

FAYETTEVILLE

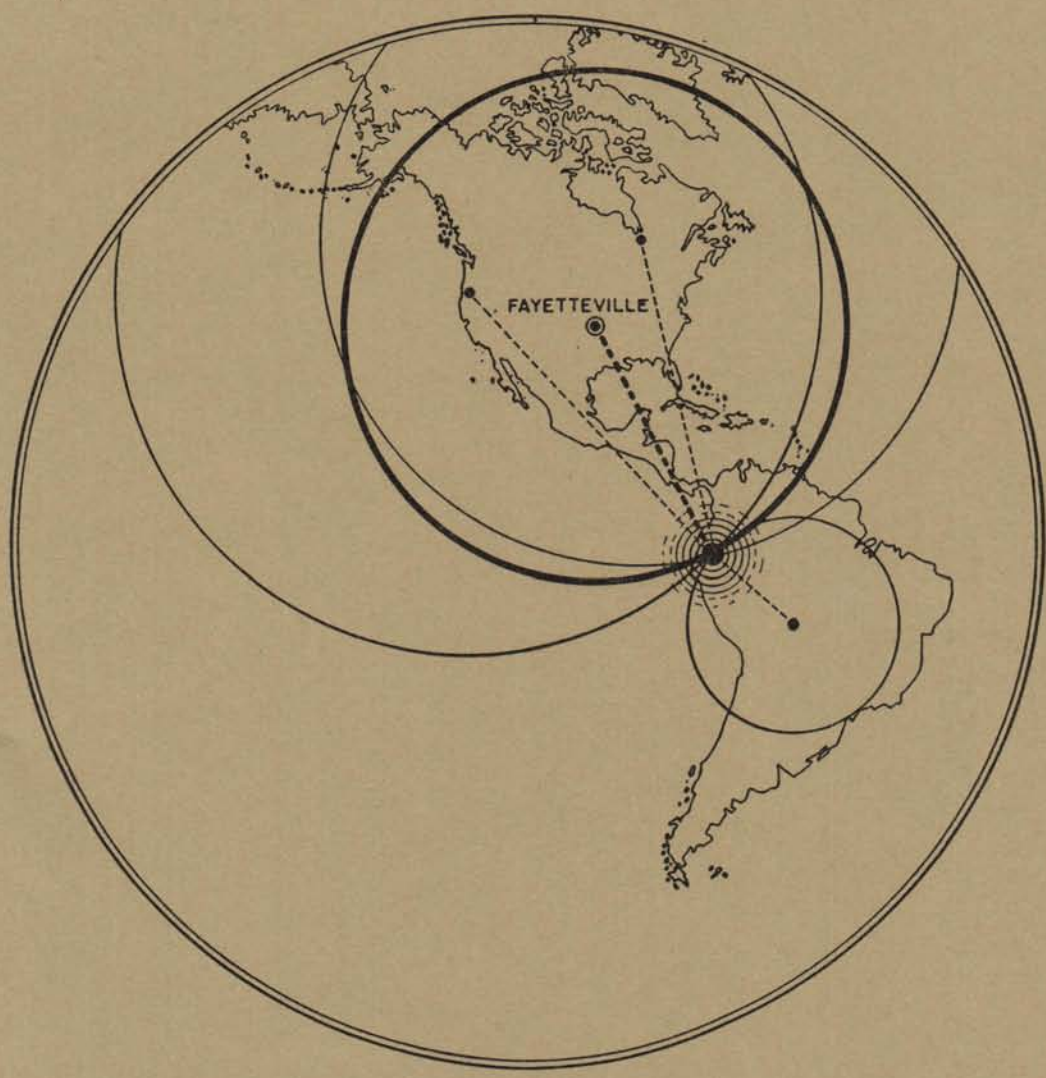
Jany - March 1965

UNIVERSITY OF ARKANSAS

SEISMOLOGICAL BULLETIN

Volume XIV

Number 1



The University Of Arkansas Seismograph Station

Operated by the University's Department of Geology
in conjunction with the
United States Coast Guard and Geodetic Survey

FAYETTEVILLE SEISMOGRAPH STATION

Volume 14, Number 1, September 1966

Data for January, February, March 1965

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

DATE	PHASE	Time G. C. T.			Period		Sec.	Trace Amp. (mms)			i
		h	m	s	Z	E		N	Z	E	
Jan. 1	C&GS 21-38-29.2; 35.7 N., 4.4 E., h about 10 km., Algeria. 4 killed, 40 injured and major property damage at M'Sila. Mag. $5\frac{1}{4}$ - $5\frac{1}{2}$ (PaL), 5.2 (CGS) (P-H) = 77° or 8,555 km. ca.	eP	21	50	15.9	1.0		1.9			
3	C&GS 23-13-50.4; 60.2 N., 151.2 W., h about 93 km. Kena: Peninsula, Alaska. Mag. 5.6 (CGS) (P-H)=44° or 4,890 km.ca.	e	23	21	42.5	1.0		2.0			
5	C&GS 14-18-36;* 14.3 N., 93.3 W., h about 53 km. Near coast of Chiapas, Mexico. Mag 4.7(CGS) (P-H) = 20° or about 2,220kmca.	iP	14	23	24.5	.8		2,0			
5	C&GS 18-05-58.6; 20.3 S., 174.1 W., h about 33 km.(R), Tonga Islands. Mag 6 $\frac{3}{4}$ (PAS), $6\frac{1}{4}$ (BRK) 6.0 (CGS) (P-H)= 95° or about 10,555 km. ca.	eP	18	19	15.7	1.5		3.2			
5	C&GS 19-29-38.0; 14.7 N., 93.1 W., h about 47 km. Near coast of Chiapas, Mexico, Mag. 4.4(CGS) (P-H)= 21° or about 2,335 km. ca.	eP	19	34	23.7	1.0		1.2			
6	C&GS 02-01-22.2; 44.9 N., 112.7 W., h about 7 km. Eastern Idaho; Felt: Southwestern Montana Region and Eastern Idaho. Mag. 5.1(CGS) (P-H) = 20° or about 2,220 km. ca.	eP (PP)	02 10	05 22.2	14.2 1.5	1.0		5.0 4.5			
6	C&GS 09-19-01.2; 41.4 S., 85.4 W., h about 33 km. West Chile Rise. Mag. 5.5(CGS) (P-H) = 79°. or about 8,780 km. ca.	iP	09	30	54.0	1.0		3.0			
6	C&GS 18-27-34.0; 60.0 N., 151.8 W., h about 53 km. Kenai Peninsula, Alaska; Mag. 5.3 (CGS) (P-H) = 43° or about 4,780 km.ca	iP	18	35	33.0	.8		1.5			
7	C&GS 15-56-32.5; 16.2 N., 97.2 W., h about 43 km. Oaxaca, Mexico. Felt: Mexico City. Mag. 5.5(CGS) (P-H) = 19° or about 2,110 km. ca.	iPZN	16	01	02.5	.6	3.0	5.0	4.0		
9	C&GS 13-32-46.4; 11.9 N., 126.2 E., h about 5 km. Philippine Islands Region. Mag. 6.1(CGS) (P-H)=120° or about 13,335 km. ca.	ePP	13	51	36.7	.9		1.0			

DATE	PHASE	Time G. C. T.			Period			Trace Amp. (mms)		
		h	m	s	Z	E	N	Z	E	N
Jan.										
9	e	08	57	4.5	1			.8		
9	eP	13	54	5.5	1.8			.9		
	e(S)ZE	14	07	35.5	1.4	---		1.0	---	
	eLZE		50	4.5	1.5			.8	11.0	
9	iP	19	49	43	.9			1.0		
10	e	16	05	27.7		1.5		1.2		
11	iP	13	46	35.3	.4			2.0		
	e				1.0			.8		
12	i	02	25	27.3	.8			.9		
12	e	17	08	38	.6			1.2		
14	C&GS 08-25-17.5; 5.5 S., 81.3 W., h about 32 km.(R) Near coast of Northern Peru. Mag 5.3(CGS) (P-H)=44° or about 4,890 km. ca.									
	iPZEN	08	33	17.7	1.0	4.0	2.0	8.0	2.0	2.5
	iSEN		39	43.7	---	8.0	7.0	---	7.5	2.4
	eLEN		43	15.7		10.0	5.0		6.0	2.0
14	C&GS 19-35-35*; 14.1 N., 93.1 W., h about 33 km(R) Near coast of Chiapas, Mexico. Mag. 3.9 (CGS) (P-H) = 21° or 2,335 km. ca.									
	ePP	19	40	29.9		.8		0.4		
14	C&GS 22-04-26.6; 5.3 N., 76.3 W., h about 117 km. Colombia, Felt; Armero, Manizales, and Pereira. Mag. 5.0 (CGS) (P-H)=37° or about 4,110 km. ca.									
	eP	22	11	11.9	0.9			0.8		
14	C&GS 23-54-00*; 14.4 N., 92.9 W., h about 33 km (R) Near coast of Chiapas, Mexico. Mag. 4.8(CGS) (P-H)=21° or 2,335 km. ca.									
	iP	23	58	43	1.0			0.9		
15	C&GS 05-59-58.5; 49.9 N., 79.0 E. h about 0 km., Eastern Kazakh, SSR., Mag. 5 1/2 - 5 3/4 (BRK), 5 3/4 - 6 (PAL), 6.0 (CGS) (P-H) = 93° or a. out 10,335 km. ca.									
	iP	06	13	20.9	1.0			3.5		
17	iP	02	21	37.7	1.3			1.2		

DATE	PHASE	Time G. C. T.			Period Sec.			Trace Amp. (mms)		
		h	m	s	Z	E	N	Z	E	N
Jan.										
17	iP	21	16	13.8	1.0			11.0		
	iS		17	45.3	1.0			4.0		
	iL		20	07.3	1.2			5.0		
18	e	00	15	54.2	1.2			2.9		
20	C&GS 16-42-50.9; 60.0 N., 146.3 W., h about 33 km(R) Gulf of Alaska, Mag. 4.4(CGS) (P-H)=41° or 4,555 km. ca.									
	eP	16	50	32.0	1.0			1.2		
20	C&GS 20-27-05.5; 46.3 N., 152.3 E., h about 33 km(R), Kurile Islands, Mag. 4.6 (CGS) (P-H) = 80° or about 8,890 km. ca.									
	eP	20	39	05.0	.8			1.5		
21	e	11	45	04.3	1.0			0.9		
22	e	22	23	58.9	0.9			0.8		
23	ePZEN	23	30	23.9	1.9	2.0	2.4	9.0	4.0	1.5
	ePPZEN		32	35.4	3.0	3.0	3.5	7.5	5.0	4.0
	eSZEN		36	16.4	1.3	2.0	3.0	3.0	1.5	2.0
	eLZEN		39	36.4	2.0	4.3	8.5	1.9	4.5	1.8
24	C&GS 01-19- 32.9; 6.8 N., 73.1 W., h about 169 km. Northern Colombia. Felt: Bogota, Bucaramanga, Sugamoso. Mag. 5.4(CGS) (P-H) = 37° or about 4,110 km. ca.									
	eP	01	26	11	0.9	---	---	2.0	---	---
25	C&GS 08-51-43*; 15.9 N., 93.5 E., h about 33 km(R) Near coast of Chiapas, Mexico, Mag. 3.9 (CGS) (P-H) = 18° or 2,000 km. ca.									
	eP	08	5.5	42.7	1.1			1.4		
26	C&GS 04-58-20*; 2.9 S., 102.4 E., h about 89 km. Southern Sum- atra. Mag. 4.2(CGS) (P-H) = 144° or about 16,000 km. ca.									
	eP	06	44	54.3	1.0			1.3		
26	C&GS 11-23-14*; 28.2 N., 11.7 W., h about 33 km(R) Gulf of California, Mag. 4.5(CGS) (P-H)= 18° or about 2,000 km. ca.									
	eP	11	27	08.8	0.8			0.4		
27	iP	00	00	38.3	1.2			2.0		
27	e	17	41	29.3	1.2			.08		

DATE	PHASE	Time G. C. T.			Period Sec.			Trace Amp. (mms)			4
		h	m	s	Z	E	N	Z	E	N	
Jan. 27	e	21	28	39.2	.09			.07			
28	iP	02	53	32.2	1.0			2.6			
28	C&GS 04-03-35.9; 15.3 N., 93.9 W., h about 33 km(R) Near coast of Chiapas, Mexico, Mag. 5.3(CGS) (P-H) = 20° or about 2,220 km.ca.										
	iP	04	08	20.1	0.9			4.5			
	iS	04	12	19.3	1.0			1.8			
29	iPZEN	00	15	19.8	1.2	4.0	4.0	2.0	2.4	1.8	
	iSZEN		20	28.8	9.0	2.3	7.0	3.2	33.0	19.0	
29	C&GS 02-21-54.5; 24.2 N., 108.6 W., h about 33 km(R), Gulf of California, Mag. 4.6(CGS) (P-H)=18° or about 2,000 km. ca.										
	ePZEN	02	25	52.7	1.4	5.0	4.4	1.0	1.8	2.0	
29	C&GS 09-35-25.7; 54.8 N., 161.7 E., h about 33 km(R) Near east coast of Kamohatka. Mag. 5.8(CGS) (P-H)=69° or 7,665 km. ca.										
	iP	09	46	27.1	1.8			4.2			
29	C&GS 22-31-56.3; 51.3 N., 179.0 W., h about 33 km(R) Andreanof Islands, Aleutian Islands, (P-H) = 60° or about 6,665 km. ca.										
	e	22	41	57.1	1.0			0.9			
30	C&GS 04-37-15.1; 51.6 N., 179.8 W., h about 33 km (R) Andreanof Islands, Aleutian Islands, Mag. 5.6(CGS) (P-H) = 60° or about 6,665 km. ca.										
	eP	04	47	19.5	0.8			2.5			
30	e	05	10	24.6	1.0			1.2			
31	C&GS 12-57-29.1; 21.2 S., 67.8 W., h about 71 km.(R) Chile-Bolivia border region. Mag 5.6(CGS) (P-H) = 62° or about 6,890 km. ca.										
	iP	13	07	45.3	0.9			5.5			
Feb. 8	iP	15	57	36.5	0.8			2.2			
8	C&GS 17-37-24.6; 55.2 N., 165.3 E., h about 30 km.(R) Komandorsky Islands region. Mag. 5.8(CGS) (P-H) = 66° or about 7,335 km. ca.										
	eP	17	48	14.7	0.6			1.8			

DATE	PHASE	Time G. C. T.			Period Sec.			Trace Amp. (mms)		
		h	m	s	Z	E	N	Z	E	N
Feb. 9	eP	17	47	48.2	0.7			1.7		
11	C&GS 21-57-17*; 31.6 N., 113.9 W., Depth about 33 km. (R) Gulf of California. Mag. 5 1/2 - 5 3/4 (PAS), 4.6 (CGS) (P-H) = 18° or about 2,000 km. ca.									
	eP	21	56	18.2	1.0			2.6		
	e(LZN)				4.0	5.2		2.5	6.0	
12	C&GS 00-43-17.1; 51.5 N., 175.8 E., Depth about 33 km. Rat Island, Aleutian Islands, Mag. 5 3/4 (PAS), 5.4 (CGS) (P-H) = 62° or about 6,890 km. ca.									
	eP	00	53	44.5	1.0			2.0		
12	C&GS 00-55-06.2; 52.2 N., 172.8 E., Depth about 25 km. Rat Islands, Aleutian Islands. Mag 6.0 (PAS), 5 1/2-5 3/4 (PAL), 5.5 (CGS) (P-H) = 62° or about 6,890 km. ca.									
	iPZN	01	05	39.4	0.6	3.8		2.0		1.5
	iSZN		07	20.7	0.8	2.2		0.8		1.2
12	C&GS 10-50-19.7; 40.3 N., 125.9 W., h about 33 km (R), Near coast of Northern California. Mag 5.3 (CGS) (P-H) = 25° or about 2,780 km. ca.									
	e	10	55	39.8	0.7			1.0		
12	C&GS 12-38-44*; 9.7 N., 104.9 W., h about 33 km (R), Off coast of Mexico. Mag 4.7 (CGS) (P-H)=28° or 3,110 km. ca.									
	i	12	44	33.7	0.9			1.4		
12	e	23	59	16.7	1.0			1.4		
13	C&GS 03-50-10.0; 51.1 N., 174.2 E., h about 33 km. Rat Islands, Aleutian Islands, Mag. 5.0 (CGS) (P-H) = 62° or about 6,890 km. ca.									
	e	04	00	40.7	0.6			0.8		
13	C&GS 15-29-41; 50.9 N., 174.8 E., h about 30 km. Rat Islands, Aleutian Islands, Mag. 4.6 (CGS) (P-H)=62° or 6,890 km. ca.									
	eP	15	38	38.7	1.2			4.2		
14	C&GS 19-37-17,8; 73.0 N., 6.5 E., habout 33 km. Greenland Sea Mag. 5.4 (CGS) (P-H) = 59° or about 6,555 km. ca.									
	eP	19	47	15.6	1.2			2.1		

DATE	PHASE	Time G. C. T.			Period Sec.			Trace Amp. (mms) ₆		
		h	m	s	Z	E	N	Z	E	N
Feb. 14	eP	20	03	38.1	0.5			4.2		
14	C&GS 21-17-34.4; 52.4 N., 173.9 E., h about 39 km. Rat Islands Aleutian Islands, Mag. 5.3(CGS) (P-H)=61° or 6,780 km. ca.									
	eP	21	28	01.4	1.0			2.0		
15	C&GS 01-25-08.8; 51.4 N., 179.4 E., h about 42 km. Rat Islands Aleutian Islands, Mag. 5.8(CGS) (P-H)=60° or about 6,665 km. ca.									
	iP	01	35	17.4	1.0			5.5		
15	eP	11	02	23.2	1.1			3.5		
16	C&GS 00-54-59.1; 51.2 N., 177.5 E., h about 45 km. Rat Islands, Aleutian Islands, Mag. 4.9(CGS) (P-H)=60° or about 6,665 km. ca.									
	eP	01	05	15.8	0.5			0.6		
16	C&GS 08-46-07-7; 26.4 N., 109.9 W., h about 33 km. Gulf of California, Mag. 4(BRK) (P-H)=18° or about 2,000 km. ca.									
	iP	08	50	04.7	1.0			1.5		
	iPP	08	50	13.0	1.2			0.5		
	i(iZEN)	08	55	03.0	1.8	9.6	3.2	1.6	4.5	5.0
16	C&GS 10-59-17.2; 26.4 N., 110.0 W., h about 33 km. Gulf of California, Mag. 4 $\frac{1}{4}$ -4 $\frac{1}{2}$ (BRK), 5.2(CGS) (P-H)=18° or 2,000 km. ca.									
	iPZEN	11	03	11.4	0.9	5.8	2.8	1.8	10.0	8.0
	iLZEN		09	04.2	1.2	7.0	7.0	2.2	3.5	3.0
16	C&GS 12-23-08.8; 39.5 N., 141.8 E., h about 33 km, Houshu, Japan Mag. 5.6(CGS) (P-H) = 94° or about 10,445 km. ca.									
	iP	12	37	00.8	1.0			2.5		
16	iP	20	22	44.1	1.1			2.5		
16	C&GS 22-21-44.9; 39.9 N., 105.0 W., h about 5 km. Colorado Felt at Denver area, Mag. 4.9(CGS) (P-H)=9° or 1,000 km. ca.									
	ePZN	22	24	38.2	0.9		8.0	1.0		1.4
	iSZN		26	29.8	1.2		1.8	4.8		2.2
	iLZN		27	17.8	1.3		2.0	2.5		1.0
17	C&GS 10-11-13.7; 51.2 N., 178.3 E., h about 35 km. Rat Islands Aleutian Islands. Mag. 5.3(CGS) (P-H)=60° or about 6,665 km. ca.									
	iP	10	21	28.6	1.1			2.5		

