FAYETTEVILLE
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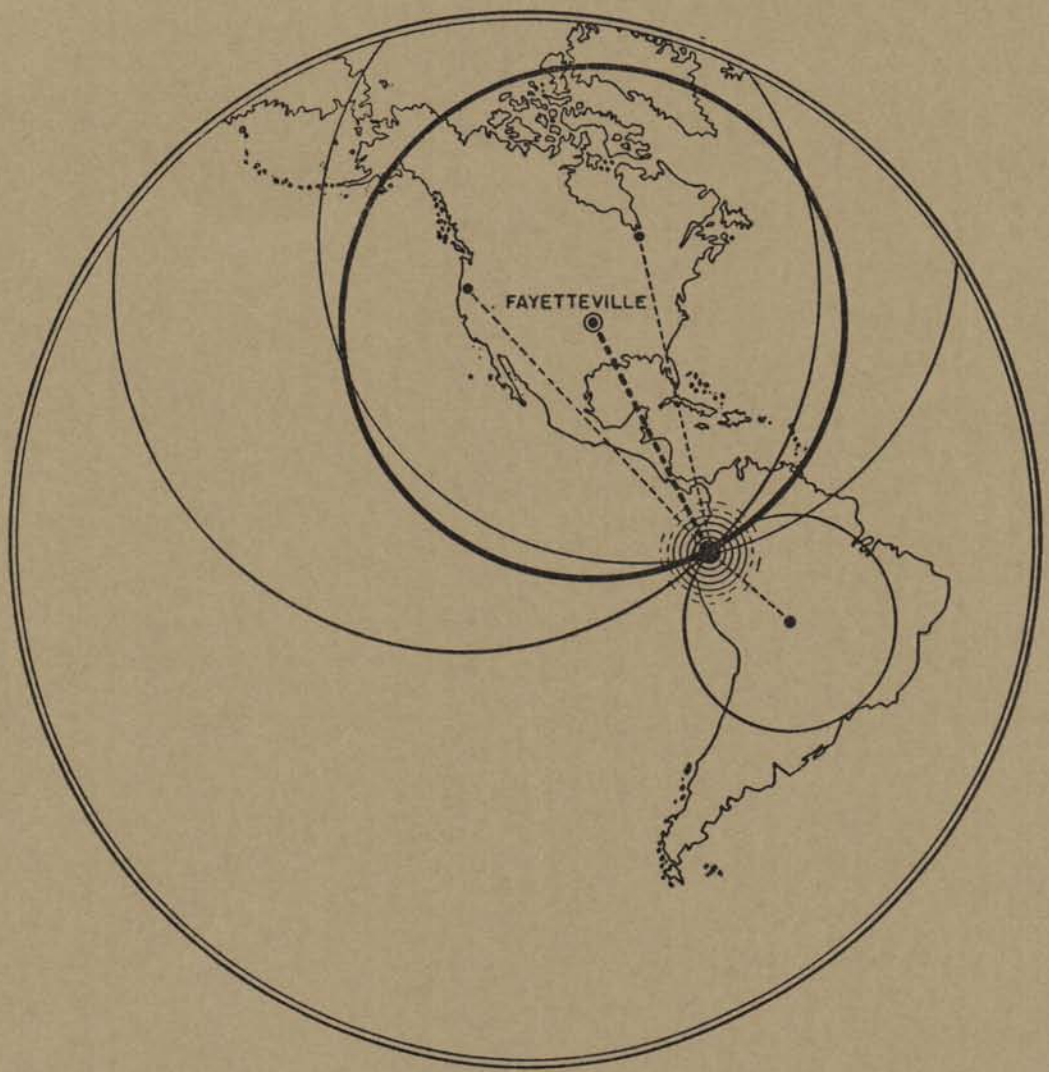

The University Of Arkansas Seismograph Station

Operated by the University's Department of Geology

in conjunction with the

United States Coast and Geodetic Survey

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
Jan.				
1	C & GS 18.2 N., 105.9 W. h about 33 km. off coast of Jalisco, Mexico Mag. 4.4 SD 0.3, 09-43-59.5 (P-H) = 2,335 km. ca. or 21°. (CGS)			
	eZ	09 48 38.7	1.2	5.5
1	eZ	12 44 09.7	0.5	5.5
1	C & GS 17-26-43.5; 45.4 N., 151.9 E. h about 45 km. Kurile Islands Mag. 6 (Pal), 5.6 SD 0.3 (CGS) (P-H) = 8,780 km. ca. or 79°.			
	e(P)Z	17 38 46.2	1.5	5.0
2	C & GS 05-01-53.5; 53.0 N., 159.6 E. h about 40 km. Kamchatka Mag. 4.9 SD 0.4 (CGS) (P-H) = 7,780 km. ca. or 70°.			
	eZ	05 13 06.2	.8	3.2
2	C & GS 05-21-00.5; 54.6 N., 161.5 E. h about 33 km. Kamchatka Mag. 4.9 SD 0.2 (CGS) (P-H) = 7,665 km. ca. or 64°.			
	eZ	05 32 03.2	.5	1.5
2	C & GS 06-32-58.9; 21.6S, 68.2 W. h about 110 km. Chile-Bolivia border, Mag. 5.1 SD 0.4 (CGS) (P-H) = 6,780 km. ca. or 61°			
	eZ	06 43 11.1	1.0	5.5
5	eZ	00 05 24.5	1.0	3.0
5	C & GS 18-33-54.7; 8.0 S., 74.5 W. h about 150 km. Central Peru Mag. 5.2 SD 0.4 (CGS) (P-H) = 5,000 km. ca. or 45°.			
	ePZ	18 42 17.0	6.5	7.0
6	C & GS 23-45-23.4; 50.9 N., 157.3 E. h about 33 km. Southern Kamchatka, Mag. 5.6 SD 0.1 (CGS) (P-H) = 8,110 km. ca. or 73°.			
8	C & GS 46.1 N., 77.7 W. h about 33 km. Ontario-Quebec border. Felt: Deep River, Ontario; Mag. 3.8 SD 0.3 (CGS).			
	ePZ	10 08 10.5	0.5	3.5
	eSZ	10 12 51.5	1.0	11.5
9	eZ	03 12 03.2	1.0	2.0
9	C & GS 14.9 N., 87.9 W. h about 33 km. Honduras, Mag. 4.6 (CGS) 18-38-11 (P-H) = 2,275 km. ca. or 20.5°.			
	e(P)Z	18 43 01.9	1.0	2.0
	iPPZ	18 43 57.4	0.8	16.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
Jan. 10	C & GS 16-57-26.5; 45.4 N., 150.0 E. h about 50 km. Kurile Islands Mag. 5.4 SD 0.2 (CGS) (P-H) = 8,890 km. ca. or 80°.			
	eZ	17 09 33.5	1.0	8.5
11	C & GS 00-40-21;16.4 N., 98.3 W. h about 33 km. Oaxaca, Mexico Mag. 4.5 SD 0.4 (CGS) (P-H) = 2,220 km. ca. or 20°.			
	eZ	00 44 51.3	1.0	3.0
12	C & GS 06-00-13.2; 53.2 N., 166.3 W. h about 33 km. Fox Islands, Aleutian Islands, Mag. 5.5 SD 0.4 (CGS) (P-H) = 5,722 km. ca. or 51.5°.			
	i(P)Z	06 09 17.4	.8	5.0
13	C & GS 04-00-48.3; 28.9 S., 66.2 W. h about 33 km. Catamarca Province, Argentina, Mag. 4.8 SD 0.3 (CGS) (P-H) = 6,610 km. ca. or 69.5°.			
	cZ	04 11 56.8	1.0	2.0
17	C & GS 02-54-22.6; 45.4 N., 151.3E. h about 55 km. Kurile Islands Mag. 5.1 SD 0.5 (CGS) (P-H) = 8,780 km. ca. or 79°.			
	eZ	03 06 25.8	1.0	2.5
18	C & GS 12004-40.0; 23.1 N., 120.5 E. h about 33 km. Taiwan, 110 dead, 479 injured, Mag. 6 3/4 (Pal), 6.1 (CGS) (P-H) = 12,445 km. ca. or 112°.			
	eZ	12 23 51.8	1.0	2.0
18	C & GS 22-36-17.6; 18.8 N., 69.4 W. h about 95 km. Dominican Republic Mag. 5.3 SD 0.3 (CGS) (P-H) = 3,000 km. ca. or 27°.			
	iPZ	22 41 59.0	.6	5.5
20	C & GS 17-08-37.4; 20.7 S., 169.9 E. h about 141 km. Loyalty Islands region, Mag. 6 3/4 (Pas). 6.1 (CGS) (P-H) = 11,780 km. ca. or 106°.			
	ePZ	17 22 36.5	1.0	1.5
	ePPZ	17 26 45.5	1.2	4.5
20	C & GS 20-30-12.6; 16.8 N., 98.5 W. h about 33 km. Near Coast of Guerrera, Mexico, Mag. 4.3 SD 0.4 (CGS) (P-H) = 2,220 km. ca. or 20°.			
	c(P)Z	20 34 40.3	1.0	3.0
24	eZ	21 43 36.0	1.0	2.0
24	eZ	23 03 31.0	0.8	7.0
28	C & GS 14-09-17.1; 36.5 N., 70.9 E. h about 207 km. Hindu Kush, Felt: Northeastern Pakiston, Mag. 6.1 SD 0.4 (CGS) (P-H) = 11,780 km. ca. or 106°.			
	iPZ	14 23 08.6	0.8	3.0
	ePPZ	14 27 13.1	1.0	23.5

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
Jan.				
30	C & GS 05-39-44.6; 24.5 N., 108.6 W. h about 49 km. Gulf of California Mag. 4.5 SD 0.3 (CGS) (P-H) = 1,890 km. ca. or 17°.			
	eZ	05 43 38.0	1.2	2.0
30	eZ	16 41 18.6	0.5	2.0
31	C & GS 04-17-12.4; 61.5 N., 151.9 W. h about 33 km. Southern Alaska Mag. 4.9 SD 0.2 (CGS) (P-H) = 4,890 km. ca. or 44°.			
	eZ	04 25 15.3	1.0	2.3
Feb.				
1	C & GS 01-47-52.1; 51.8 N., 170.8 W. h about 34 km. Fox Islands, Aleutian Islands, Mag. 5.5 1/4 (Pal), 5.2 SD 0.2 (CGS) (P-H) = 6,110 km. ca. or 55°.			
	eP	01 57 19.3	0.9	2.5
1	C & GS 11-47-28.8; 3.5 S., 78.0 W. h about 33 km. Peru-Ecuador Border, Mag. 5.0 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	eP	11 55 19.3	1.2	3.0
1	C & GS 22-53-15.0; 19.4 N., 66.3 W. h about 37 km. Off North Coast of Puerto Rico (P-H) = 3,335 km. ca. or 30°.			
	iPZ	22 59 18.0	0.8	2.5
2	C & GS 6.0 N., 82.5 W. h about 44 km. Off South Coast of Panama Mag. 4.8 SD 0.2 (CGS) (P-H) = 3,500 km. ca. or 31.5°.			
	iPZ	06 38 16.0	0.8	4.5
	e	21 48 26.8	0.6	2.0
3	C & GS 01-46-27.9; 13.0 N., 88.0 W. h about 61 km. El Salvador Mag. 4.1 (CGS) (P-H) = 2,445 km. ca. or 27°.			
	e	01 51 35.6	0.5	2.0
3	C & GS 02-00-47.3; 14.4 N., 92.6 W. h about 34 km. Off Coast of Chiapas, Mexico, Mag. 4.3 SD 0.2 (CGS) (P-H) = 2,445 km. ca. or 22°.			
	e	02 05 38.0	0.8	2.5
3	C & GS 05-55-44.9; 43.2 N., 111.1 W. h about 33 km. Idaho-Wyoming Border, Mag. 4.1 SD 0.2 (CGS) (P-H) = 2,110 km. ca. or 19°.			
	ePZ	06 00 07.4	0.8	1.0
	eSZ	06 03 30.4	1.0	2.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
Feb.				
3	C & GS 08-43-36.3; 31.5 N., 114.2 W. h about 14 km. Gulf of California, Mag. 4.6 SD 0.3 (CGS) (P-H) = 1,945 km. ca. or 17.5°.			
	ePZ	08 47 37.3	1.2	4.5
	eSZN	08 52 55.8	2.0 3.0	7.0 35.0
3	C & GS 09-15-42; 31.3 N. 114.2 W. h about 14 km. Gulf of California (P-H) = 2,110 km. ca. or 19°.			
	e	09 19 57.8	1.0	1.5
3	C & GS 13-51-07.4; 31.3 N., 114.3 W. h about 14 km. Gulf of California, Mag. 4.2 SD 0.3 (CGS) (P-H) = 2,000 km. ca. or 18°.			
	e(P)Z	13 55 11.8	1.0	1.0
	e(S)Z	14 00 35.0	4.0	2.5
5	C & GS 11-30-15.7; 36.5 N., 141.0 E. h about 46 km. Central Honshu, Japan, Felt: Tokyo, Mag. 6 1/4 (Pas), 5.4 SD 0.3 (CGS) (P-H) = 10,220 km. ca. or 92°.			
	iP	11 43 21.5	0.8	8.5
	ePP	11 48 09.5	0.8	1.2
7	e	11 08 46.5	(.5)	3.0
7	C & GS 39.8 N., 142.8 E. h about 45 km. Off east coast of Honshu, Japan, Mag. 5.4 SD 0.4 (CGS)			
	i(P)	13 11 41.4	0.8	5.5
8	C & GS 11-17-46.5; 52.3 N., 175.6 E. h about 60 km. Rat Islands, Aleutian Islands, Mag. 5.4 SD 0.4 (CGS) (P-H) = 7,110 km. ca. or 35°.			
	e(P)Z	11 28 04.8	0.8	6.5
9	C & GS 02-00-07.3; 16.5 S., 179.2 W. h about 480 km. Fiji Islands Region, Mag. 5.3 SD 0.3 (CGS) (P-H) = 10,890 km. ca. or 98°.			
	e	02 12 40.7	0.5	3.0
10	C & GS 17-27-07; 6.1 S., 104.1 E. h about 126 km. Near West Coast of Sumatra, Mag. 5.5 (CGS) (P-H) = 16,000 km. ca. or 144°.			
	iP	17 46 35.0	1.0	3.0
	i(PP)	17 47 34.5	1.0	12.0
13	C & GS 8.8 N., 102.5 W. h about 33 km. , 1700 km. northwest of Galapagos Islands, Mag. 4.6 SD 0.4 (CGS) (P-H) = 3,110 km. ca. or 28°.			
	e	02 28 07.6	1.0	2.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
Feb.								
13	C & GS 11-21-46.7; 18.1 S., 56.8 W. h about 33 km Bolivia-Brazil Border, Mag. 5.3 SD 0.3 (CGS) (P-H) = 7,110 km. ca. or 64°.							
	i(P)	11 32 20.2	1.2			4.0		
14	C & GS 16-29-45.0; 5.1 S., 151.7 E. h about 55 km. New Britain, Felt. Mag. 6 3/4 (Pas), 6.0 SD 0.3 (CGS) (P-H) = 12,750 km. ca. or 115°.							
	eP	16 44 39.8	1.0			4.5		
	ePP	48 16.3	1.0			1.5		
17	e	10 51 11.8	0.8			1.2		
17	i	09 39 01.8	0.7			1.5		
18	C & GS 09-31-11.6; 34.7 N., 85.4 W. h about 33 km. Northern Georgia-Alabama border. Felt at Mentone, Alabama; Lafayette, Trenton and Rising Fawn, Ga., Mag. 4.4 (CGS) (P-H) = 778 km. ca. or 7°.							
	eP	09 31 57.3	0.3			2.5		
	e(PP)	09 33 52.3	1.0			14		
	e(S)	04 38 32.3	1.0			1.5		
	e	12 27 19.0	0.5			1.0		
20	C & GS 03-26-58.0; 51.5 N., 175.8 E. h about 33 km. Near Islands, Aleutian Is., 4.7 SD 0.2 (CGS) (P-H) = 7,000 km. ca. or 63°.							
	e	03 37 21.2	0.5			1.5		
20	C & GS 08-35-36.2; 46.6N., 152.5 E. h about 50 km. Kurile Islands Mag. 4.8 SD 0.4 (CGS) (P-H) - 8,665 km. ca. or 78°.							
	i	08 47 31.5	1.0			2.5		
20	C & GS 09-53-51.1; 44.6 N., 150.0 E. h about 50 km. Kurile Islands Mag. 5.2 SD 0.2 (CGS) (P-H) = 8,890 km. ca. or 80°.							
	iP	10 06 00.9	1.0			7.5		
	i(PP)	06 11.9	1.0			11.0		
20	C & GS 12-03-18.7; 14.5 N. 93.0 W. h about 49 km. Near coast of Chiapas, Mexico, Mag. 4.4 (CGS) (P-H) = 2,445 km. ca. or 22°.							
	ePZN	12 08 06.4	0.8	3.0		4.5		7.0
21	C & GS 03-15-08; 15.0 N., 92.8 W. h about 33 km. Near coast of Chiapas, Mexico, Mag. 3.8 (CGS) (P-H) = 2,335 km. ca. or 21°.							
	e	03 19 51.2	(.5)			1.0		

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
Feb. 21	C & GS 07-24-08; 12.8 N., 87.9 W. h about 62 km. off South Coast of Honduras, Mag. 3.9 (CGS) (P-H) = 2,665 km. ca. or 24°.			
	e	07 29 16.4	0.5	1.5
21	C & GS 13-51-47.4; 6.8 S., 80.9 W. h about 33 km. near coast of Northern Peru, Mag. 4.3 SD 0.4 (CGS) (P-H) = 5,000 km. ca. or 45°.			
	e	13 59 58.3	1.0	1.5
21	i	14 12 42.5	0.8	3.5
21	C & GS 17-14-45; 38.3 N., 28.7 W. h about 33 km. Azores, Mag. 4.8 SD 0.2 (CGS) (P-H) = 5,835 km. ca. or 52.5°.			
	e	17 23 49.0	1.0	1.5
22	C & GS 17-50-56.2; 48.5 N., 154.9 E. h about 60 km. Kurile Islands Mag. 5.3 SD 0.4 (CGS) (P-H) = 8,445 km. ca. or 76°.			
	eP	18 02 08.5	0.6	1.2
	ePP	02 36.4	1.0	5.5
23	C & GS 00-06-59.0; 48.6 N., 154.7 E. h about 33 km. Kurile Islands Mag. 5.0 SD 0.3 (CGS) (P-H) = 8,390 km. ca. or 75.5°.			
	i	00 18 42.5	1.0	3.5
23	C & GS 22-41-06.3; 39.2 N., 23.7 E. h about 33 km. Aegean Sea Felt: Athens, Greece, Mag. 4.5 SD 0.2 (CGS) (P-H) = 9,555 km. ca. or 86°.			
	eP	22 53 43.5	1.0	2.4
24	i	10 11 59.0	1.2	5.0
25	C & GS 02-28-55.5; 9.1 S., 110.7 E. h about 81 km. off South coast of Java (P-H) = 16,220 km. ca. or 146°.			
	i	02 48 25.3	0.7	7.5
29	C & GS 15-20-12.8; 34.8 N., 141.7 E. h about 34 km. off east coast of Honshu, Japan, Mag. 5.1 (CGS) (P-H) = 10,220 km. ca. or 92°.			
March 2	C & GS 13.9 N., 91.1 W. h about 130 km. near coast of Guatemala Mag. 4.6 SD 0.3 (CGS).			
	ePZN	12 43 59.6	1.2 3.0	4.0 3.5
	eSZN	48 05.6	1.0 3.0	1.5 3.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
March				
2	C & GS 16-09-46.1; 12.5 N., 88.0 W. h about 63 km. near South Coast of El Slavador, Mag. 4.4 SD 0.3 (CGS) (P-H) = 2,555 km. ca. or 23°.			
	eP	16 14 57.1	0.8	2.5
2	C & GS 19-32-41.7; 18.9 S., 174.8 W. h about 130 km. Tonga Islands Mag. 5.3 (CGS) (P-H) = 10,445 km. ca. or 94°.			
	iP	19 45 45.9	1.0	4.2
3	C & GS 20-02-33.1; 40.3 N., 125.1 W. h about 33 km. near Coast of Northern California, Mag. 4.8 SD 0.2 (CGS) (P-H) = 2,780 km. ca. or 25°.			
	e	20 07 56.0	1.0	2.5
4	C & GS 14-30-18; 12.1 N., 88.1 W. h about 53 km. off coast of El Salvador, Mag. 4.3 (CGS) (P-H) = 2,780 km. ca. or 25°			
	i	04 28 37.9	1.3	6.0
5	C & GS 14-30-18; 12.1 N., 88.1 W. h about 53 km. off Coast of El Salvador, Mag. 4.3 (CGS) (P-H) = 2,780 km. ca. or 25°.			
	e	14 35 31	1.2	0.7
7	e	18 07 27.9	0.6	1.6
7	C & GS 21-06-06.9; 5.6 S., 152.7 E. h about 62 km. New Britain Felt: Rabaul. Mag. 4.8 (CGS) (P-H) = 13,000 km. ca. or 117°.			
8	C & GS 21.0 N., 105.5 W. h about 33 km. Jalisco, Mexico, Mag. 4.1 SD 0.3 (CGS) (P-H) = 1890 km. ca. or 17°.			
	e	19 16 54.1	0.8	1.0
8	C & GS 19-44-36.0; 21.3 N., 105.2 W. h about 33 km. Jalisco, Mexico Mag. 4.0 SD 0.3 (CGS) (P-H) = 1890 km. ca. or 17°			
	e	19 48 41.0	0.8	1.2
9	C & GS 09-59-22.7; 4.8 N., 32.8 W. h about 33 km. Mid-Atlantic Ocean. Mag. 4.8 SD 0.2 (CGS) (P-H) = 7,110 km. ca. or 64°.			
	i	09 59 22.7	1.2	1.4
11	e	01 24 58.9	1.0	2.4
11	C & GS 05-50-51.9; 38.2 S., 74.3 W. h about 33 km. near Coast of Southern Chile. Mag. 4.7 SD 0.3 (CGS) (P-H) = 8,335 km. ca. or 75°.			
	i	06 02 36.4	1.0	1.6

