

# SAINT LOUIS

SEISMOGRAPHIC STATION, ST. LOUIS UNIVERSITY, ST. LOUIS, MO., U. S. A.

One Wiechert 80 Kg., two Wood-Anderson long-period seismographs, Wiechert clock



## BULLETIN FOR JANUARY, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
January 7-8 No records January 13th Earthquake lost in changing records					
1	Jan. 13	I	eL <sub>N</sub> F	19 38 45 19 55 ±	
2	Jan. 16	I	i <sub>EN</sub> e <sub>E</sub> e <sub>N</sub> e <sub>N</sub> e <sub>E</sub> e <sub>E</sub> eL <sub>E</sub> eM <sub>E</sub> F	8 26 16 8 32 30 8 35 00 8 41 25 8 42 40 9 07 40 9 11 00 9 20 30 10 00 ±	
3	Jan. 16	I	e <sub>N</sub> eM <sub>N</sub> F	16 02 10 16 08 55 16 30 ±	
4	Jan. 17	II	eP <sub>EN</sub> eS <sub>N</sub> eS <sub>E</sub> eL <sub>E</sub> F	11 52 53 11 58 23 11 58 27 12 01 17 13 50 ±	Cumana, Venezuela Δ = 35°1
5	Jan. 17	I	eL <sub>EN</sub> F	23 30 00 23 45 ±	
6	Jan. 18	I	e <sub>N</sub> e <sub>EN</sub> eM <sub>N</sub> F	1 02 42 1 06 55 1 13 15 1 25 ±	
7	Jan. 19	I	eP <sub>N</sub> iP <sub>EN</sub> e <sub>N</sub> e <sub>N</sub> eL <sub>N</sub> F	3 24 12 3 24 16 3 25 04 3 27 12 3 29 21 4 15 ±	

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No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
8	Jan. 21	I	e <sub>EN</sub> F	5 56 30 6 10 ±	
9	Jan. 21	II	i <sub>PE</sub> e <sub>PR<sub>1</sub>EN</sub> i <sub>SN</sub> i <sub>SE</sub> e <sub>SR<sub>1</sub>EN</sub> e <sub>M<sub>EN</sub></sub> F	10 38 47 10 40 25 10 45 02 10 45 05 10 48 09 10 52 45 12 20 ±	Felt in Fairbanks, Alaska Δ = 41.8
10	Jan. 24	III	i <sub>PN</sub> i <sub>PN</sub> i <sub>E</sub> e <sub>SN</sub> i <sub>LE</sub> i <sub>M<sub>N</sub></sub> i <sub>ME</sub> F	20 42 07 20 42 09 20 42 47 20 46 35 20 48 53 20 50 53 20 51 13 End lost in following earthquake.	
11	Jan. 24	I	e <sub>PN</sub> i <sub>SN</sub> i <sub>E</sub> e <sub>LN</sub> e <sub>M<sub>N</sub></sub> F	23 33 30 23 39 20 23 40 16 23 42 52 23 46 51 24 20 ±	
12	Jan. 25	I	e <sub>PN</sub> e <sub>SN</sub> e <sub>SE</sub> e <sub>N</sub> e <sub>LE</sub> e <sub>LN</sub> e <sub>M<sub>N</sub></sub> e <sub>ME</sub> F	1 34 08 1 38 55 1 39 00 1 40 00 1 44 00 1 45 00 1 49 10 1 49 40 2 30 ±	

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No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
13	Jan. 25	I	eLN F	3 38 00 3 50 ±	
14	Jan. 25	I	eN? eN eLN F	13 04 45 13 09 57 13 16 00 13 30 ±	
15	Jan. 26	I	eN eE eLEN eMN F	2 36 08 2 41 00 2 45 00 2 49 15 3 10 ±	
16	Jan. 26	I	eN eE eN F	14 28 06 14 33 10 14 39 49 14 55 ±	
17	Jan. 28	I	ePN iPN eSEN eMN F	22 02 30 22 02 31 22 07 02 22 15 50 22 30 ±	
18	Jan. 31	I	ePN iPEN iN eSEN F	18 11 09 18 11 10 18 11 37 18 15 47 19 10 ±	Other phases lost in changing record

