SEISMOLOGICAL SERVICE OF CANADA

SEISMOLOGICAL BULLETIN
January
1944

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DOMINION OBSERVATORY
OTTAWA — CANADA

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SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

R. Meldrum Stewart, Dominion Astronomer
Ernest A. Hodgson, Seismologist
W. W. Doxsee, Station Superintendent

STATIONS

OTTAWA

ϕ = 45°23'38" N. λ = 75°42'57" W.   h = 83m.

Time correction within 0.10s.

Foundation: boulder clay over limestone

Instruments: Milne-Shaw NS and EW components,
designated 23 and 17, respectively, each with
photographic registration, magnetic damping,
paper speed of 15 mm. per min., mass 1 lb.

Benioff Vertical, short and long
period, designated BS and BL, respectively,
photographic registration, BS a paper speed
of 60 mm. per min., BL a paper speed of 30 mm.
per min., mass 235 lbs.

HALIFAX

Dalhousie University

ϕ = 44°38' N. λ = 63°36' W.   h = 46m.

Time correction from recorded radio time signals

Foundation: Carbonaceous slate

Instruments: Bosch NS and EW components, designated
HN and HE, respectively, each with photographic
registration, magnetic damping, paper speed of
15 mm. per min., mass 200g.

SEVEN FALLS

Quebec Power Company

ϕ = 47°07!4 N. λ = 70°49!6 W.   h = 232m. ca.

Time correction from recorded radio time signals

Foundation: Solid granite of Canadian Shield

Instruments: Wood-Anderson and Milne-Shaw, both
EW component, designated SF and SM, respectively,
each with photographic registration, magnetic
damping, SF a paper speed of 60 mm. per min.
and mass 15g., SM a paper speed of 8 mm. per
min. and mass 1 lb.

VICTORIA

Dominion Astrophysical Observatory

ϕ = 48°31'14" N. λ = 123°24'56" W.   h = 197m.

Time correction from recorded radio time signals

Foundation: rock

Instruments: Milne-Shaw NS and EW components,
designated 21 and 20, respectively, each with
photographic registration, magnetic damping,
paper speed of 8 mm. per min., mass 1 lb.

Wiechert Vertical, designated WV,
smoked sheet registration, air damping, paper
speed of 15 mm. per min., mass 80 kg.

SHAWINIGAN FALLS

Shawinigan Water and Power Company

$\phi = 46°33.1$ N. $\lambda = 72°45.8$ W.   h = 60m. ca.

Time correction from recorded radio time signals

Foundation: solid granite of Canadian Shield

Instrument: Wood-Anderson NS component, designated
SA, photographic registration, magnetic damping,
paper speed of 60 mm. per min., mass 15g.

SASKATOON

University of Saskatchewan

$\phi = 52°08'$ N. $\lambda = 106°38'$ W.   h = 515m.

Time correction from radio time signals

Foundation: clay and sand

Instrument: Milne-Shaw NE component, designated
SN, photographic registration, magnetic damping,
paper speed of 8 mm. per min., mass 1 lb.

KIRKLAND LAKE

Lake Shore Mines

$\phi = 48°09'$ N. $\lambda = 80°03'$ W.   h = 320m.

Time correction from recorded radio time signals

Foundation: rock

Instrument: Converted Heiland Field Seismometer,
vertical component, designated KL, photographic
registration, paper speed of 30 mm. per min.

DETERMINED CONSTANTS

INSTRUMENT	T_0	V	ε	DISPLACEMENT FOR 1" ARC TILT	DISPLACEMENT FOR 10^{-6} g
17 (Ottawa)	12.0	300	20:1	50 mm.	
23 (Ottawa)	12.0	300	20:1	50 mm.	
BS (Ottawa)	1.0				5 mm.
BL (Ottawa)	1.0				16 mm.
HN (Halifax)	5.0	125	20:1		
HE (Halifax)	5.0	125	20:1		
SA (Shawinigan)	1.0	2400			
20 (Victoria)	12.0	300	20:1		
21 (Victoria)	12.0	300	20:1		
WV (Victoria)	4.0	120	15:1		
SF (Seven Falls)	1.0	2500			
SM (Seven Falls)	12.0	300	20:1	50 mm.	
SN (Saskatoon)	10.0	150	20:1	18 mm.	
KL (Kirkland Lake)	1/30	2×10^4	at 30 cycles		

NOTE:- Universal Time used throughout.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	January 1, 1944	to	January 10, 1944	No. 1

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
4 Jan. 5	H	21 12.7	15,350	
	P'Z	21 32 09		
	PP	21 34 47		
	PSKS	21 45.0		
	PPS	21 47.0		
	SS	21 53.0		
	SSS	21 59.0		
	eN	22 03 20		
	eL	22 22		
	F	23 27		
		Victoria		
	eN	21 33 09		
	eN	21 43 08		
	eN	21 49.7		
	eN	21 58.7		
	L	22 12		
	F	23 39		
		Halifax		
	e	21 35 00		
	L	22 23		
	F	22 51		
		Seven Falls		
	e	21 34 43		
	e	21 52 32		
	L	22 06		
	F	23 44		
		Shawinigan Falls		
	e	21 32.2		
	e	21 34.7		
	L	22 30		
	F	22 45		
		Ottawa		
6 Jan. 6	eZ	16 54 09		
	LN	17 20		
	F	17 25		
		Ottawa		
7 Jan. 7	eZ	3 08 16		
	eN	3 23		
	eN	3 28		
	L	3 46		
	F	4 04		
		Ottawa		
8 Jan. 10	H	20 09.8	3950	USCGS. gives:-
	P	20 16 48		ϕ = 18°1 N.
	PPP	20 18 08		λ = 100°6 W.
	S	20 22 32		Tacubaya gives:-
	SS	20 24.5		ϕ = 16°44' N.
	L	20 29		λ = 100°41' W.
	F	20 55+		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	January 10, 1944	to	January 10, 1944	No. 2

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
8 Jan. 10 (Cont'd)	H	20 10.1	3890	
	P	20 17 02		
	S	20 22 42		
	L	20 27		
	F	20 52+		
		Saskatoon		
	H	20 10.1	3620	
	P	20 16 44		
	S	20 22 08		
	L	20 27		
	F	20 52+		
		Halifax		
	H	20 10.2	4400	
	P	20 17 43		
	S	20 23.9		
	L	20 34		
	F	21 13		
		Seven Falls		
	H	20 10.0	4240	
	P	20 17 20		
	PPP	20 18 50		
	S	20 23 21		
	L	20 28		
	F	21 51		
		Shawinigan Falls		
	H	20 10.0	4100	
	P	20 17 08		
	PPP	20 18 43		
	S	20 23.0		
	L	20 27		
	F	20 54+		
		Ottawa		
9 Jan. 10	eZ	20 40 17		
	eZ	20 41 38		
	L	20 52		
	F	21 49		
		Seven Falls		
	e	20 40 51		
	e	20 42 25		
	L	20 51		
	F	21 17		
		Shawinigan Falls		
	e	20 40 41		
	e	20 42 09		
	L	20 54		
	F	21 10		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	January 10, 1944	to	January 16, 1944	No. 3

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
10 Jan. 12	eZ	15 09 41		
	L	15 21		
	F	15 53		
		Seven Falls		
	e	15 10 04		
	L	15 23		
	F	15 52		
		Ottawa		
11 Jan. 15	eE	5 54		
	L	6 01		
	F	6 27		
		Seven Falls		
	e	5 58 29		
	L	6 01		
	F	6 32		
		Ottawa		
12 Jan. 15 and 16	H	23 49.6	8400	USCGS. gives:- $\phi = 31°5$ S. $\lambda = 68°$ W.
	P	0 01 19		
	PP	0 04 22		
	S	0 11 04		
	SS	0 16.4		
	SSS	0 20		
	L	0 26		
	F	2 45+		
		Victoria		
	H	23 50.1	9500	
	P	0 02 44		
	PP	0 06 24		
	S	0 13 17		
	SS	0 19 18		
	L	0 30		
	F	2 30+		
		Saskatoon		
	H	23 50.0	9335	
	P	0 02 30		
	S	0 12 56		
	SS	0 19.4		
	SSS	0 22		
	L	0 26		
	F	3 00 ca.		
		Halifax		
	H	23 49.8	8220	
	P	0 01 18		
	PP	0 04 02		
	S	0 10 55		
	L	0 28		
	F	2 53		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | January 16, 1944 | to | January 25, 1944 | No. 4 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
12 Jan. 15 and 16 (Cont'd)	H	23 49.7	8560	
	P	0 01 31		
	S	0 11 23		
	SSS	0 20.6		
	L	0 24		
	F	3 22		
		Shawinigan Falls		
	H	23 49.6	8560	
	P	0 01 25		
	S	0 11 17		
	L	0 29		
	F	1 16		
		Ottawa		
13 Jan. 16	eZ	2 32 30		
	L	2 45		
	F	3 11		
		Seven Falls		
14 Jan. 20	e	3 24.2		
	L	3 51		
	F	4 09		
		Ottawa		
15 Jan. 22	H	21 55.1	105	Felt at Renfrew, Ontario.
	P_1	21 55 25		
	S_1	21 55 37		
	F	22 01		
		Seven Falls		
	H	21 55.1	505	
	P_2	21 56 26		
	Sn	21 57 07		
	S_2	21 57 23		
	F	21 59		
		Shawinigan Falls		
	H	21 55.0	345	
	P_1	21 56 04		
	Sn	21 56 32.5		
	S_2	21 56 40		
	F	22 00		
		Ottawa		
16 Jan. 23	eZ	7 27 33		
	L	7 48		
	F	8 05		
		Ottawa		
18 Jan. 25	H	7 48.1	2120	
	P	7 52 32		
	S	7 56 07		
	F	8 00		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | January 25, 1944 | | to | January 31, 1944 | No. 5 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Shawinigan Falls		
18 Jan. 25 (Cont'd)	H	7 48.2	2090	
	P	7 52 34		
	S	7 56 07		
	F	8 01		
		Ottawa		
20 Jan. 29	eZ	2 33 35		
	eE	2 43.8		
	e	2 47.0		
	L	2 49		
	F	3 09		
		Seven Falls		
	e	2 33 43		
	L	2 47		
	F	3 08		
		Shawinigan Falls		
	e	2 33 40		
	L	2 48		
	F	2 58		

W. W. Doxsee.

CORRELATION TABLE

The numbered pages of the bulletin list only those earthquakes for which two or more phases are recorded. The tabulation which follows not only provides a yearly numbered list of all earthquakes recorded in Canada but also correlates the seismic registrations of the seven Canadian stations. The seismograph at the Kirkland Lake rockburst station (Established Dec. 19, 1939) records only the bursts and those earthquakes originating very close to Kirkland Lake. Entries for this station in the Correlation Table will be confined to those earthquakes and rockbursts which registered at Kirkland Lake and also at one or more outside stations. Such entries will be indexed as notes. Entries for each station show in hours and minutes the time of beginning of the tremors in Greenwich Mean Time. The appearance of entries in two or more columns 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 earthquake number 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.

   *   Recorded only by short period seismograph.

EARTHQUAKE CORRELATION TABLE

Month January, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M. S.	Seven Falls W. A.	Shawinigan	**
1	4	01P*				1 13+0 18L		1 05+0 02P	
2	5	4 19+0 01P*						4 19+0 02P	
3	5	11 06+0 01P*				11 11+0 18L		11 06+0 02P-	
4	5	21 32+1 55u	21 33+2 06u		21 35+1 16u	21 35+2 09u	21 35+1 08u	21 32+1 15u	A
5	6	13 48+0 01P*				3 48+0 28L			
6	6	16 54+0 31u							
7	7	3 08+0 56u	3 13+0 50L						
8	10	20 17+0 38R	20 17+0 35R	20 17+0 35R	20 18+0 55R	20 17+1 34R	20 17+0 23R	20 17+0 37R	B
9	10	20 40+1 09R	20 52+1 12L	20 52+0 48L			20 41+0 37R	20 41+0 29R	
10	12	15 10+0 43r	15 06+0 18L				15 10+0 21r		
11	15	5 54+0 33u	6 14+0 25L			15 23+0 29L		5 53+0 02P	
12	16	0 01+2 44U	0 03+2 27U	0 03+2 57U	0 01+2 52U	5 58+0 34u	0 02+1 05U	0 01+1 15U	C
13	16	2 32+0 39u	2 30+0 28L			0 02+3 21U			
14	20					3 24+0 45u			
15	22	21 55+0 06v					21 56+0 03v	21 56+0 04v	D
16	23	7 28+0 37r	7 22+0 17L			7 45+0 26L			
17	24	6 19+0 08L	6 06+0 09L	6 08+0 09L		6 20+0 18L			
18	25	7 53+0 07r*					7 53+0 07r	7 53+0 09r	E
19	27	4 57+0 04P*					4 57+0 04P	4 56+0 06P	
20	29	2 34+0 35r	2 35+0 16L	2 38+0 14L		2 47+0 21L	2 34+0 23r	2 34+0 24r	
21	29	19 14+0 02P*			2 52+0 08L				
22	30	0 34+0 02P*							

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International Seismological Centre

CORRELATION OF EARTHQUAKES
January, 1944

N O T E S

A :	Ottawa	Δ = 15,350 km.	H = $21^h 12^m.7$ U.T.
B :	Ottawa	Δ = 3,950 km.	H = $20^h 09^m.8$ U.T.
	Victoria	Δ = 3,890 km.	H = 20 10.1 U.T.
	Saskatoon	Δ = 3,620 km.	H = 20 10.1 U.T.
	Halifax	Δ = 4,400 km.	H = 20 10.2 U.T.
	Seven Falls	Δ = 4,240 km.	H = 20 10.0 U.T.
	Shawinigan Falls	Δ = 4,100 km.	H = 20 10.0 U.T.
C :	Ottawa	Δ = 8,400 km.	H = $23^h 49^m.6$ U.T.
	Victoria	Δ = 9,500 km.	H = 23 50.1 U.T.
	Saskatoon	Δ = 9,335 km.	H = 23 50.0 U.T.
	Halifax	Δ = 8,220 km.	H = 23 49.8 U.T.
	Seven Falls	Δ = 8,560 km.	H = 23 49.7 U.T.
	Shawinigan Falls	Δ = 8,560 km.	H = 23 49.6 U.T.
D :	Ottawa	Δ = 105 km.	H = $21^h 55^m.1$ U.T.
	Seven Falls	Δ = 505 km.	H = 21 55.1 U.T.
	Shawinigan Falls	Δ = 345 km.	H = 21 55.0 U.T.

Felt at Renfrew, Ontario.

E :	Ottawa	Δ = 2,120 km.	H = $7^h 48^m.1$ U.T.
	Shawinigan Falls	Δ = 2,090 km.	H = 7 48.2 U.T.

Dominion Observatory,
Ottawa, Canada,
March 28, 1944.

SEISMOLOGICAL BULLETINS RECEIVED
January and February, 1944

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

STATIONS	BULLETINS	RECEIVED
Pasadena and Auxiliary Stations	April to June, 1941	January 6
United States Coast and Geodetic Survey	January to March, 1942	" 7
Saint Louis and Auxiliary Stations	Supplements to August and November/42; January, April, May, June, July and August/43: Preliminaries for May 3; June 8, 9, 13, 15; July 23, 29, 30; September 6; and October 21/43	" 13
Santa Clara	December, 1943	" 15
Bogota	November, 1943	" 27
Pasadena and Auxiliary Stations	July to September/41; preliminary April to June, 1943	" 31
Fiji Colony	July to September, 1943	February 5
New Zealand Stations	November, 1943	" 7
Santa Clara	January, 1944	" 8
Pasadena and Auxiliary Stations	Local Shocks October/42 to March, 1943	" 15
Riverview	April to June, 1943	" 18
Sydney	May and June, 1943	" 18
Brisbane	November, 1943	" 19

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OTTAWA - CANADA.

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S T A T I O N S

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HE (Halifax)	5.0	125	20:1		
SA (Shawinigan)	1.0	2400			
20 (Victoria)	12.0	300	20:1		
21 (Victoria)	12.0	300	20:1		
WV (Victoria)	4.0	120	15:1		
SF (Seven Falls)	1.0	2500			
SM (Seven Falls)	12.0	300	20:1	50 mm.	
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KL (Kirkland Lake)	1/30	2×10^4	at 30 cycles		

NOTE:- Universal Time used throughout.

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DOMINION OBSERVATORY, OTTAWA

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
23 Feb. 1	H	3 22.8	8060	USCGS. gives:
	P	3 34 09		$\phi = 41°$ N.
	i	3 34 27		$\lambda = 31°$ E.
	PPZ	3 37 04		
	PPPZ	3 38 23		
	S	3 43 39		
	SS	3 48 44		
	SSS	3 51 24		
	eL	3 56		
	F	6 43		
		Hamilton		
		Courtesy of E. Mantle		
	H	3 23.2	8220	
	P	3 34 46		
	PP	3 37 41		
	PPP	3 39 22		
	S	3 44 23		
	SS	3 49 32		
	SSS	3 52 23		
	L	3 57		
	F	5 30		
		Victoria		
	H	3 22.8	9850	
	P	3 36 07		
	PP	3 39.7		
	S	3 46 55		
	PS	3 47 30		
	L	3 59		
	F	7 51		
		Saskatoon		
	H	3 22.6	9120	
	P	3 34 54		
	S	3 45 11		
	e	3 49		
	L	3 56		
	F	7 04		
		Halifax		
	H	3 22.7	7370	
	P	3 33 27		
	S	3 42 23		
	SS	3 46.7		
	SSS	3 49.2		
	L	3 54		
	F	5 26		
		Seven Falls		
	H	3 22.5	7780	
	P	3 33 39		
	S	3 42 53		
	SS	3 47.8		
	SSS	3 50.7		
	L	3 55		
	F	8 00		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	February 1, 1944		to	February 4, 1944	No. 7

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Shawinigan Falls		
23 Feb. 1 (Cont'd)	H	3 22.6	8000	
	P	3 33 54		
	S	3 43 20		
	SS	3 48.0		
	L	3 56		
	F	5 06		
		Ottawa		
25 Feb. 2	eZ	3 44 41		
	LE	4 18		
	F	4 21		
		Ottawa		
26 Feb. 3	H	12 15.1	4200	USCGS. gives:
	P	12 22 25		$\phi = 59°.3$ N.
	S	12 28 25		$\lambda = 138°$ W.
	SSZ	12 31.0		
	L	12 33		
	F	13 34		
		Victoria		
	H	12 15.1	1540	
	P	12 18 23		
	SE	12 21 06		
	L	12 23		
	F	13 36		
		Saskatoon		
	H	12 15.1	2090	
	P	12 19 23		
	S	12 22 56		
	L	12 25		
	F	13 18		
		Halifax		
	e	12 33.2		
	L	12 38		
	F	12 58		
		Seven Falls		
	H	12 15.1	4310	
	P	12 22 35		
	S	12 28 42		
	SS	12 31.8		
	L	12 33		
	F	13 40		
		Shawinigan Falls		
	H	12 15.1	4280	
	P	12 22 31		
	S	12 28 36		
	L	12 35		
	F	12 58		
		Ottawa		
28 Feb. 4	eE	23 59.4		
	L	0 03		
	F	0 21		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM   February 4, 1944   to   February 21, 1944   No. 8

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
29 Feb. 5	H	12 37.8	400	
	P_1	12 39 02.5		
	Sn	12 39 33		
	S_1	12 39 50		
	L?	12 39 59		
	F	12 42		
		Seven Falls		
	e	12 37 59		
	F	12 39		
		Shawinigan Falls		
	H	12 37.8	215	
	P_1	12 38 24		
	S_1	12 38 49		
	F	12 41		
		Ottawa		
30 Feb. 5	H	16 22.0	515	
	Pn	16 23 12		
	P_2	16 23 23		
	Sn	16 24 07		
	S_2	16 24 21		
	F	16 26		
		Ottawa		
31 Feb. 5	eE	17 49		
	L	18 07		
	F	19 11		
		Seven Falls		
	e	17 47		
	L	18 07		
	F	19 29		
		Ottawa		
37 Feb. 15	e	5 45 34		
	L	5 54		
	F	6 12		
		Ottawa		
39 Feb. 18	H	9 44.4	90	
	P_1	9 44 41		
	S_1	9 44 51.5		
	F	9 45.5		
		Ottawa		
47 Feb. 21	H	11 28.8	3980	
	P_Z	11 35 47		
	S_E	11 41 33		
	SS	11 44.0		
	L	11 48		
	F	12 31		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	February 21, 1944		to	February 26, 1944	No. 9

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
47 Feb. 21 (Cont'd)	eN	11 40 46		
	L	11 48		
	F	12 43		
		Saskatoon		
	e	11 42		
	L	11 47		
	F	12 25		
		Seven Falls		
	e	11 38.0		
	e	11 42.5		
	L	11 50		
	F	12 32		
		Ottawa		
52 Feb. 22	H	21 38.4	175	
	Pn	21 38 54		
	P_l	21 38 55.5		
	Sn	21 39 14.5		
	L?	21 39 20		
	F	21 39.5		
		Victoria		
54 Feb. 23	e	12 37 26		
	L	12 41		
	F	13 03		
		Saskatoon		
	e	12 43 04		
	L	12 51		
	F	12 59		
		Ottawa		
55 Feb. 25	eZ	7 41 18		
	L	7 56		
	F	8 16		
		Shawinigan Falls		
	e	7 41 19		
	L	7 57		
	F	8 01		
		Ottawa		
57 Feb. 26	e	22 31 40		
	L	22 46		
	F	22 59		
		Saskatoon		
	e	22 33.6		
	L	22 37		
	F	22 49		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM February 26, 1944 to February 29, 1944 No. 10

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
57 Feb. 26 (Cont'd)	e	22 31 51		
	L	22 46		
	F	22 54		
		Shawinigan Falls		
	e	22 31 46		
	L	22 46		
	F	22 54		
		Ottawa		
59 Feb. 29	H	3 42.1	6250	USCGS. gives:
	P	3 51 43		$\phi = 13°7$ S.
	e	3 52 47		$\lambda = 70°6$ W.
	e	3 56 14		Depth 200 km. ca.
	iS	3 59 38		
	i	4 01 12		
	SS	4 03 34		
	SSS	4 06.0		
	eL	4 09		
	F	5 10		
		Victoria		
	H	3 42.0	8320	
	iP	3 53 40		
	iS	4 03 22		
	L	4 15		
	F	5 04		
		Saskatoon		
	H	3 42.1	7750	
	P	3 53 11		
	iS	4 02 24		
	SSS	4 09		
	L	4 12		
	F	5 02		
		Halifax		
	e	3 54 08		
	e	3 57 24		
	e	4 04		
	F	4 28		
		Seven Falls		
	H	3 42.1	6410	
	P	3 51 54		
	S	3 59 58		
	e	4 01 20		
	SS	4 03.9		
	L	4 11		
	F	5 51		
		Shawinigan Falls		
	H	3 42.1	6550	
	P	3 51 51		
	S	3 59 51		
	L	4 07		
	F	4 22		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	February 29, 1944	to	February 29, 1944	No. 11

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
60 Feb. 29	H	16 28 ca.	14,400 ca.	
	P'	16 47 11		
	PP	16 49 13		
	PPP	16 52 14		
	PS	16 59.2		
	SS	17 06.5		
	SSS	17 11.5		
	eL	17 29		
	F	19 39		
		Victoria		
	H	16 28.5 ca.	14,000 ca.	
	P'	16 47 40		
	PP	16 49 27		
	SKP	16 50 48		
	SKKS	16 56 19		
	PS	16 59 28		
	PPS	17 01 20		
	SS	17 06 23		
	SSS	17 11 42		
	L	17 26		
	F	19 51		
		Saskatoon		
	e	16 49 03		
	e	16 56 08		
	e	17 06.1		
	L	17 23		
	F	19 28		
		Halifax		
	e	16 46.2		
	e	16 56.4		
	e	17 17		
	L	17 37		
	F	18 53		
		Seven Falls		
	H	16 28	14,100	
	P	16 47 04		
	PP	16 48 48		
	PPP	16 51 45		
	SKKS	16 56 00		
	PS	16 59 00		
	SS	17 06.5		
	L	17 21		
	F	20 08		
		Shawinigan Falls		
	P'	16 47 10		
	PP	16 49 10		
	L	17 43		
	F	18 30		W. V. Doxsee.

