RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From *to*

No.	Date	Comp.	Phase	Time	Periods	Amplitudes	REMARKS
				h. m. s.	s.	μ.	

Post-office Address.
Harvard Seismographic Station,
Geological Museum, Cambridge, Mass.

Remarks.

This record was first issued for the month of January 1911. The sheets are numbered consecutively from the beginning. A summarized annual report is issued in the Bulletin of the Museum of Comparative Zoology.

The station is located on Pleistocene sands and clays ca 20 meters thick overlying tilted Carboniferous shales in the valley of the Charles River.

The Bosch-Omori Tromometer of 100 kg. is adjusted as follows:-

	North	East
Period	25s	25s
Magnification	80	50
Damping ratio	4:1	0

The following peculiar abbreviations appear in Remarks. Q, Quake, Earthquake; Qr, earthquake reported by press; Ql, local earthquake; Qf, felt earthquake; O, origin or epicentre; TO, time at origin. 0 in column of phases means initial shock at origin. Micros., microseisms.

If agreeable and convenient, an exchange of Records will be greatly appreciated.

J. B. Woodworth.

Associate Professor of Geology
in charge of Station.

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From Jany. 31st, 1913 *to* Feb. 28, 1913.

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes mm	REMARKS
286	Jan.31	N	eP	22 54 52			4120 kms.
			S	23 00 46	6		
			eL?	23 10 21	10		
			F	23 30 ca			
		E	eL?	23 08 45			E-W record masked by wind effects.
287	Feb.9	E	e?				e in wind effects ?
			eS?	8 23 02	88		
			eL	8 29 20	28-24		
			F?	8 32 00			
288	Feb.17	E	e?	20 56 36			Micros. Hour doubtful and mins. and secs. subject to correction for parallax.
			eL	20 59 48	13		
			F	21 08 41			Very faint N-S.
289	Feb. 20	E	eS?	9 22 53	6		Not shown N-S on damped pendulum.
			L	9 41 54	30		
				9 50 44	20		
			F	10 23 ca			

J. B. Woodworth.

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From January 1,1913 *to* January 31st,1913.

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes mm.	REMARKS
278	Jan. 7	E	e	23 52 17			Record masked by micros.
			L	23 52 25	20		Not shown N-S by damped
	8		F	0 05 15			pendulum.
279	11	N	eL	13 57 04	22		Pendulum damped 4:1.
		E	eS?	13 21 15	6		Undamped pendulum.
			eL	13 55 52	20		
			L	15 22 50	19		
			F	16 03 21			Apparently same record.
280	15	N	iP	18 58 56	2		Strong.
			PR_1	19 00 16	4		
			S	19 04 28	6		Distance.
			L	19 12 20	20	0.2	Damped 4:1. 3700 kms.
			F	19 28			
		E	P	18 59 00	2		
			PR_1	19 00 18			
			S	19 04 28	8		
			L	19 12 57	16	0.7	Undamped.
			F	20 07			
281	19	N	eL	18 16 30			In micros. 4 secs. period.
			F	18 50 50			
			e	17 43 54			
		E	eL	18 12 18	20		
			L	18 36 28	17		
			F	18 52 ca			
282	19	N	eL	19 12 14	16		If W_1 of 281, Distance
			F	19 13 28			13,300 kms.?
283	22	E	e	18 30 06	var.		
			F	18 35 34			
284	23	E	e	12 29 07	var.		
			F	12 32			
285	23	N	eS?	14 45 12			Distance 10,800 ? kms.
			L	15 05 32			
			F	15 51 47			
		E	eS?	14 46 31			
			L	15 04 37			
			F	15 51 48			

