP1:	305	29	20
NP2:	198	81	117

19 06 47 43.03 54.744N 163.277E 42km
5.4mb (94 obs.) 5.2Msz (19 obs.)
OFF EAST COAST OF KAMCHATKA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 33C
Centroid Location:
Origin Time 06:47:44.4 0.5
Lat 54.92N 0.05 Lon 163.49E 0.07
Dep 36.3 5.1 Half-duration 2.0
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.50	11	285
N	0.03	79	96
P	-1.54	2	195

Best Double Couple:Mo=1.5*10**17

	Strike=	Dip=	Slip=
NP1:	329	81	174
NP2:	60	84	9

20 23 43 52.77 51.581N 174.413W 33km
5.2mb (48 obs.) 4.5Msz (1 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 23C
Centroid Location:
Origin Time 23:43:58.4 1.3
Lat 52.09N 0.15 Lon 174.37W 0.17
Dep 32.9 8.8 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	6.75	58	15
N	0.28	19	252
P	-7.03	25	153

Best Double Couple:Mo=6.9*10**16

	Strike=	Dip=	Slip=
NP1:	209	26	44
NP2:	78	72	110

21 01 51 17.62 5.602S 130.788E 55km
5.3mb (23 obs.)
BANDA SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 26C
Centroid Location:
Origin Time 01:51:22.4 0.5
Lat 5.53S 0.04 Lon 131.08E 0.06
Dep 87.8 3.8 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	9.34	73	6
N	0.03	0	97
P	-9.36	17	187

Best Double Couple:Mo=9.4*10**16

	Strike=	Dip=	Slip=
NP1:	278	28	91
NP2:	97	62	90

21 04 47 03.10 6.664S 129.815E 159km
5.4mb (34 obs.)
BANDA SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 30C
Centroid Location:
Origin Time 04:47: 2.4 0.7
Lat 7.10S 0.06 Lon 130.07E 0.04
Dep 177.0 1.8 Half-duration 2.5
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	4.09	11	251
N	-0.21	37	350
P	-3.88	51	147

Best Double Couple:Mo=4.0*10**17

	Strike=	Dip=	Slip=
NP1:	305	46	-146
NP2:	189	66	-49

21 11 26 36.62 20.608N 144.885E 118km
5.6mb (76 obs.)
MARIANA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 34C
Centroid Location:
Origin Time 11:26:41.4 0.2
Lat 20.55N 0.02 Lon 144.78E 0.03
Dep 113.3 1.6 Half-duration 3.5
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	7.19	43	88
N	2.44	6	352
P	-9.63	46	255

Best Double Couple:Mo=8.4*10**17

	Strike=	Dip=	Slip=
NP1:	248	7	-13
NP2:	351	88	-96

21 20 37 03.54 6.008S 128.836E 268km
5.3mb (29 obs.)
BANDA SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 33C
Centroid Location:
Origin Time 20:37: 6.3 0.5
Lat 6.07S 0.03 Lon 129.19E 0.05
Dep 287.9 2.2 Half-duration 1.8
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.29	65	259
N	0.71	22	106
P	-2.00	10	12

Best Double Couple:Mo=1.6*10**17

	Strike=	Dip=	Slip=
NP1:	77	40	53
NP2:	301	59	116

22 05 33 16.32 18.830S 175.736W 269km
5.2mb (35 obs.)
TONGA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 30C
Centroid Location:
Origin Time 05:33:22.5 0.4
Lat 18.91S 0.04 Lon 175.60W 0.05
Dep 278.4 1.9 Half-duration 2.5
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	2.82	65	116
N	0.86	5	14
P	-3.68	25	282

Best Double Couple:Mo=3.3*10**17

	Strike=	Dip=	Slip=
NP1:	0	21	75
NP2:	196	70	96

22 12 15 44.51 43.159N 146.479E 65km
5.4mb (68 obs.)
KURIL ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 21C
Centroid Location:
Origin Time 12:15:48.2 0.8
Lat 42.90N 0.07 Lon 146.40E 0.09
Dep 62.6 5.7 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	8.43	33	24
N	0.03	45	253
P	-8.46	26	133

Best Double Couple:Mo=8.4*10**16

	Strike=	Dip=	Slip=
NP1:	171	46	6
NP2:	77	86	135

23 17 51 09.28 1.646N 126.531E 72km
5.6mb (35 obs.)

MOLUCCA PASSAGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 34C
Centroid Locotian:
Origin Time 17:51:13.6 0.6
Lat 2.23N 0.04 Lan 126.56E 0.05
Dep 55.2 3.5 Holf-durotion 3.2
Principal Axes:

	Val=	Plg=	Azm=
T	8.55	75	167
N	0.15	14	12
P	-8.70	6	280

Scole 10**17 Nm
Best Double Cauple:Mo=8.6*10**17

	Strike=	Dip=	Slip=
NP1:	355	41	69
NP2:	203	53	108

24 08 09 21.30 41.529N 79.318E 29km
5.9mb (75 obs.) 5.9Msz (12 obs.)
KIRGHIZ-XINJIANG BORDER REGION
FAULT PLANE SOLUTION: P-Waves

	Strike=	Dip=	Slip=
NP1:	70	50	90
NP2:	250	40	90

Principal Axes:

	Plg=	Azm=
T	85	340
P	5	160

Comment: The focol mechonism is poorly controlled ond corresponds to reverse foulting. The preferred fault plane is NP2.
MOMENT TENSOR SOLUTION
Dep 14 No. of sto: 12
Principal Axes:

	Val=	Plg=	Azm=
T	1.17	64	213
N	0.00	24	56
P	-1.17	9	322

Scole 10**18 Nm
Best Double Couple:Mo=1.2*10**18

	Strike=	Dip=	Slip=
NP1:	27	42	53
NP2:	252	58	118

CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 11S, 30C
Centroid Locotion:
Origin Time 08:09:24.3 0.3
Lot 41.26N 0.04 Lon 79.31E 0.04
Dep 15.0 BDY Half-duratian 4.4
Principal Axes:

	Val=	Plg=	Azm=
T	1.96	78	261
N	0.01	12	76
P	-1.97	1	166

Scole 10**18 Nm
Best Double Couple:Mo=2.0*10**18

	Strike=	Dip=	Slip=
NP1:	268	45	107
NP2:	65	47	74

25 10 31 22.84 3.054N 79.334W 13km
5.6mb (67 obs.) 5.2Msz (3 obs.)
SOUTH OF PANAMA
CENTROID, MOMENT TENSOR (HRV)
Dato Used: GDSN
L.P.B.: 12S, 31C
Centroid Locotion:
Origin Time 10:31:31.8 0.4
Lat 3.30N 0.04 Lon 79.31W 0.04
Dep 15.4 1.9 Half-duration 2.9
Principal Axes:

	Val=	Plg=	Azm=
T	5.65	14	303
N	-1.03	10	35
P	-4.63	73	159

Scole 10**17 Nm
Best Double Couple:Mo=5.1*10**17

	Strike=	Dip=	Slip=
NP1:	19	32	-109
NP2:	221	60	-79

26 23 11 33.47 6.373N 12.453E 10km
4.8mb (31 obs.) 4.8Msz (1 obs.)
CAMEROON
CENTROID, MOMENT TENSOR (HRV)
Dato Used: GDSN
L.P.B.: 10S, 16C
Centroid Location:
Origin Time 23:11:52.9 3.6
Lat 7.85N 0.29 Lon 12.95E 0.34
Dep 15.0 FIX Holf-durotion 1.1
Principol Axes:

	Val=	Plg=	Azm=
T	2.67	65	321
N	0.21	13	201
P	-2.87	21	106

Scole 10**16 Nm
Best Double Cauple:Mo=2.8*10**16

	Strike=	Dip=	Slip=
NP1:	174	27	60
NP2:	27	67	104

27 07 06 51.99 32.154S 72.082W 35km
5.0mb (17 obs.) 5.4Msz (2 obs.)
OFF COAST OF CENTRAL CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 29C
Centroid Locotion:
Origin Time 07:06:55.8 0.3
Lat 32.35S 0.05 Lon 72.65W 0.06
Dep 15.0 FIX Half-durotion 2.1
Principol Axes:

	Val=	Plg=	Azm=
T	2.15	59	31
N	0.29	23	165
P	-2.44	20	264

Scale 10**17 Nm
Best Double Couple:Mo=2.3*10**17

	Strike=	Dip=	Slip=
NP1:	28	32	138
NP2:	156	69	65

28 09 12 49.30 1.180S 129.675E 17km
5.5mb (20 obs.) 5.5Msz (6 obs.)
HALMAHERA
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 11S, 28C
Centroid Location:
Origin Time 09:12:57.3 1.3
Lat 0.86S 0.09 Lon 129.82E 0.10
Dep 15.0 BDY Holf-duration 3.0
Principal Axes:

	Val=	Plg=	Azm=
T	5.34	5	309
N	1.32	49	45
P	-6.66	41	215

Scole 10**17 Nm
Best Double Couple:Mo=6.0*10**17

	Strike=	Dip=	Slip=
NP1:	0	58	-152
NP2:	255	67	-35

28 20 14 37.54 61.090S 153.856E 10km
5.5mb (10 obs.) 5.5Msz (4 obs.)
BALLENY ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 14S, 38C
Centroid Locotion:
Origin Time 20:14:48.8 0.3
Lot 60.79S 0.03 Lon 153.08E 0.06
Dep 15.0 FIX Holf-duration 3.4
Principol Axes:

	Val=	Plg=	Azm=
T	8.44	6	21
N	-0.72	67	277
P	-7.71	22	114

Scole 10**17 Nm
Best Double Couple:Mo=8.1*10**17

	Strike=	Dip=	Slip=
NP1:	155	70	-12
NP2:	249	79	-160

29 02 43 47.66 1.265N 126.232E 48km
5.8mb (54 obs.) 5.9Msz (17 obs.)
MOLUCCA PASSAGE
FAULT PLANE SOLUTION: P-Waves

	Strike=	Dip=	Slip=
NP1:	205	65	115
NP2:	337	35	48

Principal Axes:

	Plg=	Azm=
T	62	154
P	16	277

Comment: The focal mechanism is poorly controlled ond corresponds to reverse faulting with a moderote strike-slip component. The preferred fault plone is not determined.
RADIATED ENERGY
No. af sto: 7 Focal mech. M
Energy 6.3±1.7*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 52 No. of sto: 13
Principol Axes:

	Val=	Plg=	Azm=
T	4.82	59	159
N	0.04	31	350
P	-4.86	5	257

Scale 10**18 Nm
Best Double Couple:Mo=4.8*10**18

	Strike=	Dip=	Slip=
NP1:	318	49	47
NP2:	193	57	128

CENTROID, MOMENT TENSOR (HRV)
Dato Used: GDSN
L.P.B.: 9S, 18C
Centroid Location:
Origin Time 02:43:50.5 0.3
Lat 1.25N FIX;Lon 126.23E FIX
Dep 47.2 3.1 Holf-durotion 5.8
Principol Axes:

	Val=	Plg=	Azm=
T	4.42	68	190
N	0.41	22	22
P	-4.82	4	290

Scole 10**18 Nm
Best Double Couple:Mo=4.6*10**18

	Strike=	Dip=	Slip=
NP1:	358	45	58
NP2:	220	53	118

29 17 22 39.48 29.765S 71.208W 65km
5.4mb (23 obs.)
NEAR COAST OF CENTRAL CHILE
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 13S, 32C
Centroid Location:
Origin Time 17:22:49.1 0.2
Lat 29.81S 0.04 Lon 71.07W 0.05
Dep 65.9 5.7 Half-duration 1.9
Principal Axes:

	Val=	Plg=	Azm=
T	1.77	37	95
N	-0.53	3	2
P	-1.24	53	268

Scale 10**17 Nm
Best Double Couple:Mo=1.5*10**17

	Strike=	Dip=	Slip=
NP1:	206	9	-66
NP2:	2	82	-94

30 22 29 42.09 60.063S 26.916W 48km
6.2mb (23 obs.) 7.0Msz (26 obs.)
SOUTH SANDWICH ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves

	Strike=	Dip=	Slip=
NP1:	3	70	90
NP2:	183	20	90

Principal Axes:

	Plg=	Azm=
T	65	273
P	25	93

Comment: The focol mechanism is poorly controlled and corresponds to reverse foulting. The preferred fault plane is NP2.
MOMENT TENSOR SOLUTION
Dep 4 No. of sta: 7
Principol Axes:

	Val=	Plg=	Azm=
T	3.98	55	291
N	-0.32	23	165
P	-3.66	25	63

Scole 10**19 Nm
Best Double Couple:Mo=3.8*10**19

	Strike=	Dip=	Slip=
NP1:	114	29	36
NP2:	352	74	114

CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN, IDA
L.P.B.: 16S, 41C M.W.: 11S, 21C
Centroid Locotion:
Origin Time 22:29:50.6 0.1
Lat 60.72S 0.02 Lon 26.76W 0.03
Dep 15.0 FIX Half-durotion 11.4
Principol Axes:

	Val=	Plg=	Azm=
T	3.33	58	275
N	0.03	9	20
P	-3.36	31	115

Scole 10**19 Nm
Best Double Couple:Mo=3.3*10**19

	Strike=	Dip=	Slip=
NP1:	232	16	123
NP2:	18	76	81

31 04 40 16.59 60.090S 26.477W 33km
5.4mb (6 obs.)
SOUTH SANDWICH ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Dato Used: GDSN
L.P.B.: 11S, 20C
Centroid Locotian:
Origin Time 04:40:23.2 0.9
Lat 60.89S 0.09 Lon 27.14W 0.25
Dep 46.410.2 Half-duration 2.0
Principal Axes:

	Val=	Plg=	Azm=
T	1.48	22	246
N	0.13	67	55
P	-1.61	4	155

Scale 10**17 Nm
Best Double Couple:Mo=1.5*10**17

	Strike=	Dip=	Slip=
NP1:	288	72	167
NP2:	23	77	19

31 06 26 17.65 18.036S 178.461W 586km
5.3mb (35 obs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN
L.P.B.: 12S, 20C
Centroid Location:
Origin Time 06:26:25.5 1.2
Lat 17.58S 0.15 Lon 178.95W 0.12
Dep 592.2 7.1 Half-duration 1.7
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	13.74	52	353
N	-2.06	35	147
P	-11.68	13	246

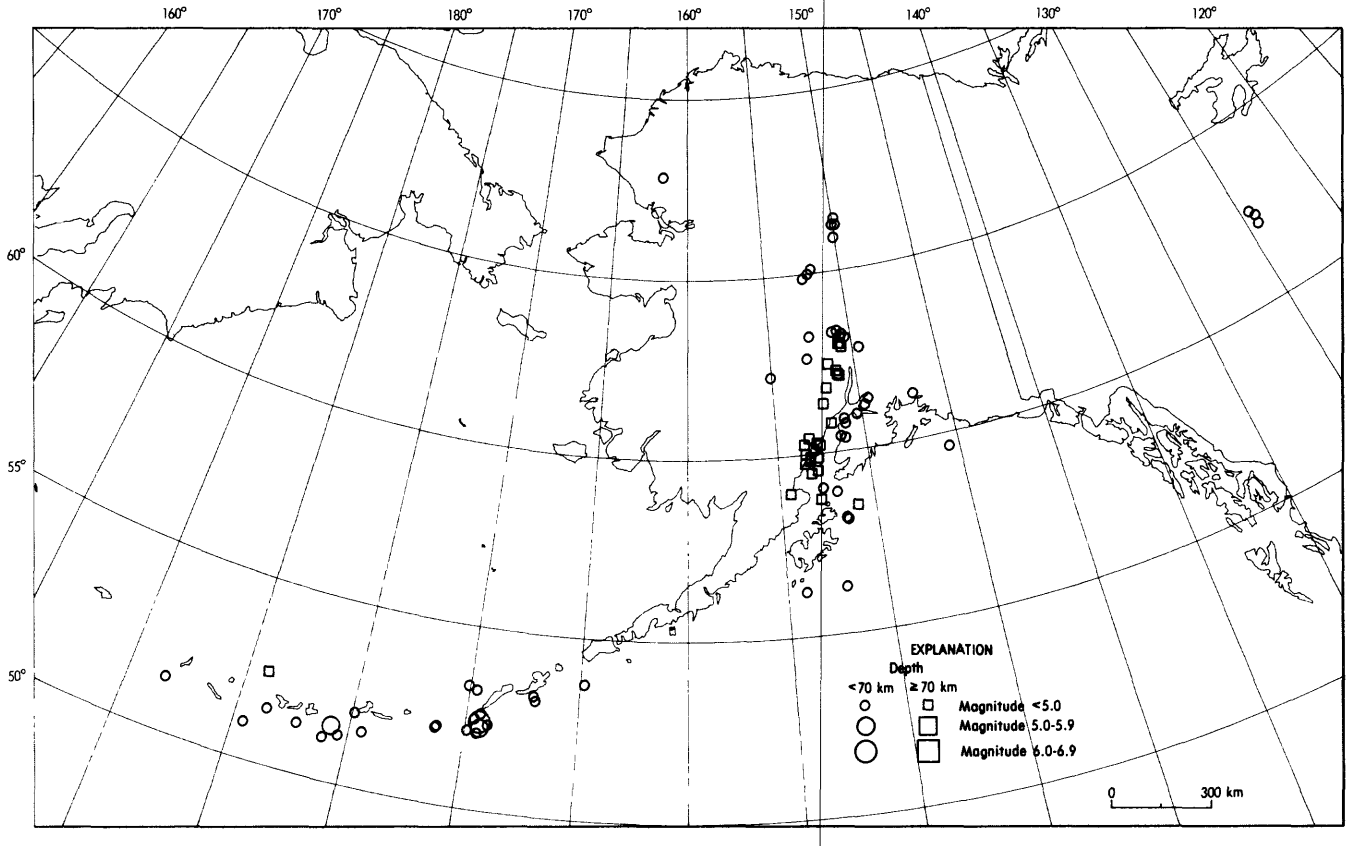
Best Double Couple:Mo=1.3*10**17
NP1:Strike= 12 Dip=44 Slip= 145
NP2: 129 66 51

31 08 43 44.10 60.079S 26.461W 31km
5.2mb (6 obs.) 5.0Msz (2 obs.)
SOUTH SANDWICH ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 30C
Centroid Location:
Origin Time 08:43:49.0 0.7
Lat 60.28S 0.12 Lon 26.63W 0.23
Dep 15.0 FIX Half-duration 1.8
Principal Axes:
Scale 10**17 Nm

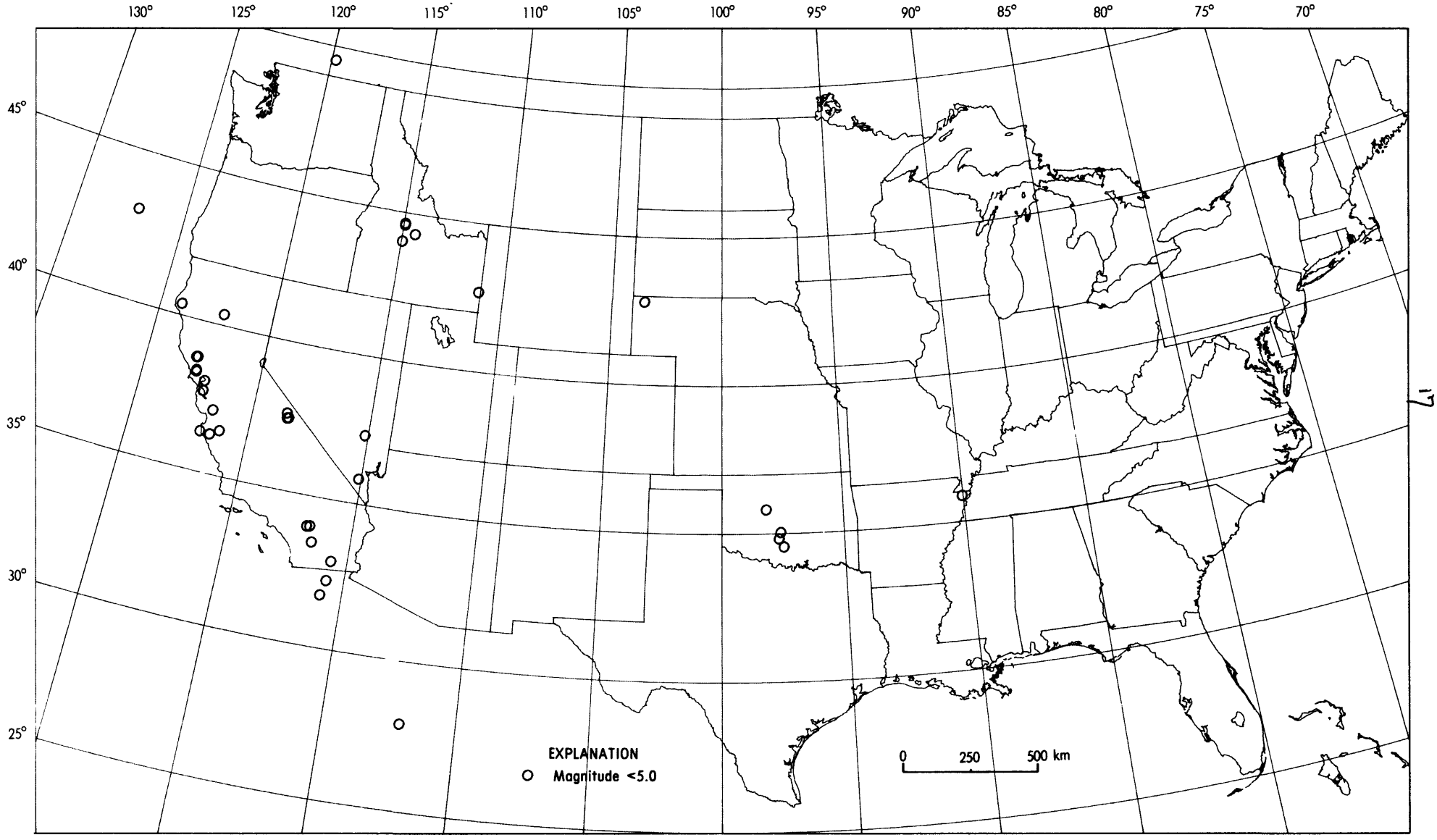
	Val=	Plg=	Azm=
T	1.48	50	266
N	-0.06	16	16
P	-1.41	35	118

Best Double Couple:Mo=1.4*10**17
NP1:Strike=259 Dip=18 Slip= 154
NP2: 14 82 74

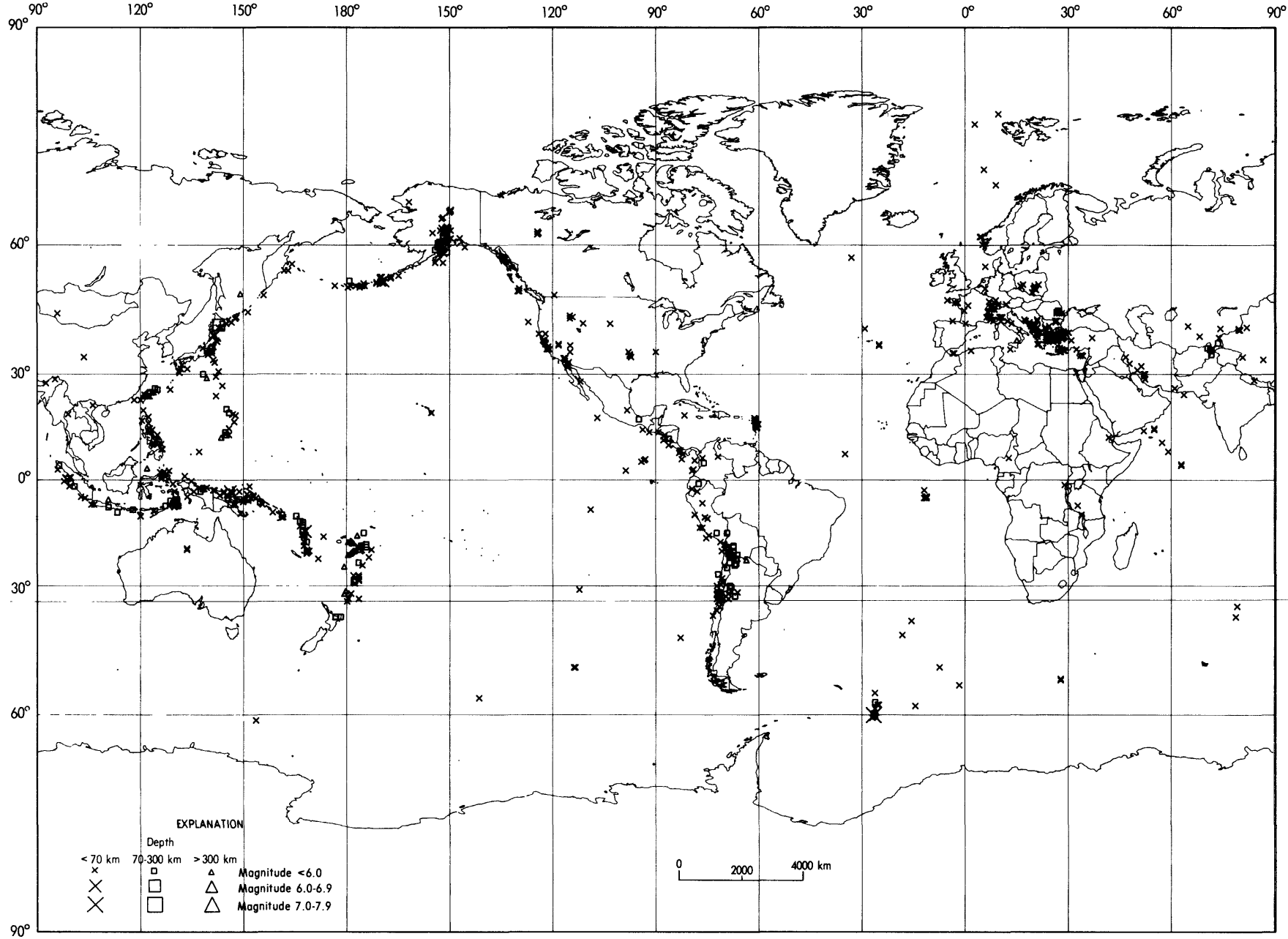
Compiled by Willis S. Jacobs, Leonard E. Kerry, John H. Minsch, Russell E. Needham, Waverly J. Persan, Bruce W. Presgrave and William H. Schmieder.



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

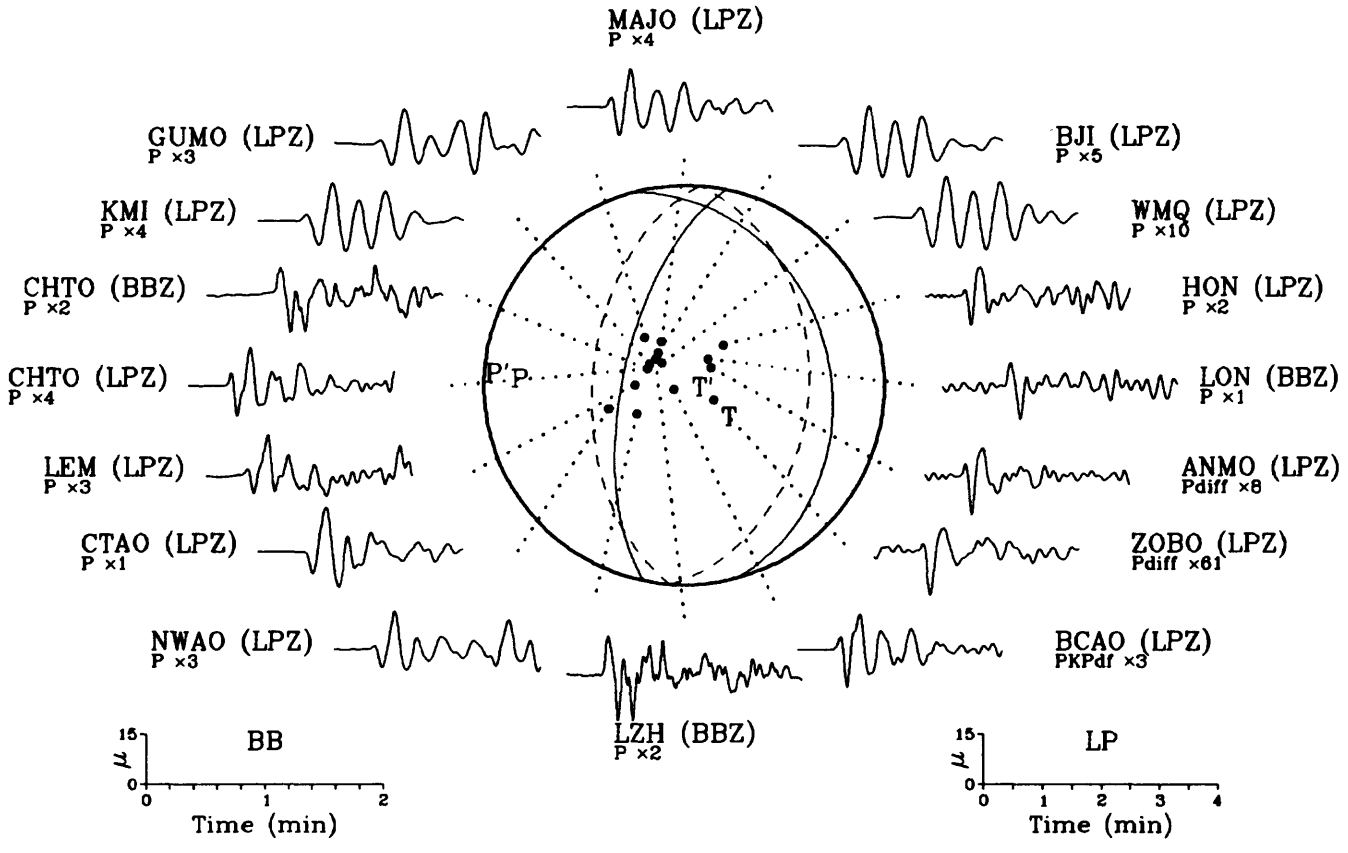


Earthquake epicenters in the conterminous United States and adjacent regions for January, 1987 (C. Stover).

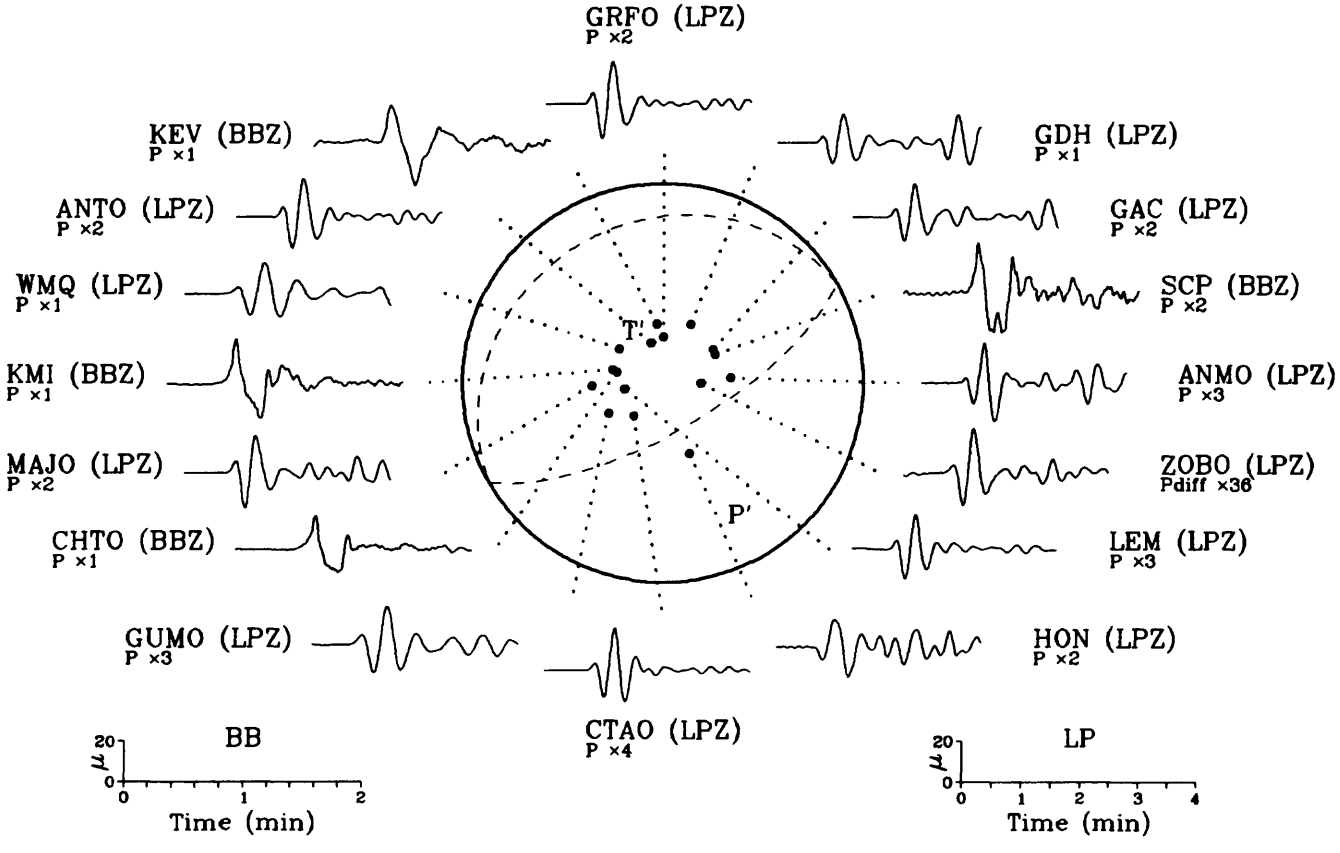


Earthquakes located in January, 1987 (C. Stover).

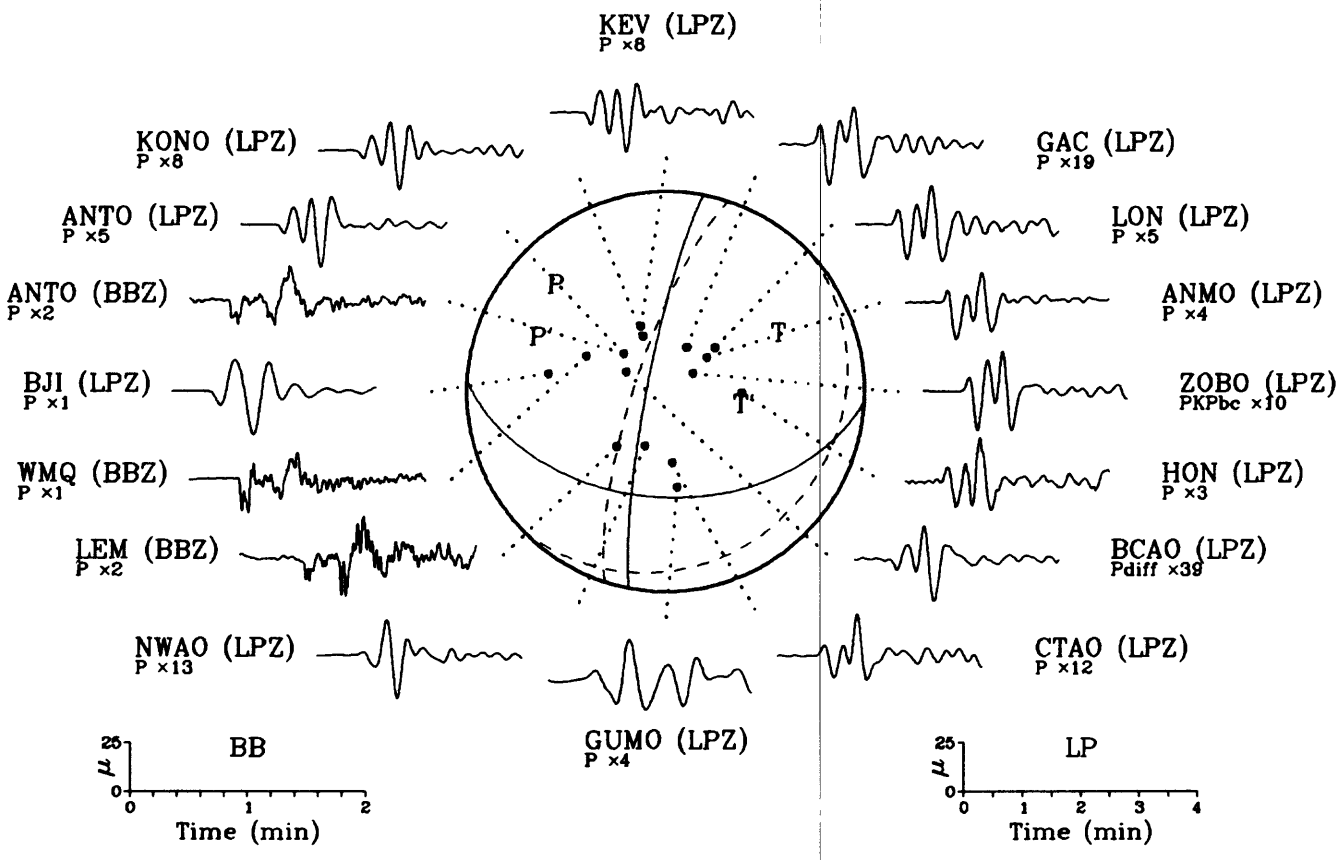
03 January 1987 22:04:04.83
Vanuatu Islands



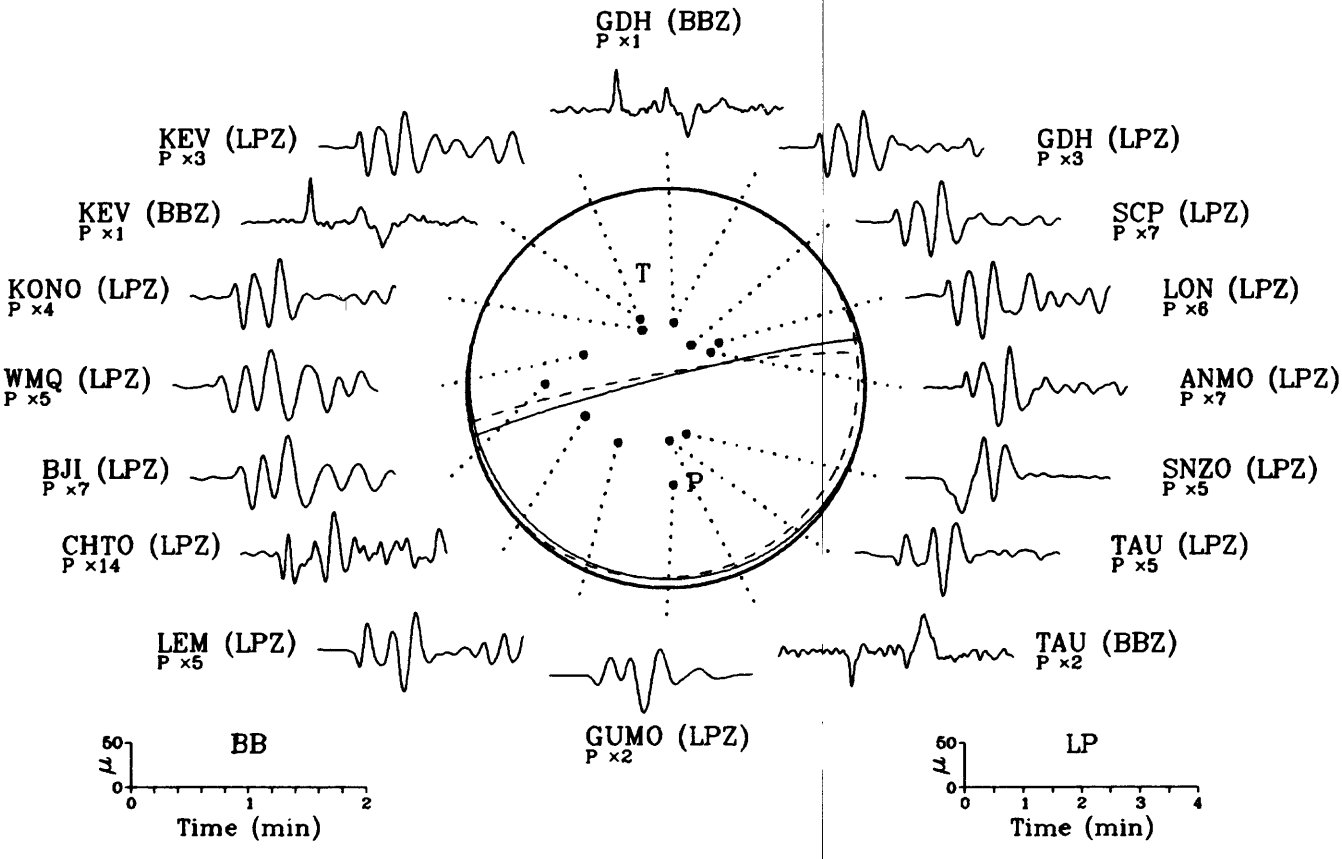
05 January 1987 12:11:55.77
Fox Islands, Aleutian Islands



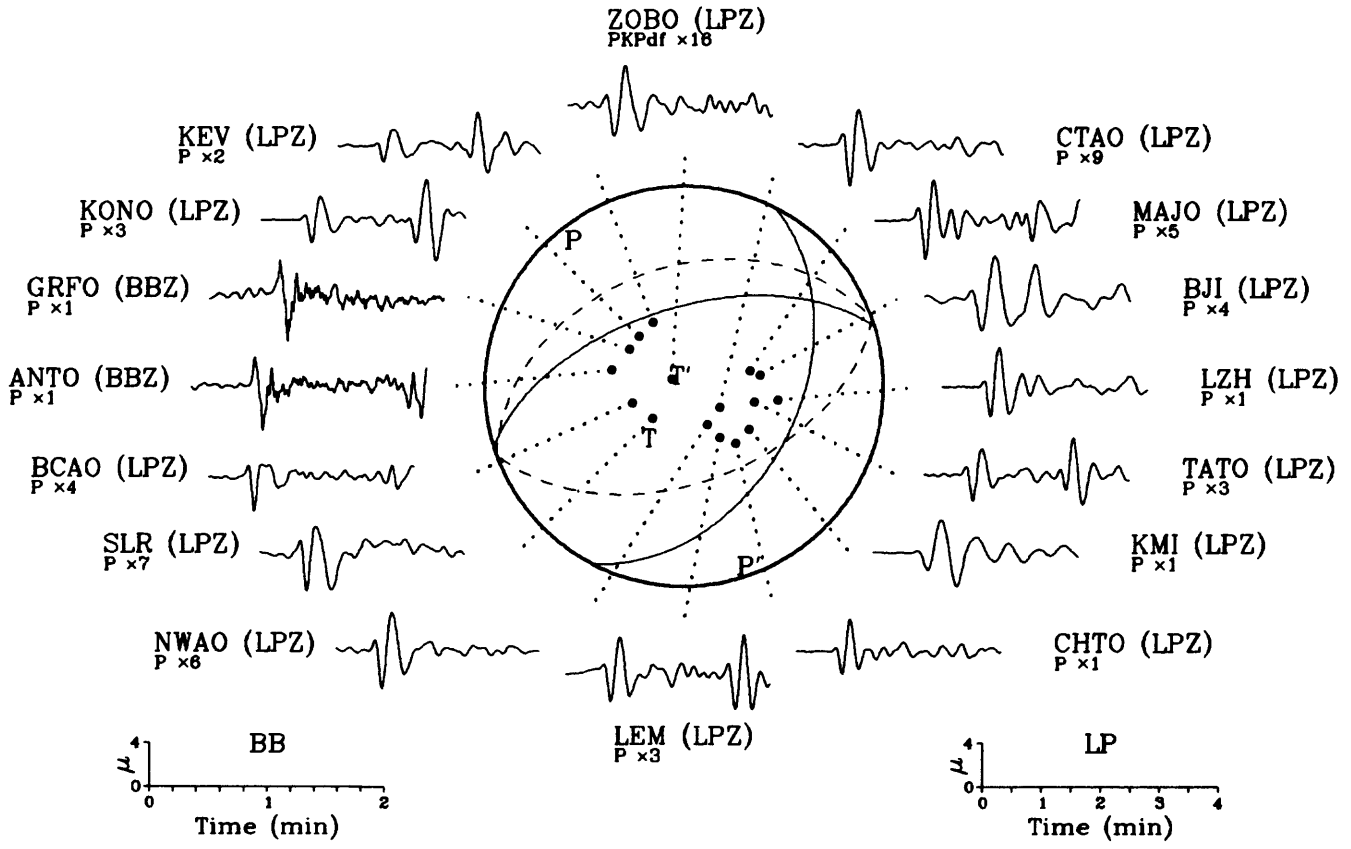
09 January 1987 06:14:44.87
Honshu, Japan



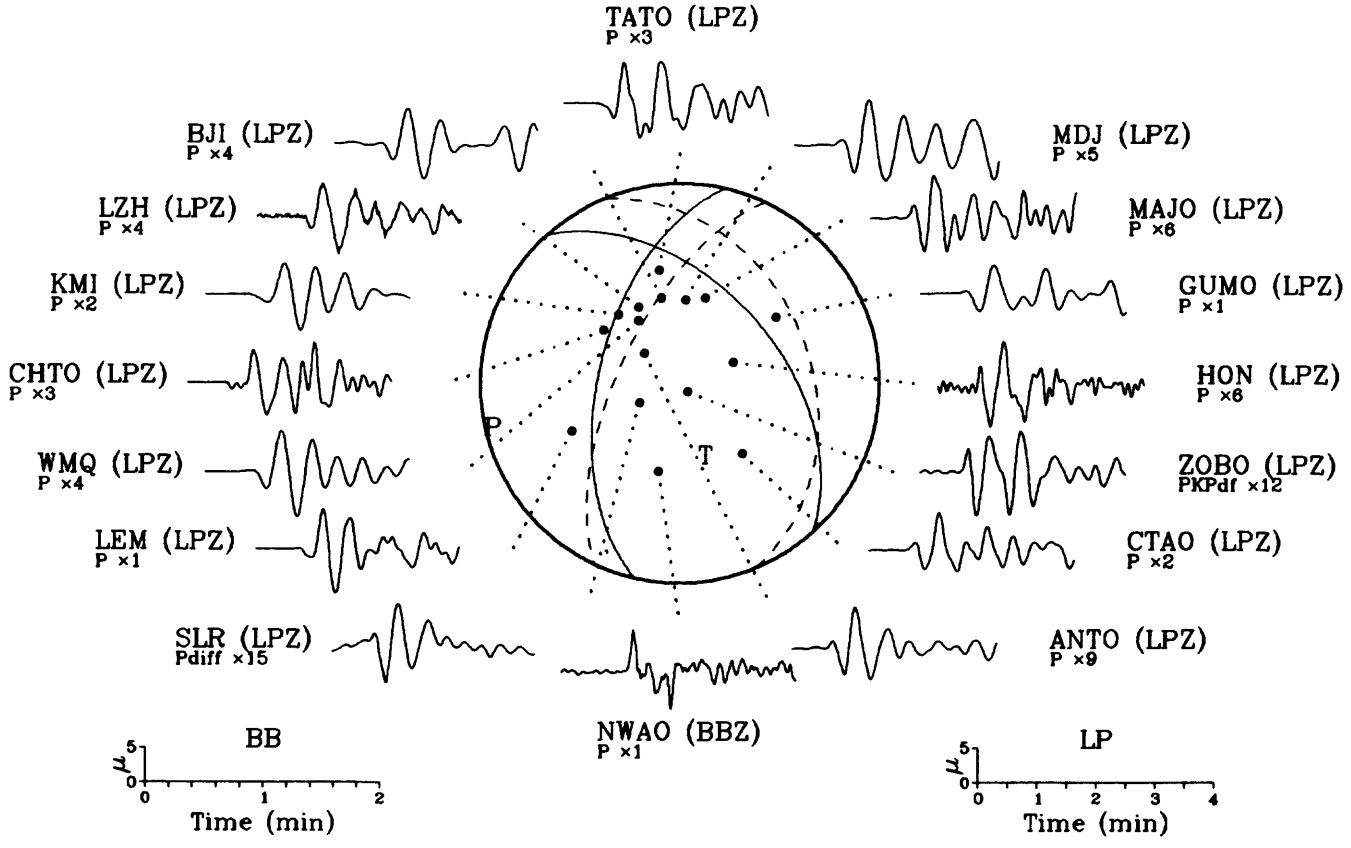
14 January 1987 11:03:48.75
Hokkaido, Japan Region



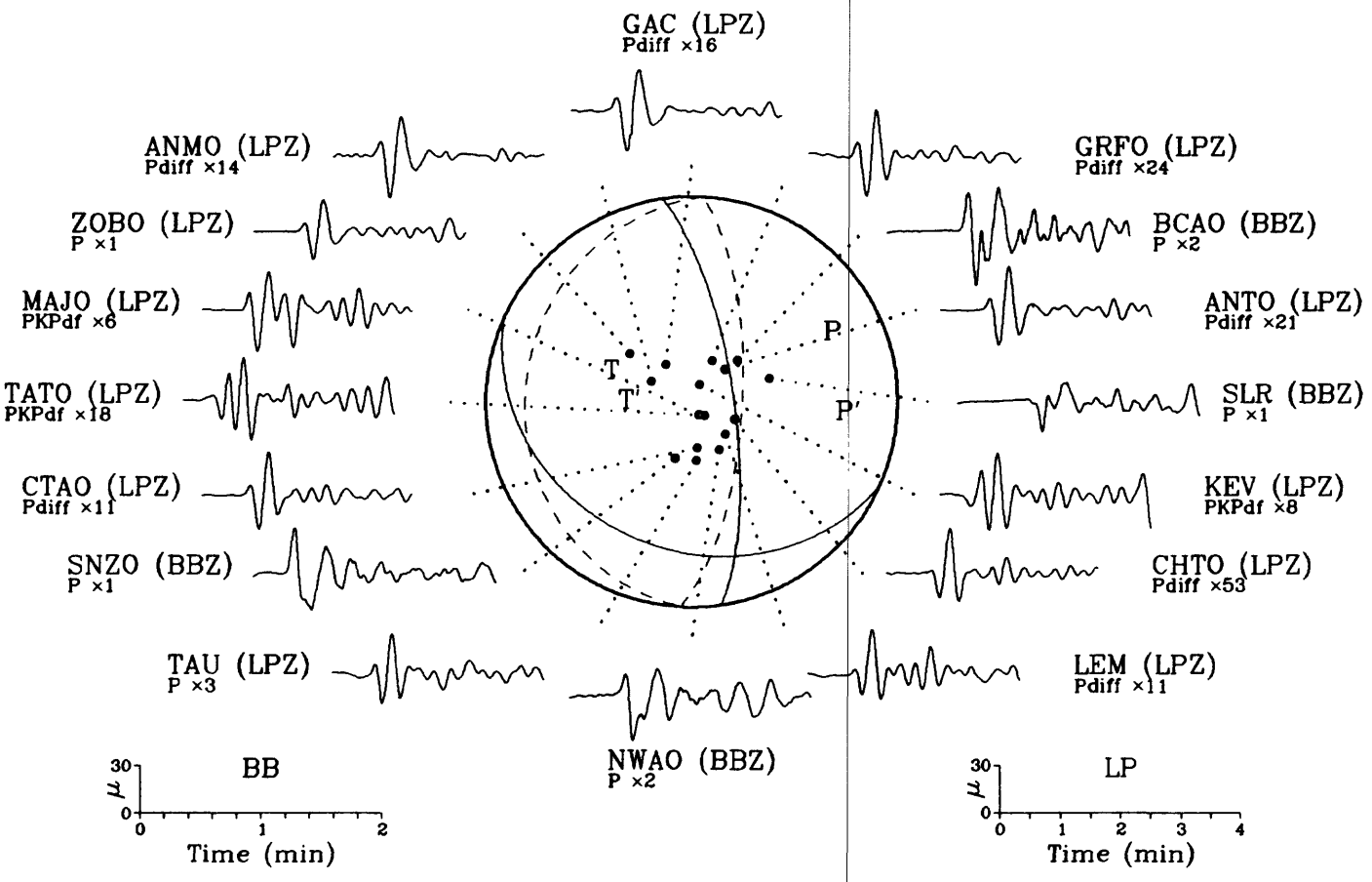
24 January 1987 08:09:21.30
Kirghiz–Xinjiang Border Region



29 January 1987 02:43:47.66
Molucca Passage



30 January 1987 22:29:42.09
South Sandwich Islands Region



EXPLANATION OF ABBREVIATIONS AND SYMBOLS APPEARING IN THIS PUBLICATION

Abbreviations in Heading

MB – Body wave magnitudes.
Msz – Vertical surface wave magnitudes.
UTC – Coordinated Universal Time. HR MN SEC – Hour, minute, second.
SD – Standard Deviation from the arithmetic mean of residuals.
No. Sta. – Number of stations reporting P or PKP phases used in computation.
KEY – (Printed vertically). A symbol in this column indicates additional source parameters and/or a focal sphere are published for this event in separate sections which follow the list of hypocenters. The symbols are:
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). Addenda to OF 85-714 are printed at the end of the Earthquake Data Report for this month.

Symbols Following Depth

N Indicates the depth was restrained at 33 km for earthquakes whose character on seismograms indicates a shallow focus but whose depth is not satisfactorily determined by the data.

D Indicates the depth was restrained by the computer program based on 2 or more compatible pP phases and/or unidentified secondary arrivals used as pP.

G Indicates the depth was restrained by a geophysicist.

* Indicates a less well-constrained free depth. The 90% marginal confidence interval on depth is greater than 8.5 km and less than or equal to 16.0 km.

? Indicates a *poorly-constrained free depth. The 90% marginal confidence interval on depth is greater than 16.0 km.*

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

Symbols Following Origin Time

& Indicates that parameters of the hypocenter were supplied or determined by a computational procedure not normally used by the National Earthquake Information Service (NEIS). The source or nature of the determination is indicated by a 2 to 5 letter code enclosed by angle brackets and appearing in the first line of comments. A "-P" appended to the code indicates that the computation is preliminary. These codes are included with the list of abbreviations above.

% Indicates a single network solution. A non-furnished hypocenter has been computed using data reported by a single network of stations for which the date and/or origin time cannot be confirmed from seismograms available to a NEIS analyst. The geometric mean of the semi-major and semi-minor axes of the horizontal 90% confidence ellipse is less than or equal to 16.0 km.

* Indicates a less reliable solution. In general, the geometric mean of the semi-major and semi-minor axes of the horizontal 90% confidence ellipse is greater than 8.5 km and less than or equal to 16.0 km.

? Indicates a poor solution, published for completeness of the catalog. In general, the geometric mean of the semi-major and semi-minor axes of the horizontal 90% confidence ellipse is greater than 16.0 km. This includes a poor solution computed using data reported by a single network.

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

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

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

TRAVEL-TIME TABLES

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

MACROSEISMIC INFORMATION

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

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 Bootwright (1981) for events with MB $\geq$ 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 Bootwright, 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 $\geq$ 5.8. A description of this solution is reported in the comments on the Preliminary Determination of Epicenters Monthly Listing. Focal sphere solutions and first motion parameters are available upon request from: National Earthquake Information Service, U.S. Geological Survey, Stop 967, Box 25046, Denver Federal Center, Denver, CO 80225.

NEIS MAGNITUDES

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

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

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

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 not 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:

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

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:

$$ML = \text{Log}\ A - \text{Log}\ Ao$$

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

CONTRIBUTED MAGNITUDES

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

Beginning with January, 1986, a contributed magnitude of unspecified type may be quoted (using the designator 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 (broadband displacement). As these types of data have a different pass-band than LP data, different time and amplitude scales than those used for LP data will generally be needed. These scales will be shown in the lower left hand corner of each plot. As with the LP waveforms, the absolute amplitudes of the other data types may be recovered from the amplitude scale and the scale factor. For IP data, the absolute amplitude is referenced to 10 seconds. For SP data, the absolute amplitude is referenced to the dominant period of the pass-band (1 s). BB data are directly proportional to displacement from 0.01 Hz to at least 2 Hz. In addition, each component will be identified by a direction indicator (ie. N, E, Z, R and T for north-south, east-west, vertical, radial, and transverse, respectively). Note that the dominant period approximation will not be valid for IP data. However, the scaling will still be correct.

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

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

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* 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)

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

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

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

These solutions have been determined using the long period body and mantle wave moment tensor inversion method described by Dziewonski, et.al. (1981) considering corrections due to an aspherical earth structure of model M84C (Woodhouse and Dziewanski, 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 = Mrr; MTT = $M\theta\theta$; MFF = $M\phi\phi$; MRT = $Mr\theta$; MRF = $Mr\phi$; MTF = $M\theta\phi$. In another frequently used notation: MRR = Mzz; MTT = Mxx; MFF = Myy; MRT = Mxz; MRF = -Myz; MTF = -Mxy (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 Ma = $1/2(\sigma_1 + \sigma_2)$. 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 (Knapoff and Randall, 1970); in most cases the magnitude of LVD is small. Although all such decompositions are highly non-unique, this particular one is the best in estimating the starting solution for the non-linear, constrained double couple inverse problem. The angles strike, dip, and slip are defined using the convention of Aki and Richards (1980, p. 106) and are the angles designated there as ϕ_s, δ, λ, respectively.

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

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

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

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

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 (Mo) 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 (Mo) in dyne-cm is defined by Log Mo = 16.74 + 1.22Log(CD_), 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 _ is the epicentral distance in km. Seismic moments quoted in "Preliminary Determination of Epicenters" are converted to Newton-meters (1 Newton-meter = 10**-7 dyne-cm).

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

GPO 854-056

CHANGE OF ADDRESS FORM

NAME—FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

PLEASE PRINT OR TYPE

(or) COUNTRY

Mail this form to: NEW ADDRESS

Superintendent of Documents
Government Printing Office SSOM
Washington, D.C. 20402

Attach last subscription label here.

SUBSCRIPTION ORDER FORM

SUBSCRIPTION ORDER FORM

ENTER MY SUBSCRIPTION TO:

@ $ Domestic; @ $ Foreign.

NAME—FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

PLEASE PRINT OR TYPE

(or) COUNTRY

☐ Remittance Enclosed (Make checks payable to Superintendent of Documents)

☐ Charge to my Deposit Account No. .....

MAIL ORDER FORM TO:
Superintendent of Documents
Government Printing Office
Washington, D.C. 20402

PRELIMINARY DETERMINATION OF EPICENTERS

MONTHLY LISTING

U.S. DEPARTMENT OF THE INTERIOR / GEOLOGICAL SURVEY

National Earthquake Information Center

FEBRUARY 1987

KEY	DAY	ORIGIN TIME UTC HR	MN	SEC	GEOGRAPHIC COORDINATES LAT		LONG		DEPTH		MAGNITUDES GS MB	Msz	SD	NO. STA USED	REGION, CONTRIBUTED MAGNITUDES AND COMMENTS
	01	01	43	26.6?	35.58	N	27.24	E	33	N			0.6	5	DODECANESE ISLANDS
	01	02	07	35.3*	40.417	N	24.053	E	10	G			0.7	6	AEGEAN SEA
	01	02	08	33.2	22.546	S	68.424	W	117	D	4.8		1.1	37	NORTHERN CHILE
	01	02	59	25.6	2.679	S	138.805	E	62	*	5.1		1.1	53	WEST IRIAN
	01	04	11	40.0	52.961	N	158.738	E	159	D	4.8		1.0	110	NEAR EAST COAST OF KAMCHATKA
	01	04	27	32.9?	35.81	N	27.50	E	33	N			0.5	5	DODECANESE ISLANDS
	01	05	35	36.6	37.834	N	21.994	E	36		4.4		1.3	84	SOUTHERN GREECE. ML 4.7 (ATH). Felt in the Pirgos area.
	01	06	28	39.3*	31.087	N	131.350	E	60	*	4.3		0.7	6	KYUSHU, JAPAN
	01	06	52	42.7*	13.917	N	120.915	E	216		4.6		1.2	13	MINDORO, PHILIPPINE ISLANDS
a	01	06	56	01.3	0.114	S	17.789	W	10	G	5.5	5.2	1.0	162	NORTH OF ASCENSION ISLAND
	01	08	26	48.4&	62.088	N	149.574	W	53					31	CENTRAL ALASKA. <AGS-P>.
	01	08	52	44.8	44.204	N	17.770	E	18	*			1.4	30	YUGOSLAVIA. ML 3.6 (TTG), 3.6 (KBA). Felt in the Travnik area.
	01	09	08	14.9	24.107	N	122.485	E	40		5.2	4.7	1.0	97	TAIWAN REGION
	01	10	54	56.5*	43.821	N	20.434	E	10	G			0.9	6	YUGOSLAVIA. ML 2.4 (TTG).
	01	11	22	03.8?	7.20	S	114.12	E	33	N			0.2	5	BALI SEA
	01	12	36	38.2*	56.839	N	7.698	E	10	G			1.2	10	NORTH SEA. MD 2.7 (BER).
	01	14	51	51.3&	37.717	N	122.525	W	9					10	CENTRAL CALIFORNIA. <BRK>. ML 3.0 (BRK). Mo=3.0*10**13 Nm (BRK). Felt (III) at San Francisco.
	01	16	13	47.9*	51.232	N	15.990	E	10	G			0.3	8	POLAND. ML 3.2 (GRF), 2.8 (KBA).
	01	16	48	04.2*	36.060	N	28.127	E	33	N			1.4	7	DODECANESE ISLANDS
	01	17	16	43.4?	32.24	S	71.68	W	10	G			0.4	7	NEAR COAST OF CENTRAL CHILE
	01	17	37	33.2&	59.911	N	153.446	W	124					28	SOUTHERN ALASKA. <AGS-P>.
	01	17	53	19.0&	37.710	N	122.515	W	9					18	CENTRAL CALIFORNIA. <BRK>. ML 3.5 (BRK). Mo=1.1*10**14 Nm (BRK). Felt (IV) at Millbrae and (III) at San Anselmo. Also felt at San Francisco.
	01	18	02	18.7	36.262	N	28.008	E	33	N	4.2		1.0	10	DODECANESE ISLANDS
	01	18	22	46.2*	60.142	S	26.754	W	33	N	4.2		0.9	15	SOUTH SANDWICH ISLANDS REGION
	01	18	26	44.2	17.060	N	93.577	W	168		4.6		1.0	79	CHIAPAS, MEXICO
	01	19	42	21.2	36.113	N	28.131	E	25		4.3	3.6	1.4	59	DODECANESE ISLANDS. ML 4.3 (ATH).
	01	20	15	56.8?	32.71	S	71.16	W	10	G			1.0	10	NEAR COAST OF CENTRAL CHILE
	01	20	21	48.3	19.129	N	121.278	E	39		5.0	4.3	1.0	71	PHILIPPINE ISLANDS REGION
	01	20	54	50.5*	57.947	S	25.429	W	33	N	5.0		1.0	37	SOUTH SANDWICH ISLANDS REGION
	02	01	19	44.4?	23.78	S	67.14	W	204	?			0.5	5	CHILE-ARGENTINA BORDER REGION
	02	01	32	56.6%	40.662	N	29.893	E	10	G			0.9	7	TURKEY
	02	01	57	12.8&	40.608	N	124.443	W	23					9	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.7 (BRK).
	02	02	58	22.3?	44.12	N	17.89	E	10	G			0.7	5	YUGOSLAVIA
	02	04	16	18.6	34.872	N	23.938	E	68	*	4.3		1.1	39	CRETE
	02	04	45	01.3&	35.903	N	120.450	W	2					13	CENTRAL CALIFORNIA. <BRK>. ML 2.6 (BRK).
	02	06	15	08.9%	39.952	N	28.969	E	10	G			1.0	6	TURKEY
	02	06	29	56.2	5.697	S	154.068	E	36	*	5.4	3.9	0.9	35	SOLOMON ISLANDS
	02	06	55	58.7	41.275	N	141.951	E	41		4.8		1.0	35	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Muroran. Also felt (I JMA) at Hachinohe, Honshu.
	02	08	14	09.2*	16.202	S	173.532	E	33	N	4.9		1.2	27	FIJI ISLANDS REGION
	02	09	14	03.1?	35.15	N	140.12	E	89	?			0.6	7	NEAR EAST COAST OF HONSHU, JAPAN
	02	10	27	03.9&	62.432	N	151.434	W	95					40	CENTRAL ALASKA. <AGS-P>.
	02	11	29	36.9*	16.303	S	173.481	E	33	N	4.8		1.3	38	FIJI ISLANDS REGION
	02	12	57	15.9*	6.816	N	123.843	E	602	*	4.7		0.9	17	MINDANAO, PHILIPPINE ISLANDS
	02	13	17	04.4	42.501	N	21.588	E	10	G			0.8	39	YUGOSLAVIA. ML 3.5 (SKO), 3.5 (TTG). Felt (V) in the Kosovska Komenico-Novo Brdo region.
	02	16	08	43.7	37.776	N	14.755	E	33	N	4.3		1.2	66	SICILY
	02	16	25	30.5	6.764	N	123.791	E	606	*	4.8		1.0	25	MINDANAO, PHILIPPINE ISLANDS
	02	17	11	38.9*	6.955	S	154.923	E	42	*	4.3		0.6	8	SOLOMON ISLANDS
	02	18	05	48.3?	16.08	N	98.58	W	33	N	4.2		1.1	12	NEAR COAST OF GUERRERO, MEXICO
	02	18	13	01.0*	38.752	N	75.749	E	73	*	4.1		1.0	6	SOUTHERN XINJIANG, CHINA
	02	18	23	09.2%	44.536	N	7.242	E	10	G			0.2	6	NORTHERN ITALY. ML 2.1 (LDG).
	02	18	41	08.4*	16.579	N	98.517	W	33	N	4.6		1.1	28	NEAR COAST OF GUERRERO, MEXICO
	02	19	22	04.8*	16.537	N	98.476	W	33	N	5.3		1.2	38	NEAR COAST OF GUERRERO, MEXICO

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
Single issues are available from Books and Open-File Reports Section, U.S. Geological Survey, P.O. Box 25425, Denver Federal Center, Denver, CO 80225.

