SEISMOLOGICAL SERIES

of the

DOMINION OBSERVATORY

Seismological Bulletin
July - September
1960

Seismological Service
of Canada

OTTAWA, CANADA

Department of Mines and Technical Surveys

DOMINION OBSERVATORIES

1961

SEISMOLOGICAL BULLETIN - 1960

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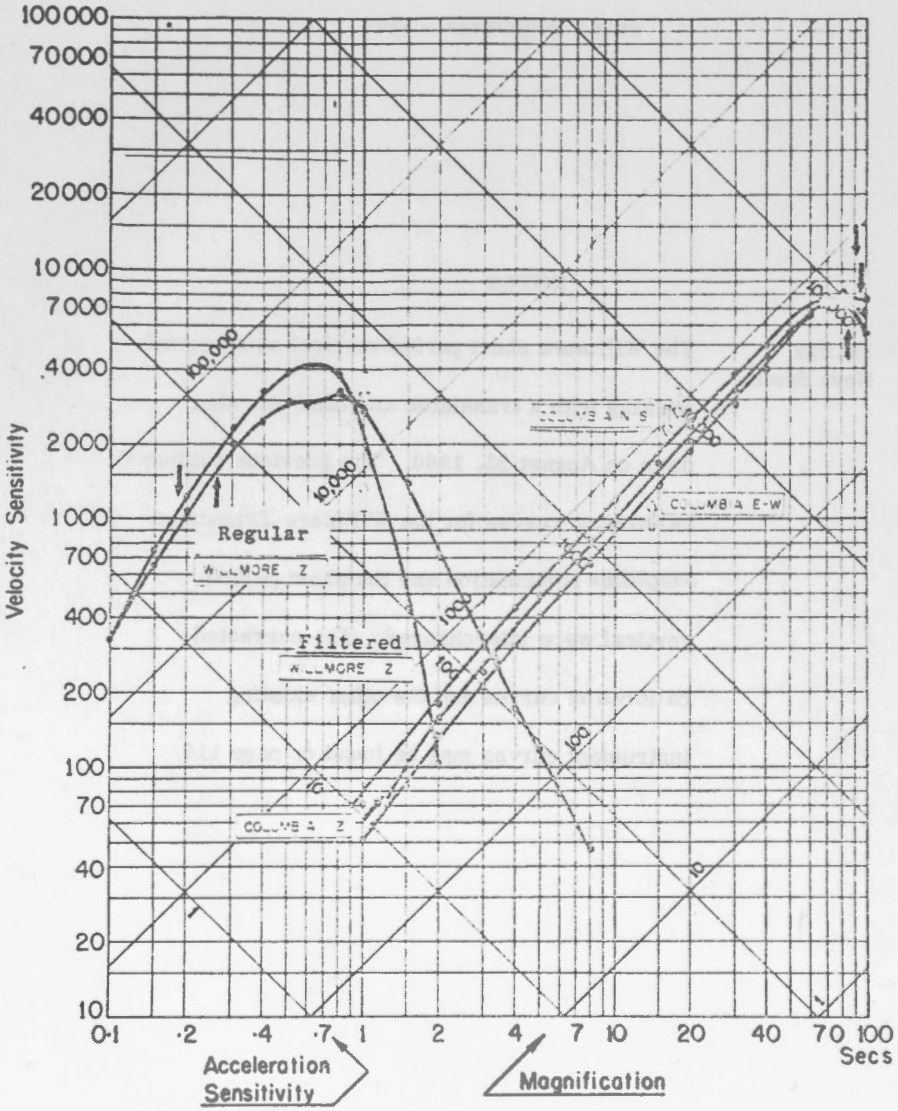
NOTES

Halifax
Nova Scotia

The Willmore short period vertical seismograph working with a transistor amplifer was shut down on August 25, 1960. The previous published calibration curves for the Willmore Transistor Amplifier combination and the short period vertical were interchanged. The corrected calibration curves and the other existing instrument curves may be found on page 110.

CALIBRATION CURVES

STATION: HALIFAX



ϕ = 44°38'N λ = 68°36'W Altitude 56 M

Foundation : Carbonaceous slate

T_s ⇕ T_g ↑

Date of Calibration: June 1960

Columbia LP-EW June 10/60
Columbia LP-NS June 10/60
Columbia LP Z June 17/60

Regular Willmore SPZ - June 3/60
Filtered Willmore SPZ - June 6/60

JULY 1
Resolute
P 05 05 17

JULY 1
U.S.C.G.S.
56N, 165E
Komandorskie Islands
H = 07 58 58
Ottawa
eP 08 09 58
Resolute
P 08 06 29
S 08 12 28
Seven Falls
eP 08 10 00 c
Shawinigan Falls
eP 08 10 00
Victoria
eP 08 06 54

JULY 1
Resolute
P 12 33 17 d

JULY 1
U.S.C.G.S.
11 1/2N, 142 1/2E
Mariana Islands
H = 17 40 38
h = 60 km
Resolute
P 17 53 21

JULY 2
U.S.C.G.S.
51 1/2N, 173 1/2W
Andreanof Islands
H = 04 29 30
Halifax
eP 04 40 23
Ottawa
eP 04 39 40
Resolute
P 04 36 58
Seven Falls
eP 04 39 48
Shawinigan Falls
eP 04 39 45 d

JULY 2
U.S.C.G.S.
56S, 27W
Sandwich Islands
H = 11 55 41
Halifax
P' 12 14 11
Ottawa
eP' 12 14 41
Resolute
P' 12 14 52
i 12 17 51
Seven Falls
eP' 12 14 41
Shawinigan Falls
eP' 12 14 42 d
Victoria
eSKP 12 18 06

JULY 2
U.S.C.G.S.
41N, 131 1/2E
Sea of Japan
H = 12 44 21
h = 550 km
Alberni
eP 12 54 28
Resolute
eP 12 53 40 c
Victoria
eP 12 54 31

JULY 3
U.S.C.G.S.
52N, 174W
Andreanof Islands
H = 03 19 19
Halifax
P 03 30 11
Ottawa
eP 03 29 29
Shawinigan Falls
eP 03 29 33

JULY 3
U.S.C.G.S.
52N, 173W
Andreanof Islands
H = 05 16 08
Shawinigan Falls
eP 05 26 22

JULY 3
U.S.C.G.S.
52N, 173 1/2W
Andreanof Islands
H = 07 16 14
Halifax
P 07 27 06.5
Ottawa
eP 07 26 25
Shawinigan Falls
eP 07 26 29 d

JULY 3
48.7N, 123.2W
North San Juan Island
H = 11 02 31.5
Alberni
iP 11 02 55.7
iS 11 03 12.7
Victoria
iP 11 02 34.0
iS 11 02 37.3

JULY 3
Alberni
iP 19 51 54

JULY 3
U.S.C.G.S.
50 1/2N, 177W
Andreanof Islands
H = 20 20 46
Banff
iP 20 28 20 d

DOMINION OBSERVATORIES

Halifax
iP 20 31 55.5
Ottawa
iP 20 31 15 d
Seven Falls
eP 20 31 21 d
Shawinigan Falls
iP 20 31 19 d

JULY 3
Ottawa
eP 21 00 15
Seven Falls
eP 21 00 10
Shawinigan Falls
eP 21 00 14

JULY 3
U.S.C.G.S.
50 1/2N, 177W
Andreanof Islands
H = 22 52 24
Resolute
P 23 00 04

JULY 3
Banff
iP 23 30 00 c

JULY 3
Resolute
P 23 57 32

JULY 4
Resolute
eP 04 19 56 c

JULY 4
U.S.C.G.S.
52N, 131 1/2W
Queen Charlotte Islands
H = 04 28 33
Mag 6 1/2
Alberni
iP 04 29 46.6
Halifax
P 04 36 46
Ottawa
eP 04 35 42
Resolute
P 04 34 19
iS 04 39 00
Seven Falls
eP 04 35 58
Shawinigan Falls
eP 04 35 54
Victoria
iP 04 30 02.6

JULY 4
Resolute
P 07 46 45

JULY 4
52N, 131W
Queen Charlotte Islands
H = 08 11 50.4
Alberni
iP 08 12 47.9
Victoria
eP 08 13 21

JULY 4
U.S.C.G.S.
8S, 71W
Western Brazil
H = 08 02 07
Resolute
P 08 13 39

JULY 4
U.S.C.G.S.
52N, 131W
Queen Charlotte Islands
H = 08 51 20
Alberni
iP 08 52 29.2
Banff
iP 08 54 00
eS 08 56 30
Resolute
P 08 57 05
S 09 01 48
Victoria
eP 08 52 52
eS 08 54 26

JULY 4
Ottawa
eP 09 10 23

JULY 4
U.S.C.G.S.
52N, 130 1/2W
Queen Charlotte Islands
H = 11 13 17
h = 600 km
Victoria
eP 11 15 04
eS 11 16 31

JULY 4
52N, 131W
Queen Charlotte Islands
H = 12 51 47
Alberni
iP 12 52 58.7
Banff
eP 12 54 30
eS 12 57 10
Victoria
eP 12 53 20
eS 12 54 46

JULY 4
U.S.C.G.S.
52N, 171W
Queen Charlotte Islands
H = 13 10 05
Mag 6
Alberni
iP 13 11 17.2
Banff
iP 13 12 50
eS 13 15 30 d
Resolute
P 13 15 53
S 13 20 32
Seven Falls
eP 13 17 30
Shawinigan Falls
eP 13 17 25
Victoria
eP 13 11 37
eS 13 13 03

JULY 4
Victoria
eP 18 15 07

JULY 4
52N, 132W
Queen Charlotte Islands
H = 18 21 53.4
Alberni
eP 18 23 13
eS 18 24 25
Penticton
eP 18 23 51
eS 18 25 36
Victoria
eP 18 23 27
e- 18 24 40
eS 18 24 55

JULY 4
Ottawa
eP 21 42 13
Shawinigan Falls
eP 21 42 20

JULY 5
Resolute
P 01 42 10

JULY 5
U.S.C.G.S.
51 1/2N, 178 1/2W
Andreanof Islands
H = 05 07 59
Penticton
iP 05 15 06 d
Resolute
P 05 15 29
i 05 17 36
Shawinigan Falls
eP 05 18 29
Victoria
eP 05 14 52 c ?

