



**SEISMOLOGICAL SERIES**  
of the  
**DOMINION OBSERVATORY**

**1961-1**  
**Seismological Bulletin**  
**January - March**  
**1961**

**Seismological Service  
of Canada**

**OTTAWA, CANADA**

**Department of Mines and Technical Surveys**

**DOMINION OBSERVATORIES**

**1961**

SEISMOLOGICAL BULLETIN - 1961

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

Halifax, Nova Scotia -

Operated by Dalhousie University for the Dominion Observatory.

Ottawa, Ontario -

Dominion Observatory, Department of Mines and Technical Surveys.

Resolute, Northwest Territories -

Owned and operated by the Dominion Observatory.

M. Strader in charge.

Seven Falls, Quebec -

Owned by the Quebec Power Company; operated by the Company for the Dominion Observatory.

Shawinigan Falls, Quebec -

Owned by the Shawinigan Water and Power Co.; operated by the Company for the Dominion Observatory.

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

DOMINION OBSERVATORIES

Western Division

Alberni, British Columbia -

Owned and operated by the Dominion Observatory.  
W. N. Burgess in charge.

Banff, Alberta -

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

Penticton -

Owned and operated by the Dominion Observatory.

Victoria, British Columbia -

Dominion Astrophysical Observatory, Department of Mines and Technical Surveys, Royal Oak, 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 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.

SEISMOLOGICAL BULLETIN - 1961

Explanation of Calibration Curves

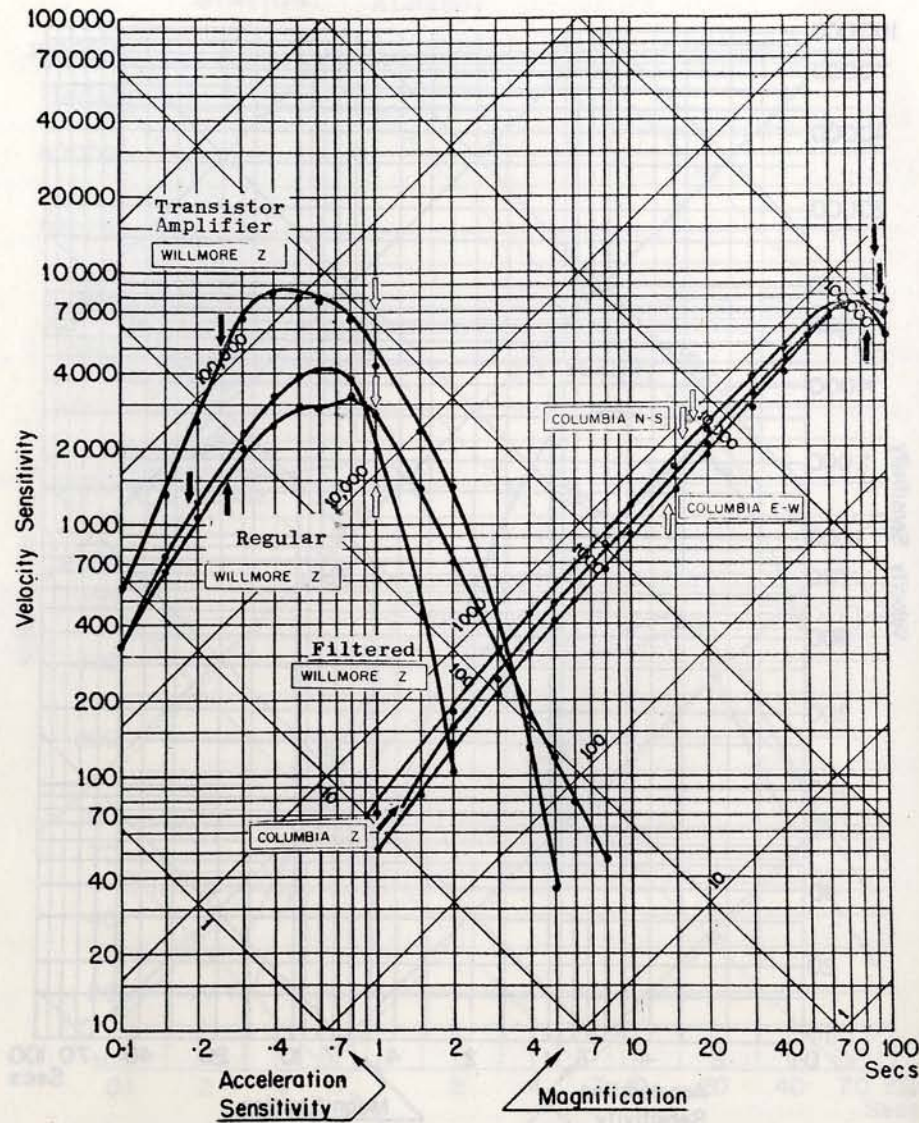
Calibration curves for all the seismographs of the Canadian network have now been determined using a bridge circuit developed by this Observatory (see P. L. Willmore, "The Application of the Maxwell Impedance Bridge to the Calibration of Electromagnetic Seismographs", Bull. Seis. Soc. Am., in press). 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  $\frac{T}{2\pi}$  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.



CALIBRATION CURVES

STATION: HALIFAX



$\phi = 44^{\circ}38'N$      $\lambda = 63^{\circ}36'W$     Altitude 56 M

Foundation: Carbonaceous slate

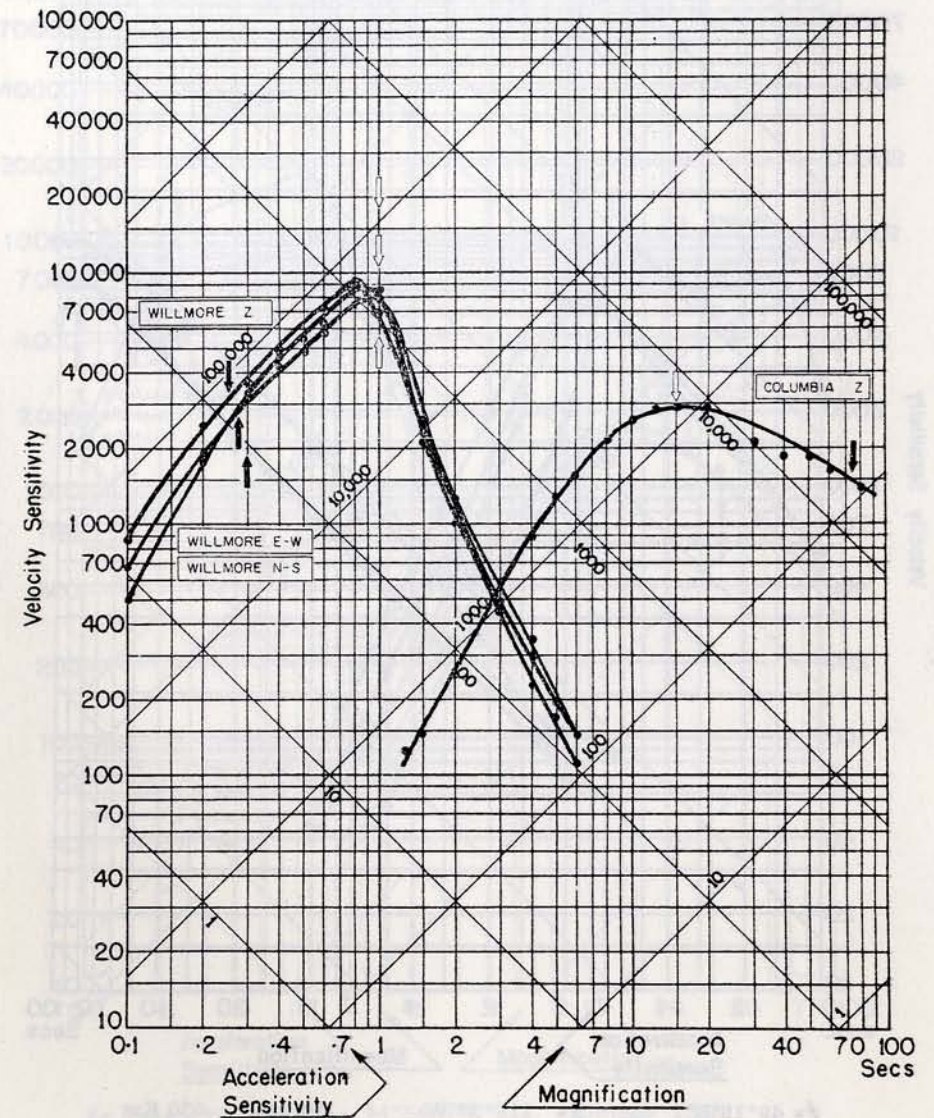
$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: June 1960

CALIBRATION CURVES

STATION: OTTAWA



$\phi = 45^{\circ}23'38''N$      $\lambda = 75^{\circ}42'57''W$     Altitude 83 M

Foundation: Boulder clay on limestone

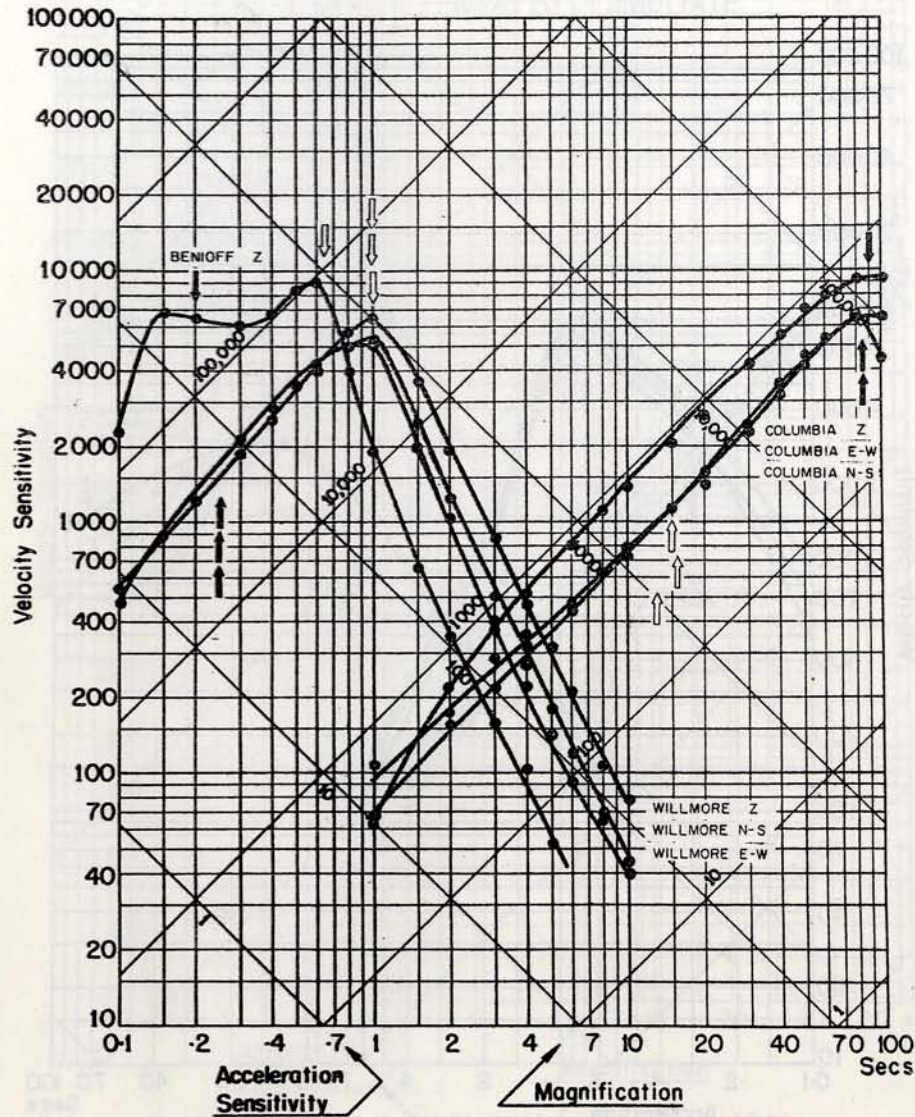
$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: Columbia Dec-12-1958  
Willmore Dec-2-1960  
Willmore N-S-Dec-9-1960  
Willmore E-W-Dec-9-1960

CALIBRATION CURVES

STATION: PENTICTON



$\phi = 49^{\circ}19'N$        $\lambda = 119^{\circ}37'W$       Altitude 550 Km

Foundation: Tertiary shale

$T_s \uparrow$

$T_g \uparrow$

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

Columbia's

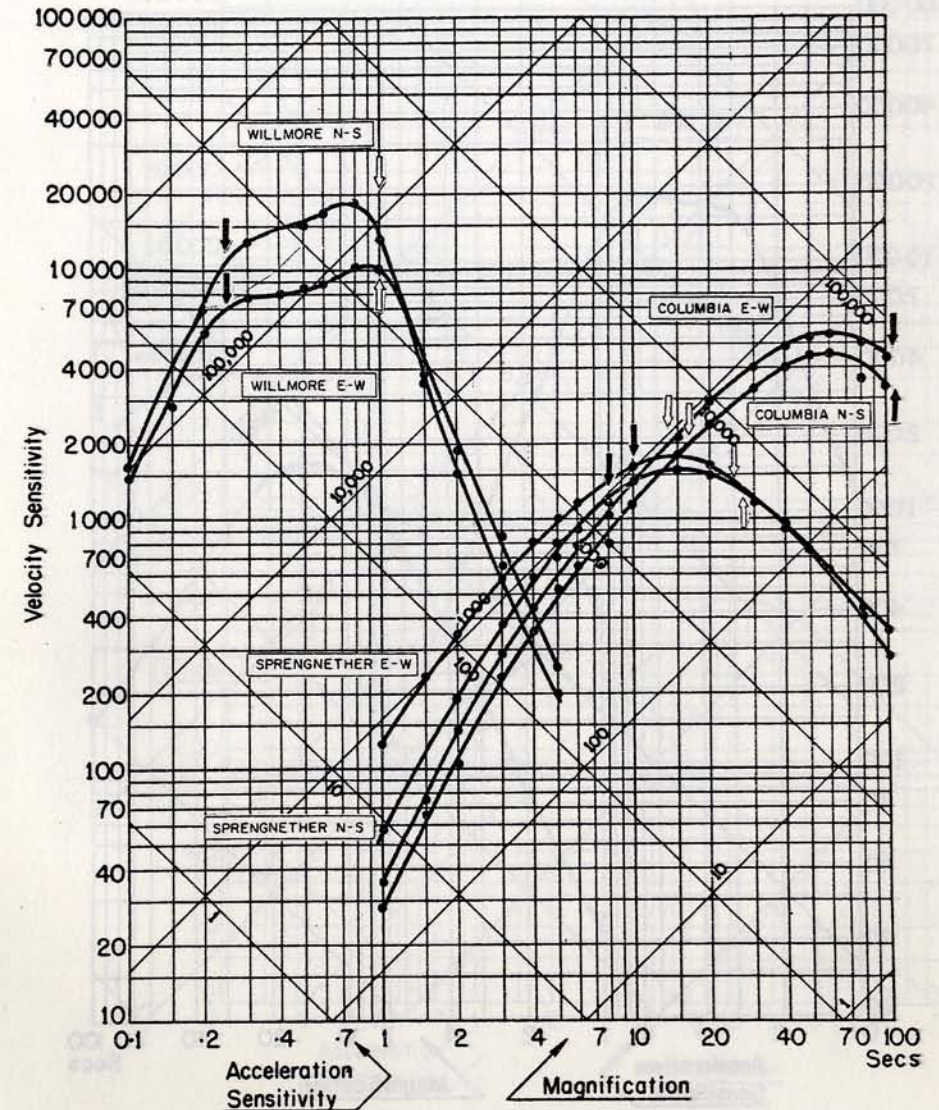
L. P. -Z      Feb-19  
L. P. H. -N.S.      Feb-18  
L. P. H. -E. W.      Feb-18

Benioff

S. P. -Z      Feb-19

CALIBRATION CURVES

STATION: RESOLUTE (Horizontals)



$\phi = 74^{\circ}41.2'N$        $\lambda = 94^{\circ}54.0'W$       Altitude 15M

Foundation: Early Palaeozoic limestone

$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: Aug.-Sept. 1958

Willmore N-S - August 18/58

Willmore E-W - September 20/58

Sprengnether N-S - September 7/58

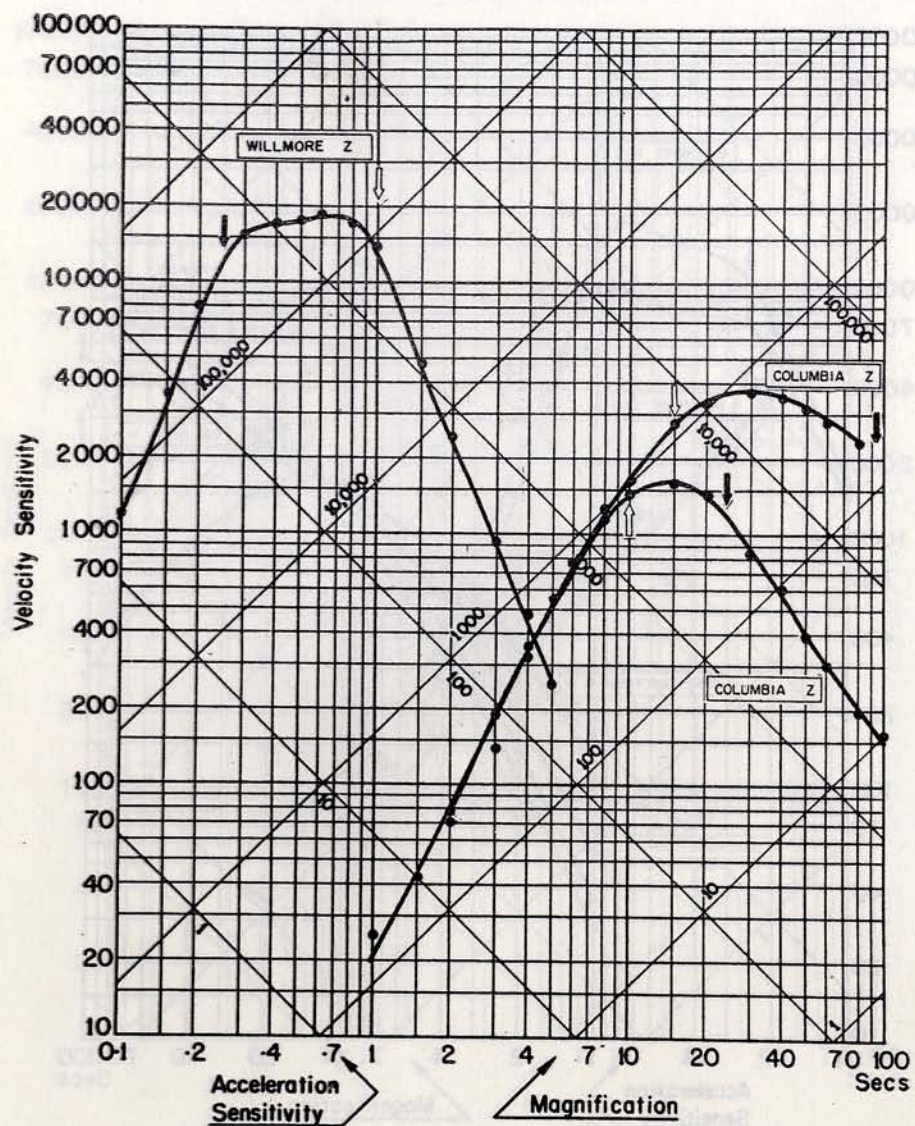
Columbia N-S - September 15/58

Columbia E-W - September 15/58

Sprengnether E-W - September 8/58

CALIBRATION CURVES

STATION: RESOLUTE (Verticals)



$\phi = 74^{\circ}41.2'N$      $\lambda = 94^{\circ}54.0'W$     Altitude 15M

Foundation: Early Palaeozoic limestone

$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: September 1958

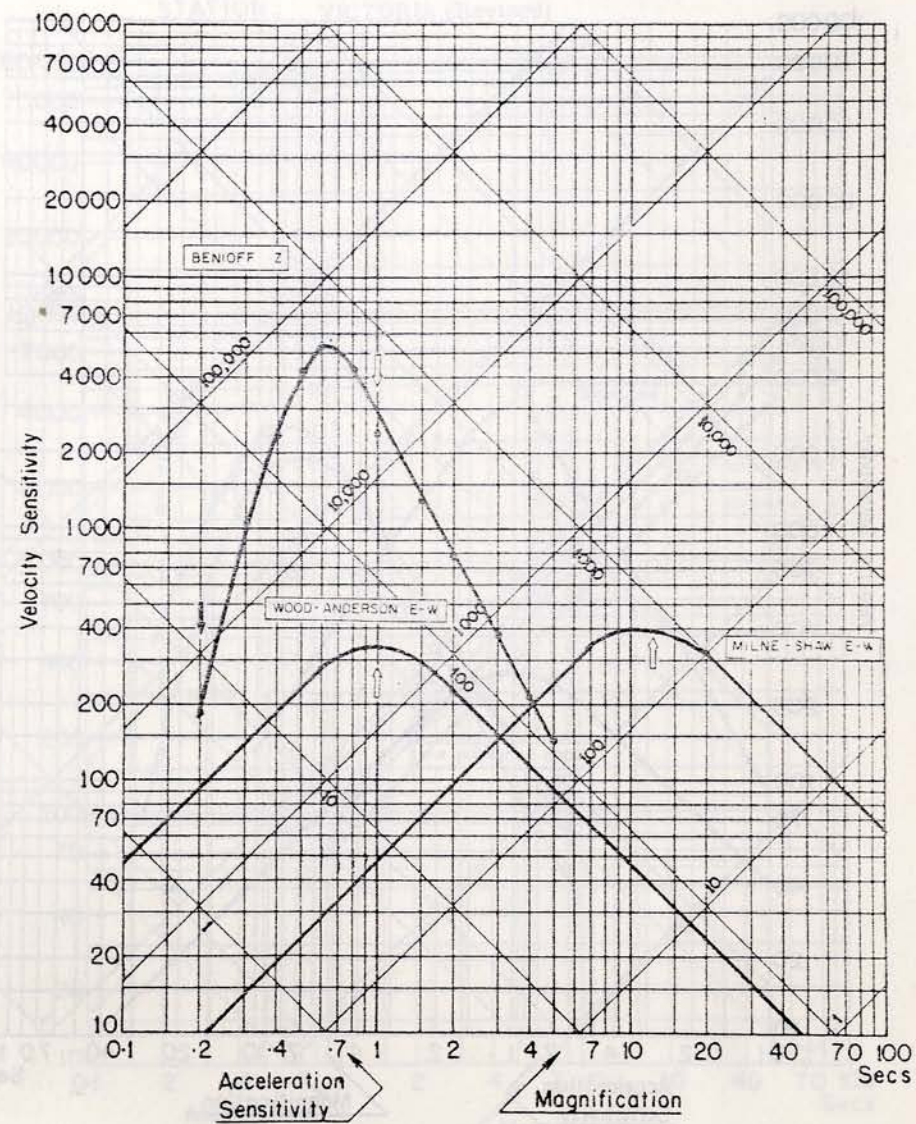
Willmore Z - August 18-58

Columbia LPZ - September 17-58

Columbia Z - September 13-58

CALIBRATION CURVES

STATION: SEVEN FALLS



$\phi = 47^{\circ}07.4'N$      $\lambda = 70^{\circ}49.6'W$     Altitude 232 M

Foundation: Precambrian basement rock

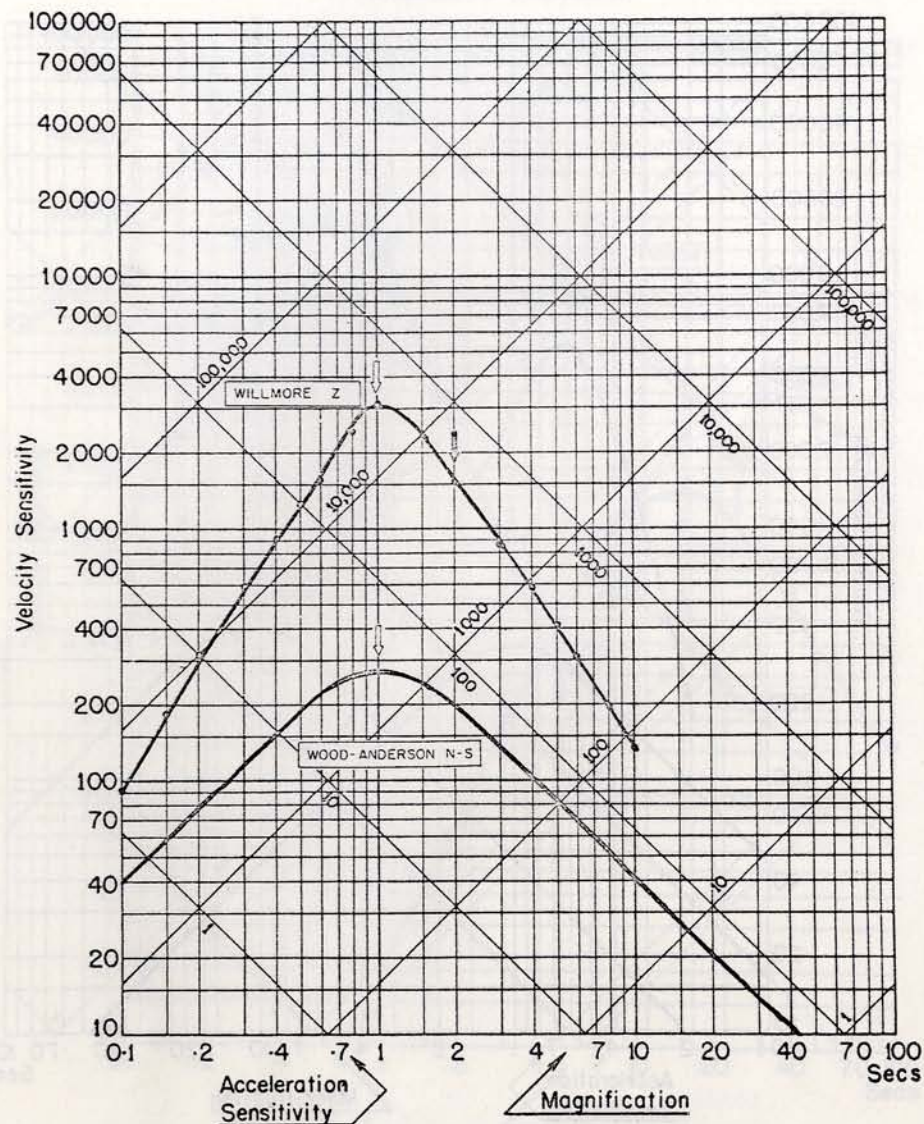
$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: May 28, 1960

CALIBRATION CURVES

STATION: SHAWINIGAN FALLS



$\phi = 46^{\circ} 33.1' N$      $\lambda = 72^{\circ} 45.8' W$     Altitude 60 M

Foundation: PRECAMBRIAN BASEMENT

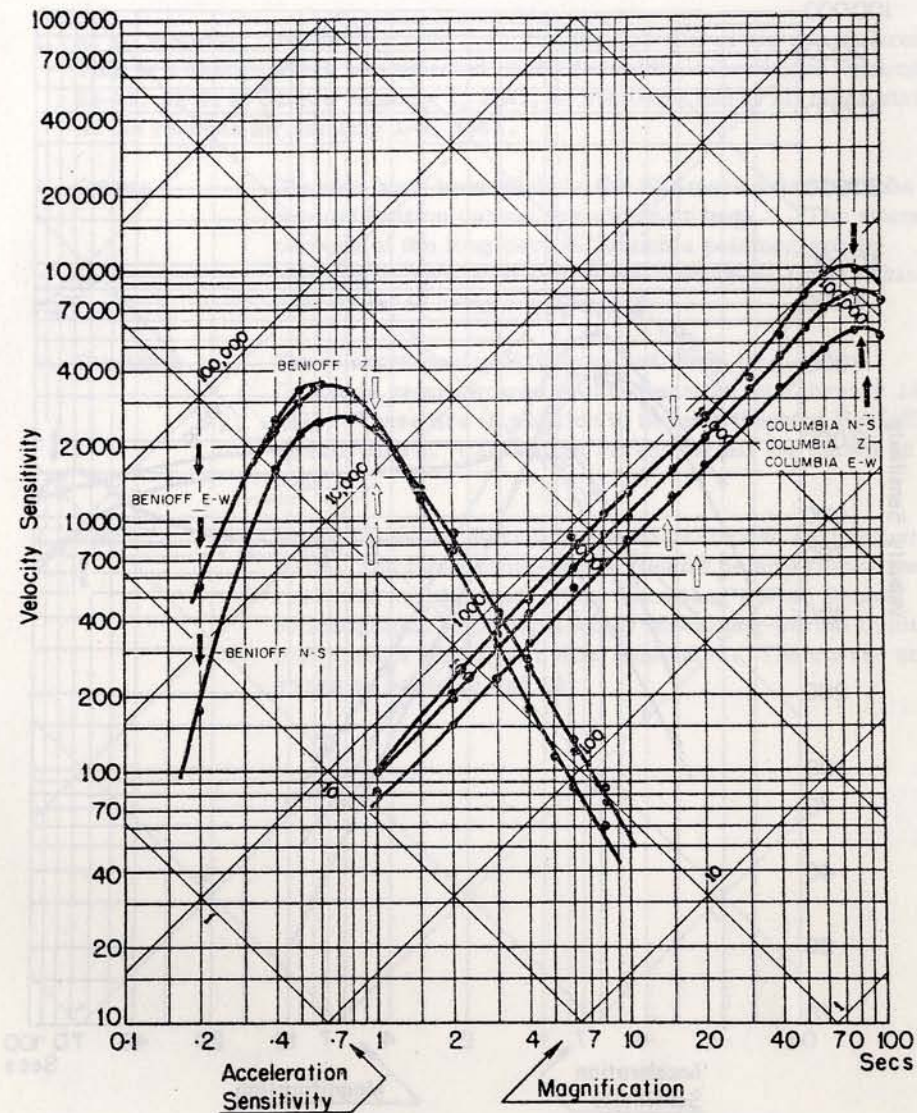
$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: November 6, 1959

CALIBRATION CURVES

STATION: VICTORIA (Revised)



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

Foundation: Quartz Diorite

$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: February - March - 1961

Benioff's

Columbia's

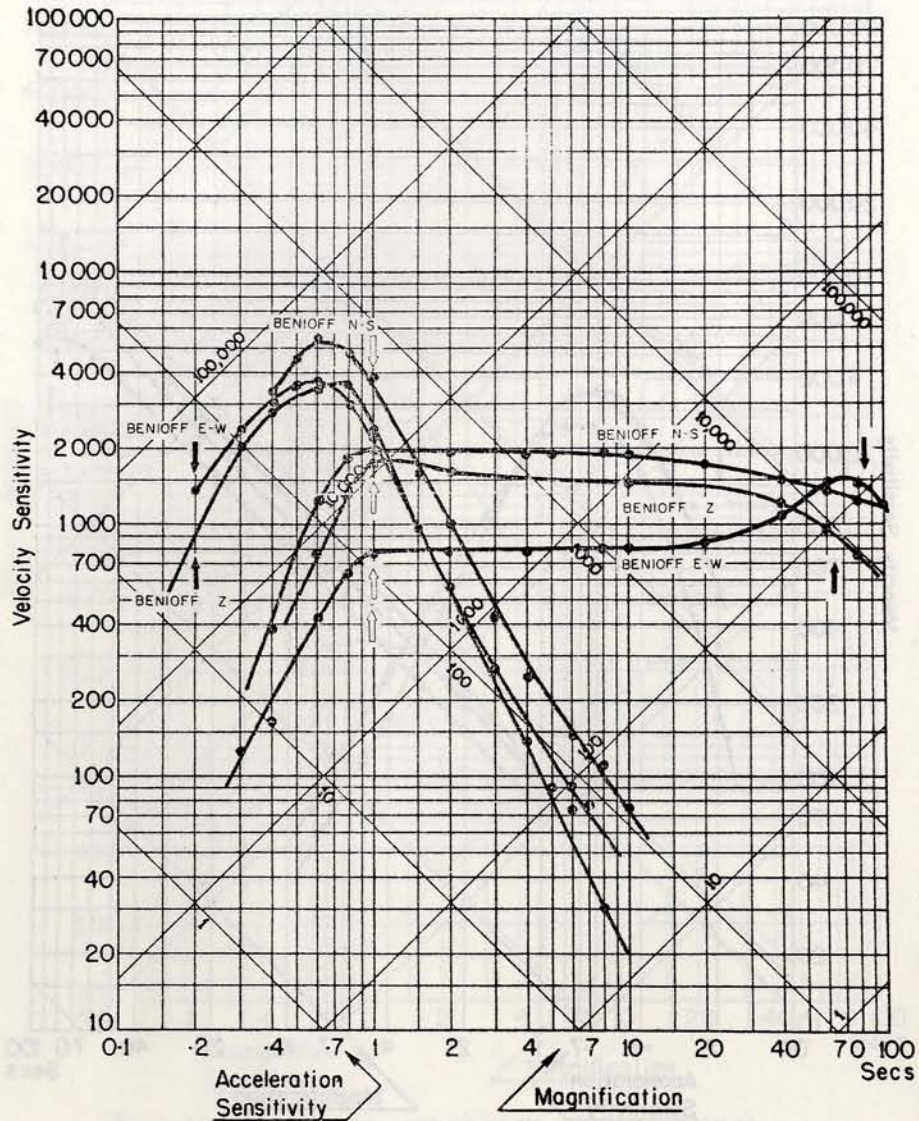
S. P. Z. Feb. 9  
S. P. H. - N. S. Feb. 10  
S. P. H. - E. W. Feb. 13

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



CALIBRATION CURVES

STATION: VICTORIA



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

Foundation: Quartz Diorite

$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: February - 1961

Benioff's

Benioff's

S.P.Z. Feb. 7  
S.P.H. - N.S. Feb. 9  
S.P.H. - E.W. Feb. 11

L.P.Z. Feb. 8  
L.P.H. - N.S. Feb. 9  
L.P.H. - E.W. Feb. 11

DOMINION OBSERVATORIES

JANUARY - MARCH 1961

NOTES

1. At all stations, time is now read from the BEGINNING of the minute break. This is a change which was effected at Halifax on the records for December 28-29, 1960; at Ottawa January 4, 1961, at 20h 06m; and at all other stations on the records for January 1-2, 1961.
2. Ottawa                      Changes have been made in the Willmore seismographs and new calibration curves are shown on page 7. The attenuator network of the long-period Columbia seismograph is believed to have been altered on January 9, 1959. This instrument is being recalibrated.
3. Penticton                  Three short-period Willmore and three long-period Columbia seismographs began operation on February 18, 1961. These are in addition to the short-period Benioff already there. Calibration curves for all are shown on page 8.
4. Victoria                    The six Benioff instruments were calibrated on February 7, 1961. The three short-period Benioff seismographs were reset and recalibrated. The three long-period Benioff seismographs were replaced by three long-period Columbia instruments which were also calibrated. The curves are shown on pages 13 and 14.

DOMINION OBSERVATORIES

<p>JANUARY 1 U. S. C. G. S. 19. 4N, 121. 0E Philippine Islands H = 13 52 37. 6 h = 77 km Resolute eP 14 05 01</p>	<p>JANUARY 2 U. S. C. G. S. 12. 4S, 166. 4E Santa Cruz Islands region H = 10 11 56. 9 h = 161 km Mag 6 3/4 Alberni eP 10 24 41 Banff eP 10 24 52 Halifax iP' 10 30 45. 5 d Ottawa eP' 10 30 29 d Penticton eP 10 24 37 Resolute eP 10 25 50 ? Seven Falls eP' 10 30 38 c Shawinigan Falls eP' 10 30 33 Victoria eP 10 24 25</p>	<p>JANUARY 2 U. S. C. G. S. 52. 0N, 157. 9E Near east coast of Kamchatka H = 16 21 34. 0 h = 43 km Banff eP 16 30 30 Ottawa eP 16 32 57 d Penticton eP 16 31 23 Resolute iP 16 29 47 c ? Victoria eP 16 31 10</p>
<p>JANUARY 1 U. S. C. G. S. 18. 3S, 178. 2W Fiji Islands region H = 16 38 27. 8 h = 663 km Penticton iP 16 50 01 d Victoria eP 16 49 48</p>	<p>JANUARY 2 46. 2N, 122. 7W Near Longview Washington, U. S. A. H = 15 54 36 Mag 2. 9 Penticton eP<sub>n</sub> 15 55 34. 6 eS<sub>n</sub> 15 56 26. 0 D = 428 km Victoria eP<sub>n</sub> 15 55 15. 6 eS<sub>n</sub> 15 55 49. 7 D = 272 km</p>	<p>JANUARY 2 Resolute eP 23 11 46 ?</p>
<p>JANUARY 1 U. S. C. G. S. 54. 1S, 7. 4E Bouvet Island region H = 19 33 20. 1 h = 91 km Resolute iP' 19 52 47 d ?</p>	<p>JANUARY 2</p>	<p>JANUARY 3 Penticton eP 00 44 28 Victoria eP 00 44 07</p>
<p>JANUARY 1 U. S. C. G. S. 49. 5S, 125. 5E South of Australia H = 20 22 14. 6 h = 59 km Resolute iP' 20 42 02 d ?</p>	<p>JANUARY 2</p>	<p>JANUARY 3 U. S. C. G. S. 1. 1N, 29. 2W Mid - Atlantic Ocean H = 08 10 40. 4 h = 25 km Resolute eP 08 23 06 ?</p>

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<p>JANUARY 3 U. S. C. G. S. 6. 8S, 129. 3E Banda Sea H = 11 40 42. 5 h = 72 km Resolute eP 11 54 58 ? Seven Falls eP' 11 59 59 c i 12 03 21</p>	<p>JANUARY 3 U. S. C. G. S. 24. 0S, 67. 0W Chile-Argentina border H = 19 08 08. 9 h = 207 km Seven Falls eP 19 20 04</p>	<p>JANUARY 3 Canadian Arctic H = 23 30 45. 2 h = 4 km Mag 2. 7 Resolute eP<sub>n</sub> 23 31 18 iP<sub>1</sub> 23 31 19 i 23 31 20. 7 i 23 31 34. 5 iS<sub>n</sub> 23 31 42. 5 S<sub>1</sub> 23 31 44. 3 D = 210 km</p>
<p>JANUARY 3 Canadian Arctic H = 12 05 24. 5 h = 25 km ? Mag 3. 4 Resolute e 12 06 40. 5 i 12 06 43. 5 iP<sub>1</sub> 12 06 52 iS<sub>n</sub> 12 07 28. 5 S<sub>1</sub> 12 07 59 D = 550 km</p>	<p>JANUARY 3 U. S. C. G. S. 6. 4S, 130. 4E Banda Sea H = 19 27 00. 4 h = 100 km Seven Falls eP' 19 46 15 i 19 49 35</p>	<p>JANUARY 4 Penticton eP 01 06 26</p>
<p>JANUARY 3 Resolute eP 14 53 00 ?</p>	<p>JANUARY 3 Canadian Arctic H = 20 47 48 Mag 4. 3 Resolute eP<sub>n</sub> 20 50 28 iS<sub>n</sub> 20 52 24. 5 L<sub>g</sub> 20 53 35 D = 1250 km</p>	<p>JANUARY 4 H = 01 53 04 Mag 3. 1 Penticton eP<sub>n</sub> 01 53 57. 4 eS<sub>n</sub> 01 54 49. 4 D = 425 km</p>
<p>JANUARY 3 Resolute eP 16 21 34 ?</p>	<p>JANUARY 3 Alberni eP 22 05 12 Penticton eP 22 06 00</p>	<p>JANUARY 4 50°55'N, 124°52'W At the head of Butte Inlet H = 07 26 04 Mag 3. 3 Alberni eP<sub>n</sub> 07 26 35. 0 D = 196 km Penticton eP<sub>n</sub> 07 27 03. 6 eS<sub>n</sub> 07 27 57. 4 D = 430 km Victoria eP<sub>n</sub> 07 26 47. 2 eS<sub>n</sub> 07 27 23. 4 D = 296 km</p>
<p>JANUARY 3 Shawinigan Falls eP 16 32 58</p>	<p>JANUARY 3 U. S. C. G. S. 20. 3S, 68. 2W Southern Bolivia H = 17 41 58. 7 h = 211 km Penticton eP 17 54 07 Seven Falls eP 17 52 37</p>	<p>JANUARY 4</p>

DOMINION OBSERVATORIES

JANUARY 4  
48.3N, 121.6W  
South of Mount Baker  
Washington, U.S.A.  
H = 10 00 57  
Mag 1.8  
Penticton  
eP<sub>n</sub> 10 01 27.1  
eS<sub>n</sub> 10 01 49.3  
D = 181 km  
Victoria  
eP<sub>1</sub> 10 01 19.2  
eS<sub>1</sub> 10 01 36.6  
D = 136 km

JANUARY 4  
U.S.C.G.S.  
17.6N, 101.2W  
Near coast of  
Mexico  
H = 12 04 33.8  
h = 40 km  
Ottawa  
eP 12 11 24  
Penticton  
eP 12 11 24  
Resolute  
eP 12 14 18  
Seven Falls  
eP 12 12 04  
Shawinigan Falls  
eP 12 11 51

JANUARY 4  
U.S.C.G.S.  
17.4S, 178.9W  
Fiji Islands  
H = 13 25 35.6  
h = 591 km  
Penticton  
eP 13 37 12

JANUARY 4  
Seven Falls  
eP 19 02 13

JANUARY 4  
Resolute  
eP 19 22 57

JANUARY 4  
U.S.C.G.S.  
5.5S, 128.7E  
Banda Sea  
H = 19 16 19.5  
h = 173 km  
Seven Falls  
iSKP 19 38 23

JANUARY 4  
H = 20 34 29  
Mag 2.6  
Penticton  
eP<sub>1</sub> 20 34 49.9  
eS<sub>1</sub> 20 35 05.5  
D = 128 km

JANUARY 5  
H = 06 20 06  
Mag 1.8  
Victoria  
eP<sub>1</sub> 06 20 13.7  
eS<sub>1</sub> 06 20 19.8  
D = 50 km

JANUARY 5  
U.S.C.G.S.  
51.6N, 176.3W  
Andreanof Islands  
H = 14 06 25.9  
h = 37 km  
Mag 6 1/4  
Alberni  
eP 14 12 57  
Banff  
iP 14 13 36 c  
Halifax  
iP 14 17 24.5 d  
Ottawa  
eP 14 16 43 c  
Penticton  
iP 14 13 22 c

Resolute  
eP 14 13 52 c?  
PP 14 15 22  
eS 14 19 43  
Seven Falls  
iP 14 16 50 c  
Shawinigan Falls  
eP 14 16 47 c  
Victoria  
eP 14 13 06 c

JANUARY 5  
U.S.C.G.S.  
45.7N, 149.3E  
Kurile Islands  
H = 15 09 37.9  
h = 19 km  
Ottawa  
eP 15 21 52  
Penticton  
eP 15 19 30  
Resolute  
iP 15 18 54 c  
Seven Falls  
eP 15 21 59  
Shawinigan Falls  
eP 15 21 55

JANUARY 5  
U.S.C.G.S.  
4.1S, 143.0E  
New Guinea  
H = 15 53 56.0  
h = 108 km  
Mag 6 3/4  
Ottawa  
eP' 16 12 50 d  
Penticton  
iP 16 07 27  
Resolute  
eP 16 07 42 d?  
i 16 19 09  
Seven Falls  
eP' 16 12 53 d  
Shawinigan Falls  
eP' 16 12 52 d  
Victoria  
eP 16 07 19

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JANUARY 5  
Resolute  
eP 16 23 46

JANUARY 5  
U.S.C.G.S.  
21.2S, 169.3E  
Loyalty Islands  
region  
H = 17 57 56.6  
h = 123 km  
Mag 6 3/4  
Alberni  
eP 18 10 56  
Halifax  
eP' 18 16 59 c  
Ottawa  
eP' 18 16 40 c  
Penticton  
eP 18 11 07  
Resolute  
eP? 18 12 30 ?  
P' 18 16 21  
i 18 26 37  
PKKP 18 27 16?  
Seven Falls  
eP' 18 16 47 c  
Shawinigan Falls  
eP' 18 16 43  
Victoria  
eP 18 10 56

JANUARY 5  
U.S.C.G.S.  
21.0S, 169.1E  
Loyalty Islands  
H = 18 14 43.0  
h = 124 km  
Mag 6 3/4  
Alberni  
eP 18 27 40  
Halifax  
iP' 18 33 45.6 d  
Ottawa  
eP' 18 33 27 d  
Penticton  
eP 18 27 56

Resolute  
eP' 18 33 08  
e 18 44 00?  
Seven Falls  
eP' 18 33 33  
Shawinigan Falls  
eP' 18 33 31 c  
Victoria  
eP 18 27 42

JANUARY 5  
U.S.C.G.S.  
51.3N, 176.6W  
Andreanof Islands  
H = 18 37 48.3  
h = 30 km  
Penticton  
eP 18 44 48

JANUARY 5  
U.S.C.G.S.  
8.2N, 83.1W  
Costa Rica -  
Panama border  
region  
H = 18 47 33.5  
h = 82 km  
Penticton  
eP 18 56 32  
Resolute  
eP 18 58 19  
Seven Falls  
eP 18 55 04

JANUARY 5  
U.S.C.G.S.  
11.5N, 143.5E  
Mariana Islands  
region  
H = 20 05 12.2  
h = 25 km  
Resolute  
iP 20 17 57

JANUARY 6  
U.S.C.G.S.  
42.5N, 143.4E  
Hokkaido Japan  
H = 01 20 30.8  
h = 21 km  
Ottawa  
eP 01 33 10 c  
Penticton  
eP 01 31 00  
Resolute  
iP 01 30 16 c

JANUARY 6  
Penticton  
eP 01 50 46

JANUARY 6  
U.S.C.G.S.  
51.8N, 176.2W  
Andreanof Islands  
H = 06 21 38.6  
h = 48 km  
Ottawa  
eP 06 31 52  
Penticton  
eP 06 28 32  
Resolute  
eP 06 29 02  
i 06 31 12  
Seven Falls  
eP 06 32 00  
Shawinigan Falls  
eP 06 31 57  
Victoria  
eP 06 28 17

JANUARY 6  
U.S.C.G.S.  
53.3N, 159.7E  
Kamchatka  
H = 07 05 47.7  
h = 24 km  
Ottawa  
eP 07 17 04 c

DOMINION OBSERVATORIES

Penticton  
eP 07 14 27  
Resolute  
eP 07 13 50 c  
Seven Falls  
eP 07 17 06 c  
Shawinigan Falls  
eP 07 17 06

JANUARY 6  
U.S.C.G.S.  
14.2N, 95.8W  
Off south coast of  
Mexico  
H = 10 48 22.9  
h = 45 km  
Ottawa  
eP 10 55 19  
Resolute  
eP 10 58 34  
Seven Falls  
eP 10 55 50 d  
Shawinigan Falls  
eP 10 55 39

JANUARY 6  
Resolute  
eP 19 21 03?

JANUARY 7  
U.S.C.G.S.  
35.9N, 27.0E  
Dodecanese Islands  
H = 10 30 58.0  
h = 127 km  
Ottawa  
eP 10 42 18 c  
Resolute  
iP 10 41 17 c  
Seven Falls  
iP 10 41 55 c  
Shawinigan Falls  
eP 10 42 04 c

JANUARY 7  
Resolute  
iP 13 38 35 c?

JANUARY 7  
U.S.C.G.S.  
37.7N, 21.1E  
Near west coast  
of Greece  
H = 15 52 54.0  
h = 22 km  
Resolute  
iP 16 03 03 c?  
Seven Falls  
eP 16 03 33

JANUARY 7  
U.S.C.G.S.  
57.2S, 25.3W  
Sandwich Islands  
H = 18 16 51.2  
h = 94 km  
Penticton  
eP' 18 36 04  
Resolute  
eP' 18 36 09  
Victoria  
eP' 18 36 08

JANUARY 7  
H = 19 31 04  
Mag 2.7  
Penticton  
iP<sub>n</sub> 19 31 43.6  
iS<sub>n</sub> 19 32 16.4  
D = 268 km

JANUARY 7  
Resolute  
eP 21 49 29

JANUARY 8  
Resolute  
eP 00 02 06

JANUARY 8  
Resolute  
eP 00 58 46?

JANUARY 8  
U.S.C.G.S.  
4.1N, 129.3E  
Halmahera region  
H = 01 15 25.6  
h = 106 km  
Resolute  
iP 01 28 50

JANUARY 8  
U.S.C.G.S.  
3.5N, 129.6E  
Halmahera region  
H = 02 56 34.1  
h = 117 km  
Resolute  
eP 03 09 57

JANUARY 8  
Alberni  
eP 07 43 13

JANUARY 8  
Alberni  
eP 07 56 57

JANUARY 8  
U.S.C.G.S.  
44.8N, 110.3W  
Yellowstone National  
Park, Wyoming  
H = 09 49 06.9  
h = 27 km  
Penticton  
eP 09 51 02.1

SEISMOLOGICAL BULLETIN - 1961

JANUARY 8  
H = 11 46 15  
Mag 3.3  
Penticton  
eP<sub>n</sub> 11 47 05.0  
eS<sub>n</sub> 11 47 48.0  
D = 352 km

JANUARY 8  
Resolute  
eP 15 07 55?

JANUARY 8  
Resolute  
eP 19 50 38?

JANUARY 8  
Resolute  
eP 21 38 45

JANUARY 9  
Penticton  
eP 00 00 57  
Resolute  
eP 00 03 18?

JANUARY 9  
U.S.C.G.S.  
31.2N, 41.0W  
North Atlantic Ocean  
H = 03 08 37.7  
h = 49 km  
Halifax  
eP 03 13 34?  
Resolute  
eP 03 17 36  
Shawinigan Falls  
eP 03 14 47

JANUARY 9  
H = 08 40 48  
Mag 2.6  
Penticton  
eP<sub>n</sub> 08 41 32.1  
eS<sub>n</sub> 08 42 09.9  
D = 310 km

JANUARY 9  
U.S.C.G.S.  
17.7N, 61.1W  
Leeward Islands  
H = 11 06 56.9  
h = 31 km  
Ottawa  
eP 11 13 10  
Resolute  
eP 11 17 04  
Shawinigan Falls  
eP 11 13 12

JANUARY 9  
U.S.C.G.S.  
17.6N, 61.0W  
Leeward Islands  
H = 11 11 12.5  
h = 52 km  
Ottawa  
eP 11 17 22  
Resolute  
eP 11 21 15?  
Shawinigan Falls  
eP 11 17 37

JANUARY 9  
U.S.C.G.S.  
17.8N, 61.0W  
Leeward Islands  
H = 19 22 05.6  
h = 31 km  
Ottawa  
eP 19 28 16  
Resolute  
eP 19 32 10  
Shawinigan Falls  
eP 19 28 18

JANUARY 9  
U.S.C.G.S.  
17.7N, 61.6W  
Leeward Islands  
H = 19 24 59.5  
h = 31 km  
Ottawa  
eP 19 31 09

JANUARY 9  
Penticton  
eP 21 20 08  
Resolute  
eP 21 19 23?  
Victoria  
eP 21 19 57

JANUARY 9  
Resolute  
eP 22 07 54?

JANUARY 9  
U.S.C.G.S.  
43.4N, 103.8E  
Outer Mongolia  
H = 22 16 32.3  
h = 38 km  
Resolute  
eP 22 26 48

JANUARY 9  
H = 23 24 56  
Mag 2.0  
Penticton  
eP<sub>n</sub> 23 25 23.5  
eS<sub>n</sub> 23 25 44.2  
D = 169 km

DOMINION OBSERVATORIES

JANUARY 10  
Resolute  
eP 02 30 02

JANUARY 10  
Resolute  
eP 07 34 22

JANUARY 10  
Resolute  
eP 11 44 33

JANUARY 10  
U.S.C.G.S.  
49.9N, 156.2E  
Kurile Islands region  
H = 14 22 18.2  
h = 29 km  
Alberni  
eP 14 31 05  
Halifax  
iP 14 34 25.5 c  
Ottawa  
iP 14 33 57 c  
Penticton  
iP 14 31 25 c  
Resolute  
iP 14 30 51 c  
eS 14 37 41  
i 14 41 28  
Shawinigan Falls  
iP 14 33 59 c  
Victoria  
eP 14 31 40

JANUARY 11  
U.S.C.G.S.  
52.3N, 170.7W  
Fox Islands  
H = 11 58 23.8  
h = 42 km  
Resolute  
eP 12 05 29

JANUARY 11  
U.S.C.G.S.  
51.8N, 171.0W  
Fox Islands  
H = 11 59 55.0  
h = 47 km  
Halifax  
eP 12 10 37 c  
Ottawa  
eP 12 09 52  
Penticton  
eP 12 06 22  
Resolute  
eP 12 07 04 c  
PP? 12 08 31?  
eS 12 12 58?  
Shawinigan Falls  
eP 12 09 57  
Victoria  
eP 12 06 06

JANUARY 11  
U.S.C.G.S.  
54.7S, 162.9E  
Macquarie Islands  
H = 16 31 50.6  
h = 27 km  
Resolute  
eP' 16 51 41?

JANUARY 11  
U.S.C.G.S.  
52.3S, 160.3E  
Near Maquarie Islands  
H = 21 37 05.1  
h = 25 km  
Resolute  
eP' 21 56 38?

JANUARY 12  
Resolute  
eP 01 26 31

JANUARY 12  
U.S.C.G.S.  
57.4N, 155.9W  
Alaska Peninsula  
H = 14 13 27.7  
h = 40 km  
Penticton  
eP 14 18 31  
Resolute  
iP 14 19 19 c  
Victoria  
eP 14 18 15

JANUARY 13  
H = 00 44 36  
Mag 2.0  
Penticton  
eP<sub>1</sub> 00 44 56.3  
eS<sub>1</sub> 00 45 12.0  
D = 129 km

JANUARY 13  
Resolute  
eP 07 57 21?

JANUARY 13  
Resolute  
eP 15 10 28?

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JANUARY 13  
U.S.C.G.S.  
46.5S, 34.1E  
Near Prince Edward  
Islands  
H = 19 18 44.7  
h = 60 km  
Resolute  
eP' 19 38 14  
i 19 38 16

JANUARY 14  
U.S.C.G.S.  
53.4N, 172.4E  
Near Islands  
H = 02 26 30.6  
h = 90 km  
Resolute  
eP 02 34 00

JANUARY 14  
H = 06 44 26  
Mag 2.7  
Alberni  
eP<sub>1</sub> 06 44 50.8  
eS<sub>1</sub> 06 45 10.1  
D = 158 km

JANUARY 14  
U.S.C.G.S.  
6.7N, 73.0W  
Colombia  
H = 16 17 25.5  
Ottawa  
iP 16 24 35 c  
Penticton  
eP 16 27 01  
Resolute  
iP 16 28 15 c  
Shawinigan Falls  
eP 16 24 45 c

JANUARY 14  
U.S.C.G.S.  
53.9N, 163.7W  
Unimak Island  
region  
H = 16 38 55.6  
h = 41 km  
Mag 5 3/4  
Ottawa  
eP 16 48 18  
Penticton  
eP 16 44 41  
Resolute  
eP 16 45 34  
i 16 45 35  
PP? 16 46 39?  
eS 16 50 55  
Shawinigan Falls  
eP 16 48 23

JANUARY 15  
U.S.C.G.S.  
17.4N, 61.2W  
Leeward Islands  
H = 05 56 15.1  
h = 60 km  
Resolute  
eP? 06 06 18?

JANUARY 15  
U.S.C.G.S.  
39.5N, 143.3E  
Near east coast of  
Honshu, Japan  
H = 11 53 10.9  
h = 75 km  
Resolute  
eP 12 03 09

JANUARY 15  
U.S.C.G.S.  
20.4N, 169.5E  
Loyalty Islands  
region  
H = 16 44 44.8  
h = 182 km  
Resolute  
eP' 01 22 38?  
e 01 30 06?

JANUARY 15  
U.S.C.G.S.  
30.0N, 140.4E  
South of Honshu,  
Japan  
H = 04 06 15.8  
h = 285 km  
Resolute  
eP 04 17 01

JANUARY 15  
U.S.C.G.S.  
17.4N, 61.2W  
Leeward Islands  
H = 05 56 15.1  
h = 60 km  
Resolute  
eP? 06 06 18?

JANUARY 15  
U.S.C.G.S.  
20.4N, 169.5E  
Loyalty Islands  
region  
H = 16 44 44.8  
h = 182 km  
Resolute  
eP' 17 03 20  
Penticton  
eP 16 57 45  
Resolute  
eP' 17 03 00  
e 17 14 00

JANUARY 15  
Ottawa  
eP 18 30 32

JANUARY 15  
Resolute  
eP 20 12 27?

DOMINION OBSERVATORIES

JANUARY 15 U.S.C.G.S. 5.2S, 110.0E Java Sea H = 20 34 14.3 h = 565 km Resolute eP' 20 51 45 Shawinigan Falls eP' 20 52 39	Penticton eP 07 31 13 Resolute iP 07 30 39 c eS 07 39 11 Shawinigan Falls eP 07 33 22 Victoria eP 07 31 02	JANUARY 16 Resolute eP 10 33 07?
JANUARY 16 U.S.C.G.S. 13.0N, 99.4W Off coast of Mexico H = 01 48 50.2 h = 25 km Resolute eP 01 59 17?	JANUARY 16 Resolute eP 07 59 07?	JANUARY 16 U.S.C.G.S. 35.7N, 140.6E Near east coast of Honshu, Japan H = 11 19 46.5 h = 157 km Penticton eP 11 30 40 Resolute iP 11 30 06c eS 11 38 37? Shawinigan Falls eP 11 33 12 Victoria eP 11 30 31
JANUARY 16 U.S.C.G.S. 18.2N, 102.4W Near coast of Mexico H = 03 58 52.5 h = 153 km Penticton eP 04 05 26 Resolute eP 04 08 27 Shawinigan Falls eP 04 06 10 P <sub>c</sub> P 04 08 25	JANUARY 16 U.S.C.G.S. 35.0N, 141.3E Near east coast of Honshu, Japan H = 08 48 17.7 h = 188 km Penticton eP 08 59 11 Resolute iP 08 58 37c?	JANUARY 16 U.S.C.G.S. 35.2N, 141.0E Near east coast of Honshu, Japan H = 11 41 06.2 h = 149 km Resolute eP 11 51 28 c
JANUARY 16 U.S.C.G.S. 36.0N, 141.1E Near east coast of Honshu, Japan H = 07 20 18.6 h = 131 km Mag 6 3/4 Alberni eP 07 30 55 Ottawa eP 07 33 19	JANUARY 16 U.S.C.G.S. 36.4N, 141.4E Near east coast of Honshu, Japan H = 10 14 09.6 h = 131 km Resolute iP 10 24 28	JANUARY 16 U.S.C.G.S. 36.2N, 141.7E Honshu Japan H = 12 12 34.4 h = 105 km Mag 6 1/2 Ottawa eP 12 25 37 Penticton eP 12 23 29

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Resolute iP 12 22 55 c eS 12 31 25 Shawinigan Falls eP 12 25 47 Victoria eP 12 23 19	JANUARY 16 Resolute eP 14 10 48?	JANUARY 16 U.S.C.G.S. 36.4N, 140.6E Near east coast of Honshu, Japan H = 15 41 23.3 h = 147 km Penticton eP 15 52 15 Resolute iP 15 51 39 c eS 16 00 09 ? Shawinigan Falls eP 15 54 21 Victoria eP 15 52 05
JANUARY 16 Resolute eP 12 41 47?	JANUARY 16 U.S.C.G.S. 36.3N, 141.2E Near east coast of Honshu, Japan H = 14 04 05.3 h = 127 km Resolute iP 14 14 24 eS 14 22 56	JANUARY 16 U.S.C.G.S. 36.7N, 141.8E Honshu, Japan H = 14 44 15.1 h = 108 km Resolute eP 14 54 33
JANUARY 16 Resolute eP 12 45 23	JANUARY 16 U.S.C.G.S. 36.7N, 141.8E Honshu, Japan H = 14 44 15.1 h = 108 km Resolute eP 14 54 33	JANUARY 16 U.S.C.G.S. 36.5N, 141.2E Near east coast of Honshu, Japan H = 15 26 21.2 h = 143 km Resolute eP 15 36 39
JANUARY 16 Resolute eP 12 47 14	JANUARY 16 U.S.C.G.S. 36.5N, 141.2E Near east coast of Honshu, Japan H = 15 26 21.2 h = 143 km Resolute eP 15 36 39	JANUARY 16 U.S.C.G.S. 36.5N, 141.8E Near east coast of Honshu, Japan H = 00 29 35.7 h = 100 km Resolute iP 00 39 57 c?
JANUARY 16 Resolute eP 12 51 53?	JANUARY 16 U.S.C.G.S. 36.5N, 141.2E Near east coast of Honshu, Japan H = 15 26 21.2 h = 143 km Resolute eP 15 36 39	JANUARY 16 U.S.C.G.S. 36.5N, 141.8E Near east coast of Honshu, Japan H = 00 29 35.7 h = 100 km Resolute iP 00 39 57 c?
JANUARY 16 Resolute eP 12 55 12?	JANUARY 16 U.S.C.G.S. 36.5N, 141.2E Near east coast of Honshu, Japan H = 15 26 21.2 h = 143 km Resolute eP 15 36 39	JANUARY 16 U.S.C.G.S. 36.5N, 141.8E Near east coast of Honshu, Japan H = 00 29 35.7 h = 100 km Resolute iP 00 39 57 c?
JANUARY 16 Resolute eP 13 08 20?	JANUARY 16 U.S.C.G.S. 36.5N, 141.2E Near east coast of Honshu, Japan H = 15 26 21.2 h = 143 km Resolute eP 15 36 39	JANUARY 16 U.S.C.G.S. 36.5N, 141.8E Near east coast of Honshu, Japan H = 00 29 35.7 h = 100 km Resolute iP 00 39 57 c?
JANUARY 16 U.S.C.G.S. 35.6N, 140.8E Near east coast of Honshu, Japan H = 13 09 17.7 h = 144 km Penticton eP 13 20 13 Resolute iP 13 19 39	JANUARY 16 U.S.C.G.S. 36.5N, 141.2E Near east coast of Honshu, Japan H = 15 26 21.2 h = 143 km Resolute eP 15 36 39	JANUARY 16 U.S.C.G.S. 36.5N, 141.8E Near east coast of Honshu, Japan H = 00 29 35.7 h = 100 km Resolute iP 00 39 57 c?

## DOMINION OBSERVATORIES

JANUARY 17  
 Resolute  
 eP 00 51 27?

JANUARY 17  
 Resolute  
 eP 01 57 05?  
 Shawinigan Falls  
 eP 01 57 21

JANUARY 17  
 Resolute  
 eP? 02 46 14?

JANUARY 17  
 U. S. C. G. S.  
 58.8N, 135.9W  
 Southeastern Alaska  
 H = 04 23 36.3  
 h = 109 km  
 Resolute  
 eP 04 28 24  
 i 04 35 02

JANUARY 17  
 U. S. C. G. S.  
 36.2N, 141.6E  
 Honshu Japan  
 H = 06 41 36.8  
 h = 99 km  
 Penticton  
 eP 06 52 34  
 Resolute  
 iP 06 52 00 d

JANUARY 17  
 Resolute  
 eP 09 08 06?

JANUARY 17  
 51.8N, 125.5W  
 Northwest of  
 Mount Waddington  
 H = 11 27 50  
 Mag 3 to 3.5  
 Alberni  
 eP<sub>n</sub> 11 28 32.7  
 eS<sub>n</sub> 11 29 08.2  
 D = 290 km  
 Penticton  
 eP<sub>n</sub> 11 29 08.6  
 eS<sub>n</sub> 11 29 57.2  
 D = 503 km

JANUARY 17  
 Resolute  
 eP 13 54 39?

JANUARY 17  
 H = 15 31 39  
 Mag less than 2  
 Alberni  
 eP<sub>1</sub> 15 32 03.1  
 eS<sub>1</sub> 15 32 18.9  
 D = 130 km  
 Victoria  
 eP<sub>1</sub> 15 31 40.5  
 eS<sub>1</sub> 15 31 44.3  
 D = 31 km

JANUARY 17  
 Resolute  
 eP 18 14 25?

JANUARY 18  
 U. S. C. G. S.  
 36.1N, 141.4E  
 Near east coast of  
 Honshu, Japan  
 H = 07 12 46.0  
 h = 100 km  
 Resolute  
 eP 07 23 06

JANUARY 18  
 U. S. C. G. S.  
 34.9N, 142.2E  
 Near east coast of  
 Honshu, Japan  
 H = 07 27 46.6  
 h = 100 km  
 Resolute  
 eP 07 38 13

JANUARY 18  
 H = 09 14 25  
 Mag 2.7  
 Alberni  
 eP<sub>1</sub> 09 14 45.4  
 eS<sub>1</sub> 09 15 00.7  
 D = 125 km

JANUARY 18  
 U. S. C. G. S.  
 35.9N, 141.7E  
 Near east coast of  
 Honshu, Japan  
 H = 16 48 34.5  
 Resolute  
 eP 16 58 54

JANUARY 18  
 U. S. C. G. S.  
 61.7N, 150.4W  
 Southern Alaska  
 H = 19 55 12.8  
 h = 150 km  
 Ottawa  
 iP 20 03 15  
 Penticton  
 eP 19 59 54  
 Resolute  
 eP 20 00 10  
 Shawinigan Falls  
 eP 20 03 20

## SEISMOLOGICAL BULLETIN - 1961

JANUARY 19  
 U. S. C. G. S.  
 14.4S, 166.7E  
 New Hebrides Islands  
 region  
 H = 04 21 16.0  
 h = 26 km  
 Ottawa  
 eP' 04 40 06  
 Resolute  
 eP' 04 39 40

JANUARY 19  
 U. S. C. G. S.  
 49.7N, 155.8E  
 Kurile Islands  
 H = 17 22 16.9  
 h = 31 km  
 Mag 5 1/4  
 Halifax  
 iP 17 34 26.5 d  
 Ottawa  
 eP 17 33 58 c  
 Penticton  
 eP 17 31 26  
 Resolute  
 iP 17 30 52 c  
 eS 17 37 43 ?  
 Shawinigan Falls  
 iP 17 33 55 c

JANUARY 19  
 Resolute  
 eP 21 00 10

JANUARY 19  
 Resolute  
 eP 21 15 47

JANUARY 19  
 Resolute  
 eP 23 13 15

JANUARY 20  
 Resolute  
 eP 00 55 18

JANUARY 20  
 U. S. C. G. S.  
 56.5N, 152.1W  
 Near Kodiak Island  
 Alaska  
 H = 00 56 59.7  
 h = 55 km  
 Resolute  
 eP 01 02 50

JANUARY 20  
 U. S. C. G. S.  
 20.3N, 108.6W  
 Off coast of Mexico  
 H = 01 51 56.6  
 h = 84 km  
 Resolute  
 eP 02 01 12?

JANUARY 20  
 U. S. C. G. S.  
 56.4N, 152.0W  
 Near Kodiak Island  
 Alaska  
 H = 05 23 16.1  
 h = 58 km  
 Resolute  
 eP 05 29 05

JANUARY 20  
 Canadian Arctic  
 H = 11 30 25.9  
 Mag 1.0  
 Resolute  
 iP<sub>1</sub> 11 30 31  
 iS<sub>1</sub> 11 30 37  
 D = 49 km

JANUARY 20  
 U. S. C. G. S.  
 56.5N, 152.2W  
 Near Kodiak Island  
 Alaska  
 H = 13 33 12.8  
 h = 44 km  
 Resolute  
 eP 13 39 15?

JANUARY 20  
 U. S. C. G. S.  
 56.4N, 152.3W  
 Kodiak Island  
 H = 17 09 15.7  
 h = 46 km  
 Mag 6 3/4  
 Alberni  
 eP 17 13 26  
 Ottawa  
 eP 17 17 45  
 Resolute  
 eP 17 15 08  
 eS 17 19 53?  
 Shawinigan Falls  
 eP 17 17 52  
 Victoria  
 eP 17 12 39

JANUARY 20  
 Resolute  
 eP 19 49 17?

JANUARY 20  
 U. S. C. G. S.  
 56.8N, 152.1W  
 Near Kodiak Island  
 H = 21 31 08.7  
 h = 43 km  
 Resolute  
 eP 21 36 57

DOMINION OBSERVATORIES

JANUARY 20  
H = 21 40 27  
Mag 2.0  
Penticton  
eP<sub>1</sub> 21 40 50.3  
eS<sub>1</sub> 21 41 08.2  
D = 146 km

JANUARY 20  
U.S.C.G.S.  
56.5N, 153.1W  
Near Kodiak Island  
H = 21 37 23.4  
h = 14 km  
Resolute  
eP 21 43 19?

JANUARY 20  
U.S.C.G.S.  
38.1N, 141.2E  
Near east coast of  
Honshu, Japan  
H = 22 34 51.1  
h = 52 km  
Resolute  
eP 22 45 07

JANUARY 21  
Resolute  
eP 05 40 01

JANUARY 21  
Resolute  
eP 08 04 55

JANUARY 21  
H = 09 01 34  
Mag 2.1  
Penticton  
eP<sub>n</sub> 09 02 03.5  
eS<sub>n</sub> 09 02 25.9  
D = 183 km

JANUARY 21  
U.S.C.G.S.  
56.3N, 152.1W  
Near Kodiak Island  
H = 13 19 28.2  
h = 63 km  
Resolute  
eP 13 25 16?

JANUARY 21  
U.S.C.G.S.  
8.6N, 82.8W  
Costa Rica-Panama  
border  
H = 14 47 57.0  
h = 40 km  
Penticton  
eP 14 56 59  
Resolute  
eP 14 58 43

JANUARY 21  
U.S.C.G.S.  
36.3N, 141.7E  
Honshu Japan  
H = 17 42 56.2  
h = 25 km  
Resolute  
eP 17 53 26

JANUARY 21  
Ottawa  
eP' 22 11 39  
Resolute  
eP 22 15 04  
Shawinigan Falls  
eP 22 11 57

JANUARY 22  
U.S.C.G.S.  
11.9S, 166.2E  
Santa Cruz Islands  
H = 03 24 04.5  
h = 25 km  
Mag 7  
Halifax  
eP' 03 43 12 d  
Penticton  
eP 03 37 10  
Resolute  
eP 03 38 16?  
Victoria  
eP 03 36 55

JANUARY 22  
U.S.C.G.S.  
28.5S, 174.8W  
Kermadec Islands  
H = 16 09 37.3  
h = 68 km  
Resolute  
eP' 16 28 04?

JANUARY 22  
Resolute  
eP 18 19 15

JANUARY 22  
U.S.C.G.S.  
10.9N, 124.6E  
Philippine Islands  
H = 19 22 51.0  
h = 185 km  
Resolute  
iP 19 35 39 c?

SEISMOLOGICAL BULLETIN - 1961

JANUARY 23  
U.S.C.G.S.  
42.9N, 145.3E  
Hokkaido Japan  
H = 04 48 21.4  
h = 46 km  
Ottawa  
eP 05 00 53  
Resolute  
iP 04 57 58  
Shawinigan Falls  
eP 05 00 53 d

JANUARY 24  
Resolute  
eP 00 13 34

JANUARY 24  
U.S.C.G.S.  
15.6S, 167.6E  
New Hebrides Islands  
H = 07 25 03.5  
h = 198 km  
Ottawa  
iP' 07 43 33 d  
Penticton  
eP 07 37 44  
Resolute  
eP' 07 43 33?  
Shawinigan Falls  
eP' 07 43 37

JANUARY 24  
U.S.C.G.S.  
61.1S, 152.1E  
Antarctic Ocean  
H = 08 02 28.7  
h = 25 km  
Resolute  
eP<sub>1</sub>' 08 22 25  
Shawinigan Falls  
eP<sub>1</sub>' 08 22 20

JANUARY 24  
H = 11 54 50  
Mag 1.6  
Victoria  
eP<sub>1</sub> 11 55 02.8  
eS<sub>1</sub> 11 55 12.8  
D = 82 km

JANUARY 24  
H = 17 13 00  
Mag 2.0  
Penticton  
eP<sub>n</sub> 17 13 39.5  
eS<sub>n</sub> 17 14 22.3  
D = 268 km

JANUARY 24  
U.S.C.G.S.  
8.3N, 82.9W  
Panama-Costa Rica  
border  
H = 23 12 49.0  
h = 78 km  
Ottawa  
eP 23 19 57 d  
Resolute  
eP 23 23 33 c?  
Shawinigan Falls  
eP 23 20 11

JANUARY 25  
U.S.C.G.S.  
14.1S, 165.4E  
New Hebrides Islands  
H = 05 21 42.2  
h = 195 km  
Ottawa  
eP' 05 40 15  
Penticton  
eP 05 34 29  
Shawinigan Falls  
eP' 05 40 19  
Victoria  
eP 05 34 17

JANUARY 25  
H = 08 45 12  
Mag 2.2  
Penticton  
eP<sub>n</sub> 08 45 54.6  
eS<sub>n</sub> 08 46 30.4  
D = 293 km

JANUARY 25  
Penticton  
eP 11 24 34

JANUARY 25  
H = 15 43 36  
Mag 1.3  
Penticton  
eP<sub>1</sub> 15 43 57.4  
eS<sub>1</sub> 15 44 13.9  
D = 135 km

JANUARY 25  
U.S.C.G.S.  
49.8N, 156.0E  
Kurile Islands  
H = 19 04 22.8  
h = 98 km  
Ottawa  
eP 19 15 57  
Penticton  
eP 19 13 25  
Resolute  
iP 19 12 50 c  
Shawinigan Falls  
eP 19 15 58  
Victoria  
eP 19 13 12



DOMINION OBSERVATORIES

<p>JANUARY 26 U. S. C. G. S. 15. 3N, 93. 7E Southern Burma H = 01 47 01. 4 h = 67 km Resolute eP 01 59 58 e 02 11 38?</p> <p>JANUARY 26 48. 8N, 125. 0W Barkley Sound H = 04 21 57 Mag 2. 3 Alberni eP<sub>1</sub> 04 22 04. 8 eS<sub>1</sub> 04 22 16. 9 D = 50 km Victoria eP<sub>1</sub> 04 22 16. 9 eS<sub>1</sub> 04 22 35. 8 D = 155 km</p> <p>JANUARY 26 Resolute eP 07 58 09?</p> <p>JANUARY 26 Resolute eP 11 01 51</p> <p>JANUARY 26 U. S. C. G. S. 21. 4S, 169. 5E Loyalty Islands H = 16 13 25. 1 h = 119 km Mag 6 1/2 Halifax e 16 35 31 Penticton eP 16 26 36 Resolute eP' 16 31 35?</p>	<p>Shawinigan Falls eP' 16 32 17 Victoria eP 16 26 19</p> <p>JANUARY 26 U. S. C. G. S. 12. 2S, 78. 1W Near coast of Peru H = 17 45 42. 9 h = 60 km Resolute eP 17 58 30? Shawinigan Falls eP 17 55 44</p> <p>JANUARY 26 U. S. C. G. S. 20. 7S, 169. 5E Loyalty Islands H = 18 48 56. 9 h = 106 km Penticton eP 19 02 16 Resolute eP' 19 07 21 e 19 18 20? Shawinigan Falls eP' 19 07 46 Victoria eP 19 01 55</p> <p>JANUARY 26 Penticton eP 21 42 13</p> <p>JANUARY 27 H = 00 47 35 Mag 1. 8 Penticton eP<sub>1</sub> 00 47 56 eS<sub>1</sub> 00 48 12 D = 131 km</p>	<p>JANUARY 27 Resolute eP 09 12 26</p> <p>JANUARY 27 Penticton eP 10 57 54</p> <p>JANUARY 27 Penticton eP 15 24 06</p> <p>JANUARY 27 Resolute eP 16 04 23</p> <p>JANUARY 27 U. S. C. G. S. 45. 4N, 149. 3E Kurile Islands H = 20 07 00. 4 h = 60 km Resolute eP 20 16 14</p> <p>JANUARY 27 Resolute eP 22 10 53?</p> <p>JANUARY 28 Penticton eP 02 04 24 Victoria eP 02 03 56</p>
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<p>JANUARY 28 U. S. C. G. S. 13. 6S, 76. 6W Near coast of Peru H = 03 24 39. 2 h = 35 km Mag 5 Halifax eP 03 34 38 Ottawa eP 03 34 36 Penticton eP 03 36 13 Resolute iP 03 37 32 c Victoria eP 03 36 18</p> <p>JANUARY 28 Resolute eP 05 30 59</p> <p>JANUARY 28 U. S. C. G. S. 39. 3N, 22. 0E Northern Greece H = 07 18 16. 2 h = 89 km Ottawa iP 07 29 11 c Penticton eP 07 30 48 Resolute eP 07 28 11 d?</p> <p>JANUARY 28 U. S. C. G. S. 35. 5N, 118. 1W California H = 08 12 45. 3 h = 21 km Mag 5 1/4 Penticton eP 08 16 04 Resolute eP 08 20 26 d Victoria eP 08 16 06</p>	<p>JANUARY 28 Penticton eP 10 29 45</p> <p>JANUARY 28 Resolute eP 11 30 34</p> <p>JANUARY 28 47. 9N, 122. 9W Eastern Puget Sound Washington, U. S. A. H = 11 52 18 Mag 2. 8 Alberni eP<sub>n</sub> 11 52 51. 5 eS<sub>n</sub> 11 53 14. 9 D = 216 km Penticton eP<sub>n</sub> 11 53 00. 5 eS<sub>n</sub> 11 53 33. 9 D = 290 km Victoria eP<sub>1</sub> 11 52 30. 8 eS<sub>1</sub> 11 52 40. 2 D = 79 km</p> <p>JANUARY 28 U. S. C. G. S. 45. 0S, 105. 8W South Pacific Ocean H = 14 06 21. 0 h = 144 km Penticton eP 14 19 34 e 14 34 56 Resolute eP' 14 25 00? Victoria eP 14 19 29</p>	<p>JANUARY 29 46°23'N, 66°56'W Near Napadogan, New Brunswick H = 00 49 39. 2 h = 24 km Mag 3. 8 Halifax iP<sub>n</sub> 00 50 24. 5 iP<sub>1</sub> 00 50 32. 1 i 00 50 52. 5 iS<sub>n</sub> 00 50 56. 9 S<sub>1</sub> 00 51 11. 8 D = 326 km Montreal iP<sub>n</sub> 00 50 49. 3 i 00 51 35. 0 iS<sub>n</sub> 00 51 42. 7 i 00 51 56. 2 iS<sub>1</sub> 00 52 09. 5 D = 530 km Ottawa eP<sub>n</sub> 00 51 08. 7 eS<sub>n</sub> 00 52 14. 2 iS<sub>1</sub> 00 52 52. 7 D = 690 km Seven Falls eP<sub>n</sub> 00 50 17. 1? i 00 50 43. 6? S<sub>n</sub> 00 50 49. 3? S<sub>1</sub> 00 51 01. 6? D = 310 km Shawinigan Falls eP<sub>n</sub> 00 50 39. 1 eS<sub>n</sub> 00 51 23. 4 S<sub>1</sub> 00 51 43. 2 D = 448 km</p> <p>JANUARY 29 Resolute eP 03 24 36?</p>
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DOMINION OBSERVATORIES

JANUARY 29  
U. S. C. G. S.  
51.8N, 175.9W  
Andreanof Islands  
H = 13 23 54.7  
h = 41 km  
Alberni  
eP 13 30 14  
Penticton  
eP 13 30 49  
Resolute  
eP 13 31 17  
Shawinigan Falls  
eP 13 34 18  
Victoria  
eP 13 30 32

JANUARY 30  
Victoria  
eP 12 24 06  
  
JANUARY 30  
Resolute  
eP 22 54 11

JANUARY 30  
Resolute  
eP 23 04 20?

JANUARY 31  
Resolute  
eP 00 36 16

JANUARY 31  
U. S. C. G. S.  
55.8N, 153.9W  
Near Kodiak Island  
H = 00 48 36.5  
h = 26 km  
Mag 6 1/2  
Alberni  
eP 00 53 00

Halifax  
eP 00 58 06  
Ottawa  
eP 00 57 19  
Penticton  
eP 00 53 25  
Resolute  
iP 00 54 37 c  
iS 00 59 28  
Shawinigan Falls  
eP 00 57 22  
Victoria  
eP 00 53 13

JANUARY 31  
Resolute  
iP 02 09 35

JANUARY 31  
Canadian Arctic  
H = 04 09 00.5  
Mag 1.7  
Resolute  
P<sub>1</sub> 04 09 18.0  
S<sub>1</sub> 04 09 31.3  
D = 109 km

JANUARY 31  
Resolute  
eP 07 11 13

JANUARY 31  
Resolute  
eP 13 47 04

JANUARY 31  
U. S. C. G. S.  
51.4N, 178.4W  
Andreanof Islands  
H = 18 32 19.5  
h = 53 km  
Penticton  
eP 18 39 26  
Resolute  
eP 18 39 50  
e 18 41 56  
e 18 45 40

JANUARY 31  
Resolute  
eP 21 47 17?

JANUARY 31  
Penticton  
eP 22 38 26  
Resolute  
eP 22 39 00?

JANUARY 30  
H = 08 17 22  
Mag 2.0  
Penticton  
eP<sub>n</sub> 08 18 01.4  
eS<sub>n</sub> 08 18 33.9  
D = 266 km

JANUARY 30  
U. S. C. G. S.  
65.2N, 149.9W  
Central Alaska  
H = 12 12 39.7  
h = 34 km  
Mag 5 1/2  
Alberni  
eP 12 17 28  
Halifax  
eP 12 21 27  
Ottawa  
eP 12 20 43 d  
Penticton  
eP 12 17 41  
Resolute  
iP 12 17 13  
i? 12 20 55  
eS 12 21 06  
Shawinigan Falls  
eP 12 20 46  
Victoria  
eP 12 17 34

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FEBRUARY 1  
Penticton  
eP 00 21 21

FEBRUARY 1  
Alberni  
iP<sub>1</sub> 00 31 51.9  
iS<sub>1</sub> 00 31 58.7  
D = 56 km

FEBRUARY 1  
U. S. C. G. S.  
50.2N, 129.7W  
Off coast of Vancouver  
Island  
H = 00 36 00.3  
h = 42 km  
Mag 3.9  
Alberni  
eP<sub>n</sub> 00 36 51.9  
D = 368 km  
Penticton  
eP<sub>n</sub> 00 37 37.6  
D = 745 km  
Resolute  
eP 00 41 56  
eS 00 46 50  
Victoria  
eP<sub>n</sub> 00 37 08.0  
D = 500 km

FEBRUARY 1  
Resolute  
eP 02 59 06 c ?

