OTTAWA

SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45° 23' 38''$ N. $\lambda = 75° 42' 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne-Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per hour	20 g. ca.
Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	To	r	V	ϵ	COMP.	l	DETERMINED
I	5.5	---	120	2:1	NS	---	December 1922
II	6.5	---	120	aper.	EW	---	"
17	12.0	---	250	20:1	EW	---	"
23	12.0	---	250	20:1	EW	---	"
D	37.2	---	---	13:10	EW	---	"
D	36.1	---	---	13:10	NS	---	"
W	6.0	---	160	20:1	V	---	"

From January 1'23 *to* January 12'23 *No.* 1

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1371	Jan. 2	e_E	22-58-42		NS lost in	heavy		micros.
		eL	23-09.5					
		L	23-17	22				
		F	0-05 ca					
1372	" 8	i_E	22-12-08					
		eL_E	22-24.5					
		F	22-50					
1373	" 11	e_E	4-46					
		eL_E	4-47.5					
		L_E	4-48.8					
		F	4-57					
1374	" 12	eL_E	19-50		Barely discernible on			
		L_E	19-55			No. 17	only.	
		F	20-05					

Edmund F. Gleadow

Dom. Obs. No. 67

3,500—1-23

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From January 12 1 23 *to* January 22 1 23 *No.* 2

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1375	Jan. 12	e_E	21-31		Very faintly recorded on 17.				
		eL_E	21-33			only			
		F	Lost in micros						
1376	" 14	eL_E	13-35 to 13-50					Can just be detected.	
		F	Lost in micros						
1377	" 20	i_E	21-57-41						
		eL_E	22-08						
		I_E	22-16	21					
		F	22-35						
1378	" 21	i_E	4-33-37						
		eL_E	4-55	12				On No. 17 only.	
		L_E	4-59 to 5-06						
		F	5-26						
1379	" 21	e	14-07.5					Sinusoidal L waves of small amplitude and with a beautiful gradation in period from 28s to 15 s.	
		eS?	14-09.7						
		eL	14-32						
		L	14-34	28					
		L	14-57	15					
		F	15-00 ca						
1380	" 22	e?	1-18					Micros obscure NS	
		e	1-20.3						
		e	1-22						
		$eS?_E$	1-23-48					Sinusoidal L waves of small amplitude predominate.	
		eL_E	1-39						
		L_E	1-54						
		L_E	2-10	19					
		F	3-25						

Ernest A Hodgson

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From January 22!23. *to* January 31!23. *No.* 3.

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1381	Jan. 22							3880
		O	9-04-10					
		P	9-11-19					
		PR_2	9-12-30					
		S	9-16-59					
		SR_2	9-19-17					
		eL	9-20-44					
		M_{17}	9-26-45	19	500			
		F	12- ca.					
1382	" 26							
		e	21-50-28					
		i	21-52					
		eL	22-00					
		F	22-30					
1383	" 27							
		e	8-09-41					
		eL	8-14					
		M_1	8-16-08					
		M_2	8-17-23					
		F	9-09					

Press report tremor felt at Sacramento Cal. and Reno. Nev.

Faint traces only.

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Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per hour	20 g. ca.
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INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	To	r	V	ϵ	COMP.	l	DETERMINED
I	5.5	--	120	2:1	NS	-a-	February 7'23.
II	6.5	--	120	18:1	EW	---	"
17	12.0	--	250	20:1	EW	---	"
23	12.0	--	250	20:1	EW	---	"
D	37.2	--	---	13:10	EW	---	"
D	36.1	--	---	13:10	NS	---	"
W	6.0	.6mm.	160	20:1	V	---	"

From February 1'23. *to* February 2'23. *No.* 4.

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1384	Feb. 1	e_E	19-45-38					
		E_E	19-55-38					
		eL_E	20-02-39			Sinusoidal		L waves.
		L	20-21	34	63			
		L	20-36	18				
		F	21-50					
1385	" 2	O	1-16-53					6500
		P	1-26-53					
		S	1-34-56					
		L	1-41-46					
		M	1-49	20	38			
		L	1-56					
		F	Lost in micros at 3-25 ca.					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From.....February 2 1923.....*to*.....February 4 1923.....*No*...5.....

No.	Date	Phase	Time	Period	AMPLITUDE			DISTANCE
					A_E	A_N	A_Z	
			h m s	s	μ	μ	μ	km.
1386	Feb. 2	O	5-08-21					7260
		P	5-19-03					
		S	5-27-45					
		SR_1	5-32-41					
		eL	5-36-00					
		L	5-40	43				
		M_{1E}	5-48	17	140			
		M_{2E}	5-54	17	140			
		L	6-05	15				
		L	6-20	16				
		L	6-40	15				
		L	6-55	15				
		L	7-25	15				
		L	7-51	15				
		L	8-00	15				
		L	8-20	15				
		F	9-10 ca					
1387	" 3	O	16-01-56					7620
		P	16-12-57					
		S	16-21-58					
		SR_2	16-29-50					
		eL	16-34-00					
		M_1	16-42					
		M_2	16-45-40	16	4400			
		L	17-00	16				
		L	18-00	16				
		L	19-00	16				
		L	20-00	16				
		L	21-00	14				
		L	23 04					
		L	1-49					
		L	6-42					
		F	7-00					

The Saskatoon and Halifax records indicate respectively distances of 5750 km. and 8440 (?) km.

Ernest E. Hodgson

Dom. Obs. No. 68
7,500—1-23

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From February 3'23 *to* February 8'23. *No.* 6

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1388	Feb.4	eL	11-47		Small amplitude L waves--an			
		eL	12-55		"after quake" to No. 1387.			
		eL	13-08					
		F	14-10					
1389	" 4	eL	16-20		Very faint traces only.			
		F	17-00		Registered only on Milne-Shaws.			
1390	" 4	eL	17-55		"	"	"	"
		F	18-07					
1391	" 4	eL	18-51					
		L	19-10					
		L	19-15	16				
		F	19-25					
1392	" 5	e	3-30					
		eL	4-00					
		L	4-04	13				
		F	4-40					
1393	" 5	eL$_E$	8-37					
		F	8-55 ca					
1394	" 5	L$_E$	12-21					
		F	12-50 ca					
1395	" 5	eL$_E$	23-01.5					
		L$_E$	23-03	15				
		L$_E$	23-26					
		L$_E$	23-35	15				
		L$_E$	23-40					
		F	0-05 ca					
1396	" 6	eL	13:06		Faint traces only.			
		F	13-25 ca					
1397	" 6	eL	22-28		"	"	"	
		F	22-45 ca					
1398	" 8	O	0-33-23					3660
		P	0-40-15					
		S	0-45-42					
		eL	0-50					
		L	0-52					
		L	1-04					
		F	1-30 ca					

Emmeat A Hodgson

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From February 8'23. *to* February 11'23. *No.* 7.

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1399	Feb. 8	eL	3-56	36				
		L	4-00	22				
		L	4-10	15				
		F	4-20					
1400	" 8	e?	7-53.3					
		e?	8-02					
		eL	8-26	22				
		L	8-29					
		L	8-38	15				
		F	9-10					
1401	" 8	e	14-24.2					
		eL	14-32					
		F	Late in changing the records.					
1402	" 9	eL	11-33		Traces very small.			
		eL	12-05					
		L	12-28					
1403	" 11	eL	1-50					
		L	1-53					
		L	2-00					
		F	2-10					
1404	" 11	e	17-43		Small amplitudes only.			
		eL	17-49	18				
		L	17-56	15				
		F	18-27					
1405	" 11	(e)	22-59-47					(2930)
		(P)	23-05-37					
		(S)	23-10-15		A curious phenomenon is the			
		eL	23-13.0		appearance at 0-35.5 of what was			
		L	23-25	16	at first believed to be LR. It			
		L	23-32	16	appeared at the minute expected			
		L	23-43	15	but one hour too early. The true			
		L	0-05	15	interpretation of this increase			
		L	0-35.5	30	in period of the L waves, is not			
		F	0-55		known. It would be interesting to			

know whether other stations found the same period increase on their records.

A may be much greater--of the order of 10000 km. with the P wave missing. Not much success has resulted from our attempts to so read it.

Ernest A Hodgson

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From February 11'23. *to* February 19' 23 *No.* 8

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1406	Feb.12	O	2-09-01					6160
		P	2-18-41					
		S	2-26-26					
		eL	2-31					
		L	2-35.5					
		M_E	2-43	22	58			
		L_E	3-00 to 3-45					
		F	4-10 ca					
1407	" 12	eL_E	13-18					
		L_E	13-22					
		F	13-38					
1408	" 14	eL_E	17-59					
		L_E	18-08					
		F	18-22 ca					
1409	" 15	eL	23-14 to 23-31					
1410	" 16	L	7-15.7					
		F	7-35					
1411	" 16	e	9-37.6					
		eL	9-50.5					
		F	10-12 ca					
1412	" 18	O	23-50-25					5880
	19	P	23-59-49					
		S	0-07-19					
		eL	0-12.5					
		L	0-17					
		M_E	0-23-24	19	26			
		F	2-00					
1413	" 19	e_E	6-39-26					
		e_E	6-51.4					
		e_E	6-56.2					
		eL_E	7-10					
		L_E	7-17					
		L_E	7-36.5					
		F	8-25 ca					

Faint traces only

Heavy micros mask much.

" " " "

" " " "

L waves taper off to very small amplitudes after M has passed.

Ernest A Hodgson

Dom. Obs. No. 68

7,500—1-23

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From February 19 1923 *to* February 23 1923 *No.* 9

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1414	Feb. 21	eL	1-01		Small amplitudes.			
		L	1-09					
		L	1-20					
		L	1-32					
		F	1-50 ca					
1415	" 21	e	3-40		Small amplitudes.			
		eL	3-46					
		L	4-00					
		L	4-15					
		L	4-25					
		F	4-45 ca					
1416	" 23	O	6-05-28					4750
		P	6-13-39					
		i	6-14-23		Periods of L waves extremely			
		S	6-20-08		irregular, amplitudes small.			
		eL	6-25.5					
		L	6-31					
		L	6-43					
		L	6-53					
		L	7-04					
		F	8-17					
1417	" 23	O	7-34-48					7390
		P	7-45-37					
		S	7-54-26					
		SR_1	7-59-32					
		SR_2	8-02-08					
		eL	8-05	45				
		L	8-10					
		M_E	8-14.5	16	410			
		L	8-20 to	8				
			11-00	8				
		F	11-40					
	HALIFAX	RECORD						
		O	7-36-40					7620
		P	7-47-41					
		S	7-56-42					
		eL	8-04					
		M_1	8-15					
		M_2	8-21					
		F	9-20 ca					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From.....*to*..... *No*.....