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## BULLETIN FOR FEBRUARY, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
19	Feb. 1	II	e <sub>N</sub>	17 29 02	Southern Turkestan
			e <sub>N</sub>	17 32 03	
			e <sub>ScPcSEN</sub>	17 33 16	
			i <sub>EN</sub>	17 40 07	
			i <sub>N</sub>	17 40 41	
			i <sub>PS<sub>E</sub></sub>	17 41 02	
			e <sub>PS<sub>N</sub></sub>	17 41 07	
			i <sub>N</sub>	17 42 16	
			i <sub>N</sub>	17 42 35	
			e <sub>SR<sub>IN</sub></sub>	17 47 35	
			e <sub>LE</sub>	17 57 35	
F	19 30 ±				
20	Feb. 1	I	e <sub>EN</sub>	22 00 30	
			F	22 25 ±	
21	Feb. 2	III	e <sub>P<sub>E</sub></sub>	0 12 05	
			i <sub>P<sub>E</sub></sub>	0 12 07	
			e <sub>P<sub>N</sub></sub>	0 12 07	
			e <sub>S<sub>E</sub>??</sub>	0 21 16	
			i <sub>S<sub>EN</sub></sub>	0 21 33	
			i <sub>L<sub>N</sub></sub>	0 30 53	
			i <sub>L<sub>E</sub></sub>	0 31 13	
			e <sub>M<sub>EN</sub></sub>	0 35 13	
			F	3 30 ±	
22	Feb. 3	I	e <sub>P<sub>EN</sub></sub>	13 06 37	
			e <sub>S<sub>N</sub></sub>	13 11 00	
			e <sub>L<sub>EN</sub></sub>	13 16 50	
			e <sub>M<sub>EN</sub></sub>	13 18 50	
			F	19 10 ±	
23	Feb. 4	I	e <sub>EN</sub>	6 49 30	
			e <sub>M<sub>N</sub></sub>	6 55 25	
			F	7 10 ±	

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## BULLETIN FOR FEBRUARY, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
24	Feb. 4	I	e <sub>NN</sub> e <sub>SN</sub> e <sub>LE</sub> e <sub>LN</sub> F	10 25 13 10 29 55 10 33 52 10 34 37 11 15 ±	
25	Feb. 5	I	e <sub>P</sub>	3 48 + Earthquake lost by fogging of record	
26	Feb. 6	I	i <sub>PN</sub> e <sub>PE</sub> i <sub>SE</sub> e <sub>SN</sub> F	7 00 49 7 00 49 7 10 21 7 10 21 7 40 ±	
27	Feb. 8	I	i <sub>PN</sub> e <sub>SE</sub> e <sub>SN</sub> F	2 10 30 2 15 06 2 19 33 3 30 ±	
28	Feb. 10	I	e <sub>PN?</sub> e <sub>SN</sub> e <sub>LEN</sub> e <sub>MN</sub> F	3 42 55 3 47 43 3 52 15 3 54 55 4 30 ±	
29	Feb. 10	II	i <sub>N</sub> e <sub>PE</sub> i <sub>SEN</sub> i <sub>LEN</sub> i <sub>MEN</sub> F	15 44 39 15 44 40 15 49 09 15 52 31 15 57 46 17 30 ±	
30	Feb. 13	I	e <sub>E</sub> F	17 58 00 18 08 ±	

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## BULLETIN FOR FEBRUARY, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
31	Feb. 13	I	e <sub>N</sub> e <sub>S<sub>N</sub></sub> e <sub>S<sub>E</sub></sub> e <sub>L<sub>EN</sub></sub> e <sub>M<sub>E</sub></sub> e <sub>M<sub>N</sub></sub> F	22 19 00 22 23 24 22 23 26 22 27 00 22 29 40 22 31 20 23 35 ±	South of Guatemala Δ = 25°9
32	Feb. 14	I	e <sub>N</sub> e <sub>N</sub> e <sub>N</sub> F	15 37 30 15 43 30 15 47 00 16 00 ±	
33	Feb. 15	I	i <sub>P<sub>N</sub></sub> e <sub>P<sub>E</sub></sub> e <sub>S<sub>E</sub></sub> e <sub>L<sub>E</sub></sub> e <sub>M<sub>N</sub></sub> F	8 10 15 8 10 20 8 14 44 8 17 43 8 21 08 9 30 ±	South of Guatemala Δ = 27°1
34	Feb. 16	I	e <sub>EN</sub> e <sub>EN</sub> e <sub>L<sub>EN</sub></sub> F	19 48 45 19 55 30 20 06 00 20 45 ±	
35	Feb. 18	I	e <sub>P<sub>N</sub></sub> e <sub>S<sub>N</sub></sub> F	0 07 40 0 12 23 0 30 ±	
36	Feb. 19	I	e <sub>N</sub> F	5 56 30 6 15 ±	
37	Feb. 20	I	e <sub>P<sub>E</sub></sub> e <sub>S<sub>E</sub></sub> e <sub>E</sub> e <sub>E</sub>	21 18 17 21 26 55 21 27 10 21 27 45	

