# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN



January, 1959

Lat. 57°10′ N. Long. 2°6′ W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder-clay.

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mm. E-W | E-W 1.11.58 |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 19.0mm. N-S | N-S 1.11.58 |

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dirn of Motion N | Dirn of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | Jan. | | | | | | | | | |
| 1 | 1 | E | e | 09 08 15 | | | | | | U.S.C.G.S.: 8½°S, 177°W |
| | | | F | 19 - | | | | | | Very slight |
| 2 | 1 | E | e | 15 11 20 | | | | | | |
| | | N | e | 31 - | | | | | | ? Seismic |
| | | | F | 16 16 - | | | | | | Large microseisms throughout Jan. 2. |
| 3 | 8 | N | iS | 01 52 05 | | | | - | | U.S.C.G.S.: 15½°N, 61°W |
| | | N | i | 59 44 | | | | + | | E-W record too faint to |
| | | | F | 02 15 - | | | | | | read |
| 4 | 9 | NE | LM | 02 10 - | | | | | | B.C.I.S.: 36½°N, 23°E. |
| | | | | -25- | | | | | | Traces only |
| 5 | 16 | NE | LM | 02 15 - | | | | | | U.S.C.G.S.: 52½°N, 171°W |
| | | | | -25- | | | | | | Traces |
| 6 | 16 | E | eL | 17 23 35 | | | | | | U.S.C.G.S.: 52°N, 131½°W |
| | | N | M | 28 43 | 16 | 2 | | | | |
| | | E | M | 30 25 | 16 | 3.5 | | | | |
| | | | F | 39 - | | | | | | Large Microseisms throughout Jan. 22. |
| 7 | 22 | N | iP | 05 22 50 | | | 82.2° | - | | U.S.C.G.S.: 36°N, 142°E |
| | | N | iPP | 26 05 | | | 9135 Km | - | | |
| | | N | iS | 33 05 | | | | + | | No E-W record available |
| | | N | iPS | 34 21 | | | | + | | |
| | | N | e | 38 15 | | | | | | |
| | | N | L | 51 20 | | | | | | |
| | | N | M | 54 38 | 28 | 47 | | | | |
| | | N | M | 59 57 | 18 | 38 | | | | |
| | | N | M | 06 02 47 | 17 | 40 | | | | |
| | | | F | 45 - | | | | | | |
| 8 | 24 | N | iS | 20 05 00 | | | 24.5° | - | | U.S.C.G.S.: 37½°N, 24½°W |
| | | N | iSS | 05 57 | | | 2720Km | - | | |
| | | N | L | 07 15 | | | | | | No E-W record available |
| | | N | M | 09 08 | 12.5 | 16 | | | | |
| | | | F | 21 03 - | | | | | | |
| | | | | | | | | | | Records interrupted towards end of month through failure of driving clocks |

No. 2

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN .

| No | Date | Compt. | Phase | Time G.M.T. h. | m. | s. | Period sec. | Ampl. μ | Δ° km. | Dir$^{n}$ of Motion N | E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 29 | E | e | 23 | 29 | 25 | | | | | | |
| | | E | i | | 29 | 42 | | | | | + | U.S.C.G.S.: 71°N, 8°E |
| | | E | iS | | 30 | 54 | | | | | + | No N-S record available |
| | | E | L | | 33 | 39 | | | | | + | |
| | | E | M | | 35 | 00 | 13 | 17 | | | + | |
| | | | F | | 58 | - | | | | | | |

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KING'S COLLEGE OBSERVATORY, ABERDEEN

NO RECORD FOR FEBRUARY 1959: BOTH DRIVING CLOCKS REMOVED FOR REPAIR AND OVERHAUL.

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

March, 1959

Lat. 57°10′ N. Long. 2°6′ W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mm E-W | E-W 1.11.58 |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 190 mm N-S | N-S 1.11.58 |

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dirn of Motion | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|
| | March | | | | | | | N E | |
| 1 | 1 | E | M | 17 49 - | 26 | 140 | | | U.S.C.G.S: 1/2°S, 134 1/2°E Obscured by overlapping. |
| 2 | 17 | E | i | 08 48 43 | | | 87.3° | - | U.S.C.G.S.: 27 1/2°N, 130°E |
| | | N | iS | 48 48 | | | | - | |
| | | E | i | 54 17 | | | 9700Km | + | |
| | | N | iSS | 54 47 | | | | + | |
| | | E | eSSS | 58 42 | | | | - | |
| | | NE | eL | 09 11 30 | | | | | |
| | | E | $M_1$ | 12 40 | 25 | 22 | | | |
| | | N | M | 20 37 | 16 | 7 | | | |
| | | E | $M_2$ | 24 37 | 15 | 18 | | | |
| | | | F | 58 - | | | | | |
| 3 | 17 | E | e | 22 07 52 | | | | - | U.S.C.G.S.: Jan Mayer Region |
| | | | F | 09 30 | | | | | |
| 4 | 18 | E | eL | 01 27 30 | | | | | U.S.C.G.S.: 27°N, 129°E |
| | | E | M | 38 35 | 15 | 3 | | | Repetition of No. 2 |
| | | | F | 57 - | | | | | Very slight effect on N-S |
| 5 | 19 | N | e | 08 33 07 | | | 31.5° | - | U.S.C.G.S.: 35°N, 36°W |
| | | E | iPPP | 33 22 | | | 3500 Km | + | |
| | | E | i | 33 42 | | | | + | |
| | | E | iS | 37 12 | | | | + | |
| | | N | iSS | 38 37 | | | | + | - E 38m 42s |
| | | NE | L | 39 47 | | | | | |
| | | N | M | 39 59 | 22 | 20 | | | |
| | | E | $M_1$ | 40 59 | 20 | 19 | | | |
| | | E | $M_2$ | 42 42 | 15 | 20 | | | |
| | | | F | 09 24 - | | | | | |
| 6 | 20 | N | i | 15 25 15 | | | | - | |
| | | NE | i, e | 26 45 | | | | - | - |
| | | N | L | 27 30 | | | | | |
| | | E | M | 30 46 | 40 | 19 | | | No definite max. on N-S |
| | | | F | 38 - | | | | | |
| 7 | 23 | E | e | 07 48 - | | | | + | U.S.C.G.S: 40°N, 118°W |
| | | E | M | 51 58 | 15 | 4 | | + | |
| | | E | i | 54 35 | | | | | |
| | | N | e | 49 - | | | | | Slight effect on N-S |
| | | | | -56- | | | | | |
| | | | F | 08 05 - | | | | | |

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# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN



April, 1959

Lat. 57°10′ N. Long. 2°6′ W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mmE-W | E-W 1.11.58. |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 19.0 mmN-S | N-S 1.11.58. |

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dir$^{n}$ of Motion N | E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | April | | | | | | | | | |
| 1 | 1 | E | eP | 00 40 57 | | | 32.5° | | + | U.S.C.G.S.: 27½°N, 21°W |
| | | NE | iS | 46 16 | | | 3610Km | + | - | $T_o$ = 00h 34m 24s |
| | | E | iSS | 48 14 | | | | + | + | $N^o$ 48m 10s |
| | | E | L | 48 46 | | | | | | |
| | | E | M | 50 39 | 15 | 26 | | | | |
| | | N | M | 55 46 | 15 | 4 | | | | |
| | | | F | 01 10 - | | | | | | |
| 2 | 2 | E | LM | 20 13 35 -32- | | | | | | U.S.C.G.S.: 20½°N, 121°E No readable effect on N-S |
| 3 | 5 | E | i | 10 54 14 | | | | | + | U.S.C.G.S.: 44°N, 7°E |
| | | E | e | 54 41 | | | | | - | |
| | | E | M | 56 09 | 7 | 1.5 | | | | No N-S record available |
| | | | F | 11 09 - | | | | | | |
| 4 | 5 | E | i | 20 14 28 | | | | | + | U.S.C.G.S.: 46°N, 151°E |
| | | E | e | 17 11 | | | | | - | |
| | | E | LM | 21 16 - -36- | | | | | | No N-S record available |
| 5 | 6 | E | Slight effect | 00h 05m - 00h 15m. | | | | | | U.S.C.G.S.: 57½°S, 146°E |
| 6 | 6 | NE | LM | 15 11 - -25- | | | | | | U.S.C.G.S.: 10°S, 120½°E |
| 7 | 9 | E | LM | 07 29 - -40- | | | | | | U.S.C.G.S.: 36°S, 76°E |
| | | N | M | 37 38 | 15 | 1.5 | | | | |
| 8 | 9 | E | L | 18 14 - | | | | | | U.S.C.G.S.: 7°N, 82°W |
| | | E | M | 24 30 | 17 | 2 | | | | No measurable effect on N-S |
| | | | F | 34 - | | | | | | |
| | 12 | E | M | 10 41 28 | 20 | 2 | | | | U.S.C.G.S.: 17½°N, 95°W |
| | | | F | 45 - | | | | | | |
| | 12 | E | e | 16 22 - | | | | | | U.S.C.G.S.: 47½°S, 134°E |
| | | E | M | 23 15 | 25 | 8 | | | | No N-S record available |
| | | | F | 45 - | | | | | | |
| | 12 | E | e | 22 05 - | | | | | | U.S.C.G.S.: 157½°S, 173°W |
| | | E | M | 14 27 | 20 | 2.5 | | | | |
| | | | F | 17 - | | | | | | |

