



CANADA

# SEISMOLOGICAL STATION, DOMINION OBSERVATORY OTTAWA



R. MELDRUM STEWART, *Director*

ERNEST A. HODGSON, *Seismologist*

W. W. DOXSEE, *Assistant Seismologist*

$\varphi = 45^{\circ} 23' 38''$  N.  $\lambda = 75^{\circ} 42' 57''$  W.  $h = 83$  m.

Foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight. Time correction: with 0.25s.

## AUXILIARY STATIONS

### SASKATOON

$\varphi = 52^{\circ} 08'$  N.  $\lambda = 106^{\circ} 38'$  W.  $h = 515$  m.

Foundation: clay and sand. Time correction: from manually recorded radio time signals.

### HALIFAX

$\varphi = 44^{\circ} 38'$  N.  $\lambda = 63^{\circ} 36'$  W.  $h = 46$  m.

Foundation: carbonaceous slate. Time correction: from hourly recorded railroad time service.

### SHAWINIGAN FALLS

$\varphi = 46^{\circ} 33'.1$  N.  $\lambda = 72^{\circ} 45'.8$  W.  $h = 60$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

### SEVEN FALLS

$\varphi = 47^{\circ} 07'.4$  N.  $\lambda = 70^{\circ} 49'.6$  W.  $h = 232$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

## INSTRUMENTS—FIXED CONSTANTS

STATION	INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Ottawa	Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Ottawa	Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Ottawa	Milne-Shaw	17	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Milne-Shaw	23	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 kg.
Halifax	Mainka	HN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Halifax	Mainka	HE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Wood-Anderson	SF	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Milne-Shaw	SM	Photographic	Magnetic	6 mm. per min.	1 lb.

## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$\tau/T_0^2$	$\nu$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
I.....	5.3		120	2:1	NS	
II.....	6.5		120	14:1	EW	
17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.6		160	10:1	Z	
HN.....	10.3		92	Aper.	NS	
HE.....	9.4		155	"	EW	
SN.....	8.7		57	"	NS	
SE.....	9.2		58	"	EW	
SA.....	0.9		2000		NS	
SF.....	1.1		1750		EW	
SM.....	12.0		250	20:1	EW	43 mm.



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM January 1, 1936 to January 31, 1936 No. 1

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
5901 Jan. 2	e <sub>N</sub>	0	46	04			
	e <sub>S</sub>	0	51	38			
	e <sub>L</sub>	0	58				
	F	1	49				
5903 Jan. 2	e <sub>N</sub>	22	56	16			
	e <sub>N</sub>	22	57	13			
	e <sub>E</sub>	23	13.8				
	e <sub>E</sub>	23	16.3				
	e <sub>L</sub>	23	39				
	F	1	22				
5907 Jan. 14	H	5	36.7			113°	
	PP	5	56	04			
	PS	6	05	38			
	SS	6	11	38			
	SSS	6	16.5				
	e <sub>L</sub>	6	25				
5909 Jan. 14	F	8	18				
	i <sub>S</sub>	14	31	49			P lost changing records. Halifax Record: e <sub>P</sub> = 14-22-50 i <sub>S</sub> = 14-31-40 $\Delta$ = 7240 H = 14-12.2
	e	14	35.1				
F	15	48					
5910 Jan. 14	e <sub>N</sub>	18	07.3				
	e <sub>E</sub>	18	09.6				
	e	18	18				
	e <sub>L</sub>	18	32				
	F	20	04				
5911 Jan. 15	e <sub>E</sub>	15	16				
	e <sub>E</sub>	15	21.5				
	e <sub>L</sub>	15	38				
	F	17	09				
5914 Jan. 18	e <sub>E</sub> ?	1	35.3				
	e	1	38.4				
	e <sub>L</sub>	1	42				
	F	2	11				
5916 Jan. 20	e <sub>N</sub>	17	17				
	e <sub>E</sub>	17	24				
	e	17	34				
	e <sub>L</sub>	17	51				
	F	19	08				

W. W. Doyser.



## CORRELATION TABLE

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This tabulation not only provides a serially numbered list of all earthquakes recorded at the Ottawa station but also shows a correlation of the entire Ottawa series with those obtained in each of the three Quebec series (Shawinigan-Wood-Anderson; Seven Falls-Wood-Anderson; Seven Falls-Milne-Shaw). The entries for each of the four series show in hours and minutes the time of beginning of the tremors in Greenwich Mean Time. The appearance of entries for two or more series in the same line indicates that these are known to be concerned with the same earthquake even though the times of beginning may differ slightly. The figures after the plus sign show the duration of the record in hours and minutes. The Ottawa serial number of the earthquake and the day of the month on which it occurred are listed in the first and second columns respectively, while the extreme right hand column is reserved for index letters to a series of notes following the tabulation. Certain letters are reserved for the purpose of classifying the entries; these are as follows:

- d (domesticus) epicentre less than 100 km.
- v (vicinus) epicentre between 100 and 1000 km.
- r (remotus) epicentre between 1000 and 5000 km.
- u (ultimus) epicentre beyond 5000 km.

(above lower-case letters apply to earthquakes of the lowest order of intensity on a scale of three).

D, V, R, U : distance as above, intensity intermediate.

D, V, R, U : distance as above, intensity top of scale.

L Long (or surface waves) alone recorded.

Q Questionable (may not be seismic).

T Time uncertain.

P Preliminary tremors alone recorded.



EARTHQUAKE CORRELATION TABLE

January, 1936.

No.	Date	Ottawa	Shawinigan	Seven Falls		**
				W. A.	M. S.	
5901	2	0-46+1-03r	0-46+0-27r	0-55+0-14L	0-55+0-17L	..
5902	2	18-37+0-54L	.....	.....	.....	..
5903	2	22-56+2-26u	22-56+1-19u	22-56+1-16u	23-14+2-00u	..
5904	4	14-48+0-12L	.....	.....	14-48+0-13L	..
5905	10	0-18+0-19L	.....	.....	.....	..
5906	14	0-16+0-20r	0-25+0-05L	.....	0-25+0-09L	..
5907	14	5-56+2-22u	.....	.....	6-05+2-05u	A
5908	14	13-06+0-21L	.....	.....	13-09+0-23L	..
5909	14	14-32+1-16u	14-23+0-19u	14-23+0-20u	14-32+0-58u	B
5910	14	18-07+1-57u	.....	.....	18-33+1-31u	..
5911	15	15-16+1-53u	.....	.....	15-21+1-06u	..
5912	15	17-52+0-04L	.....	.....	17-44+0-17L	..
5913	16	8-17+0-11L	.....	.....	.....	..
5914	18	1-35+0-36r	1-28+0-24r	1-42+0-09L	1-43+0-05L	..
5915	19	23-39+0-18L	.....	.....	.....	..
	20	.....	6-02+0-05v	6-03+0-02v	.....	C
5916	20	17-17+1-51u	.....	.....	17-28+1-27u	..
5917	21	5-09+0-27L	.....	.....	.....	..
5918	27	15-53+0-20L	.....	.....	.....	..
5919	27	20-16+0-16L	.....	.....	20-16+0-06L	..
5920	27	22-32+0-12L	.....	.....	.....	..



CORRELATION OF EARTHQUAKES

January, 1936.

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N O T E S

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- A : Ottawa  $\Delta = 12,500$  km. ca H = 5-36.7 G.M.T.
- B : Shawinigan Falls  $\Delta = 7,460$  km. H = 14-12.2 G.M.T.  
Seven Falls  $\Delta = 7,380$  km. H = 14-12.4 G.M.T.
- C : Aftershock of the Timiskaming earthquake. Felt at  
Timiskaming, Que., and vicinity.

Dominion Observatory,  
Ottawa, Canada,  
February 14, 1936.



SEISMOLOGICAL BULLETINS RECEIVED

February,

1936.



We acknowledge, with thanks, the receipt of the following seismological publications and bulletins:-

STATIONS	BULLETINS	RECEIVED
Cartuja	June and July, 1935	Feb. 1
Sydney	November, 1935	" 1
Zürich	December, 1935	" 1
Zi-Ka-Wei	October 19 to November 15, 1935	" 4
Peichiko	July to September, 1935	" 4
Manila	November, 1935	" 6
Algiers	December, 1935	" 7
United States Coast and Geodetic Survey	October to December, 1935	" 8
Chiufeng	December, 1935	" 8
Apia	October to December, 1935	" 10
Kobenhavn	January to June, 1934	" 10
Ivigtut	Year 1932	" 11
Sydney	December, 1935	" 13
St. Louis	Preliminaries for November 10, 23rd, 30th, December 14, 1935	" 14
Pasadena and Auxiliary Stations	December, 1935 and Local Shocks	" 15
La Plata	November, 1935	" 18
Hamburg	October 9 to December 31, 1935	" 19
Strasbourg ) Paris ) Bureau Central )	December, 1935	" 19
Richmond	January, 1936	" 21
Wien	April 3 to July 26, 1935	" 21
Graz	June 30 to December 31, 1935	" 21
Bucarest	June to December, 1935	" 21
Taihoku	December, 1935	" 22
San Fernando	November and December, 1935	" 22
Wellington	Preliminary for December, 1935	" 25
ChristChurch	Provisional for December, 1935	" 25
Perth	December 5 - 16th, 1935	" 25
Algiers	January, 1936	" 27
Sofia	April 1 to August 31, 1935	" 27
Zürich	January, 1936	" 27
Ksara	January, 1936	" 27

DOMINION OBSERVATORY  
OTTAWA - CANADA.

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Assistant Seismologist.





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## INSTRUMENTS—FIXED CONSTANTS

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Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
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## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$r/T_0^2$	$v$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
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II.....	6.0		120	12:1	EW	
17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.3		160	10:1	Z	
HN.....	10.3		92	Aper.	NS	
HE.....	9.4		155	"	EW	
SN.....	8.7		56	"	NS	
SE.....	8.8		56	"	EW	
SA.....	0.9		2000		NS	
SF.....	1.1		1750		EW	
SM.....	12.0		250	20:1	EW	43 mm.



SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM February 1, 1936 to February 29, 1936

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
5922 Feb. 7	e <sub>E</sub>	1	16.4				
	e <sub>E</sub>	1	22.4				
	L	1	38				
	F	2	32				
5923 Feb. 7	e	9	22				
	e <sub>E</sub>	9	26				
	L	9	39				
	F	11	15				
5924 Feb. 8	e	12	42.5				
	e	12	49	02			
	e <sub>E</sub>	12	55				
	L	13	06				
	F	13	58				
5926 Feb. 15	e	13	09	38			USCGS. gives: $\phi = 6^\circ$ S. $\lambda = 132^\circ$ E.
	e	13	26	04			
	L	13	41				
	F	15	35				
5931 Feb. 21	e	17	07	30			
	e	17	10.6				
	e	17	18	24			
	e	17	35	24			
	L	17	49				
	F	19	26				
5932 Feb. 22	H	15	32			140°	
	P <sub>E</sub>	15	51.4				
	PP	15	54	28			
	ScPcP	15	55	04			
	ScPcPcS	16	01	20			
	SS	16	13	16			
	L	16	31				
	F	18	42				
5933 Feb. 22	e <sub>E</sub>	19	45.3				
	e	19	52.2				
	e	19	59	30			
	L	20	31				
	F	21	44				
5934 Feb. 27	e	10	26	32			
	e <sub>E</sub>	10	38				
	L	11	04				
	F	12	26				
5935 Feb. 28	e <sub>E</sub>	3	20	22			
	e	3	25				
	L	3	31				
	F	4	23				

W. W. Doysee.



EARTHQUAKE CORRELATION TABLE

February, 1936.

No.	Date	Ottawa	Shawinigan	Seven Falls		**
				W. A.	M. S.	
5921	3	21-18+0-16r	21-19+0-05r	21-19+0-06r	21-19+0-07r	..
5922	7	1-16+1-16u	.....	.....	1-52+0-17L	..
5923	7	9-22+1-53u	9-53+0-19L	9-49+0-27L	9-38+0-50L	..
5924	8	12-42+0-58u	.....	.....	.....	..
5925	10	18-30+0-17L	.....	.....	.....	..
	14	.....	0-42+0-05P	.....	.....	..
5926	15	13-10+2-25U	13-09+0-57U	13-35+0-35L	13-24+2-03U	..
5927	16	15-14+0-21L	.....	.....	.....	..
5928	18	2-42+0-16L	.....	.....	2-42+0-08L	..
5929	21	1-55+0-22L	.....	.....	1-56+0-15L	..
5930	21	7-16+0-29L	.....	.....	7-24+0-14L	..
5931	21	17-07+2-19u	.....	.....	17-08+2-14u	..
5932	22	15-51+2-50U	.....	16-44+0-12L	15-51+3-07U	A
5933	22	19-45+2-00u	.....	.....	19-46+2-00u	..
5934	27	10-26+2-00u	10-23+0-10P	10-35+0-05P	10-28+2-00u	..
5935	28	3-20+1-03u	.....	.....	3-39+0-42L	..



CORRELATION OF EARTHQUAKES

February, 1936.

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N O T E S

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A : Ottawa                       $\Delta = 15,500$  km. ca                      H = 19-32<sup>h m</sup> G.M.T.

Dominion Observatory,  
Ottawa, Canada,  
March 13, 1936.



SEISMOLOGICAL BULLETINS RECEIVED

March,  
1936.