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
March				
13	C & GS04-26-23.5; 4.1 S., 105.1 W. h about 33 km, West of Galapagos Islands, Mag. 4.6 SD 0.3 (CGS) (P-H) = 4,445 km. ca. or 40°.			
	i	04 34 07.0	1.0	1.2
13	C & GS 05-51-31.2; 52.1 N., 170.0 W. h about 33 km Fox Islands, Aleutian Islands. Mag. 4.6 SD 0.3 (CGS) (P-H) = 6,110 km. ca. or 55°.			
	i	06 00 53.2	1.0	1.8
13	C & GS 11-54-06.1; 12.9 N., 90.4 W. h about 128 km. near coast of Guatemala, Mag. 4.9 SD 0.4 (CGS) (P-H) = 2,445 km. ca. or 22°.			
	iPZN	11 59 02.8	1.0	5.6
14	C & GS 15-12-22.4; 15.9 N., 60.5 W. h about 31 km. Leeward Islands region, Mag. 5.4 SD 0.2 (CGS) (P-H) = 4,000 km. ca. or 36°.			
	iPZEN	15 19 22.9	0.8 1.0	18.5 1.5
14	e	18 12 28.9	0.6	1.4
15	C & GS 09-49-42.4; 53.0 N., 157.3 E. h about 173 km. Kamchatka Mag. 4.8 SD 0.3 (CGS) (P-H) = 7,890 km. ca. or 71°.			
	i	10 00 47.4	1.0	4.0
15	C & GS 22-30-26.0; 36.2 N., 7.6 W. h about 27 km. West of Striahgt of Gibraltar, Felt: Portugal, Spain, Morocco. Felt strongly by the "St. Raphael" at 36.6 N., 7.9 W. Mag. 6 3/4 - 7 (Pas). 7-7 1/4 (13 ks), 6 1/4 - 6 1/2 (Pal), 6.2 SD 0.3 CGS) (P-H) = 7,445 km. ca. or 67 °.			
	i PZEN	22 41 19.9	0.8 2.0 3.0	73 25.5 17
	ePPZEN	42 50.9	1.2	7.0
	eLZEN	07 39.4	18 18 19	4.5 74.5 79.5
16	e(P)EN	20 18 52.6	0.8	1.6
	eLEN	40 10.6	4.5 5.0	6.5 7.0
17	C & GS 02-04-58.2; 53.5 N., 163.3 E. h about 20 km. off east coast of Kamchatka, Mag. 4.8 SD 0.3 (CGS) (P-H) = 7,780 km. ca. or 70°.			
	i	02 16 00.3	0.8	2.8
18	C & GS 04-37-26.9; 52.5 N., 153.6 E. h about 440 km. Sea of Oknotsk, Mag. 5.6 SD 0.2 (CGS) (P-H) = 8,110 km. ca. or 73°.			
	iPZEN	04 48 16.4	0.6 1.0	24.0 1.2
	i(S)ZEN	57 12.4	1.5 5.0 5.0	2.4 106 67.5
18	e	19 08 29.5	0.8	2.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E H	Trace Amp. (mms) Z E H
March				
19	C & GS 21-44-03.8; 15.1 S., 172.6 W. h about 33 km. Samoa Islands region, Felt. Mag. 5.6 SD 0.3 (CGS) (P-H) = 9,665 km. ca. or 87°.			
	e	21 56 35.5	0.5	10.0
20	C & GS 06-35-51.6; 12.9 N., 89.9 W. h about 125 km. Near coast of San Salvador, Mag. 4.2 SD 0.4 (CGS) (P-H) = 2,445 km. ca. or 22°.			
	e	06 40 47.8	1.0	3.5
20	i	07 02 58.2	1.0	4.6
21	C & GS 03-42-19.6; 6.4 S., 127.9 E. h about 367 km. Banda Sea, Felt: Darwin, Australia (P-H) = 4,000 km. ca. or 36°.			
	ePZ	04 00 31.0	0.6	5.0
	iSZEN	03 41.5	2.0 3.0 3.2	57.0 31.0 12.5
21	C & GS 15-08-14.3; 18.7 N., 103.1 W. h about 83 km. near coast of Michoacan, Mexico, Mag. 5 1/4 (Pal), 5.0 SD 0.3 (CGS) (P-H) = 2,110 or 19°.			
	iPZEN	15 12 31.2	0.8	12.5
	e(S)ZEN	18 38.2	2.6 4.0 4.0	11.5 132.0 89.0
	eLZEN	22 01.2	4.5 1.0 6.0	6.0 11.5 11.0
22	C & GS 00-52-38.8; 54.0 N., 160.5 E. h about 30 km. Kamchatka, Mag. 5.0 SD 0.3 (CGS) (P-H) = 8,110 km. ca. or 73°.			
	i	01 03 46.7	0.6	5.2
22	i	07 13 37.1	1.2	12.0
22	C & GS 08-35-06.4; 35.7 S., 72.9 W. h about 33 km. near coast of Central Chile, Mag. 5.1 SD 0.2 (CGS) (P-H) = 8,110 km. ca. or 73°.			
	i	08 46 39.5	1.2	3.6
22	C & GS 16-30-55.9; 38.7 N., 118.8 W. h about 21 km. Walker Lake, Nevada area, Felt: Hawthorne, Nevada, Mag. 5 1/4 (Bks), 4.5 (CGS) (P-H) = 2,220 km. ca. or 20°.			
	e	16 35 27.3	0.8	1.2
23	i	01 22 15.1	0.6	2.4
23	e	23 00 40.8	0.6	2.0
24	C & GS 08-28-10.4; 19.2 N., 65.9 W. h about 58 km. north of Puerto Rico, Mag. 4.4 (CGS) (P-H) = 3,335 km. ca. or 30°.			
	e	08 34 15.9	0.5	1.4
24	C & GS 17-38-08.2; 27.7 S., 68.7 W. h about 76 km. Catamarca Province, Argentina, Mag. 4.5 SD 0.2 (CGS) (P-H) = 7390 km. ca. or 67.5°.			
	i	17 49 00.6	1.0	6.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N

March

25 C &GS 02-43-23.5; 36.3 N., 140.9 E. h about 67 km. near east coast of Honshu, Japan, Mag. 4.8 SD 0.3 (CGS) (P-H) = 10,220 km. ca. or 92°.

e	02 56 24.7	1.0		2.2

25 C & GS 10-08-06.8; 7.7 N., 75.3 W. h about 48 km. Northern Columbia, Mag. 4.8 SD 0.2 (CGS) (P-H) = 3,780 km. ca. or 34°.

i	10 14 35.5	0.8		4.0

26 e	06 08 09.0	0.4		4.5
26 e	12 37 51.5	1.2		4.4

26 C & GS 13-29-56.2; 4.4 S., 104.7 W. h about 33 km. 1500 km. southwest of Galapagos Islands, Mag. 4.9 SD 0.4 (CGS) (P-H) = 4,555 km. ca. or 41°.

28 C & GS 03-36-12.7; 61.1 N., 147.6 W. h about 20 km. Prince William Sound, Alaska, Mag. 8.4 (Pas), 8 1/2 - 8 3/4 (Brk), 8.6 (Pal), 8.5 (CGS). 114 dead or missing, many injured and major property damage in Alaska. Extensive damage from seismic sea waves throughout the Gulf of Alaska, along the west coast of North America, and in Hawaii. (P-H) = 6,110 km. ca. or 41°.

iP	03 43 59.5	0.6		61.0
eS	50 07.5	10.0		85.0
eL	53 01.5	20.0		55.0

28 C & GS 07-10-21.4; 58.8 N., 149.5 W. h about 20 km. Prince William Sound, Alaska, aftershock, Mag. 6.2 (Pas), 5 3/4 - 6 (Brk), 6.1 SD 0.2 (CGS) (P-H) = 6,110 km. ca. or 41°.

iP	07 18 12.7	0.5		14.0

28 C & GS 07-30-29.6; 57.4 N., 151.7 W. h about 15 km. Prince William Sound, Alaska, aftershock, Mag. 5 1/4 - 5 1/2 (Brk), 5.7 SD 0.4 (Cas) (P-H) = 4,555 km. ca. or 41 °.

i	07 38 29.7	0.5		14.0

28 C & GS 08-33-47.0; 58.1 N., 151.1 W. h about 25 km. Prince William Sound, Alaska, aftershock, Mag. 5 1/4 - 5 1/2 (Brk), 5.6 SD 0.3 (CGS) (P-H) = 4780 km. ca. or 43°.

28 C & GS 08-39-54.9; 57.5 N. 151.6 W. h about 20 km. Prince William Sound, Alaska, aftershock, Mag. 5.4 SD 0.3 (CGS) (P-H) = 4,780 km. ca. or 43°.

iP	08 47 54.5	0.5		9.5

28 C & GS 09-01-00.5; 56.5 N., 152.0 W. h about 20 km. Prince William Sound, Alaska aftershock, Mag. 6.2 (Pas), 5 1/2 - 5 3/4 (Brk), 6.0 SD 0.2 (CGS) (P-H) = 4,835 km. ca. or 43.5°.

iP	09 09 01.4	0.8		8.0

		Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
March 28	C & GS 09-52-55.7; 59.7 N., 146.6 W. h about 30 km. Prince William Sound, Alaska aftershock, Mag. 6.2 (Pas), 5 - 5 1/4 (Brk), 5.5 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	iP	10 00 34.2	0.6	8.0
28	C & GS 10-08-42.7; 43.0 N., 101.6 W. h about 16 km. Nebraska-South Dakota border. Felt in South Dakota, Nebraska and Wyoming. Minor damage at Martin, South Dakota, Mag. 5.1 SD 0.2 (CGS) (P-H) = 889 km. ca. or 8°.			
	eP	10 10 54.2	0.3	18.0
	eL	10 19 04.2	4.0	7.0
28	C & GS 11-08-26.0; 60.1 N., 148.4 W., h about 33 km. Prince William Sound, Alaska aftershock, Mag. 5.6 (Pas), 5 1/4 - 5 1/2 (Brk), 5.7 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 41°.			
	iP	11 16 15	0.3	12.0
28	e	11 48 10.9	0.5	2.8
28	C & GS 12-03-16.5; 60.3 N. 146.6 W. h about 15 km. Prince William Sound, Alaska aftershock, Mag. 5.1 (Pas), 5.4 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	iP	12 10 59.8	0.5	9.0
28	C & GS 12-20-49.8; 56.5 N., 154.0 W. h about 25 km. Prince William Sound, Alaska aftershock Mag. 6.5 (Pas), 5 1/4 - 5 3/4 (Brk), 6.1 SD 0.4 (CGS) (P-H) = 5,000 km. ca. or 45°.			
	iP	12 28 59.6	0.8	17.0
	i(PP)	30 41.8	0.4	16.0
	i	33 39.8	0.5	7.0
	eL	42 07.8	6.5	4.0
28	C & GS 13-01-14.2; 60.1 N., 144.6 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 5.1 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	i	13 08 57.5	0.5	6.5
28	C & GS 13-27-38.5; 60.3 N., 147.1 W. h about 15 km. Prince William Sound, Alaska aftershock Mag. 4.9 SD 0.4 (CGS) (P-H) = 4,445 km. ca. or 40°.			
	i	13 35 08.0	0.5	3.5
28	C & GS 13-47-37.0; 57.0 N., 152.8 W. h about 15 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.2 (CGS) (P-H) = 4,890 km. ca. or 44°.			
	e	13 55 41.5	0.4	4.0

DATE	PHASE	Time G.C.T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
March				
28	e	14 01 20.5	0.5	1.8
28	C & GS 14-01-57.6; 56.5 N., 154.4 W. h about 25 km. Prince William Sound, Alaska aftershock, Mag. 5.1 SD 0.4 (CGS) (P-H) = 5,000 km. ca. or 45°.			
	e	14 10 07.5	0.3	1.6
28	C & GS 14-47-37.1; 60.4 N., 146.5 W., h about 10 km. Prince William Sound, Alaska aftershock, Mag. 6.3 (Pas), 5 1/4 - 6 (Brk), 6 1/2 - 6 3/4 (Pal), 5.7 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	iP	14 55 20.3	0.8	20.0
	e(PP)	56 01.3	0.5	4.0
	i(PPP)	56 57.3	0.8	17
	eL	15 09 33.3	2.0	6.0
28	C & GS 15-51-50.7; 58.8 N., 149.9 W. h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.5 (CGS) (P-H) = 4,665 km. ca. or 42°.			
	e	15 59 43	0.4	2.0
28	C & GS 15-55-25.8; 59.7 N., 146.3 W. h about 10 km. Prince William Sound, Alaska aftershock, Mag. 4.7 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	e	16 03 07	0.4	3.0
28	C & GS 16-44-35.9; 59.3 N., 147.8 W. h about 25 km. Prince William Sound, Alaska aftershock, Mag. 4 3/4 - 5 (Brk), 5.3 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	i	16 52 19.9	0.4	5.0
28	C & GS 17-47-17.0; 60.4 N., 145.7 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.7 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	i	17 54 56.7	0.4	3.4
28	C & GS 60.5 N., 148.4 W. h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.3 (CGS)			
	e	18 54 24.5	0.4	2.8
28	C & GS 20-29-08.6; 59.8 N., 148.7 W. h about 40 km. Prince William Sound, Alaska aftershock, Mag. 6.6 (Pas), 6 1/2 - 6 3/4 (Brk)(Pal) 5.8 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.			
	iP	20 36 54.2	0.5	28.0
	eL	48 07.2	6.0	5.5
28	C & GS 22-09-43.2; 58.0 N., 153.2 W. , h about 33 km. Prince William Sound, Alaska aftershock Mag. 4.7 SD 0.3 (CGS) (P-H) = 5,000 km. ca. or 45°.			
	e	22 17 54.5	0.5	2.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
March				
28	C & GS 22-22-03.1; 60.3 N., 145.3 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.6 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	i	22 29 40.9	0.4	3.5
28	C & GS 22-28-47.0; 58.2 N., 150.4 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 5.2 SD 0.4 (CGS) (P-H) = 4,727 km. ca. or 42.5°.			
	i	22 36 40.9	0.5	6.0
28	C & GS 23-46-22.0; 57.5 N., 151.1 W. h about 33 km. Prince William Sound, Alaska aftershock, Mag. 5.0 (Pas), 5 1/2 - 5 3/4 (Brk), 5.2 SD 0.5 (CGS) (P-H) = 4,610 km. ca. or 41.5°.			
	iP	23 54 17.7	0.5	10.0
29	C & GS 01-09-36.4; 59.8 N., 149.2 W. h about 20 km. Prince William Sound, Alaska aftershock Mag. 5.2 (Pas), 5 1/4 - 5 1/2 (Brk), 5 1/2 (Pal), 5.5 SD 0.4 (CGS) (P-H) = 4,665 km. ca. or 42°.			
	iP	01 17 28.4	0.5	16.0
	iPPP	01 19 28.4	0.4	5.0
29	C & GS 01-29-33.7; 57.5 N., 151.3 W. h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.6 (Pas), 5 3/4 - 6 (Brk), 5.6 SD 0.2 (CGS) (P-H) = 4,780.			
	iP	01. 37 31.3.	0.4	14.0
29	C & GS 01-48-18.5; 56.3 N., 153.7 W. h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.8 (CGS) (P-H) = 4,890 km. ca. or 44°.			
	i	01 56 26.2	0.4	3.4
29	C & GS 02-16-29.8; 58.3 N., 149.7 W. h about 25 km. Prince William Sound, Alaska aftershock, Mag. 4.9 SD 0.2 (P-H) = 4,665 km. ca. or 42°			
	e	02 24 21.1	0.4	2.8
29	C & GS 02-25-25.1; 57.0 N., 151.7 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 5.2 SD 0.2 (CGS) (P-H) = 4,780 km. ca. or 43°.			
	e	02 33 24.1	0.5	2.6
	iS	39 47.1	0.5	2.6
29	C & GS 03-07-19.5; 59.7 N., 148.8 W., h about 30 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.2 (CGS) (P-H) = 4,665 km. ca. or 42°.			
	i	03 15 07.0	0.7	3.6

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
March				
29	C & GS 03-25-24.7; 60.4 N., 144.7 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.3 SD 0.3 (CGS) (P-H) = 4,445 km. ca. or 40°.			
	i	03 32 59.9	0.5	2.2
29	C & GS 03-38-38.1; 60.7 N., 149.1 W. h about 40 km. Prince William Sound, Alaska aftershock, Mag. 5.1 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.			
	i	03 46 26.9	0.5	2.6
29	C & GS 04-12-15.7; 60.2 N., 145.5 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 5.2 (Pas), 4 3/4 - 5 (Brk), 5.3 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	iP	04 19 53.6	0.5	17.0
29	C & GS 04-51-53.3; 56.8 N., 152.4 W., h about 40 km. Prince William Sound, Alaska aftershock, Mag. 4.8 SD 0.3 (CGS) (P-H) = 4,890 km. ca. or 44°.			
	e	04 59 53.6	0.4	2.0
29	C & GS 05-08-25.8; 56.7 N., 152.7 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.6 SD 0.3 (CGS) (P-H) = 4,890 km. ca. or 44°.			
	i	05 16 29.5	0.4	1.6
29	C & GS 05-21-09.8; 57.1 N., 150.4 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.4 SD 0.4 (CGS) (P-H) = 4,780 km. ca. or 43°.			
	e	05 29 06.5	0.4	4.0
29	C & GS 05-37-47.4; 56.9 N., 153.3 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 4.8 SD 0.2 (CGS) (P-H) = 4,890 km. ca. or 44°.			
	i	05 45 53.5	0.2	6.0
29	C & GS 05-51-58.0; 58.3 N., 150.5 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.7 SD 0.2 (CGS) (P-H) = 4,890 km. ca. or 44°.			
	e	05 59 59.4	0.5	2.0
29	C & GS 06-04-44.5; 56.1 N., 154.3 W., h about 30 km. Prince William Sound, Alaska aftershock, Mag. 5.8 (Pas), 5 1/4 - 5 1/2 (Brk), 6 - 6 1/4 (Pal), 5.6 SD 0.2 (CGS) (P-H) = 5,000 km. ca. or 45°.			
	i	06 12 58.4	0.5	6.4

