

# Jesuit Seismological Service Record

of the  
**Earthquake Station, St. Louis University**  
St. Louis, Mo., U. S. A.

LATITUDE: 38° 38' 17" N.

LONGITUDE: 90° 13' 58".5 or 6<sup>h</sup> 0<sup>m</sup> 55<sup>s</sup>.9 W. Gr.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENT: Wiechert 80 kg., astatic, horizontal pendulum.

NOMENCLATURE: Goettingen.

From November 1st to November 10.

DATE. 1910	CHAR.	PHASE.	TIME.			PERIOD. T.	AMPLITUDE.		REMARKS.
							AE	AN	
			h.	m.	s.	s.	$\mu$	$\mu$	
Nov. 6	II <sub>u</sub>	eP <sub>N</sub>	8	34		3		3	
		eP <sub>E</sub>		29		3	2		
		eS <sub>N</sub>		46		4		7.5	
		eS <sub>E</sub>		48		6	11		
		L <sub>N</sub>		49		8		13	
		iL <sub>E</sub>		49		8.5	18		
		M <sub>N</sub>		52		9		14	
		M <sub>E</sub>		51		11	20		
		iC <sub>N1</sub>		55		7		7.5	
		C <sub>N2</sub>	9	10		6		4.5	
		iC <sub>E1</sub>	8	54		7.5	18.5		
		C <sub>E2</sub>	8	56		6	11.5		
		C <sub>E3</sub>	8	58		7	6.5		
		F <sub>N</sub>	9	22					
		F <sub>E</sub>		29					
Nov. 9	I	L <sub>N</sub>	6	53		16		2	Marked Microseism.
		L <sub>E</sub>		56.5		16	5		
		F <sub>N</sub>	7	38					
		F <sub>E</sub>		40					
Nov. 10	I <sub>u</sub>	e	2	30					
		eL <sub>N</sub>	3	18		22		2.5	
		L <sub>E</sub>	3	18		9	1.5		
		F <sub>N</sub>	4	20					
		F <sub>E</sub>	4	08					
		P <sub>N</sub>	12	47		18		2.5	
		P <sub>E</sub>	13	13		8	1.5		
		L <sub>N</sub>	13	18		15		2.5	
		eL <sub>E</sub>	13	16		20	3.5		
		F <sub>N</sub>	15	31					
		F <sub>E</sub>	13	38					

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TIME: Mean Greenwich, midnight to midnight.  
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NOMENCLATURE: Goettingen.

From November 10th to November 30th.

DATE. 1910	CHAR.	PHASE.	TIME.			PERIOD. T.	AMPLITUDE.		REMARKS.
							AE	AN	
			h.	m.	s.	s.	μ	μ	
Nov. 26	II <sub>u</sub>	eP <sub>N</sub>	5	14					
		P <sub>E</sub>	5	10.5		18	3.5		
		i <sub>E</sub>	5	15.5		20	5		
		S <sub>N</sub>	5	42					
		eS <sub>E</sub>	5	35		21	3		
		eL <sub>N</sub>	5	48		19			
		eL <sub>E</sub>	5	38		21	4.5		
		M <sub>N</sub>	5	52		16		3	
		M <sub>E</sub>	5	40		21	8		
		C <sub>N</sub>	5	59				1.5	
		C <sub>E1</sub>	5	49		15	5		
		C <sub>E2</sub>	5	51		15	4		
		F <sub>N</sub>	6	19					
		F <sub>E</sub>	6	06					Rdid 25753

*J.B. Goesse, S.J.*

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TIME: Mean Greenwich, midnight to midnight.  
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NOMENCLATURE: Goettingen.