FEBRUARY 1  
U. S. C. G. S.  
11.9N, 143.7E  
Mariana Islands region  
H = 04 53 44.4  
h = 95 km  
Penticton  
eP 05 06 16  
Resolute  
eP 05 06 21 c

FEBRUARY 1  
Alberni  
eP 07 48 34  
Penticton  
eP 07 49 17

FEBRUARY 1  
Victoria  
eP 07 54 52

FEBRUARY 1  
Penticton  
eP 08 59 49

FEBRUARY 1  
Canadian Arctic  
H = 10 43 55.5  
h = 29 km  
Mag 3.2  
Resolute  
iP<sub>n</sub> 10 44 28.2  
iP<sub>1</sub> 10 44 33.4  
iS<sub>n</sub> 10 44 53.5  
iS<sub>1</sub> 10 45 02.0  
D = 234 km

FEBRUARY 1  
U. S. C. G. S.  
37.4N, 138.4E  
Near coast of  
Honshu Japan  
H = 18 39 03.6  
h = 38 km  
Resolute  
iP 18 49 27

FEBRUARY 1  
U. S. C. G. S.  
18.0S, 178.4W  
Fiji Islands  
H = 20 09 13.8  
h = 599 km  
Penticton  
eP 20 20 51

FEBRUARY 1  
Alberni  
eP 20 32 00  
Penticton  
eP 20 32 47

FEBRUARY 2  
U. S. C. G. S.  
37.2N, 118.6W  
California  
H = 00 04 16.3  
h = 25 km  
Mag 5  
Penticton  
eP 00 07 13  
Resolute  
eP 00 11 43?

FEBRUARY 2  
H = 00 44 42  
Mag 1.4  
Penticton  
eP<sub>1</sub> 00 45 04.8  
eS<sub>1</sub> 00 45 22.4  
D = 144 km

FEBRUARY 2  
U. S. C. G. S.  
7.3N, 127.3E  
Mindanao, Philippine  
Islands  
H = 00 42 07.2  
h = 157 km  
Resolute  
eP 00 55 11?

FEBRUARY 2  
Penticton  
eP 01 37 59

DOMINION OBSERVATORIES

FEBRUARY 2  
46. 8N, 121. 5W  
Near Mt. Ranier,  
Washington, U.S.A.  
H = 05 50 16  
Mag 3.1  
Alberni  
eP<sub>n</sub> 05 51 08.4  
eS<sub>n</sub> 05 51 44.2  
D = 375 km  
Penticton  
eP<sub>n</sub> 05 51 00.6  
eS<sub>n</sub> 05 52 06.4  
D = 311 km  
Victoria  
eP<sub>n</sub> 05 50 49.7  
eS<sub>n</sub> 05 51 16.8  
D = 222 km

FEBRUARY 2  
Resolute  
eP 06 06 03?

FEBRUARY 2  
H = 11 04 57  
Mag 1.9  
Alberni  
iP<sub>1</sub> 11 05 06.0  
iS<sub>1</sub> 11 05 12.8  
D = 56 km  
Victoria  
iP<sub>1</sub> 11 05 22.2  
D = 158 km

FEBRUARY 2  
Penticton  
eP 11 10 49

FEBRUARY 2  
U.S.C.G.S.  
13. 6N, 145. 3E  
Mariana Islands  
H = 11 13 31.8  
h = 131 km  
Resolute  
iP 11 25 53 c?

FEBRUARY 2  
H = 17 07 55  
Mag 2.4  
Penticton  
eP<sub>n</sub> 17 08 35.0  
eS<sub>n</sub> 17 09 08.4  
D = 273 km

FEBRUARY 2  
Resolute  
eP 22 23 40

FEBRUARY 3  
Victoria  
iP 01 25 14

FEBRUARY 3  
Resolute  
eP 02 35 49

FEBRUARY 3  
U.S.C.G.S.  
36. 9S, 176. 8E  
Off north coast of  
New Zealand  
H = 12 33 22.8  
h = 300 km  
Penticton  
eP 12 47 48  
Resolute  
eP' 12 51 48

FEBRUARY 3  
U.S.C.G.S.  
36. 4N, 141. 0E  
Honshu, Japan  
H = 13 31 44.7  
h = 103 km  
Resolute  
eP 13 42 06c

FEBRUARY 3  
Resolute  
eP 14 18 26?

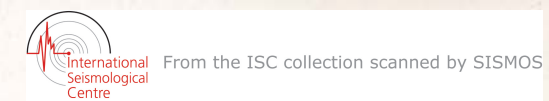
FEBRUARY 3  
U.S.C.G.S.  
23. 4S, 67. 3W  
Argentina  
H = 14 25 41.7  
h = 181 km  
Shawinigan Falls  
eP 14 36 38

FEBRUARY 3  
Resolute  
eP 23 52 53

FEBRUARY 4  
U.S.C.G.S.  
18. 3S, 69. 3W  
Chile-Bolivia border  
H = 01 13 05.0  
h = 178 km  
Halifax  
eP 01 23 17c  
Ottawa  
eP 01 23 22  
Penticton  
eP 01 25 04  
Resolute  
eP 01 26 07d?  
Shawinigan Falls  
eP 01 23 29

FEBRUARY 4  
Halifax  
eP 06 56 12 c  
Ottawa  
eP 06 55 36  
Penticton  
eP 06 56 59  
Resolute  
eP 06 59 06  
Shawinigan Falls  
eP 06 55 53  
Victoria  
eP 06 57 08

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FEBRUARY 4  
U.S.C.G.S.  
24. 7N, 95. 3E  
Northern Burma  
H = 08 51 48.9  
h = 162 km  
Penticton  
eP 09 05 54  
Resolute  
eP 09 03 46c  
i 09 04 20  
eS 09 13 40

FEBRUARY 4  
Resolute  
eP 10 24 43

FEBRUARY 4  
Ottawa  
eP 12 53 10  
Shawinigan Falls  
eP 12 53 38

FEBRUARY 4  
U.S.C.G.S.  
50. 3N, 156. 4E  
Kamchatka  
H = 12 49 37.7  
h = 161 km  
Penticton  
eP 12 58 28  
Resolute  
eP 12 57 54  
Shawinigan Falls  
eP 13 01 02

FEBRUARY 4  
Resolute  
eP 15 23 29?

FEBRUARY 4  
Halifax  
iP 15 36 28 c  
Ottawa  
eP 15 36 30  
Penticton  
eP 15 37 40

FEBRUARY 4  
U.S.C.G.S.  
17. 0S, 176. 8W  
Fiji Islands region  
H = 15 29 11.7  
h = 57 km  
Resolute  
eP? 15 43 07?

FEBRUARY 4  
Resolute  
eP? 15 54 05

FEBRUARY 4  
Penticton  
eP 16 04 43  
Resolute  
eP? 16 04 32?

FEBRUARY 4  
U.S.C.G.S.  
11. 8N, 87. 5W  
Near coast of  
Nicaragua  
H = 16 11 23.6  
h = 79 km  
Resolute  
eP 16 21 46

FEBRUARY 4  
Penticton  
eP 17 43 01

FEBRUARY 4  
U.S.C.G.S.  
24. 0N, 122. 7E  
Off coast of Formosa  
H = 19 09 12.9  
h = 14 km

Alberni  
eP 19 22 54  
Penticton  
eP 19 22 07  
Resolute  
eP 19 21 15c  
eS 19 31 05?

Victoria  
eP 19 22 02

FEBRUARY 5  
Penticton  
eP 07 36 35

FEBRUARY 5  
Penticton  
eP 07 47 45

FEBRUARY 5  
Resolute  
eP 10 30 14?

FEBRUARY 5  
Resolute  
eP 11 31 12

FEBRUARY 5  
Penticton  
eP 15 32 40

FEBRUARY 5  
U.S.C.G.S.  
8. 0N, 82. 8W  
South of Panama  
H = 15 38 34.0  
h = 49 km

Ottawa  
eP 15 45 49 d

Resolute  
eP 15 49 23  
iP 15 49 24 d  
eS 15 58 22?

Shawinigan Falls  
eP 15 46 03

DOMINION OBSERVATORIES

<p><b>FEBRUARY 5</b> U. S. C. G. S. 38. 4S, 78. 2E Indian Ocean H = 17 50 51.1 h = 25 km Resolute eP' 18 10 26</p> <p><b>FEBRUARY 5</b> Resolute eP 19 33 25?</p> <p><b>FEBRUARY 5</b> Resolute eP? 19 38 48?</p> <p><b>FEBRUARY 5</b> Resolute eP? 19 46 40</p> <p><b>FEBRUARY 5</b> Resolute eP? 23 12 57?</p> <p><b>FEBRUARY 6</b> U. S. C. G. S. 14. 1N, 145. 5E Mariana Islands H = 04 06 08. 9 h = 22 km Resolute eP 04 18 40</p> <p><b>FEBRUARY 6</b> 47. 5N, 126. 9W Off west coast of Washington, U. S. A. H = 05 19 23 Mag 3. 3 Alberni iP<sub>n</sub> 05 19 58. 1 iS<sub>n</sub> 05 20 27. 2 D = 238 km Penticton eP<sub>n</sub> 05 20 41. 2 eS<sub>n</sub> 05 21 42. 0 D = 582 km</p>	<p>Victoria eP<sub>n</sub> 05 20 15. 0 eS<sub>n</sub> 05 21 00. 1 D = 269 km</p> <p><b>FEBRUARY 6</b> Resolute eP 05 46 38?</p> <p><b>FEBRUARY 6</b> U. S. C. G. S. 19. 2S, 68. 6W Chile-Bolivia border H = 10 30 07. 2 h = 181 km Halifax iP 10 40 24 d Ottawa iP 10 40 30 d Penticton eP 10 42 21 Resolute eP 10 43 15 Shawinigan Falls eP 10 40 36 Victoria eP 10 42 19</p> <p><b>FEBRUARY 6</b> Resolute eP 11 20 03</p> <p><b>FEBRUARY 6</b> U. S. C. G. S. 51. 6N, 174. 8W Andreanof Islands H = 12 12 26. 0 h = 77 km Halifax eP 12 23 16 d Ottawa iP 12 22 34 c Penticton eP 12 19 21 Resolute eP 12 19 44</p>	<p>Shawinigan Falls eP 12 22 39 Victoria eP 12 18 56</p> <p><b>FEBRUARY 6</b> Resolute eP 12 21 57</p> <p><b>FEBRUARY 6</b> Resolute eP 12 33 30</p> <p><b>FEBRUARY 6</b> Resolute eP 14 57 35?</p> <p><b>FEBRUARY 6</b> U. S. C. G. S. 44. 8N, 149. 1E Kurile Islands H = 18 15 21. 6 h = 25 km Halifax iP 18 28 03 d Ottawa eP 18 27 39 Penticton eP 18 25 18 Resolute iP 18 24 42 c Shawinigan Falls eP 18 27 41 Victoria eP 18 25 07</p> <p><b>FEBRUARY 6</b> U. S. C. G. S. 4. 8S, 154. 2E Solomon Islands region H = 19 29 33. 2 h = 470 km Resolute eP 19 42 31</p>
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<p><b>FEBRUARY 6</b> Resolute eP 20 38 09?</p> <p><b>FEBRUARY 6</b> Resolute eP 20 58 59</p> <p><b>FEBRUARY 6</b> U. S. C. G. S. 6. 8S, 155. 3E Solomon Islands H = 21 45 13. 5 h = 59 km Halifax iP' 22 04 17 d Ottawa eP' 22 04 02 Penticton eP 21 58 18 Resolute iP 21 59 02 c? Shawinigan Falls eP' 22 04 05 c Victoria eP 21 58 08</p> <p><b>FEBRUARY 6</b> Resolute eP 22 15 08?</p> <p><b>FEBRUARY 7</b> Resolute eP 03 10 48?</p> <p><b>FEBRUARY 7</b> Resolute iP 03 31 17 i 03 31 35</p> <p><b>FEBRUARY 7</b> Resolute iP 04 28 51 i 04 28 57</p>	<p><b>FEBRUARY 7</b> U. S. C. G. S. 4. 1S, 103. 3E Sumatra H = 05 11 45. 0 h = 82 km Resolute eP' 05 30 07</p> <p><b>FEBRUARY 7</b> U. S. C. G. S. 48. 8N, 129. 3W Off coast of Vancouver Island H = 06 08 31. 2 h = 46 km Mag 3 Alberni eP 06 09 11 Victoria eP 06 09 28</p> <p><b>FEBRUARY 7</b> U. S. C. G. S. 33. 1N, 137. 6E Off coast of Honshu, Japan H = 14 36 53. 5 h = 25 km Resolute eP 14 47 40</p> <p><b>FEBRUARY 7</b> U. S. C. G. S. 23. 5N, 121. 0E Near coast of Formosa H = 15 28 33. 3 h = 38 km Resolute eP 15 40 37</p>	<p><b>FEBRUARY 7</b> U. S. C. G. S. 43. 9N, 147. 1E Kurile Islands H = 21 01 37. 3 h = 36 km Ottawa eP 21 14 03 Penticton eP 21 11 56 Resolute iP 21 11 06</p> <p><b>FEBRUARY 7</b> U. S. C. G. S. 49. 3N, 156. 3E Kurile Islands H = 22 09 41. 5 h = 60 km Resolute eP 22 18 14 c</p> <p><b>FEBRUARY 7</b> U. S. C. G. S. 51. 4N, 177. 2W Andreanof Islands H = 23 27 10. 8 h = 15 km Ottawa eP 23 37 34 Penticton eP 23 34 15 Resolute eP 23 34 42 Shawinigan Falls eP 23 37 39</p> <p><b>FEBRUARY 8</b> U. S. C. G. S. 15. 3S, 167. 5E New Hebrides Islands H = 02 36 40. 5 h = 162 km Ottawa eP' 02 55 14</p>
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DOMINION OBSERVATORIES

Penticton  
eP 02 49 30  
Resolute  
eP' 02 54 50  
e 03 06 25?  
Shawinigan Falls  
eP' 02 55 18

FEBRUARY 8  
U.S.C.G.S.  
10.6S, 71.0W  
Brazil-Peru border  
H = 08 04 13.8  
h = 699 km  
Mag 5 3/4  
Halifax  
eP 08 12 52.5 d  
Ottawa  
eP 08 12 56 c  
Resolute  
iP 08 15 53 d  
eS 08 25 36  
Shawinigan Falls  
eP 08 13 03

FEBRUARY 8  
Penticton  
eP 08 29 46

FEBRUARY 8  
Resolute  
eP 08 41 12?

FEBRUARY 8  
U.S.C.G.S.  
18.8S, 174.9W  
Tonga Islands  
H = 11 59 52.3  
h = 76 km  
Penticton  
eP 12 12 18

FEBRUARY 8  
Resolute  
eP 13 04 46?

FEBRUARY 8  
H = 16 34 14  
Mag 2.3  
Alberni  
iP<sub>1</sub> 16 34 25.8  
eS<sub>1</sub> 16 35 04.5  
D = 85 km  
Victoria  
iP<sub>1</sub> 16 34 18.0  
iS<sub>1</sub> 16 34 22.4  
D = 36 km

FEBRUARY 8  
Resolute  
eP 17 49 41?

FEBRUARY 8  
U.S.C.G.S.  
20.4S, 178.1W  
Tonga Islands  
H = 17 50 45.2  
h = 543 km  
Penticton  
eP 18 02 35  
Resolute  
eP' 18 08 11?

FEBRUARY 8  
Resolute  
eP 18 37 21?

FEBRUARY 9  
U.S.C.G.S.  
28.2S, 177.4W  
Kermadec Islands  
H = 02 08 15.9  
h = 37 km  
Mag 6 3/4  
Halifax  
eP' 02 27 09 c  
Ottawa  
eP' 02 26 59  
Penticton  
eP 02 21 28

Resolute  
eP 02 23 11?  
eP' 02 26 54  
PKKP 02 37 30  
Shawinigan Falls  
eP' 02 27 04 c  
PKKP 02 37 17  
Victoria  
iP 02 21 17

FEBRUARY 9  
Resolute  
eP 03 00 05?

FEBRUARY 9  
U.S.C.G.S.  
38.9S, 72.6W  
Near coast of Chile  
H = 13 14 45.6  
h = 25 km  
Shawinigan Falls  
eP 13 27 21

FEBRUARY 9  
U.S.C.G.S.  
9.9S, 111.3E  
Off coast of Java  
H = 20 21 20.1  
h = 73 km  
Halifax  
iP' 20 40 55 c

FEBRUARY 9  
Resolute  
eP 20 45 15

FEBRUARY 10  
Resolute  
eP 01 27 27?

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FEBRUARY 10  
Resolute  
eP 03 30 56

FEBRUARY 10  
Resolute  
eP 03 52 11

FEBRUARY 10  
Resolute  
eP 04 51 26

FEBRUARY 10  
Penticton  
eP 09 00 43

FEBRUARY 10  
Resolute  
eP 09 56 42

FEBRUARY 10  
Resolute  
eP 10 56 04

FEBRUARY 10  
Resolute  
eP 12 20 53

FEBRUARY 10  
U.S.C.G.S.  
3.5N, 126.1E  
East of Celebes Sea  
H = 16 58 18.4  
h = 25 km  
Resolute  
eP 17 11 55

FEBRUARY 11  
Resolute  
eP 00 29 54?

FEBRUARY 11  
H = 01 02 26  
Mag 2.1  
Penticton  
eP<sub>n</sub> 01 02 54.2  
eS<sub>n</sub> 01 03 16.0  
D = 177 km

FEBRUARY 11  
Penticton  
eP 01 14 32

FEBRUARY 11  
U.S.C.G.S.  
22.9N, 144.2E  
Mariana Islands  
H = 02 34 37.2  
h = 60 km  
Resolute  
eP 02 46 19

FEBRUARY 11  
Penticton  
eP 03 58 29  
Resolute  
eP 03 59 05

FEBRUARY 11  
U.S.C.G.S.  
28.8N, 139.5E  
North of Bonin Islands  
H = 06 12 23.2  
h = 358 km  
Ottawa  
e 06 27 22  
Penticton  
eP 06 23 31  
Resolute  
eP 06 23 06

FEBRUARY 11  
U.S.C.G.S.  
19.8S, 176.2W  
Fiji Islands  
H = 16 46 24.6  
h = 261 km  
Penticton  
eP 16 58 36

FEBRUARY 11  
Resolute  
eP 20 20 14 d

FEBRUARY 11  
U.S.C.G.S.  
23.3S, 65.9W  
Argentina  
H = 11 27 59.4  
h = 195 km  
Ottawa  
eP 11 38 49  
Penticton  
eP 11 40 24  
Shawinigan Falls  
eP 11 38 55

FEBRUARY 11  
U.S.C.G.S.  
5.2N, 126.3E  
Mindanao Philippine Islands  
H = 12 23 55.8  
h = 200 km  
Ottawa  
eP' 12 42 41 d  
Resolute  
eP 12 37 07  
Shawinigan Falls  
eP' 12 42 41

FEBRUARY 11  
H = 16 44 53  
Mag 1.2  
Penticton  
eP<sub>1</sub> 16 45 16.7  
eS<sub>1</sub> 16 45 35.0  
D = 150 km

DOMINION OBSERVATORIES

FEBRUARY 11  
Resolute  
eP 21 16 03?

FEBRUARY 11  
U.S.C.G.S.  
28.2S, 177.5W  
Kermadec Islands  
H = 21 01 06.4  
h = 41 km  
Halifax  
iP' 21 20 06 d  
Ottawa  
eP' 21 19 49 d  
PKKP 21 30 11  
Penticton  
eP 21 14 18  
Resolute  
eP' 21 19 43  
PKKP 21 30 21  
Shawinigan Falls  
eP' 21 19 54  
PKKP 21 30 07

FEBRUARY 11  
Penticton  
eP 21 39 35

FEBRUARY 11  
U.S.C.G.S.  
24.2S, 66.6W  
Argentina  
H = 22 44 04.8  
h = 100 km  
Penticton  
eP 22 56 34

FEBRUARY 12  
U.S.C.G.S.  
34.8S, 106.9W  
Easter Island  
region  
H = 01 19 21.8  
h = 100 km  
Penticton  
eP 01 31 52

FEBRUARY 12  
H = 01 58 58  
Mag 2.5  
Penticton  
eP<sub>n</sub> 01 59 44.7  
eS<sub>n</sub> 02 00 24.6  
D = 327 km

FEBRUARY 12  
U.S.C.G.S.  
15.0S, 175.2W  
Samoa Islands region  
H = 12 09 22.0  
h = 281 km  
Penticton  
eP 12 21 08

FEBRUARY 12  
U.S.C.G.S.  
13.1S, 171.8E  
New Hebrides  
H = 12 57 15.3  
h = 598 km  
Ottawa  
eP' 13 14 52  
e 13 17 31  
Penticton  
eP 13 09 00  
Shawinigan Falls  
eP' 13 14 56  
e 13 17 35  
Victoria  
eP 13 08 48

FEBRUARY 12  
U.S.C.G.S.  
59.4N, 150.1W  
Alaska  
H = 13 54 30.6  
h = 79 km  
Penticton  
eP 13 58 56

Resolute  
iP 13 59 47 c?

FEBRUARY 12  
Resolute  
eP 16 33 26

FEBRUARY 12  
Resolute  
eP 16 36 55?

FEBRUARY 12  
Alberni  
iP 21 29 30

FEBRUARY 12  
U.S.C.G.S.  
43.7N, 147.6E  
Kurile Islands  
H = 21 53 43.5  
h = 45 km  
Mag 6 3/4  
Halifax  
eP 22 06 32 d  
Ottawa  
eP 22 06 08  
Penticton  
eP 22 03 39  
Resolute  
eP? 22 03 10  
iP 22 03 11  
iS 22 10 49  
Shawinigan Falls  
eP 22 06 08  
Victoria  
eP 22 03 39

FEBRUARY 12  
Resolute  
eP 22 28 49

FEBRUARY 12  
Resolute  
eP 22 31 47

FEBRUARY 12  
Resolute  
eP 22 37 03

SEISMOLOGICAL BULLETIN - 1961

FEBRUARY 12  
U.S.C.G.S.  
43.7N, 148.0E  
Kurile Islands  
H = 22 51 27.7  
h = 17 km  
Resolute  
iP 23 00 58

FEBRUARY 12  
Penticton  
eP 23 03 46  
Resolute  
eP 23 03 46

FEBRUARY 12  
Resolute  
iP 23 22 33

FEBRUARY 12  
U.S.C.G.S.  
44.0N, 147.7E  
Kurile Islands  
H = 23 26 34.5  
h = 23 km  
Halifax  
eP 23 39 22.5c  
Ottawa  
eP 23 38 58  
Penticton  
eP 23 36 38  
Resolute  
iP 23 36 02  
Shawinigan Falls  
eP 23 38 59  
Victoria  
eP 23 36 29

FEBRUARY 13  
Penticton  
eP 00 11 07

FEBRUARY 13  
Penticton  
eP 00 36 31

FEBRUARY 13  
Penticton  
eP<sub>1</sub> 00 37 31.9  
eS<sub>1</sub> 00 37 49.3  
D = 142 km

FEBRUARY 13  
U.S.C.G.S.  
43.5N, 148.2E  
Kurile Islands  
H = 00 31 51.1  
h = 25 km  
Resolute  
iP 00 41 23

FEBRUARY 13  
U.S.C.G.S.  
17.0S, 173.7W  
Tonga Islands region  
H = 06 45 25.0  
h = 43 km  
Mag 5 3/4  
Resolute  
eP 06 59 27?

FEBRUARY 13  
U.S.C.G.S.  
43.8N, 147.4E  
Kurile Islands  
H = 04 43 24.6  
h = 46 km  
Resolute  
eP 04 52 52

FEBRUARY 13  
Resolute  
eP 05 44 30?

FEBRUARY 13  
Resolute  
iP 06 22 00

FEBRUARY 13  
U.S.C.G.S.  
17.0S, 173.7W  
Tonga Islands region  
H = 06 45 25.0  
h = 43 km  
Mag 5 3/4  
Resolute  
eP 06 59 27?

FEBRUARY 13  
U.S.C.G.S.  
43.7N, 147.8E  
Kurile Islands  
H = 02 30 01.7  
h = 18 km  
Resolute  
eP 02 39 33

FEBRUARY 13  
U.S.C.G.S.  
43.5N, 148.1E  
Kurile Islands  
H = 02 31 19.4  
h = 60 km  
Resolute  
eP 02 40 45

DOMINION OBSERVATORIES

FEBRUARY 13  
 H = 10 05 58  
 Mag 2.8  
 Penticton  
 eP<sub>n</sub> 10 06 35.7  
 eS<sub>n</sub> 10 07 06.8  
 D = 254 km

Ottawa  
 eP 16 39 47 c  
 Resolute  
 iP 16 36 52c?  
 eS 16 44 18?  
 Shawinigan Falls  
 eP 16 39 49

FEBRUARY 14  
 U.S.C.G.S.  
 44.2N, 147.8E  
 Kurile Islands  
 H = 02 51 15.3  
 h = 98 km  
 Penticton  
 eP 03 01 10  
 Resolute  
 iP 03 00 35

FEBRUARY 13  
 Resolute  
 eP 12 18 13?

FEBRUARY 13  
 Penticton  
 eP 17 37 28

FEBRUARY 13  
 Resolute  
 eP 13 14 18?

FEBRUARY 13  
 U.S.C.G.S.  
 44.1N, 147.4E  
 Kurile Islands  
 H = 17 50 16.5  
 h = 42 km  
 Resolute  
 eP 17 59 42

FEBRUARY 14  
 U.S.C.G.S.  
 43.8N, 147.4E  
 Kurile Islands  
 H = 03 15 25.0  
 h = 25 km  
 Resolute  
 eP 03 24 56 c

FEBRUARY 13  
 U.S.C.G.S.  
 29.7N, 81.0E  
 Nepal-Tibet border  
 H = 16 10 19.8  
 h = 35 km  
 Resolute  
 eP 16 22 06

FEBRUARY 13  
 U.S.C.G.S.  
 43.6N, 147.8E  
 Kurile Islands  
 H = 21 11 40.9  
 h = 51 km  
 Resolute  
 iP 21 21 08

FEBRUARY 14  
 U.S.C.G.S.  
 43.8N, 147.9E  
 Kurile Islands  
 H = 03 22 00.7  
 h = 20 km  
 Halifax  
 eP 03 34 46  
 Ottawa  
 eP 03 34 28  
 Penticton  
 eP 03 32 09  
 Resolute  
 iP 03 31 32 c  
 eS 03 39 02?  
 Shawinigan Falls  
 eP 03 34 28

FEBRUARY 13  
 U.S.C.G.S.  
 5.1S, 128.7E  
 Banda Sea  
 H = 16 17 20.1  
 h = 66 km  
 Resolute  
 eP 16 31 27  
 e 16 35 37?

FEBRUARY 13  
 Ottawa  
 eP 22 49 38  
 Resolute  
 eP 22 46 41  
 Shawinigan Falls  
 eP 22 49 39

FEBRUARY 13  
 U.S.C.G.S.  
 43.7N, 149.6E  
 Kurile Islands  
 H = 16 27 20.9  
 h = 25 km  
 Mag 6  
 Halifax  
 eP 16 40 13 d

FEBRUARY 13  
 Resolute  
 eP 23 05 43?

FEBRUARY 14  
 Resolute  
 eP 03 56 11

FEBRUARY 14  
 Resolute  
 eP 03 58 57

SEISMOLOGICAL BULLETIN - 1961

FEBRUARY 14  
 U.S.C.G.S.  
 42.3S, 73.1W  
 Near coast of  
 southern Chile  
 H = 05 44 24.3  
 h = 58 km  
 Halifax  
 iP 05 57 08.5c  
 Ottawa  
 iP 05 57 08  
 Resolute  
 eP' 06 03 06?  
 Shawinigan Falls  
 eP 05 57 15

FEBRUARY 14  
 Resolute  
 eP 16 45 39

Ottawa  
 eP 10 57 38  
 Resolute  
 eP 10 54 42 c  
 eS 11 02 20  
 Shawinigan Falls  
 eP 10 57 40  
 Victoria  
 eP 10 55 09

FEBRUARY 14  
 Resolute  
 eP 20 20 07

FEBRUARY 14  
 Resolute  
 eP 23 31 18

FEBRUARY 15  
 U.S.C.G.S.  
 30.8N, 84.4E  
 Tibet  
 H = 11 28 55.0  
 h = 66 km  
 Resolute  
 eP 11 40 30

FEBRUARY 14  
 Resolute  
 eP 06 54 03

FEBRUARY 15  
 Resolute  
 eP 01 46 18

FEBRUARY 15  
 Resolute  
 eP 02 20 50

FEBRUARY 15  
 Resolute  
 eP 12 06 30

FEBRUARY 14  
 Resolute  
 eP 06 56 47

FEBRUARY 15  
 Resolute  
 eP 04 05 30?

FEBRUARY 15  
 Resolute  
 eP 12 07 21?

FEBRUARY 14  
 H = 14 27 19  
 Mag 2.2  
 Penticton  
 eP<sub>n</sub> 14 27 48.9  
 eS<sub>n</sub> 14 28 11.8  
 D = 188 km

FEBRUARY 15  
 Resolute  
 eP 08 18 42

FEBRUARY 15  
 Resolute  
 eP 14 23 38?

FEBRUARY 14  
 U.S.C.G.S.  
 15.4S, 175.1W  
 Samoa Islands region  
 H = 15 50 52.2  
 h = 25 km  
 Penticton  
 eP 16 03 13

FEBRUARY 15  
 Resolute  
 eP 10 18 48

FEBRUARY 15  
 Resolute  
 eP 18 43 48

FEBRUARY 15  
 U.S.C.G.S.  
 43.7N, 147.4E  
 Kurile Islands  
 H = 10 45 15.9  
 h = 69 km  
 Mag 6  
 Halifax  
 eP 10 58 01

FEBRUARY 15  
 Resolute  
 eP 20 47 38

DOMINION OBSERVATORIES

FEBRUARY 15  
H = 21 18 00  
Mag 2.3  
Penticton  
eP<sub>n</sub> 21 18 35.9  
eS<sub>n</sub> 21 19 05.4  
D = 241 km

FEBRUARY 16  
Resolute  
eP 12 01 35

FEBRUARY 17  
U.S.C.G.S.  
6.5N, 73.5W  
Colombia  
H = 06 11 35.7  
h = 25 km  
Resolute  
eP 06 22 41

FEBRUARY 16  
Shawinigan Falls  
eP 13 14 54

FEBRUARY 16  
H = 00 47 42  
Mag 2.5  
Penticton  
eP<sub>1</sub> 00 48 05.4  
eS<sub>1</sub> 00 48 12.9  
D = 143 km

FEBRUARY 16  
Penticton  
eP 13 38 51

FEBRUARY 17  
U.S.C.G.S.  
43.5N, 148.0E  
Kurile Islands  
H = 06 48 58.5  
h = 25 km  
Resolute  
eP 06 58 32 c

FEBRUARY 16  
U.S.C.G.S.  
43.2N, 148.0E  
Kurile Islands  
H = 13 54 53.7  
h = 71 km  
Mag 6

FEBRUARY 16  
Resolute  
eP 03 54 32?

Halifax  
eP 14 07 38

FEBRUARY 17  
Resolute  
eP 13 42 09

FEBRUARY 16  
Penticton  
eP 04 08 36

Ottawa  
eP 14 07 15 c  
Penticton  
eP 14 04 56

FEBRUARY 17  
Resolute  
eP 17 14 19

FEBRUARY 16  
Penticton  
eP 05 30 11  
Resolute  
eP 05 32 13

Resolute  
iP 14 04 19 c  
Shawinigan Falls  
eP 14 07 16 c  
Victoria  
iP 14 04 45

FEBRUARY 18  
U.S.C.G.S.  
44.0N, 147.5E  
Kurile Islands  
H = 01 04 00.8  
h = 28 km  
Ottawa  
eP 01 16 26 d  
Resolute  
eP 01 13 30

FEBRUARY 16  
Resolute  
eP 05 32 36

FEBRUARY 16  
Resolute  
iP 15 03 54

FEBRUARY 16  
U.S.C.G.S.  
32.7N, 137.7E  
South of Honshu Japan  
H = 08 54 59.9  
h = 303 km  
Resolute  
eP 09 05 24

FEBRUARY 16  
Resolute  
eP? 15 43 27

FEBRUARY 18  
Resolute  
eP 02 00 48

FEBRUARY 17  
Penticton  
eP 06 10 01

SEISMOLOGICAL BULLETIN - 1961

FEBRUARY 18  
Resolute  
eP 07 27 03

FEBRUARY 18  
U.S.C.G.S.  
1.3S, 15.7W  
Atlantic Ocean  
H = 17 02 10.0  
h = 25 km  
Resolute  
eP 17 15 03?

FEBRUARY 19  
U.S.C.G.S.  
56.1N, 153.4W  
Kodiak Island  
H = 13 07 45.5  
h = 44 km  
Ottawa  
eP 13 16 21  
Resolute  
iP 13 13 43 d?  
Shawinigan Falls  
iP 13 16 27 c

FEBRUARY 18  
Resolute  
eP 08 22 28

FEBRUARY 18  
Resolute  
iP 08 32 00

FEBRUARY 18  
U.S.C.G.S.  
4.3N, 126.6E  
Philippine Islands  
H = 20 00 28.7  
h = 74 km  
Resolute  
eP 20 13 56?

FEBRUARY 19  
Resolute  
eP 16 51 31

FEBRUARY 18  
Ottawa  
eP 08 34 56

FEBRUARY 18  
Resolute  
eP 12 35 06?

FEBRUARY 19  
Alberni  
iP<sub>1</sub> 02 25 17.0  
iS<sub>1</sub> 02 25 29.8  
D = 105 km  
Victoria  
eP 02 25 39.6  
D = 268 km

FEBRUARY 19  
Resolute  
eP 20 47 58

FEBRUARY 18  
Resolute  
eP? 15 18 00?

FEBRUARY 19  
Resolute  
eP 21 44 18

FEBRUARY 18  
U.S.C.G.S.  
43.6N, 148.2E  
Kurile Islands  
H = 15 54 01.6  
h = 25 km  
Resolute  
eP 16 03 31

FEBRUARY 19  
U.S.C.G.S.  
56.1N, 153.4W  
Kodiak Island  
H = 07 55 27.6  
h = 61 km  
Resolute  
eP 08 01 23 d?  
Shawinigan Falls  
eP 08 04 08 d

FEBRUARY 20  
Resolute  
eP 00 15 42

FEBRUARY 18  
Resolute  
eP? 16 39 37

FEBRUARY 20  
Resolute  
eP? 04 45 27

FEBRUARY 19  
U.S.C.G.S.  
56.1N, 153.5W  
Kodiak Island  
H = 12 11 15.7  
h = 39 km  
Resolute  
iP 12 17 13

FEBRUARY 20  
Resolute  
eP 09 08 01?

FEBRUARY 20  
Resolute  
eP 11 03 20?



DOMINION OBSERVATORIES

FEBRUARY 20  
Resolute  
eP 13 11 08 d

FEBRUARY 20  
Resolute  
eP 13 14 56  
Shawinigan Falls  
eP 13 12 15

FEBRUARY 20  
Resolute  
eP 14 20 47

FEBRUARY 20  
Resolute  
eP? 18 17 00  
eP 18 17 13 ?

FEBRUARY 20  
Halifax  
iP 18 37 21.5 d  
Ottawa  
eP 18 37 27 d  
Shawinigan Falls  
iP 18 37 33 d

FEBRUARY 20  
Resolute  
eP 18 43 34?

FEBRUARY 20  
Resolute  
eP 18 55 12?

FEBRUARY 20  
Resolute  
eP? 19 04 37

FEBRUARY 20  
U.S.C.G.S.  
2.5S, 77.6W  
Ecuador  
H = 22 27 00.4  
h = 50 km  
Ottawa  
eP 22 35 35  
Resolute  
eP 22 38 53  
Victoria  
eP 22 37 40

FEBRUARY 21  
U.S.C.G.S.  
36.5N, 23.3E  
Near coast of Greece  
H = 03 01 55.3  
h = 49 km  
Halifax  
P 03 12 39  
Ottawa  
eP 03 13 09  
Resolute  
eP 03 12 13  
Shawinigan Falls  
eP 03 12 54

FEBRUARY 21  
Resolute  
eP 07 11 55

FEBRUARY 21  
Resolute  
eP 15 28 59?

FEBRUARY 21  
Resolute  
eP 19 26 22?

FEBRUARY 21  
U.S.C.G.S.  
48.8S, 106.2E  
Indian Ocean  
H = 19 10 56.8  
h = 52 km  
Penticton  
eP<sub>1</sub>' 19 30 43  
Resolute  
eP<sub>1</sub>' 19 30 48?

FEBRUARY 22  
51.5N, 179.8E  
Andreanof Islands  
H = 02 49 18.2  
h = 99 km  
Penticton  
eP 02 56 26  
Resolute  
eP 02 56 47

FEBRUARY 22  
Penticton  
eP 09 24 10

FEBRUARY 22  
U.S.C.G.S.  
28.4S, 177.2W  
Kermadec Islands  
region  
H = 21 53 34.5  
h = 78 km  
Mag 5 3/4  
Ottawa  
eP' 22 12 14  
Resolute  
eP' 22 12 09  
e 22 22 54?  
Shawinigan Falls  
eP' 22 12 18  
Victoria  
eP 22 06 33

SEISMOLOGICAL BULLETIN - 1961

FEBRUARY 23  
Resolute  
eP 03 27 57?

FEBRUARY 23  
U.S.C.G.S.  
38.2N, 142.7E  
Honshu Japan  
H = 04 16 25.0  
h = 119 km  
Ottawa  
eP 04 29 14  
Resolute  
iP 04 26 30 c  
eS 04 34 48  
Shawinigan Falls  
eP 04 29 14  
Victoria  
eP 04 26 59

FEBRUARY 23  
Resolute  
iP 07 58 17 c?

FEBRUARY 23  
H = 12 48 56  
Mag 2.5  
Penticton  
eP<sub>n</sub> 12 49 31.8  
eS<sub>n</sub> 12 50 01.0  
D = 238 km

FEBRUARY 23  
Penticton  
eP 14 39 29  
Resolute  
eP 14 41 52

FEBRUARY 23  
U.S.C.G.S.  
37.3N, 27.5E  
Dodecanese Islands  
H = 21 45 51.5  
h = 25 km  
Resolute  
eP 21 56 15?  
Shawinigan Falls  
eP 21 57 06

FEBRUARY 24  
Resolute  
eP 02 46 53

FEBRUARY 24  
U.S.C.G.S.  
26.1N, 125.4E  
Ryukyu Islands  
H = 03 04 11.7  
h = 25 km  
Resolute  
iP 03 15 59 d

FEBRUARY 24  
U.S.C.G.S.  
17.8S, 68.5W  
Western Bolivia  
H = 08 16 05.4  
h = 100 km  
Penticton  
eP 08 28 06

FEBRUARY 24  
H = 11 22 08  
Mag 2.2  
Alberni  
iP<sub>1</sub> 11 22 19.6  
iS<sub>1</sub> 11 22 28.8  
D = 75 km

FEBRUARY 25  
Resolute  
eP 02 15 40?

FEBRUARY 25  
Penticton  
eP 11 15 50

FEBRUARY 25  
Resolute  
eP 11 34 53

FEBRUARY 25  
H = 12 03 21  
Mag 2.4  
Penticton  
eP<sub>n</sub> 12 03 59.6  
eS<sub>n</sub> 12 04 32.0  
D = 266 km

FEBRUARY 25  
U.S.C.G.S.  
15.4S, 175.8W  
Samoa Islands region  
H = 15 02 04.8  
h = 62 km  
Penticton  
eP 15 14 11  
Resolute  
eP 15 15 58?  
Victoria  
eP 15 14 06 c

FEBRUARY 25  
Resolute  
iP 15 33 36 d?

FEBRUARY 25  
Resolute  
eP? 20 34 18

FEBRUARY 25  
Resolute  
eP? 22 03 17

## DOMINION OBSERVATORIES

<p>FEBRUARY 26 U.S.C.G.S. 32.7S, 111.2W Easter Island region H = 05 48 46.3 h = 29 km Mag 6 1/2 Ottawa eP 06 01 20 Penticton eP 06 01 08 Shawinigan Falls eP 06 01 29 Victoria eP 06 01 05 d</p>	<p>FEBRUARY 26 Resolute eP 18 59 10</p> <p>FEBRUARY 26 Ottawa eP 19 56 33 Resolute eP 19 54 15</p> <p>FEBRUARY 26 Resolute iP 21 13 48 c</p>	<p>FEBRUARY 27 Penticton eP 11 09 00</p> <p>FEBRUARY 27 Penticton eP 12 08 34 Resolute eP 12 28 19</p> <p>FEBRUARY 27 Resolute eP 12 32 11</p>
<p>FEBRUARY 26 Penticton eP 09 37 59 Resolute eP? 09 32 46</p>	<p>FEBRUARY 27 U.S.C.G.S. 6.7N, 73.0W Colombia H = 01 07 51.3 h = 200 km Ottawa eP 01 15 00 Penticton eP 01 17 26 Resolute eP 01 18 40 d Victoria iP 01 17 39</p>	<p>FEBRUARY 27 U.S.C.G.S. 52.5N, 168.8W Fox Islands H = 13 06 35.8 h = 56 km Ottawa eP 13 16 21 Resolute eP 13 13 34</p>
<p>FEBRUARY 26 U.S.C.G.S. 31.4N, 131.2E Near coast of Kyushu, Japan H = 18 10 48.7 h = 54 km Mag 7 Alberni eP 18 22 29 Halifax iP 18 24 47 d Ottawa eP 18 24 29 Penticton eP 18 22 43 Resolute iP 18 21 56 c iS 18 31 01 Victoria eP 18 22 36</p>	<p>FEBRUARY 27 Resolute eP 06 41 21</p> <p>FEBRUARY 27 U.S.C.G.S. 38.7S, 72.4W Southern Chile H = 10 29 48.3 h = 57 km Ottawa eP 10 42 15</p>	<p>FEBRUARY 27 U.S.C.G.S. 9.8N, 84.4W Near coast of Costa Rica H = 15 44 19.8 Ottawa eP 15 51 19 Resolute eP 15 54 54 Shawinigan Falls eP 15 51 32</p> <p>FEBRUARY 27 Resolute eP 16 45 26?</p>

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<p>FEBRUARY 27 U.S.C.G.S. 38.4N, 74.7E Tadzhik S.S.R. H = 17 53 35.9 h = 48 km Resolute eP 18 04 28</p>	<p>FEBRUARY 28 Resolute eP 02 14 57?</p> <p>FEBRUARY 28 Resolute eP 07 52 26?</p>	<p>MARCH 1 U.S.C.G.S. 18.7S, 177.9W Fiji Islands region H = 06 41 43.5 h = 513 km Penticton eP 06 53 32</p>
<p>FEBRUARY 27 H = 18 50 21 Mag 2.6 Alberni eP 18 50 51.5 D = 207 km Victoria eP<sub>1</sub> 18 50 34.6 eS<sub>1</sub> 18 50 45.3 D = 88 km</p>	<p>FEBRUARY 28 U.S.C.G.S. 46.5N, 152.2E Kurile Islands H = 12 33 32.1 h = 29 km Penticton eP 12 43 09 Resolute iP 12 42 35 Shawinigan Falls eP 12 45 37</p>	<p>MARCH 1 Resolute eP 13 03 37</p> <p>MARCH 1 U.S.C.G.S. 2.8N, 126.5E Molucca Passage H = 14 05 08.3 h = 61 km Resolute eP 14 18 44?</p>
<p>FEBRUARY 27 Resolute eP? 19 46 41</p>	<p>FEBRUARY 28 U.S.C.G.S. 24.1S, 66.6W Argentina H = 21 18 11.3 h = 30 km Penticton eP 21 30 57</p>	<p>MARCH 1 Resolute eP 15 06 00</p> <p>MARCH 1 Resolute eP 16 13 25?</p>
<p>FEBRUARY 27 Halifax iP 21 50 46 c Resolute eP 21 50 31?</p>	<p>FEBRUARY 28 Resolute iP 23 45 25</p>	<p>MARCH 1 U.S.C.G.S. 13.7N, 146.2E Mariana Islands H = 19 26 13.5 h = 73 km Resolute eP 19 38 40?</p>
<p>FEBRUARY 27 U.S.C.G.S. 36.2N, 26.9E Aegean Sea H = 21 54 30.6 h = 32 km Resolute eP 22 04 57?</p>	<p>FEBRUARY 28 Resolute eP 00 35 59</p>	<p>MARCH 1 U.S.C.G.S. 13.2N, 143.2E Mariana Islands region H = 00 23 42.5 h = 221 km Resolute eP 00 35 59</p>
<p>FEBRUARY 28 Resolute eP 00 13 44</p>		

DOMINION OBSERVATORIES

<p>MARCH 1 U. S. C. G. S. 2. 8S, 105. 7W West of Galapagos Islands H = 23 42 43. 8 Penticton eP 23 51 59 Resolute eP 23 54 32? Shawinigan Falls eP 23 52 27</p>	<p>MARCH 2 U. S. C. G. S. 4. 7S, 106. 3W West of Galapagos Islands H = 15 18 54. 3 h = 25 km Penticton eP 15 28 29 Resolute eP 15 31 04 Shawinigan Falls eP 15 28 57</p>	<p>MARCH 4 U. S. C. G. S. 51. 8N, 179. 3E Rat Islands H = 07 41 37. 3 h = 49 km Resolute eP 07 49 11?</p>
<p>MARCH 2 U. S. C. G. S. 15. 7N, 92. 2W Mexico-Guatemala border H = 00 04 12. 7 h = 98 km Ottawa eP 00 10 37 Penticton eP 00 11 43 c Resolute eP 00 14 01 Shawinigan Falls eP 00 10 56</p>	<p>MARCH 3 Resolute eP 02 17 47</p>	<p>MARCH 4 Resolute eP 08 01 24?</p>
<p>MARCH 2 Resolute iP 12 01 32 i 12 01 48</p>	<p>MARCH 3 U. S. C. G. S. 42. 3N, 143. 9E Hokkaido Japan H = 05 15 55. 8 Resolute iP 05 25 40 c</p>	<p>MARCH 4 Resolute eP 08 04 19?</p>
<p>MARCH 2 Penticton eP 13 54 00 Resolute eP 13 56 32 d?</p>	<p>MARCH 3 U. S. C. G. S. 31. 8S, 178. 0W Kermadec Islands region H = 08 17 30. 6 h = 63 km Resolute eP' 08 36 12 ?</p>	<p>MARCH 4 Resolute eP 08 01 24?</p>
	<p>MARCH 3 U. S. C. G. S. 5. 7S, 147. 4E Near coast of New Guinea H = 09 46 16. 7 h = 25 km Penticton eP 09 59 43</p>	<p>MARCH 4 Resolute eP 08 01 24?</p>
	<p>MARCH 3 U. S. C. G. S. 48°57'N, 125°26'W Barkley Sound H = 09 44 12 Mag 2. 7 Alberni iP<sub>1</sub> 09 44 21. 7 iS<sub>1</sub> 09 44 28. 9 D = 59 km Penticton eP<sub>n</sub> 09 45 11. 7 eS<sub>n</sub> 09 45 53. 2 D = 431 km Victoria iP<sub>1</sub> 09 44 37. 6 iS<sub>1</sub> 09 44 56. 2 D = 157 km</p>	<p>MARCH 4 Resolute eP 08 01 24?</p>
	<p>MARCH 3 U. S. C. G. S. 51. 8N, 167. 3W Fox Islands H = 18 59 58. 2 h = 99 km Resolute eP 19 06 55</p>	<p>MARCH 4 Resolute eP 19 02 50</p>
	<p>MARCH 3 U. S. C. G. S. 48°57'N, 125°30'W Barkley sound aftershock of previous earthquake H = 09 50 50 Mag 2. 4 Alberni eP<sub>1</sub> 09 51 00. 2 eS<sub>1</sub> 09 51 07. 8 D = 62 km</p>	<p>MARCH 4 Resolute eP 19 02 50</p>

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<p>Victoria eP<sub>1</sub> 09 51 16. 0 eS<sub>1</sub> 09 51 35. 8 D = 162 km</p>	<p>MARCH 4 Resolute eP 20 46 56</p>	<p>Penticton iP 01 39 23 d Resolute eP 01 40 31 ? Shawinigan Falls eP' 01 45 12 Victoria eP 01 39 12</p>
<p>MARCH 4 U. S. C. G. S. Chile-Bolivia border H = 10 19 33. 7 h = 109 km Ottawa eP 10 30 42 Penticton eP 10 31 52 Shawinigan Falls eP 10 30 48 Victoria eP 10 31 59</p>	<p>MARCH 4 U. S. C. G. S. 12. 6N, 88. 0W Near coast of El Salvador H = 21 09 09. 9 h = 85 km Penticton eP 21 17 20 Resolute eP 21 19 27? Shawinigan Falls eP 21 16 08 Victoria eP 21 17 32</p>	<p>MARCH 5 Resolute eP? 06 12 22</p>
<p>MARCH 4 Resolute eP 10 54 10</p>	<p>MARCH 4 U. S. C. G. S. 37. 8N, 141. 6E Near coast of Honshu, Japan H = 22 26 01. 2 h = 61 km Ottawa eP 22 39 01 Penticton eP 22 36 53 Resolute iP 22 36 17 c? Shawinigan Falls eP 22 39 03 Victoria eP 22 36 43</p>	<p>MARCH 5 Resolute eP 12 09 19</p>
<p>MARCH 4 Resolute eP 19 02 50</p>	<p>MARCH 4 U. S. C. G. S. 48°09'N, 80°02'W Rockburst at Kirkland Lake, Ontario H = 12 13 29 Halifax Lg 12 19 47. 4 D = 1320 km Montreal P<sub>n</sub> 12 14 46 i 12 14 59. 5 S<sub>n</sub> 12 15 43. 8 Lg 12 16 05. 5 D = 569 km Ottawa P<sub>n</sub> 12 14 31. 5 P<sub>1</sub> 12 14 40. 5 S<sub>n</sub> 12 15 15 S<sub>1</sub> 12 15 31 D = 451 km</p>	<p>MARCH 5 U. S. C. G. S. 20. 6S, 176. 1W Tonga Islands region H = 21 25 55. 6 h = 58 km Penticton eP 21 38 33</p>
<p>MARCH 4 U. S. C. G. S. 51. 8N, 167. 3W H = 18 59 58. 2 h = 99 km Resolute eP 19 06 55</p>	<p>MARCH 5 U. S. C. G. S. 10. 7S, 161. 6E Solomon Islands region H = 01 26 26. 1 h = 99 km Mag 6 1/4 Ottawa eP' 01 45 09</p>	<p>MARCH 5 U. S. C. G. S. 10. 7S, 161. 6E Solomon Islands region H = 01 26 26. 1 h = 99 km Mag 6 1/4 Ottawa eP' 01 45 09</p>

DOMINION OBSERVATORIES

Resolute L <sub>g</sub> 12 27 32 D = 3000 km	MARCH 7 U. S. C. G. S. 28. 0N, 142. 8E	Shawinigan Falls eP' 10 29 24
Seven Falls P <sub>n</sub> 12 15 01. 2 S <sub>n</sub> 12 16 12. 5 L <sub>g</sub> 12 16 44. 7 D = 700 km	Bonin Islands region H = 04 16 44. 1 h = 123 km	Victoria eP 10 23 36
Shawinigan Falls P <sub>n</sub> 12 14 46 S <sub>n</sub> 12 15 45 L <sub>g</sub> 12 16 08	Resolute eP 04 27 52	MARCH 7 Resolute eP 19 12 22
Weston P 12 15 31 S 12 17 44 D = 934 km	MARCH 7 Resolute eP 05 55 45?	MARCH 7 U. S. C. G. S. 38. 2S, 78. 1E Indian Ocean H = 19 08 36. 1 h = 30 km
MARCH 6 Resolute eP 12 24 43 ?	MARCH 7 Resolute eP 08 27 12 ?	Resolute eP' 19 27 44 ?
MARCH 6 Resolute eP? 13 27 03	MARCH 7 Resolute eP 08 31 28?	MARCH 7 U. S. C. G. S. 4. 7S, 153. 2E New Britain region H = 23 11 59. 6 h = 90 km
MARCH 6 H = 21 30 07 Mag 2. 0 Penticton iP <sub>1</sub> 21 30 33. 7 iS <sub>1</sub> 21 33 53. 8 D = 164 km	MARCH 7 U. S. C. G. S. 28. 2S, 175. 7W Kermadec Islands region H = 10 10 38. 9 h = 43 km Mag 7 1/4	Resolute eP? 23 25 39 i ? 23 25 42
MARCH 7 U. S. C. G. S. 28. 8N, 139. 1E West of Bonin Islands H = 02 47 25. 8 h = 25 km	Alberni eP 10 22 58	MARCH 8 U. S. C. G. S. 52. 2N, 165. 2W
Penticton eP 02 59 09	Halifax eP' 10 29 37	Fox Islands H = 00 17 58. 4 h = 63 km
Resolute eP 02 58 42	Ottawa eP' 10 29 19 i 10 39 51	Ottawa eP 00 27 29
	Penticton iP 10 23 47 d	Resolute eP 00 24 50
	Resolute eP 10 25 32?	Shawinigan Falls eP 00 27 34
	eP' 10 29 15?	
	i 10 30 15	
	i 10 38 10	
	e 10 40 01	
	i 10 46 20	

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MARCH 8 U. S. C. G. S. 4. 0S, 141. 8E New Guinea H = 03 27 16. 2 h = 217 km	MARCH 9 U. S. C. G. S. 10. 9N, 41. 7W Atlantic Ocean H = 03 59 08. 7 h = 27 km	MARCH 9 Resolute eP 21 14 31
Resolute eP 03 40 51?	Halifax eP 04 06 33	MARCH 9 Resolute eP 21 59 59
MARCH 8 U. S. C. G. S. 2. 2N, 128. 3E	Ottawa eP 04 07 26	
Halmahera H = 19 45 43. 0 h = 370 km	Penticton eP 04 10 45	MARCH 10 H = 00 35 06 Mag 2. 4
Resolute eP 19 58 45	Resolute eP 04 10 24	Penticton iP <sub>1</sub> 00 35 29. 6 iS <sub>1</sub> 00 35 47. 7 D = 148 km
	i 04 10 33	
	eS? 04 19 39	
	Shawinigan Falls eP 04 07 20	
MARCH 8 U. S. C. G. S. 32. 5N, 141. 7E	MARCH 9 Resolute eP 08 26 35	MARCH 10 U. S. C. G. S. 51. 9S, 161. 6E
Off coast of Honshu, Japan H = 23 01 55. 9 h = 37 km	MARCH 9 Resolute eP 09 22 46	Macquarie Island region H = 03 00 43. 3 h = 25 km
Resolute eP 23 12 45		Resolute eP' 03 20 11?
		Shawinigan Falls eP' 03 20 25
MARCH 8 H = 23 16 54 Mag 2. 3	MARCH 9 Alberni eP 09 55 17	MARCH 10 Resolute eP 03 45 24
Alberni iP <sub>1</sub> 23 17 01. 5 iS <sub>1</sub> 23 17 07. 5 D = 49 km	Penticton iP 09 55 33 d	
Victoria eP 23 17 45	Victoria eP 09 55 04	MARCH 10 H = 07 13 33 Mag 2. 1
		Penticton eP <sub>n</sub> 07 14 12. 4 eS <sub>n</sub> 07 14 44. 9 D = 266 km
	MARCH 9 U. S. C. G. S. 66. 0N, 156. 6W	Victoria eP <sub>n</sub> 07 13 52. 1 eS <sub>n</sub> 07 14 15. 1 D = 188 km
	Central Alaska H = 12 51 02. 1 h = 85 km	
	Penticton eP 12 56 25	
	Resolute eP 12 55 46	

DOMINION OBSERVATORIES

MARCH 10  
Resolute  
eP 10 00 53

MARCH 10  
Resolute  
eP 15 17 58?

MARCH 10  
U.S.C.G.  
23.5S, 65.4W  
Argentina  
H = 15 31 37.2  
h = 118 km  
Penticton  
eP 15 44 15

MARCH 10  
H = 21 35 55  
Mag 2.0  
Penticton  
iP<sub>1</sub> 21 36 19.4  
iS<sub>1</sub> 21 36 37.9  
D = 152 km

MARCH 10  
U.S.C.G.S.  
10.1N, 83.6W  
Near coast of  
Costa Rica  
H = 23 12 20.4  
h = 56 km  
Ottawa  
iP 23 19 17 d  
Penticton  
eP 23 21 09 d  
Resolute  
eP 23 22 55 c?  
Shawinigan Falls  
eP 23 19 33

MARCH 10  
Resolute  
eP 23 29 25

MARCH 10  
U.S.C.G.S.  
10.1S, 161.4E  
Solomon Islands  
region  
H = 23 36 08.8  
h = 139 km  
Penticton  
eP 23 49 00 c  
Resolute  
eP 23 49 56?  
e 23 53 52?

MARCH 11  
U.S.C.G.S.  
52.9N, 167.3W  
Fox Islands  
H = 01 27 02.3  
h = 98 km  
Resolute  
eP 01 33 50

MARCH 11  
U.S.C.G.S.  
48.7N, 154.6E  
Kurile Islands  
H = 01 31 34.4  
h = 26 km  
Mag 6 1/2  
Halifax  
eP 01 43 49.5  
Ottawa  
eP 01 43 23  
Resolute  
eP 01 40 52 c  
Resolute  
iP 01 40 19  
PP 01 42 12  
eS 01 47 17  
Shawinigan Falls  
eP 01 43 25  
Victoria  
eP 01 40 40

MARCH 11  
U.S.C.G.S.  
16.3S, 173.0W  
Tonga Islands region  
H = 02 25 17.0  
h = 25 km  
Penticton  
eP 02 37 33

MARCH 11  
H = 06 26 13  
Mag 2.1  
Penticton  
iP<sub>n</sub> 06 26 43.6  
iS<sub>n</sub> 06 27 07.6  
D = 196 km

MARCH 11  
U.S.C.G.S.  
52.8N, 168.6W  
Fox Islands  
H = 07 18 44.9  
h = 40 km  
Resolute  
eP 07 25 43

MARCH 11  
U.S.C.G.S.  
11.2N, 43.3E  
Near coast of  
British Somaliland  
H = 08 41 00.0  
h = 18 km  
Resolute  
eP 08 54 06 d?  
eS 09 05 04  
PS 09 06 09?  
SS 09 11 00?

MARCH 11  
Resolute  
eP? 10 07 28

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MARCH 11  
48.8°N, 122.4°W  
East of Bellingham  
Washington, U.S.A.  
H = 17 06 10  
Mag 2.2  
Alberni  
S<sub>1</sub> - P<sub>1</sub> = 22.7 secs.  
D = 186 km  
Penticton  
eP<sub>n</sub> 17 06 42.7  
eS<sub>n</sub> 17 07 04.0  
D = 224 km  
Victoria  
eP<sub>1</sub> 17 06 24.5  
eS<sub>1</sub> 17 06 36.5  
D = 98 km

MARCH 11  
Resolute  
eP? 22 18 10

MARCH 12  
U.S.C.G.S.  
17.4N, 107.3W  
Off coast of Mexico  
H = 02 49 33.4  
h = 57 km  
Mag 5 1/4  
Resolute  
eP 02 59 23  
i 02 59 25

MARCH 12  
Resolute  
eP 03 11 39  
i 03 11 51

MARCH 12  
Resolute  
eP 10 49 18

MARCH 12  
U.S.C.G.S.  
19.2N, 107.1W  
Off coast of  
Mexico  
H = 12 09 10.7  
h = 64 km  
Resolute  
eP 12 18 42?

MARCH 12  
Resolute  
eP 14 42 04

MARCH 12  
U.S.C.G.S.  
43.8N, 129.1W  
Off coast of Oregon  
H = 14 59 16.8  
h = 19 km  
Resolute  
eP 15 06 12?

MARCH 12  
U.S.C.G.S.  
28.4S, 176.0W  
Tonga Islands region  
H = 23 21 42.5  
h = 113 km  
Mag 6 1/4  
Penticton  
eP 23 34 45 d  
Resolute  
eP' 23 40 14

MARCH 13  
U.S.C.G.S.  
5.2S, 153.3E  
New Britain  
H = 04 51 13.9  
h = 25 km  
Resolute  
eP 05 05 00?

MARCH 13  
Resolute  
eP? 07 43 36?

MARCH 13  
U.S.C.G.S.  
19.2N, 107.3W  
Off coast of Mexico  
H = 08 03 43.9  
h = 49 km  
Mag 6 1/4  
Penticton  
eP 08 10 05

Resolute  
eP 08 13 17 c?  
eS 08 21 07  
S<sub>0</sub>S? 08 23 04?  
SS? 08 25 02  
Shawinigan Falls  
eP 08 11 09

MARCH 13  
Provisional Epicentre  
45°08'N, 75°23'W  
Near Ormond, Ont.  
H = 10 55 45  
Montreal  
P 10 56 06.0  
i 10 56 09.0  
i 10 56 12.6  
i 10 56 21.4  
i 10 56 27.5  
D = approx. 144 km  
Ottawa  
P 10 55 51.2  
10 55 56.2 (?)

D = approx. 41 km  
Shawinigan Falls  
P 10 56 24.1  
i 10 56 51.1  
i 10 56 52.9  
D = approx. 260 km

DOMINION OBSERVATORIES

MARCH 13  
Resolute  
eP 14 38 28  
Victoria  
eP 01 15 21

MARCH 13  
U.S.C.G.S.  
34.4N, 26.5E  
Crete  
H = 19 17 16.1  
h = 25 km  
Ottawa  
P 19 28 52  
Resolute  
eP 19 27 51  
Shawinigan Falls  
eP 19 28 37  
MARCH 14  
U.S.C.G.S.  
18.8S, 172.6W  
Tonga Islands region  
H = 04 18 06.5  
h = 25 km  
Penticton  
eP 04 30 29  
MARCH 14  
Resolute  
eP 07 05 07?

MARCH 13  
Resolute  
eP 19 43 14?  
MARCH 14  
Resolute  
eP 07 38 26?

MARCH 13  
U.S.C.G.S.  
56.2S, 27.2W  
Sandwich Islands  
H = 20 35 15.4  
h = 56 km  
Resolute  
eP' 20 54 31  
e 20 57 59  
Victoria  
e 20 57 37  
MARCH 14  
U.S.C.G.S.  
67.8N, 164.9W  
Bering Strait  
H = 11 58 53.9  
h = 78 km  
Resolute  
eP 12 03 44  
MARCH 14  
Resolute  
eP 12 07 51 ?

MARCH 14  
U.S.C.G.S.  
42.9N, 140.2E  
Off coast of  
Hokkaido, Japan  
H = 01 05 06.2  
h = 147 km  
Penticton  
eP 01 15 31  
Resolute  
eP 01 14 37 c?  
Shawinigan Falls  
eP 01 17 35

MARCH 14  
H = 19 48 13  
Mag 2.4  
Penticton  
eP<sub>n</sub> 19 48 49.8  
eS<sub>n</sub> 19 49 19.8  
D = 246 km

MARCH 14  
48.8°N, 122.4°W  
Near Bellingham,  
Washington, U.S.A.  
H = 23 22 45  
Mag 1.9  
Penticton  
eP<sub>n</sub> 23 23 20.6  
eS<sub>n</sub> 23 23 44.4  
D = 195 km  
Victoria  
eP<sub>1</sub> 23 22 58.0  
D = 75 km

MARCH 15  
H = 07 24 25  
Mag 2.6  
Penticton  
eP<sub>n</sub> 07 25 08.1  
eS<sub>n</sub> 07 25 44.5  
D = 298 km

MARCH 15  
Resolute  
eP 08 04 28?

MARCH 15  
Resolute  
eP? 10 27 05?

MARCH 14  
U.S.C.G.S.  
18.8S, 172.6W  
Tonga Islands region  
H = 04 18 06.5  
h = 25 km  
Penticton  
eP 04 30 29

MARCH 14  
Resolute  
eP 07 05 07?

MARCH 14  
Resolute  
eP 07 38 26?

MARCH 14  
U.S.C.G.S.  
67.8N, 164.9W  
Bering Strait  
H = 11 58 53.9  
h = 78 km  
Resolute  
eP 12 03 44

MARCH 14  
Resolute  
eP 12 07 51 ?

MARCH 14  
H = 15 02 17  
Mag 2.3  
Penticton  
eP<sub>n</sub> 15 02 55.4  
eS<sub>n</sub> 15 03 26.8  
D = 256 km

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MARCH 15  
U.S.C.G.S.  
3.3S, 150.7E  
New Ireland region  
H = 10 14 55.5  
h = 21 km  
Mag 6  
Resolute  
eP 10 28 39?  
PP? 10 32 44  
eS? 10 40 10?  
SS? 10 47 05?  
Victoria  
eP 10 28 01

MARCH 15  
U.S.C.G.S.  
4.4S, 152.5E  
New Britain  
H = 13 01 02.2  
h = 99 km  
Penticton  
eP 13 14 03  
Resolute  
eP 13 14 40  
e 13 18 40?  
Shawinigan Falls  
eP' 13 19 50  
Victoria  
eP 13 13 52

MARCH 15  
U.S.C.G.S.  
27.5N, 142.9E  
Bonin Islands  
H = 16 17 16.8  
h = 100 km  
Resolute  
eP 16 28 29?

MARCH 15  
Resolute  
eP 16 45 55?

MARCH 15  
Resolute  
eP 23 31 34

MARCH 16  
U.S.C.G.S.  
51.7N, 176.1E  
Rat Islands  
H = 04 58 00.4  
h = 39 km  
Resolute  
eP 05 05 41 c?  
Shawinigan Falls  
eP 05 08 43

MARCH 16  
Resolute  
eP 09 30 31

MARCH 16  
U.S.C.G.S.  
6.4S, 130.7E  
Banda Sea  
H = 11 19 43.5  
h = 77 km  
Resolute  
eP 11 33 55?  
e 11 45 47

MARCH 16  
Resolute  
eP 12 56 01?

MARCH 16  
U.S.C.G.S.  
8.2S, 122.0E  
Flores Island  
H = 13 45 35.6  
h = 74 km  
Mag 6 1/4  
Halifax  
iP' 14 05 02 c  
Resolute  
eP 14 00 05?  
e 14 04 04?  
i 14 14 08  
e 14 15 14?

Shawinigan Falls  
eP' 14 04 52

MARCH 16  
U.S.C.G.S.  
49.6N, 154.3E  
Kurile Islands  
H = 15 26 56.2  
h = 42 km  
Ottawa  
P 15 38 41  
Resolute  
eP 15 35 34  
Shawinigan Falls  
eP 15 38 42

MARCH 16  
Resolute  
eP 17 08 32

MARCH 16  
Resolute  
eP 17 59 00?

MARCH 16  
U.S.C.G.S.  
8.1S, 122.0E  
Flores Island  
H = 18 21 12.2  
h = 43 km  
Resolute  
eP' 18 39 47?  
Shawinigan Falls  
eP' 18 40 37

MARCH 16  
H = 19 51 07  
Mag 1.3  
Penticton  
eP<sub>1</sub> 19 51 17.3  
eS<sub>1</sub> 19 51 25.2  
D = 64 km

DOMINION OBSERVATORIES

MARCH 16  
Penticton  
eP 20 19 37

MARCH 16  
Resolute  
eP 22 39 02?

MARCH 16  
Penticton  
eP 23 27 04

MARCH 16  
U.S.C.G.S.  
10.5S, 74.9W  
Central Peru  
H = 23 31 27.2  
h = 201 km  
Resolute  
eP 23 43 49 d?  
Shawinigan Falls  
eP 23 40 45

MARCH 16  
Penticton  
eP 23 43 48

MARCH 17  
Penticton  
eP 03 52 41

MARCH 17  
H = 11 22 28  
Mag 1.7  
Victoria  
iP<sub>1</sub> 11 22 41.7  
iS<sub>1</sub> 11 22 52.2  
D = 86 km

MARCH 17  
H = 11 23 54  
Mag 1.8  
Penticton  
eP<sub>n</sub> 11 24 27.1  
eS<sub>n</sub> 11 24 53.6  
D = 217 km  
Penticton  
eP 14 21 02  
Resolute  
eP? 14 23 14?

MARCH 17  
Resolute  
eP? 14 29 12?

MARCH 17  
Resolute  
eP 16 06 47

MARCH 17  
Penticton  
eP 16 16 17

MARCH 17  
U.S.C.G.S.  
24.3S, 175.6W  
Tonga Islands region  
H = 20 10 36.4  
h = 79 km  
Mag 6  
Penticton  
e 20 23 26  
Resolute  
eP' 20 29 07

MARCH 17  
Penticton  
eP 22 33 46

MARCH 17  
Penticton  
eP 22 36 38

MARCH 17  
U.S.C.G.S.  
34.1N, 141.0E  
Off coast of  
Honshu, Japan  
H = 22 40 21.5  
h = 120 km  
Resolute  
iP 22 50 56 d?

MARCH 18  
Penticton  
eP 02 04 34  
Resolute  
iP 02 05 31 d?

MARCH 18  
U.S.C.G.S.  
8.2S, 122.0E  
Flores Island  
H = 02 08 38.5  
h = 35 km  
Resolute  
eP' 02 27 08?

MARCH 18  
U.S.C.G.S.  
24.3S, 174.2W  
Tonga Islands region  
H = 08 26 49.0  
h = 25 km  
Penticton  
eP 08 39 39

MARCH 18  
U.S.C.G.S.  
20.6S, 175.5W  
Tonga Islands region  
H = 09 29 23.5  
h = 667 km  
Resolute  
eP' 09 47 01

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MARCH 18  
U.S.C.G.S.  
29.5N, 138.6E  
Bonin Islands region  
H = 10 16 48.5  
h = 500 km  
Resolute  
iP 10 27 16 c

MARCH 18  
H = 11 18 50  
Mag 1.9  
Penticton  
eP<sub>1</sub> 11 19 18.4  
eS<sub>1</sub> 11 19 39.8  
D = 175 km

MARCH 18  
Victoria  
eP 11 27 35  
Penticton  
eP 11 37 34

MARCH 18  
U.S.C.G.S.  
49.9S, 163.3E  
South of New Zealand  
H = 14 54 59.3  
h = 38 km  
Mag 6 3/4  
Halifax  
eP' 15 14 45 d  
Ottawa  
P' 15 14 25  
Penticton  
eP' 15 13 49  
Resolute  
eP' 15 14 18  
Shawinigan Falls  
eP' 15 14 29  
Victoria  
eP' 15 13 53

MARCH 18  
U.S.C.G.S.  
7.6N, 126.9E  
Off coast of  
Mindanao,  
Philippine Islands  
H = 17 39 34.3  
h = 63 km  
Resolute  
eP 17 52 50

MARCH 18  
U.S.C.G.S.  
25.4N, 122.6E  
Off coast of Formosa  
H = 20 06 57.3  
h = 25 km  
Resolute  
iP 20 18 53 c?

MARCH 19  
U.S.C.G.S.  
40.5N, 142.9E  
North of Honshu  
Japan  
H = 04 51 52.2  
h = 14 km  
Penticton  
eP 05 02 31  
Resolute  
iP 05 01 52 c?

MARCH 19  
U.S.C.G.S.  
6.4S, 105.5E  
Soenda Strait  
H = 04 59 19.3  
h = 120 km  
Penticton  
eP' 05 18 06  
Resolute  
eP' 05 17 42  
Shawinigan Falls  
eP' 05 18 36  
Victoria  
eP' 05 18 04

MARCH 19  
U.S.C.G.S.  
16.0S, 168.2E  
New Hebrides Islands  
H = 07 14 57.4  
h = 90 km  
Ottawa  
P' 07 33 50  
Penticton  
eP 07 27 21  
Resolute  
eP' 07 33 27?  
Shawinigan Falls  
eP' 07 33 55

MARCH 19  
U.S.C.G.S.  
2.3N, 127.4E  
Molucca Passage  
H = 07 51 35.0  
h = 83 km  
Resolute  
eP 08 05 10 c  
i 08 05 27  
Shawinigan Falls  
eP' 08 10 36

MARCH 19  
U.S.C.G.S.  
37.2N, 140.7E  
Honshu Japan  
H = 09 18 53.4  
h = 115 km  
Resolute  
iP 09 29 10 c

MARCH 19  
U.S.C.G.S.  
16.4S, 167.3E  
New Hebrides Islands  
H = 12 05 47.7  
h = 16 km  
Resolute  
eP' 12 24 16?  
Shawinigan Falls  
eP' 12 24 47

DOMINION OBSERVATORIES

MARCH 19 Penticton eP 14 30 04 Resolute eP 14 32 22? Victoria eP 14 30 15	MARCH 20 U. S. C. G. S. 11.5N, 86.3W Off coast of Nicaragua H = 06 16 23.9 h = 122 km Mag 6 Alberni eP 06 25 08 Halifax eP 06 23 41.4 Ottawa eP 06 23 10(c) iP 06 23 10.3 d Penticton iP 06 24 45 c Resolute eP 06 26 44 c Shawinigan Falls eP 06 23 26 c Victoria eP 06 24 57	Penticton iP 11 48 21 c Resolute iP 11 47 27 c Shawinigan Falls eP 11 50 26 c Victoria eP 11 48 10
MARCH 19 Resolute eP? 19 01 16	MARCH 20 Halifax eP 06 23 41.4 Ottawa eP 06 23 10(c) iP 06 23 10.3 d Penticton iP 06 24 45 c Resolute eP 06 26 44 c Shawinigan Falls eP 06 23 26 c Victoria eP 06 24 57	MARCH 20 U. S. C. G. S. 35.5N, 77.9E Northern India H = 14 00 29.5 h = 74 km Resolute eP 14 11 36
MARCH 19 Resolute eP 19 18 40?	MARCH 20 Penticton iP 06 24 45 c Resolute eP 06 26 44 c Shawinigan Falls eP 06 23 26 c Victoria eP 06 24 57	MARCH 20 U. S. C. G. S. 18.4S, 175.2W Tonga Islands H = 15 53 09.9 h = 175 km Mag 6 1/2 Alberni eP 16 05 11 Halifax eP' 16 11 41.5 Ottawa i 16 08 13 P' 16 11 24 Penticton iP 16 05 22 Resolute eP 16 07 02 i 16 07 04 e 16 11 17 i 16 17 26 i 16 18 41 i 16 20 08 e 16 22 45 Shawinigan Falls eP' 16 11 30 c e 16 22 25 i 16 22 37 Victoria eP 16 05 08
MARCH 19 Penticton eP 21 46 49	MARCH 20 U. S. C. G. S. 21.6N, 145.8E Mariana Islands H = 02 17 34.5 h = 101 km Resolute iP 02 29 08	MARCH 20 U. S. C. G. S. 18.4S, 175.2W Tonga Islands H = 15 53 09.9 h = 175 km Mag 6 1/2 Alberni eP 16 05 11 Halifax eP' 16 11 41.5 Ottawa i 16 08 13 P' 16 11 24 Penticton iP 16 05 22 Resolute eP 16 07 02 i 16 07 04 e 16 11 17 i 16 17 26 i 16 18 41 i 16 20 08 e 16 22 45 Shawinigan Falls eP' 16 11 30 c e 16 22 25 i 16 22 37 Victoria eP 16 05 08
MARCH 20 Resolute eP 01 34 57 c?	MARCH 20 U. S. C. G. S. 16.4N, 121.5E Philippine Islands H = 11 27 05.4 h = 30 km Resolute eP 11 39 45	MARCH 20 U. S. C. G. S. 36.6N, 71.1E Hindu Kush H = 03 30 27.4 h = 121 km Penticton eP 03 43 38 Resolute iP 03 41 22 c? Shawinigan Falls eP 03 43 26
MARCH 20 U. S. C. G. S. 21.6N, 145.8E Mariana Islands H = 02 17 34.5 h = 101 km Resolute iP 02 29 08	MARCH 20 U. S. C. G. S. 16.4N, 121.5E Philippine Islands H = 11 27 05.4 h = 30 km Resolute eP 11 39 45	MARCH 20 U. S. C. G. S. 36.6N, 71.1E Hindu Kush H = 03 30 27.4 h = 121 km Penticton eP 03 43 38 Resolute iP 03 41 22 c? Shawinigan Falls eP 03 43 26

SEISMOLOGICAL BULLETIN - 1961

MARCH 20 Resolute eP? 21 30 51?	MARCH 21 Resolute eP 11 14 18?	MARCH 22 Penticton eP 14 25 57
MARCH 20 U. S. C. G. S. 24.2S, 175.9W Tonga Islands region H = 23 42 33.9 h = 25 km Penticton eP 23 55 28 Resolute eP' 24 01 05? eS? 24 09 31 e 24 12 20? i 24 17 18 i 24 21 20	MARCH 21 Resolute eP 11 21 42 MARCH 21 Resolute eP? 16 34 27 MARCH 21 Resolute eP? 20 00 00?	MARCH 22 U. S. C. G. S. 11.8N, 86.8W Near coast of Nicaragua H = 14 19 46.5 h = 172 km Resolute eP 14 29 57 i 14 30 18 Shawinigan Falls eP 14 26 39
MARCH 21 Resolute eP? 03 01 08?	MARCH 21 Resolute eP? 20 12 14	MARCH 22 Resolute eP 18 00 11
MARCH 21 H = 05 49 32 Mag 3.1 Penticton eP <sub>n</sub> 05 50 31.0 eS <sub>n</sub> 05 51 23.2 D = 427 km	MARCH 22 Penticton eP 06 44 58 MARCH 22 45°50'N, 77°05'W Near Pembroke, Ont. H = 12 02 56.0 Mag 2.2 Ottawa P <sub>1</sub> 12 03 14.6 S <sub>1</sub> 12 03 28.8 D = 116.5 km	MARCH 22 U. S. C. G. S. 24.6S, 179.3E South of Fiji Islands H = 21 28 41.6 h = 517 km Resolute eP' 21 46 20
MARCH 21 Penticton eP 06 18 53	MARCH 22 Resolute eP 12 19 47	MARCH 23 U. S. C. G. S. 43.5N, 12.9E Near coast of Italy H = 01 02 01.6 h = 116 km Resolute eP? 01 11 09
MARCH 21 U. S. C. G. S. 21.8S, 179.9W South of Fiji Islands H = 09 22 31.7 h = 599 km Penticton eP 09 34 27 Resolute eP' 09 39 40	MARCH 22 Resolute eP 12 46 22	



DOMINION OBSERVATORIES

MARCH 23 U.S.C.G.S. 1.0S, 120.2E Celebes H = 01 47 27.6 h = 10 km Shawinigan Falls eP' 02 06 49	Shawinigan Falls eP 02 22 32 i 02 23 05	Shawinigan Falls eP 23 10 21 Victoria eP 23 08 06
MARCH 23 Resolute eP? 02 29 36	MARCH 24 Canadian Arctic H = 06 04 28.3 Mag 2.5 Resolute iP <sub>1</sub> 06 04 37.5d iS <sub>1</sub> 06 04 44.5 D = 57.5 km	MARCH 24 U.S.C.G.S. 2.6S, 141.9E Near coast of New Guinea H = 23 37 17.1 h = 118 km Resolute eP 23 50 56
MARCH 23 U.S.C.G.S. 6.5S, 154.7E Solomon Islands H = 20 56 32.1 h = 143 km Shawinigan Falls eP' 21 15 18	MARCH 24 Resolute eP? 08 11 36?	MARCH 25 Resolute eP 01 13 27
MARCH 23 H = 23 54 46 Mag 2.1 Alberni iP <sub>1</sub> 23 54 54.9 iS <sub>1</sub> 23 55 01.6 D = 55 km	MARCH 24 U.S.C.G.S. 9.8N, 128.4E Off coast of Mindanao, Philippine Islands H = 19 10 40.6 h = 236 km Resolute eP 19 23 41 c	MARCH 25 U.S.C.G.S. 2.1S, 79.4W Ecuador H = 02 09 59.9 h = 25 km Penticton eP 02 20 22 Resolute eP 02 21 53 Victoria eP 02 20 30
MARCH 24 H = 00 13 27 Mag 1.9 Penticton eP 00 13 50.9 eS <sub>1</sub> 00 14 09.1 D = 149 km	MARCH 24 Resolute eP 22 03 44	MARCH 25 Resolute eP 06 05 33
MARCH 24 U.S.C.G.S. 8.5S, 74.7W Peru H = 02 13 14.1 h = 175 km Resolute eP 02 25 29 i 02 25 41	MARCH 24 U.S.C.G.S. 35.3N, 140.9E Near coast of Honshu, Japan H = 22 57 14.2 h = 102 km Ottawa P 23 10 20 Penticton eP 23 08 15 Resolute iP 23 07 41 c eS? 23 16 13?	MARCH 25 Resolute eP 11 51 34?

SEISMOLOGICAL BULLETIN - 1961

MARCH 25 H = 12 25 59 Mag 3.0 Penticton eP <sub>n</sub> 12 26 52.3 eS <sub>n</sub> 12 27 39.3 D = 385 km	MARCH 26 Resolute eP 00 56 17	MARCH 26 U.S.C.G.S. 30.6N, 84.4E Southern Tibet H = 23 11 38.9 h = 24 km Resolute eP 23 23 20 d?
MARCH 25 Resolute eP 13 26 57	MARCH 26 U.S.C.G.S. 16.2N, 121.2E Philippine Islands H = 01 21 58.3 h = 70 km Resolute iP 01 34 35	MARCH 27 Resolute eP 16 30 58
MARCH 25 U.S.C.G.S. 17.5S, 179.0W Fiji Islands H = 14 15 38.1 h = 688 km Penticton eP 14 27 08	MARCH 26 Resolute eP? 06 12 10?	MARCH 27 U.S.C.G.S. 30.7S, 179.3E Kermadec Islands H = 16 29 52.9 h = 514 km Resolute eP' 16 47 42
MARCH 25 U.S.C.G.S. 16.6N, 120.3E Near coast of Luzon, Philippine Islands H = 16 09 40.4 h = 21 km Resolute eP 16 22 21	MARCH 26 U.S.C.G.S. 5.7N, 126.4E Philippine Islands H = 14 29 23.8 h = 147 km Resolute iP 14 42 39	MARCH 27 Resolute eP 19 52 40?
MARCH 25 Resolute eP? 20 03 10?	MARCH 26 U.S.C.G.S. 55.5N, 163.7W Bristol Bay H = 20 10 46.6 h = 218 km Ottawa eP 20 19 46 d Resolute iP 20 16 56 d e 20 19 40	MARCH 27 H = 20 57 52 Mag 1.8 Penticton eP <sub>1</sub> 20 58 15.9 eS <sub>1</sub> 20 58 33.9 D = 148 km
MARCH 25 U.S.C.G.S. 37.1S, 51.6E Indian Ocean H = 20 58 41.9 h = 137 km Resolute eP 21 18 01	MARCH 26 Shawinigan Falls eP 20 19 51	MARCH 27 U.S.C.G.S. 8.8N, 104.2W Pacific Ocean H = 20 52 39.3 h = 26 km Resolute eP 21 03 28

DOMINION OBSERVATORIES

MARCH 27 Ottawa P 21 05 29 Resolute eP 21 07 53 Shawinigan Falls eP 21 05 47	Victoria eP 09 49 58	MARCH 28 Resolute eP 14 34 35
MARCH 27 Resolute eP 22 30 21	MARCH 28 Resolute eP? 12 06 22	MARCH 28 U.S.C.G.S. 22.0S, 68.0W Chile-Bolivia border H = 21 01 56.2 h = 125 km Mag 6 Alberni eP 21 14 35 Halifax eP 21 12 41 d Ottawa iP 21 12 46 Penticton eP 21 13 46 d Resolute eP 21 15 24 i? 21 15 56 eS 21 26 43? e 21 31 57 Shawinigan Falls eP 21 12 52 Victoria eP 21 14 28
MARCH 28 U.S.C.G.S. 52.8N, 167.7W Fox Islands H = 05 59 50.5 h = 49 km Resolute iP 06 06 46 c? e 06 09 14 Shawinigan Falls eP 06 09 37	MARCH 28 U.S.C.G.S. 51.7N, 176.2W Andreanof Islands H = 12 29 12.7 h = 60 km Alberni eP 12 35 40 Halifax eP 12 40 06 c Ottawa P 12 39 25 Penticton iP 12 36 06 c Resolute iP 12 36 34 c Shawinigan Falls eP 12 39 29 Victoria eP 12 35 49	MARCH 28 U.S.C.G.S. 33.5N, 140.9E Near coast of Honshu, Japan H = 06 43 43.3 h = 116 km Resolute iP 06 54 21
MARCH 28 U.S.C.G.S. 0.2N, 123.6E Northern Celebes H = 09 35 55.4 h = 83 km Alberni eP 09 49 54 Halifax eP' 09 54 57 Ottawa P' 09 54 48 iP' 09 55 03 d i 09 58 16 c Penticton eP 09 49 07 c Resolute iP 09 49 43 c PP? 09 53 56? eS? 10 00 56? i 10 03 02 Shawinigan Falls eP' 09 54 50	MARCH 28 U.S.C.G.S. 52.0N, 176.3W Andreanof Islands H = 13 59 03.7 h = 89 km Penticton eP 14 05 54 Resolute eP 14 06 22 e 14 08 32 e 14 12 15 Shawinigan Falls eP 14 09 18 Victoria eP 14 05 38	MARCH 29 U.S.C.G.S. 0.2N, 123.9E Northern Celebes H = 09 35 02.1 h = 84 km Resolute eP 09 48 49 Shawinigan Falls eP' 09 54 09

SEISMOLOGICAL BULLETIN - 1961

MARCH 29 Resolute eP? 17 24 50	MARCH 30 U.S.C.G.S. 22.0N, 107.8W Gulf of California H = 07 42 59.4 h = 20 km Mag 5 1/2 Ottawa P 07 50 01 Resolute eP 07 52 20 d i 07 52 25 eS 07 59 43 SS 08 03 27? Shawinigan Falls eP 07 50 23	MARCH 30 Resolute eP? 20 11 00?
MARCH 29 U.S.C.G.S. 37.1N, 141.3E Near coast of Honshu, Japan H = 18 10 24.4 h = 127 km Resolute eP 18 20 39 c? e 18 40 16	MARCH 30 U.S.C.G.S. 15.2S, 172.8W Samoa Islands region H = 08 49 45.6 h = 25 km Mag 5 3/4 Resolute eP 09 03 38 Victoria eP 09 01 43	MARCH 31 Canadian Arctic H = 00 57 57.2 Mag 1.6 Resolute iP <sub>1</sub> 00 58 15.0 iS <sub>1</sub> 00 58 28.5 D = 111 km
MARCH 29 48.2°N, 124.1°W Olympic Mountain Washington, U.S.A. H = 21 30 01 Mag 2.6 Alberni eP <sub>1</sub> 21 30 22.6 eS <sub>1</sub> 21 30 39.0 D = 134 km Victoria eP <sub>1</sub> 21 30 11.1 eS <sub>1</sub> 21 30 19.3 D = 67 km	MARCH 30 U.S.C.G.S. 32.4N, 103.8E Szechwan Province, China H = 12 00 12.8 h = 81 km Resolute eP 12 11 27?	MARCH 31 Near Clo-ose Bay H = 03 09 56 Mag 2.5 Alberni eP <sub>1</sub> 03 10 06.2 eS <sub>1</sub> 03 10 14.1 D = 64 km Victoria eP <sub>1</sub> 03 10 12.8 eS <sub>1</sub> 03 10 26.2 D = 110 km
MARCH 30 U.S.C.G.S. 0.3N, 123.9E Northern Celebes H = 01 22 19.1 h = 159 km Resolute eP 01 35 59	MARCH 30 U.S.C.G.S. 32.6N, 135.7E South of Honshu, Japan H = 05 20 36.8 h = 300 km Resolute eP 05 31 17 Victoria eP 05 31 35	MARCH 31 Resolute eP 04 26 33 d?
MARCH 30 Resolute iP 15 27 25 d?	MARCH 30 Resolute eP 18 25 08 c?	