JULY 5
Resolute
eP 05 21 21 c

JULY 5
U.S.C.G.S.
39S, 73 1/2W
Near coast of Chile
H = 05 45 26
Shawinigan Falls
eP 05 58 03

JULY 5
Resolute
P 17 18 20

JULY 5
Victoria
iP 18 37 05

JULY 5
U.S.C.G.S.
8S, 71 1/2W
Western Brazil
H = 21 15 09
h = 600 km
Halifax
iP 21 23 35 (c)
Ottawa
eP 21 23 38 c
Resolute
P 21 26 42
Seven Falls
eP 21 23 49

JULY 6
U.S.C.G.S.
36 1/2N, 70 1/2E
Hindu Kush region
H = 05 16 44
h = 200 km
Ottawa
eP 05 29 39
Penticton
iP 05 29 44 d
Resolute
iP 05 27 30 c
i 05 28 40
S 05 36 16
Victoria
eP 05 29 46

JULY 6
San Juan Island or
Race Rocks area
H = 07 03 51.2
Victoria
iP 07 03 56.4
iS 07 04 00.4
D = 32 km

DOMINION OBSERVATORIES

JULY 7
Shawinigan Falls
eP 16 00 05

JULY 7
Halifax
P 17 50 14
Ottawa
iP 17 50 15 d
Shawinigan Falls
eP 17 50 21

JULY 7
San Juan Island area ?
Race Rocks area ?
H = 20 59 10
Victoria
iP 20 59 19.2 c
iS 20 59 22.4
D = 26 km

JULY 7
U.S.C.G.S.
39S, 73W
Near coast of Chile
H = 21 40 57
Ottawa
iP 21 53 31
Seven Falls
eP 21 53 41
Shawinigan Falls
eP 21 53 35

JULY 7
Victoria
iP 23 35 34 c

JULY 8
U.S.C.G.S.
52N, 174 1/2W
Andreanof Islands
H = 10 09 11
Ottawa
iP 10 19 24 c
Resolute
P 10 16 32
Shawinigan Falls
eP 10 19 27 c

JULY 8
U.S.C.G.S.
31N, 130 1/2E
Near south coast of
Kyushu, Japan
H = 12 51 21
Resolute
iP 13 02 36 c
Victoria
iP 13 03 17 c

JULY 8
Resolute
P 13 44 34

JULY 8
U.S.C.G.S.
7S, 129E
Banda Sea
H = 14 44 40
Resolute
P 14 59 04

JULY 8
Resolute
P 16 58 56

JULY 9
U.S.C.G.S.
25 1/2N, 125 1/2E
Ryukyu Islands
H = 00 42 29
Resolute
P 00 54 21

JULY 9
Resolute
P 02 18 21
Shawinigan Falls
eP 02 15 35

JULY 9
46°18'N, 73°02'W
About 18 miles east
of St. Gabriel, Que.
H = 07 39 59.1
Mag 2.6
Montreal
P_1 07 40 14.8
S_1 07 40 27.0
D = 100 km
Ottawa
P_1 07 40 36.5
S_1 07 41 04.8
D = 232 km
Seven Falls
P_1 07 40 28.1
S_1 07 40 51.6
D = 193 km
Shawinigan Falls
P_1 07 40 07.0
S_1 07 40 11.3
D = 35.3 km

JULY 9
Resolute
P 08 23 15

JULY 9
Resolute
P 18 06 55

JULY 9
Canadian Arctic
H = 19 23 08.6
Mag 2.2
Resolute
iP_1 19 23 27
i 19 23 32.5
iS_1 19 23 41
D = 115 km

JULY 9
41N, 21E
Southern Yugoslavia
H = 22 42 50
Resolute
P 22 52 40

JULY 9
Resolute
P 23 33 00

JULY 10
U.S.C.G.S.
0. 93E
Off west coast of
Sumatra
H = 00 05 18
Resolute
P 00 19 28
i 00 30 04
Seven Falls
eP' 00 24 36
Shawinigan Falls
eP' 00 24 40

JULY 10
U.S.C.G.S.
12 1/2N, 86W
Near coast of
Nicaragua
H = 13 39 55
h = 150 km
Ottawa
eP 13 46 33
Resolute
P 13 50 06
S 13 58 24
Seven Falls
eP 13 46 57
Shawinigan Falls
eP 13 46 49 c

JULY 10
Resolute
P 14 00 13

JULY 10
Resolute
P 20 00 10

JULY 10
U.S.C.G.S.
53 1/2S, 134E
South of Australia
H = 20 22 51
Resolute
P' 20 42 55

JULY 10
San Juan Island area ?
Race Rocks area ?
H = 23 27 44.0
Victoria
eP 23 27 48.3 d ?
eS 23 27 51.6
D = 27 km

JULY 11
H = 01 31 34.8
Victoria
iP 01 31 48.0
iS 01 31 58.1
D = 83 km

JULY 11
U.S.C.G.S.
38S, 75W
Off coast of Chile
H = 06 58 28
Ottawa
iP 07 10 57 c
Seven Falls
eP 07 11 06
Shawinigan Falls
eP 07 11 03

JULY 11
U.S.C.G.S.
54S, 140 1/2E
South of Australia
H = 07 33 32
Resolute
P' 07 53 25

JULY 11
U.S.C.G.S.
51 1/2N, 173W
Andreanof Islands
H = 11 54 16
Halifax
P 12 05 10
Ottawa
iP 12 04 29 d
Seven Falls
eP 12 04 36 d
Shawinigan Falls
eP 12 04 33 d

JULY 11
U.S.C.G.S.
16S, 172W
Tonga Islands region
H = 11 55 10
Mag 6 1/4
Banff
iP 12 07 54
Resolute
P 12 09 06
Victoria
iP 12 07 09 d

JULY 11
Penticton
eP 19 45 12

JULY 11
H = 21 59 43
Penticton
P_1 22 00 08.4
S_1 22 00 27.7
D = 158 km

DOMINION OBSERVATORIES

JULY 12
H = 05 24 03.6
Penticton
iP 05 24 17.5 c
eS 05 24 28.1
D = 87 km

JULY 12
48.4N, 125.0W
Off west coast
H = 13 22 11.4
Alberni
iP 13 22 27.6
Penticton
ePP(?) 13 22 57.6
Victoria
iP 13 22 30.7
iS 13 22 45.4

JULY 12
U.S.C.G.S.
41N, 142E
Off coast of northern
Honshu, Japan
H = 17 00 25
Resolute
eP 17 10 25 c

JULY 12
Resolute
P 18 09 18

JULY 13
U.S.C.G.S.
42 1/2N, 143E
Near south coast of
Hokkaido, Japan
H = 02 30 18
Banff
iP 02 41 14 d
Resolute
iP 02 40 05 c

JULY 13
Banff
iP 07 29 56
Penticton
eP 07 29 24

JULY 13
U.S.C.G.S.
53 1/2S, 1 1/2E
Bouvet Island region
H = 07 55 54
Penticton
eP' 08 15 04
e 08 15 34
Resolute
P' 08 15 34
i 08 27 40
Victoria
eP' 08 15 44

JULY 13
U.S.C.G.S.
Greece
H = 10 20 25
Resolute
P 10 30 26
Shawinigan Falls
eP 10 31 18

JULY 13
U.S.C.G.S.
41N, 23 1/2E
Greece
H = 13 01 00
Halifax
iP 13 11 18 c
Ottawa
eP 13 12 04
Resolute
P 13 10 56
Seven Falls
eP 13 11 39
Shawinigan Falls
eP 13 11 48

JULY 13
U.S.C.G.S.
17N, 94 1/2W
Oaxaca, Mexico
H = 16 23 56
h = 150 km
Banff
eP 16 31 20
iS 16 31 48
Halifax
P 16 31 35.5
Ottawa
iP 16 30 15 c
Penticton
eP 16 30 59
i 16 31 33
Resolute
P 16 33 36
i 16 34 05
S 16 41 22
Seven Falls
eP 16 31 15
Shawinigan Falls
eP 16 30 34
Victoria
eP 16 31 12

JULY 13
Shawinigan Falls
eP 21 01 35

JULY 13
U.S.C.G.S.
9 1/2S, 75W
Central Peru
H = 21 45 09
h = 150 km
Shawinigan Falls
eP 21 54 32
iP_cP 21 55 07

JULY 14
U.S.C.G.S.
5N, 127 1/2E
Molucca Passage
H = 10 26 58
Halifax
P' 10 46 12
Ottawa
iP' 10 46 05 c
Resolute
P 10 40 31
Seven Falls
eP' 10 46 04 c
Shawinigan Falls
eP' 10 46 04

JULY 14
Penticton
iP 11 26 46

JULY 14
Resolute
i 19 04 06

JULY 14
U.S.C.G.S.
36N, 70E
Hindu Kush
H = 22 11 06
h = 100 km
Resolute
P 22 22 06

JULY 15
Penticton
eP 12 01 03

JULY 15
Penticton
iP 12 07 22 c

JULY 15
H = 21 07 09.7
Mag 2 3/4
Victoria
eP 21 07 51.8
iS 21 08 27.3
D = 290 km

JULY 15
Halifax
P 23 48 17
Shawinigan Falls
eP 23 48 59

JULY 16
U.S.C.G.S.
21 1/2S, 67W
Southern Bolivia
H = 04 44 34
h = 150 km
Halifax
iP 04 55 23 c
Seven Falls
iP 04 55 27 c
Shawinigan Falls
eP 04 55 25

JULY 16
49.7N, 124.5W
Texada Island
Mine Blast
H = 05 16 30.2
Alberni
iP 05 16 38.2
iS 05 16 44.3

JULY 16
U.S.C.G.S.
21 1/2N, 143E
Mariana Island region
H = 17 17 44
h = 300 km
Resolute
iP 17 29 10 c

JULY 16
U.S.C.G.S.
65 1/2N, 167 1/2W
Seeward Peninsula
Alaska
H = 21 19 37
Ottawa
eP 21 28 36
Resolute
eP 21 24 58 d
S 21 29 16
Shawinigan Falls
eP 21 28 40

JULY 16
U.S.C.G.S.
65 1/2N, 167 1/2W
Seeward Peninsula
Alaska
H = 22 02 53
Ottawa
eP 22 11 53
Resolute
P 22 08 15
S 22 12 32
Shawinigan Falls
eP 22 11 58

JULY 17
Resolute
P 02 06 45

JULY 17
U.S.C.G.S.
12N, 125 1/2E
Samar Philippine
Islands
H = 02 15 07
Resolute
P 02 28 07

JULY 17
Resolute
P 04 58 28

DOMINION OBSERVATORIES

JULY 17
U.S.C.G.S.
36N, 69E
Hindu Kush
H = 05 14 56
h = 200 km
Resolute
P 05 25 44
S 05 34 46

JULY 17
H = 07 11 50.8
Mag 1 1/2
Banff
iP 07 11 55.8 c
iS 07 11 59.6
D = 31 km

JULY 18
U.S.C.G.S.
Nicobar Islands
H = 00 53 54
Resolute
P 01 07 33

JULY 18
U.S.C.G.S.
4 1/2S, 151E
New Britain region
H = 01 43 29
h = 200 km
Banff
eP 01 56 38 d ?
Halifax
P' 02 02 22
Ottawa
eP' 02 02 08
Resolute
P 01 57 01
Seven Falls
eP' 02 02 12
Shawinigan Falls
eP' 02 02 10 d
Victoria
eP 01 56 13 c

JULY 18
U.S.C.G.S.
56N, 111E
Lake Baikal U.S.S.R.
H = 04 40 54
Resolute
P 04 49 38