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## BULLETIN FOR FEBRUARY, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
			e <sub>E</sub>	21 28 06	
			i <sub>N</sub>	21 28 10	
			eL <sub>N</sub>	21 34 00	
			F	22 20 ±	
38	Feb. 22	III	eP <sub>EN</sub>	20 50 54	Atlantic Ocean N.E. Brazil Δ = 51.7
			iP <sub>EN</sub>	20 50 56	
			iS <sub>N</sub>	20 58 13	
			iS <sub>E</sub>	20 58 14	
			eSR <sub>1E</sub>	21 01 35	
			eSR <sub>1N</sub>	21 01 50	
			eSR <sub>2N</sub>	21 03 43	
			eSR <sub>2E</sub>	21 03 49	
			eL <sub>EN</sub>	21 05 38	
			eM <sub>EN</sub>	21 07 38	
			F	21 50 ±	
39	Feb. 26	I	eL <sub>E</sub>	4 28 00	
			F	4 48 ±	
40	Feb. 26	II	eP <sub>E</sub>	9 09 42	
			eP <sub>N</sub>	9 09 43	
			iP <sub>EN</sub>	9 09 44	
			iS <sub>E</sub>	9 16 48	
			iS <sub>N</sub>	9 16 51	
			i <sub>EN</sub>	9 17 10	
			i <sub>EN</sub>	9 19 31	
			eL <sub>E</sub>	9 22 35	
			eL <sub>N</sub>	9 23 35	
			iM <sub>N</sub>	9 29 03	
			F	10 30 ±	
41	Feb. 28	I	eP <sub>N</sub>	9 56 26	
			e <sub>N</sub>	10 00 32	
			e <sub>E</sub>	10 02 22	
			F	10 20 ±	

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## BULLETIN FOR MARCH, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
42	Mar. 1	I	eP <sub>EN</sub> eS <sub>EN</sub> iM <sub>EN</sub> F	7 37 30 7 42 30 7 47 25 9 00 ±	$\Delta = 30^{\circ}8$
43	Mar. 1	I	eP <sub>EN</sub> ? eS <sub>EN</sub> F	9 03 34 9 08 36 9 50 ±	
44	Mar. 1	I	eP <sub>N</sub> eS <sub>EN</sub> eM <sub>EN</sub> F	15 45 18 15 49 39 16 00 09 16 28 ±	
45	Mar. 1	I	eP <sub>N</sub> eS <sub>EN</sub> eL <sub>N</sub> eM <sub>N</sub> F	21 02 37 21 06 56 21 16 00 21 18 20 21 40 ±	$\Delta = 25^{\circ}3$
46	Mar. 2	I	eL <sub>EN</sub> F	8 06 30 8 15 ±	
47	Mar. 3	I	e <sub>E</sub> eS <sub>E</sub> ? F	9 18 50 9 22 45 9 50 ±	
48	Mar. 3	I	e <sub>EN</sub> eL <sub>EN</sub> eM <sub>EN</sub> F	17 05 55 17 13 00 17 15 30 17 35 ±	
49	Mar. 3	I	eM <sub>E</sub> F	18 59 00 19 10 ±	



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## BULLETIN FOR MARCH, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
50	Mar. 5	I	eP <sub>N</sub> e <sub>E</sub> e <sub>E</sub> F	3 00 08 3 06 46 3 10 31 3 20 ±	
51	Mar. 7	III	iP <sub>EN</sub> iS <sub>E</sub> iS <sub>N</sub> F	1 44 09 1 51 49 1 51 51 5 00 ±	Aleutian Deep Δ = 55°
52	Mar. 7	I	iP <sub>N</sub> iP <sub>E</sub> i <sub>E</sub> i <sub>EN</sub> i <sub>N</sub> F	20 58 38.2 20 58 38.9 20 58 40.9 20 58 41.8 20 58 42.8 21 10 ±	Local not reported
53	Mar. 8	I	e <sub>E</sub> ? e <sub>N</sub> ? e <sub>EN</sub> i <sub>N</sub> i <sub>N</sub> i <sub>N</sub> i <sub>EN</sub> i <sub>E</sub> i <sub>EN</sub> F	9 07 46.2 9 08 24 9 08 32.8 9 08 49.3 9 08 50 9 08 51 9 08 51.6 9 08 53 9 08 59.7 9 15 ±	Bellefontaine, Ohio