From December 1st to December 15th

DATE.	CHAR.	PHASE.	TIME.			PERIOD. T.	AMPLITUDE.		REMARKS.
							AE	AN	
			h.	m.	s.	s.	μ	μ	
Dec. 7									Microseisms during the greater part of the day.
Dec. 10	I	eP <sub>N</sub>	10	00					
		eP <sub>E</sub>	10	00					
		L <sub>N</sub>	10	20					
		eL <sub>E</sub>	10	21		24			
		M <sub>E</sub>	10	23		10	5.8		
		M <sub>N</sub>	10	24		10		5.6	
		F <sub>N</sub>	11	41					
		F <sub>E</sub>	11	42					
Dec. 13	II	eP <sub>E</sub>	12	20					
		P <sub>N</sub>	12	21					
		eL <sub>N</sub>	12	30		30		15.5	
		M <sub>N</sub>	12	35	50	21		94.6	
		iL <sub>E</sub>	12	39		18			
		L <sub>N</sub>	12	41		24		99.2	
		M <sub>E</sub>	12	42	56	16	46.2		
		L <sub>E</sub>	12	45		19	69.3		
		M <sub>E</sub>	12	45	32	19	69.3		
		L <sub>E</sub>	12	45	50				
		M <sub>E</sub>	12	46	44	17	41.6		
		C <sub>E</sub>	12	50					
		C <sub>E</sub>	13	05					
		F <sub>E</sub>	13	57					
		F <sub>N</sub>	13	58					

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TIME: Mean Greenwich, midnight to midnight.  
INSTRUMENT: Wiechert 80 kg., astatic, horizontal pendulum.  
NOMENCLATURE: Goettingen.

From December 16th to December 31st

DATE.	CHAR.	PHASE.	TIME.			PERIOD. T.	AMPLITUDE.		REMARKS.
							AE	AN	
			h.	m.	s.	s.	μ	μ	
Dec. 16	II <sub>u</sub>	eP <sub>N</sub>	15	12		12		21	
		eP <sub>E</sub>	15	12					
		R <sub>1</sub> P <sub>E</sub>	15	19					
		R <sub>2</sub> P <sub>E</sub>	15	24		14	17.8		
		R <sub>3</sub> P <sub>E</sub>	15	26		10	6.3		
		R <sub>4</sub> P <sub>E</sub>	15	28					
		S <sub>E</sub>	16	00					S <sub>N</sub> indistinct.
		iL <sub>E</sub>	16	03	06	17	47.2		
		iL <sub>E</sub>	16	05		18	33.6		
		eM <sub>E</sub>	16	07	39	16	40.8		
		L <sub>N</sub>	16	10		18			
		L <sub>E</sub>	16	12		14	18.8		
		M <sub>N</sub>	16	14		21		91.2	
		C <sub>E</sub>	16	21		15	18		
		C <sub>E</sub>	16	30		15	15		
		C <sub>E</sub>	16	35		18	18.2		
		F <sub>N</sub>	16	55					
		F <sub>E</sub>	17	11					
Dec. 23	I	e <sub>E</sub>	1	05	30	8			
		F <sub>E</sub>	1	30	42				Trace on N-S.

*J. B. Grosse, S. J.*



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INSTRUMENT: Wiechert 80 kg., astatic, horizontal pendulum.

NOMENCLATURE: Goettingen.

From February 1st to February 16th

DATE.	CHAR.	PHASE.	TIME.	PERIOD. T.	AMPLITUDE.		REMARKS.
					AE	AN	
			h. m. s.	s.	$\mu$	$\mu$	
Feb. 4	I	eL <sub>N</sub>	4 29.7				
		M <sub>N</sub>	5 06.5	30		6	E-W component shows no distinct M.
		eL <sub>E</sub>	5 38.6				
		F <sub>N</sub>	7 24 1				
		F <sub>E</sub>	8 24.6				
Feb. 4	I	eI <sub>N</sub>	8 51.6				
		M <sub>N</sub>	9 07.8	12		1	No decided M on E-W.
		eL <sub>E</sub>	9 22.6				
		F <sub>N</sub>	9 46.6				
		F <sub>E</sub>	9 48.6				
Feb. 5	Ir	iP <sub>N</sub>	4 29.4	3		5	No trace of P on E-W component. The train of waves at 4:31.5 seems to be PS.
		i <sub>N</sub>	4 29.6	3.9		4	
		RP <sub>N</sub>	4 29.7				
		PS?	4 31.5				
		iS <sub>N</sub>	4 33.7	4		6	
		eS <sub>E</sub>	4 33.7				
		i <sub>E</sub>	4 34.1				Distance calculated 2690 km.
		i <sub>N</sub>	4 34.6	6		6	Co-ordinates of the epicenter, as determined from data supplied by Ottawa, Harvard, St. Boniface and St. Louis, were $\lambda = 89^\circ$ , $\phi = 14^\circ, 23'$ , near San Salvador, Central America.
		eL <sub>E</sub>	4 35				
		M <sub>N</sub>	4 39.7	6		9	
		M <sub>E</sub>	4 39.7	5.1	13		
		C <sub>E</sub>	4 42.7				
		F <sub>N</sub>	4 51.2				
		F <sub>E</sub>	4 54				