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STATION	BULLETINS	RECEIVED
Budapest	Year 1935	March 3
Riverview	December, 1935	" 3
St. Louis	Preliminaries for December 14, 15th, and 17th, 1935	" 4
Tananarive	May to July, 1935	" 4
Reykjavik	Year 1935	" 5
Manila	December, 1935	" 7
Taihoku	Preliminary for January/36	" 9
Chiufeng	January, 1936	" 10
Riverview	January, 1936	" 11
Toledo )	January to June, 1935	" 13
Cartuja )		
Alicante )		
Almeria )		
Malaga )		
La Plata	December, 1935	" 14
Paris )	January, 1936	" 14
Strasbourg )		
Bureau Central)		
Zi-Ka-Wei	November 25 to December 24/35	" 18
Helwan	December, 1935	" 19
Prague	October to December, 1935	" 19
Zagreb	April to June, 1935	" 20
Richmond	February, 1936	" 21
Toronto	January/36 and December/35	" 21
Victoria	August to December, 1935	" 21
Helwan	January, 1936	" 23
Burlington	Year 1935	" 23
Perth	December, 1935	" 24
Melbourne	October to December, 1935	" 26
Pasadena	January/36 and Local Shocks	" 26
Uccle	September 22 to December 31/35	" 27
Cartuja	August and September, 1935	" 28
Santa Clara	December/35 and January/36	" 30
San Fernando	January and February, 1936	" 30
Toronto	February, 1936	" 31
Victoria	January, 1936	" 31

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17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.3		160	10:1	Z	
HN.....	10.3		92	Aper.	NS	
HE.....	9.4		155	"	EW	
SN.....	8.7		56	"	NS	
SE.....	8.8		56	"	EW	
SA.....	0.9		2000		NS	
SF.....	1.1		1750		EW	
SM.....	12.0		250	20:1	EW	43 mm.



## OTTAWA, CANADA

## SEISMOLOGICAL STATION, DOMINION OBSERVATORY

International  
Seismological  
Centre

FROM

March 1, 1936

to

March 21, 1936

No. 3

NO. AND DATE	PHASE	TIME			AMP.  $\mu$	DISTANCE  km.	REMARKS
		h	m	s			
5936 Mar. 1	e <sup>N</sup>	10	42	48			
	e	10	45	40			
	e	11	14	40			
	e	11	22.5				
	eL? F	11 12	40	55			
5937 Mar. 2	iS	3	42	12			
	eL	3	58				
	F	6	13				
5938 Mar. 5	e	6	24	36			
	eL	6	37				
	F	7	07				
5940 Mar. 6	e <sup>E</sup>	14	54.5				
	eL	15	22				
	F	16	17				
5942 Mar. 10	e	20	59				
	eL	21	16				
	F	21	49				
5947 Mar. 18	e <sup>E</sup> ?	12	15				
	e <sup>E</sup>	12	25				
	eL	12	43				
	F	13	27				
5950 Mar. 20	e	18	59				
	eL	19	04				
	F	19	43				
5951 Mar. 21	e <sup>E</sup>	0	18				
	e <sup>N</sup>	0	26.7				
	eL	0	42				
	F	1	35				







CORRELATION OF EARTHQUAKES

March, 1936.

\*\*\*\*\*

N O T E S

=====

A : Aftershock of quake of November 1st, 1935. Felt  
at Timiskaming and vicinity.

B : Ottawa  $\Delta = 3210$  km. H = 8-58.8 G.M.T.

C : Felt at Baie St. Paul, Quebec. Recorded at both  
Shawinigan Falls and Seven Falls.

Dominion Observatory,  
Ottawa, Canada,  
April 15, 1936.



EARTHQUAKE CORRELATION TABLE

March, 1936.

No.	Date	Ottawa	Shawinigan	Seven Falls		**
				W. A.	M. S.	
5936	1	10-43+2-13u	.....	.....	10-44+2-10u	..
5937	2	3-42+2-31u	3-32+0-15u	4-00+0-13L	3-42+2-20u	..
5938	5	6-24+0-43u	.....	.....	6-25+0-42u	..
5939	5	18-43+0-11L	.....	.....	18-39+0-15L	..
5940	6	14-54+1-23u	.....	.....	15-24+0-51L	..
5941	10	12-23+0-55u	.....	.....	12-37+0-27L	..
5942	10	20-59+0-50u	.....	.....	21-19+0-26L	..
5943	11	1-27+0-24L	.....	.....	1-33+0-10L	..
5944	12	21-42+0-12L	.....	.....	.....	..
5945	14	9-54+0-39L	.....	.....	9-59+0-33L	..
5946	17	21-02+0-26L	.....	.....	20-55+0-30L	..
5947	18	12-15+1-12u	.....	.....	12-48+0-30L	..
5948	18	14-43+0-15L	.....	.....	14-44+0-17L	..
5949	20	18-01+0-37L	17-56+0-02P	.....	18-01+0-38L	..
5950	20	18-59+0-44u	.....	.....	19-01+0-38u	..
5951	21	0-18+1-17u	.....	.....	0-18+1-15u	..
5952	21	2-48+0-37L	.....	.....	2-51+0-39L	..
5953	22	12-42+2-09u	.....	.....	12-48+1-40u	..
5954	22	23-30+0-16L	.....	.....	23-27+0-05L	..
	25	.....	1-30+0-01.5v	.....	.....	A
5955	25	8-55+0-09L	.....	.....	8-52+0-06L	..
5956	25	9-05+0-49r	9-05+0-17r	9-05+0-18r	9-05+0-44r	B
	25	.....	.....	.....	11-43+0-04L	..
5957	25	18-23+0-11L	.....	.....	.....	..
5958	27	2-43+0-44L	.....	.....	.....	..
	29	.....	0-50+0-04v	0-50+0-02d	.....	C



SEISMOLOGICAL BULLETINS RECEIVED

April,  
1936.



We acknowledge, with thanks, the receipt of the following seismological bulletins:-

STATIONS	BULLETINS	RECEIVED
Saint Louis	Preliminaries for December 28/35, January 14 and February 15/36.	April 1
Ksara	February, 1936	" 2
Algiers	February, 1936	" 2
Helwan	February, 1936	" 3
Zurich	February, 1936	" 3
Eger	Year 1935	" 3
Manila	January, 1936	" 6
Chiufeng	February, 1936	" 7
Peichiko	October to December 1935	" 7
Wellington	Preliminary for January, 1936	" 7
Christchurch	Provisional for January, 1936	" 7
Sydney	January, 1936	" 9
Tananarive	August and September, 1935	" 11
Taihoku	Preliminary for February, 1936	" 11
Batavia	October to December, 1935	" 14
DeBilt	Year 1933	" 14
Paris )		
Bureau Central )	February, 1936	" 15
Estrasbourg )		
La Plata	January, 1936	" 15
Florissant	August, 1935	" 15
Karlsruhe	July to December, 1935	" 21
Bucarest	January, 1936	" 22
Apia	January to March, 1936	" 22
Wellington	Additions to January and preliminary for February, 1936	" 22
Christchurch	Provisional for February, 1936	" 22
Perth	January 1 - 20th, 1936	" 22
Richmond	March, 1936	" 23
Pasadena	Local Shocks and February, 1936	" 24
Perth	February 3 - 15th, 1936	" 25
Osaka	July to September, 1934 and November and December, 1935	" 27
Tyosi	January to December, 1934	" 27
Georgetown	Seismological Despatches for July, October to December, 1935	" 28
Zi-Ka-Wei	December 28 - 30th, 1935	" 28
Ksara	March, 1936	" 30

DOMINION OBSERVATORY,  
OTTAWA - CANADA.

R. Meldrum Stewart,  
Director.

Ernest A. Hodgson,  
Seismologist.

W. W. Dorsev,  
Assistant Seismologist.





CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY  
OTTAWAR. MELDRUM STEWART, *Director*ERNEST A. HODGSON, *Seismologist*W. W. DOXSEE, *Assistant Seismologist* $\varphi = 45^{\circ} 23' 38''$  N.  $\lambda = 75^{\circ} 42' 57''$  W.  $h = 83$  m.

Foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight. Time correction: with 0.25s.

## AUXILIARY STATIONS

## SASKATOON

 $\varphi = 52^{\circ} 08'$  N.  $\lambda = 106^{\circ} 38'$  W.  $h = 515$  m.

Foundation: clay and sand. Time correction: from manually recorded radio time signals.

## HALIFAX

 $\varphi = 44^{\circ} 38'$  N.  $\lambda = 63^{\circ} 36'$  W.  $h = 46$  m.

Foundation: carbonaceous slate. Time correction: from hourly recorded railroad time service.

## SHAWINIGAN FALLS

 $\varphi = 46^{\circ} 33'.1$  N.  $\lambda = 72^{\circ} 45'.8$  W.  $h = 60$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

## SEVEN FALLS

 $\varphi = 47^{\circ} 07'.4$  N.  $\lambda = 70^{\circ} 49'.6$  W.  $h = 232$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

## INSTRUMENTS—FIXED CONSTANTS

STATION	INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Ottawa	Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Ottawa	Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Ottawa	Milne-Shaw	17	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Milne-Shaw	23	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 kg.
Halifax	Mainka	HN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Halifax	Mainka	HE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Wood-Anderson	SF	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Milne-Shaw	SM	Photographic	Magnetic	6 mm. per min.	1 lb.

## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$r/T_0^2$	$v$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
I.....	5.1		120	2:1	NS	
II.....	6.0		120	12:1	EW	
17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.3		160	10:1	Z	
W.....	10.3		92	Aper.	NS	
HN.....	9.4		155	"	EW	
HE.....	8.7		56	"	NS	
SN.....	8.8		56	"	EW	
SE.....	0.9		2000		NS	
SA.....	1.1		1750		EW	
SF.....	12.0		250	20:1	EW	43 mm.
SM.....						



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM April 1, 1936 to April 23, 1936 No. 5

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
5959 Apr. 1	e	2	28	34		8250	USCGS. gives: $\phi = 3^{\circ}$ N. $\lambda = 124^{\circ}$ E.
	e	2	30	50			
	e	2	35	28			
	e <sub>E</sub>	2	47	22			
	eL <sub>E</sub>	3	02				
F	7	01					
5960 Apr. 1	e	20	33				
	e	20	47				
	eL	21	05				
	F	22	28				
5961 Apr. 2	e	6	45				
	e	6	54				
	eL	7	06				
	F	8	44				
5968 Apr. 12	H	20	59.6				
	eP	21	11	10			
	eS	21	20	48			
	SS	21	28	24			
	eL	21	39				
	F	23	45				
5972 Apr. 19	e	5	27	40			
	i <sub>E</sub>	5	37	40			
	e	5	45				
	eL	6	03				
	F	8	37				
5973 Apr. 19	e <sub>E</sub>	9	32.5				
	e <sub>N</sub>	9	35				
	e <sub>E</sub>	9	41.5				
	eL	9	57				
	F	11	30				
5975 Apr. 23	H	23	14.6			7010	Saskatoon Record: eP = (23-23-07) eS = (23-29-46) $\Delta = 4900$ H = (23-15)
	eP	23	25	02			
	eS	23	33	40			
	SS <sub>E</sub>	23	38.1				
	eL	23	45				
	F	1	20				



OTTAWA CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



International  
Seismological  
Centre

FROM April 23, 1936 to April 30, 1936 No. 6

NO. AND DATE	PHASE	TIME			AMP $\mu$	DISTANCE km.	REMARKS
		h	m	s			
5978 Apr. 26	e eL F	9	-	17 42 18			
5979 Apr. 27	e <sup>N</sup> e eL F	0	-	27 36 48 52			
5980 Apr. 27	eS eL F	6	-	42 - 16 46.5 47			USCGS. gives: $\phi = 16^\circ$ N. $\lambda = 87^\circ$ W.
5981 Apr. 28	e eL F	6	-	05 29 07			
5985 Apr. 30	H eP <sub>E</sub> PP S eL F	10	-	58.1 03 - 52 04 - 18 08 - 36 12 11		3010	

W. W. Doxsee.



EARTHQUAKE CORRELATION TABLE

April, 1936.

No.	Date	Ottawa	Shawinigan	Seven Falls		**
				W. A.	M. S.	
5959	1	2-29+4-32U	2-29+1-48U	2-29+1-19U	2-29+3-06U	..
5960	1	20-33+1-55u	.....	.....	20-39+2-08u	..
5961	2	6-45+1-59u	.....	.....	6-48+1-53u	..
5962	3	11-47+0-10L	.....	.....	11-48+0-09L	..
5963	6	4-05+0-14L	.....	.....	4-03+0-15L	..
5964	7	2-03+0-51u	.....	.....	2-02+0-52u	..
5965	7	7-24+0-18L	.....	.....	7-26+0-14L	..
5966	9	8-10+0-33L	.....	.....	8-11+0-22L	..
5967	9	16-56+0-46L	.....	.....	17-03+0-27L	..
5968	12	21-11+2-34u	.....	.....	21-11+2-31u	A
5969	14	20-07+0-10r	20-02+0-15r	20-01+0-14r	20-05+0-11r	..
5970	15	21-32+0-07L	.....	.....	.....	..
5971	16	9-46+0-34L	.....	.....	9-49+0-17L	..
	17	.....	15-14+0-01P	.....	.....	..
5972	19	5-28+3-09U	5-26+2-00U	5-27+2-09U	5-28+4-11U	..
5973	19	9-33+1-57u	.....	.....	9-42+2-12u	..
5974	22	10-19+0-38L	.....	.....	10-16+0-37L	..
5975	23	23-25+1-55u	23-25+0-17u	23-25+0-18u	23-25+1-48u	B
5976	24	14-50+0-21L	.....	.....	14-55+0-15L	..
5977	26	6-02+0-11L	.....	.....	.....	..
5978	26	9-16+1-02u	.....	.....	9-32+0-45L	..
5979	27	0-27+1-25u	.....	.....	0-37+1-16u	..
5980	27	6-42+1-05r	6-38+0-27r	6-38+0-23r	6-42+0-56r	..
5981	28	6-05+2-02u	.....	.....	6-05+2-02u	..
5982	28	14-20+0-32L	.....	.....	.....	..
5983	29	9-13+1-01L	.....	.....	9-39+0-28L	..
5984	29	19-29+0-19L	.....	.....	.....	..
5985	30	11-04+1-08r	.....	.....	11-04+0-40r	C
5986	30	18-27+0-21L	.....	.....	.....	..



CORRELATION OF EARTHQUAKES

April, 1936.

.....

N O T E S

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A	:	Ottawa	$\Delta = 8250$ km.	H = 20-59.6 G.M.T.
		Seven Falls	$\Delta = 8300$ km.	H = 20-59.7 G.M.T.
B	:	Ottawa	$\Delta = 7010$ km.	H = 23-14.6 G.M.T.
		Seven Falls	$\Delta = 7200$ km.	H = 23-14.5 G.M.T.
C	:	Ottawa	$\Delta = 3010$ km.	H = 10-58.1 G.M.T.
		Seven Falls	$\Delta = 2960$ km.	H = 10-58.1 G.M.T.