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## BULLETIN FOR MARCH, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
54	Mar. 9	I	e <sub>N</sub>	2 13 30	
			e <sub>N</sub>	2 16 30	
			e <sub>E</sub>	2 23 30	
			e <sub>N</sub>	2 30 10	
			e <sub>E</sub>	2 35 40	
			e <sub>N</sub>	2 36 50	
			e <sub>EN</sub>	2 43 30	
			e <sub>LN</sub>	2 52 30	
			e <sub>ME</sub>	3 03 30	
			F	4 00 ±	
55	Mar. 9	III	e <sub>EN</sub>	11 17 11	
			e <sub>EN</sub>	11 18 39	
			e <sub>EN</sub>	11 21 01	
			e <sub>EN</sub>	11 26 46	
			e <sub>E</sub>	11 28 06	
			e <sub>N</sub>	11 30 31	
			e <sub>E</sub>	11 35 31	
			e <sub>LEN</sub>	11 41 06	
			e <sub>MN</sub>	11 45 30	
			e <sub>ME</sub>	11 46 30	
			i <sub>ME</sub>	11 50 00	
			i <sub>MN</sub>	11 51 30	
			F	13 50 ±	
56	Mar. 9	I	e <sub>PN</sub>	20 33 26.4	Local not reported
			e <sub>E</sub>	20 33 27.2	
			e <sub>N</sub>	20 33 27.3	
			i <sub>E</sub>	20 33 29	
			i <sub>N</sub>	20 33 30	
			i <sub>N</sub>	20 33 30.2	
			i <sub>N</sub>	20 33 31.9	
			i <sub>N</sub>	20 33 34.9	
			i <sub>E</sub>	20 33 35.3	
			F	20 34 21	

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## BULLETIN FOR MARCH, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
57	Mar. 10	I	eP <sub>EN</sub> ?	14 52 34	
			iS <sub>EN</sub>	14 58 54	
			e <sub>EN</sub>	14 59 23	
			e <sub>EN</sub>	15 00 06	
			e <sub>EN</sub>	15 01 30	
			e <sub>EN</sub>	15 02 30	
			F	15 40 ±	
58	Mar. 10	I	eP <sub>EN</sub>	22 56 27	Δ = 53.9°
			iS <sub>EN</sub>	23 04 00	
			eL <sub>EN</sub>	23 13 00	
			eM <sub>N</sub>	23 17 15	
			F	23 30 ±	
59	Mar. 11	I	i <sub>N</sub>	13 32 45	Very small superposed waves.
			e <sub>E</sub>	13 36 46	
			e <sub>N</sub>	13 37 57	
			eL <sub>EN</sub>	13 40 32	
			F	14 00 ±	
60	Mar. 13	I	eL <sub>N</sub>	23 24 20	
			eM <sub>E</sub>	23 26 45	
			F	23 35 ±	
61	Mar. 19	I	eL <sub>N</sub>	8 07 30	
			eM <sub>N</sub>	8 03 30	
			F	8 15 ±	
62	Mar. 19	I	e <sub>N</sub>	9 33 40	
			e <sub>N</sub>	9 37 35	
			eL <sub>N</sub>	9 39 30	
			eM <sub>N</sub>	9 40 45	
			F	Lost in following earthquake	

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No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
63	Mar. 19	I	eLN eMN F	9 52 30 9 53 15 10 10 ±	
64	Mar. 19	I	ePN? iPN eSN? iSN eL eMN F	20 59 14 20 59 15 21 03 32 21 03 46 21 09 07 21 11 27 22 20 ±	
65	Mar. 21	II	iPN iSEN eLE eLN eME eMN F	2 42 30 2 46 56 2 51 15 2 51 25 2 53 25 2 56 10 4 50 ±	South of Guatemala Δ = 26.2
66	Mar. 22	I	eE F	4 06 00 4 30 ±	
67	Mar. 23	I	eE eN eEN iLEN F	11 36 51 11 40 50 11 43 19 11 43 47 12-10 ±	
68	Mar. 23	I	Beginning lost in changing record sheets eLEN F	21 01 00 21 40 ±	
69	Mar. 24	I	eME F	3 37 10 3 50 ±	
70	Mar. 24	I	eE F	6 26 35 6 50 ±	

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## BULLETIN FOR MARCH, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
71	Mar. 24	I	eL <sub>E</sub>	12 39 00	
			eL <sub>N</sub>	12 43 40	
			F	12 55 ±	
			No records March 25 to April 16.		

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BULLETIN FOR APRIL, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
72	Apr. 21	I	No records March 24 to April 16.		
		I	Beginning lost		
			e <sub>N</sub>	0 54 00	
			e <sub>MEN</sub>	0 59 15	
			F	1 30 ±	
73	Apr. 22	I	Beginning lost in changing record		
			e <sub>MN</sub>	21 14 00	
			F	21 20 ±	
74	Apr. 23	I	e <sub>EN</sub>	17 54 08	
			e <sub>LEN</sub>	17 59 00	
			e <sub>MEN</sub>	18 00 50	
			F	18 20 ±	
75	Apr. 24	I	e <sub>E</sub>	7 50 25	
			e <sub>ME</sub>	7 54 00	
			F	8 30 ±	
76	Apr. 25	I	e <sub>EN</sub>	8 47 00	
			e <sub>EN</sub>	8 52 20	
			e <sub>EN</sub>	8 56 00	
			F	9 15 ±	
77	Apr. 25	I	e <sub>EN</sub>	9 52 00	
			F	10 10 ±	
78	Apr. 27	I	i <sub>PN</sub>	11 47 00	Epicenter ? 13°2' N 92°8' W Δ = 26°5'
			e <sub>N</sub>	11 51 29	
			e <sub>SN</sub>	11 51 39	
			e <sub>SE</sub>	11 52 40	
			e <sub>E</sub>	11 52 06	
			e <sub>N</sub>	11 52 10	
			e <sub>EN</sub>	11 52 58	
			e <sub>LE</sub>	11 55 00	
			e <sub>LN</sub>	11 56 00	
			e <sub>ME</sub>	11 58 00	
			e <sub>MN</sub>	12 00 39	
			F	13 00 ±	