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NOMENCLATURE: Goettingen.

From February 17th to February 28th

DATE.	CHAR.	PHASE.	TIME.	PERIOD. T.	AMPLITUDE.		REMARKS.
					AE	AN	
			h. m. s.	s.	μ	μ	
Feb. 17	I	eP <sub>E</sub>	14 28.8				
		eP <sub>N</sub>	14 29.8				
		eS <sub>E</sub>	14 32.8				
		L	14 33.8				
		M <sub>E</sub>	14 34.9	6	12		
		M <sub>N</sub>	14 35.6	7.8		18	
		F	15 01				
Feb. 18	I	eL <sub>N</sub>	2 03				
		eL <sub>E</sub>	2 04.5				
		M	2 06.4	9.6	14	16	
		F <sub>E</sub>	2 16				
		F <sub>N</sub>	2 20				
Feb. 18	IIu	e <sub>E</sub>	19 22.1				Macedonian Earthquake. Up to 19 <sup>h</sup> 43 <sup>m</sup> the motion on both components was very complicated and irregular.
		e <sub>N</sub>	19 25.6				
		S <sub>E</sub>	19 27.4				
		L <sub>E</sub>	19 34.1				
		eL <sub>N</sub>	19 36.1				
		M <sub>E</sub>	19 38.6	18	102		
		M <sub>N</sub>	19 45.1	18		211	
Feb. 28	I	eL <sub>E</sub>	4 24.6				
		F	6 00.6				

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NOMENCLATURE: Goettingen.

From April 1st to April 30th

DATE.	CHAR.	PHASE.	TIME.			PERIOD. T.	AMPLITUDE.		REMARKS.
							AE	AN	
			h.	m.	s.	s.	μ	μ	
April 10	Ir	P	18	49.2					Distance 3660 km. According to reports received from northern Colombia by the Jesuit Observatory of Havana, the epicenter of the earthquake was between Bogota and Cartagena. The macroseismic data furnished by Havana, Ottawa, Trieste and St. Louis, place the epicenter at: Long. 75° 50' W., Lat. 8° 36' N.
		S <sub>E</sub>		54.6		7	8		
		S <sub>N</sub>		54.6		9		11	
		L		57.2					
		M <sub>E</sub>	19	3.5		14	22		
		M <sub>N</sub>		4.2		15		34	
		F		23					
April 28	IIr	P	10	0.4					
		L <sub>N</sub>		7					
		L <sub>E</sub>		7.1					
		M <sub>E</sub>		7.2		6	13		
		M <sub>N</sub>		7.2		5.5		15	
		F <sub>E</sub>		22					
		F <sub>N</sub>		51					

*J. B. Gessner, Jr.*

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TIME: Mean Greenwich, midnight to midnight.  
INSTRUMENT: Wiechert 80 kg., astatic, horizontal pendulum.  
NOMENCLATURE: Goettingen.

From May 1st to May 31st

DATE.	CHAR.	PHASE.	TIME.			PERIOD. T.	AMPLITUDE.		REMARKS.
							AE	AN	
			h.	m.	s.	s.	μ	μ	
May 4	Ilu	P	23	17.1					(S-P) <sub>N</sub> = 9 <sup>m</sup> 31 <sup>s</sup> Distance 8200 km. (S-P) <sub>E</sub> = 10 <sup>m</sup> 6 <sup>s</sup> Distance 8900 km. The coordinates of the epicenter, calculated from data furnished by Darmstadt, Vienna and St. Louis, are: Long. 152° 30'E. Lat. 51°N
		iS <sub>N</sub>		26.5		6		25	
		iS <sub>E</sub>		27.1		6	8		
		L		39.6					
		M <sub>E</sub>		40.6		24	105		
		M <sub>N</sub>		41.2		21		95	
		F <sub>E</sub>		43					
		F <sub>N</sub>		48					

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TIME: Mean Greenwich, midnight to midnight.  
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NOMENCLATURE: Goettingen.