DATE	PHASE	Time G. C. T.			Period Sec.			Trace Amp. (mms)		
		h	m	s	Z	E	N	Z	E	N
Feb. 17	C&GS 10-18-51.3; 51.8 N., 176.6 E., h about 44 km. Rat Islands, Aleutian Islands, Mag. 5 - 5 $\frac{1}{4}$ (BRK), 5.6 (CGS) (P-H) = 61° or about 6,780 km. ca.									
	eP	10	29	09.7	1.1			1.5		
18	e	00	38	29.6	0.9			0.8		
18	C&GS 08-34-05.4; 51.8 N., 176.4 E., h about 15 km. Rat Islands, Aleutian Islands, Mag. 5.2 (CGS) (P-H) = 61° or about 6,780 km. ca.									
	eP	08	44	27.3	0.6			0.7		
18	C&GS 22-32-19.6; 9.9 S., 71.2 W., h about 594 km. Peru-Brazil border region. Mag. 5 (BRK) (P-H) = 45° or about 5,000 km. ca.									
	iP	22	40	26.2	0.8			7.4		
18	C&GS 23-13-63.3; 51.4 N., 179.1 E. h about 28 km. Rat Islands, Aleutian Islands. Mag 6 (PAS), 5 1/2-5 3/4 (PAL), 5 (BRK), 5.4 (CGS) (P-H) = 60° or about 6,665 km. ca.									
	ePZN	23	23	47.9	1.2		3.0	4.0		3.0
	e(SN)	23	32	01.5			4.0			10.2
19	C&GS 03-24-43.1; 51.6 N., 175.0 E., h about 23 km. Rat Islands, Aleutian Islands, Mag. 4 1/2 - 4 3/4 (BRK), 5.2 (CGS) (P-H) = 61° or about 6,780 km. ca.									
	e	03	35	10.8	0.9			0.8		
19	e	05	48	45.3	1.0			1.1		
19	e	06	32	39.3	1.0			0.5		
19	C&GS 17-35-21.0; 44.7 N., 110.1 W., h about 22 km. Yellowstone National Park, Wyoming. Mag. 4.0 (CGS) (P-H) = 15° or 1,665 km. ca.									
	eP	17	38	50.0	1.0			1.0		
19	C&GS 18-52-42.1; 51.1 N., 178.4 E., h about 35 km. Rat Islands Aleutian Islands, Mag. 4 $\frac{1}{4}$ -4 $\frac{1}{2}$ (BRK), 5.6 (CGS) (P-H) = 60° or 6,665 km ca.									
	iP	19	02	55.8	1.2			3.0		
20	e	05	45	16.7	0.8			2.0		
22	C&GS 02-22-46; 19.5 N., 108.9 W., h about 33 km. Revilla Gigedo Islands Region. Mag. 4.8 (CGS) (P-H) = 24° or about 2,665 km. ca.									
	e	02	27	30.9	1.0			1.0		

DATE	PHASE	Time G. C. T.			Period Sec.			Trace Amp. (mms)		
		h	m	s	Z	E	N	Z	E	N
Feb.										
22	C&GS 09-14-51.3; 51.9 N., 173.4 E., h about 35 km. Rat Islands, Aleutian Islands, Mag. $5\frac{1}{4}$ - $5\frac{1}{2}$ (PAL), 5.5(CGS) (P-H) = 62° or about 6,890 km. ca.									
	iP	09	25	21.8	0.7			5.0		
22	C&GS 20157-01; 21.2 N., 106.8 W., h about 33 km. Off coast of Central Mexico. Mag. 4.2(CGS) (P-H)= 21° or about 2,335 km. ca.									
	eP	20	51	11.0	1.0			2.9		
22	C&GS 21-22-36; 19.1 N., 106.2 W., h about 33 km. Off coast of Jalisco, Mexico. Mag. 4.1(CGS) (P-H) = 21° or about 2,335 km. ca.									
	eP	2.1	27	7.8	1.2			1.0		
23	C&GS 22-11-50.2; 25.7 S., 79.5 W., h about 80 km. Near coast of Northern Chile. i killed. 5 injured and heavy damage. Mag. $7\frac{1}{4}$ (PAS), $6\frac{3}{4}$ (BRK), $6\frac{3}{4}$ -7(PAL), 6.2(CGS) (P-H) = 63° or about 7,000 km. ca.									
	iPN	22	22	25.4			3.0			22.0
	iSN	22	31	04.4			8.4			23.0
23	eLZN	22	51	07.0	2.0		11.0	2.0		7.0
23	iPZEN	08	14	00.4	1.4	4.8	3.6	4.5	6.0	9.2
	iSZEN		15	43.4	2.0	6.4	5.2	2.5	4.8	6.0
	ePZEN		18	25.4	1.0	10.0	11.8	1.2	19.0	10.0
23	eP	09	42	10.3	1.4			2.0		
23	iP	21	33	30.1	1.0					1.2
24	iPZN	05	32	45.3	0.7		1.2	8.0		2.0
	e(LN)		50	53.4			17.0			5.0
24	iP	06	50	29.0	1.2			2.0		
26	C&GS 23-36-12.2; 6.9 N., 73.0 W., h about 146 km. Northern Colombia. Felt at Bogota, Bucaramanga and Cucuta. Mag. $5\frac{3}{4}$ -6(BRK), 5.7 (CGS) (P-H) = 37° or about 4,110 km. ca.									
	iP	23	42	51.3	0.9			7.0		
27	C&GS 07-46-29.1; 28.5 N., 112.1 W., h about 33 km. Gulf of California, Mag. 5.3(CGS) (P-H) = 18° or about 2,000 km. ca.									
	ePZEN	07	50	24.2	1.1		4.0	7.5		7.8
	iSZEN		55	15.2	1.2	5.0	3.0	11.0	113.0	120.0
	iLZEN		58	01.5	7.5	10.0	9.0	6.5	16.0	13.5

DATE	PHASE	Time G. C. T.			Period Sec.			Trace Amp. (mms)			9
		h	m	s	Z	E	N	Z	E	N	
Feb. 27	C&GS 10-52-45; 28.7 N., 112.0 W., h about 33 km. Gulf of California Mag. 4.6(CGS) (P*H) = 18° or about 2,000 km.										
	ePZEN	10	56	39.1	1.0	4.0	5.0	2.2	2.0	2.5	
	eSZEN	11	01	30.4	2.0	9.0	8.0	2.5	9.4	11.0	
27	iP	11	57	37.5	0.9			3.9			
March 1	C&GS 09-04-35.5; 29.5 S., 69.8 W., h about 103 km. Chile- Argentina border region. Mag. 4.9(CGS) (P-H)=70° or 7,780 kmca.										
	iP	09	15	28.7	1.0			3.7			
	C&GS 15-54-24.5; 41.4 S., 85.6 W., h about 33 km. West Chile Rise. Mag. 5.2(CGS) (P-H) = 77° or about 8,555 km. ca.										
	eP	16	06	18.2	1.2			2.2			
1	C&GS 19-22-01.6; 52.2 N., 173.9 E., h about 3 km. Rat Islands, Aleutian Islands, Mag. 5.5(CGS) (P-H)=61° or about 6,780 km. ca.										
	iP	19	32	30.1	1.0			5.0			
1	C&GS 21-32-11.8; 15.4 N., 92.5 W., h about 93 km. Mexico- Guatemala Border Region. Felt at San Salvador. Mag 6 (PAS), 5½(BRK), 5 3/4-6(PAL), 5.9(CGS) (P-H)=20° or about 2,220 km.ca.										
	iPZEN	21	36	45.8	1.0	5.2	5.0	29.8	24.5	40.0	
	iSZEN		40	29.3	0.8	3.0	4.0	39.0	42.0	37.0	
	eLZEN		43	06.3	1.5	10.0	6.0	3.5	9.0	17.0	
3	e	15	32	51.6	1.0			1.8			
3	e				1.2			2.0			
3	iP	16	01	45.6	0.8			1.5			
	iL ₉ ZEN		02	11.6	17.0	40.0	40.0	0.5	7.0	3.0	
3	C&GS 16-47-25.7; 53.1 N., 171.2 E., h about 23 km. Rat Islands, Aleutian Islands, Mag. 5.6(CGS) (P-H)=62° or about 6,890 km. ca.										
	iP	16	58	02.6	1.0			6.2			
3	eP	17	57	45.1	0.9			3.0			
3	eP	19	17	07.5	1.0			2.4			
4	e	0s	49	28.5	0.9			1.0			

DATE	PHASE	Time G. C. T.			Period Sec.			Trace Amp. (mms)			10
		h	m	s	Z	E	N	Z	E	N	
March											
4		C&GS 06-30-16.2; 52.0 N., 175.0 E., h about 40 km. Rat Islands, Aleutian Islands, Mag. 5.5(CGS) (P-H) = 61° or about 6,780 km. ca.									
	iP	06	40	39.5	1.4			2.6			
5	e	02	50	38.0	0.5			0.6			
5	iP	06	25	12.5	0.9			4.9			
6		C&GS 21-08-49.9; 37.4 N., 91.1 W., h about 18 km. Missouri Felt at Fletcher. Mag. 5.3(CGS) (P-H)=2° or about 222 km. ca.									
	iPZEN	21	09	16.1	0.6	4.0	2.0	4.0	1.0	1.5	
	iSZEN		09	53.5	0.9	1.0	1.0	5.0	13.0	8.5	
7	i	06	06	19.0	0.7			1.5			
7	e	11	13	45.0	1.0			1.2			
7		C&GS 22-45-17.9; 41.1 S., 91.2 W., h about 33 km. Southern Pacific Ocean. Mag. 5.0(CGS) (P-H) = 77° or about 8,555 km. ca.									
	eP	22	57	07.5	1.5			1.0			
8		C&GS 23-11-31.7; 24.6 S., 67.1 W., h about 168 km. Chile-Argentina Border Region. Mag. 5(BRK), 5.4(CGS) (P-H) = 67° or about 7,445 km. ca.									
	eP	23	21	56.8	0.8			2.8			
9		C&GS 01-36-45.4; 17.0 S., 177.4 W., h about 386 km. Fiji Islands Region. Mag. 5 3/4-6(BRK), 5.5(CGS) (P-H)=95° or about 10,555 kmca.									
	iP	01	49	29.6	1.0			4.0			
9		C&GS 17-57-53.7; 39.4 N., 24.0 E., h about 18 km. Aegean Sea. Two killed and heavy damage on Lonissos Island. Felt widely throughout Greece and in Canakkalef Edremit, Turkey. Seismic sea wave reported on Pelagos and Skiathos Islands. Mag. 6 1/4-6 1/2(PAL), 6 1/4-6 1/2(BRK), 5.7(CGS) (P-H) = 96° or about 10,665 km. ca.									
	iPZN	18	10	24.2	0.9	1.0		6.0		2.0	
	iLZN		20	47.3	4.5	17.0		1.0		8.0	
9		C&GS 18-37-54.4; 39.4 N., 24.0 E., habout 33 km. Aegean Sea. (P-H) = 96° or about 10,665 km. ca.									
	e	18	50	32.9	1.0			1.5			

DATE	PHASE	Time G. C. T.			Period Z E N	Sec. Z E N	Trace Amp. (mms)			11
		h	m	s			Z	E	N	
March										
9	C&GS 19-46-58.2; 39.3 N., 23.9 E., h about 19 km. Aegean Sea. Mag. 4.7 (CGS) (P-H) = 96° or about 10,665 km. ca.									
	eP	19	59	39.3	1.0				1.5	
9	C&GS 21-20-04.9; 39.2 N., 23.8 E., h about 13 km. Aegean Sea. Mag. 4.7 (CGS) (P-H) = 96° or about 10,665 km. ca.									
	eP	21	32	45.3	0.8				0.8	
10	iP	00	15	13.6	1.0				3.0	
10	e	07	50	52.3	0.8				0.6	
12	e	01	50	14.0	0.8				0.5	
12	C&GS 22-16-54.1; 27.0 S., 71.0 W., h about 33 km, Near coast of Northern Chile, Mag. 4.9 (CGS) (P-H) = 72° or about 8,000 km. ca.									
	i	22	27	40.8	0.9				1.2	
12	C&GS 22-54-44.7; 5.8 W., 77.8 W., h about 52 km. Northern Peru, Mag. 4.9 (CGS) (P-H) = 41° or about 4,555 km. ca.									
	iP	23	02	51.4	0.7				1.8	
	iP _c P		03	07.5	1.2				1.0	
	iPP		03	51.8	1.2				1.5	
13	C&GS 04-09-38.5; 39.0 N., 23.4 E., h about 33 km., Aegean Sea. Slight damage on Alonissos Island, also felt at Athens and in central Greece. Mag 5.5 (CGS) (P-H) = 85° or about 9,445 km. ca.									
	eP	04	22	36.4	1.0				2.5	
13	e	04	56	26.6	0.9				1.2	
13	C&GS 07-33-23-.0; 53.1 N., 162.3 W., h about 37 km. South of Alaska, Mag. 5.5 (CGS) (P-H) = 50° or about 5,555 km. ca.									
	iP	07	42	09.3	1.4				5.0	
	iPP		42	19.7	0.9				3.8	
Clock stopped - No record from March 14 - 16.										
17	C&GS 14-43-58.4; 52.5 N., 172.6 E., h about 30 km. Near Islands, Aleutian Islands, Mag. 5.5 (CGS) (P-H) = 65° or about 7,220 km. ca.									
	iP	14	53	45.2	1.2				2.8	

DATE	PHASE	Time G. C. T.			Period Sec.			Trace Amp. (mms)		
		h	m	s	Z	E	N	Z	E	N
March										
18	eP	06	21	06.2	1.0			2.0		
19	iP	16	04	42.3	0.8			1.2		
19	C&GS 16-20-51.4; 2.0 S., 119.8 E., h about 46 km. Celebes. Mag. 5.0(CGS) (P-H) = 134° or about 14,890 km. ca.									
	eP	14	40	05.7	1.1			1.0		
19	C&GS 22-58-34.9; 0.0 N., 123.4 E., h about 173 km. Northern Celebes. Mag. 5.6(CGS) (P-H) = 133° or about 14,780 km. ca.									
	eP	23	17	26.1	1.0			2.4		
	ePP		19	34.1	1.5			1.0		
	ePPP		20	37.1	1.0			3.2		
20	C&GS 13-02-29; 19.0 S., 69.6 W., h about 64 km. Northern Chile. Mag. 4.5(CGS) (P-H) = 65° or about 7,220 km. ca.									
	eP	13	12	26.8	1.0			0.9		
21	C&GS 09-42-41.3; 11.7 N., 86.4 W., h about 36 km. Near coast of Nicaragua. Mag 4 3/4(BRK), 5 3/4(PAL), 5.2(CGS) (P-H) = 26° or about 2,890 km. ca.									
	iPZN	09	48	05.8	0.8	---	1.6	9.8	---	2.0
	iPP		48	16.6	0.7			5.2		
	iPcP		48	45.6	1.2			1.8		
	iPPP		51	37.6	1.0			1.0		
21	C&GS 11-08-16.2; 1.5 S., 126.5 E., h about 33 km. Molucca Sea. Mag. 5 3/4(PAS), 6 3/4 (BRK), 6 1/4-6 1/2(PAL), 6.2 (CGS) (P-H) = 132° or about 14,665 km. ca.									
	ePZN	11	27	23.0	1.0		2.4	1.8		2.0
	iPPZN	11	29	58.6	1.4		2.0	3.0		4.0
	eLN	12	03	01.6			40.6			4.0
22	C&GS 02-44-47.5; 15.3 S., 173.4 W., h about 51 km. Tonga Islands Felt at Apia, Mag. 6 1/2(PAS), 6 -6 1/4 (BRK), 6 1/2-6 3/4 (PAL), 5.9 (CGS) (P-H) = 95° or about 10,555 km. ca.									
	iPZ	02	57	40.5	1.0	---	---	3.5	---	---
	i(SKSN)	03	08	07.0	---	---	9.0	---	---	10.0
	i(SS)Z	03	14	57.0	1.0	---	---	8.5	---	---
	eLN	03	57	59.0			24.0			4.0
21	e	07	58	02.0	0.9			1.2		

No record for March 22-23.

