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SEISMOLOGICAL SERIES of the DOMINION OBSERVATORY

1963-1
Seismological Bulletin
January - March
1963

**Seismological Service
of Canada**

OTTAWA, CANADA

Department of Mines and Technical Surveys

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DOMINION OBSERVATORIES

1964

SEISMOLOGICAL BULLETIN - 1963

This report lists the instrumental results obtained at the Seismological stations maintained by the Seismological Service of Canada. These are divided into two divisions.

Eastern Division

Alert, N.W.T. -

Owned and operated by the Dominion Observatory.
C.H. McCloughan in charge.

Halifax, Nova Scotia -

Operated by Dalhousie University for the Dominion Observatory.

London, Ontario -

Operated by The University of Western Ontario for the Dominion Observatory.

Mould Bay, N.W.T. -

Owned and operated by the Dominion Observatory.
W.T. Piche in charge.

Ottawa, Ontario -

Owned and operated by the Dominion Observatory.

Resolute, N.W.T. -

Owned and operated by the Dominion Observatory.
O.J. Jensen in charge.

Scarborough, Ontario -

Owned by Dominion Observatory.
Operated for Dominion Observatory by Radiosonde Division,
Meteorological Branch, Department of Transport.

Schefferville, Quebec -

Owned by Dominion Observatory.
Operated for Dominion Observatory by McGill Sub-Arctic Research Laboratory.

Sept.-Iles, Quebec -

This station is owned and operated by the North Shore and Labrador Railway Company, Sept.-Iles, P.Q. and seismograms from the station are available through the Dominion Observatory.

Seven Falls, Quebec -

Owned by the Dominion Observatory.
Operated by the Quebec Power Company for the Dominion Observatory.

DOMINION OBSERVATORIES

Eastern Division (Cont'd)

Shawinigan Falls, Quebec -

Owned by the Shawinigan Water and Power Co.

Operated by the Company for the Dominion Observatory.

Yellowknife, N.W.T. -

An experimental array is being operated at Yellowknife, N.W.T. through co-operation of the Dominion Observatory, Ottawa, Defence Research Board, Ottawa, and the United Kingdom Atomic Energy Authority. One seismometer of this array produces a visual record. Copies of these records are available at Ottawa. Calibrations are shown on each record.

Local earthquakes are interpreted by means of travel-time curves based on rockburst studies. (See J.H. Hodgson, Publication of the Dominion Observatory, XVI, Nos. 5 and 6.

Western Division

Banff, Alberta -

Operated by the Banff School of Fine Arts for the Dominion Observatory.

Penticton, British Columbia -

Owned and operated by the Dominion Observatory.

W.H. McNaughton in charge.

Port Hardy, British Columbia -

Owned by Dominion Observatory.

Operated for Dominion Observatory by Radiosonde Division, Meteorological Branch, Department of Transport.

Victoria, British Columbia -

Dominion Astrophysical Observatory, Department of Mines and Technical Surveys, R.R. #7, Victoria, B.C.

Local earthquakes are interpreted by means of travel-time curves based on blast studies. (See W.G. Milne and W.R.H. White, Publications of the Dominion Observatories, XXIV, No. 7.) Records for all stations of the Seismological Service of Canada are stored on microfilm in Ottawa. Positive microfilm copies, or full-scale prints, will be sent on request. Beginning in 1960 records

SEISMOLOGICAL BULLETIN - 1963

of the station at Brebeuf College, Montreal, are included in the microfilm file through the courtesy of M. Buist, S.J., Director.

Magnification curves for the various instruments operated at the above stations will be found on the following pages.

John H. Hodgson,
Chief, Division of Seismology.

DOMINION OBSERVATORIES

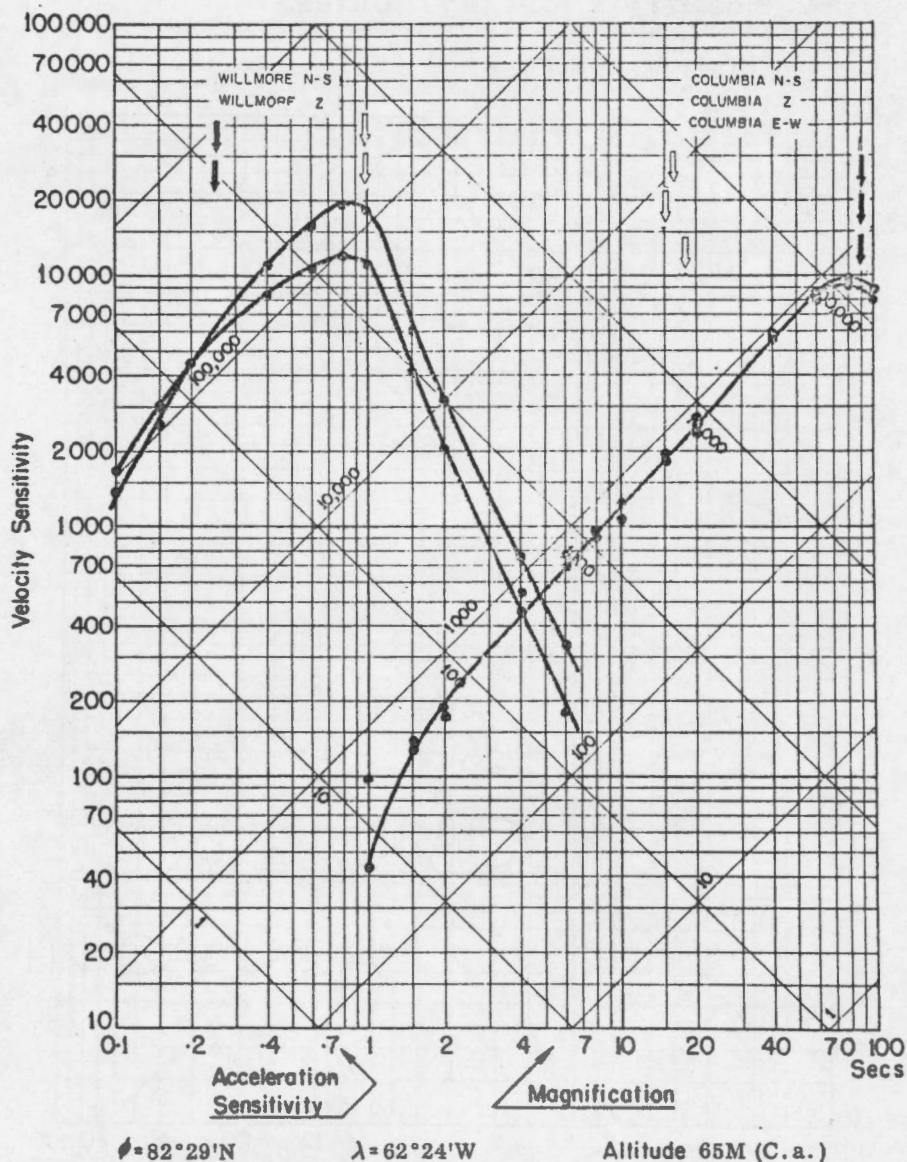
Explanation of Calibration Curves

Calibration curves for all the seismographs of the Canadian network have now been determined using a bridge circuit developed by this Observatory (see P. L. Willmore, "The Application of the Maxwell Impedance Bridge to the Calibration of Electromagnetic Seismographs", Bull. Seis. Soc. Am., Volume 49, No. 1, pp. 99-114, 1959.) Estimated curves are included for the instruments which have not yet been calibrated, and are distinguished from the others by the absence of calibration points. The curves show the velocity sensitivity of each instrument (i.e. the trace displacement in centimetres for unit particle velocity in the ground) as a function of the period of the earthquake waves.

For waves of period T , the magnification and the acceleration sensitivity of any instrument can be determined by multiplying the velocity sensitivity by $\frac{2\pi}{T}$ or by $\frac{\pi}{2} T$ respectively. To facilitate these conversions, lines of constant magnification and of constant acceleration sensitivity are ruled across each graph, the former sloping upwards from left to right, and the latter from right to left. To find the magnification of an instrument for ground waves of any given period, place one point of a pair of dividers on the calibration curve at the appropriate period, and adjust the other point to rest vertically below the first on a magnification line. Move the dividers so that the lower point falls on a horizontal grid line marked with an exact power of 10. The upper point of the dividers will then indicate the magnification. The decimal multiplier will be determined by the fact that the magnification must lie between the values indicated on the datum lines above and below the calibration point. The acceleration sensitivity can be found in the same way as the magnification, starting with an acceleration datum line.

SEISMOLOGICAL BULLETIN - 1963

STATION: ALERT



Foundation : Permanently frozen glacial debris overlying Palaeozoic limestone.

$T_s \uparrow$

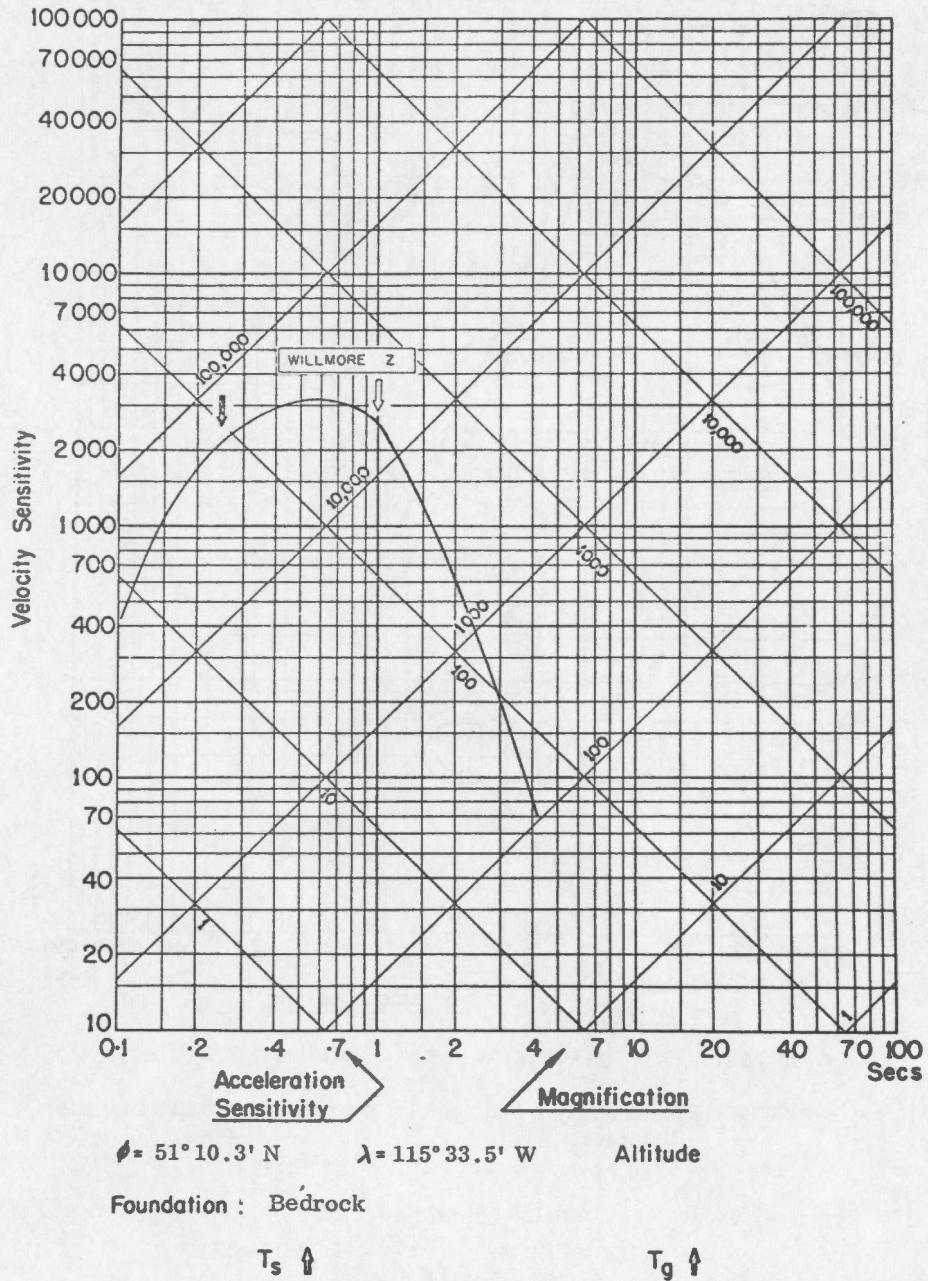
$T_g \uparrow$

Date of Calibration: 1961

WILLMORE'S	COLUMBIA'S
S. P. - Z SEPT. - 29	L. P. - Z. SEPT. - 30
S. P. H. - N. S. SEPT. - 29	L. P. H. - N. S. OCT. - 2
S. P. H. - E. W.	L. P. H. - E. W. OCT. - 1

DOMINION OBSERVATORIES

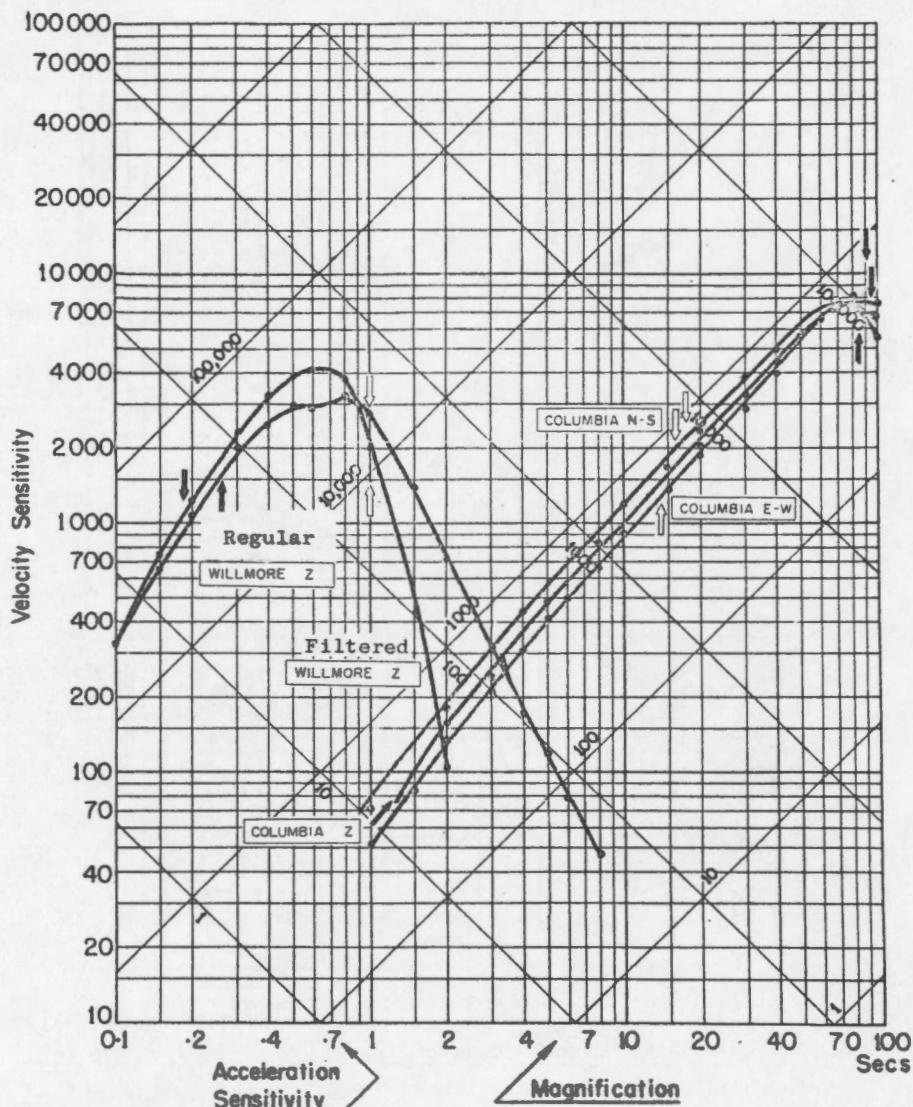
STATION: BANFF



SEISMOLOGICAL BULLETIN - 1963

CALIBRATION CURVES

STATION: HALIFAX



$\phi = 44^{\circ} 38' N$

$\lambda = 63^{\circ} 36' W$

Altitude 56 M

Foundation : Carbonaceous slate

$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: June 1960

Columbia LP-EW June 10/60

Columbia LP-NS June 10/60

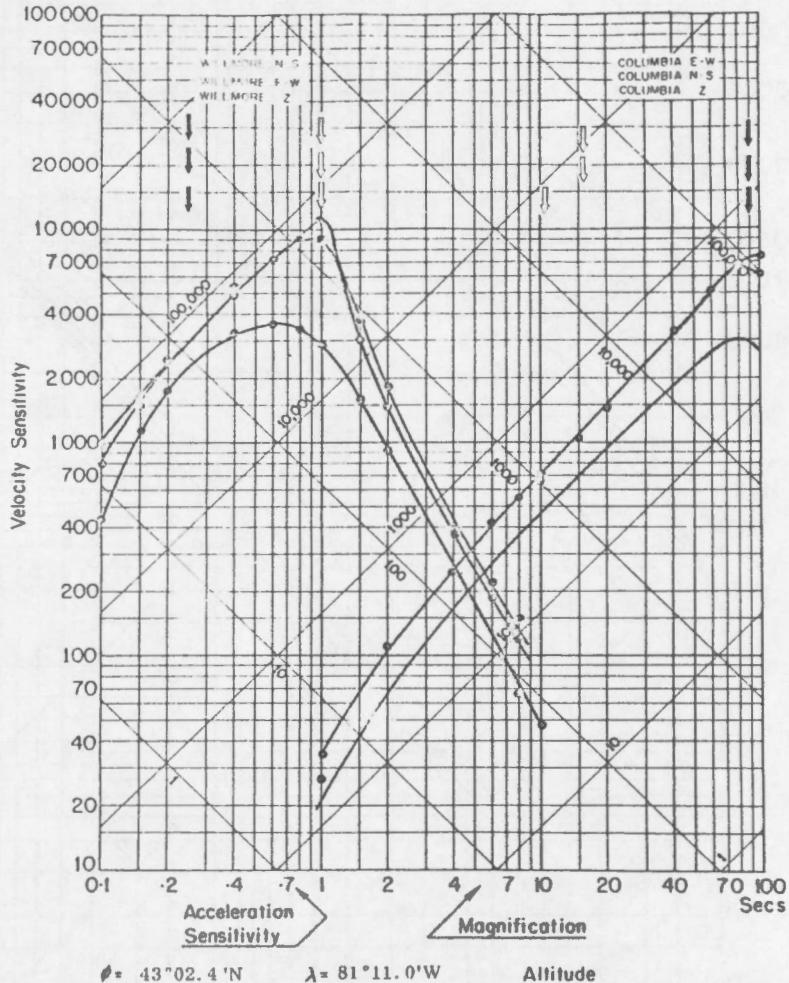
Columbia LP Z June 17/60

Regular Willmore SPZ - June 3/60

Filtered Willmore SPZ - June 6/60

DOMINION OBSERVATORIES

STATION: LONDON



Foundation : Devonian Limestone

1

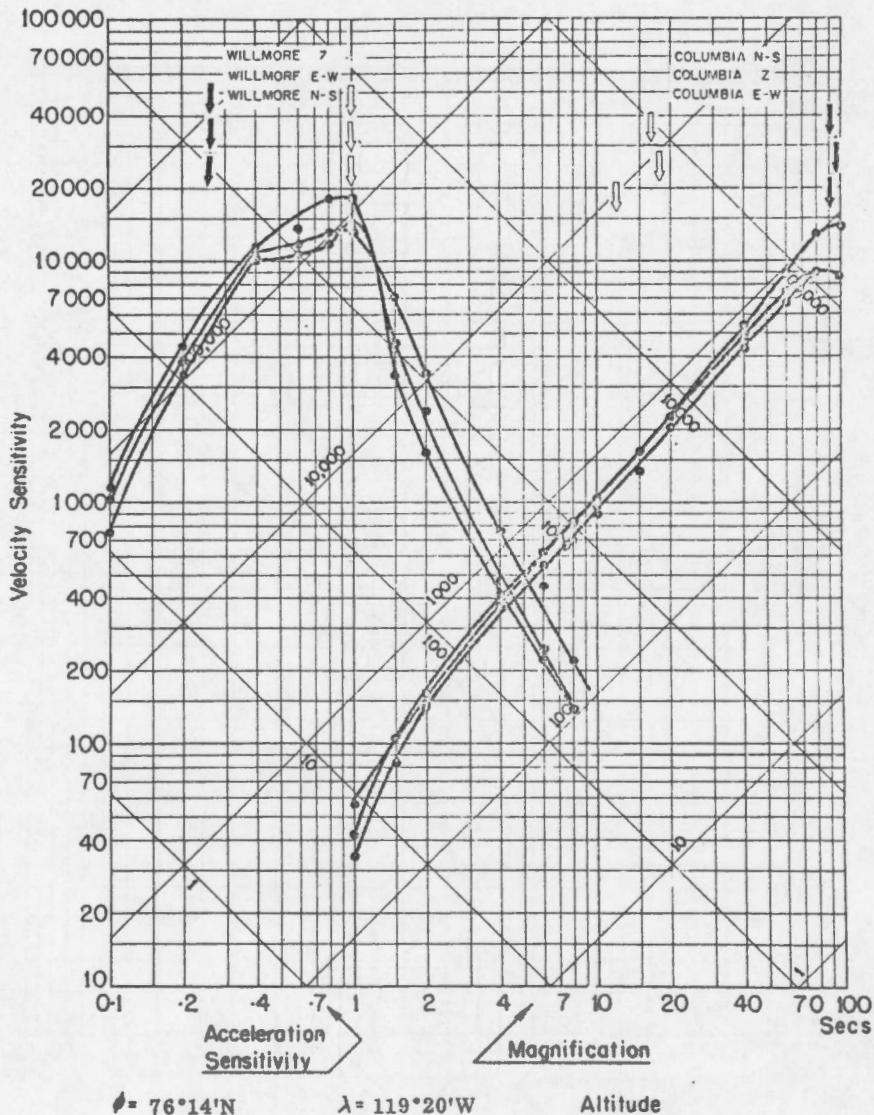
T_g

Date of Calibration: 1961-62

S. P. - Z.	NOV. 10 (at Ottawa)	L. P. - Z.	JULY 2 - 1963 installed
S. P. H. - N. S.	DEC. 11	S. P. H. - N. S.	DEC. 12
S. P. H. - E. W.	DEC. 11	S. P. H. - E. W.	DEC. 13

SEISMOLOGICAL BULLETIN - 1963

STATION: MOULD BAY



Foundation : Regolith and solifluxion deposits overlying Devonian sandstone (permafrost)

$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: 1962

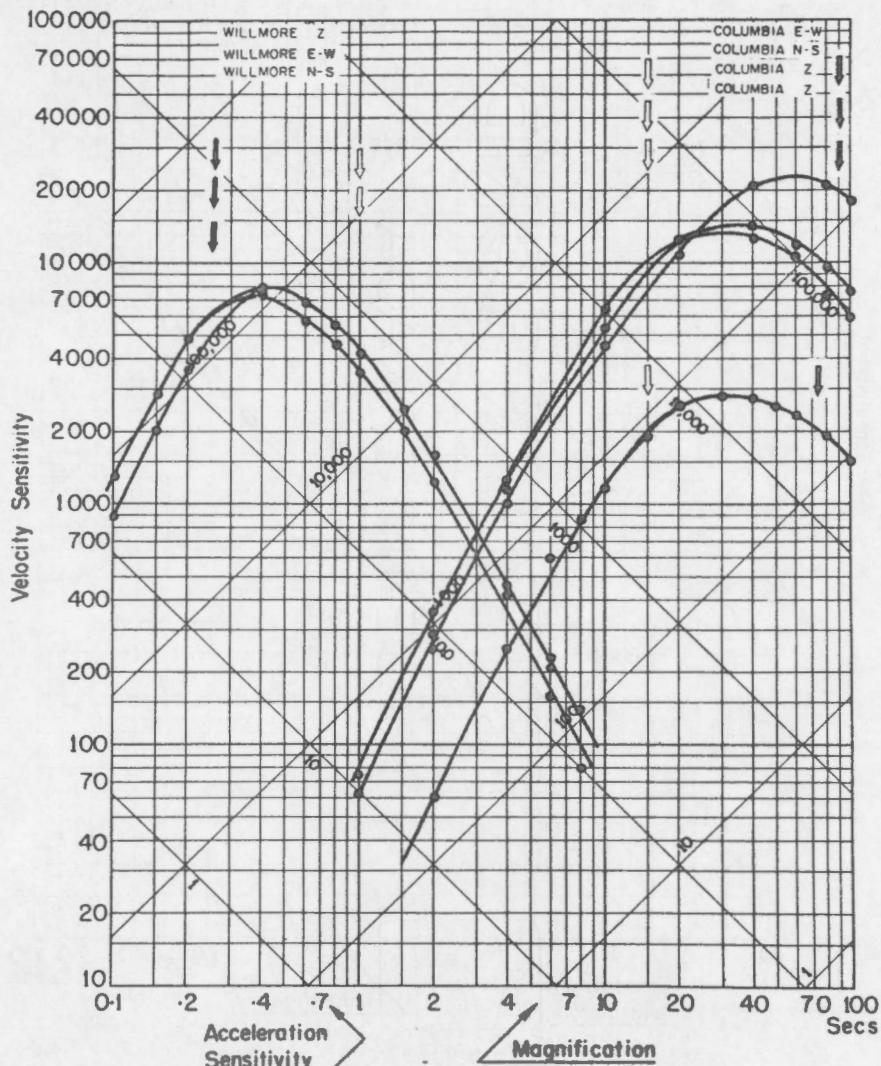
WILLMORE'S

COLUMBIA'S

S.P. -Z.	AUG. - 27	L.P. -Z.	AUG. - 31
S.P.H. - N.S.	AUG. - 27	L.P.H. - N.S.	AUG. - 30
S.P.H. - E.W.	AUG. - 27	L.P.H. - E.W.	AUG. - 30

DOMINION OBSERVATORIES

STATION: OTTAWA



T_s ↑

T_g ↑

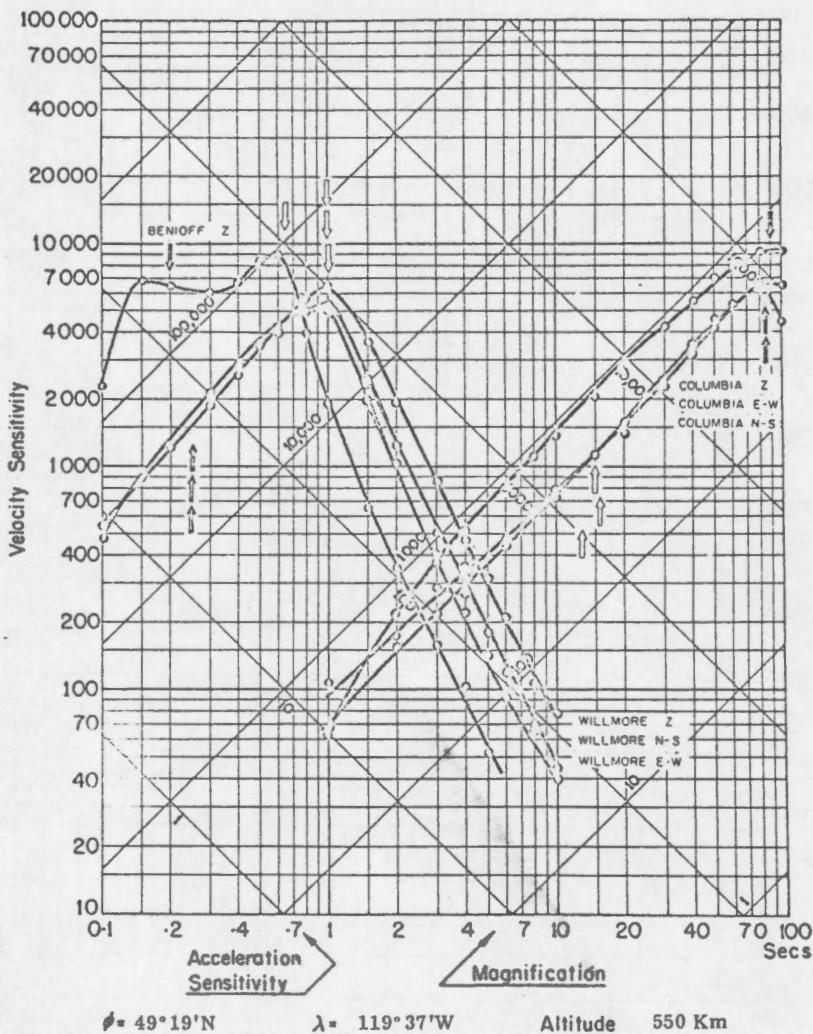
Date of Calibration: 1961-63

S.P. - Z.	JAN. 22	L.P. - Z.	JUNE 1 - 1961
S.P. - N.S.	JAN. 30	L.P. - Z.	FEB. 1
S.P. - E.W.	JAN. 23	L.P. - N.S.	FEB. 1
		L.P. - E.W.	JAN. 31

SEISMOLOGICAL BULLETIN - 1963

CALIBRATION CURVES

STATION: PENTICTON



Foundation : Tertiary shale

$T_s \downarrow$

$T_g \downarrow$

Date of Calibration: Feb. 1961

Willmore's

S. P. -Z Feb-20
S. P. H. -N. S. Feb-20
S. P. H. -E. W. Feb-20

Benioff

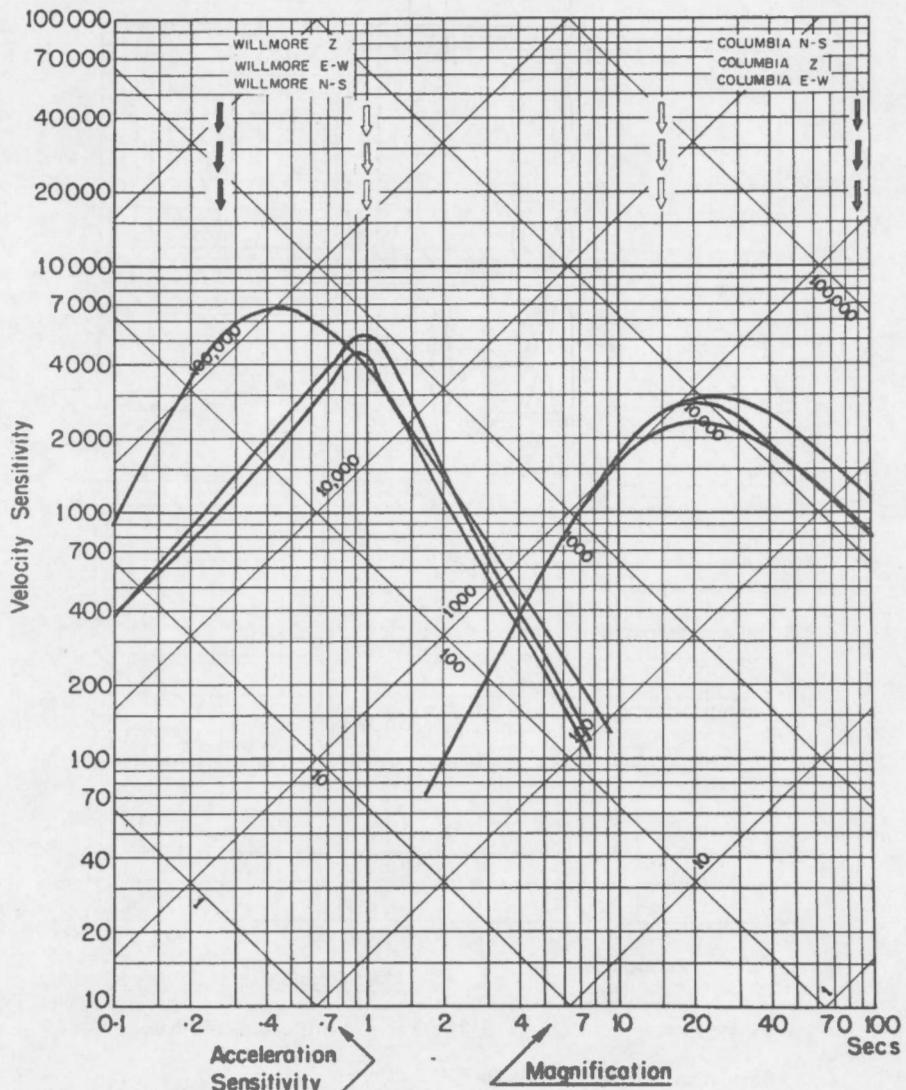
S. P. -Z Feb-19

Columbia's

L. P. -Z Feb-19
L. P. H. -N. S. Feb-18
L. P. H. -E. W. Feb-18

DOMINION OBSERVATORIES

STATION: PORT HARDY



$\phi = 50^\circ 42.4'N$ $\lambda = 127^\circ 25.9'W$ Altitude 30 m.

Foundation : Cretaceous sandstone

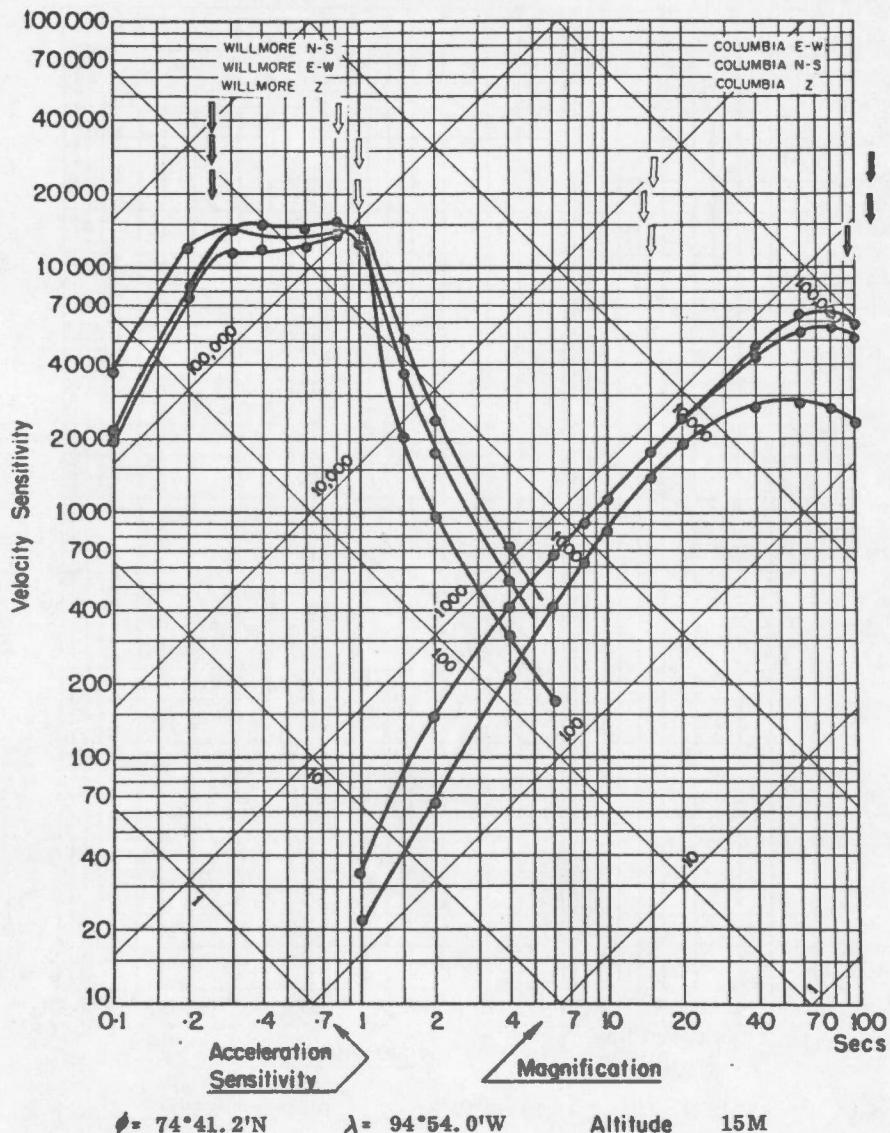
T_S 1

T_g ↑

Date of Calibration: March 17, 1963

SEISMOLOGICAL BULLETIN - 1963

STATION: RESOLUTE, N.W.T.



