

OTTAWA

No.

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **January 1st** to **January 19, 1913.**

DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
				<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
		h. m. s.	s.	μ	μ	μ	km.	
1913								
Jan. 1	i P E	18-33-02					1250	Quake South Carolina
	i P N	18-33-04	2					
	S E	18-35-00						
	L E	18-35-45	10					
	F	18-40						
Jan. 11	P	13-38-25					5500?	No maximum
	S ?	13-45-38						
	L	13-51-09	18					
	L	13-55.9	50					
	L	14-01	40					
	L	14-41	17					
	F	16-00						
Jan 15	e P	18-59-15					3800	
	i P	18-59-18	2					
	F R ₂	19-00-44	3					
	e S ₂	19-04-46						
	i S	19-04-53	6					
	L	19-09.5	40					
	M	19-15.0	18	15	30			
	L	19-17 to	14					
		19-19						
	F	20-05						
Jan. 19	e	17-28-07						
	S ?	17-40-00	8					
	L	17-45.0	40					
	L	18-05	32					
	L	18-12	30					
	L	18-23 to	20					
		18-35						
	F	19-15						

O. H. Klobb

OTTAWA

No.

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **January 20** to **January 31, 1913.**

DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
				<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
1913		h. m. s.	s.	μ	μ	μ	km.	
Jan. 20	e	0-09-48						
	S ?	0-15-20						
	L	0-26 to	16					
		0-29						
	F	0-52						
Jan. 23	e L	14-55.5	20					
	L	15-05.3	20					
		to 15-10						
	F	15-24						
Jan. 31	P	22-54-37	2				4220	
	P R ₁	22-56-05						
	S	23-00-37						
	e L ?	23-06.0						
	M	23-08.6	20	17	10			
	F	23-45						

Ottawa 1913

OTTAWA

No. 3

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From February 1 to February 28, 1913.

DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
				<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
1913		h. m. s.	s.	μ	μ	μ	km.	
Feb. 7	e L F	3-42.3 4-00	20					
Feb. 18	P ? S L F	00-50-13 00-55-11 00-56.3 1-10	4 16				3200	Weak record. No maximum.
Feb. 20	P ? S ? e L L L F	9-10-34 9-21-58 9-39.4 9-41 9-54.3 10-15	 20 40 20				10600	Phases very feeble.
Feb. 23	P ? S ? e L L F	3-03-07 3-10-09 3-18.2 3-21 3-34	 24 20				5350	Guayaquil reports quake Microseisms present.

Ottawa Feb 28 1913

OTTAWA

No. 4

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From March 1st to March 9, 1913.

DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
				AE	AN	Az		
		h. m. s.	s.	μ	μ	μ	km.	
1913								
March 3	P ? S ? eL L M F	3-12-45 3-13-45 3-21.8 3-23.0 3-24.5 3-45	20 12		20		4200?	
" 4	P PR ₂ S eL L L F	11-32-15 11-32-38 11-35-37 11-39.5 11-42 11-45 12-10	36 20				3580	
" 6	e i eL L F	11-23-36 11-44-54 11-56.4 12-00 to 12-03 12-17	20					Egebla record
" 8	P S L L M L F	16-04-06 16-07-07 16-07.4 16-09 16-11 16-25 17-01	40 30 20 11	70	30		1334	
" 9	eL L F	16-22.2 16-24 16-29	22 18					

O. H. ...

OTTAWA

No. 3

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **March 10th** to **March 23rd, 1913.**

DATE 1913	PHASE	TIME h. m. s.	PERIOD s.	AMPLITUDE			DISTANCE km.	REMARKS
				<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
				μ	μ	μ		
March 14	P	9-04-25	1-2				4300?	P' seems to be fresh impulse. L well shown but no decided M.
	PR ₁	9-06-06						
	F ₁	9-09-00	1-2					
	L	9-16.0	20					
	L	9-23.6	40					
	L	9-30 to 9-40	35					
	L	9-53 to 10-03	20					
	L	10-07 to 10-14	18					
	F	11-25						
March 15	e	14-36-40					4600?	
	F	14-55						
" 15	P?	22-26-22					4000?	
	e	22-36-54						
	L	22-37.3	13					
	L	22-39	8					
	F	22-53						
March 23	e ?	21-04-51					4000?	
	S ?	21-11-29						
	i	21-14-20						
	L	21-15	16					
	L	21-20.2	24					
	L	21-36	30					
	L	21-40	20					
	L	21-50	20					
F	21-58							

O. H. Wood

OTTAWA

No. 6

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **March 24th** to **March 31st, 1913.**

DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
				<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
1913		h. m. s.	s.	μ	μ	μ	km.	
March 31	P	3-51-41	2				7250	
	S	4-00-22						
	L	4-03.7	40					
	L	4-13	28					
	M	4-16 to						
		4-22	13	50	85			
	L	4-33	15					
	L	4-59	11					
" 31	F	6-35						
	eL	17-44.1						
	L	17-49	10					
	F	17-59						

O. H. Wood

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No.