DATE	PHASE	Time G. C. T.			Period Sgc.			Trace Amp. (mms)			13
		h	m	s	Z	E	N	Z	E	N	
March											
24		C&GS 23-54-14.7; 15.2 N., 173.5 W., h about 13 km. Tonga Islands. Felt at Apia. Mag. 6½(PAS), 5.9 (BRK), 6¼-6½ (PAL), 5.7 (CGS) (P-H) = 93° or about 10,335 km. ca.									
	iP	00	07	08.0	0.8			1.0			
24		C&GS 08-08-05.2; 56.6 N., 152.4 W., h about 30 km. Kodiak Island Region. Mag 5(BRK), 6 (PAL), 5.2(CGS) (P*H)= 35° or 3,890 km. ca.									
	eP	08	16	06.5	0.6	---	---	1.0	---	---	
	eLN	08	34	30.0	---	---	20.0	---	---	6.0	
25	e	09	03	46.8	1.2			1.0			
25		Paper reversed on the drum for the vertical - unable to read trsu print for vertical.									
	iPZN	13	00	28.7			1.0			15.0	
25	iP	20	28	38.5	1.0			1.8			
26	ePN	15	41	21.2	1.6					1.5	
	iSN	15	43	10.2	3.8					9.0	
26	iP	19	04	15.1	1.2			1.4			
27	e	00	04	41.2	1.0			0.8			
28		C&GS 09-59-58.0; 15.7 S., 74.1 W., h about 45 km. Near coast of Peru. Felt at Arequipa. Mag. 5-5¼(PAL), 5.4(CGS) (P-H) = 55° or about 6,110 km. ca.									
	iP	10	04	26.2	1.2			4.5			
28		C&GS 13-22-57.6; 55.1 N., 162.1 E., h about 33 km. Near East Coast of Kamchatka. Mag. 5.9(CGS) (P-H)=78° or 8,665 km. ca.									
	iP	13	33	57.3	1.0			5.0			
28	iPZN	16	44	28.3			4.0		---	23.0	
	iPCPN		44	57.1			2.4			13.0	
			46	51.1			5.0			9.0	
			49	16.6			4.5			12.0	
			53	43.1			7.0			42.0	
			58	15.6			9.5			44.0	
		17	01	17.1			40.0			40.0	
29		C&GS 10-47-37.6; 40.8 N., 142.8 E., h about 33 km. Near east coast of Honshu, Japan. Mag. 6.1(CGS) (P-H) = 94° or about 10,445 km. ca.									
	iPZN	11	00	21.8	1.8	---	2.8	7.5	---	3.0	
	iSN	10	45.3		---	---	8.4	---	---	19.0	
	eLN	35	43.8		---	---	18.0	---	---	5.0	

DATE	PHASE	Time G. C. T.			Period Sec.			Trace Amp. (mms)			14
		h	m	s	Z	E	N	Z	E	N	
March											
29	C&GS 17-47-48; 17.0 N., 99.7 W., h about 33 km. Guerrero, Mexico. Mag. 4.1(CGS) (P-H) = 20° or about 2,220 km. ca.										
	e	17	52	38.7	1.0			0.8			
30	C&GS 00-21-00.2; 20.0 S., 173.9 W., h about 33 km. Tonga Islands, Mag. 5.5(CGS) (P-H) = 93° or about 10,335 km. ca.										
	iP	00	34	14.5	1.5			2.1			
30	iPZN	02	37	22.1	1.0	---	5.2	13.5	---	26.2	
	iPcPH		38	18.2	?	---	6.4	?	---	20.5	
	iPPN		39	25.7	?	---	2.4	?	---	25.0	
	iSZN		45	15.2	3.5	---	4.4	4.5	---	52.0	
	iPKXPZN	03	03	25.7	20.0	---	21.0	2.5	---	76.0	
30	O&GS 14-01-00; 13.8 N., 90.8 W., h about 33 km. Near coast of Guatemala. Felt at San Salvador. Mag. 4.3(CGS) (P-H) = 20° or about 2,220 km. ca.										
	e	14	05	46.6	1.0			1.2			
30	e	16	12	18.3	1.2	---	---	2.8	---	---	
31	iPZN	10	00	01.1	1.5	---	6.0	14.2	---	15.0	
	iPcPZN		00	24.3	1.0	---	3.0	11.5	---	8.0	
	iPP		03	16.8	2.5	---	---	3.0	---	---	
	iSZN		10	20.3	2.2	---	9.0	3.0	---	24.0	
	iSeSN		10	52.3	---	---	3.6	---	---	30.0	
	eLN		19	13.8	---	---	35.0	---	---	8.0	
31	i	22	42	52.9	1.8			1.2			

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 $36^{\circ} 05.46'$ north latitude and $94^{\circ} 11.47'$ 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 vicinity of the station.



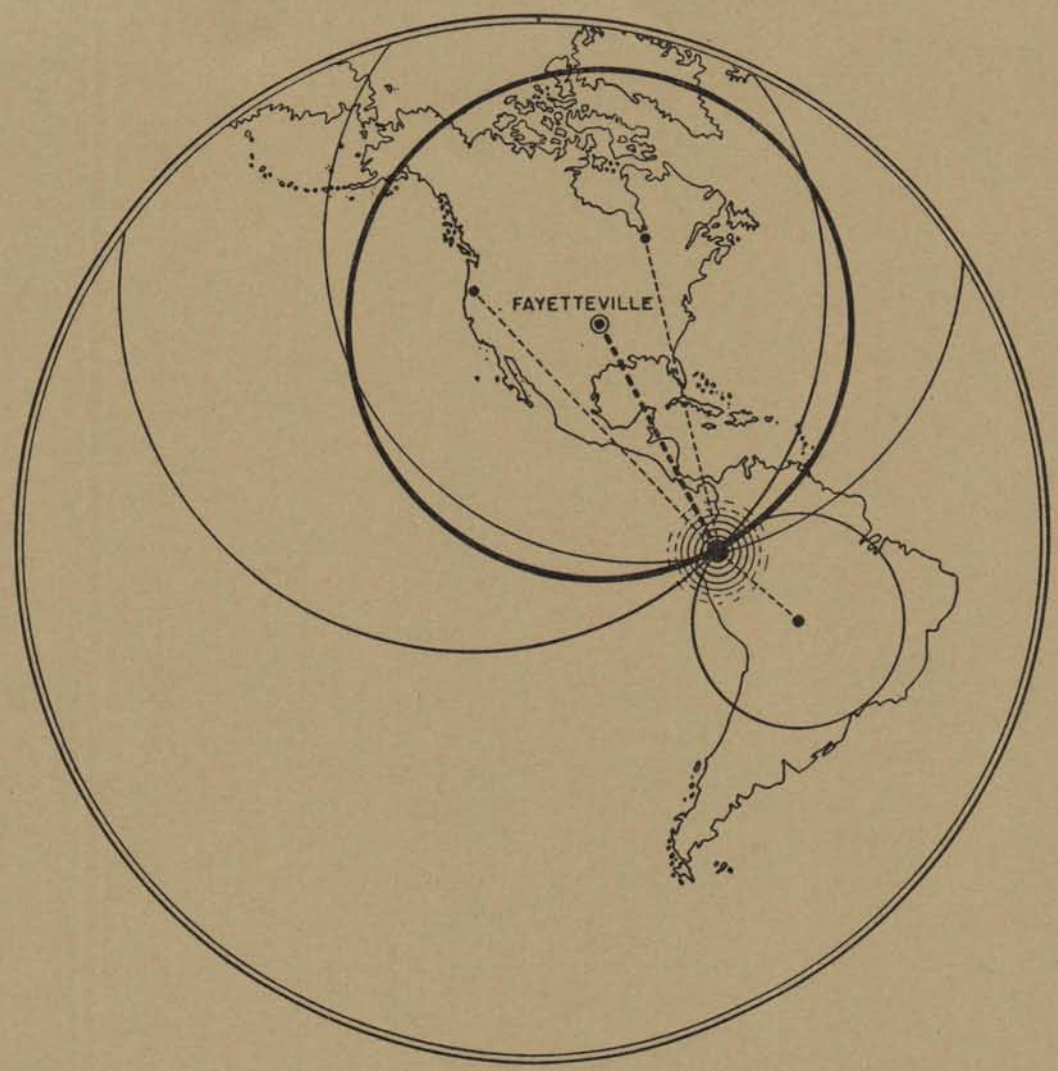
University of Arkansas
Seismograph Station
Department of Geology
Fayetteville, Arkansas

FAYETTEVILLE
Apr. - June 1965

UNIVERSITY OF ARKANSAS SEISMOLOGICAL BULLETIN

Volume XIV

Number 2



The University Of Arkansas Seismograph Station

Operated by the University's Department of Geology
in conjunction with the
United States Coast Guard and Geodetic Survey

FAYETTEVILLE SEISMOGRAPH STATION

Volume 14, Number 2, September, 1966
Data for April, May, June 1965

Instruments

Vertical component - Benioff moving coil type, short period electro-magnetic-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 - W V 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 to trace up -North
E-W - Ground motion to 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.			Period Sec.			Trace Amp. (mms)			1
		h	m	s	Z	E	N	Z	E	N	
April											
2	i	14	03	00.5	1.0			4.0			
3	C&GS 11-20-43.5; 16.0 N., 97.9 W., h about 16 km. Near coast of Oaxaca, Mexico. Felt at Mexico City. Mag. 6(PAS), 5(BRK), 5 1/2-5 3/4(PAL), 5.5(CGS) (P-H) = 15° or about 2,110 km. ca.										
	iPN	11	25	21.4			4.0			18.0	
	iPPN		30	19.1			8.0			31.5	
	iPPPN		33	49.6			7.5			35.0	
	ipPPPN		34	26.4			7.0			22.0	
	iSKKSN		37	22.1			9.0			18.5	
	iSSN		47	33.6			7.0			21.5	
4	C&GS 13-30-37.8; 59.9 N., 175.2 W., h about 40 km. Rat Islands, Aleutian Islands. Mag. 6(PAS), 5.4(BRK), 6-6 1/4(PAL), 5.7(CGS) (P-H) = 63° or about 7,000 km. ca.										
	iP	13	41	01.5	1.2			4.8			
	iPP		41	39.1	1.1			6.0			
4	C&GS 20-09-41.1; 8.8 S., 74.5 W., h about 143 km. Peru-Brazil Border Region, Mag. 5.3(CGS) (P-H)=50° or about 5,555 km. ca.										
	iP	20	18	19.9	1.5			2.0			
	iPP		18	41.9	1.2			5.0			
5	iP	63	20	46.6	1.6			11.2			
	iS		25	31.6	2.0			2.5			
6	C&GS 05-31-59.7; 36.1 N., 139.6 E., h about 69 km. Honshu, Japan. Mag. 5.7(CGS) (P-H) = 94° or about 10,445 km. ca.										
	iP	05	45	04.8	1.0			2.8			
6	C&GS 13-19-02.2; 51.3 N., 179.8 W., h about 46 km. Andreaof Islands, Aleutian Islands. Mag. 5.2(CGS) (P-H)=61° or 6,780 km. ca.										
	iP	13	29	07.0	0.5			1.4			
6	C&GS 16-53-58; 14.2 N., 92.6 W., h about 57 km. Near coast of Chiapas, Mexico. Mag. 5.0(CGS) (P-H)=21° or about 2,335 km. ca.										
	iP	16	58	47.1	0.9			4.0			
8	e	00	11	04.0	1.0			1.0			
8	iPZN	09	11	11.5	1.0	3.0		0.9		2.5	

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms) 2		
		h	m	s	Z	E	N	Z	E	N
April 8	C&GS 13-43-52.8; 52.2 N., 173.5 W., h about 46 km. Near Islands, Aleutian Islands, Felt on Shemya. Mag. 5 3/4 (PAS), 6 (PAL) 5.4 (CGS), (P-H) = 67° or about 7,445 km. ca.									
	iPZN	13	54	22.0	1.0		3.2	4.6		3.0
8	C&GS 14-31-10.9; 52.0 N., 173.4 W., h about 34 km. Near Islands, Aleutian Islands, Mag. 5.3 (CGS) (P-H) = 64° or about 7,110 km. ca.									
	iP	14	41	41.4	1.4			1.0		
9	e						1.0	0.9		
10	C&GS 23-57-03.2; 35.1 N., 24.3 E., h about 51 km. Crete. Felt on Crete and at Cairo, Egypt. Mag. 5 3/4 (PAL), 6.0 (CGS) (P-H) = 90° or about 10,000 km. ca.									
	iPZN	00	09	54.2	1.4	---	3.8	4.5	---	2.6
	iPcP	10	34.6		1.2	---	---	2.8	---	---
	iSZN	20	38.0		1.8	---	7.0	1.0	---	10.5
	iScSN	21	10.3		---	---	6.0	---	---	3.0
	eLN	40	28.5		---	---	20.0	---	---	3.0
10	C&GS 14-46-50.7; 20.2 S., 173.7 W., h about 33 km. Tongo Islands, Mag. 5.7 (CGS) (P-H) = 93° or about 10,335 km. ca.									
	iPZN	15	00	05.7	1.2	---	4.4	2.5	---	3.2
	iPP	00	16.5		1.1	---	---	1.4	---	---
10	C&GS 16-54-55.8; 53.1 N. 170.9 E., h about 8 km. Near Islands, Aleutian Islands. Mag. 5.8 (CGS) (P-H) = 65° or about 7,220 km. ca.									
	iPZN	17	05	31.4	1.2	---	4.0	2.2	---	1.8
10	C&GS 22-32-46.6; 17.8 W., 178.8 W., h about 543 km. Fiji Islands Region. Mag 6 small M (PAS), 5 1/2-5 3/4 (BRK), 5.9 (CGS) (P-H) = 99° or about 11,000 km. ca.									
	iP	22	45	17.6	1.2	---	---	3.8	---	---
	iS	49	18.2		2.6	---	---	2.5	---	---
11	C&GS 04-59-39.3; 19.8 N., 109.2 W., h about 33 km. Revilla Gigedo Islands Region. Mag. 4 3/4-5 (BRK), 4 3/4-5 (PAL), 5.0 (CGS) (P-H) = 28° or about 3,110 km. ca.									
	iPZN	05	04	20.7	1.5	---	4.0	2.8	---	2.4
	iPPN	08	21.5		---	---	11.6	---	---	8.5
	iPKS	10	28.7		---	---	7.0	---	---	7.4
12	e	04	07	42.3	0.5	---	---	0.6	---	---

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)		
		h	m	s	Z	E	N	Z	E	N
April										
12	iP	19	37	19.9	1.2	---	---	5.8	---	---
	iPP	19	47	38.5	1.1	---	---	3.9	---	---
12	e	20	53	44.8	1.2	---	---	1.0	---	---
13	e	20	48	00	1.4	---	---	1.5	---	---
13	e	22	42	21.4	1.2	---	---	0.8	---	---
14	C&GS 10-18-49.2; 18.1 N., 94.1 W., h about 106 km. Gulf of Campeche. Mag. 4.7(CGS) (P-H)=18° or about 1,665 km. ca.									
	iP	10	22	53.0	1.0	---	---	4.5	---	---
	iPcP		23	02.5	0.8	---	---	3.0	---	---
	iPP		26	03.5	0.7	---	---	2.1	---	---
14	iPZN	17	23	10.6	1.1	---	4.0	2.1	---	2.5
15	e	02	46	50.4	1.8	---	---	1.5	---	---
16	e	00	29	10.6	1.2	---	---	0.5	---	---
16	i	23	00	57.8	1.0	---	---	1.0	---	---
16	C&GS 23-22-18.6; 64.7 N., 160.1 W., h about 5 km. Central Alaska, Felt Norton Sound Vicinity Mag. 5 3/4-6(PAS), 5 3/4-6(BRK), 5.8(CGS) (P-H) = 54° or about 6,000 km. ca.									
	iPZN	23	30	58.3	1.0	---	6.4	4.0	---	1.5
	iPKcN		37	52.7	---	---	7.0	---	---	5.2
	iSN		43	56.2	---	---	6.0	---	---	4.5
	iPPcN		47	14.2	---	16.0	---	---	---	92.5
	iSSZN		50	53.2	1.2	---	10.0	3.5	---	23.0
17	i	03	04	42.9	1.0	---	---	1.8	---	---
18	C&GS 06-33-58.8; 41.5 N., 127.1 W., h about 20 km. Off coast of Northern California, Mag. 6(BRK), 5 3/4-6(PAL), 5.6(CGS) (P-H) = 25° or about 2,780 km. ca.									
	iPZN	06	39	33.7	2.1	---	6.0	4.5	---	3.2
	iSPPZN		44	15.9	3.0	---	4.0	1.5	---	3.8
	ipPPN		47	37.7	---	---	9.0	---	---	5.0
	iSKKSZN		50	40.1	15.0	---	10.0	2.2	---	19.5
18	e	09	58	02.6	1.2	---	---	0.5	---	---
18	e	13	08	22.8	0.8	---	---	1.0	---	---

Date	Phase	Time G. C. T.			Period Sec.			Trace Amo. (mms)		
		h	m	s	Z	E	N	Z	E	N
April										
19	i	16	09	35.3	1.0			3.0		
19	e	23	55	15.9	1.5			1.9		
20	C&GS 06-43-08.8; 52.4 N., 172.0 E., h about 35 km. Near Islands, Aleutian Islands. Mag. 5-5 $\frac{1}{4}$ (PAL), 5.5(CGS) (P-H) = 65° or 7,220									
	iP	06	53	42.3	1.2			1.8		
	iS	07	01	20.3	1.0			2.9		
20	e	13	17	33.0	0.9			2.0		
22	e	22	37	03.3	0.5			1.6		
23	C&GS 05-06-02.2; 19.2 N., 108.2 W., h about 33 km. Revilla Gigedo Islands Region. Mag. 4.6(CGS) (P-H)=220° or 2,445 km. ca.									
	iP	05	10	42.0	1.1			3.0		
24	iP	02	00	20.4	0.8			6.0		
24	C&GS 13-19-21.8; 16.4 N., 97.7 W., h about 33 km. Oaxaca, Mexico, Mag. 4.1(CGS) (P-H) = 19° or about 2,110 km. ca.									
	eP	13	23	52.0	1.2			1.2		
25	e	14	53	30.9	1.4			1.2		
25	C&GS 21-15-37.3; 51.3 N. 176.4 W., h about 40 km. Andreanof Islands, Aleutian Islands. Mag. 5.0(CGS) (P-H)=59° or 6,555 k mca.									
	eP	21	25	24.1	1.3			1.5		
26	C&GS 01-54-14.4; 58.9 N., 152.7 W., h about 33 km. Gulf of Alaska, Mag. 5.3(CGS) (P-H) = 43° or about 4,780 km. ca.									
	iPZN	02	04	35.8	1.5	2.0		2.5	1.0	
	iSPZN		06	07.8	2.0	2.4		2.4	2.5	
	iSSPN		17	51.3		6.0			6.2	
	iSSN		19	26.3		12.0			6.8	
26	C&GS 20-29-07.4; 54.5 N., 162.6 W., h about 53 km. Alaska Peninsula, Mag. 5.9(CGS) (P-H) = 47° or about 5,220 km. ca.									
	iP	20	37	52.3	0.8			3.5		
	iS		47	26.1	1.0			1.2		
27	C&GS 10-54-28.0; 7.0 S, 129/5 E., h about 67 km. Banda Sea Mag. 5.9(CGS) (P-h) = 126° or about 13,890 km. ca.									
	ePP	11	13	32.1	0.6			2.0		
	iPKP		16	41.9	1.4			10.0		