Foundation : Early Palaeozoic limestone

$T_s \downarrow$

$T_g \uparrow$

Date of Calibration: August 1963

WILLMORE'S

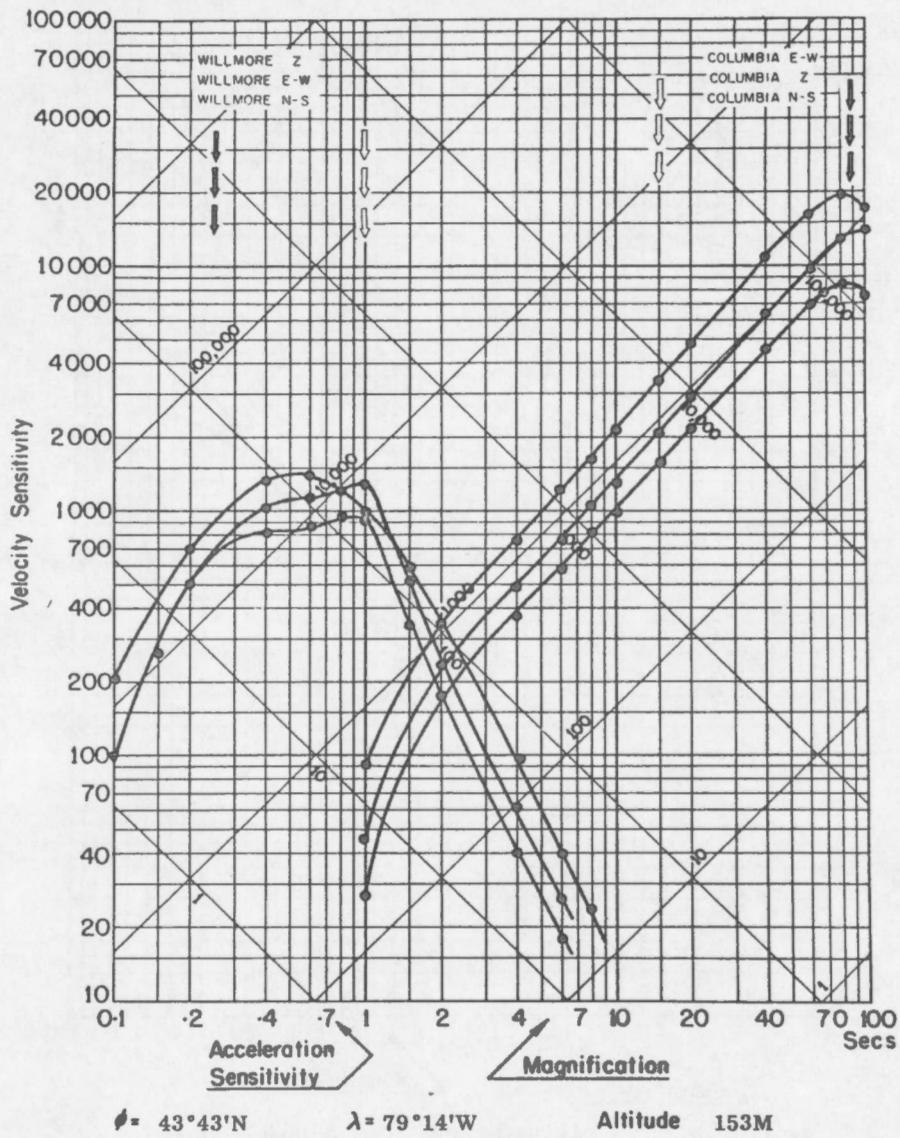
S.P. - Z. AUG. 10
S.P.H. - N.S. AUG. 10
S.P.H. - E.W. AUG. 10

COLUMBIA'S

L.P. - Z. AUG. 11
L.P.H. - N.S. AUG. 12
L.P.H. - E.W. AUG. 12

DOMINION OBSERVATORIES

STATION: SCARBOROUGH



Foundation :

$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: 1962

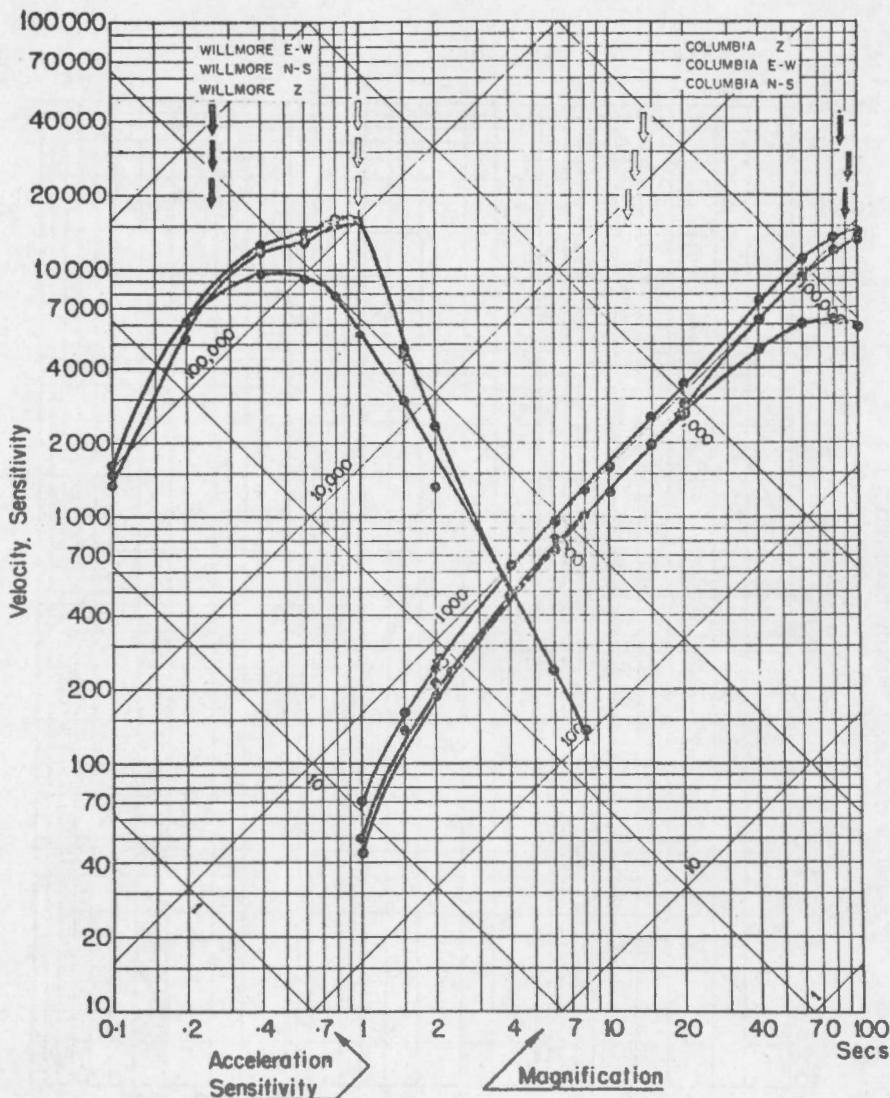
WILLMORE'S

COLUMBIA'S

S. P. - Z.	NOV. 9 (at Ottawa)	L. P. - Z.	MAY 31
S. P. H. - N. S.	MAY 30	S. P. H. - N. S.	MAY 31
S. P. H. - E. W.	MAY 30	S. P. H. - E. W.	JUNE 1

SEISMOLOGICAL BULLETIN - 1963

STATION: SCHEFFERVILLE



$\phi = 54^{\circ}49'N$

$\lambda = 66^{\circ}47'W$

Altitude 540M

Foundation: Precambrian foundation rocks.

$T_s \downarrow$

$T_g \uparrow$

Date of Calibration:

WILLMORE'S

COLUMBIA'S

S.P. - Z

JULY - 17

L.P. - Z

JULY - 19

S.P.H. - N.S. JULY - 17

L.P.H. - N.S.

JULY - 19

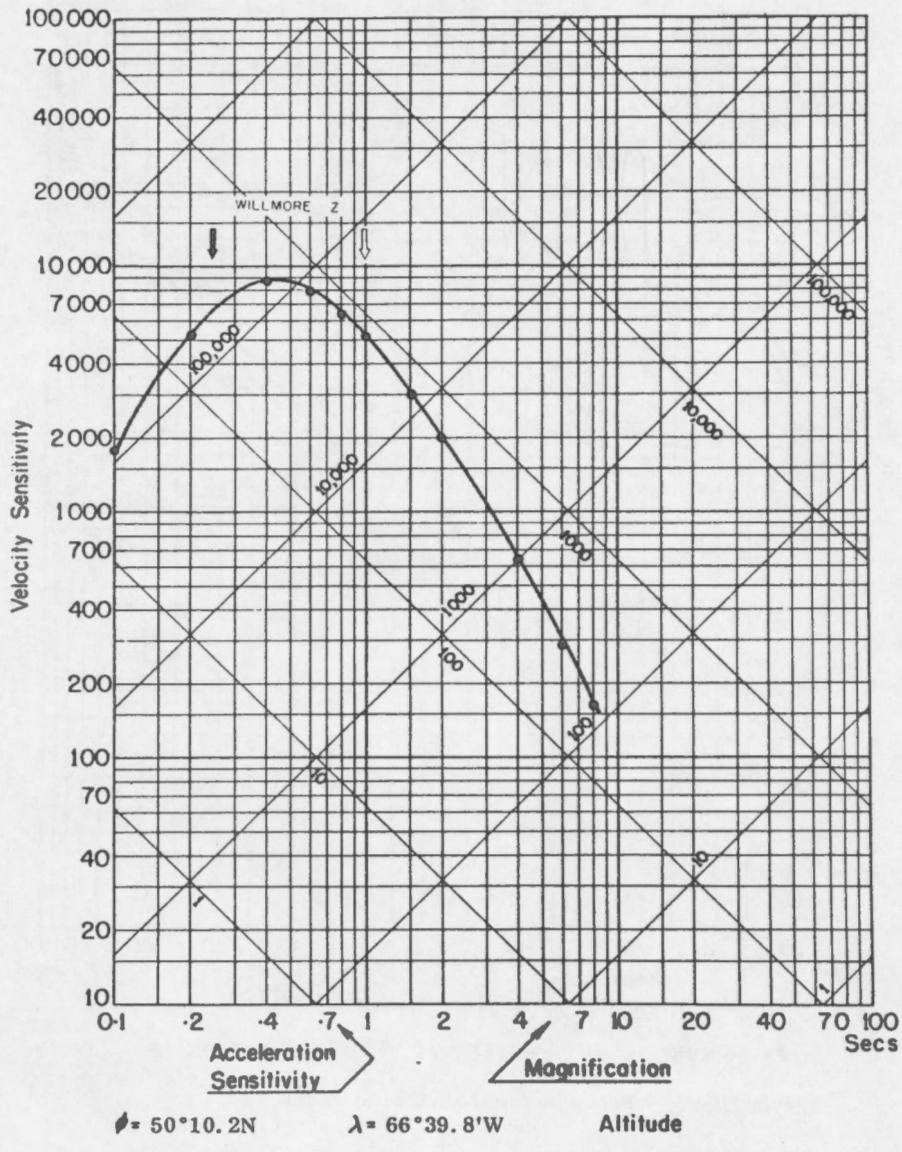
S.P.H. - E.W. JULY - 17

L.P.H. - E.W.

JULY - 19

DOMINION OBSERVATORIES

STATION: SEPT-ILES



Foundation :

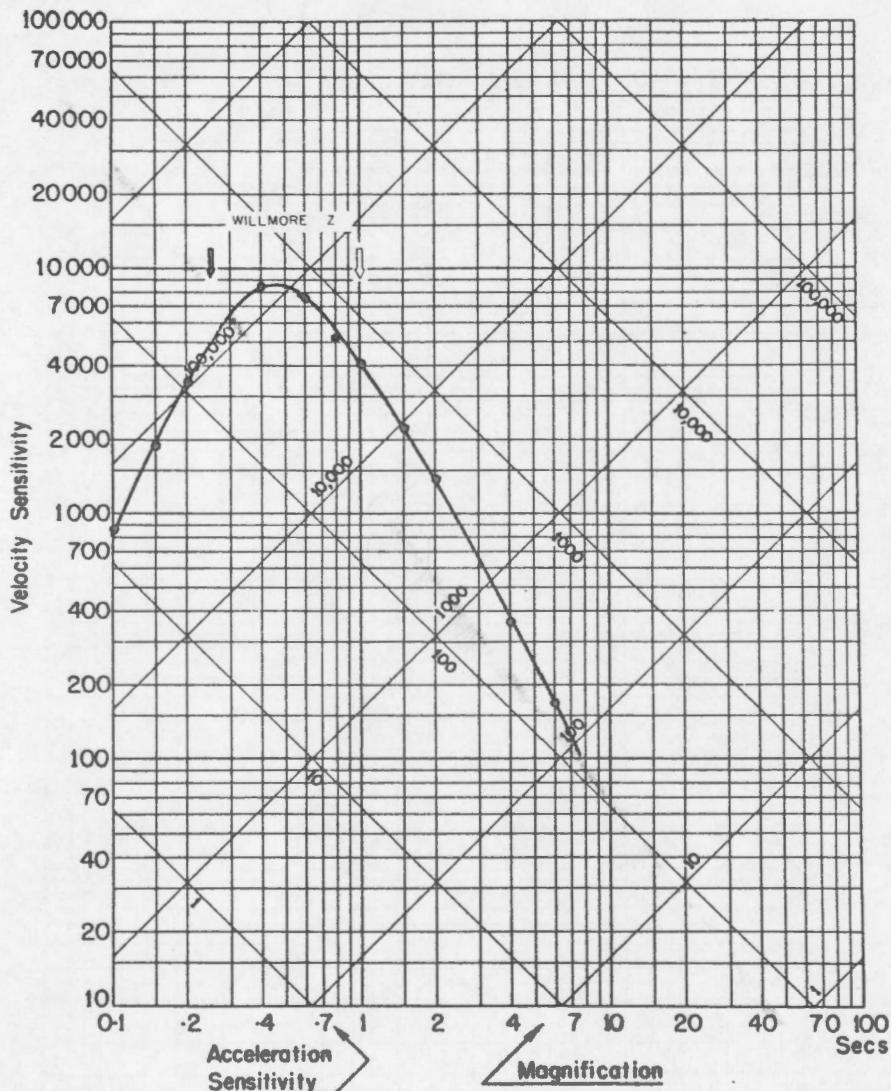
$T_s \downarrow$

$T_g \downarrow$

Date of Calibration: January 29, 1963
(at Ottawa)

SEISMOLOGICAL BULLETIN - 1963

STATION: SEVEN FALLS



$\phi = 47^{\circ}07.4'N$

$\lambda = 70^{\circ}49.6'W$

Altitude 232M

Foundation : Precambrian basement rocks.

$T_s \triangleleft$

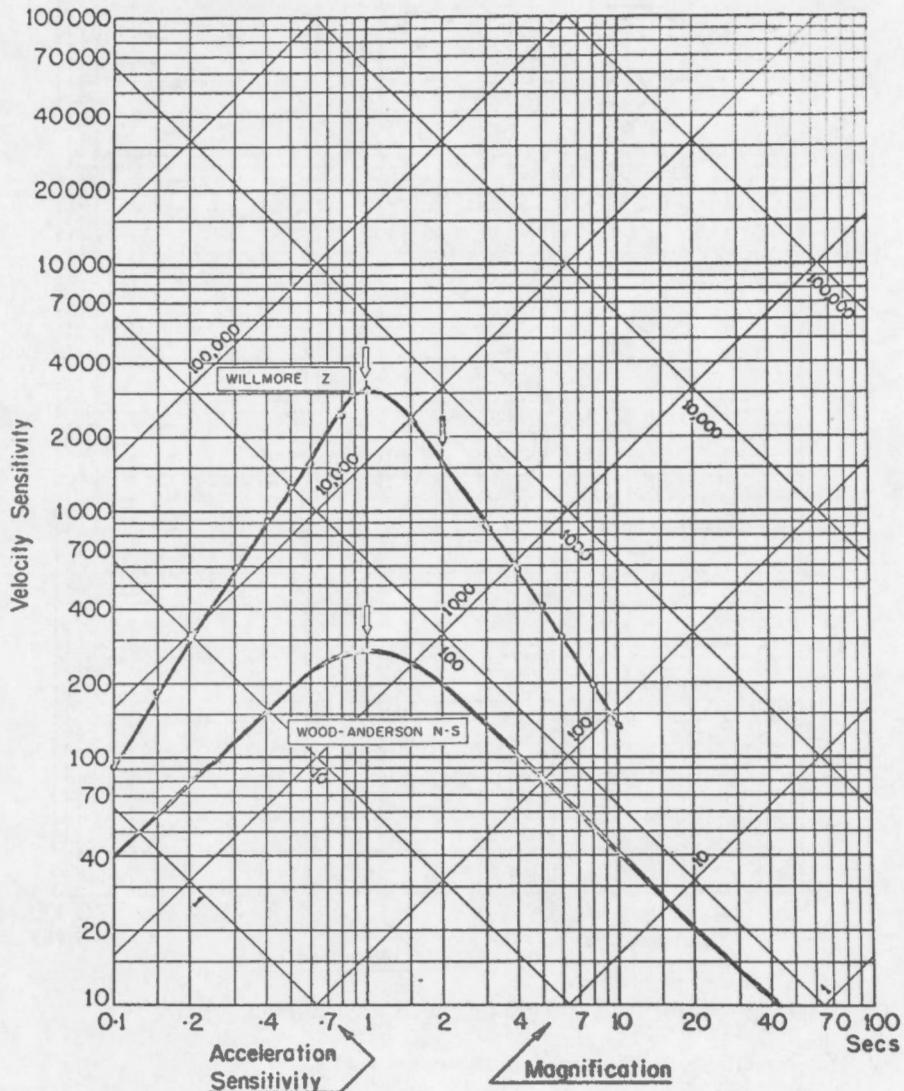
$T_g \triangleright$

Date of Calibration: February 10, 1963
(at Ottawa)

DOMINION OBSERVATORIES

CALIBRATION CURVES

STATION: SHAWINIGAN FALLS



$\phi = 43^\circ 33.1' \text{ N}$ $\lambda = 72^\circ 45.8' \text{ W}$ Altitude 60 M

Foundation : Precambrian basement

$T_s \uparrow$

$T_g \uparrow$

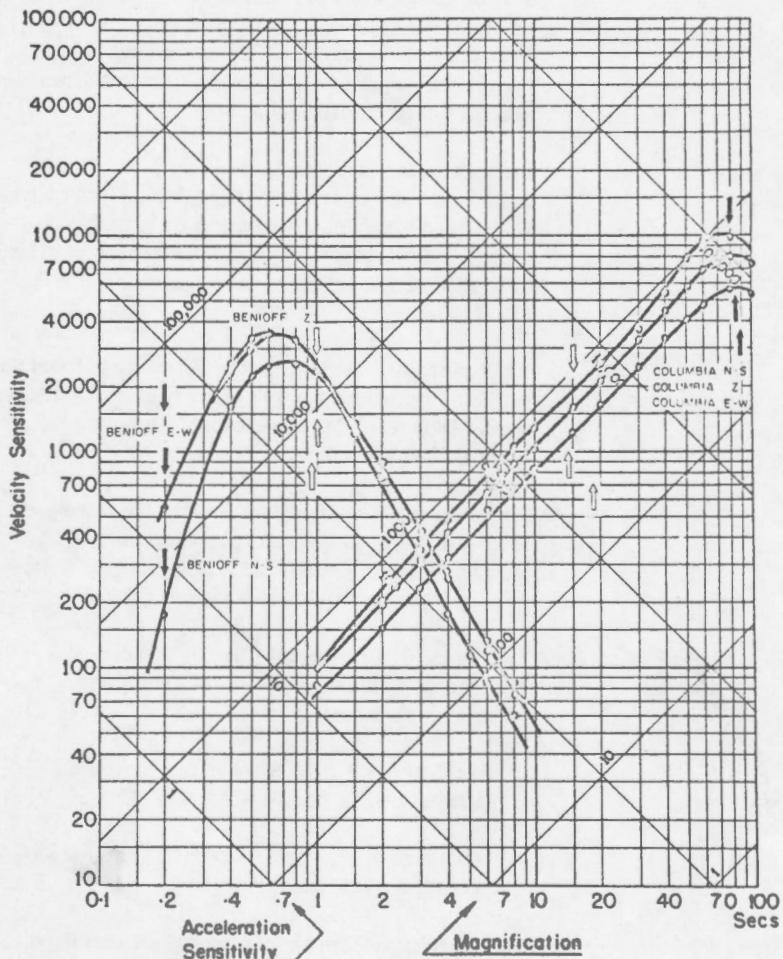
Date of Calibration: November 6, 1959

Read from end of minute mark.

SEISMOLOGICAL BULLETIN - 1963

CALIBRATION CURVES

STATION: VICTORIA (Revised)



$\phi = 48^{\circ}31'10''N$ $\lambda = 123^{\circ}24'55''W$ Altitude 197 M

Foundation : Quartz Diorite

$T_s \frac{1}{\sqrt{f}}$

$T_g \frac{1}{\sqrt{f}}$

Date of Calibration: February - March - 1961

Benioff's

Columbia's

S.P.Z. Feb. 9
S.P.H. - N.S. Feb. 10
S.P.H. - E.W. Feb. 13

L.P.Z. Mar. 22
L.P.H. - N.S. Mar. 3
L.P.H. - E.W. Mar. 2

DO MINION OBSERVATORIES

JANUARY - MARCH 1963

NOTES

1. Ottawa, Ont. January 22 - February 1, - Willmore S.P. seismographs and Columbia L.P. seismographs calibrated.
February 25 - May 10. Test running the 3 L.P. Columbia seismographs using various attenuators and damping coefficients.
2. Port Hardy, B.C. Instruments installed December 1962. S.P. seismographs operating throughout first quarter. L.P. seismographs operating on a test basis most of first quarter but seismograms available only after calibration of instruments on March 17, 1963.

This station is owned by the Dominion Observatory and operated for the Observatory by Radiosonde Division, Meteorological Branch, Department of Transport.

Records are retained in Victoria for three months for local seismicity studies, then shipped to Ottawa to be microfilmed. After being photographed the records are stored in Ottawa.
3. Schefferville, P.Q. February 6. The polarities of the two S.P. horizontal seismographs were changed to conform to standard:

Willmore S.P.-N.S. uptrace indicates ground moves north.

Willmore S.P.-E.W. uptrace indicates ground moves east.
4. Sept Iles, P.Q. Mk. II SPZ Willmore seismograph installed.

SEISMOLOGICAL BULLETIN - 1963

JANUARY 1

Penticton

eP_n 03 28 00.0

eS_n 03 28 41.1

Victoria

iP_n 03 27 42.2

iS_n 03 28 04.4

Mould Bay

eP 12 30 43

Ottawa

eP' 12 36 12

Yellowknife

eP 12 30 46 d

JANUARY 1

U.S.C.G.S.

6.9S, 155.5E

Solomon Islands

H = 17 49 31.0

h = about 82 km

Mould Bay

eP 18 02 47

JANUARY 1

Penticton

eP_n 03 55 39.5

eS_n 03 56 41.2

JANUARY 1

U.S.C.G.S.

7.4N, 74.1W

Colombia

H = 12 50 21.7

h = about 33 km

Mould Bay

eP 13 01 43

JANUARY 1

Mould Bay

eP 19 38 39

JANUARY 1

U.S.C.G.S.

6.9N, 73.1W

Colombia

H = 04 05 27.5

h = about 151 km

Alert

eP 04 16 58 c

Mould Bay

iP 04 16 47 c

Ottawa

iP 04 12 37 d

Penticton

iP 04 15 03 d

Resolute

eP 04 16 17

Schefferville

iP 04 13 54 c

Victoria

eP 04 15 16

Yellowknife

iP 04 15 41 c

JANUARY 1

U.S.C.G.S.

20.8N, 144.6E

Mariana Islands

H = 13 48 06.5

h = about 43 km

Alert

eP 13 59 52 d

Mould Bay

eP 13 59 23

Resolute

eP 13 59 59 d

Yellowknife

eP 13 59 53 d

JANUARY 1

U.S.C.G.S.

40.2S, 81.3E

Indian Ocean

H = 19 35 55.1

h = about 33 km

Mould Bay

eP' 19 55 22

Resolute

eP' 19 55 29

JANUARY 1

U.S.C.G.S.

20.0S, 175.4W

Tonga Islands

H = 16 27 38.1

h = about 130 km

Penticton

iP 16 40 01 d

JANUARY 1

U.S.C.G.S.

56.6N, 157.7W

Alaska Peninsula

H = 23 39 05.6

h = about 50 km

Mag 6 1/2 (PAS)

5 3/4 (PAL)

Alert

eP 23 45 55 c

S 23 51 19

Banff

iP 23 44 27 d

Halifax

iP 23 48 42 d

London

iP 23 47 45

Mould Bay

iP 23 44 (18) c

iS 23 48 31

Ottawa

iP 23 47 53 d

Penticton

iP 23 44 16 d

Port Hardy

iP 23 43 23 d

JANUARY 1

U.S.C.G.S.

6.8S, 155.9E

Solomon Islands

H = 12 17 38.6

h = about 165 km

DOMINION OBSERVATORIES

Resolute	JANUARY 2	JANUARY 2
eP 23 45 07 c	Mould Bay	U.S.C.G.S.
Schefferville	eP 09 01 (11) c	52.9S, 118.2W
eP 23 47 39 d		South Pacific Ocean
Victoria		H = 15 55 47.9
iP 23 44 00 c	JANUARY 2	h = about 33 km
Yellowknife	U.S.C.G.S.	Mould Bay
iP 23 43 59 d	10.0N, 84.8W	eP' 16 14 51
	West coast of	
	Costa Rica	
	H = 09 53 36.7	JANUARY 2
JANUARY 2	h = about 151 km	Mould Bay
Mould Bay	Mould Bay	eP 18 21 25
eP 00 17 (33)	eP 10 04 26	Resolute
Yellowknife	Penticton	e(P) 18 22 06 d
eP 00 17 40	iP 10 02 07 d	
JANUARY 2	JANUARY 2	JANUARY 2
U.S.C.G.S.	Mould Bay	Mould Bay
17.5N, 82.7W	eP 11 57 01	eP 21 03 53
Swan Islands region		
H = 00 53 49.1		
h = about 33 km		
Mould Bay	JANUARY 2	JANUARY 3
eP 01 04 02	U.S.C.G.S.	U.S.C.G.S.
Schefferville	51.4N, 178.4W	29.7N, 130.1E
eP 01 01 12	Andreaonof Islands	Ryukyu Islands
	Aleutian Islands	H = 03 05 03.5
	H = 11 57 21.2	h = about 33 km
JANUARY 2	h = about 29 km	Alert
U.S.C.G.S.	Mould Bay	eP 03 16 01
4.6S, 105.9W	eP 12 04 (00)	Banff
1700 km south of	Penticton	eP 03 17 16
Galapagos Islands	eP 12 04 27	Mould Bay
H = 01 15 50.6		eP 03 15 48 c
h = about 33 km		Penticton
Mould Bay	JANUARY 2	iP 03 17 12
eP 01 27 (54)	U.S.C.G.S.	Resolute
Penticton	4.1S, 135.2E	eP 03 16 24 c
iP 01 25 20 d	Near-south coast	JANUARY 3
	of Western	Mould Bay
	New Guinea	eP 05 17 17 c
JANUARY 2	H = 14 56 05.4	Resolute
H = 05 39 43	h = about 33 km	eP 05 17 53 c
Port Hardy	Mould Bay	
iP ₁ 05 40 08.7	eP 15 09 32	JANUARY 3
iS ₁ 05 40 27.0		Mould Bay
D = 150 km		eP 06 44 19

SEISMOLOGICAL BULLETIN - 1963

JANUARY 3	Yellowknife	Resolute
U.S.C.G.S.	eP 14 09 54	eP 05 53 42
52.6N, 167.8W		Yellowknife
Fox Islands		eP 05 53 44
Aleutian Islands	JANUARY 3	JANUARY 4
H = 07 13 29	Shawinigan Falls	U.S.C.G.S.
h = about 33 km	eP 19 11 (17)	32.6S, 178.6W
Mould Bay	JANUARY 4	Kermadec Islands
eP 07 19 (36)	U.S.C.G.S.	region
JANUARY 3	1.2N, 27.7W	H = 06 43 42.3
Penticton	1500 km south of	h = about 44 km
eP 08 18 15	Cape Verde Islands	Resolute
JANUARY 3	H = 00 23 55.1	eP' 07 02 25 d
Mould Bay	h = about 33 km	JANUARY 4
eP 08 39 18	Alert	H = 08 29 02
JANUARY 3	eP 00 36 17	Port Hardy
U.S.C.G.S.	Halifax	iP _n 08 29 36.5
5.3S, 151.5E	eP 00 33 14	iS _n 08 30 04.7
New Britain	Mould Bay	D = 230 km
H = 09 39 46.8	eP 00 36 49	JANUARY 4
h = about 74 km	Ottawa	U.S.C.G.S.
Banff	eP 00 34 08	46.3N, 154.3E
eP 09 53 05 c	Resolute	Kurile Islands
Mould Bay	eP 00 36 18 d	H = 08 47 25.2
eP 09 53 00	Schefferville	h = about 33 km
Ottawa	eP 00 34 16	Mould Bay
eP' 09 58 35	Shawinigan Falls	eP 08 55 36
Penticton	eP 00 33 59	JANUARY 4
eP 09 52 54	JANUARY 4	77.5°N, 118.1°W
Shawinigan Falls	Mould Bay	Off the coast of
eP' 09 58 37	eP 01 51 23	Prince Patrick Island
Yellowknife	JANUARY 4	Foreshock of the
eP 09 53 (12)	U.S.C.G.S.	earthquake on January
JANUARY 3	29.7N, 142.2E	4 at 12 43 00.6
U.S.C.G.S.	Bonin Islands region	H = 11 14 20.8
6.9S, 155.2E	H = 05 42 35.3	Mag 2.5
Solomon Islands	h = about 33 km	Mould Bay
H = 13 56 34.5	Alert	P ₁ 11 14 43
h = about 91 km	eP 05 53 30	S ₁ 11 15 00
Mould Bay	Mould Bay	D = 140 km
eP 14 09 50 c	eP 05 53 03	
	Pentiction	
	iP 05 54 04	

DOMINION OBSERVATORIES

JANUARY 4

77.5°N, 118.1°W
Off the coast of
Prince Patrick Island.
Foreshock of the
earthquake on
January 4 at 12 43 00.6
H = 11 18 01.8
Mag 2.0
Mould Bay
P₁ 11 18 24
S₁ 11 18 41
D = 140 km

JANUARY 4

77.5°N, 118.1°W
Off the coast of
Prince Patrick Island.
Foreshock of the
earthquake on
January 4 at 12 43 00.6
H = 12 13 10.8
Mag 2.0
Mould Bay
P₁ 12 13 33
S₁ 12 13 50
D = 140 km

JANUARY 4

77.5N, 118.1°W
Off the coast of
Prince Patrick Island,
near Cape Leopold
McClintock
H = 12 43 00.6
Mag 3.2
Alert
Not recorded
Mould Bay
P₁ 12 43 23 c,S
S₁ 12 43 40
D = 140 km

Resolute

P_n 12 44 30
S_n 12 45 37
L_g 12 46 07
D = 690 km

JANUARY 4

77.5°N, 118.1°W
Off the coast of
Prince Patrick Island.
Foreshock of the
earthquake on
January 4 at 12 43 00.6
H = 11 21 50.8
Mag 2.0
Mould Bay
P₁ 11 22 13
S₁ 11 22 30
D = 140 km

JANUARY 4

U.S.C.G.S.
4.7S, 154.0E
Solomon Islands
region
H = 12 16 38.0
h = about 69 km
Alert
e 12 40.9
Mould Bay
eP 12 29 (50)
Penticton
eP 12 29 30
Yellowknife
eP 12 29 (54)

JANUARY 4

77.5°N, 118.1°W
Off the coast of
Prince Patrick Island,
Aftershock of the
earthquake on
January 4 at 12 43 00.6
H = 12 55 44.8
Mag 2.0
Mould Bay
P₁ 12 56 07
S₁ 12 56 24
D = 140 km

JANUARY 4

77.5°N, 118.1°W
Off coast of
Prince Patrick Island.
Foreshock of the
earthquake on
January 4 at 12 43 00.6
H = 11 54 26.8
Mag 2.2
Mould Bay
P₁ 11 54 49
S₁ 11 55 06
D = 140 km

JANUARY 4

77.5°N, 118.1°W
Off the coast of
Prince Patrick Island.
Foreshock of the
earthquake on
January 4 at 12 43 00.6
H = 12 27 21.8
Mag 2.2
Mould Bay
P₁ 12 27 44
S₁ 12 28 01
D = 140 km

JANUARY 4

H = 13 22 48
Mag 2.8
Probably in Montana,
U.S.A.
Banff
eP_n 13 23 33.3
eS_n 13 24 11.3
D = 312 km

SEISMOLOGICAL BULLETIN - 1963

Penticton	JANUARY 4	JANUARY 5
eP _n 13 23 44.8	Mould Bay	U.S.C.G.S.
eS _n 13 24 36.0	eP 18 32 17	3.2N, 127.0E
D = 420 km		Halmahera region
	JANUARY 4	H = 00 20 11.6
	77.5°N, 118.1°W	h = about 33 km
JANUARY 4	Off the coast of	Mould Bay
77.5°N, 118.1°W	Prince Patrick Island.	eP 00 33 21
Off the coast of	Aftershock of the	Resolute
Prince Patrick Island	earthquake on	eP 00 33 48 c
Aftershock of the	January 4 at 12 43 00.6	
earthquake on	H = 18 55 51.8	JANUARY 5
January 4 at 12 43 00.6	Mag 2.1	Banff
H = 13 23 20.8	Mould Bay	eP 00 40 13 d
Mag 2.0	P ₁ 18 56 14	Penticton
Mould Bay	S ₁ 18 56 31	iP 00 39 59 d
P ₁ 13 23 43	D = 140 km	
S ₁ 13 24 00		
D = 140 km		
	JANUARY 4	JANUARY 5
JANUARY 4	U. S. C. G. S.	Mould Bay
Penticton	6.9N, 73.1W	eP 01 49 49 d
iP 13 47 50	Colombia	
	H = 21 17 10.0	
	h = about 160 km	JANUARY 5
JANUARY 4	Mould Bay	Mould Bay
77.5°N, 118.1°W	eP 21 28 28 d	eP 04 05 06
Off the coast of	Penticton	
Prince Patrick Island	eP 21 26 45	JANUARY 5
Aftershock of the	Yellowknife	Mould Bay
earthquake on	iP 21 27 22 d	eP 05 49 (14)
January 4 at 12 43 00.6		Yellowknife
H = 16 24 40.8	JANUARY 4	eP 05 47 57
Mag 1.9	U. S. C. G. S.	
Mould Bay	46.5N, 153.7E	JANUARY 5
P ₁ 16 25 03	Kurile Islands	U.S.C.G.S.
S ₁ 16 25 20	H = 23 50 09.1	65.2N, 148.0W
D = 140 km	h = about 33 km	Central Alaska
	Alert	H = 06 52 26.6
	eP 23 59 00	h = about 33 km
JANUARY 4	Mould Bay	Banff
Canadian Arctic	eP 23 58 20 c	eP 06 57 16
H = 18 16 37	Resolute	Mould Bay
Mag 2.1	eP 23 59 09 c	eP 06 55 (50)
Alert		Penticton
P ₁ 18 17 02		iP 06 57 17 c
S ₁ 18 17 21		
D = 156 km		

DOMINION OBSERVATORIES

Victoria		Halifax	JANUARY 6
eP	06 57 14	eP'	13 36 19
Yellowknife		Mould Bay	U.S.C.G.S.
eP	06 55 52	eP	13 30 54
		Penticton	6.0N, 125.3E
		iP'	13 35 24
JANUARY 5		Victoria	Near coast of
U.S.C.G.S.		eP'	Mindanao, Philippine
46.8N, 153.7E		13 35 20	Islands
Kurile Islands		Yellowknife	H = 03 18 56.6
H = 07 05 22.3		eP'	h = 143 km
h = about 33 km		13 35 19	Mould Bay
Alert		JANUARY 5	eP
eP	07 14 12 c	U.S.C.G.S.	03 31 41
i	07 15 01	43.0N, 152.6E	eP'
Mould Bay		Kurile Islands region	03 37 41
eP	07 13 31 c	H = 15 05 00	Resolute
Penticton		h = about 33 km	JANUARY 5
iP	07 14 51 d	Resolute	U.S.C.G.S.
Resolute		eP	23.6N, 108.6W
eP	07 14 20 c	15 14 09 c	Gulf of California
JANUARY 5		JANUARY 5	H = 04 40 14
U.S.C.G.S.		U.S.C.G.S.	h = about 33 km
7.3S, 73.9W		7.0S, 72.1W	Mould Bay
Peru-Brazil border		Western Brazil	eP
H = 11 05 10.5		H = 17 43 35.1	04 49 30
h = about 180 km		h = about 544 km	
Penticton		Alert	JANUARY 6
iP	11 15 59 c	eP	H = 06 01 17
JANUARY 5		Mould Bay	Port Hardy
Yellowknife		iP	eP ₁
e(P)	11 47 12	17 55 25 d	eS ₁
JANUARY 5		Penticton	D = 173 km
U.S.C.G.S.		iP	
10.0S, 124.0E		17 53 52 d	JANUARY 6
Timor		Resolute	U.S.C.G.S.
H = 13 16 43.0		eP	1.8S, 80.7W
h = about 33 km		Shawinigan Falls	Near coast of Ecuador
Alert		eP	H = 06 17 28.0
e	13 44.9	Yellowknife	h = about 51 km
Banff		iP	Alert
eP'	13 35 26	17 54 29 d	iP
		Mould Bay	06 29 57
		eP	Banff
		21 35 06	eP
			06 27 34
			London
			eP
			06 25 36 c

