



DEPARTMENT OF MINES AND TECHNICAL SURVEYS

DOMINION OBSERVATORIES BRANCH

SEISMOLOGICAL SERVICE OF CANADA

WESTERN DIVISION

SEISMOLOGICAL BULLETIN

January - March

1955

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DOMINION ASTROPHYSICAL OBSERVATORY

VICTORIA/CANADA

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SEISMOLOGICAL SERVICE OF CANADA
WESTERN DIVISION
DOMINION ASTROPHYSICAL OBSERVATORY, VICTORIA

C. S. Beals, Dominion Astronomer

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S T A T I O N S

VICTORIA

$\phi = 48^{\circ}31'10''$ N. $\lambda = 123^{\circ}24'55''$ W. $h = 197$ m.

Time correction from recorded radio time signals

Foundation: rocks

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

Benioff vertical, NS and EW, short period components with paper speed of 60 mm. per min., mass 235 lbs.

SASKATOON

University of Saskatchewan

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

Time correction from observed radio time signals

Foundation: Clay and sand

Instruments: Milne-Shaw NE and NW components, each with magnetic damping, paper speed of 8 mm. per min., mass 1 lb.

CONSTANTS

INSTRUMENT	Ts	Tg	V	ϵ	DISPLACEMENT FOR 1" ARC TILT
Victoria Benioffs	1.0	0.2			
Victoria EW-MS	12.0		300	20:1	50 mm.
Victoria NS-MS	12.0		300	20:1	50 mm.
Saskatoon NW	10.0		150	20:1	18 mm.
Saskatoon NE	10.0		150	20:1	18 mm.

Effective Dec. 4, 1953.

S T A T I O N S (Cont'd)ALBERNI (Vancouver Island)

$\phi = 49^{\circ}16'14''$ N. $\lambda = 124^{\circ}49'18''$ W.

Time correction from recorded radio time signals

Foundation: volcanic rock

Instruments: Willmore-Sharpe NS, EW and vertical
short period with paper speed of
60 mm. per min. Ts approximately
0.3 sec. and Tg approximately 0.03 sec.

HORSESHOE BAY (Vancouver)

$\phi = 49^{\circ}22'39''$ N. $\lambda = 123^{\circ}16'33''$ W.

Time correction from recorded radio time signals

Foundation: Granitic rock

Instruments: Willmore-Sharpe NS, EW, and vertical
short period with paper speed of
60 mm. per min. Ts approximately
0.3 sec. and Tg approximately 0.03 sec.

SEISMOLOGICAL SERVICE OF CANADA

WESTERN DIVISION

DOMINION ASTROPHYSICAL OBSERVATORY, VICTORIA

STATIONS: V - Victoria A - Alberni
 S - Saskatoon HB - Horseshoe Bay

January, 1955

1

DATE	STN	PHASE	TIME(G.C.T.)			REMARKS
			h	m	s	
3	V	e	19	03	29	Near west coast of Peru
		e	19	25	38	
5	V	e	01	50	01	
		e	02	53	0	
	S	L	01	55		
5	A	P	16	05	39.9	
		S	16	05	44.7	
5	V	e	18	12	22	New Hebrides Is. 16°S, 167 1/2°E
5	V	e	22	36	01	
5	HB	P	23	44	10.3	
6	V	e	00	04	01	
		S	00	09	.1	
		L	00	31	.3	
6	V	e	03	06	00	
6	V	e	10	32	38	
7	HB	P	05	38	54.2	Off coast of El Salvador
7	V	P	17	08	28.5	Blast?
		S	17	08	30.2	
7	A	P	17	54	47.0	Local
		S	17	55	03.8	
	V	P	17	54	29.2	
		S	17	54	33.4	
	HB	P	17	54	36.9	
eS	17	54	47.1			
8	V	S	07	56	33	Santa Cruz Is. 11 1/2°S, 166 1/2°E
		L	08	12	39	
	V	e	09	54	20	
9	V	e	23	03	53	
10	V	e	10	15	31	Southern Nevada 37°N, 114 1/2°W
10	HB	P	12	19	22.3	Local
		S	12	19	35.9	