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			5
		h	m	s	Z	E	N	Z	E	N	
April											
27	C&GS 14-09-07.1; 35.7 N., 23.5 E., h about 50 km. Crete Mag. 5.5(CGS) (P-H) = 87° or about 9,665 km. ca.										
	iP	14	21	53.1	1.1			3.8			
29	C&GS 15-28-43.3; 47.4 N., 122.4 W., h about 57 km. Washington. 2 killed, some injured. Moderate property damage in Seattle area. Felt in Oregon, Idaho, Monterey, British Columbia, and in Vancouver. Mag. 6.6(PAS), 6 3/4-6(BRK), 7 1/4(PAL), 6.5(CGS)(P-H) = 22° or 2,445 km.										
	iPZN	15	33	50.5	2.0	3.0	45.0	4.70			
	iSZN		37	26.0	1.0	5.6	5.5	92.0			
	eLZN		39	41.5	6.5	20.0	29.0	14.0			
30	C&GS 11-45-27.1; 10.9 N., 62.4 W., h about 86 km. Near coast of Venezuela. Felt on Trinidad. Mag. 5.0(CGS) (P-H) = 34° or about 3,780 km. ca.										
	iP	11	52	39.8	0.7			1.9			
May											
1	e	03	41	00.2	1.0			1.0			
1	C&GS 21-27-54.4; 60.4 N., 146.0 W., h about 33 km. Southern Alaska, Mag. 5.3(CGS) (P-H) = 42° or about 4,665 km. ca.										
	iPZN	21	35	33.1	1.2	1.8	4.1	2.0			
	e(S)N		49	58.3		4.0		5.5			
1	C&GS 22-10-25.6; 19.1 N., 108.1 W., h about 33 km. Revilla Gigedo Islands Region, Mag. 4.7(CGS) (P-H) = 23° or 2,555 km. ca.										
	iP	22	15	06.3	1.0			3.0			
	i(PKP)		26	15.4	3.0			31.0			
2	C&GS 05-47-43.9; 19.8 S., 69.5 W., h about 117 km. Northern Chile, Mag. 5.5(CGS) (P-H) = 61° or about 6,780 km. ca.										
	iP	05	57	43.5	0.9			2.8			
3	C&GS 01-09-31.5; 32.5 S., 70.6 W., h about 77 km. Chile-Argentina Border Region. Felt. Mag. 5.6(CGS) (P-H) = 63° or about 7,000 km. ca.										
	iPZN	01	20	46.0	1.0	2.0	4.0	1.5			
3	C&GS 10-01-35.2; 13.5 N., 89.3 W., h about 23 km. EL Salvador, 125 killed, 400 injured, 4000 homes wrecked in San Salvador, Cisneros District, San Marcos and Santo Tomas. Mag. 6 1/4(PAS), 6-6 1/4(PAL), 5.1(CGS) (P-H) = 21° or about 2,335 km. ca.										
	iPZN	10	06	38.9	1.0	6.4	12.0	21.0			
	ipPZN		07	00.2	1.2	4.0	9.2	9.0			
	iSZN		10	51.4	1.5	5.0	2.5	38.0			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			6
		h	m	s	Z	E	N	Z	E	N	
May											
3	iP	?			0.8			7.5			
5	iP	02	52	24.4	1.2			6.2			
5	iP	23	12	29.7	0.8			1.8			
6	iP	02	35	46.6	1.0			2.0			
		C&GS 02-25-12.0; 25.0 W. 68.4 W., h about 90 km. Chile-Argentina Border Region, Mag. 5.1(CGS) (P-H) = 61° or about 6,780 km. ca.									
8		C&GS 11-32-57.1; 28.0 S., 70.8 W. h about 35 km. Neat coast of Northern Chile. Felt at La Serena , Mag. 5.4(CGS) (P-H) = 64° or about 3,110 km. ca.									
	iP	11	43	50.3	1.2			5.2			
9		C&GS 14-11-08.1; 6.5 N., 87.5 W., h bout 56 km. South of Panama, Mag. 5.1(CGS) (P-H) = 31° or about 3,445 km. ca.									
	eP	14	17	29.4	1.0			1.0			
9		C&GS 23-46-42.3; 16.6 N., 99.9 W., h about 33 km. Near coast of Guerrero, Mexico, Mag. 4.5(CGS) (P-H) = 20° or about 2,220 km. ca.									
	e	23	51	13.8	1.0			0.9			
11		C&GS 17-37-38.3; 61.4 N., 149.6 W. , ha bout 58 km. Southern A Alaska, Felt widely in the Anchorage area. Mag. 5.5(CGS) (P-H) = 33° or about 3,665 km. ca.									
	iP	17	45	24.0	1.0			0.8			
	ipP		45	44.1	1.0			2.9			
	iPcP		47	23.5	1.9			3.2			
12		C&GS 10-33-43.5; 6.2 S., 130.3 E., h about 125 km. Banda Sea. Felt at Darwin. Mag. 5¼-5½(PAL), 5.7(CGS), (P-H) = 130° or 14,445 kmca.									
	eP	10	52	31.1	0.8			0.8			
	iPcP	10	54	47.6	1.6			4.0			
13	iPZEN	02	40	27.1	0.6	2.2	1.8	2.5	1.8	2.2	
15	iP	07	57	44.2	1.5			4.8			
16					1.0			1.6			
17		C&GS 17-19-25.9; 22.5 N., 121.3 E., h about 21 km. Taiwan Region, Felt on Hong Kong, Mag. 6.2(CGS), 6½(PAS, 5 3/4-6(BRK), 111° or about 12,335 km. ca. = P-H									
	eP	17	38	01.0				0.9			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amo. (mms)			7
		h	m	s	Z	E	N	Z	E	N	
May 18	C&GS 22-46-31.7; 43.7 N., 146.5 E., h about 45 km. Kurbile Islands, Mag. 5.4(CGS) (P-H) = 75° or about 8,335 km. ca.										
	iP	22	58	54.7	1.2			4.0			
19	C&GS 03-11-12.5; 52.4 N., 173.5 W., h about 44 km. Near Islands, Aleutian Islands. Mag. 5.1 (CGS) (P-H) = 65° or about 7,220 km.ca.										
	iP	03	21	28.5	0.8			1.0			
19	C&GS 06-17-12.0; 27.6 N., 110.9 W., h about 33 km. Gulf of California, Mag. 5.0(CGS) (P-H) = 19° or about 2,110 km. ca.										
	iPZEN	06	21	01.1	1.1	3.6	2.0	1.2	1.8	1.0	
	iPPZEN		23	30.2	1.2	4.0	4.0	2.5	2.5	1.5	
	iPPPZEN		25	05.4	3.2	10.0	10.0	1.5	19.0	20.0	
19	C&GS 22-07-14.1; 51.6 N., 175.2 E., h about 35 km. Rat Islands, Aleutian Islands, Mag. 5.3(CGS) (P-H) = 62° or about 6,890 km. ca.										
	IP	22	17	38.2	1.0			0.8			
19	eP	23	54	24.5	1.2			1.0			
	ipPPZEN		58	54.3	1.6	6.0	6.0	2.8	10.0	3.8	
	ipPPPZEN	00	06	23.0		8.0	11.5		10.0	7.5	
	iSSZEN		23	58.5	15.0	17.0	14.0	1.5	15.0	10.0	
20	iP	01	24	09.1	1.0			3.0			
21	eP	22	03	34.8	0.9			2.5			
22	e	03	24	46.7	1.2			1.0			
23	e	04	59	13.1	0.8			1.0			
23	52.2 N., 175.0 E., h about 22 km. Near Islands, Aleutian Islands, Mag. 6.1(CGS) (P-H) = 62° or about 6,890 km. ca.										
	iPZLN	23	56	37.3	1.0	3.0		4.8		2.9	
	iSN	00	06	23.5		3.0				7.0	
	iScSN	00	06	45.5		4.0				7.8	
24	iP	23	54	58.0	1.5			2.0			
25	C&GS 13-07-49.7; 51.3 N., 178.7 E., h about 40 km. Rat Islands, Aleutian Islands., Mag. 5(BRK), 5 3.4-6(PAL), 5.5(CGS) (P-H) = 63° or about 7,000 km. ca.										
	iP	13	18	00.6	1.2			3.2			
25	e				0.9			1.3			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			8
		h	m	s	Z	E	N	Z	E	N	
May											
26	iP	12	34	30.2	1.0			1.9			
26	e	19	37	45.3	0.9			1.2			
26	e	20	02	22.0	1.2			1.0			
27	iP				0.9			3.0			
27	i	22	55	21.2	1.2			1.2			
29	e	14	11	09.5	1.0			0.8			
30	e	03	46	28.7	1.2			1.0			
31	iP	01	22	04.9	1.3			6.1			
31	C&GS 03-20-42.0; 49.3 N., 127.8 W., h about 11 km., Vancouver Island Region, Mag. 4.7(CGS) (P-H) = 27° or about 3,000 km. ca.										
	iP	03	26	32.5	0.9			1.8			
31	C&GS 05-07-43.4; 44.1 N., 128.8 W., h about 33 km. Off coast of Oregon, Mag. 5.5(CGS) (P-H) = 26° or about 2,890 km. ca.										
	iP	05	13	28.6	1.0			2.0			
	eSN		23	02.0			14.0			2.0	
31	e	08	51	07.1	1.0			1.2			
31	C&GS 11-38-28.0; 7.5 W., 128.7 E., h about 37 km. Banda Sea. Mag. 6.0(CGS) (P-H) = 129° or about 14,335 km. ca.										
	eP	11	57	27.1	0.9			1.8			
	iPKPZN	12	01	01.1	1.0		4.0	5.9		1.5	
31	C&GS 20-46-54.4 ; 11.1 N., 86.0 W., h about 28 km. Nicaragua, Mag. 4.7(CGS) (P-H) = 24° or about 2,665 km. ca.										
	iP	20	52	25.2	1.2			1.8			
June											
1	C&GS 04-32-45.3; 20.2 N., 95.9 E., h about 57 km. Burma. Mag. 5.5 (CGS) (P-H) = 123° or about 13,665 km. ca.										
	eP	02	51	37.6	0.7			0.6			
2	e	14	13	54.0	1.4			0.8			

Date	Phase	Time G. C. T'			Period Sec.			Trace Amp; (mms)			9
		h	m	s	Z	E	N	Z	E	N	
June											
2	C&GS 23-40-24.4; 16.0 N., 46.8 W., h about 333 km, North Atlantic Ridge, Mag. 5.6(CGS) (P-H) = 45° or about 5,000 km. ca.										
	iPZN	23	48	51.6	1.5		3.0	2.0		1.4	
	eSN	23	54	19.1			2.8			2.5	
	eLN	00	01	40.1			14.0			1.0	
3	C&GS 07-43-39.1; 51.9 N., 175.8 E., h about 58 km. Rat Islands, Aleutian Islands, Mag. 5(BRK), 5.5(CGS), (P-H) = 62° or about 6,890 km. ca.										
	iP	07	53	58.0	1.0			3.0			
3	C&GS 18.5 N., 70.3 W., h about 27 km. Dominican Republic Region Mag. 5-5 $\frac{1}{4}$ (BRK, 4 $\frac{1}{2}$ (PAL), 5.5(CGS) (P-H)=27° or about 3,000.										
	iPZN	11	02	54.5	1.7		3.0	4.5		1.2	
	eSN		07	31.9			6.0			2.1	
	eLN		11	45.4			7.0			5.8	
4	C&GS 08-05-36.7; 44.2 S., 75.9 W., h about 33 km. Off coast of Southern Chile, Mag. 5.4(CGS) (P-H) = 85° or about 9,445 km. ca.										
	iP	08	17	52.2	1.2			3.0			
4	iP	15	12	30.3	1.0			1.0			
4	e	23	29	25.9	1.0			1.5			
6	eP	17	29	45.8	2.1			12.0			
7	C&GS 18-44-57.8; 19.3 N., 108.0 W. h about 33 km. Revilla Gigedo Islands Region, Mag. 4.3(CGS) (P-H)=22° or about 2,445 km.ca.										
	iP	18	49	36.2	1.4			1.0			
8	C&GS 13-39-58.2; 23.3 N., 108.5 W., h about 33 km. Gulf of California, Mag. 4 $\frac{1}{4}$ -4 $\frac{1}{2}$ (BRK), 5.1(CGS) (P-H)=18° or about 2,000 km. ca										
	iPZEN	13	44	02.9	1.6	5.0	6.0	2.2	2.8	2.5	
	iPPEN		47	28.9		7.5	6.0		8.0	8.2	
	iPPZEN		49	20.1	5.4	5.0	5.8	3.2	29.0	28.0	
	iSEN		54	23.9		5.0	6.0		12.4	16.2	
9	C&GS 13-26-52.2; 52.6 N., 173.2 E., h about 25 km. Rat Islands, Aleutian Islands, Mag. 5.6(CGS) (P-H) = 62° or about 6,890 km.ca/										
	e	13	36	22.9	1.2			1.8			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp; (mms)			10
		h	m	s	Z	E	N	Z	E	N	
June											
10		C&GS 23-14-25.7; 51.3 N., 178.8 W., h about 36 km. Andreanof Islands, Aleutian Islands., Mag.5.1(CGS) (P-H) = 60° or about 6,665 km. ca.									
	i	23	24	27.7	1.0			1.5			
11		C&GS 02-37-34.7; 51.8 N., 174.1 E., h about 35 km. Near Islands, Aleutian Islands, Ma. 5 - 5 1/4(B.K), 5.5(CGS) (P-H) = 61° or about 6,780 km. ca.									
	iP	02	48	03,5	1.4			2.6			
11		C&GS 03-33-44.9; 44.7 N., 148.7 E., h about 47 km. Kurile Islands, Mag 6 3/4(BRK), 6.0(CGS) (P-H) = 81° or about 9,000 km. ca.									
	iPZEN	03	45	58.0	1.4	3.6	4.0	20.0	5.2	5.0	
	iSZEN		56	15.0	3.0	7.0	6.0	2.0	38.0	25.0	
	iLZEN	04	18	53.6	25.0	20.0	20.0	1.5	36.0	30.0	
11		C&GS 07-11-05.7; 44.4 N., 149.2 E., h about 50 km. Kurile Islands, Mag. 5.5(CGS) (P-H) = 81° or about 9,000 km. ca.									
	i	07	23	11.2	1.4			4.0			
11		C&GS 08-41-01.1; 44.3 N., 149. E., h about 54 km. Kurile Islands, Mag. 5.1(CGS) (P-H) = 81° or about 9,000 km. ca.									
	iP	08	53	15.5	1.2			3.2			
11		C&GS 12-00-00.8; 44.2 N., 149.1 E., h about 33 km. Kurile Islands, Mag. 5.2(CGS) (P-H) = 81° or about 9,000 km. ca.									
	iP	12	12	16.8	1.2			2.0			
12		C&GS 05-41-00.3; 44.0 N., 149.1 E., h about 64 km. Kurile Islands, Mag. 5.6(CGS) (P-H) = 81° or about 9,000 km. ca.									
	iP	05	53	13.9	1.0			4.8			
12		C&GS 18-50-11.3; 20.3 S., 68.9 W. H about 103 km. Chile-Bolivia Border Region, Mag. 6 1/2(PAS), 5.8(CGS) (P-H) = 60° or about 6,665 km. ca.									
13		C&GS 02-20-52.0; 44.1 N., 149.3E, h about 50 km. Kurile Islands, Ma. 5.3(CGS) (P-H) = 81° or about 9,000 km. ca.									
	iP	02	33	06.4	1.5			2.4			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp., (mms)			11
		h	m	s	Z	E	N	Z	E	N	
June											
13	C&GS 07-06-13.6; 41.9 N., 143.4 E., h about 32 km. Hokkaido, Japan, Mag. $6-6\frac{1}{4}$ (BRK), 6(P.L), 5.7(CGS) (P-H)= 85° or 9,445 km.ca.										
	iP	07	18	53.5	1.1			3.0			
	eSN		29	26.0		8.0	6.0		8.2	5.0	
14	e	06	50	28.3	1.2			1.8			
14	ePZEN	08	29	22.8	1.0	2.0	3.5	2.5	1.2	2.0	
	eSEN		56	36.3		13.0	13.0		10.0	5.0	
15	C&GS 04-46-13.1; 50.1 N., 178.2 E., h about 28 km. Rat Islands, Aleutian Islands, Mag. 5.5(CGS), (P-H) = 61° or about 6,780 km.ca.										
	i	04	56	32.0	1.0			1.2			
16	e	04	06	40.5	2.0			1.0			
17	e(P)EN	07	39	51.2		4.0	3.0		2.8	4.9	
18	C&GS 22-45-16.4; 11.1 S., 73.6W., h about 111 km. Peru, Mag. 5.33 (CGS) (P-H) = 54° or about 6,000 km. ca.										
	iP	12	54	07.5	0.9			5.2			
19	C&GS 01-39-37.8; 13.0 N., 90.3 W., h about 32 km. Near coast of Guatemala, Mag. 4.6(CGS) (P-H) = 21° or about 2,335 km. ca.										
	iPZLN	01	44	39.2	0.8	4.0	3.0	0.9	1.5	3.5	
19	i	07	48	44.2	1.0			1.0			
20	C&GS 01-57-24.8; 44.6 N., 149.2 E., h about 40 km. Kurile Islands Mag. 5.4(CGS) (P-H) = 81° or a out 9,000 km. ca.										
	iP	02	09	37.5	1.0			1.2			
20	C&GS 18-04-35.7; 42.8 W., 126.5, h about 33 km. Off coast of Oregon, Mag. 5(BRK), $5\frac{1}{4}$ - $5\frac{1}{2}$ (P.L), 5.6(CGS) (P-H)= 27° or about 3,000 km. ca.										
	iPZEN	18	10	05.2	1.5	3.8	4.0	3.9	5.2	2.2	
	eSEN		18	03.2		10.0	7.2		4.8	11.5	
20	C&GS 19-16-21.2; 25.4 N., 109.4 W., h about 33 km. Gulf of California, Mag. $5-5\frac{1}{4}$ (PAL), 5.8(CGS) (P-H)= 18° or about 2,000 km. ca.										
21	e	00	39	42.2	1.8			1.0			
21	i	15	02	56.9	1.2			1.8			
22	i	14	29	34.4	0.8			1.5			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			12
		h	m	s	Z	E	N	Z	E	N	
June											
23	C&GS 23-48-07.1; 7.1 N., 123.5 E., h about 60 km. Mindanao, Philippine Islands, Mag. 5.6(CGS) (P-H) = 122° or 13,555 km. ca.										
	iP	00	07	00.6	1.2			1.2			
23	C&GS 07-37-46.3; 11.5 N., 87.7 W., h about 35 km. Near coast of Nicaragua, Mag. 4.6(CGS) (P-H) = 25° or about 2,780 km. ca.										
	iP	07	43	12.2	0.8			1.0			
23	C&GS 11-09-15.3; 56.6 N., 152.9 W., h about 36 km. Kodiak Island Region, Mag. 6 $\frac{1}{4}$ -6 $\frac{1}{2}$ (BAS), 5 3/4(BRK), 5.1(CGS) (P-H) = 52° or about 5,780 km. ca.										
	iPZEN	11	17	19.4	0.8	4.0	3.5	5.0	3.0	4.8	
	iPPP		23	31.3		6.8	8.4		13.0	17.0	
	iSEN		27	23.8		12.0	20.0		6.0	29.0	
	eSSEN		34	22.8		15.0	16.0		29.0	53.0	
23	C&GS 12-23-22.2; 56.5 N., 152.8 W., h about 25 km. Kodiak Island Region, Mag. 6.0(CGS) (P-H) = 52° or about 5,780 km. ca.										
	iP	12	31	28.2	1.0			1.2			
24	C&GS 03-29-46.2; 18.1 S., 19.7 W., h about 80 km. Northern Chile Felt at Arequipa, Peru. Mag. 5.0(CGS) (P-H) = 57° or about 6,335 km.										
	eP	03	39	35.2	0.9			2.1			
	eS		50	08.0	1.0			3.0			
25	Other disturbances are probably due to plowing of fields.										
	e	20	12	36.6	1.0			0.8			
26	Other disturbances are field plowing										
	e	18	42	36.3	0.8		1.0				
27	e	05	18	11.9	1.0			1.4			
27	eP	10	55	32.7	0.6			5.9			
	e(L)ZEN	11	29	04.7		3.0	3.0		3.5	15.0	
27	C&GS 17-09-02.9; 2.5 S., 77.0 W., h about 108 km. Peru-Ecuador Border Region, Mag. 5.0(CGS) (P-H) = 42° or about 4,665 km. ca.										
	iP	17	16	41.0	1.5			1.5			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			13
		h	m	s	Z	E	N	Z	E	N	
June											
29	C&GS 04-05-39, 18.1 N., 94.5 W., h about 100 km. Gulf of Campeche, Mag. 4.5(CGS) (P-H) = 160 or about 1,780 km. ca.										
	iP	04	09	43.4	1.0			4.0			
30	C&GS 08-33-31.6; 51.7 N., 176.5 E., h about 6.0 km. Rat Islands, Aleutian Islands, Mag. 5 1/2-53/4 (PAS), 6.0(CGS) (P-H) = 620 or about 6,890 km. ca.										
	iP	08	43	48.0	1.2			1.1			
	iSEN	08	53	44.3		1.6	2.0		3.5	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 $36^{\circ} 05.46'$ north latitude and $94^{\circ} 11.47'$ 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 vicinity of the station.