JULY 18
H = 09 46 29.8
Victoria
eP 09 47 07.2 d ?
eS 09 47 38.1
D = 253 km

JULY 18
Penticton
eP 23 21 48

JULY 18
H = 23 23 09.1
Mag 2
Penticton
iP 23 23 17.5 d
iS 23 23 23.0
D = 52 km

JULY 19
U.S.C.G.S.
1N, 87 1/2W
Galapagos, Islands
region
H = 02 42 30
Ottawa
eP 02 50 52
Resolute
P 02 54 11
Seven Falls
eP 02 51 13
Shawinigan Falls
eP 02 51 06

JULY 19
U.S.C.G.S.
7S, 80W
Near coast of Peru
H = 04 19 14
Banff
eP 04 29 58
Halifax
eP 04 28 37
Ottawa
eP 04 28 26
Penticton
eP 04 30 01
Resolute
P 04 31 34
Seven Falls
eP 04 28 43
Shawinigan Falls
iP 04 28 38 d
Victoria
eP 04 30 08 c

JULY 19
U.S.C.G.S.
16 1/2N, 92 1/2W
Chiapas Mexico
H = 16 03 18
Banff
eP 16 10 34
e 16 11 17
Ottawa
eP 16 09 33
Penticton
iP 16 10 36
e 16 11 20
Resolute
P 16 13 44
i 16 20 41
i 16 22 06
Shawinigan Falls
eP 16 10 25
i 16 10 39
Victoria
eP 16 10 40 c

JULY 19
U.S.C.G.S.
13 1/2N, 146E
Mariana Islands
H = 18 29 31
h = 100 km
Penticton
eP 18 41 49
Resolute
P 18 41 59

JULY 20
H = 02 12 13.0
Mag 1 1/2
Penticton
iP 02 12 41.1 d
iS 02 12 55.2
D = 178 km

JULY 20
H = 06 54 13.4
Mag 1 1/2
Alberni
iP 06 54 18.2
iS 06 54 21.9
D = 30 km

JULY 20
U.S.C.G.S.
49N, 157E
Kurile Islands region
H = 09 30 38
Banff
iP 09 39 54 c
Halifax
iP 09 42 51 c
Ottawa
iP 09 42 22 d
Penticton
iP 09 39 47 c
Resolute
iP 09 39 19 d
S 09 46 12
Seven Falls
eP 09 42 24
Shawinigan Falls
iP 09 42 24 d
Victoria
iP 09 39 35 c

JULY 20
U.S.C.G.S.
20 1/2S, 169E
New Hebrides Islands
H = 20 59 25
h = 200 km
Halifax
iP' 21 18 18 c
Ottawa
iP' 21 18 01 c
Penticton
eP 21 12 24 d
Resolute
P' 21 17 40
Seven Falls
iP' 21 18 07 c
Shawinigan Falls
eP' 21 18 05

JULY 20
H = 21 38 17.5
Mag 2 1/2
Penticton
eP 21 38 45
iS 21 39 06
D = 172 km

JULY 20
U.S.C.G.S.
Southern Chile
H = 21 38 20
Ottawa
eP 21 50 51 d
Shawinigan Falls
eP 21 50 55

JULY 21
H = 00 20 49.7
Mag 2 1/2
Penticton
iP 00 21 19.1 d
e 00 21 20.6
iS 00 21 41.9
D = 186 km

JULY 21
Penticton
iP 05 16 54 d ?

JULY 21
Resolute
P 05 17 59

JULY 21
Penticton
eP 08 08 46

JULY 21
Penticton
eP 08 35 47 c ?

JULY 21
Resolute
P 08 41 38

JULY 21
H = 19 09 55.5
Mag 3
Penticton
iP 19 10 28.1
iS 19 10 54.1
D = 213 km

DOMINION OBSERVATORIES

JULY 21
Resolute
P 20 05 05

JULY 21
U.S.C.G.S.
27N, 142 1/2E
Bonin Islands
H = 20 51 20
Resolute
P 21 02 43

JULY 22
H = 07 18 05.4
Mag 4 1/4
Penticton
iP 07 18 56.8 c
iS 07 19 41.6
D = 367 km

JULY 22
Penticton
iP 11 20 08 c

JULY 22
H = 14 22 44
Mag 2 3/4
Penticton
iP 14 23 11.3 c
iS 14 23 32.3
D = 172 km

JULY 22
Penticton
eP 21 28 53
e 21 29 29

JULY 22
H = 23 45 45.9
Mag 1 1/2
Victoria
eP 23 46. 03.0
eS 23 46 16.1
D = 108 km

JULY 23
Penticton
eP 04 14 44

JULY 23
45°43'N, 73°40'W
About 15 miles north
of Montreal, Quebec
H = 05 49 06.5
Mag 2.9
Montreal
P_1 05 49 10.6
S_1 05 49 13.4
D = 23 km
Ottawa
P_1 05 49 32.3
S_1 05 49 52.3
D = 164 km
Seven Falls
e 05 49 48.7
S_1 05 50 19.5
D = 280 km
Shawinigan Falls
P_1 05 49 25
S_1 05 49 39
D = 115 km

JULY 23
Penticton
eP 07 31 25

JULY 23
U.S.C.G.S.
21 1/2S, 179 1/2W
Fiji Islands
H = 07 31 38
h = 600 km
Penticton
eP 07 43 30
Victoria
eP 07 43 19 c

JULY 23
H = 17 54 19.0
Mag 2
Victoria
eP 17 54 39.3
eS 17 54 54.8
D = 127 km

JULY 24
U.S.C.G.S.
56N, 164E
Near coast of
Kamchatka
H = 09 48 56
Halifax
P 10 00 39
Ottawa
iP 09 59 50 d
Penticton
iP 09 58 09 c
Resolute
P 09 56 28
S 10 02 06
Seven Falls
eP 09 59 51
Shawinigan Falls
eP 09 59 51
Victoria
eP 09 56 58 d

JULY 25
U.S.C.G.S.
55N, 163E
Near coast of
Kamchatka
H = 03 41 05
Mag 6 1/2
Halifax
eP 03 52 47
Ottawa
eP 03 52 06
Penticton
eP 03 50 24
Resolute
P 03 48 44
S 03 54 54

Seven Falls
eP 03 52 09
Shawinigan Falls
eP 03 52 08

JULY 25
Victoria
eP 04 04 15

JULY 25
U.S.C.G.S.
17 1/2S, 178W
Fiji Islands
H = 10 27 00
h = 500 km
Penticton
iP 10 39 43 d

JULY 25
U.S.C.G.S.
54N, 159E
Kamchatka
H = 11 12 00
h = 100 km
Mag 6 3/4
Alberni
iP 11 20 16
Banff
iP 11 20 43 d
eS 11 25 47
Halifax
iP 11 23 38
Ottawa
eP 11 23 09 c
Penticton
iP 11 21 35 d
Resolute
iP 11 19 55 c
S 11 26 11
Seven Falls
eP 11 23 10 c
Shawinigan Falls
iP 11 23 10 c
Victoria
iP 11 20 24

JULY 25
U.S.C.G.S.
53.4N, 159.4E
Near coast of
Kamchatka
H = 15 30 36.6
h = 152 km
Halifax
P 15 42 11
Resolute
eP 15 38 27 d

JULY 25
H = 20 06 31.5
Penticton
eP 20 06 55
eS 20 07 13
D = 150 km

JULY 26
U.S.C.G.S.
40 1/2N, 144 1/2E
Off east coast of
Hokkaido Japan
H = 03 55 54
Resolute
eP 04 05 52 d

JULY 26
U.S.C.G.S.
40 1/2N, 37E
Turkey
H = 12 36 20
Banff
iP 12 48 59
Halifax
P 12 47 28
Penticton
eP 12 49 10
Resolute
P 12 46 35

JULY 26
H = 18 46 31.4
Mag 1
Banff
iP 18 46 35.8 d
iS 18 46 39.2
D = 28 km

JULY 27
U.S.C.G.S.
44.7S, 75.1W
Near coast of
Southern Chile
H = 10 04 53.0
h = 25 km
Mag 6 1/4
Halifax
P 10 17 56
Ottawa
iP 10 17 52 c
Seven Falls
eP 10 18 01
Shawinigan Falls
eP 10 18 00

JULY 27
H = 15 36 33
Mag 1 1/2
Banff
iP 15 36 37
iS 15 36 40
D = 25 km

JULY 27
H = 16 08 56
Mag 1 1/4
Penticton
iP 16 09 00.2
iS 16 09 03.4
D = 26 km

DOMINION OBSERVATORIES

JULY 27
H = 16 44 36.8
Alberni
eP 16 44 47
Penticton
iP 16 44 45.0
iS 16 44 51.3
D = 52 km

JULY 28
47.8N, 121.8W
40 km northeast of
Seattle
H = 07 21 54.3
Mag 2 1/4
Alberni
eP 07 22 36.1
Penticton
S - P = 28.7"
Victoria
eP 07 22 17.2 c
iS 07 22 34.7

JULY 28
48 1/2N, 122W
40 km southeast of
Bellingham
H = 09 10 14.0
Alberni
iP 09 10 53.2
eS 09 11 23.2
Penticton
S - P = 27.4"
Victoria
iP 09 10 33.2
iS 09 10 49.8

JULY 28
H = 20 40 53.5 ± 1 sec.
Penticton
iP 20 41 19.0
iS 20 41 38.5
D = 160 km

JULY 29
U.S.C.G.S.
19 1/2S, 170 1/2E
Loyalty Islands
H = 00 24 06
Mag 6 1/2
Halifax
P' 00 43 21
Ottawa
iP' 00 43 05 d
Penticton
eP 00 37 28
Resolute
i 00 38 44
i 00 43 16
Seven Falls
eP' 00 43 11 d
Shawinigan Falls
eP' 00 43 09
Victoria
eP 00 37 13 d

JULY 29
H = 00 53 11.8
Penticton
iP 00 53 41.0
iS 00 54 03.7
D = 185 km

JULY 29
U.S.C.G.S.
40.1N, 142.3 E
Honshu, Japan
H = 17 31 39.5
h = 50 km
Mag 6 3/4
Alberni
eP 17 42 04
Banff
eP 17 42 28
Halifax
P 17 44 48
Ottawa
eP 17 44 27 c
Penticton
iP 17 42 19
Resolute
P 17 41 38
S 17 49 44
Seven Falls
eP 17 44 31
Shawinigan Falls
eP 17 44 27 c
Victoria
eP 17 42 10 d

JULY 30
U.S.C.G.S.
1.4S, 79.1W
Ecuador
H = 02 04 49.4
h = 21 km
Penticton
iP 02 15 08 d ?