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
March								
29	C & GS 06-29-39.4; 58.1 N., 149.8 W., h about 33 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.							
	i	06 37 30.3	0.6			4.4		
29	C & GS 06-38-09; 58.6 N., 148.9 W. h about 33 km. Prince William Sound, Alaska aftershock, Mag. 4.6 SD 0.4 (CGS) (P-H) = 4,665 km. ca. or 42°.							
	i 06	45 57.3	0.4		1.6			
29	C & GS 07-05-17.1; 59.0 N., 150.2 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 4.7 SD 0.5 (CGS) (P-H) = 4,780 km. ca. or 43°.							
29	C & GS 07-18-08.0; 57.0 N., 151.8 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 4.8 SD 0.4 (CGS) (P-H) = 4,780 km. ca. or 43°.							
	i	07-26-08.1	0.3			2.2		
29	C & GS 07-52-46.4; 56.1 N., 154.2 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 4.9 (Pas), 4.8 SD 0.2 (CGS) (P-H) = 5,000 km. ca. or 45°.							
	iP	08 00 56	0.4			8.5		
29	C & GS 10-08-02.4; 60.0 N., 148.6 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 5.0 (Pas), 5 1/4 - 5 1/2 (Brk), 5.3 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.							
	iPN	10 15 51.7				0.8		1.5
	eN	30 29.7			5.0			12.6
29	C & GS 12-12-09.7; 57.2 N., 152.0 W., about 25 km. Prince William Sound, Alaska aftershock, Mag. 4.6 SD 0.3 (CGS) (P-H) = 4,890 km. ca. or 44°.							
	e	12 20 14.1			10.0			9.0
29	C & GS 16-40-57.4; 59.7 N., 147.0 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 5.8 (Pas), 5 1/2 - 5 3/4 (Brk), 5.6 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.							
	e(P)N	16 48 45.0			3.6			8.0
	eLN	17 22 48.0			8.0			7.0
30	C & GS 00-08-25; 60.2 N., 146.3 W., h about 33 km. Prince William Sound, Alaska aftershock, Mag. 3.7 (CGS) (P-H) = 4,445 km. ca. or 40°.							
	eLN	00 15 56.5			8.0			6.0

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
30	C & GS 02-18-06.3; 56.6 N., 152.9 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 6.6 (Pas), 6 1/2 - 6 3/4 (Brk), 6 3/4 (Pal), 5.8 SD 0.4 (CGS) (P-H) = 4,890 km. ca. or 44°.									
	ePN	02	26	14.0		5.0				12.0
	eSN		32	46.0		9.0				42.0
	eLN		41	12.0		16.0				125.0
30	iPZN	04	57	55.8	0.5			3.6		
30	C & GS 07-09-34.0; 59.9 N., 145.7 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 6.2 (Pas), 5 3/4 - 6 (Brk), 6 1/4 - 6 1/2 (Pal), 5.6 SD 0.3 (CGS) (P-H) = 4,390 km. ca. or 40.5°.									
	iPZN	07	17	12.3	0.6	4.0		21		7.5
	eLZN	07	30	57.6	10.0	7.0		8.0		178.0
30	C & GS 07-56-29.1; 56.3 N., 154.4 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.3 (CGS) (P-H) = 4,445 km. ca. or 40°.									
	e	08	04	02.5	0.8			2.0		
30	C & GS 09-23-05.0; 59.9 N., 145.6 W., h about 33 km. Prince William Sound, Alaska aftershock, Mag. 4.5 SD 0.3 (CGS) (P-H) = 4,445 km. ca. or 40°.									
	i	09	30	40.8	1.0			2.4		
30	C & GS 09-57-32.5; 60.9 N., 145.1 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.6 SD 0.2 (CGS) (P-H) = 4,445 km. ca. or 40°.									
	e	10	05	09.8	0.8			1.4		
30	C & GS 10-15-51.7; 60.4 N., 146.6 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.4 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.									
	e	10	23	33.7	1.0			1.4		
30	C & GS 10-59-27.6; 58.4 N., 149.2 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.									
	i	11	07	17.1	1.2			2.4		
30	C & GS 11-05-47.4; 60.4 N., 146.8 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.4 SD 0.4 (CGS) (P-H) = 4,555 km. ca. or 41°.									
	e	11	13	30.6	0.8			2.4		

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
30	C & GS 11-48-40.4; 56.4 N., 152.5 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 5.2 SD 0.4 (CGS) (P-H) = 4,890 km. ca. or 44°.							
	iP	11 56 43.6	0.6			4.4		
30	C & GS 12-05-43.5; 60.1 N., 147.0 W. h about 25 km. Prince William Sound, Alaska aftershock, Mag. 5.0 (Pas), 5.0 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	iP	12 13 26.0	1.0			4.4		
30	C & GS 12-14-28.4; 58.0 N., 151.6 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.3 (CGS) (P-H) = 4,780 km. ca. or 43°.							
	iP	12 22 27.5	0.6			3.0		
30	C & GS 12-38-16.0; 59.7 N., 146.9 W. h about 30 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	iP	12 45 56.5	1.2			5.5		
	eLN	12 58 05.5		12.5			13	
30	C & GS 13-03-34.9; 56.5 N., 152.7 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 5.3 (Pas), 4 3/4 - 5 (Brk), 5 1/2 - 5 3/4 (Pal), 5.3 (CGS) (P-H) = 4,890 km. ca. or 44°.							
	iPZN	13 11 39.0	0.8	3.2		8.0		5.5
30	C & GS 13-32-48.6; 56.4 N., 152.6 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.8 SD 0.4 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	e	13 40 21.9	1.2			3.5		
30	C & GS 14-10-48.6; 57.4 N., 152.3 W., h about 30 km. Prince William Sound, Alaska aftershock, Mag. 5.1 SD 0.2 (CGS) (P-H) = 4,890 km. ca. or 44°.							
	i	14 18 50.3	0.5			4.0		
30	C Y GS 15-07-49.3; 58.7 N., 149.6 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 5.3 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.							
	iP	15 15 40.7	1.0			13.0		
30	C & GS 16-09-28.4; 56.6 N., 152.1 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 5.5 (Pas), 5 1/2 - 5 3/4 (Brk) 5.5 SD 0.3 (CGS) (P-H) = 4,780 km. ca. or 43°.							
	iPZN	16 17 29.1	1.0	3.6		6.8		6.2
	eSN	23 23.1		4.2				6.0
	eLZN	35 21.1		18.0				23.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
March				
30	e	16 47 09.6	1.0	2.2
30	C & GS 16-53-07.7; 56.6 N., 152.2 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.3 (CGS) (P-H) = 4,890 km. ca. or 44°.			
	e	17 01 11.0	0.6	1.5
30	C & GS 17-22-06.2; 60.7 N., 145.5 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.6 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	i	17 29 45.5	1.0	3.5
30	C & GS 19-55-18.2; 57.9 N., 151.1 W., h about 30 km. Prince William Sound, Alaska aftershock, Mag. 4.5 SD 0.4 (CGS) (P-H) = 4,780 km. ca. or 43°.			
	e	20 03 12.8	0.6	1.5
30	C & GS 20-32-46.8; 59.4 N., 145.1 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.5 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.			
	e	20 40 25.7	1.0	1.8
30	C & GS 21-32-14.9; 59.9 N., 147.6 W., h about 33 km. Prince William Sound, Alaska aftershock, Mag. 4.5 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	i	21 39 58.6	0.8	2.0
30	C & GS 22-21-25.2; 60.3 N., 146.9 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.7 SD 0.4 (CGS) (P-H) = 4,610 km. ca. or 41.5°.			
	i	22 29 09.0	0.6	1.8
31	C & GS 23-03-34.5; 57.3 N., 152.7 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.4 (CGS) (P-H) = 4,890 km. ca. or 44°.			
	i	23 11 38.4	0.8	4.5
31	C & GS 23-51-46.0; 59.6 N., 147.9 W., h about 33 km. Prince William Sound, Alaska aftershock, Mag. 4.6 SD 0.5 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	i	23 59 28.8	1.0	4.6
31	C & GS 00-14-11.7; 45.3 N., 151.0 E., h about 60 km. Kurile Islands Mag. 5 1/2 - 5 3/4 (Pal), 5.3 SD 0.3 (CGS) (P-H) = 8,780 km. ca. or 79°.			
	iP	00 26 14.7	1.2	10.5
	eS	33 33.2	1.0	1.8

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
March				
31	C & GS ---- 02-45-26.9; 59.7 N., 149.8 W., h about 10 km. Prince William Sound, Alaska aftershock, Mag. 4.7 SD 0.2 (CGS) (P-H) = 4,335 km. ca. or 39°.			
	e	00 52 39.7	0.8	2.5
31	e	01 09 08.1	0.8	1.4
31	C & GS 01-40-54.5; 60.3 N., 145.3 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.5 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	i	01 48 32.6	1.0	2.0
31	C & GS 01-57-54.3; 57.6 N., 150.1 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.8 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.			
	i	02 05 48.2	1.0	2.0
31	C & GS 02-43-35.6; 56.7 N., 154.0 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.7 SD 0.3 (CGS) (P-H) = 4,890 km. ca. or 44°.			
	e	02 51 43.9	0.6	1.0
	iPP	53 21.4	1.2	2.0
31	C & GS 04-20-16.3; 60.3 N., 146.3 W., h about 5 km. Prince William Sound, Alaska aftershock, Mag. 4.9 SD 0.4 (CGS) (P-H) 4,555 km. ca. or 41°.			
	i	04 27 59.2	1.2	7.0
31	C & GS 04-46-06.1; 57.6 N., 151.2 W., h about 33 km. Prince William Sound, Alaska aftershock, Mag. 4.7 SD 0.2 (CGS) (P-H) = 4,780 km. ca. or 43°.			
	e	04 54 02.1	0.8	1.5
31	C & GS 07-08-54.5; 58.3 N., 149.3 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.5 SD 0.4 (CGS) (P-H) = 4,665 km. ca. or 42°.			
	e	07 16 44.3	0.6	1.4
31	C & GS 09-01-30.2; 50.8 N., 130.2 W., h about 15 km. Vancouver Island region, Mag. .6 (Pas), 6 - 6 1/4 (Brk), 6 1/2 - 6 3/4 IPal) 5.6 SD 0.4 (CGS) (P-H) = 3,335 km. ca. or 30°.			
	iPZEN	09 07 36.5	1.5 3.0 3.0	9.0 9.0 6.5
	e(S)EN	12 16.0	10.0 9.0	22.0 16.0
	eLZEN	17 09.0	4.0 13.0 10.0	5.0 98.0 80.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
March				
31	C & GS 11-03-35.4; 58.9 N., 149.9 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.3 (CGS) (P-H) = 4,780 km. ca. or 43°.			
	iP	11 11 28.2	1.0	6.0
31	iP	11 27 00.7	1.0	4.0
31	C & GS 11-52-13.9; 60.1 N., 146.4 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.4 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.			
31	C & GS 16-32-07.2; 57.3 N., 152.0 W., h about 33 km. Prince William Sound, Alaska aftershock, Mag. 4.3 SD 0.3 (CGS) (P-H) = 4,780 km. ca. or 43°.			
	e	16 40 06.5	0.8	1.5
31	C & GS 16-43-45.5; 59.7 N., 148.7 W., h about 33 km. Prince William Sound, Alaska aftershock, Mag. 4.6 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.			

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The University of Arkansas Seismograph Station is located on the University Farm, 2.5 miles northwest of the main campus at Fayetteville. Coordinates of the station are 36° 05.46' north latitude and 94° 11.47' west longitude. Altitude above mean sea level is 1,325 feet. The seismometer pier rests on the Boone limestone of lower Mississippian age. Approximately 2,500 feet of limestone, shale and sandstone overlie the pre-Cambrian crystalline rocks in the vicinty of the station.

University of Arkansas
Seismograph Station
Department of Geology
Fayetteville, Arkansas

Fayetteville
April - June 1964.

UNIVERSITY OF ARKANSAS

SEISMOLOGICAL BULLETIN

Volume XIII Number 2

The University Of Arkansas Seismograph Station

Operated by the University's Department of Geology

in conjunction with the

United States Coast and Geodetic Survey

FAYETTEVILLE SEISMOGRAPH STATION

Volume 13, Number 2, June 1966
Data for April, May, June 1964

D

Instruments

Vertical component - Benioff moving coil type, short period electromagnetic-galvanometric, Mass = 100 lbs.

Seismometer-Benioff moving coil period = 1.1 second
Galvanometer-Geotechnical Corp. period = 0.2 second
Damping ratio - about 15:1 (near critical)
Recording drum speed = 60 mm. per minute

Horizontal components - Wilson - Wilson-Lamison hinges types E-W
N-S electromagnetic - galvanometric

Seismometer period - 6.0 seconds (N-S)
6.0 seconds (E-W)
Galvanometer-General Electric period - 4.1 seconds (N-S)
3.8 seconds (E-W)

Recording drum speed - 30 mm. per minute

Clock - IBM, electrically wound, invar pendulum type.
Accuracy limits generally within one tenth second.

Radio - WWV Time Signal impressed manually by telegraph key in 5th, 10th, and 15th second. Time signals received by a Hallicrafter receiver, S-40B

Vertical-Ground motion trace up (compression)
reading from left to right
N-S - Ground motion trace up - North
E-W - Ground motion trace up - East

(Additional information regarding the station is given on the back cover.)

Information in Remarks column is usually from U. S. Coast and Geodetic Survey epicenter cards.

Bulletin compiled by W. Bruce Saunders

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
April								
1	C & GS 00-01-10.6; 60.4 N., 146.4 W., h about 10 km. Prince William Sound, Alaska aftershock, Mag. 4.4 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	iPZ	00 08 53.5	0.8			5.6		
	eSEN	23 13.5		6.0	4.0		7.0	4.6
1	C & GS 03-05-49.9; 60.1 N., 146.1 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.4 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	e	03 13 30.9	0.8			2.4		
1	C & GS 03-23-17.2; 57.2 N., 151.3 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 5 1/4 (Pal), 5.1 SD 03 (CGS) (P-H) = 4,780 km. ca. or 43°.							
	ePZ	03 31 15.9	0.8			4.0		
	ePP	33 14.4	1.0			2.0		
	eLEN	48 13.8		12.0	13.0		8.0	6.0
1	i	04 34 34.2	0.8			2.0		
1	C & GS 04-49-26; 57.2 N., 151.4 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.8 SD 0.3 (CGS) (P-H) = 4,780 km. ca. or 43°.							
	i	04 57 25.0	0.8			1.6		
1	C & GS 05-33-02.9; 59.9 N., 146.0 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.5 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	eP	05 40 41.4	0.6			4.0		
	eLEN	55 03.4		6.0	7.0		8.0	5.0
1	C & GS 06-16-21; 60.2 N., 147.1 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.8 SD 0.2 (CGS) (P-H) = 4,610 km. ca. or 41.5°.							
	iP	06 24 06.3	0.8			4.0		
1	C & GS 06-39-48.5; 60.4 N., 146.7 W., h about 10 km. Prince William Sound, Alaska aftershock, Mag. 4.4 SD 0.4 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	e	06 47 32.3	1.0			3.0		
1	C & GS 08-33-22.0; 59.9 N., 146.6 W., h about 10 km. Prince William Sound, Alaska aftershock, Mag. 4.5 SD 0.4 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	i	08 41 04.9	1.0			2.0		

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
April								
1	C & GS 11-01-25.5; 60.4 N., 146.5 W., h about 10 km. Prince William Sound, Alaska aftershock, Mag. 4.6 SD 0.4 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	i	11 08 08.9	1.0			1.8		
1	C & GS 13-54-31.9; 57.5 N., 151.3 W., h about 20 km. Prince William Sound, Alaska aftershock, Mag. 4.9 SD 0.3 (CGS) (P-H) = 4,780 km. ca. or 43°.							
	e	14 02 30.4	0.6			3.4		
1	C & GS 16-29-09.0; 59.7 N., 146.5 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.7 SD 0.4 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	eP	16 36 49.4	1.0			3.0		
2	e	01 31 06.8	1.0			4.0		
2	eLEN	02 28 54.7		8.0	11.0		39.0	58.0
2	C & GS 03-49-00; 12.5 N., 87.8 W., h about 32 km. near west coast of Nicaragua, Mag. 4.2 SD 0.5 (CGS) (P-H) = 2,720 km. ca. or 24.5°.							
	ePZ	03 54 15.5	1.0			3.5		
2	eLEN	22 55 50.0		3.5	3.0		55.0	36.0
3	e	04 31 51.0	0.5			3.5		
3	C & GS 05-56-23.5; 15.4 N., 94.1 W., h about 33 km. off coast of Oaxaca, Mexico, Mag. 4.2 (CGS) (P-H) = 2,335 km. ca. or 21°.							
	eZN	06 01 05.3	0.4			2.4		
3	C & GS 08-38-42.8; 59.6 N., 144.7 W., h about 10 km. Prince William Sound, Alaska aftershock, Mag. 5.4 SD 0.3 (CGS) (P-H) = 4,445 km. ca. or 40°.							
	iPZN	08 46 17.8	1.3			5.5		
3	C & GS 08-46-27; 57.9 N., 150.5 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 5.5 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	iPZN	08 54 17.3	1.0			5.0		
	eSZEN	09 00 13.9		5.0	6.0		14.0	12.0
	eLZEN	02 05.9	9.0	9.0	10.0	3.0	24	20
3	C & GS 13-46-38.0; 8.7 S., 78.7 W., h about 82 km. near coast of Central Peru, Mag. 4.6 (CGS) (P-H) = 5,110 km. ca. or 46°.							
	e	13 55 01.9	1.0			3.0		

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
April								
3	C & GS 22-33-42.2; 61.6 N., 147.6 W., h about 40 km. Prince William Sound, Alaska aftershock, Mag. 6(Pas), 6 1/4 - 6 1/2 (Pal), 5 1/4 (Brk), 5.7 SD 0.4 (CGS) (P-H) = 4,665 km. ca. or 42°.							
	iPZEN	22 41 28.7	0.8	2.0	2.0	8.0	8.0	8.0
	e(PPP)EN	43 21.7		3.0	3.0		18.0	16.0
	eSZEN	47 28.7		5.6	4.0		19.0	12.0
	eLZEN	50 54.7	5.0	10.0	9.0	11.0	54.0	48.0
4	C & GS 04-34-56.9; 60.3 N., 146.5 W., h about 5 km. Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.4 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	i	04 42 40.3	0.8			4.0		
4	C & GS 60.1 N., 146.7 W., h about 40 km. Prince William Sound, Alaska aftershock, Mag. 5.6 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	iP	05 01 42.3	1.0			10.0		
	ePP	03 21.8	2.0			4.0		
	eL	16 25.3	4.0			5.0		
4	C & GS 06-43-20.2; 12.5 N., 87.7 W., h about 41 km. off west coast of Nicaragua , Mag. 4.3 (CGS) (P-H) = 2,665 km. ca. or 24°.							
	e	06 48 33.5	1.0			4.0		
4	C & GS 06-53-25.9; 60.4 N., 146.0 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.8 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	e	07 01 06.5	1.0			4.5		
4	i	08 48 33.6	0.8			4.0		
	eL	09 11 16.6	11.0			3.0		
4	C & GS 09-10-55.1; 56.9 N., 152.7 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 5 3/4 - 6 (Pal), 5.9 SD 0.4 (CGS) (P-H) = 4,890 km. ca. or 44°.							
	iP	09 19 00.7	0.8			19.0		
4	C & GS 15-08-12.3; 59.6 N., 146.9 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.7 SD 0.4 (CGS) (P-H) = 4,555 km. ca. or 40°.							
	i	15 15 54.2	1.0			2.6		
4	C & GS 17-46-08.6; 56.3 N., 154.4 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 6 1/2 (Pal), 5 3/4 - 6 (Brk), 6 1/2 - 6 3/4 (Pal) 5.7 SD 0.4 (CGS) (P-H) = 5,000 km. ca. or 45°.							
	iP	17 54 19.4	1.0			19.0		
	e	59 52.4	1.2			4.0		