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
	February 23'23.	h m s		February 28'23.	μ	μ	μ	10km.
1417	Feb. 23	SASKATOON RECORD						5400
	cont'd	O	7-36-34					
		P	7-45-28					
		S	7-52-32					
		eL	8-00					
		L	8-02					
		M1	8-05.5					
		M2	8-11.5					
		F	9-00 ca					

The difference in time for O is probably due to clock errors in Saskatoon and Halifax. The values of Δ for Ottawa and Saskatoon give an intersection at Kamchatka. Strasbourg wireless gives the epicentre as Kamchatka.

1418	" 24	eL	18-58		
		F	19-05		
1419	" 25	eL	4-37	Very small amplitudes only.	
		L	4-39		
		F	5-00		
1420	" 27	O	20-39-12		2850
		P	20-44-54		
		S	20-49-26		
		eL	20-51-38		
		L	20-53-45		
		F	21-30 ca		
1421	" 28	O	(22-20-33)		(2640)
		P?	22-25-55		
		S	22-30-11	Small amplitudes only.	
		eL	22-34		
		M	22-38		
		F	23-18		

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Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per hour	20 g. ca.
Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

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INSTRUMENT	To	r	V	ε	COMP.	l	DETERMINED
I	5.5	--	120	2:1	NS	---	February 7'23
II	7.8	--	120	13:1	NW	---	" "
17	12.0	--	250	20:1	EW	---	" "
23	12.0	--	250	*	EW	---	See note below.
D	37.2	--	--	15:10	EW	---	February 7'23
D	36.1	--	--	13:10	NS	---	" "
W	6.0	.6mm	160	20:1	V	---	" "

From March 1'23 to March 1'23. No. 11

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km
1422	Mar.1	O	(8-26-15)					(5240)
		P	(8-36-00)					
		S	8-43-49					
		i	8-45-47					
		i	8-47-38					
		eI	8-55			Small amplitudes only.		
		I	8-56					
		I	9-00 to 10-00					
		F	11-00 ca					

* No.23 was run at various values for the damping ratio. It was kept at 20:1 until March 9'23. It was then set at 15:1 until March 10 17 when it was again changed to 10:1 until the end of the month and longer.

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From March 1'23. *to* March 12'23 *No.* 12.

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1423	Mar. 2	e?	17-01-44						
		e(S)	17-09-32						
		i	17-19-49						Halifax record contains traces of L waves but no P or S.
		i	17-26-45						
		L	17-43						
		M	17-57	23					
		L	18-09	21					
		L	18-36	19					
		F	20-05						
1424	" 3	i	22-33-18						
		e	22-42-00						
		eL	22-57						Very small amplitudes.
		L	23-05 to						
		L	23-25						
		F	23-33						
1425	" 4	eL	0-29						Traces only.
		L	0-36						
		F	1-15 ca						
1426	" 4	eL	7-44						Very small amplitudes.
		L	7-47 to						
		L	8-26						
		F	9-30						
1427	" 10	eL	0-02						
		L	0-08						
		F	0-38						
1428	" 10	e	8-33						
		e(LorS)	8-30						
		L	8-53						
		L	9-00.5						
		F	9-40 ca						
1429	" 11	O	23-06-45					3960	
		P	23-14-00						
		S	23-19-45						
		eL	23-25						Small amplitudes only.
		M	23-27						
		F	0-15 ca						
1430	" 12	eL	10-25						
		L	10-34						
		F	10-50						

Ernest W. Hodgson

Dom. Obs. No. 68
7,500—1-23

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From March 12'23. to March 19'23. No. 13

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1431	Mar.13	i	20-08-38					
		eL	20-19.5					
		L	20-24.5 to 20-45					
		F	21-15 ca					
1432	" 14	P	(20-54-49)					(6580)
		P	(21-04-53)					
		S	(21-13-00)					
		eL	21-21.5					
		L	21-43					
		M_1	21-49	22				
		M_2	21-54.5	21				
		L	22-02	19				
		L	22-08	18				
		L	22-12.5	16				
		F	23-15 ca					
1433	" 15	P	5-40-16					7020
		P	5-50-45					
		S	5-59-15					
		eL	6-05.5					
		M	6-18					
		F	7-35 ca.					
1434	" 16	P	22-12-33					6320
		P	22-22-22					
		S	22-30-15					
		eL	22-39-15					
		L	22-58	32				
		M	23-12	22				
		L	23-16	19				
		L	23-23	17				
		L	23-30 to					
	" 17	L	0-00	15				
		L	0-05	14				
		F	1-05 ca					
1435	" 18	eL	20-45-15					
		L	20-45.8					
		M	20-48					
		F	Micros interfere.					

Very small amplitudes throughout.

Strasbourg wireless gives
b= 22-15-45
Δ= 12500 km.

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OTTAWA

SEISMOLOGIC STATION, DOMINION OBSERVATORY

From March 19'23 *to* March 24'23. *No.* 14

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1436	Mar. 19	e	11-23						
		S?	11-26-32						
		L	11-29						
		M	11-35						
		F	12-27 ca						
1437	" 19	eL	16-57						
		L	17-15						
		L	17-20						
		L	17-28						
		F	17-45 ca.						
1438	" 19	eL	21-56						Small amplitudes.
		L	22-03.5						
		L	22-05						
		F	22-30 ca.						
1439	" 24	e	2-37						Small amplitudes.
		L	2-41						
		F	3-00 ca.						
1440	" 24	e	8-51.4						
		L	8-55.4						
		L	8-57						
		F	9-10 ca						
1441	" 24	e_E	13-00.6						Earthquake does not appear to
		e	13-04-53						have been a single abrupt
		S	13-06						
		eL	13-18						shock. The phases seem to
		L	13-25						
		M_1	13-38.5	30					result from several shocks
		M_2	13-42.5	26					
		L	13-43 to						and do not admit of resolution.
		L	14-00	18					
		L	14-10 to						
		L	15-15	13					
		F	15-30 ca						

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From March 24'23. *to* March 31'23. *No.* 15

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1442	Mar. 26	eL_E	14-57					
		L_E	15-00	40				
		L_E	15-02.5	24				
		L_E	15-10.5	21				
		L_E	15-14	18				
		L_E	15-24.5	22				
		L_E	15-32	20				
		F	15-49 ca					
					Small sinuscidal L ea waves.			
1443	" 28	e	(5-10)					
		e	(5-15)					
		eL?	(5-21)					
		L	(5-26 to 6-20)					
		F	(6-30)					
					Times uncertsin. Time signals faint owing to the intensity of the light spot.			

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Dom. Obs. No. 68

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45° 23' 38''$ N. $\lambda = 75° 42' 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne-Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per hour	20 g. ca.
Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	To	r	V	ϵ	COMP.	l	DETERMINED
I	5.5	--	120	2:1	NS	---	February 7'23
II	7.8	--	120	18:1	EW	---	" "
17	12.0	--	250	20:1	EW	---	" "
23	12.0	--	250	*	EW	---	See note below.
D	37.2	--	--	15:10	EW	---	February 7'23
D	36.1	--	--	13:10	NS	---	" "
W	6.0	.6mm	160	20:1	V	---	" "

From March 1'23 *to* March 1'23. *No.* 11

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1422	Mar.1	0	(8-26-15)					(6240)
		P	(8-36-00)					
		S	8-43-49					
		i	8-45-47					
		i	8-47-38					
		eL	8-53			Small amplitudes only.		
		I	8-56					
		L	9-00 to 10-00					
		F	11-00 ca					

* No.23 was run at various values for the damping ratio. It was kept at 20:1 until March 9'23. It was then set at 15:1 until March 10 17 when it was again changed to 10:1 until the end of the month and longer.

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From March 1 '23. *to* March 12 '23 *No.* 12.

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1423	Mar. 2	e?	17-01-44						
		e(S)	17-09-32						
		i	17-19-49						Halifax record contains
		i	17-26-45						traces of L waves but
		L	17-43						no P or S.
		M	17-57	23					
		L	18-09	21					
		L	18-36	19					
		F	20-05						
1424	" 3	i	22-33-18						
		e	22-42-00						
		eL	22-57						Very small amplitudes.
		L	23-05 to						
		L	23-25						
		F	23-53						
1425	" 4	eL	0-29						Traces only.
		L	0-36						
		F	1-15 ca						
1426	" 4	eL	7-44						Very small amplitudes.
		L	7-47 to						
		L	8-26						
		F	9-30						
1427	" 10	eL	0-02						
		L	0-08						
		F	0-36						
1428	" 10	e	8-33						
		e(LoS)	8-48						
		L	8-55						
		L	9-00.5						
		F	9-40 ca						
1429	" 11	e	23-06-45					3960	
		P	23-14-00						
		S	23-19-45						
		eL	23-25						Small amplitudes only.
		M	23-29						
		F	0-15 ca						
1430	" 12	eL	10-25						
		L	10-34						
		F	10-50						

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From March 12'23. *to* March 19'23. *No.* 13

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1431	Mar.13	i	20-08-38						
		eL	20-19.5						
		L	20-24.5 to 20-45						
		F	21-15 ca						
1432	" 14	O	(20-54-49)					(6580)	
		P	(21-04-53)						
		S	(21-13-00)						
		eL	21-21.5						
		L	21-43						
		M_1	21-49	22	Very small amplitudes throughout.				
		M_2	21-54.5	21					
		L	22-02	19					
		L	22-08	18					
		L	22-12.5	16					
		F	23-15 ca						
1433	" 15	O	5-40-16					7020	
		P	5-50-45						
		S	5-59-15						
		eL	6-05.5						
		M	6-18						
		F	7-35 ca.						
1434	" 16	O	22-12-33					6320	
		P	22-22-22						
		S	22-30-15		Strasbourg wireless gives O= 22-15-45 Δ= 12500 km.				
		eL	22-39-15						
		L	22-58	32					
		M	23-12	22					
		L	23-16	19					
		L	23-23	17					
		L	23-30 to						
	" 17	L	0-00	15					
		L	0-05	14					
		F	1-05 ca						
1435	" 18	eL	20-45-15						
		L	20-45.8						
		M	20-48						
		F	Micros interfere.						