SEISMOLOGICAL BULLETIN - 1963

Mould Bay	JANUARY 6	JANUARY 6
eP 06 29 38 c	U.S.C.G.S.	U.S.C.G.S.
Ottawa	62.7N, 151.1W	8.9S, 123.8E
eP 06 25 56	Central Alaska	Near Flores
Penticton	H = 17 25 53.8	H = 19 46 58.8
iP 06 27 38 c	h = about 116 km	h = about 33 km
Resolute	Alert	Schefferville
eP 06 29 (15)	iP 17 31 38 d	eP' 20 06 11
Schefferville	Banff	e 20 09 33
eP 06 27 14	eP 17 30 42	Shawinigan Falls
Shawinigan Falls	Halifax	e 20 09 52
eP 06 26 13	iP 17 34 41 d	
Yellowknife	Mould Bay	
eP 06 28 29 c	eP 17 29 47	
JANUARY 6	Penticton	JANUARY 6
U.S.C.G.S.	iP 17 30 39 d	U.S.C.G.S.
46.8N, 153.6E	Resolute	47.4N, 155.9E
Kurile Islands	eP 17 30 44 d	Kurile Islands
H = 07 29 54.3	eP 17 33 31 d	H = 21 20 56.5
h = about 33 km	Shawinigan Falls	h = about 33 km
Alert	eP 17 33 59	Alert
eP 07 38 44 c	Yellowknife	eP 21 29 40 d
Mould Bay	iP 17 29 41	Banff
eP 07 38 03 c		eP 21 30 21
Penticton	JANUARY 6	Mould Bay
eP 07 39 20	Yellowknife	eP 21 28 57 d
Resolute	eP 17 37 49	Ottawa
eP 07 38 52 c		eP 21 32 47
JANUARY 6	Penticton	
U.S.C.G.S.	iP 21 30 13	Resolute
41.7N, 142.4E		eP 21 29 46 d
Near south coast of	JANUARY 6	Schefferville
Hokkaido, Japan	U.S.C.G.S.	eP 21 32 18 d
H = 08 04 31.4	44.7N, 112.0W	Shawinigan Falls
h = about 57 km	Montana - Idaho	eP 21 32 48
Mould Bay	border region	Yellowknife
eP 08 13 35	H = 18 07 47.8	iP 21 29 42 d
Resolute	h = about 33 km	
eP 08 14 19 c	Banff	
JANUARY 6	eP 18 09 25	JANUARY 7
Mould Bay	Mould Bay	Mould Bay
eP 10 08 54 c	eP 18 14 10	eP 02 46 (11)
Resolute	Penticton	
eP 10 09 21 c	eP 18 09 25	
	Victoria	JANUARY 7
	eP 18 09 50	U.S.C.G.S.
	Yellowknife	6.4S, 154.7E
	eP 18 11 50	Solomon Islands
		H = 06 24 49.2
		h = about 80 km

DOMINION OBSERVATORIES

Banff		Shawinigan Falls	JANUARY 8	
eP	06 38 02	eP'	12 07 30	Yellowknife
Mould Bay		Yellowknife	e	10 51 51
eP	06 38 03 c	eP	12 02 16	
Ottawa				
eP'	06 43 34			JANUARY 8
Penticton		JANUARY 7	Resolute	
iP	06 37 50	Alert	eP	14 09 47 d
Shawinigan Falls		e(P)	15 13 (00)	
eP'	06 43 37			
Yellowknife				JANUARY 8
iP	06 38 08 c	JANUARY 7	Mould Bay	
		Port Hardy	eP	15 24 36
JANUARY 7		eP ₁	18 59 46.2	
Penticton		eS ₁	19 00 05.5	
eP	07 08 55	D = 158 km		JANUARY 8
				U.S.C.G.S.
JANUARY 7		JANUARY 7	31.2N, 130.2E	
Penticton		Port Hardy	Near south coast of	
eP	07 28 10	eP ₁	Kyushu, Japan	
		eS ₁	H = 15 46 45.5	
		D = 173 km	h = about 177 km	
			Alert	
JANUARY 7			eP	15 57 16
Penticton			i	15 57 58
eP	07 57 48	JANUARY 7	Mould Bay	
		U.S.C.G.S.	eP	15 57 04 c
		17.5S, 167.7E	i	15 57 43
JANUARY 7		New Hebrides Islands	Penticton	
Alert		H = 19 19 34.1	iP	15 58 30
e(P)	10 12 (01)	h = about 19 km	Resolute	
		Shawinigan Falls	eP	15 57 41 c
		eP'	Schefferville	
		19 38 31	eP	15 59 (40)
JANUARY 7			Yellowknife	
U.S.C.G.S.			eP	15 57 58
0.6N, 126.7E		JANUARY 8		
Halmahera region		U.S.C.G.S.		
H = 11 48 22.7		39.9N, 77.9E		
h = about 42 km		Sinkiang Province,	JANUARY 8	
Mag 5 1/2 - 5 3/4		China	Mould Bay	
(PAL)		H = 01 31 47.4	eP	19 49 49
Alert		h = about 33 km		
eP	12 01 (54)	Mould Bay	JANUARY 8	
Mould Bay		eP	U.S.C.G.S.	
eP	12 01 41	01 42 16 c	17.0S, 171.8W	
Ottawa			Samoa Islands region	
eP'	12 07 30		H = 19 50 04.9	
Resolute			h = about 33 km	
eP	12 02 09 c	Penticton		
		iP	20 02 15 c	

SEISMOLOGICAL BULLETIN - 1963

JANUARY 8

Mould Bay

eP 23 23 39

JANUARY 9

H = 00 01 27

Mag 1.3

Penticton

eP₁ 00 01 41.2

eS₁ 00 01 51.7

D = 86 km

JANUARY 9

U.S.C.G.S.

18.6N, 145.4E

Mariana Islands

H = 03 13 26.4

h = about 192 km

Alert

iP 03 25 06 c

Mould Bay

eP 03 24 37

i 03 25 20

S 03 33 48

Penticton

iP 03 25 11

Resolute

eP 03 25 13 c

Yellowknife

iP 03 25 05 c

JANUARY 9

Mould Bay

eP 08 37 32

Yellowknife

eP 08 36 10

eS 08 39 22

JANUARY 9

Port Hardy

eP_n 17 00 05.6

eS_n 17 00 32.0

D = 216 km

JANUARY 9

Penticton

eP 19 41 48

JANUARY 9

Penticton

eP 19 47 49

JANUARY 9

Mould Bay

eP 23 05 (11)

JANUARY 9

Port Hardy

eP₁ 23 49 41.4

eS₁ 23 49 49.8

D = 69 km

JANUARY 10

U.S.C.G.S.

18.8N, 106.3W

Off coast of

Jalisco, Mexico

H = 05 18 36.9

h = about 33 km

Mould Bay

eP 05 28 (26)

JANUARY 10

U.S.C.G.S.

36.7N, 70.8E

Hindu Kush

H = 06 47 04.0

h = about 193 km

Mould Bay

eP 06 57 38 c

JANUARY 10

Port Hardy

eP₁ 08 58 43.8

eS₁ 08 58 51.3

D = 61 km

JANUARY 10

Mould Bay

eP 09 27 (52)

JANUARY 10

U.S.C.G.S.

52.6N, 157.2E

Kamchatka

H = 17 14 07.3

h = about 125 km

Yellowknife

eP 17 22 09

JANUARY 10

U.S.C.G.S.

13.1N, 146.5E

Mariana Islands

H = 18 54 46.1

h = about 61 km

Alert

eP 19 07 10 c

Mould Bay

iP 19 06 41 c

Resolute

eP 19 07 14 c

Yellowknife

iP 19 07 03

JANUARY 11

U.S.C.G.S.

37.7N, 101.6E

Tsinghai Province,

China

H = 01 07 28.0

h = about 33 km

Mould Bay

eP 01 17 56

Resolute

eP 01 18 22 (d)

Yellowknife

eP 01 19 (14)

JANUARY 11

Resolute

eP 05 06 (00)

DOMINION OBSERVATORIES

JANUARY 11

U.S.C.G.S.
7.5N, 82.5W
Near south coast
of Panama
H = 06 42 41.8
h = about 33 km
Yellowknife
eP 06 52 43 d

JANUARY 11

Canadian Arctic
H = 07 18 09.2
Mag 2.1
Resolute
P₁ 07 18 19
S₁ 07 18 26.5
D = 61.5 km

JANUARY 11

U.S.C.G.S.
35.7N, 70.7E
Hindu Kush
H = 11 41 40.0
h = about 127 km
Mould Bay
eP 11 52 28 d

JANUARY 11

U.S.C.G.S.
45.0S, 75.7W
Near coast of
Southern Chile
H = 12 12 16.2
h = about 33 km
Alert
iP' 12 31 17
London
iP 12 25 04 (c)

Mould Bay
eP' 12 31 10
i 12 31 12

Ottawa
eP 12 25 13
Shawinigan Falls
eP 12 25 21
Yellowknife
eP' 12 30 46

JANUARY 11

U.S.C.G.S.
12.6N, 88.2W
Off coast of
El Salvador
H = 14 36 11.0
h = about 33 km
Alert
iP 14 47 23
Banff
eP 14 44 18

Mould Bay

eP 14 46 53
Penticton
eP 14 44 24
Resolute
eP 14 46 29
Schefferville
eP 14 44 27 d
Shawinigan Falls
eP 14 43 12
Yellowknife
iP 14 45 27

JANUARY 11

U.S.C.G.S.
29.4S, 178.6W
Kermadec Islands
H = 17 05 42.3
h = about 225 km
Mould Bay
eP' 17 23 49
Resolute
eP' 17 23 58

JANUARY 11

H = 23 21 07
Mag 2.0
Penticton
eP_n 23 21 41.9
eS_n 23 22 09.7
D = 228 km

JANUARY 12

JANUARY 12

Mould Bay
eP 02 03 24
Resolute
e(P) 02 03 52 d

JANUARY 12

Mould Bay
eP 03 50 26

JANUARY 12

U.S.C.G.S.
4.8N, 76.7W
Northern Colombia
H = 03 40 34.8
h = about 102 km
Alert

iP 03 53 23 c
Banff
iP 03 50 07 c
Halifax
eP 03 48 13

London
iP 03 47 47 c

Mould Bay
iP 03 52 06 c

Penticton
iP 03 50 14 c
Port Hardy
iP 03 50 48 c

Resolute
eP 03 51 39 c

Schefferville
iP 03 49 25 c
Shawinigan Falls
iP 03 48 17 c

Victoria
iP 03 50 26 c

Yellowknife
iP 03 50 58 c

JANUARY 12

Victoria
eP 00 33 10 d

SEISMOLOGICAL BULLETIN - 1963

JANUARY 12
U.S.C.G.S.
15.1N, 120.5E
Luzon, Philippine Islands
H = 04 19 27.8
h = about 83 km
Mould Bay
eP 04 31 40
Resolute
e(P) 04 32 08 d

JANUARY 12
U.S.C.G.S.
1.8N, 129.3E
Halmahera region
H = 09 13 04.2
h = about 112 km
Mould Bay
eP 09 26 08
Resolute
eP 09 26 35 (d)

JANUARY 12
U.S.C.G.S.
7.1N, 125.2E
Mindanao, Philippine Islands
H = 23 21 52.1
h = about 84 km
Mould Bay
eP 23 34 39
Resolute
eP 23 35 06

JANUARY 12
U.S.C.G.S.
16.7N, 98.3W
Near coast of Oaxaca, Mexico
H = 06 02 10
h = about 33 km
Banff
eP 06 09 28
Mould Bay
eP 06 12 18
Penticton
iP 06 09 17
Resolute
eP 06 12 (03)
Yellowknife
eP 06 10 39

JANUARY 12
Penticton
iP 10 54 27
JANUARY 12
H = 13 12 36
Mag 0.6
Victoria
iP₁ 13 12 37.6
iS₁ 13 12 38.9
D = 10 km
JANUARY 12
H = 14 43 10
Mag 2.6
Penticton
iP_n 14 43 55.4
iS_n 14 44 33.9
D = 315 km

JANUARY 13
Penticton
eP 09 01 16

JANUARY 13
Yellowknife
e(P) 11 52 04

JANUARY 13
U.S.C.G.S.
14.0S, 171.2E
New Hebrides Islands region
H = 13 43 42.1
h = about 634 km
Penticton
iP 13 55 26

JANUARY 12
U.S.C.G.S.
36.1N, 69.6E
Hinda Kush
H = 06 20 13.6
h = about 97 km
Alert
e(P) 06 30 06
Mould Bay
eP 06 31 02 c
Penticton
iP 06 33 24
Yellowknife
iP 06 32 22 d

JANUARY 12
Penticton
eP 14 58 47
JANUARY 12
Alert
e(P) 20 22 (07)

JANUARY 13
U.S.C.G.S.
49.7S, 163.7E
Auckland Island region
H = 16 21 13.1
h = about 33 km
Alert
eP' 16 40 44

DOMINION OBSERVATORIES

JANUARY 14	JANUARY 14	JANUARY 15
U.S.C.G.S. 62.2N, 150.1W	Mould Bay eP 13 51 10 c	U.S.C.G.S. 13.4N, 145.3E
Central Alaska H = 02 18 02.0 h = about 91 km	Resolute eP 13 51 46 c	Mariana Islands H = 02 32 39.9 h = about 38 km
Banff eP 02 22 46	JANUARY 14	Alert eP 02 45 05
Mould Bay eP 02 22 01 d	U.S.C.G.S. 45.7N, 26.6E	Banff eP 02 45 14
Penticton iP 02 22 42	Romania H = 18 33 25.3 h = about 132 km	Mould Bay eP 02 44 37 c
Resolute eP 02 23 01	Alert	Penticton eP 02 45 04
Shawinigan Falls eP 02 26 08	eP 18 41 28	Resolute eP 02 45 11 c
Yellowknife eP 02 21 46 c	Mould Bay eP 18 42 54	Victoria eP 02 44 56
JANUARY 14	Resolute eP 18 42 36	Yellowknife IP 02 45 01 c
U.S.C.G.S. 21.2S, 169.3E	Yellowknife eP 18 44 09	JANUARY 15
Loyalty Islands H = 11 19 47.5 h = about 33 km	JANUARY 14	Mould Bay eP 03 23 10
Ottawa eP' 11 38 39	Yellowknife e 21 49 44	JANUARY 15
Penticton eP 11 33 06	JANUARY 15	Mould Bay eP 03 33 28
JANUARY 14	U.S.C.G.S. 68.9N, 17.1W	Resolute eP 03 33 05 (d)
Mould Bay eP 12 42 33	Denmark Strait H = 01 32 20.0 h = about 33 km	Schefferville eP 03 31 02
JANUARY 14	Alert	JANUARY 15
Resolute eP 12 43 09 c	eP 01 36 06	Mould Bay eP 04 47 47
JANUARY 14	Banff eP 01 40 44	JANUARY 15
Mould Bay eP 12 47 20 c	Mould Bay eP 01 38 06	Mould Bay eP 04 47 47
Resolute eP 12 47 56 c	S 01 42 56	JANUARY 15
Yellowknife eP 12 48 12	Penticton eP 01 41 08	U.S.C.G.S. 69.0N, 16.6W
	Resolute eP 01 37 25 d	Jan Mayen Island region H = 05 23 10.4
	Yellowknife eP 01 39 (23)	h = about 33 km
	Alert eP 05 26 56	Alert

SEISMOLOGICAL BULLETIN - 1963

Mould Bay	Mould Bay	JANUARY 15
eP 05 28 55	eP 14 01 19 d	U.S.C.G.S.
S 05 33 44	Resolute	17.1S, 179.6W
Penticton	eP 14 00 55 d	Fiji Islands
eP 05 31 (56)	Yellowknife	H = 17 39 19.2
Resolute	eP 13 59 53 c	h = about 276 km
eP 05 28 15 d		Banff
Schefferville		eP 17 51 40
eP 05 28 46	JANUARY 15	Penticton
Yellowknife	Mould Bay	iP 17 51 26
eP 05 30 13 c	eP 14 17 (13)	
JANUARY 15	JANUARY 15	JANUARY 15
Mould Bay	Mould Bay	U.S.C.G.S.
eP 11 59 40	eP 14 49 31	38.2N, 75.8E
i 12 00 30		Northern India
Yellowknife		H = 19 11 09
eP 12 00 04	JANUARY 15	h = about 153 km
JANUARY 15	U.S.C.G.S.	Mould Bay
U.S.C.G.S.	36.0N, 23.9E	iP 19 21 35 c
36.7N, 102.1E	Mediterranean Sea	
Tsinghai, China	H = 15 04 15.0	JANUARY 15
H = 12 22 29.9	h = about 81 km	U.S.C.G.S.
h = about 33 km	Alert	20.5S, 177.9W
Mould Bay	eP 15 13 32 c	Fiji Islands
eP 12 33 (05)	Banff	H = 19 26 34.3
JANUARY 15	eP 15 16 50 c	h = about 496 km
U.S.C.G.S.	Halifax	Alert
24.9N, 122.0E	iP 15 14 44 c	eP' 19 44 14 c
Near coast of Formosa	Mould Bay	Banff
H = 13 08 57.2	eP 15 14 51 c	eP 19 38 39
h = about 47 km	Resolute	Mould Bay
Mould Bay	eP 15 14 32	eP 19 39 (32)
eP 13 20 19	Yellowknife	eP' 19 43 53
Yellowknife	iP 15 15 56 c	Penticton
eP 13 21 13	JANUARY 15	iP 19 38 25 d
JANUARY 15	Mould Bay	Resolute
U.S.C.G.S.	eP 15 47 31	eP' 19 44 02 c
11.5N, 87.8W		Schefferville
Off west coast of		eP' 19 44 24
Nicaragua		Shawinigan Falls
H = 13 50 28.3	eP 16 52 (47)	iP' 19 44 17
h = about 33 km	JANUARY 15	Victoria
	Mould Bay	eP 19 38 13 d
	eP 16 52 (47)	Yellowknife
		iP 19 39 09 c

DOMINION OBSERVATORIES

JANUARY 15

U.S.C.G.S.
31.3S, 13.4W
South Atlantic Ocean
H = 22 17 50.9
h = about 33 km
Yellowknife
eP' 22 36 43

JANUARY 15

76.9°N, 117.5°W
Prince Patrick Island,
N.W.T.
H = 23 59 01.3
Mag 3.8
Mould Bay
P₁ 23 59 17 D,N,E
S₁ 23 59 29
D = 98 km
Resolute
P_n 24 00 27.0
S_n 24 01 35
D = 660 km

JANUARY 16

U.S.C.G.S.
54.0S, 133.5W
South Pacific Ocean
H = 03 14 05.9
h = about 33 km
Mould Bay
eP' 03 33 11

JANUARY 16

U.S.C.G.S.
7.5N, 74.5W
Colombia
H = 03 52 56.1
h = about 33 km
Mould Bay
eP 04 04 11
Yellowknife
iP 04 03 10 c

JANUARY 16

U.S.C.G.S.
9.7N, 93.9E
Nicobar Islands
H = 04 49 11.9
h = about 70 km
Mould Bay
eP 05 02 14

JANUARY 16

Penticton
eP 05 36 40

JANUARY 16

U.S.C.G.S.
51.3N, 179.9W
Andreanof Islands,
Aleutian Islands
H = 05 44 52.3
h = about 38 km
Alert
iP 05 52 49

Banff
eP 05 52 16
Mould Bay
iP 05 51 35 c

Penticton
iP 05 52 05 c
Resolute
eP 05 52 26 c
Schefferville
eP 05 54 59 c
Shawinigan Falls
eP 05 55 23 d
Victoria
eP 05 51 50 c
Yellowknife
iP 05 51 49 c

JANUARY 16

U.S.C.G.S.
54.2N, 34.9W
1300 km southwest
of Iceland
H = 06 38 40.4
h = about 33 km

Halifax

eP 06 43 19
Mould Bay
eP 06 45 48
Schefferville
eP 06 42 52
Shawinigan Falls
eP 06 44 02
Yellowknife
eP 06 46 12

JANUARY 16

48°16'N, 122°48'W
In the vicinity of
Whidbey Island, U.S.A.
H = 06 43 13
Mag 2.3
Alberni
eP_n 06 43 43.6
D = 197 km
Penticton
eP_n 06 43 53
D = 273 km
Victoria
eP₁ 06 43 22.9
eS₁ 06 43 30.7
D = 63 km

JANUARY 16

U.S.C.G.S.
54.3N, 35.2W
1300 km southwest
of Iceland
H = 06 44 56.8
h = about 33 km
Alert
eP 06 50 58
Halifax
eP 06 49 35
Mould Bay
eP 06 52 03
Ottawa
eP 06 50 39
Resolute
eP 06 51 11
Schefferville
eP 06 49 08

SEISMOLOGICAL BULLETIN - 1963

Shawinigan Falls	JANUARY 16	Mould Bay
eP 06 50 17	Mould Bay	eP 03 59 33 d
Yellowknife	eP 16 16 07	Penticton
eP 06 52 29	i 16 16 09	iP 04 01 11
	Penticton	
	iP 16 17 30	
	Resolute	JANUARY 17
	eP 16 16 49 c	U.S.C.G.S.
	Yellowknife	10.6S, 78.7W
	iP 16 17 01 c	Off coast of Peru
JANUARY 16		H = 04 22 22.5
U.S.C.G.S.		h = about 46 km
54.4N, 35.0W		Mould Bay
1300 km southwest		eP 04 35 17
of Iceland		Yellowknife
H = 12 32 37.6		eP 04 34 16 c
h = about 33 km		
Halifax	JANUARY 16	JANUARY 17
eP 12 37 21	U.S.C.G.S.	U.S.C.G.S.
Mould Bay	4.2S, 76.2W	14.0N, 120.6E
eP 12 39 45	Peru	Luzon, Philippine
Penticton		Islands
eP 12 41 26	Penticton	H = 05 56 54.8
Resolute	iP 20 31 22	h = about 207 km
eP 12 38 51 d		Mould Bay
Shawinigan Falls	JANUARY 16	eP 06 09 00 c
eP 12 37 58	U.S.C.G.S.	Resolute
Yellowknife	11.1S, 111.6E	eP 06 09 26 c
eP 12 40 09	South of Java	Yellowknife
	H = 21 08 38.8	iP 06 09 44
JANUARY 16	h = about 94 km	
U.S.C.G.S.	Halifax	
24.0S, 68.2W	eP' 21 28 14	
Northern Chile	London	
H = 15 09 16.6	iP' 21 28 13 (c)	
h = about 150 km	Penticton	
Penticton	eP' 21 27 26	JANUARY 17
iP 15 21 41 d	Shawinigan Falls	Alert
Yellowknife	eP' 21 28 07	e(P) 12 20 19
iP 15 22 16 d	Yellowknife	
	eP' 21 27 19	
JANUARY 16		JANUARY 17
U.S.C.G.S.	JANUARY 17	Alert
36.3N, 70.3E	U.S.C.G.S.	i 13 50 17
Hindu Kush	52.3N, 152.5E	
H = 15 30 10.0	Sea of Okhotsk	
h = about 243 km	H = 03 52 42.2	JANUARY 17
Mould Bay	h = about 454 km	Yellowknife
eP 15 40 41 c	Banff	eP 17 50 50
Yellowknife	eP 04 01 16	
eP 15 42 00		

DOMINION OBSERVATORIES

JANUARY 17	JANUARY 18	JANUARY 18
Mould Bay eP 18 12 (56)	Mould Bay eP 00 29 (42)	H = 16 13 05 Mag 2.9 Penticton
JANUARY 17 U.S.C.G.S. 7.6S, 75.3W Peru H = 19 31 12.6 h = about 201 km Mould Bay eP 19 43 39 d	JANUARY 18 U.S.C.G.S. 33.1N, 135.8E South of Honshu, Japan H = 03 12 05.7 h = about 425 km Alert	iP _n 16 13 49.7 iS _n 16 14 28.2 D = 315 km
Penticton iP 19 41 57 Yellowknife iP 19 42 39 d	iP 03 21 59 c i 03 22 55 Mould Bay iP 03 21 41 c	JANUARY 18 H = 20 49 12 Mag 2.9 Penticton
JANUARY 17 U.S.C.G.S. 25.6N, 125.2E Ryukyu Islands H = 20 41 14.8 h = about 140 km Alert iP 20 52 24 d	Resolute iP 03 22 19 c Victoria eP 03 22 49 c Yellowknife iP 03 22 30 c	iP _n 20 49 58.2 iS _n 20 50 37.5 D = 322 km
Mould Bay iP 20 52 18 d S 21 01 27 Penticton eP 20 53 (40) Resolute iP 20 52 51 d Schefferville eP 20 54 42 d Victoria eP 20 53 32 d Yellowknife iP 20 53 11 d	JANUARY 18 Mould Bay eP 08 06 23 Resolute eP 13 47 38 d	JANUARY 18 H = 21 24 28 Port Hardy iP _n 21 25 02.5 iS _n 21 25 30.8 D = 231 km
JANUARY 17 Penticton eP 22 54 44 Victoria eP 22 54 57	JANUARY 18 Canadian Arctic H = 14 59 22.2 Mag 1.5 Resolute P ₁ 14 59 34 S ₁ 14 59 43 D = 74 km	JANUARY 19 U.S.C.G.S. 38.8N, 74.8E Sinkiang Province, China H = 02 35 06.8 h = about 33 km Mould Bay eP 02 45 43 c Yellowknife iP 02 47 07 d
		JANUARY 19 Yellowknife eP 03 45 (23)
		JANUARY 19 Yellowknife e 04 26 38

SEISMOLOGICAL BULLETIN - 1963

JANUARY 19	JANUARY 19	Alert
Mould Bay eP 05 56 33	Penticton eP 12 55 28	eP 09 03 53
		Banff eP 09 02 59
		Mould Bay eP 09 02 30
JANUARY 19 H = 05 57 21 In Queen Charlotte Sound Mag 3.5 Alberni ePn 05 58 39.8	JANUARY 19 Penticton eP 14 40 59	i 09 05 18
Penticton ePn 05 59 20	JANUARY 19 Penticton eP 19 02 12	Ottawa eP 09 06 11
Port Hardy iPn 05 57 49.3 isn 05 58 11.0 D = 178 km	JANUARY 19 U.S.C.G.S. 16.9N, 85.0W	Penticton iP 09 02 45
Victoria ePn 05 58 47	Off north coast of Honduras	Resolute eP 09 03 22 (d)
Yellowknife eP 06 00 49	H = 19 29 03.6 h = about 33 km	Shawinigan Falls eP 09 06 16 d
	Mould Bay eP 19 39 22	Yellowknife eP 09 02 35
JANUARY 19 Mould Bay eP 06 28 30	JANUARY 19 U.S.C.G.S. 17.0N, 85.0W	JANUARY 20 50.3°N, 129.6°W
JANUARY 19 U.S.C.G.S. 40.9N, 142.4E South of Hokkaido, Japan H = 07 22 24.5 h = about 33 km	Off north coast of Honduras H = 19 50 59.4 h = about 33 km	West of Vancouver Island H = 10 56 48
Alert eP 07 32 02	Mould Bay eP 20 01 17	Mag 3.9
Mould Bay eP 07 31 36 c	Penticton eP 19 58 55	Alberni ePn 10 57 38.7
Penticton eP 07 33 02	JANUARY 20 Mould Bay eP 02 56 (18)	D = 357 km Banff ePn 10 59 05
Resolute eP 07 32 19 (c)	JANUARY 20 U.S.C.G.S. 51.9N, 173.2W	D = 1068 km Penticton ePn 10 58 25
Yellowknife eP 07 32 29 c	Andeanof Islands, Aleutian Islands H = 08 56 06.2	D = 740 km Port Hardy iP1 10 57 15.0 is1 10 57 35.3
JANUARY 19 Penticton eP 11 54 33	h = about 30 km	Victoria ePn 10 57 56
		D = 502 km Yellowknife eP 11 00 18
	JANUARY 20 U.S.C.G.S. 26.4N, 110.7W	JANUARY 20 U.S.C.G.S.
	Gulf of California H = 13 16 27.0	26.4N, 110.7W
	h = about 27 km	Gulf of California H = 13 16 27.0
	Penticton eP 13 21 41	h = about 27 km

DOMINION OBSERVATORIES

JANUARY 20	Mould Bay	Penticton
Penticton	eP' 07 20 (22)	iP 14 51 44
eP 15 01 49	i 07 20 25	Resolute
	Penticton	eP 14 52 29 d
	eP' 07 19 56	Yellowknife
JANUARY 20	Resolute	eP 14 51 11
H = 19 19 08	eP' 07 20 (07)	
Port Hardy	Yellowknife	
IP ₁ 19 19 34.8	IP' 07 20 09	JANUARY 21
iS ₁ 19 19 55.3		U.S.C.G.S.
D = 168 km		18.0S, 175.4W
JANUARY 20	JANUARY 21	Tonga Islands
Penticton	U.S.C.G.S.	H = 18 35 41.5
eP 19 30 25	9.3N, 83.0W	h = about 64 km
	Panama-Costa Rica	Penticton
	border	IP 18 48 05
	H = 07 38 56.9	
	h = about 88 km	
JANUARY 21	Mould Bay	JANUARY 22
U.S.C.G.S.	eP 07 49 58 d	48°53'N, 122°13'W
53.3N, 157.4E	Penticton	H = 04 13 46
Southern Kamchatka	IP 07 47 47	Mag 2.2
H = 04 25 04.6	Resolute	Northeast of Bellingham,
h = about 33 km	eP 07 49 32 (d)	U.S.A.
Mould Bay		Alberni
eP 04 32 16 d		IP _n 04 14 15.4
Penticton	JANUARY 21	D = 199 km
IP 04 33 50	U.S.C.G.S.	Penticton
Resolute	3.0S, 136.2E	eP _n 04 14 16.6
eP 04 33 08 d	Western New Guinea	eS _n 04 14 44.6
Yellowknife	H = 10 35 39.0	D = 209 km
eP 04 33 08	h = about 57 km	Port Hardy
	Mould Bay	e 04 14 50.0
	eP 10 49 02 d	D = 425 km
JANUARY 21		Victoria
Penticton	JANUARY 21	IP ₁ 04 13 58.5
eP 05 52 53	U.S.C.G.S.	iS ₁ 04 14 08.8
	59.5N, 151.2W	D = 91 km
JANUARY 21	Kenai Peninsula,	JANUARY 22
U.S.C.G.S.	Alaska	U.S.C.G.S.
60.5S, 27.2W	H = 14 47 05.4	31.5N, 89.3E
Sandwich Islands	h = about 67 km	Tibet
region	Alert	H = 04 55 16.4
H = 07 00 45	eP 14 53 (24)	h = about 33 km
h = about 33 km	Mould Bay	Mould Bay
Alert	eP 14 51 36	eP 05 06 32
eP' 07 20 13	i 14 51 39	Yellowknife
		eP 05 07 46

SEISMOLOGICAL BULLETIN - 1963

JANUARY 22	JANUARY 23	JANUARY 24
Yellowknife eP 08 12 50 d	U.S.C.G.S. 48.9N, 156.0E Kurile Islands H = 04 39 23.3 h = about 50 km Alert eP 04 47 56 Mould Bay eP 04 47 12 Resolute eP 04 48 02 d Yellowknife iP 04 47 59 (d)	U.S.C.G.S. 8.4N, 60.8W Near coast of Venezuela H = 02 52 09.0 h = about 66 km Alert eP 03 03 39 (d) Banff eP 03 02 23 Mould Bay eP 03 03 44 d Ottawa eP 02 59 32 Penticton eP 03 02 36 Schefferville eP 03 00 34 d Shawinigan Falls iP 02 59 36 d Victoria eP 03 02 45 Yellowknife iP 03 02 52
JANUARY 22	JANUARY 23	JANUARY 24
U.S.C.G.S. 48.3N, 155.2E Kurile Islands H = 16 07 14.0 h = about 50 km Mould Bay eP 16 15 07 Resolute eP 16 15 57 (c) Yellowknife eP 16 20 23	Mould Bay eP 05 09 21 JANUARY 23 Mould Bay eP 13 06 21 i 13 06 28 JANUARY 23 Mould Bay eP 17 40 12 c	Mould Bay eP 03 02 45 Yellowknife iP 03 02 52 JANUARY 24 Mould Bay eP 04 09 (12)
JANUARY 22	JANUARY 23	JANUARY 24
U.S.C.G.S. 48.4N, 155.2E Kurile Islands H = 16 11 42.1 h = about 50 km Mould Bay iP 16 19 35 Resolute e(P) 16 20 25 (c) Yellowknife eP 16 15 56 d	Penticton eP 20 04 06 JANUARY 23 Mould Bay eP 21 22 02 JANUARY 23 Victoria iP 22 25 04 d	U.S.C.G.S. 6.0S, 112.6E Java Sea H = 09 29 11.6 h = about 493 km Penticton eP' 09 47 01

DOMINION OBSERVATORIES

JANUARY 24	Banff	JANUARY 24
U.S.C.G.S.	eP 21 44 37	U.S.C.G.S.
15.2S, 173.6W		7.7N, 126.0E
Tonga Islands region	Mould Bay	Near east coast of
H = 12 09 01.2	eP 21 49 12	Mindanao, Philippine
h = about 33 km	Penticton	Islands
Banff	iP 21 43 51 d	H = 23 22 16.2
eP 12 21 35	Port Hardy	h = about 150 km
Mould Bay	eP 21 44 27	Mould Bay
eP 12 22 (30)	Victoria	eP 23 34 51
Penticton	iP 21 43 35	
eP 12 21 07	Yellowknife	
Victoria	eP 21 46 49	
eP 12 20 56		
JANUARY 24		JANUARY 25
Mould Bay		U.S.C.G.S.
eP 15 06 50	JANUARY 24	61.9N, 148.9W
	Mould Bay	Southern Alaska
	eP 22 04 07	H = 00 05 34.8
JANUARY 24		h = about 78 km
U.S.C.G.S.		Banff
28.6N, 56.4E		eP 00 10 15
Southern Iran		Mould Bay
H = 15 42 23.5		eP 00 09 35
h = about 100 km		Penticton
Mould Bay		eP 00 10 09
eP 15 53 56 c		Resolute
		eP 00 10 (31)
JANUARY 24		
Mould Bay		JANUARY 25
eP 20 26 32	JANUARY 24	U.S.C.G.S.
	U.S.C.G.S.	20.3S, 169.6E
	8.0N, 126.6E	Loyalty Islands region
JANUARY 24	Near east coast	H = 00 16 05.7
Mould Bay	of Mindanao,	h = about 135 km
eP 20 40 19 d	Philippine Islands	Mould Bay
	H = 22 44 16.5	eP' 00 34 11
	h = about 44 km	Penticton
JANUARY 24	Mould Bay	eP 00 29 06
U.S.C.G.S.	eP 22 57 03	
47.5N, 121.9W		
King County, Washington		JANUARY 25
H = 21 43 13		U.S.C.G.S.
h = about 33 km		8.0N, 127.0E
Alberni		Near east coast of
iP 21 43 53.5		Mindanao, Philippine
		Islands
		H = 04 10 36.2
		h = about 70 km
		Mould Bay
		eP 04 23 20

SEISMOLOGICAL BULLETIN - 1963

JANUARY 25	Mould Bay	eP 05 16 03	JANUARY 25	U.S.C.G.S.	51.4N, 178.1E	JANUARY 26	Penticton	eP 09 52 36
JANUARY 25	Mould Bay	eP 09 02 04		Rat Islands,		JANUARY 26	Dominion Observatory	
JANUARY 25	Mould Bay	eP 09 14 40		Aleutian Islands	H = 13 01 53.3		44.1°N, 129.1°W	
JANUARY 25	Mould Bay	eP 09 27 27			h = about 33 km		Pacific Ocean about	
JANUARY 25	U.S.C.G.S.			Mould Bay			400 miles south of	
	21.8N, 143.8E				eP 13 08 39		Vancouver Island,	
JANUARY 25	Mariana Islands region						British Columbia	
	H = 12 49 42.0						H = 09 58 52	
	h = about 190 km						Banff	
Alert							eP _n 10 01 (37)	
iP	13 01 05 c						D = 1290 km	
i	13 01 56						Mould Bay	
Banff							P 10 05 20	
eP	13 01 29 c						D = 3570 km	
Mould Bay							Penticton	
iP	13 00 39 c						iP _n 10 00 53	
i	13 01 25						D = 950 km	
Penticton							Port Hardy	
iP	13 01 20 c						eP _n 10 00 29	
Resolute							D = 750 km	
iP	13 01 14 c						Resolute	
Victoria							eP 10 05 36	
eP	13 01 08 c						D = 3770 km	
Yellowknife							Victoria	
iP	13 01 10 c						iP _n 10 00 18	
OCTOBER 26	Mould Bay	eP 07 56 56					iS _n 10 01 25	
							D = 660 km	
							Yellowknife	
							eP _n 10 03 24	
							D = 2205 km	
JANUARY 26	Mould Bay	eP 10 14 25						
Resolute								
e(P)	12 32 28							
JANUARY 26	Mould Bay	eP 12 35 58						

DOMINION OBSERVATORIES

JANUARY 26

Mould Bay
eP 14 54 46

JANUARY 26

Mould Bay
eP 22 36 42

Penticton

eP 03 04 52
Victoria
eP 03 04 51

JANUARY 26

Mould Bay
eP 16 54 12

JANUARY 27

U.S.C.G.S.
25.6N, 128.3E
Ryukyu Islands

JANUARY 27
U.S.C.G.S.