J. B. Woodworth.

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From March 1st 1913 *to*

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes mm. μ.	REMARKS
290	Mar. 3	N	e	3 27 41	9-8		Among microseisms of 3 to 4 secs. period.
			F	3 29 14			E record in tangled lines of undamped pendulum.
291	Mar. 4	E	S?	11 40 21	6		L-S? 4m.24s.: 4500? kms.
				11 42 40	18		
			L	11 44 43	20	0.15	Micros. E-W damped 4:1.
			F	11 59 25			
291a	Mar. 8	E	eL	15 31 18	24-12		Very faint.
			F	15 35 31			
292	Mar. 8	E	eP	15 59 46	3		
			S	16 04 59	26		Undamped. D 3440 kms.
			eL	16 07 14			Qr Guajinquilapa, Guatemala
			M?	16 09 56	27	2.2	
			F	16 46 30			Faint LL on N-S masked
		E	e	16 52 31			by microseisms.
			F?	16 56 09			
293	Mar.10	E	eL	14 45 41	18-20		Very flat waves. Micros.
			F	15 05 03			N-S 3,5ls pd.
294	Mar. 14	N	P	9 04 19	2-3		Periods and A in sections.
				9 07 12	3		
				9 08 22	6		L?-PN, 5m 28s: 2600?kms.
				9 08 38	4-3		T at Origin ? 8h 59m 49s
				9 09 27	4		Cf. No.295, 8h 58m 36s.
				9 09 57	3-6		
			C?	9 12 02			P? of No.294. F later.
		E	eP	9 04 21	2		
				9 05 00	6		
				9 05 55	2-4		
			L?	9 06 35	8-10		
				9 09 47	6-8		
			C?	9 12 19			P? of No.294. F later.

J. B. Woodworth.

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From March 14, 1913 *to* March 31, 1913

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes mm μ.	REMARKS
295	Mar. 14	N	eP?	9 12 05			
			S?	9 23 59			S-P. 11330 kms.?
			L?	9 42 44			
		E	eP?	9 12 19			In Coda of No. 294.
			S	9 23 51	35	20	Excessive motion of undamped pendulum, i thrown to E.
			L	9 42 44			S-P, 11m 32s: 10,790 kms.
							L-S, 18m 53s: 10,550 "
							L-P, 30m 25s: 10,600 "
			M	9 50 10			Mean distance 10,650 kms.
			L	9 53 44	26-20		Time at origin 8h 58m 36s.
							Sinusoidal flat waves set in.
				10 21 25	100	2	Long rollers decreasing in period from 100 to 70-46-40 secs.
				10 26 35	15		Sinusoidal waves repeated.
			F?	11 23 30			
			e	11 24 14	36-40		Long flat waves-LR?
		F		11 29 12			Not recognized N-S Cf 10-21-2s, 1h 2m 49s earlier
296	Mar. 15	N	eP	22 37 41	4		May be microseisms.
			eL?	22 41 18	6		If Q, distance 1750 kms.
			F	22 47			
		E	eP	22 38 16	4		
				22 39 44	6		
			eL	22 41 50	8		
			F	22 48 ca			
297	Mar. 17	E	e	13 55 54	40-		e masked by microseisms.
			eL?	13 59 48	20-13		Micros. only N-S, 2 secs pd
			F	14 19 30			

H. B. Woodworth.

191 3

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From March 31 1913 *to*

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes ~~mm.~~ μ.	REMARKS
298	Mar. 31	N	P	3 51 40	2		$S_E - P_N$ 9m 13s, 7850 kms. Time at origin 3h 40m 35s.
			S	4 02 04			
			L	4 16 15	20		
			M-1	4 19 42		0.5mm	Damped 4:1.
			M-2	4 23 24		0.75	
			F	5 47			
		E	P	3 51 43			
			S	4 00 53	8		
			L	4 16 01	24		
			M-1	4 19 59		12.5	Undamped pendulum.
			M-2	4 24 21		17.5	
			F	6 49			
299	" 31	E	eL	7 35 12	20-15		Picked up by undamped pendulum.
			F?	7 48 ca			

J. B. Woodworth.

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From April 1, *to* April 30, 1913.