No. 2

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. $\mu$ | $\Delta^\circ$ km. | Dir$^n$ of Motion N E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|
| 12 | 15 | E | e | 00 59 35 | | | | | U.S.C.G.S.: 41½°N, 143°N |
| | | N | LM | 01 00 - | | | | | |
| | | | | -02- | | | | | |
| | | E | M | 01 10 | 20 | 2.5 | | | |
| | | | F | 02 - | | | | | |
| 13 | 20 | E | e | 04 35 - | | | | | U.S.C.G.S.: 6°S, 149½°E |
| | | E | M | 42 00 | 20 | 2 | | | N-S record too faint to measure. |
| | | | F | 46 - | | | | | |
| 14 | 20 | E | LM | 05 01 - | | | | | U.S.C.G.S.: 8½°N, 83°W |
| | | | | -13- | | | | | |
| 15 | 22 | E | e | 19 39 20 | | | | | U.S.C.G.S.: 11½°N, 86½°W |
| | | E | M | 45 20 | 20 | 3 | | | |
| | | N | LM | -43- | | | | | |
| | | | | -50- | | | | | |
| | | | F | 53 - | | | | | |
| 16 | 22 | NE | LM | 21 38 - | | | | | U.S.C.G.S.: 36½°S, 97½°W |
| | | | | -45- | | | | | |
| 17 | 24 | E | e | 10 10 10 | | | | | U.S.C.G.S.: 11½°N, 86½°W |
| | | E | M | 15 15 | 20 | 2.5 | | | |
| | | | F | 20 - | | | | | |
| 18 | 24 | E | iPPP | 18 25 08 | | | 154° | + | U.S.C.G.S.: 31°S, 178°W |
| | | N | eSKKS | 28 03 | | | | - | |
| | | E | iPSKS | 32 03 | | | 1711Km | - | Phases doubtful, |
| | | E | i | 34 36 | | | | + | building shaking. |
| | | N | i | 40 16 | | | | - | |
| | | E | i | 19 20 08 | | | | + | |
| | | NE | L | 25 - | | | | | |
| | | N | M | 31 00 | 15 | 1.5 | | | |
| | | E | $M_1$ | 34 20 | 20 | 8 | | | |
| | | E | $M_2$ | 54 33 | 17 | 4 | | | |
| | | N | $M_2$ | 54 38 | 15 | 2 | | | |
| | | | F | 20 17 - | | | | | |
| 19 | 25 | E | iP | 00 32 38 | | | | - | U.S.C.G.S.: 37°N, 28½°E |
| | | NE | i | 37 23 | | | | - - | |
| | | N | i | 37 53 | | | | - | Turkish Shock |
| | | NE | i | 39 13 | | | | + + | |
| | | NE | L | 40 30 | | | | | |
| | | E | M | 44 38 | 13 | 11 | | | |
| | | N | M | 46 03 | 15 | 8 | | | |
| | | | F | 01 33 - | | | | | |
| 20 | 26 | NE | iP | 20 53 05 | | | 86° | - - | U.S.C.G.S.: 25°N, 122½°E |
| | | N | iPP | 56 33 | | | 9555Km | + - | E 56m 27s |
| | | N | i | 57 20 | | | | + | |
| | | NE | iSKS | 21 03 28 | | | | - - | |
| | | NE | iPS | 04 35 | | | | + + | |
| | | E | i | 08 10 | | | | + | |
| | | NE | iSS | 09 55 | | | | + - | |
| | | E | iSSS | 13 00 | | | | + | |
| | | E | L | 22 40 | | | | | |
| | | N | L | 24 10 | | | | | |
| | | E | i | 24 37 | 30 | 206 | | | |
| | | N | M | 29 01 | 17 | 60 | | | |
| | | E | M | 36 19 | 15 | 79 | | | |
| | | | F | 22 37 - | | | | | |

No. 3

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. mm | Δ° km. | Dir$^{n}$ of Motion N | Dir$^{n}$ of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | N | E | |
| 21 | 28 | NE | e,iP | 11 21 28 | | | 78° | + | - | U.S.C.G.S.:15°N, 93°W |
| | | E | iPP | 24 24 | | | 8665Km | | + | |
| | | N | i | 30 57 | | | | + | | |
| | | E | iS | 31 20 | | | | | - | $T_o$ = 11h 09m 30s |
| | | NE | iPS | 32 02 | | | | + | + | |
| | | E | iSS | 36 47 | | | | + | + | N 37m 14s |
| | | E | eSSS | 39 49 | | | | | - | |
| | | N | e | 42 22 | | | | + | | |
| | | N | L | 48 00 | | | | | | |
| | | N | M | 50 17 | 25 | 13 | | | | |
| | | E | M | 57 44 | 18 | 29 | | | | |
| | | F | | 12 34 - | | | | | | |

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# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

May, 1959

Lat. 57°10′ N. Long. 2°6′ W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mm. | E-W 1.11.58 |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 19.0 mm. | N-S 1.11.58 |

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dir$^{n}$ of Motion N | Dir$^{n}$ of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | May | | | | | | | | | |
| 1 | 4 | E | e | 09 10 - | | | | | | U.S.C.G.S.: 52½°N, 159½°E |
| | | E | M | 52 03 | 22 | | | | | Early portion lost E |
| | | | F | 11 00 - | | | | | | through light failure |
| 2 | 5 | E | e | 19 29 45 | | | | | + | U.S.C.G.S.: 53°N, 159°E |
| | | E | e | 32 45 | | | | | + | |
| | | E | L | 38 35 | | | | | | |
| | | E | M | 49 24 | 16 | 7 | | | | |
| | | | F | 20 35 - | | | | | | |
| 3 | 6 | NE | L | 01 07 06 | | | | | | U.S.C.G.S.: 3°S, 148½°E |
| | | N | M | 19 10 | 20 | 4 | | | | |
| | | E | M | 19 25 | 20 | 5 | | | | |
| | | | F | 40 - | | | | | | |
| 4 | 7 | NE | LM | 23 00 - | | | | | | Traces only: ? seismic |
| | | | | -08- | | | | | | |
| 5 | 12 | N | eP | 05 08 37 | | | 68.6° | - | | U.S.C.G.S.: 54½°N, 168°E |
| | | E | e | 08 57 | | | 7620Km | | + | T = 04h 57m 36s |
| | | NE | iS | 17 39 | | | | + | + | o |
| | | N | eSS | 22 04 | | | | + | + | eE = 22m 00s |
| | | NE | L | 31 - | | | | | | |
| | | E | $M_1$ | 33 13 | 23 | 7 | | | | |
| | | N | $M_1$ | 36 00 | 20 | 5.5 | | | | |
| | | E | $M_2$ | 44 12 | 17 | 4 | | | | |
| | | N | $M_2$ | 46 24 | 16 | 4.5 | | | | |
| | | | F | 06 45 - | | | | | | |
| 6 | 12 | E | ePP | 10 04 13 | | | 96.0° | | - | U.S.C.G.S.: 23½°S, 64½°W |
| | | NE | iSKS | 10 53 | | | 10665Km | - | - | |
| | | N | iPPS | 13 05 | | | | | | Early phases affected |
| | | NE | i, eSS | 17 50 | | | | | | by shaking of building |
| | | N | L | 32 05 | | | | | | |
| | | E | M | 40 38 | 17 | 20 | | | | |
| | | N | $M_1$ | 41 05 | 20 | 7 | | | | |
| | | N | $M_2$ | 53 05 | 18 | 13 | | | | |
| | | | F | 12 35 - | | | | | | |
| 7 | 12 | Obscured | by No. 6. | | | | | | | U.S.C.G.S.: 20½°S, 63½°W |
| | | E | L | 10 58 40 | | | | | | |
| | | E | M | 11 05 03 | 18 | 5.5 | | | | |
| | | N | M | 13 05 | 16 | 3 | | | | |

No. 2

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. | m. | s. | Period sec. | Ampl. $\mu$ | $\Delta^\circ$ km. | Dir$^n$ of Motion N | E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | May | | | | | | | | | | | |
| 8 | 12 | N | e | 22 | 11 | 18 | | | 70° | - | | U.S.C.G.S.: 51½°N, 177°W |
| | | E | ePP | | 13 | 48 | | | 7780Km | + | + | eN 14m 06s |
| | | N | iS | | 20 | 20 | | | | + | | |
| | | E | ePS | | 20 | 47 | | | | | - | $T_o$ = 22h 00m 00s |
| | | E | eSS | | 25 | 08 | | | | | + | |
| | | N | e | | 29 | 12 | | | | + | | |
| | | E | M | | 37 | 05 | 17 | 4 | | | | |
| | | N | M | | 44 | 20 | 20 | 4 | | | | |
| | | | F | 23 | 09 | - | | | | | | |
| 9 | 14 | E | e | 01 | 04 | 00 | | | | | | |
| | | NE | LM | | 10 | - | | | | | | |
| | | | | | -17 | - | | | | | | |
| | | | F | | -24 | - | | | | | | |
| 10 | 14 | NE | eP | 06 | 42 | 58 | | | 28.0° | - | - | U.S.C.G.S.: 35½°N, 24½°E |
| | | NE | i | | 43 | 03 | | | 3110Km | - | - | |
| | | E | i | | 47 | 43 | | | | | - | $T_o$ = 06h 37m 03s |
| | | NE | iS | | 47 | 47 | | | | + | + | |
| | | E | i | | 49 | 18 | | | | | - | |
| | | N | L | | 51 | - | | | | | | |
| | | E | $M_1$ | | 54 | 26 | 20 | 30 | | | | |
| | | N | $M_1$ | | 55 | 20 | 16 | 16 | | | | |
| | | N | $M_2$ | | 57 | 01 | 13 | 19 | | | | |
| | | E | $M_2$ | | 57 | 40 | 12 | 24 | | | | |
| | | | F | 07 | 53 | - | | | | | | |
| 11 | 14 | E | e | 19 | 31 | - | | | | | | |
| | | N | e | | 32 | - | | | | | | |
| | | E | L | | 37 | - | | | | | | |
| | | E | M | | 40 | 50 | 10 | 1 | | | | |
| | | N | LM | | 36 | 30 | | | | | | |
| | | | | | -44- | | | | | | | |
| | | | F | | 48 | - | | | | | | |
| 12 | 16 | E | e | 06 | 54 | - | | | | | | U.S.C.G.S.: 47½°S, 153½°E |
| | | N | eSS | | 55 | - | | | | | | |
| | | N | M | 07 | 23 | 00 | 25 | 4 | | | | |
| | | E | $M_1$ | | 23 | 12 | 25 | 4 | | | | |
| | | E | $M_1$ | | 31 | 50 | 22 | 5 | | | | |
| | | N | $M_2$ | | 38 | 07 | 20 | 4 | | | | |
| | | | F | 08 | 30 | - | | | | | | |
| 13 | 19 | NE | e | 15 | 32 | 50 | | | | + | - | U.S.C.G.S.: 33°N, 68½°E |
| | | N | i | | 40 | 05 | | | | + | | |
| | | E | L | | 44 | - | | | | | | |
| | | E | M | | 51 | 50 | 17 | 4 | | | | |
| | | | F | 16 | 04 | - | | | | | | |
| 14 | 20 | N | Traces | 16 | 45 | - | | | | | | B.C.I.S.: 37¼°N, 26½°E |
| | | | | | -49 | - | | | | | | |
| 15 | 20 | NE | e | 20 | 02 | 45 | | | | - | - | B.C.I.S.: 44½°N, 149°E |
| | | N | i | | 07 | 30 | | | | - | | |
| | | E | L | | 09 | 40 | | | | | | |
| | | E | M | | 15 | 03 | 11 | 2.5 | | | | |
| | | | F | | 30 | - | | | | | | |
| 16 | 24 | E | Traces | 11 | 08 | - | | | | | | U.S.C.G.S.: 26½°N, 90½°E |
| | | | | | -21 | - | | | | | | |