59.4N, 153.4W

Gulf of Alaska
H = 11 47 36.3
h = about 94 km

JANUARY 26

Mould Bay
eP 16 58 (49)

Alert
eP 01 18 14
i 01 18 30

Alert
eP 11 53 53
i 11 54 13

JANUARY 26

Mould Bay
eP 17 21 (50)

Banff
eP 01 19 25
Mould Bay
iP 01 18 04 d

Banff
eP 11 52 31
Mould Bay
eP 11 52 10 d

JANUARY 26

U.S.C.G.S.
15.7S, 172.9W
Tonga Islands region
H = 19 12 02.5
h = about 33 km
Mould Bay
eP 19 25 37

Penticton
iP 01 19 21
Resolute
iP 01 18 38 d
Victoria
eP 01 19 12 d
Yellowknife
iP 01 18 54 d

Penticton
eP 11 52 22
Resolute
iP 11 53 02 d
Shawinigan Falls
e 11 56 21
Victoria
eP 11 52 07
Yellowknife
iP 11 51 50 d

Penticton
iP 19 24 10 d

JANUARY 26

Mould Bay
eP 19 28 31

JANUARY 27
U.S.C.G.S.
66.9N, 162.4W

JANUARY 27

Mould Bay
eP 13 48 34

JANUARY 26

U.S.C.G.S.
4.6N, 76.5W
Colombia
H = 21 20 41.2
h = about 92 km

Seaward Peninsula,
Alaska
H = 01 44 34.2
h = about 33 km
Mould Bay
eP 01 48 18

JANUARY 27

U.S.C.G.S.
44.3N, 114.5W
Idaho

H = 15 24 46.5
h = about 31 km

Mould Bay
eP 21 32 15 d

JANUARY 27
U.S.C.G.S.
31.6N, 115.7W

Alert
eP 15 32 33

Penticton
iP 21 30 24 c

Baja California
H = 03 00 38.7

Banff
eP 15 26 28

Schefferville
iP 21 29 33 c

h = about 33 km
Mag 4 3/4 (PAS)

London
eP 15 30 02

Yellowknife
iP 21 31 06 d

Mould Bay
eP 03 08 54 d

i 15 30 12

SEISMOLOGICAL BULLETIN - 1963

Mould Bay	Mould Bay	JANUARY 28
eP 15 31 13 d	eP 18 59 28	U.S.C.G.S.
Penticton	Penticton	10.8S, 76.7W
iP 15 26 11	eP 18 59 07	Central Peru
Resolute	Victoria	H = 02 12 14.3
eP 15 31 09 d	eP 18 59 20	h = about 105 km
Schefferville	Yellowknife	Alert
eP 15 31 13	eP 18 59 36	iP 02 25 19
Victoria		Banff
eP 15 26 35		eP 02 23 17
Yellowknife	JANUARY 27	Mould Bay
iP 15 28 57 c	Yellowknife	iP 02 25 06 c
	eP 19 41 58	Penticton
		iP 02 23 21 c
JANUARY 27		Resolute
U.S.C.G.S.	JANUARY 27	eP 02 24 44 c
26.2N, 127.9E	U.S.C.G.S.	Schefferville
Ryukyu Islands	41.2N, 49.8E	eP 02 22 52 c
H = 15 38 15.7	Caspian Sea near	Victoria
h = about 109 km	Azerbaijan SSR	eP 02 23 28 c
Mould Bay	H = 19 35 14.3	Yellowknife
iP 15 49 16 c	h = about 33 km	iP 02 24 06
Yellowknife	Alert	
iP 15 50 18	eP 19 44 24	JANUARY 28
	S 19 51 (47)	U.S.C.G.S.
	Banff	43.5N, 144.6E
JANUARY 27	eP 19 47 58	Near south coast of
Penticton	London	Hokkaido, Japan
eP 16 36 26	iP 19 47 49	H = 04 05 30.9
	Mould Bay	h = about 33 km
	iP 19 45 37 d	Alert
JANUARY 27	Ottawa	iP 04 14 48
Canadian Arctic	eP 19 47 27 d	Banff
H = 18 01 40	Penticton	eP 04 15 56
Yellowknife	eP 19 48 09	Penticton
eP ₁ 18 02 01	Resolute	eP 04 15 46
S ₁ 18 02 17	eP 19 45 33	Resolute
D = 131 km	Schefferville	eP 04 15 04
	eP 19 46 25 d	Schefferville
JANUARY 27	Victoria	eP 04 17 30
U.S.C.G.S.	eP 19 48 14	Victoria
5.2S, 152.3E	Yellowknife	eP 04 15 38
New Britain	iP 19 46 58 d	Yellowknife
H = 18 46 14.6		eP 04 15 14
h = about 72 km		
Banff	JANUARY 28	
eP 18 59 33	Yellowknife	
	e 01 30 43	

DOMINION OBSERVATORIES

JANUARY 28	Victoria	JANUARY 28
U.S.C.G.S.	eP 13 06 07 d	U.S.C.G.S.
2.6S, 149.9E	Yellowknife	31.2S, 177.7W
New Britian	iP 13 06 15 c	Kermadec Islands
H = 12 12 19.8		H = 16 07 19
h = about 33 km		h = about 33 km
Mag 6 1/2 (PAS)	JANUARY 28	Alert
Alert	Mould Bay	iP' 16 26 13
eP 12 25 58	eP 13 35 03	Mould Bay
Banff	Yellowknife	eP' 16 25 52
eP 12 25 41	eP 13 35 55	
Mould Bay		JANUARY 28
eP 12 25 30		Mould Bay
Penticton	JANUARY 28	eP 16 32 18
eP 12 25 29	Mould Bay	
Resolute	eP 13 39 10	JANUARY 29
eP 12 26 (00)	Yellowknife	U.S.C.G.S.
Yellowknife	eP 13 39 14	5.8N, 78.4W
eP 12 25 40		South of Panama
	JANUARY 28	H = 04 31 29.6
JANUARY 28	U.S.C.G.S.	h = about 31 km
U.S.C.G.S.	55.8N, 162.9W	Yellowknife
54.7N, 161.6W	Alaska Peninsula	iP 04 41 51 d
Alaska Peninsula	H = 13 49 54.7	
H = 13 00 50.7	h = about 33 km	JANUARY 29
h = about 33 km	Mould Bay	U.S.C.G.S.
Mag 6 - 6 1/2 (PAS)	eP 13 55 26	40.3N, 144.2 E
Alert	Yellowknife	Off coast of Honshu,
eP 13 08 03 c	eP 13 55 11	Japan
Banff		H = 08 01 26.8
eP 13 06 38	JANUARY 28	h = about 27 km
Halifax	U.S.C.G.S.	Mould Bay
iP 13 10 51 (d)	19.7S, 178.1W	eP 08 10 42
London	Fiji Islands	Resolute
iP 13 09 54	H = 13 50 28.3	eP 08 11 25 d
Mould Bay	h = about 587 km	Yellowknife
iP 13 06 29 c	Banff	eP 08 11 31
Ottawa	eP 14 02 23	
iP 13 10 03	Penticton	JANUARY 29
Penticton	eP 14 02 04	U.S.C.G.S.
eP 13 06 22		49.7N, 154.9E
Resolute		Kurile Islands
eP 13 07 19 c		H = 09 21 14.3
Schefferville		h = about 126 km
iP 13 09 48 d		Alert
Shawinigan Falls		iP 09 29 32 c
eP 13 10 08		iS 09 36 10

SEISMOLOGICAL BULLETIN - 1963

Banff		JANUARY 29	Mould Bay
eP	09 30 22 c	U.S.C.G.S.	eP 22 56 30
Halifax		21.5S, 68.6W	
iP	09 33 12 c	Chile-Bolivia border	
London		H = 20 33 27.0	JANUARY 30
iP	09 32 46 c	h = about 73 km	Alert
Mould Bay		Banff	eP 02 03 (29)
iP	09 28 50 c	iP 20 45 47 d	Mould Bay
iS	09 34 55	Halifax	eP 02 03 39
Ottawa		eP 20 44 12	Yellowknife
iP	09 32 45 c	London	eP 02 03 20
Penticton		iP 20 44 04 d	
iP	09 30 16	Mould Bay	
Resolute		eP 20 47 17	JANUARY 30
iP	09 29 39 c	Penticton	U.S.C.G.S.
Schefferville		iP 20 45 51	54.8N, 161.6W
iP	09 32 15 c	Schefferville	Alaska Peninsula
Shawinigan Falls		eP 20 45 12d	H = 04 39 56.3
iP	09 32 46 c	Shawinigan Falls	h = about 33 km
Victoria		iP 20 44 23d	Alert
iP	09 30 04 c	Yellowknife	eP 04 47 08 c
Yellowknife		iP 20 46 26d	Banff
iP	09 29 41 c		eP 04 45 43
		JANUARY 29	Mould Bay
		U.S.C.G.S.	eP 04 45 36 c
JANUARY 29		12.9N, 143.2E	Ottawa
Mould Bay		Mariana Islands	eP 04 49 07
eP	12 21 17	H = 21 07 57.7	Penticton
Yellowknife		h = about 144 km	eP 04 45 30
eP	12 20 42	Alert	Resolute
		eP 21 20 (14)	eP 04 46 23 c
JANUARY 29		Mould Bay	Schefferville
H = 18 45 37		eP 21 19 (46)	eP 04 48 53 (c)
Mag 1.6		Yellowknife	Shawinigan Falls
Penticton		eP 21 20 14	eP 04 49 12
iP ₁	18 46 04.6		Victoria
iS ₁	18 46 25.7	JANUARY 29	eP 04 45 13 c
D = 172 km		Yellowknife	Yellowknife
		eP 21 45 38	iP 04 45 21 c
JANUARY 29			
Mould Bay		JANUARY 29	JANUARY 30
iP	19 14 00 c	U.S.C.G.S.	U.S.C.G.S.
		52.7N, 168.4W	44.9N, 110.8W
JANUARY 29		Fox Islands,	Yellowstone National
Penticton		Aleutian Islands	Park, Wyoming
eP	20 19 25	H = 22 50 22.7	H = 05 51 00.9
		h = about 33 km	h = about 33 km

DO MINION OBSERVATORIES

Penticton	Banff	JANUARY 30
eP 05 52 59	eP' 10 29 08	Mould Bay
Yellowknife	London	eP 11 50 (49)
eP 05 55 14	iP' 10 28 48	Yellowknife
	Mould Bay	iP 11 50 37 d
	eP' 10 29 31	
JANUARY 30	Ottawa	
U.S.C.G.S.	eP' 10 28 (36)	JANUARY 30
00.2N, 123.4E	Penticton	Mould Bay
Northern Celebes	eP' 10 29 09	eP 12 44 (04)
H = 06 08 25.4	Resolute	Yellowknife
h = about 33 km	eP' 10 29 15	eP 12 43 51
Mould Bay	Schefferville	
eP 06 21 52	eP' 10 28 40	
JANUARY 30	Victoria	JANUARY 30
Penticton	eP' 10 29 13	Mould Bay
iP 07 15 18	Yellowknife	eP 13 02 14
	eP' 10 29 06	Yellowknife
		eP 13 02 04
JANUARY 30		
U.S.C.G.S.	JANUARY 30	JANUARY 30
29.7N, 80.5E	Penticton	eP 13 15 29
India-Nepal border		
H = 10 33 59.1	India-Nepal border	
h = about 57 km	eP 13 15 29	
Mould Bay	JANUARY 30	
eP 10 45 27	Penticton	
Yellowknife		
iP 10 46 41 c	eP 13 46 26	
JANUARY 30		
U.S.C.G.S.	JANUARY 30	JANUARY 30
50.8N, 157.4E	Mould Bay	Mould Bay
Near coast of	eP 11 04 42	eP 14 51 (03)
southern Kamchatka	Yellowknife	Yellowknife
H = 09 51 23.7	eP 11 04 32	iP 14 51 06 d
h = about 31 km		
Mould Bay		
eP 09 58 55		
Resolute		
eP 09 59 45 (d)		
JANUARY 30		
U.S.C.G.S.	JANUARY 30	JANUARY 30
55.6S, 28.3W	Yellowknife	Yellowknife
Sandwich Islands	e 11 07 58	eP 15 35 58
region		
H = 10 10 04.1		
h = about 33 km		
Mag 6 1/2 (PAS)		
Alert		
eP' 10 29 (19)	JANUARY 30	JANUARY 30
i 10 29 34	Mould Bay	Mould Bay
	eP 11 43 (10)	eP 15 56 (54)
	Yellowknife	Resolute
	eP 11 42 56	e(P) 15 56 (52)

SEISMOLOGICAL BULLETIN - 1963

JANUARY 30	JANUARY 31	JANUARY 31
Mould Bay eP 16 37 (09)	Mould Bay eP 01 02 00	Mould Bay eP 07 40 32
Yellowknife eP 16 37 04		
JANUARY 30	JANUARY 31	JANUARY 31
Yellowknife eP 16 43 15	Penticton eP 02 56 47	Resolute e(P) 09 55 06
JANUARY 30	JANUARY 31	JANUARY 31
Penticton eP 19 18 19	U.S.C.G.S. 63.5N, 149.4W Central Alaska H = 03 09 58.3 h = about 56 km Alert	U.S.C.G.S. 54.7N, 161.7W Alaska Peninsula H = 11 27 30.7 h = about 33 km Penticton
JANUARY 30	JANUARY 31	JANUARY 31
Yellowknife eP 19 35 34	London iP 03 17 55 d Penticton eP 03 14 42	Resolute eP 11 32 52 Yellowknife eP 11 33 58 (d) eP 11 32 55
JANUARY 30	JANUARY 31	JANUARY 31
Yellowknife eP 22 03 18	Resolute eP 03 14 42 Yellowknife eP 03 13 34	U.S.C.G.S. 35.8N, 21.9E Ionian Sea, west of Crete
JANUARY 30	JANUARY 31	JANUARY 31
Yellowknife eP 22 30 29	Alert eP 05 17 57 Penticton iP 05 19 10 d	H = 15 07 00.4 h = about 33 km Mould Bay
JANUARY 31	JANUARY 31	JANUARY 31
50°36'N, 129°45'W Off west coast of Vancouver Island H = 00 27 33 Mag 2.5 Alberni eP _n 00 28 20.5 D = 387 km	Resolute eP 05 18 21 Schefferville eP 05 20 (17) Victoria iP 05 19 02 c Yellowknife iP 05 18 40 d	Penticton iP 15 19 53 Resolute eP 15 17 22 (d) Schefferville eP 15 17 12
JANUARY 31	JANUARY 31	JANUARY 31
Port Hardy iP ₁ 00 27 59.2 iS ₁ 00 28 19.5 D = 166 km	Penticton eP 07 28 18	U.S.C.G.S. 21.5S, 178.1W Fiji Islands H = 16 21 52.8 h = about 373 km Penticton
JANUARY 31		iP 16 34 02
Mould Bay eP 00 49 (49)		

DOMINION OBSERVATORIES

JANUARY 31

Mould Bay
eP 16 59 49

JANUARY 31

U.S.C.G.S.
41.4N, 50.2E
Turkmen S.S.R.
H = 17 06 04.4
h = about 33 km
Banff

iP 17 18 47 d

Mould Bay
iP 17 16 26 d

Penticton
eP 17 18 47

Resolute
eP 17 16 23 (d)

Schefferville
eP 17 17 14

Yellowknife
iP 17 17 48 d

JANUARY 31

U.S.C.G.S.
52.7N, 168.7W
Fox Islands,
Aleutian Islands
H = 18 44 00.2
h = about 33 km
Mould Bay
eP 18 50 08

JANUARY 31

Shawinigan Falls
eP 19 10 (54)

JANUARY 31

U.S.C.G.S.
54.2N, 167.5E
Bering Sea
H = 19 10 22.6
h = about 53 km
Mould Bay
eP 19 17 05 c

JANUARY 31

Mould Bay
eP 22 15 38

JANUARY 31

H = 22 54 08
Mag less than 2
Port Hardy
iP₁ 22 54 24.2
iS₁ 22 54 36.8
D = 104 km

FEBRUARY 1

Mould Bay
eP 01 26 17

FEBRUARY 1

Mould Bay
eP 08 27 (35)

FEBRUARY 1

U.S.C.G.S.
3.0S, 131.0E
Ceram Region
H = 10 16 34.1
h = about 33 km
Mould Bay
eP 10 30 05

FEBRUARY 1

Mould Bay
eP 12 38 33

FEBRUARY 1

U.S.C.G.S.
44.2N, 114.6W
Central Idaho
H = 16 38 58.3
h = about 33 km
Banff
eP 16 40 42
Mould Bay
eP 16 45 21

Penticton

eP 16 40 29

Resolute
eP 16 45 (21)

Yellowknife
eP 16 43 10

FEBRUARY 1

Resolute
eP 16 52 27

FEBRUARY 1

Mould Bay
eP 17 19 30

FEBRUARY 1

Penticton
eP 17 35 08

FEBRUARY 1

Mould Bay
eP 19 52 (25)

FEBRUARY 1

Mould Bay
eP 21 03 40

FEBRUARY 2

183 miles from London,
Ontario, probably to
the west or south
H = 02 59 43.1
Mag 2.7

London
P₁ 03 00 30.5 d
S₁ 03 01 06.5
D = 295 km

SEISMOLOGICAL BULLETIN - 1963

FEBRUARY 2	FEBRUARY 2	FEBRUARY 2
Mould Bay	67°50'N, 91°00'W	U.S.C.G.S.
eP 04 53 (04)	Keewatin Territory	13.9N, 92.1W
Schefferville	about 32 miles	Off west coast of
eP 04 49 56	southwest of Pelly	Guatemala
	Bay, N.W.T.	H = 21 25 38
	H = 18 38 11.8	h = about 33 km
FEBRUARY 2	Mag 4.6	Banff
Mould Bay	Alert	eP 21 33 27
eP 06 01 24	P _n 18 41 54	Mould Bay
	S _n 18 44 44	eP 21 36 11
	L _g 18 46 30	Ottawa
FEBRUARY 2	D = 1740 km	iP 21 32 25 (d)
H = 08 18 48	Mould Bay	Penticton
Mag 1.8	P _n 18 40 52.7	iP 21 33 28
Penticton	S _n 18 42 57.7	Schefferville
iP 08 19 18.3	L _g 18 44 10	eP 21 33 56
iS 08 19 42.2	D = 1250 km	Shawinigan Falls
D = 196 km	Resolute	eP 21 32 43
	P _n 18 39 47	Victoria
FEBRUARY 2	S _n 18 41 05	eP 21 33 38
U.S.C.G.S.	L _g 18 41 45	Yellowknife
19.7S, 174.6W	D = 775 km	eP 21 34 40 c
Tonga Islands	Schefferville	
H = 11 48 20.0	P _n 18 41 02	FEBRUARY 2
h = about 77 km	S _n 18 44 58	Mould Bay
Penticton	L _g 18 46 49	eP 22 17 07
eP 12 00 45	D = 1850 km	
	Yellowknife	FEBRUARY 2
	P _n 18 40 35	Mould Bay
FEBRUARY 2	D = 1250 km	eP 23 27 29
Mould Bay		
eP 15 04 06		FEBRUARY 2
FEBRUARY 2		Mould Bay
U.S.C.G.S.		eP 23 27 29
51.3N, 179.1W		
Andreanof Islands,	FEBRUARY 2	FEBRUARY 3
Aleutian Islands	U.S.C.G.S.	Penticton
H = 18 01 13	18.8N, 81.5W	eP 01 47 06
h = about 33 km	Cayman Islands	FEBRUARY 3
Mould Bay	H = 19 32 15.1	U.S.C.G.S.
eP 18 07 54	h = about 71 km	15.1N, 92.0W
	Mould Bay	Off west coast of
	eP 19 42 20	Guatemala
		H = 04 23 28
		h = about 166 km
		Mould Bay
		eP 04 33 35

DOMINION OBSERVATORIES

	FEBRUARY 3	FEBRUARY 3
Ottawa	Dominion Observatory 72.9°N, 23.8°W	Alert e(P) 21 37 (02)
Penticton	Northeastern Greenland H = 14 25 41	i 21 40 01
iP 04 30 56 d	Mag 4.9	
Shawinigan Falls	An aftershock at 15 36 57	
eP 04 30 24		
Victoria	Alert	FEBRUARY 4
eP 04 31 06 d	P _n 14 27 19	U.S.C.G.S.
Yellowknife	S _n 14 28 36	6.3S, 149.1E
iP 04 32 05 c	L _g 14 29 15	New Britain region
	D = 760 km	H = 01 17 03.1
FEBRUARY 3	Mould Bay	h = about 36 km
Mould Bay	ePn 14 29 55.5	Ottawa
eP 08 17 00	D = 2040 km	iP' 01 36 01
	Resolute	Schefferville
	P _n 14 29 19	eP' 01 35 59 c
FEBRUARY 3	S _n 14 32 10	
U.S.C.G.S.	e 14 33 55	FEBRUARY 4
8.8S, 75.8W	D = 1740 km	Mould Bay
Peru		eP 04 33 56 c
H = 11 18 08		Resolute
h = about 33 km		eP 04 34 25
Mould Bay	FEBRUARY 3	
eP 11 30 58 d	Dominion Observatory 72.9°N, 23.8°W	
	Northeastern Greenland H = 15 36 57	FEBRUARY 4
	Mag 4.2	U.S.C.G.S.
	Aftershock of earthquake 14 25 41	27.3N, 54.2E
	Alert	Southern Iran
	P _n 15 38 35	H = 05 14 25.6
	S _n 15 39 51	h = about 34 km
	L _g 15 40 30	Mould Bay
	D = 760 km	eP 05 26 14
	Mould Bay	Schefferville
	eP 15 41 10	eP 05 26 (46)
	D = 2030	
Ottawa	Resolute	FEBRUARY 4
iP 12 59 29	P _n 15 40 35	Mould Bay
Penticton	S _n 15 43 26	eP 07 14 53 c
iP 13 02 02 d	D = 1740 km	
Resolute		FEBRUARY 4
eP 13 03 13		U.S.C.G.S.
Schefferville		27.7N, 54.6E
eP 13 00 46	FEBRUARY 3	Southern Iran
Yellowknife	Mould Bay	H = 07 18 06.9
iP 13 02 38 c	i 18 44 19	h = about 33 km
		Schefferville
		eP 07 30 33 d

SEISMOLOGICAL BULLETIN - 1963

FEBRUARY 4

U.S.C.G.S.
51.6N, 176.6W
Andreanof Islands,
Aleutian Islands
H = 51.6N, 176.6W
h = about 33 km
Mould Bay
eP 10 10 36
Penticton
eP 10 10 59

FEBRUARY 4

U.S.C.G.S.
5.1N, 82.4W
South of Panama
H = 12 28 38.1
h = about 45 km
Schefferville
eP 12 37 39 (c)

FEBRUARY 4

U.S.C.G.S.
26.1N, 124.1E
Ryukyu Islands region
H = 16 15 22.9
h = about 33 km
Mould Bay
eP 16 26 37 d

FEBRUARY 4

U.S.C.G.S.
48.2N, 153.9E
Kurile Islands
H = 20 57 10.9
h = about 57 km
Mould Bay
eP 21 05 07 c
Resolute
eP 21 05 56 c

FEBRUARY 4

U.S.C.G.S.
48.5N, 154.9E
Kurile Islands
H = 23 21 09.0
h = about 85 km
Alert

IP 23 29 40 c

Banff
IP 23 30 27 d

Mould Bay
IP 23 28 58 c

Ottawa
eP 23 32 (52)

Penticton
IP 23 30 19 d

Resolute
IP 23 29 47 c

Schefferville
eP 23 32 21 c

Shawinigan Falls
eP 23 32 52

Victoria
eP 23 30 07

Yellowknife
IP 23 29 47 d

FEBRUARY 5

U.S.C.G.S.
0.0, 123.8E
Celebes region
H = 01 47 49.8

h = about 164 km

Mould Bay
eP 02 01 00

FEBRUARY 5

U.S.C.G.S.
19.2N, 147.1E
Mariana Islands region
H = 05 04 03.4
h = about 38 km
Alert
eP 05 15 (55)
Mould Bay
IP 05 15 25

Penticton

IP 05 15 59
Resolute
eP 05 16 01 d
Yellowknife
IP 05 15 52 d

FEBRUARY 5

U.S.C.G.S.
59.4N, 156.4W
Alaska
H = 07 19 30.0
h = about 33 km
Mould Bay
eP 07 24 15
I 07 24 18
Yellowknife
IP 07 23 51 d

FEBRUARY 5

U.S.C.G.S.
44.3N, 114.5W
Central Idaho
H = 07 29 00.3
h = about 33 km
Penticton
eP 07 30 30
Yellowknife
eP 07 33 11

FEBRUARY 5

U.S.C.G.S.
53.7N, 165.4W
Fox Islands,
Aleutian Islands
H = 12 08 20.6
h = about 33 km
Mould Bay
eP 12 14 14
Penticton
eP 12 14 15
Resolute
eP 12 15 04
Yellowknife
eP 12 14 07

DOMINION OBSERVATORIES

FEBRUARY 5	FEBRUARY 5	FEBRUARY 6
U.S.C.G.S.	Canadian Arctic	U.S.C.G.S.
14.2N, 94.0W	H = 22 23 45.1	6.8N, 73.2W
Off coast of	Mag 1.2	Colombia-Venezuela
Chiapas, Mexico	Resolute	Border region
H = 17 49 38	P ₁ 22 33 53	H = 03 27 55.8
h = about 33 km	S ₁ 22 33 59	h = about 108 km
Mould Bay	D = 49 km	Mould Bay
eP 18 00 07 d		eP 03 39 19
Resolute		Penticton
eP 17 59 (47)		iP 03 37 36
		Resolute
FEBRUARY 5	FEBRUARY 6	eP 03 38 (50)
U.S.C.G.S.	U.S.C.G.S.	Schefferville
31.9S, 179.0W	38.4S, 73.6W	iP 03 36 26 c
Kermadec Islands	Near coast of	Shawinigan Falls
H = 19 29 30.0	Central Chile	eP 03 35 20
h = about 68 km	H = 01 21 29.0	Yellowknife
Mould Bay	h = about 33 km	iP 03 38 13 d
eP' 19 48 00 c	London	
Resolute	eP 01 33 43 c	
eP' 19 48 09 c	Mould Bay	FEBRUARY 6
Schefferville	eP' 01 40 (12)	U.S.C.G.S.
eP' 19 48 (27)	Ottawa	18.1S, 177.6W
	iP 01 33 55 d	Fiji Islands region
	Shawinigan Falls	H = 05 53 53.9
	eP 01 34 01 (c)	h = about 500 km
		Penticton
FEBRUARY 5	FEBRUARY 6	iP 06 05 34 c
U.S.C.G.S.	U.S.C.G.S.	
38.4S, 73.2W	7.9S, 119.9E	
Near coast of	Flores Sea	FEBRUARY 6
Central Chile	H = 01 55 59.2	U.S.C.G.S.
H = 20 39 21.6	h = about 306 km	14.9N, 95.0W
h = about 41 km	Halifax	Off coast of
Mag 6 1/4 - 6 1/2 (PAS)	eP' 02 14 59	Chiapas, Mexico
6 - 6 1/4 (BRK)	London	H = 06 16 39
5 3/4 - 6 (PAL)	eP' 02 14 48	h = about 33 km
Halifax	Penticton	Mould Bay
eP 20 51 45	eP' 02 14 09	eP 06 27 03 c
London	Resolute	
eP 20 51 33 c	eP' 02 13 (59)	
Ottawa	Schefferville	FEBRUARY 6
iP 20 51 46 d	eP' 02 14 40	U.S.C.G.S.
Shawinigan Falls	Yellowknife	7.4N, 82.6W
eP 20 51 50	iP' 02 14 03	Near south coast of
		Panama
		H = 07 01 47.0
		h = about 61 km

SEISMOLOGICAL BULLETIN - 1963

London		FEBRUARY 6		FEBRUARY 6	
eP	07 08 39	Ottawa	iP	16 00 24	U.S.C.G.S.
Mould Bay					28.2S, 67.4W
eP	07 13 03				La Rioja Province, Argentina
Ottawa		FEBRUARY 6		H = 21 43 16.3	
iP	07 09 03 d	Mould Bay	eP	18 00 32	h = about 19 km
Penticton				Mould Bay	
iP	07 10 53 c			eP'	22 01 52.
Resolute		FEBRUARY 6		Penticton	
eP	07 12 38 d	U.S.C.G.S.		eP	21 56 18
Schefferville		55.6N, 166.1E		Schefferville	
eP	07 10 29 c	Komandorskie		eP	21 55 48
Shawinigan Falls		Islands region		Shawinigan Falls	
eP	07 09 17	H = 18 17 10.9		eP	21 55 04
Victoria		h = about 33 km		Yellowknife	
iP	07 11 04 c	Alert		iP	21 56 55 (c)
		eP	18 24 43 c		
FEBRUARY 6		Banff		FEBRUARY 6	
U.S.C.G.S.		eP	18 25 20	Dominion Observatory	
3.5S, 146.0E		London		About 85°N, 7°W	
Bismarck Sea		eP	18 27 57	North Polar region	
H = 10 20 25.5		Mould Bay		H = 21 43 53	
h = about 33 km		eP	18 23 51	Mag 4.2	
Mould Bay		Penticton		Alert	
eP	10 33 45	eP	18 25 14	eP	21 45 28
		Resolute		S _n	21 46 44
FEBRUARY 6		eP	18 24 41	D = 745 km	
Mould Bay		Schefferville		Mould Bay	
eP	11 22 19 d	eP	18 27 (25)	iP _n	21 47 45.5
		Shawinigan Falls		D = 1870 km	
		eP	18 28 00	Resolute	
FEBRUARY 6				P _n	21 47 39
Mould Bay		FEBRUARY 6		D = 1805 km	
eP	12 57 (15)	U.S.C.G.S.			
Penticton		56.7S, 28.8W		FEBRUARY 17	
eP	12 57 15	Sandwich Islands region		U.S.C.G.S.	
Resolute		H = 20 46 50.7		17.7S, 178.7W	
eP	12 57 00	h = about 33 km		Fiji Islands region	
		Mould Bay		H = 01 23 41.7	
FEBRUARY 6		eP'	21 06 15	h = about 559 km	
Mould Bay		Yellowknife		Mag 4.3 (C.G.S.)	
eP	14 38 28 d	eP'	21 06 03	Penticton	
				iP	01 35 18

DOMINION OBSERVATORIES

FEBRUARY 7

U.S.C.G.S.
59.6S, 147.9E
1000 km southwest
of MacQuarie Islands
H = 03 29 41.9
h = about 33 km
Mag 5.0 (CGS)

London
eP' 03 49 17

Mould Bay
eP' 03 49 20

FEBRUARY 7

Mould Bay
eP 09 35 32

FEBRUARY 7

U.S.C.G.S.
36.4N, 70.8E
Hindu Kush
H = 12 12 31.4
h = about 214 km
Mag 3.7 (CGS)
Mould Bay
eP 12 23 06
i 12 23 53

FEBRUARY 7

U.S.C.G.S.
14.4N, 53.3E
Gulf of Aden
H = 16 44 45.3
h = about 33 km
Mould Bay
eP 16 57 (39)

FEBRUARY 7

U.S.C.G.S.
14.7N, 119.6E
Off west coast of
Central Luzon,
Philippine Islands
H = 17 36 52.8
h = about 151 km
Mag 4.5 (C.G.S.)

Mould Bay

eP 17 49 01 c
Resolute
eP 17 49 (28)
Yellowknife
eP 17 49 48 d

FEBRUARY 7

Penticton
eP 18 13 34
Victoria
iP 18 13 06c

FEBRUARY 7

Mould Bay
eP 20 13 29
Yellowknife
eP 20 10 07

FEBRUARY 7

Mould Bay
iP 21 19 08 d

FEBRUARY 7

Mould Bay
eP 22 04 (07)

FEBRUARY 8

Canadian Arctic
H = 02 00 53.2
Mag 2.4
Yellowknife
P₁ 02 01 26
S₁ 02 01 56
D = 205 km

FEBRUARY 8

U.S.C.G.S.
54.2N, 35.0W
North Atlantic Ocean
H = 04 07 28.1
h = about 33 km
Shawinigan Falls
eP 04 12 50

FEBRUARY 8

U.S.C.G.S.
26.6N, 55.2E
Persian Gulf
H = 06 03 09.9
h = about 33 km
Mag 4.1 (C.G.S.)
Mould Bay

eP 06 15 02

FEBRUARY 8

Mould Bay
eP 07 38 (00)

FEBRUARY 8

Penticton

eP 09 52 24

FEBRUARY 8

U.S.C.G.S.
54.1N, 159.8E
Near east coast of
Kamchatka
H = 10 02 15.0
h = about 33 km
Mag 4.1 (C.G.S.)

Alert

eP 10 10 05
Mould Bay

iP 10 09 16

Resolute

eP 10 10 09

FEBRUARY 8

U.S.C.G.S.
50.9N, 156.6E
Southern Kamchatka
H = 13 26 20.5
h = about 63 km
Mag 4.4 (C.G.S.)

Mould Bay

eP 13 33 49
Resolute

eP 13 34 41

SEISMOLOGICAL BULLETIN - 1963

FEBRUARY 8

Mould Bay
eP 16 07 30

FEBRUARY 8

U.S.C.G.S.
12.9S, 170.2E
New Hebrides Islands
region
H = 18 18 07.3
h = about 628 km
Mould Bay
eP' 18 37 31
Resolute
eP' 18 37 (28)

FEBRUARY 8

Penticton
eP 19 04 03

FEBRUARY 9

Mould Bay
eP 01 41 59
Resolute
eP 01 42 42 c

FEBRUARY 9

U.S.C.G.S.
36.4N, 137.9E
Central Honshu,
Japan
H = 03 53 06
h = about 33 km
Mag 4.4 (C.G.S.)
Mould Bay
eP 04 02 56
Resolute
eP 04 03 36 (c)

FEBRUARY 9

Alert
eP 04 18 17

FEBRUARY 9

U.S.C.G.S.
51.2N, 179.8W
Andreanof Islands,
Aleutian Islands

H = 07 59 52.9
h = about 33 km
Mag 4.5 (C.G.S.)
Banff
eP 08 07 18
London
eP 08 10 15
Mould Bay
eP 08 06 36 c

Penticton
eP 08 07 06
Resolute
eP 08 07 27 (d)

Schefferville
eP 08 10 01
Victoria
eP 08 06 51
Yellowknife
iP 08 06 50 (c)

FEBRUARY 9

U.S.C.G.S.
43.7N, 150.6E
Kurile Islands region

H = 16 05 03.0
h = about 33 km

Mag 4.8 (C.G.S.)