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes mm μ.	REMARKS
Supplementary.							
292a	Mar. 9	E	L	16 23 40	20		Very faint on undamped pendulum.
			F	16 34 ?			
300	Apr.25	E	eP??	18 18 37	5-4		Undamped pendulum.
			S?	18 34 37	10		Readings doubtful.
			eL	19 01 34	20		
			F	20 36			
		N	e	18 55			Damped 4:1.
			eL	19 03 52			
			M	19 10 41			
			F	19 38			
301	Apr.29	N	P	0 30 03	0.7		Slight earthqauake felt
			(S)(M)	0 30 53	0.5		at Montreal, Quebec
			F	0 33 34			and Ogdensburg, N.Y.
		E	P	0 30 02	0.8		(S) M-P 48 secs. D
			(S)M	0 30 50			435 kms.
			F	0 33 34			
302	Apr.30	N	eL	0 06 59			Masked by microseism.
			M	0 12.5			
			F	0 16 21			
		E	eL	0 06 43			
			F	0 31 40			
303	Apr.30	N	eL	12 11 31	16		
			F	12 18 49			
		E	eS?	11 53 48	8		
			L	12 06 01	25		eL-S? 6m 13s D 5250 ? kms.
			F	12 55			

J. B. Woodworth.

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From May 1st *to* May 31st, 1913

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes mm.	REMARKS
304	May 8	E	eP	18 54 00			Very faint LL. N-S damped 4 : 1.
			?P,R	18 55 05			
			S	19 01 30	10		Distance 6000 kms.
				19 03 34	06		
			eL	19 09 32	20		
				19 16 29	24		
				19 34 50	18		
			F	20 10 ca			
305	May 16	N	e	12 13 42	3		
				12 15 45	6		
			F	12 30 44			
306	May 18	N	eL	3 08 19	24		Very faint NS micros 3-4s pd
			F	3 17 06			
		E	e?	2 59 47			
			L?	3 02 56	24		eEW in tangled lines.
			L	3 08 07	20		
				3 11 31	20		
			F	3 43			
307	May 24	E	eL	8 00 07	18		
			F	8 15 45			
308	May 30	N	eL	12 24 58	25		Micros. mask P and S.
				12 39 58	42		
				12 59 56	20		
			F	13 25			
		E	eP?	12 09 32	2		Masked by microseisms.
			S	12 18 12	6		
			eL	12 37 42			
			M	12 42 30	38	0.9	
			L	12 52 33	20		
				13 00 21	16		
			F	14 08 30			

H. B. Woodworth.

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From July 1, 1913 *to* July 31, 1913

No.	Date	Comp.	Phase	Time	Periods	Amplitudes	REMARKS
				h. m. s.	s.	mm.	
318	July 7	E	e?	17 47 44	11		Undamped pendulum.
			eL?	18 30 42	30		
				18 41 19	20		
				19 16 09	16		
			F	19 53			
319	8	E	eP?	8 54	3		
			S?	8 56	6		
			F	9 04			
320	8	E	eL	22 03 10	28		
				04 00	20		
			F	22 35 ca			Lost in wind waves of long periods.
321	9	N	e	0 26 25	3		Damped 4:1.
			S?	0 26 40	6		
			F	0 39			
		E	e?	0 22 14			Undamped pendulum.
			S	0 24 10			
			L?	0 25 17			
			F	0 58			
322	9	E	eL	12 47 19	10		
			F	12 54			
323	12	E	eL	10 56 09			
			F	12 ca			
324	22	E	P	6 46 04			Recorded in tangled lines.
			S	6 54 04			
			L	6 59 55			
			F				
325	24	E	P?	9 04 28			
			S	9 09 46	8		3550 ? kms.
			eL	9 11 07	16		
			F	9 23			
326	25						Present, but in tangled lines.
327	26	E	P?	20 58 29			
			S	21 04 24	6		4140 kms.
			L	21 11 09			
			F?	21 45			
328	28	E	P?	5 49 36			6450 kms.
			S	5 57 35			
			L	6 07 19			
			F	7 03			