JULY 30
H = 06 06 46.6
Penticton
iP 06 06 52.8
iS 06 06 57.5
D = 39 km

JULY 30
Penticton
iP 07 25 29

JULY 30
U.S.C.G.S.
56.3N, 163.9E
Near coast of Kamchatka
H = 14 12 35.5
h = 21 km
Penticton
iP 14 20 46

JULY 30
H = 20 24 48.4
Penticton
iP 20 25 06.7
iS 20 25 20.7
D = 115 km

JULY 31
5.6S, 150.0E
New Britain
H = 02 55 46.2
h = 25 km
Mag 6 3/4
Banff
eP 03 09 17
Halifax
P' 03 14 56
PKS 03 18 24
Ottawa
iP' 03 14 43 d
Penticton
eP 03 09 06
Resolute
P 03 09 40
S 03 20 36
i 03 23 00
Shawinigan Falls
eP' 03 14 46 d
Victoria
eP 03 09 01 c ?

JULY 31
U.S.C.G.S.
43.6S, 74.3W
Near coast of Central Chile
H = 14 55 03.3
h = 97 km
Halifax
iP 15 07 59 c
Shawinigan Falls
eP 15 07 57

AUGUST 1
48.9N, 121.7W
Northeast of Mt. Baker U.S.A.
H = 01 45 44
Mag 2
Penticton
iP 01 46 07.5 c
iS 01 46 25.7
Victoria
eP 01 46 06.4
e? 01 46 30.1

AUGUST 1
H = 02 00 42.7
Penticton
iP 02 00 44.4
iS 02 00 45.7
i 02 00 46.3
D = 10 km

AUGUST 2
H = 03 46 28.5
Mag 2
Penticton
iP 03 46 42.2
eS 03 46 52.6
D = 85.3 km

AUGUST 2
U.S.C.G.S.
22.2S, 171.5E
Loyalty Islands
H = 05 07 22
h = 108 km
Mag 6 1/2
Penticton
eP 05 20 32 c?
Resolute
P' 05 26 33
i 05 27 04
Shawinigan Falls
eP' 05 26 09
i 05 27 50
Victoria
eP 05 20 20

AUGUST 2
U.S.C.G.S.
51.5N, 178.3W
Andreanof Islands
H = 06 14 47
h = 34 km
Alberni
iP 06 21 30
Halifax
eP 06 25 51
Penticton
eP 06 21 55
Resolute
P 06 22 20
i 06 24 25
Victoria
iP 06 21 38.8 c

AUGUST 2
H = 06 51 14.9
Mag 2
Penticton
iP 06 51 26.6 c
eS 06 51 35
D = 73 km

AUGUST 2
U.S.C.G.S.
28.2S, 176.6W
Kermadec Islands
H = 09 30 26
h = 61 km
Victoria
eP 09 43 20

AUGUST 2
U.S.C.G.S.
4.5S, 104.7W
Southwest of Galapagos Islands
H = 13 42 28
h = 93 km
Penticton
eP 13 51 53
Resolute
P 13 54 27
S 14 04 28

AUGUST 2
Alberni
iP 14 10 50
Victoria
eP 14 09 11

DOMINION OBSERVATORIES

AUGUST 2
U.S.C.G.S.
84.2N, 2.3E
North Polar region
H = 20 51 03.8
h = 40 km
Resolute
eP 20 54 55 d

AUGUST 2
Resolute
P 21 01 18

AUGUST 2
Alberni
iP 22 47 15

AUGUST 3
Shawinigan Falls
eP 01 26 18

AUGUST 3
Penticton
eP 02 31 20

AUGUST 4
H = 01 37 53.8
Mag 2 3/4
Penticton
iP 01 38 33.8 c?
eP 01 39 07
D = 270 km

AUGUST 4
U.S.C.G.S.
51.4N, 179.1E
Rat Islands
H = 07 34 53.8
Mag 6
h = 83 km
Alberni
eP 07 41 27
Banff
eP 07 42 22
Halifax
P 07 46 01
Ottawa
eP 07 45 23
Resolute
P 07 42 28
i 07 44 10
S 07 48 04
Seven Falls
eP 07 45 32
Victoria
iP 07 41 50.4 d
iP 07 41 54.4

AUGUST 4
U.S.C.G.S.
51N, 179.4E
Rat Islands
H = 09 08 36
h = 100 km
Penticton
eP 09 15 52
Victoria
iP 09 15 37 c

AUGUST 4
Penticton
eP 13 09 13

AUGUST 4
Penticton
eP 13 32 29 c?

AUGUST 4
U.S.C.G.S.
51.3N, 178.8E
Rat Islands
H = 14 05 28
h = 59 km
Penticton
eP 14 12 48
Resolute
P 14 13 04

AUGUST 4
Penticton
eP 16 49 09

AUGUST 4
Resolute
P 21 31 16

AUGUST 5
U.S.C.G.S.
50.5N, 130.3W
Queen Charlotte
Islands region
H = 08 45 31
h = 25 km
Alberni
iP 08 46 29
Resolute
S 08 56 20
Victoria
iP 08 46 47.3 c

AUGUST 5
Victoria
eP 08 56 27

AUGUST 5
U.S.C.G.S.
50.1N, 156.8E
Off south coast of
Kamchatka
H = 16 06 33
h = 42 km
Halifax
P 16 18 37
Penticton
iP 16 15 36 d
Resolute
P 16 15 02
S 16 41 23
Victoria
iP 16 15 23.0 c

AUGUST 5
U.S.C.G.S.
9.5S, 118.8E
Sumba Island
H = 16 26 23.5
h = 64 km
Halifax
P' 16 45 58

AUGUST 5
Victoria
eP 22 19 36

AUGUST 5
U.S.C.G.S.
51.0N, 178.7E
Rat Islands
H = 22 27 34
h = 15 km
Halifax
eP 22 38 49
Ottawa
eP 22 38 16
Resolute
P 22 35 16
i 22 37 17
Shawinigan Falls
eP 22 38 12
i 22 39 15
Victoria
iP 22 34 43.4

AUGUST 6
Victoria
eP 02 58 37

AUGUST 6
Canadian Arctic
H = 06 22 --
Mag 2.5 - 3.5
Resolute
iP_1 06 23 10.0
D = 100 - 200 km

AUGUST 6
Alberni
iP 08 32 31

AUGUST 6
Victoria
eP 08 39 28

AUGUST 6
Resolute
P 12 55 37
Victoria
eP 12 55 26

AUGUST 6
U.S.C.G.S.
42.4S, 74.8W
Near coast of Chile
H = 14 49 44.9
h = 35 km
Ottawa
eP 15 02 32
Shawinigan Falls
eP 15 02 38

AUGUST 6
Resolute
i 15 19 26

AUGUST 6
Victoria
eP 15 55 38

AUGUST 7
Penticton
eP 10 09 45

AUGUST 7
Halifax
P 16 29 57
Ottawa
eP 16 30 04
Shawinigan Falls
eP 16 30 04

AUGUST 8
H = 03 24 32.3
Mag 2 3/4
Victoria
iP 03 24 51.0 c
iS 03 25 05.3
D = 117 km

AUGUST 8
Halifax
P 07 17 02

AUGUST 8
Resolute
i 09 25 20

AUGUST 8
Resolute
i 12 53 17

AUGUST 8
U.S.C.G.S.
36N, 27.3E
Dodecanese Islands
H = 20 36 28.4
h = 87 km
Shawinigan Falls
eP 20 47 38

AUGUST 9
U.S.C.G.S.
21.2S, 71.6W
Off coast of Chile
H = 06 10 11
h = 104 km
Penticton
eP 06 22 24 c?
Shawinigan Falls
eP 06 21 00
Victoria
eP 06 22 30

DOMINION OBSERVATORIES

AUGUST 9
U.S.C.G.S.
51.1N, 156.8E
Off south coast of Kamchatka
H = 06 21 46.9
h = 10 km
Penticton
eP 06 30 00
Resolute
P 06 29 26
Victoria
eP 06 29 58

AUGUST 9
U.S.C.G.S.
56,1N, 164.2E
Off east coast of Kamchatka
H = 06 58 05.5
h = 37 km
Penticton
eP 07 06 16
Resolute
P 07 05 52
Victoria
eP 07 06 05

AUGUST 9
U.S.C.G.S.
40N, 126.6W
Off coast of Northern California
H = 07 39 22.6
Mag 6
Alberni
eP 07 41 33
Halifax
P 07 47 (47)
P 07 48 00
Ottawa
eP 07 46 33
Penticton
eP 07 41 49.7 c
Resolute
P 07 46 34
iS 07 52 28
Seven Falls
eP 07 47 04
Shawinigan Falls
eP 07 46 51
Victoria
iP 07 41 24 c

AUGUST 9
48 3/4N, 121 3/4W
Near Mt. Baker
H = 10 47 18.7
Mag 2 3/4
Alberni
eP 10 47 49.2
eS 10 48 12.9
Penticton
eP 10 47 45
eS 10 48 05
Victoria
eP 10 47 36 d

AUGUST 9
U.S.C.G.S.
47.5N, 142.7E
Sakhalin Island
H = 14 02 39.3
h = 35 km
Halifax
eP 14 15 09
Penticton
eP 14 12 45 d ?
Resolute
P 14 11 50
Victoria
eP 14 12 35

AUGUST 9
U.S.C.G.S.
24.5S, 177.1W
Tonga Islands region
H = 16 46 37.7
h = 186 km
Penticton
iP 16 59 20 d
Resolute
i 17 05 31
S 17 13 18
Victoria
eP 16 59 08 d
iS ? 17 09 52

AUGUST 10
Resolute
i 00 02 32

AUGUST 10
U.S.C.G.S.
8.9N, 83.5W
Near coast of Costa Rica
H = 12 38 48.3
h = 25 km
Halifax
iP 12 46 20
Ottawa
iP 12 45 56 d
Resolute
P 12 49 31
Shawinigan Falls
iP 12 46 10 d

AUGUST 11
U.S.C.G.S.
52.2N, 176.2W
Andreanof Islands
H = 02 36 56.5
h = 97 km
Alberni
iP 02 43 21 c
Halifax
P 02 47 44
Ottawa
iP 02 47 03 c
Penticton
iP 02 43 44 d
Shawinigan Falls
eP 02 47 06 c
Victoria
iP 02 43 30 c

AUGUST 11
U.S.C.G.S.
0.0, 121.6E
Celebes
H = 02 53 16.3
h = 46 km
Halifax
P' 03 12 36
Ottawa
iP' 03 12 30 c
Shawinigan Falls
eP' 03 12 29

AUGUST 11
U.S.C.G.S.
8.8N, 126.1E
Mindanao, Philippine Islands
H = 04 50 33.9
h = 79 km
Alberni
i 05 06 40 d
Halifax
eP' 05 09 29.5 c
iP 05 09 29.9 d
Ottawa
eP' 05 09 22 c
Penticton
iP 05 04 06 d
Resolute
P 05 03 39
i 05 07 22
Shawinigan Falls
iP' 05 09 22 c
Victoria
iP 05 03 58 d

AUGUST 11
Alberni
iP 16 06 42

AUGUST 12
H = 03 38 17.2
Mag 2 1/2
Penticton
eP 03 38 48.4c?
eS 03 39 14
D = 200 km

AUGUST 12
Resolute
i 10 43 07

AUGUST 12
U.S.C.G.S.
36.1N, 141.4E
Near east coast of Honshu, Japan
H = 13 12 34.3
h = 95 km
Penticton
eP 13 23 32c?
Resolute
iP 13 22 55 c
Victoria
eP 13 23 22