	02	19	32	20.3*	54.008	N	163.033	E	33	N	4.9 4.4	0.9	25	OFF EAST COAST OF KAMCHATKA
	02	19	34	59.2	24.440	S	68.667	W	89	*	5.3	1.2	18	CHILE-ARGENTINA BORDER REGION
	02	20	18	41.0	4.404	S	151.827	E	10	G	5.6 4.1	1.2	29	NEW BRITAIN REGION. Felt (IV) at Rabaul.
	02	20	50	00.4*	37.273	S	73.943	W	33	N	4.6 4.0	1.4	24	NEAR COAST OF CENTRAL CHILE
	02	22	17	15.1*	34.841	N	75.571	E	82	?	4.4	1.5	15	EASTERN KASHMIR
	02	23	17	07.6?	41.54	N	19.52	E	5	G		1.0	7	ALBANIA. ML 2.5 (TTG).
	02	23	20	48.9?	16.30	N	98.51	W	33	N	4.4	1.1	12	NEAR COAST OF GUERRERO, MEXICO
	03	00	22	14.0	12.949	N	88.415	W	64		5.3	1.1	146	OFF COAST OF CENTRAL AMERICA. Felt strongly at San Salvador, El Salvador.
	03	00	27	07.4*	34.005	S	179.477	W	68		5.0	1.1	27	SOUTH OF KERMADEC ISLANDS
	03	02	58	29.3*	51.160	N	15.765	E	10	G		1.4	12	POLAND. ML 3.5 (GRF), 3.4 (VKA), 3.3 (KBA).
	03	05	26	34.4*	4.811	N	127.336	E	89	?	4.7	1.4	16	TALAUD ISLANDS
	03	06	29	09.5	6.872	S	124.774	E	563		4.9	0.8	32	BANDA SEA
	03	06	38	52.5*	38.799	N	27.296	E	10	G		0.6	5	TURKEY
	03	06	44	39.6	46.559	N	153.359	E	33	N	5.1 4.2	0.8	77	KURIL ISLANDS
	03	09	32	38.9	43.867	N	17.391	E	10	G		1.1	13	YUGOSLAVIA. ML 3.6 (TRI), 3.3 (KBA). MD 3.2 (TTG). Felt in the Prazor area.
	03	10	07	00.7*	43.927	N	17.298	E	10	G		1.5	9	YUGOSLAVIA. ML 2.9 (KBA), 2.7 (TTG).
	03	10	14	26.8*	17.235	S	89.953	E	10	G	4.9	1.0	48	SOUTH INDIAN OCEAN
	03	10	20	36.1?	32.49	S	69.76	W	137	?		0.2	6	MENDOZA PROVINCE, ARGENTINA
	03	12	13	32.3%	15.752	N	60.649	W	33	N		0.5	9	LEEWARD ISLANDS. ML 2.7 (FDF).
	03	15	03	34.3%	15.036	N	60.733	W	33	N		1.1	6	LEEWARD ISLANDS. ML 3.2 (FDF).
	03	15	20	00.0&	37.181	N	116.048	W	0				7	SOUTHERN NEVADA. <DOE>. ML 2.2 (NEIS). 37° 10' 52.11" N., 116° 02' 54.39" W., Surface Elev. 1317 m., Depth of Burial 300 m., Shot Time 152000.082, "HAZEBROOK", Nevada Test Site (Dept. of Energy).
	03	15	44	26.9	37.769	S	72.970	W	32	D	5.2 3.9	0.9	65	CENTRAL CHILE. Felt (III) at Las Angeles, (II) at Concepcion and (I) at Chillan.
	03	15	46	25.3*	40.637	N	24.209	E	10	G		0.7	5	AEGEAN SEA
a	03	16	42	41.3	37.750	S	72.893	W	32	D	5.8 5.5	0.9	180	CENTRAL CHILE. Felt (V) in the Angol area.
	03	16	52	07.7*	37.848	S	73.433	W	10	G		0.9	19	NEAR COAST OF CENTRAL CHILE
	03	17	21	54.5&	36.840	N	121.580	W	2				11	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
	03	19	26	33.8*	22.792	S	176.682	W	119	?	5.0	0.7	17	SOUTH OF FIJI ISLANDS
	03	22	52	05.2	5.395	S	152.185	E	33	N	4.8	1.1	34	NEW BRITAIN REGION
	04	00	10	49.6?	32.06	S	67.33	W	30			1.2	13	MENDOZA PROVINCE, ARGENTINA
	04	00	18	45.5?	65.04	N	166.80	W	33	N	4.7	1.1	12	ALASKA. ML 4.4 (PMR).
	04	01	16	50.3*	44.376	N	10.155	E	10	G		0.9	9	NORTHERN ITALY. ML 2.9 (LDG).
a	04	02	22	32.7&	20.053	N	156.530	W	10	G	5.2 4.9		148	HAWAII. <HVO-P>. ML 5.2 (HVO). Felt (V) on Hawaii and Maui. Felt (IV) on Oahu. Also felt on Lanai and Molokai.
	04	02	36	05.0?	32.07	S	71.97	W	10	G		1.1	10	NEAR COAST OF CENTRAL CHILE
	04	03	44	43.5&	20.062	N	156.540	W	45				50	HAWAII. <HVO-P>. ML 4.2 (HVO). Felt (III) on Maui.
	04	04	01	44.1	44.601	N	15.483	E	10	G		1.4	15	YUGOSLAVIA. ML 3.1 (TRI), 3.0 (KBA).
	04	04	26	10.4	5.453	S	146.854	E	225		5.1	1.1	25	EAST PAPUA NEW GUINEA REGION
	04	04	29	08.3?	44.49	N	17.99	E	10	G		1.4	6	YUGOSLAVIA
a	04	04	41	13.0	15.186	S	172.933	W	33	N	5.2 5.2	1.1	55	SAMOA ISLANDS REGION
	04	04	56	21.9	5.551	S	152.161	E	33	*	4.8	1.4	24	NEW BRITAIN REGION
	04	05	15	32.5*	37.837	N	29.406	E	10	G		0.8	5	TURKEY
	04	05	45	48.2*	5.482	S	152.208	E	33	N	3.8	0.3	7	NEW BRITAIN REGION
	04	06	12	34.8	5.406	S	152.069	E	29		5.3	0.9	57	NEW BRITAIN REGION
	04	07	51	27.2	17.590	S	173.957	W	115	D	4.8	1.0	55	TONGA ISLANDS
	04	09	34	23.8%	28.934	S	66.986	W	157	?		0.8	7	CATAMARCA PROVINCE, ARGENTINA
	04	09	59	43.4?	16.40	S	71.92	W	5	G		1.1	5	SOUTHERN PERU. Felt (III) at Arequipa.
	04	10	22	52.7	19.199	N	121.101	E	48	*	4.5	1.0	41	PHILIPPINE ISLANDS REGION. Felt (II RF) at Pasuquin.
	04	11	42	54.2	50.656	N	129.681	W	10	G	4.3 3.8	1.2	34	VANCOUVER ISLAND REGION
	04	12	02	31.0?	62.22	N	3.92	E	10	G		0.8	9	NORWEGIAN SEA. ML 3.7 (NB2), MD 3.3 (BER). Felt.
	04	12	15	22.9	24.523	N	121.868	E	71		5.0	1.0	90	TAIWAN. Felt on northern Taiwan.
	04	12	42	09.3*	14.338	S	76.463	W	10	G		1.3	6	NEAR COAST OF PERU
	04	13	45	23.9&	34.757	N	97.580	W	5	G			5	OKLAHOMA. <TUL>. MD 1.7 (TUL).
a	04	16	06	42.7	34.719	S	179.931	W	61	D	5.2	1.2	54	SOUTH OF KERMADEC ISLANDS
	04	17	13	01.3*	37.230	N	72.064	E	168	?	4.8	0.6	10	TAJIK SSR
	04	20	14	20.0*	22.651	S	173.301	E	33	N	4.9 4.9	1.4	36	LOYALTY ISLANDS REGION
	04	21	14	53.7&	58.205	N	155.522	W	32				19	ALASKA PENINSULA. <AGS-P>. ML 3.1 (PMR).
	04	23	35	53.7	46.741	N	1.978	W	11			0.8	20	FRANCE. ML 3.6 (LDG).
	05	02	04	15.1%	39.467	N	28.342	E	10	G		0.6	5	TURKEY
	05	02	54	03.1&	59.830	N	153.357	W	116				32	SOUTHERN ALASKA. <AGS-P>.
	05	05	00	43.3*	51.043	N	15.815	E	10	G		1.2	8	POLAND. ML 3.4 (VKA), 3.4 (GRF), 3.4 (KBA).
	05	07	04	29.6	31.017	S	65.505	W	180		4.2	1.0	40	CORDOBA PROVINCE, ARGENTINA
	05	07	15	57.1*	20.664	S	69.267	W	33	N		1.2	6	NORTHERN CHILE
	05	07	36	43.7?	15.94	N	60.11	W	10	G		0.2	5	LEEWARD ISLANDS. ML 3.8 (FDF).
	05	09	59	35.5	43.655	N	4.588	E	12			1.0	24	NEAR SOUTH COAST OF FRANCE. ML 3.5 (LDG).
	05	11	04	28.0*	22.864	N	121.203	E	33	N		1.0	10	TAIWAN REGION
	05	11	06	55.1?	51.49	N	16.11	E	10	G		0.9	10	POLAND. ML 3.9 (GRF), 3.9 (KBA), 3.7 (VKA).
	05	11	18	45.9%	43.533	N	4.505	E	10	G		1.1	16	NEAR SOUTH COAST OF FRANCE. ML 2.5 (LDG).
	05	11	47	08.4*	18.074	S	71.083	W	67	?		0.8	7	OFF COAST OF NORTHERN CHILE. Felt (II) at Arequipa, Peru.
	05	13	22	43.7%	12.346	S	75.781	W	33	N		0.6	7	PERU
	05	13	56	37.6	44.736	N	111.055	W	5	G		0.7	9	HEBGEN LAKE REGION. ML 3.4 (NEIS). Felt (III) at West Yellowstone, Montana.
	05	14	43	30.1	4.704	S	103.251	E	68	*	5.2	0.8	42	SOUTHERN SUMATERA
	05	15	25	47.9%	60.454	N	5.300	E	10	G		0.8	7	SOUTHERN NORWAY. MD 1.8 (BER).
	05	15	35	59.9	16.919	S	72.174	W	93		4.8	1.3	34	NEAR COAST OF PERU. Felt (IV) at Arequipa.
	05	17	04	53.1	4.830	S	153.609	E	104	D	4.8	1.1	56	NEW IRELAND REGION
	05	17	19	07.0?	5.36	S	129.97	E	235	*	4.2	1.4	10	BANDA SEA
	05	18	14	39.1&	61.999	N	150.758	W	2				36	SOUTHERN ALASKA. <AGS-P>.
	05	22	44	15.3?	31.44	S	71.77	W	33	N		0.4	13	NEAR COAST OF CENTRAL CHILE
	05	23	39	10.6?	37.28	S	177.24	E	83	?	4.0	1.4	6	OFF E. COAST OF N. ISLAND, N.Z.
	06	01	11	59.5	31.235	S	71.142	W	104	?		0.9	21	NEAR COAST OF CENTRAL CHILE
	06	01	56	23.9*	9.772	S	112.649	E	33	N	4.6	1.2	12	SOUTH OF JAVA
	06	03	01	46.4?	5.84	N	123.51	E	33	N	4.4	1.4	5	MINDANAO, PHILIPPINE ISLANDS
	06	03	22	45.4*	11.786	N	143.139	E	33	N	4.4	0.8	13	SOUTH OF MARIANA ISLANDS
	06	06	22	22.2	11.647	N	143.273	E	31		5.0	1.0	51	SOUTH OF MARIANA ISLANDS
	06	06	54	46.1?	36.82	S	96.30	W	10	G	4.5	1.1	18	WEST CHILE RISE

	06	07	14	42.6%	42.912	N	18.455	E	10	G			0.9	6	YUGOSLAVIA. ML 2.5 (TTG).
	06	07	26	55.8*	32.594	S	71.821	W	13				0.6	15	NEAR COAST OF CENTRAL CHILE
	06	09	04	08.5*	66.371	N	149.926	W	10	G			1.6	10	ALASKA. ML 4.0 (PMR).
	06	09	29	50.7*	44.725	N	111.023	W	5	G			0.9	8	HEBGEN LAKE REGION. ML 3.1 (NEIS). Felt (III) at West Yellowstone, Montana.
	06	09	39	50.7*	66.213	N	149.855	W	10	G	4.3		0.8	5	ALASKA. ML 4.4 (PMR).
	06	10	27	39.2	34.181	N	141.155	E	68	*	4.8		1.1	30	OFF EAST COAST OF HONSHU, JAPAN
	06	11	34	45.7?	65.98	N	150.09	W	10	G			2.0	4	ALASKA. ML 3.5 (PMR).
f	06	12	23	48.0	36.992	N	141.786	E	36	G	5.9	6.1	1.2	454	NEAR EAST COAST OF HONSHU, JAPAN. Ms 6.0 (PAS), 5.7 (BRK). Felt (IV JMA) ot Onahamo ond (III JMA) in the Tokyo-Sendoi oreo. Felt from Mishima ond Wajima, Honshu to Obihiro, Hokkoido. Also felt on Hochijo-jima. Depth from broodband displacement seismograms.
a	06	13	16	17.8	36.988	N	141.689	E	48		6.1	6.3	1.0	455	NEAR EAST COAST OF HONSHU, JAPAN. Ms 6.5 (PAS), 6.3 (BRK). Felt (V JMA) at Onahama and (IV JMA) at Mito, Sendai, Tokyo, Utsunomiya and Yokohama. Felt from Hikone and Wajima, Honshu to Kushiro, Hokkaido. Also felt on Oshima and Hachijo-jima. Local tsunami recorded with maximum wave heights 12 cm at Onahama; 8 cm at Ishinomaki; 7 cm at Ofunoto. Two events about 4 seconds oport, observed on broadband displacement seismograms.
	06	15	31	28.2*	24.259	S	67.156	W	198	?			1.3	7	CHILE-ARGENTINA BORDER REGION
	06	15	50	24.3?	33.03	S	72.10	W	10	G			0.4	8	OFF COAST OF CENTRAL CHILE
	06	17	04	12.0&	32.400	N	115.310	W	6	G				2	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
	06	17	04	31.2?	5.13	S	147.69	E	189	*	4.5		1.2	9	EAST PAPUA NEW GUINEA REGION
	06	17	41	20.9*	24.103	N	121.854	E	33	N	4.1		1.4	18	TAIWAN
	06	19	04	06.3*	36.074	N	8.387	W	10	G			1.4	5	WEST OF GIBRALTAR. MG 3.2 (MTH).
	06	19	20	17.9*	66.356	N	149.971	W	10	G			1.0	7	ALASKA. ML 3.3 (PMR).
	06	19	28	04.6?	5.77	S	146.96	E	167	*	5.0		0.8	9	EAST PAPUA NEW GUINEA REGION
	06	19	41	48.5%	45.901	N	26.058	E	123	?			0.4	6	ROMANIA
	06	21	22	15.2*	36.890	N	69.551	E	33	N	4.3		1.5	17	HINDU KUSH REGION
	06	23	00	23.3	40.022	N	27.269	E	10	G			0.7	8	TURKEY
	06	23	50	05.5*	37.070	N	141.915	E	33	N	4.7		0.8	9	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Utsunomiya.
	07	00	39	23.3*	58.221	S	24.912	W	33	N	5.1		1.1	22	SOUTH SANDWICH ISLANDS REGION
	07	00	55	25.8*	14.548	S	77.044	W	33	N			1.1	12	OFF COAST OF PERU. Felt (IV) at Ica.
	07	01	21	17.4	39.796	N	24.350	E	11				1.0	23	AEGEAN SEA. ML 3.8 (ATH).
	07	03	12	18.3?	47.30	N	154.07	E	33	N	4.7		0.8	10	KURIL ISLANDS
o	07	03	45	14.7&	32.390	N	115.310	W	6	G	5.4	5.5		122	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 5.4 (PAS). Felt strongly in the Mexicoli, Mexico oreo. Felt (V) ot El Centro, Californio ond (IV) at Heber, Holtville, Palo Verde, Seeley ond Westmorlond, Californio. Also felt (IV) at San Luis ond Yumo, Arizono.
	07	04	12	11.2?	27.41	N	140.26	E	479	?	4.6		0.7	15	BONIN ISLANDS REGION
	07	04	17	19.9&	32.430	N	115.300	W	6	G				4	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.3 (PAS).
	07	04	39	36.7	23.652	N	94.639	E	83	*	4.6		0.5	16	BURMA-INDIA BORDER REGION
	07	06	36	53.2?	15.72	N	93.49	W	33	N	3.7		1.5	7	NEAR COAST OF CHIAPAS, MEXICO
	07	06	48	03.8*	20.462	N	145.482	E	33	N	4.7		1.0	21	MARIANA ISLANDS
	07	07	30	09.4?	35.52	N	80.37	E	33	N			0.6	5	KASHMIR-TIBET BORDER REGION
	07	09	59	34.5&	32.370	N	115.330	W	6	G	3.8			11	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.7 (PAS).
	07	10	05	24.9&	32.300	N	115.360	W	6	G				1	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
	07	10	25	39.1&	32.410	N	115.340	W	6	G				13	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.8 (PAS).
a	07	10	46	22.5	59.145	S	159.015	E	33	N	5.5	5.1	1.0	52	MACQUARIE ISLANDS REGION
	07	11	31	34.2	1.602	N	126.666	E	33	N	5.0		1.1	50	MOLUCCA PASSAGE
a	07	11	57	33.9	5.800	S	147.742	E	27		5.6	6.1	1.1	112	EAST PAPUA NEW GUINEA REGION. Ms 6.0 (BRK), 5.8 (PAS). Felt throughout the Huon Peninsulo ond ot Lae and Wou, New Guineo. Also felt in the Cape Gloucester oreo, New Britain.
	07	12	29	01.7*	52.581	N	168.348	W	33	N	4.8		1.0	27	FOX ISLANDS, ALEUTIAN ISLANDS
	07	12	39	41.9	5.812	S	147.741	E	14		5.3		0.8	51	EAST PAPUA NEW GUINEA REGION. Felt throughout the Huon Peninsulo and at Lae and Wau, New Guineo. Also felt in the Cape Gloucester oreo, New Britoin.
	07	13	07	56.6	11.652	N	143.307	E	20	*	5.1		1.1	52	SOUTH OF MARIANA ISLANDS
	07	14	11	55.3	5.784	S	147.829	E	38	*	4.5	4.3	1.0	26	EAST PAPUA NEW GUINEA REGION
	07	14	13	39.9?	41.00	N	19.90	E	10	G			1.3	9	ALBANIA. ML 2.5 (TTG).
	07	14	17	40.2?	5.91	S	147.70	E	33	N	3.9		1.2	7	EAST PAPUA NEW GUINEA REGION
	07	15	15	51.5&	32.420	N	115.330	W	6	G				1	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
o	07	15	24	22.3	4.924	S	103.255	E	60	D	5.4		0.9	162	SOUTHERN SUMATERA
	07	15	33	38.7&	32.420	N	115.340	W	6	G				2	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
	07	15	37	09.3&	32.420	N	115.340	W	6	G				3	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.3 (PAS).
	07	15	38	02.0	5.805	S	147.743	E	33	N	5.0		1.1	24	EAST PAPUA NEW GUINEA REGION
	07	15	51	17.3?	6.19	S	147.69	E	33	N	4.2		1.0	7	EAST PAPUA NEW GUINEA REGION
	07	15	59	10.2*	7.158	S	129.132	E	152	?	4.7		1.3	24	BANDA SEA
	07	17	13	26.0	42.630	N	1.726	E	10	G			0.9	16	PYRENEES. ML 3.3 (LDG).
	07	18	08	34.0	46.519	N	149.833	E	153	D	5.1		0.8	151	KURIL ISLANDS
	07	18	18	59.3*	5.626	S	147.788	E	33	N	4.0		1.2	9	EAST PAPUA NEW GUINEA REGION
	07	18	40	04.9%	39.624	N	29.018	E	10	G			0.9	9	TURKEY
	07	19	03	56.9	39.036	N	22.601	E	10	G			0.8	22	GREECE. ML 3.5 (ATH).
	07	19	21	59.8	8.712	S	118.880	E	91	*	4.9		1.2	36	SUMBAWA ISLAND REGION
	07	20	29	08.4	10.159	S	161.047	E	75		5.0		0.8	55	SOLOMON ISLANDS
	07	21	24	30.1&	59.871	N	153.502	W	124					27	SOUTHERN ALASKA. <AGS-P>.
	07	22	31	57.6	10.343	N	62.704	W	10	G	5.0	4.4	1.3	68	NEAR COAST OF VENEZUELA. Felt in the Carupano-Rio Caribe-El Pilar oreo.
	08	00	04	31.5?	45.69	N	26.60	E	111	?			0.8	7	ROMANIA
	08	00	07	23.6*	35.906	N	27.347	E	33	N			1.0	5	OODECANESE ISLANDS. ML 4.0 (ATH).
	08	00	16	49.4	29.853	S	71.415	W	74	*	4.7		1.3	33	NEAR COAST OF CENTRAL CHILE
	08	00	23	32.2?	9.35	N	61.82	W	10	G			0.7	8	NEAR COAST OF VENEZUELA
	08	00	44	00.9	7.477	S	128.434	E	127	*	4.9		1.0	51	BANDA SEA
	08	00	59	09.2?	15.22	N	60.30	W	10	G			0.5	6	LEEWARD ISLANDS. ML 2.6 (FDF).
	08	03	29	18.6*	34.598	N	81.190	E	33	N	4.5		1.3	9	TIBET
	08	03	38	50.6*	39.649	N	23.256	E	10	G			0.9	8	AEGEAN SEA
	08	05	03	36.8&	60.086	N	150.984	W	58					42	KENAI PENINSULA, ALASKA. <AGS-P>.
	08	05	24	20.6?	16.60	N	61.02	W	33	N			0.1	5	LEEWARD ISLANDS. ML 2.4 (FDF).

	08	05	32	57.3&	37.530	N	118.880	W	4			11	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (PAS).
	08	06	19	09.6?	54.94	N	159.93	W	33 N	4.5	1.3	11	SOUTH OF ALASKA
	08	06	22	15.3?	51.56	N	178.66	W	102 D	4.3	0.8	7	ANDREANOF ISLANDS, ALEUTIAN IS.
	08	10	56	00.9	44.733	N	111.068	W	5 G		0.7	10	HEBGEN LAKE REGION. ML 2.9 (NEIS).
	08	12	44	00.0	13.827	N	90.995	W	70 D	4.3	1.2	55	NEAR COAST OF GUATEMALA. Felt in western Guatemala.
	08	16	29	45.1*	16.496	N	121.994	E	33 N	4.0	1.0	6	LUZON, PHILIPPINE ISLANDS
a	08	17	48	48.8	1.604	N	126.588	E	17 D	5.8 5.9	1.1	206	MOLUCCA PASSAGE
	08	18	25	34.8	29.737	N	67.507	W	10 G	4.7	0.9	41	NORTH ATLANTIC OCEAN
f	08	18	33	58.3	6.088	S	147.689	E	55	7.4	1.3	290	EAST PAPUA NEW GUINEA REGION. Ms 7.6 (BRK), 7.0 (PAS). Three people killed by a landslide and some damage (VI) on the Huon Peninsula. Several hundred people homeless and moderate damage (VII), landslides and ground cracks on Umboi Island. Liquefaction occurred in some sands on Malai Island. Felt (VI) in the Cape Gloucester area, New Britain. Felt (III) as far away as Wewak and Port Moresby, New Guinea and Rabaul, New Britain. Multiple event, observed on broadband displacement seismograms.
	08	18	42	44.9*	5.835	S	147.747	E	33 N	5.5	1.1	19	EAST PAPUA NEW GUINEA REGION
	08	19	07	35.6*	14.421	S	72.914	W	97 *	4.8	0.9	15	PERU
	08	19	18	05.1	5.906	S	147.727	E	33 N	5.2	1.0	27	EAST PAPUA NEW GUINEA REGION
	08	19	26	11.1*	5.683	S	147.721	E	33 N	4.6	1.3	14	EAST PAPUA NEW GUINEA REGION
	08	19	31	56.1?	5.75	S	147.66	E	33 N	5.2	0.8	15	EAST PAPUA NEW GUINEA REGION
	08	19	43	39.3*	5.630	S	147.671	E	33 N	4.1	0.9	11	EAST PAPUA NEW GUINEA REGION
	08	20	15	04.7?	6.08	S	148.01	E	33 N	4.2	1.3	6	NEW BRITAIN REGION
	08	20	30	25.7*	6.065	S	147.565	E	33 N	4.7	0.9	19	EAST PAPUA NEW GUINEA REGION
	08	20	53	22.8	6.156	S	151.140	E	33	4.8	1.0	45	NEW BRITAIN REGION
	08	21	38	47.7?	4.87	S	147.63	E	33 N	4.1	0.6	8	BISMARCK SEA
	08	22	13	12.0?	6.20	S	147.49	E	33 N	3.9	0.4	6	EAST PAPUA NEW GUINEA REGION
	08	22	22	38.3	28.773	S	68.600	W	106	4.6	1.1	41	LA RIOJA PROVINCE, ARGENTINA
	08	22	51	17.7	6.038	S	147.679	E	33 N	4.7	0.8	31	EAST PAPUA NEW GUINEA REGION
	08	23	45	36.5*	5.431	S	151.652	E	33 N	3.9	0.9	6	NEW BRITAIN REGION
	08	23	50	09.9?	5.88	S	147.85	E	33 N	4.0	1.0	9	EAST PAPUA NEW GUINEA REGION
	09	00	21	49.1	6.107	S	147.687	E	33 N	4.8	0.9	30	EAST PAPUA NEW GUINEA REGION
	09	01	32	56.9	6.052	S	147.783	E	18	5.1 4.4	0.9	58	EAST PAPUA NEW GUINEA REGION
	09	01	44	59.8	6.035	S	147.630	E	33 N	4.8	1.2	32	EAST PAPUA NEW GUINEA REGION
	09	02	07	46.6?	7.30	S	147.10	E	33 N		0.7	5	EAST PAPUA NEW GUINEA REGION. ML 4.4 (PMG).
a	09	02	11	10.2	5.990	S	147.708	E	33 N	5.6 5.1	1.1	79	EAST PAPUA NEW GUINEA REGION
	09	02	15	25.4	5.980	S	147.690	E	33 N	5.6 5.4	1.0	34	EAST PAPUA NEW GUINEA REGION
	09	02	24	28.1	40.610	N	29.057	E	10 G		0.6	12	TURKEY
	09	02	46	04.2*	39.504	N	27.633	E	10 G		1.0	6	TURKEY
	09	03	03	10.6?	5.47	S	148.38	E	33 N	4.7	1.4	7	NEW BRITAIN REGION
	09	03	38	56.3&	32.430	N	115.320	W	6	3.5		11	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.7 (PAS).
	09	05	08	26.4*	14.986	S	172.478	W	33 N	4.7	1.2	35	SAMOA ISLANDS
	09	05	45	40.2*	6.282	S	147.573	E	33 N	4.5	0.7	19	EAST PAPUA NEW GUINEA REGION
	09	06	16	46.4	14.071	N	90.544	W	93 D	4.7	1.2	62	GUATEMALA
	09	06	27	30.2*	6.271	S	147.804	E	33 N	5.1	0.9	15	EAST PAPUA NEW GUINEA REGION
	09	06	47	14.4	6.249	S	147.730	E	33 N	4.3	1.3	18	EAST PAPUA NEW GUINEA REGION
a	09	06	48	00.2	6.145	S	147.691	E	33 N	5.6 5.1	1.0	136	EAST PAPUA NEW GUINEA REGION
	09	07	25	38.8*	6.111	S	147.719	E	33 N	4.7	1.3	13	EAST PAPUA NEW GUINEA REGION
	09	08	18	22.8*	26.243	N	128.383	E	42 *	4.8	0.7	10	RYUKYU ISLANDS. Felt (II JMA) at Nago.
	09	08	30	11.8&	60.160	N	152.808	W	108			30	SOUTHERN ALASKA. <AGS-P>.
	09	08	33	39.4	6.230	S	147.762	E	36 *	4.7	0.9	19	EAST PAPUA NEW GUINEA REGION
	09	08	44	54.2?	40.49	N	35.32	E	10 G	3.6	1.5	7	TURKEY
	09	10	01	23.5?	16.95	N	61.86	W	10 G		1.3	5	LEEWARD ISLANDS. ML 3.4 (FDF).
	09	10	03	04.6?	6.04	S	147.76	E	33 N	4.4	1.3	8	EAST PAPUA NEW GUINEA REGION
	09	10	30	57.1?	61.14	N	3.01	E	10 G		0.4	6	NORWEGIAN SEA. MD 2.1 (BER).
	09	11	05	24.9?	6.13	S	147.91	E	33 N		0.9	5	EAST PAPUA NEW GUINEA REGION
	09	11	43	32.8*	5.773	S	147.697	E	33 N	4.4	1.2	9	EAST PAPUA NEW GUINEA REGION
	09	12	28	24.0	35.372	N	26.108	E	31	4.4	1.5	74	CRETE. ML 4.9 (ATH). Felt throughout Crete.
	09	12	56	53.2*	35.323	N	25.986	E	59 *	4.1	1.5	9	CRETE
	09	14	20	44.0?	5.40	S	148.00	E	33 N	4.1	1.2	6	NEW BRITAIN REGION
o	09	14	25	30.8	6.137	S	147.722	E	49	5.5 5.0	0.9	49	EAST PAPUA NEW GUINEA REGION
	09	14	34	09.9*	44.243	N	17.941	E	10 G		1.5	7	YUGOSLAVIA
	09	14	56	58.2	35.562	N	26.266	E	33 N	4.1	0.5	9	CRETE. ML 4.0 (ATH).
	09	15	21	24.5*	24.309	N	95.140	E	33 N	3.4	1.0	6	BURMA
	09	16	08	51.0&	37.518	N	121.695	W	7			18	CENTRAL CALIFORNIA. <BRK>. ML 3.5 (BRK). Mo=7.8*10**14 Nm (BRK). Felt at Fremont and Livermore.
	09	17	07	04.7	5.524	S	147.705	E	33 N	4.8	1.1	35	EAST PAPUA NEW GUINEA REGION
o	09	18	17	30.6	6.002	S	147.802	E	44	5.7 5.7	1.1	154	EAST PAPUA NEW GUINEA REGION
	09	18	53	55.7?	6.24	S	147.53	E	33 N	4.7	0.6	12	EAST PAPUA NEW GUINEA REGION
	09	20	14	07.3?	5.61	S	147.75	E	33 N	4.4	1.2	6	EAST PAPUA NEW GUINEA REGION
	09	20	30	21.9	6.591	S	147.849	E	49 *	4.8 4.6	1.3	54	EAST PAPUA NEW GUINEA REGION
	09	21	08	03.4	6.243	S	147.794	E	37 *	4.9	1.0	23	EAST PAPUA NEW GUINEA REGION
	09	21	49	48.7?	6.73	S	147.43	E	33 N	4.4	0.6	7	EAST PAPUA NEW GUINEA REGION
	09	22	18	19.8*	4.313	S	138.585	E	33 N	4.9	0.9	13	WEST IRIAN
	09	22	42	59.5	12.926	N	144.071	E	105	5.1	1.1	129	SOUTH OF MARIANA ISLANDS. Felt (IV) on Guam.
	09	23	55	01.3*	35.482	N	25.468	E	105 ?		1.4	9	CRETE
	10	00	53	55.5?	17.19	N	61.09	W	33 N		0.2	5	LEEWARD ISLANDS. ML 3.1 (FDF).
f	10	00	59	28.5	19.489	S	177.456	W	395 G	6.2	1.0	376	FIJI ISLANDS REGION. mb 6.4 (BRK), 6.4 (PAS). Depth from broadband displacement seismograms.
	10	01	48	33.7*	6.266	S	147.8~8	E	33 N	4.8	1.5	9	EAST PAPUA NEW GUINEA REGION
	10	01	53	18.2&	58.818	N	154.999	W	131			31	ALASKA PENINSULA. <AGS-P>.
	10	02	09	17.5*	28.105	S	176.579	W	47 ?	5.0	1.1	46	KERMADEC ISLANDS REGION
	10	02	48	57.5	3.088	N	79.254	W	27 D	5.1 5.0	1.0	136	SOUTH OF PANAMA
	10	03	14	29.9*	6.593	S	147.743	E	33 N	4.2	0.7	8	EAST PAPUA NEW GUINEA REGION
	10	03	25	27.9&	58.180	N	154.119	W	80			46	ALASKA PENINSULA. <AGS-P>.
	10	04	17	53.9*	37.673	N	22.589	E	78 *	3.8	1.0	8	SOUTHERN GREECE
	10	04	49	56.3?	6.76	S	147.55	E	33 N	4.1	1.1	6	EAST PAPUA NEW GUINEA REGION
	10	05	24	23.5&	37.513	N	121.698	W	7			19	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK). Felt at San Jose.
	10	05	55	20.0	42.344	N	147.922	E	42	5.2 4.5	0.8	119	OFF COAST OF HOKKAIDO, JAPAN. Felt (I JMA) at Nemuro.
	10	06	46	33.1?	66.39	N	150.09	W	10 G		1.7	6	ALASKA. ML 3.4 (PMR).
	10	07	34	32.1&	59.194	N	153.999	W	124			34	SOUTHERN ALASKA. <AGS-P>.

	10	08	25	11.9	9.342	N	126.371	E	33	N	5.2		1.2	58	MINDANAO, PHILIPPINE ISLANDS. Felt (II RF) at Cagayan de Oro.
	10	09	49	02.7*	5.903	S	147.837	E	33	N	4.2		1.5	8	EAST PAPUA NEW GUINEA REGION
	10	09	57	35.2*	40.046	N	26.155	E	10	G			0.9	5	TURKEY
	10	10	43	17.6*	10.732	S	166.149	E	33	N	4.5		1.2	17	SANTA CRUZ ISLANDS
	10	10	52	37.4*	9.073	N	83.884	W	47	*			0.9	11	COSTA RICA. MD 4.1 (HDC). Felt in the Alajuela-San Jose-Cartago region.
	10	12	15	58.5*	24.210	N	125.125	E	30	*	4.1		1.0	10	SOUTHWESTERN RYUKYU ISLANDS
	10	12	19	38.0?	32.36	S	66.66	W	33	N			1.0	10	SAN LUIS PROVINCE, ARGENTINA
a	10	12	21	59.0	6.012	S	147.779	E	40		5.4	5.1	1.0	56	EAST PAPUA NEW GUINEA REGION
	10	12	28	13.0?	54.81	S	119.23	W	10	G	4.8	5.4	1.1	11	EASTER ISLAND CORDILLERA
	10	13	00	39.3?	24.12	S	180.00	E	563	?	4.8		0.9	17	SOUTH OF FIJI ISLANDS
	10	13	11	23.0	5.961	S	147.604	E	10	G	4.5		0.9	7	EAST PAPUA NEW GUINEA REGION
	10	13	58	10.1*	6.188	S	151.582	E	10	G	4.2		1.4	11	NEW BRITAIN REGION
	10	14	00	44.7*	26.282	N	128.469	E	33	N	4.4		0.7	12	RYUKYU ISLANDS
	10	14	20	30.2?	6.88	S	126.60	E	348	?	4.4		1.3	6	BANDA SEA
	10	14	49	58.6?	14.78	N	60.61	W	33	N			0.7	5	WINDWARD ISLANDS. ML 2.9 (FDF).
	10	15	21	01.0?	5.80	S	147.92	E	33	N	4.5		1.0	8	EAST PAPUA NEW GUINEA REGION
	10	15	35	24.7?	39.03	N	28.30	E	10	G			1.5	6	TURKEY
	10	15	37	56.0?	4.99	S	148.32	E	33	N	4.2		0.7	6	BISMARCK SEA
	10	16	06	16.0*	39.869	N	141.730	E	84		4.5		0.9	14	HONSHU, JAPAN. Felt (II JMA) at Miyako and Morioka; (I JMA) at Ofunato.
a	10	16	23	50.9	35.586	N	143.013	E	38	D	5.1	5.2	1.1	114	OFF EAST COAST OF HONSHU, JAPAN
	10	17	22	42.4	27.282	N	126.727	E	26	*	5.1		1.2	46	EAST CHINA SEA
	10	17	51	45.6	36.121	N	139.788	E	73		4.6		1.2	59	HONSHU, JAPAN. Felt (III JMA) at Utsunamiya and Mito; (II JMA) at Onahama; (I JMA) at Moebashi, Tokyo and Tateyama.
	10	19	03	02.1*	6.140	S	147.970	E	33	N	4.3		1.5	15	EAST PAPUA NEW GUINEA REGION
	10	21	20	15.5	44.271	N	10.256	E	32		4.0		1.1	99	NORTHERN ITALY. ML 4.3 (FUR), 4.2 (LDG). Felt in the Lunigiana-Garfagnana area.
	10	21	41	09.8*	10.546	S	155.271	E	33	N	4.6		0.8	12	DENTRECASTEAUX ISLANDS REGION
	10	21	58	20.2*	43.778	N	9.394	E	10	G			0.5	6	CORSICA
	10	22	02	55.3?	24.25	N	70.25	E	10	G	3.8		1.0	5	INDIA-PAKISTAN BORDER REG.
	10	23	03	01.5	21.895	S	175.236	E	10	G	4.9		1.1	67	SOUTH OF FIJI ISLANDS
	11	00	06	33.0*	4.517	S	126.409	E	33	N	4.2		1.3	13	BANDA SEA
	11	00	58	21.6*	62.955	N	156.623	E	10	G	4.6	4.9	1.0	26	EASTERN SIBERIA
a	11	01	14	40.6	6.995	S	146.991	E	19		5.3	4.9	1.2	98	EAST PAPUA NEW GUINEA REGION
	11	03	04	01.5*	35.255	S	70.017	W	152		4.4		0.6	17	CHILE-ARGENTINA BORDER REGION
	11	03	07	53.1	5.672	S	147.793	E	33	N	4.8		1.2	27	EAST PAPUA NEW GUINEA REGION
	11	05	04	27.2*	35.990	N	141.346	E	33	N	4.4		1.1	8	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Mita.
a	11	06	12	53.3	18.831	N	120.981	E	24		5.6	5.8	1.3	239	LUZON, PHILIPPINE ISLANDS. Felt (V RF) at Pasuquin, (III RF) at Santa and (II RF) at Callao Cave.
	11	07	21	03.5	6.007	S	147.912	E	58	*	3.5		0.7	9	EAST PAPUA NEW GUINEA REGION
	11	07	29	21.5%	44.826	N	6.644	E	10	G			0.3	10	FRANCE. ML 2.7 (LDG).
	11	07	34	30.8%	44.839	N	6.537	E	10	G			0.4	10	FRANCE. ML 2.9 (LDG).
a	11	07	56	12.9	15.834	S	167.355	E	24	G	5.9	6.4	1.2	310	VANUATU ISLANDS. Ms 6.6 (BRK), 6.4 (PAS). Depth from broadband displacement seismograms.
	11	07	59	57.9*	11.176	S	73.637	W	105	?	4.7		0.7	10	PERU
	11	10	24	18.1%	15.127	N	60.371	W	10	G			0.4	8	LEEWARD ISLANDS. ML 2.8 (FDF).
	11	10	24	37.6	51.151	N	178.809	E	33	N	4.8	4.8	1.1	46	RAT ISLANDS, ALEUTIAN ISLANDS. ML 4.9 (PMR).
	11	10	50	24.5	17.704	N	119.669	E	40	*	5.0		1.1	19	PHILIPPINE ISLANDS REGION
	11	10	52	53.4*	6.158	S	151.816	E	26	*	4.3		1.2	7	NEW BRITAIN REGION
	11	12	33	04.0*	16.245	S	166.789	E	33	N	4.8		1.1	21	VANUATU ISLANDS
	11	13	38	45.4	5.726	N	123.549	E	562	*	4.7		0.9	32	MINDANAO, PHILIPPINE ISLANDS
	11	14	51	18.9	6.198	S	147.780	E	53	*	4.9		1.4	30	EAST PAPUA NEW GUINEA REGION
	11	15	00	31.5	62.212	N	150.142	W	33	N			0.8	8	CENTRAL ALASKA. ML 3.1 (PMR).
	11	16	10	02.3?	15.58	N	60.18	W	27	*			1.4	9	LEEWARD ISLANDS. ML 2.9 (FDF).
	11	16	45	00.0&	37.011	N	116.045	W	0		4.5			32	SOUTHERN NEVADA. <DOE>. ML 4.2 (BRK). 37° 00' 38.48" N., 116° 02' 40.88" W., Surface Elev. 1214 m., Depth of Burial 300 m., Shot Time 164500.065, "TORNERO", Nevada Test Site (Dept. of Energy).
	11	16	52	24.5	46.467	N	0.517	E	10	G			1.5	12	FRANCE. ML 2.6 (LDG).
a	11	17	42	50.9	43.169	N	132.286	E	499	D	5.5		1.1	400	NEAR E. COAST OF EASTERN USSR. Felt (I JMA) at Tateyama, Honshu, Japan.
	11	18	26	11.4%	15.089	N	60.307	W	10				0.4	10	LEEWARD ISLANDS. ML 3.0 (FDF).
a	11	19	54	53.2	22.900	S	179.504	W	524		5.1		1.1	105	SOUTH OF FIJI ISLANDS
	11	20	22	46.3&	19.318	N	155.105	W	10					45	HAWAII. <HVO-P>. ML 3.9 (HVO). Felt (IV) at Wahaula and (III) at Puna.
	11	20	42	56.3?	0.35	S	125.04	E	33	N	4.5		1.3	10	MOLUCCA SEA
	11	21	21	52.0?	5.35	S	148.26	E	33	N	3.8		1.4	6	NEW BRITAIN REGION
	11	22	00	17.3	30.043	S	73.227	W	33	N			0.5	18	OFF COAST OF CENTRAL CHILE
	11	22	22	59.8*	2.834	N	79.630	W	10	G	4.4	4.1	1.5	18	SOUTH OF PANAMA
	11	23	49	06.8?	9.40	N	92.96	E	107	?	4.0		0.7	8	NICOBAR ISLANDS REGION
	12	00	33	57.2?	6.73	S	147.35	E	33	N	4.1		1.3	8	EAST PAPUA NEW GUINEA REGION
	12	01	02	23.1*	4.523	S	138.452	E	167	*	4.6		1.1	16	WEST IRIAN
	12	01	42	23.9?	6.27	S	147.30	E	58	*	4.4		0.8	9	EAST PAPUA NEW GUINEA REGION
	12	02	01	53.2&	62.370	N	151.522	W	93					29	CENTRAL ALASKA. <AGS-P>.
	12	02	07	03.2?	51.61	N	16.28	E	10	G			0.6	8	POLAND. ML 2.7 (KBA).
	12	03	17	00.6*	5.968	S	147.926	E	33	N	4.4		1.5	9	EAST PAPUA NEW GUINEA REGION
	12	03	39	03.6&	61.814	N	150.563	W	53					30	SOUTHERN ALASKA. <AGS-P>.
	12	05	01	44.0?	27.72	S	176.98	W	114	?	4.4		1.4	16	KERMADEC ISLANDS REGION
	12	06	01	03.4?	35.96	S	73.62	W	33	N	4.3		0.9	5	OFF COAST OF CENTRAL CHILE
	12	06	52	31.2	54.181	N	162.566	W	33	N	5.0	4.3	0.8	100	ALASKA PENINSULA
	12	07	14	09.1	44.435	N	11.086	E	10	G			1.0	15	NORTHERN ITALY. MD 3.1 (TRI), 2.9 (FIR). ML 3.0 (LDG), 2.5 (KBA).
	12	08	28	06.2*	5.929	S	147.715	E	67	*	4.4		1.0	6	EAST PAPUA NEW GUINEA REGION
	12	09	27	27.7*	51.308	N	176.917	E	33	N	4.6		0.9	32	RAT ISLANDS, ALEUTIAN ISLANDS
	12	10	32	08.0&	59.950	N	153.545	W	149					45	SOUTHERN ALASKA. <AGS-P>.
	12	12	04	01.2&	60.435	N	152.122	W	81					38	SOUTHERN ALASKA. <AGS-P>.
	12	12	23	28.2	43.245	N	20.997	E	4				1.2	20	YUGOSLAVIA. ML 3.0 (TTG).
	12	12	26	25.4	5.707	N	94.306	E	56	*	4.8		1.1	20	NORTHERN SUMATERA
	12	13	23	42.4	36.420	N	141.279	E	62		4.9		1.1	58	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Mita; (I JMA) at Utsunomiya and Tokyo.

	12	15 41 23.2	45.888	N	142.686	E	328		4.6		0.9	94	HOKKAIDO, JAPAN REGION
	12	16 34 07.6*	34.623	N	139.921	E	98		5.1		0.9	19	NEAR S. COAST OF HONSHU, JAPAN. Felt (I JMA) on Oshimo and at Ajiro, Tokyo and Toteyomo.
	12	17 40 44.0?	5.72	S	148.75	E	57	?	4.8		1.4	8	NEW BRITAIN REGION
	12	17 41 37.1*	14.188	N	93.681	W	33	N	4.7		1.3	22	NEAR COAST OF CHIAPAS, MEXICO
	12	19 31 43.7	21.758	S	68.332	W	130	D	4.7		1.3	26	CHILE-BOLIVIA BORDER REGION
	12	19 33 03.2&	38.825	N	122.795	W	2					10	NORTHERN CALIFORNIA. <BRK>. ML 2.8 (BRK). Felt at The Geysers.
	12	19 43 18.3&	38.795	N	122.763	W	2	G				16	NORTHERN CALIFORNIA. <BRK>. ML 3.6 (BRK). Felt at The Geysers.
	12	19 47 38.9?	51.38	N	16.08	E	10	G			0.3	5	POLAND
	12	23 58 43.2*	5.692	S	147.933	E	13				1.2	19	EAST PAPUA NEW GUINEA REGION
	13	00 48 36.2	35.299	N	26.146	E	33	N			1.3	16	CRETE. ML 4.2 (ATH).
	13	01 08 40.6?	52.83	N	170.08	W	33	N	4.5		0.9	8	FOX ISLANDS, ALEUTIAN ISLANDS
	13	03 36 15.9*	15.760	S	167.513	E	153	*	4.9		1.3	77	VANUATU ISLANDS
	13	04 20 59.4?	30.98	N	131.65	E	62	*	4.2		1.4	14	KYUSHU, JAPAN
	13	05 48 56.3	4.697	S	153.572	E	54		4.7		0.9	36	NEW IRELAND REGION
f	13	07 18 29.0	0.670	N	126.167	E	32		6.2	6.5	1.3	344	MOLUCCA PASSAGE. Ms 6.4 (PAS). Felt on Ternate and at Manodo, Sulawesi.
	13	09 34 09.8%	60.553	N	4.770	E	0	G			0.8	6	SOUTHERN NORWAY. MD 1.9 (BER). Probable explosion.
	13	10 01 39.2	36.634	N	140.878	E	64		5.1		1.1	180	NEAR EAST COAST OF HONSHU, JAPAN. Felt (IV JMA) at Onohama; (III JMA) at Mito; (II JMA) at Takyo, Fukushima and Utsunomiya; (I JMA) at Sendai, Ishinomoki, Miyoko, Morioka and Kumagaya.
	13	10 49 41.6&	60.014	N	153.123	W	117					32	SOUTHERN ALASKA. <AGS-P>.
	13	11 08 03.2*	0.773	N	126.347	E	33	N	4.7		1.1	12	MOLUCCA PASSAGE
	13	12 58 36.0&	37.020	N	117.800	W	6	G				13	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (PAS).
	13	13 57 08.0?	6.53	S	147.64	E	56	*	4.2		1.1	8	EAST PAPUA NEW GUINEA REGION
	13	13 58 07.8	40.200	N	19.823	E	15		5.1	4.4	1.5	171	ALBANIA. ML 5.0 (ATH), MD 4.9 (TTG). Felt (VI) at Picor, Kardhiq and Shtepez; (V) at Progonat, Nivice, Gjirokoster and Tepelena; (IV) at Saranda. Also felt at Thessoloniki and in the Kerkiro-Ioannina area, Greece.
	13	14 12 07.3&	59.439	N	153.627	W	120					30	SOUTHERN ALASKA. <AGS-P>.
	13	14 50 41.4?	5.26	S	131.79	E	33	N	4.4		1.3	9	BANDA SEA
	13	14 50 43.2?	39.98	N	20.34	E	10	G			1.5	5	GREECE-ALBANIA BORDER REGION. MG 3.3 (TIR).
	13	17 28 53.7*	37.908	N	22.466	E	10	G	3.7		0.9	7	SOUTHERN GREECE. ML 3.3 (ATH).
	13	17 59 03.5	14.515	N	60.282	W	33	N			0.7	9	WINDWARD ISLANDS. ML 3.2 (FDF).
	13	18 00 49.1?	21.58	S	68.48	W	143	?	4.4		0.9	5	CHILE-BOLIVIA BORDER REGION
	13	18 07 56.6*	50.520	N	148.705	E	551	?	4.3		0.6	18	SEA OF OKHOTSK
	13	18 13 21.5*	68.147	N	146.146	W	10	G			1.4	9	ALASKA. ML 3.8 (NEIS).
	13	19 20 16.7	23.126	N	94.135	E	55	*	4.8		1.2	34	BURMA-INDIA BORDER REGION
	13	19 52 43.1	19.131	S	68.460	W	65		4.8		1.4	47	CHILE-BOLIVIA BORDER REGION
	13	19 54 16.7	11.461	S	117.457	E	33	N	5.3		1.5	51	SOUTH OF SUMBAWA ISLAND
	13	20 19 23.3	37.882	N	22.463	E	33	N	3.6		0.5	13	SOUTHERN GREECE. ML 3.4 (ATH).
	13	21 15 45.0	45.767	N	9.416	E	10	G			1.2	28	NORTHERN ITALY. ML 3.1 (LDG), 2.8 (KBA).
	13	21 53 55.6	27.378	S	63.291	W	574		4.6		0.8	61	SANTIAGO DEL ESTERO PROV., ARG.
	13	22 58 14.0*	38.518	N	26.665	E	10	G			1.4	5	AEGEAN SEA
	13	23 44 23.2	39.069	N	27.834	E	10	G			0.8	8	TURKEY
	13	23 47 21.0*	26.431	N	111.221	W	10	G	4.4		0.9	14	GULF OF CALIFORNIA
	14	00 28 12.3*	39.064	N	27.872	E	13	*			0.8	6	TURKEY
	14	02 10 10.4	40.015	N	25.218	E	13				1.2	11	AEGEAN SEA
	14	03 30 45.9&	34.790	N	120.510	W	6	G				4	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
	14	04 44 33.7%	39.530	N	27.646	E	10	G			0.6	7	TURKEY
	14	05 06 34.7	5.617	S	147.731	E	33	N	5.0		1.2	41	EAST PAPUA NEW GUINEA REGION
	14	05 54 15.0&	36.150	N	120.335	W	13					14	CENTRAL CALIFORNIA. <BRK>. ML 2.7 (BRK).
o	14	06 34 38.8	15.467	S	167.559	E	120	D	5.5		0.9	196	VANUATU ISLANDS
	14	06 55 43.0*	57.952	S	25.363	W	33	N	5.1		1.1	28	SOUTH SANDWICH ISLANDS REGION
	14	07 11 34.2?	32.33	S	67.74	W	127	?			0.5	7	MENDOZA PROVINCE, ARGENTINA
a	14	07 26 51.7&	36.148	N	120.335	W	13		5.3	4.6		102	CENTRAL CALIFORNIA. <BRK>. ML 5.2 (BRK), 5.1 (PAS). Mo=3.8*10**16 Nm (BRK). Slight damage (V) at Coolingo. Also felt (V) at Firebough and Helm. Felt (IV) at Auberry, Avenol, Bass Lake, Big Creek, Brodley, Burrel, Contuo Creek, Chowchillo, Clovis, Dos Palos, Ducor, Formersville, Kingsburg, Lemaore, Los Banos, Moriposo, Pionodo, Riverbank, Soledad, South Dos Palos, Tollhouse, Tulare and Twoin Harte. Felt throughout much of central California as for north as Socramento.
	14	09 00 50.4	0.743	N	126.233	E	52	*	5.2		1.2	40	MOLUCCA PASSAGE
	14	10 34 38.7*	36.615	S	97.853	W	10	G	4.9	4.7	1.1	32	WEST CHILE RISE
	14	12 08 36.0	0.733	N	126.139	E	67	*	5.0		1.2	24	MOLUCCA PASSAGE
	14	12 42 15.0	32.658	S	70.141	W	124	?			0.4	13	CHILE-ARGENTINA BORDER REGION
o	14	13 38 22.7	17.926	S	178.632	W	566	D	5.7		1.1	293	FIJI ISLANDS REGION
	14	13 42 15.7	17.816	S	178.697	W	570	D	5.2		0.9	84	FIJI ISLANDS REGION
	14	15 24 01.8*	45.847	S	76.788	W	10	G	5.3	4.7	0.8	13	OFF COAST OF SOUTHERN CHILE
	14	15 24 54.7&	59.889	N	148.612	W	18					46	KENAI PENINSULA, ALASKA. <AGS-P>. ML 3.1 (PMR).
	14	15 26 04.3	6.215	S	146.995	E	109	*	3.7		1.1	11	EAST PAPUA NEW GUINEA REGION
a	14	15 44 16.1	45.698	S	76.058	W	10	G	5.3	5.8	1.4	67	OFF COAST OF SOUTHERN CHILE
	14	16 15 15.5*	56.131	N	162.322	E	33	N	4.9		0.7	11	NEAR EAST COAST OF KAMCHATKA
a	14	16 42 18.1	54.720	N	161.741	E	33	N	5.7	5.0	1.1	301	NEAR EAST COAST OF KAMCHATKA
	14	19 05 55.0	39.458	N	25.602	E	7		3.7		0.9	38	AEGEAN SEA. ML 3.7 (ATH).
	14	19 20 35.0	16.115	S	176.173	W	380	D	4.6		1.3	91	FIJI ISLANDS REGION
	14	19 44 02.7*	6.431	S	147.719	E	33	N	3.4		1.3	7	EAST PAPUA NEW GUINEA REGION
	14	19 54 00.3&	37.777	N	113.821	W	1					12	UTAH. <SLC-P>. ML 3.2 (SLC).
	14	20 11 13.1?	20.84	S	178.90	W	596	?	4.3		1.1	13	FIJI ISLANDS REGION
	14	20 13 50.2	33.483	S	70.617	W	100	*			0.3	15	CHILE-ARGENTINA BORDER REGION
	14	22 04 55.0&	62.411	N	149.508	W	64					32	CENTRAL ALASKA. <AGS-P>.
	14	22 35 32.5*	4.984	S	151.316	E	141	*	4.5		1.3	13	NEW BRITAIN REGION
	14	22 50 13.2	5.550	S	152.062	E	70	*	4.6		1.1	15	NEW BRITAIN REGION
	14	23 00 46.6*	55.967	N	153.223	W	33	N			0.9	6	SOUTH OF ALASKA. ML 3.8 (PMR).
	14	23 03 13.9	41.332	N	79.512	E	33	N	4.7	4.0	1.0	28	KIRGHIZ-XINJIANG BORDER REGION
	14	23 08 43.9?	16.65	N	60.88	W	10	G			1.1	5	LEEWARD ISLANDS. ML 2.0 (FDF).
	14	23 25 45.5&	37.307	N	121.717	W	4					11	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
	14	23 38 53.6	6.237	S	154.335	E	48		5.1		1.2	27	SOLOMON ISLANDS

	15	00	49	44.3&	59.936	N	152.052	W	57			38	SOUTHERN ALASKA. <AGS-P>.
	15	01	57	17.4*	2.178	N	101.541	W	10 G	4.7	4.2	1.1	31	EAST CENTRAL PACIFIC OCEAN
	15	02	55	23.8*	36.836	N	142.128	E	54 *	4.3		1.4	33	OFF EAST COAST OF HONSHU, JAPAN
	15	03	14	59.3*	5.272	N	94.461	E	33 N	4.2		1.2	18	NORTHERN SUMATERA
	15	03	42	11.0*	36.505	N	70.278	E	201 ?	4.1		0.6	13	HINDU KUSH REGION
	15	04	18	23.0*	37.433	S	73.625	W	33 N	4.7		1.3	38	NEAR COAST OF CENTRAL CHILE
	15	06	39	32.6?	23.06	S	71.09	W	33 N			1.5	7	OFF COAST OF NORTHERN CHILE
	15	06	45	28.6	5.511	S	151.893	E	52	4.9		1.0	55	NEW BRITAIN REGION
	15	06	58	59.3*	15.197	S	175.486	W	33 N	5.0	4.9	1.4	41	TONGA ISLANDS
	15	08	36	55.5*	44.012	N	10.348	E	10 G			0.6	7	NORTHERN ITALY. ML 2.8 (LDG), 2.7 (KBA).
	15	08	51	20.1	41.206	N	24.012	E	10 G			0.8	13	GREECE-BULGARIA BORDER REGION
	15	09	39	57.1*	37.141	N	141.633	E	60 *	4.7	4.5	1.4	32	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Onahama.
	15	09	57	20.0*	5.753	S	152.073	E	14 *	4.8	3.7	1.5	14	NEW BRITAIN REGION
	15	11	21	22.4*	5.673	S	151.984	E	33 N	4.0		0.9	8	NEW BRITAIN REGION
	15	11	29	51.6?	6.17	S	147.83	E	59 ?	3.6		0.4	6	EAST PAPUA NEW GUINEA REGION
	15	12	35	11.7&	59.899	N	152.923	W	90				36	SOUTHERN ALASKA. <AGS-P>.
	15	14	07	08.0&	36.165	N	120.325	W	9				9	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
	15	16	09	26.4	53.577	N	163.601	W	33 N	4.9	3.9	0.9	45	UNIMAK ISLAND REGION
	15	16	55	05.4&	61.505	N	151.637	W	87	3.9			61	SOUTHERN ALASKA. <AGS-P>.
	15	17	38	39.6	9.729	S	75.560	W	26 *	4.7		1.3	24	PERU
	15	17	48	52.3?	53.56	N	160.04	E	33 N	4.7		1.1	19	NEAR EAST COAST OF KAMCHATKA
	15	18	04	10.4	5.406	S	153.876	E	84 *	3.9		1.0	12	NEW IRELAND REGION
	15	18	23	18.9*	22.311	S	68.836	W	141 *			0.8	9	NORTHERN CHILE
	15	19	26	29.3	24.245	N	94.789	E	113	4.6		1.0	56	BURMA-INDIA BORDER REGION
	15	19	41	02.2	36.958	N	141.209	E	42	4.9	4.5	1.1	82	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Onahama and (I JMA) at Ishinamaki and Fukushima.
	15	19	52	51.4*	31.720	S	69.863	W	33 N			1.4	6	SAN JUAN PROVINCE, ARGENTINA
	15	20	37	39.5	43.781	N	16.603	E	10			1.3	29	YUGOSLAVIA. ML 3.8 (TTG).
	15	20	51	54.8*	17.739	S	178.050	W	663 *	4.5		0.4	15	FIJI ISLANDS REGION
	15	21	47	37.1?	16.27	N	60.54	W	10 G			0.7	5	LEEWARD ISLANDS. ML 2.7 (FDF).
	15	22	05	24.1	49.147	N	128.752	W	10 G	4.2		1.1	29	VANCOUVER ISLAND REGION
	15	22	06	41.5*	19.126	N	108.902	W	10 G	4.1	3.9	1.0	20	REVILLA GIGEDO ISLANDS REGION
a	15	22	38	44.9	15.563	S	177.204	W	33 N	5.2	5.5	1.4	120	FIJI ISLANDS REGION
	15	23	19	21.4	43.933	N	16.779	E	10 G			1.2	32	YUGOSLAVIA. ML 3.6 (TRI), 3.4 (TTG).
	16	00	29	48.6*	5.868	S	147.751	E	48 ?	4.4		1.2	10	EAST PAPUA NEW GUINEA REGION
	16	02	22	46.9	22.754	N	120.617	E	33 N	4.8		1.2	31	TAIWAN
	16	02	45	43.1*	32.144	S	178.987	W	59	5.5		1.4	32	SOUTH OF KERMADEC ISLANDS
	16	03	16	48.0?	6.54	S	147.63	E	44 ?	4.1		1.1	5	EAST PAPUA NEW GUINEA REGION
	16	04	24	29.0	2.913	S	147.558	E	10 G	4.3		1.4	23	ADMIRALTY ISLANDS REGION
	16	04	44	37.6	30.624	S	71.452	W	50	5.1	4.3	1.2	52	NEAR COAST OF CENTRAL CHILE. Felt (V) in the Ovalle area; (III) in the La Serena-Vicuna area and (II) in the Illapell area.
	16	04	47	19.3%	16.691	N	61.386	W	33 N			0.7	5	LEEWARD ISLANDS. ML 2.7 (FDF).
	16	06	55	19.2%	40.710	N	23.356	E	10 G			0.4	6	GREECE
	16	07	36	47.0?	17.65	N	61.50	W	33 N			0.7	10	LEEWARD ISLANDS. ML 3.4 (FDF).
a	16	09	38	14.5	0.739	N	126.143	E	37 *	5.3	4.8	1.2	106	MOLUCCA PASSAGE
	16	10	06	38.2%	39.305	N	27.897	E	10 G			1.2	5	TURKEY
	16	10	26	08.1	5.622	S	147.658	E	53 *	5.0		1.1	46	EAST PAPUA NEW GUINEA REGION
	16	10	44	16.5&	59.331	N	153.524	W	99				34	SOUTHERN ALASKA. <AGS-P>.
	16	12	53	02.9	60.380	N	5.338	E	10 G			0.5	6	SOUTHERN NORWAY. MD 1.7 (BER).
	16	14	37	20.0	20.596	S	68.971	W	95	5.0		0.8	38	CHILE-BOLIVIA BORDER REGION
	16	15	40	39.3*	36.337	N	34.707	E	10 G			1.0	9	TURKEY
	16	16	39	49.3	0.844	N	126.261	E	33 N	5.0		1.1	56	MOLUCCA PASSAGE
	16	17	20	42.2	0.889	N	126.231	E	33 N	4.8		1.2	35	MOLUCCA PASSAGE
a	16	17	28	11.2	0.838	N	126.186	E	25	5.7	5.9	1.3	213	MOLUCCA PASSAGE
	16	17	37	16.7	32.764	N	32.207	E	10 G			1.2	11	EASTERN MEDITERRANEAN SEA. ML 3.6 (JER).
	16	17	45	59.9*	0.934	N	126.414	E	33 N	5.0		1.3	22	MOLUCCA PASSAGE
	16	18	32	52.8*	24.246	S	70.375	W	53 *	4.9		1.4	19	NEAR COAST OF NORTHERN CHILE. Felt (III) at Antofagasta.
	16	20	08	08.1*	0.841	N	126.285	E	33 N	4.4		1.0	11	MOLUCCA PASSAGE
	16	20	41	00.7%	40.837	N	28.174	E	10 G			0.8	8	TURKEY
	16	21	40	05.2*	5.993	S	147.745	E	44 *	4.0		1.1	10	EAST PAPUA NEW GUINEA REGION
	16	22	20	48.8	0.910	N	126.314	E	33 N	5.0		1.2	46	MOLUCCA PASSAGE
	16	22	44	07.1&	57.970	N	142.992	W	38				28	GULF OF ALASKA. <AGS-P>.
	16	22	58	03.4	0.759	N	126.473	E	116 *	4.3		1.1	18	MOLUCCA PASSAGE
	16	23	14	49.4	21.920	S	63.782	W	536	4.5		0.8	23	SOUTHERN BOLIVIA
	17	00	28	12.3?	36.95	N	21.70	E	33 N			0.8	5	SOUTHERN GREECE. ML 4.1 (ATH).
	17	02	46	22.7%	40.213	N	29.292	E	10 G			0.9	6	TURKEY
	17	03	03	24.1	33.691	N	120.664	E	10 G	5.1	4.5	1.0	119	EASTERN CHINA. ML 5.4 (BJI). Some damage in Dafeng County. Felt in the Nanjing-Yancheng-Shanghai area.
a	17	04	19	57.6	19.676	S	168.761	E	33 N	5.6	5.6	1.2	233	VANUATU ISLANDS
	17	04	25	35.1%	44.514	N	7.337	E	11			0.4	17	NORTHERN ITALY. ML 2.9 (LDG).
	17	04	27	09.1&	59.905	N	153.464	W	128				40	SOUTHERN ALASKA. <AGS-P>.
	17	04	39	36.2*	11.520	S	119.803	E	33 N	3.9		1.1	11	SOUTH OF SUMBA ISLAND
	17	04	54	01.3&	60.151	N	152.967	W	110				27	SOUTHERN ALASKA. <AGS-P>.
	17	05	17	43.3	19.689	S	168.812	E	33 N	5.3		1.3	83	VANUATU ISLANDS
f	17	06	16	12.1	32.793	S	179.304	W	10 G	5.9	6.6	1.2	294	SOUTH OF KERMADEC ISLANDS. Ms 6.5 (8RK), 6.4 (PAS).
	17	07	55	59.6*	19.010	S	69.483	W	33 N			0.8	6	NORTHERN CHILE
	17	09	27	56.4*	46.700	S	165.961	E	33 N	4.2		1.4	14	OFF W. COAST OF S. ISLAND, N.Z.
	17	09	35	19.8	38.583	N	25.499	E	10 G			1.4	16	AEGEAN SEA. ML 3.8 (ATH).
	17	10	25	33.5	0.235	N	122.499	E	124 *	5.2		0.9	26	MINAHASSA PENINSULA
	17	11	00	22.6	17.227	S	24.950	E	10 G	4.9	4.5	0.7	28	ZAMBIA. Felt at Victoria Falls.
	17	12	42	30.6*	0.847	N	126.555	E	33 N	4.7		1.4	16	MOLUCCA PASSAGE
	17	12	42	48.9*	42.795	N	23.902	E	10 G			0.4	5	BULGARIA
a	17	12	56	56.0	58.705	S	25.157	W	33 N	5.3	5.1	0.9	81	SOUTH SANDWICH ISLANDS REGION
	17	13	44	17.3	39.105	N	29.466	E	10 G			1.5	13	TURKEY
	17	14	55	49.4*	6.756	S	147.322	E	44 *	4.4		1.3	11	EAST PAPUA NEW GUINEA REGION
	17	15	02	03.2&	34.130	N	117.460	W	8				12	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS). Felt at Devare and San Bernardina.
	17	17	24	32.1	45.514	N	26.333	E	157	3.8		0.8	21	ROMANIA
	17	18	31	50.5*	44.618	N	9.536	E	10 G			1.0	12	NORTHERN ITALY
	17	18	41	39.1?	15.60	N	60.31	W	33 N			1.2	10	LEEWARD ISLANDS. ML 2.7 (FDF).