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No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
79	Apr. 27	I	e <sub>EN</sub> e <sub>LN</sub> F	22 01 30 22 03 40 22 30 ±	
80	Apr. 27	I	e <sub>EN</sub> e <sub>ME</sub> F	23 08 00 23 12 00 23 30 ±	
81	Apr. 30	I	e <sub>E</sub> ? e <sub>N</sub> ? i <sub>EN</sub> i <sub>EN</sub> i <sub>EN</sub> e <sub>LE</sub> F	18 45 25 18 45 26 18 46 56 18 47 10 18 47 26 18 48 34 19 10 ±	
82	Apr. 30	I	e <sub>EN</sub> e <sub>LEN</sub> F	23 56 20 23 59 05 0 10 ±	

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BULLETIN FOR MAY, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
83	May 1	I	e <sub>E</sub> ?	7 54 05	
			e <sub>E</sub>	8 03 29	
			e <sub>E</sub>	8 12 08	
			eL <sub>E</sub>	8 32 00	
			F	9 20 ±	
84	May 1	III	e <sub>E</sub>	15 51 25	Northern Persia
			ePR <sub>1E</sub>	15 55 09	
			i <sub>E</sub>	15 57 19	
			e <sub>E</sub>	15 59 08	
			iS <sub>c</sub> P <sub>c</sub> S <sub>E</sub>	16 01 49	
			iS <sub>c</sub> P <sub>c</sub> P <sub>c</sub> S <sub>E</sub>	16 02 08	
			iS <sub>E</sub>	16 02 37	
			i(PS) <sub>E</sub>	16 04 06	
			eP <sub>c</sub> P <sub>c</sub> P <sub>c</sub> P <sub>E</sub>	16 07 49	
			eSR <sub>1E</sub>	16 09 09	
			e <sub>E</sub>	16 13 04	
			iSR <sub>2E</sub>	16 14 35	
			i <sub>E</sub>	16 15 40	
			eL <sub>E</sub>	16 19 00	
			eM <sub>E</sub>	16 26 00	
F	19 40 ±				
85	May 1	I	e <sub>E</sub>	22 18 34	
			e <sub>E</sub>	22 21 59	
			e <sub>E</sub>	22 25 29	
			eM <sub>E</sub>	22 34 00	
			F	22 50 ±	
86	May 2	I	e <sub>E</sub>	9 43 00	
			F	9 50 ±	



# SAINT LOUIS



SEISMOGRAPHIC STATION, ST. LOUIS UNIVERSITY, ST. LOUIS, MO., U. S. A.

One Wiechert 80 Kg., two Wood-Anderson long-period seismographs, Wiechert clock

## BULLETIN FOR MAY, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
87	May 2	I	eP <sub>EN</sub> eS <sub>EN</sub> ? iS <sub>E</sub> iS <sub>N</sub> i <sub>E</sub> i <sub>E</sub> eM <sub>E</sub> F	14 38 13 14 48 13 14 48 17 14 48 19 14 48 28 14 48 38 15 09 49 16 00 ±	
88	May 6	I	e <sub>E</sub> e <sub>EN</sub> e <sub>EN</sub> e <sub>EN</sub> e <sub>EN</sub> e <sub>EN</sub> e <sub>EN</sub> eL <sub>EN</sub> eM <sub>N</sub> eM <sub>E</sub> F	5 29 57 5 30 13 5 31 25 5 42 48 5 47 13 5 49 58 6 03 00 6 20 00 6 21 00 7 20 ±	
89	May 7	I	e <sub>E</sub> e <sub>EN</sub> e <sub>EN</sub> e <sub>EN</sub> e <sub>EN</sub> eL <sub>EN</sub> ? eM <sub>EN</sub> F	16 56 00 17 02 58 17 06 03 17 12 48 17 17 23 17 28 00 17 41 00 19 15 ±	
90	May 10	I	e <sub>EN</sub> eM <sub>EN</sub> F	12 34 30 12 38 00 12 50 ±	