EARTHQUAKE CORRELATION TABLE

Month February, 1944.

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	Seven Falls W.A.	Shawinigan	**
23	1	3 34+3 09U	3 36+4 15U	3 35+3 29U	3 33+1 53U	3 34+4 26U	3 34+1 43U	3 34+1 32U	A
24	1	5 29+0 04P					5 29+0 03P	5 29+0 03P	
25	2	3 45+0 36u							
26	3	12 22+1 12r	12 18+1 18r	12 19+0 59r	12 32+0 25r	12 23+1 28r	12 23+0 34r	12 23+0 35r	B
27	4	21 18+0 01P*						21 18+0 03P	
28	4	23 59+0 22u				23 58+0 29L			
29	5	12 39+0 03v				12 38+0 0.5d	12 38+0 02d	12 38+0 03v	C
30	5	16 23+0 03v							D
31	5	17 49+1 22u				17 47+1 42u			
32	5	21 05+0 21L		18 11+0 49L		21 06+0 28L			
33	6					18 56+0 08L		9 00+0 04P	
34	6					18 00+0 08L		18 48+0 02P	
35	7	18 00+0 05L		17 50+0 05L			18 00+0 02L	17 59+0 05L	
36	14	3 05+0 01P*	6 08+0 11L	6 02+0 12L		5 50+0 30L	5 45+0 02P	5 45+0 04P	E
37	15	5 46+0 26u	11 20+0 27L			11 40+0 13L			
38	16								
39	18	9 45+0 0.8v*		11 59+0 09L					
40	19		12 04+0 17L	14 11+0 04L					
41	19		14 16+0 09L						
42	19		16 07+0 07L						
43	20		10 47+0 12L						
44	20			19 56+0 05L		19 48+0 07L			
45	21		0 57+0 02L	0 50+0 03L					
46	21			8 53+0 03L					
47	21	11 36+0 55r	11 41+1 02r	11 42+0 43r		11 38+0 54r	11 50+0 10L	11 49+0 13L	F
48	21			12 35+0 06L					
49	21		15 55+0 11L	15 46+0 12L		15 42+0 13L			
50	21			17 58+0 04L					
51	22			0 57+0 03L					
52	22		1 58+0 06L						
53	23	21 39+0 0.6v*							G

EARTHQUAKE CORRELATION TABLE

Month February, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	W.A.	Shawinigan	**
54	23	12 36+0 01P*	12 37+0 26u	12 43+0 16u	. . .	12 56+0 21L	. . .	. . .	.
55	25	7 41+0 35u	7 43+0 20L	7 47+0 17L	. .	7 56+0 19L	7 57+0 04L	7 41+0 20u	.
56	26	21 00+0 01P*	. . .	. . .	. . .	. . .	. . .	21 01+0 01P	.
57	26	22 32+0 27r	22 32+0 13L	22 34+0 15r	22 48+0 05L	22 46+0 28L	22 32+0 22r	22 32+0 22r	.
58	28	18 06+0 05L	. . .	17 56+0 05L	. . .	. . .	18 06+0 03L	. . .	.
59	29	3 52+1 18u	3 54+1 10u	3 53+1 09u	3 54+0 34u	3 56+1 56u	3 52+0 27u	3 52+0 30u	J
60	29	16 47+2 52U	16 48+3 03U	16 49+2 39U	16 46+2 07U	16 49+3 20U	16 47+2 08U	16 47+1 43U	K

CORRELATION OF EARTHQUAKES
February, 1944

N O T E S

A :	Ottawa	Δ =	8,060 km.	H =	3^h22^m8 U.T.
	Hamilton	Δ =	8,220 km.	H =	3 23.2 U.T.
	Victoria	Δ =	9,850 km.	H =	3 22.8 U.T.
	Saskatoon	Δ =	9,120 km.	H =	3 22.6 U.T.
	Halifax	Δ =	7,370 km.	H =	3 22.7 U.T.
	Seven Falls	Δ =	7,780 km.	H =	3 22.5 U.T.
	Shawinigan Falls	Δ =	8,000 km.	H =	3 22.6 U.T.
B :	Ottawa	Δ =	4,200 km.	H =	12^h15^m1 U.T.
	Victoria	Δ =	1,540 km.	H =	12 15.1 U.T.
	Saskatoon	Δ =	2,090 km.	H =	12 15.1 U.T.
	Seven Falls	Δ =	4,310 km.	H =	12 15.1 U.T.
	Shawinigan Falls	Δ =	4,280 km.	H =	12 15.1 U.T.
C :	Ottawa	Δ =	400 km.	H =	12^h37^m8 U.T.
	Shawinigan Falls	Δ =	215 km.	H =	12 37.8 U.T.
D :	Ottawa	Δ =	515 km.	H =	16^h22^m0 U.T.
E :	Ottawa	Δ =	90 km.	H =	9^h44^m4 U.T.
F :	Ottawa	Δ =	3,980 km.	H =	11^h28^m8 U.T.
G :	Ottawa	Δ =	175 km.	H =	21^h38^m4 U.T.
J :	Ottawa	Δ =	6,250 km.	H =	3^h42^m1 U.T.
	Victoria	Δ =	8,320 km.	H =	3 42.0 U.T.
	Saskatoon	Δ =	7,750 km.	H =	3 42.1 U.T.
	Seven Falls	Δ =	6,410 km.	H =	3 42.1 U.T.
	Shawinigan Falls	Δ =	6,350 km.	H =	3 42.1 U.T.
K :	Ottawa	Δ =	14,400 km. ca.	H =	16^h28^m U.T. ca.
	Victoria	Δ =	14,000 km. ca.	H =	16 28.5 U.T. ca.
	Seven Falls	Δ =	14,100 km. ca.	H =	16 28 U.T. ca.

Dominion Observatory,
Ottawa, Canada,
April 26, 1944.

SEISMOLOGICAL SERVICE OF CANADA

SEISMOLOGICAL BULLETIN
March
1944

20 JUN 1944

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DOMINION OBSERVATORY
OTTAWA - CANADA

****

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

R. Meldrum Stewart, Dominion Astronomer
Ernest A. Hodgson, Seismologist
W. W. Doxsee, Station Superintendent

S T A T I O N S

OTTAWA

ϕ = 45°23'38" N. λ = 75°42'57" W.   h = 83m.

Time correction within 0.10s.

Foundation: boulder clay over limestone

Instruments: Milne-Shaw NS and EW components, designated 23 and 17, respectively, each with photographic registration, magnetic damping, paper speed of 15 mm. per min., mass 1 lb.

Benioff Vertical, short and long period, designated BS and BL, respectively, photographic registration, BS a paper speed of 60 mm. per min., BL a paper speed of 30 mm. per min., mass 235 lbs.

HALIFAX

Dalhousie University

ϕ = 44°38' N. λ = 63°36' W.   h = 46m.

Time correction from recorded radio time signals

Foundation: Carbonaceous slate

Instruments: Bosch NS and EW components, designated HN and HE, respectively, each with photographic registration, magnetic damping, paper speed of 15 mm. per min., mass 200g.

SEVEN FALLS

Quebec Power Company

ϕ = 47°07'.4 N. λ = 70°49'.6 W.   h = 232m. ca.

Time correction from recorded radio time signals

Foundation: Solid granite of Canadian Shield

Instruments: Wood-Anderson and Milne-Shaw, both EW component, designated SF and SM, respectively, each with photographic registration, magnetic damping, SF a paper speed of 60 mm. per min. and mass 15g., SM a paper speed of 8 mm. per min. and mass 1 lb.

VICTORIA

Dominion Astrophysical Observatory

ϕ = 48°31'14" N. λ = 123°24'56" W.   h = 197m.

Time correction from recorded radio time signals

Foundation: rock

Instruments: Milne-Shaw NS and EW components, designated 21 and 20, respectively, each with photographic registration, magnetic damping, paper speed of 8 mm. per min., mass 1 lb.

Wiechert Vertical, designated WV, smoked sheet registration, air damping, paper speed of 15 mm. per min., mass 80 kg.

S T A T I O N S   (Cont'd)

SHAWINIGAN FALLS

Shawinigan Water and Power Company

$\phi = 46°33!1$ N. $\lambda = 72°45!8$ W.   h = 60m. ca.

Time correction from recorded radio time signals

Foundation: solid granite of Canadian Shield

Instrument: Wood-Anderson NS component, designated
SA, photographic registration, magnetic damping,
paper speed of 60 mm. per min., mass 15g.

SASKATOON

University of Saskatchewan

$\phi = 52°08'$ N. $\lambda = 106°38'$ W.   h = 515m.

Time correction from radio time signals

Foundation: clay and sand

Instrument: Milne-Shaw NE component, designated
SN, photographic registration, magnetic damping,
paper speed of 8 mm. per min., mass 1 lb.

KIRKLAND LAKE

Lake Shore Mines

$\phi = 48°09'$ N. $\lambda = 80°03'$ W.   h = 320m.

Time correction from recorded radio time signals

Foundation: rock

Instrument: Converted Heiland Field Seismometer,
vertical component, designated KL, photographic
registration, paper speed of 30 mm. per min.

DETERMINED CONSTANTS

INSTRUMENT	T_0	V	ε	DISPLACEMENT FOR 1" ARC TILT	DISPLACEMENT FOR 10^{-6} g
17 (Ottawa)	12.0	300	20:1	50 mm.	
23 (Ottawa)	12.0	300	20:1	50 mm.	
BS (Ottawa)	1.0				5 mm.
BL (Ottawa)	1.0				16 mm.
HN (Halifax)	5.0	125	20:1		
HE (Halifax)	5.0	125	20:1		
SA (Shawinigan)	1.0	2400			
20 (Victoria)	12.0	300	20:1		
21 (Victoria)	12.0	300	20:1		
WV (Victoria)	4.0	120	15:1		
SF (Seven Falls)	1.0	2500			
SM (Seven Falls)	12.0	300	20:1	50 mm.	
SN (Saskatoon)	10.0	150	20:1	18 mm.	
KL (Kirkland Lake)	1/30	2×10^4	at 30 cycles		

NOTE:- Universal Time used throughout.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	March 1, 1944	to	March 6, 1944	No. 12

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
63 March 6	H	20 09.3	4020	
	Pz	20 16 25		
	SE	20 22 14		
	L	20 28		
	F	21 16		
		Saskatoon		
	H	20 09.1	1910	
	P	20 13 07		
	S	20 16 25		
	L	20 18		
	F	21 00		
		Seven Falls	4350	
	H	20 09.3		
	P	20 16 48		
	S	20 22 57		
	L	20 31		
	F	21 27+		
		Shawinigan Falls		
	P	20 16 42		
	L	20 31		
	F	20 41		
		Ottawa		
64 March 6	H	21 06.1	4020	
	Pz	21 13 11		
	SE	21 19 00		
	L	21 25		
	F	21 57		
		Saskatoon		
	e	21 09 58		
	L	21 16		
	F	21 52		
		Seven Falls		
	e	21 13 32		
	L	21 27		
	F	21 57		
		Saskatoon		
68 March 6	e	22 55 13		
	L	23 01		
	F	23 11		
		Ottawa		
69 March 6	H	23 16.7	4040	
	Pz	23 23 47		
	SE	23 29 37		
	L	23 35		
	F	0 17		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	March 6, 1944	to	March 8, 1944	No. 13

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Saskatoon		
69 March 6 (Cont'd)	e	23 20 29		
	L	23 25		
	F	0 15		
		Seven Falls		
	e	23 25		
	e	23 29		
	L	23 36		
	F	0 28		
		Ottawa		
73 March 7	eZ	6 16 27		
	L	6 30		
	F	6 40		
		Saskatoon		
	H	6 09.1	1980	
	eP	6 13 12		
	eS	6 16 36		
	L	6 19		
	F	6 31		
		Ottawa		
74 March 7	eZ	6 52 24		
	L	7 06		
	F	7 15		
		Saskatoon		
	H	6 45.0	1960	
	eP	6 49 07		
	eS	6 52 30		
	L	6 55		
	F	7 06		
		Ottawa		
75 March 7	H	8 21.6	4120	
	PZ	8 28 46		
	SE	8 34 41		
	L	8 42		
	F	8 54		
		Saskatoon		
	e	8 25 29		
	L	8 31		
	F	8 53		
		Ottawa		
77 March 8	H	12 49.9	305	Felt at Timiskaming, Que.
	P2	12 50 41.5		
	P1	12 50 45		
	Sn	12 51 10.5		
	i	12 51 14.5		
	S2	12 51 16		
	F	12 55		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
77 March 8 (Cont'd)	e	12 52 26		
	e	12 52 52		
	F	12 54		
		Shawinigan Falls		
	e	12 51 54.5		
	e	12 52 05		
	F	12 54		
		Ottawa		
82 March 9	H	22 13.4	9360	
	P	22 25 55		
	S	22 36 22		
	L	22 54		
	F	0 09		
		Victoria		
	H	22 13.4	9090	
	P	22 25 40		
	S	22 35 55		
	L	22 49		
	F	0 44		
		Saskatoon		
	H	22 13.3	9065	
	P	22 25 33		
	S	22 35 47		
	L	22 50		
	F	0 13		
		Halifax		
	e	22 36 13		
	L	22 55		
	F	23 47		
		Seven Falls		
	H	22 13.1	9580	
	P	22 25 43		
	S	22 36 20		
	L	22 50		
	F	1 00		
		Shawinigan Falls		
	H	22 13.4	9280	
	P	22 25 47		
	S	22 36 10		
	L	23 03		
	F	23 24		
		Ottawa		
83 March 10	H	6 40.1	9580	
	eP_Z	6 52 43		
	eS_E	7 03 20		
	L	7 19		
	F	8 16		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	March 10, 1944	to	March 23, 1944	No. 15

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
	Seven Falls			
83 March 10 (Cont'd)	H	6 40.3	9450	
	P	6 52.9		
	S	7 03 25		
	e	7 12.5		
	L	7 23		
	F	8 22		
88 March 21	eZ	22 22 38		
	L_N	22 57		
	F	23 11		
89 March 22	H	0 42.6 ca.	16,000ca.	USCGS. gives:-
	P'_Z	1 02 11		$\phi = 7°$ S,
	PP_N	1 05.3		$\lambda = 126°$ E.
	SKP	1 05 40		
	PPS_N	1 17.4		
	SS	1 24 12		
	L	1 45		
	F	2 49		
	Victoria			
	e	(1 04)		
	e	(1 13)		
	L	(1 40)		
	F	(2 05)		
	Saskatoon			
	e	1 09.8		
	e	1 13 05		
	e	1 19.5		
	L	1 33		
	F	2 21		
	Seven Falls			
	e	1 02.3		
	e	1 05.2		
	e	1 15.5		
	e	1 23.5		
	L	1 40		
	F	3 12		
	Shawinigan Falls			
	e	1 02 12		
	e	1 05 00		
	e	1 14 18		
	F	1 20		
	Ottawa			
90 March 23	H	19 09.6	215	
	P2	19 10 13		
	Sn	19 10 35.5		
	S2	19 10 37.5		
	F	19 11.4		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	March 23, 1944		to	March 31, 1944	No. 16

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
91 March 29	H	20 38.1	375	
	Pn	20 38 56		
	Sn	20 39 37		
	Sl	20 39 55		
	F	20 41		
		Ottawa		
92 March 31	eZ	3 10 57		
	e	3 14 19		
	e	3 31		
	eL	3 48		
	F	4 53		
		Victoria		
	e	3 18.2		
	L	3 35		
	F	4 13		
		Saskatoon		
	e	3 21		
	L	3 44		
	F	4 05		
		Seven Falls		
	e	3 14.0		
	e	3 31.5		
	L	3 48		
	F	5 12		
		Ottawa		
93 March 31	H	20 35.2	5000	USCGS. gives:-
	P	20 43 28		$\phi = 3° S.$
	PP	20 45 15		$\lambda = 81° W.$
	S	20 50.2		
	SSS	20 54.0		
	eL	20 58		
	F	21 21		
		Victoria		
	e	20 53 45		
	L	21 05		
	F	21 18		
		Saskatoon		
	e	20 52 47		
	L	21 09		
	F	21 18		
		Seven Falls		
	H	20 35.3	5220	
	P	20 43 48		
	S	20 50 45		
	L	21 00		
	F	21 22		

W. W. Doxse.

EARTHQUAKE CORRELATION TABLE
March, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M. S.	Seven Falls W. A.	Shawinigan	**
61	5	17 35+0 03P*					17 35+0 01P	17 35+0 04P	
62	6	14 24+0 06L	14 05+0 15L						
63	6	20 16+1 00r	20 10+0 50L	20 13+0 47r		20 18+1 09r	20 17+0 18r	20 17+0 24r	A
64	6	21 13+0 44r	21 07+0 23L	21 10+0 42r		21 27+0 30L	21 14+0 01P	21 13+0 03P	B
65	6		21 30+0 15L						
66	6		22 06+0 15L						
67	6		22 23+0 14L						
68	6	23 11+0 08L	22 53+0 17L	22 55+0 16r		23 13+0 07L	23 40+0 09L	23 39+0 08L	
69	6	23 24+0 53r	23 18+1 19L	23 20+0 55r		23 25+1 03r			C
70	6								
71	7		1 03+0 13L						
72	7		3 22+0 07L						
73	7	6 16+0 24r	5 52+0 06L	6 13+0 18r		6 32+0 07L			E
74	7	6 52+0 23r	6 10+0 27L	6 49+0 17r		7 07+0 05L			F
75	7	8 29+0 25r	6 46+0 21L	8 25+0 28r		8 44+0 10L			G
76	7	20 50+0 01P*	8 23+0 41r						
77	7	12 51+0 04v*					15 52+0 02v	12 52+0 02v	J
78	8	23 59+0 13L				0 01+0 32L			
79	8		16 24+0 24L	16 32+0 18L		16 45+0 15L			
80	9			17 17+0 05L					
81	9	22 17+0 02P*	22 26+2 18u				22 16+0 02P	22 17+0 03P	K
82	9	22 26+1 43u	7 13+0 31L	22 26+1 47u	22 36+1 11u	22 26+2 34u	22 26+1 02u	22 26+0 58u	
83	10	6 53+1 23u				7 03+1 19u	6 53+0 01P	6 53+0 01P	
84	14	11 43+0 01P*							N
85	14	18 52+0 01P*	15 28+0 21L	5 55+0 16L		5 53+0 22L			
86	15					15 51+0 06L			
87	21	22 23+0 48u	1 04+1 01u						
88	21	1 02+1 47u		1 10+1 11u		22 54+0 24L			
89	22	19 10+0 01v*				1 05+2 07u	1 02+0 12u	1 02+0 18u	Q
90	23	20 39+0 02v*							R
91	29								S
92	31	3 11+1 42u	3 18+0 55u	3 21+0 44u		3 14+1 58u			
93	31	20 43+0 38r	20 54+0 24u	20 53+0 25u		20 51+0 32u	20 44+0 03P	20 44+0 04P	T

CORRELATION OF EARTHQUAKES
March, 1944

N O T E S

A :	Ottawa	Δ =	4,020 km.	H = $20^h09^m.3$ U.T.
	Saskatoon	Δ =	1,910 km.	H = 20 09.1 U.T.
	Seven Falls	Δ =	4,350 km.	H = 20 09.3 U.T.
B :	Ottawa	Δ =	4,020 km.	H = $21^h06^m.1$ U.T.
C :	Ottawa	Δ =	4,040 km.	H = $23^h16^m.7$ U.T.
E :	Saskatoon	Δ =	1,980 km.	H = $6^h09^m.1$ U.T.
F :	Saskatoon	Δ =	1,960 km.	H = $6^h45^m.0$ U.T.
G ;	Ottawa	Δ =	4,120 km.	H = $8^h21^m.6$ U.T.
J :	Ottawa	Δ =	305 km.	H = $12^h49^m.9$ U.T.

Felt at Timiskaming, Quebec.

K :	Ottawa	Δ =	9,360 km.	H = $22^h13^m.4$ U.T.
	Victoria	Δ =	9,090 km.	H = 22 13.4 U.T.
	Saskatoon	Δ =	9,065 km.	E = 22 13.3 U.T.
	Seven Falls	Δ =	9,580 km.	H = 22 13.1 U.T.
	Shawinigan Falls	Δ =	9,280 km.	H = 22 13.4 U.T.
N :	Ottawa	Δ =	9,580 km.	H = $6^h40^m.1$ U.T.
	Seven Falls	Δ =	9,450 km.	H = 6 40.3 U.T.
Q :	Ottawa	Δ =	16,000 km. ca.	H = $0^h42^m.6$ U.T. ca.
R :	Ottawa	Δ =	215 km.	H = $19^h09^m.6$ U.T.
S :	Ottawa	Δ =	375 km.	H = $20^h38^m.1$ U.T.
T :	Ottawa	Δ =	5,000 km.	H = 20 35.2 U.T.
	Seven Falls	Δ =	5,220 km.	H = 20 35.3 U.T.

Dominion Observatory,
Ottawa, Canada,
May 15, 1944.

SEISMOLOGICAL BULLETINS RECEIVED
March and April, 1944

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

STATIONS	BULLETINS	RECEIVED
New Zealand Stations	December, 1943	March 1
St. Louis and Auxiliary Stations	Preliminaries for August 10, September 5, 10, 11, 14, 1943	" 1
Perth	November and December, 1943	" 6
United States Coast and Geodetic Survey	April to June, 1942	" 7
Sydney	July and August, 1943	" 8
Pasadena and Auxiliary Stations	October to December, 1941	" 9
New Zealand Stations	January, 1944	" 9
Santa Clara	February, 1944	" 16
Weston	September and October, 1943	" 21
Ksara	October to December, 1943	April 3
Bogota	December/43 and January/44	" 6
Brisbane	December/43 and January/44	" 8
Santa Clara	March, 1944	" 11
Weston	November and December, 1943	" 13
Apia	October to December, 1943	" 18
United States Coast and Geodetic Survey	July to September, 1942	" 20

DOMINION OBSERVATORY
OTTAWA - CANADA.

SEISMOLOGICAL SERVICE OF CANADA

SEISMOLOGICAL BULLETIN

April

1944

DOMINION OBSERVATORY

OTTAWA - CANADA

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

R. Meldrum Stewart, Dominion Astronomer
Ernest A. Hodgson, Seismologist
W. W. Doxsee, Station Superintendent

S T A T I O N S

OTTAWA

ϕ = 45°23'38" N. λ = 75°42'57" W.   h = 83m.

Time correction within 0.10s.

Foundation: boulder clay over limestone

Instruments: Milne-Shaw NS and EW components, designated 23 and 17, respectively, each with photographic registration, magnetic damping, paper speed of 15 mm. per min., mass 1 lb.

Benioff Vertical, short and long period, designated BS and BL, respectively, photographic registration, BS a paper speed of 60 mm. per min., BL a paper speed of 30 mm. per min., mass 235 lbs.

HALIFAX

Dalhousie University

ϕ = 44°38' N. λ = 63°36' W.   h = 46m.

Time correction from recorded radio time signals

Foundation: Carbonaceous slate

Instruments: Bosch NS and EW components, designated HN and HE, respectively, each with photographic registration, magnetic damping, paper speed of 15 mm. per min., mass 200g.

SEVEN FALLS

Quebec Power Company

ϕ = 47°07'.4 N. λ = 70°49'.6 W.   h = 232m. ca.