University of Arkansas
Seismograph Station
Department of Geology
Fayetteville, Arkansas

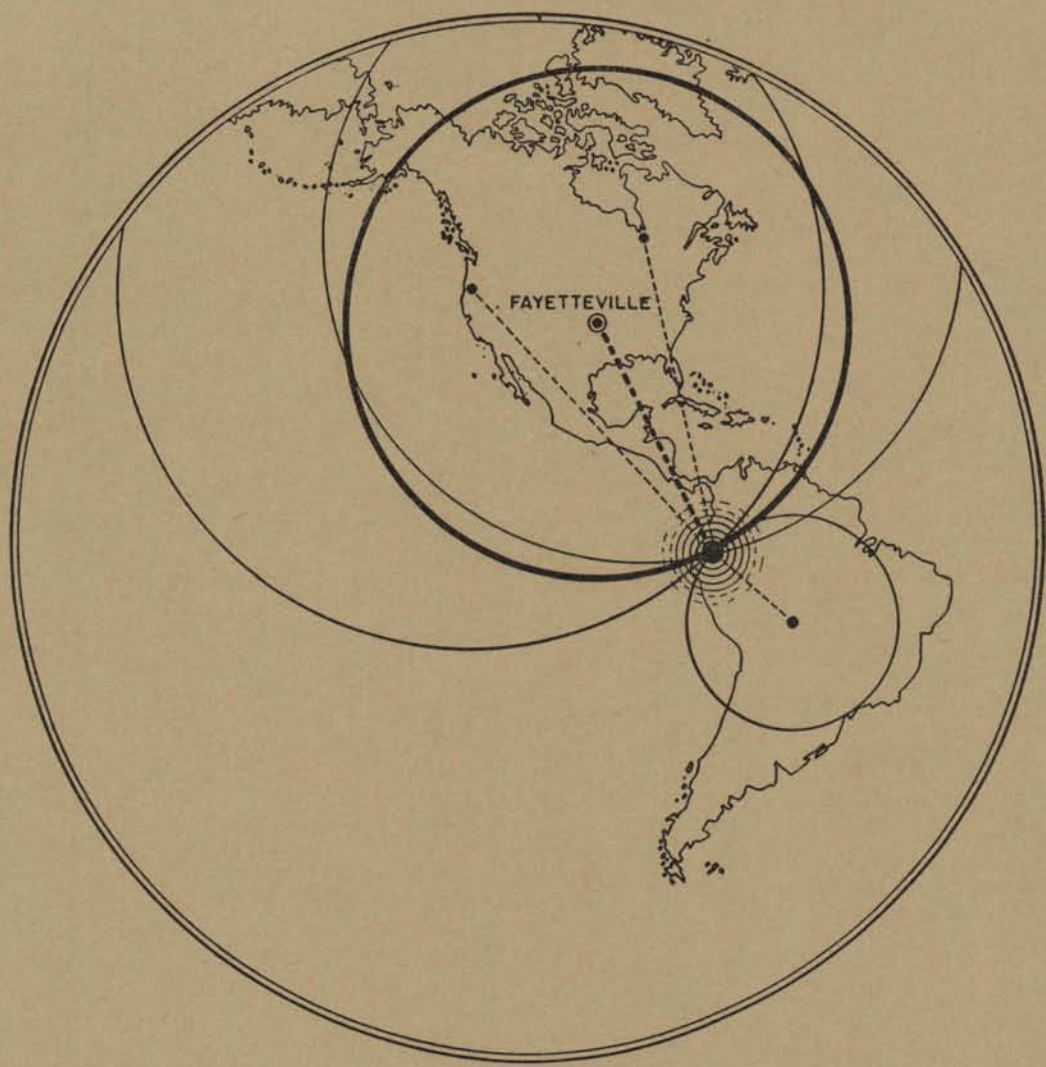
Fayetteville
July - Sept. 1965

UNIVERSITY OF ARKANSAS

SEISMOLOGICAL BULLETIN

Volume XIV

Number 3



The University Of Arkansas Seismograph Station

Operated by the University's Department of Geology
in conjunction with the
United States Coast Guard and Geodetic Survey

FAYETTEVILLE SEISMOGRAPH STATION

Volume 14, Number 3, September 1966
Data for July, August, September
1965

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 .5:1 (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 second (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 com-
pressional motion of the wave; "D" indicates dilation.

Bulletin compiled by Bruce Saunders, Observer

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			1
		h	m	s	Z	E	N	Z	E	N	
July											
1	C&GS 17-41-34.3; 50.0 N., 158.9 E., Kurile Islands, Mag. 5.0 (CGS) (P-H) = 8,220 km. ca. or 74° or about 8,220 km. ca.										
	iP	17	51	57.0	1.3			1.0			
2	C&GS 20-19-41.8; 52.0 N., 175.3 E., h about 50 km. Rat Islands, Aleutian Islands, Mag. 5¼-5½(PAL), (P-H) = 6,890 km. ca. or 62°										
	i	20	30	03.6	0.6			1.2			
2	C&GS 20-58-40.0; 53.1 N., 167.7 W., h about 59 km. Fox Islands, Aleutian Islands, Slight damage on Umnalt Island, Mag. 6 ¾-7 (PAS), 6 ¾-7(BRK), 6¾(PAL), 7445 km. ca. or 67° = (P-H)										
	iPZEN	21	07	46.9	0.9	1.2	1.6	14.0	14.8	21.0	
	iSZEN		15	08.1	2.1	4.0	3.6	3.8	15.0	60/8	
	iScSEN		17	29.5		4.4	6.0		15.9	49.0	
	iSSEN		19	21.8		9.0	12.0		9.4	28.0	
6	C&GS 38.7 N., 22.6 E., h about 28 km. Greece, One killed, six injured, considerable damage in Northern Peloponnesus. Scismic sea wave reported at Eratini, Mag. 6 (BRK), 6 -6¼(PAL), (P-H) = 9,335 km. ca. or 84°.										
	iPZEN	03	31	16.0	1.8	2..	6.0	14.0	1.9	6.0	
	iSZEN	13	41	01.75	4.0	3.4	0.5	2.0	14.0		
	e(L)EN	04	05	55.4		16.0	20.0		1.0	2.5	
6	i(P)ZEN	04	20	43.7	1.2	1.6	16.0	1.2	0.5	2.0	
8	i(P)ZEN	07	04	52.4	.70	2.4	7.0	.75	.5	2.0	
8	iP	04	18	1.2			2.0				
11	eP	02	11	50.48	1.0			1.0			
10	C&GS 4-26-41.9; 55.3 N., 162.6 E., Near East coast of Kamchatka, (P-H) = 7,445 km. ca. or 67°.										
	iP	04	37	37.0	0.8			1.5			
12	C&GS 13-57-14.7; 2814 S., 68.2 W., h about 118 km. La Rioja Province, Argentina, Mag. 5-1/2- 5 ¾(BRK), 5.7(CGS) (P-H) = 7,555 km. ca. or 68°.										
	iPN	14	08	0.3	3.0			2.5			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			2
		h	m	s	Z	E	N	Z	E	N	
July											
13	Record being changed at time of beginning of quake. C&GS 00-36-34.1 15.5 N., 98.7 W., h about 180 km. Mexico-Guatemala Border region. Mag. 5.0(CGS) (P-H) = 2,220 km. ca. or 20°.										
	i(?)PZEN	00	41	8.0	0.8	4.0	3.0	2.5	0.75	1.5	
	e(S)ZEN	00	45	12.0	1.0	2.2	3.6	1.25	1.75	2.0	
13	C&GS 10-03-46.7; 6.7 S., 106.6 E., h about 55 km. Java. Mag. 5.7(CGS) (P-H) = 16,110 km. ca. or 145°.										
	iPZEN	10	23	18.9	0.9	2.0	3.0	2.5	0.5	0.75	
13	C&GS 14-09-21.1; 51.6 N., 178.3 W., h about 57 km. Andreanof Islands, Aleutian Islands, Mag. 5.2(CGS) (P-H) = 6,665 km ca or 60°										
	iPZ N	14	19	18.5	1.0	2.0	2.4	1.75	0.5	0.5	
14	iP 04 58 17.8 1.2 1.0										
14	iPZE 18 05 10.8 1.2 2.0 1.0 0.25										
	e(S)ZE	18	05	34.0	0.8	20.2		2.75	20.1		
	e(L)ZE	18	06	3.0	1.1	4.0		0.85	0.5		
15	C&GS 14-16-07.1; 37.3 N., 74.3 W., h 0 R , Off east coast of Unites States; planned detonation of surplus U.S. Navy explosives aboard S. S. Coastal Mariner, Mag. 5.1(CGS) (P-H) = 1780 or 16°.										
	iPZEN	14	19	54.25	0.65	1.60	2.0	3.5	0.75	1.0	
	e(S)ZEN	14	24	18,60	0.89	1.60	2.0	2.5	4.5	7.5	
	e(L)ZEN	14	26	22.60	1.0	1.60	1.80	1.0	1.2	1.5	
15	iP 18 51 28.0 1.5 2.0										
16	iP 11 26 33.27 1.2 3.0										
16	iP 00 39 30.37 1.5 7.5										
16	iP 10 39 34.48 1.0 3.5										
No records for 16-18, set on 48 hrs. for vertical and could not get good timing on it.											
19	C&GS 04-13-20.4; 9.2 N., 70.4 W., h about 33 km. Venezuela. Moderate property damage in Trujilla. Felt widely. Mag. 5.4 (CGS) (P-H) = 3,665 km. ca. or 33°.										
	iP	04	20	06.9	1.0			2.2			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms) 3		
		h	m	s	Z	E	N	Z	E	N
July 21	C&GS 00-30-14.4; 28.3 S., 176.1 W., h about 33 km. Kermadec Islands, Mag. 4.8(CGS) (P-H) = 11,335 km. ca. or 102°.									
	iS	00	57	05.4	2.0			0.8		
	iL ₁	01	02	20.2	3.0			3.5		
23	ePN	17	04	15.0			2.0			0.8
	iSN		09	14.0			3.6			8.5
25	C&GS 08-44-22.5; 41.7 N., 126.9 W., h about 33 km. Off coast of Northern California. Mag. 4½(BRK), 5½(PAL), 5.3(CGS), (P-H) = 2,890 km. ca. or 26°.									
	iPZEN	08	49	56.6	1.2	2.4	4.0	1.0	1.9	1.2
25	C&GS 13-33-05.2; 41.3 N., 146.6 E., h about 33 km. Off coast of Hokkaido, Japan, Mag. 5.9(CGS) (P-H) = 9,335 km. ca. or 84°.									
	iP	13	45	38.5	0.8			2.0		
25	C&GS 21-46-45.3; 51.4 N., 176.0 E., h about 37 km. Rat Islands, Aleutian Islands, Mag. 5 3/4 (PAS), 5.3(CGS), (P-H) = 6,890 km. ca. or 62°.									
	iP	13	45	38.5	0.8			2.0		
27	C&GS 11-20-27.7; 51.2 N., 177.5 W., h about 34 km. Rat Islands, Aleutian Islands, Mag. 5.4(CGS) (P-H) = 6,890 km. ca. or 62°.									
	e	11	30	43.9	0.9			1.0		
28	iP	22	48	23.6	1.2			4.0		
29	iP	01	26	40.1	1.2			5.4		
29	C&GS 08-29-22.1; 51.2 N., 171.3 W., h about 23 km. Fox Islands, Aleutian Islands, Mag. 6 1/2-6 3/4(BRK), 6 3/4-7(PAL), 6.4(CGS) (P-H) = 5,780 km. ca. or 52°.									
	iPZEN	08	38	53.5	1.0	5.0	4.8	9.5	10.9	15.2
	iSEN		46	31.2		9	6.8		9.5	21.9
	iLEN	09	01	33.4		21.0	20.0		17.0	70.8
30	C&GS 05-45-16.1; 18 0 S., 70.6 W., h about 73 km. Near coast of Northern Chile, Felt at Arequipa, Mag 4 3/4(PAL), 5.5(CGS) (P-H) = 6,335 km. ca. or 5°.									
	iP	05	55	04.3	1.0			5.6		

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp.(mms)			4
		h	m	s	Z	E	N	Z	E	N	
July											
30	C&GS 07-20-10.3; 6.7 N., 73.0 W., h about 174 km. Felt at Bogota, Mag. 5.3(CGS) (P-H) = 3,605 km. ca. or 330.										
	iPZEN	07	26	47.3	1.4	1.4	1.0	7.0	1.2	1.2	
	iSEN		32	06.5		4.0	4.9		3.8	2.8	
	iLEN		36	52.1		4.0	6.0		5.2	4.0	
30	C&GS 18-58-58.8; 24.4 S., 67.7 W., h about 140 km. Chile-Argentina border region, Mag. 5.3(CGS) (P-H) = 7,110 km. cal or 640.										
	iPZEN	19	09	25.9	2.0	1.6	3.8	5.9	1.2	1.8	
31	i	17	45	23.1	1.0			1.1			
31	C&GS 18-46-38.4; 7.6 S., 107.5 E., h about 122 km. Mag. 4.8(CGS) (P-H) = 16,110 km. ca. or 1450.										
	i	19	06	06.6	1.0			1.2			
Aug.											
1	C&GS 16-41-13.7; 52.7 N., 153.4 E., h about 462 km. Northwest of Kurile Islands, Mag. 5.1(CGS) (P-H) = 8,555 km. ca or 770.										
	iP	16	52	00	0.6			5.0			
2	ePZEN	13	39	07.4	1.2	2.4	2.6	1.0	1.4	1.8	
	eSEN		42	14.3		2.7	5.0		2.8	4.8	
2	C&GS 16-43-09.4; 7.4 N., 78.7 W., h about 2 km. Panama. Felt at Balboa Heights, Canal Zone, Mag. 5 1/4(BRK), 4 3/4-5(PAL), 5.4 (CGS) (P-H) = 3,220 km. ca. or 290.										
	iPZEN	16	49	59.5	1.0	2.4	4.5	1.1	1.8	3.0	
2	C&GS 19-07-57.1; 7.4 N., 78.8 W., h about 33 km. Mag. 4 3/4 (BRK), 4 3/4(PAL), 5.2 (CGS) (P-H) = 3,220 km. ca. or 290.										
	iPZEN	19	14	20.3	1.3	3.0	3.0	2.6	1.2	1.8	
3	iPZEN		?		1.2	2.0	2.5	8.0	2.8	4.5	
	iS N		?			1.8	4.0		1.0	3.2	
4	C&GS 01-05-53.0; 16.8 N., 94.5 W., h about 117 km. Mag. 5.2 (CGS) (P-H) = 2,110 km. ca. or 190.										
	iPZEN	01	10	09.1	1.0	2.0	2.5	3.8	1.5	4.0	
	iSZEN		13	43.0	1.0	2.2	4.2	2.5	2.1	5.0	