No. 3

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. mm | Δ° km. | Dir$^{n}$ of Motion N | Dir$^{n}$ of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | May | | | | | | | | | |
| 17 | 24 | N | e | 13 28 35 | | | | - | | U.S.C.G.S.: 37½°N, 4°E |
| | | E | L | 30 30 | | | | | | |
| | | E | M | 33 17 | 13 | 2.5 | | | | |
| | | N | M | 33 35 | 10 | 1.5 | | | | |
| | | | F | 52 - | | | | | | |
| 18 | 24 | NE | iP | 19 29 36 | | | 78.3° | - | - | U.S.C.G.S.: 17½°N, 97°W |
| | | N | i | 30 43 | | | 8700 | + | | |
| | | E | iPP | 32 38 | | | | | + | $T_o$ = 19h 17m 38s |
| | | E | iPPP | 34 23 | | | | | - | |
| | | NE | iS | 39 33 | | | | + | + | |
| | | N | iPS | 40 13 | | | | + | | |
| | | N | iSS | 44 48 | | | | + | + | E 44m 27s |
| | | E | iSSS | 48 29 | | | | | + | |
| | | E | L | 54 50 | | | | | | |
| | | E | M | 58 27 | 25 | 61 | | | | |
| | | N | M | 20 02 03 | 25 | 9 | | | | |
| | | | F | 21 52 - | | | | | | |
| 19 | 26 | E | e | 04 55 05 | | | | | - | U.S.C.G.S.: 27½°N, 126½°E |
| | | E | e | 05 06 - | | | | | | |
| | | N | LM | 06 - | | | | | | |
| | | | | -11 - | | | | | | |
| | | | F | 18 - | | | | | | |
| 20 | 26 | E | e | 06 56 15 | | | | | + | U.S.C.G.S.: 37½°N, 70°E |
| | | E | e | 07 02 40 | | | | | - | |
| | | N | LM | 05 - | | | | | | |
| | | | | -20 - | | | | | | |
| | | E | M | 10 00 | 17 | 2 | | | | |
| | | | F | 25 - | | | | | | |
| 21 | 29 | NE | Traces | 11 11 - | | | | | | U.S.C.G.S.: 19°S, 169½°E |
| | | | | -40- | | | | | | |
| 22 | 31 | E | e | 09 49 50 | | | | | + | |
| | | E | e | 10 06 40 | | | | | - | No readable effect on |
| | | E | i | 18 52 | | | | | - | N-S compt. |
| | | E | e | 35 00 | | | | | + | |
| | | E | L | 41 - | | | | | | |
| | | E | M | 52 48 | 15 | 2.5 | | | | |
| | | | F | 11 20 - | | | | | | |
| 23 | 31 | E | e | 12 24 50 | | | | | + | |
| | | E | L | 28 40 | | | | | | |
| | | N | LM | 29 - | | | | | | |
| | | | | -34 - | | | | | | |
| | | E | M | 32 38 | 13 | 2 | | | | |
| | | | F | 36 - | | | | | | |

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# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

Lat. 57°10′ N. Long. 2°6′ W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

JUNE, 1959

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mm. | E-W 1.11.58 |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 19.0mm. | N-S 1.11.58 |

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. $\mu$ | $\Delta°$ km. | Dir$^{n}$ of Motion N E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|
| | June | | | | | | | | |
| 1 | 2 | E | e | 01 32 50 | | | | | U.S.C.G.S.:32°N, 131°E |
| | | NE | e | 39 00 | | | | | |
| | | E | e | 43 30 | | | | | |
| | | N | e | 45 15 | | | | | |
| | | | F | 02 03 - | | | | | |
| 2 | 2 | N | e | 03 22 - | | | | | U.S.C.G.S.: 21°N, 121°E |
| | | E | e | 23 - | | | | | |
| | | E | M | 27 40 | 22 | 6.5 | | | |
| | | | F | 50 - | | | | | |
| 3 | 2 | E | e | 04 54 - | | | | | U.S.C.G.S.:25½°S, 176°W |
| | | E | M | 56 50 | 16 | 2 | | | |
| | | . | F | Lost in succeeding shock | | | | | |
| 4 | 2 | E | i | 05 19 58 | | | | - | U.S.C.G.S.: 21°N, 121½°E |
| | | E | iS | 20 51 | | | | + | Light failed on N-S |
| | | E | e | 30 33 | | | | + | |
| | | E | L | 41 50 | | | | | |
| | | E | M | 47 00 | 22 | 39 | | | |
| | | | F | Lost in succeeding shock | | | | | |
| 5 | 2 | E | e | 06 19 30 | | | | + | U.S.C.G.S.: 43°S, 72°W |
| | | E | L | 31 - | | | | | |
| | | E | M | 32 45 | 20 | 5 | | | |
| | | | F | 06 56 - | | | | | |
| 6 | 7 | E | e | 14 04 - | | | | | U.S.C.G.S.: ½°N, 18°W |
| | | E | L | 08 03 | | | | | |
| | | N | LM | 09 - | | | | | |
| | | | | -16- | | | | | |
| | | E | M | 12 12 | 16 | 2.5 | | | |
| | | | F | 26 - | | | | | |
| 7 | 10 | E | e | 04 31 45 | | | | | U.S.C.G.S.: 36°N, 23°E |
| | | N | e | 32 40 | | | | | |
| | | E | M | 32 30 | 15 | 2 | | | |
| | | | F | 38 - | | | | | |
| 8 | 13 | E | e | 22 04 40 | | | | | U.S.C.G.S: 46½°N, 13°E |
| | | E | M | 07 20 | 10 | 1 | | | |
| | | | F | 12 - | | | | | |

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. mm | Δ° km. | Dirn of Motion N | Dirn of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | June | | | | | | | | | |
| 9 | 14 | E | eP | 00 25 20 | | | 95.0° | | - | U.S.C.G.S.: 20½°S, 68°W |
| | | NE | e | 25 50 | | | 10555Km | - | - | |
| | | NE | iPP | 29 08 | | | | + | + | $T_o$ = ooh 11m 57s |
| | | NE | iSKS | 35 42 | | | | + | + | |
| | | E | iS | 36 39 | | | | | + | |
| | | N | i | 37 11 | | | | + | | |
| | | E | iPS | 37 40 | | | | | + | |
| | | NE | iSS | 43 01 | | | | + | + | N 42m 53s |
| | | E | iSSS | 47 01 | | | | | - | |
| | | N | i | 49 33 | | | | + | | |
| | | N | L | 57 28 | | | | | | |
| | | E | M | 01 03 47 | 22 | 62 | | | | |
| | | N | M | 04 53 | 22 | 6.5 | | | | |
| | | | F | 03 05 - | | | | | | |
| 10 | 14 | E | e | 14 10 10 | | | | | + | |
| | | E | e | 19 30 | | | | | + | ? Seismic |
| | | E | i | 27 56 | | | | | + | |
| | | E | e | 45 15 | | | | | | |
| | | | F | 15 04 - | | | | | | |
| 11 | 17 | NE | e | 10 52 30 | | | | - | - | U.S.C.G.S.: 34½°N, 98½°W |
| | | | F | 11 10 - | | | | | | |
| 12 | 18 | NE | iS | 15 51 26 | | | 68° | + | + | U.S.C.G.S.: 54°N, 160°E |
| | | N | i | 53 17 | | | 7560Km | + | | |
| | | E | iSS | 55 53 | | | | | - | Apparently two shocks |
| | | E | i | 56 42 | | | | | - | superposed. |
| | | E | iSSS | 59 12 | | | | | + | |
| | | E | M | 16 02 47 | 30 | 69 | | | | |
| | | NE | i | 08 07 | | | | + | + | |
| | | NE | L | 13 - | | | | | | |
| | | E | M | 20 48 | 15 | 35 | | | | |
| | | N | M | 21 58 | 10 | 7.5 | | | | |
| | | | F | 17 36 - | | | | | | |
| 13 | 21 | E | e | 06 48 10 | | | | | + | U.S.C.G.S.: 4½°S, 151½° |
| | | N | e | 49 20 | | | | | | |
| | | | F | 07 20 - | | | | | | |
| 14 | 23 | E | eL | 15 12 10 | | | | | | U.S.C.G.S.: 39°N, 119°W |
| | | N | LM | 15 - | | | | | | |
| | | | | -22- | | | | | | |
| | | E | M | 16 48 | 15 | 2 | | | | |
| | | | F | 29 - | | | | | | |
| 15 | 25 | NE | iP | 06 50 10 | | | | + | + | U.S.C.G.S.: 62°N, 27½°W |
| | | N | e | 51 23 | | | 13.8° | + | | |
| | | E | eS | 52 43 | | | 1530Km | | + | $T_o$ = 06h 46m 58s |
| | | E | iSS | 53 08 | | | | - | + | eN 53m 28s |
| | | N | L | 54 10 | | | | | | |
| | | NE | M | 56 13 | 10 | E 12 N 3.5 | | | | |
| | | | F | 07 41 - | | | | | | |
| 16 | 27 | NE | i, eP | 19 24 24 | | | 71.9° | + | + | |
| | | N | i | 26 01 | | | 7990Km | - | | $T_o$ = 19h 13m 04s |
| | | N | iPP | 27 09 | | | | + | | |
| | | N | iS | 33 44 | | | | + | - | eE 33m 34s |
| | | E | ePS | 34 16 | | | | | + | |
| | | N | iSS | 38 40 | | | | - | | |
| | | N | i | 40 36 | | | | + | | |
| | | E | iSSS | 41 26 | | | | | - | |
| | | N | M | 45 16 | 10 | 2 | | | | |
| | | E | L | 47 29 | | | | | | |
| | | | F | 21 06 - | | | | | | |

No. 3

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. mm | Δ° km. | Dir$^{n}$ of Motion N | Dir$^{n}$ of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | June | | | | | | | | | |
| 17 | 28 | E | ePPP | 20 05 23 | | | 118.1° | | + | U.S.C.G.S.: 9½°S, 126½°E |
| | | E | iSKS | 09 02 | | | 13120Km | | + | |
| | | E | iPPS | 14 23 | | | | | + | T = 19h 43m 27s |
| | | E | eSS | 19 08 | | | | | + | N8 readable effect on |
| | | E | i | 22 58 | | | | | - | N-S |
| | | E | L | 45 25 | | | | | | |
| | | E | $M_1$ | 49 13 | 25 | 4 | | | | |
| | | E | $M_2$ | 53 20 | 20 | 3 | | | | |
| | | | F | 21 10 - | | | | | | |

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# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

Lat. 57°10′ N. Long. 2°6′ W. Height above M.S.L. 12M. Lithologic Foundation · Glacial deposit over boulder clay.