Alert
eP 16 14 18
London
eP 16 17 21

Mould Bay
eP 16 13 41
Penticton
iP 16 14 58 c

Resolute
eP 16 14 27 c
Schefferville
eP 16 16 (55)

Yellowknife
eP 16 14 28 d

FEBRUARY 9

Penticton
eP 17 03 54

FEBRUARY 9

U.S.C.G.S.
44.5N, 27.9W
Azores Islands region
H = 20 40 20
h = about 33 km
Mould Bay
eP 20 48 52 c

FEBRUARY 10
Mould Bay
eP 03 38 01

FEBRUARY 10

U.S.C.G.S.
7.8N, 83.4W
South of Panama
H = 05 02 34
h = about 33 km
Mag 4.0 (C.G.S.)
Mould Bay
eP 05 13 50

FEBRUARY 10

U.S.C.G.S.
54.1N, 166.5W
Fox Islands,
Aleutian Islands
H = 05 10 40
h = about 33 km
Mag 4.1 (C.G.S.)
Mould Bay
eP 05 16 51

DOMINION OBSERVATORIES

FEBRUARY 10	Shawinigan Falls eP 15 10 56	FEBRUARY 11
U.S.C.G.S. 52.0N, 108.1E	Yellowknife eP 15 13 07	Mould Bay eP 02 06 12
Lake Baikal region H = 06 48 31.2 h = about 27 km		
Mould Bay eP 06 57 08	FEBRUARY 10	FEBRUARY 11
Resolute eP 06 57 41 d	U.S.C.G.S. 44.6N, 28.1W	Penticton eP 08 10 15
	Azores Islands region H = 16 36 11.1 h = about 33 km	
FEBRUARY 10	Mould Bay eP 16 44 43	FEBRUARY 11
U.S.C.G.S. 42.4N, 142.1E		U.S.C.G.S. 67.6N, 146.7W
Near south coast of Hokkaido, Japan H = 12 00 42.2 h = about 54 km Mag 4.3 (C.G.S.)		Alaska H = 15 05 38.8 h = about 33 km Mag 4.8 (Ott)
Mould Bay eP 12 09 41 c	FEBRUARY 10	Penticton eP 15 10 40
Resolute eP 12 10 26 c	Mould Bay eP 17 57 51	Mould Bay P _n 15 08 28 S _n 15 10 36 D = 1300 km
FEBRUARY 10		Resolute eP _n 15 09 42 S _n 15 12 51 D = 1925 km
U.S.C.G.S. 53.5N, 33.4W	FEBRUARY 10	Schefferville eP _n 15 12 53
North Atlantic Ocean H = 15 05 25.3 h = about 41 km Mag 4.9 (C.G.S.)	Alert eP 21 44 54	Yellowknife eP _n 15 08 52 S _n 15 11 23 L _g 15 13 00 D = 1525 km
Alert eP 15 11 33	Banff eP 21 45 54	
Halifax eP 15 10 14	Mould Bay eP 21 44 22	FEBRUARY 11
Mould Bay eP 15 12 41 c	Penticton iP 21 45 47 c	Mould Bay eP 16 58 35
Penticton eP 15 14 23	Resolute eP 21 45 08 c	
Resolute eP 15 11 49 (c)	Schefferville eP 21 47 35	
Schefferville eP 15 09 50 c	Victoria eP 21 45 35	FEBRUARY 12
	Yellowknife eP 21 45 14 d	U.S.C.G.S. 17.7N, 122.3E
		Near west coast of Luzon, Philippine Islands H = 00 26 19 h = about 33 km Mag 4.5 (C.G.S.)

SEISMOLOGICAL BULLETIN - 1963

Mould Bay	FEBRUARY 12	London
eP 00 38 22	Alert	(e)P 00 28 55 d
Resolute	eP 21 43 01	i 00 29 18
eP 00 38 52		Mould Bay
Yellowknife		eP 00 33 18
eP 00 39 13	FEBRUARY 12	Ottawa
	Mould Bay	eP 00 29 29 c
	eP 21 45 02	Penticton
FEBRUARY 12	Resolute	iP 00 30 41 d
U.S.C.G.S.	eP 21 45 (08)	Resolute
19.0N, 107.4W		eP 00 32 55
Revilla Gigedo		Schefferville
Islands region	FEBRUARY 12	iP 00 31 00 d
H = 08 43 37.9	U.S.C.G.S.	Seven Falls
h = about 33 km	17.8S, 178.6W	eP 00 29 57 d
Mag 4.4 (C.G.S.)	Fiji Islands	Shawinigan Falls
Mould Bay	H = 23 07 28.9	eP 00 29 46
eP 08 53 26 d	h = about 583 km	Victoria
	Mag 5.5 (C.G.S.)	eP 00 30 50 d
FEBRUARY 12	Banff	Yellowknife
U.S.C.G.S.	eP 23 19 19	iP 00 31 49 c
51.5N, 177.9W	Mould Bay	
Andreanof Islands	eP 23 20 13	
Aleutian Islands	Penticton	FEBRUARY 13
H = 15 09 46.0	iP 23 19 04 c	U.S.C.G.S.
h = about 33 km	Yellowknife	13.0N, 57.9E
Mag 3.7 (C.G.S.)	iP 23 19 46 c	Arabian Sea
Mould Bay	FEBRUARY 13	H = 01 34 40.4
eP 15 16 23 c	Mould Bay	h = about 33 km
Penticton	iP 00 26 25 c	Alert
iP 15 16 50	i 00 29 56	eP 01 46 53
Resolute	Yellowknife	Mould Bay
e 15 19 22	eP 00 26 12	eP 01 47 41 d
Yellowknife		
eP 15 16 33		FEBRUARY 13
FEBRUARY 12		U.S.C.G.S.
U.S.C.G.S.	FEBRUARY 13	27.6N, 55.1E
6.7S, 147.1E	U.S.C.G.S.	Southern Iran
Near north coast	13.4N, 91.0W	H = 03 06 38.1
of New Guinea	Near south coast	h = about 33 km
H = 17 43 59.2	of Guatemala	Mag 3.9 (C.G.S.)
h = about 120 km	H = 00 22 51.3	Mould Bay
Mag 4.8 (C.G.S.)	h = about 116 km	eP 03 18 26 c
Mould Bay	Mag 5.0 (C.G.S.)	
eP 17 57 19	Alert	
	eP 00 33 (52)	
	Banff	
	eP 00 30 38	

DOMINION OBSERVATORIES

FEBRUARY 13	FEBRUARY 13	FEBRUARY 13
Mould Bay	U.S.C.G.S.	U.S.C.G.S.
eP 03 39 11	24.8N, 121.7E	24.6N, 122.1E
	Northern Formosa	Northern Formosa
	H = 09 30 34.6	H = 19 02 06.7
	h = about 33 km	h = about 33 km
	Alert	Mag 5.0 (C.G.S.)
	eP 09 42 03	Alert
	Mould Bay	e(P) 19 13 55
	iP 09 41 57	Mould Bay
	Yellowknife	eP 19 13 31 c
	eP 09 42 51	Penticton
		iP 19 14 57
FEBRUARY 13	FEBRUARY 13	FEBRUARY 13
U.S.C.G.S.	U.S.C.G.S.	Seven Falls
24.5N, 121.8E	9.9S, 160.8E	eP 19 13 46
Northern Formosa	Solomon Islands	
H = 08 50 02.2	H = 18 13 55.1	
h = about 33 km	h = about 29 km	
Mag 7 1/4 (PAS)	Mag 6 1/2 (PAS)	
7 1/4 (BRK)	6 1/2 (BKS)	
7 - 7 1/4 (PAL)	6 - 6 1/4 (PAL)	
	5.8 (CGS)	
Alert	Alert	FEBRUARY 13
iP 09 01 32 c	eP 18 27 (56)	U.S.C.G.S.
S 09 10 56	Banff	11.6N, 57.7E
Banff	eP 18 27 08	Socotra region
iP 09 02 57 c	Mould Bay	H = 19 55 36.0
Mould Bay	eP 18 27 25	h = about 33 km
eP 09 01 28 d	Ottawa	Mould Bay
S 09 10 50	eP' 18 32 (48)	eP 20 08 45
Ottawa	Penticton	
eP 09 04 (22)	eP 18 26 56	
Penticton	Resolute	FEBRUARY 14
iP 09 02 53 c	eP 18 27 54 d	Mould Bay
Resolute	Schefferville	eP 06 57 (22)
eP 09 01 59 d	eP' 18 32 (52)	
Schefferville	Seven Falls	
eP 09 03 48 c	eP' 18 32 51	
Seven Falls	Shawinigan Falls	
eP' 09 08 (27)	eP' 18 32 52	
Victoria	Victoria	
iP 09 02 45 c	eP 18 26 45	
Yellowknife	Yellowknife	
iP 09 02 22 c	eP 18 27 20	
FEBRUARY 13		FEBRUARY 14
Mould Bay		U.S.C.G.S.
iP 09 20 54 c		10.1S, 160.3E
Yellowknife		Solomon Islands
iP 09 20 48		H = 06 48 30.3
i 09 21 48		h = about 64 km
		Mag 5.1 (C.G.S.)
		Penticton
		eP 07 01 29

SEISMOLOGICAL BULLETIN - 1963

FEBRUARY 14

Alert
eP 07 12 (04)
Mould Bay
eP 07 10 25
Resolute
eP 07 11 32
Yellowknife
eP 07 11 14

FEBRUARY 14

U.S.C.G.S.
7.2S, 128.2E
Banda Sea
H = 07 04 40.8
h = about 197 km
Mag 6 1/2 (PAS)
5.8 (CGS)

Banff
eP' 07 22 55
Halifax
eP' 07 23 47
London
P' 07 23 30
Mould Bay
eP 07 18 16
iP' 07 22 41
Ottawa
eP' 07 23 32
i 07 23 43

Penticton
eP 07 18 52
Schefferville
eP' 07 23 (25)
Seven Falls
eP' 07 23 (31)
Shawinigan Falls
eP' 07 23 (37)
Victoria
eP 07 18 41
eP' 07 22 48
Yellowknife
eP 07 18 44
iP' 07 22 49

FEBRUARY 14

U.S.C.G.S.
6.2N, 82.5W
South of Panama
H = 08 31 59.5
h = about 33 km
Mag 4.2 (C.G.S.)
Mould Bay
eP 08 43 26 c
Penticton
eP 08 41 16
Resolute
eP 08 43 (00)
Schefferville
eP 08 40 53
Yellowknife
iP 08 42 10 c

FEBRUARY 14

U.S.C.G.S.
11.0N, 61.3W
Near north coast of
Trinidad
H = 08 50 36.5
h = about 33 km
Mag 4.0 (C.G.S.)
Mould Bay
eP 09 02 (02)

FEBRUARY 14

U.S.C.G.S.
00.9N, 30.0W
Mid-Atlantic Ocean
H = 12 09 11.4
h = about 33 km
Mag 4.6 (C.G.S.)
Alert
eP 12 21 (34)
S 12 31 52
Halifax
(eP) 12 18 30
London
eP 12 19 31 d
Mould Bay
eP 12 22 04 c
S 12 32 48

Ottawa

eP 12 19 (19)
Penticton
eP 12 22 04
Resolute
eP 12 21 33
Schefferville
eP 12 19 30
Seven Falls
eP 12 19 (04)
Shawinigan Falls
eP 12 19 (09)
Yellowknife
eP 12 21 52

FEBRUARY 14

U.S.C.G.S.
40.4N, 19.9E
Near coast of Albania
H = 12 48 02
h = about 33 km
Mag 4.4 (C.G.S.)
Mould Bay
eP 12 58 12

FEBRUARY 14

U.S.C.G.S.
44.5N, 15.5E
Near coast of
Yugoslavia
H = 13 18 56.4
h = about 36 km
Alert
eP 13 27 07
Mould Bay
eP 13 28 33 c
Penticton
eP 13 30 57

FEBRUARY 14

U.S.C.G.S.
45.2N, 148.6E
Kurile Islands
H = 14 09 29.8
h = about 97 km
Mag 5.1 (C.G.S.)
Mould Bay
eP 14 17 52

DOMINION OBSERVATORIES

Resolute		FEBRUARY 14		FEBRUARY 15
eP	14 18 40 c	U.S.C.G.S.	U.S.C.G.S.	
		3.1S, 134.3E	40.6N, 20.3E	
		Western New	Albania	
FEBRUARY 14		Guinea	H = 10 18 26.3	
Penticton		H = 22 41 51.1	h = about 33 km	
eP	14 48 08	h = about 49 km	Mag 4.6 (CGS)	
		Mag 4.6 (CGS)	Alert	
FEBRUARY 14		Mould Bay	eP 10 27 12	
Resolute		iP 22 55 16 c	Mould Bay	
eP	22 06 30		eP 10 28 36	
FEBRUARY 14		FEBRUARY 15	Penticton	
U.S.C.G.S.		U.S.C.G.S.	eP 10 30 53	
5.0S, 144.6E		33.2S, 179.2W	Resolute	
Eastern New Guinea		Kermadec Islands	eP 10 28 14	
H = 22 07 54.3		H = 00 48 51.9		
h = about 80 km		h = about 42 km	FEBRUARY 15	
Mag 6 1/2 (PAS)		Mag 5.3 (CGS)	Mould Bay	
6 (PAL)		Alert	eP 15 57 51 d	
6.0 (CGS)		eP' 01 07 48	Resolute	
Halifax		Mould Bay	eP 15 58 (31)	
eP' 22 27 04		eP' 01 07 27		
London		Resolute		
eP' 22 26 45		eP' 01 07 36 c	FEBRUARY 15	
Mould Bay		Seven Falls	U.S.C.G.S.	
eP 22 21 14		eP' 01 07 47 c	4.3N, 96.3E	
Ottawa		FEBRUARY 15	Sumatra	
eP' 22 26 49		U.S.C.G.S.	H = 16 29 19.0	
Penticton		14.9S, 178.7W	h = about 33 km	
eP 22 21 20		Fiji Islands region	Mag 5.7 (CGS)	
Resolute		H = 06 54 51.8	Mould Bay	
eP 22 21 (44)		h = about 33 km	eP 16 42 49 c	
Schefferville		Mag 5.0 (CGS)		
eP' 22 26 45 c		Penticton	FEBRUARY 15	
Seven Falls		iP 07 07 14	Mould Bay	
eP' 22 26 52 (c)			eP 18 26 10	
Victoria		FEBRUARY 15		
eP 22 21 10		Mould Bay	FEBRUARY 15	
Yellowknife		eP 09 10 00	U.S.C.G.S.	
eP 22 21 28			15.4S, 174.3W	
			Samoa Islands region	
			H = 18 30 36.0	
			h = about 140 km	
			Mag 5.0 (CGS)	
			Penticton	
			eP 18 42 33	

SEISMOLOGICAL BULLETIN - 1963

FEBRUARY 15	FEBRUARY 16	Shawinigan Falls
Penticton	U.S.C.G.S.	Pn 08 00 46
eP 20 33 21	5.7N, 126.5E	Sn 08 01 08.5
	South of Mindanao,	S1 08 01 12.5
	Philippine Islands	D = 200 km
FEBRUARY 15	H = 05 44 27.5	FEBRUARY 16
Mould Bay	h = about 133 km	U.S.C.G.S.
eP 22 47 49	Mag 4.3 (CGS)	15.1N, 46.5W
	Mould Bay	North Atlantic Ocean
	eP 05 57 (12)	H = 08 04 13.4
FEBRUARY 16		h = about 33 km
Penticton		Mag 4.5 (CGS)
eP 00 01 10		Penticton
FEBRUARY 16		IP 08 15 10
U.S.C.G.S.	Near coast of Turkey	FEBRUARY 16
46.2N, 111.0W	H = 06 21 13.2	U.S.C.G.S.
South Western	h = about 101 km	17.7S, 178.6W
Montana	Mag 4.1 (CGS)	Fiji Islands region
H = 03 01 40.5	Mould Bay	H = 08 31 17.5
h = about 33 km	eP 06 31 (45)	h = about 534 km
Banff	FEBRUARY 16	Mag 4.5 (CGS)
iP 03 03 07.1	44°53'N, 73°41'W	Mould Bay
Mould Bay	15 miles southwest	eP 08 44 05
eP 03 07 (54)	of Rouses Pt., N. Y.	Penticton
Penticton	H = 08 00 16.6	IP 08 42 56 c
eP 03 03 16	Mag 2.6	
Victoria	London	
eP 03 03 53	e 08 03 11	FEBRUARY 16
Yellowknife	Lg 08 03 18	U.S.C.G.S.
eP 03 05 27	D = 648 km	9.7N, 122.5E
	Montreal	Negros, Philippine
FEBRUARY 16	P1 08 00 26.7	Islands
49.6°N, 127.1°W	i 08 00 30	H = 08 31 51.1
West of Vancouver Island	S1 08 00 35	h = about 28 km
H = 04 06 45	D = 68.1km	Mould Bay
Mag 2.8	Ottawa	IP 08 44 36
Penticton	P1 08 00 45	FEBRUARY 16
eP _n 04 07 55	i 08 00 48.5	Mould Bay
D = 527 km	S1 08 01 06.0	eP 11 02 31
Port Hardy	D = 172 km	
iP ₁ 04 07 07.9	Seven Falls	
iS ₁ 04 07 25.6	Pn 08 01 03	
D = 145 km	Sn 08 01 36	
Victoria	S1 08 01 46	
eP _n 04 07 28.2	D = 325 km	
D = 302 km		

DOMINION OBSERVATORIES

FEBRUARY 16	Penticton	Schefferville
U.S.C.G.S.	eP 12 32 21	eP 00 07 17
7.0S, 117.3E	Schefferville	Seven Falls
Flores Sea	eP 12 31 (28)	eP 00 08 (10)
H = 10 46 22.0	Yellowknife	
h = about 561 km	iP 12 31 24 c	
Mag 4.6 (C.G.S.)		
Mould Bay		
eP' 11 03 38		
Ottawa	FEBRUARY 16	FEBRUARY 17
eP' 11 04 40	Mould Bay	U.S.C.G.S.
e 11 07 27	eP 14 15 24	24.1N, 122.5E
Penticton		Ryukyu Islands
iP' 11 04 03	FEBRUARY 16	H = 02 31 40.8
Resolute	U.S.C.G.S.	h = about 33 km
eP' 11 03 49 d	17.8S, 178.5W	Mag 4.6 (CGS)
Schefferville	Fiji Islands region	Banff
eP' 11 04 32	H = 17 54 41.3	eP 02 44 36
Seven Falls	h = about 564 km	Mould Bay
eP' 11 04 39	Mag 4.4 (CGS)	eP 02 43 07
	Penticton	Penticton
	iP 18 06 17	iP 02 44 31 c
FEBRUARY 16		Victoria
U.S.C.G.S.		eP 02 44 23
0.6S, 147.5E		Yellowknife
Admiralty Islands		eP 02 44 00
region		
H = 12 12 39.1		
h = about 33 km		
Mag 5.0 (CGS)		
Mould Bay	FEBRUARY 16	FEBRUARY 17
eP 12 25 43	H = 20 17 19	U.S.C.G.S.
i 12 26 22	Mag 1.9	17.2N, 100.8W
Resolute	Penticton	Guerrero, Mexico
eP 12 26 08 d	eP _n 20 17 56.2	H = 03 50 41.2
	eS _n 20 18 27.1	h = about 33 km
	D = 253 km	Mag 4.1 (CGS)
FEBRUARY 16		Mould Bay
U.S.C.G.S.		eP 04 00 46 c
36.5N, 70.5E		Resolute
Hindu Kush		eP 04 00 30 d
H = 12 19 31.1		Yellowknife
h = about 216 km		eP 03 59 05
Mag 5.2 (CGS)		
Alert	FEBRUARY 16	FEBRUARY 17
eP 12 29 10 c	U.S.C.G.S.	U.S.C.G.S.
Mould Bay	8.5S, 80.1W	36.9N, 71.3E
iP 12 30 04 c	Off coast of Peru	Hindu Kush region
S 12 38 44	H = 21 32 22.4	H = 05 38 17.1
	h = about 33 km	h = about 174 km
	Mag 4.8 (CGS)	Mag 4.7 (CGS)
	Mould Bay	Mould Bay
	eP 21 45 09 c	eP 05 48 53 d
FEBRUARY 17		i 05 49 41
U.S.C.G.S.		Penticton
54.0N, 35.1W		eP 05 51 16
North Atlantic Ocean		
H = 00 03 03.7		
h = about 32 km		
Mag 3.8 (CGS)		

SEISMOLOGICAL BULLETIN - 1963

FEBRUARY 17	FEBRUARY 17	FEBRUARY 18
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
4.8S, 144.2E	43.9N, 17.2E	36.4N, 70.9E
Northeast New	Yugoslavia	Hindu Kush
Guinea	H = 20 12 11.4	H = 14 25 18.9
H = 06 53 20.3	h = about 33 km	h = about 225 km
h = about 35 km	Mag 5.2 (CGS)	Mag 4.9 (CGS)
Mag 5.7 (CGS)	Penticton	Alert
Mould Bay	eP 20 24 19	eP 14 34 58
eP 07 06 45		Mould Bay
		IP 14 35 50 c
FEBRUARY 17	FEBRUARY 18	Resolute
U.S.C.G.S.	H = 02 44 08	e(P) 14 36 (00)
42.1N, 37.2E	Mag 1.2	Schefferville
Black Sea	Penticton	eP 14 37 16
H = 08 28 24.9	iP ₁ 02 44 23.2	Yellowknife
h = about 33 km	iS ₁ 02 44 35.1	IP 14 37 11 c
Mag 4.8 (CGS)	D = 98 km	
Mould Bay		
eP 08 38 37	FEBRUARY 18	FEBRUARY 18
Penticton	U.S.C.G.S.	U.S.C.G.S.
eP 08 41 08	25.3N, 121.8E	58.2N, 32.4W
Victoria	Near north coast of	North Atlantic Ocean
eP 08 41 15	Formosa	H = 18 24 05.5
	H = 07 08 29	h = about 33 km
	h = about 33 km	Mag 4.6 (CGS)
	Mould Bay	Mould Bay
	IP 07 19 51 d	eP 18 30 36
FEBRUARY 17		Schefferville
Mould Bay		eP 18 28 30
eP 09 19 49 c		
FEBRUARY 17	FEBRUARY 18	FEBRUARY 18
Mould Bay	Mould Bay	U.S.C.G.S.
eP 14 04 46	eP 14 14 (16)	57.9N, 32.2W
Penticton		North Atlantic Ocean
eP 14 06 10	FEBRUARY 18	H = 19 03 01
	U.S.C.G.S.	h = about 33 km
	36.2S, 90.4W	Mould Bay
	West of Chile	eP 19 09 (41)
	H = 14 12 36.0	i 19 09 53
	h = about 33 km	Penticton
	Mag 5.2 (CGS)	eP 19 11 39
	Mould Bay	Schefferville
	eP' 14 30 51 c	eP 19 07 27
	Seven Falls	Shawinigan Falls
	IP 14 25 01 c	eP 19 08 (45)
	Shawinigan Falls	
	eP 14 24 57	

DOMINION OBSERVATORIES

FEBRUARY 18	FEBRUARY 19	FEBRUARY 19
U.S.C.G.S.	U.S.C.G.S.	Mould Bay
33.7N, 137.7E	41.1N, 142.8E	eP 22 53 (45)
Near south coast	South of Hokkaido,	
of Honshu, Japan	Japan	
H = 21 53 57.6	H = 12 12 47.5	FEBRUARY 19
h = about 317 km	h = about 32 km	Mould Bay
Mag 4.1 (CGS)	Mag 4.2 (CGS)	iP 23 11 05 c
Mould Bay	Mould Bay	
eP 22 03 46	eP 12 21 58 d	
Penticton	Resolute	FEBRUARY 20
iP 22 04 53 d	eP 12 22 41 d	U.S.C.G.S.
		17.2S, 178.2W
		Fiji Islands region
		H = 06 46 19.5
FEBRUARY 19	FEBRUARY 19	h = about 612 km
Mould Bay	U.S.C.G.S.	Mag 4.4 (CGS)
eP 01 01 48	55.3S, 28.8W	Penticton
	Sandwich Islands region	eP 06 57 48
	H = 16 39 15.1	
	h = about 33 km	
FEBRUARY 19	Mould Bay	FEBRUARY 20
U.S.C.G.S.	eP' 16 58 41	Mould Bay
11.1N, 124.2E	Penticton	eP 07 47 39
Cebu, Philippine	eP' 16 58 20	
Islands region	Resolute	
H = 01 22 23	eP' 16 58 (35)	FEBRUARY 20
h = about 33 km	Yellowknife	Mould Bay
Mould Bay	eP' 16 58 31	eP 12 03 12
eP 01 34 52		
FEBRUARY 19	FEBRUARY 19	
Mould Bay	Mould Bay	
iP 03 37 47 d	eP 20 57 42	
		FEBRUARY 20
		U.S.C.G.S.
FEBRUARY 19		51.9N, 177.9E
Mould Bay		Rat Islands,
eP 08 18 17		Aleutian Islands
		H = 14 32 07.7
FEBRUARY 19	FEBRUARY 19	h = about 33 km
Alert	U.S.C.G.S.	Mag 4.7 (CGS)
eP 11 22 25 (d)	24.0N, 122.9E	Mould Bay
	Off east coast of	iP 14 38 49 c
	Formosa	Penticton
	H = 22 28 14	iP 14 39 29 c
	h = about 33 km	Resolute
	Mould Bay	eP 14 39 42 c
	eP 22 39 40	Victoria
	Resolute	eP 14 39 14
	eP 22 40 12 c	Yellowknife
		iP 14 39 10 c

SEISMOLOGICAL BULLETIN - 1963

FEBRUARY 20	Mould Bay	Mould Bay
U.S.C.G.S.	eP 19 51 55	eP 13 12 31 d
7.2N, 73.4W	Penticton	Resolute
Northern Colombia	eP 19 53 19	eP 13 13 07 (d)
H = 14 51 17.8	Resolute	
h = about 127 km	e(P) 19 52 (28)	
Mag 4.2 (CGS)		
Mould Bay		
eP 15 02 36		
FEBRUARY 20	FEBRUARY 21	FEBRUARY 21
Mould Bay	U.S.C.G.S.	U.S.C.G.S.
eP 15 47 (59)	33.4N, 139.2E	20.6S, 175.1W
	South of Honshu,	Tonga Islands region
	Japan	H = 13 16 05.6
	H = 02 33 35.9	h = about 33 km
	h = about 168 km	Mag 5.2 (CGS)
	Mag 4.4 (CGS)	Banff
FEBRUARY 20	Alert	i 13 28 56
U.S.C.G.S.	eP 02 43 52 d	Penticton
38.8N, 139.0E	Mould Bay	IP 13 28 41 c
Off west coast of	IP 02 43 29 d	Victoria
Honshu, Japan	Penticton	eP 13 28 28
H = 16 45 51.0	IP 02 44 43	
h = about 175 km	Resolute	
Mould Bay	IP 02 44 09 d	
eP 16 55 08 d	Victoria	
i 16 55 50	eP 02 44 33	
Resolute		
eP 16 55 49 d		
FEBRUARY 20	FEBRUARY 21	FEBRUARY 21
U.S.C.G.S.	U.S.C.G.S.	Mould Bay
45.7S, 78.7W	42.3N, 142.5E	eP 14 21 43
Off coast of	Near south coast	
southern Chile	of Hokkaido, Japan	
H = 17 07 32.5	H = 07 49 28.8	
h = about 33 km	h = about 33 km	
Mag 4.6 (CGS)	Mag 4.5 (CGS)	
Mould Bay	Mould Bay	
eP 17 26 29	eP 07 58 30	
	Resolute	
	eP 07 59 14 c	
FEBRUARY 20	FEBRUARY 21	FEBRUARY 21
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
24.6N, 122.1E	17.9N, 146.5E	20.5S, 173.9W
Near northeast	Mariana Islands region	Tonga Islands region
coast of Formosa	H = 13 01 06.5	H = 14 28 29
H = 19 40 30.9	h = about 88 km	h = about 29 km
h = about 33 km	Mag 4.4 (CGS)	Mag 5.0 (CGS)
Mag 4.7 (CGS)		Penticton
		eP 14 41 01
		Yellowknife
		eP 14 41 50

DOMINION OBSERVATORIES

FEBRUARY 21	FEBRUARY 21	Alert
U.S.C.G.S. 32.7N, 20.9E	Penticton eP 19 05 43	eP 07 13 19 i 07 13 22 (S) 07 15 34
Near coast of Libya H = 17 14 35.7 h = about 33 km Mag 5.0 (CGS)		Banff eP 07 18 27 c
Alert eP 17 24 19 S 17 32 19	FEBRUARY 21 U.S.C.G.S. 32.6N, 21.0E	Mould Bay eP 07 14 36
Banff eP 17 27 34	Near coast of Libya H = 20 26 43.8 h = about 33 km Mag 4.4 (CGS)	Ottawa eP 07 19 18 S 07 26 30
Halifax iP 17 25 10 c	Mould Bay eP 20 37 44	Penticton eP 07 18 41
London iP 17 26 23 (d)	Resolute eP 20 37 (24)	Resolute eP 07 15 03
Mould Bay eP 17 25 36 S 17 34 44	Schefferville eP 20 37 08	Schefferville eP 07 18 (04)
Ottawa iP 17 25 57 (c) S 17 35 22	FEBRUARY 21 U.S.C.G.S. 12.7N, 84.9W	Seven Falls eP 07 19 06
Penticton eP 17 27 39	Nicaragua H = 23 42 34.7 h = about 33 km Mag 4.3 (CGS)	Shawinigan Falls eP 07 19 15
Resolute eP 17 25 15 (d)	Mould Bay eP 23 53 21	Victoria eP 07 18 46
Schefferville eP 17 24 59		Yellowknife iP 07 16 52 c
Seven Falls eP 17 25 33	FEBRUARY 22 U.S.C.G.S. 27.5N, 87.7E	FEBRUARY 22 U.S.C.G.S.
Shawinigan Falls iP 17 25 43 c	Nepal-Tibet Border region H = 01 32 25.4 h = about 33 km	84.7N, 104.3E North Polar region H = 07 23 14
Victoria eP 17 27 49 c	Mould Bay eP 01 44 05	h = about 33 km Mag 4.8 (CGS)
Yellowknife eP 17 26 36		Mould Bay eP 07 27 25
FEBRUARY 21 U.S.C.G.S. 32.9N, 21.1E	FEBRUARY 22 U.S.C.G.S. 85.0N, 98.9E	Yellowknife iP 07 29 40 c
Near coast of Libya H = 18 33 06.8 h = about 33 km Mag 4.5 (CGS)	North Polar region H = 07 10 28.0 h = about 33 km Mag 5.0 (CGS)	FEBRUARY 22 U.S.C.G.S. 17.8S, 178.8W
Schefferville eP 18 43 28		Fiji Islands region H = 07 58 57.0 h = about 550 km Mag 5.0 (CGS)
		Banff iP 08 10 50 c

SEISMOLOGICAL BULLETIN - 1963

Mould Bay	Schefferville	FEBRUARY 22
eP 08 11 44	eP 14 22 36	Mould Bay
Penticton	Victoria	eP 22 32 49
iP 08 10 35 c	eP 14 25 33 d	
Victoria	Yellowknife	
eP 08 10 23	eP 14 24 11	FEBRUARY 22
Yellowknife		Penticton
iP 08 11 18 c		eP 23 13 12
FEBRUARY 22		
Resolute		
eP 18 27 (35)		
FEBRUARY 22		
U.S.C.G.S.		
21.1S, 68.1W		
Peru-Chile Border		
region		
H = 09 37 52.3		
h = about 98 km		
Mag 4.4 (CGS)		
Yellowknife		
iP 09 50 46 d		
FEBRUARY 22		
U.S.C.G.S.		
30.3S, 178.6W		
Kermadec Islands		
H = 11 05 42.0		
h = about 113 km		
Mag 5.0 (CGS)		
Mould Bay		
eP' 11 24 04		
FEBRUARY 22		
U.S.C.G.S.		
40.6N, 20.5E		
Albania - Greece		
Border		
H = 14 12 54.4		
h = about 33 km		
Mag 4.4 (CGS)		
Alert		
eP 14 21 (39)		
Mould Bay		
eP 14 23 02		
Penticton		
eP 14 25 21		
Resolute		
eP 14 22 (22)		
FEBRUARY 22		
Ottawa		
eP 21 25 29		
Shawinigan Falls		
eP 21 25 (38)		
FEBRUARY 22		
Resolute		
eP 21 24 39		
Banff		
eP 21 22 41		
London		
eP 21 19 36 (d)		
Mould Bay		
eP 21 24 30 c		
Ottawa		
eP 21 19 (52)		
Penticton		
eP 21 22 55		
Resolute		
eP 21 23 55 c		
Schefferville		
eP 21 21 11		
Shawinigan Falls		
eP 21 19 58		
Victoria		
eP 21 23 09		
Yellowknife		
iP 21 23 22		
FEBRUARY 22		
Ottawa		
eP 21 25 29		
Shawinigan Falls		
eP 21 25 (38)		
FEBRUARY 22		
Resolute		
eP 18 27 (35)		
Mould Bay		
eP 18 27 (35)		
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FEBRUARY 22		
Resolute		
eP 18 27 (35)		
Mould Bay		
eP 18 27 (35)		
FEB		

DOMINION OBSERVATORIES

FEBRUARY 23

U. S. C. G. S.
36.0S, 102.5W
South Pacific Ocean
H = 06 32 30
h = about 33 km
Mag 4.7 (CGS)
Penticton
eP 06 45 06

FEBRUARY 23

U. S. C. G. S.
44.8S, 76.1W
Near coast of
southern Chile
H = 07 02 37.9
h = about 33 km
Mag 4.9 (CGS)
Mould Bay
eP' 07 21 32

FEBRUARY 23

Alert
eP 16 52 24
Mould Bay
eP 16 52 37

FEBRUARY 23

U. S. C. G. S.
49.4N, 158.6W
Kurile Islands region
H = 17 12 47.4
h = about 50 km
Mag 4.4 (CGS)
Alert
eP 17 21 (09)
i 17 21 14
Mould Bay
eP 17 20 25
Resolute
eP 17 21 17 d
Schefferville
eP 17 23 52 c
Yellowknife
IP 17 21 12 c

FEBRUARY 24

U. S. C. G. S.
19.4N, 146.2E
Mariana Islands region
H = 03 57 35.8
h = about 51 km
Mould Bay
eP 04 08 58
Resolute
eP 04 09 33

FEBRUARY 24

U. S. C. G. S.
15.1S, 72.5W
Near coast of
southern Peru
H = 05 38 20.6
h = about 105 km
Mag 5.3 (CGS)
Mould Bay
eP 05 51 33
Penticton
eP 05 49 37
Resolute
eP 05 51 13
Schefferville
eP 05 49 19
Seven Falls
eP 05 48 30 (c)
Yellowknife
IP 05 50 40 c

FEBRUARY 24

U. S. C. G. S.
18.3S, 175.4W
Tonga Islands region
H = 13 07 26.4
h = about 209 km
Mag 4.5 (CGS)
Penticton
IP 13 19 32 c

FEBRUARY 24

U. S. C. G. S.
14.6N, 91.4W
Central Guatemala
H = 13 34 15.7
h = about 135 km
Mag 5.7 (CGS)
Alert
IP 13 45 06 c

Banff
eP 13 41 50
Halifax
IP 13 41 25 c
London
eP 13 40 09 c
Mould Bay
IP 13 44 32 c
S 13 54 14
Ottawa
IP 13 40 44 c
Penticton
IP 13 41 53 c
Port Hardy
IP 13 42 31 c
Resolute
eP 13 44 09 c
Schefferville
IP 13 42 15 c
Seven Falls
IP 13 41 11 c
Victoria
eP 13 42 03 c
Yellowknife
IP 13 43 02 c

FEBRUARY 24

U. S. C. G. S.
44.9N, 112.0W
Southwestern Montana
H = 15 24 56.6
h = about 33 km
Penticton
eP 15 26 27

SEISMOLOGICAL BULLETIN - 1963

FEBRUARY 24

Mould Bay
eP 15 47 25

FEBRUARY 24

U.S.C.G.S.
19.5S, 179.0W
Fiji Islands region
H = 21 34 08.1
h = about 546 km
Mag 4.8 (CGS)

Penticton

iP 21 45 54

FEBRUARY 24

U.S.C.G.S.
26.4N, 44.5W
North Atlantic Ocean
H = 22 35 00.0
h = about 33 km
Mag 4.6 (CGS)

Alert

eP 22 44 41

London

eP 22 41 45

Mould Bay

eP 22 45 12 d

Ottawa

e 22 41 (20)

Resolute

eP 22 44 28 d

Schefferville

eP 22 41 33

Seven Falls

eP 22 41 (00)