Dominion Observatory,  
Ottawa, Canada,  
May 11, 1936.



SEISMOLOGICAL BULLETINS RECEIVED

May, 1936.

We acknowledge, with thanks, the receipt of the following seismological publications and bulletins:-

STATIONS	BULLETINS	RECEIVED
Santa Clara	November/35 and February/36	May 2
Manila	February, 1936	" 4
Zurich	March, 1936	" 4
Algiers	March, 1936	" 4
Santiago	Years 1933 and 1934	" 7
La Paz	June 1 to November 7, 1935	" 8
Riverview	February and March, 1936	" 8
Graz	January 1 to March 1, 1936	" 9
Lemberg	April 21 to September 7, 1935	" 9
Wien	July 27 to December 31, 1935	" 9
Chiufeng	March, 1936	" 9
Dublin	January to March, 1936	" 11
Burlington	Year 1935	" 14
Strasbourg )	March, 1935	" 14
Paris )		
Bureau Central)		
Florissant	September to November, 1935	" 15
Wellington	Preliminary for March, 1936	" 19
Christchurch	Provisional for March, 1936	" 19
Helwan	March, 1936	" 20
Sydney	February and March, 1936	" 21
Taihoku	Preliminary for March, 1936	" 21
Perth	February 16 - 29th, 1936	" 21
Richmond	April, 1936	" 26
Ksara	April, 1936	" 27
Toronto	March and April, 1936	" 28
Victoria	February and March, 1936	" 28
Pasadena	March/36 and Local Shocks	" 28
Santa Clara	October/35 and March/36	" 29
Sofia	September to December, 1935	" 29

DOMINION OBSERVATORY,  
OTTAWA - CANADA.

R. Meldrum Stewart,  
Director.

Ernest A. Hodgson,  
Seismologist.

W. W. Doxsee,  
Assistant Seismologist.





CANADA

# SEISMOLOGICAL STATION, DOMINION OBSERVATORY OTTAWA



R. MELDRUM STEWART, *Director*

ERNEST A. HODGSON, *Seismologist*

W. W. DOXSEE, *Assistant Seismologist*

$\varphi = 45^{\circ} 23' 38''$  N.  $\lambda = 75^{\circ} 42' 57''$  W.  $h = 83$  m.

Foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight. Time correction: with 0.25s.

## AUXILIARY STATIONS

### SASKATOON

$\varphi = 52^{\circ} 08'$  N.  $\lambda = 106^{\circ} 38'$  W.  $h = 515$  m.

Foundation: clay and sand. Time correction: from manually recorded radio time signals.

### HALIFAX

$\varphi = 44^{\circ} 38'$  N.  $\lambda = 63^{\circ} 36'$  W.  $h = 46$  m.

Foundation: carbonaceous slate. Time correction: from hourly recorded railroad time service.

### SHAWINIGAN FALLS

$\varphi = 46^{\circ} 33'.1$  N.  $\lambda = 72^{\circ} 45'.8$  W.  $h = 60$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

### SEVEN FALLS

$\varphi = 47^{\circ} 07'.4$  N.  $\lambda = 70^{\circ} 49'.6$  W.  $h = 232$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

## INSTRUMENTS—FIXED CONSTANTS

STATION	INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Ottawa	Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Ottawa	Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Ottawa	Milne-Shaw	17	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Milne-Shaw	23	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 kg.
Halifax	Mainka	HN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Halifax	Mainka	HE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Wood-Anderson	SF	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Milne-Shaw	SM	Photographic	Magnetic	6 mm. per min.	1 lb.

## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$1/T_0^2$	$V$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
I.....	5.1		120	2:1	NS	
II.....	6.0		120	12:1	EW	
17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.3		160	10:1	Z	
HN.....	10.3		92	Aper.	NS	
HE.....	9.4		155	"	EW	
SN.....	8.7		56	"	NS	
SE.....	8.8		56	"	EW	
SA.....	0.9		2000		NS	
SF.....	1.1		1750		EW	
SM.....	12.0		250	20:1	EW	43 mm.



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM May 1, 1936 to May 25, 1936 No. 7

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
5996 May 8	e	17	37	00			
	eL	17	40				
	F	18	04				
6002 May 11	e	17	47	48			
	e	17	53	16			
	e	18	04.4				
	eL	18	19				
	F	20	28				
6005 May 16	e	7	31	52			
	e	7	39.4				
	eL	7	52				
	F	9	31				
6007 May 19	e	21	31				
	eL	21	57				
	F	23	47				
6008 May 20	e	3	25	32			
	e	3	31	10			
	e	3	35	34			
	e	3	37	48			
	e	3	42	36			
	eL	3	57				
	F	6	40				
6009 May 22	e	23	56	26			
	e	0	04	42			
	eL	0	13				
	F	1	48				
6012 May 25	e	3	32.3				
	e	3	36				
	e	3	40.7				
	eL	3	58				
	F	5	50				

USCGS. gives:-  
 $\phi = 8.5^\circ$  S.  
 $\lambda = 160^\circ$  E.  
 $H = 3^h 15^m.2$  G.M.T.



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM May 25, 1936 to May 31, 1936 No. 8

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6013 May 27	H	6	19.1			105° ca	USCGS. gives:- $\phi = 29^\circ$ N. $\lambda = 84^\circ$ E.
	P	6	33.3				
	PP	6	37	32			
	ScPcS	6	43	56			
	PS	6	46	36			
	eL	7	09				
	F	9	13				
6014 May 28	H	18	49.1			4670	Saskatoon Record:- H = 18 <sup>h</sup> 49 <sup>m</sup> .3 $\Delta = 4440$ km. eP = 18 56 54 eS = 19 03 08 SSS = 19 06 34 eL = 19 09.5 F = 20 00  USCGS. gives:- $\phi = 10^\circ$ N. $\lambda = 104^\circ$ W.
	eP	18	56	56			
	PP	18	58	24			
	e	19	03	06			
	iS	19	03	22			
	SS	19	06	14			
	eL	19	09.2				
	F	22	03				

*W. W. Doysee.*



EARTHQUAKE CORRELATION TABLE

May, 1936.

No.	Date	Ottawa	Shawinigan	Seven Falls		**
				W. A.	M. S.	
5987	1	0-57+0-47L	.....	.....	.....	..
5988	1	17-47+0-28L	.....	.....	17-52+0-27L	..
5989	1	17-48+0-0.1d	.....	.....	.....	A
5990	4	23-22+0-28L	.....	.....	23-23+0-16L	..
5991	5	20-33+0-48L	.....	.....	20-37+0-53L	..
5992	6	3-55+0-20r	3-48+0-01P	.....	3-56+0-20r	..
5993	7	10-22+0-12L	.....	.....	10-22+0-09L	..
5994	8	9-34+0-51u	.....	.....	.....	..
5995	8	16-20+0-18L	.....	.....	16-13+0-26L	..
5996	8	17-37+0-27r	17-44+0-07L	17-44+0-06L	17-37+0-22r	..
5997	9	6-18+0-11L	.....	.....	6-17+0-08L	..
5998	9	7-32+0-22L	.....	.....	7-45+0-12L	..
5999	10	6-15+0-14L	.....	.....	.....	..
6000	10	9-25+0-10L	.....	.....	.....	..
6001	11	11-21+0-0.1d	.....	.....	.....	A
6002	11	17-48+2-40u	18-34+0-08L	.....	17-49+2-35u	..
6003	11	21-26+0-27L	.....	.....	21-30+0-24L	..
6004	14	5-55+0-43L	.....	.....	5-56+0-24L	..
6005	16	7-32+2-00u	7-30+0-51u	8-04+0-17L	7-31+2-10u	..
	19	.....	7-44+0-03P	7-44+0-02P	.....	..
6006	19	9-49+0-07L	.....	.....	.....	..
6007	19	21-31+2-16u	21-13+0-03P	.....	21-30+2-20u	..
6008	20	3-25+3-15U	3-25+0-58U	3-26+1-14U	3-26+3-17U	..
	21	.....	.....	.....	3-44+0-45L	..
	22	.....	.....	.....	0-38+1-00u	..
6009	22	23-56+1-52u	.....	.....	0-12+1-41u	..
6010	24	17-02+0-12L	.....	.....	.....	..
6011	24	20-05+0-21L	.....	.....	.....	..
6012	25	3-22+2-18u	.....	.....	3-34+2-47u	..
	27	.....	.....	3-01+0-0.1d	.....	B
6013	27	6-33+2-40U	6-37+1-04U	6-38+1-05U	6-33+3-09U	C
	27	.....	.....	.....	12-15+0-11L	..
6014	28	18-57+3-06R	18-57+0-56R	18-57+0-55R	18-57+3-06R	E
	28	.....	.....	.....	23-19+0-12L	..
6015	29	15-02+0-12L	15-02+0-05L	15-03+0-05L	15-03+0-04L	..



CORRELATION OF EARTHQUAKES

May, 1936.

.....

N O T E S

=====

- A : May not be seismic.
- B : Slight local shock with origin probably less than  
50 km. distant from Seven Falls station.
- |     |                  |                       |  |
|-----|------------------|-----------------------|--|
| C : | Ottawa           | $\Delta = 11,700$ km. | H = 6 <sup>h</sup> -19 <sup>m</sup> .1 G.M.T.  |
|     | Seven Falls      | $\Delta = 11,200$ km. | H = 6-19.4 G.M.T.                              |
| E : | Ottawa           | $\Delta = 4,670$ km.  | H = 18 <sup>h</sup> -49 <sup>m</sup> .1 G.M.T. |
|     | Shawinigan Falls | $\Delta = 5,020$ km.  | H = 18-49.0 G.M.T.                             |
|     | Seven Falls      | $\Delta = 5,040$ km.  | H = 18-49.1 G.M.T.                             |

DOMINION OBSERVATORY,  
OTTAWA, CANADA,  
JUNE 15, 1936.



## SEISMOLOGICAL BULLETINS RECEIVED

June,  
1936.



We acknowledge, with thanks, the receipt of the following seismological publications and bulletins:-

STATIONS	BULLETINS	RECEIVED
La Plata	February and March, 1936	June 1
Manila	March, 1936	" 1
Ithaca	Year 1935	" 2
San Fernando	March and April, 1936	" 2
Malaga	Year 1935	" 3
Zurich	April, 1936	" 3
United States Coast and Geodetic Survey	Instrumental Constants and January to June, 1935	" 4
St. Louis	Preliminaries for April 1; 19th; 23rd; and 27th; 1936	" 5
Algiers	April, 1936	" 6
Prague	January 1 to March 31, 1936	" 8
Chiufeng	April, 1936	" 8
Taihoku	Preliminary for April, 1936	" 8
Helwan	April, 1936	" 8
Tokyo	Local Earthquakes October 1, 1934 to September 30, 1935	" 11
Harvard	July 1 to December 31, 1934	" 12
Nagasaki	November and December, 1935	" 16
Wellington	Preliminary for April, 1936	" 17
Christchurch	Provisional for April, 1936	" 17
Melbourne	January to March, 1936	" 18
Nagoya	July to December, 1935	" 18
Kobe	October 1 to December 31, 1934	" 18
Strasbourg, ) Paris ) Bureau Central )	April, 1936	" 19
Riverview	April, 1936	" 19
Perth	February 29 to March 22, 1936	" 19
Richmond	May, 1936	" 20
Hukuoka	Year 1935	" 22
Cartuja	October to December, 1935 and Locals for January to March/35	" 22
Zurich	May, 1936	" 22
Hamburg	January 1 to May 31, 1936	" 26
La Plata	April, 1936	" 27
Algiers	May, 1936	" 29

DOMINION OBSERVATORY,  
OTTAWA - CANADA.

R. Meldrum Stewart,  
Director.

Ernest A. Hodgson,  
Seismologist.

W. W. Doxsee,  
Assistant Seismologist.





CANADA

# SEISMOLOGICAL STATION, DOMINION OBSERVATORY OTTAWA

R. MELDRUM STEWART, *Director*ERNEST A. HODGSON, *Seismologist*W. W. DOXBEE, *Assistant Seismologist* $\varphi = 45^{\circ} 23' 38''$  N.  $\lambda = 75^{\circ} 42' 57''$  W.  $h = 83$  m.

Foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight. Time correction: with 0.25s.

## AUXILIARY STATIONS

### SASKATOON

 $\varphi = 52^{\circ} 08'$  N.  $\lambda = 106^{\circ} 38'$  W.  $h = 515$  m.

Foundation: clay and sand. Time correction: from manually recorded radio time signals.

### HALIFAX

 $\varphi = 44^{\circ} 38'$  N.  $\lambda = 63^{\circ} 36'$  W.  $h = 46$  m.

Foundation: carbonaceous slate. Time correction: from hourly recorded railroad time service.

### SHAWINIGAN FALLS

 $\varphi = 46^{\circ} 33'.1$  N.  $\lambda = 72^{\circ} 45'.8$  W.  $h = 60$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

### SEVEN FALLS

 $\varphi = 47^{\circ} 07'.4$  N.  $\lambda = 70^{\circ} 49'.6$  W.  $h = 232$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

## INSTRUMENTS—FIXED CONSTANTS

STATION	INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Ottawa	Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Ottawa	Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Ottawa	Milne-Shaw	17	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Milne-Shaw	23	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 kg.
Halifax	Mainka	HN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Halifax	Mainka	HE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Wood-Anderson	SF	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Milne-Shaw	SM	Photographic	Magnetic	6 mm. per min.	1 lb.

## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$r/T_0^2$	$V$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
I.....	5.1		120	2:1	NS	
II.....	6.0		120	12:1	EW	
17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.3		160	10:1	Z	
HN.....	10.3		92	Aper.	NS	
HE.....	9.4		155	"	EW	
SN.....	8.7		56	"	NS	
SE.....	8.8		56	"	EW	
SA.....	0.9		2000		NS	
SF.....	1.1		1750		EW	
SM.....	12.0		250	20:1	EW	43 mm.