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
April								
4	C & GS 17-59-43.3; 56.4 N., 154.5 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 5 1/4 (Brk), 6 1/2 - 6 3/4 (Pal), 5.5 SD 0.3 (CGS) (P-H) = 5,000 km. ca. or 45°.							
	eP	18 07 54.4	0.8			7.0		
	ePP	09 14.4	1.2			4.5		
	eL	17 48.4	10.0			5.0		
4	C & GS 22-16-54.5; 59.4 N., 145.2 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 5 1/2 - 5 3/4, (Pal), 5.1 SD 0.2 (CGS) (P-H) = 4,445 km. ca. or 40°.							
	iP	22-24-28.7	1.0			3.6		
5	C & GS 01-22-13.3; 56.2 N., 153.5 W., h about 25 km. Prince William Sound, Alaska aftershock, Mag. 6 - 6 1/4 (Pal), 5.4 SD 0.4 (CGS) (P-H) = 4,590 km. ca. or 44°.							
	iP	01 30 20.0	0.8			7.0		
5	C & GS 01-41-45.0; 56.2 N., 153.3 W., h about 35 km. Prince William Sound, Alaska aftershock, Mag. 5 3/4 - 6 (Pal), 5.2 SD 0.2 (CGS) (P-H) = 4,890 km. ca. or 44°.							
	iP	01 49 50	1.0			8.0		
5	C & GS 07-29-03.5; 60.4 N., 146.7 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.4 SD 0.1 (CGS) (P-H) = 4,665 km. ca. or 42°.							
5	C & GS 11-18-38.9; 41.9 S., 83.7 W., h about 33 km. off coast of Southern Chile, Mag. 5.3 SD 0.2 (CGS) (P-H) = 8,665 km. ca. or 70°.							
	i	11 30 34.3	1.0			4.0		
5	C & GS 17-40-43.1; 56.3 N., 152.9 W., h about 10 km. Prince William Sound, Alaska aftershock, Mag. 4.9 SD 0.2 (CGS) (P-H) = 4,780 km. ca. or 43°.							
	iP	17 48 41.5	0.8			1.6		
5	C & GS 19-28-18.1; 60.2 N., 146.7 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 5 - 5 1/4 (Brk), 5 1/2 (Pal), 5.8 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	iP	19 36 01.5	0.8			15.5		
	ePP	37 40.5	1.6			4.5		
	eL	50 42.5	5.0			3.5		
6	C & GS 10-42-36.3; 59.9 N., 145.6 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.8 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	iP	10 50 14.3	1.2			4.5		
	eLEN	04 35.3		6.2	6.5		17.0	10.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp.(mms) Z E N
April				
6	C & GS 17-35-50.6; 59.9 N., 147.8 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.9 SD 0.2 (CGS) (P-H) = 4,780 km. ca. or 43°.			
	e	17 43 37.0	1.0	4.5
7	C & GS 01-43-28.7; 58.5 N., 154.5 W., h about 30 km. Prince William Sound, Alaska aftershock, Mag. 5.4 SD 0.3 (CGS) (P-H) = 5,000 km. ca.			
	eP	01 51 39.7	0.6	3.0
	eLEN	02 08 24.7	12.0 16.0	7.0 5.5
7	i	03 43 11.0	0.6	2.5
7	e	12 39 12.7	1.0	3.0
7	e	17 10 21.8	0.8	2.6
	eLEN	17 27 17.8	13.0 14.5	5.0 4.0
7	eP	18 37 25.8	0.6	7.0
	eLEN	54 23.8	10.0	3.5
8	e	02 43 27.0	0.6	2.6
8	C & GS 10-58-09.1; 45.8 N., 1150.8 E., h about 40 km. Kurile Islands Mag. 5 1/2 - 5 3/4 (Brk), 6 1/4 - 6 1/2 (Pal), 5.5 SD 0.3 (CGS) (P-H) = 8,890 km. ca. or 80°.			
	iPEN	11 10 14.1	2.0 1.6	4.0 4.0
8	C & GS 19-33-19.0; 59.6 N., 147.0 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 5.1 SD 0.3 (CGS) (P-H) = 4,555 km. ca.			
	eEN	19 41 04.3	1.5	2.0
	eSEN	56 26.3	6.0 4.5	24.0 14.0
	eSSEN	59 01.3	12.0 10.4	26.0 13.0
8	eEN	20 12 23.3	12.0 10.0	20.0 17.0
8	eEN	04 20 20.5	3.0 3.2	4.0 5.0
	eEN	25 24.0		
9	C & GS 12-33-23.9; 59.5 N., 148.9 W., h about 20 km., Prince William Sound, Alaska aftershock, 4.7 SD 0.2 (CGS) (P-H) = 4,780 km. ca. or 43°.			
9	iPZEN	13 13 54.6	1.0	7.6
	eLZEN	28 09.6	4.0 16.0 16.0	2.5 41.0 28.0
9	C & GS 21-54-42.1; 18.5 S., 71.5 W., h about 39 km., Southern Peru, Felt: Arequipa, Mag. 5.2 SD 0.2 (CGS) (P-H) = 6,335 km. ca. or 57°.			
	iP	22 04 34.2	1.4	4.0

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
April										
10	C & GS 01-08-00.2; 58.4 N., 150.6 W., h about 15 km. Prince William Sound, Alaska aftershock, 5 - 5 1/4 (Pal) 5.5 SD 0.4 (CGS) (P-H) = 4,890 km. ca. or 44°.									
	iPZEN	01	15	57.2	0.8			5.0		
	eSSEN		32	12.7		16.0	16.0		7.5	6.5
10	C & GS 19-05-52.6; 59.7 N., 148.2 W., h about 15 km., Prince William Sound, Alaska aftershock, 5 - 5 1/4 (Pal), 5.2 SD 0.4 (CGS) (P-H) = 4,780 km. ca. or 43°.									
10	C & GS 21-44-06.7; 60.1 N., 153.7 W., h about 10 km. Prince William Sound, Alaska aftershock. 5 1/2 - 5 3/4 (Pal), 5.6 SD 0.4 (CGS) (P-H) = 5,000 km. ca. or 45°.									
	ePZEN	21	52	17.8	0.8			13.0		
	eSEN		58	57.3		4.0	4.0		4.5	6.5
	e(SS)EN	22	08	20.3		6.2	6.0		18.5	10.0
12	C & GS 09-34-44.1; 56.6 N., 152.1 W., h about 20 km. Prince William Sound, Alaska aftershock, 5.1 SD 0.4 (CGS) (P-H) = 4,890 km. ca. or 44°.									
	eP	09	42	45.9	0.5			1.2		
12	C & GS 12-48-02.2; 56.6 N., 151.3 W., h about 33 km. Prince William Sound, Alaska aftershock 5.1 SD 0.4 (CGS) (P-H) = 4,780 km. ca. or 43°.									
	e	12	55	58.8	1.0			2.0		
	eL	13	18	21.8						
12	iP	17	29	39.7	0.5			4.0		
	e		41	47.7	4.0			2.2		
13	C & GS 01-14-21.1; 40.0 N., 51.9 E., h about 33 km. Caspian Sea, Mag. 4.8 (CGS) (P-H) = 890 km. ca. or 97.5°.									
	e	01	27	04.4	1.0			6.0		
13	C & GS 08-30-03.6; 45.3 N., 18.1 E., h about 33 km. Northern Yugoslavia. Two killed and about 100 injured in Northern Yugoslavia. Extensive property damage in Northern Yugoslavia and Southern Hungary. (P-H) = 8,780 km. ca. or 79°.									
	i	08	42	03.2	1.0			2.5		
13	iP	12	33	06.1	0.8			2.5		
	e		46	55.1	5.0			4.2		
13	iP	14	12	58.5	1.0			8.0		

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
April								
13	C & GS 16-14-06.3; 56.6 N., 152.1 W., h about 33 km. Prince William Sound, Alaska aftershock, 5.1 SD 0.3 (CGS) (P-H) = 4,890 km. ca. or 44°.							
	i	16 22 07.0	0.5			2.0		
13	C & GS 21-25-33.0; 57.5 N., 153.9 W., h about 30 km. Prince William Sound, Alaska aftershock, 5.5 SD 0.3 (CGS) (P-H) = 4,890 km. ca. or 44°.							
	iP	21 33 40.8	0.8			5.0		
13	C & GS 21-43-16.5; 59.4 N., 143.1 W., h about 35 km., Prince William Sound, Alaska aftershock, 5.1 SD 0.2 (CGS) (P-H) = 4,555 km. ca. or 41°.							
	iP	21 50 40.8	1.5			2.8		
	eS	22 04 18.8	5.0			4.0		
14	C & GS 01-04-28.8; 49.4 N., 155.5 E., h about 60 km. Kurile Islands, Mag. 5.2 SD 0.4 (CGS) (P-H) = 8,555 km. ca. or 77°.							
	i	01 16 05.2	0.5			4.0		
15	C & GS 15-30-47.1; 56.5 N., 154.4 W., h about 35 km., Prince William Sound, Alaska aftershock, 5.5 SD 0.4 (CGS) (P-H) = 4,890 km. ca. or 44°.							
	ePZEN	15 38 57.3	0.8			5.5		
	iSZEN	45 29.3		5.2	6.0		10.5	7.0
	iPPEN	48 49.8		9.0	8.0	10.0	7.5	
	eSSEN	54 47.3		15.0	14.0		24.5	18.0
16	eZEN	05 06 14.9		4.0	3.8		2.8	3.2
16	C & GS 06-20-08.2; 30.8 N., 113.9 W., h about 33 km. Gulf of California, Mag. 4 3/4 (Pas) 4.8 SD 0.4 (CGS) (P-H) = 2110 km. ca. or 19°.							
	e	06 24 13.8						
	ePPEN	29 37.8	4.0	4.2	4.2	2.6	8.0	11.5
16	C & GS 09-18-12; 31.1 N., 113.8 W., h about 29 km. Gulf of California, Mag. 4 3/4 (Pas) 4.3 SD 0.1 (CGS) (P-H) = 2,110 km. ca., or 19°.							
	e	09 22 11.7	0.8			1.0		
	e(PP)EN	27 25.7	3.8	3.0	3.0	2.5	1.5	9.5
16	C & GS 13-43-08.9; 52.1 N., 169.4 W., h about 33 km. Fox Islands, Aleutian Islands, Mag. 4.9 SD 0.5 (CGS) (P-H) = 6,220 km. ca. or 56°.							
	e	13 52 30.1	0.8			3.0		
	e(SS)EN	14 16 12.6		18			3.5	

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
April										
16	C & GS 19-26-57.4; 56.4 N., 152.9 W., h about 30 km. Mag. 5.5 SD 0.4 (CGS) (P-H) = 5,780 km. ca. or 52°.									
	iPZEN	19	35	01.1	0.8			6.0		
	ePPZEN		37	02.1	1.2	4.4	4.0	3.0	7.0	5.0
	e(S)ZEN		41	33.1	1.5			2.0		
	eLZEN		53	02.1	13.0	18.0	17.0	6.0	93.0	105
17	C & GS 04-49-30.5; 56.4 N., 152.9 W., h about 25 km. Prince William Sound, Alaska aftershock, 5.3 SD 0.5 (CGS)(P-H) = 4,890 km. ca. or 44°.									
	ePEN	04	57	37.5		3.0	2.8		4.0	3.8
	e(S)EN	05	04	08.5		7.0	8.0		15.0	9.0
	e(PP)EN		07	44.5		12.0	14.0		9.0	13.5
17	eLEN	09	34	09.6		14.0	14.0		6.0	8.0
17	i	20	01	58.0	1.5			4.0		
18	C & GS 05-27-44.6; 45.5 N., 151.1 E., h about 33 km. Kurile Islands Mag. 5.3 SD 0.2 (CGS) (P-H) = 8,890 km. ca. or 80°.									
	e	05	39	50.5	1.2			3.0		
18	C & GS 20-08-19.7; 56.1 N., 153.7 W., h about 15 km. Prince William Sound, Alaska aftershock, Mag. 4.9 SD 0.4 (CGS) (P-H) = 5,000 km. ca. or 45°.									
	e	20	16	31.2	0.5			1.2		
	e(S)		24	25.2	0.8			1.4		
	eLEN		30	58.7		13.0	14.0		12.0	16.5
19	C & GS 05-13-01.6; 41.7 S., 83.9 W., h about 33 km. off coast of Southern Chile, Mag. 5.5 SD 0.1 (CGS) (P-H) = 8,000 km. ca. or 72°.									
	i	05	24	37.0	1.5			6.5		
20	eEN	03	56	19.5		3.8	3.0		5.0	3.2
20	C & GS 11-56-41.6; 61.4 N., 147.3 W., h about 30 km. Prince William Sound, Mag. 6 1/2 (Pas), 6 3/4 (Brk), 6 - 6 1/4 (Pal), 5.7 SD 0.4 (CGS) Felt, Anchorage; USC & GSS Surveyor, anchored at 61° 06.4' N., 146° 20.6' W. (P-H) = 4,665 km. ca. or 42°.									
	ePEN	12	04	25.6		1.8	1.5		8.0	9.0
	e(PP)EN		06	21.1		3.0	3.0		15.0	14.0
	eLEN		17	52.6		4.5	5.0		55.0	83.0
20	eEN	16	40	03.1		6.0	6.0		5.0	9.0

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
April										
21	C & GS 05-01-35.7; 61.5 N., 147.4 W., h about 40 km. Mag. 6 (Pas) 4 3/4 - 5 (Bks) 5.4 SD 0.3 (CGS) Felt: Anchorage; USC & GSS Surveyor, anchored at 61° 06.4' N., 146° 20.6' W. (P-H) = 5,445 km. ca. or 49°.									
	iP	05	09	20.5	1.0			10.5		
	eLEN		23	09.0		6.0	6.2		9.0	13.5
23	C & GS 5.3 S., 134.0 E., h about 33 km. Aru Islands region. Felt: Darwin, Australia, Mag. 6.4 (CGS) (P-H) = 13,890 km. ca. or 125°.									
	i(P)ZEN	03	51	53.4	1.0			8.0		
	ePPEN		53	49.4	2.5	3.0	5.0	4.5	7.0	6.0
	e(S)EN	04	03	54.4		8.2	9.0		4.0	8.5
23	iPZEN	15	04	31.0	0.8			7.5		
24	C & GS 01-20-55; 31.3 N., 93.8 W., h about 33 km. Texas-Louisiana border region- felt., Mag. 3.7 (CGS) (P-H) = 500 km. ca. or 4.5°									
	ePZEN	01	22	04.7	0.5	0.8	0.5	9.0	6.0	3.5
24	C & GS 03-51-05.0; 59.5 N., 144.5 W., h about 33 km. Prince William Sound, Alaska aftershock, 5.2 SD 0.3 (CGS) (P-H) = 4,445 km. ca. or 40°.									
	eP	03	58	32.5	1.0			1.8		
	eLZEN	04	12	37.5		6.0	6.0		6.0	19
24	eZN	05	35	18.3	0.6	1.0		2.0	4.5	
24	i(P)ZEN	06	14	44.1	1.0	2.0	2.0	4.0	3.5	3.0
	eLEN		48	29.1			16.0			7.0
24	C & GS 07-33-52.6; 31.6 N., 93.8 W., h about 33 km. Texas-Louisana Border region - felt. Mag. 3.7 (CGS)									
	ePZEN	07	35	00.9	0.5			9.0		
	e(S)ZEN		36	20.9		1.6	1.0	24.0	8.0	4.2
24	eZEN	07	48	26.9	0.5			5.0	2.0	1.0
24	eZEN	12	08	16.1	0.5			2.5		1.5
24	C & GS 14-40-28.3; 13.3 N., 88.8 W., h about 158 km., near coast of El Salvador- felt. Mag. 6 (Pal), 5.1 SD 0.4 (CGS) (P-H) = 2,445 km. ca. or 22°.									
	iPZEN	14	45	18.6	2.0	4.0	5.0	30.5	11.0	28.5
	i(S)EN		49			6.4	6.0		33.0	27.0

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
April										
25	C & GS 09-43-30.7; 59.9 N., 144.9 W., h about 30 km., Prince William Sound, Alaska aftershock, Mag. 5.0 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.									
	iP	09	51	04.9	1.0			6.0		
26	C & GS 01-17-12; 14.9 N., 98.1 W., h about 45 km., near coast of Chiapas, Mexico, Mag. 3.9 (CGS) (P-H) = 2,445 km. ca. or 22°.									
	eP	01	21	58.1	0.8			2.5		
26	iP	14	18	57.0	0.8			12.0		
27	e	01	56	39.7	0.5			6.0		
27	e	07	03	42.0	1.6			2.4		
27	Large quarry (?) blast									
	iPZN	00	31	55.4	0.4			3.0		
	eSZN		32	50.4	0.6	2.0		11.5		5.5
	eZN		33	17.4		6.0		3.5		3.5
28	C & GS 12-21-25.6; 59.0 N., 138.7 W., h about 33 km. near coast of southeastern Alaska, Mag. 4.6 SD 0.2 (CGS) (P-H) = 4,110 km. ca. or 37°.									
	e	12	28	25.3	0.8			1.8		
	eSZN		40	52.3		5.0				7.0
28	Large quarry (?) blast C & GS 21-18-35; 31.2 N., 93.9 W., h about 33 km. Texas-Louisiana border, Felt. (P-H) = 388 km. ca. or 3.5°/									
29	eP	06	33	35.0	1.0			6.5		
30	iP	03	20	55.4	0.9			6.5		
30	eP	03	48	06.3	0.8			1.4		
	eLN	04	03	13.3		8.0				5.0
30	iPZN	06	09	32.8	1.2			6.5		
	iLN		24	03.2		8				14
May										
1	iP	00	34	40.3	2.0			5.5		
1	i	02	05	44.6	1.2			1.9		
4	e	12	12	47.0	1.0			2.5		