Shawinigan Falls

eP 22 41 08

Yellowknife

iP 22 44 49

FEBRUARY 25

Penticton
eP 00 01 49

FEBRUARY 25

U.S.C.G.S.
7.6S, 112.3E
Near south coast
of Java

FEBRUARY 25

H = 02 38 19
h = about 33 km
Mould Bay
eP 02 45 27 c
i 02 52 26

FEBRUARY 25

Resolute
eP 05 09 34

FEBRUARY 25

U.S.C.G.S.
72.3N, 5.5E
Greenland Sea
H = 07 23 53
h = about 33 km

Alert

eP 07 27 32

FEBRUARY 25

U.S.C.G.S.
28.1S, 65.4W
San Luis Province,
Argentina
H = 08 08 20.1
h = about 32 km
Mag 5.3 (CGS)

London

iP 08 19 43 c

Penticton

eP 08 21 16

Schefferville

eP 08 20 42

Seven Falls

eP 08 20 00

Yellowknife

eP 08 21 55

FEBRUARY 25

U.S.C.G.S.
12.2N, 88.2W
Off coast of El
Salvador

H = 08 58 40.8
h = about 33 km
Mag 4.2 (CGS)
Mould Bay
eP 09 09 26
Ottawa
eP 09 05 29
Penticton
eP 09 06 38
Resolute
eP 09 09 02
Schefferville

eP 09 06 59 c
Seven Falls
eP 09 05 55
Yellowknife
iP 09 07 59 c

FEBRUARY 25

U.S.C.G.S.
10.4N, 121.8E
Near west coast of
Panay, Philippine
Islands
H = 09 11 23.7
h = about 46 km
Mag 4.5 (CGS)
Mould Bay

eP 09 24 03

FEBRUARY 25

U.S.C.G.S.
24.4N, 123.4E
Near east coast of
Formosa
H = 17 11 01.7
h = about 33 km
Mag 5.3 (CGS)
Alert

eP 17 22 30

Banff
eP 17 23 53

DOMINION OBSERVATORIES

Mould Bay		FEBRUARY 26	FEBRUARY 26
iP	17 22 26	U.S.C.G.S.	U.S.C.G.S.
S	17 32 24	19.3N, 121.0E	7.5S, 146.2E
Penticton		Coast of northern	Eastern New Guinea
iP	17 23 49	Luzon, Philippine	H = 20 14 08.7
Resolute		Islands	h = about 171 km
eP	17 22 58 d	H = 02 13 20.5	Mag 7 1/4 - 7 1/2 (PAS)
Victoria		h = about 56 km	7 - 7 1/4 (BRK)
eP	17 23 41 d	Mag 4.3 (CGS)	6 3/4 - 7 (PAL)
Yellowknife		Mould Bay	7.1 (CGS)
iP	17 23 19 d	eP 02 25 14 c	Alert
		Resolute	iP 20 27 53 c
		eP 02 25 44 c	Banff
FEBRUARY 25		Yellowknife	iP 20 27 39 d
U.S.C.G.S.		iP 02 26 04 c	Halifax
19.5N, 121.8E			eP' 20 32 54
Off coast of			Mould Bay
northern Luzon,		FEBRUARY 26	iP 20 27 26 d
Philippine Islands		U.S.C.G.S.	Ottawa
H = 19 21 49.6		12.8N, 144.1E	eP' 20 32 41
Mag 3.9 (CGS)		Mariana Islands	Penticton
Mould Bay		H = 07 52 13.6	iP 20 27 28 d
eP 19 33 43		h = about 98 km	Resolute
Yellowknife		Alert	eP 20 27 55 d
eP 19 34 33		eP 08 04 35	Schefferville
		Mould Bay	eP' 20 32 45
		eP 08 04 08	Seven Falls
FEBRUARY 25		Resolute	eP' 20 32 (37)
Mould Bay		eP 08 04 42 d	Shawinigan Falls
eP 22 36 45			eP' 20 32 44
Yellowknife		FEBRUARY 26	Victoria
eP 22 37 01		U.S.C.G.S.	iP 20 27 17 d
		12.4N, 87.4W	Yellowknife
FEBRUARY 25		Near coast of	iP 20 27 39 d
U.S.C.G.S.		Nicaragua	
15.5N, 121.3E		H = 16 30 13	FEBRUARY 27
Central Luzon,		h = about 33 km	U.S.C.G.S.
Philippine Islands		Mag. 4.2 (CGS)	1.0S, 78.8W
H = 23 45 16.8		Mould Bay	Ecuador
h = about 33 km		eP 16 40 58	H = 00 10 07.6
Mag 4.3 (CGS)		Resolute	h = about 89 km
Mould Bay		eP 16 40 36 c	Mag 4.1 (CGS)
eP 23 57 34		Schefferville	Mould Bay
Resolute		eP 16 38 34	eP 00 22 11
eP 23 58 01		Yellowknife	Penticton
		iP 16 39 33 c	iP 00 20 12 d

SEISMOLOGICAL BULLETIN - 1963

FEBRUARY 27	Schefferville	FEBRUARY 27
Penticton	eP' 04 48 56	U.S.C.G.S.
eP 01 23 01	Seven Falls	16.9N, 100.5W
Victoria	eP' 04 49 01	Off coast of
eP 01 22 48.8	Shawinigan Falls	Guerrero, Mexico
	eP' 04 49 00	H = 16 01 11.2
	Yellowknife	h = about 33 km
	eP 04 43 37	Mag 4.5 (CGS)
FEBRUARY 27		Mould Bay
80.9N, 85.8W		eP 16 11 17
Near Hare Fiord,		Resolute
Ellesmere Island,		eP 16 11 (00)
N.W.T.		Schefferville
H = 01 50 20.3		eP 16 09 34
Mag 3.7		Seven Falls
Alert		eP 16 08 35
Pn 01 51 16		Yellowknife
Sn 01 52 02		eP 16 09 37
S1 01 52 21		
D = 440 km	iP 07 46 36	
Mould Bay		FEBRUARY 27
eP _n 01 52 14.8		U.S.C.G.S.
eS _n 01 53 45.5		38.1N, 69.6E
D = 900 km		Tadzhik, S.S.R.
Resolute		H = 17 28 00.6
Pn 01 51 58		h = about 157 km
Sn 01 53 12		Mag 3.9 (CGS)
D = 740 km		Mould Bay
		eP 17 38 30
FEBRUARY 27		FEBRUARY 27
U.S.C.G.S.		Mould Bay
6.0S, 149.4E		eP 20 07 50
New Britain region		
H = 04 30 00.8		FEBRUARY 27
h = about 52 km		U.S.C.G.S.
Mag 6 1/2 - 6 3/4 (PAL)		4.6S, 152.9E
5.2 (CGS)		New Britain
Alert		H = 20 28 34.9
eP 04 43 (55)		h = about 100 km
Halifax		Mag 5.0 (CGS)
eP' 04 49 (30)		Mould Bay
Mould Bay		eP 20 41 40
eP 04 43 27		Resolute
Ottawa		e(P) 20 42 (12)
eP' 04 48 58		Yellowknife
Penticton		eP 20 41 49
eP 04 43 22		
Resolute		
eP 04 43 (55)		

DOMINION OBSERVATORIES

FEBRUARY 27	FEBRUARY 28	Mould Bay
H = 20 40 59	U.S.C.G.S.	eP 03 31 02
Mag 1.5	38.2N, 141.7E	
Port Hardy	Near coast of	
eP ₁ 20 41 08.0	northern Honshu,	MARCH 1
eS ₁ 20 41 15.0	Japan	U.S.C.G.S.
D = 57 km	H = 06 15 09.5	15.6N, 93.1W
	h = about 61 km	Near coast of
	Mag 3.8 (CGS)	Chiapas, Mexico
FEBRUARY 27	Mould Bay	H = 04 02 34
U.S.C.G.S.	eP 06 24 49	h = about 33 km
5.6S, 79.3W	Resolute	Mag 4.4 (CGS)
Northern Peru	eP 06 25 21 c	Mould Bay
H = 21 11 32.5	FEBRUARY 28	eP 04 12 44 c
h = about 33 km	Resolute	i 04 13 23
Mould Bay	eP 15 32 10 (d)	Yellowknife
eP 21 24 06		i 04 11 20
Seven Falls		
eP 21 20 53		
FEBRUARY 27	FEBRUARY 28	MARCH 1
U.S.C.G.S.	H = 20 10 24	U.S.C.G.S.
54.8N, 161.6W	Mag 1.5	18.2S, 177.9W
Alaska Peninsula	Penticton	Fiji Islands region
H = 23 36 20.4	eP ₁ 20 10 51.4	H = 04 39 34.3
h = about 33 km	eS ₁ 20 11 12.0	h = about 568 km
Mag 5.3 (CGS)	D = 168 km	Mag 4.6 (CGS)
Alert		Penticton
eP 23 43 32 c		iP 04 51 10 c
Mould Bay	MARCH 1	
iP 23 41 58 c	U.S.C.G.S.	
i 23 45 20	34.8N, 119.3W	MARCH 1
Penticton	Ventura County,	Yellowknife
eP 23 41 53	California	eP 09 58 55
Resolute	H = 00 25 57.4	
eP 23 42 47 c	h = about 16 km	
Schefferville	Mag 4 3/4 - 5 (PAS)	
eP 23 45 17	Penticton	
Yellowknife	iP 00 29 25	
iP 23 41 44 c	Mould Bay	
	eP 00 33 44	
FEBRUARY 28	MARCH 1	
Mould Bay	U.S.C.G.S.	
eP 05 15 19	35.7N, 59.9E	
	Northeastern Iran	
	H = 03 20 02.4	
	h = about 33 km	
	Mag 4.8 (CGS)	
		Alert
		eP 10 55 31
		Mould Bay
		eP 10 55 04
		Penticton
		eP 10 56 28

SEISMOLOGICAL BULLETIN - 1963

Resolute	Alert	MARCH 2
eP 10 55 47 c	eP 19 26 35	U.S.C.G.S.
Schefferville	Mould Bay	1.8S, 143.6E
eP 10 58 07	eP 19 27 05	North of New Guinea
Yellowknife	Resolute	H = 05 39 07.4
eP 10 55 57	eP 19 26 (35)	h = about 129 km
	Shawinigan Falls	Mag 5.3 (CGS)
	eP 19 24 11	Mould Bay
MARCH 1	Yellowknife	eP 05 52 09
U.S.C.G.S.	eP 19 26 58	
41.9N, 80.8E		
Sinkiang Province,	MARCH 1	MARCH 2
China	Yellowknife	Alert
H = 11 55 22.5	e 21 10 12	eP 09 34 50
h = about 33 km		Banff
Mould Bay		eP 09 35 37
iP 12 05 37 c	MARCH 1	Mould Bay
	Canadian Arctic	eP 09 34 11 c
MARCH 1	H = 21 54 50.2	S 09 40 46
Mould Bay	h = 30 km	Penticton
eP 14 01 05	Mag 1.8	iP 09 35 29 c
	Resolute	Resolute
	P _n 21 55 13.7	eP 09 34 58 c
MARCH 1	P ₁ 21 55 15.9	Yellowknife
U.S.C.G.S.	S _n 21 55 32.0	eP 09 34 58
42.2N, 141.2E	S ₁ 21 55 35.4	
Near south coast	D = 160 km	MARCH 2
of Hokkaido, Japan		U.S.C.G.S.
H = 14 32 20	MARCH 1	46.0N, 153.0E
h = about 33 km	U.S.C.G.S.	Kurile Islands region
Mag 4.5 (CGS)	22.9N, 144.2E	H = 11 12 01.3
Mould Bay	Volcano Islands region	h = about 33 km
eP 14 41 25	H = 23 03 30.7	Mould Bay
Resolute	h = about 72 km	eP 11 20 18
eP 14 42 07 c	Mag 4.4 (CGS)	Resolute
	Mould Bay	eP 11 21 05 c
MARCH 1	eP 23 14 33	Yellowknife
Mould Bay		eP 11 21 05
eP 19 07 31	MARCH 2	
	H = 00 25 46	U.S.C.G.S.
MARCH 1	Mag 1.3	10.1N, 126.1E
U.S.C.G.S.	Penticton	Mindanao, Philippine
1.4N, 29.6W	iP ₁ 00 26 13.1	Islands region
Atlantic Ocean	iS ₁ 00 26 33.8	H = 16 06 56.3
H = 19 14 13.1	D = 171 km	h = about 92 km
h = about 33 km		Mag 4.0 (CGS)

DOMINION OBSERVATORIES

Mould Bay		MARCH 2		MARCH 3
eP	16 19 29	41°31'N, 75°46'W		U.S.C.G.S.
Resolute		A few miles north of		36.7N, 71.4E
eP	16 19 56 c	Scranton, Penn.		Hindu Kush
Yellowknife		H = 20 24 32		H = 01 48 09.4
eP	16 20 07	Mag 3.4		h = about 209 km
		Montreal		Mag 4.3 (CGS)
		P _n 20 25 37		Mould Bay
MARCH 2		e 20 26 20		iP 01 58 42 c
Penticton		S ₁ 20 26 45		
eP	16 31 09	D = 475 km		
Port Hardy		Ottawa	MARCH 3	
eP	16 31 32	P _n 20 25 30	U.S.C.G.S.	
Victoria		S _n 20 26 14	20.4S, 69.0W	
eP	16 30 48.3	S ₁ 20 26 33	Northern Chile	
		D = 430 km	H = 02 08 14.6	
MARCH 2		Seven Falls	h = about 110 km	
Yellowknife		L _g 20 27 56	Mag 4.3 (CGS)	
eP	17 37 23	D = 725 km	Penticton	
		Shawinigan Falls	eP 02 20 28	
MARCH 2		e 20 27 06	Yellowknife	
U.S.C.G.S.		L _g 20 27 24	iP 02 21 03	
10.0N, 126.0E		D = 605 km		
Mindanao, Philippine Islands region				
H = 17 27 38.3		MARCH 2	MARCH 3	
h = about 67 km		U.S.C.G.S.	U.S.C.G.S.	
Mag 3.9 (CGS)		14.8N, 94.0W	54.5N, 164.9W	
Mould Bay		Off coast of	Unimak Island,	
eP	17 40 13	Chiapas, Mexico	Aleutian Islands	
		H = 22 09 17	H = 09 39 55.8	
MARCH 2		h = about 33 km	h = about 103 km	
U.S.C.G.S.		Mag 4.1 (CGS)	Mag 3.8 (CGS)	
6.8N, 73.0W		Mould Bay	Mould Bay	
Colombia		eP 22 19 42	eP 09 45 37	
H = 19 41 55.4				
h = about 173 km		MARCH 2	MARCH 3	
Mag 4.1 (CGS)		U.S.C.G.S.	H = 11 21 16	
Mould Bay		17.1S, 175.0W	Mag 1.8	
eP	19 53 13 c	Tonga Islands	Port Hardy	
		H = 22 16 35.4	iP ₁ 11 21 38.6 d	
		h = about 240 km	iS ₁ 11 21 55.6	
		Mag 5.1 (CGS)		
		Mould Bay	MARCH 3	
		eP 22 29 49	H = 11 22 10	
		Penticton	Mag 1.8	
		iP 22 28 31 d	Port Hardy	
			iP ₁ 11 22 32.6 c	
			iS ₁ 11 22 49.6	

SEISMOLOGICAL BULLETIN - 1963

MARCH 3	MARCH 3	Alert
U.S.C.G.S. 36.4N, 71.3E	U.S.C.G.S. 30.7N, 136.9E	iP 07 43 26 d iS 07 44 52
Hindu Kush H = 17 05 03.7	South of Honshu, Japan	Banff eP 07 49 37
h = about 156 km	H = 22 59 44.9	Halifax eP 07 49 (44)
Mould Bay eP 17 15 43 d	h = about 491 km Alert	London iP 07 50 10 (c) Mould Bay
MARCH 3	iP 23 09 48 c	iP 07 45 53
U.S.C.G.S. 36.7N, 90.1W	Mould Bay	S 07 49 16
Slight damage southeast Missouri H = 17 30 13.0	Penticton	Ottawa eP 07 49 46
h = about 18 km	iP 23 10 38 c	Penticton eP 07 49 57
Mag 4 1/2 (PAL) 4.5 (CGS)	Port Hardy	Resolute eP 07 45 36 (d)
Banff eP 17 35 23	eP 23 10 09 c	Schefferville eP 07 48 18
Halifax e 17 40 26	Resolute	Seven Falls eP 07 49 28 c
London iP 17 32 23 c	iP 23 10 05 c	Shawinigan Falls eP 07 49 34 c
Mould Bay eP 17 38 00	Victoria	Victoria eP 07 50 04
S 17 47 05	eP 23 10 28	Yellowknife eP 07 48 02 d
Ottawa eP 17 33 22	Yellowknife	MARCH 4
Penticton eP 17 35 35	iP 23 10 13 c	49.6°N, 114.8°W
Resolute eP 17 37 (20)	MARCH 4	Crowsnest Pass region
Schefferville eP 17 35 27 d	Banff	H = 06 08 23
Seven Falls eP 17 34 14	eP ₁ 06 08 52.0	Mag 2.3
Shawinigan Falls eP 17 33 (57)	eS ₁ 06 09 14.1	MARCH 4
Yellowknife eP 17 36 17	D = 181 km	H = 10 23 14
	Penticton	Mag 85 km
	eP _n 06 09 13.0	Port Hardy
	D = 353 km	eP ₁ 10 23 31.5
	MARCH 4	eS ₁ 10 23 41.9
	U.S.C.G.S. 82.9N, 7.7W	D = 85 km
	North Polar region H = 07 41 51.0	MARCH 4
	h = about 33 km	H = 10 40 59
	Mag 5.0 (CGS)	Mag 2.0
		Port Hardy
		eP ₁ 10 41 28.2
		eS ₁ 10 41 50.6
		D = 184 km

DOMINION OBSERVATORIES

MARCH 4	MARCH 4	Mould Bay
U.S.C.G.S.	U.S.C.G.S.	eP 15 55 29
47.7N, 152.5E	35.2N, 25.4E	i 15 58 42
Kurile Islands region	Crete	S 16 05 48
H = 12 37 44.6	H = 15 10 19.2	Penticton
h = about 140 km	h = about 42 km	iP 15 53 29 c
Mag 4.3 (CGS)	Mag 4.8 (CGS)	Port Hardy
Mould Bay	Alert	eP 15 54 00 c
iP 12 45 39	eP 15 19 48	Resolute
	Banff	eP 15 55 07 c
	eP 15 23 04	Schefferville
	Halifax	eP 15 53 10
	eP 15 21 00	Seven Falls
	Mould Bay	eP 15 52 13
	eP 15 21 06 d	Shawinigan Falls
	S 15 29 59	eP 15 52 06
	Penticton	Victoria
	eP 15 23 18	eP 15 53 37 c
	Resolute	Yellowknife
	eP 15 20 48	eP 15 54 21
	Schefferville	
	eP 15 20 44 c	
	Seven Falls	MARCH 4
	eP 15 21 21	Mould Bay
	Shawinigan Falls	eP 17 07 23
	eP 15 21 31	
	Victoria	
	eP 15 23 26	MARCH 4
	Yellowknife	H = 17 12 21
	iP 15 22 12	Mag 1.9
		Port Hardy
Alert		iP ₁ 17 12 49.5 c
eP 13 50 (11)		eS ₁ 17 13 11.0
Banff		D = 176 km
eP 13 51 38		
Mould Bay	MARCH 4	
iP 13 49 57	U.S.C.G.S.	
i 13 50 10	4.5S, 81.6W	
S 13 59 31	Off coast of northern	
Penticton	Peru	
iP 13 51 33	H = 15 43 04.0	
Resolute	h = about 33 km	
eP 13 50 40	Mag 5.4 (CGS)	
Victoria	Alert	
eP 13 51 26	eP 15 55 47	
Yellowknife	S 16 06 (12)	
eP 13 51 02	Banff	
	eP 15 53 26	
	London	
	iP 15 51 35 c	
		MARCH 4
		U.S.C.G.S.
		15.7S, 75.3W
		Near coast of
		southern Peru
		H = 18 31 51.9
		h = about 45 km
		Mag 4.9 (CGS)
		Mould Bay
		eP 18 45 13 c
		Penticton
		iP 18 43 36 c

SEISMOLOGICAL BULLETIN - 1963

Resolute	Alert	MARCH 5
eP 18 44 53 c	eP 07 17 47 c	Canadian Arctic
Schefferville	Banff	H = 15 21 53.5
eP 18 43 03	eP 07 15 26	Mag 2.4
Seven Falls	London	Resolute
eP 18 42 13	iP 07 13 34	P ₁ 15 22 33
Yellowknife	Mould Bay	i 15 22 55
iP 18 44 18	eP 07 17 27 c	S ₁ 15 22 03
	Ottawa	D = 246 km
	eP 07 13 52	
MARCH 5	Penticton	
U.S.C.G.S.	iP 07 15 28 c	MARCH 5
29.2N, 81.2E	Port Hardy	Mould Bay
Nepal	eP 07 15 59	eP 21 25 09
H = 02 35 07.8	Resolute	
h = about 33 km	eP 07 17 05 (d)	
Mould Bay	Schefferville	MARCH 6
eP 02 46 40	eP 07 15 09	Penticton
	Seven Falls	eP 01 18 44
	eP 07 14 14	
MARCH 5	Shawinigan Falls	
U.S.C.G.S.	eP 07 14 04	MARCH 6
11.0N, 90.4W	Victoria	Mould Bay
South of Guatemala	eP 07 15 35	eP 01 35 22
H = 02 48 29.9	Yellowknife	
h = about 33 km	eP 07 16 19	
Mag 4.1 (CGS)		MARCH 6
Mould Bay		Canadian Arctic
eP 02 59 25		H = 01 50 38.9
	MARCH 5	Mag 2.2
	U.S.C.G.S.	Yellowknife
	36.1N, 26.2E	P ₁ 01 50 56
MARCH 5	Aegean Sea	i 01 50 59
U.S.C.G.S.	H = 07 53 39.2	S ₁ 01 51 09
11.5N, 140.6E	h = about 77 km	D = 107 km
Mariana Islands region	Mould Bay	
H = 04 54 51.4	eP 08 04 18	
h = about 33 km		MARCH 6
Mag 4.7 (CGS)		U.S.C.G.S.
Mould Bay	MARCH 5	28.9N, 132.2E
iP 05 07 07 d	U.S.C.G.S.	Ryukyu Islands
	17.5S, 178.6W	H = 04 37 44.5
MARCH 5	Fiji Islands region	h = about 55 km
U.S.C.G.S.	H = 09 12 16.8	Mag 4.4 (CGS)
4.5S, 81.5W	h = about 512 km	Alert
Off coast of	Mag 5.0 (CGS)	eP 04 48 44 d
northern Peru	Penticton	Mould Bay
H = 07 05 01.7	iP 09 23 56 c	eP 04 48 29 d
h = about 31 km		
Mag 5.6 (CGS)		

DOMINION OBSERVATORIES

Resolute	eP	04 49 05 d	Mould Bay	eP	23 32 41	MARCH 7	U.S.C.G.S.
							27.3S, 113.0W
MARCH 6			MARCH 7			Easter Island region	
U.S.C.G.S.			H = 01 57 48			H = 11 41 29.6	
53.8N, 161.2E			Mag 1.3			h = about 33 km	
Near east coast of			Penticton			Mag 4.9 (CGS)	
Kamchatka			eP ₁	01 58 14.8	Penticton	eP	11 53 19
H = 06 55 44.3			eS ₁	01 58 35.4			
h = about 33 km			D = 168 km				
Mag 4.1 (CGS)							
Mould Bay							
eP	07 02 44 c		MARCH 7			MARCH 7	U.S.C.G.S.
Resolute	eP	07 03 37 c	U.S.C.G.S.				44.3S, 75.3W
			27.0S, 113.5W			Near coast of	
			Approximately			southern Chile	
			500 km west of			H = 12 16 28.5	
MARCH 6			Easter Island			h = about 45 km	
Yellowknife			H = 05 22 01.1			Mag 5.6 (CGS)	
eP	08 11 09		h = about 33 km			Alert	
			Mag 6 3/4 (PAS)			eP'	12 35 (23)
			6 3/4 (BRK)			London	
			5.6 (CGS)			eP	12 29 09 c
MARCH 6			London			Mould Bay	
U.S.C.G.S.			iP	05 33 46 c		eP'	12 35 20
33.8N, 72.6E			Mould Bay			Ottawa	
West Pakistan			eP	05 35 58		eP	12 29 20
H = 08 35 03.7			Ottawa			Sept Iles	
h = about 36 km			eP	05 34 14		eP	12 29 44
Mag 4.3 (CGS)			iS	05 44 14		Seven Falls	
Mould Bay			Penticton			eP	12 29 29
eP	08 46 13 c		eP	05 33 46			
MARCH 6			Port Hardy				
Yellowknife			P	05 34 01		MARCH 7	U.S.C.G.S.
e	23 15 30		Resolute				50.8N, 178.6E
			eP	05 35 (54)		Rat Islands,	
MARCH 6			Schefferville			Aleutian Islands	
U.S.C.G.S.			eP	05 35 02		H = 13 43 01.2	
37.0N, 140.8E			Sept Iles			h = about 33 km	
Near east coast			iP	05 34 51 c		Mag 4.1 (CGS)	
of Central Honshu,			Seven Falls			Mould Bay	
Japan			eP	05 34 25		eP	13 49 50 c
H = 23 23 03.1			Shawinigan Falls			Penticton	
h = about 71 km			eP	05 34 19		eP	13 50 27
Mag 4.1 (CGS)			Victoria			Resolute	
			eP	05 33 45		eP	13 50 (42)
			Yellowknife				
			eP	05 34 53			

SEISMOLOGICAL BULLETIN - 1963

Schefferville	MARCH 7	Resolute
eP 13 53 (18)	U.S.C.G.S.	P _n 00 14 46.0
Sept Iles	44.8N, 123.4W	S _n 00 15 -
eP 13 53 41	Northwestern Oregon	D = 210 km
Yellowknife	H = 23 53 25.8	Schefferville
eP 13 50 09	h = about 33 km	eP 00 19 30
	Mag 4.6 (CGS)	S 00 23 47
	Alert	L _g 00 26 40
MARCH 7	eP 24 01 26 c	D = 2672 km
270 miles from	Mould Bay	Sept Iles
London, Ontario	eP 23 59 56	e 00 20 27
H = 14 59 28	Penticton	i 00 25 43
h = about 0 km	eP 23 54 43	L _g 00 29 00
Mag 3.4	Port Hardy	D = 3135
London	eP 23 55 00	Seven Falls
P _n 14 59 28	Victoria	e 00 21 (13)
P ₁ 15 00 37.6	iP 23 54 20	e 00 26 (30)
S _n 15 01 16		e 00 30 (18)
S ₁ 15 01 30.5		D = 3390 km
D = 435 km	MARCH 8	
	76°36'N, 94°20'W	MARCH 8
MARCH 7	Grinnell Peninsula,	76°36'N, 94°20'W
Yellowknife	Devon Island, N.W.T.	Aftershock of the
eP 20 15 13	H = 00 14 15.7	earthquake on Devon
	h = 33 km (USCGS)	Island at 00 14 15.7
	Unified magnitude 4.5	H = 01 44 29.5
	(USCGS)	h = 32 km
MARCH 7	Alert	Mag 2.5
U.S.C.G.S.	P _n 00 16 12.1	Resolute
36.1N, 71.2E	S _n 00 17 42	P _n 01 44 54
Hindu Kush	D = 913 km	P ₁ 01 44 59
H = 21 49 32.6	London	i 01 45 16
h = about 202 km	e 00 21 06	S _n 01 45 18
Alert	e 00 28 11	S ₁ 01 45 24
e(P) 21 59 16	L _g 00 31 54	D = 210 km
Mould Bay	D = 3760 km	
eP 22 00 09	Mould Bay	MARCH 8
i 22 00 36	eP _n 00 15 39.2	U.S.C.G.S.
Penticton	i 00 15 40	19.2S, 169.7E
iP 22 02 32 d	S _n 00 16 44	New Hebrides Islands
Schefferville	D = 645 km	H = 02 44 31.5
eP 22 01 36 (d)	Ottawa	h = about 33 km
Yellowknife	P 00 20 43	Mag 5.3 (CGS)
eP 22 01 30	e 00 27 04	Penticton
	L _g 00 30 52	iP 02 57 41 c
	D = 3535 km	Schefferville
	Penticton	eP' 03 03 28
	eP 00 20 12	
	e 00 26 55	
	L _g 00 29 25	
	D = 3170 km	

DOMINION OBSERVATORIES

Sept Iles	Resolute	London
iP' 03 03 31	P _n 12 59 25	iP 15 16 24
Shawinigan Falls	P ₁ 12 59 30	Mould Bay
eP' 03 03 23	i 12 59 47	eP 15 18 54
Victoria	S _n 12 59 49	Ottawa
eP 02 57 29	S ₁ 12 59 55	eP 15 16 08
	D = 210 km	Resolute
		eP 15 18 26 (d)
MARCH 8	MARCH 8	Schefferville
U.S.C.G.S.	U.S.C.G.S.	eP 15 16 20
19.2S, 169.6E	21.8S, 176.5W	Sept Iles
New Hebrides Islands	Tonga Islands region	eP 15 15 58
H = 03 24 57.2	H = 13 59 40.1	Seven Falls
h = about 49 km	h = about 137 km	eP 15 15 (56)
Mag 4.8 (CGS)	Mag 4.6 (CGS)	Shawinigan Falls
Victoria	Penticton	eP 15 16 01
eP 03 37 53	iP 14 12 11 d	Victoria
		eP 15 19 12
MARCH 8	MARCH 8	Yellowknife
U.S.C.G.S.	76°36'N, 94°20'W	eP 15 18 46
19.3S, 169.6E	Aftershock of the	
New Hebrides Islands	Devon Island earthquake	MARCH 8
H = 03 33 03.4	at 00 14 15.7	Canadian Arctic
h = about 33 km	H = 13 59 59.5	H = 18 07 40.1
Penticton	h = 32 km	Mag 1.9
eP 03 46 02	Mag 2.2	Alert
	Resolute	P ₁ 18 08 02.5
MARCH 8	P _n 14 00 24	S ₁ 18 08 19.5
U.S.C.G.S.	P ₁ 14 00 29	D = 139 km
44.8N, 110.3W	i 14 00 46	
Yellowstone National	S _n 14 00 48	MARCH 8
Park, Wyoming	S ₁ 14 00 54	U.S.C.G.S.
H = 08 35 49.2	D = 210 km	9.0N, 84.1W
h = about 33 km		Near west coast of
Mag 3.8 (CGS)		Costa Rica
Penticton	MARCH 8	H = 22 26 26
eP 08 37 44	U.S.C.G.S.	h = about 33 km
	1.1N, 29.9W	Mould Bay
MARCH 8	Mid-Atlantic Ocean	eP 22 37 35
76°36'N, 94°20'W	H = 15 06 05.3	Resolute
Aftershock of the	h = about 33 km	eP 22 37 10 (d)
Devon Island earthquake	Mag 5.2 (CGS)	Schefferville
at 00 14 15.7	Alert	eP 22 35 01
H = 12 59 00.5	eP 15 18 26	Seven Falls
h = 32 km	Banff	eP 22 33 (57)
Mag 2.4	eP 15 18 44	Yellowknife
	Halifax	eP 22 36 15
	eP 15 15 21	

SEISMOLOGICAL BULLETIN - 1963

MARCH 9	Sept Iles	MARCH 9
U.S.C.G.S.	eP 06 56 42	U.S.C.G.S.
21.9N, 62.0E		21.5S, 179.0W
Arabian Sea		Fiji Islands region
H = 02 17 39.5	MARCH 9	H = 22 43 50.5
h = about 33 km	H = 06 54 50	h = about 529 km
Mag 5.1 (CGS)	Mag 2.0	Mag 4.4 (CGS)
Alert	Port Hardy	Penticton
eP 02 29 06 c	iP ₁ 06 55 18.0 c	iP 22 55 45
Mould Bay	eS ₁ 06 55 39.3	
iP 02 29 58 c	D = 175 km	
Resolute		MARCH 10
eP 02 30 01 (d)		U.S.C.G.S.
Yellowknife	MARCH 9	56.2N, 153.8W
iP 02 31 05 d	U.S.C.G.S.	Kodiak Islands, Alaska
	3.2S, 147.0E	H = 01 26 04.1
MARCH 9	Bismarck Sea	h = about 33 km
U.S.C.G.S.	H = 16 23 44.3	Mag 5.1 (CGS)
8.9N, 126.3E	h = about 33 km	Alert
Near coast of	Mag 4.8 (CGS)	iP 01 32 55 c
Mindanao, Philippine	Mould Bay	S 01 38 (25)
Islands	eP 16 37 (00)	London
H = 05 26 58.4	Penticton	iP 01 34 31 c
h = about 87 km	eP 16 37 01	Mould Bay
Mag 4.3 (CGS)	Yellowknife	iP 01 31 16 d
Mould Bay	eP 16 37 12	S 01 35 30
eP 05 39 35 c		Ottawa
Resolute	MARCH 9	eP 01 34 40
eP 05 40 02	U.S.C.G.S.	Penticton
	6.7N, 123.9E	iP 01 30 53 c
MARCH 9	Near south coast of	Port Hardy
U.S.C.G.S.	Mindanao, Philippine	eP 01 29 54
46.1N, 141.0E	Islands	Resolute
Kurile Islands region	H = 16 56 13	eP 01 32 01 c
H = 06 44 28.2	h = about 33 km	Schefferville
h = about 31 km	Mould Bay	eP 01 34 26 c
Mag 4.8 (CGS)	eP 17 09 08	Sept Iles
Alert	MARCH 9	iP 01 34 51 c
eP 06 53 29	U.S.C.G.S.	Seven Falls
Mould Bay	3.2S, 147.1E	eP 01 34 49
eP 06 53 05	New Britain region	Shawinigan Falls
S 07 00 03	H = 18 55 49.0	eP 01 34 45
Resolute	h = about 33 km	Yellowknife
eP 06 53 50 (d)	Mag 4.9 (CGS)	iP 01 30 43 d
Schefferville	Mould Bay	
eP 06 56 17	eP 19 09 12	

DOMINION OBSERVATORIES

MARCH 10	Port Hardy	Mould Bay
U.S.C.G.S.	eP ₁ 06 21 49.4	eP 11 59 47 c
24.7N, 122.1E	iS ₁ 06 22 04.7	Penticton
Near east coast	D = 125 km	iP 12 01 09
of Formosa	Victoria	Resolute
H = 02 53 33.0	eP _n 06 22 18.0	eP 12 00 29 c
Mag 4.9 (CGS)	D = 344 km	Sept Iles
Alert		eP 12 03 09
eP 03 05 01		
Mould Bay	MARCH 10	
eP 03 04 57	U.S.C.G.S.	MARCH 10
Penticton	29.9S, 71.2W	U.S.C.G.S.
eP 03 06 20	Near coast of	2.4N, 126.6E
Resolute	Central Chile	Celebes Sea
eP 03 05 29	H = 10 51 48.1	H = 13 51 04.3
Yellowknife	h = about 70 km	h = about 41 km
iP 03 05 52 d	Mag 6 - 6 1/4 (PAS)	Mould Bay
	5.5 (CGS)	eP 14 04 16
	Halifax	Resolute
MARCH 10	eP 11 03 22 c	eP 14 04 43 c
U.S.C.G.S.	London	
14.2N, 89.5W	(e)P 11 03 12	
Near coast of	Mould Bay	MARCH 10
El Salvador	eP 11 06 (14)	Mould Bay
H = 06 04 33	Ottawa	eP 21 58 28
h = about 33 km	eP 11 03 24	i 21 59 22
Mag 4.3 (CGS)	Penticton	
Mould Bay	eP 11 04 38	
eP 06 15 05	Schefferville	MARCH 11
Penticton	eP 11 04 15	U.S.C.G.S.
iP 06 12 29	Sept Iles	38.1N, 29.3E
Resolute	eP 11 03 51	Turkey
eP 06 14 42 d	Seven Falls	H = 07 27 22.0
Schefferville	iP 11 03 34 c	h = about 33 km
eP 06 12 48	Shawinigan Falls	Mag 5.5 (CGS)
Yellowknife	eP 11 03 31	Alert
iP 06 13 36 c	Yellowknife	eP 07 36 35 (c)
	eP 11 05 19	London
MARCH 10		iP 07 39 17 c
49.6°N, 127.6°W	MARCH 10	Mould Bay
West of Vancouver Island	U.S.C.G.S.	eP 07 37 55
H = 06 21 29	39.4N, 141.7E	Ottawa
Mag 2.4	Near coast of	iP 07 38 51 c
Alberni	Honshu, Japan	Penticton
iP _n 06 22 00.8	H = 11 50 26.3	eP 07 40 07
iS _n 06 22 35.3	h = about 60 km	Resolute
D = 204 km	Mag 4.6 (CGS)	eP 07 37 38 d
		Schefferville
		eP 07 37 46
		Sept Iles
		iP 07 38 02 c