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			5
		h	m	s	Z	E	N	Z	E	N	
Aug. 4	C&GS 20-11-08.7; 16.0 N., 98.19 W., h about 33 km. Guerrero, Mexico. Mag. 4.3(CGS) (P-H) = 2,220 km. ca. or 20°.										
	iP	20	15	45.9	1.0			2.5			
5	C&GS 19-05-06*; 14.7 N., 91.2 W., h about 33 km., Mag. 4.1(CGS) (P-H) = 2,220 km. ca. or 20°. Guatemala.										
	e	19	09	52.9	1.0			0.9			
5	C&GS 19-49-48; 7.8 S., 68.1 E., h about 33 km., Chagos Archipelago region, Mag. 5.2(CGS) (P-H) = 16,335 km. ca. or 147°.										
	eP	20	09	31.7	1.4			1.9			
6	C&GS 01-58-40.8; 0.5 S., 19.6 W., h about 33 km. Central Mid-Atlantic Ridge. Mag. 5.1(CGS) (P-H) = 8665 km. ca. or 78°.										
	eP	02	10	36.9	0.6			0.9			
6	C&GS 18-15-11.3; 41.4 N., 131.2 E., h about 560 km., Sea of Japan, Mag. 5.3(CGS) (P-H) = 10,110 km. ca. or 91°.										
	i	18	27	24.1	1.0			1.2			
7	e										
		04	50	19.9	0.8			0.8			
7	i										
		20	00	23.9	1.0			1.2			
8	C&GS 06-31-56.9; 20.3 S., 68.4 W., h about 89 km., Border Region, Felt at Iquique, Mag. 5.3(CGS) (P-H) = ?										
	e	06	42	03.5	1.1			4.0			
8	C&GS 12-49-23.1; 51.9 N., 175.3 W., h about 53 km., Andreanof Islands, Aleutian Islands, Felt on Adak Island, Mag. 4.2(BRK), 5.1(CGS) (P-H) = 6555 km. ca. or 59°.										
	i	12	59	07.4	0.6			1.8			
10	iP										
		23	38	18.6	1.2			4.0			
11	eP										
		03	40	48.4	1.0			2.4			
	iPPP		45	17.9	1.0			2.5			
11	C&GS 02-54-53*; 15.3 N., 92.1 W., h about 152 km., Mexico-Guatemala Border region, Mag. 4.4(CGS) (P-H) = 2110 km. ca. or 19°.										
	e	02	59	28.2	1.1			0.9			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)		
		h	m	s	Z	E	N	Z	E	N
Aug. 11	C&GS 03-40-56.2; 15.4 S., 166.9 E., h about 26 km. New Hebride Islands, Mag. 7(PAS), 6.3(CGS) (P-H) = 11,780 km. ca. or 160°.									
	iPPZEN	03	59	19.2	1.5	3.6	4.4	1.5	3.0	2.6
	i SZEN	04	05	48.2		3.0	3.5		2.9	3.0
	eL ₁ ZEN	64	32	18.1	33.0	17.5	18.0	1.0	6.0	14.0
11	C&GS 18-29-40.1; 59.6 N., 145.8 W., h about 25 km. Mag. 5.5(CGS) (P-H) = 4555 km. ca. or 41°. Gulf of Alaska.									
	iPZN	18	37	03.2	1.4		1.2	2.7		2.2
	eSN		51	31.3			13.0			12.5
11	C&GS 20-04-16*; 6.8 N., 72.9 W., h about 174 km. Northern Colombia, Felt at Bogota and Bucaramanga, Mag. 5.2(CGS) (P-H) = 3,780 km. ca. Or 34°.									
	iPZN	20	10	54.1	1.0		4.0	5.0		2.2
	eLZN		39	41.3	40.0		22.0	0.5		9.5
11	C&GS 22-31-48.9; 15.8 S., 167.2 E. h about 25 km., New Hebrides Islands, Felt at Prot Vila, Mag. 6 3/4(PAS), 6 1/2 (PAL), 6.3(CGS) (P-H) = 11780 km. ca. or 106°.									
	ePZN	08	20	20.5	1.8		3.0	1.2		1.5
	eLN		49	12.4			20.0			3.8
12	C&GS 12-40-08.3; 15.9 S., 166.8 E., h about 33 km, New Hebrides Islands, Mag. 7 (PAS), 7 -7 1/4(BRK), 5.6(CGS), (P-H) = 11,780 km. ca. or 106°.									
	iP	13	15	53.0	0.5			1.0		
	eLN	13	44	34.0			20.0			4.0
13	C&GS 12-40-08.3; 15.9 S., 166.8 E., h about 33 km, New Hebrides Islands, Mag. 7 (PAS), 7 -7 1/4(BRK), 5.6(CGS), (P-H) = 11,780 km. ca. or 106°.									
	ePPN	12	59	13.0			5.0			1.8
	eSN	13	08	27.0			9.0			6.0
	eLN		14	29.2			24.0			7.5
14	C&GS 04-12-55*; 15.0 N., 92.3 W., h about 127 km. Mexico-Guatemala Broder region, Mag. 4.0(CGS) (P-H) = 2220 km. ca. or 20°.									
	iP	20	24	49.2	2.0			1.8		
15	C&GS 04-12-55*; 15.0 N., 92.3 W., h about 127 km. Mexico-Guatemala Broder region, Mag. 4.0(CGS) (P-H) = 2220 km. ca. or 20°.									
	eP	04	17	32.6	1.0			1.2		
16	C&GS 12-16-49.9; 5.2 N., 77.5 W., h about 15 km., Near West doast of Colombia, Mag. 5.1(CGS) (P-H) = 3665 km. ca. or 33°.									
	i	04	30	08.1	1.0			3.5		
16	C&GS 12-16-49.9; 5.2 N., 77.5 W., h about 15 km., Near West doast of Colombia, Mag. 5.1(CGS) (P-H) = 3665 km. ca. or 33°.									
	eP	12	23	34.9	1.0			1.7		
	iPP		26	20.7	1.2			1.9		

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			7N
		h	m	s	Z	E	N	Z	E	N	
Aug. 16	C&GS 12-36-23.3; 0.6 S., 19.9 W., h about 33 km, Central Mid-Atlantic Ridge, Mag. 6.1(CGS) (P-H) = 8665 km. ca. or 78°.										
	iP	12	48	16.8	1.0			6.1			
17	eP	10	54	30.5	0.9			1.6			
	ePPP		57	59.9	1.2			2.0			
17	C&GS 13-16-12.7; 52.0 N., 175.2 W., h about 33 km. Andreanof Islands, Aleutian Islands, Mag. 4.9(CGS) (P-H) = 6445 km. ca. or 58°										
	eP	13	25	58.7	1.0			1.2			
17	C&GS 14-02-19*; 15.2 N., 92.1 W., h about 121 km. Mexico-Guatemala border region, Mag. 4.9(CGS) (P-H) = 2110 km. ca. or 19°.										
	eP	14	06	50.2	1.2			5.8			
17	C&GS 20-45-32.7; 21.1 S., 69.1 W., h about 103 km., Northern Chile, Mag. 4.8(CGS) (P-H) = 6890 km. ca. or 62°.										
	i	20	55	41.4	1.0			1.4			
18	e	16	36	50.5	1.0			0.8			
19	iP	06	13	25.4	0.5			3.5			
	iPPP		16	16.8	0.8			6.4			
19	iP	09	52	41.4	1.0			5.4			
19	iP	21	35	16.4	1.0			2.4			
21	iP	13	23	53.9	0.7			3.5			
23	iPZN	20	20	28.8	1.5		8.0	10.0		23.5	
	iSZN		23	09.0	2.3		15.0	14.0		120.0	
	eLZN		29	56.5	17.0		20.0	20.0		132.0	
23	C&GS 23-13-47.2; 15.9 N., 95.7 W., h about 48 km. Oaxaca, Mexico, Mag. 4.9(CGS) (P-H) = 2110 km. ca. or about 19°.										
	iPZN	23	16	53.5	0.8		2.0	2.0		1.5	
	iPPZN		18	19.4	1.0		2.0	4.2		3.0	
24	C&GS 00-56-21.4; 15.9 N., 96.2 W., h about 12 km., Near coast of Oaxaca, Mexico, Mag. 5¼-5½(PAL), 5.5(CGS) (P-H) = 2110 km. ca. or 19°.										
	iPZN	01	00	58.6	1.1		3.4	5.2		12.0	
	iSZN		05	28.3	0.9		5.6	5.4		18.0	

Date	Phase	Time		G. C. T.		Period Sec.		Trace Amp.(mms)			8
		h	m	s	Z	E	N	Z	E	N	
Aug. 24	C&GS 03-26-06.4, 59.4 N., 145.6 W., h about 19 km., Gulf of Alaska, Mag. 5 $\frac{1}{4}$ (BRK), 5.4(CGS) (P-H) = 4445 km. ca. or 40°.										
	eSEN	13	26	06.4		5.0	3.0		3.2	2.0	
	eSSEN		34	20.6		13.0	14.0		9.0	18.0	
26	e	03	02	02.4	0.8				1.0		
26	e	19	50	52.2	0.6				1.4		
27	C&GS 08-35-05*; 16.0 N., 96.0 W., h about 33 km. Near coast of Oaxaca, Mxcioc, Mag. 4.1(CGS) (P-H) = 2110 km. ca. or 19°.										
	iPP	08	39	39.8	0.6				2.6		
27	C&GS 18-22-02.8; 44.6 N., 148.9 E., h about 38 km. 44.6 N., 148.9 E., Kurile Islands, Mag. 5.3(CGS) (P-H) = 9000 km. ca. or 81°										
	iP	18	34	17.8	0.7				1.4		
29	iPZEN	01	50	46.6	1.0	2.8	4.8		4.0	3.6	7.5
	iPPPZEN	01	54	49.7	1.0	5.6	10.0		1.9	11.4	8.5
30	iPZ	22	26	38.5	0.8				4.0		
	iSZ	22	31	10.0	0.5				0.8		
Sept. 1	C&GS 04-29-21.8; 51.3 N., 150.6 E., h about 537 km., Mag. 5.1 (CGS) (P-H) = 8665 km. ca. or 78°.										
	iPZ	04	41	25.65	1.1				6.0		
1	iPZ	04	40	15.0	0.6				3.0		
2	C&GS 02-08-02.1; 29.0 N., 112.9 W., h about 33 km.R., Gulf of California, Mag. 5.2(CGS) (P-H) = 2000 km. ca. or 18°.										
	ePZEN	02	12	04.3	0.5	4.0	4.0		2.0	1.2	0.5
	eSZEN	02	17	19.8	1.2	4.0	3.6		1.0	5.5	7.5
2	iPZEN	04	37	01.2	0.8	2.4	3.6		2.0	0.9	0.9
4	C&GS 14-32-47.9; Anchorage, Alaska possibly(?); no vertical record of <u>quake</u> . 58.2 N., 152.6 W., h about 19 km., Kodiak Island region, Felt aboard USC and GS Surveyor located at 58°57' N., 151°23' W., and in a wide area of South Central Alaska. Mag. 6 $\frac{3}{4}$ -7(PAS), 7(BRK), 6 $\frac{3}{4}$ -7(PAL), 6.1(CGS) (P-H) = 5000 km. ca. or 45°.										
	iPEN	14	40	55.2		3.0	3.0		35.0	9.0	

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			
		h	m	s	Z	E	N	Z	E	N	
Sept. 9	C&GS 10-02-25.4; 6.5 N., 84.4 W., h about 27 km. Off coast of Central America, Mag. 6 3/4(PAS), 6 3/4(BRK), 5.5(CGS) (P-H) = 3555 km. ca. or 32°.										
	i(P)E	10	08	38.5		2.0			2.8		
10	C&GS 22-57-44.0; 18.6 N., 100.6 W., h about 92 km., Guerrero Mexico, Mag. 4.2(CGS) (P-H) = 1890 km. ca. or 17°.										
	eP	23	01	53.1	0.8				2.8		
12	e	08	44	38.3	1.0				2.0		
12	C&GS 20-21-19.4; 36.4 S., 97.8 W., h about 33 km, Southeast central Pacific Ocean, Mag. 5.5(CGS) (P-H) = 8000 km. ca. or 72°.										
	e	20	32	45.5	1.0				2.4		
12	β	22	22	16.8	1.0				4.8		
13	C&GS 09-58-17.9; 39.8 N., 104.8 W., h about 5 km., Colorado, felt in Denver area. Mag. 4.5(CGS) (P-H) = 1110 km. ca. or 10°.										
	iPZE	10	00	41.1	0.5	4.0			3.0	0.5	
	eS(Z)E	10	03	20.8		1.4				1.5	
	e(L)ZE	10	05	06.8	0.8	4.2			0.6	1.0	
13	13	C&GS 13-07-48.3; 55.5 N., 165.7 E., h about 23 km., Komandorsky Islands region, Mag. 5.4(CGS) (P-H) = 7445 km. ca. or 67°.									
	iPZE	13	18	46.9	1.0	3.0			1.0	1.0	
14	C&GS 16-36-47*; 39.7 N., 104.9 W., h about 5 km. Colorado, Felt in Denver area, Mag. 4.7(CGS) (P-H) = 1110 km. ca. or 10°.										
	eSZ	16	41	36.5	1.0				1.1		
14	C&GS 22-46-24*; 39.9 N., 104.6 W., h about 5 km. Colorado, slight damage in Denver area. Mag. 4.7(CGS) (P-H) = 1110 km ca or 10°										
	ePZE	22	48	35.3	1.0	0.2			3.4	0.5	
	e(S)ZE	22	51	4.0	1.5	2.0			3.5	3.5	
16	C&GS 04-10-22.6; 40.4 N., 125.7 W., h about 33 km. Off coast of Northern California, Mag. 5(BRK), 4 3/4-5(PAL), 5.6(CGS) (P-H) = 2890 km. ca. or 26°.										
	iP	04	15	47.4	1.6				5.0		

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			10
		h	m	s	Z	E	N	Z	E	N	
Sept. 16	C&GS 19-51-08.4; 37.2 N., 74.3 W., h 0 km. USC&GS Explosion, Cat 37 N., 10N 74 W, at 19:51 GMT, Off east coast of United States, planned detonation of surplus U. S. Navy explosives aboard S.S. San Tiago Iglesias, Mag. 5.1(CGS) (P-H) = 1665 km. ca. or 15°.										
	eP	19	54	53.2	1.0			0.5			
	e(S)	19	58	15.5	0.9			0.4			
17	C&GS 11-13-56.4; 1.4 S., 77.6 W., h about 190 km. Ecuador. Felt at Guayaquil and Quito, Mag. 6½(PAS), 5½-6(BRK), 6.0(CGS) (P-H) = 4335 km. ca. or 39°.										
	iPZN	11	21	13.5	0.5		6.4	1.75		8.5	
	e(S)N	11	26	31.8			6.0			2.5	
17	C&GS 16-21-21.9; 363. N., 141.1 E., h about 72 km., Near coast of Honshu, Japan, Mag. 5.8(CGS) (P-H) = 10,110 km. ca. or 9½°.										
	iPZEN	16	34	24.0	1.4	2.4	2.4	0.75	1.1	1.1	
20	ePZ	00	42	45.4	0.5			1.5			
23	ePZN	22	26	57.1	0.5		2.4	2.0		3.0	
24	C&GS 17-13-52.2; 20.2 N., 105.7 W., h about 33 km. Near coast of Jalisco, Mexico, Mag. 4.7(CGS) (P-H) = 2000 km. ca. or 19°.										
	iPE	17	18	12.4		3.0			1.8		
	eSE	17	23	40.0		5.0			4.0		
25	iPE	18	48	6.5		2.4			0.75		
	iSE	18	53	21.5		3.8			9.0		
27	C&GS 05-09-13.3; 51.9 N., 175.5 E., h about 41 km. Rat Islands, Aleutian Islands, Mag. 5.5(CGS) (P-H) = 6555 km. ca. or 59°.										
	iPZ	05	19	34.9	1.3			1.9			
	e(S)Z	05	20	43.2	1.4			0;6			
27	C&GS 51.6N., 179.2 W., h about 53 km. Andreanof Islands, Aleutian Islands, Mag. 4.8(CGS) (P-H) = 6555 km. ca. or 59°.										
	ePZ	08	41	01.5	0.7			0.4			
27	iPZ	10	39	58.4	0.8			0.65			
28	ePZ	21	37	31.5	1.2			1.0			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			11
		h	m	s	Z	E	N	Z	E	N	
Sept. 29	C&GS 39.8 N., 105.1 W., h about 5 km. Colorado, slight damage Denver area, Mag. 4.7(CGS)										
	ePZEN	19	02	5.2	0.8	1.6	2.4	0.5	0.5	0.2	
	e(S)ZEN	19	04	20.7	1.2	4.4	3.0	3.5	1.75	4.5	
	e(P)ZE	19	08	30.2	1.0	2.0		1.5	0.4		
30	C&GS 04-10-35.3; 20.3 N., 105.7 W., h about 33 km. Near coast of Jalisco, Mexico. Mag. 4.3(CGS) (P-H) = 2220 km. ca. or 20°.										
	iPZEN	04	14	54.3	0.8	0.5	0.5	0.5	0.2	0.1	
31	C&GS 59.7 N., 143.4 W., h about 19 km. Gulf of Alaska, Mag. 5 $\frac{1}{4}$ -5 $\frac{1}{2}$ (BRK), 6 $\frac{1}{4}$ -6 $\frac{1}{2}$ (PAL), 4.8(CGS) (P-H) = 4780 km. ca. or 43°.										
	ePZEN	23	55	08.7	0.9	2.4	2.5	0.75	0.6	5.0	

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 $36^{\circ} 05.46'$ north latitude and $94^{\circ} 11.47'$ 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 vicinity of the station.



University of Arkansas
Seismograph Station
Department of Geology
Fayetteville, Arkansas

FAYETTEVILLE

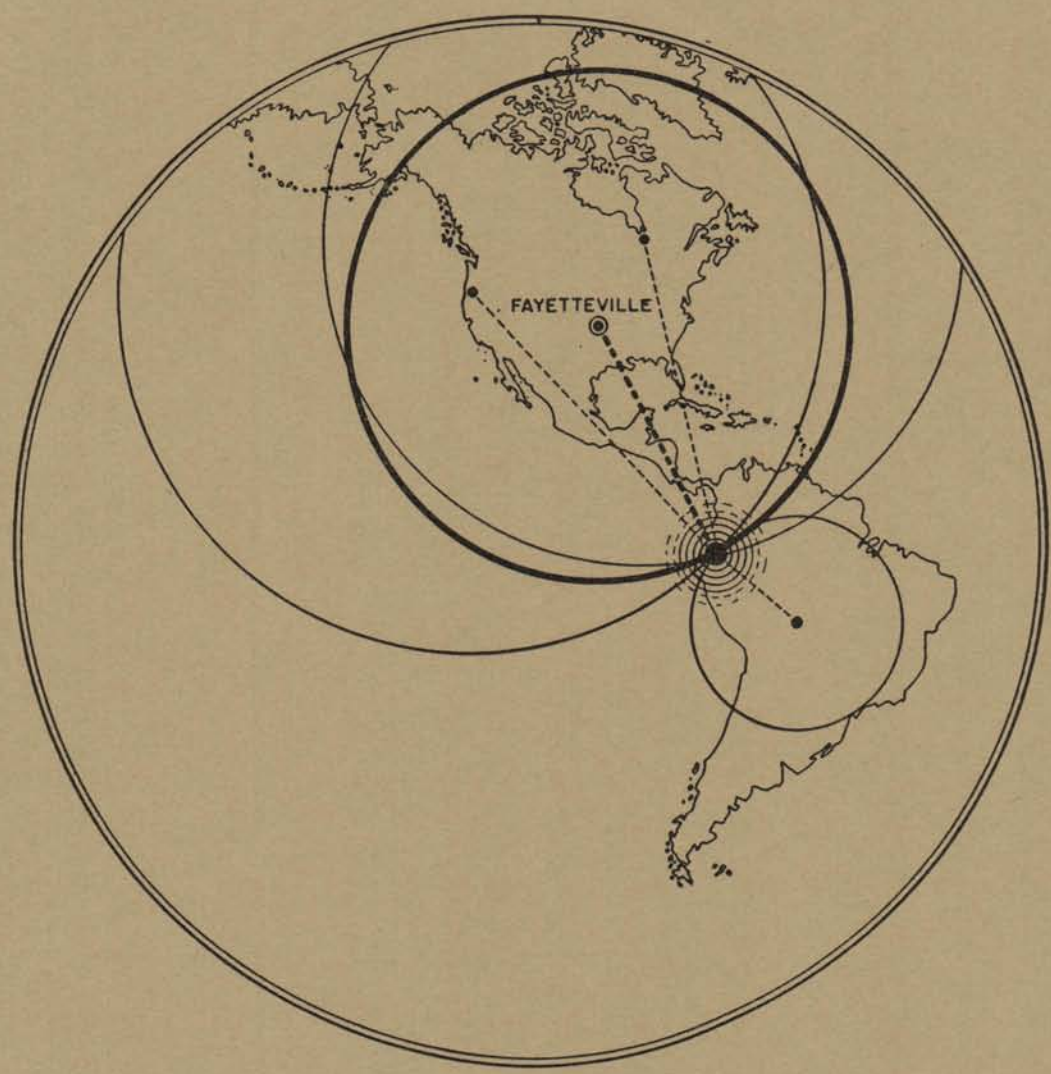
OCT. - DEC. 1965

UNIVERSITY OF ARKANSAS

SEISMOLOGICAL BULLETIN

Volume XIV

Number 4



The University Of Arkansas Seismograph Station

Operated by the University's Department of Geology
in conjunction with the
United States Coast Guard and Geodetic Survey