July, 1959

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mm. | E-W 1.11.58 |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 19.0mm. | N-S 1.11.58 |

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dirn of Motion N | Dirn of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | July | | | | | | | | | |
| 1 | 1 | E | i | 02 46 29 | | | 89° | | - | U.S.C.G.S.: 28°N, 139½°E |
| | | NE | iSKS | 49 24 | | | 9890 Km | + | + | Deep focus |
| | | E | iSP | 50 56 | | | | | - | |
| | | E | iPPS | 53 13 | | | | - | - | N 53m 18s |
| | | F | | 03 05 - | | | | | | |
| 2 | 3 | N | iPP | 18 19 00 | | | 139° | - | | U.S.C.G.S.: 16°S, 172½°E |
| | | E | i | 21 12 | | | 15445Km | | + | |
| | | E | eSKS | 21 57 | | | | | + | |
| | | N | i | 25 10 | | | | - | | |
| | | E | iS | 25 55 | | | | | + | |
| | | N | iPPS | 29 35 | | | | - | - | eE 29m 29s |
| | | N | eSSS | 41 27 | | | | - | | |
| | | E | L | 19 03 25 | | | | | | |
| | | N | L | 05 05 | | | | | | |
| | | E | M | 13 47 | 20 | 5 | | | | |
| | | N | M | 14 07 | 20 | 2.5 | | | | |
| | | F | | 20 14 - | | | | | | |
| 3 | 5 | E | e | 16 07 22 | | | | | - | U.S.C.G.S.: 8°S, 74°W |
| | | E | ePP | 09 52 | | | | | + | |
| | | E | ePPP | 11 30 | | | | | - | Displacements very slight |
| | | N | eSKKS | 17 15 | | | | - | | |
| | | NE | eSSS | 26 00 | | | | + | + | |
| | | F | | 35 - | | | | | | |
| 4 | 6 | NE | I iSKS | 09 32 35 | | | 97°.2 | - | - | U.S.C.G.S.: 26½°S, 61½°W |
| | | NE | I iS | 33 24 | | | | - | + | |
| | | NE | I iPS | 36 25 | | | 10800Km | - | - | Two shocks both in same position |
| | | NE | II iSKS | 45 46 | | | | - | - | |
| | | NE | II iS | 46 35 | | | | + | + | No definite max. |
| | | NE | II iPS | 49 33 | | | | - | - | Deep focus |
| | | F | | 10 45 - | | | | | | |
| 5 | 9 | NE | iPP | 16 22 22 | | | 95° | + | + | U.S.C.G.S.: 20½°S, 68°W |
| | | E | i | 23 03 | | | 10555 Km | | - | T = 16h 05m 14s |
| | | N | iSKS | 29 03 | | | | - | + | ° E 28m 58s |
| | | N | iS | 30 00 | | | | + | + | E 29m 55s |
| | | N | ePS | 31 08 | | | | + | | |
| | | E | ePPS | 31 33 | | | | | + | |
| | | E | iSS | 36 16 | | | | - | + | N 36m 12s |
| | | NE | eSSS | 40 21 | | | | - | + | N 40m 11s |
| | | E | L | 54 - | | | | | | |
| | | E | M | 57 02 | 20 | 2.5 | | | | |
| | | F | | 17 26 - | | | | | | |

No. 2

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date July | Compt. | Phase | Time G.M.T. h. | m. | s. | Period sec. | Ampl. mm | Δ° km. | Dirn of Motion N | E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 11 | N | e | 12 | 50 | 20 | | | | + | | U.S.C.G.S.: 36°S, 78°E |
| | | N | e | | 59 | 15 | | | | - | | |
| | | N | M | 13 | 16 | 08 | 20 | 2.5 | | | | E-W light failed |
| | | | F | | 31 | - | | | | | | |
| 7 | 16 | NE | Slight effect from 20h to 22h but no definite phases recorded. | | | | | | | | | U.S.C.G.S: 21½°S, 169°E |
| 8 | 18 | E | iPP | 20 | 11 | 47 | | | | | + | U.S.C.G.S.: 15½°N, 120½°E |
| | | NE | i | | 11 | 52 | | | 93.4° | - | - | |
| | | E | i | | 13 | 22 | | | 10380Km | | - | |
| | | NE | iSKS | | 18 | 21 | | | | + | + | |
| | | NE | iSKKS | | 18 | 57 | | | | - | + | |
| | | N | i | | 19 | 59 | | | | - | | |
| | | NE | eSS | | 25 | 02 | | | | + | - | |
| | | NE | eL | | 38 | 30 | | | | | | |
| | | NE | M | | 44 | 17 | 25 | 30E ) 9N ) | | | | |
| | | | F | 21 | 43 | - | | | | | | |
| 9 | 19 | E | e | 14 | 01 | 46 | | | | | | U.S.C.G.S.: 23½°S, 179°E |
| | | E | e | | 10 | 51 | | | | | | |
| | | E | e | | 23 | 21 | | | | | | Very little effect on N-S |
| | | | F | | 58 | - | | | | | | |
| 10 | 19 | E | e | 15 | 18 | 56 | | | 91.3° | | + | U.S.C.G.S.: 15°S, 70½°W |
| | | N | i | | 19 | 46 | | | 10145 Km | + | | |
| | | E | i | | 22 | 13 | | | | | + | |
| | | N | i | | 23 | 23 | | | | | + | |
| | | NE | iSKS | | 29 | 10 | | | | + | + | |
| | | NE | i | | 30 | 51 | | | | + | + | |
| | | NE | iPPS | | 31 | 46 | | | | - | - | |
| | | E | eSSS | | 40 | 36 | | | | | + | |
| | | NE | L | | 44 | 10 | | | | | | |
| | | E | M | | 55 | 11 | 20 | 22 | | | | |
| | | N | M | | 56 | 01 | 17 | 4 | | | | |
| | | | F | 18 | 00 | - | | | | | | |
| 11 | 20 | E | i | 03 | 04 | 23 | | | 107° | | + | U.S.C.G.S.: 6°S, 110°E |
| | | E | iSKS | | 05 | 16 | | | 11890Km | | - | |
| | | N | iSKKS | | 05 | 53 | | | | - | | |
| | | E | iPS | | 07 | 36 | | | | | + | |
| | | N | iSSS | | 18 | 04 | | | | + | | |
| | | | F | | 27 | - | | | | | | |
| 12 | 21 | E | e | 09 | 48 | 50 | | | | | | U.S.C.G.S.: 19°N, 68½°W |
| | | E | M | | 56 | 03 | 17 | 2 | | | | No effect on N-S |
| | | | F | 10 | 03 | - | | | | | | |
| 13 | 21 | E | iS | 12 | 51 | 28 | | | | | + | U.S.C.G.S.: 16°N, 98°W |
| | | E | e | | 56 | 14 | | | | | | Obscured by overlapping on N-S |
| | | E | L | 13 | 14 | 00 | | | | | | |
| | | E | M | | 17 | 55 | 20 | 4 | | | | |
| | | | F | | 36 | - | | | | | | |
| 14 | 22 | N | ePP | 19 | 37 | 53 | | | | + | | U.S.C.G.S.: 53°N, 153°E |
| | | E | e | | 40 | 06 | | | | | + | |
| | | NE | i | | 42 | 30 | | | | - | + | |
| | | N | i | 20 | 01 | 30 | | | | + | | |
| | | E | i | | 13 | 30 | | | | | - | |
| | | | F | | 42 | - | | | | | | |

No. 3

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. mm | Δ° km. | Dirn of Motion N | Dirn of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | July | | | | | | | | | |
| 15 | 22 | NE | ePP | 23 23 12 | | | | - | - | |
| | | NE | e | 24 45 | | | 124.3° | + | + | U.S.C.G.S: 5°S, 152½°E |
| | | NE | ePPP | 25 48 | | | 13810 Km | - | - | |
| | | NE | eSKKS | 30 22 | | | | + | + | |
| | | NE | ePS | 33 10 | | | | + | + | |
| | | E | e | 34 58 | | | | | + | |
| | | N | e | 43 03 | | | | + | | |
| | | NE | L | 24 01 30 | | | | | | |
| | | NE | L | 04 10 | | | | | | |
| | | NE | $M_1$ | 12 43 | 20 | 5 | | | | |
| | | E | $M_1$ | 13 05 | 20 | 5 | | | | |
| | | N | $M_2$ | 19 04 | 20 | 8 | | | | |
| | | | F | 25 27 - | | | | | | |
| 16 | 24 | N | i | 01 39 53 | | | 72.7° | + | | U.S.C.G.S: 41°N, 125½°W |
| | | NE | e, is | 43 55 | | | 8080 Km | + | + | $T_o$ = 01h 23m |
| | | E | eSS | 48 44 | | | | + | + | °eN 48m 40s |
| | | N | eSSS | 51 50 | | | | - | | |
| | | NE | L | 57 - | | | | | | |
| | | E | $M_1$ | 02 02 53 | 17 | 10 | | | | |
| | | N | $M_1$ | 03 03 | 15 | 3 | | | | |
| | | E | $M_2$ | 05 10 | 15 | 9.5 | | | | |
| | | N | $M_2$ | 06 42 | 15 | 4 | | | | |
| | | | F | 43 - | | | | | | |
| 17 | 26 | E | eS | 17 17 06 | | | | | + | U.S.C.G.S.: 41°N, 27½°E |
| | | E | L | 22 04 | | | | | | |
| | | E | M | 26 00 | 13 | 3 | | | | Light failed on N-S |
| | | | F | 41 - | | | | | | |
| 18 | 31 | E | e | 20 12 48 | | | | | - | U.S.C.G.S.: 38½°N, 70°E |
| | | E | i | 17 29 | | | | | + | |
| | | E | i | 20 16 | | | | | + | Effect on N-S almost |
| | | N | e | 22 00 | | | | + | | negligible |
| | | E | i | 23 04 | | | | | - | |
| | | E | M | 27 05 | 15 | 2.5 | | | | |
| | | | F | 36 - | | | | | | |