AUGUST 12
49°30'N, 124°W
Near Sechelt
H = 16 01 34.9
Mag 1 3/4
Alberni
iP 16 01 47.5
iS 16 01 51.7
Victoria
eP 16 01 51.1
eS 16 02 04.9

AUGUST 12
Alberni
iP 16 26 12
Penticton
eP 16 26 58
Victoria
iP 16 26 30 d

AUGUST 13
Canadian Arctic
H = 06 40 31.4
Mag 1.8
Resolute
P_1 06 40 47.0
S_1 06 40 58.9
D = 97.4

AUGUST 13
U.S.C.G.S.
40.6N, 142E
Near east coast of Honshu, Japan
H = 07 11 05.5
h = 60 km
Halifax
eP 07 24 11.5 c
i 07 24 27
Ottawa
iP 07 23 52 c
Resolute
iP 07 21 02 c
S 07 29 08
Shawinigan Falls
iP 07 23 51 c
Victoria
iP 07 21 34 c

AUGUST 13
U.S.C.G.S.
39.7S, 74.8W
Near coast of southern Chile
H = 14 14 57.7
h = 61 km
Halifax
eP 14 27 29.5 d
iP 14 27 30 c
Ottawa
eP 14 27 29 d
Resolute
P 14 29 46
i 14 40 20
S 14 42 13
i 14 44 12
Seven Falls
eP 14 27 41

DOMINION OBSERVATORIES

Shawinigan Falls
eP 14 27 35 d
Victoria
iP 14 28 31 c

AUGUST 14
U.S.C.G.S.
45.4N, 151.1E
Ryukyu Islands
H = 04 00 52.3
h = 54 km
Halifax
P 04 13 25
Ottawa
eP 04 13 00
Shawinigan Falls
eP 04 13 02

AUGUST 14
48.7°N, 124.8°W
Near Clo-oose
Vancouver Island
H = 07 37 28.8
Mag 2
Alberni
iP 07 37 39.4 c ?
Victoria
eP 07 37 46.1
eS 07 37 59.3

AUGUST 14
U.S.C.G.S.
7.2S, 146.2E
Near north coast of
New Guinea
H = 14 41 04.2
h = 200 km
Shawinigan Falls
eP' 14 59 51

AUGUST 14
U.S.C.G.S.
23.5S, 66.4W
Jujuy Province
Argentina
H = 22 46 07.6
h = 245 km
Halifax
iP 22 56 45 d
Ottawa
eP 22 56 52 d
Shawinigan Falls
iP 22 56 58 d
Victoria
iP 22 58 33 d

AUGUST 15
U.S.C.G.S.
45.3N, 148.6E
Kurile Islands
H = 05 55 48.2
h = 35 km
Victoria
eP 06 05 30 d ?

AUGUST 15
U.S.C.G.S.
13.4S, 65.8E
Indian Ocean
H = 06 58 56.4
h = 15 km
Victoria
eP' 07 18 34

AUGUST 15
U.S.C.G.S.
13.5S, 67E
Indian Ocean
H = 14 33 38.4
h = 25 km
Victoria
eP' 14 53 15

AUGUST 16
U.S.C.G.S.
16.5S, 71.5W
Southern Peru
H = 02 47 18.8
h = 113 km
Banff
eP 02 59 04
Halifax
eP 02 57 23 c
iP 02 57 23.5 d
Ottawa
eP 02 57 26 c
Shawinigan Falls
eP 02 57 34 c
Victoria
eP 02 59 14 c

AUGUST 16
47.7°N, 116.3°W
Montana, U.S.A.
H = 13 27 55.8
Banff
iP 13 28 52.3
e 13 29 28.3
Victoria
eP 13 29 06.3
eS 13 30 12.5

AUGUST 16
Banff
e 15 57 15

AUGUST 17
H = 06 39 17.6
Alberni
iP 06 39 27.8
iS 06 39 35.6
D = 64 km

AUGUST 17
U.S.C.G.S.
20.1S, 11.4W
South Atlantic Ocean
H = 09 33 49.1
h = 87 km
Ottawa
eP 09 46 26

AUGUST 17
U.S.C.G.S.
19.8S, 12.2W
South Atlantic Ocean
H = 11 24 07.2
h = 25 km
Ottawa
eP 11 36 51

AUGUST 18
H = 18 30 31.8
Mag 2.4
Penticton
eP 18 31 07.9
eS 18 31 35.4
D = 225 km

AUGUST 18
U.S.C.G.S.
44.5N, 147.6E
Kurile Islands
H = 20 47 02.5
h = 32 km
Halifax
P 20 59 48
Ottawa
eP 20 59 24
Penticton
iP 20 57 05 d
Shawinigan Falls
eP 20 59 24

AUGUST 18
H = 21 10 54.7
Mag 2.0
Penticton
eP 21 11 17
e 21 11 34
D = 139 km

AUGUST 18
H = 22 59 45.7
Mag 2.4
Penticton
eP 23 00 12
eS 23 00 32
D = 164 km

AUGUST 19
U.S.C.G.S.
40.7N, 127.2W
Off coast of Northern California
H = 04 07 07.5
h = 27 km
Banff
eP 04 10 14
Penticton
eP 04 09 31
Victoria
eP 04 09 06

AUGUST 19
Halifax
P 09 27 35
Ottawa
eP 09 28 21

AUGUST 19
Ottawa
eP 11 21 31
Shawinigan Falls
eP 11 21 48

AUGUST 19
Penticton
eP 12 15 24

AUGUST 19
Banff
iP 12 52 00.7

AUGUST 19
U.S.C.G.S.
27N, 140.1E
Bonin Islands region
H = 12 41 31.4
h = 283 km
Penticton
eP 12 52 52c ?
Victoria
iP 12 52 42 c

AUGUST 19
U.S.C.G.S.
54.1N, 160.6E
Near east coast of Kamchatka
H = 17 03 39
h = 25 km
Halifax
eP 17 15 22
eP 17 15 29
Ottawa
eP 17 14 51
Penticton
eP 17 12 13
Shawinigan Falls
eP 17 15 03

AUGUST 20
U.S.C.G.S.
14.3N, 91.4W
Guatemala
H = 00 19 34.4
Mag 6
h = 158 km
Banff
eP 00 27 10 ?
Ottawa
iP 00 26 05 c
Penticton
eP 00 27 14
Shawinigan Falls
eP 00 26 24
Victoria
iP 00 27 25 d

DOMINION OBSERVATORIES

AUGUST 20
H = 18 00 22.0
Alberni
iP 18 00 30.4
iS 18 00 36.8
D = 50 km

AUGUST 20
H = 21 34 57.5
Alberni
iP 21 35 06.0
iS 21 35 12.5
D = 52 km

AUGUST 21
U.S.C.G.S.
4.3S, 143.3E
New Guinea
H = 00 18 01.5
h = 39 km
Halifax
iP' 00 37 19 c
Ottawa
eP' 00 37 04
Shawinigan Falls
eP' 00 37 05
i 00 37 30

AUGUST 21
Ottawa
eP 04 02 44

AUGUST 21
Penticton
eP 05 33 15

AUGUST 21
U.S.C.G.S.
4.9N, 125.1E
Near south coast of Mindanao, Philippine Islands
H = 12 49 37.6
h = 211 km
Halifax
iP' 13 08 28.5 d
Ottawa
eP' 13 08 20 d
Resolute
P 13 02 42
i 13 13 04
Shawinigan Falls
eP' 13 08 19 d

AUGUST 21
Halifax
iP 13 11 32.5 c

AUGUST 21
Penticton
eP 18 00 12

AUGUST 22
H = 06 19 23
Penticton
eP 06 20 12
Victoria
eP 06 19 49.1 c
iS 06 20 19.0
D = 163 km

AUGUST 22
Penticton
iP 18 46 10

AUGUST 23
Penticton
iP 08 02 26 c

AUGUST 23
U.S.C.G.S.
0.9N, 26W
Atlantic Ocean
H = 14 08 14.9
h = 25 km
Halifax
iP 14 17 48 d
Shawinigan Falls
eP 14 18 41

AUGUST 23
Penticton
eP 17 13 42

AUGUST 23
H = 21 45 55
Banff
eP 21 46 01
eS 21 46 06
D = 37 km

AUGUST 23
U.S.C.G.S.
14.5S, 176.4W
Fiji Islands region
H = 22 44 51.5
h = 56 km
Mag 6
Penticton
eP 22 57 03

AUGUST 24
Banff
eP 01 32 28

AUGUST 24
U.S.C.G.S.
56.3N, 163.8E
Near east coast of Kamchatka
H = 01 44 09.9
h = 25 km
Halifax
P 01 55 48
Ottawa
iP 01 55 03 c
Penticton
eP 01 52 19
Resolute
P 01 51 43
i 01 53 14
S 01 57 14
Shawinigan Falls
eP 01 55 12
Victoria
eP 01 52 08

AUGUST 24
U.S.C.G.S.
19S, 174.1W
Tonga Islands
H = 05 49 01.1
h = 42 km
Penticton
eP 06 01 29

AUGUST 24
H = 18 27 31
Mag 2.4
Penticton
eP 18 27 58.7
eS 18 28 19.8
D = 172 km

AUGUST 24
U.S.C.G.S.
24.4N, 95E
Burma-India Border
H = 19 27 53.2
h = 145 km
Resolute
iP 19 39 56

AUGUST 24
47.7N, 122.3W
Near Seattle, U.S.A.
H = 20 10 29.4
Mag 2
Alberni
iP 20 11 08.8
iS ? 20 11 17.7
Victoria
iP 20 10 53.3 c
iS 20 11 11.6

AUGUST 25
H = 00 31 43
Mag 2.3
Penticton
eP 00 32 08
eS 00 32 27
D = 156 km

AUGUST 25
U.S.C.G.S.
52.7N, 169.6W
Fox Islands
H = 17 41 58.8
h = 38 km
Halifax
eP 17 52 37
Ottawa
eP 17 51 48
Penticton
eP 17 48 15
Shawinigan Falls
eP 17 51 53
Victoria
eP 17 48 00

AUGUST 25
Alberni
eP_1 19 00 42.9
Victoria
eP_1 19 00 45.9

AUGUST 26
U.S.C.G.S.
13.5S, 165.9E
New Hebrides
H = 18 27 18.2
h = 56 km
Halifax
P' 18 46 16
Ottawa
eP' 18 46 03
Penticton
iP 18 40 15 c
Shawinigan Falls
eP' 18 46 07
Victoria
eP 18 40 02

AUGUST 27
U.S.C.G.S.
34.4N, 26.3E
Crete
H = 10 17 18.1
h = 40 km
Ottawa
eP 10 28 52
Shawinigan Falls
eP 10 28 38