H. H. Woodworth

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From August 1,1913 *to* August 12,1913

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes μ. mm.	REMARKS
329	Aug.1	E	eP	17 23 24			8090 kms.
			S	17 33 25			t0, 12h 11m 04s.
			L	17 48 55			
			F	18 59			
330	Aug.5	E	eS?	2 05			
		N	L	2 16			
		E	F	2 52			
331	Aug.6	N	P	22 24 30	4		6520 kms.
			S	22 32 34	8		t0: 22h 14m 50s
			L	22 46 18	22		
			M	22 49 19	25	1.25	Damped 4:1.
			F	23 49 16			Qr Caraveli and Quicacha,
		E	P	22 24 36			Peru.
			S	22 32 36			
			L	22 42 12			
			M	22 50 51			
			F				
332		7	E	eP? 2 16 36	3-4		5500? kms.
			L	2 39 36	20		
			F	3 22			
333		12	N	P 4 44 55			10750 ? kms.
			L	4 15 58			
		E	L	4 42			
		N	F	5 33			

J. B. Woodworth

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From Aug. 15 *to* Oct. 1, 1913

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes mm	REMARKS
334	Aug.15	E	P?	19 27 24	4		Undamped pendulum.
			S?	19 35 00	8		
			L	19 46 59	28		
				19 54 34	20	0.25	
			F	20 39 19			
335	Aug.17	E	e	17 59 53	6		do
			L	18 04 08	10		
			F	18 09 43			
336	Aug.31	E	Ee	18 01 01	10		do
			L	18 07 34	26		
			F?	18 48			
337	Sept.3	N	P	21 17 29?			do
		E	S?	21 26 03?			
			L?	21 54 25?			
338	Oct.1	N	P	4 30 53			S-P,5m 45s, 3975 kms.
			S	4 36 38			
			L?	4 45 05			
			M	4 50 36			
			F	5 25			
		E	P	4 30 36			Undamped pendulum
			S	4 36 18			
			L	4 47 36			
			F	5 35			

J. B. Woodworth.

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From October 1st *to*

No.	Date	Comp.	Phase	Time	Periods	Amplitudes mm.	REMARKS
				h m s	s.	μ.	
338	Oct.2	N	P	4 30 53			S-P, 5m 45s. 3910 kms.
			S	4 36 38			N.B. Correct date of
			L?	4 45 05			Record on sheet 42 as of
			M	4 50 36			Oct. 1.
			F	5 25			
		E	P	4 30 36			Undamped pendulum and so
			S	4 36 18			for rest of this month.
			L	4 47 36			
			F	5 35			
339	Oct.4	E	P?	22 12 26			P and S in micros.
			S?	22 17 57			Qr Panama.
			eL?	22 20 53			Distance 3725 ? kms.
			F	22 46 ca			
339a	Oct.8	E	eL?	1 50 15	34		
				1 52 09	16		
			F?	1 55 03			
340	Oct.9	E	eP?	18 39 04	4-3		But Cf. Ottawa eP? 18-41-
			S	18 48 07	9		52. Distance 7670 ? kms.
			L	18 51 25	12		
				57 16	20		
			F	19 13 29			
341	Oct.11	E	e				
			S	2 08 13			
			eL	2 13 05			
				2 29 56			
			L	3 30 47			
			F	3 49			
342	Oct.11	E	eP	4 27 30	3		
				4 28 50			
			S?	4 39 32			
			eL	4 45 07	20		
				5 12 02			Sinusoidals begin.
			F	6 10			E-W comp. not recording
							between Oct.11d 13h 15m
							and 12d 14h 26m.