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# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

August, 1959

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mm. | E-W 1.11.58 |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 19:0mm. | N-S 1.11.58 |

| No | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dirn of Motion N | Dirn of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | Aug. | | | | | | | | | |
| 1 | 7 | E | iS | 11 02 51 | | | | | - | U.S.C.G.S.: 56°N, 154°W |
| | | NE | iSS | 06 54 | | | | - | - | |
| | | E | e | 10 24 | | | | | + | |
| | | N | i | 11 41 | | | | + | | |
| | | E | e | 22 30 | | | | | | |
| | | E | M | 34 36 | 13 | 1 | | | | |
| | | | F | 44 - | | | | | | |
| 2 | 7 | N | e | 22 20 50 | | | | - | | U.S.C.G.S.: 56½°N, 154°W |
| | | N | e | 25 44 | | | | - | | No E-W record |
| | | | F | 33 - | | | | | | |
| 3 | 8 | N | e | 00 59 45 | | | | + | | U.S.C.G.S.: 55°N, 162½°E |
| | | N | i | 01 07 37 | | | | + | | Very slight |
| | | N | e | 08 30 | | | | + | | No E-W record |
| | | | F | 12 - | | | | | | |
| 4 | 12 | E | e | 01 13 35 | | | | | + | U.S.C.G.S.: 11½°N, 86°W |
| | | E | e | 19 45 | | | | | | |
| | | | F | 27 - | | | | | | |
| 5 | 12 | N | i | 10 15 45 | | | 139° | - | | U.S.C.G.S.: 16½°S, 177½°W |
| | | E | iPP | 20 45 | | | 15445Km | | + | |
| | | N | iSKP | 21 25 | | | | - | | $T_o$ = 09h 58.6m |
| | | E | iPSKS | 30 35 | | | | | - | |
| | | E | iPPS | 33 35 | | | | | - | |
| | | E | eSS | 39 13 | | | | | - | |
| | | N | i | 47 58 | | | | + | | |
| | | N | L | 11 08 35 | | | | | | |
| | | E | M | 16 46 | 20 | 16 | | | | |
| | | N | M | 21 16 | 17 | 3 | | | | |
| | | | F | 12 20 - | | | | | | |
| 6 | 15 | NE | eP | 09 09 49 | | | 86.9° | + | - | U.S.C.G.S.: 23°N, 121°E |
| | | E | iPP | 13 22 | | | 9655Km | + | + | N 13m 42s |
| | | E | i | 16 57 | | | | | - | |
| | | E | iSKS | 20 17 | | | | + | - | N 20m 22s |
| | | N | iS | 20 37 | | | | - | - | E 20m 44s |
| | | E | iPS | 21 27 | | | | + | + | N 21m 56s |
| | | N | iSS | 26 36 | | | | + | - | E 26m 44s |
| | | NE | iSSS | 30 00 | | | | - | - | |
| | | N | L | 37 50 | | | | | | $T_o$ = 08h 57m 12s |
| | | E | M | 45 12 | 22 | 500 | | | | |
| | | N | $M_1$ | 45 20 | 25 | 304 | | | | |
| | | N | $M_2$ | 47 41 | 18 | 156 | | | | |
| | | E | $M_2$ | 48 57 | 20 | 411 | | | | |
| | | | F | 11 55 - | | | | | | |

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. mm | Δ° km. | Dirn of Motion N | Dirn of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | Aug. | | | | | | | | | |
| 7 | 16 | E | e | 02 08 00 | | | | | | U.S.C.G.S.: 21°S, 169°E |
| | | N | e | 09 20 | | | | | | |
| | | E | M | 10 48 | 20 | 11 | | | | |
| | | N | M | 11 20 | 20 | 5.5 | | | | |
| | | | F | 32 - | | | | | | |
| 8 | 17 | E | eP | 01 37 57 | | | 23.6° | | + | B.C.I.S.: 41°N, 19¾°E |
| | | NE | iS | 42 08 | | | 2620Km | - | - | |
| | | E | iSS | 43 17 | | | | | - | |
| | | N | L | 44 32 | | | | | | |
| | | N | M | 47 38 | 15 | 16 | | | | |
| | | E | M | 47 44 | 15 | 39 | | | | |
| | | | F | 02 24 - | | | | | | |
| 9 | 17 | NE | e | 04 41 50 | | | | | | B.C.I.S.: repetition of previous shoc |
| | | E | M | 43 30 | 15 | 3 | | | | |
| | | | F | 55 - | | | | | | |
| 10 | 17 | N | ePP | 21 25 55 | | | 127.6° | + | | U.S.C.G.S.: 7½°S, 156°E |
| | | E | e | 26 10 | | | 1418 0Km | | + | |
| | | N | ePPP | 28 20 | | | | + | | $T_o$ = 21h 04m 40s |
| | | E | eSKS | 30 48 | | | | - | | |
| | | N | iSS | 42 53 | | | | + | - | E 43m 13s |
| | | E | iSSS | 47 36 | | | | | - | |
| | | E | i | 57 13 | | | | | - | |
| | | E | L | 22 09 15 | | | | | | |
| | | E | $M_1$ | 15 03 | 27 | 49 | | | | |
| | | E | $M_2$ | 17 21 | 17 | 24 | | | | |
| | | N | M | 18 46 | 20 | 8 | | | | |
| | | | F | 25 10 - | | | | | | |
| 11 | 17 | E | e | 01 16 10 | | | | | | U.S.C.G.S.: 22°N, 121½°E |
| | | E | M | 23 18 | 20 | 5.5 | | | | Very slight. No max. on N-S |
| | | N | e | 25 30 | | | | | | |
| | | | F | 44 - | | | | | | |
| 12 | 18 | NE | iP | 06 47 43 | | | 64.2° | + | - | U.S.C.G.S: 44½°N, 111°W |
| | | E | iPP | 50 08 | | | 7135Km | | + | |
| | | N | ePPP | 51 30 | | | | - | - | iE 51m 40s |
| | | ME | i | 56 13 | | | | + | - | |
| | | E | iS | 56 28 | | | | | + | $T_o$ = 06h 37m 13s |
| | | N | iPS | 56 55 | | | | + | | |
| | | NE | i | 07 00 20 | | | | + | - | |
| | | E | i | 04 20 | | | | + | + | N 04m 28s |
| | | N | L | 09 40 | | | | | | |
| | | E | $M_1$ | 14 10 | 17 | 420 | | | | Coda includes aftershocks |
| | | N | $M_1$ | 15 12 | 15 | 158 | | | | |
| | | E | $M_2$ | 15 20 | 15 | 288 | | | | |
| | | N | $M_2$ | 16 46 | 15 | 161 | | | | |
| | | | F | 12 00 - | | | | | | |
| 13 | 18 | E | eP | 15 36 32 | | | 64.2° | | + | U.S.C.G.S.: 44½°N, 111°W |
| | | E | ePP | 39 02 | | | 7135Km | | - | |
| | | N | iPPP | 40 25 | | | | - | | $T_o$ = 15h 26m 05s |
| | | N | iS | 45 17 | | | | + | | |
| | | E | eSS | 49 30 | | | | + | | |
| | | E | iSSS | 51 57 | | | | - | | |
| | | NE | L | 57 - | | | | | | |
| | | E | M | 16 02 22 | 15 | 14 | | | | |
| | | N | M | 02 27 | 15 | 3 | | | | |
| | | | F | 17 54 - | | | | | | |
| 14 | 18 | E | e | 22 16 32 | | | | | | B.C.I.S.: 41°N, 19¾°E |
| | | E | M | 18 14 | 15 | 1.5 | | | | |
| | | N | LM | 17 - | | | | | | |
| | | | F | 22 - 30 - | | | | | | |