AUGUST 27
U.S.C.G.S.
49.9N, 153.7E
Kurile Islands
H = 18 16 15.7
h = 220 km
Halifax
iP 18 28 06 c
Ottawa
eP 18 27 40
Penticton
iP 18 25 12 d
Resolute
iP 18 24 34
S 18 31 16
i 18 32 20
Shawinigan Falls
eP 18 27 40 d
Victoria
iP 18 25 01 d

AUGUST 27
H = 19 07 41.9
Mag 1
Victoria
eP 19 07 46.1
iS 19 07 49.3
D = 26.2 km

DOMINION OBSERVATORIES

AUGUST 28
U.S.C.G.S.
3.7N, 82.8W
South of Panama
H = 06 05 22.6
h = 108 km
Ottawa
iP 06 13 03 c
Seven Falls
eP 06 13 26
Shawinigan Falls
eP 06 13 17

AUGUST 30
H = 16 33 03
Victoria
iP 16 33 23.1 c
eS 16 33 38.5
D = 126 km

AUGUST 31
U.S.C.G.S.
39.1N, 36.3E
Turkey
H = 22 11 53.9
h = 44 km
Halifax
P 22 23 01

SEPTEMBER 1
U.S.C.G.S.
56.1N, 153.7W
Kodiak Island
H = 15 37 14.4
h = 24 km
Mag 6
Halifax
iP 15 46 44
iS 15 54 17
Ottawa
iP 15 45 54 d
Resolute
iP 15 43 14 c
iS 15 48 03
Seven Falls
eP 15 46 05
Shawinigan Falls
eP 15 45 59
Victoria
eP 15 41 47 d,N,W

SEPTEMBER 1
Victoria
iP 17 09 42

SEPTEMBER 1
U.S.C.G.S.
15.8S, 179.2E
Fiji Islands
H = 18 41 16.2
h = 33 km
Victoria
eP 18 53 28

SEPTEMBER 1
U.S.C.G.S.
16.1S, 179.6W
Fiji Islands
H = 20 02 12.8
h = 183 km
Victoria
eP 20 14 14

SEPTEMBER 2
U.S.C.G.S.
28.7N, 98.3E
Tibet
H = 13 46 10.0
h = 48 km
Resolute
P 13 57 57
S 14 07 44
Victoria
eP 13 58 10

SEPTEMBER 2
U.S.C.G.S.
52.0N, 171.4W
Fox Islands
H = 22 02 48.9
h = 49 km
Mag 5 3/4
Halifax
iP 22 13 30
iS 22 22 08
Ottawa
eP 22 12 46 c
Resolute
iP 22 09 59
S 22 15 40
Seven Falls
eP 22 12 55
Shawinigan Falls
eP 22 12 51
Victoria
eP 22 09 01
e 22 12 06

SEPTEMBER 3
Halifax
P 00 11 50

SEPTEMBER 3
U.S.C.G.S.
43.2N, 144.4E
Near north coast of
Hokkaido Japan
H = 00 19 57.3
h = 14 km
Resolute
iP 00 28 59 c

SEPTEMBER 3
U.S.C.G.S.
6.1S, 154.5E
Solomon Islands
H = 12 41 34.9
h = 457 km
Mag 6 1/2
Halifax
P' 12 59 56

Ottawa
eP' 12 59 39
Resolute
iP 12 54 40
S 13 04 38
Seven Falls
eP' 12 59 44
Shawinigan Falls
iP' 12 59 41 d
Victoria
iP 12 53 45 c

SEPTEMBER 3
U.S.C.G.S.
40.9N, 142.5E
Near north coast of
Honshu, Japan
H = 13 22 53.7
h = 112 km
Resolute
P 13 32 43

SEPTEMBER 3
U.S.C.G.S.
48.5S, 126.3E
South of Australia
H = 20 41 08.6
h = 30 km
Resolute
P' 21 00 55

SEPTEMBER 3
U.S.C.G.S.
44.6N, 149.1E
Kurile Islands
H = 23 46 23.9
h = 27 km
Mag 6 1/4
Halifax
P 23 59 08
Ottawa
eP 23 58 44
Penticton
eP 23 56 21
Resolute
iP 23 55 46 c
S 24 03 17
Seven Falls
eP 23 58 39
Shawinigan Falls
eP 23 58 44
Victoria
eP 23 56 10

SEPTEMBER 4
U.S.C.G.S.
56.3N, 153.1W
Kodiak Island
H = 05 21 22.1
h = 48 km
Ottawa
eP 05 29 56
Penticton
eP 05 26 08
Resolute
iP 05 27 16 c
S 05 32 06
Shawinigan Falls
eP 05 30 08
Victoria
eP 05 25 49

SEPTEMBER 4
Canadian Arctic
H = 10 34 04.2
Mag 2.6
Resolute
eP_1 10 34 31.9
i 10 34 35.0
i 10 34 40.3
iS_1 10 34 53.0
D = 173 km

SEPTEMBER 5
H = 10 48 00
Mag 3.0
Penticton
iP_1 10 48 29.6
iS_1 10 48 52.3
D = 186 km

SEPTEMBER 5
47.7N, 121.6E
East of Seattle
Washington
H = 14 31 55
Mag 3.0
Alberni
iP_n 14 32 32.
iS_n 14 33 03.
D = 290 km
Penticton
ePn 14 32 (36.8)
eS_n 14 33 (05.5)
D = 235 km
Victoria
eP_1 14 32 15.6
eS_1 14 32 30.4
D = 158 km

SEPTEMBER 6
Resolute
P 07 21 34
P 07 24 17

SEPTEMBER 6
H = 13 05 30
Mag 2.0
Victoria
eP_1 13 05 47.4
eS_1 13 06 00.5
D = 107 km

SEPTEMBER 6
U.S.C.G.S.
20.4S, 169.4E
Loyalty Islands
H = 14 03 01.8
h = 35 km
Mag 6 1/4
Halifax
iP' 14 22 07 d
Ottawa
iP' 14 21 49 c
Seven Falls
eP' 14 21 55
Shawinigan Falls
iP' 14 21 03 c
Victoria
iP 14 16 01 c

DOMINION OBSERVATORIES

SEPTEMBER 6
U.S.C.G.S.
41.9N, 142.5E
Near south coast of Hokkaido Japan
H = 15 24 40.5
h = 109 km
Halifax
eP 15 37 37 d
Ottawa
eP 15 37 16
Resolute
P 15 34 23
Seven Falls
eP 15 37 16
Shawinigan Falls
eP 15 37 15
Victoria
iP 15 34 56 c

SEPTEMBER 6
U.S.C.G.S.
64.7N, 86.4W
Southampton Island Region
H = 21 24 26.4
h = 25 km
Mag 5.5 (Dom. Obs.)
Montreal
e 21 29 10
Halifax
P 21 29 50
S 21 34 40
Ottawa
eP 21 29 07
Resolute
iP_n 21 26 53
S_n 21 28 38
L_g 21 29 37
D = 1160 km
Seven Falls
eP 21 29 04
Shawinigan Falls
eP 21 29 13
i 21 31 28
e 21 33 04
e 21 34 51

SEPTEMBER 7
U.S.C.G.S.
37.2S, 16.1W
Tristan da Cunha region
H = 01 17 39.1
h = 35 km
Halifax
eP 01 30 51

SEPTEMBER 7
U.S.C.G.S.
44.3N, 149.1E
Kurile Islands
H = 11 44 56.6
h = 89 km
Ottawa
eP 11 57 11
Penticton
eP 11 54 50
Resolute
P 11 54 16
Shawinigan Falls
eP 11 57 12

SEPTEMBER 7
Victoria
iP 14 40 34 c

SEPTEMBER 7
H = 21 52 30 ?
Mag 2.1
Penticton
iP_1 21 52 (37.2)
iS_1 21 52 (51.2)
D = 115 km

SEPTEMBER 8
U.S.C.G.S.
6.2N, 126.2E
Near east coast of Mindanao, Philippine Islands
H = 11 07 40.8
h = 47 km
Halifax
eP' 11 26 47 c
e 11 30 00
Ottawa
eP' 11 26 39
Seven Falls
eP' 11 26 38
Shawinigan Falls
eP' 11 26 38 c

SEPTEMBER 8
U.S.C.G.S.
52.5N, 158.8E
Kamchatka
H = 14 32 00.3
h = 29 km
Alberni
eP 14 40 25
Halifax
iP 14 43 50 c
Ottawa
eP 14 43 21 c
Penticton
iP 14 40 46
Resolute
iP 14 40 09 c
Seven Falls
iP 14 43 23 c
Shawinigan Falls
iP 14 43 22 c

SEPTEMBER 9
U.S.C.G.S.
71.5N, 2.4W
Jan Mayen Island region
H = 16 19 15.9
h = 23 km
Shawinigan Falls
eP 16 27 03

SEPTEMBER 9
Halifax
eP 18 00 06 c
Ottawa
eP 18 00 05 d
Shawinigan Falls
eP 18 00 10 d

SEPTEMBER 9
U.S.C.G.S.
71.7N, 1.3W
Jan Mayen Island region
H = 20 04 32.7
h = 23 km
Ottawa
eP 20 12 30 d
Seven Falls
eP 20 12 10
Shawinigan Falls
eP 20 12 19

SEPTEMBER 10
U.S.C.G.S.
34.4N, 26.4E
Crete
H = 00 19 08.4
h = 10 km
Ottawa
eP 00 30 48
Seven Falls
eP 00 30 27
Shawinigan Falls
eP 00 30 34

SEPTEMBER 10
Canadian Arctic
H = 07 53 00.5
Mag 2.2
Resolute
P_1 07 53 32
S_1 07 53 56
D = 197 km

SEPTEMBER 10
U.S.C.G.S.
4.0N, 122.6E
Celebes Sea
H = 10 44 51.2
h = 629 km
Halifax
eP' 11 03 00
i 11 05 30
Ottawa
eP' 11 02 49
i 11 05 18
Shawinigan Falls
eP' 11 02 53 c

SEPTEMBER 10
U.S.C.G.S.
47.5N, 122.7W
Near Seattle
Washington, U.S.A.
H = 15 06 32.5
h = 25 km
Mag 5
Alberni
iP_2 15 07 05.2 c
Victoria
iP_1 15 06 49.0 c
D = 126 km

SEPTEMBER 10
H = 17 52 26
Mag 2.1
Alberni
eP_1 17 52 34.3
eS_1 17 52 40.7
D = 60 km

Victoria
eP_1 17 52 49.9
eS_1 17 53 09.9
D = 157 km

SEPTEMBER 10
H = 19 21 04
Mag 2.5
Alberni
eP 19 21 40.5
D = 244 km
Victoria
iP_1 19 21 19.3
iS_1 19 21 34.7
D = 99 km

SEPTEMBER 10
Ottawa
iP 20 56 55 c

SEPTEMBER 11
H = 04 29 13.6
Mag 2.5
Alberni
iP_n 04 29 41.3
iS_n 04 30 02.3
D = 172 km
Victoria
iP_1 04 29 23.3
iS_1 04 29 30.9
D = 62 km