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **April 1st** to **April 25th, 1913.**

DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
				<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
		h. m. s.	s.	μ	μ	μ	km.	
1913								
April 17	e ?	6-59-32						
	e ?	7-05-00						
	L ?	7-12.2	12					
	L	7-28.0	20					
	L	7-38.0	20					
	L	7-46	15					
	L	7-53	13					
	L	7-58	18					
	F	8-13						
April 18	e L	20-15	20					F masked by wind disturbance.
	L	20-25	13					
April 24	e L	10-41.2						
	L	10-47	17					
	L	10-55	17					
	L	11-11	18					
	L	11-15	20					
	L	11-31 to	18-17					
	F	11-45						
	F	12.0						
April 25	e	13-17-04					5900?	No marked M.
	1 P	18-17-34						
	S ?	18-24-36						
	e L ?	18-26.8	15					
	L	18-33.2	20					
	L	19-07 to	20 to					
	L	19-20	19					
	L	19-29 to						
	L	19-31	17					
	L	19-53	16					
	F	20-35						

O. H. ...

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Earthquake Station, Dominion Astronomical Observatory



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TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

April 26th

April 30th, 1913.

From

to

1913	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
				<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
		h. m. s.	s.	μ	μ	μ	km.	
Apr. 26	P	12-44-39	3				3600	
	P R ₂	12-46-02						
	F R ₃	12-46-13	2					
	S	12-50-02	6					
	e L	12-52.4	10					
	L	12-55.6	26					
	F	13-30						
Apr. 29	Pv	0-29-	1/3				60	Local shock felt at Ottawa & along valley of St. Lawrence from Montreal westward about 250 km. No damage done. More detailed report later.
		07.2						
	FE	0-29-	1.5	3				
		08.7						
	PN	0-29-	1	13				
		09.5						
	SE	0-29-	2		3			
		14.8						
	Sv	0-29-						
		15.0						
SN	0-29-							
	15.2							
" 29	FNE	0-30						
	Fv	0-31-15						
	P?	23-40-13				7500?		
	S?	23-49-06						
	L	24-02.7	18					
	M	24-10	13	7	20			
	L	24-15 to 24-19	14					
F	24-35							
	11-44-49							
" 30	S	11-53-00				6650		
	e L	12-02.5	14					
	L	12-09 to 12-13	16					
	M	12-11	16	15	15			
	L	12-19 to 12-22	14					
	L	12-27	14					
	F	13-06						

O. H. ...

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TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From May 1st to May 31st, 1913.

DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
				A _N	A _X	A _Z		
1913		h. m. s.	s.	μ	μ	μ	km.	
May 6	e L L F	0-51.0 0-53 0-59	10					
" 8	P E S E L L L L F	18-54-00 19-00-49 19-04.3 19-08-10 19-10 19-13-30 19-16 19-36 20-05	20 14 16				5100	No maximum. Another quake of different hypocentre seems super- posed on L waves.
" 16	P S L M F	11-53-39 12-00-38 12-07.3 12-12.4 12-55	14 14	20	25		5330	
" 17	e P i P S L F	9-57-07 9-57-22 9-59-00 9-57.4 10-10	2 2 10				1000	
" 25	P S L L F	0-36-21 0-45-31 0-58.2 1-04 to 1-09 1-30	2 6 36 25-19				7800	No marked maximum
" 30	P ? S ? e L ? L M L L F	12-08-00 12-17-38 12-24.4 12-38.5 12-53 to 13-06 13-14 13-40 14-25	2 14 44 20-17 16 15	17	27		8400?	

O. H. ...

OTTAWA

Earthquake Station, Dominion Astronomical Observatory

No.

No. 10

International
Seismological
Centre

LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From June 1st to June 14th, 1913.

DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
				<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
1913		h. m. s.	s.	μ	μ	μ	km.	
June 4	e ?	10-18-36					12500?	Approx. distance taken from L _R -L and 200 km. per minute. L show up well.
	S ?	10-30-37						
	?	10-35-30						
	e L	10-54.0	35					
	M	11-04	20	10	17			
	L	11-08	13-17					
	L	11-18	16					
	F	11-50						
	L _R	12-09	16					
" 14	P	8-43-43	2				3750	
	S	8-49-15						
	L	8-56.5	20					
	M	9-01.7	15-10	12	15			
	L	9-21	11					
" 14	merged in following						7550	
	P	9-44-18						
	S _E	9-53-14						
	S _N	9-53-16						
	L	10-04.0	30					
	L	10-14	15					
	L	10-20	13					
" 14	P _N	11-38-46				3100		
	P _E	11-38-48						
	S _N	11-43-38						
	S _E	11-43-39						
	L	11-48.0	20-19					
	L	11-50	13					
	F	12-02						

O.H. Alshof

OTTAWA

No. 11

No.

Earthquake Station, Dominion Astronomical Observatory



International
Seismological
Centre

LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **June 15th** to **June 30th, 1913.**

No.	1913 DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.
					A_E	A_N	A_z		
			h. m. s.	s.	μ	μ	μ	km.	
	June 22	P	14-00-48					7000	No distinct maximum.
		S	14-09-15						
		L	14-19.1	40					
		L	14-31	17					
		L	14-47	15					
		L	15-17	10					
		F	16-37						
	" 26	e P	5-11-50					7500	
		i	5-24-36						
		S R.	5-25-58						
		L	5-32.2						
		L	5-45	42					
		L	5-54	24					
		L	6-04	16					
		L	6-19	16					
		F	8-15						

O. H. ...

OTTAWA

No. 14

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **July 25th** to **July 31st, 1913.**

No.	1913 DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.
					<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
			h. m. s.	s.	μ	μ	μ	km.	
422	July 25	P	12-44-46					3600	
		S	12-50-10						
		L	12-55.1	26					
		M _E	12-57.7	13	20				
		M _N	13-00	15		22			
		F	13-44						
423	" 26	P	20-58-23					4000	
		S	21-04-11						
		L	21-07.6	10					
		L	21-11.5	18					
		L	21-15	12					
		F	21-46						
424	" 28	P	5-49-43					6800	
		S	5-53-02						
		SR ₂ ?	6-05.3	28					
		L	6-08	35-24					
		L	6-18	18					
		F	7-06						
425	" 29	e P	15-40-25					6450	
		S	15-48-25						
		eL	15-57.3	20					
		L	16-09	15					
		L	16-15	16					
		F	16-25						

O. H. ...

OTTAWA

No. 5

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From July 9th to July 24th, 1913.

No.	DATE 1913	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.
					A_E	A_N	A_z		
			h. m. s.	s.	μ	μ	μ	km.	
418	July 9	e P	0-13-09					2700	
		S?	0-22-37						
		L	0-24.1	16					
		M	0-25	16	25	35			
		L	0-29	7-6					
		F	1-10						
419	" 12	e P	10-43-16					3300	
		S?	10-53-20						
		L	10-56	20					
		L	11-10	16					
		L	11-17	10					
		L	11-22 to 11-38	20 to 13					
		F	12-00						
420	" 22	e	7-00-17					10300?	
		e	7-05.4						
		S?	7-11-32						
		L	7-28.4	24					
		L	7-33 to 7-58	20 to 16					
		F	8-20						
421	" 24	P	9-05-01					3300	
		S	9-10-07						
		L	9-12.3	25					
		L	9-13	12					
		F	9-26						

O. H. Wood

OTTAWA

No. 12

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From July 1

to

July 8, 1913.

No.	DATE 1913	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.
					A_E	A_N	A_Z		
			h. m. s.	s.	μ	μ	μ	km.	
	July 5	e L F	8-30.5 3-49	9-5					
415	July 7	P S ? L L L L rep _N L rep _N F	17-57-16 13-07-16 18-28.7 18-38 18-42 to 18-46 19-57 20-02 21-15	 40 24 20 to 18 20 20				10,000?	
416	July 8	e i L ? F	8-48-20 8-54-43 8-55 9-21	10 12					
417	July 8	e P S ? L F L L F	22-28-29 22-36-14 22-45.5 22-50 23-09 23-15 to 23-31 23-47	 14 20 20 to 16				6200?	