CORRELATION OF EARTHQUAKES

June, 1936.

.....

N O T E S

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A	:	Ottawa	$\Delta = 3960$ km.	H = $9^h 15^m.3$ G. M. T.
		Seven Falls	$\Delta = 4200$ km.	H = $9^h (15^m.7)$ G. M. T.
B	:	Ottawa	$\Delta = 4890$ km.	H = $4^h 38^m.4$ G. M. T.
C	:	Ottawa	$\Delta = 7820$ km.	H = $15^h 06^m.9$ G. M. T.
		Shawinigan Falls	$\Delta = 7900$ km.	H = $15^h 06^m.9$ G. M. T.
		Seven Falls	$\Delta = 7940$ km.	H = $15^h 06^m.8$ G. M. T.

Dominion Observatory,  
Ottawa, Canada,  
July 18, 1936.



EARTHQUAKE CORRELATION TABLE

June, 1936.

No.	Date	Ottawa		Shawinigan		Seven Falls			**	
						W. A.		M. S.		
6016	3	3	19+0	56u	.....	.....	3	19+0	42u	..
6017	3	9	22+2	26R	9 22+0 39R	9 22+0 31R	9	22+2	17R	A
6018	3	18	14+0	15L	.....	.....	.....	.....	.....	..
6019	4	13	59+0	15L	.....	.....	13	59+0	11L	..
6020	5	15	00+0	33r	15 00+0 02P	.....	.....	.....	.....	..
6021	6	7	32+0	25L	.....	.....	.....	.....	.....	..
6022	6	16	24+0	58u	.....	.....	16	22+0	48u	..
6023	6	21	00+0	07L	.....	.....	21	02+0	05L	..
6024	7	4	14+0	27u	.....	.....	4	12+0	26u	..
6025	7	4	46+0	52r	.....	.....	4	46+0	44r	B
6026	9	16	58+1	46u	16 58+0 03P	16 58+0 03P	16	58+1	37u	..
6027	10	4	17+0	39L	.....	.....	4	19+0	47L	..
6028	10	8	44+2	32u	8 42+0 24u	8 42+0 23u	8	44+2	40u	..
6029	10	17	59+0	16L	.....	.....	18	06+0	09L	..
6030	10	19	00+0	45u	18 59+0 07P	18 59+0 04P	18	59+0	37u	..
6031	10	22	20+0	22r	22 21+0 04r	22 22+0 04r	22	22+0	12r	..
6032	11	3	36+0	28u	.....	.....	3	41+0	26u	..
6033	12	16	05+0	25u	.....	.....	16	16+0	15L	..
6034	12	16	51+0	37L	.....	.....	16	55+0	26L	..
	13	.....	.....	.....	.....	.....	0	39+0	10L	..
6035	13	9	56+0	24L	.....	.....	9	58+0	17L	..
6036	13	20	40+0	10L	.....	.....	.....	.....	.....	..
6037	14	2	48+0	53u	2 39+0 01P	.....	2	48+0	57u	..
6038	14	10	28+0	10L	.....	.....	10	29+0	07L	..
6039	14	17	23+0	56u	.....	.....	17	23+1	03u	..
6040	14	21	39+0	07L	.....	.....	21	42+0	11L	..
6041	16	0	59+2	04u	.....	.....	0	59+2	02u	..
6042	16	19	21+0	20L	.....	.....	19	22+0	14L	..
	19	.....	.....	.....	.....	.....	17	19+0	34L	..
6043	20	3	35+0	01v	3 35+0 06v	.....	.....	.....	.....	..
6044	20	6	48+0	55L	.....	.....	6	47+0	58L	..
	20	.....	.....	.....	7 11+0 01v	.....	.....	.....	.....	..
6045	20	8	41+0	12L	.....	.....	8	41+0	11L	..
6046	22	5	57+0	12L	.....	.....	6	00+0	04L	..
6047	22	19	35+1	01u	.....	.....	19	40+0	58u	..
6048	27	3	30+0	39r	.....	.....	3	33+0	18r	..
6049	27	21	36+0	50u	.....	.....	21	56+0	24L	..
6050	28	7	07+0	06L	.....	.....	7	08+0	05L	..
6051	28	8	34+1	37u	.....	.....	8	34+1	25u	..
6052	29	14	44+1	31u	14 43+0 17u	14 44+0 14u	14	44+1	24u	..
6053	30	15	18+4	04U	15 18+1 25U	15 18+1 08U	15	18+4	12U	C
6054	30	20	03+0	54L	.....	.....	20	06+1	00L	..



OTTAWA, CANADA  
SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM June 14, 1936 to June 30, 1936 No. 10

NO. AND DATE	PHASE	TIME			AMP.	DI STANCE	REMARKS
		h	m	s			
6041 June 16	e <sub>E</sub>	0	58.7				
	e	1	07.7				
	eL	1	20				
	F	3	03				
6047 June 22	e	19	34.9				
	e	19	41.0				
	eL	19	44				
	F	20	36				
6048 June 27	e	3	29.6				
	e	3	34.0				
	eL	3	38				
	F	4	09				
6049 June 27	e	21	36				
	eL	21	55				
	F	22	26				
6051 June 28	e	8	34.4				
	e <sub>E</sub>	8	42.7				
	L	9	00				
	F	10	11				
6052 June 29	e	14	44				
	e	14	53.1				
	L	15	14				
	F	16	15				
6053 June 30	H	15	06.9		7820	Saskatoon Record: iP = 15 16 02 iS = 15 23 30 Δ = 5780 km. H = 15 06.9  USCGS. gives: φ = 51.5° N. λ = 160° E.	
	iP <sub>N</sub>	15	18 04	-1.8			
	iP <sub>E</sub>	15	18 04	+1.5			
	PP	15	20 44				
	PPP	15	22 26				
	iS <sub>N</sub>	15	27 20				
	PS <sub>E</sub>	15	27 46				
	SS	15	32 08				
	SSS	15	35 03				
	eL	15	39				
	F	19	22				

*W. W. Doysee*



OTTAWA, CANADA  
SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM June 1, 1936 to June 14, 1936 No. 9

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6016 June 3	e	3	18.7				
	eL	3	35				
	F	4	15				
6017 June 3	H	9	15.3		3960		
	eP	9	22 21				
	PPE	9	23 32				
	S	9	28 06				
	SSSN	9	30 32				
	eL	9	33				
	F	11	48				
6025 June 7	H	4	38.4		4890		
	ePN	4	46 28				
	PPE	4	48.0				
	eS	4	53.1				
	eL	5	00				
	F	5	38				
6026 June 9	eN	16	58.2				
	e	16	59 16				
	eE	17	16.3				
	eL	17	40				
	F	18	44				
6028 June 10	e	8	43 58				
	eE	8	45 20				
	e	8	52.0				
	e	8	54 00				
	e	8	57 08				
	e	9	00 36				
	eE	9	02.0				
	eL	9	13				
F	11	16					
6030 June 10	e	19	00				
	e	19	04.5				
	eL	19	07				
	F	19	45				
6037 June 14	eE	2	47 40				
	eL	3	01				
	F	3	40				
6039 June 14	e	17	23				
	eL	17	38				
	F	18	19				

USCGS. gives:  
 $\phi = 15^{\circ}\text{S.}$   
 $\lambda = 140^{\circ}\text{E.}$   
approximate location.





CANADA

# SEISMOLOGICAL STATION, DOMINION OBSERVATORY OTTAWA

R. MELDRUM STEWART, *Director*ERNEST A. HODGSON, *Seismologist*W. W. DOXSEE, *Assistant Seismologist* $\varphi = 45^{\circ} 23' 38''$  N.  $\lambda = 75^{\circ} 42' 57''$  W.  $h = 83$  m.

Foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight. Time correction: with 0.25s.

## AUXILIARY STATIONS

### SASKATOON

 $\varphi = 52^{\circ} 08'$  N.  $\lambda = 106^{\circ} 38'$  W.  $h = 515$  m.

Foundation: clay and sand. Time correction: from manually recorded radio time signals.

### HALIFAX

 $\varphi = 44^{\circ} 38'$  N.  $\lambda = 63^{\circ} 36'$  W.  $h = 46$  m.

Foundation: carbonaceous slate. Time correction: from hourly recorded railroad time service.

### SHAWINIGAN FALLS

 $\varphi = 46^{\circ} 33'.1$  N.  $\lambda = 72^{\circ} 45'.8$  W.  $h = 60$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

### SEVEN FALLS

 $\varphi = 47^{\circ} 07'.4$  N.  $\lambda = 70^{\circ} 49'.6$  W.  $h = 232$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

## INSTRUMENTS—FIXED CONSTANTS

STATION	INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Ottawa	Bosch	I	Photographic	Air	15 mm. per min.	200 g.
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Ottawa	Milne-Shaw	17	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Milne-Shaw	23	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 kg.
Halifax	Mainka	HN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Halifax	Mainka	HE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Wood-Anderson	SF	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Milne-Shaw	SM	Photographic	Magnetic	6 mm. per min.	1 lb.

## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$r/T_0^2$	$V$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
I.....	5.1		120	2:1	NS	
II.....	6.0		120	12:1	EW	
17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.3		160	10:1	Z	
HN.....	10.3		92	Aper.	NS	
HE.....	9.4		155	"	EW	
SN.....	8.7		56	"	NS	
SE.....	8.8		56	"	EW	
SA.....	0.9		2000		NS	
SF.....	1.1		1750		EW	
SM.....	12.0		250	20:1	EW	43 mm.



EARTHQUAKE CORRELATION TABLE

July, 1936.

No.	Date	Ottawa	Shawinigan	Seven Falls		**
				W. A.	M. S.	
6055	3	3 24+1 50u	.....	.....	3 26+1 58u	..
	3	.....	4 21+0 05P	4 21+0 03P	.....	..
6056	4	9 11+0 43L	.....	.....	9 12+0 50L	..
6057	5	15 16+0 28L	.....	.....	15 16+0 22L	..
6058	5	19 16+2 45u	19 14+0 20u	.....	19 16+2 34u	..
	6	.....	17 32+0 0.2d	17 31+0 0.2d	.....	A
6059	6	19 26+0 41L	18 44+0 02P	.....	19 21+0 55L	..
6060	12	3 01+1 41u	.....	.....	3 40+1 04u	..
6061	13	11 23+5 14U	11 23+2 25U	11 23+2 21U	11 23+5 13U	B
6062	14	10 15+1 20u	.....	.....	10 49+0 21L	..
6063	14	22 43+0 20r	22 42+0 06r	.....	22 46+0 17r	..
6064	14	23 03+0 32L	.....	.....	.....	..
6065	15	2 39+0 23L	.....	.....	2 41+0 19L	..
6066	15	11 36+0 28L	.....	.....	11 39+0 21L	..
6067	15	12 41+0 23L	.....	.....	.....	..
6068	16	7 19+1 02r	7 21+0 18r	7 24+0 12r	7 21+0 41r	..
6069	19	2 52+0 37L	2 45+0 01P	.....	2 52+0 24L	..
6070	22	7 11+0 44L	.....	.....	7 19+0 27L	..
6071	23	6 45+2 19u	.....	.....	6 48+2 19u	..
6072	23	18 13+0 16L	.....	.....	18 16+0 18L	..
6073	23	18 36+0 22L	.....	.....	18 41+0 13L	..
6074	23	19 14+0 50r	19 18+0 10r	19 22+0 04r	19 19+0 35r	..
6075	23	23 06+0 19L	.....	.....	23 15+0 12L	..
6076	25	1 36+0 27L	.....	.....	.....	..
6077	25	2 32+0 12L	.....	.....	.....	..
6078	26	7 48+3 05U	7 48+0 46U	7 49+0 30UT	7 57+2 55UT	C
6079	27	9 58+0 27L	.....	.....	9 59+0 30L	..
6080	28	5 46+2 04u	.....	.....	5 46+2 12u	..
6081	28	8 24+1 44u	.....	.....	8 27+1 50u	..
6082	29	23 15+0 12L	.....	.....	23 20+0 07L	..
6083	30	0 22+0 28L	.....	.....	0 22+0 22L	..
6084	30	14 32+1 18L	.....	.....	14 55+0 55L	..
6085	31	17 48+1 42R	17 57+0 22L	.....	.....	..



CORRELATION OF EARTHQUAKES

July, 1936.

.....  
N O T E S  
=====

A : Light local shock recorded by the Wood-Anderson  
seismographs at Shawinigan Falls and Seven Falls.

B : Ottawa  $\Delta = 7700$  km. H = 11<sup>h</sup>12<sup>m</sup>.3 G. M. T.  
Shawinigan Falls  $\Delta = 7780$  km. H = 11 12.4 G. M. T.  
Seven Falls  $\Delta = 7780$  km. H = 11 12.5 G. M. T.

C : Ottawa  $\Delta = 7580$  km. H = 7 37.1 G. M. T.  
Shawinigan Falls  $\Delta = 7750$  km. H = 7 37.0 G. M. T.  
Seven Falls  $\Delta = 7700$  km. H = (7 38) G. M. T.

Dominion Observatory,  
Ottawa, Canada,  
August 25, 1936.



SEISMOLOGICAL BULLETINS RECEIVED  
July, 1936.