From June 1st to July 31st

DATE.	CHAR.	PHASE.	TIME.			PERIOD. T.	AMPLITUDE.		REMARKS.
							AE	AN	
			h.	m.	s.	s.	μ	μ	
June 15	II	i <sub>1E</sub>	14	47.1		7.8	75		Phases are doubtful.
		i <sub>1N</sub>		47.1		8.4		90	
		i <sub>2</sub>		53.2		6	42	36	
		F	15	33					
July 1	Ir	eP <sub>E</sub>	22	9.9					Epicenter near San Francisco.
		L		16.5					
		M		16.6		10.8	55	60	
		F <sub>E</sub>		47.1					
		F <sub>N</sub>		55.5					
July 4	I	e <sub>N</sub>	13	56.2					
		e <sub>E</sub>		56.3					
		F <sub>E</sub>	14	42.4					
		F <sub>N</sub>		47.2					
July 12	I	i <sub>1</sub>	4	28.3					
		i <sub>2E</sub>		38.1					
		i <sub>2N</sub>		38.2		12	77		
		F <sub>N</sub>	5	54.6					
		F <sub>E</sub>	5	54.8					

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NOMENCLATURE: Goettingen.

From August 1st to September 30th

DATE.	CHAR.	PHASE.	TIME.			PERIOD. T.	AMPLITUDE.		REMARKS.
							AE	AN	
			h.	m.	s.		s.	μ	
Aug. 16	Iu	eP	22	57	42				M <sub>N</sub> indistinct.
		S	23	10	12				
		L		33	36				
		M <sub>E</sub>	0	01	09	19	90		
		F	1	11	00				
Aug. 21	I	i	16	52	12				
		F	17	10	00				
Aug. 27	I	e	11	02	50				P and S too doubtful for determination.
		eL		08	08				
		F		37	00				
Sept. 15	Iu	P	13	28	35				(S-P)=7m 10s Distance 5550 km.
		S		35	45				
		eL <sub>E</sub>		41	18				
		eL <sub>N</sub>		42	18				
		M <sub>N</sub>		45	08	27		81	
		M <sub>E</sub>		47	38	18	32		
Sept. 17	Iu	F	15	30					(S-P) <sub>N</sub> =8m 30s Distance 7000 km.
		iP	3	40	23				
		S <sub>N</sub>		48	53				
		S <sub>E</sub>		49	11				
		eL <sub>N</sub>		59	23				
		eL <sub>E</sub>	4	00	53				
		M <sub>E</sub>		01	17	15	49		
		M <sub>N</sub>		06	20	17		78	
Sept. 22	Iu	F		42					(S-P)=7m Distance 5300 km.
		eP <sub>N</sub>	5	15	29				
		eP <sub>E</sub>		15	35				
		eS <sub>N</sub>		22	29				
		eS <sub>E</sub>		22	35				
		L <sub>N</sub>		27	59				
		L <sub>E</sub>		38	53				
		M <sub>N</sub>		29	08	8		1mm	
		M <sub>E</sub>		29	09	9	Imm		
		F		53					

J. B. Gessner



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NOMENCLATURE: Goettingen.