DOMINION OBSERVATORIES

MARCH 31  
Resolute  
eP 06 36 50

MARCH 31  
Resolute  
eP 07 33 44 d?

MARCH 31  
Resolute  
eP 09 09 01

MARCH 31  
U. S. C. G. S.  
43.5N, 101.3E  
Outer Mongolia  
H = 11 02 34.9  
h = 79 km  
Resolute  
eP 11 12 44

MARCH 31  
Resolute  
eP 16 41 24 c

MARCH 31  
Resolute  
eP 21 09 02?

SEISMOLOGICAL BULLETIN - 1961

EARTHQUAKES IN THE CANADIAN ARCTIC

The following disturbances were recorded during the first quarter of 1961. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

JANUARY 3 at 12 05 25 U. T. Magnitude 3.4. Originated 550 km from Resolute, N. W. T.

JANUARY 3 at 20 47 48 U. T. Magnitude 4.3. Originated 1250 km from Resolute, N. W. T.

JANUARY 3 at 23 30 45 U. T. Magnitude 2.7. Originated 210 km from Resolute, N. W. T., at a depth of about 4 km.

JANUARY 20 at 11 30 26 U. T. Magnitude 1.0. Originated 49 km from Resolute, N. W. T.

JANUARY 31 at 04 09 01 U. T. Magnitude 1.7. Originated 109 km from Resolute, N. W. T.

FEBRUARY 1 at 10 43 56 U. T. Magnitude 3.2. Originated 234 km from Resolute, N. W. T., at a depth of about 29 km.

MARCH 24 at 06 04 28 U. T. Magnitude 2.5. Originated 57.5 km from Resolute, N. W. T.

MARCH 31 at 00 57 57 U. T. Magnitude 1.6. Originated 111 km from Resolute, N. W. T.

DOMINION OBSERVATORIES

EARTHQUAKES IN EASTERN CANADA  
AND ADJACENT AREAS

The following disturbances were recorded during the first quarter of 1961. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

JANUARY 29 at 00 49 39 U. T. Magnitude 3.8. Epicentre 46°23'N; 66°56'W. Near Napadogan, N.B. Felt by very few persons as "a sudden jar and then a bump". Water pipes rattled. Direction estimated as "northeasterly".

MARCH 6 at 12 13 29 U. T. Rockburst at Kirkland Lake, Ont. (48°09'N; 80°02'W).

MARCH 13 at 10 55 45 U. T. A small shock provisionally located at 45°08'N; 75°23'W. Near Ormond, Ont. Felt for fifty kilometres around the centre, including the city of Ottawa, Ont.

MARCH 22 at 12 02 56 U. T. Magnitude 2.2. Epicentre 45°50'N; 77°05'W. Near Pembroke, Ont., where it was felt by a few people.

SEISMOLOGICAL BULLETIN - 1961

EARTHQUAKES IN WESTERN CANADA  
AND ADJACENT AREAS

The following disturbances were recorded during the first quarter of 1961. The times of observed phases are given in their respective chronological position in the text of this bulletin. The quality (Q) of the epicentre is indicated by a letter from "a" meaning an excellent fit of the observed data to "d" meaning a very poor solution.

JANUARY 2 at 15 54 36 U. T. Magnitude 2.9. Epicentre at 46.2°N; 122.7°W. Near Longview, Washington, U.S.A. Q:b.

JANUARY 4 at 01 53 04 U. T. Magnitude 3.1. About 426 km from Penticton.

JANUARY 4 at 07 26 04 U. T. Magnitude 3.3. Epicentre at 50°55'N; 124°52'W. Head of Butte Inlet. Q:a.

JANUARY 4 at 10 00 57 U. T. Magnitude 1.8. Epicentre at 48.3°N; 121.6°W. South of Mount Baker, Washington, U.S.A. Q:c.

JANUARY 4 at 20 34 29 U. T. Magnitude 2.6. About 128 km from Penticton.

JANUARY 5 at 06 20 06 U. T. Magnitude 1.8. About 50 km from Victoria.

JANUARY 7 at 19 31 04 U. T. Magnitude 2.7. About 267 km from Penticton.

JANUARY 8 at 11 46 15 U. T. Magnitude 3.3. About 352 km from Penticton.

JANUARY 9 at 08 40 48 U. T. Magnitude 2.6. About 310 km from Penticton.

JANUARY 9 at 23 24 56 U. T. Magnitude 2.0. About 170 km from Penticton.

JANUARY 13 at 00 44 36 U. T. Magnitude 2.0. About 130 km from Penticton.

JANUARY 14 at 06 44 26 U. T. Magnitude 2.7. About 158 km from Alberni.

JANUARY 17 at 11 27 50 U. T. Magnitude 3 to 3 1/2. Epicentre at 51.8°N; 125.5°W. North west of Mount Waddington.

## DOMINION OBSERVATORIES

- JANUARY 17 at 15 31 39 U.T. Magnitude less than 2. About 32 km from Victoria.
- JANUARY 18 at 09 14 25 U.T. Magnitude 2.7. About 125 km from Alberni.
- JANUARY 20 at 21 40 27 U.T. Magnitude 2.0. About 146 km from Penticton.
- JANUARY 21 at 09 01 34 U.T. Magnitude 2.1. About 182 km from Penticton.
- JANUARY 24 at 11 54 50 U.T. Magnitude 1.6. About 82 km from Victoria.
- JANUARY 24 at 17 13 00 U.T. Magnitude 2.0. About 269 km from Penticton.
- JANUARY 25 at 08 45 12 U.T. Magnitude 2.2. About 293 km from Penticton.
- JANUARY 25 at 15 43 36 U.T. Magnitude 1.3. About 134 km from Penticton.
- JANUARY 26 at 04 21 57 U.T. Magnitude 2.3. Epicentre at 48.8°N; 125.0°W. In Barkley Sound. Q:c.
- JANUARY 27 at 00 47 35 U.T. Magnitude 1.8. About 131 km from Penticton.
- JANUARY 28 at 11 52 18 U.T. Magnitude 2.8. Epicentre at 47.9°N; 122.9°W. Eastern Puget Sound, Washington, U.S.A. Q:c.
- JANUARY 30 at 08 17 22 U.T. Magnitude 2.0. About 266 km from Penticton.
- FEBRUARY 1 at 00 31 43 U.T. Magnitude 2.0. About 56 km from Alberni.
- FEBRUARY 1 at 00 36 00 U.T. Magnitude 3.9. Epicentre determined by U.S.C.G.S. and D.A.O. to be at 50.2°N; 129.7°W. Off coast of Vancouver Island. Q:b.
- FEBRUARY 2 at 00 44 42 U.T. Magnitude 1.4. About 144 km from Penticton.
- FEBRUARY 2 at 05 50 16 U.T. Magnitude 3.1. Epicentre at 46.8°N; 121.5°W. Near Mount Rainer, Washington, U.S.A. Q:c.

## SEISMOLOGICAL BULLETIN - 1961

- FEBRUARY 2 at 11 04 57 U.T. Magnitude 1.9. About 56 km from Alberni.
- FEBRUARY 2 at 17 07 55 U.T. Magnitude 2.4. About 274 km from Penticton.
- FEBRUARY 6 at 05 19 23 U.T. Magnitude 3.3. Epicentre at 47.5°N; 126.9°W. Off west coast of Washington, U.S.A. Q:c.
- FEBRUARY 7 at 06 08 31 U.T. Magnitude 3. Epicentre at 48.8°N; 129.3°W. Off coast of Vancouver Island. Q:c.
- FEBRUARY 8 at 16 34 14 U.T. Magnitude 2.3. About 85 km from Alberni.
- FEBRUARY 11 at 01 02 26 U.T. Magnitude 2.1. About 178 km from Penticton.
- FEBRUARY 11 at 16 44 53 U.T. Magnitude 1.2. About 150 km from Penticton.
- FEBRUARY 12 at 01 58 58 U.T. Magnitude 2.5. About 326 km from Penticton.
- FEBRUARY 13 at 00 37 09 U.T. Magnitude 1.4. About 142 km from Penticton.
- FEBRUARY 13 at 02 04 33 U.T. Magnitude 1.9. About 294 km from Penticton.
- FEBRUARY 13 at 10 05 58 U.T. Magnitude 2.8. About 254 km from Penticton.
- FEBRUARY 14 at 14 27 19 U.T. Magnitude 2.2. About 189 km from Penticton.
- FEBRUARY 15 at 21 18 00 U.T. Magnitude 2.3. About 242 km from Penticton.
- FEBRUARY 16 at 00 47 42 U.T. Magnitude 2.5. About 142 km from Penticton.
- FEBRUARY 19 at 02 25 00 U.T. Magnitude 2.6. About 106 km from Alberni.
- FEBRUARY 23 at 12 48 56 U.T. Magnitude 2.5. About 238 km from Penticton.

DOMINION OBSERVATORIES

- FEBRUARY 24 at 11 22 08 U. T. Magnitude 2.2. About 75 km from Alberni.
- FEBRUARY 25 at 12 03 21 U. T. Magnitude 2.4. About 266 km from Penticton.
- FEBRUARY 27 at 18 50 21 U. T. Magnitude 2.6. About 88 km from Victoria.
- MARCH 4 at 09 44 12 U. T. Magnitude 2.7. Epicentre at 48°57'N; 125°26'W. Barkley Sound. Q:a.
- MARCH 4 at 09 50 50 U. T. Magnitude 2.4. Epicentre at 48°57'N; 125°30'W. Barkley Sound. Q:a.
- MARCH 4 at 18 04 51 U. T. Magnitude 3.4. About 381 km from Penticton.
- MARCH 6 at 21 30 07 U. T. Magnitude 2.0. About 163 km from Penticton.
- MARCH 8 at 23 16 54 U. T. Magnitude 2.3. About 49 km from Alberni.
- MARCH 10 at 00 35 06. Magnitude 2.4. About 147 km from Penticton.
- MARCH 10 at 07 13 33 U. T. Magnitude 2.1. About 187 km from Victoria.
- MARCH 10 at 21 35 55 U. T. Magnitude 2.0. About 152 km from Penticton.
- MARCH 11 at 06 26 13 U. T. Magnitude 2.1. About 197 km from Penticton.
- MARCH 11 at 17 06 10 U. T. Magnitude 2.2. Epicentre at 48.8°N; 122.4°W. East of Bellingham, Washington, U.S.A. Q:c.
- MARCH 14 at 15 02 17 U. T. Magnitude 2.3. About 256 km from Penticton.
- MARCH 14 at 19 48 13 U. T. Magnitude 2.4. About 246 km from Penticton.
- MARCH 14 at 23 22 45 U. T. Magnitude 1.9. Epicentre at 48.8°N; 122.4°W. Near Bellingham, Washington, U.S.A. Q:c.

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- MARCH 15 at 07 24 25 U. T. Magnitude 2.6. About 298 km from Penticton.
- MARCH 16 at 19 51 07 U. T. Magnitude 1.3. About 64 km from Penticton.
- MARCH 17 at 11 22 28 U. T. Magnitude 1.7. About 86 km from Victoria.
- MARCH 17 at 11 23 54 U. T. Magnitude 1.8. About 218 km from Penticton.
- MARCH 18 at 11 18 50 U. T. Magnitude 1.9. About 174 km from Penticton.
- MARCH 21 at 05 49 32 U. T. Magnitude 3.1. About 427 km from Penticton.
- MARCH 23 at 23 54 46 U. T. Magnitude 2.1. About 54 km from Alberni.
- MARCH 24 at 00 13 27 U. T. Magnitude 1.9. About 149 km from Penticton.
- MARCH 25 at 12 25 59 U. T. Magnitude 3.0. About 386 km from Penticton.
- MARCH 27 at 20 57 52 U. T. Magnitude 1.8. About 147 km from Penticton.
- MARCH 29 at 21 30 01 U. T. Magnitude 2.6. Epicentre at 48.2°N; 124.1°W. Olympic Mountain, Washington, U.S.A. Q:c.
- MARCH 31 at 03 09 56 U. T. Magnitude 2.5. Epicentre at 48.7°N; 124.8°W. Near Clo-oose Bay. Q:c.





**SEISMOLOGICAL SERIES**  
of the  
**DOMINION OBSERVATORY**

**1961-1**  
(Continued)

**Seismological Bulletin**  
**April - June**  
**1961**

**Seismological Service  
of Canada**

OTTAWA, CANADA

Department of Mines and Technical Surveys

DOMINION OBSERVATORIES

1961



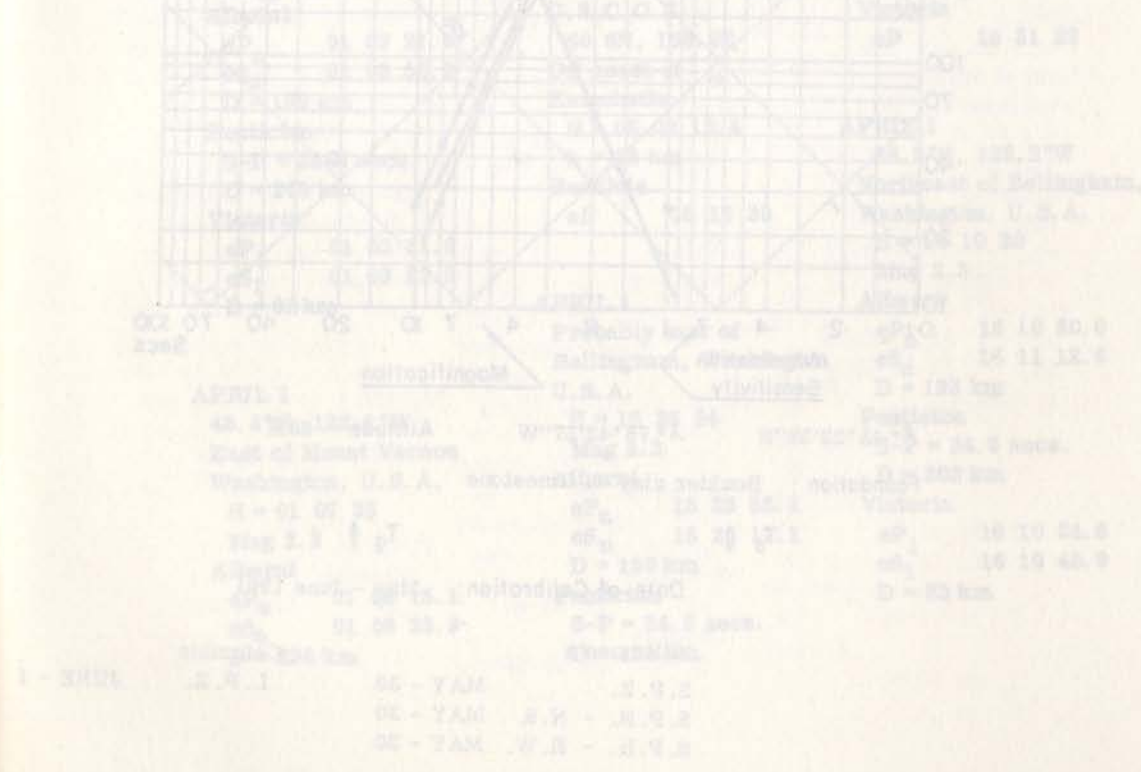


SEISMOLOGICAL BULLETIN - 1961

APRIL - JUNE 1961

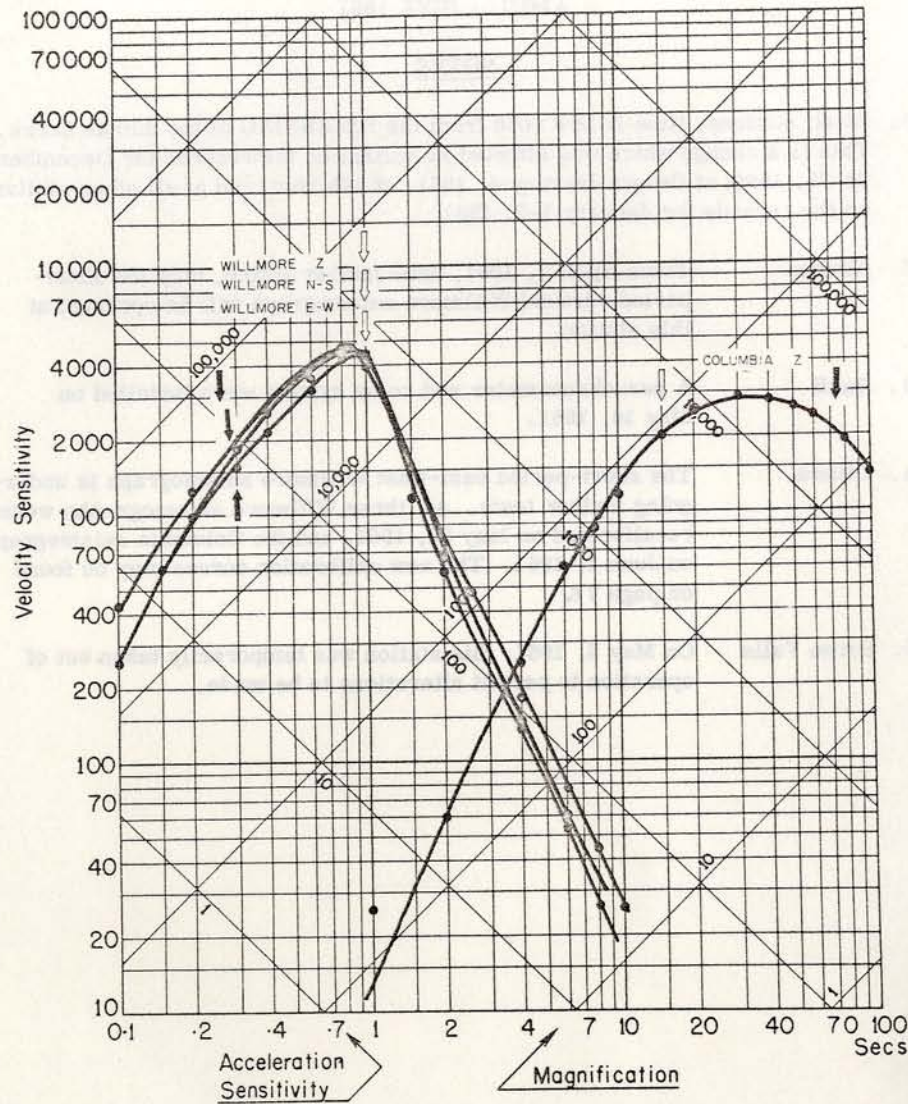
NOTES

1. At all stations, time is now read from the BEGINNING of the minute break. This is a change which was effected at Halifax on the records for December 28-29, 1960; at Ottawa January 4, 1961, at 20h 06m; and at all other stations on the records for January 1-2, 1961. .
2. Alberni From April 7, 1961, until further notice, only the short-period vertical Willmore seismograph will be operated at this station.
3. Banff A new chronometer and relay system were installed on May 14, 1961.
4. Ottawa The short-period east-west Willmore seismograph is undergoing further tests. All three Willmore seismographs were recalibrated on May 30, 1961, and the Columbia seismograph on June 1, 1961. The new calibration curves may be found on page 76.
5. Seven Falls On May 3, 1961, this station was temporarily taken out of operation to permit alterations to be made.



CALIBRATION CURVES

STATION: OTTAWA



$\phi = 45^{\circ}23'38''N$      $\lambda = 75^{\circ}42'57''W$     Altitude 83M

Foundation: Boulder clay on limestone

$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: May - June 1961

Willmore's	Columbia
S. P. Z.	L. P. Z.
S. P. H. - N. S.	
S. P. H. - E. W.	

JUNE - 1



SEISMOLOGICAL BULLETIN - 1961

<p>APRIL 1 48.4°N, 122.2°W East of Mount Vernon, Washington, U.S.A. H = 01 01 19 Mag 2.9 Alberni eP<sub>n</sub> 01 01 56.7 eS<sub>n</sub> 01 02 13.4 D = 254 km Penticton S-P = 25.8 secs. D = 211 km Victoria eP<sub>1</sub> 01 01 34.5 eS<sub>1</sub> 01 01 46.3 D = 97 km</p>	<p>Victoria eP<sub>1</sub> 01 07 49.5 eS<sub>1</sub> 01 08 00.7 D = 92 km</p>	<p>Victoria eP<sub>1</sub> 15 25 38.4 eS<sub>1</sub> 15 25 48.5 D = 91 km</p>
<p>APRIL 1 48.7°N, 122.3°W East of Bellingham, Washington, U.S.A. H = 01 02 57 Mag 2.5 Alberni eP<sub>n</sub> 01 03 27.9 eS<sub>n</sub> 01 03 50.2 D = 199 km Penticton S-P = 25.2 secs. D = 205 km Victoria eP<sub>1</sub> 01 03 11.6 eS<sub>1</sub> 01 03 22.8 D = 92 km</p>	<p>U.S.C.G.S. 30.5N, 139.7E South of Honshu, Japan H = 02 40 43.8 h = 135 km Resolute eP 02 51 40 c? Victoria eP 02 51 57</p>	<p>APRIL 1 U.S.C.G.S. 39.6N, 77.7E Sinkiang Province China H = 15 18 22.8 h = 21 km Mag 6 Alberni eP 15 31 25 Halifax eP 15 31 21 d Resolute eP 15 29 07 PPP? 15 33 07? eS 15 37 56? S<sub>C</sub>? 15 39 02 Shawinigan Falls eP 15 31 25 Victoria eP 15 31 28</p>
<p>APRIL 1 48.4°N, 122.1°W East of Mount Vernon Washington, U.S.A. H = 01 07 35 Mag 2.2 Alberni eP<sub>n</sub> 01 08 15.1 eS<sub>n</sub> 01 08 33.9 D = 236 km</p>	<p>U.S.C.G.S. 50.6N, 159.9E Off coast of Kamchatka H = 08 08 19.4 h = 38 km Resolute eP 08 16 39</p>	<p>APRIL 1 48.9°N, 122.2°W Northeast of Bellingham, Washington, U.S.A. H = 16 10 20 Mag 2.3 Alberni eP<sub>n</sub> 16 10 50.0 eS<sub>n</sub> 16 11 12.6 D = 192 km Penticton S-P = 24.6 secs. D = 202 km Victoria eP<sub>1</sub> 16 10 34.6 eS<sub>1</sub> 16 10 45.9 D = 93 km</p>
<p>APRIL 1 Probably east of Bellingham, Washington U.S.A. H = 15 25 24 Mag 2.3 Alberni eP<sub>n</sub> 15 25 55.1 eS<sub>n</sub> 15 26 17.1 D = 180 km Penticton S-P = 24.2 secs. D = 198 km</p>		

DOMINION OBSERVATORIES

APRIL 2  
U.S.C.G.S.  
30.6N, 138.4E  
South of Honshu,  
Japan  
H = 02 44 49.5  
h = 175 km  
Resolute  
eP 02 55 43

APRIL 2  
U.S.C.G.S.  
8.6S, 75.0W  
Peru  
H = 11 14 30.1  
h = 169 km  
Resolute  
eP 11 26 47

APRIL 2  
Resolute  
eP 22 38 25

APRIL 2  
47.6°N, 121.7°W  
East of Seattle,  
Washington, U.S.A.  
H = 23 32 57  
Mag 2.0  
Penticton  
eP<sub>n</sub> 23 33 31.7  
eS<sub>n</sub> 23 34 03.7  
D = 250 km  
Victoria  
eP<sub>1</sub> 23 33 20.5  
eS<sub>1</sub> 23 33 38.7  
D = 161 km

APRIL 3  
U.S.C.G.S.  
6.8N, 72.9W  
Colombia  
H = 01 10 32.2  
h = 221 km  
Ottawa  
iP 01 17 38 c  
Penticton  
eP 01 19 59 d  
Resolute  
eP 01 21 18 c  
Shawinigan Falls  
eP 01 17 48  
Victoria  
eP 01 20 17

APRIL 3  
U.S.C.G.S.  
53.6N, 161.1E  
Near coast of  
Kamchatka  
H = 02 43 48.9  
h = 25 km  
Resolute  
eP 02 51 46

APRIL 3  
U.S.C.G.S.  
Resolute  
eP 02 56 19

APRIL 3  
Resolute  
eP 05 31 45?

APRIL 3  
U.S.C.G.S.  
17.5N, 84.1W  
Caribbean Sea  
H = 07 55 52.1  
h = 92 km  
Penticton  
eP 08 03 41  
Resolute  
iP 08 05 33

APRIL 3  
Canadian Arctic  
H = 08 42 43  
Mag 3.6  
Resolute  
iP<sub>n</sub> 08 44 39  
iS<sub>n</sub> 08 46 03  
D = 910 km

APRIL 3  
U.S.C.G.S.  
52.5N, 158.9E  
Near coast of  
Kamchatka  
H = 16 32 04.3  
h = 38 km  
Ottawa  
P 16 43 24  
Resolute  
iP 16 40 12 c  
i 16 41 56

APRIL 3  
Ottawa  
eP 23 34 07 c

APRIL 4  
U.S.C.G.S.  
39.7N, 78.1E  
China  
H = 01 17 59.3  
h = 81 km  
Resolute  
eP 01 28 39

APRIL 4  
Resolute  
eP 02 49 56

APRIL 4  
Victoria  
eP 07 10 29

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APRIL 4  
U.S.C.G.S.  
26.9N, 125.8E  
Ryukyu Islands  
H = 07 38 50.2  
h = 48 km  
Resolute  
eP 07 50 30

APRIL 4  
Resolute  
eP 09 18 30

APRIL 4  
U.S.C.G.S.  
40.1N, 77.8E  
China  
H = 09 46 36.6  
h = 16 km  
Ottawa  
P 09 59 52  
Resolute  
eP 09 57 21  
eS 10 06 16?  
Shawinigan Falls  
eP 09 59 42  
Victoria  
eP 09 59 41

APRIL 4  
Resolute  
eP 12 56 25

APRIL 4  
Canadian Arctic  
H = 17 37 54  
Mag 4.5  
Resolute  
eP<sub>n</sub> 17 41 47  
iS<sub>n</sub> 17 44 33  
eLg 17 46 33  
D = 1850 km

APRIL 4  
Resolute  
eP 22 56 30

APRIL 4  
Resolute  
eP 23 20 47

APRIL 4  
Resolute  
eP 04 54 37

APRIL 5  
U.S.C.G.S.  
39.7N, 78.1E  
China  
H = 06 47 07.4  
h = 79 km  
Resolute  
eP 06 57 49?

APRIL 5  
U.S.C.G.S.  
52.2S, 160.0E  
Macquarie Island  
region  
H = 21 30 00.4  
h = 47 km  
Resolute  
eP' 21 49 27  
Shawinigan Falls  
eP' 21 49 35 d

APRIL 6  
Resolute  
eP 01 02 05?

APRIL 6  
U.S.C.G.S.  
39.6N, 77.8E  
China  
H = 01 33 46.9  
h = 33 km  
Resolute  
eP 01 44 32  
Shawinigan Falls  
eP 01 46 48

APRIL 6  
U.S.C.G.S.  
44.3N, 148.1E  
Kurile Islands  
H = 03 18 28.1  
h = 26 km  
Resolute  
eP 03 27 54 c

APRIL 6  
U.S.C.G.S.  
40.1N, 124.8W  
Near coast of  
California  
H = 04 04 46.1  
h = 73 km  
Mag 5  
Alberni  
eP 04 06 50  
Halifax  
P 04 12 54  
Ottawa  
iP 04 11 42 c  
Penticton  
eP 04 06 43  
Resolute  
iP 04 11 51 d?  
eS 04 17 38  
Shawinigan Falls  
eP 04 11 58 c  
Victoria  
eP 04 06 40

DOMINION OBSERVATORIES

APRIL 6  
Resolute  
eP 12 51 20

APRIL 6  
Resolute  
eP 13 24 01?

APRIL 6  
U.S.C.G.S.  
2.2N, 97.2E  
Near coast of  
Sumatra  
H = 14 05 00.3  
h = 25 km  
Resolute  
eP 14 19 01

APRIL 6  
U.S.C.G.S.  
27.8N, 56.7E  
Southern Iran  
H = 18 12 40.7  
h = 109 km  
Resolute  
eP 18 24 22  
Shawinigan Falls  
eP 18 25 47

APRIL 6  
Resolute  
eP 20 20 42?

APRIL 6  
U.S.C.G.S.  
1.9N, 96.5E  
Near coast of  
Sumatra  
H = 22 26 29.6  
h = 25 km  
Resolute  
eP? 22 40 30

APRIL 7  
U.S.C.G.S.  
36.2N, 70.8E  
Hindu Kush  
region  
H = 04 40 37.0  
h = 73 km  
Resolute  
eP 04 51 40

APRIL 7  
U.S.C.G.S.  
36.1N, 70.7E  
Hindu Kush region  
H = 04 52 40.0  
h = 60 km  
Resolute  
eP 05 03 38?

APRIL 7  
Resolute  
eP? 06 03 13?

APRIL 7  
Resolute  
eP 06 06 32?

APRIL 7  
U.S.C.G.S.  
51.1N, 156.7E  
Near coast of  
Kamchatka  
H = 08 35 54.9  
h = 32 km  
Resolute  
iP 08 44 19  
Shawinigan Falls  
eP 08 47 29

APRIL 7  
Resolute  
eP 12 14 32

APRIL 7  
U.S.C.G.S.  
57.2N, 163.3E  
Near coast of  
Kamchatka  
H = 19 54 51.9  
h = 20 km

Halifax  
eP 20 06 11  
Ottawa  
P 20 05 41  
Resolute  
iP 20 02 17  
eS 20 08 15  
Shawinigan Falls  
eP 20 05 43  
Victoria  
eP 20 02 52

APRIL 7  
U.S.C.G.S.  
39.3N, 73.0E  
Kirghiz-Tadzhik  
border  
H = 21 17 43.8  
h = 44 km

Resolute  
iP 21 28 29  
Shawinigan Falls  
iP 21 30 40 d  
Victoria  
eP 21 30 50

APRIL 8  
U.S.C.G.S.  
2.6S, 81.0W  
Near coast of  
Ecuador  
H = 03 06 49.9  
h = 25 km  
Resolute  
eP 03 18 45?

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APRIL 8  
U.S.C.G.S.  
2.2S, 79.2W  
Ecuador  
H = 04 22 08.7  
h = 25 km  
Ottawa  
P 04 30 43  
Resolute  
eP 04 34 02  
Shawinigan Falls  
eP 04 30 56

APRIL 8  
Resolute  
eP 04 41 59?

APRIL 8  
U.S.C.G.S.  
2.1S, 79.1W  
Ecuador  
H = 04 47 01.8  
h = 24 km  
Halifax  
eP 04 55 47 c(?)  
Ottawa  
P 04 55 37  
Resolute  
eP 04 58 56  
Shawinigan Falls  
eP 04 55 48 c

APRIL 8  
U.S.C.G.S.  
2.1S, 79.1W  
Ecuador  
H = 09 03 48.9  
h = 24 km  
Ottawa  
P 09 12 23.5  
Resolute  
eP 09 15 42  
Shawinigan Falls  
eP 09 12 35  
Victoria  
eP 09 14 22

APRIL 8  
U.S.C.G.S.  
10.0N, 122.1E  
Philippine Islands  
H = 11 48 35.9  
h = 62 km  
Resolute  
eP 12 01 44

APRIL 8  
Resolute  
eP? 13 33 02

APRIL 8  
Resolute  
eP 14 01 40

APRIL 8  
Shawinigan Falls  
eP 17 55 52

APRIL 8  
U.S.C.G.S.  
38.2S, 72.7W  
Chile  
H = 17 59 46.7  
h = 60 km  
Mag 6 1/2  
Halifax  
iP 18 12 09.5 c  
Ottawa  
iP 18 12 10 c

Resolute  
eP? 18 14 28?  
e 18 18 00?  
eS? 18 26 53  
Shawinigan Falls  
eP 18 12 17

APRIL 8  
Resolute  
eP 18 49 51 c

APRIL 8  
U.S.C.G.S.  
37.6N, 140.3E  
Honshu, Japan  
H = 19 18 54.8  
h = 189 km  
Ottawa  
iP 19 31 42 c  
Resolute  
iP 19 28 59 d  
i 19 29 29  
Shawinigan Falls  
eP 19 31 43

APRIL 8  
U.S.C.G.S.  
14.8N, 145.1E  
Mariana Islands  
H = 21 36 41.6  
h = 105 km  
Mag 6 1/2

Alberni  
eP 21 48 38  
Resolute  
eP 21 48 59 d  
Victoria  
eP 21 48 43

APRIL 8  
Resolute  
eP 23 39 14

APRIL 9  
U.S.C.G.S.  
14.6N, 145.3E  
Mariana Islands  
H = 00 29 51.7  
h = 118 km  
Resolute  
eP 00 42 08  
i 00 42 09

DOMINION OBSERVATORIES

APRIL 9  
U.S.C.G.S.  
36.5N, 121.3W  
California  
H = 07 23 16.0  
h = 11 km  
Mag 5 3/4  
Ottawa  
P 07 30 11.5  
Resolute  
eP 07 30 54  
eS? 07 37 09?  
Shawinigan Falls  
eP 07 30 28  
Victoria  
eP 07 26 12

APRIL 9  
U.S.C.G.S.  
37.0N, 120.7W  
California  
H = 07 25 41.6  
h = 13 km  
Mag 5 1/2  
Resolute  
eP 07 33 18

APRIL 9  
Resolute  
eP 08 36 47

APRIL 9  
U.S.C.G.S.  
26.0S, 178.4E  
South of Fiji Islands  
H = 09 21 29.0  
h = 655 km  
Ottawa  
eP' 09 39 08 (c)  
e 09 41 45 (c)  
Resolute  
eP' 09 38 58  
e 09 41 35

APRIL 9  
U.S.C.G.S.  
29.7N, 138.2E  
South of  
Honshu, Japan  
H = 13 20 49.0  
h = 352 km  
Resolute  
eP 13 31 27 c?

APRIL 9  
U.S.C.G.S.  
24.1N, 122.2E  
Near coast of  
Formosa  
H = 15 35 05.4  
h = 13 km  
Mag 6  
Resolute  
eP 15 47 07  
i 15 47 09  
i 15 57 00  
Victoria  
eP 15 47 54

APRIL 9  
Resolute  
iP 16 13 41 c

APRIL 9  
Canadian Arctic  
H = 16 40 50.1  
Mag 2.3  
Resolute  
iP<sub>1</sub> 16 40 58.0  
iS<sub>1</sub> 16 41 04  
D = 49 km

APRIL 9  
U.S.C.G.S.  
18.2S, 70.2W  
Chile-Peru border  
H = 17 17 47.6  
h = 29 km  
Resolute  
eP 17 31 08

Shawinigan Falls  
eP 17 28 29

APRIL 9  
U.S.C.G.S.  
18.6N, 147.7E  
Mariana Islands  
region  
H = 19 56 19.0  
h = 65 km  
Resolute  
eP 20 08 19

APRIL 10  
U.S.C.G.S.  
24.1N, 122.3E  
Near coast of Formosa  
H = 06 57 13.6  
h = 22 km  
Resolute  
eP 07 09 16

APRIL 10  
Resolute  
eP 09 15 29?

APRIL 10  
Resolute  
eP? 13 16 04?

APRIL 10  
U.S.C.G.S.  
36.2N, 141.7E  
Near coast of  
Honshu, Japan  
H = 17 15 47.7  
h = 60 km  
Resolute  
eP 17 26 12 c



SEISMOLOGICAL BULLETIN - 1961

APRIL 10  
28 km from Victoria  
H = 18 55 57  
Mag 1.8  
Alberni  
eP<sub>1</sub> 18 56 16.4  
eS<sub>1</sub> 18 56 24.0  
D = 119 km  
Victoria  
eP<sub>1</sub> 18 56 01.8  
eS<sub>1</sub> 18 56 05.2  
D = 28 km

APRIL 10  
Resolute  
eP 19 21 22?

APRIL 10  
Resolute  
eP? 19 27 57

APRIL 10  
U.S.C.G.S.  
0.2S, 132.9E  
Near coast of  
New Guinea  
H = 19 40 15.9  
h = 36 km  
Resolute  
eP 19 54 04

APRIL 10  
Resolute  
eP 20 59 39  
iP 20 59 45 d

APRIL 11  
U.S.C.G.S.  
36.7N, 141.6E  
Off coast of  
Honshu, Japan  
H = 00 29 49.2  
h = 100 km  
Resolute  
iP 00 40 08 c

APRIL 11  
Resolute  
eP 05 24 25?

APRIL 11  
Resolute  
iP 16 36 35

APRIL 11  
U.S.C.G.S.  
8.8S, 117.4E  
Near coast of  
Soembawa Island  
H = 18 32 45.0  
h = 182 km  
Resolute  
eP' 18 51 02?

APRIL 11  
U.S.C.G.S.  
50.0N, 128.6W  
North of Vancouver  
Island  
H = 20 33 48.9  
h = 25 km  
Mag 3.6  
Alberni  
eP 20 34 39  
Penticton  
eP 20 35 23  
Resolute  
eP 20 39 29?  
Victoria  
eP 20 34 54

APRIL 11  
Resolute  
eP 22 03 56?

APRIL 12  
U.S.C.G.S.  
30.8S, 178.6W  
Kermadec Islands  
region  
H = 03 06 53.9  
h = 190 km  
Resolute  
eP' 03 25 21

APRIL 12  
Resolute  
eP? 05 52 58

APRIL 12  
Resolute  
eP? 12 40 15?

APRIL 12  
U.S.C.G.S.  
45.9N, 149.4E  
Kurile Islands  
H = 15 02 00.1  
h = 25 km  
Resolute  
eP 15 11 15

APRIL 12  
U.S.C.G.S.  
0.3N, 123.8E  
Northern Celebes  
H = 17 17 55.3  
h = 122 km  
Resolute  
eP 17 31 38  
Shawinigan Falls  
eP' 17 36 58

DOMINION OBSERVATORIES

APRIL 12  
U.S.C.G.S.  
48.1N, 154.7E  
Kurile Islands  
H = 17 27 46.5  
h = 42 km  
Ottawa  
eP 17 39 35  
Penticton  
eP 17 37 03 c  
Resolute  
eP 17 36 32 c?  
Shawinigan Falls  
eP 17 39 37  
Victoria  
eP 17 36 53 c

APRIL 12  
U.S.C.G.S.  
23.2N, 142.4E  
Mariana Islands  
region  
H = 17 52 02.0  
h = 64 km  
Resolute  
eP 18 03 42 c?

APRIL 12  
U.S.C.G.S.  
13.1N, 88.9W  
El Salvador  
H = 22 20 33.6  
h = 122 km  
Mag 5 3/4  
Alberni  
eP 22 28 55  
Halifax  
eP 22 27 46.5 c  
Ottawa  
iP 22 27 10 c  
Penticton  
eP 22 28 31 d  
Resolute  
iP 22 30 42 c  
PPP? 22 34 56  
eS 22 38 58

Shawinigan Falls  
iP 22 27 27 c  
Victoria  
eP 22 28 44 c

APRIL 12  
Resolute  
iP 22 48 48

APRIL 12  
Resolute  
eP 22 59 07?

APRIL 13  
Resolute  
eP 03 22 33

APRIL 13  
Canadian Arctic  
H = 06 33 11.0  
Mag 1.8  
Resolute  
e 06 33 32.5  
iP<sub>1</sub> 06 33 34  
iS<sub>1</sub> 06 33 55.5  
D = 134 km

APRIL 13  
49.9°N, 120.6°W  
South of Merritt, B.C.  
H = 13 08 01  
Mag 3.0  
Alberni  
eP<sub>1</sub> 13 08 48.0  
D = 333 km  
Penticton  
iP<sub>1</sub> 13 08 16.7  
iS<sub>1</sub> 13 08 28.9  
D = 100 km  
Victoria  
eP<sub>n</sub> 13 08 39.7  
eS<sub>n</sub> 13 09 07.2  
D = 265 km

APRIL 13  
90 km from Penticton  
H = 14 02 22  
Mag 1.7  
Penticton  
eP<sub>1</sub> 14 02 37.0  
eS<sub>1</sub> 14 02 47.9  
D = 90 km

APRIL 13  
U.S.C.G.S.  
27.0N, 128.3E  
Ryukyu Islands  
H = 15 26 11.0  
h = 197 km  
Resolute  
eP 15 37 32 d?

APRIL 13  
U.S.C.G.S.  
40.1N, 77.8E  
Sinkiang, China  
H = 16 34 39.1  
h = 19 km  
Halifax  
eP 16 47 35  
Ottawa  
P 16 47 49  
Penticton  
eP 16 47 36  
Resolute  
eP 16 45 23 c?  
eS 16 54 16  
Shawinigan Falls  
eP 16 47 39  
Victoria  
eP 16 47 38

SEISMOLOGICAL BULLETIN - 1961

APRIL 13  
U.S.C.G.S.  
27.9S, 67.3W  
Argentina  
H = 23 43 04.7  
h = 219 km  
Shawinigan Falls  
eP 23 54 28

APRIL 14  
U.S.C.G.S.  
31.1S, 178.5W  
Kermadec Islands  
H = 04 02 31.2  
h = 60 km  
Resolute  
iP' 04 21 12

APRIL 14  
U.S.C.G.S.  
10.2N, 143.6E  
Mariana Islands  
H = 12 41 02.5  
h = 25 km  
Resolute  
eP 12 53 54

APRIL 15  
U.S.C.G.S.  
34.3N, 141.6E  
Off coast of  
Honshu, Japan  
H = 00 14 49.2  
h = 100 km  
Resolute  
eP 00 25 23  
i? 00 26 08

APRIL 15  
Victoria  
eP 00 41 14

APRIL 15  
U.S.C.G.S.  
40.0N, 77.6E  
Sinkiang China  
H = 02 55 32.8  
h = 25 km  
Resolute  
eP 03 06 18

APRIL 15  
U.S.C.G.S.  
32.2S, 178.9W  
Kermadec Islands  
region  
H = 09 36 24.4  
h = 131 km  
Resolute  
eP' 09 55 01

APRIL 15  
Canadian Arctic  
H = 10 36 10  
Mag 3.9  
Resolute  
eP<sub>n</sub> 10 38 05  
iS<sub>n</sub> 10 39 29  
eLg 10 40 18  
D = 900 km

APRIL 15  
U.S.C.G.S.  
14.9N, 119.3E  
Off coast of  
Luzon, Philippine  
Islands  
H = 10 37 41.9  
h = 115 km  
Resolute  
eP 10 50 23

APRIL 16  
U.S.C.G.S.  
29.9N, 138.8E  
South of Honshu,  
Japan  
H = 06 17 21.3  
h = 387 km  
Resolute  
eP 06 27 55

APRIL 16  
U.S.C.G.S.  
53.5N, 158.7E  
Kamchatka  
H = 11 40 40.7  
h = 27 km  
Alberni  
eP 11 49 05  
Banff  
eP 11 48 33  
Halifax  
iP 11 52 26.5d  
Ottawa  
eP 11 51 58  
Penticton  
iP 11 49 24 c  
Resolute  
iP 11 48 44 d  
Shawinigan Falls  
eP 11 51 59 c  
Victoria  
iP 11 49 14 c

APRIL 16  
U.S.C.G.S.  
51.6N, 130.6W  
Off coast of  
Vancouver Island  
H = 12 22 47.1  
h = 50 km  
Mag 4.2  
Alberni  
eP 12 23 52  
Banff  
eP 12 25 10  
Penticton  
eP 12 24 35  
D = 829 km

## DOMINION OBSERVATORIES

Ottawa eP 12 29 50	APRIL 17 U. S. C. G. S. 31. 8S, 69. 8W	APRIL 17 22 km from Penticton H = 20 28 08 Mag 1. 2
Resolute eP 12 28 31	Central Chile- Argentina border H = 02 32 28. 2 h = 147 km	Penticton eP <sub>1</sub> 20 28 11. 5 eS <sub>1</sub> 20 28 14. 2 D = 22 km
Shawinigan Falls eP 12 30 00	Halifax iP 02 44 14 d	
Victoria eP 12 24 10	Shawinigan Falls eP 02 44 22	APRIL 17 U. S. C. G. S. 20. 8S, 68. 5W Chile-Bolivia border H = 20 35 15. 4 h = 200 km
APRIL 16 47. 4°N, 120. 0°W Near Wenatchie Washington, U. S. A. H = 15 35 02 Mag 3. 1	APRIL 17 Resolute eP 13 02 04?	Penticton eP 20 47 24 Resolute eP 20 48 28?
Alberni eP <sub>n</sub> 15 36 01. 8 D = 434 km	APRIL 17 U. S. C. G. S. 29. 6N, 141. 9E South of Honshu, Japan H = 13 08 10. 8 h = 141 km	Shawinigan Falls eP 20 46 01
Penticton eP <sub>n</sub> 15 35 29. 6 eS <sub>n</sub> 15 35 54. 0 D = 225 km	Resolute eP 13 19 09	APRIL 17 U. S. C. G. S. 21. 3S, 178. 6W Tonga Islands region H = 20 48 12. 5 h = 549 km
Victoria eP <sub>n</sub> 15 35 41. 8 eS <sub>n</sub> 15 36 11. 3 D = 271 km	APRIL 17 U. S. C. G. S. 3. 9N, 31. 5W Mid-Atlantic Ocean H = 16 21 10. 2 h = 25 km	Penticton eP 21 00 06
APRIL 16 Canadian Arctic H = 20 42 45. 2 Mag 2. 5	Resolute eP 16 33 16	APRIL 18 Resolute eP 01 52 22
Resolute iP <sub>1</sub> 20 42 57. 5 iS <sub>1</sub> 20 43 05. 2 D = 94 km	APRIL 17 U. S. C. G. S. 33. 0S, 179. 6W Kermadec Islands H = 04 10 36. 4 h = 25 km	APRIL 18 Resolute eP' 04 29 29
APRIL 16 U. S. C. G. S. 3. 4S, 135. 6E Near coast of New Guinea H = 23 12 52. 2 h = 64 km	Resolute eP 18 15 39?	
Resolute eP 23 26 46 c		

## SEISMOLOGICAL BULLETIN - 1961

APRIL 18 U. S. C. G. S. 13. 1N, 146. 8E Mariana Islands H = 04 14 13. 0 h = 38 km	APRIL 19 Resolute eP 01 49 24	Shawinigan Falls eP 18 24 53 Victoria eP 18 21 59
Resolute eP 04 26 46	APRIL 19 Resolute eP 05 12 53	APRIL 19 U. S. C. G. S. 44. 6N, 150. 2E Kurile Islands H = 20 19 46. 4 h = 27 km
APRIL 18 Resolute eP? 08 08 12	APRIL 19 Resolute eP 07 09 07	Resolute iP 20 29 07 c? eS 20 36 36?
APRIL 18 U. S. C. G. S. 44. 6N, 150. 1E Kurile Islands H = 08 26 54. 8 h = 25 km	APRIL 19 Resolute eP 16 11 00	Shawinigan Falls eP 20 32 05
Resolute iP 08 36 15	APRIL 19 U. S. C. G. S. 44. 2N, 148. 0E Kurile Islands H = 16 12 28. 7 h = 51 km	APRIL 19 U. S. C. G. S. 44. 9N, 149. 5E Kurile Islands H = 22 07 51. 2 h = 34 km
APRIL 18 Resolute eP 08 47 46?	Ottawa iP 16 24 50 d Penticton eP 16 22 29	Resolute iP 22 17 08
APRIL 18 Resolute eP 12 22 34	Resolute eP 16 21 53 c Shawinigan Falls eP 16 24 51 Victoria eP 16 22 20	APRIL 19 Resolute eP 23 39 21?
APRIL 18 Resolute eP? 18 24 28	APRIL 19 U. S. C. G. S. 55. 1N, 163. 6E Kamchatka H = 18 13 51. 8 h = 21 km	APRIL 20 Resolute eP 05 20 18
APRIL 18 Resolute eP 19 44 16?	Ottawa eP 18 24 51 Resolute eP 18 21 33 eS? 18 27 43?	APRIL 20 U. S. C. G. S. 50. 0N, 155. 4E Kurile Islands H = 05 44 34. 7 h = 71 km
APRIL 19 Resolute eP 00 16 27?		Resolute eP 05 53 04

DOMINION OBSERVATORIES

<p>APRIL 20 96 km from Victoria H = 12 22 04 Mag 2.3 Alberni eP<sub>n</sub> 12 22 35.6 eS<sub>n</sub> 12 23 01.6 D = 208 km Victoria eP<sub>1</sub> 12 22 18.9 eS<sub>1</sub> 12 22 30.0 D = 96 km</p>	<p>APRIL 20 Resolute eP 14 31 07</p>	<p>Shawinigan Falls eP 19 42 81</p>
<p>APRIL 20 45°00'N, 74°47'W Between Cornwall, Ont., and Massena, N. Y. H = 13 12 59.7 Mag 2.0 Montreal iP<sub>1</sub> 13 13 16.9 i 13 13 27.2 iS<sub>1</sub> 13 13 30.0 D = 107.5 km Ottawa iP<sub>1</sub> 13 13 13.4 iS<sub>1</sub> 13 13 23.9 D = 86.2 km</p>	<p>APRIL 20 U. S. C. G. S. 32.9S, 178.8W Kermadec Islands region H = 19 19 29.7 h = 58 km Resolute eP' 19 38 11</p>	<p>APRIL 21 U. S. C. G. S. 47.7N, 154.6E Kurile Islands H = 20 10 38.3 h = 27 km Halifax eP 20 23 00 Penticton eP 20 19 59 Resolute iP 20 19 29 d PP 20 21 32? eS 20 26 36 Shawinigan Falls iP 20 22 33 d Victoria eP 20 19 46</p>
<p>APRIL 20 U. S. C. G. S. 52.5N, 171.9E Near Islands H = 13 19 33.3 h = 25 km Resolute eP 13 27 19</p>	<p>APRIL 21 Resolute eP 00 25 02?</p>	<p>APRIL 21 U. S. C. G. S. 51.7N, 173.9W Andreanof Islands H = 21 26 42.1 h = 36 km Mag 5 1/2 Halifax eP 21 37 35 Ottawa eP 21 36 52 Penticton eP 21 33 25 Resolute iP 21 34 02 Shawinigan Falls eP 21 36 56</p>
<p>APRIL 20 U. S. C. G. S. 54.7N, 159.6E Kamchatka H = 14 15 27.7 h = 25 km Resolute eP 14 23 20</p>	<p>APRIL 21 U. S. C. G. S. 48.1N, 154.6E Kurile Islands H = 19 30 36.9 h = 23 km Resolute iP 19 39 26 c?</p>	

SEISMOLOGICAL BULLETIN - 1961

<p>APRIL 22 Resolute eP? 02 10 36</p>	<p>APRIL 23 Canadian Arctic H = 07 25 16.2 Mag 0.9 Resolute iP<sub>1</sub> 07 25 22.5 iS<sub>1</sub> 07 25 27.3 D = 39.2 km</p>	<p>APRIL 23 Resolute eP 13 31 59</p>
<p>APRIL 22 49.0°N, 119.7°W Southwest of Penticton H = 16 03 49 Mag 3.3 Alberni eP 16 04 49.8 D = 391 km Penticton iP<sub>1</sub> 16 03 (52.8) D = 25 km Victoria eP<sub>n</sub> 16 04 36.2 eS<sub>n</sub> 16 05 10.4 D = 333 km</p>	<p>APRIL 23 U. S. C. G. S. 44.6N, 150.2E Kurile Islands H = 09 01 41.8 h = 44 km Mag 6 1/4 Alberni eP 09 11 14 Banff eP 09 11 41 Halifax iP 09 14 22 Ottawa eP 09 13 56 Penticton eP 09 11 33 Resolute iP 09 10 59 c iS 09 18 28 Shawinigan Falls eP 09 13 57 Victoria eP 09 11 23</p>	<p>APRIL 23 Resolute eP 15 04 40</p>
<p>APRIL 22 U. S. C. G. S. 2.8S, 80.8W Near coast of Ecuador H = 19 01 34.4 h = 30 km Ottawa eP 19 10 14 Penticton eP 19 11 54 Resolute eP 19 13 31 Shawinigan Falls eP 19 10 25</p>	<p>APRIL 23 Resolute eP 09 23 12</p>	<p>APRIL 23 U. S. C. G. S. 44.5N, 150.1E Kurile Islands H = 16 51 03.6 h = 76 km Resolute iP 17 00 19 c eS 17 07 48</p>
<p>APRIL 23 U. S. C. G. S. 26.2N, 129.8E Ryukyu Islands H = 05 14 31.1 h = 110 km Penticton eP 05 26 47 Resolute iP 05 26 07 d eS 05 35 44 Victoria eP 05 26 39</p>	<p>APRIL 23 U. S. C. G. S. 44.8N, 150.6E Kurile Islands H = 12 17 59.7 h = 78 km Resolute iP 12 27 13 c?</p>	<p>APRIL 23 Resolute eP 21 09 38</p>



DOMINION OBSERVATORIES

<p>APRIL 23 U.S.C.G.S. 28.7N, 140.5E Bonin Islands H = 22 04 18.6 h = 581 km Resolute eP 22 14 41</p>	<p>APRIL 24 U.S.C.G.S. 44.5N, 150.2E Kurile Islands H = 12 27 39.5 h = 76 km Resolute eP 12 36 55 c?</p>	<p>APRIL 25 U.S.C.G.S. 14.4N, 90.1W Guatemala H = 01 09 16.2 h = 139 km Ottawa eP 01 15 42 Resolute iP 01 19 11 c Shawinigan Falls eP 01 16 00 c</p>
<p>APRIL 24 Resolute eP 03 19 38</p>	<p>APRIL 24 Resolute eP 12 43 04</p>	<p>APRIL 25 U.S.C.G.S. 44.5N, 150.0E Kurile Islands H = 01 17 42.7 h = 78 km Resolute eP 01 26 56 c Shawinigan Falls eP 01 29 55</p>
<p>APRIL 24 Resolute eP 04 51 10</p>	<p>APRIL 24 Resolute eP 13 39 27</p>	<p>APRIL 25 U.S.C.G.S. 0.7S, 124.1E Northern Celebes region H = 02 31 44.2 h = 200 km Resolute eP ? 02 45 22</p>
<p>APRIL 24 U.S.C.G.S. 52.2N, 173.1W Fox Islands H = 04 52 29.3 h = 57 km Resolute eP 04 59 41</p>	<p>APRIL 24 Resolute eP 18 11 21</p>	<p>APRIL 25 U.S.C.G.S. 27.9N, 129.3E Ryukyu Islands H = 23 40 34.3 h = 25 km Resolute iP 23 52 09 c</p>
<p>APRIL 24 Resolute eP? 05 05 38</p>	<p>APRIL 24 Resolute eP 21 32 09</p>	<p>APRIL 25 U.S.C.G.S. 43.6N, 151.0E Kurile Islands H = 00 38 07.4 h = 100 km Resolute eP 00 47 26</p>
<p>APRIL 24 Penticton eP 05 59 06</p>	<p>APRIL 24 Resolute eP 00 24 22</p>	<p>APRIL 25 U.S.C.G.S. 44.6N, 150.1E Kurile Islands H = 19 32 34.2 h = 51 km Resolute iP 19 41 51 c</p>
<p>APRIL 24 Resolute eP 08 33 09</p>	<p>APRIL 25 Resolute eP 00 27 43</p>	<p>APRIL 27 Penticton eP 04 49 15</p>
<p>APRIL 24 Resolute eP 08 36 28</p>	<p>APRIL 25 U.S.C.G.S. 25.2N, 95.4E India-Burma border H = 11 46 46.8 h = 217 km Resolute eP 11 58 36</p>	<p>APRIL 27 Resolute eP 05 39 29</p>

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<p>APRIL 25 U.S.C.G.S. 32.7S, 178.5W Kermadec Islands region H = 11 16 41.4 h = 45 km Mag 5 1/2 Resolute eP' 11 35 27</p>	<p>APRIL 26 U.S.C.G.S. 44.6N, 149.9E Kurile Islands H = 07 38 54.1 h = 20 km Mag 6 Halifax eP 07 51 42.5 Penticton eP 07 48 54 Resolute iP 07 48 16 c eS 07 55 47 Shawinigan Falls eP 07 51 14 Victoria eP 07 48 46</p>	<p>APRIL 26 Resolute eP 12 29 16</p> <p>APRIL 26 Resolute eP 12 48 23</p> <p>APRIL 26 Resolute eP 13 01 13</p> <p>APRIL 26 Resolute eP 13 33 41?</p>
<p>APRIL 25 Resolute eP 14 03 04</p>	<p>APRIL 26 48.2°N, 124.9°W Off west coast of Washington, U.S.A. H = 08 06 34 Mag 2.7 Alberni eP<sub>1</sub> 08 06 52.7 eS<sub>1</sub> 08 07 04.2 D = 119 km Victoria eP<sub>1</sub> 08 06 53.5 eS<sub>1</sub> 08 07 08.5 D = 123 km</p>	<p>APRIL 26 U.S.C.G.S. 0.2N, 124.1E Northern Celebes H = 16 53 29.4 h = 135 km Resolute eP 17 07 09 Shawinigan Falls eP' 17 12 29</p>
<p>APRIL 25 Resolute eP 21 29 13</p>	<p>APRIL 26 U.S.C.G.S. 44.6N, 150.1E Kurile Islands H = 19 32 34.2 h = 51 km Resolute iP 19 41 51 c</p>	<p>APRIL 27 Penticton eP 04 49 15</p>
<p>APRIL 25 U.S.C.G.S. 27.9N, 129.3E Ryukyu Islands H = 23 40 34.3 h = 25 km Resolute iP 23 52 09 c</p>	<p>APRIL 26 U.S.C.G.S. 25.2N, 95.4E India-Burma border H = 11 46 46.8 h = 217 km Resolute eP 11 58 36</p>	<p>APRIL 27 Resolute eP 05 39 29</p>
<p>APRIL 26 U.S.C.G.S. 43.6N, 151.0E Kurile Islands H = 00 38 07.4 h = 100 km Resolute eP 00 47 26</p>		

DOMINION OBSERVATORIES

APRIL 27  
Resolute  
eP 09 10 13?

APRIL 27  
Resolute  
eP 11 14 25?

APRIL 27  
Resolute  
eP 11 25 54

APRIL 17  
Resolute  
eP 17 57 41?

APRIL 27  
U.S.C.G.S.  
12.9S, 75.1W  
Peru  
H = 17 52 16.5  
h = 124 km  
Penticton  
eP 18 03 40  
Resolute  
eP 18 04 58  
Shawinigan Falls  
eP 18 02 10  
Victoria  
eP 18 03 43

APRIL 27  
Resolute  
eP 20 34 58

APRIL 28  
U.S.C.G.S.  
36.3N, 121.6W  
California  
H = 01 02 52.2  
h = 41 km  
Mag 4 1/4  
Resolute  
eP 01 10 31?

APRIL 28  
Resolute  
eP? 02 29 57

APRIL 28  
U.S.C.G.S.  
21.8S, 68.0W  
Southern Bolivia  
H = 08 42 55.9  
h = 132 km  
Shawinigan Falls  
eP 08 53 49

APRIL 28  
Resolute  
eP 14 16 41

APRIL 28  
Resolute  
iP 22 24 46 c?

APRIL 29  
U.S.C.G.S.  
49.8S, 126.8E  
South of Western  
Australia  
H = 06 44 15.6  
h = 119 km  
Resolute  
eP' 07 03 56

APRIL 29  
Resolute  
eP 09 14 12

APRIL 29  
Resolute  
eP 09 25 45

APRIL 29  
U.S.C.G.S.  
40.6N, 127.5W  
Off coast of  
California  
H = 09 19 28.3  
h = 26 km  
Mag 5 1/2  
Halifax  
eP 09 27 55  
Ottawa  
eP 09 26 44  
Penticton  
eP 09 21 56  
Resolute  
eP 09 26 41 d?  
Shawinigan Falls  
eP 09 26 59  
Victoria  
eP 09 21 30

APRIL 29  
U.S.C.G.S.  
71.3N, 7.4W  
Jan Mayen Island  
region  
H = 09 29 09.5  
h = 14 km  
Halifax  
eP 09 36 29  
Resolute  
eP 09 34 22 c?  
eS 09 38 37  
Shawinigan Falls  
eP 09 36 39

APRIL 29  
U.S.C.G.S.  
41.8N, 104.5E  
Outer Mongolia  
H = 10 45 39.1  
h = 25 km  
Resolute  
eP 10 56 08

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APRIL 29  
Victoria  
eP 11 24 39

APRIL 29  
Resolute  
eP 11 57 31

APRIL 29  
Resolute  
eP 16 24 43

APRIL 29  
Resolute  
eP 21 27 24?

APRIL 30  
U.S.C.G.S.  
49.6S, 117.0E  
South of Western  
Australia  
H = 00 10 18.0  
h = 25 km  
Resolute  
eP' 00 30 06  
i 00 30 12

APRIL 30  
Resolute  
eP 00 58 44

APRIL 30  
Penticton  
eP 04 47 46  
Resolute  
eP 04 52 29

APRIL 29  
U.S.C.G.S.  
50.0N, 31.9W  
North Atlantic  
Ocean  
H = 07 33 53.5  
h = 38 km  
Mag 5 1/2  
Halifax  
eP 07 38 48  
Ottawa  
eP 07 39 56  
Penticton  
eP 07 43 04  
Resolute  
iP 07 40 32 d  
i 07 43 13  
eS 07 45 52  
Shawinigan Falls  
eP 07 39 35  
Victoria  
eP 07 43 20

APRIL 30  
Resolute  
eP 10 47 19

APRIL 30  
U.S.C.G.S.  
45.8N, 150.2E  
Kurile Islands  
H = 11 00 46.8  
h = 100 km  
Resolute  
eP 11 09 54 c

APRIL 30  
U.S.C.G.S.  
44.6N, 149.7E  
Kurile Islands  
H = 11 15 19.8  
h = 70 km  
Penticton  
eP 11 25 10  
Resolute  
eP 11 24 35 c  
eS 11 32 04

APRIL 30  
Victoria  
eP 11 24 58

APRIL 30  
Penticton  
eP 14 16 23  
Resolute  
eP 14 21 05  
Victoria  
eP 14 15 56

APRIL 30  
U.S.C.G.S.  
15.3S, 174.4W  
Samoa Islands region  
H = 14 48 11.5  
h = 25 km  
Penticton  
eP 15 00 25  
Resolute  
eP 15 02 07?  
Victoria  
eP 15 00 10

APRIL 30  
U.S.C.G.S.  
40.7N, 127.2W  
Off coast of California  
H = 17 30 38.6  
h = 44 km  
Penticton  
eP 17 33 04  
Resolute  
eP 17 37 47

APRIL 30  
Resolute  
eP 18 42 27

APRIL 30  
Resolute  
eP 21 56 12

DOMINION OBSERVATORIES

MAY 1  
U. S. C. G. S.  
36. 2N, 141. 1E  
Near coast of  
Honshu, Japan  
H = 00 42 16. 0  
h = 136 km  
Resolute  
eP 00 52 35

MAY 1  
U. S. C. G. S.  
40. 6N, 127. 6W  
Off coast of  
California  
H = 02 41 39. 4  
h = 32 km  
Penticton  
eP 02 44 12  
Resolute  
eP 02 48 52  
Victoria  
eP 02 43 41

MAY 1  
U. S. C. G. S.  
40. 5N, 127. 4W  
Off coast of  
California  
H = 02 50 48. 8  
h = 51 km  
Penticton  
eP 02 53 15  
Resolute  
eP 02 57 59  
Victoria  
eP 02 52 49

MAY 1  
U. S. C. G. S.  
40. 6N, 127. 5W  
Off coast of California  
H = 03 23 51. 3  
h = 25 km  
Penticton  
eP 03 26 20  
Resolute  
eP 03 31 02

MAY 1  
U. S. C. G. S.  
40. 7N, 127. 4W  
Off coast of  
California  
H = 07 21 26. 2  
h = 54 km  
Penticton  
eP 07 23 56  
Resolute  
eP 07 28 34  
Victoria  
eP 07 23 24

MAY 1  
U. S. C. G. S.  
45. 4N, 149. 6E  
Kurile Islands  
H = 07 45 09. 6  
h = 25 km  
Resolute  
eP 07 54 27

MAY 1  
Resolute  
eP 09 20 29

MAY 1  
Resolute  
eP? 10 14 33

MAY 1  
U. S. C. G. S.  
40. 6N, 127. 5W  
Off coast of  
California  
H = 12 19 05. 6  
h = 29 km  
Penticton  
eP 12 21 35

Resolute  
eP 12 26 17  
Victoria  
eP 12 21 07

MAY 1  
U. S. C. G. S.  
40. 7N, 127. 3W  
Off coast of  
California  
H = 18 45 28. 9  
h = 69 km  
Resolute  
eP 18 52 36  
Victoria  
eP 18 47 26

MAY 1  
Resolute  
eP? 19 50 45

MAY 2  
U. S. C. G. S.  
40. 9N, 127. 3W  
Off coast of  
California  
H = 01 28 59. 1  
h = 29 km  
Resolute  
eP 01 36 07  
Victoria  
eP 01 30 55

MAY 2  
U. S. C. G. S.  
71. 2N, 6. 9W  
Jan Mayen Island  
H = 03 11 45. 7  
h = 22 km  
Resolute  
eP 03 17 04  
Shawinigan Falls  
eP 03 19 22

MAY 2  
48. 8N, 124. 7W  
Southwest of  
Vancouver Island, B. C.  
H = 05 37 27  
Mag 2. 4  
Alberni  
S-P = 6. 8 secs.  
D = 56 km

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Penticton  
S-P = 44. 5 secs.  
D = 364 km  
Victoria  
eP<sub>1</sub> 05 37 43. 3  
iS<sub>1</sub> 05 37 55. 5  
D = 100 km

MAY 2  
Resolute  
eP 08 35 35?

MAY 2  
U. S. C. G. S.  
45. 3N, 148. 8E  
Kurile Islands  
H = 09 57 34. 0  
h = 25 km  
Resolute  
eP 10 06 52

MAY 2  
U. S. C. G. S.  
40. 7N, 127. 2W  
Off coast of  
California  
H = 10 10 32. 3  
h = 36 km  
Resolute  
eP 10 17 40

MAY 2  
U. S. C. G. S.  
44. 3N, 149. 5E  
Kurile Islands  
H = 11 17 59. 7  
h = 25 km  
Resolute  
eP 11 27 23

MAY 2  
Resolute  
eP? 21 08 15?

MAY 2  
U. S. C. G. S.  
40. 8N, 127. 0W  
Off coast of  
California  
H = 22 37 55. 5  
h = 22 km  
Resolute  
eP 22 45 04

MAY 2  
U. S. C. G. S.  
27. 8N, 176. 5W  
Kermadec Islands  
H = 22 44 44. 3  
h = 47 km  
Mag 6 3/4  
Resolute  
eP' 23 03 22  
Victoria  
eP 22 57 41

MAY 3  
U. S. C. G. S.  
1. 0N, 26. 4W  
Atlantic Ocean  
H = 00 26 17. 0  
h = 25 km  
Resolute  
iP 00 38 46  
Shawinigan Falls  
eP 00 36 31

MAY 3  
Resolute  
eP 04 32 21

MAY 3  
U. S. C. G. S.  
40. 6N, 127. 6W  
Off coast of  
California  
H = 08 48 52. 9  
h = 25 km  
Resolute  
eP 08 56 06

MAY 3  
U. S. C. G. S.  
45. 1N, 150. 1E  
Kurile Islands  
H = 08 56 28. 3  
h = 20 km  
Resolute  
eP 09 05 46

MAY 3  
Victoria  
eP 09 50 57

MAY 3  
U. S. C. G. S.  
51. 7N, 168. 3W  
Fox Islands  
H = 12 16 46. 7  
h = 47 km  
Resolute  
eP 12 23 53

MAY 3  
U. S. C. G. S.  
18. 4N, 122. 2E  
Philippine Islands  
H = 13 10 04. 0  
h = 25 km  
Resolute  
eP 13 22 36 c

## DOMINION OBSERVATORIES

MAY 3 U.S.C.G.S.  
 17.7N, 103.1W  
 Near coast of Mexico  
 H = 14 03 03.5  
 h = 20 km  
 Resolute eP 14 12 51  
 Shawinigan Falls eP 14 10 25

MAY 4 U.S.C.G.S.  
 40.6N, 127.1W  
 Off coast of California  
 H = 02 17 34.0  
 h = 25 km  
 Penticton eP 02 20 02  
 Resolute eP 02 24 42  
 Victoria eP 02 19 33

MAY 4 U.S.C.G.S.  
 17.7N, 46.4W  
 Atlantic Ocean  
 H = 07 00 32.9  
 h = 19 km  
 Resolute eP 07 11 00

MAY 4 U.S.C.G.S.  
 5.1S, 81.0W  
 Near coast of Peru  
 H = 20 20 36.5  
 h = 49 km  
 Resolute eP 20 32 44?

MAY 4 U.S.C.G.S.  
 40.6N, 127.5W  
 Off coast of California  
 H = 20 59 08.8  
 h = 67 km  
 Resolute iP 21 06 16

MAY 4 U.S.C.G.S.  
 40.6N, 127.1W  
 Off coast of California  
 H = 13 07 53.3  
 h = 36 km  
 Resolute eP 13 14 59?

MAY 4 U.S.C.G.S.  
 27.8S, 176.1W  
 Kermadec Islands Region  
 H = 13 43 21.1  
 h = 84 km  
 Mag 6 1/4  
 Resolute eP' 14 01 55?  
 eS? 14 10 44

MAY 4 U.S.C.G.S.  
 6.3N, 126.3E  
 Near coast of Mindanao, Philippine Islands  
 H = 22 32 49.7  
 h = 110 km  
 Resolute eP 22 46 07  
 Shawinigan Falls eP' 22 51 44

MAY 4 U.S.C.G.S.  
 44.3N, 149.4E  
 Kurile Islands  
 H = 00 59 06.3  
 h = 37 km  
 Resolute eP 01 08 29

MAY 4 U.S.C.G.S.  
 17.2S, 167.9E  
 New Hebrides  
 H = 23 13 29.5  
 h = 96 km  
 Resolute eP' 23 31 48?  
 eS? 23 41 40

MAY 4 Shawinigan Falls eP 07 07 37

MAY 4 Resolute eP 13 05 47

MAY 4 Resolute eP 15 34 24

MAY 4 Resolute eP 17 21 06

MAY 4 U.S.C.G.S.  
 40.6N, 127.1W  
 Off coast of California  
 H = 13 07 53.3  
 h = 36 km  
 Resolute eP 13 09 55

MAY 4 U.S.C.G.S.  
 40.6N, 127.5W  
 Off coast of California  
 H = 20 59 08.8  
 h = 67 km  
 Resolute iP 21 06 16

MAY 5 Resolute eP 11 58 48 c?

MAY 5 Resolute eP 12 35 31

MAY 5 U.S.C.G.S.  
 40.6N, 127.1W  
 Off coast of California  
 H = 13 07 53.3  
 h = 36 km  
 Resolute eP 13 14 59?

MAY 5 U.S.C.G.S.  
 27.8S, 176.1W  
 Kermadec Islands Region  
 H = 13 43 21.1  
 h = 84 km  
 Mag 6 1/4  
 Resolute eP' 14 01 55?  
 eS? 14 10 44

MAY 5 U.S.C.G.S.  
 44.3N, 149.4E  
 Kurile Islands  
 H = 00 59 06.3  
 h = 37 km  
 Resolute eP 01 08 29

MAY 5 U.S.C.G.S.  
 17.2S, 167.9E  
 New Hebrides  
 H = 23 13 29.5  
 h = 96 km  
 Resolute eP' 23 31 48?  
 eS? 23 41 40

MAY 5 Resolute eP 07 53 52?

MAY 5 Resolute eP 20 38 17

MAY 5 U.S.C.G.S.  
 40.6N, 127.1W  
 Off coast of California  
 H = 13 07 53.3  
 h = 36 km  
 Resolute eP 13 09 55

MAY 5 U.S.C.G.S.  
 40.6N, 127.5W  
 Off coast of California  
 H = 20 59 08.8  
 h = 67 km  
 Resolute iP 21 06 16

## SEISMOLOGICAL BULLETIN - 1961

MAY 6 U.S.C.G.S.  
 37.4N, 11.2E  
 Mediterranean Sea  
 H = 16 04 33.1  
 h = 30 km  
 Halifax iP 16 14 04.5d  
 Penticton eP 16 17 02  
 Resolute eP 16 14 28  
 Victoria eP 16 17 11

MAY 6 U.S.C.G.S.  
 1.2S, 15.5W  
 Atlantic Ocean  
 H = 19 38 04.6  
 h = 24 km  
 Resolute eP 19 50 59?  
 eS? 20 01 54

MAY 6 U.S.C.G.S.  
 6.3N, 126.3E  
 Near coast of Mindanao, Philippine Islands  
 H = 22 32 49.7  
 h = 110 km  
 Resolute eP 22 46 07  
 Shawinigan Falls eP' 22 51 44

MAY 6 U.S.C.G.S.  
 44.3N, 149.4E  
 Kurile Islands  
 H = 00 59 06.3  
 h = 37 km  
 Resolute eP 01 08 29

MAY 6 U.S.C.G.S.  
 17.2S, 167.9E  
 New Hebrides  
 H = 23 13 29.5  
 h = 96 km  
 Resolute eP' 23 31 48?  
 eS? 23 41 40

MAY 6 Shawinigan Falls eP' 23 32 25  
 Victoria eP 23 26 20

MAY 6 U.S.C.G.S.  
 51.5S, 161.3E  
 Macquarie Island region  
 H = 23 40 54.7  
 h = 21 km  
 Shawinigan Falls eP' 24 00 36

MAY 6 U.S.C.G.S.  
 6.1S, 154.4E  
 Solomon Islands region  
 H = 00 25 40.8  
 h = 123 km  
 Penticton eP 00 38 40  
 Resolute eP 00 39 21?  
 Shawinigan Falls eP' 00 44 28

MAY 6 U.S.C.G.S.  
 40.6N, 127.1W  
 Off coast of California  
 H = 13 07 53.3  
 h = 36 km  
 Resolute eP 13 14 59?

MAY 6 U.S.C.G.S.  
 27.8S, 176.1W  
 Kermadec Islands Region  
 H = 13 43 21.1  
 h = 84 km  
 Mag 6 1/4  
 Resolute eP' 14 01 55?  
 eS? 14 10 44

MAY 6 U.S.C.G.S.  
 44.3N, 149.4E  
 Kurile Islands  
 H = 00 59 06.3  
 h = 37 km  
 Resolute eP 01 08 29

MAY 6 U.S.C.G.S.  
 17.2S, 167.9E  
 New Hebrides  
 H = 23 13 29.5  
 h = 96 km  
 Resolute eP' 23 31 48?  
 eS? 23 41 40

MAY 7 U.S.C.G.S.  
 8.3N, 38.0W  
 Atlantic Ocean  
 H = 01 57 02.4  
 h = 25 km  
 Resolute eP 02 08 36  
 Shawinigan Falls eP 02 05 46

MAY 7 U.S.C.G.S.  
 8.2N, 38.1W  
 Atlantic Ocean  
 H = 02 43 58.5  
 h = 46 km  
 Resolute eP 02 55 31  
 Shawinigan Falls eP 02 52 45

MAY 7 U.S.C.G.S.  
 8.6S, 111.4E  
 Near coast of Java  
 H = 04 32 14.5  
 h = 113 km  
 Halifax eP' 04 51 40 c  
 Ottawa eP' 04 51 38  
 Penticton eP' 04 51 02  
 Resolute eP 04 46 46  
 e 04 50 42 c?  
 Shawinigan Falls eP' 04 51 35

MAY 7 U.S.C.G.S.  
 8.2N, 38.1W  
 Atlantic Ocean  
 H = 02 43 58.5  
 h = 46 km  
 Resolute eP 02 55 31  
 Shawinigan Falls eP 02 52 45

MAY 7 U.S.C.G.S.  
 8.6S, 111.4E  
 Near coast of Java  
 H = 04 32 14.5  
 h = 113 km  
 Halifax eP' 04 51 40 c  
 Ottawa eP' 04 51 38  
 Penticton eP' 04 51 02  
 Resolute eP 04 46 46  
 e 04 50 42 c?  
 Shawinigan Falls eP' 04 51 35

MAY 7 U.S.C.G.S.  
 8.2N, 38.1W  
 Atlantic Ocean  
 H = 02 43 58.5  
 h = 46 km  
 Resolute eP 02 55 31  
 Shawinigan Falls eP 02 52 45

MAY 7 U.S.C.G.S.  
 8.6S, 111.4E  
 Near coast of Java  
 H = 04 32 14.5  
 h = 113 km  
 Halifax eP' 04 51 40 c  
 Ottawa eP' 04 51 38  
 Penticton eP' 04 51 02  
 Resolute eP 04 46 46  
 e 04 50 42 c?  
 Shawinigan Falls eP' 04 51 35

MAY 7 U.S.C.G.S.  
 8.2N, 38.1W  
 Atlantic Ocean  
 H = 02 43 58.5  
 h = 46 km  
 Resolute eP 02 55 31  
 Shawinigan Falls eP 02 52 45

MAY 7 U.S.C.G.S.  
 8.6S, 111.4E  
 Near coast of Java  
 H = 04 32 14.5  
 h = 113 km  
 Halifax eP' 04 51 40 c  
 Ottawa eP' 04 51 38  
 Penticton eP' 04 51 02  
 Resolute eP 04 46 46  
 e 04 50 42 c?  
 Shawinigan Falls eP' 04 51 35

DOMINION OBSERVATORIES

MAY 7 U.S.C.G.S. 40.6N, 127.0W Off coast of California H = 06 03 03.3 h = 32 km Penticton eP 06 05 28 Resolute eP 06 10 11 Victoria eP 06 05 02	MAY 7 U.S.C.G.S. 35.2N, 134.5E Honshu, Japan H = 12 14 15.5 h = 25 km Resolute eP 12 25 02	MAY 7 U.S.C.G.S. 56.4N, 155.8W Near Kodiak Island, H = 21 58 44.1 h = 25 km Resolute eP 22 04 50?
MAY 7 Victoria eP 07 48 51	MAY 7 U.S.C.G.S. 16.0N, 46.9W Atlantic Ocean H = 13 22 04.8 h = 39 km Shawinigan Falls eP 13 29 20 d	MAY 8 U.S.C.G.S. 31.3S, 67.4W Argentina H = 01 54 17.1 h = 84 km Shawinigan Falls eP 02 06 13
MAY 7 U.S.C.G.S. 5.8N, 126.8E Off coast of Mindanao, Philippine Islands H = 10 22 43.7 h = 89 km Halifax eP' 10 41 47 c (?) Ottawa eP' 10 41 38 Penticton eP 10 36 27 Resolute eP 10 36 03 Shawinigan Falls eP' 10 41 39	MAY 7 Resolute eP 15 33 38	MAY 8 Resolute iP 10 02 42
MAY 7 Resolute eP 10 52 07?	MAY 7 U.S.C.G.S. 40.4N, 127.2W Off coast of California H = 16 19 05.9 h = 31 km Penticton eP 16 21 35 Resolute eP 16 26 16	MAY 8 Resolute iP 10 02 42
		MAY 8 Resolute eP 10 36 52
		MAY 8 Resolute iP 12 50 50
		MAY 8 Resolute iP 14 34 08
		MAY 8 U.S.C.G.S. 10.8S, 75.1W Peru H = 18 32 03.5 h = 60 km Resolute eP 18 44 37

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MAY 8 U.S.C.G.S. 24.3S, 69.7W Northern Chile H = 19 23 35.4 h = 48 km Mag 5 1/2 Halifax eP 19 34 42.5 c Ottawa eP 19 34 46 Resolute eP 19 37 22? Shawinigan Falls eP 19 34 53 c	MAY 9 Resolute eP 17 40 39?	MAY 11 U.S.C.G.S. 40.9N, 126.8W Off coast of California H = 04 59 33.5 h = 61 km Resolute eP 05 06 37
MAY 9 Victoria eP 00 00 20	MAY 9 Penticton H = 19 30 51 Mag 1.6 eP <sub>n</sub> 19 31 14.2 eS <sub>n</sub> 19 31 31.8 D = 144 km	MAY 11 U.S.C.G.S. 19.1S, 178.0W Fiji Islands region H = 05 26 36.2 h = 486 km Victoria eP 05 38 14
MAY 9 Resolute eP 00 05 40	MAY 10 Resolute eP? 02 00 34?	MAY 11 U.S.C.G.S. 37.2S, 73.6W Near coast of Chile H = 08 38 27.1 h = 47 km Halifax iP 08 50 48 d Shawinigan Falls eP 08 50 54 c
MAY 9 Resolute eP 11 05 09	MAY 10 Resolute eP 02 51 52?	MAY 11 Resolute eP 13 06 34?
MAY 9 U.S.C.G.S. 40.8N, 127.2W Off coast of California H = 12 06 28.5 Resolute eP 12 13 35	MAY 10 U.S.C.G.S. 15.8S, 172.3W Samoa Islands region H = 10 05 13.7 h = 52 km Victoria eP 10 17 08 d	MAY 11 U.S.C.G.S. 43.8N, 148.6E Off coast of Hokkaido, Japan H = 13 25 42.4 h = 43 km Resolute iP 13 35 08
MAY 9 Canadian Arctic H = 13 04 00.6 Mag 1.6 Resolute iP <sub>1</sub> 13 04 22.6 iS <sub>1</sub> 13 04 39.3 D = 137 km	MAY 11 U.S.C.G.S. 8.4S, 112.5E Near coast of Java H = 00 51 24.2 h = 39 km Resolute eP' 01 09 58 Shawinigan Falls eP' 01 10 52	

## DOMINION OBSERVATORIES

## SEISMOLOGICAL BULLETIN - 1961

MAY 11  
 U.S.C.G.S.  
 44.1N, 149.1E  
 Kurile Islands  
 H = 13 36 36.2  
 h = 57 km  
 Resolute  
 iP 13 45 58

MAY 11  
 U.S.C.G.S.  
 40.7N, 127.3W  
 Off coast of  
 California  
 H = 18 48 50.7  
 h = 43 km  
 Victoria  
 eP 18 50 49  
 Resolute  
 eP 18 55 59

MAY 11  
 Victoria  
 eP 23 46 30

MAY 12  
 Resolute  
 eP 02 21 34

MAY 12  
 Resolute  
 eP 06 38 04

MAY 12  
 U.S.C.G.S.  
 23.9N, 125.8E  
 Ryukyu Islands  
 H = 06 47 21.2  
 h = 100 km  
 Resolute  
 eP 06 59 15

MAY 12  
 U.S.C.G.S.  
 11.5N, 141.5E  
 Mariana Islands  
 region  
 H = 16 47 41.7  
 h = 136 km  
 Resolute  
 eP 17 00 19

MAY 12  
 U.S.C.G.S.  
 40.6N, 127.4W  
 Off coast of  
 California  
 H = 17 36 59.9  
 h = 27 km  
 Resolute  
 eP 17 44 11

MAY 12  
 Resolute  
 eP 21 57 13

MAY 13  
 U.S.C.G.S.  
 40.9N, 127.6W  
 Off coast of  
 California  
 H = 05 43 16.1  
 h = 25 km  
 Resolute  
 eP? 05 50 30

MAY 13  
 U.S.C.G.S.  
 40.6N, 127.6W  
 Off coast of  
 California  
 H = 08 47 36.7  
 h = 43 km  
 Resolute  
 eP 08 54 47  
 Victoria  
 eP 08 49 38

MAY 13  
 U.S.C.G.S.  
 43.4N, 147.8E  
 Off coast of  
 Hokkaido Japan  
 H = 15 49 29.6  
 h = 31 km  
 Resolute  
 eP 15 59 01  
 Shawinigan Falls  
 eP 16 01 58

MAY 13  
 U.S.C.G.S.  
 11.8N, 88.1W  
 Off coast of  
 Nicaragua  
 H = 12 45 04.2  
 h = 74 km  
 Resolute  
 iP 12 55 27 c  
 Shawinigan Falls  
 eP 12 52 13

MAY 13  
 U.S.C.G.S.  
 27.9S, 176.0W  
 Kermadec Islands  
 region  
 H = 14 18 42.4  
 h = 25 km  
 Resolute  
 eP' 14 37 21?