We acknowledge, with thanks, the receipt of the following seismological publications and bulletins:-

STATIONS	BULLETINS	RECEIVED
St. Louis	Preliminaries for May 20th; 27th; 28th; and June 3, 1936	July 2
Helwan	May, 1936	" 3
Zinsen	October 1, 1935 to March 22, 1936	" 3
Sydney	April, 1936	" 3
Zi-Ka-Wei	February 1 to March 21, 1936	" 3
Manila	April, 1936	" 3
Tananarive	October to December, 1935	" 4
Uccle	January 1 to March 19, 1936	" 6
Santa Clara	April, 1936	" 6
Tokyo	Local Earthquakes from October 1 to December 31, 1935	" 7
Taihoku	May, 1936	" 9
Strasbourg )	May, 1936	" 11
Paris )		
Bureau Central )		
Peichiko	January to March, 1936	" 13
Ksara	May, 1936	" 14
Chiufeng	May, 1936	" 15
Sydney	May, 1936	" 16
Riverview	May, 1936	" 16
Lund	Year 1932	" 17
Scoresby-Sund	December, 1933 to June, 1934	" 17
Kobenhavn	July to September, 1934	" 18
Kobe	January 1 to March 31, 1935	" 18
Bucarest	April to June, 1935	" 18
Santa Clara	May, 1936	" 20
Pasadena	April, 1936 and Local Shocks	" 22
Richmond	June, 1936	" 24
St. Louis	Preliminary for August 25, 1936	" 24
Florissant	December, 1935 to February, 1936	" 24
Toledo )	July to December, 1935	" 24
Malaga )		
Almeria )		
Alicante )		
Cartuja )	April to September, 1935	" 25
Göttingen		
Zürich	June, 1936	" 27
Madrid	Year 1935	" 27
Cartuja	Boletin Macrosismico 1935	" 27
Wellington	July to December, 1934	" 28
Kobe	April 1 to June 30, 1935	" 29
Manila	May, 1936	" 29
Perth	March 27 to April 29, 1936	" 30
Wellington	May, 1936	" 30
Christchurch	Provisional for May, 1936	" 30
Toronto	May and June, 1936	" 30
Victoria	April and May, 1936	" 30
Florissant	March, 1936	" 31
St. Louis	August to October, 1935	" 31

DOMINION OBSERVATORY,  
OTTAWA - CANADA.

R. Meldrum Stewart,  
Director.

Ernest A. Hodgson,  
Seismologist.  
W. W. Doxsee,  
Assistant Seismologist.



OTTAWA, CANADA,  
SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM July 1, 1936 to July 26, 1936 No. 11

NO. AND DATE	PHASE	TIME	AMP. $\mu$	DISTANCE km.	REMARKS
		h m s			
6058 July 5	e	19 16			USCGS. gives:- $\phi = 2^{\circ}$ N. $\lambda = 123^{\circ}$ E.
	e	19 33.2			
	eL	19 47			
	F	22 01			
6060 July 12	e	3 01 28			
	e	3 09 00			
	eL	3 32			
	F	4 42			
6061 July 13	H	11 12.3		7700	Saskatoon Record:- eP = 11 24 40 eS = 11 34 52 $\Delta = 9020$ km. H = 11 12.4
	iP	11 23 24			
	PF <sup>N</sup>	11 26 12			
	iS	11 32 35			
	SSS	11 40			
	L	11 45			
	F	16 37			
6068 July 16	e	7 18.8			USCGS. gives:- $\phi = 46^{\circ}2$ N. $\lambda = 118^{\circ}2$ W.
	eL	7 22.5			
	F	8 21			
6071 July 23	eE	6 45.4			
	eN	6 47 00			
	eN	6 54.5			
	eL	7 17			
	F	9 04			
6074 July 23	e	19 14			
	eL	19 16.5			
	F	20 04			
6078 July 26	H	7 37.1		7580	USCGS. gives:- $\phi = 24^{\circ}$ S. $\lambda = 71^{\circ}$ W.
	iP	7 48 03			
	iS	7 57 08			
	i	7 58 02			
	e	8 05			
	eL	8 09			
	F	10 53			



OTTAWA, CANADA,  
SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM July 26, 1936 to July 31, 1936 No. 12

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6080 July 28	e	5	46.4				
	e	5	56.4				
	eL	6	10				
	F	7	50				
6081 July 28	e	8	23.6				
	eL	8	49				
	F	10	08				
6085 July 31	e	17	48.0			USCGS. gives:- $\phi = 22^\circ$ N. $\lambda = 111^\circ$ W.	
	eS	17	53 30				
	eL	17	58				
	F	19	30				

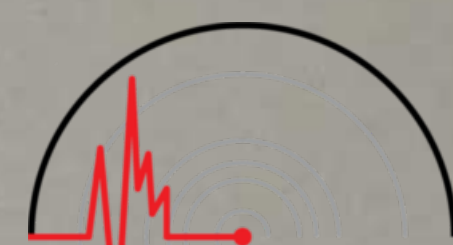
*W. W. Doxsee.*





CANADA

# SEISMOLOGICAL STATION, DOMINION OBSERVATORY OTTAWA

International  
Seismological  
CentreR. MELDRUM STEWART, *Director*ERNEST A. HODGSON, *Seismologist*W. W. DOXSEE, *Assistant Seismologist* $\varphi = 45^{\circ} 23' 38''$  N.  $\lambda = 75^{\circ} 42' 57''$  W.  $h = 83$  m.

Foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight. Time correction: with 0.25s.

## AUXILIARY STATIONS

### SASKATOON

 $\varphi = 52^{\circ} 08'$  N.  $\lambda = 106^{\circ} 38'$  W.  $h = 515$  m.

Foundation: clay and sand. Time correction: from manually recorded radio time signals.

### HALIFAX

 $\varphi = 44^{\circ} 38'$  N.  $\lambda = 63^{\circ} 36'$  W.  $h = 46$  m.

Foundation: carbonaceous slate. Time correction: from hourly recorded railroad time service.

### SHAWINIGAN FALLS

 $\varphi = 46^{\circ} 33'.1$  N.  $\lambda = 72^{\circ} 45'.8$  W.  $h = 60$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

### SEVEN FALLS

 $\varphi = 47^{\circ} 07'.4$  N.  $\lambda = 70^{\circ} 49'.6$  W.  $h = 232$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

## INSTRUMENTS—FIXED CONSTANTS

STATION	INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Ottawa	Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Ottawa	Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Ottawa	Milne-Shaw	17	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Milne-Shaw	23	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 kg.
Halifax	Mainka	HN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Halifax	Mainka	HE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Wood-Anderson	SF	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Milne-Shaw	SM	Photographic	Magnetic	6 mm. per min.	1 lb.

## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$r/T_0^2$	$V$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
I.....	5.1		120	2:1	NS	
II.....	6.0		120	12:1	EW	
17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.3		160	10:1	Z	
HN.....	10.3		92	Aper.	NS	
HE.....	9.4		155	"	EW	
HE.....	9.0		61	"	NS	
SN.....	9.0		56	"	EW	
SE.....	0.9		2000		NS	
SA.....	1.0		1800		EW	
SF.....	12.0		250	20:1	EW	44 mm.
SM.....						



OTTAWA, CANADA  
SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM August 1, 1936 to August 24, 1936 No. 13

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6087 Aug. 1	e	8	18				
	L	8	24				
	F	9	37				
6099 Aug. 8	e	4	34				
	L	4	47				
	F	5	17				
6100 Aug. 13	e	20	23	10		USCGS. gives:- $\phi = 8^\circ$ N. $\lambda = 127^\circ$ E.	
	eN	20	28.6				
	eE	20	31.1				
	eE	20	39.9				
	L	20	56				
	F	22	43				
6107 Aug. 17	e	14	26				
	e	14	37				
	L	15	06				
	F	16	35				
6108 Aug. 18	H	7	07.4		3820		
	eP	7	14	14			
	PP	7	15	32			
	eS	7	19	50			
	e	7	22.6				
	M	7	26	28			
	F	8	25				
6109 Aug. 22	e	7	09.7		USCGS. gives:- $\phi = 22^\circ 2'$ N. $\lambda = 121^\circ 3'$ E.		
	e	7	19.6				
	e	7	26.4				
	L	7	41				
	F	9	58				
6110 Aug. 23 and 24	H	21	15		130° ca		
	P'	21	31.3				
	PP	21	33	24			
	<u>ScPcP</u>	21	34	35			
	SE	21	41	24			
	SS	21	50.3				
	L	22	08				
	F	0	55				



OTTAWA, CANADA  
SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM August 24, 1936 to August 31, 1936 No. 14

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6111 Aug. 24 and 25	e	22	43				
	e <sup>N</sup>	23	11				
	L	23	25				
	F	1	01				
6112 Aug. 25	e	6	16				
	L	6	17				
	F	6	36				
6113 Aug. 25	e <sup>E?</sup>	19	12				
	e <sup>N</sup>	19	31				
	L	19	41				
	F	20	35				
6114 Aug. 26	e	21	37				
	e <sup>N</sup>	21	41				
	L	21	43				
	F	22	49				

*W. W. Doxsee.*



EARTHQUAKE CORRELATION TABLE

August, 1936.

No.	Date	Ottawa	Shawinigan	Seven Falls		**
				W. A.	M. S.	
6086	1	7 10+1 08L	.....	.....	.....	..
6087	1	8 18+1 19r	8 24+0 11r	.....	.....	..
6088	1	13 57+0 07L	.....	.....	.....	..
6089	1	14 31+0 09L	.....	.....	.....	..
6090	1	15 06+0 30L	.....	.....	.....	..
6091	1	19 28+0 05L	.....	.....	.....	..
6092	2	9 41+0 10L	.....	.....	.....	..
	2	.....	22 24+0 01P	.....	.....	..
6093	3	15 24+0 09L	.....	.....	.....	..
6094	4	1 55+0 19L	.....	.....	.....	..
6095	4	4 13+0 15L	.....	.....	.....	..
6096	4	6 26+0 20L	.....	.....	.....	..
6097	4	15 05+0 40L	.....	.....	.....	..
6098	7	22 17+0 33L	.....	.....	.....	..
6099	8	4 34+0 43L	.....	.....	.....	..
6100	13	20 23+2 20u	.....	.....	.....	..
6101	14	11 16+0 08L	.....	.....	.....	..
6102	14	23 12+1 13u	.....	.....	.....	..
6103	15	3 09+1 09L	.....	.....	.....	..
6104	15	6 15+0 50L	.....	.....	.....	..
6105	16	14 22+0 38L	.....	.....	.....	..
6106	16	7 12+0 37L	.....	.....	.....	..
6107	17	14 26+2 09u	.....	.....	.....	..
6108	18	7 14+1 11r	7 14+0 27r	7 14+0 28r	.....	A
6109	22	7 10+2 48U	7 10+1 03U	7 10+1 06U	.....	..
6110	23	21 31+3 24U	21 31+1 23U	21 31+1 14U	.....	B
6111	24	22 43+2 18u	.....	.....	.....	..
6112	25	6 16+0 20r	.....	.....	.....	..
6113	25	19 12+1 23u	.....	.....	.....	..
6114	26	21 37+1 12u	.....	.....	.....	..
6115	28	7 32+0 43L	.....	.....	.....	..
6116	29	9 38+0 20r	.....	9 34+0 01P	.....	..
6117	30	17 56+0 24L	.....	.....	.....	..
6118	30	22 21+0 20L	.....	.....	.....	..



CORRELATION OF EARTHQUAKES

August, 1936.

.....  
N O T E S  
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A : Ottawa  $\Delta = 3820$  km. H =  $7^{\text{h}}07^{\text{m}}.4$  G. M. T.

B : Ottawa  $\Delta = 14,500$  km. ca. H =  $21^{\text{h}}15^{\text{m}}$  ca. G. M. T.

General : Seven Falls Milne-Shaw not in operation  
during the month.

Dominion Observatory,  
Ottawa, Canada,  
September 15, 1936.



SEISMOLOGICAL BULLETINS RECEIVED

August,

1936



We acknowledge, with thanks, the receipt of the following seismological publications and bulletins:-

STATIONS	BULLETINS	RECEIVED
Taihoku	Preliminary for June, 1936	August 4
Apia	April to June, 1936	" 4
Ksara	June, 1936	" 4
Batavia	January to March, 1936	" 5
Chiufeng	June, 1936	" 7
Helwan	June, 1936	" 9
Zi-Ka-Wei	April 1 - 27th, 1936	" 12
Riverview	June, 1936	" 12
St. Louis	Preliminaries for June 30; July 5, 13th, and 16th, 1936	" 12
Sydney	June, 1936	" 13
Strasbourg )	June, 1936	" 13
Paris )		
Bureau Central )		
St. Louis	Preliminary for July 26, 1936	" 15
Denver	January to December, 1935	" 15
St. Louis	November and December, 1935	" 15
Leningrad and )	April to December, 1935	" 19
Auxiliary Stations )		
Colaba	January to December, 1935	" 19
Richmond	July, 1936	" 20
San Fernando	May and June, 1936	" 20
Berkeley and )	April 1, 1934 to September 30, 1935	" 20
Auxiliary Stations )		
Florissant	April and May, 1936	" 21
Zurich	July, 1936	" 21
Dublin	April to June, 1936	" 25
Uccle	March 20 to May 15, 1936	" 25
La Plata	May and June, 1936	" 26
St. Louis	January to May, 1936	" 26
Georgetown	Seismological Despatches April to July, 1936	" 26
Wellington	June, 1936	" 26
Christchurch	Provisional for June, 1936	" 26
Ksara	July, 1936	" 28
St. Louis	Preliminary for June 10, 1936	" 31
Little Rock	October 19 to December 31, 1935	" 31
Helwan	July, 1936	" 31

DOMINION OBSERVATORY  
OTTAWA - CANADA

R. Meldrum Stewart,  
Director.

Ernest A. Hodgson,  
Seismologist.

W. W. Doxsee,  
Assistant Seismologist.





CANADA

# SEISMOLOGICAL STATION, DOMINION OBSERVATORY OTTAWA

R. MELDRUM STEWART, *Director*ERNEST A. HODGSON, *Seismologist*W. W. DOXBEE, *Assistant Seismologist* $\varphi = 45^{\circ} 23' 38''$  N.  $\lambda = 75^{\circ} 42' 57''$  W.  $h = 83$  m.

Foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight. Time correction: with 0.25s.

## AUXILIARY STATIONS

### SASKATOON

 $\varphi = 52^{\circ} 08'$  N.  $\lambda = 106^{\circ} 38'$  W.  $h = 515$  m.

Foundation: clay and sand. Time correction: from manually recorded radio time signals.

### HALIFAX

 $\varphi = 44^{\circ} 38'$  N.  $\lambda = 63^{\circ} 36'$  W.  $h = 46$  m.

Foundation: carbonaceous slate. Time correction: from hourly recorded railroad time service.