Time correction from recorded radio time signals

Foundation: Solid granite of Canadian Shield

Instruments: Wood-Anderson and Milne-Shaw, both EW component, designated SF and SM, respectively, each with photographic registration, magnetic damping, SF a paper speed of 60 mm. per min. and mass 15g., SM a paper speed of 8 mm. per min. and mass 1 lb.

VICTORIA

Dominion Astrophysical Observatory

ϕ = 48°31'14" N. λ = 123°24'56" W.   h = 197m.

Time correction from recorded radio time signals

Foundation: rock

Instruments: Milne-Shaw NS and EW components, designated 21 and 20, respectively, each with photographic registration, magnetic damping, paper speed of 8 mm. per min., mass 1 lb.

Wiechert Vertical, designated WV, smoked sheet registration, air damping, paper speed of 15 mm. per min., mass 80 kg.

S T A T I O N S   (Cont'd)

SHAWINIGAN FALLS

Shawinigan Water and Power Company

$\phi = 46°33!1$ N. $\lambda = 72°45!8$ W.   h = 60m. ca.

Time correction from recorded radio time signals

Foundation: solid granite of Canadian Shield

Instrument: Wood-Anderson NS component, designated
SA, photographic registration, magnetic damping,
paper speed of 60 mm. per min., mass 15g.

SASKATOON

University of Saskatchewan

$\phi = 52°08'$ N. $\lambda = 106°38'$ W.   h = 515m.

Time correction from radio time signals

Foundation: clay and sand

Instrument: Milne-Shaw NE component, designated
SN, photographic registration, magnetic damping,
paper speed of 8 mm. per min., mass 1 lb.

KIRKLAND LAKE

Lake Shore Mines

$\phi = 48°09'$ N. $\lambda = 80°03'$ W.   h = 320m.

Time correction from recorded radio time signals

Foundation: rock

Instrument: Converted Heiland Field Seismometer,
vertical component, designated KL, photographic
registration, paper speed of 30 mm. per min.

DETERMINED CONSTANTS

INSTRUMENT	T_0	V	ε	DISPLACEMENT FOR 1" ARC TILT	DISPLACEMENT FOR 10^{-6} g
17 (Ottawa)	12.0	300	20:1	50 mm.	
23 (Ottawa)	12.0	300	20:1	50 mm.	
BS (Ottawa)	1.0				5 mm.
BL (Ottawa)	1.0				16 mm.
HN (Halifax)	5.0	125	20:1		
HE (Halifax)	5.0	125	20:1		
SA (Shawinigan)	1.0	2400			
20 (Victoria)	12.0	300	20:1		
21 (Victoria)	12.0	300	20:1		
WV (Victoria)	4.0	120	15:1		
SF (Seven Falls)	1.0	2500			
SM (Seven Falls)	12.0	300	20:1	50 mm.	
SN (Saskatoon)	10.0	150	20:1	18 mm.	
KL (Kirkland Lake)	1/30	2×10^4	at 30 cycles		

NOTE:- Universal Time used throughout.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | April 1, 1944 | to | April 19, 1944 | | No. 17 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
98 April 5	eZ	4 52 07		
	L$_N$	5 15		
	F	5 28		
		Ottawa		
100 April 7	H	13 33.0	3520	
	P	13 39 31		
	eZ	13 40 09		
	PR$_N$	13 40 28		
	S	13 44 48		
	e	13 45 44		
	L	13 48		
	F	14 04		
		Seven Falls		
	H	13 33.1	3800	
	P	13 39 53		
	S	13 45 28		
	L	13 48.5		
	F	14 07		
		Shawinigan Falls		
	H	13 33.1	3720	
	P	13 39 48		
	S	13 45 18		
	F	13 48		
		Ottawa		
101 April 9	iZ	12 47 46		
	iZ	12 47 53		
	iZ	12 48 13		
	iL?	12 48 18		
	F	12 56		
		Seven Falls		
	H	12 44.6	385	
	P$_n$	12 45 32		
	P$_2$	12 45 38.5		
	S$_n$	12 46 14		
	S$_1$	12 46 29.5		
	F	12 53		
		Shawinigan Falls		
	H	12 44.5	540	
	P$_2$	12 45 56		
	P$_1$	12 46 04		
	S$_n$	12 46 41		
	S$_2$	12 46 57		
	S$_1$	12 47 12		
	F	12 57		
		Ottawa		
109 April 19	eZ	22 44 24		
	e	22 54.4		
	eL	23 09		
	F	23 38		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	April 19, 1944	to	April 26, 1944	No. 18

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
109 April 19 (Cont'd)	eN L F	22 53.8 23 08 0 11		
		Ottawa		
111 April 21	H Pz SN SSS L F	15 01.5 15 09 14 15 15.6 15 19.1 15 23 15 37	4580	
		Ottawa		
115 April 26	H P'z PP SKP SKKS SS SSS eL F	1 54.2 2 13 22 2 15 04 2 16 40 2 22.5 2 33.0 2 37.0 2 53 4 27	14,500	USCGS. gives:- ϕ = 1° S. λ = 131° E.
		Victoria		
	H P PP S SS L F	1 54.7 2 08 04 2 12.0 2 19 26 2 25.6 2 39 4 45	10,680	
		Saskatoon		
	H PP S PS SS L F	1 54.8 2 13 12 2 20 47 2 22 31 2 28 34 2 47 4 25	11,700	
		Halifax		
	e L F	(2 18) (3 00) (3 30)		
		Seven Falls		
	H PP SKP PPS SS L F	1 54.1 2 15 29 2 16 46 2 27.5 2 32 51 2 58 4 37	14,500	

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	April 26, 1944		to	April 27, 1944	No. 19

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
116 April 27	H	14 38.1	14,500	USCGS. gives:-
	P'Z	14 57 19		$\phi = 1°$ S.
	PP	14 59 18		$\lambda = 131°$ E.
	SKP	15 00 40		
	SKS	15 04.5		
	SKKS	15 06.1		
	PPS?	15 12 06		
	SS	15 16.5		
	SSS	15 22		
	e	15 31		
	eL	15 39		
	F	17 47		
		Victoria		
	e	14 56.0		
	e	15 02 36		
	e	15 07 03		
	L	15 20		
	F	16 44+		
		Saskatoon		
	H	14 38.1	12,200	
	PP	14 57 03		
	SKS	15 03 21		
	S	15 04 49		
	SS	15 12 28		
	L	15 23		
	F	17 57		
		Halifax		
	e	(15 03)		
	L	(15 40)		
	F	(17 00)		
		Seven Falls		
	H	14 38.1	14,500	
	P'	14 57.5		
	PP	14 59 30		
	SKKS	15 06.5		
	PPS	15 11 16		
	SS	15 16 56		
	e	15 31.5		
	L	15 40		
	F	18 05		
		Shawinigan Falls		
	H	14 38.3	14,100	
	P'	14 57 26		
	SKP	15 00.4		
	PS	15 09.5		
	SS	15 15.9		
	SSS	15 21.6		
	L	15 37		
	F	16 55		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | April 27, 1944 | to | April 30, 1944 | No. 20 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
117 April 27	e	19 39		
	L	20 09		
	F	21 11		
		Seven Falls		
	e	19 39		
	L	20 11		
	F	21 29		
		Ottawa		
118 April 28	H	5 50.5	4100	
	PZ	5 57 44		
	PPP$_N$	5 59 14		
	eS	6 03 38		
	L	6 10		
	F	6 34		
		Saskatoon		
	e	6 06 25		
	L	6 20		
	F	7 16		
		Seven Falls		
	e	6 04.5		
	L	6 10		
	F	6 49		
		Seven Falls		
120 April 30	e	16 12 16		
	e	16 12 52		
	F	16 13		

W. W. Doxsee.

EARTHQUAKE CORRELATION TABLE

Month April, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	Seven Falls W.A.	Shawinigan	**
94	1	4 58+0 04L				18 51+0 37L			
95	2					23 25+0 13L			
96	3		4 53+0 06L			5 13+0 22L			
97	4	4 52+0 36u	5 32+0 16L						
98	5						14 09+0 01P	14 10+0 01P	A
99	6					13 40+0 27r		13 40+0 08r	B
100	7	12 40+0 24r					12 46+0 07V	12 46+0 11V	
101	8	12 48+0 08V							
102	9	1 26+0 0.8P*				1 33+0 02L			
103	11					2 34+0 02L			
104	11	20 27+0 0.8P*	23 22+0 05L						
105	11	21 11+0 0.6v*	13 54+0 11L						
106	11		15 41+0 08L						
107	13	14 09+0 03L	22 54+1 17u			15 19+0 13L			
108	13								
109	19	22 44+0 54u		23 12+0 42L					
110	20	8 19+0 0.3P*							C
111	21	15 09+0 28r		15 32+0 08L					
112	22	2 34+0 0.3P*							
113	22		3 57+0 25L	4 17+0 12L		4 10+0 18L			
114	24			2 19+0 05L		2 29+0 08L			
115	26	2 13+2 14U	2 08+2 37U	2 13+2 12U	2 18+1 12U	2 15+2 22U	14 57+1 52U	14 57+1 58U	D
116	27	14 57+2 50U	14 56+1 48U	14 57+3 00U	15 03+1 57U	14 59+3 06U			E
117	27	19 39+1 32u		20 01+0 15L		19 39+1 50u		5 58+0 01P	F
118	28	5 58+0 36r	6 37+0 08L	6 06+1 10r		6 04+0 45r	6 54+0 03L	6 53+0 03L	
119	29	6 53+0 18L		6 42+0 07L		6 54+0 21L	16 12+0 01d		
120	30								

CORRELATION OF EARTHQUAKES
April, 1944

N O T E S

A :	Ottawa	Δ = 3,520 km,	H = $12^h 33^m.0$ U.T.
	Seven Falls	Δ = 3,800 km.	H = 12 33.1 U.T.
	Shawinigan Falls	Δ = 3,720 km.	H = 12 33.1 U.T.
B :	Seven Falls	Δ = 385 km.	H = $12^h 44^m.6$ U.T.
	Shawinigan Falls	Δ = 540 km.	H = 12 44.5 U.T.
C :	Ottawa	Δ = 4,580 km,	H = $15^h 01^m.5$ U.T.
D :	Ottawa	Δ = 14,500 km,	H = $1^h 54^m.2$ U.T.
	Victoria	Δ = 10,680 km.	H = 1 54.7 U.T.
	Saskatoon	Δ = 11,700 km.	H = 1 54.8 U.T.
	Seven Falls	Δ = 14,500 km.	H = 1 54.1 U.T.
E :	Ottawa	Δ = 14,500 km.	H = $14^h 38^m.1$ U.T.
	Saskatoon	Δ = 12,200 km.	H = 14 38.1 U.T.
	Seven Falls	Δ = 14,500 km.	H = 14 38.1 U.T.
	Shawinigan Falls	Δ = 14,100 km.	H = 14 38.3 U.T.
F :	Ottawa	Δ = 4,100 km.	H = $5^h 50^m.5$ U.T.

Dominion Observatory,
Ottawa, Canada,
May 22, 1944.

SEISMOLOGICAL SERVICE OF CANADA

SEISMOLOGICAL BULLETIN
May
1944

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DOMINION OBSERVATORY
OTTAWA - CANADA

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SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

R. Meldrum Stewart, Dominion Astronomer
Ernest A. Hodgson, Seismologist
W. W. Doxsee, Station Superintendent

S T A T I O N S

OTTAWA

ϕ = 45°23'38" N. λ = 75°42'57" W.   h = 83m.

Time correction within 0.10s.

Foundation: boulder clay over limestone

Instruments: Milne-Shaw NS and EW components,
designated 23 and 17, respectively, each with
photographic registration, magnetic damping,
paper speed of 15 mm. per min., mass 1 lb.

Benioff Vertical, short and long
period, designated BS and BL, respectively,
photographic registration, BS a paper speed
of 60 mm. per min., BL a paper speed of 30 mm.
per min., mass 235 lbs.

HALIFAX

Dalhousie University

ϕ = 44°38' N. λ = 63°36' W.   h = 46m.

Time correction from recorded radio time signals

Foundation: Carbonaceous slate

Instruments: Bosch NS and EW components, designated
HN and HE, respectively, each with photographic
registration, magnetic damping, paper speed of
15 mm. per min., mass 200g.

SEVEN FALLS

Quebec Power Company

ϕ = 47°07'.4 N, λ = 70°49'.6 W.   h = 232m. ca.

Time correction from recorded radio time signals

Foundation: Solid granite of Canadian Shield

Instruments: Wood-Anderson and Milne-Shaw, both
EW component, designated SF and SM, respectively,
each with photographic registration, magnetic
damping, SF a paper speed of 60 mm. per min.
and mass 15g., SM a paper speed of 8 mm. per
min. and mass 1 lb.

VICTORIA

Dominion Astrophysical Observatory

ϕ = 48°31'14" N. λ = 123°24'56" W.   h = 197m.

Time correction from recorded radio time signals

Foundation: rock

Instruments: Milne-Shaw NS and EW components,
designated 21 and 20, respectively, each with
photographic registration, magnetic damping,
paper speed of 8 mm. per min., mass 1 lb.

Wiechert Vertical, designated WV,
smoked sheet registration, air damping, paper
speed of 15 mm. per min., mass 80 kg.

S T A T I O N S (Cont'd)

SHAWINIGAN FALLS

Shawinigan Water and Power Company

$\phi = 46°33!1$ N. $\lambda = 72°45!8$ W. $h = 60$m. ca.

Time correction from recorded radio time signals

Foundation: solid granite of Canadian Shield

Instrument: Wood-Anderson NS component, designated
SA, photographic registration, magnetic damping,
paper speed of 60 mm. per min., mass 15g.

SASKATOON

University of Saskatchewan

$\phi = 52°08'$ N. $\lambda = 106°38'$ W. $h = 515$m.

Time correction from radio time signals

Foundation: clay and sand

Instrument: Milne-Shaw NE component, designated
SN, photographic registration, magnetic damping,
paper speed of 8 mm. per min., mass 1 lb.

KIRKLAND LAKE

Lake Shore Mines

$\phi = 48°09'$ N. $\lambda = 80°03'$ W. $h = 320$m.

Time correction from recorded radio time signals

Foundation: rock

Instrument: Converted Heiland Field Seismometer,
vertical component, designated KL, photographic
registration, paper speed of 30 mm. per min.

DETERMINED CONSTANTS

INSTRUMENT	T_0	V	ε	DISPLACEMENT FOR 1" ARC TILT	DISPLACEMENT FOR 10^{-6} g
17 (Ottawa)	12.0	300	20:1	50 mm.	
23 (Ottawa)	12.0	300	20:1	50 mm.	
BS (Ottawa)	1.0				5 mm.
BL (Ottawa)	1.0				16 mm.
HN (Halifax)	5.0	125	20:1		
HE (Halifax)	5.0	125	20:1		
SA (Shawinigan)	1.0	2400			
20 (Victoria)	12.0	300	20:1		
21 (Victoria)	12.0	300	20:1		
WV (Victoria)	4.0	120 ·	15:1		
SF (Seven Falls)	1.0	2500			
SM (Seven Falls)	12.0	300	20:1	50 mm.	
SN (Saskatoon)	10.0	150	20:1	18 mm.	
KL (Kirkland Lake)	1/30	2×10^4	at 30 cycles		

NOTE:- Universal Time used throughout.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	May 1, 1944		to	May 7, 1944	No. 21

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
124 May 5	eE	6 11.6		
	L	6 34		
	F	6 53		
		Ottawa		
125 May 6	H	0 13.8	3660	USCGS. gives:-
	P	0 20 28		$\phi = 22°4$ N.
	S	0 25 54		$\lambda = 44°8$ W.
	SS	0 28.0		
	L	0 29.5		
	F	1 32		
		Victoria		
	H	0 13.6	7350	
	P	0 24 18		
	S	0 33 13		
	L	0 43		
	F	1 41		
		Saskatoon		
	H	0 13.4	6490	
	P	0 23 16		
	S	0 31.4		
	L	0 38		
	F	1 36		
		Halifax		
	e	(0 20)		
	L	(0 27)		
	F	(1 00)		
		Seven Falls		
	e	0 20 12		
	L	0 27		
	F	1 40		
		Shawinigan Falls		
	e	0 20 18		
	L	0 28		
	F	0 37		
		Victoria		
126 May 7	e	15 16.0		
	L	15 20		
	F	16 02		
		Saskatoon		
	e	15 21		
	L	15 25		
	F	15 42		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	May 7, 1944		to	May 18, 1944	No. 22

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
127 May 9	e	14 44.0		
	e	14 47.0		
	L	14 52		
	F	15 13		
		Victoria		
	e	14 49 55		
	L	15 02		
	F	15 26		
		Saskatoon		
129 May 13	e	22 14 40		
	L	22 16		
	F	22 22		
		Victoria		
130 May 14	e	11 07 39		
	e	11 17 24		
	F	11 24		
		Ottawa		
131 May 15	eZ	19 37 31		
	L	20 20		
	F	21 08		
		Victoria		
	e	19 42 09		
	L	20 02		
	F	20 40		
		Ottawa		
132 May 18	H	4 43.3 ca.	13,300ca.	
	PP	5 03 30		
	SKS	5 09 06		
	SKKS	5 10 30		
	PS	5 13 08		
	SS	5 20.0		
	L	5 39		
	F	6 40		
		Victoria		
	e	5 06 36		
	L	5 20		
	F	6 03		
		Saskatoon		
	e	5 07 35		
	L	5 26		
	F	6 20		
		Seven Falls		
	e	5 08.9		
	L	5 42		
	F	7 12		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | May 18, 1944 | | to | May 24, 1944 | No. 23 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
133	H	0 19.3 ca.	13,300ca.	
May	PP	0 39 26		
19	SKS	0 45 08		
	SKKS	0 46 32		
	PS	0 49 12		
	SS	0 56 00		
	eL	1 15.0		
	F	3 05		
		Victoria		
	H	0 19.5	9560	
	P	0 32 07		
	S	0 42 43		
	L	0 58		
	F	3 04		
		Saskatoon		
	e	0 43 39		
	L	1 05		
	F	2 16		
		Seven Falls		
	H	0 19.1 ca.	14,000ca.	
	PP	0 39.9		
	SKS	0 45 02		
	SKKS	0 46 42		
	SS	0 56.9		
	L	1 14		
	F	3 11		
		Ottawa		
139	H	10 38.8	6380	
May	Pz	10 48 30		
23	S	10 56 32		
	eL	11 10		
	F	12 05		
		Saskatoon		
	e	10 51 51		
	L	10 58		
	F	11 23		
		Seven Falls		
	e	10 56.9		
	L	11 10		
	F	12 19		
		Ottawa		
140	H	1 30.4	2900	
May	Pz	1 36 00		
24	S N	1 40.6		
	L	1 44		
	F	2 04		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	May 24, 1944		to	May 25, 1944		No. 24

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
140 May 24 (Cont'd)	H	1 30.9	3050	
	P	1 36 45		
	S	1 41.5		
	L	1 44		
	F	2 24		
		Ottawa		
141 May 25	iZ	1 24 06		USCGS. gives:-
	e	1 25 16		$\phi = 21°5$ S.
	e	1 29 58		$\lambda = 179°$ W.
	e	1 34 00		$H = 1^h06^m6$ U.T.
	e	1 44.0		
	e	1 48.0		
	L	1 54		
	F	3 53		
		Victoria		
	i	1 18 11		
	e	1 20 26		
	i	1 27 35		
	iN	1 27 55		
	e	1 29.0		
	e	1 31 52		
	L	1 40		
	F	3 49		
		Saskatoon		
	H	1 07.5	8250	
	P	1 19 04		
	PP	1 21 27		
	PPP	1 23 09		
	S	1 28 42		
	PS	1 29 36		
	SS	1 33 47		
	L	1 46		
	F	3 51		
		Seven Falls		
	e	1 24 14		
	e	1 25 38		
	i	1 30 10		
	i	1 31 35		
	e	1 34 24		
	e	1 37.1		
	L	1 43		
	F	4 07		
		Shawinigan Falls		
	e	1 24 12		
	i	1 30 09		
	e	1 32.5		
	e	1 36.6		
	e	1 40.8		
	L	1 48		
	F	1 54		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | May 25, 1944 | | to | May 25, 1944 | No. 25 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
144	H	12 58.4	13,100	USCGS. gives:-
May	P'z	13 17 08		ϕ = 3° S.
25	PP	13 18 20		λ = 152° E.
	SKS	13 24 00		
	SKKS	13 25 22		
	PS	13 28 20		
	SS	13 35 00		
	SSS	13 38.6		
	L	13 54		
	F	17 26		
		Victoria		
	H	12 58.5	9420	
	P	13 11 01		
	S	13 21 31		
	SS	13 27 31		
	SSS	13 31 05		
	L	13 37		
	F	17 06		
		Saskatoon		
	H	12 58.4	11,100	
	P	13 12 07		
	PP	13 16 00		
	SKKS	13 22 25		
	PS	13 24 42		
	SS	13 29 45		
	L	13 39		
	F	16 00 ca.		
		Halifax		
	e	13 19.2		
	e	13 36.7		
	L	13 48		
	F	15 44		
		Seven Falls		
	H	12 58.4	13,500	
	PP	13 18 43		
	SKS	13 24 07		
	SKKS	13 25 33		
	PS	13 28 37		
	PPS	13 29 54		
	SS	13 35 13		
	L	13 46		
	F	17 44		
		Shawinigan Falls		
	H	12 58.3	13,600	
	P'	13 17.2		
	PP	13 18.7		
	PS	13 28.3		
	SS	13 35.4		
	L	13 55		
	F	15 17		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	May 25, 1944	to	May 31, 1944	No. 26

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
145 May 25	H	14 40.2	160	
	P2	14 40 37.5		
	i	14 40 44.5		
	S2	14 40 56.0		
	i	14 41 02.5		
	F	14 42.5		
		Ottawa		
147 May 29	eZ	2 50 58		
	eN	2 57.0		
	L	3 03		
	F	3 38		
		Ottawa		
148 May 29	H	23 03.6	165	
	P2	23 04 04		
	S2	23 04 23		
	e	23 04 30		
	F	23 07		
		Seven Falls		
	e	23 05 08		
	e	23 05 17.5		
	F	23 07		
		Shawinigan Falls		
	H	23 03.6	225	
	Pn	23 04 13.5		
	Sn	23 04 39		
	S1	23 04 45.5		
	F	23 09		

W. W. Doxsee

EARTHQUAKE CORRELATION TABLE

May, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M. S.	Seven Falls W. A.	Shawinigan	**
121	4		7 30+0 17L	7 35+0 20L		7 45+0 38L			
122	4					8 58+0 11L			
123	5					4 50+0 35L			
124	5	6 54+0 20L	6 12+0 41u						A
125	6	0 20+1 12r	0 24+1 17u	0 23+1 13u	0 20+0 40r	0 20+1 20r	0 20+0 16r	0 20+0 17r	
126	6	15 34+0 32L	15 16+0 46u	15 21+0 21u		15 34+0 28L			
127	7	14 44+0 29u	14 50+0 36u						
128	9					8 02+0 22L			
129	12	22 25+0 08L	22 15+0 07L	22 15+0 07r			22 26+0 03L	22 25+0 03L	
130	13		11 08+0 16P						
131	14	19 38+1 30u	19 42+0 58u	20 14+0 29L		20 17+0 16L			
132	15	5 03+1 37u	5 07+0 56u	5 08+1 12u		5 09+2 03u			B
133	18	0 39+2 26u	0 32+2 32u	0 44+1 32u	1 21+0 37L	0 40+2 31u			C
134	19	1 17+0 07L		1 14+0 08L		1 19+0 08L		1 18+0 05L	
135	20					22 42+0 11L			
136	20	23 47+0 08L	0 42+0 19L	0 40+0 13L		23 44+0 15L			
137	20	0 31+0 23L	5 19+0 09L	5 13+0 08L		0 31+0 24L			
138	21	4 57+0 18L	10 50+0 55L	10 52+0 31u		5 00+0 20L		4 50+0 02P	
139	21	10 48+1 17u	1 57+0 10L			10 57+1 22u			D
140	23	1 36+0 28r	1 18+2 31u	1 19+2 32u		1 42+0 42r	1 37+0 07r	1 36+0 08r	E
141	24	1 24+2 29u				1 26+2 41u	1 24+0 30u	1 24+0 30u	F
142	25	1 35+0 04P*					1 35+0 03P	1 35+0 03P	
143	25	13 17+4 09U	13 11+3 55U	13 12+2 48U	13 19+2 25U	5 33+0 15L	13 19+2 13U	13 17+2 00U	G
144	25	14 41+0 02v				13 19+4 25U			J
145	25	19 35+0 01P*							
146	27	2 51+0 47u							
147	29	23 04+0 03v				3 01+1 10L	23 05+0 02v	23 04+0 05v	K
148	29								

CORRELATION OF EARTHQUAKES
May, 1944

N O T E S

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A :	Ottawa	Δ = 3,660 km.	H = $0^h13^m.8$ U.T.	
	Victoria	Δ = 7,350 km.	H = 0 13.6 U.T.	
	Saskatoon	Δ = 6,490 km.	H = 0 13.4 U.T.	
B :	Ottawa	Δ = 13,300 km. ca.	H = $4^h43^m.3$ U.T. ca.	
C :	Ottawa	Δ = 13,300 km. ca.	H = $0^h19^m.3$ U.T. ca.	
	Victoria	Δ = 9,560 km.	H = 0 19.5 U.T.	
	Seven Falls	Δ = 14,000 km. ca.	H = 0 19.1 U.T. ca.	
D :	Ottawa	Δ = 6,380 km.	H = $10^h38^m.8$ U.T.	
E :	Ottawa	Δ = 2,900 km.	H = $1^h30^m.4$ U.T.	
	Seven Falls	Δ = 3,050 km.	H = 1 30.9 U.T.	
F :	Saskatoon	Δ = 8,250 km.	H = $1^h07^m.5$ U.T.	
G :	Ottawa	Δ = 13,100 km.	H = $12^h58^m.4$ U.T.	
	Victoria	Δ = 9,420 km.	H = 12 58.5 U.T.	
	Saskatoon	Δ = 11,100 km.	H = 12 58.4 U.T.	
	Seven Falls	Δ = 13,500 km.	H = 12 58.4 U.T.	
	Shawinigan Falls	Δ = 13,600 km.	H = 12 58.3 U.T.	
J :	Ottawa	Δ = 160 km.	H = $14^h40^m.2$ U.T.	
K :	Ottawa	Δ = 165 km.	H = $23^h03^m.6$ U.T.	
	Shawinigan Falls	Δ = 225 km.	H = 23 03.6 U.T.	