	17	21	34	32.0?	32.14	S	71.36	W	33	N		1.2	10	NEAR COAST OF CENTRAL CHILE
	17	21	43	21.2	31.839	S	71.957	W	33	N	4.4	1.0	19	NEAR COAST OF CENTRAL CHILE
	17	22	36	57.4*	33.150	S	178.343	W	58	*	5.3	1.3	18	SOUTH OF KERMADEC ISLANDS
	17	22	55	10.5*	43.218	N	21.002	E	10	G		1.4	9	YUGOSLAVIA. ML 2.6 (TTG). Felt (V) in the Kopoonik area.
	17	22	55	45.7*	32.714	S	178.533	W	10	G	5.1	1.5	35	SOUTH OF KERMADEC ISLANDS
	17	23	06	42.6*	32.680	S	178.379	W	10	G	5.2	1.4	19	SOUTH OF KERMADEC ISLANDS
o	18	00	00	52.5	51.298	N	179.279	W	33	N	6.2 5.9	1.0	372	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.5 (PMR), Ms 5.8 (BRK), 5.5 (PAS). Felt (V) on Adak.
	18	01	09	41.8*	33.394	S	178.606	W	10	G	4.8	1.6	18	SOUTH OF KERMADEC ISLANDS
	18	01	57	11.0	41.053	N	20.208	E	10	G		1.2	22	ALBANIA. ML 3.2 (TTG).
	18	05	24	31.5%	40.615	N	27.804	E	10	G		0.9	9	TURKEY
a	18	05	28	23.2	51.344	N	179.298	W	33	N	5.5 4.7	1.0	212	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.4 (PMR). Felt (III) on Adak.
	18	05	34	59.0	34.949	N	32.294	E	49		4.6	0.9	73	CYPRUS. Felt in the Paphos area.
	18	07	54	36.9*	59.816	N	4.391	E	10	G		1.3	7	SOUTHERN NORWAY. MD 2.0 (BER).
	18	08	20	02.5	44.310	N	129.038	W	10	G	4.6 4.5	1.3	51	OFF COAST OF OREGON
a	18	10	32	14.4	55.728	S	27.022	W	33	N	5.5 5.0	1.0	80	SOUTH SANDWICH ISLANDS REGION
	18	10	56	52.6	44.401	N	128.966	W	10	G	4.5 4.4	1.1	45	OFF COAST OF OREGON
	18	14	22	54.2*	0.976	N	126.418	E	33	N	4.8	1.2	24	MOLUCCA PASSAGE
	18	17	00	15.8	14.235	S	75.800	W	44	D	5.0	1.1	66	NEAR COAST OF PERU. Felt (V) at Ico; (IV) at Pisco, Plota and Nazca.
	18	20	28	29.4*	43.925	N	3.973	E	10	G		1.3	11	NEAR SOUTH COAST OF FRANCE. ML 2.5 (LDG).
	18	20	46	57.4	26.091	N	57.361	E	33	N	4.6	1.0	51	SOUTHERN IRAN
	18	21	28	01.9	47.583	N	8.871	E	10	G		1.2	11	SWITZERLAND. ML 2.6 (LDG).
	18	21	31	56.0	63.210	N	150.577	W	33	N		0.8	8	CENTRAL ALASKA. ML 3.0 (PMR).
	18	21	33	50.5	42.250	N	19.979	E	10	G		0.8	14	YUGOSLAVIA. MD 2.7 (TTG).
	18	22	27	00.3*	16.340	N	120.820	E	10		4.5	1.4	27	LUZON, PHILIPPINE ISLANDS
	19	02	14	50.0?	50.08	N	19.34	E	10	G		1.6	5	POLAND. ML 2.6 (KRA).
	19	02	17	52.7?	43.65	N	4.73	W	10	G		0.9	10	SPAIN. ML 3.3 (LDG).
	19	02	25	40.1%	40.788	N	30.226	E	10	G		1.1	7	TURKEY
	19	02	59	57.7	17.370	N	84.327	W	10	G	4.6 3.5	0.6	26	CARIBBEAN SEA
	19	05	29	11.7	37.446	N	118.396	W	5	G		0.5	9	CALIFORNIA-NEVADA BORDER REGION. ML 2.8 (NEIS).
	19	05	47	57.2*	32.562	S	177.902	W	10	G	5.2	1.3	17	SOUTH OF KERMADEC ISLANDS
	19	05	50	11.5&	34.846	N	97.488	W	5	G			7	OKLAHOMA. <TUL>. mbLg 2.1 (TUL).
	19	05	56	48.8%	15.256	N	61.341	W	10	G		0.3	8	LEEWARD ISLANDS. ML 2.8 (FDF).
	19	06	12	14.3	11.455	S	118.724	E	33	N	4.2	0.9	13	SOUTH OF SUMBAWA ISLAND
	19	06	12	21.9	17.821	S	178.732	W	623	*	4.6	0.6	44	FIJI ISLANDS REGION
	19	07	09	39.6*	28.752	S	68.957	W	130	?		1.3	15	LA RIOJA PROVINCE, ARGENTINA
	19	07	43	48.9?	43.72	N	0.29	W	10	G		1.5	5	PYRENEES. ML 3.2 (LDG).
	19	07	47	12.6*	51.799	N	175.193	W	33	N	4.7	1.1	19	ANDREANOF ISLANDS, ALEUTIAN IS.
	19	08	41	09.7*	45.551	N	26.497	E	188	*		0.8	11	ROMANIA
a	19	09	32	45.6*	28.034	S	176.196	W	10	G	4.9 5.0	1.3	30	KERMADEC ISLANDS REGION
	19	10	00	16.1*	20.903	S	70.919	W	33	N		1.3	6	NEAR COAST OF NORTHERN CHILE
a	19	10	02	16.4*	32.722	S	178.839	W	33	N	5.3 4.7	1.4	34	SOUTH OF KERMADEC ISLANDS
	19	14	01	08.1*	40.278	N	25.853	E	10	G		1.1	5	AEGEAN SEA
	19	18	05	51.1&	60.109	N	151.450	W	66				34	KENAI PENINSULA, ALASKA. <AGS-P>.
	19	18	49	31.9*	6.560	S	129.871	E	165	?	4.6	1.3	24	BANDA SEA
	19	19	38	01.6?	16.30	N	148.10	E	33	N	5.1	1.1	19	MARIANA ISLANDS REGION
	19	22	25	17.4?	33.22	S	179.23	W	33	N	4.7	1.5	12	SOUTH OF KERMADEC ISLANDS
	19	22	30	47.0&	61.394	N	149.702	W	39				40	SOUTHERN ALASKA. <AGS-P>. ML 3.7 (PMR). Felt (IV) at Chugiak and (III) at Anchorage, Eagle River and Palmer.
	19	22	41	25.2	40.200	N	21.560	E	35	*	4.1	1.1	28	GREECE. ML 4.0 (ATH), 3.8 (TTG).
	19	23	07	52.2&	61.389	N	149.698	W	37				33	SOUTHERN ALASKA. <AGS-P>.
	20	00	16	16.7*	9.812	N	126.256	E	48	*	4.9	1.1	27	MINDANAO, PHILIPPINE ISLANDS
	20	02	41	00.0&	62.063	N	151.431	W	82				20	CENTRAL ALASKA. <AGS-P>.
	20	04	44	40.4&	60.144	N	152.764	W	101				31	SOUTHERN ALASKA. <AGS-P>.
	20	05	26	50.9	48.030	N	7.504	E	10	G		0.4	7	FRANCE. ML 2.3 (LDG).
	20	10	15	26.2*	6.208	S	147.906	E	48	*	4.8	1.4	14	EAST PAPUA NEW GUINEA REGION
	20	10	30	15.1*	17.636	S	178.668	W	604		4.7	0.9	60	FIJI ISLANDS REGION
	20	13	10	35.4*	24.169	N	122.098	E	33	N	3.9	1.4	14	TAIWAN REGION
	20	14	27	34.4	7.047	S	129.704	E	49		5.0	1.1	89	BANDA SEA
	20	17	59	04.4*	40.384	N	32.956	E	10	G		0.2	6	TURKEY
	20	18	30	56.1	2.396	S	138.368	E	27	*	4.8	1.3	34	WEST IRIAN
	20	20	30	17.2	41.861	N	20.300	E	10	G		1.1	12	ALBANIA. ML 3.1 (SKO), 2.8 (TTG).
	20	20	52	57.5	42.520	N	142.139	E	33	N	4.7	0.7	15	HOKKAIDO, JAPAN REGION
	20	23	30	01.4*	16.625	S	176.731	E	32	*	4.2	1.1	12	FIJI ISLANDS REGION
	21	00	34	27.7*	12.637	S	77.089	W	10	G		0.7	6	NEAR COAST OF PERU
	21	01	01	57.3	41.273	N	23.663	E	10	G		0.7	9	GREECE-BULGARIA BORDER REGION. ML 1.4 (SKO).
	21	01	05	20.0*	0.597	N	126.152	E	42	*	5.2 4.3	1.1	64	MOLUCCA PASSAGE
	21	05	38	53.6*	5.982	S	148.252	E	68	?	4.4	1.6	8	NEW BRITAIN REGION
	21	06	06	36.0&	37.237	N	121.650	W	3				12	CENTRAL CALIFORNIA. <BRK>. ML 2.7 (BRK).
	21	06	53	23.4?	6.51	S	147.35	E	57	?	3.8	1.3	5	EAST PAPUA NEW GUINEA REGION
	21	07	03	47.1&	61.382	N	150.968	W	65				37	SOUTHERN ALASKA. <AGS-P>.
	21	09	31	39.5	8.488	S	74.212	W	169	D	4.8	0.8	100	PERU-BRAZIL BORDER REGION
	21	10	59	09.3*	60.428	S	26.454	W	33	N	5.2 5.2	1.2	36	SOUTH SANDWICH ISLANDS REGION
	21	12	05	32.4&	37.510	N	118.400	W	6	G			14	CALIFORNIA-NEVADA BORDER REGION. <PAS-P>. ML 3.1 (PAS).
	21	12	55	15.6*	6.013	S	104.870	E	33	N	4.8	1.1	30	SUNDA STRAIT
	21	13	02	19.6&	36.590	N	121.228	W	6				22	CENTRAL CALIFORNIA. <BRK>. ML 3.3 (BRK), 3.2 (PAS).
	21	13	32	45.2?	5.54	S	131.39	E	33	N		1.1	5	BANDA SEA
	21	14	22	31.2*	14.535	N	123.649	E	95	*	4.5	1.2	17	LUZON, PHILIPPINE ISLANDS
a	21	15	26	26.9	6.103	S	147.778	E	44	D	5.4 5.2	1.2	70	EAST PAPUA NEW GUINEA REGION
	21	15	57	14.0*	37.841	N	27.207	E	10	G		1.0	11	TURKEY
	21	15	57	22.8*	55.576	N	161.405	E	33	N	4.6 4.6	0.6	30	NEAR EAST COAST OF KAMCHATKA
	21	16	14	36.2?	5.90	S	148.03	E	33	N	4.1	1.4	5	NEW BRITAIN REGION
	21	17	34	34.8*	14.064	S	167.046	E	33	N	4.2	0.7	20	VANUATU ISLANDS
	21	17	41	40.2*	16.245	S	167.554	E	33	N	4.2	0.8	20	VANUATU ISLANDS
	21	18	21	58.6*	31.612	S	177.822	W	33	N	4.9	1.5	16	KERMADEC ISLANDS REGION
	21	18	28	27.1&	60.127	N	152.905	W	96				26	SOUTHERN ALASKA. <AGS-P>.
	21	18	46	43.1*	33.486	S	179.181	W	33	N	4.5	1.6	8	SOUTH OF KERMADEC ISLANDS
	21	18	53	14.0	2.769	S	138.614	E	43	*	4.5 4.3	1.2	31	WEST IRIAN
	21	19	02	56.6*	51.759	N	16.447	E	10	G		1.0	11	POLAND. ML 3.4 (GRF), 3.4 (VKA), 3.1 (KBA).
	21	19	29	59.6%	40.479	N	27.209	E	10	G		0.2	5	TURKEY

	21	20	36	39.4?	11.23	N	86.55	W	33	N	4.4	3.8	0.9	15	NEAR COAST OF NICARAGUA
	21	20	39	01.3	36.011	N	139.761	E	97		4.7		1.0	35	HONSHU, JAPAN. Felt (II JMA) at Mito and Utsunomiyo; (I JMA) at Ajiro, Kumagoyo and Tokyo.
	21	20	49	04.5?	25.10	N	122.32	E	79	*	4.4		0.2	11	TAIWAN REGION
	21	22	17	54.7?	4.65	S	143.68	E	33	N	4.1		1.3	6	PAPUA NEW GUINEA
o	21	22	19	55.3	54.931	N	110.981	E	33	N	4.7	4.7	1.1	33	LAKE BAIKAL REGION
	21	22	31	06.2	11.215	N	86.834	W	33	N	4.5	3.6	0.9	22	NEAR COAST OF NICARAGUA
	21	23	15	29.9&	34.130	N	117.450	W	8					27	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.9 (PAS). Felt (V) at Colton and (IV) at Atwood, Crestline, Crest Park, Fontana, Guasti, Mira Loma, Ontario and San Bernardino. Felt in parts of Los Angeles, Orange, Riverside and San Bernardino Counties.
o	22	01	22	29.5	78.866	N	125.966	E	10	G	5.2	5.1	0.9	172	EAST OF SEVERNAYA ZEMLYA
	22	02	32	18.5	63.808	N	22.677	W	10	G	4.1		0.9	24	ICELAND REGION
	22	03	18	02.3	42.215	N	24.942	E	8				1.1	24	BULGARIA
	22	04	27	22.0*	4.980	S	133.421	E	33	N	4.6		1.4	14	WEST IRIAN REGION
	22	04	48	21.4*	36.556	N	71.214	E	33	N	4.7		1.4	13	AFGHANISTAN-USSR BORDER REGION
	22	04	50	32.1%	45.176	N	3.359	E	10	G			0.7	9	FRANCE. ML 2.4 (LDG).
	22	06	51	41.8	38.418	N	40.551	E	10	G	4.9		1.1	43	TURKEY. Felt in the Mardin-Elozig-Bingol oreo.
	22	09	28	46.1*	19.261	S	68.523	W	33	N			1.0	6	CHILE-BOLIVIA BORDER REGION
	22	09	29	35.8%	39.571	N	29.415	E	10	G			0.6	5	TURKEY
	22	09	33	41.9	43.295	N	25.901	E	10	G			0.7	7	BULGARIA
	22	10	22	03.7*	38.098	N	20.547	E	24		4.1		0.9	21	GREECE. ML 3.9 (TTG), 3.8 (ATH).
	22	12	12	40.0%	15.773	N	60.551	W	23	*			0.2	8	LEEWARD ISLANDS. ML 2.7 (FDF).
	22	12	26	44.9*	40.232	N	139.117	E	33	N	4.5		0.8	13	NEAR WEST COAST OF HONSHU, JAPAN
	22	12	45	46.5*	6.338	S	154.362	E	41	*	4.6		0.5	9	SOLOMON ISLANDS
	22	13	18	20.9*	32.784	S	71.645	W	13				0.7	14	NEAR COAST OF CENTRAL CHILE. Felt (II) at Santiago.
	22	13	24	08.1%	39.048	N	27.842	E	10	G			1.2	6	TURKEY
	22	13	48	31.6	45.347	N	112.494	W	5	G			0.7	10	MONTANA. ML 2.9 (NEIS), 3.3 (BUT).
	22	14	12	13.2%	39.280	N	27.609	E	10	G			1.0	6	TURKEY
	22	17	54	49.6*	6.769	S	155.825	E	152	*	4.3		0.9	10	SOLOMON ISLANDS
	22	18	43	10.3	31.503	S	67.977	W	10	G			0.9	6	SAN JUAN PROVINCE, ARGENTINA
	22	19	14	19.8?	45.04	N	3.11	E	10	G			0.8	6	FRANCE. ML 2.1 (LDG).
	22	19	22	11.4&	62.278	N	150.317	W	59					26	CENTRAL ALASKA. <AGS-P>.
	22	20	35	31.1*	7.536	S	127.533	E	94	?	4.4		1.2	19	BANDA SEA
	22	22	35	57.5?	6.60	S	147.73	E	63	?	4.3		0.9	7	EAST PAPUA NEW GUINEA REGION
	22	23	05	03.8*	36.214	N	140.072	E	33	N			0.3	5	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Mito and Utsunomiyo.
	22	23	52	44.9*	32.208	S	68.510	W	33	N			0.9	5	MENDOZA PROVINCE, ARGENTINA
	22	23	56	44.1%	16.770	N	61.484	W	33	N			0.6	6	LEEWARD ISLANDS. ML 2.8 (FDF).
o	23	00	21	21.2	38.983	N	70.706	E	33	N	5.0	4.7	1.4	87	AFGHANISTAN-USSR BORDER REGION. Felt (VI) at Garm; (V) at Khait and Tavildara; (IV) at Dzhirgotol, Obigarm and Rogun. Also felt (III) at Dushonbe and Kulyob and (II) at Khorog, USSR.
	23	01	31	15.8%	46.101	N	1.641	E	10	G			0.5	7	FRANCE. ML 2.1 (LDG).
	23	02	14	15.3?	19.76	S	168.80	E	33	N	4.7		0.8	10	VANUATU ISLANDS
o	23	02	43	39.5	57.922	S	25.350	W	27	D	5.9	5.7	1.0	176	SOUTH SANDWICH ISLANDS REGION
	23	03	11	21.5%	59.967	N	5.755	E	10	G			0.2	5	SOUTHERN NORWAY. MD 1.6 (BER).
	23	03	19	08.5	39.083	N	27.808	E	10	G			1.0	10	TURKEY
	23	03	37	25.3?	65.91	S	174.96	W	10	G	4.8	4.8	1.4	11	SOUTH PACIFIC CORDILLERA
	23	04	16	55.5%	40.337	N	27.439	E	10	G			1.4	9	TURKEY
	23	07	19	58.9	13.645	N	123.896	E	42		4.8		0.9	49	LUZON, PHILIPPINE ISLANDS
	23	07	45	25.7*	24.647	N	123.286	E	33	N	4.4		0.8	9	SOUTHWESTERN RYUKYU ISLANDS
	23	08	05	19.5?	54.57	N	161.15	E	33	N	4.5		0.9	14	NEAR EAST COAST OF KAMCHATKA
	23	10	57	16.9&	39.392	N	112.157	W	3					20	UTAH. <SLC-P>. MD 2.8 (SLC).
	23	11	23	47.4*	34.378	N	57.324	E	33	N	4.6		1.0	7	IRAN. ML 4.5 (MHI). Felt at Tabas and Ferdows.
o	23	11	27	52.3*	15.699	S	177.103	W	13		5.0	5.1	1.1	39	FIJI ISLANDS REGION
	23	13	14	19.2	7.342	S	120.019	E	626		5.2		1.0	90	FLORES SEA
	23	15	03	56.8	24.969	N	123.803	E	33	N	4.7		1.3	19	SOUTHWESTERN RYUKYU ISLANDS
	23	15	10	48.3	6.225	S	147.233	E	109	*	3.9		1.4	21	EAST PAPUA NEW GUINEA REGION
o	23	15	49	54.6	15.854	S	167.891	E	234		5.9		1.1	289	VANUATU ISLANDS. Two events about 6 seconds apart, observed on broadband displacement seismograms.
	23	17	16	54.4*	4.352	S	152.733	E	33	N			1.1	7	NEW BRITAIN REGION
	23	18	19	01.8	25.146	N	123.936	E	17		4.7		1.2	56	NORTHEAST OF TAIWAN
	23	19	15	14.1*	31.734	S	68.024	W	10	G			1.5	5	SAN JUAN PROVINCE, ARGENTINA
	23	19	43	26.3&	60.090	N	152.908	W	114					30	SOUTHERN ALASKA. <AGS-P>.
	23	20	41	27.8*	15.857	N	147.022	E	33	N	4.5		1.4	27	MARIANA ISLANDS REGION
	23	21	19	08.5?	56.26	S	27.05	W	33	N	5.1		1.4	11	SOUTH SANDWICH ISLANDS REGION
	23	22	22	10.9*	39.890	N	7.582	W	10	G			1.1	5	PORTUGAL. MG 3.0 (MTH). Felt (III) at Castelo Branco.
	23	22	24	39.0*	5.855	S	146.863	E	70	*	4.4		1.3	12	EAST PAPUA NEW GUINEA REGION
	23	22	31	05.7	41.355	N	79.310	E	33	N	4.6		1.0	26	KIRGHIZ-XINJIANG BORDER REGION
	23	22	49	14.9*	3.878	S	145.602	E	33	N	4.1		1.3	9	NEAR N COAST OF PAPUA NEW GUINEA
	23	23	42	10.2?	51.72	N	8.58	E	10	G			0.6	5	GERMANY. ML 2.4 (BNS).
	23	23	49	35.4	0.824	N	126.355	E	47	*	5.1		1.2	52	MOLUCCA PASSAGE
o	24	00	51	26.7	56.608	S	147.329	E	10	G	5.8	5.8	1.1	110	WEST OF MACQUARIE ISLAND
	24	01	18	52.0	51.487	N	176.773	W	33	N	5.1	5.1	1.2	71	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.3 (PMR). Felt (IV) on Adak.
	24	01	36	22.7	22.046	S	68.339	W	122	D	5.1		1.2	64	NORTHERN CHILE
	24	02	52	38.2	51.658	N	16.370	E	12				0.6	10	POLAND. ML 3.4 (GRF), 3.4 (VKA), 3.3 (KBA).
	24	03	38	38.3*	30.023	S	71.387	W	33	N			1.0	13	NEAR COAST OF CENTRAL CHILE
	24	04	12	00.5%	44.400	N	7.222	E	10	G			0.3	14	NORTHERN ITALY. ML 2.7 (LDG).
	24	04	39	11.5	43.488	N	126.821	W	10	G	4.5		1.2	24	OFF COAST OF OREGON
	24	05	36	00.9*	0.141	S	98.932	E	54	?	4.3		1.3	16	SOUTHERN SUMATERA
	24	06	15	21.9	51.437	N	174.808	W	33	N	5.0	4.7	0.9	99	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.6 (PMR).
	24	07	40	08.7	52.556	N	157.736	E	121	D	5.0		0.7	141	KAMCHATKA
	24	09	21	05.5*	19.672	S	68.877	W	147	*	4.2		0.9	17	CHILE-BOLIVIA BORDER REGION
	24	09	41	36.4&	59.956	N	153.637	W	152					28	SOUTHERN ALASKA. <AGS-P>.
	24	14	52	49.0	4.290	N	95.161	E	50	*	5.1	4.4	0.9	98	NORTHERN SUMATERA
	24	16	29	31.5	43.593	N	10.659	E	10	G			1.1	17	CENTRAL ITALY. MD 2.9 (FIR). ML 2.9 (LDG), 2.8 (KBA).
	24	16	32	17.1*	16.756	N	145.530	E	33	N	4.9		0.9	10	MARIANA ISLANDS
	24	17	57	48.5*	6.128	S	147.866	E	50	?	3.3		0.6	6	EAST PAPUA NEW GUINEA REGION
	24	18	23	53.3?	30.73	S	178.61	W	33	N	4.8		1.2	8	KERMADEC ISLANDS
	24	19	32	32.6*	3.070	S	129.471	E	33	N	4.8		1.2	23	CERAM

	24	20 14 41.7	38.305	N	22.411	E	60	•	3.7		1.0	18	GREECE
	24	20 47 21.7•	24.092	S	66.665	W	205	?	4.4		1.2	11	SALTA PROVINCE, ARGENTINA
	24	21 11 53.8%	16.765	N	61.389	W	10	G			0.7	6	LEEWARD ISLANDS. ML 3.0 (FDF).
	24	22 17 07.5•	29.052	N	81.854	E	112	?	4.4		0.9	11	NEPAL
	24	23 00 56.8•	43.732	N	145.600	E	33	N	4.1		0.7	9	HOKKAIDO, JAPAN REGION
	24	23 17 27.6•	36.257	N	27.867	E	10	G			0.6	7	DODECANESE ISLANDS
	25	00 52 43.6&	59.774	N	152.092	W	71					33	SOUTHERN ALASKA. <AGS-P>.
	25	00 52 56.5	38.330	N	26.755	E	10	G			0.7	19	AEGEAN SEA. ML 3.9 (ATH).
	25	00 54 18.8%	15.387	N	60.714	W	30	•			1.3	9	LEEWARD ISLANDS. ML 3.1 (FDF).
	25	00 59 46.1•	38.217	N	26.669	E	10	G			1.0	5	AEGEAN SEA
a	25	01 07 52.8	2.480	S	141.879	E	30		5.4	5.1	1.1	128	NEAR N COAST OF PAPUA NEW GUINEA
a	25	02 01 21.4	27.912	S	177.074	W	72	•	5.0		1.0	34	KERMADEC ISLANDS REGION. Felt (IV) on Raoul Island.
	25	03 46 59.8•	9.211	S	109.816	E	33	N	4.4		1.4	10	SOUTH OF JAVA
	25	04 00 30.0•	5.590	S	103.632	E	43	•	4.9		1.0	27	SOUTHERN SUMATERA
	25	05 22 38.9•	31.351	S	67.800	W	10	G			1.5	11	SAN JUAN PROVINCE, ARGENTINA
	25	09 15 37.3•	34.847	N	140.930	E	33	N	4.1		0.5	6	NEAR EAST COAST OF HONSHU, JAPAN
	25	09 34 55.3•	12.632	S	77.015	W	10	•			1.3	6	NEAR COAST OF PERU
a	25	10 42 45.0	27.927	S	66.835	W	172	D	5.2		1.3	81	CATAMARCA PROVINCE, ARGENTINA
	25	11 11 44.9	56.504	N	153.069	W	33	N	4.6		1.2	27	KODIAK ISLAND REGION. ML 3.7 (PMR).
a	25	11 27 13.6	6.123	S	147.637	E	65	D	5.6		1.0	200	EAST PAPUA NEW GUINEA REGION
	25	12 20 47.7	43.322	N	20.909	E	15		4.6		0.9	33	YUGOSLAVIA. ML 3.4 (TTG), 3.2 (KBA). About 300 homes damaged in the epicentral area.
	25	12 26 33.9&	60.404	N	147.539	W	27		4.0			45	SOUTHERN ALASKA. <AGS-P>. ML 3.7 (PMR).
	25	12 30 33.5&	41.823	N	112.322	W	2		3.9			40	UTAH. <SLC-P>. ML 3.7 (SLC), 3.7 (NEIS). Felt (V) at Howell and Garland, (IV) at Fielding, Plymouth, Portage, Riverside and Snowville, (III) at Franklin, Lewiston, Newton, Park Valley and Willard. Also felt (IV) at Malad City, Idaho and (III) at Holbrook and Stone, Idaho.
	25	13 52 27.2&	31.450	N	114.720	W	6	G				3	GULF OF CALIFORNIA. <PAS-P>. ML 3.0 (PAS).
	25	14 11 36.8?	58.21	N	6.40	E	10	G			0.7	7	SOUTHERN NORWAY. MD 2.4 (BER).
	25	14 28 05.3	21.730	N	111.643	E	33	N	4.1		1.1	16	EASTERN CHINA. Felt at Foshan, Guangzhou, Zhanjiang, Zhaoqing and Wuzhou.
	25	14 37 05.9	7.679	S	116.980	E	305		5.4		1.1	124	BALI SEA
a	25	15 20 18.4	18.808	N	121.080	E	16		5.3	5.3	1.2	181	LUZON, PHILIPPINE ISLANDS. Felt (VI RF) at Pasuquin, (III RF) at Santa and (II RF) at Callao Cove.
	25	15 24 19.4•	42.807	N	23.323	E	10	G			1.2	7	BULGARIA
	25	17 43 15.2&	62.352	N	147.767	W	41					32	CENTRAL ALASKA. <AGS-P>. ML 3.5 (PMR).
	25	18 15 46.7	44.193	N	10.027	E	10	G			1.1	13	NORTHERN ITALY. ML 3.0 (LDG), 2.6 (KBA).
	25	18 43 23.7•	13.566	N	121.801	E	153				0.4	8	MINDORO, PHILIPPINE ISLANDS
	25	18 47 27.7%	44.226	N	10.125	E	10	G			0.5	9	NORTHERN ITALY. ML 2.8 (LDG).
	25	19 55 08.5•	40.974	N	116.321	W	5	G			0.7	13	NEVADA. ML 3.8 (NEIS).
a	25	19 56 35.5	38.102	N	91.179	E	26	D	5.7	5.7	0.9	282	QINGHAI PROVINCE, CHINA. Felt in the Mangya area.
	25	20 27 24.9	38.138	N	91.217	E	33	N	5.0		0.7	76	QINGHAI PROVINCE, CHINA
	25	23 30 02.1&	33.230	N	116.070	W	7					9	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
	26	00 18 18.0•	60.452	N	59.046	E	10	G	4.5		1.1	12	URAL MOUNTAINS REGION
a	26	00 24 03.5	30.036	N	141.927	E	33	N	5.2	4.8	1.0	144	SOUTH OF HONSHU, JAPAN
	26	00 40 09.0•	16.072	S	167.188	E	33	N			1.1	15	VANUATU ISLANDS
	26	02 04 07.2&	35.308	N	96.620	W	5	G				6	OKLAHOMA. <TUL>. mbLg 1.9 (TUL).
	26	04 02 05.6&	72.890	N	70.280	W	18		4.0			11	BAFFIN BAY. <OTT>.
	26	04 05 27.0	6.811	S	125.841	E	485		5.0		0.9	60	BANDA SEA
	26	04 19 20.0•	7.918	N	126.442	E	109	•	4.4		1.1	11	MINDANAO, PHILIPPINE ISLANDS
	26	04 25 22.0?	48.07	N	129.03	W	10	G	3.8		1.5	7	VANCOUVER ISLAND REGION
	26	04 30 35.8	19.700	S	168.707	E	43	•	5.2		1.3	81	VANUATU ISLANDS
	26	04 31 39.7?	35.45	N	21.49	E	33	N	3.7		0.8	7	MEDITERRANEAN SEA
	26	04 36 08.4	19.795	S	168.693	E	50		5.4	5.2	1.2	112	VANUATU ISLANDS
	26	04 46 31.8%	42.301	N	19.045	E	10	G			0.4	6	YUGOSLAVIA. ML 2.2 (TTG).
	26	04 50 10.1•	48.277	N	7.643	E	10	G			0.6	7	FRANCE. ML 2.7 (LDG).
	26	04 58 22.0	49.839	N	78.122	E	0	G	5.4		0.9	172	EASTERN KAZAKH SSR
	26	05 32 40.5	4.487	N	126.287	E	33	N	5.1		1.0	35	TALAUD ISLANDS
	26	05 39 02.9	6.798	N	73.025	W	160		4.2		1.0	17	NORTHERN COLOMBIA
	26	06 37 37.6•	1.466	N	126.654	E	33	N	4.6		0.4	7	MOLUCCA PASSAGE
	26	06 39 52.7%	42.330	N	18.887	E	10	G			0.7	7	YUGOSLAVIA. ML 2.5 (TTG). Felt slightly at Budva.
	26	07 34 18.6?	51.46	N	175.24	W	33	N	4.5		1.4	13	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.5 (PMR).
	26	07 49 48.4	42.356	N	18.891	E	10	G			1.3	15	YUGOSLAVIA. ML 3.0 (TTG). Felt.
	26	08 54 38.3•	8.390	S	80.180	W	33	N	4.6		1.1	9	OFF COAST OF NORTHERN PERU
	26	08 58 41.1•	37.811	N	91.145	E	33	N	4.3		1.0	7	QINGHAI PROVINCE, CHINA
	26	09 43 26.5•	31.911	S	68.643	W	33	N			1.0	5	SAN JUAN PROVINCE, ARGENTINA
	26	10 48 54.6	53.507	N	163.696	W	33	N	4.8		1.1	61	UNIMAK ISLAND REGION
	26	11 04 31.3&	32.960	N	117.730	W	6	G				9	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.0 (PAS).
	26	12 16 47.8	6.116	S	104.766	E	33	N	5.2	4.6	1.0	59	SUNDA STRAIT
	26	12 17 59.6•	37.817	N	141.975	E	49	•	4.3		0.9	14	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Ishinomaki and Miyako.
	26	12 19 08.9•	10.281	N	86.484	W	33	N	4.1		0.7	11	OFF COAST OF COSTA RICA. MD 4.2 (HDC).
	26	12 28 40.2?	10.41	N	86.82	W	33	N	4.2		0.1	9	OFF COAST OF COSTA RICA. MD 4.3 (HDC).
	26	12 41 09.6&	37.545	N	118.890	W	7					21	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.1 (BRK), 3.2 (PAS).
	26	12 44 20.2&	61.953	N	151.245	W	75					22	SOUTHERN ALASKA. <AGS-P>.
	26	13 01 22.5&	41.827	N	112.327	W	3					6	UTAH. <SLC-P>. ML 2.8 (SLC).
	26	13 02 00.2&	37.547	N	118.890	W	8					27	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.5 (BRK), 3.4 (PAS).
	26	13 02 51.6%	60.396	N	5.100	E	10	G			0.6	7	SOUTHERN NORWAY. MD 1.5 (BER).
	26	13 13 24.6•	14.575	N	119.230	E	62	•	4.5		1.3	19	LUZON, PHILIPPINE ISLANDS
	26	13 16 19.5•	14.555	N	119.067	E	33	N	4.7		0.7	10	LUZON, PHILIPPINE ISLANDS
	26	13 20 32.3	14.533	N	119.139	E	36		4.7		1.0	42	LUZON, PHILIPPINE ISLANDS
	26	13 24 06.9	14.580	N	119.141	E	32		5.1		1.0	42	LUZON, PHILIPPINE ISLANDS
	26	13 55 40.9•	63.136	N	149.973	W	33	N			0.4	5	CENTRAL ALASKA. ML 3.0 (PMR).
	26	15 59 34.8•	8.572	S	75.433	W	33	N	5.1		1.0	11	PERU
	26	16 01 58.0•	20.322	S	173.727	W	33	N	4.8		1.4	22	TONGA ISLANDS
	26	16 35 30.8	39.491	N	25.644	E	10	G			0.9	14	AEGEAN SEA
	26	17 13 17.1	27.633	S	67.594	W	175	•			0.9	14	CATAMARCA PROVINCE, ARGENTINA
	26	18 02 13.9%	39.095	N	28.508	E	10	G			1.1	5	TURKEY
	26	18 02 31.0?	5.29	S	148.10	E	33	N	3.7		1.2	7	NEW BRITAIN REGION

	26	19	28	36.9	38.908	N	27.807	E	10	G		0.6	6	TURKEY
	26	23	20	45.6*	41.457	N	20.301	E	33	N		1.2	11	ALBANIA. ML 2.7 (TTG).
	27	00	43	36.0	38.497	N	21.380	E	10	G		1.3	11	GREECE. ML 3.6 (ATH).
	27	00	51	07.1?	15.10	N	118.76	E	33	N	4.5	0.3	5	PHILIPPINE ISLANDS REGION
	27	01	15	17.0%	42.383	N	19.797	E	10	G		0.5	6	YUGOSLAVIA. ML 2.2 (TTG).
a	27	01	39	55.4*	2.399	N	98.612	W	33	N	4.8 4.6	1.2	43	WEST OF GALAPAGOS ISLANDS
	27	02	00	25.5	47.923	N	7.904	E	10	G		0.2	7	SWITZERLAND. ML 2.2 (LDG).
	27	02	46	04.0&	40.900	N	123.300	W	18				7	NORTHERN CALIFORNIA. <BRK>. ML 2.8 (BRK).
	27	03	53	08.9?	36.70	N	36.62	E	10	G		1.4	6	JORDAN - SYRIA REGION
	27	04	25	40.8&	59.587	N	152.800	W	80				15	SOUTHERN ALASKA. <AGS-P>.
	27	04	49	01.5%	46.213	N	3.413	E	10	G		0.3	5	FRANCE. ML 1.9 (LDG).
	27	04	50	31.9%	46.243	N	3.392	E	10	G		0.2	9	FRANCE. ML 2.2 (LDG).
	27	05	21	18.9*	4.096	S	135.581	E	33	N	4.3	0.9	10	WEST IRIAN REGION
	27	06	20	26.1&	35.710	N	117.710	W	5				9	CENTRAL CALIFORNIA. <PAS-P>. ML 3.1 (PAS).
	27	06	23	06.1&	59.976	N	153.308	W	143		4.4		36	SOUTHERN ALASKA. <AGS-P>.
	27	06	44	47.6?	11.45	S	122.32	E	33	N	4.0	1.1	6	SOUTH OF TIMOR
a	27	06	50	54.4	17.238	S	176.953	W	10	G	5.2	1.4	72	FIJI ISLANDS REGION
	27	07	32	09.3*	23.060	S	66.669	W	234	*		0.4	8	JUJUY PROVINCE, ARGENTINA
	27	08	13	59.8	54.758	N	162.116	E	33	N	4.8	0.8	47	NEAR EAST COAST OF KAMCHATKA
f	27	08	31	54.4	53.470	N	167.291	W	10	G	6.2 6.7	1.1	428	FOX ISLANDS, ALEUTIAN ISLANDS. Ms 6.8 (BRK), 6.5 (PAS). Minor damage at Dutch Harbor and Unalaska. Felt (V) at Akutan, (III) at Cold Bay and False Pass and (II) at Sandpaint.
	27	09	02	14.5?	53.54	N	167.48	W	10	G	4.7	0.6	10	FOX ISLANDS, ALEUTIAN ISLANDS
	27	09	02	31.9*	53.188	N	167.407	W	10	G	4.5	1.2	19	FOX ISLANDS, ALEUTIAN ISLANDS
	27	09	54	08.6	53.527	N	167.318	W	10	G	4.6	1.0	31	FOX ISLANDS, ALEUTIAN ISLANDS
	27	10	12	30.7*	53.630	N	167.090	W	10	G	4.3	0.9	14	FOX ISLANDS, ALEUTIAN ISLANDS
	27	10	36	53.7%	42.362	N	19.837	E	10	G		0.4	6	YUGOSLAVIA. ML 2.4 (TTG).
	27	10	46	03.8	5.435	S	148.175	E	49	*	4.7	1.2	16	NEW BRITAIN REGION
	27	11	48	33.3?	40.72	N	19.47	E	10	G		0.5	5	ALBANIA. ML 2.6 (TTG).
	27	12	17	59.6?	16.73	S	167.47	E	222	?	4.4	0.8	20	VANUATU ISLANDS
	27	12	29	55.1&	38.815	N	122.795	W	5				20	NORTHERN CALIFORNIA. <BRK>. ML 3.4 (BRK). Mo=2.2*10**14 Nm (BRK). Felt at Middletown.
	27	12	34	50.6	2.514	S	126.411	E	33	N	4.5	1.0	24	CERAM SEA
	27	12	57	05.5*	53.377	N	167.207	W	10	G	4.6	0.5	7	FOX ISLANDS, ALEUTIAN ISLANDS
	27	14	56	23.8?	53.20	N	167.12	W	10	G	4.4	1.9	11	FOX ISLANDS, ALEUTIAN ISLANDS
	27	15	00	14.9	53.469	N	167.235	W	10	G	4.5	0.8	21	FOX ISLANDS, ALEUTIAN ISLANDS
	27	16	24	57.7&	37.542	N	118.887	W	8				29	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.9 (BRK), 3.5 (PAS). Felt (III) at Mammoth Lakes, Califarnia.
	27	17	36	51.8%	15.090	N	60.578	W	33	N		0.3	10	LEEWARD ISLANDS. ML 2.6 (FDF).
	27	20	20	16.7&	40.400	N	126.245	W	10	G			15	OFF COAST OF NORTHERN CALIFORNIA. <BRK>. ML 3.5 (BRK).
	27	20	25	54.9	39.021	N	24.821	E	10	G		0.5	6	AEGEAN SEA. ML 3.0 (ATH).
	27	20	58	17.5*	53.571	N	167.266	W	10	G	4.5	1.3	32	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.7 (PMR).
	27	21	43	44.2*	1.443	N	126.886	E	100	?	4.7	0.9	19	MOLUCCA PASSAGE
a	27	21	51	12.3	6.063	S	112.792	E	584		5.4	1.0	83	JAVA
	27	22	18	10.6*	24.111	S	68.069	W	127	*	4.6	1.4	16	CHILE-ARGENTINA BORDER REGION
	27	22	43	19.8&	34.470	N	120.800	W	6	G			13	SOUTHERN CALIFORNIA. <AGS-P>. ML 3.6 (PAS). Felt (III) at Lampoc. Also felt at San Luis Obispo.
	27	23	08	23.9*	53.284	N	167.113	W	10	G	4.4	1.0	16	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.1 (PMR).
	27	23	25	56.1	53.753	N	167.301	W	10	G	4.5	1.1	32	FOX ISLANDS, ALEUTIAN ISLANDS
a	27	23	34	52.0	38.473	N	20.290	E	5	G	5.3 5.5	1.2	296	GREECE. MD 5.6 (TTG), ML 5.4 (ATH). Felt strongly on Kefallinia.
	28	00	10	22.3	33.591	S	71.306	W	39	*		0.7	15	NEAR COAST OF CENTRAL CHILE. Felt (II) at Santiago.
	28	01	50	01.8*	57.951	S	25.410	W	33	N	4.9	0.7	13	SOUTH SANDWICH ISLANDS REGION
	28	02	09	02.7	18.104	N	68.858	W	103	D	4.7	0.9	43	MONA PASSAGE
	28	02	25	33.9*	53.158	N	167.183	W	10	G	4.7	1.1	27	FOX ISLANDS, ALEUTIAN ISLANDS
	28	03	38	11.7?	51.16	N	19.98	E	10	G		1.2	9	POLAND. ML 3.0 (KRA).
	28	04	00	08.7	0.475	N	126.462	E	33	N	4.8	1.2	20	MOLUCCA PASSAGE
	28	04	01	20.4	35.903	N	1.439	E	10		4.0	0.8	30	ALGERIA. Felt at Bordj Bounaoma.
	28	04	14	11.3*	53.604	N	166.849	W	10	G		1.0	9	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).
	28	04	15	06.4	9.772	S	118.261	E	59	*	4.9	1.2	48	SUMBAWA ISLAND REGION
	28	05	06	25.3	22.491	S	67.486	W	167		4.5	1.0	27	CHILE-BOLIVIA BORDER REGION
	28	06	01	52.3?	18.90	N	63.23	W	33	N		0.2	5	LEEWARD ISLANDS. ML 3.7 (FDF).
	28	06	14	41.1*	18.713	N	63.251	W	33	N		0.5	11	LEEWARD ISLANDS. ML 4.2 (FDF).
a	28	06	52	03.4	36.957	N	141.603	E	49		5.3 5.3	1.1	175	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Shirakawa, (II JMA) in the Sendai-Mita-Utsunomiya area, and (I JMA) in the Takya-Mariaka-Chashi area.
	28	07	32	43.8	37.936	N	141.117	E	92		4.8	0.9	91	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Miyako and Ofunato; (I JMA) in the Ishinamaki-Utsunamiya area.
	28	07	41	33.8?	60.36	N	2.38	E	10	G		0.2	7	NORTH SEA. MD 2.4 (BER).
	28	10	27	27.4%	39.265	N	27.631	E	10	G		0.4	6	TURKEY
	28	10	53	12.6?	5.03	S	148.38	E	33	N	3.8 3.3	0.5	6	NEW BRITAIN REGION
	28	11	23	54.6	39.096	N	28.058	E	10	G		0.9	10	TURKEY
	28	12	35	06.5	39.130	N	27.969	E	10	G		1.1	12	TURKEY
	28	13	12	10.3%	39.111	N	27.940	E	10	G		0.8	5	TURKEY
	28	13	35	29.7%	39.124	N	27.620	E	10	G		0.8	5	TURKEY
	28	16	17	36.0*	43.342	N	20.881	E	10	G		1.0	8	YUGOSLAVIA. ML 2.5 (TTG).
	28	16	22	41.0&	59.841	N	151.261	W	40				38	KENAI PENINSULA, ALASKA. <AGS-P>. ML 3.6 (PMR). Felt at Homer.
	28	16	24	28.3&	37.455	N	121.700	W	6				29	CENTRAL CALIFORNIA. <BRK>. ML 4.0 (BRK), 3.6 (PAS). Mo=2.4*10**16 Nm (BRK). Felt (IV) at Mount Hamilton, San Jose, Santa Clara and Sunnyvale. Alsa felt at Fremont and Milipitas.
	28	16	34	18.4&	37.457	N	121.697	W	6				17	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK). Mo=9.2*10**13 Nm (BRK).
	28	16	45	52.3	38.068	N	69.625	E	33	N	4.2 4.2	1.2	18	TAJIK SSR. Felt (V) at Kangurt; (IV) at Boldzhuan, Dangara, Igran and Nurek; (III) at Savetskiy.
	28	17	23	05.3	39.880	N	106.368	E	33	N		1.0	12	NORTHERN CHINA. ML 4.7 (BJI).
	28	17	59	02.3&	60.049	N	152.633	W	89				24	SOUTHERN ALASKA. <AGS-P>.
	28	18	23	21.1%	43.781	N	7.941	E	10	G		0.5	7	NEAR SOUTH COAST OF FRANCE. ML 2.5 (LDG).
	28	19	10	04.9?	5.39	S	154.05	E	99	?	3.5	0.4	5	SOLOMON ISLANDS
	28	20	07	46.0	40.144	N	29.292	E	10	G		1.1	11	TURKEY

28	20 47 38.1	20.529 S	176.906 W	347 ?	4.3		0.4	40	FIJI ISLANDS REGION
28	21 10 39.1*	37.423 N	29.473 E	10 G			1.5	6	TURKEY
28	21 27 29.0*	53.118 N	167.523 W	10 G	4.5		0.8	14	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).
28	21 52 49.3?	4.75 N	97.43 E	33 N	3.6		0.2	5	NORTHERN SUMATERA
28	22 25 57.7	38.374 N	20.256 E	10 G	3.7		1.1	21	GREECE. ML 3.7 (ATH).
28	23 20 11.1*	53.025 N	162.549 W	33 N	4.8		1.1	22	SOUTH OF ALASKA

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 06 56 01.35 0.114S 17.789W 10km
5.5mb (64 obs.) 5.2Msz (12 obs.)
NORTH OF ASCENSION ISLAND
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 17C
Centroid Location:
Origin Time 06:56:11.4 0.3
Lat 0.55N 0.03 Lan 17.47W 0.03
Dep 15.0 FIX Half-duration 2.6
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	3.07	0	216
N	0.32	90	180
P	-3.39	0	126

Best Double Couple:Mo=3.2*10**17

	Strike=	Dip=	Slip=
NP1:	261	90	180
NP2:	351	90	0

03 16 42 41.32 37.750S 72.893W 32km
5.8mb (25 obs.) 5.5Msz (6 obs.)
CENTRAL CHILE
FAULT PLANE SOLUTION: P-Waves

	Strike=	Dip=	Slip=
NP1:	160	70	120
NP2:	281	36	36

Principal Axes:

	Plg=	Azm=
T	55	108
P	19	228

Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting with a large right-lateral strike-slip component. The preferred fault plane is NP2.
MOMENT TENSOR SOLUTION
Dep 35 No. of sta: 5
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	7.49	51	104
N	1.09	33	322
P	-8.58	19	219

Best Double Couple:Mo=8.0*10**17

	Strike=	Dip=	Slip=
NP1:	269	39	31
NP2:	155	71	125

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 26C
Centroid Location:
Origin Time 16:42:46.6 0.3
Lat 37.69S 0.05 Lon 73.30W 0.06
Dep 28.4 2.8 Half-duration 2.9
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	6.46	61	80
N	0.46	1	172
P	-6.92	29	263

Best Double Couple:Mo=6.7*10**17

	Strike=	Dip=	Slip=
NP1:	357	16	95
NP2:	172	74	89

04 02 22 32.76 20.053N 156.530W 10km
5.2mb (20 obs.) 4.9Msz (5 obs.)
HAWAII
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 25C
Centroid Location:
Origin Time 02:22:36.0 0.4
Lat 20.41N 0.08 Lon 156.39W 0.10
Dep 15.0 FIX Half-duration 1.6
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.89	48	100
N	-0.33	30	329
P	-1.56	26	223

Best Double Couple:Mo=1.7*10**17

	Strike=	Dip=	Slip=
NP1:	266	33	23
NP2:	157	77	121

04 04 41 13.01 15.186S 172.933W 33km
5.2mb (14 obs.) 5.2Msz (4 obs.)
SAMOA ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 20C
Centroid Location:
Origin Time 04:41:16.4 0.4
Lat 14.86S 0.07 Lon 173.50W 0.07
Dep 15.0 FIX Half-duration 2.0
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.63	36	312
N	0.47	38	187
P	-2.10	31	68

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

	Strike=	Dip=	Slip=
NP1:	103	39	5
NP2:	9	87	129

04 16 06 42.76 34.719S 179.931W 61km
5.2mb (9 obs.)
SOUTH OF KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 20C
Centroid Location:
Origin Time 16:06:47.6 0.7
Lat 34.24S 0.08 Lon 179.76W 0.13
Dep 35.0 6.5 Half-duration 1.9
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.78	50	268
N	0.20	4	3
P	-1.97	39	97

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

	Strike=	Dip=	Slip=
NP1:	221	7	128
NP2:	3	85	86

06 12 23 48.02 36.992N 141.786E 36km
5.9mb (108 obs.) 6.1Msz (18 obs.)
NEAR EAST COAST OF HONSHU, JAPAN
FAULT PLANE SOLUTION: P-Waves

	Strike=	Dip=	Slip=
NP1:	35	78	95
NP2:	192	13	68

Principal Axes:

	Plg=	Azm=
T	57	311
P	33	121

Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting with a small left-lateral strike-slip component. The preferred fault plane is NP2.
RADIATED ENERGY
No. of sta: 8 Focal mech. F
Energy 3.8+0.8*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 26 No. of sta: 17
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	4.65	58	276
N	-0.72	12	26
P	-3.93	29	123

Best Double Couple:Mo=4.3*10**18

	Strike=	Dip=	Slip=
NP1:	244	19	130
NP2:	23	75	78

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 16S, 43C M.W.: 12S, 25C
Centroid Location:
Origin Time 12:23:52.1 0.2
Lat 36.79N 0.02 Lon 141.81E 0.03
Dep 38.2 1.5 Half-duration 5.9
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	4.03	68	302
N	0.66	2	205
P	-4.69	22	114

Best Double Couple:Mo=4.4*10**18

	Strike=	Dip=	Slip=
NP1:	200	24	84
NP2:	27	67	93

06 13 16 17.89 36.988N 141.689E 48km
6.1mb (95 obs.) 6.3Msz (20 obs.)
NEAR EAST COAST OF HONSHU, JAPAN
FAULT PLANE SOLUTION: P-Waves

	Strike=	Dip=	Slip=
NP1:	30	70	70
NP2:	257	28	133

Principal Axes:

	Plg=	Azm=
T	60	271
P	22	135

Comment: The focal mechanism is moderately well controlled and corresponds to reverse faulting with a moderate left-lateral strike-slip component. The preferred fault plane is NP2.
RADIATED ENERGY
No. of sta: 4 Focal mech. F
Energy 3.2+1.0*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 32 No. of sta: 12
Principal Axes:
Scale 10**19 Nm

	Val=	Plg=	Azm=
T	1.68	62	296
N	0.10	5	35
P	-1.78	27	128

Best Double Couple:Mo=1.7*10**19

	Strike=	Dip=	Slip=
NP1:	231	18	106
NP2:	34	73	85

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 17S, 46C M.W.: 15S, 36C
Centroid Location:
Origin Time 13:16:22.8 0.1
Lat 36.91N 0.01 Lon 141.94E 0.02
Dep 41.4 0.8 Half-duration 9.0
Principal Axes:
Scale 10**19 Nm

	Val=	Plg=	Azm=
T	1.34	70	281
N	-0.04	4	21
P	-1.30	20	113

Best Double Couple:Mo=1.3*10**19

	Strike=	Dip=	Slip=
NP1:	209	25	99
NP2:	20	65	86

07 03 45 14.70 32.390N 115.310W 6km
5.4mb (43 obs.) 5.5Msz (5 obs.)
CALIFORNIA-MEXICO BORDER REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 29C
Centroid Location:
Origin Time 03:45:17.0 0.6
Lat 32.15N 0.06 Lon 115.22W 0.06
Dep 15.0 FIX Half-duration 2.1
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	2.05	16	65
N	0.08	69	286
P	-2.13	13	159

Best Double Couple:Mo=2.1*10**17

	Strike=	Dip=	Slip=
NP1:	202	70	2
NP2:	112	88	160

07 10 46 22.55 59.145S 159.015E 33km
5.5mb (14 obs.) 5.1Msz (1 obs.)
MACQUARIE ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 26C
Centroid Location:
Origin Time 10:46:28.2 0.6
Lat 58.70S 0.06 Lon 158.48E 0.12
Dep 15.0 BDY Half-duration 2.2
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	2.55	12	128
N	0.47	77	335
P	-3.02	6	220

Best Double Couple:Mo=2.8*10**17

	Strike=	Dip=	Slip=
NP1:	264	78	4
NP2:	174	86	167

07 11 57 33.94 5.800S 147.742E 27km
5.6mb (33 obs.) 6.1Msz (17 obs.)
EAST PAPUA NEW GUINEA REGION

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 42C
Centroid Location:
Origin Time 11:57:38.8 0.3
Lat 5.96S 0.03 Lon 147.96E 0.03
Dep 15.0 BDY Half-duration 4.5
Principal Axes:
Scale 10**18 Nm
T Val= 2.58 Plg=23 Azm=312
N -0.51 65 153
P -2.06 8 45
Best Double Couple:Mo=2.3*10**18
NP1:Strike= 91 Dip=67 Slip= 11
NP2: 357 80 157

07 15 24 22.37 4.924S 103.255E 60km
5.4mb (41 obs.)
SOUTHERN SUMATERA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 29C
Centroid Location:
Origin Time 15:24:24.9 0.8
Lat 5.34S 0.06 Lon 102.94E 0.09
Dep 47.5 6.4 Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 1.04 Plg=22 Azm= 95
N 0.76 56 327
P -1.80 24 195
Best Double Couple:Mo=1.4*10**17
NP1:Strike=234 Dip=56 Slip= -2
NP2: 325 89 -146