No. 3

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. | m. | s. | Period sec. | Ampl. $\mu$ | Δ° km. | Dir$^{n}$ of Motion N | E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Aug. | | | | | | | | | | | |
| 15 | 19 | E | e | 04 | 27 | 25 | | | | | - | U.S.C.G.S.:45°N, 111½°W |
| | | N | e | | 34 | 05 | | | | + | | |
| | | E | M | | 38 | 24 | 17 | 4 | | | | |
| | | N | M | | 42 | 17 | 12 | 2 | | | | |
| | | | F | 05 | 08 | - | | | | | | |
| 16 | 23 | N | e | 22 | 26 | 00 | | | | + | | |
| | | E | i | | 30 | 23 | | | | + | - | N 30m 26s |
| | | E | i | | 32 | 31 | | | | | - | |
| | | E | i | | 34 | 14 | | | | | - | |
| | | N | i | | 34 | 21 | | | | - | | |
| | | E | M | | 35 | 10 | 11 | 4 | | | | |
| | | N | M | | 36 | 16 | 9 | 3 | | | | |
| | | | F | | 55 | - | | | | | | |
| 17 | 24 | NE | e | 21 | 51 | 07 | | | 131.5° | - | - | U.S.C.G.S:10½°S, 161°E |
| | | NE | eSKP | | 53 | 04 | | | 14610Km | + | + | |
| | | N | i | | 54 | 12 | | | | + | + | E 54m 22s |
| | | N | iPPP | | 55 | 16 | | | | + | | |
| | | NE | eS | 22 | 00 | 23 | | | | - | + | $T_o$ = 21h 30m 45s |
| | | E | eSS | | 10 | 00 | | | | | + | |
| | | N | eSSS | | 14 | 35 | | | | - | | |
| | | E | L | | 31 | 25 | | | | | | Coda may include aftershocks |
| | | E | M | | 39 | 45 | 23 | 28 | | | | |
| | | N | M | | 42 | 28 | 15 | 10 | | | | |
| | | | F | 25 | 27 | - | | | | | | |
| 18 | 26 | N | iS | 08 | 47 | 03 | | | 76.3° | - | | U.S.C.G.S.:18°N, 94½°W |
| | | N | iPS | | 47 | 34 | | | | - | | |
| | | N | eSS | | 52 | 30 | | | 8480Km | + | | $T_o$ = 08h 25.6m |
| | | N | eSSS | | 55 | 20 | | | | - | | N8 E-W record before 09h. |
| | | N | M | 09 | 08 | 00 | 22 | 10 | | | | |
| | | E | M | | 10 | 40 | 23 | 39 | | | | |
| | | | F | | 50 | - | | | | | | |
| 19 | 26 | N | ePP | 10 | 40 | 40 | | | 64.4° | + | | U.S.C.G.S: 51°N, 132°W |
| | | N | e | | 42 | 20 | | | 7155Km | + | | |
| | | NE | i, eS | | 46 | 58 | | | | - | - | |
| | | NE | i, eSS | | 51 | 00 | | | | + | + | |
| | | NE | L | | 58 | 15 | | | | | | |
| | | N | M | 11 | 03 | 21 | 18 | 22 | | | | |
| | | E | M | | 06 | 23 | 15 | 35 | | | | |
| | | | F | 12 | 09 | - | | | | | | |
| 20 | 27 | E | Traces | 00 | 36 | - | | | | | | |
| | | | | | 47 | - | | | | | | U.S.C.G.S.:25°N, 96°E |
| 21 | 27 | NE | e | 19 | 45 | 30 | | | | - | - | |
| | | NE | e, i | | 51 | 29 | | | | - | - | |
| | | N | i | | 54 | 25 | | | | + | | No definite maximum |
| | | E | e | | 56 | 06 | | | | | + | ? Deep focus |
| | | NE | e | 20 | 05 | 18 | | | | + | - | |
| | | N | e | | 12 | 08 | | | | + | | |
| | | E | e | | 13 | 26 | | | | | + | |
| | | | F | | 44 | - | | | | | | |
| 22 | 29 | N | e | 11 | 19 | 24 | | | | + | | U.S.C.G.S.: Solomon Islands Region |
| | | E | e | | 27 | 15 | | | | | + | |
| | | N | i | | 36 | 52 | | | | + | | Very slight: phases very doubtful |
| | | | F | 12 | 00 | - | | | | | | |
| 23 | 29 | NE | i, eP | 17 | 12 | 54 | | | 59.2° | - | - | U.S.C.G.S: 52°N, 106½°E |
| | | N | iPP | | 15 | 10 | | | 6580Km | + | | |
| | | NE | i, ePPP | | 16 | 16 | | | | - | | |

No. 4

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. $\mu$ | $\Delta^\circ$ km. | Dir$^n$ of Motion N E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|
| | Aug. 29 (contd.) | | | | | | | | |
| | | NE | iS | 17 21 01 | | | | + + | |
| | | NE | iSS | 25 20 | | | | + + | |
| | | E | i | 30 00 | | | | - | |
| | | NE | L | 33 12 | | | | | |
| | | NE | M | 39 09 | E 18<br>N 15 | 44)<br>24) | | | |
| | | E | M | 41 21 | 13 | 28 | | | |
| | | | F | 19 37 - | | | | | |
| 24 | 30 | NE | iS | 03 33 50 | | | | + - | U.S.C.G.S: 35½°N, 3°W |
| | | E | i | 35 59 | | | | - | |
| | | E | i | 37 11 | | | | + | |
| | | E | M | 38 34 | | | | | |
| | | | F | 51 - | | | | | |
| 25 | 30 | E | e | 22 52 08 | | | | + | U.S.C.G.S: 36½°S, 78½°E |
| | | N | e | 53 15 | | | | - | |
| | | E | L | 56 45 | | | | | |
| | | E | M | 23 04 22 | 17 | 4 | | | |
| | | N | M | 04 36 | 17 | 2 | | | |
| | | | F | 45 - | | | | | |

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# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

SEPTEMBER, 1959

Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mm. | E-W 1.11.58 |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 19.0 mm. | N-S 1.11.58 |

| No | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. $\mu$ | $\Delta^\circ$ km. | Dir$^n$ of Motion N E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|
| | Sep. | | | | | | | | |
| 1 | 1 | E | i | 07 32 44 | | | | + | |
| | | N | i | 37 26 | | | | + | |
| | | E | M | 39 14 | 14 | 3 | | | |
| | | N | M | 40 31 | 15 | 3 | | | |
| | | | F | 08 05 - | | | | | |
| 2 | 1 | NE | iP | 11 42 31 | | | 21.8° | - + | U.S.C.G.S.: 41½° N, 20° E |
| | | N | i | 45 04 | | | 2420Km | - | |
| | | NE | iS | 46 31 | | | | - - | $T_o$ = 11h 37m 38s |
| | | E | i | 47 00 | | | | - | |
| | | N | e | 48 50 | | | | - | |
| | | E | L | 50 06 | | | | | |
| | | E | M | 51 55 | 15 | 64.5 | | | |
| | | N | M | 52 15 | 14 | 43 | | | |
| | | | F | 13 00 - | | | | | |
| 3 | 3 | E | | 04 15 - -22- | | | | | U.S.C.G.S.: 41° N, 20° E |
| 4 | 3 | N | iS | 06 54 04 | | | | - | U.S.C.G.S.: 47½° S, 123° E |
| | | E | i | 54 55 | | | | + | |
| | | E | e | 07 18 28 | | | | + | |
| | | N | e | 27 05 | | | | + | |
| | | E | M | 39 05 | 20 | 3 | | | |
| | | N | M | 42 55 | 20 | 3 | | | |
| | | | F | 08 03 - | | | | | |
| 5 | 4 | E | e | 18 46 52 | | | | + | U.S.C.G.S.: 1° S, 24° W |
| | | E | M | 51 07 | 15 | 2 | | | |
| | | N | M | 52 05 | 15 | 2 | | | |
| | | | F | 19 00 - | | | | | |
| 6 | 5 | E | e | 07 05 00 | | | | | U.S.C.G.S.: 1° N, 129° E |
| | | E | $M_1$ | 06 57 | 30 | 12.5 | | | |
| | | E | $M_2$ | 15 09 | 23 | 7 | | | |
| | | N | M | 23 02 | 20 | 3 | | | |
| | | | F | 39 - | | | | | |
| 7 | 11 | NE | e, i | 12 40 07 | | | | - - | |
| | | E | e | 41 47 | | | | - | |
| | | N | e | 42 44 | | | | + | |
| | | N | M | 44 42 | 9 | 1.2 | | | |
| | | E | M | 45 42 | 9 | 1.7 | | | |
| | | | F | 13 09 - | - | | | | |

No. 2

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. $\mu$ | $\Delta^\circ$ km. | Dir$^n$ of Motion N | Dir$^n$ of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sep. | | | | | | | | | |
| 8 | 11 | E | e | 14 22 35 | | | | | + | |
| | | NE | e | 27 20 | | | | + | + | |
| | | NE | e | 31 00 | | | | - | + | |
| | | | F | 40 - | | | | | | |
| 9 | 12 | E | e | 02 23 00 | | | | | + | U.S.C.G.S.:20°S,68°W |
| | | N | e | 23 50 | | | | - | | |
| | | NE | e | 31 00 | | | | + | + | |
| | | E | $M_1$ | 49 55 | 35 | 26 | | | | |
| | | N | L | 53 00 | | | | | | |
| | | N | M | 03 09 06 | 20 | 6 | | | | |
| | | E | $M_2$ | 06 20 | 22 | 7 | | | | |
| | | | F | 04 23 - | | | | | | |
| 10 | 12 | N | ePP | 11 45 50 | | | | - | | U.S.C.G.S.:9½°S,156°E |
| | | E | e | 47 15 | | | | | - | |
| | | NE | e | 12 36 00 | | | | | | |
| | | N | M | 49 45 | 20 | 3 | | | | |
| | | E | M | 49 53 | 17 | 4 | | | | |
| | | | F | 13 09 - | | | | | | |
| 11 | 13 | E | LM | 23 38 40 | | | | | | |
| | | | | -53- | | | | | | U.S.C.G.S.: 1°N, 129°E |
| 12 | 14 | N | iPKP | 14 29 35 | | | 151.2° | + | | U.S.C.G.S:28½°S,177°W |
| | | E | i | 29 48 | | | | | + | |
| | | E | i | 32 05 | | | 16800Km | + | + | i N 32m 13s |
| | | E | i | 35 33 | | | | | + | |
| | | E | iSKKS | 39 50 | | | | | - | |
| | | N | iPSKS | 43 38 | | | | - | | |
| | | N | iSS | 52 31 | | | | - | + | i E 52m 52s |
| | | E | iSS& | 58 13 | | | | | + | |
| | | E | i | 15 10 31 | | | | | + | Includes at least one aftershock |
| | | N | L | 20 25 | | | | | | |
| | | N | $M_1$ | 29 30 | 25 | 43.5 | | | | |
| | | E | $M_1$ | 32 57 | 25 | 130 | | | | |
| | | N | $M_2$ | 39 04 | 17 | 27 | | | | |
| | | E | $M_2$ | 40 35 | 20 | 82 | | | | |
| | | | F | 19 45 - | | | | | | |
| 13 | 14 | NE | e | 22 46 30 | | | | - | - | U.S.C.G.S.:28½°S, 177°W |
| | | E | e | 58 05 | | | | | + | |
| | | E | e | 23 06 40 | | | | | - | Aftershock of No. 10 |
| | | | F | 26 - | | | | | | |
| 14 | 14 | E | e | 23 44 25 | | | | | + | U.S.C.G.S.:29°S, 177°W |
| | | N | e | 47 55 | | | | - | | Aftershock of No. 10 |
| | | E | M | 24 02 55 | 20 | 3 | | | | |
| | | N | M | 09 47 | 15 | 1.5 | | | | |
| | | | F | 25 29 - | | | | | | |
| 15 | 15 | NE | i, ePKP | 06 19 42 | | | 151.2° | - | - | U.S.C.G.S.:28½°S,177°W |
| | | NE | i | 21 46 | | | 16800 Km | + | + | |
| | | N | i | 33 45 | | | | + | | $T_o$ = 05h 59m 50s |
| | | NE | e, iSS | 42 40 | | | | - | + | |
| | | E | iSSS | 48 25 | | | | | + | |
| | | E | i | 07 00 25 | | | | | - | |
| | | E | L | 17 00 | | | | | | |
| | | N | M | 29 32 | 18 | 11 | | | | |
| | | E | M | 29 53 | 18 | 33 | | | | |
| | | | F | Lost during changing of Charts | | | | | | |