SEPTEMBER 12
U.S.C.G.S.
60.8N, 151.9W
Southern Alaska
H = 02 44 48.1
h = 230 km
Alberni
eP 02 49 00
Halifax
eP 02 53 37
Ottawa
iP 02 52 5
Resolute
P 02 49 51

DOMINION OBSERVATORIES

SEPTEMBER 12
Seven Falls
iP 02 52 58c
Shawinigan Falls
eP 02 52 55
Victoria
iP 02 49 13d

SEPTEMBER 12
Alberni
eP 06 03 32
Victoria
eP 06 03 41d

SEPTEMBER 12
U.S.C.G.S.
27.3N, 128.4E
Ryukyu Islands
H = 12 17 08.1
h = 48 km
Mag 6 1/2
Alberni
eP 12 29 16
Resolute
iP 12 28 45c
S 12 38 13
Victoria
iP 12 29 22c

SEPTEMBER 12
U.S.C.G.S.
7.0S, 117.0E
Java Sea
H = 16 02 05.8
h = 611 km
Halifax
iP' 16 20 33c
i 16 23 18
Seven Falls
eP' 16 20 22
i 16 23 10

SEPTEMBER 13
U.S.C.G.S.
27.0N, 140.2E
Bonin Islands Region
H = 03 09 09.7
h = 439 km
Resolute
iP 03 19 54d
Victoria
eP 03 20 05

SEPTEMBER 13
U.S.C.G.S.
13.8N, 90.3W
Guatemala
H = 17 51 10.8
h = 122 km
Ottawa
eP 17 57 45
Shawinigan Falls
eP 17 58 03

SEPTEMBER 14
U.S.C.G.S.
16.9N, 122.3E
Luzon, Philippine Islands
H = 00 34 25.3
h = 50 km
Victoria
eP 00 47 37

SEPTEMBER 14
U.S.C.G.S.
19.6N, 70.3W
Dominican Republic
H = 01 53 32.1
h = 103 km
Halifax
P 01 58 51
Ottawa
eP 01 58 58
iT 02 04 00
Shawinigan Falls
eP 01 59 05
Victoria
eP 02 02 25

SEPTEMBER 14
Halifax
P 02 22 09
Shawinigan Falls
eP 02 21 32

SEPTEMBER 14
U.S.C.G.S.
35.1S, 106.0W
South Pacific Ocean
H = 04 57 12.5
h = 40 km
Ottawa
iP 05 09 46
Shawinigan Falls
eP 05 09 55

SEPTEMBER 14
U.S.C.G.S.
20.9S, 174.1W
Tonga Islands
H = 23 18 35.1
h = 25 km
Victoria
iP 23 31 03c

SEPTEMBER 15
Victoria
eP 07 15 12

SEPTEMBER 15
U.S.C.G.S.
21.4N, 142.9E
Volcano Islands region
H = 17 57 42.7
h = 361 km
Alberni
iP 18 08 52
Victoria
iP 18 08 59c,s,e

SEPTEMBER 17
U.S.C.G.S.
49.3N, 155.4E
Kurile Islands
H = 07 52 50.8
h = 35 km
Alberni
eP 08 01 43
Halifax
P 08 05 02
Ottawa
eP 08 04 34c
Resolute
iP 08 01 29
iP. 08 08 23

Shawinigan Falls
iP 08 04 35c
Victoria
eP 08 01 50

SEPTEMBER 17
U.S.C.G.S.
49.4N, 155.2E
Kurile Islands
H = 08 05 29.5
h = 28 km
Mag 6
Alberni
eP 08 14 23
Halifax
eP 08 17 40c
Ottawa
iP 08 17 14c
Resolute
P 08 14 08
i 08 21 03
Shawinigan Falls
iP 08 17 16c
Victoria
iP 08 14 30c

SEPTEMBER 17
U.S.C.G.S.
20.9S, 174.5W
Tonga Islands
H = 19 56 11.1
h = 28 km
Mag 6
Alberni
eP 20 08 40
Victoria
eP 20 08 36

SEPTEMBER 18
U.S.C.G.S.
6.8S, 129.2E
Banda Sea
H = 09 40 28.3
h = 83 km
Halifax
P' 10 00 00
Ottawa
eP' 09 59 42
Seven Falls
eP' 09 59 46
i 10 03 00
Shawinigan Falls
eP' 09 59 44

SEPTEMBER 19
U.S.C.G.S.
20.5S, 65.4W
Southern Bolivia
H = 02 01 53.0
h = 118 km
Seven Falls
iP 02 12 44c
i 02 12 52

SEPTEMBER 19
U.S.C.G.S.
15.6N, 120.0E
Luzon Island
H = 03 39 40.9
h = 97 km
Resolute
eP 03 52 20
eS 04 03 00

SEPTEMBER 19
U.S.C.G.S.
6.9N, 77.5W
Columbia-Panama
Border
H = 19 01 25.4
h = 66 km
Mag 6
Ottawa
iP 19 08 45c
Resolute
eP 19 12 25
eS 19 21 23
Seven Falls
eP 19 09 03
Shawinigan Falls
eP 19 08 56
Victoria
eP 19 11 07

SEPTEMBER 21
U.S.C.G.S.
10.7N, 88.9W
Off Coast of
El Salvador
H = 03 44 25.0
h = 60 km
Ottawa
eP 03 51 29
Shawinigan Falls
eP 03 51 46

SEPTEMBER 21
U.S.C.G.S.
53.4N, 166.1W
Fox Islands
H = 10 38 31.0
h = 38 km
Banff
eP 10 44 44
Ottawa
eP 10 48 04
Shawinigan Falls
eP 10 48 10
Victoria
eP 10 44 20

SEPTEMBER 21
U.S.C.G.S.
26.5N, 124.8E
East China Sea
H = 16 08 14.7
h = 207 km
Victoria
iP 16 20 24d

SEPTEMBER 22
Victoria
eP 02 16 11

SEPTEMBER 22
Victoria
eP 02 22 42

DOMINION OBSERVATORIES

SEPTEMBER 22
U.S.C.G.S.
3.3S, 29.3E
Belgian Congo
H = 09 05 36.8
h = 28 km
Mag 6 1/4
Banff
eP 09 24 36
Victoria
eP 09 24 47

SEPTEMBER 22
U.S.C.G.S.
2.8S, 29.8E
Congo
H = 09 14 58.0
h = 20 km
Banff
eP 09 33 57
Victoria
eP 09 34 07

SEPTEMBER 22
U.S.C.G.S.
51.5N, 168.8W
Fox Islands
H = 22 47 00.6
h = 33 km
Ottawa
eP 22 56 53
Shawinigan Falls
eP 22 56 58c

SEPTEMBER 23
Halifax
iP 20 21 50.2c

SEPTEMBER 23
U.S.C.G.S.
3.5S, 67.2W
Argentina
H = 23 17 11.5
h = 298 km
Halifax
iP 23 28 01d

SEPTEMBER 24
U.S.C.G.S.
41.6N, 179.3W
New Zealand region
H = 11 06 39.2
h = 43 km
Ottawa
iP' 11 25 29d
Shawinigan Falls
eP' 11 25 33d

SEPTEMBER 24
U.S.C.G.S.
2.3S, 73.3W
Northern Peru
H = 13 58 23.1
h = 122 km
Ottawa
iP 14 07 01d
Shawinigan Falls
eP 14 07 11d
i 14 07 43

SEPTEMBER 25
U.S.C.G.S.
19.5N, 145.6E
Mariana Islands
H = 17 30 18.4
h = 95 km
Resolute Bay
iP 17 42 15c?

SEPTEMBER 25
Shawinigan Falls
iP 18 51 24

SEPTEMBER 26
U.S.C.G.S.
27.4S, 68.2W
Argentina
H = 00 32 05.0
h = 25 km
Ottawa
eP 00 43 37
i 00 44 07
Seven Falls
eP 00 43 47
Shawinigan Falls
iP 00 43 44
i 00 44 13
Victoria
eP 00 45 06

SEPTEMBER 26
U.S.C.G.S.
32.4N, 131.7E
Near Coast of
Kyushu, Japan
H = 11 36 21.7
h = 15 km
Victoria
iP 11 48 06c

SEPTEMBER 26
U.S.C.G.S.
51.6N, 172.2W
Fox Islands
H = 15 13 25.8
h = 44 km
Ottawa
eP 15 23 29
Resolute Bay
eP 15 20 39?
Seven Falls
eP 15 23 39
Shawinigan Falls
eP 15 23 35
Victoria
eP 15 19 44

SEPTEMBER 26
U.S.C.G.S.
15.9S, 72.9W
Southern Peru
H = 16 58 13.9
h = 115 km
Ottawa
eP 17 08 19
Seven Falls
eP 17 08 31c
Shawinigan Falls
eP 17 08 27
Victoria
eP 17 10 06

SEPTEMBER 27
Shawinigan Falls
eP 03 59 31c

SEPTEMBER 27
Victoria
iP 05 20 06c

SEPTEMBER 27
U.S.C.G.S.
14.4N, 145.8E
Mariana Islands
H = 18 35 52.2
h = 109 km
Resolute Bay
iP 18 48 12c
Victoria
eP 18 47 53

SEPTEMBER 28
U.S.C.G.S.
18.0S, 178.8W
Fiji Islands
H = 17 34 58.8
h = 705 km
Victoria
eP 17 46 16

SEPTEMBER 29
Resolute
eP 00 47 41?

SEPTEMBER 29
U.S.C.G.S.
17.3S, 68.5W
Peru-Bolivia Border
H = 06 27 56.3
h = 115 km
Halifax
iP 06 38 15.5c
Ottawa
iP 06 38 15c
Resolute Bay
iP 06 41 04c?
eS? 06 51 58
Seven Falls
iP 06 38 25c
Shawinigan Falls
iP 06 38 22c
Victoria
eP 06 40 06

SEPTEMBER 29
Alberni
eP 10 14 57

SEPTEMBER 29
U.S.C.G.S.
18.9N, 144.7E
Mariana Islands
H = 11 18 52.9
h = 469 km
Mag 6 1/4
Banff
eP 11 30 26
Halifax
eP' 11 36 46.5d
Resolute Bay
iP 11 30 13d
eS 11 39 32?
Seven Falls
eP' 11 36 32
Shawinigan Falls
eP' 11 36 33
Victoria
eP 11 30 01

SEPTEMBER 29
Resolute Bay
iP 12 43 44

SEPTEMBER 29
U.S.C.G.S.
14.9N, 90.3W
Guatemala
H = 18 54 23.0
h = 56 km
Banff
eP 19 02 09
Ottawa
eP 19 00 59
Resolute Bay
iP 19 04 27
eS? 19 12 32?
Shawinigan Falls
eP 19 01 11
Victoria
eP 19 02 22

SEPTEMBER 29
U.S.C.G.S.
32.5S, 70.2W
Central Chile
H = 22 12 18.8
h = 25 km
Shawinigan Falls
eP 22 24 21

SEPTEMBER 30
U.S.C.G.S.
26.9N, 127.6E
Ryukyu Islands
H = 02 20 47.9
h = 100 km
Resolute Bay
iP 02 32 22c?