From October 1st to October 31st

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							AE	AN		
			h.	m.	s.	s.	μ	μ		
Oct. 6	IIr	iP	10	21	53				(iS-iP) <sub>E</sub> = 4 m 42 s Distance 3000 km. Haiti	
		iS <sub>N</sub>		26	33					
		iS <sub>E</sub>		26	35					
		L <sub>N</sub>		29	39					
		L <sub>E</sub>		29	44					
		M <sub>N</sub>		31	30	15		204		
		M <sub>E</sub>		31	30	15	172			
		F	14	14						
Oct. 10	Ir	iP	13	18	03					
		iS		22	27					
		L <sub>N</sub>		25	33					
		L <sub>E</sub>		26	00					
		M <sub>N</sub>		35	00	12		30		
		M <sub>E</sub>		35	45	12	25			
		F	14	00						
Oct. 15	I	e	16	58	7				S and P could not be determined on account of micriseismic disturbances.	
		L <sub>E</sub>	17	09						
		L <sub>N</sub>		11	9					
		M <sub>E</sub>		12	5	15	25			
		F	18	02						
Oct. 29	Ir	P <sub>N</sub>	18	20	9				No distinct Maximum	
		P <sub>E</sub>		21						
		S <sub>E</sub>		25	9					
		S <sub>N</sub>		26						
		L <sub>E</sub>		28	1					
		L <sub>N</sub>		28	9					
		F		46						

J. B. GOSSEL, U. S. J.,  
Director  
George RUEPPEL, U. S. J.  
Associate

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NOMENCLATURE: Goettingen.

November 30th.

From November 1st to \_\_\_\_\_

DATE.	CHAR.	PHASE.	TIME.	PERIOD. T.	AMPLITUDE.		REMARKS.
					AE	AN	
			h. m. s.	s.	μ	μ	
Nov. 18	I	PN	7 38.2				P <sub>E</sub> and S <sub>E</sub> not distinct  Dist. = 3150 km.
		SN	43				
		LN	48				
		F	8 06				
Nov. 20	Ir	PN	13 54.7				
		PE	55.5				
		SN	58.6				
		LN	14 05				
		LE	06.5				
		ME	08	15	18		
		MN	08.5	15		44	
Nov. 22	E	e	10 20.4				E-W too indistinct
		LN	21				
		F	27.3				
Nov. 25	E	PE	19 35.8 ?				F lost in microseisms
		PN	37 ?				
		SE	39.8				
		SN	42				
		LE	42.8				
		LN	43				
		MN	43.6	12		35	
ME	45	12	15				

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# Jesuit Seismological Service

## Record

of the

### Earthquake Station, St. Louis University

St. Louis, Mo., U. S. A.

LATITUDE: 38° 38' 17" N.  
 LONGITUDE: 90° 13' 58".5 or 6<sup>h</sup> 0<sup>m</sup> 55<sup>s</sup>.9 W. Gr.  
 TIME: Mean Greenwich, midnight to midnight.  
 INSTRUMENT: Wiechert 80 kg., astatic, horizontal pendulum.  
 NOMENCLATURE: Goettingen.

From December 1st to December 31st.

DATE.	CHAR.	PHASE.	TIME.	PERIOD. T.	AMPLITUDE.		REMARKS.
					AE	AN	
Dec. 16	IIIr	P	19 <sup>h.</sup> 19.4 <sup>s.</sup>	6.38	2 <sup>μ</sup>	μ	(S-P) <sub>N</sub> = 4 m 20s Distance = 2690 km.
		P <sub>N</sub>	19.5	6.38		3	
		S <sub>E</sub>	23.8	8.7			
		S <sub>N</sub>	23.8	8.7			
		L <sub>E</sub>	25.2			(49)	
		L <sub>N</sub>	25.3	14.5		1064	
		M <sub>N</sub>	30				
		M <sub>E</sub>	30	12	546		
		F <sub>N</sub>	21 06.5				
		F <sub>E</sub>	12.5				
Dec. 22	Ir	P	13 00.1				(S-P) <sub>N</sub> = 4m 30s. Distance = 2830 km.
		S <sub>E</sub>	04.6				
		S <sub>N</sub>	04.6				
		L <sub>N</sub>	08.1				
		L <sub>E</sub>	08.2				
		M <sub>N</sub>	20.6	13		45	
		M <sub>E</sub>	20.7	13	34		
		F	38				
Dec. 23rd	I	e	7 57.9				F overlapped by following quake
		L <sub>N</sub>	58.8				
		L <sub>E</sub>	58.7				
Dec. 23rd	I	e <sub>N</sub>	8 08.6				Microseismic disturbances during the entire day.
		e <sub>E</sub>	07.5				
		F	43				

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