O. H. ...

OTTAWA

No. 10

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From to

Aug. 1st

Aug. 6th, 1913.

No.	DATE 1913	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE km.	REMARKS
					<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
			h. m. s.	s.	μ	μ	μ		
426	Aug. 1	P	17-22-51	3				8350	No mag- ked max- imum.
		1	17-24-38						
		S	17-32-29	5					
		LN	17-38.2	36					
		LE	17-41.5						
		L	17-48	28					
		L	17-53	20					
		L	17-58	17					
		F	18-51						
427	Aug. 5	e	1-58-33					6100?	
		L	2-14.3	13					
		L	2-22	12					
		L	2-34	10					
		F	2-55						
428	Aug. 6	e PN	22-24-50					6850	In Peru, almost due so- uth of Ottawa. e PE masked by small micro- seisms.
		1 PN	22-24-54						
		1 PE	22-25-06						
		SN	22-33-12	10		17			
		SE	22-33-13	6	25				
		LE	22-40.4	40					
		LN	22-42.4	40					
		ME	22-44	36	130				
		LN	22-49	26		100			
		L	22-52	22-20					
		L	22-58	16-15					
		L	23-08 to	16					
			23-49						
	F	25-10							

O. H. Wood

OTTAWA

No. 16

Earthquake Station, Dominion Astronomical Observatory

International
Seismological
Centre

LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **Aug. 7th** to **Aug. 13th, 1913.**

No.	DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.
					<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
429	Aug. 7	e P	2-21-17	s.	μ	μ	μ	6890	
		S	2-29-38						
		LN	2-37.2	14					
		LE	2-40.5	22					
		L	2-48	20					
		L	2-54	16					
		F	3-07						
430	Aug. 13	P	4-45-06				9500?	No sign of S.	
		P R,	4-48-50						
		L	5-12.2	26					
		F	5-31						
431	Aug. 13	eLN	5-35.1	40				If se- perate quake, P & S involved in pre- ceding quake.	
		eLE	5-39.6	36					
		L	5-42	27					
		L	5-48	24					
		L	5-56	16					
		F	6-32						

Otto Lohs

OTTAWA

No. ↗

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **Aug. 15th** to **Aug. 31st, 1913.**

No.	1913	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.
					A_E	A_N	A_z		
432	Aug. 15	P	19-27-27	4	μ	μ	μ	km. 6300?	
		S?	19-35-20	6					
		e L ?	19-47.2	24					
		L	19-56	10					
		L	20-22	16					
		F	20-40						
433	Aug. 17	L	18-04.5	10					
		F	18-10						
434	Aug. 31	e L	6-57.2	40					
		L	7-00	28					
		L	7-15	16					
		F	7-40						
435	Aug. 31	e L	18-07	48?					
		L	18-15	24					
		F	18-37						

Otto Neuhoff

OTTAWA

No.

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

No. 18

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **1913** Sep. 1

to

Sep. 30, 1913.

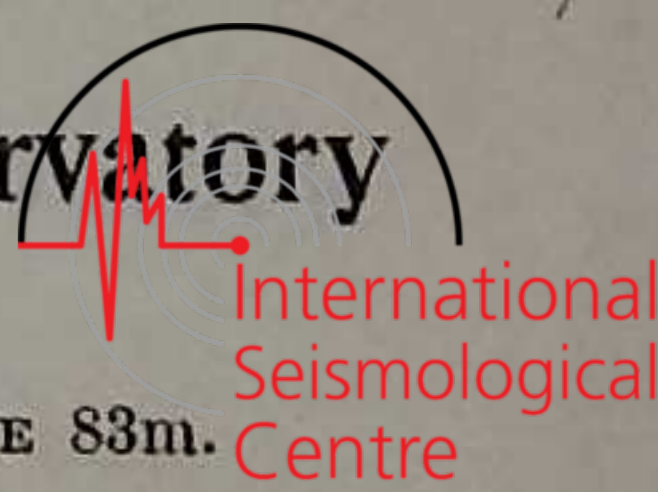
No.	DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
					A _E	A _N	A _Z		
436	Sep. 2	e L L F	19-53.3 20-10 to 20-20 20-40	36 20	μ	μ	μ	km.	
437	Sep. 3	F ₂ F ₃ PR, F PR, F S ₁ S ₂ S ₃ ? L L L L F	21-11-44 21-11-48 21-14-26 21-15-16 21-19-25 21-19-26 21-22.9 21-29.8 21-53 22-00 to 22-17 22-35 23-14	4 4 4 4 6 5 20 40 23 18 16				6100	FO MARK- ED LAG- LINE
438	Sep. 23	S ? F	11-14-18 11-15-07 11-21	8					
439	Sep. 28	e L L F	9-43-16 9-46 10-11	9 11					
440	Sep. 30	e ₁ e ₂ S ₁ F	4-20-18 4-20-24 4-37 to 4-46 4-59	10 6 20				6300 ? 6300 ?	