A. L. Worthington

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From Oct. 11, 1913 *to* Oct. 31, 1913

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes μ. mm.	REMARKS
343	Oct.11	E	eS	9 33 34			
			eL	10 00 02			Sinusoidals set in.
			F	10 48 ca			
344	Oct.12	E	e	17 50 12			N.B.
			eL	17 56 18	20		The construction of the
			F	18 05			Ethnological section of
345	Oct.14	E	eP?	8 28 23			the Agassiz Museum,
			S?				adjoining the Station,
			eL	8 42 24	36		during the months July -
			M	8 48 02			Oct. 1913 has greatly
			L	9 07 05	60		interfered with the clear-
			L	10 56 40			ness of our records. JBW
			F	11 38 ca			
346	Oct.23	E	eS	15 13 22			
			eL	15 17 10			
			F	15 39			
347	Oct.26	E	e	22 46 38			Nos. 347-350 have short
			F	22 52 08			periods up to 15 secs.
348		E	e	22 57 05			Stylus caught fuzz and
			F	23 02 10			dropped it during these
349		E	e	23 16 36			records which may thus be
			F	23 53 30			artificial; but Cf. Cornell
350	Oct.27	E	e	0 21 20			(Ithaca) No.119 e23-17-41;
			F	0 42 04			F 23-25.

J. B. Woodworth.

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From November 1, 1913 *to* November 30, 1913.

No.	Date	Comp.	Phase	Time	Periods	Amplitudes	REMARKS
				h. m. s.	s.	mm.	
351	Nov.4	E	eL	10 31 02	24		P and S obscured by micro-seisms and diurnal wave entanglement of lines.
			F	10 55 ca			
352	Nov.10	E	eL	22 11 32			Record faint; on undamped pendulum only.
				22 14 59	24		
			M		22-24	1.5	P and S obscured by micro-seisms.
			C	22 20 52			
			F	23 03 47			
353	Nov.19	E	eP?	3 44 41			No record E-W from Nov.13d 14h 16m until Nov.14d 13h 53m. Stylus tilted over on joint in smoked paper. No record N-S from Nov. 17d 20h 53m until Nov. 18d 13h 45m.
			S?	4 00 18	10		
			eL	4 14 18	20		
				4 23 26	40		
				4 27 00	30-24		
				5 12 33	17		
				5 13 45			
			F	5 32 ca			
354	Nov.23	E	e	21 38 36			e is eS?
			eL?	21 42 42	28-30		
				21 52 41			
				22 02 01	31		
				22 05 56	18		
				22 10 31	16		
			F	22 22 07			On E-W comp. from 4h 45m Nov. 26 to end of run, stylus was held against rim of drum by excessive diurnal and cyclonic tilt.

No records on N-S component damped 4:1.

J. B. Woodworth.

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From December 1, 1913 *to* December 31, 1913

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes mm. μ.	REMARKS
355	Dec.22	E	eS?	16 32 13	12		Comp. set up shortly before 16-28-40. P and S in microseisms.
			eL	16 35 12	16-34		
				16 40 18	20		
				16 44 12	20		
			F	17 06 58			

J. B. Woodworth

191 3

46 re-issue

RECORD

OF THE

Seismographic Station, Department of Geology and Geography

HARVARD UNIVERSITY, CAMBRIDGE, MASS., U.S.A.

LATITUDE 42° 22′ 56″ N., LONGITUDE 71° 06′ 59″ W. Greenwich; ALTITUDE 5.367 M.
TIME: Mean Greenwich, midnight to midnight.
INSTRUMENTS: Two Bosch-Omori horizontal pendulums (mechanical registration).

From Dec. 1,1913 *to* Dec. 31, 1913

No.	Date	Comp.	Phase	Time h. m. s.	Periods s.	Amplitudes ~~mm~~.	REMARKS
355	Dec 21		EeS?	16 32 13	12		
			eL	16 35 12	16		Then 32-34.
				16 40 18	20		
				16 44 12	20		
			F	17 06 58?			
356	Dec 25		Ee	7 01 56			
			L	7 08 16			
			F	7 10 26			

Please substitute this sheet for that of same No. previously issued.

J. B. Woodworth.