08 17 48 48.85 1.604N 126.588E 17km
5.8mb (48 obs.) 5.9Msz (2 obs.)
MOLUCCA PASSAGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 36C
Centroid Location:
Origin Time 17:48:59.4 0.3
Lat 1.68N 0.03 Lon 126.59E 0.04
Dep 57.7 2.9 Half-duration 4.8
Principal Axes:
Scale 10**18 Nm
T Val= 2.37 Plg=44 Azm=184
N 0.18 42 32
P -2.55 14 289
Best Double Couple:Mo=2.5*10**18
NP1:Strike=337 Dip=48 Slip= 25
NP2: 230 72 135

08 18 33 58.39 6.088S 147.689E 55km
7.4Msz (21 obs.)
EAST PAPUA NEW GUINEA REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 0 Dip=65 Slip= 168
NP2: 95 79 25
Principal Axes:
T Plg=26 Azm=320
P 10 225
Comment: The focal mechanism is poorly controlled and corresponds to strike-slip faulting with a moderate reverse component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 6 Focal mech. M
Energy 2.3+0.6*10**15 Nm
MOMENT TENSOR SOLUTION
Dep 21 No. of sta: 12
Principal Axes:
Scale 10**20 Nm
T Val= 1.07 Plg= 1 Azm=306
N 0.01 88 70
P -1.08 1 216
Best Double Couple:Mo=1.1*10**20
NP1:Strike=351 Dip=88 Slip=-180
NP2: 261 90 -2
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 17S, 44C M.W.: 13S, 34C
Centroid Location:
Origin Time 18:34:13.5 0.2
Lat 5.90S 0.01 Lon 147.72E 0.02
Dep 15.0 FIX Half-duration 15.0
Principal Axes:
Scale 10**20 Nm
T Val= 1.23 Plg= 8 Azm=307
N -0.24 82 146
P -0.99 3 37
Best Double Couple:Mo=1.1*10**20
NP1:Strike= 82 Dip=83 Slip= 4
NP2: 352 87 173

09 02 11 10.27 5.990S 147.708E 33km
5.6mb (17 obs.) 5.1Msz (3 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 22C
Centroid Location:
Origin Time 02:11:13.8 0.8
Lat 6.12S 0.08 Lon 147.98E 0.09
Dep 33.0 FIX Half-duration 2.9
Principal Axes:
Scale 10**17 Nm
T Val= 4.97 Plg=16 Azm=107
N 1.46 48 358
P -6.44 38 210
Best Double Couple:Mo=5.7*10**17
NP1:Strike=241 Dip=51 Slip= -17
NP2: 342 77 -140

09 06 48 00.20 6.145S 147.691E 33km
5.6mb (32 obs.) 5.1Msz (5 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 34C
Centroid Location:
Origin Time 06:48: 5.7 0.5
Lat 6.29S 0.05 Lon 147.55E 0.06
Dep 31.8 5.6 Half-duration 2.6
Principal Axes:
Scale 10**17 Nm
T Val= 3.68 Plg=35 Azm=321
N -0.54 55 137
P -3.14 1 230
Best Double Couple:Mo=3.4*10**17
NP1:Strike=359 Dip=65 Slip= 154
NP2: 101 67 28

09 14 25 30.85 6.137S 147.722E 49km
5.5mb (17 obs.) 5.0Msz (2 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 35C
Centroid Location:
Origin Time 14:25:34.3 0.3
Lat 6.21S 0.03 Lon 147.85E 0.03
Dep 44.3 3.4 Half-duration 2.4
Principal Axes:
Scale 10**17 Nm
T Val= 2.39 Plg= 0 Azm=138
N 0.62 89 48
P -3.01 1 228
Best Double Couple:Mo=2.7*10**17
NP1:Strike=273 Dip=89 Slip= -1
NP2: 3 89 -179

09 18 17 30.62 6.002S 147.802E 44km
5.7mb (44 obs.) 5.7Msz (11 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 43C
Centroid Location:
Origin Time 18:17:36.1 0.3
Lat 6.23S 0.03 Lon 147.99E 0.03
Dep 48.6 2.6 Half-duration 3.9
Principal Axes:
Scale 10**17 Nm
T Val= 11.07 Plg=13 Azm=105
N 0.44 66 343
P -11.51 20 200
Best Double Couple:Mo=1.1*10**18
NP1:Strike=241 Dip=66 Slip= -5
NP2: 333 85 -156

10 00 59 28.57 19.489S 177.456W 395km
6.2mb (52 obs.)
FIJI ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 10 Dip=77 Slip= -90
NP2: 190 13 -90
Principal Axes:
T Plg=32 Azm=100
P 58 280
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sta: 6 Focal mech. C
Energy 7.4+1.7*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 391 No. of sta: 9
Principal Axes:
Scale 10**18 Nm
T Val= 6.37 Plg=29 Azm= 77
N -0.55 21 179
P -5.81 52 300
Best Double Couple:Mo=6.1*10**18
NP1:Strike=122 Dip=25 Slip=-150
NP2: 4 78 -68
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 20S, 51C M.W.: 13S, 29C
Centroid Location:
Origin Time 00:59:35.9 0.1
Lat 19.47S 0.01 Lon 177.38W 0.01
Dep 418.5 0.6 Half-duration 6.4
Principal Axes:
Scale 10**18 Nm
T Val= 6.02 Plg=27 Azm= 94
N -0.41 8 188
P -5.61 61 294
Best Double Couple:Mo=5.8*10**18
NP1:Strike=164 Dip=19 Slip=-116
NP2: 11 73 -81

10 12 21 59.08 6.012S 147.779E 40km
5.4mb (17 obs.) 5.1Msz (2 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 29C
Centroid Location:
Origin Time 12:22: 3.2 0.6
Lat 6.07S 0.05 Lon 147.88E 0.06
Dep 46.8 5.2 Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 1.82 Plg=17 Azm=103
N -0.02 59 343
P -1.80 25 201
Best Double Couple:Mo=1.8*10**17
NP1:Strike=240 Dip=60 Slip= -7
NP2: 333 84 -150

10 16 23 50.94 35.586N 143.013E 38km
5.1mb (24 obs.) 5.2Msz (1 obs.)
OFF EAST COAST OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 24C
Centroid Location:
Origin Time 16:23:49.0 1.4
Lat 35.46N 0.11 Lon 143.21E 0.16
Dep 17.1 7.0 Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 5.47 Plg=13 Azm=296
N -1.24 8 205
P -4.23 75 85
Best Double Couple:Mo=4.9*10**16
NP1:Strike= 36 Dip=33 Slip= -76
NP2: 200 58 -99

11 01 14 40.61 6.995S 146.991E 19km
5.3mb (12 obs.) 4.9Msz (2 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 33C
Centroid Location:
Origin Time 01:14:47.2 0.4
Lat 7.36S 0.04 Lon 146.83E 0.05
Dep 38.3 4.9 Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 2.06 Plg= 4 Azm= 69
N -0.12 80 318
P -1.94 10 160
Best Double Couple:Mo=2.0*10**17
NP1:Strike=204 Dip=81 Slip= -4
NP2: 295 86 -171

11 06 12 53.39 18.831N 120.981E 24km
5.6mb (65 obs.) 5.8Msz (11 obs.)
LUZON, PHILIPPINE ISLANDS
CENTROID, MOMENT TENSOR (HRV)

Data Used: GDSN
L.P.B.: 15S, 35C
Centroid Location:
Origin Time 06:12:53.9 0.3
Lat 19.01N 0.03 Lon 120.86E 0.04
Dep 24.0 BDY Half-duration 4.0
Principal Axes:
Scale 10**18 Nm
T Val= 1.56 Plg=11 Azm=215
N -0.44 72 90
P -1.12 14 308
Best Double Couple:Mo=1.3*10**18
NP1:Strike=351 Dip=72 Slip= -3
NP2: 82 87 -162

11 07 56 12.91 15.834S 167.355E 24km
5.9mb (41 obs.) 6.4Msz (27 obs.)
VANUATU ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=180 Dip=60 Slip= 90
NP2: 360 30 90
Principal Axes:
T Plg=75 Azm= 90
P 15 270
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
RADIATED ENERGY
No. of sta: 8 Focal mech. C
Energy 1.1+0.2*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 41 No. of sta: 13
Principal Axes:
Scale 10**18 Nm
T Val= 5.34 Plg=65 Azm=124
N 0.33 14 3
P -5.68 21 267
Best Double Couple:Mo=5.5*10**18
NP1:Strike=334 Dip=27 Slip= 58
NP2: 189 67 105
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 19S, 49C M.W.: 12S, 25C
Centroid Location:
Origin Time 07:56:20.2 0.1
Lat 15.92S 0.02 Lon 167.16E 0.01
Dep 32.6 0.8 Half-duration 6.0
Principal Axes:
Scale 10**18 Nm
T Val= 4.62 Plg=70 Azm=132
N 0.27 18 337
P -4.90 8 245
Best Double Couple:Mo=4.8*10**18
NP1:Strike=315 Dip=40 Slip= 62
NP2: 170 55 112

11 17 42 50.96 43.169N 132.286E 499km
5.5mb (90 obs.)
NEAR E. COAST OF EASTERN USSR
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 40C
Centroid Location:
Origin Time 17:42:56.1 0.2
Lat 43.13N 0.02 Lon 132.16E 0.03
Dep 504.2 1.4 Half-duration 4.1
Principal Axes:
Scale 10**18 Nm
T Val= 1.57 Plg= 6 Azm=177
N 0.07 68 72
P -1.64 21 269
Best Double Couple:Mo=1.6*10**18
NP1:Strike=311 Dip=71 Slip= -11
NP2: 44 79 -161

11 19 54 53.20 22.900S 179.504W 524km
5.1mb (28 obs.)
SOUTH OF FIJI ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 23C
Centroid Location:
Origin Time 19:55: 1.4 1.2
Lat 22.44S 0.11 Lon 179.97E 0.11
Dep 524.1 5.0 Half-duration 1.6
Principal Axes:
Scale 10**17 Nm
T Val= 1.50 Plg=47 Azm= 43
N -0.15 6 307
P -1.35 43 211
Best Double Couple:Mo=1.4*10**17
NP1:Strike=234 Dip= 6 Slip= 17
NP2: 127 88 96

13 07 18 29.09 0.670N 126.167E 32km
6.2mb (58 obs.) 6.5Msz (25 obs.)
MOLUCCA PASSAGE
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=192 Dip=70 Slip= 90
NP2: 12 20 90
Principal Axes:
T Plg=65 Azm=102
P 25 282
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is NP2.
MOMENT TENSOR SOLUTION
Dep 49 No. of sta: 11
Principal Axes:
Scale 10**19 Nm
T Val= 1.86 Plg=76 Azm=164
N -0.30 13 10
P -1.56 6 278
Best Double Couple:Mo=1.7*10**19
NP1:Strike=354 Dip=41 Slip= 70
NP2: 200 52 107
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 15S, 39C M.W.: 12S, 29C
Centroid Location:
Origin Time 07:18:37.2 0.1
Lat 0.79N 0.02 Lon 126.27E 0.02
Dep 37.1 0.7 Half-duration 8.8
Principal Axes:
Scale 10**19 Nm
T Val= 1.34 Plg=84 Azm=163
N 0.10 4 253
P -1.44 4 292
Best Double Couple:Mo=1.4*10**19
NP1:Strike= 18 Dip=42 Slip= 83
NP2: 207 49 96

14 06 34 38.88 15.467S 167.559E 120km
5.5mb (30 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 29C
Centroid Location:
Origin Time 06:34:46.7 0.5
Lat 15.50S 0.04 Lon 167.16E 0.05
Dep 129.2 2.1 Half-duration 2.6
Principal Axes:
Scale 10**17 Nm
T Val= 3.41 Plg=65 Azm= 92
N 0.34 1 184
P -3.75 25 275
Best Double Couple:Mo=3.6*10**17
NP1:Strike= 6 Dip=20 Slip= 92
NP2: 184 70 89

14 07 26 51.70 36.148N 120.335W 13km
5.3mb (39 obs.) 4.6Msz (1 obs.)
CENTRAL CALIFORNIA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 18C
Centroid Location:
Origin Time 07:26:49.7 1.5
Lat 35.57N 0.25 Lon 120.00W 0.24
Dep 15.0 FIX Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 8.00 Plg=53 Azm=141
N -0.06 35 341
P -7.94 10 244
Best Double Couple:Mo=8.0*10**16
NP1:Strike=300 Dip=46 Slip= 38
NP2: 181 64 130

14 13 38 22.77 17.926S 178.632W 566km
5.7mb (53 obs.)
FIJI ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=140 Dip=70 Slip= 90
NP2: 320 20 90
Principal Axes:
T Plg=65 Azm= 50
P 25 230
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is not determined.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centroid Location:
Origin Time 13:38:31.4 0.5
Lat 17.76S 0.04 Lon 178.90W 0.05
Dep 577.9 2.2 Half-duration 2.5
Principal Axes:
Scale 10**17 Nm
T Val= 4.16 Plg=53 Azm= 0
N -1.33 35 161
P -2.83 9 258
Best Double Couple:Mo=3.5*10**17
NP1:Strike= 22 Dip=47 Slip= 142
NP2: 140 63 49

14 15 44 16.16 45.698S 76.058W 10km
5.3mb (16 obs.) 5.8Msz (5 obs.)
OFF COAST OF SOUTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 34C
Centroid Location:
Origin Time 15:44:19.1 0.2
Lat 45.70S 0.03 Lon 76.51W 0.05
Dep 15.0 FIX Half-duration 3.2
Principal Axes:
Scale 10**17 Nm
T Val= 8.11 Plg= 4 Azm=214
N -0.85 74 316
P -7.26 16 123
Best Double Couple:Mo=7.7*10**17
NP1:Strike=259 Dip=76 Slip=-171
NP2: 167 81 -14

14 16 42 18.18 54.720N 161.741E 33km
5.7mb (82 obs.) 5.0Msz (7 obs.)
NEAR EAST COAST OF KAMCHATKA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 22C
Centroid Location:
Origin Time 16:42:22.4 0.6
Lat 54.30N 0.07 Lon 161.73E 0.12
Dep 38.3 5.0 Half-duration 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 2.10 Plg=65 Azm=225
N 0.25 24 25
P -2.35 8 118
Best Double Couple:Mo=2.2*10**17
NP1:Strike=234 Dip=43 Slip= 127
NP2: 8 57 61

15 22 38 44.91 15.563S 177.204W 33km
5.2mb (24 obs.) 5.5Msz (8 obs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 28C
Centroid Location:
Origin Time 22:38:50.9 0.6
Lat 15.02S 0.05 Lon 179.96W 0.04
Dep 15.0 FIX Half-duration 2.7
Principal Axes:
Scale 10**17 Nm
T Val= 4.84 Plg=23 Azm=215
N -0.55 67 28
P -4.30 2 124
Best Double Couple:Mo=4.6*10**17
NP1:Strike=257 Dip=72 Slip= 165
NP2: 352 76 19

16 09 38 14.54 0.739N 126.143E 37km
5.3mb (26 obs.) 4.8Msz (4 obs.)
MOLUCCA PASSAGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 25C
Centroid Location:
Origin Time 09:38:17.3 0.4
Lat 1.15N 0.05 Lon 126.46E 0.05
Dep 37.3 4.2 Half-duration 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 1.72 Plg=66 Azm=208
N -0.50 23 47
P -1.21 7 314
Best Double Couple:Mo=1.5*10**17
NP1:Strike= 20 Dip=43 Slip= 55
NP2: 244 56 118

16 17 28 11.22 0.838N 126.186E 25km
5.7mb (46 obs.) 5.9Msz (18 obs.)
MOLUCCA PASSAGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 36C
Centroid Locatian:
Origin Time 17:28:19.2 0.2
Lat 1.09N 0.02 Lon 126.53E 0.03
Dep 34.4 2.1 Half-duration 4.9
Principal Axes:
Scale 10**18 Nm
T Val= 2.38 Plg=84 Azm=310
N 0.08 1 214
P -2.46 6 124
Best Double Couple:Mo=2.4*10**18
NP1:Strike=213 Dip=39 Slip= 89
NP2: 34 51 91

17 04 19 57.65 19.676S 168.761E 33km
5.6mb (30 obs.) 5.6Msz (8 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 33C
Centroid Locotion:
Origin Time 04:20: 3.9 0.6
Lat 19.55S 0.05 Lon 168.57E 0.05
Dep 22.0 BDY Half-durotion 2.7
Principal Axes:
Scale 10**17 Nm
T Val= 4.58 Plg=15 Azm=170
N 0.06 1 261
P -4.64 75 356
Best Double Couple:Mo=4.6*10**17
NP1:Strike=258 Dip=30 Slip= -93
NP2: 82 60 -88

17 06 16 12.12 32.793S 179.304W 10km
5.9mb (30 obs.) 6.6Msz (25 obs.)
SOUTH OF KERMADEC ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 5 Dip=75 Slip= 90
NP2: 185 15 90
Principal Axes:
T Plg=60 Azm=275
P 30 95
Comment: The focal mechanism is poorly controlled and correspands to reverse faulting. The preferred fault plane is NP2.
MOMENT TENSOR SOLUTION
Dep 39 No. of sto: 13
Principal Axes:
Scale 10**19 Nm
T Val= 1.36 Plg=53 Azm=234
N 0.36 30 14
P -1.72 20 116
Best Double Couple:Mo=1.5*10**19
NP1:Strike=245 Dip=36 Slip= 147
NP2: 2 71 58
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN, IDA
L.P.B.: 15S, 42C M.W.: 11S, 29C
Centroid Location:
Origin Time 06:16:25.3 0.2
Lat 32.73S 0.01 Lon 178.86W 0.02
Dep 41.9 0.8 Half-durotion 8.0
Principal Axes:
Scale 10**18 Nm
T Val= 11.58 Plg=69 Azm=267
N -0.32 5 9
P -11.26 21 101
Best Double Couple:Mo=1.1*10**19
NP1:Strike=199 Dip=25 Slip= 101
NP2: 7 66 85

17 12 56 56.02 58.705S 25.157W 33km
5.3mb (7 obs.) 5.1Msz (1 obs.)
SOUTH SANDWICH ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 19C
Centroid Location:
Origin Time 12:57: 4.9 0.6
Lat 58.54S 0.07 Lon 25.44W 0.17
Dep 26.7 4.8 Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 2.23 Plg=57 Azm=298
N 0.02 15 184
P -2.24 29 85
Best Double Couple:Mo=2.2*10**17
NP1:Strike=140 Dip=21 Slip= 44
NP2: 8 76 106

18 00 00 52.54 51.298N 179.279W 33km
6.2mb (78 obs.) 5.9Msz (29 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 45 Dip=65 Slip= 90
NP2: 225 25 90
Principal Axes:
T Plg=70 Azm=315
P 20 135
Comment: The focol mechonism is poorly controlled and correspands to reverse faulting. The preferred foult plane is NP2.
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 16S, 42C
Centroid Locotion:
Origin Time 00:00:55.8 0.2
Lat 51.48N 0.02 Lon 179.20W 0.04
Dep 33.9 1.4 Half-durotion 5.0
Principal Axes:
Scale 10**18 Nm
T Val= 2.54 Plg=62 Azm=304
N 0.09 14 62
P -2.63 24 158
Best Double Couple:Mo=2.6*10**18
NP1:Strike=276 Dip=24 Slip= 126
NP2: 57 71 75

18 05 28 23.29 51.344N 179.298W 33km
5.5mb (75 obs.) 4.7Msz (8 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 19C
Centroid Location:
Origin Time 05:28:28.0 0.9
Lat 51.52N 0.09 Lon 179.44W 0.29
Dep 20.2 8.8 Half-duration 1.8
Principal Axes:
Scale 10**17 Nm
T Val= 1.57 Plg=57 Azm=279
N -0.42 29 65
P -1.16 16 164
Best Double Couple:Mo=1.4*10**17
NP1:Strike=288 Dip=39 Slip= 140
NP2: 51 66 58

18 10 32 14.40 55.728S 27.022W 33km
5.5mb (11 obs.) 5.0Msz (2 obs.)
SOUTH SANDWICH ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 25C
Centroid Location:
Origin Time 10:32:20.1 0.4
Lat 55.68S FIX;Lon 26.99W FIX
Dep 18.4 3.3 Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 1.46 Plg=71 Azm=285
N 0.43 14 148
P -1.89 12 55
Best Double Couple:Mo=1.7*10**17
NP1:Strike=127 Dip=35 Slip= 65
NP2: 337 59 106

19 09 32 45.65 28.034S 176.196W 10km
4.9mb (4 obs.) 5.0Msz (1 obs.)
KERMADEC ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 21C
Centraid Locotion:
Origin Time 09:32:52.7 1.4
Lat 27.92S 0.13 Lon 176.37W 0.13
Dep 48.0 9.4 Half-durotion 1.3
Principol Axes:
Scale 10**16 Nm
T Val= 4.02 Plg=68 Azm=292
N -0.56 3 195
P -3.46 21 104
Best Double Couple:Mo=3.7*10**16
NP1:Strike=189 Dip=24 Slip= 83
NP2: 16 67 93

19 10 02 16.43 32.722S 178.839W 33km
5.3mb (5 obs.) 4.7Msz (1 obs.)
SOUTH OF KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 13S, 27C
Centroid Location:
Origin Time 10:02:21.6 0.8
Lot 32.54S 0.06 Lon 178.71W 0.08
Dep 37.0 4.4 Half-duration 1.7
Principol Axes:
Scale 10**16 Nm
T Vol= 9.92 Plg=68 Azm=321
N 3.22 12 201
P -13.14 19 106
Best Double Couple:Mo=1.2*10**17
NP1:Strike=178 Dip=28 Slip= 64
NP2: 26 65 103

21 15 26 26.97 6.103S 147.778E 44km
5.4mb (15 obs.) 5.2Msz (2 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 13S, 25C
Centroid Location:
Origin Time 15:26:31.5 0.6
Lat 6.01S 0.05 Lon 147.82E 0.05
Dep 43.6 5.6 Half-durotion 2.3
Principal Axes:
Scale 10**17 Nm
T Vol= 2.22 Plg= 8 Azm=112
N 0.11 75 350
P -2.33 13 204
Best Double Couple:Mo=2.3*10**17
NP1:Strike=248 Dip=75 Slip= -3
NP2: 339 87 -165

21 22 19 55.35 54.931N 110.981E 33km
4.7mb (10 obs.) 4.7Msz (1 obs.)
LAKE BAIKAL REGION
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 11S, 17C
Centroid Location:
Origin Time 22:19:51.5 1.5
Lot 54.40N 0.19 Lon 110.33E 0.35
Dep 15.0 FIX Half-duration 1.3
Principal Axes:
Scale 10**16 Nm
T Val= 1.91 Plg=14 Azm=103
N 0.95 13 197
P -2.86 71 327
Best Double Couple:Mo=2.4*10**16
NP1:Strike=176 Dip=33 Slip=-114
NP2: 24 60 -75

22 01 22 29.56 78.866N 125.966E 10km
5.2mb (66 obs.) 5.1Msz (5 obs.)
EAST OF SEVERNAYA ZEMLYA
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 12S, 28C
Centroid Location:
Origin Time 01:22:32.0 0.3
Lat 78.76N 0.05 Lon 125.59E 0.28
Dep 15.0 BDY Half-duratian 1.8
Principal Axes:
Scale 10**17 Nm
T Val= 1.38 Plg= 2 Azm=248
N -0.02 24 157
P -1.36 66 341
Best Double Couple:Mo=1.4*10**17
NP1:Strike= 0 Dip=48 Slip= -57
NP2: 136 51 -122

23 00 21 21.21 38.983N 70.706E 33km
5.0mb (39 obs.) 4.7Msz (2 obs.)
AFGHANISTAN-USSR BORDER REGION
CENTROID, MOMENT TENSOR (HRV)
Doto Used: GDSN
L.P.B.: 11S, 21C
Centroid Locatian:
Origin Time 00:21:24.0 1.2
Lat 39.12N 0.16 Lon 70.14E 0.16
Dep 33.0 FIX Half-durotion 1.7
Principal Axes:
Scale 10**16 Nm
T Vol= 2.27 Plg=48 Azm= 24
N 0.99 42 211
P -3.26 4 118
Best Double Couple:Mo=2.8*10**16
NP1:Strike=173 Dip=55 Slip= 36
NP2: 61 61 139

23 02 43 39.58 57.922S 25.350W 27km
5.9mb (18 abs.) 5.7Msz (16 abs.)
SOUTH SANDWICH ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 20 Dip=70 Slip= 90
NP2: 200 20 90
Principal Axes:
T Plg=65 Azm=290
P 25 110
Comment: The focal mechanism is poorly controlled and correspands to reverse faulting. The preferred fault plane is NP2.
MOMENT TENSOR SOLUTION
Dep 1 No. of sta: 5
Principal Axes:
Scale 10**18 Nm
T Val= 3.28 Plg=50 Azm=309
N 0.08 15 201
P -3.36 36 100
Best Double Cauple:Mo=3.3*10**18
NP1:Strike=138 Dip=17 Slip= 26
NP2: 23 83 105
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 17S, 42C
Centraid Lacatian:
Origin Time 02:43:47.7 0.2
Lat 57.98S 0.02 Lan 25.22W 0.04
Dep 19.6 1.4 Half-duration 4.7
Principal Axes:
Scale 10**18 Nm
T Val= 1.92 Plg=68 Azm=278
N 0.10 7 171
P -2.02 21 78
Best Double Cauple:Ma=2.0*10**18
NP1:Strike=156 Dip=25 Slip= 74
NP2: 354 66 97

23 11 27 52.35 15.699S 177.103W 13km
5.0mb (9 abs.) 5.1Msz (5 obs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 28C
Centraid Lacatian:
Origin Time 11:28: 3.5 0.6
Lat 15.31S 0.07 Lan 177.48W 0.05
Dep 15.0 FIX Half-duratian 1.9
Principal Axes:
Scale 10**17 Nm
T Val= 1.48 Plg=18 Azm=131
N -0.19 71 318
P -1.30 2 221
Best Double Cauple:Mo=1.4*10**17
NP1:Strike=267 Dip=75 Slip= 12
NP2: 174 79 165

23 15 49 54.64 15.854S 167.891E 234km
5.9mb (47 obs.)
VANUATU ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=260 Dip=85 Slip= 48
NP2: 164 42 173
Principal Axes:
T Plg=36 Azm=134
P 28 22
Comment: The focal mechanism is maderately well cantralled and correspands ta reverse faulting with a large strike-slip campanent. The preferred fault plane is not determined.
RADIATED ENERGY
No. af sta: 7 Facal mech. F
Energy 1.0+0.8*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 216 Na. af sta: 11
Principal Axes:
Scale 10**19 Nm
T Val= 2.53 Plg=44 Azm=132
N 0.38 35 264
P -2.91 25 14
Best Double Cauple:Ma=2.7*10**19
NP1:Strike=152 Dip=37 Slip= 162
NP2: 257 79 54
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 17S, 46C M.W.: 16S, 43C
Centraid Lacatian:
Origin Time 15:50: 5.2 0.1
Lat 15.83S 0.01 Lan 167.87E 0.01
Dep 224.9 0.8 Half-duratian 11.2
Principal Axes:
Scale 10**19 Nm
T Val= 3.33 Plg=38 Azm=135
N -0.83 46 277
P -2.50 20 29
Best Double Couple:Mo=2.9*10**19
NP1:Strike=165 Dip=48 Slip= 165
NP2: 266 79 43

24 00 51 26.75 56.608S 147.329E 10km
5.8mb (22 abs.) 5.8Msz (13 abs.)
WEST OF MACQUARIE ISLAND
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=178 Dip=79 Slip= 90
NP2: 358 11 90
Principal Axes:
T Plg=56 Azm= 88
P 34 268
Comment: The facal mechanism is paarly cantralled and corresponds to reverse faulting. The preferred fault plane is nat determined.
MOMENT TENSOR SOLUTION
Dep 11 Na. of sta: 5
Principal Axes:
Scale 10**18 Nm
T Val= 1.56 Plg=37 Azm= 51
N -0.02 44 187
P -1.54 24 302
Best Double Couple:Ma=1.6*10**18
NP1:Strike= 81 Dip=45 Slip= 168
NP2: 179 82 46
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 36C
Centroid Lacatian:
Origin Time 00:51:34.6 0.3
Lat 56.54S 0.03 Lan 147.22E 0 05
Dep 15.0 FIX Half-durotion 3.7
Principal Axes:
Scale 10**17 Nm
T Val= 11.31 Plg= 0 Azm=212
N -2.29 90 180
P -9.02 0 122
Best Double Couple:Mo=1.0*10**18
NP1:Strike=257 Dip=90 Slip= 180
NP2: 347 90 0

25 01 07 52.88 2.480S 141.879E 30km
5.4mb (21 obs.) 5.1Msz (8 abs.)
NEAR N COAST OF PAPUA NEW GUINEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 29C
Centraid Lacatian:
Origin Time 01:07:53.8 0.3
Lat 2.23S 0.04 Lan 141.95E 0.04
Dep 15.0 FIX Half-duratian 2.3
Principal Axes:
Scale 10**17 Nm
T Val= 2.99 Plg=14 Azm=212
N -0.46 12 305
P -2.54 71 75
Best Double Couple:Mo=2.8*10**17
NP1:Strike=286 Dip=33 Slip=-113
NP2: 133 60 -76

25 02 01 21.48 27.912S 177.074W 72km
5.0mb (6 abs.)
KERMADEC ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 25C
Centraid Location:
Origin Time 02:01:22.6 1.1
Lat 28.10S 0.10 Lan 177.15W 0.11
Dep 74.6 6.7 Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 5.22 Plg=69 Azm=305
N 1.49 13 177
P -6.71 16 83
Best Double Couple:Mo=6.0*10**16
NP1:Strike=154 Dip=31 Slip= 64
NP2: 4 62 105

25 10 42 45.06 27.927S 66.835W 172km
5.2mb (28 abs.)
CATAMARCA PROVINCE, ARGENTINA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 24C
Centraid Lacatian:
Origin Time 10:42:48.5 0.8
Lat 28.73S 0.09 Lan 66.31W 0.16
Dep 176.1 4.1 Half-duratian 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 10.50 Plg=23 Azm= 39
N 0.99 51 278
P -11.49 30 143
Best Double Couple:Mo=1.1*10**17
NP1:Strike=179 Dip=52 Slip= -6
NP2: 272 86 -142

25 11 27 13.64 6.123S 147.637E 65km
5.6mb (41 abs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 16S, 41C
Centraid Lacatian:
Origin Time 11:27:15.0 0.2
Lat 6.14S 0.02 Lan 147.71E 0.02
Dep 33.5 2.8 Half-duration 4.3
Principal Axes:
Scale 10**18 Nm
T Val= 1.47 Plg= 0 Azm=142
N 0.00 90 180
P -1.47 0 52
Best Double Couple:Ma=1.5*10**18
NP1:Strike=187 Dip=90 Slip= 180
NP2: 277 90 0

25 15 20 18.43 18.808N 121.080E 16km
5.3mb (47 obs.) 5.3Msz (5 abs.)
LUZON, PHILIPPINE ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 26C
Centraid Location:
Origin Time 15:20:20.8 0.3
Lat 18.79N 0.03 Lan 121.01E 0.06
Dep 32.7 3.7 Half-duration 2.3
Principal Axes:
Scale 10**17 Nm
T Val= 2.74 Plg= 4 Azm=205
N -0.10 27 297
P -2.64 62 107
Best Double Couple:Ma=2.7*10**17
NP1:Strike=269 Dip=48 Slip=-128
NP2: 138 55 -56

25 19 56 35.51 38.102N 91.179E 26km
5.7mb (80 obs.) 5.7Msz (15 abs.)
QINGHAI PROVINCE, CHINA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 30C
Centroid Location:
Origin Time 19:56:45.2 0.4
Lat 38.30N 0.05 Lan 91.08E 0.05
Dep 15.0 BDY Half-duration 2.9
Principal Axes:
Scale 10**17 Nm
T Val= 5.63 Plg=67 Azm=135
N 0.24 19 278
P -5.86 13 13
Best Double Couple:Ma=5.8*10**17
NP1:Strike=127 Dip=36 Slip= 124
NP2: 267 60 68

26 00 24 03.53 30.036N 141.927E 33km
5.2mb (32 abs.) 4.8Msz (4 obs.)
SOUTH OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 24C
Centraid Lacatian:
Origin Time 00:24: 4.7 0.8
Lat 30.03N 0.09 Lan 141.68E 0.14
Dep 45.2 7.4 Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 7.52 Plg=16 Azm=328
N -0.65 30 228
P -6.87 55 82
Best Double Couple:Mo=7.2*10**16
NP1:Strike= 94 Dip=39 Slip= -38
NP2: 214 67 -123

27 01 39 55.40 2.399N 98.612W 33km
4.8mb (15 obs.) 4.6Msz (3 obs.)
WEST OF GALAPAGOS ISLANDS

CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 27C
Centroid Location:
Origin Time 01:39:55.7 1.1
Lat 2.08N 0.11 Lon 98.40W 0.12
Dep 15.0 FIX Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 5.98 Plg= 7 Azm=165
N 2.30 65 270
P -8.28 24 72
Best Double Couple:Mo=7.1*10**16
NP1:Strike=211 Dip=68 Slip=-168
NP2: 116 78 -22

27 06 50 54.41 17.238S 176.953W 10km
5.2mb (20 obs.)
FIJI ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 24C
Centroid Location:
Origin Time 06:51: 0.1 0.6
Lat 17.44S 0.09 Lon 177.06W 0.11
Dep 15.0 FIX Half-duration 1.8
Principal Axes:
Scale 10**16 Nm
T Val= 14.57 Plg=25 Azm= 80
N -1.62 43 195
P -12.94 37 329
Best Double Couple:Mo=1.4*10**17
NP1:Strike=119 Dip=44 Slip=-170
NP2: 22 83 -47

27 08 31 54.40 53.470N 167.291W 10km
6.2mb (81 obs.) 6.7Msz (29 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=185 Dip=73 Slip= -90
NP2: 5 17 -90
Principal Axes:
T Plg=28 Azm=275
P 62 95
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 5 Focal mech. F
Energy 2.0+0.7*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 14 No. of sta: 17
Principal Axes:
Scale 10**19 Nm
T Val= 1.25 Plg=21 Azm=255
N 0.05 0 345
P -1.29 69 76
Best Double Couple:Mo=1.3*10**19
NP1:Strike=344 Dip=24 Slip= -91
NP2: 165 66 -90
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 16S, 41C M.W.: 13S, 34C
Centroid Location:
Origin Time 08:32: 4.3 0.1
Lat 53.72N 0.01 Lon 167.16W 0.01
Dep 16.0 0.6 Half-duration 10.1
Principal Axes:
Scale 10**19 Nm
T Val= 2.48 Plg=14 Azm=284
N 0.16 8 192
P -2.64 73 73
Best Double Couple:Mo=2.6*10**19
NP1:Strike= 26 Dip=32 Slip= -74
NP2: 187 60 -100

27 21 51 12.35 6.063S 112.792E 584km
5.4mb (20 obs.)
JAVA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 23C
Centroid Location:
Origin Time 21:51:18.1 0.8
Lat 6.19S 0.07 Lon 112.63E 0.11
Dep 583.8 5.8 Half-duration 1.7
Principal Axes:
Scale 10**17 Nm
T Val= 1.33 Plg=33 Azm= 36
N 0.08 17 295
P -1.41 52 182
Best Double Couple:Mo=1.4*10**17
NP1:Strike=172 Dip=20 Slip= -31
NP2: 292 80 -107

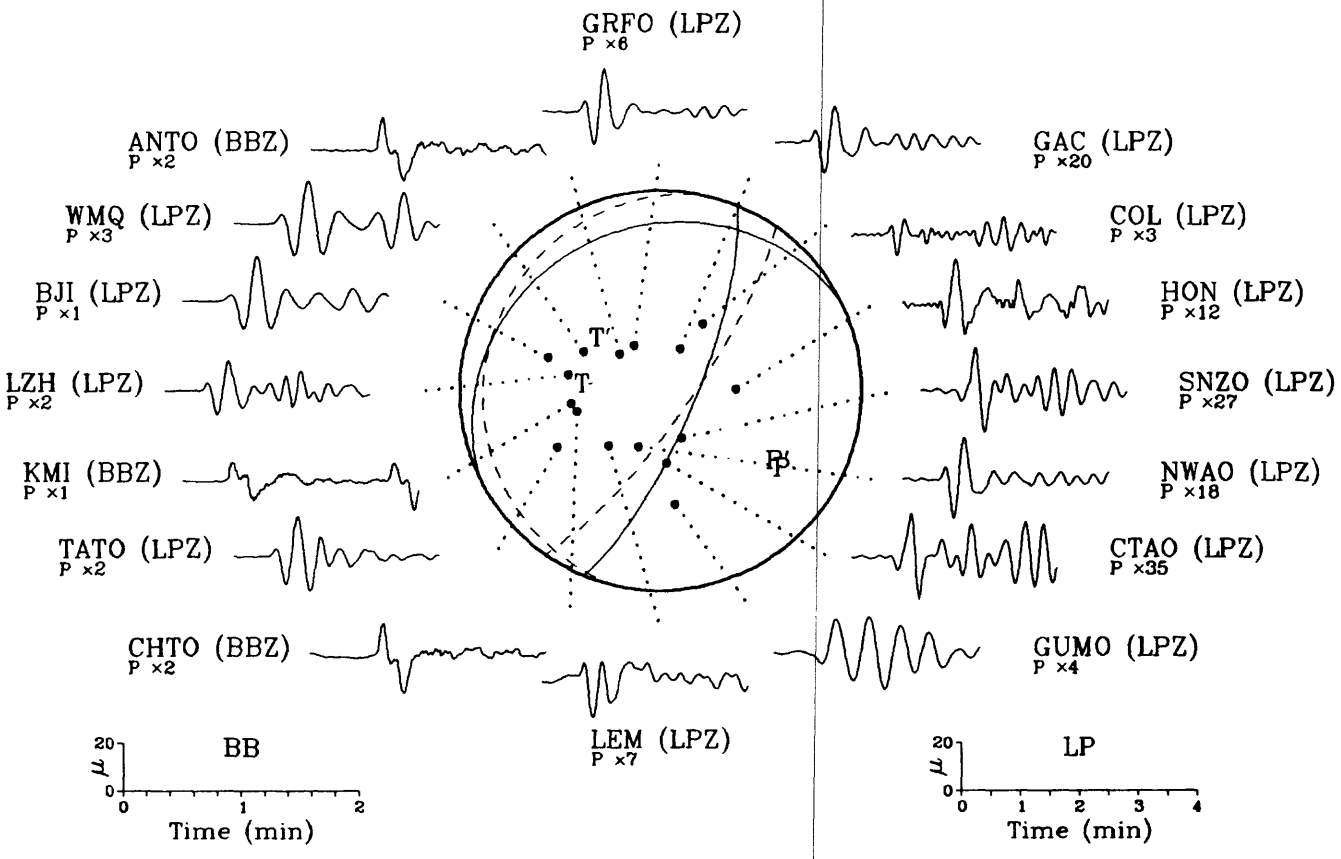
27 23 34 52.03 38.473N 20.290E 5km
5.3mb (49 obs.) 5.5Msz (6 obs.)
GREECE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 28C
Centroid Location:
Origin Time 23:34:55.6 0.6
Lat 38.51N 0.05 Lon 21.02E 0.08
Dep 15.0 BDY Half-duration 2.7
Principal Axes:
Scale 10**17 Nm
T Val= 4.80 Plg=22 Azm=359
N -0.39 33 105
P -4.41 48 242
Best Double Couple:Mo=4.6*10**17
NP1:Strike= 46 Dip=37 Slip=-155
NP2: 295 75 -55

28 06 52 03.48 36.957N 141.603E 49km
5.3mb (52 obs.) 5.3Msz (2 obs.)
NEAR EAST COAST OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 27C
Centroid Location:
Origin Time 06:52: 6.5 0.5
Lat 36.69N 0.04 Lon 141.60E 0.06
Dep 30.0 BDY Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 2.19 Plg=76 Azm=303
N 0.38 3 202
P -2.57 14 112
Best Double Couple:Mo=2.4*10**17
NP1:Strike=198 Dip=31 Slip= 85
NP2: 24 59 93

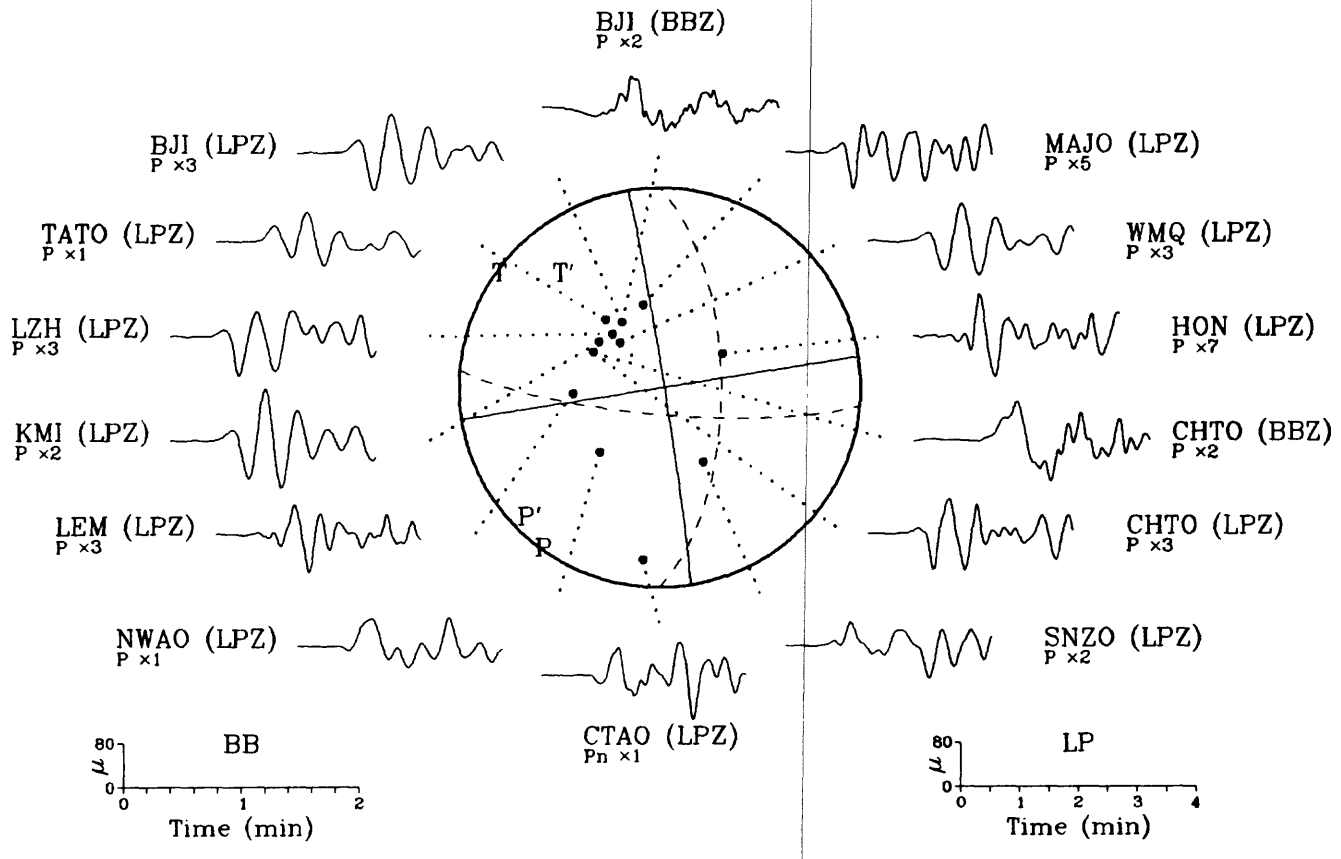
Compiled by Willis S. Jacobs, Leonard E. Kerry, John H. Minsch, Russell E. Needham, Waverly J. Person, Bruce W. Presgrave and William H. Schmieder.

Macroseismic information for the Papua New Guinea earthquakes of February 7 and 8 was contributed by I.D. Ripper and H. Letz of the Port Moresby Geophysical Observatory, Papua New Guinea.

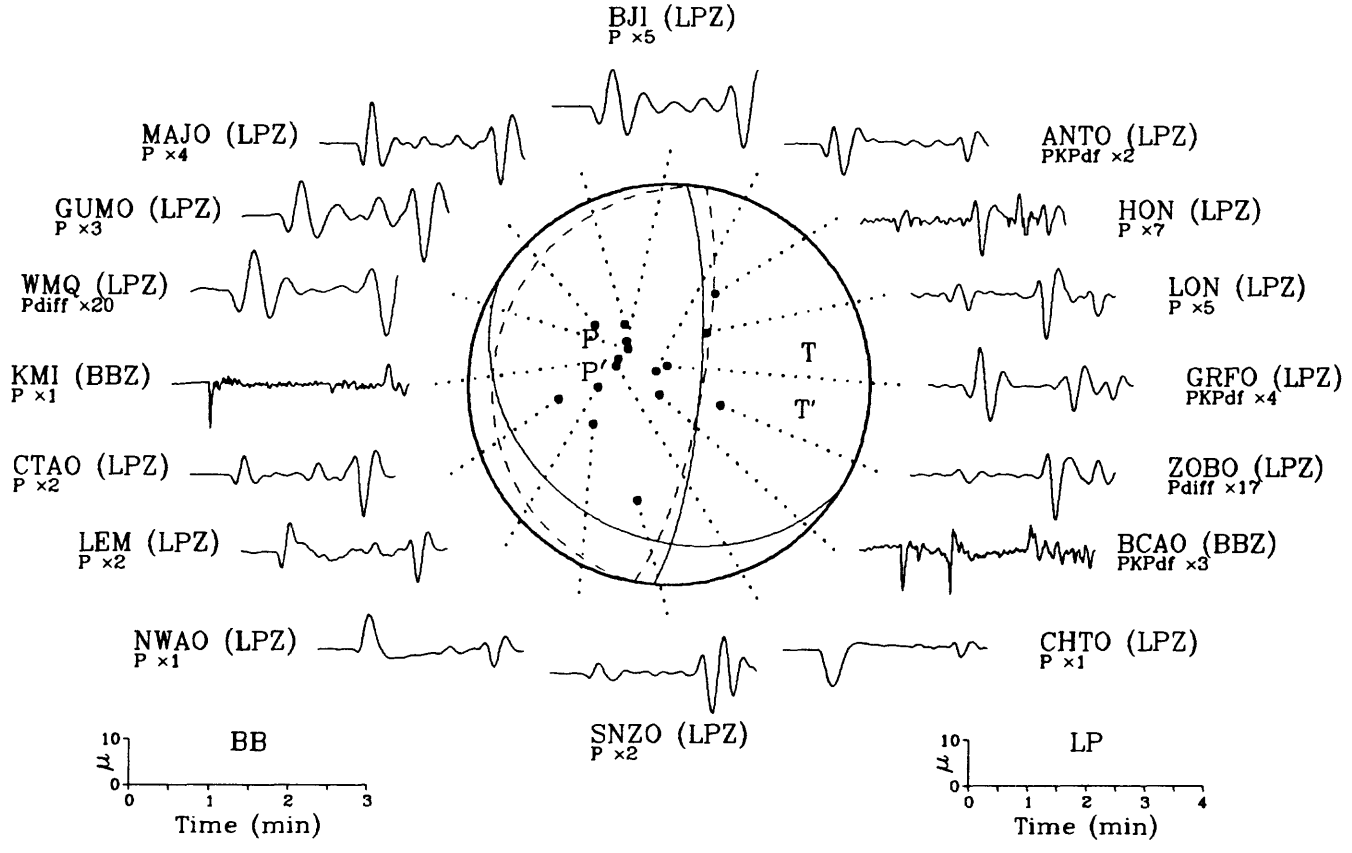
06 February 1987 12:23:48.02
Near East Coast of Honshu, Japan



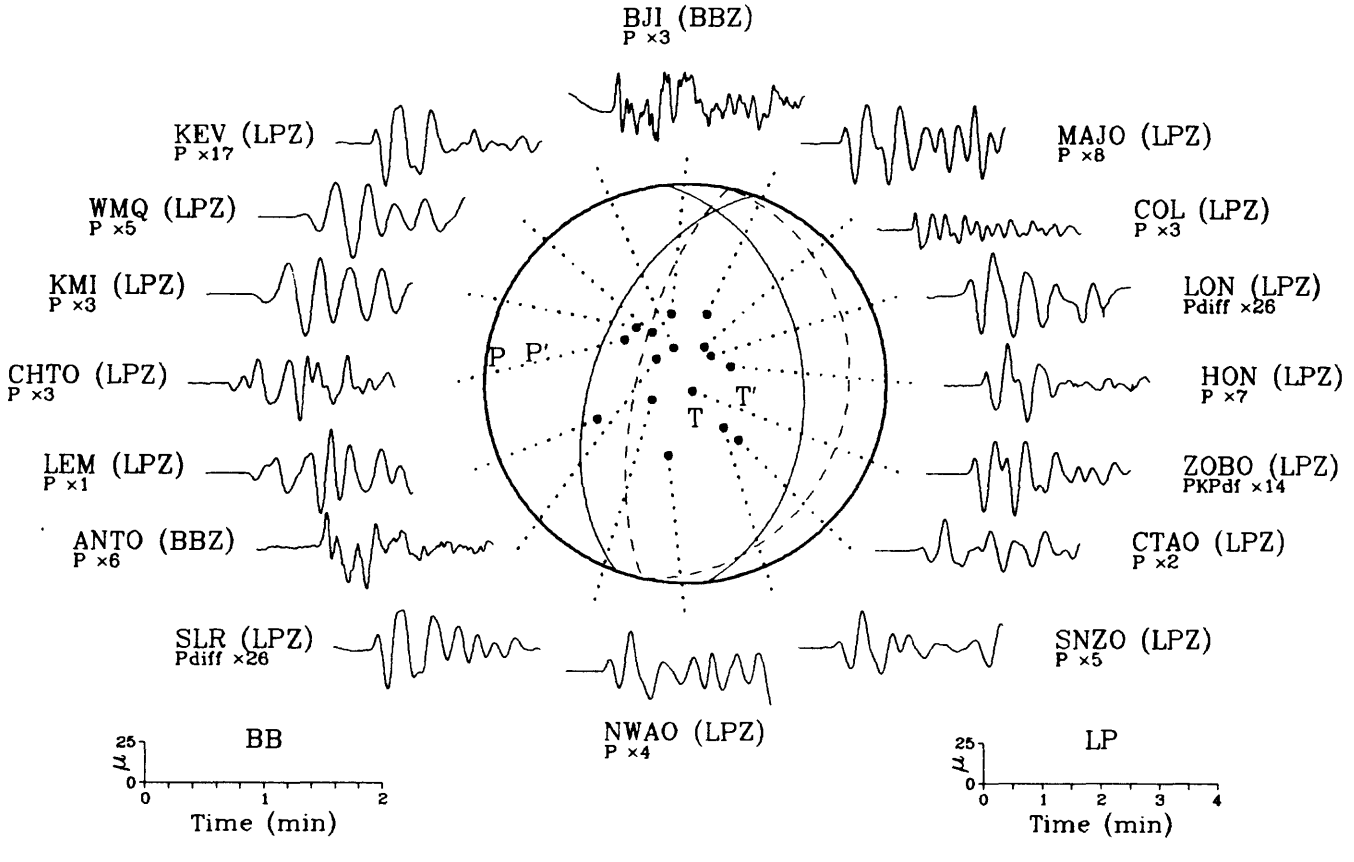
08 February 1987 18:33:58.39
East Papua New Guinea Region



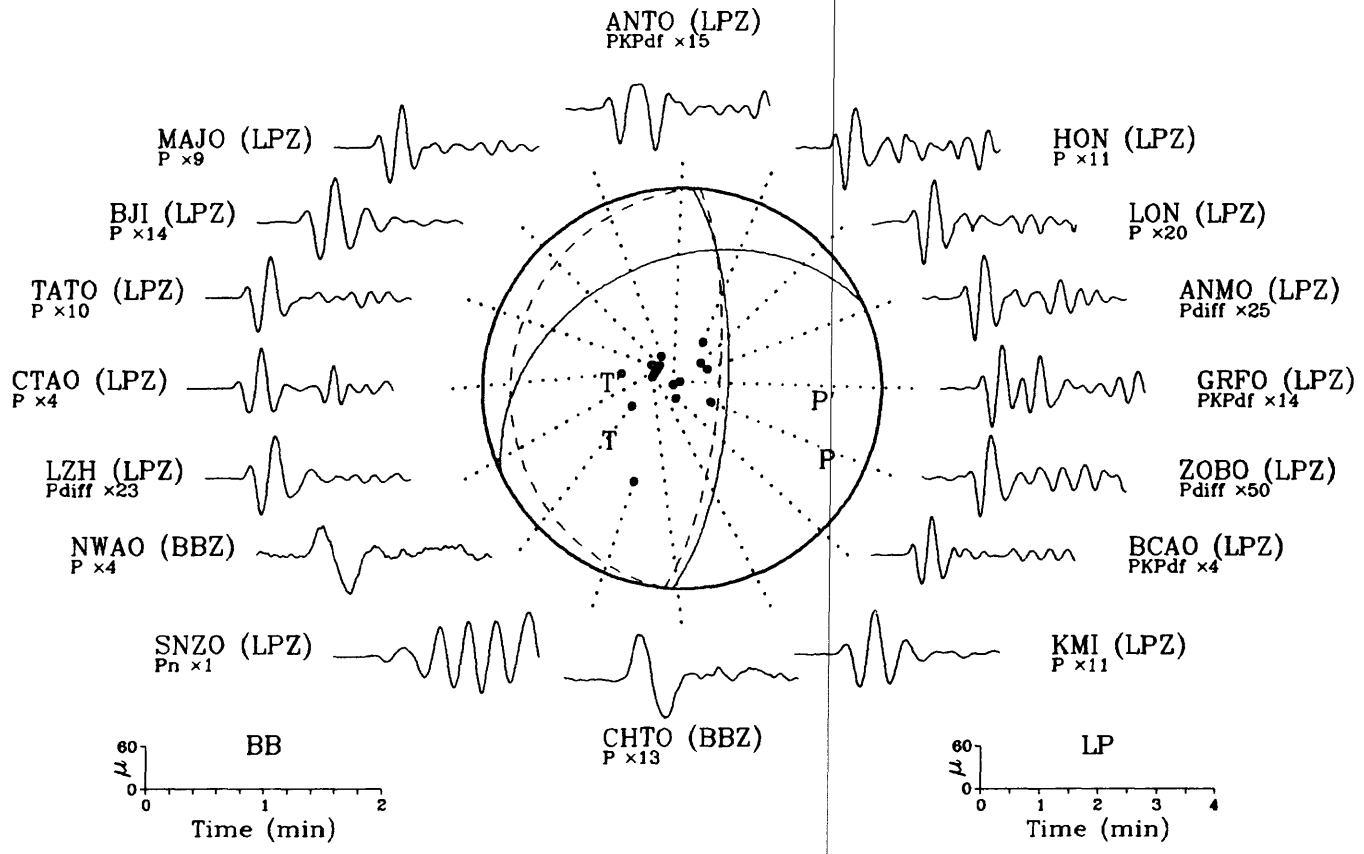
10 February 1987 00:59:28.57
Fiji Islands Region



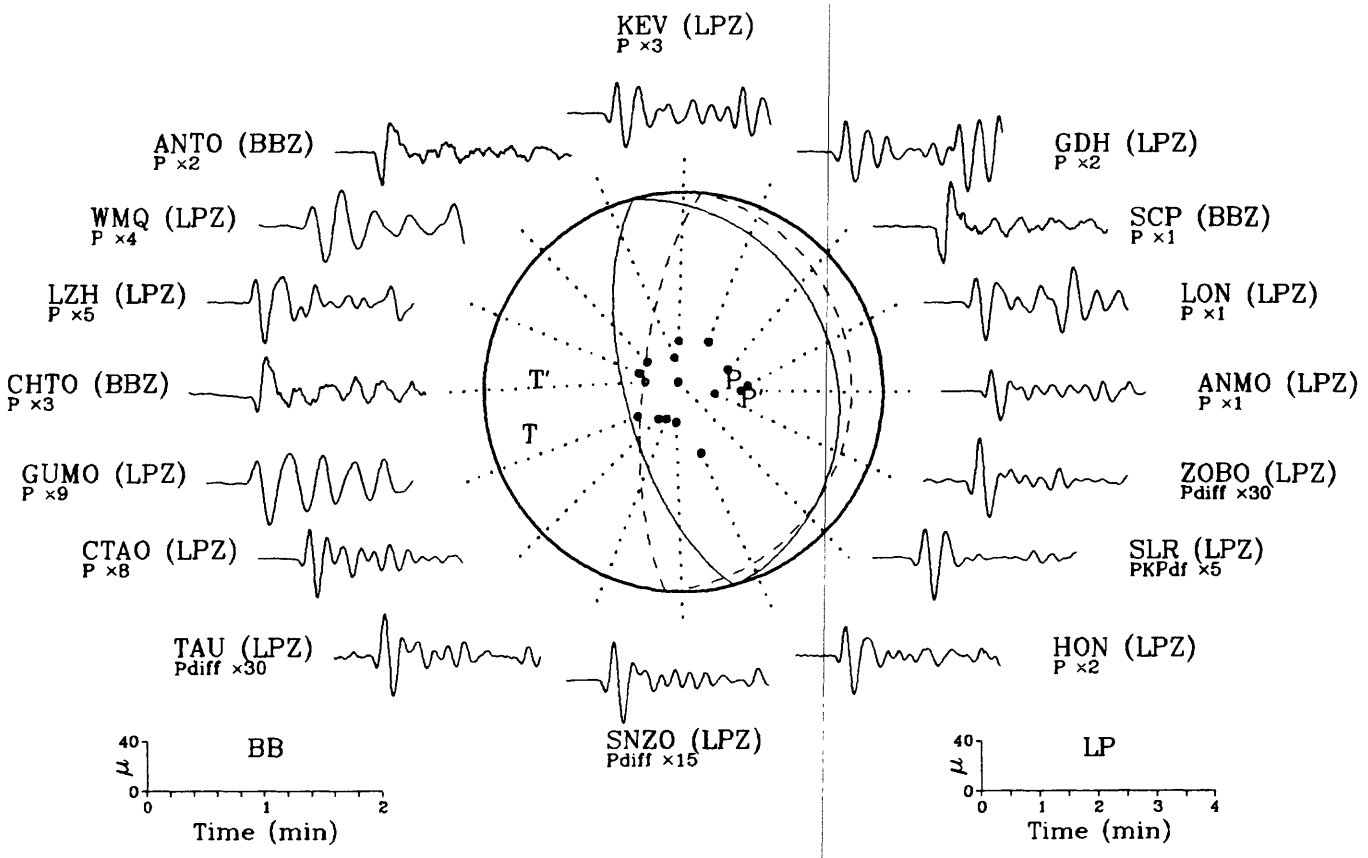
13 February 1987 07:18:29.09
Molucca Passage



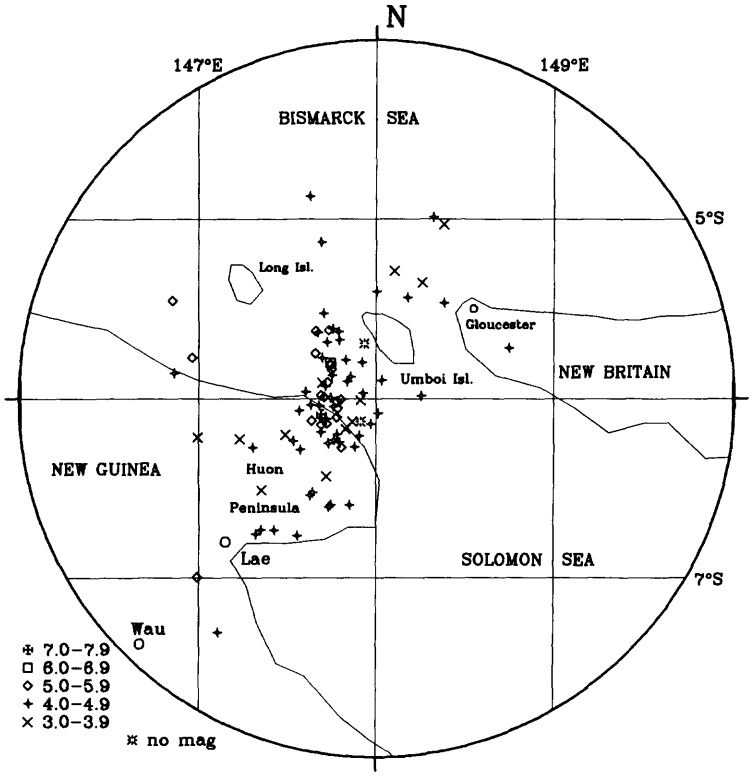
17 February 1987 06:16:12.12
South of Kermadec Islands



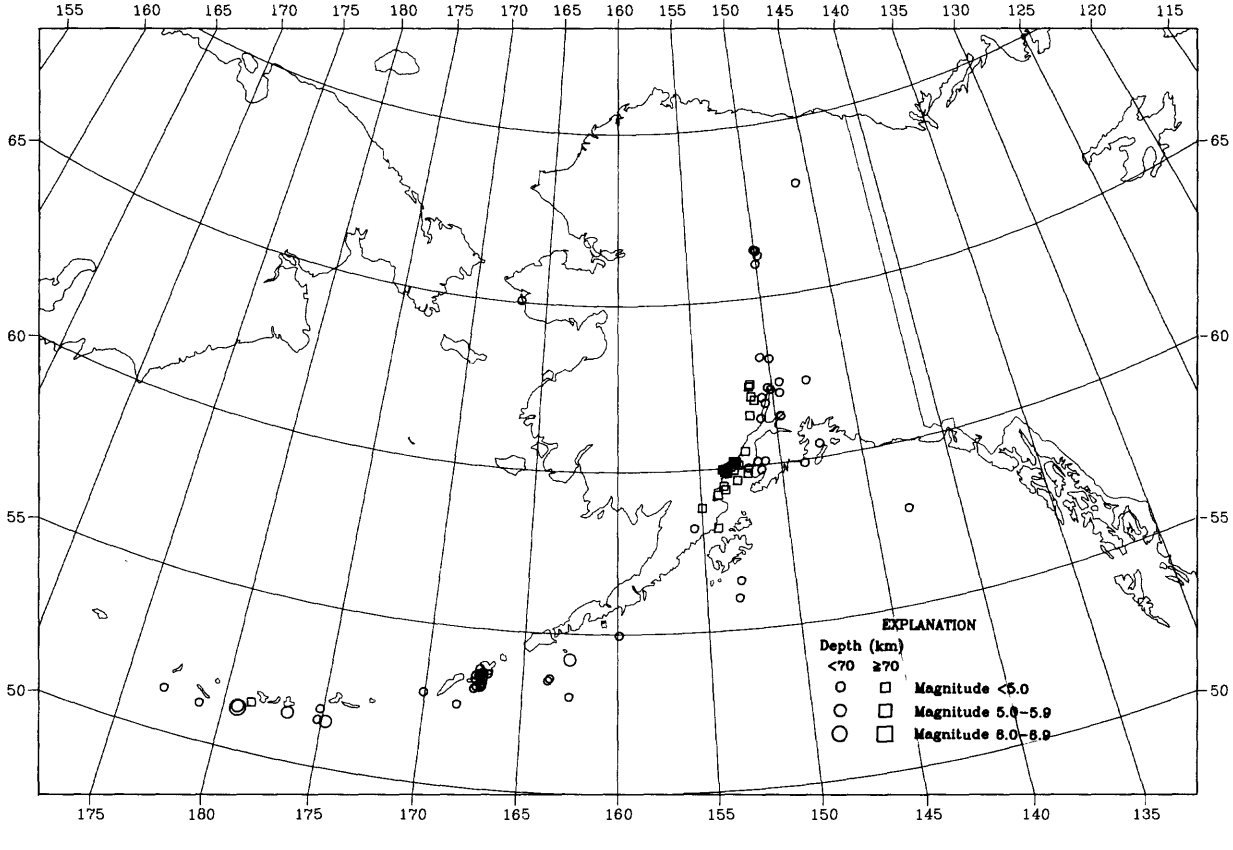
27 February 1987 08:31:54.40
Fox Islands, Aleutian Islands