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7,500—1-23

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From March 19'23 *to* March 24'23. *No.* 14

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1436	Mar. 19	e	11-23						
		S?	11-26-32						
		L	11-29						
		M	11-35						
		F	12-27 ca						
1437	" 19	eL	16-57						
		L	17-15						
		L	17-20						
		L	17-28						
		F	17-45 ca.						
1438	" 19	eL	21-56					Small amplitudes.	
		L	22-03.5						
		L	22-05						
		F	22-30 ca.						
1439	" 24	e	2-37					Small amplitudes.	
		L	2-41						
		F	3-00 ca.						
1440	" 24	e	8-51.4						
		L	8-55.4						
		L	8-57						
		F	9-10 ca						
1441	" 24	e_E	13-00.6					Earthquake does not appear to	
		e	13-04-53						
		S	13-06					have been a single abrupt	
		eL	13-18						
		L	13-25					shock. The phases seem to	
		M_1	13-38.5	30					
		M_2	13-42.5	26				result from several shocks	
		L	13-43 to						
		L	14-00	18				and do not admit of resolution.	
		L	14 -10 to						
		L	15-45	13					
		F	15-30 ca						

Dom. Obs. No. 68

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From March 24 '23. *to* March 31 '23. *No.* 15

No.	Date	Phase	Time	Period	AMPLITUDE			DISTANCE
					A_E	A_N	A_Z	
			h m s	s	μ	μ	μ	km.
1442	Mar. 26	eI	14-57					
		E	15-00	40				
		I	15-02.5	24				
		E	15-10.5	21	Small sinuscidal L ea waves.			
		L	15-14	18				
		E	15-24.5	22				
		L	15-32	20				
		E						
		F	15-49 ca					
1443	" 28	e	(5-10)		Times uncertain. Time signals faint owing to the intensity of the light spot.			
		e	(5-15)					
		eL?	(5-21)					
		L	(5-26 to 6-20)					
		F	(6-30)					

Dom. Obs. No. 68

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45° 23' 38''$ N. $\lambda = 75° 42' 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne-Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per hour	20 g. ca.
Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	To	r	V	ϵ	COMP.	l	DETERMINED
I	5.5	---	120	2:1	NS	---	April 4th 1923
II	5.8	---	120	18:1	EW	---	" " "
17	12.0	---	250	20:1	EW	---	" " "
23	12.0	---	250	10:1	EW	---	" " "
D	37.2	---	---	13:10	EW	---	February 7 1923
D	36.1	---	---	13:10	NS	---	" " "
W	6.0	.6mm.	160	20:1	V	---	April 4th 1923

From April 1 1923 *to* April 13 1923 *No.* 16

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1444	Apr. 5	eL	(23-00)		Times uncertain owing to			
		L	(23-06)					
		F	(23-20)		halation trouble on record.			
1445	" 13	e	10-26-26					
		e	10-27-58					
		c	10-33-16		Small amplitudes and irregular			
		i or eL	10-36-08					
		L	11-20		periods.			
		eL	12-00					
		F	12-25					

ERRATA.

No. 1417 should be dated February 24 not February 23 as reported in the February bulletin.

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From April 13, 1923 *to* April 19, 1923 *No.* 17

No.	Date	Phase	Time	Period	AMPLITUDE			DISTANCE
					A_E	A_N	A_Z	
			h m s	s	μ	μ	μ	km.
1446	Apr. 13	0	15-31-12					7380
		P_M	15-42-00					
		S	15-50-48					
		SR_2	15-58-20					
		eI.?	16-02					
		M_1-17	16-09		17	110		
		M_2-17	16-13		22	275		
		M_3-17	16-15		19	195		
		M_4-17	16-17		17	140		
		L	16-20 to		17			
			18-00		10			
		F	18-40					
1447	Apr. 13	eL	21-16.5 to					
			21-26					
		F	21-37					
1448	Apr.14	eL17	9-31.5 to					
			9-44					
		F	9-50ca.					
1449	Apr. 14	eL	15-57					
		L	16-09 to					
			16 08					
		F	Lost in micros.					
1450	Apr. 19	e	3-31-41					
		eL?	3 -51					
		L	4-05			45		
		L	4-12			32		
		L	4-25			22		
		L	4-39.5					
		L	4-50					
		L	5-03					
		F	5-45					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From April 19, 1923 *to* April 29, 1923 *No.* 18

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1451	Apr. 23	O	3-33-48					5580
		P	3-42-53					
		S	3-50-07					
		eL	3-58.5					
		L	4-04	45				
		L	4-10	30				
		M	4-16	17	26			
		L	4-24	14				
		L	4-31	11				
		F	5-25					
1452	" 24	e(S)	22-58-15		Δ probably the same as for			
		eL	23-04					
		M	23-05.5					
		F	23-37					
1453	" 25	O	19-31-46					4300
		P	19-39-26					
		S	19-45-30					
		eL	19-50.5					
		M	19-52.5					
		L	19-55					
		L	20-07.5					
		F	20-50					
1454	" 27	e	10-49					
		eL	11-05.5					
		L	11-33	25				
		F	12-06					
1455	" 29	O	2-31-08					3900
		P	2-38-19					
		S	2-44-00					
		eL?	2-49.5					
		L	2-51.7					
		M	2-54.4	12	12			
		F	3-35 ca					

Irregular periods. Very faintly recorded as to P and S.

No. 1453. Very irregular periods. Bears a striking resemblance to No. 1452

Small amplitudes.

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From April 29, 1923. *to* April 30, 1923. *No.* 19

No.	Date	Phase	Time	Period	AMPLITUDE			DISTANCE
					A_E	A_N	A_Z	
			h m s	s	μ	μ	μ	km.
1456	Apr. 29	e?	9-46.4					
		eL	9-56.5					
		L	10-10	30				
		L	10-19	21	Sinusoidal L waves of			
		L	10-24	18				
		L	10-27	16	small amplitude.			
		F	10-44 ca					
1457	" 29	eL	19-33		Traces on Milne-Shaw only.			
		L	19-35	23				
		F	19-43					
1458	" 30	e?	16-37.5					
		eL	16-43					
		F	17-05					
1459	" 30	eL	20-55					
		L	20-58	23				
		L	21-11.5					
		F	21-20					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45° 23' 38''$ N. $\lambda = 75° 42' 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne-Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per hour	20 g. ca.
Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	To	r	V	ϵ	COMP.	l	DETERMINED
I	5.5		120	2:1	N-S		April 4, 1923
II	5.3		120	18:1	E-W		May 3, 1923
17	12.0		250	20:1	E-W	44.5	May 3, 1923
23	12.0		250	5:1	E-W	42.0	May 3, 1923*
D	37.2			13:10	E-W		Feb. 7, 1923
D	36.1			13:10	N-S		Feb. 7, 1923
W			160		V		May 3, 1923

From May 1, 1923 *to* May 2, 1923 *No.* 20

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1460	May 1	e	10-55					
		e	11-01					
		e(S)	11-10-38					
		eL	11-17.5					
		L	11-34-44					
		F	12-05					
1461	May 2	e	16-34-52					
		e	16-36-15					
		eL	16-41.5		Irregular small periods.			
		L	16-42 to					
		L	17-05					
		F	17-30 ca.					

ERRATA. Sheets No. 28 and 29 for Dec. 1922 were inadvertently dated 1923.

* Damping ratio on No. 23 was made 5:1 on May 3. Previously it had been 10:1. This ratio is being varied for experimental purposes.

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From May 2, 1923 to May 8, 1923 No. 21

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1462	May 4	O	16-26-34					5520
		P	16-33-35					
		PR_{1M}	16-37-34					
		PR_{2M}	(16-38-07)					
		S	16-42-45					
		i	16-45-08					
		SR_1	16-46-37					
		SR_2	(16-47-30)					
		eL	16-49	49	360			
		M_{1M}	16-53-08	25	412			
		M_{2M}	16-56.5	15	307			
		M_{3M}	17-04.7	13	84			
		M_{4M}	17-07	13	120			
		M_{5M}	17-10.5	13	90			
		M_{6M}	17-13.3	13	90			
		M_{7M}	17-22.3	13	85			
		L	17-25 to					
		L	20-05					
		F	20-30 ca.					
	Harvard gives O=16-26-31 Δ=6040Km. Strasbourg gives O=16-26-35 Δ=8500Km. These values for Δ give circles which intersect at φ=54°N λ=165°W near Kodiak, Alaska.							
1463	May 4	O	(22-26-50)					(8100)
		(P)	22-28-20					
		(S)	22-47-41					
		(S_2)	22-56					
		eL	23-01					
		L	23-10					
		L	0-40					
		F	1-15					
1464	May 5	eL	9-57.5					
		F	10-04					
1465	May 5	e	15-17-12					
		eL	15-23					
		L	15-27					
		F	16-00					
1466	May 8	e	19-23-00					
		e(S?)	19-27-22					
		eL?	19-32		Very faint traces only.			
		L	19-34					
		L	19-46 to					
		L	20-07					
		F	20-18					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From May 8, 1923 *to* May 15, 1923 *No.* 22