Felt in vicinity of Lyon Mountain, New York State.

Dominion Observatory,
   Ottawa, Canada,
      June 19, 1944.

SEISMOLOGICAL SERVICE OF CANADA

SEISMOLOGICAL BULLETIN
June
1944

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DOMINION OBSERVATORY
OTTAWA - CANADA

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SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

R. Meldrum Stewart, Dominion Astronomer
Ernest A. Hodgson, Seismologist
W. W. Doxsee, Station Superintendent

S T A T I O N S

OTTAWA

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

Time correction within 0.10s.

Foundation: boulder clay over limestone

Instruments: Milne-Shaw NS and EW components,
designated 23 and 17, respectively, each with
photographic registration, magnetic damping,
paper speed of 15 mm. per min., mass 1 lb.

Benioff Vertical, short and long
period, designated BS and BL, respectively,
photographic registration, BS a paper speed
of 60 mm. per min., BL a paper speed of 30 mm.
per min., mass 235 lbs.

HALIFAX

Dalhousie University

$\phi = 44°38'$ N. $\lambda = 63°36'$ W.   h = 46m.

Time correction from recorded radio time signals

Foundation: Carbonaceous slate

Instruments: Bosch NS and EW components, designated
HN and HE, respectively, each with photographic
registration, magnetic damping, paper speed of
15 mm. per min., mass 200g.

SEVEN FALLS

Quebec Power Company

$\phi = 47°07!4$ N. $\lambda = 70°49!6$ W.   h = 232m. ca.

Time correction from recorded radio time signals

Foundation: Solid granite of Canadian Shield

Instruments: Wood-Anderson and Milne-Shaw, both
EW component, designated SF and SM, respectively,
each with photographic registration, magnetic
damping, SF a paper speed of 60 mm. per min.
and mass 15g., SM a paper speed of 8 mm. per
min. and mass 1 lb.

VICTORIA

Dominion Astrophysical Observatory

$\phi = 48°31'14"$ N. $\lambda = 123°24'56"$ W.   h = 197m.

Time correction from recorded radio time signals

Foundation: rock

Instruments: Milne-Shaw NS and EW components,
designated 21 and 20, respectively, each with
photographic registration, magnetic damping,
paper speed of 8 mm. per min., mass 1 lb.

Wiechert Vertical, designated WV,
smoked sheet registration, air damping, paper
speed of 15 mm. per min., mass 80 kg.

SHAWINIGAN FALLS

Shawinigan Water and Power Company

ϕ = 46°33.1 N. λ = 72°45.8 W.   h = 60m. ca.

Time correction from recorded radio time signals

Foundation: solid granite of Canadian Shield

Instrument: Wood-Anderson NS component, designated
SA, photographic registration, magnetic damping,
paper speed of 60 mm. per min., mass 15g.

SASKATOON

University of Saskatchewan

ϕ = 52°08' N. λ = 106°38' W.   h = 515m.

Time correction from radio time signals

Foundation: clay and sand

Instrument: Milne-Shaw NE component, designated
SN, photographic registration, magnetic damping,
paper speed of 8 mm. per min., mass 1 lb.

KIRKLAND LAKE

Lake Shore Mines

ϕ = 48°09' N. λ = 80°03' W.   h = 320m.

Time correction from recorded radio time signals

Foundation: rock

Instrument: Converted Heiland Field Seismometer,
vertical component, designated KL, photographic
registration, paper speed of 30 mm. per min.

DETERMINED CONSTANTS

INSTRUMENT	T_O	V	ε	DISPLACEMENT FOR 1" ARC TILT	DISPLACEMENT FOR 10^{-6} g
17 (Ottawa)	12.0	300	20:1	50 mm.	
23 (Ottawa)	12.0	300	20:1	50 mm.	
BS (Ottawa)	1.0				5 mm.
BL (Ottawa)	1.0				16 mm.
HN (Halifax)	5.0	125	20:1		
HE (Halifax)	5.0	125	20:1		
SA (Shawinigan)	1.0	2400			
20 (Victoria)	12.0	300	20:1		
21 (Victoria)	12.0	300	20:1		
WV (Victoria)	4.0	120	15:1		
SF (Seven Falls)	1.0	2500			
SM (Seven Falls)	12.0	300	20:1	50 mm.	
SN (Saskatoon)	10.0	150	20:1	18 mm.	
KL (Kirkland Lake)	1/30	2×10^4	at 30 cycles		

NOTE:- Universal Time used throughout.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	June 1, 1944	to	June 9, 1944		No. 27

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
152 June 3	e_z	4 24 58		
	L^z	4 33 20		
	F	4 50		
		Ottawa		
153 June 3	e_z	7 18 01		
	eL?	7 22.8		
	L	7 30		
	F	7 45		
		Ottawa		
162 June 6	H	21 32.4	150	
	P_2	21 32 50.5		
	i	21 32 52		
	S_2	21 33 08		
	i	21 33 11		
	e	21 33 17		
	F	21 33.6		
		Ottawa		
166 June 8	H	17 51.1	145	
	P_2	17 51 31.5		
	i	17 51 42		
	S_2	17 51 48		
	F	17 52.2		
		Ottawa		
167 June 9	H	15 19.3	430	
	P_3	15 20 21		
	P_2	15 20 28.5		
	S_2	15 21 17		
	F	15 23		
		Seven Falls		
	H	15 19.1	50	
	P_1	15 19 18		
	S_1	15 19 24		
	F	15 21		
		Ottawa		
168 June 9	e	20 55.5		
	e	21 01.8		
	e	21 12.5		
	L	21 30		
	F	23 07		
		Victoria		
	eN	20 59.2		
	eN	21 14		
	L	22 50		
	F	23 19		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | June 9, 1944 | to | June 13, 1944 | No. 28 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Saskatoon		
168 June 9 (Cont'd)	e	21 00.1		
	L	21 18		
	F	23 04		
		Seven Falls		
	e	20 58.7		
	L	21 31		
	F	23 16		
		Ottawa		
169 June 10	e	14 42 20		
	L	14 49		
	F	15 11		
		Victoria		
	e	14 48		
	L	15 05		
	F	15 19		
		Seven Falls		
	e	14 42.1		
	L	14 48		
	F	15 12		
		Ottawa		
171 June 11	e	19 33 48		
	e	19 37.0		
	eL	19 39		
	F	20 22		
		Seven Falls		
	e	19 34 31		
	L	19 39		
	F	20 32		
		Ottawa		
174 June 12	e	11 33.5		
	L	11 37		
	F	12 04		
		Saskatoon		
	e	11 24.3		
	e	11 27 18		
	L	11 29		
	F	11 38		
		Ottawa		
176 June 13	H	22 37.2	150	
	P2	22 37 38		
	S2	22 37 55		
	e	22 38 05		
	F	22 38.2		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	June 13, 1944		to	June 21, 1944	No. 29

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
182 June 16	H	21 51.6	3865	USCGS. gives:
	P	21 58 31		$\phi = 19°$ N.
	PP	21 59 44		$\lambda = 105°$ W.
	PPP	22 00.0		
	eS	22 04 10		
	L	22 10.5		
	F	23 57		
		Victoria		
	H	21 51.6	3600	
	P	21 58 10		
	S	22 03 32		
	SSS	22 06.2		
	L	22 08		
	F	23 42		
		Saskatoon		
	H	21 51.6	3620	
	P	21 58 12		
	PPP	21 59.5		
	S	22 03 36		
	L	22 07		
	F	23 21		
		Seven Falls		
	H	21 51.8	4165	
	P	21 59 03		
	PPP	22 00 51		
	S	22 05 01		
	SS	22 07 50		
	L	22 12		
	F	0 24		
		Shawinigan Falls		
	e	21 58.9		
	e	22 00 26		
	L	22 08		
	F	22 44		
		Ottawa		
192 June 21	H	10 58.5	13,300	USCGS. gives:
	P'	11 17 21		$\phi = 21°5$ S.
	PP	11 18 49		$\lambda = 169°8$ E.
	SKS	11 24 20		
	PS	11 28 25		
	eE	11 30 42		
	SS	11 36.0		
	L	11 44		
	F	14 00 ca.		
		Victoria		
	H	11 59.0	9480	
	P	11 11 20		
	S	11 21 50		
	SS	11 28.5		
	L	11 36		
	F	14 02		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Saskatoon		
192 June 21 (Cont'd)	e	11 23 00		
	e	11 25 40		
	e	11 31.4		
	L	11 46		
	F	13 47		
		Halifax		
	e	(11 25)		
	L	(11 56)		
	F	(13 03)		
		Seven Falls		
	H	11 58.4	13,900	
	PP	11 19 11		
	SKP	11 20.4		
	SKS	11 24.4		
	PS	11 29 30		
	SS	11 36.4		
	SSS	11 40.4		
	L	11 57		
	F	14 14		
		Ottawa		
193 June 23	e	6 41 32		
	F	6 43		
		Seven Falls		
	H	6 38.0	305	
	P_3	6 38 42.5		
	P_1	6 38 50		
	S_3	6 39 16.5		
	F	6 50		
		Shawinigan Falls		
	H	6 38.0	460	
	P_3	6 39 02.5		
	P_2	6 39 14.5		
	S_3	6 39 52		
	S_2	6 40 05		
	S_1	6 40 16		
	F	6 51		
		Ottawa		
194 June 24	H	23 48.6	145	Felt at Lachute, Que.
	P_2	23 49 00.5		
	S_2	23 49 17		
	S_1	23 49 20		
	F	23 50		
		Seven Falls		
	H	23 48.6	300	
	P_3	23 49 22		
	S_3	23 49 55.5		
	F	23 51		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	June 24, 1944	to	June 25, 1944	No. 31

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Shawinigan Falls		
194 June 24 (Cont'd)	H	23 48.6	130	
	P2	23 48 59		
	S2	23 49 14		
	F	23 53		
		Ottawa		
195 June 25	H	1 08.4	3680	
	P	1 15 03		
	PPP	1 16.5		
	S	1 20.5		
	L	1 25		
	F	2 07		
		Victoria		
	e	1 16.0		
	L	1 31		
	F	2 12		
		Saskatoon		
	e	1 26		
	L	1 34		
	F	1 55		
		Seven Falls		
	e	1 16.9		
	e	1 21.6		
	L	1 29		
	F	2 15		
		Ottawa		
196 June 25	H	4 19.9	4700	
	P	4 27 47		
	S	4 34 15		
	SS	4 37 18		
	eE	4 39		
	L	4 42		
	F	5 27		
		Victoria		
	e	4 39		
	L	5 01		
	F	5 38		
		Saskatoon		
	e	4 39		
	L	4 54		
	F	5 16		
		Seven Falls		
	e	4 27.4		
	e	4 36.4		
	L	4 41		
	F	5 58		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM   June 25, 1944   to   June 28, 1944   No. 32

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
199 June 25	eZ	14 36 21		
	e	14 54		
	L	15 19		
	F	16 43		
		Victoria		
	e	14 41.2		
	L	14 55		
	F	16 07		
		Seven Falls		
	e	14 39.4		
	e	14 55.6		
	L	15 19		
	F	17 00		
		Ottawa		
200 June 25	H	17 42.3	7160	USCGS. gives:
	P	17 52 50		ϕ = 1° S.
	S	18 01 36		λ = 25° W.
	eN	18 05.0		
	L	18 09		
	F	18 46		
		Victoria		
	e	18 06 24		
	L	18 26		
	F	19 14		
		Seven Falls		
	H	17 42.4	6940	
	P	17 52 41		
	S	18 01 15		
	L	18 08		
	F	19 34		
		Ottawa		
205 June 28	eZ	5 38.6		
	e	5 44.0		
	e	5 48		
	L	5 52		
	F	6 29		
		Seven Falls		
	e	5 40.5		
	L	5 53		
	F	6 40		
		Shawinigan Falls		
	e	5 39.5		
	L	5 55		
	F	5 59		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | June 28, 1944 | to | June 28, 1944 | No. 33 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
207 June 28	H	7 58.9	3690	USCGS. gives:-
	P	8 05 37		$\phi = 14°6$ N.
	PPP	8 07 07		$\lambda = 92.6$ W.
	S	8 11 05		
	L	8 14.3		
	F	10 11+		
		Victoria		
	H	7 59.0	4620	
	P	8 06 46		
	PPP	8 08 30		
	e	8 12 48		
	S	8 13 10		
	SSS	8 16 36		
	L	8 18		
	F	12 02		
		Saskatoon		
	H	7 59.0	4345	
	P	8 06 26		
	PP	8 08 01		
	S	8 12 35		
	SS	8 15.6		
	SSS	8 16.3		
	L	8 17		
	F	11 43		
		Halifax		
	H	(7 59.0)	4220	
	P	(8 06 21)		
	PPP	(8 08 00)		
	S	(8 12 22)		
	SSS	(8 15.4)		
	L	(8 18)		
	F	(10 22)		
		Seven Falls		
	H	7 58.7	4310	
	P	8 06 07		
	PP	8 07 31		
	S	8 12 14		
	L	8 18		
	F	12 08		
		Shawinigan Falls		
	H	7 58.7	4120	
	P	8 05 56		
	PPP	8 07 28		
	S	8 11 51		
	L	8 16.3		
	F	9 42		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	June 28, 1944		to	June 30, 1944	No. 34

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
209 June 28	e_Z e L F	10 02 02 10 11.4 10 16 10 41+		
		Ottawa		
210 June 28	e L F	10 41.5 10 46 11 06+		
		Ottawa		
211 June 28	e_Z e e L F	11 00.1 11 06 11 11 11 14 11 50		

W. W. Hoysee.

EARTHQUAKE CORRELATION TABLE

Month June, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	Seven Falls W.A.	Shawinigan	**
149	2	2 39+0 01P*							
150	2	3 07+0 0.4P*							
151	3	2 01+0 07L							
152	3	4 25+0 25r	4 30+0 05L						
153	3	7 18+0 27r	7 40+0 09L			7 24+0 30L			
154	3	7 23+0 04P*							
155	4	2 10+0 01P*							
156	4	14 03+0 24L	13 41+0 43L			14 03+0 22L			
157	4	20 13+0 20L	19 52+0 42L			20 13+0 23L			
158	5	7 02+0 03P*						7 01+0 01P	
159	6	4 03+0 01P*	4 21+0 28L			4 44+0 28L			
160	6	12 01+0 01P*							
161	6	15 16+0 01P*							
162	6	21 33+0 01v*							
163	6	23 30+0 01P*							
164	7		6 57+0 02L	6 52+0 04L					A
165	7		10 36+0 06L	10 37+0 02L					
166	8	17 52+0 0.7v*							B
167	9	15 20+0 02v*					15 19+0 01d	15 20+0 01v	C
168	9	20 56+2 11u	20 59+2 20u	21 00+2 04u		20 59+2 17u			
169	10	14 42+0 29u	14 48+0 31u			14 42+0 30u			
170	10	19 07+0 01P*							
171	11	19 34+0 48u	19 49+0 24L	19 49+0 17L		19 35+0 57u			
172	12					2 43+0 13L			
173	12	11 04+0 05L	10 54+0 03L	10 56+0 05L					
174	12	11 33+0 31r	11 23+0 18L	11 24+0 14r	11 38+0 06L	11 36+0 24r		11 35+0 04L	
175	13	10 05+0 01P*	10 06+0 09L			10 25+0 17L			
176	13	22 38+0 0.6v*					12 33+0 0.2d		D
177	15			13 51+0 0.7d					
178	15			14 05+0 0.5d					
179	15								
180	15								
181	15	16 47+0 01P*					15 58+0 02v		
182	16	21 59+1 58R	21 58+1 44R	21 58+1 23R	22 10+0 55L	21 59+2 25R	21 59+0 50R	21 59+0 45R	E

EARTHQUAKE CORRELATION TABLE
Month   June,   1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M. S.	Seven Falls W. A.	Shawinigan	**
183	18	2 59+0 36L				3 00+0 36L			
184	18								
185	18						16 03+0 01v	16 09+0 02v	
186	18						16 08+0 02v	16 21+0 01v	
187	18	22 31+0 08L	22 25+0 08L			22 32+0 06L	16 20+0 01v		
188	19	0 22+0 07L							
189	19	2 39+0 05L				2 37+0 30L			
190	20	2 17+0 10L				2 21+0 05L			
191	20	13 01+0 25L				12 59+0 27L			
192	21	11 17+2 43u	11 11+2 51u	11 23+2 24u	11 25+1 38u	11 19+2 55u			
193	23	6 42+0 02v				6 39+0 01v	6 39+0 12v	6 39+0 12v	F
194	24	23 49+0 01v			1 23+0 18L		23 49+0 02v	23 49+0 04v	G
195	25	1 15+0 52r	1 16+0 56r	1 26+0 29r		1 17+0 58r			H
196	25	4 28+1 00r	4 39+0 59r	4 39+0 37r		4 27+1 31r			J
197	25			7 47+0 11L		7 31+0 17L			K
198	25		8 20+0 12L			8 37+0 21L			
199	25	14 36+2 07u	14 41+1 26u			14 39+2 21u			
200	25	17 53+0 53u	18 06+1 08u			17 53+1 41u		17 53+0 03P	
201	26	18 22+0 0.4P							
202	27	5 04+0 01P*							
203	27	21 02+0 01P*							
204	27	23 42+0 02P*			15 18+0 14L				L
205	28	5 39+0 50r	5 46+0 53L	5 49+0 28L		5 40+1 00r		5 40+0 19r	
206	28	5 53+0 02P*							
207	28	8 06+2 05R	8 07+3 55R	8 06+3 37R	8 06+2 16R	8 06+4 03R	8 06+1 18R	8 06+1 36R	M
208	28	9 11+0 04P*							
209	28	10 02+0 39r						10 02+0 03P	
210	28	10 42+0 24r							
211	28	11 00+0 50r							
212	28					13 20+0 11L			
213	28	19 14+0 05L				19 14+0 14L			
214	29	1 57+0 10L				1 45+0 38L			
215	29		2 03+0 06L			11 47+0 29L			

CORRELATION OF EARTHQUAKES
June, 1944

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N O T E S

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A	:	Ottawa	Δ = 150 km.	H = $21^h32^m.4$ U.T.
B	:	Ottawa	Δ = 145 km.	H = $17^h51^m.1$ U.T.
C	:	Ottawa	Δ = 430 km.	H = $15^h19^m.3$ U.T.
		Seven Falls	Δ = 50 km.	H = 15 19.1 U.T.
D	:	Ottawa	Δ = 150 km.	H = $22^h37^m.2$ U.T.
E	:	Ottawa	Δ = 3865 km.	H = $21^h51^m.6$ U.T.
		Victoria	Δ = 3600 km.	H = 21 51.6 U.T.
		Saskatoon	Δ = 3620 km.	H = 21 51.6 U.T.
		Seven Falls	Δ = 4165 km.	H = 21 51.8 U.T.
F	:	Ottawa	Δ = 13300 km.	H = $10^h58^m.5$ U.T.
		Victoria	Δ = 9480 km.	H = 10 59.0 U.T.
		Seven Falls	Δ = 13900 km.	H = 10 58.4 U.T.
G	:	Seven Falls	Δ = 305 km.	H = $6^h38^m.0$ U.T.
		Shawinigan Falls	Δ = 460 km.	H = 6 38.0 U.T.
H	:	Ottawa	Δ = 145 km.	H = $23^h48^m.6$ U.T.
		Seven Falls	Δ = 300 km.	H = 23 48.6 U.T.
		Shawinigan Falls	Δ = 130 km.	H = 23 48.6 U.T.
J	:	Ottawa	Δ = 3680 km.	H = $1^h08^m.4$ U.T.
K	:	Ottawa	Δ = 4700 km.	H = $4^h19^m.9$ U.T.
L	:	Ottawa	Δ = 7160 km.	H = $17^h42^m.3$ U.T.
		Seven Falls	Δ = 6940 km.	H = 17 42.4 U.T.
M	:	Ottawa	Δ = 3690 km.	H = $7^h58^m.9$ U.T.
		Victoria	Δ = 4620 km.	H = 7 59.0 U.T.
		Saskatoon	Δ = 4345 km.	H = 7 59.0 U.T.
		Halifax	Δ = 4220 km.	H = (7 59.0) U.T.
		Seven Falls	Δ = 4310 km.	H = 7 58.7 U.T.
		Shawinigan Falls	Δ = 4120 km.	H = 7 58.7 U.T.

Dominion Observatory,
Ottawa, Canada,
October 30, 1944.