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp.(mms) Z E N
May				
5	C & GS 03-26-46.1; 17.7 S., 68.9 W., h about 33 km. Western Bolivia Mag. 4.9 SD 0.2 (CGS) (P-H) = 6,665 km. ca. or 60°.			
	iP	03 36 45.0	1.0	8.0
5	C & GS 08-01-48.4; 45.5 N., 150.1 E., h about 40 km. Kurile Islands Mag. 4.9 SD 0.4 (CGS) (P-H) = 8,890 km. ca. or 80°.			
	eP	08 13 56.7	0.8	4.0
6	C & GS 15-26-35.5; 56.7 N., 152.1 W., h about 15 km., Prince William Sound, Alaska aftershock, 5.4 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.			
	iPZN	15 34 38.6	0.7 3.6	4.0 5.5
	eSN	41 04.1	5.0	4.8
	eLN	53 30.1	16.0	20.0
7	C & GS 04-02-28.7; 51.6 N., 177.3 W., h about 25 km. Andreadot Islands Aleutian Islands, Mag. 5.0 SD 0.4 (CGS) (P-H) = 6,555 km. ca. or 59°.			
	iZ	04 12 25.9	0.6	3.5
7	eZ	06 04 28.4	1.0	2.4
	eLN	45 58.4	24.0	6.0
	eN	59 95.4	17.0	14.0
7	C & GS 07-58-14.3; 40.4 N., 130.9 E., h about 33 km. off coast of Northern Honshu and Hokkaido. Mag. 7 (Pas), 7(Brk) 6 1/2 - 6 3/4 (Pal) 6.2 SD 0.4 (CGS) (P-H)= 9,780 km. ca. or 88°.			
	iPZN	08 11 10.3	1.2 5.0	33.0 24.5
	i(PPP)ZN	14 43.3	2.2 5.2	3.5 25.0
	eSN	21 45.3	9.6	41.0
	e(L)N	43 39.3	28.0	12.5
7	C & GS 08-07-04.3; 40.2 N., 139.4 E., h about 15 km., off coast of Northern Honshu, Japan, Mag. 5.2 (CGS) (P-H) = 9,780 km. ca. or 88°.			
	e(L)Z	08 49 07.3	1.2	2.0
7	C & GS 11-11-04.9; 30.6 N., 137.7 E., h about 469 km. off south coast of Honshu, Japan, Mag. 5.1 SD 0.3 (CGS) (P-H) = 9,665 km. ca. or 87°.			
	eZ	11 23 47.7	0.8	2.0
7	C & GS 12-56-03; 23.9 N., 108.8 W., h about 33 km., Gulf of California Mag. 4.4 SD 0.2 (CGS) (P-H) = 2,335 km. ca. or 21°.			
	eZ	13 00 02.2	1.0	1.0
	C(S)Z	05 11.2		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	12 Trace Amp.(mms) Z	E	N
May										
7	C & GS 20-12-49.3; 40.5 N., 139.0 E., h about 33 km. off west coast at Honshu, Japan; Minor damage in Akita Province, Mag. 5.9 SD 0.3 (CGS) (P-H) = 9.780 km. ca. or 88°.									
	iPZN	20	25	43.5	1.5		4.0	13.5		6.5
	eSN		36	26.0			4.8			14.0
	eLN	21	03	17.0			17.0			9.0
8	C & GS 16-21-49.8; 56.7 N., 154.0 W., h about 25 km., Prince William Sound, Alaska aftershock, Mag. 5.3 SD 0.4 (CGS) (P-H) = 4,665 km. ca. or 42°.									
	iPZN	16	29	59.2	1.0			3.2		
	eLN		46	37.2			13.0			5.5
8	C & GS 21-34-40.6; 60.8 N., 143.6 W., h about 35 km. Prince William Sound, Alaska aftershock, Mag. 5.4 SD 0.3 (CGS) (P-H) = 4,555 km. ca. or 41°.									
	iPZN	21	42	10.1	1.2		2.4	6.0		3.0
	ePPZ		43	47.1	1.5			5.0		
	eLZN		55	29.1	3.5		4.0	3.2		38.0
8	C & GS 23-40-44.1; 52.2 N., 169.5 W., h about 20 km. Andreanot Islands Aleutian Islands, Mag. 5.2 SD 0.3 (CGS) (P-H) = 6,335 km. ca. or 57°.									
	ePZN	23	50	06.0	1.0			4.5		
	eLN	00	12	47.0			16.0			6.0
9	C & GS 02-02-28.8; 52.2 N., 169.6 W., h about 25 km. Andreanot Islands Aleutian Islands, Mag. 5.1 SD 0.4 (CGS) (P-H) = 6,335 km. ca. or 57°.									
	iP	02	11	51.0	0.5			4.5		
11	C & GS 02-17-01.5; 60.8 N., 142.2 W., h about 33 km. Southeastern Alaska, Mag. 4.7 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.									
	e	02	24	25.0	1.0			1.2		
	eLN		37	55.0			12.0			12.0
12	C & GS 18-16-41.9; 56.6 N., 152.4 W., h about 10 km. Alaska afterhsock Mag. 5 1/2 - 5 3/4 (Brk) 6 - 6 1/4 (Pal) 5.3 SD 0.3 (CGS) (P-H) = 4,780 km. ca. or 43°.									
	ePZEN	18	24	46.5	0.8	4.2	4.0	5.2	7.0	5.5
12	C & GS 18-17-07.7; 19.9 S., 173.9 W., h about 33 km., Tonga Islands Mag. 5.5 SD 0.3 (CGS) (P-H) = 10,555 km. ca. or 95°.									
	ePZN	18	30	22.5	1.5	7.0	6.0	2.0	13.0	7.0
	e(PS)ZEN		43	02.0	10.0	16.0	18.0	3.0	32.5	45.0
13	e	05	43	44.5						
	eLZEN	06	11	22.5		18.0	14.0		6.0	5.5

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
May 14	C & GS 11-55-28.2; 62.8 N., 152.3 W., h about 15 km. Alaska aftershock Mag. 4.6 SD 0.4 (CGS) (P-H) = 4,780 km. ca. or 43°.							
	e	12 03 36.4	1.0			2.5		
14	C & GS 13-52-14.4; 65.3 N., 86.5 W., h about 33 km. Melville Peninsula, Canada, Mag. 4.5 SD 0.1 (CGS) (P-H) = 3,665 km. ca. or 33°.							
	e	13 58 15.0	0.6			1.2		
	e(L)ZN	14 07 23.0	1.2			4.5		
15	C & GS 12-10-25.4; 10.5 N., 85.7 W., h about 33 km. near west coast of Costa Rica, Mag. 4.5 SD 0.3 (CGS) (P-H) = 3,000 km. ca. or 27°.							
	iP	12 16 01.7	0.8			7.5		
15	e(P)ZEN	19 44 25.8	1.0			3.0		
	eLZEN	49 50.8	3.5	3.0	4.0	6.0	13.0	18.0
16	i	14 37 49.8	1.0			5.2		
16	e	16 05 12.4	0.6			1.0		
	eLN	58 18.4			9.0			5.0
17	C & GS 00-50-17.9; 59.4 N., 142.7 W., h about 35 km. Alaska aftershock. Mag. 5 3/4 (Pas), 6 - 6 1/4 (Brk), 6 1/4 - 6 1/2 (Pal) 5.1 SD 0.3 (CGS) (P-H) = 4,335 km. ca. or 39°.							
	iP	00 57 40.1	1.0			2.4		
	eL	01 11 27.5	4.1			13.0		
17	C & GS 19-26-20.6; 35.2 N., 35.9 W., h about 33 km. North Atlantic Ocean, Mag. 6 1/2 (Pas) 5 3/4 - 6 (Brk) 6 - 6 1/4 (Pal) 5.6 SD 0.4 (CGS) (P-H) = 5,335 km. ca. or 48°.							
	iP	19 34 45.8	0.8			22.0		
	c(PPP)	36 42.8	1.2			8.0		
18	e	01 11 50.2						
	e	20 10.2	1.0			1.5		
	e	23 59.2	1.6			3.5		
18	C & GS 13-47-22.7; 59.6 N., 145.0 W., h about 20 km. Alaska aftershock Mag. 4.6 SD 0.5 (CGS) (P-H) = 4,665 km. ca. or 42°.							
	e	13 54 56.1	1.0			1.5		
18	C & GS 14-12-10.1; 21.2 S., 174.5 W., h about 33 km., Tonga Islands Region. Mag. 4 1/2 (Brk) 5.6 SD 0.3 (CGS) (P-H) = 10,445 km. ca. or 94°.							
	e	14 25 32.1	1.6			2.5		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
May										
18	C & GS 21-12-46.2; 59.5 N., 142.7 W., h about 25 km. Alaska after-shock, Mag. 4.9 SD 0.3 (CGS) (P-H) = 4,110 km. ca. or 37°.									
	e	21	20	10.4	1.0			1.5		
	eLN		34	01.9			5.0			3.5
19	C & GS 04-18-05.9; 18.0 N., 91.8 W., h about 33 km., Tabasco, Mexico, Mag. 4.1 (CGS) (P-H) = 2,000 km. ca. or 18°.									
	e	04	22	15.8	1.0			1.4		
	eS		25	41.8	0.8			1.6		
19	C & GS 06-09-04.1; 77.7 N., 18.3 E., h about 33 km. Svalbard region. Mag. 4.9 SD 0.3 (CGS) (P-H) = 445 km. ca. or 58°.									
	e	06	19	02.8	0.5			1.2		
19	e	06	48	32.7	0.8			1.8		
19	e	07	47	21.7	1.0			1.0		
19	C & GS 10-39-24.8; 45.5 N., 150.3E., h about 33 km., Kurile Islands Mag. 5.4 SD 0.3 (CGS) (P-H) = 8,890 km. ca. or 80°.									
	iP	10	51	32.6	1.4			7.0		
19	C & GS 14-42-40.7; 60.2 N., 146.3 W., h about 33 km., Alaska after-shock, Mag. 4.9 SD 0.4 (P-H) = 4,445 km. ca. or 40°.									
	i	14	50	20.1	1.0			2.6		
	eLN	15	05	03.6			6.0			3.0
19	C & GS 15-37-35.9; 57.0 N., 152.8 W., h about 25 km., Alaska after-shock, Mag. 4.9 SD 0.4 (CGS) (P-H) = 4,890 km. ca. or 44°.									
	i	15	45	40.5	1.0			3.5		
	eLN	16	01	17.5			12.0			3.0
19	iPZN	23	11	04.8	1.0		1.2	10.0		3.0
	i		11	31.8	0.8			11.0		
	eN		12	53.3			3.8			6.5
	eSZN		16	58.3	1.2		10.0	2.0		14.0
	eLN		20	10.3			14.0			8.0
20	C & GS 03-25-05.1; 0.9 S., 80.4 W., h about 33 km. near coast of Ecuador, Mag. 4.7 SD 0.3 (CGS) (P-H) = 4,000 km. ca. or 38°.									
	e	03	32	31.2	0.9			1.5		
20	C & GS 06-01-14.8; 2.7 S., 139.3 E., h about 61 km., near north coast of Western New Guinea. Mag. 5.8 (CGS) (P-H) = 13,220 km. ca. or 118°.									
	e(P')	06	19	59.2	1.0			1.8		
20	e	06	30	06.1	0.5			1.0		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
May										
21	C & GS 01-11-23.4; 60.4 N., 145.9 W., h about 15 km., Alaska aftershock, Mag. 4.6 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.									
	i	01	19	04.0	1.2			3.0		
	e(L)N		33	33.5			4.0			3.0
21	C & GS 15-36-01.5; 59.0 N., 153.5 W., h about 15 km., Alaska aftershock, Mag. 5 3/4 - 6 (Brk) 5.3 SD 0.3 (CGS) (P-H) = 4,890 km. ca. or 44°.									
	iPZN	15	44	10.9	0.5		3.0	6.5		4.5
	eLN		59	55.4			16.0			20.5
21	C & GS 22-30-11.0; 59.3 N., 145.3 W., h about 38 km. Alaska aftershock Mag. 4.1 SD 0.6 (P-H) = 4,780 km. ca. or 43°.									
	iPZN	22	37	17.1	1.5		2.4	10.0		9.0
	e(PP)N		41	03.1			6.0			9.5
22	2N	13	20	12.3			12.0			8.5
25	iP	20	04	01.5	0.5			4.0		
26	C & GS 10-59-12.3; 56.2 S., 27.8 W., h about 120 km. Sanwich Islands Mag. 7 1/2 - 7 3/4 (Pas) 7 1/2 - 7 3/4 (Brk) 7 - 7 1/4 (Pal) (P-H) = 11,780 km. ca. or 106°.									
	iPZN	11	13	24.5	1.5		5.4	4.0		7.0
	ePPZN		17	51.5	2.0		6.0	9.0		36.0
	eSN		25	31.5			5.0			24.0
	eSSZN		32	44.5	6.0		19.0	3.0		38.5
27	C & GS 04-22-38.0; 14.6 N., 93.5 W., h about 63 km. off coast of Chiapas, Mexico, Mag. 4.4 SD 0.3 (P-H) = 2,445 km. ca. or 22°.									
	i	04	27	23.6	0.8			4.0		
27	C & GS 11-06-22.0; 6.8 N., 73.1 W., h about 139 km. Northern Colombia Mag. 5.0 SD 0.2 (CGS) (P-H) = 4,110 km. ca. or 37°.									
	i	11	13	01.3	0.5			13.0		
28	C & GS 12-33-10.2; 0.8 S., 24.7 W., h about 33 km. Mid Atlantic Ocean, Mag. 5.2 SD 0.3 (CGS) (P-H) = 3,110 km. ca. or 73°.									
	e	12	44	43.4	1.0			4.5		
28	C & GS 12-49-57.5; 13.4 S., 74.9 W., h about 103 km. Southern Peru, Mag. 5.2 SD 0.3 (CGS) (P-H) = 5,890 km. ca. or 53°.									
	e	12	59	00.9	1.0			10.0		

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
May								
28	C & GSurvey 16-18-04.2; 58.3 N., 150.6 W., h about 25 km., Alaska aftershock, Mag. 5.4 SD 0.3 (CGS) (P-H) = 4,665 km. ca. or 42°.							
	e	16 25 59.8	1.0			6.0		
29	C & GS 02-47-38.0; 53.2 N., 167.8 W., h about 33 km. Fox Islands, Aleutian Islands, Mag. 4.7 SD 0.2 (CGS) (P-H) = 6,110 km. ca. or 55°.							
	e	02 56 48.5	1.0			1.6		
29	C & GS 03-34-51.3; 60.1 N., 146.5 W., h about 15 km., Alaska aftershock, Mag. 4.7 SD 0.3 (CGS) (P-H) = 4,780 km. ca. or 43°.							
	iP	03 42 33.5	1.0			2.2		
	eLN	03 57 43.0						
29	C & GS 10-17-34.5; 60.2 N., 146.3 W., h about 15 km. Alaska aftershock, Mag. 5 1/2 (Pal) 5.6 (CGS) (P-H) = 4,780 km. ca. or 43°.							
	iPZN	10 25 18.0	1.0	3.0		12.5		5.6
	eLZN	40 06.0	6.5	11.2		3.0		22.5
30	C & GS 03-18-08.3; 59.5 N., 148.5 W., h about km., Alaska aftershock, Mag. 4 1/4 - 4 1/2 (Pal) 5.5 SD 0.4 (CGS) (P-H) = 4,890 km. ca. or 44°.							
	iP	03 25 59.0	0.6			12.0		
30	C & GS 14-30-45.3; 36.2 N., 141.1 E., h about 49 km. near east coast of Honshu, Japan, Mag. 5 1/2 - 5 3/4 (Pal) 5.4 SD 0.2 (CGS) (P-H) = 10,220 km. ca. or 92°.							
30	C & GS 19-21-41.3; 28.4 S., 69.8 W., h about 84 km. Chile - Argentina border region, Mag. 4.1 SD 0.1 (CGS) (P-H) = 7,780 km. ca. or 70°.							
31	C & GS 00-40-36.4; 43.5 N., 146.8 E., h about 48 km., Rurile Islands Mag. 6 1/2 - 6 3/4 (Pal) 6.3 SD 0.4 (CGS) (P-H) = 9,000 km. ca. or 81°.							
	iPZN	00 52 59.3	1.0	2.4		55.0		33.0
	i(S)ZN	01 03 13.3	2.8	3.2		5.0		66.0
	e(SS)N	22 42.7		26.0				19.0
31	C & GS 10-30-25.0; 19.2 N., 69.4 W., h about 83 km., Dominican Republic, Mag. 5.0 SD 0.4 (CGS) (P-H) = 2,890 km. ca. or 26°.							
	e	10 35 58.1	0.8			2.2		
June								
1	e	18 43 37.0	1.0			1.2		
2	iPZ(N)	16 16 57.5	1.5			3.0		
	eLZ(N)	31 04.0		11.0				20.5

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
June										
2	C & GS 16-29-41.5; 59.7 N., 144.2 W., h about 10 km. Alaska aftershock Mag. 4.8 SD 0.3 (CGS) (P-H) = 3,105 km. ca. or 45°.									
	iPZ(N)	16	37	14.0	1.2			2.0		
2	C & GS 17-06-41.9; 43.9 N., 148.8 E., h about 45 km. Kurile Islands Mag. 4.5 SD 0.4 (CGS) (P-H) = 5,590 km. ca. or 81°.									
	e	17	18	58.0	0.8			1.8		
3	C & GS 02-27-27*; 31.5 N., 93.9 W., h about 33 km. (R) Texas-Louisiana Border. Felt. Mag. 4.2 (CGS) (P-H) = 445 km. ca. or ±4°.									
	eZN	02	28	35.5	0.5			3.5		
3	C & GS 09-17-07*; 15.6 N., 94.5 W., h about 59 km. off coast of Oxaca, Mex., Mag. 3.8 SD 0.2 (CGS) (P-H) = 1,285 km. ca. or 18.5°.									
	e	09	21	39.5	0.8			1.5		
3	e	11	46	32.5	1.0			1.2		
	eLN	11	53	19.5		10.0			4.5	
3	e	14	11	14.0	1.0			3.2		
	e(S)N		25	24.5		4.4			4.0	
	eLN		30	01.5		15.0			8.0	
4	C & GS 04-28-54.7; 17.5 N., 100.8 W., h about 22 km. near coast of Guerrero, Mexico, Mag. 4.7 SD 0.4 (CGS) (P-H) = 2,220 km. ca. or 20°.									
	iPZN	04	33	22.0	1.0	2.2		16.0	11.0	
	iPPZN		34	24.0	0.8	2.0		4.0	3.0	
	i(S)ZN		39	53.0	3.2	3.6		5.0	22.0	
	eLZN		44	00.0	4.0	11.0		2.0	7.0	
4	C & GS 11-46-01.7; 9.6 S., 76.1 W., h about 124 km. Central Peru Mag. 5.3 SD 0.3 (CGS) (P-H) = 5,220 km. ca. or 47°.									
	iPZN	11	54	34.8	1.5	2.4		10.0	3.5	
6	ePZN	22	14	56.7	1.0			4.0		
	eLN		31	07.7		11.0			6.0	
6	C & GS 19-07-51.4; 26.6 S., 114.4 W., h about 33 km. Easter Island region. Mag. 5.8 SD 0.3 (CGS) (P-H) = 7,220 km. ca. or 65°.									
	e	19	18	30.8	0.5			4.0		
7	C & GS 20-10-15.9; 30.4 S., 67.6 W., h about 29 km. La Rioja Province, Argentina, Mag. 5.2 (CGS) (P-H) = 8,110 km. ca. or 73°.									
	ePZ	20	21	30.4	0.4			3.8		
9	e	05	13	41.7	0.8			2.0		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
June										
9	C & GS 09-24-18; 59.6 N., 145.1 W., h about 33 km. Alaska aftershock, Mag. 4.8 SD 0.2 (CGS) (P-H) = 5,000 km. ca. or 45°.									
	e	09	31	50.4	1.0			2.2		
9	C & GS 18-16-13.7; 0.2 S., 78.9 W., h about 48 km. Ecuador, Mag. 4.6 SD 0.3 (CGS)									
	e	18	23	34	0.8			1.5		
9	e	22	01	50.7	1.0			1.2		
10	eN	22	36	30.0		1.0				0.8
10	C & GS 23-25-09.1; 59.1 N., 153.8 W., h about 33 km. (R) Alaska aftershock, Mag. 5.1 (CGS) (P-H) = 5,000 km. ca. or 45°.									
	eN	23	33	21.0						
	eSN		48	46.0		13.0				10.0
13	C & GS 08-23-45.6; 10.0 N., 93.0 E., h about 33 km. (R) Indian Ocean, 2200 km. east of Chagos Archipelago, Mag. 6.1 (CGS) (P-H) = 14,890 km. ca. or 134°.									
	eP	08	39	21.2	1.2			4.0		
14	C & GS 12-15-31.3; 38.0 N., 38.5 E., h about 8 km. Southeastern Turkey. 1 killed, 15 injured, extensive property damage at Malatya and Adiyaman. Fissure about 800 m. at Malatya. (CGS) (P-H) = 10,335 km. ca. or 93°.									
	e	12	28	52.3	1.2			3.8		
15	eN	00	27	37.5		3.0				5.5
	eLN	01	01	33.5		20.0				10.0
16	C & GS 04-01-44.3; 38.3 N., 139.1 E., h about 57 km. Near west coast of Honshu, Japan. 25 killed, many injured, and extensive property damage at Niigata. 7 foot sunami along coastal areas, Mag. 7 1/4 - 7 1/2 (Pas) 7 1/4 (Pal) 6.1 (CGS)(P-H) = 9,890 km. ca. or 89°.									
	ePZN	04	14	43.2	0.8	3.0		3.0		22.0
	ePPN		18	61.3		4.2				21.5
	e(PPP)N		20	34.2		4.0				20.0
	eSN		25	30.2		6.0				17.0
	eLZN		39	21.2	17.0	16.0		2.0		66.0
18		15	56	35.4	0.6			8.0		
18	C & GS 18-01-47.6; 47.5 N., 154.9 E., h about 33 km. (R) Kurile Islands, Mag. 5 (Pal) 5.3 (CGS) (P-H) = 8,555 km. ca. or 77°.									
	eP	18	13	34.7	0.8			1.5		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
June										
24	C & GS 15-13-01; 17.3 N., 100.4 W., h about 33 km. (R) off coast of Guerrera, Mexico, Mag. 4.4 (CGS) (P-H) = 2,220 km. ca., or 20°.									
	eP	15	17	26.5	0.8			1.5		
24	C & GS 15.4 N., 93.3 W., h about 33 km. (R) near coast of Chiapas, Mexico, Mag. 3.9 (CGS) (P-H) = 1,380 km. ca. or 20°.									
	eP	19	32	31.5	0.8			1.6		
26	e	04	27	54.8	0.5			2.4		
26	e	22	02	51.5	0.8			1.8		
27	e	05	32	18.0	0.8			2.0		
27	C & GS 16.5 N., 85.7 W., h about 28 km. near north coast of Honduras Mag. 4.3 (CGS) (P-H) = 2,780 km. ca. or 25°.									
	eP	08	55	12.3	0.8			2.0		
	e(S)		58	54.3	0.8			3.0		
28	e	13	10	07.0	1.0			1.5		
28	C & GS 17-27-59.8; 4.0 N., 32.4 W., h about 53 km. North Atlantic Ocean, Mag. 5 1/4 - 5 1/2 (Pal) 5.3 (CGS) (P-H) = 7,220 km. ca. or 65°.									
	eP	17	38	35.4	1.0			2.5		
28	C & GS 19-09-05.4; 23.3 S., 66.6 W., h about 23 km. Alaska aftershock Mag. 5.5 (CGS) (P-H) = 5,000 km. ca. or 45°.									
	iP	19	16	59.2	0.8			6.0		
29	C & GS 00-04-30.1; 16.5 N., 94.6 W., h about 68 km. Oxaca, Mex., Mag. 4.8 (CGS) (P-H) = 2,110 km. ca. or 19°.									
	iP	00	08	54.4	0.6			3.4		
29	iP	04	47	25.7	1.0			3.5		
	iPP	04	51	26.7	2.0			5.0		
29	C & GS 07-21-32.8; 62.7 N., 152.0 W., h about 33 km. (R) Southern Alaska, felt: College, Alaska, Mag. 5.6 (CGS) (P-H) = 4,890 km. ca. or 44°.									
	iP	07	29	37.3	1.0			9.5		
	iPPP		31	23.3	1.2			5.0		
	eL		44	47.3	6.0			2.0		
30	ePZN	14	05	33.0	0.8			5.0		
	eZN		07	49.0	2.0	3.0		6.0		4.5
	eZN		08	59.0	1.5	3.6		6.0		13.0
	eN		10	40.0		6.0				6.5

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
30	C & GS 13-46-21.6; 44.7 N., 150.4 E., h about 33 km. (R) Eastern Austria, Felt. Mag. 4.6 (CGS) (P-H) = 8,890 km. ca. or 80°.									
	iP	15	59	53.4	1.2			3.0		
	eZN	16	01	01.0	1.5		2.0	10.0		3.0

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The University of Arkansas Seismograph Station is located on the University Farm, 2.5 miles northwest of the main campus at Fayetteville. Coordinates of the station are 36° 05.46' north latitude and 94° 11.47' west longitude. Altitude above mean sea level is 1,325 feet. The seismometer pier rests on the Boone limestone of lower Mississippian age. Approximately 2,500 feet of limestone, shale and sandstone overlie the pre-Cambrian crystalline rocks in the vicinty of the station.