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1467	May 10	e	4-01-32					
		e	4-10-00					
		e	4-11-41					
		e	4-13-32					
		e	4-19-26					
		eL	4-47 to		Very small amplitudes.			
		L	5-04	19				
		F	6-20 ca.					
1468	May 11	e?	(8-42-52)					
		e	8-44-00					
		e	8-49-37					
		e	8-54					
		L	9-20 to	35				
			9-38	19				
		F	10 ca.					
1469	May 12	e	1-41-30					
		e	1-43-16					
		e	1-55					
		e	2-08					
		eL	2-22					
		L	2-29	44				
		L	2-40 to					
			2-59	22				
		L	3-02 to					
			3-27	21				
		F	4-00 ca.					
1470	May 15	O	21-43-00					(7600)
		(P)	21-54-00					
		(S)	22-03-00					
		(eL)	22-09.5					
		L	22-20					
		L	22-23 to					
			22-50	16				
		L	22-51 to					
			23-05	16				
		F	23-35					

Dom. Obs. No. 68

7,500—1-23

OTTAWA

SEISMOLOGIC STATION, DOMINION OBSERVATORY

From May 15, 1923 *to* May 26, 1923 *No.* 23

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1471	May 16	e	(18-27-28)					
		e	18-34-00					
		e	18-39.6					
		eL	19-04.5		Small sinusoidal L waves.			
		L	19-11	19				
		L	19-19 to					
		L	19-43	16				
		F	20-00					
1472	May 23	O	22-37-21					7580
		P_M	22-48-20					
		S_M	22-57-19					
		eL	23-05-22					
		M_1	23-14					
		M_2	23-20.5	18				
		M_3	23-23.2	18				
		L	23-26 to					
			0-06	15				
		L	0-06 to					
			2-06					
		F	2-45 ca.					
1473	May 25	e	22-45-45		On M-S No. 17 only.			
		e?	22-52-15					
		eL	22-58					
		L	23-05	34				
		L	23-15	17				
		F	0-00 ca.					
1474	May 26	O	3-29-41					4480
		P	3-37-34					
		S	3-43-48					
		eL	3-49.5					
		L	4-00					
		L	4-07	21				
		F	4-55					
1475	May 26	e	9-13.5					
		e	9-19					
		eL	9-35					
		L	9-41	30				
		L	9-54	20				
		F	10-45 ca.					

Dom. Obs. No. 68
7,500—1-23

OTTAWA

SEISMOLOGIC STATION, DOMINION OBSERVATORY

From May 26, 1923 *to* May 31, 1923 *No.* 24

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1476	May 28	e(P)17	1-4[illegible]-45					
		eL	2-05-40					
		L	2-37	30				
		L	2-42	25				
		L	2-50 to					
			3-48	15				
		F	4-00 ca.					
1477	May 30	e(P)17	8-48-23					
		eL	8-57					
		L	9-01					
		L	9-16					
		F	10-00					
1478	May 30	eL17	16-02					
		L	16-11 to					
			16 18					
		F	16-25					
1479	May 30	i	18-14-30					
		L	18-25					
		L	18-27	15				
		L	18-36 to					
			19-01	15				
		F	Lost in changing sheets.					
1480	May 31	e	6-19-52					
		e	6-26					
		eL	6-35					
		L	6-46 to					
			6-54	23				
		L	6-54 to					
			7-16	16				
		F	7-35					
1481	May 31	O	22-05-48					3380
		P	22-12-19					
		S	22-17-28					
		eL	22-20					
		L	22-21.5 to					
			22-25	21				
		L	22-29 to					
			22-54	16				
		F	23-2[illegible]					

Dom. Obs. No. 68
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Extract in Stockton

OTTAWA

SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45° 23' 38''$ N. $\lambda = 75° 42' 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne-Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per hour	20 g. ca.
Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	To	r	V	ϵ	COMP.	l	DETERMINED
I	5.5		120	2:1	N.S.		April 4, 1923
II	5.3		120	18:1	E.W.		May 30, 1923
17	12.0		250	20:1	E. .		May 30, 1923
23	12.0		250	20:1	E.W.		May 30, 1923
D	37.2			13:10	E.W.		Feb. 7, 1923
D	36.1			13:10	N.S.		Feb. 7, 1923
W	6.0	.6mm	160	20:1	V		May 30, 1923

From June 1, 1923 *to* June 1, 1923 *No.* 25

No.	Date	Phase	Time	Period	AMPLITUDE			DISTANCE
					A_E	A_N	A_Z	
			h m s	s	μ	μ	μ	km.
1482	June 1	O	17-25-31					9320
		P	17-38-00					
		PR1	17-41-46					
		S	17-48-26					
		i	17-48-49					
		i	17-50-00					
		SR1	17-54.5					
		L	18-09					
		L	18-14.5	23				
		M	18-19.5					
		M	18-24.5					
		M	18-28.5					
		L	18-30 to					
		L	20-00					
		F	Lost in next quake.					

Dom. Obs. No. 67
3,500—1-23

Ernest A Hodgson

OTTAWA

SEISMOLOGIC STATION, DOMINION OBSERVATORY

From June 1, 1923 *to* June 3, 1923 *No.* 26

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1483	June 1	P	Lost in preceding quake.					
		S	20-39-23					
		L	20-46					
		L	20-55					
		L	21-02	23				
		M	21-13.5					
		L	21-20 to					
		L	22-40					
		F	23-26					
1484	June 2	e	1-20.5					
		e	1-28					
		eL	1-36					
		L	2-04					
		F	3-30 ca.					
1485	June 2	eL	5-53.5					
		F	6-03					
1486	June 2	eL_M	13-39					
		L_M	13-43.5					
		F	14-26 ca.					
1487	June 2	e?	14-43.7					
		e	14-54					
		L	15-14.5					
		F	16-00 ca.					
1488	June 2	eL	23-58					
		F	0-10 ca.					
1489	June 3	eL	12-23					
		L	12-30.5					
		L	12-39 to					
		L	12-50					
		F	13-00 ca.					

Connect to Strongsons

Dom. Obs. No. 68
7,500—1-23

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From June 3, 1923 *to* June 10, 1923 *No.* 27

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1490	June 4	e?	(21-20)		Small traces only.				
		eL	(21-40)						
		L	21-51 to						
		L	21-56						
		F	22-50 ca.						
1491	June 5	e	(6-26.0)						
		e	6-31.5						
		eL?	6-35						
		L	6-39 to						
		L	6-55						
		F	7-00 ca.						
1492	June 6	e	18-00-34		May be two quakes. Distant.				
		e	18-07		Phases not marked.				
		eL	18-16		Strasbourg gives				
		L	18-29 to		Δ=8880km. and O=17-42-01.				
		L	19-12						
		L	19-40						
		L	20-07						
		L	20-29						
		F	20-55 ca.						
1493	June 6	e	23-10-23		Nearer than 1492 on same sheet.				
		eL	23-14						
		M	23-15.5						
		F	0-00 ca.						
1494	June 8	eL	8-16		Faint traces only.				
		L	8-18 to						
		L	8-27						
		F	8-50 ca.						
1495	June 10	eL	1-46		Barely discernible.				
		F	2-00 ca.						
1496	June 10	e	19-03.5						
		eL	19-10.5						
		L?	19-36						
		F	19-49						

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Ernest A. Hodgson

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From June 10, 1923 *to* June 18, 1923 *No.* 28

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1497	June 10	e?	20-38		Small traces only.			
		e?	20-51.3					
		eL	20-57					
		L	21-00 to					
		L	21-23					
		F	21-40					
1498	June 11	e	11-30.4					
		eL	11-37 to					
		L	11-47					
		F	12-00 ca.					
1499	June 12	eL	6-42					
		L	6-46 to					
		L	6-53					
		F	7-10					
1500	June 14	e	6-16-20					
		eL	6-19-45					
		F	6-49					
1501	June 18	O	8-26-16					4680
		e?	8-31-00					
		P	8-34-23					
		S	8-40-48		Strasbourg gives			
		i	8-41-41		P=8-31-40 and Δ=7700km.			
		SR_2	8-44-15					
		eL	8-50		Readings difficult to			
		L	9-06		accurately interpret.			
		L	9-12 to					
		L	9-33	20				
		L	9-34.5 to					
		L	10-50	13				
		F	11-35					
1502	June 18	e?	17-16					
		e?	17-20.8					
		eL	17-28.6					
		F	17-38					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From June 18, 1923 *to* June 22, 1923 *No.* 29

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1503	June 18	e	13-19.5					
		eL?	18 [illegible]					
		L	18 46 to					
		L	18 51					
		F	19-12 ca.					
1504	June 19	O	22-43-32					4900
		P	22-51-53					
		PR_1	22-53-38					
		S	22-58-30					
		i	23-01-02					
		SR_1	23-02-12					
		eL	23-06					
		M_1	23-07.5					
		M_2	23-10.5					
		L	23-14 to					
		L	0-10					
		F	1-10 ca.					
		HALIFAX R COLD						
		O	22-41-42					6450
		P	22-51-39					
		S	22-59-39					
		L	23-10-40					
		M	23-14.5					
		F	Lost					
1505	June 20	eL	6-28					
		F	6-44					
1506	June 22	e	4-02					
		eL	4-05.4					
		L	4-08					
		F	4-38					
1507	June 22	O	(6-54-19)					(6100)
		P	(7-03-56)					
		S	7-11-37					
		SR_2?	7-17-06					
		eL	7-19-30					
		L	7-31					
		M	7-41.5					
		M	7-44.5					
		M	7-50					
		M	7-53.5					
		M	7-55.5					
		M	8-02					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From June 22, 1923 *to* June 30, 1923 *No.* 30

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1507 cont'd	June 22	L	8-07 to					
		L	9-45					
		F	10-30					
1508	June 22	e	(21-12-38)					
		e	(21-16-23)					
		eL	21-24					
		L	21-45	30				
		L	21-48	24				
		L	21-51 to					
		L	21-57	20				
		L	21-58 to					
		L	22-03	18				
		L	22-03 to					
		L	22-21	17				
		L	23-02					
		F	23-14					
1509	June 24	eL	13-54					Very heavy micros.
		F	Lost changing sheets.					
1510	June 24	eL	20-32					
		L	20-35					
		F	Micros					
1511	June25	eL	(13-15)					
		F	Lost in micros.					
1512	June 25	eL	22-14 to					
		L	22-23					
		F	Lost in micros.					
1513	June26	eL	2-01					
		F	2-10 ca.					
1514	June 28	e?	19-04.3					
		eL	19-12					
		F	19-16					
1515	June 30	eL	0-29.5					
		L	0-33					
		F	0-50 ca.					