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BULLETIN FOR MAY, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Remarks
91	May 12	I	iP <sub>N</sub> eS <sub>N</sub> eS <sub>E</sub> eL <sub>N</sub> ? eM <sub>N</sub> F	9 40 15 9 44 40 9 44 43 9 50 15 9 53 53 10 20 ±	Δ = 26°0
92	May 13	I	eE <sub>N</sub> F	12 45 00 12 55 ±	
93	May 13	I	eP <sub>EN</sub> eS <sub>EN</sub> eL <sub>EN</sub> F	9 29 55 9 34 14 9 40 15 9 55 ±	
94	May 13	I	eE <sub>N</sub> eL <sub>EN</sub> eM <sub>EN</sub> F	14 06 15 14 13 45 14 23 15 15 15 ±	
95	May 18	I	eE <sub>N</sub> eE <sub>N</sub> eE <sub>N</sub> eL <sub>EN</sub> eM <sub>EN</sub> F	7 01 00 7 14 00 7 17 00 7 20 00 7 26 00 8 40 ±	
96	May 20	I	eP <sub>N</sub> iP <sub>E</sub> eE <sub>N</sub> iS <sub>N</sub> iS <sub>E</sub> eS <sub>c</sub> S <sub>EN</sub> eE <sub>N</sub> eSR <sub>1</sub> E <sub>N</sub> eL <sub>EN</sub> eM <sub>EN</sub> F	5 02 52 5 02 53 5 05 04 5 10 50 5 10 51 5 12 45 5 14 23 5 15 19 5 19 19 5 25 19 7 40 ±	Behring Sea Δ = 57°3

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## BULLETIN FOR MAY, 1929

No.	Date	Char.	Phase	G.M. Time			Remarks
				h.	m.	s.	
97	May 21	I	e <sub>EN</sub>	16	53	23	
			e <sub>EN</sub>	16	57	20	
			e <sub>EN</sub>	17	00	14	
			i <sub>EN</sub>	17	00	37	
			i <sub>EN</sub>	17	02	28	
			e <sub>EN</sub>	17	07	20	
			i <sub>LEN</sub>	17	19	20	
			e <sub>M<sub>EN</sub></sub> ?	17	27	20	
F	19	20	±				
98	May 22	I	e <sub>E</sub>	1	25	00	
			e <sub>LE</sub>	1	29	40	
			F	1	45	±	
99	May 25	I	e <sub>P<sub>EN</sub></sub>	3	50	24	
			e <sub>EN</sub>	3	54	50	
			e <sub>LEN</sub>	3	58	10	
			F	4	15	±	
100	May 25	I	e <sub>E</sub> ?	12	08	14	
			e <sub>EN</sub>	12	08	47	
			e <sub>E</sub>	12	10	22	
			e <sub>N</sub>	12	10	43	
			e <sub>E</sub>	12	15	00	
			e <sub>E</sub>	12	15	58	
			i <sub>E</sub>	12	17	48	
			i <sub>N</sub>	12	17	50	
			F	12	50	±	

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From May 25 to December 5, 1929 the Wood Anderson Seismographs were not in operation owing to the failure of the oscillator in the driving mechanism of the recording drums and the consequent necessity of reconstruction. Hence the following data for that interval is taken from the Wiechert records.

When the Wood-Anderson instruments were started again in December the periods of both components were adjusted to about 13 seconds with damping approximately aperiodic. On April 1 the periods were reduced to 12.2 seconds and on June 1 the period of the N-S component had to be still further reduced to 10.3 seconds owing to the tilting of the pier. This disturbance was caused by unequal expansion of the building subjected alternately to heating by the sun during the day and cooling by radiation at night. The E-W component was likewise reduced to 10.3 seconds on July 13 for the same reason. In the following W equals Wiechert, W-A equals Wood-Anderson, and W-A short-period refers to Wood-Anderson short-period instruments set up in the vault temporarily.

## BULLETIN FOR MAY, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Instrument	Remarks
101	May 26	II	eP <sub>E</sub>	22 46 40	W	Epicenter S-W of Sitka.
			ePR <sub>1E</sub>	22 47 35	W	
			eS <sub>N</sub>	22 51 41	W	
			iM <sub>N</sub>	22 57 00	W	
			F	24 15 ±	W	
102	May 30	I	eP <sub>N</sub>	9 55 13	W	Reported from Argentina.
			eS <sub>E</sub>	10 04 57	W	
			F	10 20 ±	W	