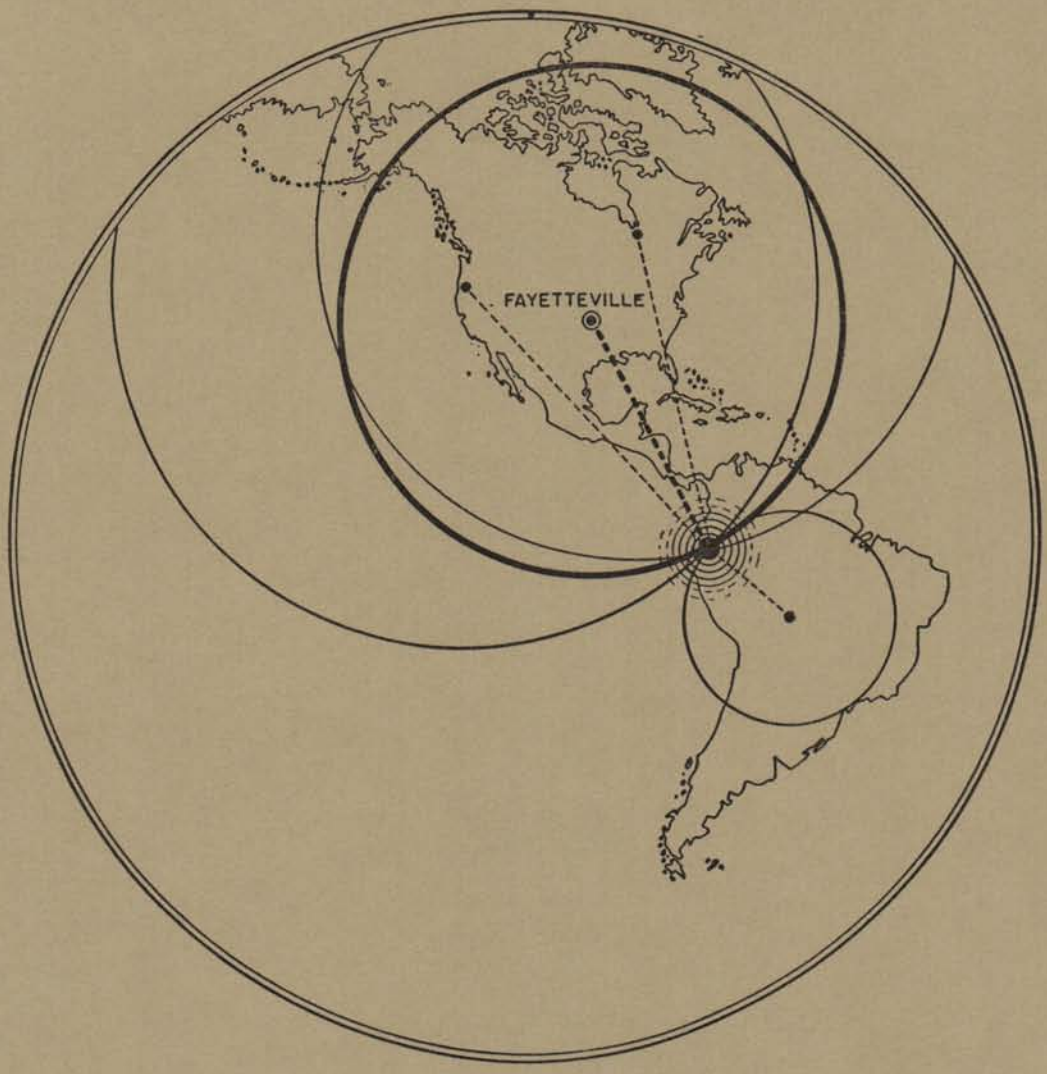
University of Arkansas
Seismograph Station
Department of Geology
Fayetteville, Arkansas

FAYETTEVILLE
July - Sept. 1964

UNIVERSITY OF ARKANSAS

SEISMOLOGICAL BULLETIN

Volume XIII **Number 3**



The University Of Arkansas Seismograph Station

Operated by the University's Department of Geology

in conjunction with the

United States Coast and Geodetic Survey

FAYETTEVILLE SEISMOGRAPH STATION

Volume 13, number 3, September 1966
Data for July, August, and September 1964

Instruments

Vertical component - Benioff moving coil type, short period electromagnetic-galvanometric, Mass = 100 lbs.

Seismometer-Benioff moving coil period = 1.1 second
Galvanometer-Geotechnical Corp. period = 0.2 second
Damping ration about 15:1 (near critical)
Recording drum speed = 60 mm. per minute

Horizontal components - Wilson - Wilson-Lamison hinges types E-W
N-S electromagnetic - galvanometric

Seismometer period - 6.0 seconds (N-S)
6.0 seconds (E-W)
Galvanometer-General Electric period - 4.1 seconds (N-S)
3.8 seconds (E-W)
Recording drum speed - 30 mm. per minute

Clock - IBM, electrically wound, invar pendulum type.
Accuracy limits generally within one tenth second.

Radio - WWV Time Signal impressed manually by telegraph key in 5th, 10th, and 15th second. Time signals received by Hallicrafter receiver, S-40B

Vertical -Ground motion trace up (compression)
reading from left to right
N-S - Ground motion frace up - North
E-W - Ground motion trace up - East

(Additional information regarding the station is given on the back cover.)

Information in Remarks column is usually from U. S. Coast and Geodetic Survey epicenter cards. "C" following the trace amplitude indicates a compressional motion of the wave; "D" indicates dilation.

Bulletin compiled by Bruce Saunders, Observer

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
July										
2	C&GS 15-09-13.5; 47.6 N., 128.7 W., h about 33 km. (R) off coast of Washington, Mag. 4.0 (CGS) (P-H) = 3,110 km.ca. or 28°.									
	e	15	15	05.8	.8			.8		
	eLN		25	15.8		9.0				4.0
2	C&GS 17-03-42.4; 47.7 N., 12813 W., h about 33 km. (R) off coast of Washington, Mag. 5 1/2 - 5 3/4 (PAL), 4.9 (CGS) (P-H) = 3,110 km. ca. or 28°.									
	iPZN	17	09	29.7	1.0			2.0		
	eSN		14	19.7		6.0				9.0
	eLZN		19	33.7	---	15.0		---		21.0
2	C&GS 01-19-02.7; 60.1 N., 146.0 W., h about 14 km. (R) Alaska aftershock, Mag. 5 1/4 (PAL), 5.1 CGS) (P-H) = 4,555 km.ca. or 41°.									
	iP	01	26	43.0	1.2			11.0		
	eSSN		43	00.0		24.0				6.0
2	C&GS 06-35-18*; 53.4 N., 167.8 W., h about 45 km. (R) Fox Islands, Aleutian Islands, Mag. 4 3/4 - 5 (PAL), 4.8 (CGS) (P-H) = 6,000 km. ca. or 54°.									
	e	06	44	28.1	.7			2.0		
2	C&GS 17-17-34.4; 47.7 N., 128.8 W., h about 14 km., off coast of Washington, Mag. 5½ (PAL), 5.0 (CGS) (P-H) = 3,110 km.ca. or 28°.									
	iPZ	17	23	27.7	1.0			2.0		
	e(L)N		33	23.7		11.0				12.0
3	e	01	42	36.9	.9			1.8		
3	C&GS 05-05-33.8; 19.4 N., 104.3W., h about 102 km., Jalisco, Mexico, Mag. 4¼-4½ (PAL), 4.4 (CGS) (P-H) = 2,220 km.ca. or 20°.									
	iPZN	05	09	48.4	1.0	3.0		1.8		2.0
	e(L)ZN		15	43.9	210	3.0		2.0		7.0
	$e(L_2)N$		17	45.9		7.0				6.0
4	C&GS 12-13-56.9; 15.5 S., 72.5 W., h about 148 km., Southern Peru, Mag. 5.3 (CGS) (P-H) = 7,780 km.ca. or 70°.									
	iP	12	23	17.5	.8			.710		
5	C&GS 03-14-33.3; 60.8 N., 144.9 W., h about 30 km., Alaska aftershock, Mag. 5 (PAL), 4.9 (CGS), (p-H) = 4,555 km. ca. or 41°.									
	iP	03	22	07.9	1.0			4.5		
	e(L)		36	19.9	2.2			1.8		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trance Amp. (mms) Z	E	N
July										
5	i	18	06	39.3	1.2			3.0		
5	C&GS 19-07-57.8; 26.2 N., 110.2 W., h about 29 km. Gulf of California, Mag. 5 3/4 - 6 (BRK), 6 - 6 1/4 (PAL), 6.0 (CGS) (P-H) = 1,890 km. ca. or 17°.									
	iP	19	11	53.3	1.5			37		
	eL		16	50.3	3.0			88		
	e(L_2)		19	05.3	8.0			40		
5	44.8 N., 149.6 E., h about 54 km. (R), Kurile Islands, Mag. 6¼ (PAS), 6-6¼ (PAL), 5.5 (CGS) (P-H) = 8,890 km.ca. or 80°.									
	ePZ	23	48	04.6	1.6			10.0		
6	C&GS 01-28-29.9; 18.7 N., 100.3 W., h about 81 km., Guerrero, Mexico, Mag. 4.3 (CGS) (P-H) = 2,110 km.ca. pr 19°.									
	e	19	25	21.6	.8			2.0		
6	C&GS 20-07-28*; 19.1 N., 100.6 W., h about 105 km., Guerrero, Mexico, Mag. 3.7 (CGS) (P-H) = 2,110 km.ca. or 19°.									
6	C&GS 10-38-41.0; 18.7 N., 100.5 W., h about 108 km., Guerrero, Mexico, Mag. 4.7 (CGS) (P-H) = 2,220 km. ca. or 20°.									
	iPZN	10	42	47.5	1.[illegible]	2.0		8.5	4.0	
6	eP	14	38	46.8	1.0			2.0		
	i		41	57.3	1.3			8.4		
6	horizontal not engaged at this time									
	ePZN	02	33	31.3	1.5			48.0		
	eSZN		38	40.3	3.2			85.0		
	eLZN		41	36.3	6.0			65.0		
6	C&GS 07-22-11.7; 18.3 N., 100.4 W., h about 100 km., Guerrero, Mexico; More than 30 killed, many injured and considerable property damage in Guerrero. Mag. 6 3/4 - 7 (PAS), 6 3/4 - 7 (BRK), 7¼ - 7½ (PAL), 6.3 (CGS) (P-H) = 2,220 km. ca. or 20°.									
	iPZN	07	26	22.6	1.5	---		135d	188.0	
	eL ZN		32	48.1	3.5	---		55	196.0	
	dl_2^1ZN		35	44.1	4.0	---		21	———	
7	C&GS 06-44-49.2; 8.8 S., 110.7 E. h about 60 km. Near South Coast of Jaua. (P-H) = 16, 110 km.ca. or 145o.									
	iP	07	04	21.6	o.6			5.0		

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
July								
7	C&GS 13-44-40; 43.4 N., 12 7.2 W., h about 7 km. Off coast of Oregon, Mag. 5.7 (CGS), (P-H) = 2,940 km. ca. or 26.5°.							
	iP	13 50 19.6	1.0			4.6		
7	C&GS 22-14-01.8; 15.2 N., 93.2 W., h about 90 km.(R), Near coast of Chiapas, Mexico, Mag. 4.1 (CGS) (P-H) = 2,220 km.ca. or20°							
	e	22 18 38.9	0.8			2.0		
8	e	08 04 44.4	0.8			1.0		
8	ePZN	12 14 19.3	0.5	2.0		22.0	2.8	
	i(S)ZN	12 17 32.3	1.2	3.0		81.0	21.0	
	eLN	12 19 00.3		6.0			8.0	
9	C&GS 16-39-49.3; 15.5 S., 16 7.6 E., h about 121 km., New Herbides Islands, Mag. 7½ (PAS), 7 1/2 - 7 3/4 (BRK), 6.6 (CGS) (P-H) = 11,555 km.ca. or 104°.							
	ePZN	16-53-54.7	1.0	—		1.2	2.5	
9	C&GS 11-22-05.4; 23.3 S., 175.7 W., h about 43 km. (R), Tonga Islands, Mag. 5½ - 5 3/4 (BRK), 5.7 (CGS) (P-H) = 10,780 km.ca. or 97°.							
	eP	11 35 28.1	1.2			7.5		
9	C&GS 12-02-11.9; 34.2 N., 140.9 E., h about 49 km. Off east coast of Honshu, Japan. Flet., Mag. 5.0 (CGS) (P-H) = 10,390 km.ca. or 93.5°.							
	eP	12 15 22.2	1.0			1.5		
10	C&GS 11-50-46.8; 26.5 N., 109.7 W., h about 33 km. (R), Gulf of California, Mag. 4.5 (CGS) (P-H) = 1,890 km.ca. or 17°.							
	eP	11 54 37.4	1.5			2.0		
	e(S)ZN	11 59 42.4	1.3	1.5		2.5	4	
11	C&GS 09-44-18.7; 59.7 N., 146.1 W1, h about 33 km (R), Alaska aftershock. Mag. 5 (PAL), 5.3 (CGS) (P-H) = 4,555 km.ca. or 41°.							
	iP	09 51 56.5	.5			2.5		
11	C&GS 20-25-40.3; 59.7 N., 146.2 W. H about 40 km. Alaska aftershock. Mag. 5 -5¼ (BRK), 5 1/2 - 5 3/4 (PAL), 5.6 (CGS) (P-H) = 4.555 km.ca. or 41°.							
	iPZN	20-33-15.9	1.3	1.5		3.0	1.0	
	iL_1ZN	20-47-28.9	7.5	?		2.0	?	

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
July 11	iPZ	23	29	0.95	1.2			1.4		
13	C&GS 11-54-50.7; 42.5 N., 126.7 W., h about 33 km. (R), Near coast of Oregon, Mag. 5.6 (CGS) (P-H) = 2,780 km.ca. or 25°.									
	e(P)Z	12	00	19.68	1.5			1.0		
	e(PP)Z	12	01	32.68	2.0			1.0		
13	e(P)Z	20	47	12.9	.03			1.0		
	e(S)Z	20	47	35.9	1.0			3.0		
	eZ	20	47	41.9	?			15.0		
14	eP	07	13	42.5	.6			.8		
14	C&GS 09-55-24.4; 19.0 N., 66.5 W., h about 46 km. Puerto Rico, Felt. Mag. 4¼-4½ (PAL), 4.8 (CGS), (P-H) = 3,220 km.ca. or 29°.									
	iP	10	00	28.1	1.7			1.8		
14	C&GS 12-47-25.6; 41.8 N., 159.7 W., h about 33 km. (R), Near coast of northern California, Mag. 4¼-4½ BRK), 5.4 (CGS)									
	iP	12	52	49.5	1.5			6.0		
14	C&GS 13-58-28.5, 53.3 N., 159.7 E., h about 40 km., Near east coast of Kamchatka, Mag. 5.5(CGS) (P-H) = 5,555 kmca or 50°.									
	iPPZ	14	09	39.6	1.2	4.0		4.0	3.2	
14	i(P)	22	14	59.5	1.5	?		3.5	?	
15	C&GS 07-26-01.4; 52.1 N., 170.6 W., h about 30 km (R), Fox Island, Aleutian Islands, Mag. 4 3/4 - 5 (PAL), 5.6 (CGS) (P-H) = 7,220 km. ca. or 65°.									
	ePZ	07	35	30-22.2 1.1		2.5				
15	iPZ	16	14	15.21	.5			1.3		
	i(P)Z	16	14	41.6	1.0	4.0				
15	ePZ	22	15	38.5	1.2			3.0		
15	ePZ	22	35	24.9	1.3			3.0		
15	ePZ	22	51	25.9	1.0			1.1		
	e(S)Z	22	51	49.9	1.3			3.0		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
July										
20	C&GS 18-49-43.5; 19.8 N., 109.0 "., h about 33 km. (R), Reulla Gigedo Islands region, Mag. 4 1/2 -4/34 (BRK), 5(PAL), 5.1 (CGS) (P-H) = 2,555 km.ca. or 23°.									
	iPNZ	18	54	27.5	1.3		1.5	3.8		4
	i(PcP)ZN	18	58	11.5	± 1.0		6.0	.5		26.5
	e(L)ZN	19	00	52.5	1.1		5.2	3.5		1.8
20	iPZ	21	08	13	0.2			1.5		
	i(S)Z	21	09	09.3	.3			4.0		
21	19.8N., 108.8 W., h about 31 km., off coast of Jalisco, Mexico, Mag. 4 3/4 - 5 (BRK), 4.9 (CGS) (P-H) = 2000 km.ca. or 18°.									
	ePZN	01	14	12.05	1.7		2.0	2.5		7.0
	eLZN	01	18	34.05	5.0		4.0	1.2		24.0
21	ePZN	07	07	06.25	1.2		1.5	4.0		2.0
21	i(P)ZN	10	07	12.4	1.1		3.0	4.0		2.5
21	ePZ	21	14	37.8	.3			3.5		
22	C&GS 10-34-11.9; 31.7 N., 114.1 W., h about 33 km., Gulf of California, Mag. 4.6 (CGS) (P-H)=2,220 km.ca. or 20°.									
	ePZ	10	38	14.5	1.8			2.1		
	e(L)ZN	10	44	24.5	2.5		2.5	1.2		7.0
	$e(L_2)N$	10	48	26.5			3.0			
23	C&GS 19-0 -06; 59.9 N., 149.2 W., h about 55 km., Alaska aftershock, felt. Mag. 5.4 (CGS), (P-H) = 4,780 km.cam. or 43°.									
	oPZN	19	15	53.8	.8		.8	5.0		1.0
23	C&GS 19-18-56.8; 27.8 S., 66.4 W., h about 130 km., Catamarca Province, Argentina, Mag. 5.2 (CGS) (P-H) = 7,780 km.ca. or 70°.									
	ePZN	19-29-30.9			1.1		.7	6.0		1.0
	e(PP)N	19	34	3.9			2.5			1.5
24	C&GS 01-39-39.0; 14.2 N., 91.6 W., h about 65 km., Near west coast of Guatemala, Mag. 4.9 (CGS) (P-H) = 2,335 km.ca. or 21°.									
	ePZN	01	44	20	1.8		1.2	2.2		2.0
24	iPZN	07	02	45	2.1		2.5	8.0		3.0
	i(S)N	07	12	33			6.0			12.0
	e(L)N	07	35	59			9.0			9.0