### SHAWINIGAN FALLS

 $\varphi = 46^{\circ} 33'.1$  N.  $\lambda = 72^{\circ} 45'.8$  W.  $h = 60$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

### SEVEN FALLS

 $\varphi = 47^{\circ} 07'.4$  N.  $\lambda = 70^{\circ} 49'.6$  W.  $h = 232$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

## INSTRUMENTS—FIXED CONSTANTS

STATION	INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Ottawa	Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Ottawa	Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Ottawa	Milne-Shaw	17	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Milne-Shaw	23	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 kg.
Halifax	Mainka	HN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Halifax	Mainka	HE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Wood-Anderson	SF	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Milne-Shaw	SM	Photographic	Magnetic	6 mm. per min.	1 lb.

## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$r/T_0^2$	$\nu$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
I	5.1		120	2:1	NS	
II	6.0		120	12:1	EW	
17	12.0		250	20:1	EW	44 mm.
23	12.0		250	20:1	NS	44 mm.
W	5.3		160	10:1	Z	
HN	10.3		92	Aper.	NS	
HE	9.4		155	"	EW	
SN	9.0		61	"	NS	
SE	9.0		56	"	EW	
SA	0.9		2000		NS	
SF	1.0		1800		EW	
SM	12.0		250	20:1	EW	44 mm.





SEISMOLOGICAL BULLETINS RECEIVED

September

1936.

We acknowledge, with thanks, the receipt of the following seismological publications and bulletins:-

STATIONS	BULLETINS	RECEIVED
Taihoku	January to March, 1935	Sept. 1
Taihoku	July, 1936	" 1
Pasadena	May, 1936 and Local Shocks	" 3
Manila	June, 1936	" 8
St. Louis	Preliminary for July 31, 1936	" 8
Little Rock	January to May, 1936	" 8
Perth	May 5 to June 10, 1936	" 9
Santa Clara	June, 1936	" 9
Chiufeng	July, 1936	" 9
Riverview	July, 1936	" 10
St. Louis	Preliminaries for August 18; 22nd/36	" 12
Florissant	June 3 - 30th, 1936	" 12
Algiers	June and July, 1936	" 12
Strasbourg )	July, 1936	" 16
Paris )		
Bureau Central )		
Richmond	August, 1936	" 19
New Zealand Stations	July, 1936	" 24
Pasadena	June, 1936	" 24
Melbourne	April to June, 1936	" 24
Sydney	July, 1936	" 24
San Fernando	July and August, 1936	" 25
Zurich	August, 1936	" 26
Ksara	August, 1936	" 28
Taihoku	April to September, 1935	" 29
Taihoku	August, 1936	" 29
Tananarive	January and February, 1936	" 29

DOMINION OBSERVATORY  
OTTAWA - CANADA

R. Meldrum Stewart,  
Director.

Ernest A. Hodgson,  
Seismologist.

W. W. Doxsee,  
Assistant Seismologist.



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM September 1, 1936 to September 30, 1936 No. 15

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6119 Sept. 3	e	5	18				
	eL	5	23				
	F	5	53				
6122 Sept. 4	e	8	33.8				
	e <sub>E</sub>	8	41.0				
	e <sub>N</sub>	9	01				
	L	9	06				
	F	10	14				
6124 Sept. 6	e	18	06.5				
	e <sub>E</sub>	18	08.3				
	e	18	14.3				
	L	18	38				
	F	20	19				
6128 Sept. 19	e	1	24.5			Micros mask phases.	
	e <sub>E</sub>	1	33				
	e	1	40				
	eL	1	56				
	F	3	53				
6133 Sept. 25	e <sub>E</sub> ?	13	01.4			Saskatoon Record:- eP = 12 57 41 S = 13 01 09 $\Delta$ = 2035 km. H = 12 53.5 G.M.T. USCGS. gives:- $\phi$ = 43° 5 N. $\lambda$ = 128° 2 W.	
	eS?	13	06.3				
	eL	13	11				
	F	15	40				

W. W. Doxsee



EARTHQUAKE CORRELATION TABLE

September, 1936

No.	Date	Ottawa		Shawinigan		Seven Falls			**
						W. A.		M. S.	
6119	3	5	18+0	35u	.....	.....	.....	..	
6120	3	13	32+0	35L	.....	.....	.....	..	
6121	3	23	15+0	03L	.....	.....	.....	..	
6122	4	8	34+1	40u	.....	.....	.....	..	
6123	5	18	23+0	40L	.....	.....	.....	..	
6124	6	18	07+2	12u	.....	.....	.....	..	
6125	12	18	54+0	23L	.....	.....	18 51+0 24L	..	
6126	16	10	18+0	39L	.....	.....	10 24+0 40L	..	
6127	18	19	22+1	03L	.....	.....	19 22+0 58L	..	
6128	19	1	24+2	29U	1 21+1 18U	2 05+0 31L	1 24+2 40U	..	
6129	19	7	26+0	33L	.....	.....	7 27+0 41L	..	
6130	19	14	59+0	11L	.....	.....	15 04+0 04L	..	
6131	21	12	02+0	29L	.....	.....	12 06+0 18L	..	
6132	21	17	24+0	25L	.....	.....	17 26+0 30L	..	
	21	.....	.....	.....	23 50+0 08v	23 50+0 08v	.....	A	
6133	25	13	01+2	39R	13 14+0 33L	13 01+0 49R	13 01+2 19R	..	
6134	28	13	16+0	12r	13 13+0 12r	13 15+0 09r	.....	..	
6135	29	17	34+0	25L	.....	.....	17 34+0 11L	..	



CORRELATION OF EARTHQUAKES

September, 1936

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N O T E S

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A : Epicentre probably within 500 km. of the Shawinigan Falls and Seven Falls Stations.

General: Seven Falls Milne-Shaw replaced in service September 11th.

Mr. Boily reported that a slight shock was felt at Baie St. Paul, Quebec, at 10 a. m. E. S. T. September 18th. No trace of seismic disturbance detected on the Seven Falls seismograms.

Dominion Observatory,  
Ottawa, Canada,  
October 14th, 1936.



SEISMOLOGICAL BULLETINS RECEIVED

October,  
1936.

We acknowledge, with thanks, the receipt of the following seismological publications and bulletins:-

STATIONS	BULLETINS	RECEIVED
Pasadena	July, 1936	October 2
Santa Clara	June, 1936	" 3
Manila	July, 1936	" 5
Königsberg	May to August, 1935	" 7
Uccle	May 16 to June 30, 1936	" 7
Paris )	August, 1936	" 8
Strasbourg )		
Bureau Central)		
Algiers	August, 1936	" 9
Trieste	January to June, 1935	" 9
State College	January to June, 1936	" 9
Mizusawa	Year 1935	" 9
Madison	October 29/35 to May 20/36	" 14
Toronto	July, 1936	" 14
Victoria	June and July, 1936	" 14
Pasadena	August, 1936	" 15
Chiufeng	August, 1936	" 15
Karlsruhe	January to June, 1936	" 16
Richmond	September, 1936	" 21
New Zealand Stations	January to March, 1935 and August, 1936	" 21
Hamburg	June 1 to September 20/36	" 21
Pasadena	Local Shocks for August, 1936	" 21
Riverview	August, 1936	" 23
Bucarest	July to September, 1936	" 23
Perth	June 11 to July 6, 1936	" 23
Santa Clara	August, 1936	" 24
Ksara	September, 1936	" 26
Vladivostok	July and August, 1936	" 29
Peichiko	April to June, 1936	" 30

DOMINION OBSERVATORY  
OTTAWA - CANADA

R. Meldrum Stewart,  
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CANADA

# SEISMOLOGICAL STATION, DOMINION OBSERVATORY OTTAWA

R. MELDRUM STEWART, *Director*ERNEST A. HODGSON, *Seismologist*W. W. DOXBEE, *Assistant Seismologist* $\varphi = 45^{\circ} 23' 38''$  N.  $\lambda = 75^{\circ} 42' 57''$  W.  $h = 83$  m.

Foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight. Time correction: within 0.25s.

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 $\varphi = 52^{\circ} 08'$  N.  $\lambda = 106^{\circ} 38'$  W.  $h = 515$  m.

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### HALIFAX

 $\varphi = 44^{\circ} 38'$  N.  $\lambda = 63^{\circ} 36'$  W.  $h = 46$  m.

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### SHAWINIGAN FALLS

 $\varphi = 46^{\circ} 33' \cdot 1$  N.  $\lambda = 72^{\circ} 45' \cdot 8$  W.  $h = 60$  m. ca.

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

### SEVEN FALLS

 $\varphi = 47^{\circ} 07' \cdot 4$  N.  $\lambda = 70^{\circ} 49' \cdot 6$  W.  $h = 232$  m. ca.

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## INSTRUMENTS—FIXED CONSTANTS

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Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
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Seven Falls	Milne-Shaw	SM	Photographic	Magnetic	6 mm. per min.	1 lb.

## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$r/T_0^2$	$V$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
I.....	5.1		120	2:1	NS	
II.....	6.0		120	12:1	EW	
17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.3		160	10:1	Z	
HN.....	10.3		92	Aper.	NS	
HE.....	9.4		155	"	EW	
HE.....	9.4		61	"	NS	
SN.....	9.0		56	"	EW	
SE.....	9.0		56	"	EW	
SA.....	0.9		2000		NS	
SF.....	1.0		1800		EW	
SF.....	1.0		1800		EW	
SM.....	12.0		250	20:1	EW	44 mm.



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM October 1, 1936 to October 23, 1936 No.16

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6137 Oct. 3 and 4th	e	22	12	43			
	e	22	24.3				
	e	22	28.4				
	eE	22	37.3				
	eL F	22 0	56 18				
6139 Oct. 5	eE	0	19	16			
	e	0	23.3				
	e	0	29.4				
	e	0	38.2				
	eL F	0 2	44 21				
6140 Oct. 5	H	9	44.3		130°	USCGS. gives: $\phi = 1^\circ$ N. $\lambda = 127^\circ$ E.	
	iP'	10	03 31				
	PP	10	05 38				
	ScPcP	10	06 52				
	i	10	07 12				
	PS	10	06 05				
	eE	10	20 08				
	SSN	10	23.3				
	eL	10	43				
F	12	24					
6152 Oct. 16	eE	12	22				
	eN	12	28				
	eL	12	50				
	F	14	06				
6156 Oct. 19	e	12	27.1				
	eN	12	33				
	eN	12	39				
	eE	12	44				
	eL? F	12 14	53 17				
6157 Oct. 23	e	0	02.5				
	eL	0	08				
	F	0	55				



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM October 23, 1936 to October 31, 1936 No.17

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6159 Oct. 23	H	6	24.3		5000	Saskatoon Record: eP = 6 29 51 eS = 6 34 23 $\Delta$ = 2850 km. H = 6 24.3 Halifax Record: eP = 6 33 20 iS = 6 40 39 $\Delta$ = 5610 H = 6 24.4 USCGS. gives: $\phi$ = 61°1 N. $\lambda$ = 149°2 W.	
	P	6	32 34				
	PP	6	34 10				
	S	6	39 18				
	SS	6	42 22				
	L	6	45.5				
	F	10	12				
6160 Oct. 23	e	15	50.5				
	eL	15	55				
	F	16	03				
6161 Oct. 23	e	16	40.2				
	e	16	43.6				
	eL	16	47				
	F	17	20				
6164 Oct. 26 and 27th	H	23	06.0		4330		
	PN	23	13 28				
	PPP	23	15 06				
	S	23	19 36				
	SSS	23	22.4				
	eL	23	24				
F	0	23					
6165 Oct. 29	eN	6	00 30				
	e	6	06 22				
	eL	6	09				
	F	7	04				
6166 Oct. 29	e	18	58				
	e	19	04				
	e	19	14				
	eL	19	26				
	F	21	14				

W. W. Doysee.



EARTHQUAKE CORRELATION TABLE

October, 1936.

No.	Date	Ottawa	Shawinigan	Seven Falls		**
				W. A.	M. S.	
6136	2	5229+0 06L	.....	.....	.....	..
6137	3	2 13+2 05u	22 13+0 13u	.....	22 13+2 16u	..
6138	4	8 01+0 09L	.....	.....	8 01+0 13L	..
6139	5	0 19+2 02u	.....	.....	0 19+2 20u	..
6140	5	10 04+2 20U	10 04+0 40U	10 04+0 35U	10 06+2 18U	A
6141	8	11 47+0 10L	.....	.....	.....	..
6142	8	14 01+0 08L	.....	.....	.....	..
6143	9	18 53+0 13L	.....	.....	.....	..
6144	10	1 24+0 12L	.....	.....	1 26+0 10L	..
6145	10	1 38+0 03L	.....	.....	.....	..
6146	10	1 44+0 16L	.....	.....	1 44+0 20L	..
6147	10	4 18+0 27L	.....	.....	.....	..
6148	12	7 51+0 53L	.....	.....	7 53+0 46L	..
6149	12	10 33+0 08L	.....	.....	.....	..
6150	14	23 14+0 31L	.....	.....	23 17+0 19L	..
6151	15	21 31+0 47L	.....	.....	21 31+0 10L	..
6152	16	12 22+1 44u	.....	.....	12 26+1 05u	..
6153	18	17 08+0 28L	.....	.....	17 08+0 21L	..
6154	19	6 57+0 07L	.....	.....	6 58+0 09L	..
6155	19	7 33+0 05L	.....	.....	7 34+0 07L	..
6156	19	12 27+1 50u	12 27+0 02P	.....	12 27+1 50u	..
6157	23	0 02+0 53u	.....	.....	0 02+0 51u	..
6158	23	3 52+0 19L	.....	.....	3 51+0 25L	..
6159	23	6 33+3 39R	6 33+1 09R	6 33+1 05U	6 33+3 24U	B
6160	23	15 51+0 12L	.....	.....	15 52+0 08L	..
6161	23	16 40+0 40r	.....	.....	16 41+0 38r	..
6162	23	20 51+0 36L	.....	.....	20 51+0 30L	..
	24	.....	.....	2 58+0 01P	.....	..
6163	26	20 29+1 15L	.....	.....	20 13+1 23u	..
6164	26	23 13+1 07r	23 13+0 02P	23 13+0 02P	23 19+0 58r	C
6165	29	6 00+1 04u	.....	.....	6 06+0 54u	..
6166	29	18 58+2 16u	.....	.....	19 07+1 53u	..
6167	31	16 01+0 23L	.....	.....	16 02+0 18L	..



