CORRELATION OF EARTHQUAKES

April, 1938.

.....

N O T E S

A :	Ottawa	Δ = 7080 km.	H = $14^h39^m.8$ U. T.
	Shawinigan Falls	Δ = 7180 km.	H = 14 39.8 U. T.
B :	Ottawa	Δ = 8140 km.	H = $10^h59^m.6$ U. T.
	Saskatoon	Δ = 9160 km.	H = 10 59.5 U. T.
	Seven Falls	Δ = 7800 km.	H = 10 59.4 U. T.
C :	Ottawa	Δ = 3850 km.	H = $4^h16^m.0$ U. T.
	Saskatoon	Δ = 1550 km.	H = 4 16.1 U. T.
	Seven Falls	Δ = 4150 km.	H = 4 15.9 U. T.
E :	Ottawa	Δ = 3630 km.	H = 17 08.0 U. T.

Dominion Observatory,
OTTAWA, CANADA,
June 20, 1938.

SEISMOLOGICAL SERVICE OF CANADA

DOMINION OBSERVATORY, OTTAWA

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

S T A T I O N S

OTTAWA

ϕ = 45°23'38" N. λ = 75°42'57" W. h = 83 m.
Time correction within 0.10 s.
Foundation: boulder clay over limestone
Instruments: Milne-Shaw N and E 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, 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 = 46 m.
Time correction from recorded railroad time signals
Foundation: carbonaceous slate
Instruments: Mainka N and E components, designated HN and HE, respectively, each with smoked sheet registration, air damping, paper speed of 15 mm. per min., mass 139 kg.

SEVEN FALLS

Quebec Power Company

ϕ = 47°07'.4 N. λ = 70°49'.6 W. h = 232 m. ca.
Time correction from recorded radio time signals
Foundation: solid granite of Canadian Shield
Instruments; Wood-Anderson and Milne-Shaw, both E component, designated SF and SM, respectively, each with photographic registration, magnetic damping, SF a paper speed of 60 mm. per min. and mass 15 g., SM a paper speed of 6 mm. per min. and mass 1 lb.

SHAWINIGAN FALLS

Shawinigan Water and Power Company

ϕ = 46°33'.1 N. λ = 72°45'.8 W. h = 60 m. ca.
Time correction from recorded radio time signals
Foundation: solid granite of Canadian Shield
Instruments: Wood-Anderson N component, designated SA, photographic registration, magnetic damping, paper speed of 60 mm. per min., mass 15 g.

SASKATOON

University of Saskatchewan

ϕ = 52°08' N. λ = 106°38' W. h = 515 m.
Time correction from radio time signals
Foundation: clay and sand
Instruments: Mainka N and E components, designated SN and SE, respectively, each with smoked sheet registration, air damping, paper speed of 15 mm. per min., mass 139 kg.

DETERMINED CONSTANTS

INSTRUMENT	T_o	V	ε	DISPLACEMENT FOR 1" ARC TILT	DISPLACEMENT FOR 10^{-5} g.
17	12.0	250	20:1	44 mm.	
23	12.0	250	20:1	44 mm.	
BS					4.8 mm.
BL					20.0 mm.
HN					
HE					
SA	1.0	2000			
SF	1.0	1800			
SM	12.0	250	20:1	44 mm.	
SN	9.0	55	Aper.		
SE	9.0	50	"		

NOTE: Universal Time used throughout.

SEISMOLOGICAL SERVICE OF CANADA

DOMINION OBSERVATORY, OTTAWA

FROM April 1, 1938 to April 13, 1938 No. 18

NO. AND DATE	PHASE	TIME	AMP.	DISTANCE	REMARKS
		h m s	μ	km.	
		Ottawa			
100 April 1	e	22 03			
	L	22 31			
	F	23 13			
		Ottawa			
101 April 2	e_N	6 20.6			
	e	6 26.5			
	e_E	6 30.0			
	L	6 35.8			
	F	6 46			
		9 00			
		Seven Falls			
	e	6 28.2			
	e	6 36.0			
	L	6 46			
	F	8 48			
		Ottawa			
107 April 10	e_Z	19 36 53			
	L	19 47			
	F	19 57			
		Ottawa			
108 April 12	e	11 15			
	L	11 18			
	F	12 08			
		Ottawa			
109 April 12	e_Z	18 57.2			Shock felt at Timiskaming, Que., at $18^h56^m13^s$ U.T.
	F_Z	18 57.5			
		Ottawa			
110 April 13	i	2 55 53			
	e	2 57 26			
	e	3 04 09			
	L	3 11			
	F	4 07			
		Seven Falls			
	e	2 55 24			
	e	3 03 12			
	L	3 11			
	F	4 06			