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
July								
24	C&GS 08-12-40.0; 47.2 N., 153.8 E., h about 33 km. Kurlic Islands, Mag. 6½ PAS), 5.9 (CGS) (P-H) = 8,555 km.ca. or 77°.							
	iPZN	08 24 27	1.8		1.7	8.5		3.0
	i(S)ZN	08 34 07	6.0					38.0
	e(L)ZN	08 58 50	10.3		21.0	.8		24.0
24	C&GS 13-25-18.3; 47.0 N., 153.7 E., h about 33 km. (R), Kurile Islands, Mag. 5 3/4 - 6 (BRK), 5.7 (CGS) (P-H) = 8,780 km.ca or 79°.							
	iPZ	13-37-11	1.2			2.5		
24	C&GS 17-02-49.2; 47.1 N., 153.6E., h about 33 km., Kurile Islands, Mag. 6½ (PAS), 6 (BRK), 5.8 (CGS) (P-H) = 8,780 km.ca. or 79°.							
	iPZN	17 14 39	2.0		1.2	11.0		3.0
	e(L)N	17 48 03			10.0			6.0
25	C&GS 19-31-07.0; 27.9 S., 70.9 W., h about 26 km. Northern Chile. Felt: Copiapo and Vallenar. Mag. 6½ (PAS), 6 (BRK), 6.1 (CGS). (P-H)= 7,780 km.ca. or 70°.							
	iPZN	19 42 01	2.0		2.0	18.3		12.3
	i(S)Z	19 50 51			6.0			7.0
25	i(P)Z	20 10 28	2.0			1.0		
	e(S)Z	20 11 18	1.5			10.0		
26	C&GS 13-55-37.4; 2.6 N., 78.5 W., h about 38 km., Ecuador. Mag. 5.2 (CGS) (P-H) = 4,000 km.ca. or 36°.							
	iPZ	14 02 38.5	1.5			2.5		
26	C&GS 18-24-34.6; 46.8N., 153.8, h about 33 km (R), Kurile Islands Mag 5.2 (CGS) (P-H) = 8,665 km. ca. or 78°.							
	iPZ	18 46 27	1.2			3.5		
27	ePZ	21 26 33.5	1.5			2.2		
27	C&GS 23-00-36.3; 46.8 N., 153.8 E., h about 33 km. (R), Kurile I Islands, Mag. 5.3 (CGS) (P-H) = 9,220 km. ca. or 83°.							
	iPZ	23 13 29.5	1.5			3.0		
27	iPZ	23 9 58.5	1.5			2.0		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
July										
29	C&GS 09-46-42.2; 14.9 N., 93.4 W., h about 56 km. Near coast of Chiapas, Mexico. Mag. 4.1 (CGS) (P-H) = 2,335 km. ca. or 21°.									
	iPZ	09	52	28.1	.8			2.0		
	iPZ	16	29	33.5	1.1			1.2		
29	iPZN	05	22	32.2	1.5	2.0		12.0	9.5	
	e(S)ZN	05	31	8.2	.6	10.5		3.5	12.0	
	e(L)N	05	48	3.2		7.5			3.5	
Aug.										
1	e	14	05	38.3	1.0			2.0		
2	iP	08	44	08.3	.8			3.0		
3	C&GS 01-48-23.3; 19.8 N., 70.7 W., h about 7 km., Dominican Republic Region, Mag. 5 (PAL), 5.2 (CGS) (P-H)=1,890 km.ca. or 17°.									
	e(S)	01	54	03.0	1.2			8.0		
6	e	10	52	00.9	.8			1.6		
6	e	18	32	50.8	.8			2.0		
	eL		51	53.8		16.0			19.0	
7	C&GS 08-08-49.9; 27.8 S., 66.4 W., h about 162 km., Catamarca Province, Argentina, Mag. 4.4 (CGS) (P-H) = 5,665 km.ca. or 51°.									
	eScS	08	26	13.5	.6			1.4		
7	C&GS 15-31-18,0 ; 14.0 N., 91.9 W., h about 89 km., Near south coast of Guatemala, Mag. 5.0 (CGS) (P-H) = 1,665 km.ca. or 15°.									
	ePPZ	15	36	06.0		1.5			1.0	
	eSZ		40	19.0		---			---	
8	12.5 N., 87.8 W., h about 63 km., off west coast of Nicaragua. Felt: San Slavador. Mag. 5.8 (CGS).									
	iPN	15	50	22.9	---	1.0		---	19.0	
	e(S)N		54	44.4		6.0			22.0	
8	ePN	20	12	26.2		1.5			2.0	
	eN		20	22.2		6.0			11.0	
10	ePN	01	16	12.0		1.5			2.0	
	eN		25	02.0		6.0			7.0	

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
Aug 12	i	07 03 25.9	1.0			3.5		
13	eP	01 00 13.5	1.2			8.0		
	eSZN	01 04 25.5	1.5		4.0	1.2		6.0
15	e	14 16 37.7	.8			2.2		
15	ePZN	03 54 21.9	1.2		---	2.0		---
	eSZN	04 00 19.9	1.5		1.6	3.0		2.0
15	C&GS 04-10-09.3; 4.1 S., 104.7 E., h about 33 km. Southern Sumatra. (P-H) = 11,110 km. ca. or 100°.							
	e(PP)	04 29 47.4	1.0			1.2		
16	e	11 36 43.3	.5			2.0		
16	C&GS 12-34-34.8; 12.0N., 88.6 W., h about 33 km. (R), off coast of central America. Mag. 4.3 (CGS) (P-H) = k,890 km.ca. or 17°.							
	i(PP)	12 39 53.3	.8			3.2		
16	e	20 11 49.3	1.0			1.4		
17	C&GS 09-07-03.8; 52.0 N., 30 W., h about 42 km., North Atlantic Ridge, Mag. 4.9 (CGS) (P-H) = 3,445 km.ca. or 31°.							
	iPcP	09 15 31.2	.8			1.4		
17	i	12 03 20.1	1.0			2.0		
17	i	15 06 40.1	1.0			2.1		
17	C&GS 15-15-18.9; 72.2 N., 1.7 E., h about 33 km., Norwegian sea Mag. 5.4 (CGS) (P-H) = 6.445 km.ca. or 58°.							
	i	15 25 07.1	1.2			1.2		
17	C&GS 16-38-53.4; 71.9 N., 0.4 W., h about 33 km. Jan Mayen Island region, Mag. 4.2 (CGS) (P-H) = 6,335 km.ca. or 57°.							
	i	16 48 58.6	.5			1.4		
18	C&GS 00-26-51.8; 7.2 S., 74.4 W., h about 156 km. (R), Peru-Brazil Broder Region, Mag. 4 1/2 - 4 3/4 (BRK), 5.3 (CGS) (P-HO = 5,110 km.ca. or 46°.							
	ip	00 35 07.6	0.8			8.0		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
Aug										
18	C&GS 04-44-58.0; 26.4 S., 71.5 W., h about 8 km. Off coast of Southern Chile, Mag. 6 (BRK), 6.4 (CGS) (P-H) = 7,110 km.ca. or 64°.									
	iPZN	04	55	43.7	.8		3.0	37.0		14.0
	e(S)N	05	04	14.7			7.0			14.0
20	CGS 07-25-09.3; 18.0 N., 98.4 W., h about 60 km. Central Mexico Mag. 4.4 (CGS) (P-H) = 1,900 km. ca. or 18°.									
	iPZN	07	29	21.2	1.0			2.0		
20	C&GS 07-25-09.3; 18.0 N., 98.4 W., h about 60 km., Central Mexico, Mag. 4.4 (CGS) (P-H) = 4,110 km.ca. or 37°.									
	iP	08	44	50.7	.5			16.0		
22	i	00	18	37.5	1.0			2.5		
22	C&GS 03-03-20.7; 31.5 N., 114.3 W., h about 15 km. (R), Gulf of California, Mag. $5\frac{1}{4}$ - $5\frac{1}{2}$ (PAS), 5.3 (CGS) (P-H) = 2,000 km.ca. or 18°.									
	iP	03	07	22.4	1.2			4.0		
	e(L)		12	54.4	2.0			6.0		
24	i	10	44	45.3	.6			1.6		
24	e	17	45	11.6	1.0			2.0		
24	C&GS 21-56-54.2; 58.4 N., 150.3 W., h about 22 km. (R) Gulf of Alaska, Mag. 5.8 (CGS) (P-H) = 4,665 km. ca. or 42°.									
	iPZN	22	04	50.5	1.0		2.5	6.5		3.5
	eLN	22	22	01.5			11.0			7.0
25	C&GS 11-11-53.6; 36.1 N., 28.7 E., h about 50 km., Dodecanese Islands, Mag. 4.9 (CGS) (P-H) = 10,000 km.ca. or 90°.									
	e	11	24	53.6	1.0			1.5		
25	iPZN	13	57	45.7	1.2		3.0	10.0		12.3
	eSZN	14	06	09.7	3.5		5.0	2.0		16.0
	eLZN		17	45.7	13.0		16.5	2.0		33.5
25	e	14	26	19.7	1.0			2.0		
25	e	14	50	36.7	0.8			1.0		
26	C&GS 03-18-44.1; 52.1 N., 30.1 W., h about 33 km., North Atlantic Ridge, Mag. 5.4(CGS) (P-H) = 5,220 km.ca. or 47°.									
	iP	03	27	14.2	1.0			6.0		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp. (mms) Z	E	N
August										
26	C&GS 05-40-27.1; 47.2 N., 148.4 E., h about 308 km.(R), Northwest of Kurile Islands. Mag. 5.3 (CGS) (P-H) = 8,780 km.ca. or 79°.									
	i	05	52	02.8	1.2			7.0		
26	eZN	08	20	07.8	1.0			1.0		
27	e	08	07	02.5	1.0			1.2		
27	i	15	56	40.5	0.8			5.5		
28	e	08	11	20.6	1.2			2.8		
31	iP	02	25	40.0	1.2			5.8		
31	C&GS 23-20-19.4; 52.4 N., 170.7 W., h about 33 km. (R) Fox Islands, Aleutian Islands, Mag. 5.2 (CGS) (P-H) = 6,000 km.ca. or 54°.									
Sept										
1	iP	17	26	08.9	1.0			4.0		
2	C&GS 18-12-22.9; 7.8 N., 73.3 "., h about 112 km., Northern Columbia, Felt: Cucuta. Mag. 4.8 (CGS) (P-H) = 3,890 km.ca. or 35°.									
	i	18	18	57.6	1.0			2.5		
3	C&GS 05-31-15.0; 50.5 N., 129.5 W., h about 29 km., Vancouver Island region. Mag. 5.0 (CGS) (P-H) = 3,220 km. ca. or 29°.									
	i	05	37	16.4	1.0			1.5		
	eLN		49	09.0		12.0			4.5	
3	C&GS 10-06-55.9; 30.9 S., 68.4 N., h about 113 km.(R) San Juan Province, Argentina, Mag. 5.1 (CGS) (P-H) = 7,600 km.ca. or 68.5°.									
	e	10	18	02.0	1.0			6.5		
3	iPZN	21	18	37.2	1.0	3.0		3.0		4.0
	eSZN		23	53.2	2.0	3.0		3.5		14.0
	eLZN		27	14.2	6.0	6.4		2.0		19.0
3	24.2 N., 108.8 W., h about 15 km. Gulf of California, Mag. 4.6 (CGS) (P-H) = 1,830 km.ca. or 16.5°.									
	e	23	46	02.3	1.0			1.0		
	e(S)N		51	34.3		4.5			9.0	

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
Sept										
4	C&GS 03-28-33.1; 7.6 N., 36.9 W., h about 22 km. Central Mid-Atlantic ridge, Mag. 5.4 (CGS) (P-H) = 6,555 km.ca. or 59°.									
	iP	03	38	33.5	1.0			3.5		
4	C&GS 09-03-00.6; 28.5 S., 70.3 W. h about 44 km. Central Chile. Mag. 4.7 (CGS) (P-H) = 7,335 km.ca. or 66°.									
	i	09	1.8	58.5	1.0			1.8		
4	C&GS 09-36-58.7; 18.3 S., 69.0 W., h about 101 km., Northern Chile, Mag. 5.4 (CGS) (P-H) = 6,445 km.ca. or 58°.									
	iP	09	46	49.5	0.5			3.5		
	iPP		47	20.5	0.6			2.0		
	eSZN		54	05.5	1.2	---		1.6	---	
	eSSZN		59	31.5	4.0	6.0		2.0	12.5	
4	iP	10	53	16.5	.8			1.8		
5	eP	03	11	50.5	1.0			1.5		
	e		23	24.5	1.5			2.6		
	eL		55	46.5	---			---		
5	C&GS 12-27-22.2; 0.6 N., 25.9 W., h about 33 km. (R) Central Mid-Atlantic Ridge, Maf. 4.7 (CGS) (P-H) = 7,890 km.ca. or 71°.									
	e	12	38	44.6	.8			1.6		
8	e	14	53	24.0	1.2			2.0		
10	eP	06	23	13.6	.5			1.2		
	e		25	41.6	.8			3.0		
10	C&GS 09-15-47.0; 16.4 N., 96.0 W. h about 59 km. Oxaca, Mexico, Mag. 4.5(CGS) (P-H) = 2,220 km.ca. or 20°.									
	iP	09	20	14.3	1.0			7.0		
10	e	14	08	51.0	.5			2.0		
10	C&GS 17-37-08.7; 33.0 S., 69.4 W. h about 80 km., Mendoz Province, Argentina. Mag. 5.4 (CGS) (P-H) = 8,000 km.ca. or 72°.									
	iP	17	48	27.7	.6			7.0		
10	C&GS 21-36-32*; 4.8 S., 81.3 W., h about 45 km. Near coast of No. Peru. Mag. 4.5 (CGS) (P-H) = 4,665 km.ca. or 42.5°.									
	e	21	44	25.4	.8			1.5		

DATE	PHASE	Time G. C. T. h	m	s	Peri d Sec. Z	E	N	Trace Amp. (mms) Z	E	N
Sept 11	G&CS 04-23-56.0; 23.9 S., 66.6 W., h about 195 km. JuJuy Province, Argentina, Mag 4 3/4-5 (BRK), 5.3(CGS) (P-H) = 7,220 km.ca. or 65°.									
	iP	04	34	16.3	.5			10.5		
	e		17	08.1	1.0			3.0		
11	C&GS 19-47-53.3; 16.5 N., 9.36 W., h about 130 km. Chiapas, Mexioc, Mag. 4.2(CGS) (P-H) = 2,165 km.ca. or 19.5°.									
	eP	19	52	13.3	.5			4.0		
	eS		55	45.3	.8			2.0		
12	C&GS 21-19-39*; 12.5 N., 89.1 W., h about 55 km. Off coast of Central America, Mag. 4.2(CGS) (P-H) = 2,780 km.ca. or 25°.									
	i	21	24	49.2	1.0			1.9		
12	ePZN	22	25	57.2	0.8	---		4.0	---	
	eZN		39	00.2	---	8.0		---	12.0	
	eLZN	23	14	00.2	17.0	14.0		2.0	23.0	
12	e	13	01	52.1	0.8			1.5		
12	C&GS 19-05-47.4; 11.2 N., 86.9 W., h about 33 km. (R), Near coast of Nicaragua, Mag. 4.7(CGS) (P-H)= 2,890 km.ca. or 26°.									
	e	19	11	14.1	1.0			1.2		
14	C&GS 13-33-33.7; 15.0 N., 93.2 W., h about 64 km. Near coast of Chiapas, Mexico. Felt: Western El Salvador. Mag. 4.9 (CGS) (P-H) = 2,220 km. ca. or 20°.									
	iPZN	13	38	16.5	.6	3.0		8.0	12.0	
	e(PP)ZN		42	13.5	1.0	5.0		7.0	20.0	
14	C&GS 15-45-22.2; 15.5 N., 90.8 W., h about 38 km. Guatemala, Major damage at Sacapulas; Felt at Guatemala City, Mag. 4.8 (CGS) (P-H) = 2,335 Km. ca. or 21°.									
	ePZN	15	50	04.1	.8	---		7.0	5.0	
	e(PP)ZN		54	12.1	1.0	4.0		6.0	7.5	
14	C&GS 10-17-46.6; 56.7 N., 157.4 W., h about 61 km. Alaska peninsula, Mag. 5.7(CGS) (P-H)= 5,220 km.ca. or 47°.									
	eP	10	26	06.8	.8			2.0		
14	e	13	15	56.0	.8			1.6		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
Sept 14	C&GS 22-41-17.2, 16.0 N., 99.9 W., h about 33 km. (R) Near coast of Guerrero Mexico, Mag. 4.7(CGS) (P-H) = 2,220 km.ca. or 20°.									
	e	22	45	51.5	1.0			4.0		
15	e	05	56	53.0	.5			1.0		
15	eP	15	48	36.4	1.0			7.5		
	eZN		51	14.4	1.0		4.4	5.0		30.0
15	C&GS 21-56-07.a; 15.3 N., 90.8 W. h about 74 km. Guatemala Mag. 4.4(CGS) (P-H) = 2,335 km.ca. or 21°.									
	eP	22	00	45.7	.8			2.0		
	eS		04	37.7	1.0			2.0		
16	e	01	45	39.0	.8			1.2		
16	C&GS 01-50-33.9; 60.0 N., 147.1 W., h about 29 km. Gulf of Alaska, Mag. 5 3/4 - 6(PAL), 5 3/4 (PAS), 5.4 (CGS) (P-H) = 4,555 km.ca. or 41°.									
	iPZN	01	58	16.5	1.0	---		6.0	---	
	eZN	02	12	14.0	5.0		14.0	2.0		56.0
16	C&GS 22-23-36.3; 22.9 N., 45.1 W., h about 33 km., (R), North Atlantic Ridge, Mag. 5 (PAL), 5.4 (CGS) (P-H) = 4,890 km. ca. or 44°.									
	e	22	31	44.0	1.0			1.5		
16	C&GS 22-37-26.5; 56.3 N., 162.8 E., h about 29 km., Near coast of Kamchatka. Mag 5.1(CGS) (P-H) += 7,665 km.ca. or 69°.									
	i	22	48	19.5	.8			4.5		
18	C&GS 13-12-42.3; 39.8 N., 29.7 W., h about 20 km. Azores Islands, Mag. 5.5(CGS) (P-H)= 5,555 km. ca. or 51°.									
	iPZN	13-21-37.9			1.5	---		3.0	---	
19	C&GS 05-08-15.1; 15.3 N., 94.0 W., h about 42 km. (R), Near coast of Oxaca, Mexico, Mag. 6(PAS), 5 3/4 - 6 (BRK), 5.3 (CGS) (P-H) = 2,220 km.ca. or 21°.									
	eP	05	12	55.2	1.0			10.0		
21	i	04	40	07.0	1.2			4.0		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
Sept										
21	C&GS 14-17-54.4; 36.2 S., 100.2 W., h about 33 km. (R), Southern Pacific Ocean, Mag. 4.8(CGS) (P-H)= 7,890km.ca.or71°.									
	i	14	29	17.0	1.0			1.5		
22	C&GS 09-05-06.4; 23.9 S., 70.7 W., h about 33 km.(R) Near coast of Northern Chile. Mag. 4.7(CGS) (P-H) = 7,110 km.ca. or 64°.									
	eP	09	15	43.5	.6			2.5		
22	C&GS 12-36-57.6; 16.6 N., 95.5 W., h about 66 km., Oxaca, Mex. 4.1(CGS) (P-H) = 2,335 km. ca. or 21°.									
	iP	12	41	23.0	1.0			5.5		
	eS		45	07.0	.5			.6		
22	C&GS 13-27-29.7; 13.3 N., 89.7 W., h about 78 km. El Salvador, Felt: San Salvador, Mag. 4.8(CGS) (P-H) = 2,445 km. ca. or 22°.									
	e	13	32	28.0	.8			1.0		
27	eZN	00	05	08.1	.6	---		3.0	---	
27	eZN	00	29	20.2	..6	---		1.5	---	
27	C&GS 15-50-54.7; 56.6 N., 152.0 W., h about 27 km.(R) Kodiak Island region, Mag. 5¼(BRK), 5.4 (CGS), (P-H) = 4,890 km. ca. or 44°.									
	ePZN	15	58	55.8	.8	---		2.0	---	
	eLN	16	17	52.8		15.0			16.0	
27	C&GS 22-58-29.3; 21.4 S., 68.7 W., h about 132 km.(R), Chile-Bolivia Border region, Mag. 5.4(CGS) (P-H)=7,110km.ca.or 64°.									
	e	23	08	36.5	.8			1.4		
28	C&GS 05-04-55.5; 1.2 S., 24.1 W., h about 37 km. Central Mid-Atlantic Ridge, Mag. 5.5 (CGS) (P-H)=8,275 km.ca. or 74.5°.									
	iP	05	16	32.4	1.0			6.8		
	e(PP)		30	11.4	.8			1.0		
28	e	15	43	48.4	.5			1.0		
	e		48	48.4	.5			1.0		
	e		48	48.4	1.5			1.5		

The University of Arkansas Seismograph Station is located on the University Farm, 2.5 miles northwest of the main campus at Fayetteville. Coordinates of the station are 36° 05.46' north latitude and 94° 11.47' west longitude. Altitude above mean sea level is 1,325 feet. The seismometer pier rests on the Boone limestone of lower Mississippian age. Approximately 2,500 feet of limestone, shale and sandstone overlie the pre-Cambrian crystalline rocks in the vicinty of the station.