SEISMOLOGICAL BULLETIN - 1963

Seven Falls	MARCH 11	Schefferville
eP 07 38 27	U.S.C.G.S.	Pn 07 07 13
Shawinigan Falls	17.6N, 100.8W	Sn 07 08 03.5
iP 07 38 36 c	Guerrero Mexico	Lg 07 08 27
Yellowknife	H = 15 30 07.6	D = 490 km
iP 07 39 06 d	h = about 33 km	Sept Iles
	Mag 4.8 (CGS)	e 07 08 02
MARCH 11	Mould Bay	Sn 07 09 21
U.S.C.G.S.	eP 15 40 06	Lg 07 10 08
18.7S, 177.6W	Penticton	D = 850 km
Fiji Islands region	iP 15 37 00 d	Seven Falls
H = 09 02 19.8	Yellowknife	Lg 07 12 10
h = about 402 km	iP 15 38 28 d	D = 1275 km
Mag 4.8 (CGS)		
Penticton	MARCH 11	MARCH 12
eP 09 14 12	Mould Bay	U.S.C.G.S.
	eP 19 06 48	53.9N, 160.6E
MARCH 11	Yellowknife	Kamchatka
U.S.C.G.S.	eP 19 07 08	H = 08 05 49.8
36.7N, 71.1E		h = about 33 km
Hindu Kush	MARCH 11	Mag 4.7 (CGS)
H = 10 27 42.1	Schefferville	Alert
h = about 189 km	eP 19 24 10	eP 08 13 40
Mag 4.7 (CGS)	Seven Falls	Mould Bay
Mould Bay	e 19 25 33	iP 08 12 51c
eP 10 38 17 c		Penticton
i 10 39 15		eP 08 14 18
Yellowknife	MARCH 12	Resolute
iP 10 39 37	U.S.C.G.S.	eP 08 13 43 c
	45.3N, 109.6W	Schefferville
MARCH 11	Southern Montana	eP 08 16 25
U.S.C.G.S.	H = 03 41 21.8	Sept Iles
5.1N, 76.4W	h = about 33 km	eP 08 16 53
Central Colombia	Penticton	Seven Falls
H = 11 30 16.0	eP 03 42 10	eP 08 17 00
h = about 95 km	Yellowknife	Yellowknife
Mag 4.3 (CGS)	eP 03 45 (24)	iP 08 13 42 d
Yellowknife		
eP 11 40 32	MARCH 12	MARCH 12
	57.0°N, 60.0°W	Resolute
	About 50 miles off	e(P) 08 49 (05)
MARCH 11	the coast of Labrador,	
Mould Bay	Nfld.	
eP 15 32 16	H = 07 06 08.5	
Resolute	Mag 3.8	
eP 15 32 58 c		

DOMINION OBSERVATORIES

MARCH 12	Mould Bay	MARCH 14
U.S.C.G.S.	P _n 20 07 02.3	Mould Bay
16.0S, 172.6W	S _n 20 09 03.2	eP 00 36 17
Tonga Islands region	D = 1235 km	Schefferville
H = 13 21 39.2	Resolute	eP 00 34 34
h = about 33 km	P _n 20 07 55.5	Yellowknife
Mag 5.3 (CGS)	S _n 20 10 40	eP 00 35 54
Penticton	D = 1690 km	
iP 13 33 47 c	Yellowknife	
	P _n 20 06 22.5	MARCH 14
MARCH 12	S _n 20 07 56.5	Resolute
Resolute	D = 885 km	eP 01 15 (53)
eP 14 07 (56)		Yellowknife
		eP 01 16 08
MARCH 12	MARCH 13	MARCH 14
U.S.C.G.S.	Penticton	U.S.C.G.S.
71.7N, 1.4W	eP 01 15 02	25.6S, 137.6E
Jan Mayen Island	MARCH 13	Northern Territory,
region	Resolute	Australia
H = 15 18 00.0	e(P) 03 13 40	H = 01 57 29.3
h = about 33 km		h = about 33 km
Mag 3.9 (CGS)	MARCH 13	Resolute
Mould Bay	U.S.C.G.S.	eP' 02 16 30 (d)
eP 15 23 (46)	19.5N, 69.5W	
Resolute	Dominican Republic	
eP 15 23 (26)	H = 10 39 19.1	MARCH 14
	h = about 33 km	U.S.C.G.S.
MARCH 12	Mag 4.1 (CGS)	19.0N, 120.4E
Resolute	Mould Bay	Off coast of northern
e(P) 16 08 53	eP 10 49 37	Luzon, Philippine
		Islands
MARCH 12	MARCH 13	H = 08 00 15.6
Resolute	U.S.C.G.S.	h = about 51 km
eP 19 24 (18)	33.1N, 141.4E	Mag 5.0 (CGS)
	Off coast of	Alert
	southern Honshu,	eP 08 12 13 (d)
MARCH 12	Japan	Mould Bay
65°40'N, 132°00'W	H = 10 54 15.8	eP 08 12 11 d
About 100 miles east	h = about 47 km	Penticton
of Whitehorse, Yukon	Mag 4.1 (CGS)	iP 08 13 29
Territory	Mould Bay	Port Hardy
H = 20 04 24	eP 11 04 21	eP 08 13 06
Mag 4.3	Resolute	Resolute
	e(P) 11 05 (02)	eP 08 12 41 d
		Yellowknife
		iP 08 13 02 d

SEISMOLOGICAL BULLETIN - 1963

MARCH 14	MARCH 15	Seven Falls
Mould Bay	U.S.C.G.S.	eP 05 53 04
eP 10 56 10	8.4N, 126.4E	Shawinigan Falls
i 10 56 16	Mindanao, Philippine	eP 05 53 (11)
Resolute	Islands	Yellowknife
eP 10 55 (54)	H = 00 16 01.3	eP 05 56 46
	h = about 117 km	
	Mag 5.0 (CGS)	
MARCH 14	Alert	MARCH 15
U.S.C.G.S.	eP 00 28 45	Canadian Arctic
53.0N, 164.9W	London	H = 06 54 50
Fox Islands,	eP' 00 34 (46)	Mag 1.7
Aleutian Islands	Mould Bay	Mould Bay
H = 18 13 19.1	eP 00 28 37 c	P ₁ 06 55 13
h = about 33 km	Penticton	S ₁ 06 55 30.5
Mag 4.6 (CGS)	eP 00 29 30	
Yellowknife	Resolute	MARCH 15
eP 18 19 08	eP 00 29 04 c	U.S.C.G.S.
MARCH 14	Sept Iles	17.5N, 119.8E
U.S.C.G.S.	eP' 00 34 41	Off west coast of
46.5N, 153.4E	Seven Falls	Luzon, Philippine
Kurile Islands	eP' 00 34 44	Islands
H = 18 30 40.6	Yellowknife	H = 10 53 59.8
h = about 32 km	eP 00 29 13	h = about 33 km
Mag 4.7 (CGS)		Mag 4.4 (CGS)
Alert	MARCH 15	Mould Bay
eP 18 39 33 c	Mould Bay	eP 11 06 05
Resolute	eP 00 46 24	Resolute
eP 18 39 41 c	Yellowknife	eP 11 06 35
Yellowknife	eP 00 45 51	Yellowknife
iP 18 39 41		eP 11 06 54
MARCH 15	MARCH 15	MARCH 15
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
5.0S, 129.6E	21.7N, 45.4W	42.3N, 142.3E
Banda Sea	North Atlantic Ocean	Near south coast of
H = 00 04 01.3	H = 05 46 32.8	Hokkaido, Japan
h = about 295 km	h = about 33 km	H = 18 50 34.7
Mag 4.8 (CGS)	Mag 4.9 (CGS)	h = about 33 km
Mould Bay	Alert	Mag 4.0 (CGS)
eP 00 17 13 d	iP 05 56 46	Resolute
Seven Falls	London	eP 19 00 21 c
eP' 00 22 40	iP 05 53 38 d	
	Mould Bay	
	eP 05 57 14	
	Penticton	
	eP 05 57 03	
	Schefferville	
	eP 05 53 39	

DOMINION OBSERVATORIES

MARCH 15	MARCH 16	MARCH 16
H = 23 06 02	U.S.C.G.S.	Penticton
Mag 2.3	46.5N, 154.7E	eP 09 31 40
Penticton	Kurile Islands region	
eP _n 23 06 41.0	H = 08 44 48.3	
eS _n 23 07 35	h = about 26 km	
D = 266 km	Mag 7 (PAS)	MARCH 16
	7 3/4 (BRK)	Penticton
	6 3/4 (PAL)	eP 09 45 13
	6.2 (CGS)	
MARCH 16	Alert	MARCH 16
Resolute	eP 08 53 40	Resolute
e(P) 02 11 35	S 09 00 48	eP 13 55 16 c
Yellowknife	Banff	
eP 02 12 05	eP 08 54 23	
MARCH 16	Halifax	MARCH 16
Mould Bay	eP 08 57 14	Resolute
eP 02 35 19	London	eP 14 43 48 c
Resolute	eP 08 56 46	
eP 02 35 (25)	Mould Bay	
	iP 08 52 59 c	MARCH 16
	eS 08 59 48	Mould Bay
	Ottawa	eP 15 42 23
MARCH 16	eP 08 57 46	
U.S.C.G.S.	Penticton	
26.1N, 92.8E	iP 08 54 15	MARCH 16
Assam, India	Port Hardy	Sept Iles
H = 03 35 22.5	eP 08 53 38	eP 15 55 28
h = about 48 km	Resolute	
Mag 4.5 (CGS)	eP 08 53 47 c	
Mould Bay	Schefferville	MARCH 16
eP 03 47 06 c	eP 08 56 17 (d)	Mould Bay
Resolute	Sept Iles	eP 18 35 42
e(P) 03 47 25	iP 08 56 41 c	
MARCH 16	Seven Falls	
Mould Bay	eP 08 56 47	MARCH 16
eP 05 14 55	Shawinigan Falls	U.S.C.G.S.
Resolute	iP 08 56 48 c	20.7S, 174.6W
eP 05 15 38	Victoria	Tonga Islands
	eP 08 54 02 c	H = 21 40 09.0
	Yellowknife	h = about 33 km
	iP 08 53 45 c	Mag 5.0 (CGS)
MARCH 16	Penticton	
	eP 21 52 43	
MARCH 16	Ottawa	
	eP 09 23 (45)	
	Sept Iles	
	eP 09 23 43	

SEISMOLOGICAL BULLETIN - 1963

MARCH 16	MARCH 17	Mould Bay
U.S.C.G.S. 38.9N, 71.8E	U.S.C.G.S. 46.0N, 155.0E	eP 14 27 39
Tadzhik, S.S.R. H = 22 28 56.7	Kurile Islands region H = 08 42 12.3	Penticton eP 14 29 56
h = about 73 km	h = about 35 km	Resolute eP 14 27 17 d
Mag 5.0 (CGS)	Mag 4.7 (CGS)	Seven Falls eP 14 27 45
Mould Bay iP 22 39 24 d	Alert eP 08 51 09	Yellowknife iP 14 28 45 d
Penticton iP 22 41 58 c	Mould Bay eP 08 50 (25)	
Resolute eP 22 39 39 (d)	Penticton iP 08 51 39	MARCH 17
Schefferville eP 22 41 (00)	Resolute eP 08 51 13 d	U.S.C.G.S. 64.9N, 174.9W
Yellowknife iP 22 40 53 d	Yellowknife iP 08 51 10 c	Eastern Siberia H = 19 38 20.1
		h = about 33 km
MARCH 17	MARCH 17	Mould Bay eP 19 42 (58)
U.S.C.G.S. 7.1N, 82.2W	U.S.C.G.S. 37.4S, 78.2E	Yellowknife eP 19 43 48
South of Panama H = 06 18 52.4	Indian Ocean H = 10 32 19.7	
h = about 53 km	h = about 33 km	MARCH 17
Mag 4.6 (CGS)	Yellowknife eP' 10 52 18	U.S.C.G.S. 44.8N, 110.3W
Mould Bay eP 06 30 11		Yellowstone National Park, Wyoming
Penticton eP 06 27 59	MARCH 17	H = 22 10 36.2
Resolute eP 06 29 46	U.S.C.G.S. 46.2N, 155.6E	h = about 33 km
Yellowknife iP 06 28 55 d	Kurile Islands H = 13 08 55.0	Penticton eP 22 14 13
	h = about 33 km	
MARCH 17	Resolute eP 13 17 51	MARCH 18
H = 08 23 17		Mould Bay eP 00 55 42
Mag 1.3		
Penticton iP1 08 23 25.5	MARCH 17	
iS1 08 23 31.6	U.S.C.G.S. 39.5N, 21.5E	MARCH 18
D = 50 km	Greece H = 14 17 25.9	Mould Bay e 04 59 (51)
	h = about 78 km	
	Mag 4.8 (CGS)	
	Alert eP 14 26 16 d	

DOMINION OBSERVATORIES

MARCH 18		MARCH 19		Yellowknife
U.S.C.G.S.		U.S.C.G.S.	eP	04 55 32
30.7N, 42.1W		18.9N, 145.3E	e	04 57 45
North Atlantic Ocean		Mariana Islands region		
H = 09 47 59		H = 05 11 08.2		
h = about 33 km		h = about 220 km		
Mag 4.3 (CGS)		Mag 4.0 (CGS)		
Mould Bay		Alert	eP	06 45 40
	eP 09 57 45		e	06 47 18
		Mould Bay		
		eP 05 22 16		
MARCH 18		Yellowknife		
U.S.C.G.S.		eP 05 22 43		
24.1N, 5.0E				
Southern Algeria		MARCH 19		
H = 10 02 00.8		Mould Bay		
h = about 0		eP 18 37 16		
Sept Iles		Penticton		
iP 10 12 11 d		eP 18 37 46		
Yellowknife		Yellowknife		
eP 10 14 19		eP 18 36 43		
MARCH 18		MARCH 19		
U.S.C.G.S.		U.S.C.G.S.		
15.7S, 178.4W		8.3N, 126.6E		
Fiji Islands region		Near east coast of		
H = 13 16 23.5		Mindanao, Philippine		
h = about 561 km		Islands		
Penticton		H = 19 08 08.1		
iP 13 27 52 c		h = about 109 km		
Yellowknife		Mag 4.2 (CGS)		
eP 13 28 35		Mould Bay		
		eP 19 20 46		
MARCH 18		Resolute		
Yellowknife		eP 19 21 (13)		
e 14 26 40				
		MARCH 20		
MARCH 19		U.S.C.G.S.		
U.S.C.G.S.		19.9S, 179.1W		
79.1N, 2.0E		Fiji Islands region		
Arctic Ocean		H = 04 43 13.5		
H = 04 52 34.5		h = about 680 km		
h = about 33 km		Mag 5.2 (CGS)		
Resolute		Penticton		
eP 04 57 (09)		iP 04 54 50 c		
		Resolute		
		eP' 05 00 (24)		

SEISMOLOGICAL BULLETIN - 1963

MARCH 20	MARCH 20	Yellowknife
Penticton	Penticton	P_n 09 25 18
eP 11 49 01	eP 21 35 37	i 09 26 57
		e 09 28 36
		D = 2122 km
MARCH 20	MARCH 21	MARCH 21
U. S. C. G. S.	U. S. C. G. S.	U. S. C. G. S.
44.6N, 110.5W	36.5N, 140.9E	50.6N, 129.4W
Yellowstone National	Near east coast of	Vancouver Island region
Park, Wyoming	Honshu, Japan	H = 18 19 22.7
H = 12 32 26.0	H = 04 00 11.1	h = about 33 km
h = about 33 km	h = about 50 km	Mag 4.0 (CGS)
Mag 4.0 (CGS)	Mag 5.2 (CGS)	Alert
Penticton		eP 04 10 19 (c)
eP 12 33 42	Mould Bay	iP_n 18 20 07.6
Yellowknife	iP 04 09 54 c	D = 344 km
eP 12 36 30	i 04 13 05	Banff
	Penticton	eP 18 21 33
	iP 04 11 12	Mould Bay
MARCH 20	Resolute	eP 18 24 53
Resolute	iP 04 10 35 c	Penticton
eP 13 31 35 (d)	Schefferville	iP_n 18 20 58.6
	eP 04 12 48	D = 760 km
MARCH 20	Sept Iles	Port Hardy
U. S. C. G. S.	iP 04 13 09 c	iP_1 18 19 45.6
11.9N, 93.1E	Yellowknife	iS_1 18 20 05.9
Andaman Islands region	iP 04 10 43 c	D = 166 km
H = 14 41 48.2		Victoria
h = about 33 km		eP 18 20 23.7
Mag 4.4 (CGS)		D = 476 km
Mould Bay	MARCH 21	Yellowknife
eP 14 54 46 d	81°18'N, 103°15'W	iP 18 22 43 d
Resolute	About 100 miles north	
eP 14 55 03 c	of Ellef Ringnes Island,	
	N.W.T.	
	H = 09 20 57.5	
	Mag 4.1	
	Alert	MARCH 21
	P_n 09 22 23.5	U. S. C. G. S.
	S_n 09 23 25.0	47.0N, 155.6E
	D = 660 km	Kurile Islands
	Mould Bay	H = 23 35 55.4
	P_n 09 22 23.8	h = about 69 km
	S_n 09 23 25.1	Mag 4.9 (CGS)
	D = 660 km	Mould Bay
	Resolute	eP 23 43 56
	P_n 09 22 36.5	Resolute
	S_n 09 23 50.5	eP 23 44 45 d
	D = 765 km	Yellowknife
Yellowknife		iP 23 44 41 c
iP 16 52 40 d		

DOMINION OBSERVATORIES

MARCH 22	Mould Bay	MARCH 22
U.S.C.G.S.	eP 13 04 (17)	U.S.C.G.S.
36.7N, 139.5E		52.7S, 137.4E
Honshu, Japan		1500 km southwest of
H = 02 38 50.1	MARCH 22	Tasmania
h = about 83 km	H = 16 18 27	H = 23 36 19.1
Mag 4.3 (CGS)	Mag 1.9	h = about 33 km
Mould Bay	Port Hardy	Resolute
eP 02 48 31	iP ₁ 16 18 52.7	eP 23 56 07 d
Resolute	iS ₁ 16 19 12.1	
eP 02 49 12 d	D = 159 km	
MARCH 22	MARCH 22	MARCH 23
U.S.C.G.S.	U.S.C.G.S.	Yellowknife
46.0N, 148.4E	22.7S, 68.0W	iP 04 12 57
Kurile Islands region	Chile-Bolivia border	
H = 03 57 23.8	region	
h = about 115 km	H = 21 18 27.4	
Mag 4.9 (CGS)	h = about 242 km	
Mould Bay	Mould Bay	
eP 04 05 40	eP 21 31 (33)	
Penticton	Yellowknife	
iP 04 07 07 c	eP 21 31 11	
Resolute		
eP 04 06 27 (d)		
Yellowknife	MARCH 22	MARCH 23
iP 04 06 34 d	80°N, 92°W	U.S.C.G.S.
	Axel Heiberg Island,	42.3N, 84.3E
MARCH 22	N.W.T.	Sinkiang Province,
44.7N, 110.7W	H = 23 25 49	China
Yellowstone National	Mag 3.3	H = 05 48 34
Park, Wyoming	Alert	h = about 33 km
H = 04 34 43.3	Lg 23 28 33	Mould Bay
h = about 33 km	D = 582 km	eP 05 58 54
Mag 4.1 (CGS)	Mould Bay	Yellowknife
Banff	Lg 23 29 16	eP 06 00 10
eP 04 36 32	D = 735 km	
Penticton	Resolute	
eP 04 36 36	e 23 27 55	
Schefferville	S _n 23 28 09	
eP 04 41 (22)	Lg 23 28 36	
Yellowknife	D = 595 km	
eP 04 38 50		
MARCH 22		
Alert		
eP 13 02 45 (d)		

SEISMOLOGICAL BULLETIN - 1963

MARCH 23		MARCH 24		Penticton
Mould Bay		U.S.C.G.S.	iP 02 31 25 c	
eP 12 19 23		9.7S, 120.4E	Sept Iles	
		Sumba Island region	eP 02 35 08	
		H = 02 07 12.8	Shawinigan Falls	
MARCH 23		h = about 33 km	iP 02 34 56	
U.S.C.G.S.		Mag 6 1/4 (PAS)		
45.0N, 111.4W		6 (PAL)		
Hebgen Lake region,		5.4 (CGS)	MARCH 24	
Montana		Banff	Mould Bay	
H = 12 21 43.3		eP' 02 25 59	eP 05 36 47	
h = about 34 km		Halifax	Yellowknife	
Penticton		eP' 02 26 49 c	eP 05 36 32	
eP 12 23 34		London		
		eP' 02 26 39 (d)		
MARCH 23		Mould Bay	MARCH 24	
Resolute		eP 02 21(25)	Mould Bay	
e(P) 14 01 (05)		Ottawa	eP 09 14 21	
Yellowknife		eP' 02 26 40	Yellowknife	
eP 14 01 08		Penticton	eP 09 13 40	
		iP' 02 25 56 c		
MARCH 23		Resolute		
48°12'N, 124°36'W		eP 02 21 (52)	MARCH 24	
Western Washington, USA		Schefferville	U.S.C.G.S.	
H = 22 38 28		eP' 02 26 31	3.2S, 146.8E	
Mag 2.1		Sept Iles	Bismarck Sea	
Alberni		iP' 02 26 45 d	H = 09 31 50.4	
eP ₁ 22 38 48.6		Seven Falls	h = about 33 km	
eS ₁ 22 39 03.6		eP' 02 26 31	Mag 5.0 (CGS)	
D = 123 km		Shawinigan Falls	Yellowknife	
Victoria		eP' 02 26 44	eP 09 45 18	
iP ₁ 22 38 43.3		Yellowknife		
iS ₁ 22 38 55.0		eP' 02 25 48		
D = 96 km		Victoria	MARCH 24	
		eP' 02 25 53	U.S.C.G.S.	
MARCH 23		MARCH 24	9.0N, 125.6E	
Resolute		U.S.C.G.S.	Mindanao Region,	
eP 23 54 56 d		51.6N, 173.3W	Philippine Islands	
		Andeanof Islands,	H = 09 43 20.2	
MARCH 24		Aleutian Islands	h = about 51 km	
Penticton		H = 02 24 49.2	Mag 5.2 (CGS)	
e 01 55 41		h = about 55 km	Alert	
		Mag 4.7 (CGS)	eP 09 56 09 d	
		Alert	Mould Bay	
		e(P) 02 32 34	eP 09 56 02 d	
		Mould Bay	Penticton	
		eP 02 31 13	iP 09 56 57 c	

DOMINION OBSERVATORIES

Resolute	MARCH 24	Halifax
eP 09 56 28 d	U.S.C.G.S.	eP 21 46 22
Seven Falls	34.4N, 47.9E	London
iP' 10 02 05 c	Western Iran	iP 21 45 36 (c)
Shawinigan Falls	H = 12 44 03.2	Mould Bay
eP' 10 02 11	h = about 33 km	iP 21 41 57 c
Yellowknife	Mag 5 1/2 - 5 3/4 (PAL)	S 21 47 12
iP 09 56 39 d	5.2 (CGS)	Ottawa
MARCH 24	Alert	iP 21 45 41 c
U.S.C.G.S.	eP 12 54 01	Penticton
36.4N, 70.8E	(S) 13 02 07	iP 21 42 25 c
Hindu Kush	Banff	Resolute
H = 10 58 55.7	eP 12 57 20	eP 21 42 49
h = about 222 km	Halifax	Schefferville
Mag 4.1 (CGS)	eP 12 56 11 d	eP 21 45 22 c
Mould Bay	Mould Bay	Sept Iles
eP 11 09 29 c	eP 12 55 09	iP 21 45 56
i 11 10 18	Ottawa	Seven Falls
Yellowknife	eP 12 56 41	eP 21 45 48
eP 11 10 38	Penticton	Shawinigan Falls
MARCH 24	eP 12 57 27	eP 21 45 44
Mould Bay	Resolute	Victoria
eP 11 22 47 c	eP 12 55 04	iP 21 42 10 c
MARCH 24	Seven Falls	Yellowknife
U.S.C.G.S.	eP 12 56 22	iP 21 42 09 c
44.8N, 141.9E	Shawinigan Falls	MARCH 24
Near coast of	eP 12 56 28	Schefferville
northern Hokkaido,	Victoria	eP 22 14 (46)
Japan	eP 12 57 36	
H = 12 04 12.7	Yellowknife	MARCH 25
h = about 195 km	iP 12 56 23	U.S.C.G.S.
Mag 4.1 (CGS)	MARCH 24	52.2N, 171.2W
Mould Bay	U.S.C.G.S.	Andreeanof Islands,
eP 12 12 40	51.8N, 178.1W	Aleutian Islands
Resolute	Andreeanof Islands,	H = 02 39 47.9
eP 12 13 23 (c)	Aleutian Islands	h = about 44 km
Yellowknife	H = 21 35 24.4	Mag 3.4 (CGS)
iP 12 13 39	h = about 57 km	Mould Bay
	Mag 6 (PAS)	eP 02 46 04
	5 (PAL)	Yellowknife
	5.5 (CGS)	eP 02 46 02
	Alert	
	iP 21 43 44 c	
	Banff	
	eP 21 42 36 c	
	i 21 44 50	

SEISMOLOGICAL BULLETIN - 1963

MARCH 25	Penticton	MARCH 25
U.S.C.G.S.	eP 09 32 01	Yellowknife
14.0N, 121.9E	Resolute	eP 21 08 (24)
Southern Luzon,	eP 09 36 17 d	
Philippine Islands	Schefferville	
H = 03 55 01	eP 09 35 (58)	MARCH 25
h = about 33 km	Yellowknife	U.S.C.G.S.
Mould Bay	iP 09 34 20	0.7N, 96.5E
eP 04 07 21		Off southwest coast
Resolute	MARCH 25	of Sumatra
eP 04 07 51 (c)	Alert	H = 22 46 16.2
Yellowknife	i 16 00 59	h = about 30 km
eP 04 08 10		Mag 5.6 (CGS)
		Alert
		eP 22 59 43 d
MARCH 25	MARCH 25	Mould Bay
U.S.C.G.S.	U.S.C.G.S.	eP 23 00 02
16.3N, 119.7E	45.0N, 111.3W	Ottawa
Near west coast	Southwestern Montana	eP' 23 05 30
of Luzon, Philippine	H = 17 43 55	Penticton
Islands	h = about 33 km	iP' 23 05 07 d
H = 08 08 56.6	Penticton	Resolute
h = about 36 km	eP 17 46 04	eP 23 00 20
Mag 4.7 (CGS)	Yellowknife	Schefferville
Mould Bay	eP 17 47 54	eP' 23 05 10
eP 08 21 10 c		Seven Falls
Resolute	MARCH 25	eP' 23 05 26 c
eP 08 21 37 c	U.S.C.G.S.	Shawinigan Falls
Yellowknife	56.3S, 149.9E	eP' 23 05 28
iP 08 21 55	Macquarie Islands	Yellowknife
	region	eP' 23 04 50
MARCH 25	H = 20 17 03.8	
Yellowknife	h = about 39 km	MARCH 25
eP 08 45 10	Mag 5.0 (CGS)	Yellowknife
	Alert	eP 23 15 38
	eP' 20 36.9	
MARCH 25	Mould Bay	
U.S.C.G.S.	eP' 20 36 32	MARCH 26
36.0N, 114.9W	Resolute	U.S.C.G.S.
Southern Nevada	eP' 20 36 49 (d)	4.2S, 152.6E
H = 09 28 44.1	Shawinigan Falls	New Ireland region
h = about 17 km	eP' 20 36 57	H = 08 50 45.4
Mag 4.3 (CGS)	Yellowknife	h = about 120 km
Alert	eP' 20 36 22	Mag 5.1 (CGS)
eP 09 37 35 (d)		Mould Bay
Mould Bay		eP 09 03 49
eP 09 36 22 d		

DOMINION OBSERVATORIES

MARCH 26	MARCH 26	Alert
Mould Bay	Alert	eP' 13 43 53
eP 10 00 14	e(P) 10 17 07	Banff
Yellowknife	Mould Bay	eP 13 38 32
eP 10 00 56	eP 10 17 (55)	Halifax
	Yellowknife	iP' 13 44 02
	eP 10 15 58	Mould Bay
MARCH 26	i 10 18 08	eP 13 39 (38)
U.S.C.G.S.		eP' 13 43 31
29.7S, 177.8W		Ottawa
Kermadec Islands	MARCH 26	eP' 13 43 (46)
H = 09 48 19.7	U.S.C.G.S.	Penticton
h = about 45 km	30.1S, 177.4W	eP 13 38 17
Mag 6 3/4 - 7 (PAS)	Kermadec Islands region	Resolute
7 (BKS)	H = 11 46 02.5	eP' 13 43 41 (d)
7 (PAL)	h = about 50 km	Schefferville
Alert	Alert	eP' 13 43 59
eP' 10 07 09	eP' 12 04 52	Sept Iles
Banff	Mould Bay	iP' 13 44 10
eP 10 01 48	eP' 12 04 31	Shawinigan Falls
Halifax	Resolute	eP' 13 43 50
eP' 10 07 19 (d)	eP' 12 04 40	Victoria
Mould Bay	Yellowknife	eP 13 38 08
eP 10 02 (57)	eP' 12 04 51	Yellowknife
eP' 10 06 (48)		eP 13 39 09
Ottawa	MARCH 26	iP' 13 43 28
eP 10 03 (24)	U.S.C.G.S.	
eP' 10 07 03	29.9S, 177.6W	MARCH 26
Penticton	Kermadec Islands	Mould Bay
eP 10 01 34	H = 12 51 29.7	eP 13 54 38
Resolute	h = about 60 km	Yellowknife
eP 10 03 (16)	Mag 4.9 (CGS)	i 13 54 48
Schefferville	Mould Bay	
eP' 10 07 16	eP' 13 10 06	MARCH 26
Sept Iles	Penticton	U.S.C.G.S.
iP' 10 07 26 c	eP 13 04 54	51.3N, 178.8E
Seven Falls	Resolute	Rat Islands,
eP' 10 07 12	eP' 13 10 16	Aleutian Islands
Shawinigan Falls	MARCH 26	H = 18 23 08.3
eP' 10 07 08	U.S.C.G.S.	h = about 50 km
i 10 17 16	29.8S, 177.9W	Mag 4.4 (CGS)
Victoria	Kermadec Islands	Mould Bay
eP 10 01 24	H = 13 25 02.6	eP 18 29 50
Yellowknife	h = about 42 km	Resolute
eP 10 02 28	Mag 7 1/4 (PAS)	e(P) 18 30 42 (d)
i 10 02 39	6 1/2 (PAL)	Yellowknife
	5.9 (CGS)	iP 18 30 08 d

SEISMOLOGICAL BULLETIN - 1963

MARCH 26	Alert	MARCH 27
Canadian Arctic	eP 21 44 55 c	U.S.C.G.S.
H = 19 25 44.2	i 21 44 56	6.8N, 73.8W
Mag 1.9	Banff	Colombia
Alert	eP 21 46 10 c	H = 02 31 51.5
P ₁ 19 25 56	Mould Bay	h = about 33 km
S ₁ 19 26 05	eP 21 44 36	Yellowknife
D = 73.8 km	S 21 52 44	iP 02 42 13 c
	Penticton	
	iP 21 46 03 c	
MARCH 26	Resolute	MARCH 27
U.S.C.G.S.	eP 21 45 16 (c)	U.S.C.G.S.
44.4N, 146.7E	Schefferville	37.0N, 71.9E
Kurile Islands	eP 21 47 27	Hindu Kush
H = 19 47 46.0	Shawinigan Falls	H = 03 39 04.9
h = about 110 km	eP 21 47 57 c	h = about 189 km
Mag 5.6 (CGS)	Victoria	Mould Bay
Alert	eP 21 45 54	eP 03 49 37 c
eP 19 56 48	Yellowknife	Penticton
Banff	iP 21 45 32	eP 03 50 36
eP 19 57 49		Resolute
Mould Bay		e(P) 03 51 (30)
eP 19 56 16	MARCH 26	Yellowknife
eS 20 03 04	Yellowknife	iP 03 50 16 c
Penticton	iP 22 13 57 c	
iP 19 57 42		
Resolute		MARCH 27
eP 19 57 01	MARCH 26	U.S.C.G.S.
Schefferville	U.S.C.G.S.	44.5N, 145.6E
eP 19 59 28 c	34.0N, 139.8E	Kurile Islands
Victoria	Off coast of	H = 05 12 07
eP 19 57 31	southern Honshu,	h = about 33 km
Yellowknife	Japan	Mag 4.2 (CGS)
iP 19 57 09 c	H = 22 36 48.0	Resolute
i 19 57 37	h = about 100 km	eP 05 21 33
	Mag 4.5 (CGS)	
MARCH 26	Alert	
U.S.C.G.S.	eP 22 47 (08)	MARCH 27
36.0N, 135.7E	Mould Bay	U.S.C.G.S.
Near east coast of	eP 22 46 44	35.6N, 135.8E
Honshu, Japan	Resolute	Southern Honshu,
H = 21 34 41.1	eP 22 47 24 (c)	Japan
h = about 33 km		H = 06 49 23.0
Mag 6 1/2 (PAS)	MARCH 26	h = about 33 km
6 1/2 (BRK)	Yellowknife	Mag 4.1 (CGS)
6 - 6 1/4 (PAL)	eP 23 48 02	Mould Bay
5.9 (CGS)		eP 06 59 20

DOMINION OBSERVATORIES

Resolute		The following minor	10 26 03.1
e(P) 07 00 01		earthquakes appear on	D = 189 km
Yellowknife		the Port Hardy records,	Mag 1.7
eP 07 00 08		and are assumed to be	11 30 50.0
		foreshocks or aftershocks	D = 192 km
		of the preceding event.	Mag 2.1
MARCH 27		Distances have been obtained	12 21 16.2
U.S.C.G.S.		from S-P values. Times	D = 191 km
44.3N, 110.6W		given are for the first	Mag 2.1
Yellowstone National		arrival at the Port Hardy	12 39 20.9
Park, Wyoming		station.	D = 189 km
H = 07 22 08.9		MARCH 27	Mag 1.7
h = about 33 km		01 41 12.8	15 00 48.0
Mag 4.2 (CGS)		D = 189 km	D = 190 km
Penticton		Mag 1.7	Mag 2.2
eP 07 23 55		03 25 14.0	15 52 33.8
Yellowknife		D = 192 km	D = 76 km
eP 07 26 20		Mag 1.9	Mag 2.1
		03 26 08.4	A very weak reading at
MARCH 27		D = 192 km	Alberni indicates an
50°38'N, 129°47'W		Mag 2.2	epicentre for the event
West of Vancouver		04 34 23.6	at 06 34 at 51° 17'N
Island		D = 189 km	and 129°51'W
H = 09 11 45		Mag 2.3	
Mag 4.1		04 37 56.1	MARCH 27
Alberni		D = 191 km	U.S.C.G.S.
eP _n 09 12 38.7		Mag 1.9	6.8N, 73.0W
D = 386 km		04 42 47.5	Colombia
Penticton		D = 194 km	H = 12 31 51.9
eP _n 09 13 24		Mag 1.7	h = about 176 km
D = 758 km		05 26 52.5	Mag 4.6 (CGS)
Port Hardy		D = 194 km	Alert
iP ₁ 09 12 11.0		Mag 2.0	iP 12 43 20 c
iS ₁ 09 12 30.9		06 34 43.5	Mould Bay
D = 163 km		D = 184 km	iP 12 43 08 c
Victoria		Mag 2.7	Penticton
eP _n 09 12 55.9		06 46 38.2	iP 12 41 26
D = 528 km		D = 198 km	Resolute
Yellowknife		Mag 1.9	eP 12 42 (39)
eP 09 15 02		08 06 29.5	Sept Iles
i 09 17 32		D = 201 km	iP 12 39 52 c
		Mag 2.1	Victoria
		09 05 21.1	eP 12 41 38
		D = 201km	Yellowknife
		Mag 2.1	iP 12 42 03 c
		09 53 00.0	
		D = 189 km	
		Mag 2.1	