MAY 13  
 U.S.C.G.S.  
 17.5S, 178.8W  
 Fiji Islands region  
 H = 14 52 55.3  
 h = 556 km  
 Resolute  
 eP 15 06 08?  
 e 15 10 18?  
 Shawinigan Falls  
 eP' 15 10 35  
 Victoria  
 eP 15 04 22 c

Victoria  
 eP 15 59 26

MAY 13  
 Resolute  
 eP 16 17 36

MAY 13  
 Resolute  
 eP? 17 32 47

MAY 13  
 U.S.C.G.S.  
 25.3N, 122.6E  
 Off coast of Formosa  
 H = 19 19 37.3  
 h = 261 km  
 Resolute  
 iP 19 31 06 d  
 Victoria  
 eP 19 31 52

MAY 13  
 Resolute  
 eP? 23 13 08?

MAY 14  
 U.S.C.G.S.  
 39.6S, 176.8E  
 New Zealand  
 H = 00 12 33.6  
 h = 40 km  
 Resolute  
 eP' 00 31 38

MAY 14  
 U.S.C.G.S.  
 67.7N, 18.4W  
 North of Iceland  
 H = 15 08 04.2  
 h = 47 km  
 Resolute  
 eP 15 13 16

MAY 14  
 U.S.C.G.S.  
 67.7N, 18.4W  
 North of Iceland  
 H = 15 38 07.5  
 h = 23 km  
 Resolute  
 eP 15 43 22  
 eS 15 47 43?

MAY 14  
 U.S.C.G.S.  
 40.8N, 127.4W  
 Off coast of  
 California  
 H = 19 31 34.4  
 h = 45 km  
 Resolute  
 eP 19 38 42  
 eS 19 44 33?  
 Victoria  
 eP 19 33 32

MAY 14  
 U.S.C.G.S.  
 51.8N, 171.3W  
 Fox Islands  
 H = 03 32 11.7  
 h = 38 km  
 Resolute  
 eP 03 39 22  
 e 03 41 43?  
 Shawinigan Falls  
 eP 03 42 17

MAY 15  
 U.S.C.G.S.  
 20.0S, 177.2W  
 Tonga Islands  
 region  
 H = 20 53 05.3  
 h = 89 km  
 Penticton  
 eP 21 05 39  
 Resolute  
 eP' 21 11 17  
 Victoria  
 eP 21 05 26

MAY 15  
 Victoria  
 eP 21 57 17

MAY 16  
 U.S.C.G.S.  
 52.0N, 171.5W  
 Fox Islands  
 H = 03 52 43.7  
 h = 62 km  
 Resolute  
 eP 03 59 51

MAY 16  
 U.S.C.G.S.  
 16.1N, 87.3W  
 Near coast of  
 Honduras  
 H = 17 57 20.8  
 h = 117 km  
 Resolute  
 eP 18 07 09

DOMINION OBSERVATORIES

<p>MAY 16 U.S.C.G.S. 30.0N, 132.0E Ryukyu Islands H = 21 45 24.0 h = 25 km Mag 5 1/4 Resolute iP 21 56 42 d eS 22 05 56 S<sub>c</sub>S 22 06 48?</p>	<p>Ottawa eP 19 40 07 Resolute eP 19 37 03 i 19 38 45 eS 19 43 13? Shawinigan Falls eP 19 40 09 Victoria eP 19 36 49</p>	<p>MAY 18 U.S.C.G.S. 3.3S, 103.3W Southwest of Galapagos Islands H = 22 08 00.4 h = 60 km Resolute eP 22 19 55?</p>
<p>MAY 17 Resolute eP 02 08 46</p>	<p>MAY 18 Resolute eP? 03 17 49</p>	<p>MAY 18 Victoria eP 23 59 28</p>
<p>MAY 17 U.S.C.G.S. 40.5N, 127.4W Off coast of California H = 03 21 52.4 h = 48 km Resolute eP 03 29 03</p>	<p>MAY 18 Resolute eP? 04 45 24</p>	<p>MAY 19 U.S.C.G.S. 3.8N, 125.7E Off coast of Mindanao, Philippine Islands H = 00 50 20.8 h = 77 km Resolute eP 01 03 52</p>
<p>MAY 17 U.S.C.G.S. 49.0N, 155.6W Kurile Islands H = 08 34 03.2 h = 36 km Resolute eP 08 42 42 c</p>	<p>MAY 18 Victoria eP 06 46 20</p>	<p>MAY 19 U.S.C.G.S. 15.8S, 172.8W Tonga Islands H = 03 42 31.1 h = 25 km Victoria eP 03 54 31</p>
<p>MAY 17 U.S.C.G.S. 52.0N, 173.9E Near Islands H = 19 29 19.3 h = 21 km Mag 6 Banff eP 19 37 15 Halifax eP 19 40 43 d</p>	<p>MAY 18 U.S.C.G.S. 4.6N, 125.7E Near coast of Mindanao, Philippine Islands H = 20 37 57.0 h = 126 km Resolute eP 20 51 19</p>	<p>MAY 19 U.S.C.G.S. 11.3N, 88.3W Off coast of Nicaragua H = 09 25 26.6 h = 34 km Banff eP 09 33 45 c Halifax iP 09 32 57 d</p>

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<p>Ottawa eP 09 32 22 Resolute iP 09 35 55 c Shawinigan Falls eP 09 32 38 Victoria eP 09 33 59</p>	<p>MAY 20 U.S.C.G.S. 44.0N, 148.8E Kurile Islands H = 11 51 01.2 h = 59 km Resolute eP 12 00 23</p>	<p>MAY 21 Canadian Arctic H = 11 56 01.5 Mag 1.1 Resolute iP<sub>1</sub> 11 56 07.0 iS<sub>1</sub> 11 56 11.2 D = 34.4 km</p>
<p>MAY 19 Banff eP 14 50 18 Resolute eP 14 54 52? Victoria eP 14 49 44</p>	<p>MAY 20 Resolute eP 22 50 46</p>	<p>MAY 21 U.S.C.G.S. 40.5N, 127.5W Off coast of California H = 15 15 14.7 h = 25 km Resolute eP 15 22 28</p>
<p>MAY 19 U.S.C.G.S. 24.1N, 123.4E Ryukyu Islands H = 16 37 28.9 h = 71 km Resolute iP 16 49 25 c</p>	<p>MAY 21 Resolute eP? 02 27 58?</p>	<p>MAY 21 U.S.C.G.S. 3.1S, 80.9W Near coast of Ecuador H = 17 41 28.2 h = 27 km Resolute eP 17 53 26? Shawinigan Falls eP 17 50 22</p>
<p>MAY 19 Canadian Arctic H = 22 00 21 Mag 4.4 Resolute iP<sub>n</sub> 22 02 41 d eS<sub>n</sub> 22 04 22 L<sub>g</sub> 22 05 23 D<sub>g</sub> = 1100 km</p>	<p>MAY 21 Resolute eP? 03 48 22</p>	<p>MAY 21 Resolute iP 05 34 00 c</p>
<p>MAY 20 Resolute eP 00 51 16</p>	<p>MAY 21 Resolute eP? 06 19 39</p>	<p>MAY 21 Resolute eP 19 26 44</p>
<p>MAY 20 Resolute eP 00 51 16</p>	<p>MAY 21 Resolute eP? 08 05 41</p>	<p>MAY 21 U.S.C.G.S. 34.3S, 150.4E Australia H = 21 40 03.2 h = 27 km Halifax iP' 22 00 04.5 c Ottawa eP' 21 59 35 Resolute eP' 21 59 11? Shawinigan Falls eP' 21 59 41</p>

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<p>MAY 22 U.S.C.G.S. 25.0S, 67.3W Argentina H = 01 19 05.1 h = 273 km Shawinigan Falls eP 01 30 03</p> <p>MAY 22 Washington, U.S.A. H = 01 57 55 Mag 2.6 Penticton eP<sub>n</sub> 01 58 21.7 iS<sub>n</sub> 01 58 40.9 D = 164 km Victoria eP<sub>n</sub> 01 58 30.5 eS<sub>n</sub> 01 59 00.0 D = 233 km</p> <p>MAY 22 Resolute eP? 03 03 32</p> <p>MAY 22 U.S.C.G.S. 49.0N, 155.6E Kurile Islands H = 08 57 15.0 h = 32 km Banff eP 09 06 36 Resolute iP 09 05 53 Shawinigan Falls eP 09 09 00 Victoria eP 09 06 15</p>	<p>MAY 22 U.S.C.G.S. 21.3S, 174.4W Tonga Islands H = 13 44 35.8 h = 97 km Mag 6 Alberni eP 13 56 54 Banff eP 13 57 22 Penticton eP 13 57 07 Resolute eP' 14 03 03? eS 14 10 53? Victoria eP 13 56 54</p> <p>MAY 22 Resolute eP 14 42 33</p> <p>MAY 22 U.S.C.G.S. 22.8S, 176.1W Tonga Islands H = 17 32 21.6 h = 35 km Mag 6 1/2 Alberni eP 17 44 57 Banff eP 17 45 23 Halifax iP' 17 51 14 d e 18 01 16 c Penticton iP 17 45 00 Resolute eP 17 46 50? e 17 50 50? Shawinigan Falls eP' 17 51 02 Victoria eP 17 44 58 c</p>	<p>MAY 22 Canadian Arctic H = 21 05 30.0 h = 9 km Mag 2.6 Resolute P<sub>n</sub> 21 06 04.5 P<sub>1</sub> 21 06 06.7 i<sub>1</sub> 21 06 24.5 S<sub>n</sub> 21 06 30.0 i 21 06 33.5 S<sub>1</sub> 21 06 34.5 D = 228 km</p> <p>MAY 22 U.S.C.G.S. 22.6S, 177.0W Tonga Islands region H = 23 47 03.2 h = 526 km Banff eP 23 59 15 Victoria eP 23 58 49</p> <p>MAY 23 U.S.C.G.S. 36.4N, 28.3E Dodecanese Islands H = 02 45 16.0 h = 49 km Mag 6 1/4 Banff eP 02 57 58 c Halifax eP 02 56 03.5 Ottawa eP 02 56 47 Resolute eP 02 55 39 eS 03 04 03 ? Shawinigan Falls eP 02 56 32 c Victoria eP 02 58 19</p>
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<p>MAY 23 U.S.C.G.S. 9.8N, 84.0W Costa Rica H = 03 40 26.1 h = 136 km Banff eP 03 48 58 Halifax iP 03 48 00 iP 03 50 28.5 c Ottawa eP 03 47 20 Resolute eP 03 50 54 i 03 53 38 Shawinigan Falls eP 03 47 34 Victoria eP 03 49 15</p> <p>MAY 23 Washington, U.S.A. H = 03 49 31 Mag 2.7 Alberni eP<sub>n</sub> 03 50 00.3 eS<sub>n</sub> 03 50 22.3 D = 188 km Victoria iP<sub>1</sub> 03 49 45.9 iS<sub>1</sub> 03 49 57.9 D = 94 km</p> <p>MAY 23 Resolute eP 06 14 04</p> <p>MAY 23 Canadian Arctic foreshock H = 11 30 11 Mag 3.9 Resolute eP<sub>n</sub> 11 31 45 iS<sub>n</sub> 11 32 53 L<sub>g</sub> 11 33 25 D = 725 km</p>	<p>MAY 23 Canadian Arctic H = 12 02 28 Mag 4.5 Resolute eP<sub>n</sub> 12 04 02 iS<sub>n</sub> 12 05 10 L<sub>g</sub> 12 05 40 D = 725 km</p> <p>MAY 23 Canadian Arctic aftershock H = 12 45 04 Mag 4.0 Resolute eP<sub>n</sub> 12 46 38 iS<sub>n</sub> 12 47 46 L<sub>g</sub> 12 48 20 D = 725 km</p> <p>MAY 23 Resolute eP 16 25 20</p> <p>MAY 23 U.S.C.G.S. 12.6N, 87.3W Near coast of Nicaragua H = 16 44 59.4 h = 138 km Mag 6 1/2 Banff eP 16 53 03 Halifax eP 16 52 08 c Ottawa eP 16 51 35 c Resolute iP 16 55 09 c eS 17 03 24 Shawinigan Falls eP 16 51 52 Victoria iP 16 53 17 c e 16 53 47</p>	<p>MAY 23 Resolute eP 17 09 16?</p> <p>MAY 24 Resolute eP 13 06 55</p> <p>MAY 24 45.5N, 128.5W Off coast of Washington, U.S.A. H = 13 34 46 Mag 4.0 Alberni eP<sub>n</sub> 13 36 04.9 eS<sub>n</sub> 13 37 07.8 D = 511 km Penticton iP<sub>n</sub> 13 36 24.6 i 13 37 05.4 D = 756 km Resolute eP 13 41 21 Victoria eP<sub>n</sub> 13 35 56.0 eS<sub>n</sub> 13 36 59.8 D = 523 km</p> <p>MAY 25 U.S.C.G.S. 27.2S, 71.3W Near coast of Chile H = 04 44 15.1 h = 46 km Alberni e 05 00 02 Shawinigan Falls eP 04 55 46 Victoria e 05 00 19</p>
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<p>MAY 25 U.S.C.G.S. 31.3N, 139.9E South of Honshu Japan H = 09 18 48.4 h = 171 km Resolute eP 09 29 35 Victoria eP 09 29 54</p> <p>MAY 25 Resolute eP 19 17 01 Shawinigan Falls eP 19 20 11</p> <p>MAY 25 Resolute eP? 22 56 10</p> <p>MAY 26 U.S.C.G.S. 32.7S, 109.1W Easter Island region H = 04 36 08.5 h = 43 km Shawinigan Falls eP 04 48 46</p> <p>MAY 26 U.S.C.G.S. 15.4N, 91.9W Western Guatemala H = 05 06 27.0 h = 123 km Ottawa eP 05 12 52 c Resolute eP 05 16 17 i 05 17 06 Shawinigan Falls eP 05 13 10 c</p>	<p>MAY 26 46.1N, 123.0W Near Longview Washington, U.S.A. H = 05 50 45 Mag 3.0 Alberni eP 05 51 39.2 D = 385 km Penticton eP<sub>n</sub> 05 51 46.1 iS<sub>n</sub> 05 52 33.1 D = 442 km Victoria iP 05 51 24.1 iS<sub>n</sub> 05 51 56.1 D = 262 km</p> <p>MAY 26 H = 06 27 57 Mag 2.1 Penticton iP<sub>1</sub> 06 28 21.7 iS<sub>1</sub> 06 28 40.2 D = 152 km</p> <p>MAY 26 U.S.C.G.S. 38.4N, 142.9E Near coast of Honshu, Japan H = 22 49 49.4 h = 60 km Resolute eP 22 59 58 c?</p> <p>MAY 27 U.S.C.G.S. 36.8N, 70.9E Hindu Kush H = 05 14 43.7 h = 92 km Resolute eP 05 25 37</p>	<p>MAY 27 U.S.C.G.S. 41.0N, 142.1E Near coast of Honshu, Japan H = 07 18 12.2 h = 156 km Banff eP 07 28 47 Penticton eP 07 28 37 Resolute iP 07 27 55 c i 07 28 12 Shawinigan Falls eP 07 30 46 Victoria eP 07 28 28</p> <p>MAY 27 Resolute iP 10 33 12 i 10 33 29</p> <p>MAY 27 Resolute eP? 13 27 03</p> <p>MAY 27 U.S.C.G.S. 15.8N, 119.2E Philippine Islands H = 22 38 35.5 h = 92 km Resolute eP 22 51 14</p> <p>MAY 28 Resolute iP 20 23 38 c?</p> <p>MAY 29 Resolute eP 00 05 04</p>
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<p>MAY 29 U.S.C.G.S. 52.1N, 166.6W Fox Islands H = 00 22 55.6 h = 67 km Resolute eP 00 29 51 Victoria eP 00 28 40</p> <p>MAY 29 U.S.C.G.S. 39.0S, 73.4W Southern Chile H = 07 28 11.7 h = 13 km Shawinigan Falls eP 07 40 51</p> <p>MAY 29 U.S.C.G.S. 27.7N, 141.7E Bonin Islands H = 10 29 27.8 h = 25 km Resolute eP 10 40 48</p> <p>MAY 29 U.S.C.G.S. 16.2N, 122.4E Philippine Islands H = 16 51 34.8 h = 25 km Resolute eP 17 04 17</p> <p>MAY 31 H = 11 38 42 Mag 2.2 Victoria iP<sub>1</sub> 11 38 57.9 iS<sub>1</sub> 11 39 09.7 D = 97 km</p>	<p>MAY 31 U.S.C.G.S. 29.8N, 114.0W Gulf of California H = 14 17 43.8 h = 74 km Mag 5 1/2 Alberni eP 14 22 26 Banff eP 14 22 29 Ottawa eP 14 24 20 Penticton eP 14 22 16 Resolute eP 14 25 58? eS 14 32 48? Shawinigan Falls eP 14 24 41 Victoria eP 14 22 13</p> <p>MAY 31 U.S.C.G.S. 48.9N, 154.5E Kurile Islands H = 14 39 20.4 h = 50 km Alberni eP 14 48 15 Banff eP 14 48 44 Halifax iP 14 51 34 d Ottawa eP 14 51 06 Penticton eP 14 48 37 Resolute iP 14 48 01 c Shawinigan Falls iP 14 51 08 c Victoria eP 14 48 23</p>	<p>MAY 31 U.S.C.G.S. 5.3S, 151.6E New Britain H = 19 15 57.0 h = 56 km Banff eP 19 29 21 Ottawa eP' 19 34 48 Penticton eP 19 29 06 Resolute eP 19 29 44? Shawinigan Falls eP' 19 34 51 Victoria eP 19 28 56</p> <p>MAY 31 U.S.C.G.S. 12.8N, 143.5E Mariana Islands H = 21 02 09.6 h = 138 km Resolute eP 21 14 35</p> <p>JUNE 1 U.S.C.G.S. 55.3N, 161.7E Near coast of Kamchatka H = 03 27 39.3 h = 25 km Resolute eP 03 35 25</p> <p>JUNE 1 Resolute iP 06 07 54 c?</p>
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## DOMINION OBSERVATORIES

<p>JUNE 1 U.S.C.G.S. 44.1N, 148.2E Kurile Islands H = 07 58 21.5 h = 67 km Resolute eP 08 07 43</p> <p>JUNE 1 U.S.C.G.S. 19.5N, 69.3W Near coast of Dominican Republic H = 10 02 45.1 h = 53 km Halifax eP 10 08 13 Ottawa eP 10 08 19 Resolute eP 10 12 27 Shawinigan Falls eP 10 08 27 Victoria eP 10 11 51</p> <p>JUNE 1 48.6°N, 128.1°W Off coast of Vancouver Island, B.C. H = 16 26 07 Mag 3.2 Alberni S-P = 31.3 secs D = 256 km Penticton eP 16 27 32.6 D = 722 km Victoria eP<sub>n</sub> 16 26 56.2 eS<sub>n</sub> 16 26 39.1 D = 351 km</p>	<p>JUNE 1 48.6°N, 128.1°W Off coast of Vancouver Island, B.C. H = 18 53 02 Mag 3.2 Penticton eP<sub>n</sub> 18 54 27.7 D = 722 km Victoria eP 18 53 51.6 D = 351 km</p> <p>JUNE 1 U.S.C.G.S. 10.6N, 39.3E Ethiopia H = 23 29 21.1 h = 51 km Mag 6 1/2 Ottawa eP 23 43 08 Resolute eP 23 42 21 PP 23 46 05 eS 23 53 14? Shawinigan Falls eP 23 43 00</p> <p>JUNE 2 U.S.C.G.S. 10.3N, 39.6E Ethiopia H = 00 08 59.8 h = 64 km Resolute eP 00 21 59? PP? 00 25 34? Shawinigan Falls eP 00 22 34</p> <p>JUNE 2 Victoria eP 01 21 23</p>	<p>JUNE 2 U.S.C.G.S. 9.8N, 40.0E Ethiopia H = 04 51 10.4 h = 41 km Halifax eP 05 04 26 Ottawa eP 05 04 59 Resolute eP 05 04 16 PP 05 07 50 eS 05 15 16? Shawinigan Falls eP 05 04 49 c</p> <p>JUNE 2 U.S.C.G.S. 10.3N, 39.6E Ethiopia H = 05 22 29.1 h = 26 km Resolute eP 05 35 33? PP? 05 39 08? Shawinigan Falls eP 05 36 07</p> <p>JUNE 2 U.S.C.G.S. 10.3N, 39.8E Ethiopia H = 05 44 52.4 h = 31 km Resolute eP 05 57 56? PP? 06 01 29? Shawinigan Falls eP 05 58 30</p> <p>JUNE 2 Resolute eP? 06 31 22?</p>
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## SEISMOLOGICAL BULLETIN - 1961

<p>JUNE 2 U.S.C.G.S. 10.3N, 40.0E Ethiopia H = 07 02 52.4 h = 54 km Resolute eP 07 15 53? PP? 07 19 28?</p> <p>JUNE 2 U.S.C.G.S. 79.3N, 4.9E Svalbard region H = 11 06 41.3 h = 25 km Resolute eP 11 11 13</p> <p>JUNE 2 H = 13 56 56 Mag 2.3 Penticton eP<sub>n</sub> 13 57 36.8 eS<sub>n</sub> 13 58 10.5 D = 276 km</p> <p>JUNE 2 Resolute eP 16 35 49?</p> <p>JUNE 2 U.S.C.G.S. 21.3N, 145.9E Mariana Islands H = 18 09 25.9 h = 42 km Resolute eP 18 21 16</p>	<p>JUNE 2 U.S.C.G.S. 2.9S, 79.9W Near coast of Ecuador H = 18 26 08.9 h = 25 km Resolute eP? 18 38 07</p> <p>JUNE 2 H = 19 56 38 Mag 1.5 Penticton eP<sub>1</sub> 19 57 02.9 eS<sub>1</sub> 19 57 21.9 D = 156 km</p> <p>JUNE 3 U.S.C.G.S. 56.1N, 164.8E Off coast of Kamchatka H = 01 13 25.4 h = 29 km Banff eP 01 21 40 Resolute eP 01 20 56 eS 01 26 56?</p> <p>JUNE 3 H = 08 20 46 Mag 1.5 Alberni eP<sub>1</sub> 08 21 06.1 eS<sub>1</sub> 08 21 22.5 D = 127 km Victoria iP<sub>1</sub> 08 20 49.9 iS<sub>1</sub> 08 20 53.0 D = 26 km</p>	<p>JUNE 3 H = 21 36 07 Mag 2.3 Alberni eP<sub>1</sub> 21 36 16.9 eS<sub>1</sub> 21 36 24.2 D = 60 km</p> <p>JUNE 4 Resolute eP 04 40 49</p> <p>JUNE 4 U.S.C.G.S. 33.8N, 81.8E Tibet H = 07 33 05.4 h = 46 km Mag 6 1/2 Banff eP 07 46 20 Halifax eP 07 46 31 c Ottawa eP 07 46 42 Resolute iP 07 44 24 d PP? 07 47 05? PPP? 07 48 48? eS? 07 53 44? SS? 07 58 12? Shawinigan Falls eP 07 46 34 d Victoria eP 07 46 26</p> <p>JUNE 4 U.S.C.G.S. 34.2N, 82.2E Tibet H = 07 43 43.6 h = 30 km Resolute eP 07 55 03 Shawinigan Falls eP 07 57 14</p>
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## DOMINION OBSERVATORIES

JUNE 4  
 U.S.C.G.S.  
 33.6N, 82.4E  
 Tibet  
 H = 13 51 26.6  
 h = 40 km  
 Resolute  
 eP 14 02 49?

JUNE 4  
 47.8N, 123.8W  
 Olympic Mountains  
 Washington U.S.A.  
 H = 16 40 45  
 Mag 2.9  
 Alberni  
 eP<sub>n</sub> 16 41 14.2  
 eS<sub>n</sub> 16 41 36.3  
 D = 184 km  
 Victoria  
 iP<sub>1</sub> 16 40 59.7  
 iS<sub>1</sub> 16 41 10.8  
 D = 91 km

JUNE 4  
 Resolute  
 eP 16 54 08?

JUNE 4  
 Resolute  
 eP 18 48 34?

JUNE 5  
 H = 01 03 43  
 Mag 2.8  
 Penticton  
 eP<sub>n</sub> 01 04 32.3  
 eS<sub>n</sub> 01 05 15.0  
 D = 349km

JUNE 5  
 U.S.C.G.S.  
 28.3N, 54.8E  
 Southern Iran  
 H = 03 31 01.4  
 h = 81 km  
 Resolute  
 eP 03 42 41?

JUNE 5  
 Resolute  
 eP 12 02 17

JUNE 5  
 H = 22 58 28  
 Mag 3.7  
 Penticton  
 eP 22 59 51.3  
 eS<sub>n</sub> 23 00 07.8  
 D = 626 km

JUNE 6  
 U.S.C.G.S.  
 17.6N, 60.9W  
 Leeward Islands  
 H = 00 33 38.2  
 h = 50 km  
 Ottawa  
 eP 00 39 47  
 Shawinigan Falls  
 eP 00 39 49

JUNE 6  
 Resolute  
 eP 02 23 11?

JUNE 6  
 U.S.C.G.S.  
 43.4N, 127.7W  
 Off coast of Oregon  
 H = 03 46 08.6  
 h = 25 km  
 Penticton  
 eP 03 48 13

JUNE 6  
 Ottawa  
 eP 21 57 57

JUNE 7  
 U.S.C.G.S.  
 45.3N, 150.8E  
 Kurile Islands  
 H = 05 03 10.7  
 h = 61 km  
 Resolute  
 eP 05 12 22

JUNE 7  
 U.S.C.G.S.  
 5.4S, 11.6W  
 Ascension Island  
 region  
 H = 14 15 18.9  
 h = 17 km  
 Mag 5 1/4  
 Halifax  
 iP 14 26 22 c  
 Ottawa  
 eP 14 27 09  
 Resolute  
 eP 14 28 37  
 Shawinigan Falls  
 eP 14 27 02

JUNE 8  
 Canadian Arctic  
 H = 05 48 20.4  
 Mag 1.4  
 Resolute  
 iP<sub>1</sub> 05 48 33.5  
 iS<sub>1</sub> 05 48 43.5  
 D = 82 km

JUNE 8  
 Resolute  
 eP 19 03 38?

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JUNE 8  
 Canadian Arctic  
 H = 22 04 06.0  
 Mag 0.8  
 Resolute  
 iP<sub>1</sub> 22 04 10.6  
 iS<sub>1</sub> 22 04 14.0  
 D = 28.7 km

JUNE 9  
 U.S.C.G.S.  
 5.5N, 95.8E  
 Near coast of  
 Sumatra  
 H = 15 17 50.7  
 h = 100 km  
 Resolute  
 eP 15 31 32?

JUNE 9  
 U.S.C.G.S.  
 34.5N, 73.8E  
 Northern India  
 H = 03 55 51.4  
 h = 110 km  
 Resolute  
 eP 04 07 00?

JUNE 9  
 U.S.C.G.S.  
 0.4N, 80.2W  
 Near coast of  
 Ecuador  
 H = 05 53 56.4  
 h = 15 km  
 Ottawa  
 eP 06 02 14

JUNE 9  
 U.S.C.G.S.  
 40.8N, 50.7E  
 Caspian Sea  
 H = 09 36 49.2  
 h = 17 km  
 Banff  
 eP 09 49 37  
 Halifax  
 iP 09 48 38 d  
 Ottawa  
 eP 09 49 07  
 Penticton  
 eP 09 49 48  
 Resolute  
 iP 09 47 13  
 Shawinigan Falls  
 eP 09 48 56

JUNE 9  
 U.S.C.G.S.  
 30.0N, 140.1E  
 South of Honshu  
 Japan  
 H = 15 43 03.1  
 h = 170 km  
 Resolute  
 eP 15 53 55  
 i 15 54 31

JUNE 9  
 H = 19 25 23  
 Mag 1.8  
 Penticton  
 eP<sub>n</sub> 19 25 45.9  
 eS<sub>n</sub> 19 26 03.0  
 D = 140 km

JUNE 9  
 U.S.C.G.S.  
 48.9N, 157.9E  
 Near coast of  
 Kamchatka  
 H = 05 53 00.6  
 h = 60 km  
 Resolute  
 eP 06 01 34

JUNE 10  
 Resolute  
 eP 08 22 01?

JUNE 10  
 U.S.C.G.S.  
 8.1N, 103.4W  
 South of Mexico  
 H = 08 52 01.1  
 h = 25 km  
 Mag 4 3/4  
 Banff  
 eP 09 00 08  
 Ottawa  
 eP 09 00 08  
 Penticton  
 eP 09 00 04  
 Resolute  
 eP 09 02 49?  
 i 09 11 42  
 Shawinigan Falls  
 eP 09 00 26  
 Victoria  
 eP 09 00 06

JUNE 10  
 U.S.C.G.S.  
 32.0S, 70.3W  
 Argentina  
 H = 11 44 49.8  
 h = 83 km  
 Shawinigan Falls  
 eP 11 56 48

JUNE 10  
 U.S.C.G.S.  
 24.1S, 112.1W  
 Easter Islands region  
 H = 20 31 50.9  
 h = 47 km  
 Mag 6  
 Ottawa  
 eP 20 43 43  
 Penticton  
 eP 20 43 26  
 Resolute  
 eP 20 45 36?  
 Shawinigan Falls  
 eP 20 43 55  
 Victoria  
 eP 20 43 20

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JUNE 10  
H = 23 39 22  
Mag 2.3  
Penticton  
eP<sub>1</sub> 23 39 48.0  
eS<sub>1</sub> 23 40 08.1  
D = 164 km

JUNE 11  
U. S. C. G. S.  
51.4N, 159.2E  
Kamchatka  
H = 04 02 41.3  
h = 24 km  
Resolute  
eP 04 10 58

JUNE 11  
U. S. C. G. S.  
28.9N, 54.6E  
Iran  
H = 05 10 26.0  
h = 38 km  
Banff  
eP 05 24 15  
Halifax  
eP 05 23 19 d  
Ottawa  
eP 05 23 43  
Penticton  
eP 05 24 29  
Resolute  
eP 05 22 10  
PP 05 25 08?  
PPP 05 26 52?  
eS 05 31 57  
Shawinigan Falls  
eP 05 23 34  
Victoria  
eP 05 24 34

JUNE 11  
U. S. C. G. S.  
27.3N, 54.5E  
Iran  
H = 05 30 05.9  
h = 25 km  
Ottawa  
eP 05 43 30  
Resolute  
eP 05 41 56  
Shawinigan Falls  
eP 05 43 19

JUNE 11  
U. S. C. G. S.  
51.4N, 159.3E  
Near coast of  
Kamchatka  
H = 05 52 51.7  
h = 18 km  
Resolute  
eP 06 01 08  
Shawinigan Falls  
eP 06 04 31 d

JUNE 11  
U. S. C. G. S.  
29.3N, 55.2E  
Iran  
H = 06 46 54.1  
h = 25 km  
Resolute  
eP 06 58 33

JUNE 11  
U. S. C. G. S.  
28.1N, 54.7E  
Iran  
H = 06 51 29.0  
h = 42 km  
Resolute  
eP 07 03 12

JUNE 11  
Resolute  
eP 07 42 06?

JUNE 11  
U. S. C. G. S.  
28.0N, 54.6E  
Iran  
H = 12 31 26.8  
h = 36 km  
Ottawa  
eP 12 44 45  
Resolute  
eP 12 43 12  
eS? 12 52 55  
Shawinigan Falls  
eP 12 44 35

JUNE 11  
U. S. C. G. S.  
27.6N, 54.6E  
Iran  
H = 13 57 58.6  
h = 63 km  
Resolute  
eP 14 09 43  
Shawinigan Falls  
eP 14 11 08

JUNE 11  
Resolute  
eP 17 11 50

JUNE 11  
U. S. C. G. S.  
24.3N, 98.4E  
Burma-China  
border  
H = 17 15 30.0  
h = 38 km  
Resolute  
eP 17 27 42

SEISMOLOGICAL BULLETIN - 1961

JUNE 11  
U. S. C. G. S.  
51.3N, 159.5E  
Near coast of  
Kamchatka  
H = 20 42 52.4  
h = 43 km  
Resolute  
eP 20 51 07

JUNE 11  
U. S. C. G. S.  
22.1N, 141.8E  
Volcano Islands  
region  
H = 22 00 28.1  
h = 100 km  
Resolute  
iP 22 12 19 d

JUNE 12  
Resolute  
eP 00 24 08?

JUNE 12  
U. S. C. G. S.  
49.6S, 163.8E  
Southwest of  
New Zealand  
H = 07 35 24.4  
h = 34 km  
Halifax  
iP' 07 55 09 d  
Ottawa  
eP' 07 54 51  
Resolute  
eP' 07 54 44  
Shawinigan Falls  
eP' 07 54 54

JUNE 12  
U. S. C. G. S.  
21.5N, 106.0E  
North Viet-Nam  
H = 09 58 17.6  
h = 55 km  
Resolute  
iP 10 10 41 c

JUNE 12  
Penticton  
eP 11 54 20

JUNE 13  
U. S. C. G. S.  
51.9N, 176.5W  
Andreanof Islands  
H = 02 24 25.9  
h = 56 km  
Banff  
eP 02 31 33  
Resolute  
eP 02 31 59?  
Penticton  
eP 02 31 20  
Victoria  
eP 02 31 04

JUNE 13  
U. S. C. G. S.  
44.0N, 148.4E  
Kurile Islands  
H = 15 16 09.9  
h = 44 km  
Resolute  
eP 15 25 35 c

JUNE 13  
Resolute  
eP 17 39 12

JUNE 13  
U. S. C. G. S.  
21.4S, 176.4W  
Tonga Islands  
H = 21 37 55.0  
h = 146 km  
Banff  
eP 21 50 41  
Penticton  
iP 21 50 27 d  
Resolute  
eP' 21 56 11  
Victoria  
eP 21 50 04 d

JUNE 14  
U. S. C. G. S.  
24.5N, 95.0E  
Northern Burma  
H = 00 41 10.3  
h = 52 km  
Resolute  
iP 00 53 21

JUNE 14  
U. S. C. G. S.  
20.1N, 121.5E  
Off coast of Luzon,  
Philippine Islands  
H = 09 07 34.7  
h = 25 km  
Resolute  
eP 09 19 56

JUNE 14  
H = 18 55 01  
Mag 1.9  
Penticton  
eP 18 55 23.1  
eS<sub>1</sub> 18 55 40.2  
D = 139 km

DOMINION OBSERVATORIES

<p>JUNE 14 U. S. C. G. S. 10. 8N, 40. 1E Ethiopia H = 20 32 24. 0 h = 56 km Resolute eP 20 45 22?</p> <p>JUNE 14 U. S. C. G. S. 52. 0N, 172. 2W Fox Islands H = 23 50 44. 0 h = 100 km Penticton eP 23 57 14 Resolute e 23 59 57</p> <p>JUNE 15 U. S. C. G. S. 27. 8N, 54. 8E Iran H = 06 21 40. 1 h = 113 km Resolute eP 06 33 19?</p> <p>JUNE 15 H = 12 18 12 Mag 2. 6 Penticton eP<sub>n</sub> 12 18 50. 2 eS<sub>n</sub> 12 19 22. 2 D = 262 km</p> <p>JUNE 15 H = 19 14 01 Mag 2. 0 Penticton eP<sub>1</sub> 19 14 22. 8 eS<sub>1</sub> 19 14 39. 2 D = 134 km</p>	<p>JUNE 15 48. 2N, 122. 7W Entrance to Puget Sound H = 21 58 27 Mag 2. 2 Alberni eP<sub>n</sub> 21 58 57. 2 eS<sub>n</sub> 21 58 11. 4 D = 195 km Victoria eP<sub>1</sub> 21 58 37. 7 eS<sub>1</sub> 21 58 46. 1 D = 69 km</p> <p>JUNE 15 U. S. C. G. S. 51. 7N, 158. 8E Near coast of Kamchatka H = 22 25 50. 6 h = 25 km Resolute eP 22 34 04 Shawinigan Falls eP 22 37 28 c</p> <p>JUNE 15 U. S. C. G. S. 39. 9N, 146. 2E Off coast of Honshu, Japan H = 22 38 54. 7 h = 78 km Resolute eP 22 48 47 c</p> <p>JUNE 15 45. 4N, 151. 3E Kurile Islands H = 23 24 40. 5 h = 38 km Halifax iP 23 37 16. 5 d Ottawa eP 23 36 50</p>	<p>Penticton eP 23 34 26 Resolute iP 23 33 51 c eS 23 41 13 S<sub>c</sub>S? 23 43 37 Shawinigan Falls eP 23 36 52 Victoria eP 23 34 13</p> <p>JUNE 16 U. S. C. G. S. 45. 6N, 151. 3E Kurile Islands H = 03 17 56. 5 h = 25 km Resolute eP? 03 27 03?</p> <p>JUNE 16 Penticton eP 06 38 29 Resolute e 06 41 05</p> <p>JUNE 16 H = 07 15 29 Mag 2. 1 Penticton eP<sub>1</sub> 07 15 52. 3 eS<sub>1</sub> 07 16 09. 8 D = 144 km</p> <p>JUNE 16 U. S. C. G. S. 41. 1S, 74. 5W Off coast of southern Chile H = 07 08 16. 5 h = 17 km Halifax iP 07 21 01. 5c Ottawa eP 07 21 00</p>
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SEISMOLOGICAL BULLETIN - 1961

<p>Shawinigan Falls eP 07 21 07</p> <p>JUNE 16 49. 0N, 121. 6W South of Hope, B. C. H = 08 17 26 Mag 2. 0 Penticton eP<sub>1</sub> 08 17 47. 5 eS<sub>1</sub> 08 18 04. 0 D = 135 km Victoria eP<sub>1</sub> 08 17 46. 7 D = 130 km</p> <p>JUNE 16 U. S. C. G. S. 8. 8N, 73. 4W Colombia H = 10 31 56. 2 h = 120 km Banff iP 10 41 16 Alberni eP 10 41 47 Halifax iP 10 38 58 d Ottawa eP 10 38 55 d Penticton eP 10 41 26 d Resolute iP 10 42 40 d i 10 43 21 Shawinigan Falls eP 10 39 05 d Victoria eP 10 41 38 d</p>	<p>JUNE 16 Resolute eP 11 10 13?</p> <p>JUNE 16 U. S. C. G. S. 43. 1N, 103. 9E Outer Mongolia H = 12 12 04. 4 h = 23 km Resolute eP? 12 22 23</p> <p>JUNE 16 Penticton eP 18 42 06</p> <p>JUNE 17 H = 03 17 58 Mag 3. 3 Penticton eP<sub>n</sub> 03 19 01. 0 eS<sub>n</sub> 03 19 56. 9 D = 458 km</p> <p>JUNE 17 Canadian Arctic H = 07 38 48. 9 Mag 1. 3 Resolute iP<sub>1</sub> 07 38 57. 3 iS<sub>1</sub> 07 39 03. 7 D = 52. 5 km</p> <p>JUNE 17 U. S. C. G. S. 11. 9S, 75. 3W Peru H = 10 56 30. 3 h = 29 km Mag 5 Ottawa eP 11 06 15 Penticton eP 11 07 58</p>	<p>Resolute eP 11 09 18? i 11 19 53 Shawinigan Falls eP 11 06 24</p> <p>JUNE 17 U. S. C. G. S. 9. 9N, 126. 0E Mindanao Philippine Islands H = 14 32 30. 6 h = 25 km Resolute eP 14 45 40</p> <p>JUNE 17 U. S. C. G. S. 14. 2N, 92. 2W Mexico-Guatemala border H = 15 07 36. 1 h = 147 km Banff eP 15 15 14 c Halifax iP 15 14 52 c Ottawa iP 15 14 10 c Penticton eP 15 15 17 c Resolute eP 15 17 35 c? Shawinigan Falls eP 15 14 28 c Victoria eP 15 15 26 c</p> <p>JUNE 17 Resolute eP? 15 38 03</p>
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## DOMINION OBSERVATORIES

JUNE 17	Resolute	JUNE 19
U.S.C.G.S.	eP 03 26 00?	U.S.C.G.S.
14.5N, 92.1W	i 03 29 59	12.6N, 121.9E
Near coast of	Shawinigan Falls	Luzon
Guatemala	eP' 03 30 49	Philippine Islands
H = 18 39 51.4	i 03 33 36 c	H = 01 45 29.9
h = 105 km	Victoria	h = 120 km
Alberni	eP' 03 30 14 d	Resolute
eP 18 47 55		iP 01 58 20
Halifax		eS? 02 09 12
eP 18 47 08.5 d	JUNE 18	Shawinigan Falls
Ottawa	46.8N, 123.6W	eP' 02 04 12
eP 18 46 27	Southwest Washington	
Penticton	U.S.A.	
eP 18 47 33	H = 09 12 32	
Resolute	Mag 2.8	JUNE 19
eP 18 49 50	Alberni	U.S.C.G.S.
Shawinigan Falls	eP <sub>n</sub> 09 13 13.9	12.5N, 122.2E
eP 18 46 45	D = 286 km	Near coast of Luzon
Victoria	Victoria	Philippine Islands
eP 18 47 43 d	eP <sub>n</sub> 09 13 02.2	H = 02 22 48.3
	eS <sub>n</sub> 09 13 25.4	h = 20 km
	D = 190 km	Resolute
		eP 02 35 48
JUNE 17	JUNE 18	JUNE 19
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
20.8S, 178.9W	31.3S, 179.8E	39.3N, 142.9E
Fiji Islands region	Kermadec Islands	Off coast of Honshu,
H = 21 49 25.8	region	Japan
h = 627 km	H = 13 55 16.6	H = 02 46 03.6
Penticton	h = 434 km	h = 85 km
eP 22 01 12	Ottawa	Resolute
	eP' 14 13 21	eP 02 56 03 c?
JUNE 18	i 14 16 17	
U.S.C.G.S.	Penticton	JUNE 19
5.9S, 113.0E	eP 14 08 02	Resolute
Java Sea	Resolute	eP 07 05 25
H = 03 12 35.7	iP' 14 13 16 d	
h = 641 km	i 14 13 30	JUNE 19
Alberni	Shawinigan Falls	U.S.C.G.S.
eP' 03 30 12	eP' 14 13 27 d	39.2N, 142.9E
Banff		Off coast of
eP' 03 30 19 d		Honshu, Japan
Halifax	JUNE 19	H = 07 38 29.6
iP' 03 30 57.5 c	Penticton	h = 98 km
Ottawa	eP 01 41 51	Resolute
eP' 03 30 50		eP 07 48 30
i 03 33 38		eS 07 56 43
Penticton		S <sub>c</sub> S? 07 58 18?
eP 03 30 17 d		

## SEISMOLOGICAL BULLETIN - 1961

JUNE 19	JUNE 19	JUNE 21
U.S.C.G.S.	U.S.C.G.S.	U.S.C.G.S.
39.7N, 142.6E	53.7N, 160.7E	11.6N, 144.6E
Near coast of	Kamchatka	Mariana Islands
Honshu, Japan	H = 22 17 13.5	H = 02 41 56.2
H = 07 59 38.1	h = 25 km	h = 77 km
h = 23 km	Resolute	Resolute
Resolute	iP 22 25 10	eP 02 54 35
iP 08 09 44		
JUNE 19	JUNE 20	JUNE 21
Resolute	U.S.C.G.S.	U.S.C.G.S.
eP 08 34 03?	11.5N, 44.5E	15.3N, 87.3W
	Gulf of Aden	Honduras
	H = 03 21 26.5	H = 03 57 44.0
	h = 30 km	h = 114 km
JUNE 19	Resolute	Ottawa
49.0N, 121.5W	eP 03 34 35?	eP 04 03 57
South of Hope, B.C.		Penticton
H = 11 46 51		eP 04 05 35
Mag 2.8	JUNE 20	Resolute
Alberni	Ottawa	eP 04 07 36
eP <sub>n</sub> 11 47 23.5	eP 09 55 20	eS? 04 15 47
eS <sub>n</sub> 11 47 49.9	Penticton	Shawinigan Falls
D = 214 km	eP 09 56 58	eP 04 04 15
Penticton	Resolute	Victoria
eP <sub>1</sub> 11 47 12.7	eP 09 59 00	eP 04 05 48 d
eS <sub>1</sub> 11 47 29.5	Shawinigan Falls	
D = 138 km	eP 09 55 37	JUNE 21
Victoria		U.S.C.G.S.
eP <sub>n</sub> 11 47 13.2	JUNE 20	27.9N, 55.0E
D = 141 km	H = 19 01 03	Iran
	Mag 1.9	H = 06 39 22.8
JUNE 19	Penticton	h = 48 km
U.S.C.G.S.	eP <sub>1</sub> 19 01 24.6	Resolute
36.6N, 71.0E	eS <sub>1</sub> 19 01 41.2	eP 06 51 07 c?
Hindu, Kush	D = 136 km	Shawinigan Falls
H = 17 04 30.3		eP 06 52 30
h = 151 km	JUNE 20	
Ottawa	U.S.C.G.S.	JUNE 21
eP 17 17 29	15.8N, 87.4W	Resolute
Penticton	Near coast of	eP 16 15 04
eP 17 17 34	Honduras	
Resolute	H = 21 21 54.2	JUNE 21
iP 17 15 20	h = 137 km	Resolute
i 17 16 06	Resolute	eP 19 06 14
Shawinigan Falls	eP 21 31 43	
eP 17 17 21 d	Shawinigan Falls	
	eP 21 28 20	

## DOMINION OBSERVATORIES

JUNE 21  
 U.S.C.G.S.  
 28.6N, 55.2E  
 Iran  
 H = 19 14 41.9  
 h = 84 km  
 Resolute  
 eP 19 26 19?

JUNE 21  
 Resolute  
 eP 20 38 09

JUNE 21  
 U.S.C.G.S.  
 7.6S, 110.0E  
 Near coast of  
 Java  
 H = 20 25 00.9  
 h = 163 km  
 Halifax  
 iP' 20 44 18 d  
 Ottawa  
 eP' 20 44 14  
 Penticton  
 eP' 20 43 41  
 Resolute  
 eP' 20 43 21  
 e 20 54 24  
 Shawinigan Falls  
 eP' 20 44 13  
 Victoria  
 eP' 20 43 37

JUNE 22  
 U.S.C.G.S.  
 42.4N, 19.6E  
 Albania-Yugoslavia  
 border  
 H = 00 56 04.7  
 h = 53 km  
 Banff  
 eP 01 08 08  
 Ottawa  
 eP 01 06 40

Penticton  
 eP 01 08 17  
 Shawinigan Falls  
 eP 01 06 23  
 Victoria  
 eP 01 08 31

JUNE 22  
 U.S.C.G.S.  
 12.8N, 89.9W  
 Off coast of  
 El Salvador  
 H = 20 00 13.1  
 h = 99 km  
 Ottawa  
 eP 20 06 57  
 Resolute  
 eP 20 10 26  
 Shawinigan Falls  
 eP 20 07 15

JUNE 23  
 Resolute  
 eP 01 21 10

JUNE 23  
 U.S.C.G.S.  
 43.9N, 128.8W  
 Off coast of Oregon  
 H = 09 22 49.8  
 h = 53 km  
 Ottawa  
 eP 09 29 57  
 Resolute  
 eP 09 29 31  
 Shawinigan Falls  
 eP 09 30 10

JUNE 23  
 U.S.C.G.S.  
 18.5N, 145.2E  
 Mariana Islands  
 H = 10 05 53.4  
 h = 256 km  
 Resolute  
 iP 10 17 18

JUNE 23  
 U.S.C.G.S.  
 35.2N, 140.0E  
 Honshu, Japan  
 H = 11 04 59.1  
 h = 138 km  
 Resolute  
 eP 11 15 25

JUNE 23  
 U.S.C.G.S.  
 46.9N, 153.9E  
 Kurile Islands  
 H = 13 20 13.9  
 h = 35 km  
 Resolute  
 iP 13 29 11 c

## SEISMOLOGICAL BULLETIN - 1961

JUNE 23  
 U.S.C.G.S.  
 28.5N, 55.5E  
 Iran  
 H = 16 36 28.0  
 h = 54 km  
 Resolute  
 eP 16 48 09

JUNE 23  
 Resolute  
 eP 21 36 57?

JUNE 24  
 U.S.C.G.S.  
 13.6N, 90.2W  
 Near coast of  
 El Salvador  
 H = 05 07 56.0  
 h = 90 km  
 Mag 4 3/4  
 Ottawa  
 eP 05 14 34  
 Resolute  
 iP 05 18 02  
 Shawinigan Falls  
 eP 05 14 52  
 Victoria  
 eP 05 16 00

JUNE 24  
 Banff  
 eP 09 14 24

JUNE 24  
 Resolute  
 eP? 14 02 04

JUNE 24  
 H = 22 47 26  
 Mag 2.1  
 Alberni  
 iP<sub>1</sub> 22 47 35.4  
 iS<sub>1</sub> 22 47 42.6  
 D = 59 km

JUNE 24  
 H = 23 33 04  
 Mag 1.9  
 Alberni  
 iP<sub>1</sub> 23 33 13.3  
 iS<sub>1</sub> 23 33 20.0  
 D = 55 km

JUNE 25  
 U.S.C.G.S.  
 40.8N, 144.1E  
 Near coast of  
 Honshu, Japan  
 H = 02 29 29.9  
 h = 57 km  
 Resolute  
 eP 02 39 22

JUNE 25  
 U.S.C.G.S.  
 19.4S, 177.9W  
 Fiji Islands  
 H = 09 10 04.2  
 h = 489 km  
 Banff  
 eP 09 22 17  
 Penticton  
 eP 09 21 57

JUNE 25  
 Resolute  
 eP? 10 21 35

JUNE 25  
 U.S.C.G.S.  
 40.5N, 144.6E  
 Off coast of  
 Honshu, Japan  
 H = 12 18 53.3  
 h = 24 km  
 Resolute  
 eP 12 28 51  
 i 12 29 00

JUNE 25  
 U.S.C.G.S.  
 18.9N, 121.3E  
 Near coast of  
 Luzon  
 Philippine Islands  
 H = 16 21 53.0  
 h = 143 km  
 Resolute  
 eP 16 34 10

JUNE 25  
 U.S.C.G.S.  
 21.7N, 143.1E  
 North of Mariana  
 Islands  
 H = 16 46 32.9  
 h = 13 km  
 Mag 5 3/4  
 Penticton  
 eP 16 58 36  
 Resolute  
 eP 16 58 28 d?  
 eS 17 08 14

JUNE 25  
 H = 19 10 28  
 Mag 2.1  
 Penticton  
 iP<sub>1</sub> 19 10 54.9  
 iS<sub>1</sub> 19 11 15.5  
 D = 168 km

JUNE 25  
 U.S.C.G.S.  
 36.6N, 141.6E  
 Near coast of  
 Honshu, Japan  
 H = 19 14 02.3  
 h = 25 km  
 Resolute  
 eP 19 24 30

DOMINION OBSERVATORIES

<p>JUNE 25 U. S. C. G. S. 37. 9S, 73. 3W Near coast of southern Chile H = 19 32 14. 4 h = 124 km Ottawa eP 19 44 31 Shawinigan Falls eP 19 44 38 d</p> <p>JUNE 25 Resolute eP 19 45 35</p> <p>JUNE 25 H = 23 04 10 Mag 2. 8 Alberni eP<sub>n</sub> 23 04 40. 8 eS<sub>n</sub> 23 05 04. 8 D = 196 km</p> <p>JUNE 26 Resolute eP? 03 00 45</p> <p>JUNE 26 Resolute iP 07 20 20 c?</p> <p>JUNE 26 U. S. C. G. S. 52. 4N, 174. 5E Near Islands H = 14 47 26. 1 h = 60 km Mag 5 1/2 Banff eP 14 55 13</p>	<p>Ottawa eP 14 58 07 Resolute iP 14 55 05 c? Shawinigan Falls eP 14 58 09 c Victoria eP 14 55 02</p> <p>JUNE 26 U. S. C. G. S. 11. 2N, 74. 5W Near coast of Colombia H = 16 43 40. 5 h = 89 km Resolute eP 16 54 12 Shawinigan Falls eP 16 50 32</p> <p>JUNE 27 U. S. C. G. S. 8. 5S, 74. 4W Peru-Brazil border H = 03 07 47. 8 h = 170 km Ottawa eP 03 16 56 Resolute eP 03 20 00? Shawinigan Falls eP 03 17 06</p> <p>JUNE 27 U. S. C. G. S. 53. 6N, 163. 4W Unimak Island region H = 03 22 09. 2 h = 93 km Resolute eP 03 28 44</p>	<p>JUNE 27 U. S. C. G. S. 27. 8N, 99. 4E China H = 07 03 42. 2 h = 33 km Mag 6 1/2 Resolute eP 07 15 35 d?</p> <p>JUNE 27 U. S. C. G. S. 54. 6N, 157. 7E Kamchatka H = 07 52 23. 7 h = 19 km Ottawa eP 08 03 38 c Resolute iP 08 00 22 c Shawinigan Falls eP 08 03 39 c Victoria eP 08 00 57 c</p> <p>JUNE 27 Resolute eP 10 57 48</p> <p>JUNE 27 H = 18 40 03 Mag 2. 5 Penticton eP<sub>n</sub> 18 40 34. 4 eS<sub>n</sub> 18 40 58. 9 D = 200 km</p> <p>JUNE 27 Resolute iP 19 25 00 d?</p> <p>JUNE 27 Resolute eP 20 33 42</p>
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<p>JUNE 27 H = 21 49 28 Mag 2. 3 Penticton eP<sub>n</sub> 21 49 49. 3 eS<sub>n</sub> 21 50 05. 6 D = 133 km</p> <p>JUNE 28 Resolute eP 01 27 36</p> <p>JUNE 28 U. S. C. G. S. 31. 2N, 104. 0E China H = 04 21 53. 8 h = 34 km Resolute eP 04 33 26</p> <p>JUNE 28 H = 10 22 46 Mag 3. 0 Penticton iP<sub>n</sub> 10 23 15. 0 D = 186 km Victoria eP<sub>n</sub> 10 23 24. 6 eS<sub>n</sub> 10 23 57. 0 D = 266 km</p> <p>JUNE 28 Resolute P 15 39 55. 5 d S 15 42 43. 5 L 15 44 38? D = 1850 km Mag 4. 9 Shawinigan Falls L = 15 54 18 D = 3910 km? Victoria eP 15 44 09</p>	<p>JUNE 28 Banff eP 19 21 11 Montreal eL 19 36 17 D = 3930 km? Resolute P 19 21 44 c S 19 24 32 L 19 26 32 D = 1850 km? Mag 5. 1 Shawinigan Falls L 19 36 00 D = 3860 km?</p> <p>JUNE 28 Victoria eP 19 26 15</p> <p>JUNE 28 Alberni eP 20 49 10</p> <p>JUNE 28 Alberni eP 21 26 17</p> <p>JUNE 28 H = 22 48 00 Mag 1. 8 Penticton eP<sub>1</sub> 22 48 23. 3 eS<sub>1</sub> 22 48 41. 2 D = 147 km</p> <p>JUNE 28 Resolute P 22 56 19 d S 22 59 09? L 23 01 08 D = 1875 km? Shawinigan Falls L 23 11 00 D = 3960 km?</p>	<p>JUNE 29 U. S. C. G. S. 13. 8S, 166. 0E New Hebrides H = 09 22 55. 8 h = 37 km Mag 6 1/4 Halifax iP' 09 42 06 d Ottawa eP' 09 41 44 Penticton eP 09 36 57 Resolute eP 09 37 06? e 09 41 20 Shawinigan Falls eP' 09 41 48 Victoria eP 09 35 45 c</p> <p>JUNE 29 Resolute eP 11 44 02</p> <p>JUNE 29 U. S. C. G. S. 52. 2N, 173. 4W Andreanof Islands H = 14 02 42. 5 h = 76 km Alberni eP 14 08 56 Ottawa eP 14 12 42 Penticton eP 14 09 19 Resolute eP 14 09 51 i 14 12 08 Shawinigan Falls eP 14 12 46 Victoria eP 14 09 02 c</p>
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DOMINION OBSERVATORIES

JUNE 29

Canadian Arctic

H = 19 31 19.4

Mag 1.3

Resolute

iP<sub>1</sub> 19 31 26

iS<sub>1</sub> 19 31 31

D = 41 km

JUNE 29

U. S. C. G. S.

85.0N, 97.3E

Severnaya Zemlya  
region

H = 22 01 21.0

h = 11 km

Resolute

eP 22 06 00

eS 22 09 51

JUNE 29

H = 23 53 26

Mag 2.3

Alberni

eP<sub>1</sub> 23 53 49.4

eS<sub>1</sub> 23 54 07.1

D = 147 km

JUNE 30

Resolute

eP 05 15 47?

SEISMOLOGICAL BULLETIN - 1961

EARTHQUAKES IN THE CANADIAN ARCTIC

The following disturbances were recorded during the second quarter of 1961. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

APRIL 3 at 08 42 43 U. T. Magnitude 3.6. Originated 910 km from Resolute, N. W. T.

APRIL 4 at 17 37 54 U. T. Magnitude 4.5. Originated 1850 km from Resolute, N. W. T.

APRIL 5 at 01 13 08 U. T. Magnitude 1.4. Originated 32.8 km from Resolute, N. W. T.

APRIL 9 at 16 40 50 U. T. Magnitude 2.3. Originated 49 km from Resolute, N. W. T.

APRIL 13 at 06 33 11 U. T. Magnitude 1.8. Originated 134 km from Resolute, N. W. T.

APRIL 15 at 10 36 10 U. T. Magnitude 3.9. Originated 900 km from Resolute, N. W. T.

APRIL 16 at 20 42 45 U. T. Magnitude 2.5. Originated 94 km from Resolute, N. W. T.

APRIL 23 at 07 25 16 U. T. Magnitude 0.9. Originated 39.2 km from Resolute, N. W. T.

MAY 9 at 13 04 01 U. T. Magnitude 1.6. Originated 137 km from Resolute, N. W. T.

MAY 19 at 22 00 21 U. T. Magnitude 4.4. Originated 1100 km from Resolute, N. W. T.

MAY 21 at 11 56 02 U. T. Magnitude 1.1. Originated 34.4 km from Resolute, N. W. T.

MAY 22 at 21 05 30 U. T. Magnitude 2.6. Originated 228 km from Resolute, N. W. T. at a depth of about 9 km.

MAY 23 at 11 30 11 U. T. Magnitude 3.9. Originated 725 km from Resolute, N. W. T. It is considered to be a foreshock of the earthquake which follows. The seismic traces are very similar.

MAY 23 at 12 02 28 U. T. Magnitude 4.5. Originated 725 km from Resolute, N. W. T. This earthquake has one foreshock and one after-shock.

DOMINION OBSERVATORIES

MAY 23 at 12 45 04 U.T. Magnitude 4.0. Originated 725 km from Resolute, N.W.T. Aftershock of the preceding earthquake.

JUNE 8 at 05 48 20 U.T. Magnitude 1.4. Originated 82 km from Resolute, N.W.T.

JUNE 8 at 22 04 06 U.T. Magnitude 0.8. Originated 29 km from Resolute, N.W.T.

JUNE 17 at 07 38 49 U.T. Magnitude 1.3. Originated 53 km from Resolute, N.W.T.

JUNE 29 at 19 31 19 U.T. Magnitude 1.3. Originated 41 km from Resolute, N.W.T.

DOMINION OBSERVATORIES

EARTHQUAKES IN EASTERN CANADA AND ADJACENT AREAS

The following disturbance was recorded during the second quarter of 1961. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

APRIL 20 at 13 13 00 U.T. Magnitude 2.0. Epicentre 45°00'N; 74°47'W. Between Cornwall, Ont. and Massena, N.Y. Felt at both places.



DOMINION OBSERVATORIES

EARTHQUAKES IN WESTERN CANADA  
AND ADJACENT AREAS

The following disturbances were recorded during the second quarter of 1961. The times of observed phases are given at their respective chronological positions in the text of this bulletin. The quality (Q) of the epicentre is indicated by a letter from "a" meaning an excellent fit of the observed data to "d" meaning a very poor solution.

- APRIL 1 at 01 01 19 U.T. Magnitude 2.9. Epicentre at 48.4N;  
122.2W. East of Mount Vernon, Washington, U.S.A. Q:b.
- APRIL 1 at 01 02 57 U.T. Magnitude 2.5. Epicentre at 48.7N;  
122.3W. East of Bellingham, Washington, U.S.A. Q:b.
- APRIL 1 at 01 07 35 U.T. Magnitude 2.2 Epicentre at 48.4N;  
122.1W. East of Mount Vernon, Washington, U.S.A. Q:c.
- APRIL 1 at 15 25 24 U.T. Magnitude 2.3 Probably east of Bellingham,  
Washington, U.S.A. Q:d.
- APRIL 1 at 16 10 20 U.T. Magnitude 2.3 Epicentre at 48.9N;  
122.2W. Northeast of Bellingham, Washington, U.S.A. Q:b.
- APRIL 2 at 23 32 57 U.T. Magnitude 2.0. Epicentre at 47.6N;  
121.7W. East of Seattle, Washington, U.S.A. Q:c.
- APRIL 10 at 18 55 57 U.T. Magnitude 1.8. 28 km from Victoria. Q:d.
- APRIL 11 at 20 33 48.9 U.T. Magnitude 3.6. Epicentre at 50.0N;  
128.6W. North of Vancouver Island, B.C. Q:c.
- APRIL 13 at 13 08 01 U.T. Magnitude 3.0. Epicentre at 49.9N;  
120.6W. Possibly a blast near Merritt, B.C. Q:c.
- APRIL 13 at 14 02 22 U.T. Magnitude 1.7. 90 km from Penticton. Q:d
- APRIL 16 at 12 22 47.1 U.T. Magnitude 4.2. Epicentre at 51.6N;  
130.6W. Off northwest coast of Vancouver Island, B.C. Q:c.
- APRIL 16 at 15 35 02 U.T. Magnitude 3.1. Epicentre at 47.4N;  
120.0W. Near Wenatchee, Washington, U.S.A. Q:c.
- APRIL 17 at 20 28 08 U.T. Magnitude 1.2. 22 km from Penticton.
- APRIL 20 at 12 22 04 U.T. Magnitude 2.3. 96 km from Victoria.
- APRIL 22 at 16 03 49 U.T. Magnitude 3.3. Epicentre at 49.0N;  
119.7W. Southwest of Penticton, B.C. Q:C.

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- APRIL 26 at 08 06 34 U.T. Magnitude 2.7. Epicentre at 48.2N;  
124.9W. Off west coast of Washington, U.S.A. Q:c.
- MAY 2 at 05 37 27 U.T. Magnitude 2.4. Epicentre at 48.8N;  
124.7W. Southwest of Vancouver Island, B.C. Q:c.
- MAY 9 at 19 30 51 U.T. Magnitude 1.6. 144 km from Penticton.
- MAY 16 at 03 28 48 U.T. Magnitude 1.8. 90 km from Victoria.
- MAY 22 at 01 57 55 U.T. Magnitude 2.6. About 233 km from Victoria  
in Washington, U.S.A.
- MAY 23 at 03 49 31 U.T. Magnitude 2.7. 94 km from Victoria in  
Washington, U.S.A.
- MAY 24 at 13 34 46 U.T. Magnitude 4.0. Epicentre at 45.5N;  
128.5W. Off west coast of Washington, U.S.A. Q:c.
- MAY 26 at 05 50 45 U.T. Magnitude 3.0. Epicentre at 46.1N;  
123.0W. Near Longview, Washington, U.S.A. Q:c.
- MAY 26 at 06 27 57 U.T. Magnitude 2.1. 152 km from Penticton.
- MAY 31 at 11 38 42 U.T. Magnitude 2.2. 97 km from Victoria.
- JUNE 1 at 16 26 07 U.T. Magnitude 3.2. Epicentre at 48.6N;  
128.1W. Off west coast of Vancouver Island, B.C. Q:c.
- JUNE 1 at 18 53 02 U.T. Magnitude 3.2. Epicentre at 48.6N;  
128.1W. Off coast of Vancouver Island, B.C. Q:c.
- JUNE 2 at 13 56 56 U.T. Magnitude 2.3. 276 km from Penticton.
- JUNE 2 at 19 56 38 U.T. Magnitude 1.5. 156 km from Penticton.
- JUNE 3 at 08 20 46 U.T. Magnitude 1.5. 26 km from Victoria.
- JUNE 3 at 21 36 07 U.T. Magnitude 2.3. 60 km from Alberni.
- JUNE 4 at 16 40 45 U.T. Magnitude 2.9. Epicentre at 47.8N;  
123.8W. Olympics, Washington, U.S.A. Q:c.
- JUNE 5 at 01 03 43 U.T. Magnitude 2.8. 349 km from Penticton.
- JUNE 5 at 22 58 28 U.T. Magnitude 3.7. 626 km from Penticton.
- JUNE 9 at 19 25 23 U.T. Magnitude 1.8. 140 km from Penticton.
- JUNE 10 at 23 39 22 U.T. Magnitude 2.3. 164 km from Penticton.

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- JUNE 14 at 18 55 01 U.T. Magnitude 1.9. 139 km from Penticton.
- JUNE 15 at 12 18 12 U.T. Magnitude 2.6. 262 km from Penticton.
- JUNE 15 at 19 14 01 U.T. Magnitude 2.0. 134 km from Penticton.
- JUNE 15 at 21 58 27 U.T. Magnitude 2.2. Epicentre at 48.2N;  
122.7W. Entrance to Puget Sound. Q:c.
- JUNE 16 at 07 15 29 U.T. Magnitude 2.1. 144 km from Penticton.
- JUNE 16 at 08 17 26 U.T. Magnitude 2.0. Epicentre at 49N;  
121.6W. South of Hope, B.C. Q:c.
- JUNE 17 at 03 17 58 U.T. Magnitude 3.3. 458 km from Penticton.
- JUNE 18 at 09 12 32 U.T. Magnitude 2.8. Epicentre at 46.8N;  
123.6W. Southwest Washington, U.S.A. Q:c.
- JUNE 19 at 11 46 51 U.T. Magnitude 2.8. Epicentre at 49.0N;  
121.5W. South of Hope, B.C. Q:c.
- JUNE 20 at 19 01 03 U.T. Magnitude 1.9. 136 km from Penticton.
- JUNE 24 at 22 47 26 U.T. Magnitude 2.1. 59 km from Alberni.
- JUNE 24 at 23 33 04 U.T. Magnitude 1.9. 55 km from Alberni.
- JUNE 25 at 19 10 28 U.T. Magnitude 2.1. 168 km from Penticton.
- JUNE 25 at 23 04 10 U.T. Magnitude 2.8. 196 km from Alberni.
- JUNE 27 at 18 40 03 U.T. Magnitude 2.5. 200 km from Penticton.
- JUNE 27 at 21 49 28 U.T. Magnitude 2.3. 133 km from Penticton.
- JUNE 28 at 10 22 46 U.T. Magnitude 3.0. 266 km from Victoria.
- JUNE 28 at 22 48 00 U.T. Magnitude 1.8. 147 km from Penticton.
- JUNE 29 at 23 53 26 U.T. Magnitude 2.3. 147 km from Alberni.



International  
Seismological  
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**SEISMOLOGICAL SERIES**  
of the  
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**1961-1**  
(Continued)

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**1961**

**Seismological Service**  
**of Canada**



**OTTAWA, CANADA**

Department of Mines and Technical Surveys

**DOMINION OBSERVATORIES**

**1962**

## SEISMOLOGICAL BULLETIN - 1961

JULY - AUGUST 1961

## NOTES

1. Alberni Not operating from September 23 - 30 inclusive.
2. Alert,  
N. W. T. Commenced operations September 29. Calibration curves will be published in October - December bulletin.  
  
Mr. W. R. Darker is operator-in-charge of Alert Seismological Station.
3. Resolute,  
N. W. T. Mr. C. H. McCloughan succeeded Mr. M. I. Strader as operator-in-charge of the Seismological Station on August 10, 1961.

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JULY 1 U.S.C.G.S. 53.9N, 164.3W Unimak Island H = 00 02 39.2 h = 34 km Penticton eP 00 08 29 Shawinigan Falls eP 00 12 12 Victoria eP 00 08 13	Victoria eP <sub>1</sub> 09 00 09.5 eS <sub>1</sub> 09 00 17.4 D = 65 km	JULY 1 U.S.C.G.S. 17.9S, 178.4W Fiji Islands H = 18 50 57.5 h = 601 km Penticton eP 19 02 35 Victoria eP 19 02 22
JULY 1 Canadian Arctic H = 02 06 28.1 Mag 1.4 Resolute iP <sub>1</sub> 02 06 34.5 iS <sub>1</sub> 02 06 39.4 D = 40.2 km	JULY 1 Olympic Mountains Washington, U.S.A. H = 09 24 36 Mag 2.3 Alberni eP <sub>n</sub> 09 25 05.7 eS <sub>n</sub> 09 25 28.0 D = 189 km Victoria eP <sub>1</sub> 09 24 49.5 eS <sub>1</sub> 09 24 57.4 D = 84 km	JULY 1 U.S.C.G.S. 53.7N, 169.8E Near Islands H = 23 44 05.7 h = 19 km Ottawa eP 23 54 57 Penticton eP 23 52 04 Resolute eP 23 51 47 Shawinigan Falls eP 23 55 00 c
JULY 1 U.S.C.G.S. 29.8N, 140.5E Bonin Islands H = 08 00 15.4 h = 181 km Penticton eP 08 11 33 Resolute eP 08 11 09 Victoria eP 08 11 23	JULY 1 Resolute eP 12 54 40	JULY 1 U.S.C.G.S. 15.3S, 75.0W Near coast of Peru H = 13 10 46.6 h = 146 km Banff eP 13 22 56 Halifax iP 13 20 47 d Ottawa eP 13 20 45 Penticton eP 13 22 20 c Resolute eP 13 23 38 Shawinigan Falls eP 13 20 51 c Victoria eP 13 22 28
JULY 1 47.9N, 123.7W Olympic Mountains, Washington, U.S.A. H = 08 59 59 Mag 2.2 Alberni eP <sub>1</sub> 09 00 26.5 eS <sub>1</sub> 09 00 47.2 D = 169 km	JULY 1 U.S.C.G.S. 47.8N, 123.8W Olympic Mountains Washington, U.S.A. H = 09 24 36 Mag 2.3	JULY 2 U.S.C.G.S. 42.8N, 143.1E Hokkaido Japan H = 02 07 14.4 h = 151 km Ottawa eP 02 19 40 Resolute iP 02 16 46 c

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JULY 2 U.S.C.G.S. 20.7N, 142.6E Bonin Islands H = 10 10 16.3 h = 64 km Resolute eP 10 22 10	JULY 4 H = 03 04 41 Penticton eP <sub>n</sub> 03 05 39.3 eS <sub>n</sub> 03 06 13.5 D = 280 km	JULY 4 Canadian Arctic H = 06 17 56.9 Mag 1.4 iP <sub>1</sub> 06 18 14 iS <sub>1</sub> 06 18 27 D = 106.5 km
JULY 2 H = 16 54 03 Alberni eP <sub>1</sub> 16 54 17.5 eS <sub>1</sub> 16 54 29.1 D = 95 km Victoria eP <sub>1</sub> 16 54 28.3 eS <sub>1</sub> 16 54 47.5 D = 160 km	JULY 4 Canadian Arctic H = 04 49 05.9 Mag 1.5 Resolute iP <sub>1</sub> 04 49 23 iS <sub>1</sub> 04 49 36 D = 106.5 km	JULY 4 U.S.C.G.S. 17.9N, 146.4E Mariana Islands H = 06 10 44.8 h = 145 km Penticton eP 06 22 38 Resolute iP 06 22 42 Victoria eP 06 22 25
JULY 3 U.S.C.G.S. 8.6S, 79.2W Near coast of Peru H = 14 49 30.8 h = 86 km Ottawa eP 14 58 50 Penticton eP 15 00 24 Resolute eP 15 01 54 Shawinigan Falls eP 14 59 01 Victoria eP 15 00 32	JULY 4 U.S.C.G.S. 40.8N, 118.0W Western Nevada H = 04 56 03.7 h = 61 km Mag 5 3/4 Halifax iP 05 03 32.5 c Ottawa eP 05 02 18 Penticton eP 04 58 07 Resolute eP 05 02 57 Victoria eP 04 58 07	JULY 4 Canadian Arctic H = 07 17 55.9 Mag 1.8 Resolute iP <sub>1</sub> 07 18 13 iS <sub>1</sub> 07 18 26 D = 106.5 km
JULY 3 Canadian Arctic H = 22 57 07 Mag 1.9 Resolute iP <sub>1</sub> 22 57 15.0 iS <sub>1</sub> 22 57 21.1 D = 50 km	JULY 4 Canadian Arctic H = 05 39 37.9 Mag 1.5 Resolute iP <sub>1</sub> 05 39 55 iS <sub>1</sub> 05 40 08 D = 106.5 km	JULY 4 Canadian Arctic H = 10 20 41.9 Mag 2.1 Resolute iP <sub>1</sub> 10 20 59 iS <sub>1</sub> 10 21 12 D = 106.5 km
	JULY 4 U.S.C.G.S. 40.8N, 117.8W Western Nevada H = 11 09 10.6 h = 43 km Mag 5 1/4	



DOMINION OBSERVATORIES

Penticton  
eP 11 11 16

JULY 4  
Victoria  
eP 11 13 36

JULY 4  
Resolute  
eP 23 00 43?

JULY 5  
U.S.C.G.S.  
29.2N, 129.5E  
Ryukyu Islands  
H = 02 22 02.9  
h = 97 km  
Resolute  
eP 02 33 23 c?

JULY 5  
U.S.C.G.S.  
58.2S, 150.4E  
Southwest of  
Macquarie Island  
H = 02 28 38.2  
h = 25 km  
Ottawa  
eP<sub>1</sub>' 02 48 33  
Shawinigan Falls  
eP<sub>1</sub>' 02 48 44

JULY 5  
U.S.C.G.S.  
15.1N, 60.4W  
Windward Islands  
H = 05 02 28.9  
h = 91 km  
Ottawa  
eP 05 08 57 c  
Penticton  
eP 05 12 26  
Shawinigan Falls  
eP 05 08 59

Victoria  
eP 05 12 36

JULY 5  
Penticton  
eP<sub>1</sub> 11 44 37.9

JULY 5  
50°18'N, 66°43'W  
About 20 miles  
northwest of  
Sept-Iles, Quebec  
H = 22 43 44.1  
Mag 5.0  
Halifax  
iP<sub>n</sub> 22 45 11.0 d  
i 22 45 20.3  
eS<sub>n</sub> 22 46 14.3  
eL<sub>g</sub> 22 46 45(?)  
D = 670 km  
Montreal  
eP<sub>n</sub> 22 45 19.6  
i 22 45 28.8  
i 22 45 37.1  
iS<sub>n</sub> 22 46 28.5  
L<sub>g</sub> 22 47 02  
D = 740 km  
Ottawa  
eP<sub>n</sub> 22 45 36  
iS<sub>n</sub> 22 46 56.2  
L<sub>g</sub> 22 47 40(?)  
D = 870 km  
Resolute  
e 22 57 52  
Shawinigan Falls  
eP<sub>n</sub> 22 45 04.0  
iS<sub>n</sub> 22 46 00.6  
L<sub>g</sub> 22 46 29.1  
D = 600 km

JULY 6  
Resolute  
eP? 05 47 54

JULY 6  
H = 13 58 21  
Victoria  
eP<sub>1</sub> 13 58 34.5  
eS<sub>1</sub> 13 58 45.7  
D = 84 km

JULY 6  
U.S.C.G.S.  
7.0S, 13.1W  
Ascension Island  
region  
H = 16 08 20.8  
h = 19 km  
Ottawa  
eP 16 20 11 c  
Resolute  
eP 16 21 43  
Shawinigan Falls  
eP 16 20 04 c

JULY 6  
Alberni  
eP<sub>n</sub> 18 23 34.1  
Victoria  
eP<sub>n</sub> 18 23 46.8

JULY 6  
U.S.C.G.S.  
20.0S, 169.0E  
New Hebrides Islands  
H = 22 09 31.4  
h = 47 km  
Mag 6 1/2  
Alberni  
eP 22 22 33  
Banff  
eP 22 21 47  
Halifax  
eP' 22 28 38 c  
i 22 31 57 d  
Ottawa  
eP' 22 28 20 c  
Resolute  
eP 22 24 04  
P' 22 28 00  
e 22 38 59  
Shawinigan Falls  
eP' 22 28 13  
e 22 28 25  
Victoria  
iP 22 22 34 c



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JULY 7  
U.S.C.G.S.  
5.7S, 149.7E  
New Britain  
H = 13 10 43.8  
h = 57 km  
Mag 6 1/4  
Halifax  
P' 13 29 56.5  
Ottawa  
eP' 13 29 40  
Shawinigan Falls  
eP' 13 29 43

JULY 7  
U.S.C.G.S.  
53.5N, 159.9E  
Near east coast  
of Kamchatka  
H = 15 28 14.5  
h = 20 km  
Resolute  
eP 15 36 15

JULY 7  
H = 19 08 05  
Penticton  
eP<sub>n</sub> 19 08 42.2  
eS<sub>n</sub> 19 09 12.9  
D = 252 km

JULY 7  
U.S.C.G.S.  
20.1S, 169.2E  
Loyalty Islands region  
H = 22 19 34.2  
h = 89 km  
Mag 5  
Halifax  
eP' 22 38 39 d?  
Penticton  
eP 22 32 45  
Shawinigan Falls  
eP' 22 38 24 c  
Victoria  
eP 22 32 33 c

JULY 7  
H = 22 51 22  
Penticton  
eP<sub>n</sub> 22 51 49.8  
eS<sub>n</sub> 22 52 11.0  
D = 174 km

JULY 7  
Penticton  
eP 23 00 16  
Victoria  
eP 23 00 03

JULY 8  
U.S.C.G.S.  
20.0S, 168.8E  
Loyalty Islands  
H = 02 35 20.1  
h = 52 km  
Halifax  
eP' 02 54 28  
Penticton  
eP 02 48 36  
Shawinigan Falls  
eP' 02 54 16  
Victoria  
eP 02 48 23

JULY 8  
U.S.C.G.S.  
20.6S, 169.1E  
Loyalty Islands  
region  
H = 03 25 19.5  
h = 25 km  
Shawinigan Falls  
iP' 03 44 19 d

JULY 8  
H = 05 49 15  
Alberni  
eP<sub>1</sub> 05 49 25.0  
eS<sub>1</sub> 05 49 32.4  
D = 60 km  
Victoria  
eP<sub>1</sub> 05 49 39.6  
eS<sub>1</sub> 05 49 59.2  
D = 152 km

JULY 8  
Resolute  
eP 08 16 28?