SEISMOLOGICAL BULLETINS RECEIVED

May and June, 1944

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

STATIONS	BULLETINS	RECEIVED
Pasadena and Auxiliary Stations	January to March, 1942	May 2
La Paz	January to July 13, 1940	" 8
Santa Clara	April, 1944	" 11
New Zealand Stations	February, 1944	" 15
Saint Louis	August, 1942 to March, 1943	" 19
Bogota	March, 1944	" 26
Florissant	November, 1941 to January, 1942	" 30
Saint Louis	April to June, 1943	" 30
Saint Louis	July to December, 1941	June 1
Denver	July to December, 1943	" 1
New Zealand Stations	March, 1944	" 3
Sydney	September and October, 1943	" 5
Santa Clara	May, 1944	" 12
Pasadena and Auxiliary Stations	April to June, 1942	" 16
Perth	January to March, 1944	" 19
Brisbane	February and March, 1944	" 20
Saint Louis	February to July, 1942	" 21
Bogota	April, 1944	" 27
United States Coast and Geodetic Survey	October, 1942	" 30

DOMINION OBSERVATORY,

OTTAWA - CANADA.

SEISMOLOGICAL SERVICE OF CANADA

SEISMOLOGICAL BULLETIN
July and August
1944

°°°°°

DOMINION OBSERVATORY
OTTAWA - CANADA

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SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

R. Meldrum Stewart, Dominion Astronomer
Ernest A. Hodgson, Seismologist
W. W. Doxsee, Station Superintendent

S T A T I O N S

OTTAWA

ϕ = 45°23'38" N. λ = 75°42'57" W.   h = 83m.

Time correction within 0.10s.

Foundation: boulder clay over limestone

Instruments: Milne-Shaw NS and EW components,
designated 23 and 17, respectively, each with
photographic registration, magnetic damping,
paper speed of 15 mm. per min., mass 1 lb.

Benioff Vertical, short and long
period, designated BS and BL, respectively,
photographic registration, BS a paper speed
of 60 mm. per min., BL a paper speed of 30 mm.
per min., mass 235 lbs.

HALIFAX

Dalhousie University

ϕ = 44°38' N. λ = 63°36' W.   h = 46m.

Time correction from recorded radio time signals

Foundation: Carbonaceous slate

Instruments: Bosch NS and EW components, designated
HN and HE, respectively, each with photographic
registration, magnetic damping, paper speed of
15 mm. per min., mass 200g.

SEVEN FALLS

Quebec Power Company

ϕ = 47°07'.4 N. λ = 70°49'.6 W.   h = 232m. ca.

Time correction from recorded radio time signals

Foundation: Solid granite of Canadian Shield

Instruments: Wood-Anderson and Milne-Shaw, both
EW component, designated SF and SM, respectively,
each with photographic registration, magnetic
damping, SF a paper speed of 60 mm. per min.
and mass 15g., SM a paper speed of 8 mm. per
min. and mass 1 lb.

VICTORIA

Dominion Astrophysical Observatory

ϕ = 48°31'14" N. λ = 123°24'56" W.   h = 197m.

Time correction from recorded radio time signals

Foundation: rock

Instruments: Milne-Shaw NS and EW components,
designated 21 and 20, respectively, each with
photographic registration, magnetic damping,
paper speed of 8 mm. per min., mass 1 lb.

Wiechert Vertical, designated WV,
smoked sheet registration, air damping, paper
speed of 15 mm. per min., mass 80 kg.

SHAWINIGAN FALLS

Shawinigan Water and Power Company

$\phi = 46°33.1$ N. $\lambda = 72°45.8$ W.   h = 60m. ca.

Time correction from recorded radio time signals

Foundation: solid granite of Canadian Shield

Instrument: Wood-Anderson NS component, designated SA, photographic registration, magnetic damping, paper speed of 60 mm. per min., mass 15g.

SASKATOON

University of Saskatchewan

$\phi = 52°08'$ N. $\lambda = 106°38'$ W.   h = 515m.

Time correction from radio time signals

Foundation: clay and sand

Instrument: Milne-Shaw NE component, designated SN, photographic registration, magnetic damping, paper speed of 8 mm. per min., mass 1 lb.

KIRKLAND LAKE

Lake Shore Mines

$\phi = 48°09'$ N. $\lambda = 80°03'$ W.   h = 320m.

Time correction from recorded radio time signals

Foundation: rock

Instrument: Converted Heiland Field Seismometer, vertical component, designated KL, photographic registration, paper speed of 30 mm. per min.

DETERMINED CONSTANTS

INSTRUMENT	T_0	V	ε	DISPLACEMENT FOR 1" ARC TILT	DISPLACEMENT FOR 10^{-6} g
17 (Ottawa)	12.0	300	20:1	50 mm.	
23 (Ottawa)	12.0	300	20:1	50 mm.	
BS (Ottawa)	1.0				5 mm.
BL (Ottawa)	1.0				16 mm.
HN (Halifax)	5.0	125	20:1		
HE (Halifax)	5.0	125	20:1		
SA (Shawinigan)	1.0	2400			
20 (Victoria)	12.0	300	20:1		
21 (Victoria)	12.0	300	20:1		
WV (Victoria)	4.0	120	15:1		
SF (Seven Falls)	1.0	2500			
SM (Seven Falls)	12.0	300	20:1	50 mm.	
SN (Saskatoon)	10.0	150	20:1	18 mm.	
KL (Kirkland Lake)	1/30	2×10^4	at 30 cycles		

NOTE:- Universal Time used throughout.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
217 July 2	e	4 11.5		
	L	4 15		
	F	4 34		
		Victoria		
218 July 2	e_N	8 57 29		
	L_N	9 34		
	F	9 43		
		Ottawa		
219 July 2	H	22 12.3	3780	
	P_Z	22 19 07		
	PP_N	22 20.0		
	S_N	22 24 40		
	SS_E	22 27		
	L	22 28		
	F	23 11		
		Victoria		
	e_N	22 20.2		
	e_N	22 26.7		
	L	22 36		
	F	23 23		
		Seven Falls		
	e	22 21.0		
	L	22 31		
	F	23 25		
		Shawinigan Falls		
	e	22 20.0		
	e	22 20.8		
	L	22 35		
	F	22 41		
		Seven Falls		
222 July 3	e	14 51 10		
	e	14 52 25		
	F	14 55		
		Ottawa		
223 July 5	e_Z	8 19 43		May not be seismic.
	i_Z	8 19 45.5		
	F	8 19.8		
		Ottawa		
224 July 5	e_N	9 59		
	e_E	10 02		
	L	10 07		
	F	10 23		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	July 5, 1944		to	July 12, 1944	No. 36

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
231 July 10	e e F	13 37.3 13 46 28 14 03		
		Saskatoon		
	e L F	13 47 52 13 54 14 05		
		Ottawa		
232 July 10	e_Z L F	16 06 29 16 41 17 13		
		Seven Falls		
	e L F	16 17.6 16 49 18 13		
		Ottawa		
234 July 12	e_N e_E L F	8 16 8 22.8 8 29 8 56		
		Seven Falls		
	e L F	8 13.7 8 17 9 18		
		Shawinigan Falls		
	e e F	8 08 13 8 21 32 8 28		
		Ottawa		
235 July 12	H P S_E L F	19 30.7 19 36 16 19 40 50 19 44.6 20 21	2880	USCGS. gives: ϕ = 44°7 N. λ = 114.4 W.
		Victoria		
	H P_2 S_2 i F	19 30.7 19 32 08 19 33 19 19 33 38 20 23	630	

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Saskatoon		
235 July 12 (Cont'd)	H	19 30.6	1170	
	P	19 33 14		
	e	19 34 52		
	S	19 35 16		
	F	20 12		
		Seven Falls		
	e	19 41.9		
	L	19 45		
	F	20 34		
		Shawinigan Falls		
	e	19 36 33		
	L	19 45		
	F	20 06		
		Ottawa		
237 July 13	e$_E$	11 09.4		
	L	11 36		
	F	12 11		
		Victoria		
	e	11 05.7		
	L	11 15		
	F	12 37		
		Saskatoon		
	e	11 07 00		
	L	11 25		
	F	12 09		
		Seven Falls		
	e	11 08.7		
	L	11 35		
	F	12 20		
		Seven Falls		
239 July 15	H	17 04.3	70	
	P$_1$	17 04 34		
	S^1	17 04 42		
	F^1	17 06		
		Ottawa		
242 July 17	e	11 16.5		
	L	11 31		
	F	12 21		
		Saskatoon		
	e	11 17.5		
	L	11 36		
	F	12 29		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	July 17, 1944	to	July 22, 1944	No. 38

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
242 July 17 (Cont'd)	e L F	11 15.8 11 31 12 32		
		Ottawa		
243 July 19	e e e$_E$ e$_E$ L F	10 38.5 10 45 15 10 50.0 10 59.0 11 07 13 00 ca.		USCGS. gives: ϕ = 33° N. λ = 138° E.
		Victoria		
	H P S L F	10 21.0 10 32 27 10 41 42 10 51 14 07	7800	
		Saskatoon		
	e L F	10 43 02 11 01 13 11		
		Seven Falls		
	e e L F	10 38.9 10 46 09 11 07 13 29		
		Saskatoon		
252 July 21	H P S L F	12 24.9 12 29 00 12 32 25 12 35 12 55	1990	
		Ottawa		
254 July 22	e$_N$ L F	11 40 15 11 43 11 58		
		Saskatoon		
	e L F	11 41 20 11 44 12 02		
		Shawinigan Falls		
	e L F	11 35 46 11 44 11 49		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	July 22, 1944	to	July 27, 1944	No. 39

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
257 July 24	e	7 53 29		
	L	8 12		
	F	8 54		
		Saskatoon		
	e	7 54.8		
	L	8 20		
	F	8 47		
		Ottawa		
260 July 27	H	0 04.5	5890	USCGS. gives:
	P	0 13 47		ϕ = 54°.5 N.
	PP	0 15 53		λ = 166°.5 W.
	S	0 21 21		
	PS	0 21 49		
	iE	0 23 29		
	SS	0 25 08		
	L	0 30.2		
	F	2 52		
		Victoria		
	H	0 04.6	2810	
	P	0 10 02		
	S	0 14 32		
	F	2 19		
		Saskatoon		
	H	0 04.7	3550	
	P	0 11 11		
	S	0 16 30		
	L	0 19		
	F	2 47		
		Halifax		
	H	0 04.6	6600	
	P	0 14 37		
	S	0 22 52		
	SSN	0 26.9		
	SSS	0 29.4		
	L	0 33		
	F	1 23		
		Seven Falls		
	H	0 04.6	6000	
	P	0 14 00		
	PP	0 16 09		
	S	0 21 40		
	SS	0 25 26		
	L	0 30		
	F	3 12		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	July 27, 1944		to	July 31, 1944	No. 40

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Shawinigan Falls		
260 July 27 (Cont'd)	H	0 04.6	5920	
	P	0 13 54		
	PP	0 15 59		
	S	0 21 30		
	L	0 31		
	F	1 09		
		Ottawa		
261 July 27	eZ	8 37 34		
	eN	8 49.4		
	L	9 13		
	F	10 12		
		Seven Falls		
	e	8 55.2		
	L	9 09		
	F	10 29		
		Ottawa		
264 July 28	iZ	22 52 13.5		
	iZ	22 52 31.5		
	eZ	22 52 40		
	F	22 53		
		Seven Falls		
266 July 30	e	4 11.5		
	L	4 33		
	F	5 13		

W. W. Doxsee.

EARTHQUAKE CORRELATION TABLE

Month   July,   1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	Seven Falls W.A.	Shawinigan	**
216	1					21 59+0 07L			
217	2	4 12+0 22u	4 19+0 13L			4 17+0 15L			
218	2		8 57+0 47u						
219	2	22 19+0 52r	22 20+1 03r			22 21+1 04r		22 20+0 21r	A
220	3					4 40+0 15L			
221	3	7 32+0 0.8P*							
222	3						14 51+0 04v		
223	5	8 20+0 0.1v*							
224	5	9 59+0 24u				10 05+0 15L			
225	5	11 12+0 27L	10 10+0 11L			11 12+0 49L			
226	7	6 33+0 0.6P*							
227	8					18 34+0 15L			
228	10			6 45+0 06L		1 52+0 12L			
229	10	12 44+0 02P*	13 37+0 26u	13 48+0 17u					
230	10	16 06+1 07u	16 11+1 02L	16 44+0 26L		16 18+1 56u			
231	10					19 36+0 29L			
232	11	8 16+0 40u	8 29+0 40L	8 28+0 46L		8 14+1 04u		8 08+0 20u	
233	11	19 36+0 45r	19 32+0 51V	19 33+0 39r	19 38+0 23L	19 42+0 52r	19 46+0 14L	19 37+0 29r	B
234	12	1 17+0 11L	0 57+0 23L			1 16+0 46L			
235	12	11 09+1 02u	11 06+1 31u	11 07+1 02u		11 09+1 11u			
236	13		20 12+0 11L						
237	13								
238	13								
239	15		23 52+0 43L			0 37+0 30L	17 05+0 01d		C
240	15		10 40+0 20L			10 47+0 08L			
241	16	11 16+1 05u	11 20+1 25L	11 18+1 11u	11 03+0 42L	11 16+1 16u	11 14+0 21L	11 16+0 19L	D
242	17	10 39+2 22u	10 32+3 35u	10 43+2 28u		10 39+2 50u			
243	19	16 50+0 12L	16 53+0 13L			16 51+0 14L			
244	19	18 18+0 18L	18 22+0 21L			18 20+0 12L			
245	19		23 57+0 33L	0 06÷0 10L		0 14+0 41L			
246	19	2 50+0 11L	2 31+0 21L	2 38+0 08L		2 51+0 06L			
247	20								
248	20								
249	20		20 27+0 38L	7 40+0 04L		20 57+0 20L			

EARTHQUAKE CORRELATION TABLE
Month   July,   1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M. S.	Seven Falls W. A.	Shawinigan	**
250	21		2 20+0 11L						
251	21			10 35+0 04L					
252	21		12 26+0 45L	12 29+0 26r		12 47+0 17L			E
253	22	11 40+0 18r	7 44+0 07L			7 06+0 05L		11 36+0 13L	
254	22	19 08+0 01v*	11 45+0 21L	11 41+0 21r		11 44+0 14L			
255	22	16 24+0 03P*							
256	23					16 33+0 09L			
257	24		7 53+1 01u			8 30+0 52L			
258	25			7 55+0 52u		3 32+0 05L			
259	26					18 08+0 06L			
260	27	0 14+2 38U	0 10+2 09R	0 11+2 36R	0 15+1 08U	0 14+2 58U		0 14+0 55U	F
261	27	8 38+1 34u	9 19+0 25L	9 19+0 31L		8 55+1 34u			
262	28	16 29+0 0.2P*							
263	28	21 33+0 02P*					21 32+0 02P	21 33+0 03P	
264	28	22 52+0 01v*							
265	29					23 12+0 19L			
266	30	4 12+0 02P*		4 45+0 03L		4 12+1 02u			
267	31					18 42+0 08L			
268	31					21 51+0 06L			

CORRELATION OF EARTHQUAKES
July, 1944

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N O T E S

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A :	Ottawa	Δ = 3,780 km.	H = $22^h 12^m.3$ U.T.
B :	Ottawa	Δ = 2,880 km.	H = $19^h 30^m.7$ U.T.
	Victoria	Δ = 630 km.	H = 19 30.7 U.T.
	Saskatoon	Δ = 1,170 km.	H = 19 30.6 U.T.
C :	Seven Falls	Δ = 70 km.	H = $17^h 04^m.3$ U.T.
D :	Victoria	Δ = 7,800 km.	H = $10^h 21^m.0$ U.T.
E :	Saskatoon	Δ = 1,990 km.	H = $12^h 24^m.9$ U.T.
F :	Ottawa	Δ = 5,890 km.	H = $0^h 04^m.5$ U.T.
	Victoria	Δ = 2,810 km.	H = 0 04.6 U.T.
	Saskatoon	Δ = 3,550 km.	H = 0 04.7 U.T.
	Halifax	Δ = 6,600 km.	H = 0 04.6 U.T.
	Seven Falls	Δ = 6,000 km.	H = 0 04.6 U.T.
	Shawinigan Falls	Δ = 5,920 km.	H = 0 04.6 U.T.

Dominion Observatory,
        Ottawa, Canada,
                November 17, 1944.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	August 1, 1944	to	August 7, 1944	No. 41

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
276 Aug. 5	e	13 13 39		
	e	13 19.0		
	L	13 25		
	F	13 41		
		Seven Falls		
	e	13 15 43		
	e	13 22 45		
	L	13 26		
	F	13 42		
		Victoria		
280 Aug. 6	e	18 37		
	L	18 54		
	F	20 05		
		Ottawa		
281 Aug. 7	H	3 25.6	6720	USCGS. gives:-
	P	3 35 42		$\phi = 16°9$ S.
	S	3 44 04		$\lambda = 71°5$ W.
	iE	3 45 30		
	SS	3 48 08		
	SSSE	3 51.1		
	L	3 54		
	F	5 41		
		Victoria		
	H	3 25.4	8750	
	P	3 37 26		
	S	3 47 27		
	L	4 07		
	F	6 20		
		Saskatoon		
	e	3 46 33		
	L	4 00		
	F	5 27		
		Seven Falls		
	H	3 25.6	6900	
	P	3 35 54		
	S	3 44 26		
	SSS	3 50.5		
	L	3 54		
	F	6 52		
		Ottawa		
282 Aug. 7	eZ	12 59 19		
	L	13 43		
	F	14 09		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | August 7, 1944 | to | August 10, 1944 | No. 42 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
282 Aug. 7 (Cont'd)	e	13 04.4		
	L	13 22		
	F	13 45+		
		Ottawa		
284 Aug. 7	eZ	18 54 09		
	L	19 08		
	F	19 20		
		Ottawa		
287 Aug. 8	eZ	8 52 43		
	e	9 01		
	L	9 30		
	F	10 06		
		Victoria		
	eE	8 47		
	e	8 58 23		
	L	9 17		
	F	10 06		
		Saskatoon		
	e	8 58.2		
	L	9 20		
	F	9 58		
		Seven Falls		
	e	8 54.5		
	L	9 31		
	F	10 07		
		Ottawa		
291 Aug. 9	eZ	4 21 31		
	e	4 26 25		
	L	4 30		
	F	4 43		
		Ottawa		
293 Aug. 9	H	10 48.6	95	
	P1	10 48 54.5		
	S1	10 49 06		
	F	10 50.3		
		Ottawa		
294 Aug. 10	H	1 53.0	3910	USCGS. gives:-
	PZ	1 59 57		$\phi = 51°.4$ N.
	SZ	2 05 39		$\lambda = 130°.5$ W.
	L	2 11		
	F	4 06		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	August 10, 1944	to	August 13, 1944		No. 43

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
294 Aug. 10 (Cont'd)	H	1 52.6	730	
	P	1 54 13		
	e	1 54 43		
	S	1 55 30		
	L	2 00		
	F	4 31		
		Saskatoon		
	H	1 53.1	1520	
	P	1 56 24		
	S	1 59 06		
	L	2 00.3		
	F	3 52		
		Halifax		
	e	2 10.9		
	L	2 15		
	F	2 56		
		Seven Falls		
	H	1 52.9	4235	
	P	2 00 16		
	S	2 06 18		
	SS	2 08 50		
	L	2 12		
	F	4 13		
		Shawinigan Falls		
	e	2 00.2		
	L	2 11		
	F	2 46		
		Ottawa		
295 Aug. 10	H	8 39.7	95	
	P₁	8 40 02		
	S₁	8 40 13		
	F	8 41		
		Ottawa		
297 Aug. 10	e	11 38 11		
	e	11 43 36		
	L	11 50		
	F	12 46		
		Seven Falls		
	e	11 19.5		
	L	11 47		
	F	13 19		
		Ottawa		
302 Aug. 13	H	8 22.5	4000	
	Pz	8 29 35		
	SE	8 35 22		
	L	8 41		
	F	9 18		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
302 Aug. 13 (Cont'd)	e	8 22.6		
	L	8 23.8		
	F	9 26		
		Saskatoon		
	H	8 22.4	1710	
	P	8 26 04		
	S	8 29 04		
	L	8 30 29		
	F	9 12		
		Seven Falls		
	H	8 22.6	4200	
	P	8 29 54		
	S	8 35.9		
	L	8 42		
	F	9 26		
		Ottawa		
303 Aug. 14	H	11 07.5	5060	
	P	11 15 50		
	S	11 22 38		
	e	11 23 15		
	SS	11 26 28		
	L	11 29		
	F	11 46		
		Victoria		
	H	11 07.4	2350	
	eP	11 12 09		
	eS	11 16 02		
	F	11 57		
		Seven Falls		
	H	11 07.5	5220	
	P	11 15 59		
	S	11 22.9		
	L	11 30		
	F	11 59		
		Shawinigan Falls		
	H	11 07.5	5120	
	P	11 15 54		
	S	11 22 46		
	L	11 30		
	F	11 42		
		Seven Falls		
304 Aug. 14	e	14 56.6		
	L	15 13		
	F	16 09		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM   August 14, 1944   to   August 18, 1944   No. 45

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
305 Aug. 14	e_Z	17 51 36		
	e_Z	17 54 22		
	F^Z	17 58		
		Seven Falls		
	e	17 51 30		
	L	17 53.3		
	F	17 56		
		Shawinigan Falls		
	e	17 50.2		
	L	17 53		
	F	18 00		
		Ottawa		
306 Aug. 15	e_Z	1 37.1		
	e_Z	1 39 41		
	F^Z	1 42		
		Seven Falls		
	e	1 36.1		
	e	1 39		
	F	1 41		
		Ottawa		
308 Aug. 15	e_Z	12 06 04		
	L^Z	12 16		
	F	12 47		
		Victoria		
	H	11 47.9	8890	
	P	12 00 03		
	S	12 10 09		
	L	12 23		
	F	13 02		
		Saskatoon		
	e	12 11.5		
	L	12 23		
	F	12 46		
		Ottawa		
311 Aug. 18	H	10 33.8	9160	USCGS. gives:-
	P	10 46 07		ϕ = 35° N.
	S	10 56 25		λ = 137° E.
	e	11 03.0		Depth = 200 km. ca.
	L	11 13		
	F	12 13		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
311 Aug. 18 (Cont'd)	H	10 33.7	7055	
	P	10 44 07		
	S	10 52 47		
	L	11 00		
	F	12 37		
		Saskatoon		
	H	10 33.5	7780	
	P	10 44 38		
	S	10 53 51		
	e	10 54 27		
	F	11 24		
		Seven Falls		
	H	10 33.7	9230	
	P	10 46 04		
	S	10 56 25		
	e	11 03		
	L	11 17		
	F	12 30		
		Shawinigan Falls		
	H	10 33.7	9180	
	P	10 46 05		
	S	10 56 24		
	F	11 01		
		Ottawa		
312 Aug. 18	H	14 11.3	155	
	P_2	14 11 42		
	S_2	14 12 00		
	e	14 12 08		
	F	14 12.3		
		Ottawa		
314 Aug. 18	e_Z	19 33 18		
	e_E	19 42.0		
	L	19 54		
	F	20 20		
		Victoria		
	e	19 45 36		
	L	20 02		
	F	20 37		
		Seven Falls		
	e	19 42 20		
	L	19 53		
	F	20 17		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	August 18, 1944	to	August 24, 1944	No. 47

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
315 Aug. 21	e	20 32.7		
	L	20 39		
	F	21 05		
		Victoria		
	e	20 28.1		
	L	20 55		
	F	21 21		
		Seven Falls		
	e	20 24.4		
	e	20 32.1		
	L	20 41		
	F	21 02		
		Victoria		
319 Aug. 24	e$_E$	16 15		
	L	16 24		
	F	16 48		
		Seven Falls		
	e	16 13		
	L	16 18		
	F	16 42		
		Ottawa		
320 Aug. 24	H	23 38.3	3200	USCGS. gives:-
	P	23 44 21		$\phi = 15°$ N.
	i	23 44 41		$\lambda = 93°$ W.
	S$_N$	23 49 18		
	e	23 49 32		
	SS	23 50 42		
	L	23 53		
	F	0 41		
		Victoria		
	H	23 38.4	4300	
	eP	23 45 51		
	eS	23 51 57		
	L	0 02		
	F	0 49		
		Saskatoon		
	e	23 45 04		
	L	23 54		
	F	0 16		
		Halifax		
	H	23 38.4	4050	
	P	23 45 30		
	eS$_E$	23 51 21		
	L	23 55		
	F	0 14		