O. H. ...

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No. ↗

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From to

Oct. 1 Oct. 8, 1913.

No.	DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.
					A_E	A_N	A_z		
			h. m. s.	s.	μ	μ	μ	km.	
441	1913 Oct. 2	1 P N	4-30-52	3				4120	PE want- ing in E-W com- ponent. Pacific side near Panama.
		PR,	4-32-23						
		S N, E	4-36-46	8	9	3			
		e L	4-41.2	30					
		L	4-45	20					
		M N, E	4-47	18	53	53			
		L	4-52 to	14 to					
	5-08	13							
	F	5-57							
442	Oct. 4	1 P N	22-12-51					4130	PE wanting in E-W component.
		PR,	22-14-22						
		e S N	22-18-42						
		1 S N	22-18-46	4		2			
		e S E	22-18-46						
		1 S N	22-18-50	5	5				
		e L	22-21.5						
L	22-27	20							
L	22-30	17							
	F	22-56							
443	Oct. 8	e L	1-48.2	13					
		L	1-50						
		F	1-57						
444	Oct. 8	e L ?	6-10.6	10					
		L	6-24	20					
		L	6-28	18					
		L	6-31	11					
		F	6-47						

W. H. Wood

OTTAWA

No.

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

No. 20

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From

to

No.	DATE	OCT. 1913	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
					<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
			h. m. s.	s.	μ	μ	μ	km.	
445	1913 Oct. 9	e P ? 1 S ? e LN e LE L L F	18-41-52 18-45-35 18-48-44 18-51.5 18-52.4 18-56 to 18-59 19-02 19-06	30 20 16				5200?	
446	Oct. 11	PN SE e LN LN e LE LN L L F	2-02-08 2-08-08 2-12.5 2-21 2-34 2-36 2-40 to 2-58 3-01 to 3-05 4-00	4 24 24 20 24 20 18				4230 No marked maximum.	
447	Oct. 11	1 PN e PE? 1 SE e LN e LE L L L L L F	4-27-19 4-27-00 4-39-18 4-58 4-59.3 5-06 5-11 to 5-17 5-18 to 5-28 5-35 6-23 6-30	6 55 40 20 20 18 17 16				11500?	

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No.

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51.8 W. Greenwich, ALTITUDE 83m. No. 21

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From Oct. 11 to Oct. 14, 1913.

No.	DATE 1913	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.
					<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
448	Oct. 11	PN ?	9-22-41	s	μ	μ	μ	9700 ^{km.} ?	P very faint.
		1 SE	9-33-26	5					
		e SN	9-33-28						
		e LN?	9-53.2	20					
		e LE	9-55	20					
		L	10-01 to 10-18	20					
		F	10-45						
449	Oct. 11	eL	23-02.2	20					
		L	23-09	12					
		F	23-45						
450	Oct. 14	PN	6-43-58	4				7300	
		SN	6-52-44	8					
		eL	7-07.2	30					
		F	7-21						
451	Oct. 14	PN?	8-27-48	4				9600	
		1 PE	8-28-07	4					
		PR ₂ N	8-34-02	5					
		PR ₂ E	8-34-04	5					
		SN ?	8-38-00	20					
		1 SE	8-38-46	5					
		SR ₁ N	8-45.2	28					
		SR ₁ E	8-45.4	24					
		eLN	8-55.3	40					
		eLE	8-56.3	40					
		L	9-02	28					
		L	9-15	20					
		L	9-34	16					
		L rep.	10-31	16					
F	10-38								

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OTTAWA

No.

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m. No. 22.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From Oct. 15 to Oct. 31, 1913.