CORRELATION OF EARTHQUAKES

October, 1936.

.....

N O T E S

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A	:	Ottawa	$\Delta = 14,450$ km.	H = $9^{\text{h}}44^{\text{m}}.3$	G.M.T.
B	:	Ottawa	$\Delta = 5,000$ km.	H = $6^{\text{h}}24^{\text{m}}.3$	G.M.T.
		Shawinigan Falls	$\Delta = 5,000$ km.	H = $6\ 24.4$	G.M.T.
		Seven Falls	$\Delta = 5,020$ km.	H = $6\ 24.3$	G.M.T.
C	:	Ottawa	$\Delta = 4,330$ km.	H = $23^{\text{h}}06^{\text{m}}.0$	G.M.T.

Dominion Observatory,  
Ottawa, Canada,  
November 18, 1936.



SEISMOLOGICAL BULLETINS RECEIVED

November, 1936.



We acknowledge, with thanks, the receipt of the following seismological publications and bulletins:-

STATIONS	BULLETINS	RECEIVED
Chiufeng	September, 1936	Nov. 2
Manila	August, 1936	" 2
Zurich	September, 1936	" 3
Dublin	July to September, 1936	" 3
Algiers	September, 1936	" 4
La Plata	July to September, 1936	" 4
Perth	July 13 to August 13, 1936	" 4
Saint Louis and Auxiliary Stations	Preliminaries for August 23; September 19; 25th; and October 5/36	" 5
La Paz	November 7/35 to January 25/36	" 7
Apia	July to September, 1936	" 7
Strasbourg ) Paris ) Bureau Central )	September, 1936	" 10
Taihoku	October to December, 1935, and September, 1936	" 13
Georgetown	Seismological Despatches from August to October, 1936	" 17
Pasadena	September, 1936	" 17
Zi-Ka-Wei	May 5 to July 23, 1936	" 18
Santa Clara	September, 1936	" 18
Sydney	August 13 to September 25, 1936	" 18
Zürich	October, 1936	" 20
Richmond	October, 1936	" 23
Pasadena	Local Shocks and Supplementary Shocks for September, 1936	" 25
United States Coast and Geodetic Survey	Earthquakes for 1934	" 26
Toronto	September and October, 1936	" 30
San Fernando	September and October, 1936	" 30
Algiers	October, 1936	" 30
La Plata	October, 1936	" 30

DOMINION OBSERVATORY,  
OTTAWA - CANADA.

R. Meldrum Stewart,  
Director.

Ernest A. Hodgson,  
Seismologist.

W. W. Doxsee,  
Assistant Seismologist.





CANADA

# SEISMOLOGICAL STATION, DOMINION OBSERVATORY OTTAWA

R. MELDRUM STEWART, *Director*ERNEST A. HODGSON, *Seismologist*W. W. DOXSEE, *Assistant Seismologist* $\varphi = 45^{\circ} 23' 38''$  N.  $\lambda = 75^{\circ} 42' 57''$  W.  $h = 83$  m.

Foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight. Time correction: within 0.25s.

## AUXILIARY STATIONS

### SASKATOON

 $\varphi = 52^{\circ} 08'$  N.  $\lambda = 106^{\circ} 38'$  W.  $h = 515$  m.

Foundation: clay and sand. Time correction: from manually recorded radio time signals.

### HALIFAX

 $\varphi = 44^{\circ} 38'$  N.  $\lambda = 63^{\circ} 36'$  W.  $h = 46$  m.

Foundation: carbonaceous slate. Time correction: from hourly recorded railroad time service.

### SHAWINIGAN FALLS

 $\varphi = 46^{\circ} 33'.1$  N.  $\lambda = 72^{\circ} 45'.8$  W.  $h = 60$  m. *ca.*

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

### SEVEN FALLS

 $\varphi = 47^{\circ} 07'.4$  N.  $\lambda = 70^{\circ} 49'.6$  W.  $h = 232$  m. *ca.*

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

## INSTRUMENTS—FIXED CONSTANTS

STATION	INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Ottawa	Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Ottawa	Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Ottawa	Milne-Shaw	17	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Milne-Shaw	23	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 kg.
Halifax	Mainka	HN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Halifax	Mainka	HE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Wood-Anderson	SF	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Milne-Shaw	SM	Photographic	Magnetic	6 mm. per min.	1 lb.

## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$r/T_0^2$	$V$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
I.....	5.1		120	2:1	NS	
II.....	6.0		120	12:1	EW	
17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.3		160	10:1	Z	
HN.....	10.3		92	Aper.	NS	
HE.....	9.4		155	"	EW	
HE.....	9.4		61	"	NS	
SN.....	9.0		56	"	EW	
SE.....	9.0				NS	
SA.....	0.9		2000		EW	
SF.....	1.0		1800		EW	
SM.....	12.0		250	20:1	EW	44 mm.



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM November 1, 1936 to November 19, 1936 No. 18

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6169 Nov. 2	e <sup>N</sup>	15	16.0			Preliminaries lost while changing records.	
	e	15	19.5				
	e	15	24.5				
	e <sup>N</sup>	15	29.3				
	e <sup>L</sup>	15	40				
	F	17	36				
6170 Nov. 2	H	20	46.1		9810	Saskatoon Record: eP = 20 57 15 iS = 21 06 33 $\Delta$ = 7860 km. H = 20 46.0 USCGS gives: $\phi$ = 37° N. $\lambda$ = 142° E.	
	P <sup>N</sup>	20	58 54				
	S	21	09 40				
	SS	21	15.7				
	e <sup>E</sup>	21	22.5				
	e <sup>L</sup>	21	26				
	F	0	03				
6178 Nov. 12	e	2	40.4				
	e	2	43.5				
	L	3	07				
	F	3	47				
6179 Nov. 12	e	4	40 48				
	e <sup>E</sup>	4	44.2				
	L	4	48				
	F	5	36				
6181 Nov. 13	H	12	31.8		7280	Saskatoon Record: eP = 12 40 18 iS = 12 47 29 $\Delta$ = 5480 km. H = 12 31.5 USCGS gives: $\phi$ = 57° N. $\lambda$ = 163° E.	
	eP	12	42 26				
	PP	12	44 56				
	iS	12	51 18				
	e	12	58.8				
	e <sup>L</sup>	13	03				
	F	16	25				
6188 Nov. 19	H	21	10.4		3650	USCGS gives: $\phi$ = 14° N. $\lambda$ = 91° W.	
	iP	21	17 03				
	PPP	21	18 26				
	iS	21	22 28				
	SS <sup>N</sup>	21	24 18				
	L	21	26				
	F	23	19				



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM November 19, 1936 to November 30, 1936 No. 19

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6191 Nov. 22	H	18	19.4		3630	USCGS. gives: $\phi = 14^{\circ}5' N.$ $\lambda = 90^{\circ}5' W.$	
	P	18	26	02			
	PPP	18	27	23			
	S	18	31	26			
	SS	18	33.4				
	L	18	35.5				
	F	19	58				
6195 Nov. 26	eN	2	19				
	S	2	24	32			
	SS	2	27.1				
	L	2	29				
	F	3	48				
6197 Nov. 27	e	2	22				
	L	2	27				
	F	2	56				
6199 Nov. 29	e	6	43	04			
	L	6	53				
	F	7	28				
6201 Nov. 29	e <sup>E?</sup>	8	57				
	e	9	07				
	L	9	20				
	F	10	46				

*W. W. Doysee.*



CORRELATION OF EARTHQUAKES  
November, 1936,

.....  
N O T E S

=====

A	: Shawinigan Falls	$\Delta = 8,500$ km.	H = 14 58.0 G.M.T.
	Seven Falls	$\Delta = 8,450$ km.	H = 14 58.0 G.M.T.
B	: Ottawa	$\Delta = 9,810$ km.	H = 20 46.1 G.M.T.
C	: Shawinigan Falls	$\Delta = 1,420$ km.	H = 5 43.6 G.M.T.
E	: Slight local shock recorded at Seven Falls but on the Wood-Anderson seismogram only.		
F	: Ottawa	$\Delta = 7,280$ km.	H = 12 31.8 G.M.T.
	Shawinigan Falls	$\Delta = 7,330$ km.	H = 12 31.7 G.M.T.
	Seven Falls	$\Delta = 7,300$ km.	H = 12 31.7 G.M.T.
G	: Ottawa	$\Delta = 3,650$ km.	H = 21 10.4 G.M.T.
	Shawinigan Falls	$\Delta = 3,835$ km.	H = 21 10.5 G.M.T.
	Seven Falls	$\Delta = 3,960$ km.	H = 21 10.5 G.M.T.
H	: Ottawa	$\Delta = 3,630$ km.	H = 18 19.4 G.M.T.
	Shawinigan Falls	$\Delta = 3,830$ km.	H = 18 19.5 G.M.T.

Dominion Observatory,  
Ottawa, Canada,  
December 15, 1936.



EARTHQUAKE CORRELATION TABLE

November, 1936.

No.	Date	Ottawa	Shawinigan	Seven Falls		**
				W. A.	M. S.	
6168	1	16 50+0 34L	.....	.....	16 51+0 18L	..
6169	2	15 16+2 20U	15 10+0 59U	15 10+0 50U	15 18+2 14U	A
6170	2	20 59+3 04U	20 59+1 13U	20 58+1 17U	21 09+2 46U	B
6171	3	5 18+0 19L	.....	.....	5 17+0 16L	..
6172	3	5 51+0 02v	5 47+0 12v	5 49+0 06v	5 50+0 01v	C
	4	.....	.....	16 36+0 0.1d	.....	E
6173	5	21 05+0 11L	.....	.....	.....	..
6174	6	11 57+0 06L	.....	.....	.....	..
6175	8	13 27+0 16L	.....	.....	.....	..
6176	10	13 27+0 21L	.....	.....	13 31+0 07L	..
6177	11	1 24+0 19L	.....	.....	1 23+0 17L	..
6178	12	2 40+1 07u	.....	.....	2 42+0 50u	..
6179	12	4 41+0 55u	.....	.....	4 41+0 32u	..
6180	12	9 19+0 32L	.....	.....	9 16+0 34L	..
		.....	20 17+0 10P	20 17+0 13P	.....	..
6181	13	12 42+3 43U	12 42+1 33U	12 42+1 31U	12 42+3 36U	F
6182	14	1 53+0 22L	.....	.....	1 51+0 23L	..
6183	14	15 03+1 22L	.....	.....	15 05+1 15L	..
6184	14	20 06+1 22L	.....	.....	20 05+1 13L	..
6185	15	22 43+0 43L	.....	.....	22 42+0 45L	..
6186	16	9 38+0 08L	.....	.....	9 38+0 07L	..
6187	19	13 21+0 09L	.....	.....	.....	..
6188	19	21 17+2 02R	21 17+1 15R	21 17+0 58R	21 17+2 00R	G
6189	20	0 34+0 21L	.....	.....	0 36+0 14L	..
6190	22	15 39+0 48L	.....	.....	.....	..
6191	22	18 26+1 32r	18 26+0 38r	18 26+0 28r	.....	H
6192	23	0 49+0 15L	0 44+0 01P	.....	.....	..
6193	23	20 22+0 18L	.....	.....	20 20+0 12L	..
6194	25	12 32+0 10L	.....	.....	12 31+0 10L	..
6195	26	2 19+1 29r	2 19+0 25r	2 31+0 12L	2 21+1 24r	..
6196	26	18 33+0 10L	.....	.....	.....	..
6197	27	2 22+0 34u	.....	.....	2 27+0 14L	..
6198	27	6 30+0 09L	.....	.....	6 30+0 10L	..
6199	29	6 43+0 45u	.....	.....	6 43+0 37u	..
6200	29	8 10+0 19L	.....	.....	.....	..
6201	29	8 57+1 49u	.....	.....	9 25+0 46L	..
6202	30	20 58+0 07L	.....	.....	.....	..
6203	30	23 17+0 09L	.....	.....	.....	..



SEISMOLOGICAL BULLETINS RECEIVED

December, 1936.



We acknowledge, with thanks, the receipt of the following seismological publications and bulletins:-

STATIONS	BULLETINS	RECEIVED
Tananarive	March and April, 1936	Dec. 1
Melbourne	July to September, 1936	" 3
Riverview	September, 1936	" 3
Ksara	October, 1936	" 3
New Zealand Stations	April to June, 1935 and September, 1936	" 4
Perth	August 17 to September 18, 1936	" 5
Manila	September, 1936	" 5
Taihoku	October, 1936	" 7
Batavia	April to June, 1936	" 9
Paris ) Strasbourg ) Bureau Central)	October, 1936	" 9
Helwan	August, 1936	" 10
Prague	April to September, 1936	" 10
Zinsen	April to July, 1936	" 10
Mitsui	April 12, 1933 to June 30, 1934	" 11
Saint Louis and Auxiliary Stations	Preliminary for October 23/36 and June, 1936	" 12
Helwan	September, 1936	" 15
Göttingen	October, 1935 to March, 1936	" 16
Zi-Ka-Wei	August 1 - 22nd, 1936	" 17
La Paz	January 25 to May 27, 1936	" 18
Chiufeng	October, 1936	" 18
Rome	November 18 to December 1, 1936	" 28
Helwan	October, 1936	" 28
Richmond	November, 1936	" 28
Algiers	November, 1936	" 28
Kobe	July 1 to September 30, 1935	" 29
Dublin	October and November, 1936	" 30
New Zealand Stations	October, 1936	" 30
Riverview	October, 1936	" 30
New Zealand Stations	July to September, 1936	" 30
Helwan	November, 1936	" 31
Ksara	November, 1936	" 31
Beograd	Year 1935 and January to May, 1936	" 31

DOMINION OBSERVATORY  
OTTAWA - CANADA

F. Meldrum Stewart,  
Dominion Astronomer.

Ernest A. Hodgson,  
Seismologist.  
W. W. Doxsee,  
Assistant Seismologist.