FROM	August 24, 1944	to	August 30, 1944	No. 48

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
320 Aug. 24 (Cont'd)	e	23 44 51		
	e	23 46 18		
	e	23 50 25		
	L	23 55		
	F	1 00		
		Shawinigan Falls		
	e	23 44 40		
	e	23 46 06		
	L	23 53		
	F	0 06		
		Ottawa		
327 Aug 29	H	23 06.9	155	
	P_1	23 07 07		
	S_1	23 07 25		
	e	23 07 34		
	F	23 07.8		
		Ottawa		
328 Aug. 30	e_Z	1 33 00		
	e_E	1 40.0		
	L	2 13		
	F	3 12		
		Victoria		
	e	1 27.0		
	e	1 39 06		
	L	1 55		
	F	2 36		
		Seven Falls		
	e	1 47.3		
	L	2 14		
	F	2 54		

W. W. Doxsee

EARTHQUAKE CORRELATION TABLE

Month August, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	Seven Falls W.A.	Shawinigan	**
269	1	15 35+0 01P*				18 43+0 43L		12 36+0 02P	
270	2	12 48+0 15L				23 52+0 23L			
271	2								
272	2		16 36+0 14L	23 49+0 12L					
273	4	1 07+0 01P*						1 08+0 01P	
274	5	1 34+0 04P*	1 34+0 30L					1 35+0 02P	
275	5	13 14+0 27u						13 14+0 03P	
276	5	19 47+0 01v				13 16+0 26u			
277	5	15 52+0 06L	15 42+0 06L	15 44+0 05L		15 53+0 05L	15 51+0 06L	15 50+0 07L	
278	6		16 54+0 49L			17 26+0 40L			
279	6	19 21+0 38L	18 37+1 28u			18 51+1 53L		3 36+0 05P	A
280	6	3 36+2 05U	3 37+2 43U	3 47+1 40U		3 36+3 16U	3 36+0 38U		
281	7	12 59+1 10u	13 04+0 41u	13 32+0 10L		13 45+0 33L			
282	7			13 51+0 06L				18 55+0 05P	
283	7		13 46+0 18L			19 08+0 25L			
284	7	18 54+0 26u	19 05+0 24L	19 06+0 11L		0 10+0 17L			
285	8		2 10+0 06L						
286	8	8 53+1 13u	8 47+1 19u	8 58+1 00u		8 54+1 13u			
287	8	10 57+0 05L	10 37+0 29L	10 43+0 11L		10 43+0 21L			
288	8		16 13+0 18L			16 30+0 04L			
289	8	18 15+0 0.6v*							
290	9	4 22+0 21r	8 18+0 12L			4 27+0 15L	4 23+0 07P	4 22+0 08P	
291	9								
292	9								B
293	10	10 49+0 01d*	1 54+2 37V	1 56+1 56R	2 11+0 45R	2 00+2 13R	2 00+0 39R	2 00+0 46R	C
294	10	2 00+2 06R							D
295	10	8 40+0 01d*		11 15+1 03L					
296	10	11 19+0 24L	11 07+1 36u			11 20+1 59u		11 40+0 11P	
297	10	11 38+1 08u	2 31+0 08L						
298	11								
299	11	8 05+0 0.4P*	15 02+0 11L						
300	12								
301	12	21 19+0 0.6v*	8 23+1 03V	8 26+0 46r	8 45+0 14L	8 36+0 50r	8 30+0 25r		E
302	13	8 30+0 48r						8 41+0 09L	
303	14	11 16+0 30u	11 12+0 45r	11 17+0 21L	11 22+0 21L	11 23+0 36u	11 16+0 25u		F

EARTHQUAKE CORRELATION TABLE

Month   August, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	Seven Falls W.A.	Shawinigan	**
304	14	15 16+0 53L	14 46+1 09L			14 57+1 12u			
305	14	17 52+0 06r					17 52+0 05r	17 50+0 11r	
306	15	1 37+0 07r					1 36+0 05r	1 36+0 06r	
307	15		12 00+1 02u	12 12+0 34u		2 12+0 18L		4 29+0 03L	
308	15	12 06+0 41u	15 12+0 11L						G
309	16								
310	17		10 44+1 53u	10 45+0 39u	10 56+0 21L	18 17+0 08L	10 46+0 14u	10 46+0 15u	J
311	18	10 46+1 27u				10 46+1 44u			K
312	18	14 12+0 0.6v*							
313	18	18 28+0 02P*							
314	18	19 33+0 47u	19 46+0 51u			19 42+0 35u			
315	21	20 33+0 32u	20 28+0 53u			20 24+0 38u			
316	22		2 17+0 12L			2 37+0 06L			
317	23		9 07+0 14L			16 13+0 29u	9 16+0 05L	9 14+0 08L	
318	24	0 07+0 02P*	16 15+0 33u			23 45+1 15r		0 07+0 03P	N
319	24		23 46+1 03r	23 45+0 31r	23 45+1 29r	10+0 24L	23 45+0 28r	23 45+0 21r	
320	24	23 44+0 57r				6 07+0 09L			
321	25								
322	25		12 47+0 04L						
323	25		15 52+0 12L						
324	25		18 54+0 22L		23 45+0 29r				
325	27	19 14+0 09L	10 47+0 21L			16 09+0 21L			
326	28					19 15+0 09L			
327	29	23 07+0 0.7v*	1 27+1 09u			11 07+0 09L			
328	30	1 33+1 39u	3 15+0 08L	1 59+0 38L		1 47+1 07u			Q
329	30								

CORRELATION OF EARTHQUAKES
August, 1944
···

N O T E S

A	:	Ottawa	Δ = 6720 km.	H = $3^h25^m.6$ U.T.
		Victoria	Δ = 8750 km.	H = 3 25.4 U.T.
		Seven Falls	Δ = 6900 km.	H = 3 25.6 U.T.
B	:	Ottawa	Δ = 95 km.	H = $10^h48^m.6$ U.T.
C	:	Ottawa	Δ = 3910 km.	H = $1^h53^m.0$ U.T.
		Victoria	Δ = 730 km.	H = 1 52.6 U.T.
		Saskatoon	Δ = 1520 km.	H = 1 53.1 U.T.
		Seven Falls	Δ = 4235 km.	H = 1 52.9 U.T.
D	:	Ottawa	Δ = 95 km.	H = $8^h39^m.7$ U.T.
E	:	Ottawa	Δ = 4000 km.	H = $8^h22^m.5$ U.T.
		Saskatoon	Δ = 1710 km.	H = 8 22.4 U.T.
		Seven Falls	Δ = 4200 km.	H = 8 22.6 U.T.
F	:	Ottawa	Δ = 5060 km.	H = $11^h07^m.5$ U.T.
		Victoria	Δ = 2350 km.	H = 11 07.4 U.T.
		Seven Falls	Δ = 5220 km.	H = 11 07.5 U.T.
		Shawinigan Falls	Δ = 5120 km.	H = 11 07.5 U.T.
G	:	Victoria	Δ = 8890 km.	H = $11^h47^m.9$ U.T.
J	:	Ottawa	Δ = 9160 km.	H = $10^h33^m.8$ U.T.
		Victoria	Δ = 7055 km.	H = 10 33.7 U.T.
		Saskatoon	Δ = 7780 km.	H = 10 33.5 U.T.
		Seven Falls	Δ = 9230 km.	H = 10 33.7 U.T.
		Shawinigan Falls	Δ = 9180 km.	H = 10 33.7 U.T.
K	:	Ottawa	Δ = 155 km.	H = $14^h11^m.3$ U.T.
N	:	Ottawa	Δ = 3200 km.	H = $23^h38^m.3$ U.T
		Victoria	Δ = 4300 km.	H = 23 38.4 U.T.
		Halifax	Δ = 4050 km.	H = 23 38.4 U.T.
Q	:	Ottawa	Δ = 155 km.	H = $23^h06^m.9$ U.T.

Dominion Observatory,
    Ottawa, Canada,
        November 27, 1944.

SEISMOLOGICAL BULLETINS RECEIVED
July and August, 1944

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

STATIONS	BULLETINS	RECEIVED
Weston	January to April, 1944	July 3
Brisbane	April, 1944	" 4
Santa Clara	June, 1944	" 10
New Zealand Stations	April, 1944	" 10
Helwan	January to June, 1943	" 11
Pasadena	Preliminary Bulletin - Jan.-June/44	" 12
Weston	May and June, 1944	" 22
Bogota	May, 1944	" 25
Brisbane	May, 1944	" 31
Apia	April to June, 1944	August 12
Ksara	January, 1944	" 15
Wellington	May, 1944	" 17
Wellington	June, 1944	" 18
Brisbane	June, 1944	" 21
Fiji Colony	October to December, 1943	" 23

DOMINION OBSERVATORY,
   OTTAWA - CANADA.

SEISMOLOGICAL SERVICE OF CANADA

SEISMOLOGICAL BULLETIN
September and October
1944

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DOMINION OBSERVATORY
OTTAWA - CANADA

✱✱✱✱

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

R. Meldrum Stewart, Dominion Astronomer
Ernest A. Hodgson, Seismologist
W. W. Doxsee, Station Superintendent

S T A T I O N S

OTTAWA

ϕ = 45°23'38" N. λ = 75°42'57" W.   h = 83m.

Time correction within 0.10s.

Foundation: boulder clay over limestone

Instruments: Milne-Shaw NS and EW components,
designated 23 and 17, respectively, each with
photographic registration, magnetic damping,
paper speed of 15 mm. per min., mass 1 lb.

Benioff Vertical, short and long
period, designated BS and BL, respectively,
photographic registration, BS a paper speed
of 60 mm. per min., BL a paper speed of 30 mm.
per min., mass 235 lbs.

HALIFAX

Dalhousie University

ϕ = 44°38' N. λ = 63°36' W.   h = 46m.

Time correction from recorded radio time signals

Foundation: Carbonaceous slate

Instruments: Bosch NS and EW components, designated
HN and HE, respectively, each with photographic
registration, magnetic damping, paper speed of
15 mm. per min., mass 200g.

SEVEN FALLS

Quebec Power Company

ϕ = 47°07.4 N. λ = 70°49.6 W.   h = 232m. ca.

Time correction from recorded radio time signals

Foundation: Solid granite of Canadian Shield

Instruments: Wood-Anderson and Milne-Shaw, both
EW component, designated SF and SM, respectively,
each with photographic registration, magnetic
damping, SF a paper speed of 60 mm. per min.
and mass 15g., SM a paper speed of 8 mm. per
min. and mass 1 lb.

VICTORIA

Dominion Astrophysical Observatory

ϕ = 48°31'14" N. λ = 123°24'56" W.   h = 197m.

Time correction from recorded radio time signals

Foundation: rock

Instruments: Milne-Shaw NS and EW components,
designated 21 and 20, respectively, each with
photographic registration, magnetic damping,
paper speed of 8 mm. per min., mass 1 lb.

Wiechert Vertical, designated WV,
smoked sheet registration, air damping, paper
speed of 15 mm. per min., mass 80 kg.

S T A T I O N S   (Cont'd)

SHAWINIGAN FALLS

Shawinigan Water and Power Company

ϕ = 46°33!1 N. λ = 72°45!8 W.   h = 60m. ca.

Time correction from recorded radio time signals

Foundation: solid granite of Canadian Shield

Instrument: Wood-Anderson NS component, designated
    SA, photographic registration, magnetic damping,
    paper speed of 60 mm. per min., mass 15g.

SASKATOON

University of Saskatchewan

ϕ = 52°08' N. λ = 106°38' W.   h = 515m.

Time correction from radio time signals

Foundation: clay and sand

Instrument: Milne-Shaw NE component, designated
    SN, photographic registration, magnetic damping,
    paper speed of 8 mm. per min., mass 1 lb.

KIRKLAND LAKE

Lake Shore Mines

ϕ = 48°09' N. λ = 80°03' W.   h = 320m.

Time correction from recorded radio time signals

Foundation: rock

Instrument: Converted Heiland Field Seismometer,
    vertical component, designated KL, photographic
    registration, paper speed of 30 mm. per min.

DETERMINED CONSTANTS

INSTRUMENT	T_0	V	ε	DISPLACEMENT FOR 1" ARC TILT	DISPLACEMENT FOR 10^{-6} g
17 (Ottawa)	12.0	300	20:1	50 mm.	
23 (Ottawa)	12.0	300	20:1	50 mm.	
BS (Ottawa)	1.0				5 mm.
BL (Ottawa)	1.0				16 mm.
HN (Halifax)	5.0	125	20:1		
HE (Halifax)	5.0	125	20:1		
SA (Shawinigan)	1.0	2400			
20 (Victoria)	12.0	300	20:1		
21 (Victoria)	12.0	300	20:1		
WV (Victoria)	4.0	120	15:1		
SF (Seven Falls)	1.0	2500			
SM (Seven Falls)	12.0	300	20:1	50 mm.	
SN (Saskatoon)	10.0	150	20:1	18 mm.	
KL (Kirkland Lake)	1/30	2×10^4	at 30 cycles		

NOTE:- Universal Time used throughout.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | September 1, 1944 | to | September 5, 1944 | No. 49 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
332 Sept. 3	e	19 31.6		
	e$_E$	19 38.0		
	e	19 45 50		
	eL	19 57		
	F	22 ca.		
		Victoria		
	e$_N$	19 31 30		
	e$_E$	19 37 36		
	e$_N$	19 38 59		
	L	20 00		
	F	21 54		
		Saskatoon		
	e	19 40		
	L	20 04		
	F	21 26		
		Seven Falls		
	e	19 33.6		
	e	19 46 33		
	L	19 57		
	F	22 21		
		Ottawa		
335 Sept. 5	H	4 38.7	90	Compression to NW.
	iP$_1$	4 39 01		USCGS. gives:-
	S$_1$	4 39 12		$\phi = 45°01'$ N.
	M	4 39 30		$\lambda = 74°44'$ W.
	F	5 40 ca.		

On both the Ottawa horizontal records the zero was considerably displaced at the first onset so that succeeding phases were indistinguishable due to overlapping with earlier registration.

On the short period Benioff the motion was so rapid and of such amplitude that no turning points could be determined for nearly four minutes after the initial onset.

		Victoria		
	e	4 51.4		
	L	4 56		
	F	5 41		
		Saskatoon		
	H	4 38.6	2590	
	P	4 43 46		
	S	4 47 59		
	SS	4 48 51		
	L	4 50		
	F	5 33		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	September 5, 1944	to	September 5, 1944	No. 50

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Halifax		
335 Sept. 5 (Cont'd)	H	4 38.8	900	
	P2	4 40 29		
	e	4 41 27		
	S2	4 42 09		
	F	5 19		
		Seven Falls		
	H	4 38.7	410	
	P2	4 39 40		
	Sn	4 40 16		
	F	5 41		
		Shawinigan Falls		
	H	4 38.7	240	
	P2	4 39 21		
	S2	4 39 48		
	F	5 17		
		Ottawa		
336 Sept. 5	H	8 30.8	90	Aftershock of No. 335.
	P1Z	8 31 05		
	S1	8 31 16		
	F	8 33		
		Ottawa		
337 Sept. 5	H	8 51.1	90	Aftershock of No. 335.
	P1	8 51 21.5		
	S1	8 51 32		
	F	9 01		
		Seven Falls		
	H	8 51.0	410	
	P2	8 52 05.5		
	Sn	8 52 41		
	S2	8 52 52		
	F	8 57		
		Shawinigan Falls		
	H	8 51.1	240	
	P2	8 51 41.5		
	S2	8 52 08		
	F	9 00		
		Ottawa		
338 Sept. 5	H	10 56.8	90	Aftershock of No. 335.
	P1Z	10 57 07		
	S1	10 57 17.5		
	F	10 58.5		
		Ottawa		
339 Sept. 5	H	11 10.9	90	Aftershock of No. 335.
	P1Z	11 11 09.5		
	S1	11 11 20		
	F	11 12		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	September 5, 1944	to	September 9, 1944	No. 51

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
340 Sept. 5	e	15 52 01		
	L	16 08		
	F	16 52		
		Ottawa		
343 Sept. 7	H	13 55.2	90	Aftershock of No. 335.
	P_{1Z}	13 55 29.5		
	S_{1Z}	13 55 40		
	F	13 56		
		Ottawa		
345 Sept. 7	H	22 14.2	150	
	P_{2Z}	22 14 36		
	S_{2Z}	22 14 54		
	F	22 15.6		
		Ottawa		
346 Sept. 8	H	10 11.2	90	Aftershock of No. 335.
	P_{1Z}	10 11 30		
	S_{1Z}	10 11 40.5		
	F	10 12.5		
		Ottawa		
347 Sept. 8	H	19 35.3	90	Aftershock of No. 335
	P_{1Z}	19 35 36.5		
	S_{1Z}	19 35 47		
	F	19 36.5		
		Ottawa		
348 Sept. 9	e_Z	17 43 21		
	L	18 03		
	F	19 37		
		Ottawa		
350 Sept. 9	H	23 24.8	90	Pronounced aftershock of No. 335.
	P_1	23 25 04		
	S_1	23 25 14.5		
	F	23 32		
		Seven Falls		
	H	23 24.7	410	
	P_2	23 25 48.5		
	S_1	23 26 23.5		
	S_2	23 26 34		
	F	23 29		
		Shawinigan Falls		
	H	23 24.8	240	
	P_2	23 25 25		
	S_2	23 25 52		
	F	23 30		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM September 9, 1944 to September 12, 1944 No. 52

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
352 Sept. 11	H	9 45 ca.	14,500 ca.	
	P'z	10 04 35		
	i	10 04 54		
	PP	10 06 35		
	SKPN	10 08 00		
	PPS	10 18.5		
	e	10 35		
	L	10 54		
	F	12 29		
		Victoria		
	e	(10 03)		
	e	10 10 05		
	L	10 28		
	F	12 21		
		Saskatoon		
	H	9 45 ca.	12,100 ca.	
	PP	10 04 49		
	S	10 12 20		
	PS	10 14.2		
	SS	10 20.4		
	L	10 34		
	F	12 16		
		Halifax		
	e	10 04.7		
	e	10 08 09		
	L	10 46		
	F	11 45		
		Seven Falls		
	H	9 45 ca.	14,500 ca.	
	P'	10 04 35		
	PP	10 06 47		
	SKP	10 07 57		
	SS	10 24 05		
	L	10 38		
	F	12 26		
		Shawinigan Falls		
	e	10 04 37		
	e	10 07 58		
	F	10 26		
		Victoria		
353 Sept. 12	e	2 54		
	L	3 16		
	F	3 50		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	September 12, 1944	to	September 19, 1944	No. 53

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
354 Sept. 13	H	22 00.4	90	Aftershock of No. 335.
	P_{1Z}	22 00 43.5		
	S_{1Z}	22 00 54		
	F	22 02		
		Ottawa		
355 Sept. 14	e_Z	6 58 30		
	e_E	7 15		
	L	7 46		
	F	8 37		
		Victoria		
	e	7 09		
	L	7 41		
	F	8 22		
		Saskatoon		
	e	7 08.4		
	e	7 25.5		
	L	7 52		
	F	8 19		
		Seven Falls		
	e	7 08.5		
	e	7 20 04		
	L	7 43		
	F	9 01		
		Ottawa		
359 Sept. 19	e_Z	13 17 17		
	L	13 43		
	F	14 09		
		Victoria		
	e	13 16		
	L	13 25		
	F	14 22		
		Saskatoon		
	e	13 23.2		
	L	13 32		
	F	13 49		
		Seven Falls		
	e	13 26.5		
	L	13 44		
	F	14 06		
		Ottawa		
360 Sept. 19	H	13 52.5	240	
	P_2	13 53 08.5		
	S_2	13 53 36		
	F	13 54.2		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | September 19, 1944 | | to | September 23, 1944 | No. 54 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
361 Sept. 20	H	22 28.9	150	
	P_2	22 29 19.5		
	S_2	22 29 37		
	e	22 29 45		
	F	22 30.1		
		Ottawa		
363 Sept. 23	H	12 13.3	7820	USCGS. gives:-
	P	12 24 30		$\phi = 53°5$ N.
	PP	12 27 18		$\lambda = 160°7$ E.
	S_E	12 33 46		
	PS_N	12 34 18		
	SS	12 39 04		
	M	12 58		
	F	17 53		
		Victoria		
	H	12 13.5	5020	
	P	12 21 45		
	PPP	12 23 49		
	S	12 28 31		
	SSS	12 31.7		
	F	16 03		
		Saskatoon		
	H	12 13.8	5600	
	P	12 22 46		
	S	12 30 04		
	SS	12 33 00		
	SSS	12 35		
	L	12 38		
	F	15 11		
		Halifax		
	H	12 13.8	8110	
	P	12 25 18		
	S	12 34 50		
	SSS	12 44		
	L	12 51		
	F	14 08		
		Seven Falls		
	H	12 13.8	7550	
	P	12 24 45		
	S	12 33 49		
	SSS	12 41.5		
	L	12 48		
	F	16 06		
		Shawinigan Falls		
	H	12 13.4	7800	
	P	12 24 32		
	S	12 33.8		
	L	12 49		
	F	13 30		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	September 23, 1944	to	September 27, 1944	No. 55

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
364 Sept. 23	e	16 25 36		
	L	16 46		
	F	18 02		
		Victoria		
365 Sept. 24	e	11 06.1		
	L	11 17		
	F	11 52		
		Ottawa		
366 Sept. 24	H	19 30.4	90	Aftershock of No. 335.
	P_{1Z}	19 30 41.5		
	S_{1Z}	19 30 52		
	F	19 31.2		
		Ottawa		
368 Sept. 25	e_Z	16 26 55		
	L	16 49		
	F	17 11		
		Ottawa		
370 Sept. 27	e	16 38 16		
	e_N	16 47 52		
	e_E	16 49 16		
	L	17 10		
	F	18 42		
		Victoria		
	H	16 25.3	10,000	
	P	16 38 14		
	PP	16 41.9		
	S	16 49 09		
	L	17 11		
	F	19 19		
		Saskatoon		
	H	16 25.4	9710	
	P	16 38 07		
	S	16 48 49		
	L	17 06		
	F	18 22		
		Halifax		
	e	16 48.6		
	L	17 12		
	F	18 05		
		Seven Falls		
	H	16 25.3	9800	
	P	16 38 05		
	S	16 48 51		
	L	17 07		
	F	19 22		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | September 27, 1944 | to | September 30, 1944 | No. 56 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Shawinigan Falls		
370 Sept. 27 (Cont'd)	e	16 38 07		
	e	16 47.6		
	F	16 51		
		Seven Falls		
371 Sept. 29	e	19 26 21		
	L	19 40		
	F	20 23		

W. W. Doxsee.

EARTHQUAKE CORRELATION TABLE

Month September, 1944

Page 1

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	W.A.	Shawinigan	**
330	1	21 31+0 0.7v*	8 57+0 08L	...	...	...	...	...	R
331	2	19 32+2 28u	19 31+2 23u	19 40+1 46u	...	19 34+2 47u	...	...	...
332	3	21 37+0 01P*	...	...	...	...	...	...	...
333	3	23 10+0 03P*	...	...	...	...	...	...	...
334	3	4 39+1 01D	4 51+0 50r	4 44+0 49r	4 40+0 39v	4 40+1 04V	4 40+0 39v	4 39+0 38v	A
335	3	8 31+0 02d	...	...	...	...	...	8 32+0 01v	R
336	5	8 51+0 10D	...	...	...	...	...	10 52+0 08v	C
337	5	10 57+0 01d	...	...	...	8 52+0 05v	8 52+0 05v	11 12+0 0.3v	D
338	5	11 11+0 01d	...	...	...	...	...	8 52+0 0.5v	...
339	5	16 19+0 52L	...	...	...	...	...	10 58+0 0.5v	...
340	5	...	...	...	...	...	...	...	...
341	6	6 18+0 25L	15 52+1 00u	...	...	15 58+1 20L	...	...	...
342	6	14 37+0 30L	14 37+0 30L	...	...	6 23+1 01L	...	...	...
343	7	13 55+0 0.5d*	...	...	...	14 02+1 05L	...	...	...
344	7	14 30+0 0.5P*	...	...	...	...	...	...	...
345	7	22 15+0 01v*	...	...	...	...	...	...	...
346	8	10 11+0 01dä*	...	...	...	...	...	...	...
347	8	19 36+0 01d*	...	...	...	...	...	...	...
348	9	...	...	...	...	18 04+0 30L	...	...	H
349	9	17 43+1 54u	17 45+0 26L	...	...	...	...	...	J
350	9	23 25+0 07D	...	...	...	...	23 26+0 03v	23 25+0 05v	E
351	10	10 05+2 24u	10 03+2 18u	10 05+2 11u	10 05+1 40u	10 05+2 21u	10 05+0 09P	10 05+0 21u	M
352	11	3 33+0 23L	2 54+0 56u	3 22+0 12L	...	3 28+0 51L	...	...	...
353	12	22 01+0 01d*	...	...	...	...	...	...	G
354	13	6 58+1 39u	7 09+1 13u	7 08+1 11u	...	7 08+1 53u	...	...	...
355	14	...	2 43+0 18L	...	...	...	4 25+0 02P	4 25+0 02P	...
356	16	...	...	...	...	0 15+0 13L	...	...	...
357	18	...	...	...	...	...	...	...	...
358	19	...	...	...	...	...	...	...	...
359	19	13 17+0 52u	13 16+1 06u	13 23+0 26u	...	13 26+0 40u	9 48+0 0.2d	13 17+0 05P	...
360	19	13 53+0 01v*	...	...	...	...	...	...	...
361	20	22 29+0 01v*	...	...	...	4 06+0 18L	...	...	...
362	23	...	...	...	...	...	...	...	...
363	23	12 24+5 29U	12 22+3 41U	12 23+2 48U	12 25+1 43U	12 25+3 41U	12 25+1 26U	12 25+1 06U	R

EARTHQUAKE CORRELATION TABLE

Month September, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	Seven Falls W.A.	Shawinigan	**
364	23		15 26+1 36u	16 54+0 24L		16 59+1 32L			
365	24	11 07+0 01P*	11 16+0 46u	11 24+0 14L		11 36+0 16L	11 46+0 02P	11 07+0 03P	
366	24	19 31+0 0.5d*							
367	25	11 42+0 04P*						11 42+0 05P	S
368	25	16 27+0 44u				16 52+0 25L		16 27+0 02P	
369	25		21 41+0 15L						
370	25	16 38+2 04u	16 38+2 41u	16 38+1 44u	16 49+1 16u	16 38+2 44u	16 38+1 11u	16 38+0 13P	T
371	27	15 38+2 04u	19 19+0 06L			19 25+0 57u			
372	29	19 39+0 34L				1 36+0 07L			
373	30		3 36+0 06L			4 51+0 12L			
374	30								
375	30		8 38+0 17L			8 30+0 20L			

CORRELATION OF EARTHQUAKES
September, 1944
....