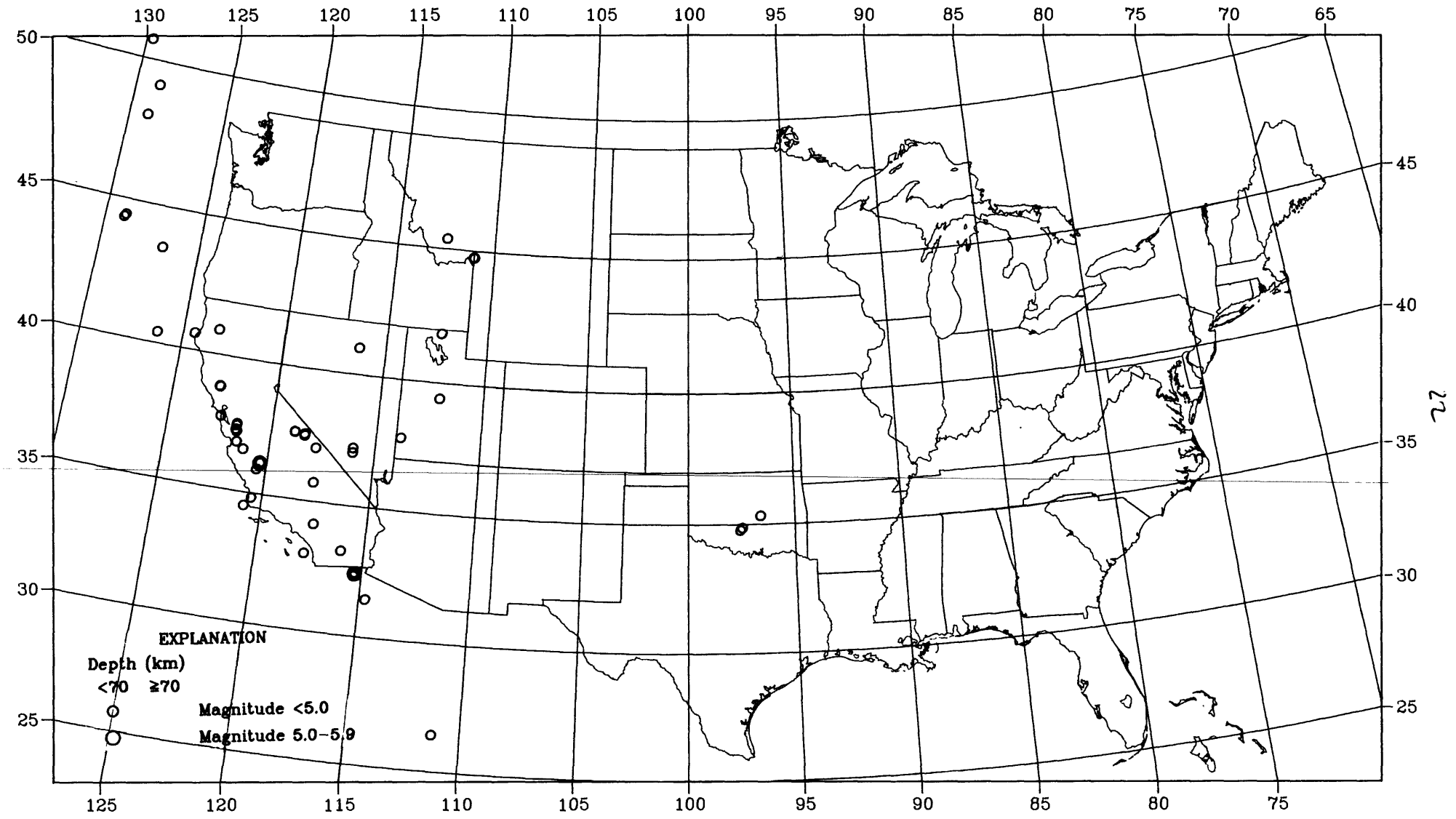
Earthquake Epicenters in the Vitiaz Strait, Papua New Guinea, February 1987

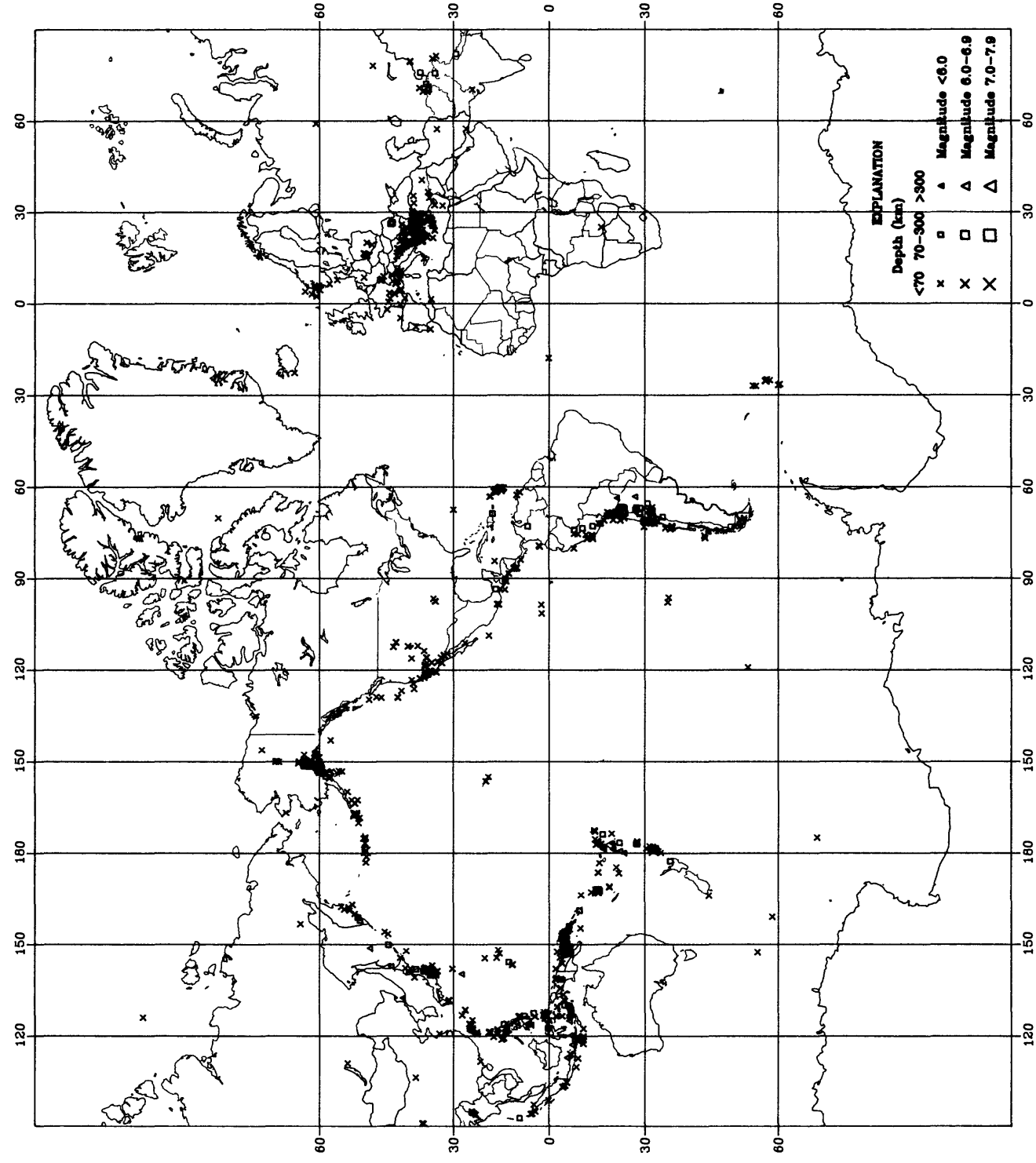


Earthquake epicenters in Alaska and adjacent regions for February, 1987



Earthquake epicenters in the conterminous United States and adjacent regions for February, 1987





Earthquakes located in February, 1987

GPO 854-417

CHANGE OF ADDRESS FORM

NAME—FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

PLEASE PRINT OR TYPE

(or) COUNTRY

Mail this form to: NEW ADDRESS

Superintendent of Documents
Government Printing Office SSOM
Washington, D.C. 20402

Attach last subscription label here.

SUBSCRIPTION ORDER FORM

SUBSCRIPTION ORDER FORM

ENTER MY SUBSCRIPTION TO:

@ $ Domestic; @ $ Foreign.

NAME—FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

PLEASE PRINT OR TYPE

(or) COUNTRY

☐ Remittance Enclosed (Make checks payable to Superintendent of Documents)

☐ Charge to my Deposit Account No. .....

MAIL ORDER FORM TO:
Superintendent of Documents
Government Printing Office
Washington, D.C. 20402

PRELIMINARY DETERMINATION OF EPICENTERS

MONTHLY LISTING

U.S. DEPARTMENT OF THE INTERIOR / GEOLOGICAL SURVEY

National Earthquake Information Center

M A R C H 1 9 8 7

KEY	DAY	ORIGIN TIME UTC HR	MN	SEC	GEOGRAPHIC COORDINATES LAT		LONG		DEPTH		MAGNITUDES GS MB	Msz	SD	NO. STA USED	REGION, CONTRIBUTED MAGNITUDES AND COMMENTS
	01	00	38	22.7	36.417	N	70.823	E	180	*	4.6		1.0	34	HINDU KUSH REGION
	01	01	38	33.6&	40.917	N	124.982	W	5	G				6	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.0 (BRK).
	01	02	32	49.4	31.612	S	69.153	W	122		4.7		0.9	56	SAN JUAN PROVINCE, ARGENTINA
	01	03	19	31.5	33.756	N	22.998	E	33	N	4.6		1.1	197	MEDITERRANEAN SEA. ML 4.8 (ATH).
	01	03	38	35.1?	38.87	N	27.72	E	10	G			1.7	5	TURKEY
	01	03	52	25.7	3.895	S	136.701	E	33	N	4.9	4.8	0.9	32	WEST IRIAN
a	01	04	55	04.3*	32.665	S	57.225	E	10	G	4.9		1.1	23	ATLANTIC-INDIAN RISE
	01	06	41	59.3	56.932	N	7.127	E	10	G			1.0	38	NORTH SEA. MD 3.2 (BER).
	01	07	16	01.6*	55.226	N	159.894	E	144	D	4.2		1.2	13	KAMCHATKA
	01	07	32	29.7	28.112	S	66.624	W	129		4.8		1.0	44	CATAMARCA PROVINCE, ARGENTINA
	01	07	48	47.6	37.372	N	141.387	E	62		4.8		1.1	84	NEAR EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Fukushima and Ishinamaki; (I JMA) at Onahama, Sendai and Utsunamiya.
	01	08	49	43.4	53.606	N	167.180	W	10	G	4.5		1.1	40	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).
	01	08	53	02.0*	53.522	N	167.609	W	10	G	4.5		1.0	23	FOX ISLANDS, ALEUTIAN ISLANDS
	01	09	11	50.3&	37.482	N	118.853	W	6					18	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.1 (BRK), 3.2 (PAS).
	01	10	00	06.3?	20.77	S	177.88	W	486	?	4.2		0.8	8	FIJI ISLANDS REGION
	01	11	04	38.8*	38.344	N	20.442	E	10	G			0.4	7	GREECE. ML 3.5 (ATH).
	01	12	17	45.5	39.001	N	22.203	E	43		4.1		1.2	51	GREECE
	01	12	34	04.0&	60.415	N	147.573	W	22					37	SOUTHERN ALASKA. <AGS-P>. ML 3.3 (PMR).
	01	12	42	00.1*	6.863	N	72.927	W	180	*			0.6	12	NORTHERN COLOMBIA
	01	13	31	09.4	28.642	N	95.921	E	33	N	5.1		1.0	26	INDIA-CHINA BORDER REGION
	01	14	10	29.7*	35.384	N	3.622	W	10	G			1.1	13	STRAIT OF GIBRALTAR. MG 3.1 (TOL).
	01	15	19	18.2?	6.21	S	147.74	E	58	?	4.0	3.1	1.3	7	EAST PAPUA NEW GUINEA REGION
	01	17	59	10.0	49.777	N	102.749	E	24	D	4.8		1.2	63	MONGOLIA. Felt (IV) in the Irkutsk-Zakamensk area, USSR.
	01	18	53	41.2&	33.910	N	116.780	W	18					8	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.2 (PAS). Felt in the Palm Springs area.
	01	20	45	22.2	44.439	N	7.411	E	10	G			0.1	7	NORTHERN ITALY. ML 2.7 (LDG).
	01	21	14	54.7?	35.98	N	28.22	E	10	G			1.1	5	EASTERN MEDITERRANEAN SEA
	01	21	25	03.5	39.319	N	28.166	E	14				0.8	12	TURKEY
	01	21	37	00.8	21.661	S	178.016	W	412	D	5.1		0.9	123	FIJI ISLANDS REGION
	01	23	03	33.4?	6.34	S	147.68	E	62	*	4.3		1.4	10	EAST PAPUA NEW GUINEA REGION
	01	23	20	31.6*	41.218	N	14.530	E	14				1.4	20	SOUTHERN ITALY
	01	23	36	46.1*	18.663	N	146.313	E	77	?	4.9		0.8	20	MARIANA ISLANDS
	01	23	48	47.8*	43.998	N	9.896	E	10	G			0.5	7	CORSICA. ML 2.8 (LDG).
	02	00	38	15.6?	29.78	N	113.50	W	10	G	4.0		1.7	10	GULF OF CALIFORNIA
	02	00	57	28.8	37.444	N	29.513	E	10	G			1.1	7	TURKEY
	02	01	35	38.9	37.930	S	176.916	E	29		5.1		1.5	31	NORTH ISLAND, NEW ZEALAND
f	02	01	42	34.1	37.965	S	176.765	E	19	G	5.9	6.6	1.5	198	NORTH ISLAND, NEW ZEALAND. Ms 6.8 (BRK), 6.4 (PAS). One person died from a heart attack, 25 injured and extensive damage (X) in the Edgecumbe-Kawerau-Whakatane area. Felt throughout much of North Island. Landslides and sandblows occurred. A southwest trending fault scarp 6 km. long had extensian openings of up to 1 m. and as much as 1.5 m. of downthrow on the northwest side. Peak ground acceleration of 0.33 g. was recorded within 15 km. of the epicenter. Depth from broadband displacement seismagrams.
	02	01	50	58.9	37.817	S	176.949	E	18	D	5.8		1.1	82	NORTH ISLAND, NEW ZEALAND. Felt.
	02	03	27	39.4*	38.100	S	176.598	E	20	G	4.8		1.0	12	NORTH ISLAND, NEW ZEALAND
	02	04	27	16.2&	40.265	N	124.618	W	15					7	NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).
	02	05	07	06.0?	37.67	N	29.57	E	10	G			1.3	4	TURKEY
a	02	05	57	43.5	45.708	S	96.212	E	10	G	5.6	6.2	1.1	94	SOUTHEAST INDIAN RISE
	02	07	42	03.0*	30.886	S	67.982	W	33	N	4.7		1.2	10	SAN JUAN PROVINCE, ARGENTINA
	02	07	55	08.9	37.912	S	176.848	E	10	G	5.5	5.2	1.2	40	NORTH ISLAND, NEW ZEALAND
	02	08	13	02.7*	31.055	S	68.383	W	10	G			1.5	11	SAN JUAN PROVINCE, ARGENTINA

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
Single issues are available from Books and Open-File Reports Section, U.S. Geological Survey, P.O. Box 25425, Denver Federal Center, Denver, CO 80225.

	02	08	30	51.7*	75.366	N	15.577	E	10	G	4.7		0.8	8	SVALBARD REGION
	02	09	43	55.3	52.137	N	159.202	E	41	D	5.0		0.8	107	OFF EAST COAST OF KAMCHATKA
	02	09	47	57.4*	45.578	S	95.953	E	10	G	4.6		0.8	18	SOUTHEAST INDIAN RISE
	02	13	34	24.6&	60.578	N	142.874	W	14					22	SOUTHERN ALASKA. <AGS-P>.
	02	15	16	57.4*	21.206	S	179.327	W	629		4.6		0.7	32	FIJI ISLANDS REGION
	02	16	31	37.6*	39.087	S	91.633	W	10	G	4.9	4.1	1.3	17	WEST CHILE RISE
	02	16	44	15.6*	31.611	S	117.108	E	10	G	3.6		1.2	8	WESTERN AUSTRALIA
	02	17	10	08.3*	21.215	S	67.745	W	183		4.1		1.3	21	CHILE-BOLIVIA BORDER REGION
	02	18	10	54.6*	36.932	N	28.594	E	10	G			0.6	6	DODECANESE ISLANDS
	02	18	34	26.7	19.139	S	68.567	W	57	*			0.9	10	CHILE-BOLIVIA BORDER REGION
	02	19	45	13.0*	40.089	N	20.500	E	10	G			1.4	5	GREECE-ALBANIA BORDER REGION. ML 3.0 (TTG).
	02	20	17	59.8	5.433	S	145.910	E	125	*	4.4		1.1	17	EAST PAPUA NEW GUINEA REGION
	02	21	51	08.2	25.436	N	63.121	E	33	N	4.4		1.0	23	PAKISTAN
	02	22	22	10.9	31.089	S	117.629	E	10	G			1.4	8	WESTERN AUSTRALIA
	02	22	34	38.3*	6.712	S	104.609	E	33	N	5.1		1.3	16	SUNDA STRAIT
	02	22	52	09.2*	58.726	S	25.379	W	33	N	4.8		0.7	13	SOUTH SANDWICH ISLANDS REGION
	02	23	14	30.9	53.399	N	167.528	W	10	G	4.8		1.4	52	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.9 (PMR).
	02	23	25	33.5&	62.098	N	150.883	W	60					21	CENTRAL ALASKA. <AGS-P>.
	02	23	35	08.1?	6.68	S	147.61	E	33	N	4.1		1.2	7	EAST PAPUA NEW GUINEA REGION
	03	00	06	03.5	52.713	N	174.613	W	162		5.0		1.0	157	ANDREANOF ISLANDS, ALEUTIAN IS.
	03	01	27	29.9?	34.37	N	104.01	E	33	N	4.3		1.7	11	GANSU PROVINCE, CHINA
a	03	01	32	12.3	46.347	N	152.013	E	96	G	5.8		0.9	408	KURIL ISLANDS. Felt (II JMA) at Kushiro and (I JMA) at Nemuro, Hokkaida. Depth from braadband displacement seismagrams.
	03	02	16	34.7	38.932	N	25.693	E	26		3.4		1.1	47	AEGEAN SEA. ML 3.5 (ATH).
	03	02	44	00.0?	39.53	N	22.54	E	10	G			0.1	5	GREECE
	03	03	04	05.0%	60.570	N	5.065	E	10	G			0.3	7	SOUTHERN NORWAY. MD 2.0 (BER).
	03	05	37	45.9	44.174	N	11.165	E	17				1.3	35	NORTHERN ITALY. MD 3.6 (FIR), ML 3.6 (KBA).
	03	06	05	52.1	53.314	N	167.414	W	10	G	4.7		1.3	39	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.8 (PMR).
	03	07	17	53.8*	53.347	N	167.362	W	10	G	4.6		1.4	18	FOX ISLANDS, ALEUTIAN ISLANDS
	03	08	00	28.8*	33.849	S	71.518	W	10	G			0.6	8	NEAR COAST OF CENTRAL CHILE
	03	08	34	03.6?	20.41	S	177.93	W	551	?	4.6		0.9	18	FIJI ISLANDS REGION
	03	09	33	02.5&	61.324	N	146.933	W	31					40	SOUTHERN ALASKA. <AGS-P>. ML 3.3 (PMR).
	03	09	34	03.2	62.210	N	124.299	W	10	G			0.9	6	NORTHWEST TERRITORIES, CANADA
a	03	09	41	33.6	41.292	N	79.298	E	33	N	5.1	5.0	1.2	81	KIRGHIZ-XINJIANG BORDER REGION
	03	10	07	19.6	19.839	S	68.772	W	149		4.9		1.0	94	CHILE-BOLIVIA BORDER REGION. Felt (III) in the Iquique area, Chile.
	03	10	41	52.1	43.198	N	0.640	W	10	G			1.1	32	PYRENEES. ML 3.9 (LDG).
	03	10	42	50.7*	42.767	N	0.483	W	10	G			0.2	5	PYRENEES. ML 3.6 (LDG).
	03	11	09	47.1%	39.014	N	26.211	E	10	G			1.5	6	TURKEY
	03	11	32	56.6%	39.500	N	28.552	E	10	G			0.3	8	TURKEY
	03	12	26	05.9?	41.83	N	24.31	E	10	G			0.7	6	GREECE-BULGARIA BORDER REGION
	03	12	59	18.2*	23.990	S	66.869	W	193		4.6		1.0	29	JUJUY PROVINCE, ARGENTINA
	03	13	09	32.0*	71.123	N	5.696	W	10	G	4.4		1.4	21	JAN MAYEN ISLAND REGION
a	03	14	20	32.3	57.910	S	25.147	W	25	D	5.4	5.0	0.9	82	SOUTH SANDWICH ISLANDS REGION
	03	14	23	06.8*	40.313	N	63.607	E	33	N	4.5		1.4	13	UZBEK SSR
	03	14	32	41.7*	39.554	N	25.829	E	10	G			1.4	9	AEGEAN SEA
	03	15	30	54.6%	60.708	N	5.538	E	10	G			0.6	7	SOUTHERN NORWAY. MD 2.3 (BER).
	03	16	47	05.5?	43.67	N	1.07	W	10	G			0.6	5	PYRENEES. ML 3.2 (LDG).
	03	17	37	44.0	43.052	N	2.030	W	10	G			1.2	23	SPAIN. ML 3.5 (LDG). Felt (III) at Astrain.
	03	20	52	46.9?	79.68	N	1.62	W	10	G			1.4	7	GREENLAND SEA
	03	21	36	00.2*	53.169	N	167.121	W	10	G	4.3		1.1	10	FOX ISLANDS, ALEUTIAN ISLANDS
	03	22	34	01.9	45.756	N	150.700	E	109	D	4.9		0.8	125	KURIL ISLANDS
	03	22	38	19.1?	23.99	N	121.79	E	114	?			0.8	5	TAIWAN
	03	23	46	25.9	35.260	N	141.222	E	52	*	4.4		0.8	14	NEAR EAST COAST OF HONSHU, JAPAN
	04	00	12	28.0	21.739	N	142.999	E	312	*	4.5		0.9	45	MARIANA ISLANDS REGION
	04	01	23	21.3	47.413	N	11.369	E	13				1.3	23	AUSTRIA. ML 3.4 (KBA), 3.4 (LDG), 3.1 (GRF), 2.8 (FUR).
	04	01	38	15.7?	22.34	S	179.51	W	592	?	4.7		1.1	16	SOUTH OF FIJI ISLANDS
	04	02	22	54.2*	53.745	N	166.954	W	10	G	4.2		1.1	19	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.5 (PMR).
	04	02	49	40.9*	34.938	S	108.749	W	10	G	4.9		1.1	17	EASTER ISLAND CORDILLERA
	04	02	55	47.9*	24.134	N	121.945	E	33	N	3.9		1.4	12	TAIWAN
	04	04	16	26.1*	1.817	N	127.111	E	86	?	4.5		1.4	10	HALMAHERA
	04	04	19	26.3&	40.645	N	119.682	W	19	G				15	NEVADA. <BRK>. ML 3.7 (BRK). Felt (II) at Wendel, California.
	04	04	33	05.6*	46.371	N	13.319	E	10	G			1.0	8	AUSTRIA. ML 2.3 (KBA), 2.2 (TRI).
	04	05	22	01.6*	41.236	N	23.616	E	10	G			0.4	8	GREECE-BULGARIA BORDER REGION
a	04	06	25	22.6	6.528	S	147.921	E	16		5.2	5.2	1.1	86	EAST PAPUA NEW GUINEA REGION. ML 5.3 (PMG).
	04	06	49	56.2%	40.685	N	23.507	E	10	G			0.8	6	GREECE
	04	08	22	05.6*	36.202	N	28.536	E	10	G			1.1	10	DODECANESE ISLANDS
	04	09	55	29.1&	36.137	N	120.220	W	5					19	CENTRAL CALIFORNIA. <BRK>. ML 3.2 (BRK).
a	04	10	04	58.5	19.962	S	68.926	W	113	D	5.2		1.2	137	CHILE-BOLIVIA BORDER REGION. Felt (III) in the Iquique area, Chile.
	04	12	04	45.6*	34.307	N	23.633	E	33	N	4.4		1.2	9	CRETE
	04	13	11	29.6	60.417	N	7.113	E	10	G			0.7	8	SOUTHERN NORWAY. MD 2.2 (BER).
	04	13	29	15.1&	36.883	N	121.335	W	4					13	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
	04	15	12	00.2*	71.360	N	4.160	W	10	G	4.3		0.8	7	JAN MAYEN ISLAND REGION
	04	18	15	26.6&	60.078	N	152.553	W	93					42	SOUTHERN ALASKA. <AGS-P>.
	04	21	18	33.4%	46.147	N	2.699	E	10	G			0.9	8	FRANCE. ML 2.0 (LDG).
	04	21	31	20.1?	4.80	S	77.26	W	33	N			1.2	7	NORTHERN PERU
	05	00	30	21.0	40.776	N	116.253	W	5	G			0.8	15	NEVADA. ML 4.1 (SLC), MD 4.1 (REN). Felt (III) at Beowawe. Felt 7 miles and 18 miles north of Carlin.
	05	00	46	42.4	0.310	S	129.730	E	33	N	4.9	4.3	1.1	40	HALMAHERA
	05	00	58	55.8	40.486	N	22.684	E	10	G			0.2	7	GREECE
	05	01	46	00.8	37.117	N	141.461	E	56		4.8		1.1	78	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Fukushima, Onahama and Sendai.
	05	02	33	39.3	35.410	N	87.386	E	33	N	4.5		1.6	18	TIBET
	05	02	56	17.0	47.803	N	155.327	E	34	D	4.8		1.2	89	KURIL ISLANDS REGION
	05	03	02	50.4&	40.442	N	110.616	W	1		4.0			40	UTAH. <SLC-P>. ML 3.7 (SLC). Felt (IV) at Mountain Home.
	05	03	19	18.8?	36.52	N	28.69	E	10	G			1.1	7	DODECANESE ISLANDS
	05	04	13	54.3&	59.514	N	153.587	W	122					32	SOUTHERN ALASKA. <AGS-P>.
	05	04	50	18.1*	38.921	N	25.652	E	10	G			0.6	6	AEGEAN SEA
	05	05	27	22.5?	23.59	S	179.25	W	566	*	5.0		0.6	23	SOUTH OF FIJI ISLANDS

	05	05	50	16.1•	5.270	S	152.694	E	33	N	3.9	1.5	6	NEW BRITAIN REGION
	05	05	56	47.5•	43.222	N	20.881	E	10	G		1.3	6	YUGOSLAVIA. Felt (IV) in the Blazevo area.
	05	06	55	25.2&	36.578	N	121.198	W	4				12	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK).
f	05	09	17	05.2	24.388	S	70.161	W	62	G	6.5 7.3	1.2	303	NEAR COAST OF NORTHERN CHILE. Ms 7.2 (BRK), 7.0 (PAS), mb 6.8 (PAS). One person killed and damage (VI) in the Antofogasta area. Felt (VI) at Chuquicamata; (V) in the Taltal-Toconao-Calama area; (IV) at Arica; (III) at Vallenar. Felt (II) at Arequipa, Peru. Also felt at La Paz, Bolivia. Local tsunami generated with maximum wave heights 22 cm. at Caldera, 20 cm. at Coquimbo, 14 cm. at Valparaiso and 18 cm. at Arica. Depth from broadband displacement seismograms.
	05	09	24	43.7	42.502	N	18.659	E	10	G		0.9	9	YUGOSLAVIA. ML 2.5 (TTG).
	05	09	51	53.4	24.432	S	70.216	W	43	D	5.6	0.9	158	NEAR COAST OF NORTHERN CHILE
	05	09	56	08.5	24.463	S	70.466	W	48	•	5.6	0.9	120	NEAR COAST OF NORTHERN CHILE
a	05	10	55	12.3	24.495	S	70.701	W	35	D	5.7	1.2	183	NEAR COAST OF NORTHERN CHILE. Felt (IV) at Antofogasta.
	05	11	08	21.8•	5.922	S	78.969	W	33	N	5.0	0.9	16	NORTHERN PERU
	05	13	06	25.3•	24.568	S	70.631	W	33	N	4.6	0.7	13	NEAR COAST OF NORTHERN CHILE
	05	15	52	20.6•	5.838	S	142.028	E	33	N	3.7	1.0	5	PAPUA NEW GUINEA
	05	16	04	13.1	40.523	N	23.750	E	10	G		1.1	10	GREECE
	05	18	20	16.6•	53.245	N	167.142	W	10	G	4.6	1.4	27	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).
	05	18	27	41.6•	24.436	S	70.100	W	33	N		1.2	7	NEAR COAST OF NORTHERN CHILE
	05	19	43	28.1•	36.356	N	28.611	E	10	G		1.5	6	DODECANESE ISLANDS
a	05	19	47	09.1	5.887	S	146.653	E	56		5.4 5.2	1.0	110	EAST PAPUA NEW GUINEA REGION
	05	20	24	34.5	53.149	N	167.143	W	10	G	4.6	1.0	39	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.8 (PMR).
	05	20	35	06.3&	62.518	N	147.721	W	58				29	CENTRAL ALASKA. <AGS-P>.
	05	20	39	19.7	52.471	N	132.719	E	15	D	5.0	0.9	87	EASTERN USSR
	05	20	42	14.5?	35.20	N	23.34	E	33	N	3.7	1.3	8	CRETE. ML 3.6 (ATH).
	05	21	14	20.2	37.597	N	118.446	W	5	G		0.6	10	CALIFORNIA-NEVADA BORDER REGION. MD 3.2 (REN).
	05	21	27	50.1	24.013	S	70.534	W	52		5.0	1.1	37	NEAR COAST OF NORTHERN CHILE
	05	22	20	43.3&	60.099	N	152.071	W	60				18	SOUTHERN ALASKA. <AGS-P>.
	05	23	09	07.1%	47.117	N	0.135	W	10	G		0.5	14	FRANCE. ML 3.3 (LDG).
	06	01	06	56.4	54.624	N	161.804	E	31	D	4.6	0.9	31	NEAR EAST COAST OF KAMCHATKA
f	06	01	54	50.4	0.048	N	77.653	W	14	G	6.1 6.1	0.9	354	COLOMBIA-ECUADOR BORDER REGION. Ms 6.2 (BRK). One old building collapsed in Quito, Ecuador. Felt throughout northern Ecuador, central and southwestern Colombia, and northern Peru. Depth from broadband displacement seismograms.
	06	02	14	47.0	48.346	N	7.664	E	10	G		0.3	8	FRANCE. ML 2.3 (LDG).
	06	02	37	05.5?	30.72	S	178.26	W	33	N	4.6	1.2	10	KERMADEC ISLANDS
f	06	04	10	41.9	0.151	N	77.821	W	10	G	6.5 6.9	1.2	344	COLOMBIA-ECUADOR BORDER REGION. Ms 7.0 (BRK), 6.7 (PAS). Approximately 1,000 people killed, 4,000 missing, 20,000 homeles, extensive damage, landslides and ground cracks in Napo Province and in the Quito-Tulcon area, Ecuador. About 27 km. of the oil pipeline in Ecuador, between Laga Agrio and Balao, were destroyed or badly damaged. Landslides occurred in the Posto-Mocoa area, Colombia. Felt (IV) at Iquitos, Peru. Felt strongly in many parts of Ecuador and southwestern Colombia. Also felt in central Colombia and northern Peru.
	06	04	17	30.0•	0.220	S	77.600	W	10	G	5.5	1.3	50	ECUADOR
	06	04	56	29.0?	24.48	S	68.74	W	33	N	4.7	1.5	12	CHILE-ARGENTINA BORDER REGION
	06	05	34	33.3	51.690	N	16.168	E	10	G		0.8	16	POLAND. ML 4.2 (VKA), 3.9 (KBA).
	06	06	10	33.2?	37.13	N	22.20	E	10	G		1.4	6	SOUTHERN GREECE. ML 3.3 (ATH).
	06	06	28	06.6&	61.567	N	152.003	W	105				25	SOUTHERN ALASKA. <AGS-P>.
	06	06	33	03.6	0.055	S	77.629	W	10	G	5.2	1.0	112	ECUADOR. Felt in southwestern Colombia.
a	06	07	06	44.0	24.089	S	70.104	W	41	D	5.9 5.5	0.9	250	NEAR COAST OF NORTHERN CHILE. Felt (IV) at Antofogasta.
	06	08	12	51.3•	24.157	S	70.184	W	33	N	4.3	1.4	9	NEAR COAST OF NORTHERN CHILE
a	06	08	14	48.0	0.022	N	77.927	W	9	D	5.5 5.4	1.2	173	COLOMBIA-ECUADOR BORDER REGION. Felt in southwestern Colombia.
	06	08	24	36.3•	23.904	S	70.056	W	33	•		0.5	7	NEAR COAST OF NORTHERN CHILE
	06	08	29	16.1%	10.922	N	61.802	W	33	N		0.8	7	TRINIDAD. MD 3.7 (TRN). Felt (IV) on Trinidad.
	06	09	36	24.4•	11.178	S	119.498	E	33	N	3.9	1.0	8	SOUTH OF SUMBA ISLAND
a	06	09	39	54.7	24.149	S	70.118	W	46	D	5.7 5.7	1.0	265	NEAR COAST OF NORTHERN CHILE. Felt (V) at Antofogasta.
	06	10	12	56.7	59.791	N	6.239	E	10	G		1.6	6	SOUTHERN NORWAY. MD 2.0 (BER).
	06	10	16	01.9•	31.484	S	179.664	W	320	•	4.9	1.3	36	KERMADEC ISLANDS REGION
a	06	10	23	26.6	14.590	N	92.287	W	95		5.1	1.0	194	NEAR COAST OF CHIAPAS, MEXICO
	06	12	40	05.0	0.152	S	77.565	W	12	D	4.9	1.3	31	ECUADOR
a	06	13	48	41.5	51.135	N	179.587	E	54	D	5.4	1.0	220	RAT ISLANDS, ALEUTIAN ISLANDS
	06	13	49	52.3	0.140	N	77.268	W	10	G	4.7	1.1	27	COLOMBIA-ECUADOR BORDER REGION
	06	13	58	11.7	6.737	N	73.042	W	172		4.9	0.9	68	NORTHERN COLOMBIA
	06	14	09	16.8?	51.09	N	179.24	E	33	N	4.5	0.8	9	RAT ISLANDS, ALEUTIAN ISLANDS
	06	14	19	20.8•	31.223	S	117.495	E	10	G		1.4	6	WESTERN AUSTRALIA
	06	15	06	08.8•	41.461	N	32.870	E	10	G		1.6	7	TURKEY
	06	15	18	30.5	45.151	N	23.109	E	10	G		1.6	10	ROMANIA
	06	15	27	41.7	16.888	N	59.876	E	10	G	4.8	1.3	50	ARABIAN SEA
	06	15	37	32.8?	51.30	N	179.44	E	33	N	4.4	0.9	7	RAT ISLANDS, ALEUTIAN ISLANDS
	06	16	30	19.4•	50.982	N	179.586	E	33	N	4.8	1.2	32	RAT ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).
	06	16	54	50.6	51.094	N	179.560	E	33	N	5.1	1.1	89	RAT ISLANDS, ALEUTIAN ISLANDS
	06	17	10	52.7	7.159	N	76.123	W	54	•	4.1	1.1	13	NORTHERN COLOMBIA
	06	17	17	42.8	31.880	S	67.881	W	117		5.0	1.0	76	SAN JUAN PROVINCE, ARGENTINA. Felt (III) at Mendoza.
	06	18	11	55.8	15.436	N	94.611	W	39	•	4.8	0.9	50	NEAR COAST OF OAXACA, MEXICO
	06	19	24	25.3•	38.437	N	31.689	E	10	G		1.0	11	TURKEY. Felt at Ilgin.
	06	19	35	39.1•	49.160	N	9.376	E	10	G		0.9	8	GERMANY. ML 3.0 (LDG).
	06	19	56	07.4•	53.217	N	167.147	W	10	G	4.5	1.1	19	FOX ISLANDS, ALEUTIAN ISLANDS
	06	20	22	26.4•	53.734	N	166.938	W	10	G	4.0	0.9	9	FOX ISLANDS, ALEUTIAN ISLANDS
	06	20	46	27.6•	6.809	S	129.698	E	87	?	4.4	0.8	11	BANDA SEA
	06	22	27	39.7?	24.90	S	71.30	W	33	N		0.9	6	OFF COAST OF NORTHERN CHILE
	07	00	03	08.3?	5.71	S	147.54	E	179	?	4.0	1.2	6	EAST PAPUA NEW GUINEA REGION
	07	00	23	39.1	6.788	N	72.965	W	167		4.8	0.9	42	NORTHERN COLOMBIA
	07	00	44	15.8•	23.858	S	174.513	W	33	N	4.7	0.8	6	TONGA ISLANDS REGION
	07	01	14	27.1	48.308	N	7.693	E	10	G		0.9	9	FRANCE. ML 2.6 (LDG).

	07	01	36	28.9*	5.347	N	126.150	E	117	*	4.7		1.0	22	MINDANAO, PHILIPPINE ISLANDS
	07	01	37	22.7	6.781	N	73.015	W	167		4.9		0.8	82	NORTHERN COLOMBIA
	07	03	16	37.2	35.236	N	140.880	E	60	*	4.5		1.2	48	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Kofu and Mito.
	07	03	59	47.0*	48.353	N	7.614	E	10	G			0.4	6	FRANCE. ML 2.1 (LDG).
	07	04	52	44.8?	51.58	N	16.76	E	10	G			1.1	5	POLAND
	07	05	25	52.8?	38.04	N	20.01	E	10	G			1.3	8	GREECE. ML 3.5 (ATH).
	07	05	38	06.6	30.739	S	117.124	E	19		4.0		0.9	10	WESTERN AUSTRALIA
o	07	06	11	17.0	16.022	S	167.399	E	36	D	5.6	5.5	1.1	171	VANUATU ISLANDS
	07	07	29	14.4*	53.268	N	166.826	W	10	G	4.2		1.3	11	FOX ISLANDS, ALEUTIAN ISLANDS
	07	07	32	20.0%	60.654	N	4.901	E	10	G			0.9	6	SOUTHERN NORWAY. MD 1.6 (BER).
	07	07	57	01.2	33.239	S	179.855	W	93	*	5.0		1.1	67	SOUTH OF KERMADEC ISLANDS
	07	07	58	36.9	8.387	S	156.522	E	33	N	4.3		0.6	8	SOLOMON ISLANDS
	07	08	07	51.9*	51.469	N	174.148	W	33	N	4.8		0.7	35	ANDREANOF ISLANDS, ALEUTIAN IS.
	07	08	30	13.9&	62.568	N	150.901	W	75					17	CENTRAL ALASKA. <AGS-P>.
	07	10	55	56.4&	59.894	N	153.482	W	130					25	SOUTHERN ALASKA. <AGS-P>.
	07	12	17	30.0?	6.87	N	82.62	W	10	G	4.4		0.9	7	SOUTH OF PANAMA
	07	13	24	28.6?	24.18	S	70.77	W	33	N	5.2		0.8	5	NEAR COAST OF NORTHERN CHILE
	07	14	01	37.5*	7.159	S	125.132	E	510	*	3.4		0.8	12	BANDA SEA
	07	14	23	34.6*	40.836	N	22.801	E	10	G			0.1	5	GREECE. ML 1.0 (SKO).
a	07	14	50	54.2	6.129	S	147.791	E	41		5.4		0.9	68	EAST PAPUA NEW GUINEA REGION
	07	15	08	03.2	10.440	N	84.618	W	10	G			0.4	16	COSTA RICA. MD 3.5 (HDC). Felt (IV) at Fortuna, Los Angeles and Tanque. Also felt at Arenal, Quesada and San Francisco.
	07	15	25	42.8*	24.658	N	123.238	E	33	N	4.1		0.6	8	SOUTHWESTERN RYUKYU ISLANDS
	07	17	05	18.7	7.000	S	129.496	E	146		5.3		0.9	106	BANDA SEA
	07	17	20	55.7	7.302	N	121.779	E	35		5.2		1.0	79	MINDANAO, PHILIPPINE ISLANDS
	07	17	34	56.4	30.817	N	137.751	E	449	*	4.2		0.6	35	SOUTH OF HONSHU, JAPAN
	07	19	16	32.2*	0.208	S	77.716	W	10	G	4.3		1.4	15	ECUADOR. Felt (III) at Quito.
a	07	19	43	06.5	15.988	S	172.716	W	33	N	5.3	5.5	1.1	148	SAMOA ISLANDS REGION. Ms 5.8 (BRK).
	07	21	45	44.2*	24.462	S	70.631	W	33	N	4.6		1.1	15	NEAR COAST OF NORTHERN CHILE. Felt (III) at Antofagasta.
a	07	21	48	46.5*	16.225	S	172.664	W	33	N	5.0	5.2	1.1	32	SAMOA ISLANDS REGION
	07	21	56	31.7*	15.648	S	170.292	E	33	N	4.5		1.5	27	VANUATU ISLANDS REGION
	07	22	37	04.3?	21.52	S	69.71	W	100	?			1.1	5	NORTHERN CHILE
	07	22	52	17.6%	45.568	N	3.495	E	10	G			1.2	13	FRANCE. ML 2.8 (LDG).
	07	22	58	14.0	0.138	S	77.533	W	10	G	4.7		1.3	40	ECUADOR. Felt at Quito.
	07	23	18	56.9	0.775	N	126.098	E	33	N	4.2		1.0	16	MOLUCCA PASSAGE
	08	00	24	24.2*	53.473	N	167.053	W	10	G	4.4		0.7	7	FOX ISLANDS, ALEUTIAN ISLANDS
	08	01	24	20.7*	53.718	N	167.195	W	10	G	4.1		0.4	6	FOX ISLANDS, ALEUTIAN ISLANDS
	08	01	59	05.5	43.012	N	1.955	W	10	G			1.2	13	PYRENEES. MG 2.8 (MDD).
	08	03	16	25.4*	53.573	N	167.148	W	10	G	4.4		1.1	13	FOX ISLANDS, ALEUTIAN ISLANDS
	08	05	10	02.1	25.617	N	124.620	E	167		4.3		0.9	30	NORTHEAST OF TAIWAN
	08	05	13	25.3	5.339	S	141.892	E	33	N	4.2		1.1	12	PAPUA NEW GUINEA
	08	06	03	25.1&	58.220	N	155.052	W	14					13	ALASKA PENINSULA. <AGS-P>.
	08	06	26	28.9?	20.83	S	177.49	W	504	?	4.4		0.9	16	FIJI ISLANDS REGION
	08	08	13	41.6	54.373	N	165.022	W	84	*	4.5		0.8	47	FOX ISLANDS, ALEUTIAN ISLANDS
	08	10	35	41.1%	60.425	N	7.196	E	10	G			0.6	7	SOUTHERN NORWAY. MD 2.0 (BER).
	08	12	25	00.9?	16.25	N	120.93	E	29	*	4.6		0.9	8	LUZON, PHILIPPINE ISLANDS
	08	12	31	08.8	13.153	N	75.312	W	10	G	4.5	3.8	1.2	28	CARIBBEAN SEA
	08	12	49	29.1	48.186	N	7.960	E	10	G			0.4	8	FRANCE. ML 2.7 (LDG).
a	08	12	51	43.3	20.483	S	70.376	W	30	D	5.2		0.9	122	NEAR COAST OF NORTHERN CHILE. Felt (III) at Iquique.
	08	13	12	33.6	10.126	N	56.826	E	10	G	4.9		1.0	24	CARLSBERG RIDGE
	08	15	43	12.6&	35.808	N	121.208	W	2	G				12	CENTRAL CALIFORNIA. <BRK>. ML 2.5 (BRK).
	08	16	01	34.0*	24.162	S	70.774	W	53	*	4.5		1.4	16	NEAR COAST OF NORTHERN CHILE. Felt (II) at Antofagasta.
	08	16	21	57.4?	10.87	N	85.06	W	120	?			0.3	13	COSTA RICA. MD 4.4 (HDC).
	08	16	33	05.5*	6.296	S	147.824	E	33	N	4.3		0.9	6	EAST PAPUA NEW GUINEA REGION. ML 3.9 (PMG).
	08	17	22	23.3&	61.884	N	152.075	W	126					29	SOUTHERN ALASKA. <AGS-P>.
	08	17	38	36.0	39.421	N	20.568	E	56		4.1		1.3	70	GREECE-ALBANIA BORDER REGION. Felt at Ioannina, Greece.
	08	17	42	21.2	39.472	N	20.569	E	41		4.9	3.7	1.3	148	GREECE-ALBANIA BORDER REGION. Felt at Ioannina, Greece.
	08	17	53	04.7	6.541	S	155.484	E	111		4.7		0.9	36	SOLOMON ISLANDS
	08	18	27	58.3*	37.900	N	29.554	E	10	G			1.6	5	TURKEY
	08	19	08	27.1*	24.080	S	71.187	W	33	N			0.4	5	OFF COAST OF NORTHERN CHILE
	08	19	17	57.3	43.137	S	173.179	E	26		5.1	4.5	1.5	33	OFF E. COAST OF S. ISLAND, N.Z. Minor damage in the Christchurch area. Felt at Greymouth.
	08	19	24	17.3&	60.939	N	151.977	W	84					24	KENAI PENINSULA, ALASKA. <AGS-P>.
	08	19	33	16.7	24.340	S	70.626	W	30	*	4.9	4.6	1.2	41	NEAR COAST OF NORTHERN CHILE. Felt (III) at Antofagasta.
	08	20	51	47.2	5.971	S	146.570	E	132	*	4.3		1.3	11	EAST PAPUA NEW GUINEA REGION
	08	22	41	55.7*	5.308	S	80.909	W	33	N	4.7		1.3	19	NEAR COAST OF NORTHERN PERU
	08	23	36	05.4%	44.307	N	7.335	E	10	G			0.4	14	NORTHERN ITALY. ML 2.9 (LDG).
	09	01	04	28.3	15.613	S	173.278	W	33	N	4.8		0.8	21	TONGA ISLANDS
	09	03	13	40.9	38.155	N	73.964	E	51	*	4.8	4.4	1.1	37	TAJIK-XINJIANG BORDER REGION
	09	04	44	46.9	41.999	N	20.390	E	5	G			0.8	7	ALBANIA. ML 2.8 (SKO).
	09	05	07	10.0&	62.728	N	151.806	W	112					23	CENTRAL ALASKA. <AGS-P>.
	09	05	22	32.3?	41.76	N	143.74	E	71	?	4.1		0.2	6	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Urakawa.
	09	05	32	38.1	37.560	N	118.435	W	5	G			0.6	9	CALIFORNIA-NEVADA BORDER REGION. ML 2.9 (NEIS).
	09	06	05	26.4*	24.299	S	70.419	W	39	*	4.8		1.0	18	NEAR COAST OF NORTHERN CHILE. Felt (III) at Antofagasta.
	09	06	10	16.0&	61.599	N	151.562	W	84					22	SOUTHERN ALASKA. <AGS-P>.
	09	06	32	31.2*	17.979	S	177.986	W	541	*	4.8		0.9	27	FIJI ISLANDS REGION
	09	07	49	42.6*	38.498	N	22.605	E	10	G			1.1	7	GREECE. ML 3.0 (ATH).
	09	07	53	05.6*	5.838	N	126.151	E	102	?	4.5		1.4	16	MINDANAO, PHILIPPINE ISLANDS
	09	08	47	51.0*	54.561	S	158.594	E	10	G	4.4		1.4	8	MACQUARIE ISLANDS REGION. Felt at Green Gorge, Caroline Cove and Main Base.
	09	09	25	28.7	0.561	S	78.797	W	10	G	4.7		1.4	34	ECUADOR
	09	10	05	00.7	7.522	N	126.639	E	79		5.1		1.2	108	MINDANAO, PHILIPPINE ISLANDS. Felt (I RF) at Cagayan de Oro.
	09	10	19	15.9*	38.401	N	31.743	E	10	G			1.1	13	TURKEY. Felt at Ilgin.
	09	10	46	45.8	42.303	N	19.981	E	5	G			0.8	8	YUGOSLAVIA. ML 2.5 (TTG).
	09	12	06	25.1*	0.930	S	129.931	E	33	N	4.4		1.5	10	HALMAHERA
	09	12	33	23.0*	12.173	N	143.474	E	33	N	4.8		1.0	21	SOUTH OF MARIANA ISLANDS
	09	13	26	06.9	5.091	N	82.482	W	10	G	5.0	4.3	1.2	71	SOUTH OF PANAMA

	09	13 41 25.4	40.076	N	114.360	W	5	G			0.5	9	NEVADA. ML 2.8 (NEIS).
	09	14 25 18.8	40.682	N	23.508	E	10	G			0.6	13	GREECE
	09	14 30 31.7*	2.955	N	128.260	E	145	*	3.8		0.7	10	HALMAHERA
	09	14 33 31.0	42.005	N	21.286	E	10	G			1.0	10	YUGOSLAVIA. ML 2.7 (TTG), 2.6 (SKO).
	09	15 42 13.2?	24.22	S	70.56	W	33	N			0.8	5	NEAR COAST OF NORTHERN CHILE
	09	16 52 46.5%	46.531	N	2.928	E	10	G			0.7	10	FRANCE. ML 2.2 (LDG).
	09	18 50 56.0	38.925	N	25.739	E	14				1.2	23	AEGEAN SEA. ML 3.2 (ATH).
	09	19 39 15.5*	53.640	N	166.933	W	10	G	4.3		0.9	13	FOX ISLANDS, ALEUTIAN ISLANDS
	09	19 45 18.0	37.555	N	118.893	W	5	G			0.6	7	CALIFORNIA-NEVADA BORDER REGION. ML 2.8 (NEIS).
	09	19 50 21.2	39.420	N	20.526	E	33	N	3.7		1.3	32	GREECE-ALBANIA BORDER REGION. ML 3.6 (ATH).
	09	20 32 18.7	22.181	N	120.130	E	33	N	4.5	4.5	1.1	33	TAIWAN
	09	20 56 21.8	48.315	N	6.757	E	10	G			0.3	7	FRANCE. ML 2.5 (LDG).
	09	22 03 47.9	40.678	N	23.458	E	10	G			0.9	10	GREECE
	09	23 58 50.4	25.488	S	179.670	E	483		4.9		0.9	97	SOUTH OF FIJI ISLANDS
a	10	00 22 35.9	18.448	S	72.035	W	41	D	5.7	5.6	1.2	225	OFF COAST OF NORTHERN CHILE. Felt (III) at Arica, Chile and (II) at Arequipa, Peru.
	10	00 37 44.5	36.474	N	140.688	E	81		5.1		1.0	47	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Mito; (II JMA) at Onahama and Utsunamiya; (I JMA) in the Kofu-Tokyo-Maebashi area.
	10	00 38 33.3*	38.192	N	22.045	E	10	G			0.5	6	GREECE. ML 3.0 (ATH).
	10	00 54 48.6	14.182	N	92.444	W	33	N	4.6		0.8	18	NEAR COAST OF CHIAPAS, MEXICO
	10	01 35 28.5	0.187	S	77.948	W	10	G	4.8		1.0	30	ECUADOR
a	10	02 18 09.6	18.341	S	71.976	W	37	D	5.5	3.9	1.1	145	OFF COAST OF NORTHERN CHILE. Felt (II) at Arequipa, Peru.
a	10	03 24 12.6	36.924	N	141.662	E	47		5.2	5.5	0.9	207	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Sendai; (II JMA) at Mariaka, Onahama and Fukushima; (I JMA) at Ishinomaki and in the Mito-Maebashi-Tokya area.
	10	03 28 54.1*	36.941	N	141.822	E	46	*	5.1		0.7	24	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Fukushima, Sendai and Utsunamiya.
	10	04 00 11.6*	18.204	S	178.120	W	593	*	4.5		0.8	33	FIJI ISLANDS REGION
	10	04 02 54.7*	45.973	N	10.809	E	10	G			1.5	7	NORTHERN ITALY. ML 2.9 (KBA).
	10	04 22 23.7	25.725	S	178.962	W	367		4.9		1.1	86	SOUTH OF FIJI ISLANDS
	10	05 27 36.7*	21.389	S	66.650	W	233	*			1.4	9	SOUTHERN BOLIVIA
	10	06 14 37.3*	42.307	N	20.088	E	2	G			1.0	5	YUGOSLAVIA. ML 2.4 (TTG).
	10	06 34 01.9%	40.737	N	23.453	E	10	G			0.5	5	GREECE
	10	06 38 56.5	0.267	S	77.950	W	10	G	4.7		1.3	31	ECUADOR
	10	07 28 13.0	41.858	N	112.758	W	10	G			0.5	7	UTAH. ML 2.9 (NEIS).
	10	07 36 03.2*	17.944	S	178.367	W	604	*	4.3		1.0	34	FIJI ISLANDS REGION
	10	07 43 47.3	51.656	N	175.211	W	33	N	5.0		1.0	53	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.9 (PMR). Felt (IV) an Adak.
	10	07 56 46.0	23.590	S	179.980	W	521	*	4.6		0.9	51	SOUTH OF FIJI ISLANDS
	10	08 58 41.3*	16.639	S	177.041	E	33	N	4.4		1.6	24	FIJI ISLANDS. Felt (III) at Yasawa.
	10	09 19 54.6*	4.822	N	126.088	E	90	*	4.4		1.4	29	TALAUD ISLANDS
	10	11 14 24.5	18.730	S	72.368	W	10	G			1.0	9	OFF COAST OF NORTHERN CHILE
	10	11 48 22.7	18.636	S	72.317	W	33	N	4.8		1.2	17	OFF COAST OF NORTHERN CHILE
	10	14 29 29.7*	48.349	N	7.609	E	10	G			0.4	6	FRANCE. ML 2.2 (LDG).
	10	14 43 21.4%	60.105	N	4.866	E	10	G			0.1	7	SOUTHERN NORWAY. MD 2.3 (BER).
	10	14 59 23.4	0.268	S	77.733	W	10	G	4.7		1.0	43	ECUADOR
	10	15 01 10.2	60.099	N	4.902	E	10	G			0.3	8	SOUTHERN NORWAY. MD 2.2 (BER).
a	10	16 14 53.2	40.612	N	145.259	E	39	D	5.7	5.2	1.0	324	OFF EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Hachinahe and Miyaka, Hanshu, and at Kushira, Hakkaido; (I JMA) at Ofunata, Mariaka, Aomari and Sendai, Hanshu and at Nemura and Urakawa, Hakkaida.
	10	17 55 54.5	13.564	N	120.894	E	143		4.7		1.0	27	MINDORO, PHILIPPINE ISLANDS
	10	17 56 31.0*	40.594	N	145.260	E	33	N	4.8		0.8	35	OFF EAST COAST OF HONSHU, JAPAN
	10	18 14 50.5*	31.564	S	178.072	W	21	*	5.3		1.2	13	KERMADEC ISLANDS REGION
a	10	18 24 34.1	40.595	N	145.235	E	38	D	5.7	5.0	1.0	306	OFF EAST COAST OF HONSHU, JAPAN. Felt (II JMA) at Miyaka and Hachinahe, Hanshu, and at Kushira, Hakkaida; (I JMA) at Mariaka, Ofunata and Sendai, Hanshu and at Urakawa, Hakkaida.
	10	18 28 15.1*	21.674	S	172.324	E	33	N	4.0		0.6	8	LOYALTY ISLANDS REGION
	10	18 54 56.6*	50.755	N	5.696	E	10	G			0.9	5	BELGIUM
	10	19 04 12.7	2.800	N	128.297	E	33	N	4.9		1.1	38	HALMAHERA
	10	19 20 12.3*	32.429	S	72.002	W	10	G	4.6		0.5	13	OFF COAST OF CENTRAL CHILE. Felt (III) at Valparaiso.
	10	20 20 31.8	41.569	N	20.159	E	10	G			0.7	9	ALBANIA. ML 3.3 (SKO), 2.8 (TTG).
a	10	22 20 33.8	6.093	N	76.623	W	56		5.1		0.9	139	NORTHERN COLOMBIA. Felt at Manizales.
	10	23 16 27.5*	46.452	N	12.623	E	10	G			1.2	8	NORTHERN ITALY. ML 2.5 (KBA).
	11	00 36 39.7	37.819	N	3.334	W	27				1.5	42	SPAIN. MG 4.2 (MDD). Felt (V) in the Jardar-Laraa area, (IV) in the Santo Tame-Larva area and (III) in the Castellar-Jaen area.
	11	01 56 06.6	40.120	N	114.311	W	5	G			0.9	9	NEVADA. ML 3.0 (NEIS).
	11	01 59 29.3*	32.828	N	46.261	E	54	*	4.4		1.4	13	IRAN-IRAQ BORDER REGION. Felt in the Mehran, Iran area.
	11	02 15 02.6	25.066	N	123.113	E	164	D	4.8		1.0	80	NORTHEAST OF TAIWAN. Felt (I JMA) an Ishigaki-shima, Ryukyu Islands.
a	11	02 50 55.1	34.219	S	178.951	E	233		5.3		1.4	81	SOUTH OF KERMADEC ISLANDS
	11	03 26 23.6?	35.23	N	25.67	E	10	G			1.2	6	CRETE
	11	03 48 43.1?	15.39	S	72.42	W	135	*			0.3	8	SOUTHERN PERU
	11	04 49 34.9	18.842	N	146.936	E	46	*	4.8	4.9	1.2	53	MARIANA ISLANDS
	11	04 54 55.5	12.616	N	87.803	W	73		4.9		1.3	85	NEAR COAST OF NICARAGUA. Felt in the Managua area. Felt (II) at San Salvador, El Salvador.
	11	05 56 15.8&	60.966	N	149.633	W	39					40	KENAI PENINSULA, ALASKA. <AGS-P>. ML 3.0 (PMR). Felt (II) at Ancharage.
	11	06 48 02.3*	21.309	S	70.330	W	33	N			0.4	6	NEAR COAST OF NORTHERN CHILE
	11	06 48 48.1?	5.93	S	148.30	E	33	N	3.6		1.4	6	NEW BRITAIN REGION
	11	07 49 16.7&	36.593	N	121.228	W	5					18	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK).
	11	08 31 51.9	51.408	N	178.364	W	33	N	4.8		1.2	76	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.4 (PMR).
	11	08 51 09.1	15.961	N	145.581	E	174		4.6		0.8	56	MARIANA ISLANDS
	11	10 58 22.8&	36.592	N	121.223	W	5					15	CENTRAL CALIFORNIA. <BRK>. ML 2.7 (BRK).
	11	11 59 10.0&	19.200	N	155.467	W	11					43	HAWAII. <HVO-P>. ML 3.9 (HVO). Felt (IV) at Pahala; (III) at Discovery Harbor Subdivision, Ocean View Estates and Papaloa-kana; (II) at Hilo, Keahau-kana, Kealakekua, Papaikou and Volcano.
	11	12 02 36.9	60.392	N	5.401	E	0	G			0.2	6	SOUTHERN NORWAY. MD 1.9 (BER). Probable explosion.