JULY 8  
U.S.C.G.S.  
20.1S, 169.8E  
Loyalty Islands  
H = 15 34 38.5  
h = 44 km  
Ottawa  
eP' 15 53 29  
Penticton  
eP 15 47 55  
Shawinigan Falls  
eP' 15 53 33  
Victoria  
eP 15 47 41  
e 15 53 18

JULY 8  
H = 20 21 06  
Penticton  
eP<sub>n</sub> 20 21 42.5  
eS<sub>n</sub> 20 22 12.2  
D = 243 km

JULY 8  
U.S.C.G.S.  
20.2S, 169.0E  
Loyalty Islands  
H = 21 13 59.4  
h = 56 km  
Halifax  
i 21 36 32  
Penticton  
eP 21 27 17  
Shawinigan Falls  
eP' 21 33 00  
Victoria  
eP 21 27 03

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JULY 8  
 U.S.C.G.S.  
 20.2S, 169.0E  
 Loyalty Islands region  
 H = 21 48 46.2  
 h = 68 km  
 Penticton  
 eP 22 02 00  
 Shawinigan Falls  
 eP' 22 07 39  
 Victoria  
 eP 22 01 54

JULY 8  
 H = 23 58 58  
 Alberni  
 eP<sub>1</sub> 23 59 07.1  
 eS<sub>1</sub> 23 59 14.3  
 D = 59 km  
 Victoria  
 eP<sub>1</sub> 23 59 23.6  
 D = 162 km

JULY 9  
 U.S.C.G.S.  
 17.0N, 88.5W  
 British Honduras  
 H = 04 57 52.7  
 h = 150 km  
 Penticton  
 eP 05 05 23  
 Shawinigan Falls  
 eP 05 04 01  
 Victoria  
 eP 05 05 34

JULY 9  
 U.S.C.G.S.  
 15.0N, 87.2W  
 Honduras  
 H = 06 32 52.4  
 h = 165 km  
 Banff  
 eP 06 40 33

Ottawa  
 eP 06 39 06  
 Penticton  
 eP 06 40 43  
 Resolute  
 eP 06 42 45  
 Shawinigan Falls  
 eP 06 39 23  
 Victoria  
 eP 06 40 54

JULY 9  
 48°32'N, 122°25'W  
 Near Anacortes  
 Washington, U.S.A.  
 H = 07 44 49  
 Mag 2.7  
 Alberni  
 iP<sub>n</sub> 07 45 19.6  
 eS<sub>n</sub> 07 45 41.9  
 D = 198 km  
 Penticton  
 iP<sub>n</sub> 07 45 22.6  
 iS<sub>n</sub> 07 45 52.9  
 D = 223 km  
 Victoria  
 iP<sub>1</sub> 07 45 00.9 d  
 iS<sub>1</sub> 07 45 09.5  
 D = 76 km

JULY 9  
 U.S.C.G.S.  
 28.8N, 54.7E  
 Iran  
 H = 08 05 45.9  
 h = 25 km  
 Penticton  
 e 08 22 38  
 Resolute  
 eP 08 17 28  
 Shawinigan Falls  
 eP 08 18 50

JULY 9  
 Penticton  
 eP 14 01 24

JULY 9  
 U.S.C.G.S.  
 51.7N, 176.2E  
 Rat Islands  
 H = 16 46 02.0  
 h = 33 km  
 Penticton  
 eP 16 53 34

JULY 10  
 Penticton  
 eP 00 36 40

JULY 10  
 U.S.C.G.S.  
 19.2S, 68.4W  
 Chile-Bolivia border  
 H = 03 49 56.4  
 h = 117 km  
 Halifax  
 iP 04 00 22  
 Ottawa  
 eP 04 00 28  
 Penticton  
 eP 04 02 09  
 Shawinigan Falls  
 eP 04 00 35  
 Victoria  
 eP 04 02 16 d

JULY 10  
 Canadian Arctic  
 H = 05 06 11.1  
 Mag 2.4  
 Resolute  
 iP<sub>1</sub> 05 06 40.5  
 iS<sub>1</sub> 05 07 02.9  
 D = 184 km

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JULY 10  
 Banff  
 e 12 22 28  
 Penticton  
 eP 12 19 50  
 Victoria  
 eP 12 19 07

JULY 10  
 U.S.C.G.S.  
 20.7S, 179.5W  
 Fiji Islands region  
 H = 12 16 29.4  
 h = 564 km  
 Penticton  
 eP 12 28 23

JULY 10  
 U.S.C.G.S.  
 18.4N, 104.9W  
 Off coast of Mexico  
 H = 12 54 04.6  
 h = 20 km  
 Penticton  
 eP 13 00 42  
 Resolute  
 eP 13 03 48?  
 Shawinigan Falls  
 eP 13 01 31 d

JULY 10  
 U.S.C.G.S.  
 18.2N, 89.8W  
 Campeche Mexico  
 H = 14 18 13.7  
 h = 56 km  
 Banff  
 eP 14 25 30  
 Penticton  
 eP 14 24 42  
 Victoria  
 eP 14 25 48

JULY 10  
 Resolute  
 eP 18 39 32

JULY 10  
 H = 18 41 30  
 Penticton  
 iP<sub>1</sub> 18 41 56.0  
 iS<sub>1</sub> 18 42 16.2  
 D = 166 km

JULY 11  
 U.S.C.G.S.  
 43.4N, 149.0E  
 Off coast of  
 Hokkaido Japan  
 H = 01 20 57.8  
 h = 25 km  
 Penticton  
 eP 01 30 55  
 Resolute  
 eP 01 30 29

JULY 11  
 U.S.C.G.S.  
 27.3S, 177.1W  
 Kermadec Islands  
 H = 05 45 29.5  
 h = 58 km  
 Penticton  
 eP 05 58 38  
 Victoria  
 eP 05 58 26

JULY 11  
 U.S.C.G.S.  
 8.3N, 93.3E  
 Nicobar Islands  
 H = 09 31 57.2  
 h = 163 km  
 Penticton  
 eP' 09 50 28  
 Resolute  
 eP 09 45 17?  
 Victoria  
 eP' 09 50 26

JULY 11  
 H = 09 54 14  
 Alberni  
 eP<sub>1</sub> 09 54 26.4  
 eS<sub>1</sub> 09 54 35.9  
 D = 78 km

JULY 11  
 U.S.C.G.S.  
 21.5S, 175.7W  
 Tonga Islands  
 H = 16 26 44.1  
 h = 90 km  
 Penticton  
 eP 16 39 23

JULY 11  
 U.S.C.G.S.  
 6.7S, 125.8E  
 Banda Sea  
 H = 18 35 54.6  
 h = 579 km  
 Shawinigan Falls  
 eP' 18 54 22

JULY 11  
 H = 23 53 06  
 Penticton  
 eP<sub>n</sub> 23 53 57.0  
 d = 364 km

JULY 12  
 U.S.C.G.S.  
 4.8N, 82.9W  
 South of Panama  
 H = 01 38 25.2  
 h = 44 km  
 Penticton  
 eP 01 47 49



DOMINION OBSERVATORIES

JULY 12  
U. S. C. G. S.  
3. 3N, 127. 9E  
Molucca Passage  
H = 04 47 29.0  
h = 92 km  
Shawinigan Falls  
eP' 05 06 27

JULY 13  
U. S. C. G. S.  
21. 3S, 175. 7W  
Tonga Islands  
H = 13 45 02.4  
h = 29 km  
Victoria  
eP 13 57 34

JULY 15  
U. S. C. G. S.  
48. 4N, 157. 6E  
Off coast of Kamchatka  
H = 05 43 06.7  
h = 17 km  
Shawinigan Falls  
eP 05 54 54

JULY 12  
H = 07 56 43  
Alberni  
eP<sub>1</sub> 07 57 57.1  
eS<sub>1</sub> 07 58 08.1  
D = 90 km  
Victoria  
eP<sub>1</sub> 07 58 02.3  
eS<sub>1</sub> 07 58 15.4  
D = 107 km

JULY 13  
U. S. C. G. S.  
22. 8N, 122. 7E  
Off coast of  
Formosa  
H = 21 44 38.0  
h = 100 km  
Banff  
eP 21 57 39  
Shawinigan Falls  
eP' 22 02 42  
Victoria  
eP 21 57 28

JULY 15  
U. S. C. G. S.  
6. 8S, 116. 9E  
Java Sea  
H = 13 55 26.5  
h = 565 km  
Shawinigan Falls  
eP' 14 13 54

JULY 12  
Victoria  
eP 08 42 25

JULY 14  
H = 00 06 21  
Victoria  
eP<sub>1</sub> 00 06 28.9  
eS<sub>1</sub> 00 06 35.1  
D = 50 km

JULY 15  
H = 20 46 31  
Victoria  
eP<sub>n</sub> 20 47 05.3  
eS<sub>n</sub> 20 47 32.6  
D = 224 km

JULY 12  
Penticton  
eP 09 15 07

JULY 15  
U. S. C. G. S.  
13. 1N, 120. 4E  
Philippine Islands  
H = 00 17 49.5  
h = 52 km  
Shawinigan Falls  
eP' 00 36 37

JULY 16  
U. S. C. G. S.  
58. 6N, 137. 2W  
Southeastern Alaska  
H = 00 47 53.5  
h = 44 km  
Resolute  
eP 00 52 44?  
Victoria  
e 00 54 51

JULY 12  
U. S. C. G. S.  
45. 2N, 151. 0E  
Kurile Islands  
H = 13 29 56.6  
h = 40 km  
Penticton  
eP 13 39 42  
Resolute  
eP 13 39 09?  
Victoria  
eP 13 39 31

JULY 16  
49°44'N, 124°55'W  
Near Texada Island  
H = 01 40 51  
Mag 2.8  
Alberni  
iP<sub>1</sub> 01 40 59.7  
D = 61 km



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Victoria  
eP<sub>1</sub> 01 41 16.1  
eS<sub>1</sub> 01 41 35.3  
D = 158 km

JULY 17  
U. S. C. G. S.  
16. 7N, 97. 7W  
Oaxaca Mexico  
H = 01 01 11.2  
h = 74 km

JULY 17  
U. S. C. G. S.  
16. 5N, 105. 0W  
Off coast of Mexico  
H = 09 08 02.1  
h = 60 km

JULY 16  
Alberni  
eP<sub>1</sub> 01 56 54.7  
eS<sub>1</sub> 01 57 02.1  
(aftershock of 01 40 51)  
Victoria  
eP<sub>1</sub> 01 58 28.3  
eS<sub>1</sub> 01 58 35.9  
(aftershock of 01 40 51)

Banff  
iP 01 08 17  
Halifax  
eP 01 08 44  
Ottawa  
eP 01 07 51  
Penticton  
eP 01 08 18  
Resolute  
eP 01 10 58  
Shawinigan Falls  
eP 01 08 10  
Victoria  
eP 01 08 25 c

Ottawa  
eP 09 15 20  
Shawinigan Falls  
eP 09 15 41d

JULY 16  
U. S. C. G. S.  
22. 7S, 171. 2E  
Loyalty Islands  
H = 14 01 38.7  
h = 56 km  
Mag 5 1/2  
Victoria  
eP 14 14 46

JULY 17  
U. S. C. G. S.  
17. 0N, 97. 8W  
Oaxaca Mexico  
H = 03 30 54.7  
h = 77 km  
Banff  
eP 03 37 58  
Shawinigan Falls  
eP 03 37 53  
Victoria  
eP 03 38 06

JULY 17  
U. S. C. G. S.  
37. 6S, 73. 3W  
Near coast of  
Central Chile  
H = 09 17 53.4  
h = 100 km  
Shawinigan Falls  
eP 09 30 29

JULY 16  
Halifax  
eP 21 03 00.3

JULY 16  
U. S. C. G. S.  
49. 3N, 155. 1E  
Kurile Islands  
H = 21 08 45.6  
h = 29 km  
Banff  
iP 21 18 05  
Resolute  
eP 21 17 24  
Shawinigan Falls  
eP 21 20 32 d  
Victoria  
eP 21 17 47

JULY 17  
U. S. C. G. S.  
27. 1N, 54. 5E  
Iran  
H = 05 13 20.3  
h = 59 km  
Shawinigan Falls  
eP 05 26 31

JULY 17  
U. S. C. G. S.  
41. 2N, 72. 4E  
Kirghiz, S. S. R.  
H = 14 53 28.4  
h = 67 km  
Shawinigan Falls  
eP 15 06 12 d

JULY 17  
U. S. C. G. S.  
35. 7N, 141. 2E  
Near coast of  
Honsu Japan  
H = 16 20 22.6  
h = 75 km  
Banff  
eP 16 31 27  
Resolute  
iP 16 30 47  
eS 16 39 22  
S<sub>c</sub>S? 16 40 40?  
Victoria  
eP 16 31 12

DOMINION OBSERVATORIES

JULY 18 U. S. C. G. S. 29.4N, 131.6E Ryukyu Islands H = 14 03 36.5 h = 21 km Mag 6 1/2 Banff iP 14 15 48 d Halifax eP 14 17 46.5 Ottawa eP 14 17 27 Penticton eP 14 15 42 Resolute iP 14 14 59 d PPP 14 19 26? eS 14 24 16 Shawinigan Falls eP 14 17 26 d Victoria eP 14 15 34	JULY 18 Resolute eP 14 54 05	JULY 18 Resolute eP? 16 56 01
JULY 18 U. S. C. G. S. 29.9N, 131.2E Ryukyu Islands H = 14 34 07.3 h = 72 km Banff iP 14 46 11 d Penticton eP 14 46 06 Resolute iP 14 45 23 d Shawinigan Falls eP 14 47 58 Victoria eP 14 45 57 d	JULY 18 U. S. C. G. S. 29.5N, 131.7E Ryukyu Islands H = 15 36 45.4 h = 25 km Resolute eP 15 48 10	JULY 18 U. S. C. G. S. 29.5N, 131.8E Ryukyu Islands H = 16 48 34.8 h = 60 km Resolute eP 16 59 57
JULY 18 U. S. C. G. S. 29.9N, 131.2E Ryukyu Islands H = 14 34 07.3 h = 72 km Banff iP 14 46 11 d Penticton eP 14 46 06 Resolute iP 14 45 23 d Shawinigan Falls eP 14 47 58 Victoria eP 14 45 57 d	JULY 18 U. S. C. G. S. 29.5N, 131.2E Ryukyu Islands H = 16 20 08.8 h = 62 km Resolute iP 16 31 27 d	JULY 18 U. S. C. G. S. 29.7N, 131.4E Ryukyu Islands H = 18 33 42.4 h = 84 km Resolute eP 18 44 57
JULY 18 U. S. C. G. S. 28.0S, 66.4W Argentina H = 16 22 48.9 h = 80 km Shawinigan Falls eP 16 34 26	JULY 18 U. S. C. G. S. 29.7N, 131.4E Ryukyu Islands H = 18 33 42.4 h = 84 km Resolute eP 18 44 57	JULY 18 U. S. C. G. S. 29.3N, 131.6E Ryukyu Islands H = 19 29 04.8 h = 60 km Resolute eP 19 40 27 ? 19 41 19 e 19 44 00 e 19 45 09

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JULY 18 Resolute eP? 20 03 48	JULY 19 U. S. C. G. S. 58.8S, 25.3W Sandwich Islands H = 03 50 42.0 h = 39 km	JULY 19 Resolute eP 08 12 58
JULY 18 Resolute eP? 22 07 57	JULY 19 U. S. C. G. S. 29.2N, 131.3E Ryukyu Islands H = 05 29 57.6 h = 60 km	JULY 19 U. S. C. G. S. 37.5N, 142.0E Off coast of Honshu Japan H = 09 19 24.2 h = 25 km Resolute eP? 09 29 46
JULY 18 U. S. C. G. S. 29.7N, 131.4E Ryukyu Islands H = 23 42 36.5 h = 39 km Resolute eP 23 53 58 d	JULY 19 U. S. C. G. S. 29.2N, 131.3E Ryukyu Islands H = 05 29 57.6 h = 60 km Resolute eP 05 41 18	JULY 19 U. S. C. G. S. 29.8N, 131.5E Ryukyu Islands H = 10 35 41.4 h = 20 km Resolute eP 10 47 02 i 10 47 06
JULY 19 U. S. C. G. S. 40.6N, 139.5E Off coast of Honshu Japan H = 00 10 39.1 h = 25 km Resolute eP? 00 20 41	JULY 19 U. S. C. G. S. 29.6N, 131.7E Ryukyu Islands H = 06 33 18.1 h = 27 km Resolute eP 06 44 40	JULY 19 U. S. C. G. S. 29.6N, 131.5E Ryukyu Islands H = 11 58 43.7 h = 31 km Resolute eP 12 10 06 d?
JULY 19 Canadian Arctic H = 02 59 29.2 h = 33 km Mag 1.9 Resolute eP <sub>n</sub> 02 59 56.0 iP <sub>1</sub> 03 00 01.5 iS <sub>n</sub> 03 00 20.3 iS <sub>1</sub> 03 00 29.8 D = 232 km	JULY 19 Resolute eP? 06 49 58	JULY 19 Resolute eP? 12 16 48
JULY 19 Resolute eP? 08 02 25	JULY 19 U. S. C. G. S. 51.7N, 173.4W Andreanof Islands H = 22 36 36.5 h = 42 km Ottawa eP 22 46 42	

## DOMINION OBSERVATORIES

Shawinigan Falls  
 eP 22 46 47

JULY 19  
 U.S.C.G.S.  
 37.7N, 20.2E  
 Near coast of  
 Greece  
 H = 23 00 56.7  
 h = 37 km  
 Halifax  
 eP 23 11 08.5  
 Ottawa  
 eP 23 11 57  
 Shawinigan Falls  
 eP 23 11 41

JULY 20  
 U.S.C.G.S.  
 18.7N, 103.0W  
 Off coast of  
 Mexico  
 H = 08 44 21.1  
 h = 14 km  
 Shawinigan Falls  
 eP 08 51 34

JULY 20  
 U.S.C.G.S.  
 28.4N, 133.6E  
 Ryukyu Islands  
 H = 09 02 31.9  
 h = 25 km  
 Resolute  
 eP? 09 14 01

JULY 20  
 U.S.C.G.S.  
 20.7S, 64.7W  
 Bolivia  
 H = 13 18 04.2  
 h = 128 km  
 Shawinigan Falls  
 eP 13 28 55 d

JULY 20  
 U.S.C.G.S.  
 31.8S, 177.2W  
 Kermadec Islands  
 H = 19 58 03.3  
 h = 44 km  
 Halifax  
 eP' 20 17 07 c

JULY 21  
 Halifax  
 eP 04 37 48.5

JULY 21  
 U.S.C.G.S.  
 29.6N, 131.6E  
 Ryukyu Islands  
 H = 18 50 50.3  
 h = 16 km  
 Resolute  
 eP 19 02 13?

JULY 21  
 U.S.C.G.S.  
 29.6N, 131.6E  
 Ryukyu Islands  
 H = 22 39 53.2  
 h = 32 km  
 Resolute  
 eP 22 51 15?

JULY 22  
 Canadian Arctic  
 H = 13 01 09  
 Mag 2.1  
 Resolute  
 iP<sub>1</sub> 13 01 24  
 iS<sub>1</sub> 13 01 35.4  
 D = 93.5 km

JULY 22  
 U.S.C.G.S.  
 39.2N, 70.0E  
 Kirghiz, S.S.R.  
 H = 20 53 30.0  
 h = 222 km  
 Shawinigan Falls  
 eP 21 06 04 d  
 i 21 06 11

JULY 22  
 U.S.C.G.S.  
 6.9N, 123.5W  
 Pacific Ocean  
 H = 14 38 03.5  
 h = 89 km  
 Mag 5 3/4  
 Banff  
 eP 14 46 11  
 Halifax  
 eP 14 48 29  
 Ottawa  
 eP 14 47 35  
 Resolute  
 eP 14 49 03  
 Shawinigan Falls  
 eP 14 47 52  
 Victoria  
 eP 14 45 43

JULY 23  
 U.S.C.G.S.  
 18.5S, 168.2E  
 New Hebrides Islands  
 H = 14 03 39.8  
 h = 44 km  
 Mag 5 3/4  
 Shawinigan Falls  
 eP' 14 22 34

JULY 23  
 Resolute  
 eP? 14 46 06

JULY 23  
 U.S.C.G.S.  
 18.4S, 167.8E  
 New Hebrides Islands  
 H = 23 46 17.2  
 h = 25 km  
 Penticton  
 eP 23 59 30  
 Shawinigan Falls  
 eP' 24 05 13

JULY 23  
 U.S.C.G.S.  
 18.3S, 168.3E  
 New Hebrides Islands  
 H = 21 51 07.5  
 h = 44 km  
 Banff  
 eP 22 04 38  
 Halifax  
 eP' 22 10 18 d  
 Ottawa  
 eP' 22 09 57  
 Penticton  
 eP 22 04 18  
 Resolute  
 eP 22 05 34  
 iP' 22 10 02  
 Shawinigan Falls  
 eP' 22 10 01  
 Victoria  
 eP 22 04 09 d

JULY 23  
 U.S.C.G.S.  
 18.4S, 168.3E  
 New Hebrides Islands  
 H = 22 01 55.3  
 h = 37 km  
 Resolute  
 eP' 22 20 45?  
 Shawinigan Falls  
 eP' 22 20 51

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JULY 23  
 U.S.C.G.S.  
 18.5S, 168.0E  
 New Hebrides Islands  
 H = 15 30 22.8  
 h = 107 km  
 Shawinigan Falls  
 eP' 15 49 10  
 Victoria  
 eP 15 43 12

JULY 23  
 U.S.C.G.S.  
 18.4S, 167.8E  
 New Hebrides Islands  
 H = 23 46 17.2  
 h = 25 km  
 Penticton  
 eP 23 59 30  
 Shawinigan Falls  
 eP' 24 05 13

JULY 23  
 U.S.C.G.S.  
 18.3S, 168.3E  
 New Hebrides Islands  
 H = 21 51 07.5  
 h = 44 km  
 Banff  
 eP 22 04 38  
 Halifax  
 eP' 22 10 18 d  
 Ottawa  
 eP' 22 09 57  
 Penticton  
 eP 22 04 18  
 Resolute  
 eP 22 05 34  
 iP' 22 10 02  
 Shawinigan Falls  
 eP' 22 10 01  
 Victoria  
 eP 22 04 09 d

JULY 23  
 U.S.C.G.S.  
 18.4S, 168.3E  
 New Hebrides Islands  
 H = 22 01 55.3  
 h = 37 km  
 Resolute  
 eP' 22 20 45?  
 Shawinigan Falls  
 eP' 22 20 51

JULY 24  
 U.S.C.G.S.  
 0, 124.1E  
 Celebes Islands  
 H = 08 48 13.8  
 h = 159 km  
 Ottawa  
 eP' 09 07 12  
 e 09 10 30  
 Shawinigan Falls  
 eP' 09 07 13  
 e 09 10 30

JULY 24  
 U.S.C.G.S.  
 21.1S, 179.3W  
 Fiji Islands  
 H = 01 30 56.5  
 h = 642 km  
 Penticton  
 eP 01 42 45

JULY 24  
 U.S.C.G.S.  
 50.6N, 128.9W  
 Vancouver Island  
 H = 10 39 23.7  
 h = 25 km  
 Mag 3.9  
 Banff  
 eP 10 41 35  
 Penticton  
 eP 10 41 00  
 Victoria  
 eP 10 40 31

JULY 24  
 U.S.C.G.S.  
 2.3S, 79.6W  
 Ecuador  
 H = 01 53 26.7  
 h = 25 km  
 Ottawa  
 eP 02 02 02  
 Penticton  
 eP 02 04 49  
 Shawinigan Falls  
 eP 02 02 14 d

JULY 24  
 Penticton  
 eP 06 56 49  
 Victoria  
 eP 06 56 21

JULY 24  
 U.S.C.G.S.  
 49.6N, 114.4W  
 Crowsnest Pass Area  
 Alberta  
 H = 02 33 21  
 Mag 3.2  
 Banff  
 eP<sub>n</sub> 02 33 47.3  
 eS<sub>n</sub> 02 34 08.6  
 D = 204 km  
 Penticton  
 eP<sub>n</sub> 02 34 09.9  
 eS<sub>n</sub> 02 34 51.9  
 D = 389 km

DOMINION OBSERVATORIES

JULY 25  
 U. S. C. G. S.  
 8. 8S, 71. 3W  
 Brazil  
 H = 02 48 13. 5  
 h = 642 km  
 Halifax  
 iP 02 56 43 d  
 Ottawa  
 eP 02 56 45  
 Penticton  
 eP 02 58 38 d  
 Resolute  
 iP 02 59 47  
 Shawinigan Falls  
 iP 02 56 43 d  
 Victoria  
 eP 02 58 47 d

JULY 25  
 U. S. C. G. S.  
 21. 0N, 123. 6E  
 Off coast of  
 Formosa  
 H = 12 00 59. 6  
 h = 61 km  
 Resolute  
 eP 12 13 06?

JULY 25  
 U. S. C. G. S.  
 0. 0, 124. 7E  
 Celebes Islands  
 H = 18 39 24. 1  
 h = 43 km  
 Ottawa  
 eP' 18 58 36  
 Penticton  
 eP 18 52 02  
 Shawinigan Falls  
 eP' 18 58 37  
 Victoria  
 eP 18 51 52

JULY 25  
 Shawinigan Falls  
 eP 21 58 20 d

JULY 25  
 Canadian Arctic  
 H = 22 35 29  
 Mag 1. 7  
 Resolute  
 iP<sub>1</sub> 22 35 45  
 iS<sub>1</sub> 22 35 55  
 D = 82 km

JULY 25  
 H = 22 38 32  
 Penticton  
 eP<sub>1</sub> 22 38 55. 0  
 eS<sub>1</sub> 22 39 12. 8  
 D = 146 km

JULY 26  
 U. S. C. G. S.  
 35. 7S, 104. 5W  
 Southeast of  
 Easter Island  
 H = 01 34 18. 2  
 h = 24 km

Ottawa  
 eP 01 46 52  
 Shawinigan Falls  
 eP 01 47 02 c

JULY 26  
 U. S. C. G. S.  
 37. 1S, 177. 3E  
 New Zealand  
 H = 09 18 59. 9  
 h = 100 km  
 Ottawa  
 eP' 09 37 50 c  
 Shawinigan Falls  
 eP' 09 37 55 c

JULY 27  
 Resolute  
 eP? 02 41 23

JULY 27  
 U. S. C. G. S.  
 18. 2S, 69. 8W  
 Bolivia-Chile border  
 H = 06 09 23. 5  
 h = 31 km  
 Penticton  
 eP 06 21 34  
 Shawinigan Falls  
 eP 06 20 02

JULY 27  
 U. S. C. G. S.  
 35. 2N, 25. 4E  
 Aegean Sea  
 H = 18 35 48. 5  
 h = 65 km  
 Shawinigan Falls  
 eP 18 47 00

JULY 28  
 U. S. C. G. S.  
 27. 0N, 126. 6E  
 Ryukyu Islands  
 H = 00 34 18. 3  
 h = 136 km  
 Penticton  
 eP 00 46 34  
 Resolute  
 iP 00 45 46  
 Victoria  
 eP 00 46 27

JULY 28  
 U. S. C. G. S.  
 2. 2S, 77. 1W  
 Ecuador  
 H = 01 05 30. 0  
 h = 136 km  
 Mag 6 1/4  
 Banff  
 eP 01 15 39

Halifax  
 iP 01 13 58  
 Ottawa  
 eP 01 13 52  
 Penticton  
 eP 01 15 44  
 Resolute  
 iP 01 17 11  
 Shawinigan Falls  
 eP 01 14 01  
 Victoria  
 eP 01 15 54 c  
 e 01 24 27

JULY 28  
 U. S. C. G. S.  
 18. 6S, 167. 7E  
 New Hebrides Islands  
 H = 06 11 38. 7  
 h = 41 km  
 Mag 5 3/4  
 Ottawa  
 eP' 06 30 30  
 Shawinigan Falls  
 eP' 06 30 36

JULY 28  
 U. S. C. G. S.  
 20. 0N, 109. 2W  
 Pacific Ocean  
 H = 10 13 51. 1  
 h = 42 km  
 Mag 5 1/2  
 Banff  
 eP 10 20 10  
 Halifax  
 eP 10 22 02  
 Ottawa  
 eP 10 21 03  
 Penticton  
 eP 10 20 01  
 Resolute  
 eP 10 23 26?  
 eS 10 31 03?  
 Shawinigan Falls  
 eP 10 21 27  
 Victoria  
 eP 10 20 03

JULY 28  
 Ottawa  
 eP 10 45 29 d

JULY 28  
 45. 9N, 122. 6W  
 Northeast of Portland,  
 Oregon, U. S. A.  
 H = 14 52 54  
 Mag 3. 1  
 Banff  
 e 14 56 31. 0  
 Penticton  
 eP<sub>n</sub> 14 53 56. 1  
 eS<sub>n</sub> 14 54 00. 0  
 D = 442 km  
 Victoria  
 eP<sub>n</sub> 14 53 37. 0  
 eS<sub>n</sub> 14 54 13. 3  
 D = 296 km

JULY 28  
 U. S. C. G. S.  
 43. 4N, 146. 1E  
 Kurile Islands  
 H = 15 19 40. 0  
 h = 34 km  
 Banff  
 eP 15 30 11  
 Ottawa  
 eP 15 32 09  
 Penticton  
 eP 15 29 53  
 Resolute  
 iP 15 29 14  
 Victoria  
 eP 15 29 43

JULY 28  
 Penticton  
 eP 18 40 51

JULY 28  
 H = 22 48 02. 8  
 Penticton  
 eP<sub>n</sub> 22 48 33. 0  
 eS<sub>n</sub> 22 48 56. 0  
 D = 188 km

JULY 29  
 U. S. C. G. S.  
 16. 6S, 174. 1E  
 Fiji Islands  
 H = 10 31 52. 5  
 h = 132 km  
 Penticton  
 eP 10 44 37

JULY 29  
 Penticton  
 eP 13 01 22

JULY 29  
 U. S. C. G. S.  
 23. 9S, 176. 1W  
 Tonga Islands region  
 H = 16 27 19. 0  
 h = 23 km  
 Mag 5 1/2  
 Penticton  
 eP 16 38 37

JULY 29  
 Banff  
 eP 21 23 07  
 Penticton  
 eP 21 23 09  
 Victoria  
 eP 21 23 33

JULY 29  
 Penticton  
 eP 21 47 35

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DOMINION OBSERVATORIES

JULY 30  
Penticton  
eP 00 25 36

JULY 30  
50.8N, 119.9W  
Near Kamloops  
H = 01 57 52  
Mag 2.1  
Penticton  
eP<sub>n</sub> 01 58 17.1  
eS<sub>n</sub> 01 58 36.6  
D = 160 km

JULY 31  
Penticton  
eP 20 03 06

JULY 31  
H = 23 29 49.8  
Penticton  
eP<sub>1</sub> 23 30 13.1  
eS<sub>1</sub> 23 30 31.8  
D = 145 km

AUGUST 1  
U.S.C.G.S.  
14.2S, 166.7E  
New Hebrides Islands  
H = 01 17 44.7  
h = 26 km  
Penticton  
eP 01 30 49

AUGUST 1  
U.S.C.G.S.  
15.5N, 46.6W  
North Atlantic Ocean  
H = 03 16 11.2  
h = 48 km  
Banff  
eP 03 26 48  
Penticton  
eP 03 27 06

AUGUST 1  
U.S.C.G.S.  
9.8S, 160.5E  
Solomon Islands  
H = 05 39 53.2  
h = 50 km  
Mag 6 1/2  
Banff  
eP 05 53 08  
Halifax  
eP' 05 58 59.5  
Penticton  
iP 05 52 54  
Resolute  
eP 05 53 52?  
Victoria  
eP 05 52 44

AUGUST 1  
U.S.C.G.S.  
56.8S, 25.1W  
Sandwich Islands  
H = 07 21 12.3  
h = 44 km  
Banff  
e 07 43 42  
Penticton  
eP' 07 40 23  
Victoria  
eP' 07 40 28  
e 07 42 55  
e 07 43 51

AUGUST 1  
Penticton  
eP 09 21 35

AUGUST 1  
U.S.C.G.S.  
56.6S, 24.0W  
Sandwich Islands  
H = 09 24 22.4  
h = 61 km  
Penticton  
eP' 09 43 32

AUGUST 1  
U.S.C.G.S.  
57.1S, 26.1W  
Sandwich Islands  
H = 09 34 40.7  
h = 31 km  
Banff  
eP' 09 53 49  
Penticton  
eP' 09 53 59  
Victoria  
e 09 56 17  
e 09 57 18

AUGUST 1  
Penticton  
eP 10 18 53

AUGUST 1  
U.S.C.G.S.  
19.1N, 104.1W  
Near coast of Mexico  
H = 14 30 37.3  
h = 58 km  
Penticton  
eP 14 37 07

AUGUST 1  
Penticton  
eP 15 01 37

AUGUST 1  
Penticton  
eP 15 13 11

AUGUST 2  
U.S.C.G.S.  
56.7S, 24.8W  
Sandwich Islands  
H = 02 31 24.8  
h = 25 km  
Penticton  
eP' 02 50 38  
Resolute  
e 02 54 40?  
Victoria  
e 02 54 04

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AUGUST 2  
Penticton  
eP 09 59 01

AUGUST 2  
U.S.C.G.S.  
44.5N, 148.7E  
Kurile Islands  
H = 12 12 03.8  
h = 74 km  
Banff  
eP 12 22 07  
Penticton  
eP 12 21 58  
Resolute  
iP 12 21 22  
Victoria  
eP 12 21 47

AUGUST 2  
Penticton  
eP 13 35 26

AUGUST 2  
U.S.C.G.S.  
4.1S, 76.7W  
Northern Peru  
H = 13 45 44.8  
h = 38 km  
Penticton  
eP 13 56 22

AUGUST 2  
U.S.C.G.S.  
51.9N, 157.8E  
Near coast of  
Kamchatka  
H = 14 32 27.9  
h = 50 km  
Penticton  
eP 14 41 18

AUGUST 2  
Penticton  
eP 15 59 04

AUGUST 2  
Penticton  
eP 17 34 00

AUGUST 2  
Penticton  
eP 19 00 34

AUGUST 2  
U.S.C.G.S.  
12.6S, 165.5E  
New Hebrides Islands  
H = 20 14 50.2  
h = 129 km  
Penticton  
eP 20 27 40

AUGUST 2  
Penticton  
eP<sub>1</sub> 21 54 58.0  
eS<sub>1</sub> 21 55 17.5  
D = 160 km

AUGUST 2  
Penticton  
eP 23 14 51

AUGUST 3  
Banff  
eP 01 35 25

AUGUST 3  
H = 02 16 48  
Penticton  
iP<sub>n</sub> 02 17 11.0  
iS<sub>n</sub> 02 17 32.3  
D = 174 km  
Victoria  
eP<sub>n</sub> 02 17 12.1  
D = 182 km

AUGUST 3  
U.S.C.G.S.  
18.2N, 66.2W  
Puerto Rico  
H = 03 08 02.3  
h = 141 km

Banff  
eP 03 16 52 d  
Halifax  
eP 03 13 30.7 d  
Ottawa  
eP 03 13 45 d  
Penticton  
iP 03 17 06 d  
Resolute  
iP 03 17 48  
Victoria  
eP 03 17 22

AUGUST 3  
Penticton  
eP 06 20 05

AUGUST 3  
U.S.C.G.S.  
52.2N, 174.0E  
Near Islands  
H = 14 24 58.2  
h = 41 km  
Penticton  
eP 14 32 38

DOMINION OBSERVATORIES

AUGUST 3  
 H = 19 42 32  
 Penticton  
 eP<sub>n</sub> 19 43 03.3  
 eS<sub>n</sub> 19 43 27.7  
 D = 200 km

AUGUST 3  
 H = 21 31 08  
 Penticton  
 iP<sub>1</sub> 21 31 31.6  
 eS<sub>1</sub> 21 31 49.4  
 D = 146 km  
 Victoria  
 eP<sub>n</sub> 21 31 50.5  
 D = 292 km

AUGUST 3  
 H = 21 43 30  
 Penticton  
 eP<sub>n</sub> 21 44 21.0  
 eS<sub>n</sub> 21 44 55.0  
 D = 278 km

AUGUST 3  
 H = 21 59 09  
 Banff  
 iP<sub>1</sub> 21 59 15.6  
 iS<sub>1</sub> 21 59 20.6  
 D = 41 km

AUGUST 3  
 Ottawa  
 eP 23 43 17

AUGUST 3  
 U. S. C. G. S.  
 12.1N, 143.8E  
 Mariana Islands  
 H = 23 33 37.7  
 h = 20 km  
 Banff  
 eP 23 46 25  
 Penticton  
 eP 23 46 15

Resolute  
 eP 23 46 19  
 Victoria  
 eP 23 46 03

AUGUST 4  
 Penticton  
 eP 00 01 52

AUGUST 4  
 U. S. C. G. S.  
 42.7N, 144.8E  
 Hokkaido Japan  
 H = 07 17 43.8  
 h = 18 km  
 Penticton  
 eP 07 28 08  
 Resolute  
 eP 07 27 27

AUGUST 4  
 U. S. C. G. S.  
 51.4N, 177.4W  
 Andreanof Islands  
 H = 10 36 25.7  
 h = 20 km  
 Penticton  
 iP 10 43 30  
 Victoria  
 eP 10 43 15

AUGUST 4  
 U. S. C. G. S.  
 15.2N, 95.3W  
 Near coast of  
 Mexico  
 H = 11 24 12.8  
 h = 24 km  
 Ottawa  
 eP 11 30 58  
 Penticton  
 eP 11 31 41  
 Shawinigan Falls  
 eP 11 31 17

AUGUST 4  
 Banff  
 eP 14 34 05  
 Penticton  
 eP 14 34 14  
 Victoria  
 eP 14 33 28

AUGUST 4  
 Penticton  
 eP 15 02 37  
 Victoria  
 eP 15 01 55

AUGUST 4  
 U. S. C. G. S.  
 39.0N, 117.7W  
 Western Nevada  
 H = 16 56 09.1  
 h = 12 km  
 Penticton  
 e 17 00 34

AUGUST 4  
 U. S. C. G. S.  
 34.8N, 38.7W  
 North Atlantic Ocean  
 H = 18 35 20.8  
 h = 26 km  
 Halifax  
 iP 18 40 12.5 d  
 Ottawa  
 eP 18 41 31  
 Resolute  
 eP 18 44 08?  
 eS 18 51 12?  
 Shawinigan Falls  
 eP 18 41 15

AUGUST 4  
 U. S. C. G. S.  
 45.3N, 151.1E  
 Kurile Islands  
 H = 22 52 49.2  
 h = 20 km  
 Banff  
 eP 23 02 46

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Ottawa  
 eP 23 05 02  
 Penticton  
 eP 23 02 38  
 Resolute  
 eP 23 02 06?  
 eS 23 09 30?  
 Shawinigan Falls  
 eP 23 05 03  
 Victoria  
 eP 23 02 25

AUGUST 4  
 Penticton  
 eP 23 31 55

AUGUST 5  
 U. S. C. G. S.  
 50.5N, 160.5E  
 Off coast of  
 Kamchatka  
 H = 06 10 16.3  
 h = 25 km  
 Penticton  
 eP 06 19 02

AUGUST 5  
 U. S. C. G. S.  
 18.8S, 68.2W  
 Near Chile-Bolivia  
 border  
 H = 09 27 45.5  
 h = 113 km  
 Banff  
 eP 09 39 53 d  
 Halifax  
 iP 09 38 10.2 d  
 Ottawa  
 eP 09 38 15  
 e 09 38 43  
 Penticton  
 iP 09 39 52  
 Shawinigan Falls  
 eP 09 38 22?  
 i 09 38 51  
 Victoria  
 eP 09 40 03 d

AUGUST 5  
 U. S. C. G. S.  
 60.5N, 148.6W  
 Alaska  
 H = 02 26 22.4  
 h = 105 km  
 Banff  
 eP 02 30 57

AUGUST 5  
 Penticton  
 eP 11 03 13

Halifax  
 eP 02 35 12 d  
 Ottawa  
 eP 02 34 22 d  
 Penticton  
 iP 02 30 51  
 Resolute  
 eP 02 31 26  
 eS 02 35 39?  
 Shawinigan Falls  
 eP 02 34 27  
 Victoria  
 eP 02 30 38

AUGUST 5  
 Canadian Arctic  
 H = 12 55 50.5  
 h = 27 km  
 Mag 3.1  
 Resolute  
 iP<sub>n</sub> 12 56 26.2  
 iP<sub>1</sub> 12 56 31.1  
 iS<sub>n</sub> 12 56 52  
 iS<sub>1</sub> 12 57 02  
 D = 252 km

AUGUST 6  
 Penticton  
 eP 23 21 24

AUGUST 6  
 Penticton  
 eP 23 57 29

AUGUST 7  
 U. S. C. G. S.  
 42.2N, 142.1E  
 Hokkaido Japan  
 H = 04 02 09.4  
 h = 24 km  
 Penticton  
 eP 04 12 42  
 Resolute  
 iP 04 11 59

AUGUST 7  
 U. S. C. G. S.  
 28.1S, 176.5W  
 Kermadec Islands  
 H = 12 22 23.3  
 h = 39 km  
 Penticton  
 eP 12 35 19  
 Victoria  
 eP 12 35 21



DOMINION OBSERVATORIES

AUGUST 7  
H = 16 30 20  
Penticton  
eP<sub>n</sub> 16 30 58.6  
eS<sub>n</sub> 16 31 30.6  
D = 262 km

AUGUST 7  
U.S.C.G.S.  
27.5S, 177.1W  
Kermadec Islands  
H = 16 57 50.0  
h = 60 km  
Penticton  
eP 17 10 59

AUGUST 7  
Victoria  
eP 22 40 55

AUGUST 8  
Penticton  
eP 01 50 25

AUGUST 8  
U.S.C.G.S.  
51.9N, 176.3W  
Andreanof Islands  
H = 05 36 28.9  
h = 57 km  
Banff  
eP 05 43 34  
Penticton  
iP 05 43 20  
Victoria  
eP 05 43 04

AUGUST 8  
Penticton  
eP 05 59 59

AUGUST 8  
U.S.C.G.S.  
24.5S, 116.2W  
West of Easter Island  
H = 07 49 55.3  
h = 38 km  
Penticton  
eP 08 01 28

AUGUST 8  
U.S.C.G.S.  
50.9N, 170.7W  
Fox Islands  
H = 12 18 18.9  
h = 24 km  
Mag 6  
Banff  
eP 12 25 06 d  
Halifax  
iP 12 29 05.5 d  
Ottawa  
eP 12 28 21  
Penticton  
iP 12 24 50  
Resolute  
iP 12 25 39  
PP 12 27 08  
eS 12 31 24  
Shawinigan Falls  
eP 12 28 29  
Victoria  
eP 12 24 33 d

AUGUST 8  
Penticton  
eP 12 55 51

AUGUST 8  
U.S.C.G.S.  
51.3N, 170.5W  
Fox Islands  
H = 13 37 53.0  
h = 39 km  
Penticton  
eP 13 44 20

AUGUST 8  
H = 18 23 02  
Penticton  
eP<sub>1</sub> 18 23 28.0  
eS<sub>1</sub> 18 23 47.5  
D = 160 km

AUGUST 8  
Penticton  
eP 23 50 03

AUGUST 8  
U.S.C.G.S.  
50.9N, 170.5W  
Fox Islands  
H = 23 49 11.9  
h = 25 km  
Penticton  
eP 23 55 43

AUGUST 9  
U.S.C.G.S.  
19.1S, 168.7E  
New Hebrides Islands  
H = 16 02 36.1  
h = 69 km  
Halifax  
iP' 16 21 40.5(c)  
Ottawa  
eP' 16 21 23 c  
Penticton  
iP 16 15 45 c  
Shawinigan Falls  
iP' 16 21 27 c  
Victoria  
iP 16 15 34 c

AUGUST 9  
H = 19 26 37.5  
Penticton  
iP<sub>1</sub> 19 26 56.5  
iS<sub>1</sub> 19 27 12.9  
D = 134 km



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AUGUST 9  
H = 22 21 41  
Penticton  
eP<sub>1</sub> 22 22 06.9  
eS<sub>1</sub> 22 22 26.4  
D = 160 km

AUGUST 9  
Penticton  
eP 23 48 31

AUGUST 10  
U.S.C.G.S.  
58.5N, 155.1W  
Alaska  
H = 00 58 38.9  
h = 68 km  
Penticton  
eP 01 03 32

AUGUST 10  
Penticton  
eP 05 46 55

AUGUST 10  
U.S.C.G.S.  
20.8S, 178.0W  
Fiji Islands  
H = 06 37 04.7  
h = 377 km  
Penticton  
eP 06 49 13

AUGUST 10  
U.S.C.G.S.  
20.1S, 174.5W  
Tonga Islands  
H = 07 32 05.3  
h = 100 km  
Penticton  
eP 07 44 33

AUGUST 10  
U.S.C.G.S.  
37.2N, 136.9E  
Near coast of  
Honshu, Japan  
H = 12 03 21.8  
h = 51 km  
Penticton  
eP 12 14 34  
Victoria  
eP 12 14 23

AUGUST 10  
U.S.C.G.S.  
43.3N, 144.9E  
Hokkaido Japan  
H = 12 05 21.4  
h = 25 km  
Banff  
eP 12 15 51  
Resolute  
iP 12 15 01  
Shawinigan Falls  
eP 12 17 56

AUGUST 10  
U.S.C.G.S.  
9.6S, 159.7E  
Solomon Islands  
H = 17 22 31.6  
h = 44 km  
Penticton  
eP 17 35 29

AUGUST 10  
Penticton  
eP 18 50 45

AUGUST 10  
H = 23 01 41  
Penticton  
eP<sub>1</sub> 23 02 07.1  
eS<sub>1</sub> 23 02 27.3  
D = 165 km

AUGUST 11  
U.S.C.G.S.  
56.1N, 164.3E  
Kamchatka  
H = 00 43 29.6  
h = 27 km  
Banff  
eP 00 51 28  
Penticton  
eP 00 51 39  
Shawinigan Falls  
eP 00 54 24  
Victoria  
eP 00 51 21

AUGUST 11  
Penticton  
eP 04 11 13

AUGUST 11  
U.S.C.G.S.  
32.5N, 131.3E  
Kyushu Japan  
H = 04 27 23.3  
h = 25 km  
Penticton  
eP 04 39 14

AUGUST 11  
U.S.C.G.S.  
32.6N, 131.4E  
Kyushu, Japan  
H = 06 08 18.2  
h = 25 km  
Penticton  
eP 06 20 10  
Victoria  
eP 06 20 01

AUGUST 11  
U.S.C.G.S.  
51.7N, 176.9W  
Andreanof Islands  
H = 06 55 54.5  
Penticton  
eP 07 02 50

DOMINION OBSERVATORIES

AUGUST 11  
Penticton  
eP 08 04 12

AUGUST 11  
Penticton  
eP 10 05 32

AUGUST 11  
U.S.C.G.S.  
18.5S, 168.2E  
New Hebrides Islands  
H = 10 24 58.9  
Penticton  
eP 10 38 09  
Shawinigan Falls  
eP' 10 43 54  
Victoria  
eP 10 38 01

AUGUST 11  
U.S.C.G.S.  
0.2N, 124.0E  
Celebes Islands  
H = 11 04 39.1  
h = 143 km  
Banff  
eP' 11 22 53  
Penticton  
eP 11 18 40  
e 11 22 50  
Shawinigan Falls  
eP' 11 23 37  
Victoria  
eP' 11 22 47

AUGUST 11  
U.S.C.G.S.  
42.9N, 145.1E  
Hokkaido Japan  
H = 15 51 35.4  
h = 71 km  
Mag 7  
Banff  
eP 16 01 58 c

Halifax  
iP 16 04 26 c  
Ottawa  
iP 16 04 04 c  
Penticton  
iP 16 01 51 c  
Resolute  
iP 16 01 10  
eS 16 08 52  
Shawinigan Falls  
iP 16 04 05 c  
Victoria  
iP 16 01 40 c

AUGUST 11  
Penticton  
eP 19 23 19

AUGUST 11  
U.S.C.G.S.  
41.5N, 141.9E  
Off coast of  
Honshu, Japan  
H = 23 11 47.9  
h = 122 km  
Penticton  
eP 23 22 16  
Resolute  
eP 23 21 32

AUGUST 11  
U.S.C.G.S.  
42.8N, 145.1E  
Hokkaido Japan  
H = 23 33 51.9  
h = 72 km  
Ottawa  
eP 23 46 21  
Penticton  
iP 23 44 06  
Resolute  
eP 23 43 27  
Shawinigan Falls  
eP 23 46 24 c  
Victoria  
eP 23 43 57 d

AUGUST 12  
Penticton  
eP 03 22 55

AUGUST 12  
Shawinigan Falls  
eP 13 43 03?

AUGUST 12  
Victoria  
eP 14 02 39

AUGUST 12  
Penticton  
eP 15 54 08

AUGUST 12  
Penticton  
eP 17 26 09

AUGUST 12  
Penticton  
eP 19 05 34

AUGUST 12  
Penticton  
eP 22 07 12

AUGUST 12  
Penticton  
eP 23 10 02

AUGUST 13  
Penticton  
iP 00 16 43



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AUGUST 13  
U.S.C.G.S.  
25.3N, 121.5E  
Near coast of Formosa  
H = 06 01 02.0  
h = 25 km  
Banff  
eP 06 13 57  
Penticton  
eP 06 13 52  
Victoria  
eP 06 13 45

AUGUST 13  
Penticton  
eP 18 19 11

AUGUST 13  
U.S.C.G.S.  
18.7S, 65.6W  
Bolivia  
H = 18 22 30.5  
h = 120 km  
Penticton  
eP 18 34 43

AUGUST 14  
U.S.C.G.S.  
3.4S, 81.3W  
Near coast of  
Peru  
H = 01 56 56.2  
h = 35 km  
Penticton  
eP 02 07 16

AUGUST 14  
Penticton  
eP 12 01 31

AUGUST 14  
U.S.C.G.S.  
57.6N, 158.7W  
Alaska  
H = 13 46 05.1  
h = 93 km  
Penticton  
iP 13 51 19

AUGUST 14  
U.S.C.G.S.  
24.2S, 175.7W  
Tonga Islands  
H = 18 50 50.3  
h = 21 km  
Mag 5 1/2  
Banff  
eP 19 03 58  
Penticton  
iP 19 03 43 d  
e 19 12 39  
Victoria  
eP 19 03 31

AUGUST 14  
U.S.C.G.S.  
31.8N, 131.2E  
Off coast of Japan  
H = 22 04 59.0  
h = 14 km  
Penticton  
eP 22 16 56  
Resolute  
eP 22 16 10

AUGUST 14  
H = 22 52 40  
Penticton  
eP<sub>n</sub> 22 53 09.3  
eS<sub>n</sub> 22 53 32.5  
D = 190 km

AUGUST 14  
U.S.C.G.S.  
20.3S, 169.4E  
New Hebrides Islands  
H = 23 28 46.5  
h = 97 km  
Mag 6  
Halifax  
iP' 23 47 50.5  
Ottawa  
eP' 23 47 34  
Penticton  
iP 23 41 56  
e 23 56 08  
Shawinigan Falls  
eP' 23 47 37  
Victoria  
iP 23 41 45 d

AUGUST 15  
Penticton  
eP 08 59 49

AUGUST 15  
61°N±1°, 135°W±1°  
Canadian Arctic  
H = 12 26 09  
Mag 5.3  
Penticton  
eP 12 29 21  
Resolute  
iP<sub>n</sub> 12 31 09 d  
eS<sub>n</sub> 12 35 04  
L<sub>g</sub> 12 37 09  
D = 2500 km  
Victoria  
e 12 32 44

AUGUST 15  
U.S.C.G.S.  
47.6N, 155.3E  
Kurile Islands  
H = 15 35 31.0  
h = 34 km  
Penticton  
eP 15 44 51

DOMINION OBSERVATORIES

AUGUST 15  
H = 19 07 14  
Penticton  
eP<sub>n</sub> 19 07 44.8  
eS<sub>n</sub> 19 08 09.3  
D = 200 km

AUGUST 15  
U. S. C. G. S.  
32.8N, 142.4E  
South of Honshu,  
Japan  
H = 19 03 55.7  
h = 39 km  
Banff  
eP 19 15 22  
Ottawa  
eP 19 17 16  
Penticton  
iP 19 15 10  
Resolute  
iP 19 14 44  
Shawinigan Falls  
eP 19 17 17  
Victoria  
eP 19 14 59

AUGUST 16  
Canadian Arctic  
H = 07 51 45  
Mag 3.2  
Resolute  
P<sub>n</sub> 07 52 28.5  
S<sub>n</sub> 07 53 00.5  
L<sub>g</sub> 07 53 13  
D = 312 km

AUGUST 16  
U. S. C. G. S.  
32.2N, 142.1E  
South of Honshu,  
Japan  
H = 08 57 36.9  
h = 32 km  
Penticton  
eP 09 08 56

AUGUST 16  
Penticton  
eP 11 54 09

AUGUST 16  
Penticton  
eP 15 51 35

AUGUST 16  
Penticton  
eP 20 36 05

AUGUST 16  
Penticton  
eP 06 48 55

AUGUST 17  
Penticton  
eP 20 09 57

AUGUST 17  
Penticton  
eP 20 16 05

AUGUST 17  
Penticton  
eP 20 30 19

AUGUST 17  
U. S. C. G. S.  
46.3N, 149.3E  
Kurile Islands  
H = 21 16 30.0  
h = 186 km  
Mag 6 3/4  
Alberni  
iP 21 25 44  
Banff  
iP 21 26 12  
Halifax  
iP 21 28 48  
Ottawa  
eP 21 28 24  
Penticton  
iP 21 26 04 c  
Resolute  
eP 21 25 24  
eS 21 32 35  
S<sub>c</sub>S? 21 34 58  
SS ? 21 36 04?  
Shawinigan Falls  
eP 21 28 25  
i 21 29 05 d  
Victoria  
e 21 25 52

AUGUST 17  
Penticton  
eP 21 55 21



SEISMOLOGICAL BULLETIN - 1961

AUGUST 18  
Penticton  
eP 01 59 04

AUGUST 18  
Alberni  
eP 07 50 11  
e 07 50 30  
Penticton  
eP 07 50 30  
Victoria  
eP 07 49 49

AUGUST 18  
U. S. C. G. S.  
24.0S, 179.9W  
Kermadec Islands  
H = 11 01 26.5  
h = 519 km  
Penticton  
eP 11 13 36

AUGUST 18  
Penticton  
eP 17 04 13

AUGUST 18  
Penticton  
eP 20 59 54

AUGUST 18  
Penticton  
eP 23 38 54

AUGUST 18  
Penticton  
eP 23 42 52

AUGUST 19  
U. S. C. G. S.  
43.1N, 145.0E  
Hokkaido Japan  
H = 02 42 58.2  
h = 32 km  
Banff  
eP 02 53 38  
Ottawa  
eP 02 55 31  
Penticton  
eP 02 53 15  
Resolute  
eP 02 52 37  
Shawinigan Falls  
eP 02 55 32  
Victoria  
eP 02 53 19

AUGUST 19  
Penticton  
eP 03 15 38

AUGUST 19  
49.8°N, 130.0°W  
Off west coast of  
Vancouver Island  
H = 04 56 12  
Mag 4.3  
Banff  
e 04 59 22  
Penticton  
iP 04 57 40 d  
Victoria  
eP 04 57 21 d

AUGUST 19  
U. S. C. G. S.  
10.7S, 71.0W  
Peru-Brazil border  
H = 05 09 49.5  
h = 649 km  
Mag 7  
Alberni  
iP 05 20 38 d

Banff  
iP 05 20 20 d  
Halifax  
iP 05 18 31 d  
Ottawa  
iP 05 18 33 d  
Penticton  
iP 05 20 23 d  
Resolute  
iP 05 21 31  
? 05 23 41  
iS 05 30 57  
? 05 34 56  
Shawinigan Falls  
iP 05 18 41 d  
Victoria  
eP 05 20 32 d

AUGUST 19  
U. S. C. G. S.  
36.0N, 136.5E  
Off coast of  
Honshu, Japan  
H = 05 33 30.6  
h = 17 km  
Mag 7 1/2  
Alberni  
eP 05 44 36  
Penticton  
iP 05 44 54 c  
Shawinigan Falls  
iP 05 46 50 c  
e 05 55 45

AUGUST 19  
Penticton  
eP 06 07 12

DOMINION OBSERVATORIES

AUGUST 19  
U. S. C. G. S.  
35. 9N, 136. 6E  
Near coast of  
Honshu, Japan  
H = 08 07 18. 3  
h = 25 km  
Penticton  
eP 08 18 40  
Shawinigan Falls  
eP 08 20 36

AUGUST 19  
U. S. C. G. S.  
43. 4N, 145. 2E  
Near coast of  
Hokkaido, Japan  
H = 12 44 57. 7  
h = 20 km  
Penticton  
eP 12 55 16  
Resolute  
iP 12 54 35

AUGUST 19  
U. S. C. G. S.  
18. 0N, 68. 8W  
Mona Passage  
H = 14 52 31. 4  
h = 146 km  
Alberni  
eP 15 00 59  
Banff  
eP 15 01 12  
Halifax  
iP 14 58 04  
Ottawa  
eP 14 58 12  
Penticton  
eP 15 00 57  
Resolute  
eP 15 02 15  
Victoria  
eP 15 01 12 d

AUGUST 19  
U. S. C. G. S.  
11. 4S, 70. 6W  
Peru-Brazil border  
H = 16 01 25. 6  
h = 645 km  
Banff  
eP 16 12 00  
Penticton  
iP 16 12 04 d  
e 16 13 55  
Resolute  
iP 16 13 11  
Shawinigan Falls  
eP 16 10 22 c  
Victoria  
eP 16 12 12 d

AUGUST 19  
Penticton  
eP 17 03 36

AUGUST 19  
Penticton  
eP 19 00 04

AUGUST 19  
Penticton  
eP 19 12 41

AUGUST 20  
U. S. C. G. S.  
17. 8S, 178. 8W  
Fiji Islands  
H = 05 04 14. 3  
h = 592 km  
Alberni  
eP 05 15 38  
Banff  
iP 05 16 08 c  
Penticton  
iP 05 15 52 c  
Shawinigan Falls  
eP' 05 21 52  
Victoria  
eP 05 15 39

AUGUST 20  
Penticton  
eP 06 34 13

AUGUST 20  
Penticton  
eP 08 44 05

AUGUST 20  
U. S. C. G. S.  
11. 4S, 70. 8W  
Peru-Brazil border  
H = 09 10 11. 7  
h = 678 km  
Banff  
iP 09 20 44  
Penticton  
iP 09 20 48  
Shawinigan Falls  
eP 09 19 06

AUGUST 20  
U. S. C. G. S.  
6. 3S, 155. 4E  
Solomon Islands  
H = 10 19 56. 0  
h = 72 km  
Penticton  
eP 10 32 58  
Shawinigan Falls  
eP' 10 38 46

AUGUST 20  
Resolute  
eP 18 07 23

AUGUST 21  
U. S. C. G. S.  
23. 4S, 65. 1W  
Argentina  
H = 01 28 32. 0  
h = 98 km  
Penticton  
eP 01 41 12

SEISMOLOGICAL BULLETIN - 1961

AUGUST 21  
Penticton  
eP 02 02 15

AUGUST 21  
U. S. C. G. S.  
22. 7S, 179. 2W  
Fiji Islands  
H = 02 06 43. 4  
h = 554 km  
Penticton  
iP 02 18 40 c

AUGUST 21  
48°45'N, 122°44'W  
Gulf Islands  
H = 03 26 02  
Mag 2. 3  
Alberni  
iP<sub>1</sub> 03 26 29. 0  
iS<sub>1</sub> 03 26 49. 7  
D = 170 km  
Penticton  
eP<sub>n</sub> 03 26 37. 8  
D = 242 km  
Victoria  
iP<sub>1</sub> 03 26 11. 5  
iS<sub>1</sub> 03 26 19. 1  
D = 58 km

AUGUST 21  
U. S. C. G. S.  
36. 3N, 71. 5E  
Hindu Kush  
H = 07 00 21. 2  
h = 152 km  
Penticton  
eP 07 13 27  
Shawinigan Falls  
eP 07 13 15

AUGUST 21  
Penticton  
eP 07 52 50

AUGUST 21  
U. S. C. G. S.  
50. 9N, 170. 9W  
Fox Islands  
H = 11 20 39. 7  
h = 33 km  
Penticton  
eP 11 28 10

AUGUST 21  
U. S. C. G. S.  
17. 8S, 174. 4W  
Tonga Islands  
H = 16 06 55. 4  
h = 74 km  
Mag 5 3/4  
Victoria  
eP 16 19 02

AUGUST 21  
Penticton  
eP 16 41 17

AUGUST 21  
U. S. C. G. S.  
40. 9N, 138. 9E  
Off coast of  
Honshu, Japan  
H = 17 00 37. 0  
h = 49 km  
Banff  
eP 17 11 34 c

AUGUST 21  
Ottawa  
eP 17 13 28  
Penticton  
iP 17 11 26 c  
Resolute  
eP 17 10 36  
Shawinigan Falls  
eP 17 13 28  
Victoria  
eP 17 11 16 c

AUGUST 21  
Penticton  
eP 18 16 34

AUGUST 21  
Penticton  
eP 18 29 47

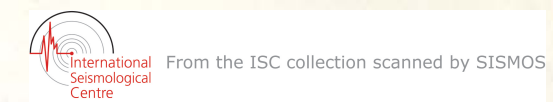
AUGUST 21  
Penticton  
eP 19 58 36

AUGUST 21  
H = 20 01 51  
Penticton  
iP<sub>1</sub> 20 02 15. 4  
eS<sub>1</sub> 20 02 33. 7  
D = 150 km

AUGUST 21  
H = 21 26 42  
Penticton  
eP<sub>n</sub> 21 27 12. 7  
eS<sub>n</sub> 21 27 37. 2  
D = 201 km

AUGUST 21  
Penticton  
eP 21 55 00

AUGUST 22  
U. S. C. G. S.  
43. 2N, 144. 5E  
Near coast of  
Hokkaido, Japan  
H = 06 12 07. 2  
h = 25 km  
Penticton  
eP 06 22 28



DOMINION OBSERVATORIES

AUGUST 22  
 U.S.C.G.S. 19 41 31.1  
 13.4S, 166.7E  
 New Hebrides Islands  
 H = 08 59 27.9  
 h = 63 km  
 Pentiction eP 09 12 23

AUGUST 22  
 47°20'N±20', 70°30'W±30'  
 St. Lawrence River  
 H = 18 55 50.8  
 Mag 3.4  
 Montreal  
 i 18 56 37  
 i(P<sub>1</sub>) 18 56 41  
 i 18 57 13  
 iS<sub>1</sub> 18 57 18  
 D = 320 km  
 Ottawa  
 e 18 56 59  
 i(P<sub>1</sub>) 18 57 05  
 e 18 57 45  
 iS<sub>1</sub> 18 57 57  
 D = 460 km  
 Shawinigan Falls  
 iP<sub>1</sub> 18 56 22.5  
 S<sub>1</sub> 18 56 46.6  
 D = 198 km

AUGUST 22  
 Pentiction eP 19 28 19

AUGUST 22  
 49°22'N, 123°37'W  
 Strait of Georgia  
 H = 19 41 16  
 Mag 2.6  
 Alberni  
 eP<sub>1</sub> 19 41 30.1  
 D = 88 km  
 Pentiction  
 eP<sub>n</sub> 19 41 58.7  
 D = 297 km

Victoria  
 eP<sub>1</sub> 19 41 31.1  
 eS<sub>1</sub> 19 41 42.9  
 D = 95 km

AUGUST 22  
 U.S.C.G.S.  
 52.3N, 172.2W  
 Fox Islands  
 H = 22 21 47.6  
 h = 53 km  
 Banff  
 eP 22 28 33

AUGUST 22  
 H = 22 47 54  
 Pentiction  
 eP<sub>1</sub> 22 48 17.7  
 eS<sub>1</sub> 22 48 36.0  
 D = 150 km

AUGUST 22  
 H = 23 00 56  
 Pentiction  
 eP<sub>1</sub> 23 01 18.1  
 eS<sub>1</sub> 23 01 35.2  
 D = 140 km

AUGUST 23  
 U.S.C.G.S.  
 32.9N, 116.3W  
 California  
 H = 01 00 47.1  
 h = 27 km  
 Mag 4 3/4  
 Pentiction  
 eP 01 04 41

AUGUST 23  
 H = 01 22 22  
 Pentiction  
 eP<sub>1</sub> 01 22 44.9  
 eS<sub>1</sub> 01 23 02.0  
 D = 140 km

AUGUST 23  
 U.S.C.G.S.  
 38.7N, 68.7E  
 Tadzhik S.S.R.  
 H = 04 12 35.9  
 h = 25 km  
 Banff  
 eP 04 25 41 d

Halifax  
 P 04 25 21

Pentiction  
 iP 04 25 46

Resolute  
 eP 04 23 26

Shawinigan Falls  
 eP 04 25 30 d

Victoria  
 eP 04 25 49 d

AUGUST 23  
 Pentiction  
 eP 19 25 16

AUGUST 23  
 Pentiction  
 eP 23 06 54

AUGUST 24  
 U.S.C.G.S.  
 42.9N, 145.3E  
 Hokkaido, Japan  
 H = 04 52 20.5  
 h = 44 km  
 Ottawa  
 eP 05 04 53

Pentiction  
 e 05 04 38

Resolute  
 iP 05 01 58 d

Shawinigan Falls  
 eP 05 04 53

SEISMOLOGICAL BULLETIN - 1961

AUGUST 24  
 Pentiction  
 eP 07 43 11

AUGUST 24  
 Pentiction  
 eP 10 01 35

AUGUST 24  
 Pentiction  
 eP 12 05 44

AUGUST 24  
 Pentiction  
 eP 16 51 21

AUGUST 24  
 U.S.C.G.S.  
 21.3S, 173.1E  
 Loyalty Islands  
 H = 20 58 36.2  
 h = 258 km  
 Pentiction  
 eP 21 11 08

AUGUST 24  
 U.S.C.G.S.  
 43.0N, 145.0E  
 Hokkaido, Japan  
 H = 22 40 49.1  
 h = 18 km  
 Banff  
 eP 22 51 19

Halifax  
 P 22 53 46

Ottawa  
 eP 22 53 24

Resolute  
 iP 22 50 30 c

Shawinigan Falls  
 eP 22 53 24

Victoria  
 eP 22 50 59

AUGUST 25  
 U.S.C.G.S.  
 15.2N, 87.0W  
 Honduras  
 H = 05 42 01.2  
 h = 48 km  
 Banff  
 eP 05 49 54

Shawinigan Falls  
 eP 05 48 38

Victoria  
 eP 05 50 16

AUGUST 25  
 U.S.C.G.S.  
 53.5N, 161.2W  
 Alaska  
 H = 06 59 30.2  
 h = 36 km  
 Banff  
 eP 07 05 20

Halifax  
 P 07 09 34

Ottawa  
 eP 07 08 46

Resolute  
 eP 07 06 09

Shawinigan Falls  
 eP 07 08 53 c

Victoria  
 eP 07 04 45

AUGUST 25  
 H = 19 01 02  
 Pentiction  
 eP<sub>1</sub> 19 01 29.6  
 eS<sub>1</sub> 19 01 50.2  
 D = 169 km

AUGUST 25  
 Resolute  
 eP 20 39 59 d

AUGUST 25  
 U.S.C.G.S.  
 8.1S, 122.8E  
 Flores Sea  
 H = 21 26 28.1  
 h = 191 km  
 Halifax  
 P' 21 45 43

AUGUST 25  
 H = 22 53 02  
 Pentiction  
 eP<sub>1</sub> 22 53 26.7  
 eS<sub>1</sub> 22 53 45.2  
 D = 152 km

AUGUST 26  
 H = 01 07 15  
 Pentiction  
 eP<sub>n</sub> 01 07 48.4  
 eS<sub>n</sub> 01 08 14.8  
 D = 216 km

AUGUST 26  
 U.S.C.G.S.  
 7.0N, 73.2W  
 Colombia  
 H = 01 19 39.1  
 h = 183 km  
 Pentiction  
 eP 01 29 13

AUGUST 26  
 Pentiction  
 eP 06 58 52

AUGUST 26  
 H = 17 01 01  
 Pentiction  
 eP<sub>1</sub> 17 01 23.3  
 eS<sub>1</sub> 17 01 39.1  
 D = 138 km



DOMINION OBSERVATORIES

AUGUST 26  
U.S.C.G.S.  
18.0N, 146.4E  
Mariana Islands  
H = 18 49 47.1  
h = 53 km  
Penticton  
eP 19 01 49  
Resolute  
eP 19 01 54

AUGUST 27  
U.S.C.G.S.  
15.3S, 13.1W  
South of Ascension  
Island  
H = 01 51 51.8  
h = 49 km  
Halifax  
eP 02 03 34  
Ottawa  
eP 02 04 14  
Shawinigan Falls  
eP 02 04 09

AUGUST 27  
H = 02 23 16  
Victoria  
iP<sub>1</sub> 02 23 21.1  
iS<sub>1</sub> 02 23 24.8  
D = 30 km

AUGUST 27  
Penticton  
eP 06 00 32

AUGUST 27  
U.S.C.G.S.  
18.5S, 178.2W  
Fiji Islands  
H = 06 43 29.9  
h = 488 km  
Penticton  
iP 06 55 19

AUGUST 27  
Penticton  
eP 12 17 26

AUGUST 27  
U.S.C.G.S.  
22.8S, 114.4W  
Easter Island  
H = 15 28 25.0  
h = 25 km  
Penticton  
eP 15 39 53

AUGUST 27  
U.S.C.G.S.  
46.6N, 154.1E  
Kurile Islands  
H = 16 22 08.1  
h = 31 km  
Mag 6 1/2  
Banff  
eP 16 31 50  
Halifax  
eP 16 34 47  
Ottawa  
eP 16 34 07  
Penticton  
iP 16 31 37  
Resolute  
iP 16 31 08 d  
S 16 38 23  
Shawinigan Falls  
eP 16 34 09

AUGUST 27  
U.S.C.G.S.  
18.3N, 146.6E  
Mariana Islands  
H = 16 47 44.8  
h = 27 km  
Mag 6 1/4  
Banff  
eP 17 00 13  
Penticton  
iP 16 59 49  
Resolute  
iP 16 59 54 c  
S 17 09 55

Victoria  
eP 16 59 37

AUGUST 27  
U.S.C.G.S.  
2.2N, 128.6E  
Halmahera  
H = 17 02 27.2  
h = 263 km  
Shawinigan Falls  
eP' 17 21 07

AUGUST 27  
U.S.C.G.S.  
17.9N, 146.4E  
Mariana Islands  
H = 17 58 00.8  
h = 74 km  
Penticton  
eP 18 10 02

AUGUST 27  
U.S.C.G.S.  
46.8N, 153.9E  
Kurile Islands  
H = 20 56 15.6  
h = 25 km  
Penticton  
eP 21 05 45  
Shawinigan Falls  
eP 21 08 18  
Resolute  
iP 21 05 16 d

AUGUST 27  
U.S.C.G.S.  
35.9N, 23.7E  
Near coast of Crete  
H = 22 08 49.8  
h = 69 km  
Halifax  
P 22 19 19  
Ottawa  
eP 22 20 05 d  
Penticton  
eP 22 21 40  
Shawinigan Falls  
eP 22 19 50 d

SEISMOLOGICAL BULLETIN - 1961

AUGUST 28  
U.S.C.G.S.  
15.1S, 70.2W  
Peru-Bolivia border  
H = 06 28 19.4  
h = 185 km  
Halifax  
iP 06 38 10 c  
Ottawa  
eP 06 38 13  
Penticton  
iP 06 40 01  
Resolute  
iP 06 41 08  
Shawinigan Falls  
eP 06 38 21 c  
Victoria  
eP 06 40 10

AUGUST 28  
Banff  
eP 06 49 29

AUGUST 28  
U.S.C.G.S.  
12.7S, 169.6E  
Santa Cruz Islands  
H = 07 41 24.5  
h = 662 km  
Penticton  
iP 07 53 10

AUGUST 28  
U.S.C.G.S.  
53.6N, 159.1E  
Kamchatka  
H = 09 10 13.0  
h = 25 km  
Banff  
eP 09 19 02  
Penticton  
eP 09 18 53

AUGUST 28  
U.S.C.G.S.  
18.6S, 178.0W  
Fiji Islands  
H = 09 44 13.5  
h = 574 km  
Banff  
iP 09 56 11 d  
Penticton  
iP 09 55 54 d  
Victoria  
iP 09 55 42 d

AUGUST 28  
U.S.C.G.S.  
46.7N, 153.9E  
Kurile Islands  
H = 12 13 45.3  
h = 19 km  
Penticton  
eP 12 23 15

AUGUST 28  
Resolute  
eP 17 45 56

AUGUST 28  
U.S.C.G.S.  
22.9S, 113.4W  
Easter Island region  
H = 20 26 04.2  
h = 56 km  
Banff  
eP 20 37 34  
Penticton  
eP 20 37 25  
Shawinigan Falls  
eP 20 38 00 c  
Victoria  
eP 20 37 22

AUGUST 28  
Penticton  
eP 21 12 08

AUGUST 28  
U.S.C.G.S.  
14.0S, 74.4W  
Near coast of Peru  
H = 21 27 12.1  
h = 73 km  
Banff  
eP 21 38 46  
Halifax  
iP 21 37 10 c  
Ottawa  
eP 21 37 09  
Penticton  
eP 21 38 49 d  
Shawinigan Falls  
eP 21 37 18  
Victoria  
eP 21 38 57

AUGUST 29  
Penticton  
eP 00 21 02

AUGUST 29  
U.S.C.G.S.  
42.7N, 145.0E  
Kurile Islands  
H = 05 55 33.0  
h = 25 km  
Penticton  
eP 06 05 54

AUGUST 29  
Penticton  
iP 12 25 15

AUGUST 29  
U.S.C.G.S.  
52.2N, 170.8W  
Fox Islands  
H = 14 51 14.2  
h = 41 km  
Mag 5  
Banff  
eP 14 57 54 d

DOMINION OBSERVATORIES

Halifax  
eP 15 01 53?  
Ottawa  
eP 15 01 10 d  
Penticton  
iP 14 57 41  
Shawinigan Falls  
eP 15 01 14  
Victoria  
eP 14 57 25 d

AUGUST 29  
U.S.C.G.S.  
15.4S, 168.1E  
New Hebrides Islands  
H = 21 33 43.0  
h = 25 km  
Penticton  
eP 21 47 14

AUGUST 30  
U.S.C.G.S.  
53.7N, 166.3W  
Fox Islands  
H = 02 25 45.4  
Halifax  
P 02 36 02  
Ottawa  
eP 02 35 16  
Penticton  
iP 02 31 43  
Shawinigan Falls  
eP 02 35 23

AUGUST 30  
U.S.C.G.S.  
7.0N, 33.2W  
North Atlantic Ocean  
H = 03 35 07.7  
h = 69 km  
Mag 4 1/2  
Halifax  
eP 03 43 28  
Ottawa  
eP 03 44 20

Penticton  
eP 03 47 30  
Shawinigan Falls  
eP 03 44 12

AUGUST 30  
U.S.C.G.S.  
3.5S, 77.7W  
Ecuador-Peru  
border  
H = 03 45 25.7  
h = 25 km  
Halifax  
P 03 54 21  
Ottawa  
eP 03 54 13  
Penticton  
iP 03 56 03  
Shawinigan Falls  
eP 03 54 25

AUGUST 30  
U.S.C.G.S.  
39.1N, 77.6E  
China  
H = 14 51 49.7  
h = 201 km  
Penticton  
eP 15 04 33

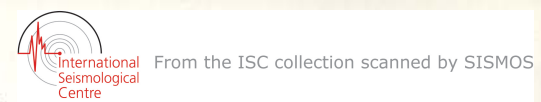
AUGUST 30  
H = 22 43 42  
Penticton  
eP<sub>1</sub> 22 44 06.5  
eS<sub>1</sub> 22 44 24.9  
D = 151 km

AUGUST 31  
U.S.C.G.S.  
28.1S, 176.7W  
Kermadec Islands  
H = 00 22 47.3  
h = 56 km  
Penticton  
eP 00 35 55

AUGUST 31  
U.S.C.G.S.  
10.6S, 70.9W  
Peru-Brazil border  
H = 01 48 37.5  
h = 626 km  
Mag 7  
Banff  
iP 01 59 07 d  
Halifax  
iP 01 57 19 d  
Ottawa  
iP 01 57 21 d  
Penticton  
iP 01 59 12 d  
Resolute  
eP 02 00 20 d  
PP? 02 02 24  
S 02 08 50  
i 02 10 06  
i 02 18 15  
Shawinigan Falls  
iP 01 57 29 d  
Victoria  
eP 01 59 21 d,S,E

AUGUST 31  
U.S.C.G.S.  
10.4S, 70.7W  
Peru-Brazil border  
H = 01 57 08.0  
h = 629 km  
Mag 7 1/2  
Halifax  
iP 02 05 45.5 d  
Ottawa  
iP 02 05 49 d  
Shawinigan Falls  
iP 02 05 56 d

SEISMOLOGICAL BULLETIN - 1961



SEPTEMBER 1  
Penticton  
eP 00 11 47.1

SEPTEMBER 1  
U.S.C.G.S.  
59.3S, 27.3W  
Sandwich Islands  
H = 00 09 34.6  
h = 151 km  
Mag 7 1/2  
Banff  
eP' 00 28 33  
Halifax  
eP 00 23 51  
Penticton  
eP' 00 28 18  
Resolute  
P' 00 28 44  
S 00 31 56  
i 00 32 34  
Shawinigan Falls  
eP 00 24 18  
eP' 00 28 10  
Victoria  
eP' 00 28 38

SEPTEMBER 1  
U.S.C.G.S.  
15.0N, 87.4W  
Honduras  
H = 03 16 12.9  
h = 161 km  
Penticton  
eP 03 24 01

SEPTEMBER 1  
U.S.C.G.S.  
16.4N, 93.8W  
Mexico  
H = 04 43 13.4  
h = 155 km  
Ottawa  
eP 04 49 57  
Shawinigan Falls  
eP 04 50 29

SEPTEMBER 1  
U.S.C.G.S.  
18.0S, 178.3W  
Fiji Islands region  
H = 18 41 32.4  
h = 619 km  
Penticton  
iP 18 53 08 c

SEPTEMBER 1  
U.S.C.G.S.  
13.5N, 92.5W  
Off coast of  
Guatemala  
H = 18 50 35.4  
h = 37 km  
Mag 6 1/2  
Banff  
iP 18 58 24 d  
Halifax  
iP 18 58 04 c  
Ottawa  
iP 18 57 22 c  
Penticton  
iP 18 58 26 d  
Resolute  
iP 19 00 48 d  
S 19 09 06  
ScS? 19 10 39  
Shawinigan Falls  
eP 18 57 40 c

SEPTEMBER 1  
U.S.C.G.S.  
15.2N, 87.3W  
Near coast of  
Honduras  
H = 20 14 56.8  
h = 75 km  
Penticton  
eP 20 22 46

SEPTEMBER 1  
Penticton  
eP 20 38 25

SEPTEMBER 1  
Penticton  
eP 22 52 13

SEPTEMBER 1  
Penticton  
eP 23 38 39

SEPTEMBER 2  
U.S.C.G.S.  
52.0N, 170.9W  
Fox Islands  
H = 00 26 06.2  
h = 39 km  
Banff  
iP 00 32 54 c  
Halifax  
eP 00 36 47.5  
Ottawa  
eP 00 36 04  
Penticton  
iP 00 32 35 c  
Resolute  
P 00 33 16  
Shawinigan Falls  
eP 00 36 09 c  
Victoria  
eP 00 32 19

SEPTEMBER 2  
U.S.C.G.S.  
42.2N, 142.6E  
Near coast of  
Hokkaido, Japan  
H = 07 33 24.3  
h = 31 km  
Penticton  
eP 07 43 54

DOMINION OBSERVATORIES

SEPTEMBER 2

Penticton  
eP 22 17 42

SEPTEMBER 2

H = 23 22 33  
Victoria  
iP<sub>1</sub> 23 22 55.8  
iS<sub>1</sub> 23 23 15.5  
D = 162 km

SEPTEMBER 3

H = 01 38 34  
Penticton  
eP<sub>n</sub> 01 39 02.2  
eS<sub>n</sub> 01 39 23.4  
D = 173 km

SEPTEMBER 3

U.S.C.G.S.  
12.1N, 86.9W  
Near coast of  
Nicaragua  
H = 04 48 25.6  
h = 124 km  
Halifax  
P 04 55 34  
Ottawa  
iP 04 55 02 c  
Penticton  
iP 04 56 37  
Shawinigan Falls  
iP 04 55 19 c

SEPTEMBER 3

Penticton  
eP 09 43 13

SEPTEMBER 3

U.S.C.G.S.  
51.8N, 158.9E  
Near coast of  
Kamchatka  
H = 17 29 20.6  
h = 22 km  
Penticton  
eP 17 38 10

SEPTEMBER 4

U.S.C.G.S.  
52.1N, 173.4E  
Near Islands  
H = 00 52 23.5  
h = 41 km

Penticton  
eP 01 00 07

SEPTEMBER 4

U.S.C.G.S.  
46.9N, 154.2E  
Kurile Islands  
H = 04 53 12.9  
h = 22 km

Penticton  
eP 05 02 43

SEPTEMBER 4

U.S.C.G.S.  
51.4N, 178.1W  
Andreanof Islands  
H = 09 49 10.7  
h = 35 km  
Mag 6 1/4  
Banff  
iP 09 56 30 c  
Halifax  
eP 10 00 13.5  
Ottawa  
eP 09 59 34  
Penticton  
iP 09 56 18 c  
Resolute  
eP 09 56 43  
Shawinigan Falls  
eP 09 59 37  
Victoria  
iP 09 56 02 c

SEPTEMBER 4

U.S.C.G.S.  
52.1N, 173.8E  
Near Islands  
H = 17 15 49.7  
h = 67 km  
Penticton  
eP 17 22 27

SEPTEMBER 4

47°32'N, 122°57'W  
Puget Sound Area,  
Washington, U.S.A.  
H = 20 00 00  
Mag 2.7

Penticton  
eP<sub>n</sub> 20 00 45.4  
D = 320 km

Victoria  
eP<sub>1</sub> 20 00 18.1  
eS<sub>1</sub> 20 00 32.1  
D = 115 km

SEPTEMBER 5

U.S.C.G.S.  
16.2S, 172.6W  
Samoa Islands  
H = 00 46 29.6  
h = 49 km  
Penticton  
eP 00 58 41

SEPTEMBER 5

U.S.C.G.S.  
80.0N, 2.3W  
Arctic Ocean  
H = 02 37 34.9  
h = 18 km  
Resolute  
eP 02 41 49  
e 02 45 04

SEPTEMBER 5

U.S.C.G.S.  
38.6N, 73.3E  
Tadzhik, S.S.R.  
H = 06 12 54.8  
h = 50 km  
Banff  
eP 06 25 50  
Penticton  
iP 06 25 58

SEISMOLOGICAL BULLETIN - 1961

Shawinigan Falls  
iP 06 25 49 c

SEPTEMBER 5

Halifax  
P 08 33 29

SEPTEMBER 5

U.S.C.G.S.  
44.2N, 149.2E  
Kurile Islands  
H = 09 11 22.2  
h = 49 km  
Penticton  
eP 09 21 20

SEPTEMBER 5

U.S.C.G.S.  
59.8N, 150.6W  
Kenai Peninsula  
H = 11 34 37.3  
h = 44 km  
Mag 6  
Banff  
eP 11 39 24 c  
Halifax  
iP 11 43 40  
Ottawa  
iP 11 42 50 c  
Penticton  
iP 11 39 11 c  
Resolute  
iP 11 39 59 d  
S 11 44 23  
Shawinigan Falls  
iP 11 42 55 c  
Victoria  
iP 11 38 58 c

SEPTEMBER 5

U.S.C.G.S.  
36.4N, 54.4E  
Northern Iran  
H = 14 09 55.1  
h = 59 km  
Shawinigan Falls  
eP 14 22 27