SEISMOLOGICAL BULLETIN - 1963

MARCH 27

Mould Bay
eP 12 59 10 d
Yellowknife
eP 12 59 26

MARCH 27

U.S.C.G.S.
6.3N, 73.1W
Colombia
H = 13 15 30.2
h = about 147 km
Mag 5.0 (CGS)
Mould Bay
eP 13 26 52 c
Yellowknife
iP 13 25 47 c

MARCH 27

Yellowknife
eP 17 46 00

MARCH 27

Yellowknife
iP 18 20 55 d

MARCH 27

Resolute
e(P) 20 50 35
Yellowknife
eP 20 50 30

MARCH 27

U.S.C.G.S.
51.4N, 179.1W
Andreanof Islands,
Aleutian Islands
H = 21 19 01.2
h = about 33 km
Mag 4.2 (CGS)
Mould Bay
eP 21 25 40
Yellowknife
eP 21 25 53

MARCH 27

H = 22 48 26
Mag 2.2
Port Hardy
iP₁ 22 48 56.0
iS₁ 22 49 19.2
D = 190 km

MARCH 27

Penticton
eP 24 00 22
Victoria
eP 23 59 47
Yellowknife
eP 24 02 55

MARCH 28

U.S.C.G.S.
66.3N, 19.6W
Iceland
H = 00 15 47.5
h = about 15 km
Mag 7 - 7 1/4 (PAS)

6 1/2 (BKS)
6 1/2 - 6 3/4 (PAL)

Alert
eP 00 20 06 d
(S) 00 23 07

Banff
iP 00 24 41 d
Halifax
iP 00 22 17
Mould Bay
eP 00 21 52 d
S 00 26 50

Ottawa
iP 00 22 49 c
Penticton
iP 00 24 41 d

Port Hardy
eP 00 24 54
Resolute
eP 00 21 08 d

Schefferville
eP 00 21 12 c

Sept Iles

eP 00 21 44
Shawinigan Falls
iP 00 22 31 (c)
Victoria
eP 00 24 57
Yellowknife
iP 00 23 02 c

MARCH 28

U.S.C.G.S.
66.3N, 20.2W
Iceland
H = 00 26 27
h = about 33 km
Mag 4.6 (CGS)
Penticton
iP 00 35 18 d

MARCH 28

U.S.C.G.S.
66.4N, 19.6W
Iceland
H = 00 59 38.9
h = about 33 km
Mag 4.5 (CGS)

Alert
eP 01 03 56 (d)

Mould Bay
eP 01 05 41
Ottawa
iP 01 06 39 d

Penticton
iP 01 08 31
Schefferville
eP 01 05 01 (c)
Yellowknife
eP 01 06 20
i 01 06 51

MARCH 28

U.S.C.G.S.
51.9N, 156.5E
Southern Kamchatka
H = 02 04 26.3
h = about 147 km
Mag 4.3 (CGS)

DOMINION OBSERVATORIES

Yellowknife	Penticton	MARCH 28
eP 02 12 33	eP ₁ 10 26 22.1	U.S.C.G.S.
	eS ₁ 10 26 45.0	30.8N, 70.0E
	D = 184 km	Hindu Kush
MARCH 28	Victoria	H = 17 12 23.1
Mould Bay	eP ₁ 10 26 10.7	h = about 24 km
eP 04 05 29 c	eS ₁ 10 26 24.2	Mould Bay
Penticton	D = 111 km	eP 17 23 52
eP 04 07 58		Resolute
Yellowknife		eP 17 24 53 (d)
iP 04 06 54	MARCH 28	Yellowknife
	U.S.C.G.S.	iP 17 25 03 c
	30.2S, 177.8W	
MARCH 28	Kermadec Islands	MARCH 28
Resolute	H = 11 12 31.3	Yellowknife
eP 04 26 27	h = about 38 km	eP 20 48 19
Yellowknife	Alert	
iP 04 26 41 d	eP' 11 31 22 c	
MARCH 28	Mould Bay	MARCH 28
Penticton	eP' 11 31 01	Mould Bay
eP 09 40 47	Penticton	eP 22 02 03
	eP 11 25 48	
MARCH 28	Resolute	
U.S.C.G.S.	eP' 11 31 10(c)	
49.0N, 154.9E	Schefferville	MARCH 28
Kurile Islands region	eP' 11 31 28	U.S.C.G.S.
H = 09 47 10.5	Sept Iles	29.6S, 177.5W
h = about 53 km	iP' 11 31 28 d	Kermadec Islands
Mag 4.9 (CGS)	Yellowknife	H = 23 29 14.6
Alert	eP 11 26 42	h = about 54 km
e(P) 09 55 42	eP' 11 30 50	Mag 5.1 (CGS)
Mould Bay	MARCH 28	Alert
eP 09 54 58	U.S.C.G.S.	eP' 23 48 02 (d)
Penticton	10.2N, 126.2E	Mould Bay
iP 09 56 23	Near north coast of	eP' 23 47 (41)
Resolute	Mindanao, Philippine	Resolute
eP 09 55 48 (d)	Islands	eP' 23 47 50 d
Yellowknife	H = 15 12 02.8	Schefferville
eP 09 55 49	h = about 60 km	eP' 23 48 09
MARCH 28	Mag 4.4 (CGS)	
48.8°N, 122.0°W	Mould Bay	MARCH 29
South of Chilliwack,	eP 15 24 36	U.S.C.G.S.
H = 10 25 53	Resolute	55.4N, 166.0E
	eP 15 25 05 (c)	Komandorskie Islands
Mag 1.9	Yellowknife	H = 00 23 31.8
	iP 15 25 15 c	h = about 33 km
		Mag 4.1 (CGS)
		Mould Bay
		eP 00 30 10

SEISMOLOGICAL BULLETIN - 1963

MARCH 29	Penticton	Penticton
U.S.C.G.S.	eP 07 55 52	iP ₁ 17 14 57.2
40.4N, 26.6E	Yellowknife	iS ₁ 17 15 16.8
Northwestern Turkey	eP 07 57 02	D = 160 km
H = 03 09 11.2		Victoria
h = about 33 km		eP _n 17 15 06.3
Mag 4.4 (CGS)	MARCH 29	eS _n 17 15 30.6
Mould Bay	Resolute	D = 230 km
eP 03 19 33	e(P) 09 11 07	
Resolute	Yellowknife	MARCH 29
eP 03 19 (15)	eP 09 11 25	U.S.C.G.S.
Yellowknife		36.5N, 70.4E
eP 03 20 42		Hindu Kush
	MARCH 29	H = 20 04 51.7
MARCH 29	Mould Bay	h = about 200 km
U.S.C.G.S.	eP 13 32 38	Mag 4.2 (CGS)
13.8N, 91.8W	Yellowknife	Mould Bay
Guatemala	eP 13 32 11	eP 20 15 26
H = 05 12 22		Yellowknife
h = about 33 km	MARCH 29	eP 20 16 46
Mag 4.5 (CGS)	Mould Bay	
Mould Bay	eP 13 52 23	MARCH 29
eP 05 22 54	Yellowknife	U.S.C.G.S.
Penticton	eP 13 52 18	30.2S, 177.7W
eP 05 20 12		Kermadec Islands
Yellowknife	MARCH 29	H = 21 16 43.7
eP 05 21 23	Yellowknife	h = about 60 km
	eP 15 54 30	Mag 5.0 (CGS)
MARCH 29		Alert
35.6N, 140.5E		eP' 21 35 32
Near coast of	MARCH 29	Mould Bay
Central Honshu,	Mould Bay	eP' 21 35 11
Japan	eP 16 28 22 d	Resolute
H = 06 32 24.5		eP' 21 35 20 (d)
h = about 33 km	MARCH 29	
Mag 4.2 (CGS)	48.0°N, 120.4°W	MARCH 29
Resolute	Near Lake Chelan,	U.S.C.G.S.
eP 06 42 56	Washington, USA	35.6N, 28.6E
	H = 17 14 31	Dodecanese Islands
MARCH 29	Mag 2.4	region
U.S.C.G.S.	Alberni	H = 21 52 08
13.4N, 91.0W	eP _n 17 15 23.3	h = about 33 km
Guatemala	D = 370 km	Yellowknife
H = 07 47 56.2		eP 22 03 51
h = about 33 km		
Mag 4.3 (CGS)		

DOMINION OBSERVATORIES

MARCH 30	Seven Falls	MARCH 30
50°38'N, 129°30'W	eP' 02 12 07	U.S.C.G.S.
West of Scott Islands	i 02 13 53	44.2N, 148.0E
H = 00 34 40	i 02 15 28	Kurile Islands
Mag 4.1	Shawinigan Falls	H = 16 51 56.6
Alberni	eP' 02 12 05	h = about 33 km
iP _n 00 35 31.8	Victoria	Mag 5 1/4 - 5 1/2 (PAL)
D = 370 km	eP 02 06 13	6.3 (CGS)
Mould Bay	Yellowknife	Alert
eP 00 40 08	iP 02 06 58	eP 17 01 07 c
Penticton	i 02 07 42	Banff
eP _n 00 36 17	MARCH 30	eP 17 02 06
D = 731 km	48°52'N, 122°23'W	Halifax
Port Hardy	Northeast of Bellingham,	eP 17 04 42 c
iP ₁ 00 35 02.8	USA	Mould Bay
D = 148 km	H = 02 57 45	eP 17 00 35 c
Resolute	Mag 2.3	i 17 02 03
eP 00 40 (26)	Alberni	Penticton
Victoria	iP ₁ 02 58 12.6	iP 17 01 58
eP _n 00 35 48.0	iS ₁ 02 58 34.1	Port Hardy
D = 503 km	D = 184 km	iP 17 01 22 c
Yellowknife	Penticton	Resolute
eP 00 37 58	eP _n 02 58 15.0	iP 17 01 20 c
MARCH 30	D = 207 km	Schefferville
U.S.C.G.S.	Victoria	eP 17 03 47
19.1S, 169.1E	iP ₁ 02 57 57.0	Sept Iles
New Hebrides Islands	iS ₁ 02 58 06.2	iP 17 04 11 c
H = 01 53 28.8	D = 87 km	Seven Falls
h = about 160 km	MARCH 30	iP 17 04 18
Mag 6.1 (CGS)	Yellowknife	Shawinigan Falls
Banff	eP 05 10 15	iP 17 04 18 c
eP 02 06 38	MARCH 30	Victoria
Halifax	Yellowknife	eP 17 01 47
iP' 02 12 20 d	eP 05 10 15	Yellowknife
Mould Bay	MARCH 30	iP 17 01 27 c
eP 02 07 14	U.S.C.G.S.	MARCH 30
Penticton	51.8N, 170.5W	Yellowknife
eP 02 06 24	Fox Islands,	eP 17 36 59
Port Hardy	Aleutian Islands	
eP 02 06 07	H = 06 54 59.6	MARCH 30
Resolute	h = about 33 km	U.S.C.G.S.
eP 02 07 40	Mould Bay	38.6N, 75.8E
Schefferville	eP 07 01 18	Sinkiang Province,
eP' 02 12 09	Schefferville	China
Sept Iles	eP 07 04 (39)	H = 17 30 04.3
iP' 02 12 13 d	Yellowknife	h = about 33 km
i 02 14 07	iP 07 01 17 d	Mag 4.3 (CGS)

SEISMOLOGICAL BULLETIN - 1963

Mould Bay		MARCH 30	Mould Bay	
eP	17 40 44	50.2°N, 127.5°W	eP	04 58 36
Yellowknife		Checleset Bay west coast	Ottawa	
eP	17 42 05	of Vancouver Island	eP	04 55 06
i	17 42 12	H = 23 58 32	Penticton	
		Mag 2.3	eP	04 56 36
MARCH 30		Alberni	Resolute	
Shawinigan Falls		eP ₁ 23 59 04.7	eP 04 58 15 (c)	
eP	19 23 01	eS ₁ 23 59 34.7	Schefferville	
		D = 214 km	eP 04 56 20 c	
MARCH 30		Port Hardy	Sept Iles	
H = 20 44 09		iP ₁ 23 58 41.6	eP 04 55 49	
Mag 2.2		iS ₁ 23 58 49.0	Seven Falls	
Port Hardy		Victoria	eP 04 55 24	
eP ₁ 20 44 39.7		eP 23 59 28.1	Shawinigan Falls	
eS ₁ 20 45 03.2			eP 04 55 18	
D = 192 km		MARCH 31	Yellowknife	
MARCH 30		Mould Bay	eP 04 57 30	
Mould Bay		eP 02 19 55 d		
eP 20 52 04		MARCH 31	MARCH 31	
Resolute		U. S. C. G. S.	U. S. C. G. S.	
eP 20 52 (58)		36.9N, 57.7E	29.9S, 177.7W	
Yellowknife		Northeastern Iran	Kermadec Islands	
iP 20 51 48 d		H = 02 27 09.2	H = 05 30 49.3	
		h = about 33 km	h = about 48 km	
MARCH 30		Mag 4.6 (CGS)	Mag 6 1/4 - 6 1/2 (PAS)	
U. S. C. G. S.		Mould Bay	6 1/2 (BKS)	
8.7S, 109.2W		eP 02 38 00	6 - 6 1/4 (PAL)	
About 2000 km southwest		Yellowknife		
of Galapagos Islands		eP 02 39 19	Alert	
H = 21 13 54.1		MARCH 31	eP' 05 49 39 c	
h = about 33 km		U. S. C. G. S.	Halifax	
Mag 4.6 (CGS)		6.5S, 81.1W	eP' 05 49 50	
Mould Bay		Near coast of	Mould Bay	
eP 21 26 35		southern Peru	iP' 05 49 18	
Penticton		H = 04 46 00.8	Ottawa	
eP 21 23 49		h = about 33 km	eP' 05 49 32	
		Mag 5.2 (CGS)	Penticton	
		Alert	eP 05 44 05	
		eP 04 58 55	Port Hardy	
			eP 05 43 52	
			Resolute	
			eP' 05 49 27 (c)	
			Schefferville	
			eP' 05 49 45	
			Yellowknife	
			eP 05 45 02	
			eP' 05 49 10	

DOMINION OBSERVATORIES

MARCH 31	MARCH 31	MARCH 31
U.S.C.G.S. 10.7S, 78.5W Near coast of Peru H = 05 51 00.9 h = about 33 km Mag 5.0 (CGS)	Yellowknife eP 09 37 04	Mould Bay eP 13 51 41
Penticton iP 06 02 11 c		Yellowknife eP 13 52 04
Schefferville eP 06 01 45 c		
Yellowknife iP 06 02 57 c		
MARCH 31	MARCH 31	MARCH 31
U.S.C.G.S. 6.1S, 149.0E New Britain H = 07 07 36.3 h = about 60 km Mag 6 1/4 (PAS) 6 (PAL) 5.7 (CGS)	Canadian Arctic H = 11 37 11.4 Mag 2.2 Resolute P ₁ 11 37 43 S ₁ 11 38 07 D = 197 km	U.S.C.G.S. 35.1N, 9.3W Off coast of Morocco H = 14 58 02.4 h = about 33 km Mould Bay eP 15 08 12
Alert eP 07 21 28		Resolute eP 15 07 34 (d)
Mould Bay eP 07 21 00		
Ottawa eP' 07 26 32		
Shawinigan Falls eP' 07 26 34		
Yellowknife eP 07 21 09		
MARCH 31	MARCH 31	MARCH 31
U.S.C.G.S. 30.1S, 177.7W Kermadec Islands H = 09 07 20.1 h = about 48 km Mag 5.2 (CGS)	U.S.C.G.S. 35.8N, 132.6E Near coast of southern Honshu, Japan H = 12 26 11.6 h = about 33 km Mag 4.7 (CGS)	U.S.C.G.S. 53.1N, 167.2W Fox Islands, Aleutian Islands H = 15 33 25.3 h = about 33 km Mag 4.3 (CGS)
Mould Bay eP' 09 25 49	Mould Bay eP 12 36 14	Mould Bay eP 15 39 26 c
Resolute eP' 09 25 58 c	Resolute eP 12 36 (52)	i 15 42 32
	Yellowknife iP 12 37 11 c	Schefferville eP 15 42 47 d
MARCH 31	MARCH 31	Yellowknife IP 15 39 21 d
	Schefferville eP 13 11 (07)	
	Yellowknife eP 13 14 31	
MARCH 31	MARCH 31	MARCH 31
	Resolute eP 13 49 48 d	Yellowknife IP 16 53 33 c
	Schefferville eP 13 48 (44)	
MARCH 31	MARCH 31	MARCH 31
		U.S.C.G.S. 0.8N, 96.6E
		Nicobar Islands region H = 17 28 52.7
		h = about 33 km
		Alert eP 17 42 19

SEISMOLOGICAL BULLETIN - 1963

Penticton

eP' 17 47 43

Yellowknife

eP' 17 47 23

MARCH 31

U.S.C.G.S.

30.0S, 178.0W

Kermadec Islands

H = 19 22 53.3

h = about 50 km

Mag 6 1/4 - 6 1/2 (PAS)

6 1/2 (BKS)

5.8 (CGS)

Alert

eP' 19 41 43

Halifax

iP' 19 41 53 d

Mould Bay

eP' 19 41 22

i 19 52 24

Ottawa

eP' 19 41 36

Penticton

iP' 19 36 09 c

Port Hardy

eP' 19 35 58

Resolute

eP' 19 41 31 (c)

Sept Iles

eP' 19 41 49

Shawinigan Falls

eP' 19 41 40

Yellowknife

eP' 19 37 (00)

DOMINION OBSERVATORIES

EARTHQUAKES IN THE CANADIAN ARCTIC

The following disturbances were recorded during the first quarter of 1963. The times of observed phases are given at their respective chronological positions in the text of this bulletin. M = magnitude.

JANUARY 4 11 14 21 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 2.5.
Foreshock of the earthquake at 12 43 01.

JANUARY 4 11 18 02 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 2.0.
Foreshock of the earthquake at 12 43 01.

JANUARY 4 11 21 51 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 2.0.
Foreshock of the earthquake at 12 43 01.

JANUARY 4 11 54 27 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 2.2.
Foreshock of the earthquake at 12 43 01.

JANUARY 4 12 13 11 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 2.0.
Foreshock of the earthquake at 12 43 01.

JANUARY 4 12 27 22 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 2.2
Foreshock of the earthquake at 12 43 01.

JANUARY 4 12 43 01 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 3.2.
Off the coast of Prince Patrick Island near Cape Leopold McClintock,
N.W.T. There were six foreshocks and four aftershocks ranging in
magnitude from 1.9 to 2.5. In addition, Mould Bay recorded about
two dozen tiny disturbances apparently associated with this epicentre.
Of these about half were foreshocks and the remainder aftershocks.

JANUARY 4 12 55 45 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 2.0.
Aftershock of the earthquake at 12 43 01.

JANUARY 4 13 23 21 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 2.0.
Aftershock of the earthquake at 12 43 01.

JANUARY 4 16 24 41. 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 1.9.
Aftershock of the earthquake at 12 43 01.

JANUARY 4 18 16 37 M = 2.1. 97 miles from Alert, N.W.T.

JANUARY 4 18 55 52 77.5°N ± 0.2°, 118.1°W ± 1.0°. M = 2.1.
Aftershock of the earthquake at 12 43 01.

JANUARY 11 07 18 09. M = 2.1. 38 miles from Resolute, N.W.T.

JANUARY 15 23 59 01 76.9°N ± 1.0°, 117.5°W ± 2.0°. M = 3.8.
Prince Patrick Island, N.W.T.

JANUARY 18 14 59 22. M = 1.5. 46 miles from Resolute, N.W.T.

SEISMOLOGICAL BULLETIN - 1963

JANUARY 26 06 22 02. Depth 20 km. M = 2.4. 150 miles from Resolute, N.W.T.

JANUARY 27 18 01 40. 81 miles from Yellowknife, N.W.T.

FEBRUARY 2 18 38 12 67°50'N ± 1.0°, 91°00'W ± 2.0°. M = 4.6. About 32 miles southwest of Pelly Bay, N.W.T.

FEBRUARY 5 22 33 45. M = 1.2. 30 miles from Resolute, N.W.T.

FEBRUARY 8 02 00 53. M = 2.4. 127 miles from Yellowknife, N.W.T.

FEBRUARY 27 01 50 20. 80.9°N ± 0.6°, 85.8°W ± 2.2°. M = 3.7. Near Hare Fiord, Ellesmere Island, N.W.T.

MARCH 1 21 54 50. Depth 30 km. M = 1.8. 99 miles from Resolute, N.W.T.

MARCH 5 15 21 54. M = 2.4. 153 miles from Resolute, N.W.T.

MARCH 6 01 50 39. M = 2.2. 67 miles from Yellowknife, N.W.T.

MARCH 8 00 14 16. 76°36'N ± 15', 94°20'W ± 1.0°. Depth 33 km (U.S.C.G.S.) M = 5.7. Grinnell Peninsula, Devon Island, N.W.T. Followed by three aftershocks.

MARCH 8 01 44 30. 76°36'N ± 15', 94° 20'W ± 1.0°. Depth 32 km. M = 2.5. Aftershock of the earthquake at 00 14 16.

MARCH 8 12 59 01. 76°36'N ± 15', 94°20'W ± 1.0°. Depth 32 km. M = 2.4. Aftershock of the earthquake at 00 14 16.

MARCH 8 14 00 00. 76°36'N ± 15', 94°20'W ± 1.0°. Depth 32 km. M = 2.2. Aftershock of the earthquake at 00 14 16.

MARCH 8 18 07 40. M = 1.9. 86 miles from Alert, N.W.T.

MARCH 12 20 04 24 65°40'N ± 1.0°, 132°00'W ± 3.0°. M = 4.3. About 100 miles east of Whitehorse, Y.T.

MARCH 15 06 54 50. M = 1.7. 89 miles from Mould Bay, N.W.T.

MARCH 21 09 20 58. 81°18'N ± 15', 103°15' W ± 1.5°. M = 4.1. About 100 miles north of Ellef Ringnes Island, N.W.T.

MARCH 22 23 25 49. 80°N, 92°W. Axel Heiberg Island, N.W.T. This epicentre is subject to considerable uncertainty as primary phases were not recorded.

DOMINION OBSERVATORIES

MARCH 23 04 26 10. M = 1.9. 56 miles from Mould Bay, N.W.T.

MARCH 26 19 25 44. M = 1.9. 46 miles from Alert, N.W.T.

MARCH 31 11 37 11. M = 2.2. 122 miles from Resolute, N.W.T.

SEISMOLOGICAL BULLETIN - 1963

EARTHQUAKES IN EASTERN CANADA
AND ADJACENT AREAS

The following disturbances were recorded during the first quarter of 1963. The times of observed phases are given at their respective chronological positions in the text of this bulletin. M = magnitude.

JANUARY 30 14 50 44.0°N, 75.9°W. M = 3.0. The Daily Times of Watertown, N.Y., reported that a shock was felt "sharply over all of the city." The seismographs at both Montreal and Ottawa were out of operation at the time of the shock.

FEBRUARY 2 02 59 43. M = 2.7. 183 miles from London, Ont., - probably to the south or west as it was not recorded at Ottawa.

FEBRUARY 16 08 00 17. 44°53'N ± 5', 73°41'W ± 8'. M = 2.6. About 15 miles southwest of Rouses Point, N.Y.

FEBRUARY 27 06 00. 43°12'N, 79°34'W. M = 3.0. Grimsby, Ont. Newspaper reports said that residents "came spilling outside" to investigate, and that the burglar alarm at the bank was tripped. London station was out of operation for the day, however the shock left a "record" at McMaster University where it caused an irregularity in a graphline depicting the regular compression of a muskeg sample.

MARCH 2 20 24 32. 41°31'N ± 30', 75°46'W ± 40'. M = 3.4. A few miles north of Scranton, Penn.

MARCH 7 14 59 28. M = 3.4. About 270 miles from London, Ont. Ottawa records were being changed at the time.

MARCH 12 07 06 08 57.0°N, ± 1.0°, 60.0°W ± 2.0°. M = 3.8. About 50 miles off the coast of Labrador, Nfld.

DOMINION OBSERVATORIES

EARTHQUAKES IN WESTERN CANADA
AND ADJACENT AREAS

The following disturbances were recorded during the first quarter of 1963. The times of observed phases are given at their respective chronological positions in the text of this bulletin. In some cases, although they are not included in the text, readings from U.S.C.G.S. stations were used to compute epicentres. The quality (Q) of the epicentre is indicated by a letter from "a" meaning an excellent fit of observed data to "d" meaning a very poor solution.

JANUARY 2 at 05 39 43 U.T. 150 km from Port Hardy.

JANUARY 4 at 08 29 02 U.T. 230 km from Port Hardy.

JANUARY 6 at 06 01 17 U.T. 173 km from Port Hardy.

JANUARY 7 at 18 59 21 U.T. 158 km from Port Hardy.

JANUARY 7 at 19 08 17 U.T. 173 km from Port Hardy.

JANUARY 9 at 16 59 33 U.T. 216 km from Port Hardy.

JANUARY 9 at 23 49 30 U.T. 69 km from Port Hardy.

JANUARY 9 at 00 01 27 U.T. Magnitude 1.3, 86 km from Penticton.

JANUARY 10 at 08 58 34 U.T. 61 km from Port Hardy.

JANUARY 11 at 23 21 07 U.T. Magnitude 2.0, 228 km from Penticton.

JANUARY 12 at 14 43 10 U.T. Magnitude 2.6, 315 km from Penticton.

JANUARY 16 at 06 43 13 U.T. Magnitude 2.3. Epicentre at $48^{\circ}16'N$, $122^{\circ}48'W$, near Whidbey Island, U.S.A.

JANUARY 18 at 16 13 05 U.T. 315 km from Penticton.

JANUARY 18 at 20 49 12 U.T. 322 km from Penticton, Magnitude 2.9.

JANUARY 18 at 21 24 28 U.T. 231 km from Port Hardy.

JANUARY 19 at 05 57 21 U.T. Magnitude 3.5. Probably a foreshock of next event. Epicentre uncertain.

JANUARY 20 at 10 56 48 U.T. Magnitude 3.9. Epicentre at $50.3^{\circ}N$, $129.6^{\circ}W$, in Queen Charlotte Sound. Q=b.

JANUARY 20 at 19 19 08 U.T. 168 km from Port Hardy.

SEISMOLOGICAL BULLETIN - 1963

JANUARY 22 at 04 13 46 U.T. Magnitude 2.2. Epicentre at 48°53'N,
122°13'W, north east of Bellingham, U.S.A.

JANUARY 31 at 00 27 33 U.T. Magnitude 2.5. Epicentre at 50°36'N,
129°45'W, off west coast of Vancouver Island.

JANUARY 31 at 22 54 08 U.T. 104 km from Port Hardy.

FEBRUARY 16 at 04 06 44 U.T. Magnitude 2.8. Epicentre at 49.6°N,
127.1°W, west of Vancouver Island.

FEBRUARY 23 at 06 19 17 U.T. Magnitude 2.3. Epicentre at 49°29'N,
123°37'W, near Sechelt Peninsula. Q=a.

MARCH 4 at 06 08 23 U.T. Magnitude 2.3. Epicentre at 49.6°N,
114.8°W, in the Crowsnest Pass area. Q=c.

MARCH 4 at 10 40 59 U.T. Magnitude 2.0. Epicentre 184 km from
Port Hardy.

MARCH 9 at 06 54 50 U.T. Magnitude 2.0. 175 km from Port Hardy.

MARCH 10 at 06 21 29 U.T. Magnitude 2.4. Epicentre at 49.6°N,
127.6°W, west of Vancouver Island.

MARCH 15 at 23 06 02 U.T. Magnitude 2.3. 266 km from Penticton.

MARCH 21 at 18 19 19 U.T. Magnitude 3.9. Epicentre at 50°05'N,
129° 45'W, west of Vancouver Island, Q=b.

MARCH 23 at 22 38 28 U.T. Magnitude 2.1. Epicentre at 48°12'N,
124°36'W, in western Washington, U.S.A. Q=b.

MARCH 27 at 09 11 45 U.T. Magnitude 4.1. Epicentre at 50°38'N,
129°47'W, west of Vancouver Island. Q=b. Many aftershocks for
this earthquake are listed in the text.

MARCH 27 at 22 48 26 U.T. Magnitude 2.2. 190 km from Port Hardy.

MARCH 28 at 10 25 53 U.T. Magnitude 1.9. Epicentre at 48.8°N,
122.0°W, in Washington, U.S.A. Q=c.

MARCH 29 at 17 14 31 U.T. Magnitude 2.4. Epicentre at 48.0°N,
120.4°W, near Chelan, Washington, U.S.A. Q=c.

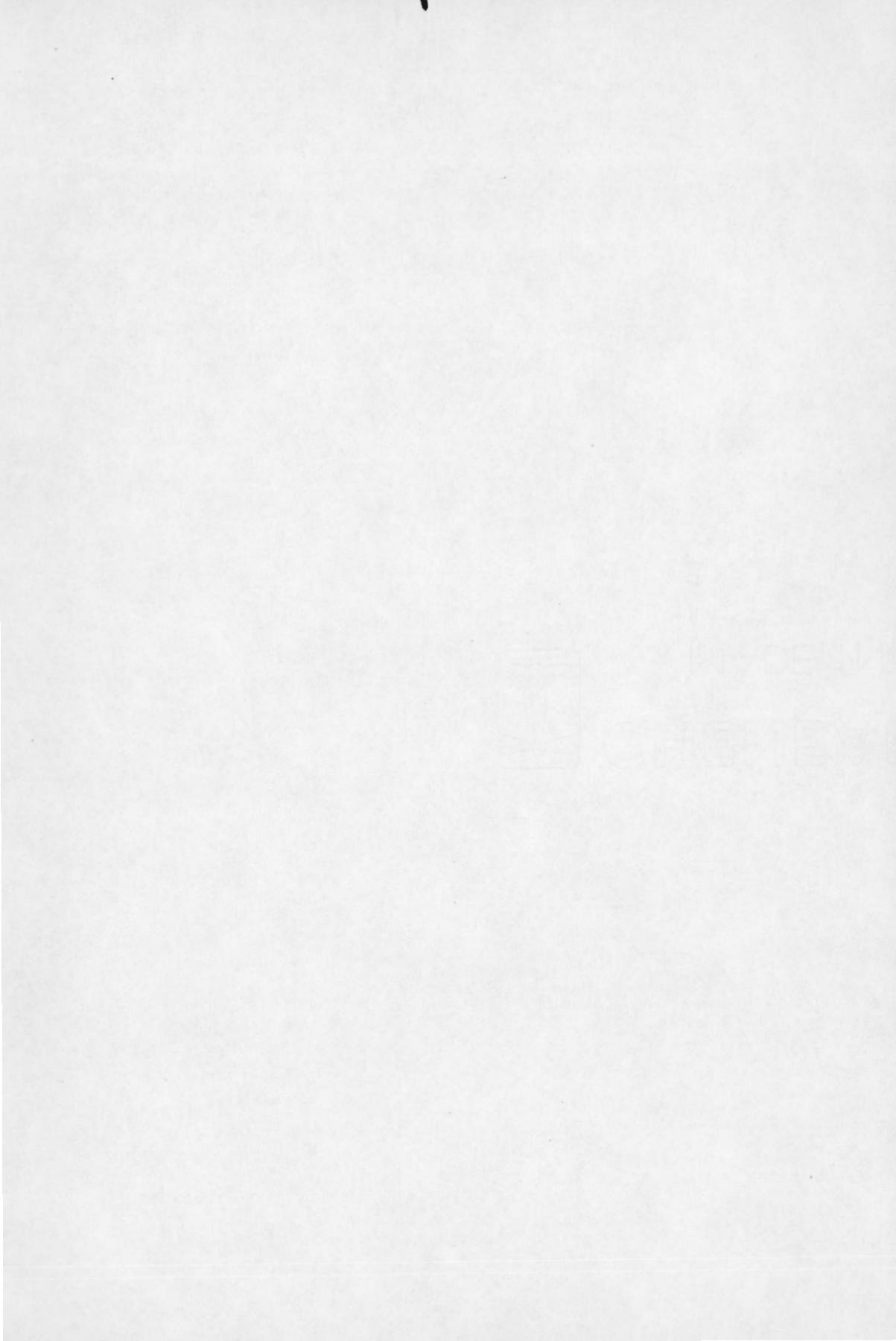
MARCH 30 at 00 34 45 U.T. Magnitude 4.1. Epicentre at 50°38'N,
129°30'W, west of Scott Islands. Q=b.

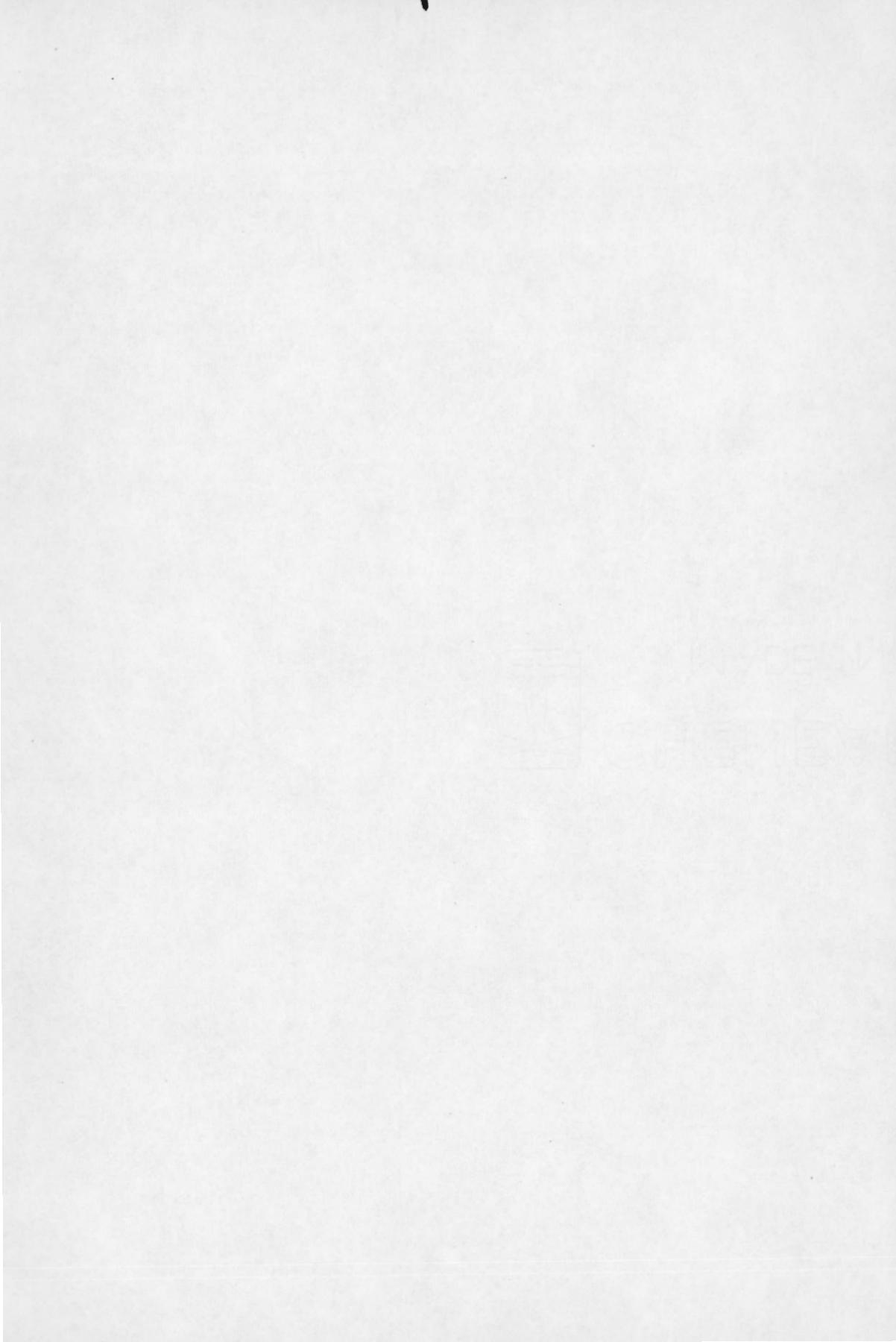
DOMINION OBSERVATORIES

MARCH 30 at 02 57 45 U. T. Magnitude 2.3. Epicentre at $48^{\circ}52'N$, $122^{\circ}23'W$, north east of Bellingham, Washington, U.S.A. Q=b.

MARCH 30 at 20 44 09 U. T. Magnitude 2.2. Epicentre 192 km from Port Hardy.

MARCH 30 at 23 58 32 U. T. Magnitude 2.3. Epicentre at $50.2^{\circ}N$, $127.5^{\circ}W$, west of Vancouver Island. Q=c.





ROGER DUHAMEL, F.R.S.C.
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