No.	DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.
					<i>A_E</i>	<i>A_N</i>	<i>A_Z</i>		
	1913		h. m. s.	s.	μ	μ	μ	km.	
452	Oct. 19	e LN L L L L	1-46.4 1-57 2-09 3-51 4-04	28 12 12 16 16					Just traces of L here & there.
453	Oct. 23	e PN e SN 1 SE e LE eLN L F	15-07-58 15-13-52 15-13-52 15-18 15-18.5 15-20 to 15-25 16-00	 5s 40 14 20				4150	No de-oided maximum.
454	Oct. 26	e L L M L F	13-50.3 13-51.4 13-52.4 13-54 14-03	16 16 9 8	2	6			Light off Oct. 24.
455	Oct. 26	PN ? SE ? SN ? eLN eLE LN F	23-07-51 23-13-44 23-14-00 23-17.2 23-17.5 23-23 23-50	 4s 20 20 10				4100 ?	

O. H. ...

OTTAWA

No.

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

No. 23

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From **Nov. 1st** to **Nov. 19, 1913.**

No.	DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.	
					A _E	A _N	A _Z			
	1913		h. m. s.	s.	μ	μ	μ	km.		
456	Nov. 4	e P N	10-18-26	5				5300	Strong micro-seisms.	
		i P E	10-18-36							
		PR, N	10-20-30							
		SN P	10-25-30	40						
		e L	10-31.6							
		L	10-37							20
		L	10-40							16
F	10-55									
457	Nov. 10	e P E ?	21-50-00	3				8000?	Strong micro-seisms.	
		e LN	22-11.6	20						
		e LE	22-13.0	20						
		L	22-15 to							
			22-20	20						
		LE	22-23	18						
		LE	22-34	16						
		LN	22-43	16						
		LN	23-00	14						
		F	23-12							
458	Nov. 15	i P N ?	5-59-23	3				10300?		
		i SE ?	6-10-37							
		e LN ?	6-27.4	20						
		e LE	6-29	22						
		L	6-35	18						
		F	6-58							
459	Nov. 19	i P N ?	3-43-34	24			9600 ?			
		e PE ?	3-43-40							
		SN ?	3-54-14							
		e LN ?	4-10							
		L	4-22						28	
		L	4-35 to							
			4-55						20	
		L	5-01						17	
		L	5-10						18	
F	5-16									

O. H. ...

OTTAWA

No.

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From

to

Nov. 20th

Nov. 30th, 1913.

No. 24

No.	DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS.
					A_E	A_N	A_z		
	1913		h. m. s.	s.	μ	μ	μ	km.	
460	Nov. 23	e N?	21-32-15					?	
		e LN?	21-43.6	38					
		LN	21-51 to						
			21-55	30					
		LN	21-57 to						
			22-02	24					
		L	22-08	18					
		L	22-11	16					
		F	22-20						
461	Nov. 26	i NE?	7-04-22	4				?	Record very slight. Much masked by micro-seisms.
		i E?	7-13-14						
		e LN?	7-30.5	8					
		LN	7-41.2	18					
		LE	7-47.3	14					
		LN	7-51.4	40					
		LN	7-58	40					
		LN	8-09	32					
		F	8-25						

O. H. ...

OTTAWA

No.

Earthquake Station, Dominion Astronomical Observatory



LATITUDE 45° 23' 38", LONGITUDE 75° 42' 57" or 5^h 02^m 51^s.8 W. Greenwich, ALTITUDE 83m.

TIME: Mean Greenwich, midnight to midnight.

INSTRUMENTS: Two Bosch photographic horizontal pendulums, one Spindler and Hoyer 80 kg. vertical seismograph.

From Dec. 1st

to Dec. 31st, 1913. No. 25

No.	DATE	PHASE	TIME	PERIOD	AMPLITUDE			DISTANCE	REMARKS
					A _E	A _N	A _Z		
			h. m. s.	s.	μ	μ	μ	km.	
1913									
462	Dec. 6	i P iN iN iN iE SE LE ? F	0-30-00 0-30-33 0-30-45 0-30-55 0-31-02 0-33-46 0-34.7 0-42	2-4 5 4-5				2260	
463	Dec. 21	e ? eLE eLN LE LN L F	16-16-10 16-38.0 16-38.5 16-45 16-46 16-50 to 16-55 17-07	2 28 28 16 16 14				8000 ^f	
464	Dec. 25	e _N ? eLN F	6-58-54 7-07.3 7-15	16					Micro- seisms mask.
465	Dec. 25	e _N ? eL F	8-52-48 8-55.7 9-01	20					Micro- seisms mask.
466	Dec. 31	e _N F	23-47-00 23-57						

O. H. ...