SEPTEMBER 5

Penticton  
eP 17 09 15

SEPTEMBER 5

H = 18 43 42  
Penticton  
eP<sub>1</sub> 18 44 05.7  
eS<sub>1</sub> 18 44 24.1  
D = 150 km

SEPTEMBER 5

U.S.C.G.S.  
11.8N, 141.9E  
Mariana Islands  
H = 21 07 32.6  
h = 25 km  
Penticton  
eP 21 20 15

SEPTEMBER 5

Penticton  
eP 23 04 34

SEPTEMBER 6

U.S.C.G.S.  
2.8N, 125.8E  
Molucca Passage  
H = 08 14 17.4  
h = 58 km  
Ottawa  
eP' 08 33 21  
Shawinigan Falls  
eP' 08 33 22 d

SEPTEMBER 6

Penticton  
eP 09 46 01

SEPTEMBER 6

U.S.C.G.S.  
10.8S, 79.1W  
Near coast of Peru  
H = 15 30 20.4  
h = 45 km

Penticton

eP 15 41 30  
Shawinigan Falls  
eP 15 40 07

SEPTEMBER 6

H = 21 07 30  
Penticton  
eP<sub>1</sub> 21 07 51.9  
eS<sub>1</sub> 21 08 08.9  
D = 139 km

SEPTEMBER 6

Penticton  
eP 22 26 19

SEPTEMBER 7

Penticton  
eP 17 23 34

SEPTEMBER 7

48°09'N, 122°56'W  
Puget Sound,  
Washington, U.S.A.  
H = 18 11 17  
Mag 2.0  
Penticton  
eP<sub>n</sub> 18 11 57.4  
D = 277 km  
Victoria  
iP<sub>1</sub> 18 11 25.5  
iS<sub>1</sub> 18 11 32.1  
D = 54 km



DOMINION OBSERVATORIES

SEPTEMBER 7  
 Penticton  
 eP 20 37 46

SEPTEMBER 7  
 Penticton  
 eP 22 46 09

SEPTEMBER 8  
 U.S.C.G.S.  
 63.1N, 150.5W  
 Alaska  
 H = 00 05 13.8  
 h = 135 km  
 Banff  
 eP 00 09 59  
 Halifax  
 P 00 13 56  
 Ottawa  
 eP 00 13 10  
 Penticton  
 iP 00 09 56  
 Resolute  
 eP 00 09 58  
 Shawinigan Falls  
 iP 00 13 14 c

SEPTEMBER 8  
 H = 01 27 28  
 Victoria  
 eP<sub>1</sub> 01 27 52.1  
 eS<sub>1</sub> 01 28 10.7  
 D = 152 km

SEPTEMBER 8  
 U.S.C.G.S.  
 51.8N, 131.2W  
 Queen Charlotte Islands  
 H = 04 52 10.3  
 h = 54 km  
 Mag 5  
 Banff  
 eP 04 54 32

Ottawa  
 eP 04 59 15  
 Penticton  
 iP 04 54 02  
 Resolute  
 eP 04 57 59  
 S 05 06 48  
 SS? 05 11 19  
 Shawinigan Falls  
 eP 04 59 24  
 Victoria  
 iP 04 53 36

SEPTEMBER 8  
 Penticton  
 eP 06 07 48

SEPTEMBER 8  
 U.S.C.G.S.  
 56.1S, 27.3W  
 Sandwich Islands  
 H = 11 26 32.8  
 h = 125 km  
 Mag 7 1/2  
 Banff  
 iP' 11 45 27 c  
 Halifax  
 eP 11 40 30  
 Ottawa  
 eP 11 40 49  
 Penticton  
 e 11 43 42  
 eP' 11 45 07  
 Resolute  
 eP' 11 45 32  
 S 11 48 33  
 i 11 49 07  
 Shawinigan Falls  
 eP 11 40 52  
 Victoria  
 eP' 11 45 15

SEPTEMBER 8  
 Penticton  
 eP 15 40 39

SEPTEMBER 8  
 Penticton  
 eP 15 50 12

SEPTEMBER 8  
 H = 21 30 12  
 Penticton  
 eP<sub>n</sub> 21 31 14.0  
 D = 462 km

SEPTEMBER 9  
 U.S.C.G.S.  
 52.5N, 169.4W  
 Fox Islands  
 H = 09 10 25.2  
 h = 61 km  
 Halifax  
 eP 09 20 58  
 Ottawa  
 eP 09 20 12  
 Penticton  
 eP 09 16 41

SEPTEMBER 9  
 U.S.C.G.S.  
 33.8N, 139.6E  
 Off coast of  
 Honshu, Japan  
 H = 09 16 08.6  
 h = 151 km  
 Penticton  
 eP 09 27 14  
 Resolute  
 P 09 26 40

SEPTEMBER 9  
 U.S.C.G.S.  
 51.7N, 174.9W  
 Andreanof Islands  
 H = 11 47 12.4  
 h = 50 km  
 Banff  
 eP 11 54 14  
 Ottawa  
 iP 11 57 24 d  
 Penticton  
 eP 11 54 00

SEISMOLOGICAL BULLETIN - 1961

SEPTEMBER 9  
 U.S.C.G.S.  
 1.5N, 90.6W  
 Galapagos Islands  
 H = 19 10 47.6  
 h = 54 km  
 Banff  
 eP 19 20 07  
 Penticton  
 iP 19 20 07  
 Shawinigan Falls  
 eP 19 19 22  
 Victoria  
 eP 19 20 13

SEPTEMBER 10  
 H = 01 28 16  
 Penticton  
 eP<sub>n</sub> 01 28 56.6  
 eS<sub>n</sub> 01 29 31.4  
 D = 285 km

SEPTEMBER 10  
 U.S.C.G.S.  
 49.2N, 158.2E  
 Off coast of  
 Kamchatka  
 H = 01 43 07.2  
 h = 33 km  
 Penticton  
 iP 01 52 09

SEPTEMBER 10  
 U.S.C.G.S.  
 22.7S, 63.1W  
 Argentina  
 H = 04 45 27.1  
 h = 519 km  
 Halifax  
 iP .04 55 31 d  
 Ottawa  
 iP 04 55 40 d  
 Penticton  
 iP 04 57 21

SEPTEMBER 10  
 Shawinigan Falls  
 eP 04 55 44  
 Victoria  
 eP 04 57 27

SEPTEMBER 10  
 Penticton  
 eP 15 48 59  
 Victoria  
 eP 15 49 08

SEPTEMBER 11  
 U.S.C.G.S.  
 51.3N, 179.7W  
 Andreanof Islands  
 H = 02 46 43.4  
 h = 15 km  
 Banff  
 eP 02 54 14  
 Ottawa  
 eP 02 57 16  
 Penticton  
 eP 02 54 02  
 Resolute  
 eP 02 54 22  
 Shawinigan Falls  
 eP 02 57 20  
 Victoria  
 eP 02 53 45 c

SEPTEMBER 11  
 U.S.C.G.S.  
 43.5N, 127.2W  
 Off coast of  
 California  
 H = 04 39 44.9  
 h = 23 km  
 Penticton  
 iP 04 41 38  
 Victoria  
 iP 04 41 08 d

SEPTEMBER 11  
 U.S.C.G.S.  
 42.8N, 145.4E  
 Near coast of  
 Hokkaido, Japan  
 H = 23 47 19.5  
 h = 18 km  
 Ottawa  
 eP 23 59 53 d  
 Penticton  
 eP 23 57 39

SEPTEMBER 11  
 U.S.C.G.S.  
 51.0N, 179.9W  
 Andreanof Islands  
 H = 09 02 39.4  
 h = 25 km  
 Penticton  
 eP 09 09 57

SEPTEMBER 11  
 Resolute  
 eP 13 30 25

SEPTEMBER 11  
 U.S.C.G.S.  
 10.8N, 62.4W  
 Off coast of  
 Venezuela  
 H = 22 15 02.6  
 h = 134 km  
 Halifax  
 iP 22 21 33 d  
 Ottawa  
 eP 22 21 53  
 i 22 24 16  
 Penticton  
 iP 22 25 01  
 Resolute  
 eP 22 25 37  
 Shawinigan Falls  
 eP 22 21 58 c  
 Victoria  
 iP 22 25 11 c

DOMINION OBSERVATORIES

Resolute  
iP 23 56 58  
Shawinigan Falls  
iP 23 59 53 d  
Victoria  
eP 23 57 24

SEPTEMBER 12  
U. S. C. G. S.  
18. 3S, 169. 1E  
New Hebrides Islands  
H = 01 14 32. 9  
h = 208 km  
Penticton  
eP 01 27 20

SEPTEMBER 12  
U. S. C. G. S.  
63. 2N, 149. 0W  
Alaska  
H = 05 38 03. 5  
h = 72 km  
Ottawa  
eP 05 46 06  
Penticton  
eP 05 42 47  
Shawinigan Falls  
eP 05 46 06

SEPTEMBER 12  
U. S. C. G. S.  
15. 1S, 173. 6W  
Tonga Islands  
H = 08 01 34. 9  
h = 87 km  
Penticton  
eP 08 13 38

SEPTEMBER 12  
U. S. C. G. S.  
13. 9N, 92. 3W  
Off coast of  
Guatemala  
H = 09 28 14. 9  
h = 83 km  
Penticton  
eP 09 35 59

Shawinigan Falls  
eP 09 35 08  
Victoria  
eP 09 36 03

SEPTEMBER 12  
45°12'N±10'  
75°15'W±10'  
Southeast of Ottawa  
H = 09 54 22. 5  
Mag 2. 8  
Montreal  
iP<sub>1</sub> 09 54 43. 0  
i 09 54 47  
iS<sub>1</sub> 09 54 59. 3  
D = 134 km  
Ottawa  
iP<sub>1</sub> 09 54 30. 0  
iS<sub>1</sub> 09 54 35. 3  
D = 43. 5 km  
Shawinigan Falls  
iP<sub>1</sub> 09 55 00. 4  
i 09 55 03. 8  
i 09 55 26. 4  
iS<sub>1</sub> 09 55 28. 5  
D = 234 km

SEPTEMBER 12  
U. S. C. G. S.  
10. 8S, 69. 8W  
Peru-Bolivia  
border  
H = 11 18 26. 3  
h = 618 km  
Penticton  
iP 11 29 07  
Shawinigan Falls  
eP 11 27 24  
Victoria  
eP 11 29 11

SEPTEMBER 12  
U. S. C. G. S.  
23. 0S, 176. 2W  
Tonga Islands  
H = 11 58 01. 4  
h = 39 km  
Penticton  
eP 12 10 52

SEPTEMBER 12  
U. S. C. G. S.  
43. 8N, 147. 8E  
Near coast of  
Hokkaido, Japan  
H = 12 27 09. 2  
h = 96 km  
Ottawa  
eP 12 39 28  
Penticton  
iP 12 37 11  
Resolute  
eP 12 36 32  
Shawinigan Falls  
eP 12 39 29

SEPTEMBER 12  
U. S. C. G. S.  
32. 1N, 115. 1W  
California  
H = 19 18 39. 0  
h = 25 km  
Mag 5 1/4  
Banff  
eP 19 23 04  
Penticton  
eP 19 22 46  
Shawinigan Falls  
eP 19 25 39  
Victoria  
eP 19 22 48 d

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SEPTEMBER 12  
U. S. C. G. S.  
59. 4S, 29. 2W  
Sandwich Islands  
H = 19 29 05. 2  
h = 25 km  
Penticton  
eP' 19 48 17

SEPTEMBER 12  
H = 20 11 58  
Penticton  
iP<sub>1</sub> 20 12 21. 1  
iS<sub>1</sub> 20 12 38. 5  
D = 142 km

SEPTEMBER 12  
Penticton  
eP 20 18 15

SEPTEMBER 12  
H = 22 11 48  
Penticton  
eP<sub>n</sub> 22 12 39. 7  
eS<sub>n</sub> 22 13 24. 4  
D = 366 km

SEPTEMBER 12  
H = 22 25 00  
Penticton  
iP<sub>1</sub> 22 25 22. 9  
iS<sub>1</sub> 22 25 40. 4  
D = 144 km

SEPTEMBER 13  
H = 13 54 46  
Penticton  
iP<sub>n</sub> 13 55 28. 7  
iS<sub>n</sub> 13 56 04. 5  
D = 293 km

SEPTEMBER 13  
U. S. C. G. S.  
41. 6S, 73. 2W  
Chile  
H = 21 19 26. 2  
h = 154 km  
Mag 7  
Halifax  
eP 21 32 01 d  
Ottawa  
eP 21 32 00  
Shawinigan Falls  
eP 21 32 06 d

SEPTEMBER 13  
U. S. C. G. S.  
33. 6N, 48. 8E  
Iran  
H = 08 03 09. 0  
h = 30 km  
Halifax  
eP 08 15 19  
Shawinigan Falls  
eP 08 15 38 d

SEPTEMBER 14  
H = 18 38 40  
Penticton  
eP<sub>1</sub> 18 39 04. 6  
eS<sub>1</sub> 18 39 23. 1  
D = 152 km

SEPTEMBER 14  
U. S. C. G. S.  
23. 6S, 179. 9W  
Fiji Islands  
H = 18 44 47. 0  
h = 521 km  
Penticton  
eP 18 56 50

SEPTEMBER 14  
U. S. C. G. S.  
37. 4N, 141. 1E  
Near coast of  
Honshu, Japan  
H = 21 50 41. 3  
h = 60 km  
Penticton  
eP 21 59 44

SEPTEMBER 14  
H = 22 14 17  
Penticton  
eP<sub>1</sub> 22 14 39. 6  
eS<sub>1</sub> 22 14 56. 5  
D = 138 km

SEPTEMBER 14  
H = 22 52 30  
Penticton  
iP<sub>1</sub> 22 52 51. 8  
eS<sub>1</sub> 22 53 08. 3  
D = 135 km

SEPTEMBER 15  
U. S. C. G. S.  
35. 1N, 33. 9E  
Cyprus  
H = 01 46 08. 4  
h = 25 km  
Banff  
eP 01 59 08 c  
Halifax  
iP 01 57 27. 5 c  
Ottawa  
eP 01 58 06  
Penticton  
iP 01 59 20

DOMINION OBSERVATORIES

Resolute  
eP 01 56 49  
Shawinigan Falls  
eP 01 57 53 c  
Victoria  
eP 01 59 27

Penticton  
iP<sub>n</sub> 03 25 54.2  
iS<sub>n</sub> 03 26 49.7  
Victoria  
iP<sub>n</sub> 03 25 39.8c  
iS<sub>n</sub> 03 26 09.3

SEPTEMBER 15  
Penticton  
eP 14 47 00

SEPTEMBER 15  
H = 19 57 33  
Penticton  
iP<sub>n</sub> 19 58 15.8  
iS<sub>n</sub> 19 58 51.7  
D = 294 km

SEPTEMBER 15  
Penticton  
eP 21 08 27

SEPTEMBER 15  
Ottawa  
eP 23 41 03  
Penticton  
eP 23 38 24

SEPTEMBER 16  
Penticton  
iP 02 33 51

SEPTEMBER 16  
U.S.C.G.S.  
45.9N, 121.9W  
Southern Washington,  
U.S.A.  
H = 03 25 00.3  
h = 37 km  
Banff  
eP 03 26 41

Penticton  
iP<sub>n</sub> 03 25 54.2  
iS<sub>n</sub> 03 26 49.7  
Victoria  
iP<sub>n</sub> 03 25 39.8c  
iS<sub>n</sub> 03 26 09.3

SEPTEMBER 16  
46.3N, 122.0W  
Aftershock of previous  
Washington, U.S.A.  
H = 06 47 00.6  
Mag 2.8  
Penticton  
eP<sub>n</sub> 06 47 53.9  
D = 382 km  
Victoria  
eP<sub>n</sub> 06 47 40.1  
eS<sub>n</sub> 06 48 13.9  
D = 270 km

SEPTEMBER 16  
46.2°N, 122.2°W  
Aftershock of  
Washington (03 25)  
H = 06 50 19.8  
Mag 2.9  
Penticton  
eP<sub>n</sub> 06 51 14.9  
D = 397 km  
Victoria  
eP<sub>n</sub> 06 50 59.3  
eS<sub>n</sub> 06 51 33.3  
D = 270 km

SEPTEMBER 16  
U.S.C.G.S.  
28.3N, 138.6E  
South of Honshu,  
Japan  
H = 12 09 49.8  
h = 388 km  
Penticton  
iP 12 20 57  
Resolute  
eP 12 20 31 ?  
Victoria  
eP 12 20 46

SEPTEMBER 16  
U.S.C.G.S.  
14.4N, 46.0W  
Mid-Atlantic Ocean  
H = 13 31 34.5  
h = 19 km  
Ottawa  
eP 13 39 12  
Penticton  
eP 13 42 40  
Shawinigan Falls  
eP 13 39 07  
Victoria  
eP 13 42 43

SEPTEMBER 16  
Penticton  
eP 10 26 01

SEPTEMBER 16  
46°11'N, 122°17'W  
Washington, U.S.A.  
H = 11 46 04.5  
Mag 3.2  
Penticton  
eP<sub>n</sub> 11 47 00.4  
eS<sub>n</sub> 11 47 57.9  
D = 402 km  
Victoria  
eP<sub>n</sub> 11 46 44.0  
eS<sub>n</sub> 11 47 20.6  
D = 270 km

SEPTEMBER 16  
U.S.C.G.S.  
28.3N, 138.6E  
South of Honshu,  
Japan  
H = 12 09 49.8  
h = 388 km  
Penticton  
iP 12 20 57  
Resolute  
eP 12 20 31 ?  
Victoria  
eP 12 20 46

SEISMOLOGICAL BULLETIN - 1961

SEPTEMBER 16  
U.S.C.G.S.  
52.1N, 158.5E  
Kamchatka  
H = 17 17 46.1  
h = 49 km  
Penticton  
eP 17 26 32  
Resolute  
eP 17 25 58

SEPTEMBER 16  
Penticton  
eP 20 09 51

SEPTEMBER 16  
U.S.C.G.S.  
10.6S, 69.8W  
Brazil-Peru  
border  
H = 20 02 47.8  
h = 629 km  
Penticton  
eP 20 13 26

SEPTEMBER 16  
Penticton  
eP 21 19 01

SEPTEMBER 17  
Penticton  
eP 04 00 11

SEPTEMBER 17  
Victoria  
eP 04 19 32

SEPTEMBER 17  
U.S.C.G.S.  
23.9N, 122.2E  
Off coast of  
Formosa  
H = 08 41 53.6  
h = 35 km  
Banff  
iP 08 54 52 c  
Penticton  
iP 08 54 48 c  
Resolute  
eP 08 53 55  
Victoria  
iP 08 54 39 c

SEPTEMBER 17  
Penticton  
eP 16 12 10?  
i 16 12 22  
Penticton  
eP 16 14 01

SEPTEMBER 17  
Penticton  
eP 16 35 03

SEPTEMBER 17  
Penticton  
eP 16 38 53

SEPTEMBER 17  
U.S.C.G.S.  
5.9S, 147.4E  
Near coast of  
New Guinea  
H = 23 22 06.3  
h = 45 km  
Halifax  
eP' 23 41 18.5  
Penticton  
iP 23 35 32  
Shawinigan Falls  
eP' 23 41 06

SEPTEMBER 17  
Banff  
eP 13 42 23

SEPTEMBER 17  
Banff  
eP 13 42 23

SEPTEMBER 17  
U.S.C.G.S.  
45.9N, 122.0W  
Washington, U.S.A.  
H = 15 55 58.9  
h = 24 km  
Alberni  
iP<sub>n</sub> 15 56 56.3  
Banff  
eP 15 57 40  
Penticton  
eP<sub>n</sub> 15 57 04.3  
Victoria  
iP<sub>n</sub> 15 56 40.0 c  
iS<sub>n</sub> 15 57 13.1  
D = 265 km

SEPTEMBER 18  
U.S.C.G.S.  
48.8°N, 128.9°W  
Vancouver Island region  
H = 02 25 19.3  
h = 21 km  
Alberni  
iP<sub>n</sub> 02 26 02.5 c  
iS<sub>n</sub> 02 26 34.4  
Banff  
iP<sub>n</sub> 02 27 30.4 c  
Halifax  
iP 02 33 27 d  
Ottawa  
eP 02 32 20  
Penticton  
iP<sub>n</sub> 02 26 49.9 c

DOMINION OBSERVATORIES

Shawinigan Falls  
eP 02 32 32 d  
Victoria  
iP<sub>n</sub> 02 26 14.9 c

SEPTEMBER 18  
H = 02 29 08  
Alberni  
iP<sub>n</sub> 02 29 40.5  
iS<sub>n</sub> 02 30 11.8  
D = 207 km

SEPTEMBER 18  
Resolute  
i 02 44 56  
i 02 51 16

SEPTEMBER 18  
U.S.C.G.S.  
35.0N, 26.3E  
Crete  
H = 05 08 37.7  
h = 83 km  
Shawinigan Falls  
eP 05 19 51

SEPTEMBER 18  
U.S.C.G.S.  
40.8N, 50.1E  
Caspian Sea  
H = 11 01 00.8  
h = 31 km  
Banff  
iP 11 13 48 d  
Halifax  
iP 11 12 50 d  
Ottawa  
eP 11 13 18 d  
Penticton  
eP 11 13 58  
Resolute  
eP 11 11 23  
Shawinigan Falls  
iP 11 13 06 d  
Victoria  
eP 11 14 04

SEPTEMBER 18  
H = 12 32 38  
Alberni  
iP<sub>n</sub> 12 33 16.9  
iS<sub>n</sub> 12 33 48.9  
D = 260 km

SEPTEMBER 18  
H = 19 29 06  
Alberni  
iP<sub>1</sub> 19 29 24.9  
iS<sub>1</sub> 19 29 38.0  
D = 116 km  
Victoria  
iP<sub>1</sub> 19 29 13.3  
iS<sub>1</sub> 19 29 18.8  
D = 45 km

SEPTEMBER 18  
U.S.C.G.S.  
48.9N, 128.4W  
Vancouver Island region  
H = 21 35 17.2  
h = 46 km  
Penticton  
eP 21 36 42  
Victoria  
eP 21 36 06

SEPTEMBER 18  
U.S.C.G.S.  
20.3S, 63.2W  
Bolivia  
H = 02 25 49.2  
h = 609 km  
Mag 6 1/2  
Banff  
eP 02 37 23  
Halifax  
iP 02 35 33 d  
Ottawa  
eP 02 35 43 d  
Penticton  
iP 02 37 29

Resolute  
eP 02 38 22  
S? 02 48 (07)  
i 02 48 54  
i 02 52 42  
i 02 55 48  
Shawinigan Falls  
eP 02 35 50  
Victoria  
eP 02 37 37

SEPTEMBER 19  
Penticton  
eP 02 55 27

SEPTEMBER 19  
Penticton  
eP 03 03 26

SEPTEMBER 19  
U.S.C.G.S.  
14.8N, 146.8E  
Mariana Islands  
H = 06 09 56.6  
h = 61 km  
Penticton  
eP 06 22 05

SEPTEMBER 19  
Ottawa  
eP 09 50 58

SEPTEMBER 19  
U.S.C.G.S.  
6.7N, 82.4W  
South of Panama  
H = 09 46 17.7  
h = 33 km  
Mag 6 1/4  
Alberni  
iP 09 55 55  
Banff  
iP 09 55 29 c  
Halifax  
iP 09 54 04.5 c

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Ottawa  
eP 09 53 44  
Penticton  
iP 09 55 34  
Resolute  
eP 09 57 19  
iS 10 06 20  
Victoria  
iP 09 55 44 c

SEPTEMBER 20  
Canadian Arctic  
H = 06 54 45.6  
Mag 2.2  
Resolute  
P<sub>1</sub> 06 55 04  
06 55 06  
06 55 14  
S<sub>1</sub> 06 55 18  
D = 115 km

SEPTEMBER 20  
H = 22 18 33  
Penticton  
eP<sub>1</sub> 22 18 56.5  
eS<sub>1</sub> 22 19 14.0  
D = 144 km

SEPTEMBER 20  
H = 22 50 12  
Penticton  
eP<sub>1</sub> 22 50 34.8  
eS<sub>1</sub> 22 50 52.0  
D = 141 km

SEPTEMBER 20  
H = 22 52 45  
Penticton  
eP<sub>n</sub> 22 53 15.0  
eS<sub>n</sub> 22 53 38.0  
D = 188 km

SEPTEMBER 20  
U.S.C.G.S.  
3.6S, 150.9E  
New Britain  
H = 19 03 37.1  
h = 30 km  
Mag 6 1/2  
Banff  
eP 19 16 57  
Halifax  
eP' 19 22 48 c  
Ottawa  
eP' 19 22 33  
Penticton  
eP 19 16 44  
Resolute  
eP 19 17 18  
S? 19 28 43  
i 19 33 57  
PSPS? 19 35 39  
Shawinigan Falls  
eP' 19 22 35

SEPTEMBER 20  
Penticton  
eP 11 44 57

SEPTEMBER 20  
Penticton  
eP 15 00 13

SEPTEMBER 20  
U.S.C.G.S.  
21.6S, 179.4W  
Fiji Islands region  
H = 18 25 29.0  
h = 639 km  
Penticton  
iP 18 37 18  
Victoria  
eP 18 37 08

SEPTEMBER 19  
Penticton  
eP 21 48 32

SEPTEMBER 19  
U.S.C.G.S.  
60.1S, 22.9W  
Sandwich Islands  
region  
H = 21 34 43.3  
h = 56 km  
Banff  
eP' 21 53 55  
Penticton  
eP' 21 53 56  
e 21 57 29  
Resolute  
eP' 21 54 09

SEPTEMBER 21  
Banff  
eP 03 13 42

SEPTEMBER 21  
Penticton  
iP 03 18 26

SEPTEMBER 21  
Penticton  
eP 07 31 34

## DOMINION OBSERVATORIES

SEPTEMBER 21 U.S.C.G.S. 26.2S, 70.8W Off coast of northern Chile H = 18 19 15.2 h = 18 km Penticton eP 18 32 01	SEPTEMBER 23 Penticton eP 01 59 45	SEPTEMBER 23 Penticton eP 23 02 01
SEPTEMBER 21 H = 23 10 55 Penticton eP 23 11 48.6 eS 23 12 25.2 D = 300 km	SEPTEMBER 23 U.S.C.G.S. 19.8N, 155.2W Hawaii H = 03 01 35.7 h = 31 km Banff eP 03 09 45 Penticton iP 03 09 19 Shawinigan Falls eP 03 12 52 Victoria eP 03 08 59	SEPTEMBER 24 U.S.C.G.S. 18.4N, 98.6W Mexico H = 19 04 40.7 h = 81 km Banff iP 19 11 29 d Ottawa eP 19 11 08 d Penticton iP 19 11 26 d Resolute eP 19 14 13 Shawinigan Falls iP 19 11 28 d Victoria eP 19 11 35 d
SEPTEMBER 22 Canadian Arctic H = 03 44 17.6 Mag 2.2 Resolute P <sub>1</sub> 03 44 27.5 S <sub>1</sub> 03 44 35.0 D = 61.5 km	SEPTEMBER 23 U.S.C.G.S. 41.7N, 131.9E Sea of Japan H = 03 48 29.9 h = 527 km Penticton iP 03 58 49	SEPTEMBER 24 H = 21 32 47 Penticton eP <sub>1</sub> 21 33 14.4 eS <sub>1</sub> 21 33 35.0 D = 168 km
SEPTEMBER 23 H = 00 06 19 Penticton eP <sub>1</sub> 00 06 42.1 eS <sub>1</sub> 00 06 59.6 D = 143 km	SEPTEMBER 23 48.1°N, 124.5°W Washington, U.S.A. H = 08 06 50 Mag 2.1 Victoria iP <sub>1</sub> 08 07 04.1 iS <sub>1</sub> 08 07 15.7 D = 96 km	SEPTEMBER 24 U.S.C.G.S. 33.3N, 141.3E South of Japan H = 21 40 58.8 h = 93 km Banff eP 21 52 17 Penticton iP 21 52 09 d Resolute eP 21 51 40 Victoria eP 21 51 58
SEPTEMBER 23 H = 00 08 12 Penticton eP <sub>n</sub> 00 08 51.9 eS <sub>n</sub> 00 09 25.3 D = 273 km	SEPTEMBER 23 Banff eP 09 38 55 Victoria eP <sub>n</sub> 09 39 16.7	

## SEISMOLOGICAL BULLETIN - 1961

SEPTEMBER 24 Penticton eP 23 13 20	SEPTEMBER 25 Penticton eP 06 37 09	Victoria eP <sub>n</sub> 13 38 50.1 D = 310 km
SEPTEMBER 25 U.S.C.G.S. 60.3N, 153.0W Alaska H = 02 27 13.4 h = 125 km Mag 5 3/4 Banff eP 02 32 05 Halifax eP 02 36 15 Ottawa eP 02 35 27 Penticton iP 02 31 57 d Resolute eP 02 32 28 i 02 36 59 i 02 39 27 Shawinigan Falls eP 02 35 40 Victoria eP 02 31 42 d	SEPTEMBER 25 U.S.C.G.S. 61.9N, 150.4W Alaska H = 20 22 44.9 h = 196 km Resolute eP 20 27 46	SEPTEMBER 27 U.S.C.G.S. 15.4S, 175.1W Fiji Islands region H = 00 46 38.4 h = 295 km Penticton iP 00 58 25
SEPTEMBER 25 U.S.C.G.S. 75.9N, 7.3E Svalbard region H = 21 12 41.0 h = 64 km Resolute eP 21 17 41	SEPTEMBER 25 H = 21 47 58 Penticton eP <sub>1</sub> 21 48 22.3 eS <sub>1</sub> 21 48 40.7 D = 150 km	SEPTEMBER 27 U.S.C.G.S. 19.2N, 105.1W Mexico H = 01 55 31.9 h = 54 km Penticton eP 02 01 54 Victoria eP 02 02 02
SEPTEMBER 25 U.S.C.G.S. 19.9N, 155.3W Hawaii H = 05 29 00.8 h = 82 km Mag 5 3/4 Ottawa eP 05 40 04 Penticton iP 05 36 40 Resolute eP 05 39 25 Shawinigan Falls eP 05 40 12	SEPTEMBER 26 H = 12 15 47 Penticton eP <sub>n</sub> 12 16 27.0 eS <sub>n</sub> 12 17 00.5 D = 274 km	SEPTEMBER 27 H = 06 35 26 Victoria iP <sub>1</sub> 06 35 33.6 iS <sub>1</sub> 06 35 39.6 D = 50 km
SEPTEMBER 26 H = 13 38 06 Penticton iP <sub>n</sub> 13 38 27.7 iS <sub>n</sub> 13 38 44.5 D = 138 km	SEPTEMBER 26 H = 13 38 06 Penticton iP <sub>n</sub> 13 38 27.7 iS <sub>n</sub> 13 38 44.5 D = 138 km	SEPTEMBER 27 U.S.C.G.S. 17.4S, 178.7W Fiji Islands H = 06 34 03.7 h = 576 km Banff iP 06 45 57 c Penticton iP 06 45 41 c Shawinigan Falls eP' 06 51 41 Victoria eP 06 45 29

DOMINION OBSERVATORIES

SEPTEMBER 27  
Victoria  
eP 07 14 37

SEPTEMBER 27  
U.S.C.G.S.  
52.3N, 168.7W  
Fox Islands  
H = 11 20 46.8  
h = 27 km

Banff  
eP 11 27 19  
Halifax  
eP 11 31 28.5  
Ottawa  
eP 11 30 36  
Penticton  
eP 11 27 04  
Resolute  
eP 11 27 51  
Shawinigan Falls  
eP 11 30 40  
Victoria  
eP 11 26 48

SEPTEMBER 27  
U.S.C.G.S.  
59.4S, 24.2W  
Sandwich Islands  
H = 12 07 39.2  
h = 110 km  
Banff  
eP' 12 26 44  
Penticton  
eP' 12 26 45  
Resolute  
eP' 12 26 56  
i 12 30 05  
Shawinigan Falls  
eP' 12 26 07  
Victoria  
eP' 12 26 47

SEPTEMBER 27  
H = 19 05 00.2  
Penticton  
iP<sub>1</sub> 19 05 03.7  
iS<sub>1</sub> 19 05 06.4  
D = 22 km

SEPTEMBER 27  
U.S.C.G.S.  
52.5N, 168.7W  
Fox Islands  
H = 19 20 48.6  
h = 42 km  
Halifax  
eP 19 31 43?  
Ottawa  
eP 19 30 35  
Penticton  
eP 19 26 56  
Resolute  
eP 19 27 50  
i 19 30 16  
Shawinigan Falls  
eP 19 30 41  
Victoria  
eP 19 26 47

SEPTEMBER 27  
U.S.C.G.S.  
52.2N, 168.7W  
Fox Islands  
H = 19 27 00.7  
h = 22 km  
Halifax  
eP 19 37 40.5  
Ottawa  
eP 19 36 51  
Penticton  
eP 19 33 18  
Resolute  
eP 19 34 05  
Shawinigan Falls  
eP 19 36 56

SEPTEMBER 27  
H = 20 20 54  
Penticton  
iP<sub>1</sub> 20 21 20.9  
iS<sub>1</sub> 20 21 41.2  
D = 166 km

SEPTEMBER 27  
U.S.C.G.S.  
26.7N, 125.0E  
Ryukyu Islands  
H = 21 06 56.3  
h = 17 km  
Penticton  
eP 21 19 33  
Resolute  
eP 21 18 42 d

SEPTEMBER 28  
Penticton  
iP 00 01 30

SEPTEMBER 28  
U.S.C.G.S.  
3.9S, 102.0E  
Sumatra  
H = 01 23 59.6  
h = 78 km  
Penticton  
iP' 01 42 49  
Resolute  
eP' 01 42 22  
Shawinigan Falls  
eP' 01 43 17  
Victoria  
eP' 01 42 46

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SEPTEMBER 28  
U.S.C.G.S.  
30.5N, 141.3E  
South of Japan  
H = 03 24 43.4  
h = 125 km  
Penticton  
eP 03 36 02  
Resolute  
eP 03 35 38 d  
Victoria  
eP 03 35 53

SEPTEMBER 28  
U.S.C.G.S.  
30.0N, 141.1E  
South of Japan  
H = 04 19 06.6  
h = 75 km  
Resolute  
eP 04 30 13?

SEPTEMBER 28  
U.S.C.G.S.  
36.5N, 70.7E  
Hindu Kush  
H = 05 00 43.0  
h = 233 km  
Penticton  
eP 05 13 37

SEPTEMBER 28  
Resolute  
eP 06 35 16

SEPTEMBER 28  
Penticton  
eP 11 23 19  
Resolute  
eP 11 24 12

SEPTEMBER 28  
Halifax  
eP 18 49 42

SEPTEMBER 28  
U.S.C.G.S.  
44.7N, 111.0W  
Wyoming, U.S.A.  
H = 18 50 09.3  
h = 20 km  
Penticton  
eP 18 52 01

SEPTEMBER 28  
Penticton  
iP 19 58 19

SEPTEMBER 28  
U.S.C.G.S.  
27.6N, 57.1E  
Iran  
H = 22 36 27.5  
h = 56 km  
Resolute  
eP 22 48 12?  
Shawinigan Falls  
eP 22 49 36

SEPTEMBER 28  
H = 23 21 23  
Penticton  
iP<sub>1</sub> 23 21 44.2  
iS<sub>1</sub> 23 22 00.3  
D = 132 km

SEPTEMBER 28  
H = 23 27 16  
Penticton  
iP<sub>1</sub> 23 27 41.2  
iS<sub>1</sub> 23 28 00.4  
D = 157 km

SEPTEMBER 29  
Penticton  
eP 00 10 01

SEPTEMBER 29  
U.S.C.G.S.  
13.8N, 94.0E  
Andaman Islands  
H = 08 45 26.9  
h = 135 km  
Alert, N.W.T.  
iP 08 57 44 c

SEPTEMBER 29  
U.S.C.G.S.  
42.9N, 145.4E  
Near coast of Japan  
H = 16 50 32.9  
h = 37 km

Banff  
eP 17 00 59  
Ottawa  
eP 17 03 05  
Resolute  
iP 17 00 11 d  
Shawinigan Falls  
eP 17 03 06  
Victoria  
eP 17 00 39

SEPTEMBER 29  
Resolute  
eP 18 25 25  
e 18 26 27

SEPTEMBER 29  
U.S.C.G.S.  
0.5N, 122.4E  
Celebes Islands  
H = 19 06 13.4  
h = 110 km  
Halifax  
eP' 19 25 45?  
Shawinigan Falls  
eP' 19 25 17

DOMINION OBSERVATORIES

SEPTEMBER 29  
 U. S. C. G. S.  
 1.7N, 79.3W  
 Near coast of  
 Colombia  
 H = 22 38 05.9  
 h = 60 km  
 Ottawa  
 iP 22 46 07 d  
 Penticton  
 eP 22 48 02  
 Resolute  
 eP 22 49 33  
 Shawinigan Falls  
 iP 22 46 20 d  
 Victoria  
 eP 22 48 11

SEPTEMBER 30  
 U. S. C. G. S.  
 44.4N, 148.9E  
 Kurile Islands  
 H = 00 21 18.8  
 h = 49 km  
 Penticton  
 eP 00 31 12

SEPTEMBER 30  
 U. S. C. G. S.  
 25.3N, 124.8E  
 Ryukyu Islands  
 H = 01 36 41.5  
 h = 100 km  
 Alert, N. W. T.  
 P 01 48 01  
 Resolute  
 eP 01 48 38

SEPTEMBER 30  
 H = 06 49 51  
 Penticton  
 iP<sub>1</sub> 06 50 12.8  
 iS<sub>1</sub> 06 50 29.1  
 D = 132 km

SEPTEMBER 30  
 U. S. C. G. S.  
 40.6N, 141.9E  
 Near coast of  
 Japan  
 H = 13 13 06.9  
 h = 21 km  
 Alert, N. W. T.  
 iP 13 22 52 d  
 Resolute  
 eP 13 23 08

SEPTEMBER 30  
 Penticton  
 iP 18 57 57

SEPTEMBER 30  
 Resolute  
 eP 22 21 13

SEISMOLOGICAL BULLETIN - 1961

EARTHQUAKES IN THE CANADIAN ARCTIC

The following disturbances were recorded during the third quarter of 1961. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

JULY 1 at 02 06 28 U. T. Magnitude 1.4. Originated 40 km from Resolute, N. W. T.

JULY 3 at 22 57 07 U. T. Magnitude 1.9. Originated 50 km from Resolute, N. W. T.

JULY 4 at 04 49 06 U. T. Magnitude 1.5. Originated 107 km from Resolute, N. W. T.

JULY 4 at 05 39 38 U. T. Magnitude 1.5. Originated 107 km from Resolute, N. W. T.

JULY 4 at 06 17 57 U. T. Magnitude 1.4. Originated 107 km from Resolute, N. W. T.

JULY 4 at 07 17 56 U. T. Magnitude 1.8. Originated 107 km from Resolute, N. W. T.

JULY 4 at 10 20 42 U. T. Magnitude 2.1. Originated 107 km from Resolute, N. W. T.

JULY 10 at 05 06 11 U. T. Magnitude 2.4. Originated 184 km from Resolute, N. W. T.

JULY 19 at 02 59 29 U. T. Magnitude 1.9. Originated 232 km from Resolute, N. W. T., at a depth of about 33 km

JULY 22 at 13 01 09 U. T. Magnitude 2.1. Originated 94 km from Resolute, N. W. T.

JULY 25 at 22 35 29 U. T. Magnitude 1.7. Originated 82 km from Resolute, N. W. T.

AUGUST 5 at 12 55 51 U. T. Magnitude 3.1. Originated 252 km from Resolute, N. W. T., at a depth of about 27 km.

AUGUST 15 at 12 26 09 U. T. Magnitude 5.3. Epicentre at 61°N±1°, 135°W±1°. Felt generally by the people of Whitehorse, Yukon Territory, Canada. Two distinct shocks reported by the Royal Canadian Mounted Police.

DOMINION OBSERVATORIES

AUGUST 16 at 07 51 45 U. T. Magnitude 3.2. Originated 312 km from Resolute, N. W. T.

SEPTEMBER 20 at 06 54 46 U. T. Magnitude 2.2. Originated 115 km from Resolute, N. W. T.

SEPTEMBER 22 at 03 44 18 U. T. Magnitude 2.2. Originated 62 km from Resolute, N. W. T.

SEISMOLOGICAL BULLETIN - 1961

EARTHQUAKES IN EASTERN CANADA AND ADJACENT AREAS

The following disturbances were recorded during the third quarter of 1961. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

JULY 5 at 22 43 44 U. T. Magnitude 5. Epicentre 50°18'N± 15', 66°43'W± 10'. About 20 miles northwest of Sept-Iles, Quebec. Felt most strongly in the northwest portion of Sept-Iles. It was also felt at Moisie, Port Cartier, and in the Moisie River Valley, as well as along the railway north to Tika at mile 57. It was not reported felt at Matane on the south shore of the St. Lawrence River.

AUGUST 22 at 18 55 51 U. T. Magnitude 3.4. Epicentre at 47°20'N ± 20', 70°30'W± 30'. On the St. Lawrence River south of Ile-aux-Coudres, Quebec.

SEPTEMBER 12 at 09 54 23 U. T. Magnitude 2.8. Epicentre at 45°12'N± 10', 75°15'W± 10'. About 27 miles southeast of Ottawa. Felt at South Mountain, Ontario and vicinity. This is the same location as the earthquake on March 13 at 10 55 45 U. T.



DOMINION OBSERVATORIES

EARTHQUAKES IN WESTERN CANADA  
AND ADJACENT AREAS

The following disturbances were recorded during the third quarter of 1961. 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 Hungry Horse station in Montana, U.S.A., and from temporary stations in Canada were used to compute epicentres. The quality (Q) of the epicentre is indicated by a letter a, b, c, or d ranging from "a" meaning an excellent fit of the observed data to "d" meaning a very poor solution.

JULY 1 at 08 59 59 U.T. Magnitude 2.2. Epicentre at 47.9°N, 123.7°W, Olympic Mountain region, U.S.A. Q:c

JULY 1 at 09 24 36 U.T. Magnitude 2.3. Epicentre at 47.8°N, 123.8°W, Olympic Mountain region, U.S.A. Q:c

JULY 2 at 07 28 28 U.T. 338 km from Penticton.

JULY 2 at 16 54 03 U.T. 95 km from Alberni and 160 km from Victoria.

JULY 4 at 03 04 41 U.T. 280 km from Penticton.

JULY 6 at 13 58 21 U.T. 84 km from Victoria.

JULY 7 at 19 08 05 U.T. 252 km from Penticton.

JULY 7 at 22 51 22 U.T. 174 km from Penticton.

JULY 8 at 05 49 15 U.T. 60 km from Alberni, and 152 km from Victoria.

JULY 8 at 20 21 06 U.T. 243 km from Penticton.

JULY 8 at 23 58 58 U.T. 59 km from Alberni, and 162 km from Victoria.

JULY 9 at 07 44 49 U.T. Magnitude 2.7. Epicentre at 48°32'N, 122°25'W, near Anacortes, Washington, U.S.A. Q:a

JULY 10 at 18 41 30 U.T. 166 km from Penticton.

JULY 11 at 09 54 14 U.T. 78 km from Alberni.

JULY 11 at 23 53 06 U.T. 364 km from Penticton.

JULY 12 at 07 56 43 U.T. 107 km from Victoria and 90 km from Alberni.

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JULY 14 at 00 06 21 U.T. 50 km from Victoria.

JULY 15 at 20 46 31 U.T. 222 km from Victoria.

JULY 16 at 01 40 51 U.T. Magnitude 2.8. Epicentre at 49°44'N, 124°55'W, near Texada Island. Q:c

JULY 24 at 10 39 23.7 U.T. Magnitude 3.9. Epicentre at 50.6°N, 128.9°W, h = 25 km, Vancouver Island region. (U.S.C.G.S. epicentre).

JULY 25 at 02 33 21 U.T. Magnitude 3.2. Epicentre at 49.6°N, 114.4°W, Crowsnest Pass area. Q:b

JULY 25 at 22 38 32 U.T. 146 km from Penticton.

JULY 28 at 14 52 54 U.T. Magnitude 3.1. Epicentre at 45.9°N, 122.6°W. Northeast of Portland, Oregon, U.S.A.

JULY 28 at 22 48 02.8 U.T. 188 km from Penticton.

JULY 30 at 01 57 52 U.T. Magnitude 2.1. Epicentre at 50.8°N, 119.9°W, possibly near Kamloops. Q:c

JULY 31 at 23 29 49.8 U.T. 145 km from Penticton.

AUGUST 2 at 19 06 23 U.T. 148 km from Penticton.

AUGUST 2 at 21 54 32 U.T. 160 km from Penticton.

AUGUST 3 at 02 16 43 U.T. 182 km from Victoria, and 174 km from Penticton.

AUGUST 3 at 19 42 32 U.T. 200 km from Penticton.

AUGUST 3 at 21 31 08 U.T. 146 km from Penticton, and 292 km from Victoria. Epicentre probably north west of Merritt, B.C.

AUGUST 3 at 21 43 30 U.T. 278 km from Penticton.

AUGUST 3 at 21 59 09 U.T. 41 km from Banff.

AUGUST 5 at 01 33 12.2 U.T. Magnitude 3.3. 49.4°N, 129.0°W, near coast of Vancouver Island. (U.S.C.G.S. epicentre).

AUGUST 7 at 16 30 20 U.T. 262 km from Penticton.

AUGUST 8 at 18 23 02 U.T. 160 km from Penticton.

DOMINION OBSERVATORIES

- AUGUST 9 at 19 26 37.5 U. T. 134 km from Penticton.
- AUGUST 9 at 22 21 41 U. T. 160 km from Penticton.
- AUGUST 10 at 23 01 41 U. T. 165 km from Penticton possibly near Merritt.
- AUGUST 14 at 22 52 40 U. T. 190 km from Penticton.
- AUGUST 15 at 19 07 14 U. T. 200 km from Penticton.
- AUGUST 19 at 04 56 12 U. T. Magnitude 4.3. Epicentre at 49.8°N, 130.0°W, near coast of Vancouver Island. Q:c.
- AUGUST 21 at 03 26 02 U. T. Magnitude 2.3. Epicentre at 48°45'N, 122°44'W, Gulf Islands, U.S.A. Q:a.
- AUGUST 21 at 20 01 51 U. T. 150 km from Penticton.
- AUGUST 21 at 21 26 42 U. T. 200 km from Penticton.
- AUGUST 22 at 19 41 16 U. T. Magnitude 2.6. Epicentre at 49°22'N, 123°37'W, in the Strait of Georgia. Q:a.
- AUGUST 22 at 22 47 54 U. T. 150 km from Penticton.
- AUGUST 22 at 23 00 56 U. T. 140 km from Penticton.
- AUGUST 23 at 01 22 22 U. T. 140 km from Penticton.
- AUGUST 25 at 19 01 02 U. T. 169 km from Penticton.
- AUGUST 25 at 22 53 02 U. T. 152 km from Penticton.
- AUGUST 26 at 01 07 15 U. T. 216 km from Penticton.
- AUGUST 26 at 17 01 01 U. T. 138 km from Penticton.
- AUGUST 27 at 02 23 16 U. T. 30 km from Victoria.
- AUGUST 30 at 22 43 42 U. T. 151 km from Penticton.
- SEPTEMBER 2 at 23 22 33 U. T. 162 km from Victoria.
- SEPTEMBER 3 at 01 38 34 U. T. 173 km from Penticton.
- SEPTEMBER 4 at 20 00 00 U. T. Magnitude 2.7. Epicentre at 47°32'N, 122°57'W, in Puget Sound, Washington, U.S.A. Q:b.

SEISMOLOGICAL BULLETIN - 1961

- SEPTEMBER 5 at 18 43 42 U. T. 150 km from Penticton.
- SEPTEMBER 6 at 21 07 30 U. T. 139 km from Penticton.
- SEPTEMBER 7 at 18 11 17 U. T. Magnitude 2.0. Epicentre at 48°09'N, 122°56'W, Washington, U.S.A. Q:b.
- SEPTEMBER 8 at 01 27 28 U. T. 152 km from Victoria.
- SEPTEMBER 8 at 04 52 10.3 U. T. Magnitude 5. Epicentre at 51.8°N, 131.2°W near the Queen Charlotte Islands. (U.S.C.G.S. epicentre).
- SEPTEMBER 8 at 21 30 12 U. T. 462 km from Penticton.
- SEPTEMBER 10 at 01 28 16 U. T. 285 km from Penticton.
- SEPTEMBER 12 at 20 11 58 U. T. 142 km from Penticton.
- SEPTEMBER 12 at 22 11 48 U. T. 366 km from Penticton.
- SEPTEMBER 12 at 22 25 00 U. T. 144 km from Penticton.
- SEPTEMBER 13 at 13 54 46 U. T. 293 km from Penticton.
- SEPTEMBER 14 at 18 38 40 U. T. 152 km from Penticton.
- SEPTEMBER 14 at 22 14 17 U. T. 138 km from Penticton.
- SEPTEMBER 14 at 22 52 30 U. T. 135 km from Penticton.
- SEPTEMBER 15 at 19 57 33 U. T. 294 km from Penticton.
- SEPTEMBER 16 at 03 25 00.3 U. T. Epicentre at 45.9°N, 121.9°W h = 37 km. Southern Washington, U.S.A.
- SEPTEMBER 16 at 06 47 00.6 U. T. Magnitude 2.8. Aftershock of previous Washington, U.S.A.
- SEPTEMBER 16 at 06 50 19.8 U. T. Magnitude 2.9. Aftershock of previous Washington, U.S.A.
- SEPTEMBER 16 at 11 46 04.5 U. T. Magnitude 3.2. at 46°11'N, 122°17'W, Washington, U.S.A.
- SEPTEMBER 17 at 15 56 01 U. T. 265 km from Victoria.
- SEPTEMBER 18 at 02 25 19.3 U. T. Epicentre at 48.8°N, 128.9°W, west of Vancouver Island. (U.S.C.G.S. epicentre).

DOMINION OBSERVATORIES

- SEPTEMBER 18 at 02 29 08 U. T. 207 km from Alberni.
- SEPTEMBER 18 at 12 32 38 U. T. 262 km from Alberni.
- SEPTEMBER 18 at 19 29 06 U. T. 45 km from Victoria, and 116 km from Alberni.
- SEPTEMBER 18 at 21 35 17.2 U. T. Vancouver Island region (U. S. C. G. S. epicentre)
- SEPTEMBER 20 at 22 18 33 U. T. 144 km from Penticton.
- SEPTEMBER 20 at 22 50 12 U. T. 141 km from Penticton.
- SEPTEMBER 20 at 22 52 45 U. T. 188 km from Penticton.
- SEPTEMBER 20 at 23 18 03 U. T. 68 km from Penticton.
- SEPTEMBER 21 at 23 10 55 U. T. 300 km from Penticton.
- SEPTEMBER 23 at 00 06 19 U. T. 143 km from Penticton.
- SEPTEMBER 23 at 00 08 12 U. T. 273 km from Penticton.
- SEPTEMBER 23 at 08 06 50 U. T. Magnitude 2.1. Epicentre at 48.1°N, 124.5°W, Olympic Mountains, Washington, U. S. A. G:c.
- SEPTEMBER 24 at 21 32 47 U. T. 168 km from Penticton.
- SEPTEMBER 25 at 21 47 58 U. T. 150 km from Penticton.
- SEPTEMBER 26 at 12 15 47 U. T. 274 km from Penticton.
- SEPTEMBER 26 at 13 38 06 U. T. 138 km from Penticton, and 310 km from Victoria.
- SEPTEMBER 27 at 06 35 26 U. T. 50 km from Victoria.
- SEPTEMBER 27 at 19 05 00.2 U. T. 22 km from Penticton.
- SEPTEMBER 27 at 20 20 54 U. T. 166 km from Penticton.
- SEPTEMBER 28 at 23 21 23 U. T. 132 km from Penticton.
- SEPTEMBER 28 at 23 27 16 U. T. 157 km from Penticton.
- SEPTEMBER 30 at 06 49 51 U. T. 132 km from Penticton.

ROGER DUHAMEL, F.R.S.C.  
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY  
OTTAWA, 1962



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**of Canada**



**OTTAWA, CANADA**

Department of Mines and Technical Surveys

**DOMINION OBSERVATORIES**

**1962**

## SEISMOLOGICAL BULLETIN - 1961

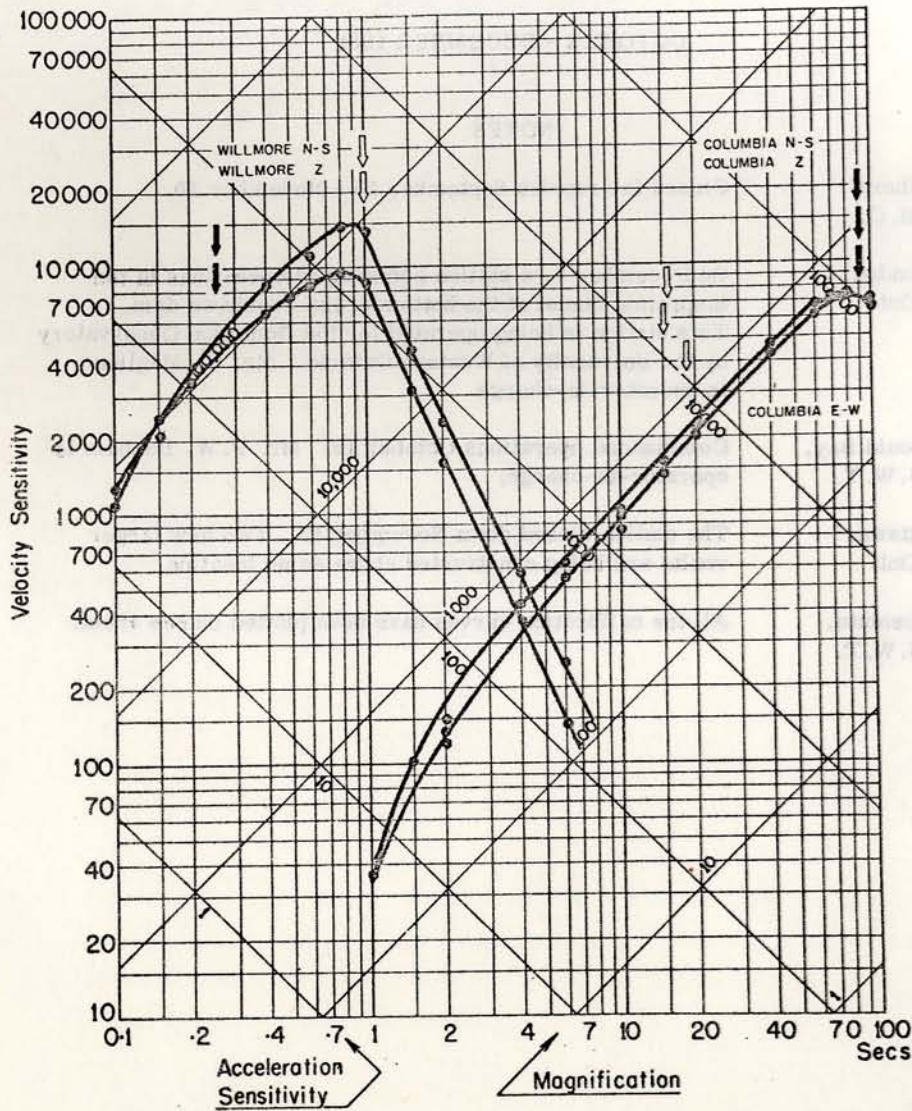
OCTOBER - DECEMBER 1961

## NOTES

1. Alberni  
B. C. Closed for repairs September 23 - November 10.
2. London,  
Ont. On December 7, a station commenced operations in the inspection tunnel at the bottom of the Fanshawe dam. This station is being operated for the Dominion Observatory by the University of Western Ontario. Mr. C. Magliano is operator-in-charge.
3. Mould Bay,  
N. W. T. Commenced operations October 18. Mr. P. W. Basham is operator-in-charge.
4. Ottawa,  
Ont. The station closed down November 13. Two new larger vaults are being constructed at the same location.
5. Resolute,  
N. W. T. All the calibration curves have been plotted on one sheet.

CALIBRATION CURVES

STATION: ALERT, N.W.T.



$\phi = 82^{\circ}29'N$      $\lambda = 62^{\circ}24'W$     Altitude 65M.(C.a)  
 Foundation : Permanently frozen glacial debris overlying Palaeozoic limestone

$T_s \uparrow$                        $T_g \uparrow$

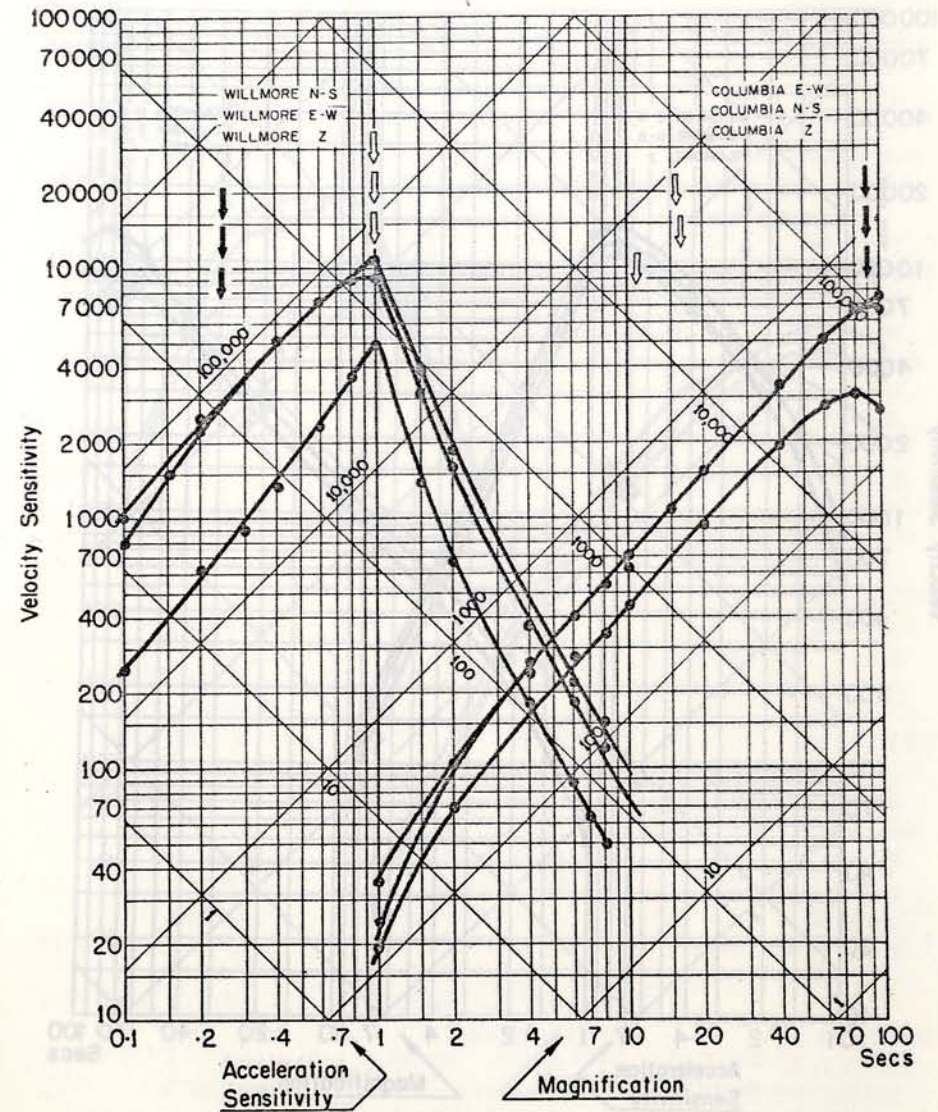
Date of Calibration: 1961

WILLMORE'S  
 S.P.Z.            SEPT. 29  
 S.P.H.-N.S. SEPT. 29

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

CALIBRATION CURVES

STATION: LONDON, ONT.



$\phi = 43^{\circ}02.4'N$      $\lambda = 81^{\circ}11.0'W$     Altitude  
 Foundation : Devonian limestone

$T_s \uparrow$                        $T_g \uparrow$

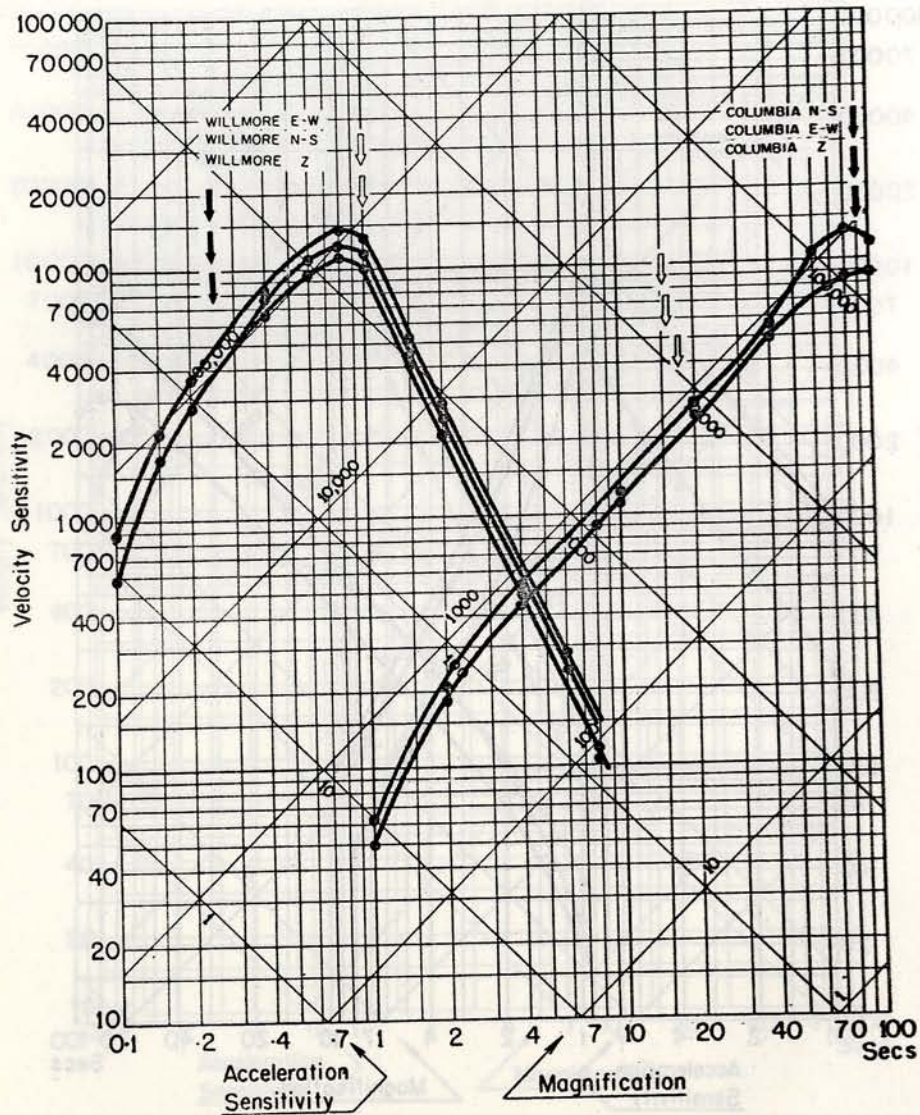
Date of Calibration: 1961

WILLMORE'S  
 S.P.Z.            DEC. 14  
 S.P.H.-N.S. DEC. 11  
 S.P.H.-E.W. DEC. 11

COLUMBIA'S  
 L.P.Z.            DEC. 13  
 L.P.H.-N.S. DEC. 12  
 L.P.H.-E.W. DEC. 13

CALIBRATION CURVES

STATION: MOULD BAY, N.W.T.



$\phi = 76^{\circ}14'N$      $\lambda = 119^{\circ}20'W$     Altitude

Foundation: Regolith and Solifluxion deposits overlying Devonian sandstone.  
(Permafrost)

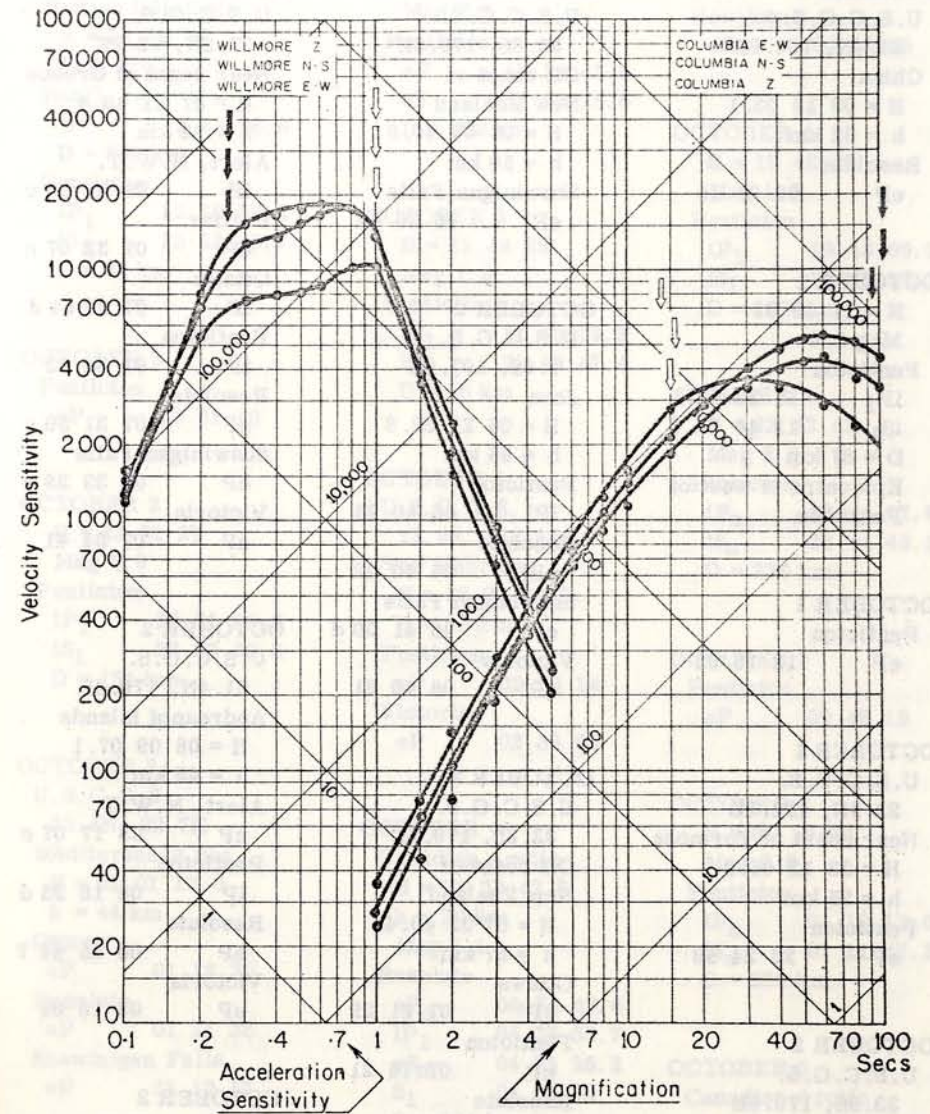
$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: At Ottawa  
JUNE 1961

CALIBRATION CURVES

STATION: RESOLUTE, N.W.T.



$\phi = 74^{\circ}41.2'N$      $\lambda = 94^{\circ}54.0'W$     Altitude 15M

Foundation: Early Palaeozoic limestone

$T_s \uparrow$

$T_g \uparrow$

Date of Calibration: 1958-59

WILLMORE'S  
S.P.Z.    AUG. 18  
S.P.H.-N.S.    AUG. 18  
S.P.H.-E.W.    JAN. 27

COLUMBIAS  
L.P.Z.    SEPT. 17  
L.P.H.-N.S.    SEPT. 15  
L.P.H.-E.W.    SEPT. 15



## SEISMOLOGICAL BULLETIN - 1961

## DOMINION OBSERVATORIES

<p>OCTOBER 1 U. S. C. G. S. 34.4N, 104.9E China H = 00 16 03.1 h = 32 km Resolute eP 00 27 16</p>	<p>OCTOBER 2 U. S. C. G. S. 33.8S, 179.6E Off coast of New Zealand H = 06 07 40.0 h = 50 km Shawinigan Falls eP' 06 26 44</p>	<p>OCTOBER 2 U. S. C. G. S. 37.2N, 22.2E Near coast of Greece H = 07 21 49.4 h = 72 km Alert, N. W. T. iP 07 31 00 c Halifax eP 07 32 07 c Ottawa iP 07 32 54 d Penticton iP 07 34 33 Resolute eP 07 31 59 c Shawinigan Falls eP 07 32 39 c Victoria eP 07 34 41</p>
<p>OCTOBER 1 H = 11 39 39 Mag 2.0 Penticton iP<sub>1</sub> 11 39 53.1 iS<sub>1</sub> 11 40 03.7 D = 87 km Epicentre is west of Penticton</p>	<p>OCTOBER 2 U. S. C. G. S. 7.6S, 107.0E Java H = 06 21 32.8 h = 85 km Penticton iP' 06 40 25 Resolute eP' 06 40 02 Shawinigan Falls eP' 06 41 00 d Victoria eP' 06 40 21</p>	<p>OCTOBER 2 U. S. C. G. S. 51.4N, 179.4E Andreanof Islands H = 08 09 07.1 h = 45 km Alert, N. W. T. eP 08 17 07 c Penticton iP 08 16 25 d Resolute eP 08 15 44 ? Victoria eP 08 16 09</p>
<p>OCTOBER 1 Penticton eP 12 16 02</p>	<p>OCTOBER 2 U. S. C. G. S. 33.9N, 122.3E Near coast of Formosa H = 23 12 05.2 h = 25 km Penticton eP 23 24 59</p>	<p>OCTOBER 2 U. S. C. G. S. 33.9S, 179.6E Off coast of New Zealand H = 05 53 37.5 h = 30 km Shawinigan Falls eP' 06 12 43</p>
<p>OCTOBER 1 U. S. C. G. S. 23.9N, 122.3E Near coast of Formosa H = 23 12 05.2 h = 25 km Penticton eP 23 24 59</p>	<p>OCTOBER 2 U. S. C. G. S. 33.8S, 179.5E Off coast of New Zealand H = 07 02 40.4 h = 57 km Ottawa eP' 07 21 29 Penticton eP 07 16 21 Resolute eP' 07 21 33 ? Shawinigan Falls eP' 07 21 35 Victoria eP 07 16 09</p>	<p>OCTOBER 2 U. S. C. G. S. 51.4N, 179.4E Andreanof Islands H = 08 09 07.1 h = 45 km Alert, N. W. T. eP 08 17 07 c Penticton iP 08 16 25 d Resolute eP 08 15 44 ? Victoria eP 08 16 09</p>
<p>OCTOBER 2 U. S. C. G. S. 33.9S, 179.6E Off coast of New Zealand H = 05 53 37.5 h = 30 km Shawinigan Falls eP' 06 12 43</p>	<p>OCTOBER 2 U. S. C. G. S. 33.8S, 179.5E Off coast of New Zealand H = 07 02 40.4 h = 57 km Ottawa eP' 07 21 29 Penticton eP 07 16 21 Resolute eP' 07 21 33 ? Shawinigan Falls eP' 07 21 35 Victoria eP 07 16 09</p>	<p>OCTOBER 2 U. S. C. G. S. 51.4N, 179.4E Andreanof Islands H = 08 09 07.1 h = 45 km Alert, N. W. T. eP 08 17 07 c Penticton iP 08 16 25 d Resolute eP 08 15 44 ? Victoria eP 08 16 09</p>

<p>OCTOBER 2 49.7°N, 118.6°W British Columbia H = 12 52 26 Mag 2.0 Banff iP 12 53 06.6 D = 280 km Penticton iP<sub>1</sub> 12 52 39.3 iS<sub>1</sub> 12 52 49.7 D = 85 km</p>	<p>OCTOBER 3 H = 17 34 05.5 Mag 2.1 Penticton eP 17 34 45.9 eS 17 35 16.6 D = 252 km</p>	<p>Penticton eP 04 39 33 Resolute eP 04 38 59</p>
<p>OCTOBER 2 Penticton eP 14 01 10</p>	<p>OCTOBER 3 H = 21 49 28 Mag 1.6 Penticton iP<sub>1</sub> 21 49 39.2 iS<sub>1</sub> 21 49 47.4 D = 68 km</p>	<p>OCTOBER 4 H = 19 42 37 Mag 1.9 Penticton iP<sub>1</sub> 19 43 00.2 iS<sub>1</sub> 19 43 18.1 D = 147 km</p>
<p>OCTOBER 2 H = 23 31 27 Mag 1.9 Penticton iP<sub>1</sub> 23 31 50.8 iS<sub>1</sub> 23 32 09.2 D = 151 km</p>	<p>OCTOBER 4 U. S. C. G. S. 13.2S, 166.5E New Hebrides H = 02 23 23.5 h = 66 km Penticton eP 02 36 14 Victoria eP 02 36 03</p>	<p>OCTOBER 4 H = 23 43 42 Mag 2.0 Penticton iP<sub>n</sub> 23 44 17.6 iS<sub>n</sub> 23 44 46.5 D = 236 km</p>
<p>OCTOBER 3 U. S. C. G. S. 35.4N, 22.7E Mediterranean Sea H = 01 01 13.0 h = 44 km Ottawa eP 01 12 30 Resolute eP 01 11 38 Shawinigan Falls eP 01 12 17</p>	<p>OCTOBER 4 Canadian Arctic H = 04 33 42.3 h = 20 km Mag 3.1 Resolute eP<sub>n</sub> 04 34 42.0 iP<sub>1</sub> 04 34 53.7 eS<sub>n</sub> 04 35 25.2 S<sub>1</sub> 04 35 35 D = 444 km</p>	<p>OCTOBER 5 Penticton eP 00 46 19</p>
<p>OCTOBER 3 Resolute iP 06 49 05</p>	<p>OCTOBER 4 U. S. C. G. S. 51.8N, 158.8E Kamchatka H = 04 30 42.7 h = 25 km Alert, N. W. T. iP   04 38 52 c</p>	<p>OCTOBER 5 H = 01 10 30 Mag 2.6 Penticton iP<sub>n</sub> 01 11 12.0 iS<sub>n</sub> 01 11 47.3 D = 288 km</p>
	<p>OCTOBER 5 Canadian Arctic H = 06 33 39.5 Mag 2.1 Resolute iP<sub>1</sub> 06 33 50.0 iS<sub>1</sub> 06 33 58.0 D = 65.6 km</p>	

DOMINION OBSERVATORIES

OCTOBER 5  
 Penticton  
 eP 17 31 29  
 Resolute  
 eP 17 29 26  
 S? 17 36 22  
 Victoria  
 eP 17 31 11

OCTOBER 5  
 U.S.C.G.S.  
 19.4S, 169.0E  
 Loyalty Islands  
 H = 18 08 43.4  
 h = 58 km  
 Penticton  
 iP 18 21 52 c  
 Victoria  
 eP 18 21 40

OCTOBER 5  
 U.S.C.G.S.  
 24.0N, 121.9E  
 Near coast of Formosa  
 H = 22 35 00.8  
 h = 56 km  
 Banff  
 eP 22 47 56  
 Penticton  
 eP 22 47 50  
 Resolute  
 eP 22 46 59  
 Victoria  
 eP 22 47 44

OCTOBER 5  
 U.S.C.G.S.  
 51.0N, 149.7E  
 Sea of Okhotsk  
 H = 23 01 07.3  
 h = 518 km  
 Penticton  
 iP 23 09 50 c

Resolute  
 iP 23 09 00  
 Victoria  
 eP 23 09 38

OCTOBER 6  
 U.S.C.G.S.  
 47.6N, 152.0E  
 Kurile Islands  
 H = 01 25 29.3  
 h = 31 km

Resolute  
 eP 01 34 25

OCTOBER 6  
 Penticton  
 eP 03 32 41

OCTOBER 6  
 U.S.C.G.S.  
 16.0N, 97.9W  
 Near coast of Mexico  
 H = 08 02 19.1  
 h = 32 km  
 Penticton  
 eP 08 09 35

OCTOBER 6  
 Penticton  
 eP 09 14 38

OCTOBER 6  
 U.S.C.G.S.  
 42.4N, 142.1E  
 Hokkaido Japan  
 H = 11 04 22.5  
 h = 115 km  
 Alert, N.W.T.  
 eP 11 13 41 d  
 Penticton  
 eP 11 14 44  
 Resolute  
 iP 11 14 00

OCTOBER 7  
 U.S.C.G.S.  
 21.3S, 67.5W  
 Bolivia  
 H = 08 15 08.0  
 h = 149 km  
 Penticton  
 eP 08 27 25

OCTOBER 7  
 U.S.C.G.S.  
 0.4S, 80.2W  
 Near coast of  
 Ecuador  
 H = 09 55 54.2  
 h = 48 km  
 Alert, N.W.T.  
 eP 10 08 16  
 Penticton  
 eP 10 05 58  
 Resolute  
 eP 10 07 34

OCTOBER 7  
 U.S.C.G.S.  
 43.5N, 128.8W  
 Off coast of Oregon  
 H = 15 54 01.3  
 h = 25 km

Banff  
 eP 15 56 10

Halifax  
 eP 16 02 21

Penticton  
 eP 15 55 25

Resolute  
 eP 16 00 12

Victoria  
 eP 15 54 53.5

SEISMOLOGICAL BULLETIN - 1961

OCTOBER 7  
 U.S.C.G.S.  
 20.1S, 68.3W  
 Chile-Bolivia border  
 H = 17 26 48.8  
 h = 179 km  
 Penticton  
 eP 17 38 55  
 e 17 49 14

OCTOBER 7  
 48°40'N±12',  
 76°35'W±12'  
 Quebec  
 H = 22 36 50.9  
 h = 8 km?  
 Mag 3.8

Montreal  
 e 22 37 54  
 iP<sub>1</sub> 22 37 58  
 eS<sub>n</sub> 22 38 31  
 iS<sub>1</sub> 22 38 49  
 D = 418 km

Ottawa  
 eP<sub>1</sub> 22 37 50  
 i 22 38 13  
 iS<sub>1</sub> 22 38 35  
 D = 369 km  
 Shawinigan Falls  
 S<sub>1</sub> 22 38 41?  
 D = 362 km

OCTOBER 8  
 H = 00 01 27  
 Mag 1.9  
 Penticton  
 iP<sub>1</sub> 00 01 51.1  
 eS<sub>1</sub> 00 02 09.6  
 D = 152 km

OCTOBER 8  
 Resolute  
 P 03 36 12

OCTOBER 8  
 U.S.C.G.S.  
 29.9S, 71.8W  
 Near coast of  
 Chile  
 H = 12 41 35.1  
 h = 65 km  
 Halifax  
 iP 12 53 09 d  
 Penticton  
 eP 12 54 29

OCTOBER 8  
 Penticton  
 eP 14 45 46

OCTOBER 8  
 U.S.C.G.S.  
 53.1N, 166.7W  
 Fox Islands  
 H = 21 56 44.0  
 h = 48 km

Alert, N.W.T.  
 iP 22 04 14 c  
 Ottawa  
 eP 22 06 19  
 Resolute  
 eP 22 03 33?  
 Penticton  
 eP 22 02 45

OCTOBER 8  
 U.S.C.G.S.  
 1.6N, 127.3E  
 Halmahera  
 H = 23 41 32.2  
 h = 102 km  
 Alert, N.W.T.  
 P 23 54 52

Ottawa  
 eP' 24 00 30  
 Resolute  
 iP 23 55 08

OCTOBER 9  
 Penticton  
 eP 00 22 15

OCTOBER 9  
 U.S.C.G.S.  
 16.1N, 94.0W  
 Near coast of Mexico  
 H = 03 16 53.2  
 h = 154 km

Banff  
 eP 03 24 14  
 Penticton  
 eP 03 24 16  
 Resolute  
 eP 03 26 29?

OCTOBER 9  
 Penticton  
 eP 13 12 52.8

OCTOBER 9  
 H = 23 52 49  
 Mag 1.9  
 Penticton  
 iP<sub>n</sub> 23 53 21.1  
 eS<sub>n</sub> 23 53 46.1  
 D = 205 km

OCTOBER 10  
 Penticton  
 eP 00 44 51

OCTOBER 10  
 Resolute  
 eP 01 55 39



DOMINION OBSERVATORIES

OCTOBER 10  
U.S.C.G.S.  
22.9S, 180.0  
South of Fiji Islands  
H = 03 44 38.3  
h = 576 km  
Penticton  
iP 03 56 41

OCTOBER 11  
Penticton  
eP 00 44 20

OCTOBER 11  
Alert, N.W.T.  
P 01 07 48?