CANADA

# SEISMOLOGICAL STATION, DOMINION OBSERVATORY OTTAWA

R. MELDRUM STEWART, *Director*ERNEST A. HODGBON, *Seismologist*W. W. DOXSEE, *Assistant Seismologist* $\varphi = 45^{\circ} 23' 38''$  N.  $\lambda = 75^{\circ} 42' 57''$  W.  $h = 83$  m.

Foundation: boulder clay over limestone (Ordovician). Time: Mean Greenwich, midnight to midnight. Time correction: within 0.25s.

## AUXILIARY STATIONS

### SASKATOON

 $\varphi = 52^{\circ} 08'$  N.  $\lambda = 106^{\circ} 38'$  W.  $h = 515$  m.

Foundation: clay and sand. Time correction: from manually recorded radio time signals.

### HALIFAX

 $\varphi = 44^{\circ} 38'$  N.  $\lambda = 63^{\circ} 36'$  W.  $h = 46$  m.

Foundation: carbonaceous slate. Time correction: from hourly recorded railroad time service.

### SHAWINIGAN FALLS

 $\varphi = 46^{\circ} 33' \cdot 1$  N.  $\lambda = 72^{\circ} 45' \cdot 8$  W.  $h = 60$  m. *ca.*

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

### SEVEN FALLS

 $\varphi = 47^{\circ} 07' \cdot 4$  N.  $\lambda = 70^{\circ} 49' \cdot 6$  W.  $h = 232$  m. *ca.*

Foundation: solid granite of Canadian Shield. Time correction: from automatically recorded radio time signals.

## INSTRUMENTS—FIXED CONSTANTS

STATION	INSTRUMENT	SYMBOL	REGISTRATION	DAMPING	PAPER SPEED	MASS
Ottawa	Bosch	I	Photographic	Air	15 mm. per min.	200 g.
Ottawa	Bosch	II	Photographic	Magnetic	15 mm. per min.	200 g.
Ottawa	Milne-Shaw	17	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Milne-Shaw	23	Photographic	Magnetic	15 mm. per min.	1 lb.
Ottawa	Spindler-Hoyer	W	Smoked Sheet	Air	15 mm. per min.	80 kg.
Halifax	Mainka	HN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Halifax	Mainka	HE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SN	Smoked Sheet	Air	15 mm. per min.	139 kg.
Saskatoon	Mainka	SE	Smoked Sheet	Air	15 mm. per min.	139 kg.
Shawinigan Falls	Wood-Anderson	SA	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Wood-Anderson	SF	Photographic	Magnetic	60 mm. per min.	15 g.
Seven Falls	Milne-Shaw	SM	Photographic	Magnetic	6 mm. per min.	1 lb.

## INSTRUMENTS—DETERMINED CONSTANTS

INSTRUMENT	$T_0$	$r/T_0^2$	$V$	$\epsilon$	COMP.	DISPLACEMENT FOR 1" ARC TILT
I.....	5.1		120	2:1	NS	
II.....	6.0		120	12:1	EW	
17.....	12.0		250	20:1	EW	44 mm.
23.....	12.0		250	20:1	NS	44 mm.
W.....	5.3		160	10:1	Z	
HN.....	10.3		92	Aper.	NS	
HE.....	9.4		155	"	EW	
SN.....	9.0		61	"	NS	
SE.....	9.0		56	"	EW	
SA.....	0.9		2000		NS	
SF.....	1.0		1800		EW	
SM.....	12.0		250	20:1	EW	44 mm.



OTTAWA, CANADA  
SEISMOLOGICAL STATION, DOMINION OBSERVATORY

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AUXILIARY STATIONS

Toronto

$\phi = 43^{\circ}40' \text{ N.}$      $\lambda = 79^{\circ}24' \text{ W.}$      $h = 111 \text{ m,}$   
Foundation: sand and clay  
Instruments: Milne-Shaw, NS. and EW. com-  
ponents, photographic record-  
ing, paper speed of 8 mm. per  
min., mass 1 lb., period 12  
secs., magnetic damping 20:1,  
and magnification 150 fold.

Victoria

$\phi = 48^{\circ}25' \text{ N.}$      $\lambda = 123^{\circ}19' \text{ W.}$      $h = 68 \text{ m.}$   
Foundation: rock  
Instruments: Milne-Shaw, NS. and EW. com-  
ponents, photographic record-  
ing, paper speed of 8 mm. per  
min., mass 1 lb., period 12  
secs., magnetic damping 20:1,  
and magnification 250 fold.  
Wiechert Vertical not operating.



SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM December 1, 1936 to December 20, 1936

No. 20

NO. AND DATE	PHASE	TIME	AMP. $\mu$	DISTANCE km.	REMARKS
		h m s			
6204 Dec. 1		Ottawa			
	e	0 08 30			
	e <sub>N</sub>	0 18			
	e <sub>E</sub>	0 23			
	e <sub>L</sub>	0 41			
	F	2 12			
		Toronto			
	e	0 08 26			
	e <sub>L</sub>	0 42			
	F	2 09			
		Victoria			
	e	0 10			
	e <sub>E</sub>	0 13.4			
	e	0 19			
	e <sub>N</sub>	0 23			
e <sub>L</sub>	0 29				
F	1 30				
6205 Dec. 1		Ottawa			
	e	6 32.7			
	e <sub>E</sub>	6 41.9			
	e <sub>L</sub>	6 46			
	F	7 26			
		Toronto			
	e	6 32 48			
	e	6 34 21			
	F	7 16			
		Victoria			
	i	6 30 11			
	F	7 04			
6213 Dec. 20		Ottawa			USCGS. gives:- $\phi = 13^{\circ}4$ N. $\lambda = 88^{\circ}8$ W. H = 2 <sup>h</sup> 43 <sup>m</sup> .4 G. M. T.
	e	2 55.5			
	e <sub>L</sub>	2 58			
	F	4 01			
		Toronto			
	e	2 54.9			
	e <sub>L</sub>	2 58			
	F	3 53			
		Victoria			
	e	2 58 17			
	e	3 01 46			
	e <sub>L</sub>	3 05			
	F	4 24			



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM December 20, 1936 to December 21, 1936

No. 21

NO. AND DATE	PHASE	TIME	AMP.	DISTANCE	REMARKS
		h m s	μ	km.	
6216 Dec. 21	H eP <sub>E</sub> S L F	19 03.2 19 10.3 19 16 10 19 22 19 47+		4070	USCGS gives:- φ = 53°1 N. λ = 132°2 W. H = 19 <sup>h</sup> 03 <sup>m</sup> .1 G. M. T.
		Saskatoon			
	e eL F	19 06 50 19 11.0 19 32+			
		Halifax			
	e M F	19 26.5 19 28.8 19 44			
		Toronto			
	e e L F	19 10.3 19 15 57 19 21 19 45+			
		Victoria		830	
	H P <sub>E</sub> S L F	19 03.1 19 05 00 19 06 27 19 06 52 19 31+			
		Seven Falls		4200	
	H P S F	19(03.4) 19(10.7) 19(16.7) 19 47+			
6217 Dec. 21	iM F	19 47 20 21 11			USCGS. gives:- φ = 53° N. λ = 132° W. H = 19 <sup>h</sup> 27 <sup>m</sup> .9 G. M. T.
		Saskatoon			
	e e L? M F	19 32 18 19 35 34 19 36 09 19 37.4 20 25			
		Halifax			
	e M F	19 50 19 52 20 11			



## OTTAWA, CANADA

## SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM December 21, 1936 to December 26, 1936

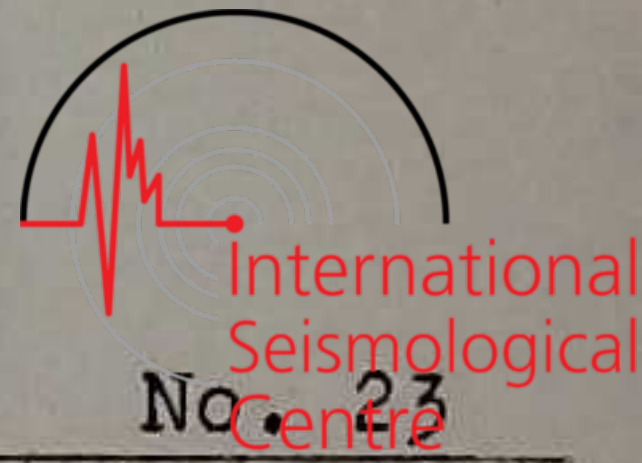
No. 22

NO. AND DATE	PHASE	TIME			AMP. $\mu$	DISTANCE km.	REMARKS
		h	m	s			
6217 Dec. 21 (Cont'd)		Toronto					
	iL	19	45	26			
	M	19	47	30			
	F	21	08				
		Victoria					
	i	19	31	06			
	L	19	31.5				
	M	19	32.3				
	F	21	12				
		Ottawa					
6218 Dec. 25	eE?	20	11.3				
	eN	20	12.2				
	e	20	17.0				
	eL	20	23.5				
	F	21	17				
		Toronto					
	e	20	16.1				
	L	20	21				
	F	21	03				
		Victoria					
	e	20	16	07			
	L	20	20				
	F	21	12				
		Seven Falls					
	e	20	13	28			
e	20	17	55				
F	21	05					
	Ottawa						
6219 Dec. 26	eE	23	18	10			
	eE	23	22	24			
	e	23	29.1				
	eE	23	37				
	eL	23	42				
	F	1	47				
		Toronto					
	eE	23	18	03			
	eN	23	20	14			
	e	23	22	07			
	e	23	28.5				
	eL	23	39				
F	1	49					



OTTAWA, CANADA

SEISMOLOGICAL STATION, DOMINION OBSERVATORY



FROM December 26, 1936 to December 31, 1936

No. 23

NO. AND DATE	PHASE	TIME			AMP.	DISTANCE	REMARKS
		h	m	s	$\mu$	km.	
6219 Dec. 26 (Cont'd)		Victoria					
	eE	23	09.5				
	e	23	16	13			
	eE	23	23				
	eL F	23	30				
6221 Dec. 29		Ottawa					
	e	15	08.7				
	e	15	13.4				
	e	15	18.2				
	e	15	24.3				
	e	15	39				
	eL	15	43				
	F	17	35				
		Saskatoon					
	e	15	10				
	e	15	19				
	eL	15	36				
	F	16	18				
		Toronto					
	e	15	08.5				
	e	15	13.3				
	eN	15	20.3				
	e	15	24.3				
	eL	15	37				
	F	17	33				
	Victoria						
eE	15	00	44				
eE	15	04	45				
iE	15	10	58				
e	15	17	15				
eE	15	21	23				
eL	15	24					
F	17	57					

N. B. Bosch seismographic service at Ottawa discontinued from December 3, 1936.

*W. W. Doysee*





EARTHQUAKE CORRELATION TABLE  
Month December, 1936

No.	Date	Ottawa	Victoria	Toronto	Saskatoon	Halifax	Seven Falls		Shawinigar	**
							M. S.	W. A.		
6204	1	0 08+2 04u	0 10+1 20u	0 08+2 00u	.....	.....	0 07+1 56u	.....	0 08+0 03P	..
6205	1	6 33+0 53u	6 30+0 34u	6 33+0 43u	.....	.....	6 35+0 35u	.....	.....	..
6206	1	18 21+0 15L	.....	.....	.....	.....	.....	.....	.....	..
6207	4	23 35+0 28L	.....	10 37+0 27L	.....	.....	23 32+0 28L	.....	.....	..
6208	5	0 57+0 04L	.....	.....	.....	.....	9 59+0 18L	.....	.....	..
6209	8	9 57+0 21L	.....	9 59+0 22L	.....	.....	22 23+0 16L	.....	.....	..
6210	13	22-23+0 17L	10 13+0 30L	.....	.....	.....	4 59+0 15L	.....	.....	..
6211	14	.....	21 54+0 46u	.....	.....	.....	.....	.....	.....	..
6212	15	22 58+0 06L	.....	15 21+0 0.4d	.....	.....	.....	.....	.....	..
6213	20	4 38+0 26L	.....	.....	.....	.....	.....	.....	.....	..
6214	20	2 55+1 06r	2 58+1 26r	2 55+1 00r	.....	.....	2 58+0 50r	.....	2 50+0 21r	..
6215	20	13 37+0 43r	13 47+0 29L	13 35+0 39r	.....	.....	13 39+0 30r	.....	.....	..
6216	21	19 45+0 40L	19 39+0 13L	19 54+0 17L	.....	.....	19 51+0 13L	.....	.....	..
6217	21	19 10+0 37+R	19 05+0 26+R	19 10+0 35+R	.....	.....	19 11+0 36+R	.....	19 21+0 26+R	..
6218	25	19 47+1 24R	19 30+1 36R	19 45+1 23R	.....	.....	19 47+1 00R	.....	19 21+0 26+R	..
6219	26	20 11+1 06u	20 16+0 56u	20 16+0 47u	.....	.....	20 13+0 51u	.....	19 47+0 24R	..
6220	29	23 18+2 29u	23 08+3 00u	23 18+2 31u	.....	.....	23 18+2 21u	.....	.....	..
6221	29	14 15+0 24L	14 22+0 17L	14 16+0 24L	.....	.....	.....	.....	.....	..
6221	29	15 09+2 26u	15 01+2 56u	15 09+2 24L	15 10+1 08u	.....	.....	.....	.....	..

A  
B  
C  
E  
E



CORRELATION OF EARTHQUAKES  
December, 1936

.....

N O T E S

=====

- A : Local shock recorded at Toronto - origin probably within 50 km. of that station.
- B : Ottawa                     $\Delta = 4,070$  km.    H = 19<sup>h</sup>03<sup>m</sup>2 G. M. T.  
Victoria                    $\Delta = 830$  km.        H = 19 03.1 G. M. T.  
Seven Falls                 $\Delta = 4,200$  km.    H = 19 03.4 ca. G.M.T.
- C : Same origin as B and identical record characteristics but preliminaries merged with surface waves of preceding quake.
- E : Dual quakes.

Dominion Observatory,  
Ottawa, Canada,  
February 2, 1937.