Dom. Obs. No. 68
7,500—1-23

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45° 23' 38''$ N. $\lambda = 75° 42' 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne-Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per hour	20 g. ca.
Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	To	r	v	ϵ	COMP.	l	DETERMINED
I	5.5	---	120	2:1	NS	---	Apr. 4, '23
II	5.3	---	120	18:1	EW	---	May 30. '23
17	12.0	---	250	20:1	E..	---	May 30, '23
23	12.0	---	250	20:1	EW	---	Not in operation
D	37.2	---	---	13:10	EW	---	Feb. 7 (after
D	36.1	---	---	13:10	NS	---	Feb. 7 (July 20)
W	5.9	.6mm	160	20:1	V	---	May 30. '23

From July 1, '23. *to* July 4, '23. *No.* 31

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1516	July 1	eL	8-49					
		L	8-55 to					
		L	9-11	18				
		F	9-33 ca					
1517	" 2	e?	2-21.5					(7940)
		e?	2-39-04		The L waves are fairly			
		e?	2-51-00		sinusoidal, never great			
		e	(2-45-49)		in amplitude, and taper			
		eP?	2-57-07		off rapidly in amplitude			
		eS?	3-06.4	9	after about 4-15			
		eL?	3-21-30	43				
		L	3-30	23				
		L	3-45	13				
		F	4-50					
1518	" 2	e	16-59 to	14				
		F	17-10.					
1519	" 3	e	18-02-35 to		May not be seismic. On			
		F	18-11-15		Milne-Shaw only			
1520	" 4	e?	5-42-30		Irregular faint trace of			
		e	5-44-30 to		seismic origin.			
		F	6-13					

Ernest A. Hodgson

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From July 4, 1923. *to* July 10, 1923. *No.* 32

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1521	July 4	0	(8-12-36)					(6180)	
		eP?	(8-22-17)						
		iS?	8-30-03						
		eL	8-39.5						
		L	8-45	15					
		L	9-20	10					
		F	9-55						
1522	" 4	eL	23-55 to						Sinusoidal L waves of small amplitude.
	5	L	0-05	18					
		F	0-20						
1523	" 5	e	16-13 to						Faint traces on Milne-Shaw only. Irregular.
		L	16-38						
1524	" 6	e	6-06 to						Sinusoidal L waves. Very small. M-S only.
		L	6-15	17					
1525	" 7	e	6-24-45						
		e	6-29-40						
		L_{17}	6-40 to	14					
		L_{17}	6-45						
		F	7-05						
1526	" 7	eL	13-40 to						Sinusoidal L waves of small amplitude. Beginning lost in changing the sheets.
		L	13-46	20					
		L	13-53 to						
		L	14-00	14					
		F	14-15						
1527	" 10	e?	0-41						
		iS?	0-50-32						
		eL?	1-00.5						
		L	1-25	13					
		L	1-45	12					
		L	2-08	12					
		L	2-31	12					
		L	3-06	12					
		F	3-30						
1528	" 10	e?17	5-48						Very small amplitudes. On M-S No. 17 only.
		eL17	6-00 to						
		L17	6-10	15					
		F	6-25						

Duncan C. Hodgson

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From July 10, '23. *to* July 14, '23. *No.* 33.

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1529	July 12	0	(3-19-40)					(10340)	
		eP_{II}	(3-32-58)						
		i_{17}	3-34-44						The emergence of P is very doubtful at the time shown, though it is evident a few seconds later. The agreement between the other phases, including LR_1 is extraordinarily good. The distance may prove a little greater than as given above.
		iS_{17}	3-44-17						
		SR_1	3-50-37						
		eL_{17}	4-06.5						
		L	4-10 to						
		L	4-15 /	23					
		L	4-20 to						
		L	4-35	17					
		L	4-50 to						
		L	5-10	15					
		L	5-15	15					
		LR_1	5-27	21					
		L	5-33 to						
		L	5-42	16					
		F	6-10 ca.						
1530	" 12	e_{17}	9-42-07						
		$eS_{?17}$	9-48-40						
		eL_{17}	10-06	32					
		L_{17}	10-13	21					
		L_{17}	10-17	16					
		L_{17}	10-29	14					
		L_{17}	10-40	14					
		F_{17}	11-05						
1531	" 13	0	11-14-45					9520	
		P	11-27-24						
		PR_1	11-31-25						The maximum was recorded with about the same period and amplitude and at about the same time on all three types of seismograph, of quite different constants. Agreement very good for Δ
		S_1	11-38-00						
		eL	11-58-00						
		L	12-06	29					
		M	12-16	17	60				
		L	12-30	17					
		L	13-00	15					
		F	Lost in changing the sheets at about 13-30						
1532	" 13	e_{17}	16-47-40						
		eL_{17}	16-57 to						
		L_{17}	17-09	16					
		F	17-12						

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Dom. Obs. No. 68
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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From July 14, '23. *to* July 20, '23. *No.* 34.

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1533	July14	e	0-20-40						
		e	0-30-40						
		eL	0-42	32					
		L	0-51	25					
		L	0-59	18					
		L	1-13	16					
		L	1-26	16					
		F	1-42	12					
			2-00 ca.						
1534	" 16	e	13-58-36						
		i	14-04-15						
		i	14-05-36						L waves distinctly sinusoidal but of very small amplitude. Preliminary phase indications on M-S only.
		i	14-08-29						
		i	14-10-20						
		eS?	14-14-58						
		eL?	14-36						
		L	14-38 to	23					
		L	15-00	15					
		L	15-10	15					
		L	15-56	17					
		F	16-30						
1535	" 17	e?	1-10-15						
		e	1-16-43						Irregular L waves of small amplitude.
		e	1-20-00						
		eL?	1-23.6 to						
		L	1-33						
		F	1-38						
1536	" 18	O	1-05-55					3600	
		P	1-12-43						
		S	1-18-07						Small record but very good agreement.
		eL	1-22 to	29					
		L	1-27	15					
		F	2-00 ca						
1537	" 18	O	6-02-13					3580	
		P	6-09-00						Undoubtedly from the same epicentre as No. 1536. The very characteristics of each phase are the same. A remarkable pair of records in the experience of this station.
		S	6-14-22						
		eL	6-18.5 to	29					
		L	6-28	15					
		F	7-00						
1538	" 20	i	5-06-00						Very small traces of L waves on M-S only.
		eL	5-20 to						
		F	5-45						

Ernest A Hodgson

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OTTAWA

SEISMOLOGIC STATION, DOMINION OBSERVATORY

From July 20, '23. to July 31, '23. No. 35.

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s					
1539	July 20	e	15-14-00		On "Milne-Shaw" only.				km.
		i	15-23-45		Wireless from Strasbourg				
		eL	15-31		gives P= 15-12-00				
		L	15-36	28		Δ= 6000			
		L	15-47	16					
		L	16-05	14	Milne-Shaw No. 23 not				
		F	16-52 ca.		recording after July 20.				
1540	" 21	eL	14-13.5						
		L	14-21 ca						
		L	14-30	13					
		L	14-40						
		F	14-45						
1541	" 22	e	14-18-07					7320	
		P	14-28-52						
		S	14-37-40		Long continued appearance				
		SR	14-45 5		of L waves, quite sinusoidal,				
		eL	14-51		but of small amplitude.				
		L	15-05	13					
		L	15-35	12					
		F	17-00 ca						
1542	" 23	e?	7-38-10		Irregular L waves of small				
		e	7-48-00	to	amplitude and short period.				
			7-55						
		F	8-10						
1543	" 26	eL	(8-10) to	23	Sinusoidal L waves only.				
		L	(8-40)	15	Time marks uncertain.				
		F	(9-00)						
1544	" 26	eL	(10-50) to	30	Sinusoidal L waves only.				
		L	(11-15)	15	Time marks uncertain.				
		F	(11-50)						
1545	" 30	eL	23-53 to	20	M-S only.				
	31	L	0-05	10					
		F	0-10						
1546	" 31	i	5-53-59						
		i	5-54-48						
		e	5-54						
		L	6-07	9					
		F	6-20						
1547	" 31	e	15-23-00						
		e	15-27-30						
		e	15-32-50						
		e	15-42-10						
		eL	15-42 to	17					
		L	16-18	10					
		F	17-15						

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45° 23' 38''$ N. $\lambda = 75° 42' 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne-Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per hour	20 g. ea.
Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	To	r	V	ϵ	COMP.	l	DETERMINED
I	5.5	---	120	2:1	NS	---	April 4, 1923.
II	5.4	---	120	15:1	E.	---	August 21, 1923.
17	12.0	---	250	20:1	E	---	August 21, 1923.
23	Was being used experimentally at Shirley Bay, Ont.						
D	37.2	---	---	13:10	EW	---	February 7, 1923.
D	36.1	---	---	13:10	NS	---	February 7, 1923.
W	5.5	---	160	4:1	Vert.	---	August 22, 1923.

From August 1, 1923. *to* August 8, 1923. *No.* 36

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1548	Aug. 1	eL	5-24					
		L	5-34	20	No. 17 only			
		L	5-55	16				
		L	6-30	16				
		F	7-00					
1549	" 1	i	8-37-20		Very slight traces which			
		i	8-37-47		are probably not seismic			
		eL	8-53	14	appear at 8-26			
		F	9-15					
1550	" 2	e	9-45-24					
		eL	9-48½	10				
		L	9-52	6				
		F	9-55					
1551	" 4	eL	17-13 to	20	Small sinusoidal L waves			
		L	17-55	10	on No. 17 only.			
		F	18-00					
1552	" 8	eL	9-05		No. 17 only			
		F	9-23					

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3,500—1-23

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From August 4, 1923 to August 12, 1923. No. 37.