OCTOBER 10  
U.S.C.G.S.  
5.4S, 154.3E  
Solomon Islands region  
H = 08 25 54.6  
h = 154 km  
Ottawa  
eP' 08 44 29

OCTOBER 11  
U.S.C.G.S.  
57.5N, 154.1W  
Kodiak Island  
H = 07 03 58.6  
h = 42 km  
Alert, N.W.T.  
iP 07 10 38 d  
Ottawa  
eP 07 12 31  
Penticton  
iP 07 08 52  
Resolute  
P 07 09 46  
Victoria  
eP 07 08 34

OCTOBER 10  
Penticton  
eP 10 40 29

OCTOBER 10  
U.S.C.G.S.  
16.1S, 176.3W  
Fiji Islands region  
H = 18 44 28.6  
h = 361 km  
Banff  
eP 18 56 26  
Penticton  
eP 18 56 10  
Victoria  
eP 18 55 58

OCTOBER 11  
U.S.C.G.S.  
50.4N, 77.4E  
Kazaka, S.S.R.  
H = 07 40 04.8  
h = 31 km  
Penticton  
eP 07 52 11

OCTOBER 10  
Penticton  
eP 20 22 14

OCTOBER 10  
Victoria  
iP 22 13 42 d

OCTOBER 11  
U.S.C.G.S.  
29.7N, 129.7E  
Ryukyu Islands  
H = 17 20 15.4  
h = 52 km  
Resolute  
eP 17 31 37 c

OCTOBER 11  
Canadian Arctic  
H = 19 47 17.4?  
Mag 3.1  
Resolute  
iP<sub>1</sub> 19 47 37.1  
iS<sub>1</sub> 19 47 52?  
D = 123 km

OCTOBER 11  
H = 22 20 55  
Mag 2.3  
Penticton  
iP<sub>n</sub> 22 21 41.2  
iS<sub>n</sub> 22 22 21.0  
D = 326 km

OCTOBER 11  
Canadian Arctic  
H = 23 58 46.3  
Mag 2.3  
Resolute  
iP<sub>1</sub> 23 59 06  
iS<sub>1</sub> 23 59 21  
D = 123 km

OCTOBER 12  
Penticton  
eP 06 04 08

OCTOBER 12  
Penticton  
eP 10 11 14

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OCTOBER 12  
U.S.C.G.S.  
19.1N, 66.0W  
North of Puerto Rico  
H = 13 53 41.3  
h = 63 km  
Ottawa  
eP 14 00 02

OCTOBER 12  
Penticton  
eP 18 03 38

OCTOBER 12  
H = 19 27 43  
Mag 1.9  
Penticton  
iP<sub>1</sub> 19 28 09.0  
iS<sub>1</sub> 19 28 28.5  
D = 160 km

OCTOBER 12  
H = 23 50 54  
Mag 2.2  
Penticton  
iP<sub>1</sub> 23 51 20.9  
iS<sub>1</sub> 23 51 41.3  
D = 167 km

OCTOBER 13  
U.S.C.G.S.  
6.3N, 126.8E  
Off coast of Mindanao,  
Philippine Islands  
H = 02 21 44.6  
h = 60 km  
Resolute  
eP 02 35 07 d

OCTOBER 13  
U.S.C.G.S.  
55.9S, 27.2W  
Sandwich Islands  
H = 04 59 04.8  
h = 67 km  
Mag 5 1/4  
Alert, N.W.T.  
eP' 05 18 16  
Penticton  
eP' 05 18 07  
Resolute  
eP' 05 18 22  
e 05 21 43

OCTOBER 13  
U.S.C.G.S.  
60.3S, 34.3W  
Sandwich Islands  
H = 10 46 47.7  
h = 44 km  
Mag 5 1/2  
Alert, N.W.T.  
eP' 11 06 12?  
Penticton  
iP' 11 05 51  
Resolute  
eP' 11 06 06

OCTOBER 13  
Penticton  
eP 16 04 50

OCTOBER 13  
H = 16 33 37  
Mag 2.1  
Penticton  
eP<sub>1</sub> 16 34 06.4  
eS<sub>1</sub> 16 34 28.8  
D = 184 km

OCTOBER 13  
U.S.C.G.S.  
22.0S, 176.9W  
Tonga Islands region  
H = 17 28 21.5  
h = 155 km  
Banff  
iP 17 41 06 d  
Penticton  
iP 17 40 52 d  
Victoria  
eP 17 40 40 d

OCTOBER 13  
Penticton  
eP 18 03 39

OCTOBER 13  
Penticton  
iP 18 59 05 c

OCTOBER 13  
Penticton  
eP 21 08 44

OCTOBER 13  
H = 21 24 57  
Mag 1.6  
Penticton  
eP<sub>1</sub> 21 25 24.2  
eS<sub>1</sub> 21 25 44.6  
D = 167 km

OCTOBER 14  
Penticton  
eP 00 15 06

OCTOBER 14  
Penticton  
eP 00 43 29



## DOMINION OBSERVATORIES

OCTOBER 14  
U.S.C.G.S.  
33.3N, 142.2E  
South of Honshu  
Japan  
H = 12 30 45.3  
h = 47 km  
Penticton  
eP 12 41 57  
Resolute  
iP 12 41 29 c

OCTOBER 14  
U.S.C.G.S.  
0.9S, 80.3W  
Near coast of  
Ecuador  
H = 21 18 03.4  
h = 25 km  
Penticton  
eP 21 28 18

OCTOBER 14  
U.S.C.G.S.  
51.1N, 159.1E  
Kamchatka  
H = 21 58 57.4  
h = 80 km  
Alert, N.W.T.  
eP 22 07 07 d  
Halifax  
eP 22 10 46.5  
Penticton  
eP 22 07 40  
Resolute  
eP 22 07 11  
i 22 13 49

OCTOBER 14  
U.S.C.G.S.  
19.1S, 168.4E  
New Hebrides  
H = 16 13 48.7  
h = 28 km  
Penticton  
eP 16 27 00

OCTOBER 14  
Canadian Arctic  
H = 18 18 20  
Mag 4.8  
Resolute  
eP<sub>n</sub> 18 20 53  
iS<sub>n</sub> 18 22 42.5  
eLg 18 23 40  
D = 1200 km

OCTOBER 14  
H = 19 57 45  
Mag 1.5  
Penticton  
eP<sub>1</sub> 19 58 07.0  
eS<sub>1</sub> 19 58 24.0  
D = 139 km

OCTOBER 15  
U.S.C.G.S.  
eP 07 17 37

OCTOBER 15  
U.S.C.G.S.  
4.1S, 102.3E  
Near coast of  
Sumatra  
H = 17 07 55.6  
h = 66 km  
Penticton  
iP' 17 26 47

OCTOBER 15  
U.S.C.G.S.  
19.9S, 176.1W  
Tonga Islands region  
H = 03 27 44.1  
h = 224 km  
Penticton  
eP 03 39 56

OCTOBER 15  
U.S.C.G.S.  
47°12'N, 123°14'W  
Washington, U.S.A.  
H = 04 53 13  
Mag 2.7  
Penticton  
eP<sub>n</sub> 04 54 03.8  
eS<sub>n</sub> 04 54 42.3  
D = 360 km  
Victoria  
eP<sub>1</sub> 04 53 36.7  
eS<sub>1</sub> 04 53 54.6  
D = 147 km

OCTOBER 16  
U.S.C.G.S.  
eP 00 49 28

OCTOBER 16  
Penticton  
iP 01 16 02  
Resolute  
eP 01 15 30

OCTOBER 16  
U.S.C.G.S.  
12.1N, 143.4E  
South of Guam  
H = 11 02 32.7  
h = 25 km  
Resolute  
eP 11 15 17?

OCTOBER 16  
Penticton  
eP 09 38 15

## SEISMOLOGICAL BULLETIN - 1961

OCTOBER 16  
H = 12 34 46  
Mag 2.5  
Victoria  
iP<sub>1</sub> 12 35 00.9  
iS<sub>1</sub> 12 35 12.2  
D = 92 km

OCTOBER 16  
Canadian Arctic  
H = 17 54 12  
h = 17 km  
Mag 4.0  
Resolute  
eP<sub>n</sub> 17 55 48  
iP<sub>1</sub> 17 56 11  
iS<sub>n</sub> 17 56 58  
iS<sub>1</sub> 17 57 33  
D = 740 km

OCTOBER 17  
U.S.C.G.S.  
55.8S, 0.5E  
Bouvet Islands region  
H = 04 27 33.5  
h = 25 km  
Resolute  
eP' 04 47 05?  
Victoria  
eP' 04 47 07

OCTOBER 17  
U.S.C.G.S.  
12.1N, 143.4E  
South of Guam  
H = 11 02 32.7  
h = 25 km  
Resolute  
eP 11 15 17?

OCTOBER 17  
H = 19 38 50  
Mag 1.8  
Penticton  
iP<sub>1</sub> 19 39 16.3  
iS<sub>1</sub> 19 39 36.4  
D = 165 km

OCTOBER 17  
Penticton  
eP 22 40 41

OCTOBER 17  
U.S.C.G.S.  
29.9S, 177.6W  
Kermadec Islands  
H = 02 49 59.6  
h = 65 km  
Resolute  
eP' 03 08 36?

OCTOBER 18  
U.S.C.G.S.  
15.1S, 173.9W  
Tonga Islands  
H = 06 38 43.8  
h = 91 km  
Penticton  
eP 06 50 45

OCTOBER 18  
U.S.C.G.S.  
17.4S, 178.6W  
Fiji Islands region  
H = 07 31 39.3  
h = 576 km  
Penticton  
eP 07 43 17

OCTOBER 18  
U.S.C.G.S.  
53.6N, 165.6W  
Fox Islands  
H = 10 44 10.7  
h = 47 km  
Penticton  
eP 10 50 06  
Resolute  
eP 10 50 55

OCTOBER 18  
48.9°N, 122.3°W  
Washington, U.S.A.  
H = 13 45 59  
Mag 2.2  
Penticton  
iP<sub>n</sub> 13 46 42.5  
D = 187 km  
Victoria  
iP<sub>1</sub> 13 46 11.6  
iS<sub>1</sub> 13 46 21.5  
D = 93 km

OCTOBER 18  
U.S.C.G.S.  
23.2N, 94.7E  
Burma  
H = 15 31 19.2  
h = 105 km  
Resolute  
eP 15 43 34 d

OCTOBER 18  
U.S.C.G.S.  
36.7S, 72.6W  
Near coast of  
Southern Chile  
H = 16 52 00.2  
h = 67 km  
Mag 6 1/2  
Banff  
eP 17 05 19  
Halifax  
eP 17 04 11.5 c  
Ottawa  
eP 17 04 13 c

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## DOMINION OBSERVATORIES

Penticton eP 17 05 15 Victoria eP 17 05 21  OCTOBER 18 Resolute eP 18 10 49  OCTOBER 18 U.S.C.G.S. 36.9S, 73.5W Near coast of Central Chile H = 18 10 30.4 h = 55 km Halifax eP 18 22 46  OCTOBER 18 H = 21 32 57 Mag 2.0 Penticton iP 21 33 21.7 iS 21 33 40.2 D = 152 km  OCTOBER 18 H = 21 47 23 Mag 2.2 Penticton iP <sub>1</sub> 21 47 48.3 iS <sub>1</sub> 21 48 07.7 D = 159 km  OCTOBER 18 Penticton eP 23 05 25	OCTOBER 18 H = 23 56 59 Mag 1.9 Penticton eP <sub>1</sub> 23 57 27.1 eS <sub>1</sub> 23 57 48.0 D = 171 km  OCTOBER 19 Penticton eP 00 11 48.1  OCTOBER 19 Penticton eP 00 16 44  OCTOBER 19 Penticton eP 00 26 07  OCTOBER 19 Mould Bay P 03 06 38  OCTOBER 19 Penticton eP 03 07 57 Victoria eP 03 07 06  OCTOBER 19 Penticton iP 03 38 23  OCTOBER 19 Penticton eP 03 56 08 Resolute eP? 03 58 17	OCTOBER 19 U.S.C.G.S. 35.8N, 117.9W Southern California H = 05 09 44.0 h = 22 km Mag 5.3 Banff eP 05 13 27 Mould Bay P 05 17 26 Penticton eP 05 13 01 Resolute eP 05 17 18? Victoria eP 05 12 57  OCTOBER 19 Mould Bay P 06 24 58  OCTOBER 19 Penticton eP 09 29 28  OCTOBER 19 U.S.C.G.S. 55.2S, 146.0E West of Macquarie Islands H = 09 12 28.5 h = 86 km Mould Bay P' 09 32 01 Ottawa eP' 09 32 18 Resolute eP' 09 32 13 d?  OCTOBER 19 Mould Bay IP 10 06 06
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OCTOBER 19 U.S.C.G.S. 43.0N, 139.2E Sea of Japan H = 10 56 53.6 h = 242 km Penticton eP 11 07 12 Resolute eP 11 06 18  OCTOBER 19 Penticton eP 11 28 47  OCTOBER 19 U.S.C.G.S. 37.1S, 69.8W Argentina H = 11 19 19.6 h = 155 km Mag 6 1/4 Halifax iP 11 31 25 d Ottawa eP 11 31 26 c Penticton eP 11 32 31  OCTOBER 19 Penticton eP 11 49 16  OCTOBER 19 Penticton eP 11 59 56  OCTOBER 19 Penticton eP 18 19 14 Resolute eP 18 19 23	OCTOBER 19 H = 19 03 46 Mag 1.7 Penticton iP <sub>1</sub> 19 04 11.2 iS <sub>1</sub> 19 04 30.6 D = 159 km  OCTOBER 19 H = 19 34 43 Mag 2.0 Penticton iP <sub>1</sub> 19 35 05.2 iS <sub>1</sub> 19 35 22.3 D = 140 km  OCTOBER 19 U.S.C.G.S. 55.3S, 146.4E South of Australia H = 19 26 32.2 h = 50 km Ottawa eP' 19 46 17 Penticton eP' 19 45 38  OCTOBER 19 Penticton eP 20 01 37  OCTOBER 19 U.S.C.G.S. 17.6S, 174.0W Tonga Islands H = 20 24 41.9 h = 25 km Penticton eP 20 37 04	OCTOBER 19 47.5°N, 122.9°W Washington, U.S.A. H = 20 37 49.6 Mag 3.0 Penticton iP <sub>n</sub> 20 38 35.0 D = 318 km Victoria iP <sub>1</sub> 20 38 08.3 iS <sub>1</sub> 20 38 22.2 D = 117 km  OCTOBER 19 Resolute eP 20 46 18 c?  OCTOBER 19 Penticton eP 22 12 55  OCTOBER 20 U.S.C.G.S. 51.8N, 176.0W Andreanof Islands H = 05 40 44.1 h = 36 km Penticton iP 05 47 37 d  OCTOBER 20 Penticton eP 10 21 06  OCTOBER 20 U.S.C.G.S. 33.6N, 118.0W California H = 19 49 50.5 h = 17 km Mag 4.6 Penticton eP 19 53 37
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DOMINION OBSERVATORIES

OCTOBER 20  
U.S.C.G.S.  
33.7N, 118.0W  
California  
H = 20 07 14.8  
h = 20 km  
Mag 4.2  
Penticton  
eP 20 11 05

OCTOBER 20  
H = 23 53 51  
Mag 1.9  
Penticton  
iP 23 54 16.9  
iS1 23 54 37.0  
D = 165 km

OCTOBER 21  
Penticton  
eP 00 41 00

OCTOBER 21  
U.S.C.G.S.  
18.0S, 178.5W  
Fiji Islands  
H = 11 43 41.3  
h = 618 km  
Banff  
eP 11 55 34 c  
Penticton  
iP 11 55 17 c  
Victoria  
eP 11 55 05

OCTOBER 21  
Resolute  
eP 17 12 50 d?

OCTOBER 21  
U.S.C.G.S.  
10.8S, 166.0E  
Santa Cruz Islands  
H = 17 34 36.8  
h = 192 km  
Penticton  
iP 17 47 07 c

OCTOBER 21  
U.S.C.G.S.  
51.6N, 176.0W  
Andreanof Islands  
H = 22 21 52.2  
Penticton  
iP 22 28 48

OCTOBER 22  
Penticton  
eP 00 09 28

OCTOBER 22  
U.S.C.G.S.  
0.2S, 94.6W  
West of Galapagos  
Islands  
H = 07 01 42.1  
h = 60 km  
Penticton  
iP 07 11 05 d

OCTOBER 22  
U.S.C.G.S.  
19.9S, 172.4E  
New Hebrides Islands  
H = 09 50 43.6  
h = 181 km  
Mag 5 1/2  
Penticton  
iP 10 03 31  
Victoria  
eP 10 03 19

OCTOBER 22  
H = 10 36 58  
Mag 2.1  
Penticton  
iP 10 37 33.2  
D = 230 km  
Victoria  
iP1 10 37 10.8  
iS1 10 37 20.2  
D = 77 km

OCTOBER 22  
U.S.C.G.S.  
2.2N, 95.9W  
West of Galapagos  
Islands  
H = 13 06 31.1  
h = 65 km  
Penticton  
eP 13 17 07

OCTOBER 22  
Penticton  
iP 13 23 33

OCTOBER 22  
Penticton  
eP 14 37 57

OCTOBER 22  
U.S.C.G.S.  
17.6S, 179.6W  
Fiji Islands  
H = 14 40 56.6  
h = 549 km  
Penticton  
iP 14 52 40 c

OCTOBER 22  
U.S.C.G.S.  
10.5N, 86.6W  
Off coast of  
Costa Rica  
H = 15 13 32.3  
h = 51 km  
Penticton  
eP 15 22 07

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Resolute  
eP 15 24 04

OCTOBER 22  
Resolute  
eP 19 11 17 ?

OCTOBER 23  
U.S.C.G.S.  
60.4S, 33.4W  
Sandwich Islands  
H = 00 08 33.3  
h = 25 km  
Alert, N.W.T.  
eP' 00 28 03 d  
Penticton  
eP' 00 27 43  
Resolute  
eP' 00 28 04 c

OCTOBER 23  
U.S.C.G.S.  
28.9S, 70.5W  
Chile  
H = 01 24 00.6  
h = 125 km  
Penticton  
iP 01 36 48 d

OCTOBER 23  
Penticton  
eP 03 06 48

OCTOBER 23  
Penticton  
eP 04 33 32

OCTOBER 23  
U.S.C.G.S.  
54.0N, 163.8W  
Unimak Island  
H = 07 54 58.9  
h = 35 km  
Penticton  
eP 08 00 54

Resolute  
eP 08 01 42

OCTOBER 23  
Alert, N.W.T.  
iP 08 36 05 d  
S 08 39 56 ? d  
L 08 41 38 ? d

OCTOBER 23  
Alert, N.W.T.  
iP 10 36 04 d  
Penticton  
iP 10 40 59 d  
Resolute  
eP 10 37 31 d

OCTOBER 23  
U.S.C.G.S.  
3.5N, 126.4E  
Molucca Passage  
H = 14 39 33.5  
h = 25 km  
Alert, N.W.T.  
eP 14 52 54 d  
Penticton  
eP 14 53 35  
Resolute  
eP 14 53 11

OCTOBER 23  
U.S.C.G.S.  
3.5N, 126.6E  
Molucca Passage  
H = 14 52 28.2  
h = 32 km  
Resolute  
eP 15 06 06

OCTOBER 23  
U.S.C.G.S.  
16.8S, 173.6W  
Tonga Islands  
H = 17 11 53.3  
h = 49 km  
Penticton  
iP 17 24 10

OCTOBER 24  
U.S.C.G.S.  
42.9N, 144.6E  
Hokkaido Japan  
H = 00 18 18.6  
h = 14 km  
Resolute  
eP 00 28 01

OCTOBER 24  
U.S.C.G.S.  
45.0N, 146.4E  
Off coast of  
Hokkaido Japan  
H = 07 25 19.9  
h = 82 km  
Alert, N.W.T.  
eP 07 34 04 c  
Banff  
iP2 07 35 26 c  
Penticton  
iP 07 35 19 c  
Resolute  
eP 07 34 36  
Victoria  
eP 07 35 07

OCTOBER 24  
U.S.C.G.S.  
16.5S, 178.3E  
Fiji Islands  
H = 07 36 17.1  
h = 40 km  
Penticton  
iP 07 48 53

OCTOBER 24  
Penticton  
eP 08 10 48

OCTOBER 24  
Penticton  
eP 17 30 44

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DOMINION OBSERVATORIES

<p>OCTOBER 24 Penticton eP 18 23 41 Resolute eP 18 23 53?</p> <p>OCTOBER 24 Penticton eP 18 27 03</p> <p>OCTOBER 24 Penticton eP 21 36 21</p> <p>OCTOBER 24 Penticton eP 21 51 18</p> <p>OCTOBER 24 Penticton eP 22 59 46</p> <p>OCTOBER 24 Penticton eP 23 15 36</p> <p>OCTOBER 24 Penticton eP 23 23 30</p> <p>OCTOBER 25 Penticton eP 23 49 43</p> <p>OCTOBER 25 Penticton eP 04 23 17</p>	<p>OCTOBER 25 Penticton eP 05 53 47</p> <p>OCTOBER 25 Penticton iP 06 54 09 c</p> <p>OCTOBER 25 U.S.C.G.S. 9.7S, 78.6W Off coast of Peru H = 08 54 36.6 h = 110 km Alert, N.W.T. iP 09 07 36 d Banff eP 09 05 28 Ottawa eP 09 03 57 Penticton iP 09 05 32 Resolute iP 09 07 00</p> <p>OCTOBER 25 Penticton eP 10 33 13</p> <p>OCTOBER 25 Penticton eP 12 22 04</p> <p>OCTOBER 25 U.S.C.G.S. 20.3S, 174.1W Tonga Islands H = 14 20 20.8 h = 25 km Penticton eP 14 32 45</p>	<p>OCTOBER 25 Penticton eP 18 40 17</p> <p>OCTOBER 25 H = 20 12 16 Mag 1.4 Penticton iP<sub>1</sub> 20 12 28.7 iS<sub>1</sub> 20 12 38.4 D = 80 km</p> <p>OCTOBER 26 U.S.C.G.S. 3.1S, 147.4E Bismark Sea H = 00 38 20.3 h = 14 km Penticton eP 00 51 39 Resolute eP 00 51 48?</p> <p>OCTOBER 26 Penticton eP 09 12 34</p> <p>OCTOBER 26 U.S.C.G.S. 0.4S, 98.6E Off coast of Sumatra H = 15 27 02.0 h = 18 km Mag 6 Penticton eP' 15 45 55 Resolute eP? 15 41 15?</p> <p>OCTOBER 26 Resolute eP 17 11 49</p>
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<p>OCTOBER 26 U.S.C.G.S. 18.0N, 100.0W Mexico H = 17 22 18.4 h = 43 km Alert, N.W.T. eP 17 33 01 Ottawa eP 17 29 01 Penticton eP 17 29 08 Resolute eP 17 31 57 d?</p> <p>OCTOBER 26 Ottawa eP 17 33 22 d Penticton eP 17 33 28</p> <p>OCTOBER 26 Penticton eP 18 36 25</p> <p>OCTOBER 26 U.S.C.G.S. 0.3S, 98.5E Off coast of Sumatra H = 19 28 37.3 h = 58 km Penticton eP' 19 47 27</p> <p>OCTOBER 26 Penticton eP 20 25 40</p>	<p>OCTOBER 26 U.S.C.G.S. 6.9N, 73.1W Colombia H = 21 56 18.2 h = 167 km Penticton eP 22 05 51 Resolute eP 22 07 05 c?</p> <p>OCTOBER 26 Penticton eP 23 43 02</p> <p>OCTOBER 27 H = 00 55 20 Mag 2.0 Penticton eP<sub>1</sub> 00 55 44.1 eS<sub>1</sub> 00 56 02.4 D = 150 km</p> <p>OCTOBER 27 Penticton eP 03 43 44</p> <p>OCTOBER 27 H = 19 52 11 Mag 1.4 Penticton eP<sub>1</sub> 19 52 21.7 eS<sub>1</sub> 19 52 30.0 D = 68 km</p>	<p>OCTOBER 27 H = 19 55 03 Mag 2.2 Penticton iP<sub>1</sub> 19 55 26.9 iS<sub>1</sub> 19 55 44.8 D = 147 km</p> <p>OCTOBER 27 Penticton eP 19 58 15</p> <p>OCTOBER 27 H = 23 37 46 Mag 2.0 Penticton eP<sub>n</sub> 23 38 16.7 iS<sub>n</sub> 23 38 40.5 D = 195 km</p> <p>OCTOBER 27 Resolute eP 19 58 10?</p> <p>OCTOBER 28 H = 00 14 34 Mag 2.1 Penticton iP<sub>n</sub> 00 15 04.9 iS<sub>n</sub> 00 15 29.2 D = 198 km</p> <p>OCTOBER 28 H = 00 17 37 Mag 1.8 Penticton eP<sub>1</sub> 00 18 06.9 eS<sub>1</sub> 00 18 30.4 D = 193 km</p>
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DOMINION OBSERVATORIES

OCTOBER 28  
U.S.C.G.S.  
17.7S, 178.9W  
Fiji Islands  
H = 01 34 59.5  
h = 605 km  
Penticton  
eP 01 46 35

OCTOBER 28  
U.S.C.G.S.  
9.3S, 80.0W  
Off coast of Peru  
H = 05 30 04.5  
h = 33 km  
Penticton  
eP 05 41 05

OCTOBER 28  
U.S.C.G.S.  
11.6S, 166.4E  
Santa Cruz Islands  
H = 06 00 33.7  
h = 34 km  
Penticton  
eP 06 13 23

OCTOBER 28  
U.S.C.G.S.  
18.9 S, 178.1W  
Fiji Islands  
H = 06 48 08.8  
h = 631 km  
Penticton  
eP 06 59 46

OCTOBER 28  
Penticton  
eP 10 14 39

OCTOBER 28  
U.S.C.G.S.  
33.7N, 48.5E  
Iran  
H = 10 46 40.2  
h = 34 km  
Alert, N.W.T.  
iP 10 56 41 c  
Halifax  
eP 10 58 52.5 c

Ottawa  
eP 10 59 21  
Resolute  
eP 10 57 45  
Shawinigan Falls  
eP 10 59 11

OCTOBER 28  
U.S.C.G.S.  
38.7S, 73.3W  
Near coast of Chile  
H = 14 49 13.6  
h = 43 km  
Halifax  
eP 15 01 40.5  
Ottawa  
eP 15 01 40  
Shawinigan Falls  
eP 15 01 47

OCTOBER 28  
Penticton  
eP 18 31 09

OCTOBER 28  
Resolute  
eP 21 37 09

OCTOBER 28  
H = 22 37 18  
Mag 1.6  
Penticton  
iP<sub>1</sub> 22 37 37.9  
iS<sub>1</sub> 22 37 52.9  
D = 123 km

OCTOBER 28  
Penticton  
eP 22 56 48  
Resolute  
eP 22 54 48  
SS? 23 10 07  
G? 23 18 32

OCTOBER 29  
Penticton  
eP 00 09 00

OCTOBER 29  
Penticton  
eP 08 46 57

OCTOBER 29  
U.S.C.G.S.  
49.0°N, 128.7°W  
West of Vancouver  
Island  
H = 09 12 15.7  
h = 16 km  
Mag 4.8

Banff  
eP 09 14 25 c

Halifax  
eP 09 20 23 d

Ottawa  
eP 09 19 14

Penticton  
eP<sub>n</sub> 09 13 43.9 c

Resolute  
eP 09 18 20 c

P<sub>c</sub>P 09 20 39

S 09 23 18

S<sub>c</sub>S 09 27 34

SKP 09 43 09

SEISMOLOGICAL BULLETIN - 1961

Shawinigan Falls  
eP 09 19 27  
Victoria  
eP<sub>n</sub> 09 13 09.0 c

OCTOBER 29  
Penticton  
eP 10 03 45

OCTOBER 29  
Penticton  
eP 10 18 05

OCTOBER 29  
Aftershock of  
Vancouver Island Quake  
H = 11 10 22 ?  
Penticton  
eP 11 11 53  
Victoria  
eP 11 11 13.2

OCTOBER 29  
Aftershock of previous  
H = 11 17 00?  
Penticton  
eP 11 18 24  
Victoria  
eP 11 17 47.2

OCTOBER 29  
U.S.C.G.S.  
49.4N, 127.6W  
Vancouver Island  
region  
H = 14 00 12.0  
h = 56 km  
Mag 3.2  
Penticton  
eP 14 01 33  
Victoria  
eP 14 00 57.7

OCTOBER 29  
U.S.C.G.S.  
48.7N, 128.3W  
Vancouver Island  
region  
H = 14 47 18.3  
h = 73 km  
Mag 3.8  
Banff  
eP 14 49 21  
Penticton  
eP 14 48 41  
Victoria  
eP 14 48 06.1

OCTOBER 29  
Vancouver Island  
region  
Penticton  
eP 18 28 47.1  
Victoria  
eP 18 28 06.3

OCTOBER 29  
Vancouver Island  
region  
Penticton  
eP 19 30 06  
Victoria  
eP 19 29 30.3

OCTOBER 29  
Resolute  
eP 19 37 37

OCTOBER 29  
Penticton  
eP 19 59 42

OCTOBER 29  
Penticton  
eP 22 26 21

OCTOBER 30  
U.S.C.G.S.  
42.5N, 126.6W  
Off coast of Oregon  
H = 01 44 53.2  
h = 50 km  
Banff  
eP 01 47 38  
Penticton  
eP 01 46 53  
Resolute  
eP 01 51 45  
Victoria  
eP 01 46 25.3

OCTOBER 30  
U.S.C.G.S.  
42.3N, 126.7W  
Off coast of Oregon  
H = 02 16 32.7  
h = 36 km

Banff  
eP 02 19 19  
Halifax  
iP 02 24 47 d

Ottawa  
eP 02 23 36  
Penticton  
eP 02 18 34  
Resolute  
eP 02 23 28  
Shawinigan Falls  
eP 02 23 51  
Victoria  
eP 02 18 08.4

OCTOBER 30  
U.S.C.G.S.  
50.8N, 158.3E  
Off coast of Kamchatka  
H = 04 47 59.8  
h = 32 km  
Penticton  
eP 04 56 55  
Resolute  
iP 04 56 23





## DOMINION OBSERVATORIES

OCTOBER 30

Novaya Zemlya  
 Nuclear blast  
 Alert, N. W. T.  
 iP 08 38 12 c  
 S 08 42 09?  
 L 08 43 40?  
 Banff  
 eP 08 43 02.0  
 Ottawa  
 eP 08 43 12  
 Penticton  
 eP 08 43 16  
 Resolute  
 P 08 39 44  
 Victoria  
 eP 08 43 22.4 c

OCTOBER 30

Banff  
 eP 16 03 52  
 Penticton  
 eP 16 03 40  
 Resolute  
 eP 16 04 08?  
 i 16 06 19  
 Victoria  
 eP 16 03 24

OCTOBER 30

U. S. C. G. S.  
 28.5S, 178.1W  
 Kermadec Islands  
 H = 17 35 03.3  
 h = 219 km  
 Penticton  
 eP 17 47 55  
 Resolute  
 eP' 17 53 17?

OCTOBER 30

Penticton  
 eP 19 13 01

OCTOBER 30

U. S. C. G. S.  
 28.9N, 141.8E  
 South of Honshu  
 Japan  
 H = 21 15 35.2  
 h = 31 km  
 Alert, N. W. T.  
 iP 21 26 36 c  
 Banff  
 eP 21 27 20  
 Penticton  
 eP 21 27 09  
 Resolute  
 eP 21 26 49  
 S 21 35 58  
 Victoria  
 eP 21 26 58

OCTOBER 30

Penticton  
 eP 23 06 01  
 Resolute  
 eP 23 07 59?

OCTOBER 31

U. S. C. G. S.  
 51.9N, 176.1E  
 Rat Islands  
 H = 01 43 53.3  
 h = 35 km  
 Alert, N. W. T.  
 iP 01 50 54  
 Halifax  
 eP 01 55 11.5  
 Mould Bay  
 iP 01 50 41  
 Ottawa  
 eP 01 54 33  
 Penticton  
 eP 01 51 26  
 Resolute  
 eP 01 51 34  
 Victoria  
 eP 01 51 12

OCTOBER 31

48.4°N, 120.0°W  
 Washington, U. S. A.  
 H = 03 34 30.3  
 Mag 3.0  
 Penticton  
 iP 03 34 48.1  
 iS 03 35 01.7  
 D = 111 km  
 Victoria  
 eP<sub>n</sub> 03 35 08.5  
 D = 258 km

OCTOBER 31

Resolute  
 eP 06 46 19

OCTOBER 31

U. S. C. G. S.  
 22.2N, 143.0E  
 Mariana Island region  
 H = 08 39 09.2  
 h = 264 km  
 Mould Bay  
 P 08 49 59  
 Penticton  
 eP 08 50 43  
 e 08 51 58  
 Resolute  
 eP 08 50 35

OCTOBER 31

Mould Bay  
 P 13 18 30

OCTOBER 31

Penticton  
 eP 14 38 21

## SEISMOLOGICAL BULLETIN - 1961

OCTOBER 31

Canadian Arctic  
 H = 18 18 08.6  
 Mag 1.6  
 Resolute  
 eP<sub>1</sub> 18 18 44  
 eS<sub>1</sub> 18 19 11  
 D = 221 km

OCTOBER 31

Penticton  
 eP 19 28 44

OCTOBER 31

Mould Bay  
 P 20 32 14  
 Resolute  
 eP 20 33 06  
 i 20 35 06

OCTOBER 31

Penticton  
 iP 21 40 25

OCTOBER 31

H = 23 24 44  
 Mag 2.2  
 Penticton  
 iP<sub>1</sub> 23 25 07.6  
 iS<sub>1</sub> 23 25 25.4  
 D = 146 km

OCTOBER 31

U. S. C. G. S.  
 43.6N, 146.5E  
 Off coast of  
 Hokkaido Japan  
 H = 23 58 50.7  
 h = 15 km  
 Penticton  
 eP 24 09 00  
 Resolute  
 iP 24 08 26

OCTOBER 31

46°06'N, 64°47'W  
 (Moncton, N. B.)  
 H = 23 50 -  
 Mag less than 1.7

NOVEMBER 1

46°55'N±15'  
 79°15'W±15'  
 Ontario  
 H = 03 41 21  
 Mag 2.9  
 Ottawa  
 P<sub>1</sub> 03 42 12.4  
 S<sub>n</sub> 03 42 37.5  
 S<sub>1</sub> 03 42 52  
 D = 125 km

NOVEMBER 1

Penticton  
 iP 06 06 06 c

NOVEMBER 1

Penticton  
 iP 10 01 52

NOVEMBER 1

U. S. C. G. S.  
 18.0S, 178.5E  
 Fiji Islands region  
 H = 10 42 21.1  
 h = 631 km  
 Penticton  
 iP 10 53 56

NOVEMBER 1

Resolute  
 eP 18 31 02

NOVEMBER 1

Canadian Arctic  
 H = 21 hrs. approx.  
 Mag 2.4  
 Alert  
 P<sub>1</sub> 21 hrs.  
 S<sub>1</sub> - P<sub>1</sub> = 28 sec.  
 D = 230 km

NOVEMBER 1

H = 21 24 36  
 Mag 2.3  
 Penticton  
 iP<sub>n</sub> 21 25 14.1  
 iS<sub>n</sub> 21 25 45.2  
 D = 254 km

NOVEMBER 1

H = 22 15 25  
 Mag 1.7  
 Penticton

eP<sub>1</sub> 22 15 41.5  
 eS<sub>1</sub> 22 15 53.9  
 D = 102 km

NOVEMBER 2

Resolute  
 eP 04 33 21

NOVEMBER 2

U. S. C. G. S.  
 17.9S, 178.5W  
 Fiji Islands  
 H = 05 22 41.4  
 h = 598 km  
 Penticton  
 iP 05 34 18

NOVEMBER 2

Penticton  
 eP 06 33 45  
 Resolute  
 eP 06 32 52

DOMINION OBSERVATORIES

NOVEMBER 2  
Mould Bay  
P 07 10 54

NOVEMBER 2  
Resolute  
eP 10 48 03?

NOVEMBER 2  
H = 20 55 41  
Mag 1.9  
Penticton  
iP<sub>1</sub> 20 56 04.6  
iS<sub>1</sub> 20 56 22.7  
D = 148 km

NOVEMBER 2  
H = 22 42 59  
Mag 1.6  
Penticton  
eP<sub>1</sub> 22 43 22.2  
eS<sub>1</sub> 22 43 40.1  
D = 147 km

NOVEMBER 2  
Mould Bay  
P 23 06 01  
Resolute  
eP? 23 06 44

NOVEMBER 2  
U.S.C.G.S.  
17.2N, 62.7W  
Leeward Islands  
H = 23 03 55.6  
h = 29 km  
Mould Bay  
iP 23 14 39  
Ottawa  
eP 23 10 06  
Shawinigan Falls  
eP 23 10 09

NOVEMBER 2  
U.S.C.G.S.  
54.5N, 162.3W  
Alaska  
H = 23 35 50.7  
h = 40 km  
Mould Bay  
P 23 41 33  
Penticton  
eP 23 41 30  
Resolute  
eP 23 42 23

NOVEMBER 3  
Canadian Arctic  
H = 00 27 07.1  
Mag 2.4  
Alert, N.W.T.  
iP<sub>1</sub> 00 27 44  
iS<sub>1</sub> 00 28 12  
D = 230 km

NOVEMBER 3  
Mould Bay  
P 05 22 24  
i 05 23 00  
Resolute  
eP? 05 23 25  
Penticton  
eP 18 47 16

NOVEMBER 3  
Resolute  
eP 20 47 16

NOVEMBER 3  
Mould Bay  
iP 22 12 19  
Penticton  
eP 22 12.10

NOVEMBER 4  
U.S.C.G.S.  
29.9N, 131.8E  
Ryukyu Islands  
H = 02 08 50.6  
h = 98 km  
Resolute  
iP 02 20 05

NOVEMBER 4  
U.S.C.G.S.  
2.9S, 137.2E  
Near coast of  
New Guinea  
H = 03 04 21.2  
h = 51 km  
Shawinigan Falls  
eP' 03 23 27

NOVEMBER 4  
U.S.C.G.S.  
50.0N, 155.5E  
Kurile Islands  
H = 03 38 30.1  
h = 32 km  
Alert, N.W.T.  
iP 03 46 58 c  
Penticton  
iP 03 47 39  
Resolute  
eP 03 47 05  
Shawinigan Falls  
eP 03 50 13

NOVEMBER 4  
Canadian Arctic  
H = 10 44 20.9  
Mag 1.3  
Resolute  
iP<sub>1</sub> 10 44 34  
iS<sub>1</sub> 10 44 44  
D = 82 km

SEISMOLOGICAL BULLETIN - 1961

NOVEMBER 4  
U.S.C.G.S.  
52.4N, 175.4W  
Andreanof Islands  
H = 14 34 36.5  
h = 75 km  
Penticton  
iP 14 41 34

NOVEMBER 4  
Penticton  
eP 17 10 58

NOVEMBER 4  
Alert, N.W.T.  
eP 18 24 40  
Ottawa  
eP 18 26 45  
Penticton  
eP 18 23 10  
Resolute  
eP 18 24 03  
i 18 41 07  
Shawinigan Falls  
eP 18 26 50

NOVEMBER 4  
Mould Bay  
P 21 30 41

NOVEMBER 4  
H = 23 22 48  
Mag 2.4  
Penticton  
iP<sub>n</sub> 23 23 20.2  
iS<sub>n</sub> 23 23 45.3  
D = 206 km

NOVEMBER 4  
Penticton  
eP 23 49 37

NOVEMBER 5  
U.S.C.G.S.  
36.6N, 140.9E  
Honshu Japan  
H = 03 15 44.6  
h = 60 km  
Mould Bay  
P 03 25 30  
Resolute  
eP 03 26 10

NOVEMBER 5  
Banff  
eP 09 54 48.9  
eS 09 56 08.9  
Penticton  
eP 09 54 53

NOVEMBER 5  
U.S.C.G.S.  
45.7N, 147.9E  
Kurile Islands  
H = 10 36 39.5  
h = 142 km  
Ottawa  
eP 10 48 45  
Penticton  
iP 10 46 26 c  
Resolute  
eP 10 45 44

NOVEMBER 5  
Penticton  
eP 04 54 06

NOVEMBER 5  
H = 07 52 22  
Mag 1.8  
Victoria  
eP<sub>1</sub> 07 52 30.4  
eS<sub>1</sub> 07 52 36.8  
D = 52 km

NOVEMBER 5  
Penticton  
eP 19 39 16

NOVEMBER 5  
Mould Bay  
P 12 57 02

NOVEMBER 5  
Penticton  
eP 19 39 16

NOVEMBER 5  
U.S.C.G.S.  
28.7N, 55.1E  
Iran  
H = 08 36 35.4  
h = 92 km  
Halifax  
ePP 08 52 54  
Mould Bay  
P 08 48 13  
e 08 51 53

NOVEMBER 5  
U.S.C.G.S.  
49.4S, 163.3E  
Northwest of  
New Zealand  
H = 23 56 25.4  
h = 35 km  
Alert, N.W.T.  
iP' 24 15 55

DOMINION OBSERVATORIES

NOVEMBER 6  
Penticton  
eP 04 49 47

NOVEMBER 6  
U.S.C.G.S.  
13.3S, 76.7W  
Near coast of  
Peru  
H = 05 13 22.5  
h = 133 km  
Mould Bay  
P 05 26 25  
Penticton  
eP 05 24 41  
Resolute  
eP? 05 26 04  
Shawinigan Falls  
eP 05 23 18

NOVEMBER 6  
U.S.C.G.S.  
13.3S, 166.0E  
Santa Cruz Islands  
region  
H = 05 28 39.3  
h = 210 km  
Penticton  
eP 05 41 17

NOVEMBER 6  
Resolute  
i 05 56 13  
i 06 02 10  
i 06 11 15

NOVEMBER 6  
Resolute  
eP? 06 21 50

NOVEMBER 6  
U.S.C.G.S.  
26.7N, 91.9E  
Bhutan  
H = 07 59 06.2  
h = 67 km  
Mould Bay  
P 08 10 46  
Resolute  
eP 08 11 04

NOVEMBER 6  
U.S.C.G.S.  
36.5N, 73.3E  
Hindu Kush  
H = 12 29 00.5  
h = 114 km  
Mould Bay  
iP 12 39 44  
Resolute  
eP? 12 39 56

NOVEMBER 6  
U.S.C.G.S.  
17.5N, 145.3E  
Mariana Islands  
H = 13 34 54.8  
h = 251 km  
Penticton  
eP 13 46 42  
Resolute  
eP 13 46 43

NOVEMBER 6  
H = 19 49 04  
Mag 2.3  
Penticton  
iP<sub>1</sub> 19 49 29.9  
iS<sub>1</sub> 19 49 49.4  
D = 150 km  
Victoria  
eP<sub>n</sub> 19 49 47.2  
D = 298 km

NOVEMBER 6  
H = 22 21 27  
Mag 1.7  
Banff  
iP<sub>1</sub> 22 21 32.2  
iS<sub>1</sub> 22 21 36.2  
D = 33 km

NOVEMBER 7  
U.S.C.G.S.  
21.4S, 179.1W  
Fiji Islands region  
H = 00 40 05.9  
h = 653 km  
Penticton  
iP 00 51 53

NOVEMBER 7  
U.S.C.G.S.  
11.6N, 126.1E  
Philippine Islands  
H = 01 12 55.7  
h = 47 km  
Mould Bay  
P 01 25 25  
Resolute  
eP 01 25 51?

NOVEMBER 7  
U.S.C.G.S.  
45.7N, 122.1W  
Oregon-Washington  
border, U.S.A.  
H = 01 29 10.6  
h = 60 km  
Banff  
eP 01 30 57  
Penticton  
iP 01 30 10 c  
Victoria  
iP 01 29 51.1 d

NOVEMBER 7  
Mould Bay  
P 03 35 41  
i 03 35 45

SEISMOLOGICAL BULLETIN - 1961

NOVEMBER 7  
U.S.C.G.S.  
48.2N, 153.0E  
Kurile Islands  
H = 05 52 20.8  
h = 25 km  
Resolute  
eP 06 01 09 c

NOVEMBER 7  
Mould Bay  
P 08 51 22

NOVEMBER 7  
Mould Bay  
P 10 57 11  
Resolute  
eP 10 57 02?

NOVEMBER 7  
Mould Bay  
P 14 46 07

NOVEMBER 7  
Mould Bay  
P 17 15 37

NOVEMBER 7  
Mould Bay  
P 18 30 33

NOVEMBER 7  
Penticton  
eP 21 31 24  
Victoria  
eP 21 31 02.2

NOVEMBER 7  
Penticton  
iP 23 06 27

NOVEMBER 8  
H = 00 38 07  
Mag 2.0  
Penticton  
iP<sub>1</sub> 00 38 32.5  
iS<sub>1</sub> 00 38 51.6  
D = 156 km

NOVEMBER 8  
Mould Bay  
P 03 26 24

NOVEMBER 8  
Resolute  
eP 03 45 41

NOVEMBER 8  
U.S.C.G.S.  
15.6N, 95.8W  
Near coast of  
Mexico  
H = 04 54 43.8  
h = 45 km  
Mould Bay  
P 05 05 05

NOVEMBER 8  
Penticton  
iP 05 02 08

NOVEMBER 8  
Mould Bay  
P 14 22 38

NOVEMBER 8  
Mould Bay  
iP 15 47 04 c  
i 15 47 25

NOVEMBER 8  
Mould Bay  
P 15 58 29

NOVEMBER 8  
H = 19 05 12  
Mag 1.6  
Penticton  
iP<sub>1</sub> 19 05 25.3  
iS<sub>1</sub> 19 05 35.4  
D = 82 km

NOVEMBER 8  
Mould Bay  
P 19 12 32

NOVEMBER 8  
Mould Bay  
P 19 58 52

NOVEMBER 8  
H = 20 58 35  
Mag 2.5  
Penticton  
iP<sub>n</sub> 20 59 08.2  
iS<sub>n</sub> 20 59 34.6  
D = 216 km

NOVEMBER 8  
Penticton  
eP 21 28 56

NOVEMBER 9  
Penticton  
eP 01 27 07

NOVEMBER 9  
Mould Bay  
P 01 33 55



DOMINION OBSERVATORIES

<p>NOVEMBER 9 U. S. C. G. S. 22.9S, 67.9W Chile-Argentina border H = 04 19 42.0 h = 84 km Mag 6 1/4 Banff iP 04 32 07 d Halifax eP 04 30 31.5 d Ottawa eP 04 30 36 d Penticton iP 04 32 11 d Shawinigan Falls eP 04 30 43 d Victoria eP 04 32 17 d</p> <p>NOVEMBER 9 Mould Bay P 05 37 43</p> <p>NOVEMBER 9 Mould Bay P 06 02 13</p> <p>NOVEMBER 9 Resolute eP? 06 16 11</p> <p>NOVEMBER 9 Mould Bay P 08 25 02</p> <p>NOVEMBER 9 Mould Bay P 09 22 34</p>	<p>NOVEMBER 9 Mould Bay P 09 53 52</p> <p>NOVEMBER 9 Mould Bay P 10 35 10</p> <p>NOVEMBER 9 Mould Bay iP 11 50 47 c</p> <p>NOVEMBER 9 Mould Bay P 12 05 48</p> <p>NOVEMBER 9 Penticton eP 12 12 44</p> <p>NOVEMBER 9 Mould Bay iP 12 45 35</p> <p>NOVEMBER 9 Mould Bay P 12 50 54</p> <p>NOVEMBER 9 Resolute eP? 12 53 04</p> <p>NOVEMBER 9 Resolute eP 13 45 42</p> <p>NOVEMBER 9 Mould Bay P 13 51 52</p>	<p>NOVEMBER 9 Mould Bay P 14 14 02</p> <p>NOVEMBER 9 Penticton eP 16 08 37</p> <p>NOVEMBER 9 Canadian Arctic H = 16 34 19 Mag 2.4 Resolute iP<sub>1</sub> 16 34 33.5 iS<sub>1</sub> 16 34 44.5 D = 92 km</p> <p>NOVEMBER 9 H = 18 22 17 Mag 2.2 Penticton iP<sub>1</sub> 18 22 42.1 iS<sub>1</sub> 18 23 01.2 D = 156 km</p> <p>NOVEMBER 9 Penticton eP 19 33 32</p> <p>NOVEMBER 9 Mould Bay P 21 10 38</p> <p>NOVEMBER 9 H = 22 28 50 Mag 2.1 Penticton iP<sub>1</sub> 22 29 16.1 iS<sub>1</sub> 22 29 35.9 D = 162 km</p>
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SEISMOLOGICAL BULLETIN - 1961

<p>NOVEMBER 9 Mould Bay P 23 16 15</p> <p>NOVEMBER 9 U. S. C. G. S. 15.8S, 174.9W Tonga Islands region H = 23 06 55.5 h = 289 km Penticton iP 23 18 40</p> <p>NOVEMBER 10 Mould Bay P 00 37 49 i 00 37 54</p> <p>NOVEMBER 10 Mould Bay P 00 58 42</p> <p>NOVEMBER 10 U. S. C. G. S. 14.3S, 71.9W Southern Peru H = 02 07 34.7 h = 68 km Ottawa eP 02 17 32 d Penticton eP 02 19 12 Resolute eP 02 20 28 Shawinigan Falls eP 02 17 40</p> <p>NOVEMBER 10 Canadian Arctic H = 05 32 24 Mag 3.4 Mould Bay P 05 34 45</p>	<p>NOVEMBER 10 Resolute P<sub>n</sub> 05 32 24.0 S<sub>n</sub>? 05 33 07 S<sub>1</sub> 05 33 31.0 D = 450 km</p> <p>NOVEMBER 10 Mould Bay P 05 44 31</p> <p>NOVEMBER 10 Mould Bay iP 06 05 06 c</p> <p>NOVEMBER 10 Mould Bay P 07 17 18</p> <p>NOVEMBER 10 Penticton eP 08 29 31</p> <p>NOVEMBER 10 Mould Bay P 11 45 00</p> <p>NOVEMBER 10 Mould Bay iP 12 01 43 c</p> <p>NOVEMBER 10 Resolute eP 13 30 23</p>	<p>NOVEMBER 10 Mould Bay P 14 30 44</p> <p>NOVEMBER 10 U. S. C. G. S. 17.5S, 178.8W Fiji Islands H = 18 00 49.6 h = 586 km Banff iP 18 12 42 c Penticton iP 18 12 27 c</p> <p>NOVEMBER 10 Canadian Arctic H = 19 23 33.5 h = 27 km Mag 3.9 Mould Bay iP 19 24 19 i 19 24 26 Resolute P<sub>n</sub> 19 24 25 P<sub>1</sub> 19 24 35 S<sub>n</sub> 19 25 02 S<sub>1</sub> 19 25 21 D = 382 km</p> <p>NOVEMBER 10 H = 22 32 45 Mag 2.5 Penticton iP<sub>1</sub> 22 33 15.1 iS<sub>1</sub> 22 33 38.8 D = 194 km</p>
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## DOMINION OBSERVATORIES

NOVEMBER 10  
 62.5°N±1.0°,  
 124.4°W±1.5°  
 Northwest Territories  
 H = 22 43 29  
 Mag 5.5  
 Alert, N.W.T.  
 eL 22 57.5  
 Mould Bay  
 P<sub>n</sub> 22 46 41  
 S<sub>n</sub> 22 49 11  
 D = 1522 km  
 Ottawa  
 eL<sub>g</sub> 23 00 04  
 D = 3520 km  
 Penticton  
 P<sub>n</sub> 22 46 32  
 S<sub>n</sub> 22 48 58  
 L<sub>g</sub> 22 50 18  
 D = 1447 km  
 Resolute  
 P<sub>n</sub> 22 47 08  
 S<sub>n</sub> 22 49 55  
 L<sub>g</sub> 22 51 52

NOVEMBER 10  
 Alert, N.W.T.  
 iP 22 48 59  
 Mould Bay  
 iP 22 49 11  
 Penticton  
 eP 22 53 29

NOVEMBER 10  
 Mould Bay  
 P 23 24 57

NOVEMBER 11  
 H = 01 59 04  
 Mag 1.7  
 Penticton  
 iP<sub>1</sub> 01 59 14.3  
 iS<sub>1</sub> 01 59 22.1  
 D = 64 km

NOVEMBER 11  
 Canadian Arctic  
 H = 02 11 49.5  
 h = 27 km  
 Mag 3.9  
 Mould Bay  
 iP 02 12 34  
 i 02 12 42  
 i 02 13 24  
 Resolute  
 P<sub>n</sub> 02 12 41  
 P<sub>1</sub> 02 12 51  
 S<sub>n</sub> 02 13 18  
 S<sub>1</sub> 02 13 37  
 D = 382 km

NOVEMBER 11  
 U.S.C.G.S.  
 13.2N, 91.0W  
 Off coast of  
 Guatemala  
 H = 12 27 03.8  
 h = 94 km  
 Mould Bay  
 P 12 37 34  
 Penticton  
 iP 12 34 57  
 Resolute  
 eP 12 37 12 c  
 i 12 50 38

NOVEMBER 11  
 H = 15 22 28  
 Mag 2.3  
 Penticton  
 iP<sub>1</sub> 15 22 59.1  
 iS<sub>1</sub> 15 23 23.4  
 D = 199 km

NOVEMBER 11  
 Mould Bay  
 P 16 18 30

NOVEMBER 11  
 Mould Bay  
 P 16 30 36

NOVEMBER 11  
 Mould Bay  
 P 16 50 13

NOVEMBER 11  
 Penticton  
 eP 20 01 44

NOVEMBER 11  
 U.S.C.G.S.  
 8.2S, 75.0W  
 Peru  
 H = 21 46 59.7  
 h = 119 km  
 Mould Bay  
 P 21 59 37  
 Penticton  
 eP 21 57 57

NOVEMBER 12  
 U.S.C.G.S.  
 0.8N, 29.5E  
 Congo region  
 H = 02 15 16.7  
 h = 39 km  
 Halifax  
 eP 02 28 13  
 Penticton  
 eP' 02 33 57

NOVEMBER 12  
 Resolute  
 i 03 15 32

NOVEMBER 12  
 Mould Bay  
 P 06 04 04

## SEISMOLOGICAL BULLETIN - 1961

NOVEMBER 12  
 U.S.C.G.S.  
 16.9S, 66.9W  
 Mascarene Islands  
 region  
 H = 08 21 06.8  
 h = 34 km  
 Penticton  
 eP' 08 40 49

NOVEMBER 12  
 Mould Bay  
 P 09 45 06

NOVEMBER 12  
 U.S.C.G.S.  
 15.6S, 175.9W  
 Fiji Islands region  
 H = 14 11 58.8  
 h = 219 km  
 Penticton  
 eP 14 23 52

NOVEMBER 12  
 Southern Vancouver  
 Island  
 H = 17 51 10  
 Mag 2.1  
 Alberni  
 iP<sub>1</sub> 17 51 18.1  
 iS<sub>1</sub> 17 51 24.3  
 D = 51 km  
 Victoria  
 eP<sub>1</sub> 17 51 28.0  
 eS<sub>1</sub> 17 51 42.7  
 D = 120 km

NOVEMBER 12  
 U.S.C.G.S.  
 23.2S, 180.0  
 South of Fiji Islands  
 H = 18 12 22.0  
 h = 556 km  
 Penticton  
 eP 18 24 28

NOVEMBER 12  
 Penticton  
 eP 21 51 43

NOVEMBER 13  
 Mould Bay  
 P 00 37 05

NOVEMBER 13  
 Resolute  
 eP 01 13 20

NOVEMBER 13  
 Penticton  
 eP 02 41 58

NOVEMBER 13  
 Mould Bay  
 P 03 03 35

NOVEMBER 13  
 Penticton  
 eP 08 22 16

NOVEMBER 13  
 U.S.C.G.S.  
 35.7N, 70.4E  
 Hindu Kush  
 H = 09 12 14.6  
 h = 157 km  
 Mould Bay  
 P 09 23 00

NOVEMBER 13  
 Mould Bay  
 P 09 39 51

NOVEMBER 13  
 Penticton  
 eP 10 50 31

NOVEMBER 13  
 Penticton  
 eP 11 08 03

NOVEMBER 13  
 Mould Bay  
 P 12 38 07

NOVEMBER 13  
 Alert, N.W.T.  
 iP 14 15 55  
 Resolute  
 eP 14 17 33

NOVEMBER 13  
 U.S.C.G.S.  
 46.8N, 153.9E  
 Kurile Islands  
 H = 19 38 15.5  
 h = 39 km  
 Alert, N.W.T.  
 iP 19 47 07  
 Mould Bay  
 P 19 46 26  
 Penticton  
 eP 19 47 47  
 Resolute  
 eP 19 47 15

NOVEMBER 13  
 Resolute  
 eP 20 35 31

NOVEMBER 13  
 H = 23 53 21  
 Mag 2.5  
 Penticton  
 iP<sub>1</sub> 23 53 50.4  
 iS<sub>1</sub> 23 54 13.5  
 D = 189 km

## SEISMOLOGICAL BULLETIN - 1961

## DOMINION OBSERVATORIES

NOVEMBER 14  
Mould Bay  
P 01 00 48

NOVEMBER 14  
Mould Bay  
P 01 06 37

NOVEMBER 14  
Mould Bay  
P 01 17 28

NOVEMBER 14  
Mould Bay  
P 02 02 43

NOVEMBER 14  
Mould Bay  
P 02 26 19

NOVEMBER 14  
Mould Bay  
P 02 34 23

NOVEMBER 14  
Mould Bay  
P 02 51 46

NOVEMBER 14  
Mould Bay  
P 04 44 13

NOVEMBER 14  
U. S. C. G. S.  
7.3N, 82.4W  
Off coast of Panama  
H = 04 42 26.5  
h = 29 km  
Mag 6 1/4

Alberni  
eP 04 52 00

Alert, N. W. T.  
eP 04 54 11  
Banff  
eP 04 51 32  
Halifax  
eP 04 50 08  
Mould Bay  
iP 04 53 49 c  
Resolute  
eP 04 53 23 c  
Shawinigan Falls  
eP 04 50 02  
Victoria  
eP 04 52 50

NOVEMBER 14  
U. S. C. G. S.  
36.1N, 139.0E  
Honshu Japan  
H = 10 02 32.7  
h = 167 km  
Alert, N. W. T.  
iP 10 12 32 c  
Mould Bay  
iP 10 12 10 c  
Resolute  
iP 10 12 50 c

NOVEMBER 14  
U. S. C. G. S.  
47.0N, 153.7E  
Kurile Islands  
H = 10 28 33.4  
h = 26 km  
Alert, N. W. T.  
P 10 37 25  
Mould Bay  
P 10 36 45  
Resolute  
eP 10 37 33

NOVEMBER 14  
Mould Bay  
P 12 13 57

NOVEMBER 14  
U. S. C. G. S.  
33.9S, 179.6W  
Off coast of  
New Zealand  
H = 12 38 51.9  
h = 51 km  
Mould Bay  
P' 12 57 29  
Resolute  
eP' 12 57 39

NOVEMBER 14  
Mould Bay  
P 13 53 50

NOVEMBER 14  
U. S. C. G. S.  
5.7S, 104.3E  
Near coast of Sumatra  
H = 17 14 00.1  
h = 16 km  
Resolute  
eP' 17 32 33

NOVEMBER 14  
Mould Bay  
P 18 04 30  
Resolute  
eP 18 05 08

NOVEMBER 14  
H = 21 31 02  
Mag 2.0  
Penticton  
eP<sub>n</sub> 21 31 29.4  
eS<sub>n</sub> 21 31 50.5  
D = 173 km

NOVEMBER 14  
U. S. C. G. S.  
44.2N, 147.6E  
Kurile Islands  
H = 22 26 47.9  
h = 25 km  
Resolute  
eP 22 36 19

NOVEMBER 14  
H = 23 05 54  
Mag 2.4  
Penticton  
eP<sub>1</sub> 23 06 20.2  
eS<sub>1</sub> 23 06 40.0  
D = 162 km

NOVEMBER 14  
H = 23 17 12  
Mag 2.5  
Penticton  
iP<sub>n</sub> 23 17 54.5  
iS<sub>n</sub> 23 18 30.0  
D = 290 km

NOVEMBER 14  
Resolute  
eP 23 21 20

NOVEMBER 14  
H = 23 25 31  
Mag 1.8  
Penticton  
eP<sub>1</sub> 23 25 56.0  
eS<sub>1</sub> 23 26 15.2  
D = 157 km

NOVEMBER 14  
Resolute  
eP 23 29 51

NOVEMBER 15  
Mould Bay  
P 04 14 05

NOVEMBER 15  
U. S. C. G. S.  
4.1S, 105.0E  
Sumatra  
H = 04 22 51.9  
h = 126 km  
Penticton  
iP' 04 41 44

NOVEMBER 15  
U. S. C. G. S.  
34.9N, 119.1W  
California  
H = 05 38 54.3  
h = 26 km  
Mag 4.9

Alberni  
eP 05 42 26  
Banff  
eP 05 42 48  
Mould Bay  
P 05 46 42

Penticton  
eP 05 42 22  
Shawinigan Falls  
eP 05 46 01  
Victoria  
eP 05 42 27

NOVEMBER 15  
47.9°N, 123.2°W  
Washington, U. S. A.  
H = 06 47 09  
Mag 2.2  
Penticton  
eP<sub>n</sub> 06 47 45.9  
D = 310 km

Victoria  
eP<sub>1</sub> 06 47 20.8  
eS<sub>1</sub> 06 47 30.1  
D = 77 km

NOVEMBER 15  
U. S. C. G. S.  
43.1N, 145.1E  
Hokkaido Japan  
H = 07 17 12.4  
h = 43 km

Alberni  
iP 07 27 10  
Alert, N. W. T.  
iP 07 26 34 c  
S 07 34 03  
Banff  
iP 07 27 37  
Penticton  
iP 07 27 29

Resolute  
iP 07 26 48 c  
Shawinigan Falls  
eP 07 29 43 c  
Victoria  
eP 07 27 18

NOVEMBER 15  
Penticton  
eP 07 56 33

NOVEMBER 15  
U. S. C. G. S.  
15.3S, 173.3W  
Samoa Islands region  
H = 13 41 37.8  
h = 34 km  
Penticton  
iP 13 53 44

NOVEMBER 15  
48°52'N, 121°53'W  
Washington, U. S. A.  
H = 17 27 07  
Mag 2.2  
Penticton  
iP<sub>n</sub> 17 27 34.3  
D = 173 km  
Victoria  
eP<sub>1</sub> 17 27 25.9  
eS<sub>1</sub> 17 27 40.6  
D = 120 km

## DOMINION OBSERVATORIES

NOVEMBER 15  
 U. S. C. G. S.  
 21. 1S, 175. 8W  
 Tonga Islands  
 H = 19 26 51.5  
 h = 25 km  
 Penticton  
 eP 19 39 29

NOVEMBER 15  
 Resolute  
 eP? 21 25 25

NOVEMBER 15  
 U. S. C. G. S.  
 56. 6S, 25. 7W  
 Sandwich Islands  
 H = 22 01 43.8  
 h = 41 km  
 Penticton  
 eP' 22 20 51  
 Resolute  
 eP' 22 21 05?

NOVEMBER 16  
 Mould Bay  
 P 02 33 12

NOVEMBER 16  
 U. S. C. G. S.  
 18. 6N, 68. 9W  
 Near coast of  
 Dominican Republic  
 H = 08 19 54.3  
 h = 147 km  
 Alberni  
 eP 08 29 04  
 Alert, N. W. T.  
 eP 08 30 13 d  
 Banff  
 eP 08 28 27  
 Halifax  
 iP 08 25 24?c  
 e 08 30 30?

Mould Bay  
 P 08 30 08  
 Penticton  
 eP 08 28, 39  
 Resolute  
 eP 08 29 32  
 i 08 30 06  
 Shawinigan Falls  
 eP 08 25 35 c  
 Victoria  
 eP 08 28 55

NOVEMBER 16  
 Mould Bay  
 P 13 11 07

NOVEMBER 16  
 U. S. C. G. S.  
 20. 2S, 172. 9W  
 Loyalty Islands region  
 H = 16 03 54.8  
 h = 32 km  
 Penticton  
 eP 16 16 50

NOVEMBER 16  
 H = 22 53 17  
 Mag 1.5  
 Penticton  
 eP<sub>1</sub> 22 53 32.8  
 eS<sub>1</sub> 22 53 45.1

NOVEMBER 17  
 U. S. C. G. S.  
 17. 7S, 178. 6W  
 Fiji Islands  
 H = 08 13 49.8  
 h = 598 km  
 Alberni  
 eP 08 25 10  
 Penticton  
 iP 08 25 27 c

NOVEMBER 17  
 Penticton  
 eP 09 35 25  
 Resolute  
 eP 09 35 32?

NOVEMBER 17  
 Penticton  
 eP 11 19 39

NOVEMBER 17  
 Alberni  
 eP 11 46 11  
 Penticton  
 eP 11 47 02

NOVEMBER 17  
 Penticton  
 eP 12 46 11

NOVEMBER 17  
 Penticton  
 eP 13 12 51

NOVEMBER 17  
 Mould Bay  
 P 14 46 56

NOVEMBER 17  
 U. S. C. G. S.  
 52. 4N, 170. 7W  
 Fox Islands  
 H = 14 49 03.0  
 Alert, N. W. T.  
 iP 14 56 43 d  
 Halifax  
 iP 14 59 42 d  
 Mould Bay  
 P 14 55 19  
 Penticton  
 iP 14 55 29  
 i 14 58 19

## SEISMOLOGICAL BULLETIN - 1961

Resolute  
 eP 14 56 09?  
 i 14 58 31

NOVEMBER 17  
 Penticton  
 eP 15 34 00

NOVEMBER 17  
 U. S. C. G. S.  
 19. 6S, 175. 5W  
 Tonga Islands region  
 H = 19 03 55.4  
 h = 200 km  
 Penticton  
 iP 19 16 10

NOVEMBER 17  
 Penticton  
 eP 20 06 22

NOVEMBER 17  
 Penticton  
 iP 20 08 45

NOVEMBER 17  
 Penticton  
 iP 23 42 47

NOVEMBER 17  
 Penticton  
 eP 23 51 52

NOVEMBER 18  
 U. S. C. G. S.  
 29. 9N, 138. 9E  
 South of Honshu,  
 Japan  
 H = 10 09 10.4  
 h = 339 km  
 Mould Bay  
 P 10 19 13

NOVEMBER 18  
 Mould Bay  
 P 02 03 17

NOVEMBER 18  
 U. S. C. G. S.  
 35. 4N, 117. 8W  
 California  
 H = 03 18 35.5  
 h = 23 km  
 Mag 4  
 Mould Bay  
 P 03 28 17

NOVEMBER 18  
 Mould Bay  
 P 04 16 00

NOVEMBER 18  
 Penticton  
 eP 07 38 21

NOVEMBER 18  
 U. S. C. G. S.  
 56. 2S, 25. 2W  
 Sandwich Islands  
 H = 07 27 40.3  
 h = 25 km  
 Mould Bay  
 iP' 07 47 16 c  
 Resolute  
 eP' 07 47 07

NOVEMBER 18  
 U. S. C. G. S.  
 27. 0S, 176. 3W  
 Kermadec Islands  
 region  
 H = 11 16 56.8  
 h = 61 km  
 Alberni  
 eP 11 29 47  
 Penticton  
 eP 11 29 00  
 Resolute  
 iP' 11 35 35

NOVEMBER 18  
 Mould Bay  
 P 16 22 57

NOVEMBER 18  
 Penticton  
 eP 18 27 15

NOVEMBER 18  
 Resolute  
 eP? 18 55 30?

NOVEMBER 18  
 U. S. C. G. S.  
 8. 8S, 74. 7W  
 Peru  
 H = 10 34 05.8  
 h = 50 km  
 Mould Bay  
 P 10 46 55  
 e 10 47 33  
 Penticton  
 eP 10 45 14  
 Resolute  
 eP 10 46 34 c  
 Shawinigan Falls  
 eP 10 43 35

## DOMINION OBSERVATORIES

NOVEMBER 18  
Mould Bay  
P 21 28 44

NOVEMBER 18  
U.S.C.G.S.  
23.7N, 121.8E  
Near coast of  
Formosa  
H = 22 09 53.4  
h = 60 km  
Alberni  
eP 22 22 32

Alert, N.W.T.  
eP 22 21 22

Banff  
eP 22 22 50

Mould Bay  
P 22 21 21

Penticton  
iP 22 22 45 c

Resolute  
eP 22 21 52 c

Victoria  
eP 22 22 38

NOVEMBER 18  
H = 23 11 25  
Mag 2.5

Alberni  
iP<sub>1</sub> 23 11 50.1  
iS<sub>1</sub> 23 12 07.7

D = 144 km

Penticton  
eP<sub>n</sub> 23 12 25.7

D = 426 km

Victoria  
iP<sub>1</sub> 23 11 32.4  
iS<sub>1</sub> 23 11 36.0

D = 36 km

NOVEMBER 19  
U.S.C.G.S.  
51.6N, 178.5W  
Andreanof Islands  
H = 00 35 14.1  
h = 68 km

Alberni  
eP 00 41 50

Banff  
eP 00 42 29

Penticton  
iP 00 42 17 c

Resolute  
i 00 44 47

NOVEMBER 19  
Resolute  
eP 03 48 10 c

NOVEMBER 19  
U.S.C.G.S.  
4.3S, 101.7W  
West of Galapagos  
Islands  
H = 08 05 07.4  
h = 25 km  
Penticton  
eP 08 14 42

NOVEMBER 19  
U.S.C.G.S.  
7.0S, 154.8E  
Solomon Islands  
H = 10 12 51.2  
h = 85 km

Mould Bay  
P 10 26 10

NOVEMBER 19  
Mould Bay  
P 12 02 18

NOVEMBER 19  
Penticton  
eP 16 29 16

NOVEMBER 19  
Mould Bay  
P 19 44 02

NOVEMBER 19  
Penticton  
iP 22 42 26 d

NOVEMBER 19  
U.S.C.G.S.  
0.8N, 124.3E  
Northern Celebes  
H = 23 21 55.5  
h = 157 km

Alberni  
eP 23 35 37

Alert, N.W.T.  
P 23 35 09

Halifax  
i 23 44 07.5 d

Mould Bay  
iP 23 35 03 d

Penticton  
iP 23 35 52 d

Resolute  
eP 23 35 29 d

Shawinigan Falls  
iP' 23 40 49 c

e 23 43 54

NOVEMBER 20  
Penticton  
iP 02 12 19

NOVEMBER 20  
U.S.C.G.S.  
50.9N, 92.5E  
Mongolia-Siberia  
border  
H = 04 03 55.7  
h = 53 km

Alert, N.W.T.  
P 04 12 18

Banff  
eP 04 15 37

Mould Bay  
P 04 12 58

Penticton  
iP 04 15 42

Resolute  
eP 04 13 21?

NOVEMBER 20  
U.S.C.G.S.  
37.3N, 141.3E

Near coast of  
Honshu Japan

H = 04 32 36.9  
h = 83 km

Alert, N.W.T.  
P 04 42 35

Mould Bay  
eP 04 42 10 c

Penticton  
eP 04 43 21

Resolute  
eP 04 42 51

NOVEMBER 20  
U.S.C.G.S.  
54.7N, 161.8E

Near coast of  
Kamchatka

H = 06 40 20.9  
h = 71 km

Alberni  
eP 06 48 21

Banff  
eP 06 48 47

Mould Bay  
P 06 47 09  
Penticton  
iP 06 48 42 d  
Resolute  
eP 06 48 02

NOVEMBER 20  
Mould Bay  
P 07 59 01

NOVEMBER 20  
U.S.C.G.S.  
33.7N, 117.9W

California  
H = 08 53 35.1  
h = 17 km

Mag 4

Penticton  
eP 08 57 23

NOVEMBER 20  
U.S.C.G.S.  
21.8S, 169.9E

Loyalty Islands  
region

H = 11 44 19.4  
h = 33 km

Halifax  
e 12 06 53.5

Penticton  
eP 11 57 41

Shawinigan Falls  
eP' 12 03 20

NOVEMBER 20  
Mould Bay  
P 12 21 25

NOVEMBER 20  
Mould Bay  
P 13 38 30

NOVEMBER 20  
Penticton  
iP 14 19 19 d

NOVEMBER 20  
Penticton  
eP 14 53 57

NOVEMBER 20  
Mould Bay  
P 17 18 53

NOVEMBER 20  
Mould Bay  
P 17 31 05

NOVEMBER 20  
U.S.C.G.S.  
31.3N, 40.9W

North Atlantic Ocean  
H = 17 58 17.5  
h = 44 km

Alberni  
eP 18 08 50

Alert, N.W.T.  
iP 18 07 24 d

Banff  
eP 18 08 01

Halifax  
iP 18 03 16 d

Mould Bay  
P 18 08 04

Penticton  
eP 18 08 22

Resolute  
eP 18 07 18

i 18 08 41

PP 18 09 20

S 18 14 47

SS 18 18 22

L 18 29 56

Shawinigan Falls  
eP 18 04 16

Victoria  
eP 18 08 41



## DOMINION OBSERVATORIES

NOVEMBER 20  
H = 19 45 10  
Mag 2.0  
Penticton  
eP<sub>1</sub> 19 45 35.8  
eS<sub>1</sub> 19 45 55.4  
D = 160 km

NOVEMBER 20  
Mould Bay  
P 19 47 29

NOVEMBER 20  
Mould Bay  
P 20 11 05

NOVEMBER 20  
Penticton  
eP 22 32 54

NOVEMBER 20  
U.S.C.G.S.  
28.3N, 138.9E  
South of Honshu  
Japan  
H = 23 07 47.5  
h = 525 km  
Alert, N.W.T.  
iP 23 18 01 c  
Mould Bay  
iP 23 17 39  
Penticton  
iP 23 18 41 d  
Resolute  
iP 23 18 16 c

NOVEMBER 20  
Penticton  
iP 23 41 13

NOVEMBER 20  
Penticton  
eP 23 50 53

NOVEMBER 21  
U.S.C.G.S.  
43.8N, 145.3E  
Japan  
H = 01 16 50.2  
h = 165 km  
Penticton  
eP 01 26 49  
Resolute  
eP 01 26 07

NOVEMBER 21  
H = 01 49 13  
Mag 2.1  
Alberni  
iP<sub>1</sub> 01 49 21.3  
iS<sub>1</sub> 01 49 27.8  
D = 53 km

NOVEMBER 21  
U.S.C.G.S.  
39.7N, 69.3E  
Tadzhik, S.S.R.  
H = 05 00 25.9  
h = 249 km  
Mould Bay  
iP 05 10 36 c  
Penticton  
iP 05 13 07  
Resolute  
eP 05 10 44

NOVEMBER 21  
Mould Bay  
P 05 45 31

NOVEMBER 21  
U.S.C.G.S.  
10.6N, 62.8W  
Near coast of  
Venezuela  
H = 06 38 51.1  
h = 70 km  
Mould Bay  
P 06 50 12

NOVEMBER 21  
Penticton  
eP 07 25 50

NOVEMBER 21  
U.S.C.G.S.  
0.9N, 122.5E  
Northern Celebes  
H = 11 06 38.1  
h = 85 km  
Mould Bay  
P 11 19 55

NOVEMBER 21  
Resolute  
eP 13 48 19

NOVEMBER 21  
Penticton  
eP 14 17 23

NOVEMBER 21  
Resolute  
eP 15 03 32

NOVEMBER 21  
U.S.C.G.S.  
62.6N, 156.5W  
Southern Alaska  
H = 20 20 05.4  
h = 154 km  
Mould Bay  
P 20 24 15  
Penticton  
eP 20 24 57  
Resolute  
eP 20 25 08

NOVEMBER 21  
H = 21 25 30  
Mag 2.5  
Penticton  
iP<sub>n</sub> 21 26 10.7  
iS<sub>n</sub> 21 26 44.3  
D = 275 km

NOVEMBER 21  
Penticton  
eP 23 03 53

NOVEMBER 22  
Penticton  
eP 03 56 06

NOVEMBER 22  
U.S.C.G.S.  
51.4N, 174.7W  
Andreasof Islands  
H = 10 18 21.8  
h = 25 km  
Mould Bay  
P 10 24 48

Penticton  
iP 10 25 14

NOVEMBER 22  
Penticton  
eP 12 08 02  
Resolute  
eP 12 07 23

NOVEMBER 22  
U.S.C.G.S.  
15.4N, 91.7W  
Mexico-Guatemala  
border  
H = 12 30 01.9  
h = 84 km  
Mould Bay  
P 12 40 18

NOVEMBER 22  
Penticton  
iP 12 37 39

NOVEMBER 22  
U.S.C.G.S.  
2.7N, 84.8W  
South of Panama  
H = 13 01 40.1  
h = 37 km  
Alert, N.W.T.  
P 13 13 49  
Mould Bay  
P 13 13 26  
Penticton  
eP 13 11 13  
Shawinigan Falls  
eP 13 09 52

NOVEMBER 22  
Mould Bay  
P 14 38 08

NOVEMBER 22  
Mould Bay  
P 15 27 30  
Penticton  
eP 15 27 31

NOVEMBER 22  
Mould Bay  
P 16 34 05

NOVEMBER 22  
H = 16 40 12  
Mag 2.1  
Penticton  
iP<sub>1</sub> 16 40 36.0  
iS<sub>1</sub> 16 40 53.9  
D = 147 km

NOVEMBER 22  
Mould Bay  
P 18 04 00

NOVEMBER 22  
80.0°N±0.4°,  
111.7°W±1.5°  
Northwest Territories  
H = 19 56 21  
h = 10 km  
Mag 4.0  
Alert, N.W.T.  
P<sub>n</sub> 19 58 18  
S<sub>n</sub> 19 59 41  
D = 900 km  
Mould Bay  
P<sub>n</sub> 19 57 22  
D = 450 km  
Resolute  
P<sub>n</sub> 19 57 55  
S<sub>n</sub> 19 59 03  
D = 715 km

NOVEMBER 22  
Mould Bay  
iP 22 01 57 c  
Resolute  
eP? 22 02 31

NOVEMBER 23  
Mould Bay  
P 06 27 00

NOVEMBER 23  
Penticton  
eP 10 04 14

NOVEMBER 23  
Penticton  
eP 10 29 04

DOMINION OBSERVATORIES

NOVEMBER 23  
 U.S.C.G.S.  
 11.1N, 84.7W  
 Costa Rica-Nicaragua  
 border  
 H = 10 36 11.0  
 h = 234 km  
 Mould Bay  
 eP 10 46 45 c  
 Pentiction  
 eP 10 44 27  
 Resolute  
 eP 10 46 19  
 Shawinigan Falls  
 eP 10 42 59

NOVEMBER 23  
 U.S.C.G.S.  
 5.5S, 80.5W  
 Near coast of Peru  
 H = 11 17 25.5  
 h = 60 km  
 Mould Bay  
 P 11 29 56  
 Pentiction  
 eP 11 27 56

NOVEMBER 23  
 Pentiction  
 eP 12 12 57

NOVEMBER 23  
 U.S.C.G.S.  
 18.5S, 175.1W  
 Tonga Islands region  
 H = 15 26 58.3  
 h = 168 km  
 Pentiction  
 eP 15 39 12

NOVEMBER 23  
 Pentiction  
 eP 16 53 02

Shawinigan Falls  
 eP 16 52 37

NOVEMBER 23  
 U.S.C.G.S.  
 23.4S, 176.2W  
 Tonga Islands  
 H = 16 58 50.1  
 h = 60 km  
 Pentiction  
 eP 17 11 37

NOVEMBER 23  
 H = 19 53 29  
 Mag 2.2  
 Pentiction  
 iP<sub>1</sub> 19 53 54.8  
 iS<sub>1</sub><sup>1</sup> 19 54 14.4  
 D = 161 km

NOVEMBER 24  
 H = 00 57 20  
 Mag 2.5  
 Alberni  
 eP<sub>1</sub> 00 57 35.4  
 eS<sub>1</sub> 00 57 47.4  
 D = 98 km

NOVEMBER 24  
 Pentiction  
 eP 03 16 26

NOVEMBER 24  
 Pentiction  
 eP 07 46 58

NOVEMBER 24  
 Pentiction  
 eP 14 13 51

NOVEMBER 24  
 Pentiction  
 eP 14 44 39

NOVEMBER 24  
 Pentiction  
 iP 19 52 08

NOVEMBER 24  
 Mould Bay  
 P 22 03 32

NOVEMBER 24  
 Mould Bay  
 P 22 30 47

NOVEMBER 24  
 Mould Bay  
 P 05 57 53

NOVEMBER 25  
 Pentiction  
 iP 06 14 50 c

NOVEMBER 25  
 Pentiction  
 eP 07 27 37

NOVEMBER 25  
 Pentiction  
 eP 11 10 42

NOVEMBER 25  
 U.S.C.G.S.  
 6.3S, 154.8E  
 Solomon Islands  
 H = 14 11 23.2  
 h = 83 km  
 Alberni  
 eP 14 24 06  
 Banff  
 eP 14 24 35

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Pentiction  
 iP 14 24 22

NOVEMBER 25  
 Resolute  
 eP 16 08 14

NOVEMBER 25  
 U.S.C.G.S.  
 36.4N, 141.4E  
 Near coast of  
 Honshu Japan  
 H = 20 19 50.7  
 h = 64 km  
 Alert, N.W.T.  
 iP 20 30 00 c  
 Pentiction  
 iP 20 30 51  
 Resolute  
 eP 20 30 16 c

NOVEMBER 25  
 Pentiction  
 eP 22 43 35

NOVEMBER 25  
 U.S.C.G.S.  
 22.3S, 175.5W  
 Tonga Islands  
 H = 22 54 46.3  
 h = 25 km  
 Pentiction  
 eP 23 07 33

NOVEMBER 26  
 H = 00 01 33  
 Mag 2.2  
 Alberni  
 iP<sub>1</sub> 00 01 40.8  
 iS<sub>1</sub> 00 01 46.9  
 D = 50 km  
 Victoria  
 eP<sub>1</sub> 00 01 58.5  
 D = 161 km

NOVEMBER 26  
 Pentiction  
 eP 01 07 28

NOVEMBER 26  
 Mould Bay  
 P 10 10 42  
 Pentiction  
 eP 10 08 04

NOVEMBER 26  
 Banff  
 eP 12 55 20.7  
 Pentiction  
 iP 12 54 39.7 d  
 Victoria  
 eP 12 55 01.2

NOVEMBER 26  
 U.S.C.G.S.  
 30.7N, 44.1W  
 North Atlantic Ocean  
 H = 14 17 50.5  
 h = 39 km  
 Mould Bay  
 P 14 27 42  
 Resolute  
 eP 14 26 55  
 Shawinigan Falls  
 eP 14 23 41

NOVEMBER 26  
 Mould Bay  
 P 14 40 05  
 Pentiction  
 eP 14 40 12  
 Resolute  
 eP 14 39 19

NOVEMBER 26  
 Canadian Arctic  
 H = 19 07 37.8  
 Mag 2.0  
 Resolute  
 P<sub>1</sub> 19 08 22.0  
 S<sub>1</sub> 19 08 55.5  
 D = 275 km

NOVEMBER 27  
 U.S.C.G.S.  
 38.9N, 106.1W  
 Colorado  
 H = 00 55 44.3  
 h = 19 km  
 Pentiction  
 eP 00 58 58

NOVEMBER 27  
 Pentiction  
 eP 01 02 16

NOVEMBER 27  
 U.S.C.G.S.  
 56.4S, 28.2W  
 Sandwich Islands  
 H = 01 54 20.6  
 h = 163 km

Pentiction  
 eP' 02 13 08  
 Resolute  
 eP' 02 13 22

NOVEMBER 27  
 H = 04 00 57  
 Mag 2.2  
 Alberni  
 eP<sub>1</sub> 04 01 08.9  
 eS<sub>1</sub> 04 01 17.6  
 D = 72 km

NOVEMBER 27  
 Mould Bay  
 iP 05 55 35 c  
 Resolute  
 eP 05 56 10 c

DOMINION OBSERVATORIES

<p>NOVEMBER 27 U. S. C. G. S. 31.6N, 131.1E Near coast of Japan H = 05 57 07.6 h = 25 km Alert, N. W. T. iP 06 07 57 Banff eP 06 09 12 Mould Bay iP 06 07 43 c Penticton iP 06 09 07 Resolute iP 06 08 19 c Victoria eP 06 08 58</p> <p>NOVEMBER 27 Mould Bay P 06 18 32 Resolute eP 06 19 09</p> <p>NOVEMBER 27 Mould Bay P 06 44 18</p> <p>NOVEMBER 27 Resolute eP 06 54 44</p> <p>NOVEMBER 27 U. S. C. G. S. 49.8S, 121.7E South of Australia H = 10 53 45.2 h = 25 km Mould Bay P' 11 13 17 Resolute eP' 11 13 38?</p>	<p>NOVEMBER 27 U. S. C. G. S. 0.6S, 127.1E Halmahera region H = 17 10 33.3 h = 25 km Mag 6 1/4 Mould Bay P 17 24 04 Penticton eP' 17 28 40 Resolute eP 17 24 31 Shawinigan Falls eP' 17 29 49</p> <p>NOVEMBER 27 Banff eP 17 40 34</p> <p>NOVEMBER 27 H = 19 48 39 Mag 2.0 Penticton eP<sub>1</sub> 19 49 03.2 eS<sub>1</sub> 19 49 21.4 D = 149 km</p> <p>NOVEMBER 27 Penticton eP 22 09 47</p> <p>NOVEMBER 27 U. S. C. G. S. 60.6S, 156.9E Balleny Islands region H = 23 30 46.4 h = 46 km Mould Bay P' 23 50 18 Resolute eP' 23 50 33?</p>	<p>NOVEMBER 28 47.1°N, 122.5°W Puget Sound Basin H = 03 07 56 Mag 2.5 Penticton eP<sub>n</sub> 03 08 42.0 D = 325 km Victoria eP<sub>1</sub> 03 08 22.8 eS<sub>1</sub> 03 08 43.5 D = 170 km</p> <p>NOVEMBER 28 Mould Bay iP 03 58 22</p> <p>NOVEMBER 28 Mould Bay P 04 22 25</p> <p>NOVEMBER 28 H = 05 19 20 Mag 1.9 Penticton iP<sub>1</sub> 05 19 34.5 iS<sub>1</sub> 05 19 45.5 D = 90 km Victoria eP<sub>n</sub> 05 19 59.0 D = 265 km</p> <p>NOVEMBER 28 Mould Bay P 06 46 49</p> <p>NOVEMBER 28 U. S. C. G. S. 46.7N, 153.5E Kurile Islands H = 07 53 43.9 h = 80 km Mould Bay P 08 01 49 Penticton eP 08 03 08</p>
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<p>Resolute eP 08 02 38</p> <p>NOVEMBER 28 U. S. C. G. S. 40.6N, 26.5E Greece-Turkey border H = 08 58 51.3 h = 119 km Banff eP 09 11 02 Mould Bay P 09 08 57 Penticton eP 09 11 18 Resolute eP 09 08 38</p> <p>NOVEMBER 28 Mould Bay P 10 24 02</p> <p>NOVEMBER 28 U. S. C. G. S. 35.7N, 73.6E India-Pakistan border H = 10 14 44.5 h = 31 km Alert, N. W. T. eP 10 24 55 c Mould Bay iP 10 25 49 c Penticton iP 10 28 10 d Resolute eP 10 25 57</p> <p>NOVEMBER 28 Penticton eP 13 42 08</p>	<p>NOVEMBER 28 U. S. C. G. S. 35.9N, 140.2E Honshu Japan H = 16 37 58.5 h = 101 km Mould Bay P 16 47 42 Resolute eP 16 48 22</p> <p>NOVEMBER 28 U. S. C. G. S. 56.9S, 143.5E South of Tasmania H = 18 34 37.4 h = 51 km Mould Bay P' 18 54 13 Resolute eP' 18 54 29 i 19 43 13</p> <p>NOVEMBER 28 Penticton eP 20 18 16</p> <p>NOVEMBER 28 H = 20 42 00 Mag 1.9 Alberni iP<sub>1</sub> 20 42 08.1 iS<sub>1</sub> 20 42 14.5 D = 52 km</p> <p>NOVEMBER 28 H = 23 24 28 Mag 1.7 Alberni eP<sub>1</sub> 23 24 38.3 eS<sub>1</sub> 23 24 45.8 D = 62 km</p> <p>NOVEMBER 28 Penticton eP 13 42 08</p>	<p>NOVEMBER 28 H = 23 45 05 Mag 1.6 Alberni iP<sub>1</sub> 23 45 14.0 iS<sub>1</sub> 23 45 20.9 D = 56 km</p> <p>NOVEMBER 29 Mould Bay P 01 21 18</p> <p>NOVEMBER 29 U. S. C. G. S. 38.5S, 75.0W Near coast of Chile H = 04 43 07.7 h = 85 km Shawinigan Falls eP 04 55 37 c</p> <p>NOVEMBER 29 Resolute i 10 04 41?</p> <p>NOVEMBER 29 Penticton eP 10 47 46</p> <p>NOVEMBER 29 Penticton eP 11 54 31 Victoria eP 11 53 10</p> <p>NOVEMBER 29 U. S. C. G. S. 52.2N, 158.4E Near coast of Kamchatka H = 17 50 05.6 h = 76 km Mould Bay P 17 57 20</p>
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DOMINION OBSERVATORIES

Penticton  
eP 17 58 49  
Resolute  
eP 17 58 11

NOVEMBER 29  
Penticton  
eP 18 29 51

NOVEMBER 29  
Mould Bay  
P 20 34 50

NOVEMBER 29  
U.S.C.G.S.  
6.9S, 75.9W  
Peru  
H = 20 38 06.5  
h = 25 km  
Mould Bay  
eP 20 50 52 c  
Penticton  
eP 20 48 42  
Shawinigan Falls  
eP 20 47 28

NOVEMBER 30  
Penticton  
eP 00 26 10

NOVEMBER 30  
Resolute  
eP 01 21 22

NOVEMBER 30  
Mould Bay  
iP 04 41 15 c

NOVEMBER 30  
Mould Bay  
P 06 09 03

NOVEMBER 30  
47.2°N, 122.1°W  
East of Seattle  
Washington, U.S.A.  
H = 08 12 50  
Mag 3.1  
Alberni  
eP<sub>n</sub> 08 13 29.0  
D = 265 km  
Penticton  
eP<sub>n</sub> 08 13 28.5  
eS<sub>n</sub> 08 14 03.3  
D = 260 km  
Victoria  
iP<sub>1</sub> 08 13 10.6  
iS<sub>1</sub> 08 13 26.2  
D = 128 km

NOVEMBER 30  
Mould Bay  
P 08 15 14

NOVEMBER 30  
Canadian Arctic  
H = 08 41 08.0  
Mag 2.0  
Resolute  
iP<sub>1</sub> 08 41 18.0  
i 08 41 23.0  
iS<sub>1</sub> 08 41 25.6  
D = 62.4 km

NOVEMBER 30  
Mould Bay  
iP 10 40 48 c  
Resolute  
eP 10 40 57

NOVEMBER 30  
U.S.C.G.S.  
43.8N, 132.1E  
Near Vladivostok,  
U.S.S.R.  
H = 12 20 07.3  
h = 469 km  
Mould Bay  
P 12 28 37  
Penticton  
iP 12 30 23 c  
Resolute  
eP 12 29 16

NOVEMBER 30  
Penticton  
eP 16 31 11

NOVEMBER 30  
Mould Bay  
P 16 45 59

NOVEMBER 30  
U.S.C.G.S.  
3.3S, 127.2E  
Ceram Sea  
H = 16 46 51.5  
h = 75 km  
Mould Bay  
P 17 00 26

NOVEMBER 30  
Mould Bay  
P 18 01 19

NOVEMBER 30  
Resolute  
eP? 18 02 08

NOVEMBER 30  
Penticton  
eP 22 37 05



SEISMOLOGICAL BULLETIN - 1961

DECEMBER 1  
Mould Bay  
iP 02 26 51

DECEMBER 1  
Mould Bay  
P 02 53 09

DECEMBER 1  
U.S.C.G.S.  
56.6N, 158.8E  
Kamchatka  
H = 07 34 17.9  
h = 18 km  
Alberni  
eP 07 42 31  
Alert, N.W.T.  
P 07 41 52  
Banff  
eP 07 42 56  
Halifax  
iP 07 45 51 c  
Mould Bay  
eP 07 41 08 d  
Penticton  
iP 07 42 51  
Resolute  
eP 07 41 59 c  
Shawinigan Falls  
eP 07 45 24 d

DECEMBER 1  
U.S.C.G.S.  
8.7N, 122.0E  
Philippine Islands  
H = 07 58 49.7  
h = 36 km  
Mould Bay  
P 08 11 36  
Resolute  
eP 08 12 02

DECEMBER 1  
Penticton  
eP 13 00 28

DECEMBER 1  
Resolute  
i 19 04 11

DECEMBER 1  
Penticton  
eP 19 22 29

DECEMBER 1  
H = 19 59 20  
Mag 1.9  
Penticton  
eP<sub>1</sub> 19 59 46.4  
eS<sub>1</sub> 20 00 06.4  
D = 164 km

DECEMBER 1  
U.S.C.G.S.  
27.7N, 141.5E  
Volcano Islands region  
H = 20 17 41.5  
h = 25 km  
Alert, N.W.T.  
eP 20 28 50 d  
Mould Bay  
P 20 28 24  
Penticton  
eP 20 29 43  
Resolute  
eP 20 29 02

DECEMBER 1  
Penticton  
eP 21 35 22

DECEMBER 1  
Penticton  
eP 21 58 09

DECEMBER 1  
Penticton  
eP 22 16 29

DECEMBER 1  
Penticton  
eP 22 20 15

DECEMBER 1  
Penticton  
eP 23 08 28

DECEMBER 1  
Penticton  
eP 23 12 45

DECEMBER 1  
Resolute  
eP 23 54 15 ?