	11	12	24	56.1	4.859	S	153.645	E	94		5.3	0.9	98	NEW IRELAND REGION. Felt (III) at Rabaul.
	11	13	11	29.4&	39.246	N	111.629	W	1				18	UTAH. <SLC-P>. ML 2.8 (SLC). Felt (IV) at Manti and Sterling. Also felt at Ephraim.
	11	13	27	31.9*	3.169	S	134.334	E	33	N	4.6	1.3	11	WEST IRIAN REGION
	11	14	34	33.8*	32.068	S	69.732	W	95	?		1.4	11	MENDOZA PROVINCE, ARGENTINA
	11	14	50	49.1?	58.35	N	6.32	E	10	G		0.5	8	SOUTHERN NORWAY. MD 2.5 (BER).
	11	15	31	02.9&	39.250	N	111.636	W	2				8	UTAH. <SLC-P>. ML 3.0 (NEIS). Felt at Manti.
	11	15	59	37.3&	32.990	N	117.740	W	6	G			7	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.1 (PAS).
	11	16	18	45.3	5.324	S	147.996	E	35	*	4.8	1.4	32	EAST PAPUA NEW GUINEA REGION. ML 4.8 (PMG).
	11	17	02	17.1	6.310	N	125.558	E	45	*	4.7	1.2	31	MINDANAO, PHILIPPINE ISLANDS
a	11	17	04	14.8	24.712	S	88.219	E	10	G	5.1 5.5	1.2	57	SOUTH INDIAN OCEAN
	11	17	45	02.0*	41.797	N	140.999	E	142	?	4.3	0.9	19	HOKKAIDO, JAPAN REGION
	11	17	46	03.3	60.700	N	5.495	E	0	G		0.9	8	SOUTHERN NORWAY. MD 2.1 (BER). Probable explosion.
	11	18	43	44.8%	45.362	N	6.711	E	10	G		0.2	5	FRANCE. ML 2.5 (LDG).
	11	20	27	44.2*	51.029	N	15.872	E	10	G		1.4	5	POLAND
	11	20	42	28.3*	40.836	N	22.801	E	10	G		0.1	5	GREECE. ML 1.6 (SKO).
	11	20	54	37.3&	59.306	N	153.736	W	108				19	SOUTHERN ALASKA. <AGS-P>.
	11	23	04	39.9	4.050	N	127.916	E	72	*	4.8	0.9	26	TALAUD ISLANDS
	11	23	14	38.2*	21.211	S	69.077	W	151	*		1.2	9	NORTHERN CHILE
	11	23	28	16.5	14.244	N	91.479	W	80		4.6	1.5	51	GUATEMALA. Felt along the Pacific coast of Guatemala and at Guatemala City.
	12	01	20	05.3	27.720	N	139.714	E	483	*	4.3	0.8	36	BONIN ISLANDS REGION
	12	01	57	17.2	49.939	N	78.823	E	0	G	5.5 3.9	0.8	207	EASTERN KAZAKH SSR
	12	01	57	44.6*	15.659	S	172.659	W	33	?	5.1 5.0	1.0	38	SAMOA ISLANDS REGION
	12	02	34	33.9*	35.557	N	23.132	E	76	*		0.8	10	CRETE
	12	02	41	07.7*	24.327	S	70.117	W	33	N		1.6	7	NEAR COAST OF NORTHERN CHILE
	12	05	34	20.4*	0.993	S	13.696	W	10	G	4.8 4.4	1.1	19	NORTH OF ASCENSION ISLAND
	12	05	57	07.0&	36.048	N	120.077	W	8				14	CENTRAL CALIFORNIA. <BRK>. ML 2.6 (BRK).
a	12	06	07	19.2	18.467	S	72.192	W	35		5.1	1.1	80	OFF COAST OF NORTHERN CHILE
	12	06	27	24.2?	26.62	N	68.48	E	33	N	4.2	1.4	10	PAKISTAN
	12	06	37	34.2	5.237	S	148.047	E	27	*	4.2	1.4	19	NEW BRITAIN REGION
	12	06	57	44.7*	18.818	S	72.246	W	33	N		1.4	9	OFF COAST OF NORTHERN CHILE
	12	07	35	45.5	2.735	N	126.726	E	63	*	5.0	1.2	49	MOLUCCA PASSAGE
	12	07	58	55.1	17.982	S	69.772	W	135	*	4.8	1.3	26	PERU-BOLIVIA BORDER REGION
	12	09	13	37.3*	6.018	N	125.700	E	171	*	4.5	1.3	19	MINDANAO, PHILIPPINE ISLANDS
	12	09	31	48.5*	6.033	S	150.138	E	124	*	3.7	0.6	6	NEW BRITAIN REGION
	12	10	39	49.2%	60.723	N	5.560	E	10	G		0.4	6	SOUTHERN NORWAY. MD 1.8 (BER).
a	12	11	02	28.2	3.861	S	81.444	W	33	*	5.2	0.9	98	NEAR COAST OF NORTHERN PERU
	12	11	59	24.8	9.911	S	119.178	E	33	N	4.5	1.1	29	SUMBA ISLAND REGION
	12	12	05	20.4	40.623	N	22.484	E	10	G		1.2	12	GREECE. ML 1.8 (SKO).
a	12	12	18	11.9	15.610	N	94.597	W	40		5.7 5.6	1.1	262	NEAR COAST OF OAXACA, MEXICO. Ms 5.8 (BRK), 5.8 (PAS). Felt at Mexico City and in Chiapas, Guerrera, Oaxaca and Michoacan. Also felt in the San Marcos-Retalhuleu area, Guatemala.
	12	13	21	28.1*	53.385	N	167.186	W	10	G	4.5	1.4	15	FOX ISLANDS, ALEUTIAN ISLANDS. ML 4.6 (PMR).
a	12	14	56	28.3	5.034	S	151.357	E	149		4.8	1.1	21	NEW BRITAIN REGION
	12	15	21	42.5*	29.943	N	69.730	E	33	N	4.0	1.0	12	PAKISTAN
	12	16	03	33.2%	47.080	N	7.782	E	10	G		0.1	5	SWITZERLAND
	12	16	36	22.1*	29.854	N	69.395	E	33	N	4.1	1.4	8	PAKISTAN
	12	18	28	52.5*	39.053	N	27.740	E	10	G		0.7	5	TURKEY
	12	20	21	19.4*	28.159	N	142.660	E	33	N	4.7	1.0	17	BONIN ISLANDS REGION
	12	21	28	37.9?	36.40	N	28.55	E	10	G		1.5	6	DODECANESE ISLANDS
	12	22	48	47.5*	31.333	N	50.856	E	78	*	4.3	1.3	17	IRAN
	12	23	07	48.7?	51.37	N	20.21	E	10	G		0.1	5	POLAND. ML 2.6 (KRA). Three people killed and three injured in the Slask Mine at Ruda Slaska.
a	12	23	10	30.7	0.268	S	18.147	W	10	G	5.5 4.8	0.9	167	CENTRAL MID-ATLANTIC RIDGE
	12	23	17	41.5*	8.267	N	83.131	W	10	G		0.4	11	COSTA RICA. MD 4.1 (HDC). Felt at Laurel.
	12	23	18	15.1?	36.10	N	28.56	E	28	*		1.2	8	DODECANESE ISLANDS
	13	00	06	42.2*	51.167	N	179.090	E	33	N	4.6	0.8	19	RAT ISLANDS, ALEUTIAN ISLANDS
	13	00	31	30.4?	42.60	N	1.28	E	10	G		1.8	5	PYRENEES. ML 2.7 (LDG).
	13	00	31	42.9*	6.443	S	147.996	E	66	*	3.7	1.2	8	EAST PAPUA NEW GUINEA REGION
	13	00	53	10.3?	39.32	N	20.55	E	10	G		1.5	5	GREECE-ALBANIA BORDER REGION
	13	02	04	51.3*	41.763	S	171.976	E	33	N	4.8	1.3	10	SOUTH ISLAND, NEW ZEALAND. Felt at Greymouth, Westport and Christchurch.
	13	02	24	25.5	40.690	N	23.521	E	10	G		0.4	7	GREECE
	13	03	34	59.7	48.211	N	7.959	E	10	G		1.3	13	FRANCE. ML 2.5 (LDG).
	13	03	39	38.6	40.687	N	23.512	E	10	G		0.4	8	GREECE
a	13	05	03	35.4*	23.368	S	177.587	W	94	?	4.8	1.1	38	SOUTH OF FIJI ISLANDS
	13	05	24	32.0*	23.271	S	177.635	W	63	?	4.8	1.4	22	SOUTH OF FIJI ISLANDS
	13	06	06	56.6?	61.68	N	6.60	E	0	G		0.5	6	SOUTHERN NORWAY. MD 2.0 (BER). Probable explosion.
a	13	06	19	13.4*	23.484	S	177.520	W	80	?	4.9	1.1	35	SOUTH OF FIJI ISLANDS
	13	06	28	10.6*	23.754	S	177.426	W	56	?	5.1	1.2	29	SOUTH OF FIJI ISLANDS
a	13	06	32	00.7?	31.84	S	177.55	W	33	N	4.9 5.7	1.3	27	KERMADEC ISLANDS REGION
	13	06	39	49.4	40.698	N	23.544	E	10	G		0.7	15	GREECE
	13	06	51	50.5	40.709	N	23.519	E	10	G		0.5	8	GREECE
a	13	06	56	32.8	12.301	N	87.432	W	60		5.1	1.2	172	NEAR COAST OF NICARAGUA
	13	07	11	47.5?	24.84	S	176.73	W	33	N	4.7	0.7	9	SOUTH OF FIJI ISLANDS
	13	07	22	18.5?	23.90	S	177.23	W	33	N	4.6	1.5	11	SOUTH OF FIJI ISLANDS
	13	07	27	00.5	8.331	N	83.103	W	27		4.5	1.3	29	COSTA RICA. MD 4.8 (HDC).
a	13	07	40	20.1	23.771	S	177.301	W	50	*	5.2 5.3	0.9	49	SOUTH OF FIJI ISLANDS
	13	07	57	35.9*	8.010	N	82.952	W	9		4.2	0.7	21	PANAMA-COSTA RICA BORDER REGION. MD 4.2 (HDC).
	13	08	14	46.8	40.664	N	23.450	E	10	G		1.1	14	GREECE
a	13	08	21	49.0	23.778	S	177.325	W	32		5.8 6.0	1.2	207	SOUTH OF FIJI ISLANDS
	13	08	24	00.2&	59.860	N	152.516	W	70				38	SOUTHERN ALASKA. <AGS-P>.
	13	08	35	50.6*	23.654	S	177.247	W	33	N	4.8	1.2	14	SOUTH OF FIJI ISLANDS
	13	08	40	11.8?	30.22	S	71.09	W	33	N		1.4	13	NEAR COAST OF CENTRAL CHILE
	13	09	28	15.4	1.840	N	126.996	E	67	*	5.0	1.2	83	MOLUCCA PASSAGE
	13	09	36	07.2*	14.439	N	91.279	W	88		4.4	1.2	30	GUATEMALA
	13	09	49	22.4*	22.916	S	177.990	W	152	D	4.7	1.0	18	SOUTH OF FIJI ISLANDS
a	13	10	28	13.7	15.624	S	74.276	W	66		5.3	1.2	100	NEAR COAST OF PERU. Felt (V) at Chala and Agua Salada and (II) at Nazca.
	13	11	05	26.3*	50.649	N	5.365	E	10	G		0.8	5	BELGIUM
	13	11	18	38.3*	54.217	N	165.105	W	33	N	4.5	1.3	12	FOX ISLANDS, ALEUTIAN ISLANDS

	13	11	48	36.3	41.339	N	23.937	E	10	G			1.4	16	GREECE-BULGARIA BORDER REGION
	13	11	52	39.4	46.621	N	7.506	E	10	G			0.9	6	SWITZERLAND
	13	13	03	57.1*	23.884	S	177.414	W	33	N	5.0	4.3	1.1	21	SOUTH OF FIJI ISLANDS
	13	13	58	02.3*	37.435	N	23.340	E	56	*	3.6		1.3	16	SOUTHERN GREECE
	13	15	08	00.8&	38.803	N	122.818	W	5	G				22	NORTHERN CALIFORNIA. <BRK>. ML 3.5 (BRK). Mo=4.4*10**14 Nm (BRK).
	13	16	05	14.1&	57.756	N	138.886	W	33					13	OFF COAST OF SOUTHEASTERN ALASKA. <AGS-P>.
	13	17	05	04.5&	59.615	N	152.983	W	97					41	SOUTHERN ALASKA. <AGS-P>.
	13	17	54	37.4*	53.214	N	167.203	W	10	G	4.6		1.2	29	FOX ISLANDS, ALEUTIAN ISLANDS
	13	18	48	32.7&	61.421	N	149.897	W	58					40	SOUTHERN ALASKA. <AGS-P>. Felt (II) at Anchorage, Eagle River and Palmer.
	13	18	49	18.2?	23.01	S	178.80	W	78	?	4.7		1.1	20	SOUTH OF FIJI ISLANDS
	13	19	09	22.0*	22.368	S	177.521	W	275	?	5.0		1.0	22	SOUTH OF FIJI ISLANDS
	13	19	50	19.0	51.502	N	176.315	W	33	N	4.8		1.0	31	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.5 (PMR). Felt (I) on Adak.
	13	19	55	39.9*	4.813	N	82.785	W	10	G	4.5	3.9	1.1	15	SOUTH OF PANAMA
	14	02	02	22.5?	41.90	N	20.16	E	10	G			0.8	8	ALBANIA. ML 3.4 (TTG).
	14	02	21	29.1*	24.175	S	70.513	W	67	*	4.8		1.6	15	NEAR COAST OF NORTHERN CHILE
	14	02	42	51.1*	5.623	N	78.157	W	10	G	4.2	3.5	1.4	10	SOUTH OF PANAMA
	14	03	00	53.8	40.658	N	23.477	E	10	G			1.2	15	GREECE
	14	03	48	58.8*	16.310	N	120.483	E	25		4.3		1.3	17	LUZON, PHILIPPINE ISLANDS
a	14	04	25	58.1	10.693	N	138.954	E	20	*	5.3	4.2	0.9	65	WEST CAROLINE ISLANDS
	14	04	43	03.5&	34.790	N	96.331	W	5	G				6	OKLAHOMA. <TUL>. mbLg 2.8 (TUL).
	14	05	21	11.5	0.223	S	132.551	E	68	*	5.1		1.4	60	WEST IRIAN REGION
a	14	05	35	58.9	13.157	N	143.822	E	147		5.2		1.0	126	SOUTH OF MARIANA ISLANDS
a	14	06	10	04.9	23.520	S	177.467	W	40	*	5.3	5.4	1.1	89	SOUTH OF FIJI ISLANDS
	14	09	23	58.6	51.598	N	173.444	W	33	N	5.1	4.4	1.0	146	ANDREANOF ISLANDS, ALEUTIAN IS.
	14	13	12	07.4*	53.246	N	166.990	W	10	G	4.0		1.0	15	FOX ISLANDS, ALEUTIAN ISLANDS
	14	13	41	57.2	41.744	N	27.306	E	10	G			0.6	8	TURKEY
	14	13	50	09.7?	35.62	N	20.60	E	10	G			1.6	5	MEDITERRANEAN SEA. ML 4.0 (ATH).
	14	14	11	57.0?	5.58	S	148.03	E	33	N	3.2		1.1	6	NEW BRITAIN REGION
	14	14	42	45.4	43.105	N	25.653	E	10	G			1.4	9	BULGARIA
	14	14	43	40.3*	2.174	N	128.112	E	154	?	4.5		0.5	12	HALMAHERA
	14	16	11	51.4?	32.86	S	179.16	W	33	N	4.8		1.4	11	SOUTH OF KERMADEC ISLANDS
a	14	20	18	37.6	38.897	S	92.203	W	10	G	5.4	5.6	1.2	85	WEST CHILE RISE
	14	20	46	50.8*	38.212	N	21.799	E	56	?	3.5		1.4	8	GREECE
	14	21	09	32.8*	38.742	N	28.115	E	10	G			0.6	5	TURKEY
	14	21	33	14.1	44.182	N	12.160	E	19				1.3	29	NORTHERN ITALY. ML 3.4 (KBA), 3.3 (LDG). MD 2.9 (TRI).
	14	21	42	56.7*	53.127	N	167.121	W	10	G	4.3		1.4	19	FOX ISLANDS, ALEUTIAN ISLANDS
	14	22	31	20.5	21.458	S	66.634	W	224		4.4		1.1	24	SOUTHERN BOLIVIA
	14	23	14	55.6*	24.019	N	122.331	E	37	?	4.4		1.5	18	TAIWAN REGION
	15	02	02	14.9	41.567	N	20.482	E	10	G	3.4		1.4	20	ALBANIA
	15	02	23	19.5*	15.713	S	174.360	W	33	N	4.7		0.7	13	TONGA ISLANDS
	15	03	57	08.6	39.306	N	23.794	E	10	G			1.0	8	AEGEAN SEA. ML 3.0 (ATH).
	15	05	06	53.2	24.945	N	127.096	E	23	*	4.9	5.5	0.9	45	RYUKYU ISLANDS REGION
	15	05	08	59.9*	20.195	S	68.915	W	156	*			1.5	15	CHILE-BOLIVIA BORDER REGION
a	15	05	11	17.0	15.609	N	94.581	W	40		5.6	5.5	1.1	246	NEAR COAST OF OAXACA, MEXICO. Felt in the Oaxaca-Salina Cruz area.
	15	05	17	27.0?	15.49	N	94.64	W	33	N	4.9		0.8	32	NEAR COAST OF OAXACA, MEXICO
	15	06	02	51.2%	40.304	N	27.668	E	10	G			0.4	6	TURKEY
a	15	06	03	02.2	24.285	S	70.557	W	24	*	5.0	5.2	1.3	57	NEAR COAST OF NORTHERN CHILE. Minor damage in the epicentral area. Felt (III) at Antofagasta.
	15	06	17	51.0*	23.925	S	70.379	W	48	*	4.9		1.5	42	NEAR COAST OF NORTHERN CHILE. Felt (II) at Antofagasta.
	15	06	46	29.9%	44.133	N	6.924	E	10	G			0.8	5	FRANCE. ML 2.1 (LDG).
	15	07	40	11.4	18.764	N	146.923	E	58	*	4.7	4.6	1.0	59	MARIANA ISLANDS
	15	08	06	26.6	18.818	N	147.005	E	43	*	4.8	4.6	1.0	51	MARIANA ISLANDS REGION
	15	08	17	31.4	18.890	N	147.003	E	33	N	4.7	4.5	0.9	54	MARIANA ISLANDS REGION
	15	08	57	23.3*	0.561	N	126.367	E	33	N	4.5		1.6	11	MOLUCCA PASSAGE
	15	09	02	06.9%	39.601	N	29.434	E	10	G			0.6	5	TURKEY
	15	09	30	02.7?	15.33	N	94.99	W	33	N	4.0		1.3	10	NEAR COAST OF OAXACA, MEXICO
	15	09	44	23.2&	61.708	N	150.613	W	64					20	SOUTHERN ALASKA. <AGS-P>.
	15	09	50	28.6	46.422	N	14.872	E	10	G			0.9	11	YUGOSLAVIA. ML 2.9 (VKA), MD 2.5 (TRI).
a	15	11	35	24.5	18.766	N	146.949	E	52	*	5.3		0.9	114	MARIANA ISLANDS
	15	11	56	12.6*	18.880	N	146.832	E	39	?	4.9	5.2	1.2	35	MARIANA ISLANDS
	15	12	15	33.0*	47.902	N	7.288	E	10	G			0.6	6	SWITZERLAND. ML 2.3 (LDG).
	15	12	16	46.2*	18.848	N	146.914	E	50	?	4.4		0.9	16	MARIANA ISLANDS
	15	12	39	22.4*	24.023	S	67.090	W	206	*	4.8		0.7	8	CHILE-ARGENTINA BORDER REGION
	15	13	13	34.4?	27.23	N	111.88	W	10	G	3.6		1.5	10	GULF OF CALIFORNIA
	15	13	45	09.2&	59.983	N	153.474	W	132					21	SOUTHERN ALASKA. <AGS-P>.
	15	15	33	53.9	40.676	N	23.377	E	10	G			1.1	18	GREECE
a	15	16	14	46.2	10.365	S	91.617	E	10	G	5.6	4.8	1.0	227	SOUTH INDIAN OCEAN
	15	16	43	18.2&	63.132	N	150.942	W	118					18	CENTRAL ALASKA. <AGS-P>.
	15	17	44	07.2&	32.580	N	118.010	W	6	G				7	OFF COAST OF CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
	15	17	47	18.0%	45.579	N	3.369	E	8				1.5	16	FRANCE. ML 2.9 (LDG).
	15	19	00	01.8	18.662	N	146.362	E	82	*	4.6		1.0	34	MARIANA ISLANDS
	15	19	08	22.5*	18.810	N	146.303	E	52	?	4.6		0.9	15	MARIANA ISLANDS
	15	19	25	38.6*	31.355	N	113.006	W	5	G	4.4		1.0	6	GULF OF CALIFORNIA
	15	19	41	39.7?	58.49	S	25.02	W	33	N	4.5		1.3	10	SOUTH SANDWICH ISLANDS REGION
a	15	21	42	17.1	5.314	S	151.488	E	63		5.7		0.9	225	NEW BRITAIN REGION. Felt (III) at Rabaul.
	16	00	13	43.6%	44.465	N	7.274	E	10	G			0.1	5	NORTHERN ITALY. ML 2.2 (LDG).
	16	00	28	23.4*	23.917	S	70.334	W	33	N			1.4	5	NEAR COAST OF NORTHERN CHILE
	16	01	07	59.8%	44.788	N	7.662	E	10	G			0.7	10	NORTHERN ITALY. ML 2.7 (LDG).
	16	01	45	51.0?	9.52	S	125.23	E	33	N	4.4		1.6	12	TIMOR
	16	02	34	17.6%	45.078	N	6.722	E	10	G			0.3	10	FRANCE. ML 2.8 (LDG).
	16	03	46	14.7	40.574	N	145.320	E	37	D	5.3	5.0	0.8	164	OFF EAST COAST OF HONSHU, JAPAN
a	16	03	50	16.4	16.337	S	172.627	W	33	N	5.0	4.8	1.3	64	SAMOA ISLANDS REGION
	16	04	21	33.1%	45.974	N	3.196	E	11				0.3	9	FRANCE. ML 1.9 (LDG).
	16	04	32	22.2*	23.724	S	176.043	W	33	N	4.9		0.9	17	SOUTH OF FIJI ISLANDS
	16	07	31	49.7*	0.100	S	77.776	W	10	G	4.3		1.4	20	ECUADOR. La Merced cathedral at Ibarra collapsed. It had been damaged by the main shock.
	16	08	55	31.2*	7.009	S	145.694	E	33	N	3.3		0.2	5	NEAR S COAST OF PAPUA NEW GUINEA
	16	09	50	02.6	60.574	N	4.707	E	0	G			0.7	7	SOUTHERN NORWAY. MD 1.6 (BER). Probable explosion.
	16	10	28	58.3	39.288	N	72.982	E	58	?	4.5		1.3	24	KIRGHIZ SSR

a	16	12	21	39.0	6.441	S	147.652	E	24		5.8	5.5	1.3	118	EAST PAPUA NEW GUINEA REGION. ML 5.8 (PMG).
a	16	12	33	35.8	6.414	S	147.645	E	29		5.5	5.5	1.3	114	EAST PAPUA NEW GUINEA REGION. ML 5.8 (PMG).
	16	13	28	08.2	18.817	N	146.895	E	46	*	4.7		0.9	35	MARIANA ISLANDS
a	16	14	35	45.6	14.604	S	167.249	E	189	*	5.0		1.0	117	VANUATU ISLANDS
	16	15	27	59.1	6.544	S	147.705	E	47		5.2		1.3	32	EAST PAPUA NEW GUINEA REGION
	16	15	43	01.9*	61.180	N	5.055	E	10	G			1.4	8	SOUTHERN NORWAY. MD 2.4 (BER).
a	16	15	49	36.9	6.446	S	147.603	E	26		5.7	6.1	1.4	184	EAST PAPUA NEW GUINEA REGION. ML 5.8 (PMG).
a	16	16	39	56.2	10.900	S	165.942	E	57		5.4		0.9	133	SANTA CRUZ ISLANDS
	16	16	51	05.9	39.649	N	118.227	W	5	G			0.5	8	NEVADA. ML 3.5 (NEIS).
a	16	17	20	44.6	53.355	N	167.248	W	10	G	5.1	5.0	1.2	102	FOX ISLANDS, ALEUTIAN ISLANDS
	16	17	59	24.5*	53.627	N	167.566	W	10	G	4.4		1.4	11	FOX ISLANDS, ALEUTIAN ISLANDS
	16	18	58	30.0	36.181	N	120.111	W	5	G			0.9	7	CENTRAL CALIFORNIA. ML 2.8 (NEIS).
	16	19	00	11.6*	22.194	S	169.471	E	33	N	4.9		1.5	17	LOYALTY ISLANDS REGION
	16	19	13	01.6	46.149	N	8.262	E	10	G			0.9	6	SWITZERLAND
	16	20	48	31.1*	48.315	N	7.616	E	10	G			0.5	5	FRANCE. ML 2.0 (LDG).
	16	20	59	34.1*	17.015	S	173.530	W	33	N	4.8		1.3	24	TONGA ISLANDS
	16	21	11	19.9*	0.538	N	126.349	E	30	*	4.8		1.4	20	MOLUCCA PASSAGE
	16	21	29	49.5*	33.002	S	72.243	W	33	N			0.9	13	OFF COAST OF CENTRAL CHILE. Felt (V) in the Valparaiso-Vina del Mar area.
	16	22	19	46.4*	6.639	S	147.746	E	13		4.8		1.6	14	EAST PAPUA NEW GUINEA REGION. ML 4.6 (PMG).
	16	23	36	33.1&	59.040	N	154.022	W	109					42	SOUTHERN ALASKA. <AGS-P>. Felt (II) at Iliamna.
	17	01	12	09.6&	61.374	N	150.671	W	59					19	SOUTHERN ALASKA. <AGS-P>.
	17	01	44	59.7	43.928	N	138.170	E	261	*	4.3		0.9	52	EASTERN SEA OF JAPAN
	17	03	05	07.6	48.254	N	8.931	E	10	G			1.0	50	GERMANY. ML 4.2 (FUR), 4.1 (KBA), 3.9 (LDG), 3.5 (GRF). Minor damage to two buildings in the epicentral area.
	17	03	29	12.1*	24.688	S	70.388	W	33	N			1.4	8	NEAR COAST OF NORTHERN CHILE
	17	08	18	19.2%	40.691	N	23.492	E	10	G			0.3	7	GREECE
	17	08	25	55.5%	40.694	N	23.490	E	10	G			0.2	6	GREECE
	17	08	50	43.1	24.019	S	66.765	W	205		4.2		0.9	17	SALTA PROVINCE, ARGENTINA
	17	10	37	37.5?	51.18	N	16.06	E	10	G			1.0	6	POLAND. ML 3.1 (KBA).
	17	11	12	26.6&	61.589	N	150.667	W	58		3.8			55	SOUTHERN ALASKA. <AGS-P>.
	17	13	12	10.0&	19.200	N	155.467	W	11					47	HAWAII. <HVO-P>. ML 3.5 (HVO). Felt (IV) at Pahala.
	17	14	28	32.8*	12.115	N	87.753	W	155	*	4.5		1.1	55	NEAR COAST OF NICARAGUA
	17	15	31	51.7?	21.27	S	179.27	W	559	*	4.9		1.3	15	FIJI ISLANDS REGION
	17	16	10	07.6	6.902	S	147.575	E	42	*	4.1		1.4	18	EAST PAPUA NEW GUINEA REGION
	17	16	34	53.0	48.275	N	121.716	W	5	G			0.8	7	WASHINGTON. ML 2.9 (NEIS). Felt at Darrington.
	17	16	36	26.1%	44.305	N	11.865	E	10	G			0.4	11	NORTHERN ITALY
	17	17	28	56.0%	40.559	N	29.994	E	10	G			0.8	6	TURKEY
	17	18	09	44.1	41.955	N	20.446	E	10	G			1.2	12	ALBANIA. ML 3.5 (SKO), MD 3.1 (TTG).
	17	18	18	16.9	60.562	N	5.001	E	10	G			0.1	7	SOUTHERN NORWAY. ML 1.8 (BER).
	17	19	33	55.3*	47.725	N	7.133	E	10	G			0.7	6	SWITZERLAND. ML 2.4 (LDG).
	17	21	31	02.2	9.328	S	123.501	E	33	N	4.9		1.5	36	TIMOR
	17	23	22	44.8	27.678	S	67.499	W	168	*			1.0	11	CATAMARCA PROVINCE, ARGENTINA
	17	23	46	18.5?	8.84	S	116.95	E	33	N	4.1		1.2	9	SUMBAWA ISLAND REGION
	18	00	00	42.9	42.581	N	111.299	W	5	G	3.9		0.9	25	EASTERN IDAHO. ML 4.3 (NEIS), 4.3 (SLC). Felt (IV) at Dingle, (III) at Georgetown, Soda Springs and Wayan. Also felt (III) at Auburn, Wyoming.
a	18	00	22	49.1	2.114	N	126.571	E	30		5.8	5.5	1.2	226	MOLUCCA PASSAGE. Felt at Manado, Sulawesi.
f	18	03	36	30.3	32.034	N	131.837	E	54	D	6.4		1.2	534	KYUSHU, JAPAN. Ms 6.7 (BRK), 6.6 (PAS). One person killed; also one person died from a heart attack and five people were injured. Damage (V JMA) and landslides in the Miyazaki area. Felt (IV JMA) in the Kumamoto-Nobeoka-Oita-Saga area; (III JMA) in the Fukuoka-Kagoshima area and on southwestern Shikoku. Felt (I JMA) from Naze, Ryukyu Islands to Mito, Honshu. Seven cm. tsunami recorded along the coast of Kyushu.
	18	03	58	13.1	31.998	N	131.943	E	49		4.8		1.1	51	KYUSHU, JAPAN. Felt (II JMA) at Miyazoki and Nobeoka; (I JMA) at Kagoshima and Kumamoto.
	18	04	34	36.4	46.154	N	8.275	E	11				1.4	15	SWITZERLAND. ML 2.8 (LDG).
	18	05	00	18.5	32.026	N	131.924	E	48	D	4.9		1.3	68	KYUSHU, JAPAN. Felt (III JMA) at Nobeaka, (II JMA) at Miyazaki and (I JMA) at Oita and Kumamoto.
	18	05	50	11.4	27.359	N	129.446	E	30		5.0		1.1	75	RYUKYU ISLANDS. Felt (I JMA) at Naze.
	18	06	28	30.3*	15.429	S	172.823	W	33	N	4.9		1.1	23	SAMOA ISLANDS REGION
	18	07	37	02.5*	47.718	N	7.126	E	10	G			0.5	6	SWITZERLAND. ML 2.7 (LDG).
	18	08	02	20.6	26.452	N	142.359	E	33	N	5.0		0.7	39	BONIN ISLANDS REGION
	18	08	31	16.6?	66.10	N	149.06	W	10	G			0.7	4	ALASKA. ML 3.3 (PMR).
	18	08	50	55.5?	13.87	S	74.84	W	33	N			1.5	6	PERU
a	18	08	52	48.4	30.188	S	177.612	W	28	*	5.3	5.0	1.4	101	KERMADEC ISLANDS
	18	13	12	11.5*	6.665	S	147.680	E	24	*	4.5		1.2	25	EAST PAPUA NEW GUINEA REGION. ML 4.9 (PMG).
	18	16	20	59.4*	39.693	N	28.665	E	10	G			1.5	6	TURKEY
	18	16	59	48.3&	36.183	N	120.348	W	11					12	CENTRAL CALIFORNIA. <BRK>. ML 2.8 (BRK), 3.1 (PAS).
	18	17	39	59.1	40.467	N	20.818	E	10	G			1.0	14	GREECE-ALBANIA BORDER REGION
	18	17	55	45.6	45.617	N	26.633	E	118		4.6		1.0	69	ROMANIA. Felt (IV) in the epicentral area and (III) at Bucharest.
	18	18	02	20.6	13.220	N	89.127	W	58	D	4.5		1.3	42	EL SALVADOR. Felt (III) in the San Salvador area.
	18	18	03	00.8?	18.06	S	177.08	W	108	?	4.7		1.3	14	FIJI ISLANDS REGION
	18	18	14	20.9?	43.83	N	7.85	E	10	G			0.7	5	NEAR SOUTH COAST OF FRANCE. ML 2.6 (LDG).
	18	18	17	56.4	36.579	N	121.218	W	5	G			0.4	8	CENTRAL CALIFORNIA. ML 1.9 (BRK).
	18	18	28	00.0&	37.210	N	116.209	W	0		4.3			39	SOUTHERN NEVADA. <DOE>. Tunnel Shot. ML 4.4 (BRK). 37° 12' 36.86" N., 116° 12' 30.84" W., Surface Elev. 2250 m., Depth of Burial 400 m., Shot Time 182800.085, "MIDDLE NOTE", Nevada Test Site (Dept. of Energy).
	18	20	30	44.0%	40.295	N	29.574	E	10	G			0.7	7	TURKEY
	18	20	48	36.3%	44.417	N	6.905	E	10	G			0.1	5	FRANCE. ML 2.4 (LDG).
	18	21	22	20.0?	6.58	S	147.34	E	33	N	4.0		1.5	6	EAST PAPUA NEW GUINEA REGION
	18	21	29	22.7	5.857	S	146.260	E	33	N	5.0		1.2	53	EAST PAPUA NEW GUINEA REGION
	18	21	34	14.6*	50.508	N	19.031	E	10	G			1.3	6	POLAND. ML 3.3 (KBA), 3.2 (KRA), 3.0 (VKA).
	19	00	30	11.1	38.622	N	25.890	E	9				0.9	35	AEGEAN SEA. ML 3.6 (ATH).
	19	01	00	12.0%	40.650	N	23.475	E	10	G			0.7	6	GREECE
a	19	01	28	52.1	6.775	N	76.506	W	10	G	5.7	4.2	1.3	222	NORTHERN COLOMBIA. Felt at Medellin and Quibdo.
	19	01	34	55.9*	51.646	N	16.627	E	10	G			1.2	9	POLAND. ML 3.2 (VKA), 2.9 (KBA).
	19	01	45	03.2?	6.14	S	11.44	W	10	G	4.8	4.9	0.7	9	ASCENSION ISLAND REGION
	19	03	17	18.2*	44.056	N	12.117	E	10	G			0.3	10	NORTHERN ITALY. ML 2.9 (KBA).

	19	04	02	53.0	6.928	N	76.162	W	65	*	4.7		1.2	47	NORTHERN COLOMBIA
	19	04	39	19.6*	18.618	S	178.310	W	476		4.5		0.9	18	FIJI ISLANDS REGION
	19	06	51	46.3*	5.846	N	127.308	E	83	*	4.4		1.3	25	PHILIPPINE ISLANDS REGION
	19	07	13	35.8*	24.127	N	122.211	E	35	*	4.4		1.4	27	TAIWAN REGION
	19	07	18	11.7	51.228	N	161.013	E	33	N	4.7	4.6	0.8	40	OFF EAST COAST OF KAMCHATKA
	19	07	30	54.9	38.898	N	25.016	E	13				1.2	25	AEGEAN SEA. ML 3.5 (ATH).
	19	07	35	56.3	6.965	N	76.343	W	32		5.0	3.9	1.2	92	NORTHERN COLOMBIA
	19	08	05	02.5	41.451	N	22.357	E	10	G			0.7	14	YUGOSLAVIA. ML 2.5 (SKO).
	19	08	31	40.0	0.697	N	126.227	E	38	*	5.0		1.2	43	MOLUCCA PASSAGE
	19	08	42	51.2&	60.378	N	148.692	W	40					25	KENAI PENINSULA, ALASKA. <AGS-P>.
	19	09	53	00.0	6.974	N	76.407	W	28		5.1	3.5	1.1	105	NORTHERN COLOMBIA
	19	10	15	33.8%	40.454	N	23.079	E	10	G			0.4	6	GREECE
	19	12	06	13.3&	59.565	N	152.945	W	94					30	SOUTHERN ALASKA. <AGS-P>.
	19	14	08	18.1&	32.990	N	117.740	W	6	G				10	CALIFORNIA-MEXICO BORDER REGION. <PAS-P>. ML 3.2 (PAS).
a	19	14	32	15.6	23.664	N	64.688	E	10	G	5.1	4.2	1.1	97	NEAR COAST OF PAKISTAN
	19	15	13	38.7*	38.634	N	25.807	E	10	G			0.7	6	AEGEAN SEA
	19	15	20	05.2*	23.672	N	64.674	E	10	G	4.3		1.0	10	NEAR COAST OF PAKISTAN
	19	15	28	44.5	51.606	N	16.389	E	10	G			0.6	12	POLAND. ML 3.6 (KBA), 3.5 (GRF).
	19	15	59	29.7*	13.354	N	121.205	E	14	*	4.3		0.8	9	MINDORO, PHILIPPINE ISLANDS
	19	16	17	22.4?	26.74	S	177.69	W	33	N	4.9	4.9	1.2	12	SOUTH OF FIJI ISLANDS
a	19	17	14	41.2	14.898	S	167.225	E	150		5.5		1.0	180	VANUATU ISLANDS
	19	17	58	14.5	32.074	N	131.970	E	61		4.6		1.1	37	KYUSHU, JAPAN. Felt (I JMA) at Nobeoka and Miyazaki.
	19	19	34	15.2*	39.421	S	78.108	E	10	G	4.7		0.4	11	MID-INDIAN RISE
	19	20	29	16.0*	38.061	N	27.111	E	10	G			0.5	6	TURKEY
a	19	21	27	50.1	29.229	N	137.907	E	537		5.3		0.9	259	SOUTH OF HONSHU, JAPAN
f	19	22	51	39.2	20.397	S	176.134	W	214	G	5.9		1.1	405	FIJI ISLANDS REGION. mb 5.5 (BRK). Depth from broadband displacement seismograms.
	19	23	29	38.7?	40.87	N	30.16	E	10	G			0.7	6	TURKEY
	20	00	55	11.6?	15.88	S	179.90	E	22	*			0.5	8	FIJI ISLANDS
	20	01	28	03.4	41.618	N	20.518	E	10	G	3.5		1.4	58	ALBANIA. MD 3.9 (TTG). Felt (V) in the Navrava area, Yugoslavia.
	20	01	58	18.2*	13.336	N	121.206	E	19	*	4.9		1.5	16	MINDORO, PHILIPPINE ISLANDS. Felt (I RF) at Puerto Galera.
	20	02	36	33.0*	55.689	S	27.472	W	33	N	5.1	4.1	1.0	19	SOUTH SANDWICH ISLANDS REGION
	20	02	47	58.6?	11.09	N	85.72	W	150	G			0.4	8	NICARAGUA. MD 4.3 (HDC).
	20	03	28	32.5?	41.49	N	20.70	E	10	G			1.8	5	ALBANIA. MG 3.1 (SKO).
	20	05	29	00.0	36.129	N	70.758	E	123	*	4.6		1.3	38	HINDU KUSH REGION
	20	06	16	46.3*	41.104	N	23.585	E	10	G			1.2	8	GREECE-BULGARIA BORDER REGION
	20	06	33	27.7*	34.914	N	34.118	E	33	N			0.9	7	CYPRUS. ML 3.6 (BHL).
	20	08	29	25.3*	5.826	S	151.635	E	33	N	4.1		1.4	9	NEW BRITAIN REGION
	20	08	36	12.7&	38.817	N	122.855	W	4	G				10	NORTHERN CALIFORNIA. <BRK>. ML 3.0 (BRK).
	20	08	41	37.8*	68.337	N	17.803	W	10	G	4.5	4.2	1.4	28	ICELAND REGION
	20	09	15	30.3*	3.964	N	76.243	W	126	*	4.0		1.2	8	COLOMBIA
	20	09	28	10.1	3.423	N	126.454	E	51	?	4.7		1.0	12	TALAUD ISLANDS
	20	09	46	30.1*	7.214	S	129.768	E	117	?	4.7		1.3	10	BANDA SEA
	20	10	14	26.9*	6.984	N	76.450	W	33	N			1.3	6	NORTHERN COLOMBIA
	20	11	15	16.8*	26.483	N	56.758	E	43	*	4.6		1.0	18	SOUTHERN IRAN
	20	12	53	29.6*	23.509	S	174.709	W	33	N	5.1	4.1	1.2	46	TONGA ISLANDS REGION
	20	13	03	02.3	7.410	N	123.715	E	607		4.5		0.8	34	MINDANAO, PHILIPPINE ISLANDS
	20	13	10	50.1&	58.902	N	152.740	W	73					19	KODIAK ISLAND REGION. <AGS-P>.
	20	13	57	31.3	18.731	N	121.063	E	53	*	4.4		1.2	30	LUZON, PHILIPPINE ISLANDS. Felt (III RF) at Pasuquin.
	20	14	33	20.7	6.806	N	72.981	W	165		4.3		1.2	35	NORTHERN COLOMBIA
	20	15	14	40.9%	46.256	N	8.647	E	10	G			1.1	6	SWITZERLAND
	20	15	45	10.9&	38.423	N	119.448	W	9					22	CALIFORNIA-NEVADA BORDER REGION. <BRK>. ML 3.8 (BRK).
	20	17	05	58.0*	5.922	S	151.753	E	33	N	3.9		1.2	8	NEW BRITAIN REGION
	20	19	13	44.7	41.630	N	20.699	E	10	G			1.0	7	ALBANIA. ML 3.2 (SKO), 2.8 (TTG).
	20	23	00	24.4	38.257	N	114.416	E	30	*	4.3		1.5	18	NORTHEASTERN CHINA
	20	23	20	11.8%	37.780	N	25.441	W	10	G			1.0	7	AZORES ISLANDS
	20	23	31	13.3&	61.913	N	150.969	W	82					30	SOUTHERN ALASKA. <AGS-P>.
	20	23	57	33.7?	16.79	N	101.47	W	33	N	3.8		1.3	7	NEAR COAST OF GUERRERO, MEXICO
	21	01	04	01.1?	3.04	S	148.94	E	33	N	4.4	3.5	1.5	5	BISMARCK SEA
	21	01	06	57.2%	37.755	N	25.459	W	10	G			0.5	6	AZORES ISLANDS
	21	01	34	57.7%	37.721	N	25.430	W	10	G			0.3	5	AZORES ISLANDS
	21	03	01	20.8	45.694	N	26.710	E	169		4.7		1.3	39	ROMANIA
	21	04	05	37.7	53.059	N	35.158	W	10	G	4.9	4.4	1.0	91	NORTH ATLANTIC OCEAN
	21	04	07	53.0	53.156	N	35.088	W	10	G	4.4		0.9	32	NORTH ATLANTIC OCEAN
	21	04	14	30.5*	53.035	N	35.111	W	10	G	4.2		1.1	20	NORTH ATLANTIC OCEAN
	21	04	54	10.8*	47.550	N	12.872	E	10	G			0.5	5	AUSTRIA. ML 1.8 (KBA).
	21	06	27	22.1*	43.212	N	26.119	E	10	G			1.5	8	BULGARIA
	21	07	13	52.8	3.681	S	149.299	E	11		4.8	4.5	1.0	23	BISMARCK SEA
	21	07	20	03.2*	31.517	S	69.968	W	154	?			0.3	13	SAN JUAN PROVINCE, ARGENTINA
	21	08	12	20.7&	61.605	N	149.674	W	35					37	SOUTHERN ALASKA. <AGS-P>. ML 3.3 (PMR). Felt (IV) at Eagle River and Willow; (III) at Chugiak, Palmer and Wasilla; (II) at Anchorage.
	21	09	00	10.1	22.795	S	68.792	W	124		4.5		0.8	30	NORTHERN CHILE
f	21	10	41	35.9	52.056	N	177.547	W	93	G	6.0		0.9	440	ANDREANOF ISLANDS, ALEUTIAN IS. mb 6.2 (BRK). Felt (V) an Adak. Depth fram braadband displacement seismagrams.
	21	11	53	19.8%	46.271	N	8.624	E	10	G			0.9	7	SWITZERLAND
a	21	12	08	58.8	8.816	N	83.404	W	24		5.3	5.3	1.1	155	COSTA RICA. ML 5.2 (HDC). Felt (VI) in the central valley of Costa Rica. Felt thraughout Costa Rica. Felt (V) at Puerto Armuelles, Concepcion, Valcan and Boquete, Panama.
	21	12	11	47.3*	24.322	N	141.634	E	93	?	4.7		0.9	11	VOLCANO ISLANDS REGION
	21	13	15	08.9*	25.314	N	125.400	E	91	*	4.6		1.4	15	SOUTHWESTERN RYUKYU ISLANDS
	21	13	27	53.6	39.319	N	29.207	E	10	G			0.7	9	TURKEY
	21	13	29	04.8	0.491	N	126.367	E	33	N	4.6		0.9	21	MOLUCCA PASSAGE
	21	14	08	28.0?	61.36	N	4.99	E	10	G			1.1	6	SOUTHERN NORWAY. MD 2.3 (BER).
	21	14	17	10.0%	40.694	N	29.912	E	10	G			1.3	7	TURKEY
	21	14	36	33.0%	39.623	N	29.430	E	10	G			0.8	5	TURKEY
	21	14	46	38.6	36.489	N	70.946	E	212	*	4.8		1.2	28	HINDU KUSH REGION
	21	14	47	23.9	50.386	N	3.690	E	10	G			0.6	16	BELGIUM. ML 3.0 (LDG).
	21	15	31	51.9	52.080	N	177.582	W	103		4.8		1.0	57	ANDREANOF ISLANDS, ALEUTIAN IS.
	21	16	33	40.7*	19.644	S	175.864	W	244	*	4.6		1.1	19	TONGA ISLANDS

	21	16 41 23.1	45.761	N	26.661	E	150		3.6		1.2	43	ROMANIA
	21	18 29 47.5*	41.585	N	20.816	E	10	G			0.9	5	ALBANIA. MG 2.6 (SKO).
	21	19 34 38.3*	14.114	N	91.214	W	86		4.4		1.1	35	GUATEMALA. Felt (II) at San Marcas and Retalhuleu. Also felt at Guatemala City and along the southern coast.
	21	20 32 28.1?	43.75	N	9.52	E	10	G			0.2	6	CORSICA
	21	20 48 16.3	47.100	N	7.142	E	10	G			1.0	18	SWITZERLAND. ML 3.0 (LDG).
	21	22 17 54.1*	5.948	S	151.846	E	33	N	4.1		1.2	9	NEW BRITAIN REGION
	21	23 16 39.3	5.954	S	151.805	E	33	N	4.8	4.2	1.4	15	NEW BRITAIN REGION
	22	00 06 50.0&	60.216	N	152.408	W	76		3.9			41	SOUTHERN ALASKA. <AGS-P>.
	22	01 36 46.9	46.173	N	7.937	E	10	G			1.0	23	SWITZERLAND. ML 3.0 (LDG).
	22	01 37 33.7?	46.42	N	150.17	E	33	N	4.6		1.1	29	KURIL ISLANDS
	22	01 43 49.1%	40.626	N	29.863	E	10	G			1.2	7	TURKEY
	22	02 41 55.1&	41.876	N	112.704	W	2					6	UTAH. <SLC-P>. ML 3.4 (SLC).
f	22	02 49 15.9	51.594	N	173.574	W	20	G	5.9	6.0	1.0	366	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.8 (PMR), Ms 6.2 (BRK). Felt (IV) an Adak and Atka. Complex rupture. Depth from braadband displacement seismograms.
	22	02 57 51.6*	51.668	N	173.504	W	33	N	4.6		0.8	30	ANDREANOF ISLANDS, ALEUTIAN IS. ML 5.2 (PMR).
a	22	03 23 57.6	24.058	S	70.142	W	40	D	5.8	5.8	1.1	232	NEAR COAST OF NORTHERN CHILE. Felt (IV) in the Antofagasta area.
	22	05 38 35.1?	4.32	S	105.24	W	10	G	4.4		1.5	10	NORTHERN EASTER I. CORDILLERA
	22	06 03 50.4*	5.130	S	143.742	E	121	?	3.9		0.9	6	PAPUA NEW GUINEA
	22	06 10 26.0*	47.022	N	112.945	W	5	G			0.6	7	MONTANA. ML 2.8 (NEIS).
	22	07 17 32.0	6.777	N	73.030	W	163		4.5		0.8	60	NORTHERN COLOMBIA
	22	07 49 03.2?	12.26	N	89.13	W	33	N	4.3		0.7	11	OFF COAST OF CENTRAL AMERICA
	22	08 12 31.2?	0.35	S	129.54	E	33	N	4.0		0.5	6	HALMAHERA
	22	08 56 27.7*	51.720	N	173.742	W	33	N	4.5		1.3	12	ANDREANOF ISLANDS, ALEUTIAN IS.
	22	09 22 58.9*	5.713	S	153.810	E	50	?	4.2		1.3	9	NEW IRELAND REGION
	22	10 04 51.2	51.678	N	173.460	W	33	N	4.8		0.9	53	ANDREANOF ISLANDS, ALEUTIAN IS.
	22	10 30 22.3	25.769	N	96.911	E	33	N	4.7		0.8	39	BURMA
	22	11 16 49.6*	51.916	N	173.574	W	33	N	4.0		0.4	15	ANDREANOF ISLANDS, ALEUTIAN IS.
	22	11 27 02.9	2.713	N	128.523	E	226	*	5.0		1.0	67	HALMAHERA
	22	11 53 53.6*	6.157	S	152.112	E	33	N	4.4		0.7	7	NEW BRITAIN REGION
a	22	12 12 35.6	37.160	S	176.702	E	359		4.9		1.3	62	NORTH ISLAND, NEW ZEALAND. Felt throughout North Island and northern South Island.
	22	13 12 42.1&	60.196	N	152.228	W	85					32	SOUTHERN ALASKA. <AGS-P>.
	22	15 22 23.7*	17.535	S	167.809	E	25	*	4.4		0.9	18	VANUATU ISLANDS
	22	15 24 42.4	7.352	S	128.514	E	146		5.0		0.9	79	BANDA SEA
	22	17 35 16.6*	42.059	N	143.982	E	57	*	4.5		1.2	20	HOKKAIDO, JAPAN REGION. Felt (I JMA) at Kushiro.
a	22	17 45 04.6	52.094	N	171.453	W	33	N	5.3	4.9	1.1	200	FOX ISLANDS, ALEUTIAN ISLANDS
	22	19 31 07.8*	45.900	N	15.686	E	10	G			1.6	6	YUGOSLAVIA. ML 3.5 (KBA), MD 3.0 (TRI). Felt (IV) in the Samoborska Garje area.
	22	20 18 34.9*	47.219	N	15.248	E	10	G			1.5	7	AUSTRIA. ML 3.1 (VKA), 2.5 (KBA). Felt (V) at Bruckleaben.
	22	20 36 06.9&	62.621	N	151.214	W	81					15	CENTRAL ALASKA. <AGS-P>.
	22	20 43 17.1*	8.037	S	107.746	E	33	N	4.3		1.4	16	JAVA
	22	20 49 03.1*	36.612	N	28.390	E	10	G			0.6	6	DODECANESE ISLANDS
	22	20 49 47.2	45.892	N	15.755	E	12				1.0	37	YUGOSLAVIA. ML 3.9 (KBA), 3.7 (VKA), 3.6 (KRA), 3.6 (TRI). Felt (VI) in the Samaborsko Garje area. Also felt at Zagreb.
	22	21 05 35.7	50.372	N	3.734	E	10	G			0.8	34	BELGIUM. ML 3.3 (LDG), 2.5 (BNS), 2.4 (UCC). Felt at Barinage.
	22	22 09 45.2*	38.441	N	27.269	E	10	G			1.5	5	TURKEY
	22	22 11 07.9*	45.103	N	17.375	E	10	G			1.3	8	YUGOSLAVIA. ML 3.1 (KBA).
	22	22 55 32.0?	34.26	S	179.62	E	19	D	4.9		1.5	6	SOUTH OF KERMADEC ISLANDS
	22	23 15 01.8	48.216	N	8.910	E	10	G			1.0	44	GERMANY. ML 3.8 (VKA), 3.7 (FUR), 3.6 (KBA), 3.5 (LDG), 3.0 (GRF).
	22	23 38 54.5&	63.248	N	150.848	W	106					13	CENTRAL ALASKA. <AGS-P>.
	23	00 01 07.5	52.018	N	171.379	W	33	N	4.7		0.9	75	FOX ISLANDS, ALEUTIAN ISLANDS
	23	00 24 29.5	40.729	N	27.343	E	8		3.6		1.0	37	TURKEY
	23	01 05 50.2*	2.309	N	96.197	E	33	N	4.3		1.1	12	NORTHERN SUMATERA
	23	02 00 40.1	5.624	S	147.802	E	57		5.0	4.6	1.1	70	EAST PAPUA NEW GUINEA REGION
	23	02 23 51.0?	4.47	S	150.44	E	33	N	3.8		1.4	5	NEW BRITAIN REGION
	23	04 07 00.1	40.034	N	114.337	W	5	G			0.7	11	NEVADA. ML 3.0 (NEIS).
a	23	04 58 19.3	31.974	N	131.899	E	50		5.2	5.1	1.1	130	KYUSHU, JAPAN. Felt (III JMA) at Nobeoka and Oita; (II JMA) at Kagoshima and Miyazaki; (I JMA) at Asosan, Kumamoto and Saga.
	23	05 10 12.1&	60.557	N	148.980	W	34		4.0			59	KENAI PENINSULA, ALASKA. <AGS-P>. ML 4.5 (PMR). Felt (IV) at Cooper Landing and Eagle River; (III) at Anchorage, Girdwaad and Seward; (II) at Palmer.
	23	07 40 26.3?	18.59	S	178.21	W	641	?	4.7		0.7	9	FIJI ISLANDS REGION
	23	07 53 34.7	40.575	N	15.616	E	13	*			1.2	15	SOUTHERN ITALY
	23	08 30 40.0*	36.098	N	119.801	W	5	G			1.0	5	CENTRAL CALIFORNIA. ML 2.8 (NEIS).
	23	09 05 26.8	43.827	N	23.587	E	10	G			1.4	22	BULGARIA
	23	10 09 45.3*	5.471	S	147.781	E	33	N	4.9		1.1	7	EAST PAPUA NEW GUINEA REGION
	23	10 12 57.5	39.280	N	28.816	E	9				0.4	9	TURKEY
	23	11 01 13.4*	40.817	N	123.288	W	10	G			1.1	6	NORTHERN CALIFORNIA. ML 2.9 (BRK).
	23	11 05 12.1*	3.610	S	149.403	E	30	?	4.1		1.2	10	BISMARCK SEA
	23	11 22 11.3*	23.840	S	179.945	E	520	*	4.5		0.9	19	SOUTH OF FIJI ISLANDS
	23	11 22 43.8%	46.322	N	9.102	E	10	G			0.2	5	SWITZERLAND
	23	12 32 08.6?	3.75	S	135.45	E	33	N	4.5		1.5	8	WEST IRIAN REGION
	23	13 29 53.3	17.427	S	176.323	E	33	N	4.9	4.9	1.3	33	FIJI ISLANDS REGION
	23	14 04 35.8	44.439	N	114.088	W	5	G			0.7	10	WESTERN IDAHO. ML 3.3 (NEIS).
	23	14 35 08.7*	7.466	S	128.847	E	143	?	3.8		1.4	9	BANDA SEA
	23	14 38 13.2	46.275	N	8.630	E	10	G	3.3		1.1	8	SWITZERLAND
	23	15 22 45.1&	36.037	N	120.040	W	6					13	CENTRAL CALIFORNIA. <BRK>. ML 3.1 (BRK), 3.3 (PAS).
	23	16 12 05.3?	3.65	N	125.84	E	33	N	4.3		1.0	5	TALAUD ISLANDS
	23	16 50 09.5	60.840	N	5.291	E	10	G			0.5	8	SOUTHERN NORWAY. MD 2.1 (BER).
	23	17 09 00.8	0.173	N	119.412	E	56	*	4.9		1.0	29	MINAHASSA PENINSULA
	23	18 42 10.7*	44.527	N	9.696	E	10	G			1.3	21	NORTHERN ITALY. ML 3.1 (LDG).
	23	18 53 52.3	60.843	N	5.287	E	10	G			0.5	6	SOUTHERN NORWAY. MD 2.3 (BER).
	23	19 00 50.4?	19.80	S	178.38	W	568	*	4.0		1.2	18	FIJI ISLANDS REGION
	23	19 06 41.1?	10.08	N	72.75	W	33	N			1.1	7	VENEZUELA
	23	19 45 19.9%	39.433	N	28.974	E	10	G			1.0	5	TURKEY

a	23	20	48	00.1*	34.014	S	72.079	W	58	*	4.8		1.2	65	NEAR COAST OF CENTRAL CHILE. Felt (III) at Rancagua; (II) at Vina del Mar and Valparaiso. Also felt at Santiago.
	23	21	43	41.8?	4.98	S	148.16	E	33	N	4.7		1.1	6	BISMARCK SEA
	23	22	45	17.5*	13.316	S	77.037	W	33	N			1.4	11	OFF COAST OF PERU
	24	01	29	11.4	44.110	N	16.395	E	10	G	3.7		1.1	90	YUGOSLAVIA. ML 4.3 (KBA), 4.2 (VKA), 4.2 (TTG), 4.2 (TRI). Felt (VI) in the Knin-Basansko Grahovo area.
	24	03	08	28.1*	9.639	S	149.367	E	33	N	4.4		1.2	10	EAST PAPUA NEW GUINEA REGION
	24	03	49	33.7	11.345	N	125.453	E	69		5.2		1.2	99	SAMAR, PHILIPPINE ISLANDS. Felt (IV RF) at Palo, Leyte.
	24	06	40	47.9	6.552	S	147.579	E	39	*	4.5		1.1	20	EAST PAPUA NEW GUINEA REGION
	24	07	44	30.2	5.356	S	147.859	E	60		4.7		1.0	27	EAST PAPUA NEW GUINEA REGION
	24	11	06	35.3*	6.427	S	147.046	E	69	*	3.3		0.2	6	EAST PAPUA NEW GUINEA REGION
	24	12	48	07.7*	37.376	N	137.872	E	32		4.6		1.3	25	NEAR WEST COAST OF HONSHU, JAPAN. Felt (I JMA) at Utsunomiya and Wajima.
a	24	12	49	47.0	37.447	N	137.865	E	23	D	5.7	5.1	1.1	339	NEAR WEST COAST OF HONSHU, JAPAN. Felt (IV JMA) at Joetsu and Wajima, (III JMA) at Tayama, (II JMA) in the Niigata-Nagano area and (I JMA) in the Utsunomiya-Maebashi-Kofu-Tokya area.
	24	13	22	24.7	37.420	N	137.796	E	32		4.8		1.0	66	NEAR WEST COAST OF HONSHU, JAPAN. Felt (II JMA) at Joetsu and Takada and (I JMA) at Niigata and Wajima.
	24	13	46	14.8*	33.298	S	179.088	W	36	*	4.7		1.6	15	SOUTH OF KERMADEC ISLANDS
	24	14	19	58.9%	45.713	N	26.531	E	144	?			0.8	9	ROMANIA
	24	15	12	09.4	39.324	N	28.902	E	10	G			0.8	9	TURKEY
	24	15	21	30.5	42.327	N	18.881	E	10	G			0.8	6	YUGOSLAVIA. ML 2.5 (TTG). Felt at Budva.
	24	15	30	59.6*	53.223	N	167.280	W	10	G	4.4		1.1	21	FOX ISLANDS, ALEUTIAN ISLANDS. ML 5.1 (PMR).
	24	15	53	01.8*	0.043	S	77.752	W	10	G	3.7		0.8	6	ECUADOR
	24	16	48	55.0%	46.232	N	8.661	E	10	G			1.3	9	SWITZERLAND
	24	17	04	15.6*	56.245	N	161.243	W	162	*	4.6		1.4	32	ALASKA PENINSULA
	24	17	31	21.1	43.841	N	151.285	E	29	D	4.9		1.1	53	KURIL ISLANDS REGION
	24	18	19	53.1	37.435	N	29.471	E	10	G			0.3	6	TURKEY
	24	19	21	36.3	44.578	N	9.530	E	10	G			0.9	19	NORTHERN ITALY. ML 2.9 (LDG), 2.2 (KBA).
	24	20	38	02.1?	44.55	N	9.64	E	10	G			0.4	6	NORTHERN ITALY
	24	21	24	50.2%	39.280	N	27.810	E	10	G			1.1	6	TURKEY
	24	21	38	11.2	22.105	N	143.813	E	122	D	4.9		1.0	86	VOLCANO ISLANDS REGION
	24	21	43	50.7*	10.658	N	85.378	W	33	N			0.8	8	COSTA RICA
	24	22	15	24.7&	61.988	N	152.002	W	115					18	SOUTHERN ALASKA. <AGS-P>.
	25	00	39	43.1	37.434	N	137.786	E	38		4.7		0.9	47	NEAR WEST COAST OF HONSHU, JAPAN. Felt (II JMA) at Joetsu, Takada and Wajima; (I JMA) at Aikawa, Niigata and Tayama.
	25	00	46	37.0?	19.21	N	102.17	E	33	N			1.6	5	SOUTHEAST ASIA
	25	01	49	04.4	42.897	N	20.799	E	10	G			1.3	9	YUGOSLAVIA. ML 2.7 (SKO), 2.2 (TTG).
	25	02	43	20.8	32.912	S	64.186	W	30	*	4.5		1.2	30	CORDOBA PROVINCE, ARGENTINA. Felt (II) at Rio Cuarto.
	25	03	36	13.2	40.799	N	22.931	E	10	G			0.6	10	GREECE. ML 2.1 (SKO).
	25	05	02	51.3	51.549	N	173.514	W	33	N	4.7		1.0	84	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.2 (PMR).
	25	05	44	00.8*	51.607	N	16.330	E	10	G			1.1	12	POLAND. ML 4.0 (GRF), 3.8 (VKA), 3.7 (KBA).
	25	06	07	58.8	3.166	N	96.292	E	65	*	4.9		1.0	70	NORTHERN SUMATERA
	25	06	37	09.6	14.226	N	124.451	E	33	N	3.9		1.4	9	LUZON, PHILIPPINE ISLANDS
	25	06	39	46.9*	53.505	S	24.888	E	10	G	4.7		0.8	14	SOUTH OF AFRICA
	25	09	38	28.4	38.932	N	26.383	E	25		3.9		1.1	27	AEGEAN SEA. ML 3.5 (ATH).
	25	10	55	25.9*	38.083	N	19.984	E	10	G			1.2	13	IONIAN SEA. ML 3.6 (ATH).
	25	11	27	03.7*	38.966	N	26.398	E	10	G			0.5	6	AEGEAN SEA
	25	13	06	17.4*	46.354	N	25.970	E	33	N			0.6	6	ROMANIA
	25	13	42	24.8*	40.982	N	142.039	E	71	*	4.7		1.1	28	NEAR EAST COAST OF HONSHU, JAPAN. Felt (III JMA) at Hachinahe.
	25	15	03	35.6&	60.175	N	152.497	W	85					27	SOUTHERN ALASKA. <AGS-P>.
	25	15	14	11.3&	58.428	N	148.179	W	44					39	GULF OF ALASKA. <AGS-P>. ML 3.1 (PMR).
	25	15	32	50.3*	1.901	N	126.411	E	84	?	4.4		0.3	6	MOLUCCA PASSAGE
	25	15	48	39.1	40.136	N	117.694	W	5	G	3.9		0.7	26	NEVADA. ML 4.2 (BRK).
	25	16	01	32.2	40.139	N	117.687	W	5	G	3.9		0.8	26	NEVADA. ML 4.2 (BRK).
	25	16	07	50.3*	62.364	N	6.500	E	10	G			0.3	8	SOUTHERN NORWAY. MD 2.5 (BER).
	25	16	11	02.0	40.122	N	117.738	W	10	G			0.7	17	NEVADA. ML 3.8 (BRK).
	25	18	37	24.6*	32.097	N	132.068	E	43	*			0.7	7	SHIKOKU, JAPAN. Felt (I JMA) at Nabeoka.
	25	19	39	05.2*	53.045	S	140.308	E	10	G	4.4		1.5	24	WEST OF MACQUARIE ISLAND
	25	19	42	33.1?	61.71	N	4.18	E	10	G			0.7	5	SOUTHERN NORWAY. MD 2.2 (BER).
	25	21	04	46.3?	51.13	N	7.09	E	10	G			1.3	5	GERMANY. ML 2.5 (BNS).
	25	21	34	39.5	41.863	N	21.147	E	10	G			1.1	12	YUGOSLAVIA. ML 3.0 (SKO), 2.7 (TTG). Felt (IV) in the Tetavo area.
	25	21	41	45.7?	56.07	N	161.48	E	33	N	4.5		1.6	8	NEAR EAST COAST OF KAMCHATKA
	25	22	14	54.8	2.351	N	126.558	E	71	*	4.6		1.0	34	MOLUCCA PASSAGE
	25	22	58	22.6	18.782	N	146.939	E	33	N	4.8		0.8	23	MARIANA ISLANDS
	25	23	59	04.2*	52.121	N	171.497	W	33	N	4.4		1.0	8	FOX ISLANDS, ALEUTIAN ISLANDS
	26	00	06	43.3?	15.32	S	67.03	E	10	G	4.7	4.6	0.8	28	MID-INDIAN RISE
	26	00	24	51.1*	50.771	N	30.048	W	10	G	4.3		0.9	16	NORTH ATLANTIC RIDGE
a	26	01	05	15.9	55.938	S	27.748	W	110	D	5.2		0.9	29	SOUTH SANDWICH ISLANDS REGION
	26	02	33	23.1&	60.504	N	152.463	W	94					29	SOUTHERN ALASKA. <AGS-P>.
	26	02	35	47.4	50.755	N	129.970	W	10	G	4.6		1.0	54	VANCOUVER ISLAND REGION
	26	02	56	01.9?	5.32	S	154.04	E	33	N	4.0		0.1	5	SOLOMON ISLANDS
	26	04	30	21.1?	19.11	S	174.04	W	33	N	4.8		1.3	12	TONGA ISLANDS
	26	04	58	39.6*	48.844	S	121.378	E	10	G	4.4	5.0	1.2	17	SOUTH OF AUSTRALIA
	26	05	09	15.3*	13.896	S	167.351	E	33	N	4.4	4.6	1.1	16	VANUATU ISLANDS
	26	06	31	55.6*	48.844	S	121.476	E	10	G	4.6		1.3	23	SOUTH OF AUSTRALIA
a	26	06	47	10.6	21.517	S	173.801	W	20	D	5.4	5.3	1.0	160	TONGA ISLANDS
	26	11	02	39.5&	59.738	N	153.466	W	120					26	SOUTHERN ALASKA. <AGS-P>.
	26	11	07	19.4%	46.227	N	8.653	E	10	G			1.1	10	SWITZERLAND
	26	11	29	55.8	21.183	S	68.626	W	117	D	4.8		1.1	66	CHILE-BOLIVIA BORDER REGION
a	26	11	56	54.2	41.691	N	69.843	E	20	D	5.1	4.3	0.8	105	KIRGHIZ SSR. Felt (VI) at Fagelevka, (IV) in the Chimkent-Chirchik-Leninabad-Tashkent area, (III) at Kayrakkum and (II) at Andizhan, Dushanbe, Namangan and Samarkand.
	26	12	11	06.7&	59.673	N	151.968	W	58					33	KENAI PENINSULA, ALASKA. <AGS-P>.
	26	12	31	18.6	20.124	S	178.627	W	627		4.8		0.9	29	FIJI ISLANDS REGION
	26	13	46	15.9?	23.74	S	67.35	W	283	?			1.3	8	CHILE-ARGENTINA BORDER REGION
	26	14	21	56.0?	58.20	N	6.28	E	10	G			0.8	7	SOUTHERN NORWAY. MD 2.4 (BER).