No. 3

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dirn of Motion N E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|
| | Sep. | | | | | | | N E | |
| 16 | 15 | N | eSKKS | 11 34 50 | | | | + | U.S.C.G.S.: 21½°S, 179½ |
| | | E | e | 36 - | | | | + | |
| | | NE | i | 45 24 | | | | + + | |
| | | E | i | 49 08 | | | | - | |
| | | N | Traces | 11 51 - | | | | | |
| | | | | 12-11 - | | | | | |
| | | | F | 16 - | | | | | |
| 17 | 16 | NE | Traces | 05 31 - | | | | | |
| | | | | -37- | | | | | U.S.C.G.S.: 28½°S, 176°W |
| 18 | 16 | NE | Traces | 11 35 - | | | | | |
| | | | | 12 00 - | | | | | U.S.C.G.S.: 29°S, 176½°W |
| 19 | 16 | E | eL | 17 15 40 | | | | | U.S.C.G.S.: 29°S, 176½°W |
| | | N | L | 23 00 | | | | | |
| | | E | $M_1$ | 29 00 | 18 | 2 | | | |
| | | E | $M_2$ | 41 45 | 16 | 4 | | | |
| | | N | M | 42 45 | 16 | 2 | | | |
| | | | F | 18 10 - | | | | | |
| 20 | 17 | E | e | 16 03 35 | | | | | |
| | | E | M | 08 16 | 15 | 1.5 | | | U.S.C.G.S.: 28½°S, 176° |
| | | | F | 24 - | | | | | |
| 21 | 18 | NE | e | 13 01 15 | | | | | U.S.C.G.S.: 57½°S, 24°W |
| | | N | M | 07 24 | 20 | 2.5 | | | |
| | | E | M | 08 20 | 20 | 2.5 | | | |
| | | | F | 15 - | | | | | |
| 22 | 23 | E | LM | 23 08 - | | | | | U.S.C.G.S.: 35½°N, 138½ |
| | | | | -20- | | | | | |
| 23 | 25 | NE | iP | 02 49 42 | | | 88.2° | + - | U.S.C.G.S.: 22°N, 122°E |
| | | NE | iPP | 53 12 | | | 9800Km | + + | |
| | | NE | iS | 03 00 21 | | | | - + | $T_o$ = 02h 36m 46s |
| | | E | iPS | 01 16 | | | | - + | N° 01m 26s |
| | | NE | iSS | 06 21 | | | | - + | |
| | | E | e | 11 23 | | | | - | |
| | | N | L | 21 36 | | | | | |
| | | NE | M | 24 56 | 24 | 94E) 51N) | | | |
| | | E | $M_2$ | 33 30 | 18 | 111 | | | |
| | | N | $M_2$ | 33 36 | 17 | 60 | | | |
| | | | F | 05 10 - | | | | | |
| 24 | 26 | NE | eS | 08 41 22 | | | 70° | + + | U.S.C.G.S.: 43½°N, 128½°E |
| | | E | eSS | 45 54 | | | 7780Km | + | |
| | | NE | eSSS | 49 09 | | | | - - | |
| | | E | L | 53 15 | | | | | |
| | | E | M | 09 04 50 | 15 | 16 | | | Max. on N-S lost during changing of chart |
| | | | F | 33 - | | | | | |
| 25 | 29 | E | e | 15 55 00 | | | 151.5° | + | U.S.C.G.S.: 29°S, 176°W |
| | | N | eSKKS | 16 02 05 | | | 16835Km | - + | E 02m 20s |
| | | NE | e,iSS | 15 05 | | | | + + | |
| | | N | i | 16 50 | | | | - | |
| | | E | L | 49 00 | | | | | |
| | | E | M | 17 03 56 | 17 | 8 | | | |
| | | N | M | 17 15 | 15 | 3 | | | |
| | | | F | 18 03 - | | | | | |
| 26 | 30 | NE | Traces | 17 11 - | | | | | B.C.I.S.: 36°N, 3.3°W |
| | | | | -13 - | | | | | |

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# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

OCTOBER, 1959

Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mm. | E-W 1.11.58 |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 19.0mm. | N-S 1.11.58 |

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dir$^{n}$ of Motion N E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|
| | Oct. | | | | | | | N E | |
| 1 | 4 | NE | e | 18 52 15 | | | | - + | ? Seismic |
| | | NE | LM | 19 00 - | | | | | |
| | | | | -35- | | | | | |
| 2 | 5 | E | e | 18 35 35 | | | 36.2° | + | U.S.C.G.S.: 83½°N, 112½°E |
| | | N | ePP | 36 11 | | | 4020Km | - | |
| | | E | i | 37 05 | | | | + - | iN 37m 12s |
| | | NE | e,is | 40 31 | | | | + + | |
| | | E | eSS | 42 35 | | | | - | |
| | | N | i | 49 57 | | | | - | |
| | | E | M | 56 20 | 20 | 4 | | | |
| | | N | M | 19 01 15 | 15 | 2 | | | |
| | | | F | 13 - | | | | | |
| 3 | 5 | NE | iS | 20 42 55 | | | 21.4° | + + | U.S.C.G.S.: 41°N, 20°E |
| | | E | iSS | 43 36 | | | 2380 Km | + | |
| | | E | iSSS | 44 14 | | | | - | |
| | | N | L | 46 55 | | | | | $T_o$ = 20h 34m 08s |
| | | E | M | 48 12 | 15 | 8 | | | |
| | | N | M | 48 18 | 16 | 7 | | | |
| | | | F | 21 01 - | | | | | |
| 4 | 7 | NE | iS | 08 39 30 | | | 21.4° | - - | U.S.C.G.S.: 41°N, 20°E |
| | | E | iSS | 40 12 | | | 2380Km | - | |
| | | N | iSSS | 40 33 | | | | + | |
| | | N | i | 42 02 | | | | + - | iE 42m 23s |
| | | NE | L | 44 - | | | | | |
| | | N | $M_1$ | 45 03 | 16 | 20 | | | $T_o$ = 08h 30m 43s |
| | | E | M | 47 28 | 13 | 20.5 | | | |
| | | N | $M_2$ | 47 36 | 13 | 14 | | | |
| | | | F | 09 15 - | | | | | |
| 5 | 12 | E | e | 04 16 05 | | | | | U.S.C.G.S.: 19°S, 68½°W |
| | | E | M | 19 20 | 20 | 2.5 | | | No N-S effect |
| | | | F | 35 - | | | | | |
| 6 | 15 | E | iPP | 06 34 20 | | | 108° | + | U.S.C.G.S.: 1°N, 120½°E |
| | | E | iPPP | 36 42 | | | 12000Km | + | $T_o$ = 06h 15m 35s |
| | | E | iSKS | 40 35 | | | | - | |
| | | E | iSKKS | 41 28 | | | | | Minute break on N-S not |
| | | E | iPPS | 44 33 | | | | | functioning correctly. |
| | | E | L | 07 10 10 | | | | | |
| | | E | $M_1$ | 13 45 | 22 | 39. | | | |
| | | | $M_2$ | 18 03 | 20 | 32 | | | |
| | | | F | 08 40 - | | | | | |

No. 2

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. $\mu$ | $\Delta^\circ$ km. | Dir$^n$ of Motion N | Dir$^n$ of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| | Oct. | | | | | | | | | |
| 7 | 19 | E | e | 16 23 25 | | | | | + | U.S.C.G.S.: 54½°S, 29°W |
| | | NE | ePS | 24 43 | | | | + | + | |
| | | E | e | 29 18 | | | | | + | Phases very uncertain through shaking of building |
| | | N | L | 48 10 | | | | | | |
| | | E | M | 49 55 | 22 | 6.5 | | | | |
| | | N | M | 17 01 08 | 18 | 10 | | | | |
| | | | F | 35 - | | | | | | |
| 8 | 26 | NE | iS | 07 57 38 | | | 81.0° | - | - | U.S.C.G.S.: 37½°N, 142½°E |
| | | E | i | 08 02 10 | | | 9000Km | | - | |
| | | N | iSS | 03 06 | | | | - | | $T_o$ = 07h 35m 15s |
| | | E | L | 14 55 | | | | | | |
| | | N | $M_1$ | 20 02 | 25 | 13 | | | | |
| | | E | $M_1$ | 20 26 | 23 | 25 | | | | |
| | | E | $M_2$ | 29 10 | 15 | 13 | | | | |
| | | N | $M_2$ | 34 02 | 14 | 13 | | | | |
| | | | F | 09 05 - | | | | | | |
| 9 | 27 | NE | e, iS | 07 14 10 | | | 75.2° | + | + | U.S.C.G.S.: 45½°N, 151°E |
| | | E | iPS | 14 53 | | | 8355Km | | + | |
| | | N | eSS | 19 53 | | | | - | | |
| | | NE | eL | 30 - | | | | | | $T_o$ = 06h 52m 51s |
| | | E | M | 38 55 | 20 | 30 | | | | Confused by microseisms |
| | | N | M | 41 57 | 21 | 30 | | | | |
| | | | F | 08 13 - | | | | | | |

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# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