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## BULLETIN FOR JUNE, 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Instrument	Remarks
103	June 9	I	eS <sub>EN</sub>	9 30 00	W	Kurile Islands
			eM <sub>N</sub>	9 52 00	W	
			F	10 20 ±	W	
104	June 13	I	eS <sub>E</sub>	0 34 19	W	Kurile Islands Two quakes superposed.
			e <sub>E</sub>	0 36 17	W	
			i <sub>E</sub>	0 46 54	W	
			eM <sub>E</sub>	1 03 00	W	
			F	1 30 ±	W	
105	June 27	II	e <sub>EN</sub>	13 05 53	W	Epicenter South Atlantic near South Sandwich Islands.
			e <sub>N</sub>	13 06 40	W	
			i <sub>N</sub>	13 13 09	W	
			i <sub>N</sub>	13 13 52	W	
			e <sub>EN</sub>	13 16 05	W	
			i <sub>N</sub>	13 16 53	W	
			i <sub>N</sub>	13 21 54	W	
			eL <sub>N</sub>	13 33 00	W	
			eM <sub>EN</sub>	13 42 00	W	
F	15 15 ±	W				
106	July 4	I	e <sub>E</sub>	4 33 27	W	
			eM <sub>E</sub>	4 50 55	W	
			F	5 15 ±	W	
107	July 5	I	eP <sub>E</sub>	14 29 08	W	Aleutian Islands. Four quakes superposed.
			eS <sub>EN</sub>	14 37 15	W	
			iS <sub>E</sub>	14 37 17	W	
			i <sub>N</sub>	14 37 32	W	
			e <sub>EN</sub>	14 42 05	W	
			i <sub>EN</sub>	14 43 40	W	
			i <sub>N</sub>	14 50 19	W	
			i <sub>EN</sub>	14 53 26	W	
			L <sub>E</sub>	14 47 00	W	
			M <sub>E</sub>	14 51 00	W	
F	16 00 ±	W				

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## BULLETIN FOR 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Instrument	Remarks
108	July 6	I	eP <sub>EN</sub> iS <sub>EN</sub> eM <sub>EN</sub> F	2 13 53 2 21 57 2 35 00 3 00 ±	W W W W	
109	July 6	I	eP <sub>E</sub> iS <sub>N</sub> eM <sub>E</sub> F	9 54 54 10 01 31 10 10 00 10 45 ±	W W W W	Atlantic Ocean
110	July 7	I	eP <sub>EN</sub> eS <sub>EN</sub> iS <sub>EN</sub> iE eM <sub>E</sub> F	21 33 12 21 41 17 21 41 19 21 42 15 21 54 30 23 40 ±	W W W W W W	Aleutians
111	July 14	I	eP <sub>N</sub> eS <sub>E</sub> iS <sub>E</sub> eL <sub>EN</sub> F	9 48 33 9 56 09 9 56 12 10 15 00 10 30 ±	W W W W W	
112	July 17	I	eP <sub>E</sub> eS <sub>E</sub> F	8 43 15 8 56 39 9 30 ±	W W W	
113	July 23	I	eP <sub>E</sub> eS <sub>E</sub> F	18 51 46 18 58 35 19 20 ±	W W W	Iceland
114	Aug. 15	I	eN eE F	20 03 40 20 08 17 20 15 ±	W W W	

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## BULLETIN FOR 1929

No.	Date	Char.	Phase	G. M. Time h. m. s.	Instrument	Remarks
115	Aug. 17	I	eP <sub>N</sub>	23 45 55	W	Acapulco Deep
			iP <sub>W</sub>	23 45 58	W	
			iS <sub>(N)</sub>	23 50 13	W	
			eM <sub>N</sub>	23 56 00	W	
			F	24 30 ±	W	
116	Sept. 27	I	eP <sub>EN</sub>	23 21 58	W	Lower California
			eS <sub>N</sub>	23 25 53	W	
			eM <sub>N</sub>	23 27 10	W	
			F	24 00 ±	W	
117	Oct. 19	I	eP(E) <sub>N</sub>	10 23 18	W	Atacama Deep Practically no surface waves.
			iS <sub>E</sub>	10 31 49	W	
			iE	10 32 27	W	
			F	10 45 ±	W	
118	Nov. 16	I	e <sub>E</sub>	19 09 56	W	North of New Guinea
			e <sub>E</sub>	19 19 10	W	
			e <sub>E</sub>	19 19 26	W	
			eM <sub>N</sub>	19 47 00	W	
			F	20 30 ±	W	
119	Nov. 18	II	iP <sub>E</sub>	20 37 34	W	Atlantic south of Newfoundland Possibly sev- eral successive shocks.
			iEN	20 38 07	W	
			iEN	20 38 15	W	
			eS <sub>EN</sub>	20 41 51	W	
			iS <sub>EN</sub>	20 42 08	W	
			iE	20 42 14	W	
			iN	20 42 54	W	
			iN	20 43 15	W	
			iL <sub>EN</sub>	20 45 05	W	
			iM <sub>N</sub>	20 45 52	W	
			F	21 30 ±	W	