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1553	Aug. 5	e	11-04 to		Very short periods, small			
			11-15	5	amplitudes,- L waves.(?)			
		F	11-18					
1554	" 8	0	(12-01-48)					(3500)
		iP?	12-08-28					
		i	12-09-51					
		eS?	12-13-45					
		eL	12-16.5					
		L	12-24	14				
		F	Lost in succeeding quake.					
1555	" 8	eP?V	12-27-39		There is no doubt that there			
		e	12-35.8		are two distinct quakes here			
		eL?17	12-42.7		in 1554 and 1555. The P wave			
		L17	12-45.6	30	of 1555 is lost in the coda			
		L17	12-51	16	of 1554 in all records except			
		F17	13-50 ca		the vertical.			
1556	" 10	L	3-08 to		No 17 only.			
		F	3-18					
1557	" 10	eL	16-45	25	Sinusoidal L waves on 17			
		L	16-55	30	only. Micros heavy.			
		L	17-05	25				
		F	17-20					
1558	" 10	eL	23-08		Sinusoidal L waves. No 17.			
		L	23-15 to	27	Heavy micros.			
		L	23-45	15				
	" 11	F	0-10					
1559	" 11	e	1-27.7		Sinusoidal L waves. No 17.			
		i	1-38					
		eL?	1-51.5	40	Heavy micros.			
		L	1-59	26				
		L	2-05	23				
		L	2-20	16				
		L	2-38	13				
		F	3-15					
1560	" 12	e?	6-55			No. 17 only		
		e	7-04 to					
		e	7-12					
		eL	7-13 to					
		L	7-28	14				
		F	7-35					

Ernest A Hodgson

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7,500—1-23

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From August 12'23. *to* August 23'23. *No.* 38

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1561	Aug. 12	e?	10-24-46						
		e	10-25.2						
		eL?	10-54						
		L	11-07.5 to	28					
		L	11-3?	12					
		F	12-00 ca						
1562	" 12	eL	17-42 to	14					
		F	18-00						
1563	" 16	e	20-44-40						Sinusoidal L waves. Record on No. 17 only.
		e?	20-53.8						
		eL	21-03	22					
		L	21-12	20					Small amplitude
		L	21-20						
		F	22- ca						
1564	" 17	i	1-25-31						No. 17 only. Sinusoidal
		e	1-34						
		eL	1-45.?	18					L waves of small amp.
		F	2-15						
1565	" 17	eL	4-27 to	20					No. 17 only.
		F	5 hr. ca.						
1566	" 17	L	12-14 to	20					No. 17 only.
		L	13-10						
		F	Lost in changing sheets.						
1567	" 19	e	12-56.?						No. 17 only.
		i	13-01-28						
		eL?	13-18.?						
		L	13-25	24	6				
		L	13-35	18					
		L	13-46	16					
		F	14-15						
1568	" 20	L	19-20 to	20	1				
		F	20-10						
1569	" 23	0	(5-21-31)					(5060)	
		eP	5-30-03						Only traces on Bosch instruments.
		eS	(5-36.8)						
		eL	5-42.?	18	6				
		L	5-51	14					
		F	7 hr. ca.						

Ernest E. Hodgson

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From August 23'23. *to* August 31'23. *No.* 39.

No.	Date	Phase	Time	Period	AMPLITUDE			DISTANCE	
					A_E	A_N	A_Z		
			h m s	s	μ	μ	μ	km.	
1570	Aug. 26.	L ,F	(14-30) (15-15)	22	15				Small sinusoidal waves L easily read but time marks uncertain.
1571	" 28	0 iP iS eL M L	22-15-17 23-21-55 23-22-10 22-31 22-31 22-49	(8) 14	(307) 58			3470	Period at M may have been greater than 8 seconds as it was difficult to determine.
	" 29	L F	0-18 0-59 2- hr ca.	11 12	8 1				
1572	" 30	L F	(15-00) (15-45)	18	1				Time marks uncertain. No. 1/ only record.

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45° 23' 38''$ N. $\lambda = 75° 42' 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per min.	20 g. ca.
Spindler Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	T_o	r	v	ϵ	COMP.		DETERMINED
I	5.5	----	120	2:1	NS	----	April 4, '23.
II	5.4	----	120	15:1	EW	----	Aug. 21. '23.
17	12.0	----	250	20:1	EW	----	Aug. 21, '23.
23	12.0	----	250	20:1	EW	----	To Sept 5 only.
D	37.2	----	---	13:10	EW	----	Feb. 7. '23.
D	36.1	----	---	13-10	NS	----	Feb. 7. '23.
W	5.5	----	---	4:1	Vert	----	Aug. 22. '23.

From September 1, '23 *to* September 1. '23. *No.* 40

No	DATE	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.

Note: Milne-Shaw No. 23 was used for experimental purposes at a station about eight miles west of the Observatory--at Shirley Bay, Ontario. The station was installed July 21 and was discontinued after September 5. The instrument was not again put into service, as a similar test station was to be put in at Kemptville, Ont--about twenty-eight miles south of the Observatory. That station was not ready to be occupied until Octo ber 16 when the seismograph was again made use of. The records began again October 21.

Errata. In Bulletin No. 37 the heading should read "Aug 8. '23 to Aug. 12. '23" instead of being as written "August 4. '23 to Aug. 8. '23 And quake No. 1553 should be dated Aug 8 instead of Aug. 5.

Ernest A Hoody

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From September 1'23. *to* September 2.'23. *No.* 41

No.	Date	Phase	Time	Period	AMPLITUDE			DISTANCE	
					A_E	A_N	A_Z		
			h m s	s	μ	μ	μ	km.	
1573	Sep. 1	O	2-58-59					9760	
		eP	3-11-49						
		iS	3-22-36						
		eL	3-37-	(60)					
		M	3-53.5	20	381				
		L	4-03	17	171				
		L	4-30	16	71				
		L	4-54	14-	37				
		L	5-16	14	16				
		L	5-48	14	9				
		L	6-05	13					
		L	6-40	13					
		L	7-05						
		eL	8-20						
		L	8-25	28	15				
		L	8-34	19	9				
		L	8-50	13					
		F	9-50						
		SASKATOON RECORD							
		O	2-58-35					8520	
		P	3-10-25						
		S	3-20-09		Good record on both horizontal components.				
		eL	3-31.5 ca						
		HALIFAX RECORD							
		O	2-58-55					10050	
		P	3-12-00						
		PR_1	3-15-50						
		S	3-23-00						
		SR_1?	3-29-18						
		eL	3-42-30						
1574	" 2	O	2-47-11					9560	
		P	2-59-52						
		PR_1	3-03-49						
		S	3-10-30						
		i	3-12-17						
		SR_1	3-17-30						
		eL	3-32						
		M	3-48	19	247				
		F	7-00						

Ernest A. Hodgson

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From September 2, 123. *to* September 9, 123. *No.* 42

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1575	Sep. 2	O	(9-24.1)					(9900)	
		P	(9-37.0)						
		PR_1	(9-40.7)						
		S	(9-47.9)		Time marks failed on all seismographs				
		SR_1	(9-54.2)						
		SR_2	(9-58.3)						
		eL	(10-04)						
		M	(10-22)						
		F	(12-30)						
1576	" 2	e	13-51		Milne-Shaw only.				
		eL	13-57						
		L	14-02 to						
		L	14-07						
		F	14-30 ca						
1577	" 2	e	15-06.7						
		L	15-10						
		F	15-21 ca						
1578	" 2	O	(22-38.6)					6340	
		P	(22-48.5)						
		S	(22-56.4)						
		SR_1?	(23-01.7)		Time marks uncertain.				
		eL	(23-05)						
		M	(23-09)		irreg.				
		F	1-10 ca						
1579	" 9	O	24-18-18						
		P	4-29-52					4220	
		S	4-31-52		Very faintly defined.				
		eL	4-36-30						
		F	5-05						
1580	" 9	eL	18-03.7		Faint traces on M-S only.				
		L	18-08						
		F	18-15						
1581	" 9	O	(22-13-17)					(5960)	
		P	(22-22-45)						
		S	22-30-19						
		eL	22-38-08						
		M	23-00	34					
		L	23-04	(26)					
		L	23-18	(16)					
		F	1-20						

Ernest A. Hodgson

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12,000-7-22

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From September 9, '23 *to* September 17, '23. *No.* 43

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1582	Sep. 10	e?	9-51.5						
		eL	9-54						
		L	9-59						
		F	10-27 ca						
1583	" 10	e?	12-52.5						
		eL	12-55						
		F	13-05						
1584	" 11	e	9-15-52						
		i(S?)	9-20-08						
		eL	9-24						
		L	9-27						
		F	9-55 ca						
1585	" 12	e?	(6-14)						Time marks uncertain
		i	(6-20.5)						
		e	(6-23)						Slight traces. Only on M-S.
		L	6-55	15					
		F	7-25						
1586	" 14	e	Lost in changing sheets.						
		eL	13-48 to	15					
		F	14-10						
1587	" 16	e?	16-55-17						
		i	16-55-59						
		e	17-02-40						
		e	17-07-27						Sinusoidal L waves:
		e	17-13-40						
		eL	17-36.7						
		L	17-42	19	8				M-S record only
		L	18-01	15					
		L	18-44	18					
		F	19-25						
1588	" 17	e?	4-03-10						
		e	4-11-24						
		eL?	4-24						
		L	4-32						Faint traces only. M-S
		F	4-50						
1589	" 17	i	7-32-45						
		eL	7-45						
		M	7-52	28	12				Sinusoidal L waves.
		L	8-01	15	8				
		L	8-20	12					
		F	9 hr. ca.						