NOVEMBER, 1959

Lat. 57°10′ N. Long. 2°6′ W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mm. | E–W 1.11.58 |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 19.0 mm. | N–S 1.11.58 |

| No | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dirn of Motion N | Dirn of Motion E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Nov. 7 | NE | eS | 02 40 49 | | | | | | |
| | | NE | eL | 43 - | | | | - | - | N 40m 54s |
| | | E | M | 44 18 | 12 | 7 | | | | U.S.C.G.S.: 36.5°N, 2.5°E |
| | | N | M | 44 42 | 12 | 4.5 | | | | |
| | | | F | 59 - | | | | | | |
| 2 | 10 | E | i | 21 21 04 | | | | | + | |
| | | NE | e | 29 20 | | | | | | |
| | | E | M | 30 09 | 18 | 15.5 | | + | - | |
| | | N | M | 30 38 | 19 | 22 | | | | |
| | | | F | 39 - | | | | | | |
| 3 | 15 | E | i | 10 49 02 | | | | | - | U.S.C.G.S.: 38°N, 74½°E |
| | | N | e | 50 54 | | | | - | | |
| | | N | i | 52 03 | | | | + | | |
| | | E | e | 53 57 | | | | | - | |
| | | N | i | 55 55 | | | | - | | Maxima ill defined |
| | | E | e | 57 19 | | | | | + | |
| | | E | M | 11 01 54 | 13 | 5 | | | | |
| | | N | M | 03 37 | 15 | 3 | | | | |
| | | | F | 07 - | | | | | | |
| 4 | 15 | NE | iP | 17 14 02 | | | 24.3° | + | - | U.S.C.G.S.: 37½°N, 20½°E |
| | | NE | iPP | 14 31 | | | 2700 Km | - | - | N 14m 37s |
| | | NE | i | 15 07 | | | | + | + | |
| | | NE | i | 16 06 | | | | + | + | |
| | | NE | iS | 18 20 | | | | + | + | N 18m 17s |
| | | N | L | 21 07 | | | | | | |
| | | N | M | 23 35 | 15 | 169 | | | | |
| | | E | M | 23 42 | 16 | 255 | | | | |
| | | | F | 19 14 - | | | | | | |
| 5 | 16 | NE | i | 10 36 28 | | | 59.4° | + | - | U.S.C.G.S.: 1°N, 26½°W |
| | | NE | iS | 39 39 | | | 6600 Km | - | - | |
| | | E | eSSS | 45 36 | | | | | | |
| | | NE | L | 47 30 | | | | | | |
| | | E | M | 52 23 | 20 | 4 | | | | |
| | | N | M | 52 36 | 20 | 4 | | | | |
| | | | F | 11 05 - | | | | | | |

No. 2

# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. | m. | s. | Period sec. | Ampl. μ | Δ° km. | Dir$^{n}$ of Motion N | E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nov. | | | | | | | | | | | |
| 6 | 19 | E | iSS | 11 | 46 | 11 | | | | | + | U.S.C.G.S.: 57½°S, 146°E |
| | | NE | eSSS | | 51 | 19 | | | | - | - | E 51m 24s |
| | | E | i | | 59 | 47 | | | | | + | |
| | | E | L | 12 | 05 | 35 | | | | | | |
| | | N | L | | 08 | 20 | | | | | | |
| | | N | M | | 11 | 54 | 27 | 14.5 | | | | |
| | | E | M | | 12 | 19 | 25 | 30 | | | | |
| | | | F | | 39 | - | | | | | | |
| 7 | 19 | E | e | 14 | 12 | 05 | | | | | + | U.S.C.G.S.: 38½°N, 26°E |
| | | E | e | | 15 | 30 | 20 | 4 | | | | |
| | | E | i | | 17 | 30 | | | | | - | |
| | | E | i | | 19 | 25 | | | | | + | |
| | | E | i | | 23 | 14 | | | | | + | Phases doubtful through shaking of building |
| | | | F | | 26 | - | | | | | | |
| 8 | 20 | E | i | 00 | 16 | 55 | | | | | + | U.S.C.G.S.: 42½°N, 126½° |
| | | E | e | | 18 | 36 | | | | | + | Obscured by shaking of building |
| | | E | i | | 21 | 25 | | | | | | |
| | | | F | | 28 | - | | | | | | |
| 9 | 26 | E | eL | 08 | 06 | 30 | | | | | | U.S.C.G.S.: 57½°S, 102½°E |
| | | E | M | | 10 | 20 | 23 | | | | | N-S clock under repair |
| | | | F | | 40 | - | | | | | | |
| 10 | 27 | E | eSKS | 23 | 34 | 19 | | | 103°.5 | | + | U.S.C.G.S.: 57½°S, 103°E |
| | | E | iPS | | 36 | 49 | | | 11,500Km | | + | |
| | | E | eSS | | 42 | 34 | | | | | + | |
| | | E | e | 24 | 02 | 15 | | | | | + | |
| | | E | L | | 10 | 15 | | | | | | |
| | | E | M | | 18 | 29 | 20 | 35 | | | | |
| | | | F | | 52 | - | | | | | | |
| 11 | 28 | E | iSKS | 12 | 59 | 49 | | | | | - | U.S.C.G.S.: 28½°S, 71°W |
| | | E | ePS | 13 | 02 | 19 | | | | | + | |
| | | E | i | | 08 | 34 | | | | | + | Phases doubtful |
| | | E | e | | 17 | 27 | | | | | + | |
| | | E | L | | 24 | 35 | | | | | | |
| | | E | $M_1$ | | 31 | 29 | 20 | 4 | | | | |
| | | E | $M_2$ | | 38 | 44 | 18 | 5.5 | | | | |
| | | | F | | 53 | - | | | | | | |

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# SEISMOLOGICAL BULLETIN

## KING'S COLLEGE OBSERVATORY, ABERDEEN

DECEMBER, 1959

Lat. 57°10′ N. Long. 2°6′ W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

Instruments: Milne-Shaw Seismographs, Photographic Registrations, Two Components.

| Compt. | Mass | To | Damping Ratio | Magnification | 1" Tilt | Date from which constants apply |
|---|---|---|---|---|---|---|
| N | 1 lb. | 10 sec. | 20 : 1 | 150 | 18.1 mm. | E-W 1.11.58 |
| E | 1 lb. | 10 sec. | 20 : 1 | 150 | 19.0mm. | N-S 1.11.58 |

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dirⁿ of Motion N E | Remarks Time of origin |
|---|---|---|---|---|---|---|---|---|---|
| | Dec. | | | | | | | | |
| 1 | 1 | E | iP | 12 44 06 | | | 24.7° | - | U.S.C.G.S.: 38°N, 21½°E |
| | | E | e | 47 46 | | | 2745 Km | + | $T_o$ = 12h 38m 44s |
| | | E | iS | 48 31 | | | | + | |
| | | E | e | 52 28 | | | | - | |
| | | E | e | 56 12 | | | | + | |
| | | | F | 13 06 - | | | | | |
| 2 | 2 | E | iPS | 10 02 13 | | | | + | U.S.C.G.S.: 1°S, 123°E |
| | | E | iPPS | 03 14 | | | | - | |
| | | E | eSS | 08 08 | | | | + | |
| | | E | i | 08 56 | | | | - | Obscured by |
| | | E | e | 14 55 | | | | + | microseisms |
| | | E | e | 19 08 | | | | + | |
| | | E | L | 28 26 | | | | | |
| | | E | M | 38 22 | 25 | 35 | | | |
| | | | F | 57 - | | | | | |
| 3 | 12 | E | i | 20 11 36 | | | | + | B.C.I.S.: 35¾°N, ¾°W |
| | | E | e | 12 06 | | | | + | |
| | | E | i | 12 28 | | | | - | Very slight effect |
| | | E | M | 12 51 | 10 | 1.5 | | | |
| | | | F | 14 - | | | | | |
| 4 | 14 | E | L | 22 47 30 | | | | | U.S.C.G.S.: 52½°N, 168°W |
| | | E | i | 51 54 | | | | + | |
| | | E | M | 55 48 | 16 | 9 | | | |
| | | | F | 23 06 - | | | | | |
| 5 | 14 | E | eP | 23 37 47 | | | 117° | - | U.S.C.G.S.; 59½°S, 31°W |
| | | E | ePKP | 41 36 | | | 13000Km | + | |
| | | E | iPS | 51 31 | | | | + | |
| | | E | iPPS | 52 44 | | | | + | |
| | | E | iSS | 59 09 | | | | + | |
| | | E | e | 24 14 25 | | | | + | |
| | | E | L | 23 50 | | | | | |
| | | E | $M_1$ | 26 41 | 20 | 33 | | | |
| | | E | $M_2$ | 31 08 | 17 | 40 | | | |
| | | | F | 50 - | | | | | |
| 6 | 15 | E | i | 00 52 00 | | | | - | |
| | | E | i | 54 20 | | | | + | |
| | | E | i | 57 36 | | | | - | |
| | | E | i | 01 00 36 | | | | + | |
| | | E | M | 11 26 | 18 | 13 | | | |
| | | | F | 25 - | | | | | |

# KING'S COLLEGE OBSERVATORY, ABERDEEN

| No. | Date | Compt. | Phase | Time G.M.T. h. m. s. | Period sec. | Ampl. μ | Δ° km. | Dir$^{n}$ of Motion N | Dir$^{n}$ of Motion E | Remarks · Time of origin |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 21 | E | iPP | 11 31 35 | | | | | - | U.S.C.G.S.: 14°N, 52°E |
| | | E | i | 32 58 | | | 59.4° | | + | |
| | | E | iS | 37 34 | | | 6600Km | | + | |
| | | E | iSS | 41 31 | | | | | - | |
| | | E | i | 45 03 | | | | | - | |
| | | E | L | 47 - | | | | | | |
| | | E | $M_1$ | 51 41 | 25 | 48 | | | | |
| | | E | $M_2$ | 57 38 | 18 | 47 | | | | |
| | | | F | 12 53 - | | | | | | |
| 8 | 22 | E | eLM | 17 48 - | | | | | | U.S.C.G.S.: 37½°N, 141½°E |
| | | | | -57- | | | | | | |
| 9 | 27 | N | i | 16 12 28 | | | 66.5° | + | | U.S.C.G.S.: 56°N, 162½°E |
| | | NE | iS | 12 38 | | | 7390Km | - | - | |
| | | E | iPS | 12 53 | | | | | + | $T_o$ = 15h 52m 54s |
| | | N | i | 15 05 | | | | + | | |
| | | N | iSS | 17 16 | | | | + | | |
| | | E | e | 22 18 | | | | | + | |
| | | N | L | 25 38 | | | | | | |
| | | E | $M_1$ | 27 18 | 22 | 39 | | | | |
| | | N | $M_1$ | 29.37 | 22 | 33 | | | | |
| | | N | $M_2$ | 33 13 | 18 | 24 | | | | |
| | | E | $M_2$ | 39 31 | 15 | 19 | | | | |
| | | | F | 17 19 - | | | | | | |
| 10 | 28 | NE | i | 07 41 10 | | | | + | + | U.S.C.G.S.: 52½°N, 160°E |
| | | E | i | 43 35 | | | | | - | |
| | | E | i | 50 23 | | | | | - | |
| | | NE | i, e | 52 15 | | | | + | + | Obscured by microseisms |
| | | E | $M_1$ | 57 56 | 20 | 16 | | | | |
| | | E | $M_2$ | 08 05 36 | 18 | 15.5 | | | | |
| | | N | M | 07 16 | 15 | 7 | | | | |
| | | | F | 55 - | | | | | | |

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