FAYETTEVILLE SEISMOGRAPH STATION

VOLUME 14, NUMBER 1, SEPTEMBER 1966
Data for October, November, December 1965

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

Year	Date	Time G. C. T.			Period Sec.			Trace Amp. (mms)			1
		h	m	s	Z	E	N	Z	E	N	
Oct.											
1	e(L)ZEN	00	08	52.3	6.5	16.0	7.0	2.25	130.0	22.5	
1	ePZLN	05	47	04.0	1.2	4.0	4.0	1.1	1.2	0.7	
1	C&GS 08-52-05.8; 50.1 N., 178.3 E., h about 32 km. Rat Islands, Aleutian Islands, Mag. $6\frac{1}{2}$ (PAS), $6\frac{1}{4}$ - $6\frac{1}{2}$ (BRK), $6\frac{1}{2}$ - $6\frac{3}{4}$ (PAL) Felt on Adak. (P-H) = 6780 km. ca. or 61° .										
	iPZEN	09	02	23.3	1.5	11.5	1.6	6.0	80.0	5.5	
	eSZEN	09	10	41	1.3	16.0	8.0	0.5	117.5	15.5	
	e(SS)EN	09	25	04.7		16.0	10.0		15.0	4.5	
	e(L)ZN	09	32	30	12.0					11.0	
1	ePZ	13	38	4117	1.3			1.5			
2	eP	09	06	30.0	0.8			1.3			
3	C&GS 14-45-26.8; 49.5 N., 156.5 E., h about 33 km. Kurile Islands, Mag. 6(PAS), $5\frac{1}{2}$ - $5\frac{3}{4}$ (BRK) (P-H)=8110 kmca or 73°										
	iPZN	14	57	02.3	1.5		4.5	3.0		43.0	
3	C&GS 16-14-54.9; 42.9 S., 75.4 W., h about 28 km. Off coast of Southern Chile. Mag. $6-6\frac{1}{2}$ (BRK) (P-H) = 9110 km. ca. or 82° .										
	iPZEN	16	27	06.5	1.6	4.2	4.2	4.0	1.0	1.0	
3	ePZ	15	32	12.4	1.8			1.0			
3	C&GS 10-46-16.7; 52.6 N., 170.6 W., h about 22 km. Fox Islands, Aleutian Islands, Mag. 5.3(CGS) (P-H) = 6665 km. ca. or 60° .										
	iPZ	10	55	42.5	1.0			2.0			
4	C&GS 00-13-25.8; 6.4 S., 147.4 E., h about 75 km. East New Guinea region, felt at Lae and Saidor, Mag. 5.8(CGS) (P-H) = 12,780 km. ca. or 115° .										
	ePP	00	32	51.0	2.2			1.0			
5	C&GS 03-50-25; 36.0 S., 72.5 W., h about 33 km. Near coast of central Chile. Felt at Concepcion, Talca, and Chillan. Mag. 5.2(CGS) (P-H) = 8110 km. ca. or 73° .										
	eP	03	50	25.0	1.2			1.1			
7	C&GS 02-41-32; 16.2 N., 94.7 W., h about 131 km., Oaxaca, Mexico Mag. 4.3(CGS) (P-H) = 2110 km. ca. or 19° .										
	iPZ	02	41	32.1	1.0			2.5			

	Time	G. C. T.			Period Sec.			Trace Amp. (mms)			2
		h	m	s	Z	E	N	Z	E	N	
Oct.											
7	C&GS 03-35-59.6; 12.6 N., 114.5E., h about 17 km., South China Sea, Mag. 5.9(CGS) (P-H) = 13,890 km. ca. or 125°.										
	ePZ	03	54	59.0	0.8			0.5			
8	C&GS 16-32-31.8; 51.4 N., 173.9 W., h about 43 km. Andreanof Islands, Aleutian Islands, Mag. 5.1(CGS) (P-H) = 6445 km. ca or 58°.										
	iPZN	16	42	1.0		1.2	2.1	0.5			
8	ePZN	19	42	04.6	0.8		2.0	0.5		1.2	
	e(PP)Z	19	44	50.1	0.7			0.5			
8	iPZ	11	13	09.8	0.8			0.9			
8	iPZ	15	40	43.2	1.0			0.75			
9	ePZN	20	03	39.8	1.0			1.05			
10	C&GS 00-35-58.7; 51.9 N., 175.3 W., h about 42 km. Andreanoff Islands, Aleutian Islands, Mag. 5 3/4(PAL), 5.4(CGS) Felt on Adak. (P-H) = 6445 km. ca. or 58°.										
	iPZN	00	45	44.3	0.5			0.6			
12	C&GS 13-40-55.9; 56.3 N., 153.7 W., h about 11 km. Kodiak Island Region, Mag. 5 1/4(BRK), 5.3(CGS) (P-H)=5000 kmca.or45°										
	iPZE	13	49	08.0	1.0	2.0		4.0	2.0		
	e(S)E	14	05	44.0		8.0			4.5		
12	ePZ	00	46	16.8	1.2			1.0			
12	C&GS 06-27-16.7; 52.2N., 174.8 W., h about 17 km. Andreanof Islands, Aleutian Islands, Mag. 5.1(CGS) Felt on Adak (P-H) = 6445 km. ca. or 58°.										
	iPZE	16	37	03.6	0.8	1.0		0.5	1.0		
14	ePZN	10	55	37.2	1.2		1.2	0.5		1.5	
15	iPZ	00	27	17.1	1.0			2.5			
15	C&GS 00-34-09.3; 8.5 N., 103.0 W., h about 33 km. Off coast of Mexico, Mag. 4 3/4-5(BRK), 5 1/4-5 1/2(PAL), 5.2(CGS), (P-H) = 3335 km. ca. or 30°.										
	ePZ	00	40	04.7	1.9			0.8			
16	ePZ	13	28	17.8	0.5			0.5			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)		
		h	m	s	Z	E	N	Z	E	N
Oct. 16	iPZ	21	57	19.8	0.7			0.6		
19	iPZ	15	16	48.1	0.7			1.0		
20	ePZ	22	09	15.5	1.0			1.0		
	e(S)Z	22	11	16.0	2.1			0.6		
20	iPZ	22	55	14.5	1.2			4.5		
	i(PP)Z	22	58	48.2	1.0			2.0		
21	C&GS 02-04-38.3; 37.5 N., 91.0 W., h about 22 km. Eastern Missouri. Mag. 5.2(CGS) Felt throughout Missouri and in parts of Illinois, Kansas, Iowa, Nebraska, Kentucky, Tennessee and Arkansas. (P-H) = 400 km. ca. or 3.5°.									
21	ePZ	03	55	48.6	1.0			3.5		
21	ePZ	04	07	33.1	1.0			1.2		
21	ePZ	04	13	14.8	1.5			7.0		
21	C&GS 11-50-04; 16.1 N., 93.8 W., h about 150 km. Chiapas, Mexico. Mag. 3.7(CGS) (P-H) = 2220 km. ca. or 20°.									
	iPZ	11	54	26.4	0.7			0.5		
	iSZ	11	58	04.4	0.6			0.6		
23	C&GS 06-53-32.8; 29.4S., 71.6W., h about 33 km. Near coast of Central Chile. Mag. 5.5(CGS) (P-H) = 7555 km. ca. or 68°.									
	iPZ	07	04	33.5	1.2			1.1		
24	C&GS 18-45-38.3; 45 N., 149.3 E., h about 48 km. Kurile Islands Mag. 5.0(CGS) (P-H) = 9000 km. ca. or 81°.									
	iPZ	18	57	47.8	0.5			0.5		
24	C&GS 19-06-13.4; 17.9 N., 93.8 W., h about 206 km. Chiapagos, Mexico. Mag. 4.3(CGS) (P-H) = 1890 km. ca. or 17°.									
	iPZ	19	10	18.7	0.7			1.0		
27	C&GS 22-40-17.1; 46.0 N., 142.9 E., h about 230 km. Sakhalin Islands, Mag. 4.75-5(BRK), 4.5(CGS) (P-H) = 9000 km. ca. or 81°.									
	iPZ	22	52	19.7	1.0			1.8		

Date	Phase	Time G. C. T.			Perio d Sec.			Trace Amp.(mms)		
		h	m	s	Z	E	N	Z	E	N
Oct.										
28	C&GS 01-46-45.9; 51.8 N., 176.5 E., h about 54 km. Rat Islands, Aleutian Islands, Mag. 5.0(CGS) (F-H) = 6890 km. ca. or 62°.									
	ePZ	01	57	01.6	0.8			1.1		
28	C&GS 10-20-11; 28.7 N., 108.0 W., h about 33 km. Chihuahua, Mexico. Mag. 5.0(CGS) (P-H) = 1445 km. ca. or 13°.									
	iPZ	20	23	25.8	0.8			0.6		
	i(L ₁)Z	20	27	33.2	1.1			1.1		
	i(L ₂)Z	20	28	39.3	1.5			0.6		
29	C&GS 21-00-00.1; 51°26' 17" N., 179° 10' 57" E., h about 0 km. Amchitka Island. "Long shot". Elevation -66M.(DASA). Mag. 5½(BRK), 5 1/2- 5 3/4(PAL), 5.4(CGS), (P-H) = 6890 km. ca. or 62°.									
	iPZ	21	10	16.0	1.0			3.25		
30	ePZ	19	28	14.2	0.6			0.6		
30	ePZ	20	43	10.0	1.0			0.5		
30	ePZ	22	43	6.8	0.8			0.5		
31	C&GS 13-47-56.8; 24.9 S., 69.0 W., h about 107 km. Chile-Argentina border region. Mag. 5.4(CGS) (P-H) = 6780 km.ca.or61°.									
	iPZ	13	58	33.3	1.0			3.5		
	i(PcP)Z	13	58	54.5	1.5			2.5		
31	ePZ	17	44	10.3	0.6			0.3		
	i(S)Z	17	44	27.7	1.3			0.8		
Nov.										
1	C&GS 09-54-17 .2; 17.0 N., 99.9 W., h about 33 km. Guerrero, Mexico, Mag. 4.4(CGS) Slight damage at Acapulco. (P-H) = 2220 km. ca. or 20°.									
	iPZ	09	58	43.8	1.0			1.0		
2	ePZ	20	60	22.3	1.0			1.5		
3	C&GS 01-39-02.5; 9.1 S., 71.4 W., h about 583 km. Peru-Brazil border region. Mag. 6 3/4(PAL), 6 3/4 - 7 1/4(BRK), 6¼-6½(PAL), 6.2(CGS). (P-H) = 5335 km. ca. or 48°.									
	iPZE	01	47	03.3	1.5	4.0		19.0	7.5	
	i(S)ZE	01	53	32.8	3.0	5.0		4.5	15.0	

Date	Phase	Time G.C.T.			Period Sec.			Trace Amp.(mms)			5
		h	m	s	Z	E	N	Z	E	N	
Nov.											
3	iPZ	12	34	24.7	1.0			1.5			
	e(S)Z	12	35	02.0	1.0			3.0			
4	C&GS 07-43-38.9; 91.0 W., 37.1 N., h about 33 km. Eastern Missouri. Mag. 4.5(CGS) (P-H) = 334 km. ca. or 30.										
	iPZ	07	44	23.7	1.0			5.0			
6	iPZ	09	46	24.8	1.0			0.75			
6	C&GS 09-21-48.6; 22.1S., 113.8W., h 33 km. Easter Island Region. Mag. 6(PAS), 6 (BRK), 5 1/2-5 3/4(PAL), 6.2(CGS) (P-H) = 6665 km. ca. or 60°.										
	iPZ	09	31	58.7	1.0			0.9			
6	iPZ	21	05	03.3	1.5			0.7			
7	C&GS 20-57-43*, 47.2 N., 76.3W., h about 33 km. Mag. 3.8(CGS) (P-H) = 2000 km. ca. or 18°.										
	eSZ	21	05	03.0	1.0			0.6			
10	iPZ	16	48	57.5	1.0			1.0			
10	C&GS 12-47-37.5; 21.0 S., 69.0 W., h about 110 km. Mag. 4.8 (CGS) (P-H) = 6780 km. ca. or 61°.										
	iPZ	12	57	44.4	1.0			1.7			
11	iPZ	18	42	05.3	0.8			0.5			
12	C&GS 08-59-53.3; 10.6N., 84.4 W., h about 25 km. Costa Rica. Mag. 4.9(CGS) (P-H) = 3110 km.ca. or 28°.										
	iPZ	09	05	35.4	1.0			1.1			
12	C&GS 17-52-24.1; 30.5N., 140.2 E., h about 40 km. South of Honshu Japan. Mag. 6 3/4(PAS), 6 1/2(BRK), 6-6 1/4(PAL), 6.6(CGS) (P-H)= 10,890 km. ca. or 98°.										
	iPZ	18	05	41.4	1.5			1.5			
12	iPZ	19	04	18.6	0.6			1.0			
13	C&GS 23-55-08.8; 34.0 N., 118.3W., h about 16 km. Mag. 4.2 (CGS) (P-H) = 2446 km. ca. or 22°.										
	eSZ	00	03	51.6	0.7			0.5			

Date	Phase	Time G.C.T.			Period Sec.			Trace Amp.(mms)			6
		h	m	s	Z	E	N	Z	E	N	
Nov. 13	iPZ	02	25	15.6	0.5			0.4			
13	C&GS 17-59-41.7; 29.4 S., 68.1 W., h about 48 km. San Juan Province, Argentina. Mag. 5(CRK), 5 $\frac{1}{4}$ -5 $\frac{1}{2}$ (PAL, 5.9(CGS) Damage at Villa Union. (P-H) = 7780 km. ca. or 70°.										
	iPZ	18	10	52.0	1.2			4.5			
	ePPZ	18	13	38.4	1.0			0.5			
14	EPZ	04	22	08.5	0.4			0.7			
14	C&GS 03-11-23; 1.7 N., 90.6 W., h about 33 km. Gala Pagos Island, region. Mag. 5(PAL), 5 (CGS) (P-H) = 4000 km. ca. or about 36°.										
	ePZ	03	18	01.0	1.2			0.5			
14	ePZ	05	21	21.7	0.5			0.5			
15	ePZ	06	33	16.5	0.4			1.1			
15	C&GS 11-18-49.9; 0.3S., 18.7 W., h about 24 km. Central Mid-Atlantic Ridge; Mag. 6 $\frac{1}{2}$ (PAS), 6 $\frac{1}{4}$ (PAL), 5.6(CGS) (P-H) = 8665 km. ca. or 78°.										
	iPZ	11	30	55.8	1.2			2.0			
16	C&GS 15-24-42.41 31N., 41.5 W., h about 17 km. North Atlantic Ridge. Mag. 6 $\frac{1}{2}$ (PAS), 6.4(BRK), 6(RAL), 6(CGS) (P-H) = 4890 km. ca. or 44°.										
17	i(P)Z	00	59	29.9	1.0			0.5			
	e(S)Z	00	00	20.2	1.4			0.8			
	e(L)Z	00	00	46.8	2.8			0.5			
18	ePZ	04	08	49.8	.5			.5			
	e(S)Z	04	09	18.0	1.8			1.0			
18	C&GS 09-23-03.8; 15.5N., 94.8 W., h about 33 km. Near coast of Oaxaca, Mexico, Mag. 4.4(CGS) (P-H)=2116 km.ca. or 19°.										
	iPZ	09	27	43.0	1.5			3.5			
18	C&GS 13-10-59.6; 18.8 N., 108.0 W., h about 33 km. Off coast of Jalisco, Mexico. Mag. 4.6(CGS) (P-H) = 2335 km. ca. or 21°.										
	iPZ	13	15	43.3	1.0			0.75			
18	iPZ	20	14	02.4	1.3			0.75			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp.(mms)			7
		h	m	s	Z	E	N	Z	EN	N	
Nov. 18	C&GS 21-58-12.4; 53.9 N., 160.7E., h about 112 km. Near coast of Kamchatka. Mag. 5½(PAL), 6.0(CGS) , (P-H) = 7555 km.ca. or 68°.										
	iPZ	22	09	22.5	2.0			4.0			
	e(PP)Z	22	10	49.0	1.2			0.8			
19	iPZ	15	26	1.3			1.0				
20	iPZE	15	24	37.5	1.0			1.0			
	i(S)ZE	15	27	48.8	1.6	4.0		2.5	2.0		
20	iPZ	16	25	52.5	1.2			3.0			
21	C&GS 04-20-29; 39.8 N., 104.8 W., h about 5 km. Colorado Mag. 4.5(CGS) One injured and minor damage in Denver area. (P-H) = 1050 km. ca. or 9.5°.										
	ePZE	04	02	47.5	1.0	1.0		3.0	4.0		
21	C&GS 05-00-27*; 39.8 N., 109.9 W., h about 5 km., Colorado, Felt in Denver area. Mag. 4.7(CGS) (P-H) = 1110 km.ca. or 10°.										
	ePZE	05	03	18.0	1.0			5.0			
21	iPZ	10	50	45.5	1.2			1.5			
21	ePZ	14	53	15.5	1.0			1.2			
21	C&GS 21-39-27; 16.4 N., 98.8 W., h about 18 km. Near coast of Guerrero, Mexico. Mag. 4.6(CGS) (P-H) = 2110 km. ca. or 19°.										
	iPZ	21	44	00.7	0.5			0.5			
22	C&GS 14-00-27.0; 52.0 N., 176.1 W., h about 49 km. Andreanof Islands, Aleutian Islands. Mag. 5.5(CGS) Felt on Adak. (P-H) = 6,445 km. ca. or 58°.										
	iPZ	14	10	15.2	1.0			2.0			
22	C&GS 20-25-30.4; 51.3N., 179.8 W., h about 40 km. Andreanof Island, Aleutian Islands. Mag. 5.9 (P-H) = 6665 km. ca. or 60°.										
	iPZE	20	35	16.5	1.0	1.5		2.5	1.0		
	ePcPE	21	00	56.5		20.0			6.0		
23	iPZE	02	27	53.8	1.0	5.2		2.5	2.5		
23	iPZE	16	50	45.0	1.0	1.0	2.5	0.5			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)		
		h	m	s	Z	E	N	Z	E	N
Nov. 24	C&GS 08-22-3817; 63.2 N., 151.0 W., h about 129 km. Central Alaska. Mag. 5.1(CGS) (P-H) = 4890 km. ca. or 44°.									
	iPZ	08	30	30.2	1.0			1.1		
25	C&GS 10-50-38.1; 17.1S., 100.4 W., h about 29 km. Southeast Central Pacific Ocean, Mag. 5¼-5½(BRK), 5.8(CGS) (P-H) = 6110 km. ca. or 55°.									
	iPZ	10	59	52.0	1.5			3.0		
27	ePZ	09	15	26.0	1.0			1.0		
27	C&GS 19-50-01*; 16.8 N., 86.6 W., h about 33 km., Caribbean Sea, Mag. 4.0(CGS) (P-H) = 2220 km. ca. or 20°.									
	ePZ	19	54	40.0	0.5			0.5		
28	C&GS 03-56-45.9; 45.6 S., 72.4 W., h about 33 km. Near coast of Southern Chile. Mag. 6-6¼(PAL), 5.8(CGS). Felt at Aysen. (P-H) = 9335 km. ca. or 84°.									
	iPZE	04	09	14.0	1.2	2.0		2.0	1.5	
	iSZE	04	19	44.5		6.0			5.0	
28	C&GS 05-26-05.6; 36.1 N., 27.7 E., h about 89 km. Dodecanese Islands, Moderate damage at Rhodes and felt in western Turkey, Mag. 5¼-5½(PAL), 5.9(CGS) (P-H) = 10,000 km. ca. or 90°.									
	iPZE	05	38	58.2	1.5	1.5	5.5	1.5		
28	iPZE	21	51	16.8	2.0	0.5		6.5	1.0	
29	iPZ 09 12 14.3 1.2 2.5 C&GS 09-00-08.3; 45.1 N., 146.5 E., h about 153 km. Kurile Islands, Mag. 4 /34-5)BRK), 5.3(CGS) (P-H) = 9220 km. ca. or 83°.									
29	iPZ	17	15	11.3	1.0			1.0		
Dec. 1	C&GS 20-22-01; 16.3N., 95.8 W., h 62 km. Oaxaca, Mexico, Mag. 4.4(CGS) (P-H) = 2110 km. ca. or 19°.									
	iPZ	20	26	22.8	1.0			4.0		
2	C&GS 00-36-30.1; 16.4S., 69.6 W., h about 196 km. Peru-Bolivia border region, felt at Arica, Chile, Mag. 5.2(CGS) (P-H) = 6335, 57°.									
	iPZ	00-45-56.1			1.0			2.0		
	e(PFZ)	00	46	47.0	1.0			0.5		