	26	16	05	56.5	7.269	S	155.704	E	51 •	4.5	0.3	10	SOLOMON ISLANDS
a	26	16	17	38.1	13.731	S	167.197	E	191 D	5.5	1.0	254	VANUATU ISLANDS
	26	16	26	52.7•	51.622	N	16.365	E	10 G		0.5	8	POLAND. ML 3.7 (VKA), 3.4 (KBA).
	26	17	44	01.2•	34.577	N	140.861	E	33 N	4.8	1.1	9	NEAR EAST COAST OF HONSHU, JAPAN. Felt (I JMA) at Ajiro.
a	26	18	32	25.9	21.390	S	174.459	W	81 D	5.4	1.5	147	TONGA ISLANDS
	26	18	38	27.7	16.914	N	99.989	W	33 N	4.8 4.5	1.0	36	NEAR COAST OF GUERRERO, MEXICO. Slight damage at Acapulco. Felt lightly at Mexico City.
	26	18	56	19.3	5.417	S	133.927	E	56 D	5.1	1.4	47	AROE ISLANDS REGION
	26	19	26	19.0?	16.43	N	100.19	W	33 N		1.3	7	NEAR COAST OF GUERRERO, MEXICO
	26	20	52	12.0?	34.46	S	178.71	E	227 ?	4.4	1.4	9	SOUTH OF KERMADEC ISLANDS
	26	21	09	22.0	24.959	N	96.330	E	33 N	4.7	1.3	47	BURMA
	26	22	19	37.3•	0.650	S	97.869	E	12	3.7	1.2	11	SOUTHWEST OF SUMATERA
	26	22	31	24.7•	21.848	S	174.283	W	33 N	4.8	0.8	27	TONGA ISLANDS
	26	22	58	50.5•	51.645	N	16.633	E	10 G		0.9	7	POLAND. ML 3.7 (VKA), 3.4 (KBA).
	26	23	14	12.5•	6.846	N	76.544	W	33 N		0.4	5	NORTHERN COLOMBIA
	27	00	44	29.4•	7.206	S	129.325	E	216 ?	4.1	0.3	6	BANDA SEA
	27	01	53	08.8?	4.02	S	135.31	E	33 N	4.0	1.3	7	WEST IRIAN REGION
	27	05	45	39.4•	30.155	N	67.716	E	33 N	4.3	0.8	9	PAKISTAN
	27	06	30	47.2&	61.012	N	151.154	W	72			45	SOUTHERN ALASKA. <AGS-P>.
	27	07	29	30.4&	35.567	N	84.229	W	19	4.3		19	TENNESSEE. <TEIC>. mbLg 4.2 (NEIS), 4.2 (TUL). Slight damage (VI) at Friendsville, Greenback, Louisville and Tallassee. Felt (V) at Benton, Delano, Harriman, Jacksboro, Philodelphia, Sweetwater, Tellico Plains, Turtletown and Vonare. Also felt (V) at Epworth and Mineral Bluff, Georgia. Felt in much of eastern Tennessee and in parts of Georgio and North Carolina.
	27	09	15	28.1•	21.238	S	174.693	W	33 N	5.0 4.6	1.3	30	TONGA ISLANDS
	27	09	38	23.5	36.761	N	4.006	W	93 •		0.9	25	STRAIT OF GIBRALTAR. Felt (III) at Tarre del Mar, Spain.
	27	10	12	51.3•	10.587	S	41.057	E	10 G	4.5	0.7	11	NORTHWEST OF MADAGASCAR
	27	10	33	25.6•	52.040	N	171.324	W	33 N	4.4	0.9	9	FOX ISLANDS, ALEUTIAN ISLANDS
	27	11	07	37.3	8.379	S	76.086	W	146 •	4.8	0.9	34	PERU
	27	11	19	12.5•	35.425	N	141.135	E	57 •	4.6	0.7	17	NEAR EAST COAST OF HONSHU, JAPAN
	27	11	35	49.1	36.575	N	70.910	E	236 •	4.6	0.7	25	HINDU KUSH REGION
	27	11	42	39.5	22.299	S	172.082	E	33 N	4.8	1.3	33	LOYALTY ISLANDS REGION
	27	11	54	02.1•	30.418	S	176.474	W	65 •	5.4	1.4	24	KERMADEC ISLANDS REGION. Felt on Raoul Island.
	27	13	24	36.7%	60.286	N	5.407	E	0 G		0.5	5	SOUTHERN NORWAY. MD 2.2 (BER). Probable explosion.
	27	13	49	27.7•	7.205	S	150.214	E	45 ?	4.5	1.0	9	NEW BRITAIN REGION
	27	13	55	04.1	40.013	N	23.958	E	10 G		0.9	21	GREECE. ML 3.1 (ATH).
	27	14	00	32.1	39.897	N	24.051	E	6		1.2	19	AEGEAN SEA. ML 3.0 (ATH).
	27	14	30	32.3•	32.429	N	51.315	E	33 N	4.4	1.2	9	IRAN
	27	15	54	37.2•	21.546	N	121.320	E	44 •	4.1	1.5	19	TAIWAN REGION
	27	17	02	21.1	52.966	N	168.429	E	33 N	4.4	0.7	25	ALEUTIAN ISLANDS REGION
	27	17	10	51.9	51.297	N	178.271	W	33 N	5.1	0.9	89	ANDREANOF ISLANDS, ALEUTIAN IS.
	27	18	42	01.9•	7.224	S	120.221	E	399 •	4.3	1.1	15	FLORES SEA
	27	19	03	24.1•	34.951	N	30.882	E	10 G		1.0	8	EASTERN MEDITERRANEAN SEA
	27	20	01	55.7?	39.61	N	75.56	E	33 N	4.7	0.7	6	SOUTHERN XINJIANG, CHINA
	27	20	33	13.0?	36.16	N	10.47	W	33 N		1.2	5	NORTH ATLANTIC OCEAN. MG 3.5 (MTE).
	27	21	08	40.4•	5.255	S	153.725	E	70 ?	3.7	0.9	6	NEW IRELAND REGION
	27	21	14	36.8•	34.985	N	30.903	E	33 N	3.8	1.4	11	EASTERN MEDITERRANEAN SEA
	27	21	25	03.9%	43.797	N	7.435	E	10 G		1.5	6	NEAR SOUTH COAST OF FRANCE. ML 2.8 (LDG).
	27	22	25	41.2?	47.67	N	7.44	E	10 G		0.1	5	SWITZERLAND. ML 2.2 (LDG).
	27	22	53	17.2	31.946	N	90.939	E	33 N	3.9	1.5	20	TIBET
	27	23	12	04.9	40.696	N	23.512	E	10 G		0.3	6	GREECE
	28	01	36	15.8?	21.72	S	170.31	E	33 N	4.3 3.8	1.6	14	LOYALTY ISLANDS REGION
	28	03	44	43.4•	66.267	N	149.892	W	10 G		1.5	5	ALASKA. ML 3.3 (PMR).
a	28	05	04	10.8	57.919	S	25.386	W	33 N	5.5	0.9	102	SOUTH SANDWICH ISLANDS REGION
	28	05	26	44.0?	51.11	N	168.94	W	33 N	4.8	0.7	8	FOX ISLANDS, ALEUTIAN ISLANDS
	28	06	14	13.9•	39.319	N	20.158	E	10 G	3.7	1.1	14	GREECE-ALBANIA BORDER REGION. ML 3.7 (ATH).
	28	08	48	51.0	26.462	N	103.075	E	33 N	4.2	1.1	14	YUNNAN PROVINCE, CHINA. ML 4.5 (BJI).
	28	09	22	29.6%	44.423	N	6.500	E	10 G		0.5	5	FRANCE. ML 2.3 (LDG).
	28	09	46	13.1?	6.34	N	73.01	W	162 •		0.7	8	NORTHERN COLOMBIA
	28	10	48	12.4%	41.204	N	28.967	E	10 G		0.4	6	TURKEY
	28	11	04	12.7	30.654	N	131.426	E	45	4.7 5.1	1.1	52	KYUSHU, JAPAN
a	28	11	26	38.4	30.658	N	131.328	E	40	5.1 5.8	1.4	116	KYUSHU, JAPAN
	28	11	30	04.3	44.223	N	12.099	E	14		1.2	30	NORTHERN ITALY. ML 3.4 (KBA), 3.2 (LDG), MD 3.2 (TRI).
	28	11	44	56.2•	30.673	N	131.451	E	51 •	4.5	1.2	23	KYUSHU, JAPAN
	28	11	53	11.1•	6.710	S	147.564	E	40 •	4.5	1.4	10	EAST PAPUA NEW GUINEA REGION. ML 4.6 (PMG).
	28	13	03	24.6•	6.075	S	147.652	E	53 •	4.8	0.9	10	EAST PAPUA NEW GUINEA REGION
	28	13	03	53.1&	59.057	N	137.060	W	23			12	SOUTHEASTERN ALASKA. <AGS-P>.
	28	13	04	41.3?	17.08	S	178.67	W	572 •	5.0	0.5	11	FIJI ISLANDS REGION
	28	13	13	49.2&	59.910	N	152.263	W	82			26	SOUTHERN ALASKA. <AGS-P>.
	28	13	30	58.9•	22.456	S	171.475	E	141 ?	4.7	0.7	8	LOYALTY ISLANDS REGION
	28	13	55	18.8?	35.21	N	141.42	E	33 N	4.5	0.6	7	NEAR EAST COAST OF HONSHU, JAPAN
	28	14	02	30.8	40.689	N	23.431	E	10 G		1.0	8	GREECE
	28	14	42	20.2•	24.010	S	66.706	W	208 •		1.5	15	SALTA PROVINCE, ARGENTINA
	28	15	52	10.0	39.151	N	29.528	E	10 G		1.4	10	TURKEY
	28	16	02	17.3•	33.908	N	103.116	E	33 N		0.5	6	GANSU PROVINCE, CHINA. ML 4.2 (BJI).
	28	19	29	00.3&	33.980	N	118.320	W	6			11	SOUTHERN CALIFORNIA. <PAS-P>. ML 3.1 (PAS). Felt (V) at Inglewood and Los Angeles and (IV) at Hawthorne and La Habra.
	28	20	05	04.8?	4.57	S	136.18	E	33 N	4.1	1.1	5	WEST IRIAN REGION
	28	20	20	11.5	52.008	N	178.012	E	125 •	4.7	1.0	32	RAT ISLANDS, ALEUTIAN ISLANDS
	28	21	12	17.9&	37.542	N	121.642	W	4			13	CENTRAL CALIFORNIA. <BRK>. ML 2.9 (BRK).
	28	22	12	02.1	29.401	N	52.497	E	15	4.2	0.9	27	SOUTHERN IRAN
	28	23	27	36.4	30.664	N	131.583	E	43 •	4.8	1.0	25	KYUSHU, JAPAN
a	28	23	31	58.3	5.275	S	152.563	E	54	5.8 5.2	1.0	183	NEW BRITAIN REGION. Felt (III) at Rabaul.
	29	00	14	36.7?	36.27	N	27.94	E	10 G		1.1	5	DODECANESE ISLANDS
	29	01	17	19.9	51.549	N	173.254	W	33 N	4.6	1.1	43	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.3 (PMR).
	29	01	30	55.5	51.604	N	173.176	W	33 N	5.0	1.0	122	ANDREANOF ISLANDS, ALEUTIAN IS. ML 4.5 (PMR).
	29	01	33	10.7	45.530	N	6.807	E	10 G		0.8	9	FRANCE. ML 2.6 (LDG).
	29	03	37	18.7	44.147	N	12.198	E	20 G		1.1	66	NORTHERN ITALY. ML 4.2 (KBA), 4.0 (LDG), 3.9 (TRI). MD

														3.6 (FIR).
	29	04	05	14.0*	25.813	S	13.892	W	10	G	4.9	4.8	1.1	13 SOUTH ATLANTIC RIDGE
	29	04	10	08.3	42.072	N	25.367	E	10	G			1.2	36 BULGARIA. Felt (IV) in the Chirpan-Purvomay area.
	29	04	19	18.5?	8.84	S	114.63	E	33	N	3.9		1.3	6 BALI ISLAND REGION
	29	04	44	29.2	15.673	N	96.485	W	33	N	4.9	3.9	1.0	45 NEAR COAST OF OAXACA, MEXICO
	29	05	17	45.1*	22.522	S	66.922	W	210	*	4.9		1.2	9 JUJUY PROVINCE, ARGENTINA
	29	05	26	39.1&	38.798	N	122.778	W	2					10 NORTHERN CALIFORNIA. <BRK>. ML 3.0 (BRK).
	29	05	29	59.0?	51.70	N	7.56	E	10	G			1.4	5 GERMANY
	29	05	36	54.4*	7.110	S	129.563	E	164	*	4.7		1.1	10 BANDA SEA
	29	08	24	41.1	34.889	N	26.417	E	48	*	4.2		1.6	31 CRETE
a	29	09	17	34.9	17.244	S	167.886	E	22	D	5.3	5.4	1.1	158 VANUATU ISLANDS
	29	13	56	31.8	6.927	S	149.698	E	33	N	4.6	3.8	1.2	12 NEW BRITAIN REGION
	29	14	00	29.2*	5.637	S	146.498	E	33	N	3.6		1.2	6 EAST PAPUA NEW GUINEA REGION
	29	14	08	22.2?	59.16	N	4.77	E	10	G			0.9	6 SOUTHERN NORWAY. MD 2.1 (BER).
	29	14	59	28.4	6.302	S	129.839	E	181	D	5.3		1.1	101 BANDA SEA
	29	20	10	43.0	38.399	N	25.170	E	10	G			1.3	16 AEGEAN SEA. ML 3.3 (ATH).
	29	21	16	42.2	47.256	N	156 329	E	28	D	4.9		0.9	88 KURIL ISLANDS REGION
	29	21	45	10.4	4.677	N	125.234	E	44	*	5.1		1.4	30 TALAUD ISLANDS
	29	22	11	37.6%	40.770	N	23.331	E	10	G			0.2	5 GREECE
	29	22	27	34.6*	6.373	N	72.981	W	164		4.1		0.6	11 NORTHERN COLOMBIA
	29	23	14	14.3*	57.958	S	25.218	W	33	N	4.9		0.8	17 SOUTH SANDWICH ISLANDS REGION
	29	23	16	46.8	27.175	N	100.039	E	33	N	5.0		1.2	50 YUNNAN PROVINCE, CHINA
	29	23	24	04.3	2.282	N	127.062	E	69	*	5.1		1.1	63 MOLUCCA PASSAGE
	29	23	45	58.5	41.500	N	22.566	E	10	G			0.4	7 YUGOSLAVIA. ML 1.7 (SKO).
	30	01	25	48.6	43.294	N	25.969	E	10	G			1.0	9 BULGARIA
	30	01	41	07.0?	16.02	N	94.10	W	33	N	4.3		1.4	13 OAXACA, MEXICO
	30	02	15	57.2*	30.690	N	131.408	E	33	N	4.9		0.7	18 KYUSHU, JAPAN
	30	02	25	14.9?	3.41	S	149.69	E	33	N	4.4		0.8	5 BISMARCK SEA
a	30	03	13	40.9	74.618	N	130.594	W	10	G	5.5	4.6	0.9	223 BEAUFORT SEA
	30	03	41	27.4	45.797	N	26.701	E	84		4.5		1.1	90 ROMANIA. Felt (IV) in the Facsani area.
	30	04	22	58.0%	40.423	N	29.066	E	10	G			0.5	7 TURKEY
	30	05	28	10.0%	36.803	N	28.894	E	10	G			0.6	5 DODECANESE ISLANDS
	30	08	12	34.7*	17.873	S	168.181	E	94	*	4.3		1.5	11 VANUATU ISLANDS
	30	09	11	05.5*	46.285	N	149.376	E	174	?	4.6		1.2	17 KURIL ISLANDS
	30	09	12	24.1*	18.918	S	169.124	E	239		4.6		1.0	25 VANUATU ISLANDS
	30	10	04	17.4*	14.843	N	120.090	E	76	*	4.6		1.2	11 LUZON, PHILIPPINE ISLANDS
	30	12	30	49.6	43.884	N	147.656	E	33	N	5.0		0.9	22 KURIL ISLANDS
	30	12	46	50.8*	37.042	N	13.933	W	33	N			0.8	11 NORTH ATLANTIC OCEAN. MG 3.9 (MTH).
	30	13	26	05.2%	60.212	N	5.041	E	0	G			0.2	6 SOUTHERN NORWAY. MD 1.8 (BER). Probable explosion.
	30	14	39	30.3	15.308	S	172.566	W	33	N	4.7		0.5	19 SAMOA ISLANDS REGION
	30	15	53	06.6	2.645	N	126.956	E	73	*	4.9		1.0	28 MOLUCCA PASSAGE
	30	16	02	38.5%	46.796	N	9.440	E	10	G			0.8	6 SWITZERLAND
	30	16	17	14.9	46.997	N	9.882	E	10	G			1.3	6 SWITZERLAND. ML 2.2 (KBA).
	30	17	09	15.6?	25.81	N	97.78	E	33	N			0.2	6 BURMA-CHINA BORDER REGION
	30	19	07	21.2	40.710	N	23.487	E	10	G			0.2	6 GREECE
	30	19	20	20.8&	62.056	N	149.846	W	47					41 CENTRAL ALASKA. <AGS-P>.
a	30	20	27	26.4	21.309	S	174.165	W	32	D	5.0	5.0	1.1	64 TONGA ISLANDS
	30	21	27	36.6&	61.591	N	146.406	W	37					31 SOUTHERN ALASKA. <AGS-P>.
	30	22	42	20.2	34.635	N	117.130	W	5	G			0.4	6 SOUTHERN CALIFORNIA. ML 2.8 (NEIS).
	30	23	15	06.4%	40.822	N	30.154	E	10	G			0.6	5 TURKEY
	30	23	26	25.2&	35.502	N	120.888	W	2					11 CENTRAL CALIFORNIA. <BRK>. ML 2.7 (BRK).
	31	00	09	19.9*	6.613	S	147.650	E	42	*	4.2		1.3	8 EAST PAPUA NEW GUINEA REGION
a	31	01	18	36.8	53.182	N	156.469	E	175	D	5.2		0.9	278 KAMCHATKA
	31	01	42	58.0*	6.013	S	147.932	E	64	*	4.0		1.4	12 EAST PAPUA NEW GUINEA REGION
	31	02	19	12.3*	46.301	S	13.497	W	10	G	4.6		0.8	9 SOUTH ATLANTIC RIDGE
	31	03	07	11.6*	46.232	S	13.529	W	10	G	4.4		0.9	8 SOUTH ATLANTIC RIDGE
	31	03	30	59.1%	40.696	N	23.504	E	10	G			0.1	6 GREECE
	31	03	31	48.0*	21.912	S	176.694	W	134	*	4.9		1.0	28 FIJI ISLANDS REGION
	31	05	01	11.3?	33.47	S	72.17	W	33	N			0.7	9 OFF COAST OF CENTRAL CHILE
	31	05	58	31.8?	32.91	S	71.54	W	33	N			1.4	6 NEAR COAST OF CENTRAL CHILE
	31	06	34	35.2	2.438	S	140.421	E	33	N	4.4	4.0	0.9	23 NEAR N. COAST OF WEST IRIAN
	31	07	48	13.2%	40.043	N	27.742	E	10	G			1.0	11 TURKEY
	31	09	15	52.2	29.662	S	71.483	W	27		4.8		0.8	67 NEAR COAST OF CENTRAL CHILE. Felt (IV) at La Serena and Coquimba.
	31	09	58	10.7&	40.462	N	124.648	W	14	G				10 NEAR COAST OF NORTHERN CALIF. <BRK>. ML 3.1 (BRK).
	31	10	00	55.7	18.229	S	69.811	W	154	*	4.4		0.9	11 NORTHERN CHILE
	31	12	09	17.2*	50.387	N	6.075	E	10	G			0.2	5 GERMANY
	31	13	00	36.5*	19.405	N	67.808	W	33	N	4.6		1.2	10 MONA PASSAGE
	31	14	01	18.0	53.597	N	166.944	W	10	G	4.2		0.9	23 FOX ISLANDS, ALEUTIAN ISLANDS
	31	15	21	27.6	46.241	N	8.692	E	10	G			1.0	25 SWITZERLAND. ML 2.8 (LDG).
	31	15	36	01.7	2.519	N	126.889	E	89	*	4.8		0.9	38 MOLUCCA PASSAGE
	31	15	59	00.2	60.383	N	4.930	E	0	G			0.6	7 SOUTHERN NORWAY MD 1.7 (BER). Probable explosion.
	31	16	24	19.6*	16.527	S	71.736	W	10	G			0.9	7 SOUTHERN PERU
	31	19	25	20.3?	21.90	S	67.32	W	203	*	4.5		0.7	6 CHILE-BOLIVIA BORDER REGION
	31	19	29	48.6*	51.144	N	15.581	E	10	G			1.0	7 POLAND. ML 3.7 (GRF), 3.2 (VKA), 3.1 (KBA).
	31	19	49	27.0?	9.55	N	125.50	E	33	N			1.5	5 MINDANAO, PHILIPPINE ISLANDS
	31	19	57	38.4*	33.126	S	178.859	W	33	N	5.2		1.4	20 SOUTH OF KERMADEC ISLANDS
	31	20	07	44.1*	26.784	S	72.110	W	33	N			1.2	12 OFF COAST OF NORTHERN CHILE
	31	21	04	24.3&	35.920	N	118.350	W	5					15 CENTRAL CALIFORNIA. <PAS-P>. ML 3.2 (PAS).
	31	21	07	35.5	30.465	N	138.273	E	447		4.8		0.8	140 SOUTH OF HONSHU, JAPAN
	31	23	26	29.1	44.279	N	12.073	E	10	G			0.3	12 NORTHERN ITALY. ML 3.1 (KBA), MD 2.6 (FIR).

ADDITIONAL SOURCE PARAMETERS

01 04 55 04.34 32.665S 57.225E 10km
4.9mb (6 obs.)
ATLANTIC-INDIAN RISE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 27C
Centraid Location:
Origin Time 04:55:11.4 0.8
Lot 32.67S 0.09 Lon 57.23E 0.06
Dep 15.0 FIX Half-duration 1.4
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	6.62	0	141
N	-0.50	90	180
P	-6.13	0	51

Best Double Couple:Mo=6.4*10**16
NP1:Strike=186 Dip=90 Slip= 180
NP2: 276 90 0

02 01 42 34.11 37.965S 176.765E 19km
5.9mb (30 obs.) 6.6Msz (18 obs.)
NORTH ISLAND, NEW ZEALAND
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=220 Dip=59 Slip=-158
NP2: 118 71 -33
Principal Axes:

	Plg=	Azm=
T	8	171
P	36	76

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, IDA
L.P.B.: 10S, 27C M.W.: 10S, 23C
Centroid Location:
Origin Time 01:42:39.2 0.1
Lat 37.82S 0.02 Lan 177.03E 0.03
Dep 15.0 FIX Half-duration 6.8
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	7.04	13	314
N	-1.20	6	45
P	-5.84	76	158

Best Double Couple:Mo=6.4*10**18
NP1:Strike= 36 Dip=32 Slip=-101
NP2: 228 58 -83

02 05 57 43.56 45.708S 96.212E 10km
5.6mb (20 obs.) 6.2Msz (11 obs.)
SOUTHEAST INDIAN RISE
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 14S, 33C
Centroid Location:
Origin Time 05:57:54.3 0.3
Lat 45.56S 0.03 Lon 96.06E 0.05
Dep 15.0 FIX Half-duration 4.7
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	2.25	13	82
N	-0.09	74	224
P	-2.16	9	350

Best Double Couple:Mo=2.2*10**18
NP1:Strike=126 Dip=74 Slip= 178
NP2: 217 88 16

03 01 32 12.31 46.347N 152.013E 96km
5.8mb (75 obs.)
KURIL ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=210 Dip=77 Slip=-125
NP2: 102 37 -22
Principal Axes:

	Plg=	Azm=
T	24	326
P	46	84

Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with o large strike-slip companent. The preferred foult plone is not determined.
MOMENT TENSOR SOLUTION
Dep 88 No. of sta: 10
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	3.45	3	319
N	0.14	36	226
P	-3.59	54	53

Best Double Couple:Mo=3.5*10**17
NP1:Strike= 81 Dip=52 Slip= -42
NP2: 199 58 -134
CENTROID, MOMENT TENSOR (HRV)
Dato Used: GDSN
L.P.B.: 12S, 30C
Centroid Location:
Origin Time 01:32:11.8 0.2
Lot 46.16N 0.02 Lon 152.40E 0.04
Dep 96.8 2.2 Holf-durotion 2.8
Principal Axes:
Scole 10**17 Nm

	Val=	Plg=	Azm=
T	4.38	25	295
N	0.42	15	32
P	-4.80	60	151

Best Double Couple:Mo=4.6*10**17
NP1:Strike=355 Dip=25 Slip=-130
NP2: 218 71 -74

03 09 41 33.61 41.292N 79.298E 33km
5.1mb (33 obs.) 5.0Msz (4 obs.)
KIRGHIZ-XINJIANG BORDER REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 20C
Centroid Locotion:
Origin Time 09:41:33.1 1.0
Lat 41.30N 0.15 Lon 79.52E 0.17
Dep 33.0 FIX Half-duration 1.3
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	4.03	66	121
N	0.21	2	216
P	-4.25	24	307

Best Double Couple:Mo=4.1*10**16
NP1:Strike= 42 Dip=21 Slip= 96
NP2: 215 69 88

03 14 20 32.31 57.910S 25.147W 25km
5.4mb (12 obs.) 5.0Msz (1 obs.)
SOUTH SANDWICH ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 14S, 28C
Centroid Location:
Origin Time 14:20:40.6 0.5
Lot 57.97S 0.05 Lon 24.91W 0.09
Dep 24.7 3.1 Holf-durotion 1.9
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.50	71	288
N	-0.05	10	168
P	-1.45	16	75

Best Double Couple:Mo=1.5*10**17
NP1:Strike=151 Dip=30 Slip= 71
NP2: 353 61 101

04 06 25 22.62 6.528S 147.921E 16km
5.2mb (16 obs.) 5.2Msz (6 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 20C
Centroid Location:
Origin Time 06:25:17.1 0.8
Lat 6.18S 0.09 Lon 147.82E 0.10
Dep 15.0 FIX Holf-duration 1.6
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	1.67	32	6
N	0.00	28	257
P	-1.67	45	135

Best Double Couple:Mo=1.7*10**17
NP1:Strike=149 Dip=29 Slip= -16
NP2: 253 82 -118

04 10 04 58.58 19.962S 68.926W 113km
5.2mb (21 obs.)
CHILE-BOLIVIA BORDER REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 27C
Centroid Locotion:
Origin Time 10:05: 6.0 0.5
Lat 19.83S 0.07 Lon 69.13W 0.06
Dep 133.2 2.3 Holf-duration 1.9
Principol Axes:
Scole 10**17 Nm

	Val=	Plg=	Azm=
T	1.29	8	55
N	0.00	19	323
P	-1.30	69	168

Best Double Couple:Mo=1.3*10**17
NP1:Strike=166 Dip=40 Slip= -60
NP2: 309 56 -113

05 09 17 05.28 24.388S 70.161W 62km
6.5mb (66 obs.) 7.3Msz (16 obs.)
NEAR COAST OF NORTHERN CHILE
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=354 Dip=20 Slip= 90
NP2: 174 70 90
Principal Axes:

	Plg=	Azm=
T	65	84
P	25	264

Comment: The focal mechanism is poorly controlled ond corresponds to reverse faulting. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sto: 4 Focal mech. C
Energy 1.8±0.5*10**15 Nm
MOMENT TENSOR SOLUTION
Dep 53 No. of sta: 7
Principal Axes:
Scole 10**20 Nm

	Val=	Plg=	Azm=
T	2.34	57	61
N	0.18	28	208
P	-2.52	15	306

Best Double Couple:Mo=2.4*10**20
NP1:Strike= 70 Dip=39 Slip= 139
NP2: 194 66 59
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 13S, 31C M.W.: 12S, 28C
Centroid Locotion:
Origin Time 09:17:20.6 0.1
Lat 24.38S 0.01 Lon 70.93W 0.01
Dep 41.9 0.8 Holf-duration 15.0
Principal Axes:
Scole 10**20 Nm

	Val=	Plg=	Azm=
T	2.52	66	73
N	-0.09	6	177
P	-2.43	23	270

Best Double Couple:Mo=2.5*10**20
NP1:Strike= 12 Dip=23 Slip= 106
NP2: 175 68 83

05 10 55 12.35 24.495S 70.701W 35km
5.7mb (50 obs.)
NEAR COAST OF NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 10S, 20C M.W.: 9S, 17C
Centroid Locotian:
Origin Time 10:55:22.7 0.4
Lat 24.19S 0.06 Lon 71.31W 0.05
Dep 33.0 FIX Half-duration 8.4
Principal Axes:
Scale 10**19 Nm

	Val=	Plg=	Azm=
T	2.81	61	81
N	0.49	3	346
P	-3.30	28	254

Best Double Couple:Mo=3.1*10**19
NP1:Strike=336 Dip=17 Slip= 80
NP2: 166 73 93

05 19 47 09.11 5.887S 146.653E 56km
5.4mb (23 obs.) 5.2Msz (1 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Dota Used: GDSN
L.P.B.: 7S, 15C
Centroid Locotian:
Origin Time 19:47:16.9 0.9
Lot 6.05S 0.08 Lon 146.51E 0.10
Dep 87.4 9.0 Holf-duration 2.2
Principal Axes:
Scole 10**17 Nm

	Val=	Plg=	Azm=
T	2.44	85	276
N	-0.62	3	142
P	-1.83	3	51

Best Double Couple:Mo=2.1*10**17
NP1:Strike=138 Dip=42 Slip= 85
NP2: 325 48 94

06 01 54 50.49 0.048N 77.653W 14km
6.1mb (68 obs.) 6.1Msz (18 obs.)
COLOMBIA-ECUADOR BORDER REGION

FAULT PLANE SOLUTION: P-Waves
NP1:Strike=353 Dip=72 Slip= 90
NP2: 173 18 90
Principal Axes:
T Plg=63 Azm=263
P 27 83
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 4 Focal mech. M
Energy 2.7±0.7*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 23 No. of sta: 10
Principal Axes:
Scale 10**18 Nm
T Val= 5.08 Plg=50 Azm=218
N 0.07 33 358
P -5.16 21 102
Best Double Couple:Mo=5.1*10**18
NP1:Strike=233 Dip=38 Slip= 152
NP2: 346 73 56
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 38C
Centroid Location:
Origin Time 01:54:57.5 0.2
Lat 0.10N 0.03 Lon 77.77W 0.03
Dep 15.0 BDY Half-duration 5.8
Principal Axes:
Scale 10**18 Nm
T Val= 4.92 Plg=61 Azm=244
N -0.05 9 351
P -4.87 27 86
Best Double Couple:Mo=4.9*10**18
NP1:Strike=198 Dip=20 Slip= 118
NP2: 348 73 81

06 04 10 41.96 0.151N 77.821W 10km
6.5mb (51 obs.) 6.9Msz (21 obs.)
COLOMBIA-ECUADOR BORDER REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=353 Dip=72 Slip= 90
NP2: 173 18 90
Principal Axes:
T Plg=63 Azm=263
P 27 83
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 4 Focal mech. F
Energy 6.5±1.3*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 49 No. of sta: 10
Principal Axes:
Scale 10**19 Nm
T Val= 2.98 Plg=52 Azm=196
N 0.94 32 341
P -3.92 17 82
Best Double Couple:Mo=3.5*10**19
NP1:Strike=211 Dip=40 Slip= 147
NP2: 327 70 55
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 15S, 39C M.W.: 13S, 32C
Centroid Location:
Origin Time 04:10:55.4 0.1
Lat 0.06S 0.01 Lon 77.84W 0.01
Dep 15.0 BDY Half-duration 14.0
Principal Axes:
Scale 10**19 Nm
T Val= 6.35 Plg=71 Azm=268
N 0.04 3 8
P -6.39 19 100
Best Double Couple:Mo=6.4*10**19
NP1:Strike=195 Dip=27 Slip= 98
NP2: 7 64 86

06 07 06 44.04 24.089S 70.104W 41km
5.9mb (63 obs.) 5.5Msz (4 obs.)
NEAR COAST OF NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 13C
Centroid Location:
Origin Time 07:06:55.9 1.6
Lat 23.53S 0.17 Lon 69.70W 0.30
Dep 41.0 FIX Half-duration 4.6
Principal Axes:
Scale 10**18 Nm
T Val= 1.61 Plg=39 Azm= 88
N -0.31 24 199
P -1.30 41 312
Best Double Couple:Mo=1.5*10**18
NP1:Strike=113 Dip=24 Slip=-177
NP2: 20 89 -66

06 08 14 48.08 0.022N 77.927W 9km
5.5mb (61 obs.) 5.4Msz (10 obs.)
COLOMBIA-ECUADOR BORDER REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 28C
Centroid Location:
Origin Time 08:14:58.5 0.6
Lat 0.31N 0.07 Lon 77.73W 0.10
Dep 15.0 FIX Half-duration 3.2
Principal Axes:
Scale 10**17 Nm
T Val= 11.93 Plg=26 Azm=186
N -0.41 38 298
P -11.52 41 71
Best Double Couple:Mo=1.2*10**18
NP1:Strike=226 Dip=40 Slip=-166
NP2: 125 81 -51

06 09 39 54.70 24.149S 70.118W 46km
5.7mb (65 obs.) 5.7Msz (13 obs.)
NEAR COAST OF NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 24C
Centroid Location:
Origin Time 09:40: 2.8 0.4
Lat 23.87S 0.05 Lon 70.55W 0.09
Dep 45.0 FIX Half-duration 4.4
Principal Axes:
Scale 10**18 Nm
T Val= 2.63 Plg=51 Azm= 53
N -0.04 22 172
P -2.59 31 276
Best Double Couple:Mo=2.6*10**18
NP1:Strike= 54 Dip=24 Slip= 154
NP2: 168 80 68

06 10 23 26.64 14.590N 92.287W 95km
5.1mb (59 obs.)
NEAR COAST OF CHIAPAS, MEXICO
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 7S, 9C
Centroid Location:
Origin Time 10:23:26.1 1.3
Lat 14.53N FIX;Lon 92.13W FIX
Dep 68.014.8 Half-duration 2.8
Principal Axes:
Scale 10**17 Nm
T Val= 2.88 Plg=21 Azm=218
N -0.05 5 310
P -2.83 69 53
Best Double Couple:Mo=2.9*10**17
NP1:Strike=300 Dip=25 Slip=-102
NP2: 133 66 -85

06 13 48 41.54 51.135N 179.587E 54km
5.4mb (74 obs.)
RAT ISLANDS, ALEUTIAN ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 29C
Centroid Location:
Origin Time 13:48:40.6 0.5
Lat 51.33N 0.06 Lon 179.98W 0.11
Dep 15.0 FIX Half-duration 2.6
Principal Axes:
Scale 10**17 Nm
T Val= 3.80 Plg=59 Azm=335
N 0.12 1 67
P -3.92 31 157
Best Double Couple:Mo=3.9*10**17
NP1:Strike=250 Dip=14 Slip= 94
NP2: 66 76 89

07 06 11 17.02 16.022S 167.399E 36km
5.6mb (20 obs.) 5.5Msz (7 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 25C
Centroid Location:
Origin Time 06:11:18.6 0.3
Lat 16.12S 0.02 Lon 167.53E 0.03
Dep 37.7 1.5 Half-duration 3.4
Principal Axes:
Scale 10**17 Nm
T Val= 6.92 Plg=82 Azm=165
N 1.82 8 353
P -8.74 1 263
Best Double Couple:Mo=7.8*10**17
NP1:Strike=345 Dip=44 Slip= 78
NP2: 181 47 101

07 14 50 54.20 6.129S 147.791E 41km
5.4mb (12 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 24C
Centroid Location:
Origin Time 14:50:58.2 0.6
Lat 6.16S 0.04 Lon 147.94E 0.06
Dep 57.6 5.7 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 10.16 Plg=16 Azm=122
N 0.64 65 355
P -10.80 19 217
Best Double Couple:Mo=1.0*10**17
NP1:Strike=259 Dip=65 Slip= -3
NP2: 350 88 -155

07 19 43 06.54 15.988S 172.716W 33km
5.3mb (36 obs.) 5.5Msz (11 obs.)
SAMOA ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 32C
Centroid Location:
Origin Time 19:43: 8.3 0.3
Lat 15.93S 0.04 Lon 172.27W 0.04
Dep 22.0 BDY Half-duration 2.7
Principal Axes:
Scale 10**17 Nm
T Val= 4.00 Plg=11 Azm= 55
N -0.37 22 150
P -3.63 65 300
Best Double Couple:Mo=3.8*10**17
NP1:Strike=120 Dip=39 Slip=-126
NP2: 343 59 -65

07 21 48 46.59 16.225S 172.664W 33km
5.0mb (6 obs.) 5.2Msz (1 obs.)
SAMOA ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 12C
Centroid Location:
Origin Time 21:48:50.7 1.3
Lat 14.89S 0.27 Lon 172.87W 0.23
Dep 15.0 FIX Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 7.74 Plg=12 Azm=235
N -0.91 56 343
P -6.82 31 138
Best Double Couple:Mo=7.3*10**16
NP1:Strike=281 Dip=59 Slip=-165
NP2: 183 77 -31

08 12 51 43.34 20.483S 70.376W 30km
5.2mb (36 obs.)
NEAR COAST OF NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 25C
Centroid Location:
Origin Time 12:51:51.0 0.6
Lat 20.01S 0.15 Lon 71.09W 0.09
Dep 15.0 FIX Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 8.70 Plg=55 Azm= 67
N 1.47 17 182
P -10.18 30 282
Best Double Couple:Mo=9.4*10**16
NP1:Strike= 52 Dip=22 Slip= 142
NP2: 178 77 73

10 00 22 35.95 18.448S 72.035W 41km
5.7mb (60 obs.) 5.6Msz (8 obs.)
OFF COAST OF NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 15S, 28C

Centroid Location:
Origin Time 00:22:40.7 0.3
Lat 18.53S FIX;Lon 72.15W FIX
Dep 15.0 BDY Half-duration 3.6
Principal Axes:
Scale 10**17 Nm
T Val= 5.04 Plg= 7 Azm= 82
N 1.57 3 351
P -6.62 83 234
Best Double Couple:Mo=5.8*10**17
NP1:Strike=176 Dip=39 Slip= -84
NP2: 349 52 -94

10 02 18 09.62 18.341S 71.976W 37km
5.5mb (29 obs.) 3.9Msz (1 obs.)
OFF COAST OF NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 22C
Centroid Location:
Origin Time 02:18:11.9 0.7
Lat 18.22S FIX;Lon 72.13W FIX
Dep 15.0 BDY Half-duration 1.8
Principal Axes:
Scale 10**17 Nm
T Val= 2.73 Plg=33 Azm=269
N 0.09 2 177
P -2.82 57 84
Best Double Couple:Mo=2.8*10**17
NP1:Strike= 8 Dip=12 Slip= -79
NP2: 177 78 -92

10 03 24 12.60 36.924N 141.662E 47km
5.2mb (58 obs.) 5.5Msz (2 obs.)
NEAR EAST COAST OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 27C
Centroid Location:
Origin Time 03:24:13.8 0.5
Lat 36.74N 0.05 Lon 141.88E 0.07
Dep 28.5 4.0 Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.75 Plg=61 Azm=308
N 0.07 3 212
P -2.82 29 120
Best Double Couple:Mo=2.8*10**17
NP1:Strike=201 Dip=16 Slip= 79
NP2: 33 74 93

10 16 14 53.23 40.612N 145.259E 39km
5.7mb (87 obs.) 5.2Msz (5 obs.)
OFF EAST COAST OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 31C
Centroid Location:
Origin Time 16:14:54.1 0.2
Lat 40.56N 0.03 Lon 145.16E 0.04
Dep 18.0 BDY Half-duration 2.9
Principal Axes:
Scale 10**17 Nm
T Val= 5.52 Plg= 7 Azm=310
N -0.50 5 40
P -5.02 81 165
Best Double Couple:Mo=5.3*10**17
NP1:Strike= 34 Dip=38 Slip= -98
NP2: 224 52 -84

10 18 24 34.14 40.595N 145.235E 38km
5.7mb (82 obs.) 5.0Msz (5 obs.)
OFF EAST COAST OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centroid Location:
Origin Time 18:24:32.5 0.4
Lat 40.60N 0.04 Lon 145.34E 0.05
Dep 18.0 BDY Half-duration 2.1
Principal Axes:
Scale 10**17 Nm
T Val= 1.85 Plg= 3 Azm=279
N 0.16 2 189
P -2.01 86 63
Best Double Couple:Mo=1.9*10**17
NP1:Strike= 12 Dip=42 Slip= -87
NP2: 187 48 -93

10 22 20 33.85 6.093N 76.623W 56km
5.1mb (56 obs.)
NORTHERN COLOMBIA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 21C
Centroid Location:
Origin Time 22:20:36.2 1.1
Lat 5.86N 0.11 Lon 76.41W 0.17
Dep 50.9 8.7 Half-duration 1.3
Principal Axes:
Scale 10**16 Nm
T Val= 4.07 Plg=64 Azm= 0
N -1.14 2 265
P -2.93 26 174
Best Double Couple:Mo=3.5*10**16
NP1:Strike=258 Dip=19 Slip= 83
NP2: 86 71 93

11 02 50 55.17 34.219S 178.951E 233km
5.3mb (21 obs.)
SOUTH OF KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 25C
Centroid Location:
Origin Time 02:51: 6.1 0.6
Lat 33.94S 0.07 Lon 178.69E 0.10
Dep 262.2 3.5 Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 10.48 Plg=40 Azm=229
N 0.07 29 346
P -10.55 37 100
Best Double Couple:Mo=1.1*10**17
NP1:Strike=252 Dip=29 Slip= 177
NP2: 345 88 61

11 17 04 14.82 24.712S 88.219E 10km
5.1mb (9 obs.) 5.5Msz (1 obs.)
SOUTH INDIAN OCEAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 20C
Centroid Location:
Origin Time 17:04:19.4 0.9
Lat 24.29S 0.14 Lon 88.06E 0.15
Dep 15.0 FIX Half-duration 1.3
Principal Axes:
Scale 10**16 Nm
T Val= 4.04 Plg=73 Azm=290
N 1.72 6 39
P -5.76 16 131
Best Double Couple:Mo=4.9*10**16
NP1:Strike=230 Dip=30 Slip= 102
NP2: 36 61 83

12 06 07 19.21 18.467S 72.192W 35km
5.1mb (17 obs.)
OFF COAST OF NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 16C
Centroid Location:
Origin Time 06:07:18.4 1.3
Lat 18.45S FIX;Lon 72.24W FIX
Dep 15.0 FIX Half-duration 1.3
Principal Axes:
Scale 10**16 Nm
T Val= 4.10 Plg=28 Azm=240
N 0.78 1 149
P -4.87 62 58
Best Double Couple:Mo=4.5*10**16
NP1:Strike=332 Dip=17 Slip= -87
NP2: 149 73 -91

12 11 02 28.29 3.861S 81.444W 33km
5.2mb (30 obs.)
NEAR COAST OF NORTHERN PERU
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 14C
Centroid Location:
Origin Time 11:02:31.8 0.7
Lat 3.45S 0.13 Lon 82.16W 0.11
Dep 15.0 FIX Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 4.74 Plg=59 Azm= 4
N 2.93 17 125
P -7.67 25 224
Best Double Couple:Mo=6.2*10**16
NP1:Strike=347 Dip=25 Slip= 135
NP2: 119 72 72

12 12 18 11.97 15.610N 94.597W 40km
5.7mb (54 obs.) 5.6Msz (18 obs.)
NEAR COAST OF OAXACA, MEXICO
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 32C
Centroid Location:
Origin Time 12:18:14.3 0.4
Lat 15.61N 0.04 Lon 94.39W 0.03
Dep 17.0 BDY Half-duration 3.8
Principal Axes:
Scale 10**18 Nm
T Val= 1.40 Plg=64 Azm=358
N 0.22 3 93
P -1.62 26 184
Best Double Couple:Mo=1.5*10**18
NP1:Strike=281 Dip=19 Slip= 98
NP2: 92 71 87

12 14 56 28.33 5.034S 151.357E 149km
4.8mb (4 obs.)
NEW BRITAIN REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 12C
Centroid Location:
Origin Time 14:56:27.6 2.4
Lat 5.35S 0.20 Lon 151.60E 0.19
Dep 163.310.4 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 5.17 Plg=30 Azm=272
N 3.84 45 146
P -9.00 30 22
Best Double Couple:Mo=7.1*10**16
NP1:Strike= 57 Dip=45 Slip= 0
NP2: 327 90 135

12 23 10 30.78 0.268S 18.147W 10km
5.5mb (64 obs.) 4.8Msz (3 obs.)
CENTRAL MID-ATLANTIC RIDGE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 19C
Centroid Location:
Origin Time 23:10:40.5 0.5
Lat 0.36N 0.04 Lon 17.81W 0.04
Dep 15.0 FIX Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 1.63 Plg= 0 Azm=209
N 0.14 90 180
P -1.77 0 119
Best Double Couple:Mo=1.7*10**17
NP1:Strike=254 Dip=90 Slip= 180
NP2: 344 90 0

13 05 03 35.42 23.368S 177.587W 94km
4.8mb (8 obs.)
SOUTH OF FIJI ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 21C
Centroid Location:
Origin Time 05:03:32.6 1.1
Lat 24.12S 0.13 Lon 177.92W 0.14
Dep 24.1 7.5 Half-duration 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 4.62 Plg=21 Azm=100
N 0.81 22 2
P -5.43 59 230
Best Double Couple:Mo=5.0*10**16
NP1:Strike=224 Dip=31 Slip= -44
NP2: 353 69 -113

13 06 19 13.42 23.484S 177.520W 80km
4.9mb (7 obs.)
SOUTH OF FIJI ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 25C
Centroid Location:
Origin Time 06:19:12.1 1.1
Lat 23.86S 0.09 Lon 177.35W 0.11
Dep 15.0 FIX Half-duration 1.6
Principal Axes:
Scale 10**16 Nm
T Val= 9.73 Plg=24 Azm=101
N -0.70 2 10
P -9.03 66 276
Best Double Couple:Mo=9.4*10**16
NP1:Strike=195 Dip=21 Slip= -85
NP2: 9 69 -92

13 06 32 00.79 31.84 S 177.55 W 33km
4.9mb (3 obs.) 5.7Msz (2 obs.)
KERMADEC ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 7S, 13C
Centroid Location:
Origin Time 06:31:59.6 1.9
Lat 30.98S 0.23 Lon 176.55W 0.29
Dep 15.0 FIX Half-duration 2.0
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	2.40	18	109
N	-0.13	24	11
P	-2.27	59	232

Best Double Couple:Mo=2.3*10**17
NP1:Strike=232 Dip=34 Slip= -43
NP2: 0 67 -116

13 06 56 32.87 12.301N 87.432W 60km
5.1mb (43 obs.)
NEAR COAST OF NICARAGUA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 29C
Centroid Location:
Origin Time 06:56:32.8 0.5
Lat 11.92N 0.07 Lon 87.80W 0.09
Dep 33.1 4.1 Half-duration 2.3
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	2.39	57	81
N	0.36	22	312
P	-2.76	23	212

Best Double Couple:Mo=2.6*10**17
NP1:Strike=266 Dip=30 Slip= 40
NP2: 140 71 114

13 07 40 20.10 23.771S 177.301W 50km
5.2mb (7 obs.) 5.3Msz (3 obs.)
SOUTH OF FIJI ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 23C
Centroid Location:
Origin Time 07:40:21.3 0.7
Lat 24.11S 0.06 Lon 177.48W 0.06
Dep 16.2 2.6 Half-duration 2.4
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	3.03	15	103
N	0.56	23	6
P	-3.59	62	224

Best Double Couple:Mo=3.3*10**17
NP1:Strike=222 Dip=36 Slip= -48
NP2: 354 64 -116

13 08 21 49.09 23.778S 177.325W 32km
5.8mb (35 obs.) 6.0Msz (22 obs.)
SOUTH OF FIJI ISLANDS
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=288 Dip=86 Slip= 22
NP2: 196 68 176
Principal Axes:

	Plg=	Azm=
T	18	154
P	12	60

Comment: The focal mechanism is moderately well controlled and corresponds to strike-slip faulting with a moderate reverse component. The preferred fault plane is not determined.
MOMENT TENSOR SOLUTION
Dep 22 No. of sta: 10
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	1.82	8	306
N	-0.05	21	213
P	-1.78	67	57

Best Double Couple:Mo=1.8*10**18
NP1:Strike= 59 Dip=41 Slip= -57
NP2: 198 57 -115
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 14S, 35C M.W.: 12S, 27C
Centroid Location:
Origin Time 08:21:49.9 0.3
Lat 24.02S 0.02 Lon 177.12W 0.02
Dep 15.0 FIX Half-duration 4.7
Principal Axes:
Scale 10**18 Nm

	Val=	Plg=	Azm=
T	1.74	4	291
N	0.23	9	22
P	-1.97	80	177

Best Double Couple:Mo=1.9*10**18
NP1:Strike= 12 Dip=42 Slip=-103
NP2: 210 50 -78

13 10 28 13.76 15.624S 74.276W 66km
5.3mb (17 obs.)
NEAR COAST OF PERU
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 29C
Centroid Location:
Origin Time 10:28:24.4 0.9
Lat 15.57S 0.10 Lon 74.72W 0.12
Dep 97.2 7.4 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	11.47	22	211
N	0.94	42	100
P	-12.41	40	321

Best Double Couple:Mo=1.2*10**17
NP1:Strike=349 Dip=44 Slip= -15
NP2: 90 79 -133

14 04 25 58.15 10.693N 138.954E 20km
5.3mb (22 obs.) 4.2Msz (2 obs.)
WEST CAROLINE ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 13C
Centroid Location:
Origin Time 04:26: 1.3 1.5
Lat 10.38N 0.13 Lon 138.85E 0.15
Dep 15.0 FIX Half-duration 1.3
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	3.80	10	67
N	0.70	24	333
P	-4.50	63	177

Best Double Couple:Mo=4.1*10**16
NP1:Strike=184 Dip=41 Slip= -51
NP2: 317 59 -119

14 05 35 58.93 13.157N 143.822E 147km
5.2mb (29 obs.)
SOUTH OF MARIANA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 20C
Centroid Location:
Origin Time 05:35:59.4 1.0
Lat 12.61N 0.08 Lon 143.77E 0.11
Dep 135.8 3.9 Half-duration 1.6
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	9.70	43	26
N	-2.00	20	136
P	-7.70	40	244

Best Double Couple:Mo=8.7*10**16
NP1:Strike= 41 Dip=20 Slip= 175
NP2: 136 88 70

14 06 10 04.97 23.520S 177.467W 40km
5.3mb (22 obs.) 5.4Msz (2 obs.)
SOUTH OF FIJI ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 31C
Centroid Location:
Origin Time 06:10: 6.1 0.5
Lat 23.91S 0.03 Lon 177.37W 0.04
Dep 16.6 1.6 Half-duration 2.5
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	3.34	5	111
N	-0.07	13	20
P	-3.26	76	221

Best Double Couple:Mo=3.3*10**17
NP1:Strike=215 Dip=42 Slip= -71
NP2: 10 51 -107

14 20 18 37.62 38.897S 92.203W 10km
5.4mb (18 obs.) 5.6Msz (6 obs.)
WEST CHILE RISE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 30C
Centroid Location:
Origin Time 20:18:42.8 0.2
Lat 39.13S 0.03 Lon 92.18W 0.04
Dep 15.0 FIX Half-duration 3.3
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	8.48	13	44
N	-2.86	76	195
P	-5.62	7	313

Best Double Couple:Mo=7.1*10**17
NP1:Strike= 88 Dip=76 Slip= 176
NP2: 179 86 14

15 05 11 17.02 15.609N 94.581W 40km
5.6mb (71 obs.) 5.5Msz (14 obs.)
NEAR COAST OF OAXACA, MEXICO
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 30C
Centroid Location:
Origin Time 05:11:18.4 0.3
Lat 15.63N 0.04 Lon 94.83W 0.04
Dep 39.8 2.0 Half-duration 3.3
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	6.91	67	59
N	1.11	7	313
P	-8.02	22	220

Best Double Couple:Mo=7.5*10**17
NP1:Strike=297 Dip=24 Slip= 73
NP2: 136 67 98

15 06 03 02.22 24.285S 70.557W 24km
5.0mb (12 obs.) 5.2Msz (1 obs.)
NEAR COAST OF NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 22C
Centroid Location:
Origin Time 06:03: 6.9 0.7
Lat 24.44S 0.12 Lon 70.54W 0.16
Dep 15.0 FIX Half-duration 1.9
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	2.12	52	89
N	-0.29	16	337
P	-1.83	34	236

Best Double Couple:Mo=2.0*10**17
NP1:Strike=279 Dip=19 Slip= 30
NP2: 160 81 106

15 11 35 24.55 18.766N 146.949E 52km
5.3mb (23 obs.)
MARIANA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 23C
Centroid Location:
Origin Time 11:35:25.5 0.8
Lat 18.79N 0.11 Lon 146.72E 0.16
Dep 15.0 BDY Half-duration 1.7
Principal Axes:
Scale 10**16 Nm

	Val=	Plg=	Azm=
T	9.59	47	310
N	2.96	0	41
P	-12.55	43	131

Best Double Couple:Mo=1.1*10**17
NP1:Strike=236 Dip= 2 Slip= 105
NP2: 41 88 90

15 16 14 46.20 10.365S 91.617E 10km
5.6mb (54 obs.) 4.8Msz (6 obs.)
SOUTH INDIAN OCEAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 27C
Centroid Location:
Origin Time 16:14:47.6 0.4
Lat 9.91S 0.06 Lon 91.46E 0.06
Dep 15.0 FIX Half-duration 2.1
Principal Axes:
Scale 10**17 Nm

	Val=	Plg=	Azm=
T	2.10	63	291
N	0.30	5	30
P	-2.40	27	122

Best Double Couple:Mo=2.3*10**17
NP1:Strike=224 Dip=19 Slip= 105
NP2: 28 72 85

15 21 42 17.16 5.314S 151.488E 63km
5.7mb (31 obs.)
NEW BRITAIN REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 32C
Centroid Location:
Origin Time 21:42:22.2 0.3
Lat 5.53S 0.03 Lon 151.54E 0.04

Dep 31.0 BDY Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.56 Plg=66 Azm= 32
N -0.08 12 272
P -2.49 20 177
Best Double Couple:Mo=2.5*10**17
NP1:Strike=247 Dip=27 Slip= 62
NP2: 97 66 103

16 03 50 16.43 16.337S 172.627W 33km
5.0mb (14 obs.) 4.8Msz (1 obs.)
SAMOA ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 23C
Centroid Location:
Origin Time 03:50:22.2 0.8
Lat 16.31S 0.09 Lon 172.45W 0.09
Dep 15.0 FIX Half-duration 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 12.59 Plg=65 Azm=309
N -0.37 6 206
P -12.22 25 114
Best Double Couple:Ma=1.2*10**17
NP1:Strike=191 Dip=21 Slip= 74
NP2: 28 70 96

16 12 21 39.03 6.441S 147.652E 24km
5.8mb (23 obs.) 5.5Msz (10 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 24C
Centroid Location:
Origin Time 12:21:44.1 0.4
Lat 6.73S 0.06 Lon 147.42E 0.06
Dep 15.0 FIX Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.03 Plg=16 Azm=337
N 0.22 29 238
P -2.26 56 93
Best Double Couple:Mo=2.1*10**17
NP1:Strike=102 Dip=38 Slip= -39
NP2: 225 67 -122

16 12 33 35.85 6.414S 147.645E 29km
5.5mb (29 obs.) 5.5Msz (7 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 24C
Centroid Location:
Origin Time 12:33:42.1 0.8
Lat 6.78S 0.11 Lon 147.10E 0.13
Dep 15.0 FIX Half-duration 2.2
Principal Axes:
Scale 10**17 Nm
T Val= 2.60 Plg=19 Azm=334
N 0.61 22 236
P -3.21 61 101
Best Double Couple:Mo=2.9*10**17
NP1:Strike= 95 Dip=33 Slip= -46
NP2: 226 67 -114

16 14 35 45.62 14.604S 167.249E 189km
5.0mb (21 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 8S, 13C
Centroid Locotion:
Origin Time 14:35:40.2 2.6
Lat 14.79S 0.23 Lon 167.44E 0.21
Dep 162.6 4.7 Half-durotion 1.4
Principal Axes:
Scale 10**16 Nm
T Val= 5.69 Plg=83 Azm=155
N -2.75 7 0
P -2.94 3 270
Best Double Couple:Mo=4.3*10**16
NP1:Strike=352 Dip=42 Slip= 80
NP2: 186 49 99

16 15 49 36.99 6.446S 147.603E 26km
5.7mb (27 obs.) 6.1Msz (19 obs.)
EAST PAPUA NEW GUINEA REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 31C
Centroid Locatian:
Origin Time 15:49:43.8 0.2
Lot 6.66S 0.03 Lon 147.42E 0.03
Dep 15.0 FIX Half-duratian 3.6
Principal Axes:
Scale 10**17 Nm
T Val= 11.06 Plg=10 Azm=327
N -0.63 16 233
P -10.43 70 87
Best Double Couple:Mo=1.1*10**18
NP1:Strike= 76 Dip=37 Slip= -62
NP2: 223 57 -110

16 16 39 56.29 10.900S 165.942E 57km
5.4mb (24 obs.)
SANTA CRUZ ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 25C
Centroid Location:
Origin Time 16:40: 0.3 0.5
Lat 11.11S 0.05 Lon 165.75E 0.05
Dep 43.4 2.9 Half-duration 2.5
Principal Axes:
Scale 10**17 Nm
T Val= 3.47 Plg=77 Azm=148
N 0.17 12 337
P -3.64 2 247
Best Double Couple:Mo=3.6*10**17
NP1:Strike=324 Dip=45 Slip= 72
NP2: 168 48 107

16 17 20 44.64 53.355N 167.248W 10km
5.1mb (23 obs.) 5.0Msz (1 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 19C
Centroid Location:
Origin Time 17:20:51.5 0.8
Lat 53.38N FIX;Lan 167.20W FIX
Dep 15.0 FIX Half-duration 1.8
Principal Axes:
Scale 10**17 Nm
T Val= 1.43 Plg=20 Azm=273
N 0.37 16 9
P -1.80 64 135
Best Double Couple:Mo=1.6*10**17
NP1:Strike=337 Dip=29 Slip=-125
NP2: 196 67 -72