January, 1955

2

DATE	STN	PHASE	TIME(G.C.T.)			REMARKS
			h	m	s	
11	V	P	10	20	22.0	South of Vancouver Is.
	HB	P	10	20	33.5	
		S	10	20	52.8	
	A	P	10	20	36.5	
		S	10	20	54.4	
12	HB	P	02	09	51.4	
13	V	P	02	09	38.6	Fox Is. Aleutian Is. 53°N, 167 1/2°W
		S	02	14	04	
	S	P	02	11	23	
		S	02	16	27	
		L	02	18.9		
13	V	P	02	41	41.0 d	Fox Is. Aleutian Is. 53°N, 167 1/2°W.
19	V	P	01	01	20.2	Local
		S	01	01	23.5	
19	V	P	15	43	19.4	Colombia - Ecuador Border
	HB	e	15	43	22.3	
19	V	P	16	00	22.0	Local
		S	16	00	33.4	
20	HB	e	03	56	04.9	Off coast of Mexico 15°N, 104 1/2°W VΔ = 37°
	V	P	04	01	48	
		e	04	04	11	
		S	04	07	13	
	S	L _r	04	07.3		
20	V	P	10	16	23.5	Local
		S	10	16	36.5	
	HB	P	10	16	35.2	
		S	10	16	57.6	
	V	e	22	03	57	
		e	22	04	20	
21	V	e	14	24	51	Fox Is. Aleutian Is. 53°N, 168°W
22	A	P	08	43	30.4	Local
		S	08	43	37.4	
25	HB	e	14	58	39	Arctic Ocean off west coast of Spitzbergen 80°N, 3°W
	V	e	14	58	45.2	
25	V	e	15	10.5		
		e	15	12.2		
26	V	e	03	48	55.4	
	HB	e	03	50	03.5	
28	V	e	17	47	58	
		e	17	49.4		
29	A	P	13	03	19.8	Local
		S	13	03	31.1	

January, 1955

3

DATE	STN	PHASE	TIME(G.C.T.)			REMARKS
			h	m	s	
29	V	e	18	29.2		
31	HB	e	05	15	37.0	Matto Grosso, Brazil 12 1/2°S, 57°W
	V	e	05	15	36.6	
31	HB	e	16	11	33.3	Kurile Is. 46 1/2°N, 153°E
	V	e	16	11	24.3	
31	V	e	16	18.4		
		e	16	19.2		
	S	e	16	20	32	
		L	16	35.4		
31	A	e	19	27	05.0	
	V	P	19	27	18.2	
	HB	e	19	27	21.3	
31	HB	e	23	05	41.8	

W. G. Milne
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SEISMOLOGICAL SERVICE OF CANADA

WESTERN DIVISION

DOMINION ASTROPHYSICAL OBSERVATORY, VICTORIA

STATIONS: V - Victoria A - Alberni
 S - Saskatoon HB - Horseshoe Bay

February, 1955

4

DATE	STN	PHASE	TIME(G.C.T.)			REMARKS
			h	m	s	
1	HB	e	19	26	29.0	Off south coast of Hokkaido, Japan. 42°N, 142 1/2°E
	V	P	19	26	31	
2	V	P	07	35	00 d	Tonga Is. Oregon foreshock
	HB	e	22	13	01.9	
3	V	P	03	11	37	Oregon foreshock
	HB	P	03	11	43.9	
		S	03	12	58.6	
3	HB	P	03	16	43.4	Local
		S	03	17	49.1	
3	HB	e	03	29	15.2	
	V	P	09	09	18	Oregon foreshock
HB	e	09	09	29		
3	V	P	12	24	08	Oregon foreshock
	HB	e	12	24	27	
3	V	P	12	36	18	Oregon foreshock
	HB	e	12	36	31	
3	V	P	12	42	52.9	200 M. off coast of Oregon 44°N, 128 1/2°W
		S	12	44	00	
	A	P	12	42	54.0	
		S	12	44	00.2	
	HB	P	12	43	03.3	
	S	12	44	16.9		
4	HB	P	07	40	33.7	Mascaren Is. region 17°S, 67°E
	V	P	07	41	36	
4	A	P	22	29	01.1	Local
		S	22	29	05.3	
6	HB	e	02	35	48.1	Jan Mayen Is. region 71°N, 13 1/2°W
	S	P	02	36	03	
		S	02	42	18	
		L	02	51.3		
7	V	P	00	18	11.1 c	Local
		S	00	18	21.8	
	HB	P	00	18	12.2	
		S	00	18	23.6	
7	HB	i	23	00	23.5	Blast
8	HB	P	21	18	22.4	Blast
9	HB	P	21	08	06.3	Local
		S	21	08	20.6	