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms) 9		
		h	m	s	Z	E	N	Z	E	N
Dec.										
2	C&GS 05-58-41.5; 51.3N., 176.3 E., h 17 km. Rat Islands, Aleutian Islands, Mag. 5.1(CGS) (P-H) = 6780 km. ca. or 61°.									
	ePZ	06	09	11.3	0.8			0.5		
2	C&GS 10-16-27.0; 31.3 S., 68.5 W., h 46 km. San Juan Province, Argentina, Felt at San Juan, Mag. 4.6(CGS) (P-H) = 6890 km. ca. or 62°.									
	iPZ	10	27	42.5	1.0			1.15		
2	eP Z	21	19	37.6	.9			1.4		
4	C&GS 02-11-49.9; 51.3N., 170.6 W., h 18 km. Fox Islands, Aleutian Islands, Mag. 5.5(CGS) (P-H) = 6110 km. ca. or 55°.									
	iPZE	02	21	22	1.1	.4		.5	.5	
5	iPZ	16	23	48.8	.25			.5		
5	iPZ	18	25	19.4	.5			.5		
5	iPZ	03	35	58	.8			.55		
5	ePZ	04	25	16.7	1.0			1.0		
6	C&GS 01-22-36.0; 50.6 N., 177.4 W., h 37 km. Rat Islands, Aleutian Islands, Mag. 5.1(CGS) (P-H) = 6890 km. ca. or 62°.									
	iPZ	01	32	55.4	0.8			0.5		
6	C&GS 04-39-11*; 12.7 N., 87.3 W., h 47 km. Near coast of Nicaragua, Mag. 4.6(CGS) (P-H) = 2665 km. ca. or 24°.									
	ePZ	04	44	18.3	1.0			.4		
6	C&GS 11-34-53.7; 18.9 N., 107.1 W., h 37 km. Off coast of Jalisco, Mexico, Mag. 6 3/4(PAS), 7-7.5(BRK), 6 1/2-6 3/4(PAL), 5.9(CGS) (P-H) = 2110 km. ca. or 19°.									
	iPZ	11	39	31.9	1.5			6.5		
	e(S)Z	11	41	19.7	3.6			2.0		
	e(PP)Z	11	42	42.7	1.3			2.5		
	e(E) ₂ Z	11	45	36.2	9.0			3.8		

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			10
		h	m	s	Z	E	N	Z	E	N	
Dec. 6	C&GS 18-42-33.2; 18.8 N., 107.0 W., h a out 40 km. Off coast of Jalisco, Mexico, Mag. 5 3/4(PAS), 5 3/4(PAL), 5.1(CGS) (P-H) = 2110 km. ca. or 19°.										
	iPZ	18	47	11.7	1.4			2.0			
	e(S)Z	18	48	11.6	1.2			0.6			
7	ePZ	18	47	49.4	.6			.6			
7	ePZ	23	17	47.3	1.0			.9			
7	iPZ	22	37	48.9	1.0			.6			
8	ePZ	05	21	02	.8			.4			
8	iPZ	20	46	57	1.5			.5			
8	iPZ	21	54	15.5	1.2			1.0			
9	iPZ	03	12	14.3	1.8			.5			
9	C&GS 06- 07-48.6; 173.4 N., 100.0 W., h about 57 km. Guerrero Mexico, Mag. 6 1/4(PAS), 6(BRK), 6 1/4-6 1/2(PAL), 6.0(CGS) (P-H) = 2110 km. ca. or 19°.										
	iPZE	06	12	11.0	1.8	4.6		8.5	2.5		
	eSZE	06	15	57.0	3.0	3.6		2.2	3.2		
	e(SS)ZE	06	20	18.0	.4	10.0		2.0	2.3		
	e(L ₁)Z	06	22	13.8	2.0	4.0		1.1	1.5		
	e(L ₂)ZE	06	23	16.5	3.5	4.0		1.0	2.0		
9	iPZ	11	06	14.9	.8			1.1			
9	iPZ	13	25	15.2	1.2			.5			
9	ePZ	20	58	42.4	1.0			.75			
9	iPZ	22	05	41.1	.8			.3			
9	ePZ	22	24	54.6	.8			1.4			
10	iPZE	19	56	26.5	.75	1.8		.75	.6		
10	ePZE	19	29	25.5	1.0	7.2		.5	7.2		
10	C&GS 02-29-15.9; 6.5 S., 8.8 W., h about 30 km. Near coast of Northern Peru, Mag. 4.6(CGS) (P-H) = 4780 km. ca. or 43°.										
	iPZ	03	07	24.5	1.0			.5			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp.			11
		h	m	s	Z	E	N	Z	E	N	
Dec. 10	ePZE	18	41	19.5	.75	7.2	.5	7.2			
11	C&GS 13-40-13*; 29.7 S., 67.0 W., h about 29 km. La Rioja Province, Argentina, Mag. 5.0(CGS) (P-H) = 8335 km. ca. or 75°.										
	iPZE	13	51	19.6	1.0	.5		1.0	.25		
11	C&GS 15-30-09*; 14.2 N., 90.8 W., h about 33 km. Guatemala, Mag. 4.2(CGS) (P-H) = 2220 km. ca. or 20°.										
	ePZE	15	37	32.5	.8	6.2		.5	.2		
11	iPZE	16	32	37.0	1.0	.2		.75	.2		
11	iPZ	17	54	07.0	1.0			.5			
12	C&GS 00-48-01.7; 51.5N., 178.9 W., h about 119 km., Andreanof Islands, Aleutian Islands, Mag. 5.0(CGS) (P-H) = 6665 km. ca. or 60°.										
	iPZ	00	58	2.6	.9			.75			
12	ePZ	01	41	21.0	1.3			.5			
12	iPZ	04	15	47.2	1.3			.5			
12	iPZ	20	24	54.8	.9			.6			
12	C&GS 19-25-09.1; 50.3N., 149.5 E., h about 438 km. Sea of Okhotek, Mag. 4.9(CGS) (P-H) = 8665 km. ca. or 78°										
	iPZ	19	36	17.3	1.2			.8			
13	iPZ	21	10	03.2	0.7			1.0			
	e(S)E	21	11	04.8		0.5			0.25		
13	iPZ	14	59	23.9	1.3	0.8		1.1	0.1		
13	iPZ	16	54	47.6	1.0			.75			
13	iPZ	16	54	47.6	1.0			.75			
	e(S)ZE	16	58	20.9	1.2	0.8		0.5	.25		
13	C&GS 05-45-12.7; 44.1 N., 150.2 E., h about 33 km. Kurile Islands, region, Mag. 5.4(CGS) (P-H) = 8890 km. ca. or 80°.										
	iPZ	05	57	26.0	1.2			1.2			

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp.(mms)			12
		h	m	s	Z	E	N	Z	E	N	
Dec. 13	C&GS 10-52-08.5; 44.7 N., 150.1 E., h about 35 km. Kurile Islands, Mag. 6(PAL), 5.7(CGS) (P-H) = 8890 km. ca. or 80°.										
	iPZE	11	04	19.4	2.0	1.8		2.0	.6		
14	iPZE	00	49	32.9	0.6	7.2		0.8	2.2		
14	C&GS 04-55-14*, 18.3 S., 70.4 W., h about 50 km. Near coast of Northern Chile, Mag. 4.8(CGS) (P-H) = 6445 km. ca. or 58°.										
	iPZ	05	05	7.2	0.7			0.5			
14	C&GS 06-06-47*; 35.0 S., 11.4 W., h about 33 km, Easter Island Cordillera, Mag. 5.1(CGS) (P-H) = 8000 km. ca. or 72°.										
	iPZ	06	18	12.5	1.7			.6			
14	C&GS 14-12-05.3; 14.4 N., 89.8 W., h about 276 km. Guatemala, Mag. 4.9(CGS) (P-H) = 2445 km. ca. or 22°.										
	iPZE	14	25	37.9	1.2	2.0		1.0	.5		
14	C&GS 17-27-01.7; 25.9 N., 109.7 W., h about 33 km, Gulf of California. Felt at Y Varos, Sanora, Mexico. Mag. 4.9(CGS) (P-H) = 2000 km.ca. or 18°.										
	iPZE	17	30	54.2	1.2	1.0		1.1	0.55		
	iSZE	17	35	54.2	2.0	3.0		1.6	3.5		
	iLZE	17	38	9.5	3.0	2.0		0.75	1.5		
15	ePZ	00	10	8.5	1.0			1.5			
15	iPZ	08	44	25.3	1.0			1.0			
15	C&GS 10-22-22.5; 44.8 N., 150.3 E., h about 67 km. Kurile Islands, region, Mag. 5.3(CGS) (P-H) = 8890 km.ca. or 80°.										
	iPZ	10	34	29.0	1.0			.6			
15	C&GS 23-05-20.7; 7.5 N., 82.8 W., h about 15 km., South of Panama, Mag. 6 3/4(PAS), 6 1/4-6 1/2(PAL), 6.0(CGS) (P-H) = 3335 km. ca. or 30°.										
	iPZ	23	10	34.5	.8			3.5			
16	ePZ	05	28	7.1	1.0			.7			
16	iPZ	06	17	9.4	0.8			.7			

Date	Phase	Time G.C.T.			Period Sec.			Trace Amp. (mms)			13
		h	m	s	Z	E	N	Z	E	N	
Dec. 16	ePZ	07	09	06.1	1.0			.6			
16	iPZ	19	19	6.8	1.2			.8			
	e(S)Z	19	20	17.3	1.0			1.0			
	e(L)Z	19	24	7.1	1.5			.7			
16	iPZ	22	01	4.0	1.2			0.6			
17	C&GS 06-17-24.7; 8.6 N., 39.4 W., h about 33 km. Central Mid-Atlantic Ridge. Mag. 5.3(CGS) (P-H) = 5890 km. ca. or 53°.										
	ePZE	16	06	27.2	1.2	7.2	2.5	7.2			
17	ePZE	16	48	59.2	1.0	1.0		1.25	0.7		
18	ePZE	01	51	36.3	1.0	7.2		.5	7.2		
18	ePZE	05	11	56.6	1.0	7.2		.6	7.2		
18	C&GS 08-30-45.8; 44.7 N., 149.9 E., h about 33 km, Kurile Islands, Mag. 5.5(CGS) (P-H) = 8890 km. ca. or 80°.										
	iPZE	08	42	56.7	1.0	1.0		1.2	.5		
18	C&GS 13-20-23.4 44.3 N., 150.2E., h a out 36 km, Kurile Islands region, Mag. 5.1(CGS) (P-H) = 8890 km. ca. or 80°.										
18	ePZE	16	00	13.6	0.8	1.0		0.7	0.5		
18	ePZ	19	53	13.2	1.2	1.4		1.2	0.8		
18	iPZ	23	28	39.3	0.7	1.0		1.2	0.5		
19	ePZE	00	56	57.3	.9	1.4		1.0	0.8		
19	C&GS 02-21-27.0; 18.0 S., 179.3 W., h about 620 km. Fiji Islands, Mag. 5.5(CGS) (P-H) = 10665 km. ca. or 96°.										
	ePZ	02	37	44.8	.8			.5			
19	C&GS 20-10-23.5; 14.8 S., 73.6 W., h about 94 km. Peru, Mag. 5.1(CGS) (P-H) = 6,110 km. ca. or 55°.										
	iP ZE	20	19	41.0	0.7	1.6		0.5	0.55		
19	C&GS 22-19-10.0; 35.9 N., 89.9 W. h about 5 km., Tennessee, Mag. 4.7(CGS) (P-H) = 445 km. ca. or 4°.										
	iPZE	22	20	07.8	0.4	1.0		2.0	1.0		
	iS _e	22	21	01.8		0.3			1.5		

Date	Phase	Time G.C.T.			Period Sec.			Trace Amp. (mms)			14
		h	m	s	Z	E	N	Z	E	N	
Dec. 20	C&GS 00-08-15.2; 40.2 N., 24.8 E., h about 33 km., Aegean Sea, Felt in Northern Greece, Mag. 5.3(CGS) (P-H) = 9445 km. ca. or 85°										
	iPZE	00	20	53.4	2.0	1.0	4.0	1.0	0.6		
20	C&GS 06-25-38.2; 16.6N., 100.1 W., h about 33 km., Near coast of Guerrero, Mexico. Mag. 4.6(CGS) (P-H) = 2110 km. ca. or 19°										
	iPZE	06	30	9.7	1.0	1.0		1.2	.4		
20	ePZE	20	22	59.1	0.9	1.0		0.8	0.5		
21	C&GS 00-32-00.7; 52.6 N., 158.8 E., h about 67 km, Near east coast of Kamchatka, Mag. 5.0(CGS) (P*H) = 7780 km. ca. or 70°										
	iPZE	00	43	14.9	.8	7.2		.8	7.2		
21	ePZ	01	54	06.8	1.0			.6			
21	C&GS 08-41-00.4; 16.8 N., 98.1 N., h about 53 km, Near coast of Guerrero, Mexico, Mag. 5.0(CGS) (P-H) = 2110 km. ca. or 19°										
	iPZE	08	45	26.6	1.2	2.0		2.1	1.0		
21	C&GS 12-25-53*; 6.9N. 73.0 W., h about 172 km, Northern Colombia, Mag. 4.9(CGS) (P-H) = 3335 km. ca. or 30°										
	iPZE	12	32	21.2	1.0	1.0		1.1	0.7		
22	C&GS 07-27-20.8; 52.5 N., 160.2E., h about 33 km, Off east coast of Kamchatka, Mag. 5.1(CGS) (P-H) = 7780 km. ca. or 70°										
	iPZE	07	38	35.6	1.1	6.2		0.85	7.2		
22	C&GS 19-41-23.0; 58.4 N., 153.9 W., h about 50 km., Kodiak Island region, minor damage at Kodiak and felt widely Mag. 6 3/4-7(PAS), 6 3/4-7(BRK), 6.5(CGS) (P-H) = 5000 km.ca. or 45°										
	iPZE	19	49	35.7	1.1	2.4		3.5	2.0		
	iPBZE	19	51	02.6	1.4	2.0		2.75	1.5		
	i(S)ZE	19	59	28.2	1.0	2.0		0.95	1.0		
21	iPZE	19	13	22.4	1.5	1.2	2	2.5	0.75		
22	C&GS 00-28-46.2; 52.4 N., 160.2 E., h about 5 km, Off east coast of Kamchatka, Mag. 5(BRK), 5.1(CGS), (P-H) = 7780 km. ca. or 70°										
	iPZE	00	40	3.5	1.8	0.2		0.6	0.3		

Date	Phase	Time G. C. T.			Period Sec.			Trace Amp. (mms)			15
		h	m	s	Z	E	N	Z	E	N	
Dec. 22	iPZ	20	43	38.7	1.0			1.1			
24	iPZ	10	17	40.8	1.8			0.5			
24	iPZ	10	37	48.5	1.0			0.75			
24	iPZ	01	49	39.8	0.9			0.4			
24	iPZ	05	44	30.6	.5			0.4			
26	iPZ	03	10	30.5	1.0			0.95			
26	ePZ	05	37	59.9	0.8			0.7			
27	iPZ	08	23	42.9	1.0			1.2			
27	iPZ	19	21	35.8	1.3			2.0			
28	iPZ	21	27	54.0	7.2			1.1			
28	ePZ	04	20	25.5	.7			.5			
28	C&GS 20-32-24.7; 27.8N., 141.8 E., h about 36 km, Bonin Islands region, Mag. 6(PAS), 5.9(CGS) (P-H) = 10780 km. ca. or 97°.										
	ePZ	20	51	29.1	.5			1.0			
30	C&GS 22-56-49.1; 3.0 S., 139.7 E., h about 33 km., West New Guinea, Mag. 4.9(CGS) (P-H) = 13335 km. ca. or 120°.										
	iPZ	23	12	44.7	.9			2.5			
31	ePZ	00	03	26.7	1.2			.9			
30	C&GS 02-06-31.1; 54.1 N., 164.3 W., h about 28 km. Unimak Islands region, Mag. 5 3/4(BRK), 5 3/4(PAL), 5.6(CGS) (P-H) = 5555 km. ca. or 50°										
	iPZ	02	15	26.0	0.6			4.5			
	e(PP)Z	02	16	14.4	1.5			0.5			
30	C&GS 06-16-03.9; 16.8 S., 71.2 W., h about 118 km, Southern Peru, Felt at Arequipa, Mag. 6(BRK), 5.7(CGS) (P-H) = 6445 km. ca. or 58°										
	iPZ	06	25	36.5	1.0			9.0			
	e(PP)Z	06	26	58.3	1.2			1.0			

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 $36^{\circ} 05.46'$ north latitude and $94^{\circ} 11.47'$ 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 vicinity of the station.



University of Arkansas
Seismograph Station
Department of Geology
Fayetteville, Arkansas