18 00 22 49.12 2.114N 126.571E 30km
5.8mb (39 obs.) 5.5Msz (10 obs.)
MOLUCCA PASSAGE
FAULT PLANE SOLUTION: P-Woves
NP1:Strike=205 Dip=55 Slip= 90
NP2: 25 35 90
Principal Axes:
T Plg=80 Azm=115
P 10 295
Comment: The focal mechanism is poorly controlled and corresponds to reverse faulting. The preferred foult plane is NP2.
MOMENT TENSOR SOLUTION
Dep 28 No. af sta: 11
Principal Axes:
Scale 10**18 Nm
T Val= 1.29 Plg=80 Azm=158
N -0.01 10 348
P -1.28 2 257
Best Double Couple:Ma=1.3*10**18
NP1:Strike=337 Dip=44 Slip= 75
NP2: 177 48 104
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 29C
Centroid Locotion:
Origin Time 00:22:55.6 0.2
Lat 1.96N 0.03 Lon 126.55E 0.04
Dep 29.5 2.2 Half-duration 4.1
Principal Axes:
Scale 10**18 Nm
T Val= 1.47 Plg=77 Azm=151
N 0.05 7 30
P -1.52 12 299
Best Double Couple:Mo=1.5*10**18
NP1:Strike= 20 Dip=34 Slip= 78
NP2: 215 57 98

18 03 36 30.33 32.034N 131.837E 54km
6.4mb (102 obs.)
KYUSHU, JAPAN
FAULT PLANE SOLUTION: P-Woves
NP1:Strike=194 Dip=72 Slip= -55
NP2: 308 39 -150
Principal Axes:
T Plg=19 Azm=259
P 50 143
Comment: The focal mechanism is moderotely well cantrolled and corresponds to normal faulting with a large strike-slip component. The preferred fault plane is not determined.
RADIATED ENERGY
No. of sta: 5 Focal mech. C
Energy 1.1±0.3*10**14 Nm
MOMENT TENSOR SOLUTION
Dep 36 No. af sta: 16
Principal Axes:
Scale 10**18 Nm
T Val= 10.07 Plg=22 Azm=294
N -0.90 42 182
P -9.17 40 44
Best Double Couple:Mo=9.6*10**18
NP1:Strike= 71 Dip=44 Slip= -15
NP2: 172 79 -133
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 14S, 35C M.W.: 13S, 30C
Centroid Location:
Origin Time 03:36:34.1 0.1
Lat 31.94N 0.01 Lon 131.77E 0.01
Dep 38.0 0.8 Half-duratian 8.0
Principal Axes:
Scale 10**18 Nm
T Val= 11.88 Plg=19 Azm=267
N -0.36 6 359
P -11.52 71 106
Best Double Couple:Ma=1.2*10**19
NP1:Strike=348 Dip=27 Slip=-103
NP2: 182 64 -84

18 08 52 48.40 30.188S 177.612W 28km
5.3mb (11 obs.) 5.0Msz (5 obs.)
KERMADEC ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 26C
Centroid Location:
Origin Time 08:52:57.0 1.0
Lat 30.06S 0.08 Lon 177.66W 0.09
Dep 47.3 5.7 Half-durotion 2.4
Principal Axes:
Scale 10**17 Nm
T Val= 2.63 Plg=73 Azm=260
N 0.54 7 15
P -3.17 15 107
Best Double Couple:Mo=2.9*10**17
NP1:Strike=207 Dip=31 Slip= 104
NP2: 11 60 82

19 01 28 52.17 6.775N 76.506W 10km
5.7mb (76 obs.) 4.2Msz (2 obs.)
NORTHERN COLOMBIA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centroid Location:
Origin Time 01:29: 1.3 1.0
Lat 7.13N 0.08 Lon 76.30W 0.12
Dep 15.0 BDY Half-duratian 1.6
Principal Axes:
Scale 10**17 Nm
T Val= 1.37 Plg=61 Azm=104
N 0.07 5 202
P -1.44 29 295
Best Double Couple:Mo=1.4*10**17
NP1:Strike= 38 Dip=17 Slip= 106
NP2: 201 74 85

19 14 32 15.65 23.664N 64.688E 10km
5.1mb (24 obs.) 4.2Msz (1 obs.)
NEAR COAST OF PAKISTAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 21C
Centroid Location:
Origin Time 14:32:16.6 1.0
Lat 23.27N 0.14 Lon 64.48E 0.15
Dep 35.7 9.2 Half-duration 1.2
Principal Axes:
Scale 10**16 Nm
T Val= 3.17 Plg=10 Azm=337
N 0.97 31 73

P -4.14 57 232
Best Double Couple:Mo=3.6*10**16
NP1:Strike= 35 Dip=45 Slip=-138
NP2: 272 62 -54

19 17 14 41.25 14.898S 167.225E 150km
5.5mb (38 obs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centroid Location:
Origin Time 17:14:44.9 0.4
Lat 14.94S 0.03 Lon 166.96E 0.03
Dep 142.5 0.9 Half-duration 2.9
Principal Axes:
Scale 10**17 Nm
T Val= 5.70 Plg=45 Azm=157
N -1.03 45 343
P -4.67 3 250
Best Double Couple:Mo=5.2*10**17
NP1:Strike=304 Dip=57 Slip= 33
NP2: 195 63 143

19 21 27 50.11 29.229N 137.907E 537km
5.3mb (69 obs.)
SOUTH OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 24C
Centroid Location:
Origin Time 21:27:52.9 0.4
Lat 29.26N 0.03 Lon 137.80E 0.05
Dep 524.0 2.8 Half-duration 2.6
Principal Axes:
Scale 10**17 Nm
T Val= 3.72 Plg=24 Azm=342
N -0.38 65 143
P -3.33 7 249
Best Double Couple:Mo=3.5*10**17
NP1:Strike= 23 Dip=68 Slip= 168
NP2: 118 79 22

19 22 51 39.28 20.397S 176.134W 214km
5.9mb (46 obs.)
FIJI ISLANDS REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 25 Dip=82 Slip= -55
NP2: 126 36 -166
Principal Axes:
T Plg=28 Azm= 88
P 42 328
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with a large strike-slip component. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sta: 5 Focal mech. M
Energy 3.2±1.1*10**13 Nm
MOMENT TENSOR SOLUTION
Dep 226 No. of sta: 13
Principal Axes:
Scale 10**18 Nm
T Val= 8.47 Plg=38 Azm=121
N 0.51 8 25
P -8.97 51 284
Best Double Couple:Mo=8.7*10**18
NP1:Strike=256 Dip=11 Slip= -38
NP2: 24 84 -98
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 12S, 32C M.W.: 11S, 24C
Centroid Location:
Origin Time 22:51:45.9 0.1
Lat 20.30S 0.01 Lon 175.96W 0.01
Dep 215.3 0.7 Half-duration 7.5
Principal Axes:
Scale 10**18 Nm
T Val= 8.08 Plg=38 Azm=126
N -0.28 17 22
P -7.80 47 273
Best Double Couple:Mo=7.9*10**18
NP1:Strike=275 Dip=17 Slip= -16
NP2: 21 85 -107

21 10 41 35.97 52.056N 177.547W 93km
6.0mb (96 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 95 Dip=85 Slip= 95
NP2: 230 7 45
Principal Axes:
T Plg=50 Azm= 10
P 40 180
Comment: The focal mechanism is poorly controlled and corresponds to normal faulting with a small right-lateral strike-slip component. The preferred fault plane is NP1.
RADIATED ENERGY
No. of sta: 5 Focal mech. C
Energy 1.6±0.5*10**14 Nm
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN, IDA
L.P.B.: 15S, 38C M.W.: 11S, 21C
Centroid Location:
Origin Time 10:41:39.7 0.3
Lat 52.03N 0.01 Lon 177.38W 0.05
Dep 84.5 4.8 Half-duration 5.9
Principal Axes:
Scale 10**18 Nm
T Val= 4.19 Plg=43 Azm=208
N 0.07 13 106
P -4.26 44 3
Best Double Couple:Mo=4.2*10**18
NP1:Strike= 12 Dip=13 Slip= -3
NP2: 105 89 -103

21 12 08 58.87 8.816N 83.404W 24km
5.3mb (44 obs.) 5.3Msz (3 obs.)
COSTA RICA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 20C
Centroid Location:
Origin Time 12:09: 5.7 1.1
Lat 8.77N FIX;Lon 83.44W FIX
Dep 33.0 FIX Half-duration 3.0
Principal Axes:
Scale 10**17 Nm
T Val= 4.68 Plg=22 Azm=147
N 1.91 47 263
P -6.59 35 41
Best Double Couple:Mo=5.6*10**17
NP1:Strike=189 Dip=48 Slip=-169
NP2: 91 82 -43

22 02 49 15.90 51.594N 173.574W 20km
5.9mb (94 obs.) 6.0Msz (23 obs.)
ANDREANOF ISLANDS, ALEUTIAN IS.
FAULT PLANE SOLUTION: P-Waves
NP1:Strike= 70 Dip=72 Slip= 90
NP2: 250 18 90
Principal Axes:
T Plg=63 Azm=340
P 27 160
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. C
Energy 2.7±0.8*10**13 Nm
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 34C
Centroid Location:
Origin Time 02:49:21.5 0.2
Lat 51.66N 0.02 Lon 173.40W 0.04
Dep 23.2 1.4 Half-duration 4.7
Principal Axes:
Scale 10**18 Nm
T Val= 1.94 Plg=68 Azm=320
N 0.12 5 64
P -2.06 21 156
Best Double Couple:Mo=2.0*10**18
NP1:Strike=256 Dip=25 Slip= 103
NP2: 62 66 84

22 03 23 57.63 24.058S 70.142W 40km
5.8mb (60 obs.) 5.8Msz (3 obs.)
NEAR COAST OF NORTHERN CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 14S, 30C
Centroid Location:
Origin Time 03:24: 7.3 0.3
Lat 23.92S 0.05 Lon 70.61W 0.04
Dep 45.3 3.2 Half-duration 4.1
Principal Axes:
Scale 10**17 Nm
T Val= 14.26 Plg=55 Azm= 38
N -0.40 25 170
P -13.85 23 271
Best Double Couple:Mo=1.4*10**18
NP1:Strike= 40 Dip=32 Slip= 145
NP2: 161 72 63

22 12 12 35.62 37.160S 176.702E 359km
4.9mb (18 obs.)
NORTH ISLAND, NEW ZEALAND
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 27C
Centroid Location:
Origin Time 12:12:40.2 0.5
Lat 36.95S 0.06 Lon 176.69E 0.07
Dep 360.1 2.8 Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 1.62 Plg=40 Azm= 34
N -0.12 39 167
P -1.50 26 280
Best Double Couple:Mo=1.6*10**17
NP1:Strike= 60 Dip=40 Slip= 167
NP2: 160 82 51

22 17 45 04.61 52.094N 171.453W 33km
5.3mb (60 obs.) 4.9Msz (8 obs.)
FOX ISLANDS, ALEUTIAN ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 27C
Centroid Location:
Origin Time 17:45: 6.4 0.4
Lat 51.96N 0.04 Lon 171.23W 0.09
Dep 46.8 3.0 Half-duration 2.0
Principal Axes:
Scale 10**17 Nm
T Val= 1.45 Plg=76 Azm=340
N 0.39 1 76
P -1.84 14 166
Best Double Couple:Mo=1.6*10**17
NP1:Strike=258 Dip=31 Slip= 93
NP2: 75 59 88

23 04 58 19.31 31.974N 131.899E 50km
5.2mb (35 obs.) 5.1Msz (5 obs.)
KYUSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 9S, 18C
Centroid Location:
Origin Time 04:58:37.1 1.9
Lat 32.60N 0.13 Lon 130.56E 0.13
Dep 45.7 7.1 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 8.68 Plg= 0 Azm= 93
N -3.03 16 3
P -5.66 74 184
Best Double Couple:Mo=7.2*10**16
NP1:Strike=198 Dip=47 Slip= -68
NP2: 348 47 -111

23 20 48 00.18 34.014S 72.079W 58km
4.8mb (14 obs.)
NEAR COAST OF CENTRAL CHILE
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 22C
Centroid Location:
Origin Time 20:47:59.5 0.7
Lat 34.32S 0.08 Lon 72.84W 0.09
Dep 51.2 5.2 Half-duration 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 6.11 Plg=66 Azm= 28
N 0.89 22 184
P -7.00 9 277
Best Double Couple:Mo=6.6*10**16
NP1:Strike= 31 Dip=41 Slip= 125
NP2: 169 58 64

24 12 49 47.02 37.447N 137.865E 23km
5.7mb (88 obs.) 5.1Msz (7 obs.)
NEAR WEST COAST OF HONSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 25C
Centroid Location:
Origin Time 12:49:50.4 0.3
Lat 37.39N 0.03 Lon 137.77E 0.04
Dep 20.7 1.6 Half-duration 2.6
Principal Axes:

Scale 10**17 Nm
T Val= 3.60 Plg=79 Azm=166
N -0.12 11 5
P -3.48 4 274
Best Dauble Cauple:Ma=3.5*10**17
NP1:Strike=353 Dip=42 Slip= 74
NP2: 194 50 104

26 01 05 15.98 55.938S 27.748W 110km
5.2mb (7 obs.)
SOUTH SANDWICH ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 19C
Centraid Lacation:
Origin Time 01:05:20.2 0.9
Lat 55.81S 0.08 Lan 28.19W 0.19
Dep 135.3 4.4 Half-duratian 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 10.13 Plg=40 Azm=169
N -3.18 41 306
P -6.94 23 58
Best Dauble Cauple:Ma=8.5*10**16
NP1:Strike=196 Dip=43 Slip= 165
NP2: 297 80 48

26 06 47 10.64 21.517S 173.801W 20km
5.4mb (30 abs.) 5.3Msz (3 obs.)
TONGA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 13S, 26C
Centraid Lacatian:
Origin Time 06:47:19.3 0.4
Lat 21.32S 0.05 Lon 173.75W 0.03
Dep 31.0 BDY Half-duratian 2.5
Principal Axes:
Scale 10**17 Nm
T Val= 2.91 Plg=75 Azm=272
N 0.83 2 176
P -3.75 15 85
Best Dauble Couple:Ma=3.3*10**17
NP1:Strike=173 Dip=30 Slip= 87
NP2: 356 60 92

26 11 56 54.21 41.691N 69.843E 20km
5.1mb (49 abs.) 4.3Msz (2 abs.)
KIRGHIZ SSR
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 10S, 22C
Centraid Lacatian:
Origin Time 11:57: 1.4 1.2
Lat 42.44N 0.21 Lon 70.02E 0.20
Dep 15.0 FIX Half-duratian 1.2
Principal Axes:
Scale 10**16 Nm
T Val= 7.47 Plg=57 Azm=318
N 0.08 4 221
P -7.55 33 129
Best Double Couple:Ma=7.5*10**16
NP1:Strike=203 Dip=13 Slip= 72
NP2: 42 78 94

26 16 17 38.18 13.731S 167.197E 191km
5.5mb (47 abs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 33C
Centroid Lacation:
Origin Time 16:17:44.6 0.2
Lat 13.78S 0.02 Lon 167.00E 0.02
Dep 193.5 0.6 Half-duratian 4.6
Principal Axes:
Scale 10**18 Nm
T Val= 2.05 Plg=83 Azm= 71
N 0.07 0 337
P -2.12 7 247
Best Dauble Couple:Ma=2.1*10**18
NP1:Strike=336 Dip=38 Slip= 89
NP2: 157 52 91

26 18 32 25.96 21.390S 174.459W 81km
5.4mb (32 obs.)
TONGA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 27C
Centraid Lacation:
Origin Time 18:32:26.4 0.3
Lat 21.59S 0.03 Lan 174.11W 0.03
Dep 16.5 1.5 Half-duratian 4.0
Principal Axes:
Scale 10**17 Nm
T Val= 13.75 Plg=65 Azm=256
N 0.43 12 12
P -14.18 22 107
Best Dauble Cauple:Mo=1.4*10**18
NP1:Strike=218 Dip=25 Slip= 118
NP2: 8 68 77

28 05 04 10.87 57.919S 25.386W 33km
5.5mb (10 abs.)
SOUTH SANDWICH ISLANDS REGION
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 23C
Centraid Lacatian:
Origin Time 05:04:18.3 0.5
Lat 57.86S 0.06 Lan 25.18W 0.12
Dep 38.3 4.2 Half-duratian 1.7
Principal Axes:
Scale 10**17 Nm
T Val= 1.11 Plg=78 Azm=308
N -0.20 8 174
P -0.91 9 83
Best Dauble Couple:Mo=1.0*10**17
NP1:Strike=163 Dip=37 Slip= 76
NP2: 0 54 100

28 11 26 38.46 30.658N 131.328E 40km
5.1mb (36 abs.) 5.8Msz (9 abs.)
KYUSHU, JAPAN
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 26C
Centraid Lacatian:
Origin Time 11:26:41.6 0.4
Lat 30.73N 0.05 Lan 131.76E 0.06
Dep 15.0 FIX Half-duratian 2.4
Principal Axes:
Scale 10**17 Nm
T Val= 4.44 Plg=60 Azm=321
N -0.02 14 205
P -4.42 26 108
Best Double Cauple:Ma=4.4*10**17
NP1:Strike=168 Dip=23 Slip= 51
NP2: 29 73 105

28 23 31 58.32 5.275S 152.563E 54km
5.8mb (41 abs.) 5.2Msz (4 obs.)
NEW BRITAIN REGION
FAULT PLANE SOLUTION: P-Waves
NP1:Strike=170 Dip=47 Slip= -16
NP2: 271 78 -136
Principal Axes:
T Plg=20 Azm= 34
P 39 141
Comment: The facal mechanism is moderately well cantrolled and correspands to narmal faulting with a large strike-slip campanent. The preferred fault plane is not determined.
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 12S, 27C
Centraid Lacatian:
Origin Time 23:32: 1.0 0.4
Lat 5.58S 0.04 Lon 152.55E 0.03
Dep 56.3 4.3 Half-duratian 2.5
Principal Axes:
Scale 10**17 Nm
T Val= 3.56 Plg=31 Azm= 22
N -0.01 34 268
P -3.54 41 144
Best Dauble Cauple:Mo=3.6*10**17
NP1:Strike=167 Dip=34 Slip= -9
NP2: 265 85 -124

29 09 17 34.93 17.244S 167.886E 22km
5.3mb (19 abs.) 5.4Msz (10 abs.)
VANUATU ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 25C
Centraid Lacatian:
Origin Time 09:17:41.4 0.3
Lat 17.10S 0.03 Lon 167.63E 0.03
Dep 32.2 1.9 Half-duration 2.8
Principal Axes:
Scale 10**17 Nm
T Val= 3.97 Plg=74 Azm= 20
N 0.93 14 177
P -4.89 6 268
Best Dauble Couple:Ma=4.4*10**17
NP1:Strike= 14 Dip=41 Slip= 112
NP2: 165 53 72

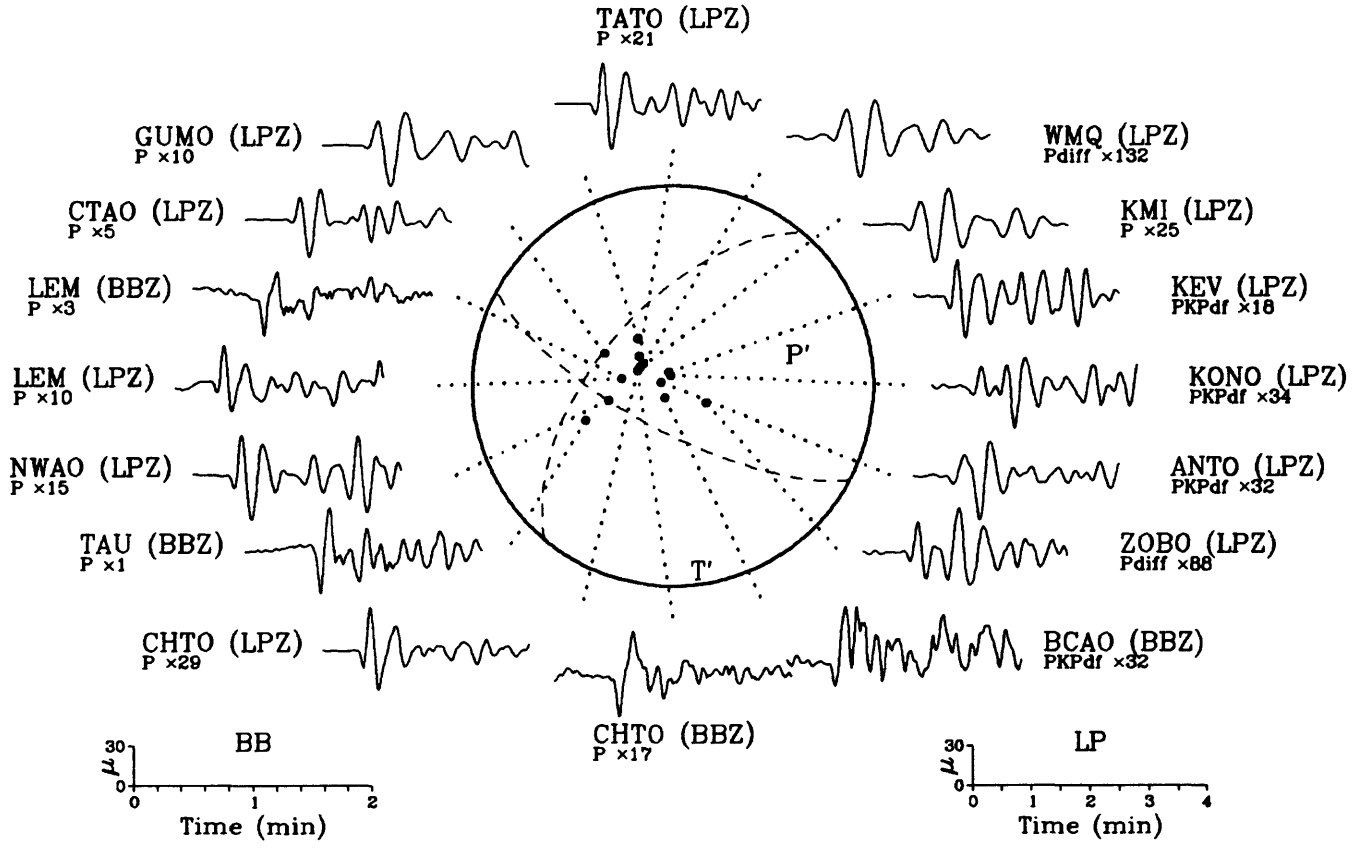
30 03 13 40.97 74.618N 130.594W 10km
5.5mb (74 abs.) 4.6Msz (2 obs.)
BEAUFORT SEA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 22C
Centraid Lacatian:
Origin Time 03:13:44.7 0.8
Lat 74.40N 0.10 Lan 133.12W 0.36
Dep 15.0 FIX Half-duratian 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 8.95 Plg=59 Azm=255
N 0.22 16 14
P -9.17 26 112
Best Dauble Cauple:Ma=9.1*10**16
NP1:Strike=235 Dip=24 Slip= 134
NP2: 8 73 73

30 20 27 26.45 21.309S 174.165W 32km
5.0mb (14 abs.) 5.0Msz (1 abs.)
TONGA ISLANDS
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 18C
Centroid Lacatian:
Origin Time 20:27:29.3 1.3
Lat 20.99S 0.14 Lon 174.11W 0.14
Dep 15.0 FIX Half-duratian 1.7
Principal Axes:
Scale 10**16 Nm
T Val= 10.24 Plg=56 Azm=328
N -0.46 10 223
P -9.78 32 127
Best Dauble Cauple:Ma=1.0*10**17
NP1:Strike=185 Dip=16 Slip= 50
NP2: 45 78 100

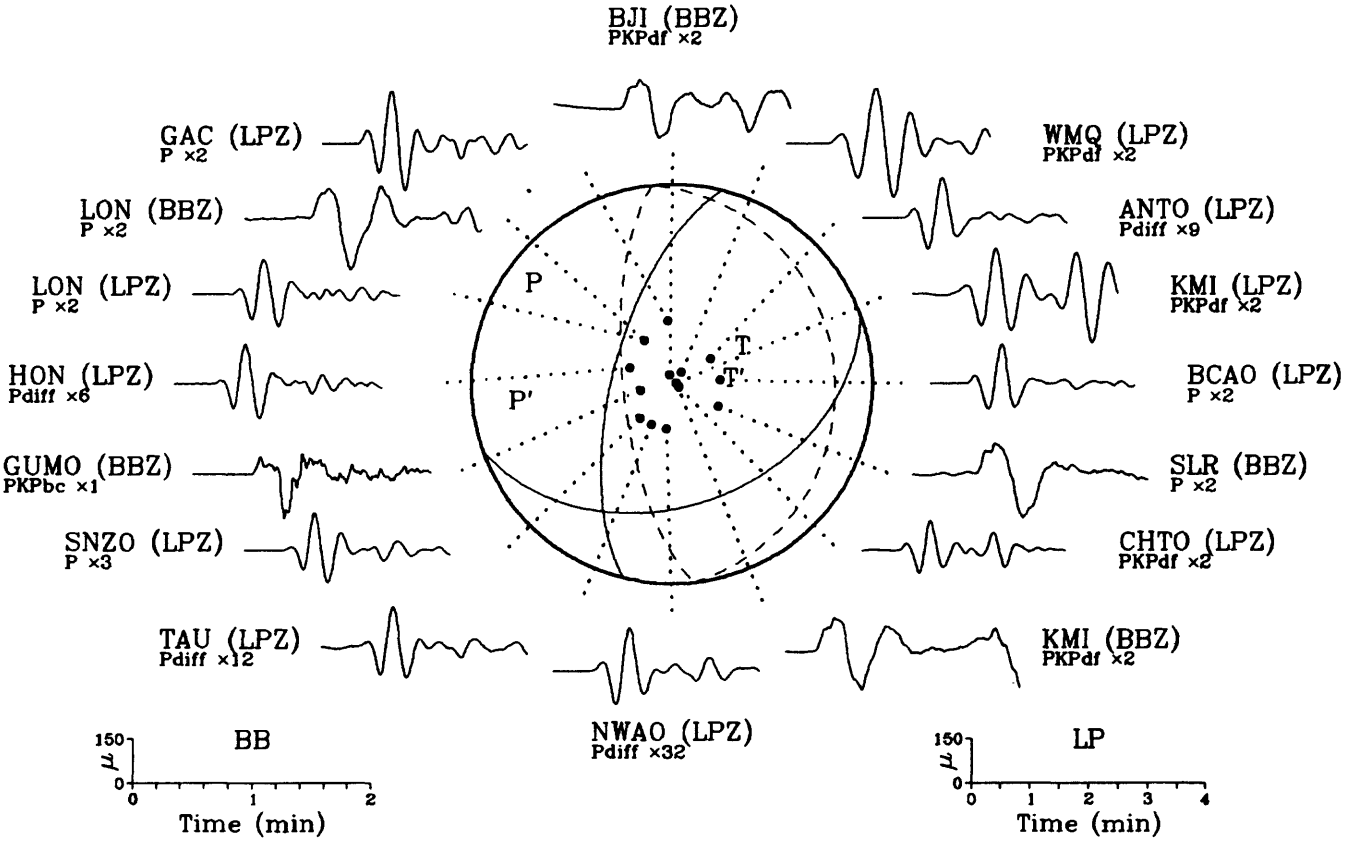
31 01 18 36.87 53.182N 156.469E 175km
5.2mb (63 obs.)
KAMCHATKA
CENTROID, MOMENT TENSOR (HRV)
Data Used: GDSN
L.P.B.: 11S, 23C
Centraid Lacatian:
Origin Time 01:18:37.4 1.5
Lat 53.05N 0.11 Lan 156.62E 0.25
Dep 191.2 6.7 Half-duratian 1.5
Principal Axes:
Scale 10**16 Nm
T Val= 7.58 Plg=28 Azm=195
N -0.35 57 52
P -7.22 17 294
Best Dauble Cauple:Ma=7.4*10**16
NP1:Strike=337 Dip=58 Slip= 8
NP2: 243 83 147

Compiled by Willis S. Jacabs, Leanard E. Kerry, John H. Minsch, Russell E. Needham, Waverly J. Persan, Bruce W. Presgrave and William H. Schmieder.

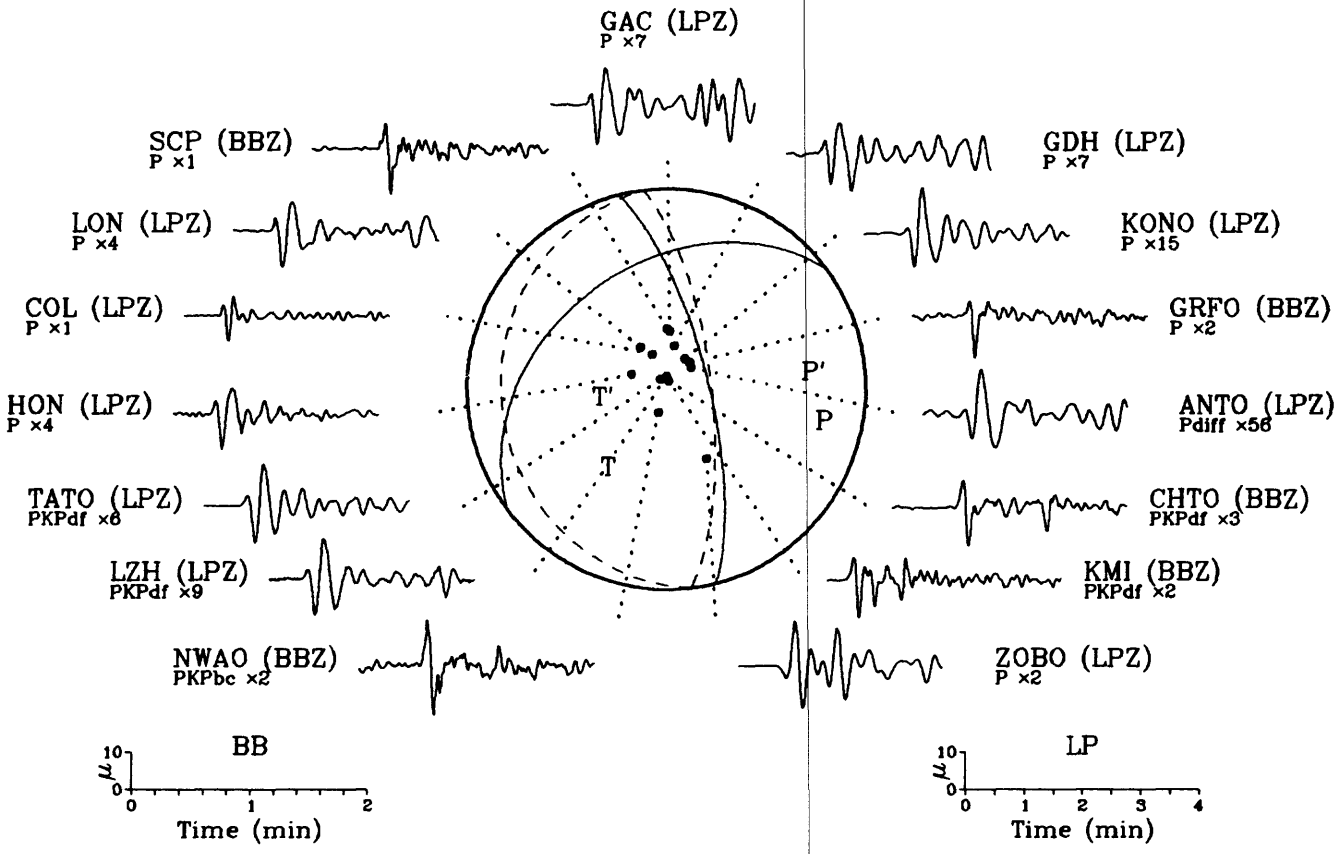
02 March 1987 01:42:34.11
North Island, New Zealand



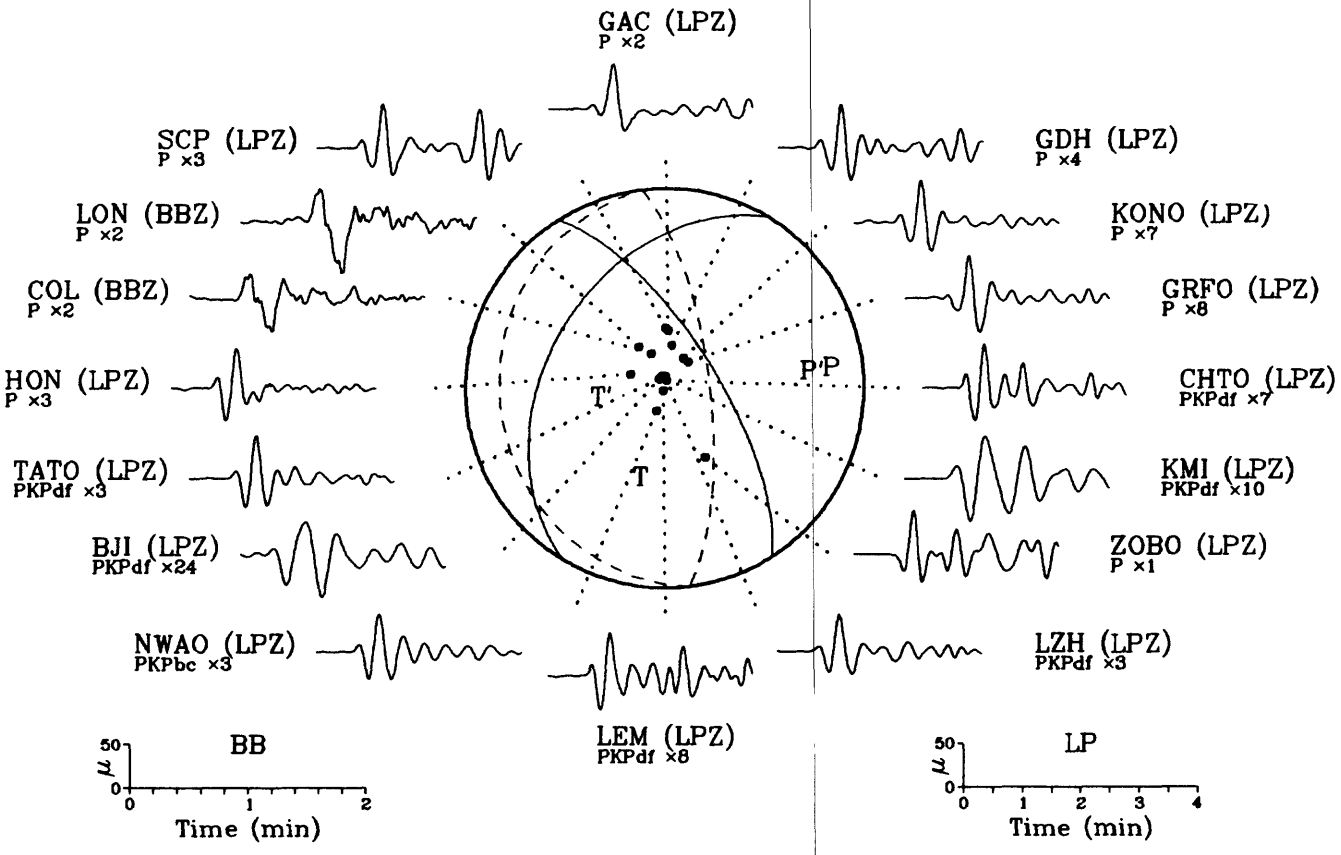
05 March 1987 09:17:05.28
Near Coast of Northern Chile



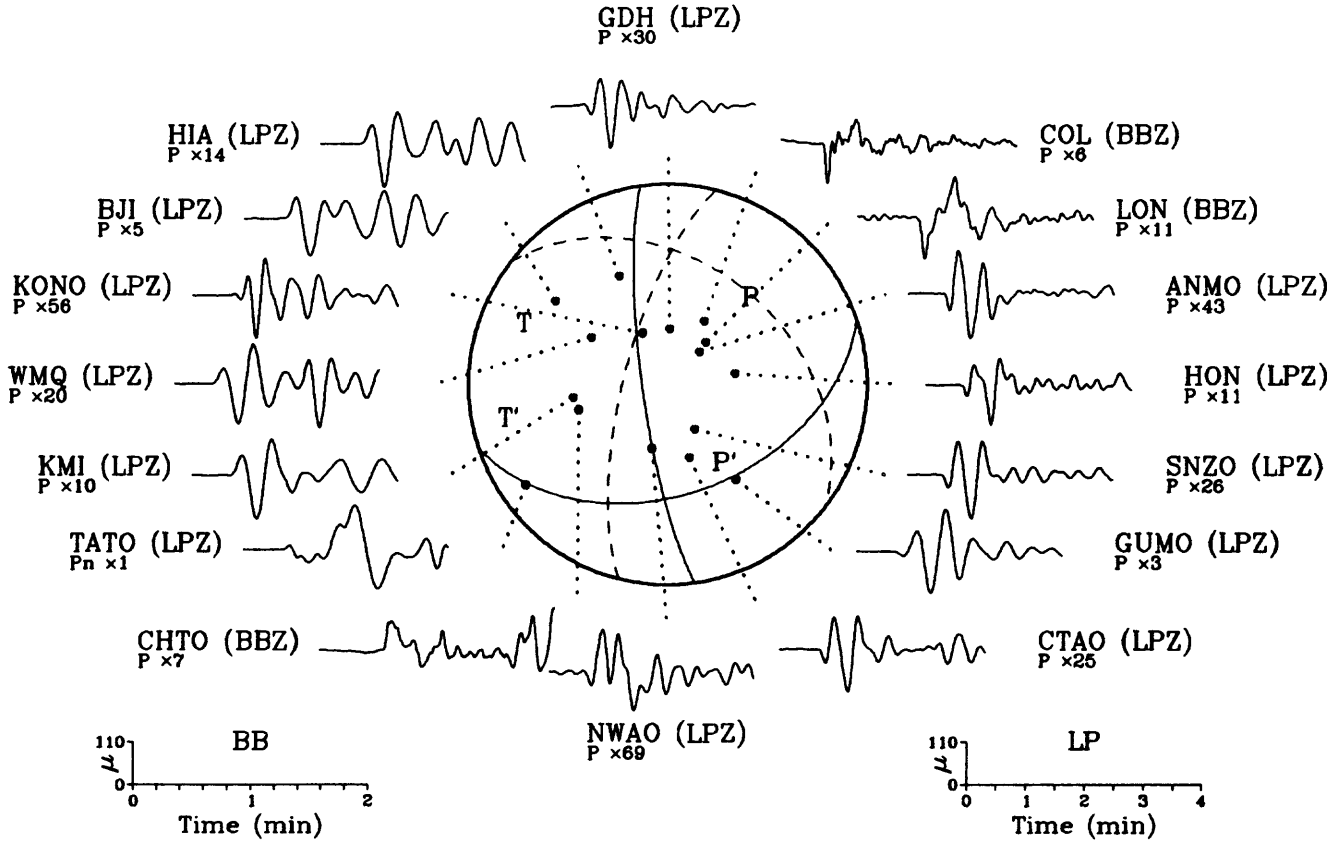
06 March 1987 01:54:50.49
Colombia–Ecuador Border Region



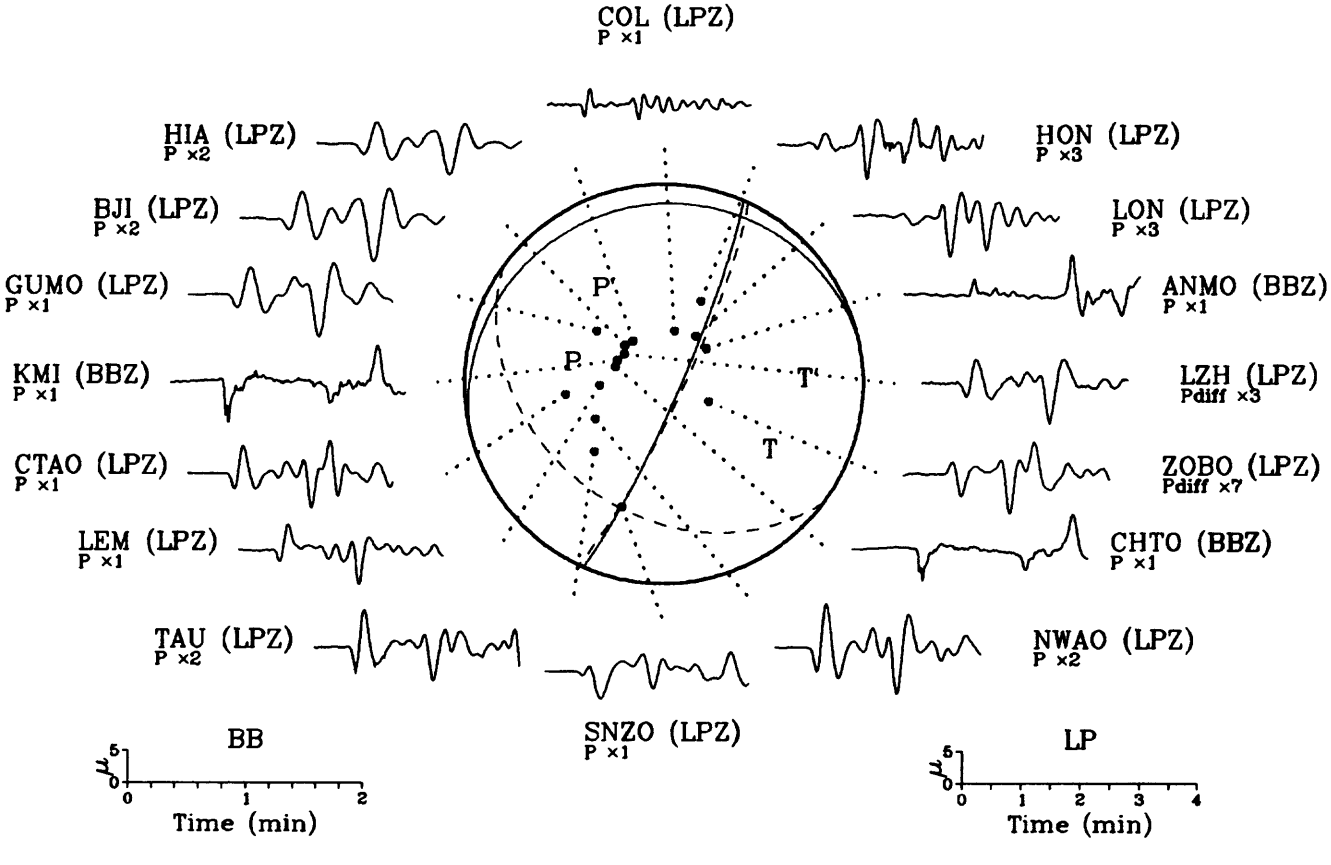
06 March 1987 04:10:41.96
Colombia–Ecuador Border Region



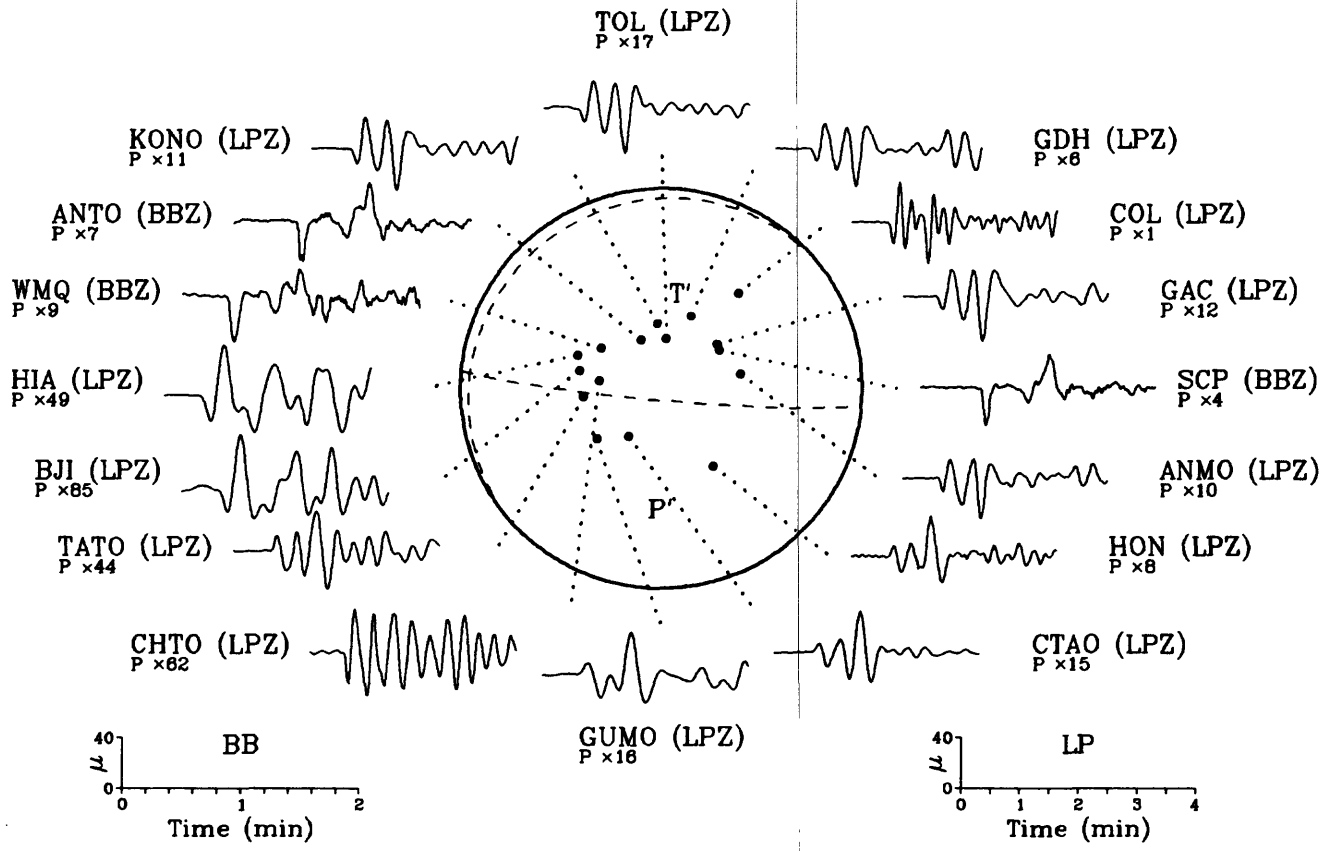
18 March 1987 03:36:30.33
Kyushu, Japan



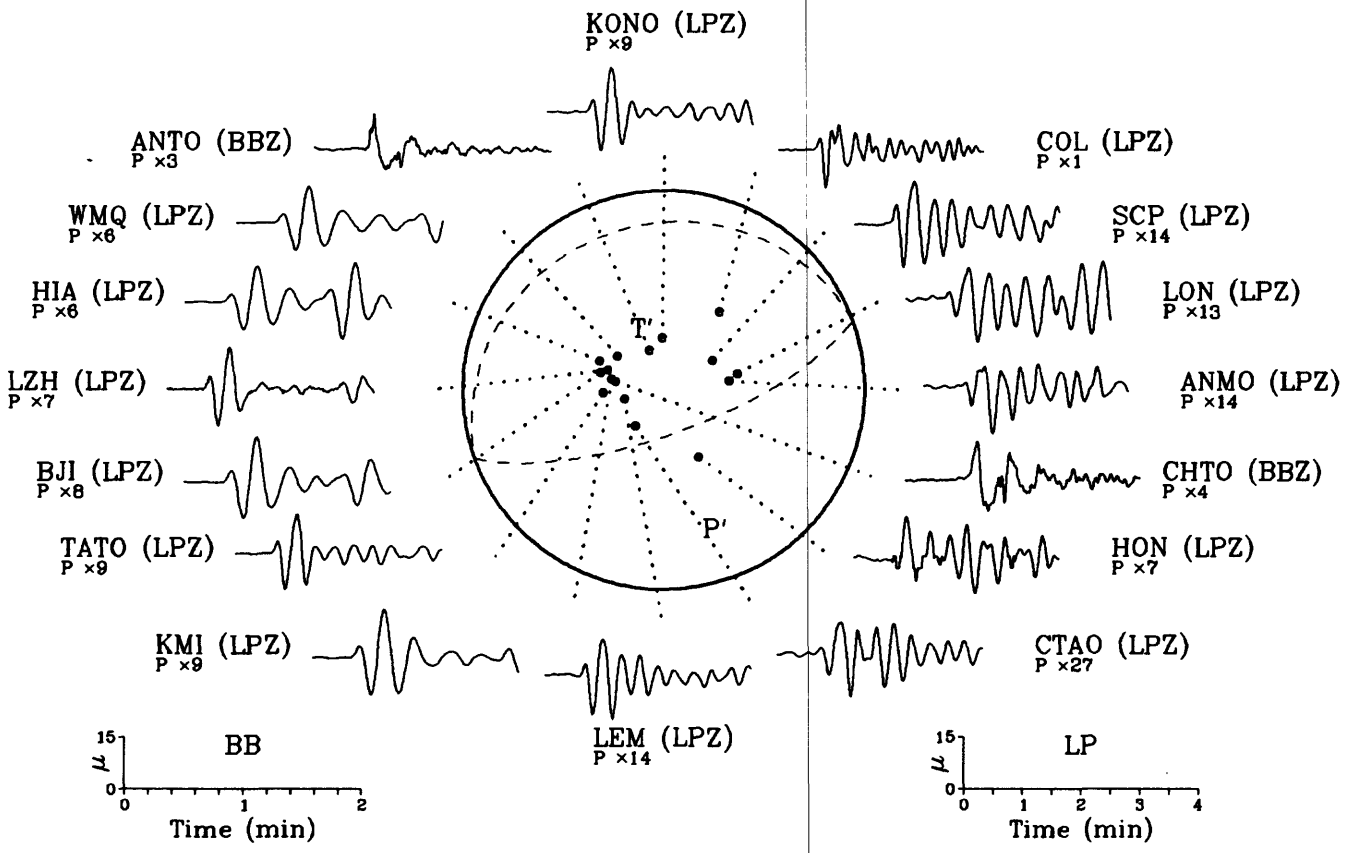
19 March 1987 22:51:39.28
Fiji Islands Region

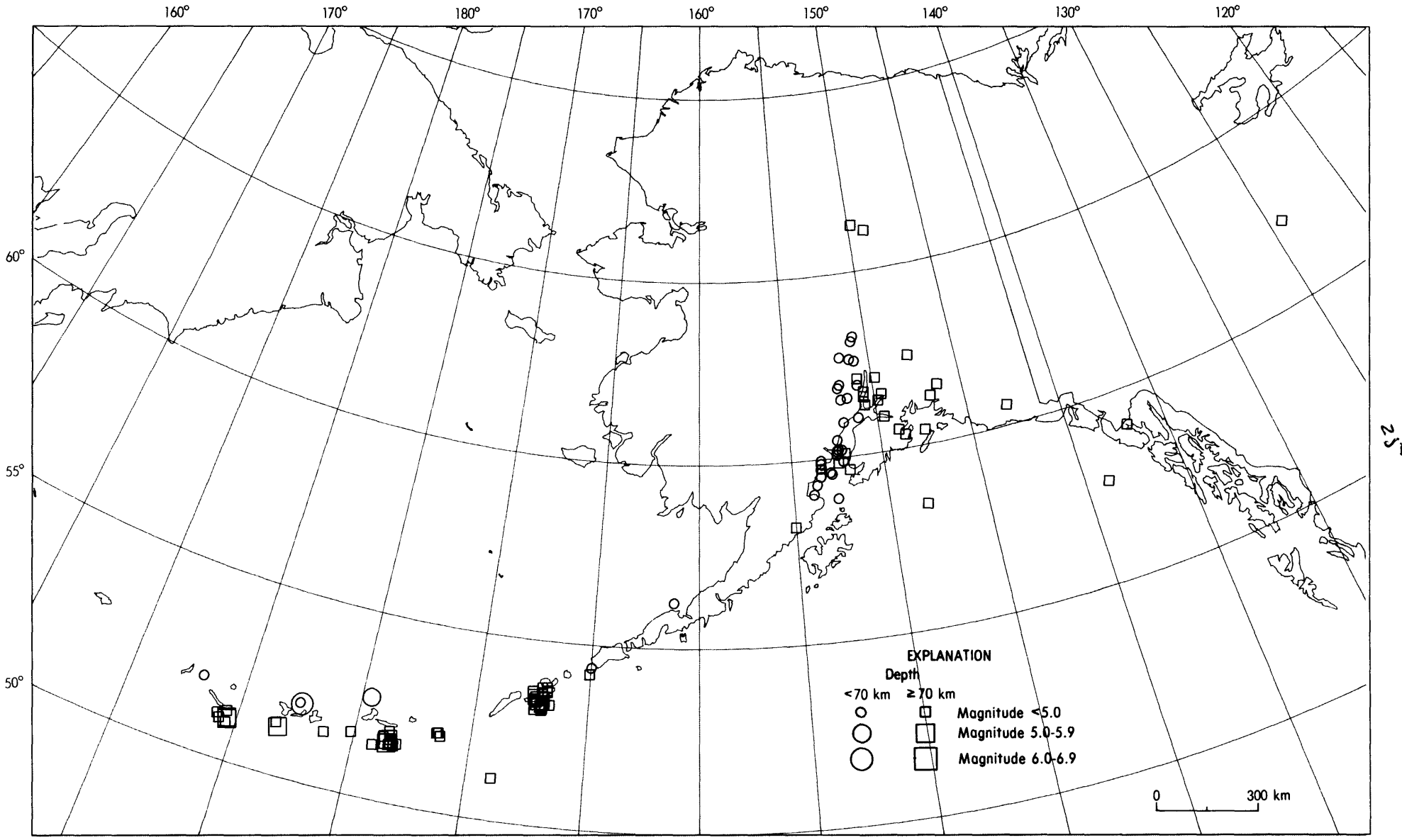


21 March 1987 10:41:35.97
Andreanof Islands, Aleutian Is.

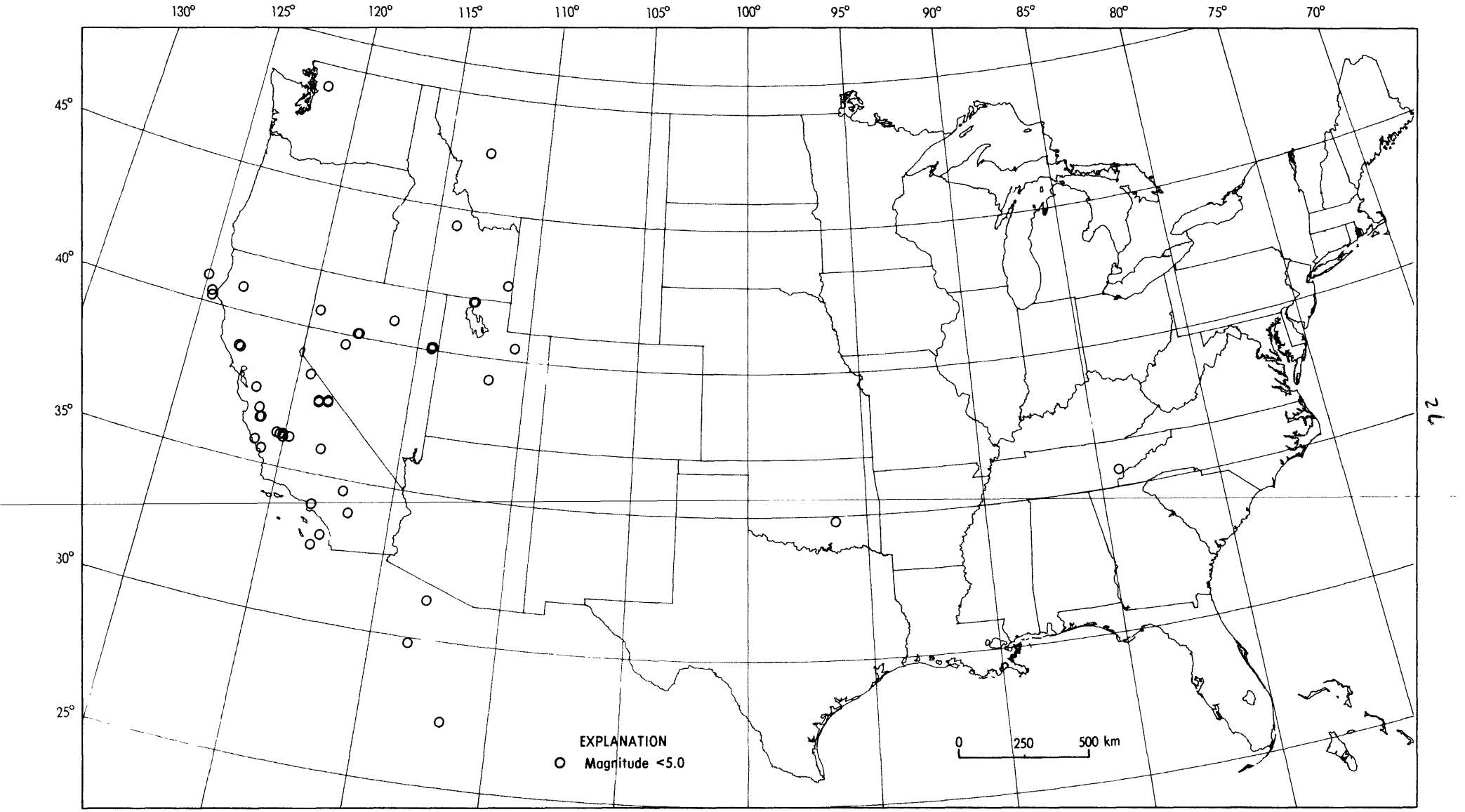


22 March 1987 02:49:15.90
Andreanof Islands, Aleutian Is.

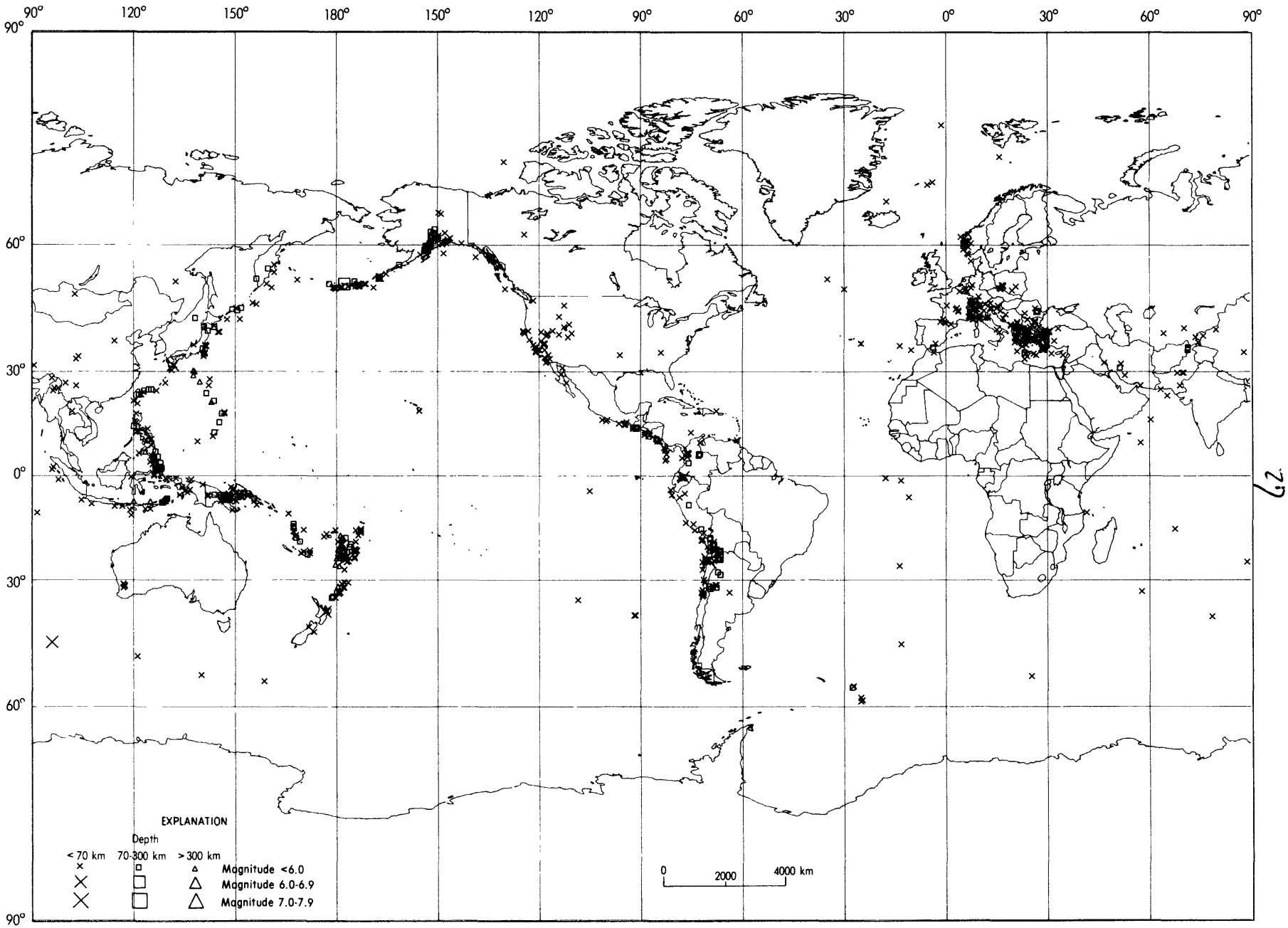




Earthquake epicenters in Alaska and adjacent regions for March, 1987 (C. Stover).



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



GPO 854-781

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

CHANGE OF ADDRESS FORM

NAME—FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

PLEASE PRINT OR TYPE

(or) COUNTRY

Mail this form to: NEW ADDRESS

Superintendent of Documents
Government Printing Office SSOM
Washington, D.C. 20402

Attach last subscription label here.

SUBSCRIPTION ORDER FORM

SUBSCRIPTION ORDER FORM

ENTER MY SUBSCRIPTION TO:

@ $ Domestic; @ $ Foreign.

NAME—FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

PLEASE PRINT OR TYPE

(or) COUNTRY

☐ Remittance Enclosed (Make checks payable to Superintendent of Documents)

☐ Charge to my Deposit Account No. .....

MAIL ORDER FORM TO:
Superintendent of Documents
Government Printing Office
Washington, D.C. 20402