February, 1955

5

DATE	STN	PHASE	TIME(G.C.T.)			REMARKS
			h	m	s	
11	V	P	21	45	34.8	Local
		S	21	45	44.0	
	HB	P	21	45	45.7	
		S	21	46	01.7	
	A	P	21	45	54.2	
		S	21	46	18.0	
12	V	P	04	03	53.7	Local
		S	04	05	40	
	HB	P	04	04	50.6	
		S	04	04	56.9	
13	HB	P	17	08	50.9	
		i	17	09	57.0	
13	V	P	17	24	56 d	Central Kamchatka 56°N, 160 1/2°E
15	HB	P	00	24	54.3	
15	HB	e	06	33	06.0	New Hebrides Is. 13 1/2°S, 166 1/2°E
15	HB	P	23	11	54.0	
16	A	P	14	15	01.4	
		S	14	15	10.9	
18	V	e	08	15	53.5	Off N. E. Coast of Dominican Republic 19 1/2°N, 68°W
18	V	e	08	34	57.2	
18	V	e	23	43	0	
19	V	P	03	56	48.7 d	Off north coast of Panama
		P e e	12	47	43.5	
			12	51	12	
	V	P S	20	00	20.9 d	Local
			20	00	23.1	
		e	23	55	56	
23	V HB	P	05	09	11.0	Tonga Is. 20°S, 175°W
		P	05	09	14.0	
	HB	P	11	52	31.1	Fiji Is. 18°S, 178°W
	V	e	20	04	3	
24	HB	P	00	47	44.1	
24	V	P	10	01	04.3	Local
		S	10	01	14.3	
		HB	P	10	01	
	S		10	01	33.4	
	A	P	10	01	20.1	
		S	10	01	42.0	

February, 1955

6

DATE	STN	PHASE	TIME(G.C.T.)			REMARKS	
			h	m	s		
25	V	e	17	15.9			
27	A	P	20	55	34.3	Local	
		S	20	56	00.1		
	HB	P	20	55	38		
		i	20	56	05		
	V	P	20	55	48.2		
27	V	P	20	56	22.3	Kermadec Is. region 27 1/2°S, 176°W. SΔ = 11,000 km.	
		e	20	59.9			
		e	20	59	59		
		S	21	06	58		
		i	21	13.2			
		L	21	20.4			
		i	21	24.2			
		A	e	20	56		24.2
		HB	i	20	56		38
		S	P	20	57		12
			PP	21	01		20
			SKS	21	07		54
			S	21	08		53
			S	21	10		18
			e	21	11		32
		SS	21	15.9			
	L	21	29.6				

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March, 1955

7

DATE	STN	PHASE	TIME(G.C.T.) h m s	REMARKS
1	HB	P	04 46 57	Yukon 65°N, 133°W
		S	04 51 41	
	V	P	04 47 06.7 c	
		S	04 50 17	
		L	04 51 53	
	S	i	04 52 04.6	
		P	04 47 15	
		S	04 50 59	
		L	04 52 11	
1	A	P	09 19 24.3	Local
		S	09 19 33.0	
1	HB	P	14 06 22	Yukon aftershock
		S	14 11.1	
	V	P	14 06 32.9	
		S	14 09.9	
		e	14 11 21	
	S	i	14 11.9	
		i	14 13.2	
		P	14 10 00	
		S	14 12 22	
		L	14 13 46	
1	V	e	14 52 58.5	
2	V	e	02 19.1	
2	V	e	16 05 00.2	West Central California 36°N, 121°W
3	A	P	10 05 37.8	Local
		S	10 05 49.2	
3	HB	P	12 07 19.5	Local
		S	12 07 38.3	
3	V	e	21 17.5	
5	V	e	03 37 54 c	Guatemala 14°N, 90 1/2°W
5	V	e	04 00.2	
5	V	e	05 43 34.3	
5	V	e	19 40 21.8	
5	V	e	20 05.3	
5	V	P	23 08 15	