SEPTEMBER 30
U.S.C.G.S.
49.3N, 129.3W
Off Coast of
Vancouver Island
H = 03 20 20.3
h = 79 km
Alberni
eP 03 21 15
Victoria
eP 03 21 15

SEPTEMBER 30
U.S.C.G.S.
49.2N, 129.7W
Vancouver Island
region
H = 06 35 08.9
h = 55 km
Alberni
eP 06 35 59
Resolute Bay
eP 06 41 20?
eS 06 46 10?
Victoria
eP 06 36 11

DOMINION OBSERVATORIES

EARTHQUAKES IN EASTERN CANADA AND ADJACENT AREAS

The following disturbances were recorded during the third quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

JULY 9 at 07 34 59 U.T. Magnitude 2.6. Epicentre at 46° 18'N; 73° 02'W. About 18 miles east of St. Gabriel, Que.

JULY 23 at 05 49 07 U.T. Magnitude 2.9. Epicentre at 45° 43'N; 73° 40'W. About 15 miles north of Montreal, Que.

SEISMOLOGICAL BULLETIN - 1960

EARTHQUAKES IN THE CANADIAN ARCTIC

The following disturbances were recorded during the third quarter of 1960. The times of observed phases are given at their respective chronological positions in the text of this bulletin.

JULY 9 at 19 23 09 U.T. Magnitude 2.2. Originated 115 km from Resolute, N.W.T.

AUGUST 6 at 06 22 -- U.T. Magnitude 2.5 - 3.5. Originated 100 - 200 km from Resolute, N.W.T.

AUGUST 13 at 06 40 31 U.T. Magnitude 1.8. Originated 97.4 km from Resolute, N.W.T.

SEPTEMBER 4 at 10 34 04 U.T. Magnitude 2.6. Originated 173 km from Resolute, N.W.T. The seismic trace is abnormal and may have been the result of more than one disturbance. The above interpretation is therefore doubtful.

SEPTEMBER 6 at 21 24 26.4 U.T. Magnitude 5.5. Epicentre at 64.7N 86.4W. Depth 25 km. In the Southampton Island region.

SEPTEMBER 10 at 07 53 01. Magnitude 2.2. Originated 197 km from Resolute, N.W.T.

DOMINION OBSERVATORIES

EARTHQUAKES IN WESTERN CANADA AND ADJACENT AREAS

The following disturbances were recorded during the third quarter of 1960. 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.

JULY 3 at 11 02 31.5 U.T. Epicentre at 48.3N, 123.6W, St. of Juan de Fuca; or at 48.7N, 123.2W. North San Juan Island. Q=c.

JULY 4 at 04 28 33 U.T. Magnitude 6 1/2 - 6 3/4. Epicentre at 52N, 131 1/2W. Queen Charlotte Islands. Q=b.

JULY 4 at 08 11 50.4 U.T. Epicentre at 52N, 131W. Queen Charlotte Islands. Q=c.

JULY 4 at 08 51 20 U.T. Epicentre at 52N, 131W. Queen Charlotte Islands. Q=d.

JULY 4 at 11 13 17 U.T. Epicentre at 52N, 130 1/2W. Queen Charlotte Islands. Q=d.

JULY 4 at 12 51 47 U.T. Epicentre at 52N, 131W. Queen Charlotte Islands. Q=d.

JULY 4 at 13 10 05 U.T. Magnitude 6. Epicentre at 52N, 131W. Queen Charlotte Islands. Q=d.

JULY 4 at 18 21 53.4 U.T. Epicentre at 52N, 132W. Queen Charlotte Islands? Q=d.

JULY 6 at 07 03 51.2 U.T. 32 km. from Victoria.

JULY 7 at 20 59 15.0 U.T. 26 km. from Victoria.

JULY 10 at 23 27 44.0 U.T. 27 km. from Victoria.

JULY 11 at 01 31 34.8 U.T. 83 km. from Victoria.

JULY 11 at 21 59 43 U.T. 158 km. from Penticton.

JULY 12 at 05 24 03.6 U.T. 87 km. from Penticton.

JULY 12 at 13 22 11.4 U.T. Epicentre at 48.4N, 125W. Off west coast. Q=c.

JULY 15 at 21 07 09.7 U.T. Magnitude 2 3/4. 290 km. from Victoria.

JULY 17 at 07 11 50.8 U.T. 31 km. from Banff.

JULY 18 at 09 46 29.8 U.T. 253 km. from Victoria.

JULY 18 at 23 23 09.1 U.T. Magnitude 1.6. 52 km. from Penticton.

JULY 20 at 02 12 13.0 U.T. Magnitude 1 1/2. 178 km. from Penticton.

JULY 20 at 06 54 13.4 U.T. 30 km. from Alberni.

JULY 20 at 21 38 17.5 U.T. Magnitude 2 1/2. 172 km. from Penticton.

JULY 21 at 00 20 49.7 U.T. Magnitude 2 1/2. 186 km. from Penticton.

JULY 21 at 19 09 55.5 U.T. Magnitude 3? 213 km. from Penticton.

JULY 22 at 07 18 05.4 U.T. Magnitude 4 1/4. 367 km. from Penticton.

JULY 22 at 14 22 43.8 U.T. Magnitude 2 3/4. 172 km. from Penticton.

JULY 22 at 23 45 45.9 U.T. Magnitude 1 1/2. 108 km. from Victoria.

JULY 23 at 17 54 19.0 U.T. Magnitude 2. 127 km. from Victoria.

JULY 25 at 20 06 31.5 U.T. 148 km. from Penticton.

JULY 26 at 18 46 31.4 U.T. Magnitude 1. 28 km. from Banff.

JULY 27 at 15 36 33 U.T. Magnitude 1 1/2. 25 km. from Banff.

JULY 27 at 16 08 56 U.T. Magnitude 1 1/4. 26 km. from Penticton.

JULY 27 at 16 44 36.8 U.T. 68 km. from Alberni and 52 km. from Penticton.

JULY 28 at 07 21 54.3 U.T. Magnitude 2 1/4. Epicentre at 47.8N, 121.8W. 40 km. northeast of Seattle, Washington, U.S.A. Q=b.

JULY 28 at 09 10 14.0 U.T. Epicentre at 48 1/2N, 122W. 40 km. southeast of Bellingham, Washington, U.S.A. Q=c.

JULY 28 at 20 40 53.5 U.T. 160 km. from Penticton.

JULY 29 at 20 53 11.8 U.T. 185 km. from Penticton.

JULY 30 at 06 06 46.6 U.T. 39 km. from Penticton.

JULY 30 at 20 24 48.4 U.T. 115 km. from Penticton.

AUGUST 1 at 01 45 43.7 U.T. Magnitude 2. Epicentre at 48.9N, 121.7W. Northeast of Mount Baker. Q=c.

AUGUST 1 at 02 00 42.7 U.T. 10 km. from Penticton.

AUGUST 2 at 03 46 30 U.T. 85.3 km. from Penticton.

AUGUST 2 at 06 51 14.9 U.T. Magnitude 2. 73 km. from Penticton.

AUGUST 2 at 16 51 16.2 U.T. Magnitude 2. 66 km. from Penticton.

AUGUST 4 at 01 37 53.8 U.T. Magnitude 2 3/4. 270 km. from Penticton.

AUGUST 8 at 03 24 32.3 U.T. Magnitude 2 3/4? 117 km. from Victoria.

AUGUST 9 at 10 47 18.9 U.T. Magnitude 2 3/4. Epicentre at 48 3/4N, 121 3/4W. Near Mount Baker. Q=b.

AUGUST 12 at 03 38 17.2 U.T. Magnitude 2 1/2. 200 km. from Penticton.

AUGUST 12 at 16 01 33.1 U.T. Magnitude 1 3/4. 113 km. from Victoria and 67 km. from Alberni.

AUGUST 14 at 07 37 28.8 U.T. Magnitude 2. Epicentre at 48.7N, 124.8W. Near Clo-oose. Q=c.

AUGUST 16 at 13 27 53.5 U.T. Magnitude 4. Epicentre at 47.7N, 116.3W. North of Kellogg, Montana, U.S.A. Q=c.

AUGUST 17 at 06 39 17.6 U.T. 64 km. from Alberni.

AUGUST 18 at 18 30 31.8 U.T. Magnitude 2.4. 225 km. from Penticton.

AUGUST 18 at 21 10 54.7 U.T. Magnitude 2.0. 139 km. from Penticton.

AUGUST 18 at 22 59 45.7 U.T. Magnitude 2.4. 164 km. from Penticton.

AUGUST 20 at 18 00 22.0 U.T. 50 km. from Alberni.

AUGUST 20 at 21 34 57.5 U.T. 53 km. from Alberni.

AUGUST 22 at 06 19 19.2 U.T. 380 km. from Penticton.

AUGUST 23 at 21 45 55.1 U.T. 37 km. from Banff.

AUGUST 24 at 18 27 31 U.T. Magnitude 2.4. 172 km. from Penticton.

AUGUST 24 at 20 10 29.4 U.T. Magnitude 2. Epicentre at 47.7N, 122.3W. Near Seattle, Washington, U.S.A. Q=c.

AUGUST 25 at 00 31 43 U.T. Magnitude 2.3. 156 km. from Penticton.

AUGUST 25 recorded at 19 00.6 at Alberni and Victoria.

AUGUST 27 at 19 07 42.4 U.T. 23 km. from Victoria.

AUGUST 30 at 16 33 02.9 U.T. 126 km. from Victoria.

SEPTEMBER 5 at 10 48 00 U.T. Magnitude 2.7. 186 km. from Penticton. Q=d.

SEPTEMBER 5 at 14 31 55 U.T. Magnitude 3.0. Epicentre at 47.7N, 121.6W. East of Seattle, Washington, U.S.A. Q=b.

SEPTEMBER 6 at 13 05 30 U.T. Magnitude 2. 107 km. from Victoria.

SEPTEMBER 7 at 21 52 30 U.T. Magnitude 2.1. 115 km. from Penticton.

SEPTEMBER 10 at 15 06 32.5 U.T. Magnitude 5. Epicentre at 47.5N, 122.7W. Near Seattle, Washington, U.S.A. Felt: Western Washington, U.S.A.

SEPTEMBER 10 at 17 52 26 U.T. Magnitude 2.1. 157 km. from Victoria, 60 km. from Alberni.

SEPTEMBER 10 at 19 21 04 U.T. Magnitude 2.5. Probably after-shock of Seattle, Washington, U.S.A. tremor.

SEPTEMBER 11 at 04 29 13.6 U.T. Magnitude 2.5. 62 km. from Victoria, 172 km. from Alberni.

SEPTEMBER 30 at 03 20 20.3 U.T. Epicentre at 49.3N, 129.3W. Off coast of Vancouver Island, B.C.

SEPTEMBER 30 at 06 35 08.9 U.T. Epicentre at 49.2N, 129.7W. Vancouver Island region, B.C.