Ernest A. Hodgson

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From September 17, '23. *to* September 23, '23 *No.* 44

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1590	Sep. 18	L	4-38 to		Faint sinusoidal L waves on				
		F	4-40		Milne-Shaw only.				
1591	" 19	e	8-39 to		Irregular faint traces on				
		F	8-52		Milne-Shaw only.				
1592	" 19	e	19-47 to		Faint traces only.				
		F	19-58						
1593	" 20	e	9-33 to		Faint irregular traces only.				
		F	9-49						
1594	" 20	eL	(16-00)		Faint sinusoidal L waves.				
		F	(16-02)		M-S only. Time uncertain.				
1595	" 21	e?	20-24-15						
		eL	20-49 to						
		L	20-54	16	1	No. 17 only			
		L	21-00 to						
		L	21-06	14					
		F	21-15		Faint sinusoidal L waves.				
1596	" 22	e	(12-47)						
		i	12-50.5						
		F	13-10						
1597	" 22	eL	15-50 to	23					
		L	16-25	17	Small amplitude--less than 1 μ				
		F	16-35						
1598	" 22	P?	21-04-20						
		e	21-11.4						
		i	21-15-28						
		eL?	21-26						
		L	21-29	50	70				
		L	21-45	17	21				
		L	22-04	14	3				
		L	23-05	18	Very small trace at 23-05				
		F	0-00 ca						
1599	" 23	eL	4-04 to	9	Faint regular traces of small amplitude and short period.				
		F	4-30						
1600	" 23	i	17-44-08						
		e	17-47.8						
		eL?	17-52.7						
		M	17-57.5	11	6				
		L	18-10	10					
		F	18-35						

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From September 23, '23 **to** September 30, '23 **No.** 45

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1601	Sep. 23	e	21-31.5					
		eL	21-35.6		No. 17 only			
		F	21-52					
1602	" 24	eL	16-11		Faint sinusoidal trace			
		F	16-13					
1603	" 26	e?	(2-43)					
		i	(2-47.7)		Time marks uncertain throughout.			
		eL	(2-54.3)					
		L	3-10	13	No definite phase markings.			
		F	3-50					
1604	" 26	e	8-48.2					
		eL?	9-05					
		L	9-11					
		M	9-19	20	No definite phases shown.			
		L	9-26	14				
		L	9-43	14				
		L	10-03	14				
		F	10-40 ca					
1605	" 27	e	(7-36.8)		On M-S only. Faint traces. Sinusoidal L eaves.			
		eL?	(7-41.6)					
		L	8-05	16				
		L	8-25	16				
		F	9 hr. ca.					
1606	" 28	e	21-15-10		Except for about five minutes at the maximum, the record is a faint trace of irreg. wavelets			
		eL	21-18-50					
		M	21.23	irreg.				
		F	22-05					
1607	" 29	eL	7-46 to		Very faint sinusoidal trace on No. 17 only.			
		F	7-58					
1608	" 30	O	1-20-56					3040
		P	1-26-56					
		S	1-31-42					
		eL?	1-34 ca.					
		M	1-40	12	309			
		L	1-50	10				
		L	2-17	10				
		L	2-44	10				
		L	3-17	11				
		L	4-45	18				
		L	5-12	10				
		L	5-30 ca					

17

Dom. Obs. No. 68
12,000-7-23

OTTAWA

SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45° 23' 38''$ N. $\lambda = 75° 42' 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne-Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per min.	20 g. ca.
Spindler Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	T_o	r	v	ϵ	COMP.		DETERMINED
I	5.5	----	120	2:1	NS	----	April 4, '23
II	5.4	----	120	15:1	EW	----	Aug. 21, '23
17	12.0	----	250	20:1	EW	----	Aug. 21, '23
23	12.0	----	250	20:1	EW	----	After Oct. 21
D	37.2	----	---	13:10	EW	----	Feb. 7, '23
D	36.1	----	---	13:10	NS	----	Feb. 7, '23
W	5.5	----	160	4:1	Vert	----	Aug. 22, '23

From October 1, 1923, *to* October 11, 1923. *No.* 46

No.	DATE	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1609	Oct. 1	e?	8-55					
		eL	9-04	30				
		L	9-13	19				
		L	9-19	16				
		F	9-48					
1610	" 1	O	22-40-21					10040
		P	22-53-25					
		S	23-04-25		Well marked phases.			
		eL	23-24	31	5			
		L	23-33	16		Very small amplitudes.		
		L	23-43	15				
		F	0-10					
1611	" 3	eL	16-35					
		L	16-42	18				
		F	16-55					
1612	" 4	i	17-50-40		Irregular traces preceded by a sharp impulse.			
		L	18-03					
		F	18-25					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From October 4, '23 *to* October 13, '23. *No.* 47

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1613	Oct. 7	O	(3-26-06)					(12140)
		eP	3-51-09					
		S	(4-03-35)					
		e	4-08.5					
		e_I	4-13.8		Sinusoidal L waves.			
		eL_I	4-31					
		M	4-43	19	70			
		L	4-50	19	30			
		L	5-13	16				
		L	5-35	16				
		L	6-02	15				
		L	6-35	13				
		F	7-10					
1614	" 8	O	3-52-28					1570
		eP	3-55-49					
		eS	3-58-33					
		eL	3-59.5					
		M	4-03	21	7	Very faint L waves after 4-06		
		L	4-06	13				
		F	4-50					
1615	" 10	O	7-11-08					4460
		iP	7-18-59					
		iPR_1	7-20-30					
		iS	7-25-12					
		SR_1	(7-28.4)					
		SR_2	(7-29.2)					
		eL_{II}	7-31.5					
		M_{17}	7-33	17	45			
		L_{17}	7-42	9	10			
		L	7-55	irreg	small			
		F	9 hr. ca.					
1616	" 10	e	23-06 to		Faint traces of L waves on M-S only.			
		F	23-30					
1617	" 11	e	12-41.5					
		eL?	12-45	16				
		L	12-52	13				
		L	13-00	13	1	Small sinusoidal L waves.		
		F	13-25					
1618	" 13	e	4-41.3					
		eL	4-46					
		M	4-48	12	13			
		L	5-01	7				
		F	5-30					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From October 13, 1923 *to* October 31, 1923. *No.* 48

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1619	Oct. 15	e	(8-25)						Horizontal slit on M-S was partially obscured by a bit of lint at light spot. No definite record
		eL?	(8-48)						
		L	9-15	19					
		L	9-33	16					
		L	10-00	16					
		F	10-15 ca						
1620	" 15	eL	20-45						Faint sinusoidal L waves.
		L	20-46	12					
		E	20-55						
1621	" 17	e	6-54 to						Faint irregular t[illegible]s, M-S.
		F	7-08						
1622	" 18	eL	22-13						
		L	22-18	20					Sinusoidal L waves.
		F	22-25						
1623	" 20	eL	4-06	30					
		L	4-22	16					Irregular to sinusoidal L waves
		L	4-30	14					
		F	4-40						
1624	" 21	e	19-16-38						Irregular small wavelets.
		F	19-35						
1625	" 22	e	16-22.8						Faint trace, M-S only. Lost in micros.
		F	16-33						
1626	" 26	e	19-39 to						Faint irregular traces on M-S only.
		F	19-49						

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45° 23' 38''$ N. $\lambda = 75° 42' 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne-Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per min.	20 g. ca.
Spindler Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	T_o	r	v	ε	COMP.		DETERMINED
~~5.5~~	----	~~120~~	~~2:1~~	NS	----	Apr. 4'23
I	5.4	----	120	15:1	EW	----	Aug.21'23
II	12.0	----	250	20:1	EW	----	Aug.21'23
17	12.0	----	250	20:1	Not operating after Nov. 25		
23	37.2	----	---	13:10	EW	----	Feb. 7'23
D	36.1	----	---	13:10	NS	----	Feb. 7'23
D	5.5	----	160	4:1	Vert	----	Aug.22'23
W							

From November 1, 1923. to November 2, 1923. No. 49.

No	DATE	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1627	Nov. 1	e	20-16-06		New Zealand paper reports this quake as being observed by Adams at Wellington, N.Z. in adjusting a transit: The level bubble indicated the L waves. 10040				
		eL	20-16-37						
		M	20-[illegible].9	12	12				
		L	20-20	7	2.5				
		L	20-27	7	1-				
		F	20-58						
1628	" 2	C	21-14-32						
		PV	21-27-36						
		eP	(21-28-24)						
		P_{E1}	(21-32-09)		Difficult record to read. eS uncertain as well as the correct reading for P.				
		PR_2	21-34-24						
		eS	21-38-36						
		SR_1	21-44-52						
		SR_2	21-49-11						
		eL	21-58-30						
		M_1	22-19.5	18	72				
		M_2	22-25.7	17	63				
		M_3	22-28.5	17	50				
		M_4	22-30	17	63				
		L	22-33	17					
		L	22-39.5	17					
		L	23-07	24					
		L	23-[illegible].6						
		L	0-30						
		F	1-00 ca						

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From November 2, 1923. *to* November 4. 1923. *No.* 50

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1629	Nov. 3	eL	3-41					
		L	3-48	20	.5	Sinusoidal L waves.		
		F	4-02					
1630	" 3	e?	5-43					
		eL	5-52.5	22				
		L	6-03.5	20	2.5	Sinusoidal L waves.		
		L	6-16	15				
		F	7-05					
1631	" 3	O	8-37-43					2820
		P	8-43-22					
		S	8-47-52					
		eL	8-50-00					
		M	8-53	20				
		L	8-56	16				
		L	9-03	12				
		L	10-07					
		L	10-25					
		F	10-35 ca					
1632	" 3	e	16-44-28					
		e(S)	16-56-00					
		eL	17-05					
		M_1	17-13	30	30			
		M_2	17-19	20	20			
		L	17-22.5	15				
		L	17-34	15				
		L	18-20					
		F	Lost in micros.					
1633	" 4	O	0-12-41					9000
		P	0-24-54					
		PR_2	0-30-12					
		e	0-31-49					
		S	0-35-04					
		SR_1	0-41-24					
		SR_2	0-45-28					
		eL	0-55					
		M_1	1-08.6	22	89			
		M_2	1-10.5	22	90			
		L	1-17	19				
		L	1-31	15				
		L	2-07	15				
		L	2-17	15				
		L	3-00					
		F	Micros.					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From November 4,1923. *to* November 6, 1923. *No.* 51