March, 1955

8

DATE	STN	PHASE	TIME(G.C.T.)			REMARKS			
			h	m	s				
6	V	e	06	36	57	Near south coast of Sumatra 2 1/2°S, 100 °E.			
6	A	P	08	40	04.9	Local			
		S	08	40	33.6				
	HB	P	08	40	07.3				
		S	08	40	25.1				
	V	P	08	40	17.6				
S	08	40	45.5						
6	V	e	11	09	05.6	Philippine Is. foreshock 9 1/2°N, 122 1/2°E			
		e	11	19.2					
6	V	e	13	47	12	Negros Is., Philippine Is. 9 1/2°N, 122 1/2°E			
		e	13	57.9					
7	V	e	04	57	48.3	New Hebrides Is. 18°S, 169°E			
7	V	e	05	26.4					
		e	05	33.9					
7	V	e	15	00	08.6				
7	V	e	19	26	18				
11	HB	P	22	43	12.2	Local			
		S	22	43	24.3				
	V	P	22	42	56.4				
		i	22	42	57.0				
	A	S	22	43	00.4				
		P	22	43	14.5				
S	22	43	32.0						
14	HB	P	01	55	22.2	Local			
		S	01	55	28.5				
	A	P	01	55	30.3				
		S	01	55	42.8				
	V	P	01	55	36.0				
		S	01	55	53.0				
14	HB	P	13	18	19	Andreanof Is., Aleutian Is. 52 1/2°N, 173 1/2°W			
		S	13	24	37				
	V	iP	13	18	22.3 c				
		pP	13	18	23				
		e	13	19	11				
		ipP	13	19	22				
		esP	13	19	59				
		eS	13	23	21				
		iS	13	23	22				
		i	13	23	28				
		L	13	27.4					
		eScS	13	28	38				
		L	13	29.4					
		S	iP	13	19		25		
			i	13	21		02		
			iS	13	25		15		
			e	13	26		21		
		14	A	P	23		47	21.5	Local
				S	23		47	34.8	

March, 1955

9

DATE	STN	PHASE	TIME(G.C.T.)			REMARKS			
			h	m	s				
15	HB	P	00	49	02.3	Local			
		S	00	49	08.7				
16	V	P	21	56	59				
18	V	P	00	15	00.4	Near east coast of Kamchatka 54 1/2°N, 161°E			
		e	00	17	07				
		S	00	21	52				
		e	00	24.1					
	S	L	00	25.2					
		P	00	15	45				
		S	00	23	04				
		SS	00	26.8					
18	HB	G	00	31.9					
		L	00	33.5					
18	HB	P	00	45	00				
		e	00	45	24				
20	V	P	14	42	59.1	Local			
		S	14	44	31.1				
	HB	P	14	43	05.5				
		S	14	44	12.6				
20	V	P	20	21	26	Guatemala 15°N, 92°W			
	HB	P	20	21	29.5				
22	HB	P	13	59	40	Yukon 65 1/2°N, 133°W			
		V	13	59	46.4				
	e	i	14	04	55				
		e	14	05	05				
		i	14	24	24				
		i	14	26	40				
		i	14	27	50				
		i	14	39	52				
		i	14	44.5					
		i	14	46.7					
		e	15	07					
		S	e	14	05		45		
		22	HB	P	16		03	54.1	Local
				S	16		04	31.2	
23	V	e	06	06.5					
24	HB	P	22	40	36.1	Local			
		S	22	40	41.1				
	V	P	22	40	45.1				
		S	22	40	58.3				
A	P	22	40	53.4					
25	V	P	23	01	10.5	Near east coast of Kamchatka			
26	V	P	06	56	10.0	Local			
		S	06	56	24.2				
	HB	P	06	56	19.4				
27	A	S	06	56	40.5				
		P	00	05	22.0	c			
A	P	00	05	30.7					

March, 1955

10

DATE	STN	PHASE	TIME(G.C.T.)			REMARKS
			h	m	s	
27	A	P	08	56	56.8	Local
		S	08	57	11.5	
28	HB V	P	09	24	13.6	Ryukyu Is. 29°N, 130°E
		P	09	24	16.0	
		i	09	24	26	
		e	09	34	2	
28	HB	P	22	32	06.8	Blast
29	HB	P	23	32	31.9	
31	V	P i i i S	18	30	59.8	Near N.W. Coast of Mindanao 8°N, 124°E
			18	34	00	
			18	34	59.8	
			18	41	48	
			18	42	29	
	S	P S e e	18	35	00	
			18	42	14	
			18	45	04	
			18	51	5	
			18	46	3	
HB	e	18	46	3		

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