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## BULLETIN FOR 1929

No.	Date	Char.	Phase	G. M. Time h. m. s.	Instrument	Remarks
120	Dec. 6	I	e <sub>L</sub> E	17 41 00	W-A	Time uncertain
			F	18 00 ±	W-A	
121	Dec. 6	I	e <sub>N</sub>	20 39 10	W-A	Time uncertain
			e <sub>L</sub> E	21 15 00	W-A	
			F	21 30 ±	W-A	
122	Dec. 6	I	e <sub>N</sub>	20 04 10.2	W-A	Time uncertain. Local
			i <sub>N</sub>	20 04 12	W-A	
			i <sub>N</sub>	20 04 14.5	W-A	
			i <sub>N</sub>	20 04 16.2	W-A	
			F	20 05 ±	W-A	
123	Dec. 7	I	i <sub>N</sub>	8 02 58.8	W-A	Time uncertain. Felt in Manhattan, Kans.
			F	8 04 ±	W-A	
124	Dec. 9	I	i <sub>P</sub> (E) <sub>N</sub>	6 47 18.4	W-A	Time uncertain Δ = 21.2
			i <sub>N</sub>	6 47 50	W-A	
			i <sub>N</sub>	6 47 54	W-A	
			e <sub>S</sub> E <sub>N</sub>	6 51 06	W-A	
			i <sub>N</sub>	6 51 07	W-A	
			F	7 00 ±	W-A	
125	Dec. 9	I	e <sub>N</sub>	7 09 47	W-A	Time uncertain.
			e <sub>N</sub>	7 13 12	W-A	
			i <sub>N</sub>	7 13 14	W-A	
			e <sub>L</sub> E	7 14 57	W-A	
			e <sub>L</sub> E	8 08 30	W-A	
			F	9 05 ±	W-A	
126	Dec. 11	I	e <sub>N</sub>	7 33 33	W-A	Time uncertain.
			e <sub>N</sub>	7 45 02	W-A	
			F	8 00 ±	W-A	



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## BULLETIN FOR 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Instrument	Remarks
127	Dec. 11	I	e <sub>N</sub>	12 32 56	W-A	Time uncertain
			i <sub>N</sub>	12 33 32	W-A	
			e <sub>N</sub>	12 36 58	W-A	
			F	12 40 ±	W-A	
128	Dec. 17	II	e <sub>P<sub>N</sub></sub>	11 09 08	W-A	Aleutians 52° N. 173° E.
			i <sub>N</sub>	11 09 40	W-A	
			i <sub>PR<sub>1N</sub></sub>	11 11 40	W-A	
			i <sub>S<sub>EN</sub></sub>	11 17 48	W-A	
			i <sub>SR<sub>1N</sub></sub>	11 22 38	W-A	
			e <sub>LE</sub>	11 28 38	W-A	
			i <sub>ME</sub>	11 32 56	W-A	
			F	12 00 ±	W-A	
129	Dec. 17	I	P	12 22 38	W-A	
			S	12 31 14	W-A	
			F	Uncertain		
130	Dec. 19	I	i <sub>SE</sub>	10 42 02	W-A	
			e <sub>ME</sub>	10 55 36	W-A	
			F	11 15 ±	W-A	
131	Dec. 20	I	e <sub>P<sub>N</sub></sub>	10 32 23	W-A	
			i <sub>P<sub>N</sub></sub>	10 32 35	W-A	
			i <sub>N</sub>	10 32 48	W-A	
			i <sub>N</sub>	10 33 02	W-A	
			i <sub>N</sub>	10 33 18	W-A	
			F	10 50 ±	W-A	
132	Dec. 27	I	e <sub>N</sub>	13 52 57	W-A	
			i <sub>E</sub>	13 53 29	W-A	
			e <sub>N</sub>	13 53 47	W-A	
			i <sub>N</sub>	13 53 49	W-A	
			e <sub>S<sub>EN</sub></sub> ?	13 59 22	W-A	
			F	14 10 ±	W-A	

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## BULLETIN FOR 1929

No.	Date	Char.	Phase	G.M. Time h. m. s.	Instrument	Remarks
133	Dec. 28	I	e <sub>N</sub>	0 34 50	W-A	Felt at Elreno and in the surround- ing counties of Oklahoma. Δ = 770 km.
			e <sub>N</sub>	0 36 03	W-A	
			i <sub>N</sub>	0 36 05	W-A	
			i <sub>N</sub>	0 36 41	W-A	
			i <sub>M</sub>	0 37 18	W-A	
			F	0 45 ±	W-A	
134	Dec. 30	I	e <sub>N</sub>	11 34 49	W-A	
			F	11 45 ±	W-A	
135	Dec. 31	I	e <sub>N</sub>	20 25 12	W-A	Local
			i <sub>N</sub>	20 25 14	W-A	
			i <sub>N</sub>	20 25 30	W-A	
			F	20 30 ±	W-A	
136	Dec. 31	I	i <sub>N</sub>	21 17 19	W-A	Local
			i <sub>N</sub>	21 17 21	W-A	
			F	21 20 ±	W-A	