No.	Date	Phase	Time	Period	AMPLITUDE			DISTANCE
					A_E	A_N	A_Z	
			h m s	s	μ	μ	μ	km.
1634	Nov. 4	eL	12-53 to					
		F	13-15					
1635	" 4	e	20-33.5					
		e	20-40-56					
		e	20-49-15					
		eL	21-01-45					
		L	21-06	26				
		M	21-10	20	6			
		L	21-22	20				
		L	21-38	16				
		F	22-22 ca					
1636	" 4	eL	23-15					
		L	23-24	20				
		F	23-45					
1631	" 5	L	2-23	22				
		F	2-37					
1638	" 5	eL	14-37					
		L	14-39	29				
		L	14-42	16				
		F	14-55					
1639	" 5	O	21-29-07					10140
		P	21-42-16					
		PR_1	21-46-13					
		PR_2 I	(21-48-18)					
		S	21-53-20					
		i	21-55-15					
		SR_{2I}	22-04.5					
		eL	22-13					
		M_1	22-16.0	44	105			
		M_2	22-22.4	28	50			
		M_3	22-27.5	24	35			
		L	22-35.5	16				
		L	23-09 to					
		L	23-55	16				
	" 6	F	1-00 ca					
1640	" 6	i	17-38-08		On M-S only			
		L	17-53	36				
		L	18-00	20				
		F	19-35 ca					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From November 6, 1923. *to* November 11, 1923. *No.* 52

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1641	Nov. 6	e	(20-00)					
		eL	20-09	36				
		L	20-20.5	16				
		F	21-12 ca					
1642	" 7	i	14-14-26					
		L	14-30					
		L	14-40	40				
		L	14-47					
		F	Lost in changing sheets.					
1643	" 8	O	0-01-48					3600
		P	0-08-36					
		S	0-14-00					
		SR_1 ?	0-15-26					
		eL	0-17-00	8	11			
		F	1-05 ca					
1644	" 8	e	20-45.5		Sinusoidal L waves on M-S no. 17 only.			
		eL	20-53					
		L	20-56.5	20				
		F	21-15 ca					
1645	" 9	O	3-22-43					2880
		P	3-28-28					
		S	3-33-02					
		eL	3-35-39					
		L	3-38					
		L	3-40	35	7			
		L	3-45					
		F	4-45 ca					
1646	" 10	e	4-38					
		eL	4-43					
		F	5-12 ca					
1647	" 10	eL?	22-00					
		L	22-22	20				
		L	22-28	18				
		L	22-35	16				
		L	22-59	12				
		F	23-05					
1648	" 11	e?	6-05					
		e	6-12					
		F	6-15					

May not be seismic

E.A.H.

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From November 11, 1923. *to* November 17, 1923. *No.* 53

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1649	Nov. 11	e	14-18					
		eL	14-21	30				
		L	14-26	irreg				
		F	14-40					
1650	" 12	O	(11-56-21)					(3580)
		P?	12-03-08					
		S?	12-08-30					
		SR_2?	12-10-38					
		eL?	12-13					
		L	12-20	30	5			
		L	12-26	15				
		F	13-10 ca.					
1651	" 16	O	(4-15-22)					(4120)
		P?	4-22-49					
		S	4-28-43					
		eL	4-33.5					
		M_1	4-35.5	11	41			
		M_2	4-38	10	21			
		L	4-47	10				
		L	4-56	15				
		F	5-25 ca					
1652	" 16	eL	7-26.3					
		L	7-27-15	12				
		L	7-29-34	8				
		F	Micros obscure the exact time of F.					
1652 A	" 16	eL	19-26		Faint traces only of sinusoidal			
		L	19-30	20	L waves on M-S No. 17.			
		L	19-48.5					
		F	Lost in micros.					
1653	" 17	O	2-52-49					7120
		P	3-03-23					
		PR_2	3-07-24					
		S^2	3-11-58					
		SR_1	3-16-46					
		SR_2	3-18-57					
		eL^2	3-22	40	5			
		M	3-32.5	16	14			
		L	3-39	16	3			
		L	3-46	16				
		F	5-10 ca.					

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From November 18, 1923. *to* November 30, 1923. *No.* 54.

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
				s	μ	μ	μ	km.	
1654	Nov. 18	e	($^h21^m48.^s3$)						
		S?	21-57-39						
		SR_1?	22-03-12						
		eL	22-12						
		L	22-18.5						
		L	22-27	20	3				
		L	22-38.5						
		L	22-45	15					
		F	23-35						
1655	" 19	eL	9-13.5						
		L	9-17.3 to						
		L	9-30						
		F	Lost in micros						
1656	" 22	eL	8-19						
		L	8-28	18	1			Sinusoidal L waves.	
		L	8-33						
		F	8-45						
1656 A	" 23	e	3-22						
		L	3-28	24					
		F	3-45 ca.						
1657	" 25	eL	(17-50)						
		L	(17-55)	38				Time marks failed, Time approx.	
		L	(17-59)	30					
		L	(18-06)	15					
		F	(18-40)						
1658	" 26	e	(13-05)						
		L	(13-26)					Time marks failed. Time approx.	
		M	(13-37)	24	5				
		L	(14-07)	24					
		F	(14-34)						
1659	" 26	e	16-26-00						
		eL	16-32						
		F	16-42 ca.						
1660	" 28	e?	0-40						
		eL	0-49	15				Sinusoidal L waves--small.	
		F	1-00 ca						

E.A.H.

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

$\varphi = 45°\ 23'\ 38''$ N. $\lambda = 75°\ 42'\ 57''$ W. h = 83m.

Lithologic foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight.
Time correction: within .25s.

INSTRUMENTS—FIXED CONSTANTS

INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Milne Shaw	17	Photographic	Magnetic	8 mm. per min.	1 lb.
Milne Shaw	23	Photographic	Magnetic	8 mm. per min.	1 lb.
Deformation	D	Photographic	Air	17 mm. per min.	20 g. ca.
Spindler Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 Kgm.

INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	T_o	r	v	ϵ	COMP.		DETERMINED
I	5.5		120	2:1	NS		Apr. 4, 1923.
II	5.4		120	15:1	EW		Aug.21, 1923.
17	12.0		250	20:1	EW		Aug.21, 1923.
23	12.0		250	20:1	Not in operation----------		
D	37.2		---	13:10	EW		Feb. 7, 1923.
D	36.1		---	13:10	NS		Feb. 7, 1923.
W	5.5		160	4:1	Vert		Aug.22, 1923.

From December 1, 1923. *to* December 5, 1923. *No.* 55.

No.	DATE	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE
			h m s	s	μ	μ	μ	km.
1661	Dec. 2	e	15-13.8	Sinusoidal	L waves. M-S No. 17 only.			
		L	15-40	19	5			
		L	16-00	16				
		F	17-00 ca.					
1662	" 3	eL	8-56	Sinusoidal	L waves M-S No. 17 only.			
		L	8-59	19	1.5			
		F	9-15					
1663	" 5	Q	20-56-56					7640
		iP_{17}	21-07-58		V_L is very high--nearly 245 km/m.			
		iS_{17}	21-17-00		on an average.			
		eD	21-28.0	23	4.5			
		M	21-39	15	7.			
		L	21-43	13	1.			
		LR_1?	23-16	irreg.				
		F	Lost in what is recorded as 1664 but which may be the LR_2 of 1663.					
1664	" 5	(eL)	23-18	irreg.				
		L	23-39	37	8.	Sinusoid l L waves.		
		L	23-57	25	3.5	Some micros.		
	" 6	L	0-09	16	1.			
		F	0-50 ca.					

Ernest A. Hodgson

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From December 5, 1923. *to* December 19, 1923. *No.* 56

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1665	Dec. 7	eL	(16-30)						
		L_{17}	16-32 to irreg						
		F_{17}	16-40						
1666	" 11	eL	6-11	28					
		L_{17}	6-16	23	1.5				
		L_{17}	6-24	16	1.				
		L_{17}	6-33	14					
		F	6-50						
1667	" 13	e	17-05-06		Micros mask the record a good deal				
		e	17-07.6						
		eL	17-11						
		L	17-12	irreg					
		F	17-25						
1668	" 14	O	(10-42-23)					(1820)	
		iP_{17}	10-46-15						
		iS_{17}	(10-49-22)		Time marks somewhat blurred				
		eL	(10-50)		Time uncertain.				
		M	10-58.5	23	9				
		L_{17}	11-08	10					
		F	11-45 ca						
	Strasbourg reports a quake by wireless.				Strasbourg P= 16-01-32 " Δ= 117 Km				Dec. 14
	No trace of this appears on our records.								
1669	" 15	eL	12-52 to irreg		Small L waves lost in micros.				
		F	13-05						
1670	" 16	O	7-36-48						
		eP_{17}	7-45-03						
		eS_{17}	7-51-34						
		eSR_{17}	7-54.6						
		eL	(7-58)		irregular L waves less than a micron in amplitude.				
		F	8-20						
1671	" 19	eL	20-14,5	(20)	Sinusoidal L waves lost in heavy micros.				
		F	20-20						

E.A.H.

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SEISMOLOGIC STATION, DOMINION OBSERVATORY

From December 19, 1923 *to* December 31, 1923. *No.* 57

No.	Date	Phase	Time	Period	AMPLITUDE A_E	AMPLITUDE A_N	AMPLITUDE A_Z	DISTANCE	
			h m s	s	μ	μ	μ	km.	
1672	Dec. 21	0	(9-59-38)					(2940)	
		eP	(10-05-27)						
		eS	10-10-06						
		eL	10-13-00	40	23				
		L	10-21	18	14				
		L	10-25	14	6				
		F	11-10 ca						
1673	" 22	eL	18-15		Faint trace of sinuscidal L waves in micros.				
		F	18-24						
1674	" 26	i	8-09-52						
		e	8-10-50						
		e	8-12-22						
		eL	8-16-32						
		L	8-19-18						
		F	8-30						
1675	" 27	e	15-03		Micros mask preliminary phases.				
		e	15-09.4						
		eL	15-28	26	4				
		L	15-38	20	3				
		F	15-45						
1676	" 28	eL	18-07						
		L	18-15	22	4	Micros mask much.			
		L	18-26	13	1				
		F	18-45 ca.						

E.A.H.

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12,000-7-23