SEISMOLOGICAL SERVICE OF CANADA

DOMINION OBSERVATORY, OTTAWA

FROM April 13, 1938 to April 17, 1938 No. 19

NO. AND DATE	PHASE	TIME	AMP.	DISTANCE	REMARKS
		h m s	μ	km.	
		Ottawa			
114	e	1(34.6)			
April	e	1(43)			
14	e	1(51)			
	L	2(05)			
	F	2(50)			
		Seven Falls			
	e	1 42 38			
	e	1 43 38			
	e	1 50 16			
	L	2 01			
	F	2 40			
		Ottawa			
115	e_N	20 25			
April	e	20 29.4			
16	L	20 32			
	F	21 32			
		Seven Falls			
	e	20 25 51			
	e	20 29.6			
	L	21 10			
	F	21 27			
		Ottawa			
116	i	9 16 02			Nearby quake.
April	F	9 18 05			
17					
		Shawinigan Falls			
	i	9 16 07			
	F	9 18			
		Ottawa			
117	H	14 39.8		7080	
April	P	14 50 13			
17	S	14 58 55			
	L	15 16			
	F	16 36			
		Seven Falls			
	i	14 59 16			
	L	15 11			
	F	16 33			
		Shawinigan Falls			
	H	14 39.8		7180	
	P	14 50 20			
	S	14 59 07			
	F	15 00			

SEISMOLOGICAL SERVICE OF CANADA

DOMINION OBSERVATORY, OTTAWA

FROM April 17, 1938 to April 22, 1938 No. 20

NO. AND DATE	PHASE	TIME	AMP.	DISTANCE	REMARKS
		h m s	μ	km.	
		Ottawa			
119	H	10 59.6		8140	USCGS. gives:
April	P	11 11 01			ϕ = 39°.5 N.
19	S	11 20 34			λ = 33°.5 E.
	L	11 32			
	F	13 51			
		Saskatoon			
	H	10 59.5		9160	
	P	11 11.8			
	S	11 22.1			
	L	11 34			
	F	12 08			
		Shawinigan Falls			
	e	11 10.7			
	L	11 33			
	F	11 46			
		Seven Falls			
	H	10 59.4		7800	
	P	11 10 31			
	S	11 19 46			
	e	11 24.5			
	L	11 36			
	F	14 12			
		Ottawa			
122	e	6 47.2			
April	e_E	6 52.8			
20	e_N	6 55.4			
	e_E	6 57.0			
	e_N	7 03.7			
	e_E	7 07			
	L	7 17			
	F	9 24			
		Seven Falls			
	e	6 47.3			
	e	6 52 57			
	e	7 08.2			
	L	7 18			
	F	9 23			
		Ottawa			
124	H	4 16.0		3850	
April	P	4 22 52			
22	S	4 28 30			
	S_N	4 31.0			
	L	4 33			
	F	5 31			

SEISMOLOGICAL SERVICE OF CANADA

DOMINION OBSERVATORY, OTTAWA.

FROM April 22, 1938 to April 30, 1938 No. 21.

NO. AND DATE	PHASE	TIME	AMP.	DISTANCE	REMARKS
		h m s	μ	km.	
		Saskatoon			
124 April 22 (Cont'd)	H	4 16.1		1550	
	P	4 19 24			
	S	4 22 08			
	L	4 23.6			
	F	4 54			
		Shawinigan Falls			
	e	4 23.7			
	L	4 35			
	F	4 57			
		Seven Falls			
	H	4 15.9		4150	
	P	4 23 07			
	S	4 29 04			
	L	4 35			
	F	5 34			
		Ottawa			
131 April 25	H	17 08.0		3630	
	P	17 14 38			
	S	17 20 02			
	eN	17 21 14			
	SSE	17 22.0			
	L	17 24			
	F	18 45			
		Shawinigan Falls			
	e	17 14.9			
	L	17 26			
	F	17 47			
		Seven Falls			
	e	17 20.8			
	e	17 22.9			
	L	17 25			
	F	18 39			

W. W. Doyle.