N O T E S
===

A : Ottawa Δ =   90 km.   H = 4^h38^m7 U.T.
    Saskatoon Δ =   2,590 km.   H = 4 38.6 U.T.
    Halifax Δ =   900 km.   H = 4 38.8 U.T.
    Seven Falls Δ =   410 km.   H = 4 38.7 U.T.
    Shawinigan Falls Δ =   240 km.   H = 4 38.7 U.T.

    Felt throughout eastern Ontario, western Quebec and northeastern United States. Considerable damage at Cornwall, Ontario and Massena, New York State.

Pronounced Aftershocks of Cornwall-Massena Earthquake

C : Ottawa Δ =   90 km.   H = 8^h51^m1 U.T.
    Seven Falls Δ =   410 km.   H = 8 51.0 U.T.
    Shawinigan Falls Δ =   240 km.   H = 8 51.1 U.T.

K : Ottawa Δ =   90 km.   H = 23^h24^m8 U.T.
    Seven Falls Δ =   410 km.   H = 23 24.7 U.T.
    Shawinigan Falls Δ =   240 km.   H = 23 24.8 U.T.

Other Aftershocks of Cornwall-Massena Earthquake

B : Ottawa Δ =   90 km.   H = 8^h30^m8 U.T.

D : Ottawa Δ =   90 km.   H = 10^h56^m8 U.T.

E : Ottawa Δ =   90 km.   H = 11^h10^m9 U.T.

F : Ottawa Δ =   90 km.   H = 13^h55^m2 U.T.

H : Ottawa Δ =   90 km.   H = 10^h11^m2 U.T.

J : Ottawa Δ =   90 km.   H = 19^h35^m3 U.T.

N : Ottawa Δ =   90 km.   H = 22^h00^m4 U.T.

S : Ottawa Δ =   90 km.   H = 19^h30^m4 U.T.

G : Ottawa Δ =   150 km.   H = 22^h14^m2 U.T.

M : Ottawa Δ = 14,500 km. ca. H = 9^h45^m ca. U.T.
    Saskatoon Δ = 12,100 km. ca. H = 9 45   ca. U.T.
    Seven Falls Δ = 14,500 km. ca. H = 9 45   ca. U.T.

P : Ottawa Δ =   240 km.   H = 13^h52^m5 U.T.

Q : Ottawa Δ =   150 km.   H = 22^h28^m9 U.T.

R : Ottawa Δ =   7,820 km.   H = 12^h13^m3 U.T.
    Victoria Δ =   5,020 km.   H = 12 13.5 U.T.
    Saskatoon Δ =   5,600 km.   H = 12 13.8 U.T.
    Halifax Δ =   8,110 km.   H = 12 13.8 U.T.
    Seven Falls Δ =   7,550 km.   H = 12 13.8 U.T.
    Shawinigan Falls Δ =   7,800 km.   H = 12 13.4 U.T.

T : Victoria Δ =   10,000 km.   H = 16^h25^m3 U.T.
    Saskatoon Δ =   9,710 km.   H = 16 25.4 U.T.
    Seven Falls Δ =   9,800 km.   H = 16 25.3 U.T.

Dominion Observatory,
    Ottawa, Canada,
        January 19, 1945.

SEISMOLOGICAL BULLETINS RECEIVED
September and October, 1944

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

STATIONS	BULLETINS	RECEIVED
Santa Clara	July, 1944	September 5
Santa Clara	August, 1944	" 11
Perth	April and May, 1944	" 13
Sydney	November and December, 1943	" 13
Riverview	July to September, 1943	" 14
Helwan	July 2 to December 31, 1943	" 16
La Paz	July to December, 1943	" 19
Pasadena	Local Shocks for April-June, 1943	" 20
New Zealand Stations	July, 1944	October 4
Bogota	June and July, 1944	" 5
Brisbane	July, 1944	" 6
Santa Clara	September, 1944	" 17
Pasadena and Auxiliary Stations	July to September, 1942	" 17
Brisbane	August, 1944	" 24

DOMINION OBSERVATORY,
OTTAWA - CANADA.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	October 1, 1944	to	October 2, 1944	No. 57

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
376 Oct. 2	H	17 22.0	3460	USCGS. gives:-
	P	17 28 25		$\phi = 14°5$ N.
	PP	17 29 14		$\lambda = 90°1$ W.
	PPP	17 29 42		
	S	17 33 38		
	eL	17 36.7		
	F	18 00 ca.		
		Victoria		
	H	17 22.2	4510	
	eP	17 29 12		
	eS	17 35.5		
	F	18 01		
		Saskatoon		
	e	17 35.3		
	L	17 41		
	F	17 55		
		Seven Falls		
	H	17 22.1	3760	
	P	17 28 54		
	S	17 34 26		
	F	18 01		
		Shawinigan Falls		
	H	17 22.0	3660	
	P	17 28 42		
	PPP	17 30 08		
	S	17 34 08		
	F	17 39		
		Ottawa		
377 Oct. 2	H	20 31.1	7950	
	Pz	20 42 25		
	S	20 51 48		
	L	21 12		
	F	21 46		
		Victoria		
	H	20 30.4	6620	
	P	20 39 43		
	S	20 47 59		
	L	20 59		
	F	21 46		
		Saskatoon		
	e	20 49 59		
	L	21 01		
	F	21 55		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM   October 2, 1944   to   October 6, 1944   No. 58

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
377 Oct. 2 (Cont'd)	e	20 53 00		
	e	20 58.8		
	L	21 12		
	F	22 06		
		Ottawa		
379 Oct. 4	H	0 36.4	90	Aftershock of No. 335.
	P$_{IZ}$	0 36 41		
	S$_{IZ}$	0 36 51.5		
	i	0 36 56		
	F	0 37.7		
		Seven Falls		
382 Oct. 5	e	17 27.8		
	L	17 34		
	F	17 55+		
		Ottawa		
383 Oct. 5	H	17 28.3 ca.	13,500ca.	
	P'$_Z$	17 47 10		
	S$_N$	17 56 35		
	PS$_E$	17 58 34		
	SS	18 05 05		
	e	18 08.3		
	L	18 19		
	F	19 56		
		Victoria		
	e	17 51 44		
	i	17 52 14		
	L	18 00		
	F	19 15		
		Saskatoon		
	e	17 52.6		
	e	18 01.0		
	L	18 16		
	F	19 14		
		Seven Falls		
	e	17 55.8		
	e	18 07.0		
	L	18 27		
	F	19 54		
		Ottawa		
385 Oct. 6	H	2 34.8	7860	USCGS. gives:-
	P	2 46 00		$\phi = 39°$ N.
	S	2 55 18		$\lambda = 27°$ E.
	SS	3 00.0		
	SSS	3 02.5		
	L	3 07		
	F	4 23		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM   October 6, 1944   to   October 13, 1944   No. 59

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
385 Oct. 6 (Cont'd)		Victoria		
	H	2 35.0	9545	
	P	2 47.6		
	S	2 58 11		
	L	3 15		
	F	4 18		
		Saskatoon		
	e	2 57.1		
	L	3 11		
	F	4 11		
		Seven Falls		
	H	2 34.8	7420	
	P	2 45 35		
	S	2 54.5		
	SS	2 59		
	L	3 03		
	F	4 26		
		Shawinigan Falls		
	e	2 45 45		
	L	3 07		
	F	3 17		
		Ottawa		
389 Oct. 9	H	1 45.9	90	Aftershock of No. 335.
	P_{1Z}	1 46 11.5		
	S_{1Z}	1 46 22		
	F	1 46.7		
		Victoria		
391 Oct. 11	e	10 06 59		
	L	10 22		
	F	10 46		
		Saskatoon		
	e	10 09.0		
	L	10 27		
	F	10 57		
		Seven Falls		
	e	10 10.2		
	e	10 13.5		
	L	10 37		
	F	11 36		
		Ottawa		
393 Oct. 13	H	2 33.8	90	Aftershock of No. 335.
	P_{1Z}	2 34 03		
	S_{1Z}	2 34 13.5		
	F	2 35.3		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM October 13, 1944   to   October 14, 1944   No. 60

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
394	e	11 50.3		
Oct.	L	12 22		
13	F	12 56		
		Ottawa		
396	e$_Z$	2 37 14		
Oct.	e$_E$	2 40.0		
14	e	2 50.7		
	L	3 18		
	F	4 35		
		Victoria		
	e	2 42.0		
	L	3 01		
	F	3 51		
		Saskatoon		
	e	2 46		
	L	3 09		
	F	3 51		
		Seven Falls		
	e	2 49.3		
	e	2 56.9		
	L	3 16		
	F	4 42		
		Ottawa		
400	H	19 17.9	150	
Oct.	P2$_Z$	19 18 17		
14	S2$_Z$	19 18 34		
	e$_Z$	19 18 43		
	F	19 19		
		Ottawa		
401	e$_Z$	20 35 18		
Oct.	e	20 38.8		
14	e	20 54		
	L	21 18		
	F	22 18		
		Victoria		
	e$_E$	20 40.5		
	e$_N$	20 49.5		
	L	21 03		
	F	21 36		
		Seven Falls		
	e	20 38.3		
	L	21 14		
	F	22 29		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	October 14, 1944		to	October 23, 1944	No. 61

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
407 Oct. 17	e	19 01.5		
	e$_N$	19 02.3		
	L	19 20		
	F	20 28		
		Victoria		
	e$_N$	18 56 35		
	e	19 01 48		
	L	19 23		
	F	20 19		
		Saskatoon		
	e	19 01 06		
	e	19 09.0		
	L	19 27		
	F	20 04		
		Seven Falls		
	e	19 01.3		
	e	19 08 44		
	L	19 18		
	F	20 38		
		Ottawa		
410 Oct. 23	H	23 40.2	4850	USCGS. gives:-
	P	23 48 18		$\phi = 0°5$ N.
	PP	23 50 05		$\lambda = 80°0$ W.
	S	23 54 54		
	SS	23 58 12		
	L	0 03		
	F	2 20		
		Victoria		
	H	23 40.5	6535	
	P	23 50 28		
	S	23 58 39		
	L	0 07		
	F	1 48		
		Saskatoon		
	H	23 40.5	6010	
	P	23 49 55		
	S	23 57 36		
	e	23 59 30		
	L	0 04		
	F	0 32		
		Halifax		
	e	23 55 07		
	L	0 04		
	F	0 44		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	October 23, 1944	to	October 31, 1944	No. 62

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
410	H	23 40.2	5120	
Oct.	P	23 48 36		
23	S	23 55 28		
(Cont'd)	SS	23 58.7		
	L	0 04		
	F	2 48		
		Shawinigan Falls		
	H	23 40.3	4920	
	P	23 48 29		
	S	23 55.1		
	SS	23 58.7		
	L	0 04		
	F	0 20		
		Ottawa		
412	H	19 18.6	150	
Oct.	P_{2Z}	19 19 01.5		
27	S_{2Z}	19 19 18.5		
	e	19 19 27		
	F	19 19.8		
		Ottawa		
413	e	0 36.0		
Oct.	L	0 55		
29	F	1 53		
		Victoria		
	e	0 35.4		
	L	0 58		
	F	1 38		
		Seven Falls		
	e	0 43.6		
	L	0 53		
	F	1 48		
		Ottawa		
414	H	8 42.4	90	Aftershock of No. 335.
Oct.	P_{1Z}	8 42 40.5		
31	S	8 42 51		
	i_Z	8 42 56		
	F	8 48		
		Seven Falls		
	H	8 42.3	**410**	
	P_2	8 43 25		
	Sn	8 44 00		
	S_2	8 44 11		
	F	8 45		
		Shawinigan Falls		
	H	8 42.4	240	
	P_2	8 43 01.5		
	S_2	8 43 28.5		
	F	8 46		

W. W. Doysee.

EARTHQUAKE CORRELATION TABLE

Month October, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	Seven Falls W.A.	Shawinigan	**
376	2	17 28+0 32r	17 29+0 32r	17 35+0 20r	.	17 30+0 31r	17 29+0 03P	17 29+0 10r	A
377	2	20 42+1 04u	20 40+1 06u	20 50+1 05u	.	20 53+1 13u	20 53+0 05P	20 42+0 08P	B
378	3	.	.	.	.	.	.	2 40+0 03P	C
379	4	0 37+0 01d*	.	.	.	.	.	.	.
380	5	0 33+0 0.3P*	.	.	.	.	.	.	.
381	5	17 16+0 02P*	.	.	.	.	.	.	.
382	5	17 25+0 0.3P*	17 20+0 30L	.	.	17 28+0 27u	.	.	.
383	5	17 47+2 09u	17 52+1 23u	17 53+1 21u	.	17 56+1 58u	.	.	D
384	5	19 36+0 0.4P*	.	.	.	.	.	.	.
385	6	2 46+1 37U	2 48+1 30u	2 57+1 14u	3 04+0 30L	2 46+1 40U	2 46+0 04P	2 46+0 32U	E
386	6	7 40+0 0.5P*	.	.	.	.	.	.	.
387	7	.	.	.	.	19 22+0 59L	.	.	.
388	7	1 46+0 0.5d*	.	.	.	22 13+0 11L	.	.	.
389	9	.	.	.	.	.	.	.	F
390	9	.	.	.	.	21 52+0 15L	.	.	.
391	11	10 35+0 29L	10 07+0 39u	10 09+0 48u	10 44+0 08L	10 10+1 26u	.	.	.
392	12	.	.	.	.	.	.	.	.
393	13	2 34+0 01d*	.	.	.	.	.	.	G
394	13	.	.	.	.	11 50+1 06u	.	17 00+0 01P	.
395	13	21 08+0 0.7P*	.	.	.	.	.	.	.
396	14	2 37+1 58u	2 42+1 09u	2 46+1 05u	.	2 49+1 54u	.	.	.
397	14	10 02+0 18L	.	.	.	10 04+0 44L	.	.	.
398	14	13 29+0 0.2v*	.	.	.	.	13 28+0 01v	13 28+0 04v	J
399	14	17 15+0 29L	16 58+0 35L	17 08+0 05L	.	17 16+0 35L	.	.	.
400	14	19 18+0 0.7v*	.	.	.	.	.	.	.
401	14	.	.	.	.	20 18+0 05L	.	.	.
402	14	20 35+1 43u	20 40+0 56u	21 14+0 17L	.	20 38+1 51u	.	.	.
403	14	22 59+0 43L	22 43+0 36L	22 50+0 29L	.	23 00+0 43L	.	.	.
404	15	.	.	.	.	0 19+0 07L	.	.	.
405	15	8 52+0 23L	8 47+0 11L	.	.	8 55+0 24L	.	.	.
406	15	10 08+0 55L	9 52+0 34L	.	.	10 10+0 44L	.	.	.
407	17	19 01+1 27u	18 57+1 22u	.	.	19 01+1 37u	.	.	.
408	21	20 37+0 12L	.	19 01+1 03u	.	.	.	.	.

EARTHQUAKE CORRELATION TABLE

Month   October, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls		Shawinigan	**
						M.S.	W. A.		
409	23	..:..:..:	..:..:..:	..:..:..:	..:..:..:	23 13+0 11L	..:..:..:	..:..:..:	
410	23	23 48+2 32R	23 50+1 58U	23 50+0 42u	23 55+0 49r	23 49+3 00U	23 49+1 34U	23 48+0 32R	K
411	24							0 36+0 03P	
412	27	19 19+0 0.8v*							M
413	29	0 36+1 17u	0 35+1 03u	1 01+0 32L		0 44+1 04u			
414	31	8 43+0 05d					8 43+0 02v	8 43+0 03v	N

CORRELATION OF EARTHQUAKES
October, 1944

N O T E S

==

A :	Ottawa	Δ =	3,460 km.	H =	$17^h22^m.0$ U.T.
	Victoria	Δ =	4,510 km.	H =	17 22.2 U.T.
	Seven Falls	Δ =	3,760 km.	H =	17 22.1 U.T.
	Shawinigan Falls	Δ =	3,660 km.	H =	17 22.0 U.T.

B :	Ottawa	Δ =	7,950 km.	H =	$20^h31^m.1$ U.T.
	Victoria	Δ =	6,620 km.	H =	20 30.4 U.T.

C :   Ottawa Δ =   90 km.   H = $0^h36^m.4$ U.T.
Aftershock of the Cornwall-Massena earthquake.

D :   Ottawa Δ = 13,500 km.   H = $17^h28^m.3$ U.T.

E :	Ottawa	Δ =	7,860 km.	H =	$2^h34^m.8$ U.T.
	Victoria	Δ =	9,545 km.	H =	2 35.0 U.T.
	Seven Falls	Δ =	7,420 km.	H =	2 34.8 U.T.

F :   Ottawa Δ =   90 km.   H = $1^h45^m.9$ U.T.
Aftershock of the Cornwall-Massena earthquake.

G :   Ottawa Δ =   90 km.   H = $2^h33^m.8$ U.T.
Aftershock of the Cornwall-Massena earthquake.

J :   Ottawa Δ =   150 km.   H = $19^h17^m.9$ U.T.

K :	Ottawa	Δ =	4,850 km.	H =	$23^h40^m.2$ U.T.
	Victoria	Δ =	6,535 km.	H =	23 40.5 U.T.
	Saskatoon	Δ =	6,010 km.	H =	23 40.5 U.T.
	Seven Falls	Δ =	5,120 km.	H =	23 40.2 U.T.
	Shawinigan Falls	Δ =	4,920 km.	H =	23 40.3 U.T.

M :   Ottawa Δ =   150 km.   H = $19^h18^m.6$ U.T.

N :	Ottawa	Δ =	90 km.	H =	$8^h42^m.4$ U.T.
	Seven Falls	Δ =	410 km.	H =	8 42.3 U.T.
	Shawinigan Falls	Δ =	240 km.	H =	8 42.4 U.T.

Pronounced aftershock of the Cornwall-Massena earthquake.

Dominion Observatory,
    Ottawa, Canada,
       January 22, 1944.

SEISMOLOGICAL SERVICE OF CANADA

SEISMOLOGICAL BULLETIN
November and December
1944

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DOMINION OBSERVATORY
OTTAWA - CANADA

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SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

R. Meldrum Stewart, Dominion Astronomer
Ernest A. Hodgson, Seismologist
W. W. Doxsee, Station Superintendent

S T A T I O N S

OTTAWA

ϕ = 45°23'38" N. λ = 75°42'57" W.   h = 83m.

Time correction within 0.10s.

Foundation: boulder clay over limestone

Instruments: Milne-Shaw NS and EW components, designated 23 and 17, respectively, each with photographic registration, magnetic damping, paper speed of 15 mm. per min., mass 1 lb.

Benioff Vertical, short and long period, designated BS and BL, respectively, photographic registration, BS a paper speed of 60 mm. per min., BL a paper speed of 30 mm. per min., mass 235 lbs.

HALIFAX

Dalhousie University

ϕ = 44°38' N. λ = 63°36' W.   h = 46m.

Time correction from recorded radio time signals

Foundation: Carbonaceous slate

Instruments: Bosch NS and EW components, designated HN and HE, respectively, each with photographic registration, magnetic damping, paper speed of 15 mm. per min., mass 200g.

SEVEN FALLS

Quebec Power Company

ϕ = 47°07!4 N. λ = 70°49!6 W.   h = 232m. ca.

Time correction from recorded radio time signals

Foundation: Solid granite of Canadian Shield

Instruments: Wood-Anderson and Milne-Shaw, both EW component, designated SF and SM, respectively, each with photographic registration, magnetic damping, SF a paper speed of 60 mm. per min. and mass 15g., SM a paper speed of 8 mm. per min. and mass 1 lb.

VICTORIA

Dominion Astrophysical Observatory

ϕ = 48°31'14" N. λ = 123°24'56" W.   h = 197m.

Time correction from recorded radio time signals

Foundation: rock

Instruments: Milne-Shaw NS and EW components, designated 21 and 20, respectively, each with photographic registration, magnetic damping, paper speed of 8 mm. per min., mass 1 lb.

Wiechert Vertical, designated WV, smoked sheet registration, air damping, paper speed of 15 mm. per min., mass 80 kg.

SHAWINIGAN FALLS

Shawinigan Water and Power Company

$\phi = 46°33.1$ N. $\lambda = 72°45.8'$W.   h = 60m. ca.

Time correction from recorded radio time signals

Foundation: solid granite of Canadian Shield

Instrument: Wood-Anderson NS component, designated
    SA, photographic registration, magnetic damping,
    paper speed of 60 mm. per min., mass i5g.