Alert, N.W.T.  
iP 21 24 01 d  
Banff  
iP 21 25 23 d  
Mould Bay  
P 21 23 53  
Penticton  
iP 21 25 20 d  
Resolute  
iP 21 24 28 d  
Victoria  
iP 21 25 11 d

## DOMINION OBSERVATORIES

DECEMBER 2 H = 00 18 39 Mag 2.4 Penticton iP <sub>1</sub> 00 19 07.0 iS <sub>1</sub> 00 19 28.7 D = 177 km Victoria eP <sub>n</sub> 00 19 24.5 D = 322 km	DECEMBER 2 Mould Bay P 11 10 39	DECEMBER 2 Penticton eP 14 29 53
DECEMBER 2 Resolute eP 02 21 48	DECEMBER 2 U. S. C. G. S. 36.5N, 8.6E Northern Tunis H = 12 40 17.8 h = 62 km Alberni eP 12 52 59 Alert, N.W.T. P 12 49 20 Banff eP 12 52 21	DECEMBER 2 Penticton eP 14 31 56
DECEMBER 2 Penticton eP 02 43 02	DECEMBER 2 Halifax iP 12 49 34.5 d Mould Bay P 12 50 41 Penticton eP 12 52 40 Resolute eP 12 50 11 c Shawinigan Falls eP 12 50 14 Victoria eP 12 52 50	DECEMBER 2 Mould Bay iP 14 33 55 d
DECEMBER 2 Resolute eP 03 13 33	DECEMBER 2 Resolute eP 12 50 11 c Shawinigan Falls eP 12 50 14 Victoria eP 12 52 50	DECEMBER 2 Penticton eP 14 51 45
DECEMBER 2 Resolute eP 03 36 56	DECEMBER 2 Mould Bay P 15 39 06	DECEMBER 2 Penticton eP 15 22 44
DECEMBER 2 Resolute eP 04 23 27	DECEMBER 2 Mould Bay P 13 33 32	DECEMBER 2 Penticton iP 15 52 40 d
DECEMBER 2 Mould Bay P 04 58 24 Penticton eP 04 55 42	DECEMBER 2 U. S. C. G. S. 16.9S, 168.2E New Hebrides Islands H = 14 06 10.0 h = 219 km Penticton ep 14 19 03	DECEMBER 2 Resolute eP 16 15 15 ?
DECEMBER 2 Mould Bay P 07 29 58	DECEMBER 2 Mould Bay P 17 12 26	DECEMBER 2 Mould Bay P 17 12 26

## SEISMOLOGICAL BULLETIN - 1961

DECEMBER 2 Mould Bay iP 17 28 43	DECEMBER 2 Mould Bay P 21 07 50	DECEMBER 3 Penticton eP 07 00 12
DECEMBER 2 Resolute eP? 18 12 38 i 18 13 52	DECEMBER 2 Mould Bay P 21 29 01	DECEMBER 3 Penticton eP 07 55 42
DECEMBER 2 Mould Bay P 18 34 30	DECEMBER 2 Resolute eP? 21 45 (28) i 21 46 42	DECEMBER 3 U. S. C. G. S. 25.0N, 122.9E Off coast of Formosa H = 08 40 20.6 h = 91 km Alberni eP 08 52 58 Alert, N.W.T. iP 08 51 44 c Banff eP 08 53 08 Mould Bay iP 08 51 40 c Penticton iP 08 53 04 Resolute eP 08 52 10 c
DECEMBER 2 U. S. C. G. S. 22.7S, 175.1W Tonga Islands H = 18 45 51.6 h = 89 km Penticton iP 18 58 33 d	DECEMBER 2 Penticton eP 22 56 09	DECEMBER 3 U. S. C. G. S. 17.9N, 99.3W Guerrero Mexico H = 01 00 35.2 h = 31 km Alert, N.W.T. eP 01 11 20 Mould Bay P 01 10 41 Penticton iP 01 07 32 d Resolute eP? 01 10 17 Shawinigan Falls eP 01 07 36 d
DECEMBER 2 U. S. C. G. S. 51.8N, 179.6E Andeanof Islands H = 19 19 58.5 h = 81 km Mould Bay P 19 26 36 Resolute eP? 19 27 28 i 19 28 54	DECEMBER 2 Mould Bay P 19 26 36 Resolute eP? 19 27 28 i 19 28 54	DECEMBER 3 U. S. C. G. S. 41.4N, 70.0E Kirghiz, S.S.R. H = 09 32 23.1 h = 25 km Mould Bay P 09 42 41 Penticton eP 09 45 16
DECEMBER 2 Mould Bay P 19 55 26	DECEMBER 3 Penticton iP 04 05 38	DECEMBER 3 U. S. C. G. S. 41.4N, 70.0E Kirghiz, S.S.R. H = 09 32 23.1 h = 25 km Mould Bay P 09 42 41 Penticton eP 09 45 16
DECEMBER 2 Mould Bay iP 21 04 27 d	DECEMBER 3 Penticton eP 06 10 42	DECEMBER 3 U. S. C. G. S. 41.4N, 70.0E Kirghiz, S.S.R. H = 09 32 23.1 h = 25 km Mould Bay P 09 42 41 Penticton eP 09 45 16

DOMINION OBSERVATORIES

DECEMBER 3  
Mould Bay  
P 11 27 28  
Shawinigan Falls  
eP 11 24 15

DECEMBER 3  
U.S.C.G.S.  
24.0S, 68.1W  
Northern Chile  
H = 14 27 43.4  
h = 217 km  
Penticton  
iP 14 40 03 c

DECEMBER 3  
U.S.C.G.S.  
11.6S, 166.1E  
Santa Cruz Islands  
H = 16 14 31.4  
h = 122 km  
Penticton  
eP 16 27 15

DECEMBER 3  
Resolute  
i 16 47 55 ?

DECEMBER 3  
Mould Bay  
P 17 11 08

DECEMBER 3  
U.S.C.G.S.  
41.2N, 44.0E  
Armenia S.S.R.  
H = 18 31 59.1  
h = 49 km  
Alert, N.W.T.  
eP 18 41 02  
Banff  
eP 18 44 38

DECEMBER 3  
Mould Bay  
iP 18 42 19 d  
Penticton  
eP 18 44 48  
Resolute  
eP 18 42 09  
Shawinigan Falls  
eP 18 43 44

DECEMBER 3  
U.S.C.G.S.  
43.6N, 134.9E  
Near Vladivostok,  
U.S.S.R.  
H = 19 55 05.3  
h = 420 km

Alberni  
eP 20 05 10  
Alert, N.W.T.  
iP 20 03 51 d  
Banff  
eP 20 05 23  
Mould Bay  
eP 20 03 36 d  
Penticton  
iP 20 05 19  
Resolute  
eP 20 04 17  
Shawinigan Falls  
eP 20 07 08 c  
Victoria  
eP 20 05 09

DECEMBER 3  
Alberni  
eP 21 25 47  
Penticton  
eP 21 26 28

DECEMBER 3  
Penticton  
eP 23 08 06

DECEMBER 3  
Penticton  
eP 23 11 39

DECEMBER 3  
Resolute  
i 23 12 28

DECEMBER 4  
Penticton  
eP 03 29 45

DECEMBER 4  
Penticton  
eP 03 41 11

DECEMBER 4  
U.S.C.G.S.  
55.2N, 159.9W  
South of Alaska  
H = 03 42 38.2  
h = 106 km  
Mould Bay  
iP 03 48 06 d  
Penticton  
eP 03 48 01  
Resolute  
eP? 03 48 52?  
Shawinigan Falls  
eP 03 51 43

DECEMBER 4  
Penticton  
eP 04 37 41

DECEMBER 4  
Mould Bay  
P 05 15 41  
Local ?



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DECEMBER 4  
U.S.C.G.S.  
5.2S, 151.6E  
New Britain  
H = 05 33 18.5  
h = 59 km  
Mould Bay  
P 05 46 36  
Penticton  
iP 05 46 29 d  
Shawinigan Falls  
eP' 05 52 12 d

DECEMBER 4  
Penticton  
eP 06 32 56

DECEMBER 4  
U.S.C.G.S.  
18.9N, 68.8W  
South of Dominican  
Republic  
H = 07 36 26.0  
h = 164 km  
Alert, N.W.T.  
eP 07 46 42 c  
Mould Bay  
P 07 46 36

DECEMBER 4  
U.S.C.G.S.  
60.3N, 160.4E  
Off coast of  
Kamchatka  
H = 08 20 14.0  
h = 15 km  
Alert, N.W.T.  
eP 08 27 18  
Mould Bay  
P 08 26 27  
Penticton  
eP 08 28 28  
Resolute  
eP? 08 27 24?  
i 08 27 28  
i 08 29 48

DECEMBER 4  
Penticton  
eP 10 28 43  
DECEMBER 4  
Mould Bay  
P 12 39 55

DECEMBER 4  
U.S.C.G.S.  
33.2N, 95.3E  
Tibet  
H = 12 38 11.9  
h = 45 km  
Alert, N.W.T.  
eP 12 48 45  
Banff  
eP 12 51 17  
Mould Bay  
P 12 49 13  
Penticton  
eP 12 51 23  
Resolute  
eP 12 49 37  
S 12 58 57  
SPS 13 01 28  
G 13 09 07  
i 13 18 29  
i 13 22 22

DECEMBER 4  
Mould Bay  
P 14 36 25  
Penticton  
eP 14 36 53

DECEMBER 5  
H = 00 52 31  
Mag 2.0  
Alberni  
eP<sub>1</sub> 00 52 40.1  
eS<sub>1</sub> 00 52 46.7  
D = 54 km

DECEMBER 5  
H = 03 13 49  
Mag 2.9  
Penticton  
iP<sub>n</sub> 03 14 33.5  
iS<sub>n</sub> 03 15 11.0  
D = 307 km

DECEMBER 5  
U.S.C.G.S.  
45.9S, 74.6W  
Southern Chile  
H = 06 44 12.7  
h = 25 km  
Mould Bay  
P' 07 03 11

DECEMBER 5  
U.S.C.G.S.  
16.0S, 168.1E  
New Hebrides Islands  
H = 13 02 31.9  
h = 145 km  
Alberni  
eP 13 15 06  
Alert, N.W.T.  
eP' 13 20 44  
Mould Bay  
P' 13 20 32  
Penticton  
eP 13 15 20  
Resolute  
eP' 13 20 (38)  
i 13 20 44  
Shawinigan Falls  
eP' 13 21 06

DECEMBER 5  
Resolute  
eP 15 00 50

DOMINION OBSERVATORIES

DECEMBER 5

Mould Bay  
P 15 31 45  
Penticton  
eP 15 29 41

DECEMBER 5

Penticton  
eP 15 47 59

DECEMBER 5

U.S.C.G.S.  
21.0S, 178.4W  
New Hebrides Islands  
H = 22 39 11.0  
h = 532 km  
Penticton  
eP 22 51 03

DECEMBER 5

H = 22 55 48  
Mag 1.4  
Penticton  
eP<sub>1</sub> 22 55 54.4  
eS<sub>1</sub> 22 55 59.0  
D = 38 km

DECEMBER 5

H = 23 11 48  
Mag 1.7  
Penticton  
eP<sub>1</sub> 23 11 59.1  
eS<sub>1</sub> 23 12 07.3  
D = 67 km

DECEMBER 6

Penticton  
eP 00 16 14

DECEMBER 6

Penticton  
eP 00 39 37

DECEMBER 6

Penticton  
eP 00 59 08

DECEMBER 6

U.S.C.G.S.  
37.8N, 142.6E  
Off coast of  
Honshu Japan  
H = 02 15 59.5  
h = 47 km  
Alert, N.W.T.  
eP 02 25 58  
Mould Bay  
iP 02 25 32  
Resolute  
eP 02 26 14

DECEMBER 6

Penticton  
eP 04 54 43  
Resolute  
eP? 04 55 20

DECEMBER 6

U.S.C.G.S.  
13.7N, 93.6E  
Andaman Islands  
H = 05 48 39.3  
h = 53 km  
Mag 5 3/4  
Alert, N.W.T.  
eP 06 01 05  
Mould Bay  
eP 06 01 28 c  
Resolute  
eP 06 01 45  
PP 06 05 29  
S? 06 12 41

DECEMBER 6

Penticton  
eP 06 07 11

DECEMBER 6

Mould Bay  
P 06 19 11  
Penticton  
eP 06 18 08

DECEMBER 6

47.1°N, 121.7°W  
East of Seattle,  
Washington, U.S.A.  
H = 07 45 22  
Mag 2.1  
Alberni  
eP<sub>n</sub> 07 46 05.6  
D = 300 km  
Penticton  
eP<sub>n</sub> 07 45 55.5  
eS<sub>n</sub> 07 46 21.6  
D = 214 km  
Victoria  
eP<sub>1</sub> 07 45 43.4  
eS<sub>1</sub> 07 45 59.9  
D = 135 km

DECEMBER 6

Mould Bay  
iP 09 41 47 c  
Local ?

DECEMBER 6

Penticton  
eP 10 44 05

DECEMBER 6

Penticton  
eP 11 08 36

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DECEMBER 6

Resolute  
i 13 04 45

DECEMBER 6

U.S.C.G.S.  
23.5S, 176.0W  
Tonga Islands region  
H = 13 35 43.8  
h = 18 km  
Mag 6 1/4  
Alberni  
eP 13 48 23  
Banff  
eP 13 48 50  
Penticton  
iP 13 48 36  
Victoria  
eP 13 48 22

DECEMBER 6

Penticton  
eP 13 55 27

DECEMBER 6

Resolute  
i 14 04 18  
i 14 14 29  
i 14 35 02

DECEMBER 6

U.S.C.G.S.  
23.7S, 175.7W  
Tonga Islands region  
H = 15 18 05.8  
h = 29 km  
Penticton  
eP 15 30 59

DECEMBER 6

Mould Bay  
iP 16 12 18  
Local ?

DECEMBER 6

U.S.C.G.S.  
49.4N, 155.2E  
Kurile Islands  
H = 16 39 31.5  
h = 22 km  
Mag 6  
Alberni  
eP 16 48 25 c  
Alert, N.W.T.  
eP 16 48 04  
Banff  
eP 16 48 53 c  
Halifax  
eP 16 51 44.5 d?  
Mould Bay  
iP 16 47 22 c  
Penticton  
iP 16 48 46 c  
Resolute  
iP 16 48 12 c  
Shawinigan Falls  
eP 16 51 18  
Victoria  
eP 16 48 34 c

DECEMBER 6

Penticton  
eP 22 20 47

DECEMBER 6

H = 22 52 28  
Mag 2.2  
Penticton  
eP<sub>1</sub> 22 52 53.9  
eS<sub>1</sub> 22 53 13.6  
D = 162 km

DECEMBER 6

Penticton  
iP 23 19 30

DECEMBER 7

U.S.C.G.S.  
23.4S, 175.9W  
Tonga Islands region  
H = 00 18 26.0  
h = 45 km  
Penticton  
eP 00 31 16

DECEMBER 7

Penticton  
eP 02 13 29

DECEMBER 7

Penticton  
eP 03 03 07

DECEMBER 7

Penticton  
eP 06 03 03

DECEMBER 7

Resolute  
eP 08 07 39

DECEMBER 7

Resolute  
i 09 49 44

DECEMBER 7

Mould Bay  
i 09 52 43  
Resolute  
eP? 09 52 32  
i 09 52 43  
i 09 54 07

DECEMBER 7

Resolute  
eP? 09 56 34  
i 09 56 39



DOMINION OBSERVATORIES

DECEMBER 7  
Resolute  
i 12 03 10

DECEMBER 7  
U.S.C.G.S.  
22.9S, 175.9W  
Tonga Islands  
H = 14 24 00.6  
h = 27 km  
Penticton  
eP 14 36 51

DECEMBER 7  
U.S.C.G.S.  
25.4S, 175.4W  
Tonga Islands region  
H = 16 29 13.3  
h = 79 km  
Penticton  
eP 16 42 05

DECEMBER 7  
Penticton  
eP 19 42 51

DECEMBER 7  
Penticton  
eP 20 50 13

DECEMBER 7  
Penticton  
eP 23 49 12

DECEMBER 8  
Mould Bay  
P 03 17 16

DECEMBER 8  
U.S.C.G.S.  
23.6S, 175.8W  
Tonga Islands region  
H = 03 46 24.5  
h = 45 km  
Penticton  
eP 03 59 15

DECEMBER 8  
Penticton  
eP 04 52 32

DECEMBER 8  
Penticton  
eP 05 00 19

DECEMBER 8  
Resolute  
eP? 06 40 (20)

DECEMBER 8  
U.S.C.G.S.  
16.3N, 104.3W  
South of Mexico  
H = 07 58 02.0  
h = 65 km  
Mould Bay  
P 08 08 06

DECEMBER 8  
U.S.C.G.S.  
1.8S, 139.4E  
Near New Guinea  
H = 09 36 24.9  
h = 55 km  
Shawinigan Falls  
eP' 09 55 27 d

DECEMBER 8  
Mould Bay  
P 10 16 17

DECEMBER 8  
Mould Bay  
iP 11 20 42  
Local ?

DECEMBER 8  
Penticton  
eP 14 55 32

DECEMBER 8  
Penticton  
eP 18 49 29

DECEMBER 8  
Mould Bay  
P 20 40 36

DECEMBER 8  
Mould Bay  
P 21 46 00

DECEMBER 8  
Mould Bay  
P 22 02 05

DECEMBER 8  
Penticton  
iP 22 01 48

DECEMBER 8  
Penticton  
eP 23 30 12

DECEMBER 9  
U.S.C.G.S.  
56.3N, 153.9W  
Alaska region  
H = 02 15 22.0  
h = 31 km  
Mag 5 1/2  
Alert, N.W.T.  
iP 02 22 14 c  
Banff  
eP 02 20 24  
Halifax  
eP 02 24 53  
Mould Bay  
iP 02 20 36 c  
Penticton  
iP 02 20 12 d  
Resolute  
eP 02 21 20 c  
Shawinigan Falls  
eP 02 24 13  
Victoria  
eP 02 19 55

DECEMBER 9  
Mould Bay  
P 02 44 34

DECEMBER 9  
U.S.C.G.S.  
14.9S, 75.7W  
Off coast of Peru  
H = 03 58 55.4  
h = 39 km  
Halifax  
eP 04 08 58  
Mould Bay  
P 04 12 15 c  
Penticton  
eP 04 10 36  
Resolute  
eP 04 11 54 c  
Shawinigan Falls  
eP 04 09 10

DECEMBER 9  
Mould Bay  
iP 04 42 13  
Local ?

DECEMBER 9  
U.S.C.G.S.  
35.9S, 179.3W  
Northeast of  
New Zealand  
H = 04 25 56.6  
h = 60 km  
Mould Bay  
P' 04 44 36

DECEMBER 9  
Penticton  
eP 04 58 05

DECEMBER 9  
Penticton  
eP 07 29 04

DECEMBER 9  
Resolute  
eP 08 10 06?

DECEMBER 9  
Resolute  
eP? 11 14 09

DECEMBER 9  
U.S.C.G.S.  
43.7S, 75.2W  
Near coast of  
Southern Chile  
H = 11 18 08.9  
h = 34 km  
Mag 6 3/4  
Alert, N.W.T.  
P' 11 37 07  
Halifax  
eP 11 31 00

Mould Bay  
P' 11 37 01

Penticton  
eP 11 31 57

Resolute  
e 11 36 10

iP' 11 37 08

S? 11 47 (34)

i 11 48 02

SS? 11 54 17

i 11 57 08

i 12 06 18

i 12 40 11

Shawinigan Falls  
eP 11 31 05

DECEMBER 9  
Penticton  
eP 11 48 11

DECEMBER 9  
Mould Bay  
iP 19 47 21

DECEMBER 9  
U.S.C.G.S.  
21.7S, 179.9E

Fiji Islands  
H = 19 49 41.3

h = 620 km

Alberni  
iP 20 01 23 d

Alert, N.W.T.  
iP' 20 07 16 c

Banff  
eP 20 01 52 d

Mould Bay  
P 20 02 41

Penticton  
iP 20 01 35 d

Resolute  
eP' 20 07 06

Victoria  
iP 20 01 24 d



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## DOMINION OBSERVATORIES

DECEMBER 9  
 Mould Bay  
 P 21 14 14

DECEMBER 9  
 Mould Bay  
 P 21 24 30  
 Penticton  
 eP 21 24 07

DECEMBER 9  
 U.S.C.G.S.  
 56.3N, 153.5W  
 Kodiak Island region  
 H = 21 21 49.0  
 h = 19 km  
 Alert, N.W.T.  
 eP 21 28 40  
 Mould Bay  
 iP 21 27 01  
 Penticton  
 eP 21 26 38  
 Resolute  
 eP 21 27 47

DECEMBER 9  
 U.S.C.G.S.  
 23.0S, 176.8W  
 Tonga Islands region  
 H = 21 41 42.1  
 h = 25 km  
 Penticton  
 eP 21 54 35

DECEMBER 9  
 Penticton  
 eP 22 22 38

DECEMBER 9  
 Mould Bay  
 P 23 57 19

DECEMBER 10  
 Penticton  
 eP 00 24 37

DECEMBER 10  
 Mould Bay  
 P 04 06 03  
 Local ?

DECEMBER 10  
 Penticton  
 eP 04 23 44

DECEMBER 10  
 U.S.C.G.S.  
 56.5N, 152.1W  
 Kodiak Island region  
 H = 04 58 41.3  
 h = 68 km  
 Mould Bay  
 P 05 03 47 d  
 Penticton  
 iP 05 03 22 d  
 Resolute  
 eP 05 04 31

DECEMBER 10  
 U.S.C.G.S.  
 38.8N, 25.7E  
 Aegean Sea  
 H = 08 39 11.1  
 h = 79 km  
 Mould Bay  
 P 08 49 57  
 Resolute  
 eP? 08 49 40?  
 Shawinigan Falls  
 eP 08 50 24

DECEMBER 10  
 Mould Bay  
 P 12 26 38  
 Resolute  
 eP 12 27 18  
 eP 12 27 22  
 Penticton  
 eP 12 26 19

DECEMBER 10  
 U.S.C.G.S.  
 32°15'49"N,  
 103°51'57"W  
 Carlsbad, New Mexico  
 (Project Gnome)  
 H = 19 00 00  
 Mould Bay  
 P 19 08 14 d  
 Penticton  
 iP 19 04 41

DECEMBER 11  
 Penticton  
 eP 00 32 22

DECEMBER 11  
 Penticton  
 eP 00 40 10

DECEMBER 11  
 Penticton  
 eP 07 15 38

DECEMBER 11  
 Penticton  
 eP 09 22 26

DECEMBER 11  
 Penticton  
 eP 09 28 53

## SEISMOLOGICAL BULLETIN - 1961

DECEMBER 11  
 Mould Bay  
 P 09 34 46  
 Local ?

DECEMBER 11  
 Penticton  
 eP 10 16 37

DECEMBER 11  
 Penticton  
 eP 16 14 36

DECEMBER 11  
 U.S.C.G.S.  
 36.5N, 23.5E  
 Near coast of  
 Greece  
 H = 16 53 05.3  
 h = 25 km  
 Alert, N.W.T.  
 eP 17 02 25  
 Mould Bay  
 P 17 03 45  
 Resolute  
 eP 17 03 25  
 Shawinigan Falls  
 eP 17 04 09

DECEMBER 11  
 Mould Bay  
 iP 19 20 18  
 Local ?

DECEMBER 11  
 H = 20 36 09  
 Mag 1.9  
 Penticton  
 iP<sub>1</sub> 20 36 37.1  
 iS<sub>1</sub> 20 36 58.6  
 D = 176 km  
 Mag 1.9

DECEMBER 11  
 Penticton  
 eP 21 10 13

DECEMBER 12  
 Penticton  
 eP 00 12 25

DECEMBER 12  
 Penticton  
 eP 00 36 39

DECEMBER 12  
 Mould Bay  
 iP 10 34 52  
 Local ?

DECEMBER 12  
 U.S.C.G.S.  
 11.8N, 59.8W  
 Windward Islands  
 region  
 H = 11 18 14.8  
 h = 36 km  
 Mould Bay  
 P 11 29 37  
 Penticton  
 iP 11 28 33 d

DECEMBER 12  
 Mould Bay  
 Local ?

DECEMBER 12  
 U.S.C.G.S.  
 43.5N, 146.2E  
 Near coast of  
 Hokkaido Japan  
 H = 23 06 18.4  
 h = 44 km  
 Alberni  
 iP 23 16 10 c  
 Alert, N.W.T.  
 P 23 15 34  
 Banff  
 eP 23 16 37 c  
 Halifax  
 eP 23 19 09.5 d  
 i 23 19 26  
 Mould Bay  
 P 23 15 05

DECEMBER 12  
 U.S.C.G.S.  
 21.7N, 146.0E  
 Mariana Islands region  
 H = 17 23 04.0  
 h = 24 km  
 Alert, N.W.T.  
 eP 17 34 43  
 Penticton  
 eP 17 34 57  
 Resolute  
 eP 17 34 55

DECEMBER 12  
 U.S.C.G.S.  
 18.9N, 107.6W  
 Revilla Gigedo Islands  
 region  
 H = 22 14 36.3  
 h = 33 km  
 Mould Bay  
 P 22 24 27  
 Resolute  
 eP 22 24 16  
 i 22 28 30  
 i 22 39 44  
 i 22 48 20  
 i 22 54 05

DECEMBER 12  
 U.S.C.G.S.  
 43.5N, 146.2E  
 Near coast of  
 Hokkaido Japan  
 H = 23 06 18.4  
 h = 44 km  
 Alberni  
 iP 23 16 10 c  
 Alert, N.W.T.  
 P 23 15 34  
 Banff  
 eP 23 16 37 c  
 Halifax  
 eP 23 19 09.5 d  
 i 23 19 26  
 Mould Bay  
 P 23 15 05

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## DOMINION OBSERVATORIES

Penticton iP 23 16 29 c Resolute eP 23 15 49 e 23 17 12 e 23 23 48 Shawinigan Falls eP 23 18 45 c Victoria eP 23 16 18 c	DECEMBER 13 Penticton eP 23 37 49	DECEMBER 14 Mould Bay P 01 54 49
DECEMBER 13 Penticton eP 02 36 06	DECEMBER 13 Penticton eP 23 48 26	DECEMBER 14 Mould Bay P 02 49 56
DECEMBER 13 Mould Bay P 04 28 06	DECEMBER 14 Penticton eP 00 01 23	DECEMBER 14 Resolute eP? 06 45 38 ?
DECEMBER 13 U. S. C. G. S. 26.7N, 129.6E Ryukyu Islands H = 08 40 57.3 h = 161 km Alert, N. W. T. P 08 52 01 Mould Bay P 08 51 50 Resolute eP 08 52 23 iP 08 52 28 d	DECEMBER 14 Penticton eP 00 52 23	DECEMBER 14 U. S. C. G. S. 3.1S, 140.9E Near coast of New Guinea H = 07 10 23.2 h = 44 km Penticton eP 07 24 02 e 07 27 54 Resolute eP 07 24 15 eP 07 24 18 e 07 34 53 e 07 37 32 e 07 43 18 e 07 45 18 Shawinigan Falls eP' 07 29 37
DECEMBER 13 U. S. C. G. S. 50.9S, 73.0W Chile-Argentina border H = 11 23 28.9 h = 82 km Mould Bay P' 11 42 29	DECEMBER 14 Halifax P <sub>n</sub> 01 50 23.4 c P <sub>1</sub> 01 50 32.9 S <sub>n</sub> 01 50 59.4 S <sub>1</sub> 01 51 12 D = 348 km Montreal iP <sub>1</sub> 01 50 54.0 c S <sub>n</sub> 01 51 27.6 S <sub>1</sub> 01 51 53.3 D = 496 km Shawinigan Falls S <sub>1</sub> 01 51 52.4 D = 492 km	DECEMBER 14 Mould Bay P 08 23 47
		DECEMBER 14 Mould Bay P 12 10 07

DECEMBER 14 Resolute eP 17 34 57	DECEMBER 14 U. S. C. G. S. 26.1S, 179.3E South of Fiji Islands H = 23 26 02.8 h = 497 km Penticton eP 23 38 27	DECEMBER 15 Mould Bay P 19 35 23
DECEMBER 14 Resolute eP 18 03 47	DECEMBER 15 U. S. C. G. S. 0.9N, 126.2E Molucca Passage H = 19 36 03.5 h = 47 km Mould Bay P 19 49 21	DECEMBER 15 Penticton eP 21 37 06
DECEMBER 14 U. S. C. G. S. 17.1S, 179.0W Fiji Islands H = 18 49 02.4 h = 394 km Penticton eP 19 00 54	DECEMBER 15 U. S. C. G. S. 5.5S, 147.2E Near coast of New Guinea H = 12 36 30.7 h = 181 km Penticton iP 12 49 39	DECEMBER 15 Penticton eP 23 36 20
DECEMBER 14 48.9°N, 125.4°W Berkley Sound H = 20 45 49 Mag 2.0 Albarni iP <sub>1</sub> 20 45 57.6 iS <sub>1</sub> 20 46 03.9 D = 51 km Penticton eP <sub>n</sub> 20 46 49.8 D = 430 km Victoria eP <sub>1</sub> 20 46 15.0 eS <sub>1</sub> 20 46 32.2 D = 150 km	DECEMBER 15 Mould Bay P 14 20 54 Penticton eP 14 18 10	DECEMBER 15 Resolute eP? 23 53 (59)
DECEMBER 14 Penticton eP 22 05 23	DECEMBER 15 Mould Bay P 14 57 18	DECEMBER 16 U. S. C. G. S. 9.7N, 125.6E Near coast of Mindanao, Philippine Islands H = 01 37 18.1 h = 163 km Mould Bay P 01 49 45 Resolute eP 01 50 12
DECEMBER 14 Penticton eP 23 27 01	DECEMBER 15 Local ?	DECEMBER 16 Mould Bay P 02 22 14 Local ?

DOMINION OBSERVATORIES

DECEMBER 16  
Resolute  
eP 04 18 04 ?

DECEMBER 16  
Mould Bay  
P 04 21 55  
Local ?

DECEMBER 16  
Mould Bay  
P 08 38 28  
Local ?

DECEMBER 16  
U. S. C. G. S.  
23.9S, 175.4W  
Tonga Islands region  
H = 09 59 11.8  
h = 25 km  
Penticton  
iP 10 12 06 c

DECEMBER 16  
Alberni  
eP 10 57 05  
Penticton  
eP 10 57 57  
Victoria  
eP 10 57 22

DECEMBER 16  
Alberni  
eP 11 38 23  
Penticton  
eP 11 38 23  
Victoria  
eP 11 38 01

DECEMBER 16  
U. S. C. G. S.  
51.9N, 160.2E  
Near coast of  
Kamchatka  
H = 13 40 20.1  
h = 23 km  
Alert, N. W. T.  
iP 13 48 31 c  
Mould Bay  
P 13 47 41  
Penticton  
eP 13 49 06  
Resolute  
eP 13 48 33

DECEMBER 16  
Mould Bay  
P 14 32 10  
Local ?

DECEMBER 16  
Mould Bay  
P 17 12 27  
Local ?

DECEMBER 16  
H = 17 24 29  
Mag 2.0  
Penticton  
eP<sub>n</sub> 17 25 09.4  
eS<sub>n</sub> 17 25 33.3  
D = 196 km

DECEMBER 16  
Penticton  
eP 17 28 22

DECEMBER 16  
H = 18 25 08  
Mag 2.0  
Penticton  
eP<sub>n</sub> 18 25 37.6  
eS<sub>n</sub> 18 26 00.7  
D = 189 km

DECEMBER 16  
Penticton  
iP 21 39 30 d

DECEMBER 16  
H = 23 38 07  
Mag 1.8  
Penticton  
eP<sub>1</sub> 23 38 31.5  
eS<sub>1</sub> 23 38 50.5  
D = 156 km

DECEMBER 17  
Mould Bay  
P 00 36 46  
Local ?

DECEMBER 17  
Mould Bay  
P 01 02 12

DECEMBER 17  
Mould Bay  
iP 06 02 18 d

DECEMBER 17  
Canadian Arctic  
H = 09 24 42.5  
h = 25 km  
Mag 2.4  
Resolute  
eP<sub>n</sub> 09 25 13.8  
iP<sub>1</sub> 09 25 17.5  
i 09 25 32.6  
iS<sub>n</sub> 09 25 36.9  
iS<sub>1</sub> 09 25 44  
D = 216 km

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DECEMBER 17  
Mould Bay  
P 14 42 28  
Local ?

DECEMBER 17  
Penticton  
eP 16 52 45

DECEMBER 17  
U. S. C. G. S.  
14.4S, 75.8W  
Near coast of Peru  
H = 21 32 01.8  
h = 85 km  
Penticton  
iP 21 43 35 c  
Resolute  
eP 21 44 53  
Shawinigan Falls  
eP 21 42 08

DECEMBER 17  
U. S. C. G. S.  
54.5S, 143.9E  
South of Tasmania  
H = 22 12 32.3  
h = 45 km  
Alert, N. W. T.  
P' 22 32 20  
Mould Bay  
P' 22 31 59  
Resolute  
eP' 22 32 16  
Shawinigan Falls  
eP' 22 32 26

DECEMBER 17  
Mould Bay  
P 22 39 59  
Resolute  
eP 22 40 15  
e 22 56 04  
e 23 29 14

DECEMBER 17  
Mould Bay  
P 23 02 05

DECEMBER 17  
U. S. C. G. S.  
19.6N, 120.8E  
Off coast of Luzon  
Philippine Islands  
H = 02 18 31.3  
h = 32 km  
Mould Bay  
P 02 30 26  
Resolute  
eP 02 30 56

DECEMBER 18  
Alert, N. W. T.  
P 03 23 18  
Mould Bay  
P 03 23 31  
Penticton  
iP 03 23 04  
Resolute  
e 03 23 12

DECEMBER 18  
Mould Bay  
P 03 23 12

DECEMBER 18  
Penticton  
eP 03 26 29

DECEMBER 18  
Penticton  
eP 06 26 09

DECEMBER 18  
Mould Bay  
iP 06 41 35 c

DECEMBER 18  
48.7°N, 128.0°W  
West of Vancouver  
Island  
H = 07 15 58  
Mag 3.0  
Alberni  
eP<sub>n</sub> 07 16 34.4  
eS<sub>n</sub> 07 17 04.0  
D = 242 km  
Penticton  
eP<sub>n</sub> 07 17 29  
D = 692 km  
Victoria  
eP<sub>n</sub> 07 16 46.0  
D = 338 km

DECEMBER 18  
Mould Bay  
P 09 31 48

DECEMBER 18  
Mould Bay  
P 15 52 12  
Local

DECEMBER 18  
U. S. C. G. S.  
26.4N, 96.3E  
Burma-India border  
H = 16 42 21.6  
h = 85 km  
Mould Bay  
iP 16 53 57 d  
Resolute  
eP 16 54 17

DECEMBER 18  
Mould Bay  
P 20 39 39  
Local ?

## DOMINION OBSERVATORIES

 DECEMBER 18  
 48°50'N, 122°48'W  
 Washington, U.S.A.  
 H = 22 08 36  
 Mag 2.7

 Alberni  
 iP<sub>1</sub> 22 09 03.3  
 iS<sub>1</sub> 22 09 24.2  
 D = 159 km

 Penticton  
 eP<sub>n</sub> 22 09 13.2  
 D = 253 km

 Victoria  
 iP<sub>1</sub> 22 08 47.0  
 iS<sub>1</sub> 22 08 55.6  
 D = 57 km

 DECEMBER 18  
 U.S.C.G.S.  
 21.3S, 174.2W  
 Tonga Islands  
 H = 22 24 49.8  
 h = 25 km  
 Penticton  
 eP 22 37 29

 DECEMBER 19  
 H = 04 01 38  
 Mag 1.8  
 Penticton  
 iP<sub>n</sub> 04 02 08.0  
 iS<sub>n</sub> 04 02 31.8  
 D = 195 km

 DECEMBER 19  
 Canadian Arctic  
 H = 06 19 41.6  
 Mag 2.5  
 Resolute  
 iP<sub>1</sub> 06 20 04.7  
 iS<sub>1</sub> 06 20 22.3  
 D = 144 km

 DECEMBER 19  
 Penticton  
 eP 14 18 14

 DECEMBER 19  
 U.S.C.G.S.  
 24.2N, 122.4E  
 Near coast of  
 Formosa  
 H = 17 30 09.7  
 h = 93 km  
 Mould Bay  
 P 17 41 35  
 Penticton  
 iP 17 43 00 d

 DECEMBER 19  
 Mould Bay  
 P 18 44 28

 DECEMBER 19  
 Penticton  
 eP 20 03 20

 DECEMBER 19  
 Penticton  
 eP 22 04 54

 DECEMBER 19  
 Penticton  
 eP 23 35 20

 DECEMBER 20  
 Penticton  
 eP 07 06 32  
 Resolute  
 eP 07 06 36

 DECEMBER 20  
 U.S.C.G.S.  
 4.6N, 75.6W  
 Colombia  
 H = 13 25 34.4  
 h = 176 km  
 Mag 6 3/4

 Alberni  
 eP 13 35 31 d  
 Alert, N.W.T.  
 iP 13 37 14 d  
 Banff  
 iP 13 35 03 d  
 Halifax  
 eP 13 33 04 d?  
 Mould Bay  
 iP 13 37 00 d  
 Penticton  
 iP 13 35 11 d

 Resolute  
 eP 13 36 33  
 Shawinigan Falls  
 iP 13 33 10 d  
 Victoria  
 iP 13 35 22 d

 DECEMBER 20  
 Mould Bay  
 iP 18 01 27 d

 DECEMBER 20  
 Penticton  
 eP 19 48 46

 DECEMBER 20  
 Penticton  
 eP 23 08 14

 DECEMBER 21  
 Resolute  
 e 19 37 09

## SEISMOLOGICAL BULLETIN - 1961

 DECEMBER 21  
 Canadian Arctic  
 H = 20 03 38.1  
 Mag 1.5  
 Resolute  
 eP<sub>1</sub> 20 04 07  
 iS<sub>1</sub> 20 04 29  
 D = 180 km

 DECEMBER 21  
 Penticton  
 eP 21 03 32

 DECEMBER 22  
 Penticton  
 eP 00 54 03

 DECEMBER 22  
 Mould Bay  
 P 01 10 25  
 Local ?

 DECEMBER 22  
 U.S.C.G.S.  
 40.7N, 126.0W  
 Off coast of  
 California  
 H = 11 26 45.2  
 h = 25 km  
 Mag 4.6  
 Penticton  
 eP 11 29 09  
 Resolute  
 eP 11 33 54

 DECEMBER 22  
 U.S.C.G.S.  
 56.2N, 154.3W  
 Alaska  
 H = 14 58 33.4  
 h = 26 km  
 Alert, N.W.T.  
 iP 15 05 27 c

 Mould Bay  
 P 15 03 48  
 Penticton  
 iP 15 03 26 c  
 Resolute  
 eP 15 04 32 c

 DECEMBER 22  
 Mould Bay  
 P 15 47 08  
 Penticton  
 iP 15 44 45 d

 DECEMBER 22  
 Penticton  
 eP 17 41 41

 DECEMBER 22  
 H = 22 45 38  
 Mag 1.7  
 Penticton  
 iP<sub>1</sub> 22 46 04.5  
 iS<sub>1</sub> 22 46 24.3  
 D = 162 km

 DECEMBER 22  
 Canadian Arctic  
 H = 22 55 46.0  
 Mag 2.7  
 Resolute  
 iP<sub>1</sub> 22 56 09.5  
 iS<sub>1</sub> 22 56 25.0  
 D = 127 km

 DECEMBER 22  
 U.S.C.G.S.  
 18.6N, 145.6E  
 Mariana Islands  
 H = 22 46 24.6  
 h = 155 km  
 Alert, N.W.T.  
 iP 22 57 09  
 Mould Bay  
 P 22 57 40

 Penticton  
 eP 22 58 15  
 Resolute  
 eP 22 58 16

 DECEMBER 22  
 U.S.C.G.S.  
 16.4N, 120.4E  
 Near coast of Luzon,  
 Philippine Islands  
 H = 23 43 35.3  
 h = 33 km  
 Resolute  
 eP 23 56 15 ?  
 eP 23 56 22

 DECEMBER 23  
 Penticton  
 eP 04 51 31

 DECEMBER 23  
 U.S.C.G.S.  
 44.9N, 111.2W  
 Montana, U.S.A.  
 H = 06 53 36.5  
 h = 23 km

 Banff  
 eP 06 55 19  
 Penticton  
 eP 06 55 23

 DECEMBER 23  
 Resolute  
 eP? 07 09 06?

 DECEMBER 23  
 Penticton  
 eP 08 46 55

 DECEMBER 23  
 Resolute  
 eP 12 55 51

DOMINION OBSERVATORIES

DECEMBER 23  
 U.S.C.G.S.  
 6.4N, 73.4W  
 Colombia  
 H = 14 36 27.1  
 h = 197 km  
 Mould Bay  
 iP 14 47 40 c  
 Pentiction  
 iP 14 46 01

DECEMBER 23  
 Resolute  
 eP 17 05 28  
 e 17 07 11

DECEMBER 23  
 U.S.C.G.S.  
 34.9N, 137.6E  
 Near coast of  
 Honshu Japan  
 H = 19 11 54.5  
 h = 270 km  
 Pentiction  
 eP 19 22 51

DECEMBER 23  
 Pentiction  
 eP 19 30 25

DECEMBER 24  
 Alert, N.W.T.  
 iP 02 09 41 c  
 Banff  
 eP 02 09 20  
 Mould Bay  
 P 02 07 35  
 Pentiction  
 eP 02 09 21  
 Resolute  
 eP 02 08 47?  
 eP 02 08 52

DECEMBER 24  
 U.S.C.G.S.  
 3.4S, 140.3E  
 New Guinea  
 H = 02 40 07.6  
 h = 29 km  
 Mould Bay  
 P 02 53 32  
 Pentiction  
 eP 02 53 49

DECEMBER 24  
 U.S.C.G.S.  
 43.8N, 143.9E  
 Near coast of  
 Hokkaido Japan  
 H = 06 50 48.4  
 h = 79 km  
 Alert, N.W.T.  
 iP 07 00 03  
 Mould Bay  
 P 06 59 36  
 Pentiction  
 iP 07 01 04 c  
 Resolute  
 iP 07 00 20 c  
 i 07 00 51

DECEMBER 24  
 U.S.C.G.S.  
 29.5N, 80.9E  
 Nepal  
 H = 07 13 25.4  
 h = 20 km  
 Mould Bay  
 P 07 25 00  
 Resolute  
 eP 07 25 13

DECEMBER 24  
 Alert, N.W.T.  
 iP 07 30 17

DECEMBER 24  
 U.S.C.G.S.  
 20.4S, 173.6W  
 Tonga Islands  
 H = 09 19 02.7  
 h = 45 km  
 Pentiction  
 eP 09 31 26

DECEMBER 24  
 U.S.C.G.S.  
 5.7S, 80.9W  
 Near coast of Peru  
 H = 14 25 32.7  
 h = 52 km  
 Alert, N.W.T.  
 iP 14 38 20  
 Mould Bay  
 P 14 38 03  
 Resolute  
 eP 14 37 41  
 Shawinigan Falls  
 eP 14 34 49

DECEMBER 24  
 Mould Bay  
 P 17 36 36

DECEMBER 24  
 Resolute  
 eP 20 33 24  
 i 20 33 33

DECEMBER 24  
 Pentiction  
 eP 20 47 55

DECEMBER 24  
 Pentiction  
 eP 22 11 07

SEISMOLOGICAL BULLETIN - 1961

DECEMBER 24  
 U.S.C.G.S.  
 38.3S, 74.6W  
 Near coast of  
 Chile  
 H = 23 43 19.2  
 h = 31 km  
 Shawinigan Falls  
 eP 23 55 50

DECEMBER 25  
 Pentiction  
 eP 00 05 20

DECEMBER 25  
 U.S.C.G.S.  
 3.7S, 127.7E  
 Ceram  
 H = 08 00 59.3  
 h = 47 km  
 Mould Bay  
 P 08 14 39

DECEMBER 25  
 U.S.C.G.S.  
 1.1S, 126.7E  
 Spice Islands  
 H = 08 13 07.2  
 h = 25 km  
 Mould Bay  
 P 08 26 37  
 Resolute  
 eP? 08 27 04

DECEMBER 25  
 Pentiction  
 eP 08 51 11

DECEMBER 25  
 U.S.C.G.S.  
 6.4N, 82.2W  
 South of Panama  
 H = 08 57 39.1  
 h = 77 km  
 Mould Bay  
 P 09 09 00  
 Pentiction  
 eP 09 06 52

DECEMBER 25  
 U.S.C.G.S.  
 3.7S, 127.7E  
 Ceram Sea  
 H = 09 09 07.4  
 h = 54 km  
 Mould Bay  
 P 09 22 46  
 Resolute  
 eP? 09 23 14

DECEMBER 25  
 Pentiction  
 iP 10 40 53

DECEMBER 25  
 U.S.C.G.S.  
 26.9N, 90.1E  
 Bhutan-India  
 border  
 H = 11 19 11.9  
 h = 46 km  
 Mould Bay  
 P 11 30 53

DECEMBER 25  
 48.0°N, 122.4°W  
 Washington, U.S.A.  
 H = 12 27 44  
 Mag 2.2  
 Pentiction  
 eP<sub>n</sub> 12 28 22.0  
 D = 254 km

Victoria  
 eP<sub>1</sub> 12 28 00.6  
 eS<sub>1</sub> 12 28 13.0  
 D = 102 km

DECEMBER 25  
 Pentiction  
 eP 13 46 59

DECEMBER 25  
 U.S.C.G.S.  
 20.4S, 173.7W  
 Tonga Islands  
 H = 13 55 38.8  
 h = 64 km  
 Pentiction  
 iP 14 08 05

DECEMBER 25  
 Mould Bay  
 P 14 29 28  
 Pentiction  
 eP 14 29 49  
 Resolute  
 eP 14 30 21?  
 eP 14 30 35

DECEMBER 25  
 Mould Bay  
 P 17 12 21  
 Local ?

DECEMBER 25  
 63.0°N±1°,  
 92.0°W±1.5°  
 W.S.W. of Chesterfield  
 Inlet, N.W.T.  
 H = 19 58 28.5  
 Mag 5.1  
 Mould Bay  
 P<sub>n</sub> 20 02 09  
 D = 1755 km  
 Pentiction  
 e 20 03 21

DOMINION OBSERVATORIES

Resolute  
 eP<sub>n</sub> 20 01 06  
 i 20 01 19 d  
 iS<sub>n</sub> 20 03 00  
 Lg 20 04 18  
 D = 1250 km  
 Shawinigan Falls  
 P<sub>n</sub> 20 03 02.0  
 S<sub>n</sub> 20 06 16.0  
 Lg 20 08 49.0  
 D = 2175 km

DECEMBER 25

U.S.C.G.S.  
 39.4N, 76.9E  
 China  
 H = 21 51 06.9  
 h = 167 km  
 Mould Bay  
 P 22 01 25  
 Penticton  
 eP 22 03 53

DECEMBER 26

U.S.C.G.S.  
 5.5S, 110.7E  
 Java Sea  
 H = 04 24 55.4  
 h = 566 km  
 Penticton  
 iP' 04 42 47 c  
 e 04 53 01  
 Resolute  
 eP' 04 42 26  
 Shawinigan Falls  
 eP' 04 43 20

DECEMBER 26

Canadian Arctic  
 H = 05 21 25.5  
 Mag 3.0  
 Resolute  
 P<sub>n</sub> 05 22 22  
 i 05 23 11  
 S<sub>1</sub> 05 23 24  
 D = 420 km

DECEMBER 26

U.S.C.G.S.  
 44.2S, 38.1E  
 Prince Edward  
 Islands region  
 H = 06 17 30.6  
 h = 22 km  
 Penticton  
 e 06 48 55  
 Resolute  
 eP' 06 37 04  
 e 06 58 47

DECEMBER 26

Resolute  
 eP' 07 54 13  
 i 07 54 54  
 i 08 14 51

DECEMBER 26

Canadian Arctic  
 H = 14 54 09  
 Mag 4.5  
 Resolute  
 P<sub>n</sub> 14 56 54  
 S<sub>n</sub> 14 58 54  
 Lg 15 00 10  
 D = 1300 km

DECEMBER 26

Penticton  
 eP 22 47 58

DECEMBER 26

Penticton  
 eP 23 52 14

DECEMBER 27

Penticton  
 eP 00 21 58

DECEMBER 27

U.S.C.G.S.  
 22.3S, 67.6W  
 Chile-Bolivia border  
 H = 02 15 49.2  
 h = 47 km  
 Penticton  
 eP 02 28 24  
 Shawinigan Falls  
 eP 02 26 55

DECEMBER 27

Mould Bay  
 P 03 22 11

DECEMBER 27

Mould Bay  
 P 04 07 06  
 Resolute  
 eP' 04 06 47?

DECEMBER 27

Mould Bay  
 P 09 48 22  
 Penticton  
 eP 09 45 23

DECEMBER 27

Penticton  
 eP 10 55 24

DECEMBER 27

Resolute  
 eP 12 35 34

DECEMBER 27

U.S.C.G.S.  
 53.4N, 160.3E  
 Near coast of  
 Kamchatka  
 H = 15 19 15.8  
 h = 35 km  
 Resolute  
 eP 15 27 13

DECEMBER 27

Penticton  
 eP 15 44 33  
 Resolute  
 eP 15 46 47

DECEMBER 27

Penticton  
 eP 22 59 25

DECEMBER 27

U.S.C.G.S.  
 41.2S, 175.7E  
 Near coast of  
 New Zealand  
 H = 23 48 01.3  
 h = 57 km  
 Mag 6 3/4  
 Alert, N.W.T.  
 P' 24 07 17  
 Mould Bay  
 P' 24 06 56  
 Resolute  
 eP' 24 07 06  
 i 24 10 32  
 Shawinigan Falls  
 eP' 24 07 17

DECEMBER 28

Resolute  
 eP 00 17 37?

DECEMBER 28

Penticton  
 eP 00 59 39  
 e 01 06 35  
 Resolute  
 eP' 01 01 31  
 Shawinigan Falls  
 eP 00 58 17

DECEMBER 28

Penticton  
 eP 05 17 25  
 Resolute  
 eP 05 17 34?

DECEMBER 28

Resolute  
 eP 10 29 13

DECEMBER 28

Resolute  
 eP 22 44 45

DECEMBER 28

Penticton  
 eP 23 02 00

DECEMBER 28

U.S.C.G.S.  
 12.4S, 166.3E  
 Santa Cruz Islands  
 region  
 H = 23 55 57.6  
 h = 100 km  
 Penticton  
 eP 24 08 43  
 Shawinigan Falls  
 eP' 24 14 38

DECEMBER 29

Resolute  
 i 00 39 05  
 e 00 44 (41)  
 DECEMBER 29  
 Penticton  
 eP 02 01 09

DECEMBER 29

Mould Bay  
 iP 03 11 11  
 Local ?

DECEMBER 29

Penticton  
 eP 04 01 25

DECEMBER 29

Resolute  
 i 05 27 37

DECEMBER 29

U.S.C.G.S.  
 42.6N, 142.7E  
 Hokkaido Japan  
 H = 08 00 08.9  
 h = 43 km

DECEMBER 29

Mould Bay  
 P 08 09 08  
 Penticton  
 eP 08 10 37  
 Resolute  
 eP 08 09 51 c

DECEMBER 29

U.S.C.G.S.  
 6.3S, 154.5E  
 Solomon Islands  
 H = 10 00 33.1  
 h = 44 km  
 Mould Bay  
 P 10 13 53

SEISMOLOGICAL BULLETIN - 1961

DOMINION OBSERVATORIES

Penticton iP 10 13 40	DECEMBER 29 Mould Bay P 19 40 02	Penticton eP 00 46 46 Resolute eP 00 46 58 Shawinigan Falls eP 00 49 56 Victoria eP 00 46 22
DECEMBER 29 Mould Bay P 12 10 02	DECEMBER 29 Penticton eP 20 47 33	
DECEMBER 29 Mould Bay P 12 22 33	DECEMBER 29 Penticton eP 21 50 28	DECEMBER 30 Penticton eP 01 18 41
DECEMBER 29 Penticton eP 13 57 26	DECEMBER 29 Penticton eP 21 54 48	DECEMBER 30 Mould Bay P 07 07 30 Penticton eP 07 04 46
DECEMBER 29 U.S.C.G.S. 13.6N, 92.4W Off coast of Guatemala H = 14 53 12.3 h = 37 km Mould Bay eP 15 03 49 c Penticton eP 15 01 03 Resolute eP 15 03 24 Shawinigan Falls iP 15 00 21 d Victoria eP 15 01 11	DECEMBER 29 Penticton eP 22 04 50	DECEMBER 30 U.S.C.G.S. 39.7N, 77.7E China H = 07 08 29 h = 35 km Alert, N.W.T. P 07 18 12 Mould Bay iP 07 19 03 c Penticton iP 07 21 31 Resolute eP 07 19 15
DECEMBER 29 Penticton iP 15 46 55	DECEMBER 29 Mould Bay iP 22 43 59 Local ?	DECEMBER 30 U.S.C.G.S. 51.9N, 177.6E Rat Islands H = 08 53 14.4 h = 67 km Mould Bay P 08 59 55 Penticton eP 09 00 38
	DECEMBER 29 U.S.C.G.S. 52.3N, 177.7E Rat Islands H = 00 39 24.1 h = 52 km Mag 6 3/4 Alberni eP 00 46 24 Alert, N.W.T. iP 00 47 15 d Banff eP 00 47 03 c Halifax iP 00 50 37.5 d Mould Bay P? 00 46 55	

SEISMOLOGICAL BULLETIN - 1961

Shawinigan Falls eP 09 03 51	DECEMBER 30 Mould Bay P 10 54 36 Resolute eP 10 55 15?	Mould Bay P 16 48 35 Penticton eP 16 49 17 Resolute eP 16 49 27 S? 16 55 37 L 16 58 26 i 17 02 41 Shawinigan Falls eP 16 52 29
DECEMBER 30 U.S.C.G.S. 22.9S, 175.2W Tonga Islands H = 08 59 31.7 h = 41 km Penticton iP 09 12 17	DECEMBER 30 Mould Bay iP 11 46 02 c Penticton eP 11 46 09 Resolute eP 11 46 52 i 11 49 45 Shawinigan Falls eP 11 49 45	DECEMBER 30 U.S.C.G.S. 8.7N, 126.3E Near coast of Mindanao, Philippine Islands H = 18 18 32.6 h = 119 km Mould Bay P 18 31 13 Resolute eP 18 31 40
DECEMBER 30 U.S.C.G.S. 52.3N, 179.7E Rat Islands H = 09 17 21.1 h = 57 km Mould Bay P 09 23 55 Penticton eP 09 24 36 Shawinigan Falls eP 09 27 50	DECEMBER 30 Mould Bay P 12 25 01 Local ?	DECEMBER 30 Mould Bay iP 15 26 19 c Penticton eP 15 26 09
DECEMBER 30 U.S.C.G.S. 52.0N, 178.2E Rat Islands H = 10 14 37.2 h = 62 km Alert, N.W.T. P 10 22 29 Mould Bay P 10 21 17 Penticton eP 10 21 58 Resolute eP? 10 22 13 e 10 31 14	DECEMBER 30 Mould Bay P 15 35 21 Penticton eP 15 35 57	DECEMBER 30 Mould Bay P 22 27 31 Local ?
	DECEMBER 30 U.S.C.G.S. 51.7N, 178.5E Rat Islands H = 16 41 51.5 h = 63 km Alert, N.W.T. P 16 49 45	DECEMBER 30 U.S.C.G.S. 16.5N, 46.6W North Atlantic Ocean H = 23 20 16.9 h = 32 km Banff eP 23 30 51 Mould Bay P 23 31 29 Penticton iP 23 31 08 c

## DOMINION OBSERVATORIES

Resolute e 23 30 51 ?	DECEMBER 31 U. S. C. G. S. 44.4N, 100.5W South Dakota, U. S. A. H = 16 35 58.7 h = 16 km
DECEMBER 31 Penticton eP 06 46 47	Banff eP 16 38 54 Penticton eP 16 39 18
DECEMBER 31 Penticton eP 08 26 03	Victoria eP 16 39 51
DECEMBER 31 Penticton eP 13 17 18 Victoria eP 13 17 19.3	DECEMBER 31 Resolute eP? 16 48 (07) i 16 50 49 i 16 51 38
DECEMBER 31 Penticton eP 13 53 57	DECEMBER 31 Mould Bay P 16 52 21
DECEMBER 31 U. S. C. G. S. 1.6N, 127.3E Halmahera H = 13 46 01.8 h = 140 km Mould Bay iP 13 59 04 c Penticton eP' 14 03 25 Resolute eP 13 59 31 c	DECEMBER 31 U. S. C. G. S. 51.8N, 171.2W Fox Islands H = 17 48 27.8 h = 47 km Mould Bay P 17 54 49 Resolute eP 17 55 39 e 18 14 11
DECEMBER 31 Mould Bay P 16 01 27 Penticton eP 16 02 10 Resolute eP 16 02 20 S? 16 08 30 G 16 11 24	DECEMBER 31 U. S. C. G. S. 18.2N, 105.8W Off coast of Mexico H = 18 04 25.4 h = 32 km Mould Bay P 18 14 22 Shawinigan Falls eP 18 11 59

## SEISMOLOGICAL BULLETIN - 1961

## EARTHQUAKES IN THE CANADIAN ARCTIC

The following disturbances were recorded during the last quarter of 1961. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

OCTOBER 4 at 04 33 42 U. T. Magnitude 3.1. Originated 44 km from Resolute, N. W. T., at a depth of about 20 km.

OCTOBER 5 at 06 33 40 U. T. Magnitude 2.1. Originated 66 km from Resolute, N. W. T.

OCTOBER 11 at 19 47 17 ? U. T. Magnitude 3.1. Originated 123 km from Resolute, N. W. T.

OCTOBER 11 at 23 58 46 U. T. Magnitude 2.3. Originated 123 km from Resolute, N. W. T. Possibly an aftershock of the preceding earthquake.

OCTOBER 14 at 18 18 20 U. T. Magnitude 4.8. Originated 1200 km from Resolute, N. W. T.

OCTOBER 16 at 17 54 12 U. T. Magnitude 4.0. Originated 740 km from Resolute, N. W. T.

OCTOBER 31 at 18 18 09 U. T. Magnitude 1.6. Originated 221 km from Resolute, N. W. T.

NOVEMBER 1 at approximately 21 hrs. U. T. Magnitude 2.4. Originated 230 km from Alert, N. W. T.

NOVEMBER 3 at 00 27 07 U. T. Magnitude 2.4. Originated 230 km from Alert, N. W. T.

NOVEMBER 4 at 10 44 21 U. T. Magnitude 1.3. Originated 82 km from Resolute, N. W. T.

NOVEMBER 9 at 16 34 19 U. T. Magnitude 2.4. Originated 92 km from Resolute, N. W. T.

NOVEMBER 10 at 05 32 24 U. T. Magnitude 3.4. Originated 450 km from Resolute, N. W. T.

NOVEMBER 10 at 19 23 34 U. T. Magnitude 3.9. Originated 382 km from Resolute, N. W. T., at a depth of about 27 km.

NOVEMBER 10 at 22 43 29 U. T. Magnitude 5.5. Epicentre  $62.5^{\circ}\text{N} \pm 1.0^{\circ}$ ,  $124.4^{\circ}\text{W} \pm 1.5^{\circ}$ . About 110 miles W. N. W. of Fort Simpson, Mackenzie, N. W. T.



DOMINION OBSERVATORIES

NOVEMBER 11 at 02 11 50 U. T. Magnitude 3.9. Originated 382 km from Resolute, N. W. T., at a depth of about 27 km. Believed to be an aftershock of the earthquake on November 10 at 19 23 34 U. T.

NOVEMBER 22 at 19 56 21 U. T. Magnitude 4.0. Epicentre 80.0°N ± 0.4°, 111.7°W ± 1.5°. Queen Elizabeth Islands region about 100 miles north of Borden Island, N. W. T.

NOVEMBER 26 at 19 07 38 U. T. Magnitude 2.0. Originated 275 km from Resolute, N. W. T.

NOVEMBER 30 at 08 41 08 U. T. Magnitude 2.0. Originated 62 km from Resolute, N. W. T.

DECEMBER 6 Mould Bay iP 09 41 47 c appears local.

DECEMBER 8 Mould Bay iP 11 20 42 Local?

DECEMBER 9 Mould Bay P 04 42 13 Local?

DECEMBER 10 Mould Bay P 04 06 03 Local?

DECEMBER 10 Mould Bay P 06 41 53 Local?

DECEMBER 11 Mould Bay P 09 34 46 Local?

DECEMBER 11 Mould Bay iP 19 20 18 Local?

DECEMBER 12 Mould Bay iP 10 34 52 Local?

DECEMBER 12 Mould Bay iP 14 18 15 Local?

DECEMBER 15 Mould Bay P 18 20 29 Local?

DECEMBER 16 Mould Bay P 02 22 14 Local?

DECEMBER 16 Mould Bay P 04 21 55 Local?

DECEMBER 16 Mould Bay P 08 38 28 Local?

DECEMBER 16 Mould Bay P 14 32 10 Local?

DECEMBER 16 Mould Bay P 17 12 27 Local?

DECEMBER 17 Mould Bay P 00 36 46 Local?

DECEMBER 17 at 09 24 42.5 U. T. Magnitude 2.4. Originated 216 km from Resolute, N. W. T.



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DECEMBER 17 Mould Bay P 14 42 28 Local?

DECEMBER 18 Mould Bay P 15 52 12 Local?

DECEMBER 18 Mould Bay P 20 39 30 Local?

DECEMBER 19 at 06 19 42 U. T. Magnitude 2.5. Originated 144 km from Resolute, N. W. T.

DECEMBER 21 at 20 03 38.1 U. T. Magnitude 1.5. Originated 180 km from Resolute, N. W. T.

DECEMBER 22 Mould Bay P 01 10 25 Local?

DECEMBER 22 at 22 55 46 U. T. Magnitude 2.7. Originated 127 km from Resolute, N. W. T.

DECEMBER 25 Mould Bay P 17 12 21 Local ?

DECEMBER 25 at 19 58 29 U. T. Magnitude 5.1. Epicentre 63.0°N ± 1°, 92.0°W ± 1.5°. About 50 miles WSW of Chesterfield Inlet, N. W. T.

DECEMBER 26 at 05 21 26 U. T. Magnitude 3.0. Originated 420 km from Resolute, N. W. T.

DECEMBER 26 at 14 54 09 U. T. Magnitude 4.5. Originated 1300 km from Resolute, N. W. T.

DECEMBER 29 Mould Bay P 03 11 11 Local?

DECEMBER 29 Mould Bay P 22 43 59 Local?

DECEMBER 30 Mould Bay P 12 25 01 Local?

DECEMBER 31 at 20 11 15 U. T. Magnitude 3.5. Originated 675 km from Resolute, N. W. T.

DOMINION OBSERVATORIES

EARTHQUAKES IN EASTERN CANADA  
AND ADJACENT AREAS

The following disturbances were recorded during the last quarter of 1961. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

OCTOBER 7 at 22 36 51 U. T. Magnitude 3.8. Epicentre  $48^{\circ}40'N \pm 12'$ ,  $76^{\circ}35'W \pm 12'$ . Depth about 8 km. About 40 miles ENE of Senneterre, Que.

OCTOBER 31 at 23 50 U. T. Magnitude less than 1.7.  $46^{\circ}06'N$ ,  $64^{\circ}47'W$  (Moncton, N. B.). This shock was felt by quite a number of people in Moncton, N. B. It was not recorded at Halifax 200 km distant, from which it is inferred that the magnitude was below 1.7. However radio station CKCW at Moncton was reported to have received hundreds of calls.

NOVEMBER 1 at 03 41 21 U. T. Magnitude 2.9.  $46^{\circ}55'N \pm 15'$ ,  $79^{\circ}15'W \pm 15'$ . Near Tee Lake, 17 miles NW of Timiskaming, Ont. Felt in the epicentral area. Mr. Wm. Irwin mayor of Timiskaming, forwarded felt reports from the area. These were greatly appreciated as they made it possible to determine the epicentre which was close to that of the large earthquake in the same region November 1, 1935.

DECEMBER 14 at 01 49 35 U. T. Magnitude 3.9. Epicentre  $43^{\circ}50'N \pm 18'$ ,  $67^{\circ}49'W \pm 18'$ . Depth about 25 km. In the Atlantic Ocean about 40 miles off the New England coast and 85 miles due west of Yarmouth, N. S.

SEISMOLOGICAL BULLETIN - 1961

EARTHQUAKES IN WESTERN CANADA  
AND ADJACENT AREAS

The following disturbances were recorded during the fourth quarter of 1961. 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 Hungry Horse, in Montana, U. S. A., and Seattle, Wash., U. S. A., were used to compute epicentres. The quality (Q) of the epicentre is indicated by a letter from "a" meaning an excellent fit of the observed data to "d" meaning a very poor solution.

OCTOBER 1 at 11 39 39. Magnitude 2. 87 km from Penticton.

OCTOBER 2 at 12 52 26. Magnitude 2.0. Epicentre at  $49.7^{\circ}N$ ,  $118.6^{\circ}W$ , between Okanagan Lake and Lower Arrow Lake.

OCTOBER 2 at 23 31 27. Magnitude less than 2. 151 km from Penticton.

OCTOBER 3 at 17 34 05.5. Magnitude 2.1. 252 km from Penticton.

OCTOBER 3 at 21 49 28. Magnitude 1.6. 68 km from Penticton.

OCTOBER 4 at 19 42 37. Magnitude 1.9. 147 km from Penticton.

OCTOBER 4 at 23 43 42. Magnitude 2.0. 236 km from Penticton.

OCTOBER 5 at 01 10 30. Magnitude 2.6. 288 km from Penticton.

OCTOBER 8 at 00 01 27. Magnitude 1.9. 152 km from Penticton.

OCTOBER 9 at 23 52 49. Magnitude 1.9. 205 km from Penticton.

OCTOBER 11 at 22 20 55. Magnitude 2.3. 326 km from Penticton.

OCTOBER 12 at 19 27 43. Magnitude 1.9. 160 km from Penticton.

OCTOBER 12 at 23 50 54. Magnitude 2.2. 167 km from Penticton.

OCTOBER 13 at 16 33 37. Magnitude 2.1. 184 km from Penticton.

OCTOBER 13 at 21 24 57. Magnitude 1.6. 167 km from Penticton.

OCTOBER 14 at 19 57 45. Magnitude 1.5. 139 km from Penticton.

OCTOBER 15 at 04 53 13. Magnitude 2.7. Epicentre at  $47^{\circ}12'N$ ,  $123^{\circ}14'W$ , which is west of Puget Sound near Sheldon, Wash.

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- OCTOBER 16 at 12 34 46. Magnitude 2.5. 92 km from Victoria.
- OCTOBER 17 at 19 38 50. Magnitude 1.8. 165 km from Penticton.
- OCTOBER 18 at 13 45 59. Magnitude 2.2. Mount Baker area.
- OCTOBER 18 at 21 32 57. Magnitude 2.0. 152 km from Penticton.
- OCTOBER 18 at 21 47 23. Magnitude 2.2. 159 km from Penticton.
- OCTOBER 18 at 23 56 59. Magnitude 1.9. 171 km from Penticton.
- OCTOBER 19 at 19 03 46. Magnitude 1.7. 159 km from Penticton.
- OCTOBER 19 at 19 34 43. Magnitude 2.0. 140 km from Penticton.
- OCTOBER 19 at 20 37 50. Magnitude 3.0. Epicentre at 47.5°N, 122.9°W, in the Olympic Mountains, southwest of Seattle, Wash, U.S.A. Felt.
- OCTOBER 20 at 23 53 51. Magnitude 1.9. 165 km from Penticton.
- OCTOBER 22 at 10 36 58. Magnitude 2.1. 77 km from Victoria, and 230 km from Penticton.
- OCTOBER 25 at 20 12 16. Magnitude 1.4. 80 km from Penticton.
- OCTOBER 27 at 00 55 20. Magnitude 2.0. 150 km from Penticton.
- OCTOBER 27 at 19 52 11. Magnitude 1.4. 68 km from Penticton.
- OCTOBER 27 at 19 55 03. Magnitude 2.2. 147 km from Penticton.
- OCTOBER 27 at 23 37 46. Magnitude 2.0. 195 km from Penticton.
- OCTOBER 28 at 00 14 34. Magnitude 2.1. 198 km from Penticton.
- OCTOBER 28 at 00 17 37. Magnitude 1.8. 193 km from Penticton.
- OCTOBER 28 at 22 37 18. Magnitude 1.6. 123 km from Penticton.
- OCTOBER 29 at 09 12 15.7. Magnitude 4.8. Epicentre at 49.0°N, 128.7°W, west of Vancouver Island.
- OCTOBER 29 at 11 10 22? Aftershock of previous.
- OCTOBER 29 at 11 17 00 Aftershock of previous.

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- OCTOBER 29 at 14 00 12.0. Magnitude 3.2. Epicentre at 49.4°N, 127.6°W, west of Vancouver Island.
- OCTOBER 29 at 14 47 18.3. Magnitude 3.8. Epicentre at 48.7°N, 128.3°W, west of Vancouver Island.

The following are considered to be aftershocks of the previous series of earthquakes:

- OCTOBER 29 at 18 28; 19 29.
- OCTOBER 30 at 01 45; 02 17.
- OCTOBER 31 at 03 34 30.3. Magnitude 3.0. 111 km from Penticton.
- OCTOBER 31 at 23 24 44. Magnitude 2.2. 146 km from Penticton.
- NOVEMBER 1 at 21 24 36. Magnitude 2.3. 254 km from Penticton.
- NOVEMBER 1 at 22 15 25. Magnitude 1.7. 102 km from Penticton.
- NOVEMBER 2 at 20 55 41. Magnitude 1.9. 148 km from Penticton.
- NOVEMBER 2 at 22 42 59. Magnitude 1.6. 147 km from Penticton.
- NOVEMBER 4 at 23 22 48. Magnitude 2.4. 206 km from Penticton.
- NOVEMBER 5 at 07 52 22. Magnitude 1.8. 52 km from Victoria.
- NOVEMBER 6 at 19 49 04. Magnitude 2.3. 150 km from Penticton.
- NOVEMBER 6 at 22 21 27. Magnitude 1.7. 33 km from Banff.
- NOVEMBER 8 at 00 38 07. Magnitude 2.0. 156 km from Penticton.
- NOVEMBER 8 at 19 05 12. Magnitude 1.6. 82 km from Penticton.
- NOVEMBER 8 at 20 58 35. Magnitude 2.5. 216 km from Penticton.
- NOVEMBER 9 at 18 22 17. Magnitude 2.2. 156 km from Penticton.
- NOVEMBER 9 at 22 28 50. Magnitude 2.1. 162 km from Penticton.
- NOVEMBER 10 at 22 32 45. Magnitude 2.5. 194 km from Penticton.
- NOVEMBER 11 at 01 59 04. Magnitude 1.7. 64 km from Penticton.
- NOVEMBER 11 at 15 22 28. Magnitude 2.3. 199 km from Penticton.

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- NOVEMBER 12 at 17 51 10. Magnitude 2.1. Epicentre on southern Vancouver Island.
- NOVEMBER 13 at 23 53 21. Magnitude 2.5. 189 km from Penticton.
- NOVEMBER 14 at 21 31 02. Magnitude 2.0. 173 km from Penticton.
- NOVEMBER 14 at 23 05 54. Magnitude 2.4. 162 km from Penticton.
- NOVEMBER 14 at 23 17 12. Magnitude 2.5. 290 km from Penticton.
- NOVEMBER 14 at 23 25 31. Magnitude 1.8. 157 km from Penticton.
- NOVEMBER 15 at 06 47 09. Magnitude 2.2. 47.9°N, 123.2°W. Epicentre in Olympic Mountains, Wash., U.S.A.
- NOVEMBER 15 at 17 27 07. Magnitude 2.2. Epicentre at 48°52'N, 121°53'W, in the Mount Baker area, Wash., U.S.A.
- NOVEMBER 16 at 22 53 17. Magnitude 1.5. 100 km from Penticton.
- NOVEMBER 18 at 23 11 27. Magnitude 2.5. Epicentre is probably southwest of Victoria.
- NOVEMBER 20 at 19 45 10. Magnitude 2.0. 160 km from Penticton.
- NOVEMBER 21 at 01 49 13. Magnitude 2.1. 53 km from Alberni.
- NOVEMBER 21 at 21 25 30. Magnitude 2.5. 275 km from Penticton.
- NOVEMBER 22 at 16 40 12. Magnitude 2.1. 147 km from Penticton.
- NOVEMBER 23 at 19 53 29. Magnitude 2.2. 161 km from Penticton.
- NOVEMBER 24 at 00 57 20. Magnitude 2.5. 98 km from Alberni.
- NOVEMBER 26 at 00 01 33. Magnitude 2.2. Epicentre is probably under northern Strait of Georgia.
- NOVEMBER 27 at 04 00 57. Magnitude 2.2. 72 km from Alberni.
- NOVEMBER 27 at 19 48 39. Magnitude 2.0. 149 km from Penticton.
- NOVEMBER 28 at 03 07 56. Magnitude 2.5. Epicentre at 47.1°N, 122.5°W, in the Puget Sound basin, Wash., U.S.A.
- NOVEMBER 28 at 05 19 20. Magnitude 1.9. 265 km from Victoria.

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- NOVEMBER 28 at 20 42 00. Magnitude 1.9. 52 km from Alberni.
- NOVEMBER 28 at 23 24 28. Magnitude 1.7. 62 km from Alberni.
- NOVEMBER 28 at 23 45 05. Magnitude 1.6. 56 km from Alberni.
- NOVEMBER 30 at 08 12 50. Magnitude 3.1. Epicentre at 47.2°N, 122.1°W, east of Seattle, Wash., U.S.A.
- DECEMBER 1 at 19 59 20. Magnitude 1.9. 164 km from Penticton.
- DECEMBER 2 at 00 18 39. Magnitude 2.4. 177 km from Penticton.
- DECEMBER 5 at 00 52 31. Magnitude 2.0. 54 km from Alberni.
- DECEMBER 5 at 03 13 49. Magnitude 2.9. 307 km from Penticton.
- DECEMBER 5 at 22 55 48. Magnitude 1.4. 38 km from Penticton.
- DECEMBER 5 at 23 11 48. Magnitude 1.7. 67 km from Penticton.
- DECEMBER 6 at 07 45 22. Magnitude 2.1. Epicentre at 47.1°N, 121.7°W, east of Seattle, Wash., U.S.A.
- DECEMBER 6 at 22 52 28. Magnitude 2.2. 162 km from Penticton.
- DECEMBER 11 at 20 36 09. Magnitude 1.9. 176 km from Penticton.
- DECEMBER 14 at 20 45 49. Magnitude 2.0. Epicentre at 48.9°N, 125.4°W, in Barkley Sound.
- DECEMBER 16 at 17 24 29. Magnitude 2.0. 196 km from Penticton.
- DECEMBER 16 at 18 25 08. Magnitude 2.0. 189 km from Penticton.
- DECEMBER 16 at 23 38 07. Magnitude 1.8. 156 km from Penticton.
- DECEMBER 18 at 07 15 58. Magnitude 3.0. Epicentre at 48.7°N, 128.0°W, west of Vancouver Island.
- DECEMBER 18 at 22 08 36. Magnitude 2.7. Epicentre at 48°50'N, 122°48'W, northwest of Bellingham, Wash., U.S.A.
- DECEMBER 19 at 04 01 38. Magnitude 1.8. 195 km from Penticton.
- DECEMBER 22 at 22 45 38. Magnitude 1.7. 162 km from Penticton.
- DECEMBER 25 at 12 27 44. Magnitude 2.2. Epicentre at 48.0°N, 122.4°W, near Whidbey Island, Wash., U.S.A.

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