University of Arkansas
Seismograph Station
Department of Geology
Fayetteville, Arkansas

Fayetteville
Oct. - Dec. 1964

UNIVERSITY OF ARKANSAS

SEISMOLOGICAL BULLETIN

Volume XIII **Number 4**

The University Of Arkansas Seismograph Station

Operated by the University's Department of Geology

in conjunction with the

United States Coast and Geodetic Survey

FAYETTEVILLE SEISMOGRAPH STATION

Volume 32, Number 4, September 1966
Data for October, November, December 1964

Instruments

Vertical component - Benioff moving coil type, short period electromagnetic-galvanometric, Mass = 100 lbs.

Seismometer-Benioff moving coil period = 1.1 second
Galvanometer-Geotechnical Corp. period = 0.2 second
Damping ratio - about 15:1 (near critical)
Recording drum speed = 60 mm. per minute

Horizontal components - Wilson - Wilson-Lamison hinges types E-W
N-S electromagnetic-galvanometric

Seismometer period - 6.0 seconds (N-S)
6.0 seconds (E-W)
Galvanometer-General Electric period - 4.1 seconds (N-S)
3.8 seconds (E-W)

Recording drum speed - 30 mm. per minute

Clock - IBM, electrically wound, invar pendulum type.
Accuracy limits generally within one tenth second.

Radio - WWV Time Signal impressed manually by telegraph key in 5th, 10th, and 15th second. Time signals received by a Hallicrafter receiver, S-40B

Vertical-Ground motion trace up (compression)
reading from left to right
N-S - Ground motion trace up - North
E-W - Ground motion trace up - East

(Additional information regarding the station is given on the back cover.)

Information in Remarks column is usually from U. S. Coast and Geodetic Survey epicenter cards. "C" following the trace amplitude indicates a compressional motion of the wave; "D" indicates dilation.

Bulletin compiled by Bruce Saunders, Observer

		Time G. C. T. h	m	s	Period Sec: Z	E	N	p. Trace Amp.(mms) Z	E	N
Oct										
1	C&GS 11-00-48.3; 43.5 N., 126.9 W., h about 33 km.(R), Off coast of Oregon (P-H)= 3,000 km.ca. or 27°.									
	eP	11	06	21.5	1.0			2.5		
1	C&GS 18-19-43.8; 13.6 N., 90.1 W., h about 62 km., Near coast of Guatemala, Mag. 4.4(CGS) (P-H) = 2,445 km.ca. or 22°.									
	eP	18	24	43.5	1.0			2.0		
	eLZ		35	58.5	1.0			1.8		
2	iPZN	01	10	42.5	1.5		4.0	7.2		5.5
2	e	13	04	13.4	1.0			1.2		
2	eP	20	07	07.3	1.5			1.4		
	e(S)ZN		12	18.3	2.0		3.0	1.4		3.5
2	C&GS 22-23-32.4; 59.7 N., 144.5 W., h about 22 km., Gulf of Alaska, Mag. 5.2(CGS) (P-H)= 4,445 km.ca. or 40°.									
	iP	22	31	05.2	.5			3.5		
	eLN		46	03.2			10.4			14.0
3	61.4 N., 147.1 W., h about 48 km.(R), Southern Alaska, Mag. 5.2 (CGS) (P-H)= 4,665 km. ca. or 42°.									
	iP	13	47	23.0	1.0			4.0		
5	C&GS 03-35-08.4; 42.6 N., 142.6 E., h about 38 km., Hokkaido, Japan region, Mag. 5.0(CGS) (P-H)= 9,445 km.ca. or 85°.									
	e	03	47	42.1	.8			1.8		
6	eP	07	29	20.3	1.0			8.0		
6	C&GS 14-31-19.2; 40.3 N., 28.2 E., h about 10 km. (R) Turkey. 19 killed, several injured, extensive property damage in Western Turkey. Crevasses and hot springs appeared in epicentral area. Felt widely throughout Black Sea Region. Mag. 6 3/4 - 7 (PAS), 6 3/4 - 7 (BRK), 6¼ (PAL), 6.0 (CGS) (P-H) = 9,335 km.ca. or 84°.									
	ePZN	14	44	07.1	1.0		4.0	12.0		11.0
	eSN		54	49.1			6.0			35.0
	eLZN	15	21	00.1	17		16.0	2.6		41.0
9	e	14	04	10.0	.8			1.2		

		Time G. C. T. h m s	Period Sec. Z E N	Trace Amp. (mms) Z E N
Oct				
9	C&GS 19-26-39.7; 6,8 N., 73.0 W., h about 157 km., Northern Colombia. Felt: Bogota, Bucaramanga, and Medellin, Mag. 5.3 (CGS) (P-H) = 4,335 km. ca. or 39°.			
	i	19 33 18.5	.5	15.0
9	C&GS 19-55-34.7; 57.0 N., 151 .9 W., h about 17 km., Kodiak Island Region, Mag. 5.1(CGS) (P-H)=4,890 km.ca. or 44°.			
	e	20 03 36.4	.8	2.4
9	29 09.2; 16.2 S, 171.9 W., h about 33 km.(R), Samon Islands Region, Mag. 5¼ (BRK), 5.8 (CGS) (P-H)= 10,000 km.ca. or 90°.			
	e	21 47 05.9	1.0	3.0
11	e	06 12 49.9	.8	2.8
11	i	?	1.0	2.8
11	C&GS 14-19-11.5; 17.9 S., 71.5 W., h about 35 km., Near coast of Peru; Felt: Arequipa. Mag. 5.2(CGS) (P-H)=6,110km.ca. or55°.			
	i	14 29 01.2	1.3	2.6
11	e	21 34 15.6	1.0	2.2
	eZN	36 31.1	2.2 3.6	2.5 10.0
12	e	16 01 52.5	.8	1.4
12	C&GS 21-55-33.2; 31.3 S., 110.8 W., h about 25 km., Easter Island region, Mag. 6¼(PAS), 6¼(BRK), 5 3/4 (PAL), 6.0 (CGS) (P-H) = 7,665 km. ca. or 69°.			
	iPZN	22 06 37.4	1.6 3.0	8.0 7.4
	eN	15 19.4	---	---
13	C&GS 02-20-49.3; 44.4 N., 151.6 E., h abo t 33 km.(R), Kurile Islands Region, Mag. 5.2 (CGS) (P-H)=9,000 km. ca. or 81°.			
	e	02 32 57.9	1.0	3.5
15	C&GS 20-26-53.5; 44.7 N., 149.8 E., h about 49 km.(R), Kurile Islands, Mag. 5.2(CGS) (P-H)=9,000 km. ca. or 87°.			
	iPZN	20 39 03.5	1.0	11.0
	eSZ	47 50.5	1.5	2.0
	eLN	21 17 28.5	17.0	10.0

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
Oct										
15	e	22	52	45.5	1.0			2.0		
15	e	23	07	43.5	.6			1.0		
17	i	02	07	38.5	.8			4.2		
17	eP	03	36	38.0	1.0			2.6		
	e(S)		40	03.0	1.5			3.2		
17	e	10	50	26.9	.5			2.0		
17	i	15	23	25.8	1.2			5.8		
19	iP	01	12	04.1	1.2			5.2		
21	iPZN	07	42	10.5	.8	1.8		5.0		2.5
	eSZN		46	56.5	1.5	8.0		19.0		61.0
	eLZN		50	40.5	4.5	6.0		5.0		5.0
21	eP	23	28	41.3	.8			2.0		
	e		38	41.3	1.0			1.0		
	eLZN	00	14	09.3	---	18.0		---		30.0
22	A-Bomb in salt dome in Mississippi									
	iPZN	16	01	32.2	.4	---		3.6		---
	eSZN		03	34.7	1.0	1.6		11.0		4.4
23	iPZN	02	03	08.2	1.0	3.0		30.0		13.5
	ePPZN		04	58.2	1.5	3.6		11.5		16.0
	iSZN		09	01.2	?	9.0		?		40.0
	eLZN		12	21.2	18.0	16.0		3.0		118.0
23	e	05	44	34.4	1.0			1.6		
23	iP	21	18	43.5	.8			7.4		
25	iPZN	06	33	16.2	1.2	---		8.0		---
25	IPZN	23	04	07.6	.8	---		3.5		---
27	e	21	44	37.0	1.5			1.2		
28	e	00	33	09.0	1.0			2.4		
28	IPZN	01	38	59.5	.6			19.0		
28	3	06	13	29.8	.5			2.2		
30	eP	02	21	45.2	1.5			3.0		

DATE	PHASE	Time G. C. T. h	m	s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
Oct.										
30	e	02	55	57.2	.8			2.0		
30	iP	16	54	31.7	1.6			6.0		
Nov.										
2	eP	07	03	57	1.2			7.0		
4	C&GS 02-11-24.9; 19.7 S., 69.2 W., h about 102 km., Northern Chile, Mag. 5.2 (CGS) (P-H)= 6,665 km. ca. or 60°.									
	e	02	21	23.5	.8			2.0		
4	iP	13	45	30.8	.5			9.5		
	i		45	52.0	.8			22.0		
	e		46	25.5	---			5.0		
4	iP	13	49	57.9	---			8.0		
	i		50	18.5	---			16.0		
	e		50	52.6	---			4.0		
6	(True Trace readings from here on; prior to this all have been X2) C&GS 09-53-22.4; 44.4 N., 149.0 E., h about 60 km., Kurile Islands, Mag. 5 1/2 - 5 3/4 (PAL), 5.7 (CGS) (P-H) = 9,110 km. ca. or 82°.									
	iP	10	05	35.0	1.2			2.3		
7	iP	14	46	21.8	1.2			2.1		
9	eP	05	03	18.7	.5			1.2		
	i		06	29.3	1.0			1.1		
10	C&GS 06-07-49.6; 59.8 N., 144.3 W., h about 42 km., Gulf of Alaska, Mag. 5.0(CGS) (P-H)= 4,665km. ca. or 42°.									
	eZ	06	15	19.8	1.0			.6		
11	C&GS 08-01-26.1; 59.4 N., 144.6 W., h about 10 km. Gulf of Alaska, mag. 5.2 (CGS) (P-H) = 4,665 km. ca. or 42°.									
	ePZN	08	08	59.8	1.2	---		1.0	---	
	eLZN		22	33.3	---	6.4		---	19.0	
11	C&GS 13-17-37.5; 56.6 N., 161.4 E., h about 33 km., Near coast (east) of Kamchatka, Mag. 5.4(CGS) (P-H)=7,555 km.ca. or 68°.									
	iPZN	13	28	31.6	1.0	---		2.0	---	
11	ePZN	16	49	45.8	1.0	---		1.7	---	
11	e	17	08	19.9	1.0	0.8				

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z E N	Trace Amp.(mms) Z E N
Nov.				
11	C&GS 17-28-50.5; 56.6 N., 161.4 E., h about 33 km., Near east coast of Kamchatka, Mag. 5.1 (CGS) (P-H)=7,555 km.ca. or 60°.			
	eP	17 39 45.9	.8	1.0
11	C&GS 18-18-52.7; 56.5 N., 161.3 E., h about 33 km., Near east coast of Kamchatka, Mag. 5.3(CGS) (P-H)= 5,780 km. ca. or 52°.			
	eP	18 29 47.5	1.0	.8
11	C&GS 18-48-56.6; 13.4 S., 75.0 W., h about 99 km., Peru, Mag. 5.9(CGS), (P-H) = 5,780 km. ca. or 52°.			
	iP	18 57 59.0	1.2	1.5
11	C&GS 19-06-57.1; 56.5 N., 161.3E, h about 33 km., Near east coast of Kamchatka, Mag. 5.6(CGS) (P-H)=7,555 km. ca. or 68°.			
	i	19 17 51.5	1.0	1.6
13	C&GS 08-02-38.5; 13.0 N, 88.6 N., h about 86 km. Off coast of Cen. Amer.; Felt: San Salvador, El Salvador, Mag. 4.9(CGS) (P-H)= 2,890 km. ca. or 25°.			
	ePZN	08 07 42.5	1.0 ---	1.5
14	e	04 09 39.4	1.0	1.2
14	C&GS 12-52-46.3; 18.2 N., 105.5 W., h about 33 km. Off coast of Jalisco, Mexico, Mag. 5.3(CGS) (P-H)= 2,555 km. ca. or 23°.			
	iP	12 57 21.5	1.0	4.1
16	eZN	02 51 40.2	.8	.9
16	i	06 13 20.2	.5	1.1
17	eP	08 30 47.7	1.5	1.0
	e	45 07.7	1.5	1.8
	eLZN	09 04 03.7	23 22	1.0 11.5
17	C&GS 16-17-03.0; 13.2 N., 89.6 W., h about 54 km., El Salvador. Relt San Salvador. Mag. 4.5(CGS) (P-H) = 2,555 km. ca. or 23°.			
	e	16 22 06.1	1.2	1.0
18	iP	05 13 03.4	.8	3.0
18	i	22 49 17.9	1.0	1.0
20	e	23 45 21.0	.5	1.8

DATE	PHASE	Time G. C. T. h m s	Period Sec. Z	E	N	Trace Amp.(mms) Z	E	N
Nov.								
21	e	00 43 04.0	.5			2.0		
28	C&GS 16-41-33.4; 7.7 S., 71.2 W., h about 626 km., Western Brazil, Mag. 5.4(CGSO (P-H) = 4,780 km. ca. or 43°.							
	iPZE	16 48 23.0	.5			8.0		
28	C&GS 16-49-30.3; 8.0 S., 71.4 W., h about 655 km. Western Brazil, Mag. 5.6(CGS), (P-H)= 4,780 km. ca. or 43°.							
	iPZE	16 56 18.5	.5			7.0		
29	i	03 17 19.0	.8			1.5		
29	i	09 17 45.5	.8			1.5		
	C&GS 09-11-05.8; 6.8 N., 73.2 W., h about 171 km., Northern Columbis, Mag. 4.9(CGS) (P-H) = 3,555 km. ca. or 32°.							
30	eP	12 47 02.8	.8			1.0		
	eN	50 38.8		3.0			2.0	
Dec.								
2	C&GS 13-18-29.0; 53.8 N., 165.4 W., h about 35 km. Fox Islands, Aleutian Islands, Mag. 5.0(CGSO (P-H)=4,665 km.ca. or 42°.							
	i	13 27 29.2	1.0			1.0		
3	e	04 09 43.2	1.3			1.5		
4	C&GS 07-43-47; 77.3 N., 6.4 E., h about 33 km. Svalbard region. Mag. 4.9(CGS) (P-H)= 6,555 km. ca. or 58°.							
	e	07 53 34.0	1.0			1.2		
7	C&GS 18-52-47.6; 6.7 N., 82.2 W., h about 30 km. South of Panama ; Mag. 5¼-5½(PAL), 5.2(CGS) (P-H)=3,555km.ca. or 32°.							
	iP	18 59 05.6	1.0			1.0		
8	C&GS 04-11-53.7; 11.5 N., 87.0 W., h about 48 km. Near coast of Nicaragua, Mag. 4 3/4-5(PAL), 5.0(CGS) (P-H)=2,780km.ca. or25°.							
	eP	04 17 17.4	.8			0.7		
8	C&GS 09-14-29; 21.3 S., 81.8 W., h about 33 km. Southeast central Pacific Ocean, mag. 4.8(CGS) (P-H)=6445km.ca. or 58°.							
	iP	09 24 22.5	1.0			0.8		
8	e	18 03 02.6	1.0			0.6		

Date	Phase	Time G. C. T. h m s	Period sec.			Trace Amp. (mm)		
Dec.								
9	C&GS 13-35-42.2; 27.5 S., 63.2 W., h about 586 km.(R) Santiago del Estro Province, Argentina. Mag. 5 - 5¼(BRK) 6¼(PAL), 5.9 (CGS) (P-H) = 7,220 km. ca. o r 65°.								
	iPZEN	13	45	54.3	.8	1.0	1.0	6.0	3.0	3.0
	iSZEN		54	16.3	1.2	4.0	4.0	1.8	15.0	38.0
10	eP	15	22	02.3	1.4			1.5		
	e(S)ZEN	"	24	01.3	1.5	1.6	---	4.2	2.0	---
14	iP	03	44	33.5	1.5			2.5		
14	eP	12	18	04.4	1.0			9.0		
	eS		22	02.4	1.5			6.0		
17	C&GS 05-18-34.8; 45.4 N., 150.1 E., h about 17 km. Kurile Islands Mag. 5.3 (CGS) (P-H)= 9,000 km. ca. or 81°.								
	ip	05	30	46.9	1.0			3.0		
17	iP	14	04	02.4	1.0			4.2		
20	iP	00	32	50.1	1.0			12.0		
20	iP	08	06	58.4	.8			3.8		
	ePP		07	24.4	1.0			9.0		
20	eP	20	59	02.0	.8			8.0		
	e	21	00	12.0	1.2			4.0		
	eL		50	01.0	3.6			8.0		
21	iP	12	44	10.9	1.0			3.0		
21	C&GS 18-32-03.0; 63.1 N., 150.3 W, h about111 km. Central Alaska; Mag. 4.8(CGS) (P-H) = 5,000 km ca. or 45°.								
	eP	18	39	53.5	1.0			1.5		
23	e	08	58	28.5	.5			1.0		
23	iP	16	34	20.0	.8			3.2		
	eS		40	57.0	3.0			1.8		
23	i	18	07	15.1	.5			2.5		

The University of Arkansas Seismograph Station is located on the University Farm, 2.5 miles northwest of the main campus at Fayetteville. Coordinates of the station are 36° 05.46' north latitude and 94° 11.47' west longitude. Altitude above mean sea level is 1,325 feet. The seismometer pier rests on the Boone limestone of lower Mississippian age. Approximately 2,500 feet of limestone, shale and sandstone overlie the pre-Cambrian crystalline rocks in the vicinty of the station.

University of Arkansas
Seismograph Station
Department of Geology
Fayetteville, Arkansas