SASKATOON

University of Saskatchewan

$\phi = 52°08'$ N. $\lambda = 106°38'$ W.   h = 515m.

Time correction from radio time signals

Foundation: clay and sand

Instrument: Milne-Shaw NE component, designated
    SN, photographic registration, magnetic damping,
    paper speed of 8 mm. per min., mass 1 lb.

KIRKLAND LAKE

Lake Shore Mines

$\phi = 48°09'$ N. $\lambda = 80°03'$ W.   h = 320m.

Time correction from recorded radio time signals

Foundation: rock

Instrument: Converted Heiland Field Seismometer,
    vertical component, designated KL, photographic
    registration, paper speed of 30 mm. per min.

DETERMINED CONSTANTS

INSTRUMENT	T₀	V	ε	DISPLACEMENT FOR 1" ARC TILT	DISPLACEMENT FOR 10^{-6} g
17 (Ottawa)	12.0	300	20:1	50 mm.	
23 (Ottawa)	12.0	300	20:1	50 mm.	
BS (Ottawa)	1.0				5 mm.
BL (Ottawa)	1.0				16 mm.
HN (Halifax)	5.0	125	20:1		
HE (Halifax)	5.0	125	20:1		
SA (Shawinigan)	1.0	2500			
20 (Victoria)	12.0	300	20:1		
21 (Victoria)	12.0	300	20:1		
WV (Victoria)	4.0	120	15:1		
SF (Seven Falls)	1.0	2500			
SM (Seven Falls)	12.0	300	20:1	50 mm.	
SN (Saskatoon)	10.0	150	20:1	18 mm.	
KL (Kirkland Lake)	1/30	2x10⁴	at 30 cycles		

NOTE:-   Universal Time used throughout.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	November 1, 1944	to	November 13, 1944	No. 63

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
416 Nov. 3	H	18 16.5	170	
	P_{1Z}	18 17 04		
	S_{1Z}	18 17 24		
	i_Z	18 17 27		
	F^Z	18 17.7		
		Ottawa		
417 Nov. 5	H	19 08.4	375	Felt at Timmins, Ontario.
	P_3	19 09 18		
	S_3	19 09 59		
	S_1	19 10 15		
	F	19 15		
		Seven Falls		
	e	19 11 26		
	F	19 14		
		Shawinigan Falls		
	H	19 08.4	500	
	P_2	19 09 42		
	S_3	19 10 24.5		
	S_1	19 10 51		
	F	19 14		
		Ottawa		
420 Nov. 10	e_Z	13 25 40		
	L	13 43		
	F	14 10		
		Victoria		
	e	13 25 40		
	F	14 12		
		Seven Falls		
	e	13 32.9		
	L	13 43		
	F	14 21		
		Ottawa		
421 Nov. 13	H	11 51.3	375	
	P_3	11 52 11		
	P_2	11 52 17		
	S_3	11 52 52		
	F	11 57		
		Shawinigan Falls		
	e	11 53 08		
	e	11 54 03		
	F	11 59		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	November 13, 1944	to	November 16, 1944	No. 64

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
424	H	20 46.9	14,200	USCGS. gives:-
Nov.	P'Z	21 06 00		$\phi = 4° N.$
15	PP	21 08 00		$\lambda = 128° E.$
	SKS	21 13.0		
	PS	21 18 00		
	SS	21 25.2		
	eL	21 48		
	F	23 23		
		Victoria		
	H	20 47.3	11,100	
	PP	21 05.0		
	PPP	21 07 17		
	SKS	21 11 32		
	SS	21 18.5		
	L	21 28		
	F	23 19		
		Saskatoon		
	H	20 46.4	12,000	
	PP	21 05.2		
	SKS	21 11.9		
	PPS	21 15.4		
	SS	21 20 33		
	L	21 33		
	F	23 07		
		Seven Falls		
	H	20 47.2	13,900	
	P'	21 06 14		
	PP	21 08 05		
	SKS	21 13.1		
	PS	21 17 35		
	SS	21 24 52		
	L	21 40		
	F	23 39		
		Shawinigan Falls		
	H	20 46.9	14,200	
	P'	21 06 00		
	PP	21 07.9		
	PS	21 17.9		
	L	21 55		
	F	22 11		
		Victoria		
426	e	12 24 32		USCGS. gives:-
Nov.	e	12 34 23		$\phi = 12° S.$
16	e	12 39.8		$\lambda = 166° E.$
	eN	12 46.3		
	L	12 53		
	F	15 08		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	November 16, 1944	to	November 24, 1944	No. 65

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Saskatoon		
426	H	12 10.2	11, 100	
Nov.	PP	12 28		
16	SKKS	12 35 16		
(Cont'd)	PPS	12 37.4		
	SS	12 42 42		
	L	12 56		
	F	15 03		
		Seven Falls		
	H	12 11.0	13,400	
	PP	12 31 16		
	SKS	12 36 54		
	PS	12 41 13		
	SS	12 48 20		
	SSS	12 51.6		
	L	13 04		
	F	15 21		
		Hamilton		
		Courtesy of E. Mantle		
	H	12 11	13,000	
	P'	12 30		
	SKS	12 36.8		
	PS	12 40 29		
	SS	12 46.5		
	eL	13 05		
	F	15 30		
427	H	18 55.0	150	
Nov.	P_2	18 55 25		
18	S_2	18 55 42		
	i	18 55 46		
	F	18 56.5		
		Ottawa		
435	H	4 48.8	13,300	USCGS. gives:-
Nov.	P'$_Z$	5 07 38		ϕ = 20° S.
24	PP	5 09 07		λ = 171° E.
	SKS	5 14 20		
	SKKS	5 15 46		
	S	5 16.8		
	PS	5 19 54		
	SS	5 25.5		
	SSS	5 31.4		
	eL	5 40		
	F	7 14		
		Victoria		
	e	5 02 58		
	e	5 12 12		
	L	5 27		
	F	6 13		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	November 24, 1944	to	November 30, 1944	No. 66

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
435 Nov. 24 (Cont'd)	e	5 09 31		
	e	5 15 52		
	e	5 20 28		
	e	5 27 07		
	L	5 52		
	F	7 11		
		Ottawa		
436 Nov. 25	H	19 56.0	160	
	P_1	19 56 27		
	S_1	19 56 46		
	e	19 56 58		
	F	19 57.2		
		Ottawa		
439 Nov. 29	e_Z	19 09 57		
	e_E	19 18.0		
	e_E	19 22.3		
	L	19 49		
	F	20 10		
		Seven Falls		
	e	19 21.8		
	L	19 30		
	F	20 21		

W. W. Doxsee.

EARTHQUAKE CORRELATION TABLE
Month   November, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Seven Falls M.S.	Seven Falls W.A.	Shawinigan	**
415	2	11 09+0 0.8P*						
416	3	18 17+0 0.6v*						A
417	5	19 09+0 05v				19 11+0 02P	19 10+0 04v	B
418	6	6 38+0 36L		6 45+0 13L	6 36+0 29L			
419	7	5 43+0 03P*						
420	10	13 26+0 44r	13 26+0 46r	13 39+0 24L	13 33+0 48r			C
421	13	11 52+0 05v		1 14+0 05L			11 53+0 06v	
422	14	1 04+0 21L						
423	14					16 13+0 02d		D
424	15	21 06+2 17U	21 05+2 14U	21 05+2 02U	21 08+2 31U	21 06+1 06U	21 06+1 05U	
425	15	22 36+0 01P*						
426	16	13 09+1 46L	12 25+2 43U	12 28+2 35U	12 31+2 50U	12 41+1 56U	13 08+0 47L	E
427	18	18 55+0 01v*						F
428	19	4 50+0 16L			4 44+0 27L			
429	19				6 33+0 07L			
430	19				7 49+0 24L			
431	20	5 43+0 22L			5 45+0 31L			
432	20	21 42+0 01P*						
433	21	10 45+0 35L	10 58+0 08L		10 50+0 32L			
434	23		5 03+1 10u					
435	24	5 03+2 06u		5 13+0 58u	5 10+2 01u		5 08+0 11P	G
436	25	18 56+0 0.7v*						J
437	26	9 07+0 26L			9 10+0 24L			
438	28	16 28+0 10L						
439	29	19 10+1 00u	19 14+0 18L		19 22+1 00u			
440	30		2 08+0 05L		2 10+0 47L			

CORRELATION OF EARTHQUAKES
November, 1944

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N O T E S

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A :	Ottawa	$\Delta =$	170 km.	$H = 18^h16^m\!.5$ U.T.
B :	Ottawa	$\Delta =$	375 km.	$H = 19^h08^m\!.4$ U.T.
	Shawinigan Falls	$\Delta =$	500 km.	$H = 19\ 08.4$ U.T.
C :	Ottawa	$\Delta =$	375 km.	$H = 11^h51^m\!.3$ U.T.
D :	Ottawa	$\Delta =$	14,200 km.	$H = 20^h46^m\!.9$ U.T.
	Victoria	$\Delta =$	11,100 km.	$H = 20\ 47.3$ U.T.
	Saskatoon	$\Delta =$	12,000 km.	$H = 20\ 46.4$ U.T.
	Seven Falls	$\Delta =$	13,900 km.	$H = 20\ 47.2$ U.T.
	Shawinigan Falls	$\Delta =$	14,200 km.	$H = 20\ 46.9$ U.T.
E :	Saskatoon	$\Delta =$	11,100 km.	$H = 12^h10^m\!.2$ U.T.
	Seven Falls	$\Delta =$	13,400 km.	$H = 12\ 11.0$ U.T.
	Hamilton	$\Delta =$	13,000 km.	$H = 12\ 11.0$ U.T.
F :	Ottawa	$\Delta =$	150 km.	$H = 18^h55^m\!.0$ U.T.
G :	Ottawa	$\Delta =$	13,300 km.	$H = 4^h48^m\!.8$ U.T.
J :	Ottawa	$\Delta =$	160 km.	$H = 19^h56^m\!.0$ U.T.

Dominion Observatory,
    Ottawa, Canada,
        January 31, 1945.

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM	December 1, 1944	to	December 7, 1944	No. 67

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Ottawa		
445 Dec. 7	H	4 36.0	10,580	USCGS. gives:-
	P	4 49 20		ϕ = 33° N.
	PP	4 53 18		λ = 137° E.
	PPP	4 55 12		
	SKS	4 59 44		
	S	5 00 38		
	PS	5 02.0		
	SS	5 07 05		
	SSS	5 11.0		
	eL	5 20		
	F	10 00 ca.		
		Hamilton		
		Courtesy of E. Mantle		
	H	4 36.0	10,500	
	P	4 49 25		
	PP	4 53 25		
	SKS	4 59 43		
	S	5 00 30		
	SS	5 07 19		
	L	5 16		
	F	7 30		
		Victoria		
	H	4 35.9	7940	
	P	4 47 10		
	S	4 56 32		
	SS	5 00.3		
	SSS	5 04.4		
	L	5 10		
	F	9 39		
		Saskatoon		
	H	4 36.6	8190	
	P	4 48 07		
	PP	4 51.0		
	S	4 57 42		
	SS	5 02.8		
	SSS	5 06.0		
	L	5 09		
	F	9 28		
		Halifax		
	H	4 36.5	10,560	
	PP	4 53.9		
	S	5 01 11		
	SS	5 07.8		
	SSS	5 12.2		
	L	5 16		
	F	7 50		

SMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

| FROM | December 7, 1944 | to | December 10, 1944 | No. 68 |

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
445 Dec. 7 (Cont'd)	H	4 36.1	10,600	
	P	4 49 29		
	PP	4 53 23		
	SKS	4 59 55		
	SKKS	5 00 23		
	SS	5 07 08		
	SSS	5 10 25		
	L	5 21		
	F	10 00 ca.		
		Shawinigan Falls		
	H	4 35.8	10,900	
	P	4 49.4		
	SKS	4 59.5		
	S	5 00 13		
	PS	5 01 24		
	SS	5 07 19		
	L	5 22		
	F	7 21		
		Ottawa		
451 Dec. 10	e_Z	5 31 00		
	e_E	5 34 40		
	e	5 44.4		
	e_E	5 54		
	L	6 19		
	F	7 22		
		Saskatoon		
	e	5 35.0		
	e	5 50.2		
	L	6 48		
	F	7 22		
		Seven Falls		
	e	5 33.9		
	e	5 43.9		
	L	6 22		
	F	7 27		
		Ottawa		
452 Dec. 10	H	15 09.7	150	
	P_{1Z}	15 10 10		
	S_{1Z}	15 10 27		
	F	15 11		
		Ottawa		
453 Dec. 10	H	16 24.8	13,700	USCGS. gives:- $\phi = 18°$ S. $\lambda = 167°$ E.
	P'_Z	16 43 46		
	PP	16 45.4		
	SKS	16 50 43		
	SKKS	16 52 14		
	PS	16 55 13		
	PPS	16 57		
	SS	17 02		
	L	17 21		
	F	18 59		

SEISMOLOGICAL SERVICE OF CANADA

DOMINION OBSERVATORY, OTTAWA

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
453 Dec. 10 (Cont'd)	H	16 25.5	9340	
	P	16 38 00		
	S	16 48 26		
	L	17 04		
	F	18 18		
		Saskatoon		
	e	16 42 22		
	e	16 49 25		
	e	16 52 18		
	L	17 13		
	F	18 57		
		Halifax		
	e	16 47 31		
	L	17 32		
	F	18 06		
		Seven Falls		
	H	16 25.3	13,700	
	PP	16 45.9		
	SKKS	16 52 34		
	PS	16 55 41		
	SS	17 02.5		
	L	17 20		
	F	19 09		
		Ottawa		
454 Dec. 12	H	4 17.4	6850	USCGS. gives:- $\phi = 51^{\circ}.5$ N. $\lambda = 179^{\circ}$ E.
	P	4 27 37		
	S	4 36 06		
	SS	4 41.1		
	SSS	4 43 07		
	L	4 47		
	F	7 08		
		Victoria		
	H	4 17.3	3790	
	P	4 24 08		
	PPP	4 25 37		
	iS	4 29 42		
	L	4 32		
	F	6 29		
		Saskatoon		
	H	4 17.9	4360	
	P	4 25 26		
	S	4 31 36		
	SSS	4 35 09		
	L	4 37		
	F	6 30		
		Halifax		
	e	4 37.3		
	L	4 53		
	F	5 32		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM   December 12, 1944   to   December 22, 1944   No. 70

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
454	H	4 17.4	6900	
Dec.	P	4 27 44		
12	S	4 36 17		
(Cont'd)	SS	4 41.1		
	L	4 47		
	F	7 06		
		Shawinigan Falls		
	P	4 27 40		
	L	4 50		
	F	5 13		
		Ottawa		
457	eN	14 47 36		
Dec.	eN	14 53.0		
19	L	14 59		
	F	15 39		
		Victoria		
458	eN	21 09 06		
Dec.	L	21 32		
20	F	21 52		
		Ottawa		
460	e	20 43.7		
Dec.	L	21 19		
21	F	21 56		
		Victoria		
	e	20 37.3		
	L	20 56		
	F	21 53		
		Victoria		
461	e	22 51.8		
Dec.	L	23 15		
21	F	23 46		
		Victoria		
462	e	6 00		
Dec.	L	6 18		
22	F	6 42		
		Ottawa		
463	H	22 31.9	7730	
Dec.	P	22 42 57		
22	S	22 52 09		
	L	23 05		
	F	23 35		
		Saskatoon		
	e	22 54 29		
	L	23 17		
	F	23 52		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM   December 22, 1944   to   December 30, 1944   No. 71

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Seven Falls		
463 Dec. 22 (Cont'd)	H	22 31.9	7840	
	P	22 43 09		
	S	22 52 26		
	L	23 01		
	F	0 18		
		Ottawa		
466 Dec. 27	H	15 25.6	13,800	
	P'$_Z$	15 44 37		
	PP	15 46 16		
	SKKS	15 53		
	PPS	15 57 22		
	SS	16 03.1		
	L	16 17		
	F	17 05		
		Victoria		
	e	15 49.2		
	L	16 10		
	F	16 35		
		Seven Falls		
	e	15 44.7		
	e	15 46.7		
	e	15 53 16		
	L	16 19		
	F	17 42		
		Ottawa		
467 Dec. 28	e$_Z$	1 24 28		
	e$_E$	1 39.0		
	L	1 57		
	F	3 32		
		Ottawa		
468 Dec. 28	H	20 24.8	150	
	P$_{2Z}$	20 25 09.5		
	S$_{2Z}$	20 25 26.5		
	F^{2Z}	20 26.2		
		Ottawa		
469 Dec. 29	e$_Z$	23 11.7		
	L	23 20		
	F	23 32		
		Ottawa		
471 Dec. 30	H	22 02.8	4350	
	P$_Z$	22 10 15		
	S$_E$	22 16.4		
	L	22 21		
	F	22 47		

SEISMOLOGICAL SERVICE OF CANADA
DOMINION OBSERVATORY, OTTAWA

FROM **December 30, 1944** to **December 31, 1944** No. 72

NO. AND DATE	PHASE	TIME	DISTANCE	REMARKS
		h m s	km.	
		Victoria		
471	e	22 04 27		
Dec.	L	22 05.6		
30	F	0 15		
(Cont'd)				
		Saskatoon		
	e	22 07 12		
	L	22 12		
	F	23 10		

W. W. Doxsee.

EARTHQUAKE CORRELATION TABLE

Month December, 1944

No.	Date	Ottawa	Victoria	Saskatoon	Halifax	Seven Falls M.S.	Seven Falls W.A.	Shawinigan	**
441	4	14 59+0 11L	14 55+0 10L			21 26+0 29L		15 00+0 05L	
442	5	15 34+0 29L				15 01+0 10L	15 01+0 06L		
443	5	15 34+0 29L				15 28+0 53L			
444	5	17 27+0 15L	17 23+0 11L			17 29+0 17L	17 29+0 07L	17 28+0 07L	
445	7	4 49+5 11U	4 47+4 52U	4 48+4 40U	4 54+2 56U	4 49+5 11U	4 49+3 00U	4 49+2 32U	A
446	7								
447	8	2 09+0 27L	8 03+0 32L			2 13+0 25L			
448	8	8 18+0 31L		8 08+0 16L		8 20+0 40L			
449	8	13 59+0 44L	13 25+0 54L	13 49+0 27L					
450	8	19 11+0 17L	18 41+0 48L			14 02+0 42L			
451	10	5 31+1 51u	6 30+1 56L	5 35+1 47u		19 04+0 22L			
452	10	15 10+0 01v*				5 34+1 53u			B
453	10	16 44+2 15u	16 38+1 40u	16 42+2 15u	16 48+1 18u	4 28+2 38u		16 44+0 05P	C
454	12	4 28+2 40u	4 24+2 05r	4 25+2 05r	4 37+0 55u	11 12+0 28L	4 28+0 44u	4 28+0 45u	D
455	12	11 11+0 24L		11 06+0 22L					
456	15	14 02+0 0.8P*							
457	19	14 48+0 51u	14 44+0 42L	14 46+0 31L		14 54+0 54L			
458	20	14 52+0 14L	21 09+0 43u	21 42+0 10L					
459	21	5 39+0 05L	5 21+0 15L	5 30+0 05L					
460	21	20 44+1 12u	20 37+1 16u	21 06+0 16r		21 24+0 41L			
461	21	23 33+0 32L	22 52+0 54u	23 21+0 28L		23 28+0 45L			
462	22	6 42+0 23L	6 00+0 42u	6 31+0 12L		6 37+0 29L			
463	22	22 43+0 52u	22 54+0 57L	23 54+0 58u		22 52+1 26u	22 43+0 12u	22 44+0 08P	E
464	23	7 31+0 01P*				15 34+0 32L		7 32+0 02P	
465	24	15 50+0 11L	15 49+0 46u			15 47+1 56u			
466	27	15 45+1 20u	1 48+0 34L			1 59+1 33L	15 45+0 03P		F
467	28	1 24+2 08u							
468	28	20 25+0 01v*							G
469	29	23 12+0 20u	23 14+1 07L	22 07+1 03r					
470	29	23 53+0 01P*							
471	30	22 10+0 37r	22 04+2 11r			22 24+0 52L	22 11+0 03P	22 10+0 03P	
472	31	22 13+0 18L	22 20+0 11L			22 18+0 11L			J

CORRELATION OF EARTHQUAKES,
December, 1944

N O T E S

A :	Ottawa	$\Delta = 10,580$ km.	$H = 4^h36^m.0$ U.T.
	Hamilton	$\Delta = 10,500$ km.	$H = 4\ 36.0$ U.T.
	Victoria	$\Delta = 7,940$ km.	$H = 4\ 35.9$ U.T.
	Saskatoon	$\Delta = 8,190$ km.	$H = 4\ 36.6$ U.T.
	Halifax	$\Delta = 10,560$ km.	$H = 4\ 36.5$ U.T.
	Seven Falls	$\Delta = 10.600$ km.	$H = 4\ 36.1$ U.T.
	Shawinigan Falls	$\Delta = 10,900$ km.	$H = 4\ 35.8$ U.T.
B :	Ottawa	$\Delta = 150$ km.	$H = 15^h09^m.7$ U.T.
C :	Ottawa	$\Delta = 13,700$ km.	$H = 16^h24^m.8$ U.T.
	Victoria	$\Delta = 9,340$ km.	$H = 16\ 25.5$ U.T.
	Seven Falls	$\Delta = 13,700$ km.	$H = 16\ 25.3$ U.T.
D :	Ottawa	$\Delta = 6,850$ km.	$H = 4^h17^m.4$ U.T.
	Victoria	$\Delta = 3,790$ km.	$H = 4\ 17.3$ U.T.
	Saskatoon	$\Delta = 4,350$ km.	$H = 4\ 17.9$ U.T.
	Seven Falls	$\Delta = 6,900$ km.	$H = 4\ 17.4$ U.T.
E :	Ottawa	$\Delta = 7,730$ km.	$H = 22^h31^m.9$ U.T.
	Seven Falls	$\Delta = 7,840$ km.	$H = 22\ 31.9$ U.T.
F :	Ottawa	$\Delta = 13,800$ km.	$H = 15^h25^m.6$ U.T.
G :	Ottawa	$\Delta = 150$ km.	$H = 20^h24^m.8$ U.T.
J :	Ottawa	$\Delta = 4,350$ km.	$H = 22^h02^m.8$ U.T.

Dominion Observatory,
 Ottawa, Canada,
  February 7, 1945.

SEISMOLOGICAL BULLETINS RECEIVED
November and December, 1944

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

STATIONS	BULLETINS	RECEIVED
Pasadena and Auxiliary Stations	October to December, 1942	November 7
Santa Clara	October, 1944	" 8
Pasadena and Auxiliary Stations	July to December, 1943	" 10
United States Coast and Geodetic Survey	November and December, 1942	" 13
Pasadena	Noteworthy shocks July - Sept., 1944	" 13
Bogota	August and September, 1944	" 15
New Zealand Stations	August, 1944	" 16
Ksara	April to June, 1944	" 17
Brisbane	September, 1944	" 22
New Zealand Stations	September, 1944	" 27
Sydney	January and February, 1944	" 27
Pasadena and Auxiliary Stations	January to March, 1943	" 28
Saint Louis and Auxiliary Stations	Preliminaries June 21, 25, 28, August 7; Supplement to June, 1944	December 8
Florissant	March to June, 1943	" 8
Pittsburgh	Year 1943	" 8
Mount St. Michaels	July to December, 1942	" 11
Santa Clara	November, 1944	" 11
Saint Louis and Auxiliary Stations	Preliminaries July 12, 19, 27, August 24, September 11; Revision for October 24; Supplements to March and July, 1944	" 22
Pasadena and Auxiliary Stations	April to June, 1943	" 27
New Zealand Stations	October, 1944	" 22
Perth	July to September, 1944	" 27

DOMINION OBSERVATORY,
     OTTAWA - CANADA.